

IRWD Sewer System Management Plan 2018
Appendices

APPENDIX LIST

Appendix Item	Document Title	Responsible Party
A	State Water Resources Control Board Order No. 2013-0058 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, September 9, 2013	Director of Recycling Operations
B	Contact Names and Numbers of Position Responsible for SSMP Development and Implementation	Director of Recycling Operations
C	Environmental Work Practice Sanitary Sewer Overflow Notification and Reporting	Director of Recycling Operations
D	Lift Station Weekly Inspection Form	Collection Systems Manager
E	IRWD PLSD Field Report & SSO Field Report	Collection Systems Manager
F	FOG Control Program Manual	Regulatory Compliance Manager
G	Sewer Collection System Master Plan 2017	Planning and Technical Services, Principal Engineer
H	Sewer System Management Plan Audit 2016	Director of Recycling Operations

APPENDIX A

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).

2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.

3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.

4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"[1] (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.

5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.

6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.

7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information[2] to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

---

[1] Available for download at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

[2] Cal OES Hazardous Materials Spill Reports available Online at:
http://w3.calema.ca.gov/operational/malhaz.nsf/$defaultview and http://w3.calema.ca.gov/operational/malhaz.nsf

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS[3] Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.

9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.

10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program[4] objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

8/6/13
Date

Thomas Howard
Executive Director

[3] California Integrated Water Quality System (CIWQS) publicly available at http://www.waterboards.ca.gov/ciwqs/publicreports.shtml

[4] Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/sso/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to $5,000 a day per violation pursuant to Water Code section 13350; up to $1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that: • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION **(see section B of MRP)**	• Within two hours of becoming aware of any Category 1 SSO **greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water**, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.	Call Cal OES at: **(800) 852-7550**
REPORTING **(see section C of MRP)**	• Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months.	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING **(see section D of MRP)**	• Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING **(see section E of MRP)**	• SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume.	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.

2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:

    i. Name of person notifying Cal OES and direct return phone number.
    ii. Estimated SSO volume discharged (gallons).
    iii. If ongoing, estimated SSO discharge rate (gallons per minute).
    iv. SSO Incident Description:
        a. Brief narrative.
        b. On-scene point of contact for additional information (name and cell phone number).
        c. Date and time enrollee became aware of the SSO.
        d. Name of sanitary sewer system agency causing the SSO.
        e. SSO cause (if known).
    v. Indication of whether the SSO has been contained.
    vi. Indication of whether surface water is impacted.
    vii. Name of surface water impacted by the SSO, if applicable.
    viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
    ix. Any other known SSO impacts.
    x. SSO incident location (address, city, state, and zip code).

3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).

4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.

2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.

3. **SSO Categories**

   i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:

      a. Reach surface water and/or reach a drainage channel tributary to a surface water; or

      b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

   ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.

   iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**

   i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:

      a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.

      b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.

iii. **"No Spill" Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a "No Spill" certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, "No Spill" certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a "No Spill" certification statement for that month.

iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

i. **Causes and Circumstances of the SSO:**

a. Complete and detailed explanation of how and when the SSO was discovered.

b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).

c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.

d. Detailed description of the cause(s) of the SSO.

e. Copies of original field crew records used to document the SSO.

f. Historical maintenance records for the failure location.

ii. **Enrollee's Response to SSO:**

a. Chronological narrative description of all actions taken by enrollee to terminate the spill.

b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.

b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.

ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:

1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
2. SSO Location Name.
3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
5. Whether or not the SSO reached a municipal separate storm drain system.
6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
7. Estimate of the SSO volume, inclusive of all discharge point(s).
8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
9. Estimate of the SSO volume recovered (if applicable).
10. Number of SSO appearance point(s).
11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
12. SSO start date and time.
13. Date and time the enrollee was notified of, or self-discovered, the SSO.
14. Estimated operator arrival time.
15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.

b. **Certified Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :

1. Description of SSO destination(s).
2. SSO end date and time.
3. SSO causes (mainline blockage, roots, etc.).
4. SSO failure point (main, lateral, etc.).
5. Whether or not the spill was associated with a storm event.
6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
7. Description of spill response activities.
8. Spill response completion date.
9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
11. Whether or not health warnings were posted as a result of the SSO.
12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
13. Name of surface water(s) impacted.
14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.

c. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:

1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.

d. **Certified Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:

1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.

e. **Certified Category 3 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:

1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.

2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).

3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.

4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.

5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
   i. Ammonia
   ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).

2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
   i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

a. Date, time, and method of notification.

b. Date and time the complainant or informant first noticed the SSO.

c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.

d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.

e. Final resolution of the complaint.

ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.

iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.

3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.

4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:

i. Supervisory Control and Data Acquisition (SCADA) systems

ii. Alarm system(s)

iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.

2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.

3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.

4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13
Date

Jeanine Townsend
Clerk to the Board

APPENDIX B

Contact Names and Numbers of Position Responsible for SSMP Development and Implementation

WDR Reference	SSMP Element/Measure	Responsible Position	Dept.	Name	Telephone No. (949) 453-XXXX
D.13	Overall SSMP Development and Implementation	Executive Director of Operations	805	Wendy Chambers	5720
D.13(i)	Goal	Director of Recycling Operations	805	Jose Zepeda	5572
D.13(ii)	Organization	Director of Recycling Operations	805	Jose Zepeda	5572
D.13(iii)	Legal Authority	Director of Recycling Operations	805	Jose Zepeda	5572
D.13(iv)(a)	O&M Program – Mapping	Planning and Technical Services, Principal Engineer	300	Eric Akiyoshi	5553
D.13(iv)(b)	O&M Program – Sewer Pipeline and Manhole Preventive and Routine Maintenance	Collection Systems Manager	570	Dorien McElroy	5803
D.13(iv)(b)	O&M Program – Lift Station Mechanical and Electrical Preventive and Routine Maintenance	Mechanical Services Manager	840	Colton Martin	5673
D.13(iv)(c)	O&M Program – System Inspection	Collection Systems Manager	570	Dorien McElroy	5803
D.13(iv)(c)	O&M Program – Condition Assessment; Rehabilitation and Replacement Program	Engineering and Water Quality, Executive Director	300	Kevin Burton	5594
D.13(iv)(c)	O&M Program – Capital Program Funding	Engineering and Water Quality, Executive Director	300	Kevin Burton	5594
D.13(iv)(d)	O&M Program – Training	Collection Systems Manager	570	Dorien McElroy	5815
D.13(iv)(e)	O&M Program – Critical and Replacement Part inventory	Mechanical Services Manager	840	Colton Martin	5673
D.13(v)	Design and Performance Provisions	Planning and Technical Services, Principal Engineer	300	Eric Akiyoshi	5553
D.13(vi)	Overflow Emergency Response Plan	Collection Systems Manager	570	Dorien McElroy	5803
D.13(vii)	Fats, Oils, and Grease Control Program	Regulatory Compliance Manager	740	Lyndy Lewis	5852
D.13(viii)	System Evaluation and Capacity Assurance Plan	Planning and Technical Services, Principal Engineer	300	Eric Akiyoshi	5553
D.13(ix)	Monitoring, Measurement, and Program Modifications	Director of Recycling Operations	805	Jose Zepeda	5572
D.13(x)	SSMP Program Audits	Director of Recycling Operations	805	Jose Zepeda	5572

Contact Names and Numbers of Position Responsible for SSMP Development and Implementation

D.13(xi)	Communication Program – Public education	Public Affairs, Director	730	Beth Beeman	5320
D.13(xi)	Communication Program – Satellite agencies	Executive Director of Operations	805	Vacant	5720

Revised: May 2018

APPENDIX C

EWP-6 SANITARY SEWER OVERFLOW (SSO) NOTIFICATION

1. PURPOSE

1.1 The purpose of this procedure is to provide clear instructions for accurate and timely reporting to regulatory agencies in the event of a sanitary sewer overflow (SSO). This document also serves as a supplement to existing SSO procedures and provides regulatory guidelines for spill reporting.

2. DEFINITIONS

2.1 **Private Lateral Sewage Discharge (PLSD)**
Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to IRWD's sanitary sewer system or from other private sewer assets.

2.2 **Sanitary Sewer Overflow (SSO)**
Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from IRWD's sanitary sewer system. SSOs include:

- Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within IRWD's sanitary sewer system.

Furthermore, there are different categories of SSOs that are defined as follows:

2.2.1 **Category 1 SSO**
Discharges of untreated or partially treated wastewater of **any volume** resulting from IRWD's sanitary sewer system failure or flow condition that:

APPROVED BY: _____ **DATE:** _____

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

2.2.2 **Category 2 SSO**

Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from IRWD's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

2.2.3 **Category 3 SSO**

All other discharges of untreated of partially treated wastewater resulting from IRWD's sanitary sewer system failure or flow condition.

2.3 **Sanitary Sewer System**

Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

2.4 **Untreated or Partially Treated Wastewater**

Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

3. PROCEDURES

3.1 All SSOs shall first be reported to the Collection Systems Department immediately.

3.2 The following reporting procedures must be followed for ALL SSOs including:

3.2.1 Brine spills and;

3.2.2 Private lateral sewage discharges that IRWD staff responds to by physically going to the site of the discharge.

3.3 During normal work house (0630 to 1600 Hours, Monday through Friday, except Holidays and Flex Fridays), the Collection Systems Department shall notify the Regulatory Compliance Department as soon as possible, but no later than 2 hours after becoming aware

of the SSO. Based on the spill category, the Regulatory Compliance Department will notify and submit reports to the appropriate regulatory agencies within the required time window as shown in *Table 1 - Sanitary Sewer Overflow Notification & Reporting Guidelines* and *Table 2 – External Notification Contact List*.

3.4 After work hours, the Collection Systems Department will notify the appropriate agencies within the required time window as shown in *Table 1* and *Table 2* and forward all pertinent information to the Regulatory Compliance Department on the next business day. The Regulatory Compliance Department will then submit required follow-up reporting to all regulatory agencies.

3.5 For Category 1 SSOs <u>greater than or equal to 1,000 gallons</u> that reach or may reach surface waters:

3.5.1 Notify within 2 hours of becoming aware of the Category 1 SSO:

- *California Office of Emergency Services (Cal OES)* and be prepared to provide the following information, as prompted by the Cal OES operator:
  - Your name and best contact phone number.
  - Estimated SSO volume discharged (gallons).
  - If ongoing, estimated SSO discharge rate (gpm).
  - SSO incident description:
    - Brief narrative.
    - Date/time enrollee become aware of the SSO.
    - Name of responsible sanitary sewer system agency.
    - SSO cause (if known).
  - Indication of whether the SSO has been contained.
  - Name of surface water impacted by the SSO.
  - Any other known SSO impacts.
  - SSO incident location (address, city, state, and zip code).

  Please be sure to take note of Cal OES operator name and notification control number that the Cal OES operator will give you at the end of the phone call.
- *Orange County Health Care Agency*
- Appropriate *Regional Water Quality Control Board*
- *Orange County Public Works (if necessary)*
- City where the SSO impacts (*if necessary*)

3.5.2 Regulatory Compliance Department staff will enter a draft SSO report into the California Integrated Water Quality System (CIWQS) within 3 business days of becoming aware of the SSO. If online reporting is unavailable, staff will submit the Sanitary Sewer Overflow (SSO) Notification Report Form (See Attachment A) via email or fax to the appropriate Regional Board.

3.5.3 Within 15 calendar days, the final report must be certified through CIWQS by the Legally Responsible Official or their designee.

3.5.4 For Category 1 SSOs in which 50,000 gallons enters a surface water, immediately notify Regulatory Compliance/Water Quality Standby staff in order for water quality sampling to be conducted no later than 48 hours after initial SSO notification. Water quality sampling for the minimum constituents is required:

- *Ammonia*
- *Appropriate bacterial indicator(s) which may include total and fecal coliform, enterococcus, and e-coli.*

An SSO Technical Report must be submitted within 45 calendar days after the end date of the SSO.

3.6 For Category 1 SSOs less than 1,000 gallons that reach surface waters:

3.6.1 Notify within 24 hours, but as soon as possible:

- *Orange County Health Care Agency*
- *Appropriate Regional Water Quality Control Board*
- *Orange County Public Works (if necessary)*
- City where the SSO impacts (*if necessary*)

3.6.2 Regulatory Compliance Department staff will follow the reporting procedures referenced in Section 3.5.2 and 3.5.3.

3.7 For Category 2 SSOs ($\geq$ 1,000 gallons, does not reach surface waters):

3.7.1 Notify within 24 hours, but as soon as possible:

- *Orange County Health Care Agency*
- *Appropriate Regional Water Quality Control Board*
- *Orange County Public Works (if necessary)*

3.7.2 Regulatory Compliance staff will follow the reporting procedures referenced in Section 3.5.2 and 3.5.3.

3.8 For Category 3 SSOs (< 1,000 gallons, does not reach surface waters):

3.8.1 Notify within 24 hours as appropriately determined:

- *Orange County Health Care Agency*
- *Appropriate Regional Water Quality Control Board*

3.8.2 Regulatory Compliance Department staff will enter the draft SSO report into the California Integrated Water Quality System (CIWQS) within 30 calendar days of becoming aware of the SSO. If online reporting is unavailable, staff will submit the Sanitary Sewer Overflow (SSO) Notification Report Form (See Attachment A) via email or fax to the appropriate Regional Board.

3.8.3 Within 30 calendar days after the end of month in which the SSO occurred, the final report must be certified through CIWQS by the Legally Responsible Official (LRO) or their designee.

3.9 For PLSDs:

3.9.1 If PLSD is greater than or equal to 1,000 gallons that reaches a surface water, consider notifying:

- Within 2 hours:
  - *California Office of Emergency Services (Cal OES)*
- Within 24 hours, but as soon as possible:
  - *Orange County Health Care Agency*
  - Appropriate *Regional Water Quality Control Board*
  - *Orange County Public Works (if necessary)*
  - City where the SSO impacts (*if necessary*)

3.9.2 All other PLSDs, notify within 24 hours:

- *Orange County Health Care Agency*

3.9.3 Regulatory Compliance Department staff will enter the PLSD report into the California Integrated Water Quality System (CIWQS) within 30 calendar days after the end of month in which the SSO occurred. This report is not required to be certified.

3.10 For discharges of any volume of <u>brine</u> from any facilities or lines owned by the District follow reporting procedures for Category 1 SSOs referenced in Section 3.5 as applicable.

3.10.1 In addition, notify within 24 hours:

- *Orange County Sanitation District*

3.10.2 Regulatory Compliance Department staff will submit a report within 5 days after the spill to the appropriate Regional Board.

3.11 See Attachment B for SSO Notification Procedure Flow Chart and Attachment C for PLSD Notification Procedure Flow Chart.

Table 1 - Sanitary Sewer Overflow Notification & Reporting Guidelines

Type of Spill	Requirement	Notification Timeframe	Agency to Notify	Report Timeframe
Category 1	● Greater than or equal to 1,000 gallons, and; ● Reaches surface waters.	Within 2 hours of becoming aware	OES* OCHCA* RWQCB* OCPW City	● Submit draft report within 3 business days of becoming aware of the SSO. ● Certify within 15 calendar days of SSO end date. ● Submit SSO Technical Report within 45 calendar days of SSO end date (if applicable).
	● Less than 1,000 gallons, and; ● Reaches surface water.	Within 24 hours, but as soon as possible.	OCHCA* RWQCB* OCPW City	
Category 2	● Greater than or equal to 1,000 gallons, and; ● Does not reach surface waters.	Within 24 hours	OCHCA* RWQCB*	● Submit draft report within 3 business days of becoming aware of the SSO. ● Certify within 15 calendar days of SSO end date.
Category 3	● Less than 1,000 gallons, and; ● Does not reach surface waters.	Within 24 hours	OCHCA* RWQCB*	● Submit and certify report within 30 calendar days after the end of the month in which SSO occurred.
PLSD	● Greater than or equal to 1,000 gallons, and; ● Reaches surface waters.	Within 2 hours	OES	● Submit report within 30 calendar days after the end of the month in which the PLSD event occurred. ● Report not required to be certified.
		Within 24 hours, but as soon as possible	OCHCA RWQCB OCPW City	
	● All other PLSDs	Within 24 hours	OCHCA	
Brine	● Any volume and spill destination.	Within 2 hours of becoming aware (*as applicable)*	OES* OCHCA* RWQCB* OCPW City	● Submit a report within 5 days after the spill to RWQCB.
		Within 24 hours	OCSD*	

Star symbol (*) indicates notification to regulatory agency is a regulatory requirement.

Agency Key

OES - California Office of Emergency Services
OCHCA – Orange County Health Care Agency
RWQCB –Regional Water Quality Control Board
OCPW – Orange County Public Works
OCSD – Orange County Sanitation District

Table 2 - External Notification Contact List[a,b]

Agency	Reporting Agency	Contact	After Hours
Cal OES	California Office of Emergency Services	(800) 852-7550	
RWQCB	Santa Ana Regional Water Quality Control Board		
	• Najah Amin	(951) 320-6362	
	• General Line	(951) 320-2028	(951) 782-4130
	San Diego Regional Water Quality Control Board		
	• General Line	(858) 467-4254	(858) 467-2952
OCHCA	Orange County Health Care Agency	(714) 433-6000	(714) 628-7008
OCPW	Orange County Public Works	(877) 897-7455	
OCSD	Orange County Sanitation District	(714) 593-7025	
FOG Program Implementer	EEC Environmental		
	• Jim Kolk	(714) 642-8937	
	• Joe Jenkins	(562) 447-4109	
	• General Line	(714) 667-2300	
City	Irvine	(949) 724-6000	
	Tustin	(714) 549-6913	
	Orange	(714) 744-7444	(714) 538-1961
	Newport Beach	(949) 644-3717	
	Lake Forest	(949) 461-3400	

[a]See Standby List for up-to-date contact information.
[b]Call in order of listing shown above.

Sanitary Sewer Overflow Notification Report Form

Attachment A

Irvine Ranch Water District
Sanitary Sewer Overflow (SSO) Notification Report Form

The following is a notification report form for draft reports as required by the State Water Resources Control Board in the event that CIWQS is not working. The 3-day draft report may be faxed to the appropriate RWQCB using this form:

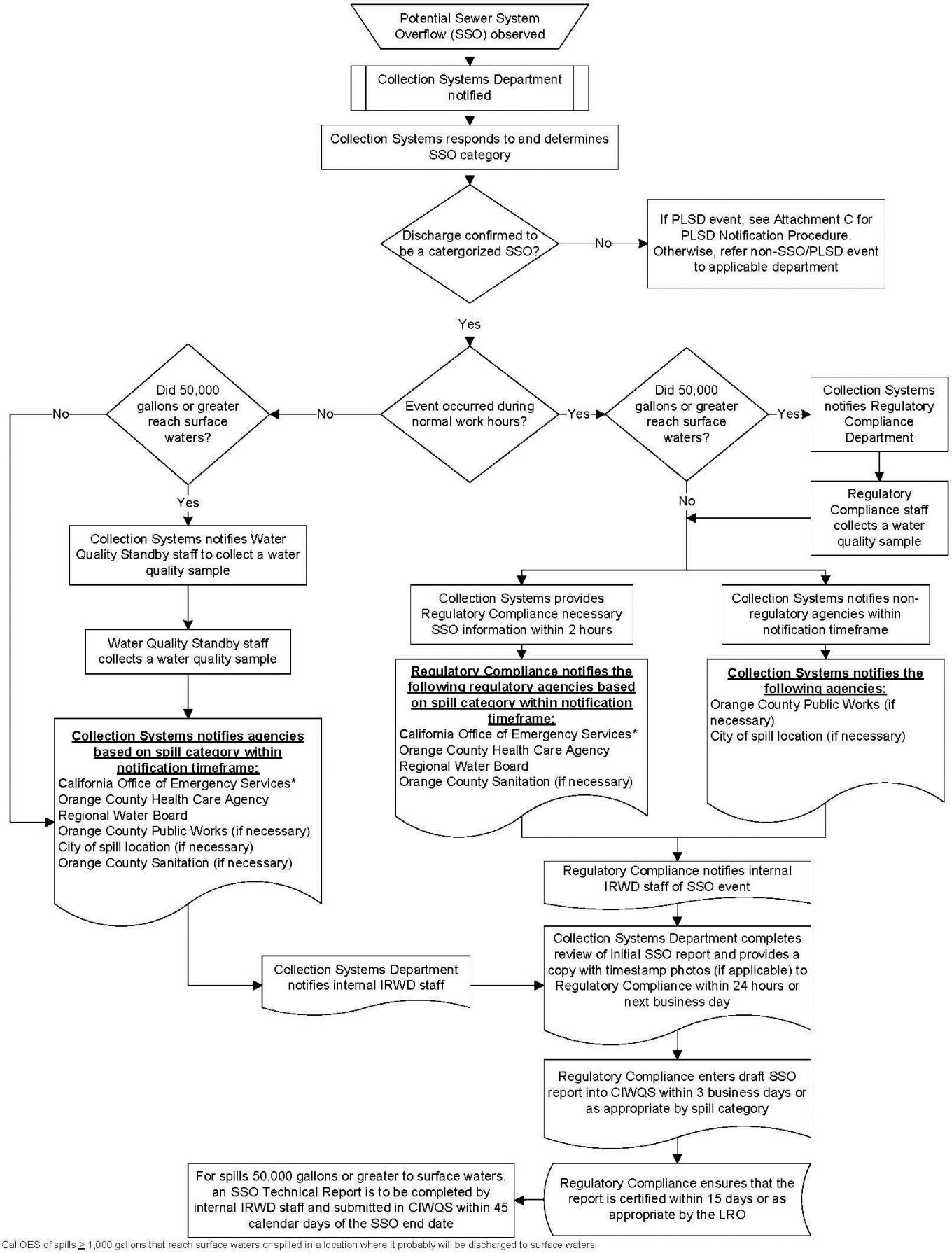
Santa Ana RWQCB Fax Number: (951) 781-6288
San Diego RWQCB Fax Number: (858) 571-6972

1. SSO CONTACT
   NAME: _____
   PHONE: _____
2. SSO LOCATION
   STREET: _____
   CITY: _____
3. SSO REACH SURFACE WATER OR DRAINAGE CHANNEL? _____
4. SSO REACH AN MS4? _____
5. SSO FULLY RECOVERED? _____
6. ESTIMATED SSO VOLUME: _____
7. ESTIMATED SSO VOLUME NOT RECOVERED: _____
8. ESTIMATED SSO VOLUME RECOVERED: _____
9. DESCRIPTION OF SSO APPEARANCE POINT: _____
10. SSO START DATE AND TIME: (MM/DD/YY, HH:MM) _____
11. SSO SPILL RESPONSE END DATE AND TIME: (MM/DD/YY, HH:MM) _____
12. DATE AND TIME ENROLLEE WAS NOTIFIED OR KNOWN OF SSO: (MM/DD/YY, HH:MM) _____
13. ESTIMATED OPERATOR ARRIVAL DATE AND TIME (MM/DD/YY, HH:MM) _____
14. DATE AMD TIME CAL OES NOTIFIED: (MM/DD/YY, HH:MM) _____
15. CAL OES CONTROL NUMBER: _____

Sanitary Sewer Overflow
Notification Procedure Flow Chart

Attachment B

SSO Notification Procedure Flow Chart

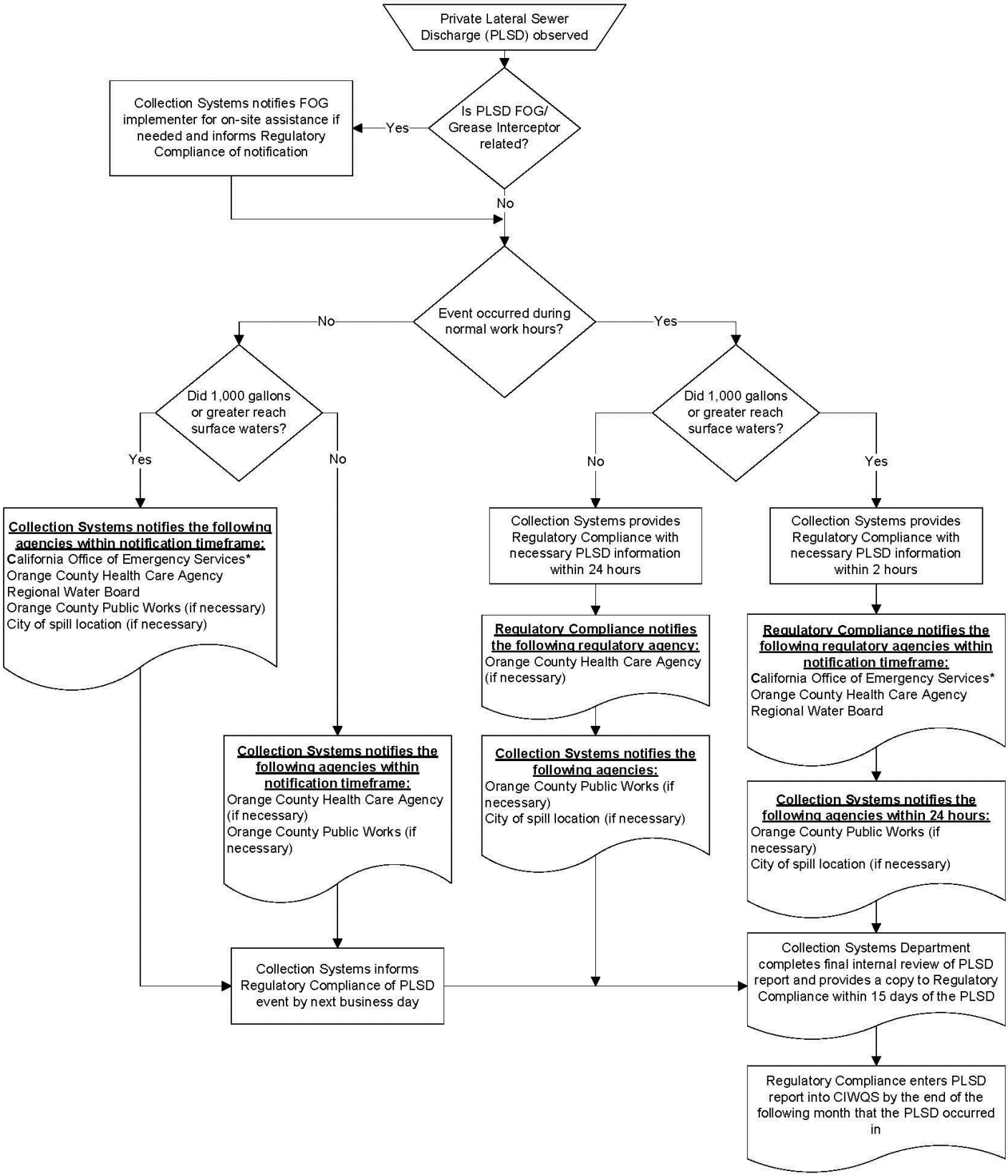


*Notify Cal OES of spills ≥ 1,000 gallons that reach surface waters or spilled in a location where it probably will be discharged to surface waters

Sanitary Sewer Overflow
Notification Procedure Flow Chart

Attachment C

PLSD Notification Procedure Flow Chart



*Notify Cal OES of spills ≥ 1,000 gallons that reach surface waters or spilled in a location where it probably will be discharged to surface waters

APPENDIX D

Collection System Lift Station Inspection Sheet
Department 57/Collection Systems

Operator: _____ **Station:** _____

Inspection Date: _____

Completed	Control Panel	Notes
	Control Panel Lights	
	Control Panel Switches	
	Sump Pump Switches	
	Overhead Panel Lights	
	Pump Seal Test	
	Overhead Outside Lights	
Completed	**Pumps**	**Notes**
	Pump Operation	Abnormal Noise, Pump Times Close
	Sump Pump Floats	
	Packing	
	Seal Oil	
	Surge Tank Compressor	
	P.S.I. Gauge	What Are The Gauges Reading
	Flow Output Acceptable	What Are The Flow Rates For Each Pump
	Pump Down Time	
	Bubbler Compressor	
	Leaking/Excessive Vibration	
Completed	**Generator**	**Notes**
	Generator Hours Recorded	
	Automatic Transfer Switch	
	Fuel Level	Full, 3/4, 1/2, 1/4
	Radiator / Heater Block	No Signs of Damage or Failure
	Leaks, Rat Nest, Access	
	Paperwork	All Up to Date
Completed	**Wet Well / Dry Well**	**Notes**
	Emergency Level Floats	
	Coating	No Signs of Damage or Failure
	Eye Wash	Last Time Checked
	Cables	No Signs of Damage or Failure
	Pump Seating	
	Guide Rails	Not Seperated or Offset
	Ventilator	No Signs of Damage or Failure
	Gas Detection	
	Exhaust Fans	No Signs of Damage or Failure
	Lids	Open,Close, Locks are Good
	Ultra Sonic Sensor	
	Bio-Magic System and Shelter	

Main Pumps

Pump 1 Hours_____Pump 2 Hours_____ Pump 3 hours_____

Pump 1 Hours_____Pump 2 Total_____Pump 3 Total_____

Sump Pumps

Pump 1 Hours_____Pump 2 Hours_____

Pump 1 Hours_____Pump 2 Total_____

Name: _____ Date: _____

Collection System Lift Stations Daily Lift Station Inspection Flow Reads

Station	Pump #1	Pump #2	Pump #3	Totalizer	24HR Totalizer
Buck Gully					
Coastal Ridge					
El Morro					
HATS					
Los Trancos					
Montecito					
Muddy Canyon					
Newport Coast					

Lift Station	Hours	Multiply by 0.6	Multiply by 100	Multiply by Est. Flow	Total Flow
Buck Gully Pump #1				180 Gallons	
Buck Gully Pump #2				180 Gallons	
Montecito Pump #1				120 Gallons	
Montecito Pump #2				120 Gallons	
Newport Coast Pump #1				1600 Gallons	
Newport Coast Pump #2				1600 Gallons	
Newport Coast Pump #3				1600 Gallons	

APPENDIX E

IRWD SSO OR BRINE DISCHARGE REPORT

(Return a copy of the completed report to Regulatory Compliance within 24 hours of spill event)

PHYSICAL LOCATION DETAILS

1. Sanitary Sewer System:
☐ El Toro CS ☐ Los Alisos WRP CS ☐ Michelson WRP CS ☐ OCSD Regional 1 CS ☐ OCSD Regional 2 CS

2. Regional Water Quality Control Board: ☐ Region 8 (Santa Ana) ☐ Region 9 (San Diego)

3. Spill location address: _____
Street Number Street Name City

4. Spill location description: _____

ESTIMATED SPILL VOLUMES

5. Estimated spill volume that reached a separate storm drain, drainage channel, surface water body, or land:

Storm Drain:	_____	Gallons Spilled	_____	Gallons Recovered[1]
Drainage Channel:	_____	Gallons Spilled	_____	Gallons Recovered
Directly to Surface Water Body:	_____	Gallons Spilled	_____	Gallons Recovered
Land[2]:	_____	Gallons Spilled	_____	Gallons Recovered[1]

[1]Do not include water used for clean-up.
[2]Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location. Also, includes backups to building structures.

6. Explanation of volume estimation methods used: _____

SPILL DETAILS

7. Spill appearance point: (Check all that apply)
☐ Backflow Prevention Device ☐ Force Main ☐ Gravity Mainline ☐ Inside Building/Structure
☐ Lateral Clean Out ☐ Lower Lateral ☐ Manhole ☐ Pump Station
☐ Other Sewer System Structure
☐ Other/Notes: _____

8. Final spill destination: (Check all that apply)
☐ Beach ☐ Building/Structure ☐ Drainage Channel ☐ Paved Surface ☐ Separate Storm Drain
☐ Street/Curb/Gutter ☐ Surface Water ☐ Unpaved Surface
☐ Other/Notes: _____

9. Estimated spill start date and time: _____ (MM/DD/YY, HH:MM)

10. Date and time IRWD was notified of or discovered spill: _____ (MM/DD/YY, HH:MM)

11. Estimated Operator arrival date and time: _____ (MM/DD/YY, HH:MM)

12. Estimated spill end date and time: _____ (MM/DD/YY, HH:MM)

13. Spill response completion date and time: _____ (MM/DD/YY, HH:MM)

14. Spill cause: (Check one)

☐ Air Relief/Blow-Off Valve Failure	☐ Construction Diversion Failure	☐ CS Maintenance Caused Spill/Failure
☐ Damage by Others unrelated to CS Const./Maint.	☐ Debris from Construction	☐ Debris from Lateral
☐ Debris-General	☐ Debris-Rags	☐ Flow Exceeded Capacity (Separate CS)
☐ Grease Deposition (FOG)	☐ Inappropriate Discharge to CS	☐ Natural Disaster
☐ Non-Dispersables	☐ Operator Error	☐ Pipe Structural Problem
☐ Pipe Structural Problem-Controls	☐ Pump Station Problem-Power	☐ Pump Station Problem-Installation
☐ Pump Station Failure-Mechanical	☐ Root Intrusion	☐ Rainfall Exceeded Design, I&I (Separate CS)
☐ Siphon Failure	☐ Surcharged Pipe (Combined CS)	☐ Vandalism

☐ Other/Notes: _____

(revised: 10/25/16)

IRWD SSO OR BRINE DISCHARGE REPORT

(Return a copy of the completed report to Regulatory Compliance within 24 hours of spill event)

15. Where did failure occur? (Check one)

☐ Air Relief/Blow-Off Valve Failure ☐ Force Main ☐ Gravity Mainline ☐ Lower Lateral ☐ Manhole
☐ Pump Station-Controls ☐ Pump Station-Mechanical ☐ Pump Station-Power ☐ Siphon
☐ Other/Notes: _____

16. Spill response activities: (Check all that apply)

☐ Cleaned-Up ☐ Contained all or portion of spill ☐ Mitigated Effects of Spill ☐ Property Owner Notified
☐ Restored flow ☐ Returned All Spill to Sanitary System ☐ Other Enforcement Agency Notified
☐ Other/Notes: _____

17. Spill corrective action take: (Check all that apply)

☐ Added sewer to preventive maintenance program ☐ Adjusted schedule/method of preventative maintenance
☐ Enforcement action against FOG source ☐ Inspected Sewer Using CCTV to Determine Cause
☐ Plan rehabilitation or replacement of sewer ☐ Repaired Facilities or Replaced Defect
☐ Other/Notes: _____

NOTIFICATION DETAILS

California Office of Emergency Services: (800) 852-7550	OES Control Number	Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
Orange County Health Care Agency: (714) 433-6000, After Hours: (714) 682-7008		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
Regional Water Quality Control Board: Region 8: (951) 320-2028, After Hours: (951) 782-4130 Region 9: (858) 467-4254, After Hours: (858) 457-2952		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
Orange County Public Works: (877) 897-7455		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
Orange County Sanitation District: (*Brine*) (714) 593-7025		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
City: (if necessary) Costa Mesa: (714) 549-1111 Irvine: (949) 724-7200 Lake Forest: (949) 461-3480 Newport Beach: (949) 644-3717 Orange: (714) 744-7444 Santa Ana: (714) 647-5700 Tustin: (714) 573-3200	City	Person Contacted	Date (MM/DD/YY)	Time (HH:MM)

COMMENTS

(revised: 10/25/16)

IRWD PLSD REPORT

(Return a copy of the completed report to Regulatory Compliance)

GENERAL INFORMATION

1. Sanitary Sewer System:
☐ El Toro CS ☐ Los Alisos WRP CS ☐ Michelson WRP CS ☐ OCSD Regional 1 CS ☐ OCSD Regional 2 CS

2. Regional Water Quality Control Board: ☐ Region 8 (Santa Ana) ☐ Region 9 (San Diego)

3. Estimated Spill Volume: _____ Gallons

4. Did the spill discharge to a drainage channel or surface water? ☐ Yes ☐ No

5. Did the spill reach a storm drainpipe? ☐ Yes ☐ No (Skip #6, go to #7)

6. If spill reached a storm drainpipe, was all of the wastewater fully captured from the storm drain and returned to the sanitary sewer system? ☐ Yes ☐ No

7. Estimated volume of spill recovered: _____ Gallons

8. Estimated volume of spill that reached surface water, drainage channel, or not recovered from a storm drain: _____ Gallons

PHYSICAL LOCATION DETAILS

9. Spill location address: _____
Street Number Street Name City

10. Spill location description: _____

SPILL DETAILS

11. Spill appearance point: (Check all that apply)
☐ Force Main ☐ Gravity Mainline ☐ Inside Building/Structure ☐ Lateral Clean Out ☐ Manhole ☐ Pump Station
☐ Upper Lateral ☐ Other/Notes: _____

12. Final spill destination: (Check all that apply)
☐ Beach ☐ Building/Structure ☐ Combined Storm Drain ☐ Drainage Channel ☐ Paved Surface
☐ Separate Storm Drain ☐ Street/Curb/Gutter ☐ Surface Water ☐ Unpaved Surface
☐ Other/Notes: _____

13. Estimated spill start date and time: _____
(MM/DD/YY, HH:MM)

14. Date and time IRWD was notified of or discovered spill: _____
(MM/DD/YY, HH:MM)

15. Estimated Operator arrival date and time: _____
(MM/DD/YY, HH:MM)

16. Estimated spill end date and time: _____
(MM/DD/YY, HH:MM)

17. Spill cause: (Check one)

☐ Air Relief/Blow-Off Valve Failure	☐ Construction Diversion Failure	☐ CS Maint. Caused Spill/Failure
☐ Damage by Others unrelated to CS Const./Maint.	☐ Debris from Construction	☐ Debris-General
☐ Debris-Rags	☐ Flow Exceeded Capacity (Separate CS Only)	☐ Grease Deposition (FOG)
☐ Inappropriate Discharge to CS	☐ Natural Disaster	☐ Operator Error
☐ Pipe Structural Problem/Failure	☐ Pipe Structural Problem/Failure-Installation	☐ Pump Station Failure-Controls
☐ Pump Station Failure-Mechanical	☐ Pump Station Failure-Power	☐ Root Intrusion
☐ Rainfall Exceeded Design, I&I (Separate CS Only)	☐ Vandalism	

☐ Other/Notes: _____

(revised: 10/19/16)

IRWD PLSD REPORT

(Return a copy of the completed report to Regulatory Compliance)

18. PLSD Source: (Check one)

- ☐ Multi-Family Home (≤4 Units – Apts, Condos, etc)
- ☐ High Density Residential (≥5 Units – Apts, Condos, etc)
- ☐ Single Family Home
- ☐ Food Service Establishment (FSE)
- ☐ Public/quasi-public institutions (Hospital, school, etc)
- ☐ Mixed Use Property
- ☐ Commercial Property (Office, retail, etc.)
- ☐ Industrial Property

19. Where did failure occur? (Check one)

- ☐ Air Relief/Blow-Off Valve
- ☐ Force Main
- ☐ Gravity Mainline
- ☐ Manhole
- ☐ Siphon
- ☐ Pump Station-Controls
- ☐ Pump Station-Mechanical
- ☐ Pump Station-Power
- ☐ Upper Lateral (Private)
- ☐ Other/Notes: _____

20. Spill response activities: (Check all that apply)

- ☐ Cleaned-Up
- ☐ Contained all or portion of spill
- ☐ Mitigated Effects of Spill
- ☐ Property Owner Notified
- ☐ Returned All Spill to Sanitary Sewer System
- ☐ Restored flow
- ☐ Other Enforcement Agency Notified
- ☐ Other/Notes: _____

NOTIFICATION DETAILS

California Office of Emergency Services: (800) 852-7550	OES Control Number	Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
Orange County Health Care Agency: (714) 433-6000, After Hours: (714) 628-7008		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
Regional Water Quality Control Board: Region 8: (951) 320-2028, After Hours: (951) 782-4130 Region 9: (858) 467-4254, After Hours: (858) 457-2952		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
Orange County Public Works: (877) 897-7455		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
EEC Environmental: (*if needed*) Jim Kolk: (714) 642-8937 Joe Jenkins: (562) 447-4109		Person Contacted	Date (MM/DD/YY)	Time (HH:MM)
City: (*if necessary*) Costa Mesa: (714) 549-1111 Irvine: (949) 724-7200 Lake Forest: (949) 461-3480 Newport Beach: (949) 644-3717 Orange: (714) 744-7444 Santa Ana: (714) 647-5700 Tustin: (714) 573-3200	City	Person Contacted	Date (MM/DD/YY)	Time (HH:MM)

COMMENTS

(revised: 10/19/16)

APPENDIX F

ENVIRONMENTAL
ENGINEERING & CONTRACTING, INC.
501 Parkcenter Drive, Santa Ana, CA 92705
Phone (714) 667-2300 Fax (714) 667-2310

IRVINE RANCH WATER DISTRICT

FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM MANUAL

Date Prepared:

December 15, 2004

Table of Contents

1.0 INTRODUCTION 1

2.0 FOG CONTROL PROGRAM BACKGROUND AND OVERVIEW 2
2.1 Service Area 2
2.2 Sanitary Sewer Overflows 2
2.3 Historical FOG Control Activities 2
2.4 Overview of FOG Control Program 3

3.0 SEWER LINE – HOT SPOT PREVENTATIVE MAINTENANCE 3
3.1 Overview of Sewage Collection System and Mapping 3
3.2 Routine Sewer Line Cleaning and CCTV 4
3.3 Hot Spot Sewer Line Identification, Prioritization and Cleaning 4
3.4 FOG Sewer Line Characterization and Source Identification Activities 5
3.5 Hot Spot Data Management 5

4.0 FSE FOG CONTROL PROGRAM 6
4.1 Legal Authority 6
4.2 Food Service Establishments (FSEs) 6
4.3 FOG Wastewater Discharge Requirements 6
4.3.1 GENERAL PERMIT REQUIREMENTS 6
4.3.1.1 Part I - Effluent Limitations and Discharge Requirements 7
4.3.1.2 Part II - Requirements for FOG Control 7
4.3.1.3 Part III - Record-Keeping and Notification and Reporting Requirements 7
4.3.1.4 Part IV - Standard Conditions 7
4.3.2 SPECIFIC PERMIT CONDITIONS 8
4.3.2.1 Grease Interceptor Installation Requirements 8
4.3.2.2 Other Requirements or Modifications 10
4.4 Grease Interceptors 10
4.4.1 OPERATION 10
4.4.2 SIZING 11
4.5 Waste Hauling Requirements 12
4.6 FSE Education 12
4.7 FSE Inspections 13
4.8 FSE Enforcement 13
4.8.1 BMP NON-COMPLIANCE 14
4.8.2 GRE NON-COMPLIANCE 15
4.8.3 FOG SOURCE SEWER LINE NON-COMPLIANCE 15
4.8.4 COMPLIANCE SCHEDULE AGREEMENTS (CSA) 16
4.8.5 APPEALS 16
4.9 FSE FOG Program and Data Management 16

5.0 MULTI-FAMILY HOUSING, AND SINGLE FAMILY HOME FOG CONTROL PROGRAM 17

6.0 INDUSTRIAL FOG PROGRAM 17

Figures:

Figure 1: Grease Interceptor Installation Evaluation Process Flow Chart 9
Figure 2: Typical Conceptual Grease Interceptor Design – Side View 11
Figure 3: FOG Control Program General Enforcement Response Plan 14

Appendices

Appendix A: Irvine Ranch Water District Service Area Map
Appendix B: Historical SSOs
Appendix C: Irvine Ranch Water District Composite Sewer, SSOs, Hot Spots and FSE Map
Appendix D: Irvine Ranch Water District Sewer Hot Spot Report
Appendix E: Irvine Ranch Water District Food Service Establishment (FSE) List
Appendix F: Irvine Ranch Water District FOG Waste Discharge Permit
Appendix G: Building Department Referral Form for Irvine Ranch Water District Approval of Sewer Connection and/or Grease Removal Equipment
Appendix H: "Honolulu Method" for Grease Interceptor Sizing
Appendix I: Waste Hauling Documentation Requirements
Appendix J: FSE Record Keeping Logs and Educational Material
Appendix K: Multi-Family Homes and Single Family Home Educational Material

1.0 INTRODUCTION

Irvine Ranch Water District's (District) Fats, Oils, and Grease (FOG) Control Program has been developed to prevent FOG-related sanitary sewer overflows (SSOs) as required by the Santa Ana Regional Water Quality Control Board (SARWQCB) *General Waste Discharge Requirements* (WDR), Order No. R8-2002-0014, issued in April 2002. This order was issued in response to a regional SSO problem and was issued to 32 co-permittees, which included local agencies, such as cities and special districts, in the northern and central portions of Orange County.

The FOG Control Program's goal is to eliminate all FOG-related SSOs. These SSOs are usually attributable to cooking grease in wastewater discharged from Food Service Establishments (FSEs)[1], multi-family housing, and single family homes that create FOG (or grease) blockages in sanitary sewer collection systems. These grease blockages, located in either the property owner's sewer lateral or the sanitary sewerage system, lead to SSOs, which can cause untreated sewage to flow onto streets and travel to storm drains, creeks, and other surface waters. Untreated sewage on private property or in the street is a nuisance and poses an obvious human health risk. If this sewage reaches the ocean, it often results in coastal contamination, beach closures, and the associated potential human health risks.

To achieve this goal of eliminating FOG-related SSOs, the WDR has identified key requirements for a FOG Control Program, which are as follows:

- Limit grease discharges that may cause blockages;
- Prohibit FOG discharges that may cause sewer overflows;
- Adopt and enforce an ordinance;
- Require implementation of kitchen best management practices (BMPs);
- Require installation of grease removal equipment, as necessary;
- Inspect FSEs; and
- Implement source control measures for sewer line "hot spots[2]".

These requirements are the key issues that were addressed in the development of the District's FOG Control Program.

[1] Food Service Establishments (FSEs) are those establishments primarily engaged in preparing or serving food to the public such as restaurants, hotels, commercial kitchens, bakeries, caterers, schools, prisons, correctional facilities, and care institutions.
[2] Known problem areas in the sanitary sewer system that require more frequent cleaning and maintenance.

2.0 FOG CONTROL PROGRAM BACKGROUND AND OVERVIEW

2.1 Service Area

The District provides water and sewer service to a population of 316,000 through 89,067 connections. The District's service area includes approximately 85,019 acres (133 square miles (Refer to the map in Appendix A).

2.2 Sanitary Sewer Overflows

The District has adopted a Sewer System Overflow Response Plan (SSORP) to ensure that any reported spill is responded to immediately to protect the public health and safety, and to protect the beneficial uses of the waters of the United States. The SSORP identifies the response procedures, the notification and reporting requirements, and follow-up requirements for the District associated with SSOs. The partial list of historical SSOs is provided in Appendix B.

2.3 Historical FOG Control Activities

The District initiated a FOG Characterization Study (Study) in 2004 to provide key information and program recommendations for the development of the District's FOG Control Program. The Study consists of four tasks:

- Hot Spot Characterization - identifying and mapping the known problem areas in the sanitary sewer system that require more frequent cleaning and maintenance (referred to as "hot spots") due to FOG. Key information will be obtained from available staff to identify the factors that cause or may contribute to the 180 areas identified as hot spots.
- FOG Source Characterization - physically inspecting the hot spots through the use of closed circuit television (CCTV) equipment to further assess approximately 75 critical hot spots identified by the District's staff to confirm known or to identify unknown problems in the sanitary sewer system and to identify potential sources of FOG.
- FSE Characterization - physically inspecting and educating the FSEs. Approximately, 750 FSEs located within the district service area will be inspected to identify and classify each FSE's potential to generate and discharge FOG to the sanitary sewer system.
- Data Integration and Program Recommendations - mapping the hot spot and FSE locations, development of databases for the information collected from the FSE Characterization, and the Hot Spot Characterization and the FOG Source Characterization. Correlations and recommendations for the development of the District's FOG Control Program will then be developed utilizing these resources.

Although the District's Study has not yet been concluded, the results from FOG Characterization Studies from similar sewering agencies (that have been completed) are

most likely very similar to the anticipated District's results. Thus, these Study results from similar sewering agencies will be utilized as a basis for the program. The Studies concluded that FOG Source Characterization (CCTV inspection of Hot Spots) is extremely beneficial at identifying the potential sources, determining the cleaning effectiveness, defining the contributing issues (e.g., structural issues, roots, other), and assisting in defining the approach for resolving and/or controlling the grease blockage issues for Hot Spots. Additionally, the Studies concluded that FSE Characterization activities are beneficial in identifying potential grease producing equipment, identifying the removal equipment and maintenance practices, and kitchen best management practices.

The Studies recommended inspections to ensure that the grease removal equipment (GRE) is maintained properly and that kitchen best management practices (BMPs) are followed to minimize the accumulation of grease and blockages in the sanitary sewer system. Additionally, the Studies recommended: cleaning of hot spots be continued and the cleaning effectiveness and frequency be evaluated (through the judicious use of CCTV) on an ongoing basis for District staff and cleaning contractors; and upgrades to sewer pipe segments be prioritized in hot spot areas focusing on structural repairs that may minimize grease accumulation and potentially resolve the hot spot.

2.4 Overview of FOG Control Program

The FOG Control Program is based on the FOG Characterization Studies from similar sewering agencies and the requirements of the WDR. This program integrates various elements into the program to accomplish the goal. These key elements of the program are: sewer line maintenance activities associated with the FOG-related hot spots; a FOG Control Ordinance, and inspection process to minimize the discharge of FOG from FSEs; an educational outreach program to minimize the discharge of FOG from multi-family housing, and single family homes; and the Orange County Sanitation District's (OCSD) Waste Discharge Pretreatment and Source Control Program for discharge of FOG from industry.

3.0 SEWER LINE – HOT SPOT PREVENTATIVE MAINTENANCE

3.1 Overview of Sewage Collection System and Mapping

The District's sewage collection system consists of a network of trunk sewers, manholes, and a lift station, which conveys approximately 14 million gallons per day at MWRP and 4.3 million gallons per day at (LAWRP) of sewage generated within the District's service area to trunk sewers for treatment at District Water Reclamation Plants. The system consists of approximately 791miles of collection system mainline piping ranging in size from 6 inches to 60 inches. The system includes 14 sewage lift stations, approximately 70,122 linear feet of forced main, 13,460 manholes and over 100,213 individual service connections. The District is responsible for repairs to the sewer laterals from the public sewer main to the property line in the public right of way.

This sewer collection system is mapped utilizing two methods: Atlas Maps and a Composite (Digital) Map. Historically, the core mapping for the District has been documented by the use of sectional Atlas Maps. These Atlas Maps have been incorporated into Atlas Books that include every sewer mainline and manhole

The District has also developed a Composite Map, which displays the entire system on a single map utilizing GIS. The Composite Map incorporates a grid system similar to the Atlas Maps and displays the information contained on the Atlas Maps. As modifications to the sewer system occur, the Composite Map is updated and the affected pages of the Atlas Map are printed to update the Atlas Maps, as appropriate. (Refer to the map in Appendix C).

3.2 Routine Sewer Line Cleaning and CCTV

The entire collection system is cleaned on approximately a one-year cycle. The line cleaning operation is accomplished utilizing a Vactor unit by two trained operators. The general process consists of hydrojetting the sewer line and vacuuming excessive debris generated from downstream manholes. The program is typically performed in a progressive manner meaning that the system is cleaned from manhole to manhole continuing on each successive day at the manhole following that at which work was ceased on the previous day. If significant FOG is identified during the line cleaning operation, the area is then evaluated for potential further analysis utilizing closed circuit television (CCTV) inspection.

Visual inspection, utilizing CCTV, of the entire collection system is conducted on a rotating basis every 6 years years. Any problems identified during the video inspection are scheduled for correction depending on their severity. Copies of the video recording are made by the contractor and supplied to the District.

3.3 Hot Spot Sewer Line Identification, Prioritization and Cleaning

Sewer line cleaning is conducted in FOG-related Hot Spots or specific reaches of sewer pipe that have a history of FOG-related problems or pose higher than normal risk of an SSO. These Hot Spots are identified during normal maintenance of the collection system by maintenance staff when they observe conditions that warrant more frequent cleaning. Additionally, if necessary, locations where an SSO occurs may be designated as a Hot Spot and cleaned on a more frequent basis. The frequency of cleaning for these Hot Spots ranges generally from monthly to semi annually depending on the severity of the problem and the cleaning effectiveness. These Hot Spots are evaluated (through the judicious use of CCTV) on an ongoing basis. Additionally, the list of Hot Spots is periodically reviewed to assess the necessity to maintain high frequency cleaning at each location. Refer to Appendix D for an example Hot Spot Report and Appendix C for an example of a Composite Sewer & Hot Spot Map.

3.4 FOG Sewer Line Characterization and Source Identification Activities

Many issues in the sanitary sewer system can contribute to a hot spot, each with varying degrees of severity. Management of this information for each hot spot location is necessary to identify effective solutions and to prioritize resources. Sewer line characterization is the process of classification and prioritization of these hot spots in the District's sanitary sewer system. It is important to note that while there are many reasons and causes for hot spots in the sanitary sewer system, the focus of the FOG Control Program is the FOG-related locations.

The characterization process consists of collecting all known (or perceived) factors associated with each hot spot from the sewer maintenance staff to identify the critical information. Factors related to pipe conditions and potential sources are identified, documented and mapped. Relationships between the various factors are then developed to define each hot spot. For critical hot spots, visual inspections utilizing CCTV of the hot spot and the sewer pipe upstream of the hot spot is conducted: to confirm known or to identify unknown problems in the sanitary sewer system; and to identify the potential sources of FOG. This information is critical to the FOG Control Program to enable identification and implementation of the appropriate mitigation solutions.

The potential solutions include the evaluation of structural issues that impact hot spots. The resolution of the structural issue is evaluated to determine if repair may minimize grease accumulation and potentially resolve the hot spot. Additionally, the laterals (and associated discharger[s]) identified as potential sources of FOG during these CCTV inspections will be documented and the information will be provided to the FOG Control Program Manager for appropriate source reduction and enforcement activities (refer to Sections 4.7 and 4.8).

Ultimately, this information will help to guide the focus of the FOG Control Program to those hot spot locations that present the greatest potential for SSOs.

3.5 Hot Spot Data Management

The sewer line hot spot cleaning is the responsibility of the Collection System Manager and data management is the responsibility of the Administrative Analyst who works directly with the FOG Control Program Manager.

The Hot Spot data management process consists of:

- Database that is utilized to document and manage the Hot Spot data. The database identifies: Hot Spot locations and the associated sewer piping; cleaning frequencies; and structural issues associated with each Hot Spot. (Refer to the Appendix D for a Hot Spot Report)
- Composite Map displaying the location of the Hot Spots (Appendix C)

4.0 FSE FOG CONTROL PROGRAM

4.1 Legal Authority

The District has adopted Grease Control Regulations (Section 7.11 of the District's Rules and Regulations) to specify appropriate FOG discharge requirements for food service establishments (FSEs) to prevent blockages of sewer lines resulting from discharges of FOG. The discharge requirement prohibits FSEs from "the discharge into the sewer system of FOG that may accumulate and/or cause or contribute to blockages in the sewer system or at the sewer system lateral."

The key elements of these regulations are the requirement of FSEs to:

- Obtain a FOG Wastewater Discharge Permit to discharge wastewater to the sanitary sewer system;
- Implement best management practices (BMPs); and
- Install, operate and maintain an approved type and adequately sized grease interceptor.

4.2 Food Service Establishments (FSEs)

These regulations are applicable to all Food Service Establishments designated as facilities defined in California Uniform Retail Food Service Establishments Law (CURFFL) Section 113785, and any commercial entity within the boundaries of the District, operating in a permanently constructed structure such as a room, building, or place, or portion thereof, maintained, used, or operated for the purpose of storing, preparing, serving, or manufacturing, packaging, or otherwise handling food for sale to other entities, or for consumption by the public, its members or employees, and which has any process or device that uses or produces FOG, or grease vapors, steam, fumes, smoke or odors that are required to be removed by a Type I or Type II hood, as defined in CURFFL Section 113785.

The FSEs identified within the District are establishments ranging from sandwich shops to full service restaurants, including major kitchens in retirement homes or hospital facilities. These FSEs are listed in Appendix E.

4.3 FOG Wastewater Discharge Requirements

The District has developed a FOG Wastewater Discharge Permit (Permit) for FSEs (Appendix F) and issues each FSE a Permit that identifies the facilities requirement. The Permit has General Permit Conditions (or requirements) that apply to all FSEs; and it may also have specific permit conditions that apply uniquely to individual FSEs.

4.3.1 GENERAL PERMIT REQUIREMENTS

General Permit Conditions have been developed to identify the core requirements of the FOG Regulation, which the FSEs are required to comply with. These conditions are segregated into sections and are summarized as follows:

4.3.1.1 Part I - Effluent Limitations and Discharge Requirements

- Waste discharge of FOG into the sewer system will not accumulate and/or cause or contribute to a blockage.
- General Prohibitions
    - No food grinders (garbage disposal units) for new or existing FSEs – 180 days to retrofit
    - No emulsifying additives, no use as a supplement to interceptor maintenance
    - No disposal of waste cooking oil into drains
    - No discharge of wastewater in excess of 140 degrees Fahrenheit into grease removal equipment
    - No discharge of wastewater from dishwashers into a grease trap or interceptor
    - No toilet discharge into grease interceptor
    - No waste removed from the interceptor shall be discharged into the sewer system

4.3.1.2 Part II - Requirements for FOG Control

- Best Management Practices (BMPs)
    - Installation of drain screens
    - Segregation and collection of waste cooking oils
    - Disposal of food waste into trash or garbage, and not into sinks
    - Employee Training
    - Kitchen signage
- FOG Pretreatment
    - Requirement for the installation of a grease interceptor
    - Requirement for grease interceptor maintenance (FOG and/or solids cannot exceed 25% of the capacity of the interceptor)
    - Frequency of grease interceptor maintenance (minimum quarterly [once every 3 months])

4.3.1.3 Part III - Record-Keeping and Notification and Reporting Requirements

- Record Keeping requirements
    - Logbook of employee training
    - Records of spills and/or cleaning of the lateral or sewer system
    - Logbook of grease control equipment cleaning activities
    - Copies of grease control equipment records or waste hauling manifests
    - Records of sampling data and height monitoring of FOG and solid accumulation in the interceptor
- Notification Requirements
    - Notification of a spill
    - Notification regarding planned changes

4.3.1.4 Part IV - Standard Conditions

- Non-transferability of Permit
- Access requirements
- Civil Penalties
- Criminal Penalties

- Severability
- Termination of service

4.3.2 SPECIFIC PERMIT CONDITIONS

Specific requirements can be required or authorized by the FOG Control Program Manager for individual FSEs. These specific permit conditions can be segregated into two categories: 1) grease interceptor installation requirements for FSEs; and 2) other requirements or permit modifications.

4.3.2.1 Grease Interceptor Installation Requirements

The requirement for the installation of a grease interceptor is a key requirement of the District's FOG Regulations. However, this requirement has many options for FSEs that may delay or potentially override this requirement. The attached flow chart generally describes the evaluation process that will be utilized for the grease interceptor installation requirement.

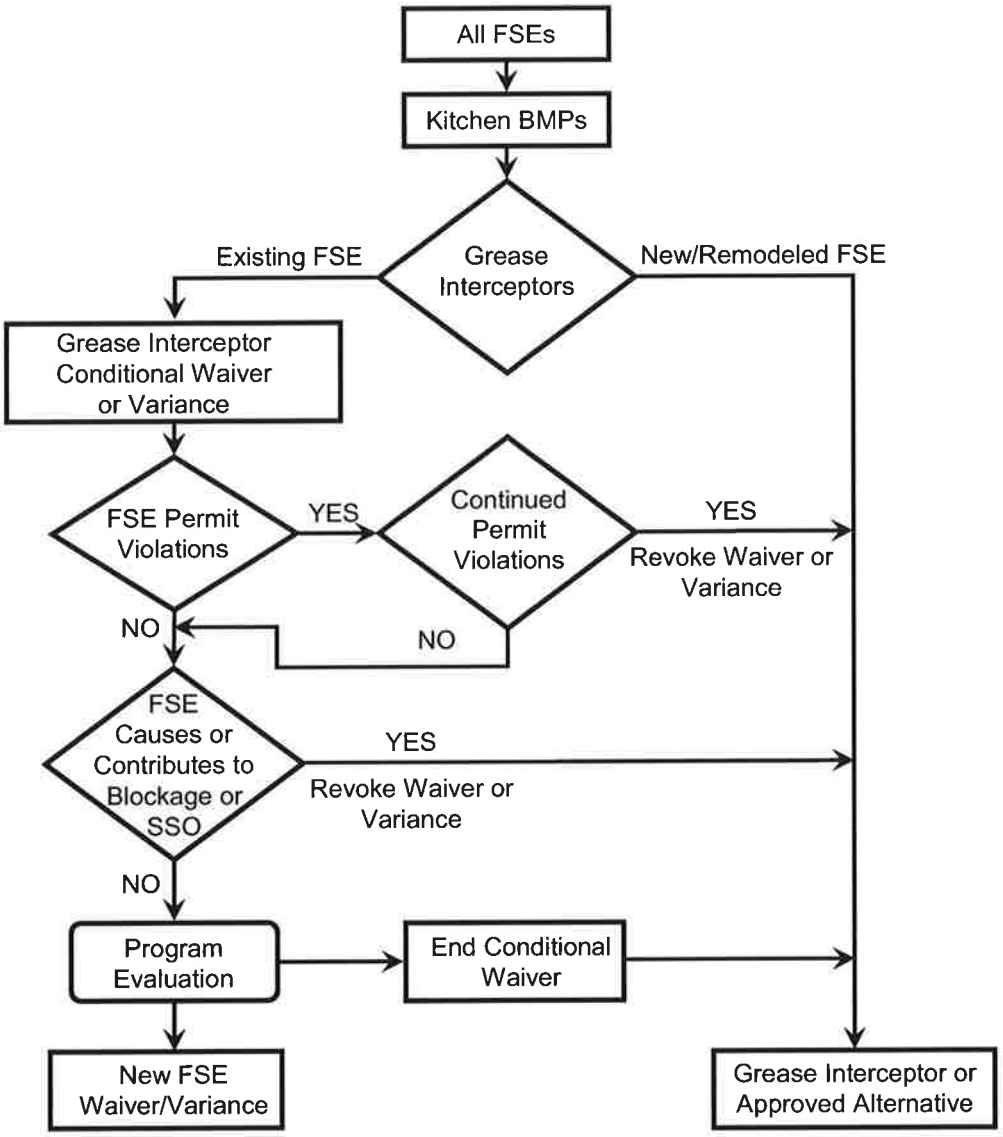


Figure 1: Grease Interceptor Installation Evaluation Process Flow Chart

Based on the process flow chart, the majority of existing FSEs that do not have grease interceptors installed have been issued a "Conditional Waiver" from the requirement to install a grease interceptor. However, if the FSE has continued program violations or if the FSE is identified as a significant contributor of FOG to the sewer system, the "Conditional Waiver" may be revoked requiring the installation of a grease interceptor.

4.3.2.2 Other Requirements or Modifications

There are other situations where specific permit conditions will be required or approved by the FOG Control Program Manager. A few of the common "other" specific conditions are as follows:

- Authorization for the utilization of an additive
- Requirement for increased maintenance frequency of the grease interceptor
- Authorization to extend the period between pumping services grease interceptor pumping services
- Requirement to submit records (grease interceptor maintenance log and waste hauling receipts and other logs) to the District on a scheduled semi-annual basis

4.4 Grease Interceptors

4.4.1 OPERATION

Grease interceptors are underground or in-ground grease collection devices that separate FOG (or grease), solids, and water based on the principle of Stoke's Law. Stoke's Law describes the rising or settling of a particle in a fluid (water in this case). Simply put, under non-turbulent conditions in an interceptor given enough time, particles that are lighter then water (grease) will rise to the surface and particles that are heavier than water (solids) will settle to the bottom. A typical conceptual interceptor design is illustrated in Figure 2.

The proper plumbing and placement of baffles will provide the non-turbulent conditions. The proper dimensions and volume of the interceptor will provide sufficient retention time to allow the particles to fully rise or settle before they pass-through to the outlet of the interceptor. Over time, the grease and solids layers thicken and will eventually fill the first chamber if they are not removed. If the grease and solids are not removed regularly, the interceptor no longer functions for its intended purpose, and grease will be carried into the sewer system. Emulsified or partially emulsified particles will rise or settle slower, which is why soaps and other emulsifiers may cause some grease or solids to pass-through an interceptor and collect downstream of the interceptor.

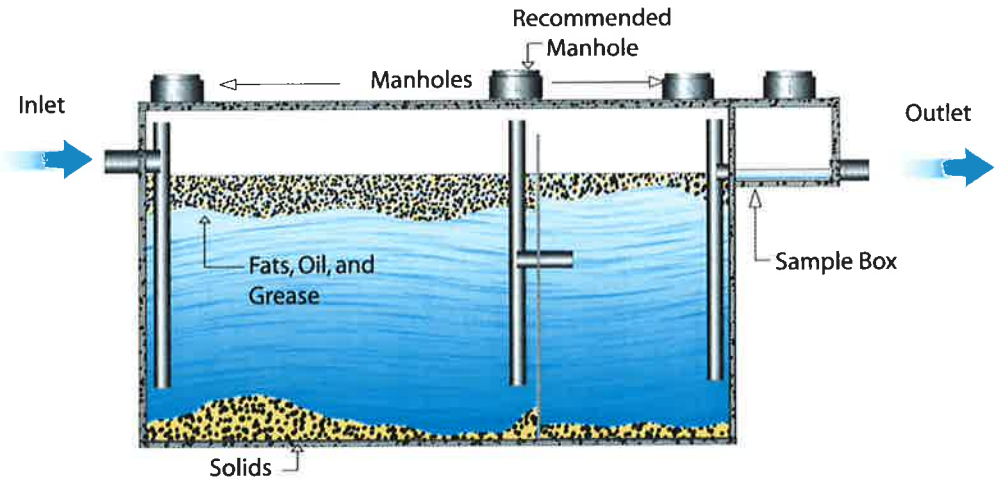


Figure 2: Typical Conceptual Grease Interceptor Design – Side View

Since an interceptor is not self-cleaning or free of maintenance, it is critical that an interceptor be suitably designed with manholes in the right locations to facilitate maintenance and that it be cleaned and pumped at a frequency that maintains its design removal efficiency.

4.4.2 SIZING

The District's FOG Control Program Manager will review and approve the sizing and installation of grease interceptors. This is accomplished by requirement of the permittee, by the appropriate Building Department, for the District's approval prior to issuance of the building permit. Refer to Appendix G for the form utilized by the Building Departments to refer the permittee to the District for grease interceptor installation and sizing approval.

The FOG Control Manager will base the design and sizing of the grease interceptors on the current version of the California Plumbing Code[3] (Code). Section §1014.8, "Grease Interceptors for Commercial Kitchens", refers to Appendix H of the Code for the provisions required for installation and sizing of grease interceptors. The FOG Control Program Manager will also consider the potential for large grease interceptors to become septic (which may create nuisance odors and corrosive conditions) due to excessively long retention times. Thus, the Code will be utilized with the following general considerations:

1) If the California Plumbing Code sizing calculation exceeds 1,500 gallons, the calculation should be compared against formulas such as the Honolulu Formula[4]

[3] The Code is based on the Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials with California amendments

[4] Many cities in the US have developed their own interceptor sizing criteria (e.g., Honolulu, Hawaii and Cary, North Carolina) based primarily on retention time and flow rate. Honolulu has developed a relatively simple interceptor sizing formula based on a retention time of 30 minutes, a storage factor of 1.25, and the maximum flow rate of the influent.

(refer to Appendix H) to ensure that the interceptor is not over-sized. If the results are dramatically different, the FOG Control Program Manager will use utilize his/her best judgment based on other factors at the FSE (e.g., cooking equipment, menu, frequency of use of the drainage fixture units) to determine the final size of the interceptor.

2) The floor of the interceptor should not be too deep to allow for proper cleaning and/or the individual interceptor should not be larger than 3,000 gallons for most installations. Multiple interceptors may be installed to satisfy very large flows.

3) An FSE calculation of 375 to 750 gallons should require an interceptor of 750 gallons.

4.5 Waste Hauling Requirements

Proper disposal of waste grease collected either from grease traps and interceptors or through kitchen practices is essential to a successful FOG control program. To ensure that FSEs properly dispose of their waste FOG and that haulers and disposal/recycling sites are properly operated, the District requires that all hauler documentation be completed and that the hauler provide the FSE a copy prior to departing the FSE. The FSE is required to maintain copies of the hauling documentation. The minimum information requirements to be documented on the hauler's record are (Refer to Appendix I for copy of the District's Waste Hauling Documentation requirements):

- Name of hauling company
- Name and signature of operator performing the pumpout
- Documentation of full pumpout with volume of water and FOG removed (e.g., 1500 gallons)
- Documentation of the level of floating FOG and Settable Solids (to determine if volume exceeds 25% capacity of the grease removal equipment)
- Documentation if repairs to the grease interceptor are required
- Identification of the facility where the hauler is planning to dispose of the waste

4.6 FSE Education

The District has developed FSE FOG Control educational material for the FSEs. The initial education to the FSEs was through FOG Characterization Study inspections conducted in 2004, through mailing, or ongoing inspections. In this process, the FSE was provided the General Requirements, a Kitchen BMP Poster, a Training CD, Record Keeping Logs and other Educational Material. This information is also available to FSEs by downloading it from the District's website www.irwd.com. Refer to Appendix J for examples of Kitchen BMP Signage, Record Keeping Logs, and other Educational Material.

4.7 FSE Inspections

To ensure compliance with the FOG Control Program requirements, the District has developed a few types of FSE Inspections. These inspections and their purpose are as follows:

Initial Inspections	These inspections are conducted to identify and classify each FSE's potential to generate FOG and its potential to discharge the FOG to the sanitary sewer system. If not adequately controlled, this FOG can lead to sewer blockages and, potentially, SSOs. The inspection identifies the type of food, equipment, and kitchen practices that contribute to FOG discharges and the equipment (e.g., grease interceptors, grease traps) that may reduce the discharge of FOG to the sewer. These initial inspections also provides the opportunity to educate the FSEs on the impact of their grease discharges, what they can do to minimize grease discharges, and how the District's Regulation could potentially impact them.
BMP Inspections	These inspections are conducted to evaluate compliance with the facility's best management practices requirements.
GRE Inspections	These inspections are conducted to evaluate compliance with the facility's grease removal equipment requirements.
Compliance Inspections	These inspections are conducted where it is determined by the FOG Control Program Manager that a follow-up inspection is required for a Non-Compliance issue that has been identified in previous BMP, GRE or FOG Source Sewer Line Inspections.
Enforcement Inspections	These inspections are conducted when elevated enforcement of the Permit requirements are required or when the revocation of the FSE's grease interceptor installation Conditional Waiver, Waiver or Variance is required.

The inspection strategy is to focus the District's resources on FSEs in the vicinity and upstream of Hot Spots and on FSEs that have been identified with a greater potential to generate FOG and discharge FOG to the sanitary sewer system. Generally, FSE inspections will be conducted on a biannual basis.

4.8 FSE Enforcement

The District has developed an enforcement response plan to respond to Non-Compliance issues identified during the inspection processes. The enforcement response will be based on the severity of the non-compliance and the history of non-compliance at the FSE. The general approach utilized is displayed below in Figure 3.

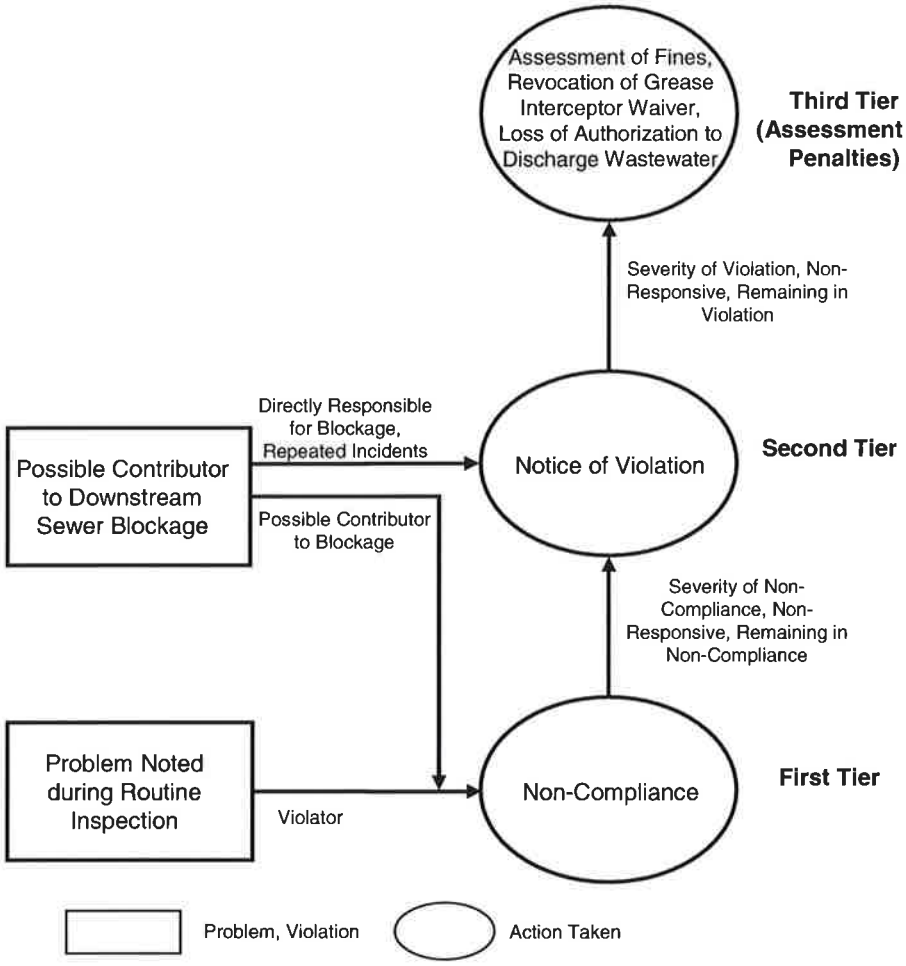


Figure 3: FOG Control Program General Enforcement Response Plan

4.8.1 BMP NON-COMPLIANCE

Issues identified as deficient during the BMP inspection process will be documented and the FSE will be issued a Notice of Non-Compliance. The Notice will identify the area of non-compliance and the required action. Issues identified as deficient during the inspection will compromise the effectiveness of the FOG BMP Program, which will increase the FSEs potential to discharge FOG into the sanitary sewer. Therefore, the overall impact of each of the deficient issues will need to be evaluated individually and in relationship to the other reported deficiencies to determine the projected impact and severity of the combined deficient issues. Generally, for a single deficient issue (not considered as a serious non-compliance individually), no further enforcement action will be taken after correction of the deficiency. For multiple deficient issues, a Notice of Violation may be issued with the potential for assessment of a non-compliance fee.

For repeated issues identified as non-compliant, the enforcement process may be elevated by: issuance of a Notice of Violation; assessment of non-compliance fees; increased assessment of fees; revocation of the FSE's Conditional Waiver requiring installation of a grease interceptor (if applicable); and the potential for the loss of the FSE's right to discharge wastewater into the District's sewer collection system.

4.8.2 GRE NON-COMPLIANCE

Issues identified as deficient during the GRE inspection process will be documented and the FSE will be issued a Notice of Non-Compliance. The Notice will identify the area of non-compliance and the required action. The majority of the issues on the GRE inspection form, if identified as deficient, will compromise the effectiveness of the GRE and would likely have resulted in a direct discharge of FOG into the sanitary sewer. Therefore, for these items it is considered a serious non-compliance issue and a Notice of Violation with the potential assessment of a non-compliance fee may be issued

For repeated issues identified as non-compliant, the enforcement process may be elevated by: assessment of non-compliance fees; increased assessment of fees; and the potential for the loss of the FSE's right to discharge wastewater into the District's sewer collection system.

4.8.3 FOG SOURCE SEWER LINE NON-COMPLIANCE

FSEs identified as sources of FOG to the District's sewer piping during FOG Source Sewer Line inspections will be issued Notices of Non-Compliance. This Notice will inform the FSE that FOG discharging from their lateral has impacted the District's sewer line. This is considered a serious non-compliance issue and a Notice of Violation may be issued and there may be an assessment of a non-compliance fee.

- If the FSE does not have a grease interceptor, the FSE will be informed that they have been identified as a significant FOG discharger, that their BMP practices do not appear to be effective and that stringent adherence to BMPs is required. Additionally, they will be informed that if their facility is identified as a source of FOG to the District's sewer during any future FOG Source Sewer Line inspections, the FSE's grease interceptor "Conditional Waiver" may be revoked requiring the installation of a grease interceptor.

- If the FSE has a grease interceptor, the FSE will be informed that they have been identified as a significant FOG discharger, and that the maintenance of their grease interceptor has not been effective. The FSE may be required to: 1) pump their grease interceptor on a more frequent basis; 2) conduct a functional integrity test of their grease interceptor; and/or 3) have their kitchen drain lines dye tested to ensure that the appropriate drains are connected to the interceptor.

For repeated non-compliance, the enforcement process may be elevated by increased assessment of fees including termination of the FSE's right to discharge wastewater into the District's sewer collection system.

4.8.4 COMPLIANCE SCHEDULE AGREEMENTS (CSA)

The General Manager may require the permittee to enter into a Compliance Schedule Agreement (CSA) when the permittee is in non-compliance with the terms of the Regulations, and/or is required to install grease control equipment or grease interceptor. The CSA may not be initiated until all amounts owed to the District by the FSE are paid in full and, if the compliance schedule is not achieved, the General Manager may initiate the enforcement process. This includes termination of the FSE's right to discharge wastewater into the District's sewer collection system.

4.8.5 APPEALS

Any FSE affected by the action or determination of the FOG Control Program Manager or Notice of Violation issued by an inspector may file a request for an appeal hearing with the General Manager. This request is required to be in writing and must be submitted within 15 days of the date of the notice of the decision or action. The General Manager will conduct a hearing to allow the appellant(s) to present information supporting the FSE's position. The General Manager will review the facts, make a determination concerning the appeal, and provide in writing the findings to the appellant.

Any FSE affected by the action or determination of the General Manager may file a request for appeal hearing with the Board of Directors. This request is required to be in writing and must be submitted before the date the General Manager's order becomes final. The Board of Directors will grant all hearing requests concerning appeals for permit suspension, revocation or denial. The Board of Directors will evaluate all other hearing requests and will determine whether they will grant or deny the request. The Board of Directors, during the hearing, will allow the appellant(s) to present information supporting the FSE's position. The Board of Directors will review the facts, make a determination concerning the appeal, and provide in writing the Board of Directors' findings to the appellant.

4.9 FSE FOG Program and Data Management

The FOG Control Program is managed by the FOG Control Program Manager and the inspection and enforcement activities are conducted by District staff or by outside contractors under his/her supervision. The program is well integrated with the collection system maintenance program, specifically the hot spot sewer cleaning and video inspection activities.

The FSE data management process consists of:

- Access database that is utilized to identify the FSEs in the FOG Control Program and the specific details and inspection history of each facility.
- Composite Map displaying the location of the FSEs (Appendix C)

Additionally, the District utilizes their internal Customer Service Records, business licenses, Orange County Health Care Agency's (OCHCA) website, building departments' new construction or tenant improvement reviews for commercial or industrial property, and input from District field personnel to identify new FSEs or modifications to existing FSEs.

5.0 MULTI-FAMILY HOUSING, AND SINGLE FAMILY HOME FOG CONTROL PROGRAM

The multi-family housing, and single family home FOG Control Program will utilize education as the primary method for controlling the discharge of the FOG to the sewer system. Educational information concerning FOG will be provided in the District's Quarterly Newsletter, and FOG education brochures will be mailed with utility bills on an annual basis to educate District customers.

For areas identified as potential upstream sources of FOG in the sewer system, more frequent mailing of FOG brochures will be conducted. Additionally, FOG brochures and other educational material will be provided to multi-family housing for posting in common areas. Refer to Appendix K for FOG educational material.

6.0 INDUSTRIAL FOG PROGRAM

Orange County Sanitation District's source control program is utilized to regulate the wastewater discharged from Industrial users into the District's sewer collection system. The District will coordinate with OCSD for regulation and enforcement for those industrial discharges that are identified as significant FOG discharges.

APPENDIX G

Sewer Collection System Master Plan (SCSMP) Change Log

Revision Tracking

This Change Log is to provide notice of revisions made to the Irvine Ranch Water District (IRWD) SCSMP document.

SCSMP CHANGE LOG

Item	Description	Revision Date
90% Draft Submittal	Last project submittal by consultant AKM; completion level of the document reflects a 90% Submittal.	12/30/2016
Chapter 4	IRWD staff updated AKM's 90% submittal to include comments provided at the 75% Submittal level that were omitted. Corrected tables and figures as needed.	3/1/2017
Chapter 5	Removed duplicate sections from report document.	3/1/2017
Chapter 6		3/1/2017
Plate 2	Pipes <= 8" diameter removed from map; General cleanup work of the figure	3/2/2017
Plate 3	Reworded Categories for Criticality Analysis	3/3/2017
Appendix "D"	Removed "Draft" Watermark	6/6/2017

IRVINE RANCH WATER DISTRICT

Sewer Collection System Master Plan

Final Report

Submitted to

IRVINE RANCH WATER DISTRICT
15600 Sand Canyon Avenue
Irvine, California 92618

Submitted by

AKM CONSULTING ENGINEERS
553 Wald
Irvine, California 92618

March 2017

TABLE OF CONTENTS

SECTION			PAGE
1	Introduction		
	1-1	Purpose	1-1
	1-2	Sewer System Related Documents	1-1
	1-3	Scope of Work	1-2
	1-4	Organization of SCSMP Report	1-3
	1-5	Abbreviations	1-3
2	Study Area		
	2-1	Purpose	2-1
	2-2	General	2-1
	2-3	Physical Geography	2-2
	2-4	Geotechnical Information	2-5
	2-5	Climate	2-5
	2-6	Land Uses	2-7
	2-7	Population	2-13
3	Existing Sewer System		
	3-1	General Description	3-1
	3-2	Treatment Plants	3-1
	3-3	Sewersheds and Trunk Sewer Systems	3-4
	3-4	Summary of Sewage Flows	3-7
	3-5	Gravity System Facilities	3-8
	3-6	Lift Stations and Force Mains	3-10
	3-7	Siphons	3-10
	3-8	Diversion Structures	3-10
4	Sewer System Performance Evaluation Criteria		
	4-1	General	4-1
	4-2	Flow Monitoring Plan	4-2
	4-3	Sewer Generation Factors	4-2
	4-4	Peak Dry Weather Flows	4-7
	4-5	Peak Wet Weather Flows / Inflow and Infiltration	4-9
	4-6	Gravity Sewer Performance Criteria	4-10
	4-7	Lift Station Performance Criteria	4-11
	4-8	Siphon Performance Criteria	4-12
	4-9	Diversion Structure Performance Criteria	4-14
	4-10	Service Life of Pipe and Lift Station Equipment	4-15

SECTION **PAGE**

5 Existing System Analysis
- 5-1 Hydraulic Model 5-1
- 5-2 Capacity Analysis Results 5-1
- 5-2.1 Gravity System Results 5-1
- 5-2.2 Lift Station Model Results 5-3
- 5-2.3 Siphon Model Results 5-4
- 5-3 Lift Station and Force Mains 5-5
- 5-4 Inverted Siphons 5-5
- 5-5 Diversion Structures 5-6

6 Future System Analysis
- 6-1 Future Developments 6-1
- 6-2 Model Development for Future Facilities 6-1
- 6-3 Capacity Analysis Results 6-4
- 6-3.1 Gravity System Results 6-4
- 6-3.2 Lift Station Model Results 6-5
- 6-3.3 Siphon Model Results 6-6

7 Risk Analysis
- 7-1 General 7-1
- 7-2 Gravity Pipe Risk Analysis 7-2
- 7-2.1 Likelihood of Failure 7-2
- 7-2.2 Consequence of Failure 7-3
- 7-2.3 Risk Matrix 7-4
- 7-3 Gravity Pipe Decision Tree 7-6
- 7-4 Siphon Risk Analysis 7-8
- 7-5 Force Main Risk Analysis 7-8
- 7-6 Lift Station Risk Analysis 7-10
- 7-7 Long Term Capital Plan 7-13

8 San Diego Creek Interceptor Evaluation
- 8-1 General 8-1
- 8-2 Previous Studies 8-2
- 8-2.1 Sewer Collection System Master Plan (2006, Dudek) 8-2
- 8-2.2 San Diego Creek Interceptor Risk Evaluation and Alternative Analysis (2009, Dudek) 8-2
- 8-3 Recent Activity Related to San Diego Creek Interceptor 8-3
- 8-4 Condition Inspection and Assessment of the San Diego Creek Interceptor 8-3
- 8-5 Hydraulic Analysis of San Diego Creek Interceptor 8-4
- 8-6 Existing Location of San Diego Creek Interceptor 8-5
- 8-7 Conclusions and Recommendations 8-5

APPENDICES (Available on attached DVD)

Appendix A	Flow Monitoring Plan
Appendix A.1	Flow Monitoring Reports
Appendix B	Sewer Flow Generation Factors and Sewage Projections
Appendix C	Agreements between IRWD and OCSD
Appendix D	Sewer Flow Projections and Calibration Memo
Appendix E	Hydraulic Model and Analysis Results
Appendix F	Lift Station and Force Main Reports
Appendix G	Siphon Reports
Appendix H	Diversion Structure Reports
Appendix I	Risk Assessment
Appendix J	San Diego Creek CCTV Inspections
Appendix K	SCSMP Capital Improvement Program Description

FIGURES **PAGE**

2-1 Location Map 2-3
2-2 Dominant Drainage Features 2-4
2-3 Soils Map 2-6
2-4 Seasonal Rainfall 2000-2015 2-7
2-5 Existing Land Use 2-8
2-6 Ultimate Land Use 2-9
2-7 Future Development Areas 2-12
2-8 IRWD Service Area Population 2-13
3-1 Treatment Facility Tributary Ares 3-2
3-2 2010-2015 Influent Flows to MWRP and LAWRP 3-4
3-3 Sewershed Flow Chart 3-6
3-4 Total Length of Gravity Sewers by Year of Construction 3-8
3-5 Existing System 3-11
4-1 Residential Diurnal Curve 4-8
4-2 Commercial Diurnal Curve 4-9
5-1 Gravity Sewer Model Deficiencies 5-2
6-1 Summary of Future System Pipes Identified as Exceeding d/D Criteria 6-4

7-1 Historical Sewer Overflows from 2008-2016 7-3
7-2 Gravity Main Risk Matrix 7-4
7-3 Description of Risk Matrix Categories for Gravity Mains 7-5
7-4 Risk Analysis Decision Tree for Gravity Sewer Pipes 7-7
7-5 Force Main Risk Matrix 7-9
7-6 Description of Risk Matrix Categories for Force Mains 7-10
7-7 Lift Station Risk Matrix 7-12
7-8 Description of Risk Matrix Categories for Lift Stations 7-12

PHOTOGRAPHS **PAGE**

8-1 MH138N0017 TO MH138N0016 8-4
8-2 MH138N0015 TO MH138N0014 8-4
8-3 MH102W0003 TO MH102W0002 8-4
8-4 MH102S0006 TO MH102S0005 8-4

PLATES **PLATE**

Existing System 1
Existing and Future System Analysis Peak Dry Weather Flow d/D Results 2
Gravity Sewer Risk Profile 3
Recommended Action Items 4
San Diego Creek Interceptor 5

TABLES **PAGE**

1-1 Abbreviations 1-4
2-1 Existing and Ultimate Land Uses 2-10
3-1 Sewersheds and Trunk Lines 3-5
3-2 Comparison of 2015 SCSMP Flow Monitoring with 2015-16 DFT Projections (mgd) 3-7
3-3 Summary of Build-out Condition Sewer Flow Projections 3-7
3-4 Gravity Sewer Summary 3-9
3-5 Existing Lift Stations 3-12
3-6 Existing Lift Stations Assessed in SCSMP 3-13
3-7 Existing Siphons 3-14

3-8 Existing Diversion Structures 3-15
4-1 Inflow and Infiltration Flow Monitoring Sites 4-3
4-2 Calibration Flow Monitoring Sites 4-4
4-3 Sewer Generation Factor Flow Monitoring Sites 4-5
4-4 Sewer Generation Factor Summary 4-6
4-5 Diurnal Factors 4-7
4-6 Limits of d/D for Sewer Pipes 4-10
4-7 Minimum Sewer Slopes 4-10
4-8 Planning Criteria for Facility Useful Life 4-15
5-1 Lift Station Model Results 5-3
5-2 Siphon Model Results 5-4
6-1 SAMP Reports and Models 6-2
6-2 Lift Station Future Model Results 6-5
6-3 Siphon Future Model Results 6-6
7-1 Gravity Main Risk Analysis Weighted Scores 7-2
7-2 Siphon Risk Profile 7-8
7-3 Force Main Risk Analysis Weighted Scores 7-9
7-4 Force Main Risk Profile 7-10
7-5 Lift Station Risk Analysis Weighted Scores 7-11
7-6 Lift Station Risk Profile 7-13

CHAPTER 1 INTRODUCTION

1-1 Purpose

Irvine Ranch Water District's (IRWD) latest Sewer Collection System Master Plan (SCSMP) was completed in 2006. The purpose of this project is to update the 2006 SCSMP. IRWD's primary goals are as follows:

1. Identify the necessary infrastructure to support future growth through the year 2035
2. Update and calibrate the sewer collection system hydraulic model
3. Update the sewer flow generation factors and system flow projections
4. Develop a risk analysis based replacement planning model to prioritize capital improvements and replacement projects
5. Review and update sewer system design and performance criteria
6. Identify projects that will improve reliability and redundancy within the existing sewer collection system
7. Organize documentation of all existing sewer collection system facilities

1-2 Sewer System Related Documents

Previously established sewer system related documents that were utilized and referred to throughout the course of this project include the following:

1. Sewer System Management Plan, June 2013 (RMC)
2. San Diego Creek Interceptor Risk Evaluation and Alternative Analysis, September 2009 (Dudek)
3. Lake Forest Woods Sewer Rehabilitation, June 2009 (AECOM)
4. Sewer Collection System Master Plan, June 2006 (Dudek)
5. University of California, Irvine Sanitary Sewer System Evaluation, October 2003 (Tetra Tech)
6. Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service (IRWD)
7. Procedural Guidelines and General Design Requirements (IRWD)
8. Water Resources Master Plan 2007

9. SAMP Documents
    - Planning Areas 1&2
    - Planning Areas 5B, 8A, 9A, 40
    - Planning Area 5B update
    - Planning Area 6
    - Planning Areas 9B & 9C
    - Planning Area 12 & 13
    - Planning Area 12 Update – Hoag Health Center
    - Planning Area 17
    - Planning Area 18
    - Planning Area 27 – Turtle Ridge
    - Planning Areas 30 & 51 – Great Park
    - Planning Area 39
    - Planning Area 40 East Addendum
    - Sewer and Water Master Plan Study - Heritage Fields Project 2012
    - Irvine Business Complex Redevelopment SAMP
    - Lake Forest SAMP
    - Marine Corps Air Station – Tustin / Legacy Park

1-3 Scope of Work

The scope of work for the SCSMP consisted of the following tasks:

1. Project Management / Meetings & Coordination
2. Data Collection and Review
3. Land Use Update
4. Flow Monitoring Plan and Implementation
5. Calibrate Sewer Flow Generation Factors and Update Sewer Flow Projections
6. Develop Hydraulic Models of the Existing and Future Sewer Collection Systems
7. Review and Update IRWD Sewer System Design and Performance Criteria
8. Complete Existing and Future System Analysis
9. Prioritized Existing and Future System Capital Improvement Program
10. Reliability and Redundancy Analysis
11. Operational Criteria and Sewer System Management Plan Review
12. Updating IRWD's Sewer Collection System Master Plan Report

1-4 Organization of SCSMP Report

This Sewer Collection System Master Plan report presents the methodology, findings, and recommendations of a comprehensive study of IRWD's sewer collection system. A brief outline of the report follows:

Section 1: ***Introduction*** provides an overview and outline for the report.

Section 2: ***Study Area*** describes the physical features, land use characteristics and population of the study area.

Section 3: ***Existing System Facilities*** describes IRWD's existing sewer collection system, drainage regions, and the regional facilities that will receive flows from the study area.

Section 4: ***Sewer Design and Performance Criteria*** describes the standards and procedures utilized in developing the existing and future wastewater flows, assessing the existing system, and selecting the recommended improvements.

Section 5: ***Existing System Analysis*** describes the methodology used in the construction of the hydraulic sewer model. The current condition of the sewer system facilities based on the hydraulic model results, provided documentation, field visits, and interviews with IRWD staff is also discussed.

Section 6: ***Future System Analysis*** describes planned future facilities and discusses the process of evaluating whether or not those facilities will meet the established system criteria.

Section 7: ***Risk Analysis*** describes the methodology implemented for the sewer system risk analysis.

Section 8: ***San Diego Creek Interceptor Evaluation*** discusses history of studies completed, previous work completed, and current work completed in regards to the San Diego Creek Interceptor.

The ***Appendices*** contain background information and are referred to in the text as the location of supplementary facts and figures.

1-5 Abbreviations

To conserve space and improve readability, abbreviations have been used in this report. Each abbreviation has been spelled out in the text the first time it is used. Subsequent usage of the term is usually identified by its abbreviation. The list of abbreviations utilized in this report is contained in Table 1-1.

Please also note that the terms "sewer" or "sewage" and "wastewater" are generally interchangeable throughout this report.

Table 1-1
Abbreviations

Abbreviations	Explanation
AC, Ac	Acres
ABS	Acrylonitrile Butadiene Styrene Pipe
ACP	Asbestos Cement Pipe
ADWF	Average Dry Weather Flow
amsl	Above Mean Sea Level
BMP	Best Management Practices
CCFRPM	Centrifugally Cast Fiberglas Reinforced Polymer Mortar Pipe
CCTV	Closed Circuit Television
cfs	Cubic Feet per Second
CI	Cast Iron Pipe
CIP	Capital Improvement Program
CML&C	Cement Mortar Lined and Coated
CMOM	Capacity, Management, Operation and Maintenance
CoF	Consequence of Failure
CWEA	California Water Environment Association
d/D	Depth to Diameter Ratio
DFT	Demand Forecast Tool
Dia	Diameter
DIP	Ductile Iron Pipe
DU, du	Dwelling Unit
D/S	Downstream
EDU	Equivalent Dwelling Unit
EPA	Environmental Protection Agency
EPDD	Existing Peak Dry Day
FAR	Floor Area Ratio
FOG	Fats, Oil, and Grease
fps	Feet per Second
GASB 34	Government Accounting Standards Board Statement 34
GIS	Geographic Information System
gpcd	Gallons per Capita per Day
GPD, gpd	Gallons per Day
gpm	Gallons per Minute
HDPE	High Density Polyethylene Pipe
HP	Horsepower
ID	Identification
IRWD	Irvine Ranch Water District
I/I	Inflow and Infiltration
LF	Lineal Feet
LoF	Likelihood of Failure
LTCP	Long Term Capital Plan
Mat	Material
mg	Million Gallons
MGD, mgd	Million Gallons per Day
MH	Manhole

Table 1-1 (Continued)
Abbreviations

Abbreviations	Explanation
NASSCO	National Association of Sewer Service Companies
NCPI	National Clay Pipe Institute
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OPA	Orange Park Acres
OSHA	Occupational Safety & Health Administration
PACP	Pipeline Assessment and Certification Program
PDWF	Peak Dry Weather Flow
PMP	Preventative Maintenance Program
PS	Pump Station
PVC	Polyvinyl Chloride
PWWF	Peak Wet Weather Flow
RCP	Reinforced Concrete Pipe
RFP	Request for Proposal
RP	Regional Plant
RPM	Revolutions per Minute
RPMP	Reinforced Plastic Mortar Pipe
SAMP	Sub-Area Master Plan
SCA	Santiago Canyon Areas
SDCI	San Diego Creek Interceptor
SSO	Sanitary Sewer Overflow
SSMP	Sewer System Management Plan
SWRCB	State Water Resources Control Board
TDH	Total Dynamic Head
TSF	Thousand Square Feet
UFF	Unit Flow Factor
U/S	Upstream
VCP	Vitrified Clay Pipe
WDR	Waste Discharge Requirements

CHAPTER 2 STUDY AREA

2-1 Purpose

This section describes the study area of Irvine Ranch Water District's (IRWD) sewer collection system. The existing and future land uses are described in detail.

2-2 General

IRWD was established in 1961 as a California Water District under the provisions of the California Water Code. As a special district, IRWD focuses on four primary services – providing potable water, collecting sewage, producing and distributing recycled and other non-potable water, and implementing urban runoff source control and treatment programs. IRWD is an independent public agency that is managed by five Board of Directors that are publicly elected.

The IRWD service area is generally bounded by the Santa Ana Mountains to the northeast and the San Joaquin Hills to the south and is located along the west coast of California. The estimated residential population served is 380,000 through approximately 108,000 water connections and over 97,000 sewer service connections. The daytime population grows to approximately 530,000 when workers enter the large employment areas within the service area.

The sewer collection system study area is approximately 92.5 square miles, shown on Figure 2-1. It includes some or all of the Cities of Irvine, Lake Forest, Tustin, Newport Beach, and Orange, and portions of unincorporated Orange County. Although a part of the service area, this study does not incorporate the Orange Park Acres (2008) or Santiago Canyon areas (2006). IRWD consolidated with the former Orange Park Municipal Water Company and former Santiago County Water District. Currently, there are no plans to build, or integrate a new sewer system in either of these areas, as described below:

- Former Orange Park Acres (OPA) Municipal Water Company Service Area:

  The OPA service area does not have an existing area wide sewer collection system. The majority of the homes are equipped with their own private septic tanks. However, there are a few homes that currently have existing sewer connections and permits. Some homes have Out of Area Service (OAS) agreements and are served by the City of Orange (City) or the Orange County Sanitation District (OCSD).

In 1994, OCSD prepared a sewer service study for properties located in the unincorporated County areas of the OPA service area. An update to this study was later prepared in 2004 with the "Orange Park Acres Sewer Master Plan Study Update", which proposed a gravity sewer system for all OPA properties. Pursuant to the 2007 IRWD-OPAMWC annexation agreement, IRWD was tasked to investigate the feasibility of providing sewer collection service to OPA parcels, and present its findings to the local community. IRWD's 2009 Sub Area Master Plan analyzed the requirements of a new gravity sewer collection system and estimated total costs at approximately $11 million. IRWD presented the benefits and costs of a new sewer system to the community. Public meetings revealed that while most residents preferred to connect to a sewer system, many felt that the time was not right to incur this expense. To confirm this, IRWD conducted a telephone survey of the community in 2011. The survey indicated that only 29% of the community would vote yes on a new sewer system proposal, far short of the necessary 67% approval needed to build and finance the system. Currently, IRWD continues to work on a one-on-one basis with property owners who still desire to connect to nearby sewer collection systems.

- Former Santiago County Water District (SCWD) Service Area:

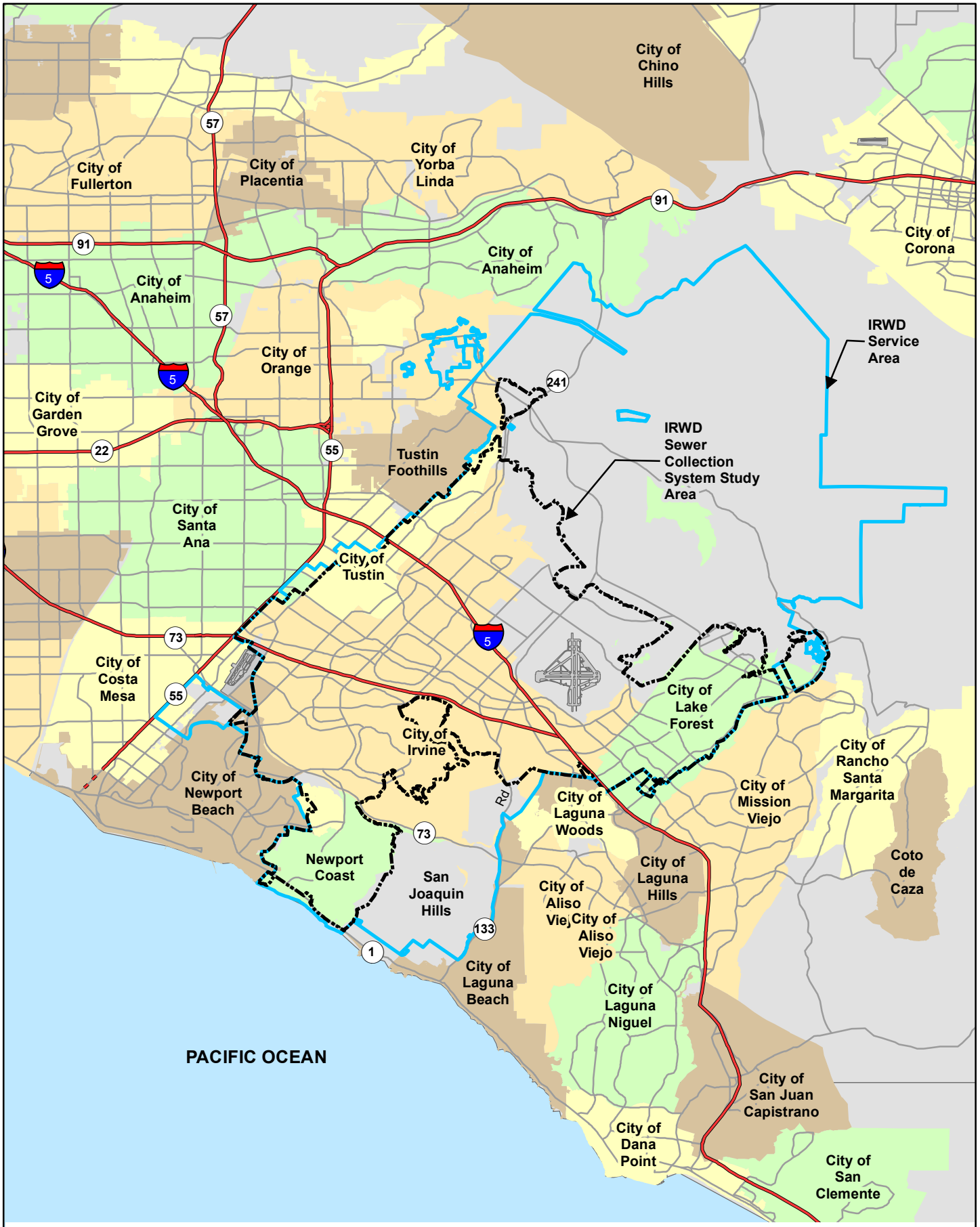
  Currently, residences within the former SCWD service area operate private on-site septic systems. While new sewer systems within this area have been evaluated in the past (i.e. SCWD's 1984 Wastewater Master Plan, and IRWD's 2004 East Orange Lake Village SAMP), a series of land donations by the Irvine Company have revised the feasibility of a new sewer collection system in the area. Most recent of such land donations occurred in 2014, when 2,500 acres of land located within the vicinity of Irvine Lake was converted from master-development to open-space use. This latest conversion eliminated the need for 13 miles of planned gravity sewers, 3 miles of planned force mains, and two future lift stations.

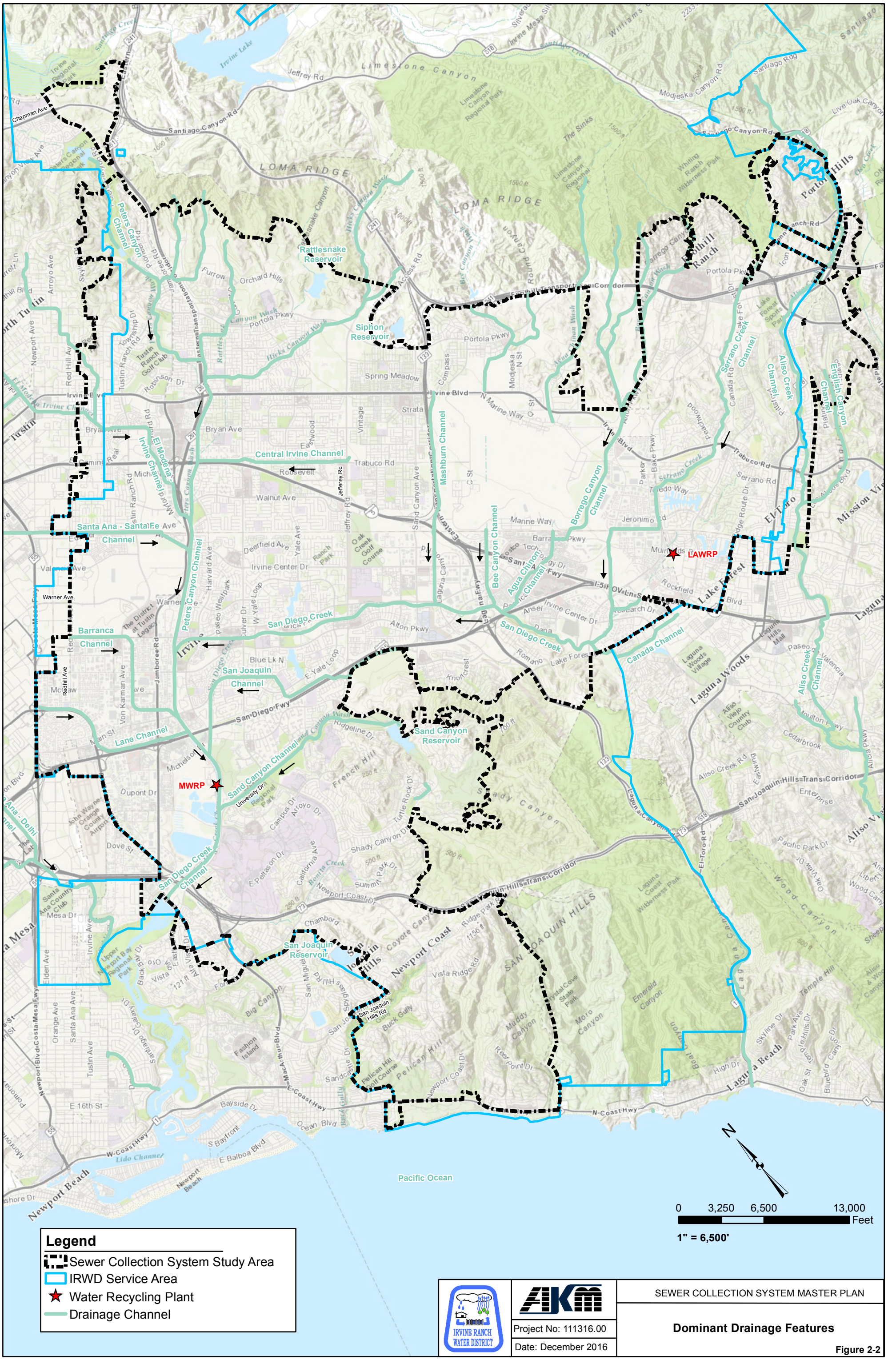
2-3 Physical Geography

The IRWD service area is bounded on the north by the Santa Ana Mountains and on the southeast by the San Joaquin Hills. The Santa Ana Mountains slope southward toward the service area. The San Joaquin Hills slopes north and west toward the service area as well as south toward the Pacific Ocean. Ground elevations in the sewer service area range from just above sea level to about 1,400 feet.

The sewer system flow patterns are defined by the surrounding physical geography of the service area as well as the primary drainage features, shown in Figure 2-2. The two primary drainage channels within the service area are San Diego Creek and Peters Canyon Channel.

Peters Canyon Channel starts on the south side of the City of Orange and extends south along Jamboree Road and SR-261 to its confluence with San Diego Creek just south of Barranca Parkway.


City of Chino Hills
City of Fullerton
City of Placentia
City of Yorba Linda
City of Corona
City of Anaheim
City of Anaheim
City of Orange
IRWD Service Area
City of Garden Grove
IRWD Sewer Collection System Study Area
Tustin Foothills
City of Santa Ana
City of Tustin
City of Costa Mesa
City of Lake Forest
City of Irvine
City of Rancho Santa Margarita
City of Newport Beach
City of Laguna Woods
City of Mission Viejo
Newport Coast
San Joaquin Hills
City of Laguna Hills
Coto de Caza
City of Aliso Viejo
City of Aliso Viejo
City of Laguna Beach
City of Laguna Niguel
PACIFIC OCEAN
City of San Juan Capistrano
City of Dana Point
City of San Clemente
Rd
57
91
5
22
55
73
241
133
1
N
0
10,000
20,000
40,000
Feet
IRVINE RANCH WATER DISTRICT
AKM
Project No: 11316.00
Date: December 2016
SEWER COLLECTION SYSTEM MASTER PLAN
Location Map
Figure 2-1


Irvine Lake
Limestone Canyon
Jeffrey Rd
Santiago Canyon Rd
Modjeska Canyon Rd
Santiago Ridge
Live Oak Canyon
Chapman Ave
Irvine Regional Park
Limestone Canyon Regional Park
The Sinks
LOMA RIDGE
Whiting Ranch Wilderness Park
Portola Hills
Peters Canyon Channel
Rattlesnake Reservoir
Hicks Canyon Wash
Furrow
Orchard Hills
Portola Pkwy
Siphon Reservoir
Foothill Transportation Corridor
Foothill Ranch
Lake Forest Sports Park
Serrano Creek Channel
Aliso Creek Channel
English Canyon Channel
Tustin Ranch Golf Club
Spring Meadow
Irvine Blvd
Strata
Bryan Ave
Central Irvine Channel
Trabuco Rd
Walnut Ave
Mashburn Channel
Borrego Canyon Channel
Bee Canyon Channel
Agua Chinon Channel
Santa Ana - Santa Fe Channel
Irvine Center Dr
Deerfield Ave
Oak Creek Golf Course
Marine Way
Jeronimo Rd
Serrano Rd
El Toro
Mission Viejo
LAWRP
Lake Forest
Rockfield Blvd
Warner Ave
Barranca Channel
San Diego Creek
Alton Pkwy
Canada Channel
Laguna Woods
Laguna Woods Village
San Joaquin Channel
Blue Lk N
Knollcrest
San Diego Fwy
Lane Channel
Sand Canyon Channel
Sand Canyon Reservoir
Ridgeline Dr
French Hill
Shady Canyon
MWRP
University Dr
Dupont Dr
Campus Dr
Arroyo Dr
Turtle Rock Dr
Aliso Creek Rd
San Joaquin Hills Trans Corridor
Enterprise
Cedarbrook
Michelson
Redhill Ave
Jamboree Rd
Tustin Ranch Rd
Red Hill Ave
Newport Ave
Arroyo Ave
Von Karman Ave
Main St
Irvine Channel
El Modena
Peters Canyon Channel
Harvard Ave
Paseo Westpark
Culver Dr
W Yale Loop
E Yale Loop
Jeffrey Rd
Sand Canyon Ave
Eastern Transportation Corridor
Ranch Park
Laguna Canyon Rd
Laguna Hills Mall
Paseo de Valencia
Aliso Creek Channel
Aliso Viejo Country Club
Moulton Pkwy
Cedarbrook
Alicia Pkwy
Lake Forest Dr
Toledo Way
Parker
Bake Pkwy
Trabuco Rd
Serrano Creek
Ridge Route Dr
Jeronimo Rd
Barranca Pkwy
Irvine Center Dr
Ansel
Research Dr
Dana
Romano
Lake Forest
Rockfield Blvd
Laguna Hills Mall
Paseo de Valencia
Aliso Creek Channel
Laguna Woods
Aliso Viejo Country Club
Moulton Pkwy
Cedarbrook
Aliso Creek Rd
San Joaquin Hills Trans Corridor
Enterprise
Laguna Canyon Rd
El Toro Rd
Pacific Park Dr
Alicia Pkwy
Aliso Creek
Wood Canyon
Oak View Dr
Liberty
Sheep
Temple Hill
Park Ave
Skyline Dr
Bluebird Canyon Dr
Laguna Beach
High Dr
Oak St
Coast Hwy
Pacific Ocean
Tustin
Irvine
Newport Beach
Santa Ana
Costa Mesa
Mesa Dr
Elden Ave
Irvine Ave
Orange Ave
Santa Ana Ave
Tustin Ave
Fashion Island
MacArthur Blvd
Newport Blvd
Bayside Dr
E 16th St
Ocean Blvd
S Bayfront
E Balboa Blvd
W Coast Hwy
Lido Channel
Upper Newport Bay Regional Park
Back Bay Dr
Vista de Oro
Vista de Este
Alta Vista Dr
San Joaquin Reservoir
San Joaquin Hills Rd
Big Canyon
San Miguel Dr
Glass Hill Rd
Coyote Canyon
Newport Coast
Vista Ridge Rd
SAN JOAQUIN HILLS
Crystal Cove State Park
Emerald Canyon
Muddy Canyon
Moro Canyon
Buck Gully
Pelican Hill Golf Course
Pelican Hill
Newport Coast Dr
Reef Point Dr
Sandcastle Dr
Ridge Park
Chambord
Summit Park Dr
Newport Coast Dr
Santiago Canyon
Bonita Creek
California Ave
E Pelican Dr
Campus Dr
Arroyo Dr
Turtle Rock Dr
Shady Canyon Dr
Shady Canyon
Irvine Blvd
Trabuco Rd
Serrano Rd
Toledo Way

San Diego Creek starts on the east side of the City of Irvine near the I-5 freeway and extends east along Barranca Parkway to its confluence with Peters Canyon Channel just past Harvard Avenue. The creek then turns southward and continues past IRWD's Michelson Water Reclamation Plant to its discharge point into Newport Bay.

The IRWD sewer system generally follows the same flow patterns as the dominant drainage features, which is north to south and east to west. The sewers in the Tustin Ranch area follow the drainage patterns of El Modena – Irvine Channel and Santa Ana – Santa Fe Channel. The sewage generally flows from north to south and west to east.

2-4 Geotechnical Information

Four soil classifications exist within the service are, as seen on the Hydrologic Classification of Soils, Plate A of the Orange County Hydrology Manual and Figure 2-3. The descriptions of each soil type are as follows:

- Group A soils have high infiltration rates and a high rate of water transmission and includes well drained sand and gravels
- Group B soils have moderate infiltration rates and moderate rate of water transmission and includes fine to coarse textures
- Group C soils have low infiltration rates and low rates of water transmission and have a moderately fine texture
- Group D soils have a high runoff potential and very low infiltration rate. They have a very low rate of water transmission and are comprised of nearly impervious material

The soils with higher infiltration rates permit better passage of water through them to the groundwater table. Sewer lines constructed in Group A and B soils would therefore be more susceptible to infiltration through defective pipe joints and manholes than Group C and D soils.

The majority of the soils in the service area are Groups B, C, and D. The northerly portion of the City of Irvine and Tustin is comprised of primarily Group B soils. The southerly portion of the Cities of Irvine and Lake Forest is comprised of primarily Group D soils with some Group B and C soils as well. Newport Coast primarily consists of Group C and D soils.

2-5 Climate

The climate in the study area is Mediterranean-like with generally moderate temperatures and low humidity year-round. The average median temperature is approximately 65° F.

The historical average annual rainfall is about 10.4 inches. Most of the rainfall typically occurs between December and March. Figure 2-4 shows the seasonal rainfall from 2000 to 2015 as measured by Orange County Rain Gauge Stations 61 (Tustin / Irvine Ranch), 165 (Costa Mesa), and 169 (Corona Del Mar).

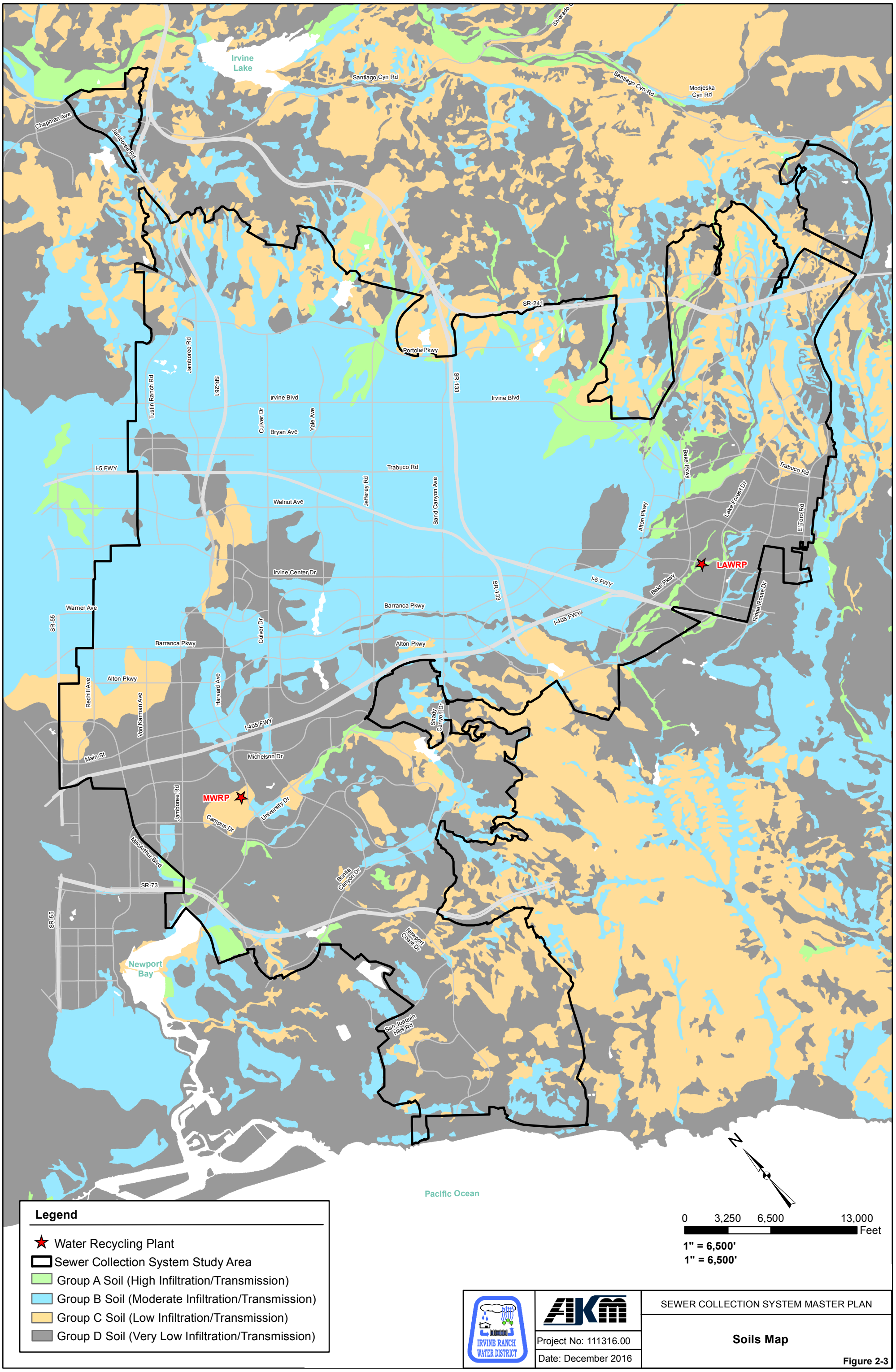
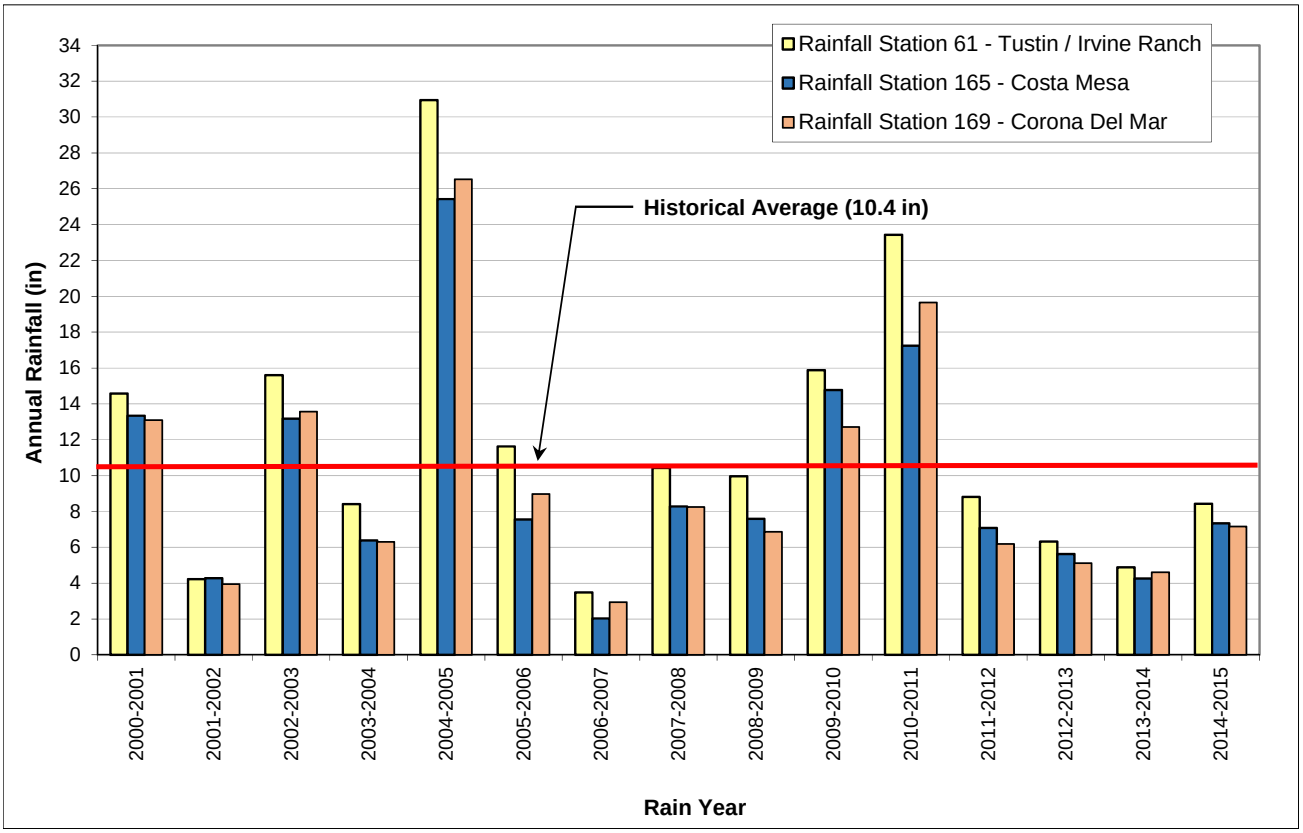

Irvine Lake
Santiago Cyn Rd
Santiago Cyn Rd
Modjeska Cyn Rd
Chapman Ave
Jamboree Rd
SR-241
Portola Pkwy
Jamboree Rd
Tustin Ranch Rd
SR-261
Irvine Blvd
Culver Dr
Yale Ave
Bryan Ave
SR-133
Irvine Blvd
I-5 FWY
Trabuco Rd
Walnut Ave
Jefferey Rd
Sand Canyon Ave
Bake Pkwy
Alton Pkwy
Lake Forest Dr
El Toro Rd
Trabuco Rd
LAWRP
Irvine Center Dr
I-5 FWY
Bake Pkwy
Ridge Route Dr
SR-133
Warner Ave
Barranca Pkwy
I-405 FWY
SR-55
Barranca Pkwy
Culver Dr
Alton Pkwy
Alton Pkwy
Redhill Ave
Harvard Ave
Shady Canyon Dr
I-405 FWY
Von Karman Ave
Main St
Michelson Dr
MWRP
Jamboree Rd
University Dr
Campus Dr
MacArthur Blvd
Bonita Canyon Dr
SR-73
SR-55
Newport Coast Dr
Newport Bay
San Joaquin Hills Rd
Pacific Ocean
N
0
3,250
6,500
13,000
Feet
1" = 6,500'
1" = 6,500'
Legend
Water Recycling Plant
Sewer Collection System Study Area
Group A Soil (High Infiltration/Transmission)
Group B Soil (Moderate Infiltration/Transmission)
Group C Soil (Low Infiltration/Transmission)
Group D Soil (Very Low Infiltration/Transmission)
IRVINE RANCH WATER DISTRICT
AKM
Project No: 111316.00
Date: December 2016
SEWER COLLECTION SYSTEM MASTER PLAN
Soils Map
Figure 2-3

Figure 2-4
Seasonal Rainfall 2000-2015



2-6 Land Uses

The land use information utilized in the preparation of the Sewer Collection System Master Plan is based upon IRWD's Land Use Areas GIS data. This information was supplemented by aerial photographs, field reviews, and information provided by IRWD staff.

Since the formation of IRWD in 1961, land use has changed steadily with the continuing urbanization of the area. Much of the land that was previously agricultural land has now been or is being converted to residential, commercial, industrial, and other urban uses. Adopted General Plans within the IRWD service area are frequently updated by the responsible jurisdictional agency. IRWD periodically goes through an extensive process of evaluating and updating the existing land uses and projected land uses based upon the adopted General Plans and Sub-Area Master Plans (SAMPs). One result of the evaluation is an updated Land Use Areas shapefile.

A breakdown of the existing (2015) and ultimate (2035) land uses is shown in Table 2-1. The land uses are shown in Figure 2-5 and 2-6.

City of Lake Forest
Foothill Ranch
Whiting Rd
Santiago Canyon
Limestone Canyon Regional Park
Tustin Foothills
Jamboree Rd
Culver Dr
Sand Canyon Ave
Jeffrey Rd
Irvine Blvd
Tustin Ranch Rd
Jamboree Rd
SR-241
Bake Pkwy
Portola Pkwy
City of Mission Viejo
Alton Pkwy
Irvine Blvd
Bryan Ave
City of Tustin
I-5 FWY
Trabuco Rd
SR-133
Trabuco Rd
Walnut Ave
Edinger Ave
OCTA Metrolink
SR-133
I-5 FWY
Ridge Route Dr
Warner Ave
SR-55
I-405 FWY
City of Laguna Hills
Barranca Pkwy
Alton Pkwy
City of Laguna Woods
Shady Canyon Dr
Bake Pkwy
I-405 FWY
Michelson Dr
University Dr
Campus Dr
Jamboree Rd
City of Aliso Viejo
City of Costa Mesa
MacArthur Blvd
Bonita Canyon Dr
SR-73
Newport Coast Dr
San Joaquin Hills
City of Newport Beach
San Joaquin Hills Rd
City of Laguna Beach
Pacific Ocean

Legend

- Sewer Collection System Study Area
- ETWD
- Newport Beach
- SMWD
- Tustin
- Unincorporated OC
- IRWD Service Area
- Regional Commercial
- Community Commercial
- General Office
- High Density Irvine
- High Density LF
- High Density NPB
- High Density PC Tustin
- High Rise Density - Irvine Irvine
- Urban Density OC
- Hotel
- Industrial
- Industrial - Heavy
- Industrial - Light
- Low Density Irvine
- Low Density LF
- Low Density NPB
- Low Density PC Tustin
- Rural Density - Irvine
- Rural Density - Orange E Orange
- Rural Density - County OC
- Estate Density Irvine
- Estate Density E Orange
- Suburban Density OC
- Medium Density Irvine
- Medium Density LF
- Medium Density NPB
- Medium Density PC Tustin
- Medium-High Density Irvine
- Medium-High Density LF
- Medium-Low Density NPB
- Low-Medium Density LF
- Freeways & Major Road
- Airports
- Military Air Field
- Low-Irrigated AG Potable
- Low-Irrigated AG Untreated
- Low-Irrigated AG Recycled
- High-Irrigated AG Potable
- High-Irrigated AG Untreated
- High-Irrigation AG Recycled
- Community Park
- Regional Park
- Commercial Recreation
- Wildlife Preserve
- Open Space (Rec)
- Fuel Modification Zone
- School
- UCI
- Institutional
- Hospital
- Water
- Vacant

N

0 3,250 6,500 13,000 Feet

1" = 6,500'

IRVINE RANCH WATER DISTRICT

AKM

Project No: 111316.00

Date: December 2016

SEWER COLLECTION SYSTEM MASTER PLAN

Existing Land Use

Figure 2-5

City of Lake Forest
Santiago Canyon
Foothill Ranch
Limestone Canyon Regional Park
Tustin Foothills
City of Mission Viejo
City of Tustin
City of Laguna Hills
City of Laguna Woods
City of Aliso Viejo
City of Costa Mesa
San Joaquin Hills
City of Newport Beach
City of Laguna Beach
Pacific Ocean

Jamboree Rd
Whiting Rd
SR-241
Bake Pkwy
Portola Pkwy
Culver Dr
Sand Canyon Ave
Jeffrey Rd
Irvine Blvd
Tustin Ranch Rd
Alton Pkwy
Trabuco Rd
SR-133
OCTA Metrolink
I-5 FWY
Ridge Route Dr
Bryan Ave
Walnut Ave
Edinger Ave
Warner Ave
SR-55
Barranca Pkwy
I-405 FWY
Shady Canyon Dr
Michelson Dr
University Dr
Campus Dr
MacArthur Blvd
Bonita Canyon Dr
SR-73
Newport Coast Dr
San Joaquin Hills Rd

Legend

- Sewer Collection System Study Area
- IRWD Service Area
- ETWD
- Newport Beach
- SMWD
- Tustin
- Unincorporated OC
- Regional Commercial
- Community Commercial
- General Office
- High Density Irvine
- High Density LF
- High Density NPB
- High Density PC Tustin
- High Rise Density - Irvine Irvine
- Urban Density OC
- Hotel
- Industrial
- Industrial - Heavy
- Industrial - Light
- Low Density Irvine
- Low Density LF
- Low Density NPB
- Low Density PC Tustin
- Low Density E Orange
- Rural Density - Irvine
- Rural Density - Orange E Orange
- Rural Density - County OC
- Estate Density Irvine
- Estate Density E Orange
- Suburban Density OC
- Medium Density Irvine
- Medium Density LF
- Medium Density NPB
- Medium Density PC Tustin
- Medium Density E Orange
- Medium-High Density Irvine
- Medium-High Density LF
- Medium-Low Density NPB
- Low-Medium Density E Orange
- Low-Medium Density LF
- Freeways & Major Road
- Airports
- Military Air Field
- Low-Irrigated AG Potable
- Low-Irrigated AG Untreated
- Low-Irrigated AG Recycled
- High-Irrigated AG Potable
- High-Irrigated AG Untreated
- High-Irrigation AG Recycled
- Community Park
- Regional Park
- Commercial Recreation
- Wildlife Preserve
- Open Space (Rec)
- Fuel Modification Zone
- School
- UCI
- Institutional
- Hospital
- Water
- Vacant

N

0 3,250 6,500 13,000 Feet

1" = 6,500'

IRVINE RANCH WATER DISTRICT

AKM

SEWER COLLECTION SYSTEM MASTER PLAN

Project No: 111316.00

Date: December 2016

Ultimate Land Use

Figure 2-6

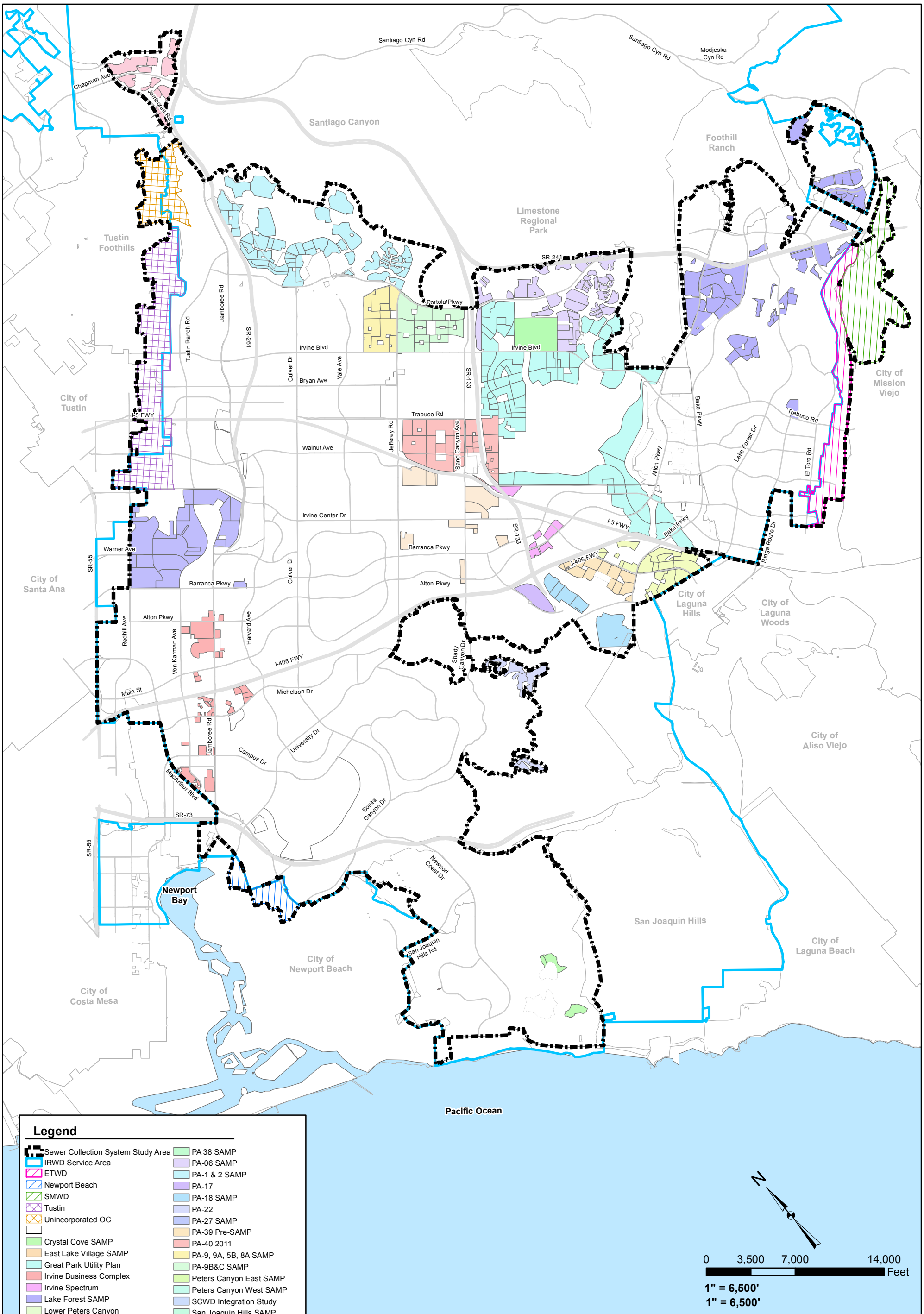
Table 2-1
Existing and Ultimate Land Uses

Code	Land Use Category	Agency	Average Density	Density Units	Existing Area (Ac)	Ultimate Area (Ac)	Change (Ac)
1100	**Residential**						
1111	Rural Density	Orange	0.30	du/ac	1	1	
1112	Rural Density	Irvine	0.30	du/ac	15	15	
1115	Rural Density	Orange County	0.26	du/ac	-	46	46
1121	Estate Density E	Orange	1.20	du/ac	-	-	-
1122	Estate Density	Irvine	0.50	du/ac	116	200	85
1126	Estate Density	Lake Forest	0.50	du/ac	-	-	-
1131	Low Density	Orange	4.00	du/ac	-	139	139
1132	Low Density	Irvine	3.00	du/ac	1,913	2,984	1070
1133	Low Density	Newport Beach	1.00	du/ac	1,086	1,086	
1134	Low Density PC	Tustin	4.50	du/ac	165	165	
1135	Suburban Density	Orange County	9.25	du/ac	881	1,048	167
1136	Low Density	Lake Forest	3.00	du/ac	1,818	2,062	244
1141	Low-Medium Density	Orange	10.50	du/ac	-	30	30
1146	Low-Medium Density	Lake Forest	11.00	du/ac	13	13	
1153	Medium-Low Density	Newport Beach	2.75	du/ac	44	44	
1161	Medium Density	Orange	19.50	du/ac	-	32	32
1162	Medium Density	Irvine	7.50	du/ac	5,018	6,912	1894
1163	Medium Density	Newport Beach	5.00	du/ac	872	872	
1164	Medium Density PC	Tustin	11.80	du/ac	1,040	1,035	-4
1166	Medium Density	Lake Forest	7.50	du/ac	443	526	
1172	Medium-High Density	Irvine	17.50	du/ac	2,315	3,030	715
1175	Urban Density	Orange County	29.00	du/ac	143	143	
1176	Medium-High Density	Lake Forest	17.50	du/ac	113	145	33
1182	High Density	Irvine	32.50	du/ac	1,015	1,490	475
1183	High Density	Newport Beach	12.25	du/ac	363	363	
1184	High Density PC	Tustin	17.40	du/ac	14	14	
1186	High Density	Lake Forest	32.50	du/ac	13	35	22
1191	High Rise Density	Orange	35.00	du/ac	-	-	-
1192	High Rise Density	Irvine	40.00	du/ac	176	300	124
1200	**Commercial/Industrial/Institutional**						
1210	General Office		25	ksf/ac	3,274	4,281	1006
1221	Community Commercial		9	ksf/ac	2,134	2,640	507
1222	Regional Commercial		10	ksf/ac	322	322	
1223	Community Commercial - High Density		21	ksf/ac	-	-	-
1230	Commercial Recreation		8	ksf/ac	78	319	241
1235	Hotel		45	rooms/ac	-	-	-
1240	Institutional		8	ksf/ac	551	878	327
1244	Hospital		9	ksf/ac	38	38	
1260	School		10	ksf/ac	950	1,178	228
1261	UCI		10	ksf/ac	1,347	1,347	
1273	Military Air Field		0	ksf/ac	4,398	0	-4398
1290	Hotel		45	rooms/ac	62	62	
1300	Industrial		9.091	ksf/ac	21	21	
1310	Industrial - Light		18	ksf/ac	2,776	2,620	-156
1320	Industrial - Heavy		25	ksf/ac	77	77	

Table 2-1
Existing and Ultimate Land Uses

Code	Land Use Category	Agency	Average Density	Density Units	Existing Area (Ac)	Ultimate Area (Ac)	Change (Ac)
	Open Space and Other						
1411	Airports		0	ac/ac	109	109	
1413	Freeways & Major Road		0	ac/ac	3,506	3,502	-5
1820	Community Park		1	ac/ac	1,676	2,248	571
1830	Regional Park		1	ac/ac	1,702	3,604	1,902
1840	Fuel Modification Zone		0	ac/ac	301	432	131
1850	Wildlife Preserve		0	ac/ac	2,216	2,271	55
1880	Open Space (Rec)		1	ac/ac	2,311	3,299	988
1900	Vacant		1	ac/ac	3,341	74	-3,267
4100	Water		0	-	808	776	-32
9100	Mixed Use		0	-	-	-	-
9101	Central Park Land Use		0	ac/ac	-	-	-
2100	Low-Irrigated AG Potable		1	ac/ac	69	-	-69
2110	Low-Irrigated AG Untreated		1	ac/ac	1,248	32	-1,217
2120	Low-Irrigated AG Recycled		1	ac/ac	615	575	-41
2200	High-Irrigated AG Potable		1	ac/ac	374	134	-240
2210	High-Irrigated AG Untreated		1	ac/ac	711	-	-711
2220	High-Irrigation AG Recycled		1	ac/ac	1,099	122	-977
				Total	**53,694**	**53,694**	

Sub-Area Master Plans (SAMPs) are water and sewer facility planning studies prepared by IRWD for specific planning areas or development proposals. When available, SAMPs are used to refine the general plan land uses and phasing information. SAMPs are generally completed on an area after the developer has generated a specific plan of development. This information is of greater detail and accuracy than General Plan data. The future development areas are shown in Figure 2-7.



IRVINE RANCH WATER DISTRICT

AKM

Project No: 111316.00

Date: December 2016

SEWER COLLECTION SYSTEM MASTER PLAN

Future Development Areas

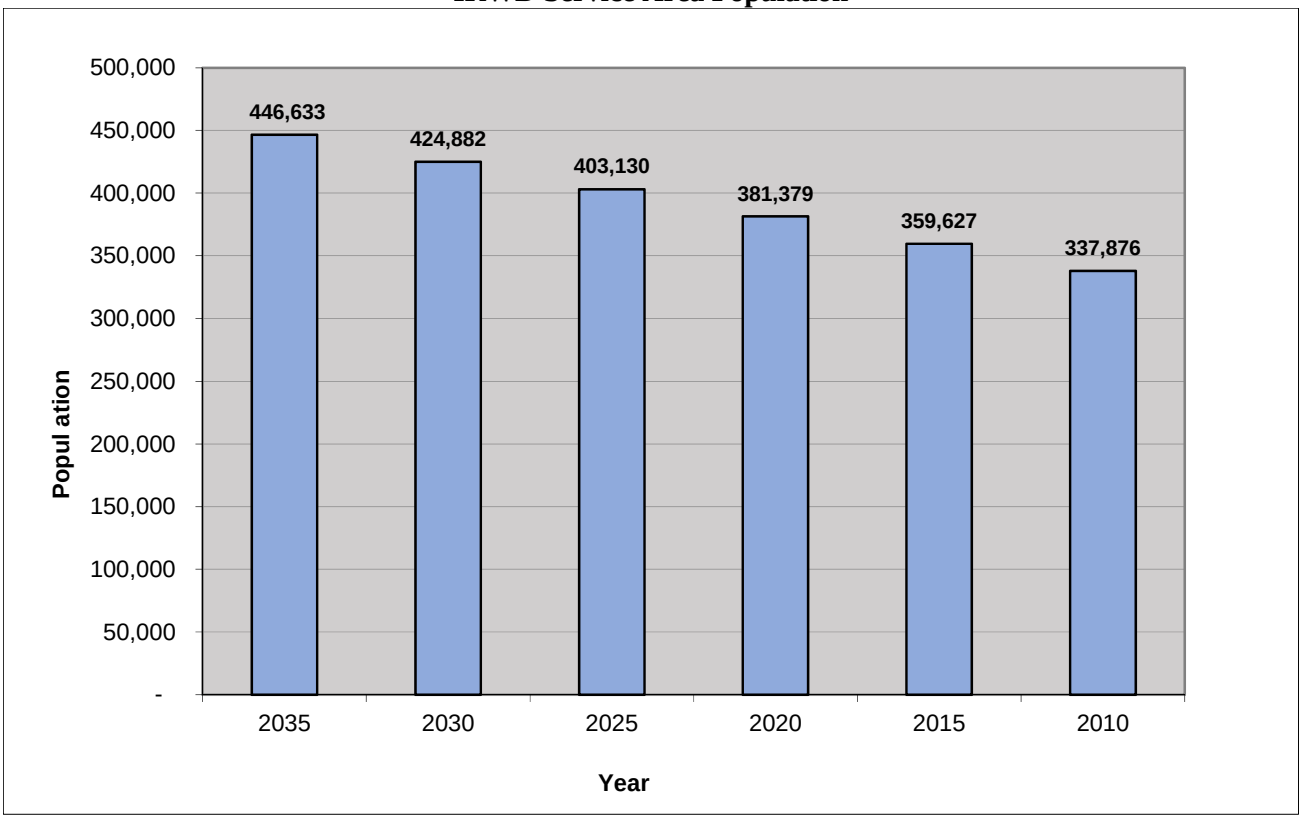
Figure 2-7

2-7 Population

The IRWD service area has approximately 380,000 night time residents that increases to 530,000 customers during the daytime, when workers enter the large employment areas within the district.

The existing and future population estimates per the 2010 Urban Water Management Plan is shown in Figure 2-8.

Figure 2-8
IRWD Service Area Population



CHAPTER 3 EXISTING SEWER SYSTEM

3-1 General Description

The existing sewer collection system, shown on Plate 1, is made up of a network of gravity sewers, pump stations, and force mains. The primary elements of the sewer system are as follows:

- 1,009 miles of gravity sewer mains (4-inches to 60-inches in diameter)
- 2 water recycling plants (Michelson WRP and Los Alisos WRP)
- 23 lift stations and associated force mains
- 19 siphons (8-inches to 30-inches in diameter)
- 7 diversion structures
- 97,000 sewer service connections

The majority of the sewage collected by IRWD's sewer collection system is conveyed to the Michelson Water Recycling Plant or the Los Alisos Water Recycling Plant for treatment. Some of the sewage treated at these facilities is generated outside of IRWD's service area ((parts of Tustin, parts of Lake Forest, parts of Mission Viejo) but are conveyed to a connection point and ultimately treated at IRWD's treatment facilities.

There are also areas within the IRWD service area (i.e. Irvine Business Complex, Newport Coast) that contribute sewage flow to Orange County Sanitation District's (OCSD) system and is ultimately conveyed to OCSD treatment facilities.

Orange Park Acres (OPA) and the Santiago Canyon Areas (SCA) are areas where IRWD consolidated with a former agency and now maintains the sewer system. Currently, there are no plans to build, or integrate a new sewer system in these areas. The SCSMP project did not include analysis of the OPA or the SCA areas.

3-2 Treatment Plants

IRWD provide drinking water, wastewater collection and treatment to produce recycled water. Tertiary treatment of wastewater results in an excellent quality of recycled water that is used for landscape and agricultural irrigation, and for industrial and commercial needs. About 20 percent of IRWD's current supply is recycled water. This is enough water to provide landscape irrigation for 80 percent of the business and community customers, such as parks, schools, and golf courses.

The areas tributary to each treatment plant are shown on Figure 3-1.

Unincorporated Orange County (IRWD)

Tustin (IRWD)

Portola (SMWD)

Foothill Ranch flows could be diverted to LAWRP with system improvements

LAWRP (IRWD)

El Toro Road Sewer (IRWD/ ETWD)

IRWD/ETWD Flow Splitter

Caltrans Selenium Dewatering Plant

MWRP (IRWD)

IBC (OCSD/IRWD)

Michelson WRP

Los Alisos WRP

Newport Beach (IRWD)

Coastal (OCSD)

Santiago Canyon

Limestone Regional Park

Foothill Ranch

English Canyon

Tustin Foothills

City of Tustin

City of Santa Ana

City of Laguna Hills

City of Laguna Woods

City of Aliso Viejo

City of Mission Viejo

San Joaquin Hills

City of Laguna Beach

Pacific Ocean

Newport Bay

Chapman Ave

Santiago Cyn Rd

Modjeska Cyn Rd

SR-241

Portola Pkwy

Irvine Blvd

Trabuco Rd

Jamboree Rd

Tustin Ranch Rd

SR-261

Culver Dr

Yale Ave

Bryan Ave

SR-133

Jeffrey Rd

Walnut Ave

Sand Canyon Ave

Bake Pkwy

Alton Pkwy

Lake Forest Dr

El Toro Rd

Ridge Route Dr

I-5 FWY

Irvine Center Dr

Barranca Pkwy

I-405 FWY

Warner Ave

SR-55

Harvard Ave

Redhill Ave

Von Karman Ave

Shady Canyon Dr

Main St

Michelson Dr

University Dr

Campus Dr

MacArthur Blvd

SR-73

Bonita Canyon Dr

Newport Coast Dr

San Joaquin Hills Rd

Legend

- Water Recycling Plant
- Interagency Connection
- Caltrans Selenium Dewatering Plant
- IRWD Service Area
- Sewer Collection System Study Area
- Service Area Tributary to MWRP
- Service Area Tributary to LAWRP
- Service Area (IBC) Tributary to OCSD
- Service Area (Coastal) Tributary to OCSD
- Portions of Service Area 7
- Newport Beach
- El Toro Road Sewer Tributary Area

N

0 3,500 7,000 14,000 Feet

1" = 7,000'

IRVINE RANCH WATER DISTRICT

AKM

Project No: 111316.00

Date: December 2016

SEWER COLLECTION SYSTEM MASTER PLAN

Treatment Facility Tributary Areas

Figure 3-1

Michelson Water Recycling Plant

The Michelson Water Recycling Plant (MWRP) is located on Riparian Way south of Michelson Drive, on the northwest side of the San Diego Creek in the City of Irvine. MWRP was initially put into operation in 1967, delivering 2 mgd of tertiary-treated recycled water to agricultural users. As the service area grew, the recycled water system grew along with it. By 2008, the MWRP capacity was 18 mgd and recycled water was being used for a variety of other non-potable uses. The MWRP capacity was recently expanded to 28 mgd.

It is estimated that final build-out conditions will require 32.6 mgd of recycled water to meet the future demands (*per Table 4 of IRWD's 2016 Sewer Flow Projections and Calibration Memorandum*). Based on recent flow monitoring information, approximately 20.3 mgd is currently being conveyed to MWRP for treatment *(per Table 3 of IRWD's 2016 Sewer Flow Projectiosn and Calibration Memorandum).*

Since 1988, all residuals from MWRP have been conveyed to OCSD for processing, reuse, and disposal. In 2009 however, IRWD Board of Directors made the decision to implement solids handling facilities at MWRP to ultimately cease conveyance of residuals to OCSD. IRWD's "Biosolids and Energy Recovery Project", currenty under construction, will include biosolids processing, biogas management, and energy recovery systems within a 4.6-acre site adjacent to MWRP. A list of summaries of agreements between IRWD and OCSD can be found in Appendix C.

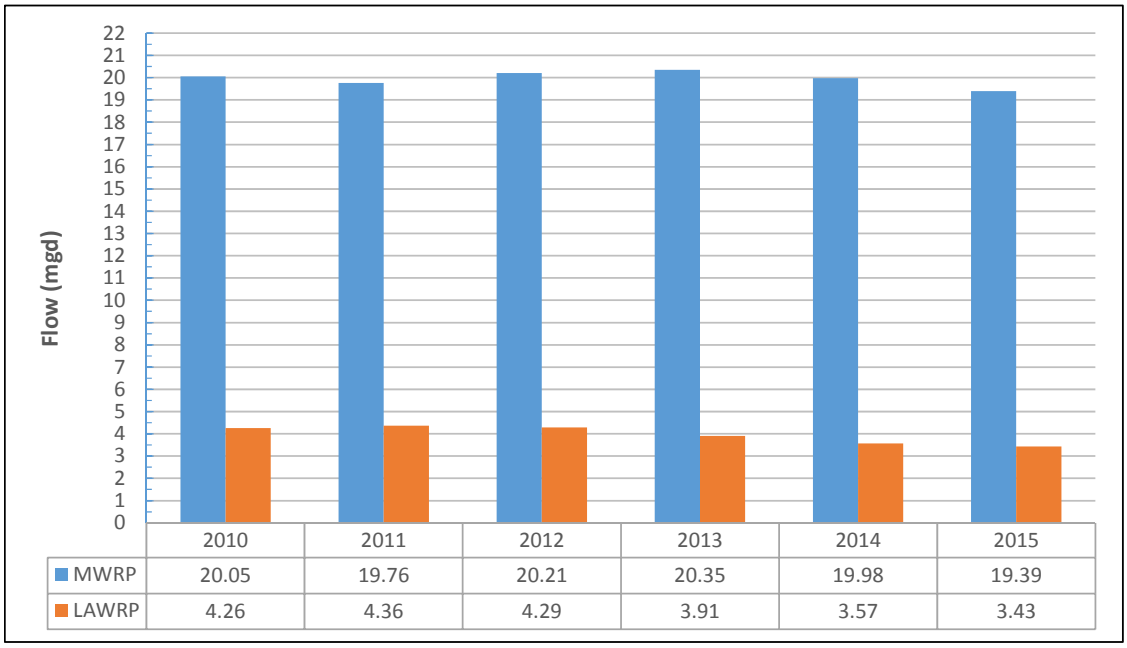
Los Alisos Water Recycling Plant

The Los Alisos Water Recycling Plant (LAWRP) is located on the corner of Muirlands Boulevard and Aspen Street in the City of Lake Forest. The LAWRP has been operating since 1964 and has undergone several upgrades as new technology was developed. Recycled water is also produced at LAWRP and the current plant capacity is 7.5 mgd.

Based on recent flow monitoring information, approximately 3.43 mgd is currently being conveyed to the LAWRP for treatment.

The influent flows to MWRP and LAWRP are shown in Figure 3-2.

Figure 3-2
2010-2015 Influent Flows to MWRP and LAWRP



	2010	2011	2012	2013	2014	2015
MWRP	20.05	19.76	20.21	20.35	19.98	19.39
LAWRP	4.26	4.36	4.29	3.91	3.57	3.43

3-3 Sewersheds and Trunk Sewer Systems

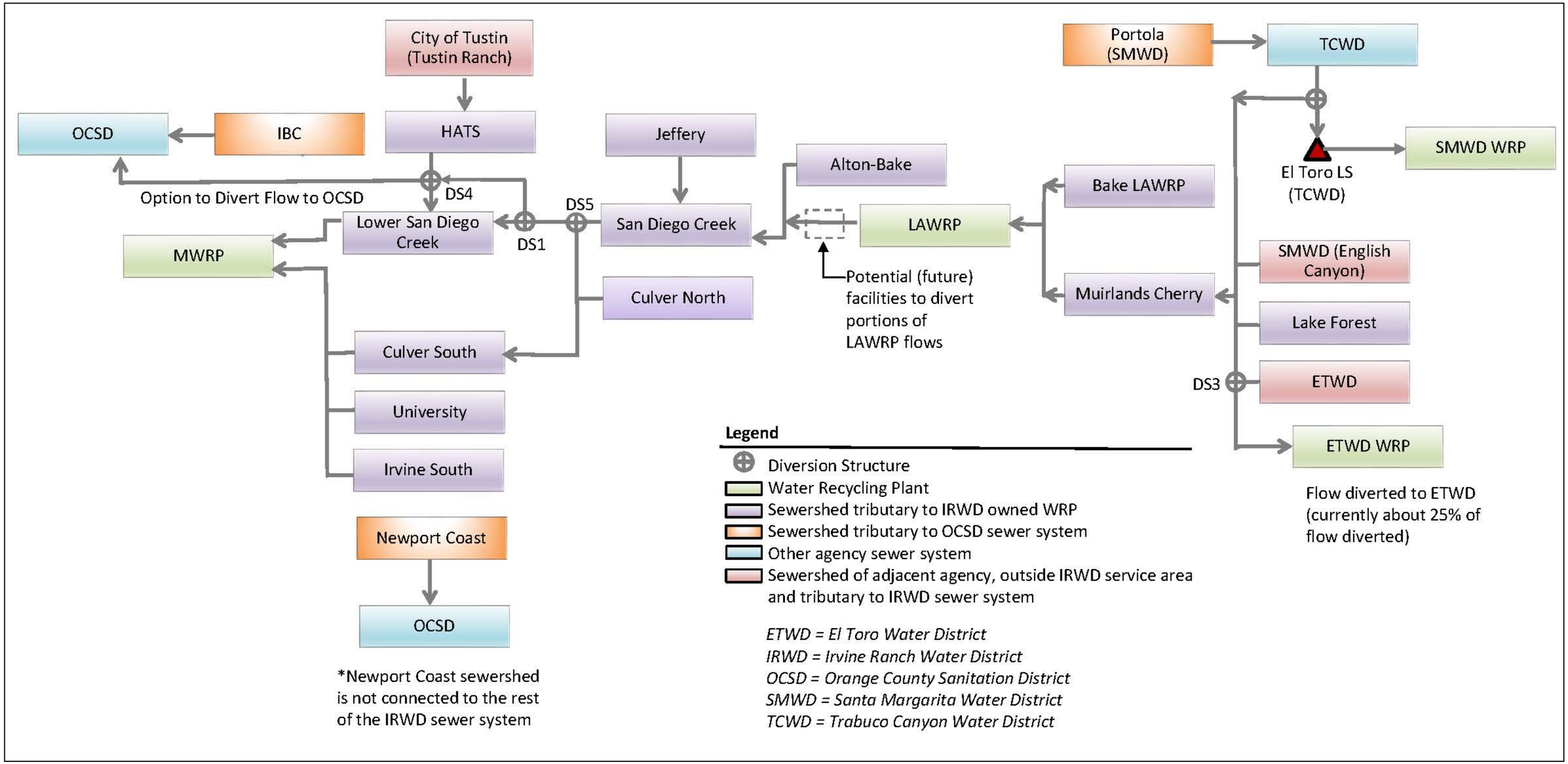
For this study, the sewer collection system study area has been divided into 15 major sewersheds, as shown on Plate 1. Each sewershed has an associated trunk sewer line that collects the wastewater from the sewershed. Generally, the major trunk lines are 10-inches in diameter and greater. The minor collectors are 8-inches in diameter and smaller.

Descriptions of the sewersheds and associated trunk sewer system are included in Table 3-1. Figure 3-3is a schematic display of the flow paths from each sewershed to a treatment facility. There are several areas outside of the IRWD service area that contribute sewage flow to the system. These include portions of Tustin Ranch, El Toro Water District's (ETWD) service area,, and the City of Newport Beach. The sewage from ETWD's area is conveyed to the sewer in Cherry Avenue but is then split at an existing diversion structure located at El Toro Road and Muirlands Boulevard. Approximately 75 percent of the flow is diverted to LAWRP and 25 percent of the flow is diverted to ETWD's treatment facility.

Table 3-1
Sewersheds and Trunk Lines

Treatment Facility	Sewershed	Tributary Area (Ac)	Tributary Area Location Description	Trunk Line Location Description	Diameters (in)	Total Length (ft)
Los Alisos	Bake LAWRP	2,319	Generally bounded by SR-241 on the north, Lake Forest Dr on the east, OC Metrolink on the south and Bake Pkwy on the west	Bake Pkwy north of OC Metrolink; adjacentSerrano Creek	4" to 24"	253,700
	Lake Forest	580	Generally bounded by Rimhurst Dr on the north, El Toro Rd and Ridge Route Dr on the east, OC Metrolink on the south, and Lake Forest Dr on the west	Easement from Lake Forest Dr to Serrano Rd; to Ridge Route Dr; to Trabuco Rd; to Rimhurst Dr; to Montcliff Dr	6" to 15"	94,000
	Muirlands Cherry	2,386	Generally bounded by SR-241 on the north, the IRWD boundary on the east and south, and Bake Pkwy and Lake Forest Rd on the west	Muirlands Blvd, east of LAWRP; Cherry Ave north of Muirlands; Aliso Park Dr and Midcrest Dr, northwest of Cherry Ave	6" to 30"	272,700
Michelson	Alton Bake	4,395	Generally bounded by IRWD boundary on the north, Bake Pkwy on the east, OC Metrolink on the south, and IRWD boundary and Great Park on the west	Alton Pkwy OC Metrolink to Irvine Blvd; Bake Pkwy South Pointe Dr to Lake Forest Dr	4" to 21"	291,600
	Culver North	6,460	Generally bounded by the IRWD boundary on the north, Jefferey Rd on the east, San Diego Creek on the south, and Culver Dr on the west	Culver Dr north of San Leandro	4" to 39"	921,100
	Culver South	1,008	Generally bounded by San Diego Creek on the north, University Dr on the south and east, Harvard Ave on the west	Generally Michelson Dr east of Harvard Ave	4" to 36"	149,000
	Harvard Avenue Trunk Sewer (HATS)	8,430	Generally bounded by the IRWD boundary on the north, Culver Dr on the east, San Diego Creek on the south, and Peters Canyon Channel and the IRWD boundary on the west; includes a portion of the Tustin Ranch, outside IRWD service area	From Irvine Park along 261 Fwy and Jamboree Rd to Edinger Ave; Harvard Ave north of Main St	4" to 60"	994,000
	Irvine South	3,557	Generaly bounded by San Diego Creek and Campus Dr on the north, Culver Dr and Bommer Canyon on the east and the IRWD boundary on the south and west	Adjacent SR-73, south of San Diego Creek and Bonita Canyon Dr	6" to 30"	191,000
	Jefferey	5,601	Generally bounded by the IRWD boundary on the north, Sand Canyon Ave on the east, San Diego Creek on the south, and Jeffrey Rd on the west	Jefferey Rd north of San Diego Creek	4" to 36"	666,300
	San Diego Creek	9,781	Generallly bounded by Portola Pkwy on the north, the east boundary of the Great Park and Bake Pkwy on the east, the IRWD boundary on the south, and Sand Canyon Ave and SR-133 on the west	Adjacent San Diego freeway on the north side	4" to 48"	450,700
	Lower San Diego Creek	65	Area southeast of Harvard Ave and Main St, north of I-405 Fwy; Area southwest of Harvard Ave and I-405 Fwy, with San Diego Creek to southwest	Michelson Dr east of San Diego Creek; easement north of Michaelson Dr	6" to 51"	14,600
	University	4,286	Generally bounded by University Dr on the north, Quail Hill Preserve and Bommer Canyon on the east, Shady Canyon Dr on the south, and Culver Dr on the west; Includes UCI	University Dr east of Harvard Ave; Culver Dr south of University Dr	4" to 24"	371,700
OCSD	IBC	5,299	Bounded by Edinger Ave on the north, Peters Canyon Channel on the east and south, and the IRWD boundary on the west	Jamboree Rd, Barranca to McGaw Ave; McGaw Ave, Jamboree Rd to Redhill Ave; Redhill Ave, McGaw Ave to Main St; Main St, Peters Canyon Channel to Redhill Ave	8" to 66"	296,500
	Newport Coast	4,736	Generally bounded by SR-73 on the north, San Joaquin Hills on the east, Pacific Coast Hwy on the south, and the IRWD boundary on the west	Newport Coast Dr; Pelican Hill Rd	4" to 18"	341,300
Portola (SMWD)	SMWD	317	Generally bounded by Santiago Canyon Rd on the north, El Toro Rd on the east, and Saddleback Ranch Rd on the south and on the west	Saddleback Ranch Rd, Ridgeline, El Toro Rd	8" to 15"	22,100
	Total	**59,222**	**acres**			
	Total	**92.5**	**sq miles**			

Figure 3-3: Sewershed Flow Chart



3-4 Summary of Sewage Flows

A significant flow monitoring effort was conducted and sewer generation factors were developed as a part of this master plan effort. The details of the flow monitoring and sewer generation factor development can be found in Appendix B.

In 2016, IRWD performed additional analyses on the sewer generation factors for the purposes of:

1. Calculating existing and projecting future sewer collection system flows with IRWD's Demand Forecasting Tool (DFT)

2. Calibrating the sewer demand generation factors (aka local interior usage, or sewage generation factors) for planning purposes (e.g. Sub-Area Master Plan Updates).

Table 3-2
Comparison of 2015 SCSMP Flow Monitoring with 2015-16 DFT Projections (mgd)

Service Area	2015-2016 DFT Projections (mgd)	SCSMP Flow Monitoring (mgd)
MWRP Service Area	20.6	18.4
SA-7 to MWRP	1.0	1
IBC to MWRP	0.5	0.5
Caltrans to MWRP	0.4	0.4
Total Flow to MWRP	22.5	20.3
LAWRP (incl. English Cyn)	3.9	3.4
IBC / Tustin Legacy[1]	5.2	5.45
HATS Trunk Sewer[2 3]	4.9	4.8
Newport Coast	1.00	1.00

[1] 0.5 mgd of IBC flow diverted to MWRP at the Michelson LS

[2] HATS Trunk Sewer included in MWRP service area but shown as a separate area

[3] Flow monitoirng = I&I minus Cal5(Feb 2015) minus other Tustin OCSD flows (May 2015 OCSD report) minus Caltrans flows (~300 gpm)

Table 3-3
Summary of Build-out Condition Sewer Flow Projections

Sewer Treatment Plant / Service Area	Current Projections (mgd)	2011-12 Water Demand Factor Study (mgd)	2005-06 SCSMP (mgd)
MWRP Tributary (incl. HATS)	31.1	30.7	34.8
SA-7 to MWRP	1.0	1.0	1
IBC to MWRP	0.5	0	0
Caltrans to MWRP	-	0.4	0.4
Total Flow to MWRP	**32.6**	**32.1**	**36.2**
LAWRP Tributary	4.0	4.9	7.2
Baker WTP	0.2	-	-
Portola Hills (ETRSLS)	0.23	-	-
English Canyon	0.6	0.6	0.6
Total Flow to LAWRP	**5.0**	**5.5**	**7.8**
OCSD Tributary			
IBC / Tustin Legacy	7.5	8.3	4.3
Newport Coast	1.0	1.0	1.0
Other Flows to be considered			
TCWD / Add'l SMWD			
ETWD / Cherry Ave			

IRWD's study resulted in final recommendations to the local-interior factors, which were documented in the 2016 Sewer Flow Projections and Calibration Memorandum (Appendix D). Table 3-2 shows the resultant comparison of flows estimated using flow monitoring data versus flows calculated using the DFT 2015-2016 Projections. Table 3-3 is a summary of the build-out condition sewer flow projections.

3-5 Gravity System Facilities

The gravity system consists of approximately 1,009 miles of pipe, 24,300 manholes, and 5,300 cleanouts. The existing sewers are primarily constructed of vitrified clay pipe (496 miles or 49.1%) and polyvinyl chloride pipe (493 miles or 48.8%). Pipe sizes range from 4-inches to 60-inches in diameter. Approximately 734 miles of pipe (72.7%) are 8-inches in diameter. The sewer system was constructed between 1955 and today as shown in Figure 3-4. Table 3-4 is a summary of the gravity sewers by diameter, decade of construction, and material.

Figure 3-4
Total Length of Gravity Sewers by Year of Construction

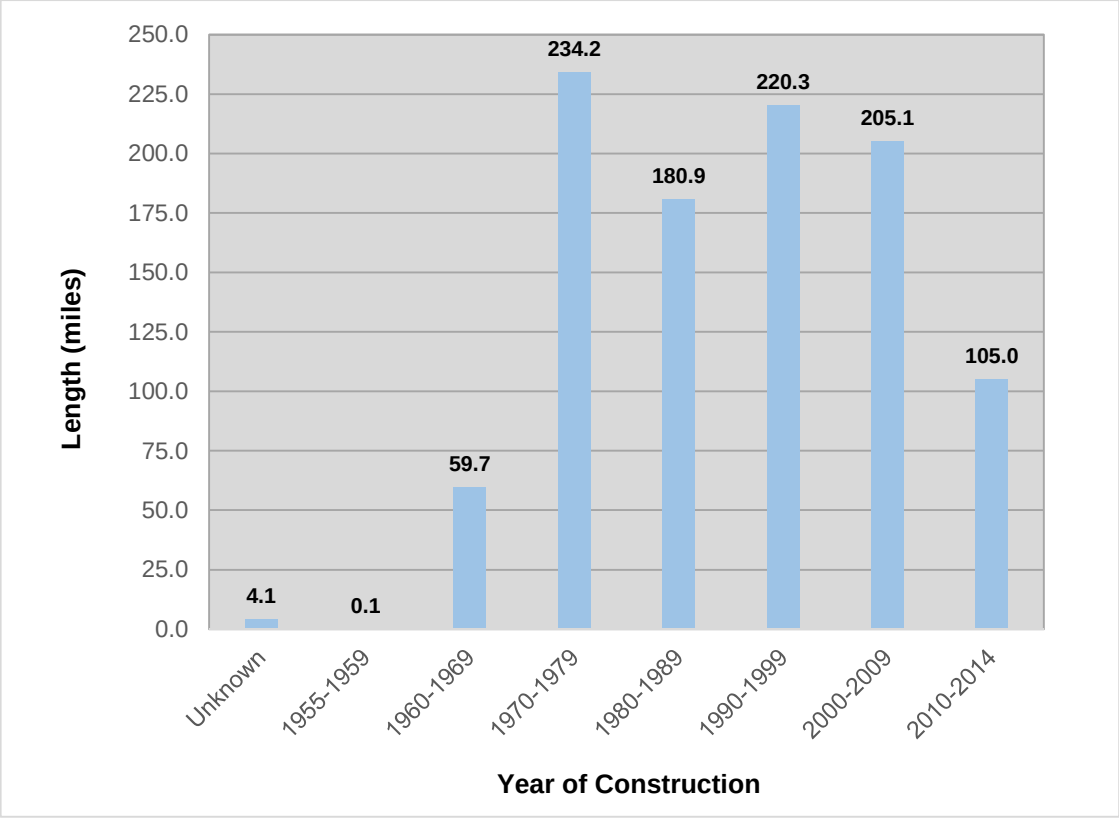


Table 3-4
Gravity Sewer Summary (Length in feet)

Diameter (in)	1950-1959	1960-1969				1970-1979						
	VCP	ACP	PVC	UNK	VCP	ABS	ACP	DIP	PVC	RCP	UNK	VCP
4					592							1,539
6	254			110	18,045		54		6,524			126,524
8	260	60		147	173,312	656	1,501		27,308		15	782,475
10		234	450		30,524		189		1,473			65,802
12		6,742			25,012		903		50,593			31,520
15		3,352		956	17,209		113		131		31	38,182
16								50				
18		2,137			9,776							39,961
20												
21		938			2,983						130	10,524
24		12,340			4,330		218					8,346
27		2,001								6		599
28												
30												457
33												2,603
36		3,421			117		3,062					8,945
37		448										
39							4,704					1,005
42										591		11,038
45										3,448		
48										558		
51										5,017		
54												
60												
Length (ft) Subtotal	**514**	**31,673**	**450**	**1,214**	**281,898**	**656**	**10,744**	**50**	**86,029**	**9,620**	**176**	**1,129,519**
Total (feet)	**514**	**315,235**				**1,236,793**						
Total (miles)	**0.1**	**59.7**				**234.2**						

Diameter (in)	1980-1989							1990-1999				
	ABS	ACP	DIP	PVC	RCP	UNK	VCP	ACP	DIP	PVC	UNK	VCP
4							153			139		375
6				40,685		8	22,094	262		31,103	375	10,854
8	5,423	2,323	443	351,986		27	283,046	386	1,618	570,908		330,636
10		412	292	18,158	18		45,934		248	14,622		38,051
12			130	4,691			30,845			2,249		25,243
15				3,161	627		67,428			1,820		69,174
16			382						569	635		
18		705	1,059				10,891		415	220		13,743
20							269		464			658
21							6,335					19,270
24			145		1,326		11,355		2,812			20,922
27					117		2,189					
28												
30							2,851					1,246
33							10,793					3,851
36			339				9,706		393			
37												
39												
42					3,716		455					
45					7,438							
48					1,361							
51												
54					4,743							
60					1,207							
Length (ft) Subtotal	**5,423**	**3,440**	**2,790**	**418,681**	**20,552**	**35**	**504,344**	**648**	**6,519**	**621,696**	**375**	**534,022**
Total (feet)	**955,266**							**1,163,260**				
Total (miles)	**180.9**							**220.3**				

Diameter (in)	2000-2009						2010-2015					UNK			Total (ft)
	ACP	CCFRPM	DIP	PVC	RPMP	VCP	ACP	CML&C	HDPE	PVC	VCP	PVC	UNK	VCP	
4				681						45					**3,523**
6				51,178		2,800				4,897	99	217			**316,081**
8	1,130		2,815	774,484		71,772		162		470,250	2,182	7,313	106	9,913	**3,872,656**
10			1,474	47,515		14,767			1,565	10,073	489	312		1,892	**294,495**
12				17,825		6,623				30,860	586	1,051			**234,873**
15				11,708		20,210				4,821	6,863			10	**245,796**
16			1,512	11,812						4,562					**19,521**
18				4,538		6,190				6,640				500	**96,773**
20			20	2,277		3,725				2,871	104				**10,387**
21						1,446					2,384			326	**44,336**
24						2,218	13			4,923					**68,948**
27				1,475		754								88	**7,228**
28		1,087		40	3,373	1,641									**6,141**
30				14		5,584									**10,151**
33															**17,247**
36				1,110		3,400									**30,493**
37															**448**
39															**5,709**
42				1,052	4,661	44									**21,557**
45															**10,886**
48															**1,919**
51															**5,017**
54															**4,743**
60										10					**1,217**
Length (ft) Subtotal	**1,130**	**1,087**	**5,821**	**925,708**	**8,034**	**141,173**	**13**	**162**	**1,565**	**539,951**	**12,706**	**8,892**	**106**	**12,729**	**5,330,146**
Total (feet)	**1,082,953**						**554,398**					**21,727**			**5,330,146**
Total (miles)	**205.1**						**105.0**					**4.1**			**1,009**

3-6 Lift Stations and Force Mains

IRWD owns and operates a total of twenty-three (23) sewage lift stations, listed in Table 3-5. The SCSMP evaluated the hydraulics (i.e. modeled) and assessed the condition of eleven lift stations that pump directly to IRWD's sewer collection syste, excluding small lift stations operated within MWRP's boundaries. Descriptions of the existing lift stations assessed in the SCSMP are listed in Table 3-6 and shown on Figure 3-5 and Plate 1.

Lift stations are necessary in areas where the tributary flow is collected at a lower elevation than the surrounding or adjacent trunk sewer system that conveys flow by gravity to the treatment facilities. Each lift station has an associated force main(s), which is a pressurized pipeline that conveys the sewage from the lift station to the gravity collection system.

Lift stations require frequent maintenance and pose a significant risk in the system in regards to overflows or spills. Therefore, the design and construction of new lift stations is avoided if feasibly possible. Lift stations are constructed with redundant facilities and standby power to minimize the potential for spills and potential impact to the environment.

3-7 Siphons

IRWD's sewer collection system includes inverted siphons (siphons) at eighteen (18) locations. Each was constructed to go under a major flood control channel or a conflicting utility. Siphons are designed with an elevation difference, between the upstream side and the downstream side, so that sufficient pressure is created to convey wastewater flow from one side of the siphon to the other. The primary concerns with each siphon is the fact that grease and debris can often build up in the siphon, requiring frequent maintenance to prevent sewer spills and the formation of hydrogen sulfide, which is a foul smelling gas. Odor complaints are often made in areas where the siphons are not vented properly.

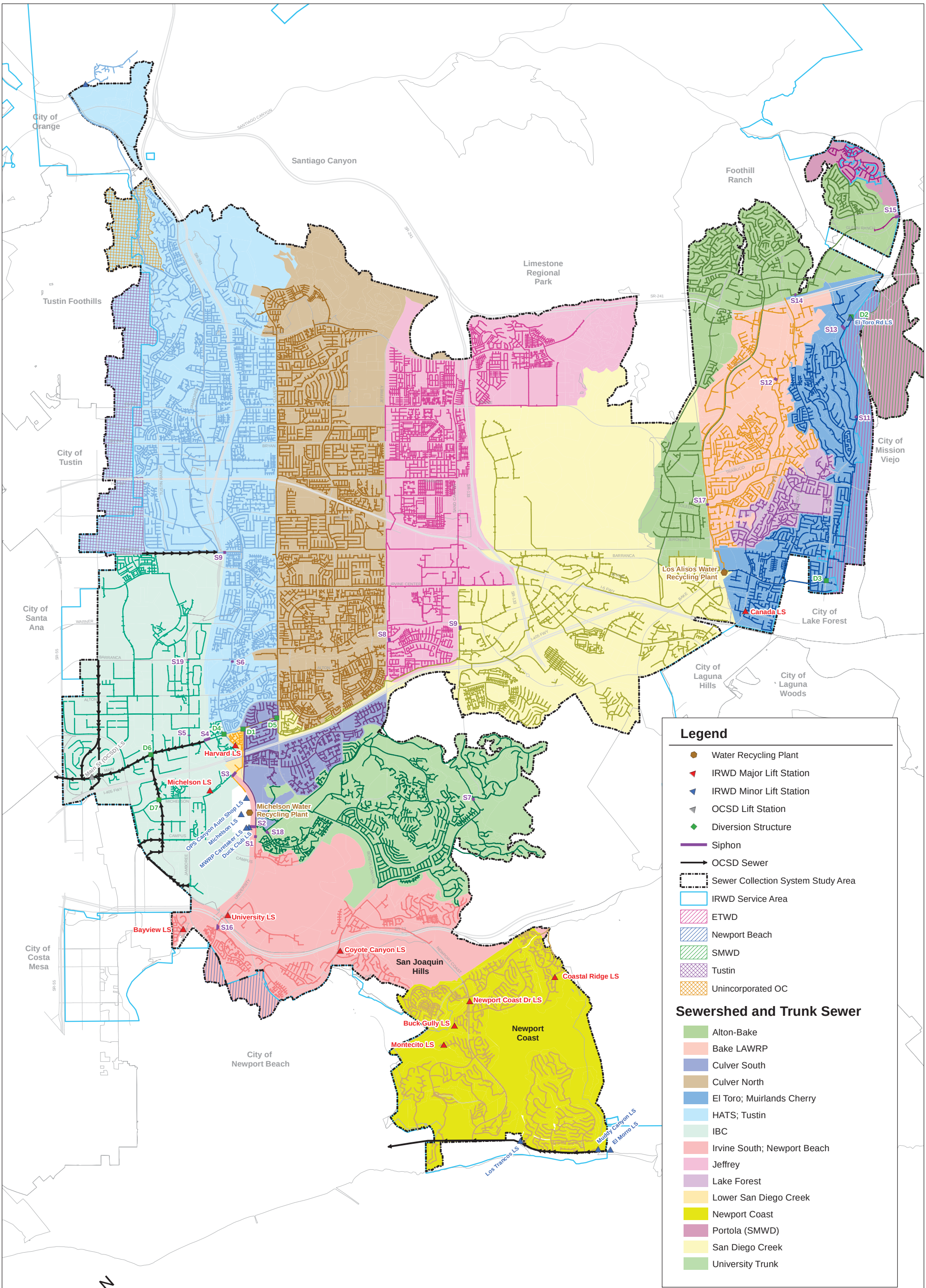
Most of IRWD's siphon facilities include more than one barrel, for purposes of redundancy as well as capacity. Often, smaller barrels are utilized under low flow conditions and the larger barrels are utilized under high flow conditions.

The existing siphon locations and descriptions are listed in Table 3-7 and shown on Figure 3-5 and Plate 1.

3-8 Diversion Structures

IRWD's sewer collection system includes diversion structures at seven (7) locations. Diversion structures divert or split the upstream flows into two separate downstream pipes. Typically, the diversion structures are set for "normal" operating conditions but they provide IRWD staff with the option to change the flow paths within the system for maintenance or emergency purposes. The operational flexibility that diversion structures provide is important within the sewer system so that maintenance events can occur without causing a spill or overflow.

The existing siphon locations and descriptions are listed in Table 3-8 and shown on Figure 3-5 and Plate 1.



IRVINE RANCH WATER DISTRICT

PROJECT NO: 11316.00

DATE: December 2016

Sewer Collection System Master Plan

Existing System

Figure 3-5

Table 3-5
Existing Lift Stations

No.	ID	Name	Operated by	Type	Pumped to	Tributary Area					SCSMP	
						Gross Area (acres)	Residential (Units)	Non-Res. (acres)	Estimated 2015 Avg. Flow (MGD)	Estimated 2035 Avg. Flow (MGD)	Hydraulic Model	Field Evaluated
1	CLS001	Bayview	IRWD	Sewage	IRWD Sewers	59.0	224	32.1			yes	yes
2	CLS005	University	IRWD	Sewage	IRWD Sewers	1,868.0	6,691	451.5			yes	yes
3	CLS010	Newport Coast Drive	IRWD	Sewage	IRWD Sewers	1,092.0	2,811	34.0			yes	yes
4	CLS013	Buck Gully	IRWD	Sewage	IRWD Sewers	36.8	95	-			yes	yes
5	CLS015	Montecito	IRWD	Sewage	IRWD Sewers	36.4	98	-			yes	yes
6	CLS016	Coyote Canyon	IRWD	Sewage	IRWD Sewers	922.1	2,375	214.6			yes	yes
7	CLS019	Canada	IRWD	Sewage	IRWD Sewers	249.0	1,024	81.0			yes	yes
8	CLS025	Irvine Park	IRWD	Sewage	IRWD Sewers	280.0	-	280.0			yes	yes
9	CLS029	Coastal Ridge	IRWD	Sewage	IRWD Sewers	217.5	514	-			yes	yes
10	CLS030	Michelson	IRWD	Sewage	IRWD Sewers	157.0	4,213	57.4			yes	yes
11	CLS041	Harvard Ave. Trunk Sewer	IRWD	Sewage	IRWD Sewers	8,976.9	26,621	3,034.9			yes	yes
12	CLS022	El Morro School	IRWD	Sewage	OCSD Sewers	El Morro High School					no	?
13	CLS024	DATS Lift Station	IRWD	Brine Disposal	OCSD Sewers	Deep Aquifer Treatment System					no	no
14	CLS021	San Joaquin Housing	IRWD	Sewage	Newport Beach Sewers	Caretaker House at San Joaquin Reservoir					no	no
15	CLS026	Operations Center - Auto Shop	IRWD	Sewage	IRWD Sewers	Autoshop at MWRP					no	no
16	CLS027	Duck Club Lift Station	IRWD	Sewage	IRWD Sewers	Duck Club Building at MWRP					no	no
17	CLS028	Michelson - Caretaker Housing	IRWD	Sewage	IRWD Sewers	Caretaker House at MWRP					no	no
18	CLS017	Los Trancos Low Flow	IRWD	Low-Flow Drainage	OCSD Sewers	Los Trancos Canyon					no	?
19	CLS018	Muddy Canyon Low Flow	IRWD	Low-Flow Drainage	OCSD Sewers	Muddy Canyon					no	?
20	CLS009	MWRP MPS-3	IRWD	Solids Disposal	OCSD Sewers	MWRP					no	no
21	CLS042	LAWRP SOCWA Outfall	IRWD	Solids Disposal	SOCWA Sewers	LAWRP					no	no
22	CLS032	Main Street	OCSD	Sewage	OCSD Sewers	IBC + Diversion for HATS, Culver TS, &					no	no
23	CLS040	El Toro Rd	TCWD	Sewage	SMWD Sewers	Portola Hills + TCWD					no	no

Table 3-6
Existing Lift Stations Assessed in SCSMP

General Pump Station Information										Pump and Motor Data													Wet Well Data						Forcemain				
Asset ID	Facility Name	Location	Atlas Sheet	Map_ID	As-Built No.	As-Built Date	Plans Pad Elevation (ft	Plans Ground Elevation (ft)	No. of Pumps on Plan	Pumping Capacity (gpm)[1]	TDH	Curve Date	Manu-facturer	Model	Type	Design Capacity (gpm)	Design TDH (ft)	VFD	Pump Motor RPM	Motor HP	SCADA Screenshot Lead Start	SCADA Screenshot Lead Stop	Inlet Sewer Size (in)	Inlet Sewer Material	Inlet Sewer elevation (ft)	Wet well Dimensions	Wet Well Diameter	Wet Well Bottom Elevation	Forcemain Size (in)	Forcemain Length (ft)	Forcemain Material	Forcemain Beginning Elev (ft)	Forcemain Terminal Elev (ft)
CLS001	Bayview LS	Bayview Pl at Bayview Wy	051E	00467	A00467_911	1986	22.60	31.30	2	435	55	2008	Cornell Pump Company	4NNDH	Submersible	435	55	no	1800	15	72"	25"	10 NW	PVC	16.86	6'x6'	-	10.00	6	2,852	PVC	23.30	27.79
																							10 E	PVC	16.99								
CLS005	University LS	University Dr NE of SR-73	057N	00080	A00080B_446	1997	-4.00	18.00	3	1,000	44	1998	Cornell Pump Company	6NHG		1,000	44	yes	1196	20	9'	3.5	30	DIP	2.45	30'2"x8'	-	-5.00	16	5,008	PVC	-0.20	20.40
					A01799_9794	2009																							12	4,690		-0.20	26.40
CLS010	Newport Coast Dr LS	Newport Coast Dr SW of Ridge Park Rd	129E	00628	A01808_9470 (FM)	2005	577.30	602.50	3	2,000	85	2012	Cornell Pump Company	8NHTA	enclosed solids handling	2,000	85	no	1180	50	57"	35"	18	VCP	580.80	21.5'x7'	-	577.30	12	2,951	PVC	581.14	652.86
					A00628_1127	1990																							12	3,057	DIP	581.14	645.84
CLS013	Buck Gully LS	SW end of White Pine	129W	14103	T14103A_2378	1993	530.50	540.80	2	180	110	1998	ESSCO	4x12TF	submersible vortex pump	180	110	no	1750	20	15"	6"	8	VCP	526.87	8'x8'	-	524.50	6	1,398	PVC	525.00	614.66
CLS015	Montecito LS	Via Burrone west of Vista Alberni	129W	14070	T14070 pdf_4316	1999	528.42	535.92	2	120	119	2008	ESSCO	4x12TF	submersible vortex pump	120	119	no	1750	20	36"	24"	8	PVC	523.17	6'X6'	-	517.67	4	1,154	DIP	518.35	623.53
CLS016	Coyote Canyon LS	Bonita Canyon Dr SW of SR-73	091S	00798	A00798_1422 A00798C_3565	1999	135.74	169.00	4	500	82	2000	Cornell Pump Company	4414T-VC1BDB	horizontal non clog	500	82	no	1200	14.8	7'	4.5'	20 (2 pipes)	DIP	143.00	7'x11'	-	136.00	12	2,134	PVC	141.29	201.20
CLS019	Canada LS I	East corner of Rockfield Blvd and Lake Forest Dr	196W	01236	A01236_137	1980	275.33	294.67	2	712	72	2004	Cornell Pump Company	6x6x14x3 6X6X14X4	submersible non clog	650	72	no	1200	30	7.5'	4.4'	12 NW	VCP	278.67	-	6'	275.33	8	1,496	DIP	279.73	325.89
																							8 E	VCP	278.67				8	1,519	PVC	279.73	325.89
CLS025	Irvine Park LS	On Irvine Park Rd NE of Jamboree Rd	018W	00984	A00984_8587	2003	559.90	565.00	2	270	72	2004	ESSCO	4x12TF	submersible vortex pump	270	72	no	1750	20	4.9'	3.2'	8	PVC	542.80	-	10'	537.90	6	2,286	PVC	537.90	599.00
CLS029	Coastal Ridge LS	Easement SE of Pacific Mist	134S	01902	F01902_6138	2002	833.00	852.50	2	260	144	2003	Cornell Pump Company	4NHTA		260	288	no	1770	17.8	6.5'	3.5'	8	PVC	841.50	12'x6'	-	833.20	6		PVC	834.80	1081.10
CLS030	Michelson LS	Michelson Dr east of Carlson Ave	059N	00733	NA	2015	-0.77	24.75	3	2-1050; 1-1500	40, 54	NA	NA	NA	cutter pump	1050; 1050; 1500	54	yes	1760	20; 20; 30			24	VCP	6.70	35.83' x8'	-	-1.42	12	2,249	DI	2.31	29+L1B17:AH17
CLS041	Harvard LS (HATS)	Harvard Ave south of Coronado	060W	02247	A00122_491 A02247_9319	2008	10.80	43.60	2	6,805	27	2010	Wilo	T34-10/49K	submersible	6,805	27	no	870	67	13'	6'	36	PVC	17.44	17'x12'	-	5.84	30	786	PVC	11.80	40.25

Table 3-7
Existing Siphons

No.	Location	US MH ID	DS MH ID	US MH Elevation	DS MH Elevation	No. Barrels	Size (in)	Length (ft)	Material	Year of Construction	Artifact ID	Air Jump Size (in)	Air Jump Material
1	San Diego Creek Channel/University	MH059S023	MH059S022	13.54	13.08	3	10, 15, 18	195	ACP	1966	624	-	-
2	Harvard/San Diego Creek Channel	MH059S024	MH059S025	10.75	10.25	3	15, 24, 30	422	ACP	1966	624	-	-
3	Michelson/Riparian	MH059N025	MH059N023	17.68	14.27	2	24, 36	434	VCP	1976	414	21	UNK
4	Main/Veneto	MH060W012	MH048S001	19.3	16.6	3	18, 24, 42	455	VCP	1986	881	UNK	UNK
5	Jamboree/N of Main	MH048S004	MH048S034	22.67	22.4	2	8,8	74	VCP	1972	9021	-	-
6	Harvard/Barranca	MH061W019	MH061W021	26.47	24.27	3	24,24,24	148	VCP	1986	904	18	UNK
7	Shady Canyon/Sage Creek	MH126E060	MH126E062	216.02	209.47	2	6,8	352	PVC	1998	3591	-	-
8	Jeffrey/Alton	MH102E004	MH102E005	98.43	97	2	15, 21	269	VCP	1988	1089	UNK	UNK
9	Sand Canyon/Barranca	MH124E082	MH124E081	135.9	135.2	2	8, 12	290	VCP	1987	1008	-	-
10	OCTA Metrolink/Jamboree	MH062N028	MH062N027	37.3	36.2	3	24, 24, 18	183	VCP	1986	904	-	-
11	El Toro/Raintree	MH220N003	MH220N006	623.66	605.35	1	15	316	VCP	1986	115	-	-
12	Prism/Linear	MH193S011	MH193S015	630.5	623.7	2	8,8	246	VCP	1988	8701, 111	-	-
13	Portola/El Toro	MH209S003	MH209S004	725	713.2	2	8,8	374	VCP	1992	67, 1760	-	-
14	241/Lake Forest	MH209N079	MH209N031	780.8	779	2	8, 10	144	VCP	1996	1490-1492	-	-
15	Glenn Ranch/El Toro	MH217E003	MH217E004	973.45	931.2	2	8,8	305	VCP	1989	1123, 1124	-	-
16	University/Milano	MH057N250	MH057N252	8.2	4.3	2	16,16	317	VCP	1998	1517, 1518	-	-
17	Bake/Toledo	MH173E113	MH173E114	361.52	361.06	1	15	108	VCP	1975	153	8	VCP
18	Harvard/University	MH059S036	MH059S035	22.89	18.9	2	8,8	269	VCP	1978	691	-	-
19	Jamboree/Barranca	MH047S002	MH047S003	28.89	28.52	1	10	60	VCP	1973	-	8	VCP

Table 3-8
Existing Diversion Structures

Diversion Structure	Location	MH_ID	Invert Elevation	Rim Elevation	D/S Pipe Diam. (in)	Direction	Year of Construction	Artifact ID	Comment
1	San Leandro and San Joaquin Channel	DS060E097	45.8	23.92	48" 45"	West South	1985	870	Flow typically diverted to south. May be diverted west to OCSD
2	El Toro and Portola	DS209S042	731.33	741.8	15" 15"	SAMCWDPS South	2005	11348	Nothing is delivered to IRWD. Only if SMWD Trabuco Canyon LS is shut doen, then the sewage cascades to IRWD's system.
3	El Toro and Muirlands	MH205E012	395.87	402.37	15" 21"	East South	1979	16022	Agreement with ETWD, 75% of flow to IRWD. 25% of flow to ETWD.
4	Harvard and Main	DS060W142	21.1	43.4	60" 36"	West South	2008	11119	Flows typically are diverted to the west to the HATS Lift Station. To the west, the flows would be diverted to OCSD.
5	Culver and San Leandro	MH060E006	37.5	56.9	24" 45"	West Southwest	1976	414	Flow are typically diverted to the west (24"), not to the southwest (45"). DS060E009 is the location of the downstream sewer not the actual diversion structure.
6	Von Karman and Main	DS048W023	17.5	35	21" 21	West Soutwest	1972	9019	Flows typically are diverted to the west (21"), not the northwest OCSD sewer (48"). Flows eventually converge into the OCSD line at Main and Sky MH007E011
7	Von Karman and Michelson	DS049N045	23.68	33.9	18" 18"	West East	1991		Flows typically are diverted to the east and north (18") to the OCSD line on Von Karman and Main, not to the west (18"). Flows are diverted over 270 degrees.

CHAPTER 4

SEWER SYSTEM PERFORMANCE EVALUATION CRITERIA

4-1 General

Establishing performance criteria is an important part of evaluating existing wastewater collection systems, as it forms the basis for system analysis and system improvement recommendations.

The Sewer Collection System Master Plan performance evaluation criteria includes the following;

- Methodology for estimating wastewater flows to evaluate available capacity in the system
- Gravity sewer performance criteria, including flow velocity and depth of flow to pipe diameter ratio (d/D)
- Lift station performance criteria for:
    1. Wet well
    2. Pumps
    3. Dry well
    4. Force main
    5. Redundancy
    6. Emergency power
    7. Remote monitoring capabilities
    8. Safety and regulatory agency requirements
- Siphon performance criteria for:
    1. Siphon barrels
    2. Access structures
    3. Slide gates, stoplogs, weirs
    4. Valves
    5. Air jumper
- Diversion structure performance criteria for:
    1. Structure

2. Slide gates, stoplogs, weirs

- Facility useful lives

IRWD's design guidelines (Procedural Guidelines Manual, Standard Drawings, and Standard Specifications) are used for sewer facility design purposes. The criteria described herein is planning level and for purposes of performance evaluation.

4-2 Flow Monitoring Plan

An extensive flow monitoring plan was developed and implemented as a part of this study to achieve the following goals:

- Calibration of sewer flow generation factors (i.e. local interior demand factors)
- Updating of dry weather flow peaking relationships
- Characterization of flows (development of diurnal curves)
- Calibration of the system model
- Development of wet weather flow peaking relationships

The flow monitoring plan included data captured via the installation flow monitoring equipment as well as data collected from IRWD's Supervisory Control and Data Acquisition (SCADA) system. Details of the plan can be found in Appendix A.

Temporary flow monitoring was conducted by ADS Environmental Services from January 2015 through April 2015. A total of 65 flow monitors were installed in the IRWD gravity sewer system:

- Sixteen (16) locations for purposes of identifying rainfall related inflow and infiltration into the system
- Twenty-five (25) locations for purposes of further calibrating the hydraulic model
- Twenty-four (24) locations for purposes of developing sewer generation factors

The results of the flow monitoring effort are shown in Tables 4-1 through 4-3. Maps showing the locations of each flow monitor can be found in Appendix A. Tables 4-1 through 4-3 also include influent flows recorded or calculated at several lift stations and LAWRP.

4-3 Sewer Generation Factors

A detailed study was conducted as a part of this master plan effort to update sewer generation factors (i.e. local interior demands) as documented in IRWD's *Land Use and Water Use Factors (September 2012),* shown in Table 4-4. Sewer flow monitoring data, SCADA data at sewage lift stations and the treatment plants, non-irrigation water billing data, and land use information were all collectively utilized in developing sewer generation factors, to be used for future development and redevelopment flow estimates. The technical details of this study can be found in Appendix B of this report. The recommended Sewer Generation Factors (SGFs) are shown in Table 4-4.

Table 4-1
Inflow and Infiltration Flow Monitoring Sites

Flow Monitor ID	Main Trunk Sewer	Manhole ID	City	Location	Upstream Pipe Characteristics				Flow Monitoring or SCADA Data Results (mgd)[1]		
					Pipe ID	Size (in)	Slope	Material	Min	Ave	Max
I&I1 (MP Site 1)	Jeffrey Rd	MH102S009	Irvine	Jeffrey Rd, south of Alton Pkwy	CLMH102E008MH102S009	33	0.0012	VCP	0.384	2.202	4.822
I&I2 (MP Site 2)	San Diego Creek Interceptor (SDCI)	MH102S002	Irvine	Easement, east of Jeffrey Rd and north of 405 Fwy	CLMH102S003MH102S002	48	0.0024	RCP	1.140	3.601	6.830
I&I3 (MP Site 3)	San Diego Creek Interceptor (SDCI)	MH138N016	Irvine	Easement, west of 133 Fwy and north of 405 Fwy	CLMH138N017MH138N016	42	0.0015	VCP	0.780	2.718	5.370
I&I4 (MP Site 4)	Alton-Bake	MH172N011	Irvine	Alton Pkwy, north of Barranca Pkwy	MH172N012MH172N011	18	0.0065	VCP	0.391	1.451	3.293
I&I5 (MP Site 5)	Culver So. 24	MH060E003	Irvine	Culver Dr south of Main St	CLMH060E002MH060E003	36	0.0015	ACP	1.057	4.156	7.973
I&I6 (MP Site 6)	Culver Dr	MH062S010	Irvine	Culver Dr, south of Irvine Center Dr	CLMH062S011MH062S010	39	0.0099	ACP	0.753	2.772	5.759
I&I7 (MP Site 7)	Culver Dr	MH084N146	Irvine	Culver Dr, south of Irvine Blvd	CLMH084N047MH084N146	18	0.0120	VCP	0.174	0.597	2.136
I&I8 (MP Site 8)	Harvard Ave (HATS)	MH060N031	Irvine	Harvard Ave, north of Main St	CLMH060N016MH060N031	54	0.0005	RCP	1.128	6.193	12.048
I&I9 (MP Site 9)	Harvard Ave (HATS)	MH063W047	Irvine	Harvard Ave, north of Edinger Ave	CLMH063W046MH063W047	24	0.0017	VCP	0.677	1.365	2.385
I&I10 (MP Site 10)	Harvard Ave (HATS)	MH044S019	Tustin	Myford Rd, north of 5 Fwy	CLMH044S018MH044S019	36	0.0024	VCP	0.287	1.813	3.927
I&I11 (M01)	Irvine Business Complex (IBC)	MH007E029	Irvine	Main St, west of MacArthur Blvd	CLMH008S044MH007E029	42	0.0020	RPMP	1.134	2.992	6.795
I&I12 (S1)	MWRP, Irvine South Influent	MH059S019	Irvine	Harvard Ave, northwest of University Dr	CLMH059S020MH059S019	24	0.0010	ACP	0.281	1.583	3.485
I&I13 (S2)	MWRP, University Influent	MH059S092	Irvine	Harvard Ave, northwest of University Dr	CLMH059S093MH059S092	18	0.0040	PVC	0.469	1.738	3.098
CAL5	OCSD facility	MH046N002	Tustin	Edinger Ave, east of Red Hill Ave	CLMH046N001MH046N002	24	0.0020	VCP	0.156	0.686	1.316
CAL21	MWRP, Culver So. 24	MH059E036	Irvine	Riparian Way, north of MWRP	CLMH059N021MH059E036	51	0.0020	RCP	1.814	14.723	29.390
CAL28	MWRP, Culver So. 24	MH059N021	Irvine	Riparian Way, south of Michelson Dr.	CLMH059N009MH059N021	51	0.0020	RCP	1.919	14.580	32.078
LAWRP	Muirlands Cherry	MH196N126	Lake Forest	Muirlands and Ferngreen	CLMH196N143MH196N126	27	0.0025	VCP		3.42	

[1] *Flow monitoring performed between 01/06/2015 to 04/05/2015. Results per ADS Environmental final report dated July 2015. See Appendix A.1.*

Table 4-2
Calibration Flow Monitoring Sites

Flow Monitor ID	Main Trunk Sewer	Manhole ID	City	Location	Upstream Pipe Characteristics				Flow Monitoring or SCADA Data Results (mgd)[1]		
					Pipe ID	Size (in)	Slope	Material	Min	Ave	Max
CAL1	Newport Coast	MH164N009	Newport Beach	Reef Point Dr, south of Sidney Bay Dr	CLMH164N008MH164N009	8	0.0399	PVC	0.020	0.113	0.359
CAL2	Newport Coast	MH131E003	Newport Beach	Newport Coast Dr, north of PCH	CLMH131E006MH131E003	15	0.0500	VCP	0.133	0.859	2.912
CAL3	University	MH089S004	Irvine	Culver Dr, west of Campus Dr	CLMH089S005MH089S004	12	0.0240	VCP	0.262	0.759	1.398
CAL4	Culver So. 24	MH060S050	Irvine	405 Fwy off ramp, west of Culver Dr and south of freeway	CLMH060S051MH060S050	15	0.0055	VCP	0.137	0.446	0.958
CAL6	Culver So. 24	MH088N005	Irvine	Main St, west of West Yale Loop	CLMH088N006MH088N005	18	0.0012	VCP	0.162	0.728	1.587
CAL7	Culver Dr	MH084W047	Irvine	Trabuco Rd, east of Culver Dr	CLMH084W068MH084W047	18	0.0118	VCP	0.215	0.806	1.695
CAL8	Jeffrey Rd	MH105S159	Irvine	Jeffrey Rd, north of Trabuco Rd	MH105S161MH105S159	18	0.0049	VCP	0.104	0.764	1.493
CAL9	Harvard Ave (HATS)	MH044E008	Tustin	Jamboree Rd, south of Irvine Blvd	CLMH044E007MH044E008	27	0.0085	VCP	0.258	0.873	2.835
CAL10	Bake LAWRP	MH196N148	Lake Forest	Mosscreek Rd, south of Rosewood Ln	CLMH196N128MH196N148	21	0.0099	VCP	0.399	1.326	2.715
CAL11	Lake Forest	MH196E021	Lake Forest	Lake Forest Dr, north of Muirlands Blvd	CLMH196E022MH196E021	15	0.0026	VCP	0.083	0.410	1.085
CAL12	Muirlands Cherry	MH196E154	Lake Forest	Muirlands Blvd, east of Lake Forest Dr	CLMH196E154	18	0.0099	VCP	0.491	1.635	3.123
CAL13	Bake LAWRP	MH195N022	Lake Forest	Toledo Wy, west of Bake Pkwy	CLMH195N108MH195N022	21	0.0030	VCP	0.136	0.744	1.950
CAL14	Bake LAWRP	MH173E116	Lake Forest	Bake Pkwy, south of Trabuo Rd	CLMH174S107MH173E116	18	0.0220	VCP	0.109	0.301	0.487
CAL15	Muirlands Cherry	MH206E090	Lake Forest	Cherry Ave, north of Trabuco Rd	CLMH207S091MH206E090	15	0.0199	VCP	0.236	0.840	1.608
CAL16	Bake LAWRP	MH193S035	Lake Forest	Easement north of Sharmila	CLMH193S034MH193S035	15	0.0136	VCP	0.119	0.376	1.377
CAL17	Culver Dr	MH086W001	Irvine	Warner Ave, east of Culver Dr	CLMH086W002MH086W001	18	0.0010	VCP	0.195	0.671	1.409
CAL18	MWRP, Irvine South Influent	MH058E006	Irvine	Campus Dr, east of University Dr	CLMH058E007MH058E006	21	0.0124	ACP	0.393	1.140	2.152
CAL19	San Diego Creek Interceptor (SDCI)	MH124W007	Irvine	Easement, north of 405 Fwy and west of Sand Canyon Ave	CLMH124W008MH124W007	24	0.0013	VCP	0.243	0.550	1.463
CAL20	University	MH125W006	Irvine	Easement, west of Shady Canyon and Canyon Creek.	CLMH125W007MH125W006	15	0.0340	VCP	0.140	0.370	0.788
CAL22	Irvine South	MH058E001	Irvine	University Dr, north of Campus Dr	CLMH058E002MH058E001	27	0.0031	ACP	0.240	1.681	3.455
CAL23	Irvine Business Complex (IBC)	MH008E056	Tustin	Armstrong Ave, north of Langley Ave	CLMH008E055MH008E056	28	0.0016	RPMP	0.095	0.346	0.912
CAL24	Irvine Business Complex (IBC)	MH007E011	Irvine	Main St, west of MacArthur Blvd	CLMH007E013MH007E011	21	0.0007	VCP	0.126	0.314	0.653
CAL25	University LS South	MH057N247	Newport Beach	Milano, north of La Salud	CLMH057N003MH057N247	24	0.0109	VCP	0.206	0.984	2.291
CAL26	Coyote LS South	MH091S019	Newport Beach	Bonita Canyon Road and SR-73	CLMH091S020MH091S019	12	0.0060	VCP	0.007	0.087	0.626
CAL27	Coyote LS North	MH091E007	Newport Beach	Bonita Canyon Road and SR-73	CLMN091E006MH091E007	15	0.0020	VCP	0.029	0.186	0.677
Newport Coast Dr LS	Newport Coast	LS129E010_1 LS129E010_2 LS129E010_3	Newport Beach	Newport Coast Dr, south of Ridge Park Road	CLMH129E552129E_WW010	18	0.0579	VCP		0.36	
Coyote Canyon LS	Newport Coast	LS091S016_1 LS091S016_2 LS091S016_3	Newport Beach	Bonita Canyon Drive, north of Chambord	CLMH091S018091S_WW016_1 CLMH091S018091S_WW016_2	20	0.0190	DIP		0.30	

[1] *Flow monitoring performed between 02/06/2015 to 03/08/2015. Results per ADS Environmental final report dated July 2015. See Appendix A.1.*

Table 4-3
Sewer Generation Factor Flow Monitoring Sites

Flow Monitor ID	Main Trunk Sewer	Manhole ID	Landuse	Existing Land Use Code	City	Location	Upstream Pipe Characteristics				Flow Monitoring or SCADA Data Results (mgd)[1]		
							Pipe ID	Size (in)	Slope	Material	Min	Ave	Max
UFF1	Harvard Ave (HATS)	MH042S011	Res-MDR	1164	Tustin	Portola Pkwy, northwest of Jamboree Rd	CLMH042S012MH042S011	24	0.0074	VCP	0.126	0.609	1.464
UFF2	Harvard Ave (HATS)	MH065W010	Res-MDR	1162	Irvine	Easement east of SR-261	CLMH065W008MH065W010	12	0.0070	VCP	0.055	0.266	0.696
UFF3	Harvard Ave (HATS)	MH044S092 (north)	Res-MDR	1164	Tustin	Intersection of Bryan Ave and Myford Rd	CLMH044E017MH044S092	18	0.0049	ACP	0.196	0.648	1.360
UFF4	Culver Dr	MH083W057	Res-LDR	1132	Irvine	Irvine Blvd, southeast of Culver Dr	CLMH083W058MH083W057	12	0.0118	VCP	0.033	0.175	0.383
UFF5	Culver Dr	MH084E046 (north)	Res-MDR	1162	Irvine	Yale Ave, southwest of Northwood	CLMH084E047MH084E046	15	0.0131	VCP	0.040	0.176	0.319
UFF6	Jeffrey Rd	MH105S225	Res-HDR	1172	Irvine	Jeffrey Rd, northeast of Trabuco Rd	MH105S227MH105S225	15	0.0049	PVC	0.139	0.494	0.991
UFF7	Culver Dr	MH084S031	Res-MDR	1162 (UFF7 - UFF5)	Irvine	Yale Ave, south of Southwood	CLMH084S032MH084S031	18	0.0077	VCP	0.131	0.382	0.623
UFF8	Jeffrey Rd	MH123W124	Res HDR	1182	Irvine	Barranca Pkwy, northwest of Valley Oak Dr	CLMH123W121MH123W124	10	0.0060	VCP	0.056	0.178	0.335
UFF9	Alton-Bake	MH192S136 (west)	COMM	1221	Lake Forest	Intersection of Bake Pkwy and Town Centre Dr	CLMH192S012MH192S136	12		VCP	0.006	0.113	0.536
UFF10	Harvard Ave (HATS)	MH045S037	Res-MDR	1164	Tustin	Edinger Ave, west of Jamboree Rd	CLMH045W007MH045S037	18	0.0020	VCP	0.017	0.169	0.383
UFF11	San Diego Creek Interceptor (SDCI)	MH124S052	Res-MDR	1162	Irvine	Quail Hill, east of Shady Canyon Dr	MH124S053MH124S052	12	0.0020	PVC	0.041	0.233	0.984
UFF12	San Diego Creek Interceptor (SDCI)	MH124S015	Res-HDR	1172	Irvine	Easement south of 405 and east of Sand Canyon Ave	MH124S059MH124S015	8	0.0099	PVC	0.020	0.166	0.376
UFF13	San Diego Creek Interceptor (SDCI)	MH138S015	Res-MDR	1162/1172	Irvine	Easement west of 133-Fwy	CLMH138S014MH138S015	15	0.0100	PVC	0.010	0.118	0.736
UFF14	San Diego Creek Interceptor (SDCI)	MH157E054	Office	1210	Irvine	Research Dr, southwest of Irvine Center Dr	CLMH157E004MH157E054	21	0.0070	VCP	0.027	0.202	0.509
UFF15	Bake LAWRP	MH194W079	Res-LDR	1136	Lake Forest	Trabuco Rd, east of Bake Pkwy	CLMH194W078MH194W079	10	0.0465	VCP	0.049	0.196	0.393
UFF16	Bake LAWRP - SMWD Inflow	MH217N002	Res-LDR	1135	Lake Forest	Saddleback Ranch Rd, northeast of Glenn Ranch Rd	CLMH217N003MH217N002	8	0.0688	VCP	0.073	0.248	0.581
UFF17	Alton-Bake	MH192E018	Res-LDR	1135	Lake Forest	Bake Pkwy, northeast of Portola Pkwy	CLMH192E017MH192E018	10	0.0649	VCP	0.086	0.376	0.818
UFF18	Alton-Bake	MH192N030	Res-LDR	1135	Lake Forest	Portola Pkwy, southeast of Alton Pkwy	CLMH192N029MH192N030	15	0.0052	VCP	0.057	0.240	0.611
UFF19	San Diego Creek Interceptor (SDCI)	MH156N003	Office	1210	Irvine	Easement, west of Technology Dr and south of Alton Pkwy	CLMH156N004MH156N003	21	0.0030	VCP	0.026	0.085	0.805
UFF20	Harvard Ave (HATS)	MH063W034	Office	1210 (UFF20 - I&I10)	Tustin	Easement, north of Edinger Avenue and west of Jamboree Rd	CLMH063W035MH063W034	36	0.0027	VCP	0.505	1.975	3.863
UFF21	Irvine South	MH058W003	Office	1210	Irvine	University Dr, east of MacArthur Blvd	CLMH058W002MH058W003	15	0.0070	VCP	0.011	0.059	0.211
UFF22	Newport Coast	MH132S065	Res-LDR	1133	Newport Beach	Scotia Sea, southwest of Scenic Bluff	CLMH132S006MH132S065	8	0.0040	PVC	0.003	0.027	0.224
UFF23	San Diego Creek Interceptor (SDCI)	MH156W021	Comm	1222	Irvine	Pacifica, east of Irvine Center Dr	CLMH156W024MH156W021	12	0.0071	VCP	0.034	0.244	0.602
UFF24	Irvine Business Complex (IBC)	MH049E032	Res-HDR	1192	Irvine	Michelson Dr, east of Carlson Ave	MH049E017MH049E032	10	0.0099	VCP	0.092	0.299	0.679
Bayview LS	Irvine South	LS051E001_1 LS051E001_2	Res-MDR	1163	Newport Beach	Bayview Place and Bayview Way	CLMH051E009051E_WW001 CLMH051E011051E_WW001	10 8	0.0390 0.1141	PVC PVC		0.085	
Coastal Ridge LS	Newport Coast	LS134S029_1 LS134S029_2	Res-MDR	1163	Newport Beach	Between Pacific Mist cul-de-sac and Canyon Peak cul-de-sac	CLMN134S086134S_WW029	8	0.0036	PVC		0.086	
Buck Gully LS	Newport Coast	LS129W013_1 LS129W013_2	Res-MDR	1163	Newport Beach	White Pine Drive, south of Sugar Pine Drive	CLMN129W016129W_WW013	8	0.0074	VCP		0.016	
Montecito LS	Newport Coast	LS129W015_1 LS129W015_2	Res-LDR	1133	Newport Beach	Via Burrone, west of Vista Alberi	CLMH129W122129W_WW015	8	0.0039	PVC		0.010	

[1] *Flow monitoring performed between 02/06/2015 to 03/08/2015. Results per ADS Environmental final report dated July 2015. See Appendix A.1.*

Table 4-4
Sewer Generation Factor Summary

Land Use Code	Land Use Description	Agency	Land Use		Previous (Sept.12')		Preliminary Recommendation		SCSMP 2015 Factors[1]	
			Average Density	Density Units	SGF	Units	SGF	Units	SGF	Units
1100	***Residential***									
1111	Rural Density	Orange	0.30	du/ac	250	gpd/du	250	gpd/du	250	gpd/du
1112	Rural Density	Irvine	0.30	du/ac	250	gpd/du	250	gpd/du	250	gpd/du
1115	Rural Density	Orange County	0.26	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1121	Estate Density E	Orange	1.20	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1122	Estate Density	Irvine	0.50	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1126	Estate Density	Lake Forest	0.50	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1131	Low Density	Orange	4.00	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1132	Low Density	Irvine	3.00	du/ac	225	gpd/du	215	gpd/du	215	gpd/du
1133	Low Density	Newport Beach	1.00	du/ac	290	gpd/du	250	gpd/du	250	gpd/du
1134	Low Density PC	Tustin	4.50	du/ac	450	gpd/du	450	gpd/du	450	gpd/du
1135	Suburban Density	Orange County	9.25	du/ac	165	gpd/du	215	gpd/du	215	gpd/du
1136	Low Density	Lake Forest	3.00	du/ac	270	gpd/du	210	gpd/du	210	gpd/du
1141	Low-Medium Density	Orange	10.50	du/ac	235	gpd/du	235	gpd/du	235	gpd/du
1146	Low-Medium Density	Lake Forest	11.00	du/ac	205	gpd/du	200	gpd/du	200	gpd/du
1153	Medium-Low Density	Newport Beach	2.75	du/ac	400	gpd/du	400	gpd/du	400	gpd/du
1161	Medium Density	Orange	19.50	du/ac	200	gpd/du	200	gpd/du	200	gpd/du
1162	Medium Density	Irvine	7.50	du/ac	200	gpd/du	165	gpd/du	155	gpd/du
1163	Medium Density	Newport Beach	5.00	du/ac	225	gpd/du	200	gpd/du	200	gpd/du
1164	Medium Density PC	Tustin	11.80	du/ac	155	gpd/du	160	gpd/du	160	gpd/du
1166	Medium Density	Lake Forest	7.50	du/ac	140	gpd/du	150	gpd/du	150	gpd/du
1172	Medium-High Density	Irvine	17.50	du/ac	130	gpd/du	130	gpd/du	125	gpd/du
1175	Urban Density	Orange County	29.00	du/ac	140	gpd/du	130	gpd/du	130	gpd/du
1176	Medium-High Density	Lake Forest	17.50	du/ac	145	gpd/du	110	gpd/du	110	gpd/du
1182	High Density	Irvine	32.50	du/ac	130	gpd/du	125	gpd/du	120	gpd/du
1183	High Density	Newport Beach	12.25	du/ac	115	gpd/du	110	gpd/du	110	gpd/du
1184	High Density PC	Tustin	17.40	du/ac	115	gpd/du	100	gpd/du	100	gpd/du
1186	High Density	Lake Forest	32.50	du/ac	115	gpd/du	100	gpd/du	100	gpd/du
1191	High Rise Density	Orange	35.00	du/ac	115	gpd/du	115	gpd/du	115	gpd/du
1192	High Rise Density	Irvine	40.00	du/ac	115	gpd/du	120	gpd/du	120	gpd/du
1200	***Commercial/Industrial/Office***									
1210	General Office		25	ksf/ac	62	gpd/ksf	62	gpd/ksf	62	gpd/ksf
1221	Community Commercial		9	ksf/ac	142	gpd/ksf	142	gpd/ksf	142	gpd/ksf
1222	Regional Commercial		10	ksf/ac	130	gpd/ksf	130	gpd/ksf	130	gpd/ksf
1223	Community Commercial - High Density		21	ksf/ac	0	gpd/ksf	0	gpd/ksf	0	gpd/ksf
1230	Commercial Recreation		8	ksf/ac	41	gpd/ksf	41	gpd/ksf	41	gpd/ksf
1235	Hotel		45	rooms/ac	110	gpd/ksf	110	gpd/ksf	110	gpd/ksf
1240	Institutional		8	ksf/ac	30	gpd/ksf	30	gpd/ksf	30	gpd/ksf
1244	Hospital		9	ksf/ac	165	gpd/ksf	165	gpd/ksf	165	gpd/ksf
1260	School		10	ksf/ac	20	gpd/ksf	20	gpd/ksf	20	gpd/ksf
1261	UCI		10	ksf/ac	215	gpd/ksf	215	gpd/ksf	215	gpd/ksf
1273	Military Air Field		0	ksf/ac	0	gpd/ksf	0	gpd/ksf	0	gpd/ksf
1290	Hotel		45	rooms/ac	110	gpd/ksf	110	gpd/ksf	110	gpd/ksf
1300	Industrial		9.091	ksf/ac	600	gpd/ksf	600	gpd/ksf	600	gpd/ksf
1310	Industrial - Light		18	ksf/ac	60	gpd/ksf	60	gpd/ksf	67	gpd/ksf
1320	Industrial - Heavy		25	ksf/ac	2,000	gpd/ksf	2,000	gpd/ksf	2,000	gpd/ksf
	Open Space and Other									
1411	Airports		0	ac/ac						
1413	Freeways and Major Road		0	ac/ac						
1820	Community Park		1	ac/ac						
1830	Regional Park		1	ac/ac						
1840	Fuel Modification Zone		0	ac/ac						
1850	Wildlife Preserve		0	ac/ac						
1880	Open Space (Rec)		1	ac/ac						
1900	Vacant		1	ac/ac						
4100	Water		0	-						
9100	Mixed Use		0	-						
9101	Central Park Land Use		0	ac/ac						
2100	Low Irrigated AG Potable		1	ac/ac						
2110	Low Irrigated AG Untreated		1	ac/ac						
2120	Low Irrigated AG Recycled		1	ac/ac						
2200	High Irrigated AG Potable		1	ac/ac						
2210	High Irrigated AG Untreated		1	ac/ac						
2220	High Irrigated AG Recycled		1	ac/ac						

[1] *SCSMP 2015 Factor finalized by IRWD per Sewer Collection System Demand Projections and Calibration Memo dated February 16, 2016*

4-4 Peak Dry Weather Flows

The hydraulic model (discussed in detail in the Hydraulic Model Manual) generates sewer flows by routing the tributary loads through the sewer system model, over a 24-hour period. For this study, "base loads" are defined as the 24-hour average sewer flow rates applied to the model nodes. The base loads were established to match the flow monitoring and SCADA data at various lift stations and LAWRP for the calibration period (February and March 2015). The total calibration scenario base loads to MWRP and LAWRP are 21.2 mgd and 3.7 mgd, respectively.

These calibration base loads were then increased to match what was determined to be a "peak dry day" based on historical data at the recycling plants. The base loads were globally adjusted to match the following:

- Highest influent flow calculated at MWRP based on 2015 historical data provided by IRWD

  At MWRP, the highest influent flow was calculated on June 9, 2015 at a rate of 22.6 MGD.

- Highest influent flow measured at LAWRP based on 2015 historical SCADA data provided by IRWD

  At LAWRP, the highest influent flow was measured on February 22, 2015 at a flow rate of 3.7 MGD.

- For areas that are <u>not</u> tributary to MWRP or LAWRP, the calibration base loads were increased by 6.6 percent. This percentage increase is the same as what was used to match the highest influent flow calculated at MWRP in 2015 (dry weather conditions).

More information describing the establishment of base loads and peak dry day loads is discussed in the Section 6 of the Hydraulic Model Manual.

The hydraulic model generates sewer flows by routing the tributary loads through the sewer system model, over a 24-hour period. The instantaneous model flows are generated from the base loads and the corresponding hourly diurnal patterns. The adequacy of a sewage collection system is based upon its ability to convey the peak flows. The instantaneous peak dry weather flows (PDWF) were used to evaluate the capacity of IRWD's existing and future systems.

Wastewater flows vary throughout the day based on the demographics and individual characteristics of customers upstream of any point in the system. The hourly flow variations are important in determining the peak flow depths that sewers experience. For this study, hourly flow variations over a 24-hour period were generated from the following:

Table 4-5
Diurnal Factors

Time	Residential	Commercial
12:00 AM	0.53	0.41
1:00 AM	0.39	0.39
2:00 AM	0.31	0.39
3:00 AM	0.28	0.37
4:00 AM	0.28	0.36
5:00 AM	0.49	0.39
6:00 AM	1.13	0.49
7:00 AM	2.14	0.87
8:00 AM	1.50	1.26
9:00 AM	1.32	1.65
10:00 AM	1.23	1.87
11:00 AM	1.15	1.87
12:00 PM	1.05	1.77
1:00 PM	0.99	1.78
2:00 PM	0.94	1.75
3:00 PM	0.92	1.66
4:00 PM	0.96	1.53
5:00 PM	1.06	1.27
6:00 PM	1.21	0.98
7:00 PM	1.33	0.74
8:00 PM	1.37	0.63
9:00 PM	1.32	0.59
10:00 PM	1.18	0.53
11:00 PM	0.91	0.46
Minimum	**0.28**	**0.36**
Average	**1.00**	**1.00**
Maximum	**2.14**	**1.87**

- Flow monitoring data
- Potable water use data obtained from Meter Master equipment installed on large water user meters
- SCADA data collected at the lift stations

The 24-hour general diurnal factors as a ratio to the average dry weather sewage flows for residential and commercial uses are summarized in Table 4-5 and illustrated on Figure 4-1 and 4-2. Other specific diurnal patterns were created and utilized in the hydraulic model. The factors for these patterns can be found in Section 6 of the Hydraulic Model Manual.

Figure 4-1
Residential Diurnal Curve

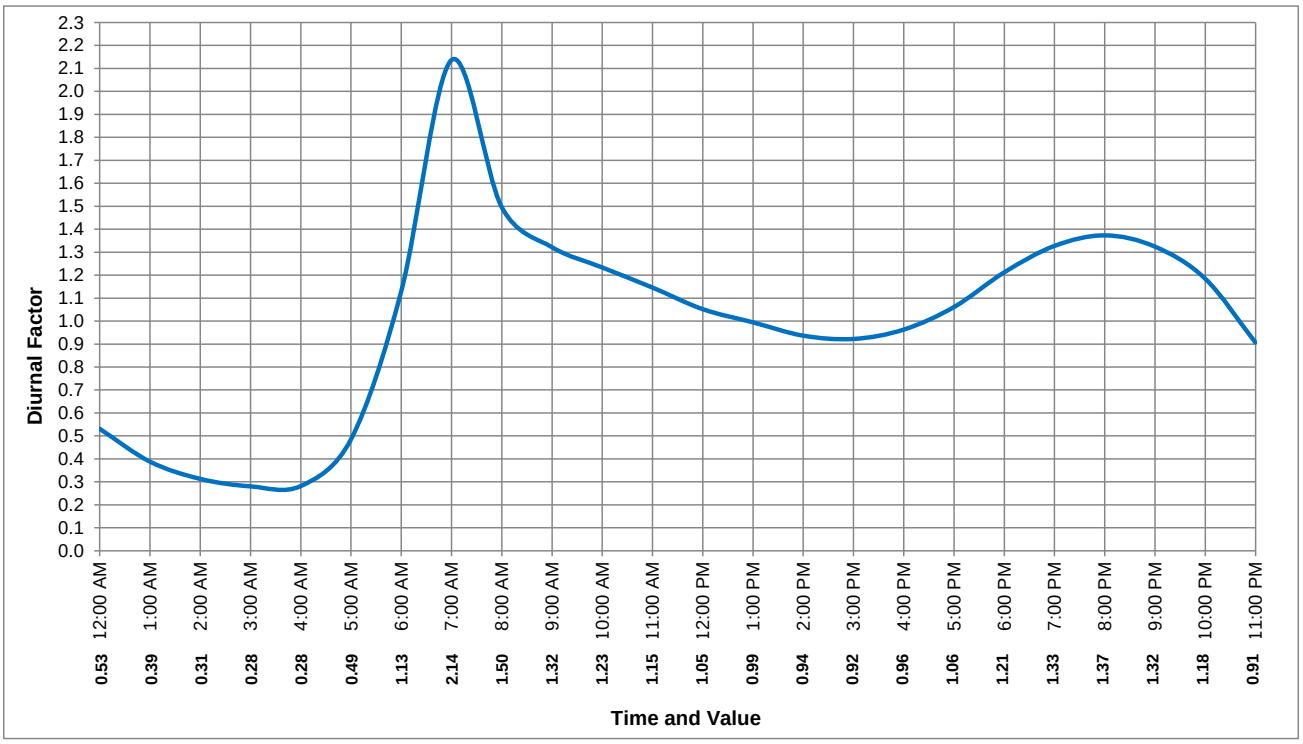
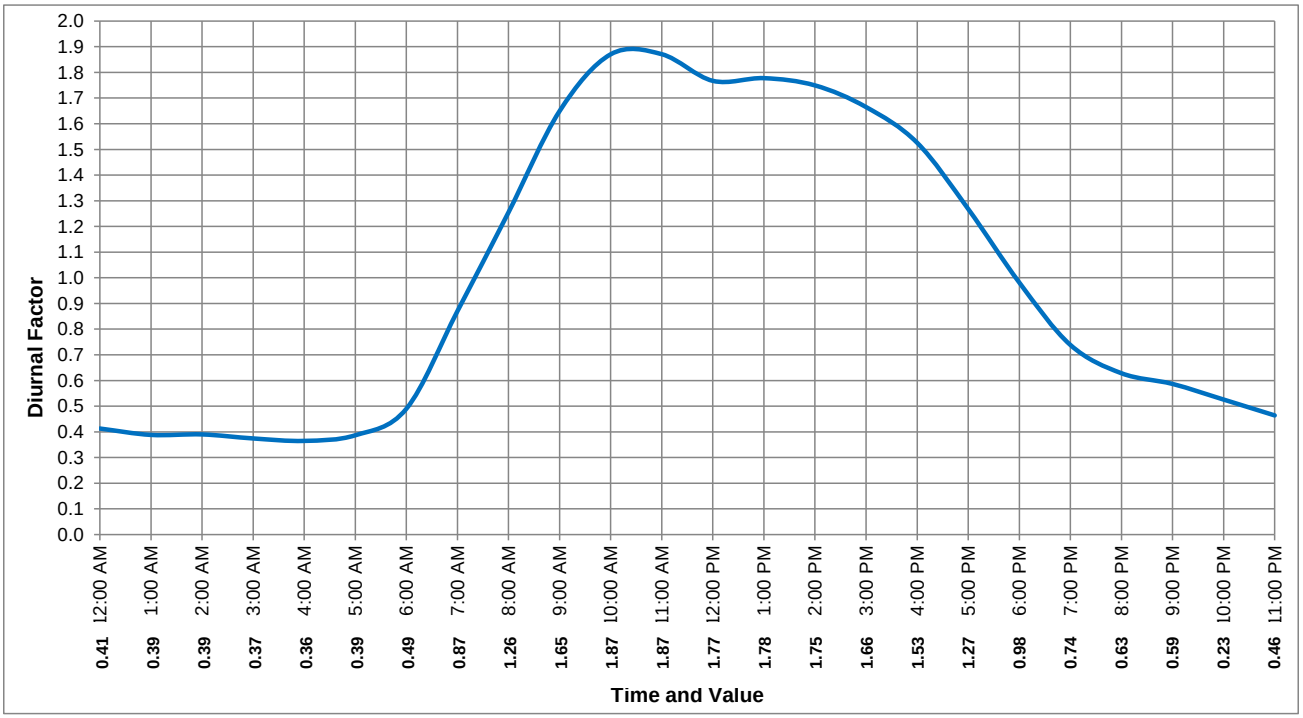


Figure 4-2
Commercial Diurnal Curve



4-5 Peak Wet Weather Flows / Inflow and Infiltration

Extensive flow monitoring was conducted in the 2015 and 2016 calendar years in an attempt to develop a relationship between the dry weather and wet weather sewer flows. Unfortunately minimal rainfall occurred during the flow monitoring periods and therefore the dry weather to wet weather relationship could not be developed.

In order to create the existing peak wet weather scenario, influent flow data at MWRP and LAWRP were reviewed for the last significant wet weather event, which occurred in December 2010. The inflow and infiltration was estimated from this data. The base loads were globally increased to match a total of 26.8 mgd at MWRP and 6.4 mgd at LAWRP. For areas that are not tributary to MWRP or LAWRP, the calibration base loads were increased by 26.4 percent. This percentage increase is the same as what was used to match the highest influent flow calculated at MWRP in 2010 (wet weather conditions).

The instantaneous model flows are generated from the base loads and the corresponding hourly diurnal patterns.

It is recommended that IRWD update the peak wet weather flow scenario if and when a more significant rainfall event occurs and flow monitoring data is captured.

4-6 Gravity Sewer Performance Criteria

Performance criteria are established to ensure that the wastewater collection system can operate effectively under all flow conditions. Each pipe segment must be capable of carrying peak wet weather flows in the hydraulically stable zone of the pipe. Low flows must be conveyed at a velocity that will prevent solids from settling and blocking the system.

The design capacity of a gravity pipeline is the calculated capacity of the pipeline based on the Manning formula:

$$\mathbf{Q = 1.486\ A\ R^{2/3}\ S^{1/2} / n}$$

where, **Q** = flow in cubic feet per second
R = hydraulic radius in feet = A / P
A = cross-sectional area of the flow in square feet
P = wetted perimeter in feet
S = slope of pipe in feet of rise per foot of length
n = Manning's friction factor

Sewer system capacity was established using a Manning's friction factor of 0.013 for vitrified clay pipe and asbestos cement pipe and 0.012 for PVC pipe.

The design and analysis of gravity sewer pipes is typically based upon the depth to diameter ratio (d/D). In this study, IRWD's flow design criteria shown in Table 4-6 was utilized for performance criteria and to establish input data for the InfoMaster Criticality Analysis described in Section 7 of this report.

Table 4-6
d/D Performance Criteria for Gravity Sewer Pipes

	Peak Dry Weather Flow d/D		
	Diameter < 15"	**Diameter = 15"**	**Diameter > 15"**
Priority 1	> 82%	> 82%	> 82%
Priority 2	75% - 82%	75% - 82%	75% - 82%
Priority 3	67% - 75%	67% - 75%	-
Priority 4	50% - 67%	-	-
Design Requirement	**≤50%**	**≤67%**	**≤75%**

Per IRWD's Design Criteria for Sewer Facilities, the minimum size sewer mains shall be 8-inches in diameter. Developer-sized and contributed facilities shall be sewer mains 10-inches in diameter and smaller. Capital facilities shall be sewer mains 12-inches in diameter and larger.

Per IRWD's Design Criteria for Sewer Facilities, all pipes shall be designed and constructed to provide a mean velocity of not less than two (2) feet per second (fps) when flowing half-full at the estimated peak flow. This velocity will prevent deposition of solids in the sewer and help to re-suspend any materials that may have already settled in the pipe. The minimum corresponding slopes for various pipe sizes are shown in Table 4-7.

The maximum slope for sewer main lines is twenty (20%) percent and for sewer laterals is forty (40%) percent. The desirable maximum slope for main lines and laterals is ten (10%) percent. Sewers should be designed to provide steeper slopes whenever possible up to the stated maximum. The peak flow velocity shall be less than 8 feet per second.

IRWD recognizes that minimum slopes and velocities are sometimes not achievable under certain circumstances. On a case by case basis, IRWD may approve sewer designs that do not meet these criteria.

Table 4-7
Minimum Sewer Slopes

Sewer Size	Minimum Slope
8"	0.00400
10"	0.00280
12"	0.00220
15"	0.00150
18"	0.00120
21"	0.00100
24"	0.00080
27"	0.00067
30"	0.00058

*Note: d/D = 0.50

4-7 Lift Station, Siphon and Diversion Structure Evaluations

This section describes the planning level criteria used in this study for purposes of evaluating the existing lift stations, siphon and diversion structure. IRWD recognizes that each lift station, siphon and diversion structure has its own set of site specific and hydraulic conditions. The criteria for design and performance will be at the discretion of IRWD and addressed during the preliminary and final design phase of the project.

4-7.1 Lift Station Evaluations

In general, the lift stations were evaluated for the following:

1. Reliability
2. Sufficient firm capacity to handle tributary wet weather flows
3. Redundant equipment and control system for operation of the pumps
4. Dual force mains
5. Permanent emergency power supply
6. Bypass pumping capability
7. Sufficient wet well storage

8. SCADA equipment, including radio telemetry and a telephone dialer as a backup or ability to notify the appropriate personnel of pending problems and failures
9. Wet well / dry well type for larger lift stations
10. Easy access to all equipment
11. Proper ventilation

The primary components of a typical lift station are the wet well, dry well, valves, motors, pumps, ventilation, electrical, controls and the force main. The following performance criteria was utilized in this study:

Wet Wells

Wet wells should be sized of sufficient capacity to prevent short cycles whereby the pumps frequently start and stop, yet small enough that it will regularly evacuate sewage from the wet well to prevent the wastewater from becoming septic.

Pumps

Pump performance criteria consisted of the following:

1. Sized to efficiently handle the peak wet weather flows.
2. Minimum of two pumps sized to handle the peak wet weather flows so that sufficient standby capacity is available when one pump is removed for repairs or experiences a mechanical failure.

Force Mains

Force mains should be sized to provide adequate velocities to prevent solids accumulation.

4-7.2 Siphon Evaluations

In general, siphons should be avoided when possible. This section describes the performance criteria used in this study for purposes of evaluating the existing siphons. Final criteria for ultimate upgrades will be at the discretion of IRWD and addressed during the design phase of the project.

General

1. Accessibility of the inlet and outlet structures to minimize traffic control setup.
2. Adequate space for equipment setup and vehicle parking, including a buffer for safety.

Siphon Barrels

1. Dual (or multiple) barrels so that normal flow can be diverted to either barrel when the other barrel is cleaned.
2. Minimum barrel diameters of 8-inches.

3. Minimum barrel velocity of 3 feet per second at average dry weather flow and 4 feet per second at peak dry weather flow.
4. Barrels with vertical curves and with no horizontal angles or changes of grade.
5. For an inverted siphon crossing a stream or waterway, a minimum of 5 feet between the top of the siphon and the level of possible scour in the stream or waterway.
6. Location away from an outlet of a lateral or a drop manhole.
7. Invert of the barrels at the outlet structure at least 0.2 feet lower than the invert at the inlet structure.
8. Siphons materials constructed of pressure rated HDPE or PVC.

Access Structures

1. Access structure at each end of siphon. Rectangular access structures are preferred.
2. Access structures sized to allow for any maintenance and operation procedure.
3. The interior surface of the access structures are lined, coated or otherwise protected with a suitable corrosion resistant material.
4. Steps, ladders, maintenance hole frames and covers, gratings and other appurtenances fabricated of 316 stainless steel.
5. Ability to install temporary guard rails while maintenance work is being conducted.

Slide Gates, Stoplogs, Weirs

1. Slide gates, stoplogs, weirs, and similar devices fabricated of 316 stainless steel.

Valves

1. No valves shall be used for siphons.

Air Jumper

1. Adequately sized air jumper line between junction structures.
2. Minimum air jumper size of 6-inches in diameter.

The empirical method for determining the cross sectional area of the conduit allocated for gas flow approaching the inverted siphon is as follows:

$$A_A = 2A_S$$

Where, A_A = Cross sectional area of airline

A_S = Flow cross sectional area allocated for gas flow of the approaching conduit

3. Air jumpers made of pressure rated HDPE or PVC.

4. Air jumpers designed to remove condensate with a minimum slope for drainage. Where practical, overhead air jumpers that are self-draining to the junction structures are preferred.

5. Air jumpers designed to accommodate inspection and IRWD's cleaning methods.

4-7.3 Diversion Structure Evaluations

This section describes the performance criteria used in this study for purposes of evaluating the existing diversion structures. Final criteria for ultimate upgrades will be at the discretion of IRWD and addressed during the design phase of the project.

General

1. Located so that structure is accessible, minimizing traffic control setup. Adequate space provided for equipment setup and vehicle parking, including a buffer for safety

Structure

1. Diversion structures sized to allow for any maintenance and operation procedure.

2. The interior surface of the diversion structure is lined, coated or otherwise protected with a suitable corrosion resistant material.

3. Steps, ladders, maintenance hole frames and covers, gratings and other appurtenances fabricated of 316 stainless steel.

4. Ability to install temporary guard rails while maintenance work is being conducted.

Slide Gates, Stoplogs, Weirs

1. Slide gates, stoplogs, weirs, and similar devices fabricated of 316 stainless steel.

CHAPTER 5 EXISTING SYSTEM ANALYSIS

5-1 Hydraulic Model

To perform a detailed analysis of the sewer collection system, it is essential to create a mathematical model that is capable of simulating the operating characteristics of the system. The simulations for this study were performed utilizing Innovyze's InfoSWMM, which is a fully dynamic, geospatial wastewater and stromwater modeling and management software application. It is a fully ArcGIS integrated program. In terms of hydraulic modeling, InfoSWMM solves the St. Venant equations (i.e. dynamic wave function), which is capable of calculating backwater effects throughout a collection system. The program also manages and maintains the database that stores the sewer analysis input and output results.

The sewer system is modeled by entering pipe diameters, lengths, inverts, and roughness coefficients. The sewer model includes all of the IRWD's existing manholes, sewer pipes (excluding most service laterals and private sewers and sewers belonging to other agencies), lift stations, siphons, diversion structures, large point source flows, and tributary area boundaries. The model identifies points of connection to regional facilities, primarily belonging to OCSD.

The model uses the base loads (i.e. average flows) and diurnal patterns specified by the user to calculate peak dry weather flows. Pump curves are input for each pump. At the completion of a modeling run, output data is created for viewing on the screen or for printing. Output data for nodes include the hydraulic grade inflow rates, flooding rates, and storage volume. Output data for pipes include flow rate, velocity, and water depth.

The details of the development and calibration of the hydraulic model are included under separate cover in the Sewer Collection System Hydraulic Model Manual document submitted as a part of this Sewer Collection System Master Plan study. The hydraulic model can be found in Appendix E.

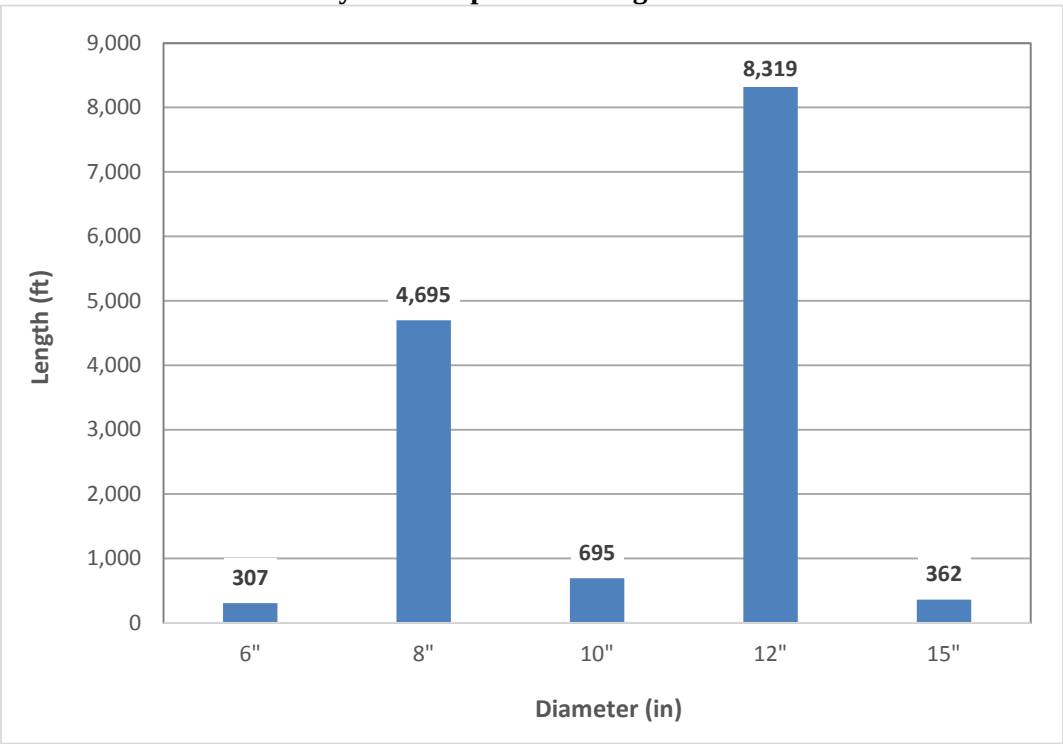
5-2 Capacity Analysis Results

5-2.1 Gravity System Results

The analysis of the sewer collection system is based upon the calculated existing peak dry weather flows. Pipelines that exceed the design criteria are evaluated (with InfoMaster) as part of the criticality based risk analysis. IRWD's 'Collections Advisory Team' will review and prioritize critical facilities on a continual basis. IRWD's current design and criticality based analysis criteria is presented in Section 4-6 of this report.

The total length, identified by the hydraulic model under future conditions that exceed the d/D criteria is 14,072 feet. The length of pipe by size is summarized on Figure 5-1. The locations of these deficiencies are shown on Plate 2. A list of the locations with details such as upstream and downstream manhole IDs, pipe IDs, pipe size, slope, estimated flows, and calculated d/D is located in Appendix E.

Figure 5-1
Gravity Sewer Pipes Exceeding d/D Criteria



5-2.2 Lift Station Model Results

The hydraulic data for each lift station is shown in Table 5-1. Note that the ADWF and PDWF values are direct outputs from the model, whereas PWWF is calculated from the PDWF since the model does not currently contain a PWWF scenario.

Table 5-1
Lift Station Model Results

Lift Station Name	Lift Station ID	Firm Capacity[1] (gpm)	ADWF[2] (gpm)	PDWF[3] (gpm)	PWWF[4] (gpm)
Bayview	CLS001	425	63	104	146
University	CLS005	2,000	534	935	1,309
Newport Coast Dr	CLS010	3,200	437	936	1,311
Buck Gully	CLS013	180	12	25	35
Montecito	CLS015	120	7	16	22
Coyote Canyon	CLS016	1,500	224	407	570
Canada	CLS019	650	151	272	381
Irvine Park	CLS025	270	22	42	58
Coastal Ridge	CLS029	260	66	128	180
Michelson	CLS030	1,200	234	382	534
Harvard (HATS)	CLS041	5,730	4,625	7,185	10,059

[1] *Firm Capacity is capacity with largest pump excluded*
[2] *ADWF is Average Dry Weather Flow based on hydraulic model results*
[3] *PDWF is peak hour inflow to the lift station on peak dry day based on hydraulic model results*
[4] *PWWF is Peak Wet Weather Flow = 1.4 x PDWF*

5-2.3 Siphon Model Results

The hydraulic data for each siphon is shown in Table 5-2; Maximum Flow (MGD) should be field-verified as part of future siphon evaluations.

Table 5-2
Siphon Model Results

Location	US MH ID	DS MH ID	Diameter (in)	Maximum Flow (mgd)	Maximum Velocity (ft/s)
San Diego Creek Channel/University	MH059S023	MH059S022	10	0.4000	1.12
			15	1.0900	1.37
			18	1.6700	1.46
Harvard/San Diego Creek Channel	MH059S024	MH059S025	15	1.8747	2.36
			24	6.1556	3.03
			30	closed	closed
Michelson/Riparian	MH059N025	MH059N023	24	8.9344	4.40
			36	17.0618	3.73
Main/Veneto	MH060W012	MH048S001	18	closed	closed
			24	closed	closed
			42	0.1974	0.08
Jamboree/N of Main	MH048S004	MH048S034	8	0.1170	0.52
			8	0.1077	0.48
Harvard/Barranca	MH061W019	MH061W021	24	9.6182	4.74
			24	closed	closed
			24	closed	closed
Shady Canyon/Sage Creek	MH126E060	MH126E062	6	0.2430	1.91
			8	0.3160	1.40
Jeffrey/Alton	MH102E004	MH102E005	15	1.4749	1.86
			21	1.9755	1.27
Sand Canyon/Barranca	MH124E082	MH124E081	8	closed	closed
			12	0.5399	1.06
OCTA Metrolink/Jamboree	MH062N028	MH062N027	18	closed	closed
			24	closed	closed
			24	5.7093	2.81
El Toro/Raintree	MH220N003	MH220N006	15	0.1530	0.19
Prism/Linear	MH193S011	MH193S015	8	0.1006	0.45
			8	0.1006	0.45
Portola/El Toro	MH209S003	MH209S004	8	0.0206	0.09
			8	0.0206	0.09
241/Lake Forest	MH209N079	MH209N031	8	0.3464	1.54
			10	0.3964	1.12
Glenn Ranch/El Toro	MH217E003	MH217E004	8	not in use	not in use
			8	not in use	not in use
University/Milano	MH057N250	MH057N252	16	1.3000	1.44
			16	closed	closed
Bake/Toledo	MH173E113	MH173E114	15	0.7912	1.00
Harvard/University	MH059S036	MH059S035	8	0.2863	1.27
			8	0.2863	1.27
Barranca/Jamboree	MH047S002	MH047S003	10	0.2377	0.67

5-3 Lift Stations and Force Mains

Each of the primary sewage lift stations (11 total) were evaluated as a part of this SCSMP study. An initial meeting with IRWD planning, engineering, and operations staff was held on April 22, 2015 to discuss the conditions and operations of each lift station. Field visits were conducted in at each lift station between April 28, 2015 and May 14, 2015. Detailed reports are provided in Appendix F. Topics discussed in each lift station evaluation are as follows:

- Tributary flow estimates
- Influent sewers
- Wet well
- Dry well
- Suction piping
- Discharge piping
- Force main
- Main Pumps
- Sump Pump
- Gas Detection System
- Electrical and Controls

Recommendations provided in Appendix F are a combination of analyses conducted per review of record drawings, pump information (pump curves, efficiency tests, etc.), SCADA data, field reviews, and staff comments.

5-4 Inverted Siphons

Each of the active inverted siphons (18 total) were evaluated as a part of this SCSMP study. An initial meeting with IRWD planning, engineering, and operations staff was held on March 25, 2015 to discuss the conditions and operations of each siphon. Field visits were conducted in at each siphon between April 28, 2015 and May 14, 2015. Detailed reports are provided in Appendix G. Topics discussed in each inverted siphon evaluation are as follows:

- Location and Plans
- Siphon Barrels
- Air Jumper
- Upstream Structure
- Downstream Structure

Recommendations provided in Appendix G are a combination of analyses conducted per review of record drawings, field reviews, and staff comments.

5-5 Diversion Structures

Each of the active diversion structure (7 total) were evaluated as a part of this SCSMP study. An initial meeting with IRWD planning, engineering, and operations staff was held on April 2, 2015 to discuss the conditions and operations of each diversion structure. Field visits were conducted in at each diversion structure between April 28, 2015 and May 14, 2015. Detailed reports are provided in Appendix H. Topics discussed in each diversion structure evaluation are as follows:

- Location and Plans
- Access
- Structure Condition
- Valves / Slide Gates
- Vault Access Hatches / Hardware
- Odors

Recommendations provided in Appendix H are a combination of analyses conducted per review of record drawings, field reviews, and staff comments.

CHAPTER 6 FUTURE SYSTEM ANALYSIS

6-1 Future Developments

IRWD plans for future development areas through a Sub-Area Master Plan (SAMP) process. In this process, the developer submits conceptual plans for the development of properties. The SAMP typically includes descriptions and mapping of the proposed sewer system with defined connection points to IRWD's existing system, calculations of the expected wastewater generation, and analysis of the impact of the new development on the existing downstream sewer system. The current available SAMP reports and models were utilized to develop the future system facility geometry for the hydraulic model.

For this SCSMP hydraulic model, sewer flow loadings for these areas were applied at the LU_Areas polygon level. The project team acknowledges that the sewer hydraulic models for the SAMPs were developed at a much more detailed level: SAMP consultants used currently entitled tract map information to load the SAMP hydraulic models. In the SAMP reports, no future gravity mains exceed design criteria. For SAMP areas shown on Plate 3 that have had detailed analysis performed, please refer to the specific SAMP for that area. Plate 3 presents deficiencies outside of those more detailed SAMP analysis areas.

6-2 Model Development for Future Facilities

The Existing Peak Dry Day (EPDD) hydraulic model scenario was used as the basis for the future system model. The geometry and location of the future facilities is based upon the Sub-Area Master Plan (SAMP) hydraulic models. The pipe alignments, pipe sizes, and connections to the existing system were generally maintained. The SAMP reports and models utilized to develop the future model geometry are listed in Table 6-1.

The IRWD Demand Forecast Tool (DFT) was utilized to identify the areas of the system where land use changes or densification were planned to occur. The sewage loads in these areas were modified to represent the future build-out condition in 2035.

The details of the development of the future model scenario are included under separate cover in the Sewer Collection System Hydraulic Model Manual document submitted as a part of this Sewer Collection System Master Plan study.

Table 6-1
SAMP Reports and Models

Model ID Acryonym	SAMP Report Title	Report Date	Prepared by	Comments
IBC	Irvine Business Complex Redevelopment Sub-Area Master Plan	Feb 2008	EarthTech	
LKF	Lake Forest Area Sub-Area Master Plan	Oct 2010	Dudek	
PA1	Planning Areas 1 and 2 Sub-Area Master Plan	Feb 2005	Tetttemer & Associates	
PA51	Planning Area 30 & 51 Great Park/Great Park Neighborhoods	Sep 2011	RBF	Model geometry was used for the Great Park Area. Update underway by Stantec.
PA6	Planning Area 6 (Portola Springs Sub-Area Master Plan Update) for Lambert Ranch	Feb 2007	Tetratech	
PA9	Planning Areas 5B, 8A, 9A and Spectrum 8 (PA 40) Sub-Area Master Plan Update	Feb 2005	Tettemer & Associates	
PA9B	Planning Areas 9B & 9C SAMP Update	April-12	Stantec	Generally built out. Added Gateway area.
PA40	Planning Area 40 Sub-Area Master Plan	Jan 2011	Stantec	Generally built out.
PA18	PA 18 SAMP Update	Sep 2011	Stantec	
PA39	Planning Area 39 Sub-Area Master Plan	Aug 2011	Stantec	
TL	Marine Corps Air Station (MCAS Tustin/Legacy Park) Sub-Area Master Plan Update	May 2013	RBF	Update underway.

Table 6-1 (continued)
SAMP Reports and Models

SAMP Addendums				
PA12	Hoag Health Center Irvine	Jul 2014	Dudek	
PA36	IBC SAMP Update	Jun 2014	Dudek	
PA36	IBC SAMP Update	Jan 2015	Adams Streeter	
SH2	Santiago Hills Sub-Area Master Plan	Nov 2015	Michael Baker	75% submittal
	UCI Research Park and West Campus Development	Feb 1998	RBF	Loads accounted for in DFT
	Lake Forest SAMP Amendment, Foothill Ranch Auto Center Redevelopment	Jan 2014	Stantec	
	Musick Jail Expansion	Jul 2015	Dudek	
	Derian Affordable Apartments Sub-Area Master Plan Addendum	Dec 2015	Fuscoe	
	IBC Redevelopment Sub-Area Master Plan Addendum for Uptown Newport	Dec 2015	AKM	
	Lake Forest SAMP Addendum for Baker Ranch	Jan 2016	Dudek	
	Lake Forest SAMP Addendum Encanto Residential Development	Feb 2016	Huitt-Zollars	
	Lake Forest Area SAMP Addendum Portola Project	Feb 2016	Dudek	
	Planning Area 1 & 2 SAMP Addendum No 2	Feb 2016	Stantec	

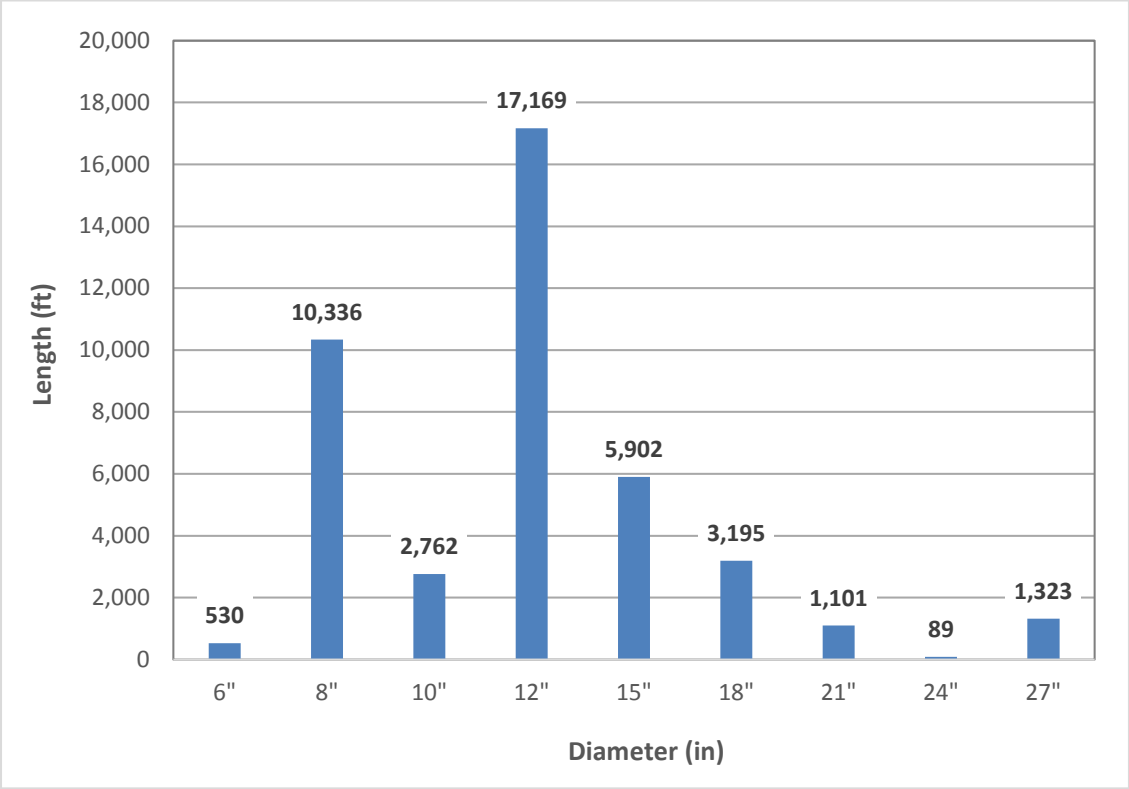
6-3 Capacity Analysis Results

6-3.1 Gravity System Results

The analysis of the sewer collection system is based upon the calculated future peak dry weather flows (PDWF), which is defined as the peak flow on the peak dry day. Pipelines that exceed the design criteria are evaluated (with InfoMaster) as part of the criticality based risk analysis. IRWD's 'Collections Advisory Team' will review and prioritize critical facilities on a continual basis. IRWD's current design and criticality based analysis criteria is presented in Section 4-6 of this report.

The total length, identified by the hydraulic model under future conditions that exceed the d/D criteria is 42,408 feet. The length of pipe by size is summarized on Figure 6-1. The locations of these deficiencies are shown on Plate 2. A list of the locations with details such as upstream and downstream manhole IDs, pipe IDs, pipe size, slope, estimated flows, and calculated d/D is located in Appendix E.

Figure 6-1
Summary of Future System Pipes Identified as Exceeding d/D Criteria



The 8-inch pipelines were included in the hydraulic model primarily to assist with flow routing and peak flow attenuation. Minimal flow monitoring was conducted on 8-inch sewers and was primarily done to assist in the development of the sewer generation factors.

All hydraulic analysis results exceeding d/D criteria are included in Figure 6-1 and Plate 2 regardless of size. The analysis results will be utilized and all pipes will be evaluated by IRWD in future Criticality Analysis /

Risk Analysis runs. The Criticality Analysis / Risk Analysis developed as a part of the SCSMP is discussed in detail in Section 7 of this report.

6-3.2 Lift Station Model Results

The hydraulic data for each lift station is shown in Table 6-2. Note that the ADWF and PDWF values are direct outputs from the model, whereas PWWF is calculated from the PDWF since the model does not currently contain a PWWF scenario.

Table 6-2
Lift Station Future Model Results

Lift Station Name	Lift Station ID	Firm Capacity[1] (gpm)	ADWF[2] (gpm)	PDWF[3] (gpm)	PWWF[4] (gpm)
Bayview	CLS001	425	63	104	146
University	CLS005	2,000	521	913	1,279
Newport Coast Dr	CLS010	3,200	434	891	1,247
Buck Gully	CLS013	180	12	25	35
Montecito	CLS015	120	7	16	22
Coyote Canyon	CLS016	1,500	224	407	570
Canada	CLS019	650	151	272	381
Irvine Park	CLS025	270	22	42	58
Coastal Ridge	CLS029	260	66	128	180
Michelson	CLS030	1,200	958	1,896	2,655
Harvard (HATS)	CLS041	5,730	4,781	7,446	10,424

[1] Firm Capacity is capacity with largest pump excluded
[2] ADWF is Average Dry Weather Flow based on hydraulic model results
[3] PDWF is peak hour inflow to the lift station on peak dry day based on hydraulic model results
[4] PWWF is Peak Wet Weather Flow = 1.4 x PDWF

6-3.3 Siphon Model Results

The hydraulic data for each siphon is shown in Table 6-3.

Table 6-3
Siphon Future Model Results

Location	US MH	DS MH	Diameter (in)	Maximum Flow (MGD)	Maximum Velocity (ft/s)
San Diego Creek Channel/University	MH059S023	MH059S022	10	0.9483	2.69
			15	2.7800	3.50
			18	4.5074	3.95
Harvard/San Diego Creek Channel	MH059S024	MH059S025	15	2.9355	3.70
			24	10.3820	5.11
			30	closed	closed
Michelson/Riparian	MH059N025	MH059N023	24	11.2874	5.54
			36	28.3238	6.20
Main/Veneto	MH060W012	MH048S001	18	closed	closed
			24	closed	closed
			42	0.1990	0.08
Jamboree/N of Main	MH048S004	MH048S034	8	0.1826	0.81
			8	0.1686	0.75
Harvard/Barranca	MH061W019	MH061W021	24	9.9481	4.90
			24	closed	closed
			24	closed	closed
Shady Canyon/Sage Creek	MH126E060	MH126E062	6	0.2342	1.85
			8	0.3021	1.34
Jeffrey/Alton	MH102E004	MH102E005	15	1.9514	2.46
			21	4.2643	2.74
Sand Canyon/Barranca	MH124E082	MH124E081	8	closed	closed
			12	0.5848	1.15
OCTA Metrolink/Jamboree	MH062N028	MH062N027	18	closed	closed
			24	closed	closed
			24	6.6100	3.26
El Toro/Raintree	MH220N003	MH220N006	15	0.3010	0.38
Prism/Linear	MH193S011	MH193S015	8	0.1577	0.70
			8	0.1577	0.70
Portola/El Toro	MH209S003	MH209S004	8	0.0938	0.42
			8	0.0938	0.42
241/Lake Forest	MH209N079	MH209N031	8	0.4773	2.12
			10	0.5512	1.56
Glenn Ranch/El Toro	MH217E003	MH217E004	8	not in use	not in use
			8	not in use	not in use
University/Milano	MH057N250	MH057N252	16	1.3166	1.46
			16	closed	closed
Bake/Toledo	MH173E113	MH173E114	15	0.8396	1.06
Harvard/University	MH059S036	MH059S035	8	0.2862	1.27
			8	0.2862	1.27
Barranca/Jamboree	MH047S002	MH047S003	10	0.2376	0.67

CHAPTER 7 RISK ANALYSIS

7-1 General

As a part of the Sewer Collection System Master Plan, a risk analysis of the gravity system pipes, force mains, and lift stations was conducted. The analysis utilized the existing closed circuit television (CCTV) inspection data, the developed hydraulic model data, as well as other elements deemed of importance to the analysis.

InfoMaster, an ArcGIS based asset integrity management and capital planning software package, was utilized to conduct the analysis. InfoMaster is certified by the National Association of Sewer Service Companies (NASSCO). It is a powerful tool that assists in characterizing the likelihood and consequence of failure for individual pipes in the network. IRWD's CCTV inspection data follows the Pipeline Assessment and Certification Program (PACP) standards and can be easily imported into the InfoMaster software, which already recognizes the same coding system that is required by PACP. InfoMaster has the capability to incorporate any asset data that is in IRWD's geodatabase as well as the CCTV inspection data and hydraulic analysis data.

The NASSCO Pipeline Assessment and Certification Program (PACP) describes risk as follows:

"Risk relates to the probability of something bad happening, or the likelihood of a negative impact occurring, and how this can be avoided. Sometimes risk is used to describe the severity of the consequence(s) related to a potential failure. Asset management relates the combination of both **Likelihood of Failure** and **Consequence of Failure** to risk. Risk takes into account the asset's physical condition, as well as the impact that its failure would have on system performance and stakeholders. Mathematically, the risk from an occurrence may be expressed as the product of likelihood and consequence of failure as quantified in the following equation:

Risk = Likelihood of Failure (LoF) x Consequence of Failure (CoF)"

Likelihood of Failure (LoF) refers to a calculated numerical representation that denotes the probability of failure based on an asset's physical and hydraulic condition.

Consequence of failure (CoF) is the combination of direct and indirect impacts on the vicinity and community due to a potential asset failure.

7-2 Gravity Pipe Risk Analysis

The resulting gravity system risk profile and recommended action items are graphically displayed on Plate 3 and Plate 4, respectively. The elements considered in the calculation of the gravity main LoF and CoF are shown in Table 7-1.

Each of the LoF and CoF elements are assigned different weighting factors depending on the goals and priorities of IRWD. In the Gravity Pipe Risk Analysis, the overall LoF and CoF scores are calculated as a weighted average of all individual LoF and CoF scores. The weighting factors are shown in Table 7-1.

Table 7-1
Gravity Main Risk Analysis Weighted Scores

Liklihood of Failure Element	Weighting Factor	Highest LoF Score	Weighted LoF Score	Total Percentage of Element
PACP Structural Condition Grade	5	10	50	26%
PACP O&M Condition Grade	5	10	50	26%
PDWF d/D	5	10	50	26%
Root Type	2	8	16	8%
Deposit Type	2	8	16	8%
Age/Construction Period	1	6	6	3%
Pipe Material	1	6	6	3%
Total	**21**	**58**	**194**	**100%**

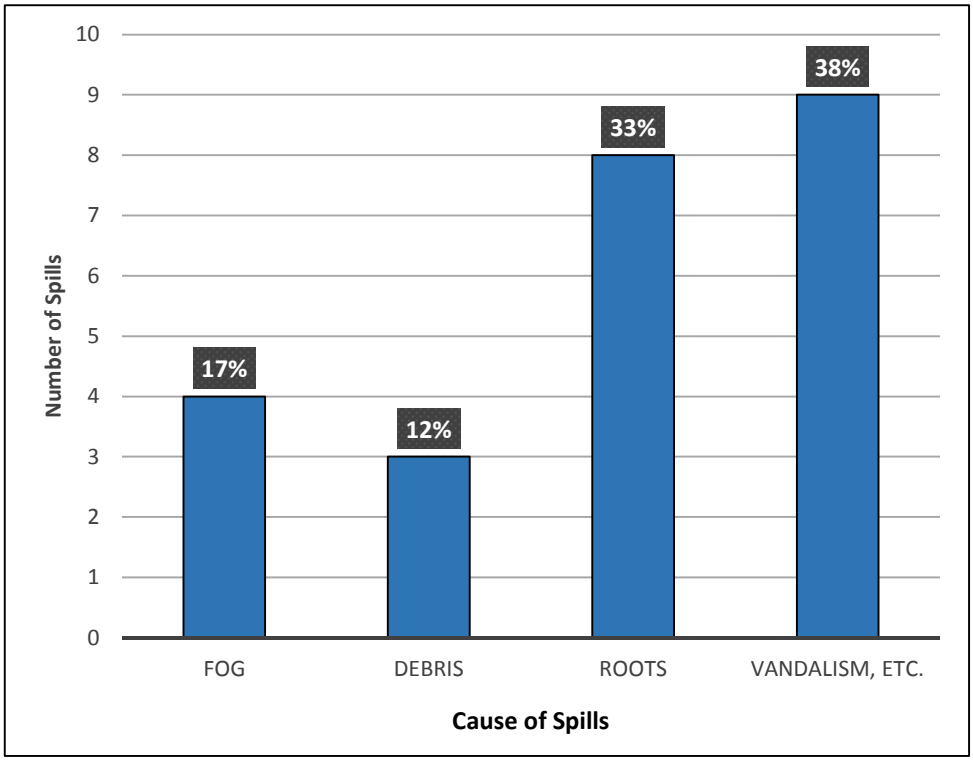
Consequence of Failure Element	Weighting Factor	Highest CoF Score	Weighted CoF Score	Total Percentage of Element
Proximity to Major Waterway	5	10	50	45%
Maximum Rate of Flow	5	10	50	45%
Size of Pipe	1	6	6	5%
Depth of Pipe	1	6	6	5%
Total	**12**	**32**	**112**	**100%**

7-2.1 Likelihood of Failure

For LoF elements, the structural and O&M condition grades, established via CCTV assessment data, are heavily weighted because they represent actual observed conditions of the pipe. The peak dry weather flow (PDWF) depth to diameter ratio is weighted heavily because it can be directly correlated with the potential that an overflow could occur.

Roots and deposits are weighted higher than age and material based on historical spill records. The causes of spills are more often due to roots and deposits and not due to structural defects, which relate to age and material. The cause of the IRWD historical sewer overflows from 2008-2016 are summarized in Figure 7-1. About 17 percent of the overflows are attributed to fats, oils, and grease; 12 percent are due to debris; and 33 percent are due to root intrusion. Based on the historical overflow information, roots and deposits are also considered as elements of Likelihood of Failure. The range of scores assigned to each LoF element for this study are discussed in further detail in Appendix I.

Figure 7-1
Historical Sewer Overflows from 2008-2016



7-2.2 Consequence of Failure

Consequence of failure (CoF) is the combination of direct and indirect impacts on the vicinity and community due to a potential asset failure. The CoF can be broken up into three categories:

1. **Economical Costs**: impacts of direct (repairs and fines) and indirect (cleanup and loss of business revenue) economic losses to organization and third parties due to asset failure
2. **Social Costs:** impact to society, appearance and public health safety, due to asset failure (hospitals, schools, parks, businesses, critical services)

3. **Environmental Costs:** impact to ecological conditions occurring as a result of asset failure (contamination of soil, groundwater, and surface water)

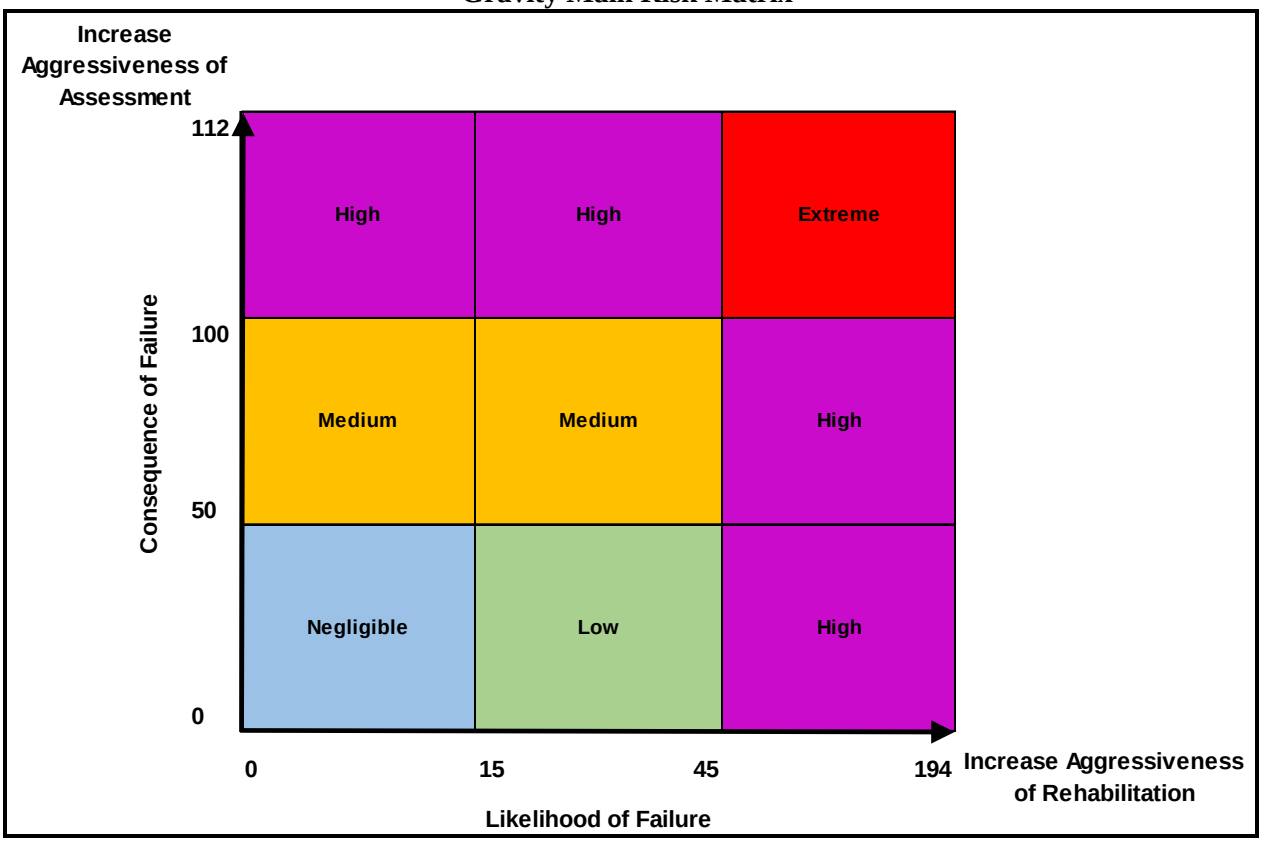
Some elements can be categorized into more than one type of cost. For CoF elements, the proximity to major waterways and the maximum rate of flow through a pipe segment are heavily weighted because of the impact a sewer spill could have on the environment and the community. The size of pipe and depth of pipe are weighted lower. These elements are included because they play a role in the cost of replacing a pipe.

The range of scores assigned to each CoF element for this study are discussed in further detail in Appendix I.

7-2.3 Risk Matrix

The overall risk associated with a failure event is a function of the LoF and CoF. A risk matrix was developed to display the results of the gravity main risk analysis as shown on Figure 7-2. Increased likelihood of failure should result in more aggressive maintenance and repair. Increased consequence of failure should result in increased assessment.

Figure 7-2
Gravity Main Risk Matrix



Using the bi-directional distribution method, the evaluated sewer pipes were classified into categories of CoF and LoF.

On the CoF Scale:

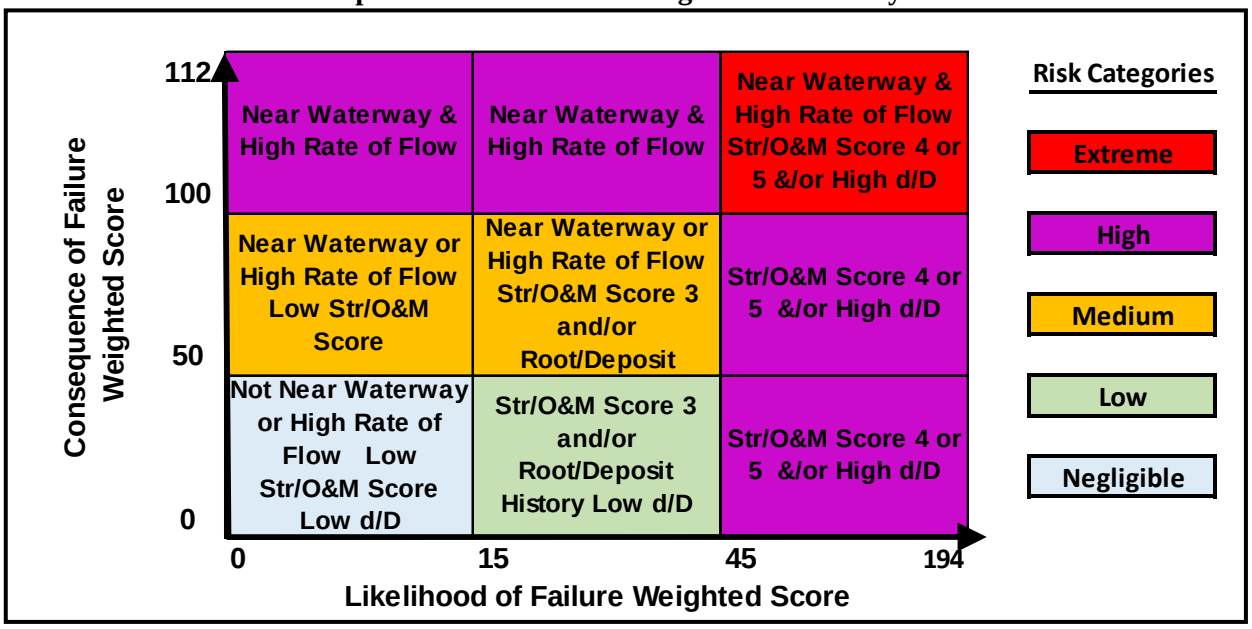
- Any weighted scores greater than 100 were classified as an "Extreme" or "High" Risk Pipe
- Any weighted scores between 50 and 100 were classified as a "Medium" or "High" Risk Pipe, depending on its corresponding LoF Score
- Any weighted scores below 50 were classified as a "High", "Low", or "Negligible" Risk Pipe, depending on its corresponding LoF Score

On the LoF Scale:

- Any weighted scores greater than 45 were classified as an "Extreme" or "High" Risk Pipe
- Any weighted scores between 15 and 45 were classified as a "High", "Medium", or "Low" Risk Pipe, depending on its corresponding CoF score
- Any weighted scores less than 15 were classified as a "High", "Medium" or "Negligible" Risk Pipe, depending on its corresponding CoF score

The Risk Matrix and the weighted score breaks were developed to ensure that the pipes with a high rate of flow and near a major waterway OR pipes with a structural or O&M grade greater than 4 and/or a high depth to diameter ratio were identified as "High Risk". If the pipe has a high rate of flow and is near a major waterway AND has a structural or O&M grade greater than 4 and/or a high depth to diameter ratio, it was identified as "Extreme Risk". Figure 7-3 shows the Risk Matrix from a different perspective. Each matrix box contains a description of the criteria met by each pipe that falls into each respective box. The individual CoF scores and LoF Scores determine the specific risk category that each pipe segment is classified. The overall Risk Score (LoF x CoF) is then considered within each risk category when developing the prioritization of recommended actions.

Figure 7-3
Description of Risk Matrix Categories for Gravity Mains



7-3 Gravity Pipe Decision Tree

The final step in the risk analysis is to run the results through a decision tree to determine action items related to each pipe. Any LoF or CoF elements can be incorporated into the decision tree. The developed decision tree is shown in Figure 7-4. A few items to note about the decision tree:

1. Action items are highlighted in orange boxes.

2. If the pipe has already been identified by the hydraulic model as capacity deficient, the recommendation will be to flow monitor to verify the capacity deficiency.

3. If the pipe has not been CCTV inspected, the recommendation will be to perform a CCTV inspection, starting with the "High Risk" pipes.

4. If the pipe has been identified to have a structural defect with a PACP grade of 4 or 5, the pipe will be categorized by priority so that IRWD will know which group of pipes should be considered first for rehabilitation.

5. If the pipe has been identified to have an operational or maintenance defect with a PACP grade of 4 or 5, the pipe will be categorized by priority so that IRWD will know which group of pipes should be considered first for cleaning and/or treatment.

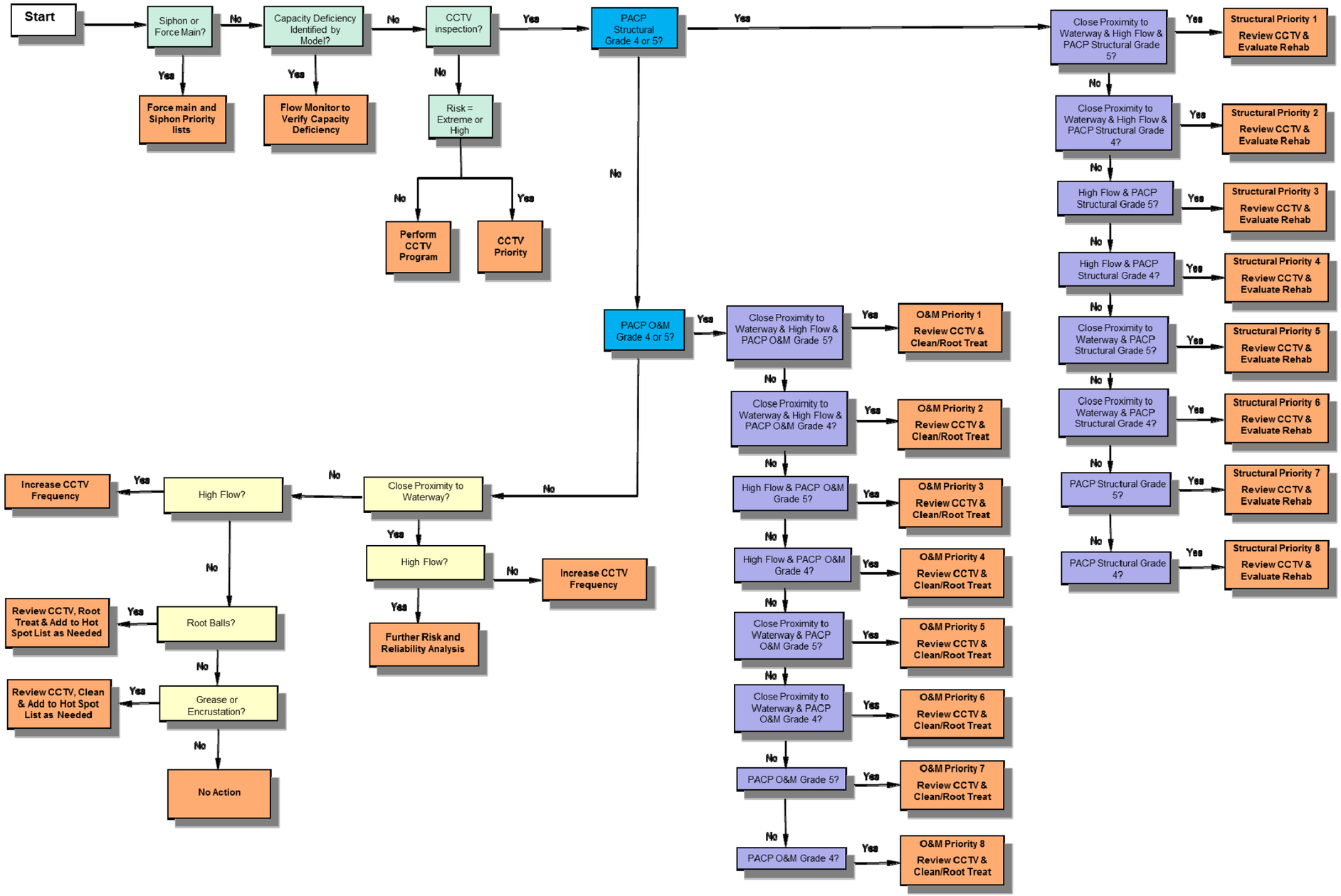
6. If the pipe does not have severe structural issues but is close to a waterway with high flows, further risk analysis may be considered.

7. If the pipe does not have severe structural issues, but has root balls or heavy grease/encrustation, currently or historically, the recommendation will be to review the CCTV, root treat or clean, and add to the hot spot list.

8. If the pipe has any other defects or attributes that place it into the extreme or high risk category, the recommendation will be to increase the CCTV frequency at these locations, as they could become a concern and need rehabilitation in the near future.

The resulting recommended action items are graphically displayed on Plate 4.

Figure 7-4
Risk Analysis Decision Tree for Gravity Sewer Pipes



7-4 Siphon Risk Analysis

The siphon risk analysis was conducted along with the gravity main pipes. Because of the fact that siphons for the most part flow under pressure, and have a d/D greater than 0.75, all siphons are classified in the "Extreme Risk" or "High Risk" category. The siphons are then scored based on the other LoF and CoF scores and its overall total risk score. The resulting risk profile is as shown in Table 7-2.

Table 7-2
Siphon Risk Profile

No.	Siphon	Risk
1	SD Creek/ University	Extreme
2	Michelson/Riparian	Extreme
3	Harvard/SD Creek	Extreme
4	Harvard/Barranca	Extreme
5	Metro/Jamb	Extreme
6	Jeffrey/Alton	Extreme
7	Bake/Toledo	High
8	University/Milano	High
9	Sand Canyon/Barranca	High
10	Main/Veneto	High
11	241/Lake Forest	High
12	El Toro/Rain Tree	High
13	Jamboree/Kelvin	High
14	Universty and Harvard	High
15	Jamboree/Barranca	High
16	Prism/Linear	High
17	Portola/El toro	High
18	Sand Canyon/Sage Creek	High
19	Glan Ranch/El Toro	High

7-5 Force Main Risk Analysis

Each of the LoF and CoF elements are assigned different weighting factors depending on the goals and priorities of IRWD. In the Force Main Risk Analysis, the overall LoF and CoF scores are calculated as a weighted average of all individual LoF and CoF scores.

The weighted scores for all force main CoF and LoF Elements are shown in Table 7-3. The failure grade element is weighted heavily because it is based on actual observations and calculations of each force main. The proximity to waterways element is weighted heavily because in the event of a spill/break it will have the highest impact on the environment and the community. The range of scores assigned to each CoF and LoF element for this study are discussed in further detail in Appendix I.

The overall risk associated with a failure event is a function of the LoF and CoF. A risk matrix was developed to display the results of the force main risk analysis as shown on Figure 7-5. Increased likelihood of failure should result in more aggressive maintenance and repair. Increased consequence of failure should result in increased assessment.

The Risk Matrix and the weighted score breaks were developed to ensure that the force mains near a major waterway OR has a high failure grade were, at minimum, identified as "High Risk". If the force main is near a major waterway AND has a high failure grade, it was identified as "Extreme Risk". Figure 7-6 shows the Risk Matrix from a different perspective. Each matrix box contains a description of the criteria met by each pipe that falls into each respective box.

Based on the CoF and LoF scores and weightings, the resulting Force Main Risk Profile is shown in Table 7-4.

Table 7-3
Force Main Risk Analysis Weighted Scores

Liklihood of Failure Element	Weighting Factor	Highest LoF Score	Weighted LoF Score	Element Percentage
Failure Grade	5	10	50	69%
Age/Construction Period	3	6	18	25%
Pipe Material	2	2	4	6%
Total	**10**	**18**	**72**	**100%**

Consequence of Failure Element	Weighting Factor	Highest CoF Score	Weighted CoF Score	Element Percentage
Proximity to Major Waterway	5	10	50	63%
Maximum Rate of Flow	3	10	30	38%
Total	**8**	**20**	**80**	**100%**

Figure 7-5
Force Main Risk Matrix

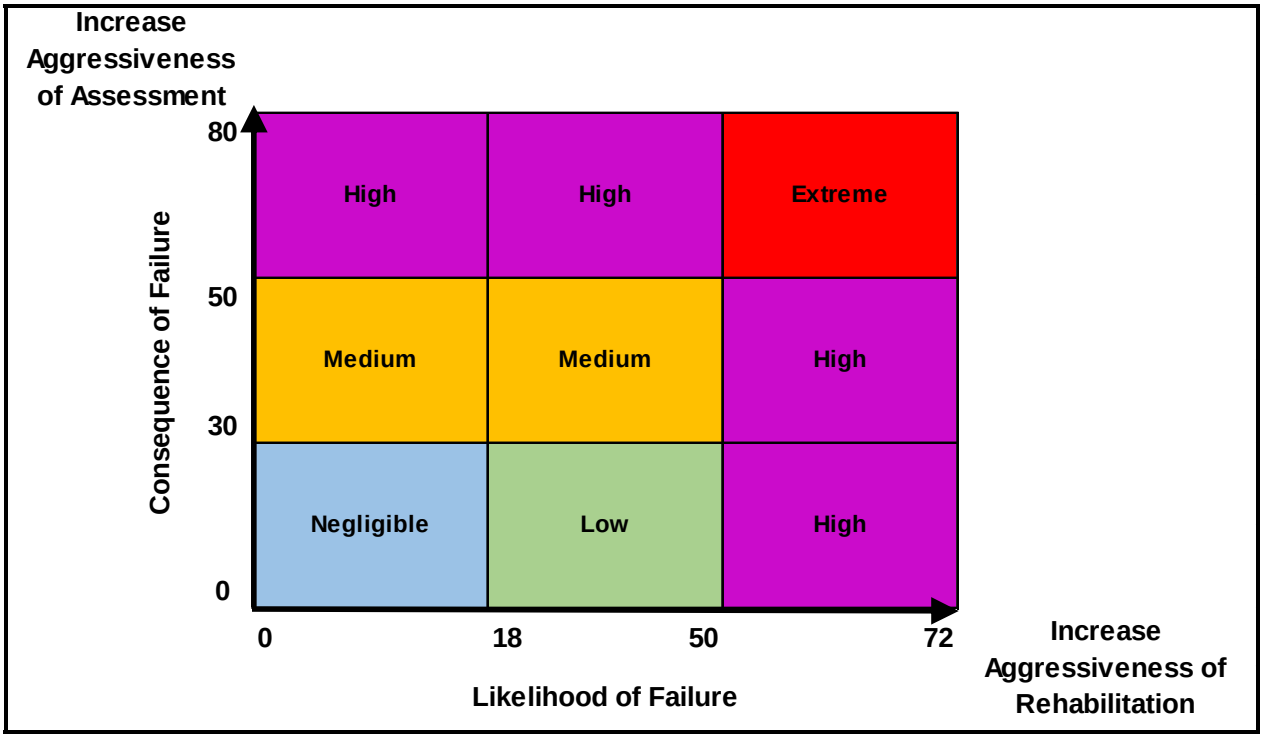


Figure 7-6
Description of Risk Matrix Categories for Force Mains

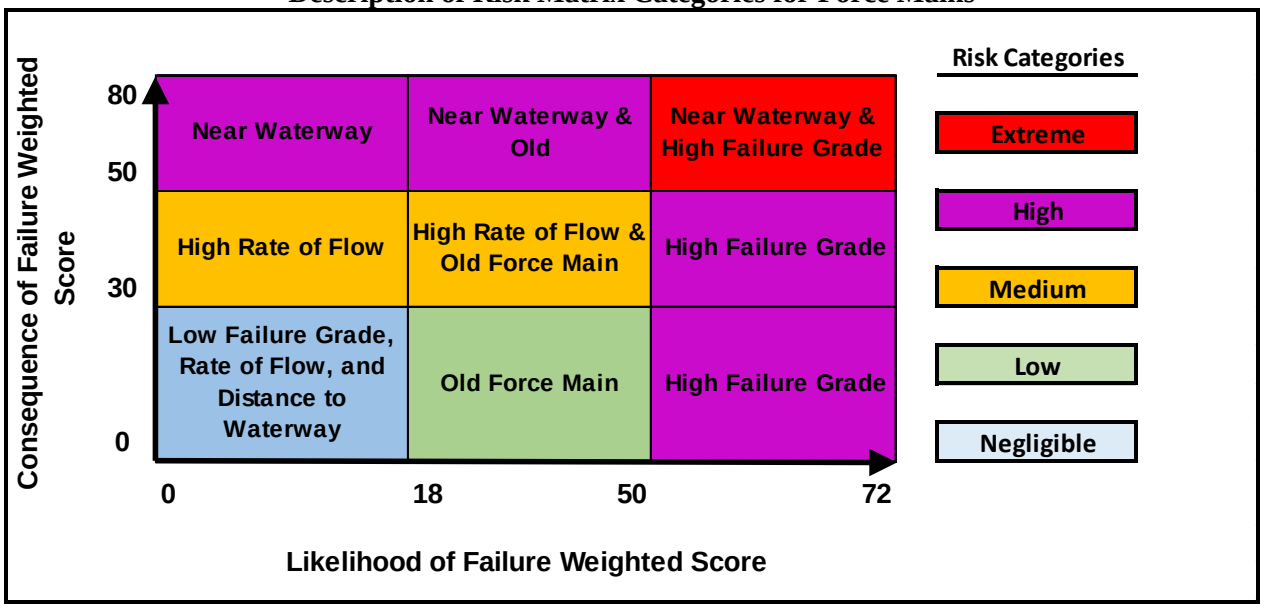


Table 7-4
Force Main Risk Profile

No.	Force Main	Risk
1	Bayview LS Force Main	Extreme
2	Canada LS Force Main	High
3	Coyote LS Force Main	High
4	Harvard LS Force Main	High
5	Buck Gully LS Force Main	High
6	University LS Force Main	High
7	Montecito LS Force Main	Medium
8	Michelson LS Force Main	Medium
9	Newport Coast LS Force Main	Medium
10	Coastal Ridge LS Force Main	Low
11	Irvine Park LS Force Main	Negligible

7-6 Lift Station Risk Analysis

Each of the LoF and CoF elements are assigned different weighting factors depending on the goals and priorities of IRWD. In the Lift Station Risk Analysis, the overall LoF and CoF scores are calculated as a weighted average of all individual LoF and CoF scores.

The weighted Scores for all CoF and LoF Elements are shown in Table 7-5. The Condition Grade is weighted heavily because it is based on actual observations made during the field visits of each lift station. Proximity

to Major Waterways and Rate of Flow are weighted heavily because in the event of a spill, these lift stations would have the most impact on the community and the environment. The range of scores assigned to each CoF and LoF element for this study are discussed in further detail in Appendix I.

The overall risk associated with a failure event is a function of the LoF and CoF. A risk matrix was developed to display the results of the force main risk analysis as shown on Figure 7-7. Increased likelihood of failure should result in more aggressive maintenance and repair. Increased consequence of failure should result in increased assessment.

The Risk Matrix and the weighted score breaks were developed to ensure that the lift stations near a major waterway OR have a high condition grade were, at minimum, identified as "High Risk". Lift stations near a major waterway AND have a high condition grade were identified as "Extreme Risk". Figure 7-8 shows the Risk Matrix from a different perspective. Each matrix box contains a description of the criteria met by each lift station that falls into each respective box.

Based on the CoF and LoF scores and weightings, the resulting Lift Station Risk Profile is shown in Table 7-6.

Table 7-5
Lift Station Risk Analysis Weighted Scores

Likelihood of Failure Element	Weighting Factor	Highest LoF Score	Weighted LoF Score	Element Percentage
Condition Grade	5	10	50	89%
Age/Construction Period	1	6	6	11%
Total	**6**	**16**	**56**	**100%**

Consequence of Failure Element	Weighting Factor	Highest CoF Score	Weighted CoF Score	Element Percentage
Proximity to Major Waterway	5	10	50	63%
Max Rate of Flow	3	10	30	38%
Total	**8**	**20**	**80**	**100%**

Figure 7-7
Lift Station Risk Matrix

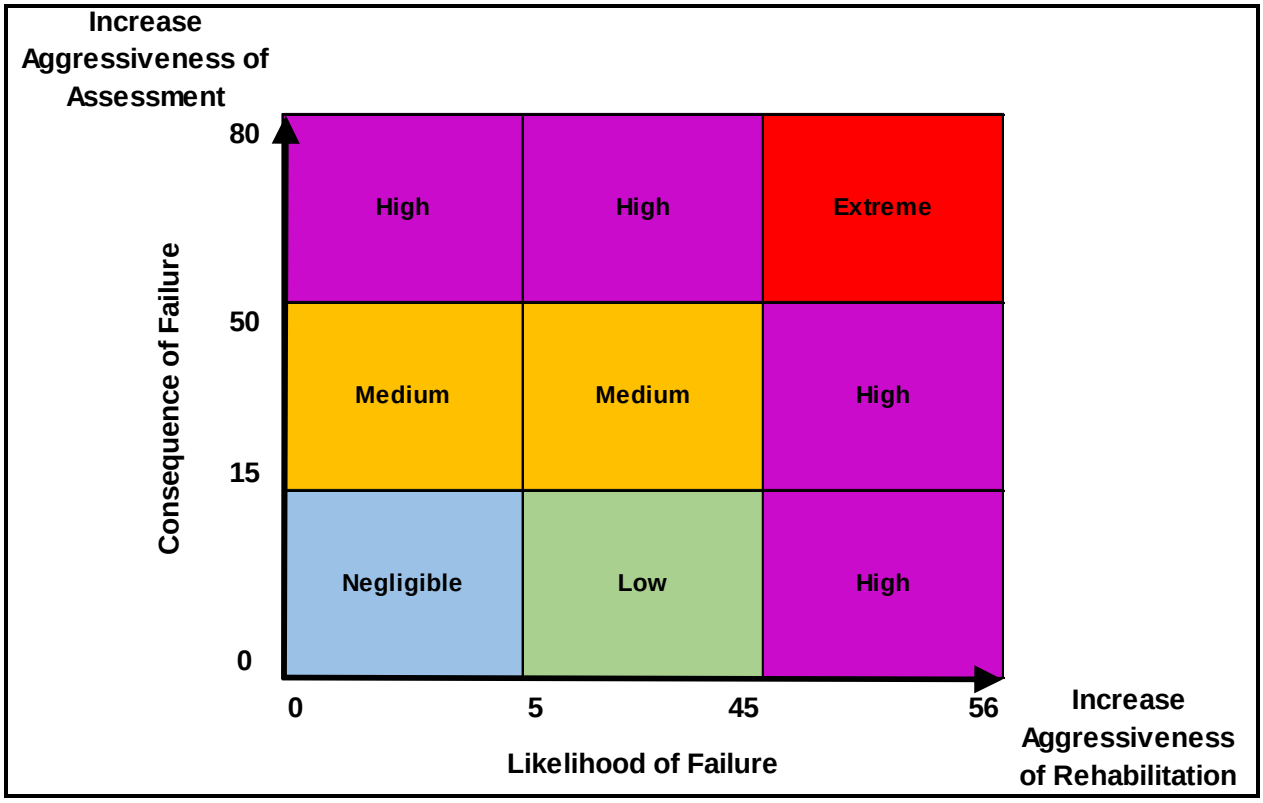


Figure 7-8
Description of Risk Matrix Categories for Lift Stations

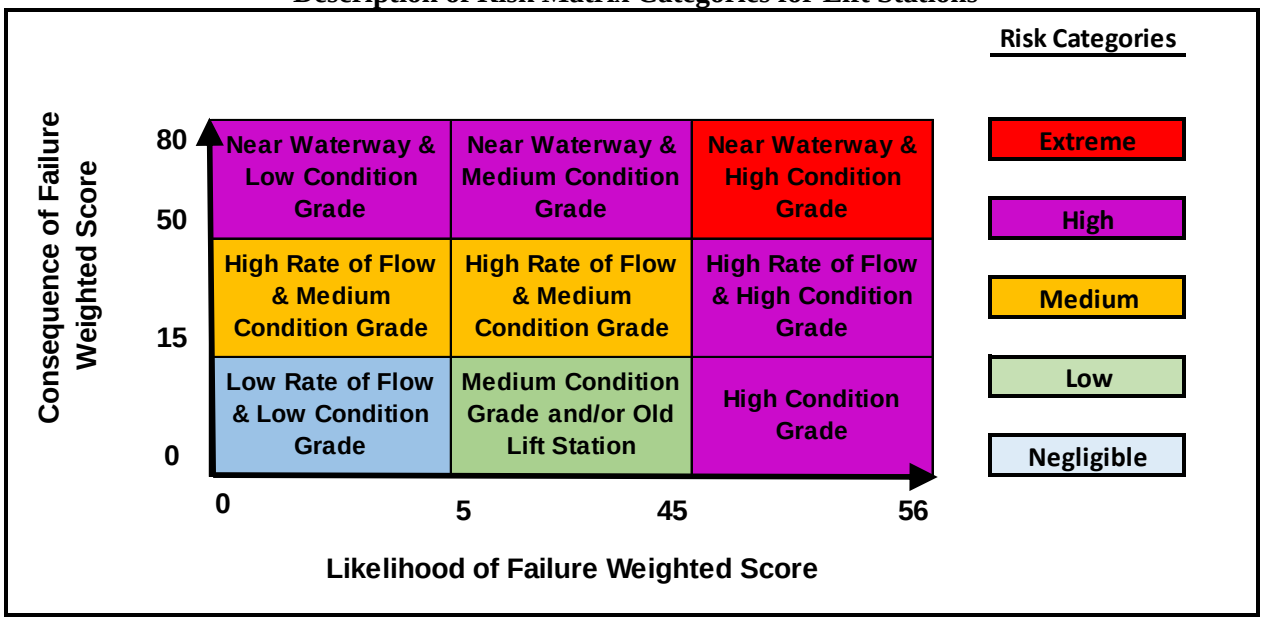


Table 7-6
Lift Station Risk Profile

No.	Lift Station	Risk
1	Harvard Lift Station	Extreme
4	University Lift Station	High
3	Newport Coast Lift Station	High
2	Bayview Lift Station	High
5	Canada Lift Station	Medium
6	Michelson Lift Station	Medium
7	Coyote Canyon Lift Station	Low
8	Coastal Ridge Lift Station	Low
9	Buck Gully Lift Station	Low
10	Montecito Lift Station	Low
11	Irvine Park Lift Station	Low

7-7 Long Term Capital Plan

The SCSMP does not include a traditional Capital Improvement Project list. IRWD anticipates updating the risk analysis and reviewing the results internally to determine the capital projects that should be added into the annual capital budgeting process. More information on IRWD's Long Term Capital Plan can be found in Appendix K.

CHAPTER 8

SAN DIEGO CREEK INTERCEPTOR EVALUATION

8-1 General

Large diameter pipelines with substantial flows (typically the major trunk sewers) are a concern because they are difficult to maintain and repair. They also tend to be CCTV inspected less due to accessibility and high flows. The consequence of failure is increased when the large diameter pipelines with high flows are located adjacent to a major water way.

The risk analysis discussed in Section 7 resulted in recommended action items that are graphically displayed on Plate 4. It can be seen that major trunk sewers were often classified into one of the following recommendation categories:

1. Increase CCTV Frequency due to its close proximity to a waterway or its high flow.
2. CCTV Priority due to being classified as an "Extreme Risk" and no current inspection data is available.
3. Further risk and reliability analysis due its close proximity to a waterway and its high flow.

The major trunk sewers have been previously discussed and studied by IRWD to determine the best courses of action. These studies were not repeated for this sewer master plan update. However, San Diego Creek Interceptor (SDCI) was re-evaluated, because it is of high concern to IRWD for the following reasons:

1. It conveys a significant amount of flow from the majority of the eastern and north eastern regions of the collection system
2. Its failure or blockage could result in spilling several million gallons of sewage directly into San Diego Creek Channel, San Joaquin Channel, Bee Canyon Channel, or Agua Chinon Channel.
3. The financial risk potential in the event of a failure of the SDCI could be extremely high due to the high cost of:
    a. Emergency repair of SDCI – materials are not readily available due to the size.
    b. Bypass pumping needed to repair or replace SDCI – large flow; IRWD does not have equipment to bypass pump the entire flow.
    c. Regulatory fines – if sewage spills into waters of the state

8-2 Previous Studies

8-2.1 Sewer Collection System Master Plan (2006, Dudek)

The 2006 Sewer Collection System Master Plan identified five projects to mitigate high risk concern areas, including the SDCI. Two alternatives were studied for the SDCI:

1. A parallel South San Diego Creek Interceptor – 24-inch and 42-inch gravity main, 3 freeway crossings, 3 diversion structures at a cost of $45 Million.
2. Irvine Center Drive Trunk – 24-inch and 36-inch gravity main and 4 diversion structures at a cost of $40 Million

The final recommendation was to begin feasibility studies on various identified projects to more fully determine the engineering and environmental constraints that would be faced.

8-2.2 San Diego Creek Interceptor Risk Evaluation and Alternative Analysis (2009, Dudek)

The 2009 SDCI Risk Evaluation and Alternative Analysis compared several risk areas along the SDCI to identify the location representing the greatest financial cost in the event of a pipeline failure and subsequent sanitary sewer overflow (SSO). Five alternatives were compared, - three low capital cost alternatives and two high capital cost alternatives, as follows:

1. No change (25-yr life cycle cost = $7.2 M)

   SDCI remains as is. Inspection/maintenance continues and is accomplished every 5 years.

2. On-call bypass pumping contractor (25-yr life cycle cost = $6.6 M)

   SDCI remains as is. Inspection/maintenance continues and is accomplished every 5 years. IRWD partners with an on-call bypass contractor capable of supplementing existing IRWD bypass pump equipment.

3. IRWD Owned Bypass equipment (25-yr life cycle cost = $6.9 M)

   SDCI remains as is. Inspection/maintenance continues and is accomplished every 5 years. IRWD purchases the necessary additional bypass pumping equipment to handle peak flows

4. Irvine Center Drive Interceptor (25-yr life cycle cost = $29.0 M)

   Construct parallel interceptor in Irvine Center Drive to relieve flows in the SDCI.

5. Alton Relief Project (25-yr life cycle cost = $16.6 M)

   Construct a permanent bypass suction pipe and force main at Culver to convey flows down Alton Boulevard.

Ultimately, the study concluded the following:

1. The construction of high cost capital infrastructure to reduce both risk and overflow volume does not reduce the overall financial risk of a potential failure along the SDCI compared to the lower cost alternatives.
2. IRWD should pursue either a coordinated effort with one or several bypass pumping contractors, or begin to purchase additional bypass pumps as peak flows increase through the SDCI.
3. IRWD should conduct a thorough assessment of the SDSI for verification of the existing pipeline condition.
4. IRWD should consider implementing preventative measures such as:
    - Controlling overflow locations by sealing strategic manholes.
    - Purchase and install water level monitoring equipment such as SmartCoversTM.
    - Develop emergency action plan to reduce the time to react and contain a spill.
5. IRWD should establish an on-call agreement with one or more bypass pumping contractors.

8-3 Recent Activity Related to San Diego Creek Interceptor

Following the completion of the 2009 SDCI Risk Evaluation and Alternative Study, IRWD has made efforts toward mitigating the risk of a spill in the SDCI. These efforts included the following:

1. Installation of SmartCoversTM at four locations along the SDCI, shown on Plate 5.
2. Purchase of an additional 12" bypass pump with a 6,500 gpm pumping capacity. IRWD also owns a 10" pump with 4,425 gpm capacity and a 6" pump.
3. Established on-call service contractors with numerous bypass pumping contractors
4. CCTV inspection of portions of SDCI
5. Collections group is in the process of developing specific emergency action/overflow response plans for each lift station (*per 8-4-16 meeting with Collections staff*)

8-4 Condition Inspection and Assessment of the San Diego Creek Interceptor

As a part of this master plan study, AKM reviewed some of the San Diego Creek Interceptor CCTV inspections that were completed in 2012 and 2015. The videos and notes of the inspection review are located in Appendix J. The locations of the sections of pipe reviewed are shown on Plate 5.

Generally, the visible portions of the pipe were observed to be in good condition as shown on Photograph 8-1 and 8-2. There were no structural defects identified by the video operator and none were visible to the video reviewer. Some reaches had a thin coating of calcification on the upper portion of the pipe as shown on Photograph 3 and 4. The inspections were conducted mid-day to avoid the peak flows. Water levels ranged from 10 to 25 percent during inspections. High water marks were noted at 50 to 65 percent.

Based on the CCTV inspection reviews, the San Diego Creek Interceptor is considered to be in good structural condition and is not in need of any immediate repairs or replacement.



Photograph 8-1 MH138N0017 to MH138N0016



Photograph 8-2 MH138N0015 to MH138N0014



Photograph 8-3 MH102W0003 to MH102W0002



Photograph 8-4 MH102S0006 to MH102S0005

8-5 Hydraulic Analysis of San Diego Creek Interceptor

The existing system analysis, discussed in Section 5, did not result in the identification of any current capacity deficiencies in the San Diego Creek Interceptor. As shown on Plate 5, the peak dry weather depth to diameter ratios are estimated to range from 0.24 to 0.37 which is below IRWD's design criteria of 0.75 for pipes larger than 18-inches in diameter. CCTV inspection reviews often showed high water lines at 50 to 65 percent full. This could be the result of a difference in constructed slope versus the design plans. It could also be due to the fact that water use and sewage generation has been decreasing over the past several years because of the water use restrictions in California.

Future system analysis, discussed in Section 6, did not result in the identification of any future capacity deficiencies in the San Diego Creek Interceptor. The peak dry weather depth to diameter ratios are estimated to range from 0.39 to 0.62 which is below IRWD's design criteria of 0.75 for pipes larger than 18-inches in diameter.

8-6 Existing Location of San Diego Creek Interceptor

The SDCI was constructed in 1975 within a 20 foot IRWD easement that is generally parallel to and north of the San Diego Freeway (I-405) from the Laguna Freeway (SR-133) to Culver Drive. In between the San Diego Freeway and the IRWD easement is a Southern California Edison (SCE) right-of-way that is approximately 180 feet wide.

The portion of the SDCI between Jeffery Road and Culver Drive is located within the streets and greenbelts of the existing Woodbridge Village development. These developments were constructed in the early 1980's after the SDCI was already constructed. The development walls are located south of the SDCI, apparently within the SCE right-of-way. The walls separating properties physically cross over the top of the SDCI. In addition there are garages and carport structures located very close to the SDCI alignment.

One section of the SDCI seems to be located directly adjacent the San Joaquin Channel on the north side and under the maintenance roadway.

The existing location of the SDCI from Jeffery Road to Culver Drive potentially will become a major issue if/when the SDCI needs to be repaired or rehabilitated. There is limited access and room for heavy construction equipment that might be needed. There is also very limited room to excavate a sufficient trench if needed. Some structures, walls, and landscaping would require removal.

8-7 Conclusions and Recommendations

Based on the CCTV inspection review and the existing hydraulic analysis, the San Diego Creek Interceptor is not an immediate concern but IRWD should be prepared for an emergency repair and should start planning for a redundant line because of its criticality to the entire system.

Due to the fact that the access is limited and there are structures located extremely close to the SDCI alignment and property walls that cross over the alignment, it is recommended that IRWD begin planning for the construction of a redundant line for SDCI in the area between Jeffery Road and Culver Drive.

AKM and IRWD staff met on several occasions to discuss the SDCI and possible solutions to the construction of a future redundant facility. It was agreed that the construction of a parallel line south of the Woodbridge development would be an important element of the work because the construction would be outside of existing streets and away from existing utilities and structures. A preliminary review of the SDCI plans and aerial photographs indicate that the existing freeway trail might be an ideal alignment for the parallel sewer line. It is generally located between the development wall and the SCE transmission towers or between the SCE transmission towers and the freeway north right-of-way. In the future, an alignment within the SCE right-of-way would also allow better access for crews to work on the facility in the event of a needed repair. This option would require IRWD to obtain an easement within the existing SCE right-of-way, and temporary relocation and replacement of the freeway trail. IRWD should investigate whether or not this is possible before making a decision on the best solution for a replacement facility.

Following a more detailed study of the options for constructing a redundant sewer line for the San Diego Creek Interceptor, IRWD should incorporate the project into its Long Term Capital Plan (LTCP). More information on the LTCP can be found in Appendix K.

City of Orange
Santiago Canyon
Foothill Ranch
Tustin Foothills
Limestone Regional Park
City of Tustin
City of Santa Ana
City of Mission Viejo
City of Lake Forest
City of Laguna Hills
City of Laguna Woods
City of Costa Mesa
San Joaquin Hills
Newport Coast
City of Newport Beach

S15
S14
D2
El Toro Rd LS
S13
S12
S11
S17
S9
S8
S19
S6
S5
S4
D4
D5
D1
D6
Harvard LS
S3
Michelson LS
D7
Michelson Water Recycling Plant
S2
S18
S1
OPS Canyon Auto Shop LS
Michelson LS
MWRP Caretaker LS
Duck Club LS
S7
D3
Los Alisos Water Recycling Plant
Canada LS
University LS
S16
Bayview LS
Coyote Canyon LS
Coastal Ridge LS
Newport Coast Dr LS
Buck Gully LS
Montecito LS
Muddy Canyon LS
El Morro LS
Los Trancos LS

SANTIAGO CANYON
SR-241
SR-261
SR-133
SR-73
SR-55
I-5 FWY
I-405 FWY
IRVINE
BRYAN
WALNUT
EDINGER
WARNER
BARRANCA
ALTON
MAIN
MICHELSON
CAMPUS
JAMBOREE
TUSTIN RANCH
CULVER
JEFFREY
SAND CANYON
IRVINE CENTER
BAKE
TRABUCO
TOLEDO
JERONIMO
GLENN RANCH
RANCHO PARKWAY
ANTONIO PARKWAY
BONITA CANYON
UNIVERSITY
NEWPORT COAST
Main St (OCSD) LS

Legend

- Water Recycling Plant
- IRWD Major Lift Station
- IRWD Minor Lift Station
- OCSD Lift Station
- Diversion Structure
- Siphon
- OCSD Sewer
- Sewer Collection System Study Area
- IRWD Service Area
- ETWD
- Newport Beach
- SMWD
- Tustin
- Unincorporated OC

Sewershed and Trunk Sewer

- Alton-Bake
- Bake LAWRP
- Culver South
- Culver North
- El Toro; Muirlands Cherry
- HATS; Tustin
- IBC
- Irvine South; Newport Beach
- Jeffrey
- Lake Forest
- Lower San Diego Creek
- Newport Coast
- Portola (SMWD)
- San Diego Creek
- University Trunk

N

0 3,000 6,000 12,000 Feet

1" = 3,000'

IRVINE RANCH WATER DISTRICT

PROJECT NO: 11316.00

DATE: December 2016

Sewer Collection System Master Plan

Existing System

Plate 1

Irvine Park LS
City of Orange
SANTIAGO CANYON
Santiago Canyon
SR-241
Limestone Regional Park
Foothill Ranch
GLENN RANCH
ELTORO
SR-261
Tustin Foothills
PORTOLA
JEFFREY
YALE
CULVER
JAMBOREE
IRVINE
BRYAN
City of Tustin
I-5 FWY
TUSTIN RANCH
WALNUT
TRABUCO
SAND CANYON
SR-133
EDINGER
IRVINE CENTER
WARNER
BARRANCA
ALTON
SR-55
City of Santa Ana
Proposed Diversion Structure and downstream hydraulics to be analyzed by IRWD at a future date.
Refer to Lake Forest SAMP for recommendations regarding these potential deficiencies
TOLEDO
JERONIMO
BAKE
LAKE FOREST
RIDGE ROUTE
City of Mission Viejo
Los Alisos Water Recycling Plant
Canada LS
Currently Monitored with Smart Manhole covers
I-405 FWY
City of Laguna Hills
City of Laguna Woods
Previously addressed via an internal IRWD memo
Harvard LS
MAIN
Michelson LS
MICHELSON
Michelson Water Recycling Plant
CAMPUS
UNIVERSITY
BONITA CANYON
University LS
Bayview LS
Coyote Canyon LS
SR-73
San Joaquin Hills
NEWPORT COAST
Coastal Ridge LS
Newport Coast Dr LS
Buck Gully LS
Montecito LS
Newport Coast
City of Newport Beach
City of Costa Mesa

Legend

- Water Recycling Plant
- Lift Station
- Diversion Structure
- Siphon
- Forcemain
- OCSD Sewer
- Sewer Collection System Study Area
- IRWD Service Area
- Existing Sewer

Existing d/D *

- Potential Capacity Deficiency (10" & 12") (d/D > 0.50)
- Potential Capacity Deficiency (15") (d/D > 0.67)
- Potential Capacity Deficiency (18" and greater) (d/D > 0.75)

Future d/D *

- Future Potential Capacity Deficiency (10" & 12") (d/D > 0.50)
- Future Potential Capacity Deficiency (15") (d/D > 0.67)
- Future Potential Capacity Deficiency (18" and greater) (d/D > 0.75)

* All pipe d/D to be analyzed by Analysis Criteria in Criticality Analysis

Future Development Areas

- Redevelopment Areas
- Crystal Cove SAMP
- Great Park Utility Plan
- Irvine Business Complex
- Irvine Spectrum
- Lake Forest SAMP
- Newport Coast
- PA 12 & 13
- PA-06 SAMP
- PA-1 & 2 SAMP
- PA-17
- PA-18 SAMP
- PA-22
- PA-39 Pre-SAMP
- PA-40 2011
- PA-9, 9A, 5B, 8A SAMP
- PA-9B&C SAMP
- Santiago Hills II SAMP
- Spectrum 5
- Tustin MCAS SAMP
- UC Regents Property

N

0 3,000 6,000 12,000 Feet

1" = 3,000'

IRVINE RANCH WATER DISTRICT

PROJECT NO: 11316.00

DATE: February 2017

Sewer Collection System Master Plan

Existing and Future System Analysis Peak Dry Weather Flow d/D Results

Plate 2

Irvine Park LS
City of Orange
SANTIAGO CANYON
Santiago Canyon
Foothill Ranch
GLENN RANCH
EL TORO
SR-241
Limestone Regional Park
SR-261
Tustin Foothills
PORTOLA
IRVINE
JAMBOREE
CULVER
YALE
JEFFREY
IRVINE
City of Mission Viejo
BRYAN
City of Tustin
TUSTIN RANCH
El Modena Irvine Channel
Central Irvine Channel
I-5 FWY
TRABUCO
SAND CANYON
SR-133
WALNUT
Borrego Canyon Channel
Serrano Creek Channel
LAKE FOREST
RIDGE ROUTE
TOLEDO
JERONIMO
EDINGER
Como Storm Channel
Marshburn Channel
BARRANCA
ALTON
Los Alisos Water Recycling Plant
BAKE
Alisо Creek Channel
IRVINE CENTER
Peters Canyon Channel
City of Santa Ana
WARNER
Canada LS
City of Lake Forest
SR-55
San Diego Creek Channel
San JoaquinChannel
I-405 FWY
City of Laguna Hills
City of Laguna Woods
MAIN
Harvard LS
Michelson LS
San Diego Creek Channel
Sand Canyon Channel
MICHELSON
CAMPUS
Michelson Water Recycling Plant
City of Aliso Viejo
JAMBOREE
UNIVERSITY
BONITA CANYON
University LS
Bayview LS
SR-73
Coyote Canyon LS
NEWPORT COAST
San Joaquin Hills
Coastal Ridge LS
Newport Coast Dr LS
Buck Gully LS
Montecito LS
Newport Coast
City of Costa Mesa
Upper Newport Bay
City of Newport Beach
Pacific Ocean

Legend

- Modeled Lift Stations
- Force Main
- OCSD Sewer

Note: Pipe colors follow Risk Matrix below

Consequence of Failure Weighted Score \ Likelihood of Failure Weighted Score			
	Near Waterway & High Rate of Flow	Near Waterway & High Rate of Flow	Near Waterway & High Rate of Flow Str/O&M Score 4 or 5 &/or High d/D
	Near Waterway or High Rate of Flow Low Str/O&M Score	Near Waterway or High Rate of Flow Str/O&M Score 3 and/or Root/Deposit History	Str/O&M Score 4 or 5 &/or High d/D
	Not Near Waterway or High Rate of Flow Low Str/O&M Score Low d/D	Str/O&M Score 3 and/or Root/Deposit History Low d/D	Str/O&M Score 4 or 5 &/or High d/D

0 3,000 6,000 12,000 Feet

1" = 3,000'

IRVINE RANCH WATER DISTRICT

AKM

PROJECT NO: 11316.00

DATE: February 2017

Sewer Collection System Master Plan

Gravity Sewer Risk Profile

Plate 3

IRWD Master Plan Update 2015
Flow Monitoring Report
January 6, 2015 – April 22, 2015

Final Report Submitted to:
AKM Consulting Engineers
July 2015





ADS ENVIRONMENTAL SERVICES®
A Division of ADS LLC

ADS. An IDEX Water & Wastewater Business. IDEX

Table of Contents

Temporary Flow Monitoring 8
Sewer Flow Study for IRWD Master Plan Update 2015 8
Attachments 15
Locations 17
CAL1 17
Attachments 19
Graphs 20
Tabular Reports 22
CAL10 23
Attachments 25
Graphs 26
Tabular Reports 28
CAL11 29
Attachments 31
Graphs 32
Tabular Reports 34
CAL12 35
Attachments 37
Graphs 38
Tabular Reports 40
CAL13 41
Attachments 43
Graphs 44
Tabular Reports 46
CAL14 47
Attachments 49
Graphs 50
Tabular Reports 52
CAL15 53
Attachments 55
Graphs 56
Tabular Reports 58
CAL16 59
Attachments 61
Graphs 62
Tabular Reports 64
CAL17 65
Attachments 67
Graphs 68
Tabular Reports 70
CAL18 71
Attachments 73
Graphs 74

Table of Contents

Tabular Reports 76
CAL19 77
Attachments 79
Graphs 80
Tabular Reports 82
CAL2 83
Attachments 84
Graphs 85
Tabular Reports 87
CAL20 89
Attachments 91
Graphs 92
Tabular Reports 94
CAL21-N1 95
Attachments 97
Graphs 98
Tabular Reports 100
CAL22 101
Attachments 103
Graphs 104
Tabular Reports 106
CAL23 107
Attachments 109
Graphs 110
Tabular Reports 112
CAL24 113
Attachments 115
Graphs 116
Tabular Reports 118
CAL25 119
Attachments 121
Graphs 122
Tabular Reports 124
CAL26 125
Attachments 127
Graphs 128
Tabular Reports 130
CAL27 131
Attachments 133
Graphs 134
Tabular Reports 136
CAL28-N1A 137
Attachments 139

Table of Contents

Graphs 140
Tabular Reports 142
CAL3 143
Attachments 145
Graphs 146
Tabular Reports 148
CAL4 149
Attachments 151
Graphs 152
Tabular Reports 154
CAL5 155
Attachments 157
Graphs 158
Tabular Reports 160
CAL6 162
Attachments 164
Graphs 165
Tabular Reports 167
CAL7 168
Attachments 170
Graphs 171
Tabular Reports 173
CAL8 174
Attachments 176
Graphs 177
Tabular Reports 179
CAL9 180
Attachments 182
Graphs 183
Tabular Reports 185
M01 186
Attachments 188
Graphs 189
Tabular Reports 191
MPSite1 194
Attachments 195
Graphs 196
Tabular Reports 198
MPSite10 200
Attachments 202
Graphs 203
Tabular Reports 205
MPSite2 207

Table of Contents

Attachments 209
Graphs 210
Tabular Reports 212
MPSite3 214
Attachments 216
Graphs 217
Tabular Reports 219
MPSite4 221
Attachments 223
Graphs 224
Tabular Reports 226
MPSite5 228
Attachments 230
Graphs 231
Tabular Reports 233
MPSite6 235
Attachments 237
Graphs 238
Tabular Reports 240
MPSite7 242
Attachments 244
Graphs 245
Tabular Reports 247
MPSite8 249
Attachments 251
Graphs 252
Tabular Reports 254
MPSite9 256
Attachments 258
Graphs 259
Tabular Reports 261
S1 263
Attachments 265
Graphs 266
Tabular Reports 268
S2 270
Attachments 272
Graphs 273
Tabular Reports 275
UFF1 277
Attachments 279
Graphs 280
Tabular Reports 282

Table of Contents

UFF10 283
- Attachments 285
- Graphs 286
- Tabular Reports 288

UFF11 289
- Attachments 291
- Graphs 292
- Tabular Reports 294

UFF12 295
- Attachments 297
- Graphs 298
- Tabular Reports 300

UFF13 301
- Attachments 303
- Graphs 304
- Tabular Reports 306

UFF14 307
- Attachments 309
- Graphs 310
- Tabular Reports 312

UFF15 313
- Attachments 315
- Graphs 316
- Tabular Reports 318

UFF16 319
- Attachments 321
- Graphs 322
- Tabular Reports 324

UFF17 325
- Attachments 327
- Graphs 328
- Tabular Reports 330

UFF18 331
- Attachments 333
- Graphs 334
- Tabular Reports 336

UFF19 337
- Attachments 339
- Graphs 340
- Tabular Reports 342

UFF2 343
- Attachments 345
- Graphs 346

Table of Contents

Tabular Reports 348
UFF20 349
Attachments 351
Graphs 352
Tabular Reports 354
UFF21 355
Attachments 357
Graphs 358
Tabular Reports 360
UFF22 361
Attachments 363
Graphs 364
Tabular Reports 366
UFF23 367
Attachments 369
Graphs 370
Tabular Reports 372
UFF24 373
Attachments 375
Graphs 376
Tabular Reports 378
UFF3 379
Attachments 381
Graphs 382
Tabular Reports 384
UFF4 385
Attachments 387
Graphs 388
Tabular Reports 390
UFF5 391
Attachments 393
Graphs 394
Tabular Reports 396
UFF6 397
Attachments 399
Graphs 400
Tabular Reports 402
UFF7 403
Attachments 405
Graphs 406
Tabular Reports 408
UFF8 409
Attachments 411

Table of Contents

Graphs 412
Tabular Reports 414
UFF9 415
Attachments 417
Graphs 418
Tabular Reports 420

Sewer Flow Study for IRWD Master Plan Update 2015

January 6, 2015 - April 22, 2015

Prepared for:

Ms. Diann Pay
Project Engineer
AKM Consulting Engineers
553 Wald, Irvine, CA 92618

Prepared by:

ADS, LLC
15205 Springdale Street
Huntington Beach, CA 92649

Letter of Transmittal

ADS LLC

July 6, 2015

Ms. Diann Pay, P.E.
AKM Consulting Engineers
553 Wald
Irvine, CA 92618

SUBJECT: Sewer Flow Study for IRWD Master Plan Update 2015

Dear Ms. Pay,

ADS is pleased to submit the report for IRWD Master Plan Update 2015 conducted on behalf of AKM Consulting Engineers. The metering was conducted for one hundred and seven (107) days in five (5) various monitoring durations at sixty-five (65) locations. The study period is January 06, 2015 - April 22, 2015 .

The report contains hourly averaged depth, velocity, and quantity hydrographs as well as daily long tables for the metering period in pdf format. An Excel file containing depth, quantity, and velocity entities for the monitoring location in 5-minute format is also provided.

In addition, we would be happy to further explain any details about the report that may seem unclear. Should you have any questions or comments, you may contact the Project Manager, Paul Mitchell at (714) 379-9778 ext 223.

Thank you for choosing ADS products and services to meet your flow monitoring needs.

Sincerely,
ADS ENVIRONMENTAL SERVICES

Rodney Ralpho
Data Analyst III

Scope and Methodology

Introduction

AKM entered into an agreement with ADS Environmental Services to conduct flow monitoring at sixty-five (65) metering points within the Irvine Ranch Water District (IRWD). The primary objective was to quantify flows. The study was conducted over a 107-day period for various monitoring durations.

Project Scope

The scope of this study involved using flow monitors to quantify wastewater flows at the designated locations. Specifically, the study included the following key components.

- Investigate the proposed flow-monitoring sites for adequate hydraulic conditions.
- Flow monitor installations.
- Flow monitor confirmations and data collections.
- Flow data analysis.

Equipment installation was done at various times during the monitoring period, which began on January 06, 2015 and was completed on April 22, 2015 .

Flow Monitoring Equipment





The ***ADS FlowShark Triton*** monitor was selected for this project. This flow monitor is an area velocity flow monitor that uses both the Continuity and Manning's equations to measure flow.

The ADS FlowShark Triton monitor consists of data acquisition sensors and a battery-powered microcomputer. The microcomputer includes a processor unit, data storage, and an on-board clock to control and synchronize the sensor recordings. The monitor was programmed to acquire and store depth of flow and velocity readings at 5-minute intervals.

The FS Triton monitor features cross-checking using multiple technologies in each sensor for continuous running of comparisons and tolerances. The FS Triton monitor can support two (2) sets of sensors. The sensor option used for this project was: **The Peak Combo Sensor** installed at the bottom of the pipe includes three types of data acquisition technologies.

The ***up looking ultrasonic depth*** uses sound waves from two independent transceivers to measure the distance from the sensor upward toward the flow surface; applying the speed of sound in the water and the temperature measured by sensor to calculate depth.

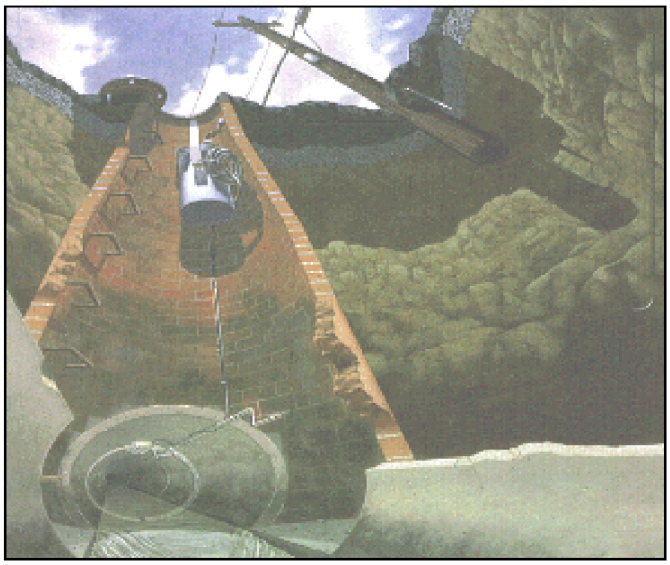
The ***pressure depth*** is calculated by using a piezo-resistive crystal to determine the difference between hydrostatic and atmospheric pressure. The pressure sensor is temperature compensated and vented to the atmosphere through a desiccant filled breather tube.

To obtain ***peak velocity,*** the sensor sends an ultrasonic signal at an angle upward through the widest cross-section of the oncoming flow. The signal is reflected by suspended particles, air bubbles, or organic matter with a frequency shift proportional to the velocity of the reflecting objects. The reflected signal is received by the sensor and processed using digital spectrum analysis to determine the peak flow velocity.

Installation

Installation of flow monitoring equipment typically proceeds in four steps. First, the site is investigated for safety and to determine physical and hydraulic suitability for the flow monitoring equipment. Second, the equipment is physically installed at the selected location. Third, the monitor is tested to assure proper operation of the velocity and depth of flow sensors and verify that the monitor clock is operational and synchronized to the master computer clock. Fourth, the depth and velocity sensors are confirmed and line confirmations are performed.

In pipes up to 42 inches in diameter, the sensors were mounted on expandable stainless steel rings, inserted at least a foot upstream into influent pipes and tightened against the inside walls of the pipes. Influent pipe installations reduce the influences of turbulence and backwater often caused by changes in channel geometry in manholes.





Data Collection, Confirmation, and Quality Assurance

Data collects were done remotely via wireless connect on a weekly basis via ADS Field Representatives. During the monitoring period, field crews visit each monitoring location to verify proper monitor operation and document field conditions. The following quality assurance steps are taken to assure the integrity of the collected data:

Measure power supplies: monitors were powered by dry cell battery packs. Voltages were recorded and battery packs replaced, as necessary. Separate batteries provided back-up power to memory allowing primary batteries to be replaced without loss of data.

Clock synchronization: Field crews synchronized monitor clocks to master clocks.

Confirm depth and velocity readings: Field crews descended into meter manholes to manually measure depths and velocities and compare them meter readings to confirm that they agreed. They also measured silt levels, if any, in the inverts of the pipes. Silt areas were subtracted from flow areas to compute true areas of flow.

Confirm average velocities through cross-sectional velocity profiles: Since ADS velocity sensors measure peak velocity, field crews collected cross-sectional velocity profiles in order to develop a relationship between peak and average velocity in lines that meet the hydraulic criteria.

Upload and Review Data: Data collected from the monitors were uploaded and reviewed by a Data Analyst for completeness, outliers and deviations in the flow patterns, which indicate system anomalies or equipment failure.

Flow Quantification Methods

There are two main equations used to measure open channel flow: the ***Continuity Equation*** and the ***Manning Equation.*** The Continuity Equation, which is considered

the most accurate, can be used if both depth of flow and velocity are available. In cases where velocity measurements are not available or not practical to obtain, the Manning Equation can be used to estimate velocity from the depth data based on certain physical characteristics of the pipe (i.e. the slope and roughness of the pipe being measured). However, the Manning equation assumes uniform, steady flow hydraulic conditions with non-varying roughness, which are typically invalid assumptions in most sanitary sewers. The Continuity Equation was used exclusively for this study.

Continuity Equation

The Continuity Equation states that the flow quantity (Q) is equal to the wetted area (A) multiplied by the average velocity (V) of the flow.

$$Q = A * V$$

This equation is applicable in a variety of conditions including backwater, surcharge, and reverse flow.

Data Analysis and Presentation

Data Analysis

A flow monitor is typically programmed to collect data at either 15-minute or 5-minute intervals throughout the monitoring period. The monitor stores raw data consisting of (1) the ultrasonic depth, (2) the peak velocity and (3) the pressure depth. The data is imported into ADS's proprietary software and is examined by a data analyst to verify its integrity. The data analyst also reviews the daily field reports and site visit records to identify conditions that would affect the collected data.

Velocity profiles and the line confirmation data developed by the field personnel are reviewed by the data analyst to identify inconsistencies and verify data integrity. Velocity profiles are reviewed and an average to peak velocity ratio is calculated for the site. This ratio is used in converting the peak velocity measured by the sensor to the average velocity used in the Continuity equation. The data analyst selects which depth sensor entity will be used to calculate the final depth information. Silt levels present at each site visit are reviewed and representative silt levels established.

Occasionally the velocity sensor's performance may be compromised resulting in invalid readings sporadically during the monitoring period. This is generally caused by excessive debris (silt) blocking the sensor's crystals, shallow flows (~< 2") that may drop below the top of the sensor or very clear flows lacking the particles needed to measure rate. In order to use the Continuity equation to quantify the flow during these periods, a Data Analyst and/or Engineer will use the site's historical pipe curve (depth vs. velocity) data along with valid field confirmations to reconstitute and replace the false velocity recordings with expected velocity readings for a given historical depth along the curve.

Selections for the above parameters can be constant or can change during the monitoring period. While the data analysis process is described in a linear manner, it often requires an iterative approach to accurately complete.

Data Presentation

This type of flow monitoring project generates a large volume of data. To facilitate review of the data, results have been provided in graphical and tabular formats. The flow data is presented graphically in the form of scattergraphs and hydrographs. Hydrographs are based on hourly averaging. Tables are provided in daily average format. These tables show the flow rate for each day, along with the daily minimum and maximums, the times they were observed, the total daily flow, and total flow for the month (or monitoring period). The following explanation of terms may aid in interpretation of the tables and hydrographs. In addition, please see the "Site Data Quality Summary" table included herein for more comments regarding data quality.

DEPTH - Final calculated depth measurement (in inches)

QUANTITY - Final calculated flow rate (in MGD)

VELOCITY - Final calculated flow velocity (in feet per second)

REPORT TOTAL - Total volume of flow recorded for the indicated time period (in MG)

Table 1 - Site Data Quality Summary				
Location	Data Period	Data Quality Rating	Estimated Error Range	Comments
CAL1	2/6/2015 - 3/8/2015	Fair	20% - 25%	Shallow fast flow conditions and general hydraulic instability
CAL10	2/6/2015 - 3/8/2015	Good	~10%	
CAL11	2/20/2015 - 3/22/2015	Good	5% - 10%	
CAL12	2/6/2015 - 3/8/2015	Good	~10%	
CAL13	2/6/2015 - 3/8/2015	Good	~10%	D vs. V pattern shifts slightly, likely caused by bottom debris moving along the pipe.
CAL14	2/6/2015 - 3/8/2015	Good	10% - 15%	Shallow fast flow, but excellent stability and repeatability.
CAL15	2/6/2015 - 3/8/2015	Good	~10%	Lower confidence in the low flows due to an apparent mild hydraulic jump.
CAL16	2/6/2015 - 3/8/2015	Good	~10%	
CAL17	2/6/2015 - 3/8/2015	Good	~10%	D vs. V pattern shifts slightly, likely caused by bottom debris moving along the pipe.
CAL18	2/6/2015 - 3/8/2015	Good	~10%	
CAL19	2/6/2015 - 3/8/2015	Fair	15% - 20%	Daily backwater above 3 in. depth, otherwise fast shallow flow for the size of pipe
CAL2	2/6/2015 - 3/8/2015	Good	10% - 15%	Fast flow, extremely frequent cycles from pump station influence.
CAL20	2/6/2015 - 3/8/2015	Good	10% - 15%	Shallow fast flow, but excellent stability and repeatability.
CAL21 (N1)	2/6/2015 - 3/8/2015	Good	5% - 8%	Mild backwater conditions when flows reached 25 inches or greater.
CAL22	2/6/2015 - 3/8/2015	Good	~10%	Frequent extreme pump cycles, but D vs V pattern extremely stable and repeatable
CAL23	2/6/2015 - 3/8/2015	fair	15% - 20%	slimy sludge variable depth, fouling sensor occasionally
CAL24	2/6/2015 - 3/8/2015	Good	~10%	
CAL25	2/6/2015 - 3/8/2015	Fair	15% - 20%	Shallow fast flow for the size of pipe. Hydraulic jump in lower flow regime. Frequent extreme pump cycles. Very stable repeatable data.
CAL26	2/6/2015 - 3/8/2015	Good	~10%	
CAL27	2/6/2015 - 3/8/2015	Good	10% - 15%	D vs. V pattern shifts along IsoQ, likely caused by bottom debris moving along the pipe.
CAL28 (N1A)	2/6/2015 - 3/8/2015	Good	5% - 10%	
CAL3	2/6/2015 - 3/8/2015	Good	~10%	
CAL4	2/6/2015 - 3/8/2015	Good	~10%	
CAL5	1/27/2015 - 4/22/2015	Good	~10%	
CAL6	2/6/2015 - 3/8/2015	Good	~10%	
CAL7	2/6/2015 - 3/8/2015	Good	~10%	Possible slight high bias in lower flows due to evidence of mild hydraulic jump
CAL8	2/6/2015 - 3/8/2015	Good	10% - 15%	Mild sag in pipe and low avg/peak value
CAL9	2/6/2015 - 3/8/2015	Good	~10%	
M01	1/6/2015 - 4/5/2015	Fair	15%-20%	Shown to be biased high by indicated amount in IBC flow study.
MPSite1	1/6/2015 - 4/5/2015	Good	~10%	
MPSite10	1/6/2015 - 4/5/2015	Good	~10%	
MPSite2	1/6/2015 - 4/5/2015	Good	~10%	
MPSite3	1/6/2015 - 4/5/2015	Good	~10%	
MPSite4	1/6/2015 - 4/5/2015	Good	~10%	
MPSite5	1/6/2015 - 4/5/2015	Good	~10%	
MPSite6	1/6/2015 - 4/5/2015	Good	~10%	
MPSite7	1/6/2015 - 4/5/2015	Good	~10%	
MPSite8	1/6/2015 - 4/5/2015	Fair/Good	10% - 15%	Velocity less stable with frequent backwater cycles. Data more confident after Jan 30 (much less sensor fouling).
MPSite9	1/6/2015 - 4/5/2015	Good	10% - 15%	Somewhat choppy flow. Difficult to confirm well.
S1	1/6/2015 - 4/5/2015	Good	5% - 10%	Very stable hydraulics
S2	1/6/2015 - 4/5/2015	Good	~10%	Stable with some backwater during part of the day

Table 1 - Site Data Quality Summary				
Location	Data Period	Data Quality Rating	Estimated Error Range	Comments
UFF1	2/28/2015 - 3/30/2015	Good	10% - 15%	Waves due to operating near critical velocity. Data in March much more stable.
UFF10	2/6/2015 - 3/8/2015	Good	10% - 15%	shallow slow flow for size of pipe
UFF11	2/6/2015 - 3/8/2015	Good	~10%	
UFF12	2/6/2015 - 3/8/2015	Good	~10%	
UFF13	2/6/2015 - 3/8/2015	Fair	15% - 20%	Shallow fast flow for the size of pipe. Hydraulic jump in lower flow regime and evidence of waves.
UFF14	2/6/2015 - 3/8/2015	Good	10% - 15%	Shallow flow with some small waves during higher flows.
UFF15	2/6/2015 - 3/8/2015	Good	10% - 15%	Shallow fast flow. Hydraulic jump in lower flow regime. Excellent data stabililty.
UFF16	2/6/2015 - 3/8/2015	Good	10% - 20%	Fast shallow flow with lower confidence in min flows.
UFF17	2/6/2015 - 3/8/2015	Good	10% - 15%	Shallow fast flow, but excellent stability and repeatability.
UFF18	2/6/2015 - 3/8/2015	Fair	15% - 25%	Unstable hydraulics during mid day from operating near critical velocity with waves and hydraulic jump
UFF19	2/6/2015 - 3/8/2015	Fair	15% - 20%	Shallow slow flow for size of pipe
UFF2	2/6/2015 - 3/8/2015	Fair	15% - 25%	Operates at critical velocity with significant hydraulic jump
UFF20	2/6/2015 - 3/8/2015	Good	10% - 15%	
UFF21	2/6/2015 - 3/8/2015	Good	~10%	Lower confidence near min flows (near lower detection limit of monitor)
UFF22	2/6/2015 - 3/8/2015	Fair	15% - 20%	Low erratic flow - better confidence in data after 2/21.
UFF23	2/6/2015 - 3/8/2015	Fair	15% - 20%	Shallow fast flow with hydraulic jump at about 1.5" (average depth is 2")
UFF24	2/6/2015 - 3/8/2015	good	10% - 15%	Hydraulic jump in lower flow regime. Very good data stability otherwise.
UFF3	2/6/2015 - 3/8/2015	Good	10% - 15%	Shallow fast flow, some waves evident, but excellent stability and repeatability.
UFF4	2/6/2015 - 3/8/2015	Fair	15% - 20%	Shallow fast flow. Hydraulic jump in lower flow regime.
UFF5	2/6/2015 - 3/8/2015	Fair	15% - 20%	Lower confidence in the lower flow regime (<3.5 ft/s velocity) due to fast shallow flow and presence of hydraulic jump
UFF6	2/6/2015 - 3/8/2015	Good	10% - 15%	Mild hydraulic jump in low flow regime, but excellent stability and repeatability.
UFF7	2/6/2015 - 3/8/2015	Fair	15% - 20%	Lower confidence in the lower flow regime (<3.5 ft/s velocity) due to fast shallow flow and presence of hydraulic jump and some waves
UFF8	2/6/2015 - 3/8/2015	Fair	15% - 20%	Significant shifting of Depth vs Velocity pattern due to apparent mid range flow hydraulic jump
UFF9	2/6/2015 - 3/8/2015	Fair	15% - 20%	Very slow flow in continuous backwater throughout each day

Site Commentary

Site Information

CAL1	
Pipe Dimensions	8.00" x 8.00"
Silt Level	0.00"

Overview

Site CAL1 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.49	3.80	0.113
Minimum	0.95	1.19	0.020
Maximum	3.07	5.82	0.359
Time of Minimum	2/13/2015 5:45 AM	2/20/2015 4:25 AM	2/20/2015 4:25 AM
Time of Maximum	3/3/2015 6:15 AM	2/27/2015 7:50 AM	2/23/2015 8:00 AM

Data Quality

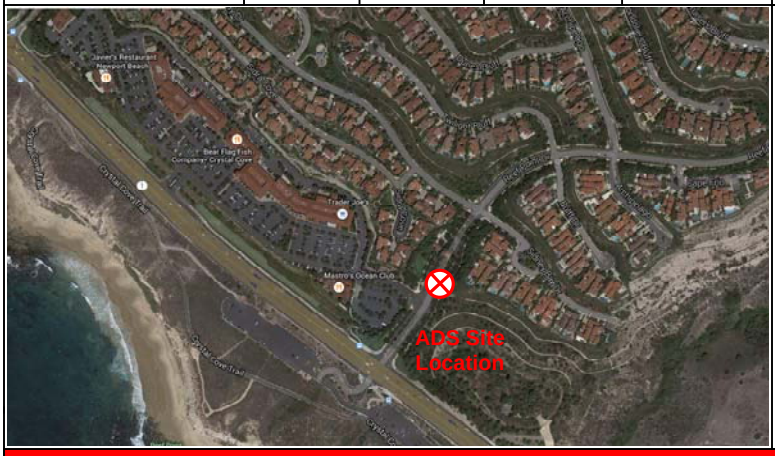
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL1	**Install Date:** 1/21/15	**Monitor Type**	Peak Doppler
Address/Location: 23262 Reef Point Dr.		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH164N009
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	8.00 "
		Pipe Width:	8.00 "





Investigation Information:

Date/Time of Investigation:	1/21/15 @ 0928
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.49 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	PVC/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

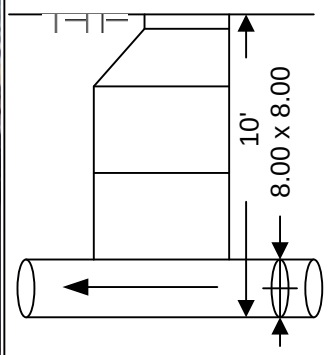
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

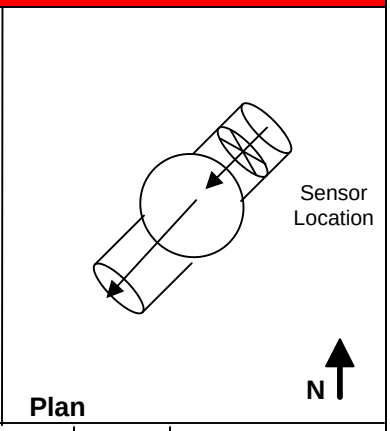
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

CAL1

Flow Monitor

CAL1

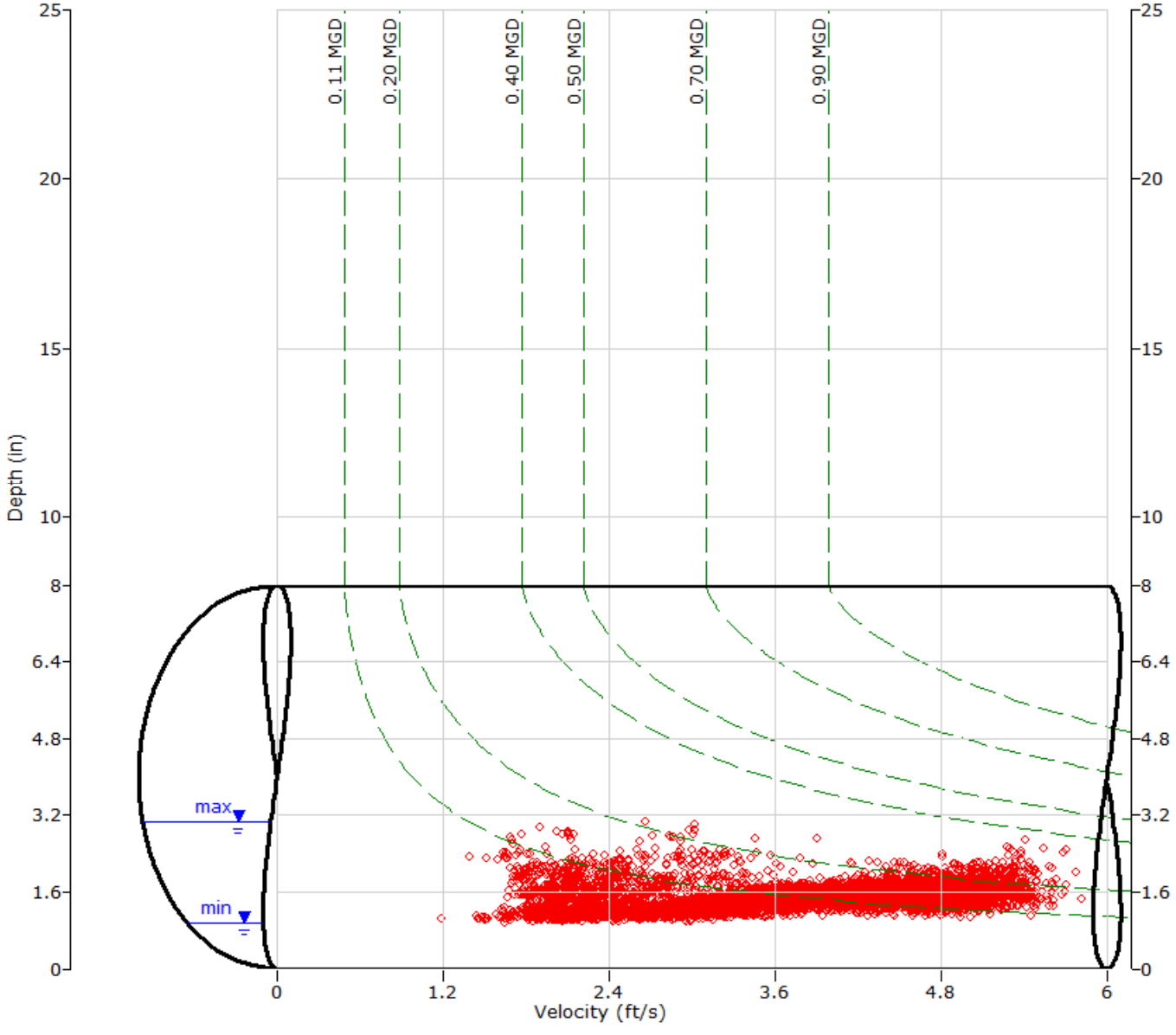
Pipe Height
8.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



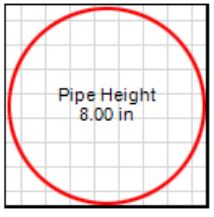
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL1

Flow Monitor

CAL1

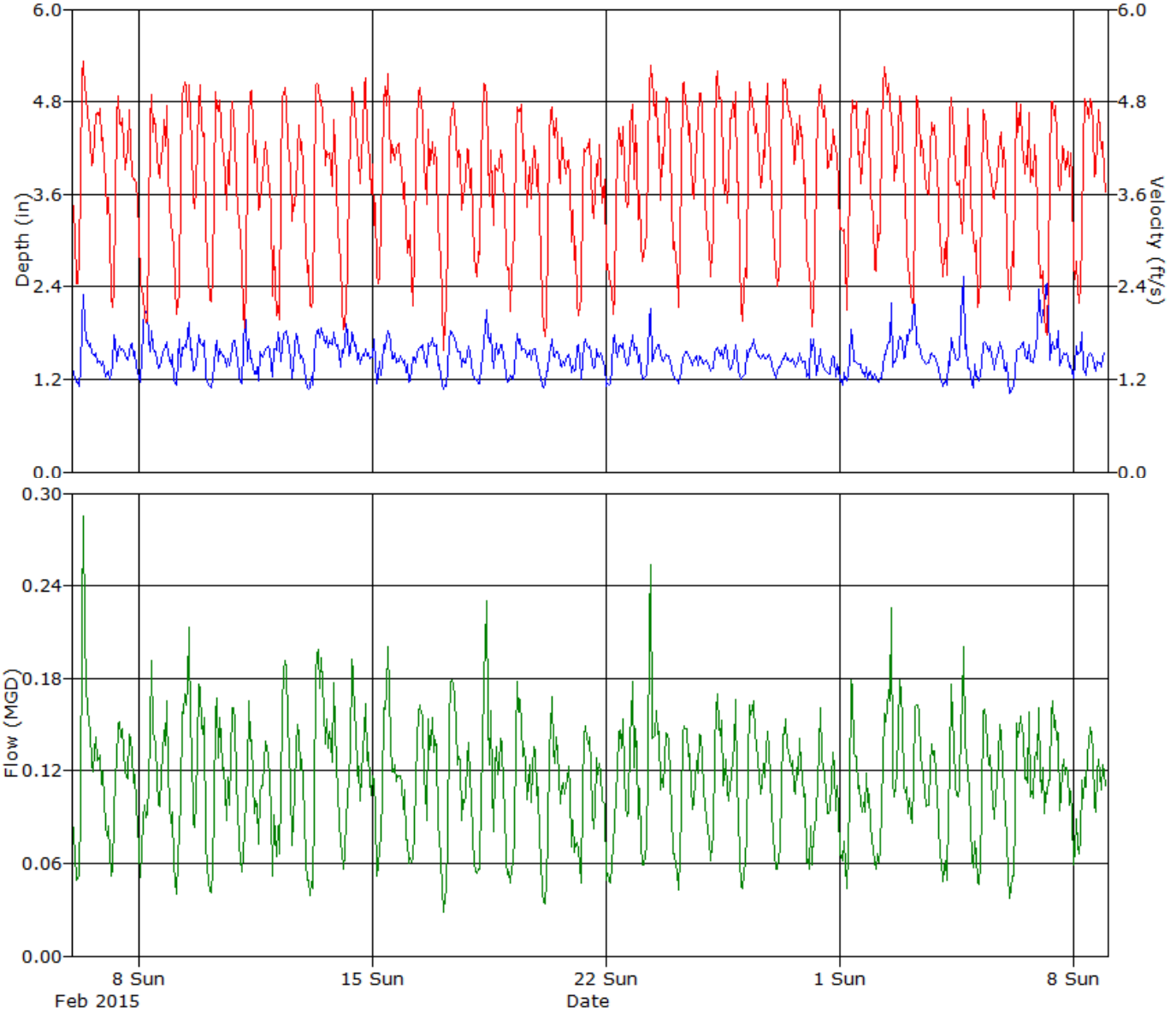


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL1, Pipe Height: 8 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	05:50	1.07	08:15	2.53	1.50	03:35	2.16	08:30	5.71	4.12	04:40	0.041	08:30	0.340	0.128	0.128	
2/7/2015	00:00	1.06	07:15	2.76	1.48	04:40	1.90	08:35	5.42	3.80	05:05	0.044	10:45	0.191	0.111	0.111	
2/8/2015	01:10	1.09	06:55	2.69	1.59	06:15	1.72	08:50	5.49	3.60	01:35	0.038	09:20	0.256	0.114	0.114	
2/9/2015	03:40	1.01	11:55	2.21	1.54	03:35	1.83	14:30	5.78	3.96	03:35	0.031	12:10	0.255	0.125	0.125	
2/10/2015	04:50	1.02	11:35	2.20	1.43	04:50	1.69	08:15	5.44	3.81	04:50	0.028	11:35	0.257	0.110	0.110	
2/11/2015	02:55	1.08	05:45	2.30	1.48	03:45	1.73	09:50	5.44	3.69	03:05	0.036	07:20	0.210	0.106	0.106	
2/12/2015	00:40	0.97	18:00	2.42	1.58	05:50	1.39	19:15	5.49	3.66	00:40	0.032	19:15	0.247	0.117	0.117	
2/13/2015	05:45	0.95	09:00	2.12	1.57	05:45	1.65	08:50	5.37	3.82	05:45	0.025	09:00	0.245	0.127	0.127	
2/14/2015	06:25	1.19	06:05	2.26	1.57	03:15	1.67	10:20	5.61	3.76	03:15	0.048	10:20	0.263	0.119	0.119	
2/15/2015	05:00	1.02	05:55	2.12	1.50	04:55	2.02	10:45	5.39	3.92	05:00	0.035	11:15	0.227	0.118	0.118	
2/16/2015	02:45	1.14	18:25	2.04	1.50	06:20	1.84	10:20	5.56	3.79	04:00	0.045	18:25	0.216	0.114	0.114	
2/17/2015	03:35	1.04	07:40	2.21	1.47	03:15	1.45	12:50	5.64	3.60	03:30	0.025	07:40	0.267	0.110	0.110	
2/18/2015	05:45	1.10	10:10	2.20	1.51	02:30	1.95	08:15	5.61	3.77	03:30	0.040	10:10	0.253	0.117	0.117	
2/19/2015	01:20	1.10	07:55	1.89	1.47	03:55	1.65	07:40	5.13	3.69	03:25	0.036	08:50	0.193	0.110	0.110	
2/20/2015	04:20	1.02	09:05	1.87	1.40	04:25	1.19	07:35	5.24	3.63	04:25	0.020	09:05	0.197	0.101	0.101	
2/21/2015	16:30	1.13	04:00	2.00	1.49	06:30	1.71	08:40	5.15	3.48	06:45	0.034	08:40	0.221	0.103	0.103	
2/22/2015	00:50	0.98	07:05	2.28	1.50	04:55	1.70	21:55	5.46	3.58	03:35	0.034	21:55	0.196	0.108	0.108	
2/23/2015	04:00	1.16	08:00	2.68	1.50	02:55	2.59	14:25	5.54	4.12	02:55	0.053	08:00	0.359	0.125	0.125	
2/24/2015	04:05	1.11	17:30	1.76	1.40	04:55	1.59	21:30	5.62	3.96	04:55	0.031	17:30	0.182	0.108	0.108	
2/25/2015	18:30	1.17	16:05	1.87	1.47	03:15	1.89	18:25	5.58	4.01	03:15	0.042	08:05	0.207	0.116	0.116	
2/26/2015	03:55	1.06	10:10	1.84	1.47	03:05	1.78	20:55	5.53	3.87	04:00	0.036	10:10	0.197	0.113	0.113	
2/27/2015	02:50	1.17	09:55	1.71	1.41	03:40	1.81	07:50	5.82	4.02	02:50	0.041	09:10	0.183	0.110	0.110	
2/28/2015	21:20	1.07	03:30	1.92	1.40	04:40	1.72	10:50	5.44	3.80	02:00	0.038	10:30	0.190	0.100	0.100	
3/1/2015	00:40	1.09	08:25	2.00	1.34	05:00	1.74	09:50	5.61	3.88	05:30	0.037	08:05	0.224	0.099	0.099	
3/2/2015	06:50	1.06	13:15	2.23	1.48	01:40	1.92	11:35	5.70	4.12	01:40	0.044	13:15	0.267	0.123	0.123	
3/3/2015	23:55	1.26	06:15	3.07	1.61	05:40	1.67	11:10	5.23	3.72	04:00	0.061	06:20	0.218	0.118	0.118	
3/4/2015	23:30	1.04	17:45	3.01	1.49	02:35	2.07	07:20	5.24	3.65	02:35	0.036	17:40	0.264	0.109	0.109	
3/5/2015	00:50	0.97	19:35	1.98	1.46	04:00	1.79	08:20	5.36	3.69	00:50	0.034	19:35	0.205	0.107	0.107	
3/6/2015	04:45	0.99	23:10	2.67	1.48	03:30	1.87	16:15	5.38	3.70	02:20	0.032	11:45	0.232	0.110	0.110	
3/7/2015	07:10	1.19	04:20	2.93	1.71	04:50	1.52	12:25	5.42	3.60	06:40	0.052	13:40	0.203	0.120	0.120	
3/8/2015	01:00	1.17	06:35	2.41	1.46	03:55	1.95	11:50	5.68	3.84	01:10	0.046	10:15	0.185	0.107	0.107	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			3.504
Avg	1.49	3.80	0.113

Site Commentary

Site Information

CAL10	
Pipe Dimensions	21.13" x 21.00"
Silt Level	0.00"

Overview

Site CAL10 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015. No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.50	5.18	1.326
Minimum	2.63	3.30	0.399
Maximum	6.68	6.40	2.715
Time of Minimum	2/15/2015 5:20 AM	3/5/2015 3:55 AM	3/1/2015 5:10 AM
Time of Maximum	2/14/2015 11:10 AM	2/14/2015 11:10 AM	2/14/2015 11:10 AM

Data Quality

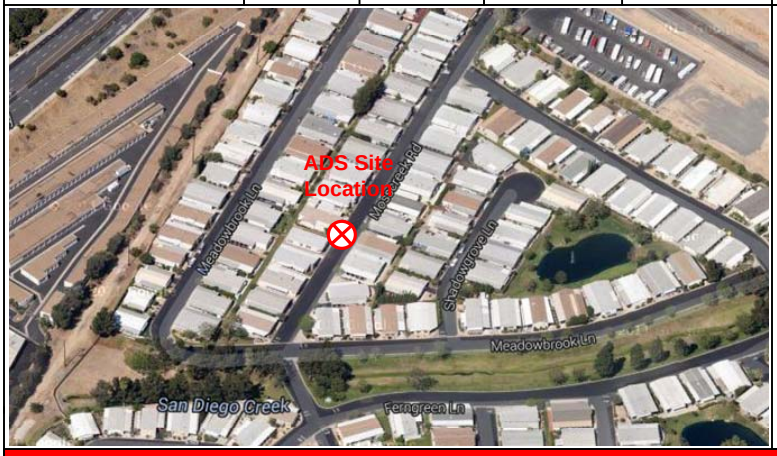
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

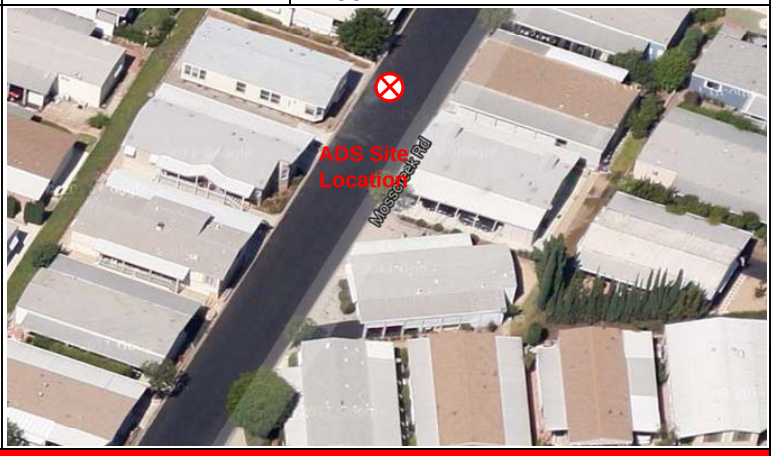
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Lake Forest	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL10	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: 437 Mosscreek Rd		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH196N148
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	21.13 "
		Pipe Width:	21.00 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1600
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	4.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	6.07 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	5'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

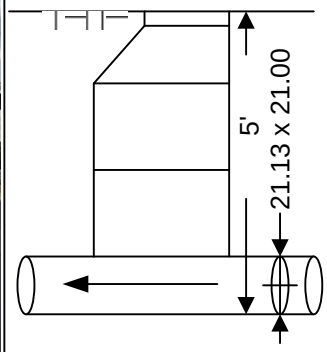
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

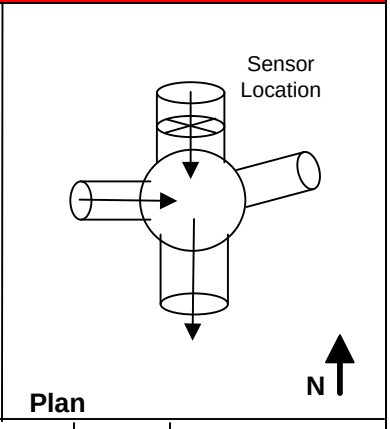
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

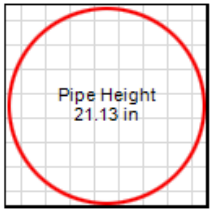
ub

SCATTERGRAPH REPORT

CAL10

Flow Monitor

CAL10

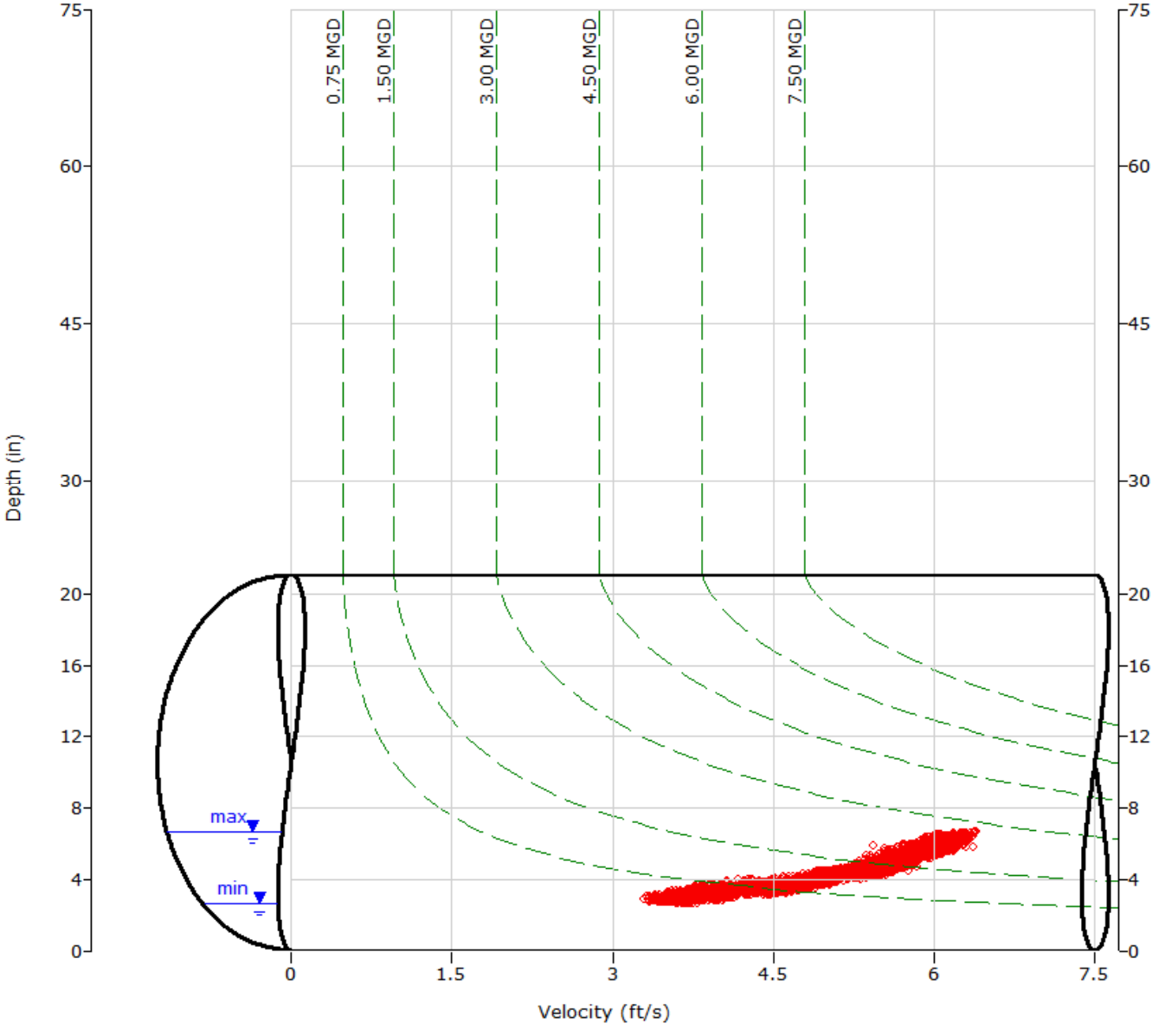


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth

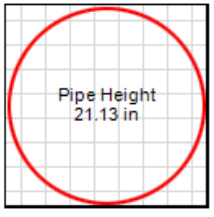


HYDROGRAPH REPORT

CAL10

Flow Monitor

CAL10

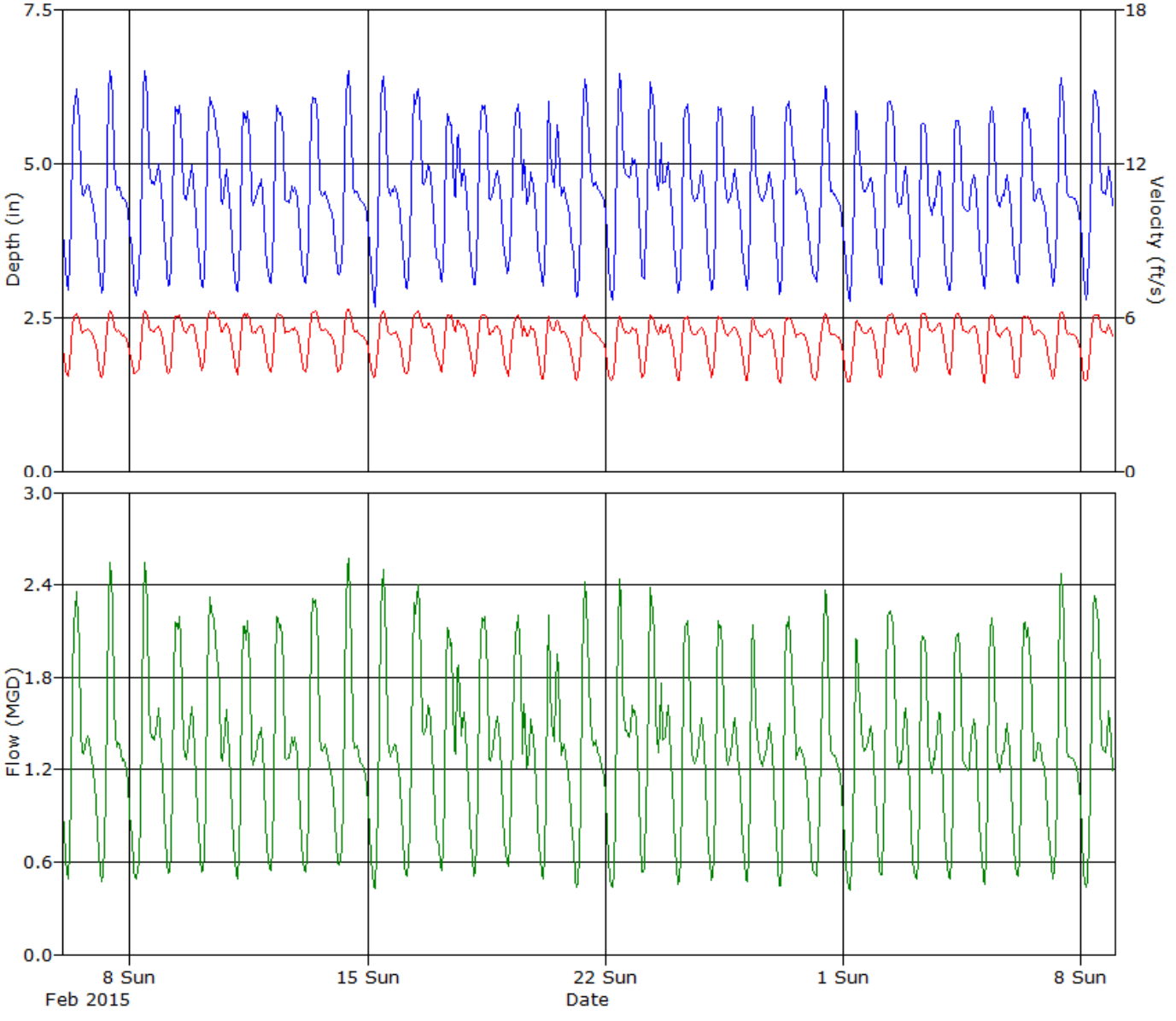


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL10, Pipe Height: 21.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:20	2.85	10:10	6.27	4.54	04:40	3.60	10:50	6.20	5.21	04:20	0.475	10:15	2.400	1.345	1.345	
2/7/2015	04:30	2.79	10:25	6.60	4.48	03:55	3.50	10:25	6.33	5.12	04:15	0.440	10:25	2.646	1.310	1.310	
2/8/2015	05:30	2.79	10:35	6.58	4.55	04:10	3.69	10:30	6.30	5.16	05:20	0.466	10:30	2.614	1.353	1.353	
2/9/2015	03:40	2.94	08:40	6.05	4.57	03:30	3.71	08:55	6.21	5.29	03:35	0.498	08:55	2.298	1.379	1.379	
2/10/2015	04:20	2.95	09:40	6.44	4.60	03:10	3.74	09:40	6.36	5.41	03:15	0.508	09:40	2.566	1.423	1.423	
2/11/2015	04:20	2.87	11:25	5.95	4.48	04:25	3.67	11:35	6.23	5.32	04:25	0.469	11:25	2.245	1.347	1.347	
2/12/2015	04:25	2.99	08:15	6.01	4.51	04:35	3.83	09:35	6.23	5.29	04:25	0.519	08:10	2.236	1.352	1.352	
2/13/2015	04:05	2.96	09:45	6.17	4.50	04:15	3.85	09:45	6.27	5.29	04:05	0.516	09:45	2.382	1.356	1.356	
2/14/2015	05:20	3.15	11:10	6.68	4.51	03:45	3.67	11:10	6.40	5.21	03:45	0.550	11:10	2.715	1.338	1.338	
2/15/2015	05:20	2.63	11:15	6.48	4.46	04:35	3.57	11:20	6.29	5.10	05:00	0.408	11:15	2.544	1.306	1.306	
2/16/2015	03:40	2.92	12:30	6.28	4.65	03:20	3.74	12:25	6.33	5.29	03:35	0.492	12:30	2.463	1.428	1.428	
2/17/2015	04:25	3.01	09:05	5.90	4.58	04:30	3.76	08:30	6.14	5.34	04:30	0.514	08:30	2.174	1.391	1.391	
2/18/2015	03:55	2.99	11:10	5.99	4.56	04:20	3.58	09:05	6.16	5.29	03:10	0.494	09:15	2.232	1.375	1.375	
2/19/2015	03:25	2.90	10:00	6.02	4.56	03:15	3.46	10:00	6.10	5.20	03:15	0.450	10:00	2.243	1.349	1.349	
2/20/2015	04:45	2.94	08:10	6.08	4.45	04:20	3.38	08:55	6.08	5.13	04:30	0.459	08:25	2.238	1.281	1.281	
2/21/2015	05:00	2.70	09:55	6.46	4.46	04:15	3.47	10:20	6.18	5.00	05:00	0.406	10:20	2.484	1.271	1.271	
2/22/2015	05:25	2.70	10:45	6.50	4.59	05:20	3.44	10:30	6.06	5.02	05:25	0.401	10:30	2.473	1.334	1.334	
2/23/2015	04:00	2.87	08:15	6.40	4.69	02:30	3.52	08:20	6.11	5.20	04:00	0.455	08:10	2.436	1.404	1.404	
2/24/2015	03:20	2.82	09:55	5.98	4.47	04:40	3.37	08:25	6.04	5.15	03:20	0.428	09:55	2.198	1.305	1.305	
2/25/2015	04:10	2.90	10:10	5.99	4.46	04:10	3.42	08:10	6.12	5.19	04:10	0.443	08:40	2.214	1.304	1.304	
2/26/2015	04:20	2.87	08:55	6.06	4.37	03:30	3.35	08:40	6.04	5.08	04:20	0.443	08:50	2.234	1.235	1.235	
2/27/2015	03:45	2.74	10:05	6.11	4.52	03:55	3.33	08:40	6.11	5.09	03:45	0.399	10:10	2.246	1.316	1.316	
2/28/2015	05:10	2.96	12:05	6.34	4.43	04:20	3.40	11:50	6.19	5.02	05:15	0.474	11:50	2.441	1.257	1.257	
3/1/2015	05:20	2.69	10:20	6.02	4.31	04:10	3.38	10:10	5.97	4.95	05:10	0.399	10:25	2.185	1.193	1.193	
3/2/2015	04:10	2.87	08:45	6.15	4.51	04:10	3.42	09:45	6.22	5.25	04:10	0.436	08:45	2.314	1.345	1.345	
3/3/2015	04:30	2.81	08:45	5.83	4.32	03:20	3.72	08:45	6.37	5.28	04:05	0.477	08:45	2.238	1.275	1.275	
3/4/2015	03:35	2.86	08:35	5.81	4.36	04:15	3.64	10:35	6.20	5.27	04:35	0.466	08:35	2.147	1.285	1.285	
3/5/2015	04:00	2.82	09:30	5.99	4.42	03:55	3.30	09:55	6.16	5.16	04:00	0.419	09:30	2.226	1.284	1.284	
3/6/2015	03:45	2.68	08:50	6.06	4.53	04:05	3.49	08:30	6.10	5.16	03:50	0.409	08:30	2.263	1.335	1.335	
3/7/2015	04:15	2.90	10:25	6.47	4.45	04:05	3.48	10:50	6.24	5.08	04:05	0.455	10:25	2.506	1.285	1.285	
3/8/2015	05:20	2.73	11:00	6.27	4.56	03:25	3.41	11:05	6.15	5.13	05:20	0.409	11:00	2.387	1.353	1.352	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			41.114
Avg	4.50	5.18	1.326

Site Commentary

Site Information

CAL11	
Pipe Dimensions	15.13" x 15.13"
Silt Level	0.00"

Overview

Site CAL11 functioned under normal conditions during the period Friday, February 20, 2015 to Sunday, March 22, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 20, 2015 to Sunday, March 22, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.03	1.63	0.410
Minimum	2.69	0.85	0.083
Maximum	8.12	2.46	1.085
Time of Minimum	3/4/2015 3:55 AM	3/4/2015 4:00 AM	3/4/2015 4:00 AM
Time of Maximum	3/3/2015 11:05 AM	3/3/2015 11:20 AM	3/3/2015 11:05 AM

Data Quality

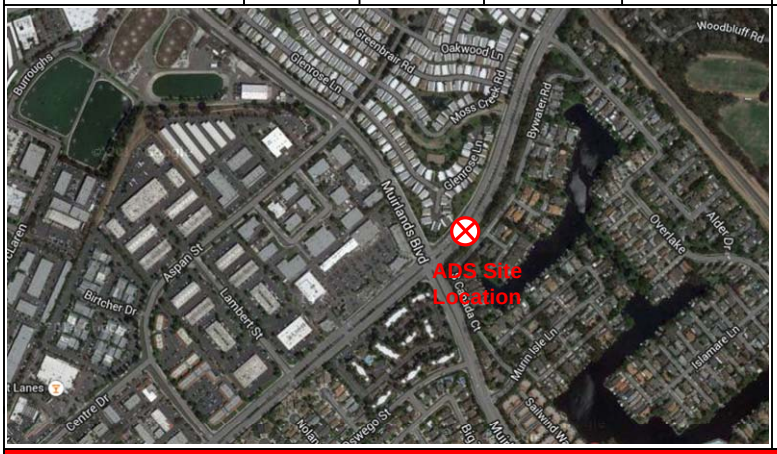
Data uptime observed during the Friday, February 20, 2015 to the Sunday, March 22, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Lake Forest	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL11	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: Lake Forest & Muirlands		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH196E021
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	15.13 "
		Pipe Width:	15.13 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	5.38 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.90 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

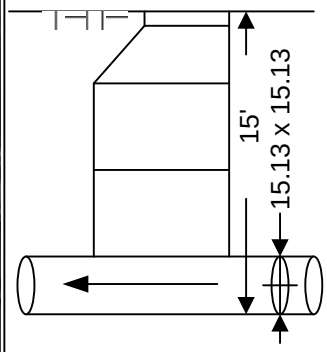
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

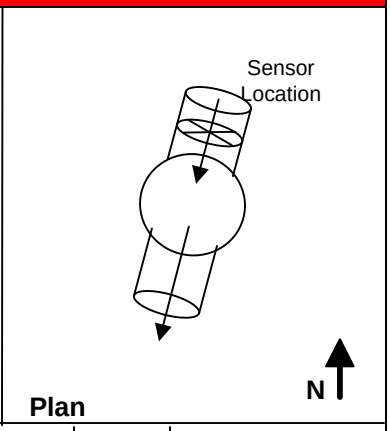
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

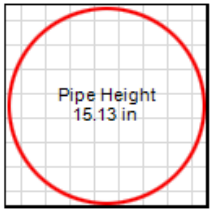
ub

SCATTERGRAPH REPORT

CAL11

Flow Monitor

CAL11

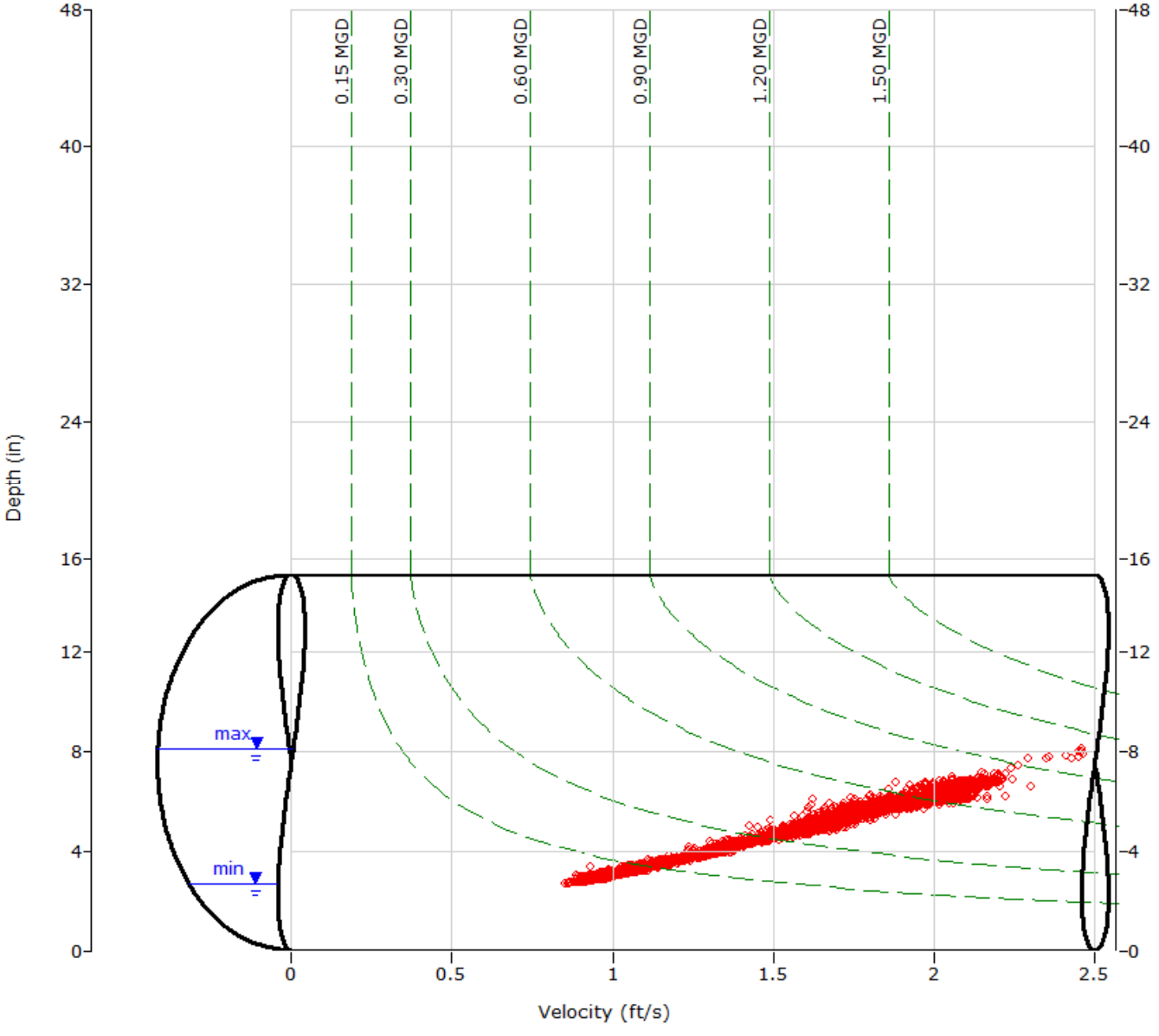


Report Period

2/20/2015
To
3/22/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



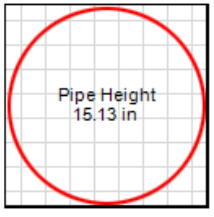
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL11

Flow Monitor

CAL11

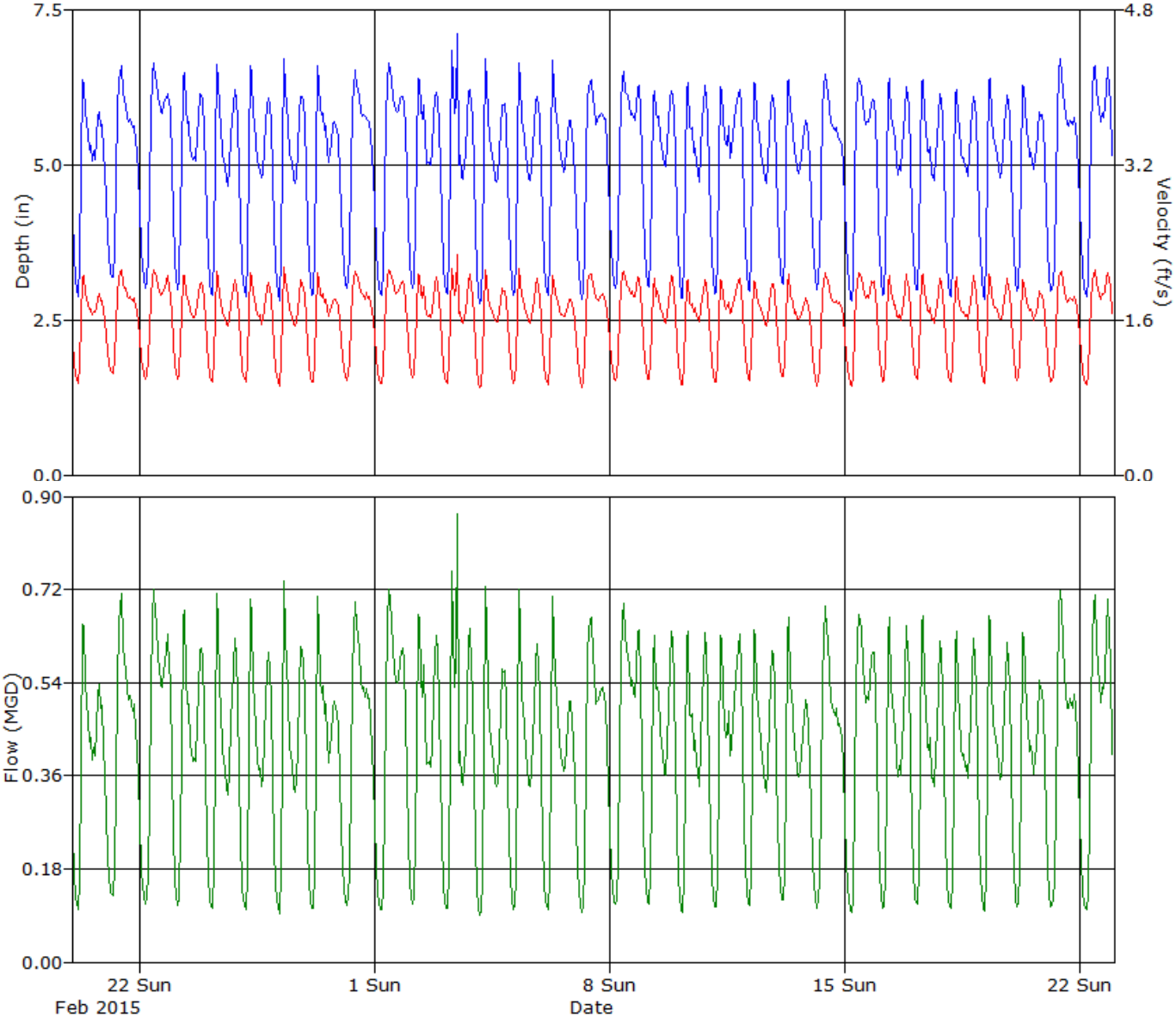


Report Period

2/20/2015
To
3/22/2015

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 2/20/2015 - 3/22/2015

CAL11, Pipe Height: 15.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/20/2015	04:30	2.82	08:05	6.67	4.97	04:35	0.91	08:10	2.14	1.60	04:35	0.095	08:10	0.726	0.393	0.393	
2/21/2015	05:15	3.08	10:00	6.76	5.12	05:15	1.01	11:50	2.17	1.65	05:15	0.119	11:15	0.735	0.424	0.424	
2/22/2015	04:55	2.89	09:50	6.87	5.22	05:00	0.95	10:00	2.20	1.68	05:00	0.102	09:50	0.776	0.449	0.449	
2/23/2015	03:55	2.88	07:45	6.90	5.08	03:55	0.94	07:40	2.19	1.64	03:55	0.100	07:45	0.785	0.414	0.414	
2/24/2015	04:05	2.85	07:30	7.12	4.97	04:25	0.93	07:55	2.17	1.61	04:25	0.098	07:30	0.801	0.399	0.399	
2/25/2015	04:45	2.81	07:50	6.80	4.96	04:45	0.93	08:15	2.17	1.61	04:45	0.097	07:30	0.756	0.397	0.397	
2/26/2015	04:15	2.73	07:25	6.87	4.95	04:15	0.89	07:35	2.24	1.61	04:15	0.089	07:35	0.796	0.399	0.399	
2/27/2015	03:20	2.85	07:40	7.06	5.01	03:20	0.94	07:40	2.22	1.61	03:20	0.099	07:40	0.820	0.403	0.403	
2/28/2015	04:00	2.92	10:05	6.60	5.09	04:20	0.93	10:30	2.13	1.65	04:00	0.106	12:10	0.716	0.423	0.423	
3/1/2015	05:15	2.83	10:05	6.74	5.16	03:40	0.89	11:05	2.17	1.67	04:35	0.096	11:05	0.750	0.442	0.442	
3/2/2015	03:40	2.93	07:55	6.67	5.07	03:30	0.97	07:50	2.17	1.65	03:40	0.107	07:55	0.733	0.417	0.417	
3/3/2015	03:50	2.87	11:05	8.12	5.08	03:50	0.92	11:20	2.46	1.65	03:50	0.098	11:05	1.085	0.425	0.425	
3/4/2015	03:55	2.69	07:25	6.86	4.90	04:00	0.85	07:30	2.16	1.59	04:00	0.083	07:25	0.764	0.388	0.388	
3/5/2015	03:40	2.86	07:50	6.85	4.97	03:35	0.92	07:30	2.19	1.62	03:35	0.097	07:30	0.769	0.399	0.399	
3/6/2015	04:15	2.79	08:00	6.80	4.92	04:15	0.89	07:50	2.17	1.59	04:15	0.091	07:50	0.753	0.385	0.385	
3/7/2015	05:05	2.82	11:45	6.59	5.07	04:35	0.90	11:45	2.21	1.63	04:35	0.093	11:45	0.745	0.419	0.419	
3/8/2015	04:30	2.91	09:55	6.64	5.22	04:30	0.96	10:50	2.12	1.69	04:30	0.104	09:50	0.718	0.449	0.449	
3/9/2015	04:00	2.90	07:40	6.57	5.05	04:00	0.93	08:05	2.11	1.62	04:00	0.101	07:40	0.697	0.408	0.408	
3/10/2015	04:00	2.78	08:25	6.59	4.97	04:20	0.90	08:00	2.15	1.60	03:40	0.091	08:00	0.724	0.395	0.395	
3/11/2015	04:15	2.85	07:30	6.64	5.09	04:20	0.93	08:05	2.11	1.65	04:15	0.098	07:30	0.707	0.418	0.418	
3/12/2015	04:15	2.88	07:45	6.78	4.97	04:10	0.94	07:50	2.13	1.61	04:10	0.101	07:45	0.744	0.395	0.395	
3/13/2015	04:35	2.99	07:45	7.00	4.95	03:40	0.99	08:00	2.21	1.60	04:35	0.113	07:50	0.805	0.386	0.386	
3/14/2015	04:45	2.94	09:45	6.52	5.03	04:45	0.89	10:20	2.13	1.61	04:45	0.098	10:20	0.701	0.407	0.407	
3/15/2015	05:55	2.78	09:50	6.67	5.10	05:45	0.90	10:00	2.14	1.67	05:55	0.092	10:00	0.726	0.434	0.434	
3/16/2015	03:25	2.82	07:35	6.72	4.99	03:25	0.94	07:45	2.16	1.63	03:25	0.097	07:50	0.740	0.404	0.404	
3/17/2015	04:15	2.95	08:05	6.75	4.96	04:20	0.97	08:05	2.20	1.63	04:20	0.108	08:05	0.767	0.399	0.399	
3/18/2015	04:15	2.83	08:15	6.53	4.91	04:00	0.94	07:50	2.14	1.61	04:15	0.098	08:15	0.712	0.391	0.391	
3/19/2015	04:05	2.76	07:50	6.71	4.96	04:05	0.92	07:50	2.16	1.62	04:05	0.093	07:50	0.746	0.399	0.399	
3/20/2015	03:35	2.91	07:50	6.68	4.96	03:35	0.96	08:05	2.09	1.61	03:35	0.104	07:55	0.717	0.392	0.392	
3/21/2015	03:40	2.88	10:30	6.82	5.06	03:40	0.91	10:30	2.17	1.62	03:40	0.098	10:30	0.765	0.416	0.416	
3/22/2015	05:10	2.83	11:35	6.70	5.17	05:00	0.92	10:45	2.16	1.67	05:10	0.096	11:30	0.742	0.443	0.443	

Report Summary For The Period 2/20/2015 - 3/22/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			12.713
Avg	5.03	1.63	0.410

Site Commentary

Site Information

CAL12	
Pipe Dimensions	17.88" x 18.00"
Silt Level	0.00"

Overview

Site CAL12 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.50	5.26	1.635
Minimum	3.27	3.33	0.491
Maximum	8.12	6.25	3.123
Time of Minimum	2/15/2015 5:30 AM	2/28/2015 4:05 AM	2/15/2015 5:20 AM
Time of Maximum	2/26/2015 8:05 AM	2/8/2015 11:30 AM	2/26/2015 8:00 AM

Data Quality

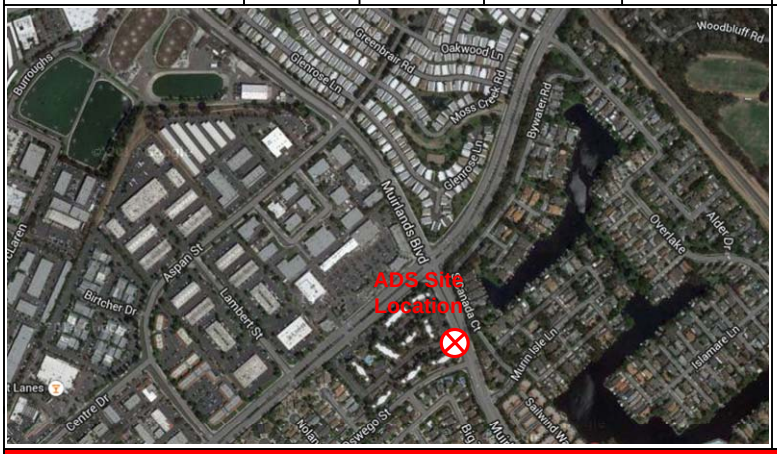
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Lake Forest	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL12	**Install Date:** 1/22/15	**Monitor Type**	Peak Doppler
Address/Location: Muirlands and Oswego		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH196E154
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	17.88 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	1/22/15 @ 1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	5.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.90 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

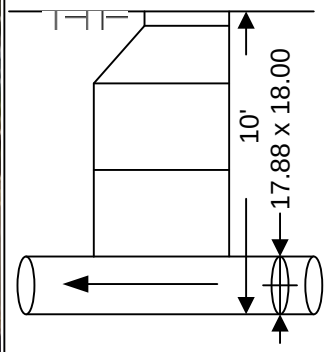
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

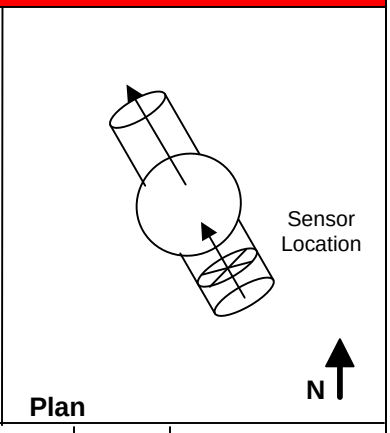
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

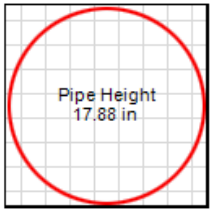
ub

SCATTERGRAPH REPORT

CAL12

Flow Monitor

CAL12

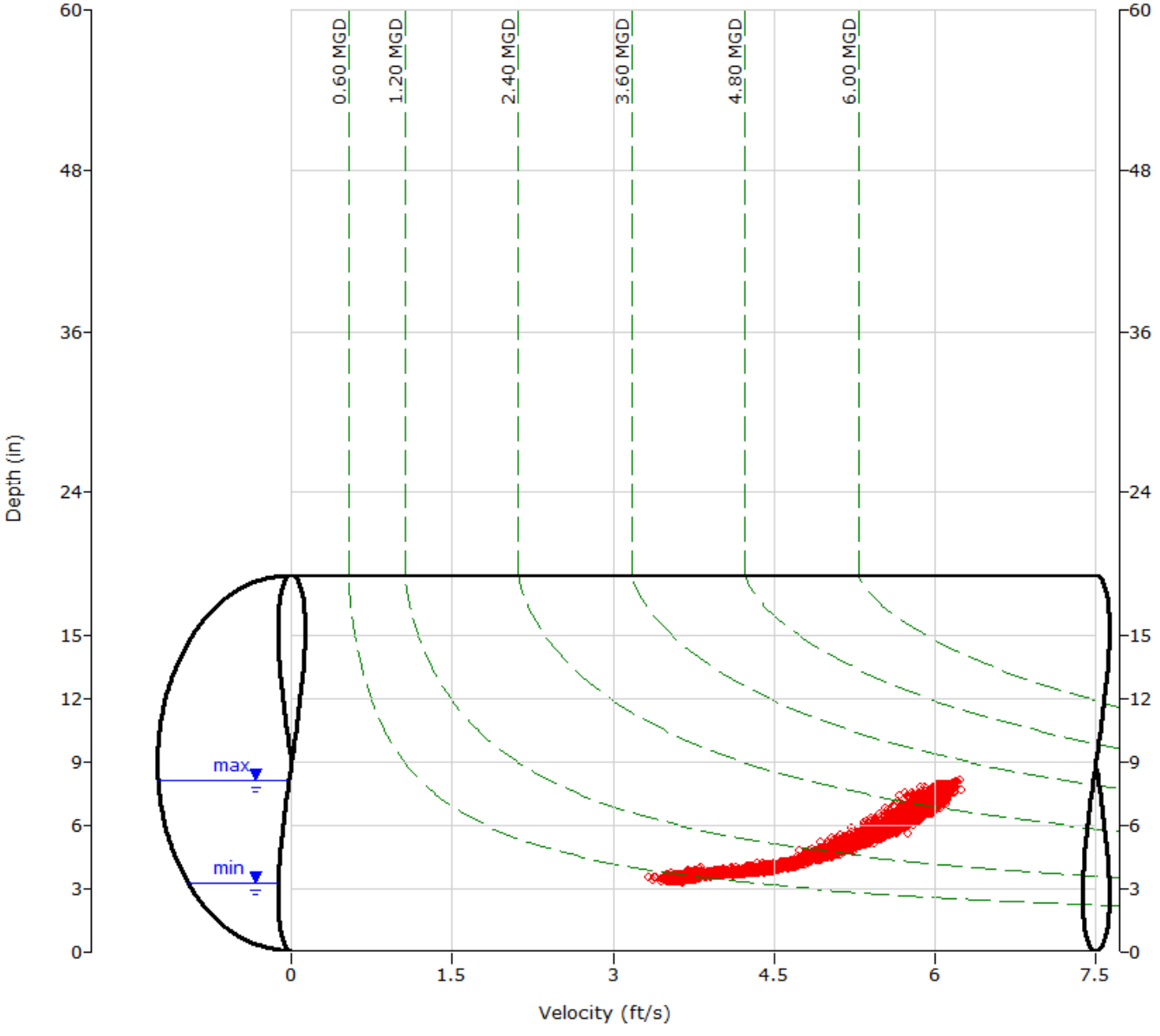


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



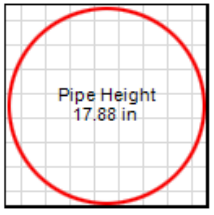
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL12

Flow Monitor

CAL12

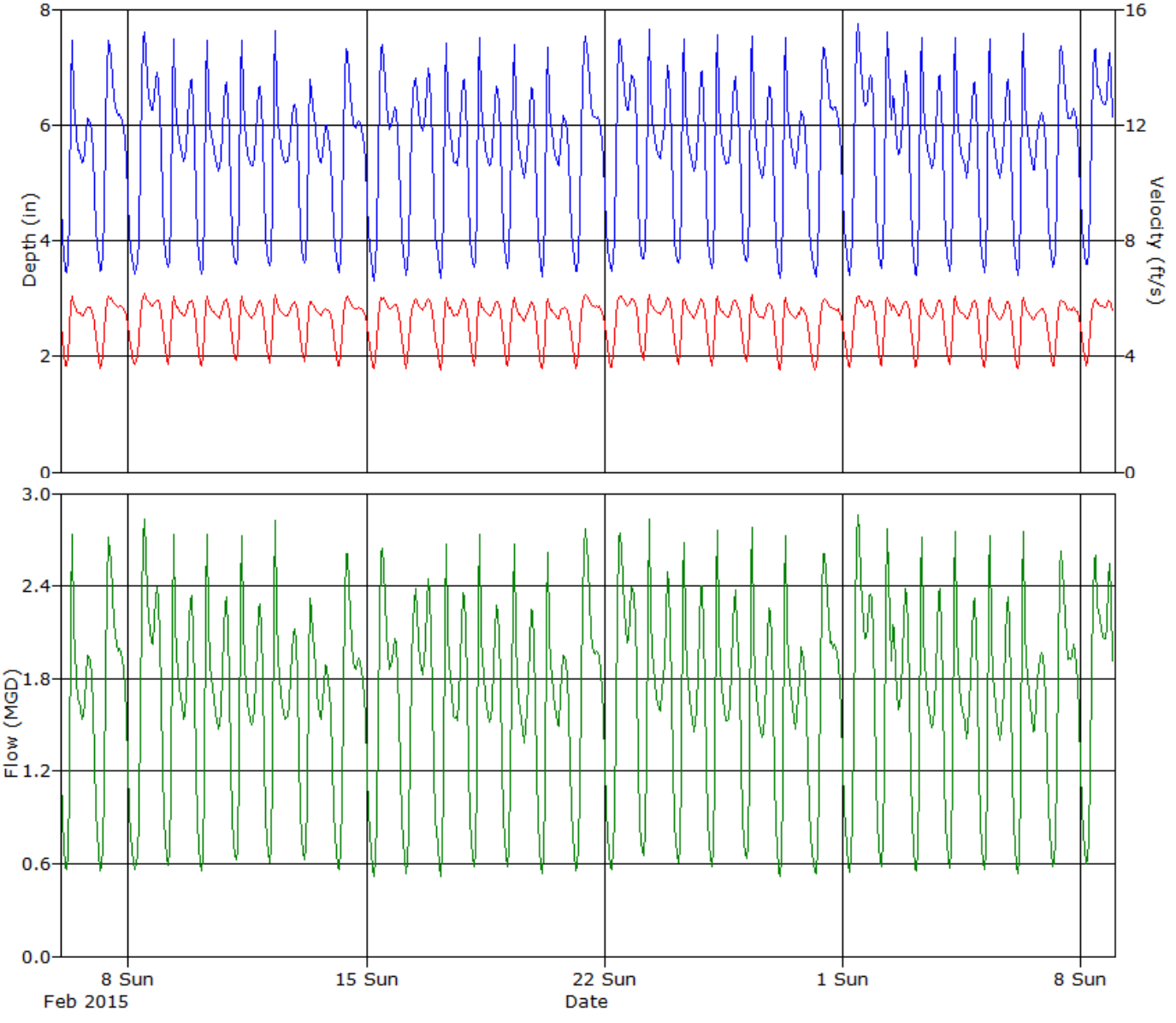


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL12, Pipe Height: 17.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:15	3.37	08:10	7.73	5.35	03:25	3.53	08:30	6.16	5.23	04:15	0.538	08:15	2.865	1.556	1.556	
2/7/2015	05:00	3.33	10:15	7.49	5.59	04:40	3.52	10:55	6.10	5.27	05:00	0.522	10:15	2.739	1.685	1.685	
2/8/2015	05:30	3.39	11:00	7.75	5.69	04:45	3.61	11:30	6.25	5.32	05:25	0.544	11:00	2.898	1.753	1.753	
2/9/2015	04:30	3.44	08:20	7.68	5.49	04:40	3.66	08:20	6.15	5.30	04:30	0.561	08:20	2.864	1.632	1.632	
2/10/2015	04:20	3.33	08:10	7.80	5.42	04:20	3.58	08:20	6.20	5.27	04:20	0.522	08:10	2.941	1.601	1.601	
2/11/2015	05:00	3.55	08:05	7.73	5.45	05:05	3.52	08:30	6.17	5.29	05:05	0.585	08:20	2.886	1.611	1.611	
2/12/2015	04:15	3.54	08:05	7.85	5.45	04:10	3.63	08:20	6.17	5.31	04:15	0.578	08:10	2.953	1.616	1.616	
2/13/2015	04:25	3.59	08:00	6.86	5.34	04:45	3.67	08:40	5.96	5.26	04:45	0.606	08:00	2.374	1.546	1.546	
2/14/2015	05:05	3.38	11:10	7.39	5.47	05:20	3.56	11:20	6.09	5.23	05:20	0.531	11:20	2.678	1.618	1.618	
2/15/2015	05:30	3.27	10:55	7.52	5.49	05:20	3.45	10:50	6.09	5.24	05:20	0.491	10:55	2.750	1.637	1.637	
2/16/2015	04:05	3.36	21:00	7.13	5.57	04:50	3.46	11:40	6.03	5.30	04:05	0.520	20:45	2.525	1.676	1.676	
2/17/2015	04:30	3.32	08:10	7.61	5.45	04:45	3.37	08:10	6.08	5.27	04:45	0.497	08:10	2.800	1.613	1.613	
2/18/2015	05:05	3.50	08:10	7.78	5.46	04:05	3.55	08:30	6.15	5.28	04:20	0.564	08:05	2.864	1.616	1.616	
2/19/2015	04:20	3.39	08:05	7.70	5.39	05:00	3.58	08:00	6.09	5.22	04:15	0.540	08:20	2.825	1.566	1.566	
2/20/2015	04:45	3.32	08:30	7.60	5.35	04:25	3.52	08:05	6.13	5.18	04:45	0.510	08:05	2.812	1.540	1.540	
2/21/2015	05:30	3.38	11:15	7.56	5.55	04:50	3.53	11:15	6.13	5.27	04:15	0.534	11:15	2.797	1.664	1.664	
2/22/2015	05:25	3.41	10:50	7.61	5.73	05:10	3.57	11:30	6.14	5.34	05:10	0.544	10:50	2.800	1.774	1.774	
2/23/2015	03:30	3.65	08:25	7.84	5.57	03:55	3.70	08:30	6.18	5.37	03:55	0.618	08:25	2.955	1.681	1.681	
2/24/2015	04:25	3.55	08:10	7.80	5.47	04:20	3.50	07:40	6.08	5.29	04:25	0.566	08:05	2.863	1.622	1.622	
2/25/2015	04:20	3.45	08:05	7.86	5.47	04:20	3.53	07:50	6.15	5.28	04:20	0.542	08:05	2.940	1.623	1.623	
2/26/2015	04:20	3.59	08:05	8.12	5.42	04:25	3.67	08:00	6.24	5.27	04:25	0.599	08:00	3.123	1.589	1.589	
2/27/2015	04:25	3.30	07:55	7.91	5.37	03:20	3.40	08:10	6.08	5.17	04:25	0.507	07:55	2.929	1.547	1.547	
2/28/2015	05:25	3.32	11:00	7.42	5.62	04:05	3.33	11:10	6.01	5.21	04:55	0.511	11:00	2.666	1.676	1.676	
3/1/2015	05:05	3.35	11:20	7.85	5.75	05:25	3.53	11:55	6.15	5.28	05:25	0.526	11:25	2.905	1.763	1.763	
3/2/2015	04:10	3.37	08:05	7.78	5.61	04:15	3.50	08:25	6.13	5.30	04:10	0.520	08:20	2.902	1.688	1.688	
3/3/2015	03:45	3.30	08:05	7.91	5.45	03:35	3.49	08:05	6.11	5.25	03:40	0.513	08:05	2.963	1.609	1.609	
3/4/2015	04:20	3.41	08:00	7.94	5.43	04:30	3.64	08:10	6.17	5.26	04:20	0.555	08:00	2.999	1.599	1.599	
3/5/2015	04:25	3.35	08:00	7.82	5.41	04:20	3.54	08:15	6.14	5.22	04:20	0.522	08:00	2.932	1.583	1.583	
3/6/2015	04:45	3.35	08:15	7.91	5.38	05:00	3.49	08:00	6.11	5.16	05:00	0.524	08:10	2.946	1.552	1.552	
3/7/2015	04:45	3.47	11:00	7.47	5.61	04:45	3.47	10:55	6.05	5.23	04:45	0.536	10:55	2.698	1.669	1.669	
3/8/2015	04:55	3.44	11:25	7.44	5.80	04:45	3.47	11:30	6.04	5.30	04:55	0.532	11:25	2.692	1.774	1.773	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			50.677
Avg	5.50	5.26	1.635

Site Commentary

Site Information

CAL13	
Pipe Dimensions	20.00" x 20.88"
Silt Level	0.00"

Overview

Site CAL13 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.80	1.92	0.744
Minimum	3.37	0.68	0.136
Maximum	9.16	3.02	1.950
Time of Minimum	2/15/2015 4:20 AM	2/6/2015 4:00 AM	2/6/2015 4:00 AM
Time of Maximum	2/8/2015 10:10 AM	2/10/2015 9:25 AM	2/10/2015 9:20 AM

Data Quality

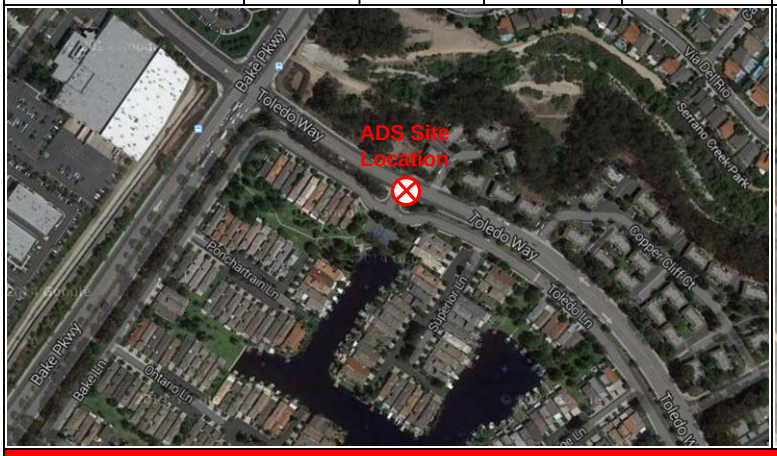
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

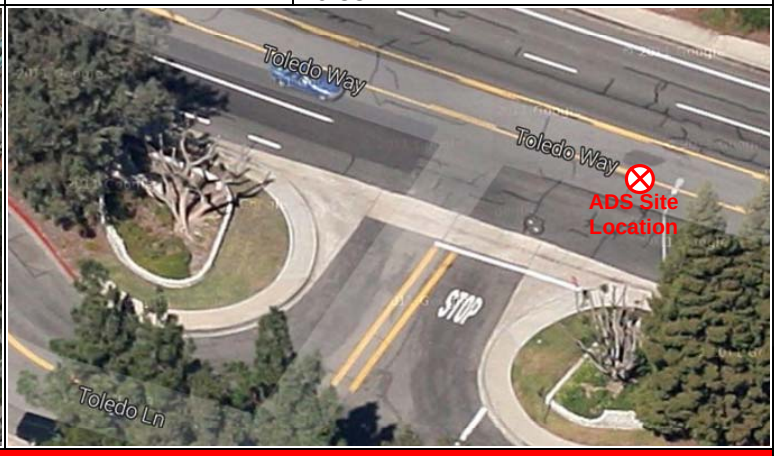
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL13	**Install Date:** 2/2/15	**Monitor Type**	Peak Doppler
Address/Location: Toledo Way & Toledo Ln		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH195N022
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	21.00 "
		Pipe Width:	20.88 "





Investigation Information:

Date/Time of Investigation:	2/2/15 @ 1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	7.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.90 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	PVC/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

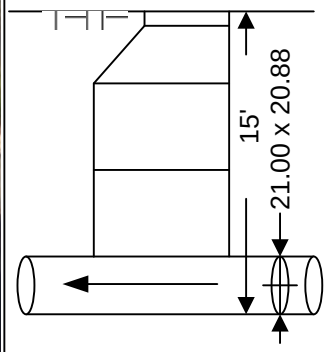
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

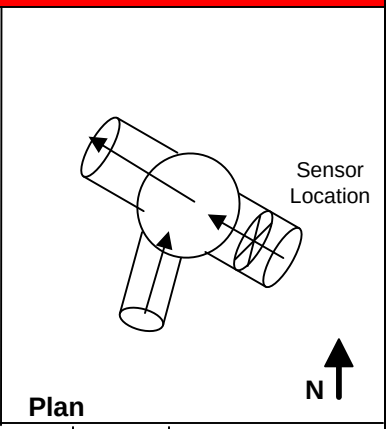
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

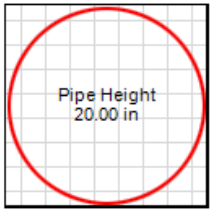
ub

SCATTERGRAPH REPORT

CAL13

Flow Monitor

CAL13

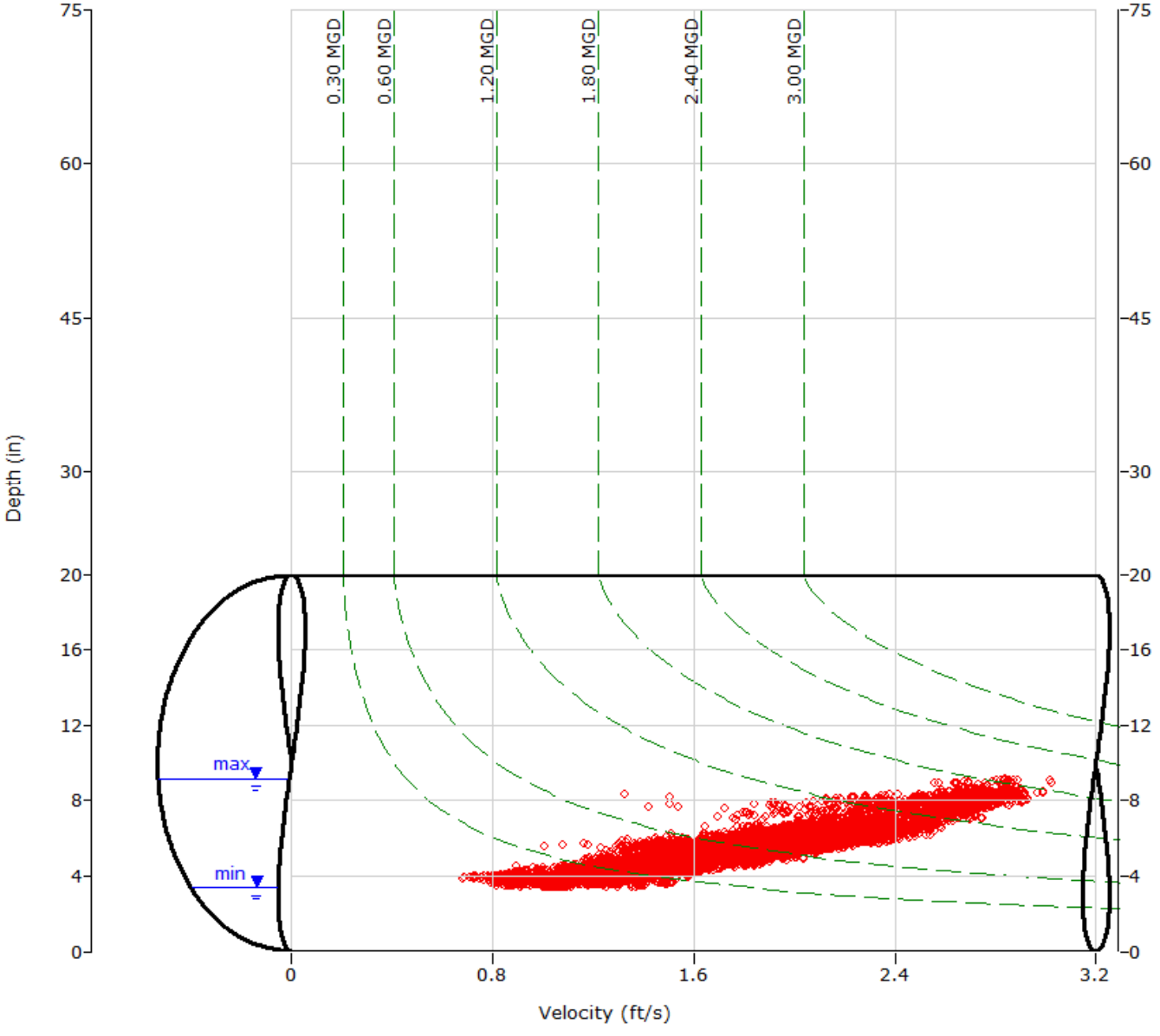


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



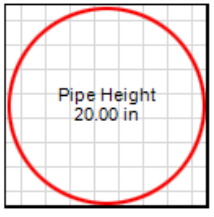
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL13

Flow Monitor

CAL13

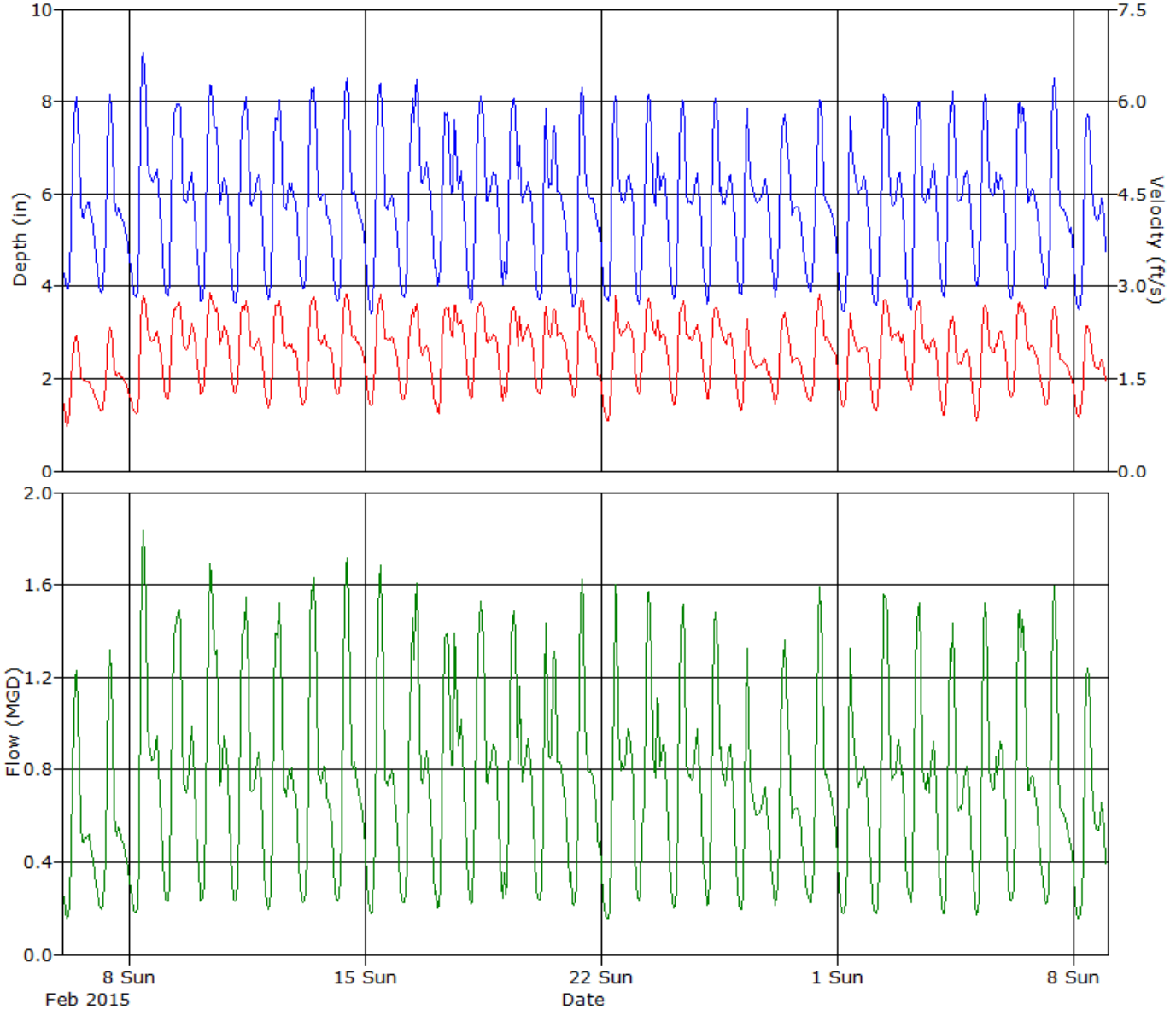


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL13, Pipe Height: 20 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:00	3.86	10:10	8.21	5.66	04:00	0.68	08:55	2.36	1.44	04:00	0.136	10:00	1.295	0.542	0.542	
2/7/2015	04:00	3.84	10:10	8.31	5.51	04:00	0.97	10:15	2.41	1.52	04:00	0.191	10:15	1.390	0.547	0.547	
2/8/2015	06:00	3.75	10:10	9.16	6.04	06:35	0.90	09:55	2.89	1.90	06:00	0.177	10:10	1.865	0.807	0.807	
2/9/2015	04:00	3.78	10:55	8.42	5.92	04:15	1.06	10:55	2.79	2.05	04:15	0.206	10:55	1.640	0.810	0.810	
2/10/2015	02:40	3.61	09:20	9.04	6.06	02:55	1.11	09:25	3.02	2.16	02:55	0.201	09:20	1.950	0.887	0.887	
2/11/2015	04:20	3.52	11:20	8.54	5.90	03:55	1.20	11:20	2.85	2.04	04:00	0.213	11:20	1.708	0.801	0.801	
2/12/2015	03:45	3.67	11:05	8.28	5.85	04:20	0.98	11:00	2.83	1.96	04:20	0.185	11:05	1.610	0.771	0.771	
2/13/2015	03:45	3.90	11:15	8.49	5.90	02:55	1.05	11:20	2.86	2.00	03:45	0.214	11:15	1.686	0.795	0.795	
2/14/2015	04:50	3.62	11:15	8.75	5.72	06:20	1.15	10:40	2.99	2.05	04:50	0.220	10:40	1.780	0.780	0.780	
2/15/2015	04:20	3.37	10:45	8.87	5.66	04:35	1.03	11:10	2.92	1.98	04:35	0.170	10:45	1.806	0.753	0.753	
2/16/2015	04:35	3.73	12:00	8.69	6.07	03:30	1.12	12:20	2.76	1.91	04:35	0.217	12:20	1.690	0.791	0.791	
2/17/2015	05:30	3.74	15:20	7.95	6.02	04:05	0.88	15:35	2.77	2.08	04:05	0.177	15:20	1.493	0.840	0.840	
2/18/2015	03:35	3.61	10:45	8.49	5.95	03:30	1.09	10:40	2.79	2.07	03:30	0.199	10:45	1.648	0.823	0.823	
2/19/2015	03:05	3.87	09:40	8.40	5.99	02:55	1.06	09:50	2.72	2.04	02:55	0.212	09:45	1.589	0.810	0.810	
2/20/2015	04:25	3.65	08:00	8.23	5.70	04:25	1.19	08:20	2.71	2.05	04:25	0.218	08:15	1.521	0.763	0.763	
2/21/2015	04:35	3.50	10:55	8.40	5.59	04:35	1.06	09:55	2.87	1.95	04:35	0.184	10:20	1.646	0.721	0.721	
2/22/2015	05:05	3.62	10:55	8.31	5.71	04:35	0.77	10:30	2.93	1.89	05:05	0.144	09:40	1.659	0.727	0.727	
2/23/2015	03:50	3.53	09:55	8.31	5.92	04:05	1.17	08:05	2.85	2.11	04:05	0.206	08:20	1.637	0.828	0.828	
2/24/2015	03:05	3.70	10:00	8.32	5.80	04:10	0.92	10:05	2.81	2.05	04:10	0.175	10:05	1.625	0.786	0.786	
2/25/2015	04:00	3.57	10:00	8.50	5.82	04:00	1.11	09:55	2.88	2.04	04:00	0.198	10:00	1.711	0.780	0.780	
2/26/2015	04:05	3.74	08:30	8.17	5.70	03:50	0.94	08:30	2.51	1.66	03:50	0.181	08:30	1.421	0.610	0.610	
2/27/2015	03:20	3.64	09:55	7.95	5.70	03:20	1.03	09:55	2.66	1.82	03:20	0.188	09:55	1.450	0.677	0.677	
2/28/2015	04:50	3.77	11:45	8.23	5.55	04:50	1.08	11:35	2.93	1.93	04:50	0.207	11:45	1.656	0.706	0.706	
3/1/2015	04:50	3.38	10:05	7.79	5.48	04:50	1.00	09:30	2.60	1.80	04:50	0.165	09:25	1.356	0.639	0.639	
3/2/2015	04:05	3.51	08:30	8.38	5.86	03:45	0.91	09:55	2.86	2.04	03:45	0.158	08:20	1.646	0.801	0.801	
3/3/2015	04:20	3.41	09:50	8.24	5.81	04:35	1.24	10:50	2.80	2.03	04:30	0.210	09:35	1.568	0.776	0.776	
3/4/2015	04:20	3.71	10:05	8.29	5.94	04:20	0.87	10:20	2.54	1.76	04:20	0.165	10:20	1.463	0.702	0.702	
3/5/2015	03:45	3.95	09:15	8.39	5.97	03:40	0.78	09:15	2.80	1.89	03:40	0.160	09:15	1.643	0.757	0.757	
3/6/2015	03:45	3.68	09:10	8.15	5.91	05:00	1.13	09:50	2.86	1.99	05:00	0.216	09:20	1.544	0.787	0.787	
3/7/2015	04:25	3.89	10:15	8.69	5.68	03:55	1.04	10:15	2.68	1.75	03:55	0.211	10:15	1.643	0.664	0.664	
3/8/2015	03:20	3.43	10:35	7.93	5.42	03:40	0.82	10:25	2.41	1.63	03:40	0.141	10:35	1.299	0.581	0.581	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			23.061
Avg	5.80	1.92	0.744

Site Commentary

Site Information

CAL14	
Pipe Dimensions	17.88" x 17.88"
Silt Level	0.00"

Overview

Site CAL14 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.80	4.90	0.301
Minimum	1.25	3.11	0.109
Maximum	2.27	5.95	0.487
Time of Minimum	2/25/2015 3:15 AM	2/21/2015 5:20 AM	2/21/2015 5:20 AM
Time of Maximum	2/13/2015 9:45 AM	3/2/2015 11:40 AM	3/2/2015 11:45 AM

Data Quality

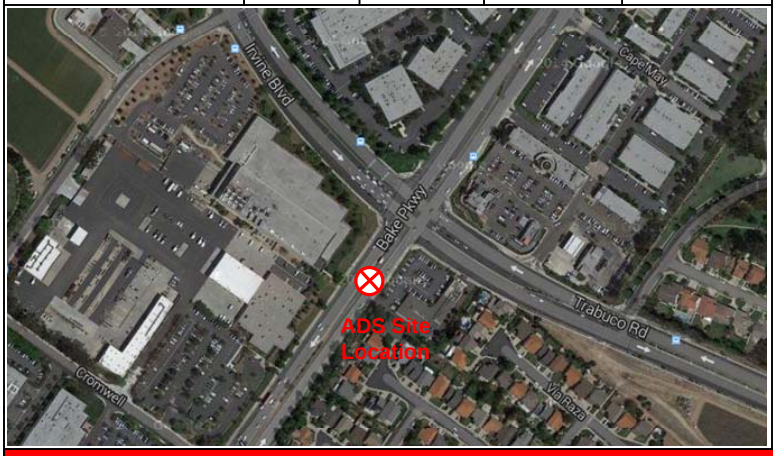
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL14	**Install Date:** 1/22/15	**Monitor Type**	Peak Doppler
Address/Location: Bake and Irvine Blvd		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH173E116
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	17.88 "
		Pipe Width:	17.88 "





Investigation Information:

Date/Time of Investigation:	1/22/15 @ 1300
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.59 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	8'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	PVC/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	X			

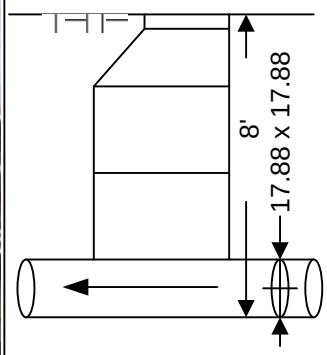
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

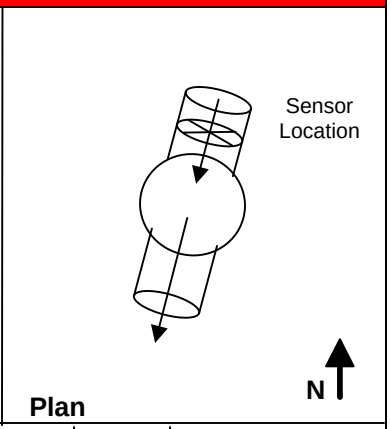
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

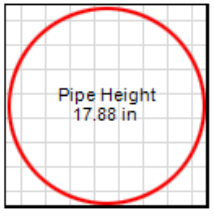
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

CAL14

Flow Monitor

CAL14

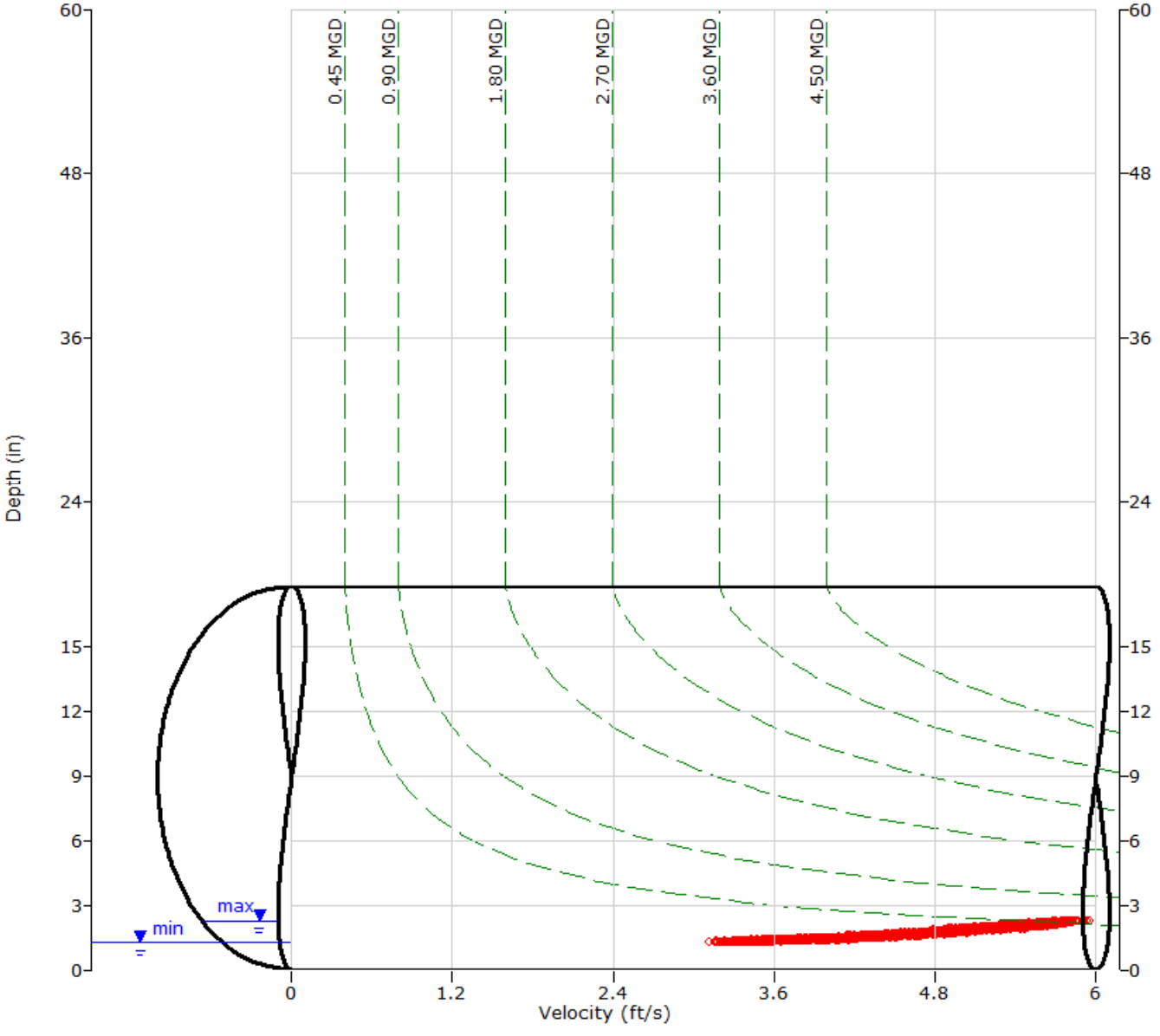


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



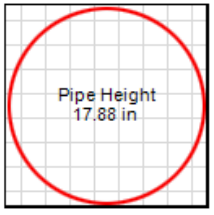
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL14

Flow Monitor

CAL14

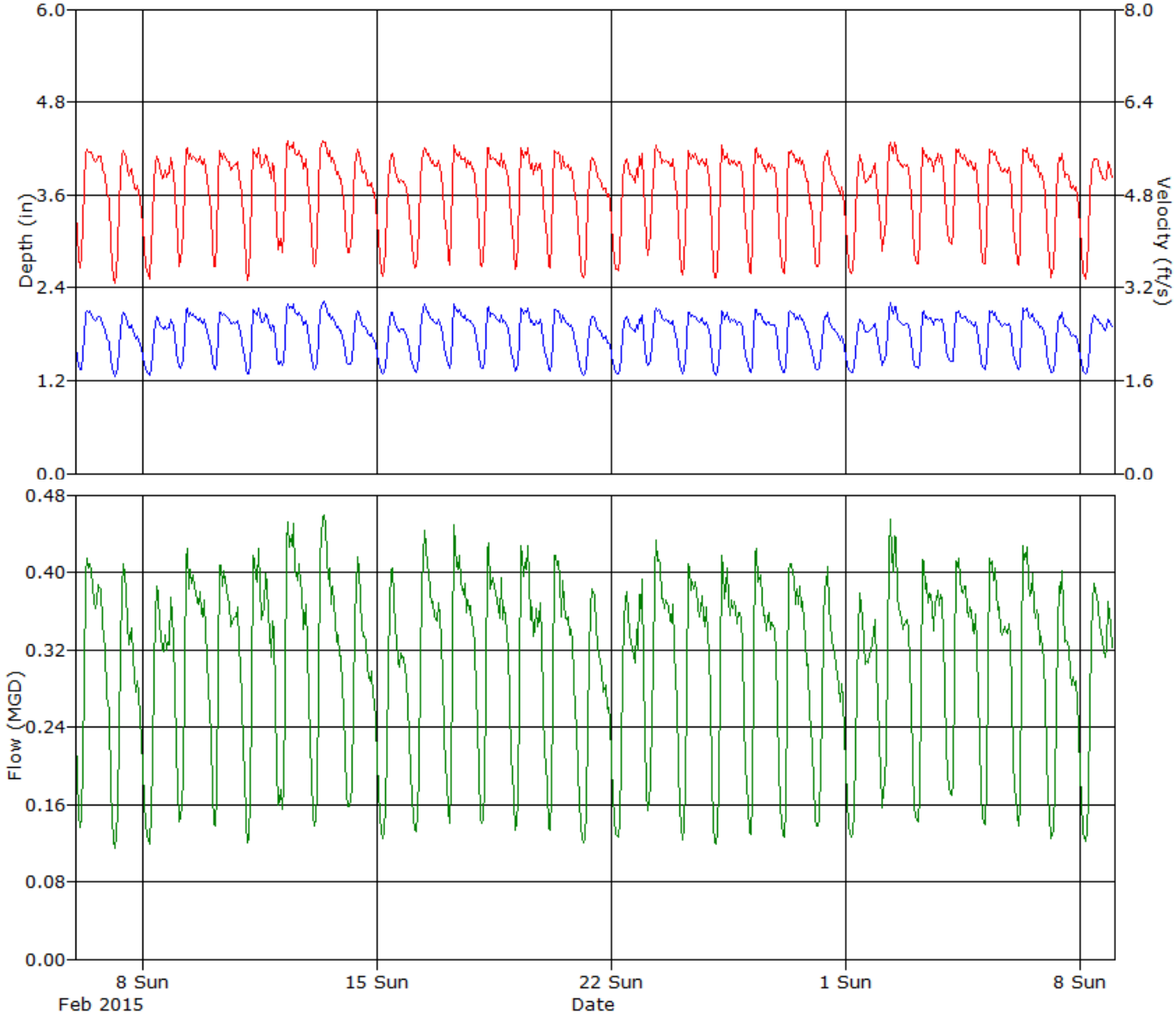


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL14, Pipe Height: 17.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:10	1.31	08:00	2.16	1.84	03:55	3.47	08:00	5.76	5.00	04:10	0.131	08:00	0.446	0.315	0.315	
2/7/2015	04:05	1.25	10:55	2.12	1.72	04:45	3.22	10:50	5.72	4.70	04:45	0.112	10:50	0.429	0.270	0.270	
2/8/2015	04:25	1.26	11:25	2.05	1.73	05:20	3.26	09:50	5.52	4.74	05:20	0.115	11:25	0.395	0.276	0.276	
2/9/2015	03:10	1.32	07:45	2.18	1.85	03:10	3.36	07:25	5.76	5.01	03:10	0.126	07:30	0.450	0.318	0.318	
2/10/2015	04:05	1.30	07:55	2.20	1.84	03:55	3.39	07:50	5.75	4.99	04:00	0.125	07:50	0.455	0.314	0.314	
2/11/2015	03:50	1.26	07:55	2.17	1.83	03:55	3.21	11:05	5.74	4.95	03:50	0.112	11:05	0.444	0.312	0.312	
2/12/2015	04:45	1.31	12:30	2.26	1.88	04:45	3.53	10:25	5.82	5.07	04:45	0.132	12:30	0.479	0.331	0.331	
2/13/2015	04:30	1.34	09:45	2.27	1.86	04:25	3.47	11:05	5.87	5.01	04:30	0.133	09:50	0.484	0.324	0.324	
2/14/2015	04:05	1.40	10:40	2.18	1.76	04:40	3.73	10:40	5.73	4.83	03:35	0.154	10:40	0.448	0.283	0.283	
2/15/2015	04:45	1.28	11:45	2.13	1.72	04:30	3.25	10:50	5.62	4.68	04:30	0.118	10:50	0.425	0.269	0.269	
2/16/2015	04:30	1.30	10:45	2.23	1.82	03:50	3.38	10:45	5.76	4.92	03:55	0.125	10:45	0.466	0.309	0.309	
2/17/2015	04:35	1.35	07:35	2.23	1.87	04:10	3.44	07:15	5.74	5.03	04:10	0.134	07:15	0.461	0.325	0.325	
2/18/2015	04:10	1.34	07:50	2.19	1.85	02:55	3.31	07:50	5.73	4.98	02:55	0.130	07:50	0.454	0.316	0.316	
2/19/2015	03:15	1.29	07:55	2.24	1.84	02:55	3.32	12:15	5.80	4.97	03:05	0.122	08:00	0.467	0.315	0.315	
2/20/2015	04:20	1.30	07:45	2.20	1.81	04:20	3.40	13:45	5.73	4.93	04:20	0.125	07:45	0.451	0.305	0.305	
2/21/2015	05:20	1.26	11:50	2.08	1.69	05:20	3.11	12:05	5.52	4.66	05:20	0.109	11:50	0.403	0.261	0.261	
2/22/2015	05:30	1.27	20:50	2.17	1.74	06:00	3.37	20:50	5.72	4.76	05:00	0.121	20:50	0.445	0.279	0.279	
2/23/2015	03:30	1.37	08:25	2.18	1.85	01:35	3.60	08:25	5.71	5.05	03:30	0.144	08:25	0.446	0.320	0.320	
2/24/2015	03:55	1.27	07:45	2.16	1.82	03:50	3.27	07:45	5.65	4.95	03:50	0.116	07:45	0.437	0.308	0.308	
2/25/2015	03:15	1.25	07:50	2.13	1.81	03:05	3.16	07:10	5.71	4.92	03:05	0.109	07:50	0.430	0.306	0.306	
2/26/2015	04:30	1.30	07:45	2.20	1.82	04:30	3.24	08:10	5.81	4.94	04:30	0.119	08:15	0.456	0.308	0.308	
2/27/2015	04:00	1.28	09:40	2.15	1.80	04:00	3.36	07:40	5.71	4.88	04:00	0.121	07:40	0.437	0.301	0.301	
2/28/2015	03:10	1.33	11:10	2.10	1.73	03:35	3.42	11:05	5.61	4.75	03:35	0.131	11:10	0.415	0.274	0.274	
3/1/2015	04:40	1.28	10:40	2.05	1.71	04:35	3.31	10:40	5.66	4.71	04:35	0.119	10:40	0.406	0.268	0.268	
3/2/2015	04:20	1.36	08:10	2.26	1.86	04:10	3.50	11:40	5.95	5.07	04:10	0.138	11:45	0.487	0.324	0.324	
3/3/2015	04:35	1.33	07:50	2.13	1.83	03:45	3.43	07:45	5.69	4.98	03:50	0.132	07:50	0.430	0.313	0.313	
3/4/2015	04:15	1.39	07:45	2.15	1.85	03:00	3.59	09:15	5.73	5.04	04:15	0.147	07:45	0.435	0.318	0.318	
3/5/2015	04:00	1.32	07:40	2.13	1.83	04:00	3.33	08:40	5.64	4.95	04:00	0.125	07:40	0.424	0.310	0.310	
3/6/2015	03:30	1.27	07:35	2.17	1.84	03:25	3.17	08:40	5.71	4.95	03:25	0.113	07:35	0.443	0.314	0.314	
3/7/2015	03:55	1.27	11:15	2.12	1.72	03:50	3.23	11:15	5.63	4.70	03:50	0.115	11:15	0.424	0.270	0.270	
3/8/2015	05:20	1.27	10:55	2.09	1.77	03:10	3.24	20:00	5.68	4.77	05:15	0.117	20:05	0.412	0.286	0.286	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			9.342
Avg	1.80	4.90	0.301

Site Commentary

Site Information

CAL15	
Pipe Dimensions	15.25" x 15.13"
Silt Level	0.00"

Overview

Site CAL15 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.52	5.63	0.840
Minimum	1.89	3.31	0.236
Maximum	5.33	7.11	1.608
Time of Minimum	3/6/2015 3:50 AM	2/13/2015 3:20 AM	2/19/2015 3:30 AM
Time of Maximum	2/24/2015 7:40 AM	3/6/2015 7:50 AM	2/24/2015 7:50 AM

Data Quality

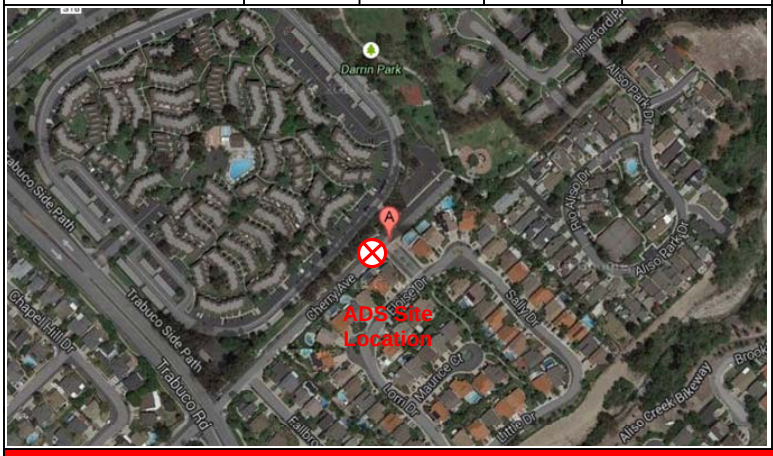
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

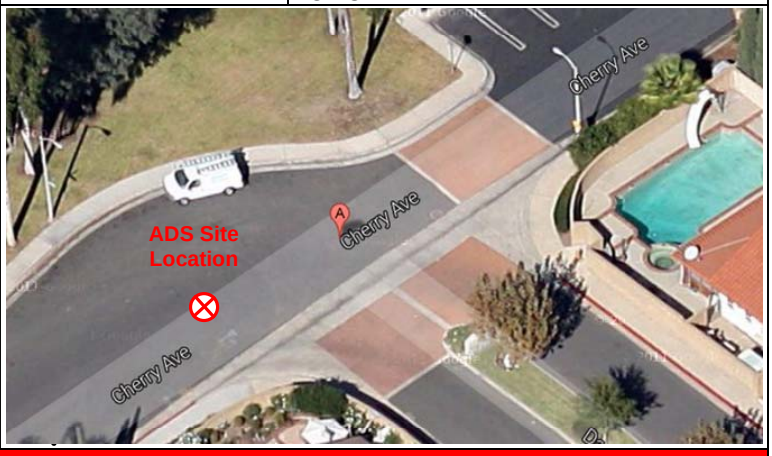
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL15	**Install Date:** 1/22/15	**Monitor Type**	Peak Doppler
Address/Location: Cherry & Darrin		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH206E090
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	15.25 "
		Pipe Width:	15.13 "





Investigation Information:

Date/Time of Investigation:	1/22/15 @ 1530
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	6.18 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	X			

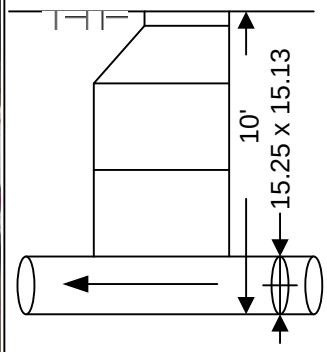
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

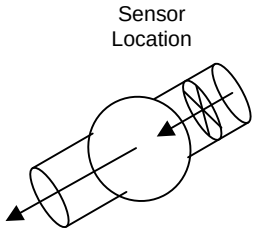
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

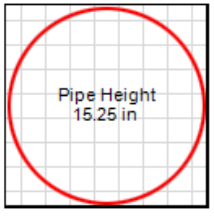
ub

SCATTERGRAPH REPORT

CAL15

Flow Monitor

CAL15

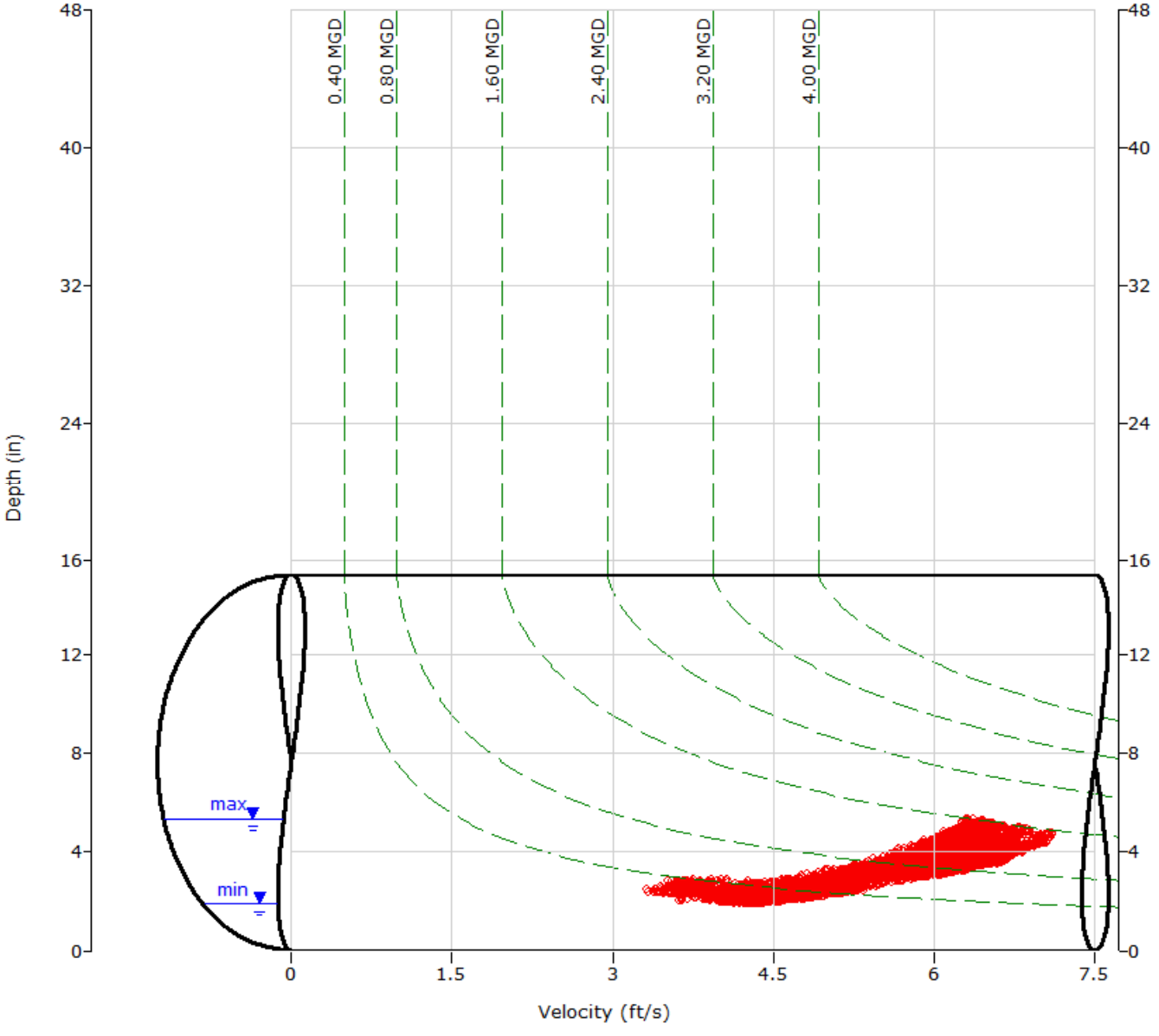


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



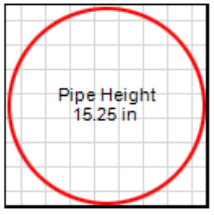
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL15

Flow Monitor

CAL15

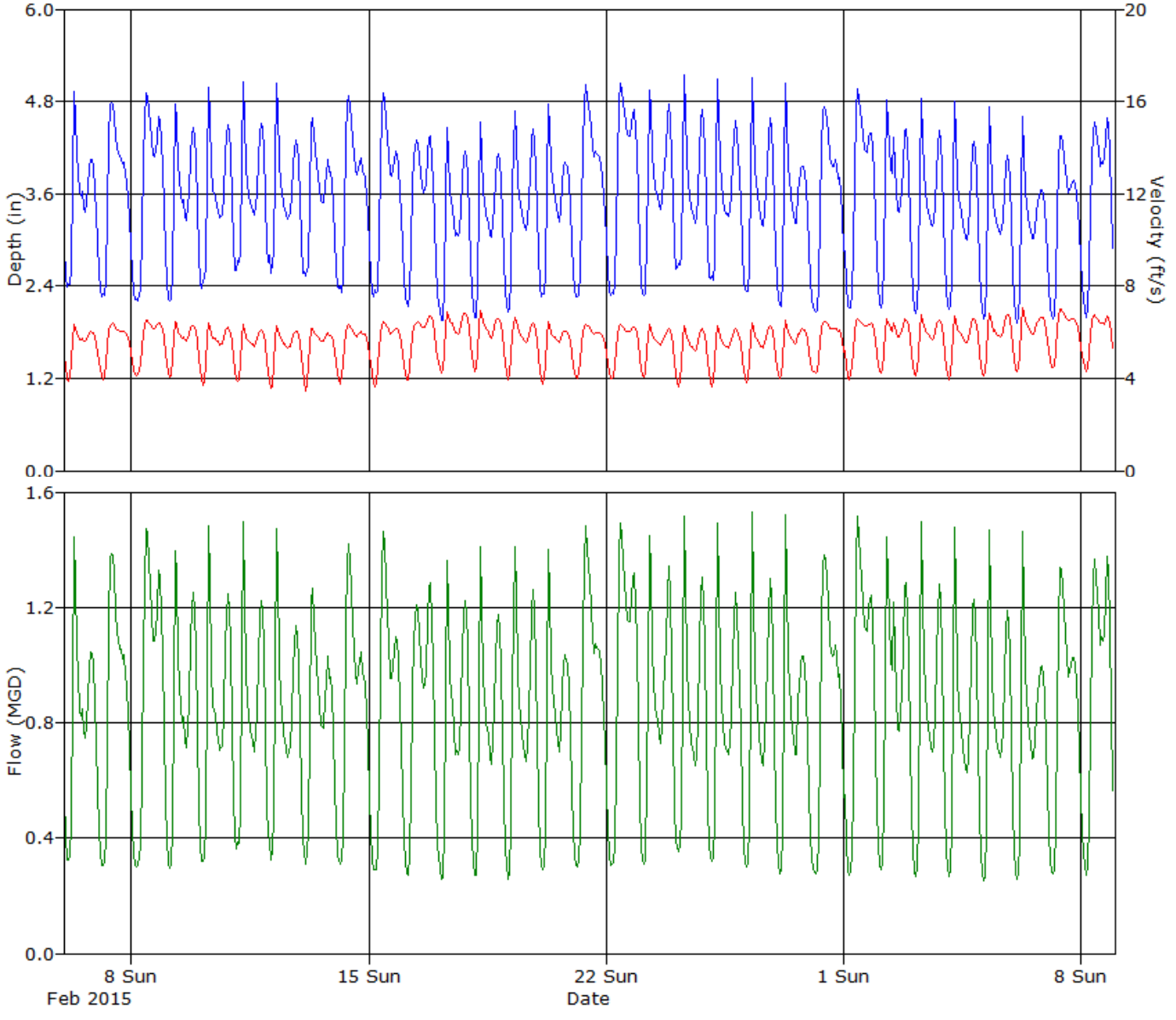


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL15, Pipe Height: 15.25 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	02:30	2.37	07:55	5.09	3.52	04:35	3.72	07:50	6.47	5.47	04:35	0.307	07:55	1.540	0.810	0.810	
2/7/2015	03:45	2.24	09:45	4.94	3.63	04:10	3.59	09:50	6.45	5.58	04:10	0.285	09:50	1.470	0.876	0.876	
2/8/2015	05:20	2.20	10:30	4.96	3.72	04:15	3.86	10:25	6.55	5.70	04:15	0.283	10:25	1.488	0.934	0.934	
2/9/2015	03:15	2.19	07:50	5.05	3.51	04:10	3.89	08:00	6.57	5.60	04:10	0.283	07:50	1.535	0.832	0.832	
2/10/2015	02:10	2.31	07:45	5.16	3.55	03:15	3.63	07:50	6.50	5.45	02:55	0.303	07:45	1.575	0.823	0.823	
2/11/2015	01:55	2.52	07:55	5.18	3.63	04:00	3.69	07:50	6.42	5.40	03:05	0.347	07:50	1.561	0.835	0.835	
2/12/2015	03:40	2.31	07:50	5.18	3.59	04:10	3.45	07:40	6.35	5.34	03:40	0.277	07:55	1.537	0.812	0.812	
2/13/2015	03:30	2.46	08:15	4.65	3.57	03:20	3.31	07:20	6.21	5.40	03:20	0.284	08:05	1.294	0.812	0.812	
2/14/2015	05:45	2.30	09:55	5.04	3.62	04:00	3.47	10:15	6.38	5.49	04:00	0.286	09:55	1.486	0.858	0.858	
2/15/2015	03:30	2.22	10:20	4.98	3.60	03:50	3.33	10:20	6.50	5.52	03:50	0.266	10:20	1.501	0.861	0.861	
2/16/2015	04:30	2.12	19:40	4.47	3.51	03:35	3.66	20:25	6.77	5.81	04:35	0.258	19:45	1.334	0.867	0.867	
2/17/2015	04:05	1.92	07:55	4.66	3.26	03:40	4.13	07:45	6.97	5.99	03:40	0.249	07:50	1.467	0.803	0.803	
2/18/2015	04:15	1.93	07:40	4.76	3.27	04:20	4.23	07:40	7.07	5.92	04:15	0.252	07:40	1.531	0.796	0.796	
2/19/2015	03:40	2.04	07:55	4.83	3.38	03:30	3.62	08:00	6.74	5.65	03:30	0.236	07:55	1.492	0.799	0.799	
2/20/2015	03:05	2.25	08:00	4.94	3.45	03:40	3.48	07:30	6.57	5.49	03:25	0.268	08:00	1.481	0.793	0.793	
2/21/2015	04:25	2.25	10:45	5.05	3.67	03:40	3.88	10:15	6.43	5.52	03:40	0.293	10:55	1.500	0.880	0.880	
2/22/2015	03:10	2.25	10:10	5.15	3.84	03:45	3.80	10:10	6.40	5.56	03:20	0.293	10:10	1.547	0.954	0.954	
2/23/2015	04:40	2.23	07:55	5.23	3.65	03:30	3.91	08:00	6.41	5.48	04:15	0.294	07:55	1.581	0.857	0.857	
2/24/2015	02:05	2.57	07:40	5.33	3.63	03:35	3.56	07:50	6.36	5.32	03:35	0.337	07:50	1.608	0.827	0.827	
2/25/2015	04:55	2.45	07:40	5.23	3.58	03:45	3.52	08:00	6.39	5.35	03:45	0.301	07:40	1.561	0.815	0.815	
2/26/2015	03:45	2.32	07:35	5.24	3.54	03:30	3.59	07:45	6.46	5.44	03:25	0.288	07:35	1.599	0.819	0.819	
2/27/2015	04:15	2.11	07:50	5.14	3.44	04:05	3.64	07:35	6.54	5.54	04:05	0.251	07:50	1.573	0.799	0.799	
2/28/2015	05:00	2.05	10:00	4.76	3.56	03:45	4.07	10:20	6.51	5.69	03:45	0.271	10:20	1.401	0.870	0.870	
3/1/2015	04:30	2.10	10:45	5.01	3.69	04:40	3.80	10:40	6.62	5.73	04:00	0.263	10:40	1.538	0.929	0.929	
3/2/2015	03:15	2.11	07:50	5.03	3.55	04:15	4.09	07:45	6.66	5.80	04:15	0.280	07:55	1.554	0.877	0.877	
3/3/2015	02:55	2.03	07:55	4.92	3.40	03:40	3.91	07:30	6.87	5.74	03:40	0.253	07:30	1.548	0.819	0.819	
3/4/2015	04:10	2.08	07:30	4.96	3.35	03:30	3.64	07:25	6.80	5.70	03:30	0.249	07:25	1.559	0.796	0.796	
3/5/2015	04:20	1.96	07:50	4.85	3.27	04:05	4.00	07:50	6.90	5.82	04:05	0.246	07:50	1.535	0.788	0.788	
3/6/2015	03:50	1.89	07:40	4.73	3.15	03:15	4.14	07:50	7.11	5.96	03:15	0.243	07:45	1.525	0.760	0.760	
3/7/2015	05:10	1.95	10:30	4.42	3.34	05:10	4.28	09:15	7.05	6.08	05:10	0.260	10:25	1.369	0.847	0.847	
3/8/2015	04:35	1.97	10:45	4.68	3.56	04:35	4.19	10:45	6.81	5.92	04:35	0.257	10:45	1.440	0.908	0.908	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			26.054
Avg	3.52	5.63	0.840

Site Commentary

Site Information

CAL16	
Pipe Dimensions	14.88" x 15.00"
Silt Level	0.00"

Overview

Site CAL16 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.33	4.21	0.376
Minimum	1.53	2.62	0.119
Maximum	4.76	6.36	1.377
Time of Minimum	2/18/2015 3:50 AM	3/2/2015 4:10 AM	2/27/2015 4:55 AM
Time of Maximum	2/10/2015 8:55 AM	2/10/2015 9:00 AM	2/10/2015 8:55 AM

Data Quality

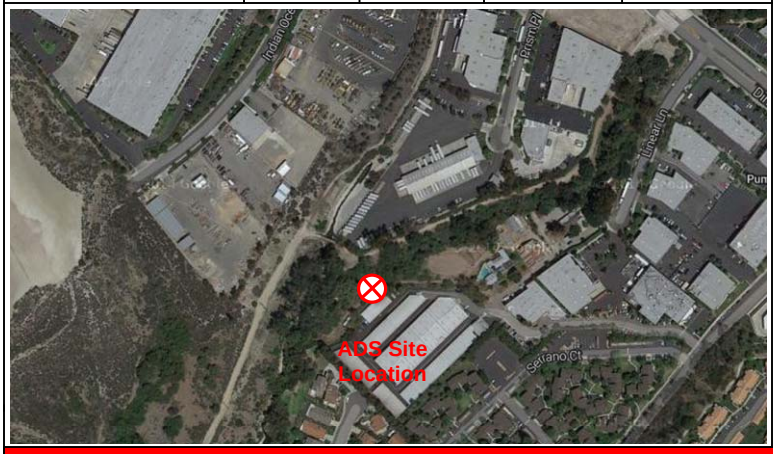
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL16	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: Canada Rd (Located on horse trail off Canada Rd)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH193S035
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	14.88 "
		Pipe Width:	15.00 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1800
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.54 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	6'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

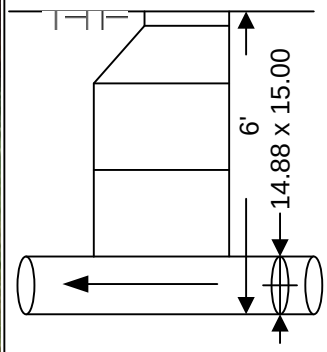
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

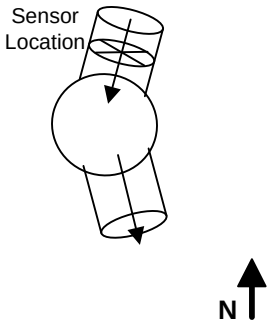
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

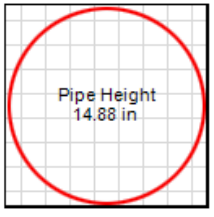
ub

SCATTERGRAPH REPORT

CAL16

Flow Monitor

CAL16

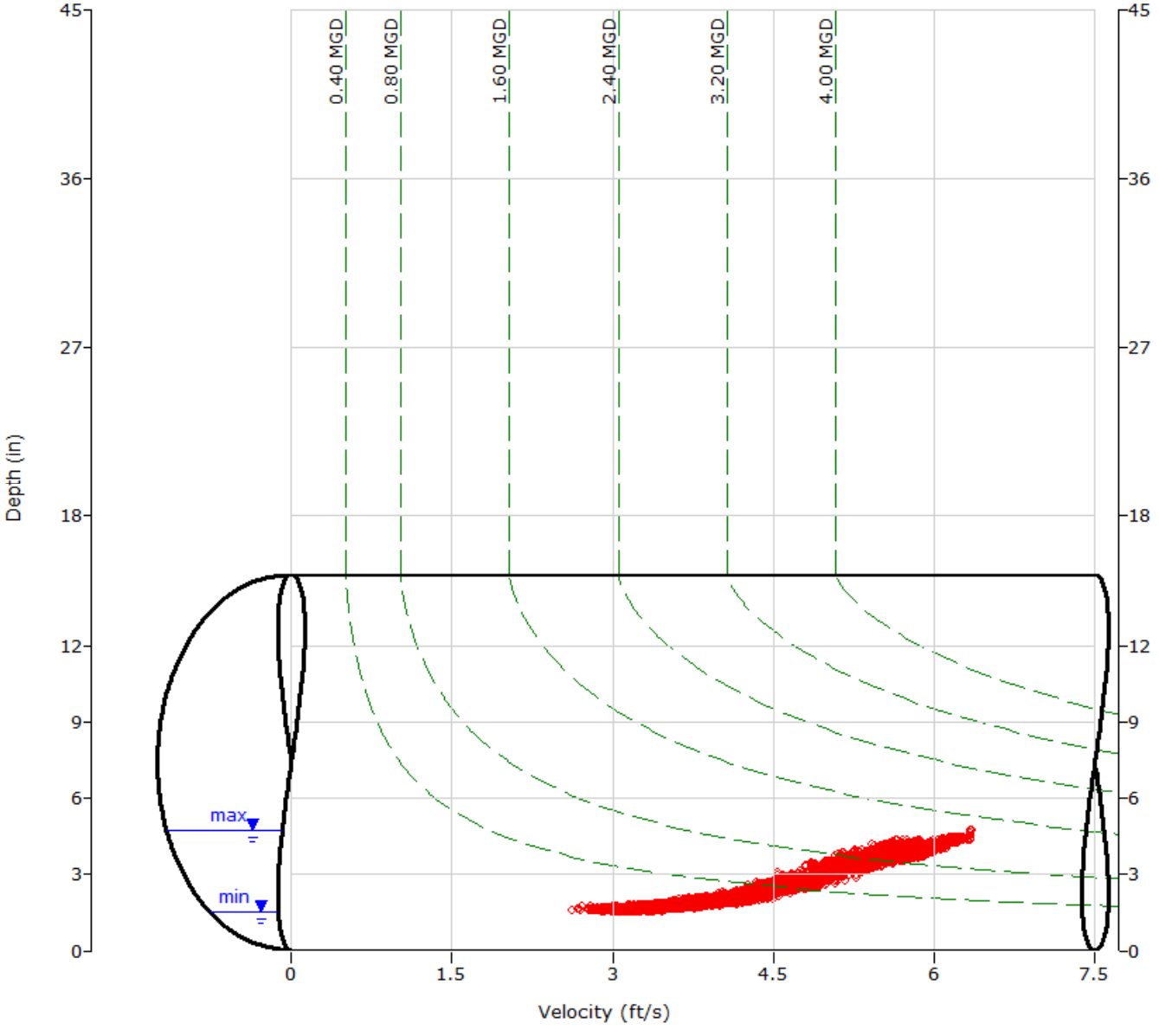


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth

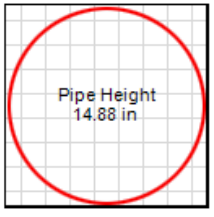


HYDROGRAPH REPORT

CAL16

Flow Monitor

CAL16

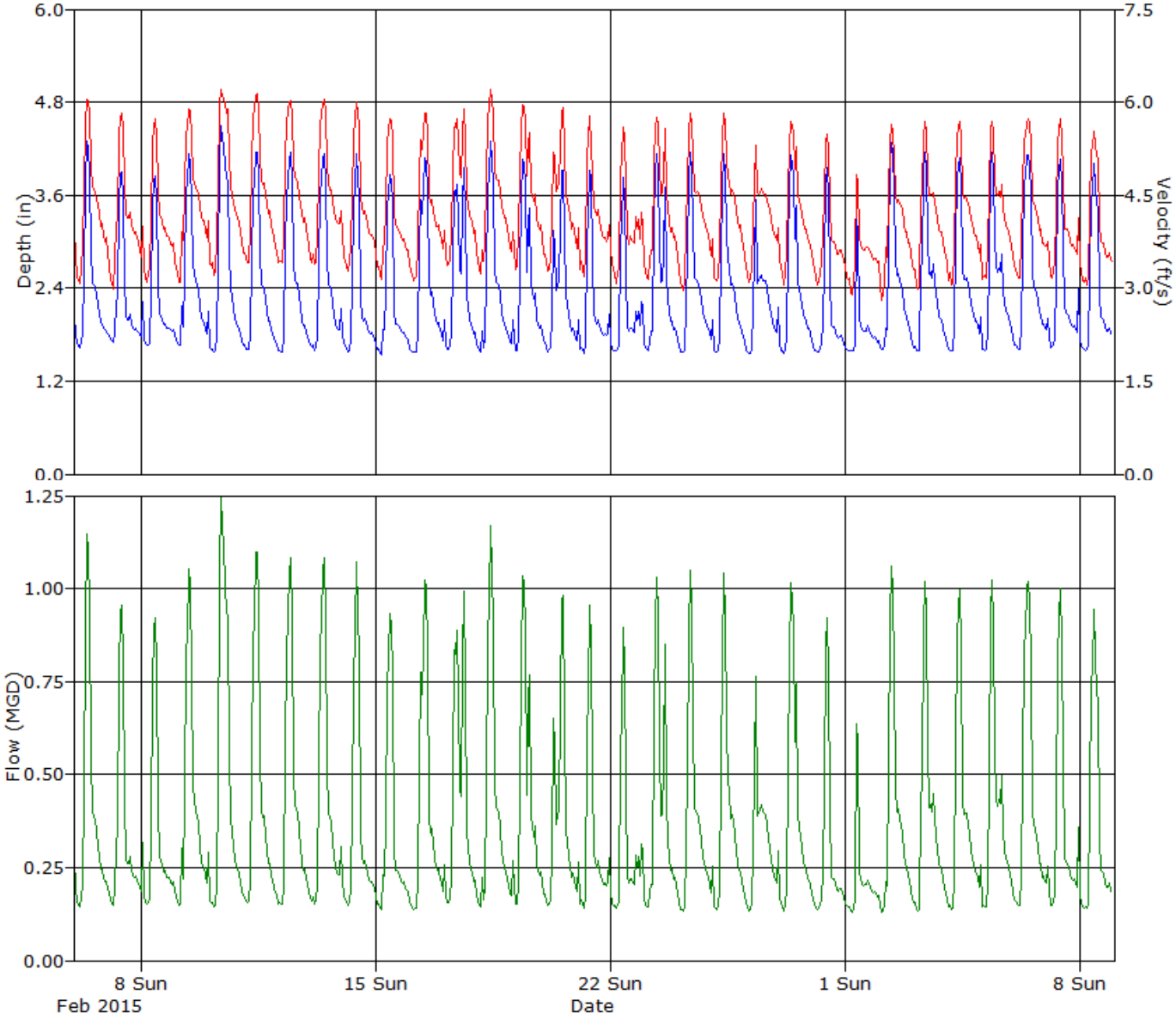


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL16, Pipe Height: 14.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:40	1.62	09:30	4.49	2.39	02:20	2.86	09:25	6.25	4.31	03:40	0.135	09:25	1.249	0.401	0.401	
2/7/2015	04:55	1.69	09:35	4.10	2.24	02:40	2.72	09:55	5.92	4.11	02:40	0.139	09:35	1.032	0.343	0.343	
2/8/2015	05:40	1.66	09:45	4.00	2.22	04:15	2.99	10:15	5.81	4.06	04:15	0.145	09:50	0.984	0.334	0.334	
2/9/2015	03:45	1.66	10:35	4.28	2.45	03:30	2.91	10:35	5.98	4.35	03:30	0.141	10:35	1.118	0.413	0.413	
2/10/2015	04:50	1.54	08:55	4.76	2.61	04:45	3.07	09:00	6.36	4.61	04:45	0.133	08:55	1.377	0.501	0.501	
2/11/2015	04:40	1.55	10:55	4.39	2.41	04:35	3.17	10:55	6.35	4.51	04:35	0.139	10:55	1.230	0.426	0.426	
2/12/2015	05:00	1.53	10:45	4.29	2.41	05:05	3.32	10:40	6.14	4.48	05:05	0.143	10:45	1.152	0.421	0.421	
2/13/2015	04:50	1.56	10:55	4.33	2.41	02:55	3.24	11:25	6.18	4.46	05:50	0.145	11:20	1.157	0.419	0.419	
2/14/2015	05:05	1.57	10:35	4.21	2.25	04:15	3.16	10:30	6.07	4.26	04:15	0.141	10:30	1.109	0.365	0.365	
2/15/2015	05:35	1.54	10:45	4.00	2.20	04:20	3.10	10:40	5.87	4.10	04:20	0.134	10:40	1.000	0.342	0.342	
2/16/2015	04:35	1.56	11:35	4.22	2.40	03:45	2.96	12:00	5.94	4.27	03:45	0.130	11:55	1.081	0.402	0.402	
2/17/2015	04:55	1.56	14:50	4.28	2.46	04:50	3.24	14:50	6.09	4.50	04:50	0.142	14:50	1.139	0.431	0.431	
2/18/2015	03:50	1.53	10:20	4.41	2.41	03:50	2.91	10:20	6.31	4.47	03:50	0.124	10:20	1.233	0.423	0.423	
2/19/2015	05:10	1.54	10:00	4.20	2.43	04:10	3.21	09:50	6.06	4.46	05:10	0.139	09:50	1.097	0.420	0.420	
2/20/2015	03:40	1.56	13:35	4.15	2.30	03:35	3.08	13:45	6.00	4.35	03:35	0.135	13:40	1.074	0.376	0.376	
2/21/2015	05:30	1.53	09:10	3.96	2.15	05:00	3.01	09:15	5.90	4.13	05:25	0.130	09:15	0.990	0.322	0.322	
2/22/2015	02:50	1.58	09:15	3.87	2.14	06:00	2.95	09:40	5.64	3.99	04:15	0.135	09:20	0.913	0.308	0.308	
2/23/2015	04:30	1.59	09:10	4.24	2.42	03:50	3.02	09:00	5.82	4.26	03:50	0.137	09:10	1.074	0.401	0.401	
2/24/2015	02:10	1.56	09:05	4.21	2.34	04:40	2.81	09:05	5.90	4.19	04:40	0.125	09:05	1.081	0.373	0.373	
2/25/2015	02:55	1.57	09:20	4.23	2.34	04:30	2.87	09:10	5.96	4.23	04:30	0.128	09:10	1.090	0.375	0.375	
2/26/2015	03:25	1.54	08:05	3.66	2.17	04:50	3.00	08:05	5.39	4.09	04:50	0.131	08:05	0.811	0.310	0.310	
2/27/2015	04:20	1.55	09:30	4.27	2.42	04:55	2.71	09:30	5.85	4.23	04:55	0.119	09:30	1.092	0.399	0.399	
2/28/2015	05:15	1.57	10:55	4.05	2.07	03:55	2.87	10:50	5.61	3.81	03:55	0.127	10:50	0.970	0.286	0.286	
3/1/2015	04:10	1.58	08:40	3.55	1.88	05:40	2.83	08:50	5.08	3.54	05:40	0.128	08:55	0.728	0.217	0.217	
3/2/2015	04:15	1.61	09:10	4.37	2.42	04:10	2.62	09:05	5.75	4.08	04:10	0.120	09:10	1.106	0.384	0.384	
3/3/2015	04:10	1.57	09:10	4.21	2.39	03:40	2.78	09:10	5.72	4.15	03:45	0.124	09:10	1.047	0.379	0.379	
3/4/2015	03:10	1.59	09:55	4.21	2.40	02:30	2.87	09:45	5.85	4.17	02:55	0.131	09:50	1.063	0.384	0.384	
3/5/2015	04:35	1.58	08:55	4.23	2.42	02:55	2.93	08:50	5.78	4.18	02:55	0.132	09:00	1.060	0.386	0.386	
3/6/2015	04:20	1.59	10:45	4.34	2.50	04:20	2.87	10:50	5.87	4.25	04:20	0.130	10:50	1.120	0.423	0.423	
3/7/2015	04:55	1.60	09:45	4.18	2.31	03:05	2.92	10:10	5.81	4.04	03:05	0.135	10:05	1.039	0.356	0.356	
3/8/2015	04:20	1.59	10:35	4.05	2.31	05:55	2.82	10:15	5.57	3.93	05:55	0.129	10:35	0.960	0.352	0.352	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			11.668
Avg	2.33	4.21	0.376

Site Commentary

Site Information

CAL17	
Pipe Dimensions	17.88" x 17.88"
Silt Level	0.00"

Overview

Site CAL17 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.63	1.40	0.671
Minimum	4.76	0.76	0.195
Maximum	11.25	1.89	1.409
Time of Minimum	2/11/2015 4:40 AM	2/27/2015 4:35 AM	2/12/2015 5:05 AM
Time of Maximum	3/5/2015 7:35 AM	3/5/2015 7:35 AM	3/5/2015 7:35 AM

Data Quality

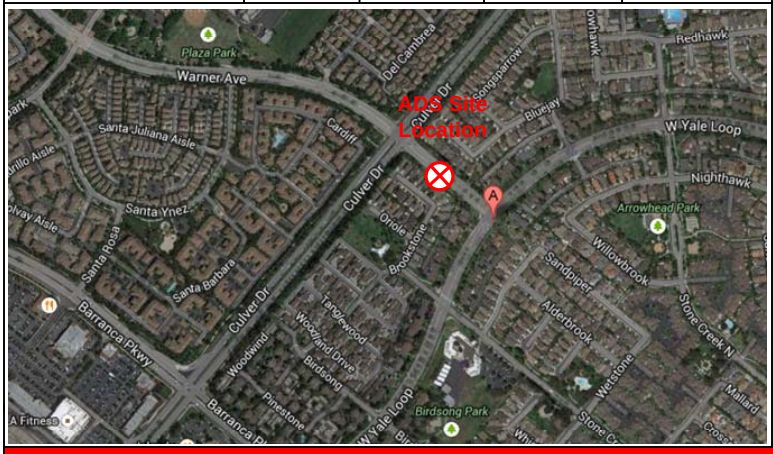
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL17	**Install Date:** 1/26/15	**Monitor Type**	Peak Doppler
Address/Location: Warner Ave & W Yale Loop		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH086W001
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	17.88 "
		Pipe Width:	17.88 "





Investigation Information:

Date/Time of Investigation:	1/26/15 @ 1030
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	8.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.63 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

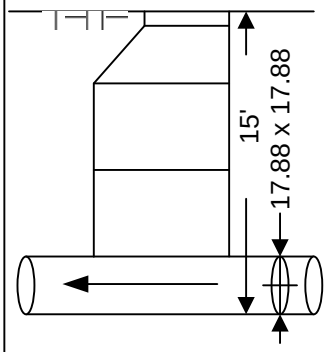
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

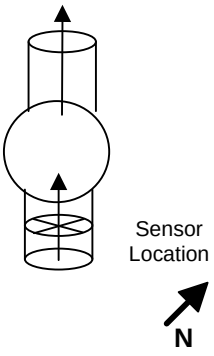
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

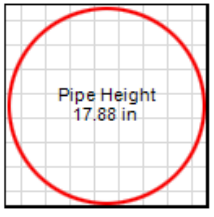
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

CAL17

Flow Monitor

CAL17

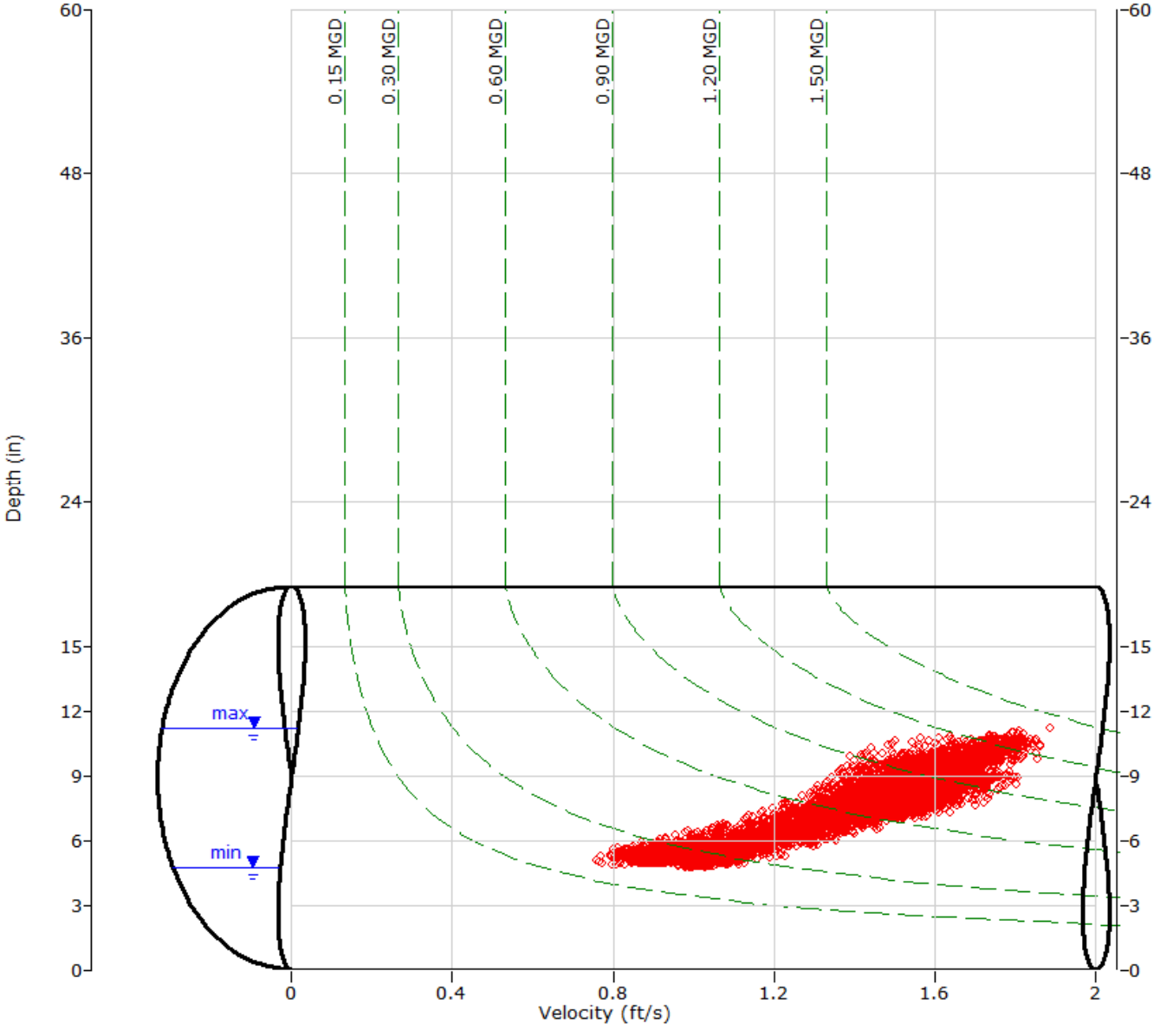


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL17

Flow Monitor

CAL17

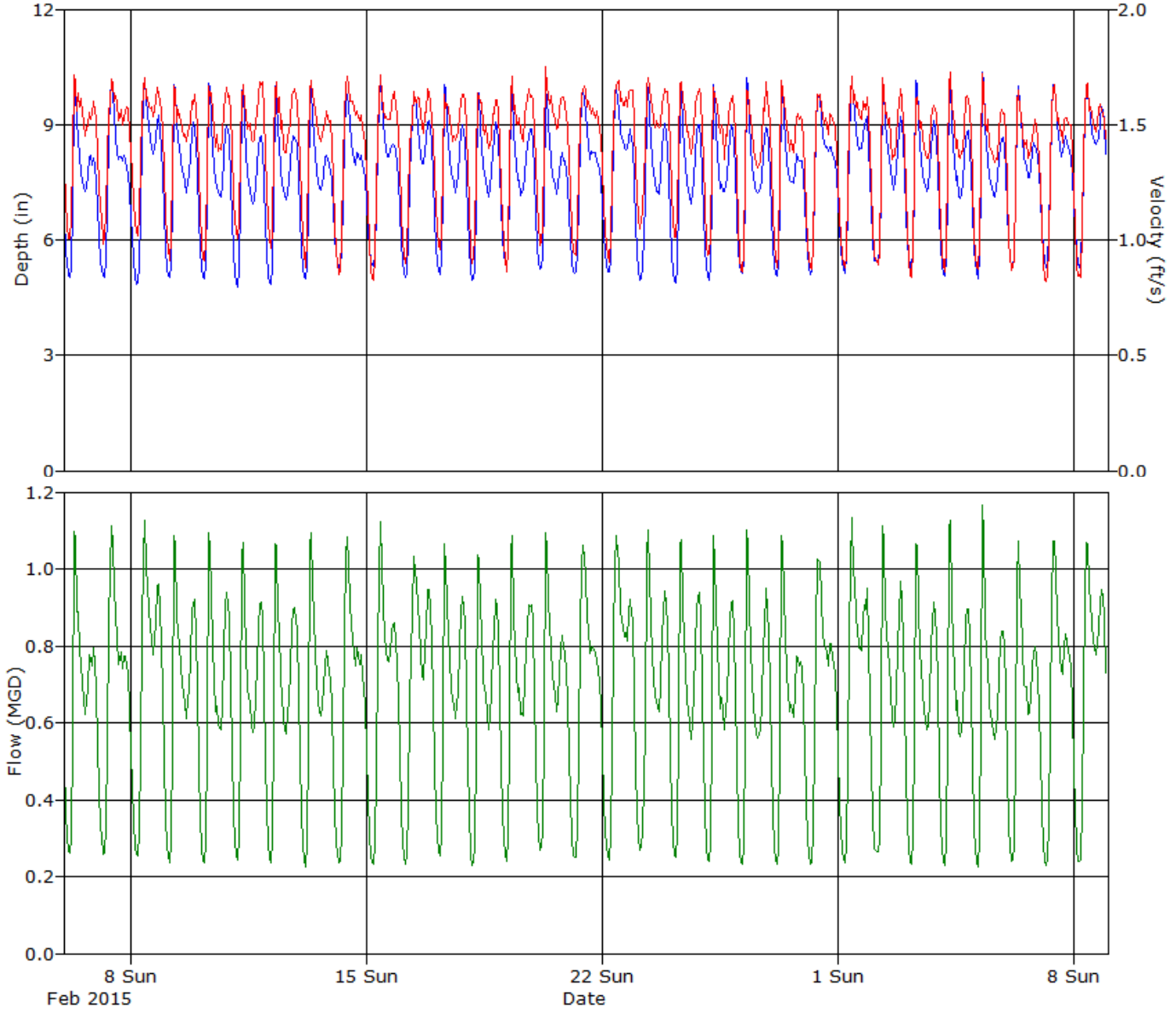
Pipe Height
17.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL17, Pipe Height: 17.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:05	4.98	07:45	10.98	7.44	03:55	0.94	07:45	1.82	1.44	03:55	0.243	07:45	1.321	0.664	0.664	
2/7/2015	05:05	4.99	10:00	10.30	7.61	04:05	0.92	11:05	1.82	1.44	04:05	0.244	11:05	1.167	0.683	0.683	
2/8/2015	05:05	4.84	10:45	10.29	7.79	05:00	0.96	10:35	1.81	1.46	05:00	0.238	10:35	1.212	0.717	0.717	
2/9/2015	04:50	4.99	07:55	10.80	7.62	04:25	0.89	07:55	1.81	1.40	04:50	0.230	07:55	1.291	0.671	0.671	
2/10/2015	04:35	4.96	07:45	10.81	7.52	04:55	0.85	07:35	1.83	1.40	04:55	0.221	07:40	1.293	0.659	0.659	
2/11/2015	04:40	4.76	07:50	10.75	7.38	05:40	0.96	07:55	1.82	1.45	04:25	0.238	07:55	1.270	0.659	0.659	
2/12/2015	03:40	4.80	07:50	10.57	7.42	05:10	0.76	08:15	1.85	1.42	05:05	0.195	07:50	1.229	0.655	0.655	
2/13/2015	04:20	4.96	07:45	10.71	7.45	04:00	0.82	08:10	1.84	1.40	04:00	0.209	08:10	1.273	0.649	0.649	
2/14/2015	04:50	5.18	10:15	9.98	7.63	04:15	0.82	09:15	1.81	1.38	04:15	0.226	09:15	1.140	0.666	0.666	
2/15/2015	04:50	5.32	10:00	10.43	7.73	03:45	0.81	18:40	1.77	1.38	04:50	0.229	10:00	1.177	0.677	0.677	
2/16/2015	04:40	4.99	09:25	9.92	7.79	03:35	0.85	18:35	1.79	1.41	04:15	0.225	09:50	1.088	0.697	0.697	
2/17/2015	04:20	5.04	07:45	10.82	7.62	04:05	0.92	20:55	1.78	1.41	04:15	0.242	07:45	1.168	0.672	0.672	
2/18/2015	03:35	4.94	07:55	10.53	7.53	03:45	0.86	07:40	1.86	1.39	03:45	0.220	07:40	1.268	0.656	0.656	
2/19/2015	04:35	5.25	08:00	10.44	7.61	04:35	0.81	08:25	1.80	1.41	04:35	0.224	07:55	1.214	0.670	0.670	
2/20/2015	03:40	5.20	08:00	10.51	7.46	03:40	0.94	07:55	1.86	1.45	03:40	0.257	07:55	1.275	0.670	0.670	
2/21/2015	05:10	5.09	10:15	10.08	7.65	05:00	0.83	11:15	1.73	1.41	05:00	0.223	10:10	1.115	0.679	0.679	
2/22/2015	04:50	5.12	10:05	10.16	7.81	05:15	0.88	10:05	1.77	1.44	05:20	0.236	10:05	1.171	0.713	0.713	
2/23/2015	04:35	4.91	07:55	10.58	7.54	03:20	1.02	07:55	1.82	1.47	03:20	0.259	07:55	1.264	0.687	0.687	
2/24/2015	04:10	4.82	07:50	10.69	7.47	03:40	0.98	07:50	1.85	1.44	03:40	0.243	07:50	1.300	0.669	0.669	
2/25/2015	04:10	4.93	07:40	10.72	7.52	04:10	0.90	07:45	1.80	1.41	04:10	0.226	07:45	1.269	0.661	0.661	
2/26/2015	03:55	5.09	07:55	10.86	7.58	04:15	0.84	20:25	1.80	1.37	03:45	0.222	07:50	1.270	0.650	0.650	
2/27/2015	04:05	5.00	07:55	10.64	7.50	04:35	0.76	07:45	1.82	1.38	04:35	0.200	07:45	1.247	0.643	0.643	
2/28/2015	04:45	5.03	10:40	9.94	7.76	06:00	0.84	09:10	1.82	1.37	05:15	0.225	09:10	1.159	0.672	0.672	
3/1/2015	05:15	5.10	10:15	10.29	7.89	05:40	0.85	10:35	1.82	1.39	05:40	0.225	10:35	1.218	0.703	0.703	
3/2/2015	02:55	5.30	07:50	10.79	7.77	04:45	0.85	07:35	1.85	1.38	02:45	0.249	07:40	1.275	0.674	0.674	
3/3/2015	04:40	5.22	07:45	10.77	7.69	04:20	0.77	08:05	1.74	1.35	04:20	0.212	07:50	1.224	0.655	0.655	
3/4/2015	03:50	5.03	07:35	10.70	7.55	04:40	0.85	07:40	1.84	1.37	04:15	0.222	07:40	1.293	0.651	0.651	
3/5/2015	04:30	4.98	07:35	11.25	7.57	03:55	0.84	07:35	1.89	1.36	03:55	0.220	07:35	1.409	0.644	0.644	
3/6/2015	04:05	5.18	08:10	10.15	7.73	05:15	0.83	07:45	1.70	1.33	03:55	0.229	08:10	1.118	0.647	0.647	
3/7/2015	04:25	5.25	09:10	10.17	7.88	04:05	0.79	10:05	1.83	1.35	04:10	0.221	10:05	1.204	0.676	0.676	
3/8/2015	04:40	5.25	09:25	10.24	8.08	05:35	0.80	10:05	1.86	1.37	05:35	0.229	10:05	1.177	0.713	0.713	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			20.800
Avg	7.63	1.40	0.671

Site Commentary

Site Information

CAL18	
Pipe Dimensions	17.88" x 17.88"
Silt Level	0.00"

Overview

Site CAL18 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.75	4.62	1.140
Minimum	2.82	2.83	0.393
Maximum	6.75	5.95	2.152
Time of Minimum	2/19/2015 5:25 AM	2/22/2015 5:15 AM	2/22/2015 5:15 AM
Time of Maximum	2/23/2015 10:15 AM	2/20/2015 11:55 AM	2/23/2015 10:15 AM

Data Quality

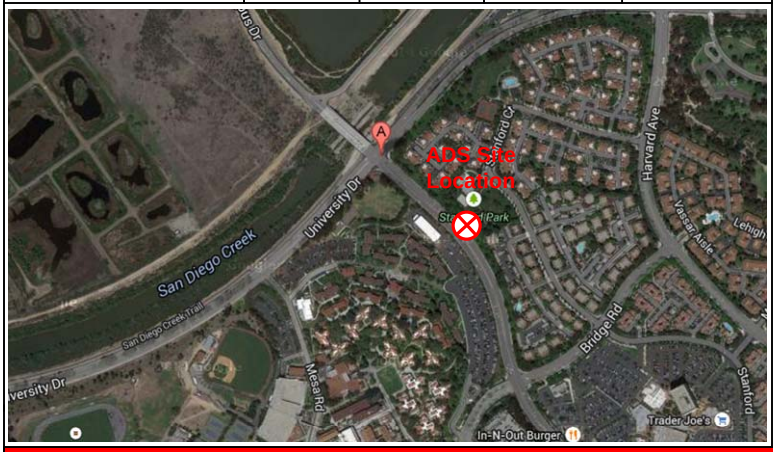
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL18	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: Campus & University Dr.		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH058E006
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	17.88 "
		Pipe Width:	17.88 "





Investigation Information:

Date/Time of Investigation:	1/29/15 @ 0400
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.38 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.38 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	7'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	PVC/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

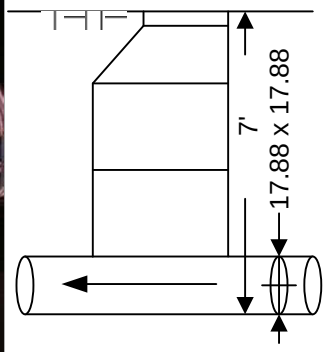
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

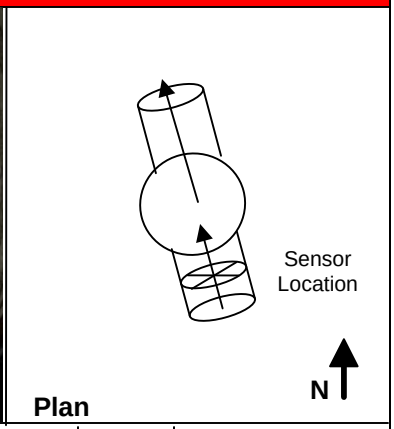
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

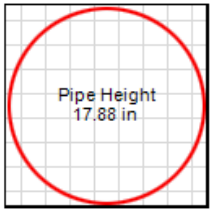
ub

SCATTERGRAPH REPORT

CAL18

Flow Monitor

CAL18

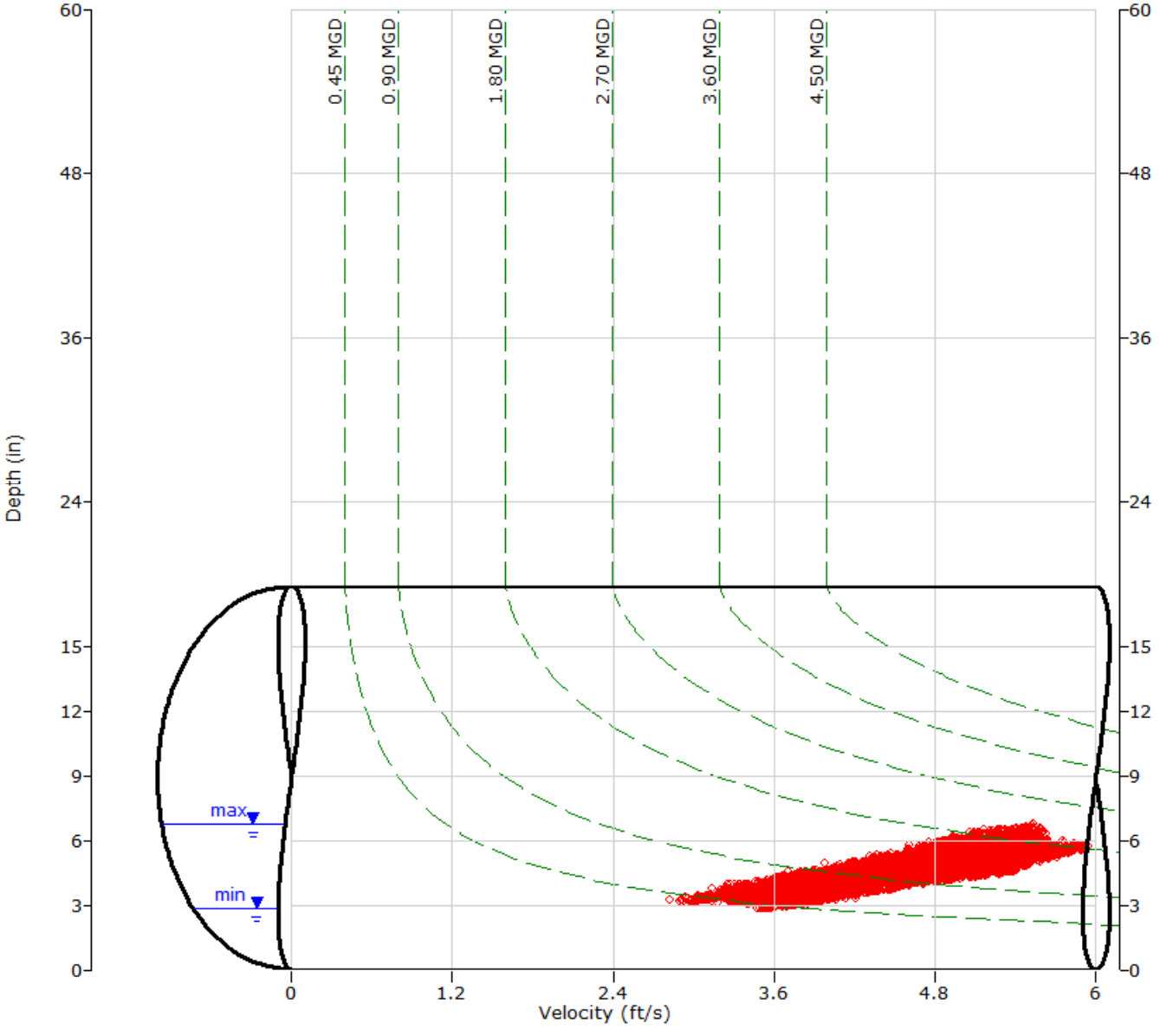


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL18

Flow Monitor

CAL18

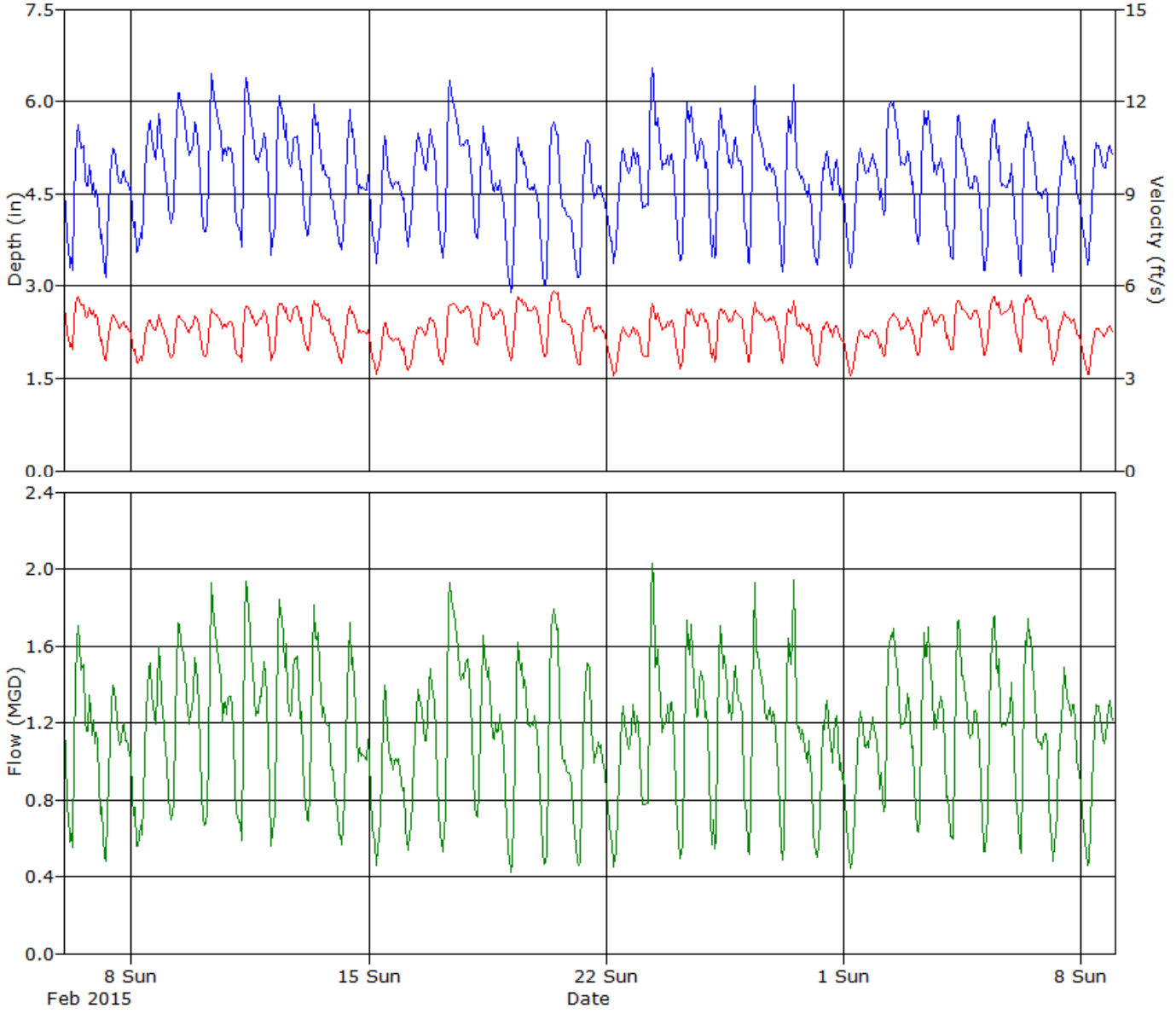
Pipe Height
17.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL18, Pipe Height: 17.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	06:10	3.09	10:35	5.74	4.58	06:10	3.83	11:00	5.81	5.00	06:10	0.499	10:35	1.779	1.168	1.168	
2/7/2015	06:40	3.08	11:30	5.28	4.45	06:20	3.53	00:25	5.20	4.55	06:20	0.460	11:30	1.438	1.017	1.017	
2/8/2015	05:45	3.46	19:55	5.97	4.82	05:50	3.37	19:55	5.20	4.38	05:45	0.518	19:55	1.713	1.103	1.103	
2/9/2015	04:30	3.97	10:05	6.37	5.20	05:45	3.51	09:50	5.18	4.54	05:45	0.665	09:50	1.852	1.262	1.262	
2/10/2015	05:05	3.73	09:50	6.53	5.12	05:05	3.55	09:50	5.38	4.62	05:05	0.605	09:50	2.004	1.262	1.262	
2/11/2015	06:05	3.52	09:35	6.43	5.09	06:20	3.44	11:10	5.54	4.69	06:20	0.539	10:05	1.985	1.278	1.278	
2/12/2015	04:00	3.36	09:25	6.20	5.05	03:55	3.41	11:25	5.60	4.87	03:55	0.500	09:20	1.892	1.308	1.308	
2/13/2015	04:10	3.58	09:35	6.16	4.80	04:10	3.74	09:35	5.61	4.80	04:10	0.600	09:35	1.930	1.191	1.191	
2/14/2015	06:45	3.47	11:05	5.92	4.62	05:20	3.38	10:55	5.40	4.48	05:20	0.523	11:00	1.757	1.061	1.061	
2/15/2015	05:50	3.27	12:00	5.54	4.46	05:45	2.90	12:10	4.90	4.08	05:45	0.410	12:00	1.451	0.916	0.916	
2/16/2015	04:50	3.26	20:15	5.84	4.83	04:45	3.03	20:15	5.13	4.27	04:50	0.427	20:15	1.638	1.074	1.074	
2/17/2015	04:15	3.38	09:40	6.58	5.14	04:10	3.30	08:40	5.60	4.85	04:15	0.489	09:40	2.081	1.347	1.347	
2/18/2015	05:00	3.63	09:35	5.81	4.69	05:00	3.95	13:15	5.72	4.98	05:00	0.648	13:15	1.783	1.189	1.189	
2/19/2015	05:25	2.82	09:20	5.61	4.40	05:25	3.47	09:20	5.73	4.98	05:25	0.396	09:20	1.734	1.114	1.114	
2/20/2015	05:05	2.98	09:40	5.83	4.40	06:00	3.58	11:55	5.95	4.90	06:05	0.445	12:10	1.868	1.104	1.104	
2/21/2015	04:45	3.06	11:15	5.42	4.31	05:55	3.28	11:25	5.45	4.50	05:55	0.432	11:25	1.565	0.971	0.971	
2/22/2015	05:30	3.16	19:30	6.04	4.56	05:15	2.83	19:30	5.26	4.13	05:15	0.393	19:30	1.762	0.962	0.962	
2/23/2015	02:25	4.06	10:15	6.75	5.14	03:55	3.55	10:25	5.59	4.59	02:25	0.688	10:15	2.152	1.256	1.256	
2/24/2015	05:05	3.33	12:15	6.18	4.91	04:10	3.23	12:15	5.42	4.62	05:05	0.475	12:15	1.872	1.203	1.203	
2/25/2015	06:10	3.26	09:50	6.13	4.87	06:10	3.41	09:50	5.42	4.74	06:10	0.479	09:50	1.852	1.212	1.212	
2/26/2015	05:35	3.25	09:30	6.36	4.87	04:50	3.23	09:35	5.63	4.75	04:50	0.465	09:35	2.017	1.212	1.212	
2/27/2015	05:00	3.18	13:30	6.37	4.77	05:05	3.40	13:20	5.61	4.67	05:05	0.463	13:20	2.015	1.161	1.161	
2/28/2015	06:15	3.29	09:50	5.34	4.51	06:15	3.25	09:50	4.94	4.36	06:15	0.463	09:50	1.396	0.992	0.992	
3/1/2015	05:25	3.20	13:00	5.33	4.53	05:25	2.97	12:10	4.65	4.10	05:25	0.406	13:00	1.306	0.946	0.946	
3/2/2015	06:10	4.11	11:45	6.15	5.11	06:05	3.64	11:40	5.24	4.59	06:05	0.712	11:40	1.792	1.239	1.239	
3/3/2015	05:40	3.61	09:45	6.13	4.91	06:00	3.65	12:40	5.47	4.74	05:45	0.597	09:45	1.839	1.218	1.218	
3/4/2015	06:10	3.25	10:10	6.05	4.63	06:05	3.79	09:55	5.64	4.89	06:10	0.530	10:10	1.894	1.158	1.158	
3/5/2015	04:15	3.04	11:15	5.98	4.63	04:20	3.57	11:20	5.76	4.99	04:20	0.454	11:15	1.902	1.188	1.188	
3/6/2015	06:15	2.93	11:20	5.89	4.60	05:35	3.58	11:20	5.84	4.99	06:15	0.435	11:20	1.890	1.178	1.178	
3/7/2015	05:15	3.12	12:15	5.53	4.53	04:30	3.13	12:15	5.25	4.52	05:15	0.419	12:15	1.556	1.041	1.041	
3/8/2015	05:35	3.21	11:10	5.41	4.64	05:25	2.91	21:35	4.86	4.18	05:25	0.411	11:05	1.346	0.997	0.996	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			35.329
Avg	4.75	4.62	1.140

Site Commentary

Site Information

CAL19	
Pipe Dimensions	25.00" x 24.88"
Silt Level	0.00"

Overview

Site CAL19 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows daily backwater conditions when flows reached 3 inches or greater.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.62	4.34	0.550
Minimum	1.89	3.16	0.243
Maximum	5.39	5.31	1.463
Time of Minimum	3/1/2015 2:15 AM	3/1/2015 4:45 AM	3/1/2015 4:45 AM
Time of Maximum	2/26/2015 9:50 AM	3/6/2015 12:15 PM	2/26/2015 9:50 AM

Data Quality

Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

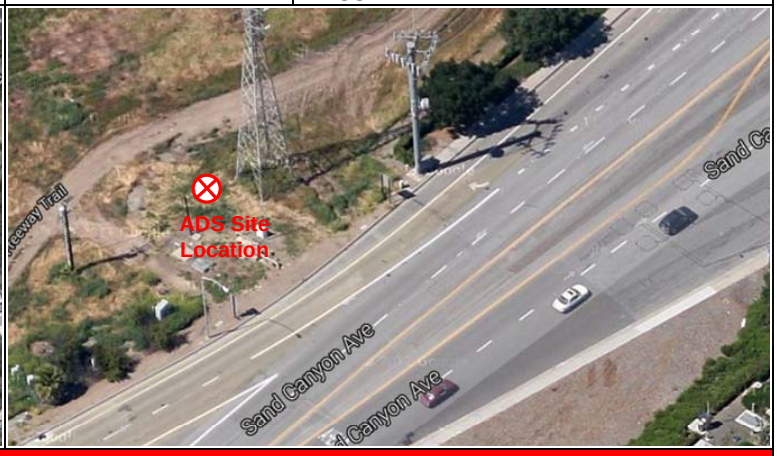
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Lake Forest	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL19	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: Alton & Sand Canyon		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH124W007
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	25.00 "
		Pipe Width:	24.88 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1130
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	4.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.41 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

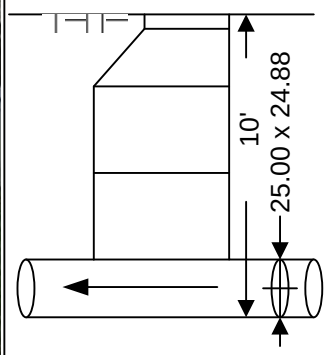
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

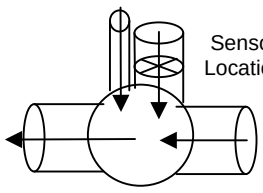
Other Information:





Cross Section





N

Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

CAL19

Flow Monitor

CAL19

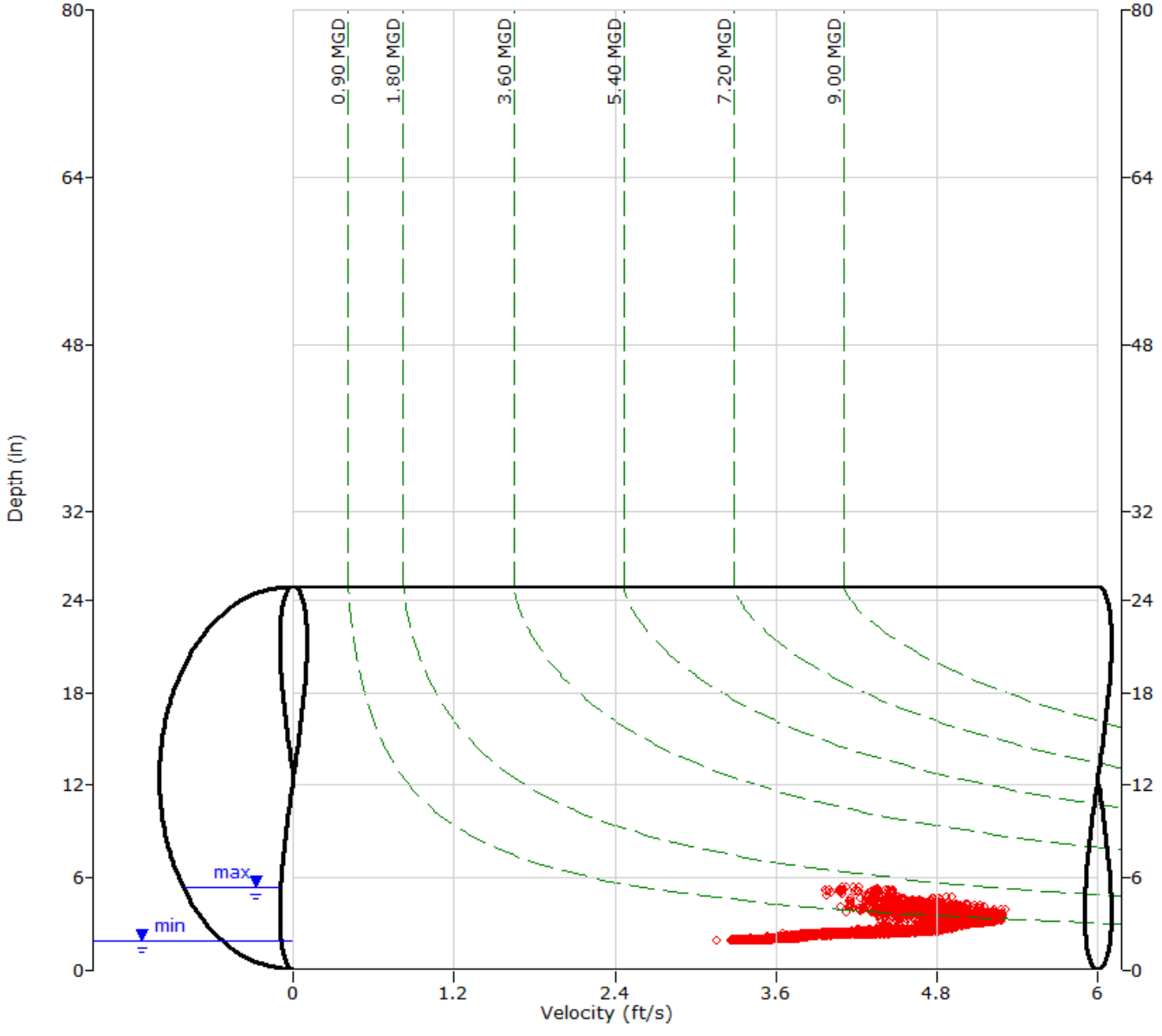
Pipe Height
25.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



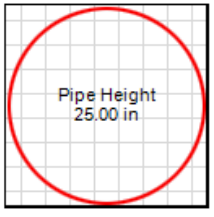
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL19

Flow Monitor

CAL19

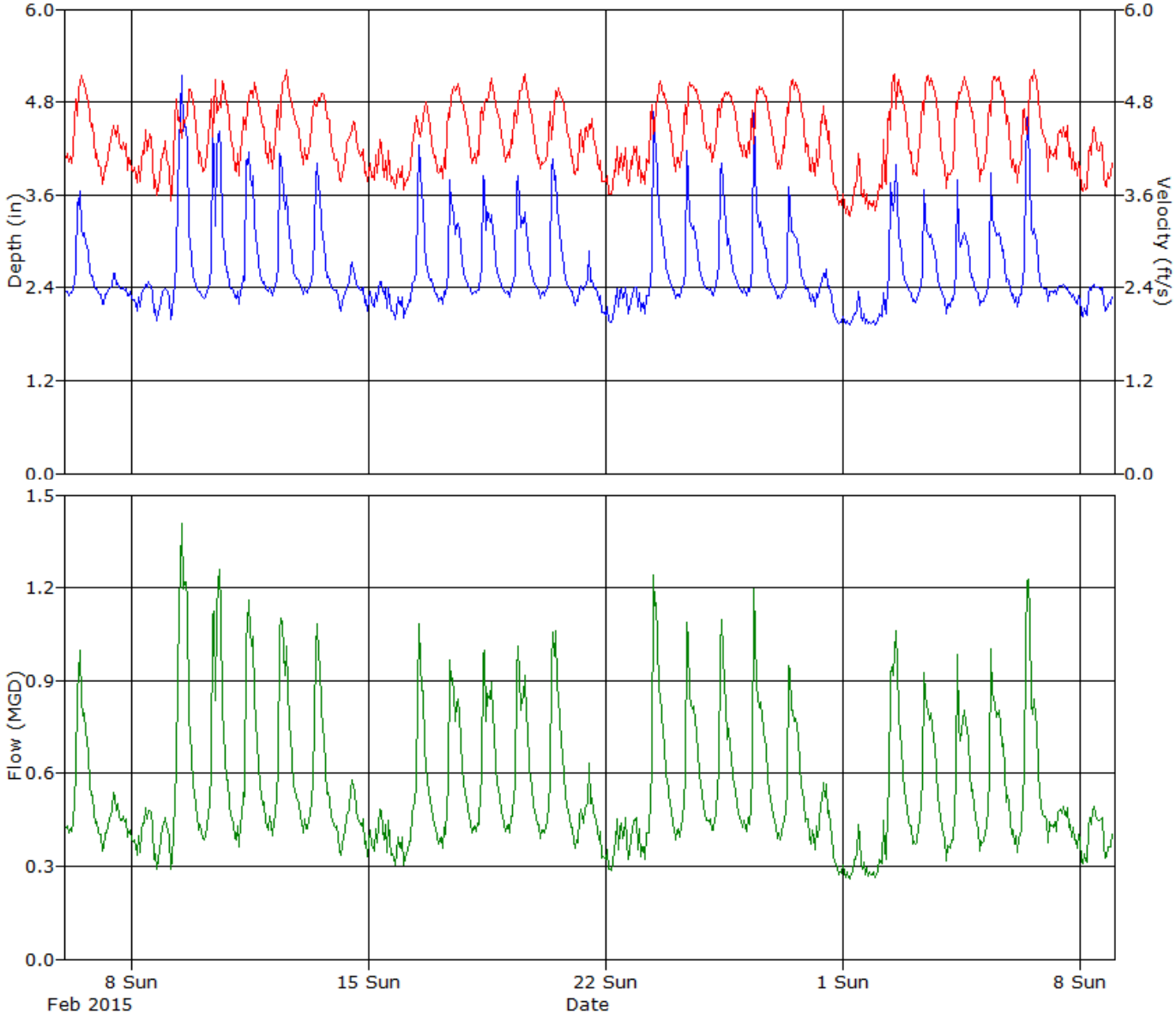


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL19, Pipe Height: 25 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:35	2.20	11:40	3.99	2.72	03:35	3.80	12:25	5.21	4.53	03:35	0.360	11:35	1.129	0.598	0.598	
2/7/2015	04:25	2.05	12:00	2.84	2.37	04:25	3.64	11:20	4.80	4.15	04:25	0.311	11:20	0.620	0.440	0.440	
2/8/2015	21:10	1.94	12:25	2.56	2.26	18:45	3.50	10:35	4.67	4.00	21:10	0.278	10:35	0.527	0.398	0.398	
2/9/2015	04:50	1.94	11:25	5.26	3.03	04:30	3.42	08:30	5.10	4.42	04:35	0.272	11:25	1.461	0.697	0.697	
2/10/2015	03:25	2.12	09:50	5.19	2.98	03:25	3.71	11:50	5.18	4.52	03:25	0.333	13:55	1.396	0.691	0.691	
2/11/2015	04:20	2.06	09:45	5.22	2.89	04:40	3.77	12:25	5.13	4.52	04:20	0.323	09:45	1.450	0.659	0.659	
2/12/2015	03:50	2.24	09:55	4.71	2.89	01:40	3.87	14:10	5.29	4.58	03:50	0.378	09:55	1.291	0.665	0.665	
2/13/2015	04:00	2.18	11:30	4.21	2.78	04:00	3.82	12:15	5.12	4.49	04:00	0.357	11:25	1.198	0.615	0.615	
2/14/2015	04:25	1.99	11:55	3.35	2.37	03:55	3.54	14:00	4.81	4.12	04:25	0.296	11:55	0.773	0.439	0.439	
2/15/2015	19:30	1.96	11:45	2.73	2.25	00:35	3.62	09:25	4.51	3.93	19:30	0.289	09:30	0.513	0.386	0.386	
2/16/2015	01:45	1.97	11:20	4.65	2.69	03:50	3.62	16:25	4.84	4.27	01:45	0.294	11:20	1.245	0.559	0.559	
2/17/2015	01:40	2.06	09:20	4.01	2.74	03:45	3.66	15:55	5.15	4.51	01:40	0.321	11:50	1.086	0.607	0.607	
2/18/2015	01:40	2.20	09:55	4.30	2.80	01:35	3.84	15:35	5.28	4.55	01:40	0.364	10:15	1.163	0.626	0.626	
2/19/2015	04:25	2.12	09:30	4.31	2.79	04:25	3.74	13:50	5.29	4.55	04:25	0.335	09:30	1.134	0.624	0.624	
2/20/2015	02:05	2.15	09:50	4.40	2.81	02:05	3.53	12:15	5.16	4.46	02:05	0.324	12:20	1.219	0.621	0.621	
2/21/2015	23:45	1.96	12:30	3.41	2.35	23:40	3.59	14:25	4.71	4.17	23:45	0.287	12:30	0.784	0.438	0.438	
2/22/2015	03:00	1.91	20:45	2.51	2.21	03:00	3.51	20:40	4.74	3.93	03:00	0.271	20:45	0.541	0.377	0.377	
2/23/2015	02:00	1.98	09:30	5.13	2.85	01:20	3.61	13:45	5.13	4.47	02:00	0.297	09:30	1.412	0.642	0.642	
2/24/2015	01:50	2.12	09:30	4.74	2.76	01:40	3.63	11:25	5.18	4.55	01:50	0.329	09:35	1.279	0.614	0.614	
2/25/2015	04:00	2.21	09:35	4.20	2.79	04:00	3.86	13:00	5.00	4.56	04:00	0.367	10:20	1.195	0.624	0.624	
2/26/2015	04:10	2.19	09:50	5.39	2.81	04:10	3.80	10:40	5.11	4.53	04:10	0.356	09:50	1.463	0.625	0.625	
2/27/2015	02:55	2.14	09:40	4.03	2.67	02:55	3.71	14:05	5.18	4.54	02:55	0.337	09:45	1.079	0.584	0.584	
2/28/2015	22:05	1.90	12:05	3.02	2.27	20:25	3.38	10:20	4.80	4.04	22:00	0.263	12:05	0.712	0.406	0.406	
3/1/2015	02:15	1.89	11:05	2.42	2.01	04:45	3.16	12:40	4.58	3.57	04:45	0.243	11:00	0.487	0.298	0.298	
3/2/2015	00:25	1.92	13:50	4.19	2.71	00:00	3.37	12:20	5.28	4.46	00:00	0.260	14:20	1.144	0.599	0.599	
3/3/2015	03:25	2.09	09:50	4.02	2.66	01:20	3.70	14:15	5.28	4.53	03:25	0.328	09:50	1.072	0.581	0.581	
3/4/2015	01:35	1.96	09:50	3.94	2.63	01:35	3.56	15:45	5.22	4.50	01:35	0.284	09:25	1.048	0.570	0.570	
3/5/2015	01:40	2.06	09:40	4.15	2.68	03:25	3.66	11:50	5.25	4.53	01:40	0.315	09:55	1.147	0.587	0.587	
3/6/2015	03:25	2.07	11:05	4.74	2.85	03:25	3.68	12:15	5.31	4.51	03:25	0.319	11:05	1.287	0.645	0.645	
3/7/2015	21:10	2.01	09:50	2.50	2.34	21:10	3.64	09:50	4.72	4.18	21:10	0.303	09:50	0.541	0.435	0.435	
3/8/2015	01:40	1.94	16:10	2.47	2.26	03:15	3.52	14:10	4.75	4.00	01:40	0.280	14:10	0.516	0.397	0.397	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			17.048
Avg	2.62	4.34	0.550

Site Commentary

Site Information

CAL2	
Pipe Dimensions	14.88" x 14.88"
Silt Level	0.00"

Overview

Site CAL2 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. In addition, flows were cyclical with evidence of upstream pump station.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.74	7.90	0.859
Minimum	1.32	3.60	0.133
Maximum	5.82	11.75	2.912
Time of Minimum	2/27/2015 4:45 AM	2/6/2015 3:25 AM	2/11/2015 4:15 AM
Time of Maximum	2/6/2015 7:40 AM	2/22/2015 9:35 AM	2/6/2015 7:40 AM

Data Quality

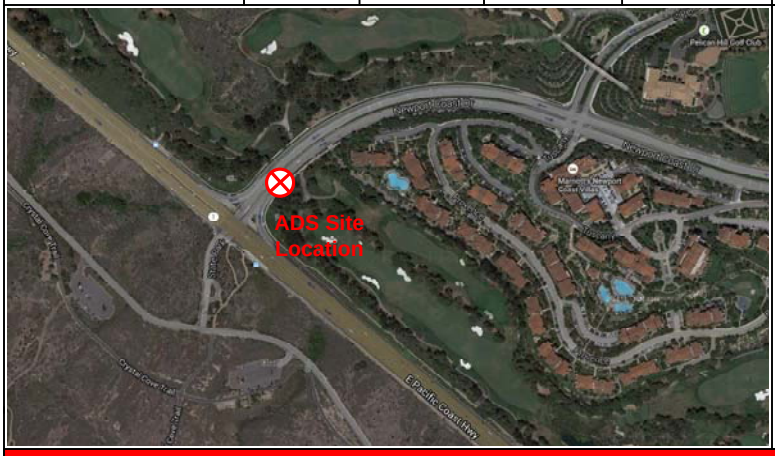
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL2	**Install Date:** 1/21/15	**Monitor Type**	Peak Doppler
Address/Location: Newport Coast & Pacific Coast		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH131E003
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	14.88 "
		Pipe Width:	14.88 "





Investigation Information:

Date/Time of Investigation:	1/21/15 @ 1000
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	9.49 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	5'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	PVC/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

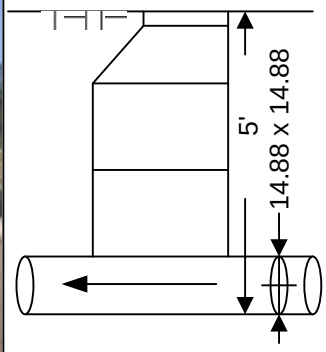
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

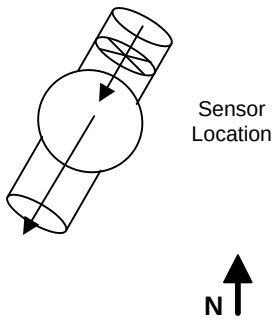
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

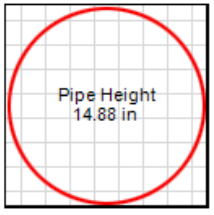
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

CAL2

Flow Monitor

CAL2

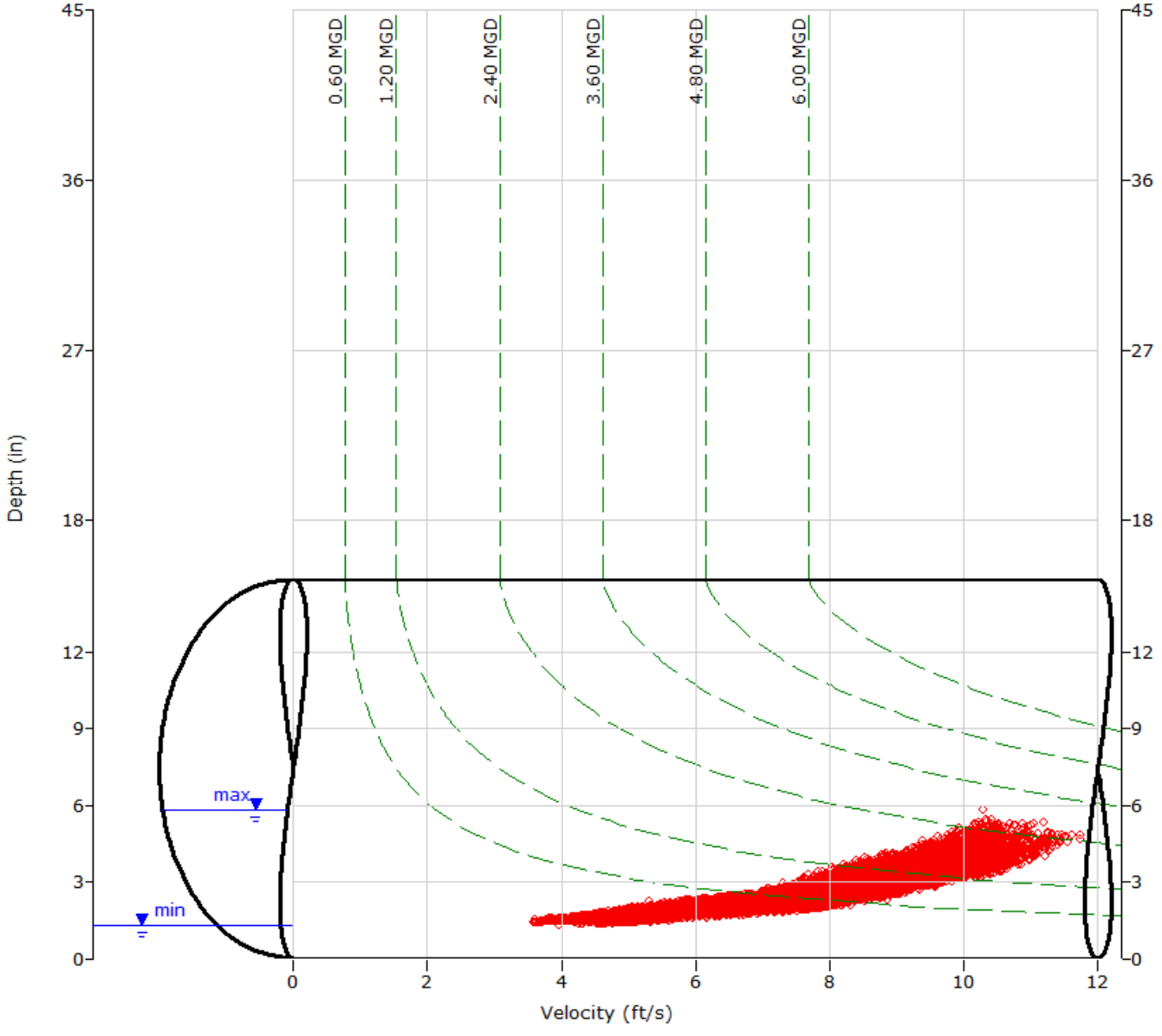


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth

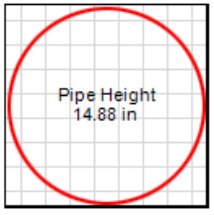


HYDROGRAPH REPORT

CAL2

Flow Monitor

CAL2

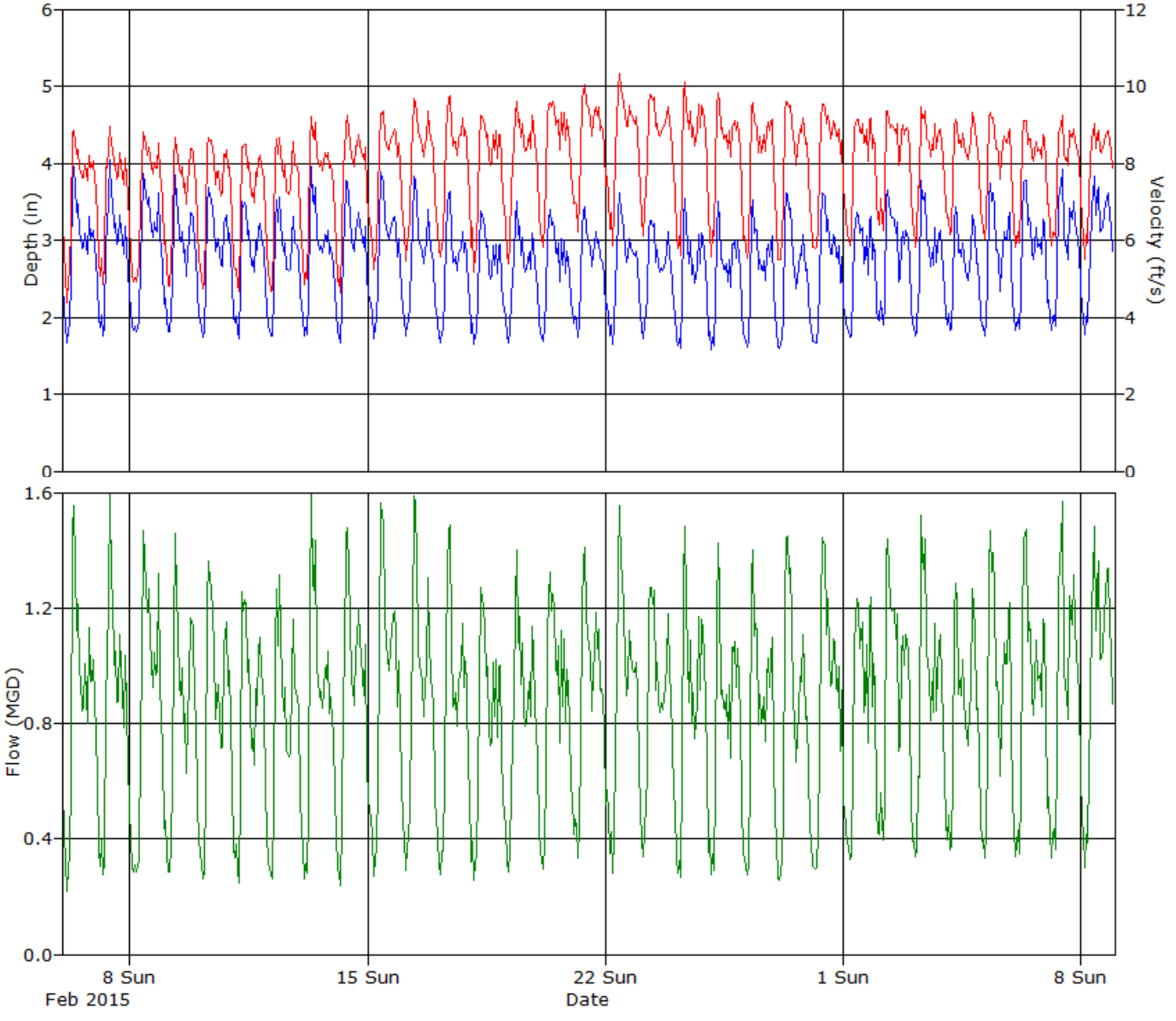


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL2, Pipe Height: 14.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:25	1.42	07:40	5.82	2.87	03:25	3.60	12:35	10.36	7.29	03:25	0.137	07:40	2.912	0.865	0.865	
2/7/2015	03:35	1.49	10:30	5.43	2.87	03:35	4.03	10:30	10.34	7.31	03:35	0.163	10:30	2.667	0.853	0.853	
2/8/2015	03:30	1.48	20:35	5.06	2.88	04:25	3.61	20:35	10.43	7.23	04:25	0.153	20:35	2.442	0.856	0.856	
2/9/2015	04:50	1.41	08:25	5.41	2.82	04:50	3.68	09:10	10.52	7.20	04:50	0.139	08:25	2.667	0.822	0.822	
2/10/2015	04:15	1.48	08:55	5.05	2.81	04:05	3.78	08:55	10.45	7.23	04:05	0.155	08:55	2.442	0.828	0.828	
2/11/2015	04:15	1.39	21:10	5.00	2.77	04:15	3.62	21:10	10.53	7.17	04:15	0.133	21:10	2.429	0.807	0.807	
2/12/2015	04:10	1.45	10:20	5.08	2.73	05:40	3.73	08:05	10.59	7.23	05:40	0.146	10:20	2.452	0.792	0.792	
2/13/2015	04:05	1.46	07:20	5.28	2.81	03:30	3.92	08:55	10.70	7.49	03:30	0.158	08:55	2.628	0.857	0.857	
2/14/2015	05:30	1.41	10:35	5.23	2.85	05:25	3.62	10:35	10.77	7.61	05:25	0.137	10:35	2.637	0.881	0.881	
2/15/2015	04:05	1.55	09:20	5.25	2.85	05:30	4.32	17:55	11.02	7.81	04:05	0.187	09:20	2.676	0.906	0.906	
2/16/2015	03:40	1.48	10:10	5.28	2.77	03:40	4.45	21:55	11.05	8.05	03:40	0.179	10:10	2.736	0.890	0.890	
2/17/2015	05:25	1.43	09:10	5.29	2.66	02:40	4.35	10:25	11.33	8.06	02:40	0.167	09:10	2.789	0.847	0.847	
2/18/2015	03:20	1.43	10:40	4.92	2.60	03:10	4.21	10:40	11.25	7.88	03:10	0.164	10:40	2.533	0.795	0.795	
2/19/2015	04:50	1.39	08:15	4.84	2.61	04:45	4.19	08:15	11.31	8.07	04:50	0.155	08:15	2.489	0.821	0.821	
2/20/2015	04:35	1.42	08:50	4.89	2.65	02:25	4.45	11:30	11.34	8.39	02:25	0.171	08:50	2.482	0.864	0.864	
2/21/2015	05:15	1.46	09:20	4.83	2.64	03:45	5.01	09:20	11.73	8.56	05:15	0.204	09:20	2.576	0.873	0.873	
2/22/2015	06:05	1.41	09:55	4.75	2.66	05:55	4.44	09:35	11.75	8.58	05:55	0.169	09:55	2.475	0.888	0.888	
2/23/2015	03:35	1.36	20:45	4.81	2.62	03:35	4.66	20:45	11.62	8.57	03:35	0.165	20:45	2.537	0.865	0.865	
2/24/2015	05:50	1.42	09:10	4.83	2.58	03:55	4.66	09:10	11.47	8.42	03:55	0.179	09:10	2.515	0.846	0.846	
2/25/2015	03:10	1.34	18:30	4.87	2.55	03:05	4.54	07:40	11.42	8.25	03:10	0.161	14:30	2.502	0.815	0.815	
2/26/2015	04:10	1.39	09:40	4.82	2.58	05:25	4.53	08:25	10.90	8.07	05:25	0.169	09:40	2.345	0.811	0.811	
2/27/2015	04:45	1.32	09:00	5.20	2.61	04:45	3.96	09:00	11.00	8.10	04:45	0.134	09:00	2.671	0.833	0.833	
2/28/2015	06:05	1.38	11:10	5.22	2.68	04:25	4.43	09:40	10.95	8.19	04:25	0.162	11:10	2.560	0.868	0.868	
3/1/2015	05:05	1.36	20:15	4.51	2.68	05:05	4.25	22:00	10.64	8.06	05:05	0.151	20:15	2.116	0.845	0.845	
3/2/2015	05:25	1.46	08:30	4.93	2.79	05:25	4.87	21:05	10.69	8.20	05:25	0.193	08:30	2.359	0.910	0.910	
3/3/2015	04:30	1.39	08:10	5.19	2.76	04:30	4.35	08:10	10.75	8.13	04:30	0.159	08:10	2.606	0.893	0.893	
3/4/2015	05:40	1.45	20:05	4.76	2.66	03:25	4.74	19:35	10.79	8.11	05:40	0.188	20:05	2.282	0.837	0.837	
3/5/2015	03:25	1.41	10:15	5.12	2.79	03:25	4.77	07:50	10.61	8.09	03:25	0.178	21:10	2.444	0.900	0.900	
3/6/2015	03:35	1.45	08:50	5.26	2.83	03:35	4.41	18:45	10.47	7.89	03:35	0.173	08:50	2.572	0.899	0.899	
3/7/2015	05:50	1.46	11:30	5.25	2.87	03:20	4.33	10:00	10.59	7.87	03:20	0.175	10:00	2.528	0.913	0.913	
3/8/2015	04:00	1.48	19:30	5.38	2.99	04:00	4.29	19:30	10.35	7.90	04:00	0.172	19:30	2.635	0.963	0.962	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			26.641
Avg	2.74	7.90	0.859

Site Commentary

Site Information

CAL20	
Pipe Dimensions	15.13" x 15.13"
Silt Level	0.00"

Overview

Site CAL20 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.06	5.39	0.370
Minimum	1.41	3.57	0.140
Maximum	3.09	6.70	0.788
Time of Minimum	2/6/2015 6:15 AM	2/28/2015 5:20 AM	2/15/2015 5:55 AM
Time of Maximum	3/2/2015 8:35 AM	3/2/2015 8:50 AM	3/2/2015 8:40 AM

Data Quality

Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

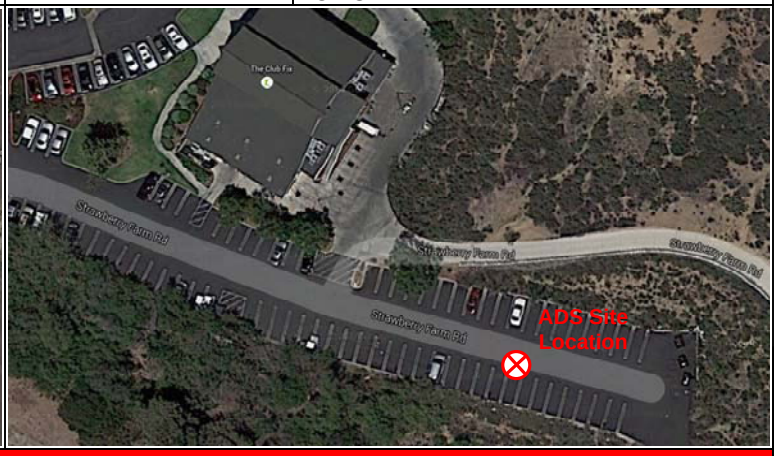
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL20	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: Strawberry Farms Golf Club parking lot		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH125W006
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	15.13 "
		Pipe Width:	15.13 "





Investigation Information:

Date/Time of Investigation:	1/29/15 @ 1830
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.75 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.81 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

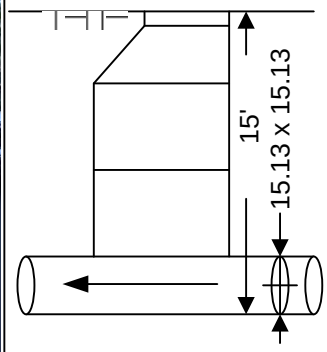
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

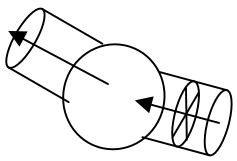
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

CAL20

Flow Monitor

CAL20

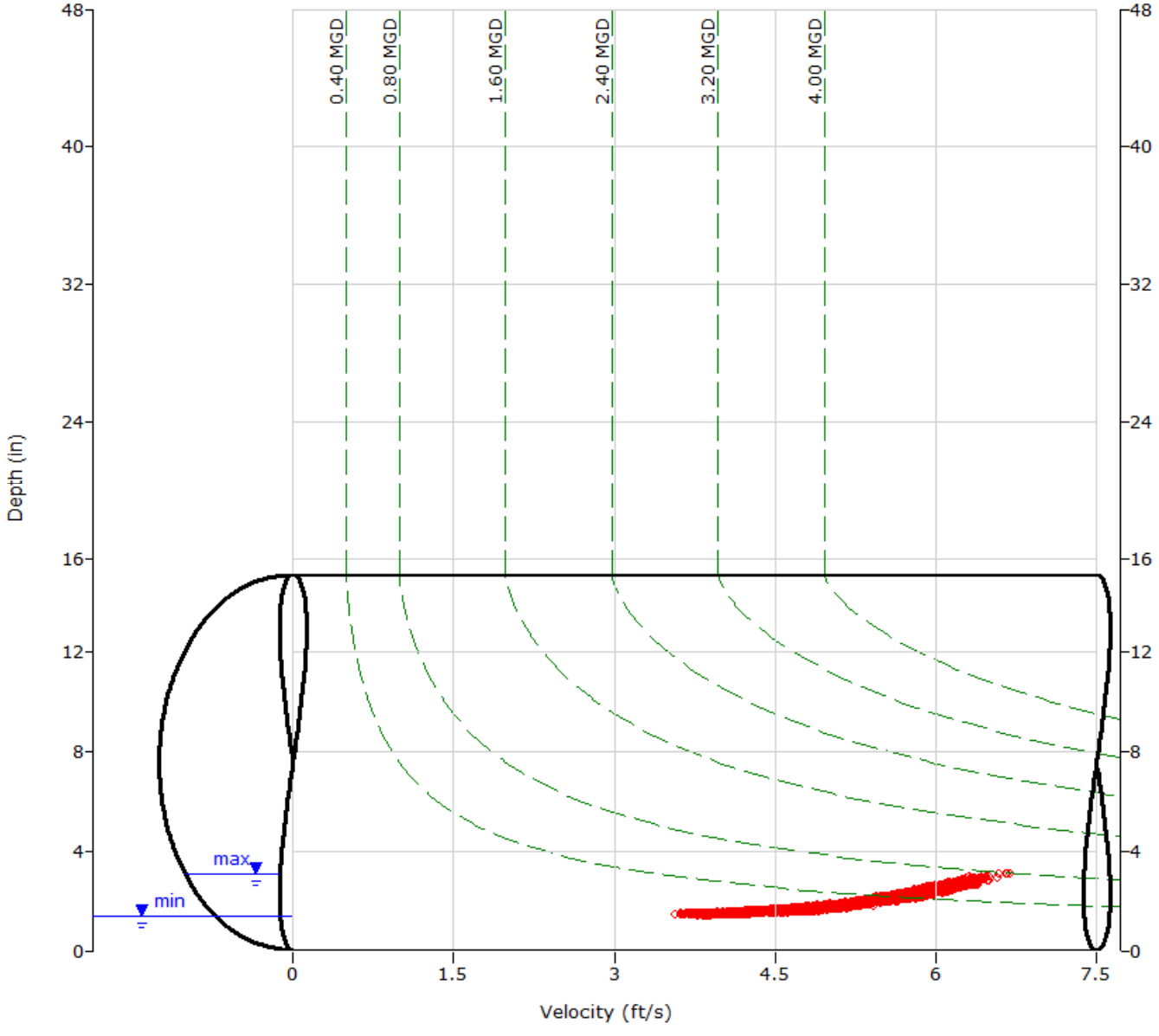
Pipe Height
15.13 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



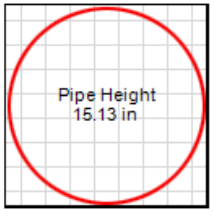
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL20

Flow Monitor

CAL20

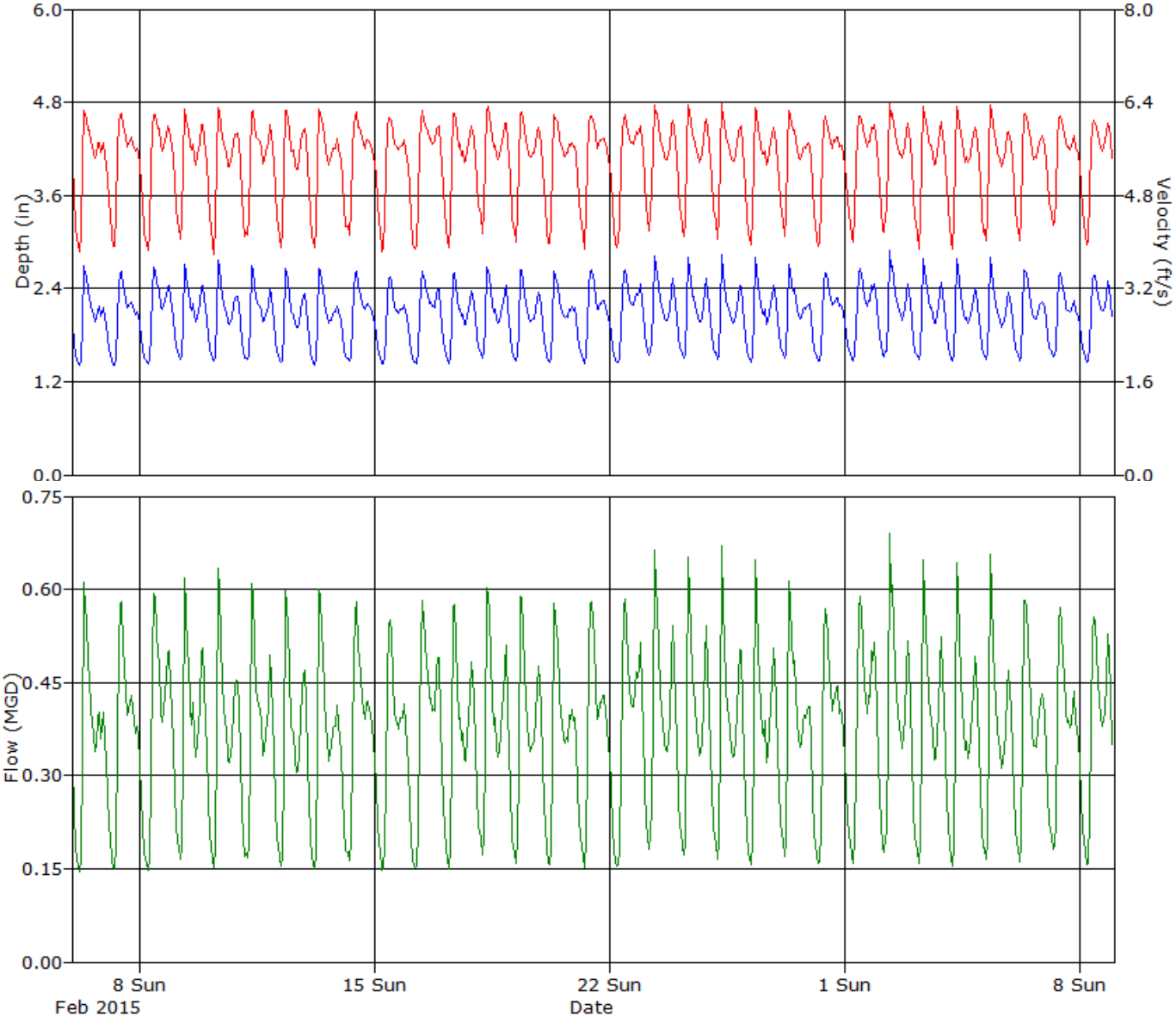


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL20, Pipe Height: 15.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	06:15	1.41	08:40	2.89	2.02	05:10	3.78	08:40	6.37	5.33	06:25	0.143	08:40	0.684	0.356	0.356	
2/7/2015	06:35	1.41	10:40	2.65	2.03	06:25	3.85	11:50	6.31	5.36	06:30	0.146	10:35	0.595	0.361	0.361	
2/8/2015	07:05	1.41	11:10	2.78	2.08	05:55	3.65	11:05	6.38	5.36	07:00	0.143	11:05	0.645	0.376	0.376	
2/9/2015	05:55	1.46	08:30	2.89	2.08	05:45	3.95	08:35	6.46	5.40	05:45	0.158	08:30	0.693	0.374	0.374	
2/10/2015	05:15	1.47	08:40	2.82	2.05	05:10	3.62	08:15	6.36	5.34	05:15	0.146	08:45	0.659	0.365	0.365	
2/11/2015	05:45	1.46	08:40	2.80	2.05	03:10	3.87	09:10	6.50	5.38	03:10	0.157	09:10	0.662	0.367	0.367	
2/12/2015	06:20	1.43	08:45	2.73	2.02	05:45	3.76	08:45	6.37	5.34	05:45	0.147	08:45	0.631	0.356	0.356	
2/13/2015	05:45	1.41	08:55	2.75	2.01	05:40	3.86	08:55	6.40	5.33	05:40	0.146	08:55	0.641	0.353	0.353	
2/14/2015	06:50	1.45	11:30	2.65	2.04	06:35	4.07	11:15	6.28	5.39	06:50	0.162	11:15	0.596	0.365	0.365	
2/15/2015	05:45	1.41	10:55	2.64	2.00	06:05	3.63	10:50	6.22	5.32	05:55	0.140	10:50	0.583	0.350	0.350	
2/16/2015	04:50	1.43	10:00	2.63	2.07	04:50	3.70	10:05	6.38	5.39	04:50	0.143	10:05	0.598	0.375	0.375	
2/17/2015	05:15	1.42	09:20	2.65	2.03	05:05	3.74	09:30	6.30	5.38	05:05	0.144	08:40	0.594	0.360	0.360	
2/18/2015	05:30	1.48	08:35	2.78	2.07	05:35	4.04	09:00	6.39	5.48	05:30	0.164	08:40	0.643	0.376	0.376	
2/19/2015	05:40	1.43	08:40	2.81	2.04	05:30	3.82	08:40	6.36	5.41	05:35	0.149	08:40	0.658	0.365	0.365	
2/20/2015	05:10	1.44	08:45	2.73	2.03	05:10	3.86	08:45	6.34	5.36	05:10	0.151	08:45	0.628	0.359	0.359	
2/21/2015	06:50	1.43	10:50	2.73	2.06	06:45	3.79	10:55	6.31	5.39	06:45	0.146	10:55	0.625	0.370	0.370	
2/22/2015	05:50	1.43	11:10	2.69	2.09	05:50	3.77	11:25	6.27	5.38	05:50	0.145	11:35	0.597	0.379	0.379	
2/23/2015	05:00	1.52	08:35	2.99	2.12	04:30	4.12	08:35	6.50	5.50	05:05	0.175	08:35	0.734	0.392	0.392	
2/24/2015	05:40	1.49	08:25	2.92	2.10	05:35	4.01	08:35	6.44	5.45	05:35	0.165	08:25	0.699	0.383	0.383	
2/25/2015	05:25	1.47	08:40	2.88	2.08	05:20	3.89	08:30	6.41	5.42	05:20	0.157	08:40	0.687	0.375	0.375	
2/26/2015	05:25	1.44	08:25	2.91	2.07	05:25	3.82	08:45	6.43	5.36	05:25	0.149	08:25	0.685	0.370	0.370	
2/27/2015	05:10	1.49	08:40	2.79	2.08	05:10	4.01	09:05	6.30	5.42	05:10	0.165	08:40	0.644	0.373	0.373	
2/28/2015	06:30	1.45	10:45	2.67	2.07	05:20	3.57	10:45	6.24	5.34	05:15	0.142	10:45	0.600	0.369	0.369	
3/1/2015	06:40	1.45	11:00	2.72	2.11	06:30	3.91	10:55	6.36	5.42	06:40	0.154	11:00	0.627	0.385	0.385	
3/2/2015	04:10	1.51	08:35	3.09	2.13	03:55	4.04	08:50	6.70	5.46	03:55	0.170	08:40	0.788	0.393	0.393	
3/3/2015	05:55	1.46	08:40	2.85	2.08	05:20	3.78	08:20	6.49	5.38	05:25	0.153	08:30	0.677	0.376	0.376	
3/4/2015	05:50	1.45	08:35	2.84	2.06	04:20	3.78	08:55	6.42	5.37	05:20	0.151	08:55	0.672	0.369	0.369	
3/5/2015	05:30	1.47	08:30	2.89	2.05	05:15	3.90	08:25	6.58	5.37	05:25	0.159	08:25	0.709	0.366	0.366	
3/6/2015	05:20	1.45	08:50	2.74	2.07	05:20	3.93	08:55	6.36	5.41	05:20	0.155	08:55	0.632	0.372	0.372	
3/7/2015	05:05	1.50	10:50	2.64	2.05	05:05	4.18	11:00	6.28	5.42	05:05	0.173	10:50	0.590	0.365	0.365	
3/8/2015	06:15	1.44	20:45	2.61	2.07	05:50	3.83	20:45	6.14	5.38	05:50	0.150	20:45	0.571	0.372	0.372	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			11.464
Avg	2.06	5.39	0.370

Site Commentary

Site Information

CAL21-N1	
Pipe Dimensions	51.00" x 51.00"
Silt Level	0.00"

Overview

Site CAL21-N1 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows entered into mild backwater conditions when flows were greater than 25 inches. In addition, flows were cyclical with evidence of upstream pump station.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	20.23	4.12	14.723
Minimum	8.99	1.62	1.814
Maximum	34.07	5.58	29.390
Time of Minimum	2/22/2015 6:25 AM	2/15/2015 6:35 AM	2/15/2015 6:35 AM
Time of Maximum	2/28/2015 12:30 PM	3/7/2015 9:55 AM	3/7/2015 11:55 AM

Data Quality

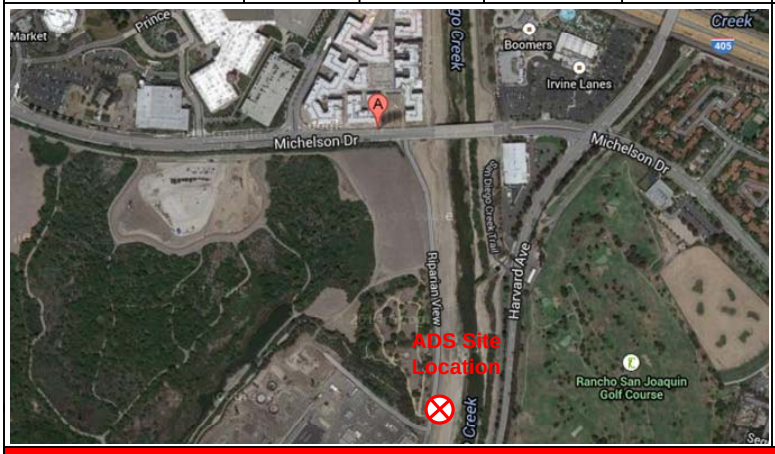
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

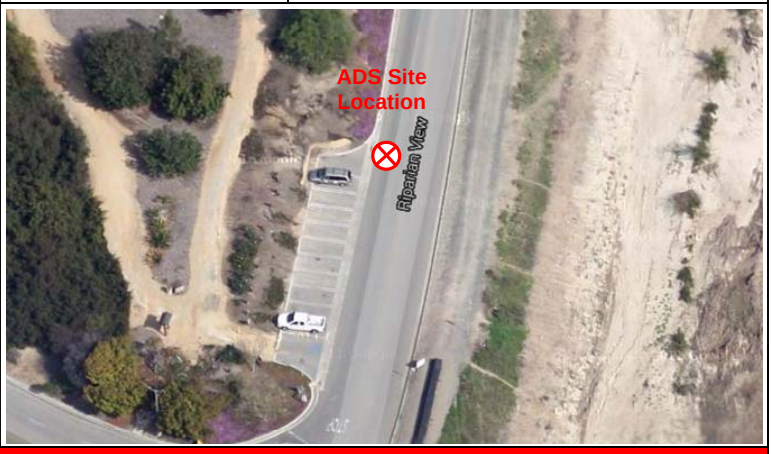
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL21	**Install Date:** 2/5/15	**Monitor Type**	Peak Doppler
Address/Location: Reperian & Michelson		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH059E036
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	51.00 "
		Pipe Width:	51.00 "





Investigation Information:

Date/Time of Investigation:	2/5/15@ 0300
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	10.38" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.88 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	18'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

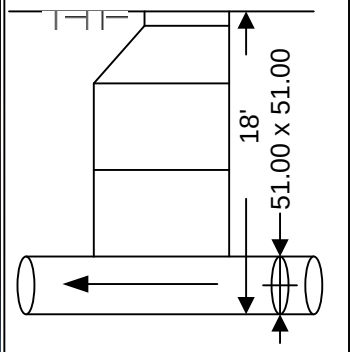
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

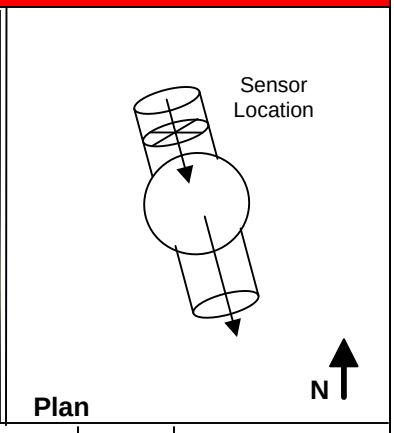
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

CAL21-N1

Flow Monitor

CAL21-N1

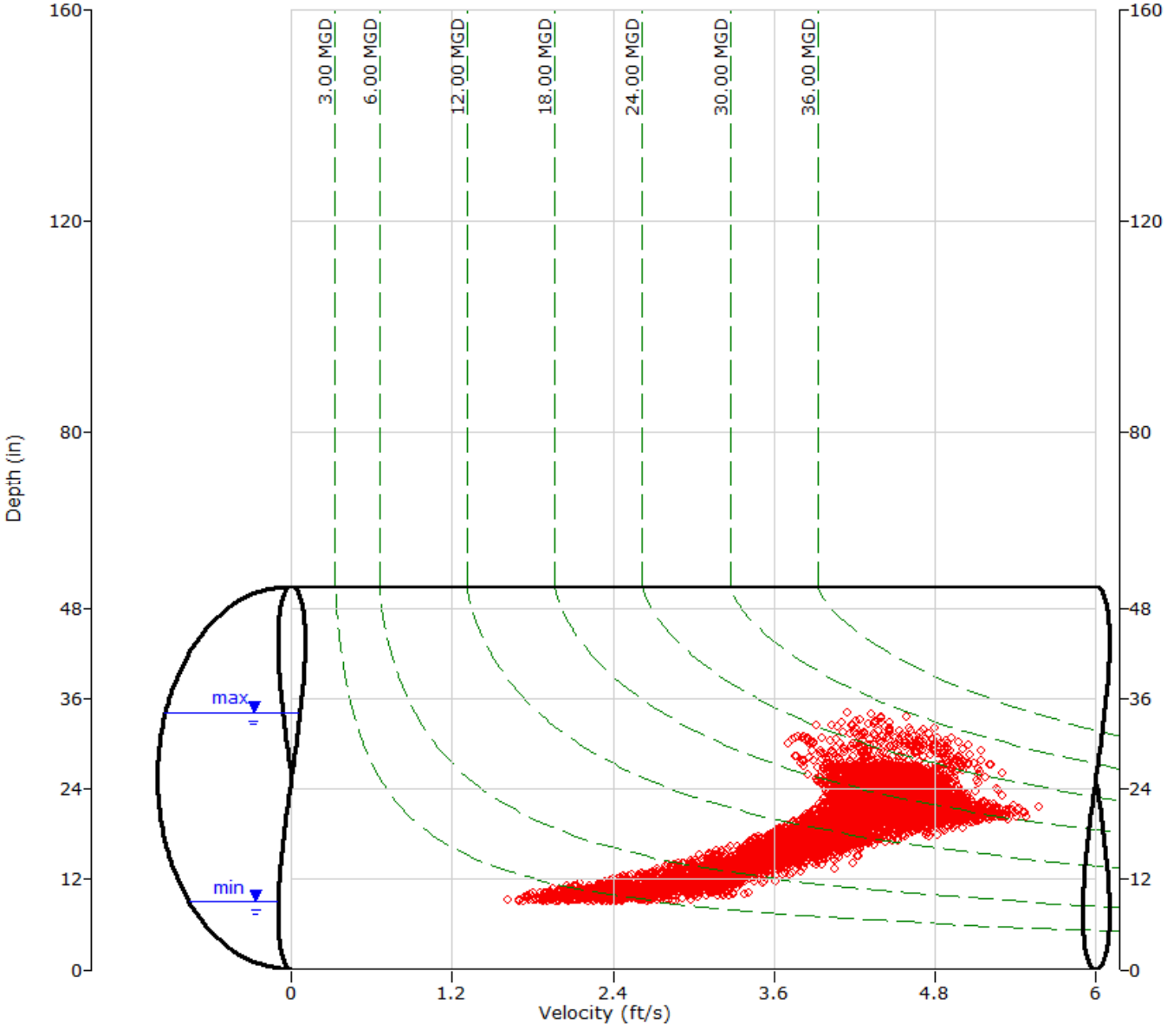
Pipe Height
51.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL21-N1

Flow Monitor

CAL21-N1

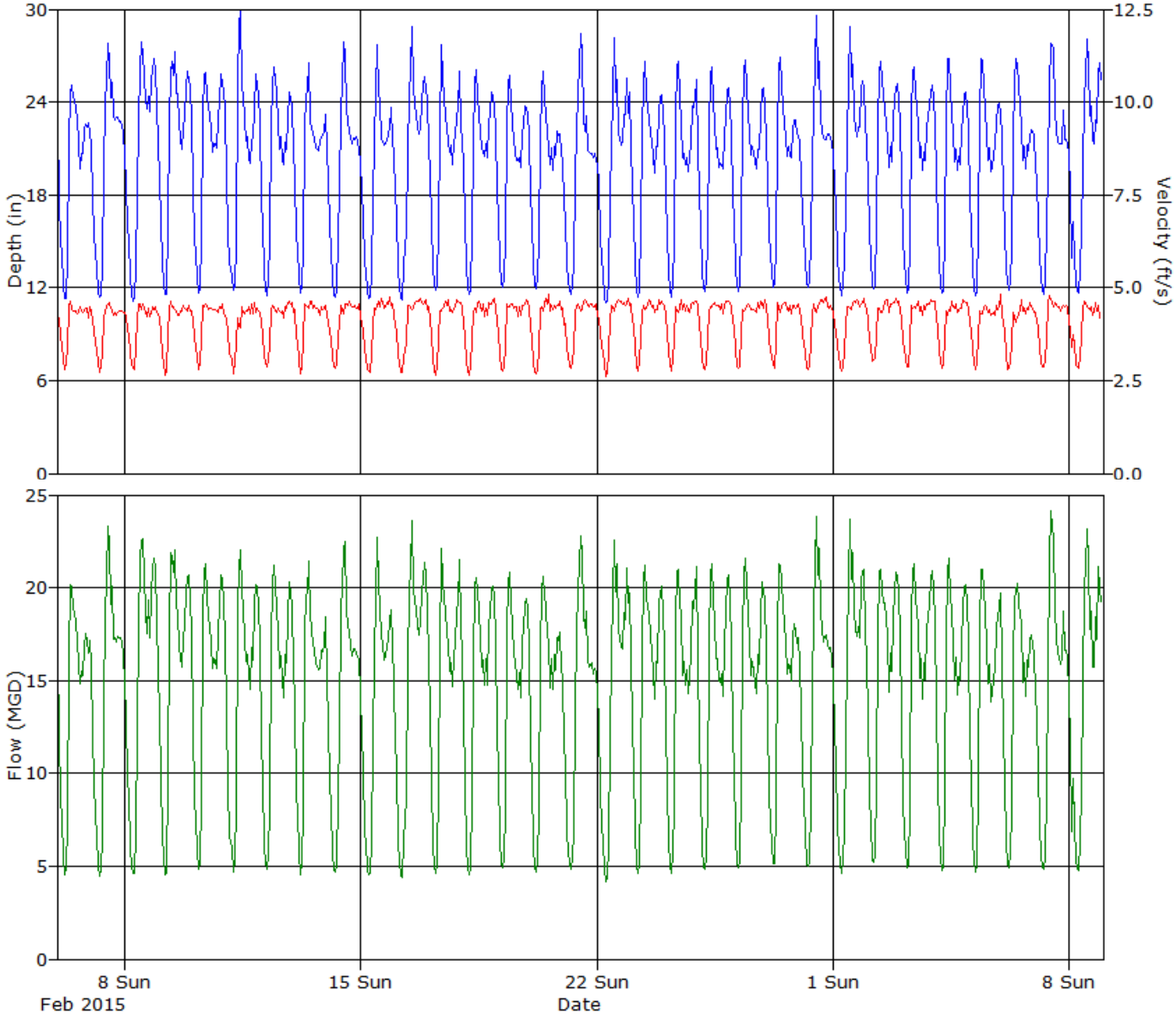
Pipe Height
51.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL21-N1, Pipe Height: 51 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	06:25	9.10	10:00	25.56	19.94	05:15	1.90	16:15	5.48	4.10	05:15	2.171	10:00	21.627	14.291	14.291	
2/7/2015	07:10	9.24	12:15	32.27	20.22	06:15	1.83	13:15	5.05	4.03	06:15	2.101	12:10	27.628	14.479	14.479	
2/8/2015	06:50	9.00	12:05	32.68	20.90	07:05	1.89	13:05	5.06	4.06	06:50	2.077	13:10	28.360	15.245	15.245	
2/9/2015	05:55	9.17	12:10	31.58	21.30	06:35	1.88	08:15	5.36	4.10	05:50	2.313	12:05	27.029	15.656	15.656	
2/10/2015	05:30	9.40	21:00	26.48	20.74	05:30	1.88	15:50	5.34	4.14	05:30	2.184	10:35	22.376	15.210	15.210	
2/11/2015	05:25	9.47	10:05	30.92	21.06	05:30	1.94	17:25	5.05	4.05	05:25	2.362	10:45	23.653	15.105	15.105	
2/12/2015	05:50	9.28	10:30	27.22	20.32	05:55	1.70	20:50	5.25	4.12	05:55	1.944	09:40	22.246	14.776	14.776	
2/13/2015	05:25	9.74	11:30	30.82	20.03	06:20	1.96	00:25	5.37	4.16	05:10	2.443	11:25	26.292	14.556	14.556	
2/14/2015	06:55	9.37	12:10	32.61	19.74	07:05	1.76	01:40	5.01	4.10	07:05	2.134	13:30	27.272	14.181	14.181	
2/15/2015	07:25	9.18	12:25	32.32	19.43	06:35	1.62	10:25	5.24	4.07	06:35	1.814	12:20	27.617	13.923	13.923	
2/16/2015	05:45	9.17	12:40	33.28	20.63	05:55	1.84	20:35	5.22	4.12	05:45	2.082	12:30	28.071	15.246	15.246	
2/17/2015	06:05	9.90	09:45	32.77	20.38	04:45	1.89	14:45	5.26	4.15	04:45	2.486	09:40	27.123	14.930	14.930	
2/18/2015	05:55	9.55	10:15	26.32	20.30	04:55	1.79	17:00	5.33	4.12	04:55	2.273	10:15	21.383	14.795	14.795	
2/19/2015	05:35	9.70	10:15	26.27	20.02	04:40	2.00	08:10	5.33	4.14	05:35	2.532	10:30	21.350	14.563	14.563	
2/20/2015	05:45	9.67	10:10	26.24	19.73	06:30	1.86	22:35	5.39	4.12	06:30	2.434	10:00	21.760	14.260	14.260	
2/21/2015	06:40	9.36	12:15	32.89	19.30	05:40	1.76	16:05	5.26	4.12	05:40	2.154	12:15	27.233	13.858	13.858	
2/22/2015	06:25	8.99	12:40	32.33	19.80	06:15	1.70	19:45	5.11	4.11	06:15	1.881	14:15	26.498	14.413	14.413	
2/23/2015	05:50	9.37	10:20	26.78	20.29	05:40	1.77	20:05	5.43	4.19	05:40	2.089	09:55	22.384	14.954	14.954	
2/24/2015	05:50	9.23	23:25	29.64	20.07	05:50	1.77	17:15	5.25	4.17	05:50	1.999	23:25	26.712	14.718	14.718	
2/25/2015	05:35	9.56	10:15	26.77	20.01	06:40	1.91	17:10	5.47	4.17	06:40	2.454	10:00	22.311	14.663	14.663	
2/26/2015	05:50	9.82	10:35	26.91	20.30	04:55	1.97	19:55	5.32	4.17	04:55	2.515	10:05	22.584	14.891	14.891	
2/27/2015	06:20	10.02	10:25	27.23	20.21	06:10	1.90	17:45	5.46	4.17	06:10	2.493	09:45	22.942	14.766	14.766	
2/28/2015	06:15	10.00	12:30	34.07	20.28	06:20	1.86	18:35	5.14	4.13	06:20	2.394	12:20	28.461	14.786	14.786	
3/1/2015	06:40	9.21	12:45	33.47	20.34	05:45	1.74	22:40	5.20	4.10	05:45	2.087	12:45	28.037	14.870	14.870	
3/2/2015	05:15	9.91	10:10	26.93	20.72	04:55	2.13	18:55	5.34	4.21	04:55	2.763	10:00	22.324	15.414	15.414	
3/3/2015	05:35	9.48	10:00	26.70	20.42	05:25	1.77	19:35	5.24	4.17	05:25	2.117	10:15	22.621	15.050	15.050	
3/4/2015	06:05	9.58	10:10	27.40	20.34	06:10	1.99	15:00	5.23	4.17	06:10	2.372	10:25	22.883	14.950	14.950	
3/5/2015	05:00	9.58	10:00	27.36	20.14	05:45	1.88	23:35	5.00	4.11	05:45	2.253	10:00	21.911	14.545	14.545	
3/6/2015	05:40	9.61	10:25	26.89	20.10	05:35	1.81	20:00	5.39	4.07	05:35	2.179	11:05	20.616	14.326	14.326	
3/7/2015	06:45	9.72	12:00	33.86	20.03	06:50	2.15	09:55	5.58	4.14	06:50	2.623	11:55	29.390	14.633	14.633	
3/8/2015	07:40	9.65	13:15	32.72	20.20	08:45	2.05	19:45	5.30	4.00	07:40	2.669	13:15	27.727	14.358	14.348	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			456.402
Avg	20.23	4.12	14.723

Site Commentary

Site Information

CAL22	
Pipe Dimensions	25.88" x 25.00"
Silt Level	0.00"

Overview

Site CAL22 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. In addition, flows were cyclical with evidence of upstream pump station.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.63	2.75	1.681
Minimum	3.32	1.40	0.240
Maximum	11.04	3.72	3.455
Time of Minimum	2/22/2015 5:40 AM	3/8/2015 5:40 AM	2/22/2015 5:40 AM
Time of Maximum	2/12/2015 2:15 PM	2/12/2015 2:15 PM	2/12/2015 2:15 PM

Data Quality

Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL22	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: University & Campus		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH058E001
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	25.88 "
		Pipe Width:	25.00 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1530
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	7.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.29 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	12'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	X			

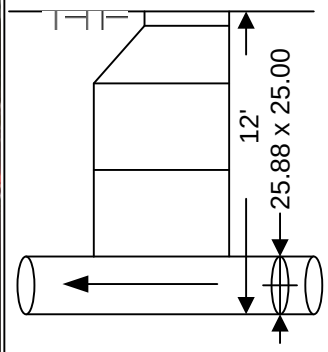
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

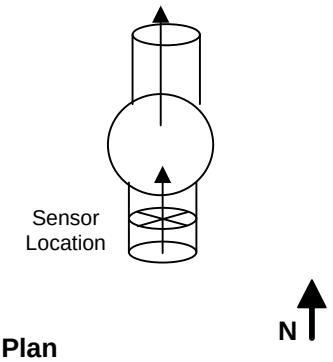
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

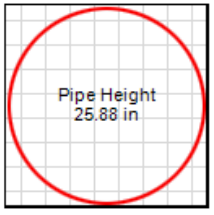
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

CAL22

Flow Monitor

CAL22

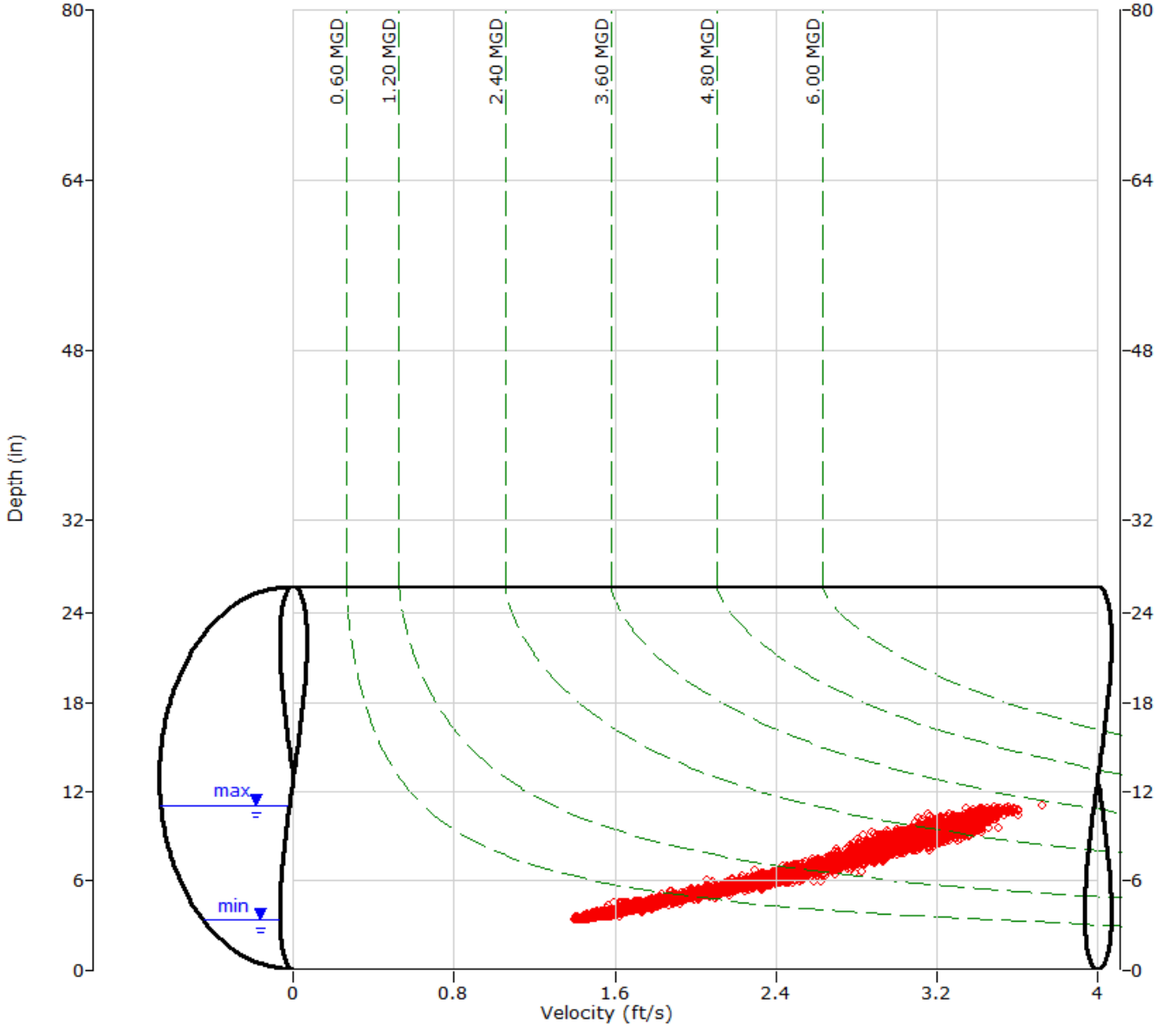


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



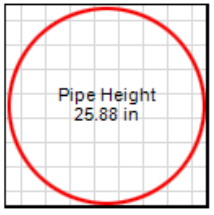
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL22

Flow Monitor

CAL22

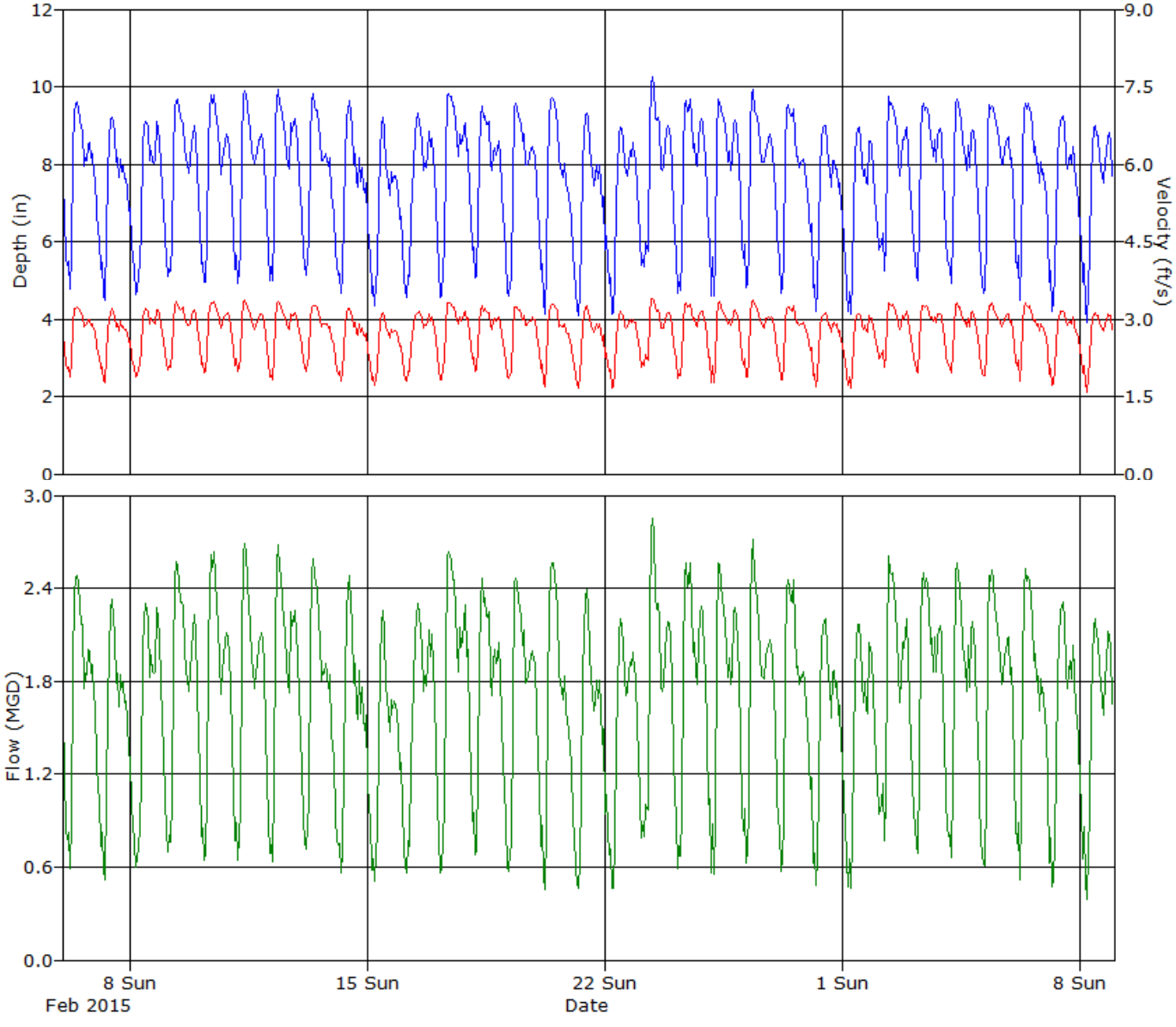


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL22, Pipe Height: 25.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	05:00	4.00	18:25	10.50	7.81	06:30	1.61	18:25	3.46	2.77	06:30	0.366	18:25	3.006	1.732	1.732	
2/7/2015	06:20	3.71	18:25	10.64	7.29	06:20	1.52	18:25	3.54	2.64	06:20	0.306	18:25	3.132	1.524	1.524	
2/8/2015	05:50	3.71	18:20	10.61	7.38	05:50	1.57	18:20	3.58	2.70	05:50	0.317	18:20	3.149	1.590	1.590	
2/9/2015	05:55	4.16	14:35	10.73	7.82	05:55	1.74	18:20	3.55	2.83	05:55	0.413	16:55	3.161	1.769	1.769	
2/10/2015	05:10	4.08	09:20	10.49	7.90	04:10	1.71	00:05	3.50	2.85	05:15	0.399	00:05	3.029	1.805	1.805	
2/11/2015	06:20	3.82	22:40	10.83	7.90	06:20	1.59	22:40	3.58	2.82	06:20	0.333	22:40	3.242	1.791	1.791	
2/12/2015	04:05	3.77	14:15	11.04	8.01	04:05	1.49	14:15	3.72	2.80	04:05	0.306	14:15	3.455	1.819	1.819	
2/13/2015	04:20	4.21	14:40	10.66	7.79	04:20	1.71	00:05	3.47	2.77	04:20	0.412	14:40	2.983	1.726	1.726	
2/14/2015	05:30	3.76	14:10	10.92	7.35	05:30	1.52	14:10	3.48	2.63	05:30	0.311	14:10	3.186	1.547	1.547	
2/15/2015	05:55	3.45	14:05	10.14	6.96	06:00	1.40	18:10	3.40	2.53	06:00	0.254	18:10	2.811	1.401	1.401	
2/16/2015	05:00	3.41	21:00	10.59	7.49	04:55	1.41	22:10	3.49	2.69	04:55	0.250	21:00	3.012	1.615	1.615	
2/17/2015	04:10	3.68	17:00	10.95	7.97	04:10	1.48	22:40	3.61	2.82	04:10	0.293	17:00	3.261	1.838	1.838	
2/18/2015	04:50	4.25	10:20	10.76	7.84	04:50	1.75	10:20	3.53	2.81	04:50	0.427	10:20	3.164	1.747	1.747	
2/19/2015	05:35	3.41	21:25	10.70	7.64	05:25	1.44	21:25	3.56	2.75	05:35	0.258	21:25	3.171	1.693	1.693	
2/20/2015	06:15	3.54	14:45	10.82	7.51	05:25	1.52	14:45	3.52	2.72	05:25	0.289	14:45	3.176	1.650	1.650	
2/21/2015	05:55	3.35	20:05	10.26	7.11	05:50	1.43	18:10	3.51	2.62	05:50	0.247	16:50	2.885	1.494	1.494	
2/22/2015	05:40	3.32	23:50	10.37	7.13	05:30	1.40	17:15	3.45	2.62	05:40	0.240	22:50	2.908	1.487	1.487	
2/23/2015	02:30	4.31	07:40	10.72	8.01	02:25	1.74	15:20	3.50	2.85	02:30	0.435	07:40	3.121	1.836	1.836	
2/24/2015	05:15	3.43	18:30	10.65	7.88	05:15	1.46	18:30	3.53	2.82	05:15	0.262	18:30	3.121	1.800	1.800	
2/25/2015	06:15	3.69	19:00	10.67	7.89	06:15	1.45	17:25	3.54	2.80	06:15	0.288	19:00	3.134	1.783	1.783	
2/26/2015	05:40	3.54	15:45	10.67	7.88	05:40	1.45	07:35	3.50	2.81	05:40	0.271	15:45	3.089	1.783	1.783	
2/27/2015	05:30	3.59	14:45	10.57	7.69	05:00	1.47	18:35	3.49	2.76	05:30	0.281	14:45	2.963	1.705	1.705	
2/28/2015	05:35	3.46	17:35	10.34	7.22	05:35	1.46	17:50	3.44	2.65	05:35	0.265	17:35	2.904	1.520	1.520	
3/1/2015	07:00	3.34	17:10	10.14	7.11	06:55	1.41	16:15	3.49	2.62	06:55	0.243	16:15	2.872	1.485	1.485	
3/2/2015	05:45	4.35	17:25	10.14	7.97	05:45	1.79	15:15	3.45	2.85	05:45	0.452	15:15	2.854	1.812	1.812	
3/3/2015	05:45	4.11	15:15	10.66	7.99	05:50	1.68	15:15	3.48	2.85	05:50	0.391	15:15	3.081	1.820	1.820	
3/4/2015	06:15	3.91	13:30	10.84	7.83	06:20	1.64	13:45	3.46	2.81	06:15	0.356	13:30	3.127	1.757	1.757	
3/5/2015	04:20	3.61	14:20	10.81	7.82	04:30	1.54	14:35	3.60	2.81	04:30	0.299	14:35	3.248	1.764	1.764	
3/6/2015	05:45	3.59	14:35	10.47	7.74	06:05	1.52	19:40	3.46	2.79	05:45	0.292	14:35	2.908	1.729	1.729	
3/7/2015	05:20	3.33	14:10	10.43	7.35	04:40	1.42	19:00	3.60	2.67	05:20	0.244	19:00	3.072	1.568	1.568	
3/8/2015	05:45	3.34	14:30	10.41	7.26	05:40	1.40	14:30	3.47	2.64	05:45	0.241	14:30	2.979	1.533	1.532	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			52.123
Avg	7.63	2.75	1.681

Site Commentary

Site Information

CAL23	
Pipe Dimensions	26.88" x 26.88"
Silt Level	0.44"

Overview

Site CAL23 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. In addition, slimy sludge was present causing variable flow depths and fouling of the depth sensor.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	6.67	0.69	0.346
Minimum	4.77	0.29	0.095
Maximum	9.73	1.11	0.912
Time of Minimum	2/23/2015 5:45 AM	2/8/2015 6:25 AM	2/8/2015 6:25 AM
Time of Maximum	2/18/2015 11:40 AM	2/18/2015 11:40 AM	2/18/2015 11:40 AM

Data Quality

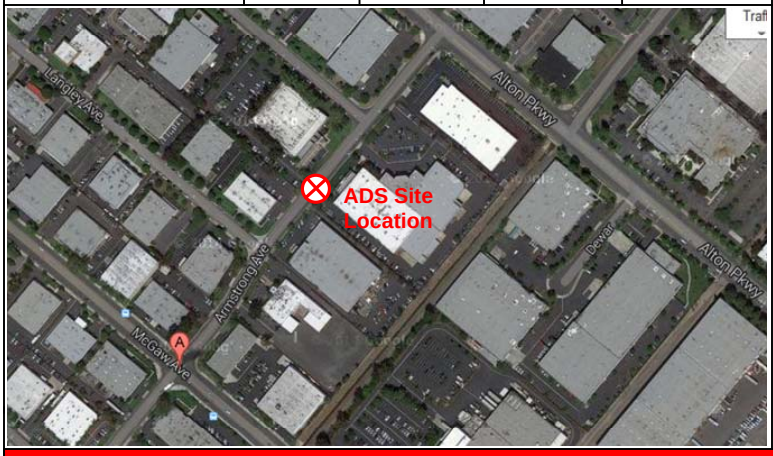
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

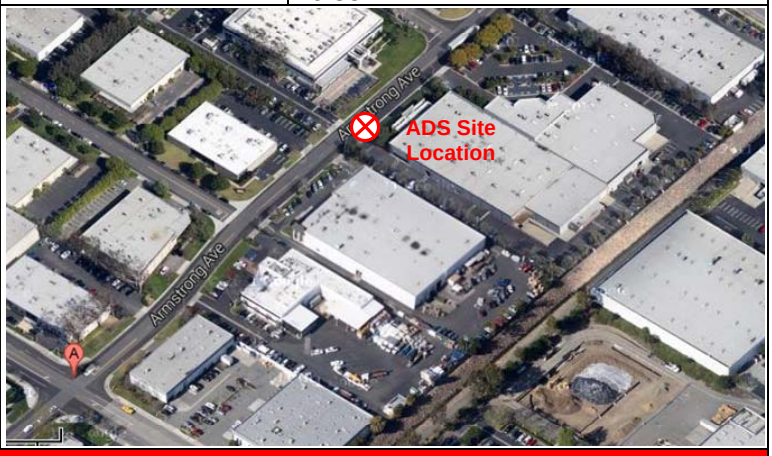
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAI23	**Install Date:** 1/16/15	**Monitor Type**	Peak Doppler
Address/Location: 17152 Armstrong		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH008E056
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	26.88 "
		Pipe Width:	26.88 "





Investigation Information:

Date/Time of Investigation:	1/16/15 @1200
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	7.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	.73 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

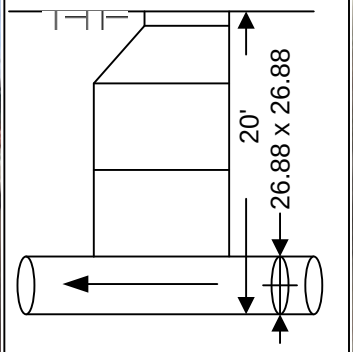
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

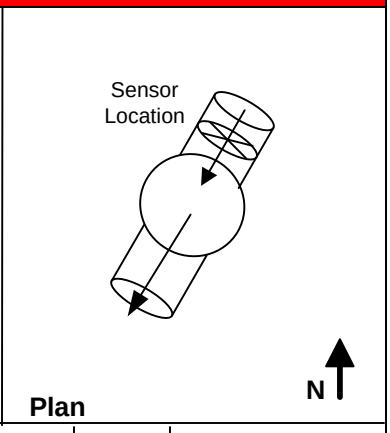
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

CAL23

Flow Monitor

CAL23

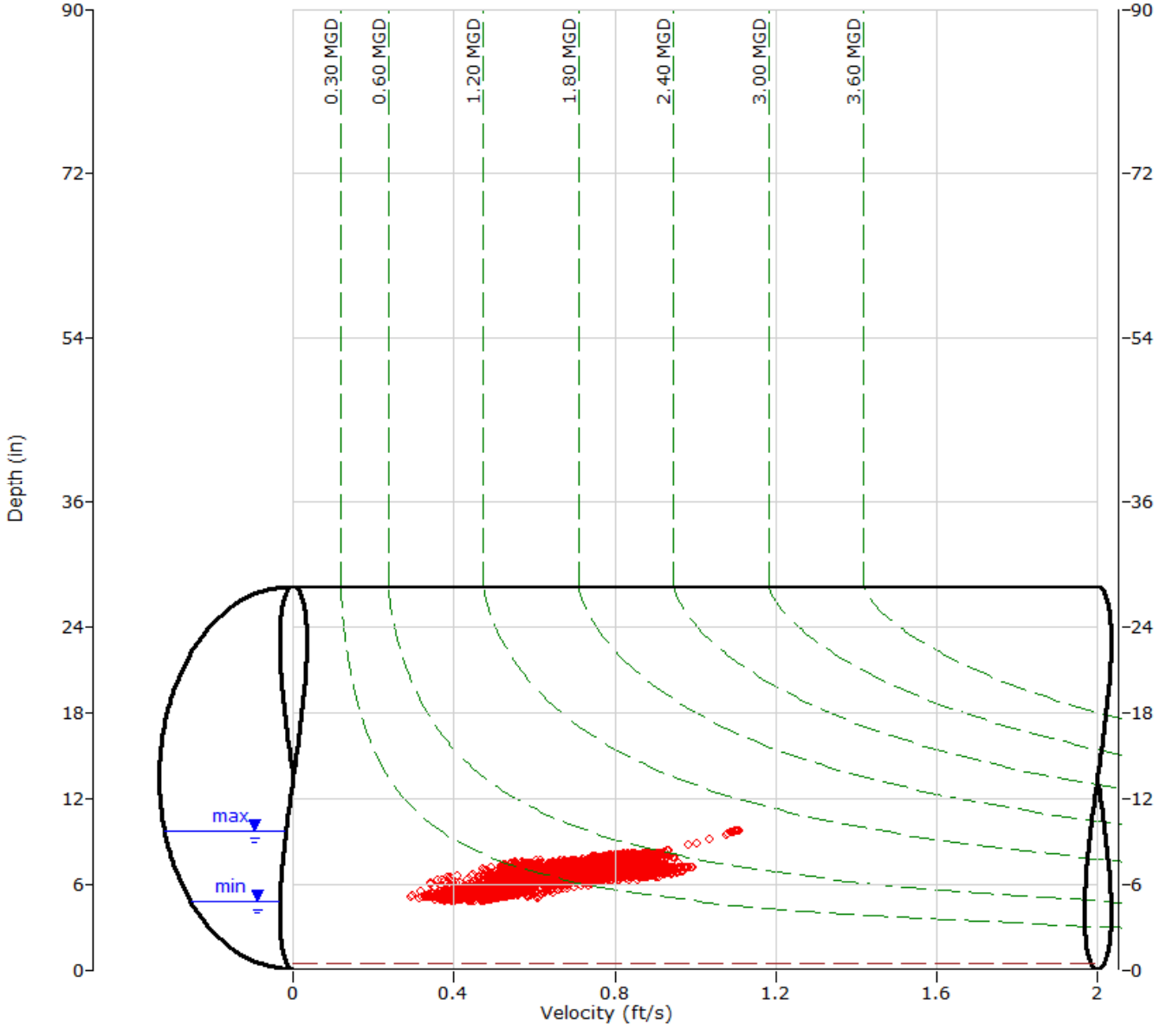
Pipe Height
26.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



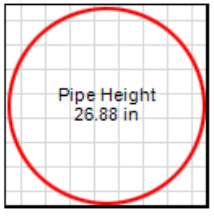
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL23

Flow Monitor

CAL23

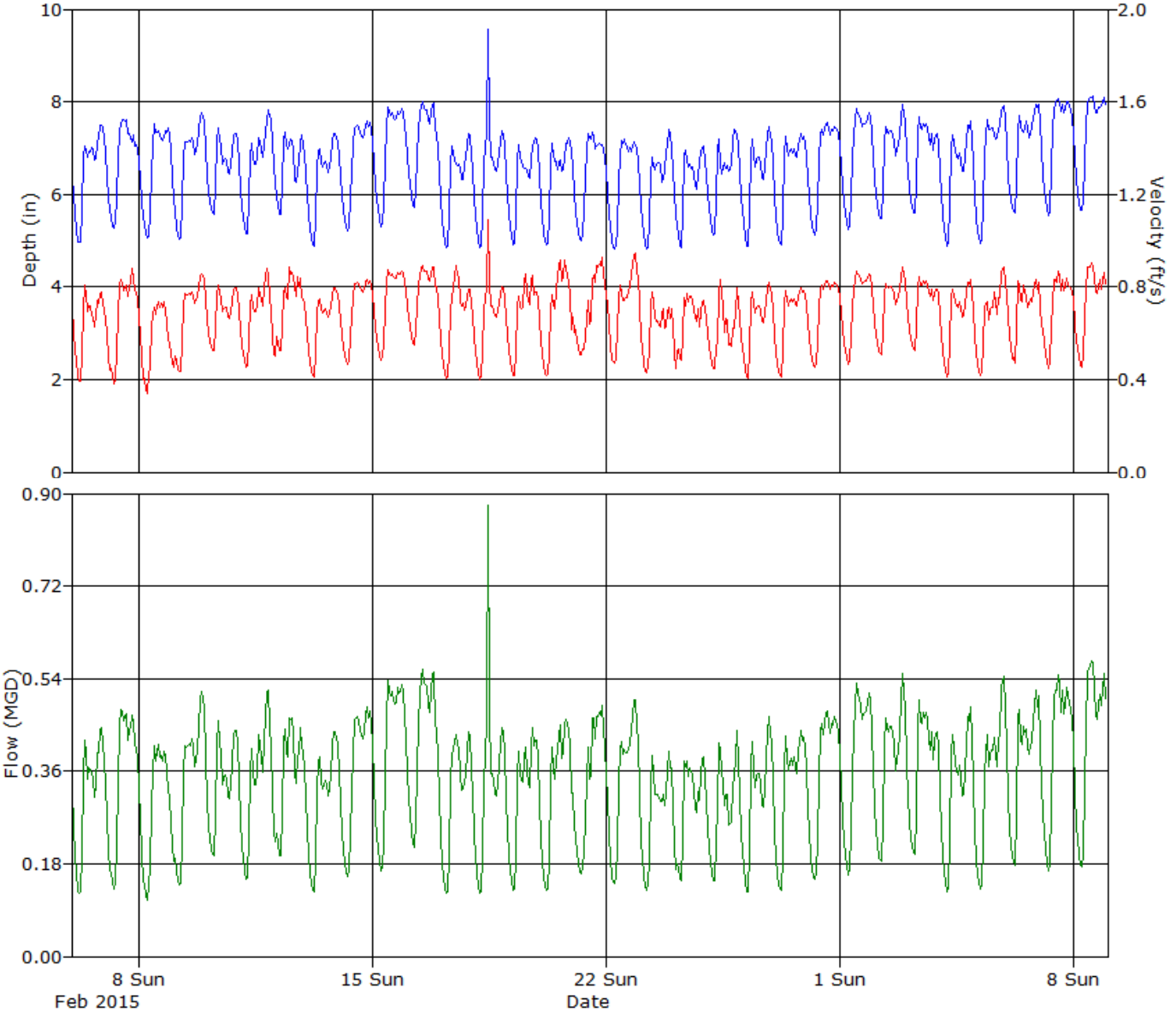


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL23, Pipe Height: 26.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:50	4.90	20:50	7.63	6.53	05:10	0.32	09:55	0.90	0.65	05:10	0.099	20:55	0.490	0.316	0.316	
2/7/2015	05:55	5.24	12:55	7.69	6.74	05:45	0.34	18:35	0.92	0.68	05:45	0.116	15:05	0.513	0.348	0.348	
2/8/2015	07:10	5.02	11:35	7.68	6.63	06:25	0.29	18:05	0.87	0.59	06:25	0.095	18:05	0.464	0.295	0.295	
2/9/2015	06:15	5.01	21:10	7.80	6.67	01:40	0.34	21:10	0.86	0.68	02:15	0.134	21:10	0.522	0.344	0.344	
2/10/2015	06:25	5.54	09:15	7.49	6.65	06:25	0.52	09:15	0.82	0.69	06:25	0.192	09:15	0.467	0.340	0.340	
2/11/2015	05:55	5.09	21:15	7.89	6.65	05:55	0.44	20:50	0.95	0.69	05:55	0.145	20:50	0.573	0.343	0.343	
2/12/2015	06:10	5.48	00:00	7.43	6.67	02:50	0.34	12:35	0.93	0.72	02:50	0.146	14:20	0.501	0.353	0.353	
2/13/2015	06:15	4.84	20:55	7.40	6.39	06:15	0.40	20:55	0.81	0.65	06:15	0.122	20:55	0.452	0.308	0.308	
2/14/2015	06:50	5.18	20:25	7.62	6.75	06:50	0.46	20:25	0.84	0.71	06:50	0.154	20:25	0.489	0.361	0.361	
2/15/2015	06:35	5.26	11:35	7.96	7.01	06:35	0.47	11:35	0.89	0.74	06:35	0.162	11:35	0.551	0.402	0.402	
2/16/2015	06:10	5.67	20:45	8.30	7.17	06:10	0.54	20:45	0.93	0.77	06:10	0.207	20:45	0.615	0.424	0.424	
2/17/2015	05:40	4.81	22:05	7.37	6.33	05:40	0.40	10:40	0.97	0.68	05:40	0.119	10:40	0.497	0.316	0.316	
2/18/2015	05:50	4.80	11:40	9.73	6.56	05:50	0.40	11:40	1.11	0.68	05:50	0.118	11:40	0.912	0.339	0.339	
2/19/2015	05:55	4.86	22:10	7.24	6.35	05:55	0.41	19:45	0.89	0.68	05:55	0.124	19:50	0.474	0.317	0.317	
2/20/2015	05:40	4.89	21:45	7.25	6.36	05:40	0.41	18:40	0.97	0.70	05:40	0.126	19:30	0.492	0.329	0.329	
2/21/2015	05:55	4.95	14:20	7.38	6.48	08:05	0.49	19:30	0.97	0.71	05:55	0.156	19:30	0.518	0.340	0.340	
2/22/2015	06:15	4.79	11:50	7.25	6.37	04:35	0.40	21:35	0.99	0.73	04:35	0.127	21:50	0.527	0.342	0.342	
2/23/2015	05:45	4.77	21:40	7.53	6.27	06:40	0.37	23:05	0.85	0.63	06:10	0.112	23:05	0.450	0.285	0.285	
2/24/2015	06:15	4.81	22:10	7.12	6.27	02:50	0.37	08:25	0.84	0.65	02:50	0.132	08:25	0.443	0.296	0.296	
2/25/2015	05:50	5.06	21:00	7.57	6.44	06:55	0.35	09:35	0.90	0.62	06:55	0.120	09:35	0.483	0.292	0.292	
2/26/2015	06:10	4.82	21:10	7.55	6.42	06:10	0.40	21:10	0.83	0.66	06:10	0.120	21:10	0.479	0.311	0.311	
2/27/2015	06:20	4.86	20:55	7.34	6.52	06:20	0.40	20:55	0.80	0.67	06:20	0.123	20:55	0.443	0.326	0.326	
2/28/2015	06:20	5.11	15:05	7.61	6.74	06:20	0.45	15:05	0.84	0.70	06:20	0.147	15:05	0.489	0.360	0.360	
3/1/2015	06:35	5.20	12:15	7.90	6.92	06:35	0.46	12:15	0.88	0.73	06:35	0.156	12:15	0.540	0.387	0.387	
3/2/2015	06:20	5.43	21:25	8.01	6.88	06:20	0.50	21:25	0.89	0.73	06:20	0.180	21:25	0.560	0.378	0.378	
3/3/2015	06:05	5.51	09:30	7.69	6.91	06:05	0.52	09:30	0.85	0.73	06:05	0.189	09:30	0.503	0.381	0.381	
3/4/2015	05:55	4.85	22:20	7.69	6.51	05:55	0.40	22:20	0.85	0.67	05:55	0.123	22:20	0.502	0.326	0.326	
3/5/2015	05:40	4.90	22:15	7.96	6.81	05:40	0.41	20:45	0.94	0.68	05:40	0.127	20:45	0.577	0.352	0.352	
3/6/2015	06:15	5.55	23:05	8.04	7.06	06:10	0.43	08:30	0.96	0.71	06:15	0.160	08:30	0.541	0.383	0.383	
3/7/2015	06:35	5.53	13:20	8.14	7.27	06:20	0.41	13:10	0.93	0.72	06:20	0.152	13:10	0.589	0.407	0.407	
3/8/2015	05:25	5.65	14:30	8.15	7.29	06:25	0.41	11:15	0.93	0.74	06:25	0.156	11:15	0.591	0.419	0.419	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			10.719
Avg	6.67	0.69	0.346

Site Commentary

Site Information

CAL24	
Pipe Dimensions	21.00" x 21.13"
Silt Level	0.00"

Overview

Site CAL24 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.49	1.24	0.314
Minimum	3.71	0.66	0.126
Maximum	5.68	1.95	0.653
Time of Minimum	2/9/2015 2:20 AM	3/1/2015 4:10 AM	3/1/2015 5:25 AM
Time of Maximum	3/4/2015 1:45 PM	3/6/2015 2:10 PM	3/6/2015 2:10 PM

Data Quality

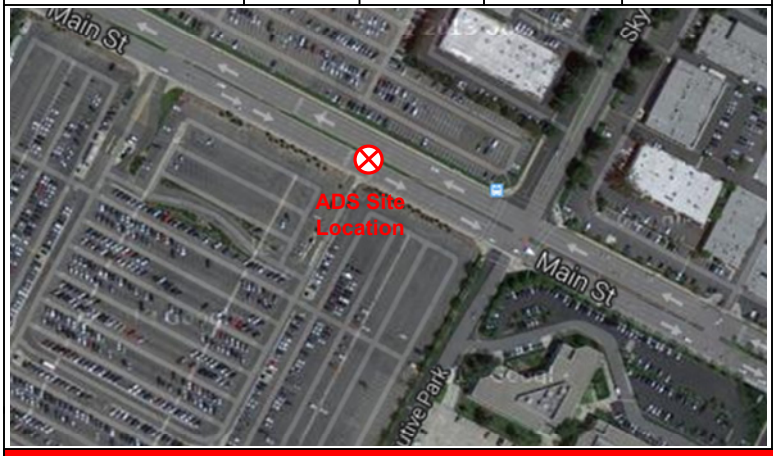
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

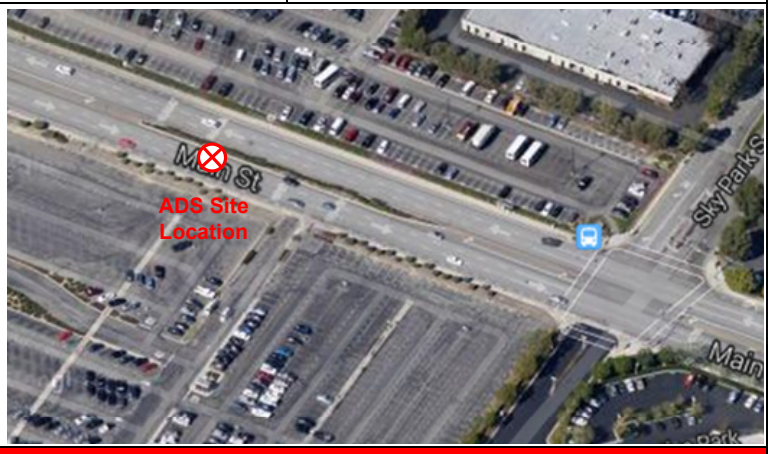
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL24	**Install Date:** 1/15/15	**Monitor Type**	Peak Doppler
Address/Location: Main St.& Executive Park		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH007E011
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	21.00 "
		Pipe Width:	21.13 "





Investigation Information:

Date/Time of Investigation:	1/15/15@ 1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	5.13 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.98 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	12'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [x]	Industrial [ ]	Trunk [ ]

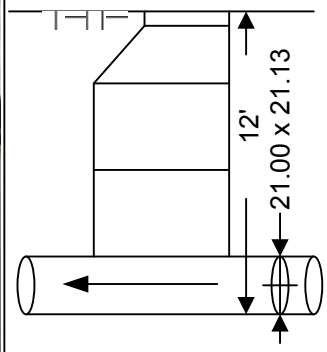
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

Other Information:

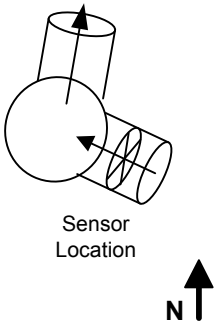




Cross Section



Plan



Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[x]	[ ]	
WWTP	[ ]	[x]	[ ]	
Other	[ ]	[x]	[ ]	

Additional Site Information / Comments:

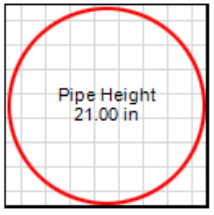
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

CAL24

Flow Monitor

CAL24

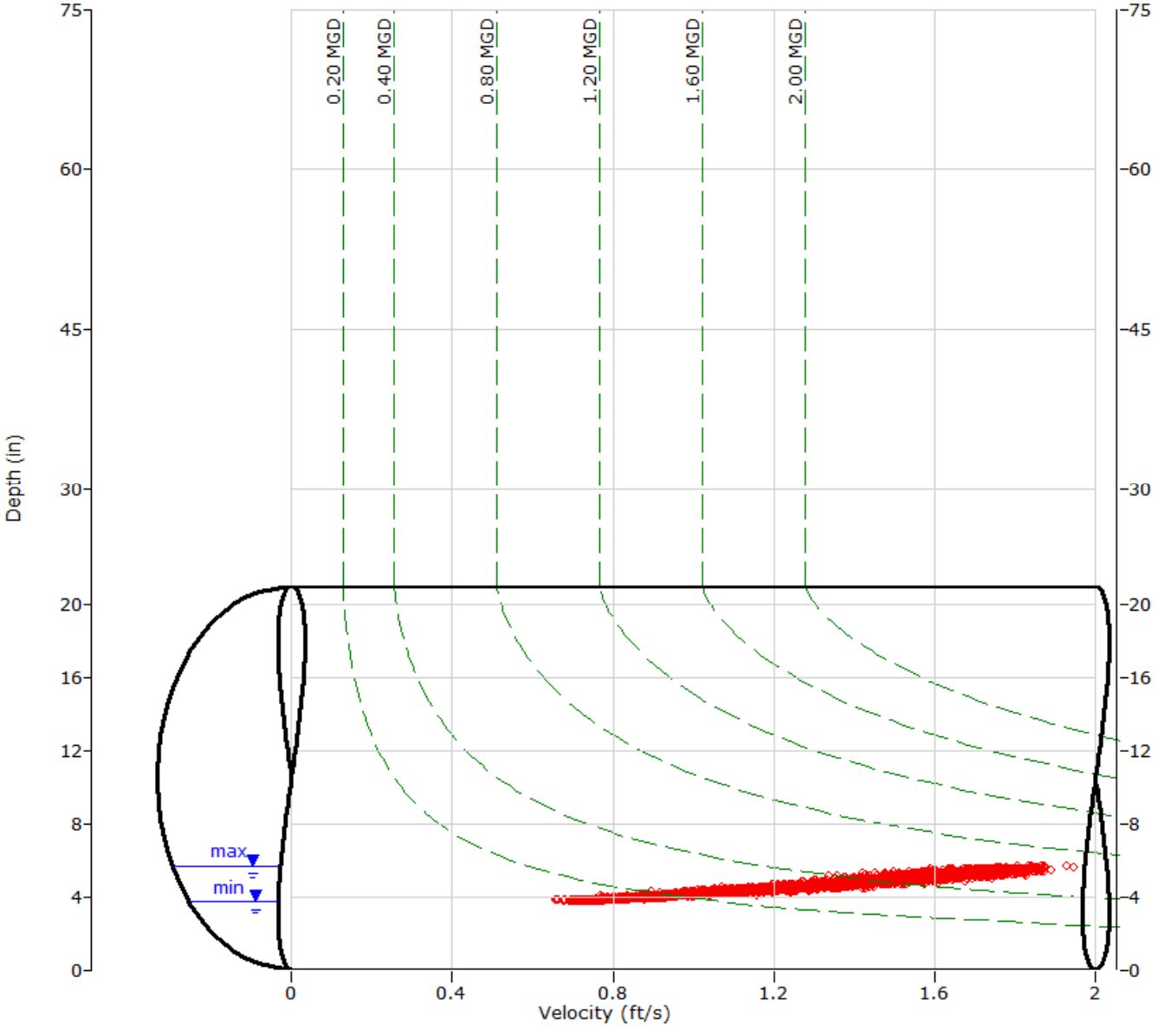


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



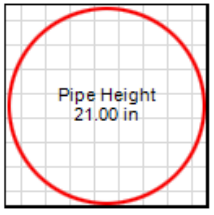
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL24

Flow Monitor

CAL24

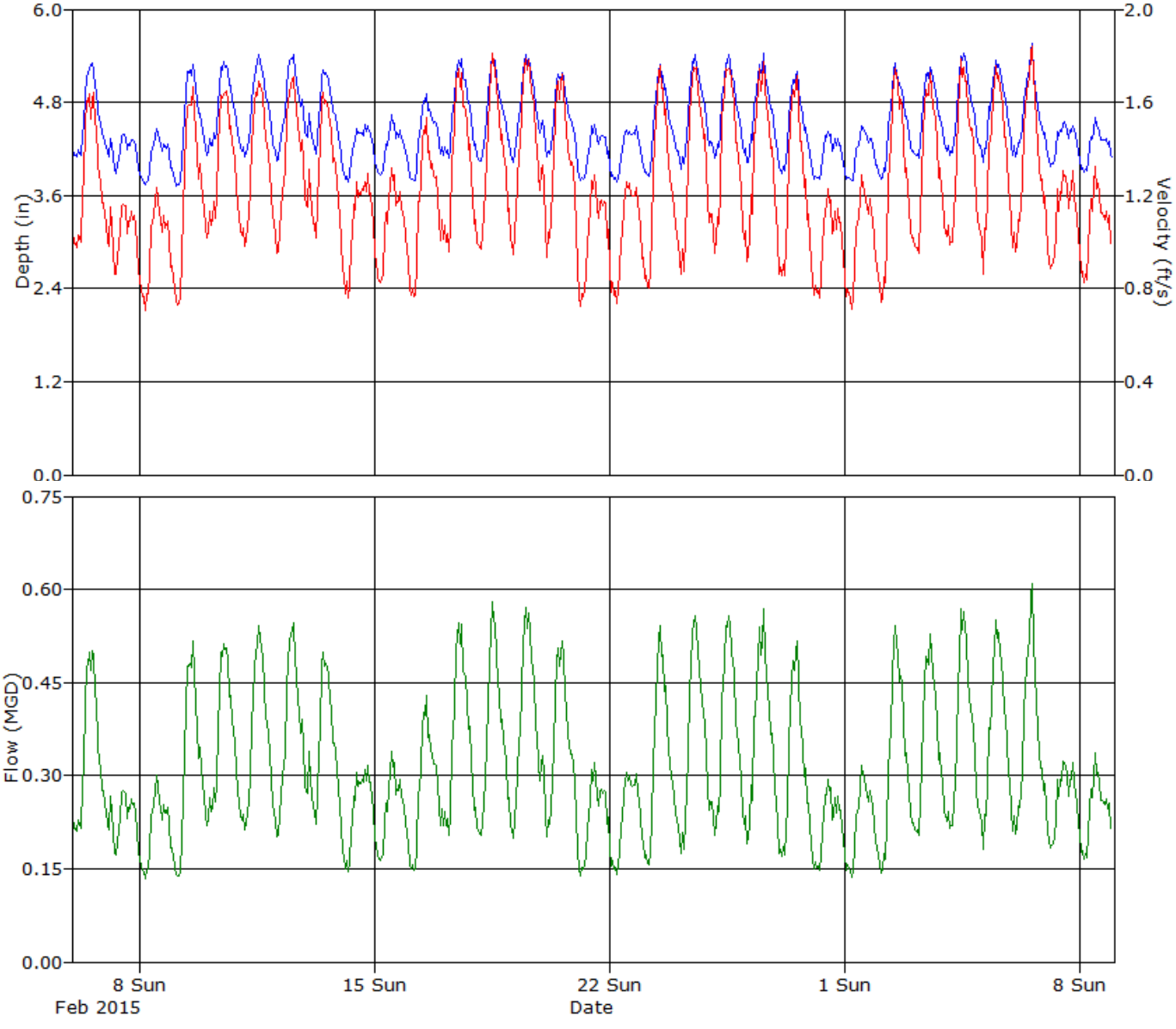


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL24, Pipe Height: 21 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:05	4.04	14:00	5.53	4.62	02:55	0.90	13:50	1.75	1.29	02:55	0.191	13:50	0.567	0.339	0.339	
2/7/2015	23:55	3.87	11:55	4.43	4.19	07:15	0.81	14:35	1.25	1.05	07:20	0.160	14:35	0.296	0.234	0.234	
2/8/2015	04:45	3.72	11:55	4.49	4.09	04:35	0.69	11:45	1.27	0.98	04:35	0.130	11:55	0.311	0.214	0.214	
2/9/2015	02:20	3.71	14:35	5.44	4.52	01:50	0.72	14:40	1.76	1.22	01:50	0.135	14:40	0.564	0.315	0.315	
2/10/2015	01:10	4.06	14:05	5.48	4.72	01:15	0.96	14:05	1.76	1.34	01:15	0.204	14:05	0.570	0.361	0.361	
2/11/2015	03:50	4.04	13:50	5.59	4.72	03:55	0.93	13:40	1.76	1.35	03:55	0.197	13:50	0.590	0.365	0.365	
2/12/2015	02:55	3.99	14:55	5.53	4.73	03:20	0.88	14:30	1.75	1.36	03:20	0.184	14:55	0.568	0.367	0.367	
2/13/2015	06:30	4.05	10:50	5.38	4.67	06:25	0.95	10:50	1.75	1.34	06:25	0.201	10:50	0.553	0.352	0.352	
2/14/2015	05:25	3.76	17:40	4.55	4.22	05:20	0.70	19:35	1.38	1.08	05:20	0.133	19:35	0.341	0.246	0.246	
2/15/2015	03:55	3.86	12:20	4.70	4.22	03:45	0.79	14:15	1.41	1.07	03:45	0.156	12:10	0.363	0.243	0.243	
2/16/2015	05:10	3.76	13:35	4.98	4.36	04:55	0.73	13:35	1.65	1.16	04:55	0.138	13:35	0.467	0.280	0.280	
2/17/2015	05:40	4.04	14:00	5.54	4.70	05:55	0.91	12:30	1.81	1.36	05:55	0.195	12:30	0.592	0.365	0.365	
2/18/2015	03:50	3.96	12:10	5.51	4.67	04:00	0.92	12:30	1.87	1.37	04:00	0.191	12:00	0.605	0.364	0.364	
2/19/2015	03:30	3.99	12:20	5.49	4.73	03:25	0.92	14:45	1.89	1.41	03:25	0.191	14:45	0.610	0.383	0.383	
2/20/2015	03:55	4.07	15:00	5.32	4.65	03:35	0.87	14:55	1.81	1.37	03:35	0.187	15:00	0.556	0.360	0.360	
2/21/2015	03:40	3.78	13:10	4.66	4.17	03:35	0.68	13:10	1.48	1.04	03:35	0.130	13:10	0.382	0.233	0.233	
2/22/2015	05:40	3.76	19:20	4.55	4.17	05:40	0.71	14:50	1.39	1.04	05:40	0.136	14:50	0.340	0.233	0.233	
2/23/2015	04:20	3.82	12:20	5.36	4.53	04:15	0.77	12:10	1.83	1.28	04:15	0.149	12:10	0.573	0.330	0.330	
2/24/2015	03:25	3.87	13:35	5.52	4.66	05:35	0.80	12:15	1.83	1.34	03:15	0.161	13:35	0.584	0.358	0.358	
2/25/2015	03:55	4.06	13:40	5.51	4.70	03:50	0.94	14:10	1.85	1.38	03:50	0.199	14:10	0.598	0.371	0.371	
2/26/2015	02:40	3.97	14:35	5.52	4.70	02:25	0.85	14:40	1.86	1.38	02:25	0.176	14:40	0.609	0.370	0.370	
2/27/2015	03:15	3.88	14:20	5.26	4.49	05:00	0.82	14:20	1.83	1.26	05:00	0.166	14:20	0.560	0.319	0.319	
2/28/2015	05:05	3.79	12:30	4.47	4.13	05:05	0.71	12:20	1.28	1.00	05:05	0.136	12:20	0.307	0.219	0.219	
3/1/2015	06:20	3.76	12:25	4.54	4.14	04:10	0.66	12:10	1.38	1.01	05:25	0.126	12:10	0.341	0.223	0.223	
3/2/2015	02:40	3.79	12:00	5.40	4.55	02:30	0.72	12:05	1.84	1.27	02:30	0.138	12:05	0.583	0.332	0.332	
3/3/2015	05:35	4.06	13:30	5.41	4.65	04:55	0.88	13:10	1.76	1.33	04:55	0.188	13:30	0.552	0.351	0.351	
3/4/2015	03:35	4.07	13:45	5.68	4.71	05:05	0.94	11:05	1.88	1.36	03:40	0.204	13:45	0.640	0.368	0.368	
3/5/2015	03:20	3.99	12:40	5.45	4.71	03:35	0.77	12:30	1.87	1.37	03:20	0.160	12:30	0.600	0.367	0.367	
3/6/2015	02:50	4.04	14:20	5.66	4.68	02:50	0.93	14:10	1.95	1.37	02:50	0.196	14:10	0.653	0.366	0.366	
3/7/2015	03:25	3.92	13:20	4.59	4.30	03:20	0.82	12:55	1.45	1.12	03:25	0.165	12:55	0.360	0.261	0.261	
3/8/2015	03:45	3.88	11:15	4.71	4.23	03:25	0.78	11:20	1.42	1.07	03:25	0.157	11:20	0.372	0.243	0.243	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			9.732
Avg	4.49	1.24	0.314

Site Commentary

Site Information

CAL25	
Pipe Dimensions	24.13" x 24.25"
Silt Level	0.00"

Overview

Site CAL25 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. In addition, flows were cyclical with evidence of upstream pump station.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.37	5.28	0.984
Minimum	1.72	2.47	0.206
Maximum	5.12	7.17	2.291
Time of Minimum	2/7/2015 5:35 AM	2/13/2015 3:35 AM	3/4/2015 4:00 AM
Time of Maximum	3/2/2015 7:50 AM	3/2/2015 7:50 AM	3/2/2015 7:50 AM

Data Quality

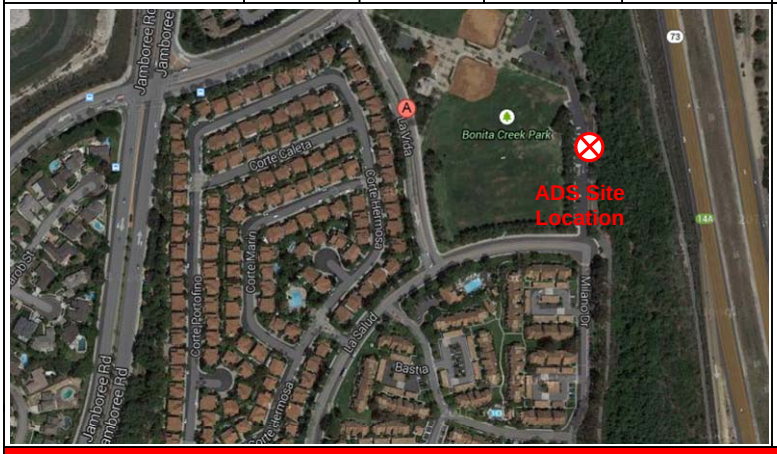
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

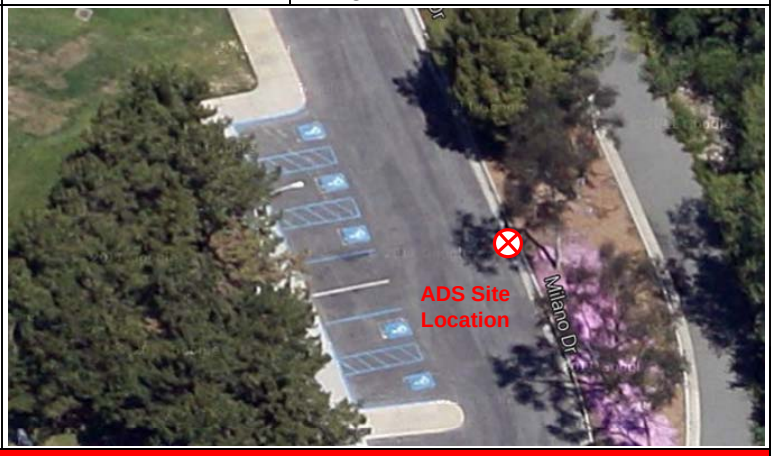
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Newport Beach	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL25	**Install Date:** 2/3/15	**Monitor Type**	Peak Doppler
Address/Location: 3010 La Vida		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH057N247
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	24.13 "
		Pipe Width:	24.25 "





Investigation Information:

Date/Time of Investigation:	2/3/15 @ 0930
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	4.38 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.20 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

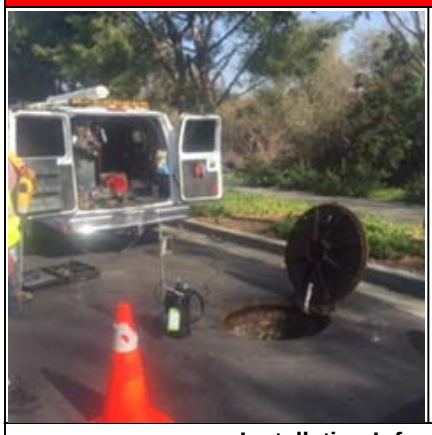
Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

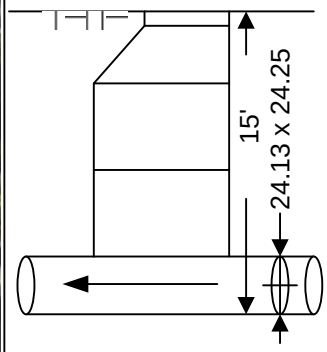
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

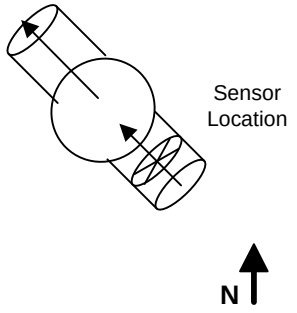
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

CAL25

Flow Monitor

CAL25

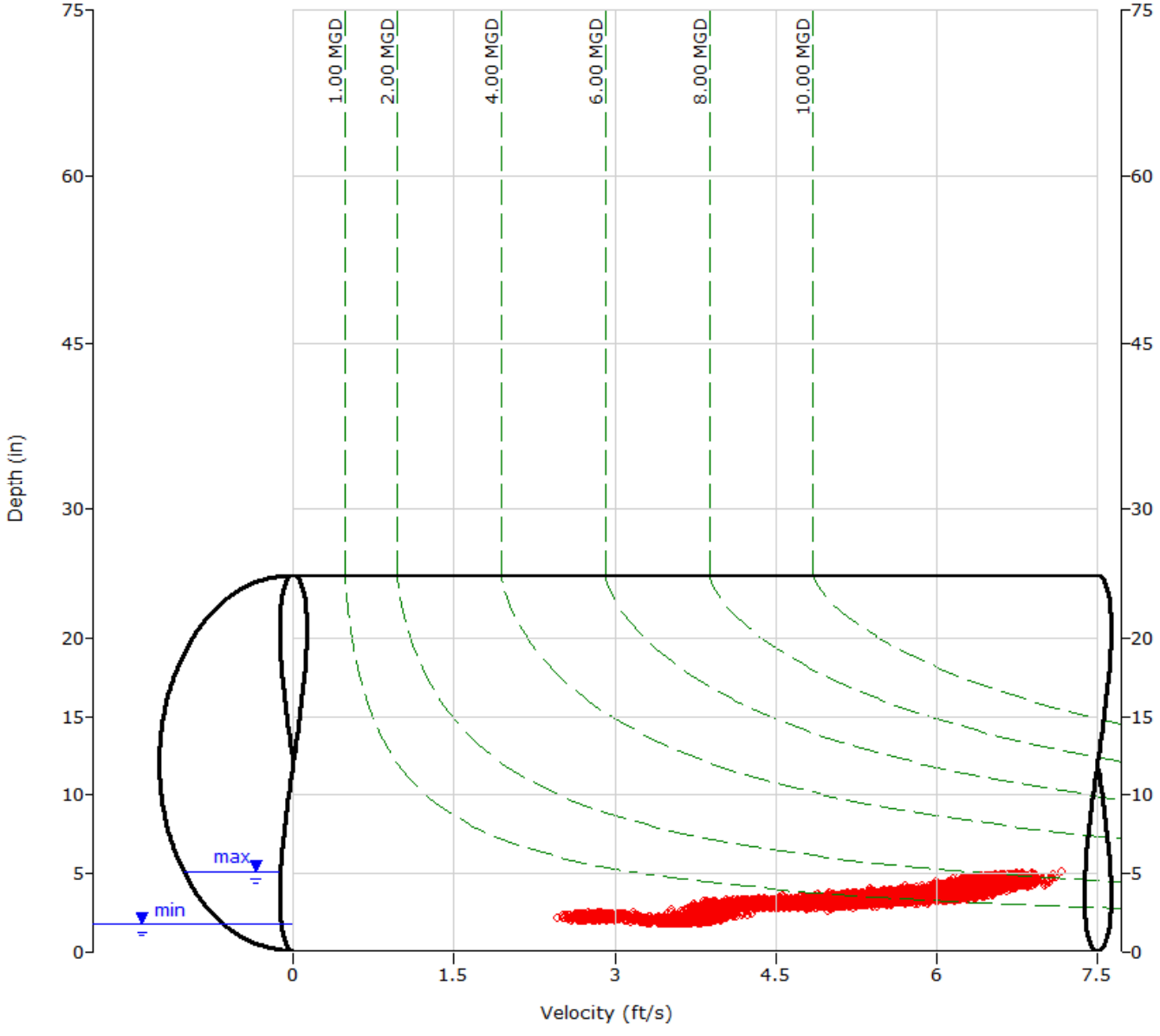
Pipe Height
24.13 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



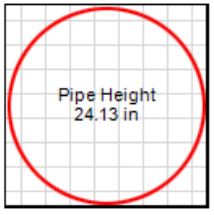
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL25

Flow Monitor

CAL25

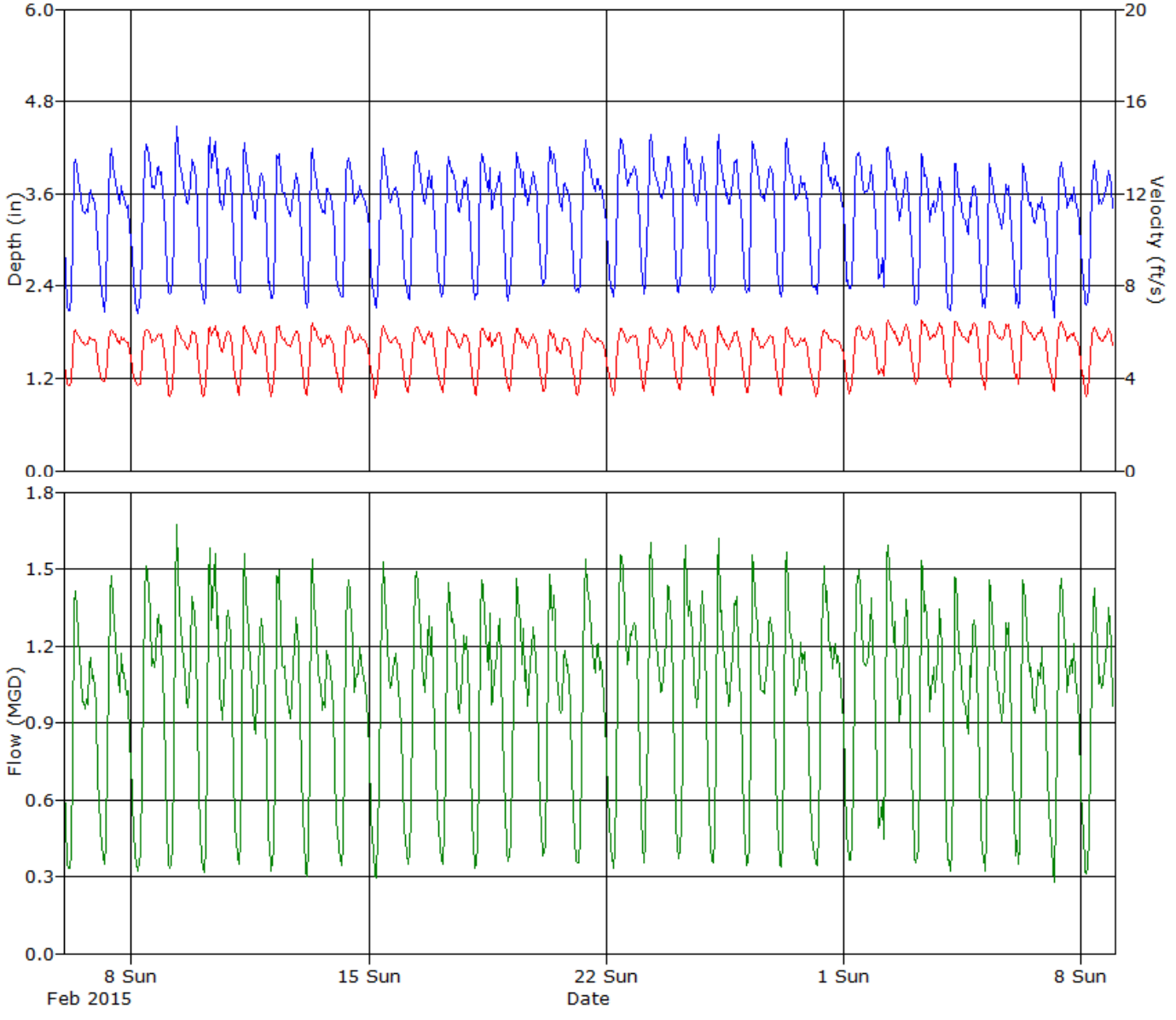


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL25, Pipe Height: 24.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:45	1.80	07:40	4.67	3.25	04:55	3.12	07:25	6.67	5.24	03:50	0.233	07:40	1.852	0.928	0.928	
2/7/2015	05:35	1.72	10:50	4.70	3.28	04:35	3.33	11:05	6.83	5.22	04:35	0.226	11:05	1.894	0.933	0.933	
2/8/2015	04:10	1.75	10:55	4.95	3.40	05:10	2.82	10:55	6.74	5.24	05:10	0.212	10:55	2.051	0.996	0.996	
2/9/2015	02:00	2.05	07:45	4.92	3.47	02:45	2.52	20:25	6.65	5.18	04:05	0.239	07:45	1.981	1.016	1.016	
2/10/2015	04:50	1.96	07:45	4.87	3.45	02:30	2.70	21:10	6.79	5.23	03:40	0.233	07:45	2.012	1.018	1.018	
2/11/2015	05:25	1.98	07:30	4.78	3.38	03:20	2.66	07:30	6.90	5.22	04:30	0.248	07:30	2.000	0.978	0.978	
2/12/2015	01:50	1.97	08:10	4.74	3.35	03:50	2.61	09:15	6.85	5.26	03:50	0.232	08:10	1.939	0.976	0.976	
2/13/2015	05:45	1.91	07:35	4.78	3.32	03:35	2.47	08:05	6.85	5.29	04:40	0.213	07:35	1.972	0.964	0.964	
2/14/2015	02:45	1.89	09:45	4.68	3.29	05:10	2.60	10:35	6.83	5.23	05:15	0.227	10:35	1.889	0.948	0.948	
2/15/2015	06:45	1.89	10:35	4.80	3.29	04:20	2.56	10:20	6.92	5.16	04:20	0.221	10:20	1.966	0.933	0.933	
2/16/2015	05:40	1.92	09:20	4.81	3.37	03:40	2.54	09:20	6.82	5.26	03:40	0.222	09:20	1.992	0.988	0.988	
2/17/2015	03:40	1.94	08:25	4.69	3.38	02:55	2.75	10:20	6.74	5.28	04:45	0.247	10:20	1.890	0.985	0.985	
2/18/2015	05:40	1.91	09:30	4.72	3.39	04:05	2.60	09:30	6.77	5.27	04:10	0.230	09:30	1.923	0.993	0.993	
2/19/2015	03:50	1.98	10:25	4.71	3.42	04:40	2.66	09:20	6.80	5.25	04:55	0.264	08:15	1.892	0.992	0.992	
2/20/2015	02:00	2.16	08:50	4.89	3.44	04:10	2.56	08:50	6.69	5.12	04:10	0.253	08:50	2.004	0.976	0.976	
2/21/2015	06:25	2.00	10:20	4.88	3.38	03:55	2.64	11:25	6.72	5.12	05:15	0.248	10:20	1.978	0.963	0.963	
2/22/2015	05:30	2.02	12:10	4.91	3.48	05:25	2.71	11:35	6.84	5.18	05:25	0.224	12:10	2.049	1.018	1.018	
2/23/2015	04:35	2.06	08:15	4.95	3.55	03:20	2.68	08:15	6.92	5.32	03:35	0.258	08:15	2.106	1.063	1.063	
2/24/2015	02:25	2.03	08:05	4.82	3.50	04:00	2.66	08:05	6.85	5.28	04:00	0.261	08:05	2.009	1.037	1.037	
2/25/2015	05:20	1.98	07:45	4.96	3.47	04:05	2.62	07:45	6.89	5.24	04:25	0.250	07:45	2.102	1.018	1.018	
2/26/2015	02:40	2.01	07:50	5.00	3.48	04:35	2.75	07:50	6.75	5.20	02:50	0.251	07:50	2.088	1.013	1.013	
2/27/2015	05:40	2.02	07:45	4.90	3.44	03:30	2.65	07:45	6.91	5.18	04:40	0.242	07:45	2.071	0.993	0.993	
2/28/2015	03:00	2.05	10:25	4.81	3.44	04:00	2.59	12:55	6.64	5.13	05:10	0.243	10:25	1.914	0.986	0.986	
3/1/2015	05:35	2.08	10:40	4.72	3.42	04:35	2.63	20:20	6.98	5.28	05:00	0.247	10:40	1.941	1.005	1.005	
3/2/2015	05:15	1.94	07:50	5.12	3.40	02:30	3.71	07:50	7.17	5.51	02:35	0.295	07:50	2.291	1.027	1.027	
3/3/2015	03:05	1.83	08:05	4.78	3.28	03:55	3.02	07:15	6.94	5.56	03:05	0.255	08:05	1.981	0.996	0.996	
3/4/2015	05:10	1.76	07:50	4.96	3.19	04:05	2.57	07:35	7.12	5.54	04:00	0.206	07:50	2.077	0.953	0.953	
3/5/2015	02:55	1.75	07:50	4.74	3.20	04:30	2.73	09:30	7.03	5.53	04:30	0.219	07:50	1.948	0.955	0.955	
3/6/2015	03:30	1.78	07:50	4.77	3.20	04:35	2.61	08:25	7.02	5.53	04:35	0.214	07:50	1.978	0.950	0.950	
3/7/2015	03:35	1.79	09:25	4.58	3.24	05:35	2.83	09:25	6.92	5.39	05:30	0.226	09:25	1.886	0.948	0.948	
3/8/2015	02:40	1.86	21:45	4.55	3.29	03:30	2.52	10:35	6.96	5.24	04:30	0.208	10:35	1.867	0.950	0.950	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			30.498
Avg	3.37	5.28	0.984

Site Commentary

Site Information

CAL26	
Pipe Dimensions	11.88" x 11.88"
Silt Level	0.00"

Overview

Site CAL26 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.30	1.18	0.087
Minimum	0.95	0.37	0.007
Maximum	5.43	2.93	0.626
Time of Minimum	2/27/2015 5:05 AM	2/28/2015 4:35 AM	2/28/2015 4:35 AM
Time of Maximum	2/25/2015 5:15 PM	2/18/2015 5:15 PM	3/4/2015 5:15 PM

Data Quality

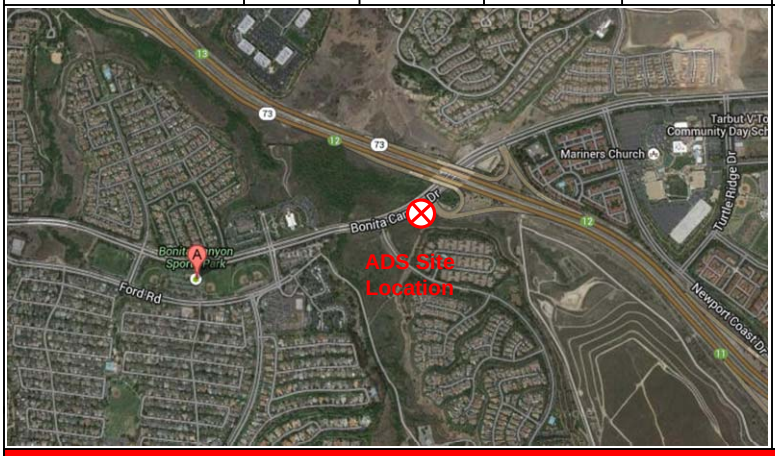
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Newport Beach	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL26	**Install Date:** 2/2/15	**Monitor Type**	Peak Doppler
Address/Location: Bonita Canyon Rd & 73 overpass (Located south of 73 overpass on Bonita Canyon Rd)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH091S019
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	11.88 "
		Pipe Width:	11.88 "





Investigation Information:

Date/Time of Investigation:	2/2/15 @ 1300
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.23 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

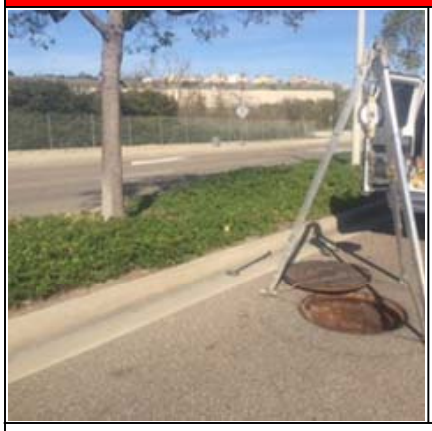
Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

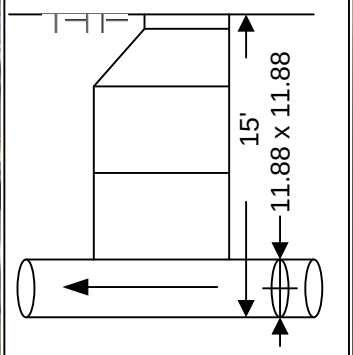
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

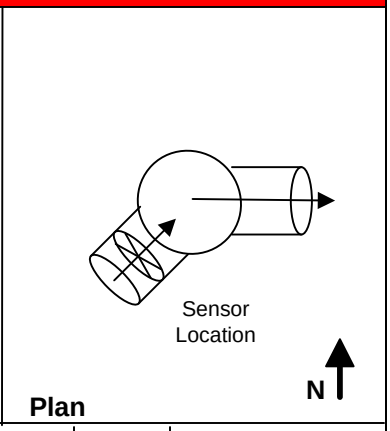
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

CAL26

Flow Monitor

CAL26

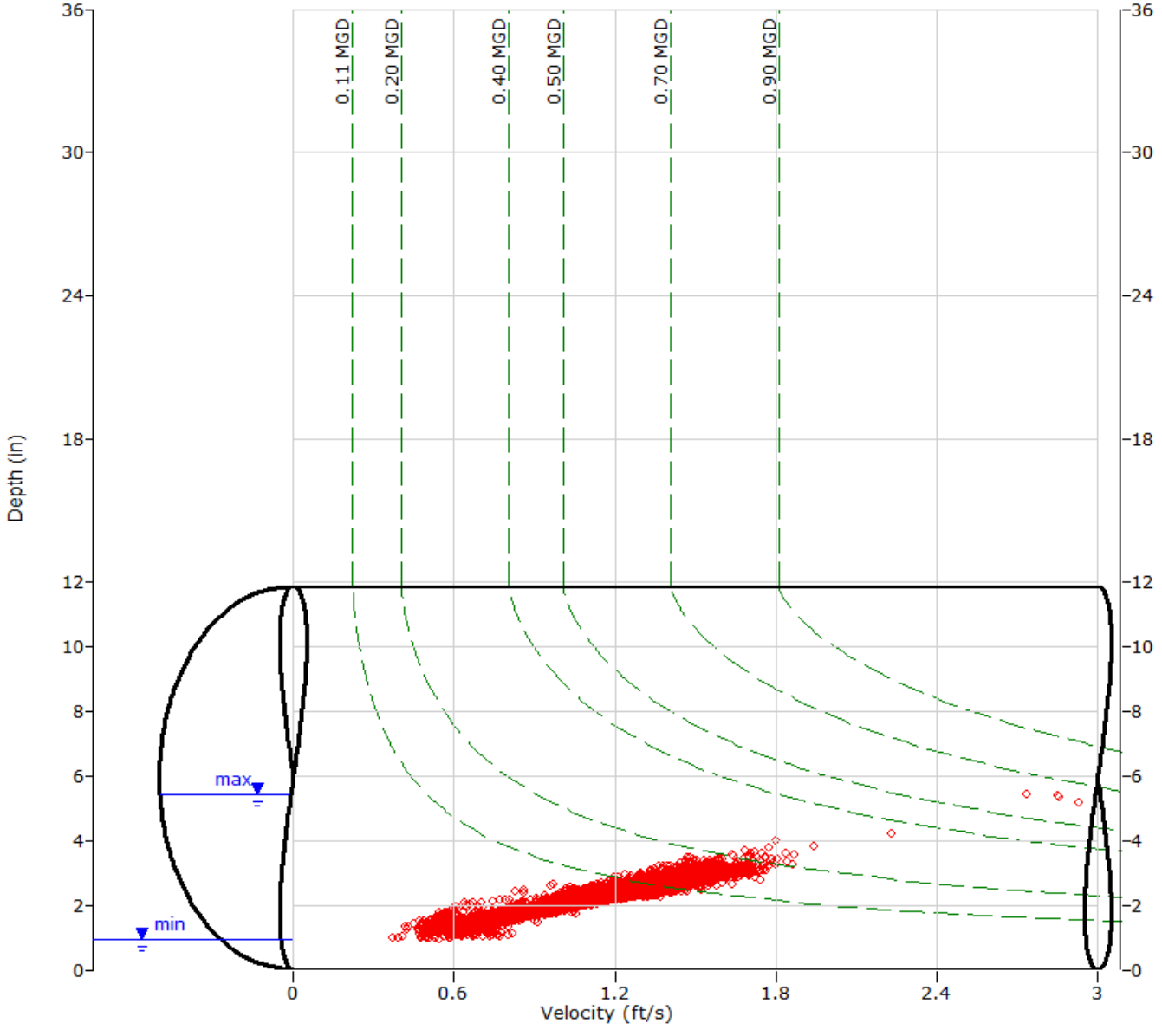
Pipe Height
11.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



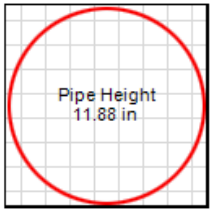
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL26

Flow Monitor

CAL26

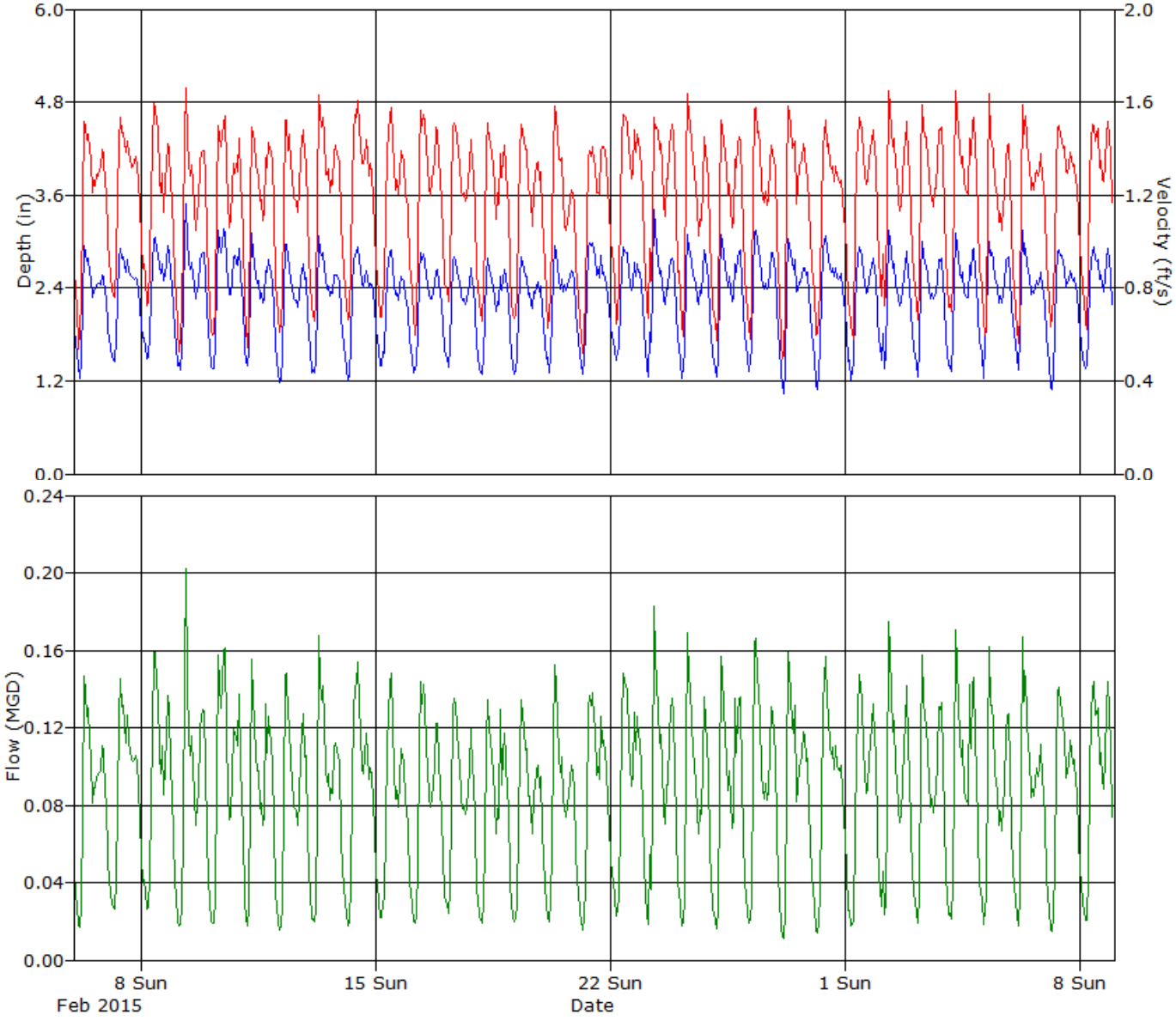


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL26, Pipe Height: 11.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:55	1.11	07:15	3.13	2.27	04:05	0.42	07:45	1.66	1.18	04:10	0.012	08:30	0.170	0.085	0.085	
2/7/2015	05:15	1.30	11:05	3.06	2.31	05:15	0.70	09:25	1.62	1.22	05:15	0.021	09:25	0.160	0.089	0.089	
2/8/2015	05:20	1.39	09:20	3.13	2.39	04:45	0.69	11:00	1.70	1.19	05:20	0.023	11:00	0.175	0.092	0.092	
2/9/2015	04:20	1.18	08:10	3.77	2.39	03:35	0.47	08:10	1.77	1.13	04:20	0.014	08:10	0.241	0.089	0.089	
2/10/2015	03:10	1.31	07:15	3.39	2.46	04:55	0.56	12:10	1.62	1.17	04:55	0.017	07:15	0.184	0.096	0.096	
2/11/2015	04:15	1.29	17:15	5.32	2.34	04:30	0.50	17:15	2.86	1.17	04:25	0.016	17:15	0.616	0.088	0.088	
2/12/2015	03:35	1.12	08:40	3.16	2.22	03:40	0.57	08:40	1.68	1.16	03:35	0.014	08:40	0.178	0.082	0.082	
2/13/2015	03:35	1.23	07:05	3.44	2.27	04:20	0.55	07:10	1.84	1.21	04:15	0.016	07:05	0.215	0.088	0.088	
2/14/2015	04:25	1.14	11:25	3.07	2.25	05:35	0.63	10:30	1.74	1.21	04:25	0.016	10:30	0.178	0.087	0.087	
2/15/2015	03:25	1.26	11:20	3.24	2.20	03:25	0.62	11:25	1.70	1.16	03:25	0.017	11:20	0.186	0.080	0.080	
2/16/2015	04:00	1.15	07:50	3.47	2.23	05:00	0.54	07:50	1.76	1.20	04:15	0.015	07:50	0.214	0.085	0.085	
2/17/2015	04:10	1.32	07:45	2.99	2.23	01:40	0.70	08:25	1.65	1.20	04:35	0.022	08:25	0.156	0.082	0.082	
2/18/2015	04:20	1.12	17:15	5.17	2.18	04:00	0.58	17:15	2.93	1.16	04:20	0.014	17:15	0.609	0.080	0.080	
2/19/2015	04:35	1.18	08:35	2.99	2.18	04:40	0.58	07:50	1.72	1.15	04:35	0.016	07:50	0.159	0.078	0.078	
2/20/2015	04:45	1.22	20:25	3.19	2.27	03:35	0.55	09:30	1.68	1.13	04:45	0.016	09:30	0.170	0.080	0.080	
2/21/2015	04:35	1.23	08:25	3.17	2.34	05:05	0.47	20:25	1.55	1.12	04:35	0.014	11:30	0.159	0.085	0.085	
2/22/2015	04:55	1.29	12:20	3.46	2.32	04:35	0.55	12:20	1.70	1.23	04:55	0.017	12:20	0.205	0.091	0.091	
2/23/2015	04:10	1.15	07:10	3.97	2.37	04:10	0.54	07:10	1.80	1.22	04:10	0.013	07:10	0.262	0.093	0.093	
2/24/2015	03:05	1.12	18:55	3.29	2.31	04:25	0.53	07:30	1.76	1.16	03:05	0.014	07:30	0.184	0.087	0.087	
2/25/2015	04:05	1.17	17:15	5.43	2.33	04:15	0.47	17:15	2.73	1.15	04:20	0.013	17:15	0.605	0.088	0.088	
2/26/2015	03:55	1.22	08:10	3.47	2.39	04:35	0.51	08:10	1.76	1.17	03:55	0.016	08:10	0.212	0.092	0.092	
2/27/2015	05:05	0.95	12:10	4.20	2.28	03:05	0.47	12:10	2.23	1.17	04:50	0.009	12:10	0.351	0.088	0.088	
2/28/2015	04:35	0.97	10:15	3.47	2.30	04:35	0.37	10:15	1.73	1.15	04:35	0.007	10:15	0.209	0.086	0.086	
3/1/2015	04:50	1.14	10:40	3.14	2.27	06:45	0.51	10:35	1.71	1.18	06:45	0.015	10:35	0.178	0.086	0.086	
3/2/2015	04:40	1.17	08:30	3.81	2.31	01:50	0.61	08:30	1.94	1.22	04:40	0.016	08:30	0.267	0.090	0.090	
3/3/2015	04:15	1.22	07:20	3.19	2.29	04:15	0.56	07:20	1.70	1.21	04:15	0.015	07:20	0.183	0.088	0.088	
3/4/2015	04:10	1.27	17:15	5.39	2.32	04:40	0.67	17:15	2.85	1.23	04:10	0.019	17:15	0.626	0.092	0.092	
3/5/2015	03:50	1.13	07:15	3.44	2.33	04:50	0.57	07:10	1.76	1.14	03:50	0.015	07:15	0.211	0.085	0.085	
3/6/2015	04:40	1.26	07:25	3.37	2.33	04:40	0.54	07:25	1.72	1.17	04:40	0.015	07:25	0.200	0.087	0.087	
3/7/2015	03:55	1.01	09:25	3.18	2.25	04:45	0.58	09:25	1.75	1.19	03:30	0.013	09:25	0.188	0.085	0.085	
3/8/2015	05:50	1.29	19:40	3.24	2.33	04:55	0.53	19:40	1.72	1.21	04:55	0.017	19:40	0.189	0.091	0.091	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			2.696
Avg	2.30	1.18	0.087

Site Commentary

Site Information

CAL27	
Pipe Dimensions	15.13" x 15.00"
Silt Level	0.00"

Overview

Site CAL27 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.32	1.31	0.186
Minimum	1.54	0.37	0.029
Maximum	6.09	2.25	0.677
Time of Minimum	2/21/2015 5:00 AM	2/7/2015 4:50 AM	2/15/2015 4:45 AM
Time of Maximum	2/18/2015 1:55 PM	2/18/2015 1:55 PM	2/18/2015 1:55 PM

Data Quality

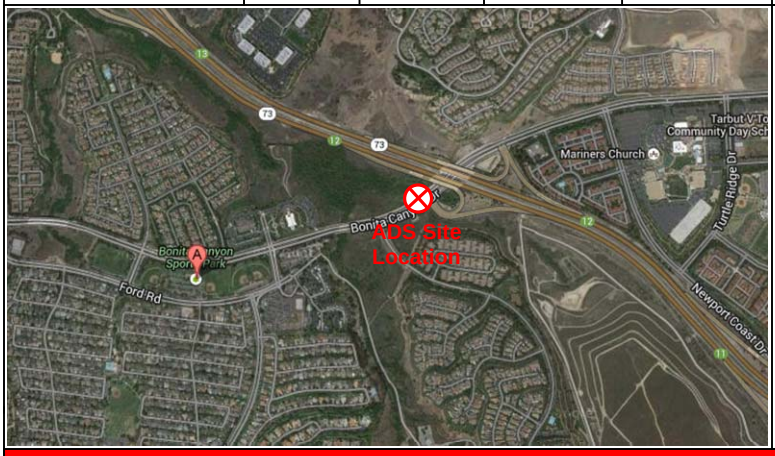
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

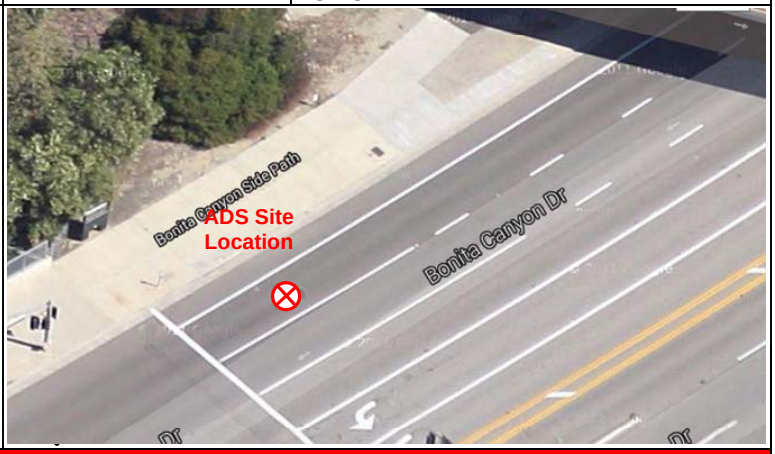
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Newport Beach	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL27	**Install Date:** 2/2/15	**Monitor Type**	Peak Doppler
Address/Location: Bonita Canyon Rd & 73 overpass (Located south of 73 overpass on Bonita Canyon Rd)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH091E007
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	15.13 "
		Pipe Width:	15.13 "





Investigation Information:

Date/Time of Investigation:	2/2/15 @ 1430
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.75 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.49 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	5'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

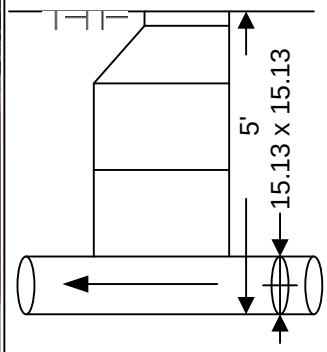
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

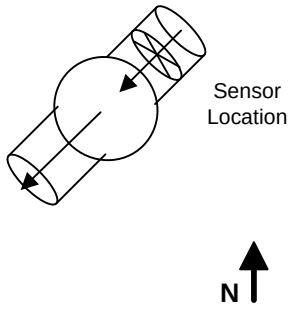
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

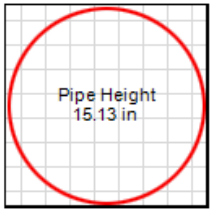
ub

SCATTERGRAPH REPORT

CAL27

Flow Monitor

CAL27

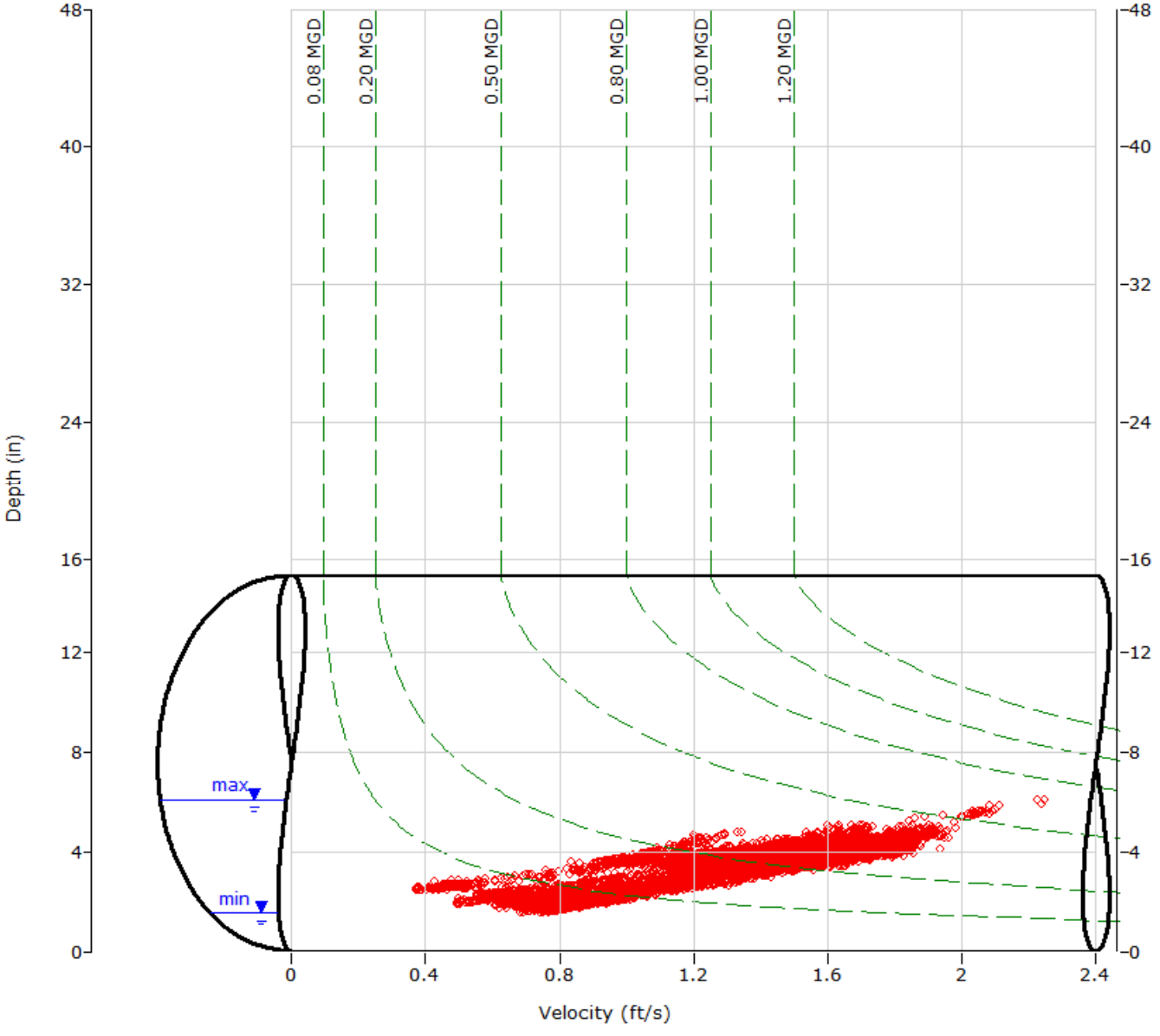


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



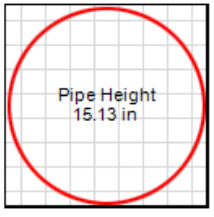
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL27

Flow Monitor

CAL27

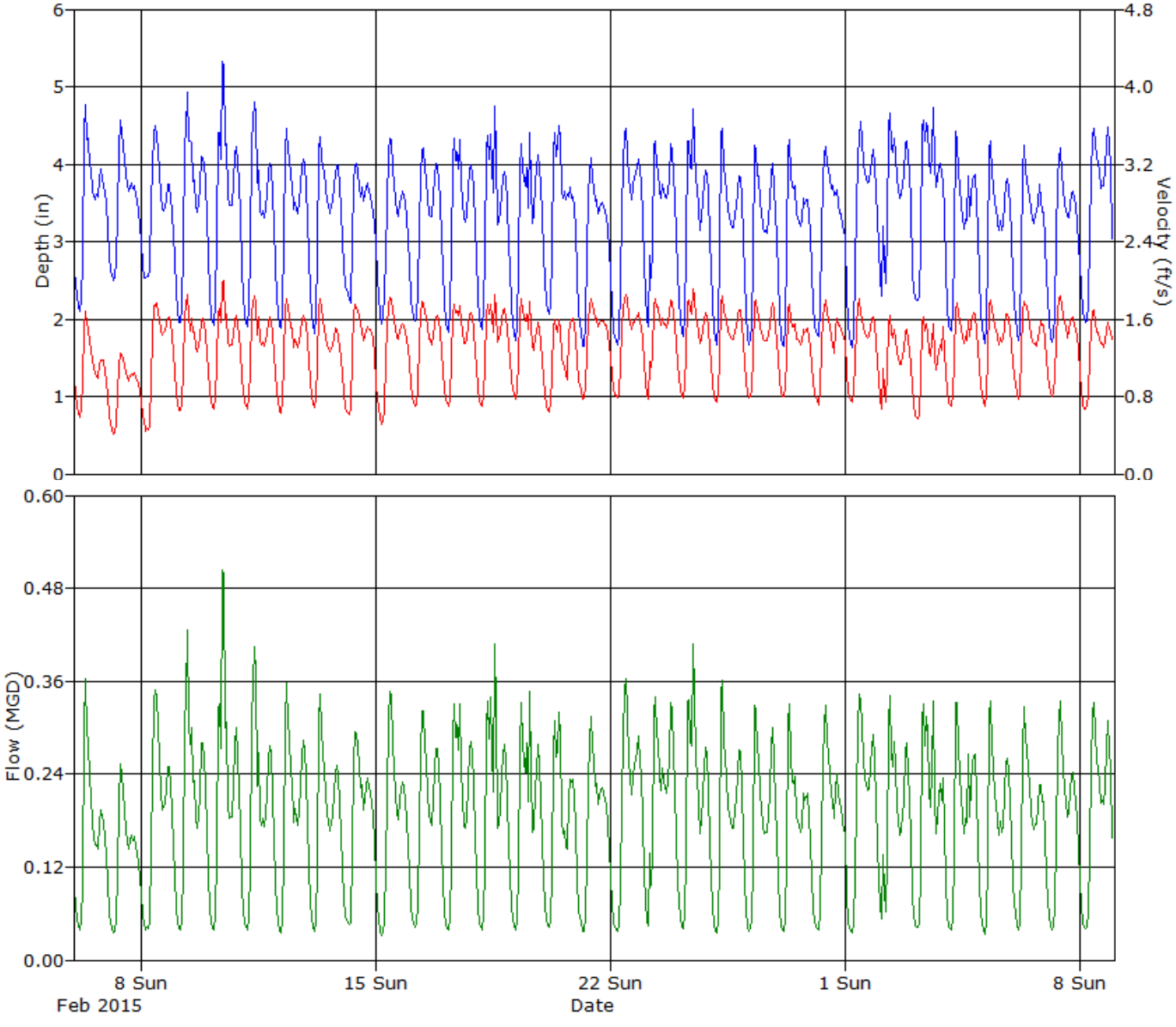


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL27, Pipe Height: 15.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:20	2.08	07:55	5.01	3.45	04:15	0.57	07:55	1.73	1.10	04:20	0.038	07:55	0.401	0.164	0.164	
2/7/2015	04:40	2.45	09:45	4.77	3.49	04:50	0.37	09:40	1.34	0.89	04:40	0.032	09:40	0.289	0.134	0.134	
2/8/2015	03:50	2.48	08:00	4.63	3.43	03:10	0.38	11:05	1.83	1.23	03:10	0.034	11:05	0.371	0.185	0.185	
2/9/2015	04:05	1.92	09:15	5.83	3.49	05:00	0.63	09:20	2.11	1.31	05:00	0.037	09:20	0.598	0.202	0.202	
2/10/2015	04:50	1.87	10:15	5.69	3.57	03:55	0.62	10:20	2.10	1.35	03:55	0.036	10:15	0.577	0.219	0.219	
2/11/2015	04:35	1.88	09:30	5.49	3.38	04:15	0.65	09:30	2.03	1.32	04:00	0.038	09:30	0.531	0.195	0.195	
2/12/2015	04:25	1.86	08:10	4.70	3.36	04:20	0.61	08:10	1.85	1.32	04:20	0.034	08:10	0.393	0.192	0.192	
2/13/2015	04:35	1.78	08:05	4.64	3.34	04:35	0.67	08:20	1.85	1.29	04:35	0.035	08:05	0.381	0.183	0.183	
2/14/2015	06:40	2.17	10:30	4.11	3.29	05:05	0.59	09:20	1.78	1.28	06:05	0.044	09:10	0.308	0.178	0.178	
2/15/2015	04:40	1.89	10:55	4.66	3.22	04:45	0.49	10:45	1.94	1.27	04:45	0.029	11:00	0.401	0.177	0.177	
2/16/2015	05:05	1.95	10:35	4.36	3.25	04:40	0.68	09:15	1.84	1.33	04:45	0.041	09:15	0.350	0.184	0.184	
2/17/2015	04:20	1.77	10:50	4.91	3.33	04:25	0.67	10:55	1.93	1.36	04:25	0.035	10:50	0.422	0.196	0.196	
2/18/2015	04:00	1.78	13:55	6.09	3.38	04:35	0.67	13:55	2.25	1.38	04:05	0.036	13:55	0.677	0.205	0.205	
2/19/2015	04:30	1.70	12:40	4.65	3.32	04:20	0.75	08:05	1.86	1.36	04:30	0.037	12:40	0.387	0.193	0.193	
2/20/2015	04:25	2.05	11:00	5.07	3.40	04:55	0.62	11:00	1.70	1.22	04:25	0.040	11:00	0.400	0.179	0.179	
2/21/2015	05:00	1.54	10:40	4.25	3.03	05:00	0.74	10:35	1.85	1.38	05:00	0.032	10:40	0.341	0.173	0.173	
2/22/2015	05:20	1.65	11:10	4.74	3.24	05:20	0.77	11:25	1.90	1.39	05:20	0.036	11:10	0.404	0.196	0.196	
2/23/2015	03:50	1.86	08:05	4.59	3.41	03:50	0.74	08:00	1.95	1.45	03:50	0.042	08:00	0.397	0.211	0.211	
2/24/2015	04:15	1.74	12:40	4.92	3.34	04:15	0.76	12:10	1.96	1.42	04:15	0.039	13:15	0.430	0.204	0.204	
2/25/2015	04:30	1.59	07:50	4.87	3.18	04:55	0.70	07:50	1.90	1.37	04:55	0.032	07:50	0.422	0.185	0.185	
2/26/2015	03:15	1.62	07:30	4.60	3.12	03:45	0.76	07:30	1.86	1.38	03:15	0.036	07:30	0.382	0.180	0.180	
2/27/2015	04:15	1.60	07:40	4.59	3.12	04:15	0.77	08:15	1.82	1.33	04:15	0.035	07:40	0.369	0.172	0.172	
2/28/2015	04:45	1.71	09:55	4.45	3.17	05:35	0.62	10:05	1.82	1.33	05:35	0.031	09:55	0.354	0.178	0.178	
3/1/2015	05:10	1.58	11:20	4.77	3.33	05:10	0.69	10:45	1.83	1.33	05:10	0.030	10:55	0.366	0.194	0.194	
3/2/2015	02:35	2.19	07:55	4.82	3.65	02:30	0.63	08:05	1.70	1.21	02:30	0.045	07:50	0.371	0.192	0.192	
3/3/2015	04:00	2.21	15:45	5.03	3.61	04:00	0.55	08:05	1.70	1.17	04:00	0.040	10:25	0.384	0.190	0.190	
3/4/2015	04:05	1.79	16:30	5.03	3.22	04:15	0.67	16:40	1.93	1.34	04:15	0.036	16:30	0.442	0.183	0.183	
3/5/2015	04:25	1.67	07:45	4.47	3.13	04:45	0.69	08:35	1.87	1.35	04:20	0.034	08:35	0.365	0.177	0.177	
3/6/2015	04:30	1.67	08:20	4.30	3.13	04:30	0.75	10:30	1.82	1.36	04:30	0.036	08:20	0.337	0.176	0.176	
3/7/2015	04:30	1.68	10:00	4.41	3.10	04:30	0.77	10:50	1.87	1.39	04:30	0.038	10:00	0.362	0.179	0.179	
3/8/2015	04:55	1.92	10:20	4.54	3.44	03:05	0.66	10:45	1.73	1.26	04:15	0.040	10:20	0.347	0.191	0.190	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			5.767
Avg	3.32	1.31	0.186

Site Commentary

Site Information

CAL28-N1A	
Pipe Dimensions	51.00" x 51.00"
Silt Level	0.00"

Overview

Site CAL28-N1A functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. In addition, flows were cyclical with evidence of upstream pump station.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	15.67	5.71	14.580
Minimum	6.95	2.54	1.919
Maximum	27.00	7.70	32.078
Time of Minimum	2/6/2015 6:15 AM	2/16/2015 5:45 AM	2/16/2015 5:45 AM
Time of Maximum	2/8/2015 12:10 PM	2/9/2015 12:10 PM	2/8/2015 12:10 PM

Data Quality

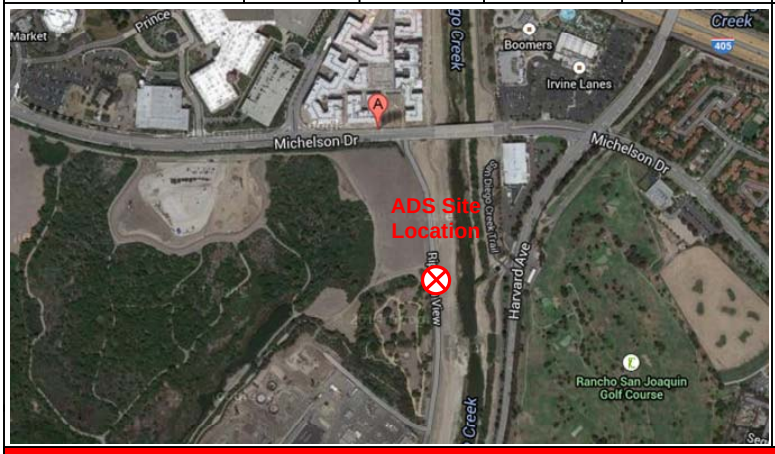
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL28	**Install Date:** 2/5/15	**Monitor Type**	Peak Doppler
Address/Location: Reperian & Michelson		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH059N021
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	51.00 "
		Pipe Width:	51.00 "





Investigation Information:

Date/Time of Investigation:	2/5/15@ 0200
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	15.50" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.16 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

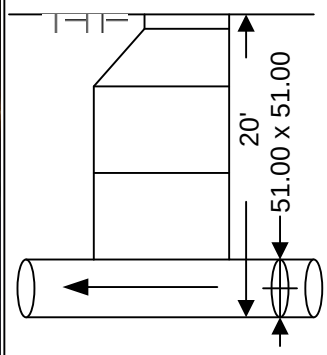
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

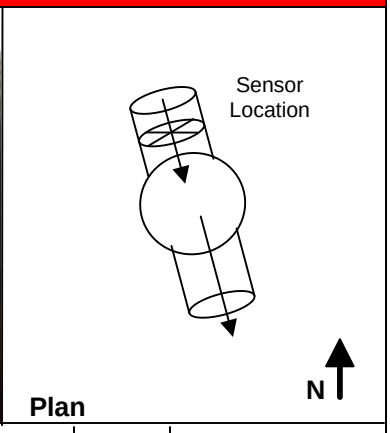
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

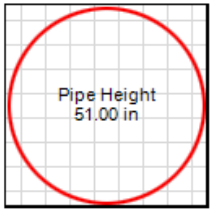
ub

SCATTERGRAPH REPORT

CAL28-N1A

Flow Monitor

CAL28-N1A

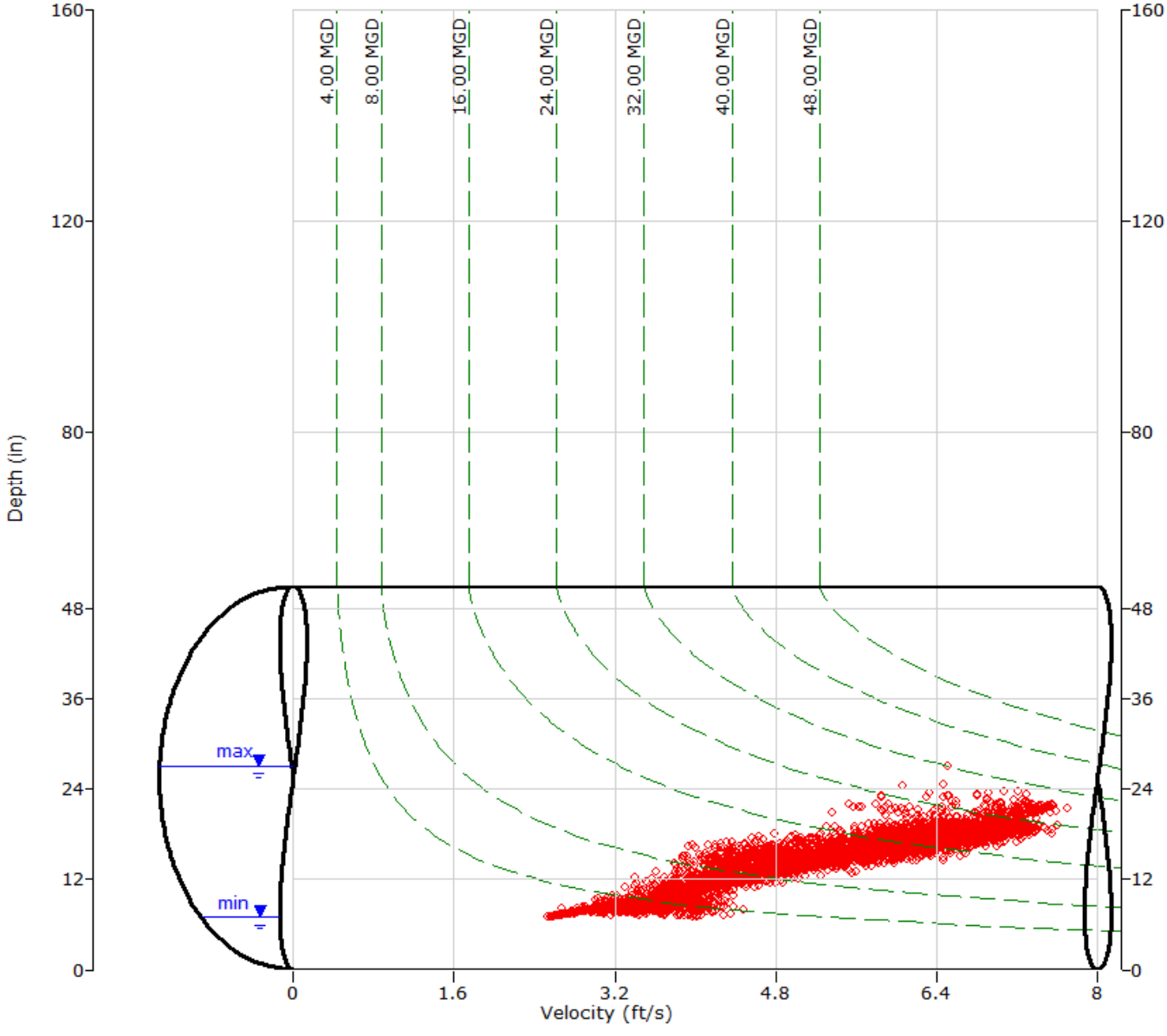


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



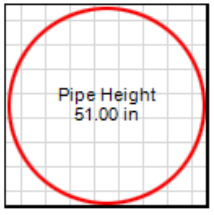
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL28-N1A

Flow Monitor

CAL28-N1A

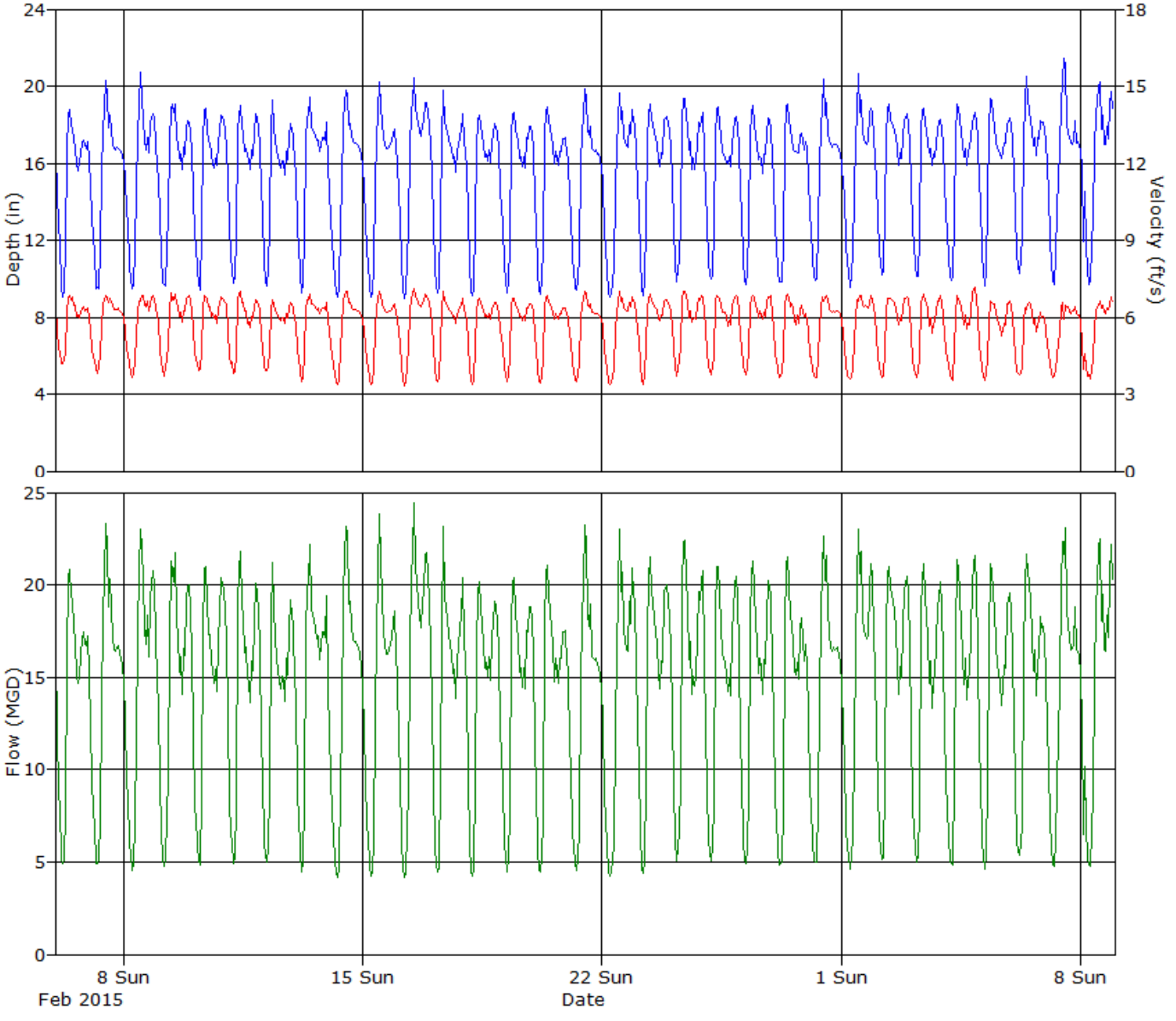


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL28-N1A, Pipe Height: 51 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	06:15	6.95	09:45	19.02	15.35	04:50	3.38	12:20	7.19	5.86	05:20	2.924	09:55	22.232	14.380	14.380	
2/7/2015	07:00	7.21	12:15	23.59	15.41	06:20	3.11	12:00	7.28	5.73	07:20	2.738	12:15	29.923	14.256	14.256	
2/8/2015	07:05	7.52	12:10	27.00	15.70	05:50	3.01	14:55	7.59	5.74	06:55	2.604	12:10	32.078	14.775	14.775	
2/9/2015	05:55	7.52	12:10	21.46	15.78	05:40	3.03	12:10	7.70	5.89	05:55	2.727	12:10	28.219	15.057	15.057	
2/10/2015	06:25	7.55	09:45	19.02	15.56	06:10	3.21	09:40	7.22	5.83	06:10	2.964	09:40	22.192	14.616	14.616	
2/11/2015	06:35	7.70	10:00	19.30	15.68	06:30	3.07	09:40	7.61	5.78	06:30	2.873	09:40	23.769	14.659	14.659	
2/12/2015	05:35	7.61	09:20	20.27	15.42	05:35	2.81	09:40	7.16	5.68	05:35	2.407	09:40	24.165	14.043	14.043	
2/13/2015	05:25	7.51	11:30	22.32	15.80	05:25	2.77	11:25	7.50	5.81	05:25	2.322	11:30	28.124	14.962	14.962	
2/14/2015	06:05	7.24	12:00	22.14	15.39	06:05	2.65	13:35	7.55	5.67	06:05	2.105	13:35	28.115	14.278	14.278	
2/15/2015	07:20	7.08	12:15	23.49	15.28	07:20	2.58	12:25	7.53	5.62	07:20	1.986	12:15	28.497	14.090	14.090	
2/16/2015	05:45	6.99	12:40	22.51	15.94	05:45	2.54	12:25	7.55	5.83	05:45	1.919	12:40	28.320	15.514	15.514	
2/17/2015	05:40	7.31	09:40	21.92	15.57	05:40	2.68	09:45	7.45	5.74	05:40	2.166	09:35	27.661	14.502	14.502	
2/18/2015	05:45	7.20	10:30	18.66	15.54	05:45	2.63	10:30	6.75	5.73	05:45	2.079	10:30	20.513	14.456	14.456	
2/19/2015	05:40	7.12	10:05	18.95	15.47	05:40	2.60	10:05	6.83	5.71	05:40	2.016	10:05	21.193	14.339	14.339	
2/20/2015	05:40	7.12	10:05	19.24	15.40	05:40	2.60	10:05	6.92	5.68	05:40	2.016	10:05	21.901	14.225	14.225	
2/21/2015	05:30	7.24	12:10	22.05	15.24	05:30	2.65	12:05	7.52	5.62	05:30	2.105	12:05	28.056	13.949	13.949	
2/22/2015	06:10	7.18	12:35	21.73	15.36	06:10	2.62	12:35	7.56	5.65	06:10	2.063	12:35	28.133	14.301	14.301	
2/23/2015	05:50	7.12	10:20	19.29	15.76	05:50	2.60	10:20	6.93	5.80	05:50	2.016	10:20	22.019	14.908	14.908	
2/24/2015	05:25	7.10	23:25	21.12	15.86	05:25	2.59	09:40	7.36	5.88	05:25	2.001	23:25	25.926	15.170	15.170	
2/25/2015	06:30	7.91	10:00	19.24	15.63	05:30	2.67	10:20	7.41	5.80	05:30	2.533	10:20	23.205	14.673	14.673	
2/26/2015	06:35	8.07	10:30	19.24	15.63	05:45	2.83	09:25	7.26	5.82	05:45	2.654	10:20	22.509	14.712	14.712	
2/27/2015	04:35	8.03	10:05	19.25	15.65	06:15	2.87	09:40	7.20	5.72	06:15	2.738	10:30	22.520	14.491	14.491	
2/28/2015	06:10	7.72	12:25	23.15	15.62	06:55	3.03	12:20	7.55	5.63	06:00	2.736	12:20	28.592	14.299	14.299	
3/1/2015	06:40	7.24	12:40	24.61	15.73	06:35	2.79	21:30	7.39	5.65	06:35	2.270	12:40	28.351	14.634	14.634	
3/2/2015	05:05	8.04	10:20	19.27	15.99	05:55	3.10	10:10	7.16	5.77	05:15	3.028	10:20	22.580	15.015	15.015	
3/3/2015	05:35	7.68	10:20	19.09	15.78	05:25	3.12	08:55	7.27	5.70	05:25	2.768	10:20	22.305	14.596	14.596	
3/4/2015	05:50	7.62	09:40	19.33	15.87	05:55	2.95	22:15	7.55	5.73	05:55	2.579	22:25	22.836	14.836	14.836	
3/5/2015	05:55	7.64	09:30	19.57	16.04	05:50	2.96	09:55	7.25	5.55	05:50	2.586	09:55	23.417	14.538	14.538	
3/6/2015	05:40	7.64	10:45	21.61	16.24	05:35	2.77	11:20	7.01	5.51	05:35	2.409	10:45	22.686	14.656	14.656	
3/7/2015	06:40	7.72	13:15	23.66	16.12	05:40	3.02	11:55	7.29	5.50	05:40	2.799	11:55	29.668	14.538	14.538	
3/8/2015	07:35	7.78	13:10	22.90	15.97	06:50	2.97	23:05	7.41	5.49	06:50	2.691	13:05	28.094	14.508	14.498	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			451.966
Avg	15.67	5.71	14.580

Site Commentary

Site Information

CAL3	
Pipe Dimensions	12.13" x 12.13"
Silt Level	0.00"

Overview

Site CAL3 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.43	6.12	0.759
Minimum	2.08	4.37	0.262
Maximum	5.00	6.97	1.398
Time of Minimum	2/15/2015 5:45 AM	2/15/2015 4:55 AM	2/15/2015 5:45 AM
Time of Maximum	2/25/2015 8:35 AM	3/5/2015 8:35 AM	3/5/2015 8:35 AM

Data Quality

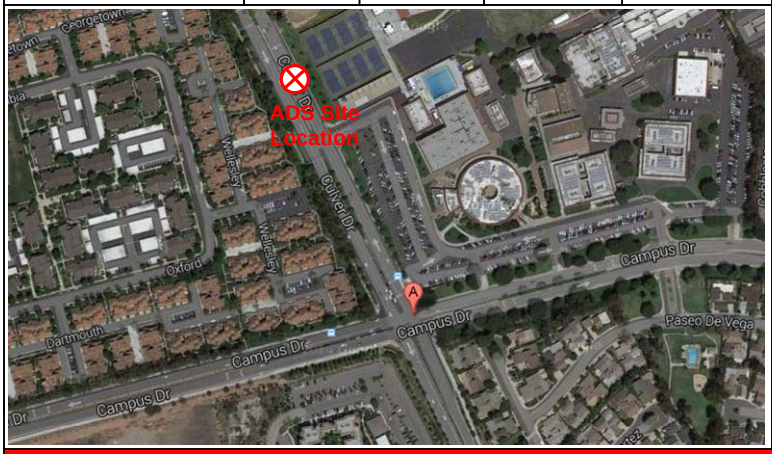
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

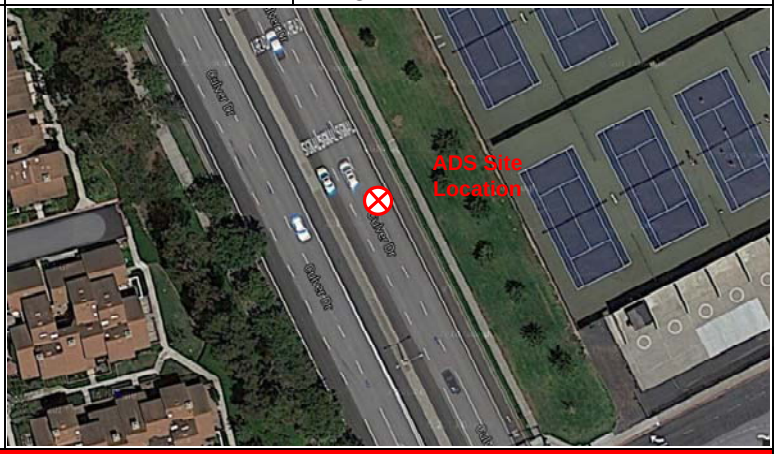
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL3	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: Culver Dr & Campus		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH089S004
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	12.13 "
		Pipe Width:	12.13 "





Investigation Information:

Date/Time of Investigation:	1/29/15 @ 0540
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.39 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	5'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	PVC/Good

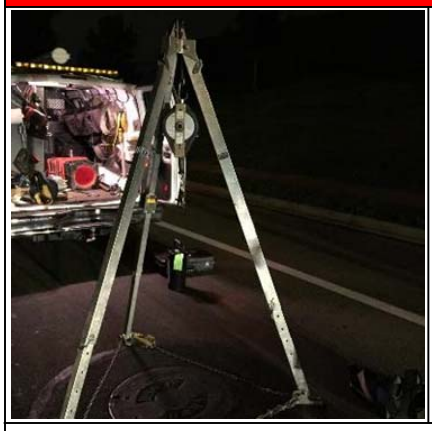
Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

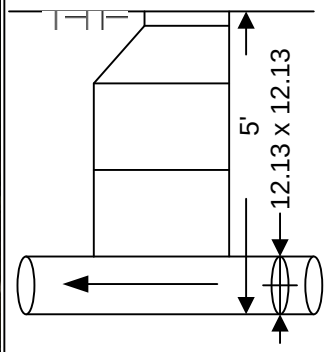
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

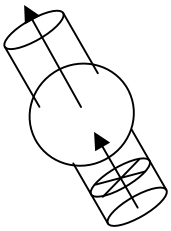
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

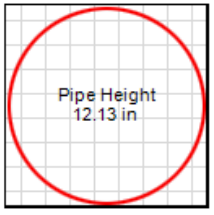
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

CAL3

Flow Monitor

CAL3

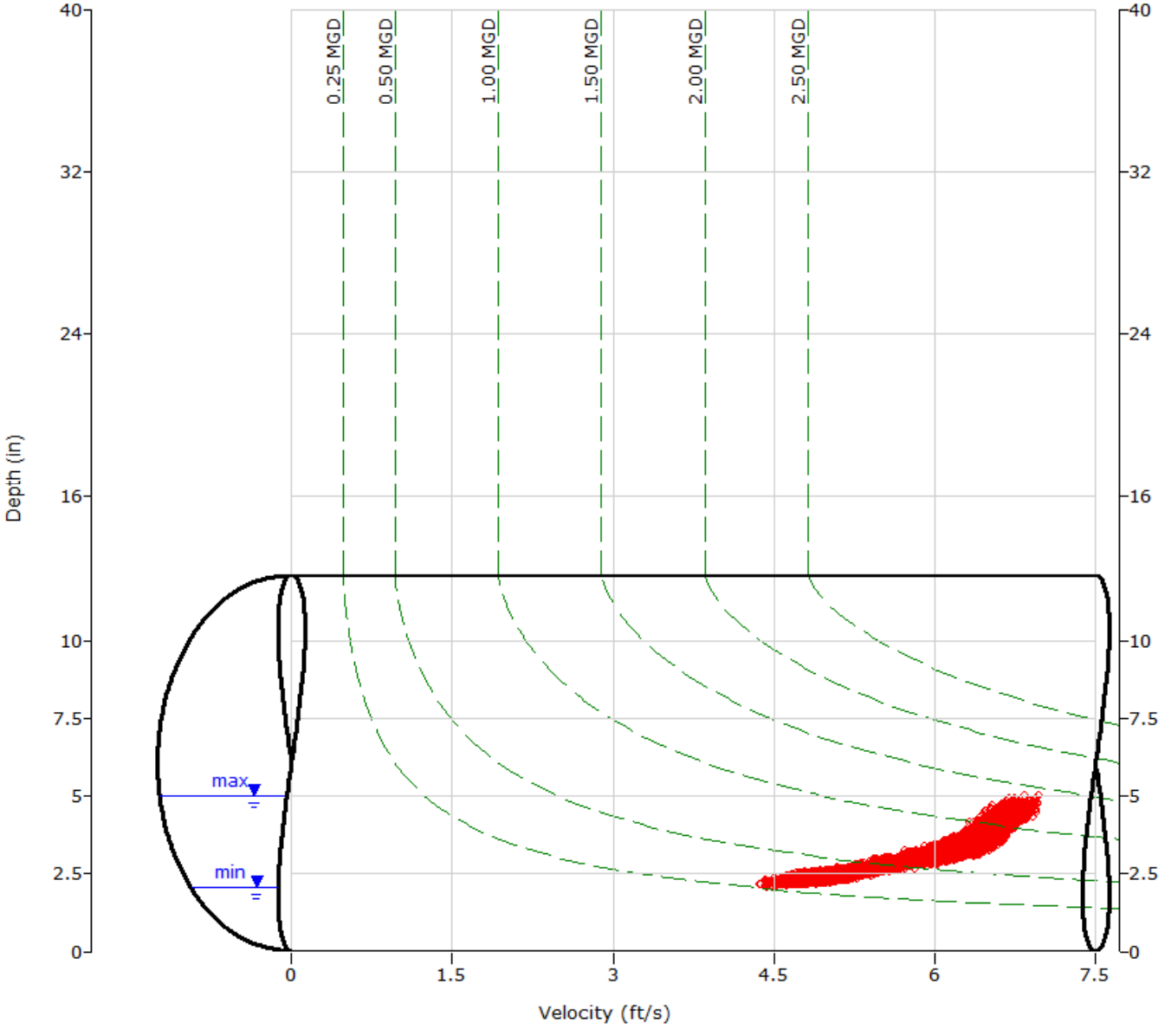


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



HYDROGRAPH REPORT

CAL3

Flow Monitor

CAL3

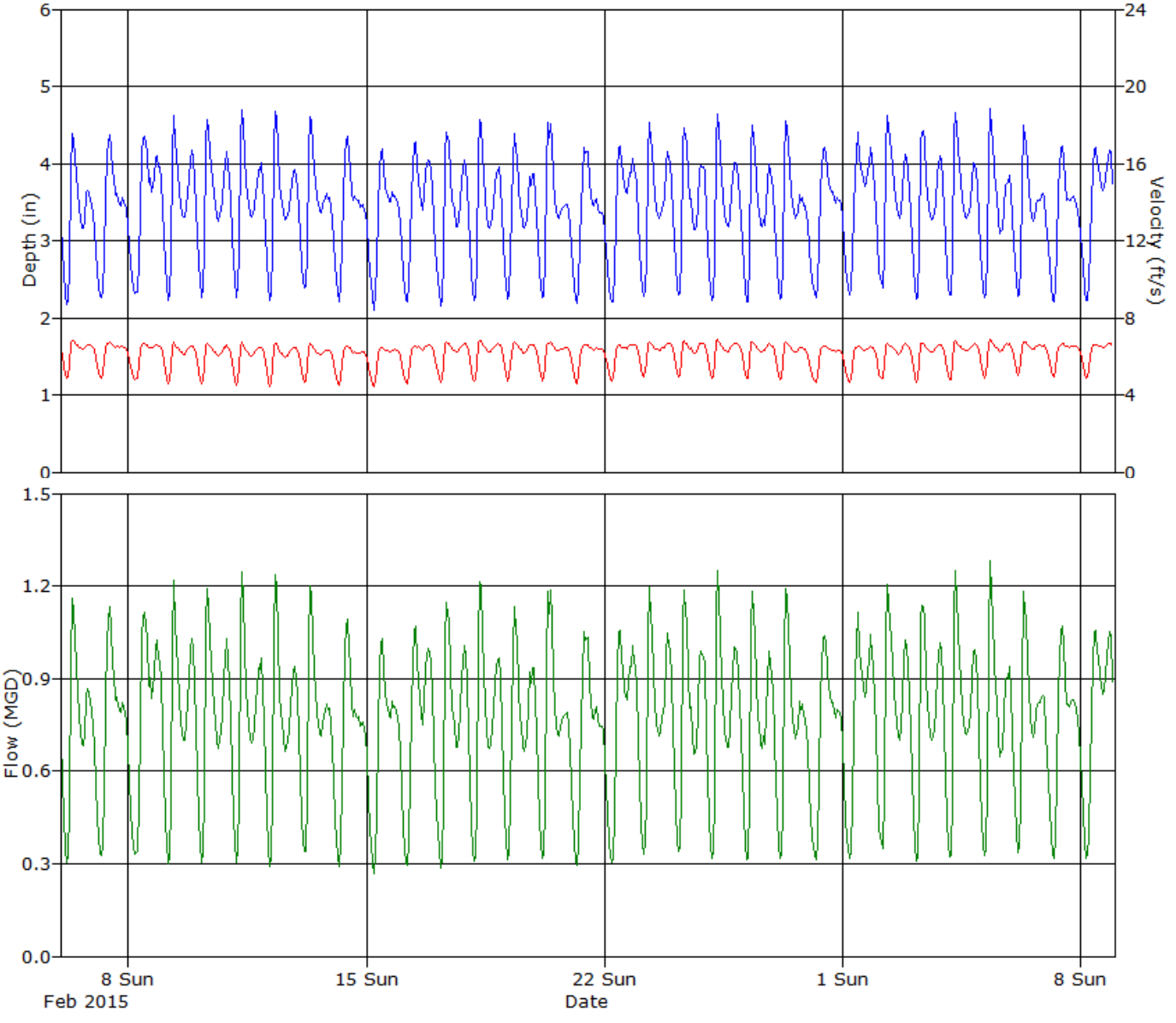
Pipe Height
12.13 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL3, Pipe Height: 12.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:30	2.14	08:30	4.59	3.32	04:35	4.73	07:45	6.94	6.25	04:30	0.292	08:30	1.232	0.741	0.741	
2/7/2015	05:55	2.24	11:35	4.47	3.36	05:45	4.79	11:35	6.83	6.18	05:45	0.316	11:35	1.186	0.745	0.745	
2/8/2015	06:15	2.29	11:40	4.54	3.51	05:50	4.76	10:05	6.73	6.14	05:45	0.325	11:40	1.193	0.790	0.790	
2/9/2015	04:50	2.15	08:05	4.74	3.50	04:45	4.49	08:00	6.80	6.07	04:50	0.281	08:05	1.278	0.776	0.776	
2/10/2015	04:55	2.17	08:20	4.70	3.50	04:45	4.47	07:45	6.73	6.04	04:55	0.284	08:20	1.244	0.773	0.773	
2/11/2015	04:45	2.21	09:15	4.88	3.51	04:50	4.46	08:10	6.80	6.01	04:45	0.291	09:15	1.323	0.770	0.770	
2/12/2015	04:50	2.20	09:10	4.90	3.49	04:00	4.42	08:15	6.77	5.99	04:15	0.287	09:10	1.327	0.763	0.763	
2/13/2015	04:40	2.37	09:35	4.83	3.46	04:45	4.62	08:25	6.71	6.00	04:40	0.331	09:35	1.285	0.751	0.751	
2/14/2015	05:15	2.19	11:00	4.60	3.36	05:00	4.48	11:45	6.57	5.92	05:15	0.287	11:00	1.177	0.715	0.715	
2/15/2015	05:45	2.08	10:50	4.33	3.30	04:55	4.37	10:55	6.53	5.90	05:45	0.262	10:55	1.083	0.698	0.698	
2/16/2015	05:10	2.10	10:20	4.37	3.43	05:10	4.48	11:35	6.63	6.05	05:10	0.269	10:20	1.114	0.755	0.755	
2/17/2015	04:25	2.10	10:05	4.60	3.42	04:25	4.51	09:05	6.78	6.15	04:25	0.272	09:15	1.207	0.764	0.764	
2/18/2015	04:45	2.13	09:40	4.80	3.42	05:00	4.53	09:40	6.95	6.18	05:00	0.279	09:40	1.326	0.767	0.767	
2/19/2015	04:20	2.20	07:40	4.56	3.38	04:55	4.60	07:45	6.80	6.16	04:55	0.296	07:40	1.210	0.749	0.749	
2/20/2015	04:55	2.20	10:35	4.77	3.40	05:00	4.62	10:50	6.82	6.15	04:55	0.297	10:35	1.290	0.753	0.753	
2/21/2015	05:20	2.15	10:55	4.39	3.28	05:15	4.55	10:45	6.66	6.05	05:15	0.283	10:55	1.126	0.707	0.707	
2/22/2015	05:40	2.19	11:45	4.32	3.41	05:20	4.65	20:40	6.65	6.11	05:30	0.297	11:45	1.089	0.757	0.757	
2/23/2015	04:30	2.25	07:50	4.68	3.47	04:30	4.78	07:45	6.93	6.23	04:30	0.318	07:45	1.275	0.786	0.786	
2/24/2015	04:45	2.25	09:05	4.69	3.46	04:30	4.83	07:55	6.95	6.24	04:45	0.322	09:05	1.275	0.783	0.783	
2/25/2015	04:20	2.22	08:35	5.00	3.45	04:25	4.75	07:30	6.96	6.22	04:25	0.310	08:35	1.380	0.778	0.778	
2/26/2015	04:45	2.15	09:05	4.66	3.40	04:35	4.67	07:45	6.87	6.19	04:35	0.291	09:05	1.242	0.761	0.761	
2/27/2015	05:10	2.22	08:05	4.65	3.38	04:10	4.65	08:05	6.78	6.12	04:10	0.305	08:05	1.240	0.743	0.743	
2/28/2015	05:50	2.23	11:50	4.31	3.38	04:50	4.58	10:55	6.60	6.02	04:50	0.300	11:50	1.083	0.730	0.730	
3/1/2015	05:50	2.27	11:40	4.57	3.50	05:45	4.61	11:40	6.61	6.01	05:50	0.310	11:40	1.182	0.769	0.769	
3/2/2015	05:20	2.35	08:40	4.76	3.52	04:30	4.75	08:40	6.72	6.10	05:20	0.339	08:40	1.268	0.785	0.785	
3/3/2015	04:55	2.18	07:30	4.74	3.48	04:50	4.60	07:35	6.83	6.15	04:55	0.292	07:30	1.279	0.780	0.780	
3/4/2015	05:00	2.23	08:50	4.74	3.50	04:45	4.67	08:15	6.86	6.19	05:00	0.308	08:50	1.285	0.791	0.791	
3/5/2015	05:05	2.24	08:35	4.98	3.42	04:55	4.80	08:35	6.97	6.24	04:55	0.317	08:35	1.398	0.772	0.772	
3/6/2015	04:55	2.24	08:35	4.58	3.37	04:35	4.89	08:25	6.80	6.27	04:35	0.322	08:35	1.218	0.756	0.756	
3/7/2015	04:55	2.17	11:25	4.29	3.32	04:30	4.79	12:25	6.69	6.20	04:55	0.310	11:25	1.093	0.733	0.733	
3/8/2015	05:10	2.19	21:00	4.29	3.48	04:25	4.78	20:20	6.79	6.20	05:10	0.305	22:20	1.096	0.786	0.786	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			23.528
Avg	3.43	6.12	0.759

Site Commentary

Site Information

CAL4	
Pipe Dimensions	14.75" x 14.75"
Silt Level	0.00"

Overview

Site CAL4 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.43	3.17	0.446
Minimum	2.08	2.04	0.137
Maximum	5.77	3.82	0.958
Time of Minimum	2/12/2015 4:25 AM	2/12/2015 4:00 AM	2/12/2015 4:00 AM
Time of Maximum	2/14/2015 9:55 AM	2/25/2015 8:20 AM	2/14/2015 9:55 AM

Data Quality

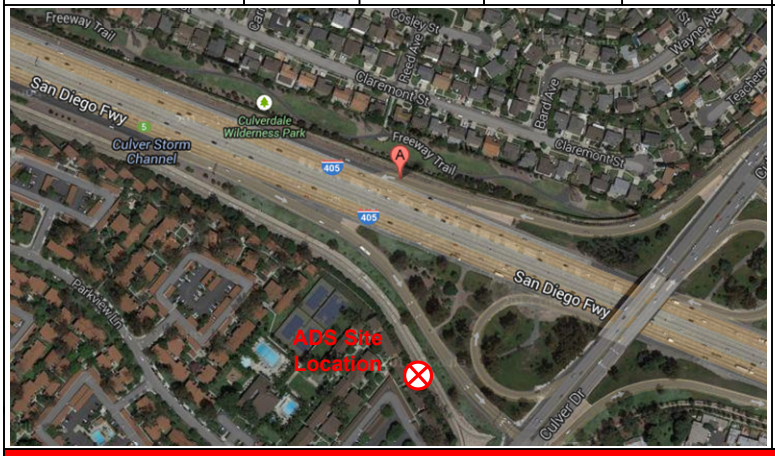
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

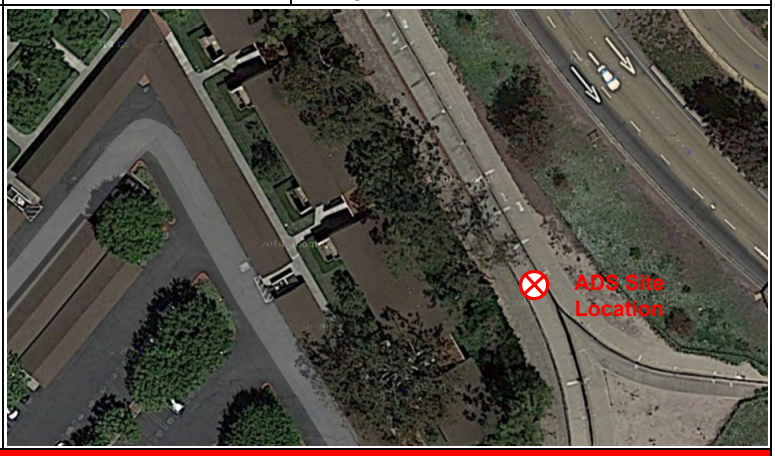
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL4	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: 405 freeway off ramp west of Culver Dr.and south of freeway		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH060S050
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	14.75 "
		Pipe Width:	14.75 "





Investigation Information:

Date/Time of Investigation:	1/29/15 @ 0830
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.11 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

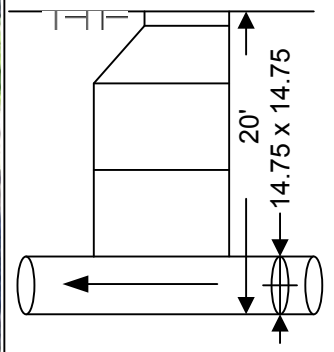
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

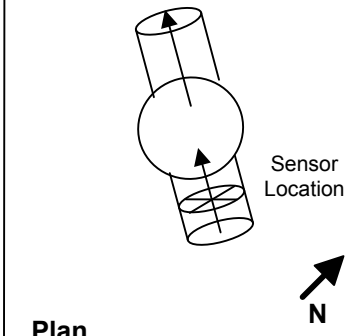
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[x]	[ ]	
WWTP	[ ]	[x]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

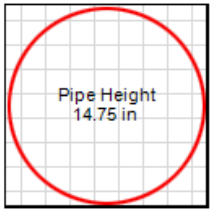
ub

SCATTERGRAPH REPORT

CAL4

Flow Monitor

CAL4

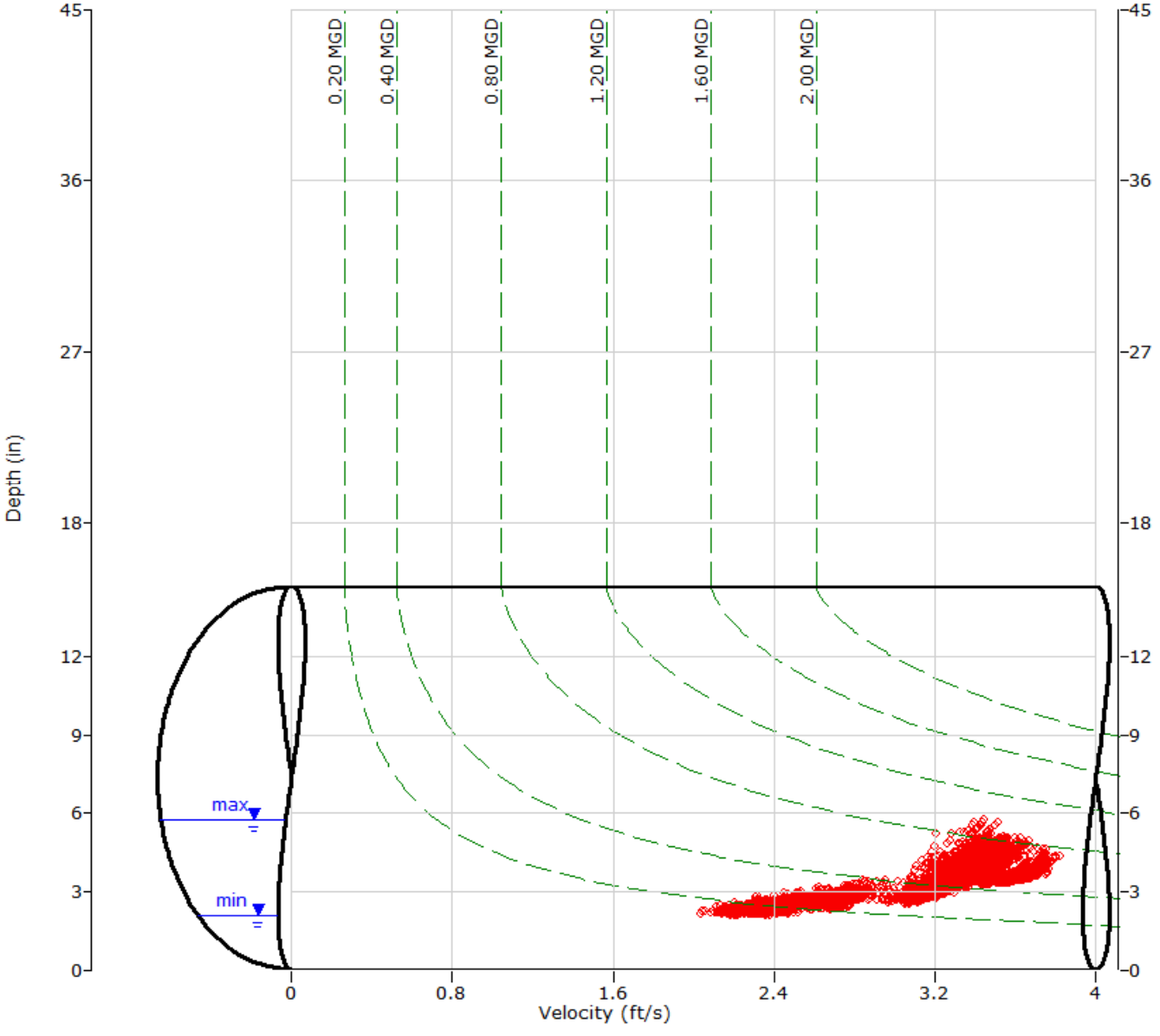


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



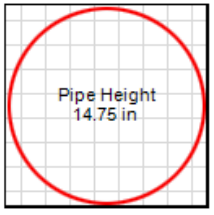
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL4

Flow Monitor

CAL4

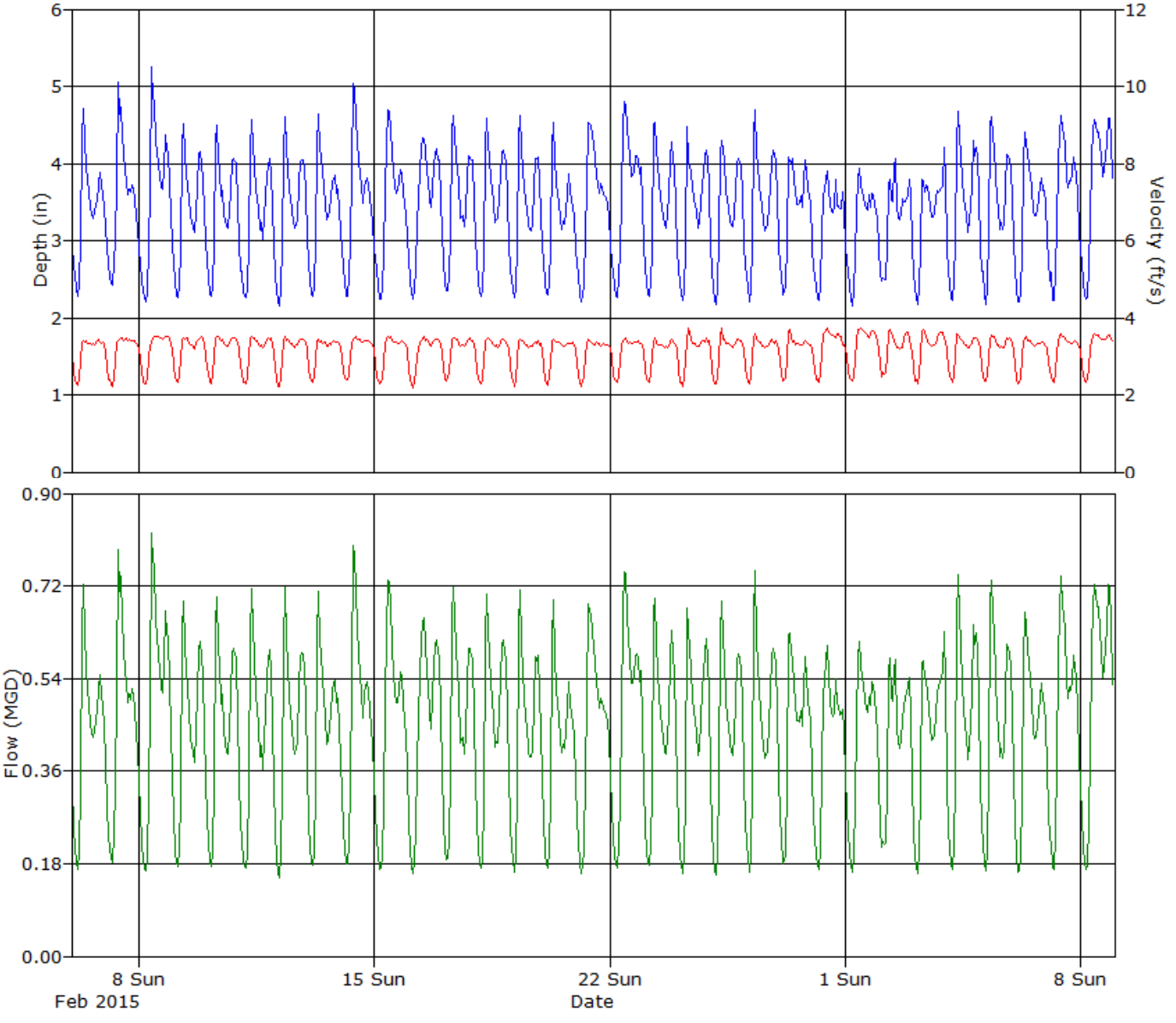


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL4, Pipe Height: 14.75 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:30	2.20	07:50	4.90	3.41	04:30	2.09	18:20	3.50	3.13	04:30	0.150	07:55	0.755	0.435	0.435	
2/7/2015	05:10	2.39	09:40	5.64	3.53	05:40	2.11	11:00	3.60	3.13	05:10	0.174	09:45	0.924	0.459	0.459	
2/8/2015	05:15	2.16	19:45	5.67	3.59	04:30	2.19	11:00	3.56	3.19	05:45	0.158	19:45	0.954	0.485	0.485	
2/9/2015	04:10	2.21	07:50	4.95	3.39	04:50	2.20	07:50	3.61	3.17	04:15	0.168	07:50	0.815	0.439	0.439	
2/10/2015	04:10	2.18	07:50	5.10	3.41	04:55	2.21	08:35	3.60	3.19	04:10	0.161	07:50	0.833	0.444	0.444	
2/11/2015	04:20	2.21	08:10	4.94	3.39	04:05	2.17	08:05	3.56	3.18	04:05	0.159	08:10	0.801	0.438	0.438	
2/12/2015	04:25	2.08	08:20	4.93	3.39	04:00	2.04	08:20	3.57	3.14	04:00	0.137	08:20	0.801	0.438	0.438	
2/13/2015	05:00	2.22	08:20	4.86	3.42	02:30	2.24	08:20	3.49	3.15	04:55	0.168	08:20	0.767	0.439	0.439	
2/14/2015	05:05	2.22	09:55	5.77	3.51	04:45	2.29	11:15	3.54	3.16	04:45	0.171	09:55	0.958	0.462	0.462	
2/15/2015	04:40	2.21	10:45	4.82	3.47	05:15	2.19	12:20	3.61	3.13	05:20	0.160	10:40	0.764	0.450	0.450	
2/16/2015	04:25	2.20	08:50	4.45	3.51	04:30	2.06	11:25	3.56	3.13	04:30	0.149	11:25	0.683	0.458	0.458	
2/17/2015	04:50	2.27	07:50	4.88	3.49	02:30	2.21	20:45	3.56	3.16	04:30	0.174	07:50	0.773	0.456	0.456	
2/18/2015	05:05	2.21	08:15	4.86	3.47	04:35	2.21	08:55	3.53	3.14	05:05	0.161	08:15	0.766	0.450	0.450	
2/19/2015	04:55	2.17	08:05	5.06	3.39	04:50	2.12	08:05	3.56	3.13	04:50	0.150	08:05	0.829	0.433	0.433	
2/20/2015	04:40	2.26	07:50	4.93	3.31	04:15	2.16	07:50	3.67	3.13	04:15	0.165	07:50	0.824	0.416	0.416	
2/21/2015	04:45	2.13	09:40	4.72	3.43	04:45	2.17	10:15	3.51	3.09	04:45	0.148	09:40	0.722	0.435	0.435	
2/22/2015	05:25	2.21	10:00	5.09	3.59	04:25	2.17	11:50	3.57	3.12	03:45	0.159	10:00	0.797	0.472	0.472	
2/23/2015	04:10	2.21	07:55	5.05	3.43	04:20	2.13	07:55	3.62	3.12	04:15	0.155	07:55	0.840	0.440	0.440	
2/24/2015	04:45	2.17	07:55	5.01	3.41	04:00	2.15	08:10	3.77	3.16	04:45	0.152	07:55	0.809	0.441	0.441	
2/25/2015	04:45	2.12	07:50	4.45	3.39	05:00	2.14	08:20	3.82	3.16	04:55	0.146	07:50	0.731	0.438	0.438	
2/26/2015	04:30	2.18	07:55	4.91	3.45	03:50	2.18	08:20	3.76	3.15	03:50	0.158	07:55	0.805	0.446	0.446	
2/27/2015	03:30	2.24	07:10	4.30	3.41	04:55	2.27	08:05	3.76	3.18	03:10	0.175	08:20	0.661	0.441	0.441	
2/28/2015	05:40	2.19	17:45	4.06	3.22	03:35	2.19	11:20	3.75	3.26	03:35	0.157	11:10	0.631	0.418	0.418	
3/1/2015	05:25	2.11	17:15	4.15	3.21	05:20	2.19	09:15	3.78	3.30	05:20	0.147	09:15	0.667	0.422	0.422	
3/2/2015	02:55	2.25	07:50	4.35	3.31	02:55	2.33	08:15	3.77	3.23	02:55	0.172	07:50	0.695	0.427	0.427	
3/3/2015	04:15	2.16	22:20	4.46	3.31	04:45	2.23	07:40	3.76	3.22	04:55	0.157	22:20	0.688	0.431	0.431	
3/4/2015	04:30	2.17	07:55	4.95	3.47	04:30	2.24	07:30	3.69	3.19	04:30	0.157	07:55	0.802	0.457	0.457	
3/5/2015	04:35	2.13	07:45	4.85	3.45	02:35	2.20	08:45	3.62	3.17	04:25	0.159	08:25	0.776	0.451	0.451	
3/6/2015	04:10	2.10	08:25	4.52	3.39	04:10	2.18	08:45	3.65	3.14	04:10	0.146	08:30	0.698	0.435	0.435	
3/7/2015	05:10	2.11	10:10	4.70	3.53	05:45	2.20	10:25	3.67	3.17	05:10	0.158	10:25	0.769	0.467	0.467	
3/8/2015	04:30	2.14	21:15	4.84	3.71	04:25	2.12	20:45	3.64	3.22	04:25	0.151	20:45	0.776	0.511	0.511	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			13.834
Avg	3.43	3.17	0.446

Site Commentary

Site Information

CAL5	
Pipe Dimensions	24.00" x 24.00"
Silt Level	0.00"

Overview

Site CAL5 functioned under normal conditions during the period Tuesday, January 27, 2015 to Wednesday, April 22, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 27, 2015 to Wednesday, April 22, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.23	2.00	0.686
Minimum	2.43	1.38	0.156
Maximum	7.64	2.44	1.316
Time of Minimum	3/31/2015 4:40 AM	2/3/2015 3:50 AM	2/3/2015 3:50 AM
Time of Maximum	3/15/2015 10:15 AM	2/28/2015 10:10 AM	2/15/2015 11:00 AM

Data Quality

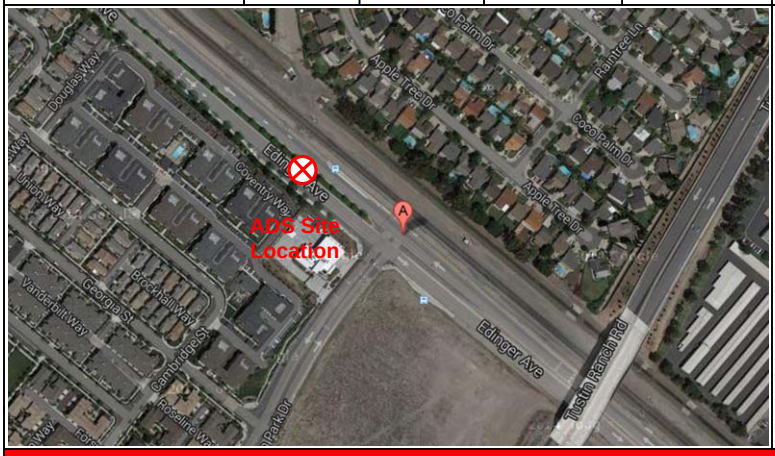
Data uptime observed during the Tuesday, January 27, 2015 to the Wednesday, April 22, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL5	**Install Date:** 1/26/15	**Monitor Type**	Peak Doppler
Address/Location: Edinger & Kensington		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH046N002
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	24.00 "
		Pipe Width:	24.00 "





Investigation Information:

Date/Time of Investigation:	1/26/15 @
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	6.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.85 fps
Silt:	0.00 Inches

Manhole Information:

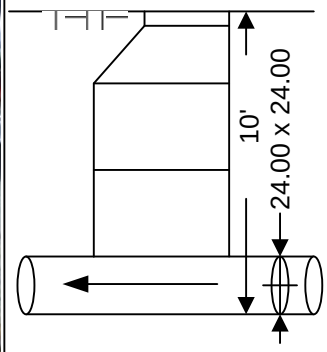
Manhole Depth:	10'						
Manhole Material / Condition	Precast/OK						
Pipe Material / Condition:	VCP/Good						
Land Use:	Residential X	Commercial	Industrial	Trunk			
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0				

Safety Notes:

2 man crew required and one blower is to be operated at all times.

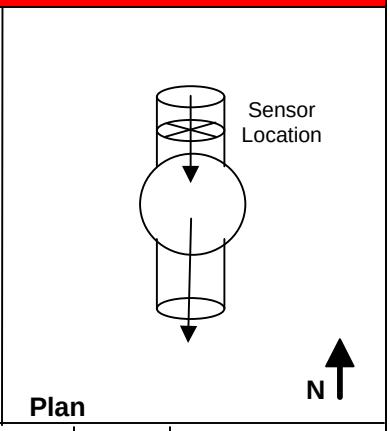
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

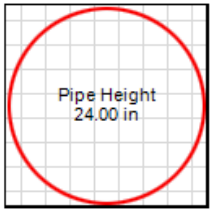
ub

SCATTERGRAPH REPORT

CAL5

Flow Monitor

CAL5

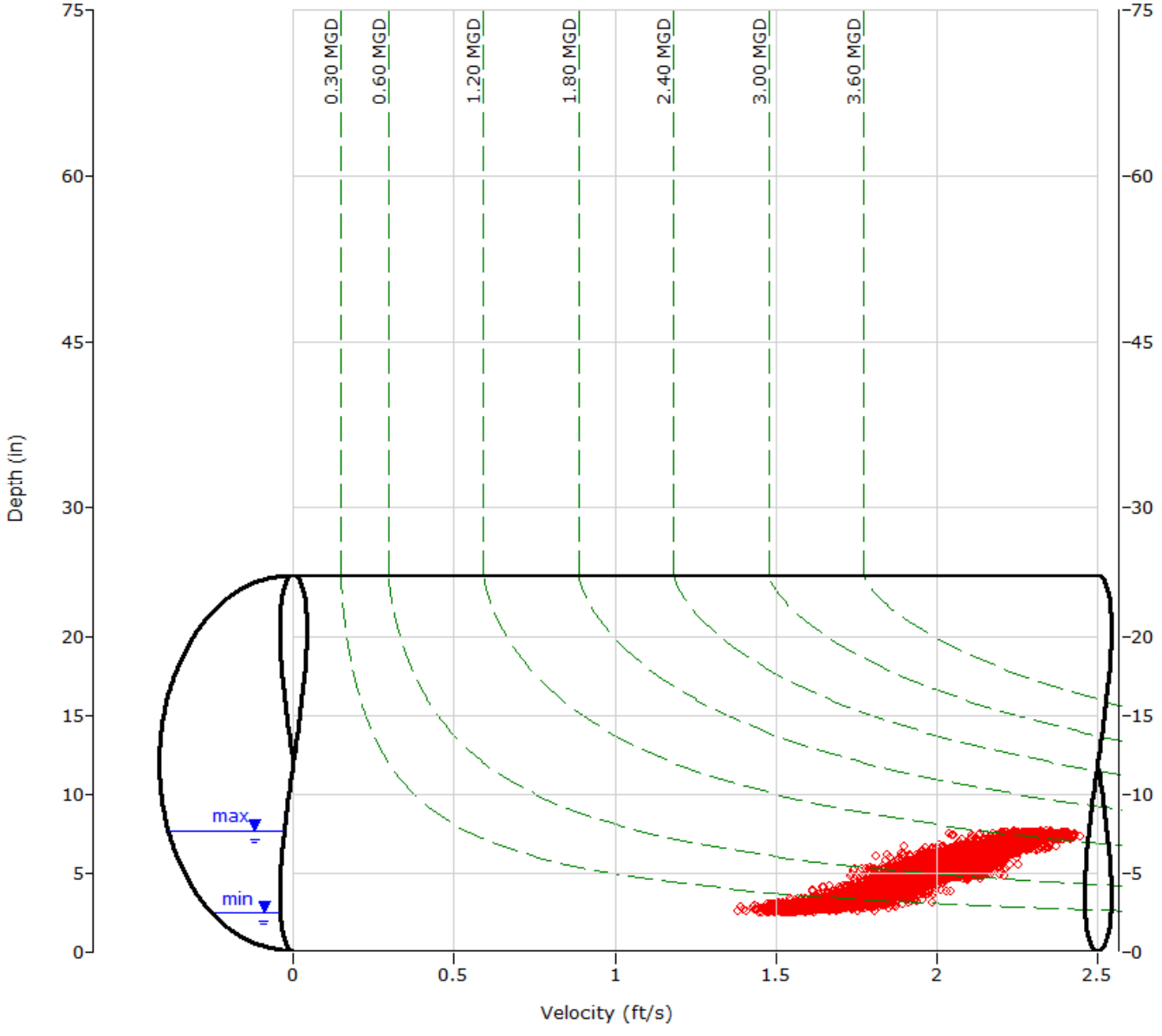


Report Period

1/27/2015
To
4/22/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



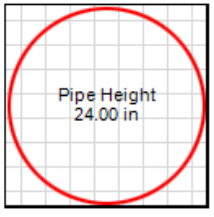
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL5

Flow Monitor

CAL5

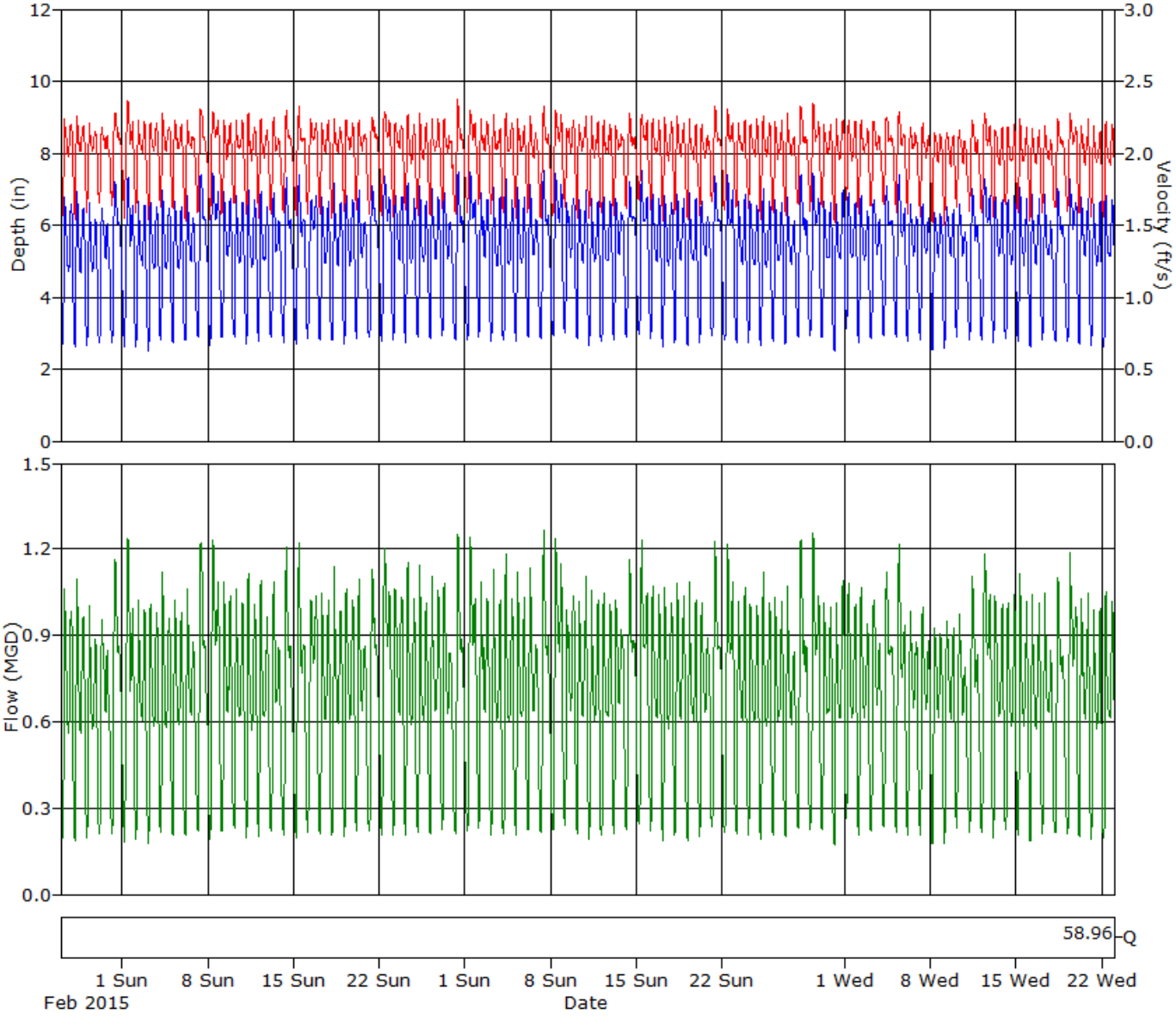


Report Period

1/27/2015
To
4/22/2015

Legend

- Silt
- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 1/27/2015 - 4/22/2015

CAL5, Pipe Height: 24 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/27/2015	04:30	2.67	08:10	7.24	5.03	03:55	1.46	08:15	2.31	2.00	03:55	0.184	08:10	1.191	0.649	0.649	
1/28/2015	04:10	2.58	08:05	7.27	5.03	04:15	1.49	07:50	2.39	2.01	04:15	0.176	08:00	1.225	0.651	0.651	
1/29/2015	04:00	2.59	07:55	7.23	4.94	04:00	1.51	07:45	2.30	2.00	04:00	0.179	07:55	1.181	0.629	0.629	
1/30/2015	04:05	2.67	08:55	6.60	5.04	03:50	1.50	20:30	2.22	2.00	03:50	0.190	08:55	0.995	0.645	0.645	
1/31/2015	05:15	2.69	10:55	7.32	5.24	06:00	1.48	10:45	2.32	2.02	06:00	0.191	11:00	1.206	0.701	0.701	
2/1/2015	05:40	2.57	11:25	7.45	5.35	05:00	1.47	10:40	2.42	2.04	05:00	0.180	12:10	1.276	0.736	0.736	
2/2/2015	04:10	2.54	07:50	7.12	5.09	05:05	1.47	07:55	2.28	2.01	04:05	0.181	07:50	1.149	0.662	0.662	
2/3/2015	04:15	2.48	08:05	7.27	5.02	03:50	1.38	08:10	2.30	2.00	03:50	0.156	08:05	1.195	0.650	0.650	
2/4/2015	04:00	2.71	08:30	7.25	5.03	04:40	1.57	08:25	2.42	2.02	04:00	0.204	08:25	1.254	0.653	0.653	
2/5/2015	04:10	2.66	07:55	7.21	5.05	04:00	1.51	21:10	2.29	2.02	04:00	0.189	08:00	1.164	0.656	0.656	
2/6/2015	04:15	2.66	08:00	7.54	5.13	03:50	1.49	08:00	2.30	2.00	04:20	0.188	08:00	1.254	0.664	0.664	
2/7/2015	05:25	2.83	11:15	7.49	5.40	04:45	1.49	10:55	2.38	2.01	04:45	0.207	11:15	1.266	0.728	0.728	
2/8/2015	05:40	2.63	11:30	7.56	5.51	05:40	1.44	11:45	2.33	2.02	05:40	0.175	11:30	1.261	0.757	0.757	
2/9/2015	04:05	2.78	07:50	7.37	5.30	04:30	1.50	21:10	2.28	2.00	03:50	0.206	07:50	1.206	0.698	0.698	
2/10/2015	04:45	2.86	07:55	7.38	5.24	03:50	1.48	07:50	2.29	2.02	03:50	0.206	07:55	1.212	0.691	0.691	
2/11/2015	04:10	2.62	07:40	7.42	5.17	05:05	1.51	07:55	2.38	2.00	04:10	0.185	07:40	1.261	0.674	0.674	
2/12/2015	04:15	2.64	07:40	7.42	5.14	04:40	1.43	07:50	2.30	1.99	03:55	0.185	07:40	1.222	0.661	0.661	
2/13/2015	04:15	2.83	09:00	7.26	5.20	04:05	1.54	09:00	2.39	1.99	04:30	0.212	09:00	1.237	0.671	0.671	
2/14/2015	05:05	2.58	11:10	7.42	5.25	04:50	1.39	10:10	2.35	1.99	05:05	0.179	10:10	1.239	0.692	0.692	
2/15/2015	05:05	2.65	11:15	7.50	5.28	05:40	1.52	11:00	2.43	2.00	05:40	0.188	11:00	1.316	0.702	0.702	
2/16/2015	04:40	2.82	20:15	6.98	5.42	04:40	1.48	09:50	2.28	2.02	04:40	0.199	20:15	1.078	0.730	0.730	
2/17/2015	04:45	2.74	07:55	7.46	5.19	04:00	1.53	07:50	2.30	2.01	04:45	0.198	07:50	1.232	0.682	0.682	
2/18/2015	03:55	2.69	08:05	7.37	5.19	03:50	1.51	08:00	2.32	2.00	03:50	0.189	08:00	1.229	0.679	0.679	
2/19/2015	03:45	2.61	08:00	7.31	5.17	03:45	1.54	07:35	2.35	2.01	03:45	0.183	08:00	1.195	0.676	0.676	
2/20/2015	04:45	2.81	08:10	7.37	5.17	04:45	1.52	08:10	2.33	2.00	04:45	0.202	08:10	1.232	0.670	0.670	
2/21/2015	05:25	2.86	11:35	7.30	5.34	05:40	1.52	11:40	2.31	2.01	05:40	0.209	11:40	1.202	0.712	0.712	
2/22/2015	05:05	2.67	11:30	7.52	5.50	04:05	1.49	11:30	2.33	2.02	05:10	0.189	11:30	1.270	0.754	0.754	
2/23/2015	04:10	2.71	07:50	7.42	5.32	04:50	1.49	07:35	2.33	2.01	04:10	0.195	07:40	1.211	0.703	0.703	
2/24/2015	04:15	2.66	08:10	7.49	5.24	03:40	1.49	08:15	2.35	1.99	03:45	0.192	08:15	1.256	0.685	0.685	
2/25/2015	03:35	2.77	08:00	7.35	5.20	03:45	1.51	08:35	2.31	1.98	03:35	0.200	08:05	1.207	0.676	0.676	
2/26/2015	03:35	2.81	08:10	7.43	5.27	03:40	1.50	20:05	2.40	2.00	04:40	0.204	20:10	1.232	0.690	0.690	
2/27/2015	03:25	2.82	08:05	7.41	5.17	04:00	1.53	07:50	2.40	1.99	03:45	0.219	07:50	1.265	0.665	0.665	
2/28/2015	05:35	2.77	11:10	7.56	5.38	05:40	1.51	10:10	2.44	2.01	05:05	0.201	10:15	1.308	0.722	0.722	
3/1/2015	04:45	2.73	11:40	7.57	5.50	04:50	1.50	10:30	2.39	2.02	04:45	0.196	10:30	1.301	0.754	0.754	
3/2/2015	03:40	2.86	07:55	7.56	5.34	02:40	1.48	07:35	2.32	2.02	02:40	0.217	07:55	1.261	0.713	0.713	
3/3/2015	04:40	2.70	08:00	7.48	5.20	04:40	1.52	08:00	2.38	2.00	04:40	0.191	08:00	1.283	0.681	0.681	
3/4/2015	04:00	2.75	08:20	7.53	5.19	02:40	1.53	07:50	2.36	2.01	03:45	0.203	07:50	1.257	0.683	0.683	
3/5/2015	04:00	2.69	08:00	7.47	5.23	04:00	1.44	07:40	2.37	2.00	04:00	0.179	07:40	1.255	0.686	0.686	
3/6/2015	04:10	2.83	07:35	7.58	5.19	02:55	1.50	08:15	2.33	1.97	04:10	0.206	08:05	1.265	0.667	0.667	
3/7/2015	05:35	2.80	10:15	7.63	5.41	04:35	1.47	11:05	2.39	2.00	05:00	0.201	11:05	1.307	0.724	0.724	
3/8/2015	05:05	2.75	10:20	7.56	5.66	04:50	1.44	09:55	2.36	2.03	05:05	0.196	10:25	1.280	0.784	0.784	
3/9/2015	03:45	2.92	08:00	7.10	5.31	03:05	1.54	21:55	2.32	2.02	03:45	0.220	08:00	1.118	0.700	0.700	
3/10/2015	04:10	2.82	21:10	7.21	5.20	04:45	1.51	21:05	2.31	2.01	04:15	0.206	21:10	1.161	0.679	0.679	
3/11/2015	04:15	2.62	08:00	7.23	5.18	04:35	1.49	08:20	2.37	2.00	04:10	0.181	08:00	1.167	0.673	0.673	
3/12/2015	03:55	2.60	07:55	7.42	5.16	03:50	1.53	07:50	2.32	1.99	03:55	0.184	07:50	1.233	0.667	0.667	
3/13/2015	04:10	2.73	08:05	6.90	5.27	04:35	1.53	08:00	2.23	1.99	04:10	0.196	08:05	1.061	0.686	0.686	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
3/14/2015	04:50	2.87	11:10	7.51	5.42	04:10	1.50	11:10	2.34	2.00	04:05	0.211	11:10	1.271	0.723	0.723	
3/15/2015	06:25	2.84	10:15	7.64	5.51	04:50	1.62	10:15	2.36	2.03	06:30	0.228	10:15	1.310	0.752	0.752	
3/16/2015	03:50	2.77	07:55	7.48	5.23	03:40	1.51	07:40	2.36	2.00	03:40	0.199	07:55	1.271	0.683	0.683	
3/17/2015	03:40	2.48	08:00	7.18	5.11	04:15	1.40	08:00	2.35	1.99	04:15	0.169	08:00	1.198	0.660	0.660	
3/18/2015	03:40	2.69	08:05	7.17	5.19	03:20	1.50	08:15	2.29	1.99	03:35	0.190	08:05	1.164	0.675	0.675	
3/19/2015	04:05	2.50	08:10	7.32	5.15	04:35	1.47	08:05	2.29	1.98	04:05	0.171	08:10	1.190	0.665	0.665	
3/20/2015	04:20	2.64	08:00	6.96	5.19	04:25	1.46	07:50	2.26	1.98	04:10	0.180	08:00	1.100	0.666	0.666	
3/21/2015	05:10	2.87	10:20	7.48	5.37	04:50	1.56	10:20	2.36	2.01	04:50	0.227	10:20	1.274	0.717	0.717	
3/22/2015	04:55	2.75	10:55	7.47	5.45	04:55	1.48	11:25	2.38	2.03	04:55	0.191	11:00	1.260	0.745	0.745	
3/23/2015	04:10	2.67	21:00	7.18	5.21	03:20	1.53	08:05	2.33	2.01	04:45	0.202	21:00	1.175	0.683	0.683	
3/24/2015	03:50	2.51	07:50	7.31	5.10	04:25	1.57	20:25	2.28	2.01	04:00	0.181	07:50	1.172	0.662	0.662	
3/25/2015	04:05	2.62	08:50	7.34	5.10	04:30	1.47	08:35	2.33	1.99	03:30	0.181	08:10	1.164	0.663	0.663	
3/26/2015	04:10	2.69	07:55	7.29	5.16	03:50	1.49	21:55	2.29	2.00	04:20	0.194	07:55	1.173	0.669	0.669	
3/27/2015	04:05	2.63	07:45	7.43	5.13	04:00	1.48	07:45	2.41	2.00	04:00	0.180	07:45	1.289	0.663	0.663	
3/28/2015	05:20	2.84	11:15	7.55	5.38	05:30	1.55	10:45	2.41	2.02	05:30	0.215	11:10	1.311	0.723	0.723	
3/29/2015	05:40	2.90	10:15	7.58	5.50	05:30	1.51	10:45	2.43	2.04	05:30	0.213	11:15	1.307	0.757	0.757	
3/30/2015	03:30	2.84	07:55	7.03	5.19	04:35	1.52	22:00	2.34	2.00	04:35	0.209	07:55	1.125	0.674	0.674	
3/31/2015	04:40	2.43	21:00	7.33	5.20	05:10	1.44	21:35	2.32	1.99	04:40	0.164	21:00	1.191	0.679	0.679	
4/1/2015	03:55	3.01	08:00	7.39	5.27	04:30	1.61	08:00	2.32	2.01	04:00	0.238	08:00	1.232	0.688	0.688	
4/2/2015	03:55	2.63	07:55	7.29	5.16	03:35	1.50	07:40	2.28	1.99	04:00	0.183	07:55	1.178	0.666	0.666	
4/3/2015	04:30	2.81	09:10	6.98	5.23	04:40	1.56	08:40	2.32	2.00	04:40	0.211	09:10	1.085	0.682	0.682	
4/4/2015	04:10	2.82	10:10	7.14	5.33	03:30	1.57	09:45	2.35	2.01	04:10	0.215	10:15	1.154	0.706	0.706	
4/5/2015	06:00	2.83	10:50	7.52	5.37	05:05	1.54	10:50	2.40	2.01	06:00	0.212	10:50	1.304	0.719	0.719	
4/6/2015	04:00	2.62	08:45	6.61	5.16	04:25	1.53	09:30	2.23	1.98	04:10	0.188	09:30	1.010	0.662	0.662	
4/7/2015	03:40	2.76	09:10	6.73	5.14	04:05	1.47	09:05	2.27	1.97	04:05	0.194	09:10	1.050	0.656	0.656	
4/8/2015	03:50	2.51	20:35	6.59	5.04	04:10	1.41	11:25	2.18	1.94	04:10	0.164	20:35	0.967	0.631	0.631	
4/9/2015	04:05	2.55	08:55	6.62	5.10	04:10	1.47	09:00	2.17	1.94	04:10	0.170	09:00	0.988	0.642	0.642	
4/10/2015	03:50	2.80	09:40	6.67	5.12	03:25	1.52	09:40	2.19	1.96	03:50	0.205	09:40	1.008	0.643	0.643	
4/11/2015	04:35	2.75	11:30	7.18	5.24	04:40	1.54	10:20	2.32	1.98	04:40	0.200	11:40	1.160	0.678	0.678	
4/12/2015	04:20	2.73	10:55	7.40	5.43	05:25	1.49	10:50	2.40	1.99	05:25	0.202	10:50	1.245	0.728	0.728	
4/13/2015	03:40	2.68	07:45	7.31	5.26	03:55	1.51	07:50	2.24	1.96	03:35	0.189	07:45	1.163	0.676	0.676	
4/14/2015	03:30	2.77	08:00	7.09	5.19	03:40	1.53	21:35	2.24	1.97	03:40	0.201	07:50	1.114	0.663	0.663	
4/15/2015	03:40	2.71	08:00	7.33	5.20	03:45	1.51	08:30	2.26	1.96	03:40	0.192	08:00	1.184	0.665	0.665	
4/16/2015	04:15	2.55	07:45	7.34	5.16	03:35	1.47	08:05	2.27	1.95	04:15	0.171	07:45	1.185	0.655	0.655	
4/17/2015	04:40	2.73	07:50	7.31	5.13	04:35	1.52	07:50	2.28	1.96	04:35	0.194	07:50	1.195	0.651	0.651	
4/18/2015	05:05	2.70	09:45	7.27	5.25	03:40	1.57	09:50	2.30	1.98	04:55	0.205	09:50	1.194	0.685	0.685	
4/19/2015	05:20	2.74	10:10	7.45	5.39	05:45	1.54	10:15	2.37	2.00	05:30	0.202	10:10	1.271	0.722	0.722	
4/20/2015	03:40	2.70	07:50	7.31	5.19	03:15	1.45	07:50	2.30	1.96	04:45	0.184	07:50	1.202	0.667	0.667	
4/21/2015	03:40	2.57	07:45	7.02	5.08	03:50	1.53	08:15	2.25	1.95	03:50	0.179	07:45	1.098	0.642	0.642	
4/22/2015	04:20	2.57	07:55	7.29	5.18	03:35	1.51	19:55	2.26	1.97	03:50	0.178	07:55	1.171	0.668	0.668	

Report Summary For The Period 1/27/2015 - 4/22/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			58.963
Avg	5.23	2.00	0.686

Site Commentary

Site Information

CAL6	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site CAL6 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.39	2.40	0.728
Minimum	2.92	1.29	0.162
Maximum	8.47	3.19	1.587
Time of Minimum	2/24/2015 4:45 AM	3/7/2015 5:15 AM	2/17/2015 4:05 AM
Time of Maximum	2/26/2015 7:30 AM	2/26/2015 7:45 AM	2/26/2015 7:30 AM

Data Quality

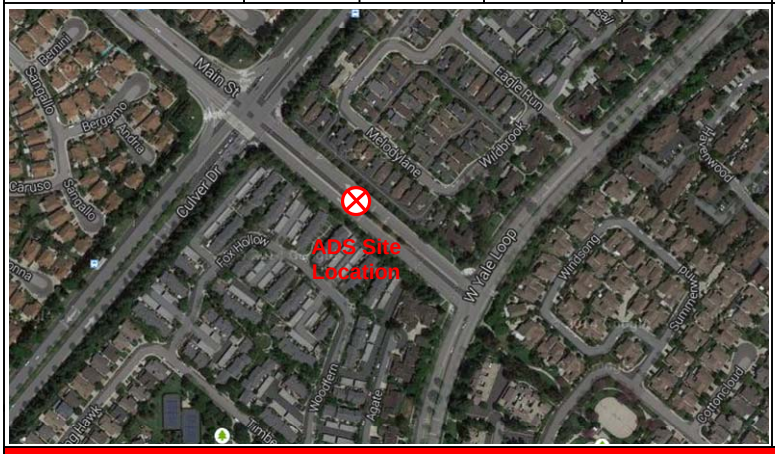
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL6	**Install Date:** 1/26/15	**Monitor Type**	Peak Doppler
Address/Location: Main St. & W Yale Loop		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH088N005
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	1/26/15 @ 0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	6.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.23 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

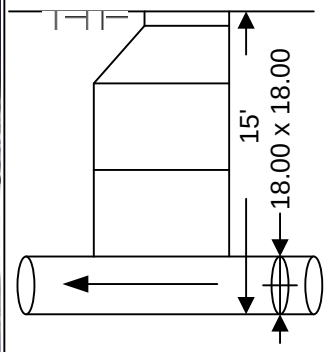
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

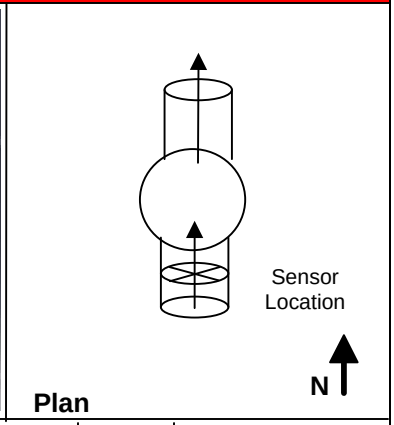
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

CAL6

Flow Monitor

CAL6

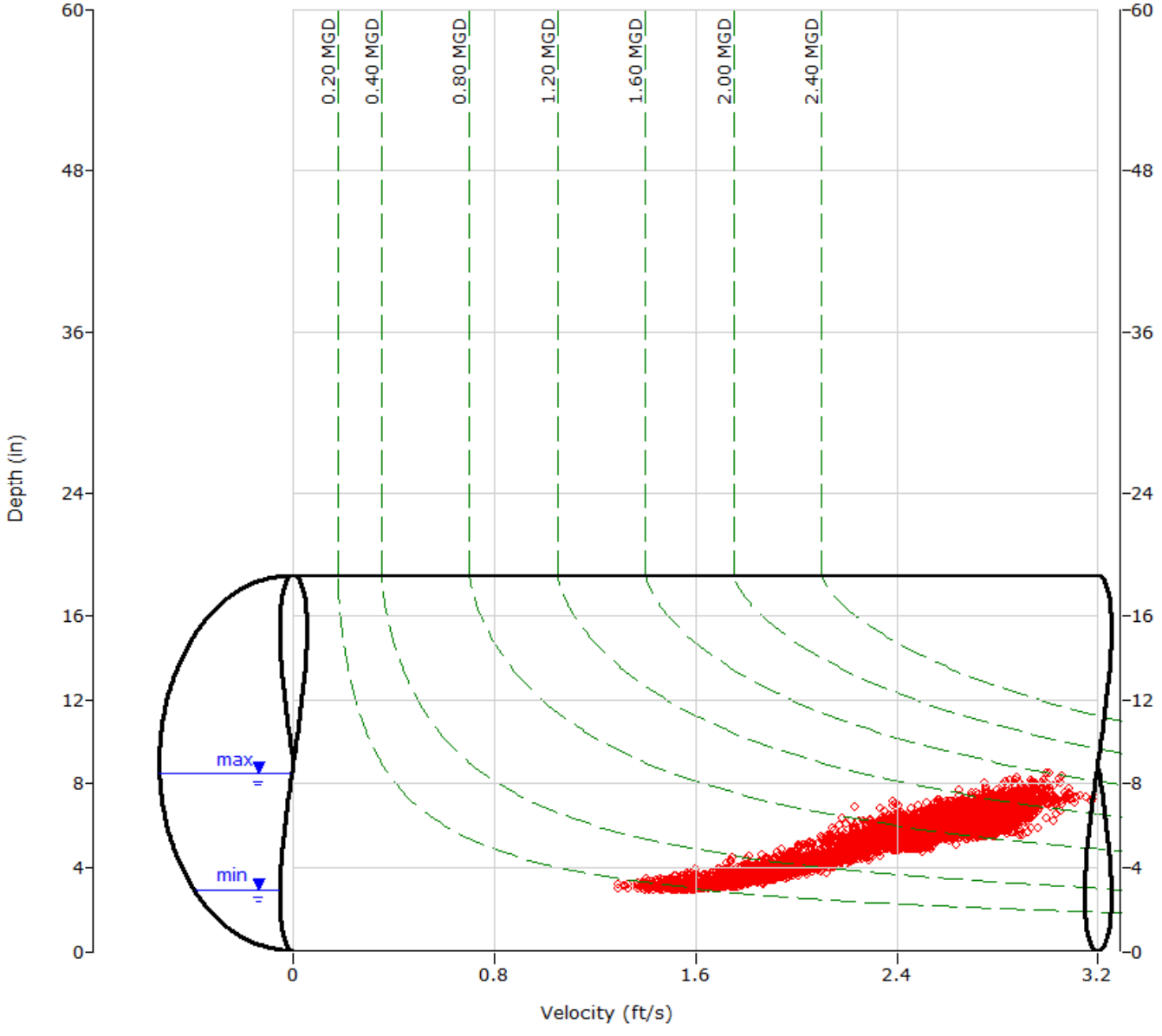
Pipe Height
18.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL6

Flow Monitor

CAL6

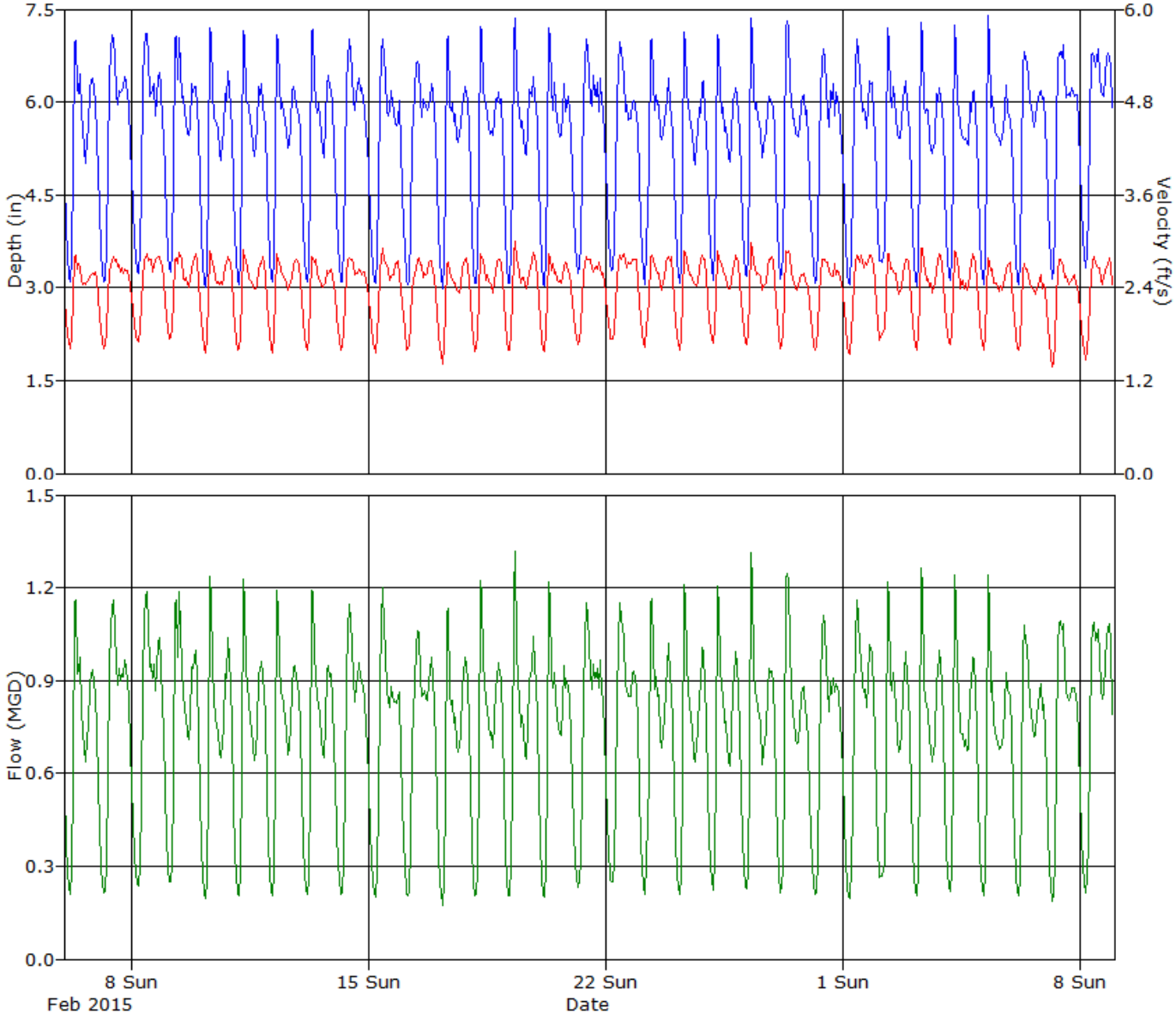
Pipe Height
18.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL6, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:45	3.01	07:45	7.91	5.37	04:25	1.55	07:45	2.96	2.39	04:45	0.198	07:45	1.427	0.718	0.718	
2/7/2015	04:40	2.98	10:00	7.21	5.50	05:05	1.55	11:50	2.96	2.41	04:40	0.192	11:50	1.215	0.754	0.754	
2/8/2015	05:10	3.13	11:00	7.36	5.51	05:25	1.58	11:00	3.08	2.46	04:35	0.219	11:00	1.352	0.771	0.771	
2/9/2015	03:55	3.18	07:55	7.90	5.48	03:45	1.63	10:45	3.03	2.45	03:45	0.224	08:00	1.399	0.756	0.756	
2/10/2015	04:20	2.93	07:45	8.47	5.29	03:35	1.49	07:50	3.03	2.41	04:15	0.185	07:45	1.583	0.714	0.714	
2/11/2015	04:40	3.01	07:35	8.11	5.32	04:40	1.45	08:05	3.08	2.39	04:40	0.182	07:35	1.467	0.713	0.713	
2/12/2015	04:40	3.02	07:35	8.19	5.35	03:45	1.42	07:50	2.99	2.40	03:45	0.190	07:35	1.454	0.718	0.718	
2/13/2015	04:15	3.05	07:55	8.06	5.37	05:15	1.47	08:10	2.99	2.38	05:15	0.193	07:55	1.404	0.718	0.718	
2/14/2015	05:25	2.99	10:50	7.31	5.42	04:35	1.42	12:20	3.05	2.39	04:35	0.182	10:50	1.307	0.732	0.732	
2/15/2015	04:40	3.02	11:00	7.22	5.30	05:10	1.38	10:20	3.00	2.39	05:10	0.177	10:30	1.252	0.712	0.712	
2/16/2015	05:00	3.00	10:25	6.83	5.35	03:20	1.46	09:25	2.95	2.39	04:40	0.190	10:25	1.152	0.721	0.721	
2/17/2015	04:40	2.92	07:55	7.60	5.32	04:05	1.30	21:30	2.88	2.33	04:05	0.162	07:55	1.305	0.697	0.697	
2/18/2015	03:55	2.93	07:40	8.00	5.36	03:15	1.44	07:35	3.02	2.40	03:15	0.191	07:40	1.462	0.724	0.724	
2/19/2015	04:50	3.02	08:00	7.54	5.35	05:00	1.41	08:20	3.11	2.43	05:00	0.180	08:00	1.400	0.731	0.731	
2/20/2015	04:45	2.95	07:40	7.86	5.38	04:50	1.39	07:35	2.99	2.40	04:50	0.171	07:40	1.434	0.726	0.726	
2/21/2015	04:35	3.15	10:25	7.17	5.45	04:35	1.52	12:15	2.95	2.42	04:35	0.205	10:30	1.234	0.744	0.744	
2/22/2015	04:15	3.22	10:40	7.20	5.39	04:15	1.56	10:10	3.01	2.47	04:15	0.216	11:05	1.232	0.747	0.747	
2/23/2015	04:05	2.99	08:10	7.55	5.38	03:45	1.56	20:30	2.94	2.44	04:05	0.197	07:55	1.309	0.735	0.735	
2/24/2015	04:45	2.92	07:35	8.04	5.29	04:30	1.46	08:20	3.09	2.42	04:40	0.178	07:35	1.456	0.716	0.716	
2/25/2015	04:35	3.07	07:30	8.25	5.32	04:55	1.62	07:35	3.06	2.43	04:30	0.215	07:30	1.557	0.720	0.720	
2/26/2015	04:20	3.10	07:30	8.47	5.34	04:05	1.55	07:45	3.19	2.44	04:20	0.209	07:30	1.587	0.730	0.730	
2/27/2015	03:50	3.05	07:45	8.02	5.41	03:35	1.50	09:35	3.07	2.39	03:35	0.197	07:45	1.501	0.728	0.728	
2/28/2015	04:15	3.05	10:20	6.99	5.35	04:40	1.48	10:15	2.96	2.39	04:50	0.195	10:20	1.192	0.718	0.718	
3/1/2015	04:40	2.99	10:05	7.20	5.37	05:35	1.41	13:10	3.04	2.44	05:35	0.176	10:55	1.262	0.742	0.742	
3/2/2015	02:55	3.31	07:50	7.99	5.40	02:50	1.64	08:00	3.01	2.41	02:55	0.237	07:50	1.463	0.729	0.729	
3/3/2015	04:45	2.96	07:45	8.36	5.30	04:50	1.52	07:55	3.17	2.40	04:50	0.187	07:45	1.587	0.714	0.714	
3/4/2015	04:05	3.07	07:45	8.01	5.27	04:40	1.58	08:05	3.02	2.41	04:40	0.206	07:45	1.449	0.705	0.705	
3/5/2015	04:50	2.95	07:45	8.03	5.28	04:50	1.56	08:20	3.09	2.37	04:50	0.190	07:45	1.476	0.696	0.696	
3/6/2015	04:35	2.98	09:30	7.18	5.46	04:00	1.50	10:40	2.83	2.30	04:20	0.195	09:30	1.138	0.708	0.708	
3/7/2015	04:20	3.12	08:45	7.21	5.58	05:15	1.29	11:25	2.88	2.29	05:15	0.174	12:10	1.201	0.732	0.732	
3/8/2015	04:40	3.23	20:25	7.24	5.75	04:35	1.37	10:40	2.94	2.36	04:35	0.191	10:00	1.192	0.786	0.786	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			22.554
Avg	5.39	2.40	0.728

Site Commentary

Site Information

CAL7	
Pipe Dimensions	18.25" x 18.13"
Silt Level	0.00"

Overview

Site CAL7 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.22	5.51	0.806
Minimum	1.59	3.22	0.215
Maximum	5.14	6.40	1.695
Time of Minimum	2/20/2015 4:35 AM	3/7/2015 5:10 AM	2/20/2015 3:50 AM
Time of Maximum	2/27/2015 7:40 AM	2/18/2015 8:10 AM	2/27/2015 7:40 AM

Data Quality

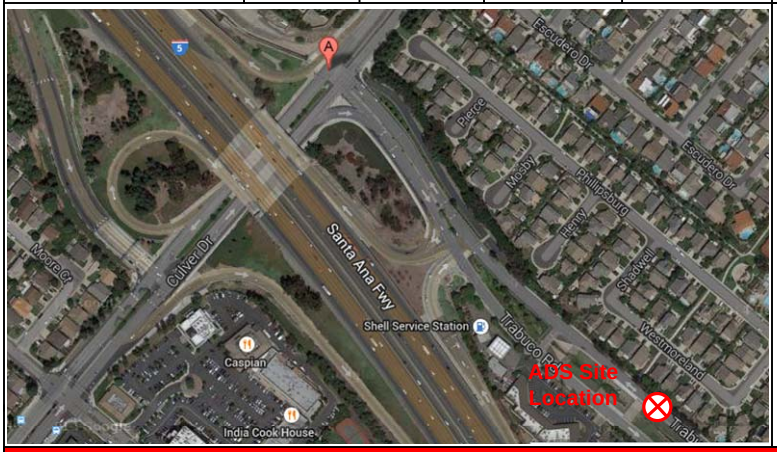
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine		**Agency:** IRWD		**FM Initials:** SK
Site Name: CAL7	**Install Date:** 1/27/15		**Monitor Type**	Peak Doppler	
Address/Location: Trabuco & Culver			**Monitor Model**	Triton	
			Data Acquisition	Manual Collect	
			Manhole ID	MH084W047	
Access: Drive	**Type of System:**	Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.25 "	
			Pipe Width:	18.13 "	





Investigation Information:

Date/Time of Investigation:	1/27/15 @ 0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	6.47 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

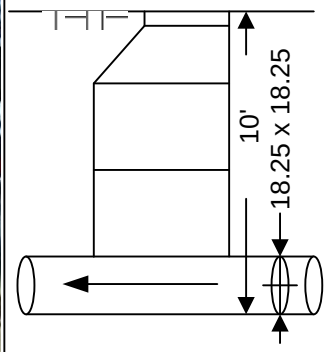
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

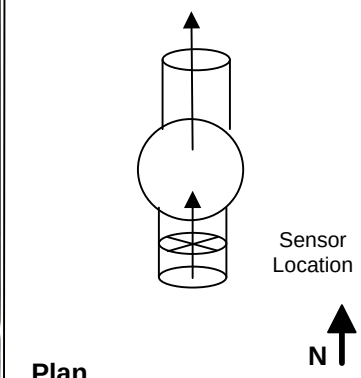
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

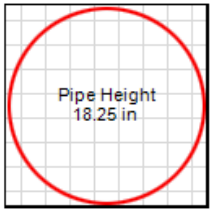
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

CAL7

Flow Monitor

CAL7

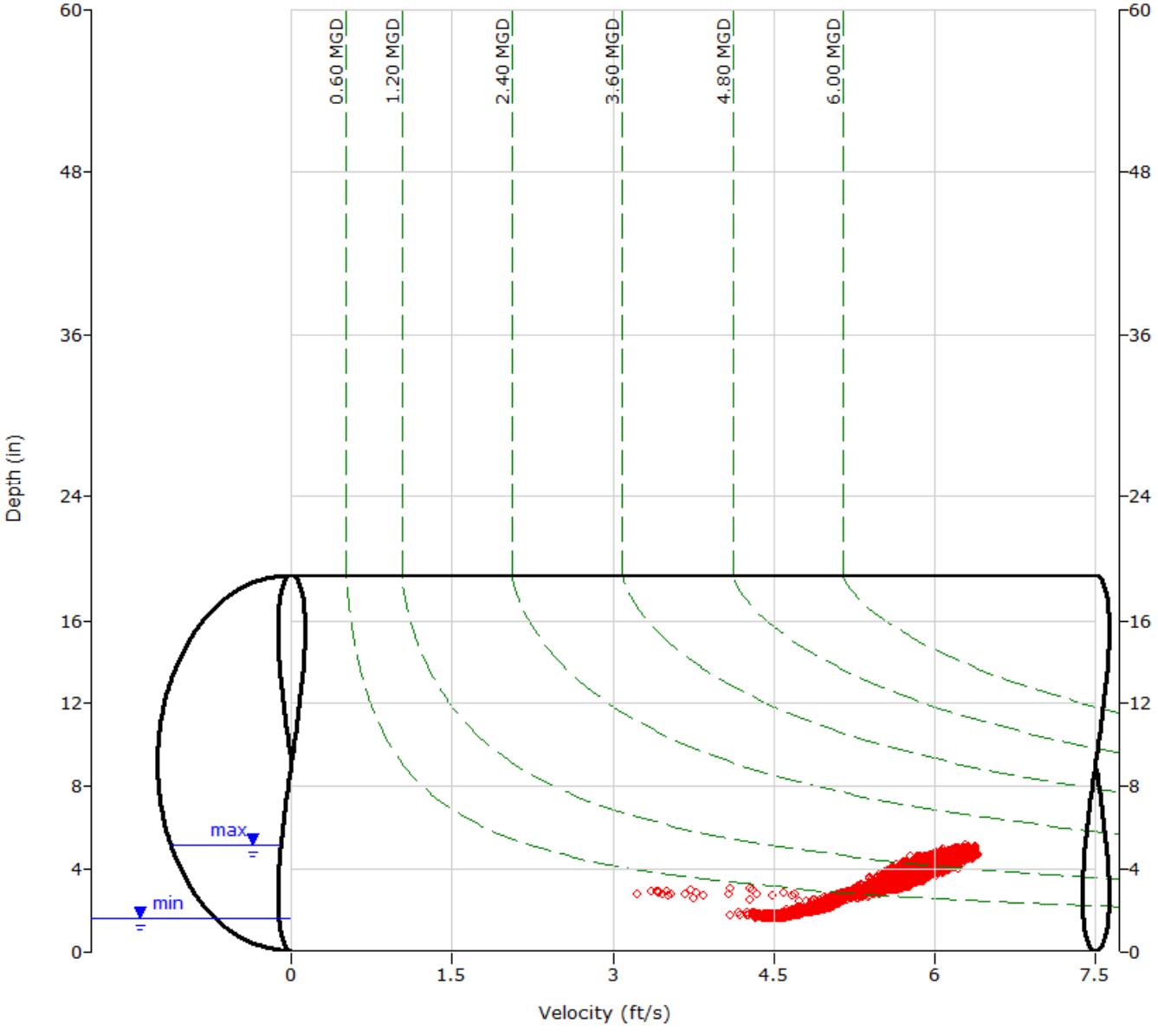


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



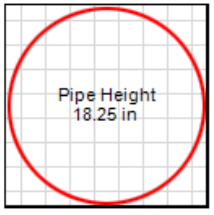
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL7

Flow Monitor

CAL7

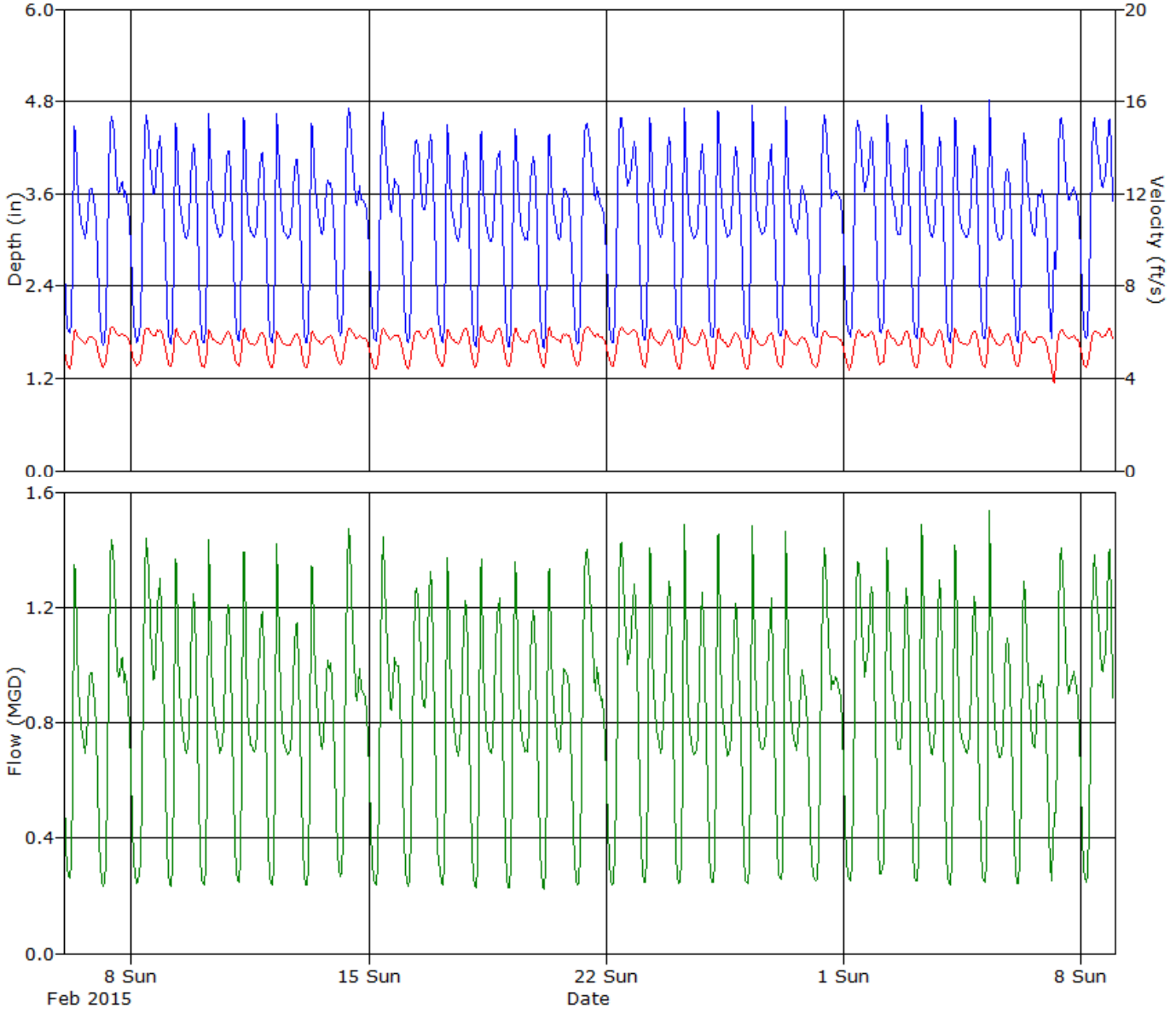


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL7, Pipe Height: 18.25 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:05	1.78	07:50	4.84	3.12	04:10	4.35	07:55	6.24	5.47	04:05	0.255	07:50	1.546	0.759	0.759	
2/7/2015	04:40	1.63	09:50	4.69	3.26	04:45	4.39	09:50	6.26	5.56	04:40	0.226	09:50	1.482	0.836	0.836	
2/8/2015	04:40	1.66	11:00	4.68	3.37	04:40	4.51	11:10	6.31	5.61	04:40	0.237	11:05	1.487	0.885	0.885	
2/9/2015	04:45	1.63	08:00	4.86	3.19	03:55	4.46	07:55	6.30	5.51	04:35	0.231	08:00	1.566	0.794	0.794	
2/10/2015	04:35	1.64	07:45	4.88	3.16	02:40	4.39	07:55	6.31	5.47	04:40	0.232	07:45	1.575	0.780	0.780	
2/11/2015	04:20	1.66	07:55	4.88	3.17	04:20	4.47	08:05	6.30	5.48	04:20	0.237	08:05	1.577	0.782	0.782	
2/12/2015	04:05	1.66	07:50	4.93	3.15	04:20	4.37	07:40	6.20	5.44	03:50	0.231	07:55	1.572	0.769	0.769	
2/13/2015	04:10	1.64	07:45	4.86	3.16	04:05	4.41	08:00	6.21	5.46	04:10	0.229	08:00	1.537	0.775	0.775	
2/14/2015	05:05	1.73	10:35	4.85	3.30	05:00	4.57	10:35	6.27	5.54	05:05	0.256	10:35	1.558	0.838	0.838	
2/15/2015	05:45	1.67	10:20	4.77	3.23	05:05	4.34	10:20	6.24	5.49	05:00	0.232	10:20	1.514	0.813	0.813	
2/16/2015	05:00	1.65	21:00	4.47	3.31	04:15	4.32	20:10	6.27	5.56	04:10	0.231	21:00	1.357	0.852	0.852	
2/17/2015	04:45	1.65	07:50	4.77	3.16	04:05	4.44	07:45	6.37	5.55	04:05	0.234	07:45	1.538	0.789	0.789	
2/18/2015	04:15	1.61	08:00	4.64	3.13	03:45	4.42	08:10	6.40	5.57	03:45	0.224	08:05	1.494	0.786	0.786	
2/19/2015	03:40	1.60	07:40	4.65	3.11	03:35	4.43	07:55	6.38	5.56	03:35	0.224	07:55	1.486	0.775	0.775	
2/20/2015	04:35	1.59	07:50	4.65	3.09	03:50	4.32	07:55	6.30	5.54	03:50	0.215	07:55	1.477	0.760	0.760	
2/21/2015	05:05	1.61	09:45	4.55	3.23	04:55	4.46	09:35	6.31	5.58	05:05	0.225	09:45	1.422	0.823	0.823	
2/22/2015	04:25	1.65	10:45	4.67	3.38	04:50	4.46	11:10	6.27	5.62	04:15	0.236	10:45	1.466	0.890	0.890	
2/23/2015	04:05	1.68	07:55	4.80	3.22	04:10	4.35	08:15	6.26	5.52	04:10	0.235	07:45	1.528	0.807	0.807	
2/24/2015	03:30	1.69	07:45	4.95	3.16	03:55	4.09	07:45	6.38	5.45	03:55	0.229	07:45	1.633	0.778	0.778	
2/25/2015	03:15	1.72	08:00	5.07	3.19	03:55	4.31	07:50	6.38	5.45	03:50	0.243	07:55	1.674	0.788	0.788	
2/26/2015	04:05	1.69	07:55	4.96	3.17	03:05	4.36	07:35	6.32	5.43	04:10	0.238	07:55	1.608	0.776	0.776	
2/27/2015	04:35	1.74	07:40	5.14	3.14	04:15	4.34	07:45	6.29	5.42	04:30	0.249	07:40	1.695	0.758	0.758	
2/28/2015	04:30	1.71	10:10	4.78	3.28	04:40	4.35	11:40	6.10	5.47	04:30	0.244	10:10	1.477	0.824	0.824	
3/1/2015	05:45	1.73	10:00	4.62	3.39	04:50	4.17	11:40	6.12	5.51	05:15	0.248	11:40	1.394	0.873	0.873	
3/2/2015	03:15	1.75	07:50	4.88	3.23	02:45	4.51	07:55	6.20	5.49	02:45	0.260	07:50	1.554	0.802	0.802	
3/3/2015	04:45	1.70	07:55	5.02	3.22	03:50	4.35	07:30	6.30	5.49	04:35	0.247	07:55	1.634	0.806	0.806	
3/4/2015	04:20	1.65	08:00	4.88	3.17	04:10	4.38	07:55	6.35	5.47	04:10	0.230	07:55	1.590	0.785	0.785	
3/5/2015	04:10	1.70	07:40	5.00	3.14	03:55	4.44	07:40	6.33	5.45	04:05	0.245	07:40	1.641	0.768	0.768	
3/6/2015	04:25	1.65	08:40	4.48	3.14	04:50	4.53	07:45	6.09	5.48	04:25	0.238	07:45	1.354	0.768	0.768	
3/7/2015	04:15	1.67	10:50	4.72	3.37	05:10	3.22	10:50	6.18	5.44	04:15	0.237	10:50	1.480	0.847	0.847	
3/8/2015	04:40	1.71	10:00	4.83	3.47	04:25	4.45	21:25	6.20	5.57	04:25	0.247	10:00	1.488	0.913	0.912	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			24.998
Avg	3.22	5.51	0.806

Site Commentary

Site Information

CAL8	
Pipe Dimensions	17.88" x 17.88"
Silt Level	0.00"

Overview

Site CAL8 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	6.02	2.12	0.764
Minimum	3.32	0.63	0.104
Maximum	8.98	2.84	1.493
Time of Minimum	2/22/2015 5:25 AM	3/7/2015 3:35 AM	3/8/2015 5:10 AM
Time of Maximum	3/5/2015 7:45 AM	2/20/2015 8:15 AM	3/2/2015 7:55 AM

Data Quality

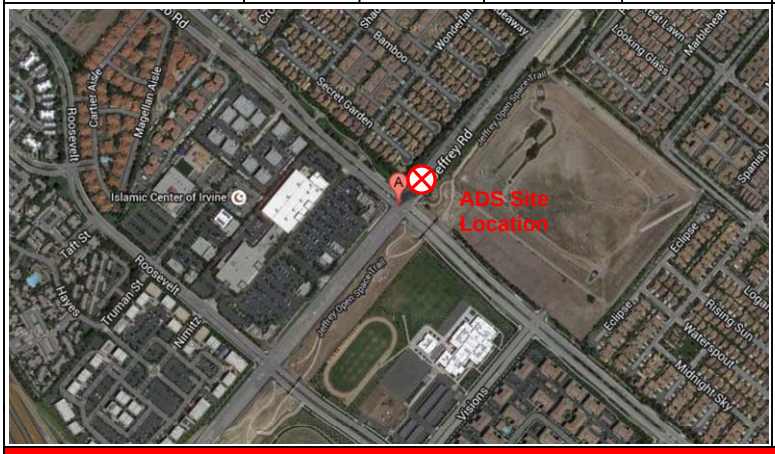
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

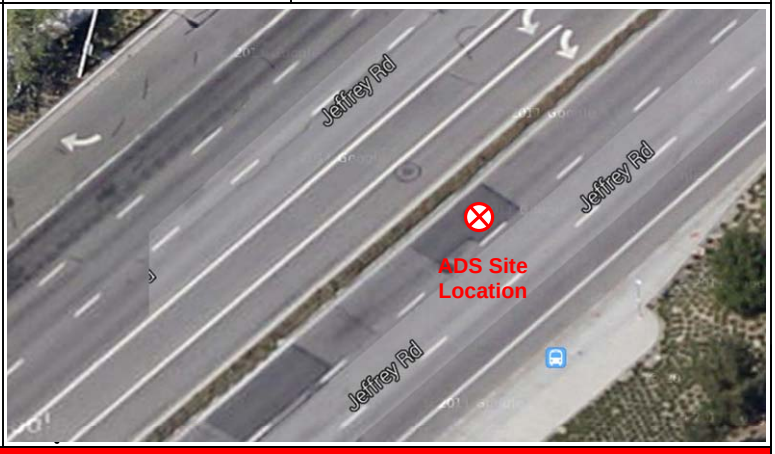
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL8	**Install Date:** 1/27/15	**Monitor Type**	Peak Doppler
Address/Location: Trabuco & Jeffrey		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH105S159
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	17.88 "
		Pipe Width:	17.88 "





Investigation Information:

Date/Time of Investigation:	1/27/15 @ 1200
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	6.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.48 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	25'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

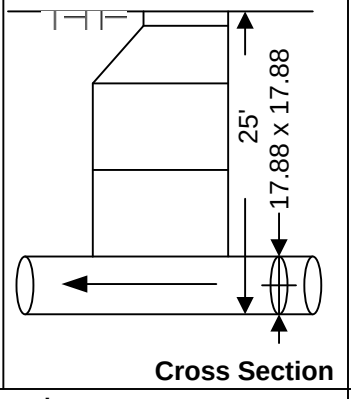
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

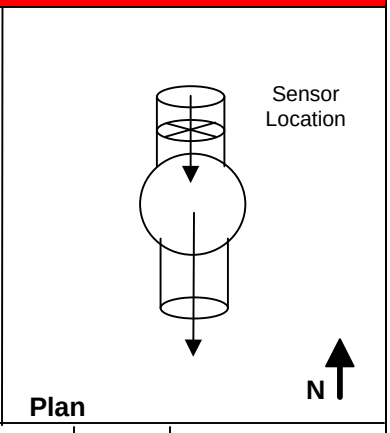
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

CAL8

Flow Monitor

CAL8

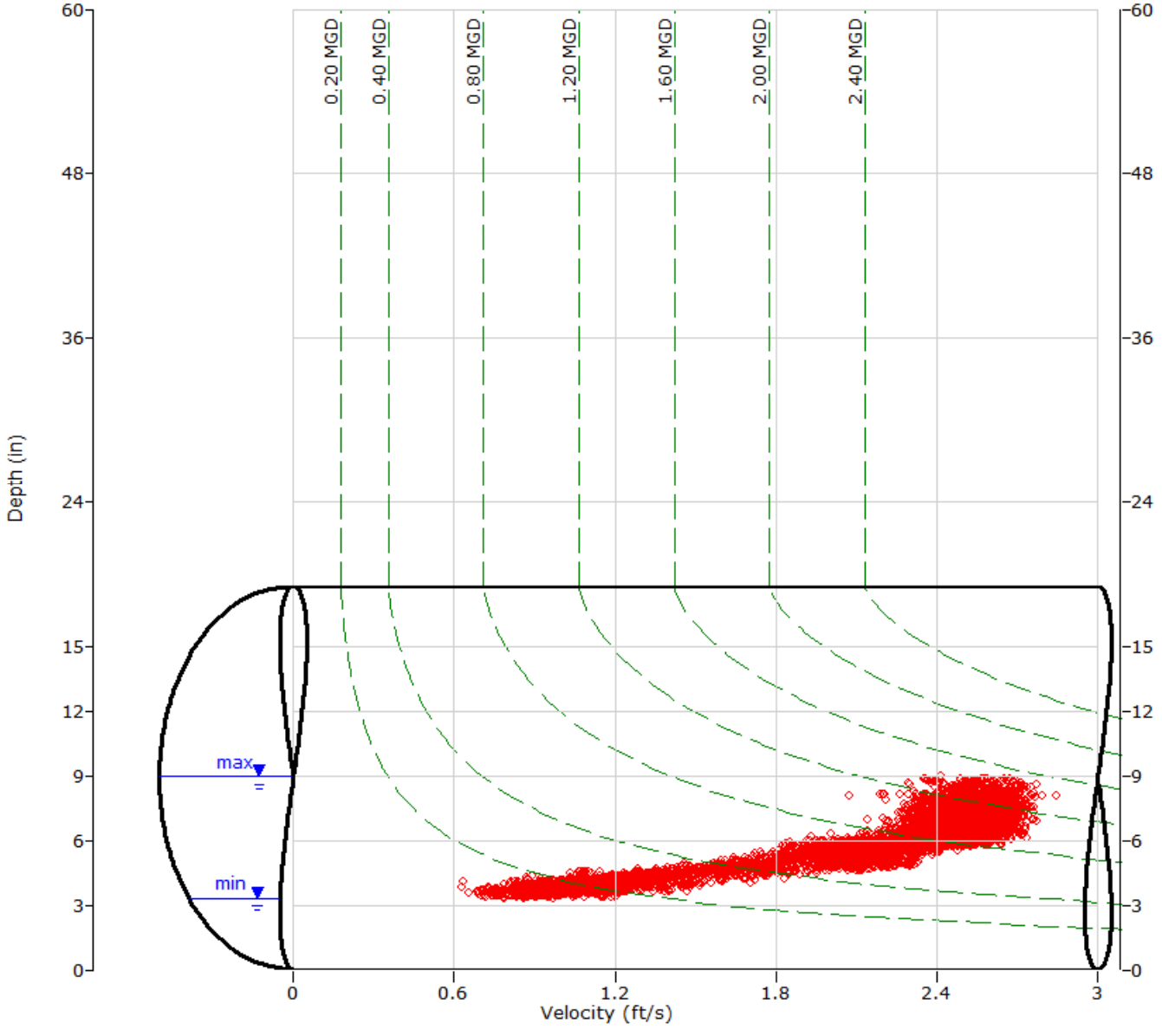
Pipe Height
17.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



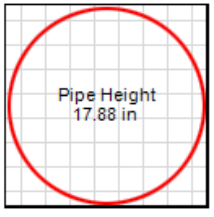
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL8

Flow Monitor

CAL8

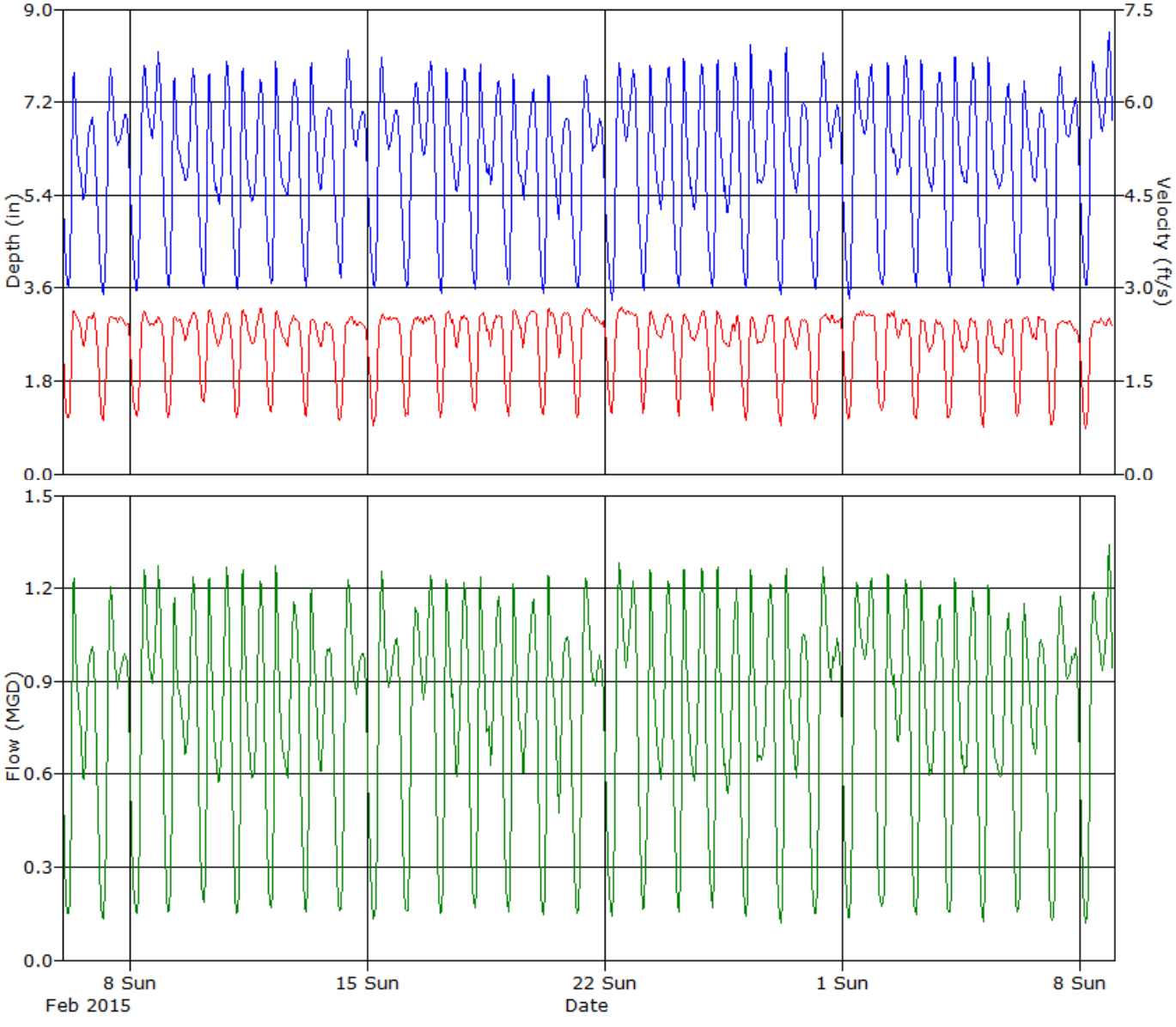


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL8, Pipe Height: 17.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:55	3.51	08:00	8.75	5.78	05:00	0.82	18:00	2.71	2.12	05:00	0.130	08:00	1.473	0.720	0.720	
2/7/2015	05:05	3.38	10:00	7.99	5.98	04:40	0.69	17:30	2.64	2.13	04:50	0.106	10:25	1.231	0.761	0.761	
2/8/2015	04:50	3.47	20:00	8.31	6.25	05:30	0.83	11:15	2.68	2.09	05:30	0.129	20:45	1.311	0.804	0.804	
2/9/2015	04:25	3.59	08:00	8.40	5.99	03:20	0.85	21:25	2.71	2.14	03:35	0.143	07:50	1.303	0.759	0.759	
2/10/2015	04:35	3.58	08:00	8.43	5.91	04:35	0.92	07:35	2.75	2.16	04:35	0.149	07:50	1.415	0.750	0.750	
2/11/2015	04:25	3.44	07:55	8.45	5.87	03:50	0.85	07:20	2.79	2.13	03:50	0.135	08:05	1.382	0.738	0.738	
2/12/2015	04:55	3.58	07:45	8.85	5.89	05:10	0.82	07:45	2.67	2.11	05:10	0.136	07:45	1.486	0.734	0.734	
2/13/2015	04:15	3.54	07:55	8.65	5.99	04:00	0.84	19:15	2.58	2.10	04:00	0.141	07:55	1.365	0.740	0.740	
2/14/2015	05:25	3.74	10:25	8.31	6.23	03:35	0.64	13:30	2.62	2.07	03:35	0.125	10:25	1.272	0.777	0.777	
2/15/2015	05:20	3.59	09:45	8.31	6.08	03:55	0.73	16:30	2.72	2.10	05:30	0.124	10:15	1.310	0.772	0.772	
2/16/2015	05:00	3.48	20:15	8.30	6.20	05:05	0.84	21:40	2.71	2.15	05:05	0.129	20:00	1.302	0.806	0.806	
2/17/2015	04:25	3.46	07:50	8.61	6.01	03:55	0.86	20:55	2.74	2.15	04:05	0.138	08:00	1.380	0.769	0.769	
2/18/2015	05:00	3.52	07:55	8.43	6.01	04:40	0.91	23:05	2.69	2.16	04:40	0.143	08:15	1.349	0.769	0.769	
2/19/2015	04:40	3.60	07:55	8.55	5.89	04:00	0.85	19:35	2.76	2.19	04:05	0.142	07:55	1.443	0.760	0.760	
2/20/2015	04:45	3.45	07:55	8.60	5.77	04:25	0.87	08:15	2.84	2.17	04:25	0.135	07:55	1.487	0.737	0.737	
2/21/2015	05:30	3.55	09:50	8.09	5.97	04:55	0.77	11:40	2.76	2.21	04:55	0.123	10:50	1.284	0.783	0.783	
2/22/2015	05:25	3.32	10:00	8.19	6.14	05:20	0.79	10:55	2.77	2.24	05:20	0.114	10:55	1.363	0.836	0.836	
2/23/2015	04:30	3.50	07:50	8.89	5.92	03:30	0.87	08:55	2.72	2.18	03:30	0.141	07:50	1.484	0.760	0.760	
2/24/2015	04:45	3.57	07:50	8.89	5.90	04:20	0.83	07:40	2.72	2.17	04:20	0.135	08:00	1.443	0.754	0.754	
2/25/2015	04:40	3.56	07:45	8.51	5.88	04:25	0.96	07:40	2.75	2.13	04:25	0.154	07:45	1.445	0.732	0.732	
2/26/2015	04:30	3.56	07:55	8.87	6.01	04:30	0.84	08:25	2.57	2.08	04:30	0.134	07:50	1.313	0.747	0.747	
2/27/2015	04:15	3.44	07:55	8.85	5.94	04:15	0.75	18:40	2.74	2.04	04:15	0.114	08:00	1.313	0.725	0.725	
2/28/2015	05:05	3.48	10:15	8.33	6.15	05:10	0.81	12:45	2.76	2.15	05:10	0.125	10:10	1.335	0.799	0.799	
3/1/2015	05:30	3.37	21:05	8.18	6.21	04:55	0.81	15:40	2.73	2.18	04:55	0.121	10:55	1.312	0.827	0.827	
3/2/2015	04:15	3.55	07:55	8.83	6.12	03:10	0.83	11:25	2.74	2.17	03:10	0.139	07:55	1.493	0.793	0.793	
3/3/2015	04:15	3.59	07:45	8.81	6.04	02:55	0.83	10:40	2.59	2.03	04:15	0.135	07:45	1.420	0.733	0.733	
3/4/2015	04:35	3.56	07:50	8.78	6.09	02:30	0.83	19:10	2.63	2.02	04:30	0.137	07:40	1.428	0.739	0.739	
3/5/2015	04:40	3.54	07:45	8.98	5.99	04:15	0.71	23:15	2.65	2.00	04:40	0.116	07:55	1.399	0.715	0.715	
3/6/2015	03:05	3.56	08:55	8.30	5.92	04:00	0.86	19:20	2.71	2.13	04:00	0.143	08:55	1.355	0.743	0.743	
3/7/2015	05:45	3.44	10:45	8.07	6.16	03:35	0.63	11:35	2.59	2.06	03:35	0.110	10:45	1.231	0.770	0.770	
3/8/2015	05:15	3.54	21:00	8.78	6.44	05:10	0.65	16:30	2.64	2.06	05:10	0.104	20:55	1.403	0.827	0.827	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			23.679
Avg	6.02	2.12	0.764

Site Commentary

Site Information

CAL9	
Pipe Dimensions	27.75" x 26.75"
Silt Level	0.00"

Overview

Site CAL9 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.99	3.57	0.873
Minimum	2.27	2.29	0.258
Maximum	7.36	5.14	2.835
Time of Minimum	2/15/2015 6:00 AM	2/22/2015 5:00 AM	2/15/2015 6:00 AM
Time of Maximum	2/9/2015 8:25 AM	2/9/2015 10:15 AM	2/9/2015 8:25 AM

Data Quality

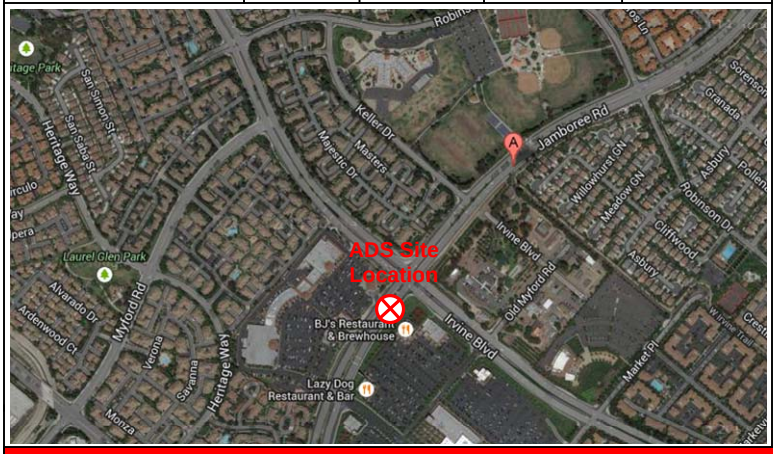
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

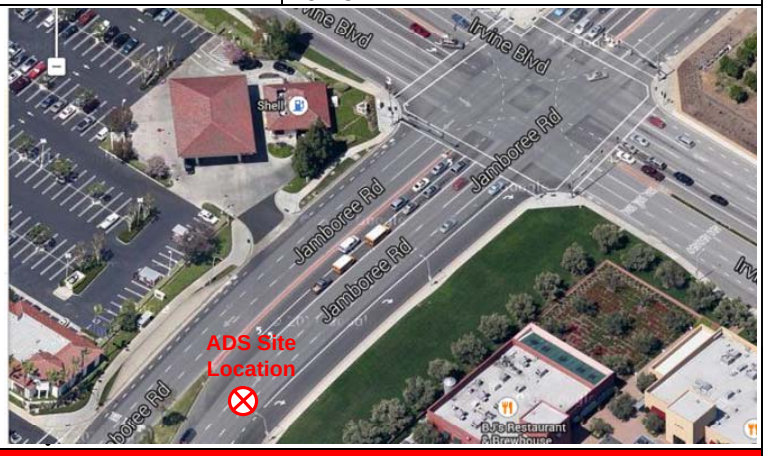
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL9	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: Jamboree & Irvine Dr		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH044E008
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	27.25 "
		Pipe Width:	26.75 "





Investigation Information:

Date/Time of Investigation:	1/29/15 @ 0340
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.00 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	PVC/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

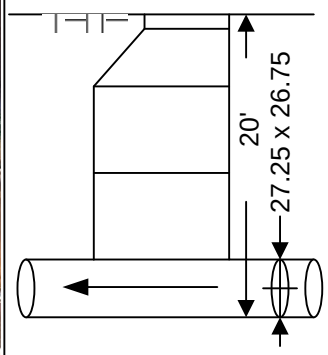
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

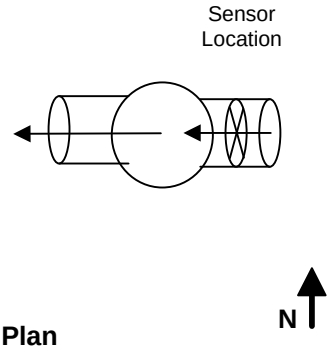
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

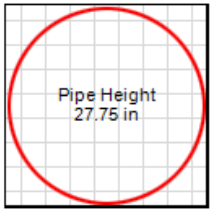
ub

SCATTERGRAPH REPORT

CAL9

Flow Monitor

CAL9

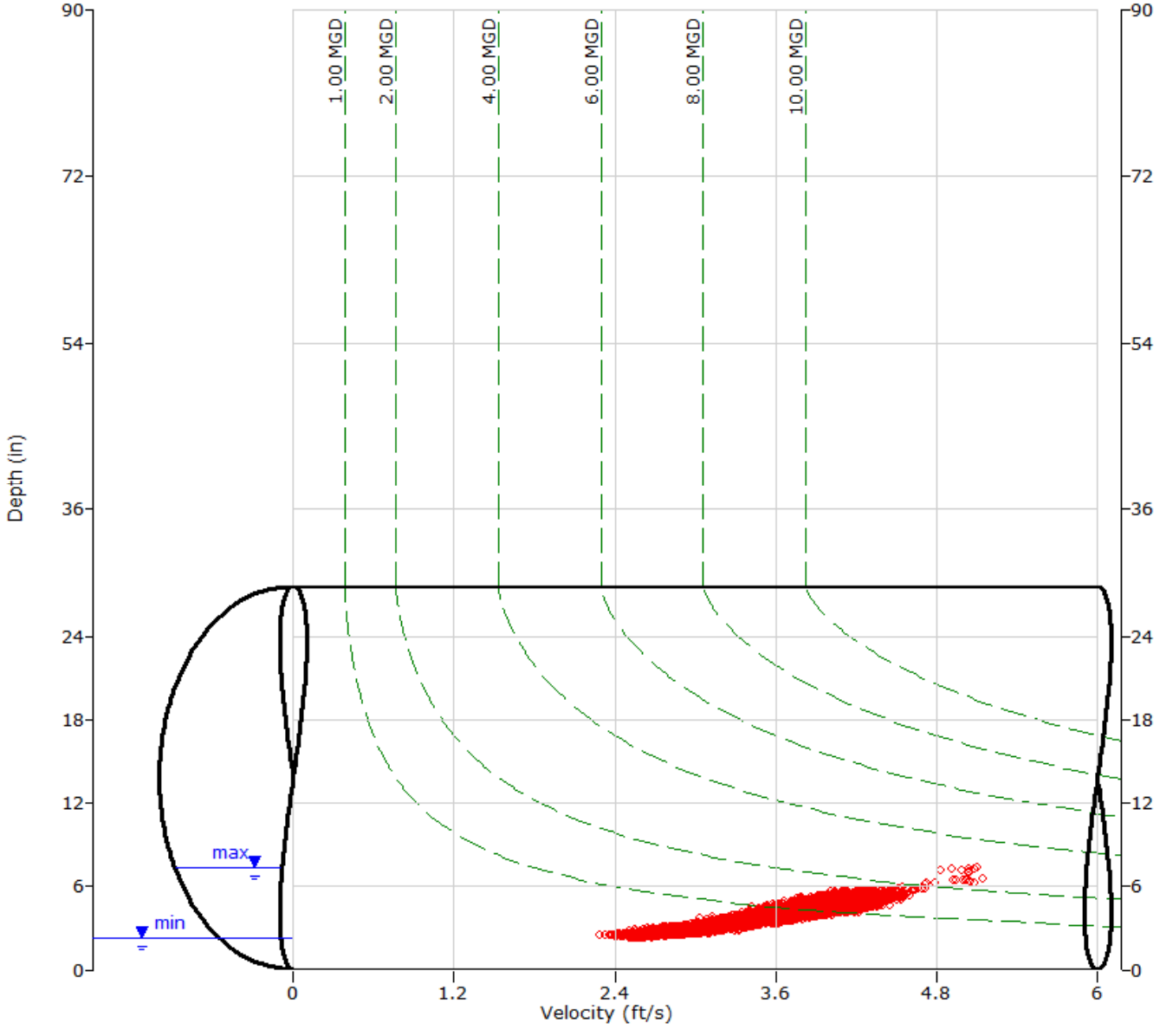


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL9

Flow Monitor

CAL9

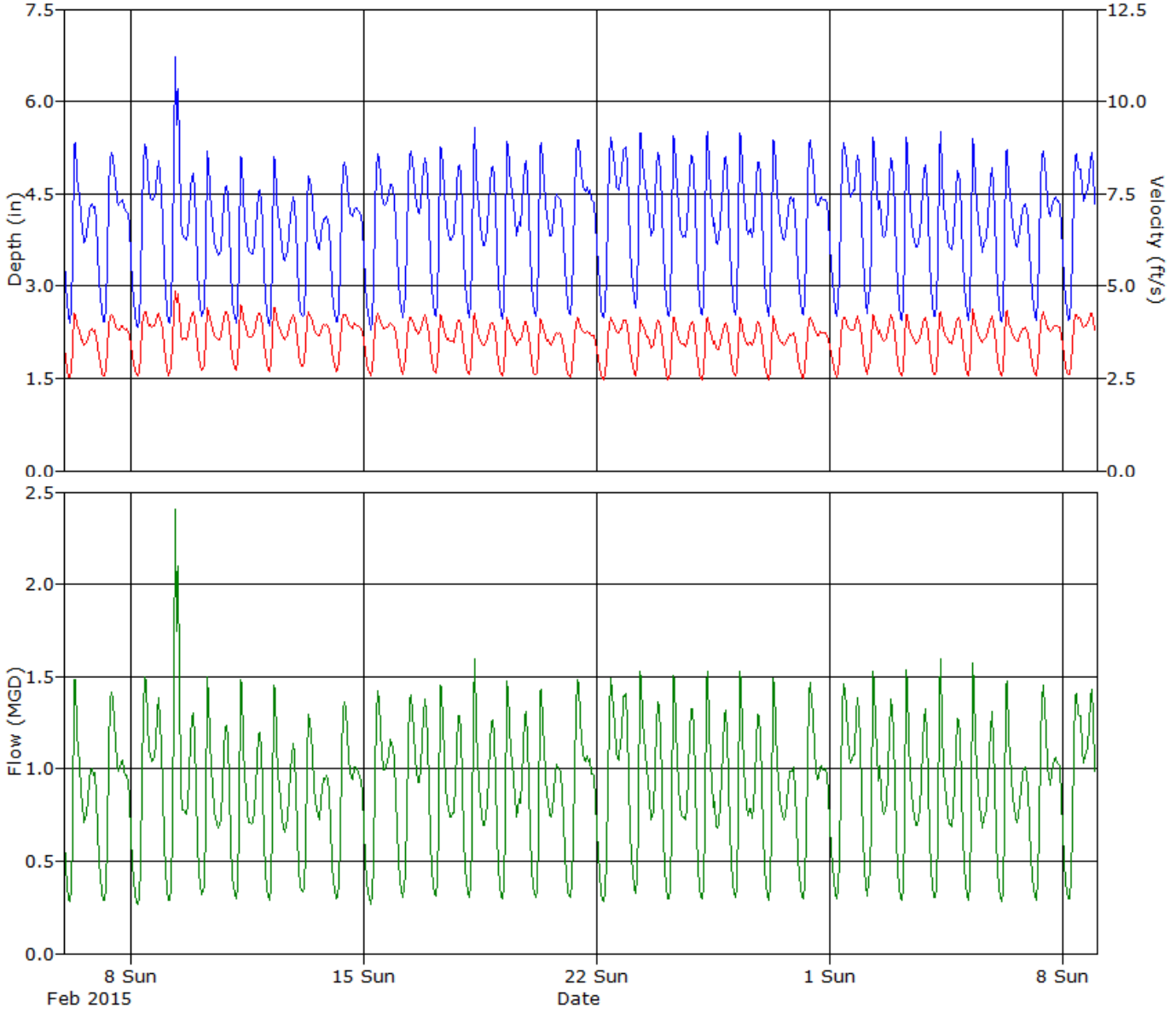
Pipe Height
27.75 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

CAL9, Pipe Height: 27.75 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:35	2.39	07:50	5.56	3.90	03:50	2.40	07:45	4.42	3.50	03:50	0.269	07:55	1.645	0.824	0.824	
2/7/2015	05:10	2.37	10:35	5.20	3.96	05:30	2.52	10:35	4.29	3.59	04:35	0.275	10:35	1.457	0.871	0.871	
2/8/2015	05:10	2.32	10:50	5.44	4.03	06:10	2.50	11:20	4.41	3.66	06:10	0.265	10:50	1.594	0.922	0.922	
2/9/2015	04:25	2.32	08:25	7.36	4.12	03:35	2.41	10:15	5.14	3.74	03:35	0.262	08:25	2.835	0.989	0.989	
2/10/2015	03:25	2.43	07:30	5.47	3.78	03:25	2.65	07:45	4.58	3.69	03:25	0.297	07:30	1.656	0.831	0.831	
2/11/2015	04:15	2.37	08:05	5.35	3.73	04:00	2.63	07:50	4.60	3.72	04:00	0.285	07:50	1.617	0.821	0.821	
2/12/2015	04:50	2.33	07:35	5.39	3.70	04:40	2.65	08:10	4.52	3.69	04:50	0.282	07:30	1.581	0.806	0.806	
2/13/2015	05:00	2.47	08:40	4.87	3.73	02:55	2.78	08:15	4.35	3.68	05:00	0.321	08:35	1.329	0.805	0.805	
2/14/2015	05:20	2.35	10:30	5.14	3.86	04:15	2.62	09:55	4.41	3.68	05:20	0.286	10:30	1.443	0.855	0.855	
2/15/2015	06:00	2.27	10:55	5.28	3.95	05:20	2.52	09:45	4.37	3.62	06:00	0.258	10:45	1.505	0.880	0.880	
2/16/2015	04:25	2.43	10:25	5.31	4.11	04:50	2.55	20:05	4.27	3.64	04:20	0.292	10:30	1.466	0.929	0.929	
2/17/2015	04:00	2.45	07:45	5.43	3.98	04:10	2.53	08:00	4.31	3.55	04:10	0.290	08:00	1.550	0.861	0.861	
2/18/2015	04:25	2.46	08:15	5.75	3.99	04:20	2.52	08:05	4.43	3.51	04:20	0.289	08:10	1.726	0.855	0.855	
2/19/2015	04:30	2.43	07:55	5.55	4.07	04:30	2.52	07:45	4.29	3.51	04:30	0.282	07:45	1.590	0.881	0.881	
2/20/2015	04:35	2.48	07:35	5.47	3.98	05:10	2.48	07:40	4.20	3.45	04:35	0.295	07:40	1.526	0.832	0.832	
2/21/2015	05:20	2.50	11:10	5.46	4.12	04:40	2.48	10:35	4.24	3.48	05:15	0.293	10:40	1.531	0.892	0.892	
2/22/2015	05:10	2.45	10:35	5.48	4.25	05:00	2.29	10:35	4.24	3.53	05:00	0.262	10:35	1.554	0.957	0.957	
2/23/2015	04:35	2.60	07:50	5.68	4.20	04:15	2.55	07:30	4.29	3.51	04:35	0.317	07:35	1.646	0.919	0.919	
2/24/2015	04:10	2.50	08:00	5.68	4.06	03:20	2.37	08:00	4.34	3.45	03:45	0.280	08:00	1.670	0.867	0.867	
2/25/2015	04:10	2.51	08:05	5.74	4.05	03:40	2.42	08:00	4.31	3.43	04:15	0.287	08:05	1.686	0.860	0.860	
2/26/2015	04:40	2.51	07:35	5.75	4.06	04:45	2.54	08:00	4.30	3.47	04:40	0.299	07:35	1.682	0.866	0.866	
2/27/2015	04:25	2.50	07:35	5.62	3.95	04:35	2.41	08:00	4.30	3.43	04:35	0.285	07:35	1.625	0.821	0.821	
2/28/2015	05:10	2.50	09:55	5.55	4.08	05:10	2.43	10:00	4.22	3.49	05:10	0.284	09:55	1.547	0.880	0.880	
3/1/2015	05:30	2.47	11:00	5.39	4.18	05:20	2.45	10:55	4.27	3.59	05:20	0.285	11:00	1.518	0.941	0.941	
3/2/2015	03:35	2.52	07:35	5.64	4.07	03:05	2.51	07:30	4.38	3.59	03:05	0.305	07:30	1.659	0.900	0.900	
3/3/2015	04:25	2.42	07:45	5.72	3.92	04:25	2.46	07:45	4.47	3.55	04:25	0.275	07:45	1.735	0.847	0.847	
3/4/2015	03:40	2.47	08:00	5.72	3.91	03:40	2.52	07:50	4.49	3.56	03:40	0.288	08:10	1.735	0.847	0.847	
3/5/2015	04:30	2.42	07:35	5.74	3.90	04:00	2.42	07:35	4.62	3.58	04:00	0.275	07:35	1.803	0.847	0.847	
3/6/2015	04:30	2.41	07:50	5.43	3.84	04:25	2.45	08:00	4.45	3.56	04:25	0.271	08:00	1.600	0.818	0.818	
3/7/2015	05:20	2.42	10:40	5.27	3.98	05:15	2.55	10:40	4.33	3.61	05:15	0.283	10:40	1.497	0.878	0.878	
3/8/2015	04:50	2.42	21:15	5.23	4.15	04:30	2.57	21:40	4.37	3.69	04:30	0.288	21:15	1.477	0.963	0.963	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			27.065
Avg	3.99	3.57	0.873

Site Commentary

Site Information

M01	
Pipe Dimensions	47.88" x 47.38"
Silt Level	0.00"

Overview

Site M01 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. This location was determined to provide high biased data (15% to 20%) due to unstable hydraulic conditions within the inlet pipe (refer to "IRWD North IBC Sewer Zone Data Balance Report" under separate cover for more detailed explanations).

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	8.67	2.97	2.992
Minimum	5.65	2.00	1.134
Maximum	13.85	3.92	6.795
Time of Minimum	2/15/2015 7:15 AM	3/15/2015 5:55 AM	2/15/2015 7:20 AM
Time of Maximum	1/23/2015 11:20 AM	1/7/2015 2:40 PM	1/23/2015 11:20 AM

Data Quality

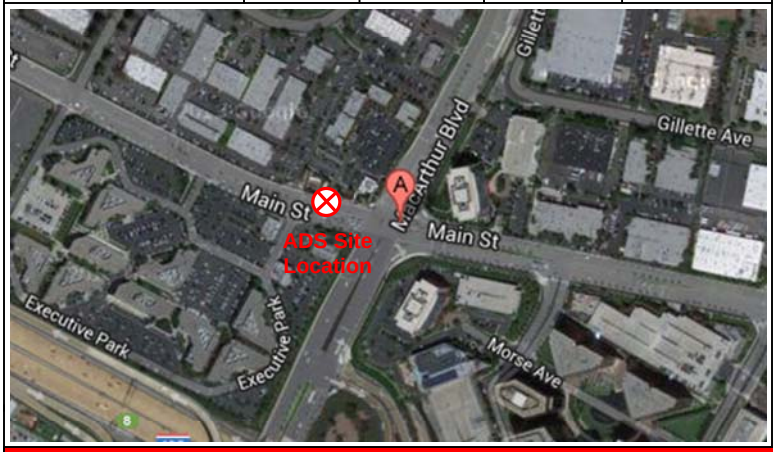
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD IBC Sewer Zone Flow Study TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: M01	**Install Date:** 12/30/14	**Monitor Type**	Peak Doppler
Address/Location: Main St. & McArthur		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH007E029
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	47.13 "
		Pipe Width:	47.25 "





Investigation Information:

Date/Time of Investigation:	4/25/14 @0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.21 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

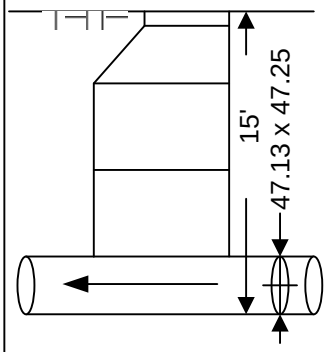
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

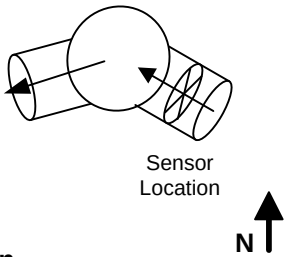
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

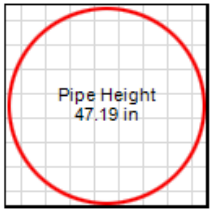
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

M01

Flow Monitor

M01

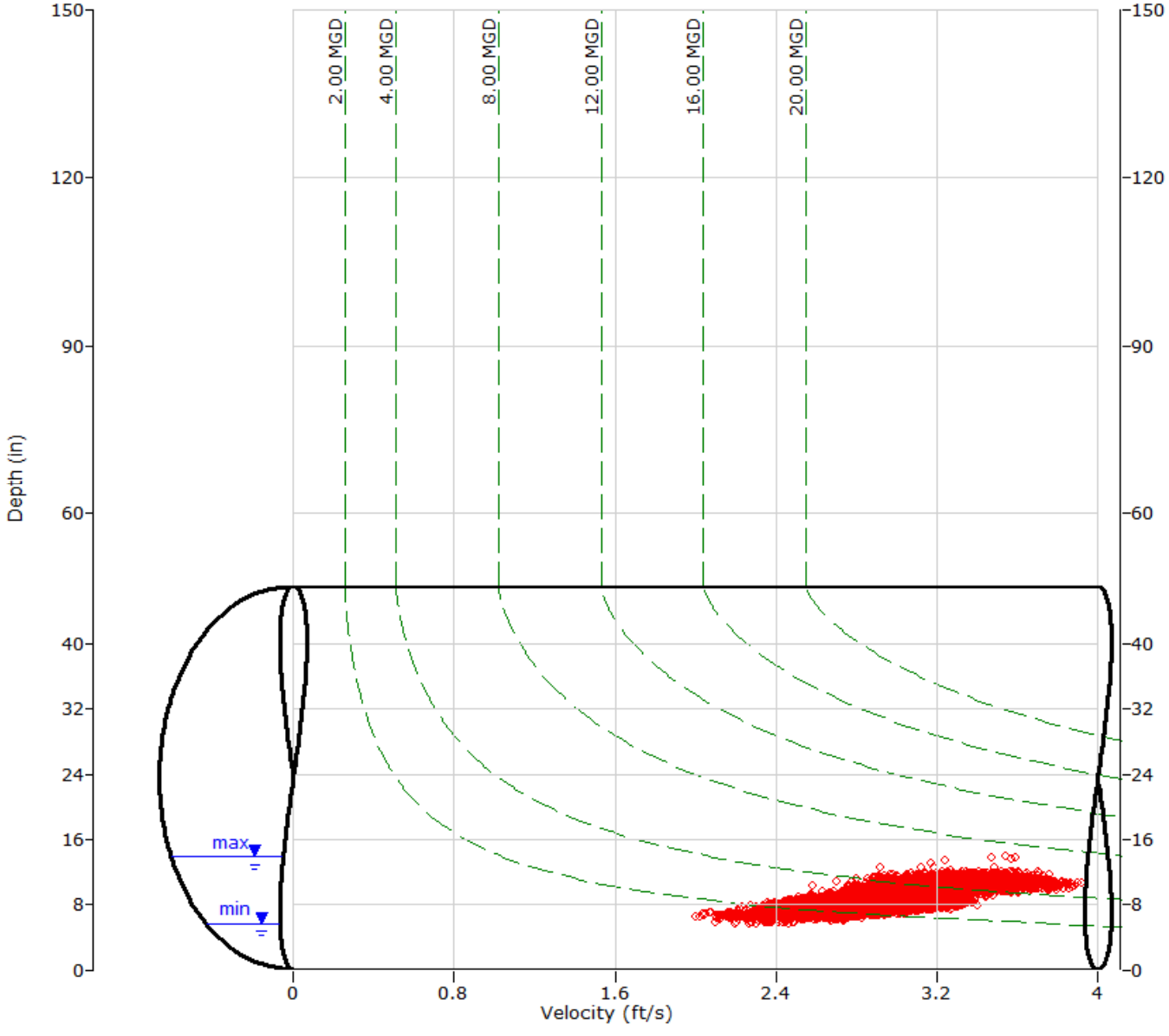


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

M01

Flow Monitor

M01

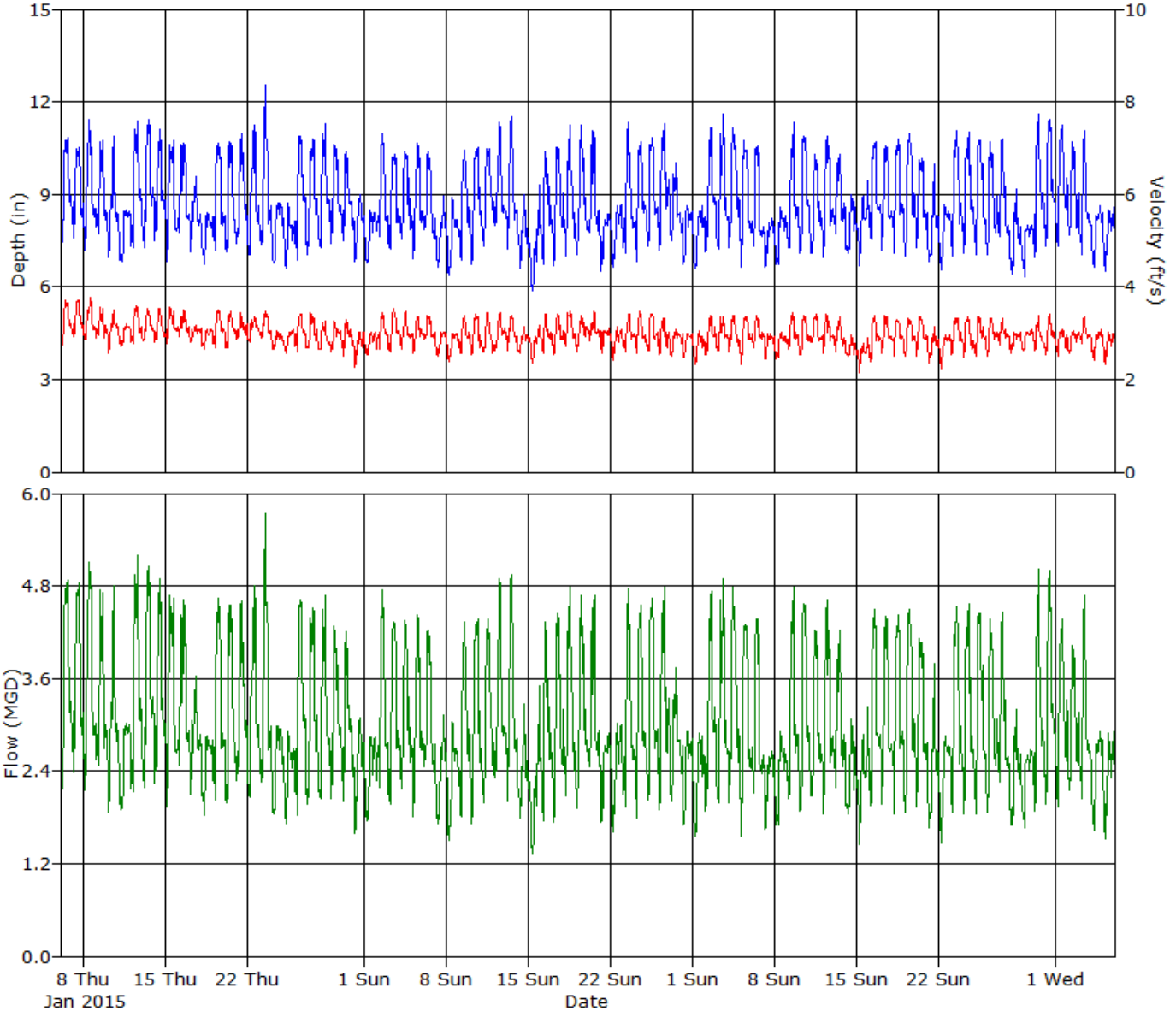
Pipe Height
47.19 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

M01, Pipe Height: 47.19 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	04:10	7.18	15:20	11.68	9.22	03:25	2.62	11:10	3.89	3.24	03:25	2.030	15:20	5.672	3.576	3.576	
1/7/2015	06:10	6.78	10:30	11.67	9.08	05:55	2.71	14:40	3.92	3.28	06:10	1.979	10:00	5.496	3.514	3.514	
1/8/2015	03:55	6.96	10:50	11.69	9.14	03:50	2.73	14:20	3.90	3.26	03:50	2.004	11:20	5.551	3.551	3.551	
1/9/2015	05:15	7.12	09:55	11.32	9.07	19:00	2.70	10:25	3.71	3.18	05:10	2.119	14:35	5.103	3.394	3.394	
1/10/2015	04:00	6.48	13:35	11.33	8.53	03:50	2.41	13:55	3.88	3.08	03:55	1.596	13:35	5.085	3.024	3.024	
1/11/2015	04:55	6.63	10:50	8.92	7.81	04:35	2.55	21:20	3.33	2.99	03:05	1.779	21:20	3.212	2.562	2.562	
1/12/2015	01:35	6.81	13:50	12.00	9.29	05:00	2.53	15:15	3.78	3.19	05:00	1.830	14:15	5.600	3.552	3.552	
1/13/2015	03:55	7.03	16:05	12.06	9.41	02:05	2.66	16:20	3.71	3.18	04:00	1.983	16:20	5.763	3.605	3.605	
1/14/2015	01:00	7.22	11:15	11.95	9.22	00:00	2.64	10:05	3.74	3.14	01:05	2.021	11:15	5.782	3.437	3.437	
1/15/2015	03:45	6.60	14:40	11.40	8.97	03:55	2.54	11:15	3.72	3.19	03:55	1.748	14:40	5.155	3.364	3.364	
1/16/2015	04:40	7.32	12:25	11.54	9.19	04:30	2.68	11:40	3.75	3.19	04:30	2.091	12:25	5.245	3.467	3.467	
1/17/2015	02:50	7.05	13:05	10.64	8.47	04:15	2.65	13:05	3.38	3.03	03:30	1.990	13:05	4.475	2.905	2.905	
1/18/2015	08:25	6.49	11:00	8.75	7.76	06:40	2.53	00:10	3.22	2.94	06:40	1.719	22:10	3.076	2.484	2.484	
1/19/2015	06:10	6.91	11:15	11.52	8.94	06:20	2.54	12:15	3.68	3.13	06:00	1.873	11:15	5.213	3.292	3.292	
1/20/2015	02:40	6.71	09:45	11.76	8.92	06:40	2.50	14:15	3.77	3.10	06:05	1.770	09:45	5.399	3.251	3.251	
1/21/2015	01:10	7.04	15:50	11.50	8.98	01:20	2.66	09:10	3.75	3.11	01:20	1.962	10:45	5.017	3.268	3.268	
1/22/2015	04:10	6.81	14:35	11.65	8.86	04:45	2.58	12:05	3.61	3.10	04:45	1.890	14:35	5.418	3.209	3.209	
1/23/2015	06:05	7.19	11:20	13.85	9.06	05:55	2.72	12:05	3.63	3.14	05:55	2.087	11:20	6.795	3.379	3.379	
1/24/2015	07:50	6.40	14:25	9.20	8.04	06:25	2.53	01:45	3.23	2.88	07:50	1.731	14:50	3.388	2.571	2.571	
1/25/2015	07:00	6.37	13:55	8.96	7.71	04:40	2.41	20:35	3.20	2.87	07:05	1.571	14:00	3.213	2.411	2.411	
1/26/2015	05:45	6.58	08:50	11.12	9.01	05:15	2.43	12:30	3.57	3.02	05:50	1.703	11:35	4.974	3.220	3.220	
1/27/2015	03:20	6.84	11:40	11.17	8.99	05:30	2.50	09:20	3.67	3.01	06:35	1.854	14:15	4.879	3.197	3.197	
1/28/2015	05:55	6.98	14:35	11.74	9.16	05:15	2.50	14:50	3.46	2.92	04:40	1.924	14:50	5.185	3.184	3.184	
1/29/2015	02:10	7.23	15:30	10.96	9.12	03:05	2.33	09:25	3.47	2.95	03:05	1.861	09:45	4.648	3.173	3.173	
1/30/2015	00:45	7.34	08:55	11.30	8.81	05:25	2.31	08:50	3.45	2.93	05:45	1.818	08:55	4.923	2.996	2.996	
1/31/2015	04:30	6.62	15:00	9.34	8.10	05:15	2.16	21:15	3.17	2.77	04:20	1.508	15:00	3.426	2.497	2.497	
2/1/2015	08:15	6.58	20:40	8.93	7.77	07:25	2.29	13:15	3.24	2.82	07:25	1.542	22:20	3.229	2.399	2.399	
2/2/2015	06:15	7.26	13:40	11.52	8.93	00:10	2.36	11:05	3.58	3.03	00:00	1.832	13:40	5.203	3.175	3.175	
2/3/2015	04:20	6.75	07:45	11.47	8.81	04:30	2.45	12:00	3.70	3.06	04:20	1.803	07:45	4.890	3.160	3.160	
2/4/2015	03:00	7.04	10:55	10.92	8.98	04:40	2.42	09:55	3.57	3.03	04:40	1.790	10:55	4.856	3.199	3.199	
2/5/2015	03:50	6.59	09:25	10.93	8.82	03:20	2.42	10:50	3.57	3.01	04:05	1.639	09:25	4.741	3.099	3.099	
2/6/2015	22:15	7.27	09:15	10.57	8.71	02:35	2.46	09:25	3.55	3.05	02:35	1.922	09:25	4.631	3.070	3.070	
2/7/2015	05:10	6.41	18:15	9.51	7.72	04:25	2.34	15:45	3.25	2.84	07:45	1.583	18:10	3.540	2.392	2.392	
2/8/2015	03:55	6.20	12:15	9.62	7.67	05:35	2.10	13:25	3.27	2.80	05:35	1.315	12:15	3.567	2.346	2.346	
2/9/2015	05:50	6.64	11:25	10.75	8.72	04:55	2.47	13:00	3.54	2.98	05:55	1.703	11:25	4.606	3.024	3.024	
2/10/2015	04:10	6.49	15:00	11.09	8.85	04:00	2.11	14:30	3.56	2.97	04:00	1.402	11:15	4.745	3.099	3.099	
2/11/2015	05:40	6.97	10:15	11.26	9.06	04:30	2.45	09:00	3.62	2.95	05:35	1.898	10:15	5.051	3.167	3.167	
2/12/2015	02:00	7.57	12:45	11.63	9.23	04:15	2.42	12:10	3.57	3.01	06:05	1.981	12:45	5.165	3.298	3.298	
2/13/2015	05:45	7.06	14:00	12.26	9.16	05:30	2.47	12:35	3.63	3.03	05:30	1.850	14:00	5.286	3.292	3.292	
2/14/2015	07:20	6.26	14:45	9.38	7.73	07:25	2.33	14:10	3.26	2.84	07:25	1.434	14:45	3.444	2.389	2.389	
2/15/2015	07:15	5.65	21:45	10.30	7.21	07:20	2.10	21:30	3.59	2.80	07:20	1.134	21:35	4.290	2.157	2.157	
2/16/2015	06:05	6.54	11:55	11.30	8.63	04:35	2.38	11:45	3.63	2.99	05:00	1.619	11:55	4.980	2.990	2.990	
2/17/2015	03:50	6.40	09:00	10.98	8.81	04:05	2.46	12:30	3.67	3.00	03:50	1.610	11:20	4.862	3.108	3.108	
2/18/2015	04:55	6.73	08:30	11.63	8.88	01:30	2.45	12:30	3.61	3.10	04:50	1.814	11:55	5.209	3.222	3.222	
2/19/2015	02:15	6.74	08:25	12.53	8.99	03:25	2.30	15:25	3.68	3.03	04:05	1.704	11:05	5.006	3.215	3.215	
2/20/2015	05:00	6.97	13:15	11.53	8.98	05:00	2.46	14:30	3.71	3.10	05:00	1.773	14:25	5.179	3.259	3.259	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	04:00	6.37	11:10	8.68	7.78	07:15	2.48	00:50	3.32	2.95	04:45	1.600	11:10	3.201	2.501	2.501	
2/22/2015	04:30	6.37	13:00	9.12	7.88	04:30	2.12	19:45	3.30	2.86	04:30	1.341	21:10	3.324	2.488	2.488	
2/23/2015	05:30	6.79	10:50	12.07	8.85	06:50	2.48	15:45	3.56	3.00	05:35	1.791	11:35	5.270	3.118	3.118	
2/24/2015	04:40	6.49	09:50	11.14	9.04	04:20	2.46	12:55	3.67	3.05	04:40	1.669	12:55	5.096	3.248	3.248	
2/25/2015	04:05	6.63	08:55	11.42	9.02	04:15	2.37	13:05	3.55	3.01	04:10	1.632	08:55	5.083	3.216	3.216	
2/26/2015	04:00	7.01	14:15	11.73	9.27	01:05	2.39	14:10	3.52	2.96	04:20	1.835	13:55	5.110	3.277	3.277	
2/27/2015	06:05	7.09	13:50	11.02	8.68	06:05	2.27	13:50	3.39	2.87	06:05	1.678	13:50	4.713	2.868	2.868	
2/28/2015	04:20	6.51	14:10	9.16	7.97	04:10	2.10	14:10	3.22	2.83	04:10	1.400	14:10	3.436	2.496	2.496	
3/1/2015	04:55	6.40	15:35	8.97	7.75	07:00	2.16	11:50	3.21	2.74	07:00	1.389	17:15	3.189	2.327	2.327	
3/2/2015	03:25	6.83	08:45	11.99	9.04	05:35	2.32	10:35	3.73	2.98	05:35	1.711	14:30	5.090	3.192	3.192	
3/3/2015	04:45	7.11	14:45	11.83	9.07	04:00	2.45	09:20	3.56	2.97	04:00	1.820	15:10	5.197	3.190	3.190	
3/4/2015	01:45	6.83	14:35	11.63	9.30	01:40	2.48	11:25	3.67	3.00	01:40	1.740	11:25	5.284	3.338	3.338	
3/5/2015	04:40	6.38	08:00	12.60	8.86	04:45	2.17	15:35	3.55	2.96	04:40	1.379	08:00	5.346	3.089	3.089	
3/6/2015	05:15	6.49	10:20	11.50	8.78	04:45	2.51	11:20	3.56	3.03	04:45	1.682	10:20	5.037	3.101	3.101	
3/7/2015	04:15	6.56	11:45	8.74	7.63	23:50	2.30	16:35	3.18	2.81	05:30	1.548	11:35	2.970	2.325	2.325	
3/8/2015	03:35	6.49	16:05	9.04	7.72	03:20	2.13	13:20	3.16	2.77	03:20	1.416	16:05	3.141	2.339	2.339	
3/9/2015	06:35	6.53	14:40	11.80	8.85	05:00	2.36	11:50	3.61	3.02	05:00	1.597	14:25	5.227	3.132	3.132	
3/10/2015	04:25	6.83	14:20	11.34	9.08	04:00	2.37	11:30	3.53	2.96	04:05	1.731	14:20	4.926	3.200	3.200	
3/11/2015	05:55	6.72	11:00	10.96	8.70	04:20	2.63	13:25	3.59	3.06	04:20	1.801	11:00	4.755	3.093	3.093	
3/12/2015	04:30	6.44	11:50	11.13	8.94	04:05	2.36	14:25	3.58	3.03	04:35	1.568	14:25	4.907	3.175	3.175	
3/13/2015	04:50	6.84	12:55	10.79	8.84	04:45	2.35	13:50	3.53	2.95	04:50	1.664	13:50	4.691	3.032	3.032	
3/14/2015	06:05	6.73	13:45	9.42	8.03	06:05	2.24	12:50	3.14	2.69	06:05	1.532	16:30	3.416	2.394	2.394	
3/15/2015	05:50	6.40	22:20	9.69	8.09	05:55	2.00	22:20	3.10	2.58	05:55	1.274	22:20	3.592	2.332	2.332	
3/16/2015	04:55	7.11	14:35	11.18	9.04	04:50	2.21	10:30	3.60	2.90	04:50	1.657	10:30	4.868	3.099	3.099	
3/17/2015	04:25	6.74	12:15	11.08	9.03	04:05	2.40	08:25	3.58	3.00	04:05	1.684	13:40	4.788	3.192	3.192	
3/18/2015	04:10	6.95	14:40	11.16	9.17	04:45	2.40	11:00	3.46	3.01	04:45	1.738	12:50	4.567	3.268	3.268	
3/19/2015	04:50	6.79	11:50	11.28	9.13	01:10	2.35	07:55	3.55	2.96	04:50	1.699	11:50	4.806	3.220	3.220	
3/20/2015	02:25	6.93	14:20	11.23	8.82	02:45	2.36	09:30	3.49	2.97	02:45	1.752	09:55	4.789	3.058	3.058	
3/21/2015	05:00	6.51	14:50	10.73	8.02	03:55	2.17	14:50	3.42	2.76	05:05	1.442	14:50	4.583	2.468	2.468	
3/22/2015	04:25	6.37	10:45	8.90	7.82	03:50	2.08	17:35	3.23	2.72	04:35	1.361	10:45	3.223	2.346	2.346	
3/23/2015	04:25	6.76	12:25	11.26	9.10	02:45	2.36	15:45	3.54	2.99	04:25	1.722	12:25	4.751	3.230	3.230	
3/24/2015	04:45	6.47	14:05	11.38	9.15	04:30	2.37	13:30	3.51	2.95	04:45	1.551	13:30	4.949	3.212	3.212	
3/25/2015	05:05	6.75	14:40	11.48	9.14	04:10	2.40	08:30	3.52	2.97	05:05	1.673	14:45	4.835	3.220	3.220	
3/26/2015	02:25	6.79	08:10	11.13	8.78	05:00	2.34	12:25	3.49	2.98	03:45	1.697	08:10	4.905	3.053	3.053	
3/27/2015	21:45	7.19	10:35	11.19	8.74	04:35	2.59	11:05	3.53	2.99	04:35	2.122	11:55	4.869	3.025	3.025	
3/28/2015	07:10	6.15	14:45	10.02	7.69	03:20	2.27	14:35	3.35	2.88	03:25	1.498	14:40	3.823	2.409	2.409	
3/29/2015	07:15	6.19	14:40	8.27	7.54	06:50	2.36	23:10	3.26	2.90	06:50	1.499	14:40	2.905	2.358	2.358	
3/30/2015	06:15	6.74	12:30	11.87	9.13	06:00	2.46	12:05	3.47	2.95	06:15	1.726	12:05	5.353	3.202	3.202	
3/31/2015	04:40	6.89	11:05	11.94	9.34	04:50	2.34	12:15	3.56	2.95	04:50	1.756	11:05	5.318	3.299	3.299	
4/1/2015	05:00	7.20	12:30	11.64	9.32	01:05	2.42	13:00	3.40	2.85	04:25	1.884	12:25	4.855	3.171	3.171	
4/2/2015	04:10	7.36	13:20	11.27	9.01	04:00	2.37	22:50	3.22	2.87	04:00	1.904	09:30	4.524	3.025	3.025	
4/3/2015	05:30	6.69	10:55	11.72	8.73	04:45	2.32	11:20	3.51	3.01	04:50	1.711	10:55	4.936	3.044	3.044	
4/4/2015	06:05	6.39	12:50	8.97	7.84	06:00	2.24	20:35	3.24	2.83	06:00	1.424	12:50	3.196	2.433	2.433	
4/5/2015	05:35	6.25	22:25	8.81	7.81	04:15	2.14	19:05	3.26	2.78	05:35	1.355	19:05	3.160	2.377	2.376	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			269.321
Avg	8.67	2.97	2.992

Site Commentary

Site Information

MPSite1	
Pipe Dimensions	33.13" x 32.88"
Silt Level	0.00"

Overview

Site MPSite1 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	10.68	1.92	2.202
Minimum	6.14	0.76	0.384
Maximum	15.84	2.74	4.822
Time of Minimum	2/13/2015 5:30 AM	3/22/2015 6:35 AM	2/16/2015 6:05 AM
Time of Maximum	3/16/2015 9:20 PM	3/16/2015 9:05 AM	3/16/2015 9:25 PM

Data Quality

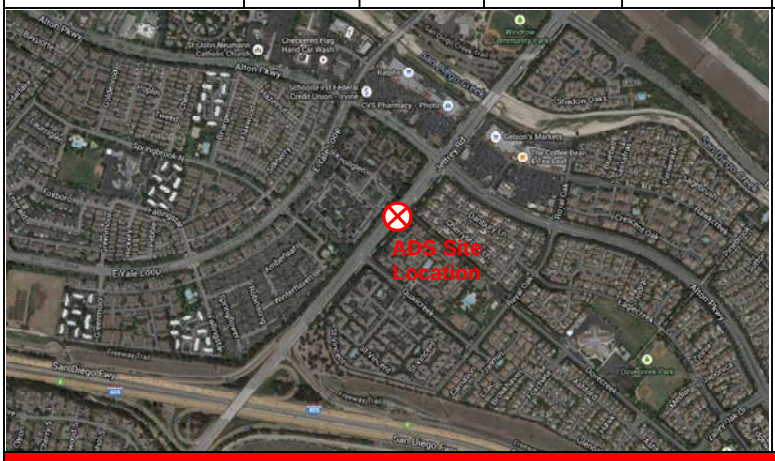
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

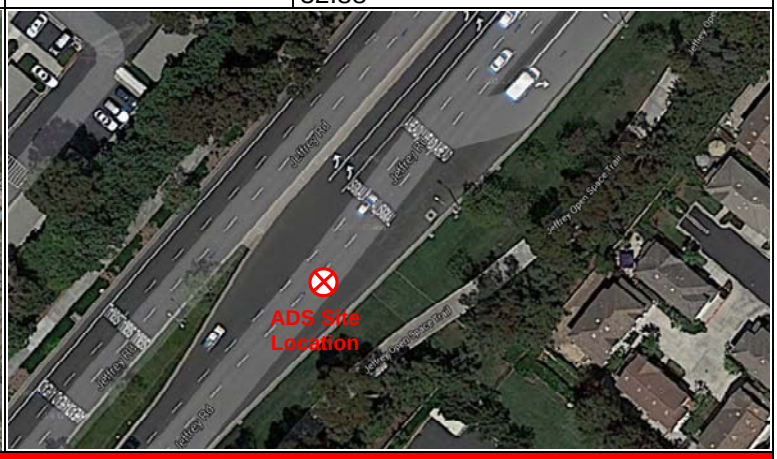
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite1	**Install Date:** 12/30/14	**Monitor Type**	Peak Doppler
Address/Location: Jeffrey Rd & Quail Creek		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH102S009
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	33.13 "
		Pipe Width:	32.88 "





Investigation Information:

Date/Time of Investigation:	12/30/14 @ 0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	12.13" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.66 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

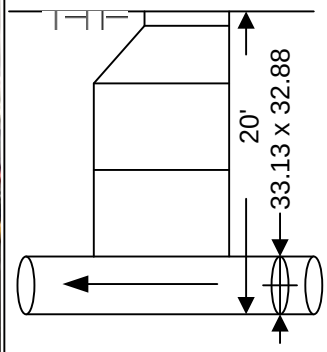
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

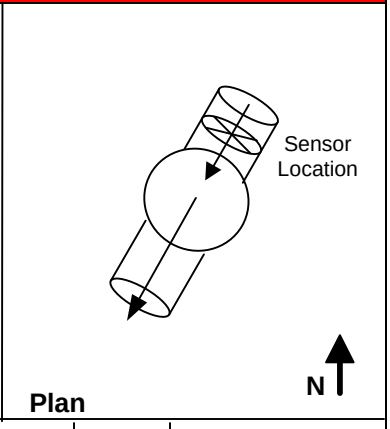
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

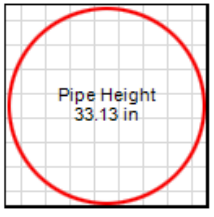
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite1

Flow Monitor

MPSite1

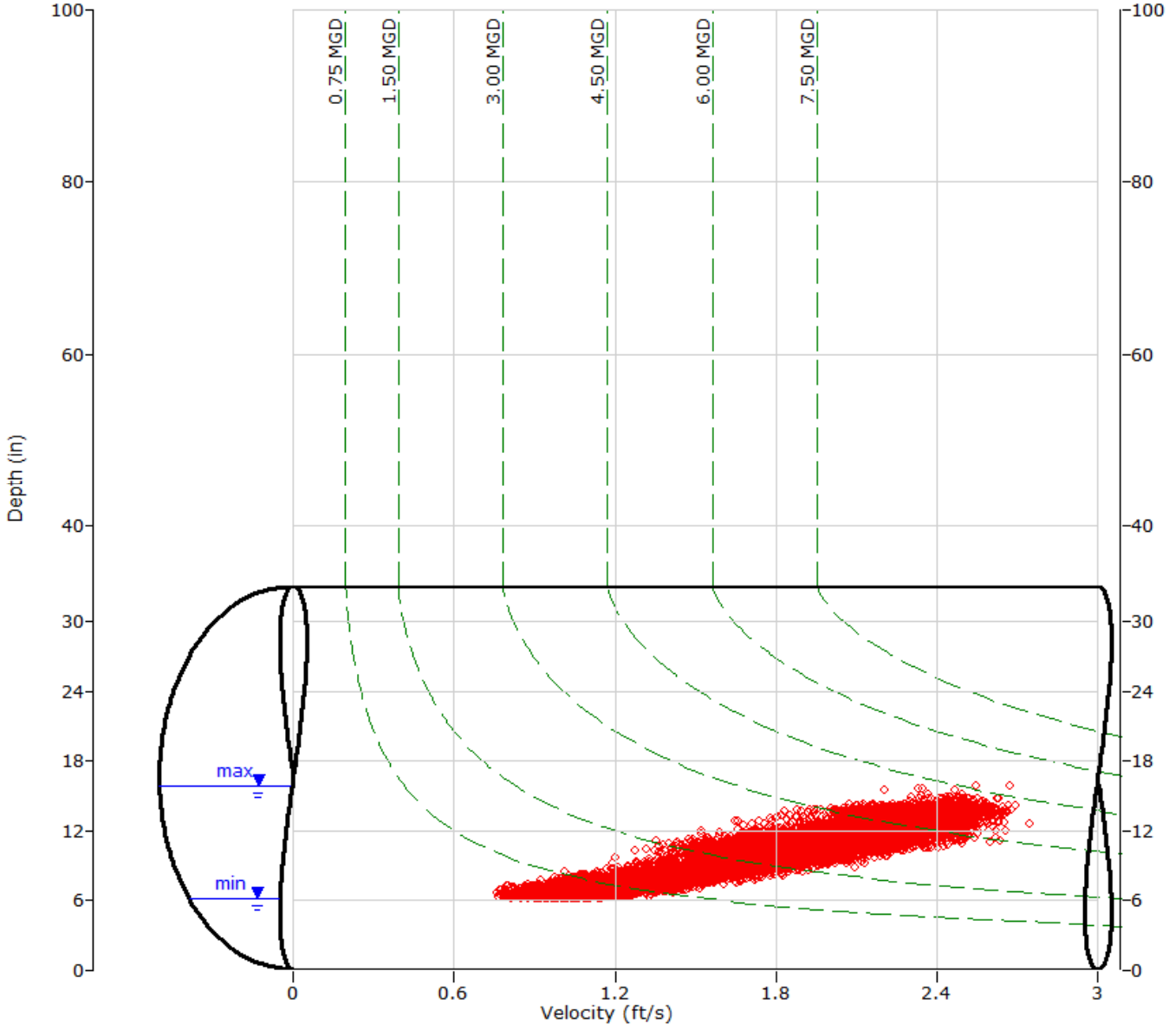


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite1

Flow Monitor

MPSite1

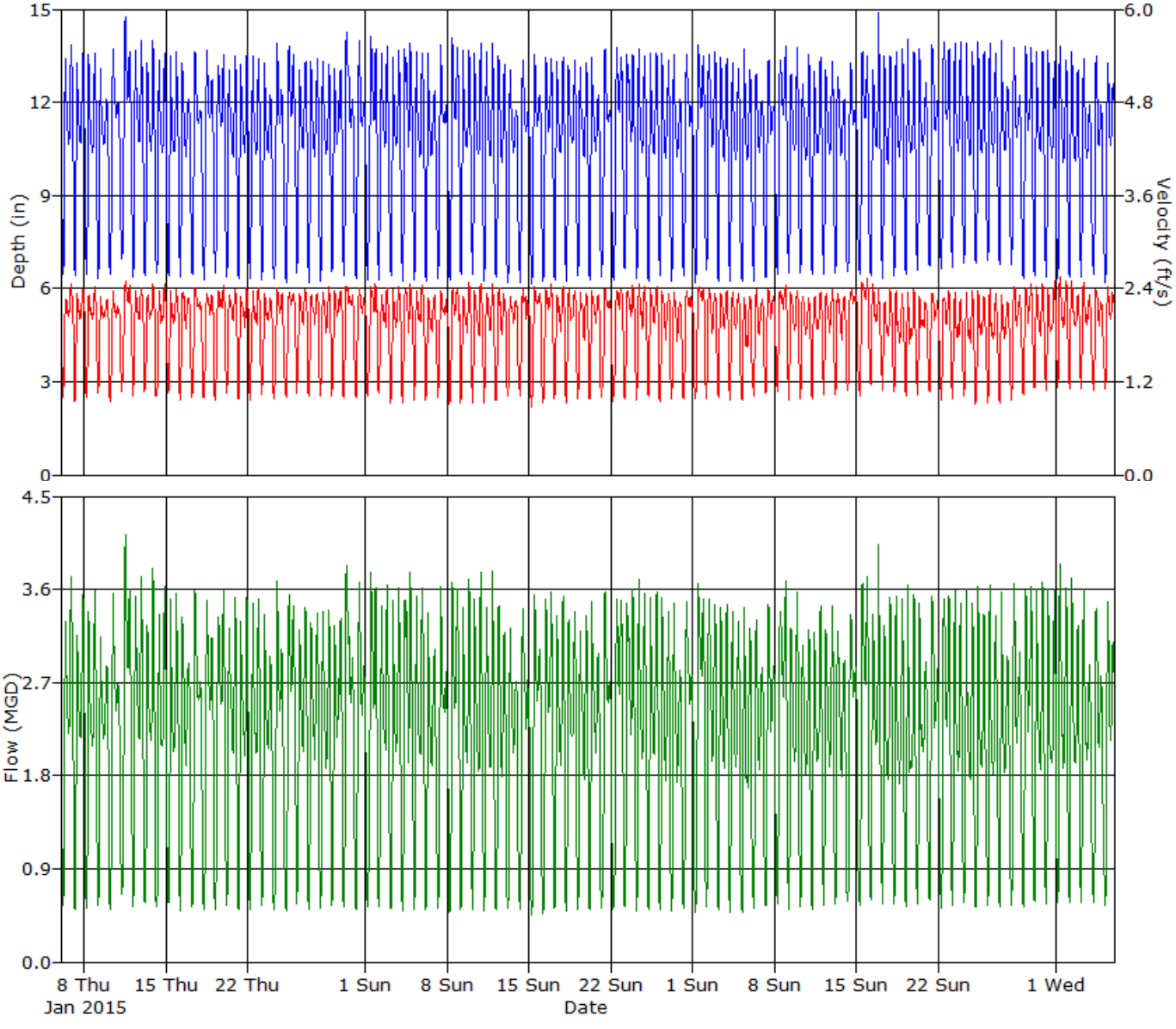
Pipe Height
33.13 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite1, Pipe Height: 33.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:20	6.41	21:35	14.26	10.82	04:30	0.87	21:50	2.49	1.96	04:30	0.472	21:35	3.888	2.270	2.270	
1/7/2015	05:25	6.38	21:45	13.93	10.80	04:15	0.83	22:05	2.49	1.93	05:20	0.450	22:05	3.681	2.236	2.236	
1/8/2015	05:20	6.41	09:35	13.92	10.72	05:00	0.89	09:25	2.55	1.94	05:00	0.474	09:25	3.859	2.219	2.219	
1/9/2015	05:20	6.32	09:35	13.34	10.51	04:25	0.94	22:25	2.45	1.93	05:25	0.486	09:20	3.419	2.133	2.133	
1/10/2015	05:35	6.43	11:55	14.11	10.70	06:10	0.86	12:30	2.51	1.86	06:10	0.455	11:55	3.836	2.140	2.140	
1/11/2015	05:20	6.88	12:10	14.90	11.26	06:30	0.96	13:00	2.58	2.00	06:30	0.572	11:50	4.229	2.482	2.482	
1/12/2015	05:40	6.35	21:45	14.23	10.83	04:55	0.91	20:30	2.52	1.96	04:55	0.471	21:45	3.949	2.279	2.279	
1/13/2015	05:20	6.37	21:35	14.27	10.74	04:10	0.94	22:00	2.57	1.96	04:10	0.532	22:00	3.907	2.245	2.245	
1/14/2015	05:00	6.48	22:05	13.83	10.69	05:05	0.81	21:10	2.59	1.94	05:05	0.431	21:10	3.900	2.219	2.219	
1/15/2015	05:30	6.38	21:40	13.87	10.60	04:25	0.94	21:15	2.57	1.94	04:25	0.513	21:15	3.830	2.183	2.183	
1/16/2015	05:30	6.33	09:20	13.61	10.51	04:55	0.82	11:45	2.51	1.93	04:55	0.430	09:35	3.552	2.146	2.146	
1/17/2015	06:20	6.43	11:45	13.88	10.63	05:15	0.83	11:00	2.52	1.92	05:15	0.451	12:15	3.705	2.203	2.203	
1/18/2015	06:10	6.28	12:20	13.93	10.66	06:25	0.82	12:25	2.61	1.89	06:25	0.418	12:25	3.842	2.184	2.184	
1/19/2015	05:30	6.46	21:20	13.80	10.88	05:45	0.77	21:20	2.49	1.95	05:45	0.407	21:20	3.773	2.306	2.306	
1/20/2015	05:20	6.31	21:20	13.73	10.62	04:55	0.88	22:05	2.65	1.96	04:55	0.453	22:05	3.967	2.214	2.214	
1/21/2015	05:15	6.26	21:50	13.87	10.66	05:30	0.79	21:35	2.49	1.93	05:30	0.403	21:55	3.752	2.201	2.201	
1/22/2015	05:25	6.27	09:25	13.78	10.57	04:25	0.81	21:50	2.58	1.94	04:25	0.432	21:50	3.793	2.177	2.177	
1/23/2015	05:25	6.25	09:25	13.76	10.46	04:50	0.95	09:50	2.46	1.93	04:50	0.496	09:50	3.591	2.125	2.125	
1/24/2015	06:20	6.31	11:30	14.09	10.69	06:35	0.79	23:20	2.53	1.94	06:35	0.404	11:20	3.827	2.234	2.234	
1/25/2015	06:30	6.15	12:00	14.00	10.80	07:00	0.83	22:10	2.66	1.90	07:00	0.417	22:10	3.906	2.259	2.259	
1/26/2015	05:15	6.23	22:10	13.54	10.81	04:40	0.91	21:30	2.51	1.96	04:40	0.471	21:30	3.611	2.264	2.264	
1/27/2015	05:10	6.19	21:55	13.71	10.60	05:15	0.85	20:55	2.56	1.94	05:15	0.424	22:05	3.684	2.192	2.192	
1/28/2015	05:05	6.18	09:50	13.52	10.58	04:15	0.87	22:10	2.59	1.94	04:15	0.461	22:10	3.722	2.189	2.189	
1/29/2015	04:45	6.45	09:45	13.32	10.75	03:25	0.88	09:45	2.53	1.97	04:35	0.487	09:45	3.658	2.265	2.265	
1/30/2015	05:05	6.40	09:55	14.78	11.09	04:15	0.83	09:30	2.69	2.01	05:40	0.453	09:50	4.342	2.423	2.423	
1/31/2015	06:30	6.30	11:30	14.15	10.64	06:15	0.80	11:20	2.61	1.94	06:15	0.410	11:20	4.040	2.220	2.220	
2/1/2015	06:30	6.26	11:35	14.55	10.91	05:55	0.78	21:55	2.61	1.95	05:55	0.402	11:50	4.100	2.338	2.338	
2/2/2015	05:35	6.23	21:30	14.11	10.73	04:55	0.95	21:20	2.54	1.94	04:55	0.484	21:20	3.865	2.232	2.232	
2/3/2015	05:20	6.38	22:10	13.95	10.69	06:00	0.79	09:40	2.51	1.93	06:00	0.419	21:40	3.774	2.201	2.201	
2/4/2015	05:25	6.19	21:25	14.07	11.09	04:40	0.80	22:10	2.54	1.97	04:40	0.411	21:25	3.880	2.383	2.383	
2/5/2015	05:25	6.24	09:05	14.28	10.57	05:45	0.82	22:05	2.61	1.96	05:45	0.417	09:10	3.948	2.200	2.200	
2/6/2015	05:30	6.22	08:55	13.86	10.44	04:10	0.91	22:20	2.41	1.86	04:40	0.483	09:15	3.613	2.050	2.050	
2/7/2015	06:40	6.32	10:55	13.99	10.64	05:55	0.89	10:40	2.52	1.92	05:55	0.462	10:40	3.773	2.181	2.181	
2/8/2015	06:15	6.25	11:00	14.19	10.87	05:40	0.81	10:40	2.55	1.94	05:40	0.414	11:30	3.947	2.300	2.300	
2/9/2015	05:20	6.42	09:25	13.96	10.74	03:55	0.79	21:05	2.66	1.93	06:20	0.443	21:05	3.972	2.218	2.218	
2/10/2015	05:40	6.44	09:10	14.06	10.64	05:20	0.84	20:35	2.54	1.91	05:20	0.443	21:15	3.890	2.165	2.165	
2/11/2015	05:20	6.20	21:10	14.26	10.61	04:45	0.79	22:35	2.63	1.91	04:45	0.402	21:25	3.967	2.171	2.171	
2/12/2015	05:15	6.36	09:40	13.76	10.63	04:50	0.83	11:40	2.54	1.90	04:50	0.431	09:55	3.740	2.169	2.169	
2/13/2015	05:30	6.14	09:50	13.43	10.36	04:45	0.85	09:45	2.48	1.91	04:45	0.437	09:45	3.623	2.080	2.080	
2/14/2015	06:20	6.17	11:55	13.67	10.43	06:35	0.90	12:25	2.46	1.93	06:35	0.446	11:50	3.618	2.142	2.142	
2/15/2015	05:50	6.15	11:40	13.83	10.50	04:10	0.78	13:50	2.58	1.90	06:15	0.400	12:15	3.822	2.170	2.170	
2/16/2015	05:45	6.18	11:30	13.70	10.74	06:05	0.77	21:45	2.60	1.93	06:05	0.384	21:45	3.810	2.262	2.262	
2/17/2015	05:25	6.24	22:00	13.74	10.69	03:50	0.89	21:35	2.65	1.93	04:50	0.467	21:35	3.861	2.218	2.218	
2/18/2015	05:25	6.20	09:25	13.54	10.72	05:15	0.81	09:30	2.52	1.95	05:15	0.402	09:30	3.720	2.243	2.243	
2/19/2015	05:40	6.36	09:20	13.53	10.63	05:10	0.89	21:55	2.45	1.91	05:10	0.462	22:25	3.515	2.163	2.163	
2/20/2015	05:20	6.28	09:45	13.80	10.56	04:05	0.90	09:40	2.49	1.93	04:50	0.472	09:45	3.757	2.160	2.160	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	06:20	6.34	11:55	13.99	10.63	06:10	0.83	13:25	2.49	1.91	06:10	0.429	11:50	3.804	2.182	2.182	
2/22/2015	06:45	6.22	11:50	14.01	10.87	05:55	0.84	21:05	2.55	1.94	05:55	0.432	11:40	3.777	2.316	2.316	
2/23/2015	05:15	6.43	21:55	13.82	11.05	05:15	0.82	21:55	2.54	1.98	05:15	0.430	21:55	3.858	2.368	2.368	
2/24/2015	05:30	6.30	09:05	14.05	10.74	05:35	0.91	09:30	2.54	1.96	05:35	0.466	09:15	3.898	2.267	2.267	
2/25/2015	05:10	6.21	21:40	13.84	10.66	05:50	0.90	22:55	2.65	1.94	05:30	0.452	22:55	3.893	2.213	2.213	
2/26/2015	05:30	6.36	09:10	13.86	10.67	04:40	0.83	09:05	2.48	1.90	04:40	0.438	09:10	3.690	2.172	2.172	
2/27/2015	05:45	6.22	09:40	13.66	10.50	05:50	0.89	09:50	2.52	1.89	05:50	0.448	09:50	3.758	2.108	2.108	
2/28/2015	06:20	6.36	12:05	13.68	10.65	06:00	0.83	11:20	2.64	1.91	06:00	0.436	11:20	3.866	2.197	2.197	
3/1/2015	06:05	6.17	12:00	13.95	10.88	06:15	0.87	14:10	2.61	1.94	06:15	0.430	21:10	3.853	2.327	2.327	
3/2/2015	04:40	6.52	22:15	13.89	10.90	05:20	0.94	21:55	2.59	1.91	04:40	0.500	21:55	3.939	2.249	2.249	
3/3/2015	05:30	6.23	09:20	13.64	10.66	05:00	0.87	10:20	2.52	1.92	05:00	0.440	22:15	3.516	2.189	2.189	
3/4/2015	05:25	6.17	09:35	13.44	10.50	05:25	0.94	09:35	2.37	1.90	05:25	0.467	09:35	3.469	2.128	2.128	
3/5/2015	05:05	6.23	09:10	13.87	10.54	05:05	0.96	09:05	2.60	1.81	05:05	0.481	09:05	3.933	2.039	2.039	
3/6/2015	05:40	6.24	10:00	13.24	10.43	04:05	0.90	11:15	2.56	1.87	04:40	0.485	09:45	3.480	2.058	2.058	
3/7/2015	06:15	6.29	12:10	13.58	10.55	06:00	0.98	11:55	2.55	1.95	06:00	0.499	11:55	3.753	2.196	2.196	
3/8/2015	06:05	6.41	22:30	14.02	10.93	05:50	0.93	11:45	2.58	1.99	05:50	0.485	22:15	3.769	2.360	2.360	
3/9/2015	05:45	6.45	21:50	13.93	10.76	05:05	0.84	00:50	2.52	1.95	05:05	0.450	21:50	3.746	2.244	2.244	
3/10/2015	05:25	6.50	22:15	13.83	10.60	05:00	0.90	10:55	2.44	1.91	05:00	0.485	22:15	3.583	2.142	2.142	
3/11/2015	05:35	6.40	22:05	13.76	10.63	05:00	0.82	21:45	2.46	1.92	05:00	0.437	22:15	3.680	2.171	2.171	
3/12/2015	05:35	6.45	22:35	13.51	10.57	05:35	0.98	23:40	2.54	1.94	05:35	0.514	22:35	3.606	2.166	2.166	
3/13/2015	05:45	6.45	09:35	13.27	10.48	05:50	0.91	23:45	2.47	1.92	05:50	0.479	09:50	3.385	2.112	2.112	
3/14/2015	06:30	6.53	11:30	13.40	10.62	06:10	0.94	13:50	2.59	2.02	06:10	0.505	12:45	3.569	2.284	2.284	
3/15/2015	06:30	6.46	22:25	13.88	10.79	05:55	0.97	12:15	2.68	2.05	07:00	0.511	12:15	4.042	2.400	2.400	
3/16/2015	05:00	6.38	21:20	15.84	10.77	04:35	0.99	09:05	2.74	2.03	04:35	0.525	21:25	4.822	2.322	2.322	
3/17/2015	05:25	6.26	08:55	13.79	10.54	06:10	0.94	21:20	2.60	1.85	06:10	0.499	21:20	3.761	2.070	2.070	
3/18/2015	05:30	6.41	21:50	14.13	10.68	05:50	1.00	09:50	2.50	1.85	05:50	0.525	21:35	3.826	2.113	2.113	
3/19/2015	05:35	6.44	09:05	14.34	10.73	05:40	0.93	09:10	2.52	1.86	05:40	0.489	09:10	4.006	2.131	2.131	
3/20/2015	05:40	6.57	09:20	14.00	10.65	05:40	0.87	09:15	2.52	1.87	05:40	0.470	09:15	3.867	2.113	2.113	
3/21/2015	06:15	6.70	11:20	13.97	10.71	06:00	0.97	13:45	2.55	1.90	06:00	0.545	12:30	3.817	2.176	2.176	
3/22/2015	06:10	6.61	11:45	14.24	10.90	06:35	0.76	22:15	2.52	1.86	06:35	0.415	22:15	3.840	2.214	2.214	
3/23/2015	05:40	6.68	21:30	14.21	10.83	04:25	0.87	21:20	2.42	1.82	04:25	0.503	21:25	3.754	2.107	2.107	
3/24/2015	05:10	6.76	09:05	14.28	10.75	05:00	0.94	21:25	2.60	1.81	05:00	0.533	08:55	3.895	2.084	2.084	
3/25/2015	05:20	6.76	09:10	14.07	10.79	04:40	0.77	08:40	2.48	1.85	04:40	0.441	09:05	3.781	2.137	2.137	
3/26/2015	05:50	6.88	09:30	14.10	10.83	05:55	0.82	09:45	2.59	1.81	05:55	0.475	09:15	3.889	2.105	2.105	
3/27/2015	05:25	6.74	09:35	14.14	10.72	05:15	0.86	09:00	2.55	1.82	05:15	0.485	09:00	3.923	2.076	2.076	
3/28/2015	06:00	6.74	11:30	13.92	10.71	06:00	0.90	12:15	2.60	1.89	06:00	0.507	11:30	3.809	2.178	2.178	
3/29/2015	06:30	6.28	11:35	14.04	10.72	05:35	0.86	22:40	2.59	1.96	05:35	0.452	22:35	3.853	2.279	2.279	
3/30/2015	05:20	6.38	22:10	14.20	10.70	04:35	0.99	21:50	2.65	1.95	04:35	0.537	21:50	4.095	2.233	2.233	
3/31/2015	05:40	6.33	09:15	13.86	10.55	05:20	0.90	23:05	2.61	1.94	05:20	0.465	09:10	3.818	2.174	2.174	
4/1/2015	05:20	6.27	09:15	14.08	10.51	05:45	1.03	09:15	2.67	1.98	05:45	0.531	09:15	4.145	2.203	2.203	
4/2/2015	05:20	6.32	09:05	14.01	10.45	05:25	0.93	08:55	2.61	1.96	05:25	0.478	08:55	4.019	2.160	2.160	
4/3/2015	05:45	6.31	09:25	13.74	10.32	05:00	1.06	08:40	2.65	1.97	05:00	0.553	09:25	3.749	2.121	2.121	
4/4/2015	06:35	6.46	11:00	13.61	10.34	05:10	0.96	10:40	2.57	1.92	06:45	0.524	11:00	3.679	2.097	2.097	
4/5/2015	06:45	6.18	11:45	13.39	10.30	07:45	0.99	11:50	2.58	1.94	06:35	0.530	11:50	3.704	2.112	2.111	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			198.149
Avg	10.68	1.92	2.202

Site Commentary

Site Information

MPSite10	
Pipe Dimensions	36.63" x 36.50"
Silt Level	0.00"

Overview

Site MPSite10 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.59	2.37	1.813
Minimum	3.74	0.99	0.287
Maximum	11.00	3.43	3.927
Time of Minimum	3/31/2015 4:30 AM	3/15/2015 5:50 AM	3/15/2015 5:55 AM
Time of Maximum	3/3/2015 7:40 AM	2/1/2015 12:05 PM	1/11/2015 10:45 AM

Data Quality

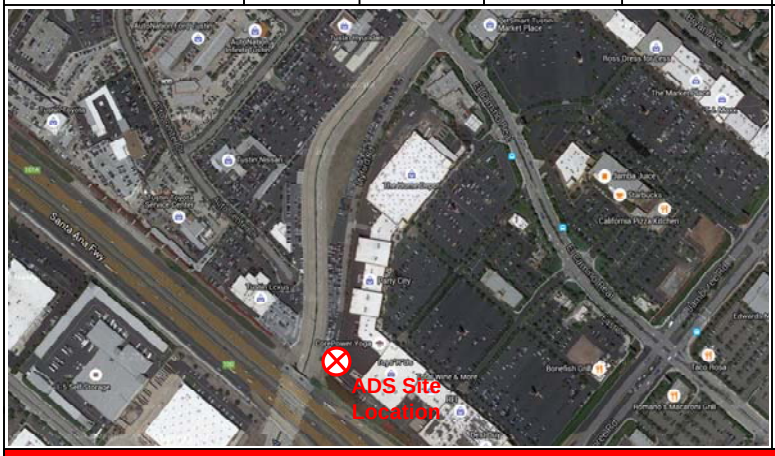
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite10	**Install Date:** 12/30/14	**Monitor Type**	Peak Doppler
Address/Location: Myford Rd (Located in parking lot behind Toys R Us)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH044S019
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	36.63 "
		Pipe Width:	36.50 "





Investigation Information:

Date/Time of Investigation:	12/30/14 @ 0800
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.25 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	30'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

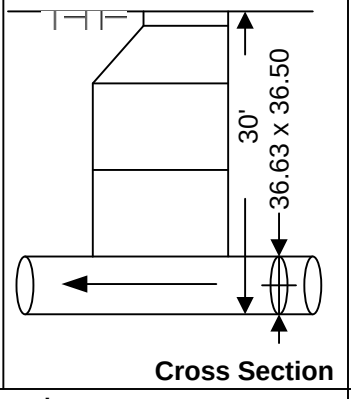
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

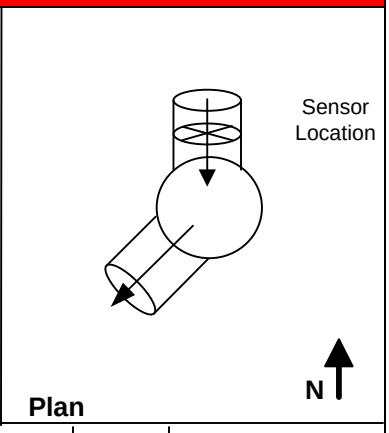
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

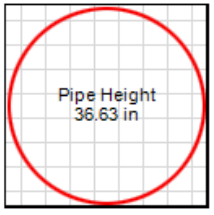
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite10

Flow Monitor

MPSite10

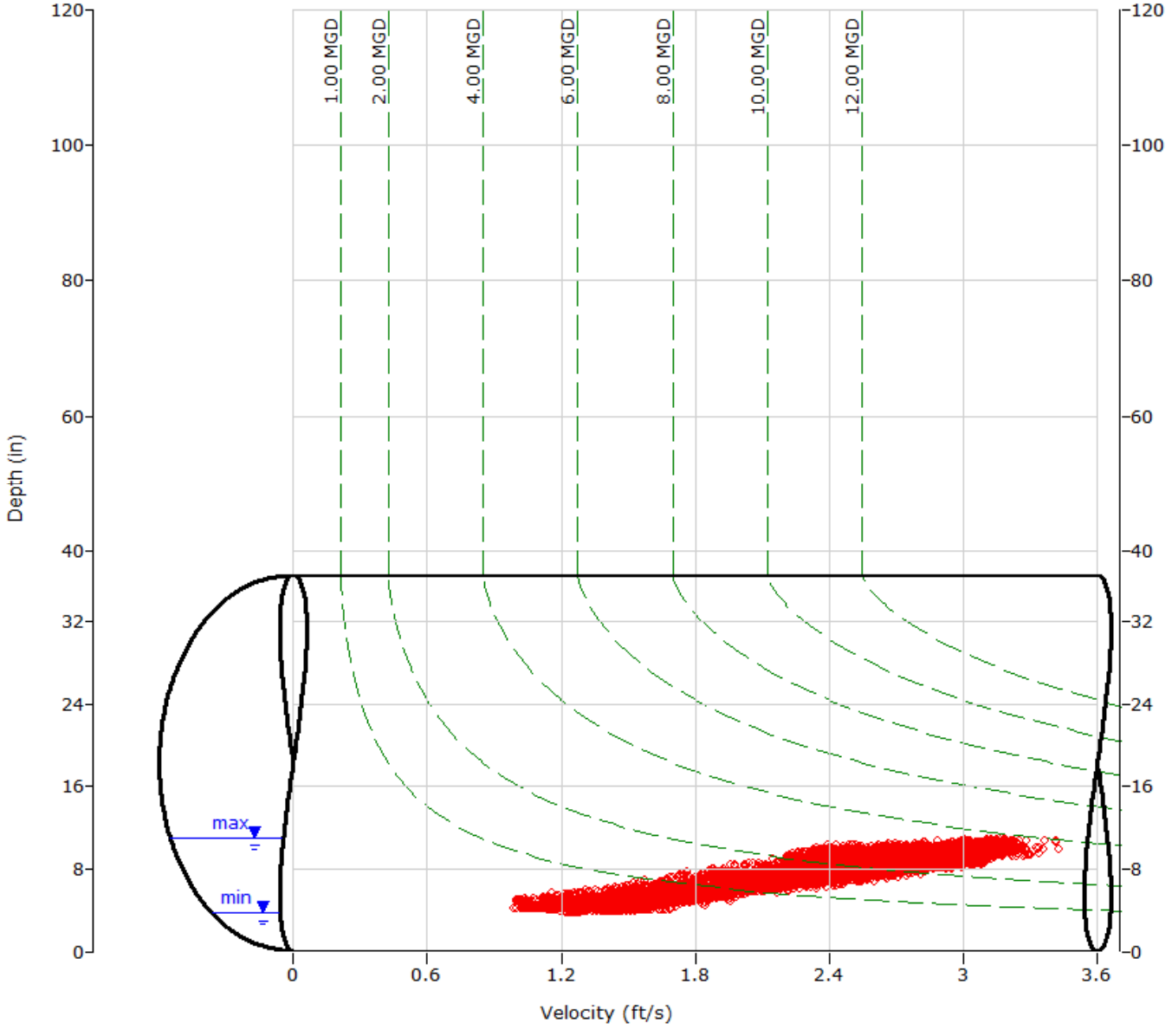


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



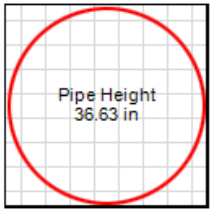
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite10

Flow Monitor

MPSite10

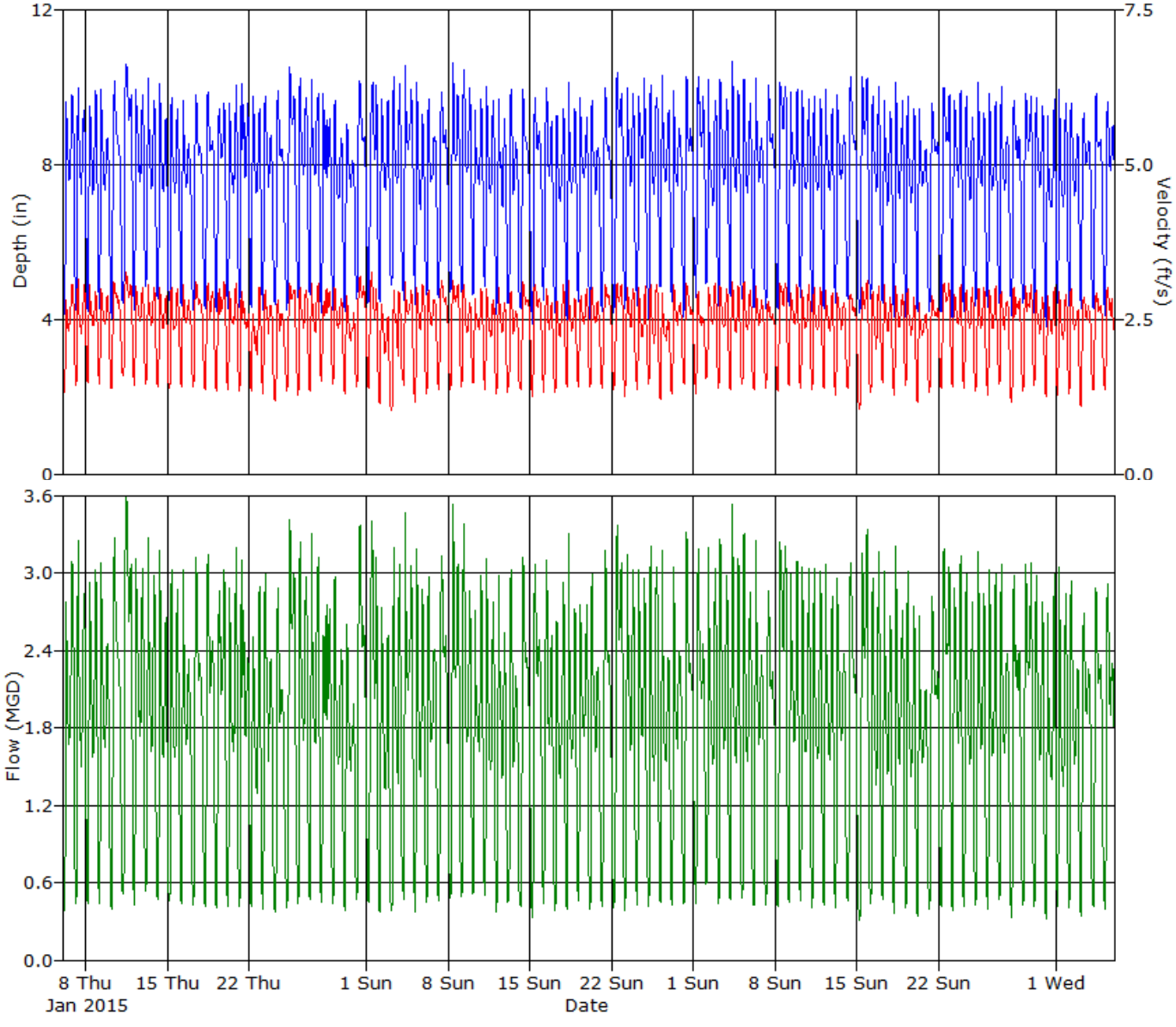


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite10, Pipe Height: 36.63 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	04:55	4.09	07:50	9.95	7.59	05:00	1.26	20:55	3.10	2.34	04:55	0.364	20:55	3.193	1.802	1.802	
1/7/2015	03:50	4.19	08:55	10.22	7.49	04:45	1.41	07:45	3.22	2.38	04:35	0.422	08:45	3.310	1.780	1.780	
1/8/2015	04:50	4.14	20:35	10.03	7.62	04:45	1.45	07:35	3.34	2.43	04:45	0.426	07:35	3.231	1.865	1.865	
1/9/2015	04:30	4.23	07:45	10.42	7.50	04:55	1.41	07:45	3.15	2.43	04:55	0.429	07:45	3.477	1.801	1.801	
1/10/2015	05:10	3.95	12:05	10.33	7.61	04:55	1.33	10:35	3.21	2.46	05:15	0.368	12:20	3.414	1.914	1.914	
1/11/2015	04:55	4.34	10:50	10.73	8.04	04:55	1.54	10:45	3.42	2.56	04:55	0.486	10:45	3.927	2.169	2.169	
1/12/2015	04:50	4.19	07:50	10.41	7.78	04:10	1.40	08:10	3.14	2.46	04:50	0.421	07:50	3.445	1.941	1.941	
1/13/2015	04:35	4.79	07:55	10.48	7.80	04:35	1.41	08:15	3.22	2.44	04:35	0.512	08:15	3.569	1.909	1.909	
1/14/2015	04:35	4.48	08:15	10.29	7.56	04:00	1.37	07:40	3.11	2.39	04:00	0.451	08:15	3.341	1.794	1.794	
1/15/2015	04:05	4.45	07:55	9.98	7.50	03:50	1.36	08:25	3.14	2.37	03:50	0.447	07:50	3.226	1.775	1.775	
1/16/2015	04:45	4.34	07:45	9.83	7.36	04:55	1.38	08:05	3.14	2.39	04:55	0.434	08:05	3.173	1.724	1.724	
1/17/2015	04:45	4.20	11:00	9.93	7.43	04:50	1.38	12:20	3.18	2.46	04:50	0.415	10:50	3.274	1.836	1.836	
1/18/2015	05:50	4.25	11:55	9.93	7.48	05:45	1.32	10:55	3.18	2.41	05:50	0.402	10:55	3.270	1.823	1.823	
1/19/2015	04:35	4.19	20:10	9.62	7.60	04:05	1.33	20:50	3.17	2.47	04:35	0.399	20:50	3.084	1.907	1.907	
1/20/2015	04:25	4.22	21:00	10.11	7.50	04:25	1.32	20:25	3.18	2.41	04:25	0.398	21:35	3.274	1.814	1.814	
1/21/2015	04:40	4.29	08:30	10.13	7.74	04:40	1.32	08:35	3.01	2.29	04:40	0.407	08:35	3.192	1.779	1.779	
1/22/2015	04:55	4.28	08:00	10.07	7.45	04:35	1.30	21:25	3.11	2.20	04:35	0.405	21:25	3.015	1.629	1.629	
1/23/2015	04:25	4.21	08:05	10.06	7.54	04:25	1.29	08:05	3.04	2.35	04:25	0.389	08:05	3.194	1.773	1.773	
1/24/2015	05:30	4.34	10:30	9.95	7.48	05:35	1.16	10:45	2.95	2.19	05:30	0.368	10:45	3.025	1.650	1.650	
1/25/2015	05:30	4.20	10:40	10.66	7.95	05:30	1.33	10:15	3.18	2.46	05:30	0.398	10:40	3.616	2.055	2.055	
1/26/2015	04:25	4.52	08:00	10.39	7.83	04:00	1.27	07:50	3.11	2.38	04:25	0.423	07:55	3.397	1.900	1.900	
1/27/2015	04:15	4.57	07:50	10.61	7.84	04:15	1.32	08:10	3.20	2.39	04:15	0.449	07:50	3.562	1.913	1.913	
1/28/2015	04:00	4.10	08:10	10.01	7.56	03:40	1.44	15:05	3.13	2.47	04:00	0.419	07:35	3.100	1.861	1.861	
1/29/2015	04:10	4.20	07:50	10.11	7.24	04:10	1.44	07:55	3.24	2.40	04:10	0.431	07:55	3.430	1.694	1.694	
1/30/2015	04:40	4.17	09:30	9.16	7.21	04:35	1.27	09:00	2.95	2.21	04:35	0.376	08:20	2.697	1.551	1.551	
1/31/2015	05:50	4.48	10:50	10.24	7.77	05:45	1.38	11:05	3.26	2.53	05:45	0.453	11:05	3.501	2.017	2.017	
2/1/2015	05:05	4.23	13:20	10.17	7.80	05:25	1.34	12:05	3.43	2.46	05:00	0.426	12:05	3.530	1.985	1.985	
2/2/2015	05:00	4.43	07:50	9.96	7.53	04:45	1.11	07:35	2.94	2.03	04:45	0.361	07:50	3.013	1.536	1.536	
2/3/2015	03:55	4.87	08:20	10.34	7.80	04:35	1.00	08:05	3.06	2.20	04:35	0.374	08:05	3.334	1.759	1.759	
2/4/2015	04:10	4.40	08:30	10.59	8.09	04:10	1.40	08:30	3.11	2.44	04:10	0.448	08:30	3.513	2.023	2.023	
2/5/2015	04:00	4.31	08:05	10.37	7.45	04:15	1.13	07:30	3.14	2.34	04:15	0.355	08:05	3.439	1.738	1.738	
2/6/2015	04:45	4.60	08:10	9.82	7.47	04:40	1.27	07:50	3.11	2.37	04:40	0.434	07:50	3.112	1.748	1.748	
2/7/2015	05:15	4.49	11:05	10.08	7.66	05:10	1.30	10:00	3.21	2.47	05:10	0.433	11:05	3.336	1.919	1.919	
2/8/2015	05:00	4.62	11:40	10.88	7.82	05:25	1.32	10:20	3.21	2.49	05:35	0.465	11:35	3.662	2.009	2.009	
2/9/2015	04:15	4.56	08:40	10.80	7.91	04:50	1.37	09:05	3.28	2.37	04:15	0.472	09:05	3.764	1.913	1.913	
2/10/2015	03:50	4.38	20:20	10.05	7.56	05:45	1.31	21:50	3.09	2.34	03:50	0.443	20:20	3.202	1.757	1.757	
2/11/2015	04:35	4.78	08:15	10.24	7.62	03:55	1.34	07:30	3.09	2.31	04:35	0.485	08:15	3.240	1.753	1.753	
2/12/2015	03:25	3.97	07:50	10.05	7.38	04:00	1.27	07:50	3.17	2.31	04:00	0.350	07:50	3.331	1.684	1.684	
2/13/2015	05:30	4.18	09:00	10.05	7.49	01:45	1.16	08:35	2.99	2.28	05:30	0.393	09:05	3.130	1.702	1.702	
2/14/2015	05:05	4.02	09:30	10.39	7.52	05:05	1.27	10:50	3.16	2.43	05:05	0.356	09:30	3.360	1.860	1.860	
2/15/2015	05:35	3.84	11:05	9.84	7.42	05:35	1.19	11:00	3.15	2.42	05:35	0.314	11:00	3.204	1.835	1.835	
2/16/2015	04:35	4.46	09:55	10.18	7.59	04:50	1.28	09:55	3.02	2.33	04:50	0.418	09:55	3.232	1.774	1.774	
2/17/2015	03:50	4.06	07:45	9.74	7.24	03:50	1.28	21:25	3.12	2.30	03:50	0.366	21:25	3.006	1.656	1.656	
2/18/2015	04:55	3.94	08:25	10.35	7.43	04:55	1.36	08:45	3.21	2.37	04:55	0.372	08:25	3.459	1.752	1.752	
2/19/2015	04:55	4.38	08:20	10.27	7.55	01:55	1.38	08:50	3.09	2.39	04:55	0.444	08:20	3.316	1.790	1.790	
2/20/2015	04:35	3.98	07:55	9.98	7.25	04:50	1.39	08:00	3.09	2.38	04:35	0.385	08:00	3.209	1.699	1.699	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	05:35	4.18	10:50	10.08	7.49	04:35	1.36	10:35	3.15	2.44	05:00	0.407	10:35	3.268	1.853	1.853	
2/22/2015	05:40	4.09	12:10	10.38	7.94	05:40	1.35	11:10	3.18	2.49	05:40	0.390	11:10	3.472	2.075	2.075	
2/23/2015	04:30	4.21	08:00	10.27	7.68	04:25	1.22	20:35	3.19	2.41	04:30	0.368	08:00	3.393	1.885	1.885	
2/24/2015	04:10	4.18	20:40	10.66	7.78	04:40	1.34	08:00	3.12	2.32	04:10	0.405	08:00	3.401	1.825	1.825	
2/25/2015	03:50	3.89	08:10	10.26	7.54	04:35	1.43	20:45	3.12	2.37	04:00	0.390	08:20	3.370	1.799	1.799	
2/26/2015	03:45	4.44	07:45	10.85	7.73	04:25	1.17	08:10	3.05	2.14	03:45	0.403	07:45	3.509	1.667	1.667	
2/27/2015	05:00	4.33	07:25	10.44	7.49	03:00	1.27	08:35	3.16	2.34	05:00	0.405	07:45	3.374	1.745	1.745	
2/28/2015	02:50	3.98	09:55	10.54	7.65	05:00	1.42	10:20	3.19	2.45	05:00	0.414	10:20	3.464	1.904	1.904	
3/1/2015	05:45	4.48	10:35	10.64	7.89	05:50	1.27	09:40	3.02	2.24	05:45	0.420	10:35	3.389	1.804	1.804	
3/2/2015	03:05	4.73	07:30	10.76	7.61	03:05	1.51	19:55	3.24	2.46	03:05	0.537	07:45	3.507	1.853	1.853	
3/3/2015	05:00	4.08	07:40	11.00	7.77	04:45	1.38	07:50	3.19	2.40	05:00	0.401	07:40	3.781	1.890	1.890	
3/4/2015	03:50	4.49	08:30	10.74	7.75	03:50	1.33	08:25	3.18	2.38	03:50	0.439	08:25	3.664	1.876	1.876	
3/5/2015	04:35	4.34	07:45	10.82	7.71	03:30	1.40	07:50	3.22	2.42	04:40	0.458	07:40	3.721	1.874	1.874	
3/6/2015	04:00	4.19	07:45	10.51	7.57	04:20	1.36	08:05	3.18	2.39	04:00	0.407	08:05	3.478	1.808	1.808	
3/7/2015	05:45	3.86	10:45	10.15	7.64	05:30	1.35	09:25	2.88	2.31	05:45	0.374	10:30	3.027	1.771	1.771	
3/8/2015	05:40	4.05	10:35	10.22	8.02	05:40	1.28	21:40	3.18	2.46	05:40	0.363	10:20	3.372	2.080	2.080	
3/9/2015	04:30	4.23	08:10	10.08	7.73	04:10	1.40	20:30	3.23	2.45	04:20	0.430	20:30	3.368	1.912	1.912	
3/10/2015	04:55	4.44	07:55	10.14	7.61	03:40	1.34	20:15	3.29	2.39	03:40	0.448	08:10	3.337	1.821	1.821	
3/11/2015	04:00	4.13	08:20	9.87	7.50	04:10	1.34	07:50	3.13	2.39	04:10	0.394	08:20	3.189	1.785	1.785	
3/12/2015	04:30	4.25	08:00	10.16	7.52	04:20	1.37	07:30	3.07	2.37	04:30	0.417	08:15	3.209	1.779	1.779	
3/13/2015	03:50	4.33	08:05	10.11	7.51	04:05	1.25	08:00	3.07	2.32	03:50	0.396	08:00	3.241	1.737	1.737	
3/14/2015	05:40	4.39	10:50	10.32	7.86	05:45	1.36	10:05	3.04	2.36	05:40	0.435	10:05	3.308	1.891	1.891	
3/15/2015	06:00	4.12	21:45	10.35	7.91	05:50	0.99	21:45	3.18	2.34	05:55	0.287	21:45	3.480	1.989	1.989	
3/16/2015	04:20	4.44	07:50	10.15	7.66	04:10	1.29	21:05	3.13	2.32	04:15	0.420	21:05	3.305	1.792	1.792	
3/17/2015	04:40	4.36	08:35	9.74	7.41	04:50	1.45	08:15	3.23	2.36	04:40	0.462	08:15	3.222	1.714	1.714	
3/18/2015	04:00	4.01	08:20	10.26	7.42	04:00	1.26	08:40	3.10	2.34	04:00	0.354	08:25	3.334	1.739	1.739	
3/19/2015	05:15	3.85	08:00	10.03	7.28	04:20	1.42	08:00	3.15	2.33	05:05	0.385	08:00	3.304	1.673	1.673	
3/20/2015	04:35	4.17	08:10	9.66	7.30	04:35	1.11	08:15	3.06	2.18	04:35	0.330	08:15	3.026	1.562	1.562	
3/21/2015	05:15	4.16	10:15	9.65	7.48	05:15	1.31	10:15	2.89	2.31	05:15	0.388	10:15	2.872	1.732	1.732	
3/22/2015	05:45	4.15	10:45	10.15	7.71	06:00	1.37	11:30	3.14	2.48	05:40	0.406	10:45	3.296	1.972	1.972	
3/23/2015	04:45	3.86	21:05	10.06	7.69	04:35	1.39	21:35	3.12	2.42	04:35	0.367	21:35	3.217	1.883	1.883	
3/24/2015	04:20	4.10	08:00	10.14	7.37	04:15	1.33	08:00	3.09	2.39	04:20	0.389	08:00	3.288	1.750	1.750	
3/25/2015	04:20	4.31	08:15	10.58	7.56	03:40	1.29	10:00	3.11	2.40	03:40	0.404	08:15	3.375	1.824	1.824	
3/26/2015	04:20	4.26	08:00	10.02	7.47	04:50	1.25	20:35	3.13	2.38	03:40	0.388	08:15	3.122	1.783	1.783	
3/27/2015	04:10	4.35	08:25	10.19	7.42	03:45	1.44	07:50	3.07	2.39	03:45	0.457	08:20	3.201	1.742	1.742	
3/28/2015	05:45	4.03	11:10	9.71	7.53	05:10	1.11	11:25	3.10	2.33	05:10	0.326	10:10	3.075	1.789	1.789	
3/29/2015	05:55	4.30	21:35	9.89	7.72	05:40	1.32	11:05	3.23	2.44	05:55	0.412	11:05	3.252	1.934	1.934	
3/30/2015	04:50	4.09	08:05	10.00	7.53	03:55	1.39	07:50	3.07	2.36	04:25	0.411	07:55	3.174	1.768	1.768	
3/31/2015	04:30	3.74	21:20	9.81	7.16	04:20	1.22	22:30	3.08	2.32	04:20	0.309	21:20	3.102	1.641	1.641	
4/1/2015	04:20	4.38	08:05	10.17	7.41	04:35	1.26	08:30	3.04	2.28	04:20	0.403	08:00	3.218	1.682	1.682	
4/2/2015	04:35	4.30	07:50	10.06	7.39	04:10	1.28	07:50	3.12	2.30	04:35	0.400	07:50	3.279	1.666	1.666	
4/3/2015	04:50	4.26	09:00	9.59	7.53	05:05	1.04	10:50	2.94	2.28	05:05	0.320	09:00	2.834	1.729	1.729	
4/4/2015	05:05	4.25	10:50	10.06	7.55	05:05	1.35	13:45	3.00	2.37	05:05	0.411	10:40	3.052	1.797	1.797	
4/5/2015	05:35	4.03	09:55	9.68	7.47	05:40	1.35	09:35	3.13	2.36	05:35	0.380	09:55	3.094	1.770	1.769	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			163.134
Avg	7.59	2.37	1.813

Site Commentary

Site Information

MPSite2	
Pipe Dimensions	48.13" x 47.88"
Silt Level	0.00"

Overview

Site MPSite2 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	9.76	2.94	3.601
Minimum	5.49	2.14	1.140
Maximum	13.64	3.65	6.830
Time of Minimum	2/1/2015 5:45 AM	3/31/2015 4:45 AM	2/1/2015 5:40 AM
Time of Maximum	3/31/2015 9:35 AM	3/31/2015 11:10 AM	3/31/2015 11:10 AM

Data Quality

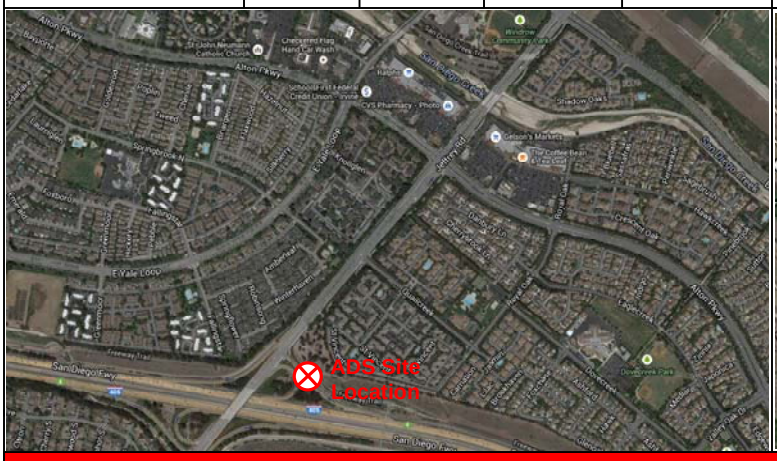
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

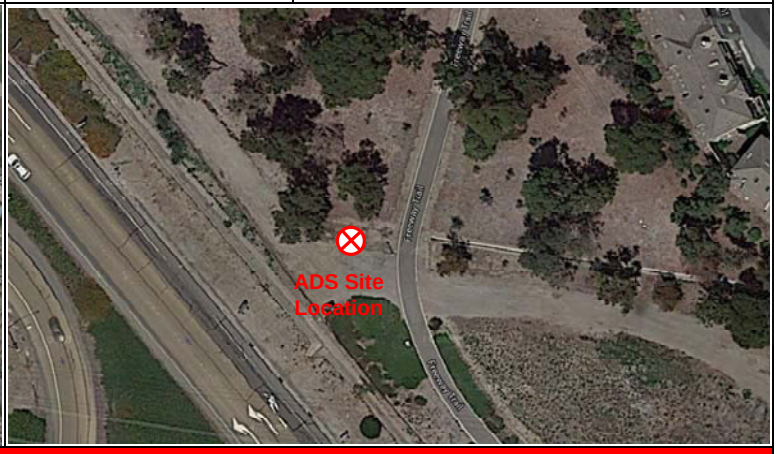
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite2	**Install Date:** 12/29/14	**Monitor Type**	Peak Doppler
Address/Location: Jeffrey Rd & Quail Creek		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH102S002
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	48.13 "
		Pipe Width:	47.88 "





Investigation Information:

Date/Time of Investigation:	12/29/14 @ 0830
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	10.25" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.92 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

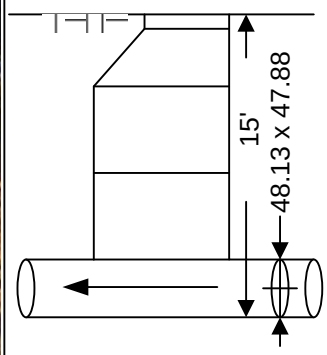
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

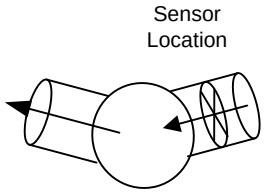
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

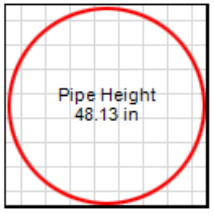
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite2

Flow Monitor

MPSite2

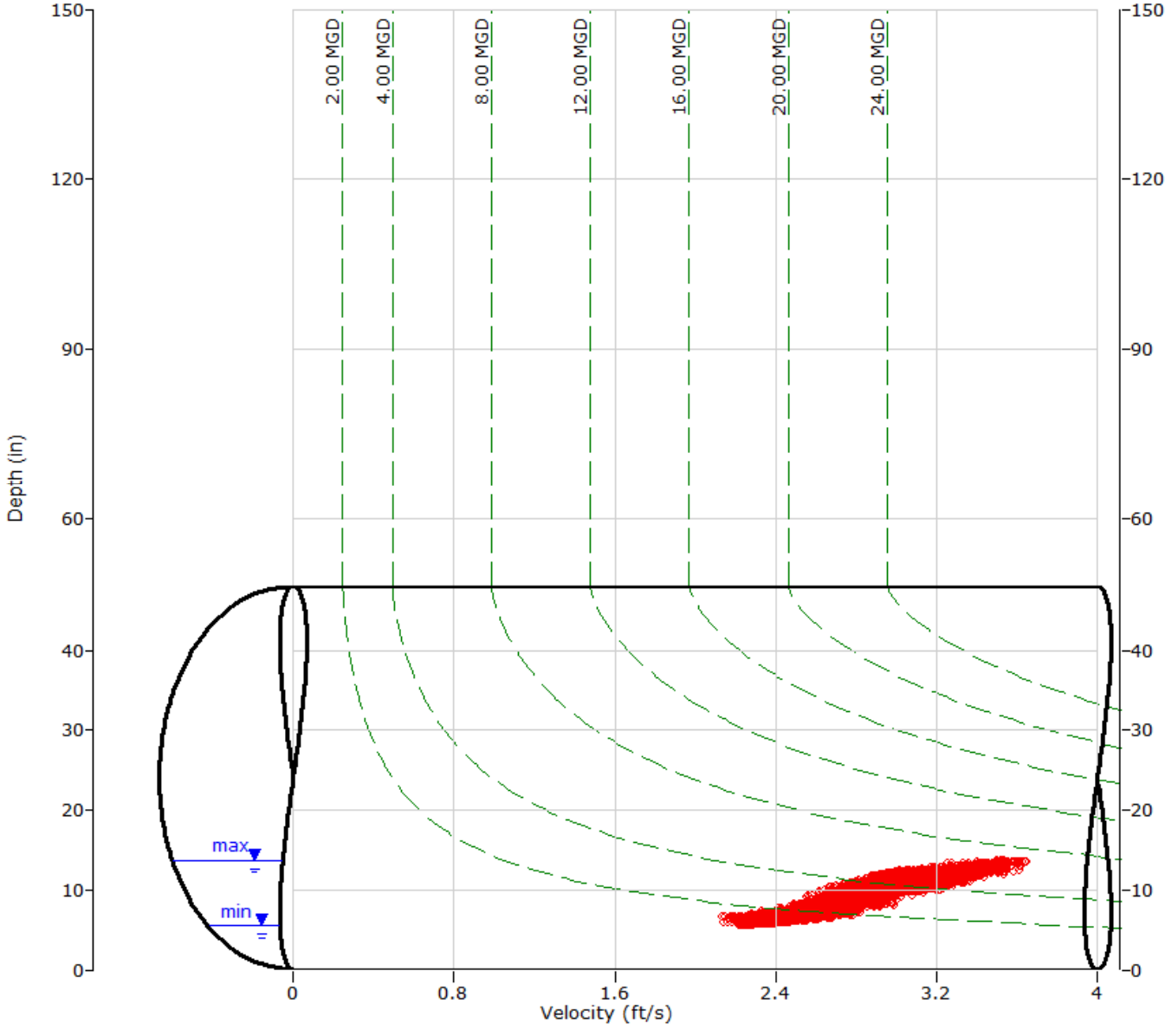


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



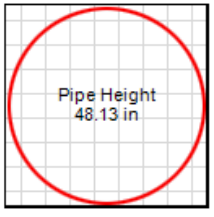
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite2

Flow Monitor

MPSite2

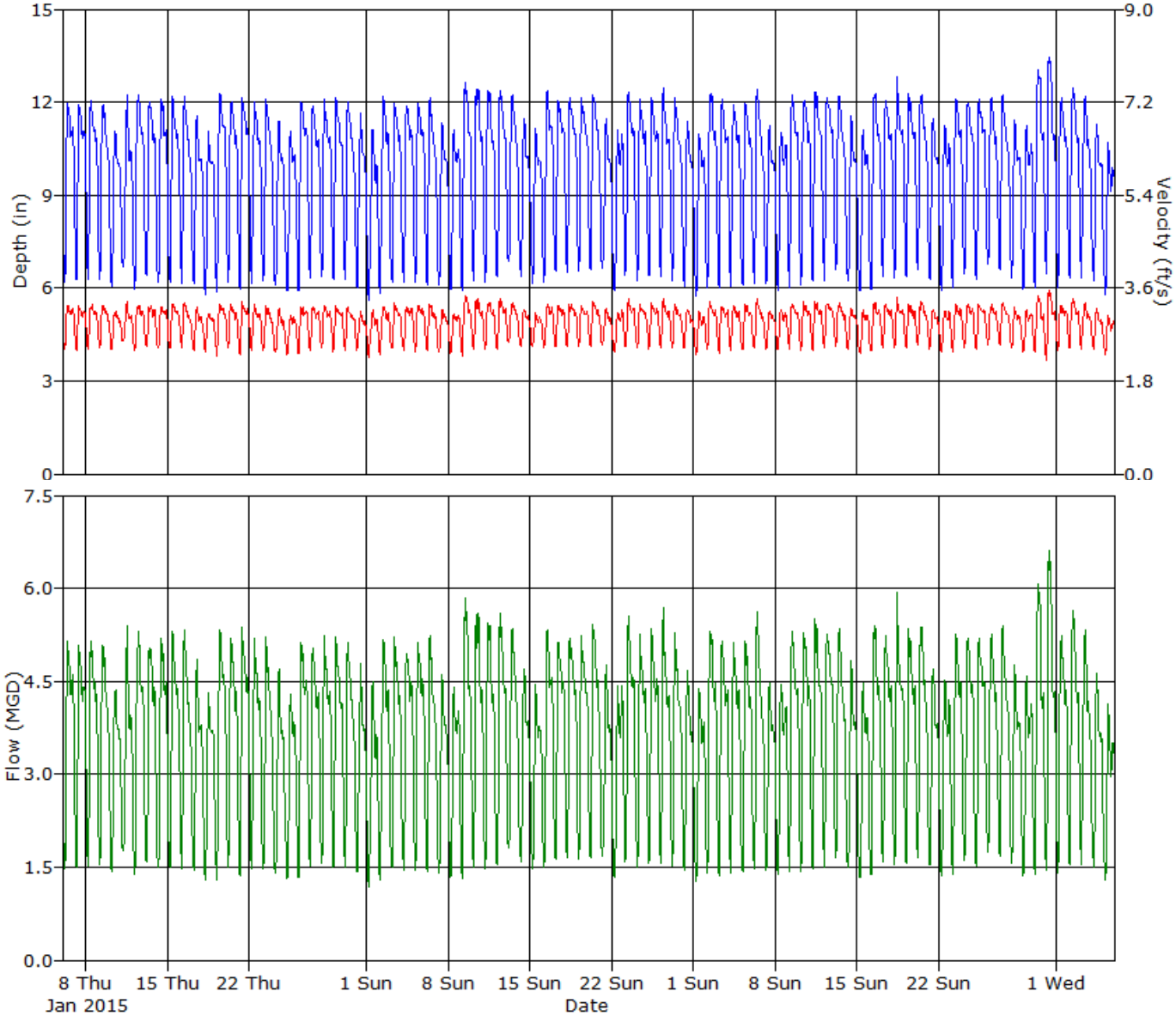


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite2, Pipe Height: 48.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:10	6.09	10:10	12.07	9.97	03:55	2.34	10:20	3.35	2.98	05:10	1.428	10:20	5.331	3.754	3.754	
1/7/2015	04:40	6.18	10:00	12.04	9.97	05:50	2.26	09:50	3.34	2.96	05:50	1.421	09:50	5.283	3.715	3.715	
1/8/2015	05:20	6.18	09:55	12.17	9.99	04:45	2.37	09:45	3.41	2.98	04:45	1.458	09:45	5.488	3.753	3.753	
1/9/2015	04:35	6.14	12:10	12.16	9.84	05:55	2.24	14:45	3.36	2.97	05:55	1.453	12:15	5.281	3.655	3.655	
1/10/2015	05:30	6.00	13:30	11.15	9.04	04:55	2.30	12:40	3.24	2.87	04:55	1.404	12:40	4.539	3.124	3.124	
1/11/2015	04:20	6.52	12:40	12.30	9.37	03:00	2.52	12:15	3.38	2.93	04:10	1.685	12:25	5.490	3.359	3.359	
1/12/2015	04:35	5.89	12:55	12.30	9.91	03:55	2.26	12:30	3.40	2.95	03:55	1.357	12:30	5.493	3.715	3.715	
1/13/2015	04:35	6.31	12:30	12.16	10.01	05:10	2.41	13:55	3.36	2.98	04:35	1.541	12:05	5.341	3.760	3.760	
1/14/2015	05:40	6.09	14:50	12.27	10.00	05:50	2.37	10:10	3.33	2.97	05:45	1.426	10:10	5.396	3.759	3.759	
1/15/2015	05:20	6.14	10:00	12.25	9.98	05:40	2.35	09:35	3.41	3.00	04:45	1.445	10:00	5.518	3.778	3.778	
1/16/2015	05:45	6.10	10:05	12.25	9.91	05:05	2.38	09:55	3.51	2.97	05:45	1.433	09:55	5.609	3.702	3.702	
1/17/2015	06:50	6.11	12:10	11.67	9.21	06:55	2.34	13:50	3.34	2.87	06:55	1.406	12:30	4.947	3.223	3.223	
1/18/2015	05:25	5.73	12:40	11.23	8.88	05:25	2.24	11:25	3.18	2.85	05:25	1.220	12:35	4.488	3.032	3.032	
1/19/2015	05:15	5.82	13:10	12.33	9.82	05:40	2.14	11:55	3.44	2.94	05:40	1.211	11:55	5.624	3.667	3.667	
1/20/2015	05:05	6.15	09:55	12.22	9.97	04:45	2.19	09:35	3.37	2.96	04:45	1.346	09:50	5.350	3.726	3.726	
1/21/2015	05:20	5.94	10:05	12.37	9.97	05:00	2.21	10:30	3.37	2.95	05:00	1.302	10:05	5.560	3.738	3.738	
1/22/2015	05:15	6.07	10:25	12.18	9.89	04:30	2.34	11:00	3.42	2.95	04:30	1.417	10:15	5.419	3.661	3.661	
1/23/2015	04:35	6.18	10:20	12.16	9.85	05:40	2.28	09:50	3.36	2.92	05:40	1.398	10:35	5.345	3.613	3.613	
1/24/2015	05:45	6.07	12:55	11.48	9.14	05:00	2.30	13:25	3.30	2.83	05:40	1.392	13:25	4.868	3.135	3.135	
1/25/2015	05:50	5.86	12:25	11.20	9.00	05:45	2.28	12:05	3.18	2.80	05:50	1.286	12:05	4.482	3.045	3.045	
1/26/2015	05:05	5.86	09:50	12.18	9.90	03:20	2.22	14:25	3.38	2.93	05:05	1.294	10:10	5.374	3.682	3.682	
1/27/2015	04:40	6.18	09:40	12.01	9.87	03:35	2.36	10:25	3.36	2.95	04:35	1.452	09:35	5.248	3.656	3.656	
1/28/2015	05:15	6.30	10:00	12.32	9.95	03:30	2.33	09:45	3.43	2.96	05:00	1.514	09:45	5.572	3.716	3.716	
1/29/2015	05:30	6.22	09:50	12.30	9.96	04:45	2.24	12:40	3.35	2.95	04:40	1.400	09:50	5.440	3.707	3.707	
1/30/2015	05:00	6.20	10:05	12.34	9.82	05:00	2.33	09:50	3.32	2.93	05:00	1.425	09:55	5.420	3.599	3.599	
1/31/2015	05:55	5.97	12:25	11.76	9.26	05:45	2.33	12:15	3.24	2.84	05:45	1.353	12:15	4.960	3.207	3.207	
2/1/2015	05:45	5.49	14:25	11.23	8.84	05:40	2.22	12:40	3.25	2.80	05:40	1.140	12:40	4.655	2.986	2.986	
2/2/2015	05:30	5.79	11:45	12.23	9.79	04:55	2.27	14:05	3.31	2.92	05:30	1.258	11:55	5.362	3.610	3.610	
2/3/2015	05:05	6.09	09:50	12.23	9.89	04:45	2.37	11:40	3.41	2.96	05:10	1.441	10:00	5.509	3.688	3.688	
2/4/2015	05:50	6.10	12:10	11.94	9.92	05:25	2.31	15:10	3.34	2.96	05:25	1.435	12:05	5.158	3.698	3.698	
2/5/2015	05:10	6.07	09:50	12.22	9.96	04:50	2.24	10:40	3.36	2.97	04:50	1.348	09:50	5.386	3.739	3.739	
2/6/2015	05:40	6.04	11:45	12.32	9.85	05:30	2.34	11:45	3.39	2.96	05:45	1.388	11:45	5.568	3.662	3.662	
2/7/2015	05:50	6.08	12:15	11.38	9.16	04:50	2.23	14:05	3.29	2.84	04:50	1.337	12:15	4.723	3.173	3.173	
2/8/2015	05:55	5.94	12:40	11.16	9.04	07:05	2.23	12:40	3.18	2.84	07:05	1.312	12:40	4.541	3.104	3.104	
2/9/2015	05:20	5.86	11:25	12.73	10.11	05:30	2.19	11:45	3.54	3.00	05:30	1.262	11:55	6.015	3.894	3.894	
2/10/2015	05:20	6.18	10:15	12.63	10.14	04:40	2.32	09:55	3.61	3.01	05:15	1.439	09:55	6.033	3.902	3.902	
2/11/2015	05:20	6.13	10:00	12.47	10.06	05:40	2.27	10:00	3.47	2.99	05:40	1.398	10:00	5.794	3.822	3.822	
2/12/2015	05:10	6.24	10:00	12.49	10.17	05:30	2.39	10:05	3.51	3.02	05:10	1.485	10:05	5.884	3.926	3.926	
2/13/2015	04:55	6.73	11:40	12.35	10.16	04:20	2.51	15:35	3.44	3.02	04:55	1.734	12:05	5.579	3.884	3.884	
2/14/2015	05:30	6.23	12:30	11.50	9.37	05:30	2.38	11:05	3.28	2.91	05:30	1.470	12:35	4.800	3.327	3.327	
2/15/2015	06:20	6.01	12:20	11.19	9.09	05:10	2.34	12:25	3.27	2.85	06:20	1.430	12:25	4.668	3.123	3.123	
2/16/2015	04:50	6.00	12:05	12.48	9.88	04:25	2.39	11:55	3.37	2.96	04:45	1.402	11:55	5.617	3.697	3.697	
2/17/2015	05:10	6.47	10:00	12.17	10.10	05:30	2.26	21:15	3.37	2.98	05:30	1.486	10:05	5.391	3.823	3.823	
2/18/2015	05:10	6.43	10:15	12.36	10.13	03:35	2.38	09:55	3.46	3.00	05:00	1.592	09:55	5.580	3.853	3.853	
2/19/2015	05:30	6.42	09:50	12.17	10.12	03:40	2.42	10:20	3.39	2.98	05:35	1.588	10:35	5.457	3.816	3.816	
2/20/2015	04:50	6.39	10:30	12.29	10.08	05:05	2.31	12:10	3.43	3.00	05:15	1.498	12:25	5.604	3.833	3.833	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	06:05	6.28	12:40	11.56	9.33	05:00	2.42	11:35	3.35	2.90	06:05	1.548	12:40	4.901	3.294	3.294	
2/22/2015	05:55	5.87	12:30	11.18	9.09	06:20	2.31	22:35	3.25	2.86	06:30	1.314	12:25	4.595	3.157	3.157	
2/23/2015	04:45	6.31	10:00	12.59	10.27	04:40	2.34	10:15	3.51	3.03	04:40	1.485	10:00	5.933	3.968	3.968	
2/24/2015	04:50	6.14	09:50	12.28	9.97	03:00	2.32	10:05	3.54	2.98	05:00	1.412	10:05	5.747	3.747	3.747	
2/25/2015	05:20	6.28	09:50	12.29	10.01	04:20	2.27	10:20	3.52	2.99	04:25	1.460	10:20	5.695	3.782	3.782	
2/26/2015	05:25	6.24	10:05	12.69	10.01	05:25	2.36	09:55	3.53	2.99	05:25	1.461	09:55	6.018	3.788	3.788	
2/27/2015	04:50	6.20	09:50	12.29	9.89	04:50	2.33	09:45	3.58	2.96	04:50	1.427	09:45	5.857	3.676	3.676	
2/28/2015	06:35	5.99	12:10	11.49	9.17	05:05	2.36	14:50	3.32	2.89	06:40	1.409	12:20	4.887	3.214	3.214	
3/1/2015	05:50	5.62	12:05	11.13	8.86	05:50	2.22	12:15	3.29	2.81	05:50	1.182	12:15	4.628	2.995	2.995	
3/2/2015	05:55	5.94	10:10	12.36	9.98	04:20	2.34	09:20	3.53	2.97	04:20	1.377	09:40	5.648	3.766	3.766	
3/3/2015	04:55	5.94	10:10	12.25	9.91	06:20	2.18	09:50	3.35	2.95	05:25	1.309	09:55	5.421	3.694	3.694	
3/4/2015	05:05	5.97	09:50	12.24	9.93	05:25	2.33	09:30	3.34	2.96	05:25	1.357	09:40	5.401	3.704	3.704	
3/5/2015	05:30	6.02	10:00	12.18	9.92	03:05	2.37	09:45	3.43	2.97	05:30	1.398	09:45	5.529	3.716	3.716	
3/6/2015	04:50	6.07	11:15	12.47	9.97	04:45	2.36	09:50	3.50	2.99	04:45	1.405	10:10	5.769	3.776	3.776	
3/7/2015	06:00	6.06	12:35	11.24	9.18	05:20	2.36	12:35	3.31	2.88	06:20	1.407	12:35	4.771	3.203	3.203	
3/8/2015	05:30	5.90	13:05	11.04	9.15	03:50	2.38	13:00	3.28	2.89	05:05	1.370	13:00	4.601	3.209	3.209	
3/9/2015	05:40	5.98	11:50	12.23	10.04	05:25	2.39	10:05	3.42	2.99	05:35	1.391	10:10	5.497	3.802	3.802	
3/10/2015	05:40	6.05	14:45	12.19	10.03	05:25	2.27	10:10	3.39	2.98	05:25	1.359	10:10	5.439	3.794	3.794	
3/11/2015	05:15	6.18	11:40	12.41	10.12	05:35	2.23	10:35	3.41	2.99	05:35	1.375	10:35	5.641	3.854	3.854	
3/12/2015	05:50	6.12	10:05	12.22	10.14	05:15	2.30	09:20	3.39	3.01	05:15	1.425	10:20	5.393	3.886	3.886	
3/13/2015	05:05	6.47	11:20	12.31	10.02	04:00	2.38	10:30	3.48	3.00	05:00	1.606	10:30	5.629	3.786	3.786	
3/14/2015	05:55	6.12	12:20	11.73	9.33	04:35	2.34	12:10	3.29	2.92	05:55	1.424	12:10	5.003	3.318	3.318	
3/15/2015	06:05	5.85	12:30	11.17	9.05	06:05	2.23	12:30	3.22	2.85	06:05	1.255	12:30	4.601	3.122	3.122	
3/16/2015	05:20	5.88	13:35	12.36	10.03	04:05	2.34	15:50	3.37	2.98	05:20	1.329	13:40	5.512	3.809	3.809	
3/17/2015	05:45	6.33	10:00	12.23	10.04	04:35	2.31	11:55	3.40	2.99	04:35	1.483	09:45	5.388	3.797	3.797	
3/18/2015	05:20	6.22	10:10	13.02	10.14	04:40	2.26	10:00	3.62	3.00	04:40	1.476	10:05	6.391	3.872	3.872	
3/19/2015	04:30	6.24	10:15	12.43	10.12	05:15	2.23	13:05	3.39	2.98	05:15	1.399	09:40	5.502	3.837	3.837	
3/20/2015	05:15	6.44	09:50	12.38	10.17	04:30	2.30	14:10	3.43	3.00	05:20	1.533	14:10	5.599	3.875	3.875	
3/21/2015	06:30	6.20	12:10	11.61	9.33	05:35	2.34	11:55	3.25	2.88	05:55	1.462	12:10	4.880	3.273	3.273	
3/22/2015	06:15	5.90	12:40	11.33	9.08	06:20	2.33	13:20	3.25	2.87	06:20	1.331	12:25	4.670	3.160	3.160	
3/23/2015	05:35	5.97	10:10	12.25	9.96	05:05	2.31	12:15	3.36	2.96	05:50	1.364	12:15	5.409	3.743	3.743	
3/24/2015	05:50	6.31	09:55	12.23	10.08	04:25	2.37	09:55	3.36	2.99	05:50	1.546	09:55	5.464	3.820	3.820	
3/25/2015	05:15	6.26	09:55	12.26	10.08	05:35	2.37	10:00	3.37	2.99	05:35	1.478	10:00	5.490	3.824	3.824	
3/26/2015	04:25	6.68	11:15	12.23	10.13	05:30	2.45	13:35	3.36	3.01	04:30	1.698	09:50	5.416	3.849	3.849	
3/27/2015	05:25	6.50	11:55	12.33	10.06	05:25	2.48	10:15	3.43	3.01	05:25	1.623	10:15	5.588	3.819	3.819	
3/28/2015	06:20	6.28	11:40	11.67	9.38	06:10	2.41	12:25	3.32	2.91	06:20	1.514	11:45	4.980	3.334	3.334	
3/29/2015	06:00	5.86	12:20	11.39	9.13	06:00	2.33	12:30	3.22	2.86	06:00	1.318	12:20	4.723	3.170	3.170	
3/30/2015	05:50	5.94	12:10	13.30	10.37	05:05	2.27	13:20	3.57	2.99	05:05	1.330	13:20	6.305	4.036	4.036	
3/31/2015	05:40	6.45	09:35	13.64	10.49	04:45	2.14	11:10	3.65	3.00	05:20	1.410	11:10	6.830	4.135	4.135	
4/1/2015	05:15	5.96	12:40	12.25	9.99	05:40	2.27	12:45	3.39	2.96	05:15	1.324	12:45	5.520	3.745	3.745	
4/2/2015	04:55	6.17	10:20	12.55	10.16	05:30	2.41	11:50	3.54	3.01	05:00	1.487	10:20	5.916	3.911	3.911	
4/3/2015	05:25	6.22	11:45	12.30	9.95	05:10	2.40	11:50	3.36	2.96	05:25	1.478	11:50	5.476	3.698	3.698	
4/4/2015	05:30	6.17	12:30	11.33	9.24	06:20	2.38	12:25	3.35	2.88	06:20	1.456	12:25	4.871	3.225	3.225	
4/5/2015	06:35	5.75	12:40	10.82	8.68	06:40	2.29	12:20	3.17	2.77	06:35	1.258	12:25	4.261	2.844	2.842	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			324.061
Avg	9.76	2.94	3.601

Site Commentary

Site Information

MPSite3	
Pipe Dimensions	42.50" x 40.00"
Silt Level	0.00"

Overview

Site MPSite3 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	12.19	1.82	2.718
Minimum	7.31	1.02	0.780
Maximum	17.37	2.46	5.370
Time of Minimum	2/1/2015 5:40 AM	1/12/2015 5:10 AM	2/1/2015 5:05 AM
Time of Maximum	3/31/2015 9:10 AM	3/30/2015 12:35 PM	3/31/2015 11:35 AM

Data Quality

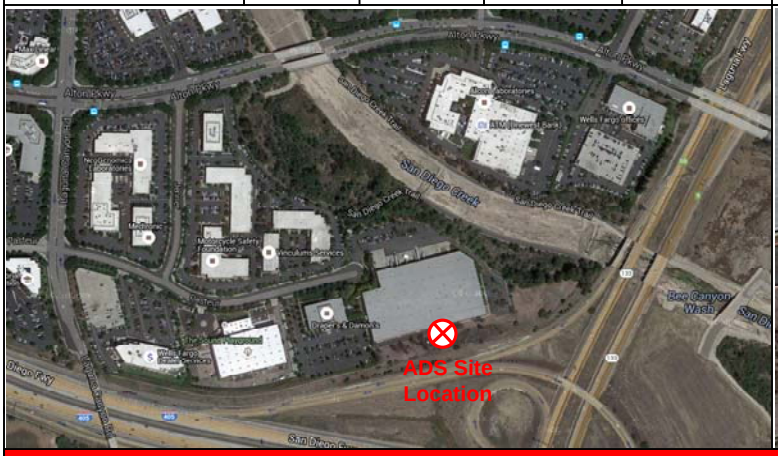
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

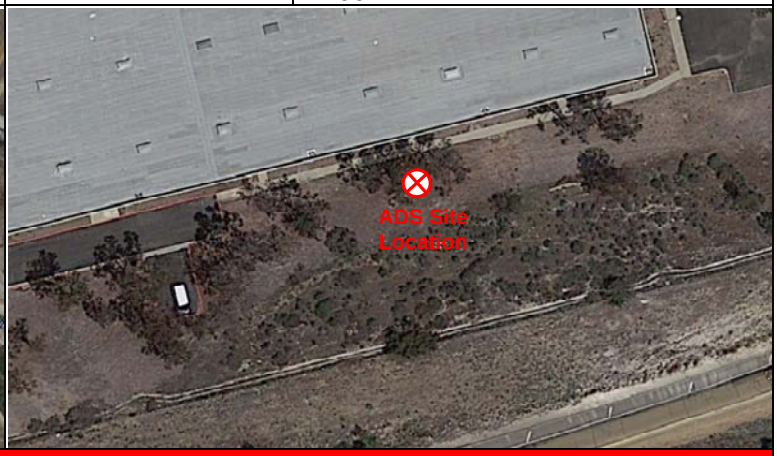
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite3	**Install Date:** 12/31/14	**Monitor Type**	Peak Doppler
Address/Location: Alton Pkwy & Laguna Canyon Rd (Located in easement behind building)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH138N016
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	42.25 "
		Pipe Width:	42.00 "





Investigation Information:

Date/Time of Investigation:	12/31/14 @ 1400
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	14.13" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.02 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[ ]	[X]	[ ]	[ ]

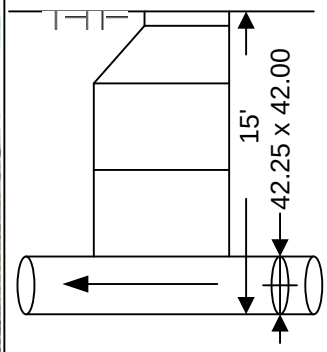
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

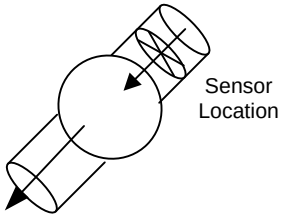
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

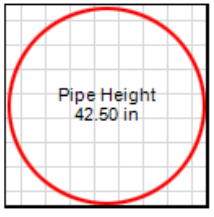
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite3

Flow Monitor

MPSite3

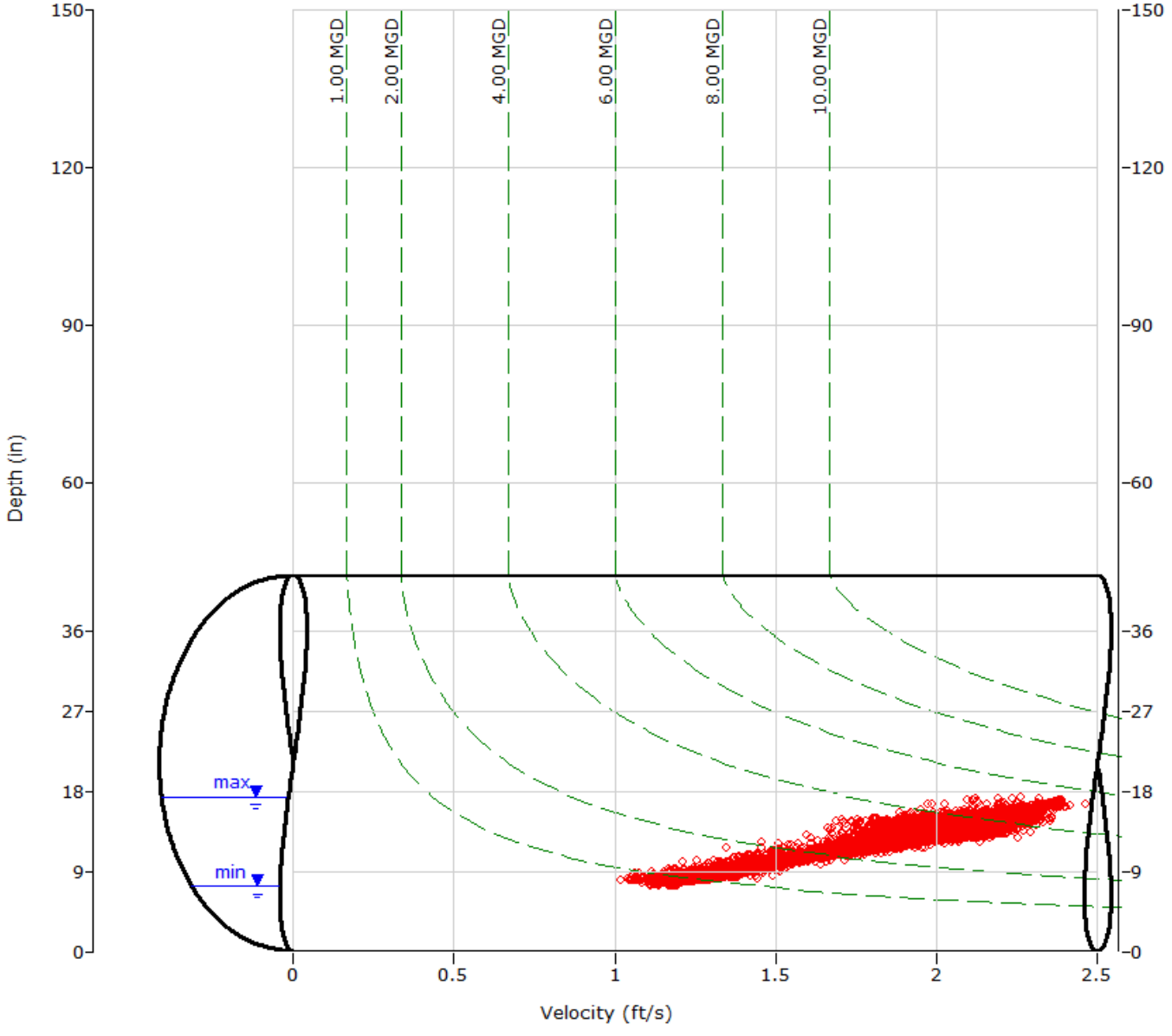


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite3

Flow Monitor

MPSite3

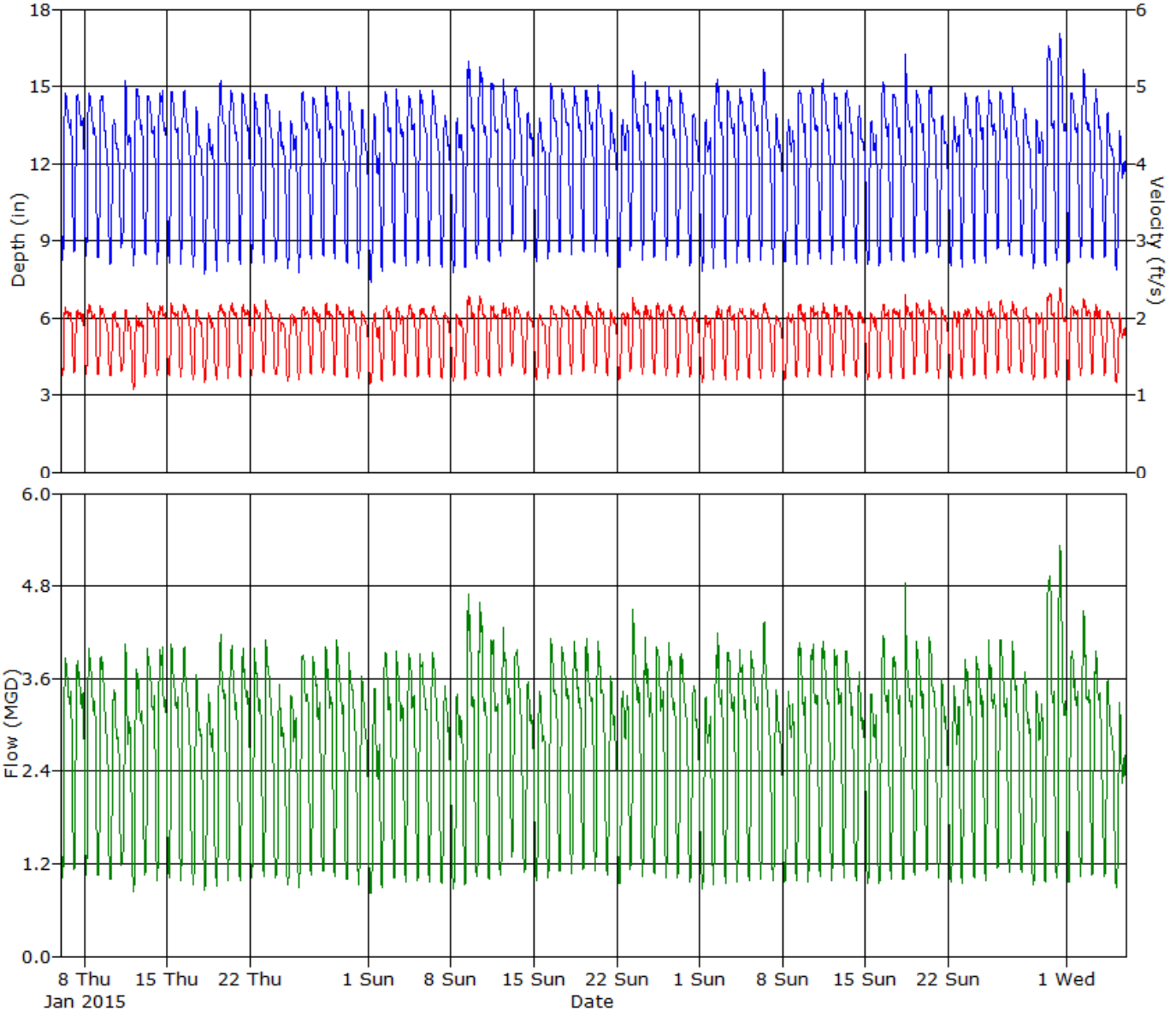
Pipe Height
42.50 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite3, Pipe Height: 42.5 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:10	8.18	09:55	14.81	12.44	05:00	1.18	09:10	2.22	1.84	05:00	0.961	09:45	4.024	2.818	2.818	
1/7/2015	04:00	8.42	11:55	14.81	12.51	05:05	1.20	11:00	2.21	1.84	05:05	1.035	10:40	3.985	2.829	2.829	
1/8/2015	05:05	8.31	09:25	14.92	12.49	04:15	1.21	11:35	2.28	1.86	04:15	1.021	11:35	4.151	2.852	2.852	
1/9/2015	04:05	8.32	11:30	14.85	12.31	04:10	1.21	15:05	2.29	1.83	04:10	1.005	09:40	4.114	2.755	2.755	
1/10/2015	06:40	8.03	13:45	13.79	11.41	06:55	1.20	13:00	2.19	1.74	06:35	0.951	13:00	3.662	2.351	2.351	
1/11/2015	03:45	8.57	12:20	15.28	11.83	03:55	1.29	11:20	2.19	1.75	03:50	1.112	12:50	4.183	2.479	2.479	
1/12/2015	05:15	7.95	12:10	15.00	12.35	05:10	1.02	12:00	2.16	1.68	05:10	0.790	12:00	4.070	2.582	2.582	
1/13/2015	05:05	8.36	11:35	14.78	12.42	04:20	1.21	09:15	2.25	1.86	04:40	1.031	09:20	4.116	2.833	2.833	
1/14/2015	05:05	7.97	14:20	14.97	12.39	05:05	1.21	14:45	2.28	1.85	05:05	0.942	14:40	4.252	2.827	2.827	
1/15/2015	05:30	8.04	09:30	14.98	12.37	04:45	1.24	09:15	2.29	1.86	05:15	0.990	09:20	4.226	2.820	2.820	
1/16/2015	05:05	7.97	11:45	14.91	12.28	04:45	1.22	11:45	2.29	1.85	05:00	0.953	11:45	4.303	2.777	2.777	
1/17/2015	06:00	7.91	12:00	14.38	11.53	05:45	1.17	11:15	2.25	1.76	06:00	0.905	11:40	3.948	2.424	2.424	
1/18/2015	05:30	7.68	12:20	13.62	11.20	06:00	1.14	13:55	2.15	1.71	06:00	0.843	12:55	3.514	2.276	2.276	
1/19/2015	05:50	7.74	13:30	15.47	12.24	06:15	1.16	13:30	2.32	1.83	05:40	0.875	13:30	4.579	2.768	2.768	
1/20/2015	05:10	8.12	09:35	15.05	12.36	05:05	1.14	12:20	2.28	1.87	05:05	0.909	10:30	4.192	2.831	2.831	
1/21/2015	05:10	8.02	09:30	14.89	12.35	05:00	1.19	14:10	2.25	1.86	05:00	0.932	11:05	4.085	2.823	2.823	
1/22/2015	05:00	8.06	09:45	14.83	12.29	04:55	1.23	13:10	2.27	1.86	04:55	0.971	09:50	4.100	2.796	2.796	
1/23/2015	05:40	8.07	10:00	14.91	12.26	05:55	1.25	09:40	2.29	1.86	05:40	1.015	09:40	4.278	2.790	2.790	
1/24/2015	05:15	8.12	13:05	14.25	11.47	03:00	1.20	12:30	2.15	1.71	05:05	0.991	12:55	3.714	2.334	2.334	
1/25/2015	06:00	7.77	11:55	13.84	11.39	06:05	1.09	11:25	2.15	1.73	06:05	0.820	11:25	3.520	2.349	2.349	
1/26/2015	05:20	7.64	09:40	14.86	12.29	05:05	1.17	14:10	2.33	1.84	05:15	0.862	14:10	4.190	2.796	2.796	
1/27/2015	04:15	8.29	09:35	14.68	12.30	04:30	1.24	14:25	2.22	1.84	04:30	1.020	09:20	4.031	2.756	2.756	
1/28/2015	05:15	8.30	09:50	15.19	12.46	03:55	1.20	11:10	2.31	1.86	05:05	1.046	11:10	4.250	2.849	2.849	
1/29/2015	04:55	8.16	09:35	15.04	12.38	04:55	1.22	09:00	2.26	1.86	04:55	0.986	09:15	4.214	2.822	2.822	
1/30/2015	05:35	8.10	09:25	15.18	12.20	04:25	1.18	10:55	2.22	1.83	04:25	0.943	09:25	4.097	2.717	2.717	
1/31/2015	05:50	7.92	11:55	14.42	11.56	05:30	1.19	11:30	2.15	1.75	05:30	0.923	11:55	3.799	2.420	2.420	
2/1/2015	05:40	7.31	13:40	14.01	11.07	05:05	1.11	14:50	2.15	1.67	05:05	0.780	13:15	3.566	2.195	2.195	
2/2/2015	04:50	7.73	11:20	14.90	12.16	02:50	1.13	12:30	2.25	1.82	04:50	0.855	12:30	4.108	2.722	2.722	
2/3/2015	05:10	8.08	09:20	15.03	12.30	06:00	1.19	12:15	2.23	1.83	06:00	0.979	09:25	4.140	2.766	2.766	
2/4/2015	05:15	7.95	09:30	14.82	12.36	05:30	1.21	09:10	2.25	1.85	05:30	0.939	09:10	4.076	2.813	2.813	
2/5/2015	04:45	8.06	09:20	15.00	12.42	04:30	1.19	18:35	2.29	1.86	04:30	0.945	09:20	4.145	2.829	2.829	
2/6/2015	05:10	7.92	09:35	14.92	12.30	05:40	1.20	09:00	2.23	1.83	05:10	0.927	09:25	4.020	2.771	2.771	
2/7/2015	05:15	7.93	11:45	14.06	11.46	04:50	1.14	11:20	2.19	1.73	04:50	0.905	11:20	3.658	2.366	2.366	
2/8/2015	05:50	7.73	12:05	13.81	11.39	05:30	1.13	12:00	2.12	1.71	05:30	0.843	12:00	3.573	2.334	2.334	
2/9/2015	05:15	7.84	11:15	16.13	12.60	04:50	1.16	13:25	2.35	1.87	04:50	0.885	11:20	4.883	2.951	2.951	
2/10/2015	05:05	8.19	09:35	16.12	12.69	05:00	1.18	09:20	2.36	1.88	05:00	0.957	09:25	4.874	2.980	2.980	
2/11/2015	05:15	8.06	14:00	15.40	12.52	04:20	1.21	14:15	2.36	1.85	05:15	0.963	14:15	4.553	2.855	2.855	
2/12/2015	04:35	8.33	09:30	15.45	12.65	05:15	1.20	09:45	2.25	1.87	05:15	1.004	09:45	4.406	2.930	2.930	
2/13/2015	04:30	8.90	11:35	15.11	12.75	04:30	1.33	13:40	2.26	1.88	04:30	1.214	13:45	4.148	2.949	2.949	
2/14/2015	05:55	8.38	11:40	14.21	11.86	05:55	1.23	11:40	2.09	1.79	05:55	1.031	11:40	3.674	2.537	2.537	
2/15/2015	05:45	8.01	11:45	13.88	11.48	05:45	1.16	11:45	2.06	1.74	05:45	0.912	11:45	3.507	2.367	2.367	
2/16/2015	04:05	8.17	11:25	15.21	12.34	04:05	1.19	11:25	2.17	1.83	04:05	0.963	11:25	4.177	2.790	2.790	
2/17/2015	05:00	8.43	09:50	15.00	12.58	05:00	1.24	19:40	2.17	1.88	05:00	1.048	09:50	4.073	2.906	2.906	
2/18/2015	04:50	8.36	09:40	15.30	12.60	04:40	1.21	09:15	2.27	1.88	04:40	1.013	09:15	4.238	2.914	2.914	
2/19/2015	05:10	8.24	09:20	15.07	12.60	04:50	1.26	13:20	2.30	1.88	05:00	1.059	11:15	4.264	2.913	2.913	
2/20/2015	04:40	8.44	09:40	15.22	12.57	04:25	1.17	11:20	2.27	1.88	04:25	0.996	11:20	4.229	2.900	2.900	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	05:35	8.21	12:15	14.26	11.74	05:30	1.20	14:20	2.20	1.78	05:30	0.974	12:20	3.818	2.492	2.492	
2/22/2015	07:05	7.90	12:45	13.85	11.51	06:40	1.12	14:00	2.16	1.76	06:40	0.859	12:40	3.632	2.423	2.423	
2/23/2015	04:20	8.53	09:30	15.80	12.76	03:55	1.18	09:30	2.36	1.90	03:55	1.031	09:30	4.791	2.997	2.997	
2/24/2015	04:50	8.18	09:25	15.42	12.42	05:05	1.21	13:45	2.31	1.85	05:05	0.979	09:10	4.491	2.823	2.823	
2/25/2015	04:45	8.26	09:20	14.97	12.46	05:25	1.22	12:20	2.28	1.87	05:25	1.018	12:20	4.145	2.865	2.865	
2/26/2015	05:15	8.19	09:30	15.13	12.45	03:40	1.22	13:55	2.29	1.87	05:15	0.993	09:35	4.177	2.855	2.855	
2/27/2015	04:55	8.27	09:30	14.98	12.38	04:00	1.18	10:50	2.28	1.84	04:05	0.989	10:50	4.131	2.794	2.794	
2/28/2015	05:55	8.00	11:55	14.18	11.60	06:00	1.18	15:10	2.18	1.75	05:55	0.928	12:00	3.637	2.432	2.432	
3/1/2015	05:10	7.74	13:40	13.82	11.34	05:35	1.13	13:15	2.10	1.71	05:35	0.865	13:25	3.497	2.311	2.311	
3/2/2015	05:10	7.84	13:20	15.45	12.48	03:55	1.19	13:35	2.27	1.83	05:15	0.910	13:30	4.461	2.831	2.831	
3/3/2015	04:50	7.94	09:30	14.97	12.39	04:30	1.15	11:50	2.23	1.84	04:30	0.895	11:50	4.150	2.807	2.807	
3/4/2015	04:50	8.00	09:30	15.02	12.46	04:10	1.17	12:00	2.21	1.85	04:40	0.941	09:30	4.155	2.829	2.829	
3/5/2015	05:15	8.03	09:25	14.98	12.44	05:20	1.19	08:50	2.25	1.84	05:20	0.935	08:50	4.136	2.815	2.815	
3/6/2015	05:00	8.18	10:10	15.74	12.52	04:30	1.18	11:50	2.33	1.85	04:30	0.961	10:55	4.598	2.859	2.859	
3/7/2015	05:45	8.04	11:40	14.02	11.61	04:45	1.21	11:40	2.13	1.74	05:10	0.972	11:40	3.678	2.406	2.406	
3/8/2015	05:00	8.01	12:10	13.69	11.58	04:05	1.13	21:10	2.11	1.75	04:50	0.937	13:15	3.458	2.427	2.427	
3/9/2015	05:10	8.05	09:50	14.99	12.42	03:45	1.22	11:05	2.32	1.84	04:55	0.973	11:05	4.304	2.817	2.817	
3/10/2015	05:15	7.94	13:15	15.19	12.48	04:40	1.17	14:05	2.25	1.86	05:10	0.925	14:05	4.268	2.863	2.863	
3/11/2015	05:05	8.19	09:50	15.51	12.57	03:10	1.17	13:35	2.32	1.86	04:55	0.997	09:25	4.396	2.878	2.878	
3/12/2015	05:25	8.02	09:35	14.87	12.50	05:20	1.18	14:40	2.25	1.87	05:20	0.931	10:20	4.118	2.878	2.878	
3/13/2015	05:30	8.15	11:45	15.00	12.46	05:20	1.20	09:25	2.29	1.87	05:30	0.983	09:30	4.233	2.848	2.848	
3/14/2015	05:35	8.04	11:30	14.51	11.78	05:40	1.17	11:35	2.26	1.78	05:40	0.926	11:35	4.039	2.513	2.513	
3/15/2015	05:30	7.98	12:05	13.79	11.51	07:20	1.15	22:25	2.19	1.74	07:20	0.925	11:35	3.569	2.392	2.392	
3/16/2015	05:00	7.95	13:05	15.27	12.46	05:00	1.18	13:35	2.29	1.85	05:00	0.914	13:35	4.389	2.858	2.858	
3/17/2015	05:30	8.18	09:35	14.86	12.42	05:05	1.16	11:05	2.28	1.85	05:05	0.947	11:05	4.184	2.827	2.827	
3/18/2015	05:20	8.07	09:45	16.50	12.58	04:50	1.17	09:35	2.41	1.87	05:15	0.939	09:35	5.182	2.914	2.914	
3/19/2015	05:25	8.28	09:30	15.03	12.49	03:20	1.19	13:55	2.29	1.87	05:10	1.026	09:40	4.331	2.876	2.876	
3/20/2015	04:50	8.36	13:45	15.00	12.59	04:45	1.20	09:20	2.33	1.89	04:45	1.004	09:25	4.355	2.930	2.930	
3/21/2015	05:55	8.25	11:55	14.15	11.70	05:30	1.17	16:00	2.20	1.79	05:30	0.962	11:50	3.764	2.495	2.495	
3/22/2015	05:45	7.93	12:15	13.92	11.46	04:20	1.17	12:00	2.21	1.75	05:45	0.920	12:00	3.738	2.390	2.390	
3/23/2015	05:35	7.93	09:45	14.84	12.28	05:55	1.19	11:15	2.29	1.83	05:35	0.923	11:15	4.246	2.772	2.772	
3/24/2015	05:30	8.12	09:20	14.76	12.37	03:50	1.19	09:25	2.28	1.85	05:40	0.977	09:20	4.207	2.811	2.811	
3/25/2015	05:10	8.01	09:40	14.97	12.41	04:50	1.14	09:20	2.24	1.85	04:50	0.900	09:20	4.191	2.831	2.831	
3/26/2015	04:00	8.59	09:30	14.89	12.51	05:20	1.26	09:45	2.36	1.89	03:55	1.105	09:45	4.346	2.904	2.904	
3/27/2015	04:55	8.36	11:05	15.24	12.50	05:15	1.23	10:15	2.31	1.88	05:15	1.036	10:15	4.300	2.878	2.878	
3/28/2015	05:50	8.34	11:50	14.25	11.77	05:55	1.21	14:00	2.25	1.81	05:55	1.009	11:05	3.806	2.546	2.546	
3/29/2015	05:50	7.87	12:00	13.91	11.46	05:50	1.14	11:45	2.20	1.75	05:50	0.868	11:45	3.725	2.403	2.403	
3/30/2015	05:30	7.96	11:45	16.74	13.01	04:40	1.20	12:35	2.46	1.91	05:30	0.935	12:35	5.318	3.173	3.173	
3/31/2015	05:20	8.18	09:10	17.37	13.10	04:10	1.12	11:35	2.39	1.91	04:10	0.922	11:35	5.370	3.202	3.202	
4/1/2015	05:00	7.96	09:30	14.91	12.46	05:00	1.15	09:20	2.28	1.86	05:00	0.896	09:20	4.261	2.853	2.853	
4/2/2015	05:10	8.17	09:45	16.03	12.68	04:00	1.24	09:20	2.36	1.90	05:10	1.007	09:25	4.688	2.993	2.993	
4/3/2015	05:00	8.16	11:25	15.00	12.39	04:30	1.24	09:35	2.27	1.85	04:45	1.000	12:25	4.103	2.797	2.797	
4/4/2015	06:00	8.24	11:45	14.04	11.64	05:10	1.19	10:05	2.18	1.79	05:10	0.999	11:45	3.671	2.472	2.472	
4/5/2015	06:00	7.76	12:05	13.51	10.96	06:05	1.09	12:15	2.18	1.65	06:05	0.813	12:15	3.523	2.112	2.110	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			244.650
Avg	12.19	1.82	2.718

Site Commentary

Site Information

MPSite4	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site MPSite4 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.16	5.16	1.451
Minimum	2.53	3.92	0.391
Maximum	8.74	5.98	3.293
Time of Minimum	2/1/2015 4:15 AM	1/18/2015 5:45 AM	2/1/2015 4:20 AM
Time of Maximum	2/10/2015 8:40 AM	2/10/2015 8:40 AM	2/10/2015 8:40 AM

Data Quality

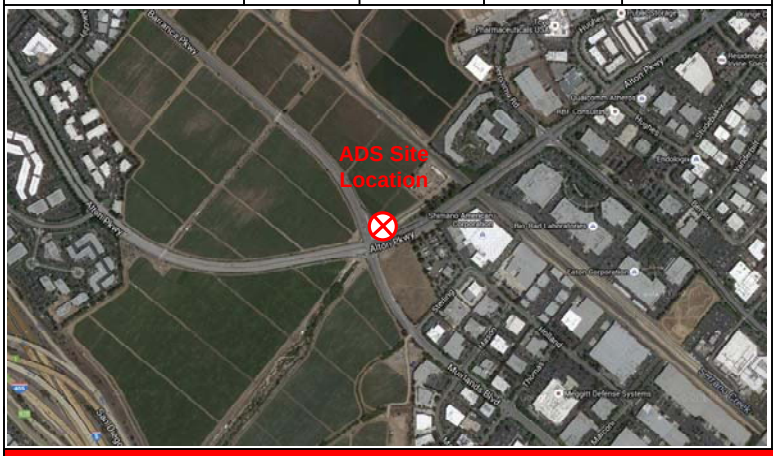
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

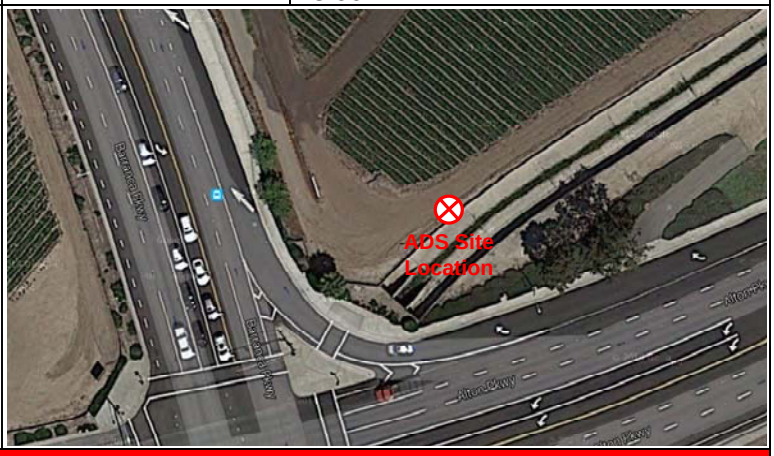
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite4	**Install Date:** 12/31/14	**Monitor Type**	Peak Doppler
Address/Location: Alton Pkwy & Barranca Pkwy		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH172N011
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	12/31/14 @ 1300
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	6.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.95 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

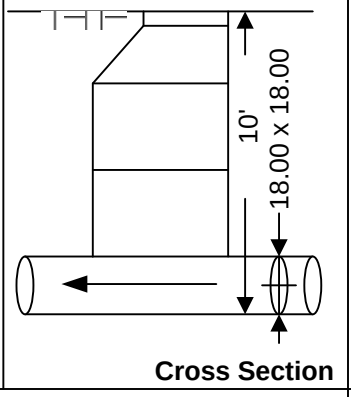
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

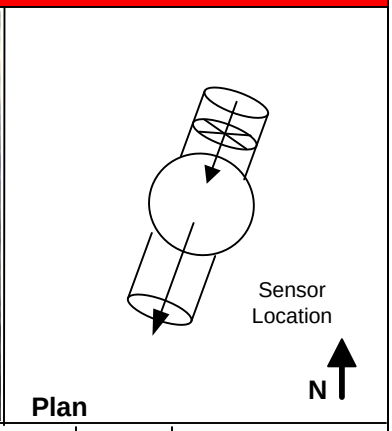
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

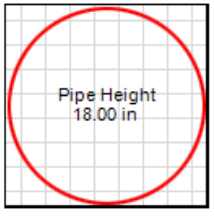
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite4

Flow Monitor

MPSite4

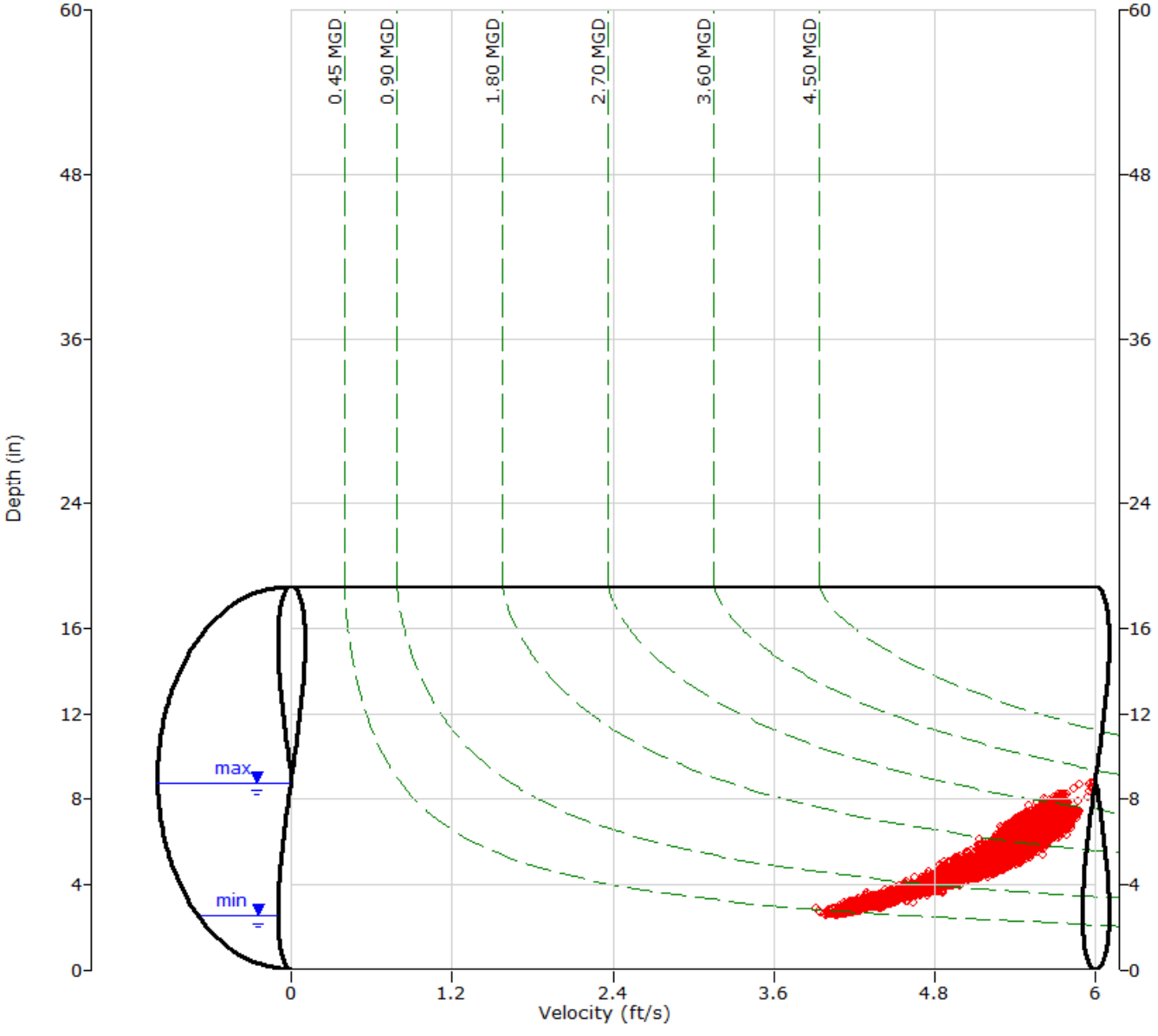


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite4

Flow Monitor

MPSite4

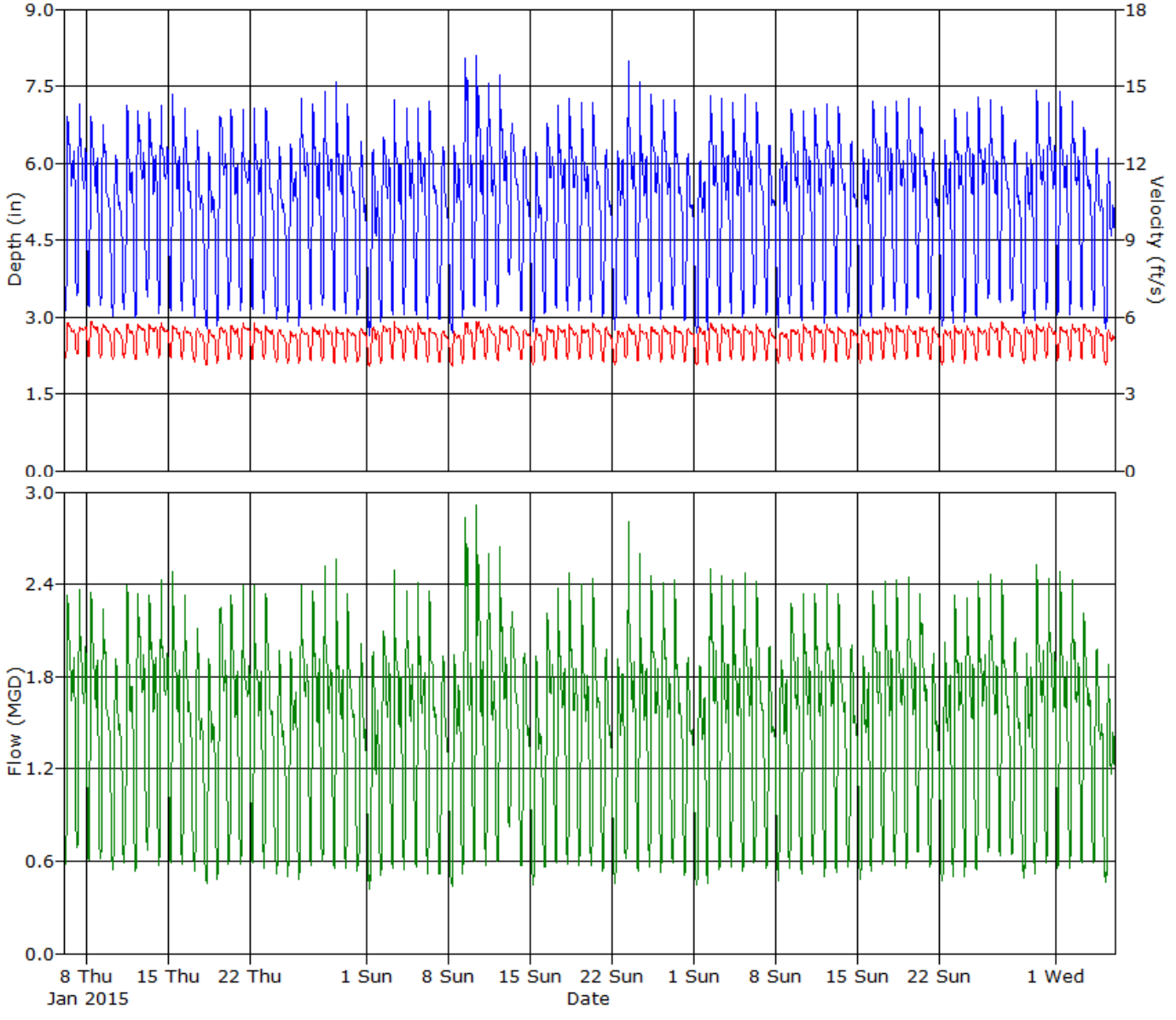
Pipe Height
18.00 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite4, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	04:00	3.04	08:40	7.08	5.37	04:45	4.35	08:40	5.78	5.30	04:45	0.558	08:40	2.411	1.566	1.566	
1/7/2015	04:40	3.34	08:35	7.34	5.38	04:15	4.49	08:35	5.69	5.30	04:40	0.658	08:35	2.493	1.565	1.565	
1/8/2015	04:15	3.10	08:30	7.29	5.33	04:10	4.39	08:30	5.87	5.35	04:15	0.576	08:30	2.545	1.566	1.566	
1/9/2015	04:00	3.15	08:30	6.94	5.19	02:50	4.38	08:30	5.75	5.28	04:00	0.593	08:30	2.337	1.487	1.487	
1/10/2015	05:30	2.94	12:25	6.28	4.71	06:05	4.22	12:30	5.58	5.12	05:35	0.524	12:25	1.973	1.262	1.262	
1/11/2015	04:10	3.07	11:20	7.19	4.99	04:05	4.37	11:10	5.72	5.15	04:10	0.565	11:30	2.420	1.383	1.383	
1/12/2015	03:50	2.95	08:30	7.16	5.34	03:45	4.32	08:30	5.72	5.25	03:50	0.530	08:30	2.419	1.553	1.553	
1/13/2015	04:40	3.28	08:25	7.17	5.39	03:55	4.45	08:35	5.75	5.30	04:40	0.637	08:30	2.429	1.569	1.569	
1/14/2015	03:55	2.99	08:30	7.30	5.37	03:40	4.33	08:30	5.83	5.28	03:50	0.550	08:30	2.537	1.562	1.562	
1/15/2015	04:20	3.02	08:30	7.55	5.37	04:20	4.38	08:40	5.74	5.23	04:20	0.554	08:30	2.596	1.549	1.549	
1/16/2015	03:50	3.00	08:45	7.26	5.22	03:50	4.25	08:55	5.65	5.17	03:50	0.533	08:45	2.419	1.468	1.468	
1/17/2015	05:25	2.94	10:50	6.70	4.84	05:30	4.19	11:05	5.59	5.06	05:30	0.512	11:05	2.163	1.297	1.297	
1/18/2015	06:00	2.64	11:10	6.29	4.61	05:45	3.92	13:00	5.54	4.97	06:00	0.416	11:10	1.965	1.200	1.200	
1/19/2015	04:45	2.74	10:35	7.11	5.29	04:15	4.12	12:00	5.63	5.14	04:40	0.454	10:35	2.349	1.506	1.506	
1/20/2015	03:35	3.09	08:30	7.23	5.30	03:10	4.32	08:40	5.70	5.22	03:35	0.566	08:30	2.431	1.516	1.516	
1/21/2015	04:30	3.05	08:30	7.39	5.23	03:30	4.29	09:05	5.83	5.26	04:30	0.553	08:35	2.543	1.501	1.501	
1/22/2015	04:40	3.02	08:20	7.20	5.22	04:45	4.23	08:35	5.79	5.19	04:40	0.535	08:20	2.468	1.478	1.478	
1/23/2015	04:40	2.98	08:50	7.25	5.18	04:35	4.30	08:50	5.68	5.17	04:40	0.533	08:50	2.445	1.458	1.458	
1/24/2015	06:50	2.91	12:15	6.46	4.75	06:15	4.18	12:10	5.59	5.04	06:50	0.506	12:10	2.059	1.261	1.261	
1/25/2015	04:50	2.68	11:05	6.43	4.85	04:50	4.14	11:05	5.46	4.98	04:50	0.439	11:05	2.001	1.285	1.285	
1/26/2015	04:05	2.69	08:35	7.45	5.35	04:00	4.09	08:45	5.61	5.09	04:00	0.439	08:40	2.490	1.511	1.511	
1/27/2015	04:45	3.06	08:40	7.26	5.31	03:55	4.21	08:35	5.65	5.16	04:45	0.543	08:35	2.435	1.502	1.502	
1/28/2015	04:05	3.14	08:35	7.70	5.40	03:55	4.22	08:30	5.72	5.19	04:10	0.568	08:35	2.658	1.543	1.543	
1/29/2015	04:20	3.06	08:10	7.81	5.33	04:40	4.13	08:40	5.68	5.11	04:15	0.540	08:10	2.662	1.500	1.500	
1/30/2015	04:15	3.05	08:35	7.50	5.13	05:40	4.17	08:45	5.67	5.09	04:15	0.544	08:35	2.501	1.416	1.416	
1/31/2015	04:35	3.00	11:25	6.53	4.76	03:55	4.09	11:10	5.58	5.08	03:55	0.519	11:10	2.074	1.274	1.274	
2/1/2015	04:15	2.53	12:55	6.34	4.53	03:40	3.98	13:20	5.62	5.00	04:20	0.391	12:55	2.009	1.189	1.189	
2/2/2015	04:40	2.89	08:45	6.59	5.13	04:05	4.16	13:05	5.72	5.20	03:50	0.495	10:25	2.147	1.460	1.460	
2/3/2015	04:50	2.97	08:25	7.51	5.22	04:45	4.27	08:35	5.88	5.24	04:45	0.529	08:25	2.623	1.490	1.490	
2/4/2015	04:00	2.91	08:30	7.33	5.26	04:15	4.20	08:35	5.69	5.22	04:15	0.506	08:30	2.483	1.501	1.501	
2/5/2015	04:40	2.96	08:40	7.21	5.26	04:10	4.23	08:50	5.82	5.21	04:25	0.527	08:40	2.484	1.500	1.500	
2/6/2015	04:25	2.92	08:35	7.35	5.20	04:05	4.19	08:50	5.60	5.12	04:00	0.506	08:40	2.447	1.453	1.453	
2/7/2015	06:00	2.92	10:50	6.46	4.77	06:05	4.19	11:20	5.47	5.00	06:05	0.505	10:50	2.013	1.258	1.258	
2/8/2015	07:05	2.62	11:30	6.41	4.78	06:10	4.06	11:15	5.46	4.93	07:00	0.418	11:15	1.992	1.257	1.257	
2/9/2015	03:50	2.89	10:15	8.21	5.59	03:50	4.10	10:15	5.79	5.17	03:50	0.488	10:15	2.937	1.643	1.643	
2/10/2015	03:50	3.16	08:40	8.74	5.60	04:40	4.26	08:40	5.98	5.26	04:40	0.574	08:40	3.293	1.665	1.665	
2/11/2015	04:00	3.07	08:40	7.81	5.41	04:15	4.27	08:45	5.80	5.19	04:15	0.553	08:45	2.747	1.555	1.555	
2/12/2015	03:55	3.12	08:20	7.98	5.54	03:55	4.27	14:00	5.75	5.20	03:55	0.567	08:35	2.772	1.614	1.614	
2/13/2015	03:20	3.69	10:15	6.96	5.44	03:15	4.60	09:15	5.69	5.28	03:20	0.775	10:15	2.318	1.567	1.567	
2/14/2015	04:45	3.04	11:10	6.46	4.81	04:45	4.28	12:10	5.50	5.06	04:45	0.545	11:10	2.016	1.281	1.281	
2/15/2015	06:05	2.63	11:35	6.27	4.59	06:45	4.05	10:45	5.61	5.01	06:45	0.424	11:00	1.975	1.200	1.200	
2/16/2015	03:15	2.99	10:50	6.96	5.19	03:20	4.22	10:15	5.78	5.15	03:15	0.527	10:50	2.292	1.465	1.465	
2/17/2015	04:15	3.11	08:15	7.35	5.33	04:55	4.32	08:55	5.68	5.22	04:15	0.574	08:20	2.462	1.529	1.529	
2/18/2015	03:55	3.07	08:35	7.41	5.31	03:30	4.27	08:30	5.79	5.19	03:30	0.558	08:30	2.565	1.512	1.512	
2/19/2015	03:55	2.96	08:20	7.27	5.26	03:50	4.25	08:25	5.71	5.19	03:50	0.523	08:25	2.468	1.493	1.493	
2/20/2015	04:45	2.94	08:45	7.48	5.18	05:00	4.25	08:45	5.81	5.21	04:45	0.520	08:45	2.607	1.470	1.470	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	04:20	2.94	11:15	6.39	4.76	05:35	4.17	11:15	5.61	5.06	05:35	0.510	11:15	2.040	1.267	1.267	
2/22/2015	05:55	2.62	23:00	6.57	4.81	05:55	4.00	23:05	5.47	4.99	05:55	0.410	23:05	2.058	1.286	1.286	
2/23/2015	04:25	3.10	08:25	8.22	5.46	04:25	4.38	08:20	5.78	5.19	04:25	0.573	08:25	2.930	1.574	1.574	
2/24/2015	04:05	2.97	08:30	8.00	5.30	04:20	4.24	08:35	5.76	5.16	04:20	0.525	08:30	2.819	1.502	1.502	
2/25/2015	04:40	3.02	08:25	7.47	5.33	05:25	4.24	08:45	5.66	5.17	05:25	0.538	08:20	2.524	1.516	1.516	
2/26/2015	04:35	2.92	08:20	7.33	5.29	03:30	4.18	08:45	5.68	5.18	04:35	0.507	08:35	2.471	1.501	1.501	
2/27/2015	03:10	3.05	08:30	7.53	5.19	04:25	4.34	08:35	5.68	5.18	03:10	0.557	08:30	2.568	1.462	1.462	
2/28/2015	04:40	2.87	12:45	6.28	4.70	03:50	4.11	12:40	5.70	5.08	04:40	0.490	12:40	2.021	1.254	1.254	
3/1/2015	05:45	2.60	11:10	6.11	4.60	05:45	4.01	11:15	5.61	5.03	05:45	0.408	11:10	1.914	1.217	1.217	
3/2/2015	03:55	2.63	08:15	7.54	5.35	04:00	4.05	08:25	5.80	5.23	04:00	0.420	08:15	2.609	1.556	1.556	
3/3/2015	03:55	2.99	08:20	7.66	5.29	03:20	4.25	08:30	5.74	5.21	03:55	0.531	08:20	2.639	1.516	1.516	
3/4/2015	03:40	3.02	08:30	7.44	5.29	03:50	4.25	08:20	5.76	5.22	03:50	0.541	08:30	2.558	1.513	1.513	
3/5/2015	04:40	2.96	08:10	7.52	5.29	04:30	4.23	08:05	5.71	5.16	04:10	0.520	08:10	2.559	1.505	1.505	
3/6/2015	03:45	3.09	08:35	7.36	5.27	03:20	4.24	08:40	5.71	5.19	03:45	0.563	08:35	2.502	1.494	1.494	
3/7/2015	04:30	2.99	10:55	6.53	4.84	05:30	4.26	11:55	5.66	5.06	04:30	0.531	10:55	2.074	1.295	1.295	
3/8/2015	05:30	2.74	11:15	6.36	4.92	05:20	4.12	11:05	5.42	4.99	05:30	0.454	11:25	1.929	1.314	1.314	
3/9/2015	03:50	3.00	08:45	7.30	5.32	04:45	4.28	08:50	5.58	5.15	03:55	0.536	09:00	2.412	1.506	1.506	
3/10/2015	04:00	2.89	08:35	7.36	5.28	04:05	4.25	08:30	5.75	5.20	04:05	0.503	08:30	2.514	1.508	1.508	
3/11/2015	03:50	3.04	08:35	7.48	5.32	03:55	4.24	09:10	5.69	5.22	03:55	0.541	08:35	2.537	1.528	1.528	
3/12/2015	04:40	2.83	08:40	7.40	5.34	04:20	4.19	08:35	5.72	5.20	04:20	0.482	08:40	2.529	1.533	1.533	
3/13/2015	04:20	2.82	08:25	7.41	5.28	04:45	4.16	09:05	5.65	5.17	04:20	0.483	08:30	2.483	1.494	1.494	
3/14/2015	04:20	2.97	10:40	6.54	4.91	04:10	4.21	11:55	5.52	5.09	04:15	0.525	10:40	2.055	1.328	1.328	
3/15/2015	06:55	2.69	12:30	6.35	4.85	06:55	4.11	11:20	5.51	5.04	06:55	0.440	12:30	1.980	1.302	1.302	
3/16/2015	03:55	2.91	08:25	7.42	5.38	04:30	4.15	23:25	5.61	5.14	03:50	0.510	08:25	2.460	1.532	1.532	
3/17/2015	04:35	3.06	08:25	7.40	5.36	04:35	4.21	08:20	5.84	5.25	04:35	0.541	08:25	2.586	1.548	1.548	
3/18/2015	04:05	2.98	08:45	7.56	5.33	04:20	4.30	08:45	5.76	5.22	04:05	0.536	08:45	2.622	1.529	1.529	
3/19/2015	04:30	3.02	08:35	7.49	5.37	04:40	4.32	08:45	5.69	5.19	04:45	0.545	08:35	2.558	1.538	1.538	
3/20/2015	04:40	3.26	08:40	7.39	5.41	03:40	4.37	08:45	5.67	5.23	03:40	0.620	08:40	2.505	1.556	1.556	
3/21/2015	04:45	2.98	12:45	6.25	4.82	06:00	4.31	12:40	5.64	5.12	04:45	0.539	12:45	1.986	1.300	1.300	
3/22/2015	06:50	2.74	11:15	6.58	4.80	07:00	4.10	11:15	5.55	5.02	07:05	0.449	11:15	2.099	1.285	1.285	
3/23/2015	04:25	2.84	08:45	7.20	5.24	04:25	4.19	08:55	5.71	5.14	04:25	0.484	08:45	2.430	1.481	1.481	
3/24/2015	04:15	2.88	08:25	7.25	5.30	04:05	4.15	08:30	5.70	5.16	04:30	0.495	08:25	2.456	1.499	1.499	
3/25/2015	04:00	2.94	08:25	7.47	5.36	04:00	4.25	08:45	5.65	5.17	04:00	0.516	08:45	2.529	1.527	1.527	
3/26/2015	04:35	3.28	08:20	7.31	5.38	04:35	4.44	08:10	5.77	5.28	04:35	0.634	08:10	2.512	1.561	1.561	
3/27/2015	04:30	3.19	10:10	7.47	5.33	04:25	4.33	08:45	5.86	5.30	04:30	0.597	10:15	2.600	1.544	1.544	
3/28/2015	04:25	3.19	11:05	6.51	4.95	04:20	4.35	12:15	5.62	5.17	04:20	0.608	11:05	2.080	1.360	1.360	
3/29/2015	04:35	2.78	10:55	6.32	4.79	06:35	4.04	10:25	5.61	5.09	04:35	0.467	10:55	1.998	1.298	1.298	
3/30/2015	04:25	2.88	08:35	7.60	5.36	04:25	4.20	08:40	5.74	5.23	04:25	0.496	08:40	2.630	1.555	1.555	
3/31/2015	04:25	3.07	08:40	7.39	5.38	04:40	4.34	08:40	5.82	5.22	04:25	0.564	08:40	2.573	1.547	1.547	
4/1/2015	03:55	2.97	08:35	7.77	5.35	03:20	4.27	08:55	5.68	5.21	03:55	0.531	08:35	2.669	1.534	1.534	
4/2/2015	04:30	2.96	08:40	7.37	5.38	03:50	4.14	08:45	5.76	5.25	04:20	0.529	08:40	2.528	1.555	1.555	
4/3/2015	04:40	3.01	08:35	6.97	5.23	04:35	4.29	08:30	5.76	5.27	04:35	0.540	08:35	2.349	1.499	1.499	
4/4/2015	04:45	3.07	10:40	6.36	4.86	03:15	4.30	11:45	5.62	5.13	04:50	0.574	11:25	2.005	1.315	1.315	
4/5/2015	06:05	2.65	11:05	6.26	4.48	06:05	4.05	11:05	5.54	4.96	06:05	0.423	11:05	1.955	1.146	1.145	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			130.560
Avg	5.16	5.16	1.451

Site Commentary

Site Information

MPSite5	
Pipe Dimensions	35.63" x 35.50"
Silt Level	0.00"

Overview

Site MPSite5 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	15.17	2.18	4.156
Minimum	9.30	1.11	1.057
Maximum	20.87	2.94	7.973
Time of Minimum	3/10/2015 5:05 AM	2/15/2015 6:20 AM	2/15/2015 6:20 AM
Time of Maximum	2/9/2015 8:40 AM	2/9/2015 8:25 AM	2/9/2015 8:50 AM

Data Quality

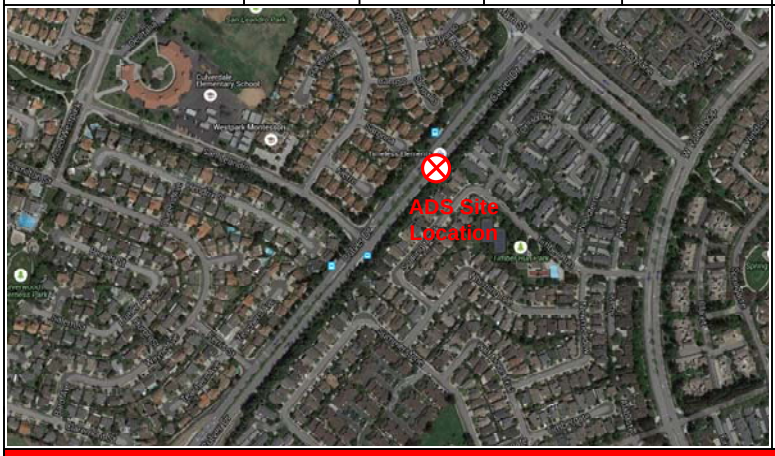
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

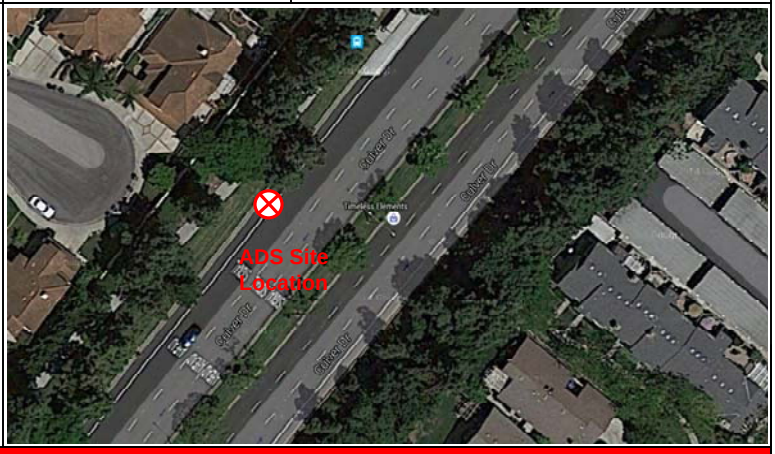
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite5	**Install Date:** 12/29/14	**Monitor Type**	Peak Doppler
Address/Location: Culver & San Leandro		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH060E003
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	35.63 "
		Pipe Width:	35.50 "





Investigation Information:

Date/Time of Investigation:	12/29/14 @1000
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	18.50" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.03 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	25'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

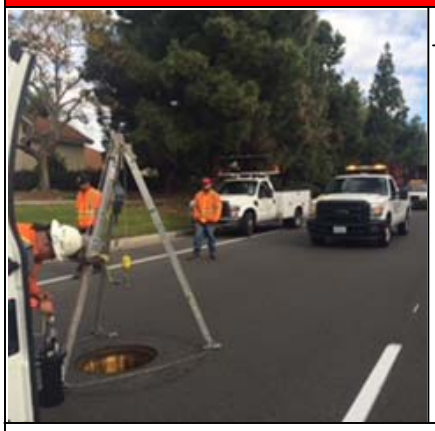
Land Use:	Residential	Commercial	Industrial	Trunk
	X			

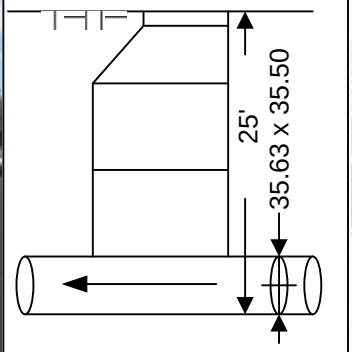
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

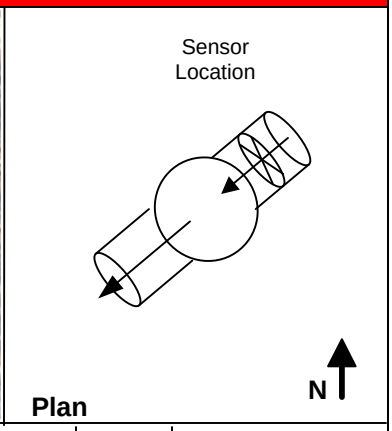
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

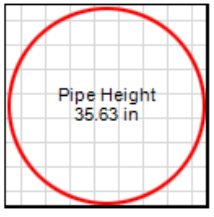
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite5

Flow Monitor

MPSite5

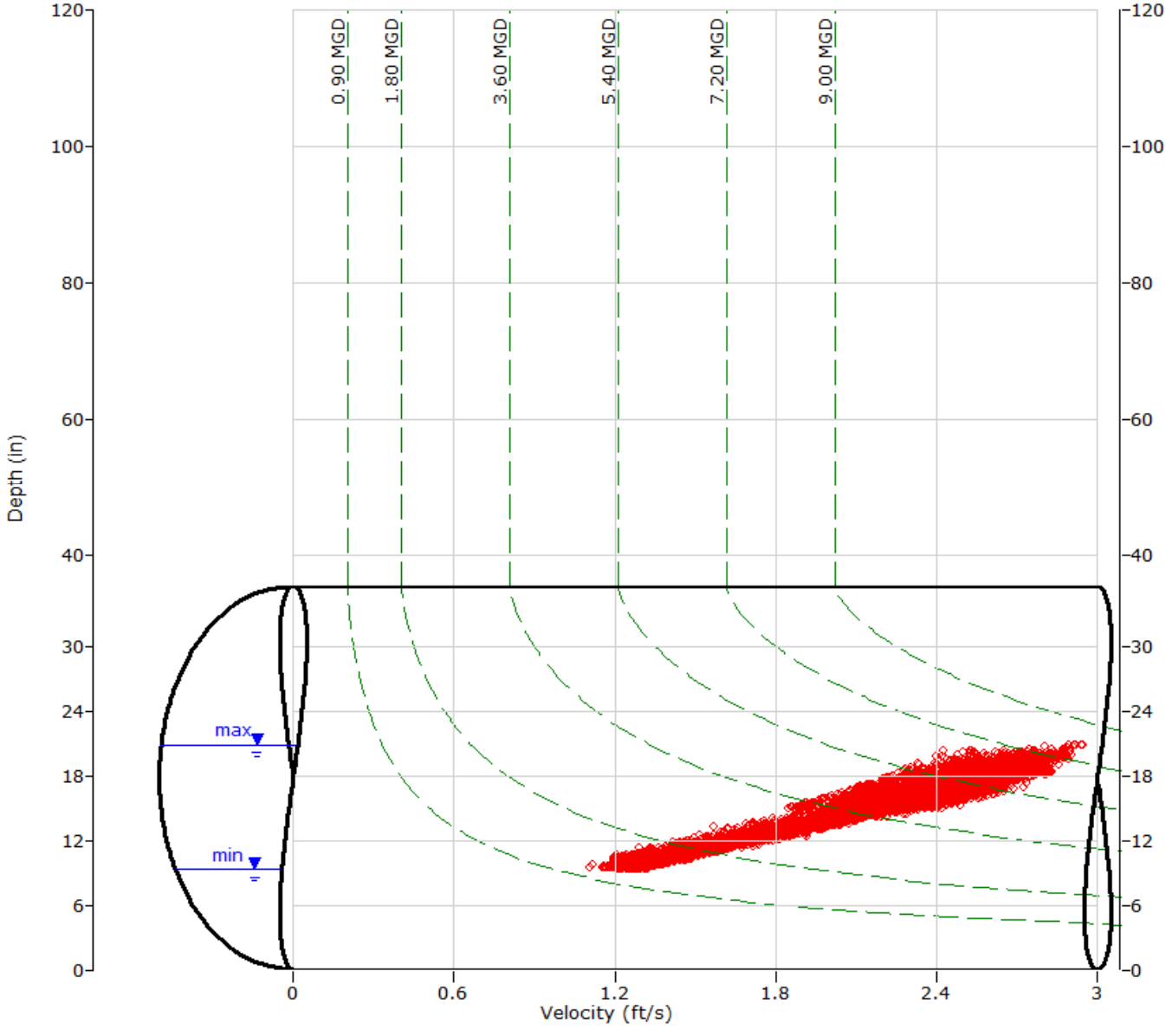


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



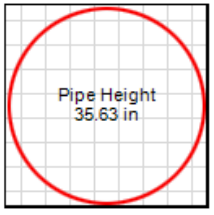
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite5

Flow Monitor

MPSite5

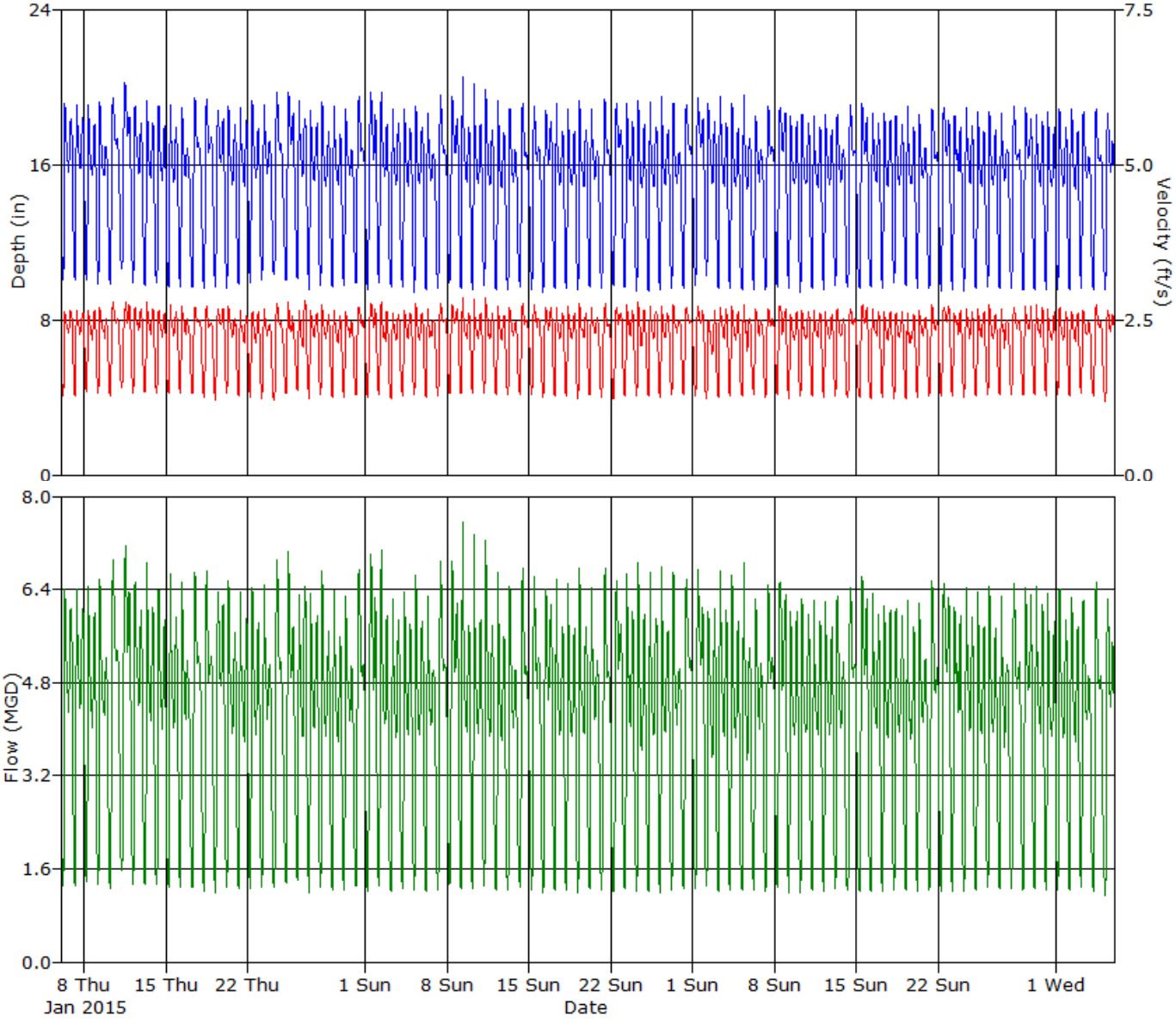


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite5, Pipe Height: 35.63 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:05	10.04	08:55	19.81	15.56	05:20	1.21	09:15	2.75	2.20	05:20	1.246	08:40	6.971	4.322	4.322	
1/7/2015	05:30	10.01	08:45	19.53	15.59	05:25	1.25	08:40	2.76	2.20	05:25	1.284	08:40	6.886	4.336	4.336	
1/8/2015	04:50	9.94	08:55	19.70	15.43	04:40	1.30	08:50	2.74	2.21	04:40	1.326	08:50	6.916	4.289	4.289	
1/9/2015	05:15	9.77	08:35	20.35	15.18	04:55	1.30	09:00	2.77	2.19	05:15	1.293	08:35	7.266	4.144	4.144	
1/10/2015	05:55	9.74	12:25	19.53	15.48	05:50	1.25	12:30	2.81	2.20	05:50	1.240	12:30	7.036	4.350	4.350	
1/11/2015	06:40	10.54	11:45	20.29	16.06	06:35	1.35	13:25	2.86	2.24	06:40	1.495	13:25	7.362	4.631	4.631	
1/12/2015	05:15	9.85	08:50	19.46	15.37	05:20	1.28	08:40	2.78	2.24	05:20	1.288	08:40	6.908	4.328	4.328	
1/13/2015	05:05	9.72	08:40	19.75	15.27	05:00	1.31	08:50	2.89	2.24	05:00	1.291	08:50	7.312	4.296	4.296	
1/14/2015	05:15	9.84	08:50	19.53	15.28	05:15	1.30	09:30	2.72	2.20	05:15	1.302	08:55	6.764	4.223	4.223	
1/15/2015	05:00	9.65	08:45	19.63	15.17	04:55	1.30	08:45	2.82	2.22	04:55	1.267	08:45	7.104	4.214	4.214	
1/16/2015	05:25	9.62	08:50	19.43	15.06	05:10	1.30	08:55	2.82	2.20	05:10	1.267	08:40	6.999	4.128	4.128	
1/17/2015	06:15	9.55	11:35	19.52	15.26	06:05	1.28	12:10	2.75	2.20	06:15	1.238	11:35	6.827	4.263	4.263	
1/18/2015	06:45	9.58	11:35	19.41	15.26	06:35	1.24	11:50	2.77	2.14	06:35	1.195	11:50	6.854	4.140	4.140	
1/19/2015	05:20	9.64	11:40	18.81	15.39	05:15	1.18	12:05	2.73	2.20	05:15	1.150	11:40	6.503	4.299	4.299	
1/20/2015	05:00	9.57	08:45	19.66	15.08	05:05	1.28	08:45	2.81	2.18	05:05	1.239	08:45	7.086	4.110	4.110	
1/21/2015	05:25	9.76	08:50	19.44	15.17	05:10	1.21	08:55	2.78	2.14	05:10	1.199	08:55	6.921	4.068	4.068	
1/22/2015	05:20	9.84	08:40	19.87	15.35	05:05	1.23	08:55	2.80	2.15	05:05	1.235	08:55	7.116	4.148	4.148	
1/23/2015	05:30	10.04	08:50	19.73	15.36	04:55	1.22	08:55	2.77	2.15	04:55	1.260	08:55	7.002	4.146	4.146	
1/24/2015	05:35	10.27	11:20	19.74	15.59	05:55	1.19	11:25	2.82	2.15	05:35	1.273	11:25	7.137	4.287	4.287	
1/25/2015	06:15	9.92	11:45	19.83	15.81	06:15	1.30	11:35	2.83	2.17	06:15	1.317	11:35	7.216	4.392	4.392	
1/26/2015	05:20	10.00	08:40	19.70	15.49	05:25	1.32	21:40	2.83	2.17	05:25	1.352	09:00	7.023	4.237	4.237	
1/27/2015	05:25	9.48	08:45	19.37	15.13	05:25	1.21	08:45	2.71	2.17	05:25	1.155	08:45	6.702	4.116	4.116	
1/28/2015	04:55	9.71	08:45	19.75	15.03	05:00	1.26	08:40	2.85	2.16	05:00	1.244	08:40	7.214	4.065	4.065	
1/29/2015	05:10	9.63	08:40	19.51	15.00	05:05	1.24	08:45	2.74	2.13	05:05	1.201	08:45	6.853	3.991	3.991	
1/30/2015	05:00	9.67	09:10	19.10	15.01	05:15	1.19	08:45	2.72	2.14	05:15	1.168	08:45	6.559	4.018	4.018	
1/31/2015	05:40	9.82	11:15	19.53	15.33	06:05	1.27	11:30	2.78	2.18	06:05	1.275	11:30	6.946	4.240	4.240	
2/1/2015	05:55	9.44	11:25	19.78	15.53	05:20	1.24	11:40	2.84	2.20	06:05	1.187	11:35	7.189	4.395	4.395	
2/2/2015	05:10	9.80	09:00	20.15	15.37	04:15	1.27	08:45	2.90	2.17	05:20	1.272	08:55	7.470	4.203	4.203	
2/3/2015	05:40	9.48	08:45	19.53	15.06	05:15	1.21	08:35	2.74	2.14	05:35	1.169	08:35	6.826	4.044	4.044	
2/4/2015	05:15	9.63	08:45	19.42	15.05	05:00	1.24	09:10	2.73	2.16	05:10	1.204	09:10	6.712	4.082	4.082	
2/5/2015	05:15	9.34	08:40	19.61	14.92	05:10	1.28	08:35	2.89	2.16	05:15	1.195	08:35	7.252	4.028	4.028	
2/6/2015	05:25	9.49	08:45	19.17	14.86	05:20	1.25	09:00	2.74	2.14	05:20	1.190	09:00	6.660	3.953	3.953	
2/7/2015	05:55	9.51	11:25	19.59	15.25	05:30	1.25	11:45	2.81	2.20	05:35	1.200	11:25	7.016	4.257	4.257	
2/8/2015	05:50	9.90	11:20	19.63	15.55	05:35	1.30	11:05	2.84	2.24	05:35	1.321	11:05	7.103	4.444	4.444	
2/9/2015	05:35	9.54	08:40	20.87	15.41	04:40	1.29	08:25	2.94	2.21	05:30	1.252	08:50	7.973	4.313	4.313	
2/10/2015	05:00	9.49	08:25	20.47	15.19	04:50	1.30	08:40	2.90	2.19	04:50	1.237	08:20	7.615	4.181	4.181	
2/11/2015	05:25	9.72	08:35	19.94	15.20	04:55	1.29	08:30	2.88	2.19	04:55	1.276	08:30	7.383	4.183	4.183	
2/12/2015	05:25	9.53	08:40	19.69	14.97	05:25	1.28	08:55	2.82	2.17	05:25	1.226	08:55	7.055	4.056	4.056	
2/13/2015	05:20	9.47	08:45	19.43	14.95	05:30	1.22	08:45	2.77	2.18	05:30	1.164	08:45	6.888	4.056	4.056	
2/14/2015	05:40	9.58	11:35	19.23	15.15	04:50	1.28	11:50	2.82	2.21	05:35	1.245	11:50	6.906	4.208	4.208	
2/15/2015	05:50	9.48	11:00	19.07	15.05	06:20	1.11	11:25	2.77	2.19	06:20	1.057	11:25	6.703	4.166	4.166	
2/16/2015	05:25	9.34	10:40	18.89	15.30	05:40	1.24	11:20	2.74	2.21	05:25	1.161	11:35	6.517	4.297	4.297	
2/17/2015	05:05	9.53	08:45	19.64	15.00	04:55	1.26	08:45	2.79	2.18	05:00	1.211	08:45	7.032	4.085	4.085	
2/18/2015	05:05	9.52	08:45	19.30	14.93	05:20	1.24	09:00	2.83	2.17	05:20	1.190	09:00	6.905	4.046	4.046	
2/19/2015	05:05	9.43	08:40	19.78	15.02	05:05	1.21	08:55	2.86	2.17	05:05	1.147	08:30	7.169	4.086	4.086	
2/20/2015	05:30	9.58	08:55	19.46	14.98	04:50	1.20	08:35	2.75	2.18	04:50	1.181	08:50	6.781	4.068	4.068	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	05:55	9.45	11:20	19.38	15.24	05:50	1.23	12:30	2.79	2.18	06:10	1.169	12:20	6.883	4.212	4.212	
2/22/2015	05:55	9.68	11:30	19.22	15.43	05:55	1.19	11:50	2.74	2.20	05:55	1.170	11:50	6.694	4.326	4.326	
2/23/2015	05:00	9.53	08:45	19.61	15.21	05:05	1.23	08:45	2.84	2.21	05:05	1.185	08:45	7.133	4.229	4.229	
2/24/2015	05:15	9.41	08:40	19.79	14.97	04:55	1.25	08:40	2.83	2.16	05:10	1.183	08:40	7.199	4.057	4.057	
2/25/2015	05:10	9.43	08:55	19.75	15.03	04:55	1.25	08:40	2.81	2.18	04:55	1.194	09:00	7.102	4.106	4.106	
2/26/2015	04:30	9.43	08:35	19.92	14.99	05:55	1.12	08:25	2.79	2.16	05:55	1.097	08:30	7.157	4.064	4.064	
2/27/2015	05:20	9.53	08:50	19.77	14.87	05:20	1.27	08:20	2.80	2.19	05:20	1.218	08:50	7.099	4.059	4.059	
2/28/2015	06:15	9.51	11:20	19.13	15.24	04:35	1.21	11:45	2.77	2.21	04:35	1.215	11:45	6.709	4.265	4.265	
3/1/2015	06:10	9.66	11:15	19.57	15.60	06:05	1.25	11:20	2.85	2.20	06:05	1.219	11:20	7.113	4.377	4.377	
3/2/2015	04:45	10.11	08:30	19.58	15.30	04:05	1.21	21:25	2.70	2.04	04:40	1.278	08:10	6.357	3.917	3.917	
3/3/2015	05:00	9.56	08:40	19.99	15.11	05:10	1.21	09:05	2.76	2.17	05:10	1.170	08:35	7.014	4.115	4.115	
3/4/2015	05:20	9.58	08:45	19.53	14.99	04:05	1.24	08:35	2.75	2.17	05:20	1.230	08:50	6.887	4.078	4.078	
3/5/2015	05:00	9.41	08:35	19.97	14.92	03:15	1.23	08:25	2.87	2.15	05:00	1.173	08:25	7.341	4.002	4.002	
3/6/2015	04:50	9.42	09:05	18.68	14.97	05:15	1.27	09:05	2.70	2.18	04:50	1.205	09:05	6.398	4.064	4.064	
3/7/2015	05:30	9.55	10:55	19.05	15.20	05:50	1.18	10:25	2.73	2.18	05:50	1.135	10:25	6.571	4.195	4.195	
3/8/2015	05:35	9.60	10:50	19.01	15.65	05:35	1.29	10:50	2.80	2.23	05:35	1.245	10:50	6.773	4.453	4.453	
3/9/2015	05:20	9.55	08:50	18.94	15.08	05:30	1.22	21:35	2.69	2.16	05:30	1.172	08:55	6.340	4.076	4.076	
3/10/2015	05:05	9.30	09:00	19.36	15.00	05:10	1.21	08:50	2.74	2.16	05:10	1.120	08:50	6.767	4.047	4.047	
3/11/2015	05:10	9.48	09:05	18.90	14.90	05:15	1.23	09:05	2.75	2.18	05:15	1.178	09:05	6.615	4.044	4.044	
3/12/2015	05:00	9.54	08:50	19.26	14.96	04:55	1.23	08:45	2.76	2.15	04:55	1.181	08:45	6.774	4.013	4.013	
3/13/2015	05:35	9.70	08:55	19.19	14.91	05:00	1.27	08:50	2.82	2.16	05:30	1.248	08:50	6.883	3.999	3.999	
3/14/2015	06:10	9.59	11:25	19.11	15.20	05:45	1.24	12:35	2.71	2.18	05:45	1.201	11:25	6.574	4.200	4.200	
3/15/2015	06:35	9.56	11:20	19.19	15.43	06:25	1.24	12:00	2.77	2.21	06:30	1.194	11:20	6.715	4.371	4.371	
3/16/2015	05:05	9.62	08:50	19.34	15.11	04:55	1.21	08:50	2.76	2.18	04:55	1.176	08:50	6.831	4.124	4.124	
3/17/2015	05:05	9.54	09:05	19.11	15.08	05:15	1.24	08:45	2.71	2.15	05:15	1.190	08:55	6.590	4.069	4.069	
3/18/2015	05:05	9.71	08:45	19.15	15.04	05:05	1.21	08:50	2.72	2.13	05:05	1.188	08:50	6.629	4.014	4.014	
3/19/2015	04:55	9.68	08:50	19.52	15.02	05:25	1.21	08:40	2.71	2.10	04:55	1.189	08:40	6.765	3.937	3.937	
3/20/2015	05:35	9.59	08:50	19.04	15.00	05:35	1.24	08:45	2.72	2.18	05:35	1.195	08:45	6.584	4.081	4.081	
3/21/2015	06:00	9.57	11:55	18.95	15.08	06:00	1.25	11:00	2.78	2.16	06:00	1.208	11:50	6.650	4.098	4.098	
3/22/2015	06:20	9.41	11:10	18.99	15.26	06:05	1.23	11:25	2.76	2.21	06:10	1.163	11:25	6.660	4.303	4.303	
3/23/2015	05:25	9.50	08:55	19.16	15.18	05:10	1.19	08:45	2.77	2.20	05:10	1.140	08:45	6.769	4.188	4.188	
3/24/2015	05:00	9.41	08:45	19.48	15.12	05:10	1.24	08:40	2.76	2.17	05:10	1.169	08:40	6.877	4.134	4.134	
3/25/2015	05:10	9.57	08:55	19.49	14.93	04:40	1.26	08:45	2.76	2.17	05:10	1.224	08:50	6.885	4.035	4.035	
3/26/2015	05:15	9.63	08:45	19.25	14.97	05:10	1.28	08:30	2.81	2.18	05:10	1.245	08:50	6.906	4.070	4.070	
3/27/2015	05:20	9.56	08:50	19.32	14.93	05:10	1.28	08:40	2.78	2.15	05:10	1.231	08:40	6.818	3.998	3.998	
3/28/2015	06:15	9.61	10:45	19.11	15.15	06:15	1.28	12:40	2.78	2.19	06:15	1.239	10:35	6.665	4.188	4.188	
3/29/2015	06:10	9.39	10:55	19.18	15.28	05:50	1.26	10:40	2.78	2.19	06:05	1.191	10:55	6.793	4.237	4.237	
3/30/2015	05:20	9.45	08:45	19.12	15.01	05:20	1.28	08:35	2.86	2.21	05:20	1.216	08:35	6.931	4.139	4.139	
3/31/2015	05:15	9.48	08:45	19.34	14.92	04:50	1.26	08:45	2.77	2.16	05:00	1.202	08:45	6.847	4.026	4.026	
4/1/2015	05:25	9.50	08:50	19.48	14.96	04:40	1.28	09:10	2.79	2.16	05:25	1.218	09:00	6.834	4.035	4.035	
4/2/2015	05:30	9.52	08:50	19.14	14.95	05:35	1.26	09:25	2.69	2.16	05:35	1.206	08:50	6.502	4.042	4.042	
4/3/2015	05:20	9.57	08:45	19.19	14.96	05:30	1.28	08:45	2.79	2.16	05:30	1.240	08:45	6.821	4.021	4.021	
4/4/2015	05:35	9.49	11:00	18.90	14.98	05:45	1.25	11:15	2.75	2.17	05:45	1.192	11:00	6.590	4.098	4.098	
4/5/2015	06:15	9.46	11:05	18.74	14.94	06:20	1.15	11:05	2.75	2.14	06:20	1.093	11:05	6.530	4.027	4.024	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			374.063
Avg	15.17	2.18	4.156

Site Commentary

Site Information

MPSite6	
Pipe Dimensions	39.13" x 38.88"
Silt Level	0.00"

Overview

Site MPSite6 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	11.39	2.02	2.772
Minimum	7.46	0.99	0.753
Maximum	15.51	2.93	5.759
Time of Minimum	2/6/2015 5:10 AM	4/4/2015 6:10 AM	2/6/2015 5:10 AM
Time of Maximum	2/9/2015 8:00 AM	2/9/2015 8:35 AM	2/9/2015 8:35 AM

Data Quality

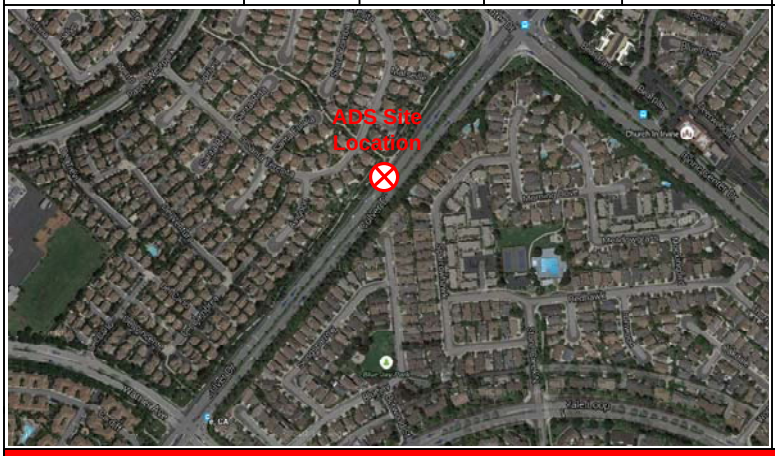
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

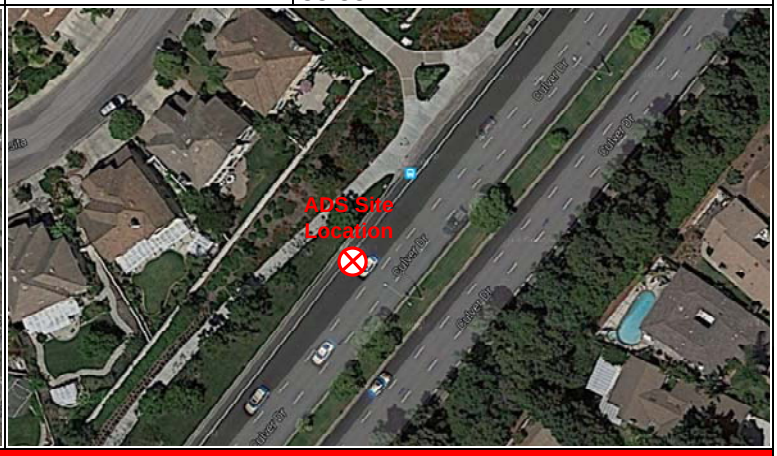
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite6	**Install Date:** 12/30/14	**Monitor Type**	Peak Doppler
Address/Location: Warner & Culver		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH062S010
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	39.13 "
		Pipe Width:	38.88 "





Investigation Information:

Date/Time of Investigation:	12/30/14 @1300
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	13.88" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.33 fps
Silt:	0.00 Inches

Manhole Information:

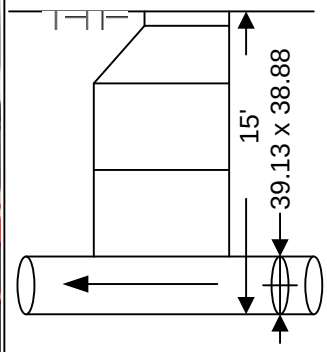
Manhole Depth:	15'						
Manhole Material / Condition	Precast/OK						
Pipe Material / Condition:	VCP/Good						
Land Use:	Residential X	Commercial	Industrial	Trunk			
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0				

Safety Notes:

2 man crew required and one blower is to be operated at all times.

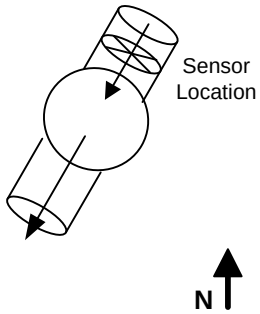
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite6

Flow Monitor

MPSite6

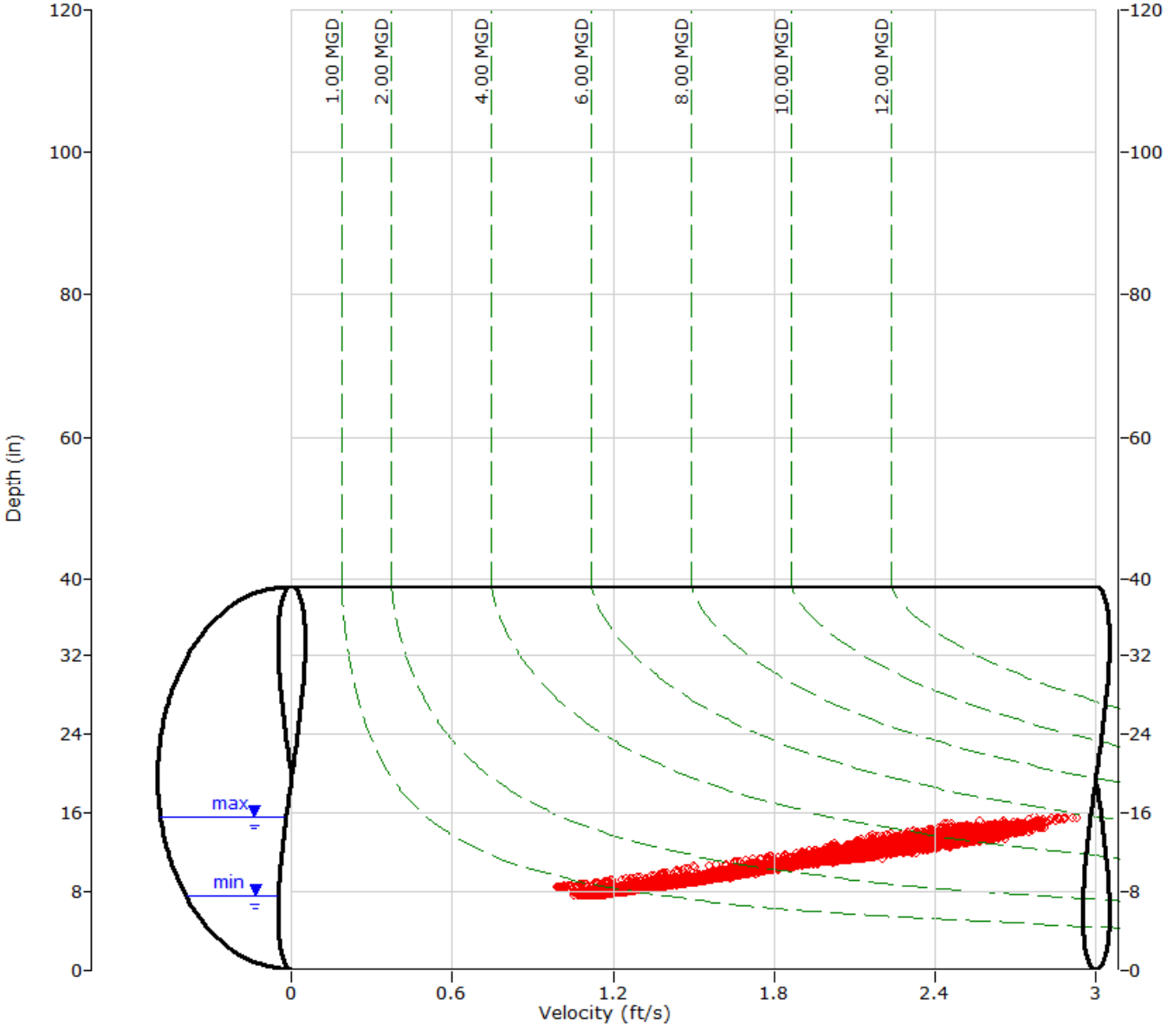
Pipe Height
39.13 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite6

Flow Monitor

MPSite6

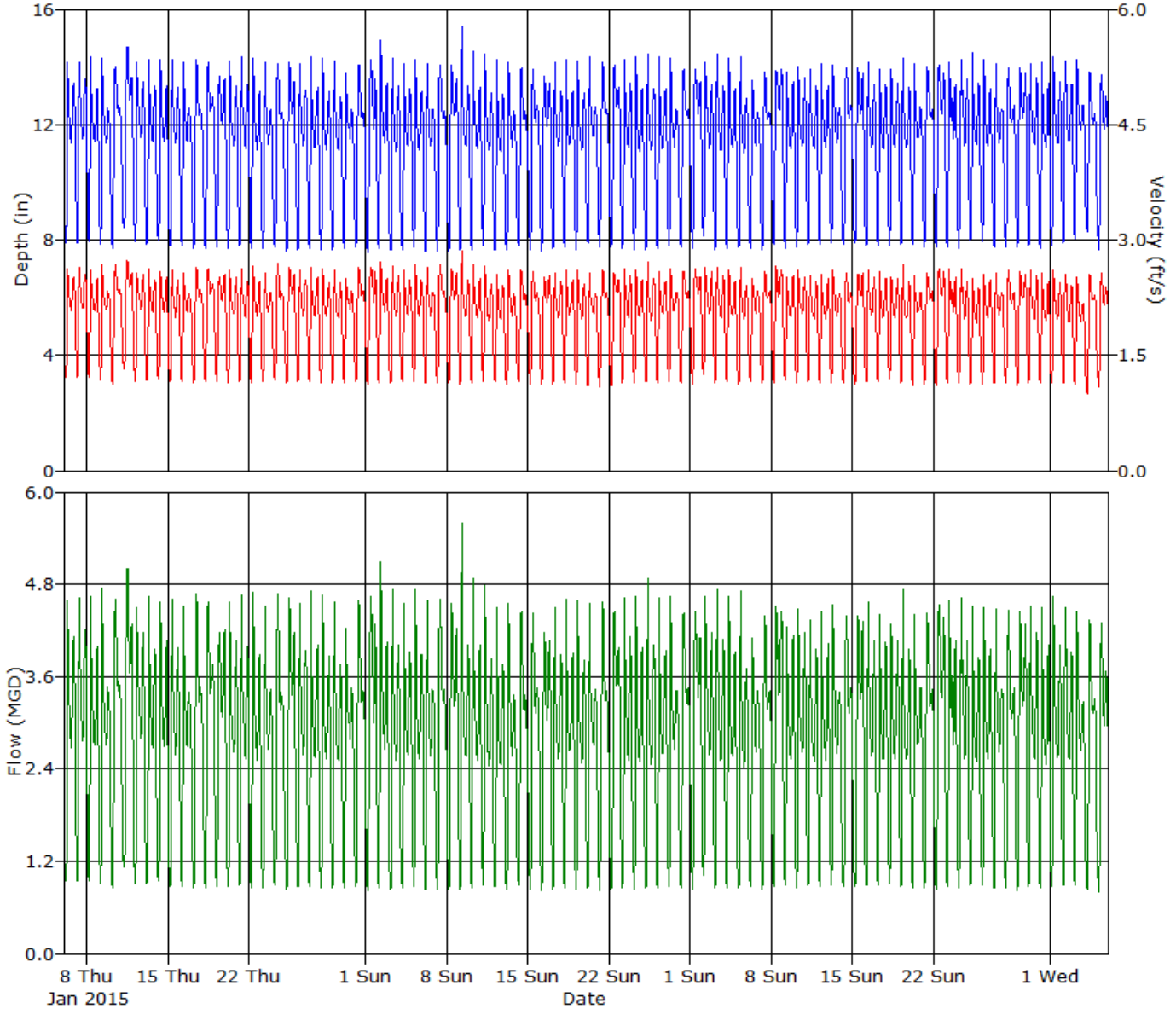
Pipe Height
39.13 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite6, Pipe Height: 39.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:10	7.82	08:25	14.37	11.42	05:15	1.19	08:25	2.68	2.06	05:15	0.909	08:25	4.787	2.822	2.822	
1/7/2015	05:00	7.78	08:20	14.35	11.50	04:55	1.18	08:20	2.73	2.07	04:55	0.897	08:20	4.859	2.863	2.863	
1/8/2015	04:40	7.91	08:25	14.62	11.46	04:55	1.19	08:30	2.72	2.06	04:55	0.927	08:30	4.970	2.828	2.828	
1/9/2015	04:50	7.77	08:20	14.60	11.28	04:30	1.17	08:20	2.78	2.03	04:55	0.885	08:20	5.070	2.725	2.725	
1/10/2015	05:45	7.67	12:05	14.11	11.49	05:30	1.11	13:00	2.71	2.07	05:30	0.830	12:15	4.677	2.892	2.892	
1/11/2015	06:10	8.29	13:10	14.88	11.95	06:20	1.29	12:00	2.80	2.15	06:20	1.072	12:00	5.162	3.173	3.173	
1/12/2015	05:15	7.88	08:25	14.39	11.50	04:00	1.15	08:20	2.68	2.05	05:15	0.888	08:30	4.781	2.841	2.841	
1/13/2015	05:00	7.83	08:25	14.48	11.45	05:05	1.16	08:20	2.80	2.04	05:05	0.884	08:20	5.049	2.811	2.811	
1/14/2015	05:05	7.89	08:30	14.47	11.45	05:15	1.17	08:30	2.70	2.04	05:15	0.903	08:30	4.871	2.807	2.807	
1/15/2015	05:05	7.71	08:20	14.58	11.38	04:25	1.12	08:25	2.79	2.02	04:25	0.849	08:25	5.076	2.757	2.757	
1/16/2015	05:10	7.75	08:25	14.33	11.31	04:40	1.14	08:20	2.73	2.00	05:10	0.859	08:20	4.812	2.705	2.705	
1/17/2015	05:40	7.67	11:10	14.31	11.44	05:45	1.11	12:05	2.76	2.04	05:45	0.825	11:15	4.803	2.838	2.838	
1/18/2015	06:10	7.61	11:05	14.26	11.47	05:45	1.12	10:35	2.69	2.06	05:45	0.824	10:55	4.704	2.879	2.879	
1/19/2015	05:20	7.68	10:45	13.77	11.54	05:20	1.13	20:55	2.63	2.07	05:20	0.837	20:55	4.366	2.893	2.893	
1/20/2015	05:00	7.63	08:20	14.52	11.32	05:05	1.12	08:25	2.73	2.02	05:05	0.822	08:25	4.945	2.737	2.737	
1/21/2015	05:10	7.75	08:30	14.47	11.36	05:15	1.12	08:15	2.68	2.01	05:15	0.846	08:20	4.826	2.742	2.742	
1/22/2015	05:00	7.65	08:20	14.55	11.25	04:40	1.11	08:25	2.75	2.00	04:50	0.822	08:20	4.993	2.695	2.695	
1/23/2015	05:15	7.59	08:20	14.38	11.23	05:20	1.12	08:25	2.70	2.01	05:20	0.820	08:20	4.802	2.686	2.686	
1/24/2015	05:30	7.75	10:25	14.12	11.41	05:25	1.16	10:50	2.72	2.06	05:25	0.873	10:50	4.723	2.840	2.840	
1/25/2015	05:55	7.52	11:25	14.23	11.57	05:50	1.12	11:05	2.70	2.08	05:50	0.808	11:05	4.750	2.956	2.956	
1/26/2015	05:00	7.61	08:25	14.41	11.32	05:15	1.14	08:20	2.73	2.02	05:05	0.835	08:20	4.892	2.748	2.748	
1/27/2015	05:00	7.62	08:20	14.59	11.27	05:20	1.14	08:00	2.77	2.02	05:00	0.834	08:35	4.921	2.724	2.724	
1/28/2015	05:05	7.62	08:20	14.54	11.21	04:20	1.12	08:10	2.81	1.99	04:20	0.832	08:10	5.058	2.669	2.669	
1/29/2015	05:05	7.62	08:20	14.43	11.22	04:45	1.13	09:15	2.66	2.00	04:45	0.832	08:20	4.726	2.678	2.678	
1/30/2015	05:20	7.63	08:40	13.88	11.23	05:10	1.11	08:45	2.59	2.01	05:10	0.819	08:45	4.411	2.682	2.682	
1/31/2015	05:50	7.69	10:55	14.14	11.43	05:40	1.16	10:30	2.67	2.05	05:50	0.864	10:25	4.641	2.841	2.841	
2/1/2015	05:35	7.55	11:00	14.28	11.52	05:25	1.11	12:10	2.72	2.08	05:40	0.808	12:10	4.800	2.937	2.937	
2/2/2015	04:50	7.67	08:30	15.14	11.41	04:55	1.12	09:10	2.80	2.04	04:55	0.829	08:30	5.344	2.815	2.815	
2/3/2015	05:05	7.58	08:20	14.65	11.23	04:40	1.12	08:15	2.77	2.03	04:55	0.820	08:15	5.078	2.723	2.723	
2/4/2015	05:05	7.62	08:20	14.26	11.24	04:35	1.14	08:15	2.71	2.01	04:35	0.845	08:20	4.784	2.700	2.700	
2/5/2015	05:15	7.68	08:20	14.60	11.21	04:55	1.08	07:55	2.75	2.01	04:55	0.805	08:25	4.989	2.693	2.693	
2/6/2015	05:10	7.46	08:20	14.31	11.15	05:10	1.06	08:10	2.68	1.99	05:10	0.753	08:20	4.744	2.648	2.648	
2/7/2015	05:40	7.60	10:50	14.12	11.38	05:35	1.12	11:45	2.75	2.05	05:35	0.822	11:45	4.719	2.840	2.840	
2/8/2015	05:55	7.57	11:00	14.15	11.58	05:55	1.13	10:55	2.66	2.08	05:55	0.825	10:55	4.645	2.958	2.958	
2/9/2015	04:50	7.59	08:00	15.51	11.52	04:55	1.10	08:35	2.93	2.05	04:55	0.806	08:35	5.759	2.871	2.871	
2/10/2015	04:50	7.65	07:55	15.18	11.40	04:45	1.11	08:05	2.85	2.03	04:45	0.823	08:00	5.477	2.792	2.792	
2/11/2015	05:10	7.70	08:20	14.71	11.37	05:25	1.15	08:05	2.73	2.02	05:05	0.859	08:25	4.943	2.750	2.750	
2/12/2015	05:10	7.54	08:15	14.67	11.17	05:05	1.13	08:20	2.62	1.99	05:05	0.818	08:15	4.798	2.644	2.644	
2/13/2015	04:50	7.62	08:25	14.35	11.21	04:00	1.12	08:40	2.67	1.99	05:05	0.830	08:30	4.740	2.654	2.654	
2/14/2015	05:30	7.80	11:05	14.06	11.41	05:45	1.09	10:35	2.68	2.04	05:45	0.836	11:10	4.600	2.804	2.804	
2/15/2015	06:05	7.62	11:35	13.99	11.35	06:10	1.12	10:05	2.64	2.01	06:10	0.822	11:15	4.525	2.763	2.763	
2/16/2015	05:20	7.55	10:10	13.79	11.46	04:30	1.08	11:20	2.65	2.04	04:30	0.795	11:20	4.402	2.835	2.835	
2/17/2015	05:00	7.65	08:15	14.53	11.28	04:15	1.10	08:25	2.65	2.00	05:05	0.826	08:20	4.789	2.700	2.700	
2/18/2015	04:50	7.71	08:30	14.44	11.30	04:15	1.12	08:35	2.68	2.01	04:40	0.840	08:35	4.794	2.719	2.719	
2/19/2015	05:00	7.56	08:10	14.47	11.23	05:00	1.07	08:15	2.75	1.99	05:00	0.777	08:15	4.945	2.675	2.675	
2/20/2015	05:10	7.85	08:20	14.48	11.35	05:25	1.09	08:35	2.67	1.97	05:10	0.834	08:35	4.790	2.671	2.671	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	05:25	7.76	11:50	14.21	11.51	05:10	1.07	12:40	2.67	2.02	05:10	0.810	11:40	4.677	2.826	2.826	
2/22/2015	05:55	7.70	11:05	14.13	11.65	06:20	1.07	10:55	2.67	2.06	05:55	0.808	11:05	4.645	2.941	2.941	
2/23/2015	04:55	7.64	08:20	14.39	11.38	05:00	1.14	08:25	2.71	2.04	05:00	0.843	08:25	4.854	2.784	2.784	
2/24/2015	05:00	7.61	08:10	14.77	11.23	05:10	1.11	08:25	2.77	2.01	05:10	0.815	08:05	5.095	2.699	2.699	
2/25/2015	05:00	7.59	08:30	14.66	11.26	04:55	1.13	08:30	2.77	2.01	04:55	0.826	08:30	5.079	2.710	2.710	
2/26/2015	04:55	7.56	08:10	14.66	11.25	04:25	1.11	08:25	2.79	2.01	04:45	0.809	08:25	5.073	2.704	2.704	
2/27/2015	05:10	7.71	08:25	14.59	11.22	05:05	1.13	08:20	2.72	2.01	05:10	0.847	08:25	4.941	2.685	2.685	
2/28/2015	05:35	7.69	10:45	14.03	11.46	05:50	1.10	11:30	2.67	2.05	05:50	0.820	11:30	4.591	2.851	2.851	
3/1/2015	05:50	7.67	10:45	14.02	11.62	05:40	1.10	11:40	2.68	2.08	05:40	0.821	10:45	4.584	2.958	2.958	
3/2/2015	03:45	8.02	08:25	14.30	11.44	03:40	1.21	08:20	2.72	2.06	03:40	0.962	08:20	4.820	2.821	2.821	
3/3/2015	05:00	7.62	08:15	14.69	11.29	05:10	1.11	08:05	2.76	2.02	05:10	0.822	08:05	5.043	2.733	2.733	
3/4/2015	05:00	7.59	08:25	14.50	11.26	05:00	1.12	08:25	2.72	2.00	05:00	0.821	08:25	4.909	2.702	2.702	
3/5/2015	05:00	7.73	08:10	14.72	11.23	04:35	1.12	08:10	2.80	1.98	05:00	0.842	08:10	5.166	2.659	2.659	
3/6/2015	05:00	7.61	08:35	13.71	11.22	05:10	1.14	08:40	2.59	2.01	05:10	0.839	08:40	4.329	2.681	2.681	
3/7/2015	05:55	7.66	10:25	13.89	11.38	05:05	1.13	10:10	2.70	2.04	05:10	0.837	10:10	4.576	2.803	2.803	
3/8/2015	05:25	7.79	11:05	13.96	11.79	05:20	1.12	10:55	2.72	2.11	05:20	0.854	11:05	4.673	3.051	3.051	
3/9/2015	05:10	7.66	08:25	13.97	11.35	04:55	1.16	08:10	2.64	2.02	04:55	0.860	08:10	4.458	2.748	2.748	
3/10/2015	05:15	7.67	08:25	14.37	11.31	04:45	1.12	08:35	2.68	2.02	04:45	0.838	08:25	4.766	2.730	2.730	
3/11/2015	04:30	7.80	08:40	14.12	11.32	04:20	1.14	08:10	2.62	1.99	04:25	0.866	08:40	4.518	2.692	2.692	
3/12/2015	05:10	7.77	08:30	14.22	11.32	05:20	1.12	08:10	2.66	1.98	05:15	0.849	08:10	4.649	2.678	2.678	
3/13/2015	05:00	7.86	08:30	14.37	11.30	05:00	1.13	08:40	2.65	1.98	05:00	0.870	08:30	4.735	2.666	2.666	
3/14/2015	05:35	7.82	11:45	14.05	11.55	05:40	1.12	11:10	2.62	2.01	05:40	0.854	11:45	4.510	2.822	2.822	
3/15/2015	05:50	7.82	11:15	14.03	11.66	05:55	1.10	12:15	2.68	2.06	05:55	0.841	10:50	4.574	2.946	2.946	
3/16/2015	05:10	7.75	08:25	14.43	11.35	04:55	1.13	08:30	2.76	2.02	05:15	0.852	08:30	4.944	2.749	2.749	
3/17/2015	05:05	7.77	08:30	14.04	11.30	05:40	1.10	08:25	2.65	2.00	05:40	0.850	08:25	4.577	2.709	2.709	
3/18/2015	05:05	7.80	08:25	14.04	11.29	04:25	1.18	08:05	2.56	2.00	04:25	0.897	08:30	4.419	2.697	2.697	
3/19/2015	05:00	7.80	08:15	14.49	11.32	04:55	1.12	08:30	2.74	1.98	04:55	0.852	08:30	4.861	2.675	2.675	
3/20/2015	05:00	7.77	08:35	14.20	11.33	04:30	1.06	08:15	2.58	1.98	04:35	0.806	08:15	4.507	2.678	2.678	
3/21/2015	05:30	7.75	11:45	14.03	11.46	05:15	1.12	11:35	2.64	2.02	05:15	0.846	11:45	4.561	2.798	2.798	
3/22/2015	05:40	7.70	11:50	14.15	11.63	05:30	1.10	11:50	2.67	2.06	05:30	0.823	11:50	4.668	2.937	2.937	
3/23/2015	04:40	7.70	08:15	14.39	11.56	05:15	1.12	08:15	2.72	2.04	04:50	0.841	08:15	4.869	2.858	2.858	
3/24/2015	04:45	7.68	08:20	14.50	11.53	05:10	1.11	08:15	2.71	2.00	05:10	0.831	08:15	4.885	2.793	2.793	
3/25/2015	05:00	7.89	08:30	14.81	11.44	04:55	1.08	08:20	2.63	1.95	04:55	0.833	08:20	4.859	2.671	2.671	
3/26/2015	05:10	7.89	08:20	14.48	11.36	05:05	1.10	08:10	2.63	1.98	05:05	0.847	08:10	4.717	2.690	2.690	
3/27/2015	05:10	7.68	08:25	14.36	11.26	05:15	1.12	08:15	2.72	1.98	05:15	0.830	08:20	4.815	2.660	2.660	
3/28/2015	05:30	7.71	11:25	14.03	11.41	05:40	1.13	11:55	2.64	2.02	05:40	0.848	11:30	4.561	2.782	2.782	
3/29/2015	05:35	7.72	11:15	14.08	11.61	05:10	1.09	10:35	2.64	2.05	05:30	0.819	10:30	4.528	2.909	2.909	
3/30/2015	04:45	7.75	08:20	14.27	11.38	05:15	1.14	08:15	2.71	2.00	04:45	0.860	08:15	4.789	2.736	2.736	
3/31/2015	05:00	7.63	08:20	14.32	11.30	04:50	1.10	08:10	2.66	1.97	04:50	0.814	08:10	4.721	2.667	2.667	
4/1/2015	05:05	7.76	08:30	14.52	11.38	05:05	1.11	08:15	2.72	1.97	05:05	0.840	08:20	4.861	2.689	2.689	
4/2/2015	05:00	7.82	08:30	14.34	11.45	05:05	1.12	08:30	2.63	1.96	05:05	0.851	08:30	4.680	2.703	2.703	
4/3/2015	05:05	7.95	08:25	14.40	11.54	05:00	1.09	08:40	2.61	1.91	05:00	0.849	08:40	4.614	2.654	2.654	
4/4/2015	05:30	8.26	09:45	14.16	11.55	06:10	0.99	09:50	2.65	1.95	05:20	0.825	09:50	4.585	2.737	2.737	
4/5/2015	05:45	7.62	10:55	13.81	11.36	05:20	1.08	10:10	2.66	2.01	05:40	0.794	11:00	4.452	2.760	2.758	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			249.464
Avg	11.39	2.02	2.772

Site Commentary

Site Information

MPSite7	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site MPSite7 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.81	4.95	0.597
Minimum	1.64	3.08	0.174
Maximum	5.77	7.03	2.136
Time of Minimum	2/17/2015 4:15 AM	3/7/2015 4:55 AM	3/7/2015 4:55 AM
Time of Maximum	2/2/2015 7:30 AM	2/9/2015 7:55 AM	2/9/2015 7:35 AM

Data Quality

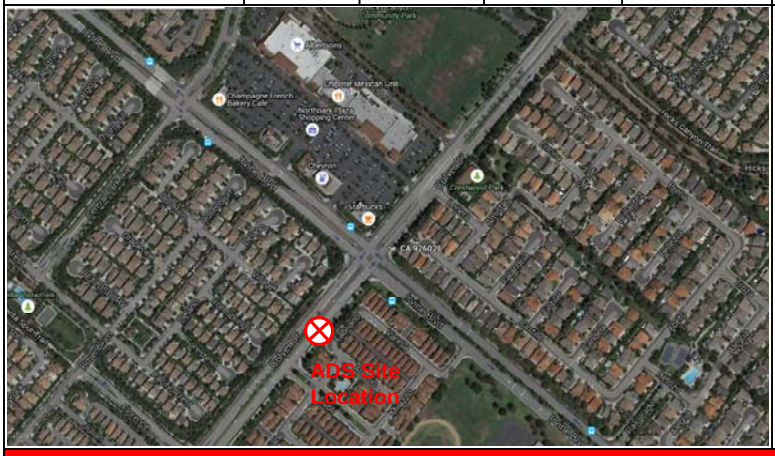
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

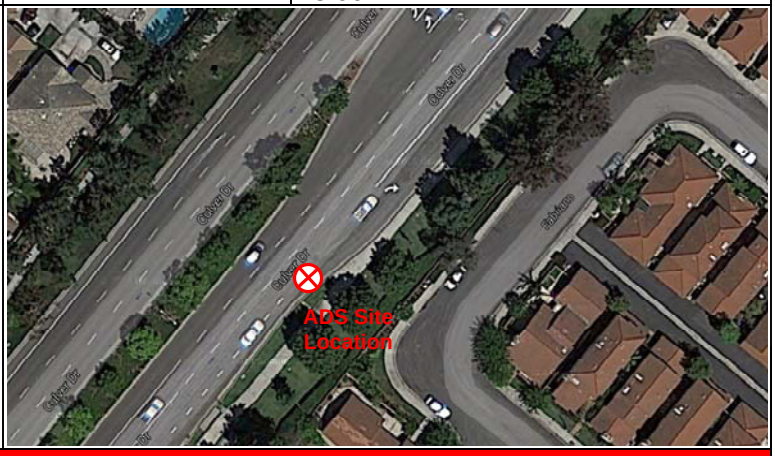
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite7	**Install Date:** 12/29/14	**Monitor Type**	Peak Doppler
Address/Location:	Irvine Blvd & Culver Dr	**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH084N146
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	12/29/14 @1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	6.37 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

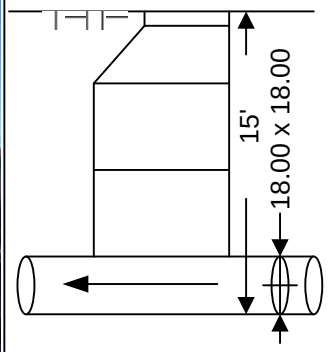
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

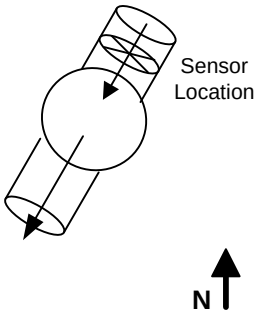
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

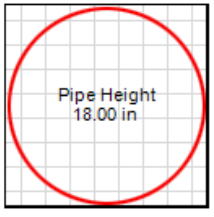
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite7

Flow Monitor

MPSite7

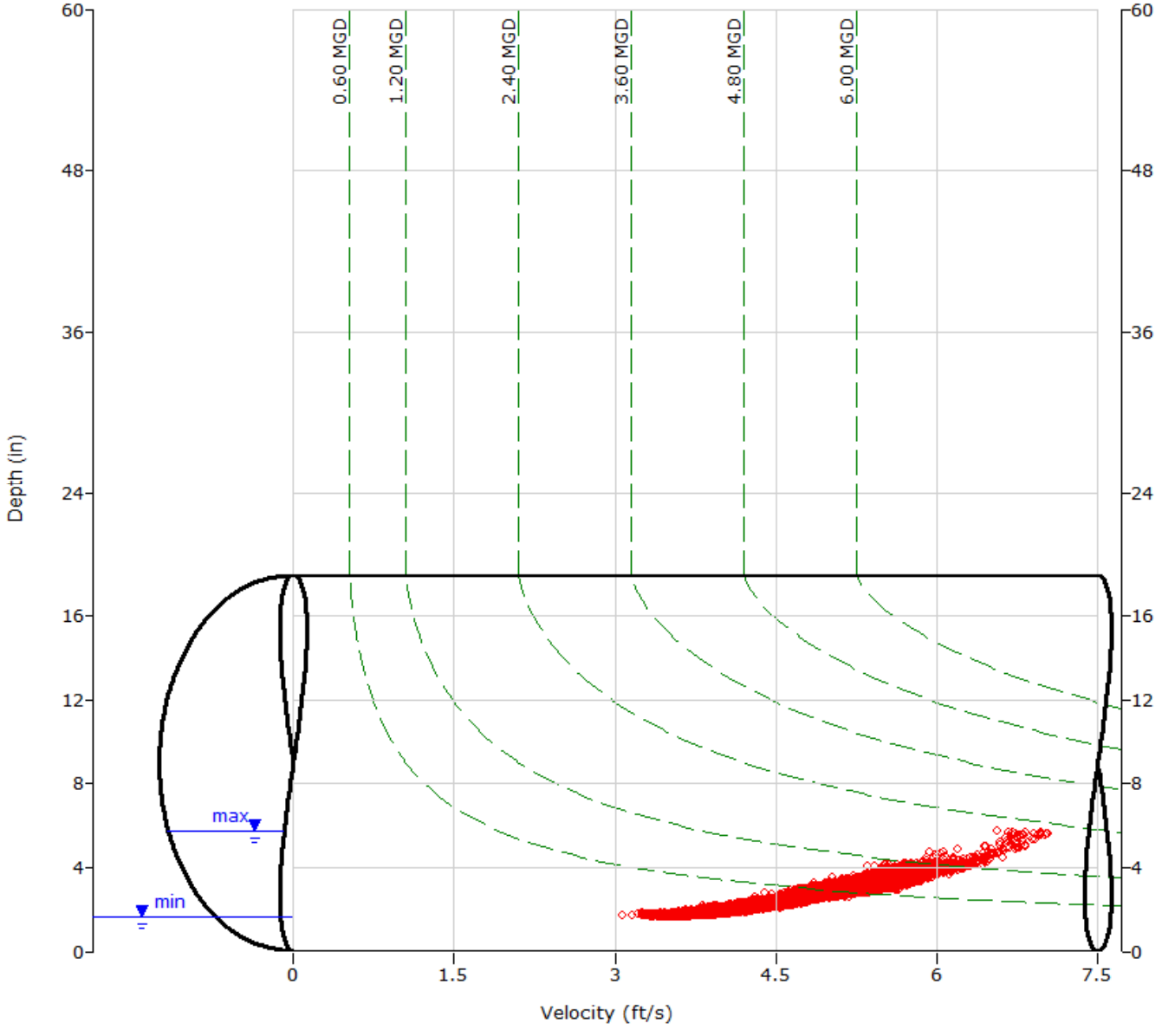


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite7

Flow Monitor

MPSite7

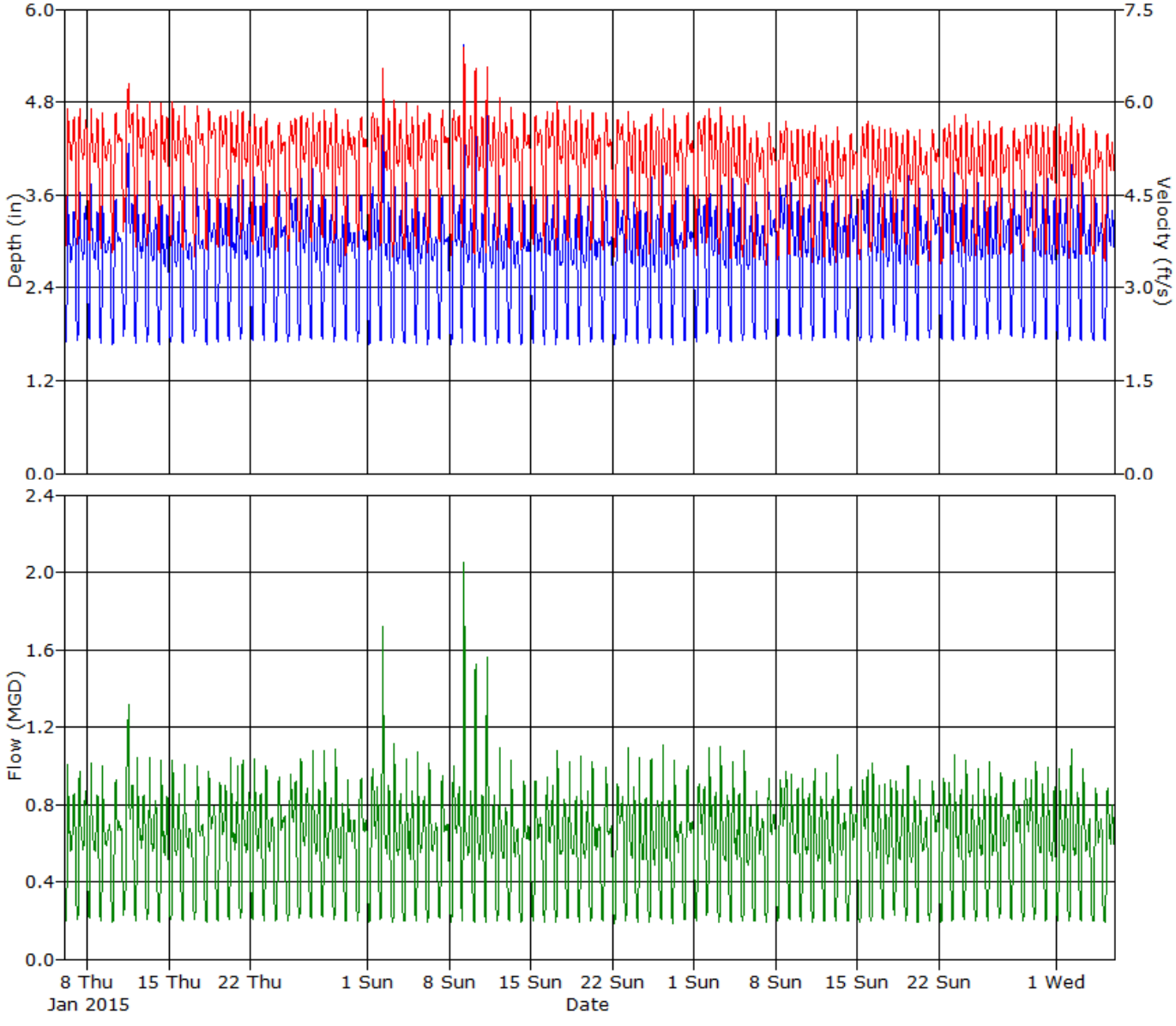
Pipe Height
18.00 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite7, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	04:10	1.68	07:50	3.97	2.77	03:55	3.64	08:00	6.08	5.06	04:10	0.196	07:50	1.132	0.594	0.594	
1/7/2015	04:20	1.69	07:45	3.84	2.79	04:20	3.63	08:25	5.99	5.03	04:20	0.197	08:00	1.043	0.594	0.594	
1/8/2015	04:20	1.71	07:35	4.00	2.78	05:25	3.66	07:45	6.02	5.03	04:20	0.203	07:35	1.134	0.593	0.593	
1/9/2015	04:35	1.68	07:50	3.97	2.74	04:30	3.52	07:45	6.01	4.97	04:30	0.189	07:50	1.118	0.572	0.572	
1/10/2015	04:50	1.64	11:30	3.65	2.75	04:55	3.48	11:30	5.93	5.03	04:55	0.181	11:30	0.984	0.587	0.587	
1/11/2015	03:45	1.76	12:30	5.10	2.96	03:45	3.87	12:30	6.82	5.24	03:45	0.223	12:30	1.818	0.686	0.686	
1/12/2015	04:05	1.65	07:45	3.99	2.79	04:05	3.56	07:35	6.12	5.11	04:05	0.186	07:45	1.149	0.606	0.606	
1/13/2015	03:55	1.69	07:40	4.03	2.75	03:55	3.58	07:40	6.16	5.06	03:55	0.195	07:40	1.175	0.587	0.587	
1/14/2015	04:05	1.65	07:55	3.89	2.73	04:15	3.44	08:05	6.09	5.05	04:15	0.181	08:00	1.105	0.582	0.582	
1/15/2015	04:25	1.70	07:45	3.97	2.73	03:55	3.65	07:45	6.20	5.06	04:25	0.199	07:45	1.159	0.581	0.581	
1/16/2015	04:25	1.68	07:45	3.89	2.71	04:45	3.54	07:30	6.14	5.05	04:50	0.190	07:55	1.100	0.574	0.574	
1/17/2015	04:10	1.76	10:50	3.78	2.76	04:15	3.43	11:00	5.98	5.05	04:15	0.199	10:50	1.040	0.590	0.590	
1/18/2015	05:30	1.65	09:50	3.72	2.78	05:05	3.56	10:30	5.97	5.09	05:30	0.187	10:30	1.017	0.604	0.604	
1/19/2015	04:10	1.67	09:35	3.82	2.82	04:15	3.54	09:40	5.88	5.10	04:15	0.189	09:40	1.040	0.618	0.618	
1/20/2015	04:25	1.69	07:45	4.13	2.82	04:25	3.64	07:40	5.99	5.05	04:25	0.196	07:40	1.178	0.610	0.610	
1/21/2015	04:20	1.70	07:40	4.08	2.82	04:10	3.66	07:40	6.01	5.03	04:15	0.200	07:40	1.167	0.605	0.605	
1/22/2015	04:45	1.70	07:50	4.12	2.83	04:45	3.63	07:45	6.05	4.97	04:45	0.198	07:50	1.185	0.601	0.601	
1/23/2015	04:25	1.70	07:50	4.12	2.81	04:05	3.47	08:05	5.92	4.95	04:05	0.193	07:50	1.162	0.592	0.592	
1/24/2015	05:25	1.69	10:00	3.75	2.83	05:05	3.54	10:00	5.74	4.96	05:15	0.194	10:00	0.988	0.603	0.603	
1/25/2015	04:40	1.67	09:45	3.75	2.89	04:30	3.48	21:00	5.81	5.03	04:30	0.188	10:40	0.982	0.635	0.635	
1/26/2015	04:20	1.69	07:30	4.07	2.87	04:20	3.62	08:20	5.88	5.04	04:20	0.197	07:40	1.125	0.621	0.621	
1/27/2015	04:25	1.71	07:45	4.16	2.82	04:15	3.67	07:40	6.00	5.03	04:15	0.203	07:40	1.199	0.605	0.605	
1/28/2015	03:55	1.71	07:35	4.21	2.79	03:55	3.74	07:35	6.14	5.01	03:55	0.207	07:35	1.249	0.594	0.594	
1/29/2015	04:05	1.67	07:30	4.20	2.74	04:05	3.62	07:40	6.09	4.97	04:05	0.194	07:30	1.222	0.572	0.572	
1/30/2015	04:20	1.70	08:00	3.80	2.78	03:20	3.45	07:50	5.90	5.00	04:20	0.190	08:00	1.036	0.589	0.589	
1/31/2015	04:55	1.67	10:20	3.70	2.80	04:20	3.63	10:55	5.84	5.03	04:55	0.194	10:55	0.975	0.600	0.600	
2/1/2015	04:35	1.66	10:40	3.80	2.83	04:25	3.53	10:40	5.92	5.06	05:30	0.186	10:40	1.038	0.622	0.622	
2/2/2015	04:15	1.69	07:30	5.77	2.89	03:10	3.64	07:40	6.83	5.04	04:15	0.198	07:40	2.106	0.647	0.647	
2/3/2015	04:45	1.68	07:40	4.20	2.76	04:25	3.43	07:45	6.30	4.99	04:10	0.188	07:40	1.270	0.586	0.586	
2/4/2015	04:25	1.67	08:10	3.94	2.76	04:15	3.56	07:45	6.17	5.01	04:15	0.192	08:05	1.132	0.588	0.588	
2/5/2015	04:20	1.68	07:35	4.08	2.76	04:40	3.61	07:35	6.24	5.03	04:20	0.194	07:35	1.214	0.588	0.588	
2/6/2015	04:15	1.64	07:50	4.01	2.71	04:10	3.44	07:55	6.07	4.99	04:10	0.180	07:50	1.152	0.568	0.568	
2/7/2015	04:45	1.73	09:50	3.79	2.77	05:20	3.68	10:55	5.92	5.05	05:20	0.207	10:00	1.009	0.595	0.595	
2/8/2015	04:30	1.65	09:10	3.88	2.82	04:55	3.41	08:50	5.95	5.10	04:45	0.180	09:10	1.065	0.622	0.622	
2/9/2015	03:40	1.67	07:35	5.65	3.02	03:25	3.56	07:55	7.03	5.21	03:40	0.192	07:35	2.136	0.719	0.719	
2/10/2015	04:00	1.68	07:15	5.35	2.92	03:55	3.40	07:15	6.91	5.12	03:55	0.183	07:15	1.967	0.663	0.663	
2/11/2015	04:20	1.66	06:55	4.96	2.90	03:55	3.47	06:55	6.78	5.16	03:55	0.188	06:55	1.737	0.659	0.659	
2/12/2015	04:50	1.68	07:35	4.13	2.70	04:50	3.53	07:40	6.30	5.02	04:50	0.189	07:35	1.245	0.569	0.569	
2/13/2015	04:35	1.66	07:35	4.02	2.70	04:15	3.55	07:55	6.17	5.01	04:15	0.191	07:40	1.169	0.566	0.566	
2/14/2015	04:15	1.65	10:35	3.61	2.71	04:50	3.56	10:40	5.90	5.04	04:40	0.188	10:40	0.957	0.572	0.572	
2/15/2015	05:15	1.65	09:35	3.70	2.72	05:10	3.58	10:50	5.85	5.05	05:15	0.188	09:35	0.983	0.578	0.578	
2/16/2015	04:45	1.64	09:00	3.72	2.76	04:15	3.48	09:00	5.95	5.09	04:40	0.183	09:00	1.015	0.599	0.599	
2/17/2015	04:15	1.64	07:35	4.05	2.73	04:05	3.54	07:50	6.20	5.03	04:10	0.184	07:35	1.180	0.579	0.579	
2/18/2015	04:50	1.73	08:00	3.95	2.74	04:50	3.70	07:55	6.14	5.07	04:50	0.207	07:55	1.140	0.583	0.583	
2/19/2015	04:20	1.65	07:35	4.05	2.74	04:20	3.53	07:40	6.06	5.02	04:20	0.186	07:35	1.162	0.579	0.579	
2/20/2015	05:00	1.66	07:35	4.05	2.73	05:00	3.52	07:40	5.98	5.02	05:00	0.186	07:35	1.143	0.576	0.576	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	05:25	1.67	10:50	4.33	2.76	05:25	3.56	10:50	6.08	4.99	05:25	0.190	10:50	1.287	0.584	0.584	
2/22/2015	05:25	1.65	10:05	3.64	2.83	05:15	3.36	11:10	5.78	5.03	05:15	0.176	10:05	0.935	0.615	0.615	
2/23/2015	04:15	1.67	09:15	4.22	2.82	04:10	3.37	09:10	6.18	4.99	04:10	0.181	09:15	1.259	0.603	0.603	
2/24/2015	04:30	1.66	07:40	4.15	2.77	04:20	3.42	07:30	6.00	4.87	04:25	0.183	07:30	1.182	0.575	0.575	
2/25/2015	03:55	1.68	08:00	4.11	2.78	04:00	3.40	07:45	5.94	4.89	04:00	0.182	07:45	1.149	0.579	0.579	
2/26/2015	04:05	1.71	07:35	4.16	2.78	04:45	3.54	07:40	6.07	4.92	04:00	0.197	07:35	1.211	0.583	0.583	
2/27/2015	04:25	1.66	07:35	4.03	2.78	04:20	3.33	07:55	5.89	4.91	04:20	0.177	07:30	1.112	0.581	0.581	
2/28/2015	04:55	1.68	11:20	4.47	2.82	04:55	3.54	11:25	6.15	4.96	04:55	0.190	11:20	1.359	0.599	0.599	
3/1/2015	05:05	1.69	09:50	3.69	2.85	05:10	3.43	21:40	5.81	5.01	05:10	0.186	09:50	0.969	0.617	0.617	
3/2/2015	03:15	1.77	08:55	4.25	2.88	02:50	3.59	08:55	6.40	5.04	02:50	0.210	08:55	1.317	0.626	0.626	
3/3/2015	04:15	1.67	07:50	4.08	2.77	03:15	3.48	07:40	6.05	4.86	04:05	0.187	07:50	1.175	0.573	0.573	
3/4/2015	04:20	1.69	15:30	4.04	2.82	04:10	3.35	08:00	5.96	4.86	04:10	0.184	08:00	1.120	0.589	0.589	
3/5/2015	04:10	1.71	07:35	4.19	2.78	02:35	3.25	07:35	6.02	4.80	04:00	0.192	07:35	1.217	0.565	0.565	
3/6/2015	04:25	1.72	08:05	3.56	2.80	03:35	3.39	08:10	5.62	4.82	04:25	0.190	08:10	0.897	0.572	0.572	
3/7/2015	04:30	1.73	10:30	3.71	2.86	04:55	3.08	10:25	5.77	4.81	04:55	0.174	10:35	0.971	0.594	0.594	
3/8/2015	04:25	1.75	09:15	3.80	3.00	04:15	3.26	21:55	5.72	4.92	04:15	0.190	21:55	0.993	0.654	0.654	
3/9/2015	04:25	1.76	07:40	4.06	2.91	03:50	3.47	20:30	5.67	4.83	04:25	0.201	07:40	1.091	0.608	0.608	
3/10/2015	04:25	1.72	07:45	4.06	2.85	03:20	3.43	07:45	5.74	4.83	04:10	0.195	07:45	1.107	0.590	0.590	
3/11/2015	04:05	1.70	07:55	3.93	2.83	03:15	3.29	08:00	5.68	4.75	03:15	0.185	08:00	1.042	0.576	0.576	
3/12/2015	04:05	1.74	07:55	4.02	2.84	04:00	3.37	08:00	5.65	4.71	04:00	0.191	07:55	1.065	0.576	0.576	
3/13/2015	03:40	1.75	07:35	4.84	2.84	04:05	3.31	07:35	6.20	4.73	04:35	0.189	07:35	1.534	0.576	0.576	
3/14/2015	05:00	1.72	10:40	3.68	2.85	04:40	3.34	10:40	5.58	4.78	04:40	0.187	10:40	0.936	0.586	0.586	
3/15/2015	04:55	1.70	21:35	3.77	2.94	05:15	3.42	20:55	5.74	4.89	04:55	0.187	21:05	0.988	0.630	0.630	
3/16/2015	04:05	1.70	07:50	4.22	2.85	04:15	3.50	07:50	5.85	4.85	04:15	0.191	07:50	1.194	0.594	0.594	
3/17/2015	04:05	1.73	08:00	3.81	2.83	04:15	3.34	07:50	5.67	4.81	04:15	0.189	07:50	0.999	0.583	0.583	
3/18/2015	05:00	1.77	07:50	3.90	2.86	04:55	3.55	08:00	5.66	4.81	05:00	0.206	07:50	1.026	0.588	0.588	
3/19/2015	04:20	1.70	08:05	4.76	2.83	04:05	3.46	08:05	6.06	4.75	04:05	0.193	08:05	1.463	0.577	0.577	
3/20/2015	04:00	1.72	07:35	3.90	2.83	04:40	3.29	08:10	5.76	4.72	04:40	0.184	08:00	1.035	0.572	0.572	
3/21/2015	04:25	1.74	10:25	3.69	2.89	04:55	3.32	11:10	5.69	4.80	04:55	0.189	11:10	0.954	0.600	0.600	
3/22/2015	04:50	1.73	10:05	3.77	2.91	04:45	3.16	21:00	5.79	4.88	04:45	0.179	10:05	0.969	0.623	0.623	
3/23/2015	04:20	1.71	07:45	4.18	2.82	03:45	3.46	07:45	5.99	4.88	04:15	0.191	07:45	1.203	0.589	0.589	
3/24/2015	03:45	1.71	07:35	4.03	2.79	03:10	3.53	07:35	5.95	4.86	03:45	0.198	07:35	1.139	0.575	0.575	
3/25/2015	04:20	1.70	08:00	3.97	2.82	03:45	3.37	08:15	5.85	4.83	03:45	0.187	08:00	1.076	0.582	0.582	
3/26/2015	04:50	1.72	07:40	4.07	2.86	04:05	3.47	07:45	5.81	4.85	04:50	0.196	07:40	1.121	0.595	0.595	
3/27/2015	04:10	1.79	09:40	4.25	2.88	03:25	3.49	09:40	5.86	4.81	04:10	0.206	09:40	1.208	0.596	0.596	
3/28/2015	04:20	1.76	10:45	3.71	2.90	04:20	3.44	10:45	5.68	4.84	04:20	0.197	10:45	0.962	0.608	0.608	
3/29/2015	04:40	1.75	09:55	3.76	2.92	03:55	3.31	21:10	5.71	4.89	04:15	0.192	09:55	0.976	0.625	0.625	
3/30/2015	04:25	1.75	07:50	4.31	2.87	03:30	3.51	07:50	5.91	4.87	03:25	0.201	07:50	1.241	0.603	0.603	
3/31/2015	04:00	1.71	07:35	4.08	2.84	04:00	3.48	07:40	5.73	4.80	04:00	0.192	07:35	1.110	0.584	0.584	
4/1/2015	04:15	1.73	08:00	3.97	2.86	04:05	3.46	08:10	5.74	4.80	04:10	0.195	08:00	1.069	0.593	0.593	
4/2/2015	04:20	1.71	08:20	4.48	2.84	03:30	3.34	08:35	5.97	4.79	04:15	0.189	08:35	1.310	0.586	0.586	
4/3/2015	05:05	1.70	08:50	4.52	2.81	05:10	3.41	08:50	6.08	4.79	05:10	0.188	08:50	1.367	0.574	0.574	
4/4/2015	04:30	1.72	09:50	3.66	2.80	03:15	3.36	11:00	5.62	4.79	03:45	0.190	09:50	0.926	0.573	0.573	
4/5/2015	04:30	1.71	10:35	3.62	2.82	05:00	3.26	10:50	5.58	4.75	05:00	0.181	10:35	0.910	0.576	0.576	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			53.702
Avg	2.81	4.95	0.597

Site Commentary

Site Information

MPSite8	
Pipe Dimensions	54.25" x 54.13"
Silt Level	0.00"

Overview

Site MPSite8 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows entered into backwater conditions when flows reached 17.50 inches or greater.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	16.18	2.31	6.193
Minimum	10.33	0.31	1.228
Maximum	27.69	3.27	12.048
Time of Minimum	1/26/2015 5:45 AM	2/5/2015 5:05 AM	2/5/2015 5:05 AM
Time of Maximum	2/5/2015 5:45 AM	1/6/2015 10:00 PM	1/25/2015 12:10 PM

Data Quality

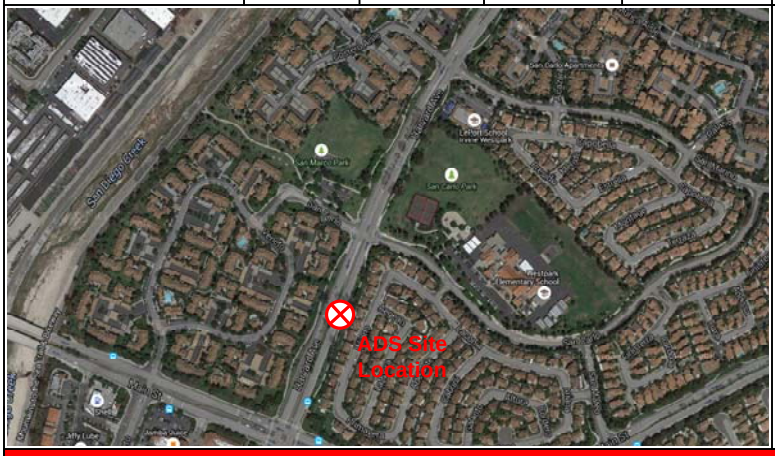
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

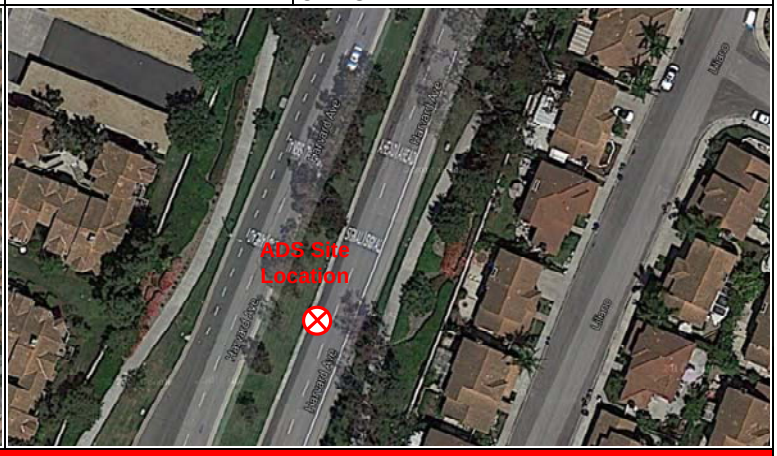
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite8	**Install Date:** 1/5/15	**Monitor Type**	Peak Doppler
Address/Location: Harvard & San Carlo		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH060N031
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	54.25 "
		Pipe Width:	54.13 "





Investigation Information:

Date/Time of Investigation:	1/5/15 @ 0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	19.38" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.40 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	X			

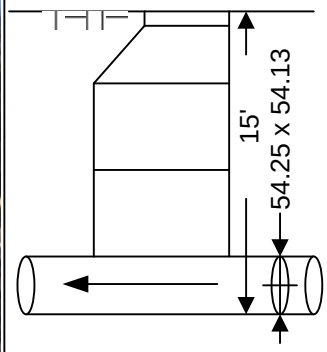
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

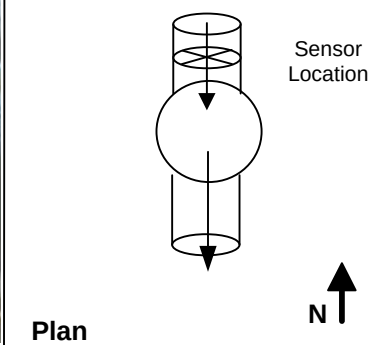
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite8

Flow Monitor

MPSite8

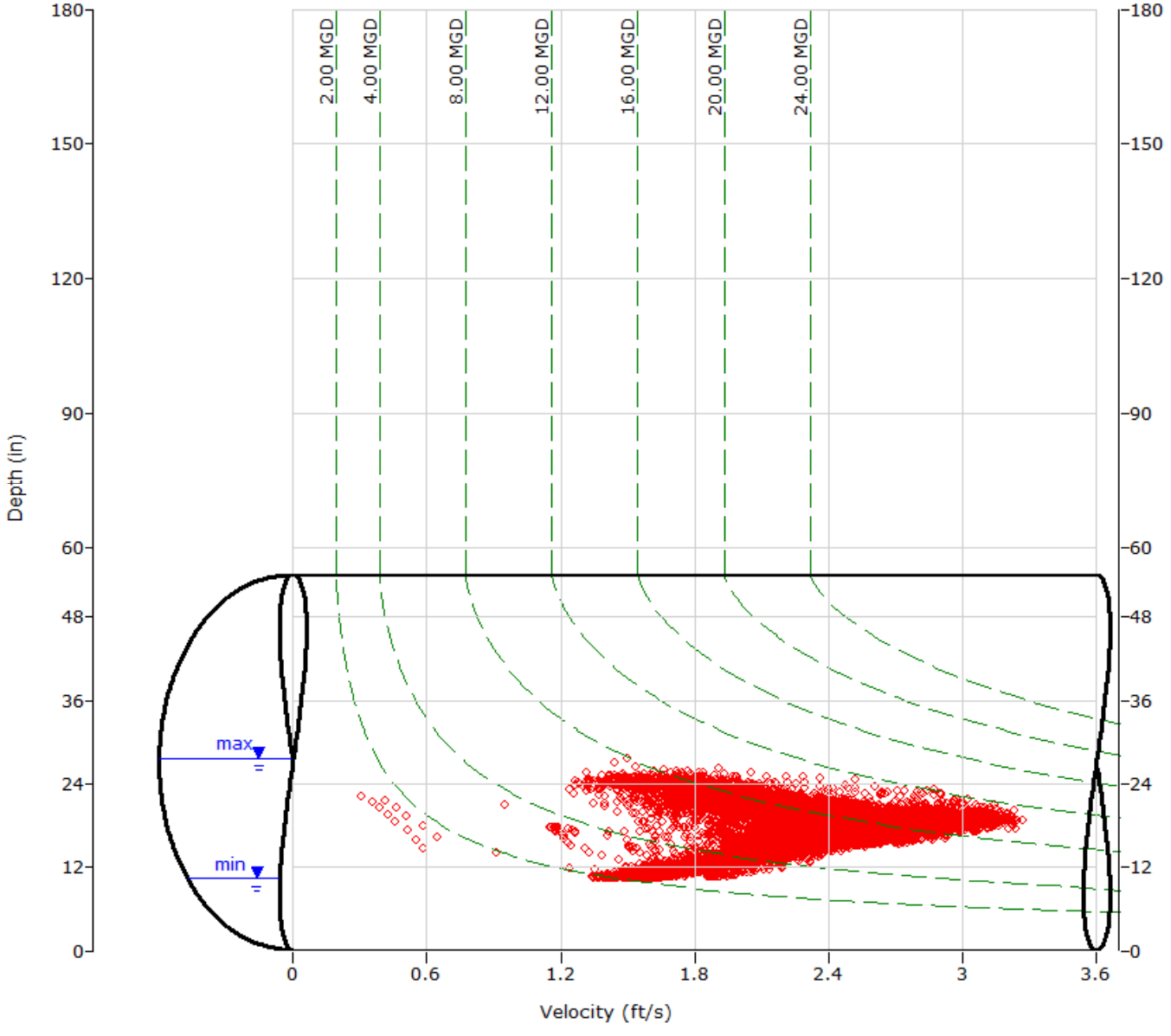
Pipe Height
54.25 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite8

Flow Monitor

MPSite8

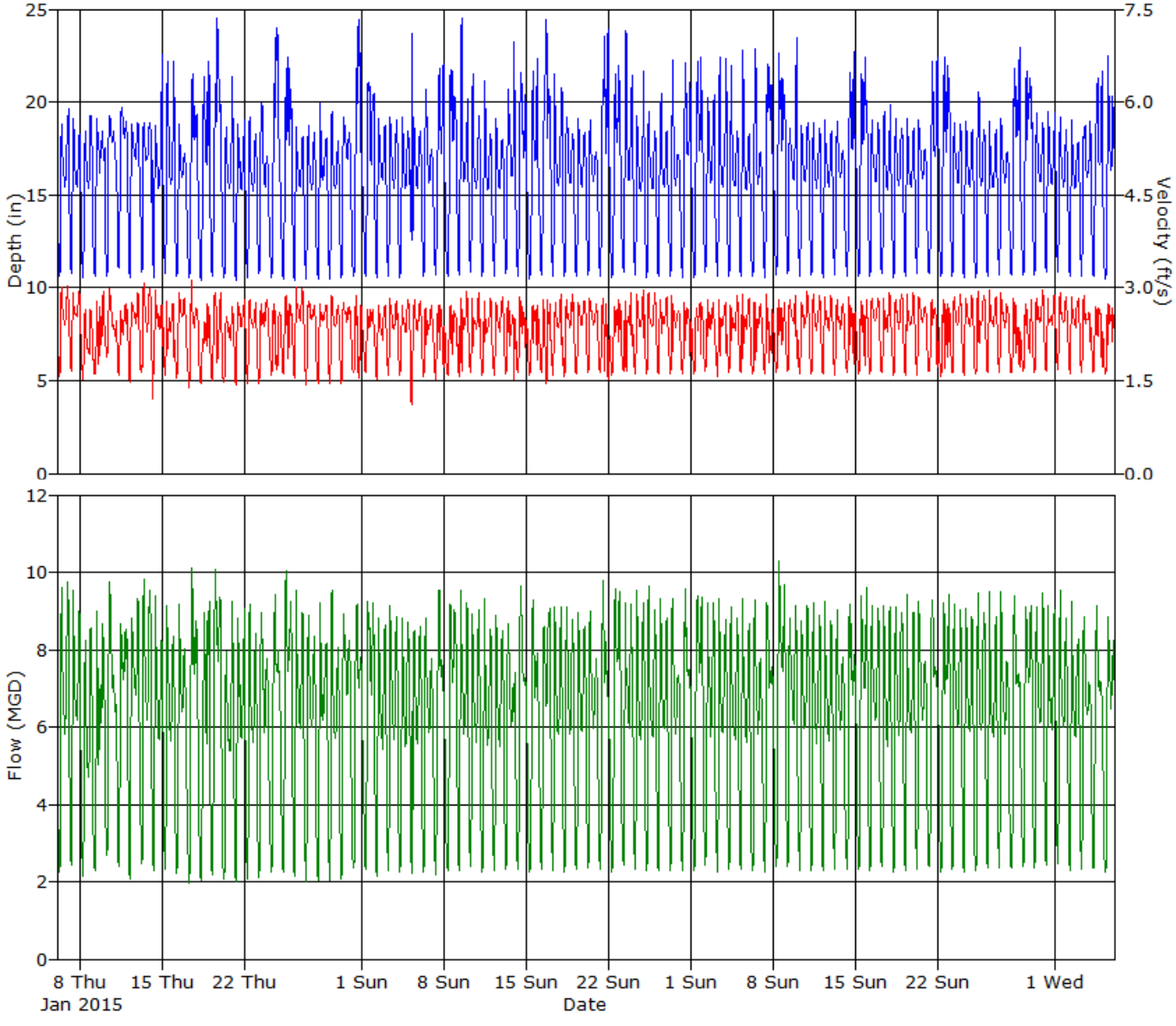
Pipe Height
54.25 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite8, Pipe Height: 54.25 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:45	10.55	23:15	19.92	15.74	05:15	1.42	22:00	3.27	2.45	05:15	2.033	22:00	10.287	6.396	6.396	
1/7/2015	05:55	10.68	10:50	19.34	15.68	06:00	1.62	21:55	3.11	2.48	06:00	2.336	09:20	10.114	6.401	6.401	
1/8/2015	05:50	10.54	20:40	23.29	15.69	19:40	1.45	20:55	3.12	2.13	05:45	2.085	20:55	9.744	5.478	5.478	
1/9/2015	05:55	10.52	19:25	22.18	16.12	13:00	1.41	21:40	3.24	2.23	04:35	2.141	21:10	10.345	5.918	5.918	
1/10/2015	06:45	10.55	14:50	22.45	16.30	01:30	1.59	11:40	3.15	2.40	06:50	2.642	11:40	10.226	6.445	6.445	
1/11/2015	06:40	11.07	15:55	22.07	16.63	06:40	1.57	22:30	2.85	2.28	06:40	2.373	01:05	9.559	6.373	6.373	
1/12/2015	05:40	10.55	23:15	22.42	16.26	05:40	1.46	22:35	3.12	2.41	05:40	2.066	21:50	10.202	6.564	6.564	
1/13/2015	05:45	10.76	18:15	21.86	16.45	15:10	1.34	09:15	3.23	2.41	05:45	2.414	09:25	10.486	6.603	6.603	
1/14/2015	05:45	10.51	22:35	25.07	16.29	02:55	1.15	09:30	3.14	2.30	05:30	2.186	22:50	10.201	6.136	6.136	
1/15/2015	05:50	10.74	10:50	22.58	16.23	05:40	1.55	08:50	3.07	2.26	05:40	2.253	08:50	9.743	6.053	6.053	
1/16/2015	06:00	10.57	00:00	21.63	15.57	05:15	1.47	10:25	3.10	2.41	05:15	2.118	09:30	9.660	6.169	6.169	
1/17/2015	06:25	10.54	12:10	25.66	16.33	06:25	1.35	10:40	3.23	2.29	06:25	1.901	12:15	11.330	6.357	6.357	
1/18/2015	06:35	10.39	12:25	25.12	16.22	07:15	1.40	15:45	3.05	2.12	06:50	1.944	14:15	11.506	5.808	5.808	
1/19/2015	05:50	10.56	12:20	24.87	17.67	06:00	1.38	12:30	3.20	2.22	06:00	1.956	12:25	11.634	6.717	6.717	
1/20/2015	05:40	10.51	23:25	21.60	15.59	03:25	1.35	09:10	2.93	2.19	05:40	2.043	22:30	9.572	5.620	5.620	
1/21/2015	05:40	10.37	00:00	19.85	15.59	05:40	1.42	23:05	2.85	2.35	05:40	1.965	00:00	9.562	6.067	6.067	
1/22/2015	05:50	10.53	10:25	19.42	15.49	05:50	1.46	22:00	2.85	2.32	05:50	2.055	10:25	9.461	5.922	5.922	
1/23/2015	05:55	10.66	10:50	20.43	15.69	05:15	1.41	09:55	2.96	2.31	05:20	2.053	09:55	9.727	5.984	5.984	
1/24/2015	06:30	10.49	13:25	25.17	17.37	21:00	1.48	13:35	3.23	2.13	06:45	2.193	13:35	11.288	6.182	6.182	
1/25/2015	06:40	10.41	12:05	25.10	16.82	06:30	1.60	21:50	3.19	2.31	06:30	2.225	12:10	12.048	6.548	6.548	
1/26/2015	05:45	10.33	09:20	18.81	15.34	05:40	1.52	09:00	3.14	2.45	05:40	2.091	09:00	9.937	6.180	6.180	
1/27/2015	05:40	10.43	09:15	18.92	15.39	06:00	1.35	09:15	2.93	2.38	06:00	1.880	09:15	9.425	6.012	6.012	
1/28/2015	05:45	10.44	10:15	20.44	15.59	05:45	1.44	09:15	2.87	2.34	05:45	2.003	10:20	9.582	6.024	6.024	
1/29/2015	05:45	10.49	10:40	19.73	15.54	05:45	1.45	08:50	2.99	2.35	05:45	2.034	10:45	9.860	6.028	6.028	
1/30/2015	05:45	10.49	09:50	19.73	16.12	05:45	1.45	09:25	2.88	2.35	05:45	2.036	09:50	9.638	6.351	6.351	
1/31/2015	06:10	10.61	11:50	25.87	17.51	16:25	1.41	13:50	3.02	2.14	06:00	2.304	11:55	11.466	6.282	6.282	
2/1/2015	06:55	10.58	11:55	25.51	16.67	23:40	1.51	14:35	3.05	2.26	06:55	2.164	12:00	11.796	6.334	6.334	
2/2/2015	05:50	10.49	09:15	19.30	15.84	05:55	1.41	22:15	3.02	2.30	05:55	1.985	22:15	9.638	6.032	6.032	
2/3/2015	05:45	10.60	09:05	19.46	15.76	06:15	1.55	08:30	3.04	2.36	05:25	2.241	09:10	10.083	6.131	6.131	
2/4/2015	05:45	10.49	10:35	19.44	15.67	05:50	1.53	22:05	3.06	2.34	05:50	2.154	09:55	9.781	6.049	6.049	
2/5/2015	04:20	11.51	05:45	27.69	16.62	05:05	0.31	10:15	2.99	2.31	05:05	1.228	05:50	9.962	6.252	6.252	
2/6/2015	05:50	10.58	11:05	21.28	15.89	05:20	1.54	09:00	2.93	2.27	05:20	2.209	09:00	9.724	5.917	5.917	
2/7/2015	06:20	10.63	11:50	25.58	17.09	11:50	1.31	13:30	3.14	2.15	06:00	1.929	11:55	11.796	6.167	6.167	
2/8/2015	06:45	10.58	12:55	25.18	16.98	14:30	1.36	20:40	3.16	2.24	06:25	2.243	20:35	11.189	6.431	6.431	
2/9/2015	05:40	10.66	11:50	25.41	16.67	11:40	1.45	09:10	3.10	2.28	05:35	2.159	09:10	10.375	6.330	6.330	
2/10/2015	05:50	10.78	10:20	21.77	16.01	05:10	1.60	21:25	3.22	2.32	05:10	2.347	08:50	10.295	6.122	6.122	
2/11/2015	05:50	10.56	10:25	21.41	15.78	05:45	1.45	08:55	3.11	2.31	05:45	2.061	08:55	10.323	6.011	6.011	
2/12/2015	05:40	10.57	09:10	19.35	15.57	05:35	1.58	08:50	2.99	2.35	05:35	2.244	08:50	9.788	6.006	6.006	
2/13/2015	05:50	10.67	11:10	24.64	16.53	22:25	1.24	11:20	2.98	2.21	05:50	2.117	11:15	10.095	5.977	5.977	
2/14/2015	06:25	10.64	11:45	25.42	16.43	11:45	1.48	11:00	3.04	2.24	07:00	2.318	11:50	11.004	6.155	6.155	
2/15/2015	06:35	10.49	12:00	25.23	16.20	21:45	1.28	12:45	3.14	2.27	06:25	2.173	12:05	11.842	6.107	6.107	
2/16/2015	06:15	10.57	12:15	25.22	17.73	15:20	1.27	22:50	3.09	2.13	06:20	2.266	12:25	11.082	6.318	6.318	
2/17/2015	05:25	10.56	09:20	25.10	16.02	05:00	1.55	21:35	3.03	2.33	05:00	2.218	09:25	11.321	6.159	6.159	
2/18/2015	05:50	10.57	00:15	21.31	15.92	06:00	1.44	09:15	3.01	2.34	06:00	2.043	09:15	9.760	6.143	6.143	
2/19/2015	05:50	10.61	09:20	19.51	15.66	05:50	1.54	09:35	3.04	2.39	05:50	2.195	08:45	9.881	6.163	6.163	
2/20/2015	05:35	10.65	09:10	19.25	15.58	06:05	1.60	08:55	3.04	2.39	06:05	2.323	08:55	9.949	6.084	6.084	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	06:10	10.60	11:50	25.23	17.44	23:10	1.33	12:15	3.13	2.12	05:55	2.200	11:55	11.352	6.180	6.180	
2/22/2015	06:55	10.53	12:15	25.00	16.86	14:00	1.33	13:00	3.09	2.28	05:35	2.030	21:20	11.596	6.491	6.491	
2/23/2015	05:45	10.79	10:50	24.19	16.88	11:20	1.48	08:55	3.08	2.26	05:35	2.295	08:55	10.248	6.321	6.321	
2/24/2015	05:50	10.64	23:05	25.23	15.90	22:50	1.40	09:25	3.13	2.36	06:25	2.210	09:25	10.430	6.202	6.202	
2/25/2015	05:45	10.54	10:25	19.75	15.70	05:40	1.59	08:45	3.20	2.40	05:40	2.246	08:45	10.678	6.219	6.219	
2/26/2015	05:25	10.59	10:30	20.56	15.80	03:50	1.56	22:45	3.05	2.37	05:05	2.254	09:15	10.016	6.162	6.162	
2/27/2015	05:40	10.60	10:25	22.46	15.88	05:15	1.60	08:45	3.19	2.32	05:20	2.289	08:55	10.374	6.044	6.044	
2/28/2015	06:30	10.55	12:05	25.98	16.64	13:55	1.57	11:00	3.04	2.23	06:15	2.249	12:10	11.821	6.208	6.208	
3/1/2015	06:40	10.54	12:20	26.13	16.70	04:40	1.54	11:10	3.11	2.30	06:35	2.277	12:25	11.734	6.463	6.463	
3/2/2015	05:10	10.82	23:10	21.22	16.21	05:35	1.56	09:20	3.07	2.35	05:35	2.312	09:00	10.296	6.330	6.330	
3/3/2015	05:25	10.63	23:35	22.65	16.31	05:20	1.41	08:35	3.08	2.28	05:20	2.016	09:10	10.335	6.136	6.136	
3/4/2015	05:50	10.59	10:35	22.22	16.04	05:30	1.60	08:40	3.13	2.33	05:35	2.285	09:20	10.361	6.162	6.162	
3/5/2015	05:45	10.57	10:30	22.94	15.98	06:00	1.62	08:50	3.14	2.34	06:00	2.309	08:50	10.579	6.158	6.158	
3/6/2015	05:30	10.61	11:05	23.18	16.14	05:15	1.57	09:15	3.13	2.28	05:15	2.251	09:15	10.515	6.049	6.049	
3/7/2015	06:15	10.51	11:30	25.21	17.02	20:20	1.26	10:45	3.09	2.17	06:05	2.204	11:40	11.308	6.174	6.174	
3/8/2015	06:05	10.62	11:50	25.49	17.19	11:45	1.49	22:00	3.18	2.27	06:00	2.294	21:55	11.080	6.611	6.611	
3/9/2015	05:45	10.70	23:35	23.78	16.20	23:50	1.53	21:35	3.03	2.36	05:50	2.332	21:35	9.554	6.323	6.323	
3/10/2015	05:45	10.55	00:00	23.11	15.85	04:30	1.59	22:55	3.03	2.37	05:45	2.261	22:35	9.619	6.190	6.190	
3/11/2015	05:55	10.60	09:20	19.04	15.64	05:25	1.57	09:05	3.05	2.38	05:25	2.260	09:05	9.772	6.136	6.136	
3/12/2015	05:40	10.54	09:10	19.41	15.64	06:00	1.58	09:10	3.00	2.38	06:00	2.245	09:10	9.986	6.130	6.130	
3/13/2015	05:50	10.64	09:10	19.23	15.73	05:40	1.43	09:15	2.97	2.36	05:40	2.054	09:20	9.715	6.096	6.096	
3/14/2015	06:20	10.58	12:10	25.52	16.61	13:50	1.33	10:40	2.98	2.26	06:25	2.296	12:15	10.800	6.242	6.242	
3/15/2015	07:00	10.61	12:15	25.18	17.00	12:15	1.42	11:30	3.21	2.25	07:00	2.302	21:00	11.122	6.436	6.436	
3/16/2015	05:40	10.57	09:15	19.29	15.76	06:00	1.57	21:30	3.05	2.41	06:00	2.240	08:55	9.725	6.275	6.275	
3/17/2015	05:45	10.74	23:35	20.23	15.85	05:50	1.57	21:55	3.11	2.36	05:50	2.277	09:30	9.736	6.171	6.171	
3/18/2015	05:45	10.52	00:00	19.46	15.69	05:40	1.52	21:55	3.05	2.40	05:40	2.140	09:15	9.682	6.208	6.208	
3/19/2015	05:40	10.61	09:20	19.40	15.71	05:20	1.58	08:40	3.05	2.38	05:20	2.261	09:25	9.828	6.172	6.172	
3/20/2015	05:50	10.73	09:30	19.24	15.70	05:05	1.54	10:25	2.98	2.41	05:05	2.263	09:50	9.488	6.220	6.220	
3/21/2015	06:05	10.69	12:25	25.68	16.70	12:20	1.42	11:40	3.10	2.27	06:10	2.362	12:30	11.496	6.315	6.315	
3/22/2015	06:40	10.57	12:15	25.21	17.08	15:25	1.26	21:35	3.17	2.23	06:35	2.131	12:20	11.547	6.392	6.392	
3/23/2015	05:55	10.57	00:00	24.11	15.77	06:20	1.50	22:05	3.10	2.40	06:20	2.179	22:05	9.992	6.258	6.258	
3/24/2015	05:45	10.52	09:15	19.28	15.61	05:15	1.57	09:10	3.13	2.39	05:55	2.223	09:10	10.179	6.139	6.139	
3/25/2015	05:30	10.54	12:00	21.35	15.93	04:35	1.46	22:25	3.07	2.34	04:35	2.130	09:30	9.834	6.171	6.171	
3/26/2015	05:45	10.62	09:20	19.13	15.58	06:05	1.60	09:00	3.09	2.42	06:05	2.316	09:40	9.851	6.183	6.183	
3/27/2015	05:30	10.66	09:15	19.33	15.63	04:20	1.60	08:50	3.07	2.40	05:20	2.310	09:10	10.024	6.147	6.147	
3/28/2015	06:10	10.64	11:50	25.79	17.12	07:45	1.51	11:10	3.13	2.17	05:20	2.277	11:10	10.344	6.244	6.244	
3/29/2015	06:35	10.71	12:05	25.10	17.23	20:15	1.48	22:05	3.09	2.21	06:20	2.304	21:40	11.522	6.443	6.443	
3/30/2015	05:45	10.62	00:20	19.60	15.95	05:40	1.61	21:45	3.19	2.40	05:40	2.308	21:45	10.185	6.335	6.335	
3/31/2015	05:50	10.81	23:45	19.73	15.85	05:40	1.64	09:20	3.09	2.38	05:40	2.406	09:20	10.113	6.221	6.221	
4/1/2015	05:40	10.78	00:00	19.44	15.73	05:25	1.65	08:45	3.13	2.42	05:25	2.425	09:10	10.072	6.249	6.249	
4/2/2015	05:45	10.56	09:10	19.30	15.53	05:45	1.59	09:30	3.00	2.40	05:45	2.253	09:30	9.689	6.117	6.117	
4/3/2015	05:55	10.56	23:35	19.10	15.77	05:40	1.61	10:00	3.00	2.34	05:40	2.290	10:00	9.361	6.071	6.071	
4/4/2015	05:55	10.58	12:10	25.04	16.33	13:55	1.39	12:35	3.11	2.25	05:50	2.250	12:15	11.391	6.052	6.052	
4/5/2015	06:35	10.46	12:40	25.20	16.12	12:30	1.37	22:20	2.99	2.27	07:20	2.124	12:45	10.527	6.053	6.049	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			557.400
Avg	16.18	2.31	6.193

Site Commentary

Site Information

MPSite9	
Pipe Dimensions	24.38" x 24.13"
Silt Level	0.00"

Overview

Site MPSite9 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	9.07	1.91	1.365
Minimum	6.61	1.47	0.677
Maximum	12.08	2.39	2.385
Time of Minimum	4/1/2015 4:35 AM	2/7/2015 5:45 AM	4/4/2015 5:25 AM
Time of Maximum	2/17/2015 8:10 AM	1/12/2015 8:25 AM	2/17/2015 8:05 AM

Data Quality

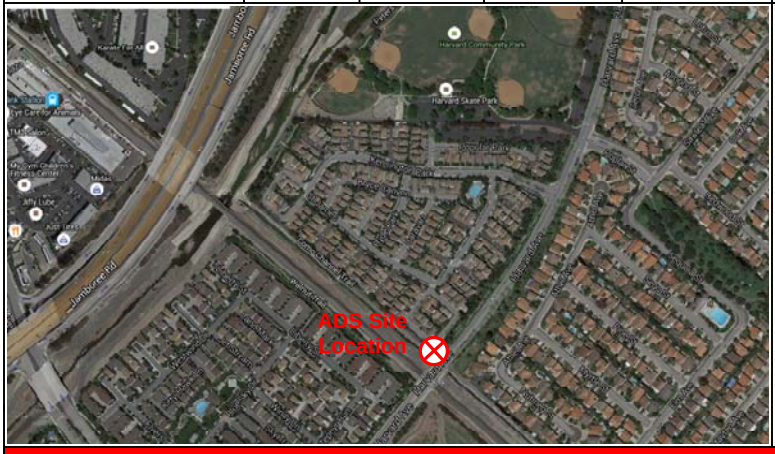
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

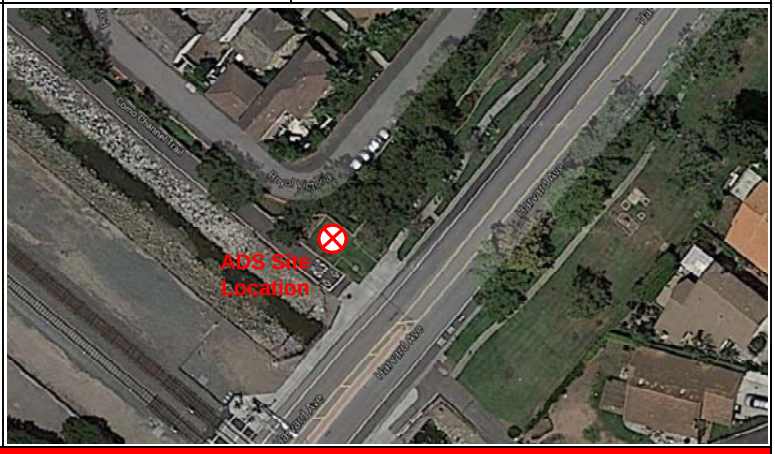
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite9	**Install Date:** 12/29/14	**Monitor Type**	Peak Doppler
Address/Location: Harvard		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH063W047
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	24.38 "
		Pipe Width:	24.13 "





Investigation Information:

Date/Time of Investigation:	12/29/14 @ 1500
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.28 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	25'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

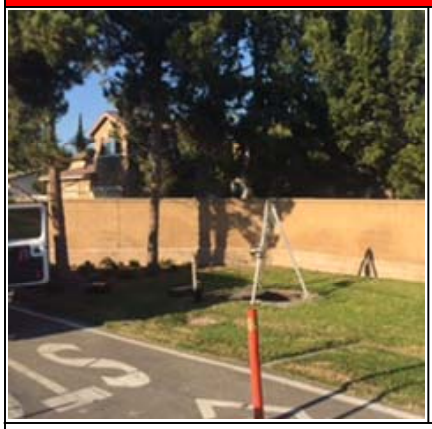
Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

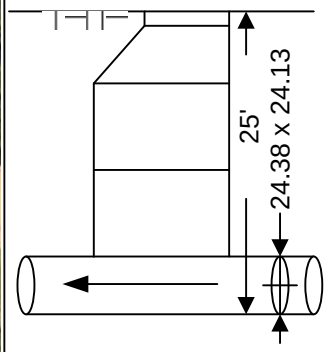
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

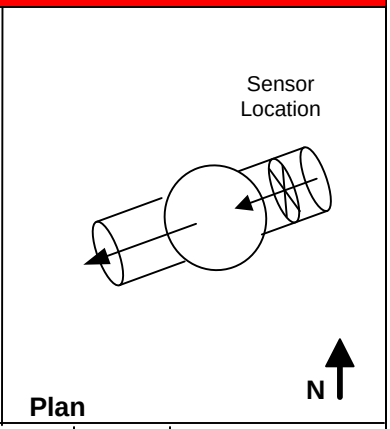
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite9

Flow Monitor

MPSite9

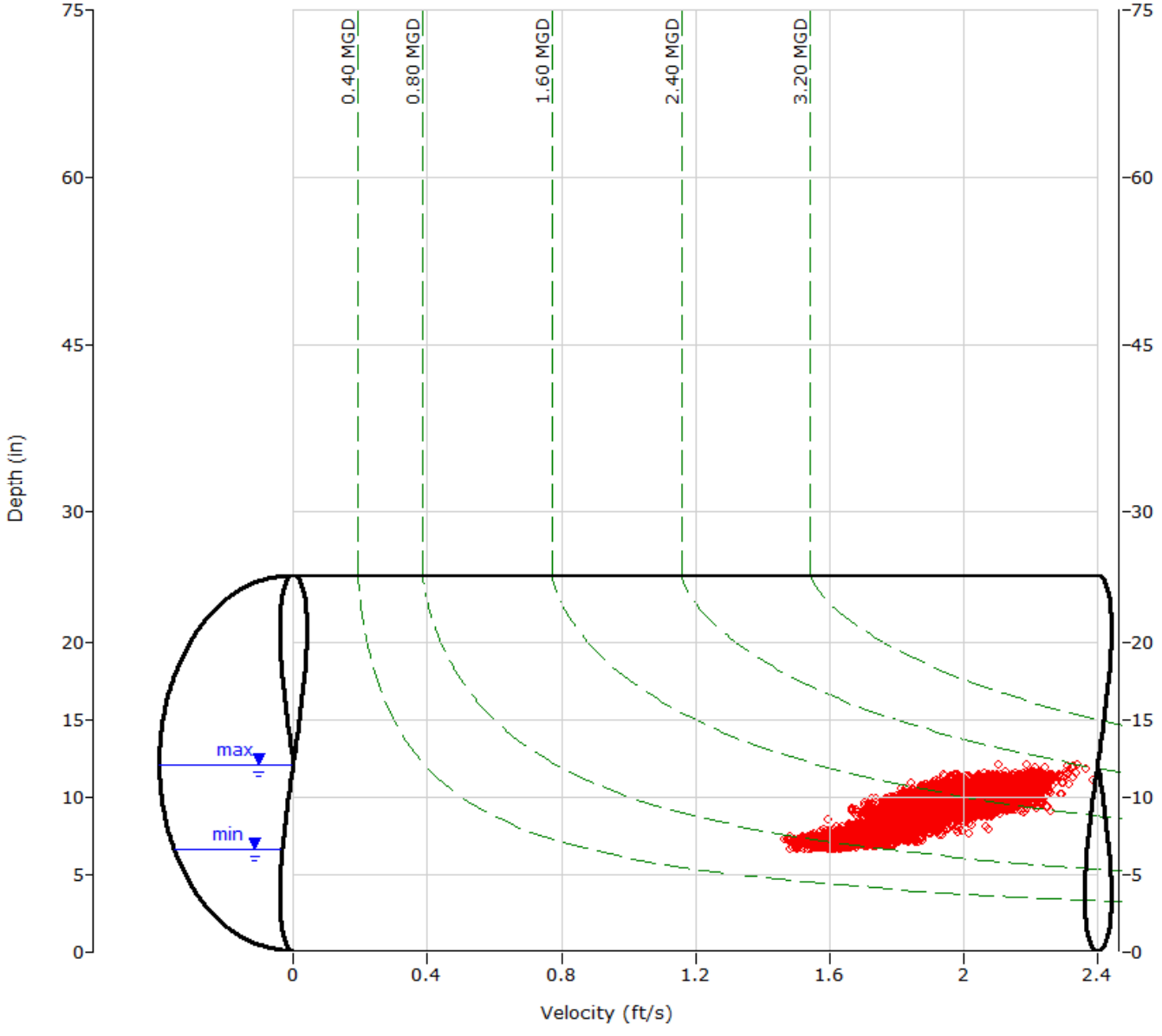
Pipe Height
24.38 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite9

Flow Monitor

MPSite9

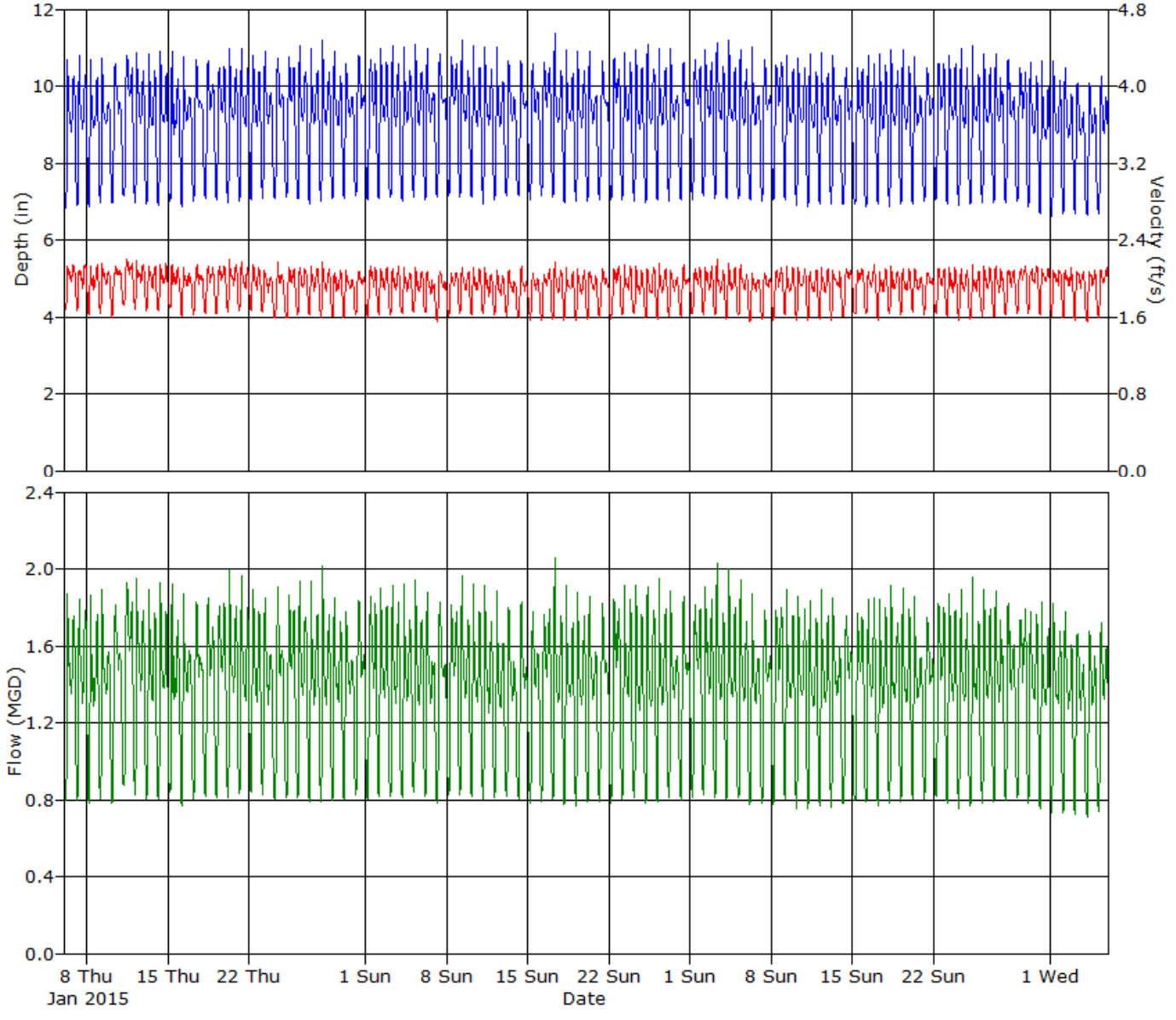
Pipe Height
24.38 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

MPSite9, Pipe Height: 24.38 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:00	6.77	08:05	11.27	8.95	04:55	1.61	08:00	2.28	1.97	04:55	0.761	08:00	2.137	1.383	1.383	
1/7/2015	05:05	6.81	08:20	10.93	8.95	04:20	1.59	19:30	2.23	1.96	04:25	0.768	08:15	2.004	1.373	1.373	
1/8/2015	04:30	6.85	08:05	11.00	8.94	03:00	1.59	20:05	2.29	1.94	04:30	0.764	08:05	2.044	1.360	1.360	
1/9/2015	05:05	6.94	08:00	11.11	8.90	05:35	1.53	07:55	2.25	1.96	05:35	0.761	08:00	2.071	1.358	1.358	
1/10/2015	05:05	6.92	11:15	10.71	8.97	03:10	1.54	09:10	2.23	1.94	03:35	0.767	12:25	1.873	1.370	1.370	
1/11/2015	05:50	7.09	10:35	10.91	9.20	04:10	1.62	10:30	2.31	1.99	04:10	0.823	10:40	2.063	1.451	1.451	
1/12/2015	04:55	6.95	08:15	11.15	9.09	04:35	1.62	08:25	2.39	1.98	04:35	0.798	08:25	2.176	1.413	1.413	
1/13/2015	05:05	6.84	08:15	11.09	9.06	04:20	1.60	07:45	2.26	1.96	04:45	0.779	08:10	2.044	1.394	1.394	
1/14/2015	04:20	6.83	08:15	11.24	9.04	04:05	1.55	07:55	2.25	1.96	04:05	0.754	08:05	2.054	1.392	1.392	
1/15/2015	04:10	7.00	08:00	11.20	8.97	05:15	1.66	07:35	2.25	1.96	05:15	0.820	07:55	2.036	1.374	1.374	
1/16/2015	04:50	6.84	08:05	11.06	8.97	02:40	1.53	09:10	2.23	1.92	05:25	0.753	08:00	1.957	1.350	1.350	
1/17/2015	04:50	6.99	11:10	10.79	9.06	04:25	1.57	12:55	2.29	1.92	04:25	0.784	12:15	1.915	1.372	1.372	
1/18/2015	05:40	7.04	10:55	10.81	9.09	06:20	1.60	20:45	2.23	1.93	05:35	0.795	11:05	1.941	1.385	1.385	
1/19/2015	05:25	7.00	20:25	10.60	9.19	03:25	1.58	19:25	2.23	1.95	04:30	0.782	20:30	1.882	1.418	1.418	
1/20/2015	04:15	6.96	08:10	11.26	9.13	05:00	1.62	08:10	2.28	1.96	04:20	0.793	08:10	2.135	1.411	1.411	
1/21/2015	04:20	6.99	08:15	11.12	9.10	04:05	1.64	09:25	2.25	1.95	04:05	0.807	08:20	2.033	1.395	1.395	
1/22/2015	04:30	7.01	07:55	11.18	9.11	05:25	1.59	22:15	2.26	1.94	05:25	0.786	08:00	2.083	1.392	1.392	
1/23/2015	05:05	7.05	08:10	11.29	9.07	03:55	1.58	07:55	2.25	1.91	05:10	0.791	07:55	2.094	1.356	1.356	
1/24/2015	05:30	7.02	10:35	10.81	9.13	06:15	1.54	11:40	2.21	1.90	05:10	0.771	11:40	1.933	1.369	1.369	
1/25/2015	06:00	7.10	10:40	11.00	9.25	03:40	1.54	11:10	2.20	1.92	06:00	0.792	10:40	1.939	1.407	1.407	
1/26/2015	05:15	7.01	08:15	11.45	9.12	03:45	1.59	08:15	2.24	1.92	05:15	0.795	08:15	2.142	1.381	1.381	
1/27/2015	04:40	6.92	08:05	11.38	9.12	03:05	1.57	08:20	2.22	1.92	04:35	0.769	08:05	2.097	1.381	1.381	
1/28/2015	04:55	6.97	08:25	11.60	9.11	03:30	1.54	08:20	2.34	1.91	05:00	0.766	08:20	2.258	1.371	1.371	
1/29/2015	04:20	7.04	08:10	11.25	9.09	05:35	1.50	21:55	2.16	1.91	05:35	0.755	07:55	1.984	1.362	1.362	
1/30/2015	04:25	7.06	08:35	10.74	9.11	03:20	1.55	09:00	2.16	1.89	05:25	0.790	09:00	1.901	1.353	1.353	
1/31/2015	04:50	7.13	10:55	11.04	9.17	06:15	1.47	13:40	2.21	1.89	06:15	0.761	10:55	1.970	1.370	1.370	
2/1/2015	05:40	6.99	10:40	10.79	9.20	03:00	1.48	10:05	2.19	1.90	04:25	0.768	10:10	1.923	1.390	1.390	
2/2/2015	04:25	7.04	08:05	11.41	9.20	04:25	1.53	07:45	2.22	1.92	04:25	0.760	08:10	2.089	1.398	1.398	
2/3/2015	04:25	7.08	07:55	11.56	9.17	05:00	1.59	08:05	2.23	1.92	04:40	0.801	08:05	2.158	1.390	1.390	
2/4/2015	04:20	6.99	08:05	11.28	9.16	04:10	1.59	08:00	2.19	1.90	04:10	0.786	08:05	2.027	1.374	1.374	
2/5/2015	03:50	7.04	08:00	11.51	9.17	02:30	1.60	08:10	2.20	1.90	03:50	0.804	08:00	2.112	1.377	1.377	
2/6/2015	04:55	7.03	08:05	11.40	9.09	05:15	1.54	07:55	2.20	1.88	05:15	0.768	08:05	2.060	1.338	1.338	
2/7/2015	04:15	7.08	10:30	10.90	9.16	05:45	1.47	12:20	2.23	1.86	05:45	0.755	12:20	1.920	1.350	1.350	
2/8/2015	05:25	7.11	10:35	10.90	9.29	05:25	1.55	21:55	2.19	1.90	05:25	0.778	10:30	1.935	1.403	1.403	
2/9/2015	04:30	7.09	08:10	11.51	9.19	02:55	1.60	08:05	2.31	1.91	04:50	0.808	08:05	2.213	1.384	1.384	
2/10/2015	04:40	7.10	08:05	11.55	9.16	03:45	1.57	07:50	2.23	1.91	03:45	0.801	08:00	2.125	1.378	1.378	
2/11/2015	04:20	6.91	07:55	11.40	9.12	04:25	1.58	07:50	2.19	1.89	04:25	0.764	07:55	2.061	1.358	1.358	
2/12/2015	04:20	7.03	08:10	11.43	9.08	03:50	1.58	07:40	2.23	1.88	04:20	0.797	08:05	2.005	1.341	1.341	
2/13/2015	04:55	7.13	08:35	10.76	9.10	04:50	1.59	08:10	2.16	1.88	04:50	0.806	08:10	1.870	1.345	1.345	
2/14/2015	05:15	7.13	11:05	10.81	9.10	06:10	1.49	11:00	2.19	1.88	06:10	0.758	11:00	1.931	1.343	1.343	
2/15/2015	05:15	7.03	11:20	10.68	9.06	05:20	1.50	10:35	2.20	1.86	05:00	0.745	10:35	1.898	1.325	1.325	
2/16/2015	05:20	7.09	11:00	10.75	9.28	05:40	1.52	21:35	2.15	1.89	05:40	0.775	10:25	1.859	1.392	1.392	
2/17/2015	04:25	7.04	08:10	12.08	9.18	02:40	1.55	08:00	2.34	1.89	04:15	0.779	08:05	2.385	1.377	1.377	
2/18/2015	04:00	6.91	08:10	11.15	9.11	03:20	1.48	08:40	2.16	1.88	03:50	0.731	08:10	1.988	1.353	1.353	
2/19/2015	04:50	6.97	08:05	11.20	9.08	04:35	1.49	22:40	2.22	1.88	04:35	0.732	08:00	2.049	1.342	1.342	
2/20/2015	04:35	6.98	07:55	11.33	9.03	05:45	1.51	09:00	2.25	1.89	03:40	0.752	07:55	2.089	1.337	1.337	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	05:15	7.03	10:35	10.80	9.07	03:55	1.57	10:10	2.18	1.89	05:05	0.783	10:10	1.892	1.349	1.349	
2/22/2015	05:35	7.01	11:20	10.94	9.21	03:50	1.49	19:50	2.22	1.92	05:30	0.759	11:00	1.958	1.401	1.401	
2/23/2015	04:10	7.04	07:55	11.32	9.18	03:30	1.56	08:15	2.21	1.91	04:10	0.782	08:00	2.051	1.384	1.384	
2/24/2015	05:05	6.98	08:00	11.45	9.11	03:55	1.56	08:05	2.26	1.90	03:55	0.777	08:05	2.159	1.362	1.362	
2/25/2015	03:50	6.95	08:05	11.34	9.11	03:55	1.53	07:40	2.23	1.89	03:55	0.747	08:00	2.082	1.360	1.360	
2/26/2015	05:10	6.94	08:00	11.42	9.13	04:35	1.54	08:00	2.26	1.90	05:05	0.759	08:00	2.159	1.370	1.370	
2/27/2015	04:25	6.98	07:55	11.33	9.08	03:30	1.58	07:45	2.23	1.90	03:50	0.789	07:50	2.074	1.352	1.352	
2/28/2015	05:15	6.99	10:35	10.76	9.10	05:30	1.55	10:30	2.21	1.90	05:25	0.767	10:30	1.922	1.361	1.361	
3/1/2015	05:25	6.98	11:25	10.83	9.23	03:20	1.56	11:35	2.20	1.92	05:30	0.785	11:35	1.943	1.405	1.405	
3/2/2015	03:20	7.14	08:10	11.26	9.26	03:55	1.59	08:05	2.26	1.92	03:20	0.808	08:05	2.111	1.411	1.411	
3/3/2015	04:30	7.06	07:50	11.58	9.23	04:00	1.60	08:20	2.33	1.90	04:00	0.806	08:20	2.162	1.391	1.391	
3/4/2015	03:50	7.08	08:10	11.33	9.17	03:25	1.51	08:20	2.31	1.91	03:30	0.762	08:20	2.168	1.382	1.382	
3/5/2015	05:15	7.01	07:55	11.35	9.15	02:50	1.57	08:05	2.26	1.91	04:55	0.796	08:05	2.134	1.378	1.378	
3/6/2015	03:50	7.04	08:05	11.47	9.06	03:40	1.48	07:55	2.23	1.87	03:40	0.741	08:05	2.123	1.332	1.332	
3/7/2015	04:50	6.95	10:15	10.77	9.09	06:50	1.55	10:50	2.17	1.87	04:40	0.759	10:50	1.876	1.342	1.342	
3/8/2015	04:55	6.99	21:20	10.71	9.27	06:25	1.52	10:50	2.16	1.90	04:30	0.758	20:40	1.868	1.401	1.401	
3/9/2015	04:25	7.02	08:10	11.11	9.14	03:10	1.58	07:55	2.28	1.91	04:50	0.795	07:55	2.053	1.374	1.374	
3/10/2015	04:30	6.86	08:05	11.04	9.06	03:40	1.52	22:30	2.19	1.90	04:25	0.742	08:05	1.953	1.356	1.356	
3/11/2015	04:50	6.86	08:10	10.96	9.01	03:55	1.52	08:05	2.18	1.89	03:55	0.738	08:05	1.959	1.334	1.334	
3/12/2015	04:25	6.86	08:10	11.29	9.05	04:20	1.56	08:10	2.20	1.90	04:20	0.750	08:10	2.068	1.353	1.353	
3/13/2015	04:40	6.91	08:15	11.00	8.96	05:05	1.50	08:15	2.19	1.90	05:05	0.731	08:15	1.988	1.331	1.331	
3/14/2015	05:20	6.87	10:20	10.74	8.92	05:25	1.56	14:30	2.23	1.93	05:25	0.749	10:20	1.871	1.349	1.349	
3/15/2015	05:00	6.91	10:50	10.63	9.05	07:15	1.54	11:05	2.22	1.93	05:05	0.779	11:05	1.901	1.375	1.375	
3/16/2015	04:20	6.86	08:10	11.14	9.02	04:10	1.54	08:05	2.19	1.93	04:10	0.738	08:05	1.988	1.365	1.365	
3/17/2015	04:40	6.92	08:10	11.01	9.04	04:50	1.53	08:25	2.17	1.90	04:40	0.743	08:25	1.960	1.349	1.349	
3/18/2015	04:25	6.82	08:15	11.08	9.05	03:05	1.58	08:50	2.23	1.91	04:20	0.763	08:50	2.029	1.355	1.355	
3/19/2015	03:50	6.89	07:55	11.35	9.04	04:25	1.56	08:25	2.20	1.91	04:25	0.754	08:10	2.068	1.357	1.357	
3/20/2015	04:25	6.90	08:00	10.90	8.99	04:10	1.58	08:40	2.17	1.92	04:30	0.765	08:10	1.942	1.349	1.349	
3/21/2015	05:40	6.98	11:00	10.74	9.00	05:35	1.57	12:45	2.21	1.90	05:35	0.770	11:25	1.829	1.342	1.342	
3/22/2015	04:45	7.00	10:25	10.74	9.14	03:45	1.58	22:30	2.19	1.91	05:00	0.804	11:25	1.895	1.379	1.379	
3/23/2015	04:40	6.91	08:20	11.03	9.11	04:20	1.56	22:55	2.25	1.91	04:25	0.760	08:20	2.012	1.369	1.369	
3/24/2015	04:20	6.87	08:05	11.30	9.04	04:55	1.49	08:10	2.29	1.89	04:55	0.721	08:10	2.158	1.347	1.347	
3/25/2015	05:00	6.83	08:10	11.21	9.04	04:05	1.55	08:05	2.20	1.89	05:00	0.741	08:05	2.049	1.344	1.344	
3/26/2015	05:05	6.95	08:05	11.20	9.07	04:50	1.59	08:15	2.21	1.92	04:50	0.775	08:15	2.037	1.369	1.369	
3/27/2015	04:20	6.96	19:30	11.39	9.04	05:00	1.57	19:30	2.25	1.91	04:45	0.767	19:30	2.142	1.357	1.357	
3/28/2015	04:10	6.94	09:00	12.01	9.04	02:35	1.56	09:00	2.33	1.92	04:05	0.779	09:00	2.365	1.367	1.367	
3/29/2015	06:00	6.93	14:35	11.81	9.08	05:50	1.58	14:35	2.36	1.94	05:50	0.770	14:35	2.356	1.391	1.391	
3/30/2015	03:50	6.81	08:05	10.79	8.87	03:30	1.56	11:10	2.25	1.96	03:30	0.744	08:15	1.903	1.353	1.353	
3/31/2015	05:00	6.64	08:10	10.85	8.75	05:00	1.54	21:20	2.19	1.95	05:00	0.706	08:05	1.909	1.329	1.329	
4/1/2015	04:35	6.61	08:10	10.95	8.74	03:15	1.58	08:10	2.24	1.94	04:20	0.726	08:10	2.023	1.318	1.318	
4/2/2015	04:20	6.66	08:05	10.69	8.69	05:15	1.52	20:30	2.21	1.93	05:15	0.706	07:55	1.861	1.298	1.298	
4/3/2015	05:10	6.66	09:20	10.11	8.67	05:10	1.49	08:50	2.15	1.93	05:10	0.684	08:50	1.740	1.292	1.292	
4/4/2015	05:30	6.63	10:50	10.25	8.61	05:25	1.48	12:00	2.22	1.91	05:25	0.677	10:00	1.743	1.271	1.271	
4/5/2015	05:55	6.68	10:35	10.34	8.65	05:05	1.49	19:35	2.25	1.92	05:05	0.689	10:25	1.784	1.289	1.288	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			122.879
Avg	9.07	1.91	1.365

Site Commentary

Site Information

S1	
Pipe Dimensions	22.63" x 22.50"
Silt Level	0.00"

Overview

Site S1 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.78	2.69	1.583
Minimum	3.36	1.69	0.281
Maximum	12.70	3.38	3.485
Time of Minimum	3/25/2015 5:40 AM	3/25/2015 5:40 AM	3/25/2015 5:40 AM
Time of Maximum	2/9/2015 9:25 AM	2/9/2015 9:15 AM	2/9/2015 9:15 AM

Data Quality

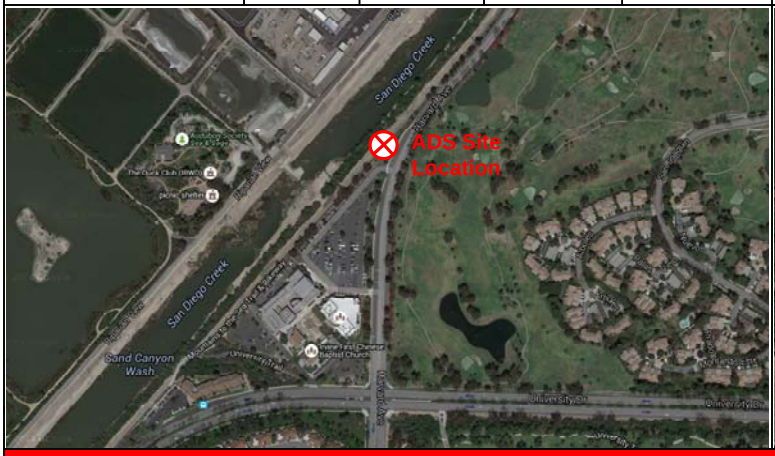
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: S1	**Install Date:** 12/30/14	**Monitor Type**	Peak Doppler
Address/Location: Harvard (Located off the bike path)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH059S019
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	22.50 "
		Pipe Width:	22.50 "





Investigation Information:

Date/Time of Investigation:	12/30/14 @ 1500
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.48 fps
Silt:	0.00 Inches

Manhole Information:

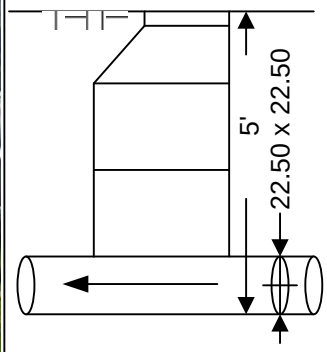
Manhole Depth:	5'			
Manhole Material / Condition	Precast/OK			
Pipe Material / Condition:	VCP/Good			
Land Use:	Residential [X]	Commercial [ ]	Industrial [ ]	Trunk [ ]
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0	

Safety Notes:

2 man crew required and one blower is to be operated at all times.

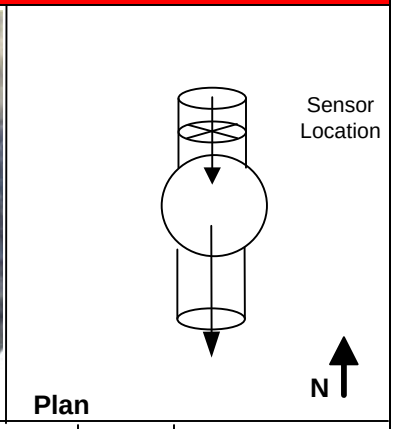
Other Information:





Cross Section





Plan

Installation Information		Backup	Yes	No	?	Distance
Installation Type:	Standard	Trunk	[ ]	[x]	[ ]	
Sensors Devices:	Ultrasonic / Pressure/Velocity	Lift / Pump Station	[ ]	[X]	[ ]	
Surcharge Height:	0	WWTP	[ ]	[X]	[ ]	
Rain Gauge Zone:		Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

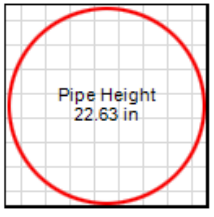
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

S1

Flow Monitor

S1

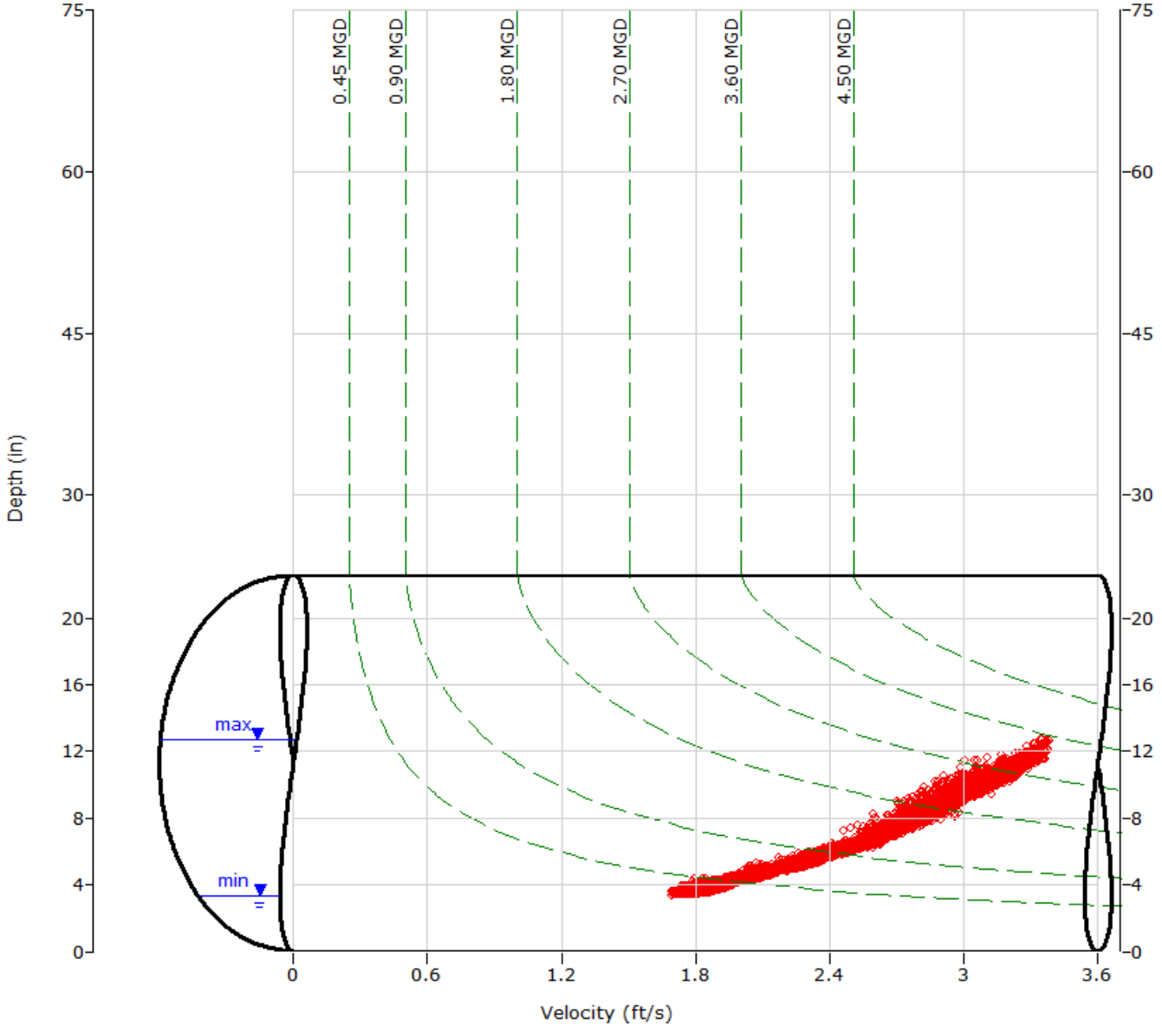


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

S1

Flow Monitor

S1

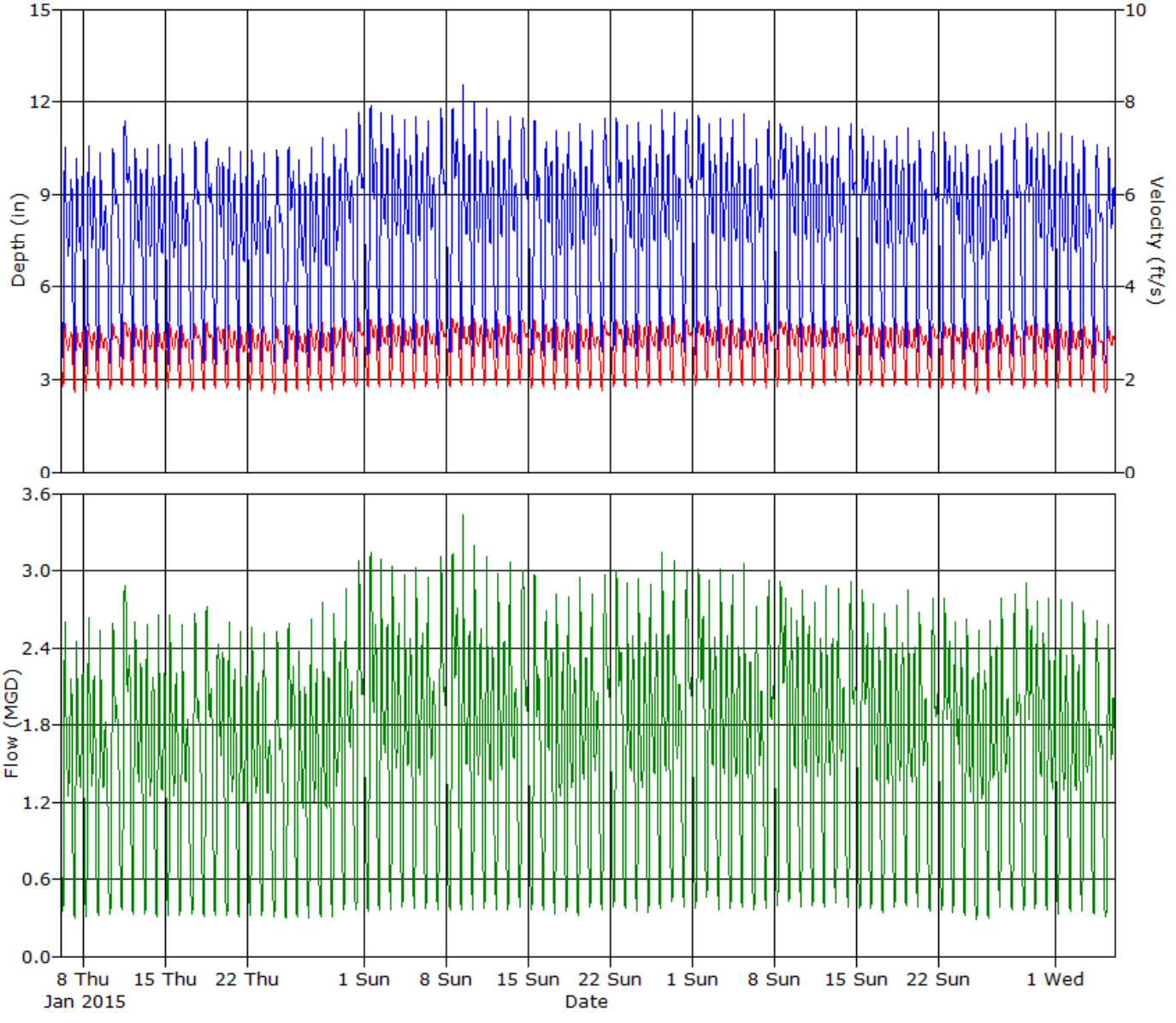
Pipe Height
22.63 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

S1, Pipe Height: 22.63 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:40	3.66	09:25	10.73	7.42	05:40	1.83	09:30	3.22	2.66	05:40	0.344	09:30	2.700	1.447	1.447	
1/7/2015	05:45	3.40	09:35	10.24	7.36	05:45	1.71	09:15	3.17	2.63	05:45	0.289	09:25	2.496	1.437	1.437	
1/8/2015	05:30	3.42	09:35	10.67	7.50	05:25	1.74	09:40	3.23	2.67	05:30	0.296	09:40	2.681	1.490	1.490	
1/9/2015	05:40	3.46	09:30	10.51	7.22	05:45	1.80	09:25	3.20	2.64	05:45	0.313	09:30	2.613	1.388	1.388	
1/10/2015	06:10	3.55	12:05	10.61	7.50	06:25	1.79	12:20	3.21	2.65	06:30	0.323	12:05	2.649	1.497	1.497	
1/11/2015	06:30	3.67	12:15	11.46	8.02	06:40	1.88	11:30	3.28	2.74	06:35	0.356	11:50	2.952	1.698	1.698	
1/12/2015	05:30	3.47	09:35	10.61	7.56	05:30	1.82	09:30	3.22	2.69	05:30	0.317	09:30	2.656	1.511	1.511	
1/13/2015	05:45	3.52	09:15	10.68	7.36	05:20	1.83	09:05	3.23	2.65	05:30	0.327	09:15	2.688	1.433	1.433	
1/14/2015	05:45	3.44	09:25	10.78	7.44	05:50	1.76	09:30	3.24	2.66	05:45	0.303	09:30	2.728	1.469	1.469	
1/15/2015	05:35	3.45	09:20	10.83	7.40	05:40	1.79	09:15	3.26	2.66	05:40	0.310	09:15	2.759	1.451	1.451	
1/16/2015	05:45	3.46	09:30	10.62	7.34	05:35	1.80	09:40	3.20	2.65	05:40	0.313	09:30	2.643	1.423	1.423	
1/17/2015	05:45	3.62	11:55	10.89	7.58	05:40	1.73	12:15	3.22	2.64	05:45	0.321	12:15	2.710	1.518	1.518	
1/18/2015	06:25	3.45	12:10	10.86	7.61	06:25	1.76	11:40	3.26	2.66	06:25	0.305	11:40	2.777	1.542	1.542	
1/19/2015	05:50	3.44	11:50	10.24	7.60	05:45	1.77	11:45	3.15	2.67	05:50	0.306	11:45	2.478	1.532	1.532	
1/20/2015	05:35	3.46	09:25	10.66	7.38	05:50	1.79	09:30	3.22	2.65	05:35	0.312	09:30	2.674	1.445	1.445	
1/21/2015	05:45	3.47	09:20	10.45	7.31	05:10	1.77	09:35	3.17	2.64	05:40	0.312	09:25	2.567	1.417	1.417	
1/22/2015	05:40	3.55	09:15	10.54	7.34	05:30	1.75	09:05	3.20	2.62	05:30	0.315	09:05	2.610	1.414	1.414	
1/23/2015	05:45	3.58	09:25	10.48	7.16	05:45	1.74	09:25	3.21	2.59	05:45	0.317	09:25	2.609	1.350	1.350	
1/24/2015	06:35	3.54	11:50	10.54	7.29	06:15	1.69	12:05	3.17	2.58	06:35	0.305	11:45	2.586	1.401	1.401	
1/25/2015	06:15	3.45	12:20	10.57	7.60	06:40	1.70	12:35	3.19	2.64	06:40	0.297	12:35	2.608	1.537	1.537	
1/26/2015	05:45	3.48	09:30	10.22	7.15	05:55	1.74	09:20	3.13	2.60	05:55	0.306	09:30	2.461	1.356	1.356	
1/27/2015	05:30	3.39	09:15	10.74	7.26	05:40	1.73	09:15	3.25	2.63	05:30	0.291	09:15	2.729	1.408	1.408	
1/28/2015	05:35	3.46	09:20	10.97	7.30	05:35	1.75	09:30	3.26	2.63	05:35	0.304	09:25	2.807	1.417	1.417	
1/29/2015	05:50	3.44	09:15	10.88	7.48	05:20	1.78	09:05	3.24	2.66	05:30	0.309	09:20	2.759	1.481	1.481	
1/30/2015	05:45	3.73	09:35	11.31	7.91	05:45	1.85	09:25	3.29	2.72	05:45	0.359	09:35	2.925	1.619	1.619	
1/31/2015	06:25	3.72	11:55	11.70	8.13	06:25	1.84	11:25	3.35	2.74	06:25	0.355	11:25	3.122	1.727	1.727	
2/1/2015	06:45	3.67	12:00	11.96	8.32	06:25	1.83	10:55	3.32	2.76	06:50	0.347	12:05	3.175	1.806	1.806	
2/2/2015	05:45	3.74	09:40	11.92	8.13	05:35	1.85	09:35	3.34	2.75	05:45	0.361	09:35	3.200	1.714	1.714	
2/3/2015	05:40	3.68	09:20	11.71	8.05	05:45	1.84	09:25	3.32	2.74	05:45	0.348	09:25	3.114	1.676	1.676	
2/4/2015	05:30	3.86	09:30	11.57	8.01	04:40	1.83	09:30	3.31	2.72	05:50	0.374	09:30	3.059	1.655	1.655	
2/5/2015	05:45	3.80	09:25	11.70	7.95	05:45	1.82	09:10	3.33	2.72	05:45	0.362	09:15	3.113	1.643	1.643	
2/6/2015	05:20	3.78	09:20	11.54	7.89	05:50	1.84	09:30	3.29	2.71	05:50	0.364	09:30	3.028	1.608	1.608	
2/7/2015	06:35	3.77	12:25	11.84	8.14	06:20	1.80	12:35	3.32	2.73	06:20	0.358	12:25	3.140	1.723	1.723	
2/8/2015	06:40	3.77	12:00	11.91	8.43	06:20	1.82	12:35	3.32	2.78	06:25	0.360	11:45	3.175	1.848	1.848	
2/9/2015	05:45	3.67	09:25	12.70	8.18	05:40	1.85	09:15	3.38	2.77	05:45	0.350	09:15	3.485	1.743	1.743	
2/10/2015	05:30	3.69	09:05	12.49	8.03	05:45	1.85	08:55	3.36	2.76	05:35	0.355	09:05	3.405	1.686	1.686	
2/11/2015	05:50	3.76	08:55	12.03	7.96	05:50	1.88	09:10	3.34	2.74	05:50	0.368	08:55	3.232	1.653	1.653	
2/12/2015	05:40	3.69	09:20	11.65	7.95	05:30	1.88	09:20	3.35	2.74	05:30	0.358	09:20	3.116	1.649	1.649	
2/13/2015	05:45	3.73	09:30	11.57	7.95	05:35	1.83	09:40	3.36	2.74	05:45	0.355	09:40	3.102	1.645	1.645	
2/14/2015	06:35	3.78	12:05	11.59	8.08	06:25	1.90	12:25	3.31	2.75	06:25	0.375	12:05	3.059	1.706	1.706	
2/15/2015	06:40	3.76	12:15	11.50	8.01	06:15	1.76	11:55	3.31	2.71	06:15	0.351	12:15	3.028	1.669	1.669	
2/16/2015	06:20	3.67	11:20	10.79	7.91	06:10	1.82	11:10	3.25	2.71	06:00	0.345	11:15	2.728	1.636	1.636	
2/17/2015	05:45	3.61	09:20	11.26	7.56	05:35	1.77	09:20	3.29	2.65	05:35	0.326	09:20	2.936	1.502	1.502	
2/18/2015	05:35	3.69	09:35	11.10	7.66	05:35	1.80	09:35	3.25	2.68	05:35	0.343	09:35	2.850	1.531	1.531	
2/19/2015	05:50	3.50	09:15	11.47	7.67	05:30	1.76	09:05	3.33	2.68	05:40	0.313	09:15	3.037	1.542	1.542	
2/20/2015	05:55	3.93	09:20	11.21	7.76	05:45	1.77	09:15	3.27	2.66	05:45	0.370	09:15	2.897	1.537	1.537	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	06:20	3.88	12:10	11.54	8.15	06:10	1.74	12:20	3.27	2.69	06:35	0.357	12:10	3.004	1.701	1.701	
2/22/2015	06:40	3.90	11:35	11.52	8.34	06:35	1.84	11:20	3.33	2.76	06:35	0.379	11:20	3.056	1.791	1.791	
2/23/2015	05:00	3.76	09:20	11.42	7.91	05:00	1.83	09:25	3.29	2.72	05:00	0.358	09:25	2.990	1.630	1.630	
2/24/2015	05:45	3.69	09:20	11.60	7.74	05:25	1.81	09:00	3.30	2.70	05:50	0.348	09:20	3.045	1.573	1.573	
2/25/2015	05:40	3.58	09:20	11.41	7.87	05:40	1.83	09:10	3.28	2.73	05:40	0.333	09:10	2.975	1.624	1.624	
2/26/2015	05:35	3.71	09:15	12.08	8.01	05:20	1.85	09:15	3.38	2.75	05:30	0.358	09:15	3.293	1.671	1.671	
2/27/2015	05:40	4.04	09:15	11.71	7.98	05:35	1.91	09:30	3.33	2.73	05:40	0.415	09:25	3.114	1.638	1.638	
2/28/2015	06:25	3.87	11:55	11.56	8.22	06:40	1.85	12:10	3.31	2.76	06:25	0.378	11:45	3.045	1.749	1.749	
3/1/2015	06:35	3.78	11:50	11.71	8.40	06:10	1.87	11:35	3.31	2.78	06:35	0.369	11:50	3.078	1.828	1.828	
3/2/2015	05:30	4.13	09:15	11.50	8.11	05:30	1.98	09:30	3.29	2.76	05:30	0.443	09:20	2.989	1.696	1.696	
3/3/2015	05:45	3.68	09:30	11.62	7.93	05:40	1.82	09:35	3.33	2.72	05:45	0.347	09:35	3.086	1.637	1.637	
3/4/2015	05:25	3.78	09:25	11.51	7.90	05:10	1.86	09:25	3.33	2.73	05:30	0.369	09:25	3.050	1.626	1.626	
3/5/2015	05:45	3.82	09:05	11.88	7.88	05:55	1.86	09:00	3.35	2.72	05:45	0.374	09:05	3.198	1.611	1.611	
3/6/2015	05:35	3.74	09:45	10.98	7.84	05:40	1.86	09:45	3.27	2.71	05:40	0.361	09:45	2.820	1.595	1.595	
3/7/2015	06:30	3.79	11:20	11.47	8.06	06:35	1.80	12:10	3.26	2.70	06:35	0.359	11:05	2.947	1.664	1.664	
3/8/2015	06:15	3.90	11:40	11.31	8.50	05:55	1.84	11:45	3.28	2.79	06:05	0.381	11:45	2.945	1.861	1.861	
3/9/2015	05:45	4.05	09:35	11.00	8.04	05:50	1.91	22:15	3.21	2.74	05:45	0.416	09:35	2.770	1.662	1.662	
3/10/2015	05:45	3.85	09:25	11.46	7.91	05:10	1.86	09:30	3.26	2.72	05:45	0.378	09:30	2.973	1.621	1.621	
3/11/2015	05:35	4.05	09:35	11.09	7.92	04:00	1.79	09:30	3.24	2.70	05:40	0.392	09:30	2.829	1.611	1.611	
3/12/2015	05:45	3.82	09:20	11.41	7.90	05:15	1.88	09:25	3.29	2.72	05:45	0.378	09:20	2.978	1.616	1.616	
3/13/2015	05:35	3.94	09:35	11.42	7.87	06:10	1.92	09:30	3.30	2.72	05:35	0.403	09:30	2.998	1.599	1.599	
3/14/2015	06:30	3.82	11:15	11.33	8.11	06:05	1.87	11:05	3.27	2.74	06:30	0.376	11:05	2.939	1.702	1.702	
3/15/2015	06:40	3.78	11:50	11.20	8.18	06:30	1.84	12:20	3.26	2.75	06:30	0.365	12:15	2.881	1.740	1.740	
3/16/2015	05:45	3.73	09:25	10.99	7.75	05:50	1.85	09:35	3.24	2.70	05:50	0.360	09:25	2.798	1.562	1.562	
3/17/2015	05:50	3.64	09:35	10.87	7.67	06:00	1.81	09:30	3.22	2.68	05:50	0.340	09:30	2.738	1.542	1.542	
3/18/2015	05:40	3.83	09:30	11.03	7.77	05:10	1.86	09:30	3.24	2.70	05:45	0.375	09:30	2.816	1.570	1.570	
3/19/2015	05:35	3.89	09:20	11.23	7.74	05:45	1.87	09:45	3.28	2.69	05:40	0.386	09:20	2.884	1.557	1.557	
3/20/2015	05:45	3.81	09:25	10.89	7.70	05:20	1.83	09:40	3.22	2.68	05:45	0.366	09:25	2.745	1.534	1.534	
3/21/2015	06:20	3.71	11:50	11.09	7.87	06:10	1.81	11:50	3.25	2.69	06:10	0.348	11:50	2.843	1.612	1.612	
3/22/2015	06:35	3.74	11:40	11.12	8.00	06:35	1.80	11:25	3.25	2.71	06:35	0.351	11:25	2.840	1.668	1.668	
3/23/2015	05:40	3.63	09:30	10.76	7.78	05:15	1.82	09:45	3.19	2.70	05:30	0.339	09:30	2.668	1.578	1.578	
3/24/2015	05:35	3.52	09:20	10.76	7.47	05:35	1.79	09:25	3.21	2.65	05:35	0.319	09:25	2.700	1.469	1.469	
3/25/2015	05:40	3.36	09:30	10.73	7.26	05:40	1.69	09:30	3.15	2.61	05:40	0.281	09:30	2.643	1.399	1.399	
3/26/2015	05:20	3.43	09:15	10.64	7.61	05:20	1.72	09:15	3.21	2.66	05:20	0.295	09:15	2.658	1.524	1.524	
3/27/2015	05:40	3.80	09:25	11.17	7.70	05:40	1.89	09:35	3.27	2.69	05:40	0.375	09:30	2.879	1.536	1.536	
3/28/2015	06:10	3.70	11:35	11.19	7.92	06:25	1.85	11:40	3.25	2.70	06:15	0.355	11:40	2.872	1.629	1.629	
3/29/2015	06:40	3.80	11:45	11.37	8.13	06:05	1.81	11:45	3.27	2.72	06:40	0.360	11:45	2.953	1.713	1.713	
3/30/2015	06:00	3.84	09:20	11.11	7.91	06:05	1.82	09:35	3.25	2.69	06:05	0.367	09:35	2.842	1.607	1.607	
3/31/2015	05:40	3.73	09:20	11.19	7.66	05:40	1.85	09:20	3.27	2.68	05:40	0.357	09:20	2.893	1.530	1.530	
4/1/2015	05:35	3.61	09:35	11.11	7.58	05:45	1.79	09:20	3.28	2.66	05:45	0.332	09:20	2.843	1.507	1.507	
4/2/2015	05:20	3.65	09:20	11.05	7.61	05:25	1.84	09:25	3.26	2.67	05:20	0.344	09:25	2.833	1.517	1.517	
4/3/2015	05:45	3.65	09:30	10.88	7.51	05:40	1.81	09:15	3.25	2.66	05:40	0.341	09:30	2.768	1.472	1.472	
4/4/2015	06:25	3.64	11:30	10.73	7.49	06:00	1.73	11:20	3.19	2.62	06:05	0.324	11:30	2.655	1.472	1.472	
4/5/2015	06:30	3.50	11:40	10.62	7.44	06:20	1.71	11:45	3.17	2.60	06:35	0.304	11:40	2.627	1.452	1.451	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			142.473
Avg	7.78	2.69	1.583

Site Commentary

Site Information

S2	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site S2 functioned under normal conditions during the period Tuesday, January 06, 2015 to Sunday, April 05, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows entered into backwater conditions when flows reached 10 inches or greater.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Tuesday, January 06, 2015 to Sunday, April 05, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.58	3.71	1.738
Minimum	3.87	2.19	0.469
Maximum	15.54	4.29	3.098
Time of Minimum	4/1/2015 5:00 AM	3/1/2015 5:40 AM	3/28/2015 5:55 AM
Time of Maximum	3/5/2015 9:25 AM	3/5/2015 10:00 PM	1/27/2015 8:55 AM

Data Quality

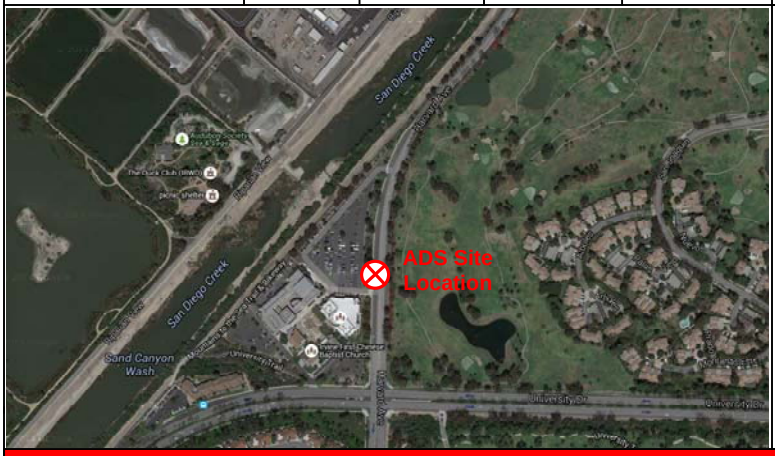
Data uptime observed during the Tuesday, January 06, 2015 to the Sunday, April 05, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

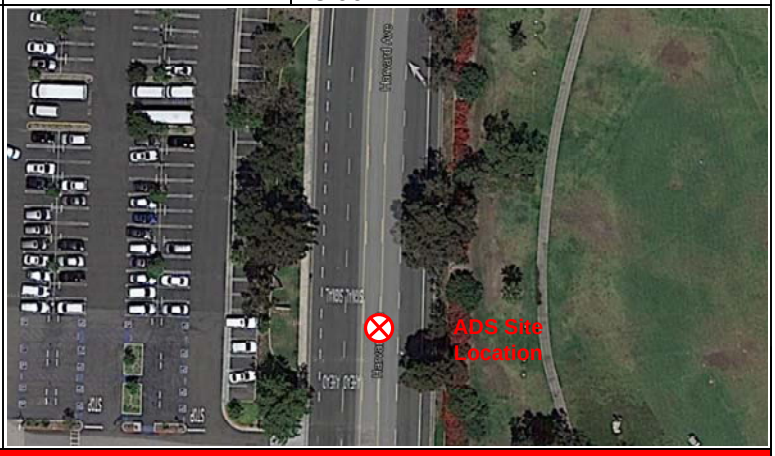
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Master Plan TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: S2	**Install Date:** 12/30/14	**Monitor Type**	Peak Doppler
Address/Location: 18700 Harvard Ave		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH059S092
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	12/30/14 @ 1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	8.75 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.48 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

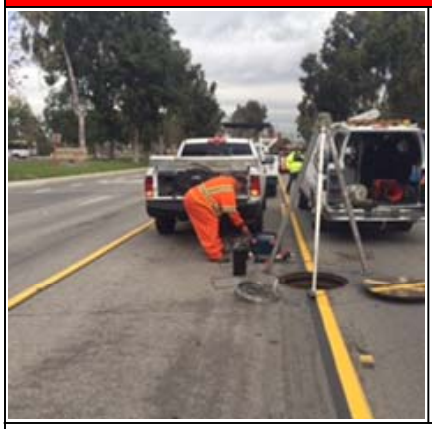
Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

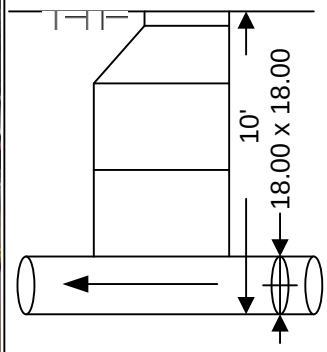
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

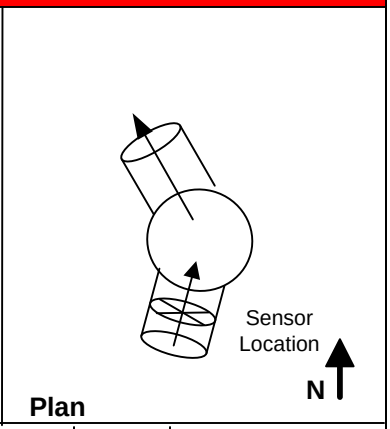
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[x]	[ ]	
WWTP	[ ]	[x]	[ ]	
Other	[ ]	[x]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

S2

Flow Monitor

S2

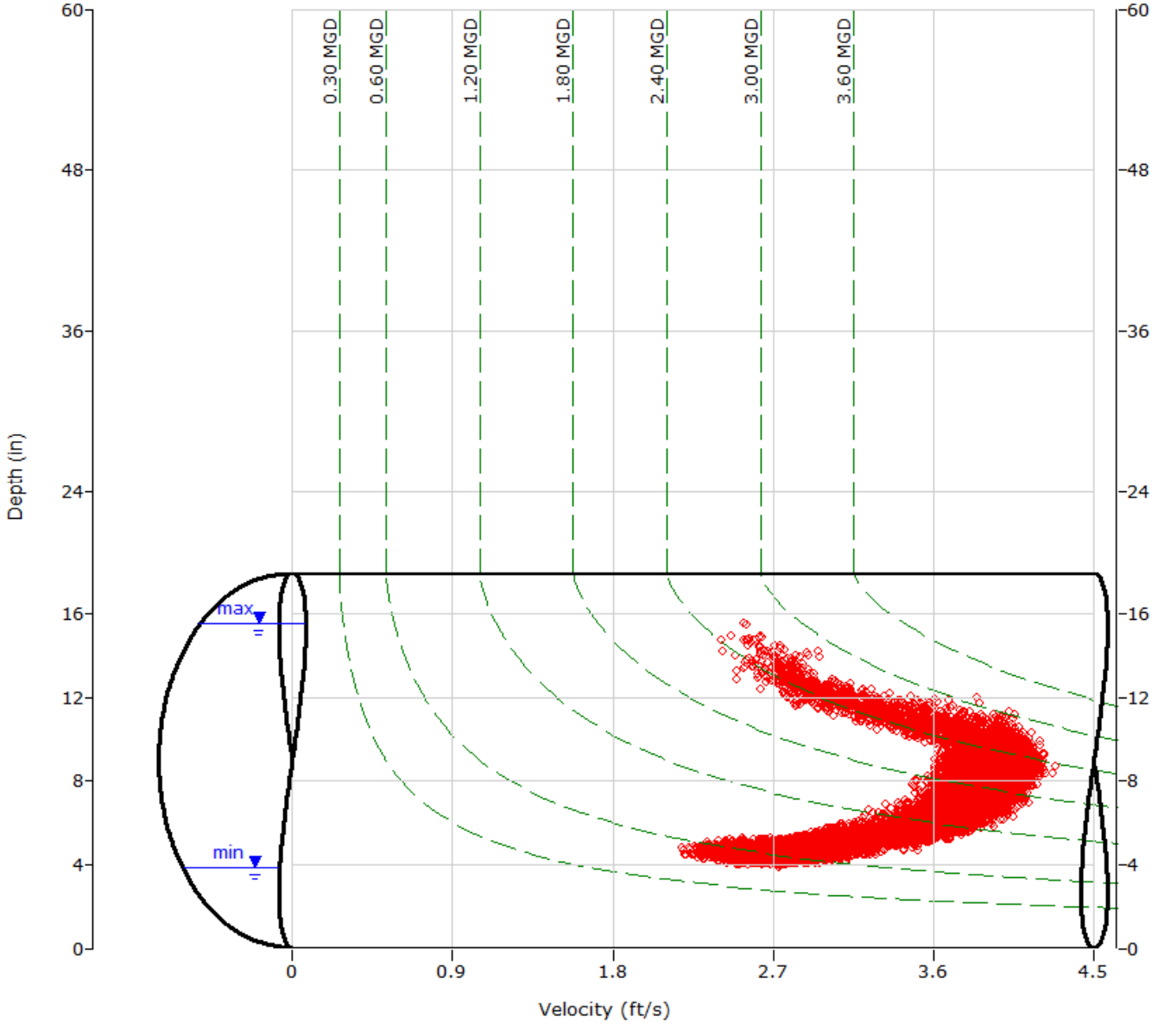
Pipe Height
18.00 in

Report Period

1/6/2015
To
4/5/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



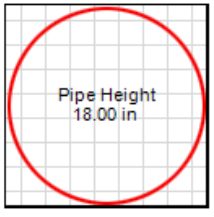
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

S2

Flow Monitor

S2

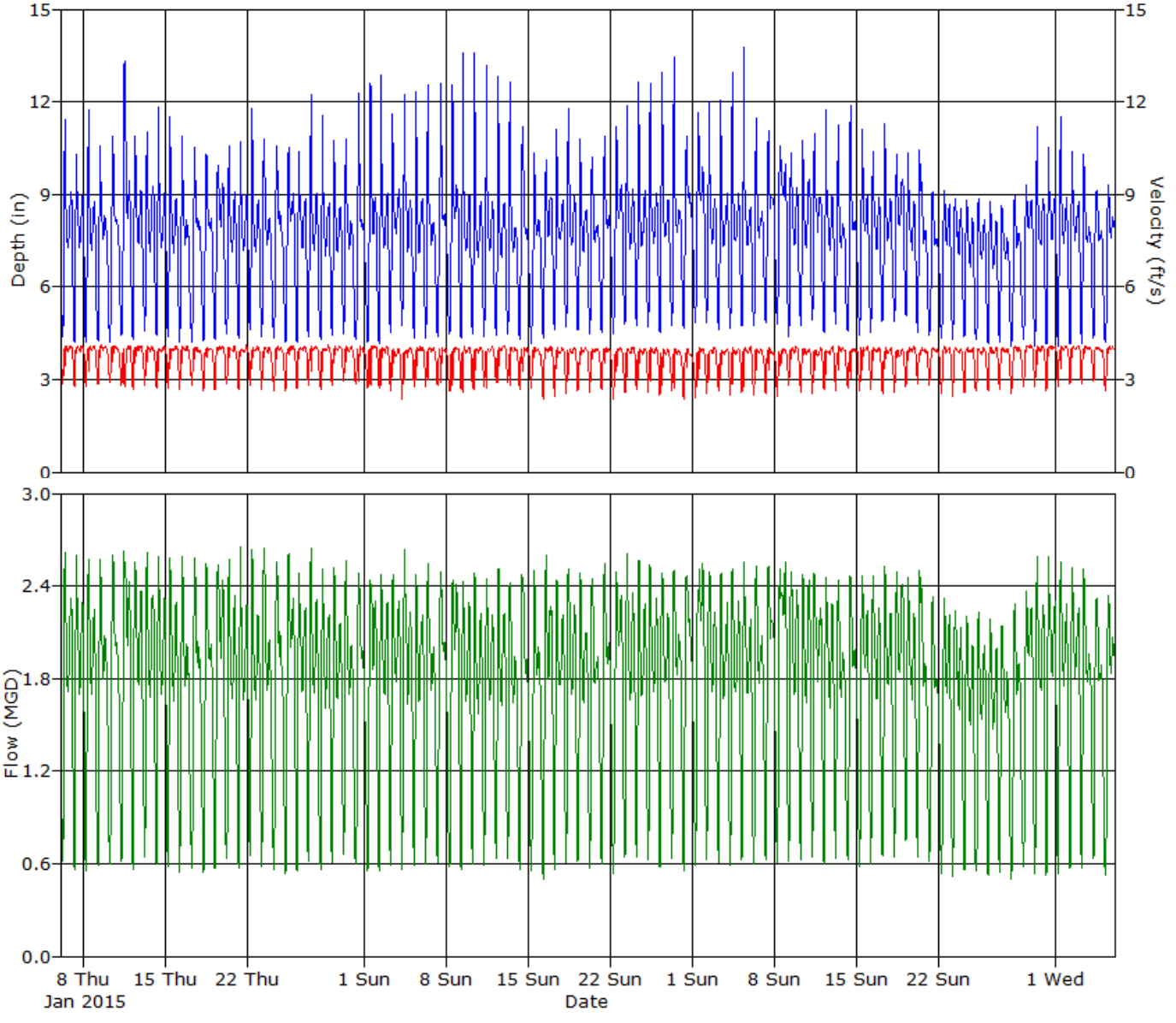


Report Period

1/6/2015
To
4/5/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 1/6/2015 - 4/5/2015

S2, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/6/2015	05:10	4.29	09:15	12.61	7.63	05:35	2.70	23:15	4.15	3.80	05:35	0.576	08:50	2.936	1.794	1.794	
1/7/2015	05:10	3.98	09:35	11.10	7.59	05:05	2.61	12:00	4.27	3.80	05:10	0.495	09:30	2.723	1.797	1.797	
1/8/2015	05:00	4.06	09:20	12.86	7.56	05:30	2.65	11:45	4.16	3.78	05:00	0.527	10:10	2.822	1.765	1.765	
1/9/2015	05:20	4.15	09:40	11.69	7.50	05:05	2.64	11:45	4.18	3.82	05:30	0.531	09:55	2.866	1.766	1.766	
1/10/2015	05:10	4.19	12:00	12.61	7.42	05:20	2.72	14:55	4.19	3.76	05:20	0.558	13:10	3.040	1.719	1.719	
1/11/2015	05:55	4.19	11:45	14.47	8.10	05:20	2.57	22:35	4.22	3.62	05:45	0.541	11:05	2.727	1.822	1.822	
1/12/2015	04:45	4.13	09:40	11.96	7.66	04:55	2.58	21:40	4.15	3.78	04:55	0.522	08:50	2.945	1.805	1.805	
1/13/2015	04:50	4.32	09:20	12.15	7.71	04:30	2.63	18:30	4.13	3.78	04:55	0.583	09:10	2.864	1.810	1.810	
1/14/2015	05:05	4.35	09:25	12.64	7.71	05:00	2.62	10:00	4.15	3.73	05:00	0.567	10:00	2.797	1.788	1.788	
1/15/2015	05:20	4.30	09:25	12.40	7.60	05:00	2.58	08:45	4.20	3.75	05:00	0.549	08:55	2.828	1.765	1.765	
1/16/2015	05:10	4.06	09:40	12.17	7.48	05:15	2.54	19:00	4.19	3.76	05:15	0.500	09:30	2.813	1.734	1.734	
1/17/2015	05:45	4.10	11:10	11.20	7.33	05:00	2.74	12:45	4.17	3.74	05:30	0.561	11:10	2.939	1.688	1.688	
1/18/2015	04:55	4.18	12:00	11.31	7.37	05:55	2.56	19:55	4.16	3.69	05:55	0.522	11:20	2.786	1.681	1.681	
1/19/2015	04:35	4.21	11:55	10.48	7.60	04:55	2.54	10:45	4.21	3.77	05:00	0.534	11:55	2.739	1.794	1.794	
1/20/2015	05:25	4.34	09:25	11.61	7.52	04:10	2.73	21:40	4.18	3.79	05:25	0.583	09:10	2.711	1.758	1.758	
1/21/2015	04:55	4.22	09:05	11.74	7.55	05:20	2.49	19:35	4.17	3.75	04:55	0.530	09:05	3.044	1.755	1.755	
1/22/2015	04:50	4.46	09:05	12.71	7.65	04:35	2.58	18:50	4.18	3.77	04:35	0.584	09:00	2.805	1.779	1.779	
1/23/2015	05:05	4.29	09:55	11.93	7.51	05:40	2.53	08:45	4.12	3.75	05:10	0.545	09:55	2.896	1.738	1.738	
1/24/2015	06:10	4.27	11:55	11.87	7.49	06:15	2.45	13:05	4.15	3.71	06:15	0.509	10:55	3.028	1.724	1.724	
1/25/2015	05:20	4.14	12:15	12.02	7.57	05:45	2.54	19:45	4.21	3.73	05:45	0.511	11:15	2.953	1.765	1.765	
1/26/2015	04:45	4.05	09:30	11.03	7.50	04:55	2.57	20:55	4.13	3.77	04:55	0.503	09:00	2.685	1.752	1.752	
1/27/2015	04:35	4.19	09:10	14.19	7.62	05:20	2.64	11:10	4.14	3.78	04:40	0.542	08:55	3.098	1.777	1.777	
1/28/2015	05:30	4.16	09:25	12.71	7.51	05:00	2.60	21:25	4.22	3.75	05:30	0.524	09:20	2.645	1.734	1.734	
1/29/2015	05:05	4.24	09:30	11.62	7.51	05:20	2.63	12:20	4.14	3.79	05:20	0.549	09:30	2.702	1.756	1.756	
1/30/2015	04:55	4.44	09:20	11.49	7.44	05:10	2.80	11:45	4.19	3.80	05:10	0.626	09:05	2.804	1.728	1.728	
1/31/2015	05:25	4.19	12:00	12.94	7.52	05:40	2.67	09:50	4.17	3.70	05:40	0.545	12:35	2.635	1.699	1.699	
2/1/2015	06:10	4.01	11:50	13.22	7.82	05:35	2.61	14:15	4.19	3.63	06:10	0.509	10:50	2.716	1.746	1.746	
2/2/2015	04:55	4.04	09:50	13.84	7.73	05:30	2.58	20:05	4.16	3.72	04:45	0.506	10:40	2.677	1.770	1.770	
2/3/2015	05:15	4.40	09:20	12.02	7.82	04:25	2.45	08:35	4.09	3.66	05:00	0.542	08:50	2.864	1.787	1.787	
2/4/2015	04:50	4.56	09:35	12.87	7.91	04:35	2.22	21:25	4.11	3.62	05:00	0.527	08:20	2.802	1.790	1.790	
2/5/2015	05:10	4.17	09:20	13.53	7.59	09:30	2.66	19:20	4.11	3.74	05:10	0.537	10:00	2.724	1.739	1.739	
2/6/2015	05:10	4.22	09:40	13.72	7.57	05:40	2.59	11:45	4.12	3.73	05:40	0.551	10:15	2.805	1.727	1.727	
2/7/2015	06:00	4.34	11:45	13.22	7.73	06:00	2.54	09:50	4.13	3.63	06:00	0.540	10:20	2.849	1.727	1.727	
2/8/2015	05:25	4.38	12:00	13.46	7.91	05:30	2.41	20:00	4.12	3.62	05:30	0.521	13:20	2.689	1.783	1.783	
2/9/2015	05:15	4.28	09:30	14.94	7.71	09:40	2.42	19:05	4.15	3.69	05:15	0.523	10:05	2.590	1.742	1.742	
2/10/2015	04:55	4.29	09:15	14.77	7.65	09:20	2.53	23:30	4.23	3.70	05:10	0.544	10:25	2.669	1.729	1.729	
2/11/2015	04:45	4.21	09:35	14.24	7.68	05:15	2.50	21:25	4.16	3.70	05:15	0.519	10:15	2.598	1.733	1.733	
2/12/2015	05:05	4.28	09:25	14.47	7.57	09:30	2.63	11:50	4.17	3.78	05:05	0.578	10:00	2.846	1.747	1.747	
2/13/2015	04:55	4.33	09:55	13.65	7.50	05:10	2.63	18:50	4.11	3.72	05:10	0.567	08:40	2.672	1.695	1.695	
2/14/2015	04:50	4.28	11:20	12.25	7.39	05:45	2.52	14:15	4.14	3.68	05:45	0.534	12:40	2.766	1.661	1.661	
2/15/2015	06:15	4.09	11:05	10.84	7.18	06:10	2.59	13:25	4.15	3.71	06:10	0.514	11:55	2.692	1.631	1.631	
2/16/2015	05:05	4.29	11:50	11.02	7.52	05:25	2.28	14:25	4.13	3.68	05:05	0.482	11:50	2.933	1.731	1.731	
2/17/2015	04:55	4.46	09:15	12.39	7.62	05:10	2.20	09:55	4.13	3.67	05:10	0.491	09:05	2.731	1.740	1.740	
2/18/2015	05:10	4.62	09:45	12.48	7.71	04:30	2.42	20:15	4.08	3.69	04:30	0.569	08:50	2.757	1.765	1.765	
2/19/2015	04:45	4.50	09:30	11.46	7.54	04:25	2.51	20:00	4.15	3.73	04:45	0.565	08:55	2.846	1.731	1.731	
2/20/2015	05:50	4.43	09:00	10.89	7.45	05:10	2.41	11:00	4.09	3.73	05:10	0.532	11:10	2.669	1.707	1.707	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/21/2015	05:05	4.44	11:55	11.80	7.53	04:55	2.37	14:00	4.20	3.66	04:55	0.525	10:55	2.883	1.704	1.704	
2/22/2015	06:00	4.43	12:00	12.17	7.83	06:05	2.24	22:40	4.11	3.59	06:05	0.492	12:25	2.719	1.779	1.779	
2/23/2015	04:30	4.76	09:05	12.30	7.86	05:10	2.33	10:40	4.11	3.68	05:10	0.577	08:35	2.729	1.802	1.802	
2/24/2015	04:55	4.65	09:25	14.35	7.88	04:55	2.45	21:15	4.12	3.68	04:55	0.574	08:45	2.845	1.801	1.801	
2/25/2015	05:10	4.60	08:55	14.03	7.90	04:40	2.47	07:25	4.09	3.67	05:10	0.582	08:55	2.700	1.799	1.799	
2/26/2015	05:10	4.44	09:25	14.72	7.86	04:55	2.34	11:05	4.09	3.62	04:55	0.515	08:30	2.868	1.770	1.770	
2/27/2015	04:35	4.71	09:35	13.90	7.93	05:20	2.45	08:20	4.09	3.62	05:20	0.587	10:15	2.690	1.775	1.775	
2/28/2015	05:20	4.63	11:55	11.52	7.92	05:55	2.20	13:45	4.09	3.53	05:55	0.521	10:50	2.678	1.767	1.767	
3/1/2015	05:20	4.79	11:55	12.14	8.15	05:40	2.19	13:15	4.07	3.58	05:40	0.537	13:15	2.685	1.860	1.860	
3/2/2015	05:15	4.76	09:35	12.93	7.88	05:15	2.40	19:30	4.12	3.67	05:15	0.581	10:10	2.606	1.797	1.797	
3/3/2015	05:25	4.52	09:25	13.50	7.71	04:45	2.43	22:00	4.11	3.65	05:15	0.552	08:45	2.852	1.747	1.747	
3/4/2015	05:25	4.60	09:20	13.70	7.83	05:55	2.35	11:15	4.13	3.65	04:45	0.553	08:35	2.824	1.772	1.772	
3/5/2015	05:30	4.64	09:25	15.54	7.82	09:10	2.41	22:00	4.29	3.66	04:45	0.579	09:20	2.668	1.758	1.758	
3/6/2015	05:20	4.68	09:45	12.04	7.79	05:00	2.23	18:45	4.09	3.66	05:00	0.530	10:55	2.760	1.773	1.773	
3/7/2015	05:20	4.79	11:00	11.48	7.97	05:15	2.42	13:40	4.07	3.60	05:20	0.593	10:20	2.767	1.808	1.808	
3/8/2015	05:20	4.75	11:20	11.30	8.24	05:25	2.29	19:15	4.12	3.58	05:25	0.556	21:10	2.713	1.884	1.884	
3/9/2015	05:05	4.20	09:25	11.58	7.63	04:50	2.57	10:45	4.17	3.75	05:05	0.539	09:25	2.697	1.774	1.774	
3/10/2015	04:50	4.67	09:35	12.03	7.72	05:30	2.43	10:10	4.13	3.69	05:30	0.582	10:00	2.771	1.773	1.773	
3/11/2015	05:25	4.84	09:40	11.77	8.03	05:00	2.45	23:15	4.10	3.65	05:00	0.617	08:45	2.730	1.842	1.842	
3/12/2015	05:05	4.48	09:20	12.70	7.63	05:05	2.42	22:10	4.21	3.70	05:05	0.539	09:00	2.629	1.746	1.746	
3/13/2015	05:10	4.68	09:35	13.12	7.55	05:00	2.45	11:15	4.16	3.72	05:05	0.581	09:35	2.617	1.721	1.721	
3/14/2015	04:25	4.48	11:45	12.30	7.53	05:55	2.48	14:10	4.13	3.65	05:55	0.557	13:00	2.678	1.685	1.685	
3/15/2015	05:20	4.39	12:20	11.91	7.59	06:00	2.47	22:45	4.13	3.69	06:00	0.545	10:40	2.661	1.734	1.734	
3/16/2015	05:10	4.44	09:30	11.65	7.50	05:15	2.47	11:30	4.14	3.75	05:15	0.552	09:30	2.594	1.733	1.733	
3/17/2015	04:05	4.85	09:05	12.03	7.72	05:00	2.39	11:05	4.15	3.70	04:55	0.597	09:05	2.700	1.772	1.772	
3/18/2015	04:55	4.78	09:35	11.29	7.97	04:15	2.43	21:05	4.08	3.66	04:15	0.601	20:50	2.769	1.837	1.837	
3/19/2015	05:30	4.97	09:55	11.22	7.66	05:55	2.33	08:30	4.16	3.74	05:55	0.619	09:05	2.654	1.770	1.770	
3/20/2015	05:10	4.35	09:20	11.35	7.51	05:20	2.70	13:40	4.11	3.75	05:20	0.583	09:10	2.707	1.732	1.732	
3/21/2015	05:05	4.36	10:10	9.31	6.96	04:45	2.55	11:45	4.11	3.74	04:45	0.548	11:45	2.401	1.570	1.570	
3/22/2015	05:30	4.29	11:40	9.64	7.07	05:15	2.39	12:10	4.16	3.67	05:15	0.508	11:40	2.560	1.592	1.592	
3/23/2015	05:15	4.24	11:15	9.18	7.15	04:35	2.36	10:00	4.20	3.69	04:35	0.495	11:15	2.354	1.615	1.615	
3/24/2015	04:50	4.32	10:15	9.05	6.95	05:35	2.36	22:10	4.11	3.69	05:35	0.510	10:15	2.322	1.551	1.551	
3/25/2015	04:55	4.19	09:30	9.28	6.93	05:05	2.39	10:45	4.14	3.68	05:05	0.487	09:30	2.417	1.544	1.544	
3/26/2015	05:00	4.08	10:10	9.17	6.89	05:15	2.40	10:10	4.12	3.71	05:15	0.472	10:10	2.409	1.541	1.541	
3/27/2015	05:20	4.09	09:55	8.87	6.82	05:35	2.55	13:55	4.12	3.71	05:35	0.504	09:55	2.262	1.520	1.520	
3/28/2015	05:55	3.98	11:25	9.10	6.85	05:00	2.49	12:50	4.12	3.70	05:55	0.469	11:15	2.349	1.538	1.538	
3/29/2015	05:35	4.25	11:15	9.86	7.26	05:30	2.62	13:05	4.20	3.78	05:30	0.542	11:15	2.552	1.691	1.691	
3/30/2015	05:25	3.99	09:30	12.23	7.52	05:45	2.69	22:15	4.15	3.78	05:20	0.513	09:05	2.964	1.758	1.758	
3/31/2015	04:30	4.03	09:25	11.56	7.60	04:50	2.44	12:25	4.14	3.79	04:50	0.474	09:10	2.857	1.794	1.794	
4/1/2015	05:00	3.87	09:30	12.43	7.58	05:35	2.58	10:55	4.18	3.79	05:00	0.493	09:45	2.702	1.778	1.778	
4/2/2015	04:45	4.05	09:10	11.62	7.56	04:50	2.74	21:20	4.18	3.83	04:50	0.530	08:50	2.781	1.794	1.794	
4/3/2015	05:25	4.10	09:45	12.23	7.36	05:55	2.73	13:20	4.13	3.81	04:30	0.545	09:20	2.831	1.723	1.723	
4/4/2015	05:05	4.26	11:55	9.26	7.13	06:15	2.71	15:10	4.15	3.79	06:15	0.580	10:35	2.389	1.640	1.640	
4/5/2015	04:55	4.06	11:10	9.72	7.16	05:55	2.50	13:15	4.16	3.76	05:55	0.503	11:10	2.474	1.650	1.649	

Report Summary For The Period 1/6/2015 - 4/5/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			156.388
Avg	7.58	3.71	1.738

Site Commentary

Site Information

UFF1	
Pipe Dimensions	23.63" x 23.88"
Silt Level	0.00"

Overview

Site UFF1 functioned under normal conditions during the period Saturday, February 28, 2015 to Monday, March 30, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Saturday, February 28, 2015 to Monday, March 30, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.97	2.59	0.609
Minimum	2.30	1.10	0.126
Maximum	5.95	4.12	1.464
Time of Minimum	3/14/2015 5:10 AM	3/28/2015 4:45 AM	3/28/2015 4:45 AM
Time of Maximum	3/29/2015 6:50 PM	2/28/2015 9:35 AM	3/29/2015 6:50 PM

Data Quality

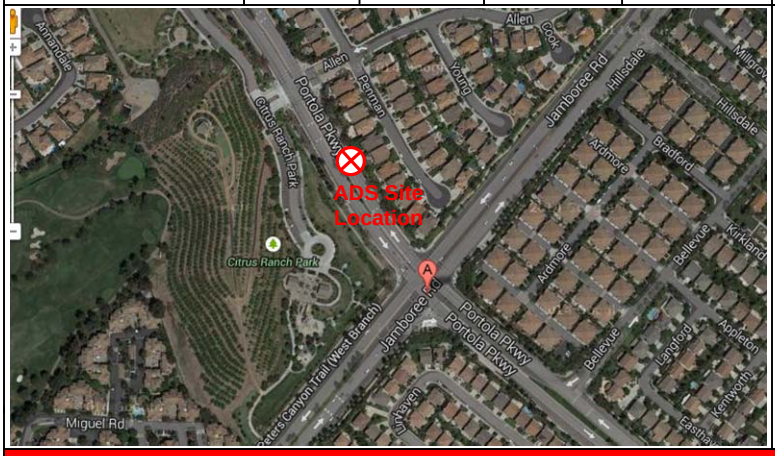
Data uptime observed during the Saturday, February 28, 2015 to the Monday, March 30, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

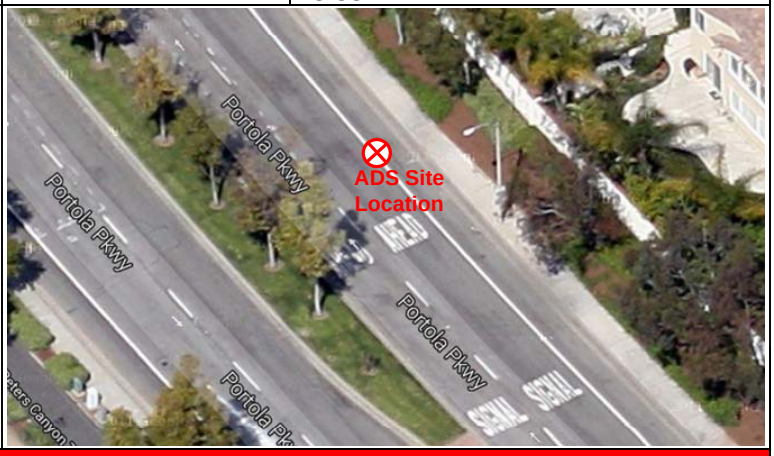
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF1	**Install Date:** 1/28/15	**Monitor Type**	Peak Doppler
Address/Location: Jamboree & Portola		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH042S011
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	23.63 "
		Pipe Width:	23.88 "





Investigation Information:

Date/Time of Investigation:	1/28/15 @ 1400
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.90 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

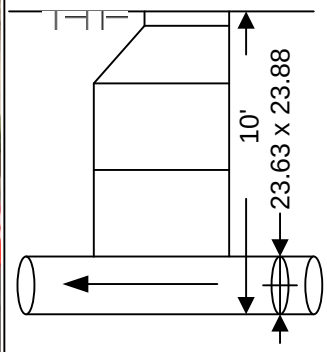
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

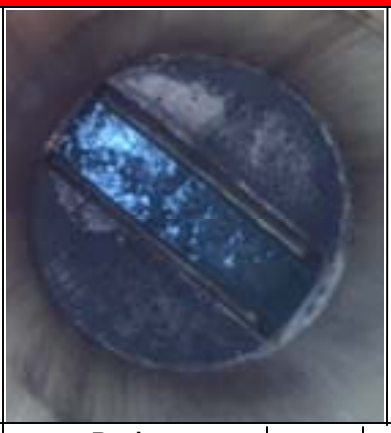
2 man crew required and one blower is to be operated at all times.

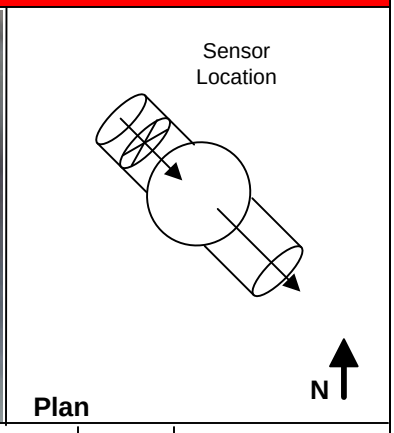
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

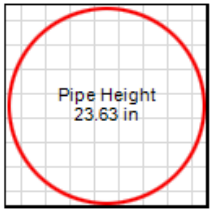
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

UFF1

Flow Monitor

UFF1

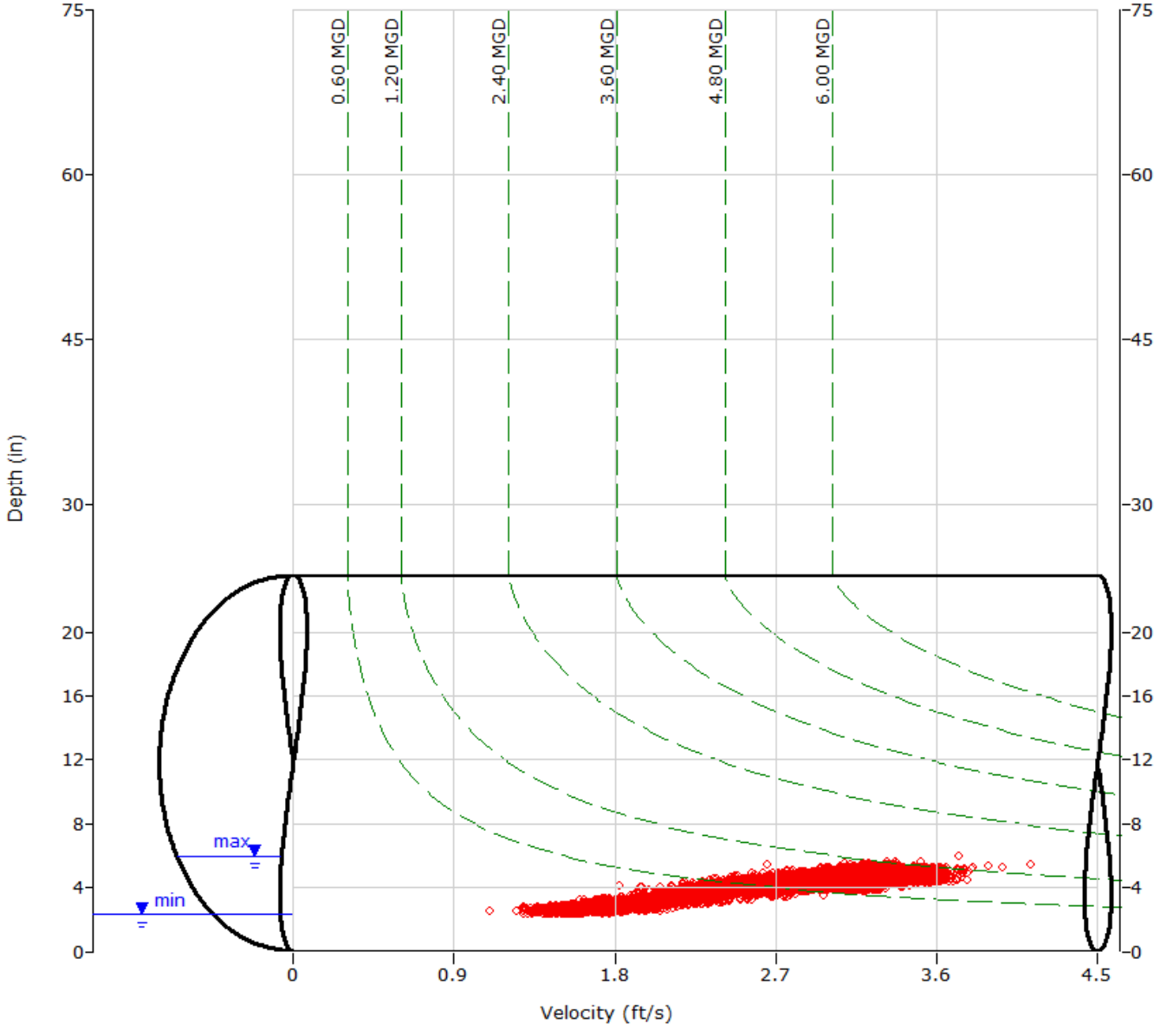


Report Period

2/28/2015
To
3/30/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



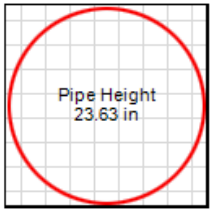
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF1

Flow Monitor

UFF1

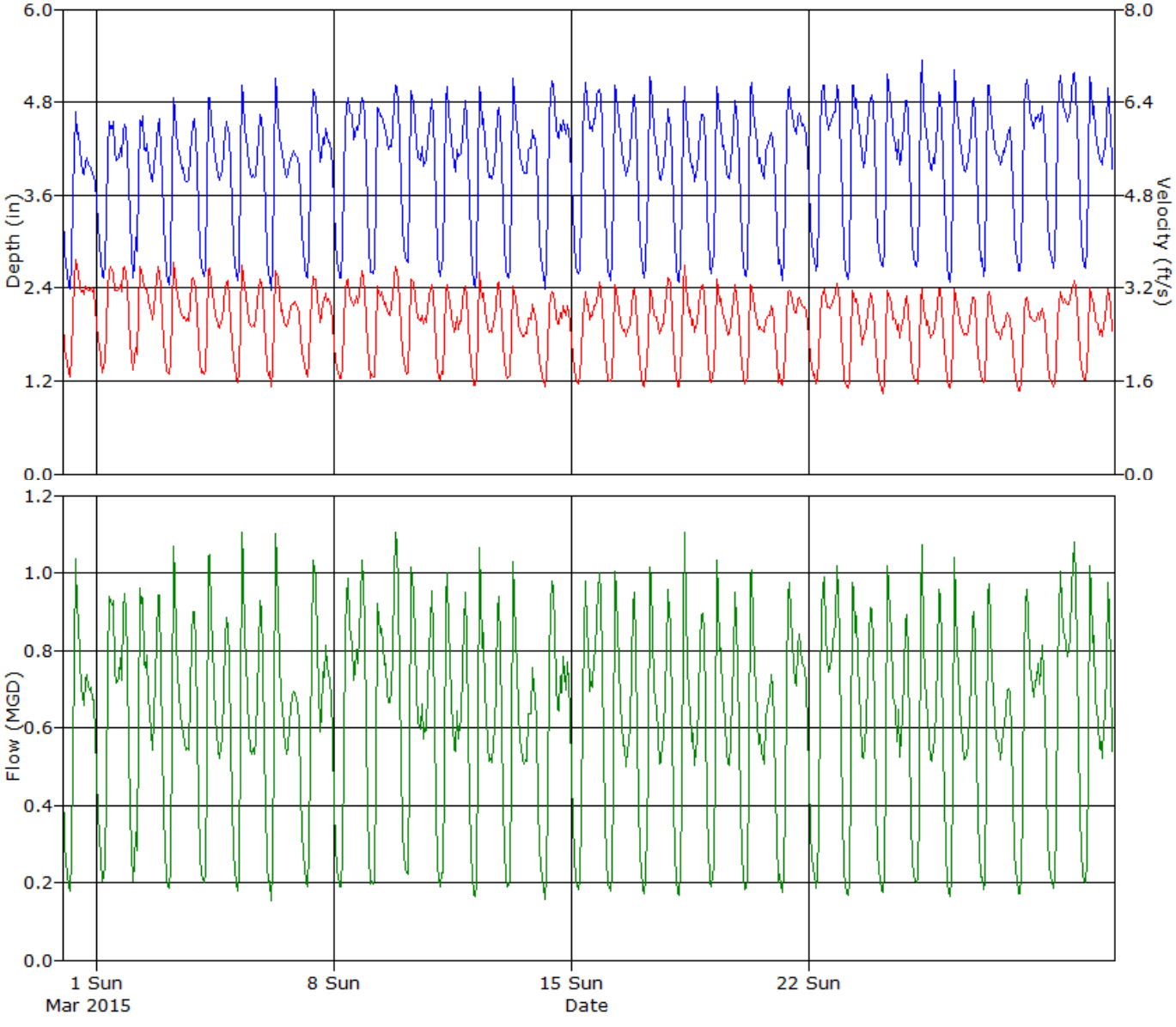


Report Period

2/28/2015
To
3/30/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/28/2015 - 3/30/2015

UFF1, Pipe Height: 23.63 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/28/2015	05:05	2.33	09:35	5.41	3.66	05:35	1.51	09:35	4.12	2.86	05:35	0.158	09:35	1.417	0.597	0.597	
3/1/2015	05:00	2.41	09:30	4.71	3.82	05:00	1.45	11:35	3.78	2.92	05:00	0.155	10:05	0.990	0.646	0.646	
3/2/2015	02:55	2.45	08:55	4.78	3.86	03:30	1.70	07:40	3.74	2.87	02:25	0.193	07:40	1.034	0.638	0.638	
3/3/2015	04:35	2.40	07:45	5.17	3.81	03:15	1.53	07:35	3.76	2.73	04:25	0.163	07:45	1.196	0.604	0.604	
3/4/2015	04:45	2.49	07:25	5.11	3.87	05:30	1.59	07:50	3.74	2.68	05:30	0.187	07:40	1.178	0.606	0.606	
3/5/2015	04:40	2.46	07:00	5.12	3.87	04:50	1.48	07:45	3.64	2.67	04:50	0.163	07:15	1.122	0.605	0.605	
3/6/2015	04:25	2.31	07:40	5.25	3.82	04:30	1.34	07:40	3.62	2.62	04:30	0.135	07:40	1.191	0.584	0.584	
3/7/2015	05:05	2.46	09:40	5.24	3.93	05:05	1.50	10:30	3.61	2.67	05:05	0.165	10:30	1.175	0.618	0.618	
3/8/2015	05:10	2.45	19:35	5.20	4.04	05:15	1.53	20:50	3.70	2.72	05:10	0.167	20:10	1.141	0.662	0.662	
3/9/2015	04:45	2.55	20:25	5.24	4.08	03:20	1.40	20:45	3.81	2.74	03:20	0.163	20:45	1.245	0.673	0.673	
3/10/2015	05:35	2.63	07:30	5.18	3.99	03:25	1.60	07:30	3.59	2.65	05:35	0.197	07:30	1.159	0.618	0.618	
3/11/2015	03:30	2.46	08:25	5.08	3.96	03:25	1.49	21:15	3.42	2.55	03:25	0.164	21:25	1.055	0.598	0.598	
3/12/2015	05:00	2.32	07:20	5.17	3.90	04:40	1.36	07:20	3.64	2.57	05:00	0.143	07:20	1.174	0.593	0.593	
3/13/2015	04:35	2.46	08:00	5.56	3.89	03:10	1.40	07:10	3.38	2.46	03:10	0.158	08:00	1.203	0.559	0.559	
3/14/2015	05:10	2.30	11:15	5.26	4.02	05:10	1.29	10:20	3.41	2.49	05:10	0.128	11:15	1.073	0.599	0.599	
3/15/2015	06:15	2.51	18:45	5.60	4.11	04:35	1.45	20:45	3.45	2.54	05:45	0.171	18:45	1.198	0.633	0.633	
3/16/2015	04:35	2.45	21:45	5.09	3.96	05:05	1.38	07:30	3.41	2.49	05:05	0.157	07:30	1.054	0.586	0.586	
3/17/2015	04:50	2.49	07:50	5.25	3.95	02:30	1.29	21:00	3.51	2.56	04:35	0.165	07:55	1.075	0.599	0.599	
3/18/2015	04:15	2.45	07:50	5.15	3.91	03:20	1.37	08:10	3.75	2.61	03:40	0.152	08:55	1.157	0.601	0.601	
3/19/2015	03:40	2.55	07:10	5.15	3.96	02:55	1.43	20:35	3.46	2.56	02:55	0.171	07:50	1.087	0.597	0.597	
3/20/2015	03:55	2.48	08:30	5.13	3.93	03:25	1.45	07:55	3.45	2.49	03:45	0.166	07:55	1.080	0.574	0.574	
3/21/2015	05:20	2.45	10:30	5.26	4.03	04:50	1.29	09:40	3.27	2.54	04:55	0.147	10:35	1.063	0.615	0.615	
3/22/2015	06:00	2.59	10:45	5.37	4.12	05:20	1.41	20:15	3.54	2.59	05:20	0.169	10:45	1.178	0.650	0.650	
3/23/2015	04:50	2.47	07:35	5.38	4.09	04:30	1.29	10:10	3.48	2.46	04:30	0.144	09:55	1.180	0.610	0.610	
3/24/2015	04:00	2.65	07:55	5.40	4.09	04:35	1.29	07:55	3.37	2.47	04:35	0.161	07:55	1.152	0.607	0.607	
3/25/2015	04:45	2.60	08:25	5.50	4.02	05:20	1.43	21:30	3.52	2.45	05:20	0.177	20:35	1.139	0.588	0.588	
3/26/2015	04:35	2.43	07:15	5.45	3.98	04:40	1.34	07:30	3.39	2.45	04:40	0.147	07:20	1.128	0.581	0.581	
3/27/2015	05:15	2.51	07:45	5.27	3.97	04:50	1.34	08:25	3.39	2.41	04:50	0.154	08:15	1.099	0.563	0.563	
3/28/2015	04:50	2.53	10:40	5.25	4.11	04:45	1.10	10:40	3.30	2.41	04:45	0.126	10:40	1.086	0.601	0.601	
3/29/2015	05:55	2.63	18:50	5.95	4.21	05:45	1.29	18:50	3.73	2.58	05:00	0.159	18:50	1.464	0.670	0.670	
3/30/2015	04:20	2.63	07:50	5.26	4.05	04:00	1.41	20:25	3.41	2.51	04:00	0.172	07:35	1.108	0.603	0.602	

Report Summary For The Period 2/28/2015 - 3/30/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			18.878
Avg	3.97	2.59	0.609

Site Commentary

Site Information

UFF10	
Pipe Dimensions	18.13" x 18.13"
Silt Level	0.00"

Overview

Site UFF10 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.62	1.51	0.169
Minimum	1.27	0.48	0.017
Maximum	3.73	2.33	0.383
Time of Minimum	2/7/2015 4:00 AM	2/7/2015 4:00 AM	2/7/2015 4:00 AM
Time of Maximum	2/24/2015 7:40 AM	2/20/2015 7:25 AM	2/14/2015 10:25 AM

Data Quality

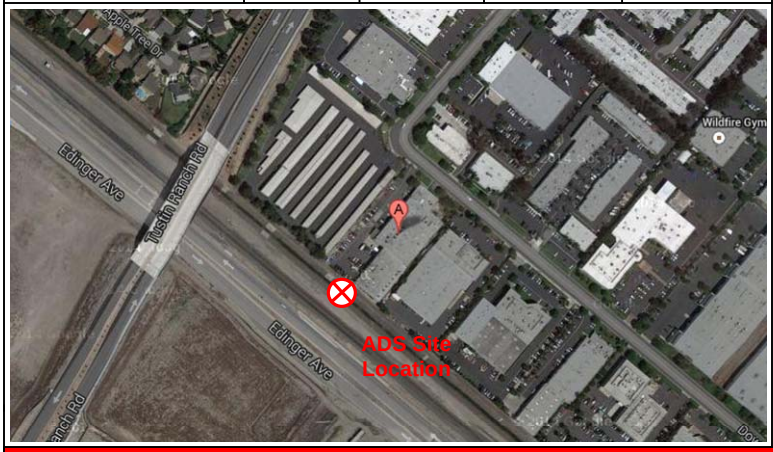
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF10	**Install Date:** 1/27/15	**Monitor Type**	Peak Doppler
Address/Location: 2652 Dow Ave (Located behind Meridian Graphics)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH045S037
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.13 "
		Pipe Width:	18.13 "





Investigation Information:

Date/Time of Investigation:	1/27/15 @ 1600
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.54 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

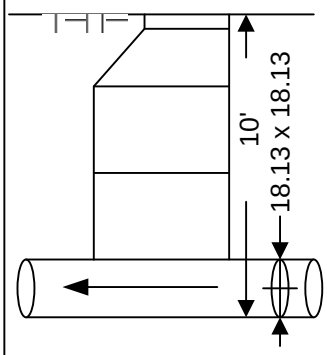
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

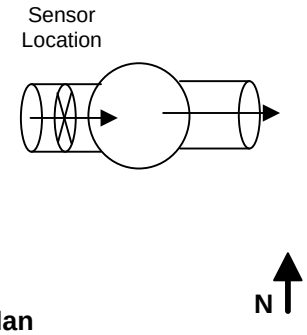
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF10

Flow Monitor

UFF10

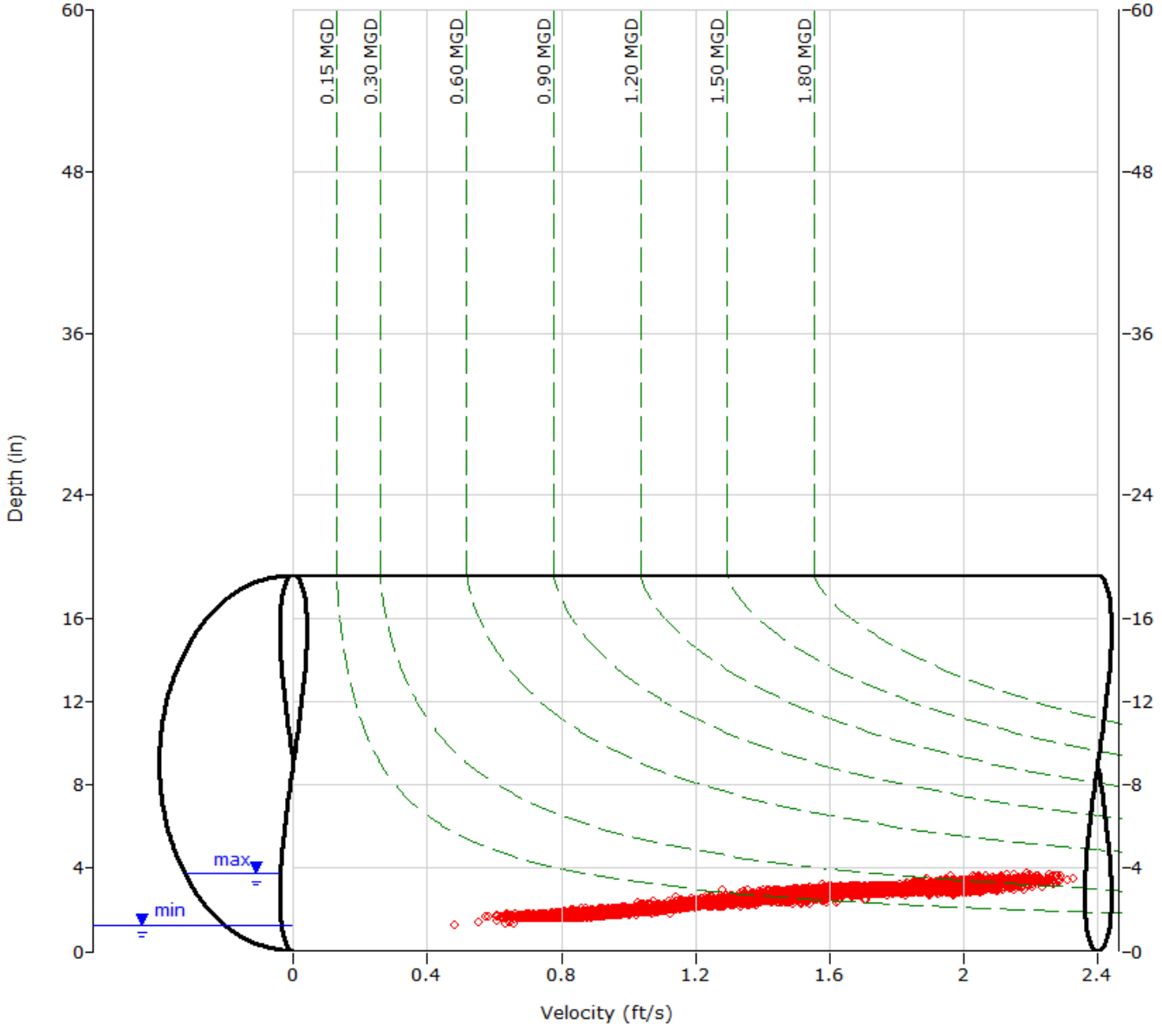
Pipe Height
18.13 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



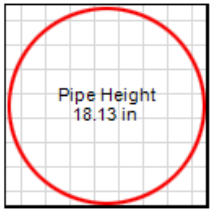
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF10

Flow Monitor

UFF10

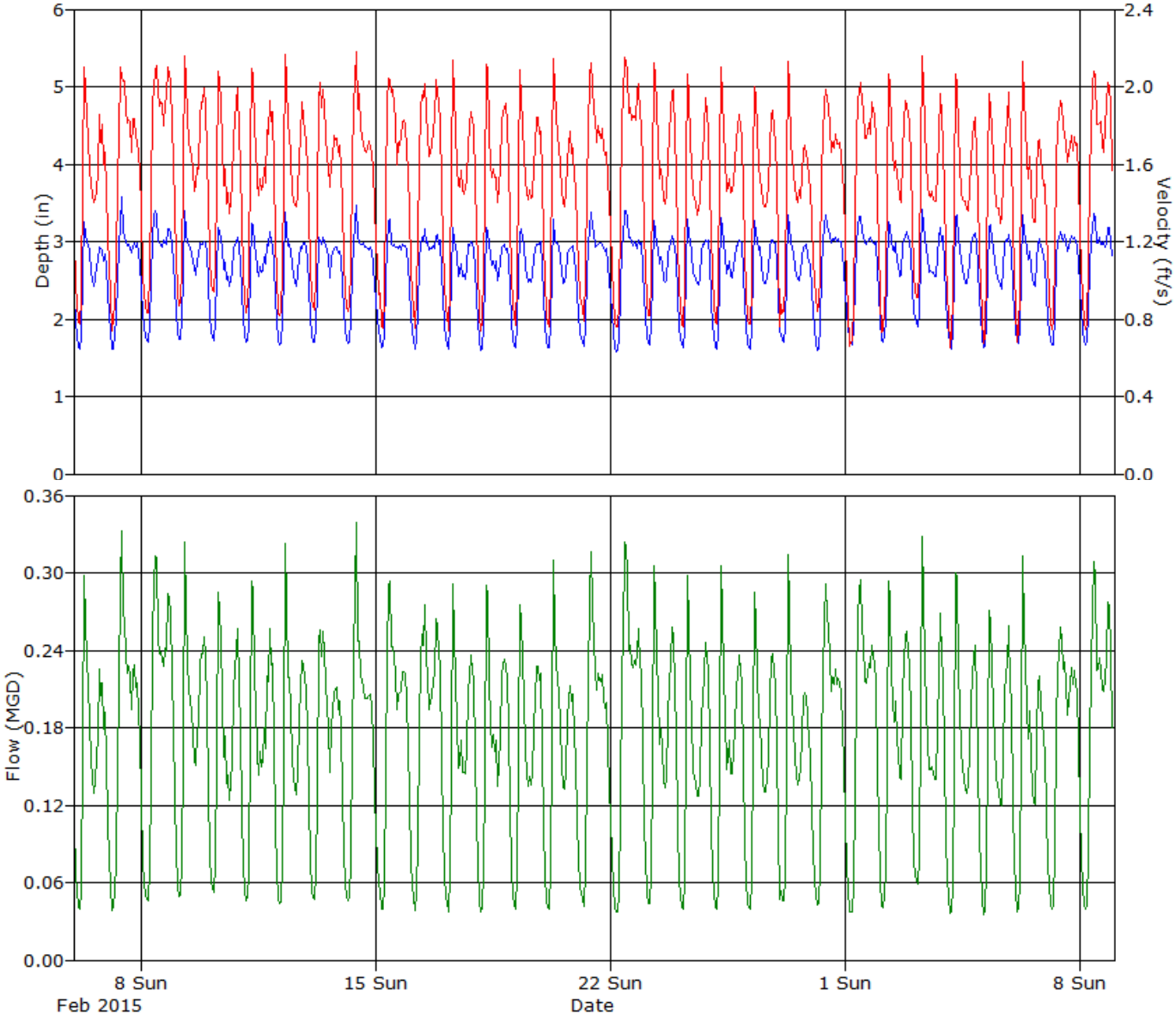


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF10, Pipe Height: 18.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:25	1.60	08:00	3.43	2.56	04:20	0.73	07:45	2.24	1.47	04:20	0.037	07:45	0.328	0.158	0.158	
2/7/2015	04:00	1.27	10:45	3.71	2.66	04:00	0.48	09:40	2.25	1.57	04:00	0.017	10:45	0.367	0.180	0.180	
2/8/2015	05:45	1.69	10:50	3.53	2.71	04:50	0.80	19:55	2.24	1.64	05:35	0.044	11:10	0.346	0.195	0.195	
2/9/2015	04:15	1.71	07:35	3.50	2.67	04:25	0.84	08:05	2.31	1.57	04:00	0.047	08:05	0.347	0.178	0.178	
2/10/2015	04:00	1.70	07:20	3.44	2.60	03:55	0.90	09:50	2.27	1.53	03:55	0.050	07:15	0.326	0.166	0.166	
2/11/2015	02:55	1.68	08:00	3.52	2.61	03:30	0.81	08:10	2.19	1.52	03:30	0.044	08:05	0.342	0.167	0.167	
2/12/2015	04:35	1.57	07:55	3.48	2.60	03:00	0.72	08:00	2.29	1.50	04:35	0.035	08:00	0.348	0.165	0.165	
2/13/2015	04:00	1.65	07:45	3.24	2.63	03:45	0.79	09:50	2.11	1.54	03:45	0.042	07:45	0.286	0.170	0.170	
2/14/2015	05:40	1.66	10:25	3.70	2.65	03:10	0.79	10:15	2.27	1.54	04:10	0.042	10:25	0.383	0.174	0.174	
2/15/2015	04:30	1.57	09:35	3.46	2.62	05:35	0.63	09:45	2.28	1.55	05:35	0.034	09:45	0.341	0.174	0.174	
2/16/2015	04:25	1.56	20:15	3.33	2.65	04:20	0.70	19:50	2.15	1.58	04:25	0.034	11:15	0.310	0.180	0.180	
2/17/2015	04:40	1.59	07:50	3.28	2.56	04:05	0.72	07:40	2.18	1.48	04:40	0.036	07:50	0.311	0.158	0.158	
2/18/2015	03:45	1.56	07:40	3.43	2.58	03:30	0.70	07:55	2.23	1.51	03:40	0.034	07:35	0.327	0.164	0.164	
2/19/2015	04:20	1.59	08:05	3.50	2.57	04:35	0.65	07:40	2.21	1.48	04:35	0.033	08:05	0.321	0.160	0.160	
2/20/2015	02:55	1.61	07:30	3.59	2.58	02:55	0.71	07:25	2.33	1.47	02:55	0.036	07:30	0.372	0.160	0.160	
2/21/2015	05:30	1.63	10:50	3.46	2.64	05:25	0.71	10:35	2.27	1.53	05:25	0.037	10:35	0.341	0.173	0.173	
2/22/2015	03:55	1.56	11:00	3.62	2.66	05:05	0.72	11:00	2.28	1.59	05:05	0.035	11:00	0.375	0.186	0.186	
2/23/2015	04:20	1.58	07:30	3.61	2.60	04:20	0.76	07:30	2.28	1.52	04:20	0.038	07:30	0.373	0.168	0.168	
2/24/2015	04:20	1.61	07:40	3.73	2.57	04:20	0.70	07:45	2.20	1.46	04:20	0.036	07:40	0.376	0.158	0.158	
2/25/2015	04:30	1.59	07:50	3.59	2.58	04:15	0.72	07:25	2.20	1.48	04:20	0.036	07:50	0.357	0.161	0.161	
2/26/2015	03:55	1.59	07:35	3.43	2.57	03:50	0.72	08:00	2.14	1.45	03:50	0.036	07:35	0.323	0.158	0.158	
2/27/2015	01:50	1.63	07:45	3.49	2.58	01:50	0.68	07:10	2.18	1.43	01:50	0.035	07:40	0.340	0.155	0.155	
2/28/2015	04:35	1.58	10:20	3.44	2.68	04:30	0.82	10:20	2.03	1.52	04:35	0.041	10:20	0.310	0.176	0.176	
3/1/2015	04:55	1.60	12:00	3.45	2.69	04:55	0.62	11:20	2.14	1.51	04:55	0.031	11:20	0.322	0.178	0.178	
3/2/2015	03:00	1.64	07:50	3.44	2.67	02:10	0.66	07:50	2.25	1.50	02:50	0.036	07:50	0.343	0.172	0.172	
3/3/2015	04:30	1.87	07:35	3.61	2.67	01:50	0.86	07:25	2.28	1.49	04:30	0.055	07:35	0.364	0.167	0.167	
3/4/2015	04:45	1.59	08:30	3.48	2.60	03:40	0.62	07:45	2.17	1.42	04:45	0.032	07:45	0.331	0.157	0.157	
3/5/2015	03:40	1.59	08:10	3.36	2.59	04:25	0.58	21:10	2.06	1.44	04:25	0.030	08:00	0.300	0.158	0.158	
3/6/2015	04:10	1.60	07:50	3.42	2.60	03:40	0.61	07:40	2.20	1.44	04:05	0.031	07:40	0.334	0.157	0.157	
3/7/2015	04:40	1.64	10:15	3.29	2.67	04:35	0.70	11:10	2.03	1.51	04:35	0.037	10:20	0.285	0.172	0.172	
3/8/2015	05:10	1.63	10:20	3.59	2.71	05:25	0.57	11:10	2.27	1.58	05:25	0.031	10:20	0.362	0.187	0.187	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			5.232
Avg	2.62	1.51	0.169

Site Commentary

Site Information

UFF11	
Pipe Dimensions	11.88" x 11.88"
Silt Level	0.00"

Overview

Site UFF11 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.48	1.77	0.233
Minimum	1.71	0.57	0.041
Maximum	7.28	3.08	0.984
Time of Minimum	2/15/2015 5:40 AM	2/10/2015 5:10 AM	2/24/2015 4:15 AM
Time of Maximum	2/26/2015 9:35 AM	2/26/2015 9:40 AM	2/26/2015 9:35 AM

Data Quality

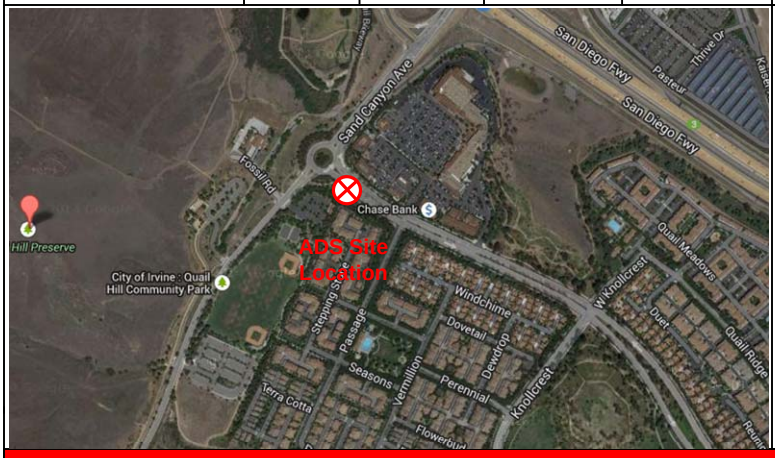
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF11	**Install Date:** 1/21/15	**Monitor Type**	Peak Doppler
Address/Location: Quail Hill Pkwy & Shady Canyon Dr.		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH124S052
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	11.88 "
		Pipe Width:	11.88 "





Investigation Information:

Date/Time of Investigation:	1/21/15 @ 1345
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.94 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

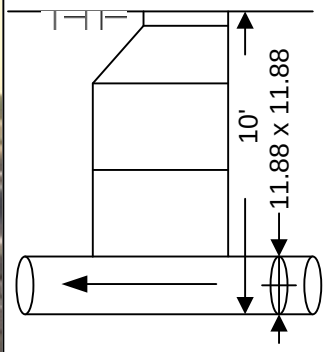
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

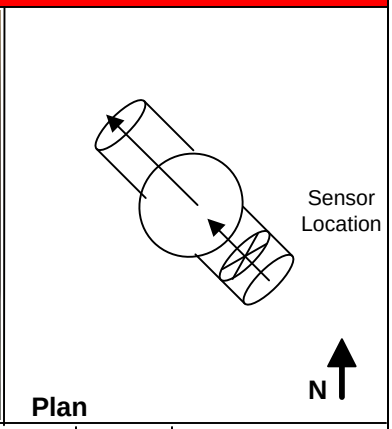
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

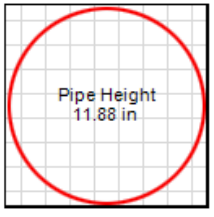
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF11

Flow Monitor

UFF11

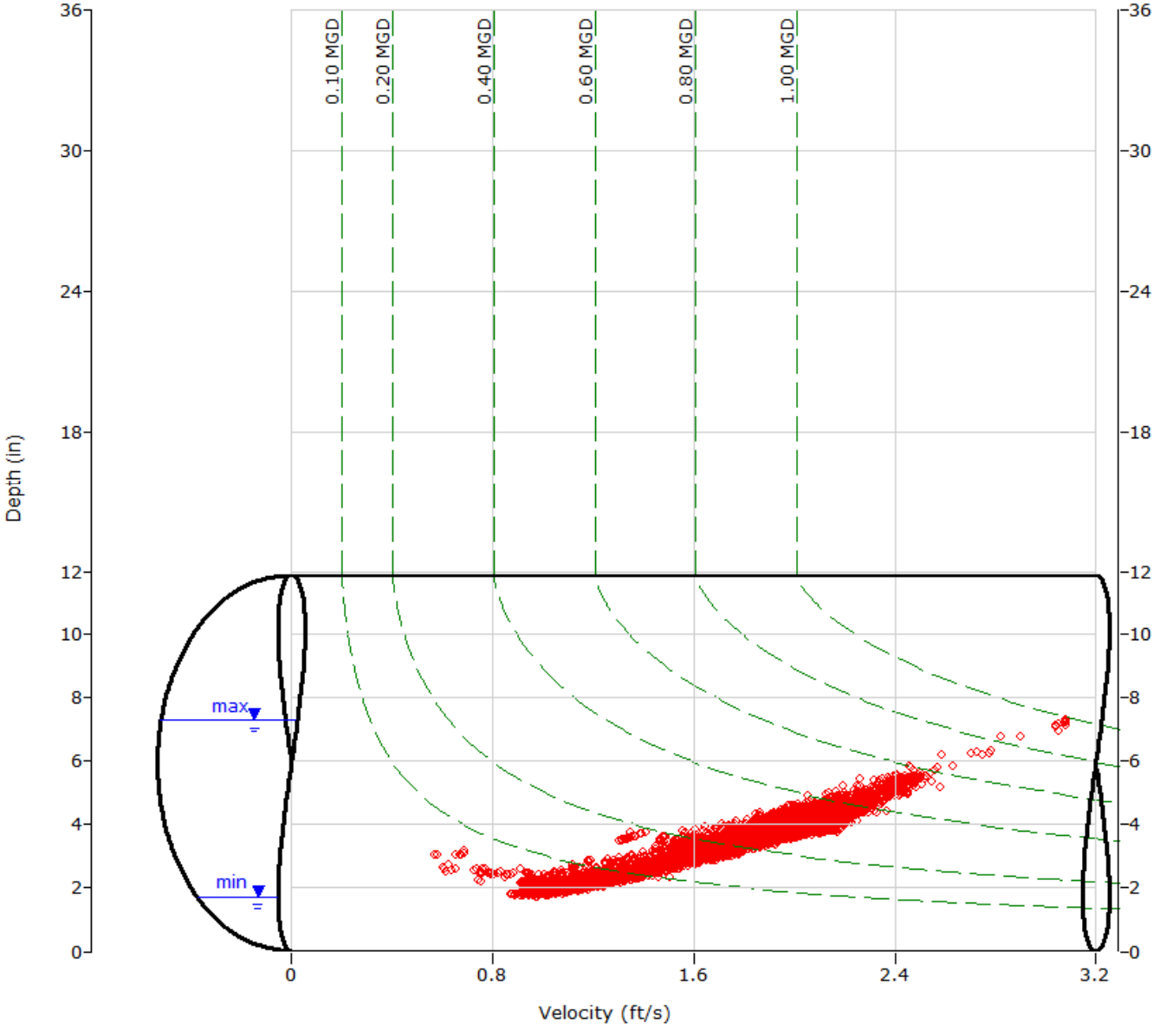


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



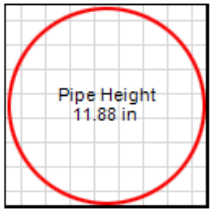
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF11

Flow Monitor

UFF11

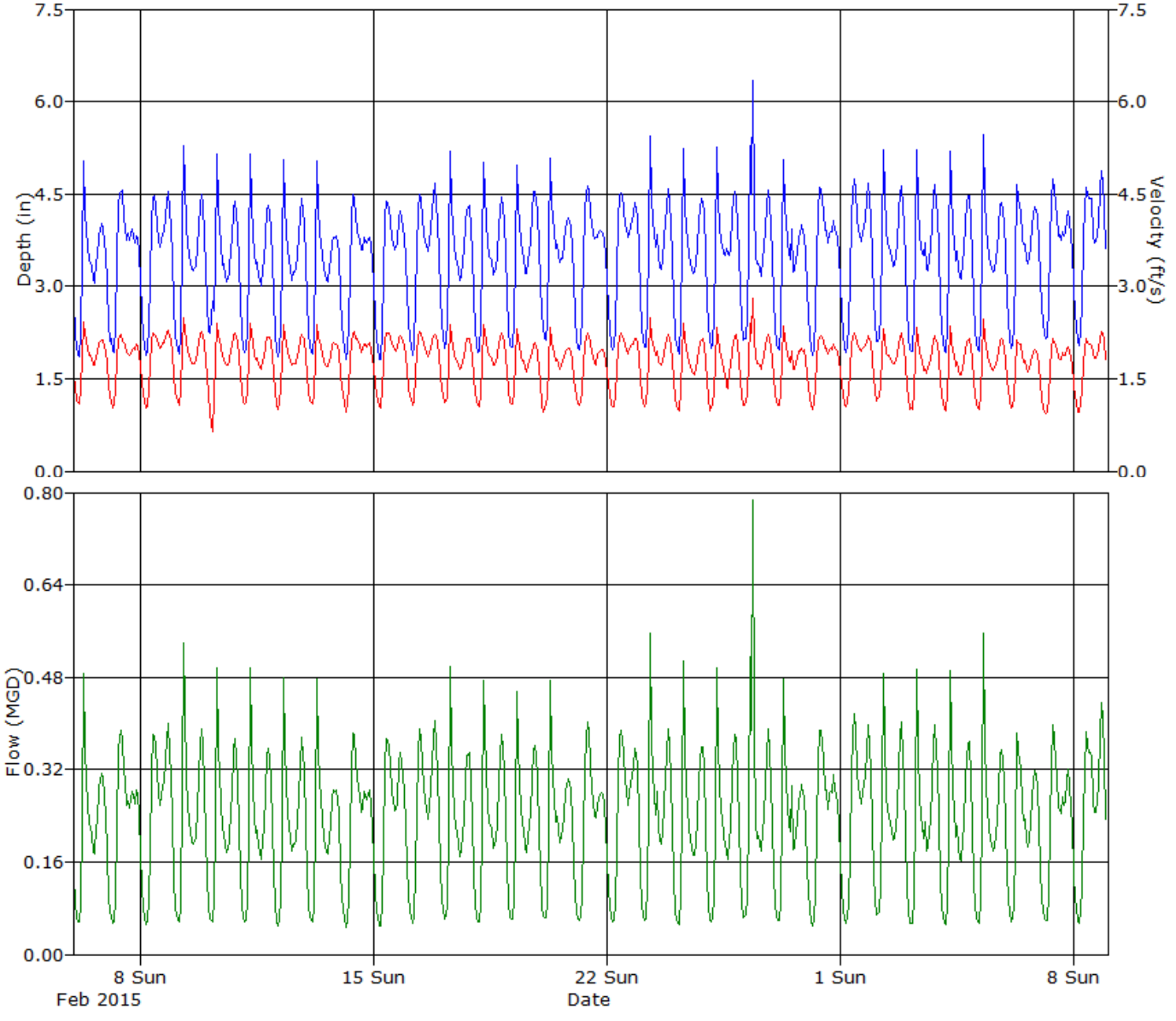


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF11, Pipe Height: 11.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:10	1.77	07:25	5.43	3.31	04:10	1.03	07:30	2.49	1.81	04:10	0.047	07:25	0.551	0.221	0.221	
2/7/2015	04:55	1.75	08:30	4.80	3.47	05:10	0.87	10:20	2.28	1.80	05:15	0.041	10:10	0.420	0.234	0.234	
2/8/2015	04:55	1.80	10:10	4.84	3.50	04:55	0.95	20:10	2.33	1.87	04:55	0.045	10:10	0.430	0.249	0.249	
2/9/2015	04:30	1.85	07:15	6.30	3.44	02:10	1.01	07:15	2.78	1.82	04:30	0.052	07:15	0.747	0.238	0.238	
2/10/2015	02:20	1.89	07:25	5.47	3.44	05:10	0.57	07:25	2.46	1.76	04:30	0.047	07:25	0.550	0.226	0.226	
2/11/2015	03:55	1.83	07:10	5.34	3.34	03:55	1.02	07:20	2.47	1.79	03:55	0.049	07:20	0.534	0.222	0.222	
2/12/2015	03:20	1.78	07:40	5.36	3.36	03:20	0.94	07:40	2.48	1.78	03:20	0.044	07:40	0.540	0.224	0.224	
2/13/2015	04:20	1.87	07:35	5.27	3.29	04:25	1.02	07:35	2.43	1.78	04:25	0.052	07:35	0.518	0.215	0.215	
2/14/2015	04:20	1.77	09:50	4.84	3.36	04:20	0.91	09:55	2.31	1.82	04:20	0.042	09:50	0.436	0.227	0.227	
2/15/2015	05:40	1.71	09:15	4.76	3.42	05:00	0.95	10:55	2.33	1.84	05:40	0.043	09:15	0.427	0.237	0.237	
2/16/2015	04:25	1.82	20:20	4.79	3.54	04:25	1.00	09:55	2.30	1.85	04:25	0.048	20:20	0.425	0.249	0.249	
2/17/2015	04:10	1.93	07:45	5.49	3.43	04:05	1.04	07:40	2.48	1.77	04:05	0.055	07:45	0.556	0.227	0.227	
2/18/2015	03:30	1.79	07:30	5.35	3.43	04:05	0.98	07:45	2.45	1.79	04:05	0.046	07:35	0.530	0.232	0.232	
2/19/2015	04:10	1.84	07:40	5.51	3.50	04:10	0.99	07:45	2.40	1.73	04:10	0.049	07:40	0.540	0.228	0.228	
2/20/2015	04:15	2.04	07:40	5.28	3.52	02:30	0.86	07:40	2.43	1.70	03:00	0.057	07:40	0.518	0.225	0.225	
2/21/2015	03:55	1.91	10:55	4.81	3.50	04:50	1.04	10:05	2.29	1.74	03:55	0.055	10:55	0.424	0.230	0.230	
2/22/2015	05:00	1.89	11:05	4.70	3.57	04:55	0.98	10:40	2.29	1.81	04:55	0.050	10:40	0.413	0.246	0.246	
2/23/2015	04:25	1.93	07:05	6.76	3.54	03:25	0.96	07:05	2.82	1.80	03:25	0.051	07:05	0.825	0.244	0.244	
2/24/2015	04:15	1.76	07:20	5.57	3.45	04:10	0.89	07:20	2.49	1.72	04:15	0.041	07:20	0.570	0.225	0.225	
2/25/2015	03:55	1.96	07:35	5.51	3.54	02:05	0.85	07:35	2.44	1.69	03:55	0.054	07:35	0.552	0.228	0.228	
2/26/2015	02:25	2.04	09:35	7.28	3.62	03:35	0.99	09:40	3.08	1.81	03:35	0.057	09:35	0.984	0.259	0.259	
2/27/2015	04:10	1.82	13:30	5.46	3.40	04:10	0.96	13:30	2.50	1.74	04:10	0.047	13:30	0.559	0.220	0.220	
2/28/2015	04:45	1.80	09:35	4.77	3.49	04:45	0.96	08:55	2.26	1.79	04:45	0.046	09:40	0.410	0.236	0.236	
3/1/2015	04:10	1.86	10:25	4.98	3.58	04:10	0.99	10:25	2.29	1.81	04:10	0.049	10:25	0.453	0.249	0.249	
3/2/2015	04:05	2.06	07:20	5.55	3.54	02:45	1.05	07:20	2.41	1.79	02:45	0.061	07:20	0.550	0.238	0.238	
3/3/2015	03:15	1.86	07:25	5.83	3.48	03:10	0.95	07:35	2.47	1.72	03:15	0.048	07:25	0.596	0.229	0.229	
3/4/2015	04:15	1.84	07:30	5.36	3.44	04:05	0.91	07:30	2.39	1.71	04:05	0.045	07:30	0.522	0.223	0.223	
3/5/2015	04:15	1.87	07:15	6.29	3.45	04:15	0.94	07:15	2.73	1.74	04:15	0.047	07:15	0.730	0.227	0.227	
3/6/2015	03:35	1.87	07:20	4.90	3.52	03:35	0.97	07:45	2.22	1.69	03:35	0.049	07:45	0.428	0.223	0.223	
3/7/2015	04:55	2.11	09:45	4.92	3.59	04:00	0.91	09:40	2.20	1.68	04:00	0.055	09:45	0.427	0.230	0.230	
3/8/2015	04:15	1.99	20:10	5.21	3.70	04:10	0.92	20:25	2.33	1.76	04:10	0.051	20:10	0.472	0.254	0.254	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			7.216
Avg	3.48	1.77	0.233

Site Commentary

Site Information

UFF12	
Pipe Dimensions	8.00" x 8.00"
Silt Level	0.00"

Overview

Site UFF12 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.39	2.75	0.166
Minimum	1.42	0.73	0.020
Maximum	3.44	4.16	0.376
Time of Minimum	3/3/2015 3:55 AM	3/3/2015 3:55 AM	3/3/2015 3:55 AM
Time of Maximum	2/25/2015 7:50 AM	2/26/2015 7:35 AM	2/25/2015 7:50 AM

Data Quality

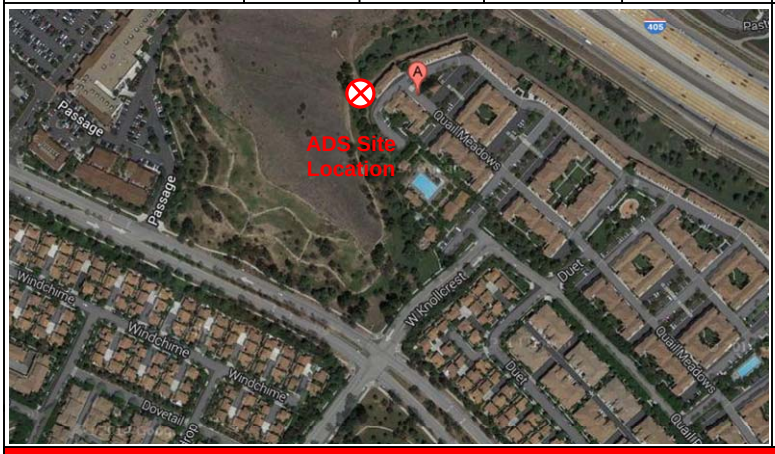
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF12	**Install Date:** 1/21/15	**Monitor Type**	Peak Doppler
Address/Location: 100 Quail Meadows (Located Behind Apartments)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH124S015
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	8.00 "
		Pipe Width:	8.00 "





Investigation Information:

Date/Time of Investigation:	1/21/15 @1430
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.67 fps
Silt:	0.00 Inches

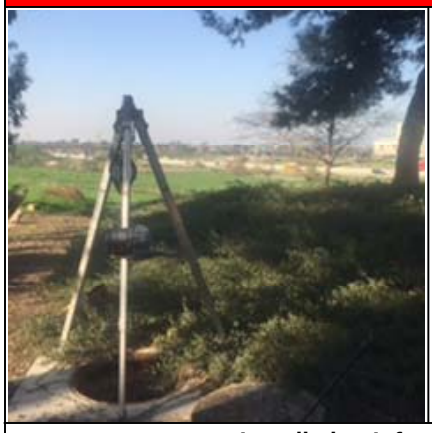
Manhole Information:

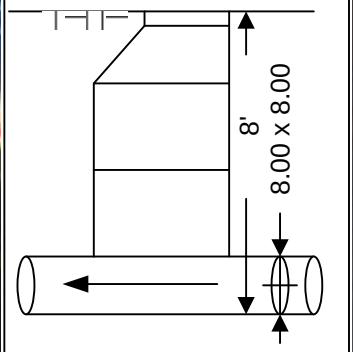
Manhole Depth:	8'						
Manhole Material / Condition	Precast/OK						
Pipe Material / Condition:	VCP/Good						
Land Use:	Residential [X]	Commercial [ ]	Industrial [ ]	Trunk [ ]			
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0				

Safety Notes:

2 man crew required and one blower is to be operated at all times.

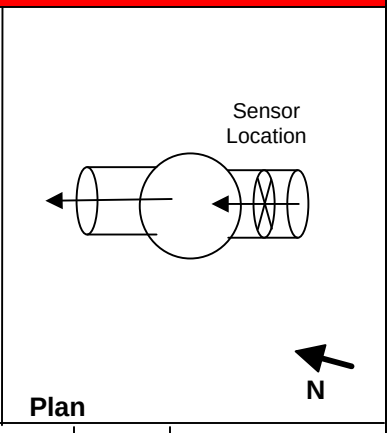
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF12

Flow Monitor

UFF12

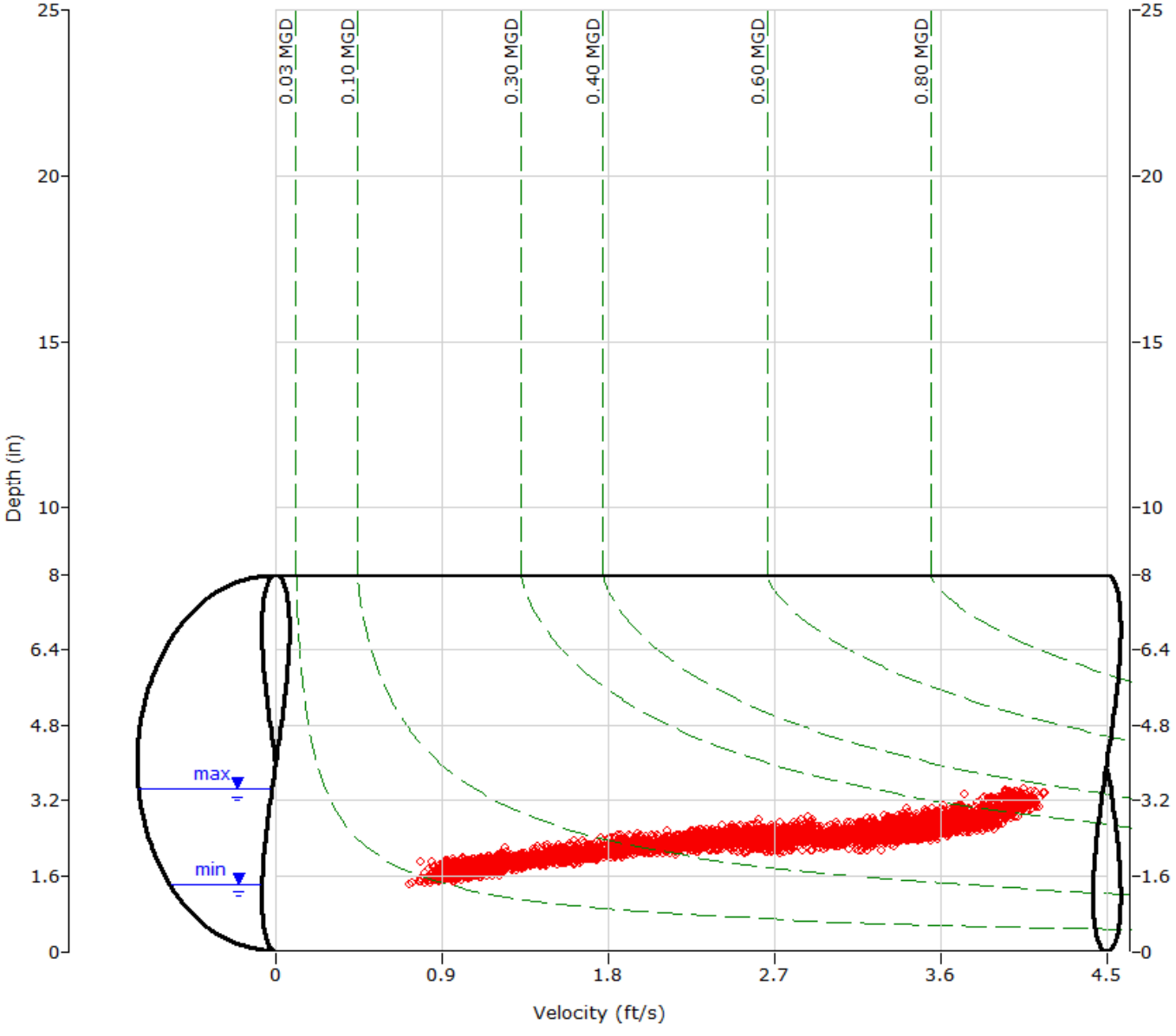
Pipe Height
8.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



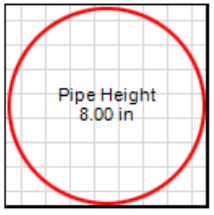
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF12

Flow Monitor

UFF12

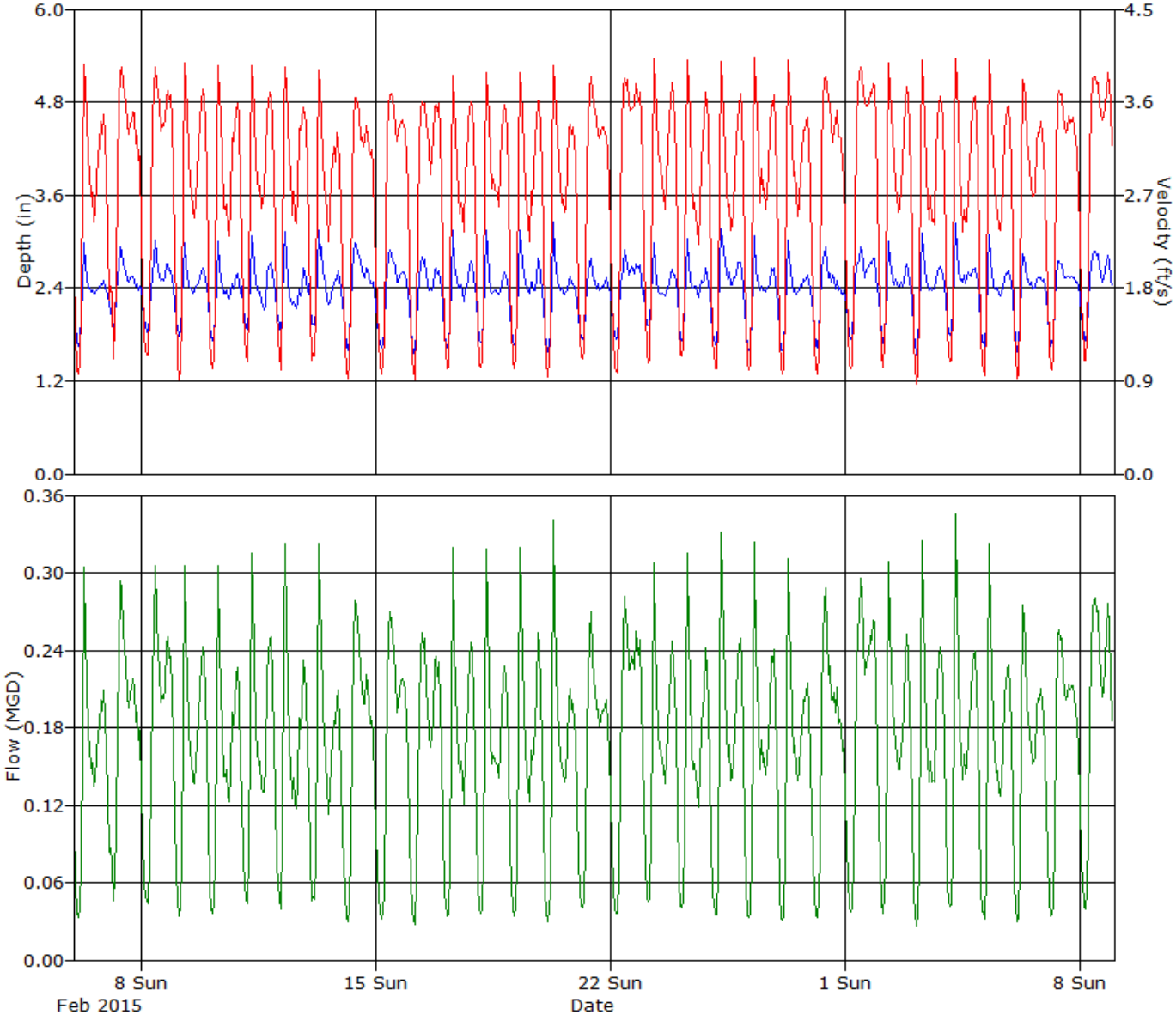


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF12, Pipe Height: 8 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:40	1.57	07:30	3.23	2.31	03:40	0.87	07:30	4.08	2.67	03:40	0.027	07:30	0.348	0.153	0.153	
2/7/2015	04:35	1.76	09:45	3.14	2.44	04:20	0.79	09:55	4.07	2.94	04:35	0.031	09:45	0.332	0.178	0.178	
2/8/2015	05:00	1.73	10:00	3.21	2.44	03:55	0.83	10:40	3.98	2.91	03:55	0.030	10:00	0.331	0.180	0.180	
2/9/2015	03:45	1.73	07:40	3.26	2.39	03:45	0.87	07:40	4.09	2.73	03:45	0.031	07:40	0.353	0.163	0.163	
2/10/2015	03:25	1.68	07:35	3.30	2.33	01:40	0.92	07:40	4.02	2.66	02:35	0.033	07:35	0.353	0.154	0.154	
2/11/2015	03:50	1.78	07:30	3.30	2.40	04:25	0.96	07:40	4.03	2.77	03:50	0.037	07:30	0.351	0.166	0.166	
2/12/2015	05:15	1.71	07:40	3.39	2.34	04:40	0.94	07:45	4.12	2.76	04:55	0.035	07:40	0.374	0.160	0.160	
2/13/2015	03:50	1.88	07:30	3.39	2.42	02:10	0.93	07:35	3.99	2.63	02:10	0.039	07:30	0.362	0.159	0.159	
2/14/2015	04:00	1.49	08:55	3.32	2.43	04:00	0.78	09:40	3.79	2.69	04:00	0.023	08:55	0.330	0.168	0.168	
2/15/2015	04:15	1.52	10:00	3.11	2.39	03:55	0.83	10:00	3.84	2.74	04:15	0.025	10:00	0.311	0.168	0.168	
2/16/2015	04:25	1.49	09:20	2.87	2.35	04:25	0.87	09:20	3.72	2.80	04:25	0.025	09:20	0.270	0.167	0.167	
2/17/2015	03:50	1.61	07:40	3.41	2.36	04:10	0.90	07:45	3.95	2.66	04:10	0.030	07:40	0.362	0.159	0.159	
2/18/2015	04:20	1.60	07:45	3.36	2.35	04:20	0.91	07:45	4.00	2.70	04:20	0.029	07:45	0.360	0.158	0.158	
2/19/2015	03:25	1.57	07:50	3.36	2.38	03:25	0.94	07:45	4.04	2.66	03:25	0.029	07:50	0.364	0.161	0.161	
2/20/2015	03:50	1.51	07:25	3.39	2.32	03:40	0.85	07:25	4.01	2.68	03:50	0.026	07:25	0.365	0.157	0.157	
2/21/2015	04:05	1.66	10:30	2.96	2.33	03:45	1.01	10:30	3.97	2.83	04:05	0.034	10:30	0.301	0.164	0.164	
2/22/2015	04:30	1.69	10:25	2.96	2.43	04:30	0.86	12:15	3.92	2.91	04:30	0.030	11:05	0.297	0.181	0.181	
2/23/2015	03:15	1.84	07:35	3.28	2.39	04:20	0.91	07:35	4.14	2.80	04:20	0.036	07:35	0.360	0.165	0.165	
2/24/2015	03:00	1.57	07:30	3.21	2.36	03:00	0.97	07:35	4.12	2.67	03:00	0.030	07:30	0.348	0.158	0.158	
2/25/2015	02:30	1.53	07:50	3.44	2.46	03:55	0.91	07:55	4.09	2.66	02:30	0.028	07:50	0.376	0.169	0.169	
2/26/2015	03:55	1.45	07:40	3.37	2.33	03:30	0.83	07:35	4.16	2.73	03:55	0.023	07:35	0.376	0.160	0.160	
2/27/2015	03:00	1.50	07:40	3.18	2.33	03:00	0.87	07:45	4.11	2.71	03:00	0.025	07:40	0.343	0.159	0.159	
2/28/2015	04:15	1.50	09:20	3.16	2.36	04:15	0.82	09:25	3.98	2.83	04:15	0.024	09:25	0.330	0.168	0.168	
3/1/2015	05:15	1.64	11:30	3.17	2.48	04:25	0.81	11:50	4.01	2.94	04:25	0.027	11:40	0.333	0.188	0.188	
3/2/2015	02:30	1.63	07:35	3.31	2.40	03:50	0.96	07:35	4.08	2.76	03:50	0.033	07:35	0.359	0.166	0.166	
3/3/2015	03:55	1.42	07:30	3.29	2.38	03:55	0.73	07:35	4.07	2.66	03:55	0.020	07:35	0.356	0.162	0.162	
3/4/2015	03:55	1.72	07:45	3.33	2.46	03:55	0.96	07:45	4.06	2.69	03:55	0.034	07:45	0.362	0.169	0.169	
3/5/2015	04:20	1.53	07:50	3.17	2.36	04:20	0.79	07:50	4.07	2.66	04:20	0.024	07:50	0.338	0.158	0.158	
3/6/2015	03:40	1.46	07:35	3.02	2.37	03:40	0.81	07:35	3.93	2.71	03:40	0.023	07:35	0.307	0.161	0.161	
3/7/2015	03:30	1.58	08:50	2.86	2.38	03:30	0.93	09:25	3.88	2.81	03:30	0.029	08:50	0.273	0.169	0.169	
3/8/2015	04:30	1.64	11:05	3.06	2.47	04:20	0.95	11:10	3.98	3.01	04:20	0.032	11:10	0.316	0.191	0.191	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			5.140
Avg	2.39	2.75	0.166

Site Commentary

Site Information

UFF13	
Pipe Dimensions	14.75" x 14.75"
Silt Level	0.00"

Overview

Site UFF13 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.49	2.78	0.118
Minimum	0.95	0.40	0.010
Maximum	3.61	5.06	0.736
Time of Minimum	3/8/2015 5:00 AM	2/21/2015 5:15 AM	2/21/2015 6:00 AM
Time of Maximum	3/6/2015 8:25 AM	3/6/2015 8:25 AM	3/6/2015 8:25 AM

Data Quality

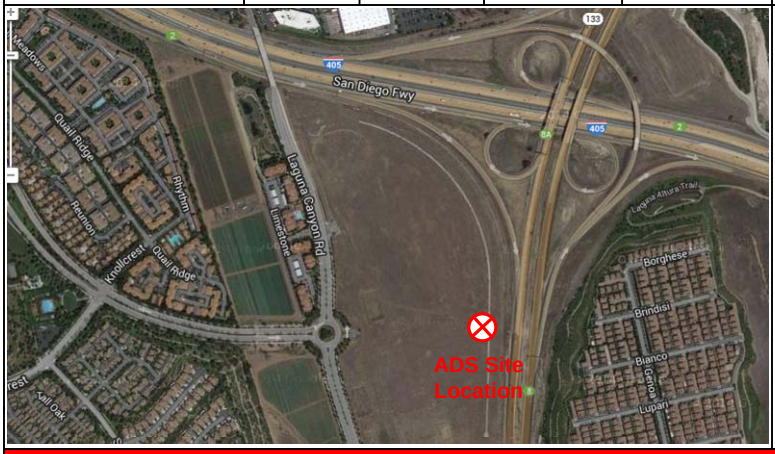
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF13	**Install Date:** 2/2/15	**Monitor Type**	Peak Doppler
Address/Location: Loaguna Canyon Rd & Limestone (Located off easement on other side of grass field)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH138S015
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	14.75 "
		Pipe Width:	14.75 "





Investigation Information:

Date/Time of Investigation:	2/2/15 @ 0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.99 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

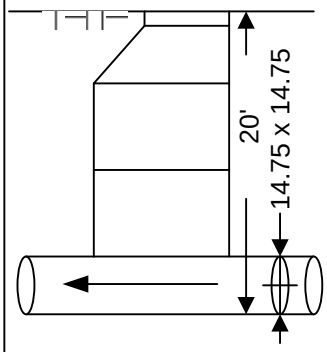
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

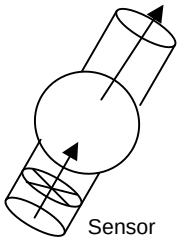
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

UFF13

Flow Monitor

UFF13

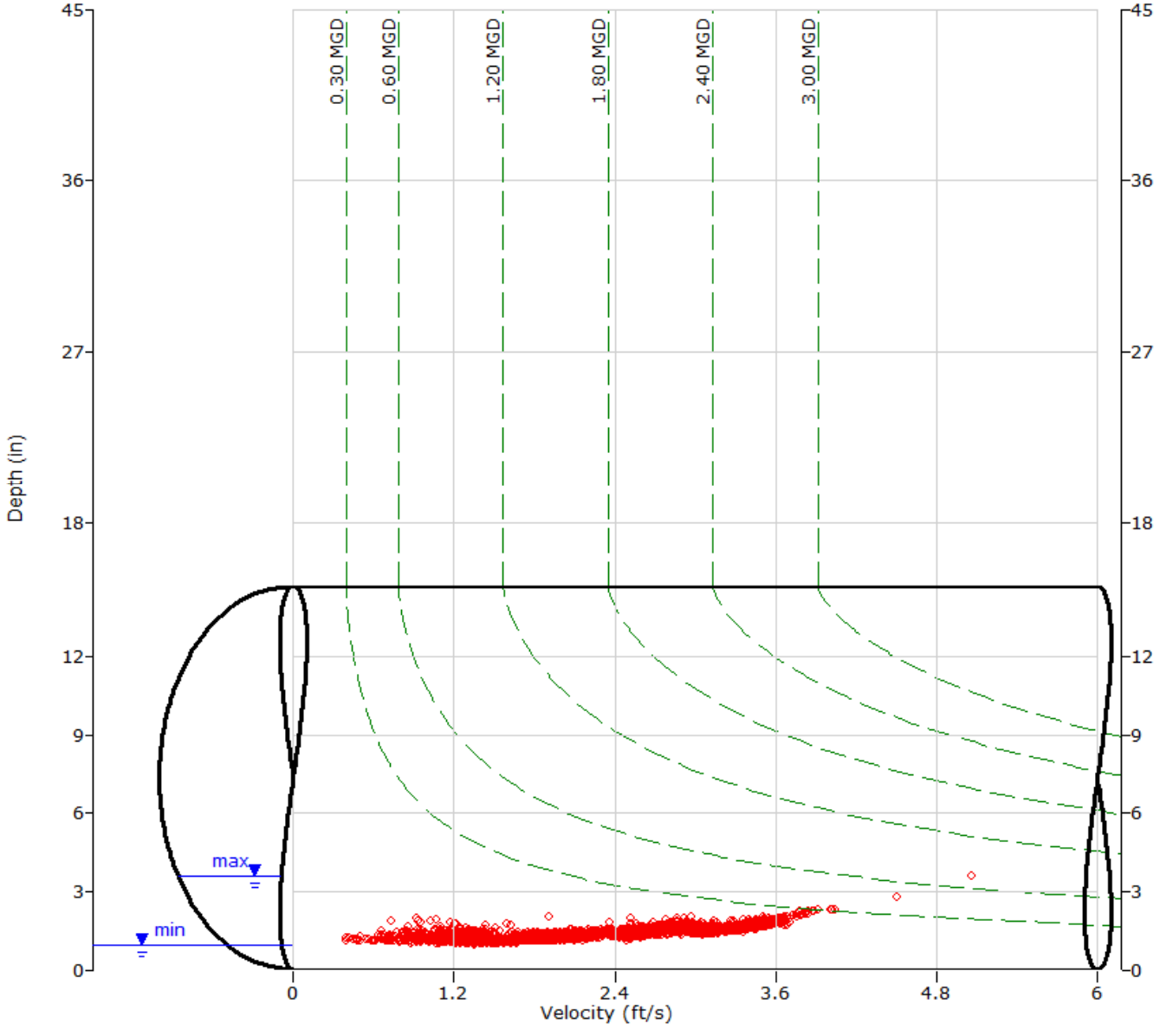
Pipe Height
14.75 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



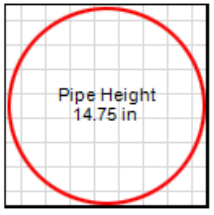
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF13

Flow Monitor

UFF13

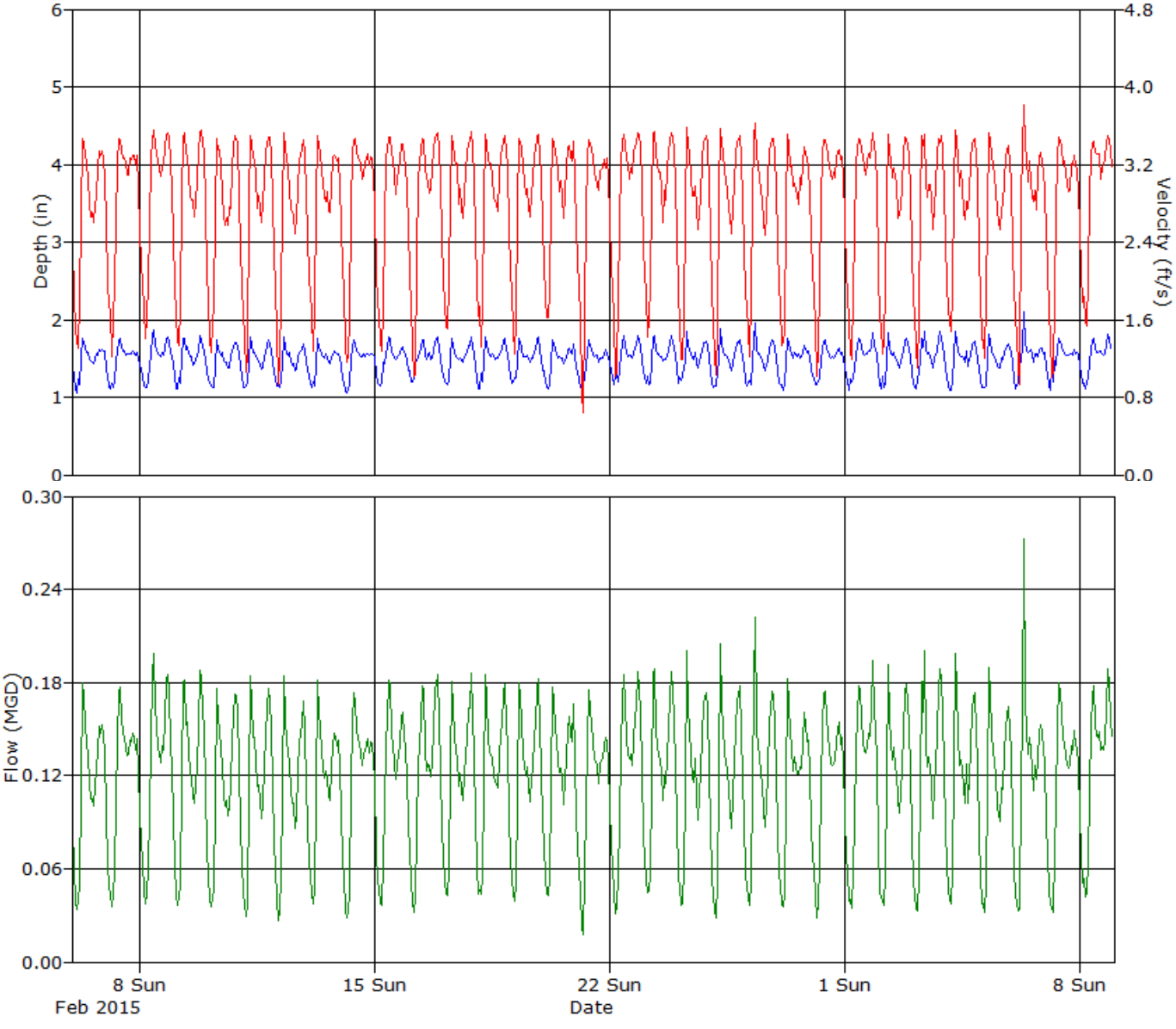


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF13, Pipe Height: 14.75 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:30	0.98	06:50	1.96	1.48	04:25	1.00	07:35	3.59	2.72	04:25	0.026	07:45	0.205	0.114	0.114	
2/7/2015	02:40	1.07	10:00	1.79	1.47	04:45	0.84	10:10	3.52	2.81	05:00	0.023	10:10	0.186	0.118	0.118	
2/8/2015	05:25	0.98	10:00	1.91	1.51	04:50	1.13	20:40	3.64	2.87	04:35	0.032	10:00	0.210	0.125	0.125	
2/9/2015	03:30	1.01	20:05	1.95	1.50	03:35	1.14	20:05	3.71	2.80	03:35	0.027	20:05	0.223	0.120	0.120	
2/10/2015	02:15	1.02	18:05	2.03	1.47	03:30	1.07	07:35	3.58	2.69	03:30	0.029	07:35	0.198	0.112	0.112	
2/11/2015	03:15	0.98	07:25	1.87	1.47	05:10	0.80	08:00	3.57	2.74	05:10	0.020	08:00	0.200	0.115	0.115	
2/12/2015	04:35	1.02	07:55	1.91	1.45	04:20	0.58	07:45	3.65	2.68	04:20	0.016	07:50	0.212	0.110	0.110	
2/13/2015	04:25	1.07	07:30	1.98	1.47	04:20	0.92	07:35	3.62	2.77	04:50	0.026	07:30	0.222	0.114	0.114	
2/14/2015	04:15	1.01	09:40	1.82	1.46	04:25	0.91	10:05	3.57	2.78	04:45	0.023	09:10	0.190	0.115	0.115	
2/15/2015	04:50	1.12	11:15	1.86	1.49	05:35	0.97	11:15	3.59	2.80	05:35	0.027	11:15	0.201	0.118	0.118	
2/16/2015	03:10	1.10	10:50	2.14	1.52	05:45	0.73	10:50	3.80	2.79	04:10	0.028	10:50	0.260	0.122	0.122	
2/17/2015	04:35	1.06	07:40	1.84	1.49	04:45	1.10	21:10	3.58	2.84	03:50	0.035	07:55	0.196	0.120	0.120	
2/18/2015	02:25	1.04	07:45	1.85	1.50	04:35	1.17	14:55	3.69	2.82	04:10	0.034	07:45	0.198	0.121	0.121	
2/19/2015	02:30	1.14	07:40	1.90	1.50	05:00	1.02	07:30	3.67	2.80	05:05	0.031	07:35	0.209	0.119	0.119	
2/20/2015	04:20	1.03	07:40	1.86	1.48	03:25	1.30	07:40	3.55	2.86	03:25	0.031	07:40	0.198	0.119	0.119	
2/21/2015	04:00	1.08	09:50	1.83	1.46	05:15	0.40	09:40	3.51	2.72	06:00	0.010	09:50	0.191	0.112	0.112	
2/22/2015	04:40	1.06	20:20	1.86	1.51	05:05	0.66	19:45	3.59	2.82	05:05	0.021	20:20	0.201	0.122	0.122	
2/23/2015	03:15	1.08	08:40	1.90	1.51	03:30	1.24	20:00	3.67	2.86	04:05	0.037	08:40	0.210	0.123	0.123	
2/24/2015	02:10	1.14	11:50	1.95	1.50	03:40	0.99	07:40	3.63	2.73	03:40	0.027	07:35	0.212	0.117	0.117	
2/25/2015	02:25	1.03	07:30	2.24	1.49	05:00	0.66	07:40	3.82	2.73	03:30	0.021	07:30	0.278	0.116	0.116	
2/26/2015	04:40	1.04	08:35	2.32	1.49	04:25	0.86	08:35	4.04	2.77	04:10	0.027	08:35	0.313	0.119	0.119	
2/27/2015	04:25	0.98	12:35	1.87	1.48	05:25	0.91	07:50	3.64	2.76	05:00	0.024	07:50	0.200	0.116	0.116	
2/28/2015	04:05	1.04	10:10	1.79	1.48	05:00	0.50	10:10	3.53	2.79	05:00	0.016	10:10	0.188	0.117	0.117	
3/1/2015	04:25	1.02	20:30	1.98	1.50	05:45	0.64	20:30	3.61	2.82	05:40	0.020	20:30	0.221	0.122	0.122	
3/2/2015	04:30	1.02	07:35	1.97	1.48	04:05	1.07	07:20	3.62	2.75	02:55	0.032	07:35	0.220	0.116	0.116	
3/3/2015	03:20	1.02	09:40	2.27	1.51	04:15	0.85	09:40	3.89	2.75	04:15	0.025	09:40	0.290	0.121	0.121	
3/4/2015	03:20	1.06	07:20	1.93	1.48	00:50	1.30	19:40	3.65	2.80	04:40	0.035	07:20	0.215	0.118	0.118	
3/5/2015	04:45	1.03	07:40	1.99	1.47	04:15	0.86	07:40	3.66	2.70	04:45	0.021	07:40	0.226	0.113	0.113	
3/6/2015	04:10	1.04	08:25	3.61	1.52	05:50	0.84	08:25	5.06	2.74	04:35	0.024	08:25	0.736	0.121	0.121	
3/7/2015	03:50	1.05	06:50	2.01	1.50	05:15	0.72	09:25	3.56	2.72	05:15	0.021	09:15	0.197	0.116	0.116	
3/8/2015	05:00	0.95	20:35	1.95	1.51	05:20	1.15	20:50	3.66	2.89	05:00	0.028	20:50	0.213	0.125	0.125	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			3.656
Avg	1.49	2.78	0.118

Site Commentary

Site Information

UFF14	
Pipe Dimensions	19.50" x 19.13"
Silt Level	0.00"

Overview

Site UFF14 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.30	2.10	0.202
Minimum	1.41	0.57	0.027
Maximum	3.65	3.14	0.509
Time of Minimum	2/12/2015 4:20 AM	2/7/2015 4:25 AM	2/7/2015 4:25 AM
Time of Maximum	2/27/2015 12:25 PM	2/20/2015 11:25 AM	2/27/2015 12:25 PM

Data Quality

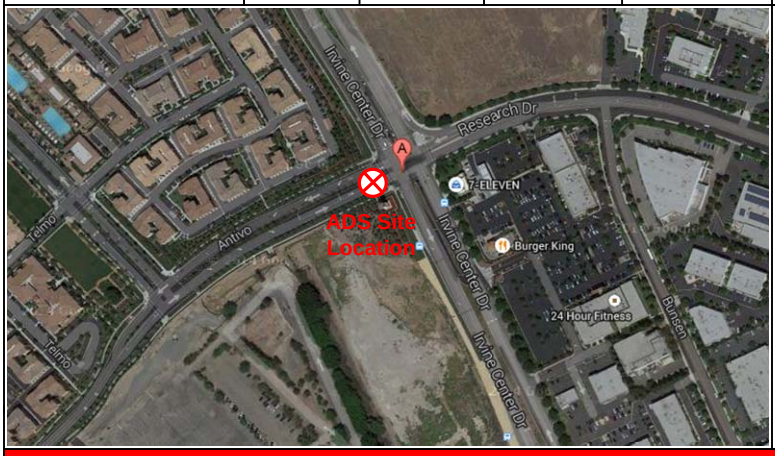
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

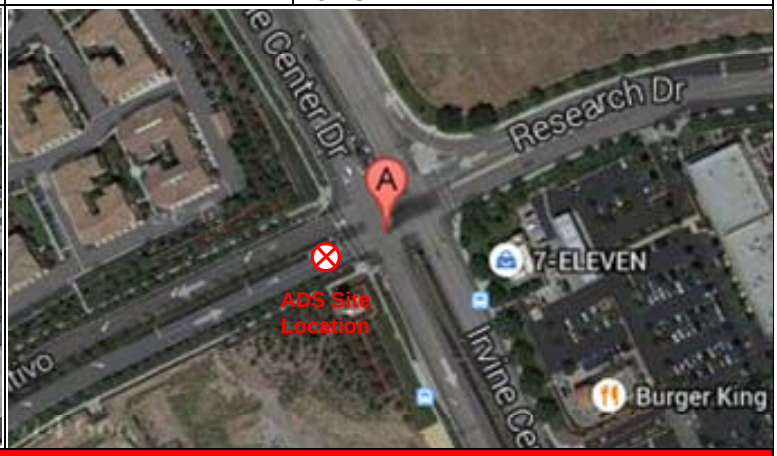
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF14	**Install Date:** 2/2/15	**Monitor Type**	Peak Doppler
Address/Location: Antivo & Irvine Center Dr.		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH157E054
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	19.50 "
		Pipe Width:	19.13 "





Investigation Information:

Date/Time of Investigation:	2/2/15 @ 0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.96 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

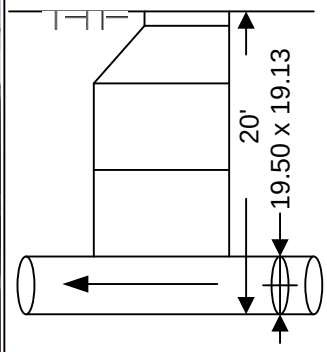
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

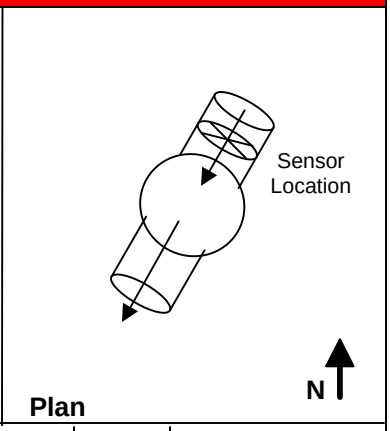
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

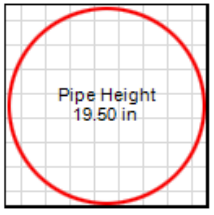
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF14

Flow Monitor

UFF14

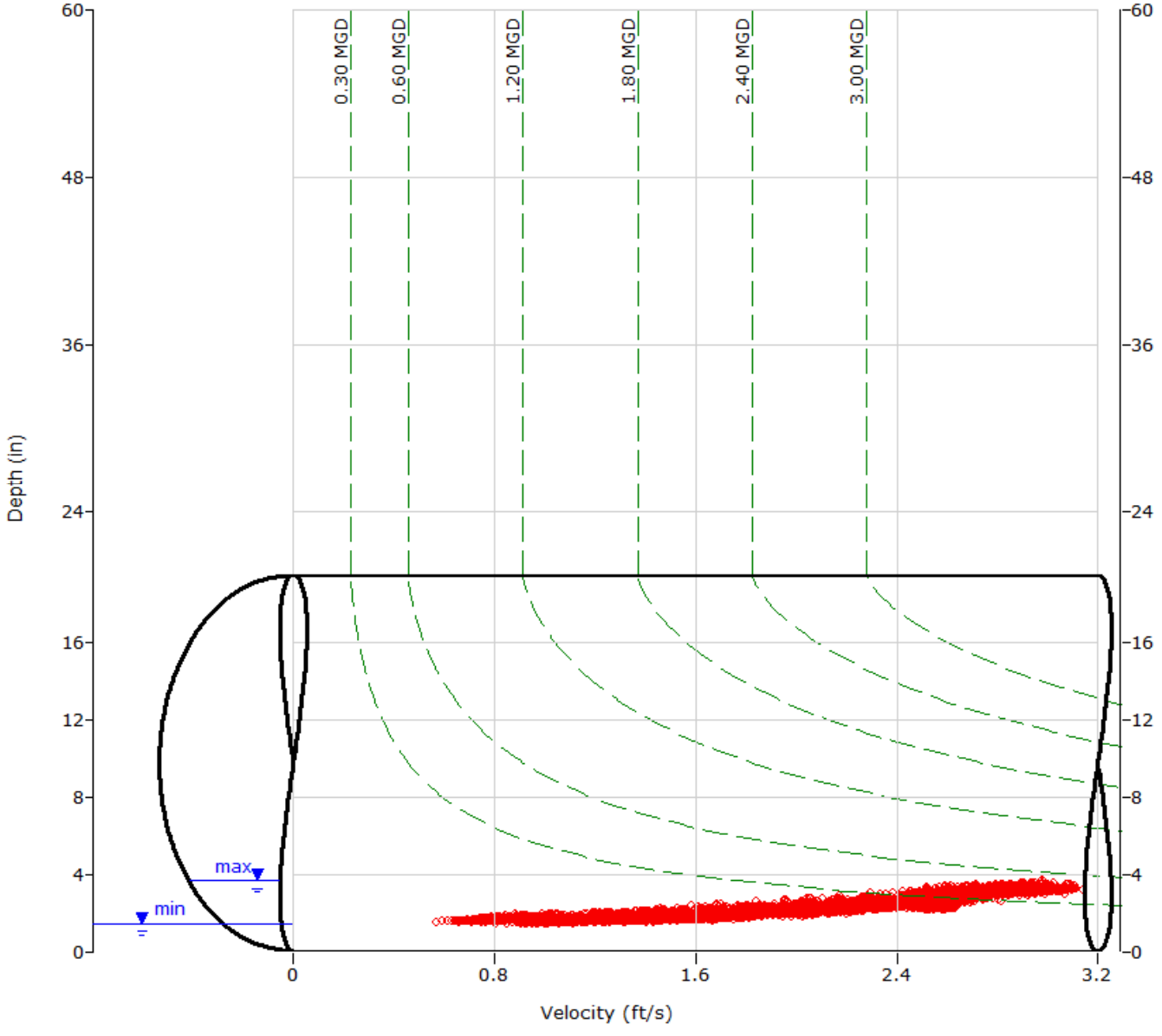


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



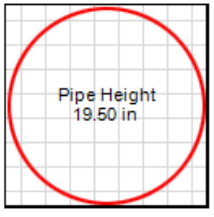
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF14

Flow Monitor

UFF14

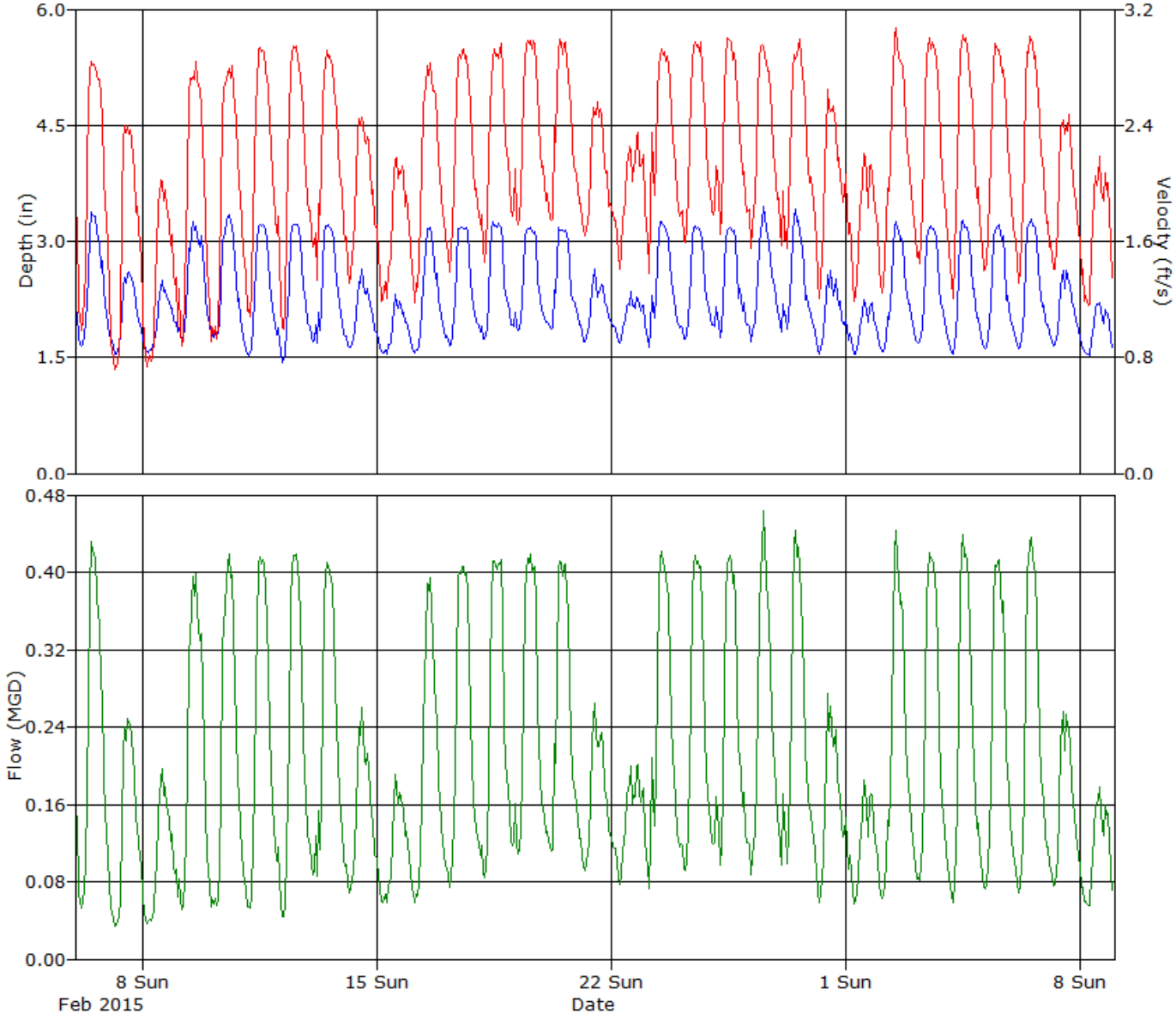


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF14, Pipe Height: 19.5 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	05:25	1.58	11:15	3.50	2.45	02:20	0.84	11:05	2.99	2.05	05:10	0.044	11:10	0.471	0.223	0.223	
2/7/2015	04:30	1.52	13:55	2.76	2.07	04:25	0.57	14:55	2.70	1.62	04:25	0.027	15:05	0.273	0.135	0.135	
2/8/2015	03:50	1.53	13:55	2.61	1.97	03:35	0.65	13:45	2.26	1.39	03:50	0.031	13:55	0.224	0.105	0.105	
2/9/2015	04:20	1.71	12:35	3.42	2.50	01:10	0.79	14:10	2.88	1.96	04:20	0.045	12:35	0.438	0.217	0.217	
2/10/2015	04:20	1.71	14:05	3.44	2.47	04:10	0.77	14:35	2.95	1.97	04:10	0.044	14:35	0.441	0.217	0.217	
2/11/2015	04:15	1.48	12:30	3.24	2.37	04:10	0.90	12:00	2.99	2.13	04:10	0.041	12:10	0.424	0.222	0.222	
2/12/2015	04:20	1.41	13:50	3.28	2.36	05:55	0.81	14:10	3.10	2.15	05:55	0.036	14:10	0.443	0.222	0.222	
2/13/2015	05:15	1.49	13:55	3.24	2.43	05:45	0.87	12:20	3.01	2.24	05:45	0.041	12:20	0.425	0.234	0.234	
2/14/2015	04:50	1.60	13:35	2.72	2.06	04:50	1.12	14:15	2.58	1.94	04:50	0.057	13:35	0.283	0.151	0.151	
2/15/2015	05:50	1.47	13:40	2.56	1.87	04:50	0.90	13:55	2.26	1.71	04:50	0.043	13:40	0.222	0.115	0.115	
2/16/2015	03:55	1.52	14:40	3.24	2.29	05:15	1.03	14:45	2.94	2.11	05:15	0.050	14:45	0.419	0.204	0.204	
2/17/2015	05:00	1.62	15:40	3.22	2.43	04:35	1.20	15:40	3.01	2.27	04:35	0.064	15:40	0.427	0.237	0.237	
2/18/2015	04:10	1.67	11:20	3.29	2.48	05:45	1.24	17:35	3.03	2.30	05:45	0.068	17:35	0.428	0.245	0.245	
2/19/2015	06:00	1.77	14:30	3.33	2.49	05:20	1.66	12:50	3.08	2.40	06:05	0.099	14:30	0.445	0.252	0.252	
2/20/2015	05:25	1.84	10:45	3.42	2.49	05:10	1.64	11:25	3.14	2.39	05:10	0.105	10:45	0.456	0.249	0.249	
2/21/2015	06:30	1.67	12:20	2.76	2.13	04:35	1.47	15:20	2.62	2.09	04:35	0.080	12:20	0.294	0.169	0.169	
2/22/2015	06:40	1.67	14:05	2.45	2.04	06:30	1.32	19:10	2.40	1.96	06:30	0.072	14:05	0.220	0.146	0.146	
2/23/2015	03:50	1.60	11:05	3.35	2.49	03:40	1.34	14:45	2.99	2.34	03:40	0.069	10:50	0.433	0.248	0.248	
2/24/2015	04:10	1.69	14:30	3.20	2.44	04:20	1.40	12:45	3.04	2.32	04:20	0.078	12:45	0.429	0.239	0.239	
2/25/2015	06:45	1.73	13:10	3.21	2.47	06:10	1.57	11:40	3.06	2.38	06:10	0.091	12:50	0.429	0.246	0.246	
2/26/2015	04:25	1.65	13:05	3.55	2.49	04:25	1.40	13:55	3.11	2.31	04:25	0.075	13:45	0.485	0.244	0.244	
2/27/2015	05:20	1.73	12:25	3.65	2.49	04:25	1.22	14:10	3.02	2.29	04:25	0.071	12:25	0.509	0.243	0.243	
2/28/2015	04:55	1.53	11:05	2.97	2.08	05:50	1.12	11:00	3.07	2.02	05:00	0.055	11:00	0.387	0.159	0.159	
3/1/2015	07:15	1.52	19:40	2.34	1.91	07:10	1.04	13:45	2.28	1.79	07:10	0.049	13:45	0.200	0.122	0.122	
3/2/2015	03:45	1.51	12:15	3.27	2.37	03:45	1.07	12:30	3.12	2.24	03:45	0.050	12:30	0.452	0.227	0.227	
3/3/2015	04:05	1.63	13:25	3.23	2.41	04:10	1.33	14:10	3.07	2.29	04:10	0.070	12:35	0.431	0.235	0.235	
3/4/2015	05:15	1.48	11:50	3.57	2.38	05:15	0.93	12:05	3.08	2.23	05:15	0.042	11:50	0.493	0.229	0.229	
3/5/2015	04:45	1.57	14:55	3.23	2.38	04:35	1.24	10:55	3.04	2.24	04:35	0.062	12:50	0.422	0.228	0.228	
3/6/2015	05:10	1.56	13:00	3.36	2.42	04:55	1.12	10:20	3.10	2.25	05:10	0.056	13:00	0.467	0.235	0.235	
3/7/2015	05:30	1.63	17:00	2.73	2.10	06:55	1.29	16:50	2.61	1.95	05:25	0.069	17:00	0.290	0.156	0.156	
3/8/2015	07:10	1.48	14:25	2.27	1.86	05:55	0.90	13:50	2.35	1.68	07:10	0.041	13:55	0.198	0.112	0.112	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			6.268
Avg	2.30	2.10	0.202

Site Commentary

Site Information

UFF15	
Pipe Dimensions	10.00" x 10.13"
Silt Level	0.00"

Overview

Site UFF15 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.55	5.41	0.196
Minimum	1.23	1.78	0.049
Maximum	2.11	7.24	0.393
Time of Minimum	2/27/2015 3:55 AM	2/18/2015 4:00 AM	3/1/2015 5:15 AM
Time of Maximum	2/9/2015 7:25 AM	2/20/2015 7:35 AM	2/20/2015 7:35 AM

Data Quality

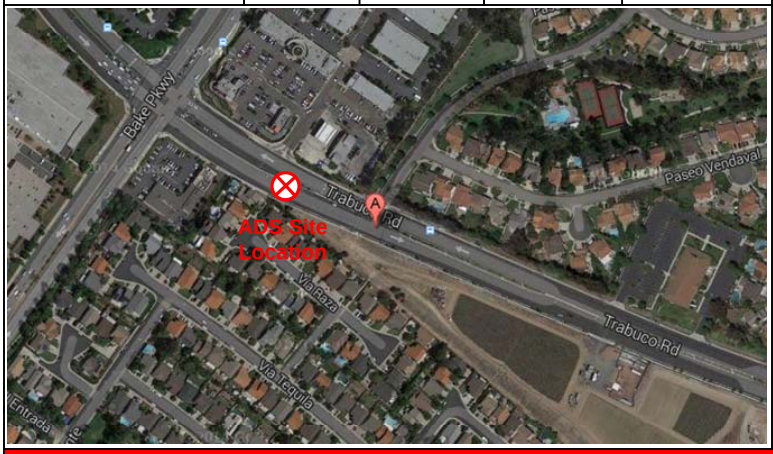
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

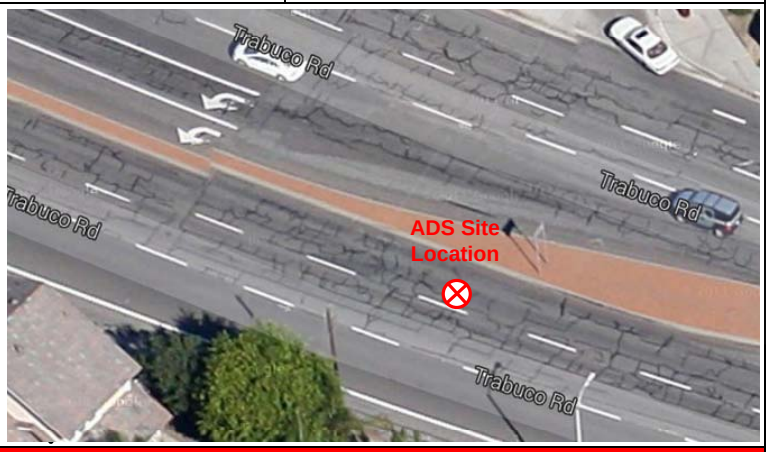
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF15	**Install Date:** 1/23/15	**Monitor Type**	Peak Doppler
Address/Location: Trabuco & Bake Pkwy (Located on Trabuco east of Bake)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH194W079
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	10.00 "
		Pipe Width:	10.13 "





Investigation Information:

Date/Time of Investigation:	1/23/15 @ 1230
Site Hydraulics:	Very fast velocity that strong surges in flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	6.33 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	6'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

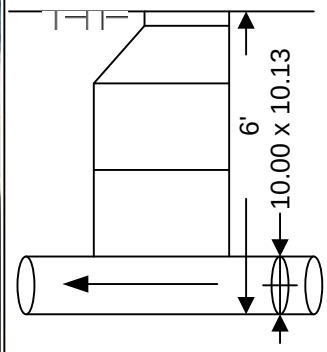
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

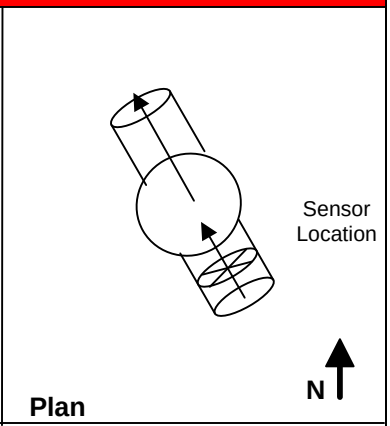
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

UFF15

Flow Monitor

UFF15

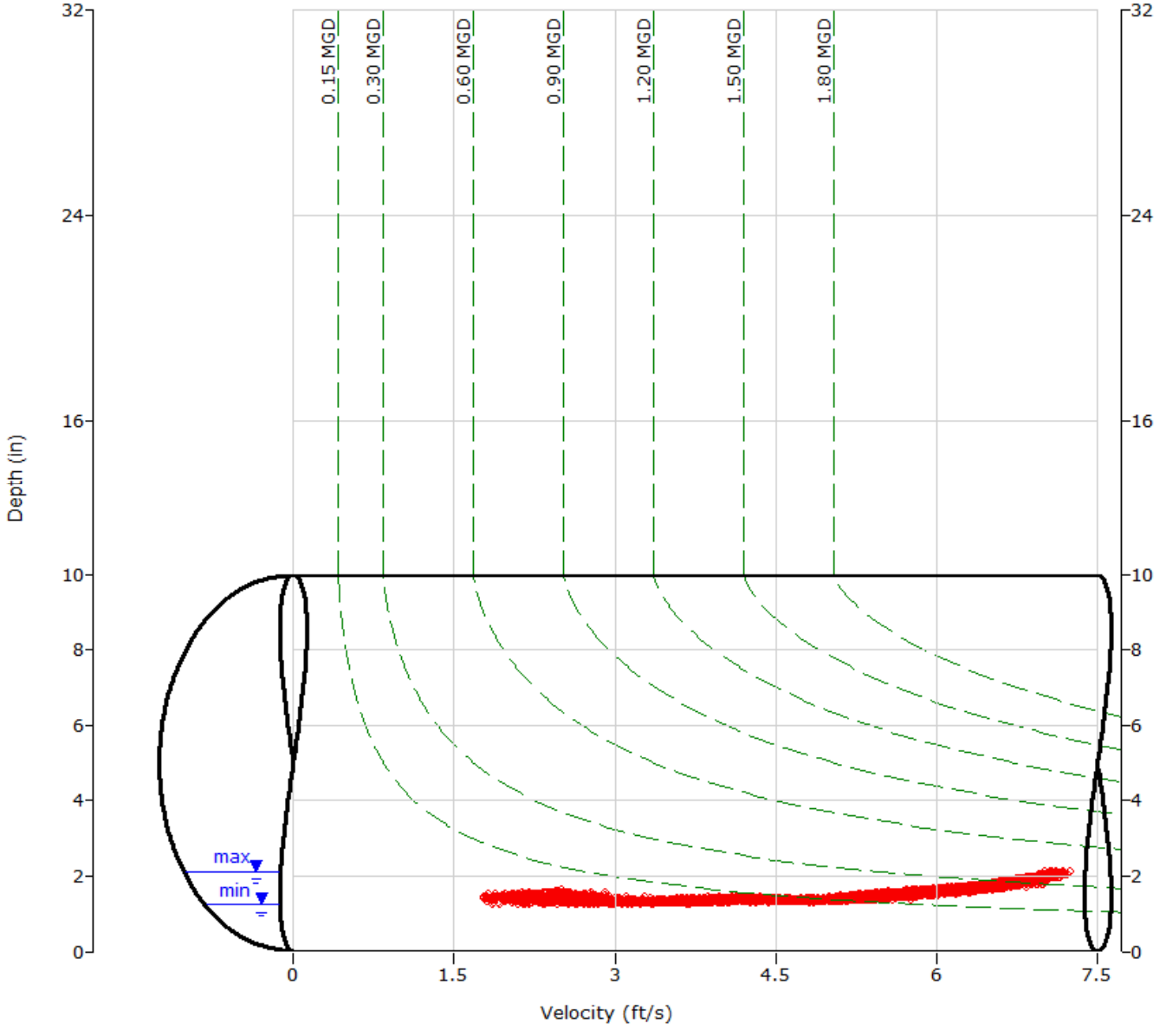
Pipe Height
10.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF15

Flow Monitor

UFF15

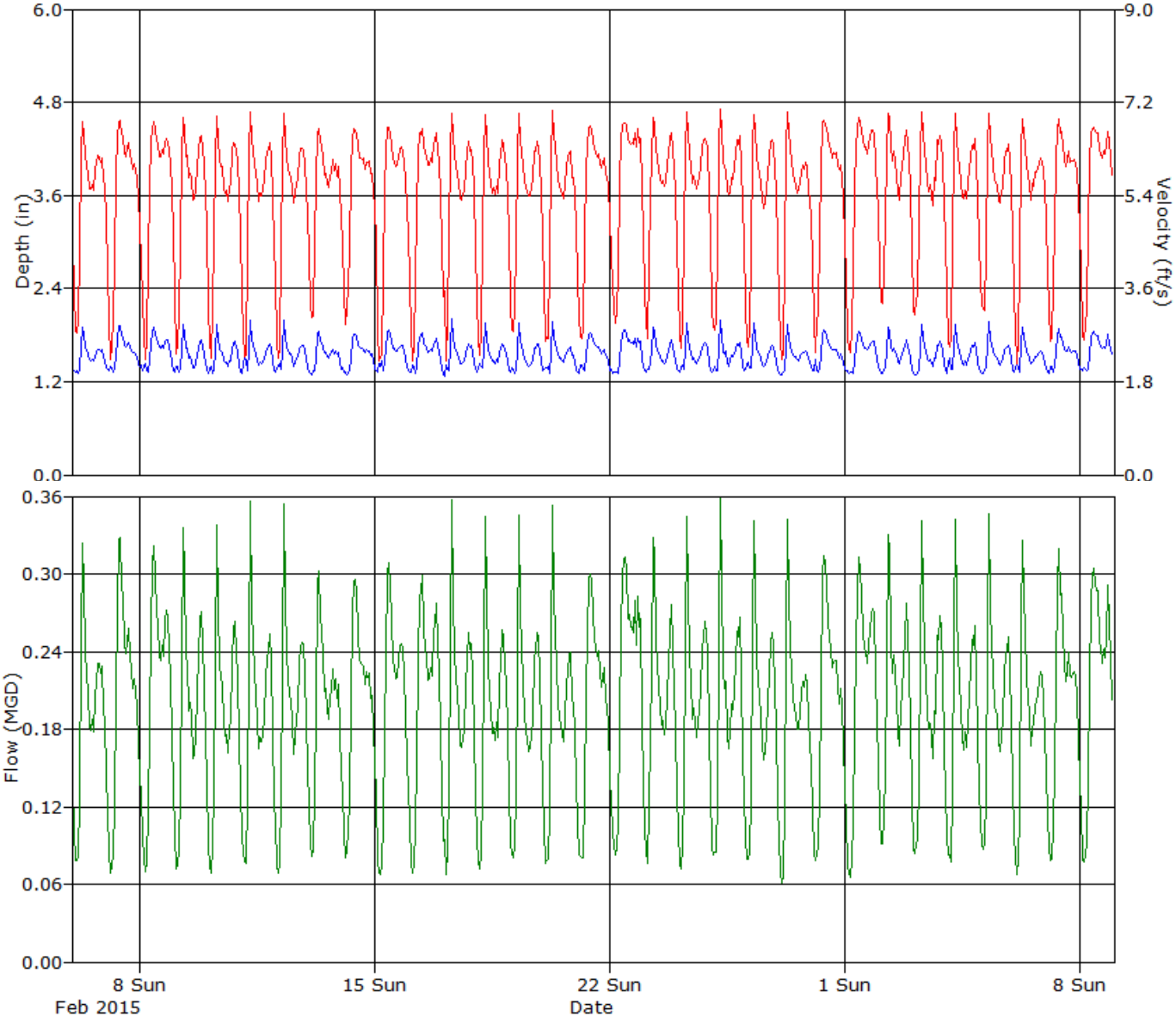
Pipe Height
10.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF15, Pipe Height: 10 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	02:05	1.28	07:55	1.94	1.53	03:00	2.21	08:00	6.93	5.35	03:00	0.064	08:00	0.336	0.191	0.191	
2/7/2015	05:50	1.29	09:45	2.05	1.58	03:55	1.96	09:45	7.00	5.38	03:55	0.059	09:45	0.368	0.202	0.202	
2/8/2015	06:05	1.28	09:50	1.96	1.60	04:20	1.85	10:40	6.95	5.46	04:20	0.056	09:50	0.340	0.208	0.208	
2/9/2015	01:40	1.29	07:25	2.11	1.53	03:40	1.94	07:30	7.06	5.39	02:20	0.060	07:25	0.387	0.193	0.193	
2/10/2015	01:35	1.27	07:35	2.07	1.53	04:00	1.98	07:35	7.15	5.34	03:55	0.058	07:35	0.383	0.190	0.190	
2/11/2015	01:35	1.28	07:05	2.04	1.54	04:10	1.83	07:40	7.14	5.30	04:10	0.062	07:40	0.374	0.190	0.190	
2/12/2015	02:05	1.28	07:50	2.09	1.54	03:55	1.90	07:05	7.07	5.31	03:55	0.057	07:50	0.381	0.191	0.191	
2/13/2015	03:15	1.26	07:45	1.96	1.54	04:10	2.16	07:50	6.88	5.45	04:10	0.064	07:50	0.339	0.195	0.195	
2/14/2015	03:05	1.28	10:35	1.95	1.55	03:15	2.24	10:35	6.90	5.48	03:15	0.068	10:35	0.339	0.199	0.199	
2/15/2015	02:10	1.28	10:45	1.92	1.56	03:30	1.88	09:20	6.85	5.31	03:30	0.060	10:45	0.329	0.196	0.196	
2/16/2015	05:40	1.27	10:45	1.91	1.58	03:50	1.86	10:15	6.77	5.46	04:40	0.054	10:45	0.322	0.204	0.204	
2/17/2015	02:20	1.26	07:10	2.10	1.53	03:35	1.97	07:15	7.11	5.38	03:05	0.056	07:10	0.387	0.193	0.193	
2/18/2015	01:55	1.29	07:45	2.05	1.54	04:00	1.78	07:45	7.14	5.31	04:00	0.055	07:45	0.377	0.190	0.190	
2/19/2015	05:00	1.28	07:15	2.03	1.52	02:40	2.18	07:15	7.14	5.36	02:40	0.070	07:15	0.370	0.189	0.189	
2/20/2015	03:35	1.27	07:35	2.09	1.53	03:10	2.02	07:35	7.24	5.30	03:25	0.059	07:35	0.393	0.189	0.189	
2/21/2015	04:55	1.28	09:35	1.91	1.56	05:20	1.96	09:30	6.89	5.39	02:20	0.058	09:30	0.328	0.199	0.199	
2/22/2015	06:05	1.27	10:25	1.98	1.60	04:40	2.38	10:20	7.15	5.65	04:20	0.069	10:20	0.356	0.218	0.218	
2/23/2015	03:05	1.26	07:20	2.01	1.54	03:35	2.15	07:55	7.10	5.53	03:35	0.068	07:25	0.362	0.199	0.199	
2/24/2015	02:20	1.26	07:45	1.99	1.54	03:15	1.99	07:35	7.07	5.43	03:15	0.058	07:45	0.358	0.196	0.196	
2/25/2015	02:00	1.29	07:30	2.05	1.54	04:45	2.15	07:20	7.11	5.40	04:45	0.069	07:30	0.374	0.194	0.194	
2/26/2015	05:15	1.28	07:40	2.07	1.53	03:35	1.86	07:40	7.18	5.31	03:35	0.057	07:40	0.383	0.190	0.190	
2/27/2015	03:55	1.23	07:35	2.04	1.52	04:25	1.81	07:35	7.19	5.25	04:45	0.049	07:35	0.375	0.186	0.186	
2/28/2015	02:20	1.28	10:50	1.93	1.56	02:35	1.99	11:05	6.95	5.46	02:35	0.059	10:50	0.331	0.201	0.201	
3/1/2015	04:25	1.26	10:40	1.92	1.57	05:15	1.86	10:40	7.01	5.47	05:15	0.049	10:40	0.335	0.206	0.206	
3/2/2015	02:20	1.27	07:30	1.96	1.55	03:25	2.82	08:10	7.10	5.63	03:25	0.076	08:05	0.349	0.204	0.204	
3/3/2015	02:05	1.25	07:45	1.98	1.52	01:30	2.51	07:20	7.12	5.44	01:20	0.069	07:45	0.356	0.194	0.194	
3/4/2015	01:50	1.27	07:20	2.02	1.54	03:55	1.81	07:20	7.21	5.32	03:55	0.057	07:20	0.372	0.191	0.191	
3/5/2015	03:25	1.26	07:05	2.02	1.53	05:10	2.50	07:05	7.13	5.40	04:30	0.077	07:05	0.368	0.193	0.193	
3/6/2015	05:10	1.29	06:50	1.97	1.53	03:50	1.81	07:35	7.09	5.30	03:50	0.055	06:50	0.348	0.187	0.187	
3/7/2015	05:10	1.28	09:25	1.92	1.56	04:50	2.13	09:35	6.95	5.46	04:15	0.070	09:25	0.332	0.200	0.200	
3/8/2015	05:45	1.29	20:00	1.92	1.61	03:25	2.00	20:00	7.01	5.55	03:25	0.059	20:00	0.337	0.214	0.214	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			6.089
Avg	1.55	5.41	0.196

Site Commentary

Site Information

UFF16	
Pipe Dimensions	7.88" x 7.88"
Silt Level	0.00"

Overview

Site UFF16 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.48	8.24	0.248
Minimum	1.00	4.18	0.073
Maximum	2.30	11.12	0.581
Time of Minimum	2/11/2015 1:45 AM	2/21/2015 5:05 AM	2/21/2015 5:05 AM
Time of Maximum	2/23/2015 7:10 AM	2/8/2015 10:10 AM	2/23/2015 7:10 AM

Data Quality

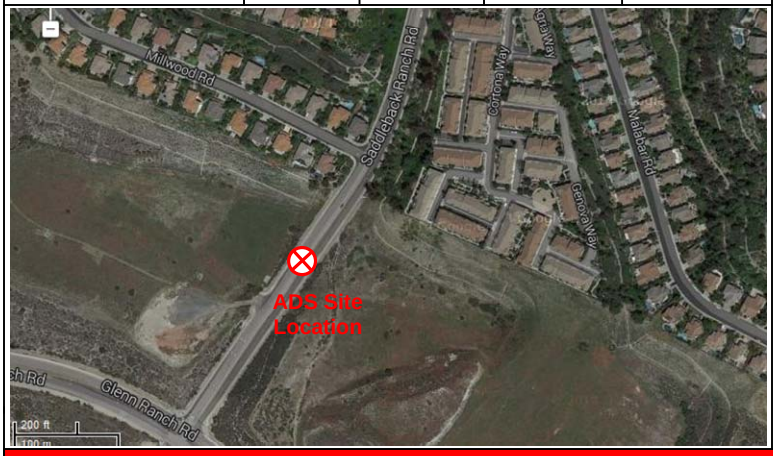
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF16	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: Saddleback & Glen Ranch Rd		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH217N002
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	7.88 "
		Pipe Width:	7.88 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1300
Site Hydraulics:	Very fast velocity that strong surges in flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.38 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	9.42 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

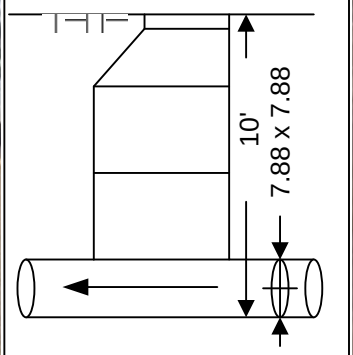
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

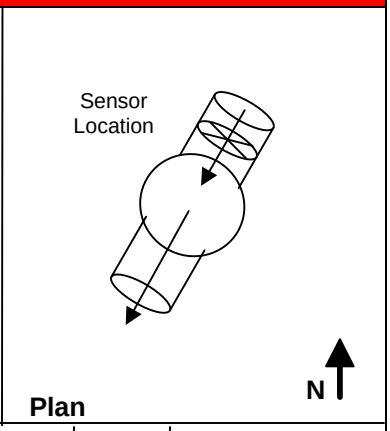
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

UFF16

Flow Monitor

UFF16

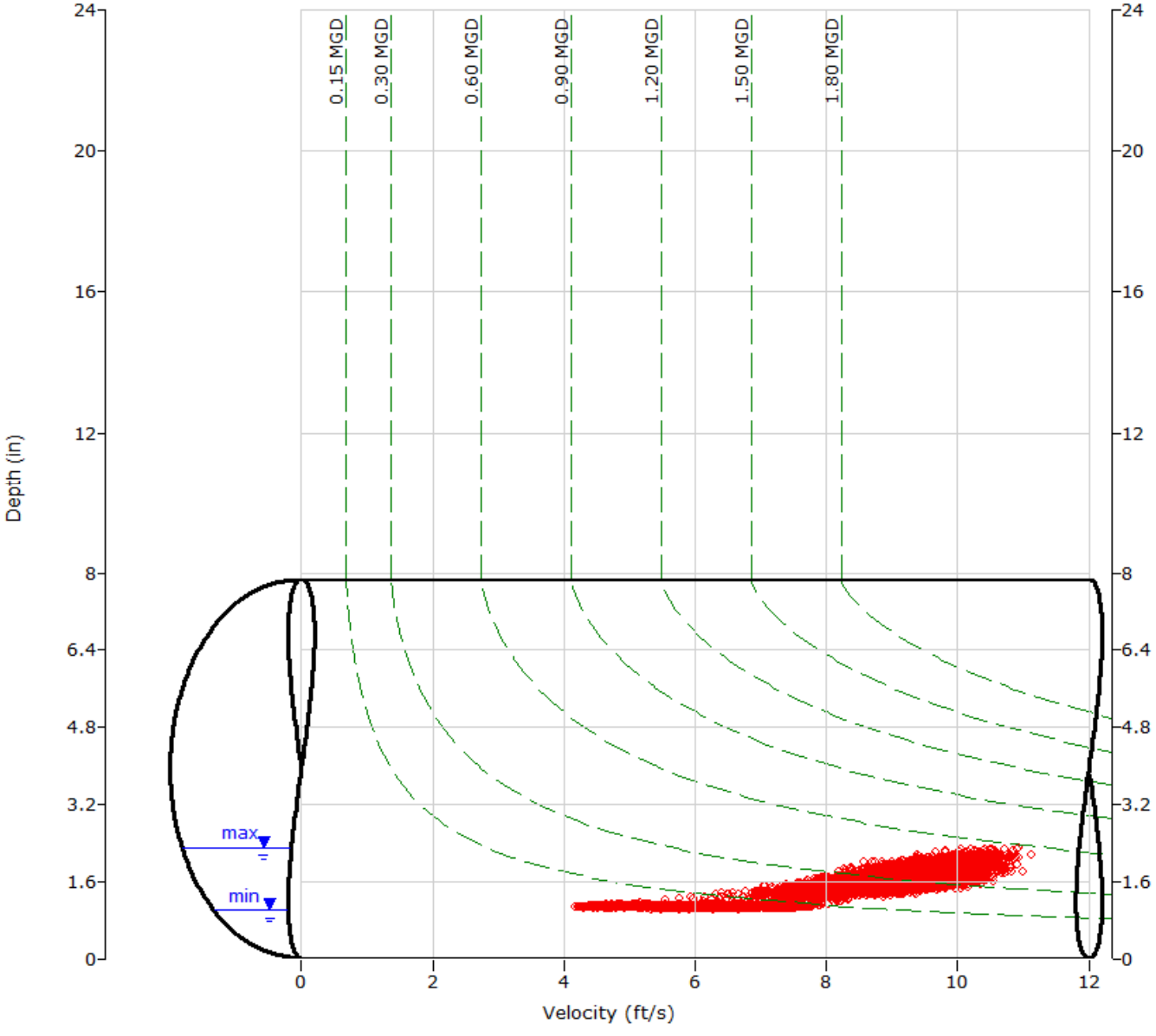
Pipe Height
7.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF16

Flow Monitor

UFF16

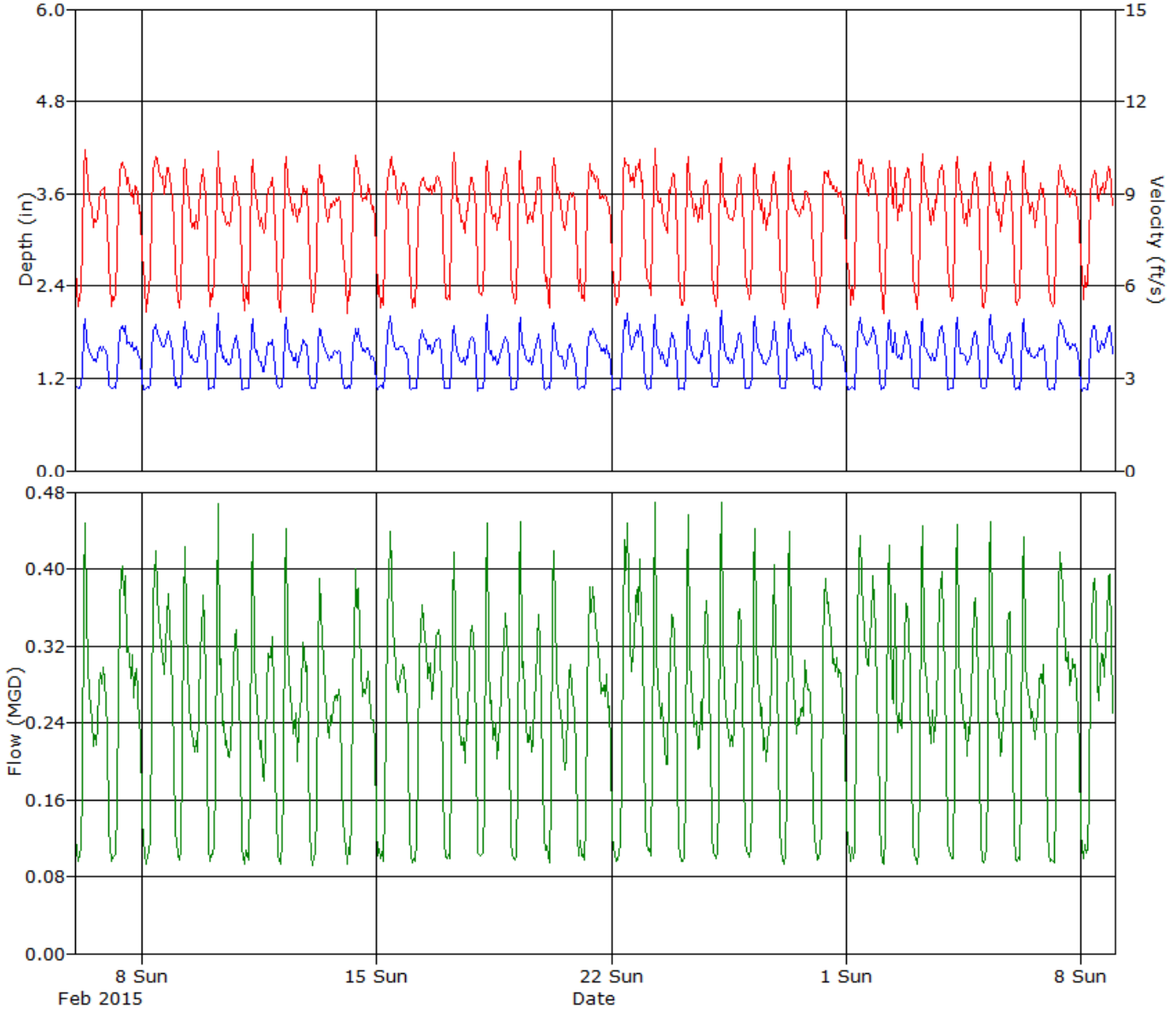
Pipe Height
7.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF16, Pipe Height: 7.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	02:20	1.04	06:55	2.27	1.47	03:05	4.21	07:10	10.84	8.19	03:05	0.074	06:55	0.561	0.241	0.241	
2/7/2015	01:05	1.05	12:40	2.18	1.50	02:40	4.60	10:25	10.69	8.30	02:40	0.082	12:40	0.495	0.255	0.255	
2/8/2015	02:30	1.05	10:10	2.14	1.51	03:40	4.29	10:10	11.12	8.47	03:40	0.076	10:10	0.533	0.265	0.265	
2/9/2015	05:30	1.03	07:10	2.23	1.48	01:10	4.47	06:35	10.80	8.13	01:10	0.080	07:10	0.534	0.244	0.244	
2/10/2015	00:00	1.04	07:30	2.26	1.45	03:35	4.45	07:45	10.66	8.13	01:15	0.077	07:30	0.546	0.237	0.237	
2/11/2015	01:45	1.00	07:10	2.13	1.44	02:20	4.33	07:10	10.76	8.08	02:20	0.077	07:10	0.515	0.233	0.233	
2/12/2015	05:25	1.04	06:50	2.18	1.47	03:00	4.29	07:15	10.66	8.20	03:00	0.077	06:50	0.519	0.242	0.242	
2/13/2015	05:10	1.03	07:35	1.97	1.45	02:10	4.35	07:55	10.51	8.10	02:10	0.076	07:30	0.422	0.233	0.233	
2/14/2015	00:50	1.02	11:30	2.08	1.46	05:35	4.27	12:15	10.72	8.24	05:35	0.076	11:30	0.451	0.243	0.243	
2/15/2015	00:20	1.03	09:30	2.21	1.49	05:10	4.39	11:10	10.61	8.31	05:10	0.079	09:30	0.487	0.252	0.252	
2/16/2015	05:55	1.03	08:50	2.01	1.48	03:25	4.42	19:35	10.38	8.31	03:25	0.077	08:35	0.435	0.250	0.250	
2/17/2015	00:00	1.05	07:05	2.07	1.46	03:05	4.31	07:05	10.83	8.18	03:05	0.077	07:05	0.498	0.240	0.240	
2/18/2015	00:20	1.03	07:10	2.18	1.46	03:10	4.38	21:15	10.99	8.19	01:35	0.079	07:10	0.523	0.241	0.241	
2/19/2015	02:10	1.01	20:25	2.24	1.45	03:50	4.50	07:00	10.94	8.18	03:50	0.081	07:25	0.528	0.239	0.239	
2/20/2015	00:05	1.00	06:35	2.13	1.44	03:00	4.37	08:15	10.82	8.18	03:00	0.076	07:10	0.470	0.234	0.234	
2/21/2015	01:00	1.02	11:00	2.05	1.47	05:05	4.18	11:30	10.55	8.22	05:05	0.073	09:15	0.464	0.245	0.245	
2/22/2015	07:40	1.03	11:35	2.20	1.54	02:15	4.18	09:35	10.91	8.47	02:15	0.073	11:35	0.515	0.275	0.275	
2/23/2015	23:30	1.04	07:10	2.30	1.48	04:05	4.27	07:05	10.94	8.25	04:05	0.075	07:10	0.581	0.245	0.245	
2/24/2015	05:15	1.03	07:30	2.26	1.48	02:55	4.61	07:25	10.70	8.17	02:55	0.080	07:30	0.540	0.244	0.244	
2/25/2015	22:45	1.03	06:45	2.23	1.48	03:00	4.56	19:25	10.38	8.14	03:00	0.085	06:45	0.523	0.245	0.245	
2/26/2015	00:40	1.05	20:10	2.19	1.48	01:55	4.36	07:05	10.57	8.19	01:55	0.076	07:15	0.495	0.246	0.246	
2/27/2015	00:30	1.05	06:40	2.13	1.48	02:20	4.55	06:45	10.37	8.14	02:20	0.080	07:15	0.491	0.241	0.241	
2/28/2015	00:30	1.02	10:10	2.04	1.50	03:25	4.37	11:30	10.26	8.26	03:25	0.078	07:55	0.441	0.254	0.254	
3/1/2015	01:55	1.04	20:15	2.12	1.53	04:35	4.54	09:40	10.54	8.44	06:10	0.081	19:30	0.491	0.269	0.269	
3/2/2015	00:55	1.03	11:05	2.23	1.51	03:30	4.41	07:20	10.82	8.39	03:30	0.080	11:05	0.528	0.259	0.259	
3/3/2015	04:45	1.04	06:55	2.26	1.49	04:30	4.30	07:25	10.81	8.30	04:30	0.075	06:55	0.541	0.252	0.252	
3/4/2015	01:25	1.03	07:15	2.19	1.48	03:30	4.36	07:40	10.66	8.29	01:45	0.077	07:15	0.519	0.248	0.248	
3/5/2015	00:45	1.04	06:55	2.15	1.49	02:50	4.24	06:40	10.55	8.19	02:50	0.075	06:55	0.506	0.248	0.248	
3/6/2015	00:05	1.03	07:25	2.12	1.46	01:00	4.32	07:00	10.61	8.13	01:00	0.075	07:20	0.486	0.237	0.237	
3/7/2015	06:00	1.03	10:05	2.10	1.51	01:45	4.26	09:20	10.38	8.19	01:45	0.075	09:45	0.461	0.255	0.255	
3/8/2015	01:35	1.02	20:55	2.08	1.53	02:05	4.45	20:30	10.40	8.44	02:05	0.080	20:30	0.464	0.266	0.266	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			7.680
Avg	1.48	8.24	0.248

Site Commentary

Site Information

UFF17	
Pipe Dimensions	12.00" x 12.00"
Silt Level	0.00"

Overview

Site UFF17 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.68	8.18	0.376
Minimum	0.95	4.32	0.086
Maximum	2.55	10.49	0.818
Time of Minimum	2/9/2015 2:05 AM	2/14/2015 4:10 AM	2/14/2015 4:10 AM
Time of Maximum	2/11/2015 7:20 AM	2/18/2015 7:35 AM	2/11/2015 7:20 AM

Data Quality

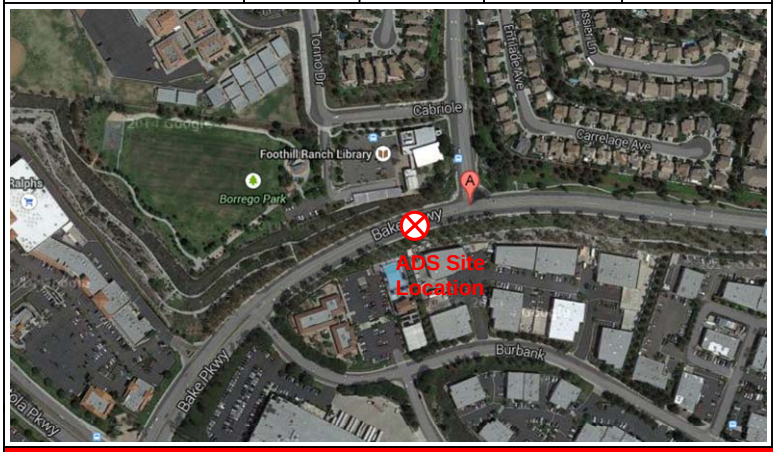
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

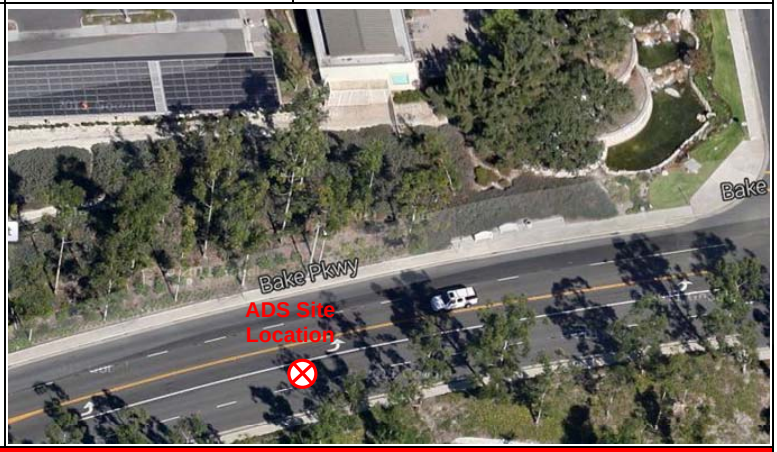
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF17	**Install Date:** 1/22/15	**Monitor Type**	Peak Doppler
Address/Location:	Bake & Rue de Fortuna (Located on Bake Pkwy)	**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH192E018
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	12.00 "
		Pipe Width:	12.00 "





Investigation Information:

Date/Time of Investigation:	1/22/15 @
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.50 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	9.17 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	18'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

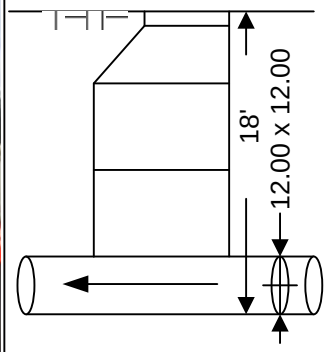
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

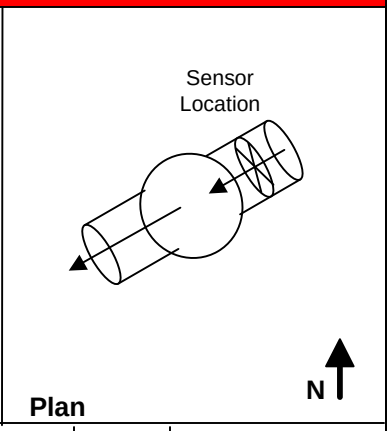
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

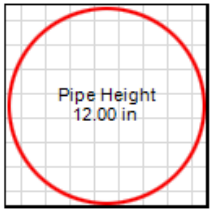
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

UFF17

Flow Monitor

UFF17

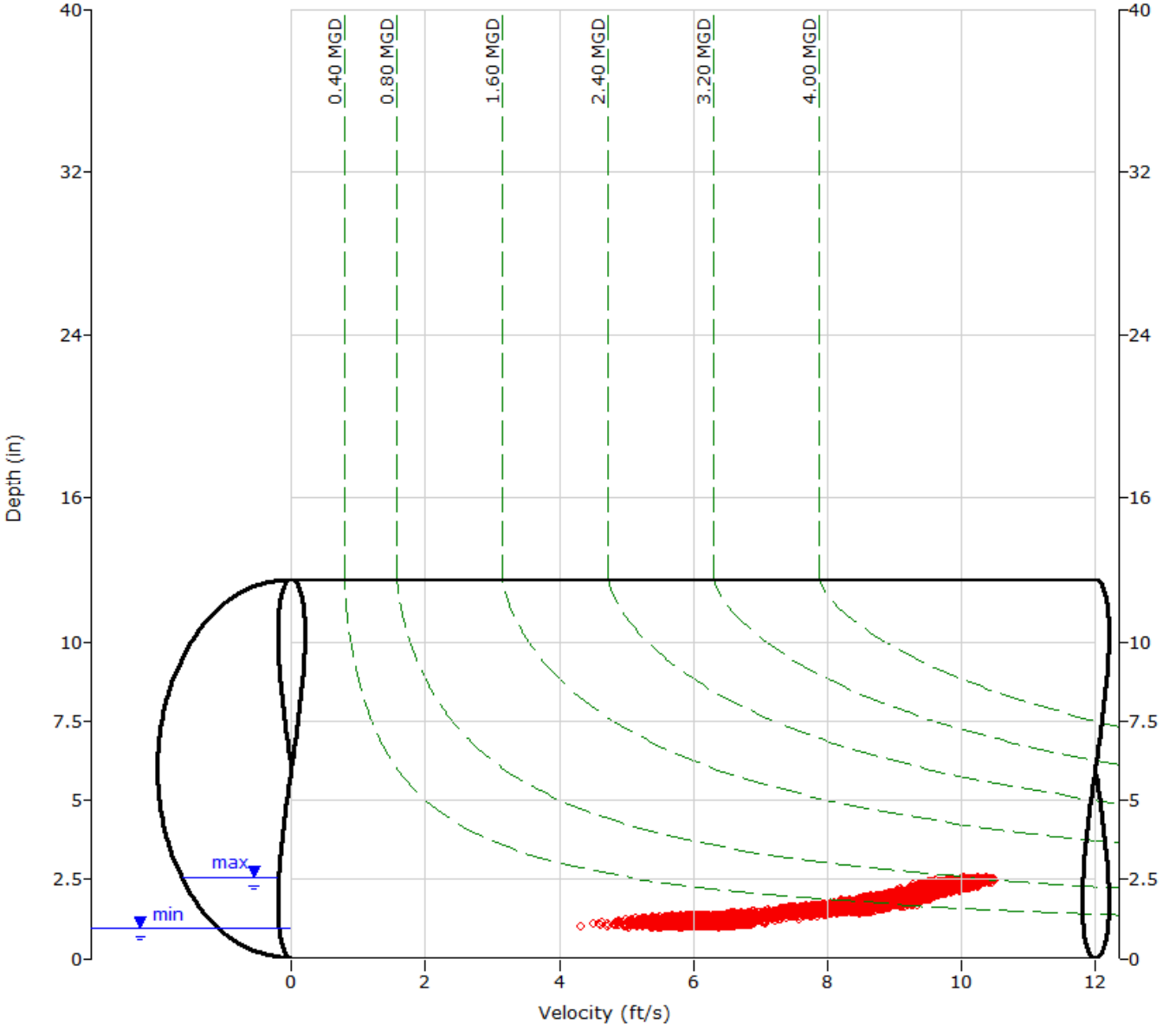


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF17

Flow Monitor

UFF17

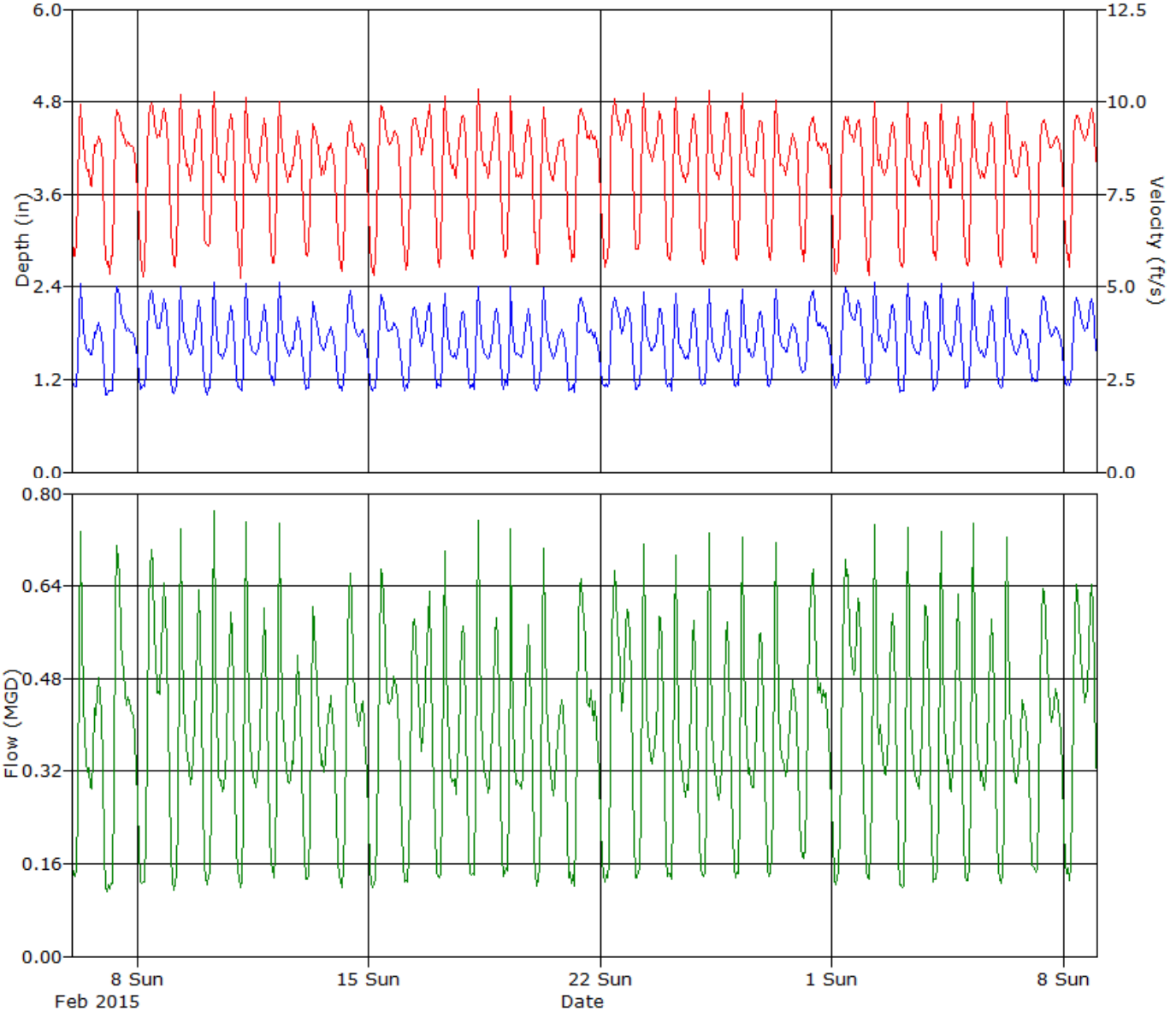
Pipe Height
12.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF17, Pipe Height: 12 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:05	1.03	07:25	2.49	1.65	02:50	5.24	07:25	10.13	8.12	03:50	0.118	07:25	0.772	0.359	0.359	
2/7/2015	02:35	0.99	09:45	2.49	1.68	04:10	4.75	09:55	9.94	8.03	04:10	0.101	09:55	0.752	0.381	0.381	
2/8/2015	03:05	1.01	09:00	2.40	1.78	04:20	4.60	09:00	10.33	8.39	03:45	0.101	09:00	0.746	0.427	0.427	
2/9/2015	02:05	0.95	07:15	2.49	1.66	03:50	4.75	07:30	10.30	8.18	03:05	0.096	07:15	0.783	0.374	0.374	
2/10/2015	02:20	0.98	07:30	2.53	1.63	03:40	5.08	07:25	10.43	8.18	03:40	0.109	07:25	0.811	0.362	0.362	
2/11/2015	02:15	0.98	07:20	2.55	1.66	03:50	4.82	07:20	10.38	8.08	03:55	0.101	07:20	0.818	0.365	0.365	
2/12/2015	03:15	1.03	07:20	2.51	1.67	02:20	4.96	07:35	10.15	8.06	03:20	0.116	07:20	0.780	0.361	0.361	
2/13/2015	03:15	0.98	07:30	2.34	1.65	03:15	4.97	07:30	9.62	8.08	03:15	0.097	07:30	0.671	0.356	0.356	
2/14/2015	04:20	0.96	10:20	2.44	1.69	04:10	4.32	10:10	9.78	8.04	04:10	0.086	10:10	0.718	0.372	0.372	
2/15/2015	04:45	1.01	10:10	2.32	1.69	03:40	4.98	09:25	10.04	8.19	03:40	0.106	09:35	0.688	0.384	0.384	
2/16/2015	02:10	1.01	20:10	2.25	1.69	03:15	4.72	19:55	10.12	8.33	03:15	0.106	20:20	0.654	0.388	0.388	
2/17/2015	01:40	1.03	07:00	2.40	1.62	03:05	4.85	07:20	10.34	8.28	03:05	0.118	07:00	0.735	0.360	0.360	
2/18/2015	04:40	1.03	07:25	2.52	1.64	03:45	5.22	07:35	10.49	8.26	03:45	0.114	07:25	0.811	0.365	0.365	
2/19/2015	01:05	0.99	07:15	2.53	1.64	03:35	5.37	07:15	10.39	8.16	01:05	0.109	07:15	0.808	0.360	0.360	
2/20/2015	00:15	1.00	07:30	2.47	1.61	02:40	5.10	07:30	10.10	8.06	00:15	0.111	07:30	0.761	0.345	0.345	
2/21/2015	01:20	0.99	10:10	2.29	1.67	03:10	5.20	09:55	9.94	8.33	01:20	0.108	10:10	0.672	0.383	0.383	
2/22/2015	06:30	1.01	10:10	2.32	1.74	03:20	5.20	10:20	10.23	8.45	06:30	0.115	10:20	0.703	0.415	0.415	
2/23/2015	01:25	1.01	07:25	2.45	1.66	04:10	5.23	07:30	10.42	8.41	01:05	0.117	07:25	0.774	0.380	0.380	
2/24/2015	00:50	1.01	07:20	2.39	1.61	01:50	5.31	07:30	10.32	8.14	00:55	0.116	07:20	0.731	0.353	0.353	
2/25/2015	04:55	1.06	07:15	2.50	1.62	03:50	4.51	07:25	10.48	8.22	03:50	0.106	07:15	0.795	0.357	0.357	
2/26/2015	01:35	1.05	07:25	2.46	1.64	03:00	5.13	07:15	10.31	8.23	03:00	0.119	07:25	0.769	0.365	0.365	
2/27/2015	01:30	1.07	07:30	2.47	1.66	03:35	5.34	07:30	10.20	8.16	02:50	0.123	07:30	0.770	0.364	0.364	
2/28/2015	03:50	1.23	11:45	2.42	1.79	04:00	5.37	11:45	9.80	8.18	02:10	0.153	11:45	0.717	0.407	0.407	
3/1/2015	03:10	1.06	11:50	2.46	1.82	03:50	5.04	10:35	9.85	8.20	03:15	0.115	11:55	0.722	0.428	0.428	
3/2/2015	01:05	1.07	07:25	2.54	1.72	03:20	5.04	07:25	10.25	8.07	03:20	0.120	07:25	0.803	0.380	0.380	
3/3/2015	01:15	1.01	07:30	2.50	1.67	03:15	4.89	07:30	10.21	7.98	03:15	0.105	07:30	0.784	0.369	0.369	
3/4/2015	01:35	1.00	07:15	2.54	1.67	03:45	5.25	07:25	10.09	8.05	01:40	0.113	07:15	0.786	0.366	0.366	
3/5/2015	01:05	0.98	07:30	2.52	1.66	02:20	5.02	07:25	10.08	8.03	02:20	0.110	07:30	0.780	0.362	0.362	
3/6/2015	05:05	1.01	07:35	2.44	1.63	03:40	5.07	07:30	10.32	8.03	05:05	0.113	07:30	0.760	0.351	0.351	
3/7/2015	01:40	1.08	09:45	2.38	1.72	04:10	4.87	09:55	9.65	8.21	04:10	0.117	09:45	0.681	0.387	0.387	
3/8/2015	05:10	1.05	09:20	2.31	1.78	04:05	4.65	20:05	9.93	8.45	04:05	0.110	20:05	0.675	0.424	0.424	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			11.651
Avg	1.68	8.18	0.376

Site Commentary

Site Information

UFF18	
Pipe Dimensions	15.00" x 15.00"
Silt Level	0.00"

Overview

Site UFF18 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.19	3.21	0.240
Minimum	1.36	0.87	0.057
Maximum	4.38	4.26	0.611
Time of Minimum	3/3/2015 2:00 AM	2/7/2015 4:35 AM	3/5/2015 3:00 AM
Time of Maximum	2/10/2015 1:00 PM	2/24/2015 7:15 AM	3/8/2015 10:00 AM

Data Quality

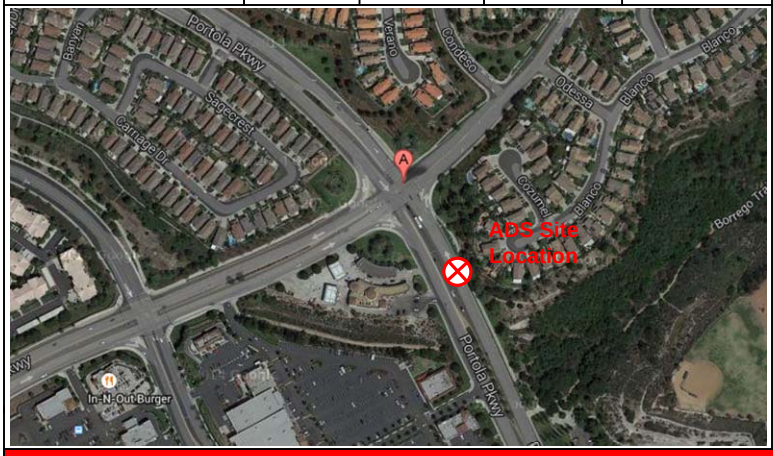
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

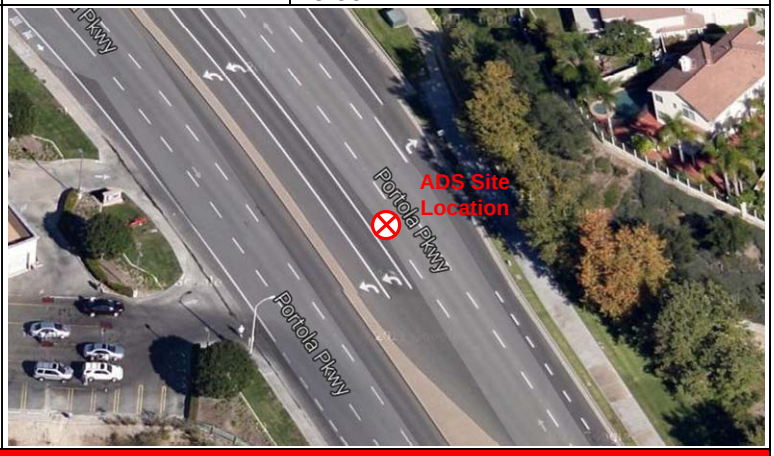
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF18	**Install Date:** 1/23/15	**Monitor Type**	Peak Doppler
Address/Location: Portola and Alton		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH192N030
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	15.00 "
		Pipe Width:	15.00 "





Investigation Information:

Date/Time of Investigation:	1/23/15 @ 1400
Site Hydraulics:	Very fast velocity that strong surges in flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.13 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.46 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	5'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

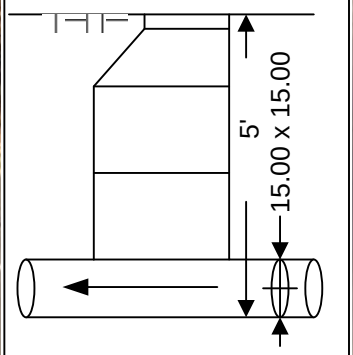
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

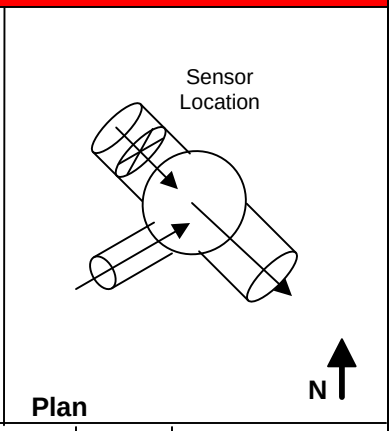
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

UFF18

Flow Monitor

UFF18

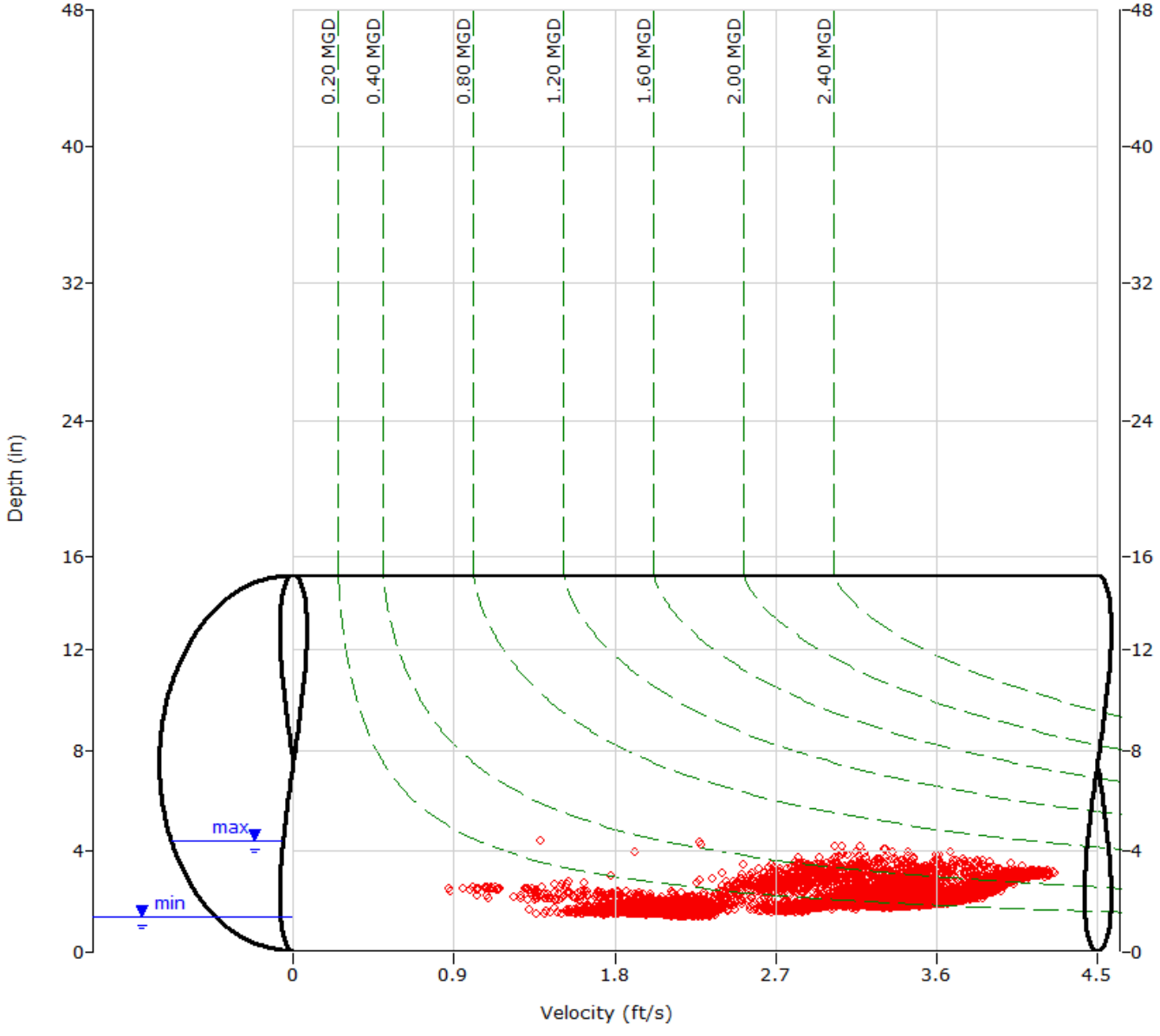
Pipe Height
15.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



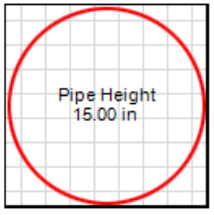
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF18

Flow Monitor

UFF18

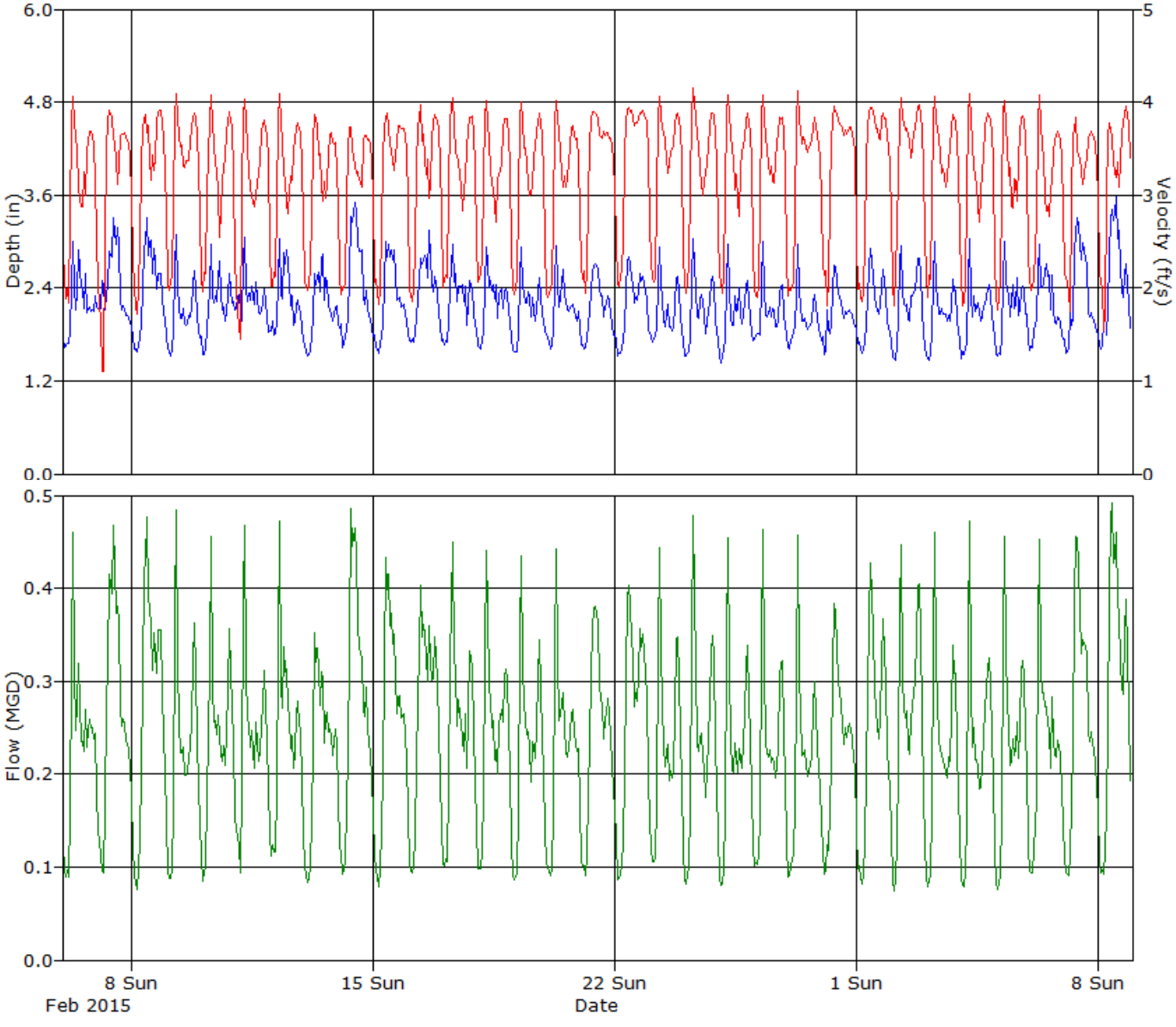


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF18, Pipe Height: 15 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	01:30	1.55	11:05	4.34	2.19	04:25	1.32	07:10	4.11	3.11	04:25	0.063	07:10	0.494	0.231	0.231	
2/7/2015	06:20	1.68	11:50	4.08	2.43	04:35	0.87	09:40	3.95	3.07	05:25	0.071	11:50	0.577	0.261	0.261	
2/8/2015	04:25	1.53	11:35	3.58	2.35	04:25	1.53	09:25	4.00	3.18	04:25	0.065	11:30	0.554	0.270	0.270	
2/9/2015	03:00	1.47	07:10	3.24	2.07	01:40	1.74	07:20	4.18	3.29	01:40	0.073	07:10	0.525	0.229	0.229	
2/10/2015	02:45	1.46	13:00	4.38	2.17	13:00	1.39	07:10	4.16	3.19	02:10	0.074	07:10	0.491	0.234	0.234	
2/11/2015	04:55	1.58	10:50	3.43	2.26	04:45	1.03	07:40	4.12	3.08	04:40	0.075	07:10	0.507	0.235	0.235	
2/12/2015	00:05	1.70	10:10	3.42	2.25	01:55	1.81	07:15	4.22	3.16	01:25	0.100	07:15	0.522	0.241	0.241	
2/13/2015	02:35	1.44	13:00	3.37	2.16	02:10	1.66	07:40	3.95	3.15	02:10	0.070	09:05	0.414	0.231	0.231	
2/14/2015	03:15	1.54	11:45	4.18	2.38	05:15	1.66	09:40	3.95	3.11	05:15	0.082	12:00	0.576	0.265	0.265	
2/15/2015	04:10	1.46	10:45	3.58	2.25	03:50	1.57	09:45	4.08	3.20	04:10	0.064	10:45	0.556	0.253	0.253	
2/16/2015	01:00	1.62	11:35	3.60	2.32	04:00	1.59	09:15	4.12	3.22	04:00	0.074	09:15	0.470	0.263	0.263	
2/17/2015	03:00	1.52	11:05	3.48	2.21	01:15	1.80	07:15	4.14	3.22	03:00	0.088	07:20	0.483	0.242	0.242	
2/18/2015	03:45	1.57	17:10	3.72	2.21	02:00	1.69	07:00	4.10	3.18	02:00	0.080	07:25	0.477	0.240	0.240	
2/19/2015	04:25	1.51	07:25	3.12	2.12	03:55	1.75	07:25	4.12	3.19	03:55	0.076	07:25	0.491	0.229	0.229	
2/20/2015	05:05	1.56	12:05	3.14	2.14	02:15	1.60	07:30	4.12	3.18	03:20	0.078	07:30	0.489	0.229	0.229	
2/21/2015	03:45	1.48	15:30	3.74	2.13	04:05	1.59	12:30	4.06	3.29	04:05	0.072	11:05	0.560	0.236	0.236	
2/22/2015	02:35	1.46	11:25	2.98	2.18	03:30	1.68	21:55	4.04	3.38	03:30	0.074	21:55	0.439	0.256	0.256	
2/23/2015	01:55	1.61	07:20	3.06	2.08	04:40	1.79	07:05	4.17	3.33	02:45	0.096	07:05	0.480	0.231	0.231	
2/24/2015	04:40	1.39	07:15	3.13	2.08	03:00	1.69	07:15	4.26	3.24	02:50	0.072	07:15	0.511	0.227	0.227	
2/25/2015	02:20	1.39	15:40	3.12	2.06	02:00	1.71	06:55	4.23	3.22	02:45	0.066	07:30	0.492	0.221	0.221	
2/26/2015	00:40	1.65	07:20	3.09	2.09	03:55	1.47	07:15	4.22	3.22	03:55	0.072	07:20	0.496	0.224	0.224	
2/27/2015	03:00	1.54	07:30	3.05	2.01	01:45	1.54	07:25	4.23	3.28	01:30	0.071	07:25	0.488	0.216	0.216	
2/28/2015	05:35	1.41	09:45	3.00	2.07	04:30	1.61	09:45	4.08	3.32	02:20	0.083	09:45	0.461	0.227	0.227	
3/1/2015	04:20	1.46	10:30	3.03	2.14	05:00	1.75	11:50	4.00	3.26	04:20	0.072	10:30	0.453	0.242	0.242	
3/2/2015	03:40	1.40	07:25	3.10	2.18	02:25	1.41	07:25	4.14	3.40	02:25	0.059	07:25	0.490	0.257	0.257	
3/3/2015	02:00	1.36	07:05	3.13	2.05	02:10	1.62	07:40	4.17	3.23	02:10	0.066	07:05	0.493	0.222	0.222	
3/4/2015	01:45	1.37	07:20	3.15	2.08	03:35	1.50	07:15	4.25	3.16	03:35	0.062	07:15	0.514	0.221	0.221	
3/5/2015	04:35	1.46	13:15	3.26	2.14	03:00	1.36	07:00	4.18	3.13	03:00	0.057	07:30	0.513	0.229	0.229	
3/6/2015	01:10	1.51	10:45	3.56	2.17	02:55	1.53	07:15	4.17	3.10	02:55	0.071	07:05	0.509	0.228	0.228	
3/7/2015	02:05	1.51	12:00	3.76	2.29	05:35	1.49	09:25	4.11	3.15	04:50	0.072	09:50	0.567	0.253	0.253	
3/8/2015	02:20	1.51	10:55	4.20	2.50	04:55	1.24	20:50	4.08	3.17	02:10	0.079	10:00	0.611	0.290	0.290	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			7.435
Avg	2.19	3.21	0.240

Site Commentary

Site Information

UFF19	
Pipe Dimensions	21.00" x 21.00"
Silt Level	0.00"

Overview

Site UFF19 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.26	0.85	0.085
Minimum	1.63	0.41	0.026
Maximum	6.41	2.00	0.805
Time of Minimum	2/16/2015 5:20 AM	2/8/2015 5:20 AM	2/21/2015 3:50 AM
Time of Maximum	3/6/2015 10:20 AM	3/6/2015 10:20 AM	3/6/2015 10:20 AM

Data Quality

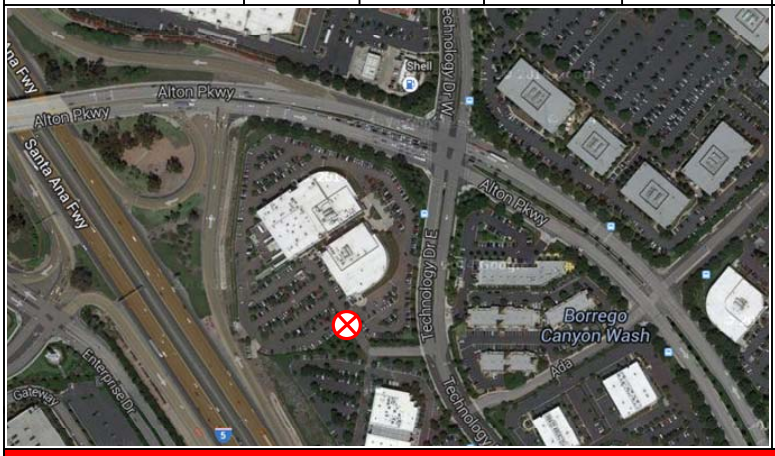
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

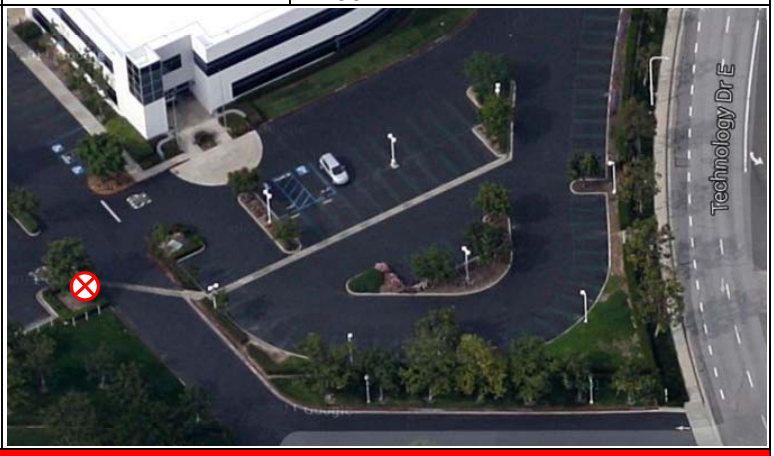
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF19	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: Technology & Alton (Located in parking lot)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH156N003
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	21.00 "
		Pipe Width:	21.00 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1000
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.04 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	18'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

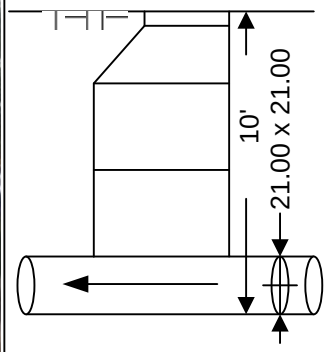
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

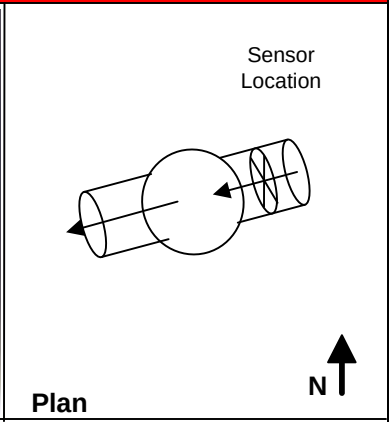
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

ub

SCATTERGRAPH REPORT

UFF19

Flow Monitor

UFF19

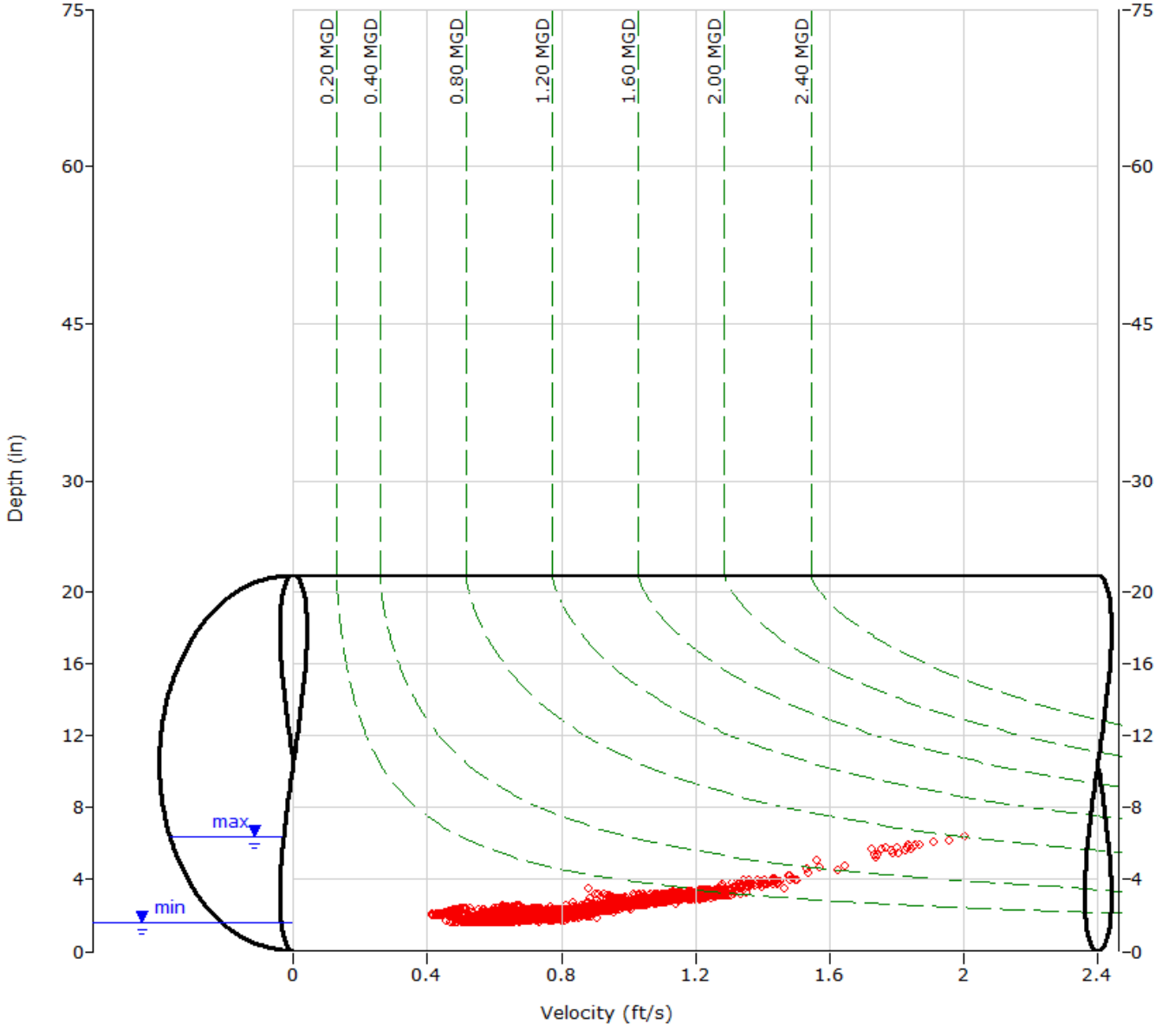
Pipe Height
21.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF19

Flow Monitor

UFF19

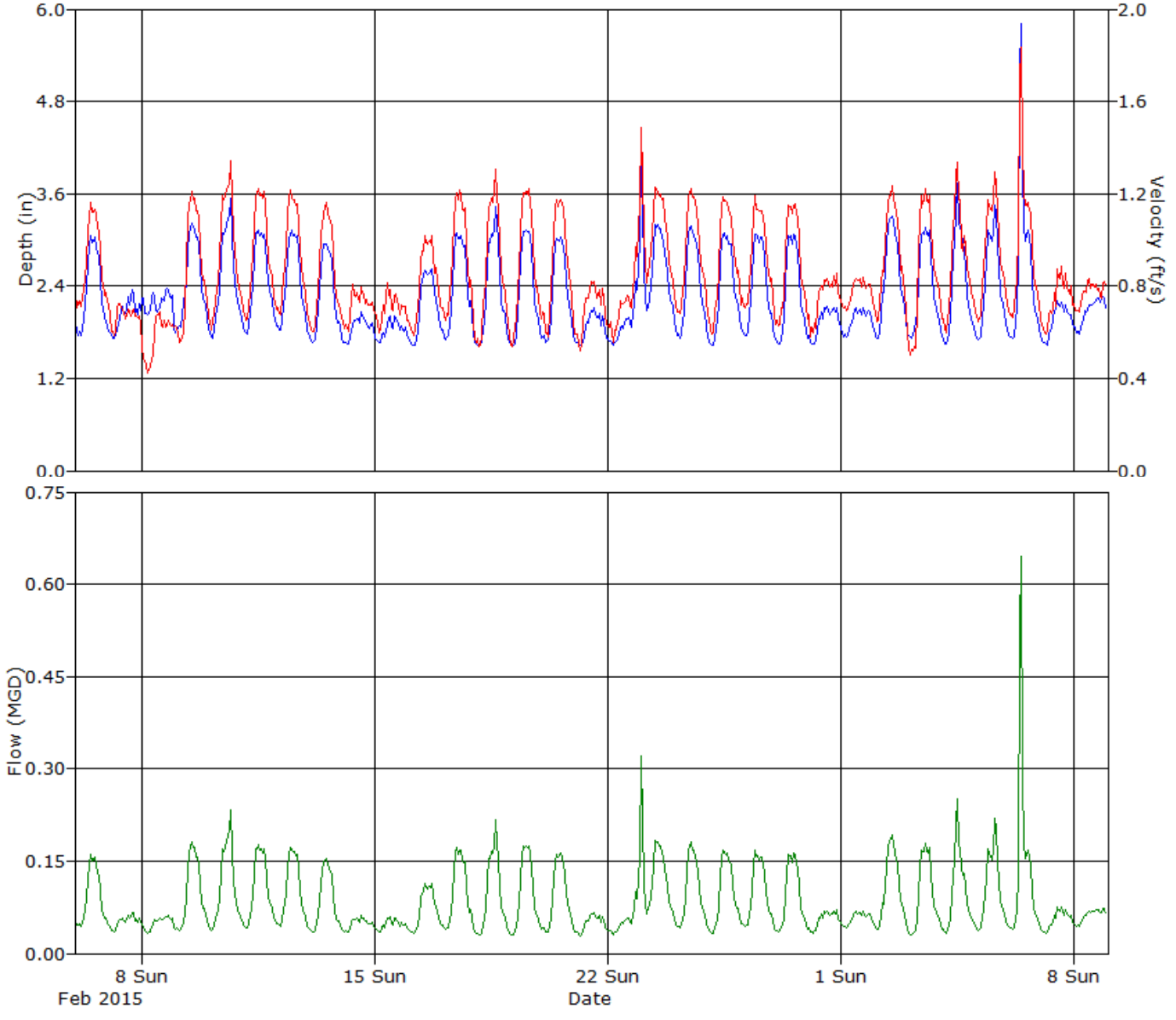
Pipe Height
21.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF19, Pipe Height: 21 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:40	1.73	13:45	3.20	2.35	23:55	0.67	13:50	1.27	0.90	23:55	0.041	13:50	0.190	0.092	0.092	
2/7/2015	04:40	1.70	17:35	2.44	2.02	20:40	0.58	09:10	0.77	0.67	04:40	0.034	18:15	0.072	0.052	0.052	
2/8/2015	23:45	1.74	19:35	2.55	2.18	05:20	0.41	13:45	0.74	0.58	04:45	0.031	19:35	0.072	0.050	0.050	
2/9/2015	01:10	1.75	08:45	3.47	2.48	03:30	0.54	14:15	1.30	0.88	03:30	0.035	14:15	0.194	0.099	0.099	
2/10/2015	03:00	1.69	15:55	3.81	2.50	02:40	0.59	15:55	1.45	0.94	02:55	0.035	15:55	0.279	0.108	0.108	
2/11/2015	04:15	1.74	12:10	3.22	2.46	03:45	0.61	10:40	1.33	0.94	04:15	0.038	10:40	0.198	0.104	0.104	
2/12/2015	23:50	1.76	13:55	3.18	2.43	03:55	0.65	11:55	1.28	0.93	23:45	0.041	11:55	0.185	0.100	0.100	
2/13/2015	03:30	1.65	12:05	3.05	2.27	03:10	0.57	12:35	1.22	0.86	03:10	0.033	12:05	0.166	0.085	0.085	
2/14/2015	05:25	1.63	14:25	2.16	1.86	05:10	0.56	08:25	0.91	0.72	05:10	0.032	14:25	0.070	0.049	0.049	
2/15/2015	04:05	1.65	14:30	2.09	1.83	02:50	0.57	09:55	0.88	0.71	04:35	0.033	10:00	0.065	0.047	0.047	
2/16/2015	05:20	1.63	17:25	2.66	2.15	04:50	0.57	17:50	1.08	0.82	04:50	0.031	17:50	0.123	0.072	0.072	
2/17/2015	03:35	1.69	13:55	3.15	2.37	23:45	0.52	13:45	1.26	0.91	23:45	0.031	13:55	0.181	0.097	0.097	
2/18/2015	04:20	1.63	15:30	3.72	2.34	04:45	0.48	15:20	1.47	0.88	04:45	0.027	15:25	0.267	0.095	0.095	
2/19/2015	04:25	1.63	11:35	3.29	2.33	03:50	0.52	11:35	1.29	0.88	03:50	0.029	11:35	0.200	0.094	0.094	
2/20/2015	04:45	1.65	14:15	3.10	2.31	04:50	0.54	14:20	1.31	0.89	05:00	0.031	14:20	0.187	0.090	0.090	
2/21/2015	04:55	1.63	12:35	2.15	1.87	03:50	0.46	12:30	0.87	0.70	03:50	0.026	12:35	0.073	0.049	0.049	
2/22/2015	04:25	1.63	23:50	3.23	1.96	04:00	0.52	23:45	1.25	0.75	04:05	0.029	23:50	0.188	0.058	0.058	
2/23/2015	05:50	2.06	00:45	4.73	2.73	04:00	0.74	00:45	1.65	1.06	04:00	0.059	00:45	0.431	0.133	0.133	
2/24/2015	04:40	1.70	12:50	3.21	2.39	02:25	0.66	12:30	1.31	0.93	04:30	0.040	12:30	0.196	0.099	0.099	
2/25/2015	04:30	1.63	11:55	3.40	2.35	03:45	0.55	11:55	1.31	0.91	03:45	0.030	11:55	0.214	0.095	0.095	
2/26/2015	03:45	1.74	12:15	3.12	2.39	00:10	0.63	10:50	1.24	0.93	02:50	0.041	10:50	0.178	0.097	0.097	
2/27/2015	04:05	1.64	10:35	3.17	2.32	02:00	0.55	15:40	1.27	0.89	02:00	0.032	15:45	0.179	0.092	0.092	
2/28/2015	04:40	1.63	19:05	2.25	1.93	02:40	0.54	19:00	0.94	0.75	02:40	0.031	19:10	0.084	0.055	0.055	
3/1/2015	02:05	1.71	11:05	2.35	1.96	22:55	0.65	11:05	0.89	0.78	02:05	0.041	11:05	0.085	0.057	0.057	
3/2/2015	02:35	1.68	11:55	3.39	2.50	02:55	0.59	10:35	1.26	0.93	02:35	0.036	11:55	0.205	0.106	0.106	
3/3/2015	03:00	1.69	13:30	3.26	2.39	06:50	0.47	13:30	1.35	0.87	03:00	0.030	13:30	0.208	0.095	0.095	
3/4/2015	04:35	1.63	12:15	4.04	2.41	04:10	0.56	12:15	1.44	0.89	04:10	0.032	12:15	0.301	0.098	0.098	
3/5/2015	03:25	1.68	15:40	3.93	2.43	03:20	0.61	15:40	1.44	0.93	03:20	0.035	15:40	0.289	0.103	0.103	
3/6/2015	05:10	1.70	10:20	6.41	2.63	23:00	0.63	10:20	2.00	0.98	05:10	0.038	10:20	0.805	0.139	0.139	
3/7/2015	05:35	1.63	11:55	2.31	1.95	04:00	0.55	12:40	0.96	0.74	04:00	0.031	12:00	0.085	0.055	0.055	
3/8/2015	04:45	1.76	15:20	2.50	2.07	01:15	0.65	11:55	0.91	0.77	04:10	0.042	22:35	0.085	0.061	0.061	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			2.623
Avg	2.26	0.85	0.085

Site Commentary

Site Information

UFF2	
Pipe Dimensions	11.88" x 11.88"
Silt Level	0.00"

Overview

Site UFF2 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.47	3.49	0.266
Minimum	1.88	1.07	0.055
Maximum	3.80	5.10	0.696
Time of Minimum	2/11/2015 4:20 AM	2/25/2015 4:25 AM	2/25/2015 4:25 AM
Time of Maximum	2/10/2015 7:00 AM	2/25/2015 6:45 AM	2/10/2015 7:00 AM

Data Quality

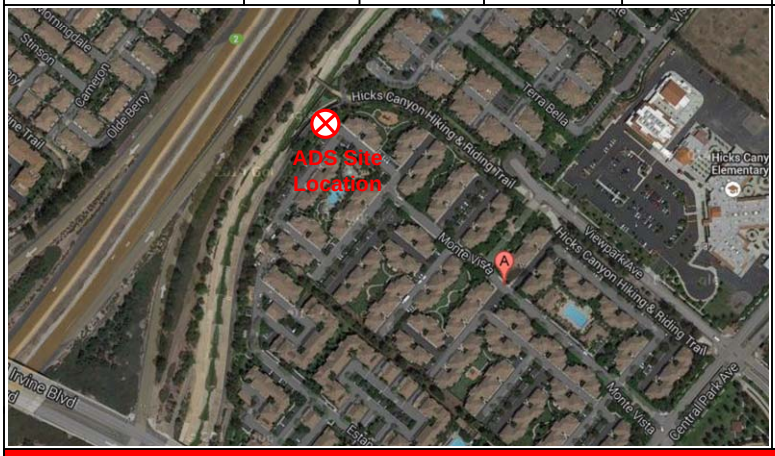
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

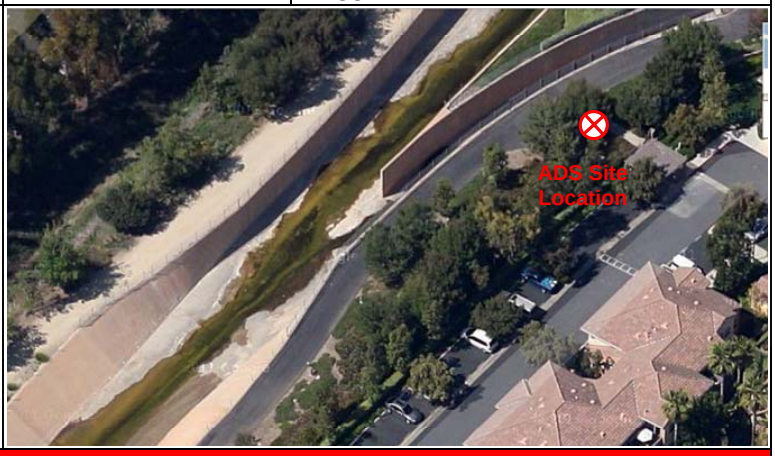
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF2	**Install Date:** 1/28/15	**Monitor Type**	Peak Doppler
Address/Location: Monte Vista (Located behind apartments on easement off Monte Vista)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH065W010
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	11.88 "
		Pipe Width:	11.88 "





Investigation Information:

Date/Time of Investigation:	1/28/15 @ 1330
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.75 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.50 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

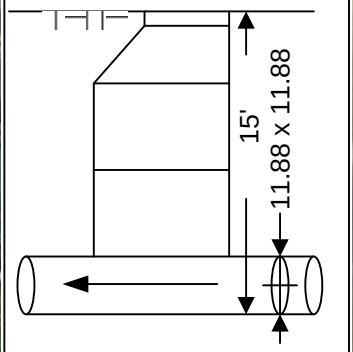
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

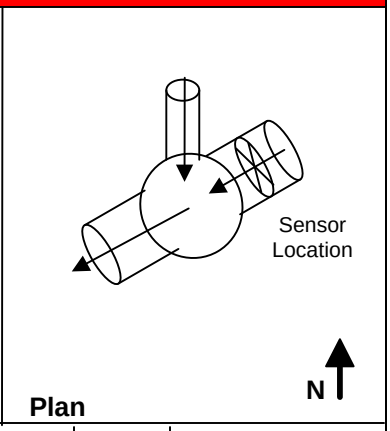
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

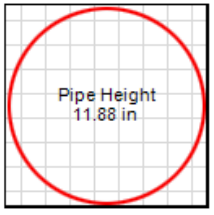
ub

SCATTERGRAPH REPORT

UFF2

Flow Monitor

UFF2

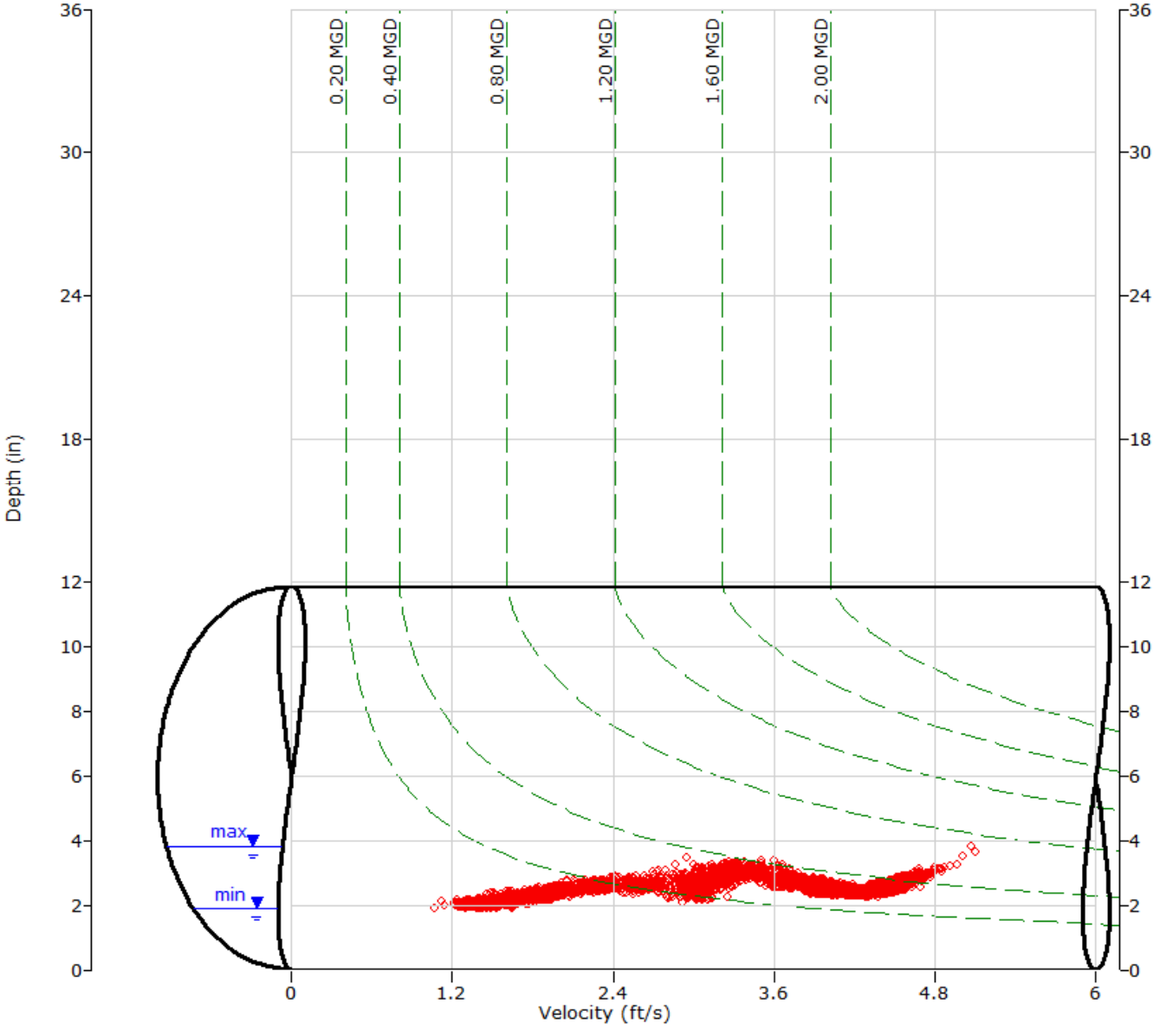


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



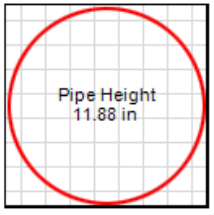
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF2

Flow Monitor

UFF2

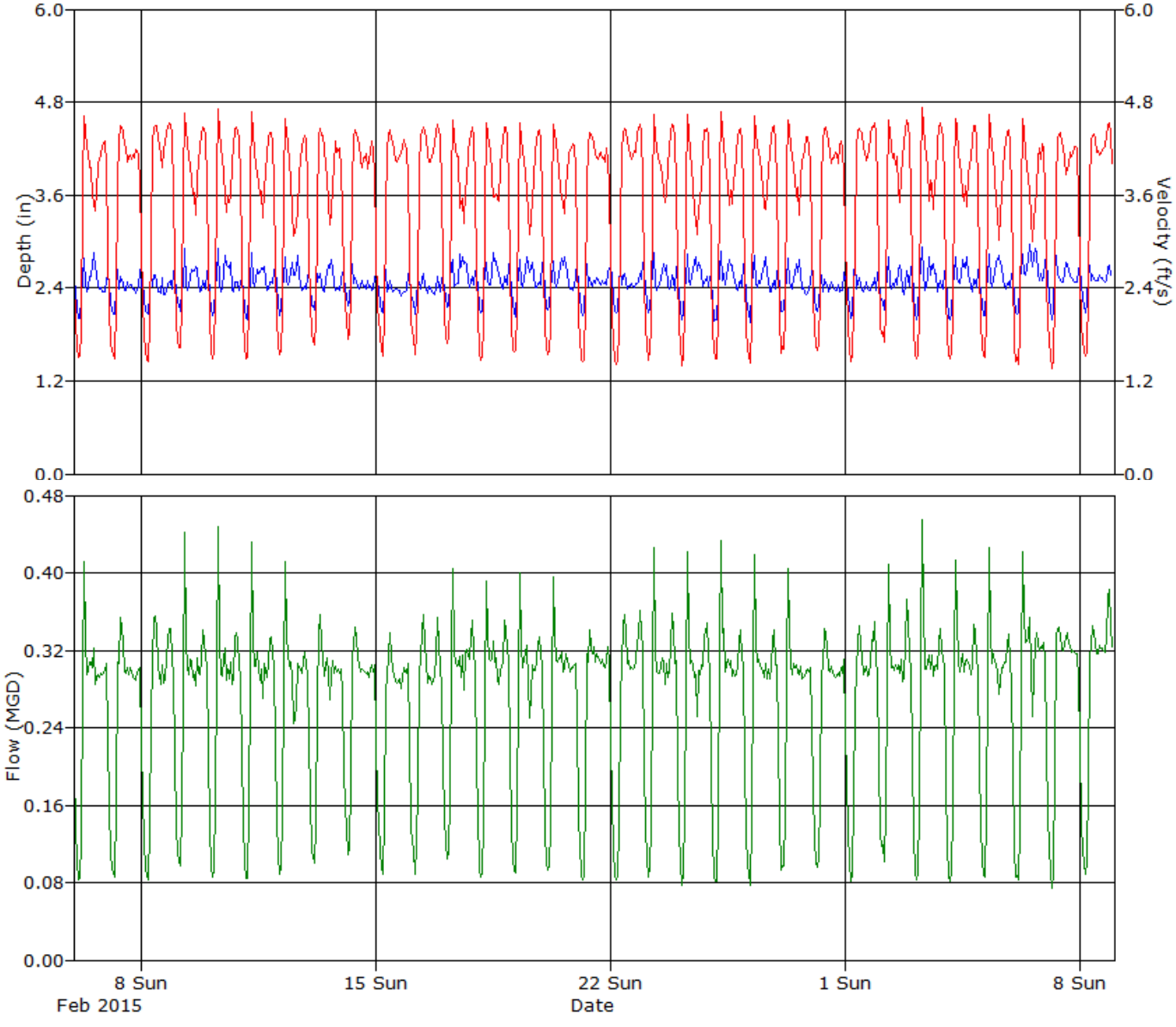


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF2, Pipe Height: 11.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:15	1.92	06:10	3.17	2.44	03:15	1.33	07:25	4.74	3.47	03:15	0.069	07:25	0.454	0.261	0.261	
2/7/2015	05:25	1.99	23:20	3.25	2.39	05:05	1.30	09:50	4.56	3.51	05:05	0.076	09:50	0.376	0.256	0.256	
2/8/2015	04:35	1.99	15:15	3.26	2.39	05:40	1.28	11:15	4.71	3.56	05:40	0.073	15:15	0.405	0.259	0.259	
2/9/2015	04:10	1.97	15:30	3.13	2.47	03:50	1.24	07:50	4.85	3.54	03:50	0.077	07:55	0.506	0.269	0.269	
2/10/2015	04:00	1.97	07:00	3.80	2.48	03:55	1.35	07:00	5.08	3.51	03:55	0.075	07:00	0.696	0.269	0.269	
2/11/2015	04:20	1.88	13:45	3.20	2.47	03:10	1.23	07:30	4.73	3.49	03:10	0.070	07:20	0.456	0.267	0.267	
2/12/2015	03:20	1.96	16:55	3.15	2.49	04:35	1.34	07:15	4.65	3.40	04:35	0.072	07:30	0.441	0.261	0.261	
2/13/2015	05:05	2.05	06:35	3.25	2.46	04:20	1.57	08:05	4.53	3.49	04:30	0.090	08:05	0.378	0.264	0.264	
2/14/2015	05:05	2.08	07:30	3.00	2.44	04:45	1.55	08:50	4.47	3.59	05:00	0.093	09:05	0.352	0.266	0.266	
2/15/2015	05:40	2.01	07:05	3.05	2.38	05:15	1.40	10:45	4.49	3.52	05:15	0.081	10:55	0.351	0.252	0.252	
2/16/2015	04:35	1.88	06:45	2.98	2.39	04:40	1.42	20:10	4.58	3.60	04:35	0.072	10:40	0.393	0.260	0.260	
2/17/2015	04:35	2.07	12:20	3.28	2.53	02:40	1.52	07:25	4.67	3.50	02:40	0.093	07:25	0.445	0.274	0.274	
2/18/2015	04:00	1.98	12:35	3.35	2.50	03:10	1.23	07:30	4.60	3.46	03:10	0.071	07:30	0.429	0.269	0.269	
2/19/2015	04:15	1.96	12:25	3.25	2.50	02:40	1.33	07:20	4.66	3.41	02:40	0.078	07:25	0.432	0.265	0.265	
2/20/2015	04:20	2.02	15:10	3.21	2.50	03:10	1.12	07:20	4.57	3.44	03:10	0.068	07:20	0.433	0.266	0.266	
2/21/2015	05:20	1.94	07:05	3.26	2.45	04:20	1.31	12:10	4.45	3.48	05:20	0.070	07:05	0.367	0.262	0.262	
2/22/2015	03:20	1.98	18:05	3.03	2.45	04:35	1.21	21:05	4.59	3.50	04:30	0.067	21:05	0.387	0.264	0.264	
2/23/2015	03:05	1.97	06:20	3.31	2.48	03:35	1.22	07:25	4.77	3.51	03:35	0.071	07:25	0.460	0.269	0.269	
2/24/2015	03:15	1.94	13:15	3.23	2.50	03:20	1.25	07:25	4.77	3.41	03:20	0.067	07:25	0.457	0.266	0.266	
2/25/2015	02:40	1.89	06:45	3.62	2.47	04:25	1.07	06:45	5.10	3.49	04:25	0.055	06:45	0.653	0.269	0.269	
2/26/2015	04:20	1.88	15:10	3.19	2.46	04:00	1.30	07:25	4.73	3.49	04:00	0.067	07:25	0.457	0.266	0.266	
2/27/2015	04:40	2.00	16:40	3.15	2.45	04:05	1.42	07:30	4.69	3.52	04:35	0.080	07:30	0.432	0.264	0.264	
2/28/2015	03:55	2.05	00:05	2.97	2.40	04:30	1.47	10:50	4.54	3.55	04:30	0.086	10:00	0.368	0.258	0.258	
3/1/2015	04:30	1.92	07:45	3.13	2.41	04:30	1.33	21:10	4.60	3.57	04:30	0.069	10:55	0.386	0.262	0.262	
3/2/2015	04:45	2.04	15:30	3.27	2.46	05:05	1.49	07:40	4.67	3.59	05:05	0.087	07:40	0.425	0.272	0.272	
3/3/2015	04:00	1.95	07:10	3.50	2.49	02:25	1.35	07:10	5.01	3.52	04:00	0.074	07:10	0.614	0.273	0.273	
3/4/2015	03:45	1.93	23:35	3.16	2.48	04:25	1.28	07:30	4.68	3.47	04:25	0.070	07:30	0.449	0.269	0.269	
3/5/2015	04:00	1.92	13:30	3.44	2.50	03:45	1.34	07:15	4.78	3.43	04:10	0.073	07:15	0.473	0.266	0.266	
3/6/2015	04:10	2.01	17:45	3.37	2.59	02:05	1.22	12:00	4.80	3.32	02:05	0.070	12:00	0.508	0.274	0.274	
3/7/2015	04:25	1.96	06:40	3.25	2.51	04:05	1.14	08:45	4.47	3.44	04:05	0.063	08:35	0.378	0.269	0.269	
3/8/2015	04:20	2.02	00:00	3.29	2.49	03:25	1.36	20:25	4.56	3.56	04:20	0.078	21:35	0.418	0.275	0.275	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			8.235
Avg	2.47	3.49	0.266

Site Commentary

Site Information

UFF20	
Pipe Dimensions	35.75" x 35.88"
Silt Level	0.00"

Overview

Site UFF20 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.73	2.60	1.975
Minimum	4.09	1.74	0.505
Maximum	10.95	3.31	3.863
Time of Minimum	2/11/2015 5:05 AM	3/5/2015 4:30 AM	2/7/2015 5:40 AM
Time of Maximum	2/9/2015 9:15 AM	2/9/2015 9:00 AM	2/9/2015 9:05 AM

Data Quality

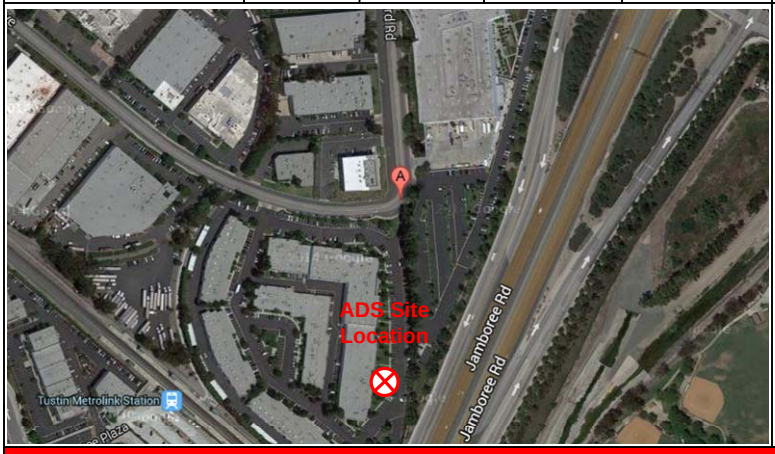
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

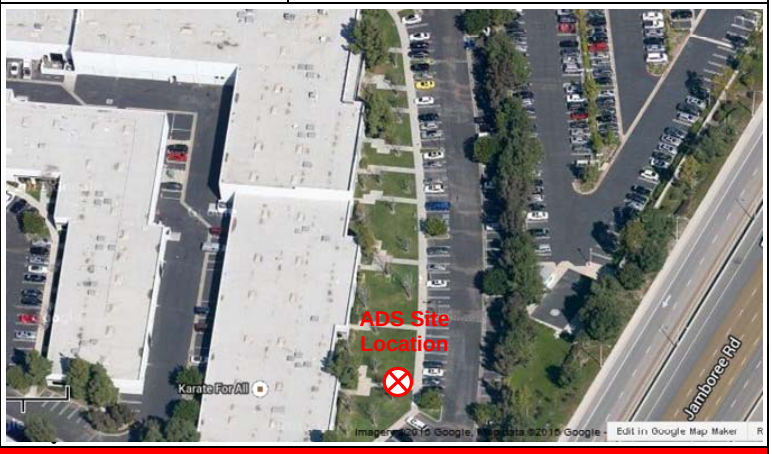
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine		**Agency:** IRWD		**FM Initials:** SK
Site Name: UFF20	**Install Date:** 1/30/15		**Monitor Type**	Peak Doppler	
Address/Location: Tustin Business Center #136			**Monitor Model**	Triton	
			Data Acquisition	Manual Collect	
			Manhole ID	MH063W034	
Access: Drive	**Type of System:**	Sanitary [X]	Storm [ ]	Combined [ ]	**Pipe Height:** 35.75 "
					Pipe Width: 35.88 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1400
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.64 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

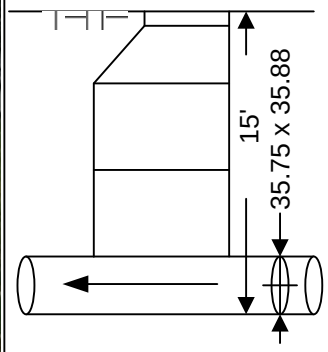
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

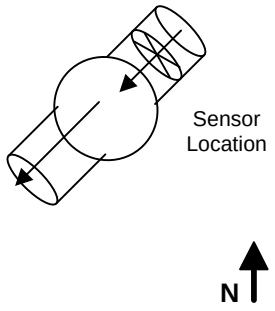
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

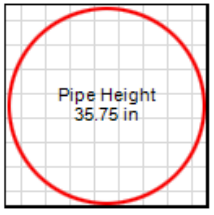
ub

SCATTERGRAPH REPORT

UFF20

Flow Monitor

UFF20

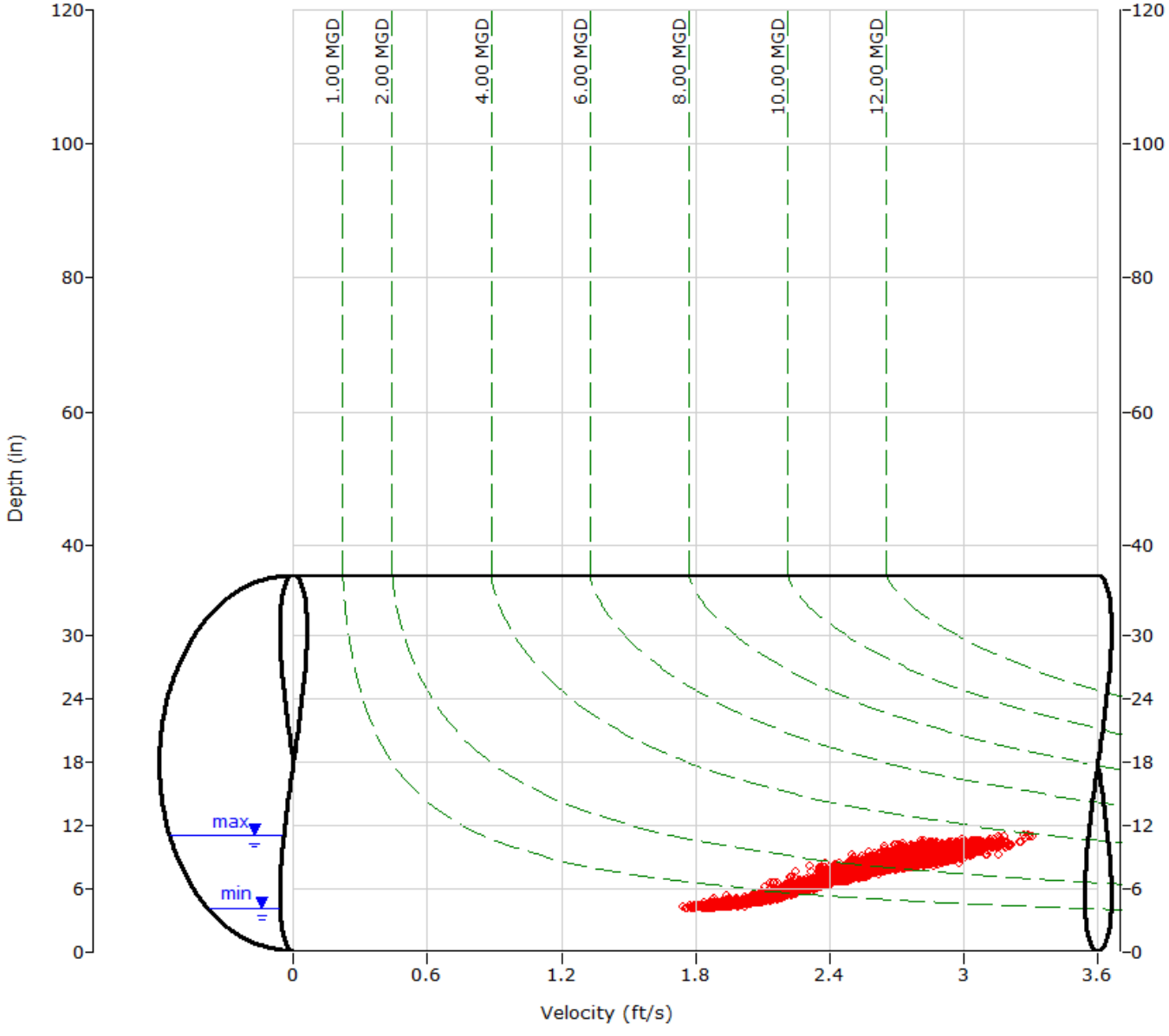


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



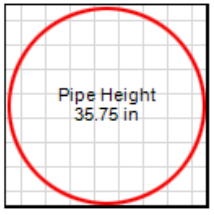
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF20

Flow Monitor

UFF20

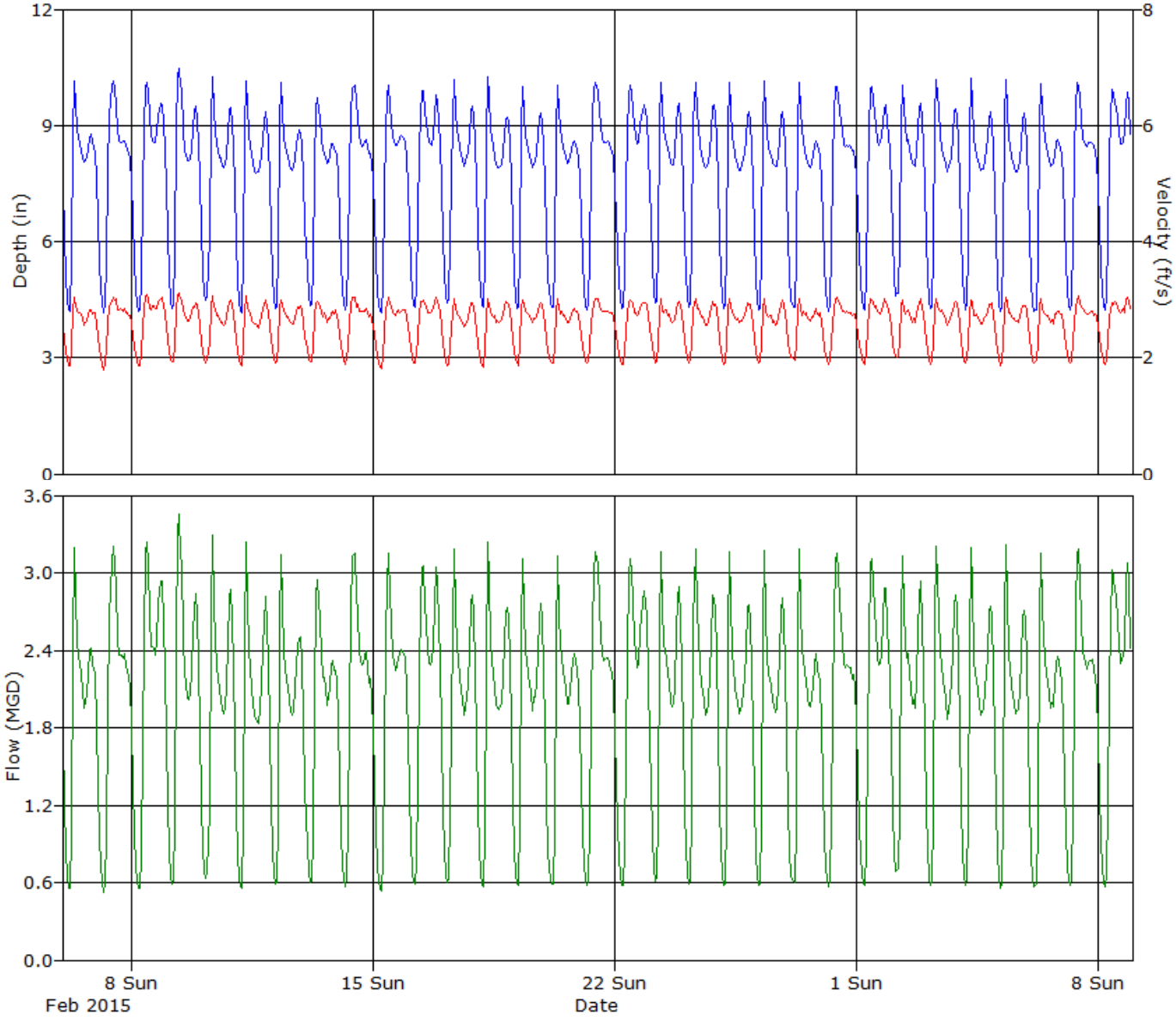


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF20, Pipe Height: 35.75 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	05:15	4.12	08:20	10.19	7.66	05:05	1.83	08:35	3.12	2.58	05:05	0.532	08:35	3.300	1.926	1.926	
2/7/2015	05:45	4.10	11:05	10.17	7.70	05:15	1.75	11:10	3.14	2.60	05:40	0.505	11:10	3.325	1.979	1.979	
2/8/2015	06:00	4.14	11:25	10.16	7.78	07:20	1.84	11:25	3.17	2.64	06:10	0.541	11:25	3.355	2.055	2.055	
2/9/2015	04:40	4.20	09:15	10.95	7.95	05:25	1.90	09:00	3.31	2.64	04:40	0.570	09:05	3.863	2.101	2.101	
2/10/2015	04:30	4.42	08:10	10.37	7.80	04:35	1.88	08:05	3.26	2.60	04:35	0.606	08:05	3.540	1.991	1.991	
2/11/2015	05:05	4.09	08:25	10.19	7.64	05:35	1.78	07:55	3.18	2.58	05:35	0.524	08:20	3.317	1.926	1.926	
2/12/2015	05:20	4.24	08:05	10.24	7.64	04:20	1.87	08:20	3.10	2.59	04:20	0.571	08:20	3.282	1.924	1.924	
2/13/2015	05:15	4.31	09:20	9.89	7.65	03:55	1.84	08:50	3.10	2.60	03:55	0.578	08:50	3.103	1.932	1.932	
2/14/2015	05:25	4.22	11:10	10.14	7.65	05:30	1.86	11:35	3.16	2.60	05:30	0.560	11:20	3.280	1.954	1.954	
2/15/2015	06:05	4.11	11:25	10.07	7.60	06:00	1.76	11:35	3.10	2.57	06:05	0.507	11:35	3.227	1.922	1.922	
2/16/2015	05:25	4.27	11:00	10.00	7.88	05:10	1.87	11:05	3.13	2.64	05:25	0.573	11:05	3.230	2.074	2.074	
2/17/2015	05:05	4.36	08:00	10.29	7.81	05:00	1.84	08:25	3.16	2.56	05:05	0.579	08:25	3.370	1.970	1.970	
2/18/2015	05:20	4.22	08:45	10.43	7.74	05:05	1.79	09:00	3.13	2.58	05:05	0.541	09:00	3.414	1.963	1.963	
2/19/2015	05:25	4.24	08:20	10.13	7.72	05:25	1.78	08:15	3.08	2.61	05:25	0.538	08:15	3.237	1.968	1.968	
2/20/2015	05:00	4.23	08:05	10.11	7.62	05:00	1.85	08:00	3.05	2.58	05:00	0.557	08:25	3.194	1.912	1.912	
2/21/2015	05:15	4.23	11:40	10.14	7.71	06:10	1.87	12:00	3.21	2.59	06:10	0.568	12:00	3.351	1.973	1.973	
2/22/2015	06:00	4.21	11:15	10.08	7.82	06:25	1.80	11:05	3.20	2.60	06:05	0.548	11:05	3.342	2.027	2.027	
2/23/2015	05:00	4.30	08:45	10.12	7.84	04:45	1.78	08:15	3.17	2.61	04:45	0.553	08:15	3.334	2.010	2.010	
2/24/2015	04:50	4.24	08:10	10.23	7.75	05:05	1.85	08:05	3.15	2.60	05:05	0.565	08:10	3.362	1.980	1.980	
2/25/2015	05:05	4.21	08:30	10.17	7.69	04:35	1.85	08:15	3.11	2.60	05:05	0.558	08:15	3.272	1.952	1.952	
2/26/2015	05:05	4.17	08:00	10.39	7.70	04:40	1.82	08:15	3.12	2.59	04:40	0.546	08:10	3.346	1.949	1.949	
2/27/2015	05:20	4.26	08:15	10.27	7.60	05:05	1.87	08:35	3.12	2.59	05:05	0.573	08:15	3.300	1.904	1.904	
2/28/2015	05:35	4.15	10:30	10.08	7.66	05:05	1.84	10:15	3.10	2.60	05:35	0.559	11:10	3.217	1.959	1.959	
3/1/2015	06:20	4.15	11:15	10.09	7.80	06:20	1.85	11:40	3.21	2.62	06:20	0.543	11:40	3.320	2.035	2.035	
3/2/2015	03:35	4.50	08:05	10.13	7.82	04:40	1.93	07:40	3.19	2.62	05:10	0.654	07:45	3.225	2.008	2.008	
3/3/2015	05:00	4.22	08:00	10.55	7.71	04:30	1.78	08:15	3.19	2.60	04:30	0.542	08:00	3.499	1.965	1.965	
3/4/2015	04:40	4.20	08:35	10.45	7.68	04:40	1.86	08:15	3.20	2.59	04:40	0.553	08:15	3.377	1.943	1.943	
3/5/2015	05:05	4.16	08:00	10.47	7.64	04:30	1.74	07:55	3.17	2.60	04:30	0.518	07:55	3.453	1.944	1.944	
3/6/2015	04:50	4.16	08:30	10.15	7.62	04:35	1.87	08:00	3.15	2.58	04:30	0.553	08:00	3.286	1.913	1.913	
3/7/2015	05:05	4.22	10:30	10.21	7.71	05:15	1.87	10:05	3.17	2.60	05:15	0.566	11:20	3.328	1.974	1.974	
3/8/2015	05:20	4.17	10:55	10.00	7.90	05:30	1.86	21:15	3.14	2.64	05:30	0.550	21:15	3.206	2.080	2.079	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			61.211
Avg	7.73	2.60	1.975

Site Commentary

Site Information

UFF21	
Pipe Dimensions	15.00" x 15.00"
Silt Level	0.00"

Overview

Site UFF21 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.95	0.76	0.059
Minimum	1.27	0.28	0.011
Maximum	3.35	1.60	0.211
Time of Minimum	2/7/2015 3:00 AM	3/8/2015 11:25 PM	3/8/2015 2:10 AM
Time of Maximum	2/26/2015 2:00 PM	2/10/2015 2:10 PM	2/10/2015 2:10 PM

Data Quality

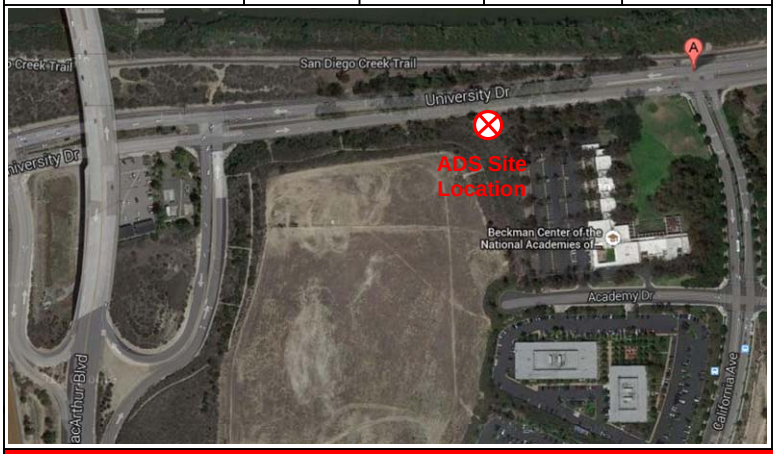
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF21	**Install Date:** 1/21/15	**Monitor Type**	Peak Doppler
Address/Location: University Dr. (Located before California ave 200' from road)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH058W003
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	15.00 "
		Pipe Width:	15.00 "





Investigation Information:

Date/Time of Investigation:	1/21/15 @ 1200
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.13 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.94 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

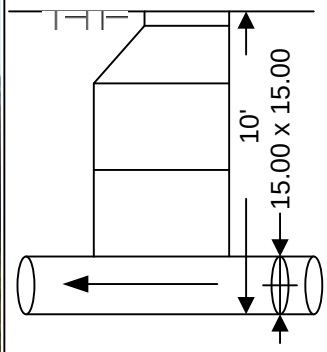
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

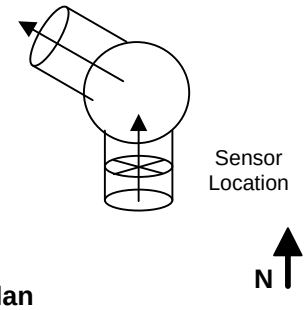
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

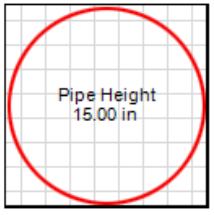
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF21

Flow Monitor

UFF21

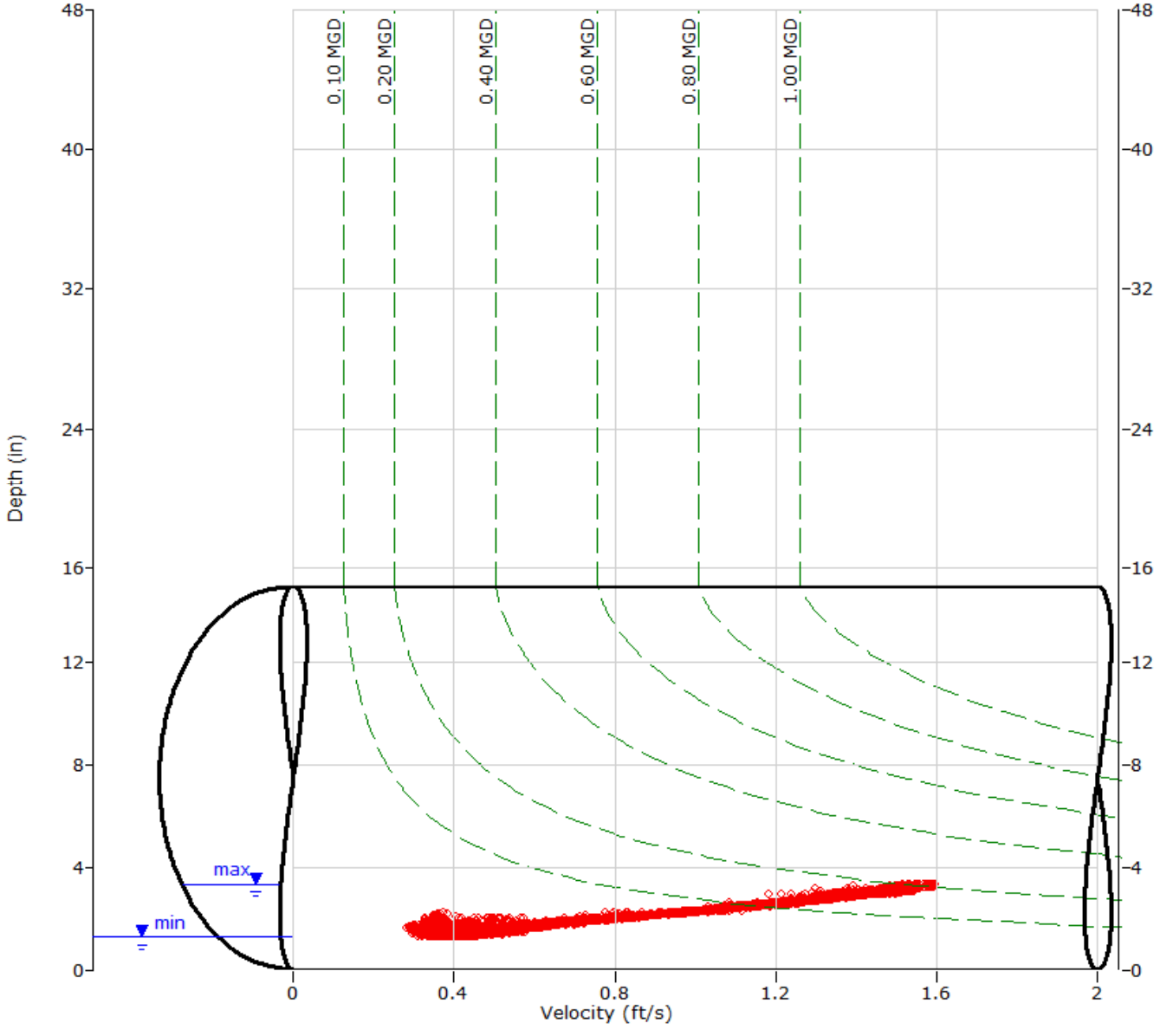


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF21

Flow Monitor

UFF21

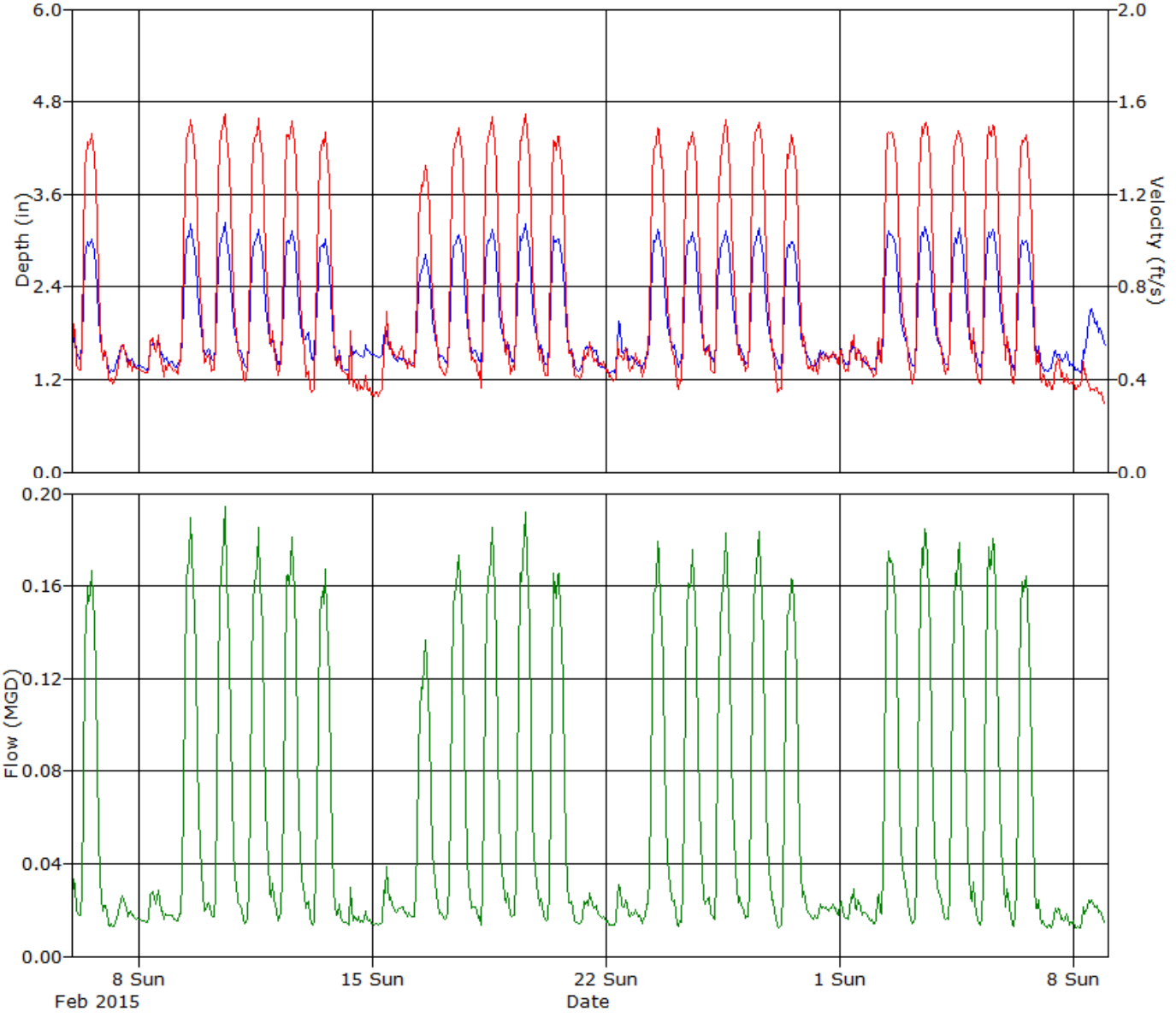
Pipe Height
15.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF21, Pipe Height: 15 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	06:10	1.42	14:20	3.10	2.15	06:15	0.38	14:05	1.48	0.90	06:15	0.015	14:10	0.174	0.076	0.076	
2/7/2015	03:00	1.27	12:05	1.75	1.44	05:25	0.32	12:05	0.66	0.46	05:25	0.011	12:05	0.034	0.018	0.018	
2/8/2015	07:05	1.32	10:00	1.74	1.48	07:00	0.38	08:30	0.64	0.48	07:00	0.013	14:20	0.032	0.020	0.020	
2/9/2015	02:20	1.33	13:45	3.30	2.16	04:30	0.39	14:05	1.59	0.91	04:30	0.014	14:05	0.205	0.080	0.080	
2/10/2015	05:00	1.35	14:10	3.34	2.20	04:50	0.38	14:10	1.60	0.93	05:00	0.013	14:10	0.211	0.082	0.082	
2/11/2015	06:05	1.32	13:45	3.25	2.19	05:45	0.37	13:45	1.58	0.92	05:45	0.013	13:45	0.199	0.081	0.081	
2/12/2015	04:45	1.37	14:20	3.21	2.20	04:25	0.38	14:00	1.55	0.93	04:25	0.014	14:20	0.192	0.082	0.082	
2/13/2015	05:00	1.40	14:20	3.04	2.13	05:10	0.33	14:45	1.50	0.84	05:00	0.013	14:20	0.172	0.071	0.071	
2/14/2015	02:50	1.29	08:10	1.79	1.49	21:30	0.30	08:10	0.72	0.41	07:35	0.012	08:10	0.039	0.017	0.017	
2/15/2015	18:20	1.41	08:20	2.03	1.54	01:40	0.30	10:25	0.76	0.47	01:45	0.012	10:25	0.045	0.021	0.021	
2/16/2015	05:10	1.37	13:45	2.88	2.01	00:15	0.42	14:15	1.35	0.82	06:40	0.016	13:45	0.143	0.061	0.061	
2/17/2015	06:00	1.37	14:20	3.14	2.17	04:40	0.37	14:20	1.52	0.90	04:40	0.013	14:20	0.183	0.078	0.078	
2/18/2015	06:25	1.38	14:05	3.24	2.20	06:00	0.34	14:10	1.59	0.92	06:00	0.012	14:10	0.198	0.081	0.081	
2/19/2015	05:25	1.39	14:45	3.35	2.24	03:45	0.42	14:35	1.59	0.93	06:10	0.016	14:45	0.210	0.084	0.084	
2/20/2015	05:25	1.37	10:10	3.30	2.13	04:40	0.37	10:10	1.58	0.87	04:40	0.014	10:10	0.204	0.075	0.075	
2/21/2015	05:20	1.29	09:35	1.74	1.47	04:35	0.37	08:15	0.62	0.47	04:40	0.012	09:35	0.030	0.019	0.019	
2/22/2015	02:55	1.27	10:15	2.01	1.48	05:50	0.38	08:10	0.62	0.46	05:50	0.012	10:15	0.036	0.019	0.019	
2/23/2015	02:45	1.32	13:40	3.28	2.17	02:40	0.38	13:50	1.53	0.91	02:40	0.013	13:50	0.196	0.078	0.078	
2/24/2015	05:00	1.33	14:00	3.32	2.18	05:00	0.34	14:15	1.54	0.90	05:00	0.012	14:05	0.199	0.079	0.079	
2/25/2015	06:10	1.34	14:15	3.28	2.21	04:15	0.37	14:05	1.59	0.93	06:10	0.014	14:15	0.202	0.081	0.081	
2/26/2015	07:05	1.37	14:00	3.35	2.20	05:55	0.41	14:00	1.59	0.93	04:40	0.015	14:00	0.210	0.082	0.082	
2/27/2015	04:45	1.32	13:40	3.11	2.11	04:05	0.30	13:45	1.50	0.87	04:05	0.011	13:45	0.178	0.073	0.073	
2/28/2015	06:35	1.37	12:45	1.63	1.48	07:50	0.39	18:50	0.56	0.48	07:50	0.014	12:45	0.025	0.019	0.019	
3/1/2015	21:50	1.32	00:55	1.76	1.48	20:05	0.41	09:55	0.68	0.49	22:00	0.015	09:55	0.035	0.020	0.020	
3/2/2015	02:00	1.32	11:45	3.26	2.21	02:00	0.39	11:15	1.52	0.94	02:00	0.013	11:15	0.191	0.083	0.083	
3/3/2015	06:10	1.33	13:50	3.33	2.22	04:30	0.34	13:35	1.58	0.93	04:30	0.012	13:50	0.204	0.084	0.084	
3/4/2015	06:00	1.34	14:35	3.27	2.18	04:50	0.41	14:25	1.51	0.92	06:05	0.015	14:35	0.193	0.080	0.080	
3/5/2015	05:00	1.33	13:40	3.26	2.21	04:55	0.37	13:40	1.53	0.92	04:55	0.013	13:40	0.195	0.082	0.082	
3/6/2015	05:20	1.29	11:10	3.07	2.13	05:15	0.36	14:40	1.52	0.88	05:15	0.012	11:10	0.174	0.075	0.075	
3/7/2015	03:10	1.28	11:30	1.67	1.43	09:05	0.34	11:30	0.62	0.41	05:45	0.011	11:30	0.030	0.016	0.016	
3/8/2015	05:05	1.28	13:50	2.22	1.69	23:25	0.28	07:00	0.55	0.37	02:10	0.011	13:50	0.027	0.018	0.018	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			1.834
Avg	1.95	0.76	0.059

Site Commentary

Site Information

UFF22	
Pipe Dimensions	7.88" x 7.88"
Silt Level	0.00"

Overview

Site UFF22 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.43	0.94	0.027
Minimum	1.04	0.14	0.003
Maximum	3.14	2.77	0.224
Time of Minimum	2/9/2015 6:05 AM	2/24/2015 1:50 AM	2/24/2015 1:50 AM
Time of Maximum	3/6/2015 9:30 AM	2/20/2015 11:45 PM	3/6/2015 9:30 AM

Data Quality

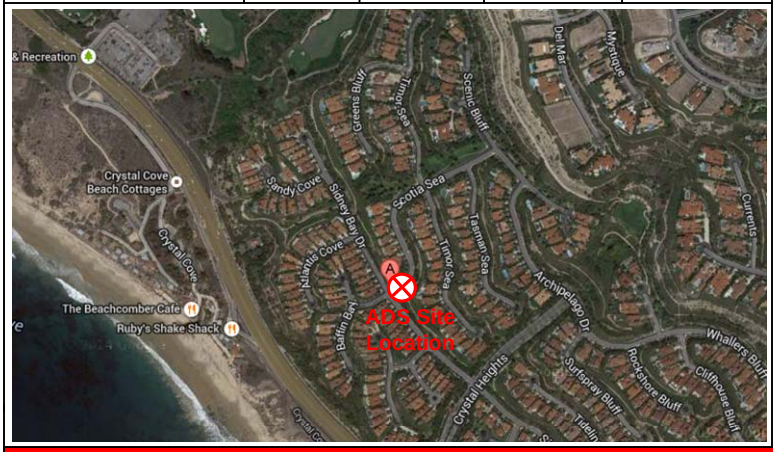
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF22	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: Scotia Sea & Sidney Bay Dr.		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH132S065
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	7.88 "
		Pipe Width:	7.88 "





Investigation Information:

Date/Time of Investigation:	1/29/15 @ 1027
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	1.38 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.43 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

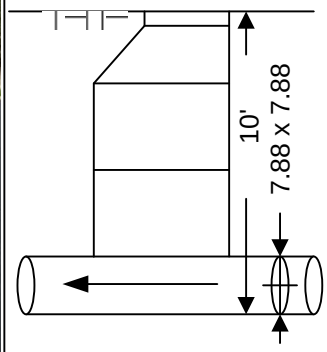
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

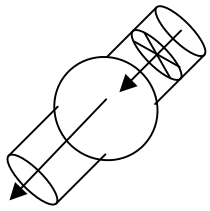
Other Information:





Cross Section





Plan

Installation Information		Backup	Yes	No	?	Distance
Installation Type:	Standard	Trunk	[ ]	[x]	[ ]	
Sensors Devices:	Ultrasonic / Pressure/Velocity	Lift / Pump Station	[ ]	[X]	[ ]	
Surcharge Height:	0	WWTP	[ ]	[X]	[ ]	
Rain Gauge Zone:		Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

ub

SCATTERGRAPH REPORT

UFF22

Flow Monitor

UFF22

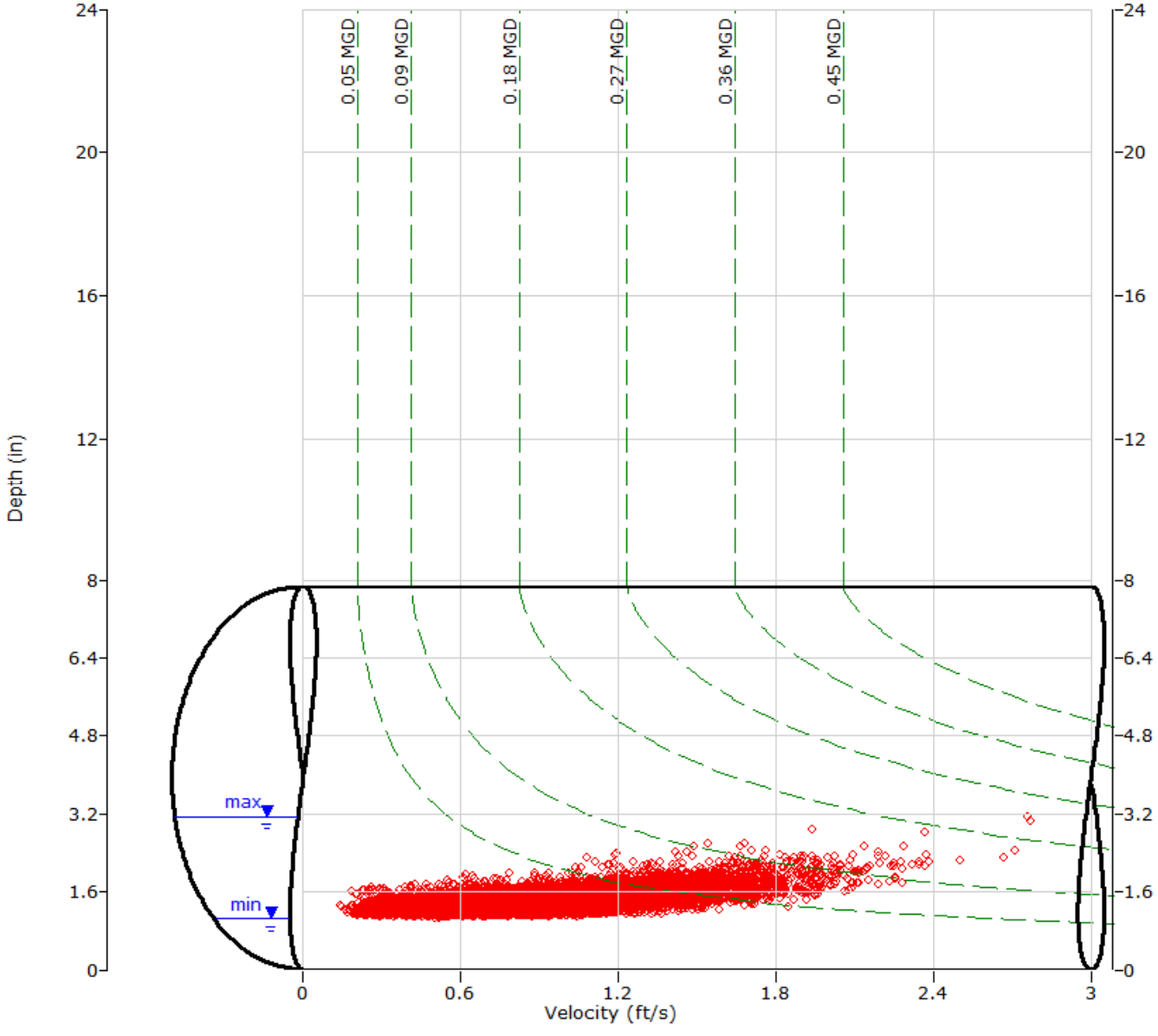
Pipe Height
7.88 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



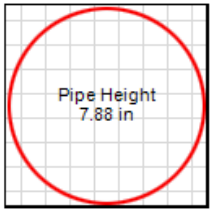
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF22

Flow Monitor

UFF22

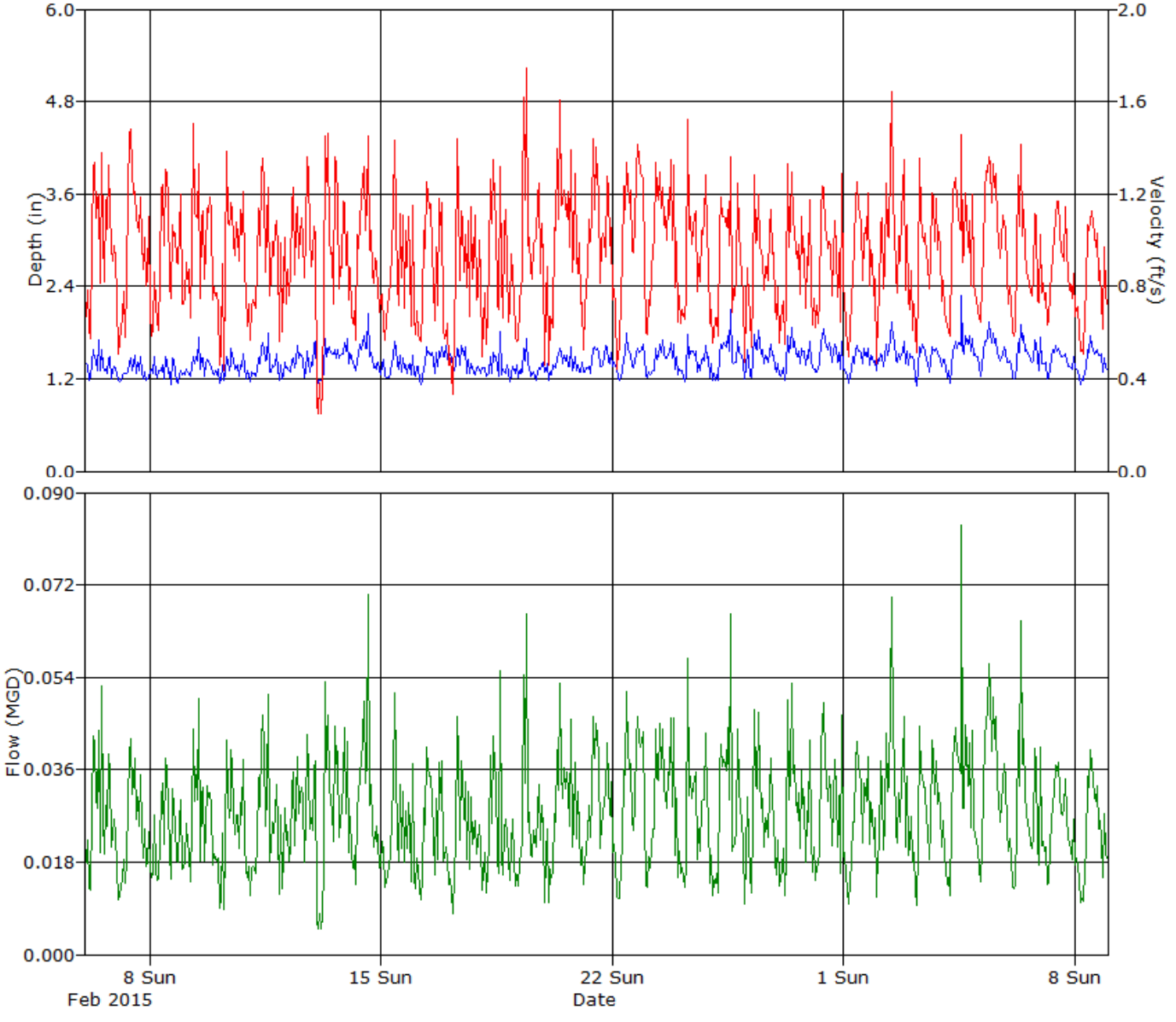


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF22, Pipe Height: 7.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:25	1.07	13:40	2.31	1.38	05:50	0.21	13:50	2.38	0.99	05:50	0.004	13:50	0.120	0.028	0.028	
2/7/2015	03:15	1.07	13:25	2.01	1.29	03:25	0.22	15:25	2.26	0.96	03:25	0.004	13:25	0.093	0.024	0.024	
2/8/2015	03:30	1.09	13:55	1.82	1.30	02:30	0.20	13:55	2.24	0.93	02:30	0.004	13:55	0.085	0.023	0.023	
2/9/2015	06:05	1.04	11:20	2.25	1.37	23:20	0.35	09:05	2.03	0.98	23:20	0.007	11:20	0.101	0.027	0.027	
2/10/2015	02:15	1.11	11:05	2.36	1.35	01:50	0.16	11:05	2.37	0.92	01:50	0.004	11:05	0.131	0.025	0.025	
2/11/2015	02:50	1.09	14:10	2.29	1.39	22:25	0.22	08:55	2.12	0.93	22:25	0.004	14:10	0.106	0.026	0.026	
2/12/2015	00:45	1.10	21:25	2.13	1.40	03:20	0.23	21:25	2.37	0.98	03:20	0.004	21:25	0.113	0.027	0.027	
2/13/2015	02:55	1.13	00:25	2.35	1.48	17:35	0.21	21:15	2.35	0.91	02:10	0.004	16:25	0.115	0.028	0.028	
2/14/2015	17:20	1.17	14:20	2.53	1.50	04:00	0.22	14:20	2.29	0.94	04:00	0.005	14:20	0.139	0.029	0.029	
2/15/2015	03:55	1.11	02:35	2.06	1.37	01:35	0.15	10:55	1.94	0.89	01:35	0.003	02:35	0.086	0.024	0.024	
2/16/2015	04:40	1.06	23:15	2.09	1.42	15:10	0.23	03:30	1.80	0.85	15:10	0.005	23:15	0.074	0.024	0.024	
2/17/2015	17:05	1.10	08:20	2.11	1.42	04:35	0.20	15:00	2.28	0.85	04:35	0.004	08:20	0.084	0.024	0.024	
2/18/2015	06:05	1.07	14:30	2.44	1.35	15:30	0.18	14:30	2.71	0.89	15:30	0.004	14:30	0.157	0.024	0.024	
2/19/2015	01:30	1.09	10:25	2.30	1.34	23:40	0.20	10:25	2.67	0.96	03:25	0.005	10:25	0.142	0.025	0.025	
2/20/2015	07:45	1.08	23:45	3.03	1.40	03:20	0.17	23:45	2.77	1.02	03:20	0.003	23:45	0.215	0.029	0.029	
2/21/2015	04:55	1.10	13:10	2.15	1.44	03:10	0.20	10:50	1.97	1.01	03:10	0.004	13:10	0.091	0.029	0.029	
2/22/2015	06:10	1.14	10:15	2.28	1.46	06:10	0.19	18:20	1.85	1.02	06:10	0.004	10:15	0.097	0.030	0.030	
2/23/2015	04:30	1.11	10:50	2.19	1.46	00:15	0.27	21:15	2.02	1.04	00:15	0.006	21:15	0.100	0.031	0.031	
2/24/2015	05:10	1.10	07:05	2.18	1.41	01:50	0.14	12:05	2.02	0.93	01:50	0.003	07:05	0.097	0.027	0.027	
2/25/2015	03:40	1.10	12:10	2.52	1.49	00:55	0.26	12:10	2.14	0.91	00:55	0.006	12:10	0.129	0.029	0.029	
2/26/2015	05:00	1.12	08:30	2.20	1.48	22:55	0.26	02:00	1.76	0.87	06:10	0.006	02:00	0.081	0.027	0.027	
2/27/2015	05:30	1.12	10:20	2.28	1.49	04:40	0.25	07:10	1.73	0.91	04:40	0.005	10:20	0.087	0.028	0.028	
2/28/2015	05:10	1.14	23:15	2.26	1.52	02:35	0.28	23:15	1.90	0.90	02:35	0.006	23:15	0.099	0.028	0.028	
3/1/2015	05:25	1.11	22:10	2.05	1.43	04:25	0.33	15:10	1.94	0.90	04:25	0.007	15:10	0.084	0.026	0.026	
3/2/2015	01:15	1.11	11:20	2.36	1.53	01:30	0.24	03:30	2.15	1.00	00:55	0.006	11:15	0.106	0.032	0.032	
3/3/2015	05:45	1.08	16:30	2.02	1.47	23:00	0.23	17:15	2.11	0.92	23:00	0.005	17:15	0.093	0.028	0.028	
3/4/2015	04:55	1.11	14:35	2.87	1.57	23:55	0.28	14:20	2.37	0.98	03:25	0.007	14:20	0.166	0.033	0.033	
3/5/2015	04:55	1.23	11:55	2.43	1.57	01:15	0.23	07:50	1.83	1.03	06:25	0.005	11:55	0.102	0.034	0.034	
3/6/2015	05:25	1.11	09:30	3.14	1.51	03:30	0.26	09:30	2.76	0.90	03:55	0.005	09:30	0.224	0.028	0.028	
3/7/2015	05:00	1.13	09:55	2.14	1.44	02:15	0.40	23:30	1.97	0.89	04:40	0.008	23:30	0.089	0.026	0.026	
3/8/2015	04:30	1.10	12:05	2.00	1.42	03:40	0.27	09:20	1.81	0.82	03:40	0.005	13:45	0.072	0.023	0.023	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			0.848
Avg	1.43	0.94	0.027

Site Commentary

Site Information

UFF23	
Pipe Dimensions	12.00" x 12.00"
Silt Level	0.00"

Overview

Site UFF23 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.12	3.79	0.244
Minimum	1.12	1.10	0.034
Maximum	3.57	4.91	0.602
Time of Minimum	2/24/2015 3:40 AM	2/8/2015 7:10 AM	2/9/2015 4:55 AM
Time of Maximum	3/3/2015 7:20 PM	2/15/2015 10:40 PM	2/15/2015 10:40 PM

Data Quality

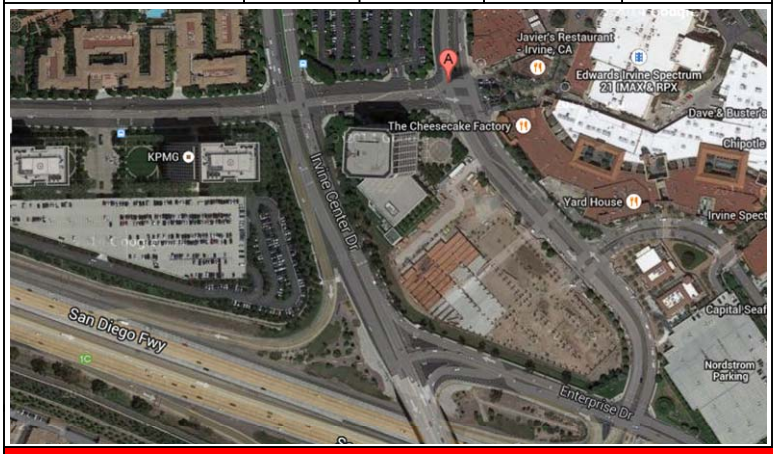
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF23	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: Spectrum Center Dr. & Pacifica (Located on Pacifica in between Irvine Center Dr & Spectrum Center Dr.)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH156W021
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	12.00 "
		Pipe Width:	12.00 "





Investigation Information:

Date/Time of Investigation:	1/23/15 @ 1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.13 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.53 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[ ]	[X]	[ ]	[ ]

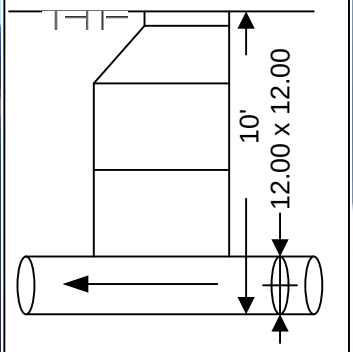
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

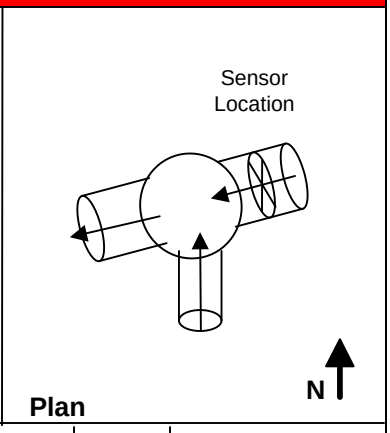
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF23

Flow Monitor

UFF23

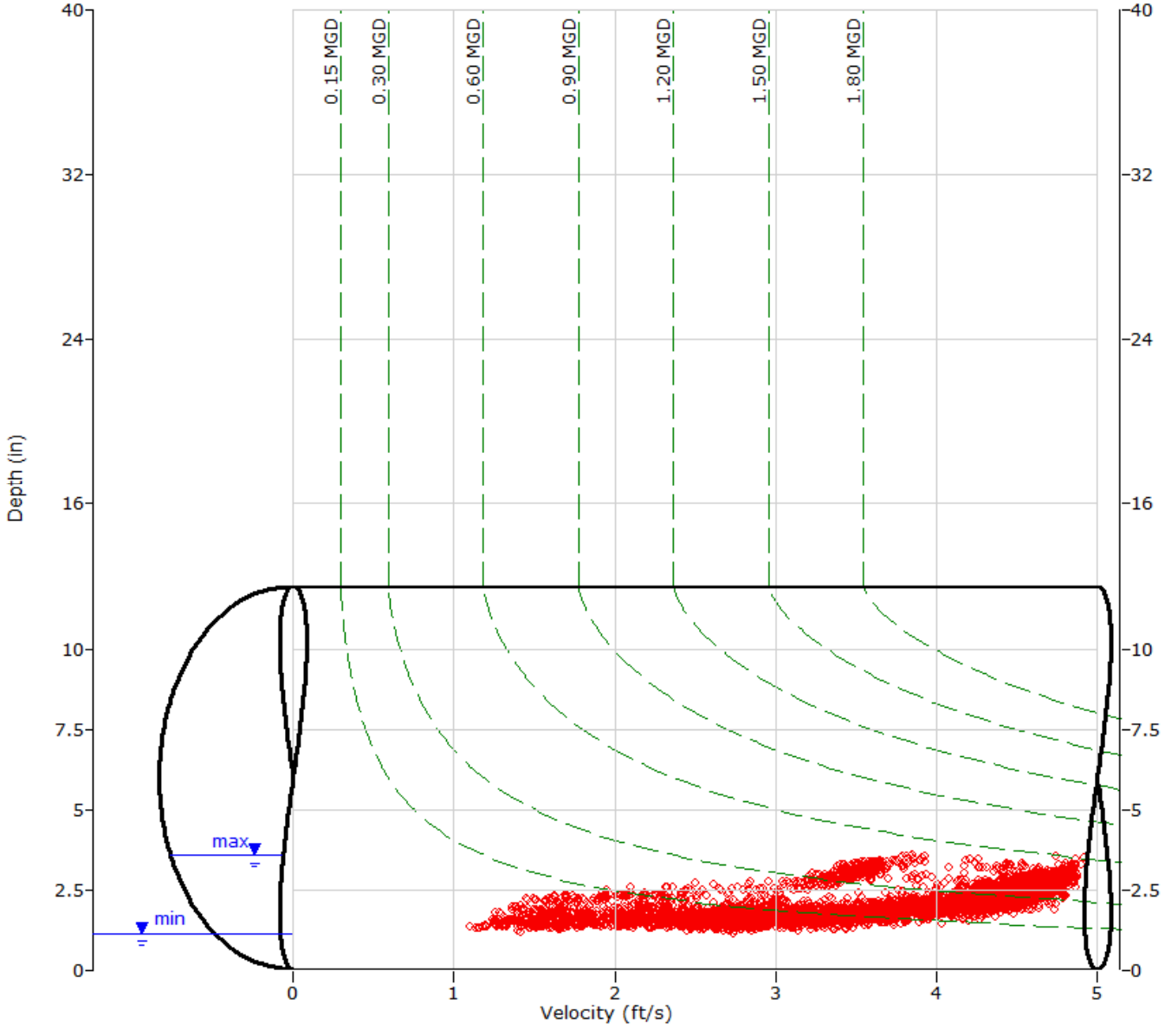
Pipe Height
12.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF23

Flow Monitor

UFF23

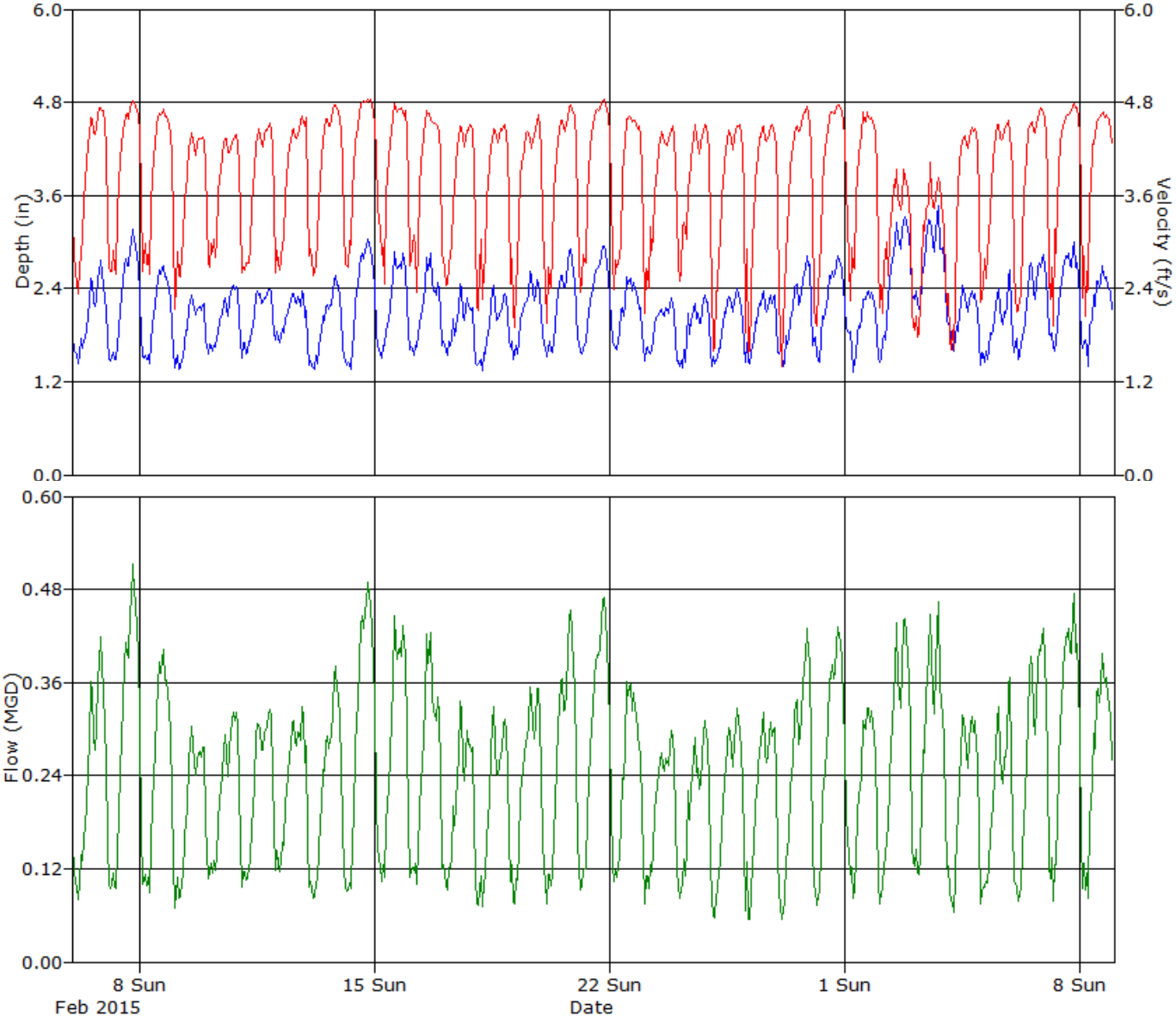
Pipe Height
12.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF23, Pipe Height: 12 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:35	1.39	06:15	3.35	2.06	02:45	1.97	13:55	4.79	3.86	04:15	0.066	13:50	0.536	0.240	0.240	
2/7/2015	07:15	1.40	19:20	3.28	2.28	07:05	1.20	19:45	4.84	3.96	07:05	0.040	19:20	0.544	0.292	0.292	
2/8/2015	07:10	1.34	16:15	3.08	2.11	07:10	1.10	17:30	4.78	3.95	07:10	0.034	16:15	0.482	0.253	0.253	
2/9/2015	05:55	1.20	22:45	2.52	1.87	04:55	1.14	13:10	4.47	3.68	04:55	0.034	22:45	0.329	0.197	0.197	
2/10/2015	06:20	1.44	21:35	2.63	2.02	03:00	2.49	21:40	4.48	3.75	06:20	0.094	21:35	0.367	0.220	0.220	
2/11/2015	05:20	1.39	22:00	2.51	2.04	01:10	2.00	21:25	4.62	3.76	01:10	0.076	22:00	0.350	0.225	0.225	
2/12/2015	07:45	1.60	23:20	2.85	2.07	01:20	1.74	23:05	4.73	3.85	01:20	0.079	23:20	0.436	0.232	0.232	
2/13/2015	02:00	1.26	20:05	2.84	1.93	05:45	1.59	20:10	4.82	3.92	05:45	0.047	20:05	0.440	0.223	0.223	
2/14/2015	07:25	1.28	14:35	3.30	2.25	07:05	2.43	19:30	4.86	4.13	07:05	0.076	14:35	0.545	0.297	0.297	
2/15/2015	02:30	1.30	22:40	3.49	2.23	05:45	1.77	22:40	4.91	4.10	07:05	0.064	22:40	0.602	0.284	0.284	
2/16/2015	03:15	1.39	15:45	3.04	2.15	06:05	1.64	14:10	4.74	3.92	06:05	0.060	15:45	0.475	0.257	0.257	
2/17/2015	04:35	1.41	13:50	2.69	1.95	03:30	1.93	20:55	4.57	3.73	03:30	0.080	13:50	0.383	0.209	0.209	
2/18/2015	04:05	1.26	13:15	2.72	1.90	02:25	1.45	21:55	4.56	3.71	05:50	0.046	13:15	0.389	0.205	0.205	
2/19/2015	03:55	1.25	17:15	2.92	2.08	04:40	1.53	21:40	4.72	3.75	03:30	0.055	21:40	0.434	0.233	0.233	
2/20/2015	06:00	1.27	19:50	3.12	2.20	03:15	1.32	20:20	4.82	3.83	06:00	0.048	19:50	0.503	0.264	0.264	
2/21/2015	05:35	1.45	22:00	3.10	2.28	03:45	1.27	19:00	4.87	4.00	03:45	0.048	22:00	0.496	0.289	0.289	
2/22/2015	05:00	1.39	17:45	2.85	2.13	03:30	1.70	12:25	4.74	3.88	03:30	0.062	17:45	0.423	0.246	0.246	
2/23/2015	01:15	1.27	20:10	2.53	1.93	01:45	1.31	21:40	4.57	3.73	01:45	0.042	20:00	0.344	0.204	0.204	
2/24/2015	03:40	1.12	22:15	2.82	1.89	03:05	1.70	20:55	4.63	3.82	03:40	0.065	22:15	0.405	0.205	0.205	
2/25/2015	01:30	1.20	19:20	2.90	1.96	02:15	1.36	21:25	4.57	3.65	01:20	0.044	19:20	0.429	0.210	0.210	
2/26/2015	01:25	1.30	14:35	3.07	1.98	04:25	1.27	20:20	4.57	3.71	04:25	0.042	14:35	0.458	0.216	0.216	
2/27/2015	04:20	1.18	22:00	3.52	2.11	01:40	1.24	21:25	4.80	3.74	04:20	0.036	22:00	0.589	0.245	0.245	
2/28/2015	05:40	1.22	17:10	3.18	2.22	04:55	1.26	14:50	4.86	3.91	03:55	0.046	17:10	0.500	0.272	0.272	
3/1/2015	06:35	1.20	00:05	2.46	1.99	07:10	1.49	13:10	4.81	3.93	06:55	0.046	19:00	0.349	0.226	0.226	
3/2/2015	02:00	1.41	19:20	3.44	2.59	03:10	1.60	20:15	4.55	3.24	01:20	0.057	18:40	0.519	0.279	0.279	
3/3/2015	06:35	2.05	19:20	3.57	2.78	02:20	1.45	13:15	4.45	3.03	04:45	0.092	19:30	0.511	0.285	0.285	
3/4/2015	04:30	1.41	00:00	2.72	2.10	04:35	1.25	19:50	4.61	3.48	04:30	0.042	19:45	0.356	0.217	0.217	
3/5/2015	04:10	1.29	22:20	2.96	1.94	02:25	1.88	13:50	4.60	3.75	01:40	0.062	22:20	0.430	0.212	0.212	
3/6/2015	04:30	1.33	22:10	3.10	2.21	04:35	1.20	20:20	4.79	3.82	04:35	0.037	22:10	0.488	0.265	0.265	
3/7/2015	06:05	1.44	20:25	3.17	2.39	02:45	1.43	20:25	4.81	3.98	05:00	0.056	20:25	0.514	0.304	0.304	
3/8/2015	06:20	1.30	16:55	2.79	2.17	02:40	1.26	17:55	4.75	3.96	06:15	0.044	16:55	0.421	0.262	0.262	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			7.568
Avg	2.12	3.79	0.244

Site Commentary

Site Information

UFF24	
Pipe Dimensions	10.13" x 10.25"
Silt Level	0.00"

Overview

Site UFF24 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.39	4.35	0.299
Minimum	1.47	2.71	0.092
Maximum	3.86	5.36	0.679
Time of Minimum	3/3/2015 4:25 AM	2/11/2015 4:10 AM	2/11/2015 4:45 AM
Time of Maximum	2/14/2015 10:25 AM	2/10/2015 7:55 AM	2/14/2015 10:55 AM

Data Quality

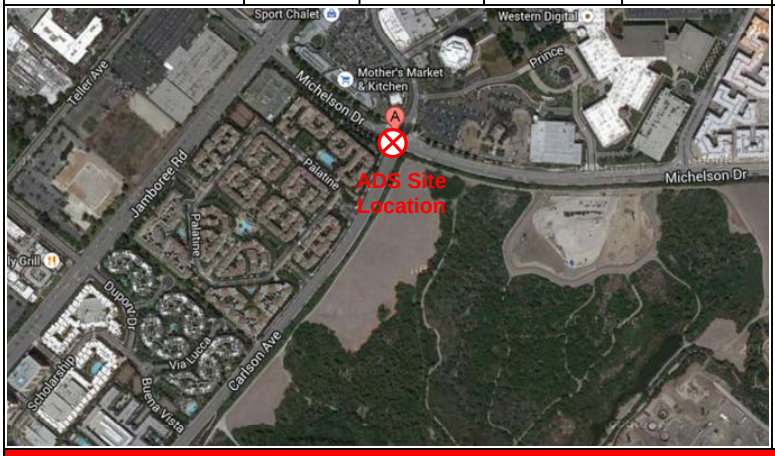
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF24	**Install Date:** 1/15/15	**Monitor Type**	Peak Doppler
Address/Location: 2652 McGraw Ave.		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH049E032
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	10.13 "
		Pipe Width:	10.25 "





Investigation Information:

Date/Time of Investigation:	1/15/15 @1000
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.52 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	12'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	X			

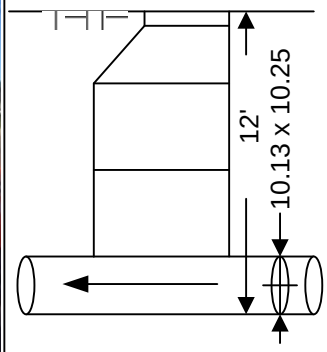
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

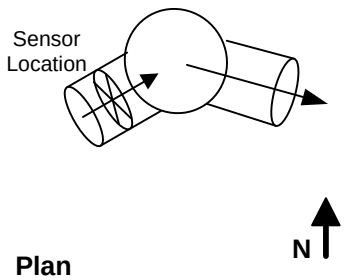
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

UFF24

Flow Monitor

UFF24

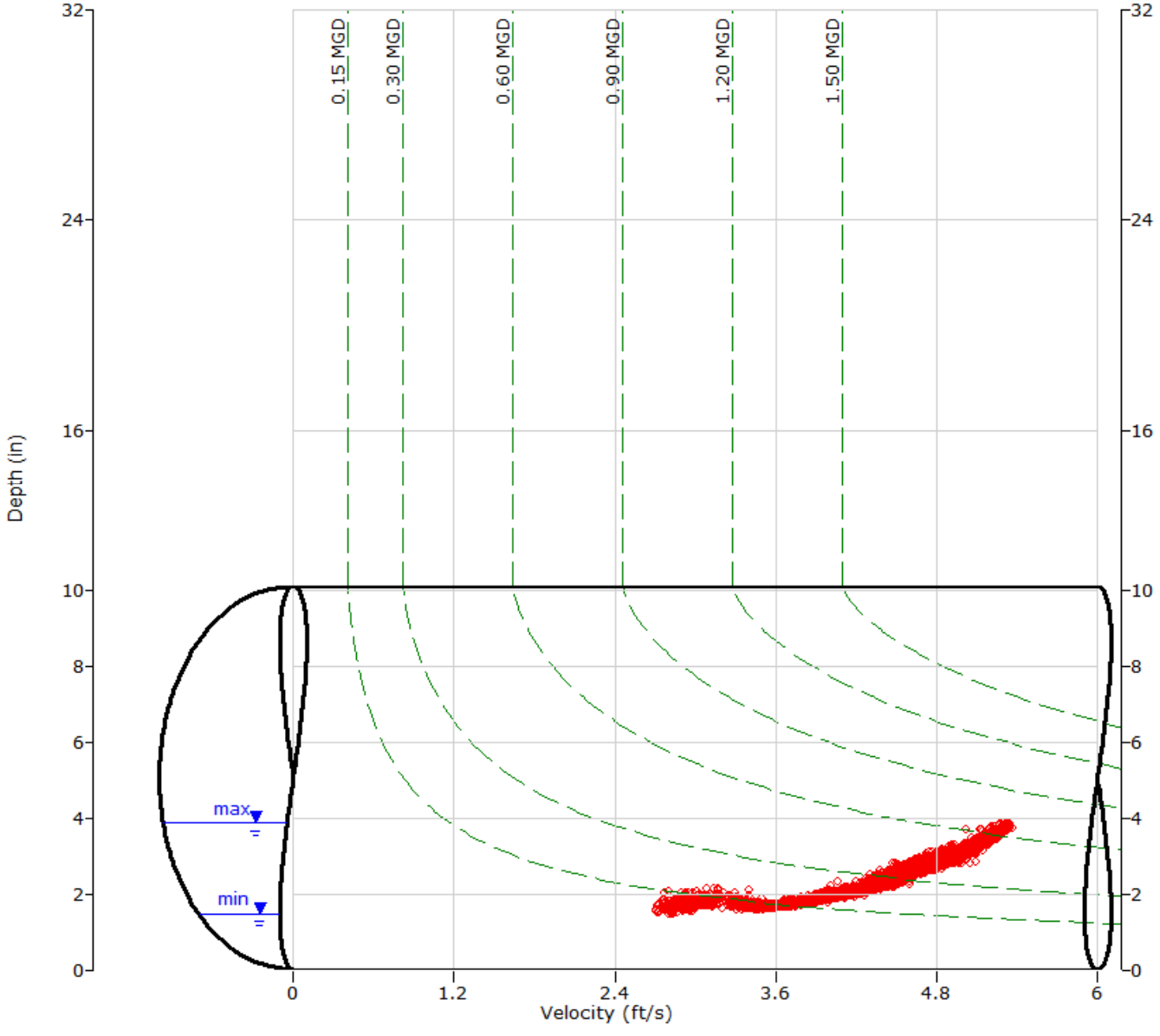
Pipe Height
10.13 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF24

Flow Monitor

UFF24

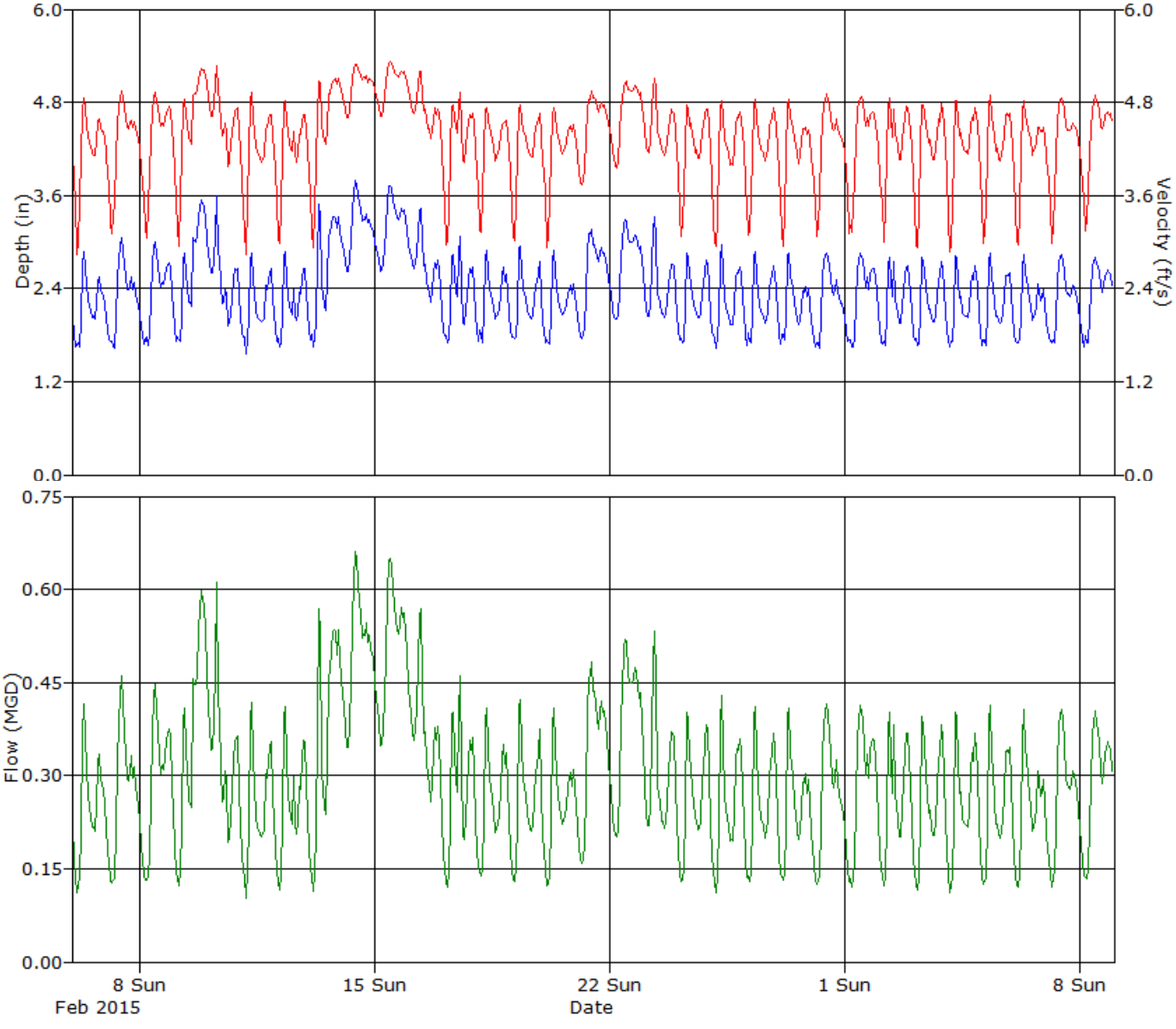
Pipe Height
10.13 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF24, Pipe Height: 10.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:15	1.59	08:40	2.95	2.18	04:15	2.71	08:35	4.89	4.17	04:15	0.099	08:40	0.431	0.249	0.249	
2/7/2015	06:20	1.60	11:05	3.21	2.30	03:20	2.75	11:05	4.99	4.27	04:50	0.121	11:05	0.498	0.277	0.277	
2/8/2015	03:50	1.62	11:40	3.15	2.35	04:25	2.84	11:25	5.04	4.31	05:30	0.119	11:25	0.489	0.288	0.288	
2/9/2015	04:00	1.61	20:20	3.67	2.62	04:35	2.83	22:15	5.28	4.50	04:00	0.110	20:20	0.628	0.359	0.359	
2/10/2015	15:30	1.90	07:40	3.74	2.57	15:30	3.89	07:55	5.36	4.62	15:30	0.184	07:55	0.656	0.344	0.344	
2/11/2015	04:40	1.47	08:25	3.05	2.18	04:10	2.71	08:30	5.02	4.16	04:45	0.092	08:25	0.465	0.248	0.248	
2/12/2015	04:35	1.51	08:00	2.97	2.21	04:35	2.73	08:25	4.94	4.18	04:35	0.093	08:25	0.441	0.255	0.255	
2/13/2015	04:40	1.56	08:35	3.74	2.63	04:55	2.79	08:35	5.20	4.47	04:55	0.102	08:35	0.639	0.358	0.358	
2/14/2015	05:25	2.53	10:25	3.86	3.21	05:20	4.56	10:40	5.35	5.02	05:25	0.326	10:55	0.679	0.503	0.503	
2/15/2015	04:55	2.58	09:50	3.81	3.22	05:00	4.58	12:25	5.34	5.05	05:00	0.337	12:25	0.674	0.510	0.510	
2/16/2015	16:40	2.11	09:05	3.63	2.74	16:40	4.23	09:00	5.25	4.72	16:40	0.234	09:05	0.617	0.381	0.381	
2/17/2015	04:45	1.52	13:40	3.24	2.31	03:15	2.80	13:40	5.06	4.25	04:45	0.102	13:40	0.511	0.277	0.277	
2/18/2015	03:10	1.62	20:55	2.97	2.25	04:00	2.92	07:55	4.90	4.20	04:25	0.123	07:55	0.436	0.260	0.260	
2/19/2015	04:30	1.59	07:40	3.16	2.24	03:30	2.73	07:50	4.85	4.17	04:30	0.104	07:40	0.471	0.259	0.259	
2/20/2015	04:35	1.63	07:55	3.10	2.20	03:35	2.72	07:50	4.80	4.17	04:30	0.108	07:50	0.456	0.251	0.251	
2/21/2015	04:55	1.72	11:10	3.29	2.57	04:50	3.61	11:15	5.00	4.51	04:55	0.150	11:15	0.514	0.340	0.340	
2/22/2015	04:50	1.98	11:00	3.44	2.74	04:50	3.89	12:10	5.10	4.68	04:50	0.196	11:00	0.558	0.383	0.383	
2/23/2015	15:20	1.97	08:15	3.58	2.44	16:35	3.98	08:15	5.18	4.47	15:20	0.201	08:15	0.601	0.309	0.309	
2/24/2015	04:50	1.63	07:35	2.94	2.25	03:05	2.79	07:30	4.84	4.21	04:45	0.113	07:30	0.428	0.263	0.263	
2/25/2015	04:35	1.56	08:20	3.09	2.22	04:35	2.85	08:20	4.88	4.14	04:35	0.102	08:20	0.461	0.254	0.254	
2/26/2015	02:45	1.62	08:35	2.95	2.21	03:00	2.88	08:35	4.91	4.19	04:10	0.116	08:35	0.435	0.256	0.256	
2/27/2015	05:00	1.61	08:10	3.03	2.19	04:30	2.85	08:15	4.90	4.17	04:00	0.118	08:10	0.451	0.250	0.250	
2/28/2015	06:30	1.59	11:25	2.96	2.25	04:25	2.79	11:55	4.96	4.26	04:25	0.117	11:25	0.442	0.268	0.268	
3/1/2015	06:15	1.57	11:10	2.94	2.32	03:45	2.87	12:30	4.93	4.28	05:25	0.110	11:10	0.432	0.281	0.281	
3/2/2015	04:35	1.60	11:30	3.13	2.24	03:55	2.76	08:00	4.91	4.25	03:55	0.107	11:30	0.467	0.263	0.263	
3/3/2015	04:25	1.47	07:25	2.98	2.22	04:30	2.73	07:35	4.88	4.20	04:25	0.092	07:25	0.438	0.257	0.257	
3/4/2015	03:15	1.54	07:40	3.02	2.22	03:15	2.73	07:50	4.98	4.19	03:15	0.096	07:40	0.456	0.257	0.257	
3/5/2015	05:25	1.62	07:45	2.94	2.19	03:05	2.77	08:15	4.97	4.20	04:55	0.115	07:45	0.430	0.253	0.253	
3/6/2015	03:30	1.58	10:20	3.05	2.19	03:35	2.89	10:20	5.04	4.18	03:30	0.106	10:20	0.469	0.250	0.250	
3/7/2015	04:15	1.62	10:20	3.00	2.25	04:45	2.92	12:25	4.98	4.26	04:15	0.112	10:20	0.439	0.267	0.267	
3/8/2015	03:45	1.64	11:20	2.91	2.33	05:00	2.93	11:30	4.93	4.34	04:55	0.116	11:20	0.426	0.284	0.284	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			9.254
Avg	2.39	4.35	0.299

Site Commentary

Site Information

UFF3	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site UFF3 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.22	4.47	0.648
Minimum	1.92	2.91	0.196
Maximum	5.01	5.32	1.360
Time of Minimum	2/26/2015 4:20 AM	2/9/2015 3:30 AM	2/26/2015 4:20 AM
Time of Maximum	3/5/2015 7:25 AM	2/9/2015 7:15 AM	3/5/2015 7:25 AM

Data Quality

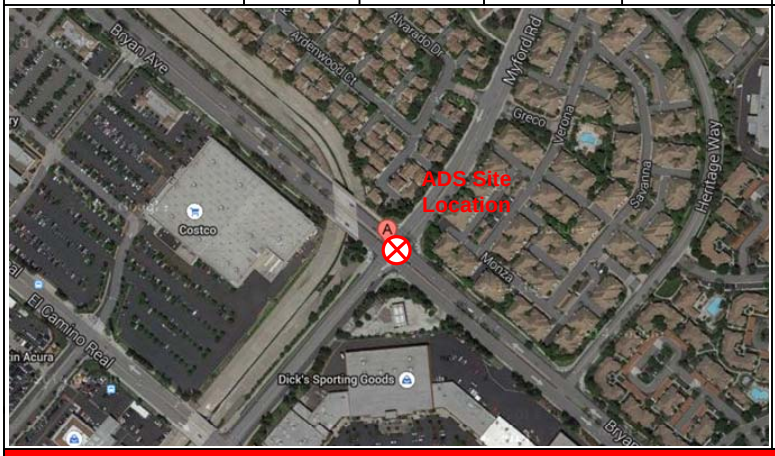
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

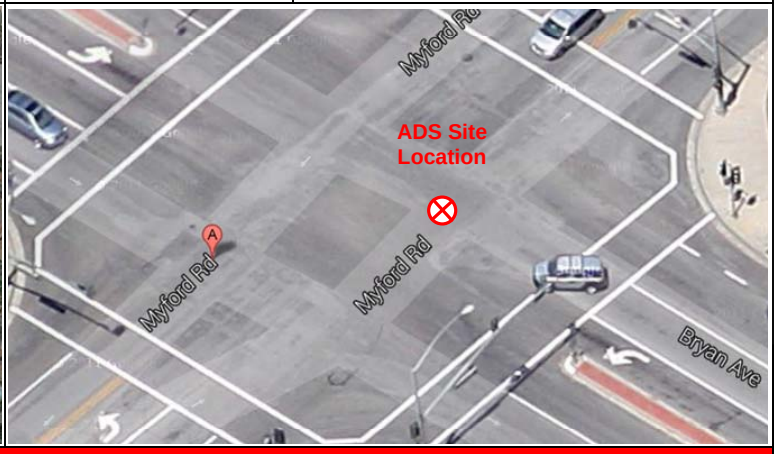
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Tustin	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF3	**Install Date:** 1/28/15	**Monitor Type**	Peak Doppler
Address/Location: Bryan Ave & Myford Rd		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH044S092
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	1/28/15 @ 1000
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.00 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	25'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

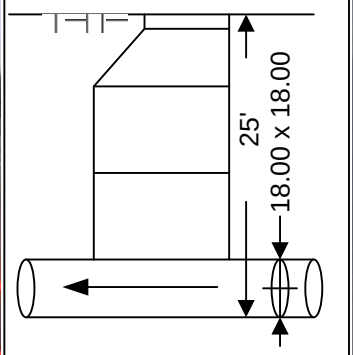
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

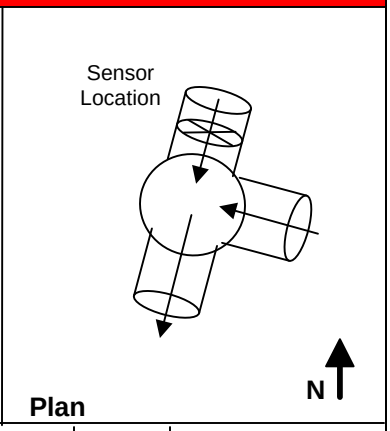
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF3

Flow Monitor

UFF3

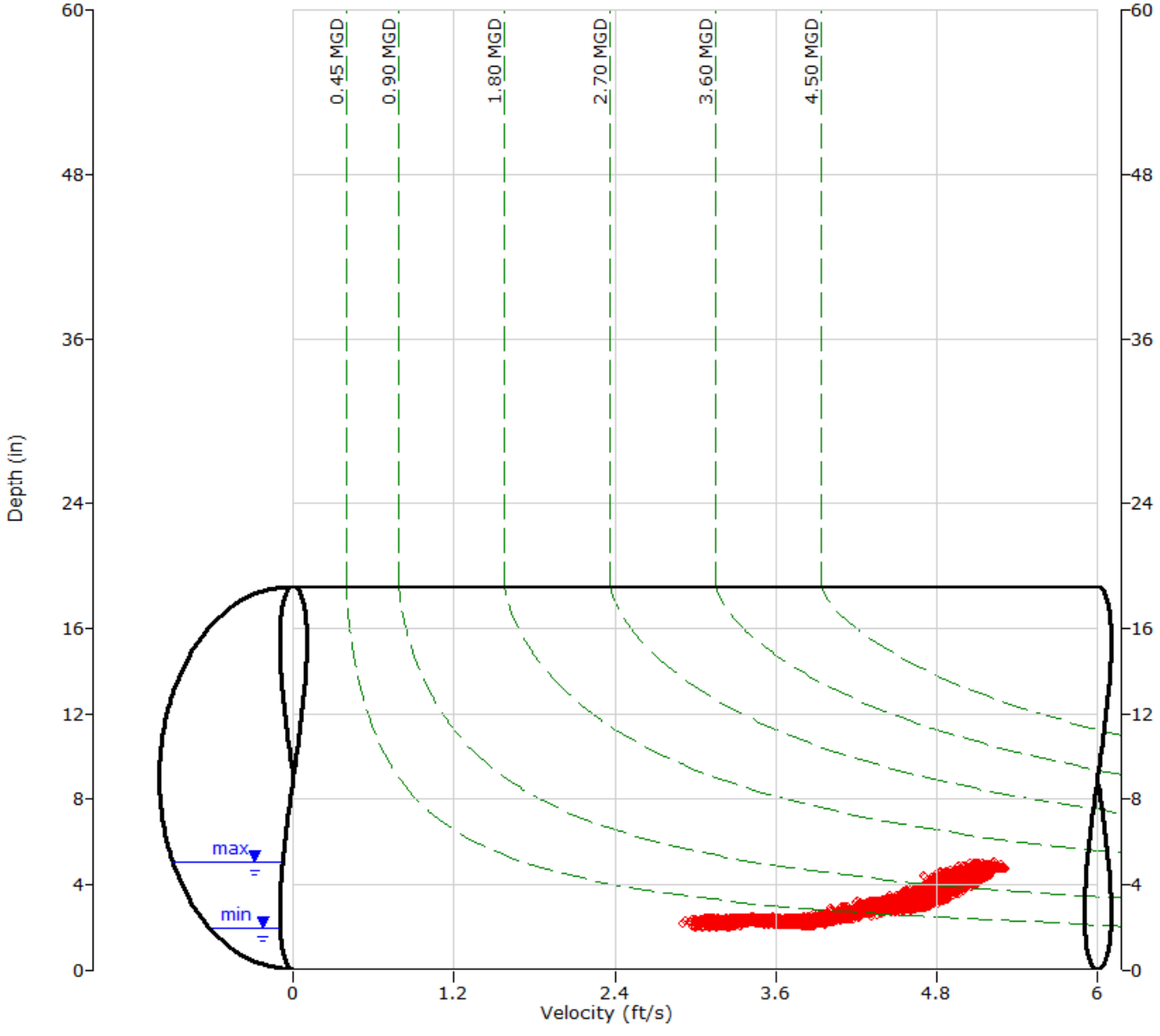
Pipe Height
18.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF3

Flow Monitor

UFF3

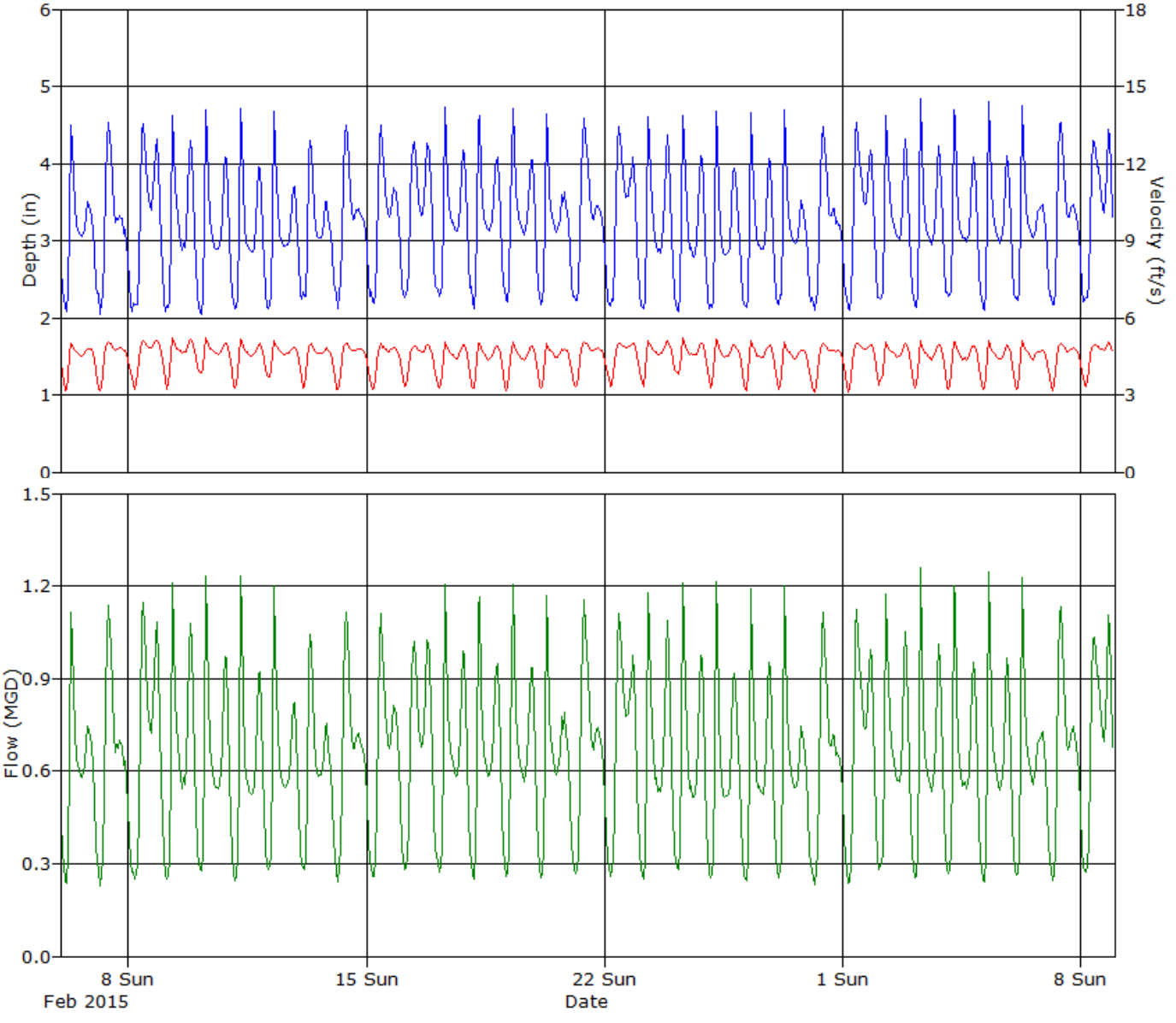
Pipe Height
18.00 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF3, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:40	1.96	07:40	4.67	3.13	03:05	2.98	07:40	5.08	4.44	03:40	0.212	07:40	1.195	0.613	0.613	
2/7/2015	05:00	1.97	10:35	4.65	3.19	04:35	2.98	10:10	5.09	4.47	04:35	0.211	10:35	1.186	0.640	0.640	
2/8/2015	02:50	2.06	10:35	4.58	3.34	04:45	3.04	20:05	5.20	4.58	05:25	0.227	10:15	1.173	0.706	0.706	
2/9/2015	02:30	2.05	07:30	4.75	3.20	03:30	2.91	07:15	5.32	4.58	03:30	0.224	07:20	1.274	0.661	0.661	
2/10/2015	04:05	2.01	07:40	4.81	3.14	05:20	3.79	07:40	5.29	4.61	04:10	0.267	07:40	1.297	0.641	0.641	
2/11/2015	04:10	1.96	07:40	4.94	3.11	02:50	3.02	07:40	5.28	4.48	04:10	0.218	07:40	1.343	0.618	0.618	
2/12/2015	03:05	2.11	07:35	4.86	3.11	04:35	3.62	07:30	5.13	4.54	03:35	0.276	07:35	1.277	0.620	0.620	
2/13/2015	04:35	2.15	08:50	4.38	3.13	03:05	3.00	09:25	5.04	4.47	04:30	0.255	08:50	1.071	0.616	0.616	
2/14/2015	04:40	2.06	09:40	4.58	3.24	03:25	3.04	10:55	5.05	4.44	04:35	0.226	09:55	1.145	0.648	0.648	
2/15/2015	05:40	2.11	10:20	4.60	3.27	05:00	3.15	10:10	5.08	4.42	05:40	0.244	10:20	1.163	0.656	0.656	
2/16/2015	03:40	2.16	10:00	4.42	3.40	03:05	3.22	19:55	5.02	4.48	03:40	0.253	10:00	1.089	0.701	0.701	
2/17/2015	03:55	2.14	07:15	4.85	3.30	03:35	3.19	07:35	5.08	4.42	03:55	0.249	07:25	1.249	0.661	0.661	
2/18/2015	04:40	2.03	08:05	4.98	3.29	02:30	3.08	08:00	5.15	4.41	04:35	0.230	08:05	1.317	0.659	0.659	
2/19/2015	03:45	2.09	07:40	4.80	3.28	03:20	3.07	07:50	5.12	4.38	03:45	0.235	07:40	1.248	0.648	0.648	
2/20/2015	03:45	2.11	07:40	4.78	3.20	04:10	3.19	07:40	5.09	4.41	04:40	0.244	07:40	1.237	0.629	0.629	
2/21/2015	04:30	2.07	10:30	4.64	3.25	05:15	3.24	10:10	5.10	4.47	04:30	0.238	10:35	1.173	0.655	0.655	
2/22/2015	04:45	2.07	10:30	4.57	3.35	04:25	3.17	10:30	5.09	4.54	04:40	0.232	10:30	1.162	0.700	0.700	
2/23/2015	03:50	2.02	07:35	4.76	3.19	04:30	3.18	07:35	5.23	4.54	04:20	0.232	07:35	1.265	0.652	0.652	
2/24/2015	04:40	2.05	07:30	4.73	3.15	04:00	3.79	07:30	5.27	4.58	04:40	0.276	07:30	1.262	0.640	0.640	
2/25/2015	04:20	2.04	07:40	4.84	3.09	03:20	2.96	08:00	5.28	4.48	03:20	0.235	07:40	1.295	0.613	0.613	
2/26/2015	04:20	1.92	07:25	4.84	3.13	04:20	3.01	07:20	5.14	4.43	04:20	0.196	07:25	1.269	0.616	0.616	
2/27/2015	03:40	2.04	07:40	4.88	3.10	03:05	3.16	07:35	5.21	4.40	03:40	0.226	07:35	1.304	0.599	0.599	
2/28/2015	04:50	2.04	10:15	4.57	3.19	04:50	3.07	10:15	5.05	4.44	04:50	0.219	10:15	1.153	0.636	0.636	
3/1/2015	05:40	2.00	09:45	4.68	3.37	04:15	3.04	10:20	5.08	4.48	04:50	0.216	10:15	1.171	0.699	0.699	
3/2/2015	01:55	2.19	07:35	4.82	3.23	02:55	2.92	07:35	5.10	4.47	02:55	0.240	07:35	1.254	0.650	0.650	
3/3/2015	04:25	2.07	07:25	4.97	3.22	02:45	3.05	07:20	5.15	4.43	04:25	0.240	07:25	1.322	0.641	0.641	
3/4/2015	03:40	2.19	07:35	4.90	3.23	04:45	3.03	08:05	5.18	4.41	03:35	0.247	07:35	1.282	0.643	0.643	
3/5/2015	03:50	2.00	07:25	5.01	3.21	03:40	3.01	07:25	5.23	4.40	03:50	0.209	07:25	1.360	0.636	0.636	
3/6/2015	04:05	2.11	07:30	4.89	3.16	02:50	3.11	07:30	5.17	4.39	04:05	0.238	07:30	1.298	0.616	0.616	
3/7/2015	03:50	2.12	09:55	4.64	3.25	04:25	3.07	10:55	5.06	4.44	04:05	0.239	09:40	1.166	0.653	0.653	
3/8/2015	03:10	2.18	20:25	4.63	3.42	03:45	3.05	20:25	5.10	4.51	03:45	0.252	20:25	1.186	0.714	0.714	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			20.079
Avg	3.22	4.47	0.648

Site Commentary

Site Information

UFF4	
Pipe Dimensions	12.38" x 12.25"
Silt Level	0.00"

Overview

Site UFF4 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.81	3.49	0.175
Minimum	1.14	1.17	0.033
Maximum	2.77	4.38	0.383
Time of Minimum	2/18/2015 4:40 AM	2/17/2015 3:50 AM	2/18/2015 4:40 AM
Time of Maximum	2/24/2015 7:15 AM	2/12/2015 7:30 AM	2/24/2015 7:15 AM

Data Quality

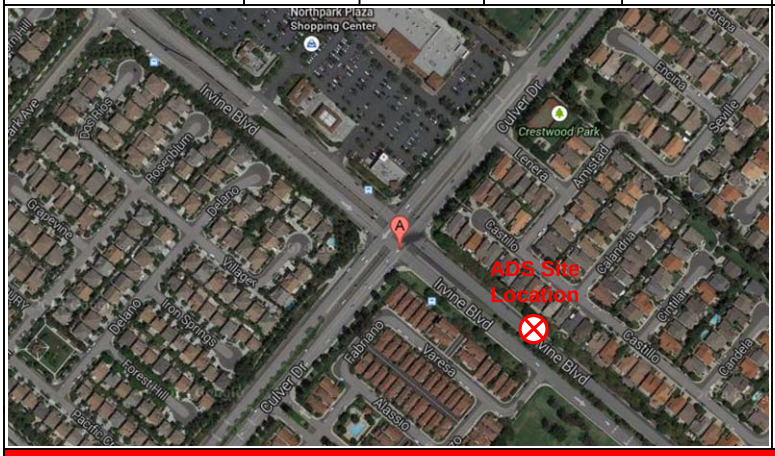
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF4	**Install Date:** 1/28/15	**Monitor Type**	Peak Doppler
Address/Location: Irvine Blvd & Culver (Site located on sidewalk of Irvine Blvd)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH083W057
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	12.38 "
		Pipe Width:	12.25 "





Investigation Information:

Date/Time of Investigation:	1/28/15 @ 0900
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.19 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

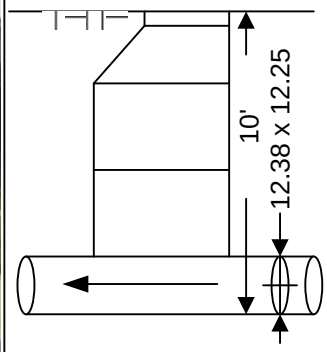
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

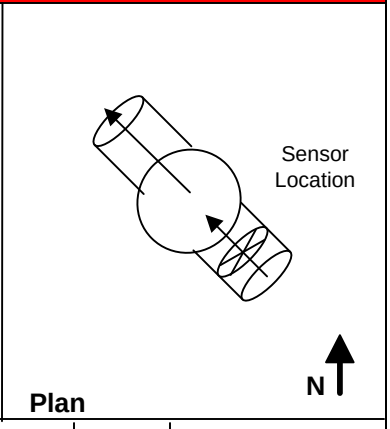
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

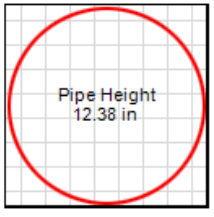
ub

SCATTERGRAPH REPORT

UFF4

Flow Monitor

UFF4

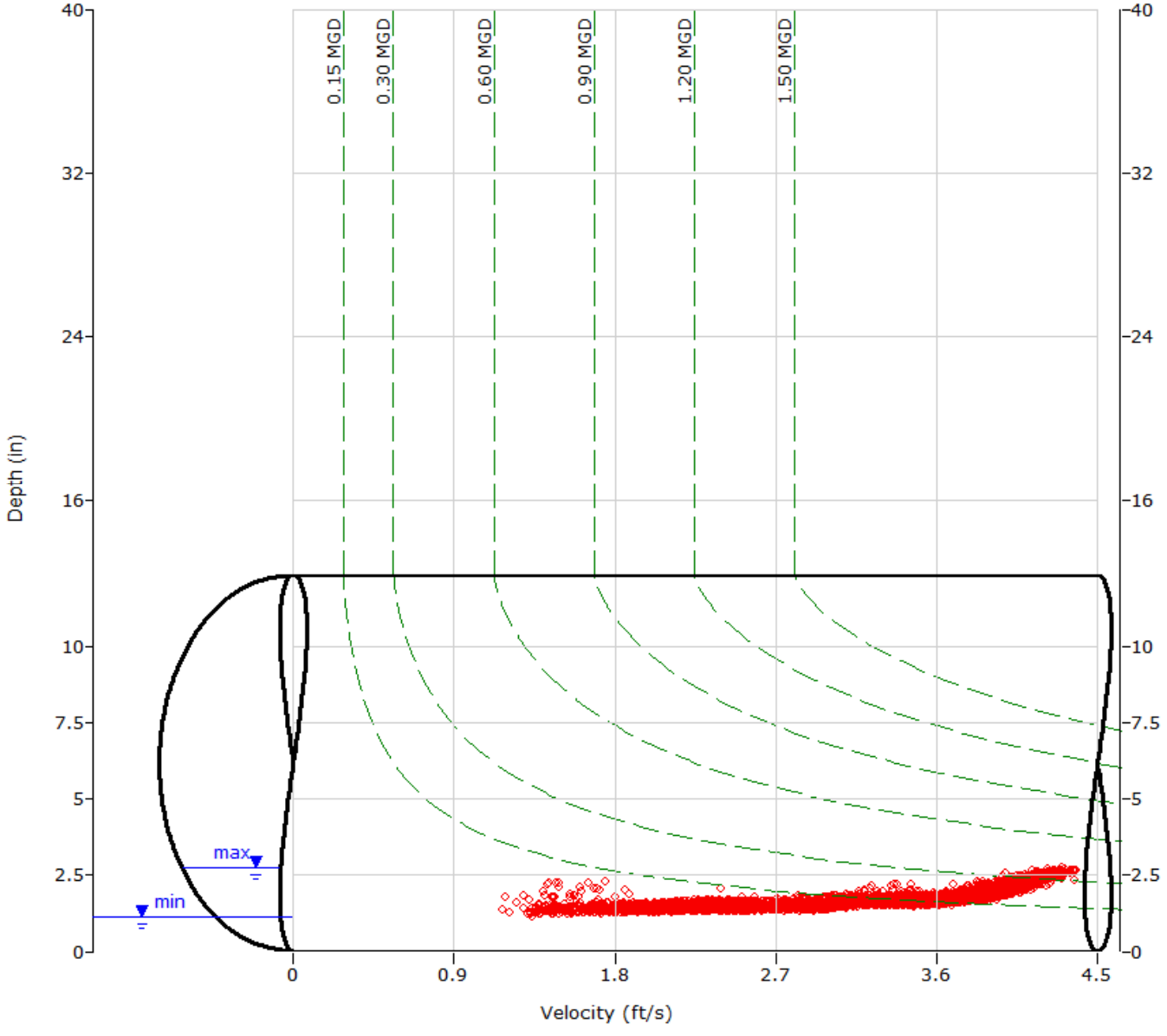


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



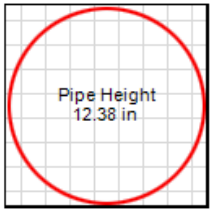
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF4

Flow Monitor

UFF4

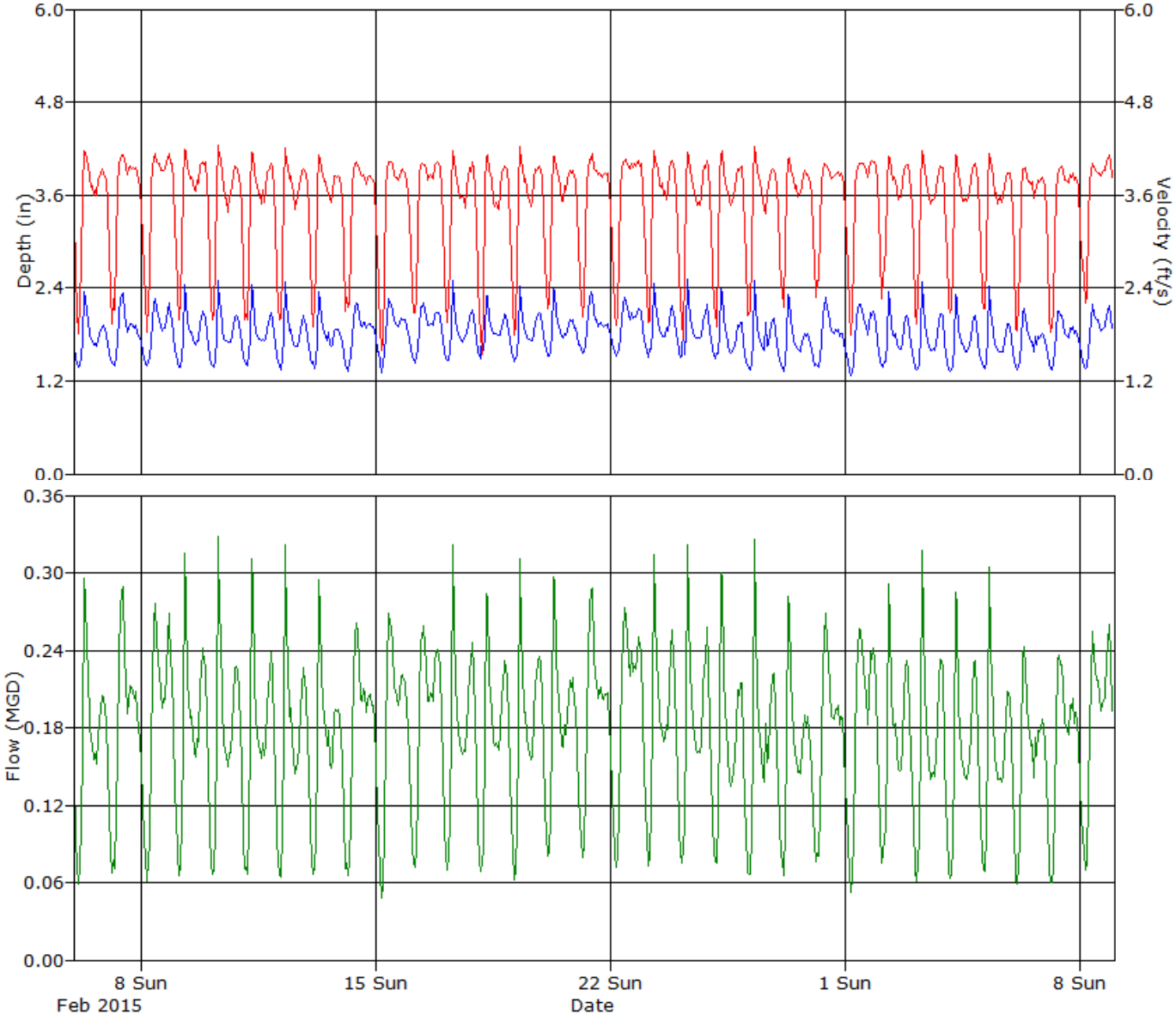


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF4, Pipe Height: 12.38 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:50	1.30	08:00	2.57	1.77	02:30	1.40	07:55	4.30	3.50	03:50	0.044	07:55	0.345	0.170	0.170	
2/7/2015	05:15	1.34	09:35	2.53	1.83	03:40	1.54	11:10	4.20	3.54	03:40	0.051	09:35	0.325	0.181	0.181	
2/8/2015	04:45	1.32	09:50	2.38	1.86	04:45	1.43	09:55	4.22	3.56	04:45	0.043	09:50	0.303	0.187	0.187	
2/9/2015	04:10	1.31	07:20	2.63	1.80	03:10	1.73	07:30	4.31	3.57	03:15	0.055	07:30	0.358	0.179	0.179	
2/10/2015	04:20	1.24	07:30	2.63	1.80	03:50	1.42	07:50	4.35	3.48	04:20	0.040	07:30	0.361	0.174	0.174	
2/11/2015	03:50	1.24	07:15	2.67	1.80	03:45	1.33	07:35	4.26	3.46	03:45	0.038	07:15	0.351	0.173	0.173	
2/12/2015	04:20	1.27	07:35	2.65	1.78	04:20	1.60	07:30	4.38	3.46	04:20	0.046	07:30	0.366	0.170	0.170	
2/13/2015	03:25	1.22	07:40	2.58	1.76	03:20	1.35	07:45	4.27	3.47	03:20	0.039	07:40	0.344	0.167	0.167	
2/14/2015	04:25	1.26	11:35	2.41	1.82	02:55	1.55	11:35	4.13	3.49	04:25	0.051	11:35	0.302	0.177	0.177	
2/15/2015	04:20	1.21	09:00	2.38	1.86	04:00	1.21	12:05	4.12	3.43	04:00	0.035	09:00	0.290	0.181	0.181	
2/16/2015	04:20	1.39	11:00	2.28	1.89	03:20	1.67	10:20	4.10	3.53	04:20	0.059	11:00	0.275	0.188	0.188	
2/17/2015	03:55	1.36	07:20	2.64	1.84	03:50	1.17	07:20	4.30	3.46	03:50	0.038	07:20	0.360	0.177	0.177	
2/18/2015	04:40	1.14	07:45	2.65	1.85	05:30	1.19	07:45	4.37	3.39	04:40	0.033	07:45	0.366	0.175	0.175	
2/19/2015	04:45	1.37	07:45	2.64	1.84	03:50	1.29	08:00	4.37	3.47	03:50	0.043	07:45	0.362	0.177	0.177	
2/20/2015	03:55	1.48	07:35	2.57	1.86	03:50	1.37	08:00	4.27	3.51	03:50	0.050	08:00	0.341	0.183	0.183	
2/21/2015	04:25	1.52	11:10	2.47	1.91	04:25	1.52	11:00	4.26	3.54	04:25	0.057	11:10	0.321	0.190	0.190	
2/22/2015	04:15	1.48	10:15	2.51	1.94	03:25	1.57	20:35	4.11	3.55	05:15	0.062	10:15	0.318	0.197	0.197	
2/23/2015	04:00	1.47	07:35	2.59	1.88	03:55	1.47	08:05	4.31	3.51	03:55	0.053	07:35	0.343	0.185	0.185	
2/24/2015	02:35	1.48	07:15	2.77	1.87	04:15	1.29	07:15	4.30	3.43	03:10	0.053	07:15	0.383	0.180	0.180	
2/25/2015	04:45	1.36	07:55	2.69	1.78	04:15	1.46	07:55	4.31	3.46	04:50	0.054	07:55	0.370	0.169	0.169	
2/26/2015	04:40	1.29	07:25	2.64	1.74	03:10	1.46	07:40	4.30	3.46	03:10	0.046	07:25	0.355	0.166	0.166	
2/27/2015	04:30	1.30	07:25	2.55	1.70	04:20	1.55	07:20	4.17	3.53	04:20	0.049	07:20	0.330	0.162	0.162	
2/28/2015	05:55	1.33	10:05	2.43	1.78	03:00	1.82	10:05	4.10	3.57	03:00	0.062	10:05	0.304	0.174	0.174	
3/1/2015	04:55	1.25	10:05	2.44	1.82	03:50	1.41	19:20	4.14	3.54	03:50	0.043	10:05	0.306	0.182	0.182	
3/2/2015	02:30	1.34	08:35	2.70	1.75	02:15	1.82	08:35	4.22	3.56	02:15	0.059	08:35	0.363	0.170	0.170	
3/3/2015	03:00	1.33	07:15	2.59	1.74	02:30	1.37	07:50	4.23	3.48	02:30	0.043	07:15	0.340	0.166	0.166	
3/4/2015	04:10	1.29	07:35	2.48	1.71	04:50	1.70	07:55	4.18	3.46	04:50	0.052	07:35	0.316	0.161	0.161	
3/5/2015	04:05	1.33	07:25	2.52	1.71	02:35	1.59	07:15	4.21	3.47	04:50	0.050	07:25	0.328	0.160	0.160	
3/6/2015	03:00	1.30	07:40	2.32	1.71	02:45	1.49	07:40	4.01	3.45	02:45	0.047	07:40	0.278	0.159	0.159	
3/7/2015	04:40	1.28	09:20	2.30	1.77	04:35	1.39	11:55	4.01	3.43	04:35	0.045	09:20	0.273	0.167	0.167	
3/8/2015	05:20	1.31	09:25	2.32	1.84	04:10	1.63	21:50	4.17	3.58	04:10	0.051	09:25	0.285	0.184	0.184	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			5.431
Avg	1.81	3.49	0.175

Site Commentary

Site Information

UFF5	
Pipe Dimensions	12.13" x 12.13"
Silt Level	0.00"

Overview

Site UFF5 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	1.75	3.73	0.176
Minimum	1.20	0.55	0.040
Maximum	3.24	4.69	0.319
Time of Minimum	3/6/2015 4:25 AM	2/10/2015 4:55 AM	3/4/2015 1:30 AM
Time of Maximum	2/10/2015 5:55 AM	3/1/2015 11:50 AM	2/6/2015 7:35 AM

Data Quality

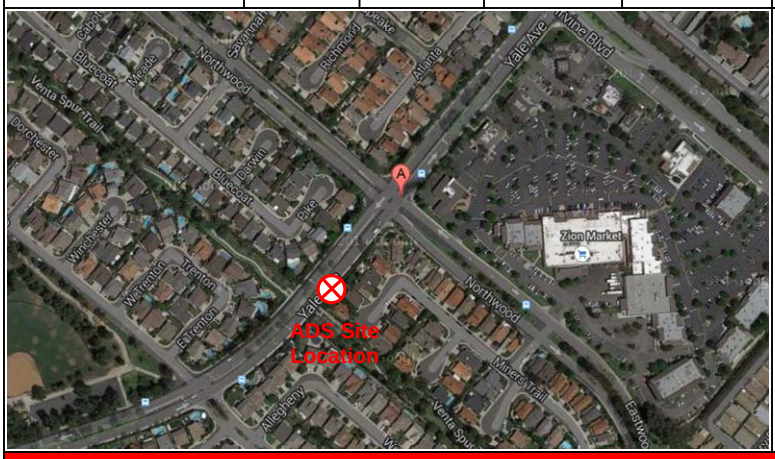
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF5	**Install Date:** 1/27/15	**Monitor Type**	Peak Doppler
Address/Location: Yale & Northwood (Located on Yale)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH084E046
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	12.13 "
		Pipe Width:	12.13 "





Investigation Information:

Date/Time of Investigation:	1/27/15 @ 1100
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.88 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.90 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

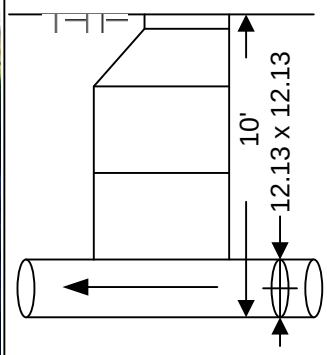
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

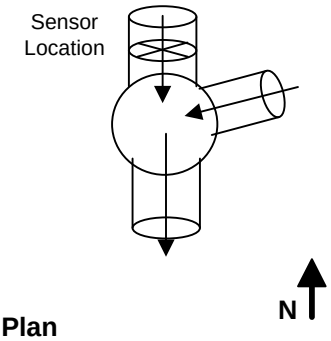
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

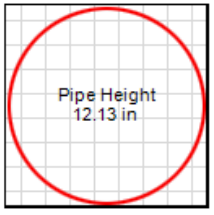
ub

SCATTERGRAPH REPORT

UFF5

Flow Monitor

UFF5

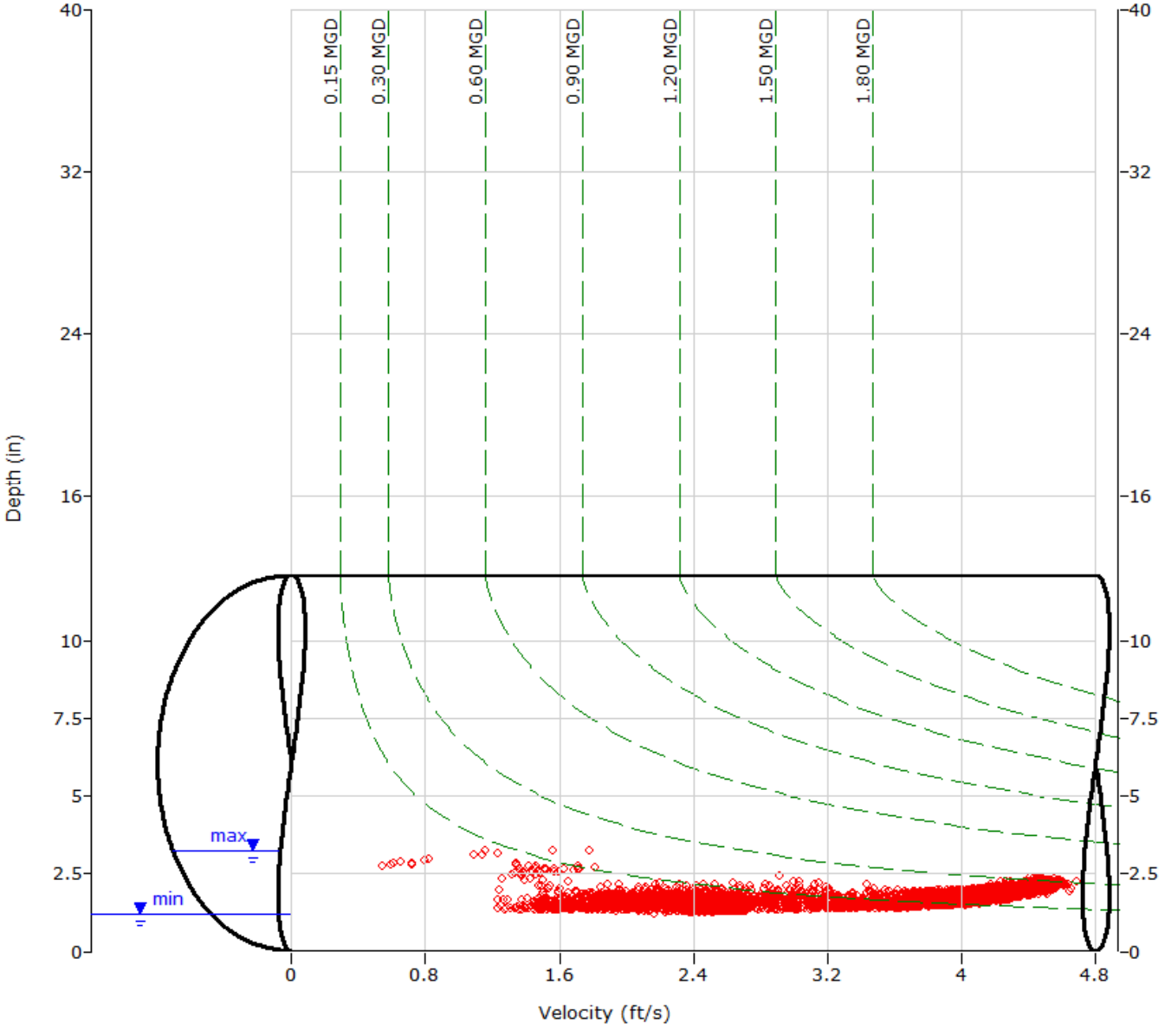


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth

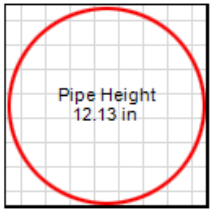


HYDROGRAPH REPORT

UFF5

Flow Monitor

UFF5

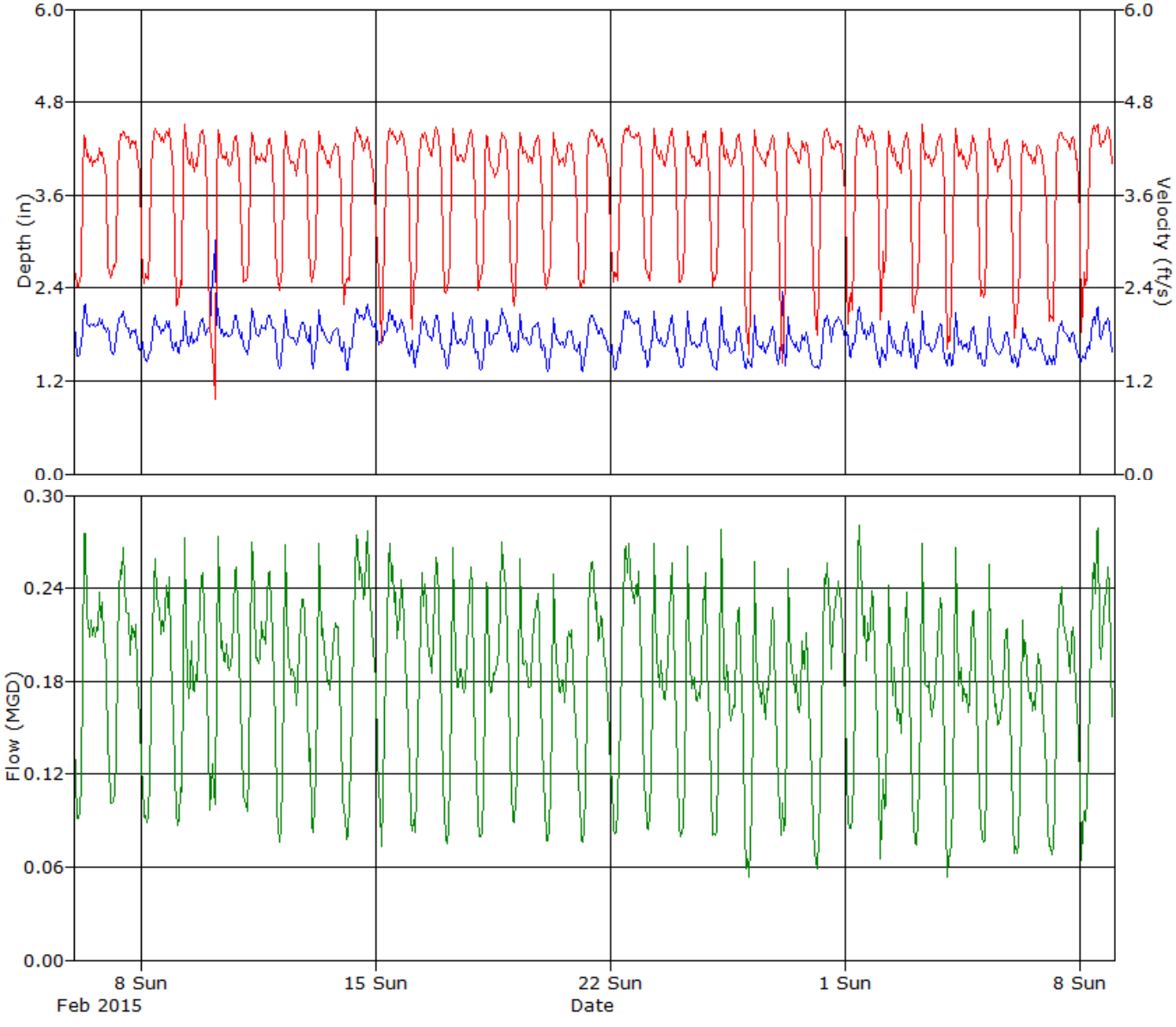


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF5, Pipe Height: 12.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	02:15	1.48	07:35	2.39	1.87	03:00	1.97	08:00	4.48	3.68	03:00	0.074	07:35	0.319	0.192	0.192	
2/7/2015	04:15	1.50	11:15	2.21	1.82	06:00	2.02	17:50	4.55	3.78	02:25	0.087	11:15	0.291	0.187	0.187	
2/8/2015	04:55	1.42	20:05	2.18	1.76	00:30	1.87	20:15	4.64	3.82	05:05	0.076	20:10	0.289	0.183	0.183	
2/9/2015	02:50	1.34	07:45	2.25	1.78	02:40	1.65	07:50	4.62	3.71	00:40	0.074	07:45	0.304	0.178	0.178	
2/10/2015	06:15	1.62	05:55	3.24	2.00	04:55	0.55	08:05	4.65	3.51	04:55	0.049	07:35	0.299	0.186	0.186	
2/11/2015	05:10	1.42	07:55	2.30	1.85	23:50	2.07	07:55	4.54	3.74	03:50	0.084	07:55	0.311	0.191	0.191	
2/12/2015	03:20	1.34	00:10	2.22	1.75	04:00	2.02	08:40	4.65	3.73	03:25	0.066	07:55	0.278	0.177	0.177	
2/13/2015	04:15	1.32	01:10	2.41	1.76	02:35	2.13	07:35	4.57	3.76	02:35	0.074	07:35	0.309	0.178	0.178	
2/14/2015	04:05	1.28	18:20	2.33	1.86	01:00	1.53	10:55	4.60	3.72	00:35	0.064	18:20	0.317	0.196	0.196	
2/15/2015	23:55	1.55	10:40	2.21	1.85	04:10	1.24	12:05	4.55	3.76	04:10	0.052	10:40	0.286	0.192	0.192	
2/16/2015	04:25	1.28	20:55	2.23	1.77	02:10	1.51	19:15	4.59	3.80	01:15	0.060	20:55	0.298	0.184	0.184	
2/17/2015	02:35	1.29	07:30	2.19	1.72	00:45	1.85	07:45	4.58	3.75	04:25	0.067	07:30	0.291	0.173	0.173	
2/18/2015	02:10	1.27	18:35	2.24	1.77	00:55	1.88	07:50	4.54	3.74	02:10	0.070	19:50	0.296	0.181	0.181	
2/19/2015	02:00	1.51	00:40	2.22	1.76	04:25	1.51	08:05	4.46	3.74	03:30	0.065	07:35	0.279	0.176	0.176	
2/20/2015	02:20	1.26	07:40	2.13	1.68	00:25	1.85	07:45	4.49	3.72	02:10	0.068	07:40	0.275	0.165	0.165	
2/21/2015	04:30	1.26	10:30	2.19	1.75	03:40	1.94	11:10	4.56	3.77	03:40	0.058	10:30	0.287	0.179	0.179	
2/22/2015	03:40	1.28	05:55	2.26	1.80	00:10	1.92	13:05	4.57	3.84	00:10	0.075	13:05	0.299	0.191	0.191	
2/23/2015	03:00	1.31	07:45	2.19	1.72	00:30	2.01	07:10	4.55	3.79	04:05	0.075	07:15	0.287	0.175	0.175	
2/24/2015	03:35	1.30	07:20	2.20	1.68	00:00	2.03	18:00	4.53	3.77	02:55	0.070	07:15	0.288	0.169	0.169	
2/25/2015	01:40	1.28	07:15	2.30	1.65	00:45	2.13	07:45	4.58	3.79	01:35	0.066	07:15	0.308	0.165	0.165	
2/26/2015	04:20	1.32	07:35	2.29	1.63	04:05	1.27	07:35	4.59	3.65	04:05	0.040	07:35	0.312	0.156	0.156	
2/27/2015	01:10	1.36	03:55	2.73	1.70	02:50	1.24	07:20	4.54	3.69	05:05	0.055	07:25	0.284	0.163	0.163	
2/28/2015	03:15	1.33	09:50	2.14	1.75	03:55	1.33	11:30	4.53	3.74	04:50	0.043	09:50	0.277	0.181	0.181	
3/1/2015	03:50	1.39	11:50	2.25	1.80	03:00	1.65	11:50	4.69	3.77	03:00	0.076	11:50	0.311	0.185	0.185	
3/2/2015	01:55	1.34	18:30	2.14	1.65	01:25	1.56	07:20	4.57	3.76	01:25	0.050	07:20	0.271	0.163	0.163	
3/3/2015	02:40	1.28	07:30	2.23	1.68	00:55	1.75	07:20	4.61	3.70	02:10	0.067	07:30	0.299	0.164	0.164	
3/4/2015	04:40	1.36	07:35	2.19	1.66	01:30	1.23	07:50	4.54	3.64	01:30	0.040	07:35	0.287	0.160	0.160	
3/5/2015	04:20	1.26	07:30	2.12	1.63	00:25	1.52	07:35	4.53	3.70	00:25	0.059	07:35	0.275	0.158	0.158	
3/6/2015	04:25	1.20	07:50	1.97	1.62	00:45	1.52	19:40	4.40	3.65	00:45	0.051	07:50	0.237	0.154	0.154	
3/7/2015	04:10	1.30	11:30	2.17	1.67	05:45	1.61	10:45	4.56	3.71	05:45	0.058	11:30	0.282	0.166	0.166	
3/8/2015	02:05	1.41	20:35	2.16	1.78	01:20	1.39	20:40	4.61	3.83	01:20	0.050	20:35	0.286	0.188	0.188	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			5.455
Avg	1.75	3.73	0.176

Site Commentary

Site Information

UFF6	
Pipe Dimensions	14.50" x 14.50"
Silt Level	0.00"

Overview

Site UFF6 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	3.20	3.86	0.494
Minimum	1.83	2.34	0.139
Maximum	4.74	4.71	0.991
Time of Minimum	3/7/2015 3:45 AM	2/13/2015 3:15 AM	2/7/2015 4:40 AM
Time of Maximum	2/12/2015 7:40 AM	2/12/2015 7:40 AM	2/12/2015 7:40 AM

Data Quality

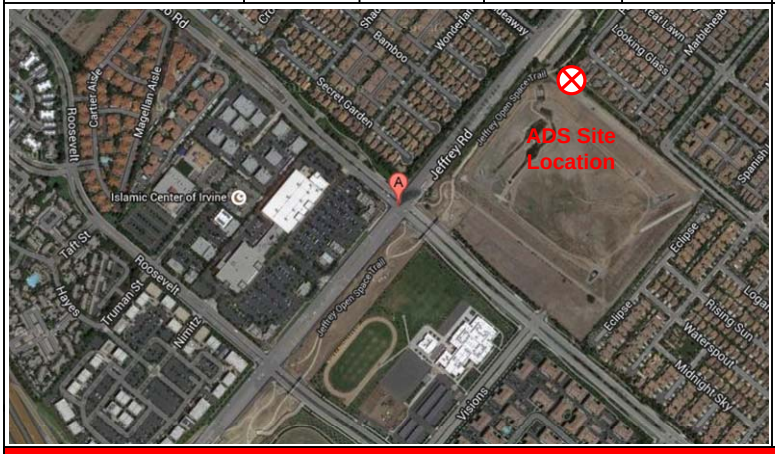
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF6	**Install Date:** 1/27/15	**Monitor Type**	Peak Doppler
Address/Location: Jeffrey Rd &		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH105S225
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	14.50 "
		Pipe Width:	14.50 "





Investigation Information:

Date/Time of Investigation:	1/27/15 @ 1400
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.26 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	25'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

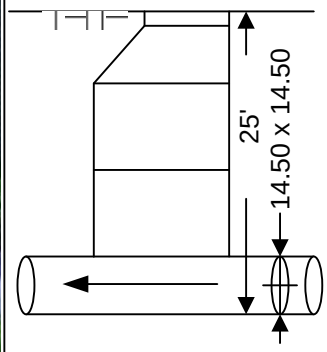
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

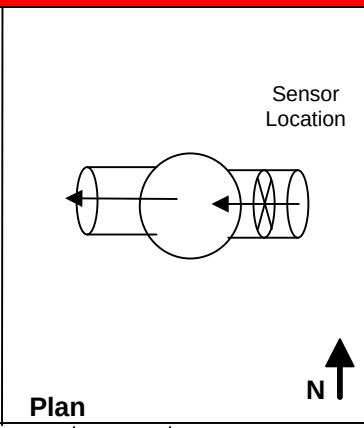
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

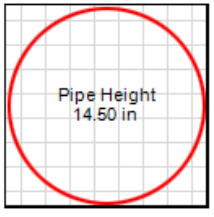
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF6

Flow Monitor

UFF6

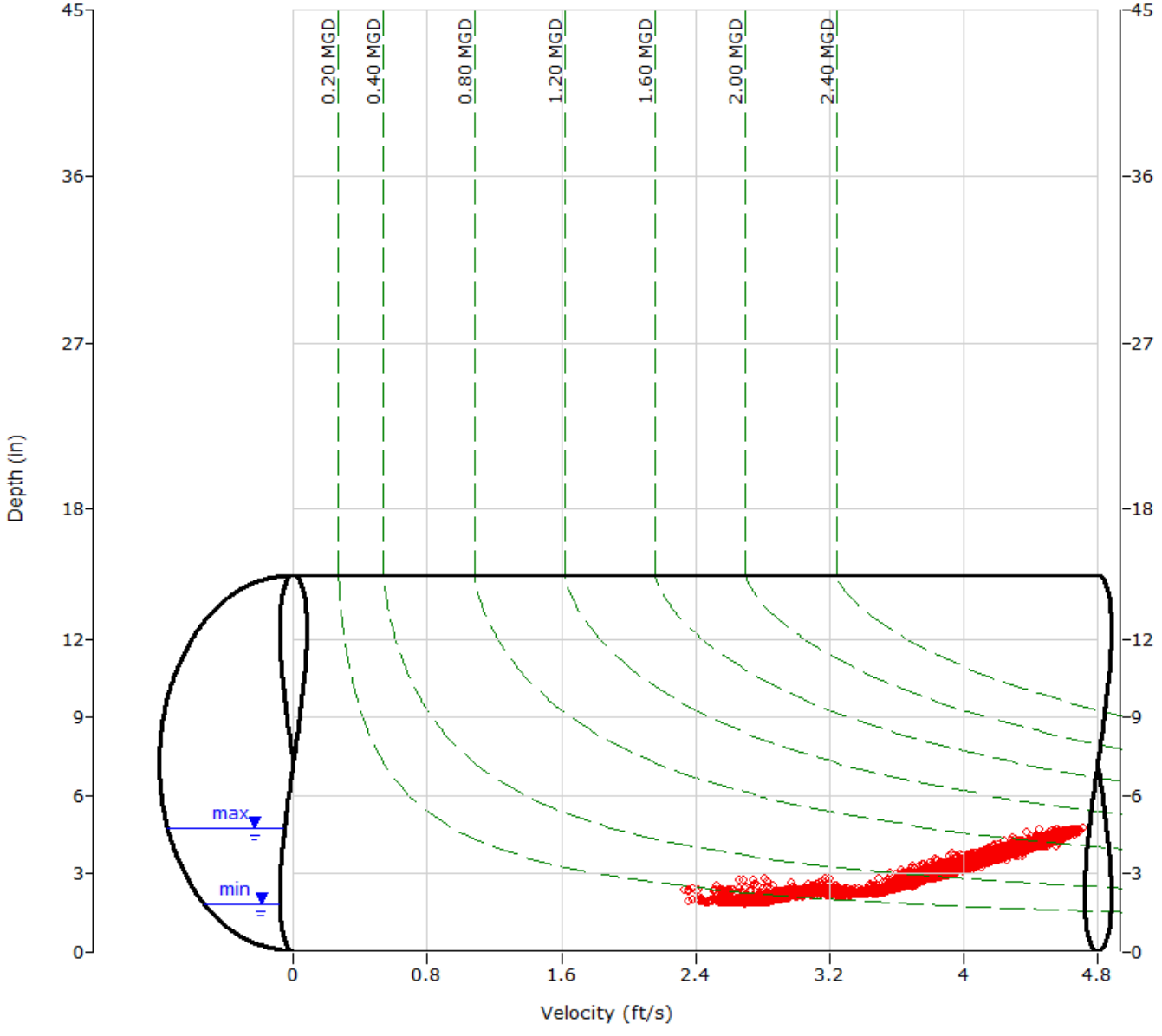


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF6

Flow Monitor

UFF6

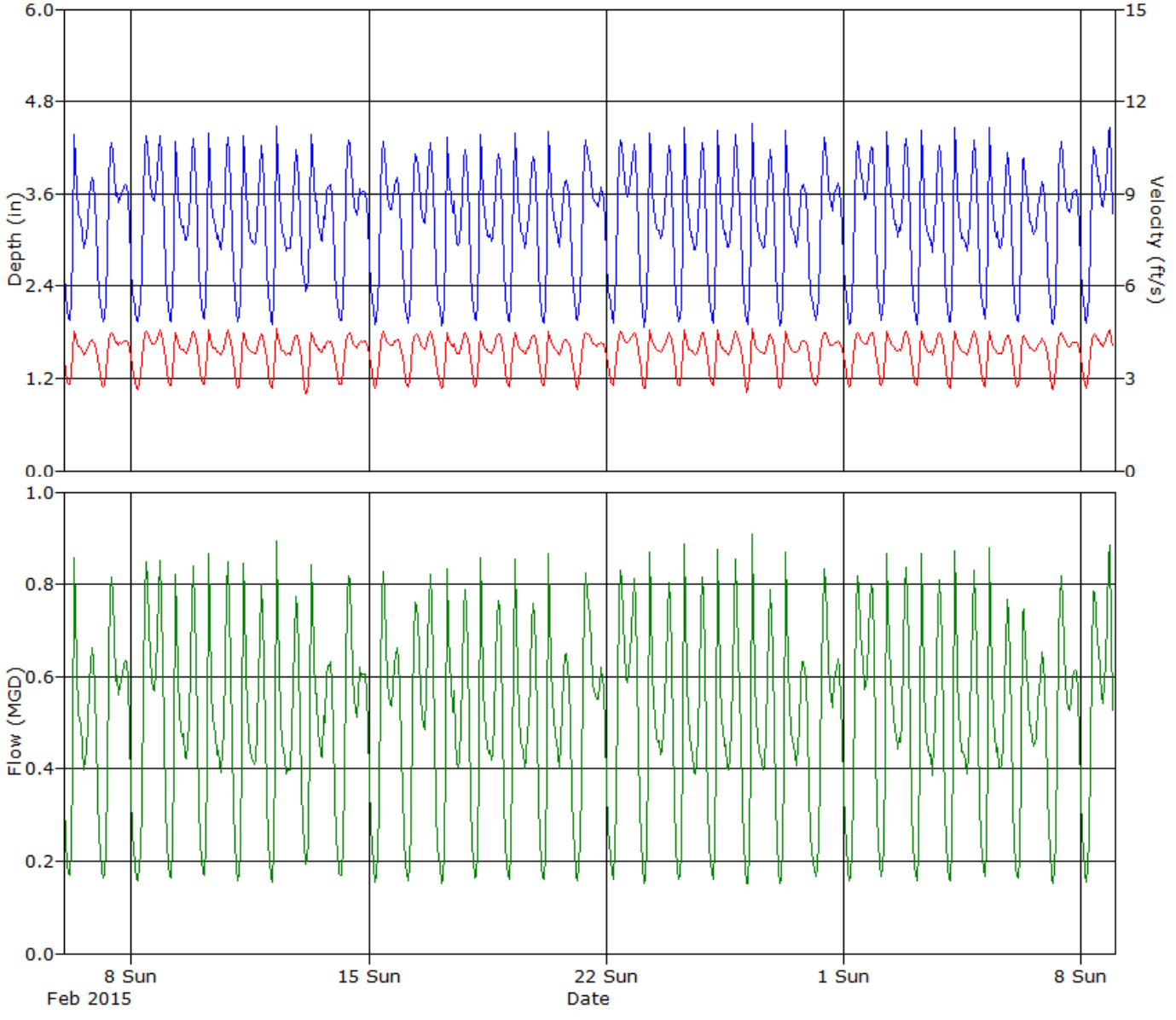
Pipe Height
14.50 in

Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF6, Pipe Height: 14.5 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:40	1.88	07:40	4.58	3.12	04:25	2.72	07:35	4.67	3.83	04:45	0.157	07:35	0.936	0.469	0.469	
2/7/2015	05:30	1.85	10:40	4.38	3.23	04:40	2.46	10:40	4.56	3.88	04:40	0.139	10:40	0.860	0.506	0.506	
2/8/2015	05:25	1.86	19:55	4.50	3.32	05:05	2.45	19:55	4.61	3.91	05:05	0.141	19:55	0.903	0.534	0.534	
2/9/2015	04:10	1.86	07:40	4.45	3.18	01:45	2.65	20:20	4.59	3.86	04:10	0.149	07:40	0.876	0.490	0.490	
2/10/2015	04:10	1.88	07:45	4.61	3.16	03:15	2.67	07:20	4.69	3.85	04:10	0.156	07:45	0.944	0.485	0.485	
2/11/2015	03:30	1.88	07:45	4.64	3.15	03:55	2.56	07:50	4.64	3.81	03:40	0.151	07:45	0.949	0.478	0.478	
2/12/2015	04:40	1.89	07:40	4.74	3.14	04:35	2.58	07:40	4.71	3.82	04:35	0.147	07:40	0.991	0.477	0.477	
2/13/2015	04:25	2.27	07:35	4.56	3.25	03:15	2.34	07:35	4.63	3.80	03:30	0.180	07:35	0.924	0.490	0.490	
2/14/2015	05:25	1.85	10:45	4.38	3.21	05:05	2.74	11:15	4.54	3.86	05:25	0.153	10:45	0.848	0.496	0.496	
2/15/2015	05:25	1.87	09:45	4.51	3.21	03:55	2.60	10:25	4.59	3.87	03:55	0.150	09:45	0.898	0.499	0.499	
2/16/2015	04:50	1.85	09:35	4.48	3.27	05:25	2.68	09:30	4.57	3.91	04:45	0.152	09:35	0.887	0.518	0.518	
2/17/2015	03:30	1.84	07:45	4.55	3.18	03:10	2.58	07:50	4.59	3.85	03:15	0.145	07:45	0.910	0.491	0.491	
2/18/2015	04:25	1.88	07:50	4.54	3.17	03:25	2.60	07:45	4.63	3.85	03:25	0.155	07:55	0.918	0.486	0.486	
2/19/2015	04:30	1.88	07:35	4.56	3.16	04:10	2.64	07:45	4.60	3.84	04:30	0.155	07:45	0.914	0.482	0.482	
2/20/2015	04:30	1.87	07:35	4.63	3.13	03:25	2.72	07:30	4.66	3.83	04:30	0.154	07:30	0.947	0.474	0.474	
2/21/2015	04:45	1.89	09:50	4.44	3.23	04:20	2.52	09:50	4.58	3.86	04:20	0.152	09:50	0.882	0.501	0.501	
2/22/2015	04:50	1.87	11:00	4.47	3.33	06:00	2.66	11:00	4.58	3.93	04:50	0.151	11:00	0.891	0.536	0.536	
2/23/2015	03:25	1.84	07:45	4.65	3.18	04:20	2.42	07:45	4.65	3.86	03:25	0.146	07:45	0.953	0.492	0.492	
2/24/2015	03:10	1.87	07:45	4.65	3.15	02:35	2.64	07:50	4.65	3.83	03:10	0.151	07:45	0.953	0.482	0.482	
2/25/2015	04:40	1.88	20:05	4.59	3.16	04:15	2.73	07:30	4.63	3.85	04:35	0.155	20:05	0.925	0.486	0.486	
2/26/2015	04:35	1.86	07:25	4.70	3.14	03:15	2.36	07:35	4.70	3.82	03:15	0.139	07:25	0.973	0.478	0.478	
2/27/2015	03:00	1.86	07:45	4.63	3.11	03:55	2.56	07:45	4.63	3.82	03:55	0.146	07:45	0.944	0.469	0.469	
2/28/2015	04:55	1.86	10:20	4.46	3.24	05:00	2.67	10:20	4.54	3.88	04:55	0.150	10:20	0.878	0.505	0.505	
3/1/2015	04:55	1.85	10:25	4.37	3.32	04:15	2.68	11:10	4.57	3.91	04:55	0.150	09:50	0.851	0.533	0.533	
3/2/2015	04:05	1.88	07:50	4.60	3.23	02:50	2.65	07:45	4.63	3.88	04:05	0.157	07:45	0.933	0.503	0.503	
3/3/2015	04:10	1.88	07:40	4.64	3.16	04:10	2.72	07:40	4.63	3.84	04:10	0.153	07:40	0.948	0.485	0.485	
3/4/2015	03:35	1.87	07:50	4.66	3.17	04:15	2.48	07:35	4.66	3.84	04:15	0.142	07:35	0.951	0.487	0.487	
3/5/2015	04:35	1.93	07:30	4.67	3.14	04:25	2.53	07:40	4.67	3.83	04:35	0.153	07:40	0.960	0.477	0.477	
3/6/2015	04:40	1.90	08:25	4.18	3.13	04:10	2.62	08:25	4.47	3.83	04:10	0.154	08:25	0.790	0.473	0.473	
3/7/2015	03:45	1.83	10:15	4.33	3.21	04:50	2.47	10:10	4.54	3.87	04:50	0.139	10:10	0.837	0.498	0.498	
3/8/2015	04:15	1.88	20:25	4.64	3.35	04:25	2.47	20:30	4.66	3.92	04:25	0.141	20:25	0.950	0.539	0.539	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			15.317
Avg	3.20	3.86	0.494

Site Commentary

Site Information

UFF7	
Pipe Dimensions	15.25" x 14.88"
Silt Level	0.00"

Overview

Site UFF7 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.77	3.79	0.382
Minimum	2.23	1.65	0.131
Maximum	3.35	4.81	0.623
Time of Minimum	3/2/2015 2:25 PM	2/10/2015 4:20 AM	3/6/2015 3:10 AM
Time of Maximum	3/3/2015 7:55 AM	2/25/2015 7:25 AM	3/3/2015 7:55 AM

Data Quality

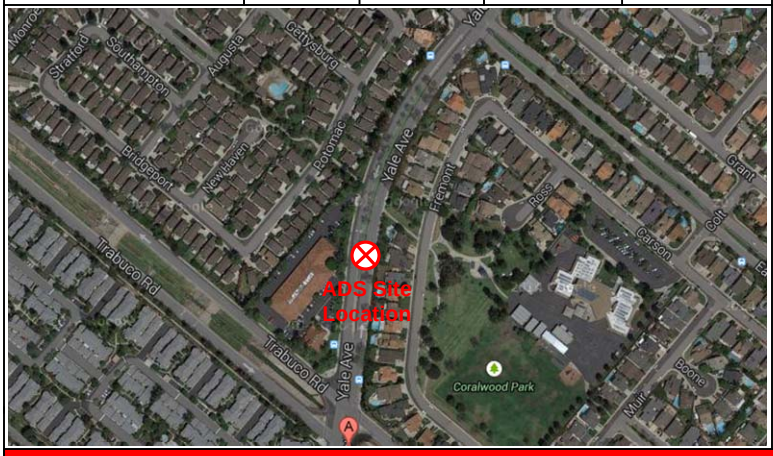
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

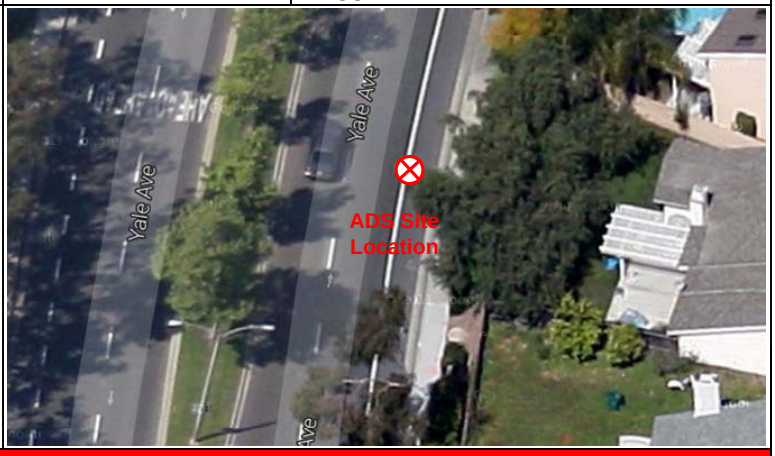
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF7	**Install Date:** 1/27/15	**Monitor Type**	Peak Doppler
Address/Location: Yale & Trabuco (Located on Yale)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH084S031
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	15.25 "
		Pipe Width:	14.88 "





Investigation Information:

Date/Time of Investigation:	1/27/15 @ 1000
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.00 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

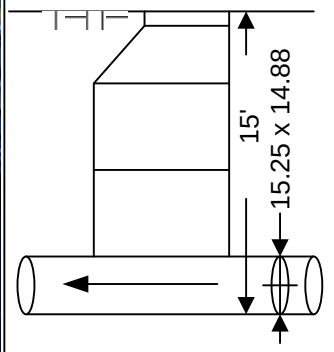
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

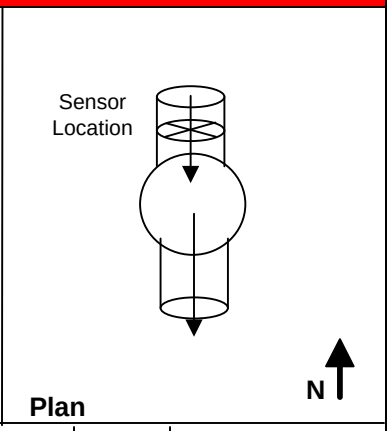
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

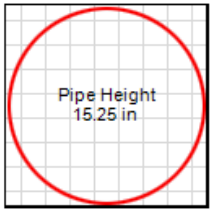
QF 675007 Rev A0
Effective Date 09/09/2003

SCATTERGRAPH REPORT

UFF7

Flow Monitor

UFF7

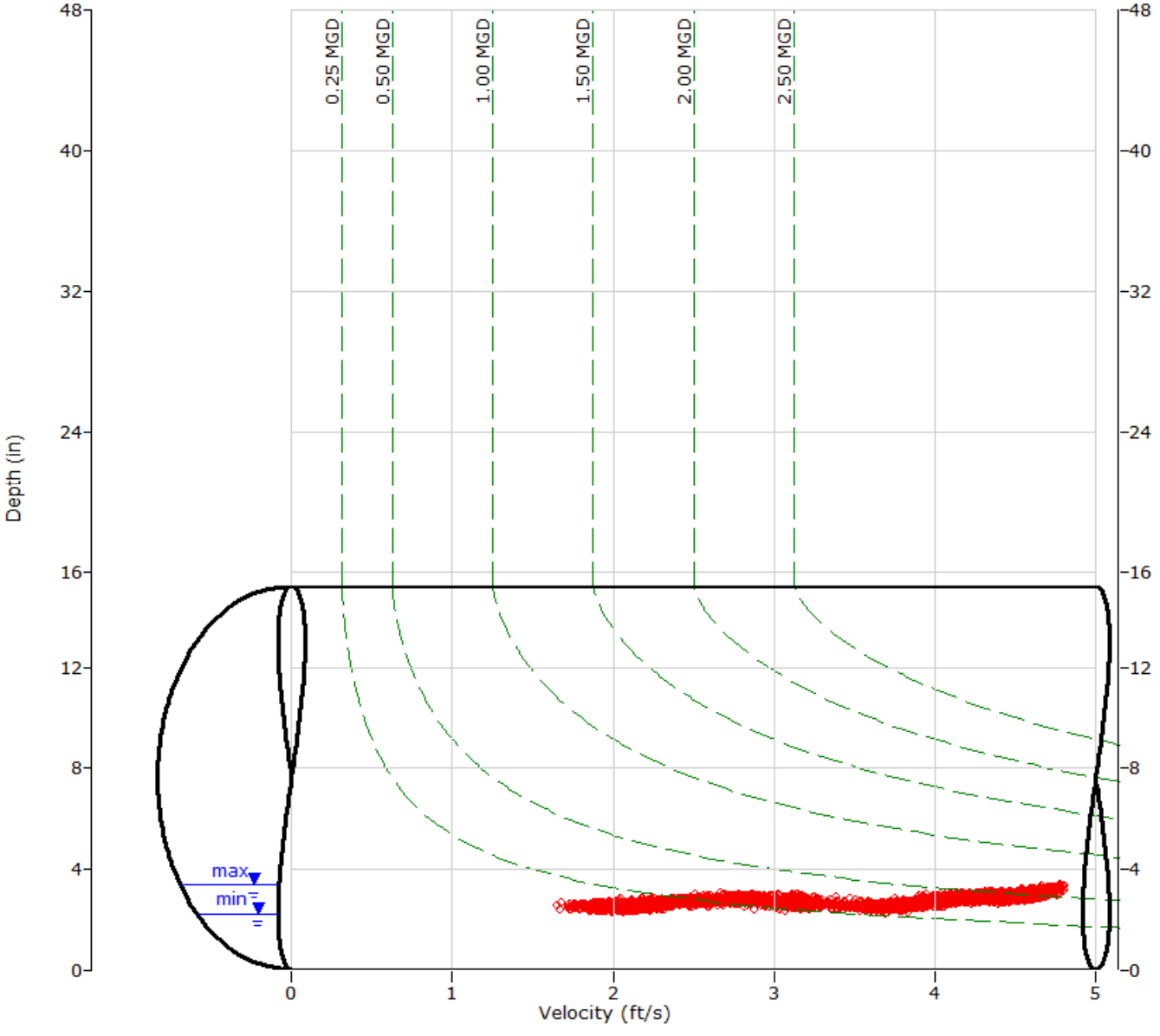


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



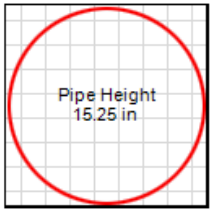
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF7

Flow Monitor

UFF7

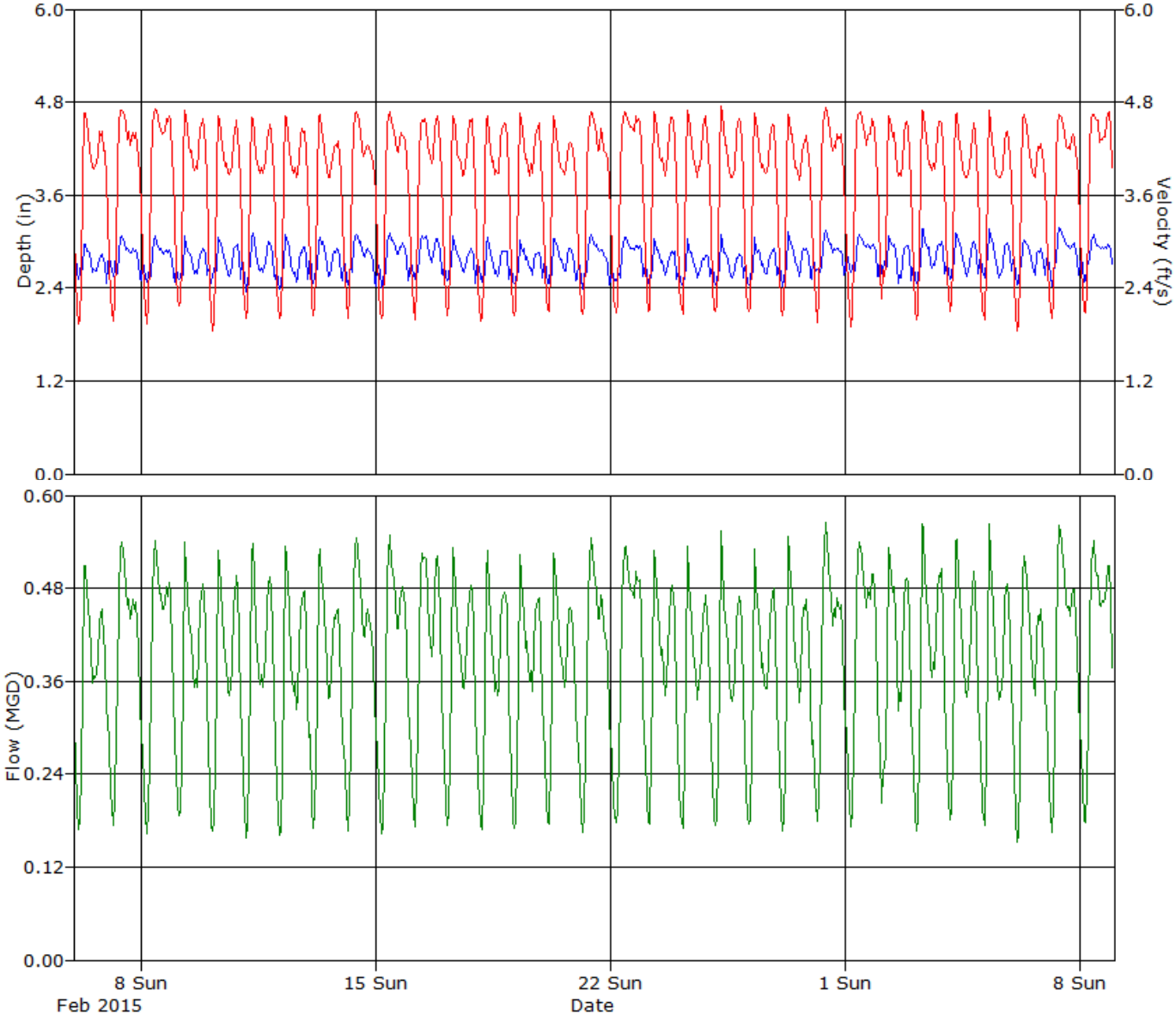


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF7, Pipe Height: 15.25 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	23:45	2.36	07:45	3.10	2.73	03:55	1.76	07:45	4.72	3.75	03:55	0.151	07:45	0.549	0.367	0.367	
2/7/2015	23:45	2.39	10:40	3.13	2.82	04:45	1.73	10:35	4.76	3.83	04:45	0.158	10:40	0.563	0.394	0.394	
2/8/2015	04:50	2.34	09:55	3.09	2.78	04:30	1.72	11:05	4.77	3.88	04:30	0.139	10:20	0.548	0.394	0.394	
2/9/2015	00:30	2.35	07:35	3.21	2.73	04:35	2.00	07:45	4.76	3.82	04:35	0.169	07:45	0.581	0.376	0.376	
2/10/2015	02:20	2.35	07:50	3.19	2.74	04:20	1.65	08:15	4.73	3.71	04:20	0.146	07:50	0.569	0.369	0.369	
2/11/2015	03:20	2.28	08:00	3.24	2.75	03:25	1.90	08:00	4.71	3.73	03:25	0.145	08:00	0.586	0.373	0.373	
2/12/2015	03:30	2.30	07:35	3.22	2.71	04:15	1.87	07:25	4.69	3.73	04:15	0.147	07:35	0.569	0.365	0.365	
2/13/2015	02:55	2.39	08:10	3.13	2.76	02:40	1.87	08:10	4.72	3.74	03:35	0.158	08:10	0.559	0.375	0.375	
2/14/2015	04:00	2.34	10:25	3.14	2.79	04:45	1.90	10:20	4.71	3.78	04:15	0.155	10:25	0.556	0.387	0.387	
2/15/2015	04:45	2.26	10:15	3.16	2.80	05:15	1.81	10:05	4.74	3.80	04:45	0.148	10:05	0.566	0.391	0.391	
2/16/2015	06:30	2.30	12:00	3.13	2.83	03:55	1.89	12:15	4.74	3.84	03:55	0.162	12:15	0.554	0.400	0.400	
2/17/2015	00:05	2.33	07:40	3.27	2.74	03:45	1.88	07:45	4.71	3.79	03:40	0.158	07:40	0.591	0.376	0.376	
2/18/2015	00:00	2.38	08:10	3.16	2.73	04:10	1.74	08:15	4.71	3.75	04:15	0.146	08:10	0.564	0.370	0.370	
2/19/2015	04:40	2.32	07:30	3.25	2.72	02:55	1.94	07:55	4.74	3.76	04:35	0.157	07:30	0.591	0.370	0.370	
2/20/2015	04:35	2.38	07:40	3.20	2.75	02:45	1.96	07:45	4.73	3.73	03:15	0.162	07:45	0.575	0.372	0.372	
2/21/2015	04:45	2.33	10:40	3.13	2.78	04:55	1.86	11:20	4.73	3.79	04:55	0.145	10:45	0.557	0.386	0.386	
2/22/2015	06:40	2.33	11:05	3.11	2.79	03:00	1.87	10:20	4.73	3.90	03:00	0.156	11:05	0.552	0.400	0.400	
2/23/2015	04:25	2.32	08:05	3.12	2.73	04:25	1.90	08:00	4.74	3.83	04:25	0.146	08:05	0.557	0.377	0.377	
2/24/2015	03:55	2.31	07:30	3.18	2.69	04:35	1.79	07:35	4.78	3.79	04:35	0.141	07:30	0.575	0.366	0.366	
2/25/2015	03:35	2.34	07:50	3.25	2.70	03:10	1.82	07:25	4.81	3.78	03:35	0.144	07:50	0.598	0.368	0.368	
2/26/2015	04:05	2.33	07:45	3.17	2.72	03:40	1.93	07:45	4.72	3.75	03:40	0.150	07:45	0.569	0.369	0.369	
2/27/2015	04:05	2.33	07:35	3.27	2.76	04:00	1.87	07:30	4.74	3.73	04:00	0.149	07:35	0.593	0.375	0.375	
2/28/2015	06:45	2.37	10:00	3.32	2.83	04:15	1.68	10:00	4.80	3.83	04:15	0.159	10:00	0.618	0.399	0.399	
3/1/2015	23:35	2.38	10:30	3.12	2.86	04:55	1.77	11:05	4.73	3.84	04:55	0.157	10:20	0.550	0.405	0.405	
3/2/2015	14:25	2.23	07:30	3.20	2.78	02:55	2.13	07:45	4.76	3.83	02:55	0.183	07:45	0.575	0.387	0.387	
3/3/2015	03:30	2.37	07:55	3.35	2.80	03:25	1.88	07:50	4.80	3.79	03:25	0.154	07:55	0.623	0.390	0.390	
3/4/2015	04:05	2.42	07:55	3.25	2.78	03:15	1.96	08:15	4.74	3.75	04:05	0.162	07:55	0.590	0.380	0.380	
3/5/2015	04:35	2.43	07:40	3.25	2.79	04:25	1.84	07:40	4.75	3.70	04:25	0.154	07:40	0.591	0.376	0.376	
3/6/2015	03:10	2.36	08:35	3.04	2.77	03:10	1.67	07:35	4.70	3.71	03:10	0.131	08:00	0.528	0.373	0.373	
3/7/2015	04:05	2.38	10:55	3.20	2.86	04:10	1.89	10:55	4.74	3.79	04:10	0.151	10:55	0.578	0.402	0.402	
3/8/2015	03:30	2.38	10:05	3.15	2.85	04:20	1.89	08:20	4.73	3.91	04:20	0.154	10:05	0.557	0.410	0.410	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			11.843
Avg	2.77	3.79	0.382

Site Commentary

Site Information

UFF8	
Pipe Dimensions	10.25" x 10.13"
Silt Level	0.00"

Overview

Site UFF8 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.10	3.22	0.178
Minimum	1.41	1.57	0.056
Maximum	3.28	3.96	0.335
Time of Minimum	2/9/2015 4:00 AM	2/26/2015 2:55 AM	2/9/2015 4:20 AM
Time of Maximum	2/9/2015 12:30 PM	2/28/2015 11:25 AM	2/25/2015 7:20 AM

Data Quality

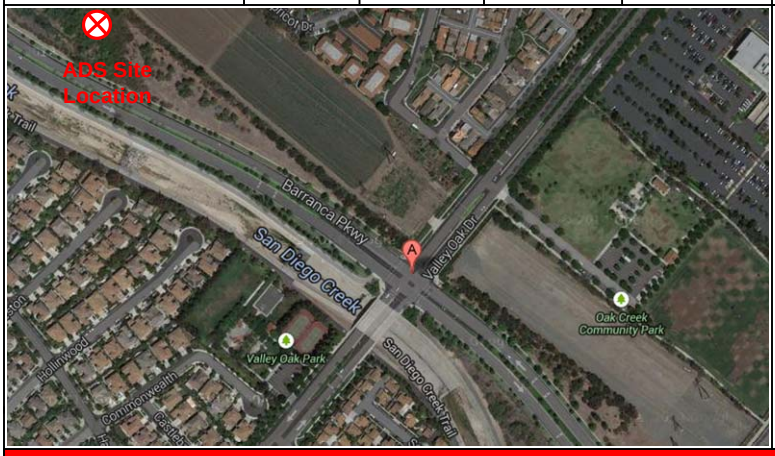
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

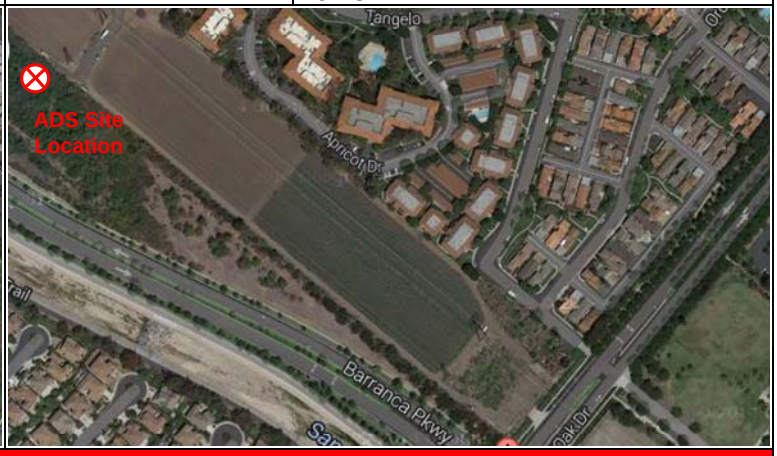
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF8	**Install Date:** 1/30/15	**Monitor Type**	Peak Doppler
Address/Location: Barranca & Valley Oak		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH123W124
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	10.25 "
		Pipe Width:	10.13 "





Investigation Information:

Date/Time of Investigation:	1/30/15 @ 1400
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.53 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

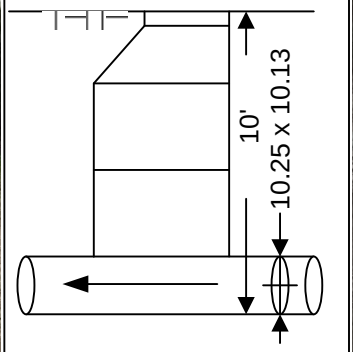
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

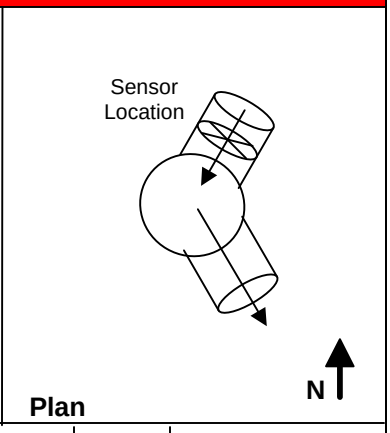
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

QF 675007 Rev A0
Effective Date 09/09/2003

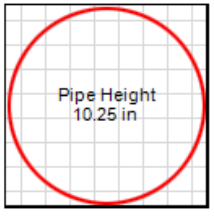
ub

SCATTERGRAPH REPORT

UFF8

Flow Monitor

UFF8

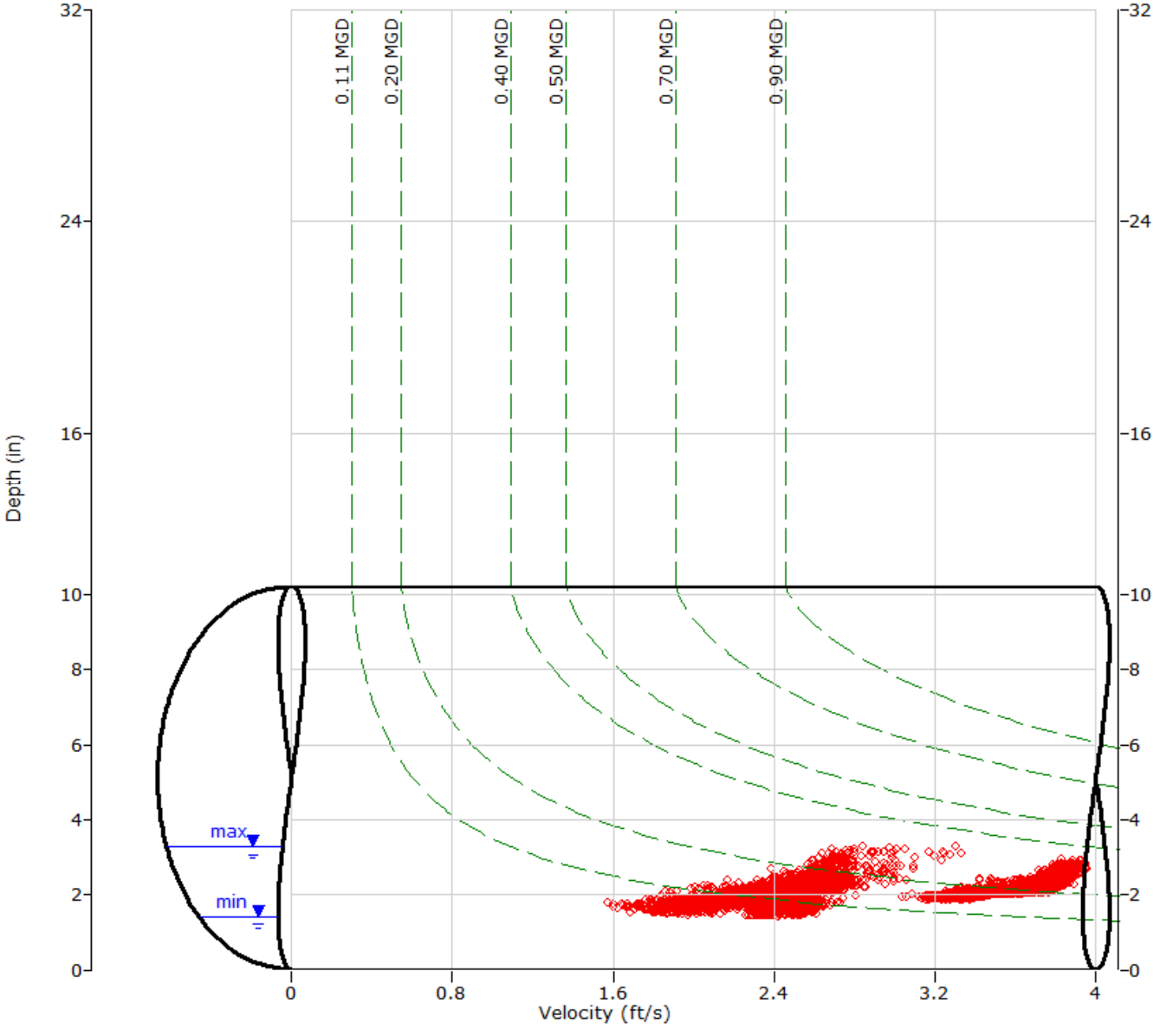


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



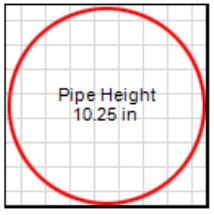
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF8

Flow Monitor

UFF8

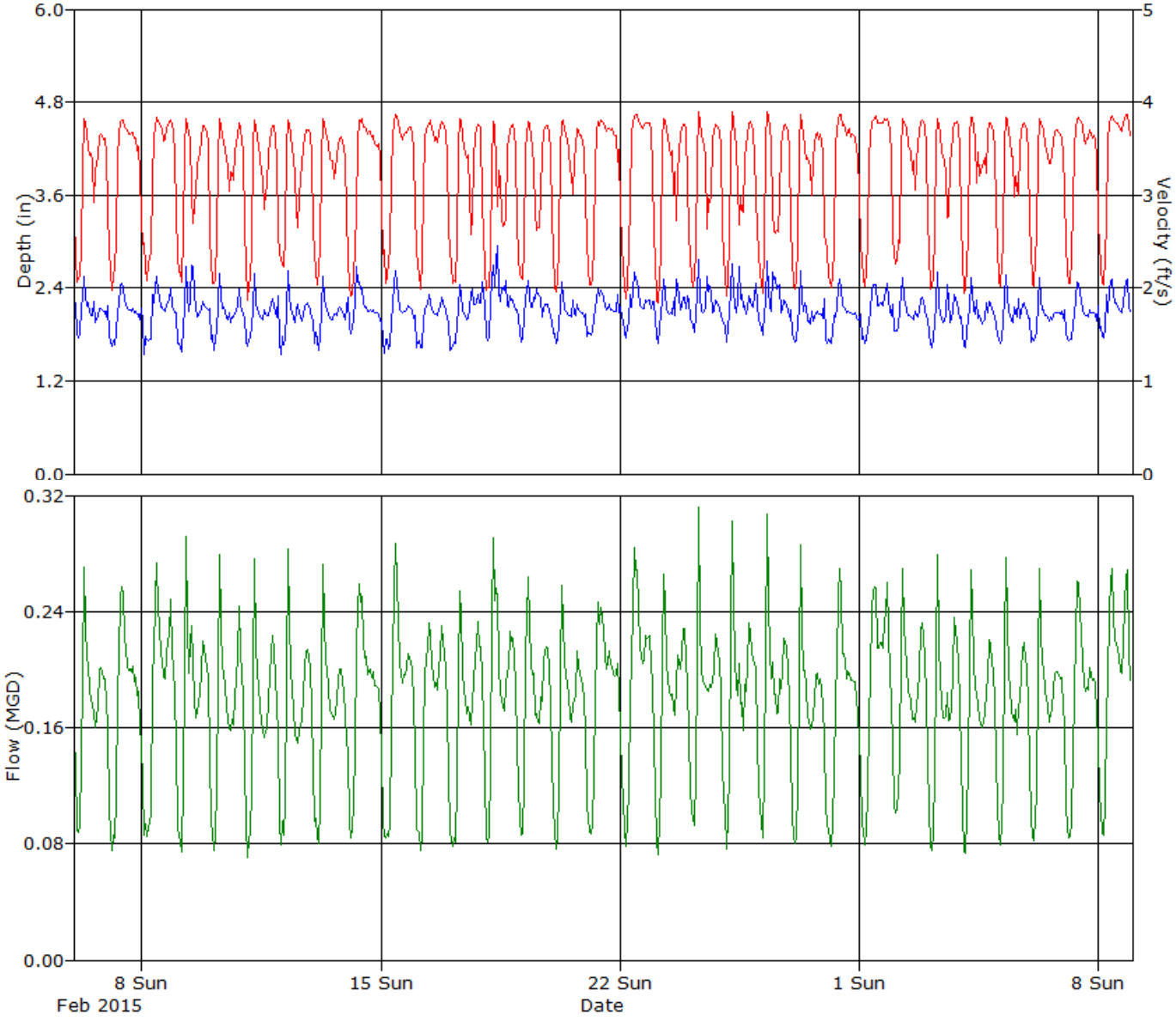


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF8, Pipe Height: 10.25 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	04:40	1.69	07:55	2.74	2.10	02:50	1.92	07:55	3.90	3.20	02:45	0.080	07:55	0.307	0.174	0.174	
2/7/2015	02:05	1.51	10:50	2.66	2.06	03:55	1.79	11:20	3.86	3.25	03:55	0.065	10:50	0.291	0.176	0.176	
2/8/2015	02:50	1.45	07:20	2.99	2.11	04:35	1.95	10:10	3.88	3.30	04:35	0.068	20:25	0.294	0.185	0.185	
2/9/2015	04:00	1.41	12:30	3.28	2.13	04:20	1.69	10:20	3.88	3.18	04:20	0.056	10:20	0.332	0.179	0.179	
2/10/2015	03:55	1.43	07:25	2.80	2.06	02:05	1.68	07:30	3.93	3.18	03:55	0.061	07:30	0.317	0.171	0.171	
2/11/2015	01:45	1.45	07:15	2.76	2.05	02:35	1.66	07:15	3.87	3.15	04:00	0.057	07:15	0.307	0.168	0.168	
2/12/2015	02:30	1.42	07:30	2.74	2.05	04:00	1.81	07:30	3.87	3.18	04:00	0.061	07:30	0.304	0.169	0.169	
2/13/2015	04:45	1.43	07:35	2.70	2.03	03:10	1.84	08:00	3.86	3.21	03:10	0.062	07:35	0.295	0.168	0.168	
2/14/2015	02:55	1.75	07:55	3.28	2.17	02:05	1.86	09:55	3.86	3.20	03:00	0.079	07:55	0.333	0.183	0.183	
2/15/2015	05:45	1.44	10:10	2.70	2.05	03:55	1.86	10:10	3.90	3.29	03:55	0.069	10:10	0.301	0.178	0.178	
2/16/2015	02:15	1.46	11:00	2.43	2.03	04:15	1.77	11:10	3.86	3.32	04:15	0.064	11:00	0.254	0.175	0.175	
2/17/2015	01:50	1.44	23:20	3.00	2.10	04:20	1.78	07:45	3.89	3.15	02:35	0.060	08:10	0.286	0.173	0.173	
2/18/2015	03:10	1.69	13:35	3.23	2.29	02:45	1.81	08:00	3.84	3.04	02:45	0.074	07:55	0.333	0.188	0.188	
2/19/2015	02:55	1.62	06:00	3.13	2.15	04:15	1.94	07:45	3.87	3.11	03:15	0.075	07:35	0.309	0.176	0.176	
2/20/2015	03:45	1.64	14:00	2.83	2.05	02:55	1.74	08:00	3.87	3.22	02:55	0.068	07:50	0.299	0.172	0.172	
2/21/2015	03:50	1.66	22:15	3.17	2.10	02:50	1.91	11:20	3.83	3.27	03:50	0.076	09:50	0.288	0.180	0.180	
2/22/2015	04:05	1.68	07:40	3.19	2.18	04:15	1.73	12:00	3.95	3.28	04:20	0.072	11:55	0.319	0.191	0.191	
2/23/2015	03:30	1.64	16:55	3.15	2.15	03:35	1.60	08:00	3.94	3.17	03:35	0.062	08:00	0.322	0.180	0.180	
2/24/2015	04:15	1.71	16:30	3.03	2.19	03:40	1.76	07:35	3.95	3.17	04:20	0.076	07:35	0.326	0.184	0.184	
2/25/2015	03:25	1.64	12:55	3.15	2.19	03:10	1.60	08:00	3.94	3.13	03:10	0.066	07:20	0.335	0.182	0.182	
2/26/2015	04:40	1.70	11:35	2.98	2.22	02:55	1.57	07:55	3.95	3.08	02:55	0.067	07:20	0.321	0.183	0.183	
2/27/2015	03:55	1.62	11:05	3.02	2.04	04:40	1.86	07:40	3.91	3.21	03:05	0.070	07:30	0.311	0.169	0.169	
2/28/2015	02:40	1.55	06:55	2.77	2.06	04:20	1.91	11:25	3.96	3.28	04:20	0.072	10:50	0.303	0.177	0.177	
3/1/2015	02:10	1.57	01:05	2.69	2.12	03:45	1.91	10:05	3.88	3.34	04:45	0.071	20:05	0.295	0.189	0.189	
3/2/2015	01:40	1.69	06:10	2.90	2.10	03:05	2.08	07:40	3.87	3.28	03:05	0.088	07:30	0.289	0.179	0.179	
3/3/2015	02:45	1.56	07:40	2.77	2.07	02:30	1.90	07:35	3.86	3.20	02:45	0.067	07:40	0.308	0.172	0.172	
3/4/2015	03:00	1.54	11:35	2.90	2.05	02:45	1.76	08:00	3.90	3.23	02:55	0.063	07:05	0.294	0.173	0.173	
3/5/2015	03:10	1.60	16:30	2.82	2.06	03:40	1.93	07:45	3.87	3.22	03:40	0.071	07:35	0.309	0.173	0.173	
3/6/2015	01:35	1.59	07:10	2.80	2.03	03:10	1.71	07:30	3.86	3.27	03:10	0.062	07:10	0.308	0.171	0.171	
3/7/2015	03:50	1.60	09:40	2.60	2.06	04:30	1.82	10:10	3.87	3.30	04:30	0.069	09:40	0.280	0.177	0.177	
3/8/2015	04:25	1.65	06:55	2.86	2.17	04:55	1.93	21:30	3.91	3.36	04:25	0.075	10:15	0.319	0.195	0.195	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			5.510
Avg	2.10	3.22	0.178

Site Commentary

Site Information

UFF9	
Pipe Dimensions	11.88" x 11.88"
Silt Level	0.00"

Overview

Site UFF9 functioned under normal conditions during the period Friday, February 06, 2015 to Sunday, March 08, 2015 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that continuous mild backwater conditions were experienced.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Friday, February 06, 2015 to Sunday, March 08, 2015 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	4.87	0.57	0.113
Minimum	0.51	0.19	0.006
Maximum	12.14	1.65	0.536
Time of Minimum	2/22/2015 5:15 AM	2/14/2015 3:40 AM	2/14/2015 3:40 AM
Time of Maximum	2/10/2015 7:45 AM	3/1/2015 6:20 AM	2/9/2015 12:35 PM

Data Quality

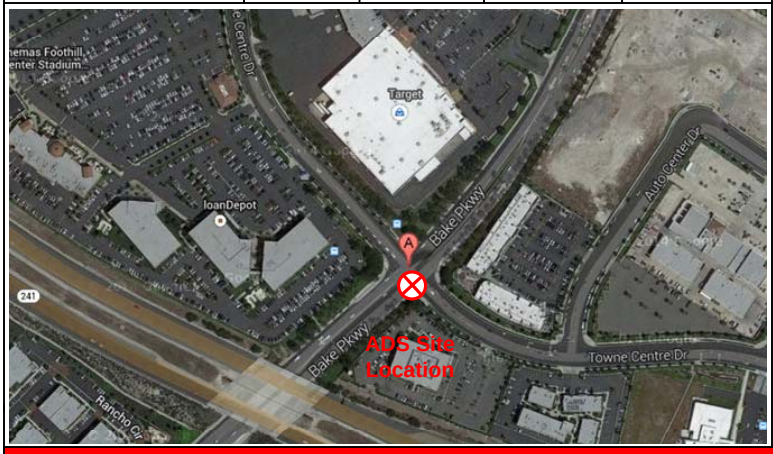
Data uptime observed during the Friday, February 06, 2015 to the Sunday, March 08, 2015 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD SCSMP TFM 2015	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: UFF9	**Install Date:** 1/29/15	**Monitor Type**	Peak Doppler
Address/Location: Bake Pkwy & Towne		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH192S136
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	11.88 "
		Pipe Width:	11.88 "





Investigation Information:

Date/Time of Investigation:	1/29/15
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	2.38 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.38 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Brick/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

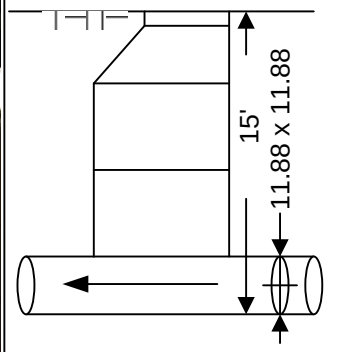
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

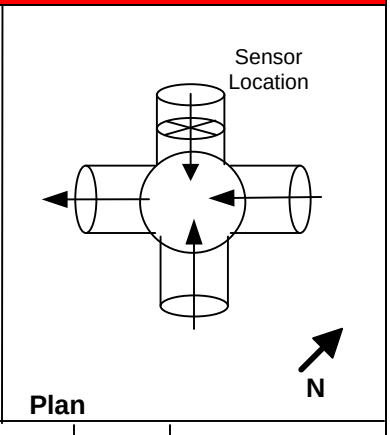
Other Information:





Cross Section





Plan

Installation Information		Backup	Yes	No	?	Distance
Installation Type:	Standard	Trunk	[ ]	[x]	[ ]	
Sensors Devices:	Ultrasonic / Pressure/Velocity	Lift / Pump Station	[ ]	[X]	[ ]	
Surcharge Height:	0	WWTP	[ ]	[X]	[ ]	
Rain Gauge Zone:		Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns (Night Site due to traffic control)

QF 675007 Rev A0
Effective Date 09/09/2003

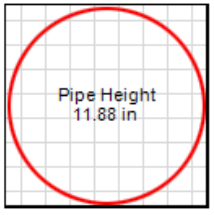
ub

SCATTERGRAPH REPORT

UFF9

Flow Monitor

UFF9

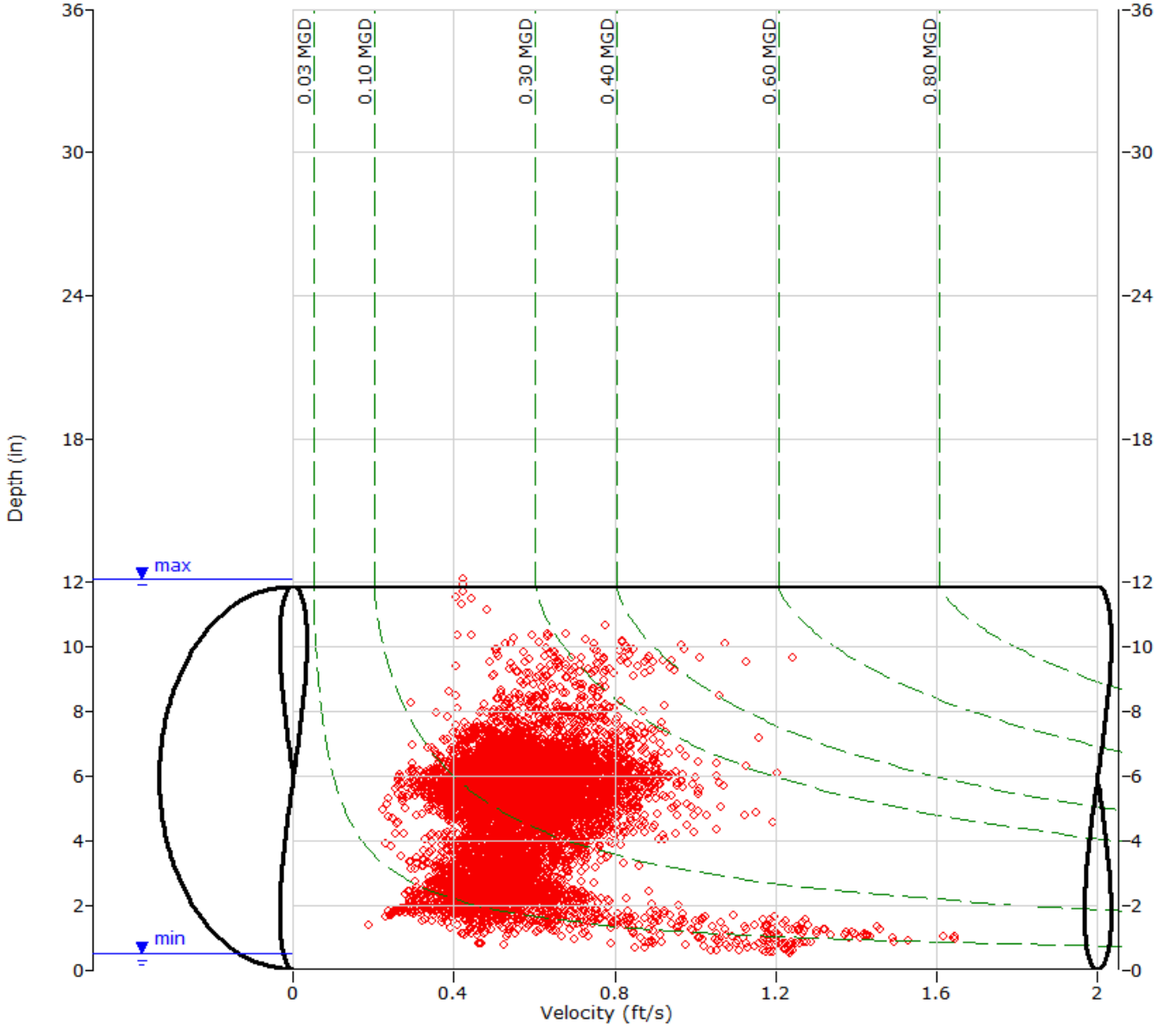


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



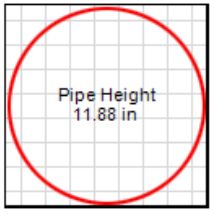
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

UFF9

Flow Monitor

UFF9

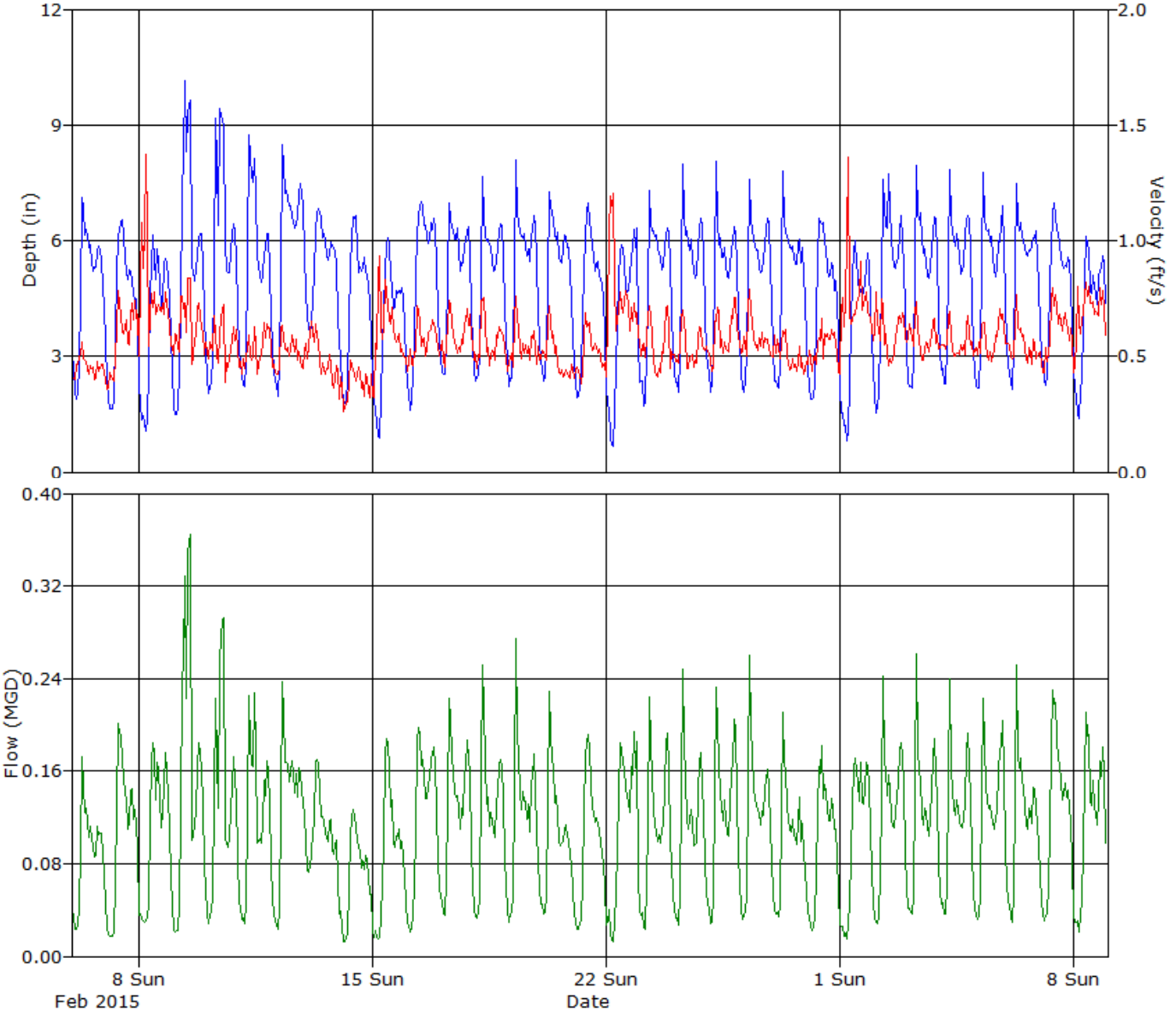


Report Period

2/6/2015
To
3/8/2015

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 2/6/2015 - 3/8/2015

UFF9, Pipe Height: 11.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
2/6/2015	03:45	1.86	07:15	7.51	4.86	17:40	0.30	07:00	0.63	0.45	03:00	0.020	07:15	0.198	0.089	0.089	
2/7/2015	03:30	1.40	11:50	7.35	4.30	06:25	0.28	11:50	0.93	0.58	05:10	0.012	11:50	0.300	0.104	0.104	
2/8/2015	04:55	0.98	10:35	6.51	3.92	00:30	0.42	06:05	1.46	0.77	03:55	0.018	11:35	0.275	0.107	0.107	
2/9/2015	02:05	1.22	08:45	10.63	5.52	14:25	0.40	12:35	1.24	0.64	02:00	0.012	12:35	0.536	0.156	0.156	
2/10/2015	02:45	1.93	07:45	12.14	5.68	14:25	0.25	07:00	0.88	0.56	02:35	0.022	13:30	0.360	0.135	0.135	
2/11/2015	04:40	2.06	07:35	9.88	5.33	10:40	0.36	07:10	0.84	0.53	04:40	0.021	11:55	0.287	0.118	0.118	
2/12/2015	04:25	1.78	07:25	9.61	5.80	03:30	0.29	06:40	0.77	0.51	04:30	0.015	07:40	0.260	0.128	0.128	
2/13/2015	23:30	3.35	11:15	7.31	5.43	22:25	0.24	04:25	0.76	0.50	23:45	0.037	07:40	0.202	0.110	0.110	
2/14/2015	03:40	1.37	10:35	7.39	4.45	03:40	0.19	15:10	0.60	0.38	03:40	0.006	10:35	0.176	0.070	0.070	
2/15/2015	05:20	0.71	11:40	6.75	3.81	01:10	0.26	04:25	1.24	0.61	04:20	0.007	09:55	0.248	0.089	0.089	
2/16/2015	03:40	1.38	11:00	7.54	5.05	03:45	0.38	09:10	1.01	0.56	03:40	0.013	09:15	0.236	0.121	0.121	
2/17/2015	04:10	2.34	07:50	7.87	5.13	03:15	0.38	07:20	1.13	0.59	04:10	0.028	07:20	0.301	0.126	0.126	
2/18/2015	01:55	2.23	07:10	8.20	5.07	03:00	0.34	06:25	1.12	0.57	02:35	0.025	07:35	0.311	0.120	0.120	
2/19/2015	02:25	2.10	07:25	8.70	5.23	02:00	0.34	07:35	1.06	0.54	02:45	0.022	07:35	0.401	0.120	0.120	
2/20/2015	03:35	1.94	07:40	8.31	5.15	21:25	0.31	07:25	1.16	0.50	03:35	0.027	07:25	0.362	0.106	0.106	
2/21/2015	04:00	1.78	10:20	7.29	4.58	05:00	0.28	09:25	0.78	0.51	05:00	0.014	10:45	0.235	0.097	0.097	
2/22/2015	05:15	0.51	22:00	7.68	4.01	00:25	0.32	03:05	1.45	0.76	03:50	0.009	22:05	0.249	0.109	0.109	
2/23/2015	03:40	1.57	07:35	8.25	4.93	07:40	0.29	06:40	1.00	0.55	04:05	0.019	07:30	0.302	0.110	0.110	
2/24/2015	04:10	1.91	07:35	8.55	5.04	04:10	0.34	06:30	0.88	0.54	04:10	0.018	07:25	0.284	0.112	0.112	
2/25/2015	03:40	1.89	07:35	8.55	4.97	05:00	0.34	20:30	0.93	0.59	03:55	0.020	20:30	0.269	0.122	0.122	
2/26/2015	02:30	1.95	07:35	8.72	5.03	05:00	0.36	07:00	0.98	0.58	03:20	0.024	07:35	0.305	0.120	0.120	
2/27/2015	02:10	1.91	07:30	8.37	4.99	21:30	0.34	01:50	0.89	0.50	02:20	0.023	07:25	0.250	0.101	0.101	
2/28/2015	03:35	1.71	10:35	7.18	4.48	04:55	0.35	13:50	0.82	0.54	04:55	0.017	13:50	0.204	0.098	0.098	
3/1/2015	05:35	0.66	11:00	6.40	3.78	00:50	0.34	06:20	1.65	0.74	05:35	0.009	11:10	0.215	0.102	0.102	
3/2/2015	02:35	1.40	11:30	8.57	5.07	11:15	0.37	02:30	0.94	0.60	02:40	0.021	07:20	0.309	0.122	0.122	
3/3/2015	02:05	2.04	07:25	8.75	5.06	11:30	0.40	06:30	1.01	0.58	04:35	0.027	07:25	0.299	0.120	0.120	
3/4/2015	03:50	2.04	07:20	8.69	5.16	00:05	0.38	07:10	0.81	0.56	04:25	0.028	07:20	0.292	0.119	0.119	
3/5/2015	04:10	2.00	07:30	8.47	5.12	05:10	0.34	21:15	0.87	0.57	04:20	0.024	07:40	0.281	0.121	0.121	
3/6/2015	04:10	1.87	07:35	7.87	5.15	18:15	0.37	07:15	0.84	0.55	04:20	0.024	07:10	0.280	0.118	0.118	
3/7/2015	04:15	2.12	10:10	7.58	4.83	02:00	0.36	11:30	1.05	0.61	03:55	0.025	09:30	0.286	0.124	0.124	
3/8/2015	04:20	1.17	09:50	6.48	4.17	01:30	0.33	09:55	1.20	0.69	04:05	0.011	09:55	0.309	0.115	0.114	

Report Summary For The Period 2/6/2015 - 3/8/2015

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			3.508
Avg	4.87	0.57	0.113

IRWD Wet Weather Sewer Flow Study
2015/2016 Season
November 25, 2015 – February 24, 2016

Final Report Submitted to:
AKM Consulting Engineers
June 27, 2016

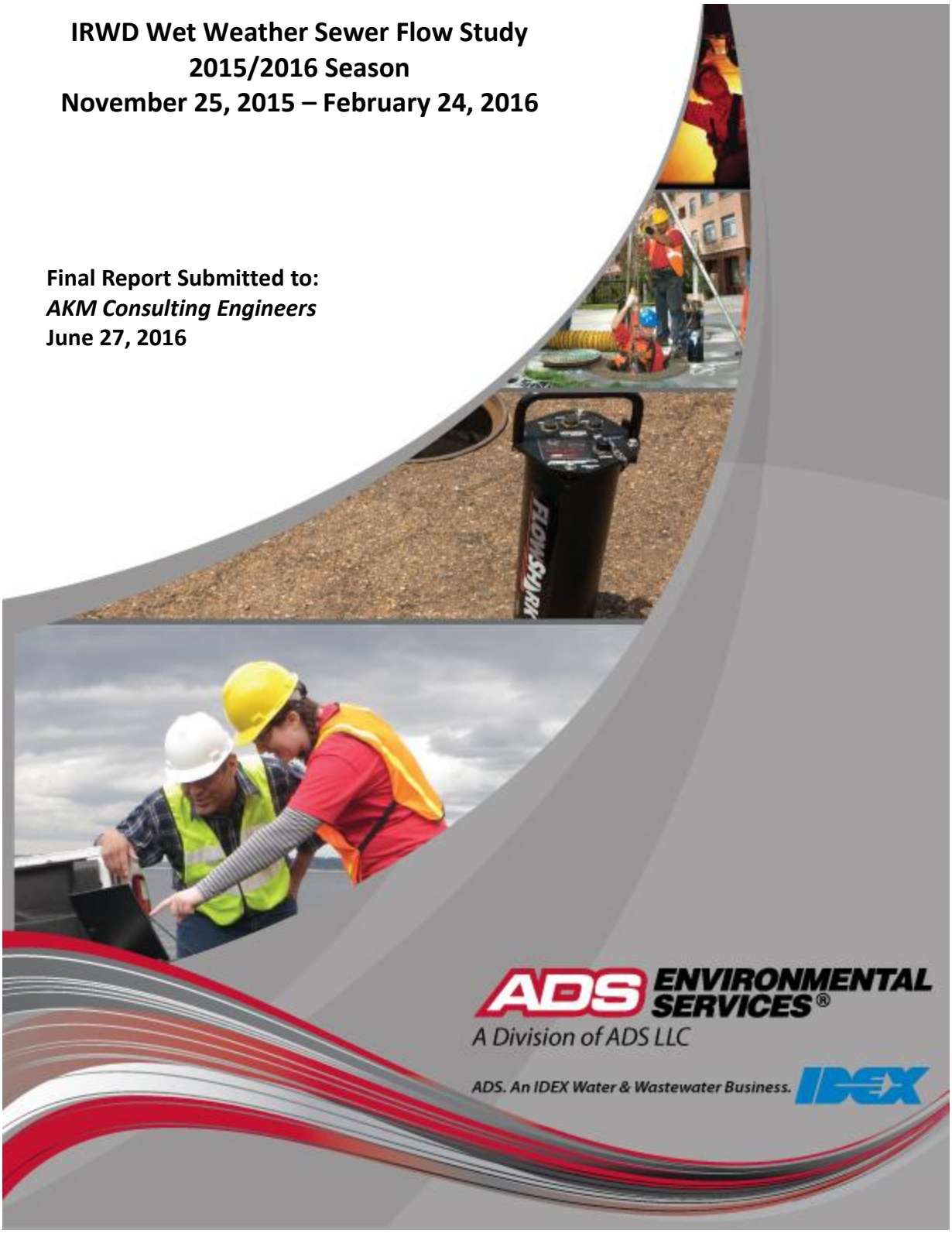


Table of Contents

Temporary Flow Monitoring 3
IRWD Master Plan Extension Study 2015 - 2016 3
Attachments 10
Locations 14
CAL22 14
Attachments 16
Graphs 17
Tabular Reports 19
CAL5 21
Attachments 23
Graphs 24
Tabular Reports 26
MPSite1 28
Attachments 30
Graphs 31
Tabular Reports 33
MPSite10 35
Attachments 37
Graphs 38
Tabular Reports 40
MPSite11 42
Attachments 44
Graphs 45
Tabular Reports 47
MPSite12 49
Attachments 51
Graphs 52
Tabular Reports 54
MPSite13 56
Attachments 58
Graphs 59
Tabular Reports 61
MPSite2 63
Attachments 65
Graphs 66
Tabular Reports 68
MPSite3 70
Attachments 72
Graphs 73
Tabular Reports 75
MPSite4 77
Attachments 79
Graphs 80

Table of Contents

Tabular Reports 82
MPSite5 84
Attachments 86
Graphs 87
Tabular Reports 89
MPSite6ALT 91
Attachments 93
Graphs 94
Tabular Reports 96
MPSite7 98
Attachments 100
Graphs 101
Tabular Reports 103
MPSite8 105
Attachments 107
Graphs 108
Tabular Reports 110
MPSite9 112
Attachments 114
Graphs 115
Tabular Reports 117

Wet Weather Sewer Flow Study
2015/2016 Season

November 25, 2015 - February 24, 2016

Prepared for:

Ms. Diann Pay
Project Engineer
AKM Consulting Engineers
553 Wald, Irvine, CA 92618

Prepared by:

ADS, LLC
15201 Springdale Street
Huntington Beach, CA 92649

Letter of Transmittal

ADS LLC

April 27, 2016

Ms. Diann Pay, P.E.
AKM Consulting Engineers
553 Wald
Irvine, CA 92618

SUBJECT: Sewer Flow Study for IRWD Master Plan Extension Study 2015/2016

Dear Ms. Pay,

ADS is pleased to submit the report for IRWD Master Plan Extension Study 2015/2016 conducted on behalf of AKM Consulting Engineers. The metering was conducted for thirteen (13) weeks at fifteen (15) locations. The study period is November 25, 2015 - February 24, 2016 .

The report contains hourly averaged depth, velocity, and quantity hydrographs as well as daily long tables for the metering period in pdf format. An Excel file containing depth, quantity, and velocity entities for the monitoring location in 5-minute format is also provided.

In addition, we would be happy to further explain any details about the report that may seem unclear. Should you have any questions or comments, you may contact the Project Manager, Paul Mitchell at (714) 379-9778 ext 223.

Thank you for choosing ADS products and services to meet your flow monitoring needs.

Sincerely,
ADS ENVIRONMENTAL SERVICES

Sean O'Donnell
Data Analyst

Scope and Methodology

Introduction

AKM entered into an agreement with ADS Environmental Services to conduct flow monitoring at fifteen (15) metering points within the Irvine Ranch Water District (IRWD). The study was initially scheduled for a twelve week period but was extended an additional week to include a rain event that occurred on February 17 and February 18. Rain data from fourteen (14) public rain gauge sources was provided by AKM for use in conducting the Rain Induced Inflow/Infiltration Analysis. The primary objective was to evaluate wet weather flows to update the model and the master plan.

Project Scope

The scope of this study involved using flow monitors to quantify wastewater flows at the designated locations. Specifically, the study included the following key components.

- Investigate the proposed flow-monitoring sites for adequate hydraulic conditions.
- Flow monitor installations.
- Flow monitor confirmations and data collections.
- Flow data analysis.

Equipment installation was done at various times throughout the monitoring period. The study period began on November 25, 2015 and was completed on February 24, 2016 .

Flow Monitoring Equipment





The ***ADS FlowShark Triton*** monitor was selected for this project. This flow monitor is an area velocity flow monitor that uses both the Continuity and Manning's equations to measure flow.

The ADS FlowShark Triton monitor consists of data acquisition sensors and a battery-powered microcomputer. The microcomputer includes a processor unit, data storage, and an on-board clock to control and synchronize the sensor recordings. The monitor was programmed to acquire and store depth of flow and velocity readings at 5-minute intervals.

The FS Triton monitor features cross-checking using multiple technologies in each sensor for continuous running of comparisons and tolerances. The FS Triton monitor can support two (2) sets of sensors. The sensor option used for this project was: **The Peak Combo Sensor** installed at the bottom of the pipe includes three types of data acquisition technologies.

The ***up looking ultrasonic depth*** uses sound waves from two independent transceivers to measure the distance from the sensor upward toward the flow surface; applying the speed of sound in the water and the temperature measured by sensor to calculate depth.

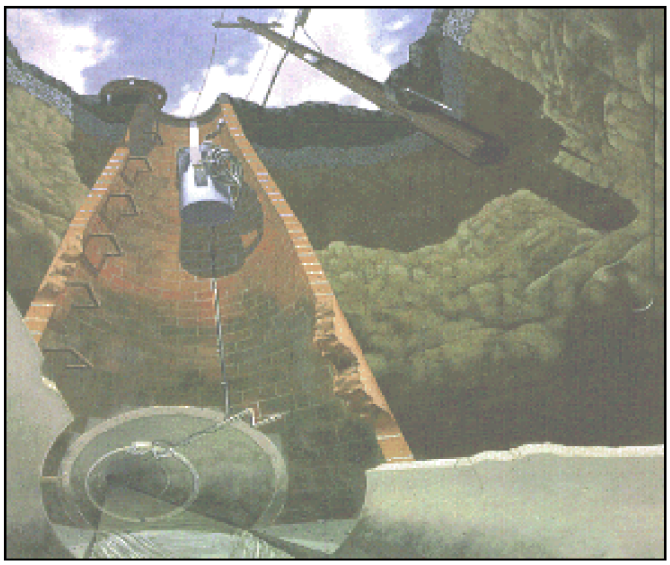
The ***pressure depth*** is calculated by using a piezo-resistive crystal to determine the difference between hydrostatic and atmospheric pressure. The pressure sensor is temperature compensated and vented to the atmosphere through a desiccant filled breather tube.

To obtain ***peak velocity*,** the sensor sends an ultrasonic signal at an angle upward through the widest cross-section of the oncoming flow. The signal is reflected by suspended particles, air bubbles, or organic matter with a frequency shift proportional to the velocity of the reflecting objects. The reflected signal is received by the sensor and processed using digital spectrum analysis to determine the peak flow velocity.

Installation

Installation of flow monitoring equipment typically proceeds in four steps. First, the site is investigated for safety and to determine physical and hydraulic suitability for the flow monitoring equipment. Second, the equipment is physically installed at the selected location. Third, the monitor is tested to assure proper operation of the velocity and depth of flow sensors and verify that the monitor clock is operational and synchronized to the master computer clock. Fourth, the depth and velocity sensors are confirmed and line confirmations are performed.

In pipes up to 42 inches in diameter, the sensors were mounted on expandable stainless steel rings, inserted at least a foot upstream into influent pipes and tightened against the inside walls of the pipes. Influent pipe installations reduce the influences of turbulence and backwater often caused by changes in channel geometry in manholes.





Data Collection, Confirmation, and Quality Assurance

Data collects were done remotely via wireless connect on a weekly basis via ADS Field Representatives. During the monitoring period, field crews visit each monitoring location to verify proper monitor operation and document field conditions. The following quality assurance steps are taken to assure the integrity of the collected data:

Measure power supplies: monitors were powered by dry cell battery packs. Voltages were recorded and battery packs replaced, as necessary. Separate batteries provided back-up power to memory allowing primary batteries to be replaced without loss of data.

Clock synchronization: Field crews synchronized monitor clocks to master clocks.

Confirm depth and velocity readings: Field crews descended into meter manholes to manually measure depths and velocities and compare them meter readings to confirm that they agreed. They also measured silt levels, if any, in the inverts of the pipes. Silt areas were subtracted from flow areas to compute true areas of flow.

Confirm average velocities through cross-sectional velocity profiles: Since ADS velocity sensors measure peak velocity, field crews collected cross-sectional velocity profiles in order to develop a relationship between peak and average velocity in lines that meet the hydraulic criteria.

Upload and Review Data: Data collected from the monitors were uploaded and reviewed by a Data Analyst for completeness, outliers and deviations in the flow patterns, which indicate system anomalies or equipment failure.

Flow Quantification Methods

There are two main equations used to measure open channel flow: the ***Continuity Equation*** and the ***Manning Equation.*** The Continuity Equation, which is considered the most accurate, can be used if both depth of flow and velocity are available. In cases where velocity measurements are not available or not practical to obtain, the Manning Equation can be used to estimate velocity from the depth data based on certain physical characteristics of the pipe (i.e. the slope and roughness of the pipe being measured). However, the Manning equation assumes uniform, steady flow hydraulic conditions with non-varying roughness, which are typically invalid assumptions in most sanitary sewers. The Continuity Equation was used exclusively for this study.

Continuity Equation
The Continuity Equation states that the flow quantity (Q) is equal to the wetted area (A) multiplied by the average velocity (V) of the flow.

$$Q = A * V$$

This equation is applicable in a variety of conditions including backwater, surcharge, and reverse flow.

Data Analysis and Presentation

Data Analysis

A flow monitor is typically programmed to collect data at either 15-minute or 5-minute intervals throughout the monitoring period. The monitor stores raw data consisting of (1) the ultrasonic depth, (2) the peak velocity and (3) the pressure depth. The data is imported into ADS's proprietary software and is examined by a data analyst to verify its integrity. The data analyst also reviews the daily field reports and site visit records to identify conditions that would affect the collected data.

Velocity profiles and the line confirmation data developed by the field personnel are reviewed by the data analyst to identify inconsistencies and verify data integrity. Velocity profiles are reviewed and an average to peak velocity ratio is calculated for the site. This ratio is used in converting the peak velocity measured by the sensor to

the average velocity used in the Continuity equation. The data analyst selects which depth sensor entity will be used to calculate the final depth information. Silt levels present at each site visit are reviewed and representative silt levels established.

Occasionally the velocity sensor's performance may be compromised resulting in invalid readings sporadically during the monitoring period. This is generally caused by excessive debris (silt) blocking the sensor's crystals, shallow flows (~< 2") that may drop below the top of the sensor or very clear flows lacking the particles needed to measure rate. In order to use the Continuity equation to quantify the flow during these periods, a Data Analyst and/or Engineer will use the site's historical pipe curve (depth vs. velocity) data along with valid field confirmations to reconstitute and replace the false velocity recordings with expected velocity readings for a given historical depth along the curve.

Selections for the above parameters can be constant or can change during the monitoring period. While the data analysis process is described in a linear manner, it often requires an iterative approach to accurately complete.

Data Presentation

This type of flow monitoring project generates a large volume of data. To facilitate review of the data, results have been provided in graphical and tabular formats. The flow data is presented graphically in the form of scattergraphs and hydrographs. Hydrographs are based on hourly averaging. Tables are provided in daily average format. These tables show the flow rate for each day, along with the daily minimum and maximums, the times they were observed, the total daily flow, and total flow for the month (or monitoring period). The following explanation of terms may aid in interpretation of the tables and hydrographs.

DEPTH - Final calculated depth measurement (in inches)

QUANTITY - Final calculated flow rate (in MGD)

VELOCITY - Final calculated flow velocity (in feet per second)

REPORT TOTAL - Total volume of flow recorded for the indicated time period (in MG)

Base Infiltration and Wet Weather Analysis

This section describes an evaluation of dry weather flow data for purposes of estimating degree of Base Infiltration ('BI' or groundwater infiltration) from the sewer shed areas associated with the flow metering sites with defined tributary areas. This section also describes an evaluation of wet weather impacts on system flows by summarizing excess flow rates and volumes from the sewer shed areas (basins) associated with each defined site/basin during the observed rain events. Of the fifteen (15) flow sites, 1 of them (MPSite12) does not have a defined tributary due to an immediate upstream flow diversion. Therefore, the effective tributary area of MPSite12 was based on the average ratio of 1675 acres per mgd among all other basins (except MPSite11, MPSite2, and MPSite3). The tributary area associated with MPSite11 generates unusually high flow rates per acre due to the commercial and industrial land use while areas associated with MPSite2 and MPSite3 have large areas of undeveloped land, resulting in unusually low flows per acre.

Base Infiltration & Dry Weather Analysis

In order to quantify Base Infiltration (BI) and prior to conducting a wet weather analysis, a dry weather analysis must first be performed by reviewing data obtained during dry weather conditions. For this analysis, a *dry day* is defined as any day in which there was less than 0.10 in. of rain in the previous day, less than 0.50 in. of rain in the previous three days, and less than 1.00 in. of rain in the previous five days. This process automatically eliminates the selection of most wet weather events and the periods associated with recovery from these events. Once the initial dry days are selected, they are compared to one another to make sure that the flow pattern for each day is repeatable. Any days that have an inconsistent flow pattern are removed from consideration. The resulting dry days are then averaged to establish an average diurnal flow pattern from the site. The dry weather analysis evaluates the weekday pattern separate from the weekend pattern to account for differences often observed.

Recorded flow rates from the sanitary sewer monitoring location for each dry day are overlaid on a hydrograph, enabling a typical or average dry day flow (ADF) and minimum daily flow (MDF) to be determined for Weekdays and Weekends as depicted in Figure 1 for site MPSite1.

It is possible to estimate the volume of flow from the basin that is attributable to groundwater infiltration (or Base Infiltration – BI) based on an evaluation of ADF and MDF values against expected wastewater flow generation rates from basins comprised of typical residential/ commercial land uses. The most refined empirical method to estimate BI is the Stevens/Schutzbach equation. Equation (1) is the Stevens/Schutzbach equation that was used to estimate BI from the associated basin.

$$BI = \frac{0.4 * MDF}{1 - 0.6\,(MDF/ADF)\ ^{\wedge}\ ADF^{0.7}} \qquad (1)$$

Reliability of the BI calculation decreases in non-residential basins and in basins where the flow meter measures flow from cycling pump stations or other unusual

flow patterns. It is important to understand that when only using flow data, BI is considered an estimate and only through more rigorous means of flow isolations (e.g. plugging all lateral connections in isolated small areas of the system and physically measuring continued flow during the plugging period) can actual BI values be determined.

Figure 1

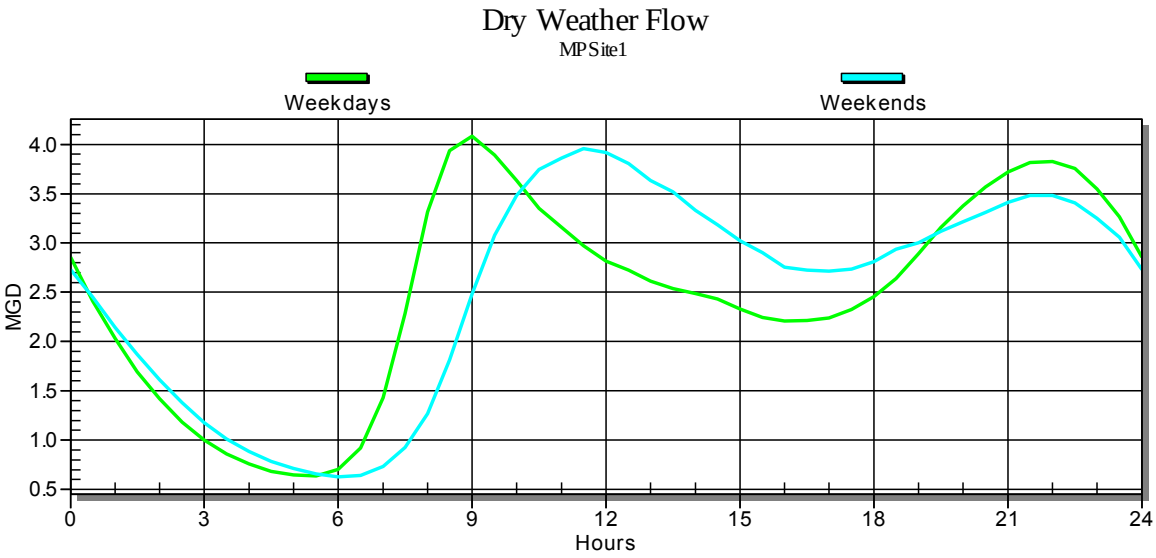


Table 1 lists the values for gross ADF at each metering location as well as estimated BI from its tributary area as a percentage of ADF. Generally, values of BI below 25% of the ADF using this method are considered potentially insignificant.

Table 1

Site/ Basin	MH ID	Nominal Pipe Diameter (in)	Max d/D Observed (% full pipe)	Gross Tributary Area (acres)	Gross ADDF Weekday (mgd)	BI (mgd)	BI (% of ADDF)
CAL22	MH058E001	26	38%	2,923	1.68	0.25	15%
CAL5	MH046N002	24	31%	1,005	0.67	0.12	18%
MPSite1	MH102S009	33	45%	4,519	2.48	0.27	11%
MPSite10	MH044S019	36	29%	3,750	1.61	0.17	11%
MPSite11	MH 008S044	41	38%	2,399	2.79	1.04	37%
MPSite12	MH059S019	23	52%	2786*	1.66	0.19	12%
MPSite13	MH059S092	18	69%	3,681	1.80	0.26	14%
MPSite2	MH102S002	48	30%	9,972	3.53	0.54	15%
MPSite3	MH138N016	42	45%	10,340	2.88	0.49	17%
MPSite4	MH172N011	18	56%	2,878	1.53	0.27	17%
MPSite5	MH060E003	36	54%	4,466	4.00	0.49	12%
MPSite6ALT	MH062S011	39	41%	4,023	2.66	0.35	13%
MPSite7	MH084N146	18	28%	1,229	0.61	0.12	20%
MPSite8	MH060N031	54	69%	8,170	5.73	0.88	15%
MPSite9	MH063W047	24	46%	1,047	1.00	0.28	28%

d = depth of flow in inches. D = diameter of pipe in inches.

* - value based on 1675 average ratio of Acres per mgd from other basins (except MPSite11, MPSite2, and MPSite3).

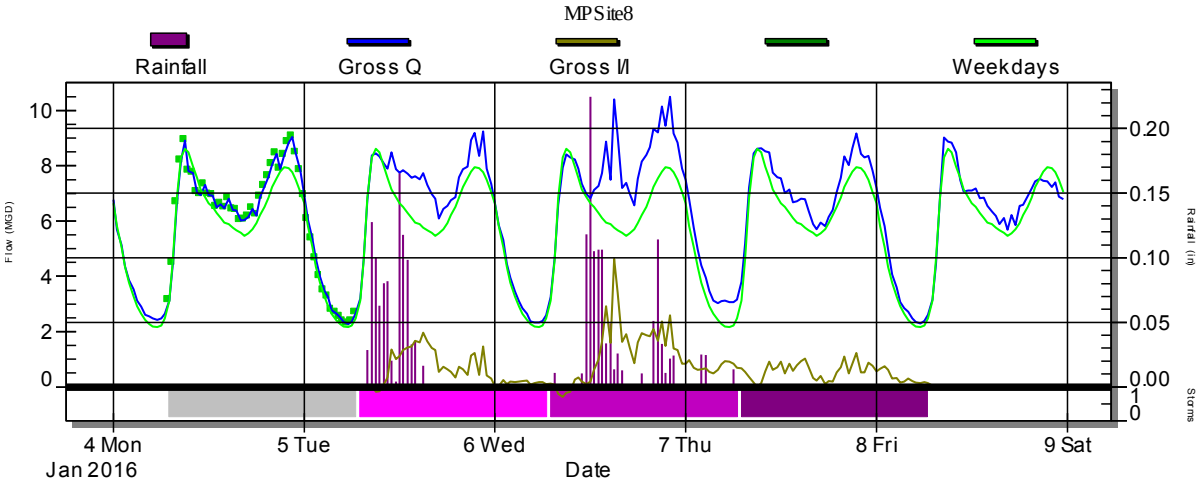
The value of BI listed for the MPSite11 basin is likely biased high because of the large volume of flow from industrial (3 shift) operations in this area. Otherwise, values of estimated BI are not considered high in any of the areas monitored.

Wet Weather Analysis

A wet weather analysis is performed by comparing specific wet weather events to average dry weather flows (ADF). Two (2) rain events were recorded and evaluated during the monitoring period. The events include approximately 0.5 inch of rain on December 22. 2015 and about 2.0 inches of rain on January 5 and 6, 2016. The rain even on December 22 was small and occurred during a holiday period where a comparison to typical dry days is dubious. Therefore, the analysis to characterize the impact of wet weather on flow measured at the sites was based on the January 5/6 storm.

Recorded flow rates for a specific storm event are plotted against average dry weather conditions. The difference observed represents the rain-dependent inflow and infiltration (RDII or I/I) entering the sanitary sewer system upstream from the monitoring location and is called a storm hydrograph. Figure 2 depicts a storm hydrograph for Site/basin MPSite8 during the largest study storm on January 5/6, 2016.

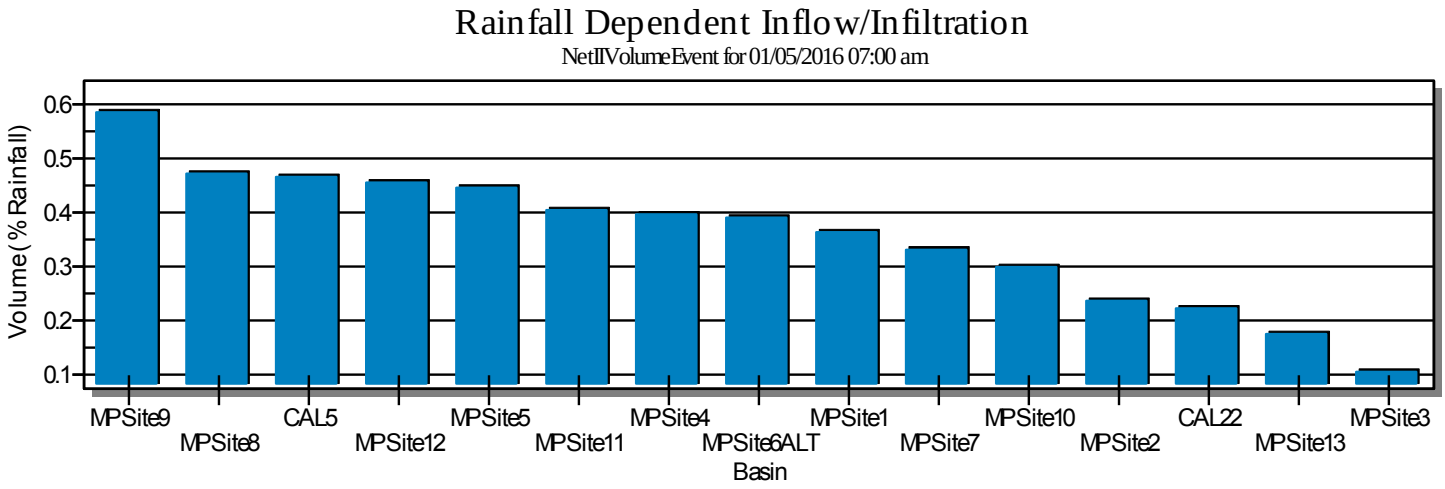
Figure 2



I/I calculations are made for the entire storm event, as depicted by the period associated with the purple colored bands above. The first period (defaulted to 24 hours) following the onset of rain is referred to as the Storm Period. The following period is referred to as Recovery 1, and the next period is referred to as Recovery 2. In this evaluation, there is no distinction between storm and recover periods; rather, the entire event is considered for purposes of determining RDII volume. The storm hydrograph for this location showed an excess flow response to recorded rainfall (shown as "Gross I/I" in the above hydrograph). Flows recovered back to normal conditions within 24 hours of the event.

The total I/I (flow in excess of normal) volumes for each site can be normalized by dividing I/I volume by rainfall and effective tributary area to yield I/I in terms of % rainfall ingress (or R-value). Figure 3 depicts a graphical summary of % rainfall ingress for each evaluated site/basin evaluated (sorted high to low).

Figure 3



Site Commentary

Site Information

CAL22	
Pipe Dimensions	25.88" x 25.00"
Silt Level	0.00"

Overview

Site CAL22 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. In addition, flows were cyclical with evidence of an upstream pump station.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.05	2.73	1.538
Minimum	2.81	1.35	0.182
Maximum	11.24	3.87	3.605
Time of Minimum	12/13/2015 5:40 AM	12/13/2015 5:40 AM	12/13/2015 5:40 AM
Time of Maximum	12/1/2015 2:00 PM	2/10/2016 1:55 PM	12/1/2015 2:00 PM

Data Quality

Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL22	**Install Date:** 11/17/15	**Monitor Type**	Peak Doppler
Address/Location: University & Campus		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH058E001
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	25.88 "
		Pipe Width:	25.00 "





Investigation Information:

Date/Time of Investigation:	11/17/15 @ 1330
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	7.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.29 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	12'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

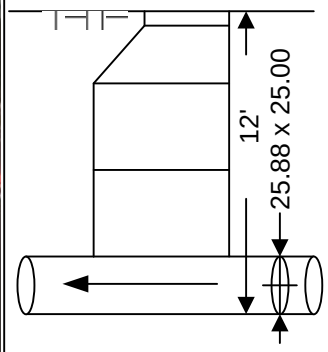
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

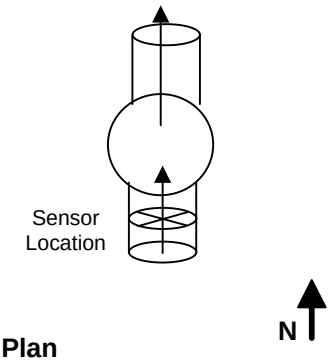
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

ub

SCATTERGRAPH REPORT

CAL22

Flow Monitor

CAL22

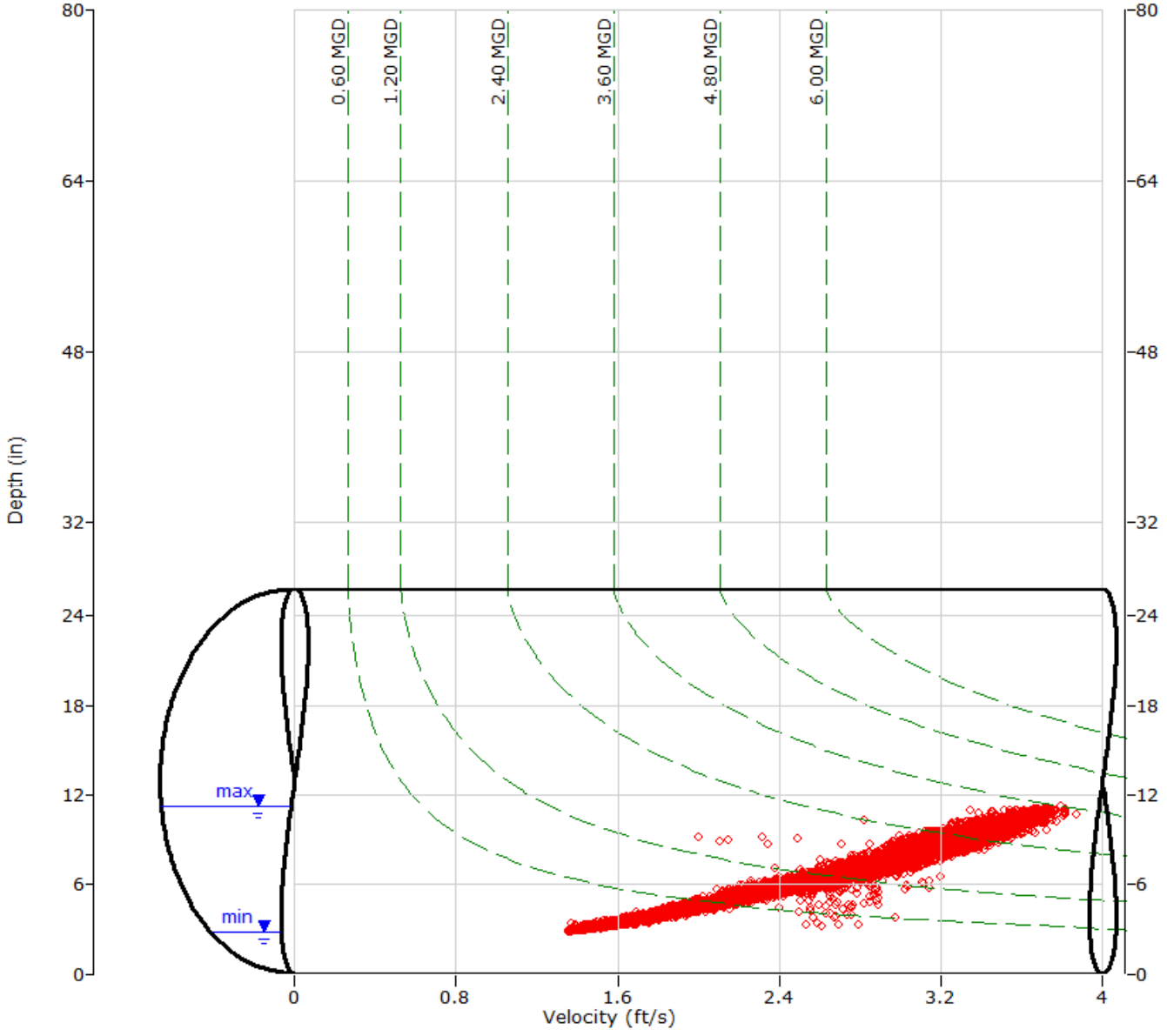
Pipe Height
25.88 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



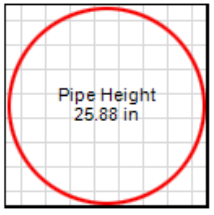
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL22

Flow Monitor

CAL22

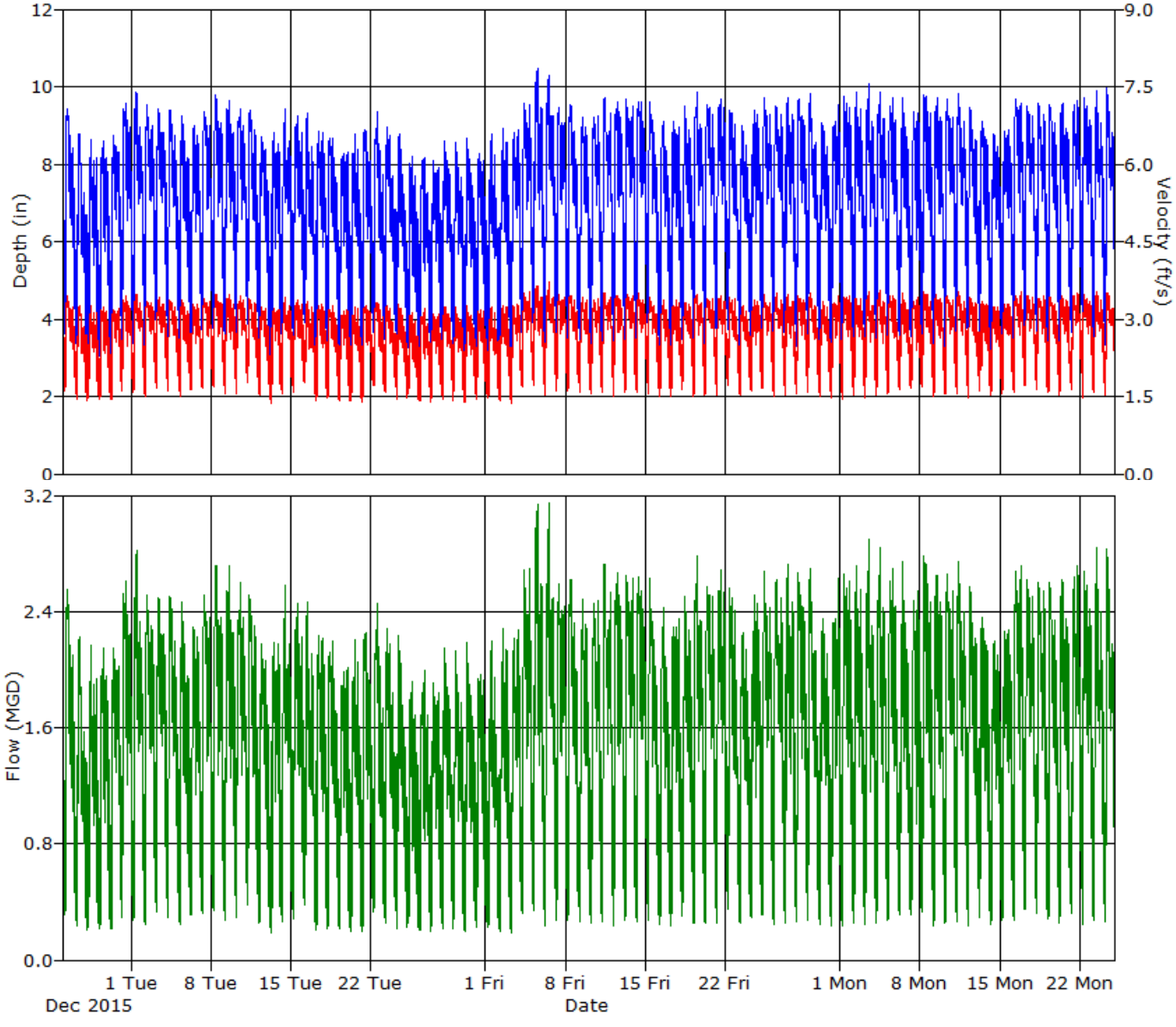


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

CAL22, Pipe Height: 25.88 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:45	3.59	14:00	10.42	7.19	05:35	1.61	14:00	3.62	2.78	05:45	0.309	14:00	3.111	1.582	1.582	
11/26/2015	06:05	3.16	22:15	9.75	6.36	07:10	1.37	22:15	3.45	2.53	06:05	0.233	22:15	2.717	1.254	1.254	
11/27/2015	04:35	2.95	16:30	9.75	6.17	04:35	1.40	16:30	3.50	2.47	04:35	0.201	16:30	2.750	1.196	1.196	
11/28/2015	06:50	2.99	20:05	9.98	6.27	06:50	1.41	16:10	3.52	2.51	06:50	0.207	14:00	2.759	1.227	1.227	
11/29/2015	05:20	2.99	20:05	10.41	6.66	05:20	1.42	18:40	3.62	2.62	05:20	0.208	20:05	3.079	1.376	1.376	
11/30/2015	05:30	3.44	16:00	10.72	7.37	05:30	1.60	16:00	3.65	2.80	05:30	0.287	16:00	3.256	1.649	1.649	
12/1/2015	05:40	3.35	14:00	11.24	7.39	04:50	1.56	14:00	3.79	2.81	05:40	0.274	14:00	3.605	1.668	1.668	
12/2/2015	05:25	3.21	19:50	10.15	7.37	05:20	1.48	13:55	3.71	2.81	05:25	0.240	13:55	3.064	1.654	1.654	
12/3/2015	05:45	3.65	13:00	10.67	7.43	04:55	1.64	13:00	3.69	2.84	05:45	0.323	13:00	3.273	1.674	1.674	
12/4/2015	06:10	3.45	13:15	10.85	7.27	06:10	1.59	13:15	3.73	2.81	06:10	0.287	13:15	3.382	1.614	1.614	
12/5/2015	06:25	3.15	13:55	10.25	6.91	05:45	1.50	16:10	3.61	2.71	06:55	0.245	13:55	3.012	1.476	1.476	
12/6/2015	05:55	3.54	22:40	10.15	6.95	06:00	1.62	22:40	3.62	2.72	06:00	0.305	22:40	3.002	1.479	1.479	
12/7/2015	06:10	3.52	16:00	10.62	7.39	06:10	1.60	21:30	3.67	2.83	06:10	0.297	16:00	3.206	1.659	1.659	
12/8/2015	05:40	3.62	14:40	10.81	7.44	05:40	1.69	12:45	3.66	2.85	05:40	0.327	14:40	3.304	1.687	1.687	
12/9/2015	04:35	3.32	12:50	10.94	7.35	04:35	1.53	15:00	3.73	2.82	04:35	0.261	13:30	3.352	1.659	1.659	
12/10/2015	06:25	3.51	16:00	10.44	7.46	06:25	1.53	16:00	3.64	2.84	06:25	0.285	16:00	3.138	1.682	1.682	
12/11/2015	05:45	3.82	13:30	10.79	7.27	05:45	1.75	13:30	3.70	2.80	05:45	0.368	13:30	3.334	1.606	1.606	
12/12/2015	05:45	3.19	14:25	10.01	6.54	05:45	1.47	17:50	3.55	2.60	05:45	0.237	14:25	2.872	1.327	1.327	
12/13/2015	05:40	2.81	15:20	10.21	6.53	05:40	1.35	22:30	3.57	2.60	05:40	0.182	20:50	2.934	1.346	1.346	
12/14/2015	06:15	3.28	12:25	10.29	6.83	02:20	1.50	11:50	3.61	2.67	06:15	0.258	12:25	3.023	1.460	1.460	
12/15/2015	05:55	3.33	14:00	10.29	7.05	05:55	1.54	15:35	3.55	2.74	05:55	0.265	15:35	3.000	1.523	1.523	
12/16/2015	05:50	3.84	11:50	10.58	6.82	06:20	1.75	11:50	3.64	2.68	06:20	0.371	11:50	3.197	1.429	1.429	
12/17/2015	05:50	2.90	13:40	10.13	6.59	04:25	1.36	13:25	3.54	2.60	05:50	0.194	13:25	2.878	1.362	1.362	
12/18/2015	05:00	3.03	16:50	10.30	6.59	05:05	1.45	13:40	3.66	2.60	05:05	0.218	16:50	3.032	1.352	1.352	
12/19/2015	05:50	2.98	00:55	9.60	6.32	05:45	1.40	17:45	3.50	2.54	05:50	0.205	00:55	2.688	1.252	1.252	
12/20/2015	05:50	2.94	15:15	9.69	6.19	04:05	1.36	09:05	3.51	2.49	04:05	0.200	15:15	2.723	1.210	1.210	
12/21/2015	05:05	2.90	19:40	10.08	6.63	04:15	1.36	21:10	3.53	2.61	04:15	0.192	19:40	2.880	1.377	1.377	
12/22/2015	04:35	3.64	13:05	10.35	6.84	04:40	1.69	15:25	3.57	2.69	04:35	0.330	14:10	2.987	1.447	1.447	
12/23/2015	06:45	3.19	15:15	10.16	6.62	06:45	1.48	15:15	3.59	2.62	06:45	0.238	15:15	2.979	1.360	1.360	
12/24/2015	05:50	3.03	14:35	9.83	6.36	06:00	1.43	23:15	3.49	2.54	06:00	0.215	14:35	2.737	1.259	1.259	
12/25/2015	03:45	3.04	16:00	10.16	5.93	03:25	1.43	16:00	3.56	2.42	03:25	0.218	16:00	2.957	1.105	1.105	
12/26/2015	04:20	2.92	15:55	9.71	6.01	06:25	1.38	13:15	3.54	2.44	06:25	0.196	13:15	2.673	1.148	1.148	
12/27/2015	05:40	2.89	14:25	10.00	6.05	05:40	1.36	12:50	3.52	2.46	05:40	0.190	14:25	2.731	1.155	1.155	
12/28/2015	06:30	2.96	08:50	9.68	6.38	06:30	1.42	20:25	3.56	2.57	06:30	0.205	20:25	2.736	1.270	1.270	
12/29/2015	04:05	3.04	13:05	10.02	6.29	04:00	1.43	21:50	3.52	2.54	04:05	0.215	13:05	2.818	1.244	1.244	
12/30/2015	05:25	2.90	19:45	9.76	6.19	04:20	1.38	13:35	3.51	2.49	04:40	0.197	19:45	2.689	1.211	1.211	
12/31/2015	05:45	3.01	12:50	9.91	6.19	06:30	1.44	18:30	3.53	2.50	05:45	0.217	18:30	2.798	1.208	1.208	
1/1/2016	05:30	2.97	09:40	9.66	6.05	05:30	1.40	16:50	3.47	2.47	05:30	0.204	09:40	2.658	1.158	1.158	
1/2/2016	06:15	2.94	20:55	10.17	6.24	05:35	1.39	19:00	3.53	2.52	05:35	0.200	20:55	2.914	1.238	1.238	
1/3/2016	06:30	2.82	18:35	10.18	6.63	06:30	1.36	22:10	3.64	2.63	06:30	0.182	22:10	3.029	1.385	1.385	
1/4/2016	06:05	3.15	15:25	10.78	7.42	06:05	1.52	19:30	3.69	2.86	06:05	0.240	15:25	3.264	1.700	1.700	
1/5/2016	06:30	3.45	12:45	10.74	7.65	06:30	1.65	22:45	3.71	2.93	06:30	0.298	22:45	3.257	1.812	1.812	
1/6/2016	04:30	3.10	16:20	10.58	7.70	04:50	1.51	12:50	3.81	2.94	04:30	0.235	12:50	3.323	1.823	1.823	
1/7/2016	05:40	3.31	12:40	10.70	7.55	05:40	1.59	12:40	3.81	2.91	05:40	0.271	12:40	3.396	1.750	1.750	
1/8/2016	05:25	3.23	13:05	10.72	7.26	05:35	1.54	13:05	3.78	2.83	05:35	0.254	13:05	3.374	1.642	1.642	
1/9/2016	06:20	3.21	17:05	10.56	6.97	06:20	1.48	18:10	3.65	2.74	06:20	0.241	18:10	3.050	1.501	1.501	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:25	3.18	21:35	10.79	7.06	06:15	1.51	21:35	3.68	2.76	05:25	0.247	21:35	3.310	1.555	1.555	
1/11/2016	05:15	3.26	22:25	10.55	7.53	05:10	1.57	00:25	3.70	2.91	05:15	0.264	22:25	3.203	1.759	1.759	
1/12/2016	05:40	3.13	12:25	10.86	7.51	05:40	1.48	12:55	3.77	2.90	05:40	0.232	12:25	3.398	1.744	1.744	
1/13/2016	05:35	3.29	10:10	10.78	7.57	04:50	1.56	10:10	3.73	2.90	05:35	0.265	10:10	3.350	1.760	1.760	
1/14/2016	05:45	3.25	15:40	10.85	7.54	05:45	1.56	21:00	3.75	2.87	05:45	0.259	15:40	3.366	1.740	1.740	
1/15/2016	05:55	3.29	15:20	10.79	7.42	05:40	1.55	15:20	3.73	2.82	05:40	0.261	15:20	3.358	1.671	1.671	
1/16/2016	06:15	3.11	18:35	10.05	6.84	06:15	1.49	18:15	3.56	2.68	06:15	0.231	18:35	2.892	1.445	1.445	
1/17/2016	05:30	3.11	20:50	10.25	6.75	05:30	1.49	22:55	3.59	2.65	05:30	0.232	22:55	2.975	1.417	1.417	
1/18/2016	05:25	3.46	14:15	10.56	7.17	05:25	1.61	19:30	3.65	2.77	05:25	0.292	19:30	3.161	1.573	1.573	
1/19/2016	06:05	3.24	13:20	10.85	7.52	05:10	1.39	19:15	3.75	2.86	05:10	0.233	19:15	3.403	1.740	1.740	
1/20/2016	04:45	3.24	12:35	10.89	7.52	04:40	1.53	15:25	3.72	2.86	04:40	0.255	14:30	3.370	1.729	1.729	
1/21/2016	04:45	3.18	12:50	10.83	7.52	05:15	1.53	12:50	3.68	2.85	04:45	0.247	12:50	3.332	1.726	1.726	
1/22/2016	05:40	3.62	13:55	10.57	7.39	05:10	1.65	13:55	3.68	2.82	05:10	0.326	13:55	3.222	1.657	1.657	
1/23/2016	06:20	3.24	13:35	10.33	6.83	06:15	1.52	15:35	3.60	2.66	06:15	0.252	13:35	3.043	1.433	1.433	
1/24/2016	05:55	3.45	13:45	10.47	7.00	06:00	1.60	16:45	3.59	2.70	05:55	0.288	13:45	3.018	1.504	1.504	
1/25/2016	05:35	3.46	13:45	11.05	7.49	05:30	1.62	12:35	3.67	2.84	05:35	0.296	13:45	3.402	1.712	1.712	
1/26/2016	05:40	3.16	12:35	11.05	7.44	05:40	1.49	12:35	3.73	2.83	05:40	0.237	12:35	3.467	1.700	1.700	
1/27/2016	05:35	3.16	12:20	10.93	7.46	05:05	1.51	11:25	3.71	2.84	05:35	0.243	11:25	3.375	1.704	1.704	
1/28/2016	05:30	3.25	13:05	10.93	7.45	05:30	1.51	12:45	3.75	2.84	05:30	0.249	13:05	3.387	1.704	1.704	
1/29/2016	05:35	3.22	09:45	10.88	7.27	05:35	1.54	09:45	3.74	2.81	05:35	0.251	09:45	3.399	1.628	1.628	
1/30/2016	05:55	3.16	20:05	10.37	6.86	05:50	1.50	20:05	3.66	2.68	05:55	0.239	20:05	3.124	1.454	1.454	
1/31/2016	06:55	3.13	16:15	10.26	6.91	06:55	1.44	15:35	3.56	2.69	06:55	0.226	16:15	2.977	1.486	1.486	
2/1/2016	05:15	3.15	12:10	11.08	7.42	05:15	1.42	18:00	3.72	2.81	05:15	0.225	12:10	3.436	1.691	1.691	
2/2/2016	05:10	3.27	14:10	10.95	7.42	05:05	1.53	12:00	3.68	2.81	05:15	0.257	12:00	3.375	1.678	1.678	
2/3/2016	05:40	3.20	13:25	11.08	7.51	05:55	1.47	22:50	3.77	2.83	05:40	0.240	13:10	3.475	1.722	1.722	
2/4/2016	06:05	3.17	12:05	11.01	7.38	06:05	1.49	13:15	3.72	2.82	06:05	0.237	12:05	3.384	1.681	1.681	
2/5/2016	05:45	3.26	13:30	10.72	7.28	05:15	1.53	13:30	3.71	2.78	05:45	0.254	13:30	3.316	1.624	1.624	
2/6/2016	06:05	3.48	13:20	10.44	7.00	06:05	1.61	13:00	3.63	2.72	06:05	0.295	13:00	3.122	1.509	1.509	
2/7/2016	05:15	3.49	22:40	10.27	6.99	04:55	1.63	23:45	3.62	2.72	05:15	0.302	22:40	3.050	1.510	1.510	
2/8/2016	04:15	3.58	19:55	10.88	7.53	04:40	1.67	21:00	3.73	2.87	04:15	0.321	21:00	3.396	1.742	1.742	
2/9/2016	05:40	3.14	13:00	10.98	7.48	05:35	1.48	11:50	3.77	2.85	05:40	0.233	11:50	3.455	1.716	1.716	
2/10/2016	05:30	3.22	22:05	10.96	7.47	05:30	1.50	13:55	3.87	2.85	05:30	0.245	13:55	3.442	1.716	1.716	
2/11/2016	06:10	3.26	14:35	10.44	7.47	06:15	1.51	14:35	3.71	2.86	06:10	0.251	14:35	3.199	1.719	1.719	
2/12/2016	05:35	3.16	13:40	10.96	7.25	05:35	1.47	17:30	3.72	2.80	05:35	0.233	13:40	3.386	1.624	1.624	
2/13/2016	05:50	3.41	13:20	10.58	6.98	05:50	1.60	13:20	3.71	2.71	05:50	0.285	13:20	3.250	1.475	1.475	
2/14/2016	05:45	3.13	20:45	10.30	6.59	05:45	1.50	20:05	3.58	2.62	05:45	0.235	20:45	3.002	1.357	1.357	
2/15/2016	06:40	3.18	18:50	10.76	6.90	06:40	1.52	18:50	3.70	2.71	06:40	0.243	18:50	3.318	1.481	1.481	
2/16/2016	05:25	3.17	07:35	11.08	7.46	04:25	1.54	07:35	3.82	2.85	05:25	0.248	07:35	3.558	1.715	1.715	
2/17/2016	05:05	3.66	10:10	10.93	7.54	05:55	1.70	09:55	3.78	2.88	05:05	0.336	09:55	3.456	1.734	1.734	
2/18/2016	05:10	3.63	12:25	11.02	7.51	05:10	1.63	12:40	3.73	2.87	05:10	0.318	12:25	3.401	1.714	1.714	
2/19/2016	05:55	3.33	19:15	10.34	7.33	05:55	1.52	16:30	3.63	2.80	05:55	0.260	19:15	3.010	1.641	1.641	
2/20/2016	05:25	3.26	13:55	10.97	7.30	05:25	1.49	07:45	3.64	2.80	05:25	0.248	13:55	3.289	1.629	1.629	
2/21/2016	06:00	3.65	22:00	10.98	7.43	05:55	1.62	09:55	3.82	2.83	05:55	0.319	09:55	3.476	1.685	1.685	
2/22/2016	05:40	3.19	13:35	10.36	7.57	05:35	1.48	15:10	3.67	2.89	05:40	0.239	22:55	3.104	1.733	1.733	
2/23/2016	05:05	3.27	22:25	10.96	7.39	05:25	1.49	21:00	3.82	2.83	05:25	0.249	09:50	3.436	1.675	1.675	
2/24/2016	05:55	3.29	19:45	10.54	7.48	05:55	1.52	13:25	3.64	2.85	05:55	0.257	13:25	3.144	1.703	1.702	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			141.513
Avg	7.05	2.73	1.538

Site Commentary

Site Information

CAL5	
Pipe Dimensions	24.00" x 24.00"
Silt Level	0.00"

Overview

Site CAL5 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located upstream of location MPSite8. A review of balancing indicated no problems (See MPSite8 Site Commentary For More Details).

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.10	2.10	0.695
Minimum	2.72	1.33	0.183
Maximum	7.77	2.62	1.404
Time of Minimum	2/10/2016 3:55 AM	12/17/2015 3:50 AM	12/17/2015 3:50 AM
Time of Maximum	11/26/2015 12:20 PM	1/31/2016 11:10 AM	11/26/2015 12:15 PM

Data Quality

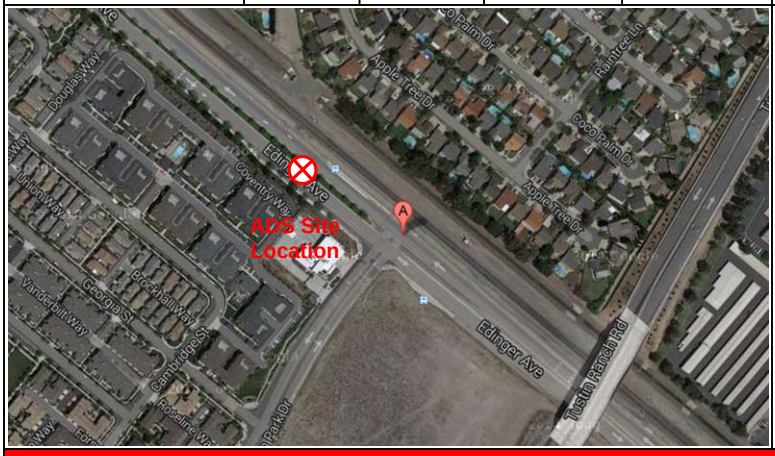
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: CAL5	**Install Date:** 11/19/15	**Monitor Type**	Peak Doppler
Address/Location: Edinger & Kensington		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH046N002
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	24.00 "
		Pipe Width:	24.00 "





Investigation Information:

Date/Time of Investigation:	11/19/15 @ 10:00 am
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	6.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	1.85 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

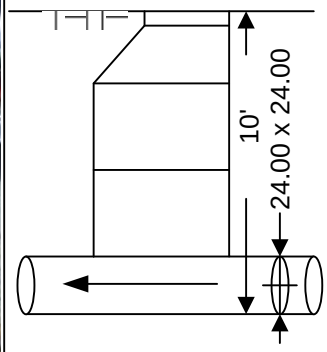
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

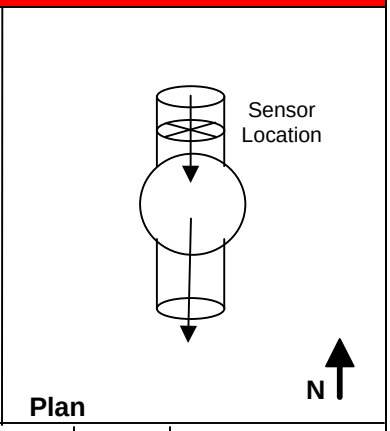
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

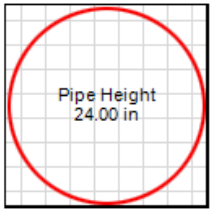
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

CAL5

Flow Monitor

CAL5

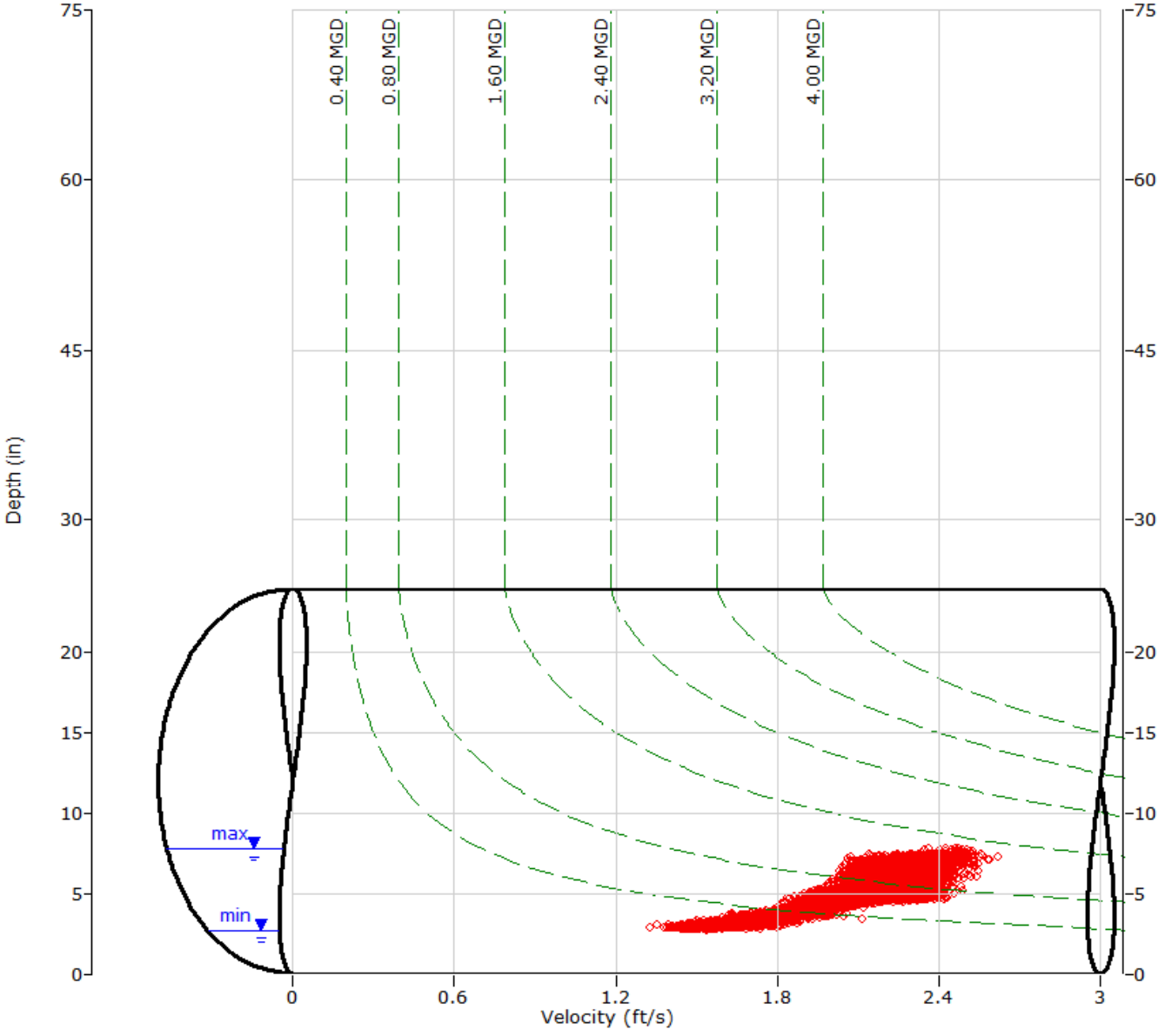


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



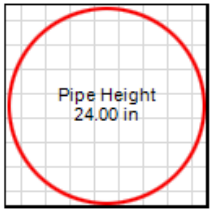
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

CAL5

Flow Monitor

CAL5

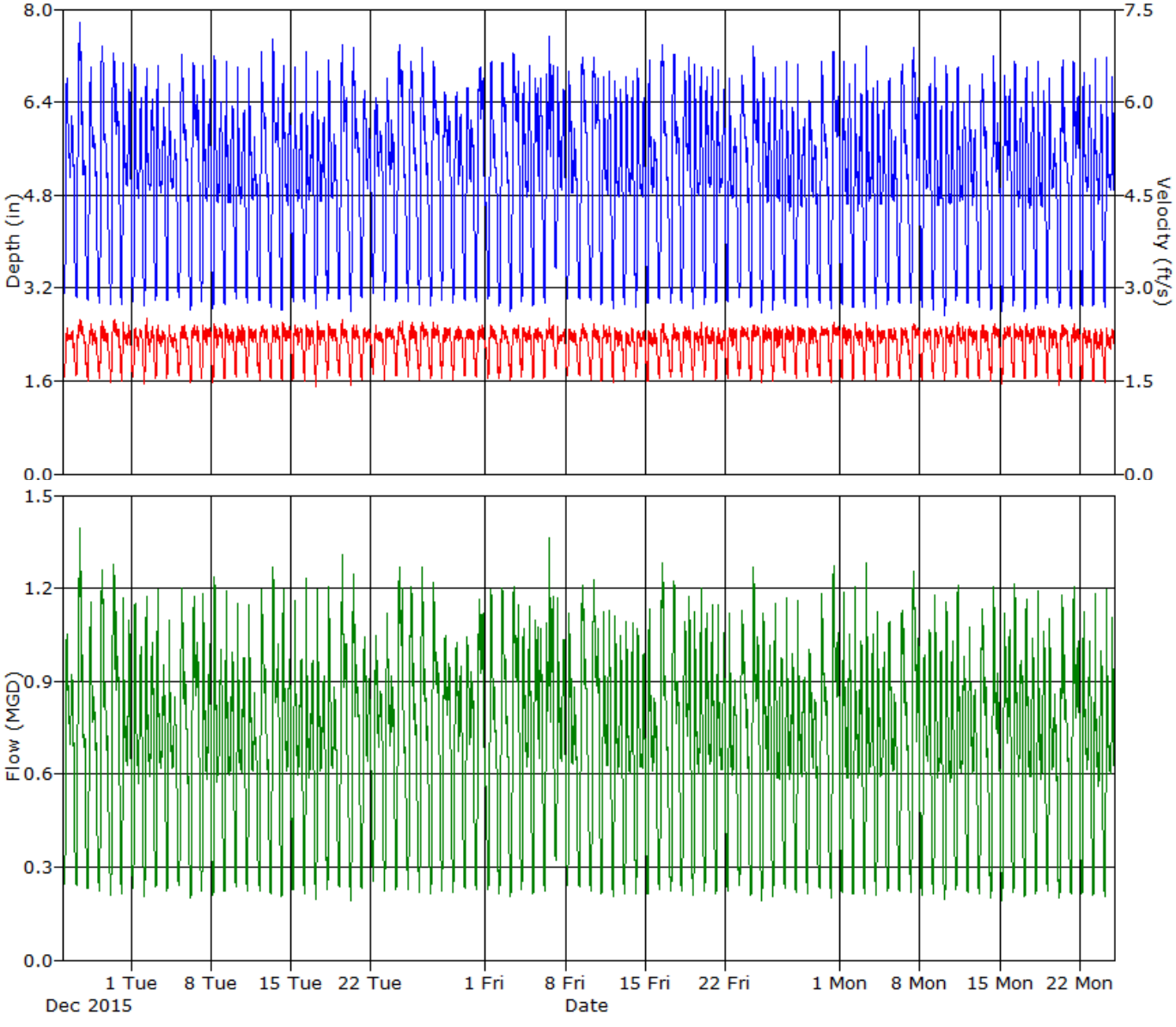


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

CAL5, Pipe Height: 24 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	04:40	3.10	09:10	6.88	5.18	04:55	1.55	20:40	2.40	2.10	04:55	0.242	08:55	1.090	0.701	0.701	
11/26/2015	05:45	3.00	12:20	7.77	5.44	04:55	1.50	11:35	2.52	2.13	04:55	0.232	12:15	1.404	0.782	0.782	
11/27/2015	05:20	2.98	11:05	7.07	5.07	05:45	1.47	12:10	2.47	2.08	05:45	0.226	11:10	1.186	0.681	0.681	
11/28/2015	05:35	2.95	11:15	7.39	5.15	05:40	1.53	11:55	2.55	2.08	04:55	0.220	11:55	1.316	0.703	0.703	
11/29/2015	06:00	2.89	11:15	7.30	5.33	05:15	1.44	13:30	2.58	2.12	05:15	0.202	11:20	1.297	0.758	0.758	
11/30/2015	03:45	2.90	08:05	7.12	5.08	04:30	1.48	08:15	2.50	2.09	04:30	0.211	08:15	1.223	0.685	0.685	
12/1/2015	04:30	2.96	08:10	7.18	5.03	03:30	1.39	19:15	2.39	2.09	03:30	0.208	08:10	1.196	0.673	0.673	
12/2/2015	04:05	2.88	09:10	7.12	5.02	04:10	1.44	08:00	2.54	2.09	04:05	0.200	08:10	1.187	0.675	0.675	
12/3/2015	04:15	2.99	07:55	7.09	4.99	03:35	1.48	07:30	2.45	2.09	03:35	0.226	07:55	1.214	0.663	0.663	
12/4/2015	03:55	2.96	08:25	6.83	4.93	03:50	1.51	08:55	2.42	2.07	03:50	0.221	08:30	1.135	0.646	0.646	
12/5/2015	05:10	3.01	11:35	7.31	5.19	04:50	1.56	12:00	2.46	2.09	04:50	0.236	12:00	1.244	0.713	0.713	
12/6/2015	05:05	2.82	10:15	7.24	5.31	05:10	1.44	12:35	2.43	2.10	05:10	0.193	12:40	1.203	0.744	0.744	
12/7/2015	04:15	2.94	07:40	7.19	5.04	04:10	1.54	19:35	2.42	2.12	04:10	0.219	07:45	1.212	0.686	0.686	
12/8/2015	04:35	2.85	07:35	7.21	4.99	03:35	1.35	06:55	2.45	2.11	03:35	0.200	07:40	1.245	0.675	0.675	
12/9/2015	04:50	2.88	07:40	7.15	4.98	04:15	1.41	07:00	2.44	2.11	04:15	0.202	07:55	1.203	0.672	0.672	
12/10/2015	04:35	3.01	07:55	7.06	4.99	04:25	1.54	07:40	2.42	2.12	04:25	0.228	07:55	1.188	0.673	0.673	
12/11/2015	03:40	2.93	07:55	6.99	4.88	04:00	1.49	08:15	2.44	2.12	04:50	0.216	08:05	1.174	0.653	0.653	
12/12/2015	05:45	2.98	10:30	7.27	5.14	05:45	1.48	13:25	2.51	2.11	05:45	0.215	10:30	1.202	0.707	0.707	
12/13/2015	05:25	2.85	10:20	7.49	5.28	05:05	1.51	10:35	2.45	2.11	05:05	0.211	10:10	1.304	0.741	0.741	
12/14/2015	03:50	2.82	07:45	7.20	4.95	04:00	1.52	07:20	2.51	2.13	03:50	0.204	07:45	1.249	0.671	0.671	
12/15/2015	04:40	2.95	07:35	7.13	5.00	04:45	1.50	07:55	2.39	2.12	04:45	0.215	07:35	1.204	0.676	0.676	
12/16/2015	04:55	2.95	07:55	7.44	5.01	04:55	1.43	08:25	2.40	2.11	04:55	0.204	08:05	1.251	0.677	0.677	
12/17/2015	04:05	2.84	07:25	7.00	4.97	03:50	1.33	07:15	2.55	2.11	03:50	0.183	07:30	1.229	0.671	0.671	
12/18/2015	03:50	2.99	07:50	7.15	4.92	04:40	1.53	07:45	2.46	2.12	04:40	0.225	07:45	1.222	0.661	0.661	
12/19/2015	05:15	2.99	11:25	7.42	5.29	04:55	1.59	11:10	2.54	2.11	04:55	0.235	11:10	1.344	0.738	0.738	
12/20/2015	05:50	2.78	10:25	7.36	5.21	05:55	1.38	16:00	2.48	2.09	05:55	0.184	10:30	1.272	0.720	0.720	
12/21/2015	03:45	3.03	10:50	6.59	5.09	04:40	1.51	14:20	2.40	2.10	04:35	0.229	10:50	1.084	0.688	0.688	
12/22/2015	03:55	3.10	09:45	6.50	5.16	03:35	1.57	10:05	2.43	2.11	03:35	0.246	10:05	1.057	0.700	0.700	
12/23/2015	04:55	2.98	09:00	6.85	5.16	04:45	1.45	12:50	2.43	2.12	04:45	0.214	09:05	1.125	0.707	0.707	
12/24/2015	04:45	2.94	11:40	7.46	5.46	04:45	1.58	12:30	2.59	2.13	04:45	0.224	11:25	1.339	0.781	0.781	
12/25/2015	05:55	2.95	11:45	7.12	5.24	06:10	1.55	14:15	2.48	2.12	06:00	0.225	11:55	1.225	0.728	0.728	
12/26/2015	05:25	2.90	11:25	7.44	5.16	04:35	1.49	09:20	2.49	2.11	05:35	0.210	11:25	1.306	0.715	0.715	
12/27/2015	05:55	2.88	10:55	7.16	5.25	04:55	1.50	18:20	2.54	2.11	04:55	0.209	11:40	1.228	0.734	0.734	
12/28/2015	04:50	2.98	11:00	6.63	5.20	04:50	1.54	10:20	2.43	2.12	04:50	0.223	10:20	1.089	0.715	0.715	
12/29/2015	04:25	2.92	11:30	6.60	5.10	04:30	1.44	15:30	2.40	2.11	04:30	0.205	11:30	1.054	0.691	0.691	
12/30/2015	04:45	2.96	09:55	6.68	5.12	04:55	1.57	08:55	2.36	2.11	04:45	0.229	09:50	1.052	0.697	0.697	
12/31/2015	04:20	2.96	13:05	7.15	5.35	03:35	1.48	11:10	2.50	2.10	04:30	0.220	11:10	1.249	0.749	0.749	
1/1/2016	06:25	3.02	13:00	7.20	5.12	06:05	1.49	12:05	2.59	2.10	06:05	0.222	12:05	1.294	0.696	0.696	
1/2/2016	05:05	2.87	12:45	7.17	5.18	05:05	1.43	11:30	2.49	2.09	05:05	0.196	11:30	1.231	0.715	0.715	
1/3/2016	05:25	2.81	11:10	7.31	5.37	05:10	1.49	20:40	2.52	2.10	05:10	0.202	11:20	1.234	0.757	0.757	
1/4/2016	04:20	2.95	20:55	7.05	5.10	03:50	1.54	07:30	2.43	2.12	04:15	0.224	20:55	1.147	0.696	0.696	
1/5/2016	04:10	2.88	21:20	6.90	5.31	04:05	1.52	13:05	2.40	2.12	04:05	0.213	07:45	1.127	0.740	0.740	
1/6/2016	04:45	2.93	14:00	7.63	5.55	02:30	1.49	13:50	2.56	2.14	04:45	0.220	14:00	1.396	0.802	0.802	
1/7/2016	04:55	3.53	08:20	7.05	5.27	03:50	1.63	08:20	2.39	2.12	03:15	0.309	08:20	1.190	0.720	0.720	
1/8/2016	04:55	3.00	07:50	7.01	5.03	04:15	1.59	10:05	2.38	2.10	04:10	0.239	07:55	1.162	0.675	0.675	
1/9/2016	05:25	3.01	12:35	7.26	5.29	05:00	1.56	12:15	2.46	2.10	05:00	0.231	12:15	1.244	0.737	0.737	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:00	2.98	12:30	7.26	5.37	05:00	1.51	11:45	2.47	2.09	05:00	0.219	12:30	1.254	0.752	0.752	
1/11/2016	03:55	2.91	21:05	7.20	5.06	04:30	1.45	07:35	2.45	2.09	03:40	0.211	21:05	1.193	0.682	0.682	
1/12/2016	04:20	2.84	08:00	6.84	5.00	04:00	1.47	07:55	2.41	2.08	04:10	0.204	08:00	1.141	0.669	0.669	
1/13/2016	04:30	2.91	08:25	6.87	5.01	03:55	1.48	20:55	2.37	2.06	03:55	0.210	08:00	1.105	0.663	0.663	
1/14/2016	04:00	2.87	08:05	7.01	4.98	03:55	1.53	07:50	2.35	2.09	03:55	0.213	07:50	1.098	0.662	0.662	
1/15/2016	04:40	2.91	08:05	7.16	4.91	04:40	1.49	17:15	2.37	2.07	04:40	0.208	08:00	1.172	0.643	0.643	
1/16/2016	05:00	3.00	10:50	7.40	5.21	04:55	1.53	13:00	2.45	2.09	04:55	0.225	10:55	1.291	0.716	0.716	
1/17/2016	05:40	2.92	12:35	7.28	5.22	05:35	1.55	11:40	2.46	2.09	05:40	0.219	12:35	1.247	0.717	0.717	
1/18/2016	04:50	2.91	20:15	7.22	5.26	05:15	1.54	13:15	2.46	2.09	04:45	0.218	19:55	1.183	0.723	0.723	
1/19/2016	05:00	2.83	08:00	7.14	5.04	03:55	1.48	20:45	2.44	2.08	05:00	0.201	20:50	1.221	0.675	0.675	
1/20/2016	04:30	2.90	20:20	7.16	5.10	03:40	1.56	20:30	2.46	2.10	04:35	0.221	20:30	1.249	0.691	0.691	
1/21/2016	04:10	2.92	08:00	7.03	5.03	04:10	1.48	08:00	2.40	2.07	04:10	0.209	08:00	1.187	0.669	0.669	
1/22/2016	04:45	2.95	07:50	6.85	4.93	04:30	1.52	07:45	2.40	2.11	04:30	0.219	07:50	1.144	0.659	0.659	
1/23/2016	05:20	3.04	11:05	6.94	5.16	05:40	1.57	11:25	2.41	2.12	05:40	0.236	11:10	1.144	0.711	0.711	
1/24/2016	05:40	2.87	11:10	7.42	5.24	05:25	1.48	20:05	2.48	2.11	05:25	0.207	11:10	1.290	0.735	0.735	
1/25/2016	04:15	2.73	07:40	6.94	4.99	04:35	1.45	13:20	2.49	2.11	04:15	0.191	07:35	1.126	0.676	0.676	
1/26/2016	03:45	2.81	07:45	7.06	4.94	03:15	1.47	18:30	2.43	2.10	03:15	0.203	07:45	1.178	0.661	0.661	
1/27/2016	04:25	2.93	08:05	7.12	4.95	04:35	1.59	19:10	2.45	2.14	04:35	0.228	07:40	1.187	0.671	0.671	
1/28/2016	04:15	2.88	07:55	7.08	4.88	04:55	1.54	09:45	2.49	2.12	04:55	0.216	07:55	1.183	0.657	0.657	
1/29/2016	04:40	2.85	08:55	6.47	4.90	05:00	1.54	15:10	2.40	2.12	05:00	0.211	09:35	1.012	0.658	0.658	
1/30/2016	05:35	2.92	10:50	7.15	5.08	05:25	1.55	23:05	2.43	2.13	05:25	0.225	10:05	1.201	0.703	0.703	
1/31/2016	05:30	2.83	11:05	7.31	5.27	05:30	1.47	11:10	2.62	2.13	05:30	0.198	11:10	1.366	0.749	0.749	
2/1/2016	04:30	2.91	07:50	7.16	5.03	04:30	1.52	16:45	2.46	2.11	04:30	0.212	07:55	1.206	0.684	0.684	
2/2/2016	04:40	2.86	07:55	7.11	4.99	03:15	1.51	07:55	2.44	2.12	03:50	0.211	07:55	1.229	0.680	0.680	
2/3/2016	04:10	2.88	08:20	7.37	4.99	03:40	1.48	08:40	2.49	2.12	03:55	0.210	08:10	1.288	0.681	0.681	
2/4/2016	04:00	2.84	07:30	6.84	4.93	04:20	1.52	07:25	2.49	2.10	04:15	0.209	07:25	1.178	0.661	0.661	
2/5/2016	04:00	2.89	08:05	6.84	4.88	04:05	1.50	21:25	2.45	2.11	04:05	0.210	08:10	1.106	0.649	0.649	
2/6/2016	04:40	2.94	11:00	7.28	5.14	02:55	1.51	16:15	2.40	2.09	04:40	0.218	10:45	1.161	0.701	0.701	
2/7/2016	05:05	2.95	10:30	7.41	5.24	06:05	1.46	12:25	2.48	2.12	05:10	0.209	10:40	1.279	0.735	0.735	
2/8/2016	04:30	2.87	21:00	6.84	5.05	03:30	1.51	19:00	2.46	2.09	04:30	0.210	20:55	1.104	0.680	0.680	
2/9/2016	03:45	2.81	07:35	7.32	4.96	04:40	1.51	07:35	2.43	2.11	03:25	0.209	07:35	1.273	0.668	0.668	
2/10/2016	03:55	2.72	07:50	7.14	4.92	03:35	1.49	21:45	2.46	2.10	03:45	0.193	07:50	1.179	0.660	0.660	
2/11/2016	04:00	2.95	07:50	7.06	4.99	04:05	1.49	07:45	2.49	2.12	04:05	0.215	07:50	1.220	0.676	0.676	
2/12/2016	04:10	2.93	07:40	6.75	4.89	04:15	1.51	12:55	2.48	2.12	04:15	0.215	07:40	1.095	0.655	0.655	
2/13/2016	04:15	2.87	10:55	6.93	5.07	04:25	1.52	11:55	2.55	2.10	04:25	0.209	11:55	1.201	0.695	0.695	
2/14/2016	05:45	2.80	11:15	7.32	5.00	04:40	1.46	12:30	2.49	2.10	05:45	0.200	11:15	1.225	0.681	0.681	
2/15/2016	04:00	2.79	10:45	6.99	5.18	03:40	1.41	20:05	2.45	2.12	03:40	0.189	10:45	1.151	0.719	0.719	
2/16/2016	03:35	2.89	07:55	7.18	4.99	05:15	1.48	19:30	2.52	2.13	05:00	0.213	07:35	1.238	0.678	0.678	
2/17/2016	04:05	2.76	08:10	7.10	4.93	04:30	1.52	07:25	2.52	2.12	04:05	0.201	08:10	1.217	0.667	0.667	
2/18/2016	03:30	2.83	07:50	7.23	4.99	03:55	1.55	18:45	2.45	2.14	03:40	0.215	07:50	1.232	0.684	0.684	
2/19/2016	04:20	2.93	08:30	6.90	4.93	03:15	1.53	11:55	2.39	2.09	04:10	0.219	08:15	1.122	0.654	0.654	
2/20/2016	05:30	2.87	12:20	7.19	5.10	05:30	1.39	13:20	2.43	2.09	05:30	0.191	11:00	1.194	0.699	0.699	
2/21/2016	05:35	2.84	10:50	7.20	5.28	05:25	1.53	11:05	2.46	2.09	05:25	0.210	11:05	1.232	0.734	0.734	
2/22/2016	04:50	2.90	08:10	6.92	5.04	04:10	1.49	08:30	2.38	2.07	04:45	0.209	08:10	1.146	0.673	0.673	
2/23/2016	03:55	2.89	07:55	7.19	4.98	03:20	1.43	07:55	2.43	2.06	03:20	0.206	07:55	1.240	0.655	0.655	
2/24/2016	04:05	2.86	08:15	7.19	5.01	03:50	1.43	08:15	2.50	2.06	04:00	0.201	08:15	1.280	0.665	0.664	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			63.963
Avg	5.10	2.10	0.695

Site Commentary

Site Information

MPSite1	
Pipe Dimensions	33.13" x 32.88"
Silt Level	0.00"

Overview

Site MPSite1 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	10.74	2.18	2.506
Minimum	6.11	1.03	0.511
Maximum	15.22	2.90	4.961
Time of Minimum	1/21/2016 5:50 AM	12/27/2015 6:25 AM	12/27/2015 6:25 AM
Time of Maximum	1/6/2016 10:50 PM	1/6/2016 10:10 PM	1/6/2016 10:50 PM

Data Quality

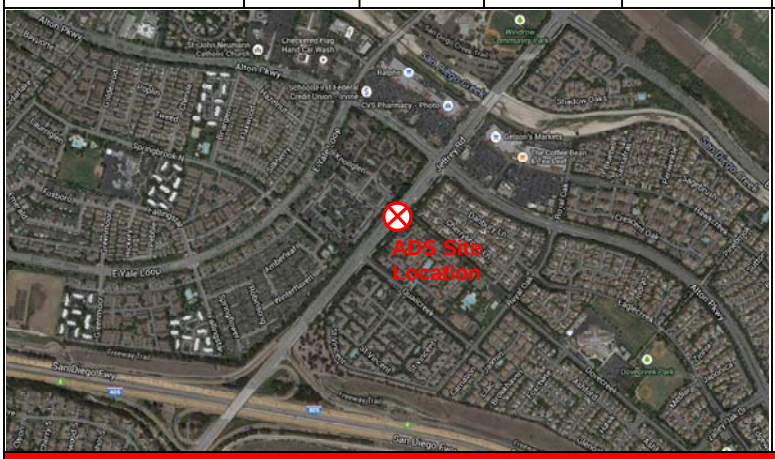
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

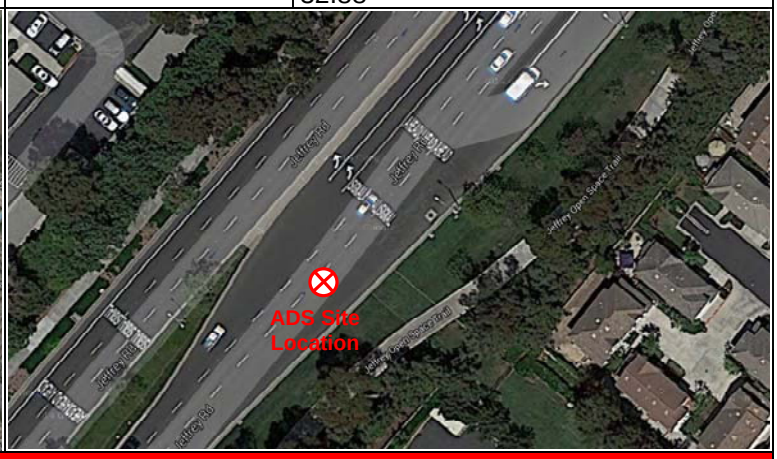
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite1	**Install Date:** 11/16/15	**Monitor Type**	Peak Doppler
Address/Location: Jeffrey Rd & Quail Creek		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH102S009
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	33.13 "
		Pipe Width:	32.88 "





Investigation Information:

Date/Time of Investigation:	11/16/15 @ 1015
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	12.13" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.66 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	20'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

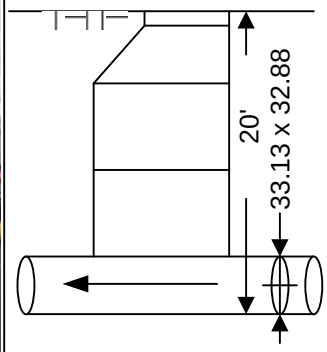
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

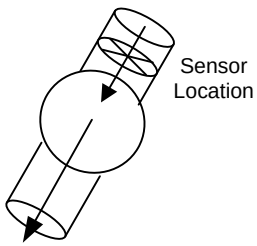
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite1

Flow Monitor

MPSite1

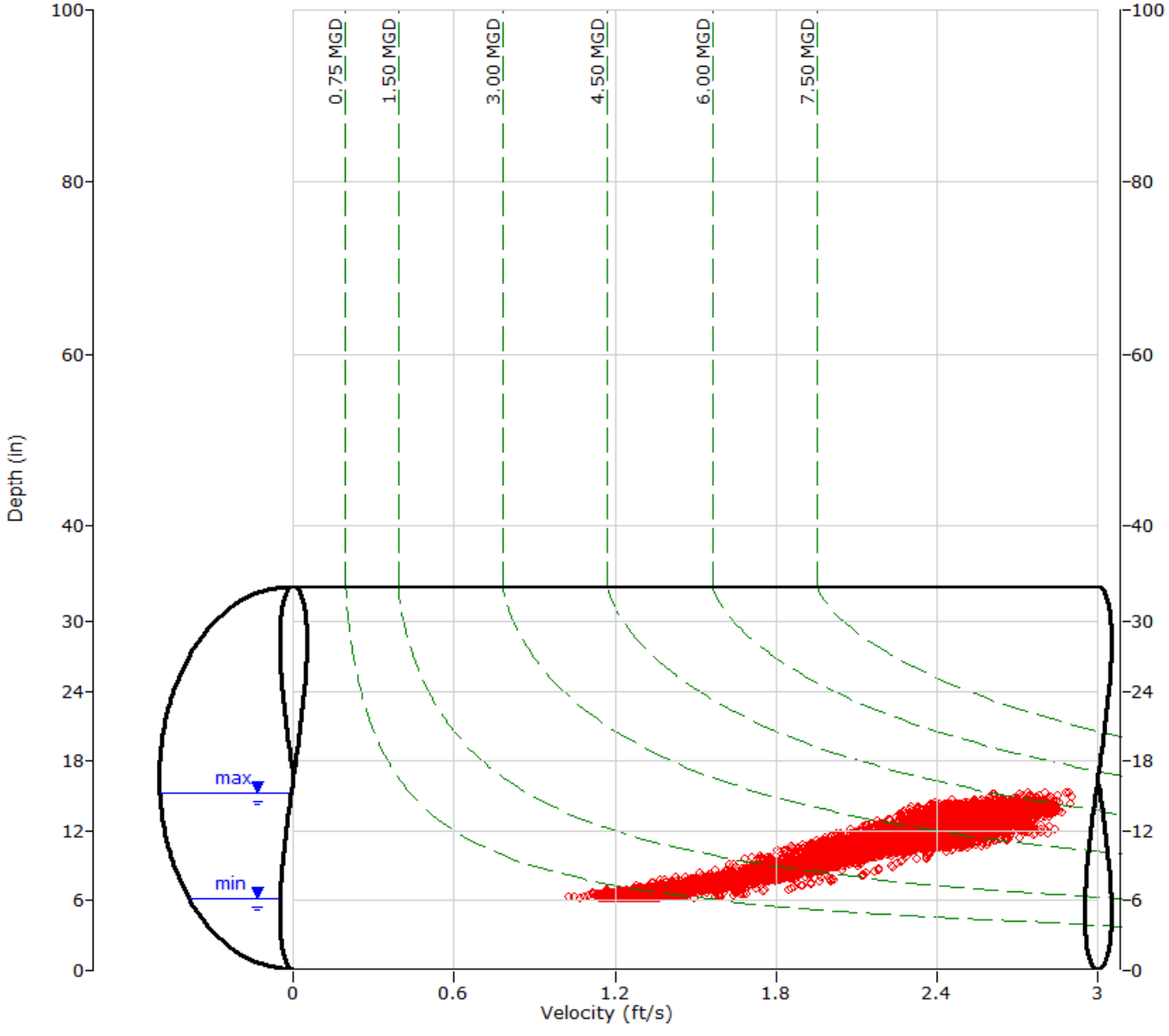
Pipe Height
33.13 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite1

Flow Monitor

MPSite1

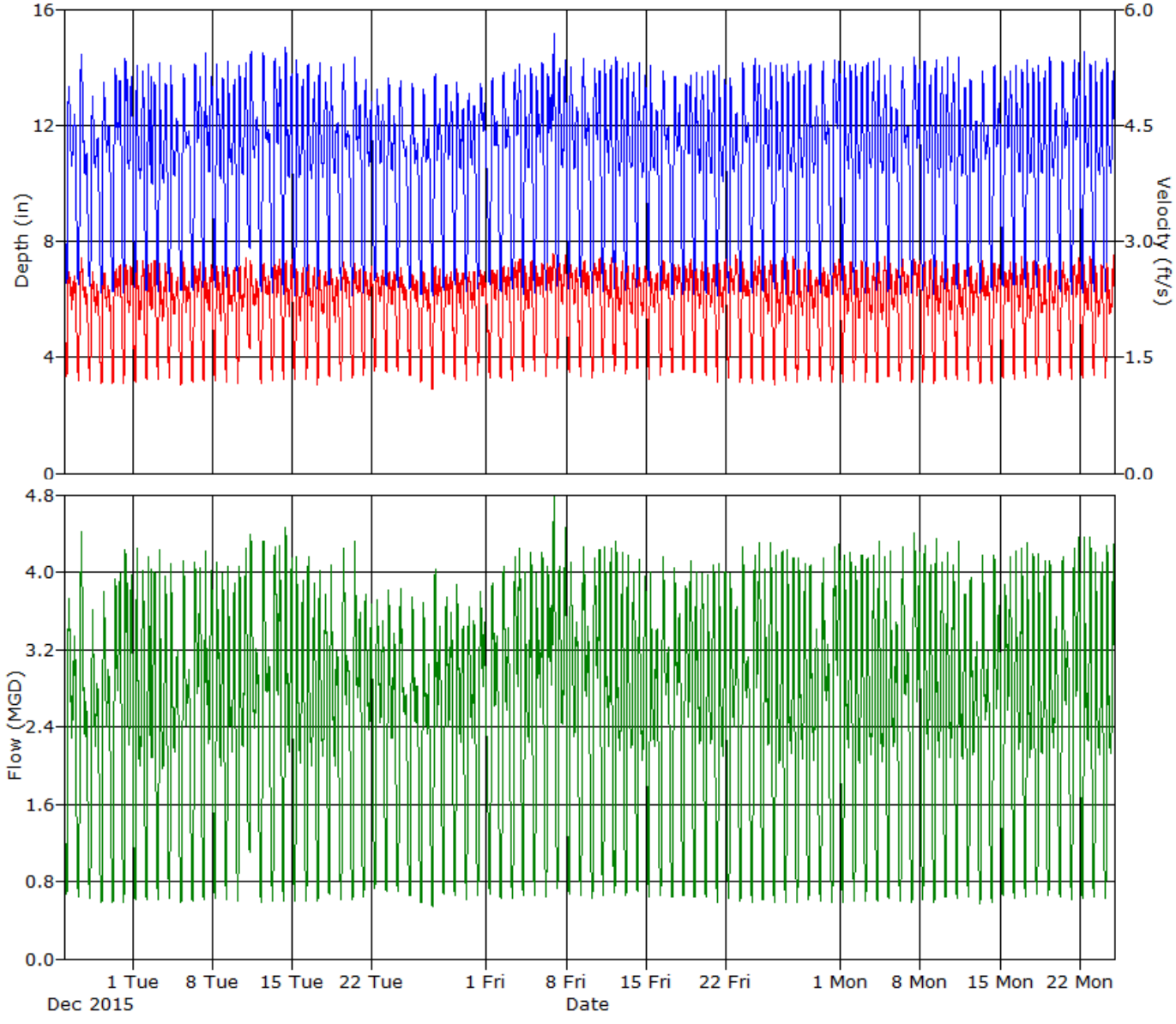
Pipe Height
33.13 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite1, Pipe Height: 33.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:50	6.57	09:45	13.37	10.66	05:35	1.24	11:25	2.65	2.16	05:40	0.673	09:45	3.827	2.431	2.431	
11/26/2015	06:45	6.48	12:35	14.49	10.55	05:55	1.14	12:05	2.90	2.15	05:55	0.612	12:05	4.601	2.416	2.416	
11/27/2015	06:05	6.45	12:25	13.04	10.16	06:10	1.17	11:45	2.69	2.06	06:10	0.615	11:45	3.739	2.179	2.179	
11/28/2015	06:35	6.20	12:35	13.54	10.43	06:55	1.14	11:45	2.68	2.07	06:55	0.571	11:45	3.883	2.294	2.294	
11/29/2015	06:25	6.26	11:35	14.00	10.83	04:55	1.12	20:35	2.76	2.16	06:20	0.575	12:10	4.042	2.546	2.546	
11/30/2015	05:35	6.22	09:10	14.40	10.88	05:35	1.13	21:40	2.75	2.17	05:35	0.566	09:10	4.295	2.550	2.550	
12/1/2015	05:20	6.42	09:00	14.16	10.64	05:45	1.12	23:00	2.83	2.15	05:45	0.588	09:00	4.370	2.436	2.436	
12/2/2015	05:40	6.21	09:00	14.14	10.80	05:20	1.21	14:50	2.85	2.22	05:30	0.606	14:50	4.239	2.571	2.571	
12/3/2015	05:40	6.25	09:10	14.18	10.55	05:40	1.14	21:35	2.75	2.15	05:40	0.575	09:05	4.296	2.400	2.400	
12/4/2015	05:35	6.28	09:00	14.08	10.47	05:30	1.21	08:45	2.67	2.13	05:30	0.612	09:00	4.115	2.340	2.340	
12/5/2015	06:25	6.30	11:25	13.79	10.60	06:30	1.09	11:20	2.75	2.11	06:30	0.553	11:20	4.167	2.386	2.386	
12/6/2015	06:50	6.30	11:30	14.15	10.89	05:55	1.13	21:40	2.75	2.18	05:55	0.586	11:40	4.166	2.583	2.583	
12/7/2015	05:40	6.28	09:15	14.47	10.86	05:45	1.19	20:50	2.76	2.16	05:45	0.606	09:15	4.356	2.515	2.515	
12/8/2015	05:35	6.39	09:15	14.13	10.99	05:45	1.16	22:50	2.73	2.17	05:45	0.604	09:10	4.190	2.570	2.570	
12/9/2015	05:45	6.38	09:05	14.26	10.73	05:35	1.16	10:00	2.73	2.15	05:35	0.600	09:10	4.138	2.462	2.462	
12/10/2015	05:45	6.28	22:25	14.17	10.81	04:50	1.12	23:00	2.81	2.16	06:00	0.577	22:40	4.313	2.513	2.513	
12/11/2015	06:15	7.72	09:20	14.59	11.29	04:15	1.60	09:30	2.79	2.25	06:10	1.105	09:30	4.496	2.674	2.674	
12/12/2015	06:30	6.24	11:15	14.61	10.80	06:35	1.16	10:50	2.80	2.15	06:35	0.582	10:50	4.512	2.515	2.515	
12/13/2015	06:55	6.22	11:20	14.33	11.00	06:40	1.17	22:10	2.78	2.20	06:40	0.587	11:35	4.299	2.654	2.654	
12/14/2015	05:40	6.15	09:00	14.76	11.00	05:10	1.21	10:15	2.79	2.21	05:30	0.602	10:15	4.524	2.640	2.640	
12/15/2015	05:45	6.12	09:05	14.31	10.66	05:50	1.21	22:50	2.75	2.16	05:50	0.589	09:15	4.192	2.453	2.453	
12/16/2015	05:40	6.13	09:20	14.19	10.67	04:35	1.18	09:35	2.71	2.15	05:40	0.585	09:20	4.262	2.445	2.445	
12/17/2015	05:45	6.33	09:15	14.28	10.71	05:15	1.13	10:05	2.68	2.13	05:15	0.589	09:20	4.105	2.426	2.426	
12/18/2015	05:35	6.45	08:55	14.10	10.60	05:40	1.25	09:20	2.66	2.14	05:40	0.660	09:20	4.125	2.386	2.386	
12/19/2015	06:30	6.30	11:45	14.15	10.64	06:50	1.14	11:40	2.81	2.18	06:50	0.589	11:40	4.390	2.486	2.486	
12/20/2015	06:50	6.12	11:45	14.38	10.66	06:55	1.23	11:35	2.74	2.20	06:55	0.601	11:35	4.354	2.509	2.509	
12/21/2015	05:55	6.23	09:40	13.66	10.62	05:05	1.22	22:40	2.76	2.20	06:00	0.628	09:40	3.843	2.478	2.478	
12/22/2015	05:05	6.67	10:05	13.26	10.66	05:50	1.26	22:00	2.66	2.22	05:50	0.701	10:10	3.724	2.493	2.493	
12/23/2015	05:50	6.45	10:40	13.64	10.59	05:55	1.29	12:00	2.78	2.19	05:55	0.681	12:00	3.984	2.444	2.444	
12/24/2015	05:50	6.40	11:40	13.52	10.52	06:50	1.30	12:35	2.69	2.17	05:45	0.685	12:35	3.866	2.400	2.400	
12/25/2015	07:05	6.35	12:30	13.45	10.27	07:15	1.25	12:10	2.69	2.13	07:15	0.646	12:10	3.900	2.290	2.290	
12/26/2015	06:50	6.15	12:10	13.27	10.22	07:45	1.17	11:05	2.64	2.08	06:05	0.575	12:00	3.706	2.235	2.235	
12/27/2015	06:50	6.15	12:05	13.81	10.43	06:25	1.03	12:10	2.69	2.10	06:25	0.511	12:05	4.074	2.338	2.338	
12/28/2015	06:00	6.33	11:40	13.56	10.70	06:35	1.22	21:45	2.66	2.16	06:35	0.637	11:40	3.847	2.453	2.453	
12/29/2015	05:55	6.49	09:50	13.54	10.61	06:15	1.21	11:00	2.69	2.15	06:00	0.647	09:50	3.929	2.421	2.421	
12/30/2015	05:55	6.28	11:50	13.13	10.59	05:15	1.16	21:20	2.67	2.18	05:15	0.597	12:30	3.671	2.443	2.443	
12/31/2015	06:05	6.35	11:35	13.44	10.80	06:30	1.20	20:05	2.68	2.19	06:30	0.628	11:40	3.808	2.517	2.517	
1/1/2016	07:20	6.51	13:05	13.63	10.56	07:40	1.21	13:15	2.77	2.14	07:40	0.654	13:15	4.122	2.396	2.396	
1/2/2016	06:10	6.24	11:45	13.88	10.57	06:50	1.21	12:40	2.74	2.15	06:30	0.615	12:40	4.144	2.438	2.438	
1/3/2016	06:55	6.35	22:10	14.10	11.01	06:20	1.17	11:40	2.84	2.24	06:20	0.607	11:40	4.335	2.700	2.700	
1/4/2016	05:45	6.18	21:35	13.97	10.79	05:15	1.30	21:45	2.78	2.22	05:15	0.654	21:45	4.270	2.552	2.552	
1/5/2016	05:35	6.22	21:40	14.24	11.05	05:05	1.30	20:55	2.77	2.27	05:35	0.653	21:35	4.292	2.710	2.710	
1/6/2016	05:45	6.31	22:50	15.22	11.36	05:55	1.16	22:10	2.90	2.31	05:55	0.593	22:50	4.961	2.882	2.882	
1/7/2016	05:40	6.43	21:50	14.28	11.05	05:25	1.34	21:55	2.84	2.29	05:25	0.709	21:45	4.469	2.712	2.712	
1/8/2016	05:45	6.32	09:00	14.04	10.74	05:30	1.30	09:40	2.79	2.23	05:30	0.668	09:40	4.223	2.542	2.542	
1/9/2016	06:45	6.39	11:50	14.33	10.80	05:40	1.23	13:10	2.76	2.21	06:50	0.646	11:50	4.293	2.570	2.570	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	06:40	6.21	11:55	13.96	10.91	05:45	1.22	12:05	2.82	2.25	06:25	0.623	12:05	4.325	2.683	2.683	
1/11/2016	05:40	6.24	09:05	14.25	10.94	05:45	1.29	22:30	2.80	2.24	05:40	0.648	09:20	4.305	2.634	2.634	
1/12/2016	05:40	6.37	09:05	14.37	10.80	05:55	1.31	22:20	2.78	2.20	05:55	0.680	09:05	4.338	2.529	2.529	
1/13/2016	05:45	6.31	09:25	14.16	10.78	05:15	1.27	09:20	2.75	2.18	05:15	0.657	09:20	4.300	2.510	2.510	
1/14/2016	05:50	6.36	09:10	14.19	10.72	06:00	1.30	09:25	2.72	2.19	06:00	0.681	09:25	4.209	2.489	2.489	
1/15/2016	05:45	6.47	09:10	14.10	10.62	05:45	1.15	09:00	2.64	2.19	05:45	0.609	08:55	4.090	2.445	2.445	
1/16/2016	06:25	6.33	11:45	13.89	10.61	06:30	1.26	13:10	2.76	2.21	06:30	0.643	12:25	4.203	2.498	2.498	
1/17/2016	06:30	6.14	12:30	13.76	10.57	06:25	1.30	13:50	2.72	2.23	06:25	0.637	12:20	4.069	2.520	2.520	
1/18/2016	06:10	6.13	22:10	13.86	10.79	06:15	1.32	21:10	2.84	2.26	06:15	0.646	22:10	4.189	2.621	2.621	
1/19/2016	05:25	6.15	09:10	13.90	10.69	05:35	1.28	22:40	2.77	2.22	05:35	0.633	22:20	4.044	2.525	2.525	
1/20/2016	05:25	6.22	21:45	13.94	10.69	04:10	1.23	22:20	2.74	2.20	05:40	0.620	22:20	4.143	2.509	2.509	
1/21/2016	05:50	6.11	09:00	14.11	10.59	05:20	1.14	22:10	2.82	2.21	05:20	0.565	09:00	4.110	2.492	2.492	
1/22/2016	05:55	6.24	09:10	13.69	10.46	05:40	1.21	20:45	2.84	2.29	05:40	0.605	09:10	4.045	2.520	2.520	
1/23/2016	05:50	6.22	11:55	14.15	10.66	06:00	1.17	11:50	2.76	2.23	06:00	0.596	11:50	4.324	2.516	2.516	
1/24/2016	06:50	6.23	11:50	14.31	11.04	06:45	1.15	21:35	2.84	2.21	06:45	0.574	21:35	4.353	2.683	2.683	
1/25/2016	05:45	6.25	22:05	14.18	10.87	05:40	1.20	22:10	2.84	2.18	05:40	0.602	22:10	4.459	2.554	2.554	
1/26/2016	05:40	6.35	08:55	14.11	10.82	05:00	1.13	22:20	2.82	2.13	05:35	0.585	22:20	4.256	2.482	2.482	
1/27/2016	05:45	6.15	09:05	14.10	10.71	05:45	1.18	21:20	2.87	2.16	05:45	0.580	09:40	4.321	2.489	2.489	
1/28/2016	05:35	6.17	09:05	14.23	10.75	05:30	1.16	22:20	2.77	2.14	05:30	0.573	09:00	4.153	2.469	2.469	
1/29/2016	05:35	6.26	09:15	14.10	10.63	05:40	1.21	08:50	2.73	2.12	05:40	0.611	08:50	4.216	2.395	2.395	
1/30/2016	06:20	6.22	11:35	14.30	10.74	05:35	1.18	11:30	2.70	2.14	06:15	0.595	11:30	4.182	2.467	2.467	
1/31/2016	06:40	6.19	11:50	14.33	11.10	07:05	1.16	22:25	2.84	2.21	06:55	0.583	22:25	4.354	2.706	2.706	
2/1/2016	05:40	6.16	08:55	14.23	10.91	05:35	1.17	21:45	2.75	2.16	05:35	0.575	21:45	4.253	2.547	2.547	
2/2/2016	05:30	6.18	09:10	14.19	10.78	05:50	1.16	22:15	2.80	2.15	05:50	0.579	22:15	4.300	2.496	2.496	
2/3/2016	05:35	6.23	21:55	14.21	10.85	04:55	1.18	21:10	2.77	2.14	04:55	0.593	22:00	4.306	2.509	2.509	
2/4/2016	05:45	6.31	09:15	14.33	10.81	06:05	1.12	22:30	2.84	2.16	05:45	0.589	09:15	4.358	2.517	2.517	
2/5/2016	05:30	6.21	09:10	14.06	10.61	05:50	1.17	09:05	2.75	2.18	05:50	0.603	09:05	4.265	2.448	2.448	
2/6/2016	06:25	6.18	11:00	14.05	10.70	06:50	1.18	12:00	2.81	2.20	06:20	0.589	12:00	4.322	2.530	2.530	
2/7/2016	06:25	6.19	11:30	14.33	11.03	06:10	1.16	13:20	2.84	2.24	06:10	0.578	11:40	4.499	2.704	2.704	
2/8/2016	05:35	6.33	09:00	14.22	10.85	04:50	1.15	23:00	2.78	2.19	04:50	0.599	09:20	4.344	2.558	2.558	
2/9/2016	05:35	6.19	09:20	14.26	10.77	05:40	1.14	21:00	2.81	2.15	05:40	0.566	09:20	4.374	2.489	2.489	
2/10/2016	05:25	6.34	09:00	14.38	10.86	06:05	1.17	23:10	2.78	2.14	06:05	0.613	09:30	4.247	2.496	2.496	
2/11/2016	05:30	6.37	08:55	14.35	10.71	05:25	1.19	08:50	2.77	2.12	05:25	0.618	08:50	4.393	2.419	2.419	
2/12/2016	05:25	6.44	09:40	13.64	10.60	05:00	1.16	09:50	2.75	2.14	05:00	0.621	09:50	4.084	2.401	2.401	
2/13/2016	06:20	6.22	10:40	13.92	10.57	06:20	1.15	11:40	2.78	2.14	06:20	0.573	11:40	4.201	2.425	2.425	
2/14/2016	06:35	6.30	12:05	14.09	10.68	06:00	1.14	12:20	2.82	2.16	06:55	0.584	12:20	4.285	2.488	2.488	
2/15/2016	05:50	6.47	21:40	13.90	10.99	05:00	1.23	21:50	2.74	2.20	05:50	0.654	21:45	4.179	2.618	2.618	
2/16/2016	05:50	6.41	08:55	14.15	10.82	05:45	1.20	21:45	2.82	2.18	05:50	0.625	08:55	4.298	2.530	2.530	
2/17/2016	05:40	6.42	09:30	14.33	10.82	05:20	1.18	22:30	2.78	2.17	05:20	0.624	09:15	4.406	2.523	2.523	
2/18/2016	05:40	6.42	09:00	14.09	10.78	05:15	1.26	21:30	2.73	2.17	05:15	0.662	09:00	4.227	2.499	2.499	
2/19/2016	05:40	6.58	08:55	14.41	10.70	05:45	1.20	09:45	2.77	2.16	05:45	0.650	09:15	4.287	2.446	2.446	
2/20/2016	06:10	6.24	11:35	14.22	10.78	06:15	1.24	12:30	2.78	2.19	06:15	0.624	11:10	4.253	2.534	2.534	
2/21/2016	06:40	6.18	11:50	14.29	11.05	06:35	1.20	21:35	2.83	2.21	06:35	0.596	21:35	4.411	2.669	2.669	
2/22/2016	05:40	6.21	09:05	14.60	10.93	04:50	1.20	21:35	2.81	2.19	04:55	0.615	09:00	4.440	2.585	2.585	
2/23/2016	05:35	6.28	08:45	14.24	10.76	06:00	1.25	09:00	2.82	2.15	05:40	0.637	09:00	4.436	2.484	2.484	
2/24/2016	05:45	6.25	09:20	14.31	10.77	05:40	1.22	22:45	2.82	2.16	05:40	0.614	21:50	4.316	2.492	2.490	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			230.537
Avg	10.74	2.18	2.506

Site Commentary

Site Information

MPSite10	
Pipe Dimensions	36.63" x 36.50"
Silt Level	0.00"

Overview

Site MPSite10 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located upstream of location MPSite8. A review of balancing indicated no problems (See MPSite8 Commentary For More Details).

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.32	2.32	1.678
Minimum	3.64	1.35	0.343
Maximum	10.88	3.18	3.652
Time of Minimum	11/29/2015 5:35 AM	12/14/2015 4:30 AM	12/1/2015 4:25 AM
Time of Maximum	1/6/2016 1:45 PM	12/19/2015 11:00 AM	1/6/2016 1:45 PM

Data Quality

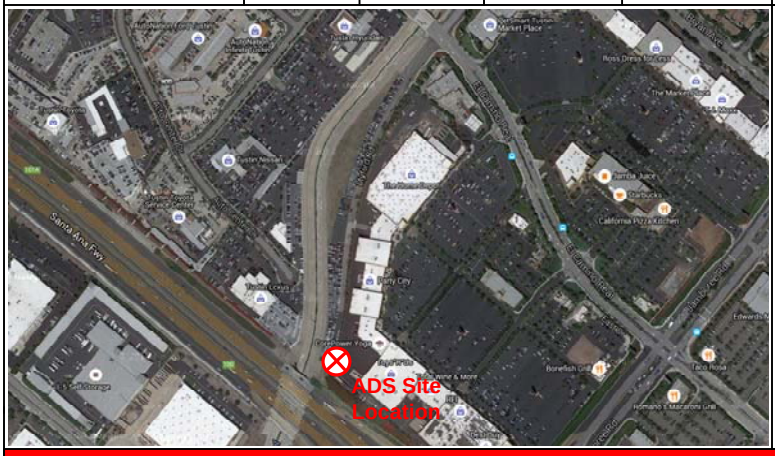
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite10	**Install Date:** 11/16/15	**Monitor Type**	Peak Doppler
Address/Location: Myford Rd (Located in parking lot behind Toys R Us)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH044S019
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	36.63 "
		Pipe Width:	36.50 "





Investigation Information:

Date/Time of Investigation:	11/16/15 @ 1600
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.00 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.25 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	30'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

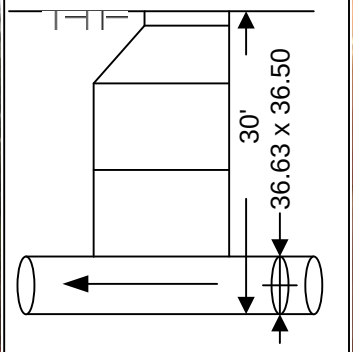
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

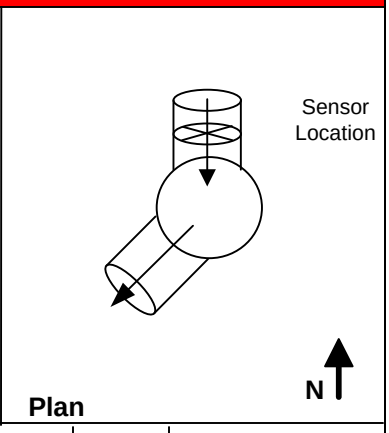
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite10

Flow Monitor

MPSite10

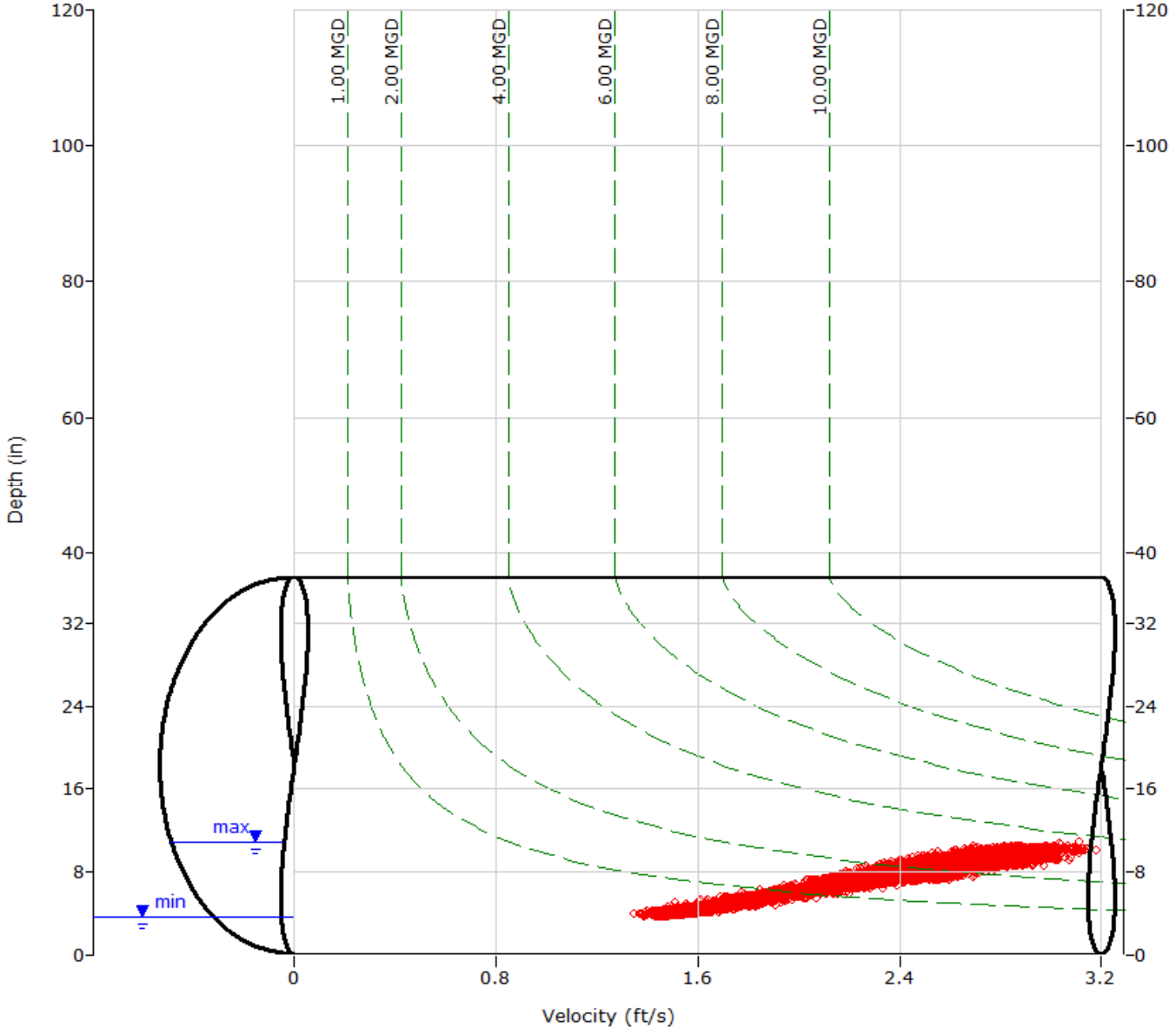
Pipe Height
36.63 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite10

Flow Monitor

MPSite10

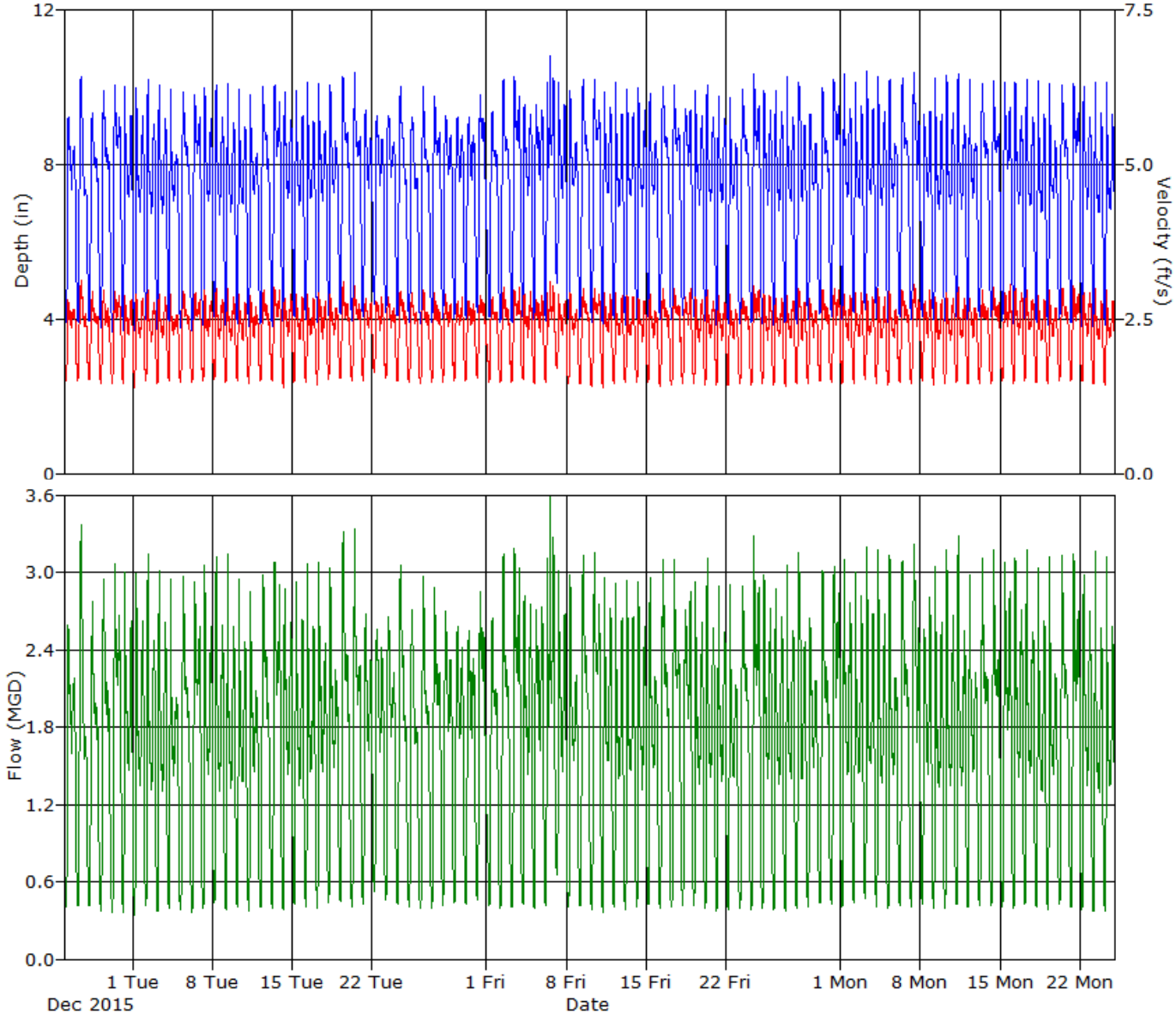
Pipe Height
36.63 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite10, Pipe Height: 36.63 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:00	3.88	08:35	9.27	7.23	04:05	1.49	08:40	2.84	2.33	05:00	0.407	08:40	2.633	1.630	1.630	
11/26/2015	05:30	3.92	11:25	10.30	7.15	05:10	1.49	11:40	3.15	2.34	05:10	0.408	11:40	3.387	1.661	1.661	
11/27/2015	05:20	3.93	12:10	9.33	7.10	04:55	1.50	11:50	3.00	2.29	04:55	0.410	11:50	2.833	1.576	1.576	
11/28/2015	05:35	3.74	11:15	9.98	7.22	05:00	1.43	11:50	3.00	2.30	05:00	0.364	11:50	3.014	1.647	1.647	
11/29/2015	05:35	3.64	10:35	10.06	7.42	04:50	1.45	10:35	3.00	2.36	05:30	0.353	10:35	3.155	1.766	1.766	
11/30/2015	04:15	3.65	07:55	10.08	7.25	04:20	1.44	07:40	2.92	2.32	04:20	0.355	07:50	3.048	1.654	1.654	
12/1/2015	04:25	3.68	07:50	10.00	7.12	04:25	1.39	08:05	2.92	2.29	04:25	0.343	07:50	2.991	1.590	1.590	
12/2/2015	04:40	3.99	08:20	10.26	7.17	04:45	1.50	08:00	3.10	2.30	04:45	0.418	08:20	3.187	1.605	1.605	
12/3/2015	04:35	3.71	07:45	10.08	7.11	03:45	1.46	08:00	2.94	2.28	04:45	0.365	07:40	3.060	1.579	1.579	
12/4/2015	04:20	3.85	08:10	9.99	7.07	04:30	1.48	08:15	3.02	2.28	04:30	0.391	08:10	3.036	1.545	1.545	
12/5/2015	05:30	3.75	11:40	10.00	7.30	05:45	1.45	10:50	2.98	2.34	05:45	0.375	11:45	3.059	1.692	1.692	
12/6/2015	05:40	3.68	11:20	9.91	7.42	05:25	1.47	12:25	3.06	2.37	05:40	0.364	11:20	2.984	1.766	1.766	
12/7/2015	04:45	3.80	08:05	9.99	7.21	04:55	1.48	07:55	3.00	2.32	04:40	0.388	07:55	3.122	1.634	1.634	
12/8/2015	04:20	4.05	07:55	10.14	7.18	04:15	1.51	07:55	3.00	2.31	04:15	0.429	07:55	3.190	1.610	1.610	
12/9/2015	04:20	3.78	08:10	10.11	7.10	03:35	1.44	08:05	3.06	2.30	04:20	0.380	08:05	3.218	1.588	1.588	
12/10/2015	04:10	3.86	07:45	9.95	7.15	04:15	1.48	08:00	2.99	2.29	04:15	0.392	08:00	3.057	1.589	1.589	
12/11/2015	04:20	3.79	08:00	9.86	7.10	04:50	1.44	07:45	2.97	2.28	04:50	0.376	07:50	2.969	1.566	1.566	
12/12/2015	05:25	3.86	10:25	10.18	7.40	05:25	1.50	11:35	2.99	2.36	05:25	0.397	10:25	3.098	1.740	1.740	
12/13/2015	05:35	3.79	11:00	10.17	7.55	05:55	1.49	11:55	3.11	2.40	05:35	0.390	11:00	3.140	1.837	1.837	
12/14/2015	04:30	3.93	08:05	9.90	7.31	04:30	1.35	21:45	2.95	2.32	04:30	0.367	08:00	2.934	1.666	1.666	
12/15/2015	04:05	4.03	07:45	9.90	7.26	03:10	1.43	08:20	2.98	2.31	04:10	0.423	07:40	2.963	1.640	1.640	
12/16/2015	04:35	3.96	08:05	10.22	7.30	04:30	1.44	08:15	2.96	2.32	04:30	0.397	08:00	3.093	1.661	1.661	
12/17/2015	04:05	3.91	08:00	10.10	7.29	03:55	1.42	08:05	2.95	2.33	03:55	0.391	08:05	3.111	1.656	1.656	
12/18/2015	04:20	4.09	08:30	10.14	7.32	03:50	1.50	07:55	2.94	2.32	04:20	0.440	07:55	3.055	1.652	1.652	
12/19/2015	05:20	4.11	10:15	10.41	7.58	05:20	1.51	11:00	3.18	2.39	05:20	0.437	11:00	3.341	1.819	1.819	
12/20/2015	05:35	3.93	10:50	10.39	7.46	05:05	1.47	10:50	3.07	2.36	05:05	0.401	10:50	3.374	1.770	1.770	
12/21/2015	04:45	4.03	10:45	9.42	7.32	04:10	1.48	21:40	2.98	2.34	04:10	0.419	10:40	2.722	1.671	1.671	
12/22/2015	04:30	4.38	10:40	9.27	7.43	04:35	1.62	20:35	2.93	2.37	04:35	0.518	10:45	2.580	1.712	1.712	
12/23/2015	04:55	4.16	08:45	9.30	7.41	04:50	1.54	09:15	2.93	2.35	04:50	0.455	09:15	2.737	1.706	1.706	
12/24/2015	04:15	4.06	11:10	10.11	7.45	05:15	1.48	11:15	2.97	2.38	05:20	0.426	11:10	3.122	1.756	1.756	
12/25/2015	05:40	3.91	11:25	9.24	7.02	05:05	1.47	11:10	2.94	2.30	05:30	0.408	11:35	2.729	1.558	1.558	
12/26/2015	05:35	3.88	11:10	10.00	7.17	06:25	1.44	13:10	3.01	2.29	04:40	0.394	11:15	3.035	1.622	1.622	
12/27/2015	05:25	3.87	11:00	9.80	7.30	05:00	1.45	11:20	2.94	2.31	05:25	0.392	11:00	2.958	1.673	1.673	
12/28/2015	04:30	4.00	10:50	9.26	7.35	04:30	1.46	10:45	2.94	2.33	04:30	0.408	10:45	2.751	1.681	1.681	
12/29/2015	04:55	4.00	11:05	9.23	7.33	03:55	1.50	21:25	2.90	2.34	05:00	0.424	11:05	2.595	1.673	1.673	
12/30/2015	05:10	4.02	11:20	9.25	7.35	03:55	1.47	09:45	2.84	2.34	05:10	0.421	10:55	2.578	1.680	1.680	
12/31/2015	04:20	4.17	11:05	9.87	7.45	05:05	1.51	10:50	2.93	2.36	04:30	0.452	11:00	2.897	1.738	1.738	
1/1/2016	06:30	4.06	12:30	9.38	7.18	06:15	1.47	11:50	2.91	2.28	06:15	0.420	11:50	2.721	1.597	1.597	
1/2/2016	05:25	3.89	12:05	10.33	7.38	05:15	1.47	11:45	3.09	2.33	05:15	0.393	12:05	3.216	1.729	1.729	
1/3/2016	05:45	3.91	10:50	10.34	7.62	04:50	1.46	20:35	3.03	2.38	05:40	0.406	11:05	3.208	1.852	1.852	
1/4/2016	05:05	3.99	07:40	9.71	7.36	04:45	1.49	07:55	2.96	2.33	04:45	0.423	07:40	2.864	1.688	1.688	
1/5/2016	04:40	3.91	07:45	9.60	7.54	04:25	1.43	20:35	2.89	2.37	04:25	0.389	07:50	2.808	1.785	1.785	
1/6/2016	04:20	3.96	13:45	10.88	7.77	04:30	1.45	08:20	3.12	2.41	04:25	0.400	13:45	3.652	1.904	1.904	
1/7/2016	04:55	4.92	07:55	10.27	7.62	05:15	1.69	07:35	2.95	2.37	05:15	0.644	07:55	3.076	1.758	1.758	
1/8/2016	04:25	4.01	07:55	10.00	7.30	04:20	1.45	08:20	2.92	2.29	04:20	0.407	08:15	2.993	1.625	1.625	
1/9/2016	04:55	4.02	11:10	10.39	7.49	04:50	1.44	11:40	3.02	2.34	04:50	0.404	11:40	3.169	1.764	1.764	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:25	3.89	11:15	10.24	7.59	05:25	1.40	11:35	3.00	2.36	05:25	0.375	11:15	3.185	1.825	1.825	
1/11/2016	04:15	3.85	08:00	9.97	7.34	04:20	1.38	07:40	2.93	2.32	04:20	0.364	08:00	3.005	1.681	1.681	
1/12/2016	03:55	3.99	07:55	10.11	7.21	03:50	1.44	08:25	3.00	2.28	03:50	0.403	08:25	2.972	1.605	1.605	
1/13/2016	04:05	3.82	08:05	10.00	7.24	04:10	1.44	08:25	2.91	2.30	04:10	0.378	08:15	2.974	1.632	1.632	
1/14/2016	04:45	3.98	07:55	10.02	7.31	04:45	1.44	07:50	2.88	2.30	04:45	0.400	07:50	2.995	1.644	1.644	
1/15/2016	04:40	4.03	07:45	9.86	7.19	04:15	1.47	07:50	2.92	2.26	04:15	0.420	07:45	2.986	1.571	1.571	
1/16/2016	05:05	3.98	10:20	10.05	7.49	04:55	1.41	11:05	3.05	2.31	04:55	0.391	12:10	3.146	1.740	1.740	
1/17/2016	05:40	3.99	11:00	10.12	7.49	04:50	1.43	10:30	3.00	2.32	05:30	0.397	10:35	3.110	1.756	1.756	
1/18/2016	05:00	4.07	10:35	9.44	7.57	04:05	1.45	20:55	3.08	2.35	05:00	0.417	20:55	2.944	1.784	1.784	
1/19/2016	04:45	4.03	07:50	9.91	7.23	04:45	1.44	07:45	2.87	2.27	04:45	0.406	07:45	2.951	1.599	1.599	
1/20/2016	04:15	3.93	08:10	10.04	7.21	03:45	1.43	08:10	3.00	2.28	04:20	0.397	08:10	3.148	1.609	1.609	
1/21/2016	04:15	3.83	07:55	9.82	7.19	04:20	1.41	07:40	2.98	2.28	04:20	0.371	08:00	2.952	1.600	1.600	
1/22/2016	04:30	3.84	07:55	9.76	7.13	03:25	1.40	08:05	2.99	2.27	04:30	0.377	07:50	2.967	1.561	1.561	
1/23/2016	05:25	3.86	11:40	10.12	7.38	05:15	1.46	11:45	2.88	2.32	05:20	0.388	11:45	3.009	1.707	1.707	
1/24/2016	05:15	3.89	10:55	10.36	7.54	05:10	1.40	10:40	3.06	2.37	05:15	0.378	10:50	3.305	1.821	1.821	
1/25/2016	04:20	3.87	08:00	9.94	7.24	03:35	1.44	07:40	2.92	2.30	04:00	0.389	07:55	2.991	1.634	1.634	
1/26/2016	03:50	3.84	07:50	9.98	7.18	03:25	1.42	08:35	2.92	2.27	03:50	0.377	07:55	2.920	1.599	1.599	
1/27/2016	04:30	3.81	07:45	10.25	7.22	04:30	1.39	08:10	2.91	2.29	04:30	0.361	07:45	3.112	1.616	1.616	
1/28/2016	04:45	3.85	07:35	10.21	7.39	04:00	1.45	09:35	3.12	2.32	04:00	0.387	09:35	3.296	1.710	1.710	
1/29/2016	04:40	3.99	09:05	9.32	7.23	04:15	1.41	08:40	2.88	2.28	04:15	0.395	08:40	2.691	1.602	1.602	
1/30/2016	05:30	4.11	10:20	10.17	7.43	04:25	1.45	10:00	3.04	2.34	04:25	0.428	10:25	3.122	1.730	1.730	
1/31/2016	05:20	4.05	10:30	10.18	7.68	05:05	1.46	12:20	3.01	2.38	05:25	0.430	10:55	3.081	1.861	1.861	
2/1/2016	04:25	3.97	08:00	10.34	7.38	04:05	1.42	07:35	2.92	2.31	04:05	0.395	07:55	3.129	1.683	1.683	
2/2/2016	04:25	4.16	07:55	10.16	7.37	04:50	1.45	20:35	2.98	2.31	04:50	0.434	07:55	3.144	1.678	1.678	
2/3/2016	04:35	4.25	07:50	10.42	7.44	03:55	1.49	08:10	2.97	2.31	03:55	0.456	08:10	3.256	1.697	1.697	
2/4/2016	03:50	4.01	07:45	10.31	7.32	03:50	1.45	08:05	3.10	2.29	03:50	0.406	08:05	3.270	1.649	1.649	
2/5/2016	04:30	3.87	08:05	10.27	7.23	03:40	1.41	07:45	2.97	2.29	04:30	0.382	07:50	3.155	1.613	1.613	
2/6/2016	05:20	4.04	10:50	10.26	7.54	03:55	1.47	12:25	3.02	2.35	05:15	0.421	10:50	3.118	1.781	1.781	
2/7/2016	05:25	3.96	10:20	10.42	7.52	04:55	1.43	12:00	3.13	2.36	04:55	0.398	12:00	3.349	1.796	1.796	
2/8/2016	04:30	4.03	21:00	9.38	7.33	04:15	1.47	20:30	3.02	2.31	04:40	0.422	20:30	2.856	1.662	1.662	
2/9/2016	04:15	3.95	08:05	10.27	7.21	04:10	1.39	08:00	2.88	2.27	04:10	0.384	07:55	3.083	1.601	1.601	
2/10/2016	04:15	3.94	07:50	10.32	7.24	04:10	1.40	07:50	2.97	2.28	04:10	0.382	07:50	3.231	1.617	1.617	
2/11/2016	04:35	4.06	07:45	10.34	7.21	03:20	1.45	07:50	3.06	2.28	04:30	0.415	07:50	3.330	1.606	1.606	
2/12/2016	04:25	3.93	08:10	10.21	7.22	03:30	1.44	08:35	2.97	2.28	04:20	0.399	08:05	3.098	1.602	1.602	
2/13/2016	04:50	4.04	11:05	10.20	7.45	04:45	1.42	11:40	3.03	2.32	04:45	0.405	11:05	3.163	1.726	1.726	
2/14/2016	05:25	4.04	11:25	10.16	7.46	05:50	1.44	11:05	3.12	2.34	05:50	0.410	11:05	3.310	1.746	1.746	
2/15/2016	04:50	3.94	10:40	10.16	7.49	04:45	1.45	21:15	3.07	2.38	04:45	0.396	10:45	3.104	1.790	1.790	
2/16/2016	04:00	3.87	07:45	10.16	7.22	03:55	1.44	07:45	3.04	2.37	03:55	0.385	07:45	3.239	1.678	1.678	
2/17/2016	04:15	4.00	08:05	10.22	7.22	04:20	1.49	08:25	2.98	2.37	04:20	0.416	08:05	3.189	1.662	1.662	
2/18/2016	04:40	3.90	07:45	10.17	7.20	04:00	1.47	07:40	2.91	2.28	04:35	0.401	07:45	3.105	1.608	1.608	
2/19/2016	04:20	3.84	07:45	10.12	7.18	03:50	1.43	07:50	2.98	2.29	04:25	0.380	07:50	3.142	1.598	1.598	
2/20/2016	05:20	4.02	10:55	10.09	7.46	05:15	1.48	10:40	3.13	2.37	05:15	0.419	10:40	3.279	1.761	1.761	
2/21/2016	05:10	3.90	10:45	10.11	7.51	04:10	1.47	10:00	3.10	2.38	05:10	0.402	10:00	3.187	1.810	1.810	
2/22/2016	04:20	3.80	07:50	10.09	7.24	04:15	1.48	20:55	2.99	2.32	04:20	0.385	07:40	3.086	1.653	1.653	
2/23/2016	04:25	3.75	07:45	10.16	7.11	04:10	1.43	07:45	3.00	2.27	04:15	0.366	07:45	3.204	1.577	1.577	
2/24/2016	04:45	3.83	08:20	10.12	7.13	03:50	1.40	08:20	3.05	2.28	04:20	0.370	08:20	3.239	1.590	1.589	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			154.386
Avg	7.32	2.32	1.678

Site Commentary

Site Information

MPSite11	
Pipe Dimensions	41.00" x 41.00"
Silt Level	0.00"

Overview

Site MPSite11 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period. A reduction in flow was observed during weekends and holiday periods.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	11.92	1.69	2.475
Minimum	8.11	0.95	0.830
Maximum	15.97	2.36	4.859
Time of Minimum	1/1/2016 7:10 AM	11/27/2015 6:45 AM	1/1/2016 7:10 AM
Time of Maximum	1/6/2016 1:25 PM	2/17/2016 1:00 PM	2/17/2016 1:00 PM

Data Quality

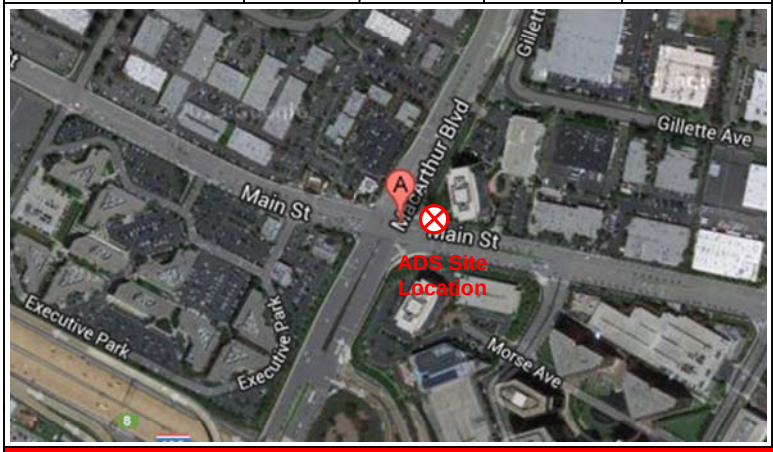
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite11	**Install Date:** 11/19/15	**Monitor Type**	Peak Doppler
Address/Location: Main St. & McArthur		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH 008S044
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	41.00 "
		Pipe Width:	41.00 "





Investigation Information:

Date/Time of Investigation:	11/19/15 @ 1745
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	13.50" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.12 fps
Silt:	1.00 Inches

Manhole Information:

Manhole Depth:	18'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

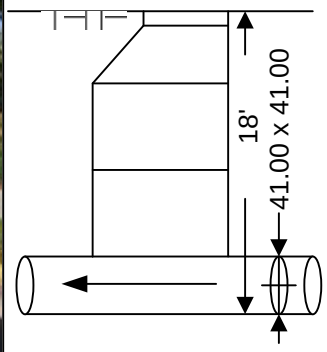
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

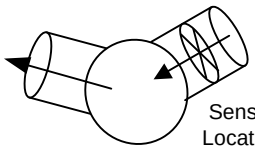
Other Information:





Cross Section





Plan

N

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

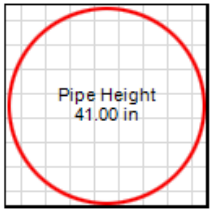
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite11

Flow Monitor

MPSite11

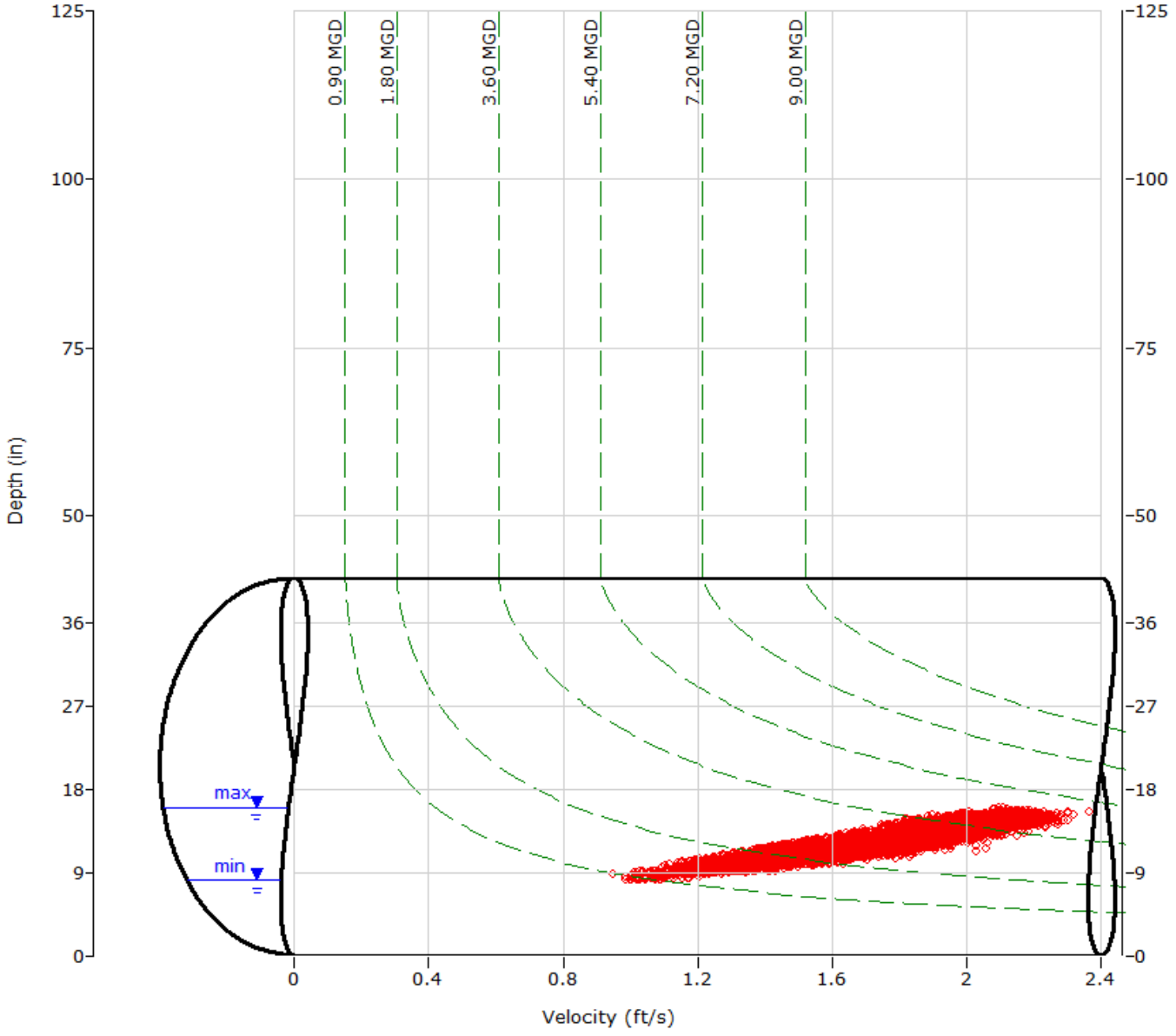


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite11

Flow Monitor

MPSite11

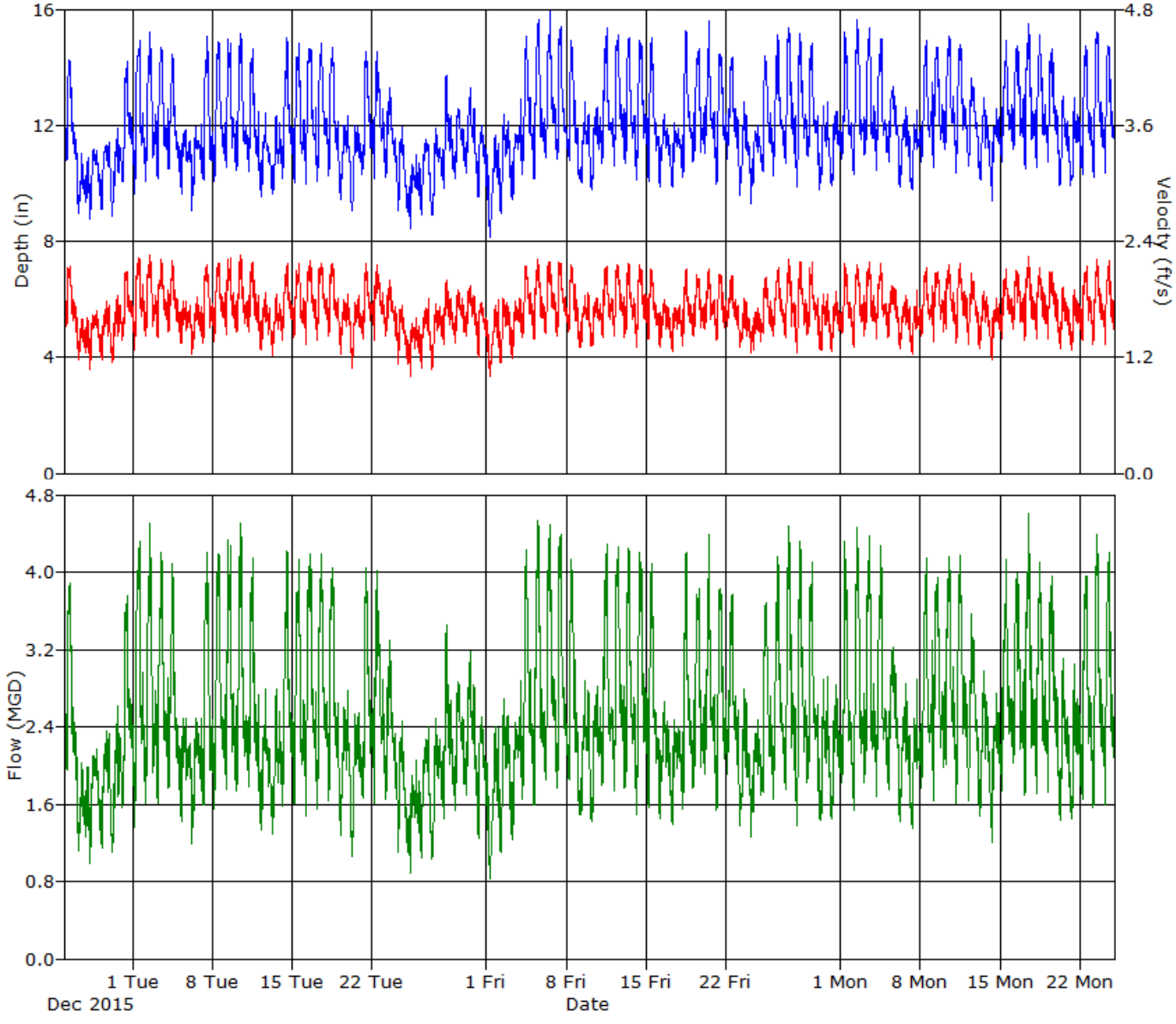
Pipe Height
41.00 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite11, Pipe Height: 41 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	06:00	10.73	11:20	14.24	12.32	05:55	1.31	08:35	2.19	1.81	05:55	1.640	12:35	3.960	2.755	2.755	
11/26/2015	07:00	8.93	02:10	11.15	10.02	06:35	1.14	02:15	1.85	1.42	07:00	1.092	02:15	2.410	1.603	1.603	
11/27/2015	06:35	8.75	21:25	11.27	10.37	06:45	0.95	18:35	1.78	1.48	06:45	0.880	21:20	2.224	1.756	1.756	
11/28/2015	07:25	9.09	17:25	11.33	10.43	07:35	1.13	17:30	1.81	1.50	07:35	1.104	17:30	2.417	1.796	1.796	
11/29/2015	04:40	8.82	16:45	11.91	10.47	04:00	1.08	16:45	2.03	1.51	04:05	1.054	16:45	2.900	1.823	1.823	
11/30/2015	03:15	10.05	13:55	14.20	12.17	02:55	1.31	10:20	2.13	1.78	02:55	1.511	13:50	3.761	2.660	2.660	
12/1/2015	04:35	9.61	15:00	15.02	12.34	04:35	1.27	13:10	2.27	1.80	04:35	1.340	15:00	4.430	2.771	2.771	
12/2/2015	04:40	10.05	12:45	15.20	12.32	04:25	1.32	12:45	2.28	1.82	04:25	1.490	12:45	4.553	2.785	2.785	
12/3/2015	06:10	10.06	13:15	14.70	12.39	05:20	1.30	13:00	2.29	1.82	06:10	1.504	13:00	4.323	2.790	2.790	
12/4/2015	04:50	10.48	12:20	14.45	12.14	03:15	1.37	12:10	2.20	1.80	03:15	1.665	12:20	4.100	2.681	2.681	
12/5/2015	06:40	9.56	16:20	11.84	11.00	06:30	1.30	14:35	1.90	1.59	06:30	1.407	16:10	2.661	2.042	2.042	
12/6/2015	05:10	9.01	12:15	12.04	10.80	05:05	1.21	15:30	1.84	1.55	05:05	1.169	12:10	2.559	1.956	1.956	
12/7/2015	06:15	10.08	12:10	15.11	12.20	03:00	1.35	14:35	2.18	1.78	06:05	1.565	12:10	4.261	2.689	2.689	
12/8/2015	04:40	9.99	11:45	14.94	12.35	03:05	1.35	11:35	2.20	1.81	04:10	1.544	11:35	4.267	2.774	2.774	
12/9/2015	04:25	10.44	09:50	15.01	12.42	04:30	1.31	13:25	2.26	1.81	04:30	1.554	09:50	4.386	2.793	2.793	
12/10/2015	03:30	10.29	12:10	15.23	12.38	03:20	1.40	12:15	2.32	1.79	03:30	1.660	12:15	4.644	2.759	2.759	
12/11/2015	05:45	10.35	13:35	14.67	12.25	04:40	1.45	10:55	2.27	1.79	05:25	1.752	13:35	4.229	2.715	2.715	
12/12/2015	06:15	9.52	15:30	12.46	11.04	04:00	1.24	15:25	1.88	1.59	06:05	1.318	15:25	2.857	2.063	2.063	
12/13/2015	06:55	9.60	13:45	12.36	10.78	06:45	1.16	13:50	1.87	1.55	06:45	1.231	13:50	2.811	1.946	1.946	
12/14/2015	03:20	10.14	13:00	15.11	12.29	03:05	1.29	13:35	2.24	1.79	03:05	1.486	13:00	4.411	2.716	2.716	
12/15/2015	04:15	10.00	14:45	14.82	12.33	03:55	1.34	13:00	2.23	1.79	03:55	1.536	14:35	4.160	2.731	2.731	
12/16/2015	04:45	9.92	12:55	14.68	12.60	04:30	1.24	12:50	2.22	1.83	04:30	1.392	12:50	4.212	2.890	2.890	
12/17/2015	03:45	10.02	13:10	14.84	12.47	03:40	1.25	13:45	2.26	1.82	03:40	1.406	13:05	4.244	2.822	2.822	
12/18/2015	05:05	10.18	11:30	14.69	12.39	05:00	1.41	14:10	2.24	1.81	05:00	1.622	11:15	4.086	2.784	2.784	
12/19/2015	05:55	9.45	20:15	12.32	11.05	06:00	1.17	20:15	1.88	1.59	06:00	1.214	20:15	2.819	2.071	2.071	
12/20/2015	05:45	8.99	10:40	12.02	10.83	05:45	1.01	19:05	1.89	1.54	05:45	0.972	19:05	2.628	1.954	1.954	
12/21/2015	02:50	10.30	11:45	14.58	12.20	04:05	1.27	11:15	2.19	1.77	04:05	1.521	12:05	4.094	2.671	2.671	
12/22/2015	04:25	10.15	10:15	14.57	12.38	04:35	1.34	10:25	2.23	1.81	04:35	1.574	10:25	4.175	2.766	2.766	
12/23/2015	05:00	10.19	12:00	13.34	11.71	04:10	1.38	13:50	2.02	1.70	05:05	1.613	11:55	3.335	2.384	2.384	
12/24/2015	07:25	9.04	14:45	12.01	10.58	07:10	1.13	02:00	1.83	1.49	07:10	1.102	15:55	2.500	1.824	1.824	
12/25/2015	07:45	8.40	21:05	11.00	9.80	07:35	0.99	21:05	1.64	1.34	07:35	0.866	21:05	2.102	1.473	1.473	
12/26/2015	07:05	8.90	17:00	11.52	10.55	06:45	1.03	21:50	2.03	1.49	06:45	1.000	21:50	2.684	1.822	1.822	
12/27/2015	08:15	8.90	14:00	11.95	10.47	04:45	1.02	19:50	1.76	1.47	04:45	0.979	14:00	2.509	1.782	1.782	
12/28/2015	06:05	9.80	11:35	13.71	11.50	06:15	1.26	11:35	2.13	1.66	06:15	1.391	11:35	3.693	2.274	2.274	
12/29/2015	06:10	10.14	13:00	12.58	11.48	06:05	1.28	11:00	1.94	1.65	06:05	1.465	15:20	2.950	2.264	2.264	
12/30/2015	04:40	10.30	13:50	13.30	11.70	04:35	1.37	13:40	2.02	1.69	04:35	1.608	13:50	3.345	2.375	2.375	
12/31/2015	07:00	9.51	13:30	12.00	10.95	07:00	1.09	12:05	1.78	1.56	07:00	1.139	13:20	2.552	2.001	2.001	
1/1/2016	07:10	8.11	19:25	11.68	9.97	07:00	0.99	20:30	1.84	1.39	07:10	0.830	18:20	2.504	1.573	1.573	
1/2/2016	06:30	8.92	12:25	12.39	10.93	03:40	1.07	20:20	1.91	1.54	03:40	1.040	12:30	2.720	1.978	1.978	
1/3/2016	08:00	9.42	23:05	12.03	10.93	03:40	1.10	13:00	1.85	1.55	03:40	1.183	22:55	2.580	1.985	1.985	
1/4/2016	02:50	10.32	11:55	15.10	12.51	06:30	1.32	12:15	2.18	1.78	03:00	1.608	12:15	4.315	2.765	2.765	
1/5/2016	04:00	10.16	13:50	15.63	12.66	06:20	1.34	12:55	2.23	1.79	03:25	1.543	12:55	4.578	2.856	2.856	
1/6/2016	04:45	10.76	13:25	15.97	12.98	05:15	1.36	12:20	2.23	1.83	06:20	1.775	13:05	4.545	2.993	2.993	
1/7/2016	04:00	10.79	12:20	15.40	12.82	04:05	1.34	08:50	2.22	1.81	04:05	1.668	12:15	4.426	2.927	2.927	
1/8/2016	05:45	10.75	10:20	14.94	12.52	04:00	1.42	10:50	2.20	1.79	05:45	1.789	09:55	4.170	2.792	2.792	
1/9/2016	08:30	10.01	15:45	12.84	11.23	06:30	1.21	14:45	1.93	1.59	06:25	1.376	15:45	2.921	2.112	2.112	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:45	9.78	16:25	12.65	11.30	06:35	1.14	10:10	1.88	1.59	06:35	1.284	16:25	2.861	2.138	2.138	
1/11/2016	02:30	10.68	13:00	15.46	12.62	01:55	1.38	12:40	2.22	1.78	05:45	1.743	12:50	4.433	2.801	2.801	
1/12/2016	04:55	10.54	12:30	15.24	12.79	05:10	1.27	12:25	2.18	1.81	05:10	1.568	12:25	4.357	2.902	2.902	
1/13/2016	04:35	10.64	12:40	15.00	12.63	02:50	1.35	10:10	2.21	1.78	02:50	1.684	12:35	4.284	2.801	2.801	
1/14/2016	03:40	10.05	11:00	14.99	12.58	03:40	1.28	10:55	2.25	1.78	03:40	1.443	10:55	4.383	2.800	2.800	
1/15/2016	04:50	10.03	11:15	15.07	12.48	05:10	1.31	11:05	2.17	1.75	04:50	1.541	11:05	4.279	2.714	2.714	
1/16/2016	04:25	9.85	13:55	12.39	11.39	04:35	1.21	15:20	1.83	1.59	04:35	1.340	15:10	2.716	2.145	2.145	
1/17/2016	06:30	9.82	12:00	12.14	11.16	07:05	1.15	13:50	1.80	1.55	07:05	1.291	12:00	2.518	2.040	2.040	
1/18/2016	05:15	10.15	11:10	15.30	12.36	04:20	1.28	12:30	2.20	1.71	05:10	1.487	12:30	4.331	2.627	2.627	
1/19/2016	02:25	10.72	14:45	14.68	12.37	02:45	1.36	13:45	2.08	1.72	02:45	1.705	14:55	3.868	2.633	2.633	
1/20/2016	04:30	10.91	12:25	15.68	12.63	00:10	1.41	12:25	2.14	1.77	03:35	1.854	12:25	4.471	2.783	2.783	
1/21/2016	04:30	9.78	13:05	14.46	12.39	04:30	1.34	13:05	2.05	1.75	04:30	1.448	13:05	3.836	2.686	2.686	
1/22/2016	01:40	10.80	12:55	14.35	12.44	01:00	1.40	12:55	2.04	1.75	23:25	1.852	12:55	3.775	2.683	2.683	
1/23/2016	04:30	9.56	14:30	12.83	11.23	08:55	1.19	14:35	1.84	1.55	04:30	1.357	14:35	2.910	2.060	2.060	
1/24/2016	04:55	9.29	20:00	12.06	10.99	09:15	1.16	20:00	1.73	1.53	04:55	1.253	20:00	2.513	1.964	1.964	
1/25/2016	05:55	10.33	09:10	14.44	12.25	00:20	1.28	13:10	2.03	1.71	00:20	1.606	09:10	3.708	2.586	2.586	
1/26/2016	03:45	10.17	13:10	15.17	12.60	00:45	1.31	13:30	2.23	1.77	03:45	1.615	13:30	4.343	2.785	2.785	
1/27/2016	04:20	10.66	10:40	15.39	12.74	04:25	1.30	12:45	2.30	1.78	04:25	1.598	12:45	4.673	2.849	2.849	
1/28/2016	04:30	9.87	11:40	15.24	12.50	04:35	1.21	11:25	2.20	1.74	04:35	1.334	11:25	4.356	2.731	2.731	
1/29/2016	05:05	10.90	12:50	14.89	12.59	02:10	1.38	12:15	2.20	1.77	02:40	1.783	12:15	4.138	2.780	2.780	
1/30/2016	05:05	9.77	21:10	12.83	11.47	06:50	1.19	11:55	1.91	1.60	04:45	1.358	21:15	2.940	2.185	2.185	
1/31/2016	04:50	9.92	16:25	12.48	11.27	04:05	1.21	16:00	2.00	1.56	04:05	1.378	16:00	3.019	2.083	2.083	
2/1/2016	01:45	10.82	09:55	15.21	12.49	06:35	1.42	10:15	2.22	1.74	02:05	1.786	10:15	4.375	2.703	2.703	
2/2/2016	04:25	10.31	11:50	15.65	12.67	04:35	1.25	12:05	2.19	1.77	04:35	1.466	12:05	4.542	2.815	2.815	
2/3/2016	06:00	10.96	12:50	15.36	12.81	02:10	1.37	12:30	2.21	1.79	02:10	1.769	12:50	4.400	2.891	2.891	
2/4/2016	03:30	10.41	15:00	15.15	12.70	03:15	1.34	13:35	2.20	1.79	03:15	1.638	13:35	4.300	2.835	2.835	
2/5/2016	06:40	10.72	15:35	13.36	12.14	02:30	1.36	19:50	2.00	1.71	06:35	1.745	13:15	3.298	2.530	2.530	
2/6/2016	05:55	9.84	18:25	12.67	11.33	05:55	1.23	18:15	1.93	1.58	05:55	1.348	18:15	2.960	2.120	2.120	
2/7/2016	08:30	9.76	16:50	12.52	11.10	04:50	1.18	16:30	2.06	1.52	08:20	1.294	16:30	3.056	1.991	1.991	
2/8/2016	03:20	10.73	13:10	15.05	12.54	03:05	1.37	12:35	2.23	1.76	03:05	1.709	13:15	4.289	2.746	2.746	
2/9/2016	04:15	10.53	12:55	14.76	12.75	04:05	1.29	07:55	2.12	1.81	04:05	1.558	13:05	4.023	2.879	2.879	
2/10/2016	03:15	11.16	14:00	15.07	12.92	02:15	1.44	13:10	2.21	1.82	02:15	1.945	13:10	4.278	2.942	2.942	
2/11/2016	03:40	10.29	11:30	14.81	12.72	03:35	1.31	12:40	2.30	1.78	03:35	1.535	12:40	4.345	2.840	2.840	
2/12/2016	04:45	10.57	11:50	13.64	12.19	05:35	1.25	11:45	2.12	1.73	05:35	1.533	11:45	3.653	2.573	2.573	
2/13/2016	07:00	10.06	15:10	13.00	11.47	06:15	1.28	13:35	1.93	1.61	04:35	1.467	13:35	3.057	2.198	2.198	
2/14/2016	06:45	9.38	16:20	12.58	11.27	05:15	1.11	16:20	1.86	1.54	06:45	1.169	16:20	2.864	2.058	2.058	
2/15/2016	02:45	10.72	13:40	14.96	12.60	03:20	1.31	13:40	2.15	1.77	03:20	1.639	13:40	4.199	2.769	2.769	
2/16/2016	04:40	11.14	12:00	14.76	12.84	19:25	1.46	12:10	2.14	1.80	04:05	2.004	12:10	4.086	2.892	2.892	
2/17/2016	04:35	10.48	12:55	15.55	12.89	04:20	1.33	13:00	2.36	1.81	04:20	1.648	13:00	4.859	2.951	2.951	
2/18/2016	04:30	10.50	12:15	15.16	12.77	04:20	1.34	11:35	2.15	1.80	04:30	1.619	12:20	4.200	2.871	2.871	
2/19/2016	04:45	10.61	13:00	14.66	12.68	04:15	1.38	14:40	2.14	1.79	04:40	1.685	12:50	3.970	2.825	2.825	
2/20/2016	05:45	9.91	12:30	13.01	11.53	06:35	1.20	12:25	1.94	1.62	06:35	1.335	12:25	3.127	2.235	2.235	
2/21/2016	04:00	9.91	12:35	12.96	11.34	07:45	1.23	12:35	2.05	1.59	07:45	1.404	12:35	3.292	2.140	2.140	
2/22/2016	05:55	10.29	13:25	14.78	12.44	06:20	1.34	13:55	2.20	1.76	06:20	1.598	13:55	4.027	2.725	2.725	
2/23/2016	04:45	10.15	12:05	15.23	12.74	03:45	1.23	11:40	2.27	1.79	03:45	1.437	11:40	4.456	2.878	2.878	
2/24/2016	05:10	10.35	10:50	14.75	12.60	04:50	1.22	12:30	2.27	1.78	04:50	1.456	12:30	4.330	2.792	2.790	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			227.714
Avg	11.92	1.69	2.475

Site Commentary

Site Information

MPSite12	
Pipe Dimensions	22.50" x 22.50"
Silt Level	0.00"

Overview

Site MPSite12 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	8.43	2.64	1.714
Minimum	4.15	1.52	0.367
Maximum	13.06	3.33	3.547
Time of Minimum	1/23/2016 6:50 AM	1/17/2016 5:40 AM	1/23/2016 6:45 AM
Time of Maximum	11/26/2015 1:35 PM	2/12/2016 1:20 PM	11/26/2015 1:10 PM

Data Quality

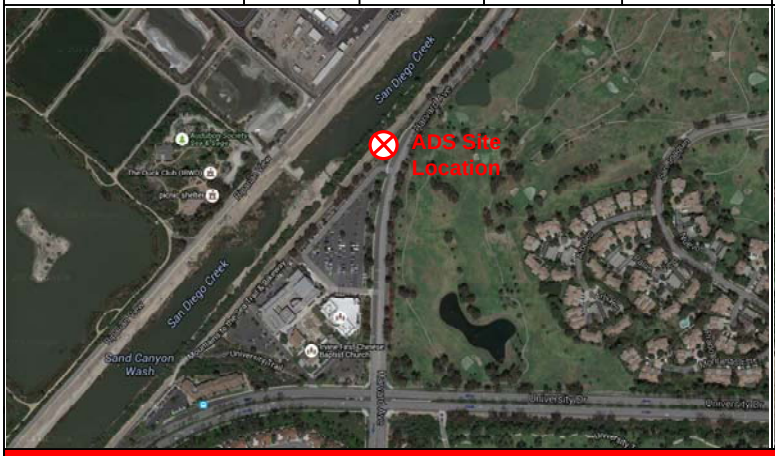
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite12	**Install Date:** 11/17/15	**Monitor Type**	Peak Doppler
Address/Location: Harvard (Located off the bike path)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH059S019
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	22.50 "
		Pipe Width:	22.50 "





Investigation Information:

Date/Time of Investigation:	11/17/15 @ 1500
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.48 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	5'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

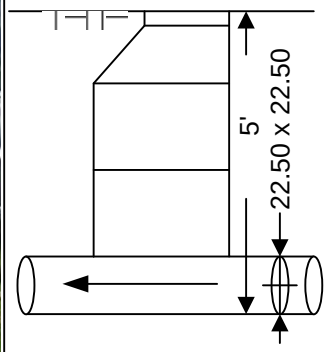
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

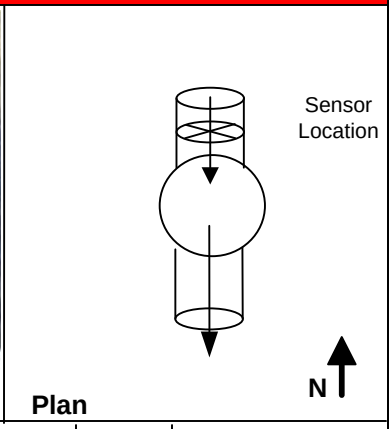
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite12

Flow Monitor

MPSite12

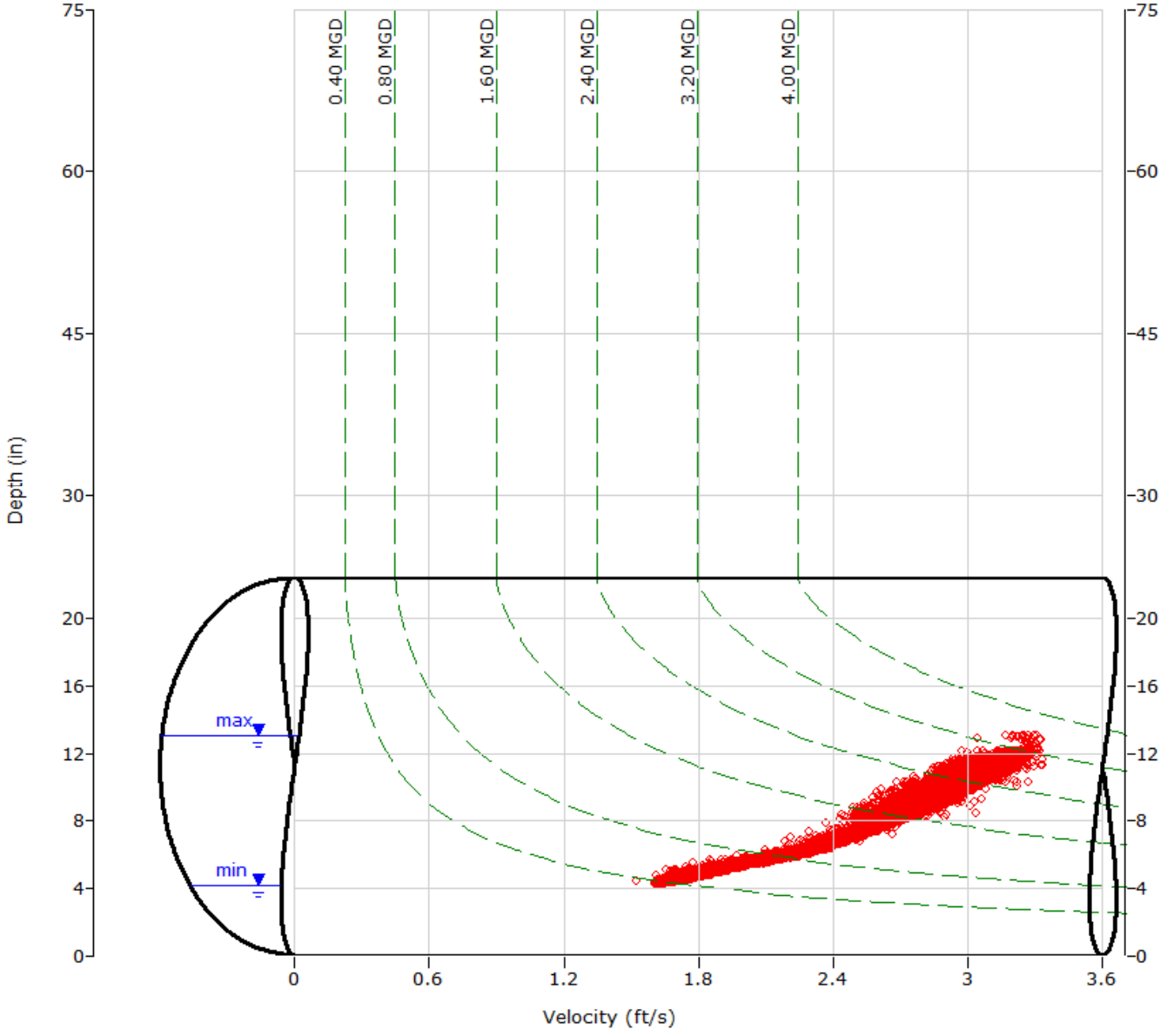
Pipe Height
22.50 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



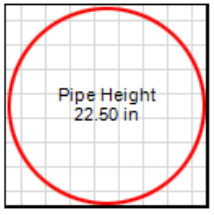
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite12

Flow Monitor

MPSite12

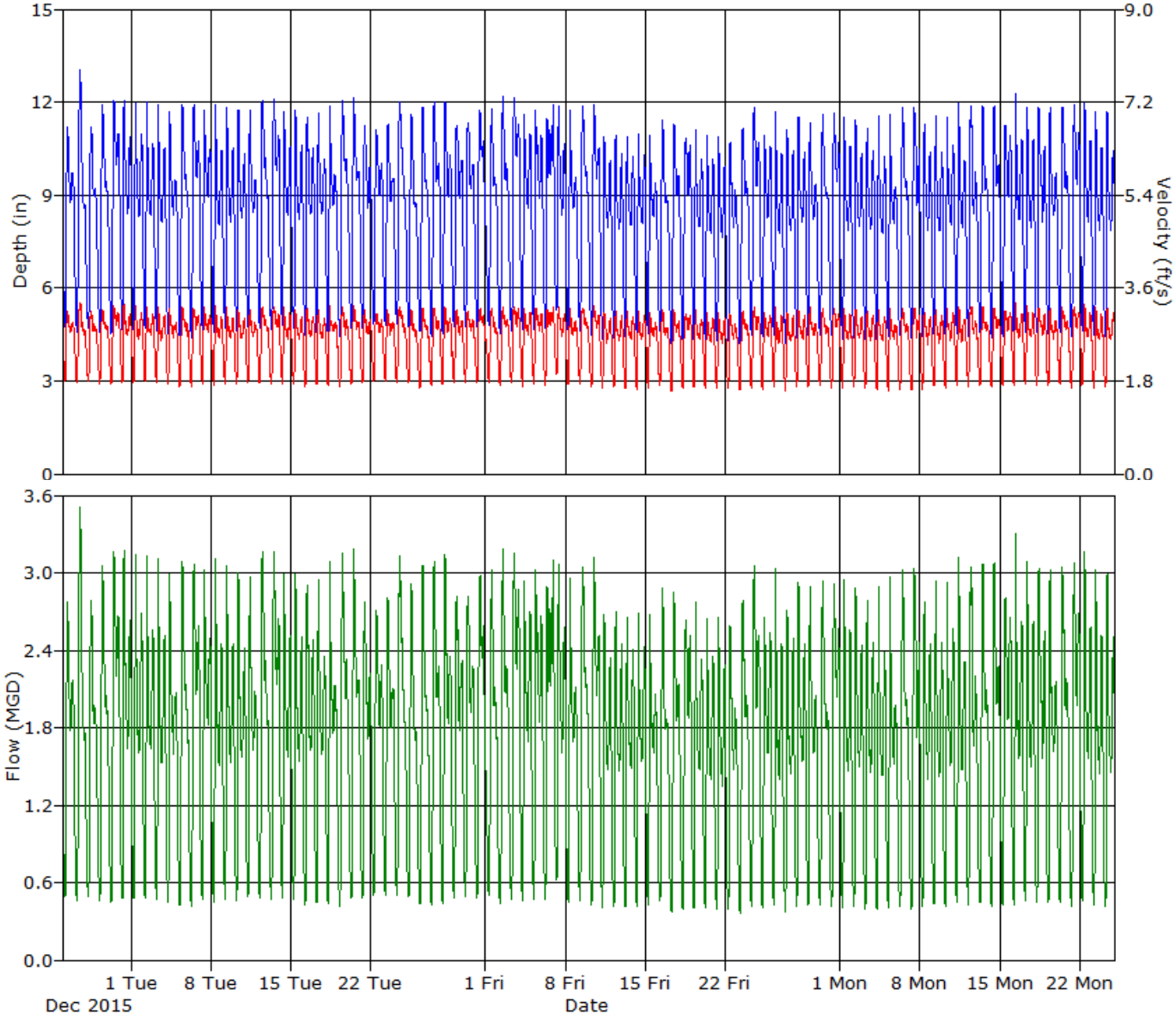


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite12, Pipe Height: 22.5 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:55	4.77	10:45	11.21	8.46	05:50	1.79	10:20	3.15	2.66	05:50	0.494	10:55	2.787	1.715	1.715	
11/26/2015	06:25	4.58	13:35	13.06	8.65	05:40	1.75	12:35	3.33	2.65	06:30	0.458	13:10	3.547	1.806	1.806	
11/27/2015	06:20	4.71	12:45	11.21	8.21	06:10	1.79	11:40	3.16	2.61	06:10	0.486	12:15	2.781	1.630	1.630	
11/28/2015	06:30	4.56	12:45	11.93	8.41	06:20	1.75	12:15	3.23	2.64	06:35	0.455	12:15	3.078	1.714	1.714	
11/29/2015	06:35	4.53	12:25	12.07	8.86	06:50	1.75	12:15	3.27	2.69	06:40	0.449	12:15	3.182	1.892	1.892	
11/30/2015	06:05	4.67	09:35	12.04	8.67	05:55	1.77	09:15	3.28	2.68	06:00	0.474	09:40	3.179	1.797	1.797	
12/1/2015	05:55	4.66	09:25	12.00	8.59	05:40	1.77	09:25	3.29	2.68	05:40	0.472	09:25	3.182	1.772	1.772	
12/2/2015	05:50	4.70	09:25	12.03	8.56	05:45	1.78	09:40	3.26	2.68	05:45	0.482	09:40	3.144	1.763	1.763	
12/3/2015	06:05	4.64	09:25	11.96	8.41	04:35	1.74	09:10	3.24	2.65	06:05	0.471	09:25	3.117	1.700	1.700	
12/4/2015	05:50	4.55	09:25	11.73	8.33	05:45	1.74	09:10	3.22	2.64	05:45	0.448	09:30	3.004	1.671	1.671	
12/5/2015	06:40	4.47	12:05	11.91	8.53	06:15	1.68	11:40	3.25	2.65	06:15	0.426	11:40	3.096	1.756	1.756	
12/6/2015	06:45	4.39	12:25	11.94	8.72	06:25	1.67	11:20	3.33	2.67	06:35	0.413	11:20	3.088	1.835	1.835	
12/7/2015	06:00	4.66	09:35	11.76	8.76	05:35	1.74	09:15	3.25	2.70	05:45	0.468	09:40	3.024	1.830	1.830	
12/8/2015	06:05	4.58	09:50	11.93	8.40	06:10	1.72	09:35	3.25	2.64	06:05	0.448	09:40	3.119	1.695	1.695	
12/9/2015	05:45	4.70	09:30	11.82	8.45	05:40	1.74	09:25	3.23	2.63	05:45	0.471	09:25	3.067	1.700	1.700	
12/10/2015	05:35	4.62	09:25	11.81	8.40	05:30	1.74	09:20	3.20	2.63	05:30	0.461	09:25	3.020	1.684	1.684	
12/11/2015	05:30	4.76	09:40	11.73	8.36	05:25	1.78	09:20	3.21	2.64	05:25	0.489	09:20	2.993	1.670	1.670	
12/12/2015	06:40	4.70	12:25	12.09	8.66	05:10	1.68	11:40	3.26	2.66	06:35	0.477	11:40	3.175	1.800	1.800	
12/13/2015	06:45	4.67	12:05	12.13	8.86	05:20	1.72	12:00	3.26	2.67	06:55	0.465	12:00	3.179	1.874	1.874	
12/14/2015	05:45	4.78	09:30	11.70	8.55	05:45	1.75	09:05	3.26	2.64	05:45	0.485	09:30	3.022	1.737	1.737	
12/15/2015	05:45	4.68	09:30	11.78	8.39	05:45	1.75	08:30	3.22	2.63	05:45	0.472	09:30	3.010	1.682	1.682	
12/16/2015	05:45	4.50	09:35	11.52	8.52	05:45	1.69	09:15	3.20	2.65	05:45	0.428	09:20	2.911	1.737	1.737	
12/17/2015	05:50	4.55	09:40	11.63	8.39	05:40	1.73	09:15	3.27	2.64	05:45	0.449	09:35	2.976	1.688	1.688	
12/18/2015	05:55	4.54	09:30	11.88	8.41	05:45	1.70	09:25	3.27	2.64	05:45	0.437	09:30	3.125	1.699	1.699	
12/19/2015	06:45	4.42	12:25	12.06	8.65	06:30	1.66	12:15	3.26	2.63	06:30	0.413	12:15	3.160	1.792	1.792	
12/20/2015	07:00	4.72	12:10	12.15	8.66	06:05	1.73	12:15	3.28	2.66	06:50	0.475	12:15	3.226	1.801	1.801	
12/21/2015	06:00	4.72	10:45	11.24	8.49	04:15	1.75	10:10	3.17	2.64	06:05	0.478	10:35	2.773	1.715	1.715	
12/22/2015	05:40	4.84	11:00	11.10	8.61	05:25	1.77	10:25	3.17	2.67	05:25	0.503	10:25	2.767	1.763	1.763	
12/23/2015	06:05	4.78	11:15	11.29	8.53	05:50	1.80	10:00	3.20	2.66	05:55	0.502	11:15	2.836	1.737	1.737	
12/24/2015	06:15	4.84	12:30	12.00	8.78	05:55	1.77	12:40	3.25	2.68	05:55	0.501	12:40	3.135	1.838	1.838	
12/25/2015	07:10	4.77	13:00	11.61	8.31	06:40	1.71	13:05	3.20	2.61	06:40	0.475	13:05	2.959	1.656	1.656	
12/26/2015	06:25	4.59	12:50	11.84	8.37	06:20	1.66	13:25	3.31	2.59	06:20	0.434	13:25	3.128	1.684	1.684	
12/27/2015	06:45	4.43	12:15	11.99	8.56	06:25	1.71	11:55	3.24	2.64	06:45	0.426	12:45	3.103	1.771	1.771	
12/28/2015	06:25	4.52	11:25	12.04	8.60	06:35	1.72	11:15	3.25	2.66	06:35	0.442	11:20	3.154	1.782	1.782	
12/29/2015	06:10	4.73	12:15	11.26	8.63	06:05	1.77	11:35	3.20	2.65	06:05	0.484	11:35	2.850	1.765	1.765	
12/30/2015	05:50	4.76	11:15	11.34	8.64	05:55	1.78	11:00	3.17	2.67	05:50	0.491	11:55	2.827	1.780	1.780	
12/31/2015	06:45	4.74	12:10	11.76	8.81	06:50	1.76	12:50	3.22	2.69	06:50	0.482	11:55	2.998	1.859	1.859	
1/1/2016	07:25	4.81	13:20	11.78	8.37	07:25	1.76	13:20	3.21	2.62	07:25	0.492	13:20	3.036	1.685	1.685	
1/2/2016	06:45	4.54	13:05	12.17	8.58	06:45	1.71	13:05	3.27	2.66	06:45	0.440	13:05	3.217	1.787	1.787	
1/3/2016	06:50	4.63	12:15	12.17	9.04	06:40	1.76	21:20	3.32	2.72	06:45	0.466	12:10	3.178	1.960	1.960	
1/4/2016	06:00	4.67	09:35	11.60	8.69	06:05	1.67	10:00	3.29	2.68	06:05	0.446	09:35	2.935	1.800	1.800	
1/5/2016	05:50	4.65	09:40	11.75	8.86	05:25	1.74	10:25	3.26	2.71	05:45	0.465	09:40	3.032	1.878	1.878	
1/6/2016	05:55	4.70	22:35	11.93	9.13	05:50	1.72	22:05	3.27	2.75	05:50	0.465	22:05	3.120	1.984	1.984	
1/7/2016	05:05	5.30	09:30	11.88	8.77	05:25	1.91	09:20	3.23	2.73	04:55	0.618	09:20	3.078	1.833	1.833	
1/8/2016	05:50	4.57	09:35	11.73	8.39	05:50	1.74	09:55	3.29	2.65	05:50	0.451	09:30	3.014	1.693	1.693	
1/9/2016	06:35	4.62	12:45	11.86	8.60	06:55	1.74	11:25	3.24	2.67	06:40	0.462	12:40	3.057	1.789	1.789	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	06:35	4.48	12:30	11.90	8.64	06:55	1.68	12:20	3.26	2.66	06:55	0.426	12:20	3.123	1.811	1.811	
1/11/2016	05:55	4.35	09:30	10.92	8.07	06:00	1.66	09:35	3.13	2.59	05:55	0.401	09:30	2.681	1.575	1.575	
1/12/2016	05:40	4.41	09:25	10.96	8.04	05:15	1.68	09:40	3.16	2.59	05:40	0.417	09:40	2.704	1.567	1.567	
1/13/2016	05:55	4.43	09:30	10.87	8.12	05:45	1.67	09:15	3.17	2.60	05:55	0.413	09:15	2.700	1.599	1.599	
1/14/2016	05:55	4.47	09:30	10.97	8.17	06:00	1.62	09:15	3.16	2.59	05:50	0.409	09:15	2.722	1.607	1.607	
1/15/2016	06:05	4.54	09:20	10.94	8.07	05:15	1.66	09:55	3.17	2.59	05:50	0.430	09:25	2.702	1.569	1.569	
1/16/2016	06:35	4.63	12:20	11.45	8.18	05:50	1.66	12:00	3.20	2.60	05:50	0.450	12:25	2.907	1.623	1.623	
1/17/2016	06:45	4.17	12:10	11.28	8.14	05:40	1.52	12:10	3.20	2.58	06:40	0.367	12:10	2.865	1.622	1.622	
1/18/2016	06:10	4.30	12:15	10.86	8.40	04:40	1.62	12:20	3.10	2.63	06:10	0.391	12:20	2.643	1.711	1.711	
1/19/2016	05:40	4.34	09:30	11.11	8.04	03:50	1.66	09:30	3.18	2.59	05:40	0.405	09:30	2.792	1.569	1.569	
1/20/2016	06:00	4.33	09:30	10.94	7.99	05:55	1.67	09:20	3.16	2.57	05:55	0.401	09:20	2.719	1.545	1.545	
1/21/2016	05:55	4.32	09:35	10.87	7.90	05:40	1.66	09:35	3.13	2.58	05:50	0.398	09:35	2.672	1.526	1.526	
1/22/2016	05:55	4.29	09:40	10.70	7.90	05:55	1.66	09:30	3.12	2.58	05:55	0.393	09:30	2.589	1.519	1.519	
1/23/2016	06:50	4.15	12:25	11.17	8.12	06:20	1.62	12:25	3.16	2.58	06:45	0.367	12:25	2.793	1.614	1.614	
1/24/2016	06:50	4.50	12:35	11.81	8.63	06:50	1.65	11:55	3.23	2.64	06:50	0.419	12:25	3.060	1.793	1.793	
1/25/2016	05:45	4.42	09:40	10.92	8.38	05:55	1.63	09:15	3.13	2.62	05:45	0.405	09:35	2.665	1.691	1.691	
1/26/2016	05:55	4.47	09:35	11.72	8.15	05:40	1.68	09:30	3.24	2.61	05:40	0.422	09:30	3.043	1.610	1.610	
1/27/2016	05:45	4.23	09:35	11.10	8.06	05:20	1.61	09:15	3.17	2.58	05:40	0.374	09:15	2.763	1.574	1.574	
1/28/2016	05:35	4.39	09:30	11.53	8.24	05:40	1.67	09:15	3.23	2.62	05:40	0.410	09:15	2.952	1.644	1.644	
1/29/2016	05:45	4.49	09:30	11.33	8.15	05:15	1.69	09:15	3.23	2.63	05:30	0.431	09:30	2.889	1.618	1.618	
1/30/2016	06:35	4.46	12:20	11.62	8.24	06:05	1.71	11:50	3.22	2.62	06:35	0.430	11:55	2.955	1.655	1.655	
1/31/2016	06:40	4.46	12:20	11.63	8.54	06:35	1.66	11:25	3.21	2.65	06:35	0.416	12:00	2.932	1.774	1.774	
2/1/2016	05:55	4.34	09:25	11.52	8.18	06:00	1.66	09:15	3.22	2.62	06:00	0.402	09:25	2.955	1.631	1.631	
2/2/2016	05:50	4.40	09:25	11.45	8.22	05:55	1.69	09:40	3.21	2.63	05:55	0.416	09:35	2.913	1.642	1.642	
2/3/2016	05:35	4.32	09:35	11.18	8.12	05:40	1.66	09:15	3.18	2.61	05:40	0.398	09:15	2.804	1.607	1.607	
2/4/2016	05:40	4.34	09:25	11.56	8.09	05:40	1.64	09:00	3.17	2.60	05:40	0.395	09:25	2.925	1.593	1.593	
2/5/2016	05:50	4.46	09:35	11.62	8.12	05:45	1.62	09:30	3.21	2.58	05:50	0.406	09:30	2.980	1.585	1.585	
2/6/2016	06:30	4.46	11:50	11.82	8.37	06:35	1.63	11:55	3.23	2.60	06:35	0.409	11:55	3.069	1.688	1.688	
2/7/2016	06:50	4.39	12:05	11.84	8.51	06:55	1.61	11:45	3.25	2.62	06:55	0.396	11:45	3.087	1.752	1.752	
2/8/2016	05:45	4.44	09:40	11.27	8.17	05:45	1.64	09:45	3.16	2.60	05:45	0.408	09:45	2.822	1.612	1.612	
2/9/2016	05:40	4.51	09:25	11.58	8.18	04:00	1.70	09:25	3.19	2.60	05:45	0.435	09:25	2.954	1.613	1.613	
2/10/2016	05:50	4.41	09:20	11.53	8.28	05:45	1.66	09:10	3.20	2.63	05:45	0.410	09:20	2.939	1.665	1.665	
2/11/2016	05:40	4.54	09:25	11.98	8.36	05:25	1.72	09:20	3.25	2.65	05:25	0.444	09:25	3.134	1.696	1.696	
2/12/2016	06:00	4.44	10:35	11.88	8.52	06:00	1.69	13:20	3.33	2.67	06:00	0.420	10:40	3.059	1.763	1.763	
2/13/2016	06:15	4.57	12:10	11.86	8.44	06:10	1.71	12:45	3.24	2.64	06:10	0.443	12:30	3.078	1.730	1.730	
2/14/2016	06:40	4.41	12:05	11.90	8.44	06:20	1.69	12:00	3.22	2.65	06:45	0.418	12:00	3.083	1.740	1.740	
2/15/2016	05:50	4.45	11:55	11.27	8.60	06:30	1.71	11:30	3.18	2.68	05:40	0.430	12:00	2.824	1.796	1.796	
2/16/2016	05:50	4.46	09:25	12.33	8.45	05:50	1.71	09:10	3.32	2.66	05:50	0.428	09:25	3.313	1.731	1.731	
2/17/2016	05:40	4.58	09:25	11.82	8.44	05:40	1.74	09:25	3.28	2.66	05:40	0.453	09:25	3.116	1.723	1.723	
2/18/2016	05:40	4.59	09:35	11.83	8.68	05:50	1.72	09:30	3.23	2.70	05:50	0.450	09:30	3.072	1.817	1.817	
2/19/2016	05:35	4.53	09:35	11.82	8.33	05:25	1.72	09:45	3.23	2.64	05:30	0.444	09:40	3.060	1.672	1.672	
2/20/2016	06:25	4.56	11:35	11.84	8.52	06:20	1.74	11:15	3.25	2.65	06:20	0.450	11:20	3.062	1.755	1.755	
2/21/2016	06:50	4.42	12:20	11.92	8.68	06:35	1.66	12:55	3.23	2.66	06:50	0.413	12:10	3.087	1.826	1.826	
2/22/2016	05:55	4.63	09:50	11.97	8.57	03:55	1.69	09:55	3.30	2.66	05:50	0.457	09:55	3.188	1.763	1.763	
2/23/2016	05:50	4.50	09:30	11.70	8.27	05:45	1.67	09:30	3.25	2.62	05:45	0.424	09:30	3.053	1.652	1.652	
2/24/2016	05:45	4.44	09:20	11.69	8.24	05:55	1.68	21:40	3.27	2.61	05:55	0.419	09:20	3.003	1.642	1.641	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			157.709
Avg	8.43	2.64	1.714

Site Commentary

Site Information

MPSite13	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site MPSite13 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows entered into backwater conditions when flows reached approximately 10 inches or greater.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	7.82	3.58	1.764
Minimum	4.28	2.07	0.439
Maximum	16.39	4.22	3.049
Time of Minimum	12/31/2015 5:20 AM	12/31/2015 5:10 AM	12/31/2015 5:10 AM
Time of Maximum	1/4/2016 9:10 AM	1/21/2016 10:20 AM	1/21/2016 9:35 AM

Data Quality

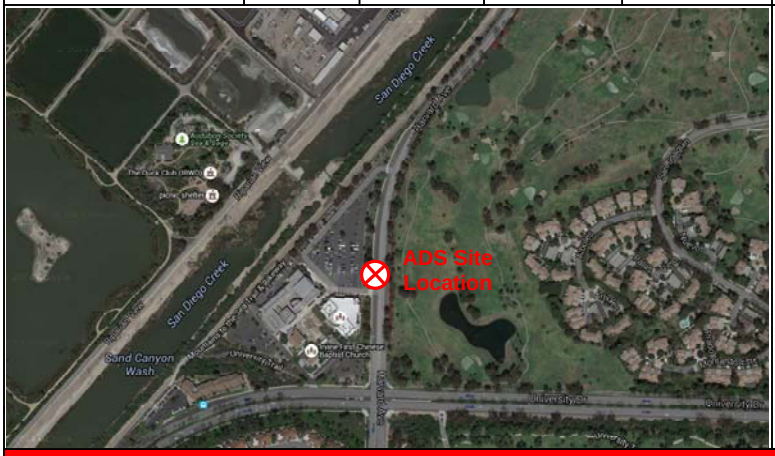
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

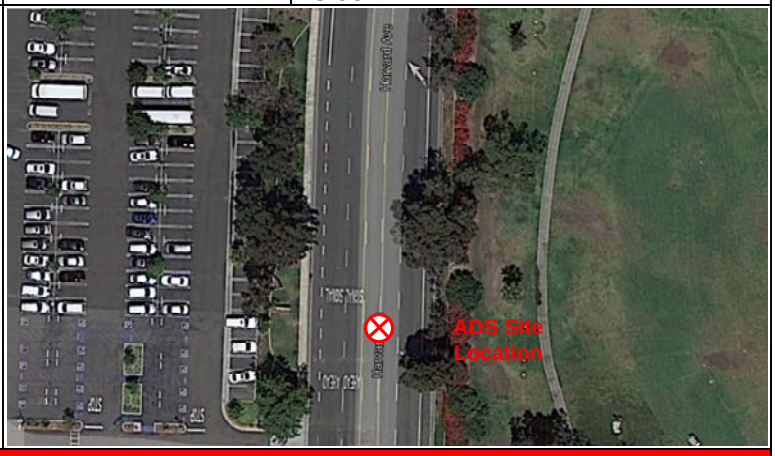
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite13	**Install Date:** 11/17/15	**Monitor Type**	Peak Doppler
Address/Location: 18700 Harvard Ave		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH059S092
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	11/17/15 @ 1220
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	8.75 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	4.48 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

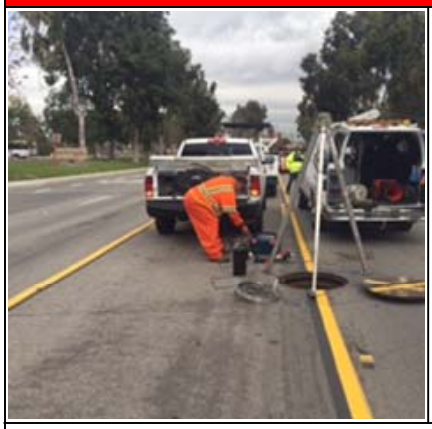
Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

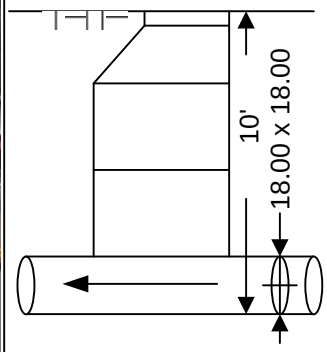
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

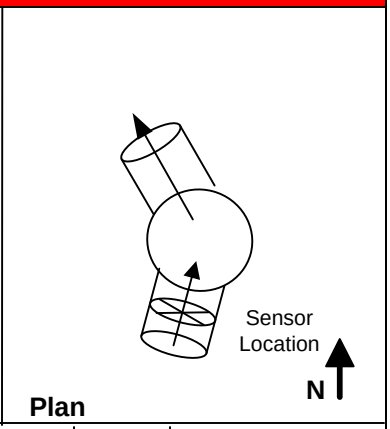
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

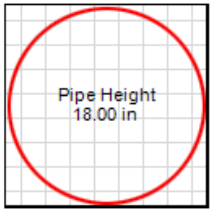
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite13

Flow Monitor

MPSite13

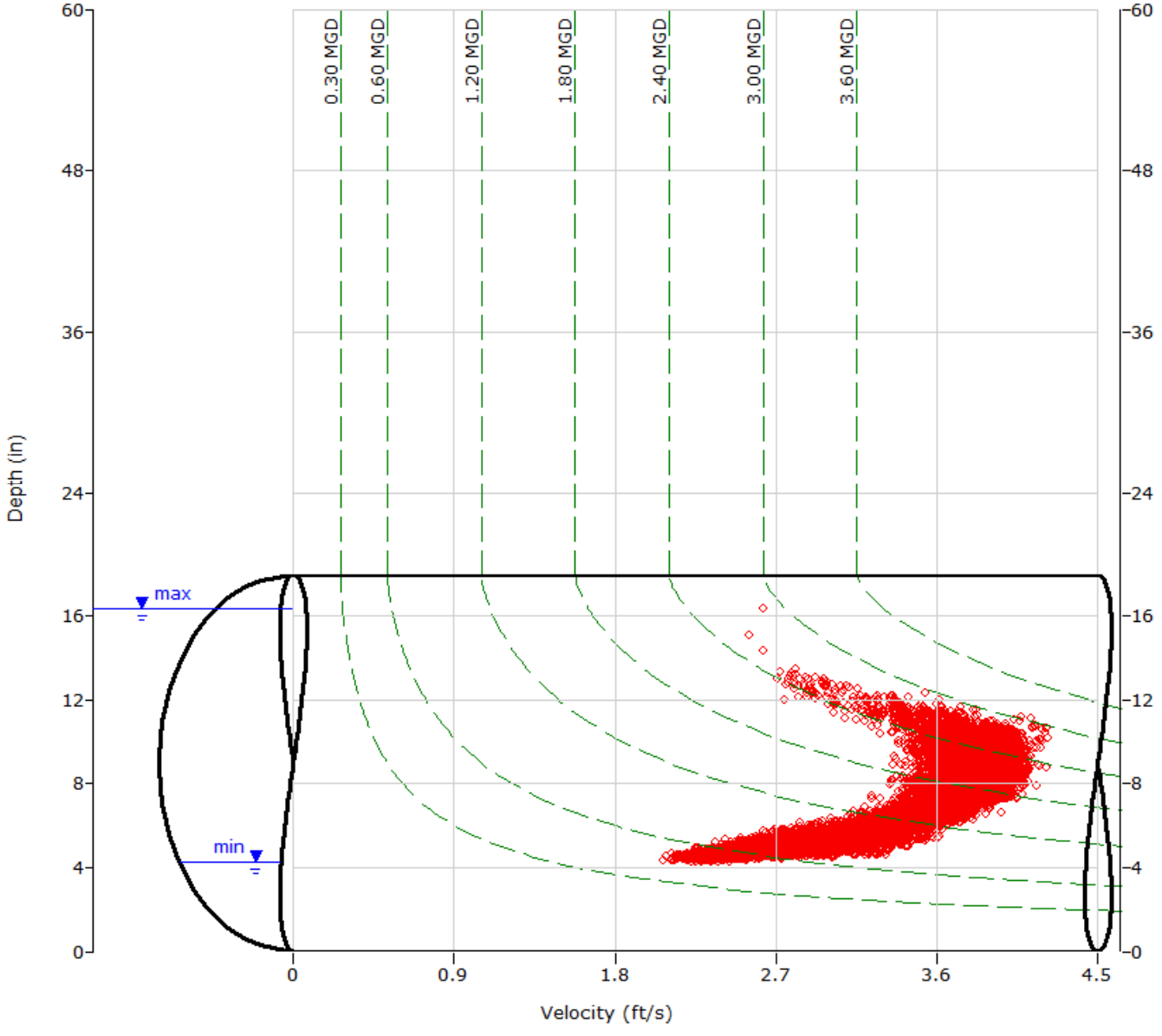


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



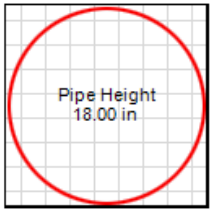
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite13

Flow Monitor

MPSite13

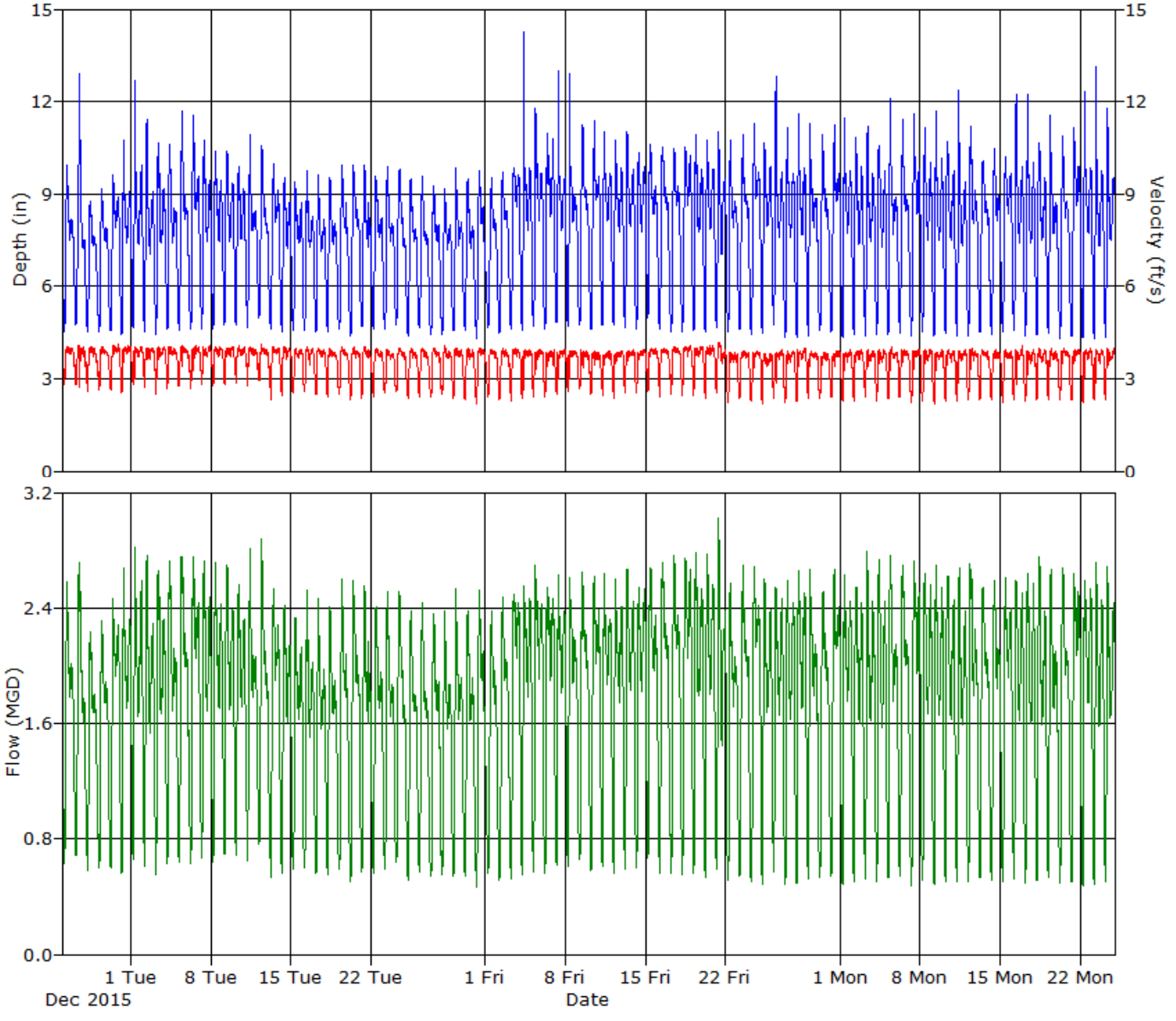


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite13, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:30	4.52	10:00	9.99	7.55	04:25	2.61	10:50	4.06	3.76	05:25	0.614	10:45	2.616	1.747	1.747	
11/26/2015	04:45	4.72	11:55	13.00	7.67	12:00	2.71	10:55	4.18	3.59	05:30	0.661	11:15	2.802	1.679	1.679	
11/27/2015	05:20	4.49	10:40	8.96	6.94	05:05	2.57	10:35	4.10	3.67	05:05	0.583	10:40	2.289	1.530	1.530	
11/28/2015	04:55	4.47	12:05	9.18	7.08	06:30	2.60	14:30	4.09	3.65	04:55	0.577	12:05	2.346	1.570	1.570	
11/29/2015	06:00	4.54	10:40	9.82	7.45	06:05	2.44	21:15	4.17	3.69	06:05	0.557	10:40	2.482	1.705	1.705	
11/30/2015	05:15	4.42	09:45	11.13	7.68	05:10	2.45	18:45	4.09	3.71	05:15	0.542	09:10	2.954	1.780	1.780	
12/1/2015	04:55	4.63	09:20	12.73	7.91	04:50	2.64	20:35	4.07	3.72	04:50	0.616	09:05	2.940	1.838	1.838	
12/2/2015	05:00	4.48	09:45	11.99	7.79	05:45	2.59	13:10	4.07	3.73	05:05	0.605	09:45	2.919	1.804	1.804	
12/3/2015	05:15	4.44	09:35	11.24	7.81	05:00	2.48	11:30	4.07	3.70	05:15	0.546	09:55	2.763	1.807	1.807	
12/4/2015	05:20	4.61	10:10	10.73	7.78	04:50	2.61	08:15	4.06	3.73	04:50	0.615	10:15	2.800	1.807	1.807	
12/5/2015	05:20	4.53	12:00	12.20	7.96	05:00	2.65	13:10	4.06	3.69	05:20	0.624	11:40	2.794	1.848	1.848	
12/6/2015	05:35	4.52	11:45	12.09	8.10	06:15	2.65	18:20	4.17	3.68	05:35	0.608	11:25	2.840	1.887	1.887	
12/7/2015	05:00	4.58	09:40	11.22	7.96	05:25	2.79	21:55	4.11	3.74	05:25	0.651	09:40	2.865	1.866	1.866	
12/8/2015	05:05	4.56	09:40	10.41	7.93	05:20	2.61	23:15	4.11	3.76	05:20	0.608	09:05	2.779	1.864	1.864	
12/9/2015	04:50	4.74	10:40	10.47	7.96	05:00	2.67	14:20	4.09	3.76	05:00	0.659	10:40	2.703	1.870	1.870	
12/10/2015	05:20	4.69	10:45	9.92	7.81	05:10	2.69	11:20	4.13	3.77	05:10	0.643	10:45	2.585	1.826	1.826	
12/11/2015	05:00	4.63	10:10	11.67	7.76	05:45	2.76	09:35	4.05	3.75	05:05	0.645	10:10	2.929	1.803	1.803	
12/12/2015	05:25	4.97	10:05	10.66	7.76	06:35	2.91	10:00	4.19	3.73	05:20	0.761	10:00	2.933	1.796	1.796	
12/13/2015	05:45	4.60	11:35	10.16	7.60	05:30	2.21	12:25	4.08	3.63	05:30	0.511	12:25	2.580	1.728	1.728	
12/14/2015	05:00	4.51	11:30	9.55	7.43	05:15	2.41	09:40	4.07	3.63	05:00	0.542	09:40	2.427	1.668	1.668	
12/15/2015	05:05	4.54	09:10	9.50	7.33	03:55	2.45	10:15	4.07	3.60	04:50	0.575	09:10	2.406	1.625	1.625	
12/16/2015	05:10	4.56	09:50	9.77	7.30	05:10	2.49	09:10	4.09	3.64	05:10	0.566	09:50	2.527	1.628	1.628	
12/17/2015	05:10	4.51	09:10	9.61	7.20	05:20	2.41	09:20	4.03	3.63	05:00	0.551	09:10	2.489	1.596	1.596	
12/18/2015	05:15	4.39	09:10	9.56	7.32	05:10	2.26	09:25	4.02	3.58	05:10	0.507	09:10	2.434	1.613	1.613	
12/19/2015	05:00	4.62	11:00	10.04	7.39	05:35	2.44	10:40	4.06	3.56	05:35	0.576	11:00	2.652	1.633	1.633	
12/20/2015	05:45	4.39	11:20	10.07	7.41	05:50	2.27	12:30	4.10	3.53	05:50	0.494	11:20	2.655	1.637	1.637	
12/21/2015	05:20	4.69	11:00	10.03	7.42	05:05	2.29	10:05	4.07	3.56	05:05	0.549	10:05	2.595	1.638	1.638	
12/22/2015	05:15	4.58	10:10	9.58	7.40	04:45	2.33	10:50	4.01	3.56	04:45	0.543	10:50	2.453	1.631	1.631	
12/23/2015	04:35	4.57	10:15	10.01	7.41	05:10	2.42	09:50	3.99	3.55	05:10	0.565	11:10	2.523	1.625	1.625	
12/24/2015	05:25	4.74	12:00	9.99	7.44	04:40	2.48	12:15	4.03	3.56	04:50	0.626	10:35	2.534	1.642	1.642	
12/25/2015	06:00	4.37	10:55	9.53	7.14	05:50	2.27	13:50	4.05	3.50	05:50	0.488	12:15	2.397	1.540	1.540	
12/26/2015	05:30	4.64	11:20	9.66	7.09	04:55	2.35	14:15	4.11	3.51	04:55	0.557	11:15	2.471	1.526	1.526	
12/27/2015	06:00	4.44	12:10	9.45	7.02	06:45	2.30	12:45	4.02	3.51	06:45	0.517	12:10	2.410	1.511	1.511	
12/28/2015	05:40	4.42	11:05	9.26	7.04	05:15	2.40	11:00	4.10	3.54	05:15	0.540	11:05	2.415	1.518	1.518	
12/29/2015	05:10	4.56	10:35	10.01	7.21	05:05	2.28	10:20	4.05	3.56	05:10	0.519	10:35	2.597	1.578	1.578	
12/30/2015	05:30	4.53	11:25	9.59	7.20	05:00	2.31	20:35	4.01	3.52	04:55	0.532	11:25	2.449	1.558	1.558	
12/31/2015	05:20	4.28	11:55	10.24	7.25	05:10	2.07	16:05	4.07	3.51	05:10	0.439	11:55	2.675	1.587	1.587	
1/1/2016	06:05	4.63	13:10	9.52	7.23	06:10	2.38	20:30	4.00	3.52	06:10	0.556	13:10	2.401	1.568	1.568	
1/2/2016	05:10	4.45	11:55	9.93	7.37	05:35	2.30	12:30	4.00	3.49	05:35	0.509	11:55	2.552	1.610	1.610	
1/3/2016	05:50	4.61	11:20	10.01	7.93	05:10	2.12	21:10	4.02	3.57	05:10	0.496	11:20	2.537	1.807	1.807	
1/4/2016	05:30	4.56	09:10	16.39	8.19	04:25	2.31	21:10	3.96	3.57	05:10	0.542	09:10	2.868	1.853	1.853	
1/5/2016	05:25	4.70	09:30	11.97	8.36	05:25	2.29	22:30	3.96	3.58	05:25	0.543	09:15	2.846	1.919	1.919	
1/6/2016	05:20	4.58	21:15	11.22	8.38	05:05	2.42	23:30	3.95	3.56	04:55	0.560	09:55	2.648	1.914	1.914	
1/7/2016	05:15	4.83	09:40	13.47	8.25	05:35	2.45	23:20	4.04	3.60	05:15	0.612	09:55	2.738	1.877	1.877	
1/8/2016	05:10	4.70	09:40	13.09	8.11	05:10	2.48	12:55	3.98	3.61	05:10	0.589	09:25	2.687	1.842	1.842	
1/9/2016	05:30	4.70	12:25	11.82	8.02	05:45	2.58	09:15	3.97	3.57	05:45	0.643	12:20	2.739	1.803	1.803	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	06:00	4.59	12:40	11.48	8.13	05:45	2.44	14:25	3.90	3.52	05:45	0.564	11:20	2.717	1.821	1.821	
1/11/2016	04:45	4.70	09:25	11.52	8.17	05:30	2.36	19:50	3.92	3.57	05:30	0.576	09:20	2.746	1.848	1.848	
1/12/2016	05:05	4.71	09:10	11.45	8.19	04:55	2.33	23:40	3.93	3.57	05:00	0.558	09:10	2.768	1.857	1.857	
1/13/2016	05:10	4.62	09:45	11.62	8.20	05:15	2.44	21:55	4.02	3.63	05:15	0.570	09:45	2.833	1.889	1.889	
1/14/2016	05:00	4.62	09:25	10.57	8.23	04:55	2.42	19:50	3.96	3.64	05:00	0.562	09:25	2.617	1.907	1.907	
1/15/2016	05:20	4.95	09:40	11.18	8.31	04:35	2.52	12:10	4.02	3.68	05:20	0.665	09:40	2.839	1.945	1.945	
1/16/2016	05:05	4.60	12:20	10.60	8.05	05:40	2.31	13:50	4.05	3.67	05:40	0.535	12:05	2.759	1.872	1.872	
1/17/2016	05:20	4.50	12:55	10.56	7.96	06:25	2.42	14:15	4.07	3.66	06:25	0.545	12:55	2.796	1.852	1.852	
1/18/2016	05:50	4.52	11:50	10.58	8.22	05:10	2.37	22:55	4.12	3.67	05:10	0.540	11:55	2.802	1.941	1.941	
1/19/2016	05:30	4.50	09:15	11.51	8.18	04:40	2.27	20:55	4.08	3.69	04:40	0.521	09:10	2.944	1.921	1.921	
1/20/2016	05:40	4.48	09:35	10.89	8.18	05:10	2.32	21:25	4.16	3.70	05:10	0.522	09:10	2.814	1.930	1.930	
1/21/2016	05:05	4.66	09:25	11.21	7.96	05:10	2.41	10:20	4.22	3.65	05:10	0.564	09:35	3.049	1.834	1.834	
1/22/2016	05:10	4.49	09:55	10.96	7.94	05:35	2.16	14:45	3.92	3.48	05:35	0.497	09:55	2.662	1.748	1.748	
1/23/2016	05:50	4.59	12:10	11.42	7.93	05:35	2.31	14:25	3.92	3.48	05:35	0.531	12:10	2.848	1.753	1.753	
1/24/2016	06:05	4.44	11:25	11.68	8.17	04:55	2.19	14:25	3.99	3.46	06:10	0.488	11:25	2.758	1.823	1.823	
1/25/2016	04:55	4.48	09:25	11.43	8.14	05:10	2.09	08:00	3.88	3.39	05:10	0.467	09:25	2.776	1.764	1.764	
1/26/2016	04:50	4.73	09:20	13.10	8.15	04:20	2.26	21:55	3.96	3.54	04:55	0.552	09:40	2.615	1.828	1.828	
1/27/2016	04:55	4.34	09:25	11.64	8.04	04:25	2.20	22:30	3.94	3.50	04:40	0.480	09:25	2.734	1.793	1.793	
1/28/2016	05:15	4.33	09:20	11.88	8.10	04:05	2.15	21:25	4.03	3.56	05:15	0.481	09:50	2.719	1.841	1.841	
1/29/2016	05:25	4.39	09:50	11.56	7.98	05:00	2.11	11:15	3.94	3.53	05:00	0.458	09:15	2.816	1.782	1.782	
1/30/2016	05:35	4.55	11:50	11.16	7.87	05:35	2.31	13:15	3.95	3.47	05:35	0.524	11:40	2.721	1.725	1.725	
1/31/2016	05:25	4.50	12:35	11.54	8.10	05:40	2.36	16:50	3.92	3.47	05:55	0.530	11:00	2.764	1.804	1.804	
2/1/2016	05:15	4.34	09:30	11.60	8.05	05:15	2.20	19:55	3.99	3.50	05:15	0.467	09:45	2.724	1.798	1.798	
2/2/2016	05:05	4.44	09:10	11.02	7.98	05:45	2.22	20:00	3.95	3.53	05:05	0.499	09:10	2.760	1.789	1.789	
2/3/2016	05:05	4.40	09:30	11.49	7.95	05:10	2.29	20:55	3.97	3.55	05:10	0.499	08:55	2.816	1.788	1.788	
2/4/2016	05:10	4.44	09:15	10.80	7.98	05:00	2.25	10:05	3.97	3.57	05:00	0.496	10:40	2.758	1.805	1.805	
2/5/2016	05:05	4.42	09:45	12.32	8.04	04:50	2.31	11:15	4.06	3.56	04:50	0.506	08:55	2.858	1.815	1.815	
2/6/2016	06:05	4.47	11:35	11.45	7.97	04:25	2.30	13:30	3.97	3.55	06:05	0.538	11:30	2.719	1.797	1.797	
2/7/2016	05:45	4.35	11:20	11.90	8.11	05:55	2.15	21:45	4.03	3.49	05:55	0.468	10:45	2.835	1.821	1.821	
2/8/2016	04:50	4.50	09:45	11.23	8.08	04:40	2.20	19:25	4.00	3.54	04:55	0.495	09:30	2.757	1.831	1.831	
2/9/2016	05:10	4.37	09:10	11.93	8.06	04:30	2.13	10:00	4.05	3.52	05:45	0.471	09:05	2.735	1.809	1.809	
2/10/2016	05:10	4.46	09:40	11.09	8.03	05:45	2.17	11:30	3.96	3.53	05:05	0.499	09:55	2.675	1.808	1.808	
2/11/2016	05:20	4.40	09:25	12.45	7.97	05:30	2.26	22:30	3.97	3.53	05:20	0.493	10:20	2.838	1.779	1.779	
2/12/2016	05:20	4.37	10:00	11.57	8.00	04:55	2.21	12:20	4.01	3.56	05:05	0.483	09:00	2.787	1.810	1.810	
2/13/2016	06:00	4.48	11:55	10.11	7.80	05:30	2.24	09:55	3.95	3.54	05:30	0.503	12:50	2.578	1.744	1.744	
2/14/2016	05:55	4.43	11:55	10.74	7.71	05:25	2.22	15:30	4.01	3.48	05:25	0.493	11:55	2.641	1.695	1.695	
2/15/2016	05:35	4.53	12:00	10.37	8.00	05:55	2.15	11:35	3.97	3.51	05:55	0.492	11:55	2.637	1.794	1.794	
2/16/2016	04:55	4.56	09:25	12.76	8.11	04:55	2.22	21:00	4.12	3.52	04:55	0.507	08:55	2.744	1.813	1.813	
2/17/2016	05:10	4.37	09:40	12.56	8.11	05:05	2.24	08:15	3.98	3.52	05:05	0.485	09:00	2.813	1.818	1.818	
2/18/2016	05:10	4.41	10:55	10.76	7.93	04:55	2.25	10:35	3.98	3.56	05:00	0.495	10:55	2.801	1.789	1.789	
2/19/2016	04:50	4.44	09:30	11.81	7.89	05:20	2.27	10:55	4.02	3.55	05:20	0.513	09:30	2.791	1.766	1.766	
2/20/2016	05:30	4.29	11:05	10.98	7.83	05:35	2.28	13:35	4.01	3.55	05:35	0.477	11:05	2.743	1.760	1.760	
2/21/2016	05:40	4.37	10:55	11.52	8.12	05:35	2.14	22:35	3.96	3.52	05:35	0.462	11:05	2.751	1.844	1.844	
2/22/2016	05:15	4.34	09:20	12.67	8.13	05:30	2.15	22:00	4.00	3.52	05:30	0.461	09:15	2.698	1.826	1.826	
2/23/2016	04:55	4.29	09:20	13.30	8.03	04:45	2.32	08:35	3.98	3.52	04:55	0.487	09:05	2.761	1.797	1.797	
2/24/2016	04:50	4.30	09:00	12.10	7.98	04:55	2.30	21:40	4.00	3.54	04:55	0.484	09:00	2.807	1.795	1.794	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			162.271
Avg	7.82	3.58	1.764

Site Commentary

Site Information

MPSite2	
Pipe Dimensions	48.13" x 47.88"
Silt Level	0.00"

Overview

Site MPSite2 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located downstream of location MPSite3. A review of balancing indicated no problems. A net flow of .596 MGD was reported for the period.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	9.47	2.82	3.340
Minimum	5.29	1.86	0.915
Maximum	15.04	3.73	7.954
Time of Minimum	1/2/2016 6:15 AM	2/22/2016 5:20 AM	1/2/2016 6:10 AM
Time of Maximum	1/5/2016 2:35 PM	1/6/2016 2:10 PM	1/5/2016 2:35 PM

Data Quality

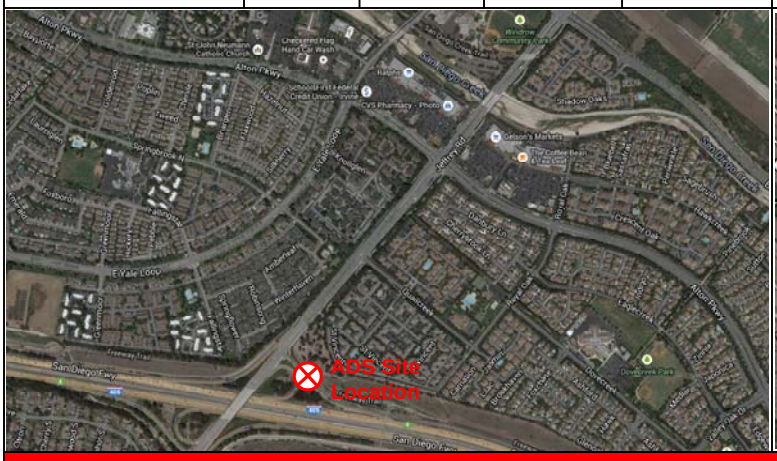
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

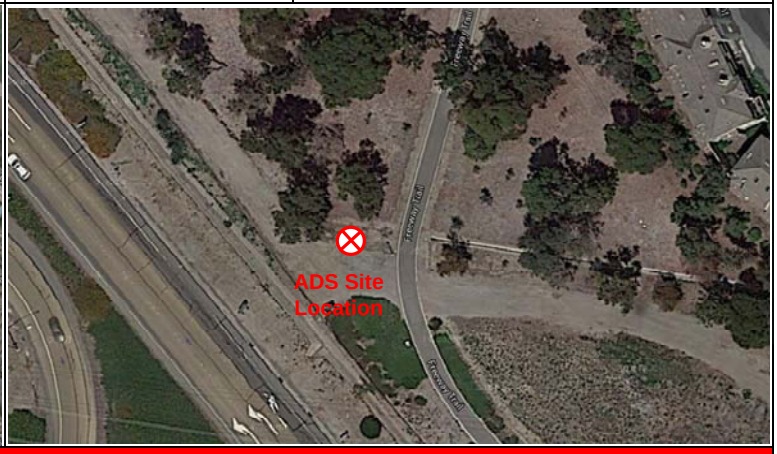
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite2	**Install Date:** 11/17/15	**Monitor Type**	Peak Doppler
Address/Location: Jeffrey Rd & Quail Creek		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH102S002
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	48.13 "
		Pipe Width:	47.88 "





Investigation Information:

Date/Time of Investigation:	11/17/15 @ 0830
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	10.25" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.92 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

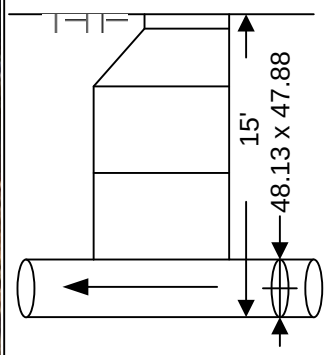
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

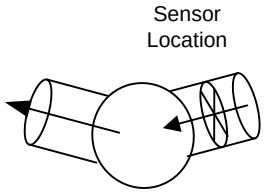
Other Information:





Cross Section





Plan

N

Installation Information		Backup	Yes	No	?	Distance
Installation Type:	Standard	Trunk	[ ]	[x]	[ ]	
Sensors Devices:	Ultrasonic / Pressure/Velocity	Lift / Pump Station	[ ]	[X]	[ ]	
Surcharge Height:	0	WWTP	[ ]	[X]	[ ]	
Rain Gauge Zone:		Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite2

Flow Monitor

MPSite2

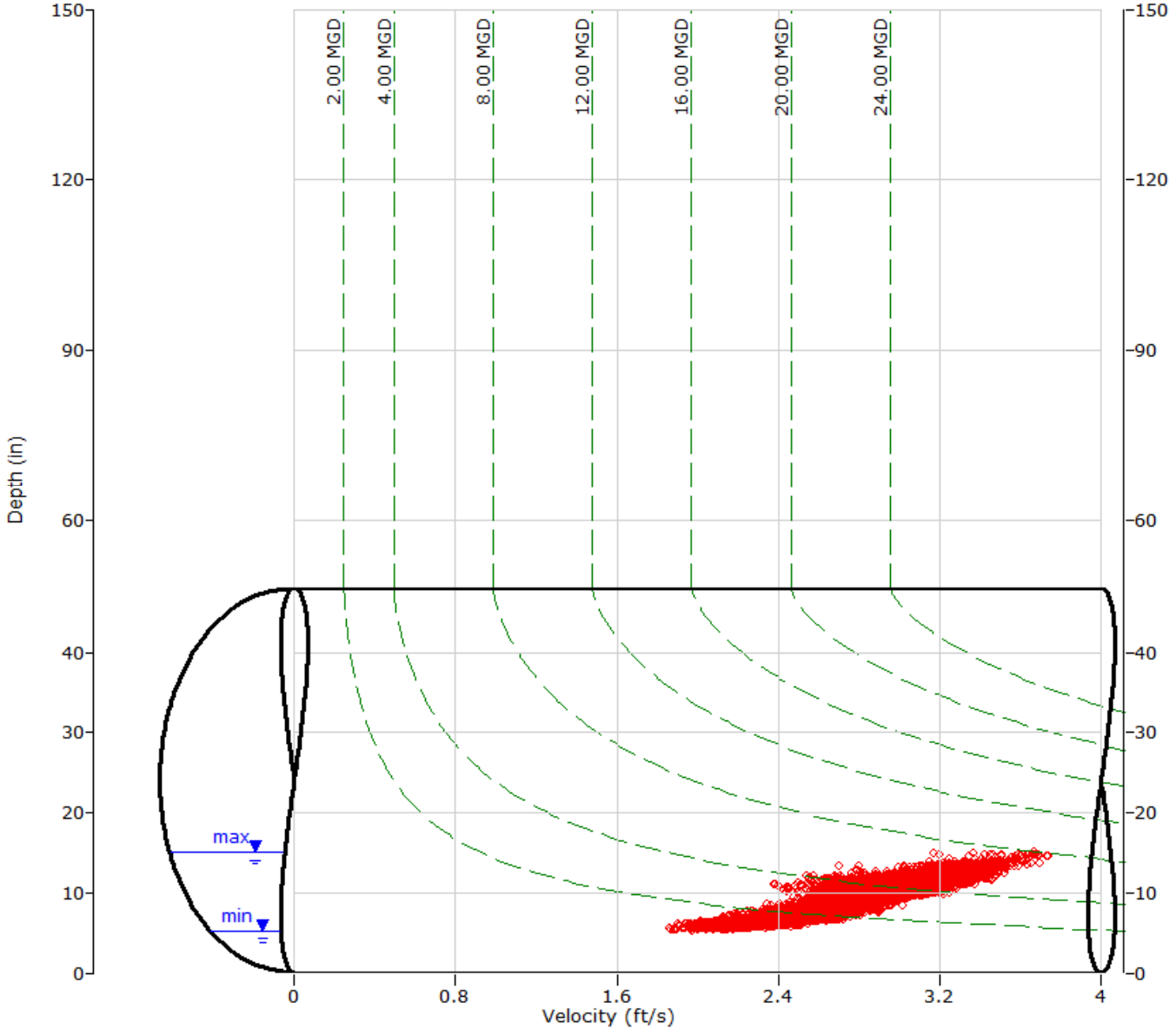
Pipe Height
48.13 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite2

Flow Monitor

MPSite2

Pipe Height
48.13 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite2, Pipe Height: 48.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:30	6.02	11:00	11.87	9.46	05:30	2.00	11:35	3.34	2.85	05:30	1.172	11:00	5.141	3.336	3.336	
11/26/2015	06:15	5.72	13:05	11.12	8.34	05:40	2.10	12:35	3.27	2.72	06:15	1.162	12:35	4.602	2.659	2.659	
11/27/2015	05:40	5.59	12:30	10.45	8.54	03:25	2.03	15:00	3.16	2.68	05:35	1.101	13:00	4.047	2.705	2.705	
11/28/2015	06:25	5.60	13:15	10.92	8.66	06:25	1.99	12:35	3.16	2.69	06:25	1.050	12:35	4.332	2.790	2.790	
11/29/2015	06:20	5.46	13:20	10.93	8.69	05:20	1.93	13:10	3.20	2.69	05:20	1.012	13:10	4.418	2.819	2.819	
11/30/2015	05:50	5.75	10:30	12.13	9.69	04:20	1.91	09:55	3.33	2.82	04:20	1.066	09:55	5.319	3.454	3.454	
12/1/2015	05:50	5.96	12:10	12.15	9.71	05:10	1.95	11:45	3.33	2.83	05:10	1.142	12:05	5.330	3.454	3.454	
12/2/2015	05:40	5.86	10:05	12.71	9.76	04:45	2.05	09:45	3.46	2.85	04:45	1.188	10:05	5.830	3.506	3.506	
12/3/2015	05:15	5.88	13:40	12.22	9.75	04:45	1.95	11:40	3.37	2.83	04:45	1.122	13:35	5.297	3.475	3.475	
12/4/2015	05:05	6.14	10:35	12.00	9.66	05:40	2.03	10:30	3.38	2.81	05:40	1.274	10:30	5.353	3.376	3.376	
12/5/2015	06:30	5.93	12:15	11.35	9.04	05:10	2.10	12:55	3.28	2.73	05:55	1.240	12:50	4.720	2.991	2.991	
12/6/2015	06:25	5.89	12:35	11.09	8.84	06:30	2.06	11:15	3.22	2.75	06:30	1.176	12:40	4.439	2.932	2.932	
12/7/2015	05:55	5.93	12:35	12.72	9.94	04:50	1.96	10:50	3.40	2.83	04:50	1.127	12:10	5.672	3.603	3.603	
12/8/2015	05:35	6.00	10:35	12.16	9.77	05:00	2.09	09:50	3.34	2.81	05:00	1.225	09:55	5.305	3.450	3.450	
12/9/2015	06:00	6.03	10:20	12.28	9.75	04:15	2.08	10:45	3.36	2.81	04:40	1.257	10:05	5.421	3.443	3.443	
12/10/2015	05:30	5.96	09:55	12.18	9.73	04:15	1.96	09:40	3.29	2.82	04:15	1.152	09:55	5.273	3.453	3.453	
12/11/2015	05:45	6.11	12:10	12.09	9.73	05:30	1.94	11:15	3.36	2.83	05:30	1.177	11:15	5.213	3.447	3.447	
12/12/2015	06:35	5.94	13:10	11.29	9.01	06:15	2.08	11:55	3.18	2.72	06:15	1.200	11:55	4.572	2.972	2.972	
12/13/2015	06:10	5.54	12:00	11.25	8.84	05:10	2.01	11:30	3.25	2.74	06:15	1.071	12:50	4.510	2.924	2.924	
12/14/2015	05:40	5.90	10:15	12.24	9.81	03:40	2.05	09:25	3.34	2.84	04:20	1.247	10:30	5.337	3.523	3.523	
12/15/2015	05:00	6.03	10:10	12.07	9.85	04:25	2.08	13:20	3.32	2.84	04:25	1.255	10:10	5.141	3.522	3.522	
12/16/2015	05:15	5.94	10:00	12.15	9.78	05:15	1.99	12:25	3.44	2.88	05:15	1.143	12:25	5.268	3.548	3.548	
12/17/2015	05:15	6.33	12:25	12.25	9.85	04:40	2.44	09:35	3.33	2.90	05:15	1.577	12:30	5.336	3.562	3.562	
12/18/2015	05:20	6.34	10:20	12.20	9.85	06:00	2.09	10:15	3.32	2.82	06:00	1.341	10:15	5.376	3.513	3.513	
12/19/2015	06:20	5.94	12:35	11.51	9.10	06:45	2.09	12:00	3.26	2.78	06:45	1.214	12:30	4.777	3.078	3.078	
12/20/2015	05:55	5.66	12:50	11.21	8.82	05:20	1.91	12:40	3.30	2.74	05:20	1.070	12:40	4.741	2.910	2.910	
12/21/2015	05:20	5.62	11:10	12.32	9.68	05:50	1.97	12:30	3.35	2.83	05:10	1.066	12:30	5.469	3.471	3.471	
12/22/2015	05:45	6.60	15:05	12.38	10.06	03:35	2.36	15:40	3.46	2.94	03:35	1.601	15:40	5.624	3.753	3.753	
12/23/2015	05:05	6.08	12:40	12.25	9.64	05:20	2.20	10:15	3.33	2.85	05:10	1.324	12:05	5.344	3.426	3.426	
12/24/2015	05:45	5.83	12:30	11.98	8.97	05:20	2.14	12:40	3.34	2.80	05:20	1.215	12:40	5.260	3.044	3.044	
12/25/2015	06:35	5.50	13:25	10.02	8.10	07:45	1.99	11:20	3.10	2.67	06:25	1.038	13:25	3.700	2.495	2.495	
12/26/2015	06:45	5.50	12:35	10.77	8.43	05:40	1.89	11:25	3.17	2.67	05:40	0.983	12:40	4.232	2.673	2.673	
12/27/2015	06:30	5.48	12:35	10.95	8.58	04:35	2.02	12:00	3.25	2.68	05:50	1.051	13:35	4.417	2.756	2.756	
12/28/2015	06:10	5.49	12:15	11.99	9.23	06:20	1.92	12:00	3.39	2.78	06:20	1.022	12:00	5.312	3.181	3.181	
12/29/2015	05:50	5.78	12:25	11.91	9.32	05:45	2.04	14:25	3.33	2.82	05:45	1.136	12:20	5.129	3.254	3.254	
12/30/2015	06:25	5.84	12:30	11.67	9.26	05:25	2.12	14:10	3.34	2.82	04:55	1.208	12:40	4.993	3.221	3.221	
12/31/2015	05:55	5.76	12:55	11.74	9.14	06:00	2.09	12:55	3.39	2.82	06:00	1.153	12:55	5.205	3.156	3.156	
1/1/2016	07:15	5.50	12:55	10.13	8.32	06:45	2.03	14:35	3.09	2.67	07:15	1.043	13:40	3.760	2.597	2.597	
1/2/2016	06:15	5.29	12:35	11.00	8.54	06:05	1.87	19:00	3.22	2.69	06:10	0.915	13:20	4.414	2.757	2.757	
1/3/2016	06:15	5.55	13:05	11.03	8.86	05:45	1.98	12:50	3.23	2.74	05:45	1.049	12:50	4.481	2.952	2.952	
1/4/2016	05:45	5.80	13:15	12.48	9.75	05:10	2.13	13:00	3.47	2.87	05:45	1.205	13:00	5.765	3.547	3.547	
1/5/2016	05:40	5.92	14:35	15.04	10.31	04:55	2.04	14:35	3.67	2.94	05:40	1.186	14:35	7.954	3.973	3.973	
1/6/2016	05:25	5.92	14:35	14.74	10.52	04:50	2.13	14:10	3.73	2.97	05:20	1.285	14:40	7.737	4.118	4.118	
1/7/2016	05:10	6.43	09:50	12.11	10.09	03:00	2.23	11:25	3.40	2.90	04:55	1.476	11:25	5.438	3.706	3.706	
1/8/2016	05:05	6.01	10:10	11.95	9.69	04:55	2.15	11:50	3.39	2.89	04:55	1.286	11:55	5.308	3.508	3.508	
1/9/2016	06:20	5.85	12:15	11.33	8.96	05:10	2.16	14:45	3.37	2.80	06:15	1.220	14:45	4.720	3.038	3.038	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:25	5.61	12:50	11.16	8.79	05:20	2.02	12:45	3.30	2.78	05:20	1.075	12:45	4.695	2.938	2.938	
1/11/2016	05:35	5.83	12:05	12.14	9.79	05:00	2.01	12:40	3.39	2.87	05:00	1.130	09:55	5.348	3.569	3.569	
1/12/2016	05:35	5.83	10:05	12.06	9.81	04:10	2.04	14:35	3.35	2.86	05:50	1.169	10:15	5.301	3.538	3.538	
1/13/2016	04:50	5.83	12:30	12.36	9.97	05:10	2.21	12:20	3.45	2.91	05:10	1.253	12:20	5.667	3.703	3.703	
1/14/2016	05:10	5.92	11:10	14.27	10.25	04:25	1.91	11:05	3.64	2.95	04:25	1.150	11:05	7.301	3.932	3.932	
1/15/2016	04:30	6.16	10:05	12.06	9.73	05:25	2.15	11:40	3.47	2.87	04:30	1.310	11:40	5.448	3.493	3.493	
1/16/2016	06:15	5.85	12:05	11.32	8.98	04:45	2.10	12:55	3.22	2.77	05:50	1.224	12:55	4.629	3.017	3.017	
1/17/2016	06:10	5.53	12:45	11.12	8.74	06:20	2.05	11:10	3.24	2.77	06:20	1.063	12:35	4.554	2.910	2.910	
1/18/2016	05:20	5.60	12:40	12.20	9.63	05:55	1.91	11:05	3.36	2.86	05:55	1.018	11:55	5.304	3.479	3.479	
1/19/2016	05:55	5.93	10:15	12.12	9.86	05:55	2.14	13:25	3.37	2.89	05:55	1.226	09:40	5.221	3.607	3.607	
1/20/2016	05:05	5.86	10:05	11.99	9.81	05:50	2.16	10:05	3.32	2.88	05:05	1.241	10:05	5.241	3.569	3.569	
1/21/2016	05:00	5.91	10:00	12.14	9.77	05:50	2.09	10:10	3.32	2.86	05:10	1.215	10:10	5.317	3.514	3.514	
1/22/2016	06:00	5.98	10:30	12.09	9.69	05:40	1.97	10:55	3.34	2.85	05:40	1.151	11:20	5.274	3.465	3.465	
1/23/2016	05:40	5.83	12:10	11.19	8.96	06:05	2.13	13:35	3.23	2.78	06:05	1.191	12:55	4.593	3.007	3.007	
1/24/2016	06:30	5.58	13:00	11.24	8.82	06:10	2.06	13:40	3.23	2.80	06:10	1.098	12:45	4.582	2.970	2.970	
1/25/2016	05:40	5.79	13:00	12.33	9.73	04:15	2.01	14:25	3.39	2.86	04:15	1.134	12:50	5.441	3.521	3.521	
1/26/2016	05:10	5.83	09:50	12.03	9.76	06:15	2.00	09:20	3.30	2.84	06:15	1.175	09:45	5.203	3.498	3.498	
1/27/2016	06:05	5.95	10:05	12.09	9.74	06:05	2.11	12:05	3.35	2.85	06:05	1.219	10:00	5.338	3.493	3.493	
1/28/2016	04:55	5.79	09:50	12.10	9.75	04:50	2.03	11:55	3.37	2.86	04:55	1.142	09:55	5.286	3.511	3.511	
1/29/2016	05:25	5.88	09:50	12.16	9.69	06:20	2.20	11:20	3.33	2.87	05:20	1.259	09:35	5.272	3.483	3.483	
1/30/2016	05:55	5.87	12:25	11.74	9.04	04:40	2.12	12:10	3.29	2.77	04:40	1.224	12:20	5.012	3.028	3.028	
1/31/2016	05:05	5.73	11:55	11.34	8.91	04:15	2.09	15:45	3.27	2.75	04:55	1.194	11:50	4.716	2.975	2.975	
2/1/2016	04:35	5.70	10:05	13.43	10.15	05:05	2.06	11:30	3.52	2.89	05:05	1.160	11:30	6.390	3.821	3.821	
2/2/2016	05:35	5.89	09:25	12.34	9.90	04:00	2.03	10:20	3.42	2.86	05:50	1.222	09:15	5.588	3.604	3.604	
2/3/2016	05:30	5.90	17:00	12.56	9.96	05:05	2.11	17:10	3.38	2.89	05:05	1.215	17:20	5.675	3.669	3.669	
2/4/2016	04:50	5.88	09:40	13.46	10.05	05:25	2.14	09:30	3.51	2.92	04:30	1.227	10:55	6.416	3.779	3.779	
2/5/2016	04:40	5.86	09:55	12.13	9.76	05:20	2.11	11:00	3.41	2.89	04:50	1.210	09:55	5.432	3.556	3.556	
2/6/2016	05:25	5.84	12:05	11.42	9.02	05:50	2.12	12:05	3.28	2.81	05:50	1.196	12:05	4.831	3.068	3.068	
2/7/2016	05:35	5.58	12:20	11.33	8.82	06:25	2.02	11:25	3.30	2.77	05:25	1.099	12:20	4.721	2.957	2.957	
2/8/2016	05:20	5.67	11:55	12.95	9.82	06:15	1.96	11:55	3.47	2.87	05:15	1.090	11:55	6.108	3.590	3.590	
2/9/2016	05:10	5.82	15:00	13.90	10.21	05:00	2.09	14:00	3.70	2.91	05:00	1.174	14:00	6.961	3.873	3.873	
2/10/2016	05:15	5.61	09:50	12.05	9.75	03:35	2.01	09:30	3.33	2.84	05:15	1.095	09:45	5.237	3.505	3.505	
2/11/2016	05:00	5.85	10:10	12.17	9.84	05:25	1.98	11:50	3.35	2.84	05:25	1.137	09:45	5.343	3.521	3.521	
2/12/2016	04:50	5.88	12:25	12.24	9.87	04:40	2.05	11:05	3.36	2.85	04:40	1.178	12:10	5.402	3.555	3.555	
2/13/2016	05:45	5.84	14:25	12.37	9.29	04:55	2.08	12:30	3.28	2.78	05:45	1.199	14:20	5.337	3.182	3.182	
2/14/2016	05:25	5.73	12:20	11.13	8.90	07:30	2.03	13:05	3.24	2.73	05:20	1.138	13:05	4.569	2.935	2.935	
2/15/2016	05:00	5.86	14:25	12.91	9.88	05:55	2.15	13:45	3.52	2.86	05:45	1.219	13:45	5.889	3.618	3.618	
2/16/2016	05:10	5.90	09:40	13.32	10.19	04:55	2.03	11:55	3.53	2.90	04:55	1.169	09:40	6.352	3.830	3.830	
2/17/2016	05:10	5.89	09:40	12.14	9.95	04:40	2.18	09:50	3.35	2.88	04:40	1.267	09:50	5.378	3.636	3.636	
2/18/2016	04:55	6.00	11:25	12.19	9.91	04:45	2.05	09:35	3.35	2.87	05:20	1.229	09:35	5.298	3.604	3.604	
2/19/2016	05:20	5.85	10:10	12.22	9.77	04:30	2.15	09:15	3.46	2.87	04:30	1.227	10:10	5.365	3.534	3.534	
2/20/2016	06:00	5.83	11:40	11.44	9.02	05:35	2.10	12:05	3.35	2.77	06:15	1.178	12:05	4.842	3.027	3.027	
2/21/2016	06:00	5.44	12:00	11.09	8.78	05:50	2.00	13:50	3.28	2.77	05:55	1.013	12:10	4.594	2.944	2.944	
2/22/2016	05:15	5.53	10:25	13.82	10.28	05:20	1.86	10:25	3.58	2.92	05:20	0.966	10:25	6.911	3.973	3.973	
2/23/2016	05:10	5.94	10:10	12.19	9.86	05:00	2.13	09:40	3.36	2.90	05:00	1.238	09:40	5.408	3.614	3.614	
2/24/2016	05:05	5.84	10:20	12.08	9.79	05:15	2.15	15:05	3.46	2.90	05:15	1.212	13:35	5.341	3.582	3.579	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			307.271
Avg	9.47	2.82	3.340

Site Commentary

Site Information

MPSite3	
Pipe Dimensions	42.25" x 42.00"
Silt Level	0.00"

Overview

Site MPSite3 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located downstream of location MPSite4. A review of balancing indicated no problems. A net flow of 1.297 MGD was reported for the period.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	12.31	1.74	2.744
Minimum	7.58	0.93	0.812
Maximum	19.06	2.39	5.356
Time of Minimum	2/21/2016 5:35 AM	1/20/2016 5:55 AM	2/21/2016 4:45 AM
Time of Maximum	1/5/2016 2:10 PM	12/18/2015 9:20 AM	1/14/2016 10:35 AM

Data Quality

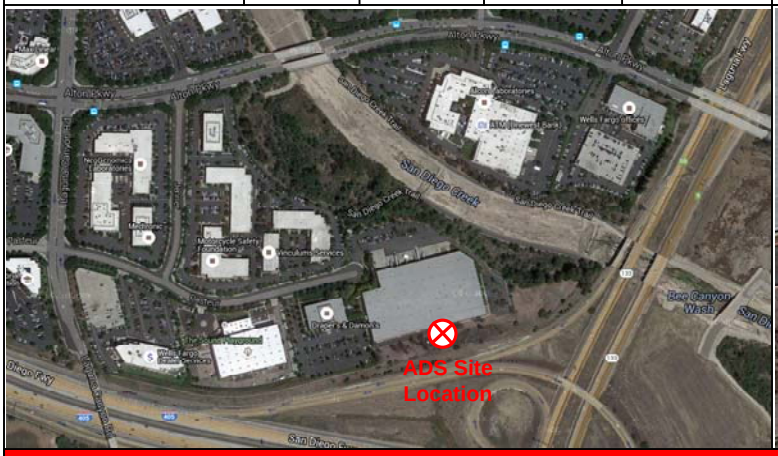
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

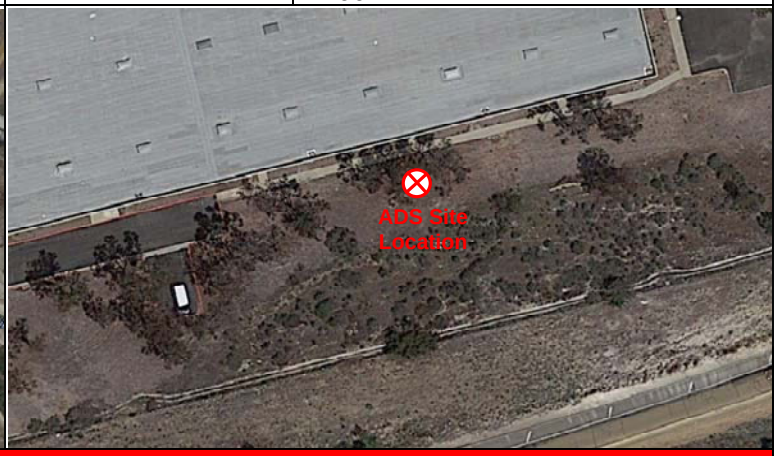
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite3	**Install Date:** 11/16/15	**Monitor Type**	Peak Doppler
Address/Location: Alton Pkwy & Laguna Canyon Rd (Located in easement behind building)		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH138N016
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	42.25 "
		Pipe Width:	42.00 "





Investigation Information:

Date/Time of Investigation:	11/16/15 @ 1200
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	14.13" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.02 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[ ]	[X]	[ ]	[ ]

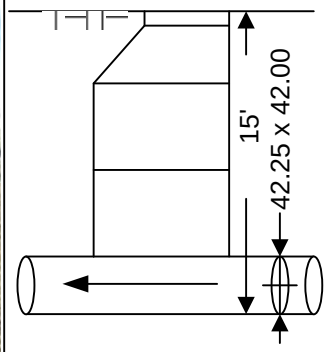
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

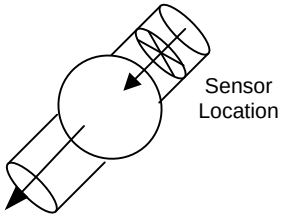
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite3

Flow Monitor

MPSite3

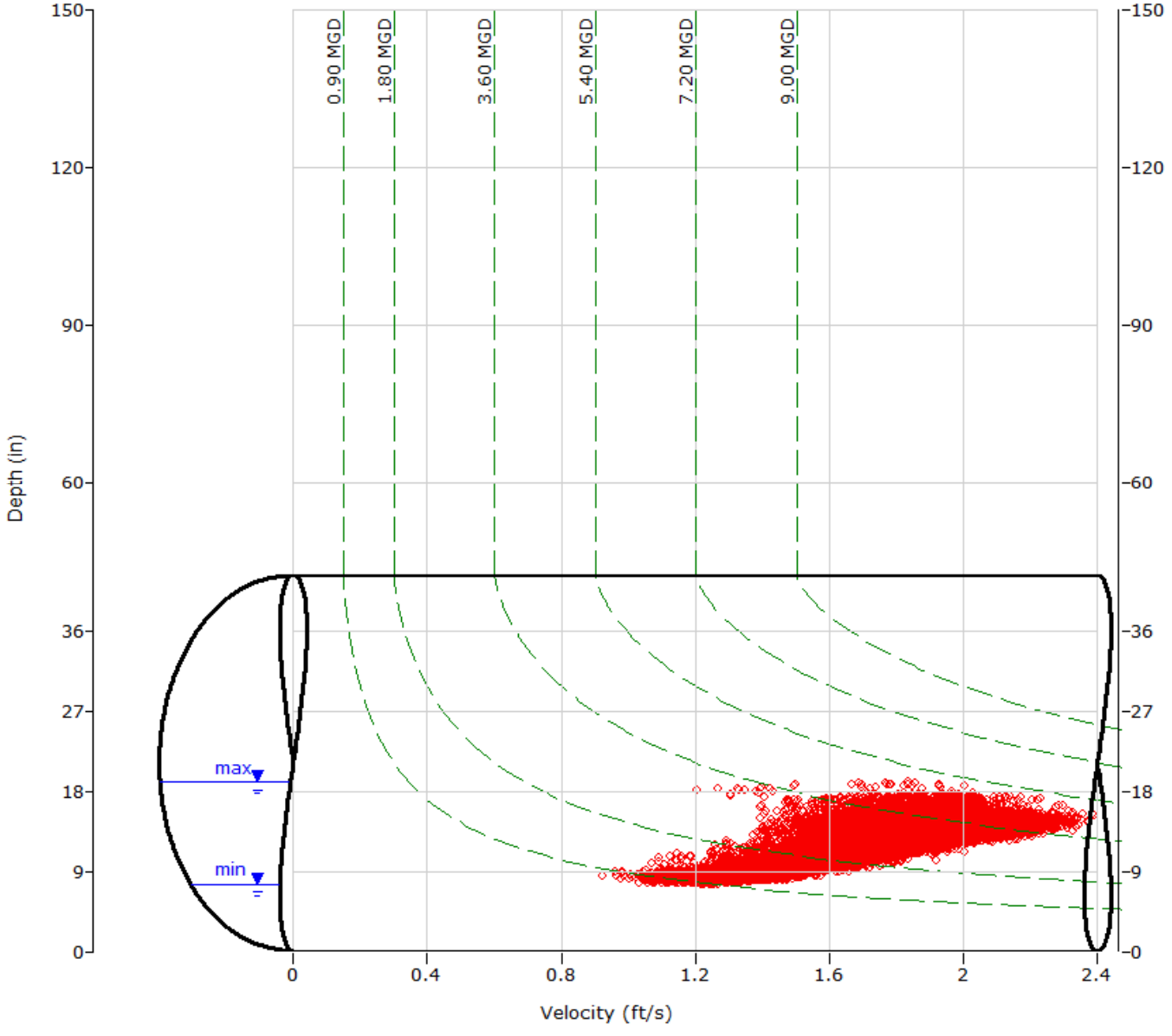
Pipe Height
42.50 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite3

Flow Monitor

MPSite3

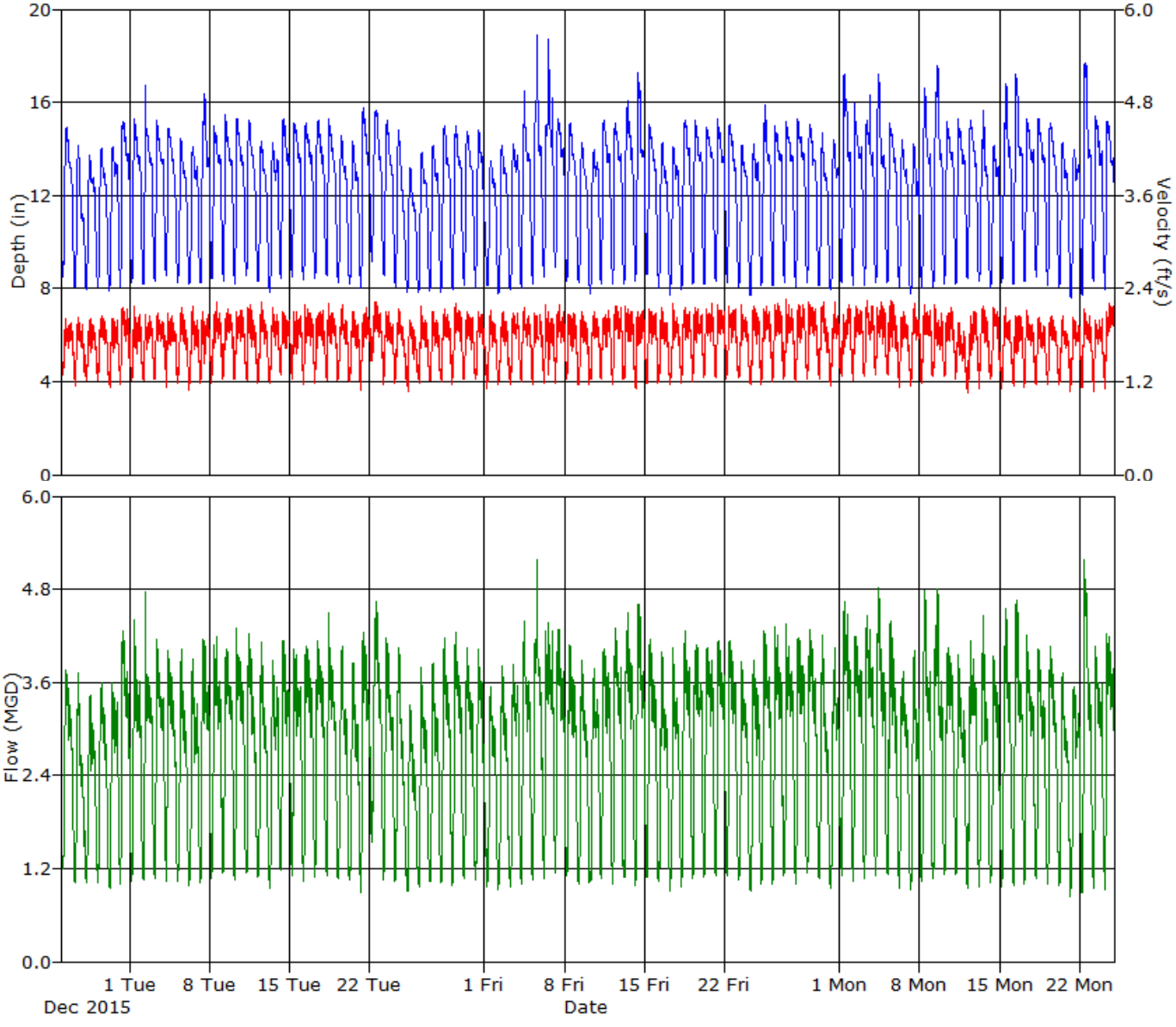
Pipe Height
42.50 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite3, Pipe Height: 42.5 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	04:55	8.51	12:05	14.93	12.38	03:40	1.16	15:30	2.13	1.71	04:40	1.126	10:25	4.119	2.676	2.676	
11/26/2015	05:40	8.05	12:40	14.18	11.11	06:45	1.12	12:10	2.10	1.66	05:30	0.974	13:35	3.830	2.255	2.255	
11/27/2015	05:40	7.95	13:10	13.73	11.37	02:50	1.10	19:20	2.11	1.65	05:10	0.975	12:05	3.624	2.310	2.310	
11/28/2015	05:30	8.04	13:35	14.06	11.54	06:10	1.16	10:50	2.15	1.69	06:10	0.967	11:45	3.745	2.420	2.420	
11/29/2015	05:40	7.91	12:40	14.13	11.62	05:55	1.06	22:20	2.16	1.66	05:55	0.866	11:30	3.682	2.416	2.416	
11/30/2015	04:55	8.05	09:45	15.19	12.56	05:00	1.05	09:00	2.29	1.76	05:00	0.872	09:45	4.477	2.860	2.860	
12/1/2015	05:25	8.26	09:35	15.28	12.60	05:20	1.09	10:30	2.19	1.72	05:20	0.940	09:15	4.408	2.786	2.786	
12/2/2015	05:10	8.16	09:40	16.74	12.65	05:25	1.14	16:00	2.24	1.71	05:25	0.984	09:30	4.837	2.788	2.788	
12/3/2015	05:15	8.31	09:45	15.24	12.56	04:15	1.14	16:10	2.27	1.75	05:10	1.000	09:40	4.556	2.825	2.825	
12/4/2015	04:50	8.58	10:05	14.91	12.48	05:20	1.08	16:00	2.24	1.75	05:20	0.986	10:05	4.226	2.780	2.780	
12/5/2015	05:40	8.26	11:50	14.45	11.80	03:35	0.98	12:20	2.25	1.72	03:35	0.959	12:20	4.213	2.555	2.555	
12/6/2015	05:50	8.21	12:10	14.12	11.64	04:30	1.06	12:05	2.19	1.67	04:30	0.945	12:05	3.998	2.437	2.437	
12/7/2015	05:25	8.24	12:15	16.41	12.87	05:05	1.13	08:45	2.15	1.70	05:05	0.979	14:05	4.471	2.825	2.825	
12/8/2015	04:55	8.44	09:40	15.01	12.59	03:55	1.13	10:05	2.29	1.78	03:55	1.041	10:05	4.518	2.882	2.882	
12/9/2015	05:15	8.30	09:30	15.55	12.59	03:55	1.12	14:15	2.22	1.79	03:55	1.052	09:50	4.248	2.889	2.889	
12/10/2015	04:40	8.18	09:30	15.34	12.56	05:25	1.12	08:55	2.20	1.79	05:25	0.974	09:20	4.322	2.881	2.881	
12/11/2015	05:10	8.57	11:50	15.26	12.53	06:00	1.09	09:25	2.29	1.77	06:00	1.033	09:25	4.473	2.840	2.840	
12/12/2015	05:30	8.32	12:30	14.32	11.80	04:20	1.12	12:45	2.26	1.74	04:20	1.037	12:45	4.183	2.577	2.577	
12/13/2015	06:00	7.82	12:05	14.28	11.60	07:40	1.07	13:30	2.26	1.71	05:20	0.919	13:30	4.077	2.494	2.494	
12/14/2015	05:10	8.44	11:30	15.30	12.63	04:05	1.25	11:10	2.33	1.77	04:05	1.147	11:10	4.661	2.868	2.868	
12/15/2015	05:10	8.51	09:30	15.13	12.68	04:35	1.13	14:20	2.24	1.75	04:35	1.026	09:55	4.324	2.840	2.840	
12/16/2015	04:45	8.38	09:25	15.19	12.64	04:50	1.12	08:40	2.34	1.79	04:50	0.985	09:25	4.648	2.906	2.906	
12/17/2015	05:25	8.42	12:10	15.23	12.78	04:45	1.08	20:40	2.27	1.77	04:45	1.003	09:40	4.461	2.920	2.920	
12/18/2015	05:25	8.55	09:35	15.33	12.68	05:20	1.13	09:20	2.39	1.77	05:20	1.026	09:20	4.866	2.889	2.889	
12/19/2015	05:50	8.22	12:40	14.59	11.95	05:55	1.14	12:25	2.26	1.75	05:55	0.983	12:25	4.266	2.646	2.646	
12/20/2015	05:15	8.17	12:20	14.34	11.66	06:30	1.04	13:15	2.20	1.71	06:30	0.943	11:50	4.012	2.492	2.492	
12/21/2015	04:35	7.98	09:35	15.87	12.55	05:35	1.04	21:30	2.22	1.74	04:30	0.863	09:20	4.401	2.830	2.830	
12/22/2015	05:10	9.15	11:45	15.69	13.07	02:00	1.40	14:05	2.36	1.85	03:15	1.459	14:05	4.913	3.125	3.125	
12/23/2015	05:35	8.56	12:00	15.28	12.53	05:20	1.06	11:50	2.17	1.75	05:20	0.979	11:50	4.411	2.799	2.799	
12/24/2015	05:35	8.10	12:05	14.81	11.69	05:45	1.12	12:15	2.20	1.72	05:45	0.938	12:15	4.287	2.513	2.513	
12/25/2015	05:40	7.81	13:00	13.31	10.83	07:45	1.00	13:00	2.13	1.63	07:45	0.847	13:00	3.603	2.140	2.140	
12/26/2015	06:10	7.81	13:05	13.83	11.25	06:20	1.08	11:50	2.22	1.69	06:20	0.874	11:50	3.870	2.366	2.366	
12/27/2015	06:05	7.87	12:05	14.14	11.51	03:45	1.16	12:00	2.19	1.68	06:15	1.005	12:00	4.024	2.418	2.418	
12/28/2015	05:35	7.84	13:35	15.06	12.16	06:55	0.98	11:40	2.23	1.73	06:55	0.918	11:40	4.361	2.696	2.696	
12/29/2015	05:25	7.94	12:15	15.00	12.23	04:45	1.08	11:00	2.27	1.77	04:45	0.903	11:00	4.378	2.787	2.787	
12/30/2015	05:30	8.11	12:40	14.78	12.19	04:15	1.15	15:05	2.16	1.74	04:15	1.033	11:25	4.130	2.705	2.705	
12/31/2015	05:20	8.02	12:25	14.80	11.99	05:20	1.08	17:50	2.33	1.75	05:20	0.896	11:50	4.219	2.652	2.652	
1/1/2016	06:40	8.14	14:25	13.50	11.22	06:05	1.04	14:00	2.18	1.67	06:05	0.894	14:00	3.715	2.309	2.309	
1/2/2016	05:25	7.78	12:00	14.16	11.47	05:30	1.11	13:05	2.23	1.67	05:30	0.877	13:05	4.073	2.404	2.404	
1/3/2016	06:05	7.97	12:50	14.22	11.71	06:30	1.12	12:55	2.13	1.72	06:30	0.924	12:55	3.936	2.542	2.542	
1/4/2016	05:25	8.02	12:35	16.53	12.60	05:15	1.09	11:00	2.26	1.76	05:15	0.905	12:25	4.808	2.873	2.873	
1/5/2016	05:15	8.21	14:10	19.06	13.28	04:20	1.12	10:10	2.28	1.71	04:20	1.010	14:30	5.307	2.944	2.412	
1/6/2016	04:55	8.50	14:20	18.80	13.55	05:10	1.15	09:05	2.30	1.72	05:10	1.042	13:45	5.000	3.058	3.058	
1/7/2016	04:45	8.91	09:30	15.40	13.00	06:40	1.15	19:10	2.33	1.81	04:35	1.103	09:25	4.323	3.043	3.043	
1/8/2016	05:05	8.34	11:35	15.14	12.57	04:30	1.16	10:55	2.26	1.75	04:30	1.026	10:55	4.418	2.828	2.828	
1/9/2016	06:05	8.25	11:45	14.25	11.75	04:40	1.02	12:15	2.18	1.71	04:40	0.903	12:15	4.028	2.526	2.526	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:55	7.79	13:25	13.99	11.56	06:40	1.11	11:10	2.17	1.70	06:40	0.939	13:35	3.882	2.463	2.463	
1/11/2016	04:45	8.20	11:40	15.20	12.56	03:25	1.05	09:05	2.29	1.76	03:25	0.951	09:05	4.490	2.857	2.857	
1/12/2016	04:45	8.19	09:25	15.11	12.61	05:15	1.09	09:15	2.28	1.80	05:15	0.941	09:15	4.574	2.925	2.925	
1/13/2016	05:00	8.16	12:00	16.11	12.84	05:55	1.12	13:25	2.27	1.78	05:55	0.985	13:25	4.756	2.973	2.973	
1/14/2016	04:50	8.34	10:40	17.30	13.24	06:10	0.96	10:35	2.23	1.72	06:10	0.936	10:35	5.356	3.022	3.022	
1/15/2016	04:40	8.63	09:45	15.05	12.58	04:40	1.08	13:25	2.27	1.79	04:40	0.993	13:25	4.305	2.900	2.900	
1/16/2016	06:10	8.01	11:40	14.29	11.71	05:10	0.98	12:55	2.22	1.73	05:10	0.835	12:55	4.108	2.538	2.538	
1/17/2016	05:45	7.71	12:15	14.19	11.53	03:50	1.05	12:00	2.25	1.71	05:30	0.874	12:00	4.073	2.477	2.477	
1/18/2016	05:10	7.93	12:15	15.33	12.43	04:40	1.10	11:10	2.34	1.78	04:40	0.898	11:10	4.666	2.856	2.856	
1/19/2016	05:30	8.20	09:40	15.23	12.63	04:35	1.13	09:05	2.24	1.79	04:35	1.014	09:05	4.413	2.912	2.912	
1/20/2016	04:45	8.17	09:35	14.97	12.58	05:55	0.93	21:05	2.27	1.81	05:55	0.830	12:55	4.271	2.935	2.935	
1/21/2016	05:30	8.34	09:25	15.32	12.57	04:55	1.20	10:50	2.26	1.83	04:55	1.061	10:50	4.449	2.952	2.952	
1/22/2016	05:30	8.21	10:10	15.09	12.49	03:50	1.06	13:35	2.22	1.81	03:50	0.983	10:05	4.305	2.897	2.897	
1/23/2016	05:20	8.09	12:00	14.25	11.71	05:30	1.12	10:55	2.26	1.73	05:30	0.946	10:55	4.033	2.547	2.547	
1/24/2016	05:45	7.70	12:40	14.30	11.53	05:50	1.07	14:00	2.24	1.72	05:50	0.839	12:45	4.060	2.498	2.498	
1/25/2016	04:35	8.13	12:25	16.61	12.54	03:25	1.12	15:45	2.31	1.78	04:15	0.990	12:25	4.694	2.887	2.887	
1/26/2016	04:40	8.12	09:20	14.99	12.51	04:25	1.18	14:20	2.32	1.81	04:25	1.000	09:10	4.595	2.920	2.920	
1/27/2016	05:00	8.25	09:25	15.23	12.55	03:10	1.14	08:50	2.37	1.81	03:55	1.066	08:50	4.558	2.922	2.922	
1/28/2016	04:35	8.06	09:20	15.40	12.53	02:40	1.10	12:10	2.37	1.83	04:25	0.937	09:20	4.579	2.960	2.960	
1/29/2016	05:15	8.25	09:45	15.07	12.49	03:35	1.03	10:35	2.28	1.84	03:35	0.955	09:35	4.391	2.946	2.946	
1/30/2016	05:30	8.13	11:40	14.70	11.72	07:10	1.07	15:15	2.27	1.76	07:10	0.971	12:20	4.278	2.586	2.586	
1/31/2016	06:05	7.94	13:35	14.42	11.66	05:30	1.06	14:35	2.26	1.73	05:30	0.875	14:35	4.128	2.539	2.539	
2/1/2016	05:20	8.25	09:40	17.27	13.15	05:40	1.10	16:10	2.39	1.78	05:40	0.955	16:10	4.959	3.069	3.069	
2/2/2016	04:50	8.16	08:40	16.05	12.70	04:40	1.06	11:30	2.26	1.82	04:40	0.904	09:00	4.527	2.999	2.999	
2/3/2016	04:55	8.14	16:30	16.38	12.79	06:10	1.01	09:40	2.28	1.85	04:50	0.879	16:50	4.711	3.069	3.069	
2/4/2016	04:30	8.24	09:20	17.29	13.03	03:35	1.14	08:05	2.34	1.84	03:35	1.023	09:55	5.224	3.141	3.141	
2/5/2016	04:35	8.27	09:25	15.17	12.57	05:10	1.18	11:10	2.35	1.81	05:10	1.023	11:10	4.602	2.914	2.914	
2/6/2016	05:15	8.06	11:50	14.41	11.78	05:20	1.09	10:45	2.20	1.73	05:20	0.913	10:45	3.957	2.557	2.557	
2/7/2016	05:40	7.80	11:45	14.22	11.46	04:40	1.12	14:10	2.28	1.73	05:40	0.903	12:55	4.095	2.488	2.488	
2/8/2016	04:45	8.00	10:45	16.69	12.65	03:30	1.10	12:05	2.29	1.81	03:40	0.974	12:05	5.111	2.962	2.962	
2/9/2016	04:40	8.08	13:55	17.56	13.22	02:20	1.17	08:40	2.32	1.73	04:40	1.037	14:05	4.954	3.007	3.007	
2/10/2016	04:35	8.16	09:20	15.22	12.66	04:00	0.96	11:20	2.26	1.77	04:00	0.855	11:20	4.459	2.888	2.888	
2/11/2016	04:25	8.18	09:45	15.30	12.64	04:00	1.19	09:40	2.15	1.63	04:00	1.038	09:40	4.382	2.622	2.622	
2/12/2016	05:25	8.41	12:05	15.25	12.72	05:05	0.96	16:50	2.27	1.64	05:05	0.860	12:15	4.344	2.711	2.711	
2/13/2016	04:40	8.28	13:55	15.65	12.10	04:50	1.03	14:35	2.33	1.76	04:50	0.902	14:35	4.873	2.720	2.720	
2/14/2016	04:55	8.00	12:30	14.17	11.66	08:35	1.09	11:50	2.23	1.74	04:50	0.971	12:15	4.072	2.553	2.553	
2/15/2016	05:15	8.23	14:00	16.87	12.81	05:00	1.08	13:10	2.28	1.70	05:00	0.925	13:10	5.063	2.846	2.846	
2/16/2016	05:30	8.17	09:20	17.29	13.20	05:15	1.06	08:20	2.24	1.71	05:15	0.915	09:20	4.787	2.974	2.974	
2/17/2016	04:35	8.29	09:15	15.34	12.74	04:05	1.09	09:00	2.15	1.71	04:05	0.969	09:20	4.390	2.814	2.814	
2/18/2016	04:45	8.49	09:35	15.27	12.72	04:25	1.04	08:40	2.19	1.67	04:25	0.943	09:50	4.223	2.747	2.747	
2/19/2016	04:45	8.08	10:30	15.18	12.57	04:10	1.13	14:35	2.18	1.69	04:10	0.985	10:50	4.188	2.739	2.739	
2/20/2016	05:25	8.09	12:30	14.32	11.78	04:45	1.06	11:35	2.12	1.63	04:45	0.917	11:35	3.902	2.418	2.418	
2/21/2016	05:35	7.58	12:00	13.98	11.51	04:45	1.03	10:55	2.14	1.64	04:45	0.812	13:25	3.726	2.367	2.367	
2/22/2016	04:45	7.71	10:00	17.80	13.33	04:35	1.08	09:15	2.22	1.72	04:35	0.848	09:50	5.262	3.082	3.082	
2/23/2016	05:05	8.34	09:10	15.47	12.65	05:10	1.01	13:00	2.09	1.69	05:10	0.884	09:20	4.259	2.757	2.757	
2/24/2016	04:55	7.94	09:30	15.19	12.55	04:15	1.07	15:00	2.31	1.79	04:15	0.904	09:15	4.412	2.912	2.910	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			251.948
Avg	12.31	1.74	2.744

Site Commentary

Site Information

MPSite4	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site MPSite4 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Periodic invalid velocity data was recorded at this location due to partial fouling of the sensor. The apparent occasional velocity outliers during the period between December 2 and December 11 were reconstituted using the best fit curve generated based on the depth to velocity relationship exhibited by this line. Review of the scattergraph shows that flow in this line entered backwater conditions for three short durations between the hours of 10:30 am and 1:30 pm on January 25, 2016.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located upstream of location MPSite3. A review of balancing indicated no problems (See MPSite3 Commentary For More Details).

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	5.21	5.05	1.447
Minimum	2.66	0.46	0.378
Maximum	37.83	6.08	3.873
Time of Minimum	1/24/2016 6:35 AM	1/25/2016 11:35 AM	1/24/2016 4:40 AM
Time of Maximum	1/25/2016 10:35 AM	12/2/2015 8:25 AM	1/25/2016 10:40 AM

Data Quality

Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data,

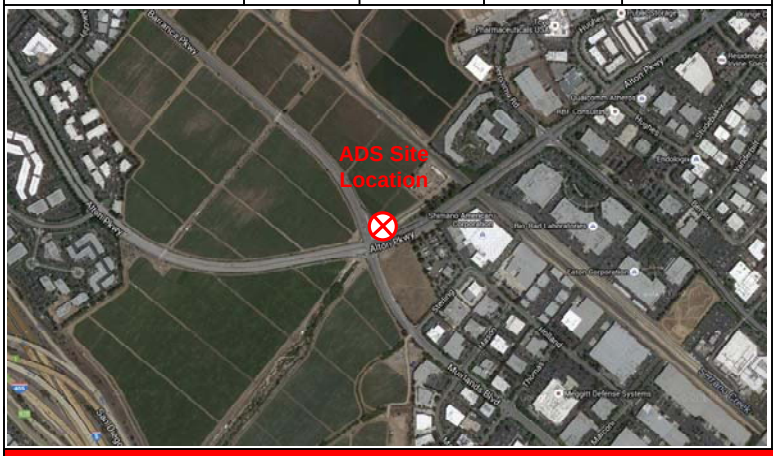
the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

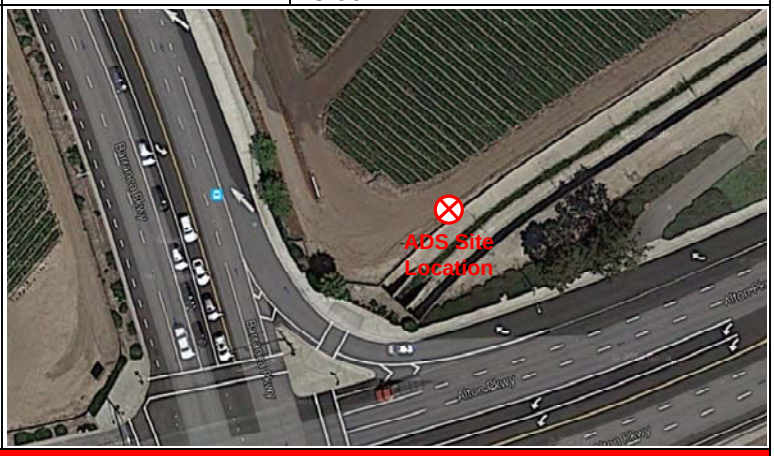
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite4	**Install Date:** 11/18/15	**Monitor Type**	Peak Doppler
Address/Location: Alton Pkwy & Barranca Pkwy		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH172N011
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	11/18/15 @ 0830
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	6.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	5.95 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	10'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential [ ]	Commercial [X]	Industrial [ ]	Trunk [ ]

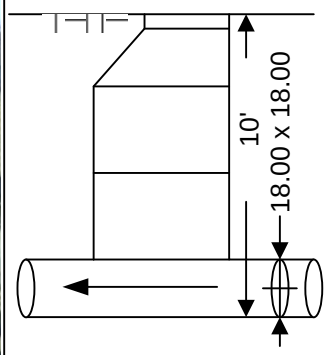
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

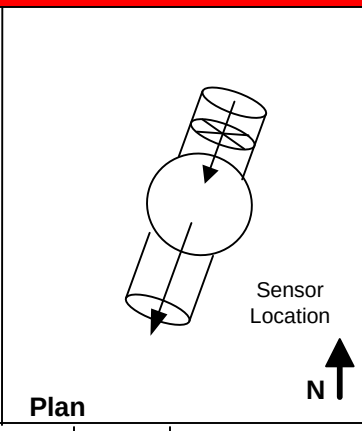
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite4

Flow Monitor

MPSite4

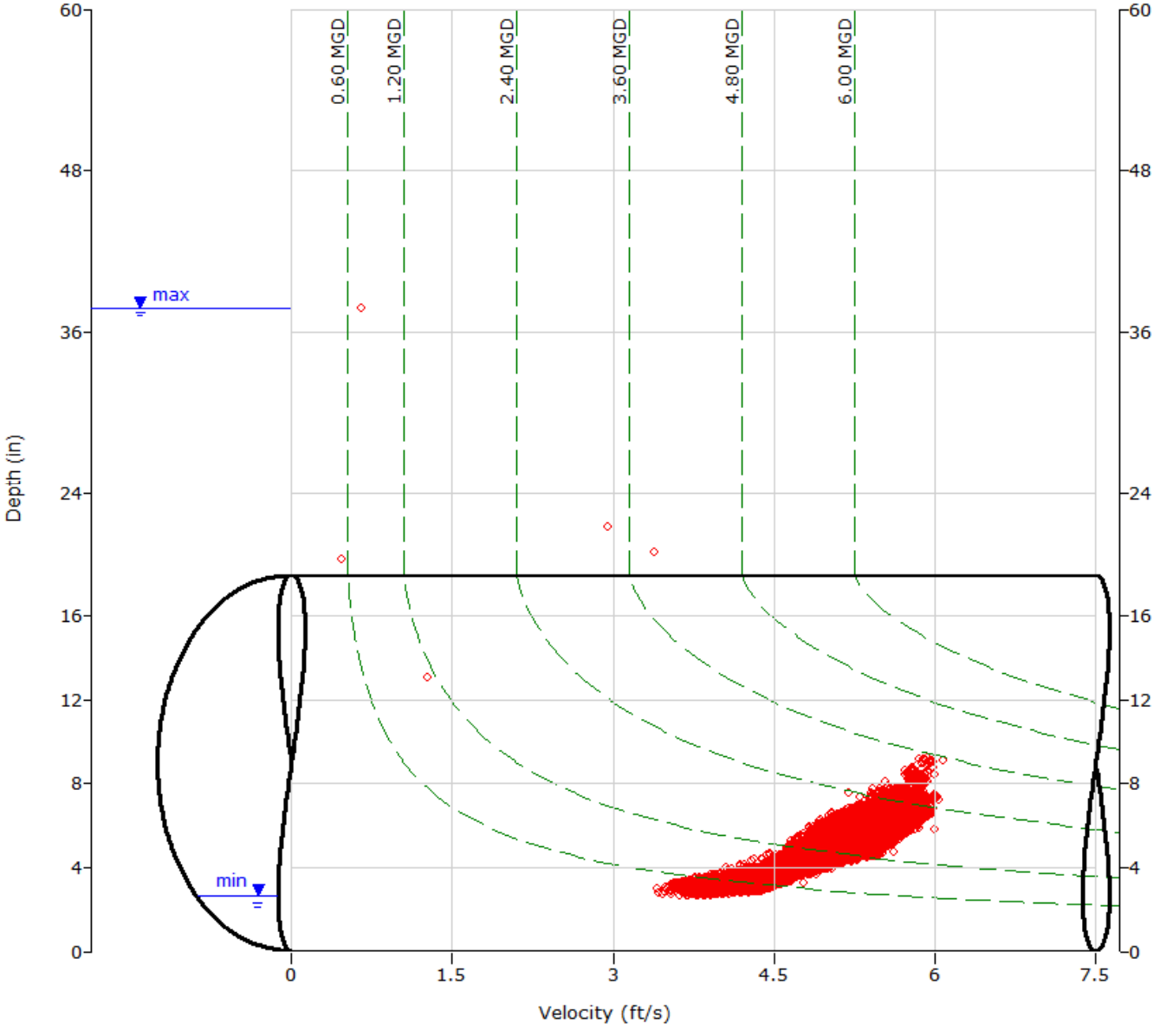
Pipe Height
18.00 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite4

Flow Monitor

MPSite4

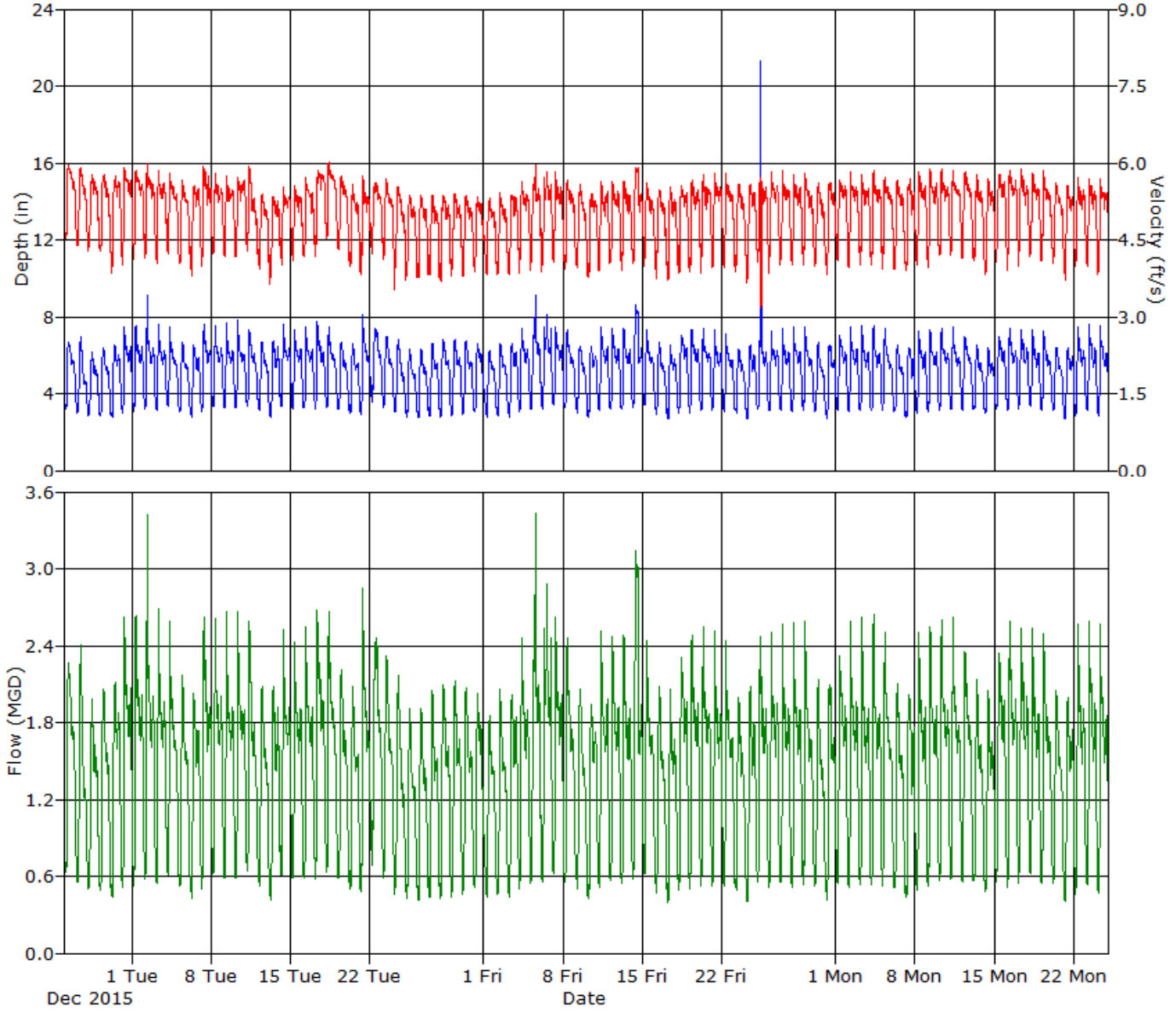
Pipe Height
18.00 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite4, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	03:50	3.23	11:10	6.69	5.20	03:55	4.52	09:30	5.97	5.44	03:55	0.633	11:10	2.289	1.540	1.540	
11/26/2015	06:15	3.01	12:30	6.99	4.72	05:30	4.36	12:30	5.91	5.25	04:15	0.552	12:30	2.426	1.310	1.310	
11/27/2015	05:40	2.85	12:15	6.16	4.64	04:15	4.28	12:35	5.78	5.21	04:20	0.502	12:15	1.994	1.264	1.264	
11/28/2015	05:30	2.83	13:05	6.36	4.74	05:40	4.27	13:20	5.78	5.18	05:30	0.492	13:05	2.071	1.300	1.300	
11/29/2015	06:55	2.73	13:50	6.56	4.92	06:55	3.74	13:55	5.77	5.12	06:55	0.409	13:50	2.165	1.368	1.368	
11/30/2015	03:40	3.01	08:50	7.43	5.39	03:35	3.98	08:30	5.92	5.27	03:35	0.501	09:00	2.633	1.587	1.587	
12/1/2015	04:30	3.04	08:25	7.56	5.43	04:30	4.01	08:30	5.87	5.28	04:30	0.512	08:30	2.665	1.597	1.597	
12/2/2015	03:50	3.22	08:50	9.19	5.55	03:50	4.15	08:25	6.08	5.28	03:50	0.574	08:25	3.520	1.649	1.649	
12/3/2015	04:45	3.13	08:50	7.70	5.43	05:10	3.85	08:35	5.89	5.20	05:10	0.530	08:50	2.719	1.569	1.569	
12/4/2015	04:15	3.32	08:40	7.48	5.35	04:15	4.22	08:25	5.83	5.20	04:15	0.610	08:35	2.602	1.528	1.528	
12/5/2015	06:50	3.07	11:05	6.67	4.97	06:50	4.03	11:00	5.66	5.01	06:50	0.520	11:05	2.176	1.336	1.336	
12/6/2015	06:50	2.78	11:10	6.62	4.90	06:50	3.79	13:40	5.61	4.98	06:50	0.425	11:10	2.097	1.316	1.316	
12/7/2015	04:25	3.02	08:50	7.67	5.43	04:25	3.99	19:00	6.00	5.19	04:25	0.504	08:50	2.642	1.573	1.573	
12/8/2015	03:45	3.33	08:15	7.58	5.47	03:45	4.23	08:45	5.83	5.18	03:45	0.615	08:15	2.623	1.571	1.571	
12/9/2015	04:30	3.26	08:40	7.76	5.49	04:30	4.18	08:40	5.88	5.17	04:30	0.591	08:40	2.770	1.576	1.576	
12/10/2015	03:35	3.26	08:35	7.82	5.45	03:35	4.18	09:00	5.77	5.23	03:35	0.589	08:45	2.706	1.585	1.585	
12/11/2015	04:30	3.35	08:40	7.36	5.40	04:30	4.25	08:50	5.93	5.13	04:30	0.623	08:40	2.601	1.525	1.525	
12/12/2015	06:45	3.12	12:20	6.69	5.08	06:10	3.70	12:35	5.42	4.83	06:30	0.498	12:25	2.087	1.325	1.325	
12/13/2015	06:35	2.74	11:15	6.76	4.99	04:00	3.50	12:30	5.53	4.77	06:35	0.412	11:15	2.104	1.297	1.297	
12/14/2015	04:50	3.25	08:45	7.61	5.53	05:30	3.79	11:15	5.57	5.01	03:50	0.579	08:20	2.540	1.543	1.543	
12/15/2015	04:35	3.22	08:35	7.34	5.47	05:30	3.80	08:35	5.58	5.04	04:30	0.577	08:35	2.440	1.529	1.529	
12/16/2015	03:40	3.25	08:30	7.47	5.45	03:40	4.17	08:30	5.72	5.12	03:40	0.585	08:30	2.562	1.547	1.547	
12/17/2015	04:15	3.21	08:30	7.78	5.55	04:05	4.17	09:25	5.88	5.38	04:15	0.578	08:30	2.733	1.669	1.669	
12/18/2015	05:00	3.24	08:25	7.46	5.40	03:55	4.52	08:20	6.04	5.46	05:00	0.635	08:30	2.681	1.624	1.624	
12/19/2015	04:35	3.18	11:45	6.81	5.03	06:25	4.27	10:35	5.75	5.19	06:25	0.585	11:40	2.252	1.405	1.405	
12/20/2015	06:25	2.95	11:20	6.61	4.89	05:25	3.76	10:55	5.58	4.90	06:25	0.482	11:15	2.092	1.280	1.280	
12/21/2015	04:15	2.91	08:40	8.12	5.39	02:55	3.56	08:45	5.86	4.98	04:35	0.465	08:45	2.928	1.502	1.502	
12/22/2015	03:35	3.56	11:00	7.41	5.77	03:40	3.95	12:55	5.69	5.16	03:40	0.644	14:30	2.471	1.674	1.674	
12/23/2015	04:30	3.24	11:10	7.04	5.30	03:15	3.76	11:00	5.74	5.06	04:30	0.582	11:05	2.346	1.467	1.467	
12/24/2015	05:55	3.01	12:05	6.82	4.93	04:10	3.49	12:00	5.58	4.87	04:10	0.445	12:05	2.207	1.293	1.293	
12/25/2015	06:55	2.76	12:05	6.34	4.63	04:00	3.57	11:50	5.44	4.77	06:50	0.420	11:50	1.938	1.158	1.158	
12/26/2015	06:40	2.74	11:10	6.36	4.70	03:20	3.55	10:55	5.40	4.74	06:40	0.413	11:10	1.926	1.181	1.181	
12/27/2015	04:50	2.79	12:20	6.64	4.82	03:40	3.73	11:10	5.40	4.73	04:50	0.427	11:05	2.058	1.221	1.221	
12/28/2015	04:05	2.79	10:55	6.83	5.08	04:45	3.47	13:35	5.39	4.80	04:45	0.404	11:20	2.115	1.335	1.335	
12/29/2015	04:25	2.81	11:10	6.84	5.09	03:20	3.64	10:05	5.45	4.82	04:25	0.434	11:05	2.147	1.341	1.341	
12/30/2015	04:15	2.92	11:50	6.73	5.11	04:10	3.55	09:55	5.52	4.82	04:10	0.431	11:10	2.089	1.337	1.337	
12/31/2015	05:15	3.05	11:50	6.65	5.04	05:30	3.59	11:45	5.35	4.80	05:30	0.480	11:50	2.041	1.308	1.308	
1/1/2016	07:05	2.79	12:30	6.25	4.71	05:15	3.54	12:25	5.39	4.71	07:05	0.428	12:25	1.887	1.167	1.167	
1/2/2016	06:30	2.86	11:00	6.63	4.82	07:05	3.65	11:05	5.52	4.74	07:05	0.441	11:05	2.098	1.223	1.223	
1/3/2016	06:40	2.81	11:50	6.59	4.98	03:50	3.54	14:40	5.44	4.82	06:40	0.433	11:40	2.032	1.307	1.307	
1/4/2016	04:10	3.02	08:35	7.42	5.42	03:00	3.61	08:20	5.66	4.99	04:05	0.500	08:35	2.495	1.508	1.508	
1/5/2016	03:50	3.18	13:30	9.22	5.86	03:40	3.78	14:10	5.99	5.14	03:40	0.521	13:30	3.495	1.746	1.746	
1/6/2016	04:30	3.21	13:30	8.16	5.81	03:40	3.77	13:25	5.83	5.14	04:30	0.527	13:30	2.929	1.710	1.710	
1/7/2016	03:35	3.43	08:35	7.50	5.59	03:25	4.04	08:35	5.85	5.12	03:15	0.619	08:35	2.635	1.596	1.596	
1/8/2016	04:30	3.25	08:45	7.33	5.35	04:35	3.59	08:30	5.67	5.04	04:35	0.503	08:50	2.469	1.490	1.490	
1/9/2016	06:50	3.01	11:20	6.48	4.90	03:20	3.79	11:15	5.61	4.88	06:35	0.492	11:20	2.069	1.279	1.279	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	07:00	2.78	11:50	6.45	4.89	04:30	3.54	11:10	5.45	4.81	04:30	0.409	11:55	1.960	1.271	1.271	
1/11/2016	04:40	3.09	08:50	7.49	5.42	04:25	3.56	08:45	5.65	4.99	04:25	0.478	08:50	2.525	1.507	1.507	
1/12/2016	04:35	3.21	08:25	7.42	5.45	03:00	3.76	08:20	5.65	5.04	03:00	0.546	08:20	2.507	1.525	1.525	
1/13/2016	04:40	3.19	08:45	7.40	5.39	03:00	3.61	08:45	5.70	5.02	03:00	0.512	08:45	2.523	1.500	1.500	
1/14/2016	03:40	3.26	09:30	8.66	5.91	03:50	3.93	10:45	5.99	5.15	03:50	0.554	09:25	3.151	1.777	1.777	
1/15/2016	04:55	3.41	08:40	7.33	5.37	04:25	3.77	08:40	5.67	5.02	04:25	0.575	08:40	2.476	1.480	1.480	
1/16/2016	05:35	2.92	12:20	6.66	4.92	04:50	3.42	12:40	5.51	4.87	04:50	0.425	12:20	2.086	1.286	1.286	
1/17/2016	06:25	2.67	11:15	6.55	4.80	05:40	3.62	11:15	5.54	4.84	06:25	0.389	11:15	2.082	1.243	1.243	
1/18/2016	04:45	2.92	11:15	7.06	5.38	03:50	3.65	11:15	5.56	4.98	04:45	0.451	11:15	2.312	1.493	1.493	
1/19/2016	04:45	3.00	08:35	7.36	5.42	02:45	3.67	08:55	5.73	5.03	04:00	0.501	08:55	2.509	1.520	1.520	
1/20/2016	04:10	3.15	08:35	7.42	5.38	03:35	3.64	08:45	5.79	5.11	03:35	0.494	08:35	2.570	1.522	1.522	
1/21/2016	04:15	3.12	08:45	7.33	5.31	05:30	3.73	08:40	5.82	5.12	04:20	0.521	08:40	2.532	1.501	1.501	
1/22/2016	04:20	3.04	08:40	7.16	5.22	04:10	3.95	08:40	5.83	5.11	04:10	0.510	08:40	2.469	1.457	1.457	
1/23/2016	06:50	2.93	11:40	6.35	4.83	04:00	3.78	12:55	5.61	4.94	06:40	0.492	11:40	2.010	1.270	1.270	
1/24/2016	06:35	2.66	11:50	6.56	4.79	05:35	3.42	11:50	5.58	4.89	04:40	0.378	11:50	2.102	1.267	1.267	
1/25/2016	04:10	3.17	10:35	37.83	5.62	11:35	0.46	08:35	5.75	5.06	11:35	0.530	10:40	3.873	1.513	1.513	
1/26/2016	04:10	3.11	08:20	7.25	5.33	04:00	3.57	08:10	5.84	5.13	04:00	0.480	08:20	2.513	1.514	1.514	
1/27/2016	04:25	3.12	08:20	7.41	5.33	03:40	3.99	08:40	5.88	5.13	03:45	0.550	08:40	2.588	1.513	1.513	
1/28/2016	04:05	3.02	08:25	7.52	5.33	03:55	3.99	08:25	5.80	5.12	03:55	0.508	08:25	2.624	1.508	1.508	
1/29/2016	03:50	3.13	08:30	7.47	5.24	04:10	3.92	08:45	5.83	5.09	04:10	0.525	08:35	2.601	1.460	1.460	
1/30/2016	04:15	3.08	11:35	6.64	4.83	05:15	3.95	11:40	5.64	4.96	04:15	0.520	11:40	2.156	1.271	1.271	
1/31/2016	06:55	2.71	10:55	6.56	4.86	06:40	3.81	14:00	5.63	4.96	06:50	0.414	14:00	2.113	1.304	1.304	
2/1/2016	04:45	3.10	08:45	7.04	5.42	04:20	4.05	09:05	5.68	5.15	04:20	0.542	09:00	2.324	1.548	1.548	
2/2/2016	04:35	3.02	08:20	7.47	5.35	04:05	3.86	08:50	5.84	5.13	04:15	0.509	08:25	2.600	1.521	1.521	
2/3/2016	03:55	3.14	08:30	7.62	5.32	04:20	3.89	08:25	5.82	5.13	04:20	0.526	08:30	2.671	1.506	1.506	
2/4/2016	04:15	3.11	08:30	7.53	5.30	04:10	3.96	08:35	5.87	5.13	04:10	0.527	08:35	2.653	1.502	1.502	
2/5/2016	04:10	3.10	08:15	7.40	5.25	04:10	3.79	08:10	5.80	5.12	04:10	0.496	08:10	2.559	1.473	1.473	
2/6/2016	04:05	3.02	11:10	6.51	4.82	03:50	3.83	12:05	5.68	5.00	03:50	0.498	11:10	2.105	1.285	1.285	
2/7/2016	07:00	2.74	12:00	6.37	4.73	04:50	3.87	13:15	5.74	4.94	06:15	0.431	12:00	2.034	1.252	1.252	
2/8/2016	04:25	2.93	08:30	7.25	5.27	04:30	3.98	08:35	5.84	5.15	04:25	0.483	08:30	2.509	1.499	1.499	
2/9/2016	04:40	3.06	08:25	7.34	5.31	04:25	3.90	08:40	5.89	5.15	03:45	0.515	08:20	2.564	1.512	1.512	
2/10/2016	03:30	3.15	08:30	7.41	5.38	03:30	4.14	08:35	5.88	5.20	03:30	0.554	08:35	2.606	1.547	1.547	
2/11/2016	04:45	3.16	08:40	7.49	5.35	02:05	4.16	08:50	5.88	5.20	04:40	0.572	08:40	2.630	1.535	1.535	
2/12/2016	04:45	3.11	09:40	6.99	5.34	03:10	4.02	11:15	5.86	5.22	04:10	0.549	09:35	2.379	1.541	1.541	
2/13/2016	03:30	3.19	11:20	6.59	4.90	05:45	3.95	10:50	5.77	5.04	05:45	0.540	11:20	2.165	1.318	1.318	
2/14/2016	05:40	2.91	11:45	6.41	4.77	05:35	3.70	11:40	5.69	4.97	05:45	0.451	11:40	2.064	1.262	1.262	
2/15/2016	04:15	3.16	10:55	6.95	5.32	03:50	3.96	12:05	5.83	5.19	03:50	0.542	10:50	2.353	1.528	1.528	
2/16/2016	04:30	3.11	08:30	7.45	5.41	04:30	3.80	08:25	5.88	5.20	04:30	0.501	08:30	2.624	1.564	1.564	
2/17/2016	03:45	3.17	08:40	7.32	5.48	03:30	3.69	08:25	5.90	5.21	03:30	0.505	08:25	2.560	1.593	1.593	
2/18/2016	05:30	3.28	08:55	7.36	5.40	05:50	4.08	09:00	5.84	5.18	04:55	0.599	08:55	2.563	1.547	1.547	
2/19/2016	03:40	3.08	08:55	7.25	5.29	04:20	4.00	08:25	5.86	5.14	03:40	0.535	08:55	2.509	1.492	1.492	
2/20/2016	04:35	3.16	11:10	6.44	4.92	05:15	3.96	10:45	5.64	4.99	04:25	0.545	11:10	2.068	1.311	1.311	
2/21/2016	04:40	2.67	11:40	6.39	4.81	06:25	3.63	11:00	5.59	4.90	06:25	0.386	11:00	2.025	1.267	1.267	
2/22/2016	03:40	2.81	08:20	7.50	5.35	04:25	3.96	08:20	5.72	5.05	03:40	0.453	08:20	2.575	1.506	1.506	
2/23/2016	04:35	3.14	08:30	7.63	5.40	04:10	3.96	08:50	5.72	5.08	04:35	0.534	08:25	2.606	1.527	1.527	
2/24/2016	03:50	2.87	08:35	7.52	5.35	04:30	3.64	07:55	5.71	5.07	03:45	0.458	08:35	2.568	1.503	1.502	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			133.101
Avg	5.21	5.05	1.447

Site Commentary

Site Information

MPSite5	
Pipe Dimensions	35.63" x 35.50"
Silt Level	0.00"

Overview

Site MPSite5 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located downstream of location MPSite6. A review of balancing indicated no problems. A net flow of 1.329 MGD was reported for the period.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	15.14	2.14	4.084
Minimum	9.25	1.08	1.017
Maximum	20.59	2.88	7.630
Time of Minimum	12/3/2015 5:15 AM	2/4/2016 4:45 AM	2/4/2016 4:45 AM
Time of Maximum	11/26/2015 12:25 PM	11/26/2015 12:35 PM	11/26/2015 12:40 PM

Data Quality

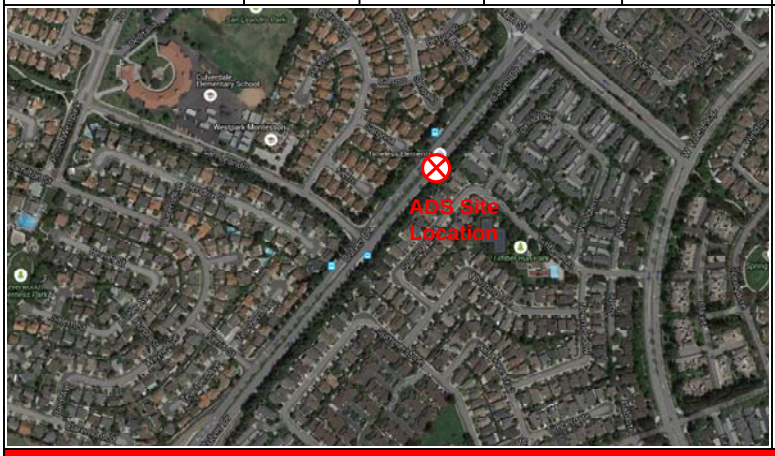
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

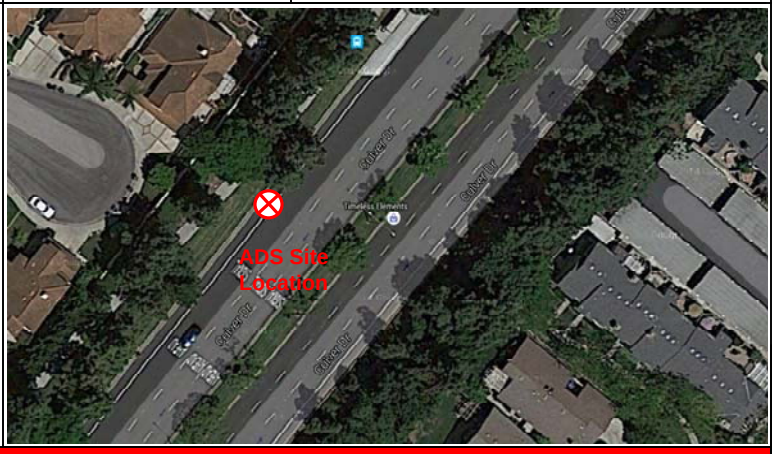
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite5	**Install Date:** 11/18/15	**Monitor Type**	Peak Doppler
Address/Location: Culver & San Leandro		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH060E003
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	35.63 "
		Pipe Width:	35.50 "





Investigation Information:

Date/Time of Investigation:	11/18/15 @1430
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	18.50" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.03 fps
Silt:	0.00 Inches

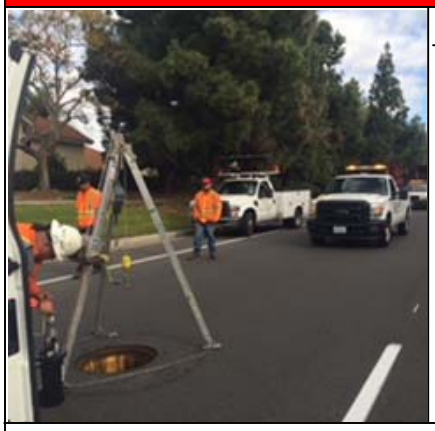
Manhole Information:

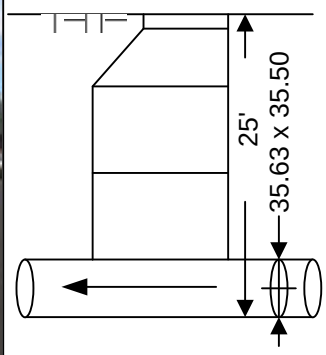
Manhole Depth:	25'			
Manhole Material / Condition	Precast/OK			
Pipe Material / Condition:	VCP/Good			
Land Use:	Residential X	Commercial	Industrial	Trunk
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0	

Safety Notes:

2 man crew required and one blower is to be operated at all times.

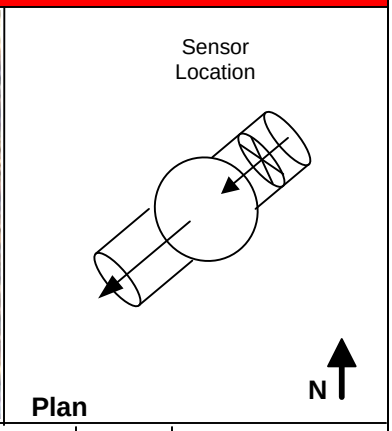
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

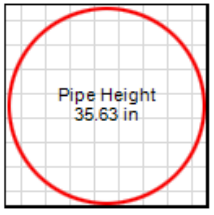
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite5

Flow Monitor

MPSite5

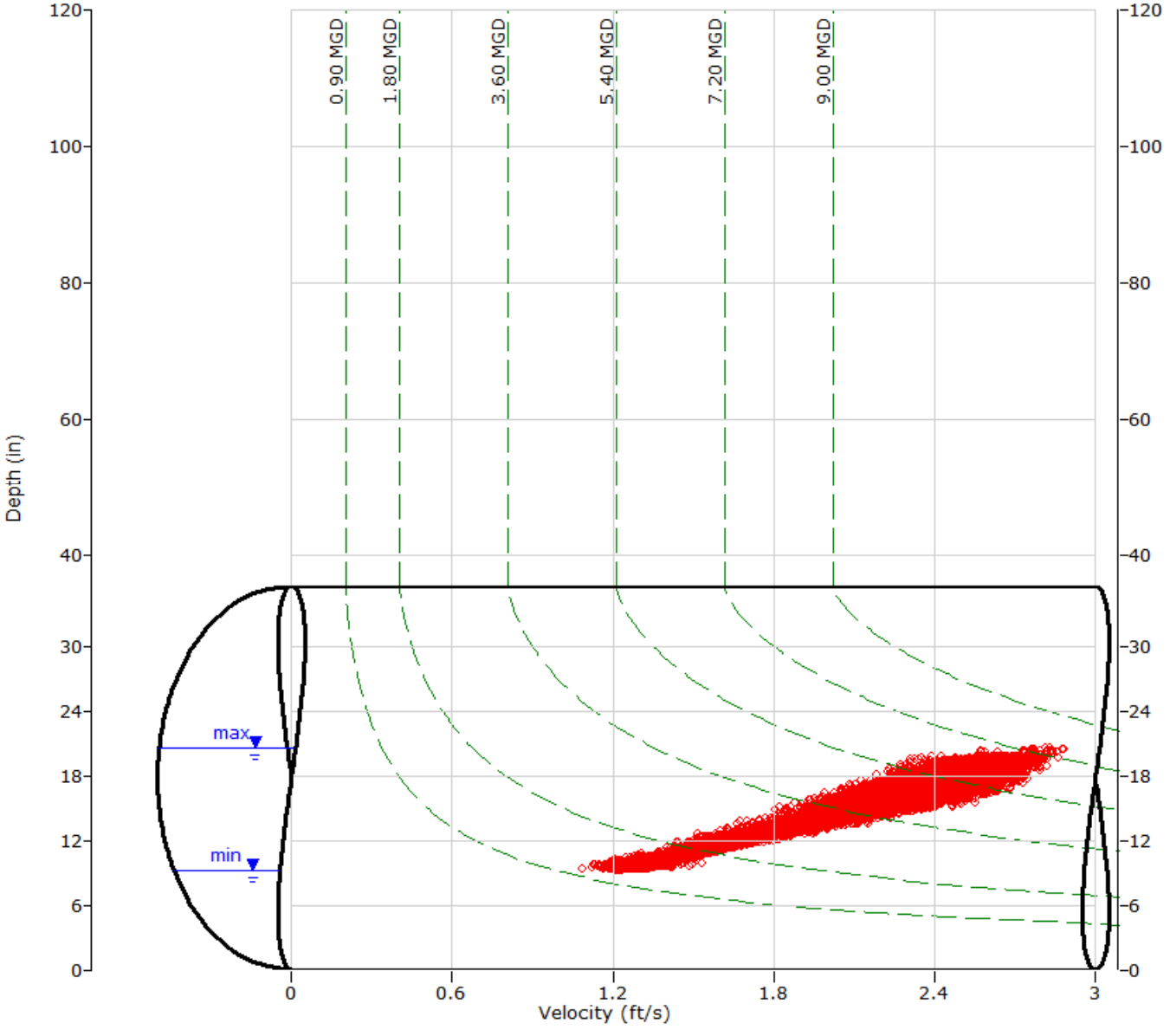


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite5

Flow Monitor

MPSite5

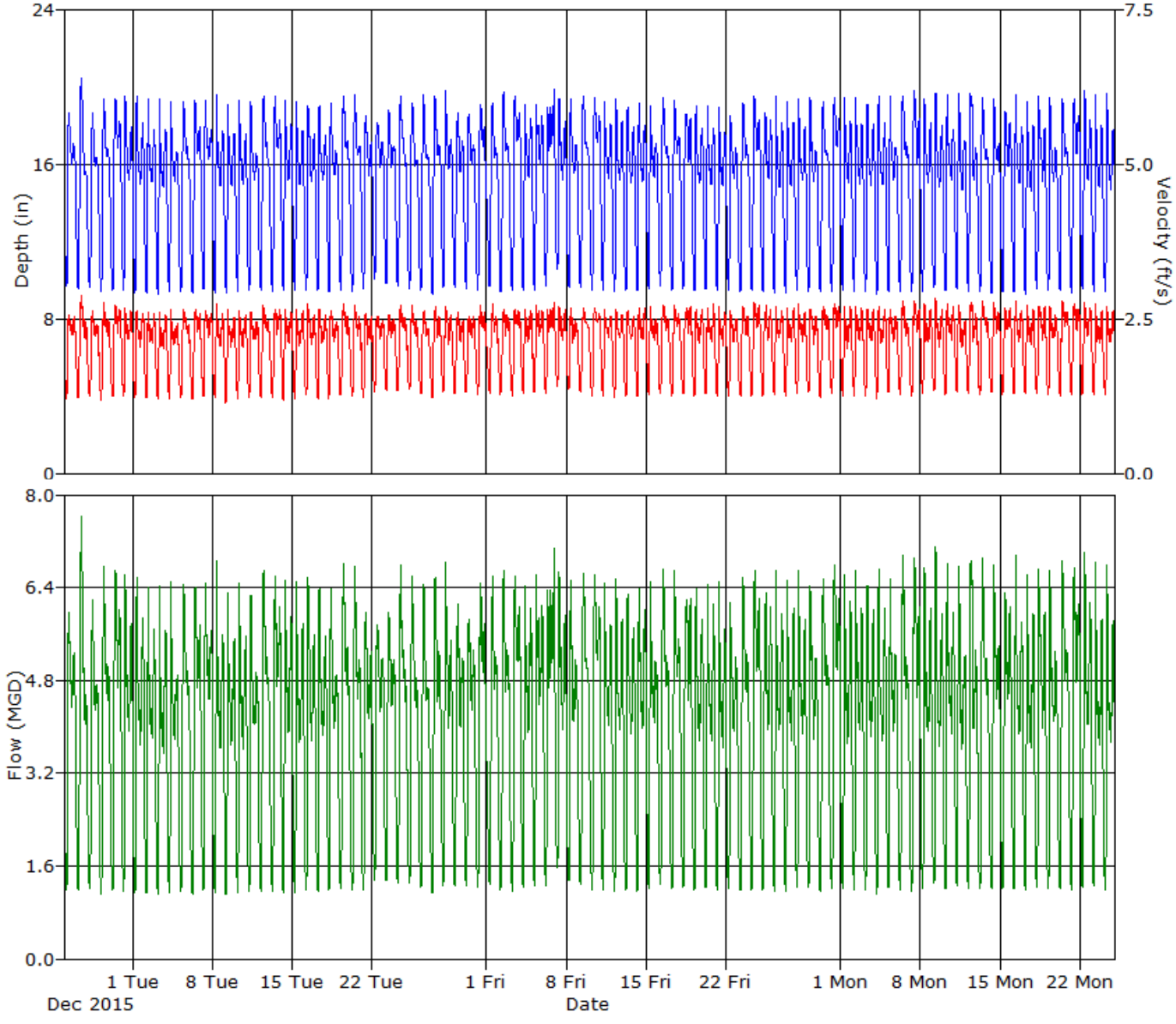
Pipe Height
35.63 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite5, Pipe Height: 35.63 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:40	9.69	09:50	18.69	15.26	05:30	1.17	10:05	2.64	2.12	05:30	1.151	10:05	6.188	4.061	4.061	
11/26/2015	06:20	9.53	12:25	20.59	15.27	05:05	1.20	12:35	2.88	2.15	06:15	1.181	12:40	7.630	4.203	4.203	
11/27/2015	06:00	9.61	11:40	18.66	14.78	06:25	1.24	12:10	2.63	2.07	06:25	1.221	12:10	6.222	3.813	3.813	
11/28/2015	06:20	9.43	11:45	19.40	15.07	06:05	1.12	12:20	2.76	2.11	06:05	1.073	12:20	6.778	4.021	4.021	
11/29/2015	06:25	9.48	11:35	19.34	15.44	06:25	1.21	11:35	2.76	2.16	06:25	1.155	11:35	6.813	4.265	4.265	
11/30/2015	05:20	9.44	08:45	19.55	15.13	05:20	1.24	09:10	2.70	2.13	05:20	1.175	08:35	6.683	4.044	4.044	
12/1/2015	05:30	9.35	08:45	19.59	14.98	04:35	1.20	08:55	2.64	2.09	04:35	1.137	08:45	6.573	3.925	3.925	
12/2/2015	05:20	9.36	08:30	19.38	14.98	05:40	1.22	09:00	2.67	2.09	05:15	1.141	09:00	6.592	3.914	3.914	
12/3/2015	05:15	9.25	08:40	19.38	14.88	05:40	1.21	08:45	2.68	2.07	05:10	1.113	08:45	6.609	3.844	3.844	
12/4/2015	05:10	9.40	08:45	19.28	14.88	05:35	1.16	08:35	2.69	2.06	05:35	1.096	08:35	6.598	3.812	3.812	
12/5/2015	06:05	9.43	11:15	19.24	15.13	05:40	1.23	12:10	2.66	2.11	05:40	1.161	11:45	6.504	4.031	4.031	
12/6/2015	06:20	9.33	11:45	19.27	15.30	07:00	1.18	12:15	2.67	2.11	06:10	1.114	12:15	6.461	4.112	4.112	
12/7/2015	05:15	9.51	08:55	19.36	15.49	05:55	1.24	10:30	2.68	2.16	05:15	1.190	08:50	6.532	4.247	4.247	
12/8/2015	05:15	9.33	08:55	19.66	14.94	05:20	1.20	08:50	2.78	2.09	05:20	1.122	08:50	6.948	3.895	3.895	
12/9/2015	05:10	9.32	08:50	19.13	14.89	03:55	1.13	08:20	2.66	2.07	05:15	1.103	08:25	6.410	3.842	3.842	
12/10/2015	05:20	9.37	08:45	19.42	14.89	05:05	1.16	08:50	2.65	2.08	05:05	1.098	08:50	6.511	3.856	3.856	
12/11/2015	05:30	9.48	08:40	19.25	14.87	05:25	1.16	08:50	2.66	2.10	05:25	1.102	08:50	6.521	3.883	3.883	
12/12/2015	05:55	9.48	11:50	19.54	15.19	05:45	1.19	11:30	2.74	2.13	05:45	1.138	11:30	6.835	4.099	4.099	
12/13/2015	06:15	9.39	11:15	19.51	15.42	06:30	1.23	20:30	2.75	2.16	06:30	1.158	11:30	6.682	4.255	4.255	
12/14/2015	05:20	9.46	08:50	19.40	15.12	04:35	1.14	08:20	2.69	2.13	04:35	1.108	08:50	6.554	4.032	4.032	
12/15/2015	05:35	9.44	08:55	19.20	14.94	05:10	1.17	09:05	2.68	2.11	05:10	1.118	08:55	6.525	3.928	3.928	
12/16/2015	05:20	9.46	09:10	19.02	15.09	05:20	1.26	08:40	2.82	2.14	05:20	1.193	08:40	6.748	4.040	4.040	
12/17/2015	05:15	9.49	08:40	19.09	14.99	06:00	1.15	08:50	2.67	2.12	06:00	1.112	08:40	6.461	3.965	3.965	
12/18/2015	05:10	9.41	08:55	19.19	14.96	04:15	1.15	08:35	2.71	2.12	04:15	1.141	08:35	6.593	3.944	3.944	
12/19/2015	06:10	9.46	11:55	19.51	15.28	05:45	1.26	11:10	2.75	2.14	06:05	1.201	11:10	6.829	4.164	4.164	
12/20/2015	06:05	9.44	11:35	19.59	15.22	06:10	1.25	10:50	2.71	2.13	06:10	1.180	11:20	6.778	4.099	4.099	
12/21/2015	05:20	9.52	10:20	18.51	15.09	05:45	1.22	09:35	2.60	2.10	05:25	1.192	10:00	5.996	3.969	3.969	
12/22/2015	05:15	10.06	11:05	18.14	15.28	04:40	1.25	10:45	2.63	2.12	04:40	1.299	10:45	5.976	4.047	4.047	
12/23/2015	05:30	9.84	10:05	18.88	15.32	05:50	1.32	12:20	2.59	2.14	05:45	1.335	10:50	6.019	4.090	4.090	
12/24/2015	06:00	9.69	11:55	19.56	15.40	04:30	1.32	11:40	2.81	2.18	06:00	1.317	11:40	7.024	4.246	4.246	
12/25/2015	06:20	9.57	12:20	19.19	15.02	05:25	1.36	12:50	2.72	2.13	06:20	1.308	12:50	6.609	4.005	4.005	
12/26/2015	06:35	9.50	11:40	19.56	15.00	06:40	1.21	11:30	2.69	2.07	06:40	1.156	11:30	6.732	3.909	3.909	
12/27/2015	06:20	9.28	11:55	19.52	15.14	06:25	1.17	12:25	2.69	2.09	06:25	1.076	11:45	6.613	4.021	4.021	
12/28/2015	05:25	9.58	10:40	19.79	15.22	05:05	1.26	11:05	2.72	2.13	05:05	1.228	10:35	6.841	4.073	4.073	
12/29/2015	05:40	9.58	11:35	18.62	15.11	05:25	1.26	12:10	2.61	2.11	05:25	1.228	11:20	6.127	3.995	3.995	
12/30/2015	05:35	9.55	10:35	18.55	15.11	04:15	1.25	21:50	2.57	2.11	05:40	1.241	11:00	6.010	3.998	3.998	
12/31/2015	05:50	9.49	11:50	19.07	15.28	06:05	1.27	12:20	2.73	2.16	06:05	1.218	11:40	6.527	4.164	4.164	
1/1/2016	06:20	9.71	12:40	19.17	14.96	06:50	1.19	13:00	2.76	2.12	06:50	1.180	13:00	6.691	3.968	3.968	
1/2/2016	06:10	9.41	11:55	19.76	15.18	05:10	1.21	14:15	2.70	2.13	05:10	1.168	12:25	6.763	4.103	4.103	
1/3/2016	06:05	9.45	12:05	19.50	15.61	06:20	1.22	12:00	2.71	2.16	06:20	1.157	12:00	6.763	4.322	4.322	
1/4/2016	05:25	9.45	08:50	19.05	15.24	03:40	1.22	08:45	2.67	2.13	05:20	1.223	08:45	6.475	4.079	4.079	
1/5/2016	05:30	9.46	09:00	19.18	15.54	04:50	1.28	08:45	2.73	2.21	04:50	1.229	08:45	6.656	4.345	4.345	
1/6/2016	05:25	9.67	22:10	19.92	15.95	03:50	1.23	22:10	2.82	2.23	05:35	1.234	22:10	7.231	4.553	4.553	
1/7/2016	05:40	10.57	09:00	19.48	15.57	04:05	1.37	09:35	2.77	2.20	05:15	1.562	08:55	6.683	4.270	4.270	
1/8/2016	05:40	9.60	09:00	19.38	15.12	06:05	1.30	08:45	2.69	2.14	06:05	1.307	08:45	6.578	4.021	4.021	
1/9/2016	06:00	9.60	11:40	19.65	15.33	05:25	1.29	11:20	2.71	2.15	05:25	1.267	11:40	6.746	4.176	4.176	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	06:15	9.49	11:35	19.46	15.52	06:15	1.25	11:35	2.66	2.18	06:15	1.192	11:35	6.638	4.325	4.325	
1/11/2016	05:20	9.46	08:50	19.26	15.15	05:20	1.24	08:50	2.65	2.15	05:20	1.179	08:50	6.516	4.074	4.074	
1/12/2016	05:25	9.42	08:40	19.37	15.06	05:25	1.24	08:40	2.66	2.14	05:25	1.166	08:40	6.580	4.024	4.024	
1/13/2016	05:15	9.45	09:05	18.96	15.05	05:15	1.24	09:05	2.62	2.13	05:15	1.179	09:05	6.327	4.019	4.019	
1/14/2016	05:05	9.44	08:30	19.13	15.09	05:05	1.24	09:05	2.72	2.16	05:05	1.175	08:30	6.585	4.086	4.086	
1/15/2016	05:25	9.52	09:00	19.00	14.98	05:10	1.26	08:20	2.70	2.14	05:20	1.210	08:45	6.517	3.994	3.994	
1/16/2016	06:15	9.67	11:50	19.49	15.24	04:15	1.27	11:30	2.76	2.17	06:25	1.251	11:30	6.819	4.163	4.163	
1/17/2016	06:05	9.50	11:30	19.31	15.21	05:55	1.26	11:40	2.73	2.15	06:25	1.200	11:40	6.726	4.149	4.149	
1/18/2016	05:35	9.57	12:35	18.66	15.43	05:00	1.27	20:45	2.72	2.19	05:00	1.231	21:10	6.275	4.288	4.288	
1/19/2016	05:30	9.44	08:45	19.02	14.95	04:50	1.22	08:50	2.68	2.13	04:50	1.187	08:50	6.473	3.984	3.984	
1/20/2016	04:55	9.52	08:40	19.27	14.97	05:25	1.27	21:20	2.74	2.15	05:25	1.222	08:40	6.595	4.021	4.021	
1/21/2016	05:30	9.48	08:40	19.04	14.89	04:45	1.25	08:50	2.72	2.13	05:30	1.189	08:50	6.549	3.946	3.946	
1/22/2016	05:30	9.44	09:10	18.58	14.86	05:50	1.16	09:10	2.69	2.12	05:50	1.127	09:10	6.318	3.915	3.915	
1/23/2016	06:10	9.38	11:10	19.18	15.06	06:40	1.17	11:30	2.72	2.14	06:40	1.137	11:30	6.641	4.072	4.072	
1/24/2016	06:10	9.44	11:20	19.50	15.41	05:10	1.21	10:20	2.79	2.19	05:10	1.183	12:50	6.786	4.314	4.314	
1/25/2016	05:30	9.42	08:45	18.69	15.15	04:50	1.23	12:10	2.74	2.16	04:50	1.168	12:20	6.353	4.132	4.132	
1/26/2016	05:25	9.31	09:00	19.51	14.95	05:25	1.26	08:45	2.81	2.16	05:25	1.173	08:45	7.011	4.042	4.042	
1/27/2016	04:55	9.33	08:55	19.23	14.91	04:40	1.24	08:50	2.72	2.15	04:40	1.158	08:50	6.672	4.005	4.005	
1/28/2016	05:30	9.47	08:50	19.38	15.02	05:35	1.29	08:35	2.76	2.17	05:35	1.225	08:55	6.778	4.065	4.065	
1/29/2016	05:40	9.43	08:55	19.40	14.91	05:35	1.30	08:35	2.68	2.16	05:35	1.233	08:45	6.591	4.011	4.011	
1/30/2016	05:55	9.41	11:50	19.34	15.08	05:45	1.22	12:25	2.73	2.17	05:45	1.155	12:25	6.634	4.134	4.134	
1/31/2016	06:10	9.39	11:00	19.55	15.44	06:40	1.28	13:15	2.79	2.20	06:20	1.209	11:15	6.822	4.349	4.349	
2/1/2016	05:20	9.47	08:45	19.52	15.12	05:45	1.20	09:00	2.78	2.13	05:45	1.157	09:00	6.728	4.039	4.039	
2/2/2016	05:35	9.37	08:35	19.55	15.14	05:25	1.22	08:45	2.77	2.16	05:25	1.140	08:50	6.899	4.113	4.113	
2/3/2016	05:20	9.37	09:00	19.15	15.01	04:15	1.24	09:25	2.71	2.15	04:15	1.189	08:30	6.554	4.046	4.046	
2/4/2016	05:20	9.27	08:40	19.61	14.96	04:45	1.08	08:40	2.75	2.14	04:45	1.017	08:40	6.908	3.993	3.993	
2/5/2016	05:10	9.42	08:45	19.50	15.00	05:10	1.30	08:35	2.75	2.17	05:10	1.221	08:35	6.798	4.047	4.047	
2/6/2016	06:05	9.40	11:05	19.55	15.27	06:05	1.24	11:35	2.80	2.15	06:05	1.164	11:05	6.986	4.165	4.165	
2/7/2016	06:15	9.43	11:05	19.79	15.46	06:15	1.24	12:00	2.80	2.19	06:15	1.171	12:00	6.979	4.329	4.329	
2/8/2016	05:20	9.38	08:45	19.40	15.06	05:20	1.30	08:25	2.76	2.18	05:20	1.220	08:50	6.797	4.116	4.116	
2/9/2016	05:05	9.64	08:45	19.71	15.05	05:05	1.32	08:30	2.86	2.17	05:05	1.289	08:30	7.188	4.071	4.071	
2/10/2016	05:15	9.48	08:40	19.67	15.10	05:10	1.25	08:25	2.79	2.20	05:10	1.188	08:30	6.830	4.158	4.158	
2/11/2016	05:20	9.56	08:35	19.72	14.96	05:30	1.30	08:30	2.82	2.13	05:30	1.259	08:30	7.055	3.965	3.965	
2/12/2016	05:35	9.40	09:45	19.75	15.29	05:30	1.28	12:35	2.79	2.19	05:30	1.206	12:35	6.911	4.246	4.246	
2/13/2016	06:15	9.38	11:30	19.49	15.08	04:55	1.20	11:35	2.79	2.18	04:55	1.167	11:30	6.951	4.162	4.162	
2/14/2016	06:20	9.30	11:15	19.35	15.03	06:20	1.31	11:15	2.80	2.17	06:20	1.210	11:15	6.919	4.110	4.110	
2/15/2016	05:40	9.38	11:15	18.71	15.22	04:15	1.21	10:40	2.73	2.17	04:15	1.204	10:40	6.396	4.184	4.184	
2/16/2016	05:25	9.35	08:45	19.61	14.96	04:50	1.27	08:35	2.78	2.16	04:50	1.195	08:40	6.993	4.037	4.037	
2/17/2016	05:10	9.27	08:40	19.29	14.89	05:00	1.29	08:55	2.74	2.15	05:05	1.192	08:40	6.737	3.994	3.994	
2/18/2016	05:05	9.54	08:40	19.49	15.39	04:55	1.29	22:35	2.73	2.22	04:55	1.241	08:55	6.745	4.325	4.325	
2/19/2016	05:20	9.44	08:45	19.51	14.96	05:15	1.27	08:35	2.74	2.17	05:15	1.198	08:35	6.794	4.043	4.043	
2/20/2016	06:05	9.50	11:25	19.46	15.20	06:15	1.18	11:40	2.79	2.20	06:15	1.127	11:25	6.890	4.225	4.225	
2/21/2016	06:10	9.30	11:30	19.43	15.41	04:20	1.26	12:15	2.78	2.21	06:10	1.177	12:10	6.817	4.341	4.341	
2/22/2016	05:20	9.53	09:25	19.92	15.33	03:50	1.25	09:45	2.79	2.20	05:05	1.237	09:25	7.130	4.270	4.270	
2/23/2016	05:20	9.43	08:35	19.59	14.98	04:20	1.26	08:35	2.81	2.16	04:20	1.232	08:35	7.055	4.030	4.030	
2/24/2016	05:10	9.37	08:55	19.71	14.91	05:10	1.26	09:00	2.71	2.13	05:10	1.181	08:55	6.805	3.964	3.961	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			375.727
Avg	15.14	2.14	4.084

Site Commentary

Site Information

MPSite6ALT	
Pipe Dimensions	39.13" x 38.88"
Silt Level	0.00"

Overview

Site MPSite6ALT functioned under normal conditions during the period Friday, December 11, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. This is an alternate location. The original location was relocated due to client request. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located downstream of location MPSite7. A review of balancing indicated no problems. A net flow of 2.123 MGD was reported for the period.

Observations

Average flow depth, velocity, and quantity data observed during Friday, December 11, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	11.91	1.89	2.755
Minimum	7.20	0.99	0.700
Maximum	16.17	2.48	5.123
Time of Minimum	2/4/2016 5:05 AM	2/17/2016 4:50 AM	2/17/2016 4:50 AM
Time of Maximum	1/6/2016 9:50 PM	2/22/2016 10:05 AM	1/6/2016 9:50 PM

Data Quality

Data uptime observed during the Friday, December 11, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

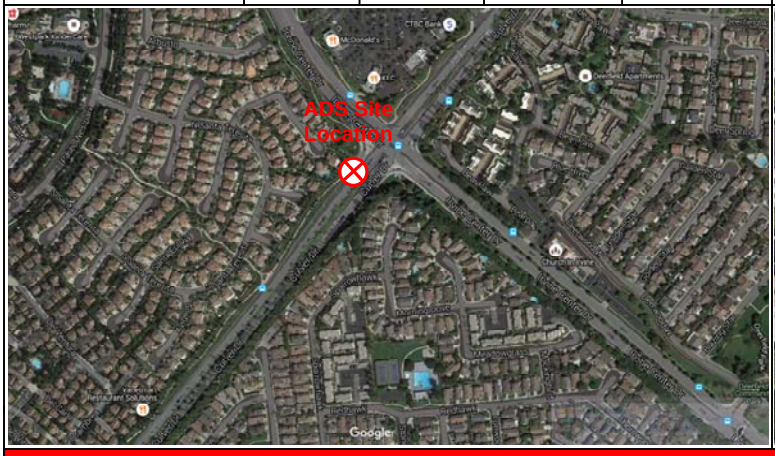
Percent Uptime*	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

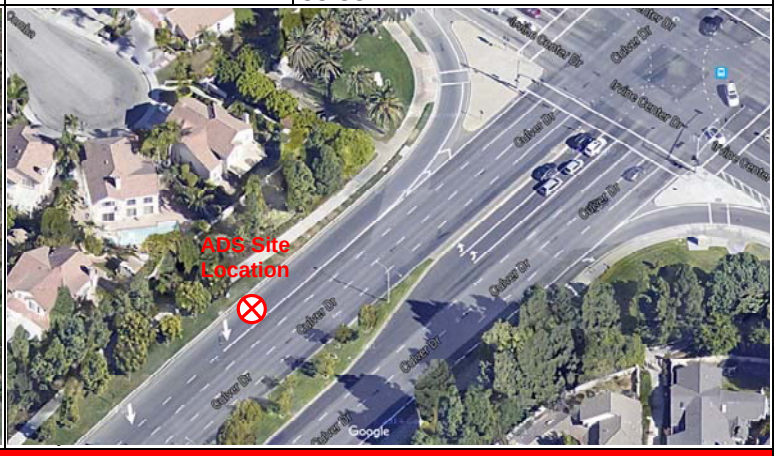
*Based on date of relocation.

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite6alt	**Install Date:** 12/11/15	**Monitor Type**	Peak Doppler
Address/Location: Culver & Irvine Center Dr		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH062S011
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	39.13 "
		Pipe Width:	38.88 "





Investigation Information:

Date/Time of Investigation:	12/11/15 @1040
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	13.88" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.33 fps
Silt:	0.00 Inches

Manhole Information:

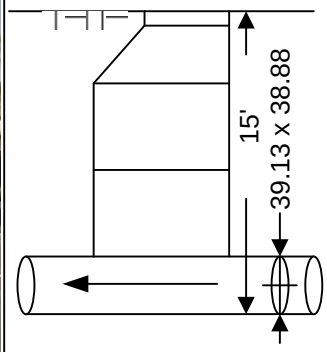
Manhole Depth:	15'			
Manhole Material / Condition	Precast/OK			
Pipe Material / Condition:	VCP/Good			
Land Use:	Residential [X]	Commercial [ ]	Industrial [ ]	Trunk [ ]
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0	

Safety Notes:

2 man crew required and one blower is to be operated at all times.

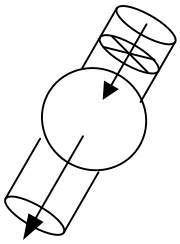
Other Information:





Cross Section

Photo Not Available



Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

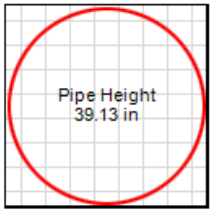
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite6ALT

Flow Monitor

MPSite6ALT

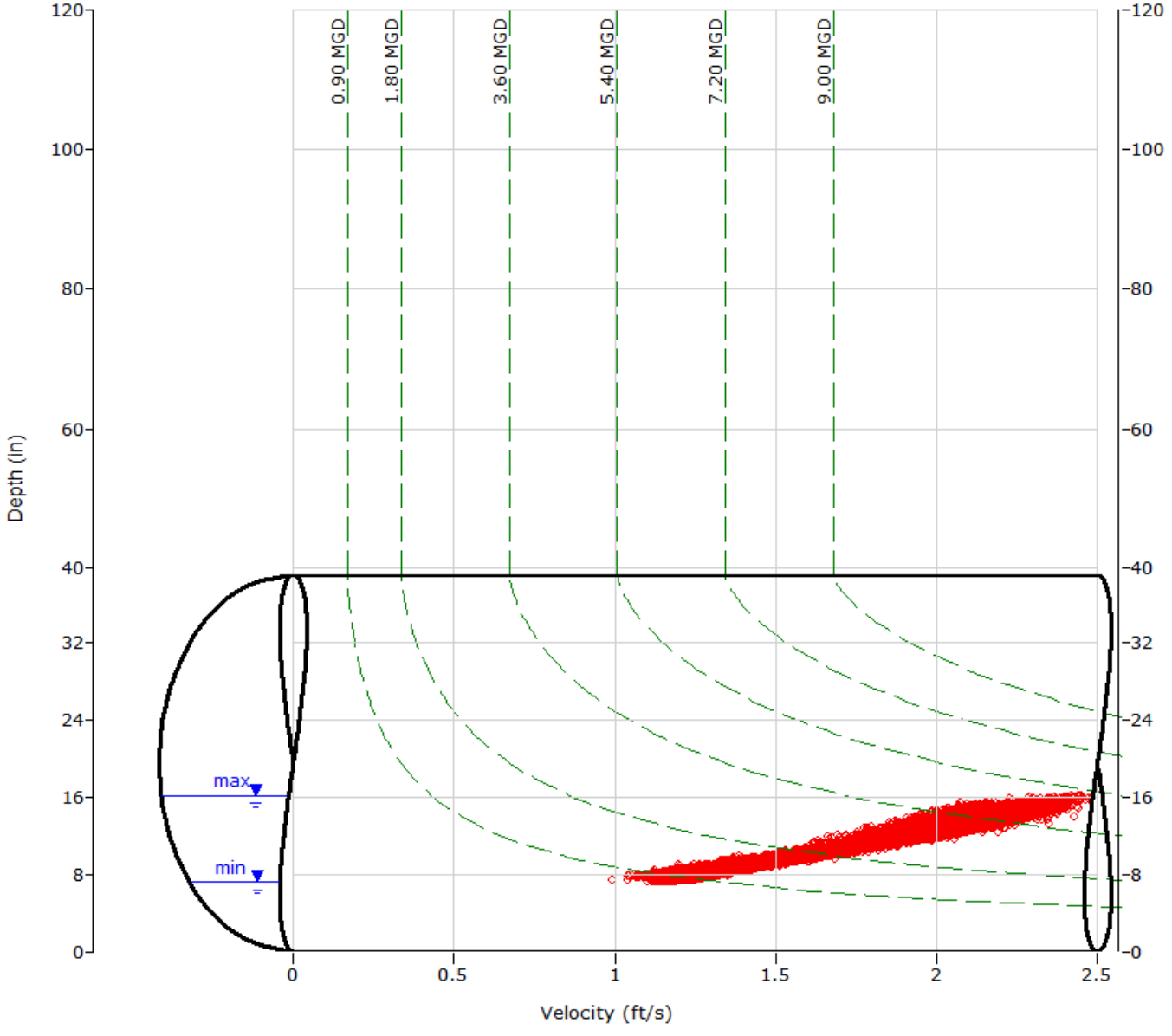


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth

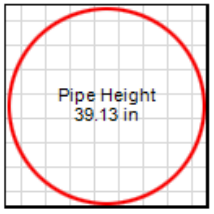


HYDROGRAPH REPORT

MPSite6ALT

Flow Monitor

MPSite6ALT

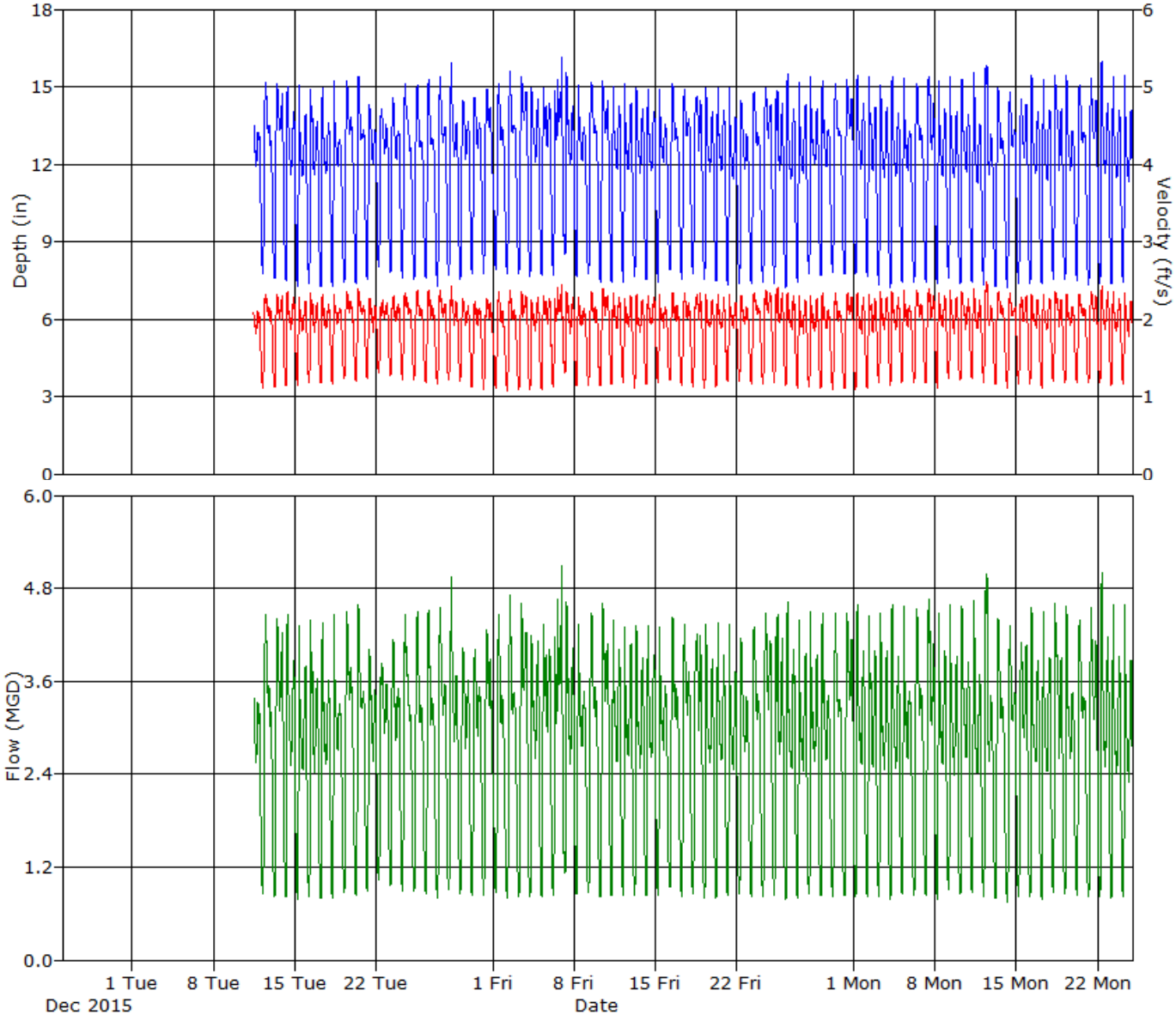


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite6ALT, Pipe Height: 39.13 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015																	
11/26/2015																	
11/27/2015																	
11/28/2015																	
11/29/2015																	
11/30/2015																	
12/1/2015																	
12/2/2015																	
12/3/2015																	
12/4/2015																	
12/5/2015																	
12/6/2015																	
12/7/2015																	
12/8/2015																	
12/9/2015																	
12/10/2015																	
12/11/2015	16:05	11.91	11:05	13.52	12.71	15:30	1.75	10:45	2.19	1.97	15:30	2.457	11:15	3.401	2.976	1.601	
12/12/2015	05:25	7.73	11:25	15.17	12.04	04:45	1.10	11:15	2.32	1.87	05:30	0.849	11:15	4.453	2.779	2.779	
12/13/2015	06:10	7.59	10:55	15.14	12.21	06:20	1.13	11:00	2.35	1.89	06:10	0.824	11:00	4.504	2.880	2.880	
12/14/2015	05:45	7.47	08:25	15.03	11.75	05:10	1.13	08:15	2.39	1.87	05:15	0.819	08:15	4.508	2.674	2.674	
12/15/2015	05:15	7.24	08:25	15.11	11.56	05:10	1.14	08:20	2.36	1.86	05:10	0.783	08:20	4.491	2.588	2.588	
12/16/2015	05:10	7.35	08:30	14.92	11.73	05:05	1.17	08:35	2.34	1.88	05:05	0.821	08:35	4.404	2.670	2.670	
12/17/2015	05:30	7.26	08:30	14.95	11.59	05:25	1.17	08:30	2.32	1.87	05:25	0.801	08:30	4.370	2.616	2.616	
12/18/2015	05:05	7.27	08:25	15.27	11.61	05:10	1.16	08:25	2.32	1.89	05:10	0.801	08:25	4.505	2.646	2.646	
12/19/2015	06:10	7.43	11:20	15.22	11.99	05:20	1.23	10:35	2.37	1.93	05:30	0.871	11:20	4.531	2.849	2.849	
12/20/2015	05:35	7.36	11:10	15.39	11.92	06:10	1.20	10:50	2.40	1.91	06:10	0.837	11:00	4.639	2.812	2.812	
12/21/2015	05:30	7.54	09:35	14.31	11.76	05:25	1.23	09:45	2.28	1.90	05:35	0.888	09:45	4.051	2.694	2.694	
12/22/2015	04:55	8.03	10:40	14.15	11.95	03:55	1.31	11:50	2.24	1.93	04:45	1.036	10:45	3.901	2.790	2.790	
12/23/2015	05:25	7.82	09:45	14.56	11.98	05:20	1.26	11:20	2.33	1.93	05:20	0.963	11:25	4.162	2.799	2.799	
12/24/2015	05:45	7.58	12:00	15.12	12.05	05:40	1.22	09:25	2.43	1.94	05:40	0.891	12:00	4.478	2.871	2.871	
12/25/2015	06:00	7.55	12:30	15.04	11.83	05:45	1.21	11:30	2.39	1.91	05:45	0.880	12:30	4.512	2.765	2.765	
12/26/2015	05:50	7.59	11:40	15.26	11.82	05:35	1.17	12:20	2.38	1.88	05:35	0.862	11:40	4.569	2.726	2.726	
12/27/2015	05:55	7.28	11:30	15.40	11.92	06:20	1.15	11:00	2.39	1.89	05:50	0.795	11:15	4.630	2.790	2.790	
12/28/2015	04:55	7.69	10:05	15.93	11.97	05:35	1.20	09:55	2.44	1.91	05:35	0.897	10:05	4.985	2.802	2.802	
12/29/2015	05:25	7.52	11:20	14.49	11.93	05:25	1.19	10:30	2.28	1.88	05:25	0.860	11:00	4.077	2.741	2.741	
12/30/2015	05:30	7.76	11:50	14.57	12.05	05:35	1.11	10:20	2.26	1.84	05:35	0.841	10:20	4.103	2.714	2.714	
12/31/2015	05:30	7.78	12:30	14.92	12.18	05:25	1.09	12:20	2.29	1.85	05:30	0.828	12:20	4.285	2.789	2.789	
1/1/2016	06:35	7.93	12:20	15.09	11.98	06:40	1.11	12:45	2.35	1.82	06:40	0.862	12:45	4.479	2.677	2.677	
1/2/2016	06:10	7.74	11:40	15.59	12.14	05:55	1.07	11:35	2.38	1.83	06:10	0.807	11:35	4.747	2.774	2.774	
1/3/2016	06:20	7.74	11:20	15.40	12.45	06:20	1.08	11:10	2.35	1.89	06:20	0.812	11:10	4.605	2.968	2.968	
1/4/2016	05:05	7.67	08:35	14.96	12.08	05:05	1.09	08:30	2.29	1.86	05:05	0.809	08:30	4.311	2.753	2.753	
1/5/2016	05:00	7.70	08:25	14.95	12.27	04:55	1.05	08:25	2.31	1.90	04:55	0.784	08:25	4.357	2.888	2.888	
1/6/2016	05:00	7.69	21:50	16.17	12.60	05:25	1.05	21:50	2.45	1.94	05:25	0.786	21:50	5.123	3.087	3.087	
1/7/2016	05:30	8.51	08:30	15.56	12.29	05:10	1.29	08:20	2.40	1.92	05:35	1.122	08:20	4.717	2.876	2.876	
1/8/2016	05:10	7.65	08:35	15.05	11.91	05:10	1.14	08:40	2.31	1.86	05:10	0.844	08:40	4.393	2.696	2.696	
1/9/2016	05:25	7.73	11:25	15.17	12.12	05:10	1.15	12:25	2.35	1.88	05:20	0.864	11:45	4.495	2.822	2.822	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	06:20	7.44	11:20	15.24	12.17	06:00	1.13	11:45	2.44	1.92	06:00	0.813	11:20	4.620	2.916	2.916	
1/11/2016	05:10	7.45	08:25	15.07	11.82	04:40	1.12	08:30	2.34	1.89	04:40	0.805	08:30	4.453	2.721	2.721	
1/12/2016	05:00	7.43	08:25	15.10	11.79	04:55	1.17	08:20	2.33	1.89	05:00	0.829	08:20	4.445	2.700	2.700	
1/13/2016	05:15	7.62	08:30	14.98	11.86	05:35	1.05	09:05	2.33	1.85	05:35	0.789	08:30	4.353	2.675	2.675	
1/14/2016	05:15	7.54	08:25	14.93	11.77	05:35	1.15	08:20	2.33	1.88	05:20	0.835	08:20	4.374	2.688	2.688	
1/15/2016	05:15	7.42	08:20	14.93	11.76	05:15	1.18	08:15	2.32	1.87	05:15	0.833	08:15	4.334	2.661	2.661	
1/16/2016	06:05	7.90	11:20	15.09	12.04	06:00	1.20	12:15	2.36	1.89	06:00	0.934	11:05	4.465	2.788	2.788	
1/17/2016	06:10	7.52	11:30	14.92	12.00	06:05	1.13	12:05	2.35	1.88	06:05	0.819	11:15	4.377	2.787	2.787	
1/18/2016	05:40	7.77	13:20	14.63	12.21	04:50	1.12	21:00	2.37	1.89	05:35	0.846	21:00	4.268	2.873	2.873	
1/19/2016	05:10	7.53	08:35	14.93	11.76	04:55	1.11	08:25	2.33	1.85	04:55	0.804	08:25	4.379	2.638	2.638	
1/20/2016	05:10	7.47	08:40	14.97	11.75	05:10	1.13	08:20	2.33	1.85	05:10	0.806	08:30	4.355	2.632	2.632	
1/21/2016	05:05	7.33	08:25	14.95	11.56	05:45	1.20	08:10	2.38	1.88	05:05	0.834	08:15	4.391	2.615	2.615	
1/22/2016	05:15	7.38	08:45	14.49	11.58	05:15	1.20	08:55	2.31	1.89	05:15	0.841	08:55	4.158	2.621	2.621	
1/23/2016	05:50	7.35	11:55	14.78	11.79	05:45	1.16	12:00	2.38	1.90	05:45	0.812	12:00	4.419	2.750	2.750	
1/24/2016	06:25	7.42	11:00	14.97	12.03	06:25	1.16	11:35	2.38	1.94	06:25	0.821	11:35	4.483	2.894	2.894	
1/25/2016	05:20	7.40	12:00	14.85	11.86	05:20	1.19	12:00	2.44	1.93	05:20	0.836	12:00	4.554	2.801	2.801	
1/26/2016	05:05	7.24	08:30	15.63	11.62	05:15	1.15	08:25	2.37	1.88	05:15	0.784	08:25	4.735	2.647	2.647	
1/27/2016	05:10	7.43	08:35	15.16	11.74	05:25	1.11	08:15	2.33	1.84	05:20	0.791	08:15	4.415	2.633	2.633	
1/28/2016	05:10	7.75	08:25	15.41	11.96	05:10	1.12	08:10	2.32	1.85	05:10	0.844	08:25	4.517	2.697	2.697	
1/29/2016	05:10	7.71	08:30	15.24	11.85	04:30	1.11	08:20	2.34	1.83	05:00	0.835	08:25	4.505	2.640	2.640	
1/30/2016	05:40	7.81	11:25	15.13	12.07	05:40	1.04	11:15	2.42	1.85	05:40	0.794	11:15	4.631	2.762	2.762	
1/31/2016	05:45	7.74	11:15	15.30	12.31	05:40	1.11	13:00	2.41	1.89	05:40	0.833	11:05	4.544	2.925	2.925	
2/1/2016	05:15	7.72	08:25	15.43	12.00	04:55	1.09	08:15	2.34	1.85	05:05	0.821	08:15	4.586	2.715	2.715	
2/2/2016	05:05	7.64	08:20	15.40	12.02	04:45	1.10	08:10	2.34	1.86	05:00	0.811	08:20	4.582	2.748	2.748	
2/3/2016	05:10	7.33	08:30	15.09	11.67	04:45	1.16	08:25	2.37	1.90	04:45	0.814	08:25	4.530	2.690	2.690	
2/4/2016	05:05	7.20	08:20	15.42	11.62	04:30	1.12	08:10	2.39	1.90	04:30	0.779	08:10	4.637	2.667	2.667	
2/5/2016	05:20	7.43	08:30	15.35	11.72	03:50	1.10	08:10	2.38	1.89	03:50	0.817	08:20	4.605	2.686	2.686	
2/6/2016	05:50	7.43	12:00	15.14	11.98	05:30	1.17	12:00	2.38	1.92	05:55	0.832	12:00	4.559	2.838	2.838	
2/7/2016	05:55	7.43	11:55	15.37	12.12	05:45	1.18	11:55	2.39	1.93	05:50	0.836	11:55	4.676	2.920	2.920	
2/8/2016	05:15	7.37	08:25	15.27	11.75	04:50	1.04	08:55	2.35	1.91	04:50	0.734	08:30	4.542	2.724	2.724	
2/9/2016	05:20	7.60	08:25	15.36	11.71	05:20	1.23	08:30	2.40	1.90	05:20	0.899	08:30	4.685	2.689	2.689	
2/10/2016	05:05	7.37	08:25	15.31	11.80	02:45	1.19	08:30	2.37	1.92	05:15	0.853	08:30	4.599	2.748	2.748	
2/11/2016	05:20	7.44	08:25	15.58	11.65	04:45	1.23	08:10	2.41	1.90	05:20	0.874	08:25	4.733	2.683	2.683	
2/12/2016	05:20	7.30	12:00	15.84	12.00	05:05	1.17	11:35	2.48	1.94	05:10	0.815	11:40	5.007	2.882	2.882	
2/13/2016	05:50	7.28	11:15	14.96	11.74	05:35	1.15	11:15	2.38	1.91	05:35	0.793	11:15	4.491	2.749	2.749	
2/14/2016	06:05	7.22	11:05	14.82	11.73	06:05	1.10	11:45	2.36	1.87	06:05	0.749	11:45	4.348	2.698	2.698	
2/15/2016	05:30	7.37	10:45	14.50	11.89	05:50	1.11	11:40	2.31	1.91	05:50	0.784	11:40	4.144	2.790	2.790	
2/16/2016	05:05	7.36	08:20	15.44	11.70	04:45	1.17	08:05	2.35	1.88	04:45	0.820	08:15	4.578	2.663	2.663	
2/17/2016	05:10	7.35	08:30	15.31	11.69	04:50	0.99	08:35	2.33	1.87	04:50	0.700	08:30	4.527	2.648	2.648	
2/18/2016	05:00	7.56	08:20	15.42	12.20	05:10	1.19	10:30	2.38	1.94	05:05	0.868	08:30	4.628	2.933	2.933	
2/19/2016	05:05	7.51	08:25	15.49	11.74	05:30	1.17	08:55	2.33	1.88	05:30	0.854	08:25	4.576	2.671	2.671	
2/20/2016	05:40	7.48	11:25	15.05	11.95	05:35	1.17	10:10	2.33	1.89	05:35	0.840	11:00	4.400	2.786	2.786	
2/21/2016	06:00	7.32	11:20	15.32	12.09	05:55	1.17	11:50	2.37	1.92	06:00	0.813	11:10	4.586	2.891	2.891	
2/22/2016	05:05	7.35	08:45	15.99	12.01	05:05	1.17	10:05	2.48	1.91	05:05	0.818	10:05	5.055	2.835	2.835	
2/23/2016	05:00	7.37	08:20	15.39	11.69	04:50	1.15	08:25	2.35	1.86	04:55	0.803	08:20	4.602	2.641	2.641	
2/24/2016	05:15	7.41	08:25	15.49	11.67	04:45	1.16	08:15	2.35	1.86	05:15	0.819	08:15	4.606	2.631	2.629	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			208.126
Avg	11.91	1.89	2.755

Site Commentary

Site Information

MPSite7	
Pipe Dimensions	18.00" x 18.00"
Silt Level	0.00"

Overview

Site MPSite7 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the data period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located upstream of location MPSite6ALT. A review of balancing indicated no problems (See MPSite6ALT Commentary For More Details).

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	2.95	4.93	0.633
Minimum	1.64	2.69	0.171
Maximum	5.50	6.72	1.989
Time of Minimum	12/17/2015 5:15 AM	2/13/2016 5:00 AM	2/14/2016 4:50 AM
Time of Maximum	12/28/2015 9:25 AM	12/28/2015 9:25 AM	12/28/2015 9:25 AM

Data Quality

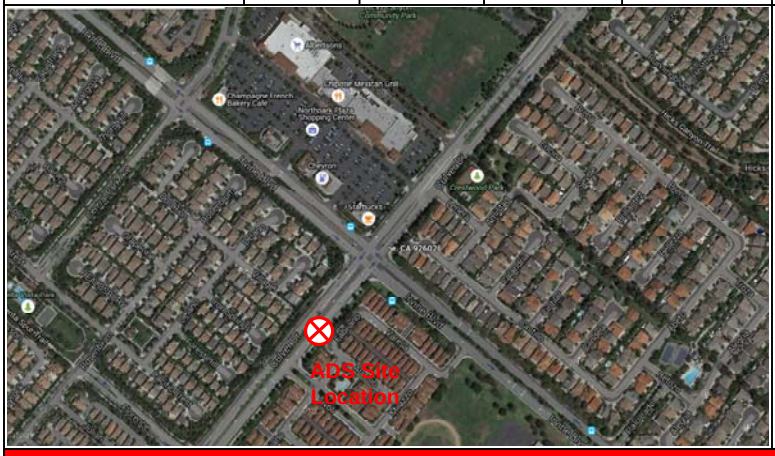
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Data loss was experienced from Monday, February 15, 2016 through Wednesday, February 24, 2016 due to a monitor malfunction. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

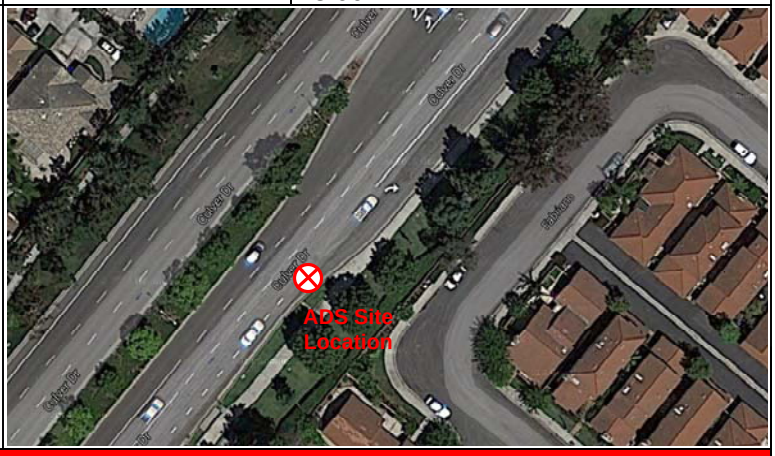
Percent Uptime	
Depth (in)	90
Velocity (ft/s)	90
Quantity (MGD)	90

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite7	**Install Date:** 11/18/15	**Monitor Type**	Peak Doppler
Address/Location: Irvine Blvd & Culver Dr		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH084N146
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	18.00 "
		Pipe Width:	18.00 "





Investigation Information:

Date/Time of Investigation:	11/18/15 @1240
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	3.25 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	6.37 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

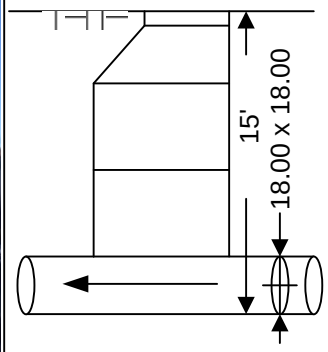
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

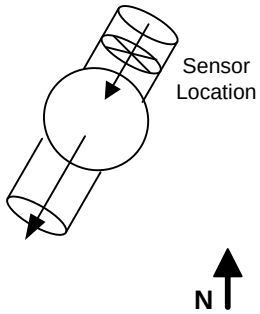
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk	[ ]	[x]	[ ]	
Lift / Pump Station	[ ]	[X]	[ ]	
WWTP	[ ]	[X]	[ ]	
Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite7

Flow Monitor

MPSite7

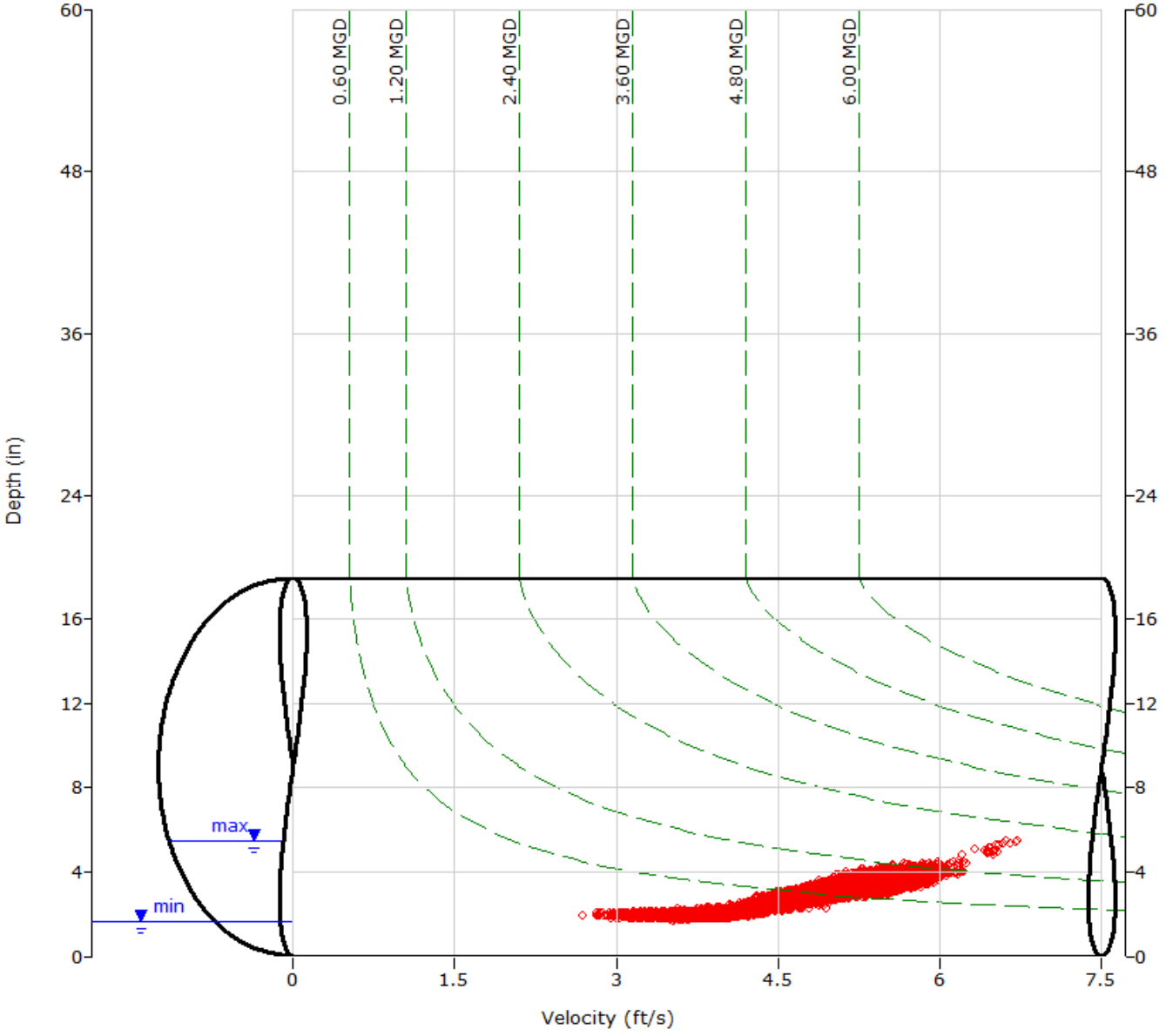
Pipe Height
18.00 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite7

Flow Monitor

MPSite7

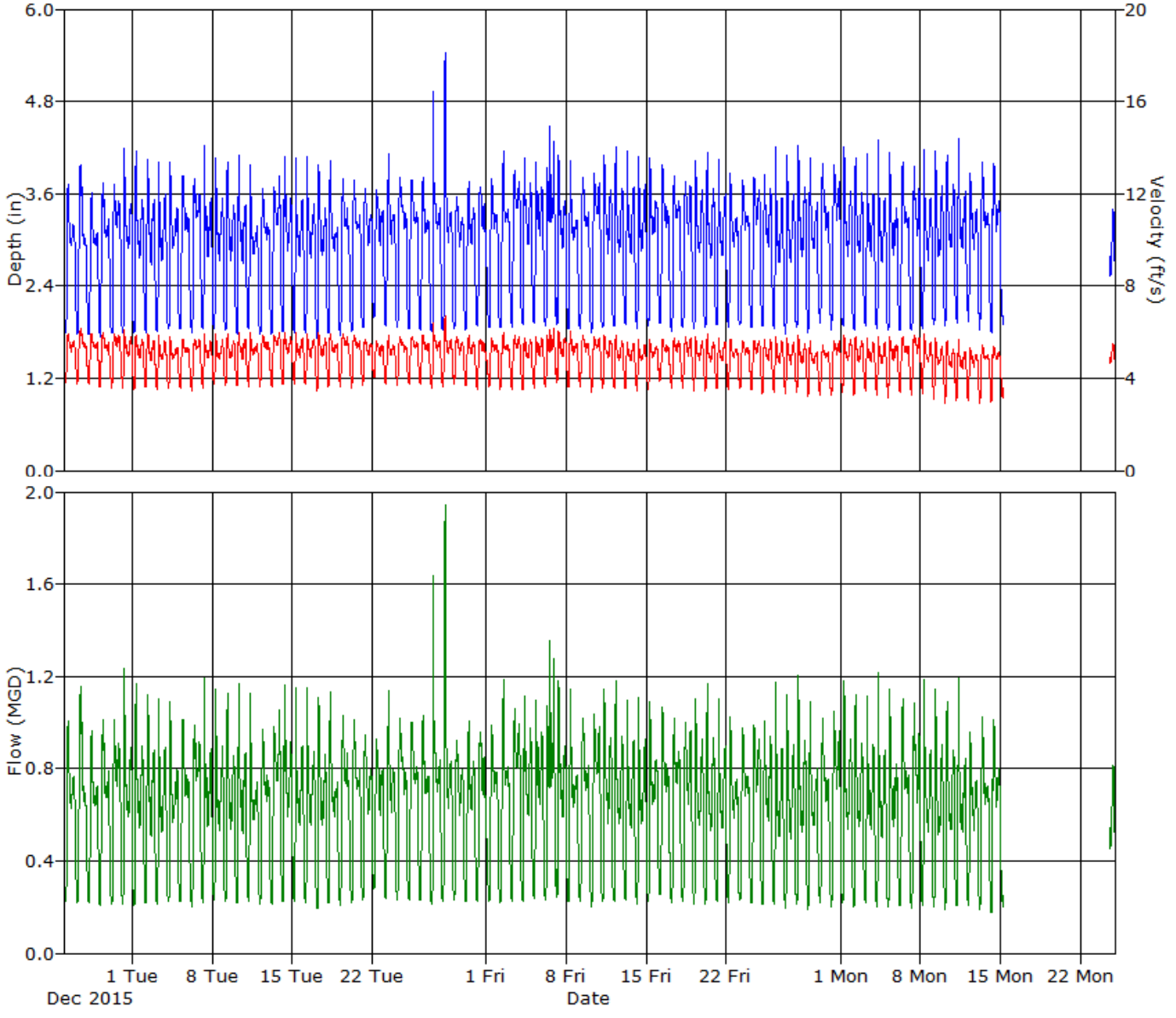
Pipe Height
18.00 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



ADS ENVIRONMENTAL SERVICES

Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite7, Pipe Height: 18 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	05:05	1.79	08:55	3.76	2.84	04:35	3.75	08:55	5.97	5.15	04:40	0.222	08:55	1.036	0.623	0.623	
11/26/2015	04:45	1.77	11:30	4.00	2.89	04:40	3.75	12:05	6.23	5.20	04:45	0.217	12:05	1.172	0.654	0.654	
11/27/2015	04:40	1.77	11:55	3.61	2.76	04:40	3.73	11:20	5.93	5.10	04:40	0.216	11:55	0.966	0.592	0.592	
11/28/2015	05:00	1.74	10:10	3.80	2.86	04:50	3.59	11:05	5.99	5.10	04:50	0.204	10:10	1.038	0.624	0.624	
11/29/2015	05:45	1.79	11:05	3.73	2.92	04:50	3.58	20:10	5.95	5.12	05:45	0.214	11:05	1.016	0.654	0.654	
11/30/2015	04:30	1.78	07:45	4.22	2.91	04:45	3.54	07:45	6.13	5.04	04:35	0.210	07:45	1.250	0.633	0.633	
12/1/2015	03:35	1.80	07:30	4.16	2.88	04:15	3.48	07:50	5.91	4.96	04:15	0.207	07:30	1.173	0.614	0.614	
12/2/2015	04:20	1.80	07:50	4.07	2.91	03:55	3.54	12:15	5.97	4.95	03:55	0.214	07:50	1.129	0.623	0.623	
12/3/2015	04:25	1.79	07:40	4.05	2.90	04:25	3.47	08:05	5.85	4.89	04:25	0.205	07:40	1.121	0.611	0.611	
12/4/2015	03:45	1.85	07:55	4.01	2.91	03:30	3.56	08:00	5.83	4.85	03:30	0.222	08:00	1.106	0.607	0.607	
12/5/2015	04:15	1.85	10:50	3.86	2.93	04:55	3.55	10:45	5.71	4.91	04:55	0.222	10:45	1.023	0.624	0.624	
12/6/2015	05:30	1.77	10:25	3.83	3.00	04:50	3.40	11:10	5.70	4.97	05:30	0.198	11:15	1.001	0.660	0.660	
12/7/2015	04:05	1.83	07:40	4.30	2.93	04:05	3.51	07:40	5.99	4.95	04:05	0.214	07:40	1.255	0.627	0.627	
12/8/2015	03:25	1.84	07:40	4.15	2.90	03:55	3.70	07:30	5.93	4.93	03:25	0.227	07:40	1.173	0.613	0.613	
12/9/2015	04:10	1.83	08:00	4.02	2.88	03:55	3.69	08:05	5.95	4.97	04:10	0.225	08:00	1.125	0.615	0.615	
12/10/2015	04:15	1.78	07:45	4.11	2.87	04:15	3.68	07:45	5.99	5.01	04:15	0.215	07:45	1.179	0.614	0.614	
12/11/2015	03:45	1.84	07:45	4.06	2.83	04:35	3.63	07:45	6.03	5.03	04:40	0.224	07:45	1.165	0.605	0.605	
12/12/2015	05:05	1.78	10:20	3.69	2.85	04:50	3.60	11:25	5.91	5.08	04:50	0.211	10:15	0.986	0.622	0.622	
12/13/2015	04:50	1.77	20:35	3.88	2.95	05:10	3.59	20:30	6.01	5.17	05:10	0.210	20:35	1.076	0.667	0.667	
12/14/2015	04:30	1.81	07:40	4.14	2.92	04:20	3.71	07:50	6.03	5.10	04:20	0.223	07:40	1.188	0.644	0.644	
12/15/2015	04:15	1.80	07:35	4.10	2.88	04:55	3.74	07:50	5.98	5.03	04:55	0.225	07:35	1.165	0.621	0.621	
12/16/2015	04:45	1.80	08:00	4.15	2.89	03:55	3.69	08:05	5.95	5.03	04:45	0.219	08:00	1.181	0.625	0.625	
12/17/2015	05:15	1.64	07:50	4.05	2.87	05:00	3.45	07:45	6.00	5.03	05:15	0.183	07:50	1.141	0.618	0.618	
12/18/2015	05:20	1.79	07:45	4.06	2.83	04:10	3.64	07:55	5.93	5.05	04:05	0.216	07:45	1.143	0.608	0.608	
12/19/2015	04:45	1.76	10:00	3.81	2.90	05:05	3.60	10:45	5.93	5.13	04:45	0.210	10:00	1.043	0.645	0.645	
12/20/2015	04:00	1.81	10:25	3.80	2.91	05:20	3.58	10:10	5.91	5.07	04:00	0.220	10:10	1.021	0.639	0.639	
12/21/2015	05:20	1.86	08:40	3.69	2.93	04:20	3.65	08:50	5.71	5.00	04:20	0.230	08:40	0.959	0.631	0.631	
12/22/2015	03:30	1.98	09:30	3.66	3.00	04:45	4.03	10:15	5.63	5.02	03:30	0.276	09:40	0.935	0.649	0.649	
12/23/2015	04:25	1.87	10:35	4.42	3.01	04:45	3.69	10:40	5.88	4.99	04:25	0.234	10:35	1.272	0.655	0.655	
12/24/2015	04:45	1.86	10:45	3.81	3.03	04:45	3.71	10:55	5.84	5.07	04:45	0.232	10:55	1.028	0.673	0.673	
12/25/2015	05:50	1.85	11:35	3.79	2.99	05:45	3.75	12:45	5.81	5.09	05:50	0.233	11:20	1.010	0.668	0.668	
12/26/2015	05:25	1.82	10:50	3.83	2.91	05:20	3.74	09:30	5.93	5.06	05:20	0.227	10:50	1.035	0.638	0.638	
12/27/2015	05:35	1.79	09:00	5.30	2.95	05:30	3.58	09:00	6.52	5.06	05:30	0.213	09:00	1.830	0.656	0.656	
12/28/2015	04:30	1.82	09:25	5.50	3.04	04:00	3.61	09:25	6.72	5.10	04:00	0.219	09:25	1.989	0.699	0.699	
12/29/2015	04:50	1.84	10:40	3.59	2.88	04:45	3.72	10:35	5.82	5.07	04:45	0.229	10:35	0.937	0.623	0.623	
12/30/2015	04:20	1.83	11:00	3.79	2.90	05:10	3.63	11:00	5.84	5.00	05:10	0.224	11:00	1.022	0.624	0.624	
12/31/2015	05:45	1.88	11:25	3.71	2.96	04:15	3.50	11:25	5.78	4.99	04:15	0.224	11:25	0.979	0.643	0.643	
1/1/2016	06:00	1.86	11:30	3.84	2.94	06:05	3.52	11:25	5.81	4.97	06:05	0.221	11:25	1.022	0.632	0.632	
1/2/2016	04:50	1.84	11:30	4.32	2.99	04:50	3.52	11:45	6.03	4.98	04:50	0.217	11:30	1.256	0.655	0.655	
1/3/2016	05:45	1.85	11:05	3.92	3.10	05:45	3.49	11:40	5.89	5.05	05:45	0.217	11:40	1.071	0.703	0.703	
1/4/2016	04:45	1.87	07:40	4.09	3.03	03:50	3.48	07:45	5.82	4.94	04:45	0.222	07:45	1.136	0.659	0.659	
1/5/2016	04:15	1.92	07:55	4.01	3.07	04:50	3.58	07:45	5.79	5.00	04:50	0.235	07:50	1.096	0.680	0.680	
1/6/2016	04:55	1.87	13:35	4.83	3.14	04:45	3.62	13:35	6.21	5.11	04:45	0.230	13:35	1.532	0.723	0.723	
1/7/2016	04:50	1.89	07:45	4.17	2.98	04:50	3.78	07:45	6.03	5.09	04:50	0.242	07:45	1.208	0.656	0.656	
1/8/2016	03:55	1.84	07:50	4.04	2.92	03:50	3.60	07:45	6.05	5.03	03:50	0.222	07:45	1.153	0.633	0.633	
1/9/2016	05:35	1.84	10:20	3.82	2.95	05:25	3.57	11:50	5.87	5.03	05:25	0.221	10:20	1.028	0.648	0.648	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:15	1.78	10:30	3.87	3.03	05:15	3.40	10:45	5.78	5.03	05:15	0.199	10:30	1.042	0.679	0.679	
1/11/2016	03:40	1.86	09:05	4.40	2.99	04:45	3.56	09:05	5.99	4.98	03:40	0.224	09:05	1.298	0.654	0.654	
1/12/2016	03:40	1.87	07:30	4.21	2.95	04:45	3.52	07:40	5.85	4.89	04:45	0.223	07:35	1.183	0.626	0.626	
1/13/2016	03:55	1.89	08:30	4.25	2.99	04:00	3.50	07:40	5.63	4.85	03:55	0.223	08:30	1.148	0.632	0.632	
1/14/2016	04:00	1.84	07:40	4.14	2.99	04:00	3.46	07:40	5.70	4.82	04:00	0.213	07:40	1.133	0.628	0.628	
1/15/2016	04:05	1.87	07:45	4.10	3.03	03:50	3.52	07:40	5.69	4.86	03:50	0.223	07:45	1.108	0.645	0.645	
1/16/2016	04:55	1.91	10:15	3.99	3.03	04:40	3.89	11:10	5.75	5.00	04:55	0.253	10:15	1.072	0.662	0.662	
1/17/2016	05:00	1.81	10:50	3.87	2.97	05:40	3.56	10:40	5.75	4.98	05:30	0.218	10:50	1.033	0.650	0.650	
1/18/2016	05:45	1.86	11:10	3.76	3.00	05:20	3.56	21:15	5.81	4.99	04:50	0.224	10:45	1.003	0.658	0.658	
1/19/2016	04:10	1.86	07:55	4.08	2.93	04:35	3.43	08:00	5.85	4.88	04:05	0.214	07:55	1.135	0.619	0.619	
1/20/2016	03:50	1.86	08:10	4.15	2.93	03:55	3.44	08:05	5.96	4.86	03:50	0.214	08:05	1.178	0.617	0.617	
1/21/2016	04:40	1.89	07:40	4.10	2.92	04:50	3.54	07:40	5.79	4.85	04:50	0.226	07:40	1.131	0.612	0.612	
1/22/2016	04:05	1.87	08:05	3.89	2.93	04:05	3.44	08:15	5.71	4.85	04:05	0.216	08:15	1.038	0.615	0.615	
1/23/2016	04:15	1.89	10:30	3.80	2.96	05:30	3.53	10:10	5.65	4.88	05:30	0.229	10:30	0.992	0.628	0.628	
1/24/2016	05:15	1.86	10:10	3.84	3.02	04:45	3.46	09:20	5.69	4.93	04:45	0.216	10:10	1.005	0.659	0.659	
1/25/2016	04:15	1.88	07:35	3.92	2.95	04:10	3.32	21:00	5.73	4.85	04:10	0.210	07:35	1.034	0.623	0.623	
1/26/2016	04:30	1.84	07:40	4.24	2.88	04:35	3.39	07:45	5.81	4.83	04:30	0.208	07:40	1.193	0.600	0.600	
1/27/2016	04:20	1.75	07:55	4.12	2.89	03:55	3.27	08:20	5.76	4.80	04:20	0.188	07:55	1.128	0.599	0.599	
1/28/2016	04:20	1.83	07:35	4.25	2.95	04:00	3.33	07:35	5.90	4.78	04:20	0.205	07:35	1.217	0.613	0.613	
1/29/2016	04:10	1.76	07:50	4.08	2.95	03:40	3.17	08:00	5.67	4.65	04:10	0.185	07:40	1.098	0.595	0.595	
1/30/2016	04:50	1.92	10:55	3.99	3.04	05:20	3.24	10:35	5.48	4.66	05:20	0.218	10:35	1.030	0.624	0.624	
1/31/2016	05:25	1.82	10:35	3.99	3.09	05:25	3.26	21:10	5.65	4.81	05:25	0.196	10:35	1.057	0.668	0.668	
2/1/2016	05:20	1.88	07:45	4.31	2.96	03:55	3.36	07:45	5.86	4.86	03:55	0.217	07:45	1.232	0.628	0.628	
2/2/2016	04:35	1.81	07:35	4.09	2.92	04:00	3.26	07:30	5.81	4.84	04:00	0.201	07:35	1.134	0.613	0.613	
2/3/2016	04:30	1.88	07:45	4.14	2.95	03:55	3.40	08:00	5.79	4.82	04:00	0.218	08:00	1.130	0.619	0.619	
2/4/2016	03:45	1.84	07:40	4.40	2.90	05:10	3.28	07:45	5.92	4.77	03:45	0.202	07:40	1.280	0.600	0.600	
2/5/2016	04:15	1.83	07:45	4.19	2.90	03:15	2.98	07:45	5.82	4.83	03:15	0.188	07:45	1.174	0.604	0.604	
2/6/2016	04:15	1.83	11:15	4.12	2.97	05:40	3.35	10:55	5.86	4.92	04:35	0.206	11:15	1.143	0.642	0.642	
2/7/2016	05:15	1.82	10:20	3.99	2.97	04:40	3.08	10:35	5.91	4.99	04:40	0.189	10:20	1.101	0.654	0.654	
2/8/2016	04:30	1.84	07:35	4.20	2.93	04:15	3.30	07:35	5.94	4.86	04:15	0.205	07:35	1.205	0.617	0.617	
2/9/2016	04:25	1.89	07:50	4.23	2.96	04:10	2.89	07:50	5.77	4.69	04:10	0.187	07:50	1.179	0.604	0.604	
2/10/2016	03:50	1.89	09:55	4.15	3.02	04:15	2.82	07:25	5.68	4.56	04:15	0.181	09:55	1.101	0.608	0.608	
2/11/2016	04:55	1.86	07:45	4.38	3.04	03:35	2.83	07:35	5.73	4.53	03:35	0.193	07:45	1.221	0.607	0.607	
2/12/2016	04:15	1.92	08:45	3.89	2.99	03:15	2.93	08:45	5.34	4.57	04:35	0.195	08:45	0.969	0.595	0.595	
2/13/2016	04:20	1.81	09:55	4.02	3.02	05:00	2.69	10:40	5.44	4.59	05:00	0.177	09:55	1.030	0.614	0.614	
2/14/2016	04:50	1.77	10:00	4.03	3.05	02:45	2.82	10:20	5.40	4.58	04:50	0.171	10:20	1.028	0.620	0.620	
2/15/2016	05:20	1.85	00:00	2.99	2.18	05:25	3.12	00:05	4.59	3.64	05:20	0.196	00:05	0.571	0.294	0.071	
2/16/2016																	
2/17/2016																	
2/18/2016																	
2/19/2016																	
2/20/2016																	
2/21/2016																	
2/22/2016																	
2/23/2016																	
2/24/2016	15:25	2.53	20:40	3.39	2.95	15:15	4.61	20:45	5.49	5.07	15:25	0.454	20:25	0.818	0.625	0.284	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			52.317
Avg	2.95	4.93	0.633

Site Commentary

Site Information

MPSite8	
Pipe Dimensions	54.25" x 54.13"
Silt Level	0.00"

Overview

Site MPSite8 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows entered into backwater conditions when flows reached approximately 18 inches or greater.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located downstream of locations MPSite10, MPSite9, and CAL5. A review of balancing indicated no problems. A net flow of 2.416 MGD was reported for the period.

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	15.64	2.27	5.833
Minimum	10.03	0.46	1.637
Maximum	41.32	3.33	17.210
Time of Minimum	12/6/2015 6:35 AM	12/2/2015 8:55 AM	11/30/2015 4:35 AM
Time of Maximum	12/2/2015 9:40 AM	2/15/2016 10:20 PM	12/2/2015 9:45 AM

Data Quality

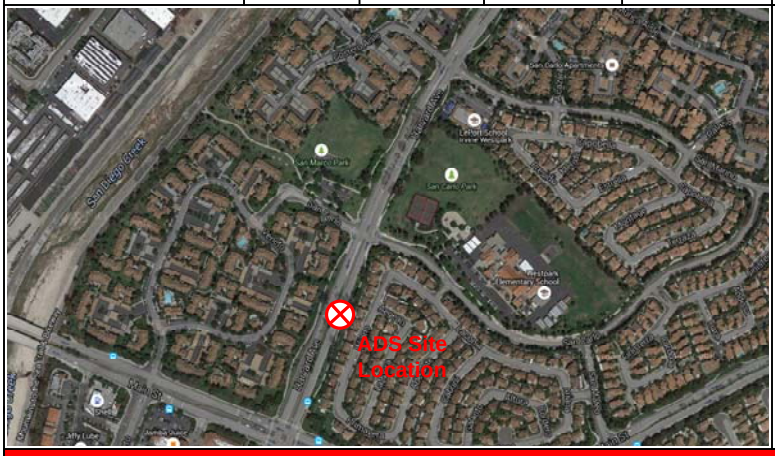
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

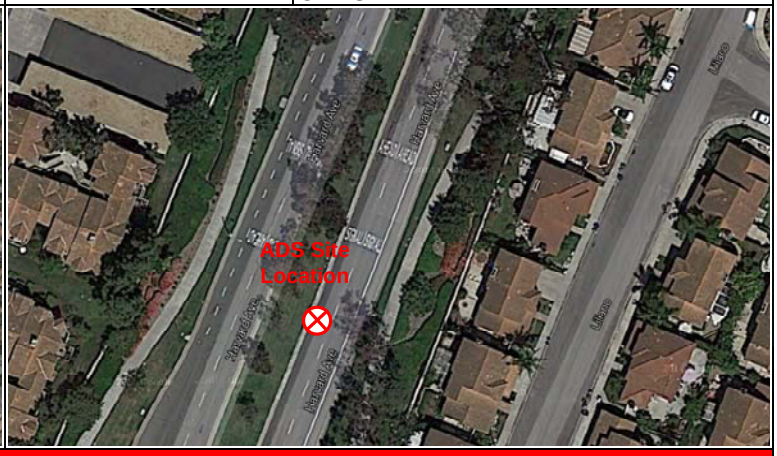
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite8	**Install Date:** 11/17/15	**Monitor Type**	Peak Doppler
Address/Location: Harvard & San Carlo		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH060N031
Access: Drive	**Type of System:** Sanitary X / Storm / Combined	**Pipe Height:**	54.25 "
		Pipe Width:	54.13 "





Investigation Information:

Date/Time of Investigation:	11/17/15 @ 1015
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	19.38" +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	3.40 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	15'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

Land Use:	Residential	Commercial	Industrial	Trunk
	X			

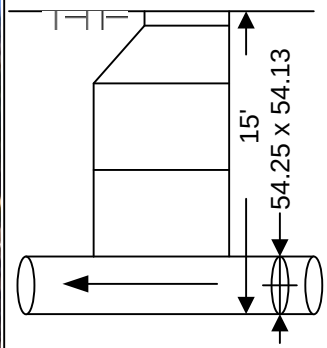
Oxygen: 20.9	**H2S:** 0	**LEL:** 0	**CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

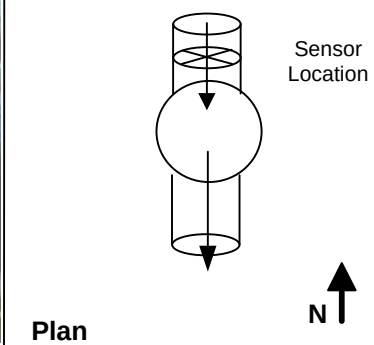
Other Information:





Cross Section





Plan

Installation Information	
Installation Type:	Standard
Sensors Devices:	Ultrasonic / Pressure/Velocity
Surcharge Height:	0
Rain Gauge Zone:	

Backup	Yes	No	?	Distance
Trunk		x		
Lift / Pump Station		X		
WWTP		X		
Other		X		

Additional Site Information / Comments:

Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite8

Flow Monitor

MPSite8

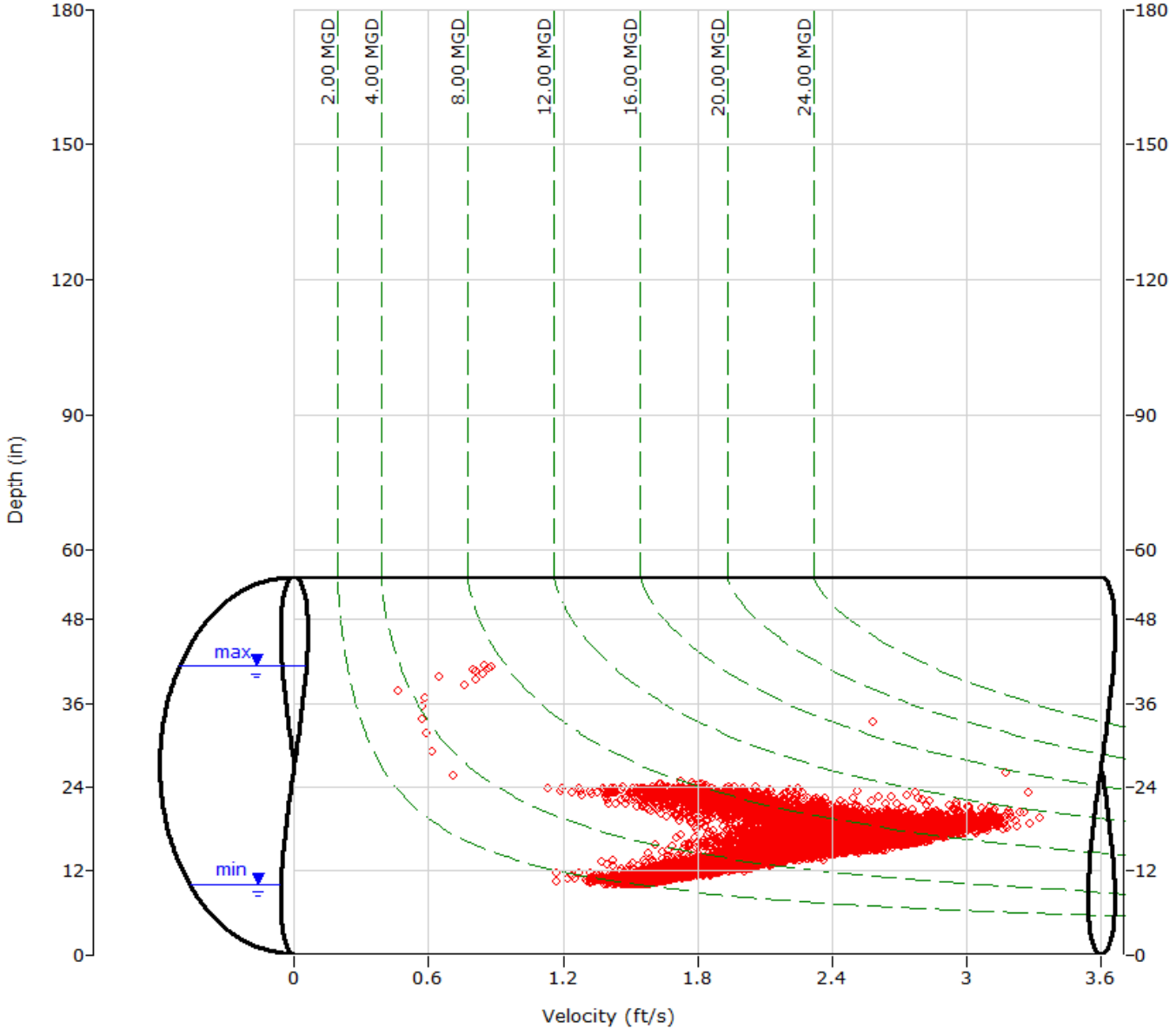
Pipe Height
54.25 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite8

Flow Monitor

MPSite8

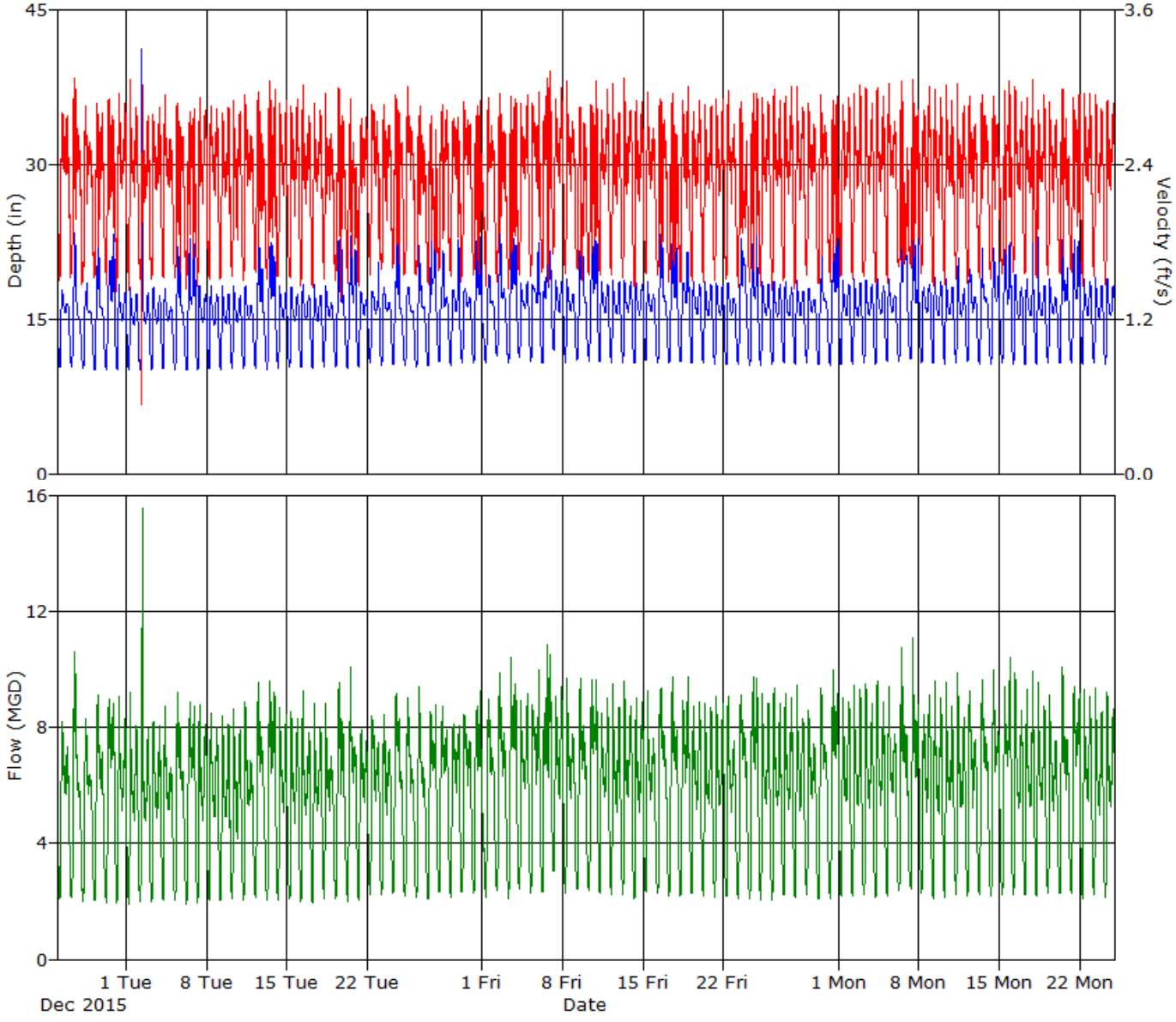
Pipe Height
54.25 in

Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite8, Pipe Height: 54.25 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	06:00	10.36	10:35	17.75	15.01	05:45	1.43	11:25	2.92	2.32	05:45	1.984	10:35	8.520	5.620	5.620	
11/26/2015	06:50	10.31	12:05	23.93	15.21	05:00	1.44	12:15	3.26	2.31	05:00	2.102	12:10	11.691	5.763	5.763	
11/27/2015	06:15	10.19	14:20	18.40	14.57	03:35	1.17	12:00	2.97	2.24	06:25	1.894	12:00	8.663	5.219	5.219	
11/28/2015	07:00	10.06	12:55	23.74	15.21	08:05	1.43	13:40	3.02	2.20	06:55	2.018	13:00	10.078	5.466	5.466	
11/29/2015	06:50	10.06	21:10	23.67	15.78	06:55	1.41	12:50	3.05	2.24	06:55	1.887	12:50	9.407	5.878	5.878	
11/30/2015	05:50	10.09	00:00	19.53	14.97	04:35	1.17	09:05	3.05	2.30	04:35	1.637	09:05	9.344	5.571	5.571	
12/1/2015	05:30	10.05	09:15	18.08	14.69	05:35	1.40	09:10	3.18	2.30	05:35	1.877	09:10	9.608	5.424	5.424	
12/2/2015	05:35	10.09	09:40	41.32	16.01	08:55	0.46	09:55	3.27	2.15	05:50	2.002	09:45	17.210	5.357	5.357	
12/3/2015	05:50	10.05	09:10	18.12	14.75	06:00	1.49	08:30	2.90	2.28	05:55	1.964	09:30	8.670	5.415	5.415	
12/4/2015	05:55	10.21	09:20	17.97	14.64	06:10	1.47	09:10	3.00	2.26	06:10	1.995	09:10	8.960	5.270	5.270	
12/5/2015	06:10	10.11	18:15	23.22	15.63	07:30	1.34	11:00	3.09	2.18	07:30	1.867	12:20	9.733	5.551	5.551	
12/6/2015	06:35	10.03	13:05	23.23	15.61	06:30	1.39	22:00	3.00	2.20	06:30	1.837	22:00	9.485	5.661	5.661	
12/7/2015	05:50	10.10	00:00	21.01	14.97	05:30	1.39	09:20	3.09	2.25	05:30	1.851	09:20	9.443	5.440	5.440	
12/8/2015	05:35	10.15	09:15	18.17	14.76	05:50	1.49	09:25	3.03	2.29	05:50	1.994	09:25	9.162	5.422	5.422	
12/9/2015	05:45	10.11	09:30	18.13	14.78	06:55	1.40	08:45	2.96	2.28	05:55	2.024	09:50	8.857	5.425	5.425	
12/10/2015	05:30	10.21	09:15	18.15	14.83	05:15	1.53	08:55	3.02	2.26	05:15	2.069	08:55	9.065	5.392	5.392	
12/11/2015	05:45	10.18	09:15	18.17	14.78	06:00	1.46	09:10	3.08	2.28	06:00	1.967	09:10	9.362	5.418	5.418	
12/12/2015	06:45	10.24	12:15	23.76	15.70	14:05	1.51	11:20	3.14	2.22	06:45	2.106	12:20	10.675	5.723	5.723	
12/13/2015	06:25	10.08	12:15	23.48	16.06	14:00	1.19	12:45	3.14	2.23	06:05	1.985	21:05	10.609	5.967	5.967	
12/14/2015	05:50	10.17	00:00	20.43	15.17	04:05	1.40	09:00	2.93	2.30	05:55	2.021	09:00	8.919	5.672	5.672	
12/15/2015	05:50	10.28	09:15	18.11	14.91	06:40	1.37	21:55	3.04	2.30	06:40	2.006	21:55	8.707	5.538	5.538	
12/16/2015	05:45	10.30	09:20	18.36	14.96	05:50	1.32	09:05	3.07	2.27	05:50	1.805	09:15	9.406	5.487	5.487	
12/17/2015	05:55	10.16	09:15	18.31	14.96	05:10	1.31	09:20	2.93	2.29	05:10	1.837	09:20	8.992	5.533	5.533	
12/18/2015	05:40	10.31	09:15	18.16	15.00	05:20	1.46	09:00	3.00	2.28	05:20	2.021	09:00	9.039	5.501	5.501	
12/19/2015	06:15	10.33	12:05	23.85	16.13	16:20	1.24	11:05	3.18	2.18	05:40	2.037	12:10	11.214	5.801	5.801	
12/20/2015	06:35	10.22	12:25	23.81	16.37	06:25	1.32	12:35	3.00	2.10	06:25	1.794	12:30	10.801	5.699	5.699	
12/21/2015	05:45	10.36	00:00	20.44	15.10	05:20	1.34	10:15	2.91	2.28	05:20	1.862	10:15	8.496	5.553	5.553	
12/22/2015	05:25	10.72	23:55	20.47	15.29	05:20	1.45	09:50	2.94	2.33	05:20	2.101	10:30	8.542	5.762	5.762	
12/23/2015	05:50	10.49	00:00	20.46	15.27	04:40	1.55	12:05	2.94	2.28	06:15	2.218	10:30	8.672	5.641	5.641	
12/24/2015	06:15	10.63	12:40	23.81	15.95	18:00	1.39	14:35	3.10	2.28	05:40	2.279	14:35	11.033	5.970	5.970	
12/25/2015	06:50	10.43	14:35	18.10	14.84	05:10	1.41	12:25	3.07	2.31	06:40	2.121	12:25	9.215	5.542	5.542	
12/26/2015	06:50	10.32	13:00	23.38	15.24	03:55	1.27	13:10	3.06	2.21	03:55	2.067	13:10	10.323	5.486	5.486	
12/27/2015	07:00	10.52	13:15	23.51	16.15	07:20	1.33	12:20	3.08	2.12	07:20	1.891	13:20	10.119	5.662	5.662	
12/28/2015	06:10	10.80	14:40	21.58	15.89	07:10	1.46	12:25	2.89	2.24	07:10	2.243	12:25	8.795	5.844	5.844	
12/29/2015	06:05	10.50	23:00	22.95	15.46	02:50	1.40	11:25	2.89	2.26	06:00	2.150	23:05	9.116	5.686	5.686	
12/30/2015	06:25	10.69	12:15	17.95	15.35	04:15	1.37	12:35	2.99	2.34	04:15	2.174	12:35	8.899	5.845	5.845	
12/31/2015	06:20	10.76	16:40	23.76	16.46	15:55	1.50	19:20	3.09	2.19	05:30	2.249	13:05	10.661	5.992	5.992	
1/1/2016	07:30	10.76	15:10	19.29	15.23	07:50	1.35	11:35	2.94	2.27	07:50	1.992	12:50	9.020	5.630	5.630	
1/2/2016	06:35	11.42	12:50	24.37	16.18	07:20	1.41	13:20	3.14	2.25	07:20	2.247	12:55	11.254	6.065	6.065	
1/3/2016	07:10	10.76	12:40	24.10	16.72	07:25	1.22	20:40	3.20	2.23	07:25	1.785	21:50	11.159	6.313	6.313	
1/4/2016	05:45	11.34	22:25	18.57	15.80	04:05	1.48	22:45	2.97	2.33	06:25	2.415	22:45	9.271	6.067	6.067	
1/5/2016	05:45	10.86	21:05	23.30	16.23	05:20	1.52	21:50	2.98	2.35	05:45	2.258	22:30	10.311	6.360	6.360	
1/6/2016	05:50	10.78	18:10	23.65	16.99	17:15	1.40	21:05	3.19	2.33	04:35	2.197	15:00	11.624	6.670	6.670	
1/7/2016	06:10	12.00	09:15	18.71	16.14	03:20	1.42	21:35	3.07	2.39	03:20	2.626	21:35	9.613	6.362	6.362	
1/8/2016	05:45	10.80	09:20	18.83	15.61	05:30	1.55	09:05	3.07	2.34	05:30	2.264	09:05	9.745	5.966	5.966	
1/9/2016	06:15	11.02	12:45	24.04	16.96	15:45	1.27	11:05	3.10	2.17	06:55	2.315	12:55	10.862	6.135	6.135	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	07:10	10.89	12:40	23.97	16.71	05:55	1.51	22:20	3.28	2.24	07:05	2.363	12:45	11.177	6.294	6.294	
1/11/2016	05:30	10.89	09:15	18.60	15.64	02:45	1.51	21:05	3.00	2.32	05:35	2.260	21:25	9.151	5.945	5.945	
1/12/2016	05:40	10.73	09:20	18.70	15.59	05:35	1.52	09:00	3.06	2.30	05:35	2.206	09:00	9.548	5.885	5.885	
1/13/2016	05:45	10.72	09:10	18.67	15.64	05:55	1.48	09:30	3.08	2.33	05:55	2.156	09:30	9.681	5.976	5.976	
1/14/2016	05:40	10.71	09:15	18.51	15.53	06:10	1.32	22:35	2.97	2.31	06:10	1.940	09:30	9.220	5.894	5.894	
1/15/2016	05:50	10.96	09:20	18.58	15.52	06:15	1.51	09:15	2.99	2.30	06:15	2.277	09:15	9.364	5.808	5.808	
1/16/2016	06:35	10.78	12:50	24.48	16.35	08:40	1.37	13:15	3.03	2.23	06:15	2.247	13:15	10.125	6.077	6.077	
1/17/2016	06:20	10.80	16:00	23.74	16.44	16:00	1.13	13:20	3.02	2.18	05:55	2.092	12:50	9.765	5.970	5.970	
1/18/2016	06:00	10.88	22:35	23.00	16.02	04:15	1.32	21:35	3.11	2.33	05:45	2.108	21:35	10.523	6.238	6.238	
1/19/2016	05:25	10.71	09:05	18.60	15.57	06:30	1.37	09:05	3.00	2.29	06:30	2.062	09:05	9.411	5.852	5.852	
1/20/2016	05:55	10.69	09:45	18.61	15.42	05:00	1.40	22:05	2.97	2.30	05:00	2.069	09:30	9.289	5.796	5.796	
1/21/2016	05:50	10.62	09:10	18.49	15.39	05:55	1.47	09:10	3.01	2.30	05:55	2.102	09:10	9.378	5.779	5.779	
1/22/2016	05:45	10.55	09:15	18.46	15.24	04:45	1.48	09:45	3.01	2.29	05:30	2.165	09:45	9.223	5.660	5.660	
1/23/2016	06:40	10.66	13:00	23.83	16.76	06:50	1.30	11:40	2.98	2.13	06:50	1.870	13:05	11.166	5.997	5.997	
1/24/2016	06:35	10.46	12:30	24.04	16.22	14:15	1.28	11:55	3.22	2.24	07:10	2.027	20:30	10.706	6.105	6.105	
1/25/2016	05:55	10.41	00:00	19.24	15.47	05:55	1.32	08:50	3.14	2.30	05:55	1.837	08:50	9.796	5.862	5.862	
1/26/2016	05:50	10.61	09:20	18.60	15.40	04:00	1.24	09:25	3.05	2.30	05:50	1.859	09:25	9.576	5.802	5.802	
1/27/2016	06:00	10.78	09:25	18.61	15.39	06:50	1.44	22:05	3.09	2.32	05:20	2.206	09:20	9.379	5.845	5.845	
1/28/2016	05:35	10.63	09:05	18.69	15.44	04:15	1.34	09:10	3.09	2.32	04:15	2.056	09:10	9.747	5.859	5.859	
1/29/2016	05:40	10.72	09:55	17.99	15.29	05:55	1.52	10:10	2.95	2.30	05:55	2.212	10:10	8.815	5.703	5.703	
1/30/2016	06:20	10.58	13:50	24.70	15.68	06:25	1.36	11:55	3.04	2.27	06:25	1.939	13:55	10.149	5.856	5.856	
1/31/2016	06:45	10.52	12:40	24.35	16.62	18:45	1.36	20:50	3.13	2.21	07:05	2.073	12:45	10.751	6.178	6.178	
2/1/2016	05:45	10.57	00:00	21.94	15.68	06:30	1.50	21:45	3.07	2.32	05:45	2.186	08:55	9.467	5.986	5.986	
2/2/2016	05:15	10.61	08:50	18.95	15.42	05:40	1.46	21:55	3.07	2.33	05:40	2.104	09:05	9.702	5.888	5.888	
2/3/2016	05:30	10.69	09:25	18.79	15.51	03:30	1.49	10:05	3.08	2.32	05:25	2.207	10:05	9.632	5.913	5.913	
2/4/2016	05:50	10.66	09:05	18.87	15.52	05:55	1.36	21:50	3.02	2.32	05:55	2.008	09:15	9.645	5.928	5.928	
2/5/2016	05:40	10.85	09:20	18.89	15.56	05:15	1.38	10:10	3.11	2.34	05:50	2.041	10:10	9.575	5.951	5.951	
2/6/2016	06:10	10.87	11:50	23.24	17.52	16:25	1.29	12:00	3.19	2.10	06:10	2.373	12:00	11.444	6.226	6.226	
2/7/2016	06:55	11.12	12:10	24.23	16.48	15:25	1.20	12:25	3.24	2.28	07:10	2.403	12:25	11.428	6.260	6.260	
2/8/2016	05:45	10.80	21:55	18.39	15.55	05:00	1.49	22:10	3.23	2.34	05:00	2.209	22:10	9.939	5.962	5.962	
2/9/2016	05:50	10.69	09:15	19.04	15.56	05:30	1.34	09:00	3.15	2.31	05:30	1.946	09:00	10.140	5.917	5.917	
2/10/2016	05:40	10.65	09:25	18.90	15.55	05:25	1.44	08:55	3.07	2.31	05:50	2.090	09:20	9.784	5.885	5.885	
2/11/2016	05:30	10.80	10:25	20.88	15.66	06:10	1.50	09:20	3.13	2.30	05:50	2.221	09:20	10.254	5.921	5.921	
2/12/2016	05:50	10.88	11:30	19.82	15.77	06:05	1.37	09:45	3.01	2.28	06:05	2.043	09:45	9.556	5.923	5.923	
2/13/2016	06:15	10.66	13:35	23.19	15.74	05:40	1.49	12:20	3.15	2.30	05:40	2.174	12:20	10.308	5.977	5.977	
2/14/2016	06:35	10.64	12:30	23.23	16.04	06:00	1.48	12:40	3.13	2.25	06:00	2.157	12:35	11.300	6.018	6.018	
2/15/2016	06:10	10.69	20:45	23.49	16.59	13:20	1.39	22:20	3.33	2.27	06:00	2.223	22:20	11.130	6.296	6.296	
2/16/2016	05:40	10.61	00:00	19.82	15.53	06:05	1.56	08:20	3.16	2.34	05:35	2.236	09:35	10.226	5.971	5.971	
2/17/2016	05:50	10.62	22:25	23.32	15.57	05:35	1.53	22:30	3.09	2.30	05:35	2.190	22:30	10.347	5.875	5.875	
2/18/2016	05:40	10.65	09:55	23.34	15.56	04:00	1.43	09:05	3.02	2.30	05:45	2.141	09:05	9.574	5.867	5.867	
2/19/2016	05:35	10.70	09:10	18.85	15.38	04:45	1.53	08:50	3.13	2.30	04:45	2.248	08:50	9.881	5.761	5.761	
2/20/2016	06:15	10.73	13:30	23.72	16.14	07:30	1.46	12:50	3.17	2.24	06:25	2.238	12:00	11.280	6.016	6.016	
2/21/2016	06:40	10.78	21:35	23.38	16.28	07:55	1.52	10:35	3.11	2.30	06:30	2.287	13:30	10.110	6.274	6.274	
2/22/2016	05:55	10.66	09:10	18.85	15.54	05:30	1.41	09:10	3.14	2.35	05:30	2.021	09:10	10.038	6.001	6.001	
2/23/2016	05:40	10.76	08:55	19.06	15.45	05:20	1.50	08:30	3.08	2.30	05:20	2.189	08:30	9.672	5.807	5.807	
2/24/2016	05:40	10.67	09:25	18.89	15.44	05:50	1.36	09:15	3.12	2.30	05:50	1.964	09:15	9.965	5.827	5.823	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			536.590
Avg	15.64	2.27	5.833

Site Commentary

Site Information

MPSite9	
Pipe Dimensions	24.38" x 24.13"
Silt Level	0.00"

Overview

Site MPSite9 functioned under normal conditions during the period Wednesday, November 25, 2015 to Wednesday, February 24, 2016 . No surcharge conditions were experienced at this location. Review of the scattergraph shows that flows remained free flowing throughout the period.

Flow depth and velocity measurements recorded by the flow monitor are consistent with field confirmations conducted to date and support the relative accuracy of the flow monitor at this location.

This line is located upstream of location MPSite8. A review of balancing indicated no problems (See MPSite8 Commentary For More Details).

Observations

Average flow depth, velocity, and quantity data observed during Wednesday, November 25, 2015 to Wednesday, February 24, 2016 , along with observed minimum and maximum data, are provided in the following table. The values presented are based on 5-minute data.

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD)
Average	8.01	1.71	1.043
Minimum	5.08	1.11	0.364
Maximum	11.54	2.48	2.349
Time of Minimum	1/30/2016 4:55 AM	1/22/2016 2:40 AM	2/3/2016 5:00 AM
Time of Maximum	2/16/2016 8:00 AM	2/16/2016 7:35 AM	2/16/2016 7:35 AM

Data Quality

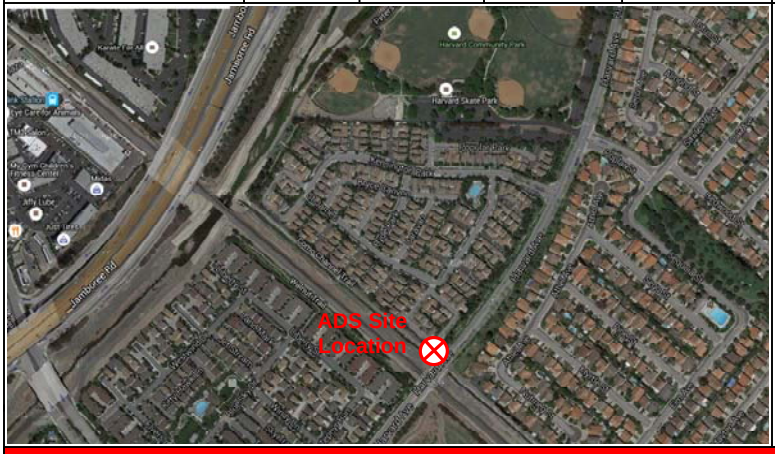
Data uptime observed during the Wednesday, November 25, 2015 to the Wednesday, February 24, 2016 monitoring period is provided in the table below. Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

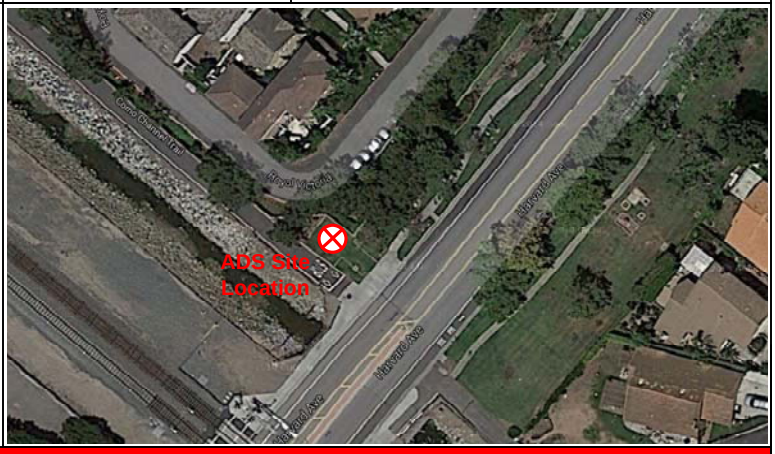
Percent Uptime	
Depth (in)	100
Velocity (ft/s)	100
Quantity (MGD)	100

ADS Site Report

Quality Form

Project Name: IRWD Wet Weather Flow Study TFM 2016	**City:** Irvine	**Agency:** IRWD	**FM Initials:** SK
Site Name: MPSite9	**Install Date:** 11/16/15	**Monitor Type**	Peak Doppler
Address/Location: Harvard		**Monitor Model**	Triton
		Data Acquisition	Manual Collect
		Manhole ID	MH063W047
Access: Drive	**Type of System:** Sanitary [X] Storm [ ] Combined [ ]	**Pipe Height:**	24.38 "
		Pipe Width:	24.13 "





Investigation Information:

Date/Time of Investigation:	11/16/15 @ 1410
Site Hydraulics:	Good straight through flow
Upstream Input: (L/S, P/S)	--
Upstream Manhole:	Not investigated
Downstream Manhole:	Not investigated
Depth of Flow:	9.63 " +/- 0.13"
Range (Air DOF):	+/-
Peak Velocity:	2.28 fps
Silt:	0.00 Inches

Manhole Information:

Manhole Depth:	25'
Manhole Material / Condition	Precast/OK
Pipe Material / Condition:	VCP/Good

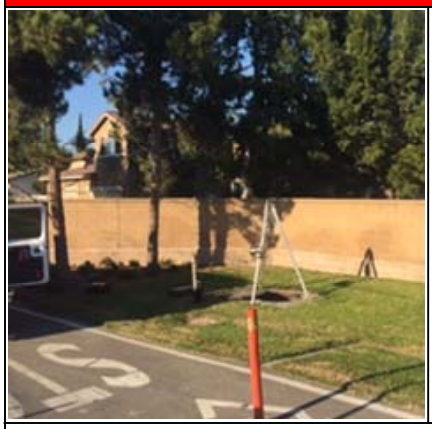
Land Use:	Residential	Commercial	Industrial	Trunk
	[X]	[ ]	[ ]	[ ]

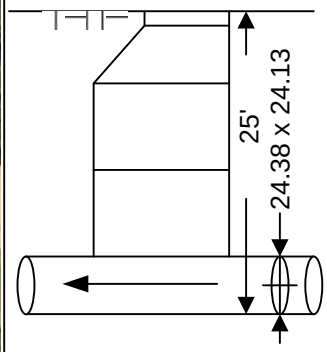
Oxygen: 20.9 **H2S:** 0 **LEL:** 0 **CO:** 0

Safety Notes:

2 man crew required and one blower is to be operated at all times.

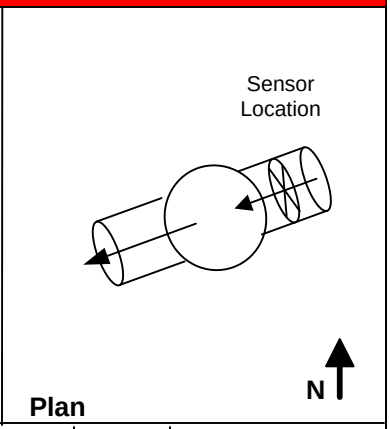
Other Information:





Cross Section





Plan

Installation Information		Backup	Yes	No	?	Distance
Installation Type:	Standard	Trunk	[ ]	[x]	[ ]	
Sensors Devices:	Ultrasonic / Pressure/Velocity	Lift / Pump Station	[ ]	[X]	[ ]	
Surcharge Height:	0	WWTP	[ ]	[X]	[ ]	
Rain Gauge Zone:		Other	[ ]	[X]	[ ]	

Additional Site Information / Comments:

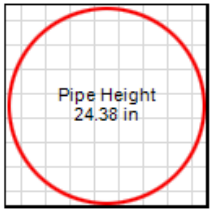
Standard Traffic Control with No Safety Concerns

SCATTERGRAPH REPORT

MPSite9

Flow Monitor

MPSite9

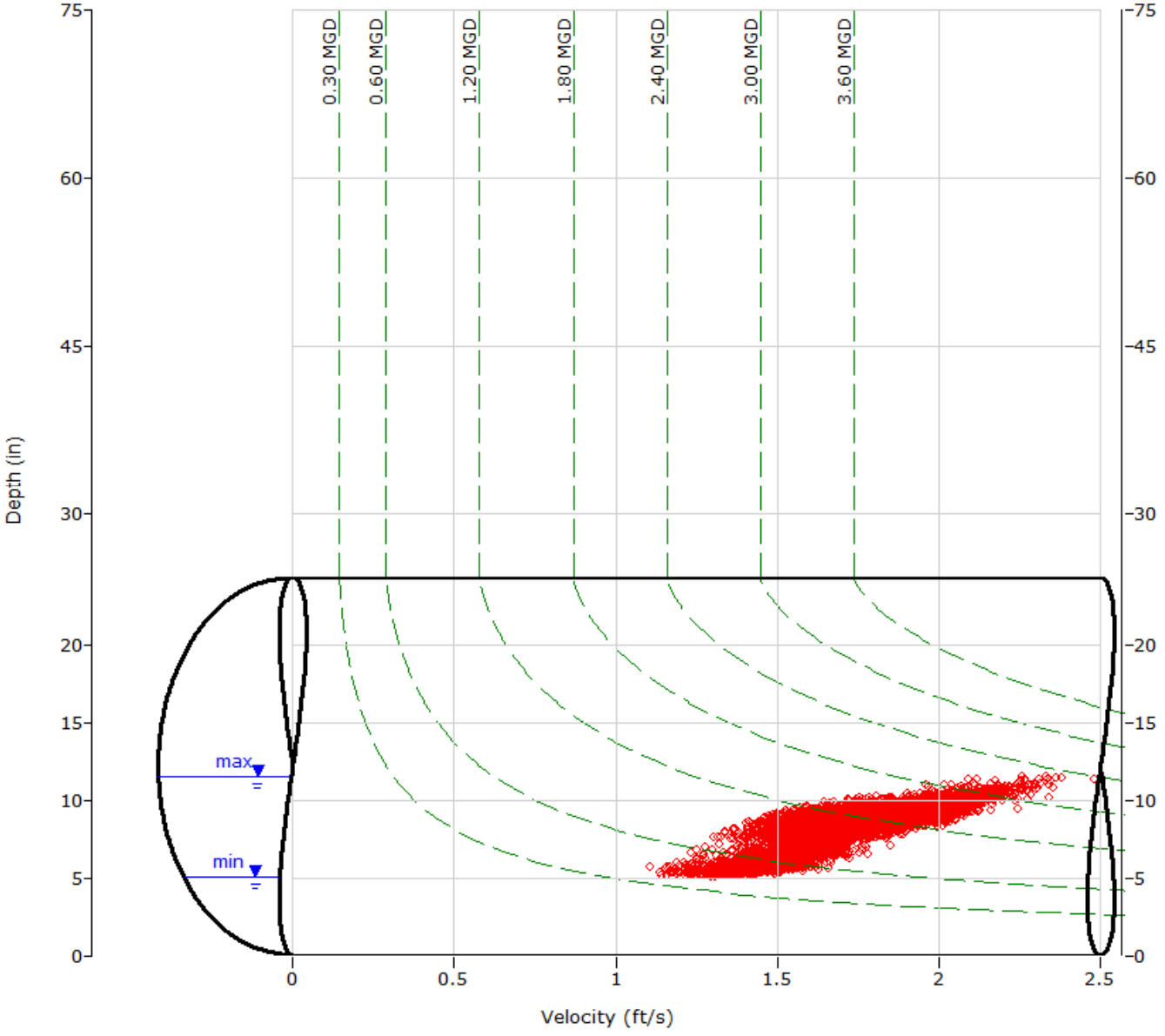


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth - Velocity
- Iso-Q™
- Silt
- Min-Max Depth



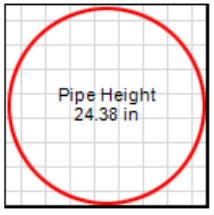
ADS ENVIRONMENTAL SERVICES

HYDROGRAPH REPORT

MPSite9

Flow Monitor

MPSite9

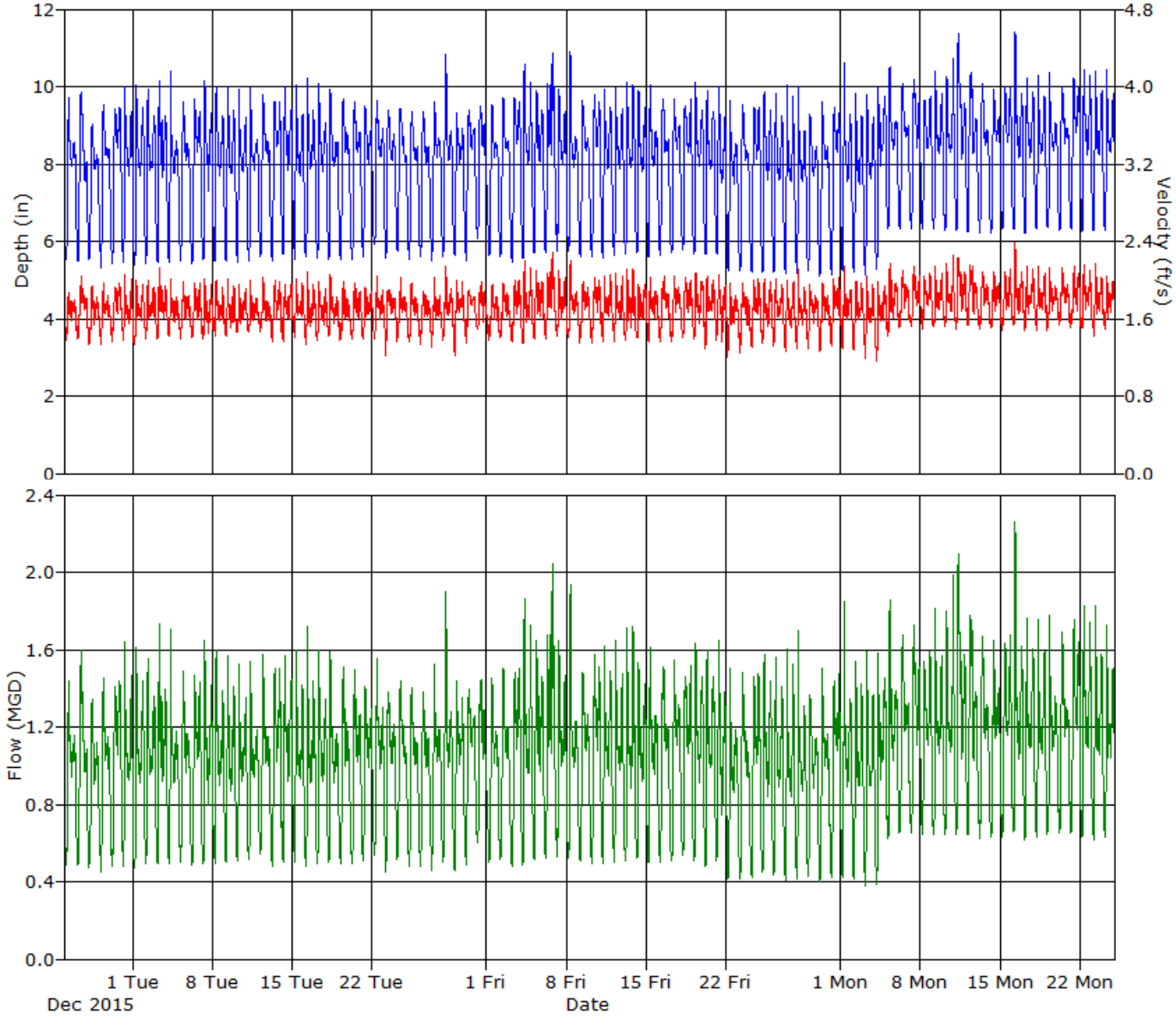


Report Period

11/25/2015
To
2/24/2016

Legend

- Depth
- Velocity
- Quantity



Daily Tabular Report For The Period 11/25/2015 - 2/24/2016

MPSite9, Pipe Height: 24.38 in

Daily Tabular Report

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
11/25/2015	04:55	5.52	10:10	9.97	7.80	04:45	1.35	10:05	2.00	1.65	04:45	0.478	10:05	1.588	0.962	0.962	
11/26/2015	05:45	5.48	12:15	9.93	7.77	05:25	1.36	11:50	2.11	1.70	05:25	0.478	11:50	1.659	0.996	0.996	
11/27/2015	04:30	5.52	12:15	9.07	7.56	06:45	1.31	10:55	1.95	1.64	04:30	0.470	10:55	1.356	0.918	0.918	
11/28/2015	05:35	5.30	11:05	9.55	7.71	05:20	1.30	10:40	2.03	1.66	05:20	0.437	10:50	1.493	0.957	0.957	
11/29/2015	05:40	5.41	21:10	9.48	7.99	06:15	1.34	20:30	1.99	1.70	05:45	0.467	20:30	1.447	1.034	1.034	
11/30/2015	04:30	5.44	08:10	10.02	7.92	04:10	1.32	08:10	2.09	1.68	04:10	0.462	08:10	1.679	1.000	1.000	
12/1/2015	05:20	5.38	08:10	10.14	7.87	03:10	1.18	07:55	2.05	1.68	03:10	0.416	08:05	1.660	0.997	0.997	
12/2/2015	04:25	5.41	08:40	9.95	7.88	04:00	1.38	08:05	2.01	1.69	04:00	0.489	08:30	1.584	1.002	1.002	
12/3/2015	04:55	5.47	08:05	10.18	7.96	05:00	1.37	08:00	2.23	1.70	05:00	0.479	08:00	1.824	1.027	1.027	
12/4/2015	05:20	5.42	08:30	10.60	7.77	05:10	1.38	08:30	2.17	1.67	05:10	0.481	08:30	1.873	0.969	0.969	
12/5/2015	05:20	5.45	10:30	9.67	7.82	03:50	1.32	10:55	2.08	1.68	05:45	0.485	10:55	1.566	0.985	0.985	
12/6/2015	05:15	5.42	10:50	9.71	7.95	06:20	1.37	10:30	2.05	1.70	05:00	0.477	10:30	1.530	1.023	1.023	
12/7/2015	05:10	5.51	07:50	10.20	7.92	03:30	1.38	07:50	2.05	1.67	05:10	0.491	07:50	1.683	0.999	0.999	
12/8/2015	04:15	5.45	08:00	10.06	7.88	01:20	1.33	08:25	2.12	1.69	05:15	0.486	07:40	1.662	0.997	0.997	
12/9/2015	05:10	5.46	09:40	10.02	7.90	03:10	1.37	09:40	2.10	1.67	04:35	0.493	09:40	1.684	0.997	0.997	
12/10/2015	04:50	5.44	08:15	10.01	7.86	02:10	1.33	08:05	2.01	1.68	04:50	0.508	08:05	1.587	0.988	0.988	
12/11/2015	05:00	5.50	08:05	9.99	7.83	04:05	1.45	08:35	2.00	1.68	04:55	0.514	08:25	1.565	0.980	0.980	
12/12/2015	05:05	5.58	10:35	9.81	7.93	18:30	1.41	10:35	2.08	1.69	05:05	0.528	10:35	1.627	1.008	1.008	
12/13/2015	05:50	5.49	21:15	9.65	8.02	05:50	1.36	11:10	2.01	1.71	05:50	0.475	11:10	1.529	1.045	1.045	
12/14/2015	04:50	5.66	08:10	10.07	8.05	05:30	1.34	21:50	1.99	1.70	05:00	0.499	08:10	1.601	1.039	1.039	
12/15/2015	05:00	5.54	08:00	10.06	7.95	05:05	1.41	07:50	2.03	1.71	05:05	0.499	08:10	1.619	1.022	1.022	
12/16/2015	05:05	5.58	08:15	10.24	7.94	04:10	1.22	08:25	2.15	1.67	04:10	0.447	08:25	1.769	1.003	1.003	
12/17/2015	05:00	5.56	08:10	10.09	7.95	13:40	1.37	08:25	2.03	1.68	04:20	0.489	08:05	1.634	1.005	1.005	
12/18/2015	05:05	5.51	08:10	9.96	7.84	05:10	1.40	08:05	2.06	1.67	05:10	0.495	08:10	1.639	0.983	0.983	
12/19/2015	05:15	5.53	10:45	9.72	7.91	03:35	1.26	10:35	1.98	1.66	03:35	0.485	10:35	1.513	0.991	0.991	
12/20/2015	05:25	5.52	10:45	9.63	7.90	05:20	1.37	11:25	1.99	1.67	05:20	0.484	11:25	1.514	0.996	0.996	
12/21/2015	05:05	5.60	09:10	9.54	7.98	05:35	1.38	08:55	1.97	1.69	04:45	0.503	09:00	1.440	1.014	1.014	
12/22/2015	04:15	5.88	10:30	9.73	8.02	04:15	1.32	10:30	2.08	1.69	04:15	0.509	10:30	1.606	1.022	1.022	
12/23/2015	04:45	5.57	10:20	9.42	7.93	04:15	1.17	13:10	2.03	1.69	04:15	0.430	09:00	1.476	1.007	1.007	
12/24/2015	05:10	5.75	09:30	9.51	7.96	04:20	1.33	12:15	2.06	1.68	04:20	0.505	12:15	1.500	1.007	1.007	
12/25/2015	05:00	5.46	11:45	9.36	7.77	07:05	1.33	12:05	2.09	1.67	05:00	0.468	12:05	1.518	0.970	0.970	
12/26/2015	06:15	5.57	10:40	9.42	7.76	04:40	1.30	12:10	1.94	1.65	05:25	0.470	12:10	1.426	0.957	0.957	
12/27/2015	05:40	5.49	11:10	9.65	7.82	05:25	1.23	11:20	2.03	1.66	05:25	0.431	11:10	1.550	0.976	0.976	
12/28/2015	05:05	5.60	11:10	10.92	7.95	05:15	1.35	11:10	2.28	1.69	05:15	0.492	11:10	2.050	1.016	1.016	
12/29/2015	05:15	5.62	09:30	9.38	7.85	06:30	1.19	21:15	2.05	1.67	06:00	0.446	09:30	1.491	0.990	0.990	
12/30/2015	05:15	5.49	11:30	9.43	8.04	04:50	1.35	11:30	1.91	1.72	05:00	0.485	11:30	1.411	1.046	1.046	
12/31/2015	06:00	6.00	12:00	9.52	8.08	07:50	1.47	12:50	1.99	1.72	06:00	0.586	11:45	1.460	1.048	1.048	
1/1/2016	06:20	5.64	11:40	9.59	7.80	06:20	1.34	11:40	2.02	1.66	06:20	0.487	11:40	1.529	0.970	0.970	
1/2/2016	05:30	5.60	11:05	9.76	7.90	04:45	1.33	10:45	2.03	1.69	04:45	0.491	11:20	1.527	1.004	1.004	
1/3/2016	05:55	5.46	11:00	9.77	8.07	06:40	1.32	20:55	2.06	1.71	05:50	0.478	20:55	1.547	1.054	1.054	
1/4/2016	04:15	5.57	07:55	10.70	8.11	05:15	1.26	08:15	2.28	1.72	05:15	0.469	07:50	1.907	1.069	1.069	
1/5/2016	05:00	5.68	08:10	9.98	8.13	05:45	1.37	09:45	2.11	1.74	04:30	0.507	09:45	1.662	1.082	1.082	
1/6/2016	04:20	5.69	20:00	10.97	8.42	05:10	1.36	20:00	2.34	1.79	05:10	0.510	20:00	2.119	1.180	1.180	
1/7/2016	04:45	5.74	07:35	9.96	8.10	05:55	1.32	08:10	2.10	1.74	05:55	0.523	08:10	1.657	1.069	1.069	
1/8/2016	04:20	5.75	08:20	10.99	8.03	02:05	1.34	08:30	2.25	1.73	04:40	0.519	08:30	2.034	1.055	1.055	
1/9/2016	05:30	5.58	10:10	9.68	7.90	03:15	1.32	21:30	2.05	1.71	05:20	0.507	10:10	1.508	1.021	1.021	

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
1/10/2016	05:45	5.59	11:05	9.81	8.07	04:05	1.32	12:10	2.24	1.73	05:20	0.489	12:10	1.668	1.069	1.069	
1/11/2016	05:10	5.57	08:10	9.95	8.02	05:15	1.33	08:05	2.07	1.72	05:15	0.480	08:05	1.648	1.047	1.047	
1/12/2016	04:45	5.61	08:10	9.98	7.99	05:20	1.33	08:15	2.11	1.73	05:20	0.491	08:15	1.683	1.044	1.044	
1/13/2016	05:00	5.64	20:25	10.80	8.01	16:50	1.34	20:20	2.34	1.71	05:00	0.497	20:25	2.033	1.039	1.039	
1/14/2016	04:25	5.70	08:15	9.91	7.97	16:30	1.37	08:15	2.00	1.70	04:05	0.522	08:15	1.584	1.026	1.026	
1/15/2016	05:00	5.59	08:05	10.07	7.89	05:55	1.28	08:35	2.05	1.70	05:55	0.492	08:05	1.623	1.006	1.006	
1/16/2016	04:55	5.65	11:25	9.73	7.92	05:55	1.34	13:20	2.08	1.71	05:55	0.492	11:25	1.552	1.026	1.026	
1/17/2016	06:15	5.70	10:55	9.73	7.94	05:40	1.32	11:00	2.06	1.72	05:40	0.495	11:00	1.573	1.032	1.032	
1/18/2016	05:05	5.77	21:20	9.70	8.11	03:55	1.39	09:25	2.10	1.75	05:10	0.524	21:20	1.563	1.084	1.084	
1/19/2016	05:00	5.66	07:55	10.14	8.04	15:05	1.34	08:35	2.10	1.73	05:00	0.507	08:20	1.655	1.057	1.057	
1/20/2016	05:00	5.64	08:15	9.90	7.96	04:55	1.28	08:10	2.09	1.72	04:55	0.465	08:10	1.646	1.035	1.035	
1/21/2016	04:35	5.66	09:00	10.28	7.81	15:15	1.30	08:15	2.17	1.69	03:30	0.510	09:00	1.742	0.993	0.993	
1/22/2016	04:20	5.22	08:40	9.70	7.62	02:40	1.11	08:05	1.97	1.64	03:50	0.401	08:05	1.503	0.932	0.932	
1/23/2016	05:40	5.22	11:25	9.59	7.67	05:05	1.17	11:20	2.00	1.66	05:05	0.389	11:20	1.511	0.954	0.954	
1/24/2016	06:05	5.21	21:35	9.50	7.81	05:20	1.28	22:25	2.06	1.70	06:05	0.421	21:40	1.517	1.004	1.004	
1/25/2016	05:10	5.19	08:05	9.89	7.76	15:40	1.31	08:05	2.04	1.68	05:10	0.444	08:05	1.606	0.979	0.979	
1/26/2016	04:20	5.22	08:00	9.91	7.67	04:30	1.27	07:55	2.05	1.68	04:30	0.415	08:00	1.624	0.964	0.964	
1/27/2016	04:55	5.17	19:45	10.11	7.70	03:25	1.17	22:05	2.03	1.66	03:25	0.388	08:05	1.636	0.965	0.965	
1/28/2016	04:20	5.16	08:05	10.02	7.66	04:25	1.26	08:05	2.14	1.67	04:25	0.406	08:05	1.723	0.956	0.956	
1/29/2016	04:25	5.24	08:35	9.30	7.59	04:55	1.25	08:10	1.97	1.67	04:55	0.414	08:55	1.403	0.943	0.943	
1/30/2016	04:55	5.08	10:45	9.65	7.61	04:25	1.19	10:55	2.00	1.66	05:10	0.386	10:55	1.506	0.946	0.946	
1/31/2016	05:25	5.13	11:20	9.49	7.80	05:30	1.31	21:30	2.07	1.71	05:30	0.414	21:30	1.508	1.009	1.009	
2/1/2016	05:10	5.25	07:45	10.67	7.79	05:10	1.24	07:55	2.19	1.68	05:10	0.407	07:50	1.890	0.984	0.984	
2/2/2016	04:35	5.20	08:00	9.84	7.70	03:35	1.27	21:00	2.01	1.67	04:35	0.415	08:00	1.558	0.969	0.969	
2/3/2016	04:35	5.12	08:20	9.80	7.69	05:00	1.14	08:00	2.06	1.64	05:00	0.364	08:00	1.603	0.947	0.947	
2/4/2016	05:05	5.29	08:10	10.01	8.07	05:05	1.14	08:05	2.02	1.63	05:05	0.377	08:05	1.611	1.012	1.012	
2/5/2016	04:30	6.33	08:05	10.62	8.38	01:55	1.37	08:00	2.27	1.77	04:30	0.608	08:00	1.965	1.135	1.135	
2/6/2016	05:15	6.32	11:30	10.09	8.39	04:15	1.45	11:50	2.17	1.80	04:15	0.627	11:50	1.747	1.156	1.156	
2/7/2016	05:15	6.30	11:10	10.25	8.46	05:50	1.51	10:55	2.24	1.81	05:45	0.649	10:55	1.818	1.181	1.181	
2/8/2016	04:20	6.31	21:35	9.73	8.43	04:45	1.49	20:50	2.12	1.81	04:45	0.638	20:50	1.635	1.168	1.168	
2/9/2016	04:35	6.30	08:15	10.41	8.42	02:10	1.42	08:10	2.17	1.79	04:35	0.634	08:10	1.833	1.155	1.155	
2/10/2016	04:45	6.27	20:25	11.19	8.42	18:25	1.47	20:25	2.34	1.80	04:45	0.643	20:25	2.177	1.167	1.167	
2/11/2016	04:35	6.29	08:00	11.51	8.66	04:00	1.48	08:30	2.36	1.85	04:00	0.640	08:00	2.173	1.256	1.256	
2/12/2016	04:15	6.24	10:10	10.39	8.54	14:40	1.48	10:15	2.24	1.84	04:45	0.632	10:15	1.885	1.220	1.220	
2/13/2016	05:20	6.22	10:45	10.10	8.30	06:45	1.45	11:00	2.12	1.79	05:15	0.621	11:00	1.716	1.138	1.138	
2/14/2016	05:45	6.20	11:05	9.93	8.32	04:25	1.47	11:10	2.11	1.79	05:50	0.627	11:10	1.674	1.138	1.138	
2/15/2016	04:45	6.31	10:20	10.02	8.50	03:50	1.45	21:00	2.14	1.80	04:40	0.626	21:25	1.690	1.179	1.179	
2/16/2016	04:50	6.31	08:00	11.54	8.58	03:35	1.50	07:35	2.48	1.84	04:40	0.652	07:35	2.349	1.227	1.227	
2/17/2016	04:55	6.20	08:20	10.23	8.38	01:55	1.42	08:10	2.17	1.80	04:05	0.606	08:10	1.780	1.157	1.157	
2/18/2016	04:15	6.28	08:10	10.30	8.41	04:05	1.44	21:40	2.16	1.81	04:05	0.618	08:00	1.800	1.164	1.164	
2/19/2016	04:55	6.33	07:55	10.40	8.35	03:15	1.48	08:10	2.23	1.79	03:25	0.639	08:10	1.852	1.143	1.143	
2/20/2016	04:45	6.27	10:50	10.03	8.35	04:55	1.51	10:35	2.19	1.80	04:55	0.637	10:35	1.746	1.146	1.146	
2/21/2016	05:45	6.31	10:45	10.28	8.54	04:50	1.48	11:25	2.17	1.81	05:05	0.649	11:20	1.783	1.200	1.200	
2/22/2016	04:35	6.24	20:50	10.54	8.48	01:35	1.43	07:55	2.19	1.81	04:15	0.623	07:55	1.871	1.187	1.187	
2/23/2016	04:45	6.27	07:55	10.42	8.43	05:20	1.31	07:40	2.18	1.79	05:20	0.571	07:45	1.834	1.163	1.163	
2/24/2016	04:35	6.30	08:05	10.43	8.41	12:25	1.44	08:45	2.10	1.77	04:35	0.617	08:00	1.741	1.145	1.144	

Report Summary For The Period 11/25/2015 - 2/24/2016

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Total			95.926
Avg	8.01	1.71	1.043

APPENDIX A
Flow Monitoring Plan

A-1 General

Data collection and review is essential in obtaining information that is used in constructing the sewer collection system model. An extensive flow monitoring plan was developed and implemented to achieve the following goals:

- Calibration of sewer flow generation factors
- Updating of dry weather flow peaking relationships
- Characterization of flows (development of diurnal curves)
- Calibration of the system model
- Development of wet weather flow peaking relationships

The flow monitoring plan included data captured via the installation flow monitoring equipment as well as data collected from IRWD's Supervisory Control and Data Acquisition (SCADA) system.

A-2 Supervisory Control and Data Acquisition (SCADA) Data

Available SCADA data for all sewer lift stations and treatment plant inflow meters was considered in the development of the flow monitoring plan. Reliable SCADA data was utilized in lieu of the installation of flow meter equipment. Ultimately, SCADA data was collected in at the following eight lift stations and one treatment plant:

- Coyote Canyon Lift Station - *Calibration*
- Newport Coast Lift Station – *Calibration (No flow meter)*
- Buck Gully Lift Station – *Calibration, Sewer Flow Generation Factors (No flow meter)*
- Montecito Lift Station – *Calibration, Sewer Flow Generation Factors (No flow meter)*
- *Bayview Lift Station - Sewer Flow Generation Factors (No flow meter)*
- Coastal Ridge Lift Station – *Calibration*
- Los Alisos Water Recycling Plant (LAWRP) – *Inflow and Infiltration, Calibration*
- University Lift Station – *SCADA were not used for sewage estimate*
- Michelson Lift Station – *SCADA were not used for sewage estimate*
- Canada Lift Station – *SCADA were not used for sewage estimate*
- Harvard Lift Station – *SCADA were not used for sewage estimate*

SCADA data collected at each lift station included pump on/off status, pump speed (if applicable), pump runtime, pump start and stop set points, lift station discharge flow (not available for Newport Coast, Buck Gully, and Montecito LS) lift station discharge pressure, and wet well level. SCADA data collected at LAWRP included the influent flow to the treatment plant.

The collected SCADA data was used for various purposes as indicated above, depending on the location and the tributary area. All locations were used in determining average dry weather flows (ADWF), peak dry weather flows (PDWF), developing 24-hour diurnal patterns, and calibrating the hydraulic model. The LAWRP location has a large and was used as a part of the inflow and infiltration analysis. The locations with primarily one specific tributary land use were also used to develop sewer flow generation factors.

Influent flowrates were calculated at the lift stations from the pump on/off times, wet well level settings, and wet well dimensions. The influent sewers to the wet well were evaluated to ensure that the pump start and stop levels were below the influent sewer inlet elevation. The influent flowrates could not be measured the Canada Lift Station, Michelson Lift Station, and the Harvard Lift Station because the influent sewer inlet elevation is lower than the pump start elevation. The influent flowrates could not be estimated at University Lift Station because the pumps are operated with variable frequency drives.

Influent flow at the Michelson Water Recycling Plant (MWRP) were not available during this project due to inaccurate readings. In January 2015, an influent flow meter verification study was being conducted by IRWD, for which flow meters were placed in the influent sewers to MWRP. The data collected by these flow meters was utilized for this Master Plan study as well. The locations of the flow meters are discussed further in Sections 1-5 through 1-7.

A-3 Temporary Flow Monitoring

Temporary flow monitoring was conducted by ADS Environmental Services from January 2015 through March 2015. A total of 65 flow monitors were installed in the IRWD gravity sewer system.

The flow monitoring equipment used was the ADS Model FlowShark Wireless flow monitor. The installation included an ultrasonic depth sensor mounted at the crown of the pipe, a redundant pressure depth sensor mounted at the invert, and a Doppler velocity sensor also mounted at or near the invert. The monitors were activated and set to take readings at 5 minute intervals. Field crews took manual depth readings with a ruler and velocity readings with a portable, instantaneous velocity meter in order to confirm the monitor accuracy based on actual existing hydraulic conditions at each location. The collected data was used to calculate flow using the continuity equation from the recorded depth and average velocity data.

A-4 Site Selection

The flow monitoring sites were selected for the following primary purposes:

- Inflow and Infiltration (14 Sites)
- Calibration (27 Sites)
- Sewer Generation Flow Factor (24 Sites)

Specific manholes were generally selected based on the following criteria:

a. Locations chosen with relatively large tributary areas and therefore significant flow
    - Tributary areas were drawn to initially selected sites.

- IRWD's demand forecast tool was used to estimate the ADWF tributary to each selected site.
- The average depth was calculated at each site using the estimated ADWF and the upstream pipe size and slope.
- If the average depth was estimated to be 2-inches or greater, it was considered as a potential flow monitoring site.
- If the average depth was less than 2-inches, an alternate locations was selected.

b. Locations chosen to capture steady flows and depth readings and minimize turbulent flow conditions, looking for the following:
   - Straight sections of sewers, without angle points in the selected manhole
   - Manhole without additional incoming pipes from the sides
   - Pipes without steep slopes and therefore lower velocities

c. Locations chosen without significant structural defects
   - CCTV data was reviewed to determine if there were any sags, offset joints, severe obstructions, or other pipe defect that may have affected the flow in the pipe and the results of potential flow monitoring data
   - Locations observed with turbulent flow conditions, fast velocities, or flow backing up in the sewer were noted and alternate locations were selected

ADS Environmental and IRWD staff conducted a site investigation to observe the hydraulic conditions of the selected locations prior to installing each flow monitor. If the selected site was deemed inappropriate based on the initial investigation, an alternate site was selected.

A-5 Inflow and Infiltration Flow Monitoring Sites

In addition LAWRP, fourteen (14) locations were selected for purposes of conducting an inflow and infiltration (I&I) analysis. The I&I locations are shown on Plate 1. The flow monitors were installed for a total of three months from about January 5, 2015 through April 6, 2015 in an attempt to capture flow data during a wet weather event.

The I&I locations selected encompass the large tributary areas of the trunk sewers as well as known or suspected areas of I&I, such as in the Harvard Avenue Trunk Sewer area, as shown in Table 1.

For the I&I analysis, rainfall data was collected from Orange County Public Works at eleven (11) stations in and around IRWD's service area (El Toro, Upper Aliso Creek, Aqua Chinon, Sand Canyon, Bee Canyon, Loma Ridge, Irvine Lake, El Modena-Irvine, San Diego Creek at Culver, Peters Canyon Wash at Barranca, San Diego Creek at Campus), as shown on Plate 1. Orange County Public Works provided rainfall data in 15 minute increments in database format (Excel files).

Table A-1
Inflow and Infiltration Flow Monitoring Sites

Flow Monitor ID	Main Trunk Sewer	Manhole ID	City	Location	Upstream Pipe Characteristics			
					Pipe ID	Size (in)	Slope	Material
I&I1	Jeffrey Rd	MH102S009	Irvine	Jeffrey Rd, south of Alton Pkwy	CLMH102E008MH102S009	33	0.0012	VCP
I&I2	San Diego Creek Interceptor (SDCI)	MH102S002	Irvine	Easement, east of Jeffrey Rd and north of 405 Fwy	CLMH102S003MH102S002	48	0.0024	RCP
I&I3	San Diego Creek Interceptor (SDCI)	MH138N016	Irvine	Easement, west of 133 Fwy and north of 405 Fwy	CLMH138N017MH138N016	42	0.0015	VCP
I&I4	Alton-Bake	MH172N011	Irvine	Alton Pkwy, north of Barranca Pkwy	MH172N012MH172N011	18	0.0065	VCP
I&I5	Culver So. 24	MH060E003	Irvine	Culver Dr south of Main St	CLMH060E002MH060E003	36	0.0015	ACP
I&I6	Culver Dr	MH062S010	Irvine	Culver Dr, south of Irvine Center Dr	CLMH062S011MH062S010	39	0.0099	ACP
I&I7	Culver Dr	MH084N146	Irvine	Culver Dr, south of Irvine Blvd	CLMH084N047MH084N146	18	0.0120	VCP
I&I8	Harvard Ave (HATS)	MH060N031	Irvine	Harvard Ave, north of Main St	CLMH060N016MH060N031	54	0.0005	RCP
I&I9	Harvard Ave (HATS)	MH063W047	Irvine	Harvard Ave, north of Edinger Ave	CLMH063W046MH063W047	24	0.0017	VCP
I&I10	Harvard Ave (HATS)	MH044S019	Tustin	Myford Rd, north of 5 Fwy	CLMH044S018MH044S019	36	0.0024	VCP
I&I11	Irvine Business Complex (IBC)	MH007E029	Irvine	Main St, west of MacArthur Blvd	CLMH008S044MH007E029	42	0.0020	RPMP
I&I12	MWRP, Irvine South Influent	MH059S019	Irvine	Harvard Ave, northwest of University Dr	CLMH059S020MH059S019	24	0.0010	ACP
I&I13	MWRP, University Influent	MH059S092	Irvine	Harvard Ave, northwest of University Dr	CLMH059S093MH059S092	18	0.0040	PVC
CAL5	OCSD facility	MH046N002	Tustin	Edinger Ave, east of Red Hill Ave	CLMH046N001MH046N002	24	0.0020	VCP
LAWRP		SCADA Data						

A-6 Calibration Flow Monitoring Sites

In addition to the facilities listed in Section 1-2 and the 14 I&I flow monitoring sites, twenty-seven (27) locations were selected for purposes of further calibrating the developed sewer system hydraulic model. The selected calibration locations cover large tributary areas of the sewers that branch off of the main trunk sewers. The SCADA data from the facilities and the flow monitoring data collected at the I&I sites will also be utilized in developing diurnal curves for their tributary areas and for calibrating the model. The additional calibration sites are shown in Plate 2 and are listed in Table 2. These flow monitors were installed for a total of four weeks from about February 2, 2015 through February 27, 2015.

A-7 Sewer Generation Flow Factor Flow Monitoring Sites

An additional twenty-four (24) locations were selected for purposes of developing sewer generation factors for specific land use types covering various jurisdictions within the service area. The additional calibration sites are shown in Plate 3 and are listed in Table 3. These flow monitors were installed coincidentally with the calibration sites for a total of four weeks from about February 2, 2015 through February 27, 2015.

Flow monitoring becomes more and more unreliable as the flow depth in the sewer pipe decreases. More accurate measurements result from larger tributary areas, resulting in larger flows with sufficient flow depth. Typically, sewer flow generation factors can be developed for single family residential land uses from sewer flow monitoring data because large areas of single family residential uses can usually be isolated and flow monitored at one or more locations. It is more difficult to isolate large areas of multi-family, commercial, industrial, and institutional land uses. Additionally, because of large variation in industrial land use types and water use, sewer flow generation factors are even more difficult to develop for this land use.

With the aforementioned considerations, sewer generation flow factor sites were selected to cover as many land use types as possible. The sewer flow projections as well as the predicted growth in sewage flow for each land use type was also considered in selecting the flow monitoring locations. IRWD's demand forecast tool provided the sewer flow projections by General Plan Land Use Code for existing 2014 conditions as well as ultimate 2035 conditions. The land uses were then ranked by sewer flow projections as shown in Table 4.

For some of the land uses where installation of flow monitors was not feasible, water meter billing records and/or flow data collected via Meter Master equipment will be utilized in developing sewer generation factors. These land uses will include, but are not limited to, heavy industrial (1320; Braun Medical, etc.), High Density Irvine (1182), Medium Density Lake Forest (1166), Medium-High Density Lake Forest (1176), High Density Lake Forest (1186), and Commercial Recreation (1230).

Table A-2
Calibration Flow Monitoring Sites

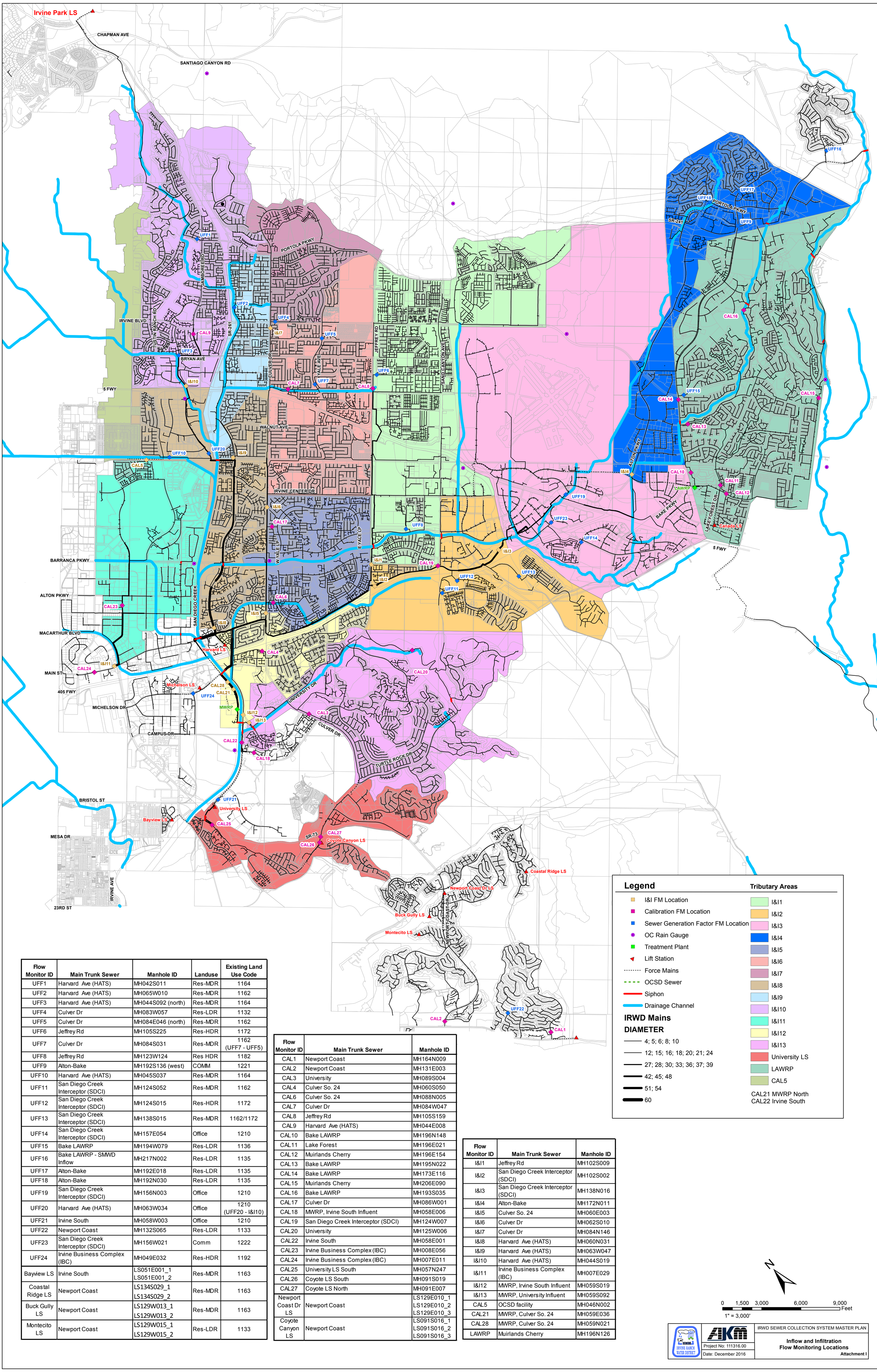
Flow Monitor ID	Main Trunk Sewer	Manhole ID	City	Location	Upstream Pipe Characteristics			
					Pipe ID	Size (in)	Slope	Material
CAL1	Newport Coast	MH164N009	Newport Beach	Reef Point Dr, south of Sidney Bay Dr	CLMH164N008MH164N009	8	0.0399	PVC
CAL2	Newport Coast	MH131E003	Newport Beach	Newport Coast Dr, north of PCH	CLMH131E006MH131E003	15	0.0500	VCP
CAL3	University	MH089S004	Irvine	Culver Dr, west of Campus Dr	CLMH089S005MH089S004	12	0.0240	VCP
CAL4	Culver So. 24	MH060S050	Irvine	405 Fwy off ramp, west of Culver Dr and south of freeway	CLMH060S051MH060S050	15	0.0055	VCP
CAL6	Culver So. 24	MH088N005	Irvine	Main St, west of West Yale Loop	CLMH088N006MH088N005	18	0.0012	VCP
CAL7	Culver Dr	MH084W047	Irvine	Trabuco Rd, east of Culver Dr	CLMH084W068MH084W047	18	0.0118	VCP
CAL8	Jeffrey Rd	MH105S159	Irvine	Jeffrey Rd, north of Trabuco Rd	MH105S161MH105S159	18	0.0049	VCP
CAL9	Harvard Ave (HATS)	MH044E008	Tustin	Jamboree Rd, south of Irvine Blvd	CLMH044E007MH044E008	27	0.0085	VCP
CAL10	Bake LAWRP	MH196N148	Lake Forest	Mosscreek Rd, south of Rosewood Ln	CLMH196N128MH196N148	21	0.0099	VCP
CAL11	Lake Forest	MH196E021	Lake Forest	Lake Forest Dr, north of Muirlands Blvd	CLMH196E022MH196E021	15	0.0026	VCP
CAL12	Muirlands Cherry	MH196E154	Lake Forest	Muirlands Blvd, east of Lake Forest Dr	CLMH196E154	18	0.0099	VCP
CAL13	Bake LAWRP	MH195N022	Lake Forest	Toledo Wy, west of Bake Pkwy	CLMH195N108MH195N022	21	0.0030	VCP
CAL14	Bake LAWRP	MH173E116	Lake Forest	Bake Pkwy, south of Trabuo Rd	CLMH174S107MH173E116	18	0.0220	VCP
CAL15	Muirlands Cherry	MH206E090	Lake Forest	Cherry Ave, north of Trabuco Rd	CLMH207S091MH206E090	15	0.0199	VCP
CAL16	Bake LAWRP	MH193S035	Lake Forest	Easement north of Sharmila	CLMH193S034MH193S035	15	0.0136	VCP
CAL17	Culver Dr	MH086W001	Irvine	Warner Ave, east of Culver Dr	CLMH086W002MH086W001	18	0.0010	VCP
CAL18	MWRP, Irvine South Influent	MH058E006	Irvine	Campus Dr, east of University Dr	CLMH058E007MH058E006	21	0.0124	ACP
CAL19	San Diego Creek Interceptor (SDCI)	MH124W007	Irvine	Easement, north of 405 Fwy and west of Sand Canyon Ave	CLMH124W008MH124W007	24	0.0013	VCP
CAL20	University	MH125W006	Irvine	Easement, west of Shady Canyon and Canyon Creek.	CLMH125W007MH125W006	15	0.0340	VCP
CAL21	MWRP, Culver So. 24	MH059E036	Irvine	Riparian Way, north of MWRP	CLMH059N021MH059E036	51	0.0020	RCP
CAL22	Irvine South	MH058E001	Irvine	University Dr, north of Campus Dr	CLMH058E002MH058E001	27	0.0031	ACP
CAL23	Irvine Business Complex (IBC)	MH008E056	Tustin	Armstrong Ave, north of Langley Ave	CLMH008E055MH008E056	28	0.0016	RPMP
CAL24	Irvine Business Complex (IBC)	MH007E011	Irvine	Main St, west of MacArthur Blvd	CLMH007E013MH007E011	21	0.0007	VCP
CAL25	University LS South	MH057N247	Newport Beach	Milano, north of La Salud	CLMH057N003MH057N247	24	0.0109	VCP
CAL26	Coyote LS South	MH091S019	Newport Beach	Bonita Canyon Road and SR-73	CLMH091S020MH091S019	12	0.0060	VCP
CAL27	Coyote LS North	MH091E007	Newport Beach	Bonita Canyon Road and SR-73	CLMN091E006MH091E007	15	0.0020	VCP
CAL28	MWRP, Culver So. 24	MH059N021	Irvine	Riparian Way, south of Michelson Dr.	CLMH059N009MH059N021	51	0.0020	RCP
Newport Coast Dr LS		SCADA Data						
Coyote Canyon LS		SCADA Data						

Table A-3
Sewer Generation Factor Flow Monitoring Sites

Flow Monitor ID	Main Trunk Sewer	Manhole ID	Landuse	Existing Land Use Code	City	Location	Upstream Pipe Characteristics			
							Pipe ID	Size (in)	Slope	Material
UFF1	Harvard Ave (HATS)	MH042S011	Res-MDR	1164	Tustin	Portola Pkwy, northwest of Jamboree Rd	CLMH042S012MH042S011	24	0.0074	VCP
UFF2	Harvard Ave (HATS)	MH065W010	Res-MDR	1162	Irvine	Easement east of SR-261	CLMH065W008MH065W010	12	0.0070	VCP
UFF3	Harvard Ave (HATS)	MH044S092 (north)	Res-MDR	1164	Tustin	Intersection of Bryan Ave and Myford Rd	CLMH044E017MH044S092	18	0.0049	ACP
UFF4	Culver Dr	MH083W057	Res-LDR	1132	Irvine	Irvine Blvd, southeast of Culver Dr	CLMH083W058MH083W057	12	0.0118	VCP
UFF5	Culver Dr	MH084E046 (north)	Res-MDR	1162	Irvine	Yale Ave, southwest of Northwood	CLMH084E047MH084E046	15	0.0131	VCP
UFF6	Jeffrey Rd	MH105S225	Res-HDR	1172	Irvine	Jeffrey Rd, northeast of Trabuco Rd	MH105S227MH105S225	15	0.0049	PVC
UFF7	Culver Dr	MH084S031	Res-MDR	1162 (UFF7 - UFF5)	Irvine	Yale Ave, south of Southwood	CLMH084S032MH084S031	18	0.0077	VCP
UFF8	Jeffrey Rd	MH123W124	Res HDR	1182	Irvine	Barranca Pkwy, northwest of Valley Oak Dr	CLMH123W121MH123W124	10	0.0060	VCP
UFF9	Alton-Bake	MH192S136 (west)	COMM	1221	Lake Forest	Intersection of Bake Pkwy and Town Centre Dr	CLMH192S012MH192S136	12		VCP
UFF10	Harvard Ave (HATS)	MH045S037	Res-MDR	1164	Tustin	Edinger Ave, west of Jamboree Rd	CLMH045W007MH045S037	18	0.0020	VCP
UFF11	San Diego Creek Interceptor (SDCI)	MH124S052	Res-MDR	1162	Irvine	Quail Hill, east of Shady Canyon Dr	MH124S053MH124S052	12	0.0020	PVC
UFF12	San Diego Creek Interceptor (SDCI)	MH124S015	Res-HDR	1172	Irvine	Easement south of 405 and east of Sand Canyon Ave	MH124S059MH124S015	8	0.0099	PVC
UFF13	San Diego Creek Interceptor (SDCI)	MH138S015	Res-MDR	1162/1172	Irvine	Easement west of 133-Fwy	CLMH138S014MH138S015	15	0.0100	PVC
UFF14	San Diego Creek Interceptor (SDCI)	MH157E054	Office	1210	Irvine	Research Dr, southwest of Irvine Center Dr	CLMH157E004MH157E054	21	0.0070	VCP
UFF15	Bake LAWRP	MH194W079	Res-LDR	1136	Lake Forest	Trabuco Rd, east of Bake Pkwy	CLMH194W078MH194W079	10	0.0465	VCP
UFF16	Bake LAWRP - SMWD Inflow	MH217N002	Res-LDR	1135	Lake Forest	Saddleback Ranch Rd, northeast of Glenn Ranch Rd	CLMH217N003MH217N002	8	0.0688	VCP
UFF17	Alton-Bake	MH192E018	Res-LDR	1135	Lake Forest	Bake Pkwy, northeast of Portola Pkwy	CLMH192E017MH192E018	10	0.0649	VCP
UFF18	Alton-Bake	MH192N030	Res-LDR	1135	Lake Forest	Portola Pkwy, southeast of Alton Pkwy	CLMH192N029MH192N030	15	0.0052	VCP
UFF19	San Diego Creek Interceptor (SDCI)	MH156N003	Office	1210	Irvine	Easement, west of Technology Dr and south of Alton Pkwy	CLMH156N004MH156N003	21	0.0030	VCP
UFF20	Harvard Ave (HATS)	MH063W034	Office	1210 (UFF20 - I&I10)	Tustin	Easement, north of Edinger Avenue and west of Jamboree Rd	CLMH063W035MH063W034	36	0.0027	VCP
UFF21	Irvine South	MH058W003	Office	1210	Irvine	University Dr, east of MacArthur Blvd	CLMH058W002MH058W003	15	0.0070	VCP
UFF22	Newport Coast	MH132S065	Res-LDR	1133	Newport Beach	Scotia Sea, southwest of Scenic Bluff	CLMH132S006MH132S065	8	0.0040	PVC
UFF23	San Diego Creek Interceptor (SDCI)	MH156W021	Comm	1222	Irvine	Pacifica, east of Irvine Center Dr	CLMH156W024MH156W021	12	0.0071	VCP
UFF24	Irvine Business Complex (IBC)	MH049E032	Res-HDR	1192	Irvine	Michelson Dr, east of Carlson Ave	MH049E017MH049E032	10	0.0099	VCP
Bayview LS		SCADA Data	Res-MDR	1163	Newport Beach					
Coastal Ridge LS		SCADA Data	Res-MDR	1163	Newport Beach					
Buck Gully LS		SCADA Data	Res-MDR	1163	Newport Beach					
Montecito LS		SCADA Data	Res-LDR	1133	Newport Beach					

Table A-4
Land Uses with Highest Sewer Flow Projections

General Plan Land Use Code	Description	Agency	Sewer Flow Projections from IRWD Demand Forecast Tool (gpd)			Highest Sewer Flow Producing Land Uses			Notes
			2015	2035	2035 - 2015 (Growth)	Ranking 2015	Ranking 2035	Ranking 2035 - 2015 (Growth)	
1162	Medium Density	Irvine	6,479,007	8,125,995	1,646,988	1	1	2	UFF2, UFF5, UFF7, UFF11, UFF13
1172	Medium-High Density	Irvine	3,529,189	4,423,250	894,061	2	3	5	UFF6, UFF12, UFF13
1210	General Office		2,868,969	3,234,098	365,129	3	5	11	UFF10, UFF14, UFF19, UFF20, UFF21
1310	Industrial - Light		2,775,332	3,208,234	432,902	4	6	8	Use CAL24 and I&I11
1182	High Density	Irvine	2,447,528	3,501,794	1,054,266	5	4	4	UFF8, UFF24, Meter Master Data
1221	Community Commercial		2,311,706	2,684,471	372,766	6	7	10	UFF9
1136	Low Density	Lake Forest	2,249,885	2,541,240	291,355	7	9	13	UFF15, Canada LS
1261	UCI		2,000,000	4,920,000	2,920,000	8	2	1	Use CAL18
1320	Industrial - Heavy		1,970,000	2,350,000	380,000	9	11	9	Use Meter Master Data (i.e. Braun)
1132	Low Density	Irvine	1,749,814	2,613,150	863,336	10	8	6	UFF4
1164	Medium Density PC	Tustin	1,282,005	1,282,005	0	11	13	28	UFF1, UFF3
1135	Suburban Density	County of Orange	1,151,130	1,315,380	164,250	12	12	15	UFF16, UFF17, UFF18
1192	High Rise Density - Irvine	Irvine	1,052,198	2,392,000	1,339,802	13	10	3	UFF24
1166	Medium Density	Lake Forest	709,100	857,500	148,400	14	14	16	Tributary areas too small; Use wateruse data
1163	Medium Density	Newport Beach	535,725	535,725	0	15	15	28	Coastal Ridge LS, Buck Gully LS
1133	Low Density	Newport Beach	487,490	487,490	0	16	17	28	UFF22, Montecito LS
1183	High Density	Newport Beach	421,705	421,705	0	17	18	28	No Growth
1222	Regional Commercial		397,008	418,311	21,303	18	19	23	UFF23
1175	Urban Density	County of Orange	377,792	377,792	0	19	21	28	No Growth
1176	Medium-High Density	Lake Forest	322,480	373,230	50,750	20	22	19	Tributary areas too small; Use wateruse data
1131	Low Density	East Orange	0	506,100	506,100	38	16	7	No Existing areas
1141	Low-Medium Density	East Orange	0	311,140	311,140	38	23	12	No Existing areas
1111	Rural Density - Orange	East Orange	215,250	395,500	180,250	21	20	14	No Sewers in this area
1161	Medium Density	East Orange	0	121,000	121,000	38	29	17	No Existing areas
1230	Commercial Recreation		37,606	110,626	73,019	32	31	18	Tributary areas too small; Use wateruse data
1186	High Density	Lake Forest	76,381	126,040	49,659	27	28	20	Tributary areas too small; Use wateruse data



Flow Monitor ID	Main Trunk Sewer	Manhole ID	Landuse	Existing Land Use Code
UFF1	Harvard Ave (HATS)	MH042S011	Res-MDR	1164
UFF2	Harvard Ave (HATS)	MH065W010	Res-MDR	1162
UFF3	Harvard Ave (HATS)	MH044S092 (north)	Res-MDR	1164
UFF4	Culver Dr	MH083W057	Res-LDR	1132
UFF5	Culver Dr	MH084E046 (north)	Res-MDR	1162
UFF6	Jeffrey Rd	MH105S225	Res-HDR	1172
UFF7	Culver Dr	MH084S031	Res-MDR	1162 (UFF7 - UFF5)
UFF8	Jeffrey Rd	MH123W124	Res HDR	1182
UFF9	Alton-Bake	MH192S136 (west)	COMM	1221
UFF10	Harvard Ave (HATS)	MH045S037	Res-MDR	1164
UFF11	San Diego Creek Interceptor (SDCI)	MH124S052	Res-MDR	1162
UFF12	San Diego Creek Interceptor (SDCI)	MH124S015	Res-HDR	1172
UFF13	San Diego Creek Interceptor (SDCI)	MH138S015	Res-MDR	1162/1172
UFF14	San Diego Creek Interceptor (SDCI)	MH157E054	Office	1210
UFF15	Bake LAWRP	MH194W079	Res-LDR	1136
UFF16	Bake LAWRP - SMWD Inflow	MH217N002	Res-LDR	1135
UFF17	Alton-Bake	MH192E018	Res-LDR	1135
UFF18	Alton-Bake	MH192N030	Res-LDR	1135
UFF19	San Diego Creek Interceptor (SDCI)	MH156N003	Office	1210
UFF20	Harvard Ave (HATS)	MH063W034	Office	1210 (UFF20 - I&I10)
UFF21	Irvine South	MH058W003	Office	1210
UFF22	Newport Coast	MH132S065	Res-LDR	1133
UFF23	San Diego Creek Interceptor (SDCI)	MH156W021	Comm	1222
UFF24	Irvine Business Complex (IBC)	MH049E032	Res-HDR	1192
Bayview LS	Irvine South	LS051E001_1 LS051E001_2	Res-MDR	1163
Coastal Ridge LS	Newport Coast	LS134S029_1 LS134S029_2	Res-MDR	1163
Buck Gully LS	Newport Coast	LS129W013_1 LS129W013_2	Res-MDR	1163
Montecito LS	Newport Coast	LS129W015_1 LS129W015_2	Res-LDR	1133

Flow Monitor ID	Main Trunk Sewer	Manhole ID
CAL1	Newport Coast	MH164N009
CAL2	Newport Coast	MH131E003
CAL3	University	MH089S004
CAL4	Culver So. 24	MH060S050
CAL6	Culver So. 24	MH088N005
CAL7	Culver Dr	MH084W047
CAL8	Jeffrey Rd	MH105S159
CAL9	Harvard Ave (HATS)	MH044E008
CAL10	Bake LAWRP	MH196N148
CAL11	Lake Forest	MH196E021
CAL12	Muirlands Cherry	MH196E154
CAL13	Bake LAWRP	MH195N022
CAL14	Bake LAWRP	MH173E116
CAL15	Muirlands Cherry	MH206E090
CAL16	Bake LAWRP	MH193S035
CAL17	Culver Dr	MH086W001
CAL18	MWRP, Irvine South Influent	MH058E006
CAL19	San Diego Creek Interceptor (SDCI)	MH124W007
CAL20	University	MH125W006
CAL22	Irvine South	MH058E001
CAL23	Irvine Business Complex (IBC)	MH008E056
CAL24	Irvine Business Complex (IBC)	MH007E011
CAL25	University LS South	MH057N247
CAL26	Coyote LS South	MH091S019
CAL27	Coyote LS North	MH091E007
Newport Coast Dr LS	Newport Coast	LS129E010_1 LS129E010_2 LS129E010_3
Coyote Canyon LS	Newport Coast	LS091S016_1 LS091S016_2 LS091S016_3

Flow Monitor ID	Main Trunk Sewer	Manhole ID
I&I1	Jeffrey Rd	MH102S009
I&I2	San Diego Creek Interceptor (SDCI)	MH102S002
I&I3	San Diego Creek Interceptor (SDCI)	MH138N016
I&I4	Alton-Bake	MH172N011
I&I5	Culver So. 24	MH060E003
I&I6	Culver Dr	MH062S010
I&I7	Culver Dr	MH084N146
I&I8	Harvard Ave (HATS)	MH060N031
I&I9	Harvard Ave (HATS)	MH063W047
I&I10	Harvard Ave (HATS)	MH044S019
I&I11	Irvine Business Complex (IBC)	MH007E029
I&I12	MWRP, Irvine South Influent	MH059S019
I&I13	MWRP, University Influent	MH059S092
CAL5	OCSD facility	MH046N002
CAL21	MWRP, Culver So. 24	MH059E036
CAL28	MWRP, Culver So. 24	MH059N021
LAWRP	Muirlands Cherry	MH196N126

Legend

- I&I FM Location
- Calibration FM Location
- Sewer Generation Factor FM Location
- OC Rain Gauge
- Treatment Plant
- Lift Station
- Force Mains
- OCSD Sewer
- Siphon
- Drainage Channel

IRWD Mains

DIAMETER

- 4; 5; 6; 8; 10
- 12; 15; 16; 18; 20; 21; 24
- 27; 28; 30; 33; 36; 37; 39
- 42; 45; 48
- 51; 54
- 60

Tributary Areas

- I&I1
- I&I2
- I&I3
- I&I4
- I&I5
- I&I6
- I&I7
- I&I8
- I&I9
- I&I10
- I&I11
- I&I12
- I&I13
- University LS
- LAWRP
- CAL5

CAL21 MWRP North
CAL22 Irvine South

0 1,500 3,000 6,000 9,000 Feet

1" = 3,000'

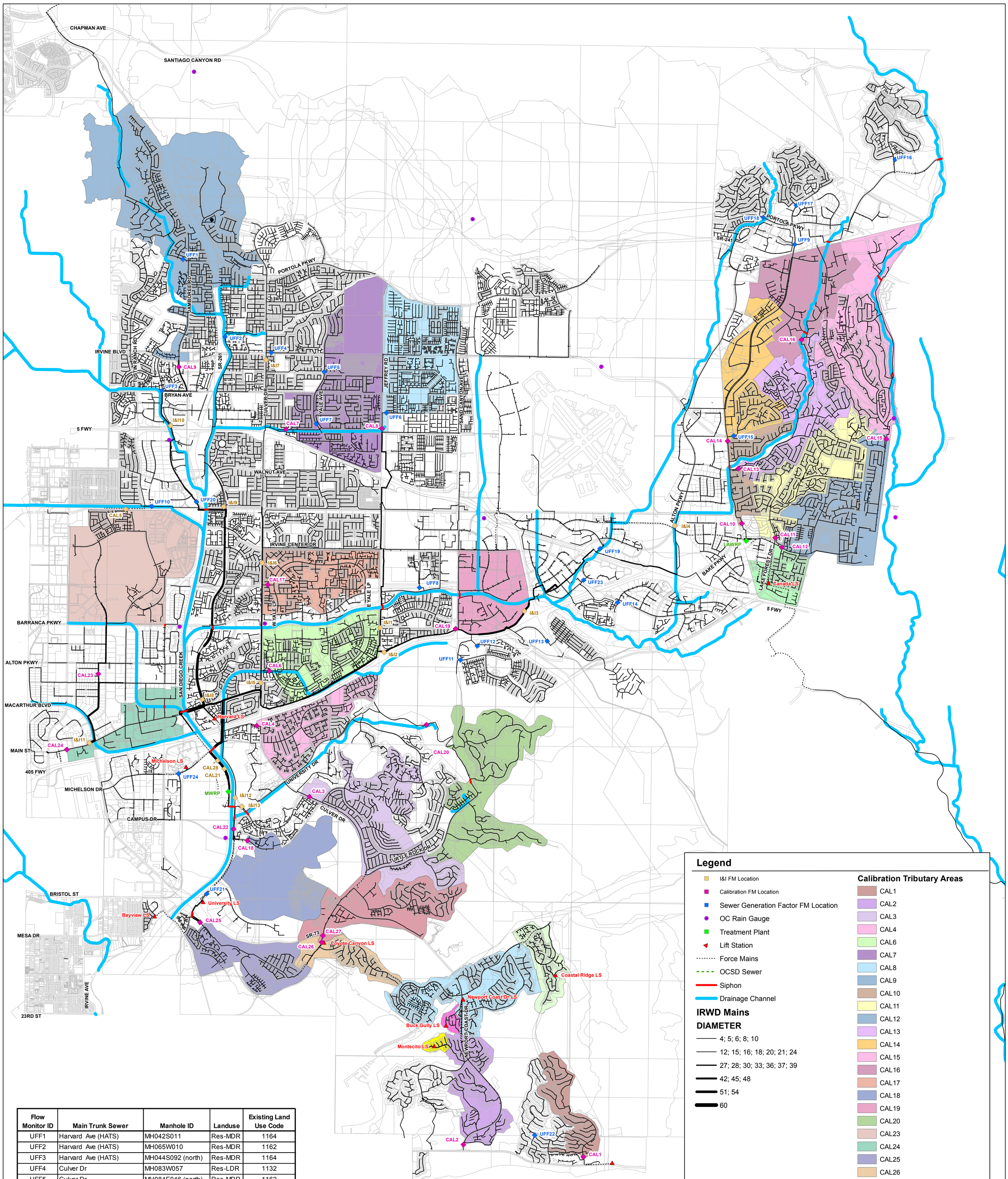
IRWD SEWER COLLECTION SYSTEM MASTER PLAN

Inflow and Infiltration Flow Monitoring Locations

Attachment I

Project No: 111316.00

Date: December 2016



Flow Monitor ID	Main Trunk Sewer	Manhole ID	Landuse	Existing Land Use Code
UFF1	Harvard Ave (HATS)	MH042S011	Res-MDR	1164
UFF2	Harvard Ave (HATS)	MH065W010	Res-MDR	1162
UFF3	Harvard Ave (HATS)	MH044S092 (north)	Res-MDR	1164
UFF4	Culver Dr	MH083W057	Res-LDR	1132
UFF5	Culver Dr	MH084E046 (north)	Res-MDR	1162
UFF6	Jeffrey Rd	MH105S225	Res-HDR	1172
UFF7	Culver Dr	MH084S031	Res-MDR	1162 (UFF7 - UFF5)
UFF8	Jeffrey Rd	MH123W124	Res HDR	1182
UFF9	Alton-Bake	MH192S136 (west)	COMM	1221
UFF10	Harvard Ave (HATS)	MH045S037	Res-MDR	1164
UFF11	San Diego Creek Interceptor (SDCI)	MH124S052	Res-MDR	1162
UFF12	San Diego Creek Interceptor (SDCI)	MH124S015	Res-HDR	1172
UFF13	San Diego Creek Interceptor (SDCI)	MH138S015	Res-MDR	1162/1172
UFF14	San Diego Creek Interceptor (SDCI)	MH157E054	Office	1210
UFF15	Bake LAWRP	MH194W079	Res-LDR	1136
UFF16	Bake LAWRP - SMWD Inflow	MH217N002	Res-LDR	1135
UFF17	Alton-Bake	MH192E018	Res-LDR	1135
UFF18	Alton-Bake	MH192N030	Res-LDR	1135
UFF19	San Diego Creek Interceptor (SDCI)	MH156N003	Office	1210
UFF20	Harvard Ave (HATS)	MH063W034	Office	1210 (UFF20 - I&I10)
UFF21	Irvine South	MH058W003	Office	1210
UFF22	Newport Coast	MH132S065	Res-LDR	1133
UFF23	San Diego Creek Interceptor (SDCI)	MH156W021	Comm	1222
UFF24	Irvine Business Complex (IBC)	MH049E032	Res-HDR	1192
Bayview LS	Irvine South	LS051E001_1 LS051E001_2	Res-MDR	1163
Coastal Ridge LS	Newport Coast	LS134S029_1 LS134S029_2	Res-MDR	1163
Buck Gully LS	Newport Coast	LS129W013_1 LS129W013_2	Res-MDR	1163
Montecito LS	Newport Coast	LS129W015_1 LS129W015_2	Res-LDR	1133

Flow Monitor ID	Main Trunk Sewer	Manhole ID
CAL1	Newport Coast	MH164N009
CAL2	Newport Coast	MH131E003
CAL3	University	MH089S004
CAL4	Culver So. 24	MH060S050
CAL6	Culver So. 24	MH088N005
CAL7	Culver Dr	MH084W047
CAL8	Jeffrey Rd	MH105S159
CAL9	Harvard Ave (HATS)	MH044E008
CAL10	Bake LAWRP	MH196N148
CAL11	Lake Forest	MH196E021
CAL12	Muirlands Cherry	MH196E154
CAL13	Bake LAWRP	MH195N022
CAL14	Bake LAWRP	MH173E116
CAL15	Muirlands Cherry	MH206E090
CAL16	Bake LAWRP	MH193S035
CAL17	Culver Dr	MH086W001
CAL18	MWRP, Irvine South Influent	MH058E006
CAL19	San Diego Creek Interceptor (SDCI)	MH124W007
CAL20	University	MH125W006
CAL22	Irvine South	MH058E001
CAL23	Irvine Business Complex (IBC)	MH008E056
CAL24	Irvine Business Complex (IBC)	MH007E011
CAL25	University LS South	MH057N247
CAL26	Coyote LS South	MH091S019
CAL27	Coyote LS North	MH091E007
Newport Coast Dr LS	Newport Coast	LS129E010_1 LS129E010_2 LS129E010_3
Coyote Canyon LS	Newport Coast	LS091S016_1 LS091S016_2 LS091S016_3

Flow Monitor ID	Main Trunk Sewer	Manhole ID
I&I1	Jeffrey Rd	MH102S009
I&I2	San Diego Creek Interceptor (SDCI)	MH102S002
I&I3	San Diego Creek Interceptor (SDCI)	MH138N016
I&I4	Alton-Bake	MH172N011
I&I5	Culver So. 24	MH060E003
I&I6	Culver Dr	MH062S010
I&I7	Culver Dr	MH084N146
I&I8	Harvard Ave (HATS)	MH060N031
I&I9	Harvard Ave (HATS)	MH063W047
I&I10	Harvard Ave (HATS)	MH044S019
I&I11	Irvine Business Complex (IBC)	MH007E029
I&I12	MWRP, Irvine South Influent	MH059S019
I&I13	MWRP, University Influent	MH059S092
CAL5	OCSD facility	MH046N002
CAL21	MWRP, Culver So. 24	MH059E036
CAL28	MWRP, Culver So. 24	MH059N021
LAWRP	Muirlands Cherry	MH196N126

0 1,500 3,000 6,000 9,000 Feet

1" = 3,000'

IRVINE RANCH WATER DISTRICT

AKM

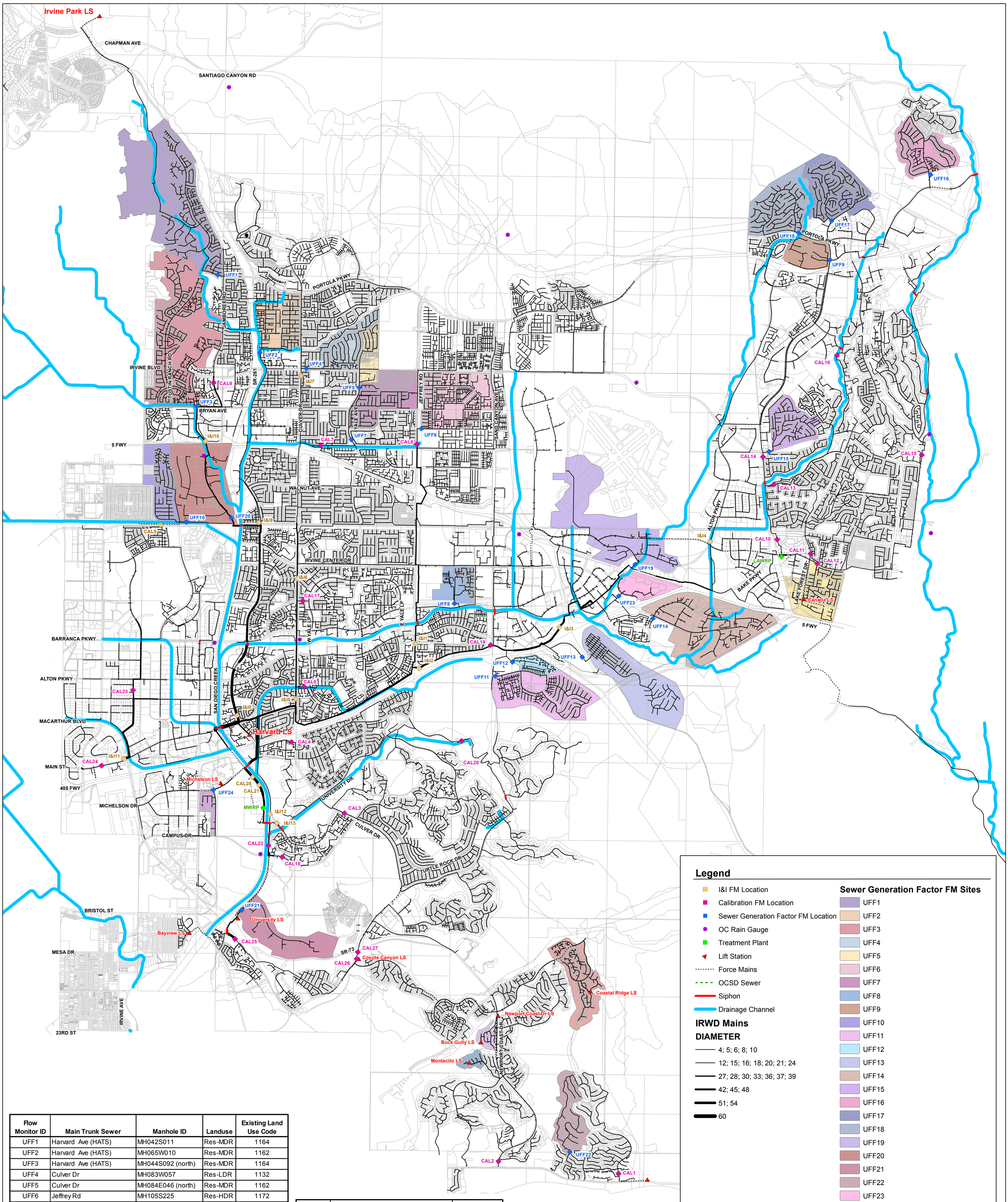
Project No.: 111316.00

Date: December 2016

IRWD SEWER COLLECTION SYSTEM MASTER PLAN

Calibration Flow Monitoring Locations

Attachment II



Legend

- I&I FM Location
- Calibration FM Location
- Sewer Generation Factor FM Location
- OC Rain Gauge
- Treatment Plant
- Lift Station
- Force Mains
- OCSD Sewer
- Siphon
- Drainage Channel

IRWD Mains

DIAMETER

- 4; 5; 6; 8; 10
- 12; 15; 16; 18; 20; 21; 24
- 27; 28; 30; 33; 36; 37; 39
- 42; 45; 48
- 51; 54
- 60

Sewer Generation Factor FM Sites

- UFF1
- UFF2
- UFF3
- UFF4
- UFF5
- UFF6
- UFF7
- UFF8
- UFF9
- UFF10
- UFF11
- UFF12
- UFF13
- UFF14
- UFF15
- UFF16
- UFF17
- UFF18
- UFF19
- UFF20
- UFF21
- UFF22
- UFF23
- UFF24
- Buck Gully LS
- Canada LS
- Coastal Ridge LS
- Montecito LS

Flow Monitor ID	Main Trunk Sewer	Manhole ID	Landuse	Existing Land Use Code
UFF1	Harvard Ave (HATS)	MH042S011	Res-MDR	1164
UFF2	Harvard Ave (HATS)	MH065W010	Res-MDR	1162
UFF3	Harvard Ave (HATS)	MH044S092 (north)	Res-MDR	1164
UFF4	Culver Dr	MH083W057	Res-LDR	1132
UFF5	Culver Dr	MH084E046 (north)	Res-MDR	1162
UFF6	Jeffrey Rd	MH105S225	Res-HDR	1172
UFF7	Culver Dr	MH084S031	Res-MDR	1162 (UFF7 - UFF5)
UFF8	Jeffrey Rd	MH123W124	Res HDR	1182
UFF9	Alton-Bake	MH192S136 (west)	COMM	1221
UFF10	Harvard Ave (HATS)	MH045S037	Res-MDR	1164
UFF11	San Diego Creek Interceptor (SDCI)	MH124S052	Res-MDR	1162
UFF12	San Diego Creek Interceptor (SDCI)	MH124S015	Res-HDR	1172
UFF13	San Diego Creek Interceptor (SDCI)	MH138S015	Res-MDR	1162/1172
UFF14	San Diego Creek Interceptor (SDCI)	MH157E054	Office	1210
UFF15	Bake LAWRP	MH194W079	Res-LDR	1136
UFF16	Bake LAWRP - SMWD Inflow	MH217N002	Res-LDR	1135
UFF17	Alton-Bake	MH192E018	Res-LDR	1135
UFF18	Alton-Bake	MH192N030	Res-LDR	1135
UFF19	San Diego Creek Interceptor (SDCI)	MH156N003	Office	1210
UFF20	Harvard Ave (HATS)	MH063W034	Office	1210 (UFF20 - I&I10)
UFF21	Irvine South	MH058W003	Office	1210
UFF22	Newport Coast	MH132S065	Res-LDR	1133
UFF23	San Diego Creek Interceptor (SDCI)	MH156W021	Comm	1222
UFF24	Irvine Business Complex (IBC)	MH049E032	Res-HDR	1192
Bayview LS	Irvine South	LS051E001_1 LS051E001_2	Res-MDR	1163
Coastal Ridge LS	Newport Coast	LS134S029_1 LS134S029_2	Res-MDR	1163
Buck Gully LS	Newport Coast	LS129W013_1 LS129W013_2	Res-MDR	1163
Montecito LS	Newport Coast	LS129W015_1 LS129W015_2	Res-LDR	1133

Flow Monitor ID	Main Trunk Sewer	Manhole ID
CAL1	Newport Coast	MH164N009
CAL2	Newport Coast	MH131E003
CAL3	University	MH089S004
CAL4	Culver So. 24	MH060S050
CAL6	Culver So. 24	MH088N005
CAL7	Culver Dr	MH084W047
CAL8	Jeffrey Rd	MH105S159
CAL9	Harvard Ave (HATS)	MH044E008
CAL10	Bake LAWRP	MH196N148
CAL11	Lake Forest	MH196E021
CAL12	Muirlands Cherry	MH196E154
CAL13	Bake LAWRP	MH195N022
CAL14	Bake LAWRP	MH173E116
CAL15	Muirlands Cherry	MH206E090
CAL16	Bake LAWRP	MH193S035
CAL17	Culver Dr	MH086W001
CAL18	MWRP, Irvine South Influent	MH058E006
CAL19	San Diego Creek Interceptor (SDCI)	MH124W007
CAL20	University	MH125W006
CAL22	Irvine South	MH058E001
CAL23	Irvine Business Complex (IBC)	MH008E056
CAL24	Irvine Business Complex (IBC)	MH007E011
CAL25	University LS South	MH057N247
CAL26	Coyote LS South	MH091S019
CAL27	Coyote LS North	MH091E007
Newport Coast Dr LS	Newport Coast	LS129E010_1 LS129E010_2 LS129E010_3
Coyote Canyon LS	Newport Coast	LS091S016_1 LS091S016_2 LS091S016_3

Flow Monitor ID	Main Trunk Sewer	Manhole ID
I&I1	Jeffrey Rd	MH102S009
I&I2	San Diego Creek Interceptor (SDCI)	MH102S002
I&I3	San Diego Creek Interceptor (SDCI)	MH138N016
I&I4	Alton-Bake	MH172N011
I&I5	Culver So. 24	MH060E003
I&I6	Culver Dr	MH062S010
I&I7	Culver Dr	MH084N146
I&I8	Harvard Ave (HATS)	MH060N031
I&I9	Harvard Ave (HATS)	MH063W047
I&I10	Harvard Ave (HATS)	MH044S019
I&I11	Irvine Business Complex (IBC)	MH007E029
I&I12	MWRP, Irvine South Influent	MH059S019
I&I13	MWRP, University Influent	MH059S092
CAL5	OCSD facility	MH046N002
CAL21	MWRP, Culver So. 24	MH059E036
CAL28	MWRP, Culver So. 24	MH059N021
LAWRP	Muirlands Cherry	MH196N126

0 1,500 3,000 6,000 9,000 Feet

1" = 3,000'

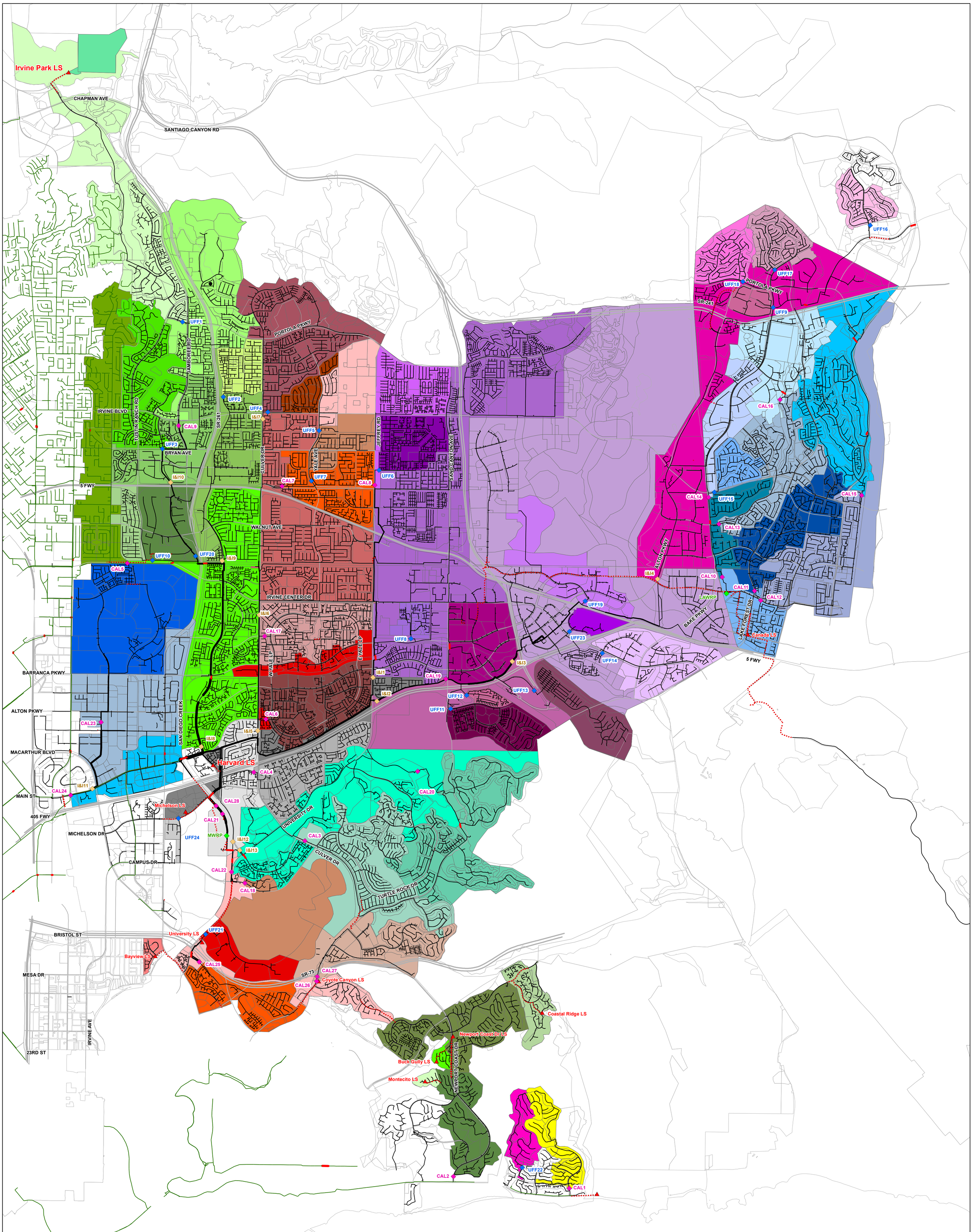
IRWD SEWER COLLECTION SYSTEM MASTER PLAN

Sewer Generation Factor Flow Monitoring Locations

Attachment III

Project No.: 111316.00

Date: December 2016



Legend

- I&I FM Location
- Calibration FM Location
- Sewer Generation Factor FM Location
- Treatment Plant
- Lift Station
- Force Mains
- OCSD Sewer
- Siphon

IRWD Gravity Sewers

Diameter

- 4" - 10"
- 11" - 24"
- 25" - 39"
- 40" - 48"
- 49" - 54"
- 60"

Not Monitored	CAL2	CAL17	UFF5	UFF20	
II_1	CAL3	CAL18	UFF6	UFF21	
II_2	CAL4	CAL19	UFF7	UFF22	
II_3	CAL5	CAL20	UFF8	UFF23	
II_4	CAL6	CAL21 & CAL28	UFF9	UFF24	
II_5	CAL7	CAL22	UFF10	Bayview LS	
II_6	CAL8	CAL23	UFF11	Buck Gully LS	
II_7	CAL9	CAL24	UFF12	Coastal Ridge LS	
II_8	CAL10	CAL25	UFF13	Irvine Park LS	
II_9	CAL11	CAL26	UFF14	LAWRP	
II_10	CAL12	CAL27	UFF15	Montecito LS	
II_11	CAL13	UFF1	UFF16	Newport Coast Dr LS	
II_12	CAL14	UFF2	UFF17		
II_13	CAL15	UFF3	UFF18		
CAL1	CAL16	UFF4	UFF19		

N

0 1,500 3,000 6,000 9,000 Feet

1" = 3,000'

IRVINE RANCH WATER DISTRICT

AKM

Project No.: 111316.00

Date: September 2015

IRWD SEWER COLLECTION SYSTEM MASTER PLAN

Flow Monitoring Tributary Areas

Attachment IV

ADS ENVIRONMENTAL SERVICES®

15205 Springdale St • Huntington Beach, CA 92649
PHONE: 714.379.9778 • FAX: 714.379.9588

www.adsenv.com

A DIVISION OF ADS CORP

TECHNICAL MEMORANDUM - DRAFT

Subject: **Sewer Flow Uncertainty Evaluation and Quality Assurance Procedure Summary**

Prepared For: AKM Consulting Engineers

Prepared By: Paul Mitchell, Regional Engineer

Date: March 20, 2015

This memo discusses typical expected uncertainty / error associated with computation of flows in open channel sewer systems using Area-Velocity measurement methods. This document also summarizes the quality control process used to minimize flow measurement bias and obtain the most accurate flow data possible from a given monitoring site.

Introduction

Flow rate in open channel sewer systems is quantified based on measurements of flow depth and flow velocity. The cross-sectional area of the flow is calculated based on measured flow depth and the geometry of the pipe cross section, and the flow rate is determined based on the Continuity Equation. The Continuity Equation states that the flow quantity (Q) is equal to the cross-sectional area of the flow (A) multiplied by the average velocity (V) of the flow.

Q = A * V

This equation is applicable in a variety of conditions including backwater, surcharge, and reverse flow. Most modern flow monitoring equipment, including the ADS models, measure both flow depth and velocity. They are referred to as Area-Velocity flow monitors and use the Continuity Equation to calculate flow rate.

The components of uncertainty in flow measurement can effectively be broken into two categories: 1) Depth measurement error (i.e. effective cross sectional flow area), and 2) velocity measurement error. The flow measurement uncertainty associated with any flow monitoring site will be dependent on both the sensor accuracy and the hydraulic conditions (and specific geometry) of the site being monitored. As a general rule, an Area-Velocity type of flow monitoring device deployed into a sewer pipe to measure flow rate can be expected to provide data with an average flow uncertainty within about +/- 10%. However, some sites will perform better and some worse than this. The primary cause for such variability in flow measurement accuracy is primarily the result of non-ideal hydraulic conditions at the measurement location, some of which are described herein.

15205 Springdale St • Huntington Beach, CA 92649
PHONE: 714.379.9778 • FAX: 714.379.9588

www.adsenv.com

A DIVISION OF ADS CORP

Equipment Accuracy

ADS uses Triton™ model area-velocity flow monitors. This equipment includes a data logger and a combination sensor consisting of Ultrasonic depth (water ultrasonic), Doppler peak velocity and pressure depth as a redundant backup to the ultrasonic sensor. Laboratory testing of the velocity and depth sensors produced the following accuracy values for the depth and velocity sensors:

Depth +/- 0.125 inch or 0.5%, whichever greater (ultrasonic sensor)
Velocity +/- 0.2 ft/s or +/- 4%, whichever greater

Site Hydraulics Impact on Accuracy

There are hydraulic and/or site physical conditions that can cause data to be collected that is of lower overall accuracy or confidence. The following hydraulic conditions are the most common cause for decreased flow quantification accuracy: Unusually low flow, Dead Dog (or bottom obstruction), hydraulic jump, silt or sediment, extreme or transitional hydraulics, pump station influence, backwater and surcharge.

Seeing these indicators in open channel flow data is common and does not necessarily significantly adversely impact data accuracy unless the condition is prominent or severe. Each of the conditions indicated below can cause depth and/or velocity misrepresentation that adds error in the likely range of +/- 10% to 30%, depending on severity of the condition.

- Low flow – caused by either unusually low wastewater production for a given pipe size or steeply sloped pipes (creating shallow flow conditions that are predominantly < 2 in.). These conditions are approaching the lower limit of detection by the sensors and are often difficult to confirm.

- Dead dog (bottom obstruction) -can create a data quality issue because it impacts the wetted area of the pipe where the depth is being measured and may differ from the location where velocity is being recorded (just upstream). Often times the effect of a dead dog on flow rate is not noticed until flow balancing occurs.

- Hydraulic jump -can create a data quality issue because the equipment ends up measuring in two flow regimes, super-and sub-critical. This results in an inaccurate flow rate calculation during transitional periods between these two flow regimes.

- Silt/sediment -poses both serviceability and data quality issues because it reduces the wetted area of the pipe (used in the Continuity equation). Silt is prone to "shifting" or changing both spatially and temporally which means it is difficult to estimate correctly and results in flow quantification error. Furthermore, the presence of silt causes the need for the sensor to be placed above the bottom of the pipe (e.g. 7:00 O'clock position is common in such cases) and this introduces additional measurement uncertainty due to the offset of the sensor.

- Extreme or Transitional Hydraulics -This can result from sudden changes in slope, the presence of dead dogs, or very steep pipe slopes. Slope changes and obstructions can cause

a gradually varied flow condition (rather than well developed stable flow) and create error in the continuity calculation of flow. Steep slopes usually result in very shallow depths of flow also; making confirmation very difficult and any depth bias difficult to determine and correct.

- Pump Station Influence -This can create extreme changes to flow over short intervals of time causing difficulties in confirming sites and resulting in bias. Flow measurement upstream of pump stations can often result in significant backwater and surcharge flow conditions. This often renders flow too slow to measure confidently and can be compounded by debris/ silt accumulation related error. If flow changes are extremely rapid, pronounced, and frequent, temporal errors can also be introduced (e.g. flow changing while the individual depth and velocity sensors are running through a normal reading cycle causing lower confidence in the computed resulting flow rate).

A general quality rating can be assigned to each flow site location (e.g. Good, Fair, Poor) on the basis of a review of data for the presence of such adverse hydraulic conditions and included in a flow site summary table along with notes describing conditions adverse to flow data accuracy.

ADS Flow Monitoring QA/QC Procedure

ADS has an exceptional reputation for delivering accurate and dependable data to its longterm and temporary flow monitoring clients who rely on the accuracy of delivered data for billing, modeling, design and regulatory purposes. In order to ensure that the most reliable and accurate data possible is delivered, ADS uses the following QA/QC procedure.

General

Manual measurements of flow depth are taken using a ruler and the flow velocity is measured using a factory calibrated hand held Doppler point velocity meter (FlowShark HV). Field Crews descend the manhole to take manual measurements. After the Field Crew has recorded both depth and velocity manual measurements, the ultrasonic depth and Doppler velocity sensors attached to the monitor are activated to take a reading. This occurs as soon as possible after the time that the manual measurements were taken. The measurements taken by the Field Crew and recorded by the monitor are then compared to assure consistency.

Confirmation of Depth

The primary depth sensor is the ultrasonic sensor that is positioned at the bottom of the pipe measuring the distance to the water surface. Depth of Flow (DOF) measured by the meter and the DOF measured manually by ruler are compared to one another. If the difference between the meter calculated depth of flow and the manually measured depth of flow is greater than the field crew's measurement tolerance, typically ±0.25 inch, it most likely signifies either a sensor is operating out of specification or there is higher variability to the depth measurements (choppy surface or frequent changes or surges in flow). The depth is re-measured and the confirmation performed again at least two times during each visit. Limited work space in the meter location manhole, limited bench room on which to stand or kneel in the manhole or sub-optimal flow conditions at the meter location (wavy flow or flow velocity greater than 7

ft/s) are a few examples of conditions that may make it challenging to manually confirm meter DOF within the typical ±0.25 inches. Manual depth measurements are also compared to the secondary depth measurement pressure sensor to check and correct any sensor drift.

Confirmation of Velocity

The peak velocity measured by the installed flow meter is compared to peak velocity measured by the manual handheld velocity meter. If the measurements differ by more than 20%, the flow meter sensor is checked for fouling and signal strength of the flow meter's velocity is checked and the sensor replaced if warranted. The confirmation is repeated and if field measured vs. meter recorded values are consistent, the average vs. peak ratios and flow meter "gain" values are set as described below.

Peak velocity measurements are subject to the same challenges of limited workspace and flow velocities greater than 7 ft/s, as field depth measurements are. In addition to the challenge associated with taking manual field confirmations detailed above, flow that is influenced by an upstream pump station increases the difficulty of taking a manual confirmation. The depth and velocity change rapidly where the flow is influenced by an upstream pump cycle. The change can happen so rapidly that the depth and velocity at the point in time when the field crew took a manual measurement and the depth and velocity recorded at the point in time that the meter sensors were activated manually by the field crew may be significantly different.

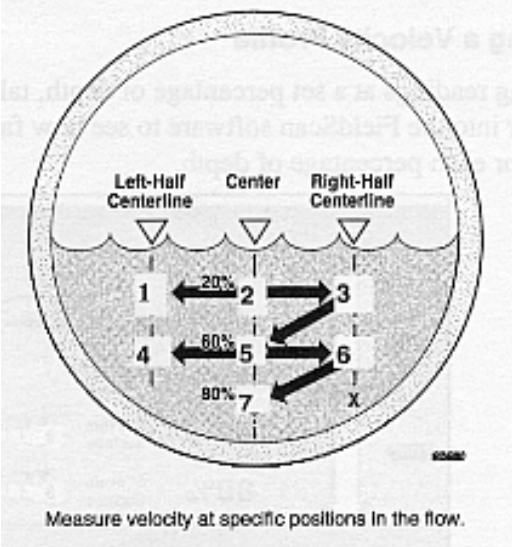
The Doppler velocity technology measures peak velocity proximate to the velocity sensor (i.e. from approximately as far upstream as the depth of water in the pipe). The meter peak velocity is converted to an average velocity by multiplying the ratio of field measured peak / meter peak velocity by an average to peak ratio (A/P). The value of A/P times the ratio of field peak velocity to meter peak velocity is termed a "Gain" or an overall A/P value. The gain takes into account the occasional difference in peak velocity directly below (or above) the depth sensors and recorded peak proximate to the meter sensor. At locations where meter peak velocity matches field peak measured at the depth sensor location, the A/P will be equal to the Gain. The Gain is site specific but in the majority of sites (based on ADS' historical experience) is 0.90. The typical range of Gain values is 0.70 – 1.00. Sites with an average depth consistently greater than 5 inches have velocity profiles performed to determine the A/P. Five (5) inches of flow depth is necessary to ensure enough points in the flow can be measured to calculate a meaningful average. A/P is obtained by averaging point velocities taken throughout the flow as indicated in the Figure below. The profile method conforms to ISO 748. Alternate methods of profiling sites include the use of a continuously profiling flow meter if conditions allow (depths 10 in. or deeper, no bottom sludge/debris, reasonably well developed flow profile) or the use of insert weirs (generally applicable to smaller pipes with slow consistent flows). Sites with an average DOF between 0 and 5 inches that are unable to be profiled are assumed to have an A/P ratio of 0.90.

15205 Springdale St • Huntington Beach, CA 92649
PHONE: 714.379.9778 • FAX: 714.379.9588

www.adsenv.com

A DIVISION OF ADS CORP

Example Velocity Profile in Sewer



Data Analyst Data Finalization Procedure

Data finalization is the process of comparing manual field confirmation data with meter data and to correct any obvious data outliers. This comparison is made to ensure correct meter installation and to identify any unusual hydraulic conditions (such as silt or poor hydraulic conditions) that may have an impact on the final measured flow quantity. Confirmations are completed and evaluated by field crews at the meter location and again by data analysts in the office to identify trends or shifts in hydraulic conditions. The data analysts make a final determination that depth and velocity bias is eliminated to the extent practicable based on a review of all confirmations conducted. Adjustments are made to meter gain and recorded depths as warranted.

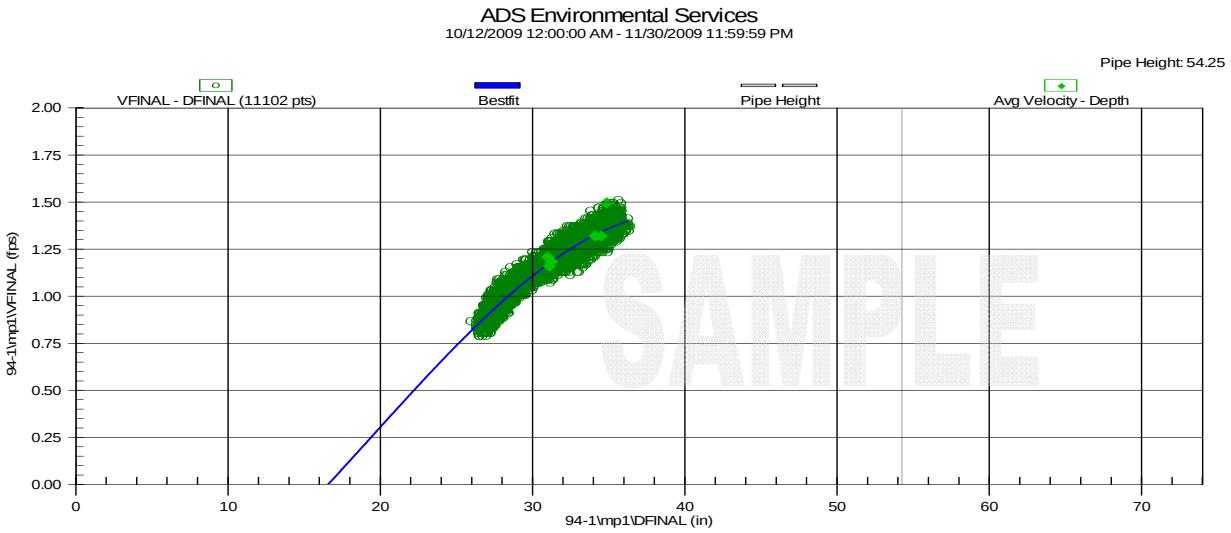
A data analyst also evaluates individual meter data points for anomalies based on confirmations and historical data patterns. Data anomalies are those data that do not conform to the temporal data series as observed on tabular data, hydrographs, and depth vs. velocity scattergraph plots. Obvious outliers in the data will be flagged (omitted from final data set) or reconsitituted based on adjacent valid data so that ideally no outliers are contained in the final data. An outlier is a depth or velocity data point on a hydrograph that is significantly different from adjacent data points and not also reflected in both depth and velocity data simultaneously. This can also been identified as a data point on a valid and repeatable scattergraph that lies away from the overwhelming majority of the data pattern. Outliers are indications of isolated measurement error.

15205 Springdale St • Huntington Beach, CA 92649
PHONE: 714.379.9778 • FAX: 714.379.9588

www.adsenv.com

A DIVISION OF ADS CORP

Depth and Velocity Confirmations (solid light green dots) Plotted on a Depth vs. Velocity Scattergraph in a Free-Flow Site Exhibiting Repeatable Hydraulic Conditions



Computed Total Flow Uncertainty

AS part of ADS standard procedure, flow monitoring locations are visually inspected prior to installation for good flow monitoring hydraulic conditions. However, it is not practical to detect all adverse hydraulic conditions until evaluation of collected data and associated confirmations. This is particularly true for cases where a large number of meters are deployed in a prescribed time frame over a short duration (one to several weeks) study period and there is limited time to evaluate data or there may be limited alternate locations available. For long-term flow monitoring sites (e.g. for billing or custody transfer), there is often an iterative approach to site selection that can take many weeks.

IRWD short term flow study monitoring location data are analyzed and finalized based on the previously described QA/QC procedure. At locations where less than the typical +/- 10% flow rate uncertainty may be present, such cases will be noted and summarized to enable modeling staff to take the lower confidence flow data into consideration during the model calibration process.

Estimation of flow computation error from the basic measured components of depth and velocity can be done by summing the errors based on the square root of sum of squares method. As an example, if perceived overall depth uncertainty is +/- 0.5 inch in a flow system that is 10 inches deep (and results in a computed flow rate error of +/- 5%) and velocity error is estimated at +/- 5% (or velocity component of flow rate error is +/- 5%), then the overall flow rate uncertainty will be about +/- 7%; computed by taking the square root of [5^2 plus 5^2]. In this example, the site would be considered to fall within the bounds of the typical open channel flow monitoring site accuracy of +/- 10% and would not be flagged for attention regarding potential reduced accuracy. An example quality summary table is indicated below.

15205 Springdale St • Huntington Beach, CA 92649
PHONE: 714.379.9778 • FAX: 714.379.9588

www.adsenv.com

A DIVISION OF ADS CORP

Site ID	Estimated Uncertainty	Comments
Site A	15% to 20%	Low/shallow flow
Site B	15% to 20%	Sediment present (2”) and non-scouring flow conditions
Site C	20% to 25%	Shallow flow, flow transition, evidence of waves, hydraulic jump and frequent flow changes
Etc.		

Attachment VI

Projected Sewage Flow Summary

	LU Description	Yes=served by IRWD	Rural Density - Orange E Orange	Rural Density - Irvine	Estate Density E Orange	Estate Density Irvine	Low Density Irvine	Low Density NPB	Low Density PC Tustin	Low Density Unincorporated Orange	Suburban Density OC	Low Density LF	Low-Medium Density LF	Low-Medium Density NPB	Medium Density Irvine	Medium Density NPB	Medium Density PC Tustin	Medium Density LF	Medium-High Density Irvine	Urban Density OC	Medium-High Density LF	High Density Irvine	High Density NPB	High Density PC Tustin	High Density LF	High Rise Density - Irvine	Student Housing (OSC and UCI North)	Medium Low UCI	Medium UCI	General Office	Community Commercial	Regional Commercial	Commercial Recreation	Institutional	Hospital	School	UCI	Military Air Field	Hotel	Industrial	Industrial - Light	Industrial - Heavy	Airports	Community Park	Regional Park	Caltrans- Selenium (300 gpm)	OCSD (OA-LS)	Field Measured Sewage Flow (Flow Monitoring or OCSD)	Projected Sewer Flow from Planning Land Uses	Projected Sewer Flow from Comm/Ind/Office Land Uses	Projected Sewage Flow	Ratio	Percent Difference	Water Use	Sewer Return Factor (SRF) (%)	ADS Error Range (%)	Flow Monitoring Comments (ADS)	Evaluation Comment	Disregard	Location	Site	Main Tributary Areas
	LU Code	0	1111	1112	1121	1122	1132	1133	1134	1135	1136	1146	1153	1162	1163	1164	1166	1172	1175	1176	1182	1183	1184	1186	1192	UCI	UCI	UCI	1210	1221	1222	1230	1240	1244	1260	1261	1273	1290	1300	1310	1320	1411	1820	1830	1850																														
	Type		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	Student	DU	DU	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	%	%	GPD	%	%																														
	LU Factor		**250**	**250**	**300**	**300**	**215**	**250**	**450**	**215**	**210**	**200**	**400**	**165**	**200**	**160**	**150**	**130**	**130**	**110**	**125**	**110**	**100**	**100**	**120**	**65**	**200**	**165**	**95%**	**95%**	**95%**	**95%**	**95%**	**95%**	**95%**	**90%**	**95%**	**95%**	**95%**	**95%**	**95%**	**95%**	**0%**	**0%**	**100%**	**100%**																														
	Table 3-1 (2012)		250	250	300	300	225	290	450		165	270	205	400	200	225	155	140	130	140	145	130	115	115	115																																																										
Site	Density DU/acre		0.30	0.30	1.20	0.50	3.00	1.00	4.50		9.25	3.00	11.00	2.75	7.50	5.00	11.80	7.50	17.50	29.00	17.50	32.50	12.25	17.40	32.50	40.00																		

APPENDIX B
Sewer Flow Generation Factors and Sewage Projections

B-1 General

Appendix B details the methodology that was implemented for developing sewer flow generation factors and sewage projections. The calculation steps and assumptions necessary to create the sewer flow generation factors are described and illustrated via figures and tables.

The primary data sources that were used are as follows:

1. GIS Land Use Areas shapefile data
2. Water billing data (February/March 2015) and GPS Water Meter shapefile. The meter data was categorized by the land use type from IRWD's Land Use Areas shapefile, based on its GPS coordinates. Water meter data that is not expected to return to the sewers, such as irrigation, agriculture, and other agency meters were disregarded when developing SGFs.
3. Sewer flow monitoring data collected at 65 locations (February 2015)
4. Lift Station Influent flow calculations, based on SCADA data (wet well levels and pump on/off times) at seven lift stations (i.e. Bayview, Buck Gully, Coastal Ridge, Coyote Canyon, LAWRP, Montecito, and Newport Coast Drive lift stations). The influent flows to the University Lift Station, Michelson Lift Station, and Canada lift station could not be estimated due to geometry and operational restrictions at these sites.
5. SCADA data at sewage lift stations (February 2015)
6. Commercial and industrial building square footage GIS shapefile provided by City of Irvine

A set of sewer flow generation factors was developed for the future model scenarios and to estimate sewage projections. The factors will be inputted into the Demand Forecast Tool (DFT) to estimate sewage projections by trunk sewer and treatment plant for various phases of land use (2020, 2025, 2030, 2035). The DFT sewage projections will be used to allocate loads in the future model scenarios, which will be used to determine potential system capacity deficiencies.

B-2 Dwelling Units and Building Square Footage

The number of dwelling units and building square footage was evaluated when developing the sewer flow generation factors.

The distribution of dwelling units over the service area is provided in IRWD's GIS Land Use Areas shapefile.

The distribution of the building square footage within the City of Irvine was provided by the City of Irvine in a point shapefile. The building square footage for the Cities of Tustin, Lake Forest, and Newport Beach were unavailable.

B-3 Occupancy and Vacancy Rates

Within IRWD's service area, there has been moderate construction in isolated communities, such as Tustin Legacy, the Great Park, and Orchard Hills. Evaluating the sewage generation in these areas become difficult because the status of the development and the occupancy are not precisely known.

The development of sewer flow generation factors focused on areas that were already well developed during the data collection period. The flow monitoring locations were generally chosen with the intent of developing sewer flow generation factors in these well-developed areas. Although there may be some vacancies within these areas, it is reasonable to anticipate that the future developments will experience a similar amount of vacancies. Therefore, the final sewer flow generation factors were not adjusted to account for vacancies.

B-4 Flow Monitoring Sites

General

An extensive flow monitoring plan was developed and implemented to achieve the following goals:

- Calibration of sewer flow generation factors
- Update of dry weather flow peaking relationships
- Characterization of flows (development of diurnal curves)
- Calibration of the system model
- Development of wet weather flow peaking relationships

The flow monitoring plan included data captured via the installation flow monitoring equipment as well as data collected from IRWD's Supervisory Control and Data Acquisition (SCADA) system. A schematic of the flow monitoring plan is illustrated on Figure B-1.

Temporary Flow Monitoring

Temporary flow monitoring was conducted by ADS Environmental Services from January 2015 to April 2015. A total of 65 flow monitors were installed in the IRWD gravity sewer system. All flow monitoring locations are illustrated on Attachment I.

Initial Site Selection

The flow monitoring sites were selected with the following intentions:

1. Conducting and inflow and infiltration (I&I) analysis (13 I&I locations)
2. Calibrating the developed sewer system hydraulic model (28 Calibration locations)
3. Developing sewer generation factors for specific land use types covering various jurisdictions within the service area (24 UFF locations)

For more information regarding the flow monitoring locations, see Appendix A.

Figure B-1
Flow Monitoring Plan Schematic

Final Location	US1	US2	US3	US4	US5	US6	US7	US8
Michelson Water Reclamation Plant	CAL21 (ADS ID: N1)	CAL28 (ADS ID: CAL21_ALT)	I&I8	UFF20	I&I10	CAL9	UFF1	
						UFF3		
				I&I9	UFF2			
				CAL5				
				UFF10				
			I&I5	I&I6	CAL7	UFF7	UFF5	
					I&I7	UFF4		
				CAL6				
				CAL17				
			I&I2	I&I3	I&I4	UFF9		
						UFF16		
						UFF17		
						UFF18		
					UFF14			
					UFF19			
					UFF23			
				CAL19				
				UFF11				
				UFF12				
				UFF13				
			I&I1	CAL8	UFF6			
				UFF8				
			UFF24					
	I&I12 (ADS ID: S1)	CAL4						
	I&I13 (ADS ID: S2)	CAL3						
		CAL20						
	CAL22 (ADS ID: S3)	CAL25	CAL26					
			CAL27					
		UFF21						
		CAL18						

End Location	US1	US2	US3
LAWRP	CAL10	CAL13	CAL16
		CAL14	UFF15
	CAL12	CAL15	
	CAL11		

End Location	US1	US2
CAL2	Newport Coast Dr LS	Coastal Ridge LS
		Buck Gully LS
	Montecito LS	

End Location	US1
I&I11 (ADS ID: M01)	CAL23 (ADS ID: M01B)

End Location
CAL1

End Location
UFF22

End Location
CAL24 (ADS ID: M03)

B-5 Flow Monitoring Accuracy

General

Flow rate in open channel sewer systems is quantified based on measurements of flow depth and flow velocity. The cross-sectional area of the flow is calculated based on measured flow depth and the geometry of the pipe cross section, and the flow rate is determined based on the Continuity Equation. The Continuity Equation states that the flow quantity (Q) is equal to the cross-sectional area of the flow (A) multiplied by the average velocity (V) of the flow.

$$Q = A * V$$

This equation is applicable in a variety of conditions including backwater, surcharge, and reverse flow. Most modern flow monitoring equipment, including the ADS models, measure both flow depth and velocity. They are referred to as Area-Velocity flow monitors and use the Continuity Equation to calculate flow rate.

Even with redundant equipment, there is a certain degree of expected uncertainty / error associated with computation of flows in open channel sewer systems using Area-Velocity measurement methods. The components of uncertainty in flow measurement can effectively be broken into two categories:

1. Depth measurement error (i.e. effective cross sectional flow area)
2. Velocity measurement error

Equipment Accuracy and Site Hydraulic Impact on Accuracy

The flow monitoring equipment used for the SCSMP project was the ADS Triton model area-velocity flow monitors. This equipment includes a data logger and a combination sensor consisting of Ultrasonic depth (water ultrasonic), Doppler peak velocity and pressure depth as a redundant backup to the ultrasonic sensor. Laboratory testing of the velocity and depth sensors produced the following accuracy values for the depth and velocity sensors:

Depth: +/- 0.125 inch or 0.5%, whichever is greater (ultrasonic sensor)

Velocity: +/- 0.2 ft/s or +/- 4%, whichever is greater

The flow measurement uncertainty associated with any flow monitoring site will be dependent on both the sensor accuracy and the hydraulic conditions (and specific geometry) of the site being monitored. As a general rule, an Area-Velocity type of flow monitoring device deployed into a sewer pipe to measure flow rate can be expected to provide data with an average flow uncertainty within about +/- 10%. However, some sites will perform better and some worse. The primary cause for such variability in flow measurement accuracy is primarily the result of non-ideal hydraulic conditions at the measurement location. The most common examples of these conditions are as follows:

1. Low flows caused by either unusually low wastewater production for a given pipe size or steeply sloped pipe (creating shallow flow conditions that are predominantly < 2 in.). These conditions are approaching the lower limit of detection by the sensors and are often difficult to confirm.
2. Dead dogs (bottom obstruction) can create a data quality issue because it impacts the wetted area of the pipe where the depth is being measured and may differ from the location where velocity is being recorded (just upstream).
3. Hydraulic jumps can create a data quality issue because the equipment ends up measuring in two flow regimes, super- and sub-critical. This results in an inaccurate flow rate calculation during transitional periods between these two flow regimes.
4. Silt/sediment poses both serviceability and data quality issues because it reduces the wetted area of the pipe (used in the Continuity equation). Silt is prone to "shifting" or changing both spatially and temporally which means it is difficult to estimate correctly and results in flow quantification error. Furthermore, the presence of silt causes the need for the sensor to be placed above the bottom of the pipe (e.g. 7:00 O'clock position is common in such cases) and this introduces additional measurement uncertainty due to the offset of the sensor.
5. Extreme or Transitional Hydraulics can result from sudden changes in slope, the presence of dead dogs, or very steep pipe slopes. Slope changes and obstructions can cause a gradually varied flow condition (rather than well developed stable flow) and create error in the continuity calculation of flow. Steep slopes usually result in very shallow depths of flow also; making confirmation very difficult and any depth bias difficult to determine and correct.
6. Pump Station Influence can create extreme changes to flow over short intervals of time causing difficulties in confirming sites and resulting in bias. Flow measurement upstream of pump stations can often result in significant backwater and surcharge flow conditions. This often renders flow too slow to measure confidently and can be compounded by debris/ silt accumulation related error. If flow changes are extremely rapid, pronounced, and frequent, temporal errors can also be introduced (e.g. flow changing while the individual depth and velocity sensors are running through a normal reading cycle causing lower confidence in the computed resulting flow rate).

A general quality rating is assigned to each flow site location (e.g. Good, Fair, Poor) on the basis of a review of data for the presence of such adverse hydraulic conditions and included in a flow site summary table along with notes describing conditions adverse to flow data accuracy.

ADS Flow Monitoring QA/QC Procedure

Field Crews take manual depth readings with a ruler and velocity readings with a portable, instantaneous velocity meter in order to confirm the monitor accuracy based on actual existing hydraulic conditions at each location. The measurements taken by the Field Crew and recorded by the monitor are then compared to assure consistency. For more detailed information on the QA/QC Procedure, please see Attachment II.

B-6 Development of Sewer Generation Factors

General

The Sewer Generation Factors (SGF) for residential land use types was evaluated independently of the SGFs for commercial, industrial, and office land use types.

Previous Studies

The SGFs were last updated in 2012. The historical SGFs will be referenced for comparison. During the development of the SGFs using current data, there were land use types with insufficient data to generate SGFs, due to their small designation areas. In these cases, the SGFs from the 2012 analysis are recommended, as determined reasonable.

Study Assumptions

Assumptions were necessary to develop the SGFs. The assumptions used in this study are as follows:

1. By focusing the SGFs analysis on well-developed areas, SGFs were not adjusted for vacancies.
2. The current dwelling unit estimate included IRWD's GIS Land Use Areas shapefile is accurate. The number of dwelling units were adjusted as discrepancies were identified.
    a. The number of dwelling units with IRWD's GIS land use shapefile at the Los Olivos and Laguna Altura residential developments are not current. The number of dwelling units was adjusted to account for the full development of these neighborhoods.
3. The square footages for the commercial, industrial, and office land use types in the City of Irvine's GIS shapefile is accurate.
4. Flow monitoring equipment is calibrated and data is within its accuracy limits.
5. Non-potable water is available to the irrigational users within the IRWD's service area. Outdoor usage is assumed to be minimal and the sewage return percentage is assumed to be high for areas that are served by the non-potable water system.
6. The flow diversion at Culver Drive and San Leandro currently split flows based on the physical geometry of the diversion structure.
7. Caltrans currently pumps 300 gpm of Peters Canyon wash flows with high levels of selenium and nitrates into the IRWD's sewer system near Peters Canyon and Harvard Avenue.
8. OCSD discharges sewage from unincorporated Orange County and the City of Tustin to IRWD's sewer collection system at Edinger Avenue, west of Jamboree Road. The sewage ultimately terminates at the Michelson Water Recycling Plant. The flow monitoring data at flow monitoring site CAL5 represents the tributary sewage, and is accounted for when evaluating the flow estimates, downstream of this inflow point.

9. OCSD conveys tributary sewage from portions of unincorporated Orange County Areas to IRWD's sewer collection system, near Peters Canyon Regional Park. All sewage estimates are based on the number of tributary dwelling units and SGFs.
10. El Toro Water District (ETWD) discharges sewage from the City of Lake Forest into IRWD sewer collection system, east of El Toro Road. All sewage estimates are based on the number of tributary dwelling units and SGFs.
    a. IRWD and ETWD areas are tributary to the El Toro and Muirlands Diversion Structure. The contribution of flow from the diversion structure was estimated by evaluating the flows at the Los Alisos Water Recycling Plant (LAWRP), before and after the operation of the diversion structure was changed to divert all flows to IRWD (mid-July 2015).
11. University of California Irvine (UCI) flows are estimated to be 90% of the water use data, as described in water billing special agreements.
    a. The distribution of the water use to the downstream sewer was allocated by estimating the number dwelling units and/or number of students tributary to each sewer.

B-6-1 Development of Residential Sewer Flow Generation Factors

The residential SGFs were generated through an iterative process that compared the field measured sewage flow from the flow monitoring data and/or the lift station SCADA data to the projected sewage flows.

The projected residential sewage flows were estimated from the number of tributary dwelling units and the study SGFs.

Because the commercial, industrial, and office water use and sewer generation vary considerably from building to building and area to area, the projected sewage flows were estimated directly from the water meter billing data and assumed to be 95% of the potable water use. Since IRWD provides non-potable water throughout its service area, the potable water is primarily used indoors in commercial, industrial, and office areas. Therefore, the percentage of potable water returned to the sewer is expected to be high.

The sum of the residential, commercial, industrial, and office projected sewer flows were compared to the flow monitoring data and lift station SCADA data. The study SGFs were adjusted through an iterative process to match the flow monitoring and/or lift station SCADA data as much as possible.

B-6-2 Initial Residential Sewer Flow Generation Factors

As an initial starting point, residential SGFs were specifically calculated for four main tributary areas that cover the majority of the land use types for the various jurisdictions. The calculation of the initial residential SGFs were developed for the following four main tributary areas:

- Michelson Water Recycling Plant North (Flow Monitoring Sites CAL28 and I&I12)
- Michelson Water Recycling Plant South (Flow Monitoring Sites CAL 22 and CAL18)
- Newport Beach (Flow Monitoring Site CAL2)

- Lake Forest (SCADA at Los Alisos Water Recycling Plant)

The main tributary areas are illustrated on Figure B-2.

Procedure

The Initial SGFs were determined by the following procedure for each of the main tributary areas:

1. The field measured sewage flows were determined from flow monitoring data or lift station SCADA data.
2. The sum of the February/March 2015 water billing data was summarized for each tributary areas, by land use type.
3. The number of residential dwelling units was summarized for each tributary areas by land use type.
4. The initial SGFs were calculated such that the total projected sewage flow were equal to the actual field data (Flow monitoring or Lift station SCADA estimates)
5. 95% water meter billing data for the commercial, industrial and office land use types were set to return to the sewer.
6. Water use for land use types that do not return significant sewage were disregarded. This includes land use types such as irrigation, vacant, and open space.
7. The meter totals for the land use type Freeways and Major Roads (1413) were dispersed among the residential, commercial, industrial, and office land use types. IRWD's GIS Land Use Areas shapefile include land use polygons for Freeways and Major Road. The meters that should be identified with the sewage generating land use types become misrepresented as land use Freeways and Major Roads (1413), due to its actual GPS coordinates and the current GIS land use designation.
8. The residential sewage estimate was estimated to be the difference between actual field data and the 95% of the meter billing data for the commercial, industrial, and office land use types.

Total Res. Sewage = Total Field Measured Sewage (Flow Monitoring & SCADA) – Com/Ind/Office Sewage (95% of Water use)

9. Within each main tributary area, the sewage estimate for each residential land use type was calculated using the ratio of the total residential sewage to the total residential water use. This ratio was applied to the water use at each residential land use type, to develop residential sewer estimates for each land use type.

$$\text{Res. L.U. Type Sewage} = \text{Res. L.U. Type Water Use} \times \frac{\text{Total Res. Sewage}}{\text{Total Res. Water Use}}$$

Figure B-2
Initial Residential SGF tributary areas

10. Within each main tributary area, the SGF was developed from the sewage estimate and the total number of dwelling units for each residential land use type within the main tributary area.

$$\text{Res. L.U. Type SGF} = \frac{\text{Res. L.U. Type Sewage (gal)}}{\text{Res. L.U. Type Dwelling Unit}}$$

11. There was no or very little sample areas for some of the residential land use types. The initial SGFs for these land use types were set equal to the factors that IRWD developed in its SGF analysis that was performed in 2012.

Example: North Michelson Water Recycling Plant Initial SGFs

The tributary area to the north side of the Michelson Water Recycling Plant (MWRP) covers the majority of IRWDs service area, as illustrated on Figure B-2.

- There is a large diversion structure at Culver Drive and San Leandro, which split the flows into two sewers that are tributary to the north side of MWRP. Therefore, the flow monitoring data at CAL 28 and I&I12 are necessary to estimate the measured flows to the north of MWRP.

FM CAL 28 Field Measured Sewage	14,683,722
FM I&I12 Field Measured Sewage	1,550,491
Total Field Measured Sewage	**16,234,213**

- The number of dwelling units and the water meter data for the north MWRP tributary area were categorized by land use types, as details in Table B-1.

- There is approximately 380,000 gpd of water meter record data that was categorized as land use Freeways & Major Roads (1413). The sewage estimates are detailed in Table B-2. To account for the water meter data that is misrepresented, the water use for all other land use types were increased by the following ratio:

$$\frac{\text{Total Water Use}}{\text{Total Water Use w/o usage from Freeways and Major Roads}} = \frac{19{,}283{,}987 \text{ gpd}}{18{,}903{,}959 \text{ gpd}} = 102\%$$

- The water use was disregarded for land use types that do not return to the sewer, such as irrigation and vacant. The sewage estimate for the commercial, industrial, and office land use types were estimated as 95% of the water use, for each land use type. The total sewage contribution for commercial, industrial, and office land use types is 3,526,646 gpd.

- Caltrans currently pumps 300 gpm (432,000 gpd) of Peters Canyon wash flows with high levels of selenium and nitrates into the IRWD's sewer system near Peters Canyon and Harvard Avenue.

Table B-1
MWRP North Dwelling Units and Water Meter Summary (Example)

Land Use Code	Land Use Description	Agency	No. Dwelling Units[1] (du)	Total Water Meter Billing[2] (gpd)	Adjusted Water Usage[3] (gpd)
1112	Rural Density	Irvine	1	11,150	11,374
1122	Low Density	Irvine	3,213	881,653	899,377
1134	Low Density PC	Tustin	98	121,793	124,241
1135	Suburban Density	Orange County	3,347	927,100	945,738
1162	Medium Density	Irvine	29,848	6,133,879	6,257,189
1164	Medium Density PC	Tustin	8,380	1,487,732	1,517,640
1172	Medium-High Density	Irvine	19,998	2,992,093	3,052,243
1175	Urban Density	Orange County	1,252	190,499	194,329
1182	High Density	Irvine	12,011	1,886,557	1,924,483
1184	High Density PC	Tustin	454	37,618	38,374
1192	High Rise Density	Irvine	2,888	380,694	388,347
1210	General Office			1,081,559	1,103,302
1221	Community Commercial			1,053,191	1,074,363
1222	Regional Commercial			241,214	246,064
1230	Commercial Recreation			35,412	36,124
1240	Institutional			14,233	14,519
1244	Hospital			71,331	72,765
1260	School			173,131	176,612
1273	Military Air Field			168,201	171,583
1290	Hotel			0	0
1300	Industrial			220,535	224,969
1310	Industrial - Light			422,648	431,145
1320	Industrial - Heavy			0	0
1411	Airports			0	0
1820	Community Park			98,243	100,218
1830	Regional Park			59,403	60,597
1840	Fuel Modification Zone			3,144	3,208
1850	Wildlife Preserve			1,014	1,035
1880	Open Space (Rec)			18,866	19,245
1900	Vacant			39,147	39,934
2110	Low-Irrigated AG Untreated			28,039	28,602
2120	Low-Irrigated AG Recycled			1,002	1,022
2200	High-Irrigated AG Potable			3,690	3,764
2210	High-Irrigated AG Untreated			14,639	14,933
2220	High-Irrigation AG Recycled			99,301	101,297
4100	Water			5,249	5,355
1413	Freeways & Major Road[3]			380,028	0
			Total Water Meter Billing	**19,283,987**	**19,283,987**
			Total Water Meter Billing w/o "Freeways & Major Road"	**18,903,959**	
			Ratio to account for Freeways & Major Roads	**102%**	
			Residential Water Usage		**15,353,334**

- OCSD discharges 683,005 gpd into IRWD's sewer facilities located on Edinger Avenue, west of Jamboree Road.

- The residential land use type sewage is estimated as the following:

Residential Sewage	=	Field Measured Sewage	-	Comm/Ind/Office Sewage	- Caltrans Sewage	-	OCSD Sewage
	=	16,234,213 gpd	-	3,526,646 gpd	- 432,000 gpd	-	683,005 gpd
	=	11,592,562 gpd					

- The sewage estimate for each individual residential land use type was calculated using the ratio of the total residential sewage to the total residential water use. An example for the land use Medium Density Irvine (1162) is provided as follows:

Medium Density Irvine Sewage	=	Medium Density Irvine Water Use	x	Total Res. Sewage / Total Res. Water Use
	=	6,257,189 gpd	x	11,592,559 gpd / 15,353,334 gpd
	=	4,724,500 gpd		

- The initial residential SGFs were estimated from the sewage generation and the total number of dwelling units for each land use type, within the north side MWRP tributary area. The summary of the initial residential SGF is detailed in Table B-2. The calculation for the land use Medium Density Irvine is provided as follows:

Medium Density Irvine SGF	=	Medium Density Irvine Sewage (gpd) / Medium Density Irvine Dwelling Unit	=	4,724,500 gpd / 29,848 DU	=	158 gpd / DU

As indicated in Table B-2, there was not enough data to generate feasible initial SGFs for land uses Rural Density – Irvine (1112) and land use Low Density PC Tustin (1134). These initial SGFs were based on the previous factors that were developed in the 2012 SGF analysis.

The initial residential SGFs developed for these main areas was applied to all tributary areas to generate the projected sewage flow that was compared to the field measured values from flow monitoring and lift station SCADA data.

B-6-3 Residential Sewer Flow Generation Factor Comparison Tables

Projected sewage flows were calculated for the 65 flow monitoring sites and seven lift stations from the SGFs and the tributary dwelling units. As starting point, the initial residential SGFs, which were developed by the procedure included in Section B-6-2, were used to develop the projected flows. These factors were adjusted through an iterative process to generate projected sewage flows, which were similar to the field measured flows from the flow monitoring and lift station SCADA data.

The procedure to calculate the projected sewage flows are summarized as follows:

Procedure

1. The field measured sewage flows were developed from flow monitoring data or lift station SCADA data.

2. The sum of the February/March 2015 water billing data was summarized for each tributary areas, by land use type.

3. The number of residential dwelling units was summarized for each tributary areas by land use type.

4. The initial residential SGFs were estimated as described in Section B-2-7.

5. 95% water meter billing data for the commercial, industrial and office land use types were estimated to return to the sewer.

6. 90% of the University of California Irvine's (UCI) water use is assumed to return to the sewer. This percentage is based on the special agreements that were set up between UCI and IRWD.

7. Water use for land use types that do not return significant sewage were disregarded. This includes land use types such as irrigation, vacant, and open space.

8. The residential sewage estimate was estimated to be the product of the residential SGFs and the number of dwelling units.

   Total Res. Sewage Estimate = Residential SGF x No. of Dwelling units

9. The projected sewage flows was calculated as the sum of all projected flows for each land use type for each flow monitoring site or lift station.

10. The sewer projected flows were adjusted by altering the initial residential SGFs. These values were adjusted such that the projected sewage flows were as similar to the field measured flows at as many sites as feasible.

Table B-2
MWRP North Sewer Flow Generation Factor (Example)

Land Use Code	Land Use Description	Agency	No. Dwelling Units du	Water Use		Sewage Generation		Initial Sewer Generation Factor gpd/du	Comments
				Comm/ Ind/ Office gpd	Resi-dential gpd	Comm/ Ind/ Office gpd	Resi-dential gpd		
1112	Rural Density	Irvine	1	-	11,374	-	8,588	8,588	Not enough data to estimate. Use 2012 data (250 gpd/du)
1122	Low Density	Irvine	3,213	-	899,377	-	679,076	211	
1134	Low Density PC	Tustin	98	-	124,241	-	93,808	957	Not enough data to estimate. Use 2012 data (450 gpd/du)
1135	Suburban Density	Orange County	3,347	-	945,738	-	714,081	213	
1162	Medium Density	Irvine	29,604	-	6,257,189	-	4,724,501	160	
1164	Medium Density PC	Tustin	8,271	-	1,517,640	-	1,145,897	139	
1172	Medium-High Density	Irvine	17,913	-	3,052,243	-	2,304,601	129	
1175	Urban Density	Orange County	1,252	-	194,329	-	146,728	117	
1182	High Density	Irvine	12,011	-	1,924,483	-	1,453,084	121	
1184	High Density PC	Tustin	454	-	38,374	-	28,975	64	
1192	High Rise Density	Irvine	2,888	-	388,347	-	293,222	102	
1210	General Office			1,103,302	-	1,048,137	-	-	
1221	Community Commercial			1,074,363	-	1,020,645	-	-	
1222	Regional Commercial			246,064	-	233,760	-	-	
1230	Commercial Recreation			36,124	-	34,318	-	-	
1240	Institutional			14,519	-	13,793	-	-	
1244	Hospital			72,765	-	69,127	-	-	
1260	School			176,612	-	167,781	-	-	
1273	Military Air Field			171,583	-	163,004	-	-	
1290	Hotel			0	-	0	-	-	
1300	Industrial			224,969	-	213,720	-	-	
1310	Industrial - Light			431,145	-	409,588	-	-	
1320	Industrial - Heavy			0	-	0	-	-	
1411	Airports			0	-	0	-	-	
1820	Community Park			100,218	-	95,207	-	-	
1830	Regional Park			60,597	-	57,567	-	-	
1840	Fuel Modification Zone			3,208	-	0	-	-	
1850	Wildlife Preserve			1,035	-	0	-	-	
1880	Open Space (Rec)			19,245	-	0	-	-	
1900	Vacant			39,934	-	0	-	-	
2110	Low-Irrigated AG Untreated			28,602	-	0	-	-	
2120	Low-Irrigated AG Recycled			1,022	-	0	-	-	
2200	High-Irrigated AG Potable			3,764	-	0	-	-	
2210	High-Irrigated AG Untreated			14,933	-	0	-	-	
2220	High-Irrigation AG Recycled			101,297	-	0	-	-	
4100	Water			5,355	-	0	-	-	
1413	Freeways & Major Road			0	-	0	-	-	
			Total	**3,930,653**	**15,353,334**	**3,526,646**	**11,592,562**		
	Total Residential Sewage to Total Residential Water Ratio						**75.51%**		

a. Residential SGFs could not be developed for the following land use types due to the lack of sites within IRWDs service area:
    i. Rural Density Irvine (1112)
    ii. Rural Density – County (1115)
    iii. Rural Density Orange (1111)
    iv. Estate Density E. Orange (1121)
    v. Estate Density Irvine (1122)
    vi. Low Density PC Tustin (1134)
    vii. Medium – Low Density Newport Beach (1153)

b. SGFs were generally adjusted, as reasonable, based on its housing density
    i. Within each jurisdiction, the SGFs were generally adjusted such that the SGFs decreased as the housing density increased.

Figure B-3, illustrates, the procedure used to develop the projected sewage flows for flow monitoring site UFF11. Attachment III summarize the calculation of the projected sewage flows for all flow monitoring and lift station tributary areas, which were used to develop the residential SGFs.

The residential SGFs are summarized in Table B-3. The initial SGFs are shown for reference.

Evaluation

It is difficult to match all field measured data to the projected flows. It was the priority to match the field measured sewage flows to the projected sewage estimate for the larger tributary areas. In general, larger tributary areas produce more accurate flow monitoring results. In terms of the projected sewage flows, larger tributary areas produce residential SGFs that are more representative of the total service area, rather than smaller tributary areas that may be characterized by abnormal water use and/or sewer generation.

As detailed in Attachment III, the field measured sewage flows and the projected sewer flows varied greatly from site to site. Reasons for the discrepancies between the projected sewer flows and the field measured flows include but are not limited to the following:

1. *Inaccuracies with the flow monitoring data* - Attachment III includes the error range that was provided by ADS Environmental Services, as well as descriptions of possible causes for the error range. Section B-4 briefly describe the flow monitoring process and some reasons for inaccuracies with the flow monitoring measurements. Attachment II includes a detailed description of the reasons for potential errors with flow monitoring data.

2. *Inaccuracies with the water meter billing data*: IRWD recently switched to the Oracle Customer Care and Billing (CC&B) system. Discrepancies between the water meter billing data and field measured sewage flows was identified throughout the system, particularly in areas of high commercial, industrial, and office land use types. The discrepancies with water use may have affected the accuracy of the projected sewage flows in areas with these land use types.

Insert Figure B-3
UFF2 Comparison

Table B-3
Residential Sewer Generation Factor

Land Use Code	Land Use Description	Agency	Housing Density	Initial Sewer Flow Generation Factor gpd/du	2012 Sewer Flow Generation Factor[1] gpd/du	Preliminary Recommendation Factor gpd/du	SCSMP 2015 Factors[2] gpd/du
1112	Rural Density	Irvine	0.3	8,588	250	250	250
1122	Estate Density	Irvine	0.5	N.A.	300	300	300
1132	Low Density	Irvine	3	211	225	215	215
1162	Medium Density	Irvine	7.5	160	200	165	155
1172	Medium-High Density	Irvine	17.5	129	130	130	125
1182	High Density	Irvine	32.5	121	130	125	120
1192	High Rise Density	Irvine	40	102	115	120	120
1134	Low Density PC	Tustin	4.5	957	450	450	450
1164	Medium Density PC	Tustin	11.8	139	155	160	160
1184	High Density PC	Tustin	17.4	64	115	100	100
1133	Low Density	Newport Beach	1	263	290	250	250
1153	Medium-Low Density	Newport Beach	2.75	N.A.	400	400	400
1163	Medium Density	Newport Beach	5	282	225	200	200
1183	High Density	Newport Beach	12.25	132	115	110	110
1136	Low Density	Lake Forest	3	208	270	210	210
1166	Medium Density	Lake Forest	7.5	95	140	150	150
1146	Low-Medium Density	Lake Forest	11	N.A.	205	200	200
1176	Medium-High Density	Lake Forest	17.5	106	145	110	110
1186	High Density	Lake Forest	32.5	31	115	100	100
1111	Rural Density	Orange	0.3	N.A.	250	250	250
1121	Estate Density	Orange	1.2	N.A.	300	300	300
1135	Suburban Density	Orange County	9.25	213	165	215	215
1175	Urban Density	Orange County	29	117	140	130	130

[1] *IRWD's SGF from the 2012 study is provided for comparison.*

[2] *SCSMP 2015 Factor finalized by IRWD per Sewer Collection System Demand Projections and Calibration Memo dated February 16, 2016*

3. *New development*: During the data collection period, there was moderate development, generally confined to isolated communities. It is difficult to estimate the sewage generation within these areas because the status of the development and the occupancy are unknown. Study areas were generally chosen to focus on the well-developed areas and not the isolated communities that were under construction. However, some flow monitoring tributary areas included these developing communities, which explain why some of the field measure flows do not match the projected sewage estimates.

4. *Diversion structures*: There are several diversion structures that split flows to downstream sewers based on pipe geometry and invert elevations. The flow monitors along these downstream reaches include portions of the tributary flows that cannot be estimated accurately.

5. *Housing densities*: Differences in housing densities within the same land use type may create discrepancies between the projected sewage flows and the field measured flows. There are differences in housing densities from one development to the next, which may affect the number of people and sewage production from development to development.

6. *SCADA discrepancies*: The SCADA data at the Newport Coast Lift Station is generating an unreasonably low sewage flow estimate. Do to the multiple inlet sewers to the lift station, flow monitoring at this location was considered unfeasible.

B-6-4 Development of Commercial, Industrial, and Office Sewer Flow Generation Factors

The evaluation of the SGFs for the commercial, industrial, and office land use types were performed independently of the analysis of the residential SGFs. SGFs were not evaluated for land use types with limited data, such as schools, hospitals, and airports. SGFs for land use types that will return little flow to the sewers will also not be include. This include land use types such as irrigation, vacant, and open space.

Developing sewer flow generation factors for commercial, industrial, and office land use types is a difficult task. Within a specific land use type, there are many different businesses that utilize water and generate sewage in unique ways. Factors that affect the sewage production for the commercial, industrial, and office land use types include but are not limited to the following:

- Products developed or services provided
- Number of employees
- Business operations (8 hours vs 24 hours)

For example, a restaurant and a retail store may both be categorized as land use Community Commercial (1221). The restaurant may contain kitchen sinks, dishwashers, and restroom facilities that produce considerable sewage, while the retail store may only have a single restroom that generates minimal sewage. It is difficult to create SGFs and generalize the sewage production for these land use types because of unknown variables like this.

The commercial, industrial, and office SGFs were evaluated from the building square footage, field measured sewage flow, and water meter billing data. The building square footage was only available for the City of Irvine. Therefore, flow monitoring tributary areas that include commercial, industrial, and/or office types from the Cities of Lake Forest, Tustin, and Newport Beach could not be evaluated.

The procedure for developing the commercial, industrial, and office SGFs is described as follows:

Procedure

1. The field measured sewage were developed flows from flow monitoring data or lift station SCADA data.

2. The sum of the February/March 2015 water billing data was summarized for each tributary areas, by land use type.

3. The total building square footage was summarized per land use type and flow monitoring tributary areas.

4. The meter totals for the land use type Freeways and Major Roads (1413) were dispersed among the residential, commercial, industrial, and office land use types. IRWD's GIS land use shapefile include land use polygons for Freeways and Major Road. The meters that should be identified with the sewage generating land use types become misrepresented as land use Freeways and Major Roads (1413), due to its actual GPS coordinates and the current GIS land use designation.

5. Tributary areas that include commercial, industrial, and/or land use types within the Cities of Lake Forest, Tustin, and Newport Beach were removed from the SGF analysis. Building square footage data is only available for the City of Irvine.

    - Thirteen flow monitoring sites were determined appropriate for evaluating the commercial, industrial, and office SGF.

6. The sewage generation were estimated for each land use type.

    - Discrepancies between water meter billing data and field measured sewage flows were identified throughout this evaluation, particularly in areas of high commercial, industrial, and office land use types. For evaluating the commercial, industrial, and office SGFs, it was assumed that the field measured flows were generally more reliable than the water meter data. If field measured flow monitoring data was greater than the tributary water meter billing data, then the estimated sewage generation was estimated by the ratio of the total field measured sewer flows and the total tributary water meter billing data.

      Comm/Ind/Office L.U. Type Sewage = Comm/Ind/Office L.U. Type Water use x Total Field Measured Sewage / Total Water Meter Billing

    - If the field measured flow monitoring data is less than the tributary water meter data, then the sewage generation was estimated as 95% of the water meter billing data.

      Comm/Ind/Office L.U. Type Sewage = Comm/Ind/Office L.U. Type Water use x 95%

7. For each commercial, industrial, and office land use type, the SGFs were calculated from the sewage use and the building square footage.

    Comm/Ind/Office L.U. Type SGF = Comm/Ind/Office L.U. Type Sewage (gal) / Building square footage (KSF)

Example: Flow Monitoring Site CAL19

The CAL19 flow monitoring site is located near the Interstate 5 Freeway, northbound onramp at Sand Canyon Road, as illustrated on Figure B-4.

- The CAL19 flow monitoring data, was collected for February 2015.

  FM CAL19 Field Measured Flows = 620,605 gpd.

- The square footage and the water meter data for the CAL19 tributary area was categorized by land use types, as detailed in Table B-4.

Table B-4
Flow Monitoring Site CAL 19 SGF Summary Table

Land Use Code	Land Use Description	ksf	Water Use gpd	Adjusted Water[1] gpd	Sewage[2] gpd	Sewer Flow Generation Factor (gpd/ksf)
1210	General Office	2,443	121,133	124,948	163,946	67
1221	Community Commercial	410	15,608	16,099	21,124	52
1222	Regional Commercial	133	951	981	1,287	10
1300	Industrial	400	220,535	227,481	298,479	746
1310	Industrial - Light	1,573	28,553	29,452	38,644	25
1413	Freeway and Major Road		14,441			
Total Water Meter Billing		472,983		**Total Sewage**		620,605
Total Water Meter Billing w/o "Freeways & Major		458,542		**Water Meter Billing**		
Ratio to account for Freeways & Major Roads		103%		**Ratio**		131%

[1] *Water use adjusted for "Freeways & Major Roads"*

[2] *Sewage adjusted by Total Sewage to Water Meter Billing Ratio*

- There was 14,441 gpd of water meter billing data that was categorized as land use Freeways & Major Roads (1413). To account for the water meter data that is misrepresented, the water use for all other land use types were increased by the following ratio:

  $$\frac{\text{Total Water Use}}{\text{Total Water Use w/o usage from Freeways and Major Roads}} = \frac{472{,}983 \text{ gpd}}{458{,}542 \text{ gpd}} = 103\%$$

- The total water meter billing data for the CAL19 tributary area was calculated

  Total Water Meter Billing (February/March 2015) = 472,983 gpd

Insert
Figure B-4

- Since the field measured flow monitoring data (620,605 gpd) is greater than the tributary water meter data (472,983), the sewage estimate per land use type was calculated by the ratio of the total field measured sewer flows and the total tributary area water meter billing data. The example calculation for land use General Office (1210) is detailed as follows:

$$\text{General Office L.U. Type Sewage} = \text{General Office L.U. Type Water use} \times \frac{\text{Total Field Measured Sewage}}{\text{Total Water Meter Billing}}$$

$$= 124{,}948 \text{ gpd} \times \frac{620{,}605 \text{ gpd}}{472{,}983 \text{ gpd}}$$

$$= 163{,}945 \text{ gpd}$$

- The SGFs for each land use type and each flow monitoring location was estimated from the estimated sewage generation and the total building area (KSA), as detailed in Table B-5. The calculation of the SGF for the land use General Office (1210) is provided as follows:

$$\text{General Office SGF} = \frac{\text{General Office Sewage (gpd)}}{\text{General Office Dwelling Unit}} = \frac{163{,}945 \text{ gpd}}{2{,}443 \text{ KSA}} = 67 \frac{\text{gpd}}{\text{KSA}}$$

As detailed in Table B-5, the range of SGFs that were developed with the current field measured sewage flows were similar to the previous SGFs that were developed in the 2012 SGF analysis. For this reason, the values developed in 2012 will be recommended for the commercial, industrial, and office land use types.

B-7 Sewer Flow Generation Factors

The recommended sewer flow generation factors are included in Table B-6.

As discussed in Section B-6, the SGFs were last updated in 2012. The historical SGFs are referenced in Table B-6 for comparison purposes. The residential SGFs were developed through the procedures detailed in Sections B-6-1, B-6-2, and B-6-3.

The evaluation of the commercial, industrial, and office SGFs are detailed in Section B-6-4. The results of the analysis indicate that the SGFs developed in the previous study are still relevant. As shown in Table B-6, the SGFs from the 2012 analysis are recommended for this study.

There are land use types with minimal areas within the service area, such as schools, hospitals, and airports. Without adequate data for an appropriate analysis, the SGFs could not be evaluated. For these land use types, the SGFs from the 2012 analysis are recommended for this study.

B-8 Sewer Projections

The recommended SGFs will be inputted into the Demand Forecast Tool (DFT) to estimate sewage projections by trunk sewer and treatment plant for various phases of land use. The DFT will estimate sewage loads by land use area for the years 2015, 2020, 2025, 2030, and 2035.

Table B-5
Commercial, Industrial, and Office SGF Summary Table

Land Use Code		1210			1221			1222			1300			1310			1320						
Land Use Description		General Office			Community Commercial			Regional Commercial			Industrial			Industrial - Light			Industrial - Heavy						
Flow Monitoring ID	Location	ksf	Sewage Flow (gpd)	gpd/ ksf	ksf	Sewage Flow (gpd)	gpd/ ksf	ksf	Sewage Flow (gpd)	gpd/ ksf	ksf	Sewage Flow (gpd)	gpd/ ksf	ksf	Sewage Flow (gpd)	gpd/ ksf	ksf	Sewage Flow (gpd)	gpd/ ksf	Total Water Use (gpd)	Total Sewage Flow (gpd)	Sewer Return Factor	Source of Sewer Estimate
CAL19	Easement, north of 405 Fwy and west of Sand Canyon Ave.	2,443	163,946	67	410	21,124	52	133	1,287	10	400	298,479	746	1,573	38,644	25				472,983	620,605	131%	Sewer/ Water Ratio
CAL4	405 Fwy off ramp, west of Culver Dr and south of freeway				86	21,879	255													465,794	440,603	95%	95% of Water
CAL6	Main St, west of West Yale Loop				185	31,930	173													736,462	719,765	98%	95% of Water
II_11	Main St, west of MacArthur Blvd	198	12,238	62	795	210,424	265							12,530	850,026	68	824	1,102,080	1,337	2,119,543	2,460,000	116%	Sewer/ Water Ratio
II_6	Culver Dr, south of Irvine Center Dr				1,777	246,434	139													3,506,364	2,728,524	78%	95% of Water
II_9	Harvard Ave, north of Edinger Ave	1,457	35,234	24	442	59,647	135													829,283	1,364,434	165%	Sewer/ Water Ratio
UFF14	Research Dr, southwest of Irvine Center Dr	4,129	213,199	52	215	16,479	77													101,988	233,234	229%	Sewer/ Water Ratio
UFF19	Easement, west of Technology Dr and south of Alton Pkwy	3,216	56,546	18	249	17,605	71	149	17,771	119										101,418	99,625	98%	95% of Water
UFF21	University Dr, east of MacArthur Blvd	962	35,049	36																38,734	78,444	203%	Sewer/ Water Ratio
UFF23	Armstrong Ave, north of Langley Ave	0	31,411					1,255	199,077	159										162,530	230,489	142%	Sewer/ Water Ratio
UFF5	Yale Ave, southwest of Northwood				192	25,594	133													243,218	171,771	71%	95% of Water
UFF6	Jeffrey Rd, northeast of Trabuco Rd				424	49,453	117													470,828	484,326	103%	Sewer/ Water Ratio
CAL24	Main St, west of MacArthur Blvd	812	30,444	37	6,000	107,534	18							1,998	165,046	83				912,443	351,554	39%	Sewer/ Water Ratio
	Total	**13,217**	**578,067**		**4,773**	**700,570**		**1,538**	**218,135**		**400**	**298,479**		**14,102**	**888,670**		**824**	**1,102,080**					
	Average[1]			44			147			142			746			63			1,337				
	Minimum			18			18			10			746			25			1,337				
	Maximum			67			265			159			746			68			1,337				
	2012 SGF[2]			**62**			**142**			**130**			**600**			**60**			**2,000**				

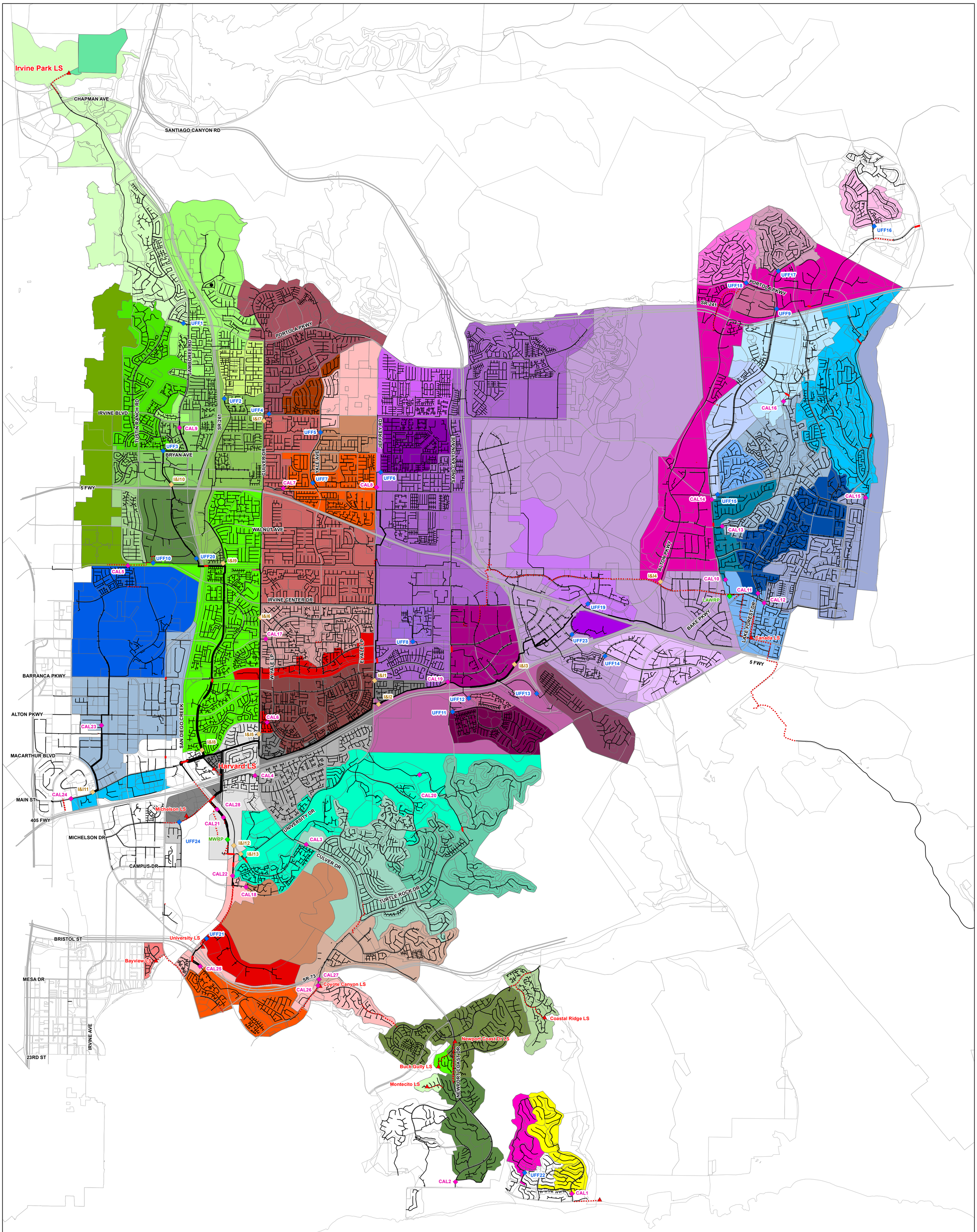
[1] *Average SGF based on total sewage flow and building square footage (ksf) for each land use type, regardless of flow monitoring tributary area.*

[2] *IRWD's SGF from the 2012 study is provided for comparison.*

Table B-6
Sewer Generation Factor Summary Table

Land Use Code	Land Use Description	Agency	Land Use		Previous (Sept.12')		Preliminary Recommendation		SCSMP 2015 Factors[1]	
			Average Density	Density Units	SGF	Units	SGF	Units	SGF	Units
1100	***Residential***									
1111	Rural Density	Orange	0.30	du/ac	250	gpd/du	250	gpd/du	250	gpd/du
1112	Rural Density	Irvine	0.30	du/ac	250	gpd/du	250	gpd/du	250	gpd/du
1115	Rural Density	Orange County	0.26	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1121	Estate Density E	Orange	1.20	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1122	Estate Density	Irvine	0.50	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1126	Estate Density	Lake Forest	0.50	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1131	Low Density	Orange	4.00	du/ac	300	gpd/du	300	gpd/du	300	gpd/du
1132	Low Density	Irvine	3.00	du/ac	225	gpd/du	215	gpd/du	215	gpd/du
1133	Low Density	Newport Beach	1.00	du/ac	290	gpd/du	250	gpd/du	250	gpd/du
1134	Low Density PC	Tustin	4.50	du/ac	450	gpd/du	450	gpd/du	450	gpd/du
1135	Suburban Density	Orange County	9.25	du/ac	165	gpd/du	215	gpd/du	215	gpd/du
1136	Low Density	Lake Forest	3.00	du/ac	270	gpd/du	210	gpd/du	210	gpd/du
1141	Low-Medium Density	Orange	10.50	du/ac	235	gpd/du	235	gpd/du	235	gpd/du
1146	Low-Medium Density	Lake Forest	11.00	du/ac	205	gpd/du	200	gpd/du	200	gpd/du
1153	Medium-Low Density	Newport Beach	2.75	du/ac	400	gpd/du	400	gpd/du	400	gpd/du
1161	Medium Density	Orange	19.50	du/ac	200	gpd/du	200	gpd/du	200	gpd/du
1162	Medium Density	Irvine	7.50	du/ac	200	gpd/du	165	gpd/du	155	gpd/du
1163	Medium Density	Newport Beach	5.00	du/ac	225	gpd/du	200	gpd/du	200	gpd/du
1164	Medium Density PC	Tustin	11.80	du/ac	155	gpd/du	160	gpd/du	160	gpd/du
1166	Medium Density	Lake Forest	7.50	du/ac	140	gpd/du	150	gpd/du	150	gpd/du
1172	Medium-High Density	Irvine	17.50	du/ac	130	gpd/du	130	gpd/du	125	gpd/du
1175	Urban Density	Orange County	29.00	du/ac	140	gpd/du	130	gpd/du	130	gpd/du
1176	Medium-High Density	Lake Forest	17.50	du/ac	145	gpd/du	110	gpd/du	110	gpd/du
1182	High Density	Irvine	32.50	du/ac	130	gpd/du	125	gpd/du	120	gpd/du
1183	High Density	Newport Beach	12.25	du/ac	115	gpd/du	110	gpd/du	110	gpd/du
1184	High Density PC	Tustin	17.40	du/ac	115	gpd/du	100	gpd/du	100	gpd/du
1186	High Density	Lake Forest	32.50	du/ac	115	gpd/du	100	gpd/du	100	gpd/du
1191	High Rise Density	Orange	35.00	du/ac	115	gpd/du	115	gpd/du	115	gpd/du
1192	High Rise Density	Irvine	40.00	du/ac	115	gpd/du	120	gpd/du	120	gpd/du
1200	***Commercial/Industrial/Office***									
1210	General Office		25	ksf/ac	62	gpd/ksf	62	gpd/ksf	62	gpd/ksf
1221	Community Commercial		9	ksf/ac	142	gpd/ksf	142	gpd/ksf	142	gpd/ksf
1222	Regional Commercial		10	ksf/ac	130	gpd/ksf	130	gpd/ksf	130	gpd/ksf
1223	Community Commercial - High Density		21	ksf/ac	0	gpd/ksf	0	gpd/ksf	0	gpd/ksf
1230	Commercial Recreation		8	ksf/ac	41	gpd/ksf	41	gpd/ksf	41	gpd/ksf
1235	Hotel		45	rooms/ac	110	gpd/ksf	110	gpd/ksf	110	gpd/ksf
1240	Institutional		8	ksf/ac	30	gpd/ksf	30	gpd/ksf	30	gpd/ksf
1244	Hospital		9	ksf/ac	165	gpd/ksf	165	gpd/ksf	165	gpd/ksf
1260	School		10	ksf/ac	20	gpd/ksf	20	gpd/ksf	20	gpd/ksf
1261	UCI		10	ksf/ac	215	gpd/ksf	215	gpd/ksf	215	gpd/ksf
1273	Military Air Field		0	ksf/ac	0	gpd/ksf	0	gpd/ksf	0	gpd/ksf
1290	Hotel		45	rooms/ac	110	gpd/ksf	110	gpd/ksf	110	gpd/ksf
1300	Industrial		9.091	ksf/ac	600	gpd/ksf	600	gpd/ksf	600	gpd/ksf
1310	Industrial - Light		18	ksf/ac	60	gpd/ksf	60	gpd/ksf	67	gpd/ksf
1320	Industrial - Heavy		25	ksf/ac	2,000	gpd/ksf	2,000	gpd/ksf	2,000	gpd/ksf
	Open Space and Other									
1411	Airports		0	ac/ac						
1413	Freeways and Major Road		0	ac/ac						
1820	Community Park		1	ac/ac						
1830	Regional Park		1	ac/ac						
1840	Fuel Modification Zone		0	ac/ac						
1850	Wildlife Preserve		0	ac/ac						
1880	Open Space (Rec)		1	ac/ac						
1900	Vacant		1	ac/ac						
4100	Water		0	-						
9100	Mixed Use		0	-						
9101	Central Park Land Use		0	ac/ac						
2100	Low Irrigated AG Potable		1	ac/ac						
2110	Low Irrigated AG Untreated		1	ac/ac						
2120	Low Irrigated AG Recycled		1	ac/ac						
2200	High Irrigated AG Potable		1	ac/ac						
2210	High Irrigated AG Untreated		1	ac/ac						
2220	High Irrigated AG Recycled		1	ac/ac						

[1] SCSMP 2015 Factor finalized by IRWD per Sewer Collection System Demand Projections and Calibration Memo dated February 16, 2016



Legend

- I&I FM Location
- Calibration FM Location
- Sewer Generation Factor FM Location
- Treatment Plant
- Lift Station
- Force Mains
- OCSD Sewer
- Siphon

IRWD Gravity Sewers

Diameter

- 4" - 10"
- 11" - 24"
- 25" - 39"
- 40" - 48"
- 49" - 54"
- 60"

- Not Monitored
- II_1
- II_2
- II_3
- II_4
- II_5
- II_6
- II_7
- II_8
- II_9
- II_10
- II_11
- II_12
- II_13
- CAL1
- CAL2
- CAL3
- CAL4
- CAL5
- CAL6
- CAL7
- CAL8
- CAL9
- CAL10
- CAL11
- CAL12
- CAL13
- CAL14
- CAL15
- CAL16
- CAL17
- CAL18
- CAL19
- CAL20
- CAL21 & CAL28
- CAL22
- CAL23
- CAL24
- CAL25
- CAL26
- CAL27
- UFF1
- UFF2
- UFF3
- UFF4
- UFF5
- UFF6
- UFF7
- UFF8
- UFF9
- UFF10
- UFF11
- UFF12
- UFF13
- UFF14
- UFF15
- UFF16
- UFF17
- UFF18
- UFF19
- UFF20
- UFF21
- UFF22
- UFF23
- UFF24
- Bayview LS
- Buck Gully LS
- Coastal Ridge LS
- Irvine Park LS
- LAWRP
- Montecito LS
- Newport Coast Dr LS

N

0 1,500 3,000 6,000 9,000 Feet

1" = 3,000'

IRVINE RANCH WATER DISTRICT

AKM

Project No.: 111316.00

Date: September 2015

IRWD SEWER COLLECTION SYSTEM MASTER PLAN

Flow Monitoring Tributary Areas

Attachment I

Attachment VI

Projected Sewage Flow Summary

	LU Description	Yes=served by IRWD	Rural Density - Orange E Orange	Rural Density - Irvine	Estate Density E Orange	Estate Density Irvine	Low Density Irvine	Low Density NPB	Low Density PC Tustin	Low Density Unincorporated Orange	Suburban Density OC	Low Density LF	Low-Medium Density LF	Low-Medium Density NPB	Medium Density Irvine	Medium Density NPB	Medium Density PC Tustin	Medium Density LF	Medium-High Density Irvine	Urban Density OC	Medium-High Density LF	High Density Irvine	High Density NPB	High Density PC Tustin	High Density LF	High Rise Density - Irvine	Student Housing (OSC and UCI North)	Medium Low UCI	Medium UCI	General Office	Community Commercial	Regional Commercial	Commercial Recreation	Institutional	Hospital	School	UCI	Military Air Field	Hotel	Industrial	Industrial - Light	Industrial - Heavy	Airports	Community Park	Regional Park	Caltrans- Selenium (300 gpm)	OCSD (OA-LS)	Field Measured Sewage Flow (Flow Monitoring or OCSD)	Projected Sewer Flow from Planning Land Uses	Projected Sewer Flow from Comm/Ind/Office Land Uses	Projected Sewage Flow	Ratio	Percent Difference	Water Use	Sewer Return Factor (SRF) (%)	ADS Error Range (%)	Flow Monitoring Comments (ADS)	Evaluation Comment	Disregard	Location	Site	Main Tributary Areas
	LU Code	0	1111	1112	1121	1122	1132	1133	1134	1135	1136	1146	1153	1162	1163	1164	1166	1172	1175	1176	1182	1183	1184	1186	1192	UCI	UCI	UCI	1210	1221	1222	1230	1240	1244	1260	1261	1273	1290	1300	1310	1320	1411	1820	1830	1850																														
	Type		DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	DU	Student	DU	DU	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	%	%	GPD	%	%																														
	LU Factor		**250**	**250**	**300**	**300**	**215**	**250**	**450**	**215**	**210**	**200**	**400**	**165**	**200**	**160**	**150**	**130**	**130**	**110**	**125**	**110**	**100**	**100**	**120**	**65**	**200**	**165**	**95%**	**95%**	**95%**	**95%**	**95%**	**95%**	**95%**	**90%**	**95%**	**95%**	**95%**	**95%**	**95%**	**95%**	**0%**	**0%**	**100%**	**100%**																														
	Table 3-1 (2012)		250	250	300	300	225	290	450		165	270	205	400	200	225	155	140	130	140	145	130	115	115	115																																																										
Site	Density DU/acre		0.30	0.30	1.20	0.50	3.00	1.00	4.50		9.25	3.00	11.00	2.75	7.50	5.00	11.80	7.50	17.50	29.00	17.50	32.50	12.25	17.40	32.50	40.00																		

Santiago Cyn Rd
Santiago Cyn Rd
Modjeska Cyn Rd
Chapman Ave
Santiago Canyon
Foothill Ranch
SMWD
Limestone Regional Park
Tustin Foothills
SR-241
12
Portola Pkwy
Irvine Blvd
Lake Forest Initial Tributary Area
City of Mission Viejo
Jamboree Rd
Tustin Ranch Rd
SR-261
Culver Dr
Bryan Ave
Yale Ave
Irvine Blvd
SR-133
City of Tustin
I-5 FWY
Trabuco Rd
Jeffrey Rd
Walnut Ave
Sand Canyon Ave
MWRP - North Initial Tributary Area
Bake Pkwy
Trabuco Rd
Lake Forest Dr
Alton Pkwy
El Toro Rd
Los Alisos WRP
Irvine Center Dr
I-5 FWY
Bake Pkwy
IRVINE
Ridge Route Dr
SR-133
Warner Ave
SR-55
Barranca Pkwy
Culver Dr
Barranca Pkwy
I-405 FWY
City of Santa Ana
City of Laguna Hills
City of Laguna Woods
Alton Pkwy
Redhill Ave
Von Karman Ave
Harvard Ave
I-405 FWY
Shady Canyon Dr
Main St
CAL28
Michelson Dr
Michelson WRP
I&i12
MWRP - South Initial Tributary Area
University Dr
Campus Dr
CAL22
CAL18
MacArthur Blvd
Jamboree Rd
Bonita Canyon Dr
SR-73
SR-55
City of Aliso Viejo
Newport Coast Dr
Newport Bay
Newport Beach Initial Tributary Area
San Joaquin Hills Rd
San Joaquin Hills
City of Newport Beach
City of Laguna Beach
City of Costa Mesa
CAL2
Pacific Ocean

Legend

- Flow Monitoring Location
- Water Recycling Plant
- Force Mains
- Gravity Sewer
- Sewer Service Area Boundary

Main Tributary Areas

- LAWRP
- MWRP-north
- MWRP-south
- Newport Beach

N

0 3,500 7,000 14,000 Feet

1" = 7,000'

IRVINE RANCH WATER DISTRICT

AKM

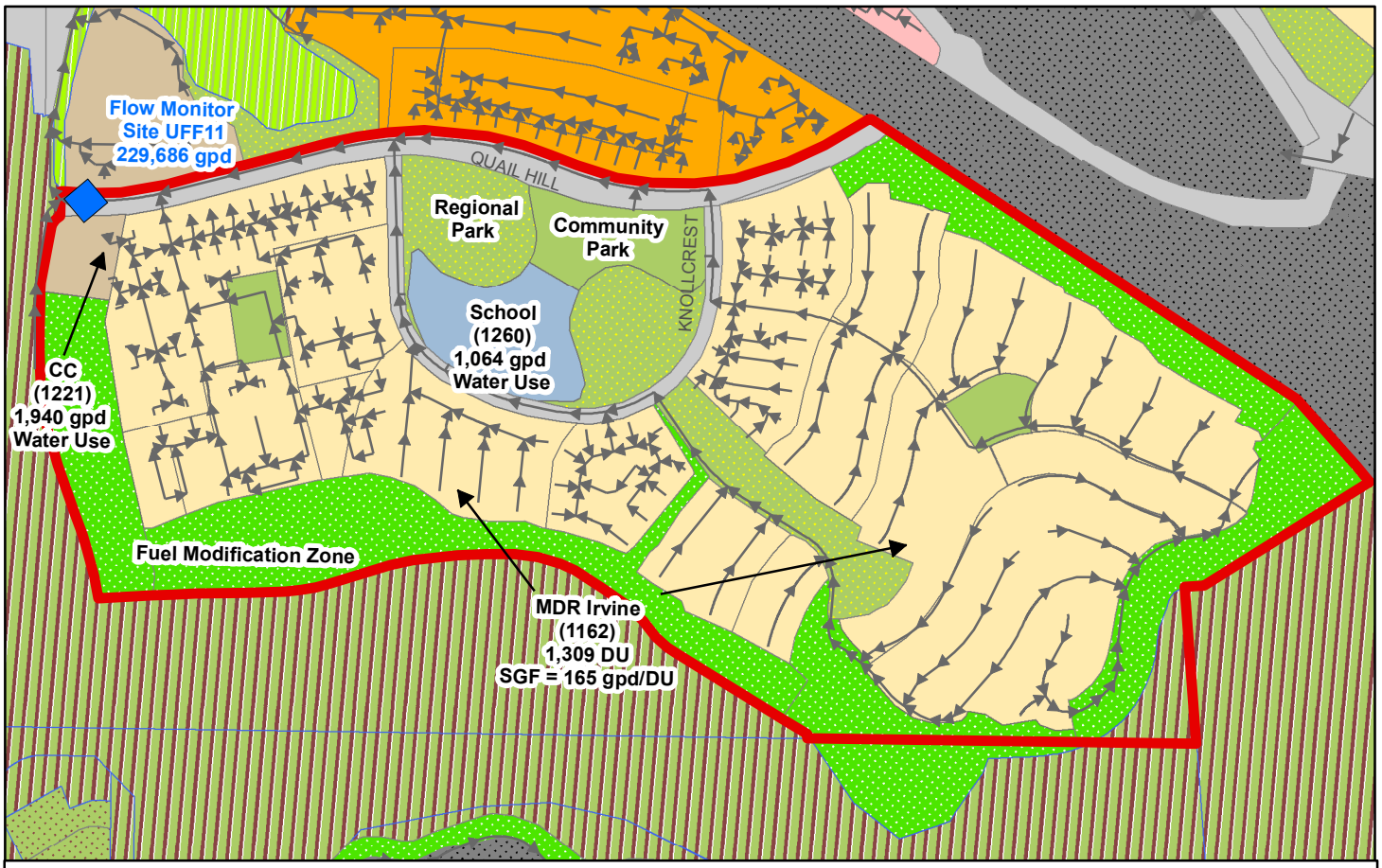
Project No: 111316.00

Date: September 2015

SEWER COLLECTION SYSTEM MASTER PLAN

Main Tributary Areas for Initial Residential SGF

Figure B-2



Flow Monitor UFF11 Tributary area

Residential Dwelling Units

1,309 Medium Density Residential (MDR) Irvine dwelling units (1162)

Comm/Ind/Office Water Billing Summary

1,940 gpd Water Use for (CC) Community Commercial (1221)
1,065 gpd Water Use for School (1260)

Minimal Sewage Return Land Use Types (Disregarded)

Community Park
Regional Park
Fuel Modification Zone

Projected Flow for Residential Land Use

Projected residential sewage flow is based on the Medium Density Residential Irvine SGF (165 gpd/DU) and number of dwelling units

MDR - Irvine	**1,309 DU x 165 gpd/DU**
Totals	**215,985 gpd**

Projected Flows for Comm/Ind/Office Land Use

The 95% of water meter data for non-residential land use types return to the sewer.

Community Commericial	**1,940 gpd x 0.95**
Schools	**+ 1,065 gpd x 0.95**
Totals	**2,854 gpd**

Total Projected Flow = Residential Land Use Projected Flows + Comm/Ind/Office Projected Flows
= 215,985 gpd + 2,854 gpd = 218,839 gpd
= 218,839 gpd

Field Measured Flow Monitoring UFF11

UFF11 Field Measured Flow Monitoring = 229,686 gpd

Percent difference between the projected estimate and the field measured sewage flow. $= \frac{(229{,}686 \text{ gpd} - 218{,}839 \text{ gpd})}{229{,}686 \text{ gpd}} = 5\%$

Note: Average water use from February/March 2015 billing data

IRVINE RANCH WATER DISTRICT

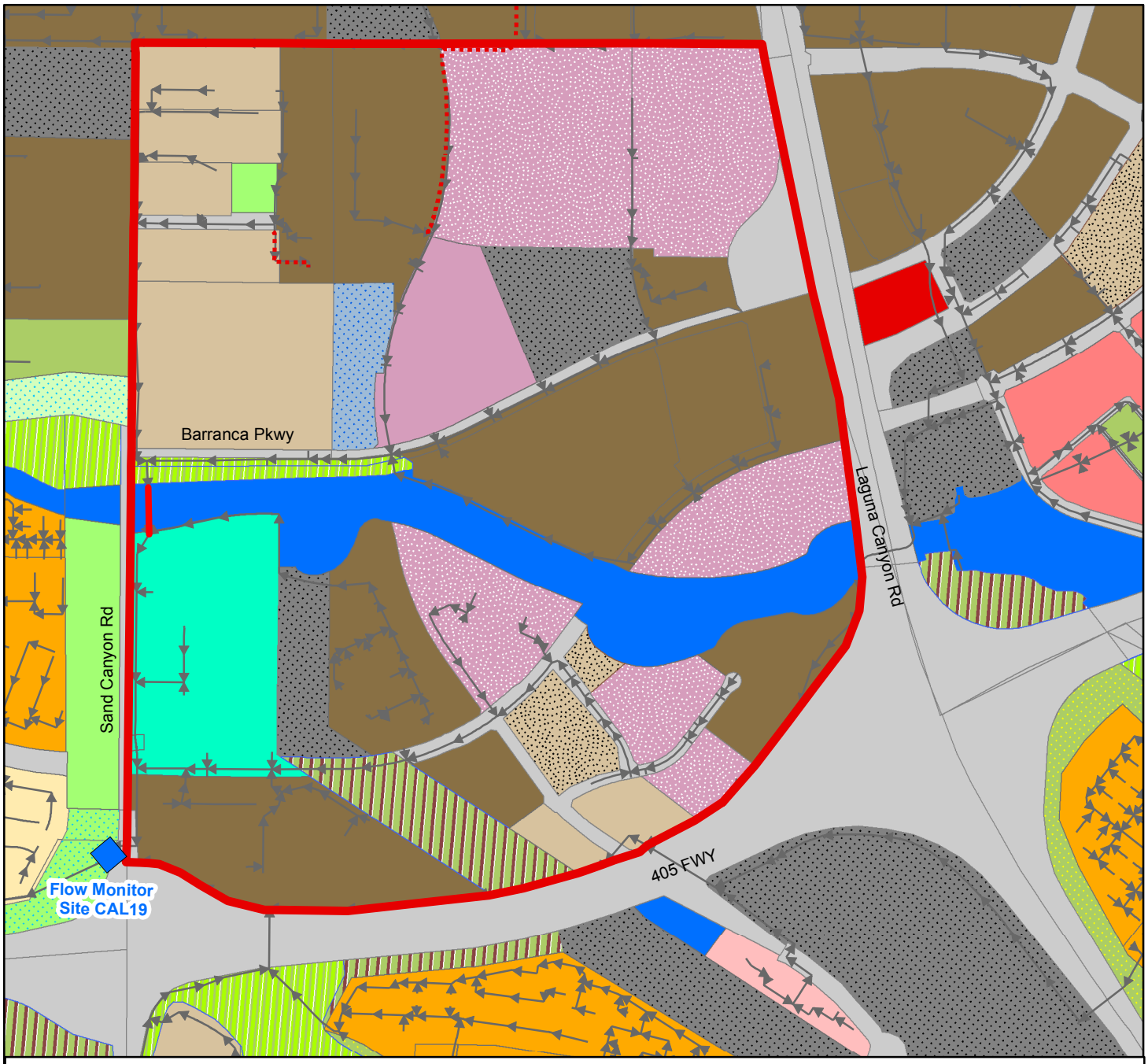
AKM

Project No: 111316.00
Date: September 2015

SEWER COLLECTION SYSTEM MASTER PLAN

UFF11 Projected Sewer Flow Example

Figure B-3



Legend

Study Area LU Types

- General Office
- Community Commercial
- Regional Commercial
- Industrial
- Industrial - Light

Insufficient Data for SGF Analysis

- Hospital
- School

Non-Sewer Generating LU Types

- Water
- Wildlife Preserve
- Freeways & Major Road
- High-Irrigated AG Potable
- Vacant

Flow Monitor CAL19 SGF Anaylsis

Sewage estimates are based on water use and flow monitoring data.

General Office (1210)	163,946 gpd / 2,443 KSF = 67 gpd/KSF
Community Commercial (1221)	21,124 gpd / 410 KSF = 52 gpd/KSF
Regional Commercial (1222)	1,287 gpd / 133 KSF = 10 gpd/KSF
Industrial (1300)	298,479 gpd / 400 KSF = 746 gpd/KSF
Industrial Light (1310)	38,644 gpd / 1,573 KSF = 25 gpd/KSF

Note: Sewer estimate is adjusted for land use type Freeways & Major Road
Average water use from February/March 2015 billing data

IRVINE RANCH WATER DISTRICT

AKM

Project No: 111316.00

Date: September 2015

SEWER COLLECTION SYSTEM MASTER PLAN

CAL19 Example
Comm/Ind/Office SGF

Figure B-4

SUMMARIES OF AGREEMENTS BETWEEN IRWD AND CSDOC

5/18/65 IRWD AND CSD-14: AGREEMENT: All obligations of CSD-14 are transferred to IRWD

1/12/72 IRWD AND CSDOC: AGREEMENT FOR CAPACITY IN DISPOSAL FACILITY

- Section 1 IRWD obtains 15 mgd capacity in CSDOC's ocean outfall
- Section 11 IRWD must pay $1.00 per 1 mgd O&M cost
- Section 13 IRWD must pay $16,185 annual Capital Replacement Charge; this will be refunded to IRWD if IRWD terminates the agreement ($1.414M was refunded in Feb. 1986)

11/24/76 IRWD AND CSD-5 AND TIC: AGREEMENT: IRVINE COASTAL AREA ANNEXATION NO. 7

TIC pays $2M to CSD-5 to annex the Irvine Coastal Area; IRWD provides water and sewer service

12/13/79 IRWD AND CSDOC: SLUDGE DISPOSAL

IRWD obtains right to dispose of 40 cubic yards of biosolids per day at the Coyote Cyn Landfill for a one time fee of $40,000, and 110% of CSDOC's actual disposal costs

5/14/80 IRWD AND CSD-5 AND NEWPORT BEACH: INTERIM SEWER SERVICE

Interim service for the Ford Aeronutronic Site by IRWD; IRWD will refund to CSD-5 when CSD-5 constructs its own facilities

10/24/83 IRWD AND UCI: SEWAGE COLLECTION, TREATMENT, AND WASTE DISPOSAL

UCI will purchase capacity in IRWD in 0.1 mgd increments

3/13/85 IRWD AND CSDOC: FORMATION OF SANITATION DISTRICT 14

- Section 1 Recitals
- Section 2 Formation of Sanitation District 14
- Section 3 Required studies
- Section 4 IRWD approval of new District 14
- Section 5 Acquisition of capacity in JWTF & land of CSDOC
- Section 6 Purchase price
- Section 7 Required funding
- Section 8 CSDOC NPDES
- Section 9 IRWD transfers its rights in outfall to D14; D14 receives $1.4M credit on buying into JWTF
- Section 10 JWTF equity of District 14 - CORF
- Section 11 CORF % calculation
  - minimum flow - 5475 MG/Yr
  - flow > 5475 MG/Yr
  - CORF changes after 1994-95
- Section 12 Calculation of JWTF ownership equity % - now based on flow only
- Section 13 District 14 to pay costs of flow meter installations
- Section 14 Handling of IRWD's biosolids
- Section 15 Trunk sewer system purchase
- Section 16 Purchase of 45 mgd capacity rights by IRWD in the Von Karman Trunk Sewer
- Section 17 O&M charges to District 14 based on % ownership of trunk facilities
- Section 18 Payment by IRWD of District 14's share of JWTF capital costs
- Section 19 IRWD's responsibility for odor mitigation
- Section 20 State Treasurer approval
- Section 21 Termination provisions

1/01/86 CSDOC AND DISTRICT 14: CAPACITY RIGHTS

11 sections; supersedes all other agreements

1/01/86 DISTRICT 1 AND DISTRICT 14: TEMPORARY CAPACITY RIGHTS

4 sections (District 14 agrees to construct its own trunk facilities by 1/1/90 per 3/13/85 agreement)

2/13/86 IRWD AND CSDOC: OWNERSHIP AGREEMENT AMENDMENT

Deletes the provisions of Section 21 of the 3/13/85 agreement and replaces the 3/13/85 agreement with the 2/13/86 agreement between IRWD and District 14

SUMMARIES OF AGREEMENTS BETWEEN IRWD AND CSDOC (cont.)

2/13/86 CSDOC AND DISTRICT 14: OWNERSHIP, OPERATION, AND CONSTRUCTION AGREEMENT
3 Sections: includes District 14 in the JAO Agreement

2/13/86 IRWD AND DISTRICT 14: OWNERSHIP, RIGHTS, AND OBLIGATIONS AGREEMENT (13 Sections)
Section 3.A: IRWD agrees: (1) to fund the O&M costs of District 14's facilities and (2) District 14's share of the JWTF O&M
Section 3.B: IRWD further agrees: (1) to fund District 14's share of the CORF, and (2) to fund a proportionate share of District 14's collection and transmission capital costs budget

7/9/86 CSDOC AND DISTRICT 14: AMENDMENT TO 1/1/86 CAPACITY RIGHTS AGREEMENT
Proportional costs of the Von Karman Trunk Sewer

10/29/86 IRWD AND DISTRICTS 7 & 14: AGREEMENT REGARDING ANNEXATION NO. 124
The 187-acre parcel (Santa Ana Heights Island) transfers from District 14 to District 7

12/10/86 IRWD AND DISTRICT 14: AMENDMENT NO. 1 TO 2/13/86 OWNERSHIP AGREEMENT
Provides for the investment of IRWD funds into District 14

2/11/87 MOU: IRWD AND DISTRICT 14: IND. WASTE PROGRAM
17 Sections; generally deals with enforcement of standards; Section 3 requires sewerage fees

3/09/88 IRWD AND DISTRICT 5 AGREEMENT TO CONSTRUCT THE DOWNCOAST SEWER FACILITIES
13 Sections; IRWD paid approximately $6M to cover CSD-5's connection charge and construction of transmission facilities and approximately $3M for "Downcoast Area Facilities"; IRWD might still be paying normal O&M user fees

06/10/91 (actually 06/10/92) IRWD AND DISTRICT 7: AGREEMENT TO BUY CAPACITY IN IRWD'S HATS
District 7 buys **3.92 mgd** total avg. capacity in IRWD's Harvard Area Trunk for $1.88M

10/09/91 IRWD & CSD-7: AGREEMENT
Prop. Tax Revenue Exch. Agree. for O. C. Reorganization No. 111 (20.68 Ac from CSD-14 to CSD-7; Tustin Navy Housing)

11/11/91 IRWD & CSDOC: COLLECTIVE DEFENSE AGREEMENT
Hold harmless agreement regarding Montrose Chemical Company, etc.

8/12/92 IRWD & DISTRICTS 5, 6, & 14: PURCHASE OF CAPACITY & O&M FOR SAN JOAQUIN COMM.
District 14 buys 1.02 cfs of capacity from District 5; CSD-5 refunded $763,500 to IRWD for a portion of CSD-5 capacity purchased under the Downcoast agreement; District 14 is responsible for the O&M costs of the West Coast Highway & Bayside Trunk Sewer systems

8/11/93 IRWD, CSD-5, & STATE PARKS
Section 3: IRWD is responsible for O&M on 1100-foot gravity sewer line near Crystal Cove Park

11/15/95 CSDOC and CSD-14: AMENDMENT NO. 2 TO THE CAPACITY AGREEMENT
Section 2: District 14 CORF percentage is based on the wastewater flows of the four months having the highest flows, etc.

11/1/96 IRWD & CSDOC: TEMPORARY DISCHARGE FROM SILVERADO CONSTRUCTORS
CSDOC deducts Silverado Constructors' flow from the flow at the Main Street LS

5/28/97 IRWD & CSDOC: DISCHARGE FROM IRVINE COMMUNITY DEVELOPMENT COMPANY (ICDC)
CSDOC deducts ICDC's flow from the flow at the Main Street LS

8/27/97 IRWD & CSDOC-7 & CSD-14: ACCOMMODATION AGREEMENT
Relative to the costs of collecting and treating flows from Parcels A and B in Newport Beach

4/15/98 IRWD, CSDOC, CITY OF NEWPORT BEACH, & OCWD: FOR GAP INTERTIE & OUTFALL
Ownership and costs of disposing of GAP water through the CSDOC outfall

IRVINE RANCH WATER DISTRICT

MEMORANDUM

TO:	**File**	DATE:	August 1, 2017
FROM:	**Eric Akiyoshi**	FILE NO.:	SCSMP_IRWDCalibrationMemo-20170801.docx
SUBJECT:	**Sewer Collection System Demand Projections and Calibration Memo**		

Introduction:

This memorandum presents IRWD's sewer projections between the years 2015 and Build-Out conditions[1]. This memo also supplements the 2015/16 Sewer Collection System Master Plan (SCSMP), "Appendix 'B' – Sewer Flow Generation Factors and Sewage Projections" prepared by the SCSMP consultant, AKM Consulting Engineers.

AKM developed sewer generation return and generation factors by land use for the specific purpose of calibrating the SCSMP hydraulic model. IRWD performed additional analyses on the sewer generation factors for the purposes of:

1. Calculating existing and projecting future sewer collection system flows with IRWD's Demand Forecasting Tool (DFT)
2. Calibrating the sewer demand generation factors (aka local interior usage, or sewage generation factors) for planning purposes (e.g. Sub-Area Master Plan Updates).

The SCSMP model calibration effort seeks to match the computer model outputs as closely as possible to the flow monitoring results from the specific period (February 2015). IRWD's projections seek to qualitatively account for potential increases and decreases in future sewage flows. Factors such as redevelopment, increased residential densities, drought, extraordinary internal use conservation, vacancies, and aging infrastructure subject to potentially greater inflow and infiltration, and flow monitor error (+/-) all impact future flow projections in upward and downward directions.

This memorandum is organized into the following sections:

- Background information
- Description of land-use changes
- Presentation of updated development phasing and sewer demand factors[2]
- Existing and future sewer flows and projections
- Sensitivity analysis

Background:

In the 2005-06 Sewer Collection System Master Plan, a similar methodology was used to calibrate the sewer demand generation factors and project future sewer collection system flows.

---

[1] Build-Out conditions are currently projected as the year 2035

[2] Sewer demand factors may also be referred to as, "Sewer Generation Factors," or, "Local Interior Demands."

Subsequently, 2011-12, IRWD conducted a water demand factor study[1] that reduced several of the residential water demand factors (This 2011-12 study was presented at the September 2012 E&O Committee). This affected both the internal (i.e. sewer) and external components of the demand factors.

Over the past four years, IRWD has continuously made minor adjustments to land uses, phasing, and sewer projections (e.g. Those presented to the Board of Directors in October 2014[2]).

The current calibration effort summarizes these past changes and incorporates IRWD's current understanding of phasing, land uses, interagency flow agreements, sewer generation factors, and influent flows to the Michelson Water and Los Alisos Water Recycling Plants (MWRP and LAWRP).

Land Use Changes

Between the 2005-06 SCSMP and the current calibration a number of land uses changed. While these changes do not necessarily increase the current sewer flows, they increase the build-out sewer flow projections. In summary, the changes include:

- The Irvine Business Complex has converted Commercial / Industrial properties to approximately 15,000 residential units.
- The Lake Forest Opportunities Study areas converted Commercial / Industrial properties to approximately 3,900 residential units.
- The Great Park Neighborhood dwelling units increased from ≈4,500 to 10,700 units.
- The County "100-Acre" and "West Alton" Parcels in the Planning Area 51 have changed from commercial / industrial land uses to approximately 2,100 and 800 residential units respectively.
- The James A. Musick (JAMF) jail facility has increase from approximately 1,200 beds to 7,580 beds.
- The Irvine Company dedicated the former East Orange Lake Village and East Orange Area I developments as permanent open space: decreasing the residential units by approximately 2,200 dwelling units.
- The Baker Water Treatment Plant backwash flows have been added at 160 gpm to the LAWRP Tributary Area.
- The existing OCSD Service Area 7 sewer flow (≈1.0 mgd) locations (e.g. Raquet Court, Covey Lane, Navy) have been added to the MWRP tributary area.
- The IBC Sewer diversion at the Michelson Lift Station (≈0.5 mgd) has been added to the MWRP tributary area.
- The Caltrans dewatering flows (≈300 gpm) has been excluded from the MWRP Tributary area.

[1] "Water Demand Factor Study" November 2011, RBF Consulting (Presented at Sept 2012 E&O Committee)
[2] As presented at the Oct 2014 Board meeting for the Recycled Water Strategic Plan

Updated Phasing

IRWD also adjusted phasing information (see attached Table 1) according to current information from developers such as Five Point Communities, The Irvine Company, Toll Brothers, and updated information from the City of Irvine for the Irvine Business Complex redevelopment projects. This information is subject to much change and should be updated regularly.

Updated Demand Factors

Table 2 presents a comparison of the 2011-12 demand factors, AKM's proposed demand factors, and the "SCSMP 2015-16" factors. The "SCSMP 2015-16" factors are the final recommended demand factors.

AKM recommended changes to seventeen residential local-interior factors: 13 decreased and 4 increased. Of the 17 proposed changes by AKM, only three of the final recommended factors (i.e. SCSMP 2015-16) were further revised (i.e. 1162, 1172, and 1182). All of which were reduced slightly by approximately 5%. In addition to AKM's recommendations, the "Light Industrial" land use (1310) was adjusted from an 86% return ratio to a 95% return ratio. The changes were implemented to better achieve the goals stated in the introduction.

Existing Sewer Flows

The SCSMP flow monitoring program installed approximately 60 flow monitoring sites for various durations to assist in the flow calibration effort. Comparing the DFT 2015-16 projections to the SCSMP flow monitoring program resulted in calibrated results as shown in Table 3.

Table 3. Compare 2015 SCSMP Flow Monitoring with 2015-16 DFT Projections (mgd)

Calibration Area	2015 DFT	Flow Monitoring
MWRP Service Area	**20.6 mgd**	**18.4 mgd**
• SA-7 to MWRP	1.0	1.0
• IBC to MWRP	0.5	0.5
• Caltrans to MWRP	0.4	0.4
Total Flow to MWRP	**22.5 mgd**	**20.3 mgd**
LAWRP (incl. English Cyn)	3.9	3.4
IBC / Tustin Legacy[1]	5.2	5.45
HATS Trunk Sewer[2]	4.9	4.8[3]
Newport Coast	1.0	≈1.0

[1] 0.5 mgd of IBC Flow diverted to MWRP at the Michelson Lift Station

[2] HATS Trunk Sewer included in MWRP Service Area, but shown as separate calibration area.

[3] Flow Monitoring = I&I8 minus Cal5 (Feb 2015) minus other Tustin OCSD Flows (May 2015 OCSD Report) minus Caltrans flows (≈300 gpm)

Table 2 Demand Factor Comparison and Summary of Proposed Changes

Scenario	Agency	Land Use Code	Land Use Description	Local - Interior (gpd/du)
Sept 2012	IRVINE	1132	Low Density	225
AKM Proposed	IRVINE	1132	Low Density	215
SCSMP 2015	**IRVINE**	**1132**	**Low Density**	**215**
Sept 2012	NEWPORT BEACH	1133	Low Density	290
AKM Proposed	NEWPORT BEACH	1133	Low Density	250
SCSMP 2015	**NEWPORT BEACH**	**1133**	**Low Density**	**250**
Sept 2012	COUNTY OF ORANGE	1135	Suburban Density	165
AKM Proposed	COUNTY OF ORANGE	1135	Suburban Density	215
SCSMP 2015	**COUNTY OF ORANGE**	**1135**	**Suburban Density**	**215**
Sept 2012	LAKE FOREST	1136	Low Density	270
AKM Proposed	LAKE FOREST	1136	Low Density	210
SCSMP 2015	**LAKE FOREST**	**1136**	**Low Density**	**210**
Sept 2012	LAKE FOREST	1146	Low-Medium Density	205
AKM Proposed	LAKE FOREST	1146	Low-Medium Density	200
SCSMP 2015	**LAKE FOREST**	**1146**	**Low-Medium Density**	**200**
Sept 2012	IRVINE	1162	Medium Density	200
AKM Proposed	IRVINE	1162	Medium Density	165
SCSMP 2015	**IRVINE**	**1162**	**Medium Density**	**155**
Sept 2012	NEWPORT BEACH	1163	Medium Density	225
AKM Proposed	NEWPORT BEACH	1163	Medium Density	200
SCSMP 2015	**NEWPORT BEACH**	**1163**	**Medium Density**	**200**
Sept 2012	TUSTIN	1164	Medium Density PC	155
AKM Proposed	TUSTIN	1164	Medium Density PC	160
SCSMP 2015	**TUSTIN**	**1164**	**Medium Density PC**	**160**
Sept 2012	LAKE FOREST	1166	Medium Density	140
AKM Proposed	LAKE FOREST	1166	Medium Density	150
SCSMP 2015	**LAKE FOREST**	**1166**	**Medium Density**	**150**
Sept 2012	IRVINE	1172	Medium-High Density	130
AKM Proposed	IRVINE	1172	Medium-High Density	130
SCSMP 2015	**IRVINE**	**1172**	**Medium-High Density**	**125**
Sept 2012	COUNTY OF ORANGE	1175	Urban Density	140
AKM Proposed	COUNTY OF ORANGE	1175	Urban Density	130
SCSMP 2015	**COUNTY OF ORANGE**	**1175**	**Urban Density**	**130**
Sept 2012	LAKE FOREST	1176	Medium-High Density	145
AKM Proposed	LAKE FOREST	1176	Medium-High Density	110
SCSMP 2015	**LAKE FOREST**	**1176**	**Medium-High Density**	**110**
Sept 2012	IRVINE	1182	High Density	130
AKM Proposed	IRVINE	1182	High Density	125
SCSMP 2015	**IRVINE**	**1182**	**High Density**	**120**
Sept 2012	NEWPORT BEACH	1183	High Density	115
AKM Proposed	NEWPORT BEACH	1183	High Density	110
SCSMP 2015	**NEWPORT BEACH**	**1183**	**High Density**	**110**
Sept 2012	TUSTIN	1184	High Density PC	115
AKM Proposed	TUSTIN	1184	High Density PC	100
SCSMP 2015	**TUSTIN**	**1184**	**High Density PC**	**100**
Sept 2012	LAKE FOREST	1186	High Density	115
AKM Proposed	LAKE FOREST	1186	High Density	100
SCSMP 2015	**LAKE FOREST**	**1186**	**High Density**	**100**
Sept 2012	IRVINE	1192	High Rise Density - Irvine	115
AKM Proposed	IRVINE	1192	High Rise Density - Irvine	120
SCSMP 2015	**IRVINE**	**1192**	**High Rise Density - Irvine**	**120**
Sept 2012		1310	Industrial - Light	60
AKM Proposed		1310	Industrial - Light	60
SCSMP 2015		**1310**	**Industrial - Light**	**67**

Table 1 Demand Forecasting Phasing Information

Phase ID	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2035
1	PA1 Village 1			0										100
2	PA1 Village 2			0										100
3	PA1 Village 3			0										100
4	PA1 Village 4			0										100
5	Santiago Hills II			0								100		
6	EO Area 1			0								0		
7	East Lake Village								0			0		0
8	PA-5B			0										100
11	PA-9B			50			100							
13	PA-40 (Spec 8)	10										100		
14	PA-9C Stonegate	50					100							
16	PA-6 Lomas Valley						100							
17	PA-6 Center Village						100							
18	PA-6 Tomato Springs		0				100							
19	PA-6 Agua Chinon Knolls		0									100		
20	PA-6 Park Village		0									100		
21	Lambert Sisters			100										
22	UCI Research Center											0		100
23	PA-51 Great Park	0												100
24	PA-51 Lifelong Learning Dev.	0							100					
25	PA-51 Park Development			0								100		
26	PA-51 Transportation Oriented Dev.			0								100		
27	PA-51 Base Housing Area			0								100		
28	PA-51 Sports Park	100												
30	Opportunity Study - Shea Homes		0									100		
31	Opportunity Study - Portola Center		0									100		
32	Opportunity Study - Other			0								100		
33	Tustin Legacy	20										100		
34	Crystal Cove						100							
37	Shady Canyon						100							
40	Spectrum Apts 2	50			100									
41	PA-39		25									100		
42	PA-18						100							
43	IBC Central Park	75					100							
44	IBC Park Place		75				100							
45	IBC Other	90			100									
47	IBC - The Lofts	100												
50	IBC - Essex Apt	100												
51	IBC - Irvine Inn	100												
52	IBC - Millikan and Baranca	100												
62	IBC- Carlyle @ Colton Plaza	100												
70	IRWD Infill Development											100		
71	Tustin Legacy - B	0			10							100		
72	Tustin Legacy - D			0								100		
73	Tustin Legacy - E		0									100		
74	Tustin Legacy - G			0										100
79	SilMod											0		100
80	Future IBC Redev						0							100
81	UCI Housing											100		
82	UCI											100		
83	B.Braun Medical	100												
84	PA-40 (Oct2010-WSV)				100									
85	PA-40 (Oct2010-Phase III+)											100		

Future Sewer Projections

While multiple land use "Local Interior" factors (aka Sewer Generation Factors) have decreased, a number of land use changes have changed to higher sewer generating types (e.g. commercial/general office to residential). These changes have resulted in minor adjustments to the overall future sewer projections.

Table 4 presents a comparison of the build-out flow projections for the MWRP and LAWRP tributary areas. Table 4a presents the phasing of the sewage flow projections.

Table 4.
Summary of Build-Out Condition Sewer Flow Projections

Sewer Treatment Plant / Area	Current Projections (mgd)	2011-12 Water Demand Factor Study (mgd)	2005-06 SCSMP (mgd)
MWRP Tributary (incl. HATS)	31.1 mgd	30.7 mgd	34.8 mgd
• SA-7 to MWRP	1.0	≈1.0	≈1.0
• IBC to MWRP	0.5	0.0	0.0
• Caltrans to MWRP	0.4 (Excluded)	≈0.4 (Included)	≈0.4 (Included)
Total Flow to MWRP	**32.6 mgd**	**32.1 mgd**	**36.2 mgd**
LAWRP Tributary	4.0 mgd	4.9 mgd	7.2 mgd
• Baker WTP	0.2	-	-
• Portola Hills (ETRSLS)	0.23	-	-
• English Canyon Flow	0.6	0.6	0.6
Total Flow to LAWRP	**5.0 mgd**	**5.5 mgd**	**7.8 mgd**
OCSD Tributary			
• IBC / Tustin Legacy[1]	**7.0 mgd**	**8.32 mgd**	**4.3 mgd**
• Newport Coast	**1.0 mgd**	**1 mgd**	**1.0 mgd**
Other Flows to be considered			
• TCWD/Add'l SMWD			
• ETWD/Cherry Ave			

[1] 0.5 mgd of IBC Flows are routed to MWRP through the Michelson Lift Station.

Table 4a. Phasing for Sewer Flow Projections				
Sewer Treatment Plant / Area	**2020 (mgd)**	**2025 (mgd)**	**2030 (mgd)**	**2035 (mgd)**
MWRP Tributary (incl. HATS) • SA-7 to MWRP • IBC to MWRP • Caltrans to MWRP **Total Flow to MWRP**	23.3 mgd ≈1.0 0.5 0.4 (Excl) **24.8 mgd**	27.1 mgd ≈1.0 0.5 0.4 (Excl) **28.6 mgd**	30.3 mgd ≈1.0 0.5 0.4 (Excl) **31.8 mgd**	31.1 mgd ≈1.0 0.5 0.4 (Excl) **32.6 mgd**
LAWRP Tributary • Baker WTP • Portola Hills (ETRSLS) • English Canyon Flow **Total Flow to LAWRP**	3.6 mgd 0.2 0.23 0.6 **4.6 mgd**	4.0 mgd 0.2 0.23 0.6 **5.0 mgd**	4.0 mgd 0.2 0.23 0.6 **5.0 mgd**	4.0 mgd 0.2 0.23 0.6 **5.0 mgd**
OCSD Tributary • IBC / Tustin Legacy[1] • Newport Coast	**5.5 mgd** **1.0 mgd**	**6.3 mgd** **1 mgd**	**6.6 mgd** **1.0 mgd**	**7.0 mgd** **1.0 mgd**
Other Flows to be considered • TCWD/Add'l SMWD • ETWD/Cherry Ave				

[1] 0.5 mgd of IBC Flow is routed to MWRP through the Michelson Lift Station.

Comparison of Demand Forecast Tool future projections to Sub-Area Master Plan projections

Table 5 presents a comparison between the latest SAMP documents and the DFT build-out projections for several growth areas in IRWD.

Table 5. Comparison of Sub-Area Master Plan Sewer Projections with Demand Forecast Tool Projections

SAMP Area	DFT Build-Out Flows (gpd)	Current SAMP Projections (gpd)	Comments
PA–51 (Great Park)	2,174,000	2,076,400	2011 SAMP Projections, (Inc. units)
IBC	6,938,000	5,581,400	SAMP excluded 390K gpd (Royalty), 1.0 mgd (Braun)
Lake Forest	6,453,400	7,600,000	Differently defined areas and demands
UC Irvine	4,920,400	4,350,000	UC Irvine (from 2007 LRDP Estimates)
PA-6	759,600	942,800	1182, 1172, 1162 all reduced in DFT
PA-1&2	724,000	895,000	1182, 1172, 1162 all reduced in DFT
PA-39	478,100	552,100	1182, 1172, 1162 all reduced in DFT
PA-40	685,000	867,800	1182, 1172, 1162 all reduced in DFT
PA-9 B&C	595,900	787,900	1182, 1172, 1162 all reduced in DFT
Santiago Hills II	379,900	368,000	
Tustin Legacy	1,470,500	1,703,000	1182, 1172, 1162 all reduced in DFT
EOLV and EOAI	0	577,000	EOLV and EOAI have been eliminated.

Sensitivity Analysis

The current projections were compared to three sensitivity scenarios. Each scenario reduced existing and future new residential sewer projections by zero to 10% and 5% to 20% respectively. Table 6 presents the results. The largest reduction (i.e. -10% of existing residential and -20% of future development residential), results in build-out sewer flows to MWRP decreasing from 32.6 mgd to 30.1 mgd and LAWRP flows reducing from 5.0 mgd to 4.6 mgd: approximately 8% reduction in total flows.

Table 6 Sensitivity Analysis
Reduce Existing Residential Sewer by 0%, 5%, and 10% and
Reduce Future Residential Sewer by 5%, 10%, and 20%

	Current Projections		Residential Reduction 1 (0% / -5%)		Residential Reduction 2 (-5% / -10%)		Residential Reduction 3 (-10% / -20%)	
Description	2015 Sewer (mgd)	Build-Out Sewer (mgd)	2015 Sewer (mgd)	Build-Out (mgd)	2015 Sewer (mgd)	Build-Out (mgd)	2015 Sewer (mgd)	Build-Out (mgd)
MWRP								
Main Tributary	20.6	31.1	20.6	30.8	19.9	29.8	19.2	28.6
OCSD Tustin to MWRP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
IBC to MWRP	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Caltrans	0.4		0.4		0.4		0.4	
Sub-Total MWRP	**22.5**	**32.6**	**22.5**	**32.3**	**21.8**	**31.3**	**21.1**	**30.1**
LAWRP								
Main Tributary	3.9	4.8	3.9	4.8	3.8	4.6	3.6	4.4
Baker WTP BW		0.2		0.2		0.2		0.2
Sub-Total LAWRP	**3.9**	**5.0**	**3.9**	**5.0**	**3.8**	**4.8**	**3.6**	**4.6**
Other Areas								
IBC	5.2	7.5	5.2	7.4	5.2	7.2	5.1	7.0
Newport Coast	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9

Pipe ID	Description	Year of Installation	Future Comment	STATUS	AKM Comment	Upstream MH ID	Downstream MH ID	AKM_COMMEN	ASBUILT	OWNER	MATERIAL	GLOBAL_ID	Pipe ID	Upstream Invert (ft)	Downstream Invert (ft)	GEOM1	Upstream MH ID	Downstream MH ID	Deficiency	Length (ft)	Pipe ID	Diameter (in)	Slope	Calibration PDWF (mgd)	Calibration PDWF d/D	Existing PDWF (mgd)	Existing PDWF d/D	Existing PWWF (mgd)	Existing PWWF d/D	Future PDWF (mgd)	Future PDWF d/D
ID	DESCRIPT	YR_INST	FUT_COMMEN	STATUS	AKM_COMM2	START_NODE	END_NODE	AKM_COMMEN	ASBUILT	OWNER	MATERIAL	GLOBAL_ID	SL_ID	UP_DATA	DN_DATA	GEOM1	FROM_	TO	Deficiency	LENGTH	ID_1	Diameter_1	Slope	Cal_Max_MG	Cal_Max_do	Ex_Max_MGD	Ex_Max_dD	WW_Max_MGD	WW_Max_dD	Fut2_MGD	Fut2_dD
CLCO009E023MH009E012		2014		Existing	assumed Mannings N	CO009E023	MH009E012		A02383	IRWD	PVC	{44D48F9D-FF9A-4B26-9EF1-7F57DC00C28D}	CLCO009E023MH009E012	50.42	48.70	0.666666667	CO009E023	MH009E012		86	CLCO009E023MH009E012	8	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.042901	0.13
CLCO009E024MH009E012		2014		Existing	assumed Mannings N	CO009E024	MH009E012		A02383	IRWD	PVC	{40188866-B283-4CA8-9610-FF2202FF3A16}	CLCO009E024MH009E012	50.83	48.70	0.500000000	CO009E024	MH009E012		54	CLCO009E024MH009E012	6	0.0398	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005313	0.06
CLCO009E025MH009E013		2014		Existing	assumed Mannings N	CO009E025	MH009E013		A02383	IRWD	PVC	{2D510E22-2AEE-4A5B-9288-5AA05D81E1B3}	CLCO009E025MH009E013	50.57	47.26	0.500000000	CO009E025	MH009E013		56	CLCO009E025MH009E013	6	0.0597	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.031013	0.12
CLCO009E026MH009E016		2014		Existing	assumed Mannings N	CO009E026	MH009E016		A02383	IRWD	PVC	{806DF226-77B7-45FE-9C23-87882963A42B}	CLCO009E026MH009E016	43.92	42.97	0.500000000	CO009E026	MH009E016		35	CLCO009E026MH009E016	6	0.0268	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.026033	0.31
CLCO009E027MH009E017		2014		Existing	assumed Mannings N	CO009E027	MH009E017		A02383	IRWD	PVC	{6BF8BEC4-3D0A-4A33-8E9D-A0FC68059921}	CLCO009E027MH009E017	43.49	42.57	0.500000000	CO009E027	MH009E017		36	CLCO009E027MH009E017	6	0.0257	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008918	0.27
CLCO009S013MH009S020		1976		Existing	assumed Mannings N	CO009S013	MH009S020		A01609	IRWD	VCP	{4BE1A7E3-7923-4CFD-B671-7C27DE86E782}	CLCO009S013MH009S020	34.15	32.34	0.500000000	CO009S013	MH009S020		300	CLCO009S013MH009S020	6	0.0060	0.006786	0.10	0.007245	0.11	0.008589	0.12	0.007245	0.11
CLCO009S014MH009S021		1976		Existing	assumed Mannings N	CO009S014	MH009S021		A01609	IRWD	PVC	{68CA0EC9-C627-4140-8B2B-184E90C72EA9}	CLCO009S014MH009S021	32.93	31.12	0.500000000	CO009S014	MH009S021		300	CLCO009S014MH009S021	6	0.0060	0.006670	0.10	0.007120	0.11	0.008442	0.12	0.007120	0.11
CLCO010E044MH010E001		2005		Existing	assumed Mannings N	CO010E044	MH010E001		T16581	IRWD	PVC	{C3ADAFB8-61FB-4CDC-BEA5-2632E8298375}	CLCO010E044MH010E001	65.45	64.87	0.500000000	CO010E044	MH010E001		65	CLCO010E044MH010E001	6	0.0053	0.000730	0.03	0.000876	0.04	0.001040	0.04	0.000876	0.04
CLCO010E046MH010E004		2005		Existing	assumed Mannings N	CO010E046	MH010E004		T16581	IRWD	PVC	{16C14261-4F61-4A90-BE28-438BAF42329F}	CLCO010E046MH010E004	64.23	63.72	0.666666667	CO010E046	MH010E004		62	CLCO010E046MH010E004	8	0.0082	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO010E048MH010E006		2005		Existing	assumed Mannings N	CO010E048	MH010E006		T16581	IRWD	PVC	{2BE4B467-0FCD-448B-B100-065F52332B6D}	CLCO010E048MH010E006	62.84	61.88	0.666666667	CO010E048	MH010E006		99	CLCO010E048MH010E006	8	0.0097	0.009401	0.07	0.011285	0.08	0.013379	0.09	0.011285	0.08
CLCO010E050MH010E011		2005		Existing	assumed Mannings N	CO010E050	MH010E011		T16581	IRWD	PVC	{D1D933AE-9490-4AB2-937B-5C6F38C3EFFD}	CLCO010E050MH010E011	59.56	57.81	0.666666667	CO010E050	MH010E011		176	CLCO010E050MH010E011	8	0.0099	0.008065	0.07	0.009685	0.08	0.011482	0.08	0.009685	0.08
CLCO010E051MH010E012		2005		Existing	assumed Mannings N	CO010E051	MH010E012		T16581	IRWD	PVC	{763B2F88-369C-4034-917E-C7883F02A4EC}	CLCO010E051MH010E012	60.06	59.27	0.666666667	CO010E051	MH010E012		191	CLCO010E051MH010E012	8	0.0041	0.002096	0.04	0.002517	0.05	0.002983	0.05	0.002517	0.05
CLCO010E052MH010E019		2005		Existing	assumed Mannings N	CO010E052	MH010E019		T16581	IRWD	PVC	{E7B2227C-6A97-4C86-A8C1-843ECE7EA79Z}	CLCO010E052MH010E019	62.36	60.81	0.666666667	CO010E052	MH010E019		392	CLCO010E052MH010E019	8	0.0040	0.004668	0.06	0.005604	0.07	0.006644	0.07	0.005604	0.07
CLCO010E054MH010E014		2005		Existing	assumed Mannings N	CO010E054	MH010E014		T16581	IRWD	PVC	{D2378F7A-D4BD-4E4C-A262-7952F1C145F9}	CLCO010E054MH010E014	60.61	59.40	0.666666667	CO010E054	MH010E014		124	CLCO010E054MH010E014	8	0.0098	0.004828	0.05	0.005796	0.06	0.006871	0.06	0.005796	0.06
CLCO010E055MH010E019		2005		Existing	assumed Mannings N	CO010E055	MH010E019		T16581	IRWD	PVC	{F479CE4E-A084-4E70-B38A-AA6FB7489691}	CLCO010E055MH010E019	61.75	60.72	0.666666667	CO010E055	MH010E019		261	CLCO010E055MH010E019	8	0.0039	0.005842	0.07	0.007016	0.08	0.008317	0.08	0.007016	0.08
CLCO010E056MH010E026		2005		Existing	assumed Mannings N	CO010E056	MH010E026		T16581	IRWD	PVC	{3DD653714-4D6E-4DA0-8390-11C59ACB863B}	CLCO010E056MH010E026	58.63	57.65	0.666666667	CO010E056	MH010E026		221	CLCO010E056MH010E026	8	0.0044	0.008732	0.08	0.010484	0.09	0.012430	0.10	0.010484	0.09
CLCO010E057MH010E031		2005		Existing	assumed Mannings N	CO010E057	MH010E031		T16581	IRWD	PVC	{C0495C94F-7DBA-4C60-B866-210C552353.1C}	CLCO010E057MH010E031	58.86	57.06	0.666666667	CO010E057	MH010E031		189	CLCO010E057MH010E031	8	0.0095	0.004414	0.05	0.005301	0.06	0.006283	0.06	0.005301	0.06
CLCO010E058MH06N019		2005		Existing	assumed Mannings N	CO010E058	MH06N019		T16581	IRWD	PVC	{6C146913-8DA1-4BB7-9547-95DFC21EAA15}	CLCO010E058MH06N019	56.43	55.56	0.666666667	CO010E058	MH06N019		219	CLCO010E058MH06N019	8	0.0040	0.006829	0.08	0.008198	0.08	0.009719	0.09	0.008198	0.08
CLCO010E083MH010E080		2008		Existing	assumed Mannings N	CO010E083	MH010E080		T16581	IRWD	PVC	{D1DE2042-DD57-4277-8B69-2FA9566E4E3BD}	CLCO010E083MH010E080	58.22	58.01	0.666666667	CO010E083	MH010E080		55	CLCO010E083MH010E080	8	0.0038	0.002255	0.04	0.002707	0.05	0.003209	0.05	0.002707	0.05
CLCO010E084MH010E075		2008		Existing	assumed Mannings N	CO010E084	MH010E075		T16581	IRWD	PVC	{F865CFA0-E5B8-4428-90F9-2FB385B140E2}	CLCO010E084MH010E075	57.14	56.32	0.666666667	CO010E084	MH010E075		30	CLCO010E084MH010E075	8	0.0273	0.001873	0.03	0.002250	0.03	0.002666	0.03	0.002250	0.03
CLCO010E085MH010E071	D	2008		Existing	assumed Mannings N	CO010E085	MH010E071		T16581	IRWD	PVC	{7F0AA21D-DF69-497F-83F2-06828414263F}	CLCO010E085MH010E071	59.99	59.64	0.666666667	CO010E085	MH010E071		71	CLCO010E085MH010E071	8	0.0049	0.001366	0.03	0.001639	0.03	0.001944	0.04	0.001639	0.03
CLCO010E086MH010E071		2008		Existing	assumed Mannings N	CO010E086	MH010E071		T16581	IRWD	PVC	{16089257-65B7-4505-9D22-2E95FE48B71B}	CLCO010E086MH010E071	60.29	59.64	0.666666667	CO010E086	MH010E071		42	CLCO010E086MH010E071	8	0.0155	0.001397	0.03	0.001677	0.03	0.001989	0.03	0.001677	0.03
CLCO010E087MH010E074		2008		Existing	assumed Mannings N	CO010E087	MH010E074		T16581	IRWD	PVC	{7D3B1400-F8AE-472F-AE45-24FACC6070A0}	CLCO010E087MH010E074	59.98	58.61	0.666666667	CO010E087	MH010E074		57	CLCO010E087MH010E074	8	0.0240	0.001651	0.03	0.001983	0.03	0.002350	0.03	0.001983	0.03
CLCO010E088MH010E074		2008		Existing	assumed Mannings N	CO010E088	MH010E074		T16581	IRWD	PVC	{DA612B44-7BCC-446E-8001-F0F0074E770}	CLCO010E088MH010E074	59.34	58.71	0.666666667	CO010E088	MH010E074		134	CLCO010E088MH010E074	8	0.0048	0.005208	0.06	0.006254	0.07	0.007414	0.08	0.006254	0.07
CLCO010E089MH010E072		2008		Existing	assumed Mannings N	CO010E089	MH010E072		T16581	IRWD	PVC	{2627B91C-B172-4666-B1D9-BE072EA4ABB0}	CLCO010E089MH010E072	60.37	59.14	0.666666667	CO010E089	MH010E072		424	CLCO010E089MH010E072	8	0.0424	0.001111	0.02	0.001334	0.02	0.001581	0.02	0.001335	0.02
CLCO010E090MH010E080		2008		Existing	assumed Mannings N	CO010E090	MH010E080		T16581	IRWD	PVC	{B82A4BD3-4EC9-4204-9F01-63E3466F9DA9}	CLMH010E080CO010E090	60.05	58.01	0.666666667	CO010E090	MH010E080		207	CLCO010E090MH010E080	8	0.0099	0.000507	0.02	0.000611	0.02	0.000724	0.02	0.000611	0.02
CLCO010S020MH010S016		1999		Existing	assumed Mannings N	CO010S020	MH010S016		A01804	IRWD	PVC	{4A8FDC09-2D49-44DA-9332-88E697FDE4A}	CLCO010S020MH010S016	62.83	62.78	0.666666667	CO010S020	MH010S016		105	CLCO010S020MH010S016	8	0.0036	0.017856	0.13	0.019065	0.13	0.022608	0.14	0.062823	0.23
CLCO010S021MH010S014		1999		Existing	assumed Mannings N	CO010S021	MH010S014		A01804	IRWD	PVC	{9E0ADECE-AE39-4954-B74E-AD1C5B605EA8}	CLCO010S021MH010S014	60.62	60.54	0.666666667	CO010S021	MH010S014		20	CLCO010S021MH010S014	8	0.0039	0.012800	0.14	0.013665	0.14	0.016202	0.16	0.019004	0.22
CLCO010S024MH010S005		2004		Existing	assumed Mannings N	CO010S024	MH010S005		A001852	IRWD	PVC	{2B6E2A23-E8F5-4637-9A86-782D54CEF32C}	CLCO010S024MH010S005	44.34	43.87	0.666666667	CO010S024	MH010S005		85	CLCO010S024MH010S005	8	0.0056	0.001474	0.03	0.001574	0.03	0.001866	0.04	0.010486	0.09
CLCO040W025MH040W026		1997		Existing	assumed Mannings N	CO040W025	MH040W026		T14797	IRWD	PVC	{52D0B000-F265-4620-A104-210DD57EF037}	CLCO040W025MH040W026	521.29	519.09	0.666666667	CO040W025	MH040W026		55	CLCO040W025MH040W026	8	0.0400	0.000787	0.02	0.000944	0.02	0.001120	0.02	0.000944	0.02
CLCO040W027MH040W026		1997		Existing	assumed Mannings N	CO040W027	MH040W026		T14797	IRWD	PVC	{3265E725-6A5F-4532-AB79-017744F09BFA}	CLCO040W027MH040W026	521.50	519.20	0.666666667	CO040W027	MH040W026		158	CLCO040W027MH040W026	8	0.0148	0.000940	0.02	0.001128	0.02	0.001340	0.03	0.001128	0.02
CLCO042N056MH042N048		2001		Existing	assumed Mannings N	CO042N056	MH042N048		T16184A	IRWD	PVC	{D6B52877-6786-4802-B34D-E59F4E45282E}	CLCO042N056MH042N048	351.60	347.51	0.500000000	CO042N056	MH042N048		233	CLCO042N056MH042N048	6	0.0176	0.001664	0.04	0.002000	0.04	0.002369	0.05	0.002000	0.04
CLCO042N057MH042N051		2001		Existing	assumed Mannings N	CO042N057	MH042N051		T16184A	IRWD	PVC	{AEF875AC-BFA3-4DC1-A7A2-AE9B30C636CE}	CLCO042N057MH042N051	359.11	343.35	0.666666667	CO042N057	MH042N051		264	CLCO042N057MH042N051	8	0.0597	0.006336	0.04	0.007608	0.04	0.009018	0.05	0.007608	0.04
CLCO042S026MH042S027		1990		Existing	assumed Mannings N	CO042S026	MH042S027		T13902	IRWD	VCP	{93771AAD-0298-4505-80C4-D2571A295286}	CLCO042S026MH042S027	216.58	212.64	0.666666667	CO042S026	MH042S027		220	CLCO042S026MH042S027	8	0.0179	0.002018	0.03	0.002423	0.04	0.002871	0.04	0.002423	0.04
CLCO042S032MH042S033		1990		Existing	assumed Mannings N	CO042S032	MH042S033		T13902	IRWD	VCP	{26E4F348-634B-4F77-8112-856D25EEB912}	CLCO042S032MH042S033	199.36	198.72	0.666666667	CO042S032	MH042S033		92	CLCO042S032MH042S033	8	0.0070	0.006992	0.07	0.008394	0.08	0.009952	0.08	0.008394	0.08
CLCO042S035MH043E180		1990		Existing	assumed Mannings N	CO042S035	MH043E180		T13786	IRWD	VCP	{1E4D6CCE-B0B9-4111-8E67-ADC67057496B}	CLCO042S035MH043E180	201.16	200.03	0.666666667	CO042S035	MH043E180		155	CLCO042S035MH043E180	8	0.0073	0.002282	0.04	0.002739	0.04	0.003248	0.05	0.002739	0.04
CLCO042S036MH042S037		1990		Existing	assumed Mannings N	CO042S036	MH042S037		T13786	IRWD	VCP	{DB10C954-ADE7-456F-9E38-6239868EDD27}	CLCO042S036MH042S037	200.05	199.74	0.666666667	CO042S036	MH042S037		35	CLCO042S036MH042S037	8	0.0089	0.006167	0.06	0.007403	0.07	0.008777	0.08	0.007403	0.07
CLCO042S041MH042S040		1990		Existing	assumed Mannings N	CO042S041	MH042S040		T13786	IRWD	VCP	{33554A97-1451-465D-828D-F70863846456}	CLCO042S041MH042S040	204.82	203.35	0.666666667	CO042S041	MH042S040		126	CLCO042S041MH042S040	8	0.0117	0.000067	0.00	0.000077	0.00	0.000073	0.00	0.000055	0.00
CLCO042S044MH042S043		1990		Existing	assumed Mannings N	CO042S044	MH042S043		T13786	IRWD	VCP	{8E01F619-FA2F-4F10-A640-3658EED0FA47}	CLCO042S044MH042S043	205.82	199.83	0.666666667	CO042S044	MH042S043		120	CLCO042S044MH042S043	8	0.0499	0.002544	0.03	0.003053	0.03	0.003621	0.03	0.003053	0.03
CLCO042S067MH042S076		1995		Existing	assumed Mannings N	CO042S067	MH042S076		A006568	IRWD	PVC	{6F69A0F9-20DD-4684-9FA4-DCE8E6CB0E3}	CLCO042S067MH042S076	255.17	254.33	0.666666667	CO042S067	MH042S076		46	CLCO042S067MH042S076	8	0.0183	0.002672	0.04	0.002853	0.04	0.003383	0.04	0.002853	0.04
CLCO042S068MH042S079		1989		Existing	assumed Mannings N	CO042S068	MH042S079		T15563	IRWD	PVC	{699C1695-7486-43C4-BA7B-038EF18A95BE}	CLCO042S068MH042S079	338.64	331.97	0.500000000	CO042S068	MH042S079		63	CLCO042S068MH042S079	6	0.0230	0.004408	0.06	0.005290	0.07	0.006273	0.07	0.005290	0.07
STCO042S085MH042S012		1989		Existing	assumed Mannings N	CO042S085	MH042S012		596	IRWD	VCP	{9625960C-0664-4245-8AA8-317A5900081C}	STDE042S046MH042S012	221.38	215.33	2.000000000	CO042S085	MH042S012		61	STCO042S085MH042S012	24	0.0992	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO042S086MH042S087		2009		Existing	assumed Mannings N	CO042S086	A006603A			IRWD	PVC	{1D1D6D86-4498-432E-ACE4-D15AD3CD59B0}	CLCO042S086MH042S087	216.11	212.85	0.500000000	CO042S086	MH042S087		84	CLCO042S086MH042S087	6	0.0388	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO042W014MH042W013		1996		Existing	assumed Mannings N	CO042W014	T14188A			IRWD	PVC	{286DE4AD9-9846-41AA-AF97-DA74ACFA7529}	CLCO042W014MH042W013	186.91	185.67	0.666666667	CO042W014	MH042W013		152	CLCO042W014MH042W013	8	0.0082	0.002272	0.04	0.002728	0.04	0.003235	0.05	0.002728	0.04
CLCO042W015MH042W016		1996		Existing	assumed Mannings N	CO042W015	MH042W016		T14188A	IRWD	PVC	{6BD7C0F6-32CC-4CCE-A79E-832486DA77AF}	CLCO042W015MH042W016	188.40	187.76	0.666666667	CO042W015	MH042W016		161	CLCO042W015MH042W016	8	0.0040	0.002763	0.05	0.003316	0.05	0.003931	0.06	0.003316	0.05
CLCO042W020MH042W021		1996		Existing	assumed Mannings N	CO042W020	T14188C			IRWD	PVC	{43738EDC-CE5C-46F2-A174-11ECEF158C8B}	CLCO042W020MH042W021	200.00	198.77	0.666666667	CO042W020	MH042W021		174	CLCO042W020MH042W021	8	0.0071	0.003897	0.05	0.004679	0.06	0.005549	0.06	0.004679	0.06
CLCO042W023MH042N025		1998		Existing	assumed Mannings N	CO042W023	MH042N025		T15563	IRWD	PVC	{66A52955-C353-4819-B623-AAABC252C952}	CLCO042W023MH042N025	390.33	366.57	0.666666667	CO042W023	MH042N025		241	CLCO042W023MH042N025	8	0.0090	0.005333	0.03	0.006403	0.04	0.007593	0.04	0.006403	0.04
CLCO042W024MH042W029		1998		Existing	assumed Mannings N	CO042W024	MH042W029		T15563	IRWD	PVC	{F39CB927-86C6-419F-B96A-DA8884DCB68D}	CLCO042W024MH042W029	359.39	355.73	0.500000000	CO042W024	MH042W029		93	CLCO042W024MH042W029	6	0.0394	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO042W025MH042W033		1998		Existing	assumed Mannings N	CO042W025	MH042W033		T15563	IRWD	PVC	{1A83D651-D58D-44CD-A404-55625F59F277}	CLCO042W025MH042W033	341.89	327.36	0.500000000	CO042W025	MH042W033		63	CLCO042W025MH042W033	6	0.0655	0.007461	0.06	0.008958	0.07	0.010621	0.07	0.008958	0.07
CLCO042W026MH042W036		1998		Existing	assumed Mannings N	CO042W026	MH042W036		T15563	IRWD	PVC	{37CCB1E6-9D09-4678-83E8-DDE687C31F94}	CLCO042W026MH042W036	285.23	277.14	0.500000000	CO042W026	MH042W036		265	CLCO042W026MH042W036	6	0.0310	0.007482	0.07	0.008982	0.08	0.010651	0.09	0.008982	0.08
CLCO042W027MH042W040		1998		Existing	assumed Mannings N	CO042W027	MH042W040		T15563	IRWD	PVC	{2641210B-CE6D-4804-9B2B-D212CBEF6C85}	CLCO042W027MH042W040	294.47	284.73	0.500000000	CO042W027	MH042W040		176	CLCO042W027MH042W040	6	0.0553	0.004759	0.05	0.005715	0.06	0.006775	0.06	0.005715	0.06
CLCO042W028MH042S073		1998		Existing	assumed Mannings N	CO042W028	MH042S073		T15563	IRWD	PVC	{23F2D960-214E-49DD-9FD3-4DB862CE1764}	CLCO042W028MH042S073	317.58	314.81	0.500000000	CO042W028	MH042S073		139	CLCO042W028MH042S073	6	0.0200	0.006183	0.07	0.007422	0.08	0.008800	0.09	0.007422	0.08
CLCO043E035MH043E036		1990		Existing	assumed Mannings N	CO043E035	MH043E036		T13902	IRWD	VCP	{93375709-BFD3-4710-8403-220D3DD991D0}	CLCO043E035MH043E036	192.00	191.16	0.666666667	CO043E035	MH043E036		193	CLCO043E035MH043E036	8	0.0044	0.004290	0.06	0.005149	0.07	0.006106	0.07	0.005149	0.07
CLCO043E045MH043E050		1990		Existing	assumed Mannings N	CO043E045	MH043E050		T13786	IRWD	VCP	{F0617D6D-128D-4F23-B730-5D25BA7F0F5E}	CLCO043E045MH043E050	199.72	195.99	0.666666667	CO043E045	MH043E050		180	CLCO043E045MH043E050	8	0.0207	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO043E046MH043E047		1990		Existing	assumed Mannings N	CO043E046	MH043E047		T14499	IRWD	VCP	{0696F45C-91D9-4ACC-9718-44B50E714AEF}	CLCO043E046MH043E047	200.63	200.02	0.666666667	CO043E046	MH043E047		25	CLCO043E046MH043E047	8	0.0244	0.000077	0.00	0.000080	0.00	0.000095	0.00	0.000080	0.00
CLCO043E048MH043E049		1990		Existing	assumed Mannings N	CO043E048	MH043E049		T13786	IRWD	VCP	{914F0D36-EE8D-4C03-AC7F-2A706EFA9B47}	CLCO043E048MH043E049	198.80	196.38	0.666666667	CO043E048	MH043E049		36	CLCO043E048MH043E049	8	0.0672	0.002744	0.03	0.003295	0.03	0.003906	0.03	0.003295	0.03
CLCO043E056MH043E057		1990		Existing	assumed Mannings N	CO043E056	MH043E057		T13786	IRWD	VCP	{4ACAD56E-7EC4-452A-A1F2-3F1E65DDB883}	CLCO043E056MH043E057	199.02	196.13	0.666666667	CO043E056	MH043E057		157	CLCO043E056MH043E057	8	0.0184	0.002288	0.03	0.002747	0.03	0.003255	0.04	0.002747	0.03
CLCO043E059MH043E060		1990		Existing	assumed Mannings N	CO043E059	MH043E060		T13786	IRWD	VCP	{B360258E-3AED-45E0-A408-8FD2CAF2AAAF}	CLCO043E059MH043E060	195.16	193.88	0.666666667	CO043E059	MH043E060		29	CLCO043E059MH043E060	8	0.0441	0.002403	0.03	0.002881	0.03	0.003416	0.03	0.002881	0.03
CLCO043E062MH043E060		1990		Existing	assumed Mannings N	CO043E062	MH043E060		T13786	IRWD	VCP	{23B040DC-BF56-403A-AF6D-4B59AEEF031B}	CLCO043E062MH043E060	194.33	193.99	0.666666667	CO043E062	MH043E060		90	CLCO043E062MH043E060	8	0.0038	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO043E063MH043E064		1990		Existing	assumed Mannings N	CO043E063	MH043E064		T13786	IRWD	VCP	{508E568S-C941-431C-A622-ED1BAF890F40}	CLCO043E063MH043E064	194.33	193.52	0.666666667	CO043E063	MH043E064		114	CLCO043E063MH043E064	8	0.0071	0.004193	0.05	0.005034	0.06	0.005969	0.07	0.005034	0.06
CLCO043E066MH043E065		1990		Existing	assumed Mannings N	CO043E066	MH043E065		T13786	IRWD	VCP	{859C9391-1ED3-498F-9F03-131C518C79E8}	CLCO043E066MH043E065	193.30	193.14	0.666666667	CO043E066	MH043E065		38	CLCO043E066MH043E065	8	0.0040	0.002620	0.03	0.003147	0.03	0.003730	0.04	0.003147	0.03
CLCO043E070MH043E159		1990		Existing	assumed Mannings N	CO043E070	MH043E159		T13786	IRWD	VCP	{D3808888C-E7D8-44DD-ADFD-F82E3FCA4030}	CLCO043E070MH043E159	191.99	190.10	0.666666667	CO043E070	MH043E159		163	CLCO043E070MH043E159	8	0.0116	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO043E072MH043E017		1990		Existing	assumed Mannings N	CO043E072	MH043E017		T13786	IRWD	VCP	{0C89C355-09D1-4D37-B627-A1A429356466}	CLCO043E072MH043E017	188.50	184.00	0.666666667	CO043E072	MH043E017		131	CLCO043E072MH043E017	8	0.0344	0.001942	0.03	0.002333	0.03	0.002765	0.03	0.002333	0.03
CLCO043E073MH043E100		1990		Existing	assumed Mannings N	CO043E073	MH043E100		T13824	IRWD	VCP	{CC882E3E-74AF-4153-9C86-3AFC1A1CF02DC}	CLCO043E073MH043E100	188.89	187.69	0.500000000	CO043E073	MH043E100		125	CLCO043E073MH043E100	6	0.0096	0.001248	0.04	0.001500	0.05	0.001778	0.05	0.001500	0.05
CLCO043E074MH043E100		1990		Existing	assumed Mannings N	CO043E074	MH043E100		T13824	IRWD	VCP	{69E4374D-548C-4F7E-91F4-66F767D9B520}	CLCO043E074MH043E100	190.00	187.69	0.500000000	CO043E074	MH043E100		65	CLCO043E074MH043E100	6	0.0355	0.003561	0.05	0.004275	0.06	0.005070	0.06	0.004275	0.06
CLCO043E076MH043E075		1990		Existing	assumed Mannings N	CO043E076	MH043E075		T13824	IRWD	VCP	{75EF3863-E92B-4776-9B4F-33F94B664E81}	CLCO043E076MH043E075	185.67	176.63	0.500000000	CO043E076	MH043E075		115	CLCO043E076MH043E075	6	0.0786	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO043E078MH043E077		1990		Existing	assumed Mannings N	CO043E078	MH043E077		T13824	IRWD	VCP	{7F1B1B32-0F62-4561-9AAD-109E3DE0952C}	CLCO043E078MH043E077	187.50	186.28	0.500000000	CO043E078	MH043E077		125	CLCO043E078MH043E077	6	0.0098	0.003373	0.07	0.004011	0.07	0.004755	0.08	0.004011	0.07
CLCO043E079MH043E084		1990		Existing	assumed Mannings N	CO043E079	MH043E084		T13824	IRWD	VCP	{6998A13D-515D-4893-95AC-8C599BAA885A}	CLCO043E079MH043E084	186.19	180.53	0.500000000	CO043E079	MH043E084		125	CLCO043E079MH043E084	6	0.0453	0.001634	0.03	0.001961	0.04	0.002327	0.04	0.001961	0.04
CLCO043E081MH043E088		1990		Existing	assumed Mannings N	CO043E081	MH043E088		T13824	IRWD	VCP	{4CEAF726-C518-4668-9F3C-00F0CBA14678}	CLCO043E081MH043E088	186.13	185.17	0.500000000	CO043E081	MH043E088		65	CLCO043E081MH043E088	6	0.0148	0.002436	0.05	0.002925

| | | |

| | | |

| | | |

CLCO060N093MH060N092		1986		Existing		CO060N093	MH060N092		T12722	IRWD	PVC	{12755633-D8CC-475D-B6B4-C61106D69704}	CLCO060N093MH060N092	33.95	29.44	0.666666667	CO060N093	MH060N092			135	CLCO060N093MH060N092	8	0.0334	0.002508	0.03	0.003010	0.03	0.003570	0.04	0.003010	0.03
CLCO060N094MH060N092		1986		Existing		CO060N094	MH060N092		T12722	IRWD	PVC	{A60FE256-21B4-4049-8DAA-7E107BF40128}	CLCO060N094MH060N092	32.20	29.44	0.666666667	CO060N094	MH060N092			240	CLCO060N094MH060N092	8	0.0115	0.003238	0.04	0.003886	0.05	0.004606	0.05	0.003886	0.05
CLCO060N096MH060N095		1986		Existing		CO060N096	MH060N095		T12722	IRWD	PVC	{0C75F645-267E-4B68-9F91-748743E0140A}	CLCO060N096MH060N095	34.68	30.68	0.666666667	CO060N096	MH060N095			159	CLCO060N096MH060N095	8	0.0253	0.007674	0.05	0.009213	0.06	0.010922	0.06	0.009213	0.06
CLCO060N097MH060N095		1986		Existing		CO060N097	MH060N095		T12722	IRWD	PVC	{A6B74AC2-AECF-48F1-A474-51EB779B2089}	CLCO060N097MH060N095	31.46	30.68	0.666666667	CO060N097	MH060N095			200	CLCO060N097MH060N095	8	0.0039	0.005873	0.07	0.007050	0.08	0.008360	0.08	0.007050	0.08
CLCO060N100MH060N099		1986		Existing		CO060N100	MH060N099		T12722	IRWD	PVC	{482B472D-19D5-4714-8653-96DFCD2BACCD}	CLCO060N100MH060N099	37.45	28.51	0.666666667	CO060N100	MH060N099			238	CLCO060N100MH060N099	8	0.0376	0.002979	0.03	0.003577	0.03	0.004241	0.04	0.003577	0.03
CLCO060N102MH060N101		1986		Existing		CO060N102	MH060N101		T12722	IRWD	PVC	{10739190-F22D-4857-BCC3-3858847ABDDD}	CLCO060N102MH060N101	35.90	29.36	0.666666667	CO060N102	MH060N101			220	CLCO060N102MH060N101	8	0.0297	0.005187	0.04	0.006228	0.05	0.007384	0.05	0.006228	0.05
CLCO060N104MH060N103		1986		Existing		CO060N104	MH060N103		T12722	IRWD	PVC	{B613C13D-9281-4599-9602-03CB78AA4757}	CLCO060N104MH060N103	34.15	29.42	0.666666667	CO060N104	MH060N103			150	CLCO060N104MH060N103	8	0.0315	0.006194	0.05	0.007437	0.05	0.008817	0.05	0.007437	0.05
CLCO060N107MH060N106		1986		Existing		CO060N107	MH060N106		T12722	IRWD	PVC	{6A54738F-24C5-44CA-BC49-CFCB7E387AC8}	CLCO060N107MH060N106	36.00	34.27	0.666666667	CO060N107	MH060N106			145	CLCO060N107MH060N106	8	0.0119	0.002422	0.04	0.002908	0.04	0.003448	0.04	0.002908	0.04
CLCO060N109MH060N108		1986		Existing		CO060N109	MH060N108		T12722	IRWD	PVC	{502D61C1-672A-4807-A737-0F9CC1DD6ED1}	CLCO060N109MH060N108	32.24	31.72	0.666666667	CO060N109	MH060N108			130	CLCO060N109MH060N108	8	0.0040	0.005081	0.06	0.006100	0.07	0.007230	0.08	0.006100	0.07
CLCO060N110MH060N108		1986		Existing		CO060N110	MH060N108		T12722	IRWD	PVC	{2379D156-E95F-4121-B6A0-57D052B7714E}	CLCO060N110MH060N108	32.45	31.72	0.666666667	CO060N110	MH060N108			186	CLCO060N110MH060N108	8	0.0039	0.002208	0.04	0.002651	0.05	0.003143	0.05	0.002651	0.05
CLCO060N111MH060N108		1986		Existing		CO060N111	MH060N108		T12722	IRWD	PVC	{1247875C-1A34-488B-9209-D8F7F5A77ABF}	CLCO060N111MH060N108	32.18	31.72	0.666666667	CO060N111	MH060N108			115	CLCO060N111MH060N108	8	0.0040	0.002829	0.05	0.003397	0.05	0.004027	0.06	0.003397	0.05
CLCO060N117MH060N116		1987		Existing		CO060N117	MH060N116		T12713	IRWD	PVC	{6CC983C2-9BB8-494E-BAA2-F866F6C9DD780}	CLCO060N117MH060N116	37.90	34.65	0.666666667	CO060N117	MH060N116			186	CLCO060N117MH060N116	8	0.0164	0.000750	0.02	0.000902	0.02	0.001068	0.02	0.000902	0.02
CLCO060N126MH060N125		1987		Existing		CO060N126	MH060N125		T12713	IRWD	PVC	{491C39D0-DE23-437B-BC5B-C08E0E149F22}	CLCO060N126MH060N125	41.59	41.20	0.666666667	CO060N126	MH060N125			93	CLCO060N126MH060N125	8	0.0042	0.002358	0.05	0.002831	0.05	0.003356	0.05	0.002831	0.05
CLCO060N128MH060N127		1987		Existing		CO060N128	MH060N127		T12713	IRWD	PVC	{04F8B3F9-ACF2-4605-AE39-009A82CCE99}	CLCO060N128MH060N127	35.79	35.63	0.500000000	CO060N128	MH060N127			40	CLCO060N128MH060N127	6	0.0040	0.002464	0.07	0.002959	0.07	0.003508	0.08	0.002959	0.07
CLCO060N130MH060N129		1987		Existing		CO060N130	MH060N129		T12713	IRWD	PVC	{B1338B1C-AA35-424B-AE89-D91EDF81AFC5}	CLCO060N130MH060N129	39.18	37.91	0.666666667	CO060N130	MH060N129			165	CLCO060N130MH060N129	8	0.0077	0.001393	0.03	0.001673	0.03	0.001983	0.04	0.001673	0.03
CLCO060N131MH060N132		1987		Existing		CO060N131	MH060N132		T12714	IRWD	PVC	{F0C7A530-15C1-4C4C-A7E8-EE1B68401E12}	CLCO060N131MH060N132	35.54	33.59	0.500000000	CO060N131	MH060N132			97	CLCO060N131MH060N132	6	0.0201	0.002447	0.05	0.002940	0.05	0.003483	0.06	0.002940	0.05
CLCO060N133MH060N132		1987		Existing		CO060N133	MH060N132		T12714	IRWD	PVC	{9C43AA48-4DB5-4CA0-B2E2-459274C1702E}	CLCO060N133MH060N132	34.50	33.77	0.666666667	CO060N133	MH060N132			230	CLCO060N133MH060N132	8	0.0032	0.000846	0.03	0.001016	0.03	0.001207	0.03	0.001016	0.03
CLCO060N135MH060N013		1987		Existing		CO060N135	MH060N013		A00481	IRWD	PVC	{74668605-B5DD-4AC1-8F5C-4BFFEDF1F98F}	CLCO060N135MH060N013	34.95	34.74	0.666666667	CO060N135	MH060N013			54	CLCO060N135MH060N013	8	0.0039	0.003736	0.06	0.003989	0.06	0.004730	0.06	0.003989	0.06
CLCO060N138MH060N137		1989		Existing		CO060N138	MH060N137		T12669	IRWD	PVC	{276FC285-993C-4765-A6CA-AC3F206693B}	CLCO060N138MH060N137	36.83	35.77	0.500000000	CO060N138	MH060N137			136	CLCO060N138MH060N137	6	0.0078	0.005487	0.09	0.006589	0.10	0.007811	0.10	0.006589	0.10
CLCO060N139MH060N137		1989		Existing		CO060N139	MH060N137		T12669	IRWD	PVC	{5CEDC5F6-A756-40D0-9DB9-33C481C2778C}	CLCO060N139MH060N137	36.75	35.77	0.500000000	CO060N139	MH060N137			101	CLCO060N139MH060N137	6	0.0097	0.005787	0.09	0.006948	0.09	0.008238	0.10	0.006948	0.09
CLCO060N140MH060N141		1989		Existing		CO060N140	MH060N141		T12669	IRWD	PVC	{58539708-2E69-42B3-BA62-0F19068B92BD}	CLCO060N140MH060N141	33.79	32.11	0.500000000	CO060N140	MH060N141			110	CLCO060N140MH060N141	6	0.0153	0.010547	0.10	0.012661	0.11	0.015011	0.12	0.012661	0.11
CLCO060N142MH060N141		1989		Existing		CO060N142	MH060N141		T12669	IRWD	PVC	{D8FB8DA5-6DAB-47CE-A79A-383B89AFAE37}	CLCO060N142MH060N141	33.34	32.11	0.500000000	CO060N142	MH060N141			65	CLCO060N142MH060N141	6	0.0118	0.000450	0.02	0.000541	0.02	0.000641	0.03	0.000541	0.02
CLCO060N143MH060N144		1989		Existing		CO060N143	MH060N144		T12669	IRWD	VCP	{7043067A-D88D-473C-8BD1-C9086F090F7F}	CLCO060N143MH060N144	32.86	30.59	0.500000000	CO060N143	MH060N144			83	CLCO060N143MH060N144	6	0.0273	0.007542	0.08	0.009049	0.09	0.010728	0.09	0.009049	0.09
CLCO060N147MH060N146		1989		Existing		CO060N147	MH060N146		T12669	IRWD	PVC	{7050199D-197E-4819-BADF-85044D415DAE}	CLCO060N147MH060N146	35.02	34.40	0.666666667	CO060N147	MH060N146			67	CLCO060N147MH060N146	8	0.0093	0.008681	0.07	0.010422	0.08	0.012358	0.09	0.010422	0.08
CLCO060N150MH060N149		1989		Existing		CO060N150	MH060N149		T12669	IRWD	PVC	{02460A7D-CE08-433D-ACBD-FB17B1D7D6B6}	CLCO060N150MH060N149	35.86	34.45	0.500000000	CO060N150	MH060N149			145	CLCO060N150MH060N149	6	0.0097	0.007288	0.09	0.008749	0.10	0.010373	0.11	0.008749	0.10
CLCO060N151MH060N149		1989		Existing		CO060N151	MH060N149		T12669	IRWD	PVC	{57C708D8-5BB4-4E15-9D3F-5E3B9BE646D9}	CLCO060N151MH060N149	35.24	34.45	0.500000000	CO060N151	MH060N149			80	CLCO060N151MH060N149	6	0.0099	0.008852	0.10	0.010629	0.11	0.012601	0.12	0.010629	0.11
CLCO060N153MH060N152		1989		Existing		CO060N153	MH060N152		T12669	IRWD	PVC	{78B809CC-6547-4F5C-BFB8-B0B8E70E626D}	CLCO060N153MH060N152	38.95	37.54	0.500000000	CO060N153	MH060N152			142	CLCO060N153MH060N152	6	0.0099	0.005037	0.08	0.006048	0.09	0.007170	0.09	0.006048	0.09
CLCO060N157MH060N155		1989		Existing		CO060N157	MH060N155		T12669	IRWD	PVC	{54D61EEB-2390-4605-B4B8-EE7D1E1900E0}	CLCO060N157MH060N155	39.63	38.66	0.500000000	CO060N157	MH060N155			101	CLCO060N157MH060N155	6	0.0096	0.000815	0.03	0.000979	0.04	0.001160	0.04	0.000979	0.04
CLCO060N158MH060N156		1989		Existing		CO060N158	MH060N156		T12669	OTHER	PVC	{1BBFACFD-B7FC-498A-9A21-F83A25F39F42}	CLCO060N158MH060N156	43.00	39.16	0.333333333	CO060N158	MH060N156			143	CLCO060N158MH060N156	4	0.0269	0.000279	0.03	0.000335	0.03	0.000397	0.03	0.000335	0.03
CLCO060N159MH060N160		1985		Existing		CO060N159	MH060N160		T12669	IRWD	PVC	{2E24242E-42EA-436E-A52A-0D53B8F972D4}	CLCO060N159MH060N160	38.75	37.25	0.500000000	CO060N159	MH060N160			153	CLCO060N159MH060N160	6	0.0098	0.004637	0.08	0.005452	0.08	0.006463	0.09	0.005452	0.08
CLCO060N162MH060N161		1985		Existing		CO060N162	MH060N161		T12669	IRWD	PVC	{61255E07D-B1B3-4D33-B6F6-9A87B81BD846}	CLCO060N162MH060N161	40.25	39.33	0.500000000	CO060N162	MH060N161			60	CLCO060N162MH060N161	6	0.0099	0.003836	0.07	0.004606	0.08	0.005461	0.08	0.004606	0.08
CLCO060N163MH060N161		1983		Existing		CO060N163	MH060N161		T12669	IRWD	PVC	{52F11023-8B42-43EE-8E74-1B90E33DD6CE}	CLCO060N163MH060N161	40.16	39.33	0.500000000	CO060N163	MH060N161			90	CLCO060N163MH060N161	6	0.0092	0.002359	0.07	0.002812	0.07	0.003312	0.07	0.002812	0.07
CLCO060N165MH060N166		1985		Existing		CO060N165	MH060N166		T12669	IRWD	VCP	{51DCDE8D-B2D9-4F92-996A-5F0C6FCD17FC}	CLCO060N165MH060N166	39.13	37.40	0.500000000	CO060N165	MH060N166			80	CLCO060N165MH060N166	6	0.0216	0.003473	0.06	0.004168	0.06	0.004942	0.07	0.004168	0.06
CLCO060N167MH060N166		1985		Existing		CO060N167	MH060N166		T12669	IRWD	VCP	{DE47CF49-7993-49ED-BCBD-4CD279EBF0EC}	CLCO060N167MH060N166	38.88	37.38	0.500000000	CO060N167	MH060N166			102	CLCO060N167MH060N166	6	0.0147	0.000880	0.03	0.001055	0.03	0.001250	0.04	0.001055	0.03
CLCO060N168MH060N169		1985		Existing		CO060N168	MH060N169		T12669	IRWD	PVC	{B071D35C-488D-4ACO-B08F-38F4CBA2C6B4}	CLCO060N168MH060N169	39.50	37.83	0.500000000	CO060N168	MH060N169			95	CLCO060N168MH060N169	6	0.0176	0.002508	0.05	0.003010	0.05	0.003570	0.06	0.003010	0.05
CLCO060N170MH060N169		1985		Existing		CO060N170	MH060N169		T12669	IRWD	PVC	{7062C37F-BCBE-4ED5-ACC6-77A0FCDA0C30}	CLCO060N170MH060N169	38.43	37.83	0.500000000	CO060N170	MH060N169			63	CLCO060N170MH060N169	6	0.0095	0.005595	0.08	0.006717	0.09	0.007963	0.10	0.006717	0.09
CLCO060N211MH060N009		1985		Existing		CO060N211	MH060N009		A00481	IRWD	PVC	{A2EE4E81-D35D-4027-9CF9-F7F70C6E2A96}	CLCO060N211MH060N009	29.55	27.11	0.666666667	CO060N211	MH060N009			58	CLCO060N211MH060N009	8	0.0421	0.001731	0.02	0.002081	0.02	0.002191	0.03	0.001848	0.02
CLCO060S117MH060S116		1978		Existing		CO060S117	MH060S116		218	IRWD	VCP	{28D31B4A-3F54-404A-BA32-550B1CB8F3E9}	CLCO060S117MH060S116	33.02	26.30	0.666666667	CO060S117	MH060S116			224	CLCO060S117MH060S116	8	0.0300	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S122MH060S076		1970		Existing		CO060S122	MH060S076		A00260	IRWD	VCP	{43158E62-670A-4279-BA55-2D7077391DF6}	CLCO060S122MH060S076	47.79	46.41	0.500000000	CO060S122	MH060S076			66	CLCO060S122MH060S076	6	0.0184	0.000000	0.00	0.000000	0.00	0.000000	0.01	0.000000	0.00
CLCO060S123MH060S083		1970		Existing		CO060S123	MH060S083		A00260	IRWD	VCP	{D64AF0A2-41EF-4965-9064-3C72A81D7EE2}	CLCO060S123MH060S083	46.61	46.02	0.500000000	CO060S123	MH060S083			50	CLCO060S123MH060S083	6	0.0118	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S127MH060S083		1970		Existing		CO060S127	MH060S083		A00260	IRWD	VCP	{5CE4D851-494D-4B99-BA0C-93C9A72DF2B1}	CLCO060S127MH060S083	47.09	46.11	0.500000000	CO060S127	MH060S083			84	CLCO060S127MH060S083	6	0.0117	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S128MH060S084		1970		Existing		CO060S128	MH060S084		A00260	IRWD	VCP	{15BEC95E-5C75-4E54-9492-78885D86F36C}	CLCO060S128MH060S084	47.13	46.13	0.500000000	CO060S128	MH060S084			68	CLCO060S128MH060S084	6	0.0119	0.000424	0.02	0.000508	0.02	0.000602	0.03	0.000508	0.02
CLCO060S130MH060S085		1970		Existing		CO060S130	MH060S085		A00260	IRWD	VCP	{03CE660AF-0497-41DC-9010-E8B797D81CC7}	CLCO060S130MH060S085	45.41	44.58	0.500000000	CO060S130	MH060S085			40	CLCO060S130MH060S085	6	0.0116	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S132MH060S081		1970		Existing		CO060S132	MH060S081		A00260	IRWD	VCP	{3EC332AE-9F7F-4637-A88E-685EA884AE09}	CLCO060S132MH060S081	45.88	44.06	0.500000000	CO060S132	MH060S081			50	CLCO060S132MH060S081	6	0.0364	0.009713	0.08	0.011661	0.09	0.013823	0.10	0.011661	0.09
CLCO060S133MH060S101		1970		Existing		CO060S133	MH060S101		A00262	IRWD	VCP	{E3964792-651E-450A-A937-08E0E7DC94E1}	CLCO060S133MH060S101	43.00	40.79	0.500000000	CO060S133	MH060S101			63	CLCO060S133MH060S101	6	0.0491	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S134MH060S098		1970		Existing		CO060S134	MH060S098		A00262	IRWD	VCP	{00B60C81-0943-478b-9C22-E875B140CD4}	CLCO060S134MH060S098	45.00	42.38	0.666666667	CO060S134	MH060S098			45	CLCO060S134MH060S098	8	0.0582	0.000000	0.03	0.000000	0.04	0.000000	0.05	0.000000	0.04
CLCO060S135MH060S093		1970		Existing		CO060S135	MH060S093		A00262	IRWD	VCP	{78061CD8-9DE7-45BD-B298-21AEA81438144}	CLCO060S135MH060S093	39.25	38.24	0.666666667	CO060S135	MH060S093			45	CLCO060S135MH060S093	8	0.0155	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S139MH060S090		1970		Existing		CO060S139	MH060S090		A00262	IRWD	VCP	{BDC9F15D-EA99-486B-A6C0-EB3862982DB7}	CLCO060S139MH060S090	45.00	39.11	0.333333333	CO060S139	MH060S090			60	CLCO060S139MH060S090	4	0.0736	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S140MH060S112		1970		Existing		CO060S140	MH060S112		A00262	IRWD	VCP	{BD1C4AAD-C425-4AE5-BCE6-F2F3470ZFB2F}	CLCO060S140MH060S112	36.58	35.75	0.500000000	CO060S140	MH060S112			40	CLCO060S140MH060S112	6	0.0208	0.012913	0.11	0.015477	0.12	0.018348	0.13	0.015477	0.12
CLCO060S141MH060S113		1970		Existing		CO060S141	MH060S113		A00262	IRWD	VCP	{502E9483-EEE8-486B-B496-E977095C9DDE}	CLCO060S141MH060S113	38.00	34.90	0.500000000	CO060S141	MH060S113			75	CLCO060S141MH060S113	6	0.0413	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S142MH060S107		1970		Existing		CO060S142	MH060S107		A00262	IRWD	VCP	{9C81679A-7748-4648-AB33-F4BAD9261C0}	CLCO060S142MH060S107	37.75	34.20	0.333333333	CO060S142	MH060S107			100	CLCO060S142MH060S107	4	0.0355	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S162MH060S107		1970		Existing		CO060S162	MH060S107		A00262	IRWD	VCP	{A902C370-736B-4C04-9B49-7FD93D47B333}	CLCO060S162MH060S107	35.29	34.20	0.333333333	CO060S162	MH060S107			45	CLCO060S162MH060S107	4	0.0242	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S169MH060S100		1970		Existing		CO060S169	MH060S100		A00262	IRWD	VCP	{922CA843-420D-4E71-964D-917AAE02797F}	CLCO060S169MH060S100	43.50	40.95	0.500000000	CO060S169	MH060S100			95	CLCO060S169MH060S100	6	0.0268	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060S170MH060S076		1970		Existing		CO060S170	MH060S076		A00260	IRWD	VCP	{B5B02279-159A-45BE-B8D5-5454626D1F79}	CLCO060S170MH060S076	48.50	46.31	0.500000000	CO060S170	MH060S076			209	CLCO060S170MH060S076	6	0.0105	0.017035	0.16	0.020451	0.18	0.024247	0.19	0.020451	0.18
CLCO060S171MH060S077		1970		Existing		CO060S171	MH060S077		A00260	IRWD	VCP	{E2AA4D03-4998-45FD-B0FC-95C6057EE5E5}	CLCO060S171MH060S077	47.74	46.22	0.333333333	CO060S171	MH060S077			76	CLCO060S171MH060S077	4	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO060V016MH060W017		1987		Existing		CO060W016	MH060W017		T12866	IRWD	PVC	{FD330274-0A0E-49D4-A0C1-31C72A73A742}	CLCO060V016MH060W017	34.79	34.20	0.666666667	CO060W016	MH060W017			78	CLCO060V016MH060W017	8	0.0076	0.007572	0.07	0.009059	0.08	0.010740	0.08	0.009059	0.08
CLCO060V023MH060W022		1987		Existing		CO060V023	MH060W022		T12866	IRWD	PVC	{CD9552B7-731D-48CB-81DF-F9914251BAA3}	CLCO060V023MH060W022	36.79	35.70	0.666666667	CO060V023	MH060W022			88	CLCO060V023MH060W022	8	0.0057	0.003139	0.05	0.003767	0.05	0.004467	0.06	0.003767	0.05
CLCO060V024MH060W021		1987		Existing		CO060V024	MH060W021		T12866	IRWD	PVC	{CC560C02-F405-4029-A5FB-26343E4255FD}	CLCO060V024MH060W021	33.59	32.20	0.666666667	CO060V024	MH060W021			146	CLCO060V024MH060W021	8	0.0095	0.006478	0.06	0.007748	0.07	0.009185	0.07	0.007748	0.07
CLCO060V032MH060W031		1987		Existing		CO060V032	MH060W031		T12714	IRWD	PVC	{61C525AA-F34C-4464-975D-BAE157DDBA22}	CLCO060V032MH060W031	34.90	32.68	0.500000000	CO060V032	MH060W031			67	CLCO060V032MH060W031	6	0.0331	0.001966	0.04	0.002361	0.04	0.002797	0.05	0.002361	0.04
CLCO060V035MH060W034		1987		Existing		CO060V035	MH060W034		T12714	IRWD	PVC	{2AA12088-1E6F-4AD3-A799-212549D80A6D}	CLCO060V035MH060W034	34.24	31.45	0.500000000	CO060V035	MH060W034			216	CLCO060V035MH060W034	6	0.0129	0.001427	0.04	0.001711	0.04	0.002030	0.05	0.001711	0.04
CLCO060V039MH060W038		1987		Existing		CO060V039	MH060W038		T12714	IRWD	PVC	{2D817025-922E-4096-9D08-D4E320326E0E}	CLCO060V039MH060W038	35.25	31.77	0.500000000	CO060V039	MH060W038			101	CLCO060V039MH060W038	6	0.0345	0.001832	0.04	0.002199	0.04	0.002607	0.05	0.002199	0.04
CLCO060V040MH060W038		1987		Existing		CO060V040	MH060W038		T12714	IRWD	PVC	{776B4299-53AC-4C03-97E7-AEED5F2C358F}	CLCO060V040MH060W038	34.79	31.77	0.500000000	CO060V040	MH060W038			63	CLCO060V040MH060W038	6	0.0479	0.001927	0.04	0.002314	0.04	0.002743	0.04	0.002314	0.04
CLCO060V041MH060W037		1987		Existing		CO060V041	MH060W037		T12714	IRWD	PVC	{74185EEB-419E-41D1-A1DE-6E9F75BCF354}	CLCO060V041MH060W037	34.38	31.00	0.500000000	CO060V041	MH060W037			70	CLCO060V041MH060W037	6	0.0483	0.001446	0.03	0.001735	0.03	0.002057	0.04	0.001735	0.03
CLCO060V043MH060W042		1987		Existing		CO060V043	MH060W042		12417	IRWD	PVC	{30211E9A0-D9D9-42F7-BAA2-81548C25B94A}	CLCO060V043MH060W042	34.65	29.19	0.500000000	CO060V043	MH060W042			156	CLCO060V043MH060W042	6	0.0350	0.003448	0.05	0.004141	0.05	0.004910	0.06	0.004141	0.05
CLCO060V047MH060W046		1987		Existing		CO060V047	MH060W046		12417	IRWD	PVC	{91DA7852-4E2C-4496-931DA-7A498CD8FC27}	CLCO060V047MH060W046	33.75	32.86	0.500000000	CO060V047	MH060W046			61	CLCO060V047MH060W046	6	0.0146	0.001619	0.04	0.001944	0.05	0.002303	0.05	0.001944	0.05
CLCO060V048MH060W046		1987		Existing		CO060V048	MH060W046		12417	IRWD	PVC	{BD8DC62F-3EDF-47C3-B4AF-A3449B505118}	CLCO060V048MH060W046	33.56	32.86	0.500000000	CO060V048	MH060W046			71	CLCO060V048MH060W046	6	0.0099	0.001562	0.05	0.001874	0.05	0.002222	0.05	0.001874	0.05
CLCO060V049MH060W045		1987		Existing		CO060V049	MH060W045		12417	IRWD	PVC	{83CDE5EA-1183-405C-B5FF-AF251996CB4A}	CLCO060V049MH060W045	33.15	32.02	0.500000000	CO060V049	MH060W045			52	CLCO060V049MH060W045	6	0.0217	0.002236	0.05	0.002683	0.05	0.003181	0.05	0.002683	0.05
CLCO060V052MH060W051		1987		Existing		CO060V052	MH060W051		T12714	IRWD	PVC	{9A69E01D-0007-40EC-AA98-DB7253947C50}	CLCO060V052MH060W051	32.97	27.23	0.500000000	CO060V052	MH060W051			58	CLCO060V052MH060W051	6	0.0990	0.003200	0.04	0.003841	0.04	0.004553	0.04	0.003841	0.04
CLCO060V054MH060W053		1987		Existing		CO060V054	MH060W053		T12714	IRWD	PVC	{C9616F33-111F-4A4E-9973-FACF66E909F0}	CLCO060V054MH060W053	32.45	26.07	0.500000000	CO060V054	MH060W053			141	CLCO060V054MH060W053	6	0.0452	0.002111	0.04	0.002519	0.04	0.002986	0.04	0.002519	0.04
CLCO060V057MH060W056		1987		Existing		CO060V057	MH060W056		T12714	IRWD	PVC	{47E27956-57CA-4A9B-A6E4-49BD1033EF2E}	CLCO060V057MH060W056	32.68	30.21	0.500000000	CO060V057	MH060W056			249	CLCO060V057MH060W056	6	0.0099	0.001271	0.04	0.001528	0.05	0.001810	0.05	0.001528	0.05
CLCO060V059MH060W058		1987		Existing		CO060V059	MH060W058		T12714	IRWD	PVC	{EAA86521-D886-422C-9B08-FE501A535352}	CLCO060V059MH060W058	34.20	29.38	0.500000000	CO060V059	MH060W058			162	CLCO060V059MH060W058	6	0.0298	0.002544	0.04	0.003053	0.05	0.003621	0.05	0.003053	0.05
CLCO060V061MH060W060		1987		Existing		CO060V061	MH060W060		T12714	IRWD	PVC	{58511D57-0FC6-4A78-B273-E71CDA8E41BF}	CLCO060V061MH060W060	35.20	30.12	0.500000000	CO060V061	MH060W060			180	CLCO060V061MH060W060	6	0.0282	0.002758	0.05	0.003300	0.05	0.003912	0.06	0.003300	0.05
CLCO060V063MH060W062		1987		Existing		CO060V063	MH060W062		T12714	IRWD	PVC	{C9560DCC-2CEE-4C96-9BAB-C95F3ABFC852}	CLCO060V063MH060W062	34.25	33.70	0.500000000	CO060V063	MH060W062			62	CLCO060V063MH060W062	6	0.0089	0.001889	0.05	0.002267	0.06	0.002688	0.06	0.002267	0.06
CLCO060V064MH060W

CLCO061E153MH061E152			1994		Existing		CO061E153	MH061E152		14741	IRWD	PVC	{6CCC95B5-99D9-4A2E-861C-950E84FD0123}	CLCO061E153MH061E152	53.50		53.31	0.666666667	CO061E153	MH061E152			53	CLCO061E153MH061E152	8	0.0036	0.001030	0.03	0.001235	0.03	0.001464	0.03	0.001235	0.03
CLCO061E154MH061E155			1994		Existing		CO061E154	MH061E155		14741	IRWD	PVC	{CAF8F06E-C6E3-44E4-90AF-6152F0E18DF2}	CLCO061E154MH061E155	51.56		51.40	0.666666667	CO061E154	MH061E155			41	CLCO061E154MH061E155	8	0.0039	0.001436	0.03	0.001724	0.04	0.002045	0.04	0.001724	0.04
CLCO061E156MH061E155			1994		Existing		CO061E156	MH061E155		14741	IRWD	PVC	{1485F8A2-B141-4F47-98BE-CD53E792859D}	CLCO061E156MH061E155	51.61		51.40	0.666666667	CO061E156	MH061E155			53	CLCO061E156MH061E155	8	0.0040	0.001543	0.04	0.001852	0.04	0.002196	0.04	0.001852	0.04
CLCO061E157MH061E158			1994		Existing		CO061E157	MH061E158		14741	IRWD	PVC	{4FE38500-4BA9-4F64-85C5-FD2BB215DD86}	CLCO061E157MH061E158	51.59		51.40	0.666666667	CO061E157	MH061E158			48	CLCO061E157MH061E158	8	0.0040	0.003859	0.06	0.004632	0.06	0.005491	0.07	0.004632	0.06
CLCO061E159MH061E158			1994		Existing		CO061E159	MH061E158		14741	IRWD	PVC	{8446C985-6D7A-4C5B-9F6E-6F7C615B855A}	CLCO061E159MH061E158	51.59		51.40	0.666666667	CO061E159	MH061E158			48	CLCO061E159MH061E158	8	0.0040	0.000707	0.02	0.000848	0.02	0.001006	0.03	0.000848	0.02
CLCO061E161MH061E160			1994		Existing		CO061E161	MH061E160		14741	IRWD	PVC	{92327585-E730-4692-89E1-07F4DD1D6104}	CLCO061E161MH061E160	50.13		49.18	0.666666667	CO061E161	MH061E160			55	CLCO061E161MH061E160	8	0.0173	0.003087	0.04	0.003707	0.04	0.004393	0.05	0.003707	0.04
CLCO061E162MH061E163			1994		Existing		CO061E162	MH061E163		14741	IRWD	PVC	{273CF8CB-9EF7-4530-8765-2D82CF64B733}	CLCO061E162MH061E163	48.02		47.68	0.666666667	CO061E162	MH061E163			88	CLCO061E162MH061E163	8	0.0039	0.003000	0.05	0.003602	0.06	0.004271	0.06	0.003602	0.06
CLCO061E164MH061E165			1994		Existing		CO061E164	MH061E165		14741	IRWD	PVC	{113C7EB6-E949-4474-B8BD-BD23F3CE2415}	CLCO061E164MH061E165	50.43		49.97	0.666666667	CO061E164	MH061E165			79	CLCO061E164MH061E165	8	0.0058	0.001307	0.03	0.001570	0.03	0.001861	0.04	0.001570	0.03
CLCO061E166MH061E167			1994		Existing		CO061E166	MH061E167		14741	IRWD	PVC	{54394823-C0F6-4F3C-9A24-A28E63EB561E}	CLCO061E166MH061E167	52.61		52.41	0.666666667	CO061E166	MH061E167			84	CLCO061E166MH061E167	8	0.0041	0.000965	0.03	0.001158	0.03	0.001374	0.03	0.001158	0.03
CLCO061E168MH061E167			1994		Existing		CO061E168	MH061E167		14741	IRWD	PVC	{291A0E8C-2AB5-4CC5-BB72-9F648CBE8A4F}	CLCO061E168MH061E167	52.58		52.41	0.666666667	CO061E168	MH061E167			43	CLCO061E168MH061E167	8	0.0040	0.000751	0.02	0.000902	0.02	0.001068	0.03	0.000902	0.02
CLCO061E171MH061E211			1994		Existing		CO061E171	MH061E211		14741	IRWD	PVC	{FD1C1FC8-E567-4D47-B64D-0AA754CF5C9C}	CLCO061E171MH061E211	54.16		53.99	0.666666667	CO061E171	MH061E211			48	CLCO061E171MH061E211	8	0.0035	0.003794	0.06	0.004555	0.06	0.005401	0.07	0.004555	0.06
CLCO061E172MH061E057			1993		Existing		CO061E172	MH061E057		14746	IRWD	PVC	{9E69472F-B807-4E65-AEA1-5E8365D9C605}	CLCO061E172MH061E057	49.52		45.29	0.666666667	CO061E172	MH061E057			65	CLCO061E172MH061E057	8	0.0255	0.006023	0.05	0.007232	0.05	0.008574	0.06	0.007232	0.05
CLCO061E173MH061E211			1994		Existing		CO061E173	MH061E211		14741	IRWD	PVC	{8D6B946E-BFD1-4B87-A4CB-D7488F1AD366}	CLCO061E173MH061E211	54.15		53.99	0.666666667	CO061E173	MH061E211			44	CLCO061E173MH061E211	8	0.0036	0.001286	0.03	0.001545	0.04	0.001831	0.04	0.001545	0.04
CLCO061E176MH061E177			1994		Existing		CO061E176	MH061E177		14741	IRWD	PVC	{3495657C-4C43-49A2-97F1-38AA0548ZE45}	CLCO061E176MH061E177	52.13		51.95	0.666666667	CO061E176	MH061E177			47	CLCO061E176MH061E177	8	0.0038	0.000880	0.02	0.001055	0.03	0.001250	0.03	0.001055	0.03
CLCO061E184MH061E185			1994		Existing		CO061E184	MH061E185		T14953	IRWD	PVC	{2125E033-CE08-44FF-BA2D-F32FA3829C6E}	CLCO061E184MH061E185	49.90		48.90	0.666666667	CO061E184	MH061E185			56	CLCO061E184MH061E185	8	0.0179	0.003730	0.04	0.004478	0.05	0.005309	0.05	0.004478	0.05
CLCO061E187MH061E186			1994		Existing		CO061E187	MH061E186		T14953	IRWD	PVC	{38C72296-2183-4003-966F-8EB71339FC5E}	CLCO061E187MH061E186	49.90		49.54	0.666666667	CO061E187	MH061E186			59	CLCO061E187MH061E186	8	0.0061	0.002937	0.05	0.003525	0.05	0.004179	0.05	0.003525	0.05
CLCO061E188MH061E189			1994		Existing		CO061E188	MH061E189		T14953	IRWD	PVC	{237876AF-F538-4EF9-B164-873CA2FC3015}	CLCO061E188MH061E189	51.00		50.70	0.666666667	CO061E188	MH061E189			29	CLCO061E188MH061E189	8	0.0103	0.005536	0.06	0.006641	0.06	0.007873	0.07	0.006641	0.06
CLCO061E190MH061E189			1994		Existing		CO061E190	MH061E189		T14953	IRWD	PVC	{F208A016-1F69-4147-8F60-6D6DB91F1464}	CLCO061E190MH061E189	51.59		50.70	0.666666667	CO061E190	MH061E189			83	CLCO061E190MH061E189	8	0.0107	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO061E191MH061E192			1994		Existing		CO061E191	MH061E192		T14953	IRWD	PVC	{478819C2-C31E-468F-AB54-3D29C761B3C5}	CLCO061E191MH061E192	50.90		49.52	0.666666667	CO061E191	MH061E192			92	CLCO061E191MH061E192	8	0.0150	0.004416	0.05	0.005301	0.05	0.006286	0.06	0.005301	0.05
CLCO061E196MH061E194			1994		Existing		CO061E196	MH061E194		T14953	IRWD	PVC	{5F6FDB2D-E0A9-41E4-A83B-F04101A2014A}	CLCO061E196MH061E194	50.00		47.59	0.666666667	CO061E196	MH061E194			202	CLCO061E196MH061E194	8	0.0119	0.007568	0.06	0.009084	0.07	0.010770	0.08	0.009084	0.07
CLCO061E198MH061E195			1994		Existing		CO061E198	MH061E195		T14953	IRWD	PVC	{94511867-B4F7-403E-8F79-37D99DF04FCA}	CLCO061E198MH061E195	49.09		46.04	0.666666667	CO061E198	MH061E195			177	CLCO061E198MH061E195	8	0.0172	0.005808	0.05	0.006974	0.06	0.008268	0.06	0.006974	0.06
CLCO061E199MH061E197			1994		Existing		CO061E199	MH061E197		T14953	IRWD	PVC	{2CCE178D-B01F-4A7E-AB25-3DE06B828F94}	CLCO061E199MH061E197	48.50		45.34	0.666666667	CO061E199	MH061E197			184	CLCO061E199MH061E197	8	0.0177	0.003815	0.04	0.004581	0.05	0.005431	0.05	0.004581	0.05
CLCO061E207MH061E202			1995		Existing		CO061E207	MH061E202		T14873	IRWD	PVC	{1C36047E-6D3E-448C-80D5-870AE6678AF5}	CLCO061E207MH061E202	48.70		47.20	0.500000000	CO061E207	MH061E202			6	CLCO061E207MH061E202	6	0.0195	0.002850	0.05	0.003423	0.06	0.004057	0.06	0.003423	0.06
CLCO061E208MH061E204			1995		Existing		CO061E208	MH061E204		T14873	IRWD	PVC	{A2742548-A34D-4845-98FA-06CE656613D3}	CLCO061E208MH061E204	51.59		48.65	0.500000000	CO061E208	MH061E204			52	CLCO061E208MH061E204	6	0.0565	0.003815	0.05	0.004581	0.05	0.005431	0.05	0.004581	0.05
CLCO061E209MH061E202			1995		Existing		CO061E209	MH061E202		T14873	IRWD	PVC	{304CF6A1-FBD6-44DF-84C9-653AA89F8DC9}	CLCO061E209MH061E202	50.90		47.20	0.500000000	CO061E209	MH061E202			90	CLCO061E209MH061E202	6	0.0771	0.002443	0.04	0.002933	0.04	0.003478	0.04	0.002933	0.04
CLCO061E216MH061E224			1998		Existing		CO061E216	MH061E224		A0076A	IRWD	PVC	{8E44AA6F-D1A3-41EB-9FF8-043CDAAF1A1B}	CLCO061E216MH061E224	56.59		55.93	0.666666667	CO061E216	MH061E224			76	CLCO061E216MH061E224	8	0.0087	0.009090	0.08	0.010911	0.08	0.012937	0.09	0.010911	0.08
CLCO061E217MH061E224			1998		Existing		CO061E217	MH061E224		A0076A	IRWD	PVC	{DCC0842D-846E-49B1-8826-4355E224B86E}	CLCO061E217MH061E224	58.18		55.93	0.666666667	CO061E217	MH061E224			199	CLCO061E217MH061E224	8	0.0113	0.001693	0.03	0.002034	0.04	0.002410	0.04	0.002034	0.04
CLCO061E218MH061E226			1998		Existing		CO061E218	MH061E226		A0076A	IRWD	PVC	{0AB3F74F-6B20-46AC-8DFA-BD158F46F7B4}	CLCO061E218MH061E226	58.24		57.70	0.666666667	CO061E218	MH061E226			139	CLCO061E218MH061E226	8	0.0039	0.012934	0.10	0.015417	0.11	0.018276	0.12	0.015417	0.11
CLCO061E219MH061E225			1998		Existing		CO061E219	MH061E225		A0076A	IRWD	PVC	{64B0B0FD8-685C-4AAA-9D06-7156C9287F93}	CLCO061E219MH061E225	59.95		58.90	0.666666667	CO061E219	MH061E225			63	CLCO061E219MH061E225	8	0.0063	0.006603	0.07	0.007926	0.07	0.009396	0.08	0.007926	0.07
CLCO061E220MH061E233			1998		Existing		CO061E220	MH061E233		A0076A	IRWD	PVC	{2F290C6E-21E5-4EE1-A1EE-80792EEBA688}	CLCO061E220MH061E233	61.11		60.27	0.666666667	CO061E220	MH061E233			171	CLCO061E220MH061E233	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO061E221MH061E234			1998		Existing		CO061E221	MH061E234		A0076A	IRWD	PVC	{2AEC58E7-88F0-4E7A-BD92-2952F1761C99}	CLCO061E221MH061E234	61.00		57.34	0.500000000	CO061E221	MH061E234			119	CLCO061E221MH061E234	6	0.0308	0.002003	0.04	0.002403	0.04	0.002849	0.05	0.002403	0.04
CLCO061E222MH061E231			1998		Existing		CO061E222	MH061E231		A0076A	IRWD	PVC	{54D899E3-4F1B-411B-A462-624C72537E9F}	CLCO061E222MH061E231	57.09		55.15	0.666666667	CO061E222	MH061E231			160	CLCO061E222MH061E231	8	0.0121	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO061E223MH061E234			1998		Existing		CO061E223	MH061E234		A0076A	IRWD	PVC	{94319C1B-A633-4689-9292-0F2277A486E0}	CLCO061E223MH061E234	61.24		57.34	0.666666667	CO061E223	MH061E234			160	CLCO061E223MH061E234	8	0.0244	0.002314	0.03	0.002780	0.03	0.003295	0.04	0.002780	0.03
CLCO061E237MH061E020			1992		Existing		CO061E237	MH061E020		A00755	IRWD	VCP	{A3A42275-7B7B-4DD8-A628-C1A19B3DEB27}	CLCO061E237MH061E020	49.78		48.73	0.666666667	CO061E237	MH061E020			75	CLCO061E237MH061E020	8	0.0700	0.000000	0.02	0.000000	0.03	0.000000	0.03	0.000000	0.03
CLCO061N015MH061N016			1993		Existing		CO061N015	MH061N016		T14788	IRWD	PVC	{6758C20F-A433-48EA-82CE-199D416831CE}	CLCO061N015MH061N016	47.50		45.59	0.500000000	CO061N015	MH061N016			140	CLCO061N015MH061N016	6	0.0136	0.002487	0.05	0.002985	0.06	0.003540	0.06	0.002985	0.06
CLCO061N018MH061N019			1993		Existing		CO061N018	MH061N019		T14788	IRWD	PVC	{86DB1B08-9ABC-465B-AEEC-5D9B06D268FC}	CLCO061N018MH061N019	46.88		46.11	0.500000000	CO061N018	MH061N019			130	CLCO061N018MH061N019	6	0.0059	0.000386	0.02	0.000463	0.02	0.000549	0.03	0.000463	0.02
CLCO061N022MH061N023			1994		Existing		CO061N022	MH061N023		T14788	IRWD	PVC	{EE661FFC-1CD8-4525-89A9-8DA1036 1F9ED}	CLCO061N022MH061N023	48.00		44.52	0.500000000	CO061N022	MH061N023			135	CLCO061N022MH061N023	6	0.0258	0.002552	0.05	0.003062	0.05	0.003630	0.05	0.003062	0.05
CLCO061N034MH061N033			1993		Existing		CO061N034	MH061N033		T14788	IRWD	PVC	{9083C7CE-FCD4-45F1-B0EE-D4D982DBCA7D}	CLCO061N034MH061N033	45.20		43.56	0.500000000	CO061N034	MH061N033			40	CLCO061N034MH061N033	6	0.0410	0.001201	0.03	0.001442	0.03	0.001709	0.03	0.001442	0.03
CLCO061N035MH061N033			1993		Existing		CO061N035	MH061N033		T14788	IRWD	PVC	{72F8CD60-2037-412B-9483-227D86A551D2}	CLCO061N035MH061N033	45.00		43.56	0.500000000	CO061N035	MH061N033			145	CLCO061N035MH061N033	6	0.0099	0.002573	0.06	0.003087	0.06	0.003662	0.07	0.003087	0.06
CLCO061N038MH061N037			1993		Existing		CO061N038	MH061N037		T14788	IRWD	PVC	{4E205335-7D33-428D-B27F-A86F58323500}	CLCO061N038MH061N037	45.79		42.22	0.500000000	CO061N038	MH061N037			224	CLCO061N038MH061N037	6	0.0159	0.006023	0.08	0.007232	0.08	0.008574	0.09	0.007232	0.08
CLCO061N040MH061N041			1993		Existing		CO061N040	MH061N041		T14788	IRWD	PVC	{FB9E276E-6004-4706-A6A6-BADD32BA5A3C}	CLCO061N040MH061N041	44.47		43.79	0.500000000	CO061N040	MH061N041			124	CLCO061N040MH061N041	6	0.0055	0.003494	0.07	0.004194	0.08	0.004974	0.09	0.004194	0.08
CLCO061N043MH061N044			1993		Existing		CO061N043	MH061N044		T14788	IRWD	PVC	{29454B13-6837-464E-AEE3-C2BAE1BA7D60}	CLCO061N043MH061N044	44.00		43.43	0.500000000	CO061N043	MH061N044			60	CLCO061N043MH061N044	6	0.0067	0.002958	0.07	0.003551	0.07	0.004211	0.08	0.003551	0.07
CLCO061N047MH061N046			1993		Existing		CO061N047	MH061N046		T14788	IRWD	PVC	{8E335362-B084-4002-9282-0195925A42F5}	CLCO061N047MH061N046	45.09		45.06	0.500000000	CO061N047	MH061N046			6	CLCO061N047MH061N046	6	0.0004	0.002702	0.10	0.003243	0.11	0.003844	0.12	0.003243	0.11
CLCO061N052MH061N051			1993		Existing		CO061N052	MH061N051		T14788	IRWD	PVC	{C12AD004-D140-48E1-BA9C-2F062BFFF736}	CLCO061N052MH061N051	47.34		46.54	0.500000000	CO061N052	MH061N051			82	CLCO061N052MH061N051	6	0.0098	0.002958	0.06	0.003551	0.07	0.004211	0.07	0.003551	0.07
CLCO061N056MH061N066			1994		Existing		CO061N056	MH061N066		T14953	IRWD	PVC	{C487C4D1-FBF4-4D9E-BEE9-E6C43BDEED4A}	CLCO061N056MH061N066	47.79		43.16	0.666666667	CO061N056	MH061N066			236	CLCO061N056MH061N066	8	0.0196	0.005552	0.05	0.006666	0.05	0.007903	0.06	0.006666	0.05
CLCO061N058MH061N059			1994		Existing		CO061N058	MH061N059		T14953	IRWD	PVC	{6044EE4F-40EC-48C1-B0B6-79E094CB282A}	CLCO061N058MH061N059	46.20		40.79	0.666666667	CO061N058	MH061N059			180	CLCO061N058MH061N059	8	0.0301	0.004286	0.04	0.005147	0.04	0.006102	0.05	0.005147	0.04
CLCO061N060MH061N061			1994		Existing		CO061N060	MH061N061		T14953	IRWD	PVC	{A6135071-641C-4DBD-A49C-9AD1386977 2A}	CLCO061N060MH061N061	45.79		41.38	0.666666667	CO061N060	MH061N061			155	CLCO061N060MH061N061	8	0.0245	0.003859	0.04	0.004632	0.04	0.005491	0.05	0.004632	0.04
CLCO061N068MH061N067			1994		Existing		CO061N068	MH061N067		T14953	IRWD	PVC	{4F40CA7C-E53D-4BDF-815B-458BC95A3F1C}	CLCO061N068MH061N067	47.29		43.75	0.666666667	CO061N068	MH061N067			187	CLCO061N068MH061N067	8	0.0189	0.004972	0.05	0.005969	0.05	0.007078	0.06	0.005969	0.05
CLCO061N069MH061N066			1994		Existing		CO061N069	MH061N066		T14953	IRWD	PVC	{59C67BAE-35F4-4987-8245-28DBF4BA26E6}	CLCO061N069MH061N066	46.70		43.16	0.666666667	CO061N069	MH061N066			192	CLCO061N069MH061N066	8	0.0184	0.004972	0.05	0.005969	0.05	0.007078	0.06	0.005969	0.05
CLCO061N070MH061N063			1994		Existing		CO061N070	MH061N063		T14953	IRWD	PVC	{AA2399BF-C8CB-49B4-AEB4-81EB9FC74CFB}	CLCO061N070MH061N063	44.47		42.56	0.666666667	CO061N070	MH061N063			193	CLCO061N070MH061N063	8	0.0099	0.005037	0.06	0.006048	0.06	0.007170	0.07	0.006048	0.06
CLCO061N071MH061N064			1994		Existing		CO061N071	MH061N064		T14953	IRWD	PVC	{76FB5611-A7F7-4D08-8BD8-BE05CC257 1F6}	CLCO061N071MH061N064	44.77		43.20	0.666666667	CO061N071	MH061N064			198	CLCO061N071MH061N064	8	0.0079	0.006002	0.06	0.007206	0.07	0.008544	0.07	0.007206	0.07
CLCO061N073MH061N080			1995		Existing		CO061N073	MH061N080		T14873	IRWD	PVC	{CC58OB72-8EC5-4FD0-88A2-CD58B8331FAB}	CLCO061N073MH061N080	47.00		46.27	0.500000000	CO061N073	MH061N080			30	CLCO061N073MH061N080	6	0.0243	0.001030	0.03	0.001235	0.03	0.001464	0.04	0.001235	0.03
CLCO061N192MH061N130			2005		Existing	assumed Mannings N	CO061N192	MH061N130		T16662	IRWD	PVC	{60F358D8-0868-4AA5-A8E9-DCA083934925}	CLCO061N076MH061N130	45.77		45.49	0.666666667	CO061N192	MH061N130			71	CLCO061N192MH061N130	8	0.0404	0.003194	0.05	0.003835	0.06	0.004547	0.06	0.003835	0.06
CLCO061N215MH061N142			2003		Existing	assumed Mannings N	CO061N215	MH061N142		T16661	IRWD	PVC	{E5F5151ED-D1FC-406D-A08C-47A2D9E5C08F4}	CLCO061N099MH061N142	45.60		44.39	0.666666667	CO061N215	MH061N142			82	CLCO061N215MH061N142	8	0.0082	0.001243	0.03	0.001493	0.03	0.001769	0.03	0.001493	0.03
CLCO061N216MH061N141			2005		Existing	assumed Mannings N	CO061N216	MH061N141		T16661	IRWD	PVC	{E7E445D0-1869-4DBB-B030-794BCF393425}	CLCO061N100MH061N141	45.89		41.69	0.666666667	CO061N216	MH061N141			271	CLCO061N216MH061N141	8	0.0155	0.003773	0.04	0.004529	0.05	0.005371	0.05	0.004529	0.05
CLCO061N217MH061N141			2005		Existing	assumed Mannings N	CO061N217	MH061N141		T16661	IRWD	PVC	{7AF62AEE-B58E-40B5-A365-0651DF5F87EC}	CLCO061N101MH061N141	44.70		41.59	0.666666667	CO061N217	MH061N141			79	CLCO061N217MH061N141	8	0.0392	0.002058	0.03	0.002470	0.03	0.002929	0.03	0.002470	0.03
CLCO061N218MH061N104			2005		Existing	assumed Mannings N	CO061N218	MH061N104		T16663	IRWD	PVC	{97382728-0145-44FA-B9A7-120EF46476 53}	CLCO061N102MH061N104	44.59		42.15	0.666666667	CO061N218	MH061N104			215	CLCO061N218MH061N104	8	0.0100	0.003751	0.05	0.004501	0.05	0.005339	0.06	0.004501	0.05
CLCO061N219MH061N142			2005		Existing	assumed Mannings N	CO061N219	MH061N142		T16661	IRWD	PVC	{D927A797-0A3A-633D-B012-3062275DBE93}	CLCO061N103MH061N142	45.16		44.29	0.666666667	CO061N219	MH061N142			92	CLCO061N219MH061N142	8	0.0094	0.002252	0.04	0.002703	0.04	0.003203	0.05	0.002703	0.04
CLCO061N220MH061W152			2007		Existing		CO061N220	MH061W152		A01865	IRWD	PVC	{62619E28-FC71-4C5F-8661-63E435155BF4}	CO061N220-MH061W152	32.00		31.26	0.666666667	CO061N220	MH061W152			74	CLCO061N220MH061W152	8	0.0100	0.000718	0.02	0.000767	0.02	0.000909	0.02	0.000767	0.02
CLCO061S020MH061S019			1986		Existing		CO061S020	MH061S019		T12352	IRWD	PVC	{EE10D291-EC5F-4E86-8724-603857AD23D4}	CLCO061S020MH061S019	55.79		55.47	0.666666667	CO061S020	MH061S019			65	CLCO061S020MH061S019	8	0.0049	0.004822	0.06	0.005790	0.07	0.006865	0.07	0.005790	0.07
CLCO061S024MH061S023			1986		Existing		CO061S024	MH061S023		T12352	IRWD	PVC	{7242A5F4-B2B2-4DB5-9C22-A39E1626CA58}	CLCO061S024MH061S023	57.04		56.65	0.666666667	CO061S024	MH061S023			79	CLCO061S024MH061S023	8	0.0049	0.005034	0.06	0.006024	0.07	0.007143	0.07	0.006024	0.07
CLCO061S025MH061S027			1986		Existing		CO061S025	MH061S027		T12352	IRWD	PVC	{83A61F30-A337-4FFB-9144-DEBED64938AE}	CLCO061S025MH061S027	54.06		53.16	0.666666667	CO061S025	MH061S027			184	CLCO061S025MH061S027	8	0.0049	0.005658	0.07	0.006794	0.07	0.008055	0.08	0.006794	0.07
CLCO061S026MH061S027			1986		Existing		CO061S026	MH061S027		T12352	IRWD	PVC	{AC28DCB7-0F0E-4848-8B3B-240974A056B7}	CLCO061S026MH061S027	53.81		53.16	0.666666667	CO061S026	MH061S027			131	CLCO061S026MH061S027	8	0.0050	0.004102	0.06	0.004902	0.06	0.005813	0.07	0.004902	0.06
CLCO061S028MH061S029			1986		Existing		CO061S028	MH061S029		T12352	IRWD	PVC	{C24E1B70-4428-4389-8F42-FFB0C2CA41DD}	CLCO061S028MH061S029	56.47		56.09	0.666666667	CO061S028	MH061S029			78	CLCO061S028MH061S029	8	0.0049	0.008666	0.08	0.010380	0.09	0.012306	0.10	0.010380	0.09
CLCO061S033MH061S032			1986		Existing		CO061S033	MH061S032		T12352	IRWD	PVC	{8F3F1B5E-DEAC-47D6-858F-6C9368AB2C24}	CLCO061S033MH061S032	57.50		57.02	0.666666667	CO061S033	MH061S032			97	CLCO061S033MH061S032	8	0.0049	0.003087	0.05	0.003707	0.05	0.004393	0.06	0.003707	0.05
CLCO061S034MH061S032			1986		Existing		CO061S034	MH061S032		T12352	IRWD	PVC	{14EC48E7-C3D8-4FCB-B2CC-3EBCFE0DA798}	CLCO061S034MH061S032	57.75		57.02	0.666666667	CO061S034	MH061S032			146	CLCO061S034MH061S032	8	0.0050	0.005252	0.06	0.006305	0.07	0.007476	0.08	0.006305	0.07
CLCO061S037MH061S036			1986		Existing		CO061S037	MH061S036		T12351	IRWD	PVC	{BC18AF0A-BE20-430F-B22C-0B051478175C}	CLCO061S037MH061S036	46.58		45.50	0.666666667	CO061S037	MH061S036			27	CLCO061S037MH061S036	8	0.0400	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO061S042MH061S041			1986		Existing		CO061S042	MH061S041		T12351	IRWD	PVC	{9999A92F-9A45-4D85-B705-05DD01617C9C}	CLCO061S042MH061S041	45.04		43.56	0.666666667	CO061S042	MH061S041			89	CLCO061S042MH061S041	8	0.0166	0.001436	0.03	0.001724	0.03	0.002045	0.03	0.001724	0.03
CLCO061S046MH061S044			1986		Existing		CO061S046	MH061S044		T12351	IRWD	PVC	{A4477F5F9-EC2E-4DD6-9B55-D918318AC376}	CLCO061S046MH061S044	45.02		42.11	0.666666667	CO061S046	MH061S044			92	CLCO061S046MH061S044	8	0.0316	0.001737	0.03	0.002085	0.03	0.002472	0.03	0.002085	0.03
CLCO061S052MH061S051			1986		Existing		CO061S052	MH061S051		T12351	OTHER	PVC	{F66A6308-BF28-4054-9833-25D3EF448512}	CLCO061S052MH061S051	45.29		45.06	0.666666667	CO061S052	MH061S051			58	CLCO061S052MH061S051	8	0.0040	0.001030	0.03	0.001235	0.03	0.001464	0.03	0.001235	0.03
CLCO061S053MH061S054			1986		Existing		CO061S053	MH061S054		T12351	IRWD	PVC	{ABC4405F-0125-4B43-9BE0-76893AD446BD}	CLCO061S053MH061S054	43.40		39.49	0.666666667	CO061S053	MH061S054			54	CLCO061S053MH061S054	8	0.0477	0.001586	0.02	0.001904	0.02	0.002258	0.03	0.001904	0.02
CLCO061S059MH061S058			1986		Existing		CO061S059	MH061S058		T12351	IRWD	PVC	{2AFC188A-1345-47DB-9834-6B107BCE8258}	CLCO061S059MH061S058	44.36		42.84	0.666666667	CO061S059	MH061S058			49	CLCO061S059MH061S058	8	0.0310	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO061S064M

CLCO06ZE110MH06ZE104		1984		Existing		CO06ZE110	MH06ZE104		T11982	IRWD	PVC	{5D32AD2B-9CC7-42CF-BA35-F8970A15B86F}	CLCO06ZE110MH06ZE104	51.13	50.24	0.666666667	CO06ZE110	MH06ZE104			92	CLCO06ZE110MH06ZE104	8	0.0097	0.001307	0.03	0.001570	0.03	0.001861	0.03	0.001570	0.03
CLCO06ZE111MH06ZE102		1984		Existing		CO06ZE111	MH06ZE102		T11982	IRWD	PVC	{68D26E35-858E-4574-A552-435350496DB2}	CLCO06ZE111MH06ZE102	50.38	49.47	0.666666667	CO06ZE111	MH06ZE102			92	CLCO06ZE111MH06ZE102	8	0.0099	0.001328	0.03	0.001596	0.03	0.001891	0.03	0.001596	0.03
CLCO06ZE112MH06ZE097		1984		Existing		CO06ZE112	MH06ZE097		T11982	IRWD	PVC	{A66AAD60-C710-4E31-9DB5-AEBE413D004E}	CLCO06ZE112MH06ZE097	50.18	49.29	0.666666667	CO06ZE112	MH06ZE097			92	CLCO06ZE112MH06ZE097	8	0.0097	0.001372	0.03	0.001647	0.03	0.001953	0.04	0.001647	0.03
CLCO06ZE113MH06ZE099		1984		Existing		CO06ZE113	MH06ZE099		T11982	IRWD	PVC	{5E3C7C55-3349-4C5D-9DD7-93F0E54ECC2}	CLCO06ZE113MH06ZE099	50.93	50.04	0.666666667	CO06ZE113	MH06ZE099			92	CLCO06ZE113MH06ZE099	8	0.0097	0.001051	0.02	0.001261	0.03	0.001496	0.03	0.001261	0.03
CLCO06ZE114MH06ZE101		1984		Existing		CO06ZE114	MH06ZE101		T11982	IRWD	PVC	{4FA807B3-AEA2-45A5-9D0E-0FAB9DA274F7}	CLCO06ZE114MH06ZE101	51.72	50.83	0.666666667	CO06ZE114	MH06ZE101			92	CLCO06ZE114MH06ZE101	8	0.0097	0.000836	0.02	0.001004	0.02	0.001190	0.03	0.001004	0.02
CLCO06ZE115MH06ZE101		1984		Existing		CO06ZE115	MH06ZE101		T11982	IRWD	PVC	{D8308A1F-60C2-49A3-BB87-650031053C77}	CLCO06ZE115MH06ZE101	51.02	50.72	0.666666667	CO06ZE115	MH06ZE101			75	CLCO06ZE115MH06ZE101	8	0.0040	0.000665	0.02	0.000797	0.02	0.000946	0.03	0.000797	0.02
CLCO06ZE116MH06ZE100		1984		Existing		CO06ZE116	MH06ZE100		T11982	IRWD	PVC	{209F8BEE-8D51-4E00-A10D-21E60E8D0E66}	CLCO06ZE116MH06ZE100	51.06	50.68	0.666666667	CO06ZE116	MH06ZE100			129	CLCO06ZE116MH06ZE100	8	0.0029	0.003065	0.05	0.003679	0.06	0.004363	0.06	0.003679	0.06
CLCO06ZE117MH06ZE098		1984		Existing		CO06ZE117	MH06ZE098		T11982	IRWD	PVC	{012BECF1-938F-4D3A-9AE6-03D3EBC5A13B}	CLCO06ZE117MH06ZE098	50.31	49.79	0.666666667	CO06ZE117	MH06ZE098			129	CLCO06ZE117MH06ZE098	8	0.0040	0.003623	0.06	0.004350	0.06	0.005155	0.07	0.004350	0.06
CLCO06ZE118MH06ZE103		1984		Existing		CO06ZE118	MH06ZE103		T11982	IRWD	PVC	{BC07371F-56A4-4AB0-98F2-9D3565240AF7}	CLCO06ZE118MH06ZE103	50.04	49.72	0.666666667	CO06ZE118	MH06ZE103			82	CLCO06ZE118MH06ZE103	8	0.0039	0.001478	0.03	0.001775	0.04	0.002104	0.04	0.001775	0.04
CLCO06ZE119MH06ZE105		1984		Existing		CO06ZE119	MH06ZE105		T11982	IRWD	PVC	{8B220A45-39EF-4E59-B020-485301B9B890}	CLCO06ZE119MH06ZE105	50.79	50.47	0.666666667	CO06ZE119	MH06ZE105			82	CLCO06ZE119MH06ZE105	8	0.0039	0.001030	0.03	0.001235	0.03	0.001464	0.03	0.001235	0.03
CLCO06ZE120MH06ZE106		1984		Existing		CO06ZE120	MH06ZE106		T11982	IRWD	PVC	{BAA67E1F-045D-4993-9E90-D613CDA63352}	CLCO06ZE120MH06ZE106	51.70	51.38	0.666666667	CO06ZE120	MH06ZE106			92	CLCO06ZE120MH06ZE106	8	0.0035	0.001693	0.04	0.002034	0.04	0.002410	0.05	0.002034	0.04
CLCO06ZE121MH06ZE094		1994		Existing		CO06ZE121	MH06ZE094		T11982	IRWD	VCP	{2402BA7A-2C57-4B04-90A4-CB668D840BFC}	CLCO06ZE121MH06ZE094	50.52	49.62	0.500000000	CO06ZE121	MH06ZE094			102	CLCO06ZE121MH06ZE094	6	0.0098	0.002702	0.06	0.003243	0.07	0.003844	0.07	0.003243	0.07
CLCO06ZE122MH06ZE094		1994		Existing		CO06ZE122	MH06ZE094		T11982	IRWD	VCP	{952BADAB-F46E-4B40-B8F6-A0050B0C1BD2}	CLCO06ZE122MH06ZE094	52.08	49.52	0.500000000	CO06ZE122	MH06ZE094			256	CLCO06ZE122MH06ZE094	6	0.0100	0.004856	0.08	0.005788	0.09	0.006860	0.09	0.005788	0.09
CLCO06ZE123MH06ZE086		1984		Existing		CO06ZE123	MH06ZE086		T11982	IRWD	VCP	{2F03DE97-FAAB-4219-8D3D-41D45F377B0B}	CLCO06ZE123MH06ZE086	53.81	50.72	0.500000000	CO06ZE123	MH06ZE086			223	CLCO06ZE123MH06ZE086	6	0.0139	0.003388	0.06	0.004066	0.07	0.004686	0.07	0.004066	0.07
CLCO06ZE124MH06ZE088		1984		Existing		CO06ZE124	MH06ZE088		T11982	IRWD	VCP	{120BA0D5-F5FC-42D4-B5B9-6221F72AB378}	CLCO06ZE124MH06ZE088	53.68	50.27	0.500000000	CO06ZE124	MH06ZE088			223	CLCO06ZE124MH06ZE088	6	0.0153	0.002787	0.06	0.003346	0.06	0.003965	0.07	0.003346	0.06
CLCO06ZE125MH06ZE091		1984		Existing		CO06ZE125	MH06ZE091		T11982	IRWD	VCP	{020C22D3-F740-43CC-99ED-22AFCFC4817D}	CLCO06ZE125MH06ZE091	55.61	53.13	0.500000000	CO06ZE125	MH06ZE091			92	CLCO06ZE125MH06ZE091	6	0.0270	0.001092	0.03	0.001312	0.03	0.001555	0.04	0.001312	0.03
CLCO06ZE126MH06ZE131		1984		Existing		CO06ZE126	MH06ZE131		T11982	IRWD	VCP	{0FF63847-67FA-4BDD-9A56-4BF92FA59C78}	CLCO06ZE126MH06ZE131	53.99	53.27	0.500000000	CO06ZE126	MH06ZE131			53	CLCO06ZE126MH06ZE131	6	0.0147	0.002252	0.05	0.002703	0.06	0.003203	0.06	0.002703	0.06
CLCO06ZE127MH06ZE092		1984		Existing		CO06ZE127	MH06ZE092		T11982	IRWD	VCP	{4F2F33AB-39E3-4934-ABB4-B5077FF07B2B}	CLCO06ZE127MH06ZE092	56.22	54.18	0.500000000	CO06ZE127	MH06ZE092			92	CLCO06ZE127MH06ZE092	6	0.0222	0.001092	0.03	0.001312	0.04	0.001555	0.04	0.001312	0.04
CLCO06ZE128MH06ZE081		1984		Existing		CO06ZE128	MH06ZE081		T11982	IRWD	VCP	{30978B03-EAA2-466C-830A-6D3053CA7E45}	CLCO06ZE128MH06ZE081	54.25	53.81	0.500000000	CO06ZE128	MH06ZE081			45	CLCO06ZE128MH06ZE081	6	0.0098	0.001007	0.04	0.001209	0.04	0.001434	0.04	0.001209	0.04
CLCO06ZE129MH06ZE083		1984		Existing		CO06ZE129	MH06ZE083		T11982	IRWD	VCP	{D388EE1A-B64A-42FE-AB29-63272FAB1A98}	CLCO06ZE129MH06ZE083	53.90	52.54	0.500000000	CO06ZE129	MH06ZE083			139	CLCO06ZE129MH06ZE083	6	0.0098	0.002552	0.06	0.003062	0.06	0.003630	0.07	0.003062	0.06
CLCO06ZE130MH06ZE084		1984		Existing		CO06ZE130	MH06ZE084		T11982	IRWD	VCP	{9AA4B8FC-4367-4F5E-9AD6-0DFC1E39671E}	CLCO06ZE130MH06ZE084	53.22	51.86	0.500000000	CO06ZE130	MH06ZE084			139	CLCO06ZE130MH06ZE084	6	0.0098	0.001072	0.04	0.001286	0.04	0.001525	0.05	0.001286	0.04
CLCO06ZE133MH06ZE132		1984		Existing		CO06ZE133	MH06ZE132		T11982	IRWD	VCP	{B593982E-6B6C-4BDE-AD69-62B3001B0B7D}	CLCO06ZE133MH06ZE132	49.50	43.91	0.500000000	CO06ZE133	MH06ZE132			62	CLCO06ZE133MH06ZE132	6	0.0726	0.000492	0.02	0.000592	0.02	0.000701	0.02	0.000592	0.02
CLCO06ZE137MH06ZE136		1984		Existing		CO06ZE137	MH06ZE136		T11982	IRWD	VCP	{6D48FB63-5301-42AD-A4AD-62CD337A1391}	CLCO06ZE137MH06ZE136	50.77	45.84	0.500000000	CO06ZE137	MH06ZE136			63	CLCO06ZE137MH06ZE136	6	0.0850	0.002252	0.03	0.002703	0.04	0.003203	0.04	0.002703	0.04
CLCO06ZE138MH06ZE134		1984		Existing		CO06ZE138	MH06ZE134		T11982	IRWD	PVC	{D6F8D88F-E328-4A22-A500-D522DB168E7C}	CLCO06ZE138MH06ZE134	50.08	44.79	0.500000000	CO06ZE138	MH06ZE134			57	CLCO06ZE138MH06ZE134	6	0.0928	0.001351	0.03	0.001622	0.03	0.001923	0.03	0.001622	0.03
CLCO06ZE142MH06ZE141		1984		Existing		CO06ZE142	MH06ZE141		T11948	IRWD	PVC	{795B419B-7869-4030-9C08-410D3C293A10}	CLCO06ZE142MH06ZE141	51.04	46.72	0.500000000	CO06ZE142	MH06ZE141			49	CLCO06ZE142MH06ZE141	6	0.0882	0.001716	0.03	0.002060	0.03	0.002440	0.03	0.002060	0.03
CLCO06ZE143MH06ZE141		1984		Existing		CO06ZE143	MH06ZE141		T11982	IRWD	PVC	{5F8FF6A9-9BF8-473D-A88B-4A373ABFDF82}	CLCO06ZE143MH06ZE141	50.61	46.72	0.500000000	CO06ZE143	MH06ZE141			99	CLCO06ZE143MH06ZE141	6	0.0393	0.002208	0.04	0.002651	0.04	0.003143	0.05	0.002651	0.04
CLCO06ZE145MH06ZE144		1984		Existing		CO06ZE145	MH06ZE144		T11948	IRWD	PVC	{385DE0DC-29C9-42DC-887D-4084CF991FB2}	CLCO06ZE145MH06ZE144	51.29	47.27	0.500000000	CO06ZE145	MH06ZE144			58	CLCO06ZE145MH06ZE144	6	0.0693	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO06ZE148MH06ZE147		1984		Existing		CO06ZE148	MH06ZE147		T11948	IRWD	PVC	{CD4CF853-1E47-492B-98BB-3FFBA1E285DF}	CLCO06ZE148MH06ZE147	52.61	48.36	0.500000000	CO06ZE148	MH06ZE147			62	CLCO06ZE148MH06ZE147	6	0.0506	0.000655	0.02	0.000698	0.02	0.000829	0.02	0.000698	0.02
CLCO06ZE151MH06ZE150		1984		Existing		CO06ZE151	MH06ZE150		T11948	IRWD	PVC	{AC245242-16E4-426D-BB6F-00E5429020F3}	CLCO06ZE151MH06ZE150	51.06	50.61	0.500000000	CO06ZE151	MH06ZE150			47	CLCO06ZE151MH06ZE150	6	0.0096	0.001092	0.04	0.001311	0.04	0.001555	0.05	0.001312	0.04
CLCO06ZE153MH06ZE152		1984		Existing		CO06ZE153	MH06ZE152		T11948	IRWD	PVC	{A8EDA502-E872-4423-9000-4C49CB9C3F1}	CLCO06ZE153MH06ZE152	52.24	49.56	0.500000000	CO06ZE153	MH06ZE152			69	CLCO06ZE153MH06ZE152	6	0.0388	0.003278	0.05	0.003920	0.05	0.004646	0.06	0.003920	0.05
CLCO06ZE156MH06ZE155		1984		Existing		CO06ZE156	MH06ZE155		T11948	IRWD	PVC	{1953E0BB-97F8-40F9-A751-D627E94CECA5}	CLCO06ZE156MH06ZE155	52.81	52.54	0.500000000	CO06ZE156	MH06ZE155			63	CLCO06ZE156MH06ZE155	6	0.0090	0.000642	0.03	0.000771	0.03	0.000914	0.03	0.000771	0.03
CLCO06ZE158MH06ZE157		1982		Existing		CO06ZE158	MH06ZE157		T11948	IRWD	PVC	{C1D4B01C-1C7B-4CBB-9E26-AA8E78D132E6}	CLCO06ZE158MH06ZE157	52.63	49.83	0.500000000	CO06ZE158	MH06ZE157			63	CLCO06ZE158MH06ZE157	6	0.0500	0.000751	0.02	0.000902	0.02	0.001068	0.03	0.000902	0.02
CLCO06ZE159MH06ZE160		1984		Existing		CO06ZE159	MH06ZE160		T11948	IRWD	PVC	{AE1D1D28-3C4C-45EF-920B-023D466EC2C5}	CLCO06ZE159MH06ZE160	51.65	47.52	0.500000000	CO06ZE159	MH06ZE160			54	CLCO06ZE159MH06ZE160	6	0.0765	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO06ZE163MH06ZE161		1984		Existing		CO06ZE163	MH06ZE161		T11948	IRWD	PVC	{3A85C5A1-B275-450B-ACB2-A97AC9E75A9A}	CLCO06ZE163MH06ZE161	51.65	47.65	0.500000000	CO06ZE163	MH06ZE161			63	CLCO06ZE163MH06ZE161	6	0.1026	0.002122	0.03	0.002547	0.03	0.003021	0.04	0.002547	0.03
CLCO06ZE166MH06ZE168		1984		Existing		CO06ZE166	MH06ZE168		T11948	IRWD	PVC	{E4363853-C128-468F-B8CA-5328F9548437}	CLCO06ZE166MH06ZE168	53.22	51.43	0.500000000	CO06ZE166	MH06ZE168			34	CLCO06ZE166MH06ZE168	6	0.0526	0.002016	0.03	0.002419	0.04	0.002867	0.04	0.002419	0.04
CLCO06ZE167MH06ZE168		1982		Existing		CO06ZE167	MH06ZE168		T11948	IRWD	PVC	{32F79283-E733-4A6C-9CED-BDB854C48BD1}	CLCO06ZE167MH06ZE168	53.52	51.43	0.500000000	CO06ZE167	MH06ZE168			53	CLCO06ZE167MH06ZE168	6	0.0387	0.001951	0.04	0.002342	0.04	0.002777	0.04	0.002342	0.04
CLCO06ZE170MH06ZE165		1984		Existing		CO06ZE170	MH06ZE165		T11948	IRWD	PVC	{C9CB0E84-BC48-488D-81B3-BAAC2144AE92}	CLCO06ZE170MH06ZE165	53.29	49.68	0.500000000	CO06ZE170	MH06ZE165			63	CLCO06ZE170MH06ZE165	6	0.0694	0.002939	0.04	0.003517	0.04	0.004169	0.05	0.003517	0.04
CLCO06ZE200MH06ZE254		1999		Existing		CO06ZE200	MH06ZE254		A00352D	IRWD	VCP	{634C703C-3739-4D24-87SB-489649581ZCA}	CLCO06ZE200MH06ZE254	53.43	51.95	0.333333333	CO06ZE200	MH06ZE254			375	CLCO06ZE200MH06ZE254	4	0.0039	0.000992	0.08	0.001059	0.08	0.001255	0.08	0.001059	0.08
CLCO06ZE222MH06ZE224		1995		Existing		CO06ZE222	MH06ZE224		T13465	IRWD	VCP	{35150DF4-7DCB-451B-ACA8-8E277635705A}	CLCO06ZE222MH06ZE224	50.74	49.40	0.666666667	CO06ZE222	MH06ZE224			125	CLCO06ZE222MH06ZE224	8	0.0107	0.005508	0.06	0.006615	0.06	0.007841	0.07	0.006615	0.06
CLCO06ZE228MH06ZE227		1996		Existing		CO06ZE228	MH06ZE227		T13465	IRWD	PVC	{66BA7792-4F51-4559-B8D0-CB031C9E1D87}	CLCO06ZE228MH06ZE227	49.29	48.15	0.666666667	CO06ZE228	MH06ZE227			158	CLCO06ZE228MH06ZE227	8	0.0072	0.005016	0.06	0.006023	0.06	0.007140	0.07	0.006023	0.06
CLCO06ZE230MH06ZE229		1996		Existing		CO06ZE230	MH06ZE229		T13465	IRWD	PVC	{99348489-F781-44B1-8D54-CC1285A7E3CB}	CLCO06ZE230MH06ZE229	50.59	47.00	0.666666667	CO06ZE230	MH06ZE229			101	CLCO06ZE230MH06ZE229	8	0.0355	0.004866	0.04	0.005841	0.04	0.006927	0.05	0.005841	0.04
CLCO06ZE232MH06ZE231		1996		Existing		CO06ZE232	MH06ZE231		T13465	IRWD	PVC	{5C216C2F-CD78-4CA8-94EE-D79A5E256579}	CLCO06ZE232MH06ZE231	52.40	45.86	0.666666667	CO06ZE232	MH06ZE231			63	CLCO06ZE232MH06ZE231	8	0.0648	0.004630	0.03	0.005559	0.04	0.006591	0.04	0.005559	0.04
CLCO06ZE236MH06ZE237		1996		Existing		CO06ZE236	MH06ZE237		T13465	IRWD	PVC	{11896735-9C5A-49F4-BC39-7BF86A7A591C}	CLCO06ZE236MH06ZE237	49.29	48.81	0.666666667	CO06ZE236	MH06ZE237			69	CLCO06ZE236MH06ZE237	8	0.0098	0.004374	0.05	0.005249	0.06	0.006224	0.06	0.005249	0.06
CLCO06ZE238MH06ZE239		1996		Existing		CO06ZE238	MH06ZE239		T13465	IRWD	PVC	{C234896F-1BE8-436E-9F8F-553B8E951713}	CLCO06ZE238MH06ZE239	49.93	49.20	0.666666667	CO06ZE238	MH06ZE239			141	CLCO06ZE238MH06ZE239	8	0.0052	0.001801	0.04	0.002162	0.04	0.002564	0.05	0.002162	0.04
CLCO06ZE241MH06ZE240		1996		Existing		CO06ZE241	MH06ZE240		T13465	IRWD	PVC	{BA7CDB34-BCEF-4958-84C4-01FD3014B28F}	CLCO06ZE241MH06ZE240	49.50	47.72	0.666666667	CO06ZE241	MH06ZE240			148	CLCO06ZE241MH06ZE240	8	0.0120	0.003238	0.04	0.003886	0.05	0.004606	0.05	0.003886	0.05
CLCO06ZE243MH06ZE244		1996		Existing		CO06ZE243	MH06ZE244		T13465	IRWD	PVC	{3803AEF1-317D-4579-9856-C61D1595D5B23}	CLCO06ZE243MH06ZE244	48.43	47.74	0.666666667	CO06ZE243	MH06ZE244			140	CLCO06ZE243MH06ZE244	8	0.0049	0.002529	0.05	0.003036	0.05	0.003604	0.05	0.003036	0.05
CLCO06ZE247MH06ZE242		1996		Existing		CO06ZE247	MH06ZE242		T13465	IRWD	PVC	{A5B19399-845A-4F95-8188-77E1D1648A77}	CLCO06ZE247MH06ZE242	51.00	46.56	0.666666667	CO06ZE247	MH06ZE242			177	CLCO06ZE247MH06ZE242	8	0.0251	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO06ZE249MH06ZE248		1996		Existing		CO06ZE249	MH06ZE248		T13465	IRWD	PVC	{147E2311-C2FF-4AA3-A5D5-29476SA3BEA}	CLCO06ZE249MH06ZE248	52.90	45.39	0.666666667	CO06ZE249	MH06ZE248			63	CLCO06ZE249MH06ZE248	8	0.0427	0.003559	0.03	0.004273	0.04	0.005066	0.04	0.004273	0.04
CLCO06N002MH06N100		2006		Existing	assumed Mannings N	CO06N002	MH06N100	T16507	IRWD	PVC		{BD3DAGE-6636-4385-BCA4-262009123A56}	CLCO06N002MH06N100	49.09	48.76	0.666666667	CO06N002	MH06N100			83	CLCO06N002MH06N100	8	0.0040	0.001222	0.03	0.001468	0.03	0.001739	0.04	0.001468	0.03
CLCO06N003MH06N100		2006		Existing	assumed Mannings N	CO06N003	MH06N100	T16507	IRWD	PVC		{502817?8-CED8-4E08-8F04-7111E1A8CA09}	CLCO06N003MH06N100	49.97	48.76	0.666666667	CO06N003	MH06N100			71	CLCO06N003MH06N100	8	0.0172	0.000857	0.02	0.001029	0.02	0.001220	0.02	0.001029	0.02
CLCO06N004MH06N099	C 900	2006		Existing	assumed Mannings N	CO06N004	MH06N099	T16507	IRWD	PVC		{18B5109F-DBB6-4985-9824-420CC7FA7096}	CLCO06N004MH06N099	49.89	48.89	0.666666667	CO06N004	MH06N099			82	CLCO06N004MH06N099	8	0.0123	0.001372	0.03	0.001647	0.03	0.001953	0.03	0.001647	0.03
CLCO06N005MH06N099	C 900	2006		Existing	assumed Mannings N	CO06N005	MH06N099	T16507	IRWD	PVC		{2ED4E04D-180E-4DF5-8AD6-B8A053050D4}	CLCO06N005MH06N099	49.17	48.89	0.666666667	CO06N005	MH06N099			72	CLCO06N005MH06N099	8	0.0039	0.001993	0.04	0.002393	0.05	0.002837	0.05	0.002393	0.05
CLCO06N006MH06N095		2006		Existing	assumed Mannings N	CO06N006	MH06N095	T16507	IRWD	PVC		{A55FA475-9E1A-48EC-8EA3-BE13F3001574}	CLCO06N006MH06N095	52.53	50.48	0.666666667	CO06N006	MH06N095			206	CLCO06N006MH06N095	8	0.0099	0.001351	0.03	0.001623	0.03	0.001923	0.03	0.001623	0.03
CLCO06N007MH06N096		2006		Existing	assumed Mannings N	CO06N007	MH06N096	T16507	IRWD	PVC		{3D6B1066-C65C-45F9-8E31-E73EC0D5E38C}	CLCO06N007MH06N096	50.71	49.05	0.666666667	CO06N007	MH06N096			82	CLCO06N007MH06N096	8	0.0204	0.000729	0.01	0.000875	0.01	0.000397	0.01	0.000335	0.01
CLCO06N008MH06N095		2006		Existing	assumed Mannings N	CO06N008	MH06N095	T16507	IRWD	PVC		{68B8D26A-42EB-489A-B361-BE7734490292}	CLCO06N008MH06N095	50.71	50.38	0.666666667	CO06N008	MH06N095			82	CLCO06N008MH06N095	8	0.0040	0.001522	0.03	0.001827	0.04	0.002166	0.04	0.001827	0.04
CLCO06N009MH06N088		2006		Existing	assumed Mannings N	CO06N009	MH06N088	T16507	IRWD	PVC		{1CC90DEE-F15A-4A14-9348-6A16B1B06204}	CLCO06N009MH06N088	49.51	48.84	0.666666667	CO06N009	MH06N088			50	CLCO06N009MH06N088	8	0.0040	0.004587	0.06	0.005508	0.07	0.006529	0.07	0.005508	0.07
CLCO06N010MH06N089		2006		Existing	assumed Mannings N	CO06N010	MH06N089	T16507	IRWD	PVC		{20A2D4F6-3602-4EF3-A880-0A6820779E6C}	CLCO06N010MH06N089	51.37	50.70	0.666666667	CO06N010	MH06N089			82	CLCO06N010MH06N089	8	0.0040	0.003751	0.06	0.004504	0.06	0.005339	0.06	0.004504	0.06
CLCO06N011MH06N087		2006		Existing	assumed Mannings N	CO06N011	MH06N087	T16507	IRWD	PVC		{44A31388-3EF9-42E1-BC91-BF80C7972B10}	CLCO06N011MH06N087	49.67	44.76	0.666666667	CO06N011	MH06N087			166	CLCO06N011MH06N087	8	0.0297	0.004416	0.04	0.005301	0.04	0.006286	0.05	0.005301	0.04
CLCO06N012MH06N098		2006		Existing	assumed Mannings N	CO06N012	MH06N098	T16507	IRWD	PVC		{09DC2DED8-6593-4E8E-888F-71331C1401AF}	CLCO06N012MH06N098	51.92	47.96	0.666666667	CO06N012	MH06N098			227	CLCO06N012MH06N098	8	0.0175	0.004009	0.04	0.004811	0.05	0.005704	0.05	0.004811	0.05
CLCO06N013MH06N086		2006		Existing	assumed Mannings N	CO06N013	MH06N086	T16507	IRWD	PVC		{71181950-22F1-40FB-8A0C-86879DBD09C0}	CLCO06N013MH06N086	52.86	51.97	0.666666667	CO06N013	MH06N086			81	CLCO06N013MH06N086	8	0.0110	0.002723	0.04	0.003269	0.04	0.003876	0.05	0.003269	0.04
CLCO06N014MH06N094		2006		Existing	assumed Mannings N	CO06N014	MH06N094	T16507	IRWD	PVC		{4CD53146-A33A-422A-A0DC-D872913120331}	CLCO06N014MH06N094	52.73	47.93	0.666666667	CO06N014	MH06N094			254	CLCO06N014MH06N094	8	0.0189	0.001972	0.03	0.002367	0.03	0.002807	0.04	0.002367	0.03
CLCO06N015MH06N091		2006		Existing	assumed Mannings N	CO06N015	MH06N091	T16507	IRWD	PVC		{521A28F5-650A-4B23-BD2B-F962CB644B34}	CLCO06N015MH06N091	52.84	51.85	0.666666667	CO06N015	MH06N091			248	CLCO06N015MH06N091	8	0.0040	0.002143	0.04	0.002574	0.05	0.003051	0.05	0.002574	0.05
CLCO06N016MH06N103		2006		Existing	assumed Mannings N	CO06N016	MH06N103	T16507	IRWD	PVC		{D7E4A3C2-5693-4C0E-A9FD-D529940C6EEC}	CLCO06N016MH06N103	49.95	46.85	0.666666667	CO06N016	MH06N103			207	CLCO06N016MH06N103	8	0.0150	0.002252	0.03	0.002703	0.04	0.003203	0.04	0.002703	0.04
CLCO06N017MH06N102		2006		Existing	assumed Mannings N	CO06N017	MH06N102	T16507	IRWD	PVC		{E3E15E67-C2E0-48A2-8DA8-45E27CE53366}	CLCO06N017MH06N102	50.40	45.99	0.666666667	CO06N017	MH06N102			226	CLCO06N017MH06N102	8	0.0195	0.001586	0.03	0.001904	0.03	0.002258	0.03	0.001904	0.03
CLCO06N020MH06N122		2006		Existing	assumed Mannings N	CO06N020	MH06N122	16474	IRWD	PVC		{4005FBA0-1845-4446-9CC8-E829863ACB6E}	CLCO06N020MH06N122	50.65	48.21	0.666666667	CO06N020	MH06N122			124	CLCO06N020MH06N122	8	0.0197	0.000665	0.02	0.000798	0.02	0.000946	0.02	0.000798	0.02
CLCO06N021MH06N119		2006		Existing	assumed Mannings N	CO06N021	MH06N119	16474	IRWD	PVC		{8AE33FDB-9B54-49D7-AFD4-D99924788C49}	CLCO06N021MH06N119	54.30	53.16	0.500000000	CO06N021	MH06N119			59	CLCO06N021MH06N119	6	0.0193	0.001522	0.04	0.001827	0.04	0.002166	0.05	0.001827	0.04
CLCO06N022MH06N119		2006		Existing	assumed Mannings N	CO06N022	MH06N119	16474	IRWD	PVC		{22D36007-60A9-4120-B398-03CCCA531871}	CLCO06N022MH06N119	54.69	53.16	0.500000000	CO06N022	MH06N119			74	CLCO06N022MH06N119	6	0.0207	0.002443	0.05	0.002933	0.05	0.003478	0.06	0.002933	0.05
CLCO06N023MH06N145		2006		Existing	assumed Mannings N	CO06N023	MH06N145	16474	IRWD	PVC		{296EC811-7F1C-428D-A510-492B590E07AE}	CLCO06N023MH06N145	53.16	51.54	0.500000000	CO06N023	MH06N145			74	CLCO06N023MH06N145	6	0.0219	0.001737	0.04	0.002085	0.04	0.002472	0.05

| | | |

CLCO065Z078MH065042		2006		Existing	assumed Mannings N	CO065Z078	MH065042		T16644B	IRWD	PVC	{4C6EC288-70C5-4842-8862-48017A9FF91E}	CLCO065S053MH065042	98.81	96.98	0.500000000	CO065Z078	MH065042			117	CLCO065Z078MH065042	6	0.0156	0.001737	0.04	0.002085	0.05	0.002472	0.05	0.002085	0.05
CLCO065Z079MH065044		2006		Existing	assumed Mannings N	CO065Z079	MH065044		T16644B	IRWD	PVC	{A3FFD39F-43A3-42E9-8151-5F853CB54D7E}	CLCO065S054MH065044	97.90	96.19	0.500000000	CO065Z079	MH065044			123	CLCO065Z079MH065044	6	0.0139	0.001501	0.04	0.001801	0.05	0.002137	0.05	0.001801	0.05
CLCO065Z080MH065045		2006		Existing	assumed Mannings N	CO065Z080	MH065045		T16644B	IRWD	PVC	{908451C4-8998-4ABB-80F8-58E2B2E0EF E6}	CLCO065S055MH065045	96.92	95.48	0.500000000	CO065Z080	MH065045			129	CLCO065Z080MH065045	6	0.0112	0.002508	0.06	0.003010	0.06	0.003570	0.07	0.003010	0.06
CLCO065Z081MH065051		2006		Existing	assumed Mannings N	CO065Z081	MH065051		T16644B	IRWD	PVC	{DF1CFE62-D3E3-4DEF-9EA3-8B635C457B47}	CLCO065S056MH065051	96.92	93.14	0.500000000	CO065Z081	MH065051			114	CLCO065Z081MH065051	6	0.0132	0.000657	0.02	0.000794	0.02	0.000835	0.03	0.000794	0.02
CLCO065Z082MH065046		2006		Existing	assumed Mannings N	CO065Z082	MH065046		T16644B	IRWD	PVC	{5A177A6B-7B66-422E-9E7B-451BFD645A37}	CLCO065S057MH065046	95.05	94.55	0.500000000	CO065Z082	MH065046			125	CLCO065Z082MH065046	6	0.0040	0.001716	0.06	0.002060	0.06	0.002440	0.07	0.002060	0.06
CLCO064S083MH065062		2006		Existing	assumed Mannings N	CO064S083	MH065062		T16644A	IRWD	PVC	{03B751BF-F90D-4519-B69C-955D269DB28Z}	CLCO064S058MH065062	110.18	107.55	0.500000000	CO064S083	MH065062			95	CLCO064S083MH065062	6	0.0276	0.001351	0.03	0.001622	0.04	0.001923	0.04	0.001622	0.04
CLCO064S084MH065061		2006		Existing	assumed Mannings N	CO064S084	MH065061		T16644A	IRWD	PVC	{85C1D946-703E-482C-B89F-87C1212OF8D8}	CLCO065S059MH065061	108.91	106.28	0.500000000	CO064S084	MH065061			95	CLCO064S084MH065061	6	0.0276	0.000771	0.03	0.000927	0.03	0.001098	0.03	0.000927	0.03
CLCO064S085MH065060		2006		Existing	assumed Mannings N	CO064S085	MH065060		T16644A	IRWD	PVC	{2C72119C-9ED5-435C-9A77-FA523A56A137}	CLCO065S060MH065060	107.82	104.77	0.500000000	CO064S085	MH065060			92	CLCO064S085MH065060	6	0.0332	0.001030	0.03	0.001235	0.03	0.001464	0.03	0.001235	0.03
CLCO064S086MH065059		2006		Existing	assumed Mannings N	CO064S086	MH065059		T16644A	IRWD	PVC	{46DB07A0-2529-492A-B966-C779949FCE2A}	CLCO065S061MH065059	105.89	103.02	0.500000000	CO064S086	MH065059			100	CLCO064S086MH065059	6	0.0288	0.001478	0.03	0.001775	0.04	0.002104	0.04	0.001775	0.04
CLCO064S087MH065058		2006		Existing	assumed Mannings N	CO064S087	MH065058		T16644A	IRWD	PVC	{FE028E5B-AFCF-412E-8420-01154458E20}	CLCO065S062MH065058	104.69	101.83	0.500000000	CO064S087	MH065058			100	CLCO064S087MH065058	6	0.0288	0.001351	0.03	0.001622	0.04	0.001923	0.04	0.001622	0.04
CLCO064S088MH065057		2006		Existing	assumed Mannings N	CO064S088	MH065057		T16644A	IRWD	PVC	{6DA5AFB7-BCF2-4782-A14A-27FED0F6B4CA}	CLCO065S063MH065057	103.52	100.62	0.500000000	CO064S088	MH065057			99	CLCO064S088MH065057	6	0.0292	0.000901	0.03	0.001081	0.03	0.001282	0.03	0.001081	0.03
CLCO064S089MH065056		2006		Existing	assumed Mannings N	CO064S089	MH065056		T16644A	IRWD	PVC	{AF82255E-145C-4A55-9430-CA6A526666D6}	CLCO065S064MH065056	102.32	99.32	0.500000000	CO064S089	MH065056			102	CLCO064S089MH065056	6	0.0300	0.000965	0.03	0.001158	0.03	0.001374	0.03	0.001158	0.03
CLCO064S090MH065055		2006		Existing	assumed Mannings N	CO064S090	MH065055		T16644A	IRWD	PVC	{4C920DCF-6C52-4AD8-9AAB-5CB0D2534AED}	CLCO065S065MH065055	101.16	98.58	0.500000000	CO064S090	MH065055			99	CLCO064S090MH065055	6	0.0260	0.001478	0.04	0.001775	0.04	0.002104	0.04	0.001775	0.04
CLCO065Z091MH065056		2006		Existing	assumed Mannings N	CO065Z091	MH065056		T16644A	IRWD	PVC	{7816A758-138C-447A-9D3D-7B69F92F439F}	CLCO065S066MH065056	99.96	99.32	0.500000000	CO065Z091	MH065056			164	CLCO065Z091MH065056	6	0.0039	0.001072	0.05	0.001286	0.05	0.001525	0.05	0.001286	0.05
CLCO065Z092MH065057		2006		Existing	assumed Mannings N	CO065Z092	MH065057		T16644A	IRWD	PVC	{D305F21E-D58A-48BA-9563-BD7419GE4C0}	CLCO065S067MH065057	101.28	100.62	0.500000000	CO065Z092	MH065057			164	CLCO065Z092MH065057	6	0.0040	0.001265	0.05	0.001519	0.05	0.001801	0.06	0.001519	0.05
CLCO064S093MH065058		2006		Existing	assumed Mannings N	CO064S093	MH065058		T16644A	IRWD	PVC	{FBD87E82-C03E-48E4-8DB7-98668929AF15}	CLCO065S068MH065058	102.49	101.83	0.500000000	CO064S093	MH065058			164	CLCO064S093MH065058	6	0.0040	0.002101	0.06	0.002521	0.07	0.002989	0.07	0.002521	0.07
CLCO064S094MH065059		2006		Existing	assumed Mannings N	CO064S094	MH065059		T16644A	IRWD	PVC	{5250F1CE-686A-4DC5-AC1C-28CF1032FA1A}	CLCO065S069MH065059	103.68	103.02	0.500000000	CO064S094	MH065059			164	CLCO064S094MH065059	6	0.0040	0.001328	0.05	0.001596	0.05	0.001891	0.06	0.001596	0.05
CLCO064S095MH065060		2006		Existing	assumed Mannings N	CO064S095	MH065060		T16644A	IRWD	PVC	{91OCFC53-A867-4F2B-ABD4-B602EC162603}	CLCO065S070MH065060	105.48	104.77	0.500000000	CO064S095	MH065060			130	CLCO064S095MH065060	6	0.0055	0.001586	0.05	0.001904	0.05	0.002258	0.06	0.001904	0.05
CLCO064S096MH065061		2006		Existing	assumed Mannings N	CO064S096	MH065061		T16644A	IRWD	PVC	{D76EA1FB-981E-43EC-99C3-5476964840BE}	CLCO065S071MH065061	106.99	106.28	0.500000000	CO064S096	MH065061			137	CLCO064S096MH065061	6	0.0052	0.001351	0.05	0.001622	0.05	0.001923	0.06	0.001622	0.05
CLCO064S097MH065062		2006		Existing	assumed Mannings N	CO064S097	MH065062		T16644A	IRWD	PVC	{FB177267-F209-4921-88A9-D80352877B3D}	CLCO065S072MH065062	108.22	107.55	0.500000000	CO064S097	MH065062			129	CLCO064S097MH065062	6	0.0052	0.001595	0.05	0.001866	0.05	0.002212	0.06	0.001866	0.05
CLCO064W041MH064W032		2001		Existing	assumed Mannings N	CO064W041	MH064W032		A00883C	IRWD	VCP	{D48DC797-22F5-4C0E-8A6E-F87AC97AC51A}	CLCO064W041MH064W032	83.76	82.26	0.666666667	CO064W041	MH064W032			304	CLCO064W041MH064W032	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W043MH064W037		1998		Existing	assumed Mannings N	CO064W043	MH064W037		A00883	IRWD	VCP	{21669E3F-095C-41BD-B892-8E9E109AC1B5}	CLCO064W043MH064W037	72.54	72.51	0.666666667	CO064W043	MH064W037				CLCO064W043MH064W037	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W044MH064W037		1998		Existing	assumed Mannings N	CO064W044	MH064W037		A00883	IRWD	VCP	{B2A2A543-C10D-4CC2-8391-D58BE48CB8DF}	CLCO064W044MH064W037	72.66	72.51	0.666666667	CO064W044	MH064W037				CLCO064W044MH064W037	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W045MH064W040		1998		Existing	assumed Mannings N	CO064W045	MH064W040		A00883	IRWD	VCP	{545C0801-80D8-44DB-98BB-D0E310E898C9}	CLCO064W045MH064W040	73.58	73.50	0.666666667	CO064W045	MH064W040			8	CLCO064W045MH064W040	8	0.0100	0.000000	0.00	0.000000	0.01	0.000000	0.03	0.000000	0.01
CLCO064W076MH064W049		2002		Existing	assumed Mannings N	CO064W076	MH064W049		960	IRWD	PVC	{553E8A12-3A67-403C-9075-CFD06024A034}	CLCO064W076MH064W049	95.00	93.73	0.666666667	CO064W076	MH064W049			79	CLCO064W076MH064W049	8	0.0161	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W077MH064W051		2002		Existing	assumed Mannings N	CO064W077	MH064W051		960	IRWD	PVC	{45CF252D-0BB7-4D30-A236-36F2A3DD3875}	CLCO064W077MH064W051	94.12	92.41	0.666666667	CO064W077	MH064W051			121	CLCO064W077MH064W051	8	0.0141	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W078MH064W053		2002		Existing	assumed Mannings N	CO064W078	MH064W053		960	IRWD	PVC	{A9E4DE16-8AE8-487B-A839-935BD27F03DA}	CLCO064W078MH064W053	99.00	98.66	0.666666667	CO064W078	MH064W053			69	CLCO064W078MH064W053	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W079MH064W054		2002		Existing	assumed Mannings N	CO064W079	MH064W054		960	IRWD	PVC	{A1368779-5677-43D5-973D-91C200D43EF}	CLCO064W079MH064W054	97.33	96.12	0.666666667	CO064W079	MH064W054			169	CLCO064W079MH064W054	8	0.0072	0.004672	0.06	0.005610	0.06	0.006651	0.07	0.005610	0.06
CLCO064W080MH064W059		2002		Existing	assumed Mannings N	CO064W080	MH064W059		960	IRWD	PVC	{5657EB11-1651-4393-A701-77CFC3B523AA}	CLCO064W080MH064W059	90.93	88.18	0.666666667	CO064W080	MH064W059			373	CLCO064W080MH064W059	8	0.0177	0.007910	0.05	0.009497	0.05	0.011257	0.06	0.009497	0.05
CLCO064W081MH064W060		2002		Existing	assumed Mannings N	CO064W081	MH064W060		960	IRWD	PVC	{39735518-89FF-466F-AF7D-FBCD7D57651A}	CLCO064W081MH064W060	89.12	88.52	0.666666667	CO064W081	MH064W060			169	CLCO064W081MH064W060	8	0.0036	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W082MH064W062		2002		Existing	assumed Mannings N	CO064W082	MH064W062		960	IRWD	PVC	{1514FCEA-08E0-42GF-8FF2-D60A934ACECB}	CLCO064W082MH064W062	96.69	95.23	0.666666667	CO064W082	MH064W062			184	CLCO064W082MH064W062	8	0.0079	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W083MH064W066		2002		Existing	assumed Mannings N	CO064W083	MH064W066		A00960	IRWD	PVC	{90CF2B96-B868-402D-BF4E-BB318DDC5B0F}	CLCO064W083MH064W066	88.33	86.22	0.666666667	CO064W083	MH064W066			71	CLCO064W083MH064W066	8	0.0297	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W084MH064W068		2002		Existing	assumed Mannings N	CO064W084	MH064W068		A00960	IRWD	PVC	{81A1867E-9D0F-4C47-B887-77D5D628C522}	CLCO064W084MH064W068	86.83	83.94	0.666666667	CO064W084	MH064W068			169	CLCO064W084MH064W068	8	0.0171	0.004780	0.05	0.005739	0.05	0.006805	0.06	0.005739	0.05
CLCO064W085MH064W066		2002		Existing	assumed Mannings N	CO064W085	MH064W066		960	IRWD	PVC	{766C29CA-B4CE-62A3-8EBC-009BE495DAA0}	CLCO064W085MH064W066	90.52	86.22	0.666666667	CO064W085	MH064W066			82	CLCO064W085MH064W066	8	0.0524	0.009796	0.05	0.011762	0.06	0.013943	0.06	0.011762	0.06
CLCO064W086MH064W064		2002		Existing	assumed Mannings N	CO064W086	MH064W064		960	IRWD	PVC	{AEC06A78-E0F7-4081-8542-9DF66045CEE}	CLCO064W086MH064W064	92.59	86.76	0.666666667	CO064W086	MH064W064			221	CLCO064W086MH064W064	8	0.0264	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO064W087MH064W074		2002		Existing	assumed Mannings N	CO064W087	MH064W074		960	IRWD	PVC	{A8882E57-A7AC-42B8-BA61-D4F31A35CCE4}	CLCO064W087MH064W074	91.73	86.13	0.666666667	CO064W087	MH064W074			165	CLCO064W087MH064W074	8	0.0131	0.000000	0.00	0.000000	0.01	0.000000	0.01	0.000000	0.01
CLCO064W088MH064W075		2002		Existing	assumed Mannings N	CO064W088	MH064W075		960	IRWD	PVC	{D8F23213-BD1D-43CD-B6A8-32F21AE8CBE2}	CLCO064W088MH064W075	92.93	87.23	0.666666667	CO064W088	MH064W075			169	CLCO064W088MH064W075	8	0.0337	0.004737	0.04	0.005687	0.04	0.006743	0.05	0.005687	0.04
CLCO064W090MH064W089		2000		Existing	assumed Mannings N	CO064W090	MH064W089		A00064B	IRWD	PVC	{C63CBCFC-D06D-4760-A84E-99A5195E9DFFD}	CLMH064W089CO064W090	78.34	76.24	0.50000000	CO064W090	MH064W089			105	CLCO064W090MH064W089	6	0.0200	0.005762	0.07	0.006151	0.07	0.007294	0.08	0.006151	0.07
CLCO064W091MH064W089		2000		Existing	assumed Mannings N	CO064W091	MH064W089		A00064B	IRWD	PVC	{D097B035-AAA4-4A92-ACB1-5A2448248DCC}	CLMH064W089CO064W091	76.46	76.14	0.50000000	CO064W091	MH064W089			6	CLMH064W089CO064W091	6	0.0078	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO065E096MH065080		2000		Existing	assumed Mannings N	CO065E096	MH065080		T15494	IRWD	PVC	{857E3A68-2CFC-4B61-9C75-0144DFB737D0}	CLCO065E096MH065080	193.03	192.64	0.666666667	CO065E096	MH065080			39	CLCO065E096MH065080	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.05
CLCO065E097MH065E085		2000		Existing	assumed Mannings N	CO065E097	MH065E085		T15494	IRWD	PVC	{8ED5291C-4A5D-4200-A0F0-C75BFD3870E0}	CLCO065E097MH065E085	179.07	177.77	0.666666667	CO065E097	MH065E085			26	CLCO065E097MH065E085	8	0.0500	0.000617	0.01	0.000660	0.01	0.000782	0.01	0.000660	0.01
CLCO065E098MH065N101		1999		Existing	assumed Mannings N	CO065E098	MH065N101		T15741	IRWD	PVC	{DF6885DE-7D63-44A4-9507-407B70BA46B3}	CLCO065E098MH065N101	161.69	160.86	0.666666667	CO065E098	MH065N101			212	CLCO065E098MH065N101	8	0.0039	0.002512	0.05	0.003015	0.05	0.003574	0.06	0.003015	0.05
CLCO065E099MH065N102		1999		Existing	assumed Mannings N	CO065E099	MH065N102		T15741	IRWD	PVC	{C6E4B207-EA60-4081-AD11-B8BE5F667D71}	CLCO065E099MH065N102	158.30	157.30	0.666666667	CO065E099	MH065N102			213	CLCO065E099MH065N102	8	0.0047	0.004976	0.06	0.005976	0.07	0.007085	0.07	0.005976	0.06
CLCO065E100MH065E093		1999		Existing	assumed Mannings N	CO065E100	MH065E093		T15741	IRWD	PVC	{537A6E7E-D2AC-4667-BA27-CCDF7E7440BE}	CLCO065E100MH065E093	162.30	150.97	0.666666667	CO065E100	MH065E093			347	CLCO065E100MH065E093	8	0.0327	0.000673	0.01	0.000808	0.02	0.000957	0.02	0.000808	0.02
CLCO065E101MH065N104		1999		Existing	assumed Mannings N	CO065E101	MH065N104		T15741	IRWD	PVC	{DCBE3210-E255-4CB7-9880-EEEE834551C0}	CLCO065E101MH065N104	153.69	152.50	0.666666667	CO065E101	MH065N104			213	CLCO065E101MH065N104	8	0.0055	0.004775	0.06	0.005732	0.06	0.006796	0.07	0.005732	0.06
CLCO065E102MH065E095		1999		Existing	assumed Mannings N	CO065E102	MH065E095		T15741	IRWD	PVC	{9F51FD55-7FC8-4734-8DD6-440A3C120D7B}	CLCO065E102MH065E095	155.10	146.83	0.666666667	CO065E102	MH065E095			291	CLCO065E102MH065E095	8	0.0284	0.001256	0.04	0.001506	0.05	0.001786	0.05	0.001506	0.05
CLCO065E112MH065E105		1999		Existing	assumed Mannings N	CO065E112	MH065E105		T15744	IRWD	PVC	{B8A8E16A-3FD4-4D0C-B6B2-47E2E8C8CA0F}	CLCO065E112MH065E105	186.50	181.24	0.666666667	CO065E112	MH065E105			260	CLCO065E112MH065E105	8	0.0202	0.002196	0.03	0.002635	0.03	0.003128	0.04	0.002635	0.03
CLCO065E113MH065E108		1999		Existing	assumed Mannings N	CO065E113	MH065E108		T15744	IRWD	PVC	{A76516D1-A983-44ED-B9A9-D6D40202CB5F}	CLCO065E113MH065E108	179.60	173.63	0.666666667	CO065E113	MH065E108			218	CLCO065E113MH065E108	8	0.0274	0.005626	0.05	0.006756	0.05	0.008010	0.05	0.006756	0.05
CLCO065E114MH065E109		1999		Existing	assumed Mannings N	CO065E114	MH065E109		T15744	IRWD	PVC	{CF1451CE-5CB3-4B7D-B80A-BCADFAF9ABB5}	CLCO065E114MH065E109	173.89	165.53	0.666666667	CO065E114	MH065E109			230	CLCO065E114MH065E109	8	0.0363	0.004976	0.04	0.005976	0.04	0.007083	0.05	0.005976	0.04
CLCO065E115MH065E108		1999		Existing	assumed Mannings N	CO065E115	MH065E108		T15744	IRWD	PVC	{0E253CDC-6624-4E27-B409-F02B8513B248}	CLCO065E115MH065E108	182.89	173.52	0.666666667	CO065E115	MH065E108			273	CLCO065E115MH065E108	8	0.0343	0.003990	0.04	0.004790	0.04	0.005679	0.04	0.004790	0.04
CLCO065E116MH065E111		1999		Existing	assumed Mannings N	CO065E116	MH065E111		T15744	IRWD	PVC	{432F2B71-301A-44B0-97F9-3372354SF61C}	CLCO065E116MH065E111	177.19	176.11	0.666666667	CO065E116	MH065E111			43	CLCO065E116MH065E111	8	0.0251	0.001412	0.02	0.001696	0.03	0.002010	0.03	0.001696	0.03
CLCO065E117MH065S094		1999		Existing	assumed Mannings N	CO065E117	MH065S094		T15744	IRWD	PVC	{07CF49DD-D13A-4AE5-9FE8-1B66C4924286}	CLCO065E117MH065S094	171.80	164.63	0.666666667	CO065E117	MH065S094			218	CLCO065E117MH065S094	8	0.0329	0.010851	0.06	0.013026	0.07	0.015443	0.07	0.013026	0.07
CLCO065E127MH065E118		1999		Existing	assumed Mannings N	CO065E127	MH065E118		T15745	IRWD	PVC	{1C7D8246-760B-4FFF-A07D-6AB26AD1C1ED}	CLCO065E127MH065E118	197.10	188.36	0.666666667	CO065E127	MH065E118			242	CLCO065E127MH065E118	8	0.0361	0.002421	0.03	0.002906	0.03	0.003446	0.03	0.002906	0.03
CLCO065E128MH065E120		1999		Existing	assumed Mannings N	CO065E128	MH065E120		T15745	IRWD	PVC	{DAF73226-418B-4B2E-A10A-3BF107A4AE0D}	CLCO065E128MH065E120	191.33	184.63	0.666666667	CO065E128	MH065E120			215	CLCO065E128MH065E120	8	0.0312	0.001680	0.03	0.002019	0.03	0.002393	0.03	0.002019	0.03
CLCO065E129MH065E123		1999		Existing	assumed Mannings N	CO065E129	MH065E123		T15745	IRWD	PVC	{0D056129-5B43-4C16-B281-A1DFE0B283BE}	CLCO065E129MH065E123	199.00	197.69	0.666666667	CO065E129	MH065E123			111	CLCO065E129MH065E123	8	0.0118	0.006815	0.06	0.008181	0.07	0.009700	0.07	0.008181	0.07
CLCO065E130MH065E125		1999		Existing	assumed Mannings N	CO065E130	MH065E125		T15745	IRWD	PVC	{521A828F-DFFE-46AD-B786-7D0F584C7E72}	CLCO065E130MH065E125	189.89	186.00	0.666666667	CO065E130	MH065E125			238	CLCO065E130MH065E125	8	0.0163	0.009863	0.07	0.011843	0.07	0.014039	0.08	0.011843	0.07
CLCO065E131MH065E125		1999		Existing	assumed Mannings N	CO065E131	MH065E125		T15745	IRWD	PVC	{4C53BC86-1257-4146-9597-82E3BE7930J2}	CLCO065E131MH065E125	188.94	185.91	0.666666667	CO065E131	MH065E125			185	CLCO065E131MH065E125	8	0.0143	0.005761	0.06	0.006913	0.06	0.008200	0.06	0.006913	0.06
CLCO065E153MH065E145		1999		Existing	assumed Mannings N	CO065E153	MH065E145		T15747	IRWD	PVC	{0FA2DABE-1A95-4633-935C-32B78B005BAC}	CLCO065E153MH065E145	157.11	155.19	0.500000000	CO065E153	MH065E145			66	CLCO065E153MH065E145	6	0.0291	0.005694	0.07	0.006837	0.07	0.008104	0.08	0.006837	0.07
CLCO065E155MH065E145		1999		Existing	assumed Mannings N	CO065E155	MH065E145		T15747	IRWD	PVC	{0FF8AA47-7362-4202-BD11-A443BFF2F42F}	CLCO065E155MH065E145	158.86	155.19	0.666666667	CO065E155	MH065E145			270	CLCO065E155MH065E145	8	0.0136	0.003654	0.04	0.004386	0.05	0.005200	0.05	0.004386	0.05
CLCO065E157MH065E149		1999		Existing	assumed Mannings N	CO065E157	MH065E149		T15747	IRWD	PVC	{8913E109-8356-408B-A625-9C51CF90CA02}	CLCO065E157MH065E149	155.46	149.78	0.666666667	CO065E157	MH065E149			114	CLCO065E157MH065E149	8	0.0498	0.003743	0.03	0.004495	0.04	0.005328	0.04	0.004495	0.04
CLCO065E158MH065E151		1999		Existing	assumed Mannings N	CO065E158	MH065E151		T15747	IRWD	PVC	{F3C9114C-E681-432E-8E08-52D2929BDF8E}	CLCO065E158MH065E151	163.22	162.26	0.666666667	CO065E158	MH065E151			240	CLCO065E158MH065E151	8	0.0046	0.003654	0.04	0.004386	0.06	0.005200	0.07	0.004386	0.06
CLCO065E171MH065E159		2000		Existing	assumed Mannings N	CO065E171	MH065E159		T15975	IRWD	PVC	{585EB260-CC72-43C1-B697-CC8C46DE941A}	CLCO065E171MH065E159	197.13	192.77	0.666666667	CO065E171	MH065E159			87	CLCO065E171MH065E159	8	0.0501	0.002821	0.03	0.003386	0.03	0.004017	0.03	0.003386	0.03
CLCO065E172MH065E160		2000		Existing	assumed Mannings N	CO065E172	MH065E160		T15975	IRWD	PVC	{77829546-DF03-4C60-B510-163F12114230}	CLCO065E172MH065E160	189.27	185.69	0.666666667	CO065E172	MH065E160			72	CLCO065E172MH065E160	8	0.0497	0.002652	0.03	0.003183	0.03	0.003775	0.03	0.003183	0.03
CLCO065E173MH065E161		2000		Existing	assumed Mannings N	CO065E173	MH065E161		T15976	IRWD	PVC	{4F592296-3B86-4E88-AF6A-9BDAC4E2A6E8}	CLCO065E173MH065E161	187.57	185.78	0.500000000	CO065E173	MH065E161			161	CLCO065E173MH065E161	6	0.0111	0.000446	0.02	0.000536	0.02	0.000637	0.03	0.000536	0.02
CLCO065E174MH065E162		2000		Existing	assumed Mannings N	CO065E174	MH065E162		T15976	IRWD	PVC	{09650B19-13DE-4A38-9208-6AF437CA3A2B}	CLCO065E174MH065E162	187.00	186.35	0.500000000	CO065E174	MH065E162			161	CLCO065E174MH065E162	6	0.0040	0.001001	0.04	0.001201	0.05	0.001427	0.05	0.001201	0.05
CLCO065E181MH065E175		2000		Existing	assumed Mannings N	CO065E181	MH065E175		T15978	IRWD	PVC	{94FD372C-4B86-48EF-B58F-BA639AB8743C}	CLCO065E181MH065E175	182.90	174.07	0.666666667	CO065E181	MH065E175			193	CLCO065E181MH065E175	8	0.0458	0.004237	0.04	0.005087	0.04	0.006031	0.04	0.005087	0.04
CLCO065E182MH065E175		2000		Existing	assumed Mannings N	CO065E182	MH065E175		T15978	IRWD	PVC	{7F2D97AA-E404-418B-A95D-CE547D394C3E}	CLCO065E182MH065E175	175.00	174.13	0.666666667	CO065E182	MH065E175			145	CLCO065E182MH065E175	8	0.0060	0.007195	0.07	0.008640	0.08	0.010242	0.09	0.008640	0.08
CLCO065E183MH065E176		2000		Existing	assumed Mannings N	CO065E183	MH065E176		T15978	IRWD	PVC	{3191F0B3-39BB-400F-BC38-2362D35BC9C7}	CLCO065E183MH065E176	184.69	176.38	0.666666667	CO065E183	MH065E176			188	CLCO065E183MH065E176	8	0.0442	0.005470	0.04	0.006568	0.04	0.007785	0.05	0.006568	0.04
CLCO065E184MH065E179		2000		Existing	assumed Mannings N	CO065E184	MH065E179		T15978	IRWD	PVC	{1EAAD503-F7C6-4D68-A6A4-A74F800947F2}	CLCO065E184MH065E179	186.52	180.67	0.666666667	CO065E184	MH065E179			196	CLCO065E184MH065E179	8	0.0298	0.000986	0.02	0.001184	0.02	0.001404	0.02	0.001184	0.02
CLCO065E185MH065E180		2000		Existing	assumed Mannings N	CO065E185	MH065E180		T15978	IRWD	PVC	{F4CEC48C-48B8-405E-8093-28B6D2C110DF}	CLCO065E185MH065E180	177.14	176.16	0.666666667	CO065E185	MH065E180			162	CLCO065E185MH065E180	8	0.0060	0.002466	0.04	0.002961	0.05	0.003510	0.05	0.002961	0.05
CLCO065E187MH065N144		2000		Existing	assumed Mannings N	CO065E187	MH065N144		T15977	IRWD	PVC	{2F355EF6-6524-4931-BFE6-27997C8BA5BF}	CLCO065E187MH065N144	170.21	169.42	0.666666667	CO065E187	MH065N144			158	CLCO065E187MH065N144	8	0.0050	0.001704	0.

| | | |

| | | |

CLCO08N151MH08N148		1983		Existing		C008N151	MH08N148		T10990	IRWD	VCP	{98FD174D-8A42-47D1-A529-4E7F9998EA58}	CLCO08N151MH08N148	150.60	147.60	0.666666667	C008N151	MH08N148				207	CLCO08N151MH08N148	8	0.0145	0.000959	0.02	0.001026	0.02	0.001216	0.02	0.001026	0.02
CLCO08N152MH08N144		1983		Existing		C008N152	MH08N144		T10990	IRWD	VCP	{DC052BFD-923D-47B5-9868-958CC3FCC80A}	CLCO08N152MH08N144	147.60	146.97	0.666666667	C008N152	MH08N144				65	CLCO08N152MH08N144	8	0.0097	0.002333	0.04	0.002491	0.04	0.002953	0.04	0.002491	0.04
CLCO08N153MH08N144		1983		Existing		C008N153	MH08N144		T11545	IRWD	VCP	{2F2ECDD9-6765-4F08-B77B-B2C0ACF9B02}	CLCO08N153MH08N144	148.30	146.94	0.666666667	C008N153	MH08N144				135	CLCO08N153MH08N144	8	0.0101	0.002136	0.04	0.002280	0.04	0.002704	0.04	0.002280	0.04
CLCO08N154MH08N143		1983		Existing		C008N154	MH08N143		T10990	IRWD	VCP	{0758388-C46D-420A-B1D5-D869184D66F6}	CLCO08N154MH08N143	148.10	147.00	0.666666667	C008N154	MH08N143				74	CLCO08N154MH08N143	8	0.0149	0.000745	0.02	0.000796	0.02	0.000942	0.02	0.000796	0.02
CLCO08N155MH08N157		1983		Existing		C008N155	MH08N157		T10990	IRWD	VCP	{FBB741A7-BF9C-4DB3-A54E-0CFC63AC001C}	CLCO08N155MH08N157	140.67	137.33	0.666666667	C008N155	MH08N157				75	CLCO08N155MH08N157	8	0.0445	0.002725	0.03	0.002909	0.03	0.003448	0.03	0.002909	0.03
CLCO08N156MH08N141		1983		Existing		C008N156	MH08N141		T10990	IRWD	VCP	{B6C263CA-C08A-4084-89D1-F39748AB4A14}	CLCO08N156MH08N141	142.08	140.66	0.500000000	C008N156	MH08N141				151	CLCO08N156MH08N141	6	0.0094	0.002989	0.06	0.003193	0.07	0.003784	0.07	0.003193	0.07
CLCO08450S62MH08450S63		1976		Existing		C008450S62	MH08450S63		T09158	IRWD	VCP	{D013AC1E-C4CB-4CDF-82BF-2FF0703E3EBE}	CLCO08450S62MH08450S63	146.74	144.97	0.500000000	C008450S62	MH08450S63				200	CLCO08450S62MH08450S63	6	0.0089	0.002782	0.06	0.003339	0.07	0.003959	0.08	0.003339	0.07
CLCO08451139MH08451100		1977		Existing		C008451111	MH08451100		T09503	IRWD	VCP	{316B4240-2236-4861-9D93-50751B2A8B58}	CLCO08451111MH08451100	150.03	148.36	0.666666667	C008451111	MH08451100				95	CLCO08451111MH08451100	8	0.0176	0.001256	0.02	0.001508	0.03	0.001788	0.03	0.001508	0.03
CLCO08470W070MH08470W069		1984		Existing		C008470W070	MH08470W069		12200	IRWD	PVC	{DBEC7FE8-4377-4D56-93C0-A7D3909E359A}	CLCO08470W070MH08470W069	116.23	111.23	0.500000000	C008470W070	MH08470W069				280	CLCO08470W070MH08470W069	6	0.0179	0.004488	0.07	0.005386	0.07	0.006386	0.08	0.005386	0.07
CLCO08470W072MH08470W071		1984		Existing		C008470W072	MH08470W071		12200	IRWD	PVC	{868EE08B-BD34-4ADC-B2FF-F85CBA405C2B}	CLCO08470W072MH08470W071	118.19	114.15	0.500000000	C008470W072	MH08470W071				280	CLCO08470W072MH08470W071	6	0.0144	0.004712	0.07	0.005657	0.08	0.006707	0.08	0.005657	0.08
CLCO08470W078MH08470W077		1984		Existing		C008470W078	MH08470W077		12200	IRWD	PVC	{09A8DCC8-88D3-450B-8131-E58DCBA30B7D}	CLCO08470W078MH08470W077	109.43	108.19	0.500000000	C008470W078	MH08470W077				207	CLCO08470W078MH08470W077	6	0.0060	0.003274	0.07	0.003494	0.07	0.004144	0.08	0.003494	0.07
CLCO08470W082MH08470W081		1984		Existing		C008470W082	MH08470W081		12200	IRWD	PVC	{44B5B09C-F5DC-4AA9-AD4E-2E455D6495BE}	CLCO08470W082MH08470W081	102.29	100.38	0.500000000	C008470W082	MH08470W081				240	CLCO08470W082MH08470W081	6	0.0080	0.003371	0.07	0.003599	0.07	0.004267	0.08	0.003599	0.07
CLCO08470W084MH08470W083		1984		Existing		C008470W084	MH08470W083		12200	IRWD	PVC	{90CA8929-183A-4AE6-819C-E87FD146447F}	CLCO08470W084MH08470W083	103.33	101.81	0.500000000	C008470W084	MH08470W083				229	CLCO08470W084MH08470W083	6	0.0066	0.004370	0.08	0.004666	0.08	0.005533	0.09	0.004666	0.08
CLCO08470W086MH08470W085		1984		Existing		C008470W086	MH08470W085		12200	IRWD	PVC	{9FE3B549-5982-4948-9F40-EC1EA9059411}	CLCO08470W086MH08470W085	105.47	104.09	0.500000000	C008470W086	MH08470W085				275	CLCO08470W086MH08470W085	6	0.0050	0.004742	0.09	0.005063	0.09	0.006004	0.10	0.005063	0.09
CLCO08470W088MH08470W087		1984		Existing		C008470W088	MH08470W087		12200	IRWD	PVC	{A8734037-E2D4-436C-B8C2-26FB7EC21F0A}	CLCO08470W088MH08470W087	109.75	106.05	0.666666667	C008470W088	MH08470W087				372	CLCO08470W088MH08470W087	8	0.0099	0.005852	0.06	0.006247	0.06	0.007407	0.07	0.006247	0.06
CLCO08470W109MH08470W108		1985		Existing		C008470W109	MH08470W108		T12080	IRWD	PVC	{6EFDCDD2-CCAC-4FD5-8B1F-1D183950F03}	CLCO08470W109MH08470W108	124.98	123.00	0.666666667	C008470W109	MH08470W108				202	CLCO08470W109MH08470W108	8	0.0098	0.001795	0.03	0.002156	0.04	0.002555	0.04	0.002156	0.04
CLCO08471111MH08471100		1985		Existing		C008471111	MH08471100		T12080	IRWD	PVC	{FFCC6988-E8A5-47ED-A506-B4388EC123E9}	CLCO08471111MH08471100	129.13	125.66	0.666666667	C008471111	MH08471100				178	CLCO08471111MH08471100	8	0.0195	0.003813	0.04	0.004579	0.05	0.005429	0.05	0.004579	0.05
CLCO08501041MH08501024		1976		Existing		C008501041	MH08501024		T09643	IRWD	VCP	{EB79AD72-F907-4131-8303-E13DB9E96845}	CLCO08501041MH08501024	114.19	113.69	0.500000000	C008501041	MH08501024				88	CLCO08501041MH08501024	6	0.0057	0.003488	0.08	0.003724	0.08	0.004416	0.09	0.003724	0.08
CLCO08501059MH08501060		1984		Existing		C008501059	MH08501060		T11614	IRWD	PVC	{2A6143F5-18AF-41D4-9DB0-2B8A97227C6A}	CLCO08501059MH08501060	118.98	117.91	0.500000000	C008501059	MH08501060				110	CLCO08501059MH08501060	6	0.0097	0.002035	0.05	0.002442	0.06	0.002895	0.06	0.002442	0.06
CLCO08501062MH08501061		1984		Existing		C008501062	MH08501061		T11614	IRWD	PVC	{D721B2EC-CA2E-42BA-B10F-C122C63D90EE}	CLCO08501062MH08501061	119.19	117.30	0.500000000	C008501062	MH08501061				85	CLCO08501062MH08501061	6	0.0222	0.001121	0.03	0.001346	0.04	0.001596	0.04	0.001346	0.04
CLCO08501064MH08501063		1984		Existing		C008501063	MH08501063		T11614	IRWD	PVC	{E48FB34A-F3EF-46EE-8F00-748AB666F309}	CLCO08501064MH08501063	120.33	116.26	0.500000000	C008501064	MH08501063				101	CLCO08501064MH08501063	6	0.0403	0.003541	0.05	0.004228	0.05	0.005011	0.06	0.004228	0.05
CLCO08501069MH08501068		1984		Existing		C008501069	MH08501068		T11614	IRWD	PVC	{E1DE5C05-64B3-4FE6-BCED-E4257A3062BA}	CLCO08501069MH08501068	126.50	124.65	0.500000000	C008501069	MH08501068				166	CLCO08501069MH08501068	6	0.0264	0.002124	0.04	0.002549	0.05	0.003023	0.05	0.002549	0.05
CLCO08507070MH08507067		1984		Existing		C008507070	MH08507067		T11614	IRWD	PVC	{E43D2E4A-0DB0-4CAE-83A2-BE67AF71C3C6}	CLCO08507070MH08507067	124.61	124.00	0.500000000	C008507070	MH08507067				60	CLCO08507070MH08507067	6	0.0090	0.001571	0.05	0.001887	0.05	0.002235	0.05	0.001887	0.05
CLCO08507072MH08507071		1984		Existing		C008507072	MH08507071		T11614	IRWD	PVC	{38478B4C-FE9E-41FC-9CAA-7056DB80AF92}	CLCO08507072MH08507071	121.90	120.00	0.500000000	C008507072	MH08507071				131	CLCO08507072MH08507071	6	0.0145	0.003485	0.06	0.004183	0.07	0.004961	0.07	0.004183	0.07
CLCO08507073MH08507074		1984		Existing		C008507073	MH08507074		T11614	IRWD	PVC	{DFA28A28-613B-45E4-8FEE-D7CD5DE0BAD}	CLCO08507073MH08507074	124.00	120.40	0.500000000	C008507073	MH08507074				90	CLCO08507073MH08507074	6	0.0400	0.002783	0.04	0.003325	0.05	0.003942	0.05	0.003325	0.05
CLCO08507075MH08507074		1984		Existing		C008507075	MH08507074		T11614	IRWD	PVC	{2A2275AB-8919-4616-8276-AF79371501E1}	CLCO08507075MH08507074	121.11	120.34	0.500000000	C008507075	MH08507074				78	CLCO08507075MH08507074	6	0.0099	0.001872	0.05	0.002241	0.05	0.002659	0.06	0.002241	0.05
CLCO08508101MH08508100		1985		Existing		C008508101	MH08508100		T12288	IRWD	PVC	{290F33A0-14DE-456B-B2A6-77038FBF7317}	CLCO08508101MH08508100	120.02	117.65	0.500000000	C008508101	MH08508100				150	CLCO08508101MH08508100	6	0.0158	0.002318	0.05	0.002784	0.05	0.003299	0.06	0.002784	0.05
CLCO08508102MH08508099		1985		Existing		C008508102	MH08508099		T12288	IRWD	PVC	{69A735C3-1C56-4C0D-BD6E-45FE5CCD2FC95}	CLCO08508102MH08508099	122.09	119.51	0.500000000	C008508102	MH08508099				105	CLCO08508102MH08508099	6	0.0246	0.004218	0.06	0.005064	0.06	0.006004	0.07	0.005064	0.06
CLCO08508103MH08508098		1985		Existing		C008508103	MH08508098		T12288	IRWD	PVC	{2013F1F8-6001-43EF-9CF8-DD302241BCF8C}	CLCO08508103MH08508098	123.90	121.62	0.500000000	C008508103	MH08508098				85	CLCO08508103MH08508098	6	0.0152	0.002139	0.05	0.002568	0.05	0.003045	0.06	0.002568	0.05
CLCO08508104MH08508097		1985		Existing		C008508104	MH08508097		T12288	IRWD	PVC	{F735FBFF-CB49-4EB7-9CE6-6C0B80D255A6}	CLCO08508104MH08508097	125.90	123.69	0.500000000	C008508104	MH08508097				150	CLCO08508104MH08508097	6	0.0147	0.003365	0.06	0.004040	0.07	0.004790	0.07	0.004040	0.07
CLCO08508105MH08508096		1985		Existing		C008508105	MH08508096		T12288	IRWD	PVC	{BCD0617B-4494-4D13-B9BC-E616AB030096}	CLCO08508105MH08508096	127.01	125.76	0.500000000	C008508105	MH08508096				150	CLCO08508105MH08508096	6	0.0083	0.002812	0.06	0.003376	0.07	0.004002	0.07	0.003376	0.07
CLCO08508106MH08508095		1985		Existing		C008508106	MH08508095		T12288	IRWD	PVC	{B707D35A-4E0E-4467-8535-648E8AD658AE}	CLCO08508106MH08508095	128.53	126.68	0.500000000	C008508106	MH08508095				150	CLCO08508106MH08508095	6	0.0110	0.003515	0.07	0.004220	0.07	0.005004	0.08	0.004220	0.07
CLCO08508107MH08508094		1985		Existing		C008508107	MH08508094		T12288	IRWD	PVC	{77B2B14B-C47E-485C-8B47-609604B302CA}	CLCO08508107MH08508094	125.44	124.05	0.666666667	C008508107	MH08508094				176	CLCO08508107MH08508094	8	0.0079	0.003395	0.05	0.004076	0.05	0.004833	0.06	0.004076	0.05
CLCO08508108MH08508094		1985		Existing		C008508108	MH08508094		T12288	IRWD	PVC	{D077D988-755B-4339-A3D0-9642AD1CFB5B}	CLCO08508108MH08508094	124.70	124.15	0.666666667	C008508108	MH08508094				140	CLCO08508108MH08508094	8	0.0039	0.001824	0.04	0.002190	0.04	0.002597	0.05	0.002190	0.04
CLCO08508109MH08508093		1985		Existing		C008508109	MH08508093		T12288	IRWD	PVC	{63354AF8-7530-4127-89B1-15F4987A359}	CLCO08508109MH08508093	123.08	122.52	0.666666667	C008508109	MH08508093				140	CLCO08508109MH08508093	8	0.0040	0.001256	0.03	0.001508	0.03	0.001788	0.04	0.001508	0.03
CLCO08511100MH08508092		1985		Existing		C008511100	MH08508092		T12288	IRWD	PVC	{6BB19BD9-5EA9-408B-867A-EF2C6B9DEA10}	CLCO08511100MH08508092	120.95	120.40	0.666666667	C008511100	MH08508092				140	CLCO08511100MH08508092	8	0.0039	0.002527	0.05	0.003031	0.05	0.003591	0.06	0.003031	0.05
CLCO08511111MH08508091		1985		Existing		C008511111	MH08508091		T12288	IRWD	PVC	{A139AE3A-D694-4EF9-A998-7ABCDF17D39C}	CLCO08511111MH08508091	119.02	118.52	0.666666667	C008511111	MH08508091				125	CLCO08511111MH08508091	8	0.0040	0.001452	0.03	0.001741	0.04	0.002066	0.04	0.001741	0.04
CLCO08511122MH08508090		1985		Existing		C008511122	MH08508090		T12288	IRWD	PVC	{40895L60-8558-4AD9-B8D9-0EE451DEC1B0}	CLCO08511122MH08508090	117.48	116.98	0.666666667	C008511122	MH08508090				130	CLCO08511122MH08508090	8	0.0038	0.005354	0.07	0.006429	0.07	0.007621	0.08	0.006429	0.07
CLCO08511911MH08508118		1985		Existing		C008511911	MH08508118		T12415	IRWD	PVC	{9C529210-1C35-4E5A-8BD2-C74A26D7F0AA}	CLCO08511911MH08508118	135.50	132.22	0.500000000	C008511911	MH08508118				80	CLCO08511911MH08508118	6	0.0410	0.002812	0.04	0.003376	0.05	0.004002	0.05	0.003376	0.05
CLCO08511120MH08511121		1985		Existing		C008511120	MH08511121		T12415	IRWD	PVC	{2ZC1A692-8DE3-4EA7-8166-2E10DAA01725}	CLCO08511120MH08511121	133.83	130.80	0.500000000	C008511120	MH08511121				80	CLCO08511120MH08511121	6	0.0388	0.002812	0.04	0.003376	0.05	0.004002	0.05	0.003376	0.05
CLCO08511123MH08508122		1985		Existing		C008511123	MH08508122		T12415	IRWD	PVC	{02A92E89-DBB7-46CD-A560-AA55A1B719D2}	CLCO08511123MH08508122	133.80	129.89	0.500000000	C008511123	MH08508122				80	CLCO08511123MH08508122	6	0.0489	0.003754	0.05	0.004508	0.05	0.005343	0.06	0.004508	0.05
CLCO08511126MH08508125		1985		Existing		C008511126	MH08508125		T12415	IRWD	PVC	{A10D038F-A709-4C1B-A165-120AD9E722C5}	CLCO08511126MH08508125	130.35	129.63	0.500000000	C008511126	MH08508125				65	CLCO08511126MH08508125	6	0.0099	0.003395	0.07	0.004051	0.07	0.004802	0.08	0.004051	0.07
CLCO08511134MH08511132		1985		Existing		C008511134	MH08511132		T12415	IRWD	PVC	{7A225A6F-1170-4503-8F21-D7CFC1197713}	CLCO08511134MH08511132	133.64	132.30	0.500000000	C008511134	MH08511132				80	CLCO08511134MH08511132	6	0.0168	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO08511135MH08511134		1985		Existing		C008511135	MH08511134		T12415	IRWD	PVC	{3A7EBD30-4972-442D-BF08-B9A5F8124F50}	CLCO08511135MH08511134	132.91	132.03	0.500000000	C008511135	MH08511134				78	CLCO08511135MH08511134	6	0.0113	0.003963	0.07	0.004758	0.08	0.005643	0.08	0.004758	0.08
CLCO08511136MH08511137		1985		Existing		C008511136	MH08511137		T12415	IRWD	PVC	{963691B2-B03E-4025-B4D3-643BBA08BD0B}	CLCO08511136MH08511137	135.30	134.07	0.500000000	C008511136	MH08511137				132	CLCO08511136MH08511137	6	0.0101	0.001704	0.05	0.002047	0.05	0.002427	0.06	0.002047	0.05
CLCO08511139MH08511138		1985		Existing		C008511139	MH08511138		T12415	IRWD	PVC	{82CC0840-890B-4827-9AC5-57D557E6DBC6}	CLCO08511139MH08511138	135.69	134.30	0.500000000	C008511139	MH08511138				72	CLCO08511139MH08511138	6	0.0188	0.002109	0.05	0.002532	0.05	0.003002	0.05	0.002532	0.05
CLCO08511142MH08511141		1985		Existing		C008511142	MH08511141		T12415	IRWD	PVC	{FF0074DC-CF15-4D17-8D88-991784867661}	CLCO08511142MH08511141	139.50	135.50	0.500000000	C008511142	MH08511141				80	CLCO08511142MH08511141	6	0.0615	0.003386	0.00	0.000403	0.00	0.000484	0.01	0.000291	0.00
CLCO08511153MH08508152		1985		Existing		C008511153	MH08508152		T12151	IRWD	PVC	{4AD13F51-A510-4835-BAEB-D83EB86D5114}	CLCO08511153MH08508152	132.47	130.30	0.666666667	C008511153	MH08508152				58	CLCO08511153MH08508152	8	0.0068	0.003129	0.05	0.003706	0.05	0.004394	0.05	0.003706	0.05
CLCO08511157MH08508156		1985		Existing		C008511157	MH08508156		T12151	IRWD	PVC	{9E662AAB-B56C-4DCD-B9D6-7B95603AC65F}	CLCO08511157MH08508156	132.17	131.66	0.666666667	C008511157	MH08508156				130	CLCO08511157MH08508156	8	0.0039	0.003097	0.05	0.003718	0.06	0.004408	0.06	0.003718	0.06
CLCO08511160MH08511156		1985		Existing		C008511160	MH08511156		T12151	IRWD	PVC	{45100604-3C8C-45B2-B4F8-6E652269A966}	CLCO08511160MH08511156	133.13	131.66	0.666666667	C008511160	MH08511156				245	CLCO08511160MH08511156	8	0.0060	0.001146	0.03	0.001375	0.03	0.001617	0.03	0.001375	0.03
CLCO08N062MH08N061		1982		Existing		C008N062	MH08N061		T11701	IRWD	PVC	{C5698DCD-5B06-4A61-BA2D-DB26790A9CFE}	CLCO08N062MH08N061	107.44	106.56	0.500000000	C008N062	MH08N061				66	CLCO08N062MH08N061	6	0.0161	0.003717	0.06	0.003967	0.06	0.004702	0.07	0.003967	0.06
CLCO08N063MH08N059		1982		Existing		C008N063	MH08N059		T11701	IRWD	PVC	{B5A7A946-027D-4BCD-97F1-1A500CCDCC9}	CLCO08N063MH08N059	109.83	109.26	0.500000000	C008N063	MH08N059				64	CLCO08N063MH08N059	6	0.0089	0.006604	0.09	0.007053	0.10	0.008360	0.10	0.007053	0.10
CLCO08N064MH08N050		1982		Existing		C008N064	MH08N050		T11701	IRWD	PVC	{91669074-DCE8-4C29-B366-CAC0124B0DDB}	CLCO08N064MH08N050	111.44	110.47	0.500000000	C008N064	MH08N050				110	CLCO08N064MH08N050	6	0.0088	0.002939	0.06	0.003139	0.06	0.003722	0.07	0.003139	0.06
CLCO08N065MH08N052		1983		Existing		C008N065	MH08N052		T11701	IRWD	PVC	{8D68E0D1-19AB-49B4-9C50-FEDCE55BAA1E}	CLCO08N065MH08N052	114.34	113.06	0.500000000	C008N065	MH08N052				165	CLCO08N065MH08N052	6	0.0095	0.002018	0.05	0.002153	0.06	0.002554	0.06	0.002153	0.05
CLCO08N066MH08N056		1982		Existing		C008N066	MH08N056		T11701	IRWD	PVC	{479E87E8-BE2D-4B49-AE3F-C679F13A7B30}	CLCO08N066MH08N056	110.80	109.22	0.500000000	C008N066	MH08N056				102	CLCO08N066MH08N056	6	0.0155	0.002979	0.06	0.003181	0.06	0.003771	0.06	0.003181	0.06
CLCO08N074MH08N073		1983		Existing		C008N074	MH08N073		T12288	IRWD	PVC	{164BF62D-4D64-4162-823C-838431BFCCB6}	CLCO08N074MH08N073	118.05	115.83	0.500000000	C008N074	MH08N073				150	CLCO08N074MH08N073	6	0.0148	0.002020	0.05	0.002425	0.05	0.002874	0.06	0.002425	0.05
CLCO08N075MH08N072		1983		Existing		C008N075	MH08N072		T12288	IRWD	PVC	{1A147B86-78ED-4B49-A385-8A8442288D80}	CLCO08N075MH08N072	116.84	115.01	0.500000000	C008N075	MH08N072				150	CLCO08N075MH08N072	6	0.0122	0.001661	0.04	0.001993	0.05	0.002363	0.05	0.001993	0.05
CLCO08N076MH08N071		1985		Existing		C008N076	MH08N071		T12288	IRWD	PVC	{22CDE8CC-6598-40FE-A08D-BABBBB81B316}	CLCO08N076MH08N071	115.63	115.18	0.666666667	C008N076	MH08N071				130	CLCO08N076MH08N071	8	0.0035	0.003021	0.05	0.003628	0.06	0.004301	0.06	0.003628	0.06
CLCO08SN124MH08SN123		2005		Existing	assumed Mannings N	C008SN124	MH08SN123		16597	IRWD	PVC	{1BE84CD0-DE30-4990-8453-0E2760534SDC}	CLCO08SN124MH08SN123	98.57	98.01	0.666666667	C008SN124	MH08SN123				141	CLCO08SN124MH08SN123	8	0.0040	0.004568	0.06	0.004875	0.06	0.005780	0.07	0.004875	0.06
CLCO08E101MH08E100		1975		Existing		C008E101	MH08E100		T08693	IRWD	VCP	{2185CDE1-A694-44A5-8471-5EB346732209}	CLCO08E101MH08E100	78.95	77.91	0.666666667	C008E101	MH08E100				65	CLCO08E101MH08E100	8	0.0160	0.002647	0.04	0.002825	0.04	0.003350	0.04	0.002825	0.04
CLCO08E104MH08E103		1975		Existing		C008E104	MH08E103		T08693	IRWD	VCP	{41291167-8884-4ECD-A455-1BFEF1122F4A}	CLCO08E104MH08E103	78.04	76.00	0.666666667	C008E104	MH08E103				51	CLCO08E104MH08E103	8	0.0400	0.001607	0.02	0.001716	0.03	0.002035	0.03	0.001716	0.03
CLCO08E109MH08E108		1975		Existing		C008E109	MH08E108		T08693	IRWD	VCP	{896BCCC3-EFC1-4903-B079-75104ED33E26}	CLCO08E109MH08E108	75.18	74.90	0.666666667	C008E109	MH08E108				69	CLCO08E109MH08E108	8	0.0041	0.001685	0.04	0.001799	0.04	0.002134	0.04	0.001799	0.04
CLCO08E117MH08E116		1975		Existing		C008E117	MH08E116		T08693	IRWD	VCP	{A84A6E88-A24A-4AF8-8D51-ACDA921895C9}	CLCO08E117MH08E116	80.20	79.41	0.666666667	C008E117	MH08E116				67	CLCO08E117MH08E116	8	0.0118	0.000745	0.02	0.000796	0.02	0.000942	0.02	0.000796	0.02
CLCO08E137MH08E089		1975		Existing		C008E137	MH08E089		T08693	IRWD	VCP	{91E55103-8519-44B4-B2A8-157BE2C768BC}	CLCO08E137MH08E089	82.20	80.58	0.666666667	C008E137	MH08E089				47	CLCO08E137MH08E089	8	0.0345	0.002234	0.05	0.002386	0.06	0.002829	0.06	0.002386	0.06
CLCO08N060MH08N059		1975		Existing		C008N060	MH08N059		8557	IRWD	VCP	{6E302217-1BD0-4657-9A7B-CE6EB0D28AAB}	CLCO08N060MH08N059	68.79	68.58	0.666666667	C008N060	MH08N059				50	CLCO08N060MH08N059	8	0.0042	0.001235	0.03	0.001319	0.03	0.001564	0.04	0.001319	0.03
CLCO08N066MH08N064		1975		Existing		C008N066	MH08N064		8557	IRWD	VCP	{3FC1BE0E-B223-4161-8A0D-D804634AF472}	CLCO08N066MH08N064	68.79	68.58	0.666666667	C008N066	MH08N064				50	CLCO08N066MH08N064	8	0.0042	0.001018	0.03	0.001089	0.03	0.001290	0.03	0.001089	0.03
CLCO08N067MH08N063		1975		Existing		C008N067	MH08N063		8557	IRWD	VCP	{A5B9ACC2-F1DA-4FE2-BEF7-94EF94D47DFB}	CLCO08N067MH08N063	67.73	67.52	0.666666667	C008N067	MH08N063				54	CLCO08N067MH08N063	8	0.0039	0.002028	0.05	0.002139	0.05	0.002010	0.05	0.002135	0.05
CLCO08N070MH08N069		1975		Existing		C008N070	MH08N069		8557	IRWD	VCP	{47434721C-F8E5-4A10-928F-7D67B0997EAE}	CLCO08N070MH08N069	68.62	68.40	0.666666667	C008N070	MH08N069				30	CLCO08N070MH08N069	8	0.0038	0.003057	0.05	0.003264	0.05	0.003870	0.06	0.003264	0.05
CLCO08N104MH08N103		1975		Existing		C008N104	MH08N103		8557	IRWD	VCP	{2E67274A-8A06-4356-ACA2-DC2737BD0606}	CLCO08N104MH08N103	64.51	64.30	0.666666667	C008N104	MH08N103				30	CLCO08N104MH08N103	8	0.0070	0.001450	0.03	0.001548	0.03	0.001835	0.04	0.001548	0.03
CLCO08N106MH08N105		1975		Existing		C008N106	MH08N105		8557	IRWD	VCP	{9C3096A3-2B22-49DF-8657-88DF858403DB}	CLCO08N106MH08N105	64.94	64.80	0.666666667	C008N106	MH08N105				38	CLCO08N106MH08N105	8	0.0037	0.001332	0.03	0.001423	0.04	0.001687	0.04	0.001423	0.04
CLCO08N149MH08N102		1975		Existing		C008N149	MH08N102		8557	IRWD	VCP	{9E72AE6A-5885-4C7C-8419-0DE6F0A9AE7}	CLCO08N149MH08N102	63.31	63.29	0.666666667	C008N149	MH08N102				30	CLCO08N149MH08N102	8	0.0007	0.000804	0.04	0.000859	0.04	0.001017	0.04	0.000859	0.04
CLCO08N155MH08N024		1975		Existing		C008N155	MH08N024		T08625	IRWD	VCP	{11C99055-6EF0-455F-8242-21C95D57FC44}	CLNN08N155MH08N024	66.71	66.59	0.500000000	C008N155	MH08N024				30	CLCO08N155MH08N024	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO08650S51MH08650S52		1977		Existing		C008650S51	MH08650S52		T09595	IRWD	VCP	{5E7069AA-12E7-413C-8524-A252CB83B240}	CLCO08650S51MH08650S52	73.13	71.16	0.500000000	C008650S51	MH08650S52				94	CLCO08650S51MH08650S52

| | | |

| | | |

| | | |

| | | |

CLCO100E088MH100E090		1990		Existing		CO100E088	MH100E090	T12022	IRWD	VCP	{8FC121DB-7242-46DE-A672-EC5B40AC8B87}	CLCO100E088MH100E090	286.82	285.69	0.500000000	CO100E088	MH100E090				112	CLCO100E088MH100E090	6	0.0101	0.003986	0.07	0.004256	0.08	0.005044	0.08	0.004256	0.08
CLCO100E094MH100E098		1990		Existing		CO100E094	MH100E098	T12022	IRWD	VCP	{D7B84800-4F60-459A-BC7D-62AFD9CE371}	CLCO100E094MH100E098	299.32	298.00	0.500000000	CO100E094	MH100E098				96	CLCO100E094MH100E098	6	0.0138	0.003628	0.07	0.003874	0.07	0.004592	0.07	0.003874	0.07
CLCO100E095MH100E096		1990		Existing		CO100E095	MH100E096	T12022	IRWD	VCP	{B8B29C5A-02E5-48B0-B2E9-1AA1CEFD5D21}	CLCO100E095MH100E096	289.13	285.27	0.666666667	CO100E095	MH100E096				177	CLCO100E095MH100E096	8	0.0218	0.002886	0.04	0.003082	0.04	0.003654	0.04	0.003082	0.04
CLCO100E103MH100E100		1990		Existing		CO100E103	MH100E100	T12022	IRWD	ACP	{31E08A22-DCFE-441A-B489-7FE0CE8F76B8}	CLCO100E103MH100E100	294.57	291.75	0.500000000	CO100E103	MH100E100				138	CLCO100E103MH100E100	6	0.0204	0.001672	0.04	0.001786	0.04	0.002117	0.05	0.001786	0.04
CLCO100E122MH100E121		1990		Existing		CO100E122	MH100E121	T13244	IRWD	VCP	{8B535735-7433-45A6-AC4B-364D8A63F31E}	CLCO100E122MH100E121	330.85	328.92	0.666666667	CO100E122	MH100E121				38	CLCO100E122MH100E121	8	0.0508	0.003528	0.03	0.003766	0.03	0.004465	0.04	0.003766	0.03
CLCO100E123MH100E124		1991		Existing		CO100E123	MH100E124	T13244	IRWD	VCP	{228BF554-ACA2-45F1-BC2B-1F1F1F5A4AF3}	CLCO100E123MH100E124	302.79	298.86	0.666666667	CO100E123	MH100E124				126	CLCO100E123MH100E124	8	0.0312	0.002153	0.03	0.002299	0.03	0.002726	0.03	0.002299	0.03
CLCO100E127MH100E126		1991		Existing		CO100E127	MH100E126	T13244	IRWD	VCP	{C9EB753F-501E-4FC3-8C2E-1269395946E4}	CLCO100E127MH100E126	304.79	299.39	0.666666667	CO100E127	MH100E126				41	CLCO100E127MH100E126	8	0.1317	0.004856	0.03	0.005185	0.03	0.006146	0.03	0.005185	0.03
CLCO100E128MH100E148		1991		Existing		CO100E128	MH100E148	T13244	IRWD	VCP	{4B2A0C98-CC7E-4547-A953-3AFDA4C16935}	CLCO100E128MH100E148	344.19	343.39	0.666666667	CO100E128	MH100E148				50	CLCO100E128MH100E148	8	0.0160	0.005039	0.05	0.005381	0.05	0.006378	0.06	0.005381	0.05
CLCO100E134MH100E133		1992		Existing		CO100E134	MH100E133	T14115	IRWD	VCP	{18ACCBAC-3A27-4D49-94F9-C9F700C58AD1}	CLCO100E134MH100E133	290.54	290.23	0.666666667	CO100E134	MH100E133				81	CLCO100E134MH100E133	8	0.0038	0.002956	0.05	0.003156	0.05	0.003741	0.06	0.003156	0.05
CLCO100E137MH100E136		1990		Existing		CO100E137	MH100E136	T14115	IRWD	VCP	{C1A158CB-273C-4947-AF20-68C3118A08B0}	CLCO100E137MH100E136	274.41	271.32	0.666666667	CO100E137	MH100E136				54	CLCO100E137MH100E136	8	0.0572	0.004507	0.04	0.005412	0.04	0.006416	0.04	0.005412	0.04
CLCO100E140MH100E077		1990		Existing		CO100E140	MH100E077	T14115	IRWD	VCP	{7B2E7CDD-6113-4E59-A066-0C552C41597A}	CLCO100E140MH100E077	241.61	241.19	0.666666667	CO100E140	MH100E077				105	CLCO100E140MH100E077	8	0.0040	0.002113	0.04	0.002536	0.05	0.003008	0.05	0.002536	0.05
CLCO100E141MH100E139		1992		Existing		CO100E141	MH100E139	T14115	IRWD	VCP	{B68A1F8C-6682-4410-861A-10F666FD8A98}	CLCO100E141MH100E139	245.50	244.74	0.666666667	CO100E141	MH100E139				204	CLCO100E141MH100E139	8	0.0037	0.001710	0.04	0.002053	0.04	0.002436	0.05	0.002053	0.04
CLCO100E151MH100E150		1990		Existing		CO100E151	MH100E150	T13244	IRWD	VCP	{8A57FD92-7778-414E-8F16-CD1310461DC7}	CLCO100E151MH100E150	316.51	316.36	0.666666667	CO100E151	MH100E150				36	CLCO100E151MH100E150	8	0.0042	0.005956	0.07	0.006359	0.07	0.007539	0.08	0.006359	0.07
CLCO100W027MH100N026		1994		Existing		CO100W027	MH100N026	14861	IRWD	PVC	{0FA0B35A-239D-4D42-8EE0-01CD6FD289CE}	CLCO100W027MH100N026	162.69	162.11	0.666666667	CO100W027	MH100N026				162	CLCO100W027MH100N026	8	0.0035	0.008041	0.08	0.008584	0.09	0.010178	0.09	0.008584	0.09
CLCO100N031MH100N011		1978		Existing		CO100N031	MH100N011	T08592	IRWD	VCP	{F22F91EA-CB74-45C3-AF24-7D331C443527}	CLCO100N031MH100N011	158.36	153.05	0.500000000	CO100N031	MH100N011				142	CLCO100N031MH100N011	6	0.0374	0.000802	0.03	0.000857	0.03	0.001015	0.03	0.000857	0.03
CLCO100N033MH100N013		1978		Existing		CO100N033	MH100N013	T08592	IRWD	VCP	{05BAFDD0-575A-4465-9AE5-6B010DC5CA37}	CLCO100N033MH100N013	145.69	144.86	0.500000000	CO100N033	MH100N013				154	CLCO100N033MH100N013	6	0.0054	0.002909	0.07	0.003107	0.07	0.003682	0.08	0.003107	0.07
CLCO100N036MH100N005		1978		Existing		CO100N036	MH100N005	T08999	IRWD	VCP	{241EBCF1-9AFB-4E4D-891C-056BAC4C7E4B}	CLCO100N036MH100N005	161.86	160.41	0.500000000	CO100N036	MH100N005				72	CLCO100N036MH100N005	6	0.0201	0.000756	0.03	0.000807	0.03	0.000958	0.03	0.000807	0.03
CLCO100N039MH100W074		1976		Existing		CO100N039	MH100W074	T08997	IRWD	VCP	{C74E0FB8-F8B0-4E9D-8D8F-AE32650E643E}	CLCO100N039MH100W074	192.33	190.83	0.500000000	CO100N039	MH100W074				162	CLCO100N039MH100W074	6	0.0093	0.006460	0.09	0.006897	0.10	0.008178	0.11	0.006897	0.10
CLCO100N058MH100N010		1978		Existing		CO100N058	MH100N010	T08592	IRWD	VCP	{208E9A02-943C-4136-A1D0-FE70F73CC23B}	CLCO100N058MH100N010	140.99	140.88	0.500000000	CO100N058	MH100N010				10	CLCO100N058MH100N010	6	0.0110	0.003279	0.07	0.003938	0.07	0.004668	0.08	0.003938	0.07
CLCO100N060MH100N015		1978		Existing		CO100N060	MH100N015	T08592	IRWD	PVC	{CC748D5F-6301-4A6C-B038-48273350A112}	CLCO100N060MH100N015	130.05	129.91	0.500000000	CO100N060	MH100N015				159	CLCO100N060MH100N015	6	0.0093	0.004804	0.08	0.005130	0.08	0.006082	0.09	0.005130	0.08
CLCO100N063MH100N014		1978		Existing		CO100N063	MH100N014	T08592	IRWD	VCP	{D2A1B82E-58F6-490F-899A-F4E4B029C972}	CLCO100N063MH100N014	132.69	131.42	0.500000000	CO100N063	MH100N014				13	CLCO100N063MH100N014	6	0.1016	0.002841	0.04	0.003032	0.04	0.003595	0.04	0.003032	0.04
CLCO100S020MH100S012		1976		Existing		CO100S020	MH100S012	T09004	IRWD	VCP	{11CEAD14-B56B-4ECC-9364-B384F72952A6}	CLCO100S020MH100S012	279.76	267.00	0.666666667	CO100S020	MH100S012				129	CLCO100S020MH100S012	8	0.0997	0.001237	0.02	0.001321	0.02	0.001566	0.02	0.001321	0.02
CLCO100S060MH100S059		1985		Existing		CO100S060	MH100S059	T12377A	IRWD	PVC	{11AA303A-6525-4CB1-9FB0-1FEF534B7F44}	CLCO100S060MH100S059	452.67	450.67	0.666666667	CO100S060	MH100S059				208	CLCO100S060MH100S059	8	0.0100	0.004102	0.05	0.004381	0.05	0.005193	0.06	0.004381	0.05
CLCO100S065MH100S066		1985		Existing		CO100S065	MH100S066	T12281	IRWD	PVC	{B28E78DC-1366-4A61-B2E7-72E2016558C1}	CLCO100S065MH100S066	467.85	467.54	0.666666667	CO100S065	MH100S066				79	CLCO100S065MH100S066	8	0.0039	0.000540	0.02	0.000576	0.02	0.000684	0.02	0.000576	0.02
CLCO100W100MH100W076		1976		Existing		CO100W100	MH100W076	T08997	IRWD	VCP	{34795D8F-0B6D-4258-A5AD-D7FAF5F86D18}	CLCO100W100MH100W076	182.96	182.47	0.500000000	CO100W100	MH100W076				88	CLCO100W100MH100W076	6	0.0056	0.007444	0.11	0.007948	0.11	0.009424	0.12	0.007948	0.11
CLCO100W101MH100W084		1976		Existing		CO100W101	MH100W084	T08999	IRWD	VCP	{4129CE4D-91F5-44B0-9EDD-DFE89B2292E4}	CLCO100W101MH100W084	129.00	127.30	0.500000000	CO100W101	MH100W084				113	CLCO100W101MH100W084	6	0.0150	0.000412	0.02	0.000443	0.02	0.000523	0.02	0.000441	0.02
CLCO100W131MH100W087		1976		Existing		CO100W131	MH100W087	T08999	IRWD	VCP	{5627CDFD-48D7-401C-910F-61D4310E289C}	CLCO100W131MH100W087	143.89	142.28	0.500000000	CO100W131	MH100W087				40	CLCO100W131MH100W087	6	0.0403	0.002198	0.04	0.002348	0.04	0.002784	0.04	0.002348	0.04
CLCO101N087MH101N084		1984		Existing		CO101N087	MH101N084	T12012	IRWD	PVC	{6417EA6F-9142-4B81-88C1-28FDB67BEA7E}	CLCO101N087MH101N084	93.98	93.66	0.666666667	CO101N087	MH101N084				98	CLCO101N087MH101N084	8	0.0038	0.001604	0.04	0.001925	0.04	0.002282	0.05	0.001925	0.04
CLCO101N088MH101N086		1984		Existing		CO101N088	MH101N086	T12012	IRWD	PVC	{C116CFBA-5D76-41B1-9598-150C40B9445}	CLCO101N088MH101N086	97.30	96.72	0.666666667	CO101N088	MH101N086				39	CLCO101N088MH101N086	8	0.0039	0.001662	0.04	0.001996	0.04	0.002367	0.05	0.001996	0.04
CLCO101N089MH088E136		1984		Existing		CO101N089	MH088E136	T12012	IRWD	PVC	{8A255892-1AFC-4DD1-AEE8-2112AD3F8D98}	CLCO101N089MH088E136	96.62	96.04	0.666666667	CO101N089	MH088E136				150	CLCO101N089MH088E136	8	0.0039	0.001702	0.04	0.002045	0.04	0.002425	0.05	0.002045	0.04
CLCO101N095MH101N090		1984		Existing		CO101N095	MH101N090	T11672	IRWD	PVC	{E71641C7-D546-4618-8159-ACOFE3673F43}	CLCO101N095MH101N090	94.51	93.94	0.666666667	CO101N095	MH101N090				59	CLCO101N095MH101N090	8	0.0097	0.002966	0.04	0.003559	0.05	0.004220	0.05	0.003559	0.05
CLCO101N096MH101N090		1984		Existing		CO101N096	MH101N090	T11672	IRWD	PVC	{5146A5A7-C2A0-4976-9389-C50E1822D0C24}	CLCO101N096MH101N090	98.15	93.94	0.666666667	CO101N096	MH101N090				101	CLCO101N096MH101N090	8	0.0417	0.001683	0.02	0.002021	0.03	0.002395	0.03	0.002021	0.03
CLCO101N097MH101N094		1984		Existing		CO101N097	MH101N094	T11672	IRWD	PVC	{80758547-8534-497D-A125-4EE59E92E67B}	CLCO101N097MH101N094	98.26	97.86	0.666666667	CO101N097	MH101N094				44	CLCO101N097MH101N094	8	0.0091	0.000861	0.02	0.001034	0.02	0.001226	0.03	0.001034	0.02
CLCO101N119MH102W059		1984		Existing		CO101N119	MH102W059	T11672	IRWD	PVC	{22E4E5CD-D89F-4D03-BD19-286732C1E096}	CLCO101N119MH102W059	96.40	92.44	0.500000000	CO101N119	MH102W059				199	CLCO101N119MH102W059	6	0.0199	0.000842	0.03	0.001091	0.03	0.001011	0.03		
CLCO101N124MH102W061		1984		Existing		CO101N124	MH102W061	T11672	IRWD	PVC	{0EF1FAF3-08BB-4CB4-B896-5110B73F13DF}	CLCO101N124MH102W061	94.15	93.55	0.500000000	CO101N124	MH102W061				134	CLCO101N124MH102W061	6	0.0045	0.001062	0.04	0.001275	0.05	0.001511	0.05	0.001275	0.05
CLCO101N125MH101N130		2012		Existing	assumed Mannings N	CO101N125	MH101N130	T17358	IRWD	PVC	{02DE2AFF-1CA4-481F-B04D-BC69FE0145F9}	CLCO101N125MH101N130	117.37	113.86	0.500000000	CO101N125	MH101N130				82	CLCO101N125MH101N130	6	0.0428	0.003965	0.05	0.004760	0.05	0.005643	0.06	0.004760	0.05
CLCO101S009MH101S008		1984		Existing		CO101S009	MH101S008	12131	IRWD	PVC	{A568A222-2646-4FA8-8685-A3C07F401514}	CLCO101S009MH101S008	213.97	213.27	0.666666667	CO101S009	MH101S008				127	CLCO101S009MH101S008	8	0.0055	0.001007	0.03	0.001207	0.03	0.001431	0.03	0.001207	0.03
CLCO101S013MH101S012		1984		Existing		CO101S013	MH101S012	12131	IRWD	PVC	{50C845DD-291D-48DC-8A74-FDB5122A92DE}	CLCO101S013MH101S012	223.49	222.99	0.666666667	CO101S013	MH101S012				105	CLCO101S013MH101S012	8	0.0048	0.002092	0.04	0.002513	0.05	0.002978	0.05	0.002513	0.05
CLCO101S017MH101S016		1984		Existing		CO101S017	MH101S016	12131	IRWD	PVC	{08ECC833-8D07-4AF0-B102-F47D1CC82148}	CLCO101S017MH101S016	229.11	228.71	0.666666667	CO101S017	MH101S016				80	CLCO101S017MH101S016	8	0.0050	0.001387	0.03	0.001425	0.03	0.001690	0.04	0.001425	0.03
CLCO101S023MH101S022		1984		Existing		CO101S023	MH101S022	12131	IRWD	PVC	{0F168DFA-6A23-422F-8495-934265471F4F}	CLCO101S023MH101S022	229.55	227.72	0.666666667	CO101S023	MH101S022				51	CLCO101S023MH101S022	8	0.0073	0.005291	0.06	0.006354	0.07	0.007533	0.07	0.006354	0.07
CLCO101S027MH101S026		1984		Existing		CO101S027	MH101S026	12131	IRWD	PVC	{1A79E388-63C1-4534-83BD-A1539CEFF16D}	CLCO101S027MH101S026	234.08	233.19	0.666666667	CO101S027	MH101S026				118	CLCO101S027MH101S026	8	0.0075	0.002073	0.04	0.002489	0.04	0.002951	0.04	0.002489	0.04
CLCO102E282MH102E266		1999		Existing	assumed Mannings N	CO102E282	MH102E266	T15534	IRWD	PVC	{2D1D06F2-2C61-4B35-8B48-2DE18C6F7830}	CLCO102E282MH102E266	108.29	105.09	0.500000000	CO102E282	MH102E266				176	CLCO102E282MH102E266	6	0.0464	0.003190	0.04	0.003829	0.05	0.004540	0.05	0.003829	0.05
CLCO102E284MH102E268		1998		Existing	assumed Mannings N	CO102E284	MH102E268	T15534	IRWD	PVC	{FCDA78EF-12F5-4F21-89BB-A53D6E9A9EA7}	CLCO102E284MH102E268	110.02	108.02	0.500000000	CO102E284	MH102E268				68	CLCO102E284MH102E268	6	0.0294	0.001427	0.03	0.001713	0.04	0.002030	0.04	0.001713	0.04
CLCO102E286MH102E272		1999		Existing	assumed Mannings N	CO102E286	MH102E272	T15534	IRWD	PVC	{D5A68A0A-5107-4505-8B01-8FF1125BB1B1}	CLCO102E286MH102E272	110.94	108.76	0.500000000	CO102E286	MH102E272				99	CLCO102E286MH102E272	6	0.0220	0.002398	0.05	0.002878	0.05	0.003412	0.05	0.002878	0.05
CLCO102E287MH102E271		1999		Existing	assumed Mannings N	CO102E287	MH102E271	T15534	IRWD	PVC	{89190AEB-CAAF-4B29-9531-F607375CFEEB}	CLCO102E287MH102E271	111.16	108.97	0.500000000	CO102E287	MH102E271				141	CLCO102E287MH102E271	6	0.0308	0.001505	0.03	0.001807	0.04	0.002143	0.04	0.001807	0.04
CLCO102E290MH102E272		1999		Existing	assumed Mannings N	CO102E290	MH102E272	T15534	IRWD	PVC	{A8737D7F-A0C3-44E4-B6F9-83167273A4E8}	CLCO102E290MH102E272	111.22	108.76	0.500000000	CO102E290	MH102E272				70	CLCO102E290MH102E272	6	0.0351	0.003190	0.05	0.003829	0.05	0.004540	0.06	0.003829	0.05
CLCO102E294MH102E273		1998		Existing	assumed Mannings N	CO102E294	MH102E273	T15534	IRWD	PVC	{150E19E4-8D22-498E-9683-8FD795F549DA8}	CLCO102E294MH102E273	113.19	110.22	0.500000000	CO102E294	MH102E273				74	CLCO102E294MH102E273	6	0.0358	0.002278	0.04	0.002735	0.04	0.003243	0.05	0.002735	0.04
CLCO102E297MH102E275		1999		Existing	assumed Mannings N	CO102E297	MH102E275	T15534	IRWD	PVC	{553A8A15D-0D98-4A1F-A0C4-F6705FBC1439}	CLCO102E297MH102E275	114.02	111.38	0.500000000	CO102E297	MH102E275				81	CLCO102E297MH102E275	6	0.0326	0.004735	0.06	0.005685	0.06	0.006739	0.07	0.005685	0.06
CLCO102E303MH102E276		1999		Existing	assumed Mannings N	CO102E303	MH102E276	T15534	IRWD	PVC	{FE4F5B03-B79B-4EEC-8355-4138794C667C}	CLCO102E303MH102E276	112.56	112.12	0.500000000	CO102E303	MH102E276				50	CLCO102E303MH102E276	6	0.0088	0.003863	0.07	0.004638	0.08	0.005499	0.09	0.004638	0.08
CLCO102E307MH102E278		1998		Existing	assumed Mannings N	CO102E307	MH102E278	T15534	IRWD	PVC	{21330C85-4E1A-4997-90C6-CEA7C2568FC5}	CLCO102E307MH102E278	116.80	112.87	0.500000000	CO102E307	MH102E278				84	CLCO102E307MH102E278	6	0.0491	0.004497	0.05	0.005399	0.06	0.006401	0.06	0.005399	0.06
CLCO102E308MH102E279		1998		Existing	assumed Mannings N	CO102E308	MH102E279	T15534	IRWD	PVC	{E791908C-1C44-48DF-BF01-09777E9A2F42}	CLCO102E308MH102E279	116.16	114.16	0.500000000	CO102E308	MH102E279				63	CLCO102E308MH102E279	6	0.0357	0.001545	0.03	0.001854	0.04	0.002198	0.04	0.001854	0.04
CLCO102E309MH102E279		1999		Existing	assumed Mannings N	CO102E309	MH102E279	T15534	IRWD	PVC	{506F1796-4F58-463F-978C-01473CBF9874}	CLCO102E309MH102E279	116.08	114.05	0.500000000	CO102E309	MH102E279				32	CLCO102E309MH102E279	6	0.0634	0.000891	0.02	0.001070	0.02	0.001269	0.03	0.001070	0.02
CLCO102E313MH102E280		1998		Existing	assumed Mannings N	CO102E313	MH102E280	T15534	IRWD	PVC	{80A2BD16-6EDA-4206-A040-7A5D7C268D9A}	CLCO102E313MH102E280	116.41	114.47	0.500000000	CO102E313	MH102E280				54	CLCO102E313MH102E280	6	0.0359	0.002101	0.04	0.002521	0.04	0.002989	0.05	0.002521	0.04
CLCO102E344MH102E436		1998		Existing	assumed Mannings N	CO102E344	MH102E436	T15831	IRWD	PVC	{B5B619F5-8E45-4063-A806-279279FA6A68}	CLCO102E344MH102E436	118.37	115.22	0.666666667	CO102E344	MH102E436				84	CLCO102E344MH102E436	8	0.0192	0.006002	0.05	0.007206	0.06	0.008544	0.06	0.007206	0.06
CLCO102E345MH102E325		1998		Existing	assumed Mannings N	CO102E345	MH102E325	15590	IRWD	PVC	{DBF69A9A-18F2-4F8A-98BA-A354231A7A7}	CLCO102E345MH102E325	111.76	109.56	0.666666667	CO102E345	MH102E325				27	CLCO102E345MH102E325	8	0.0815	0.001606	0.02	0.001927	0.02	0.002284	0.02	0.001927	0.02
CLCO102E353MH102E437		1998		Existing	assumed Mannings N	CO102E353	MH102E437	T15538	IRWD	PVC	{781F1DFA-C48E-42CD-9BBB-F9B3BE018982}	CLCO102E353MH102E437	119.73	116.51	0.666666667	CO102E353	MH102E437				232	CLCO102E353MH102E437	8	0.0139	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO102E371MH102E367		1999		Existing	assumed Mannings N	CO102E371	MH102E367	A009121	IRWD	PVC	{ADA6E8DD5-0011-4955-A610-D92CCE131841}	CLCO102E371MH102E367	115.83	113.19	0.666666667	CO102E371	MH102E367				136	CLCO102E371MH102E367	8	0.0194	0.000627	0.02	0.000753	0.02	0.000882	0.02	0.000753	0.02
CLCO102E402MH102E386		1999		Existing	assumed Mannings N	CO102E402	MH102E386	T15859	IRWD	PVC	{AE0733EE-4ED6-4502-B0C0-76ABC5F7326C}	CLCO102E402MH102E386	109.37	107.86	0.666666667	CO102E402	MH102E386				104	CLCO102E402MH102E386	8	0.0145	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLCO102E403MH102E386		1999		Existing	assumed Mannings N	CO102E403	MH102E386	T15859	IRWD	PVC	{D2D54882-A6C3-46FF-A459-B4C534970E4F}	CLCO102E403MH102E386	107.87	107.76	0.666666667	CO102E403	MH102E386				24	CLCO102E403MH102E386	8	0.0046	0.002001	0.04	0.002401	0.04	0.002848	0.05	0.002401	0.04
CLCO102E404MH102E387		1999		Existing	assumed Mannings N	CO102E404	MH102E387	T15859	IRWD	PVC	{DCA06363-5508-4186-8689-8E4FFBA483EC}	CLCO102E404MH102E387	112.29	111.87	0.666666667	CO102E404	MH102E387				104	CLCO102E404MH102E387	8	0.0040	0.000416	0.02	0.000500	0.02	0.000592	0.02	0.000500	0.02
CLCO102E405MH102E387		1999		Existing	assumed Mannings N	CO102E405	MH102E387	T15859	IRWD	PVC	{E0714FD5-AA67-4943-B8B8-0B1A7975012B}	CLCO102E405MH102E387	112.04	111.76	0.666666667	CO102E405	MH102E387				26	CLCO102E405MH102E387	8	0.0106	0.000832	0.02	0.001000	0.02	0.001184	0.02	0.001000	0.02
CLCO102E406MH102E389		1999		Existing	assumed Mannings N	CO102E406	MH102E389	T15859	IRWD	PVC	{8F2EC884-6189-4FEC-9686-B6AA9DA41906}	CLCO102E406MH102E389	107.84	107.41	0.666666667	CO102E406	MH102E389				62	CLCO102E406MH102E389	8	0.0069	0.000891	0.02	0.001070	0.03	0.001269	0.03	0.001070	0.03
CLCO102E407MH102E388		1999		Existing	assumed Mannings N	CO102E407	MH102E388	T15859	IRWD	PVC	{EF0DFE49-BAF9-434B-BA2E-0DEF3E4FE56E}	CLCO102E407MH102E388	111.75	106.23	0.666666667	CO102E407	MH102E388				185	CLCO102E407MH102E388	8	0.0299	0.001168	0.02	0.001404	0.02	0.001664	0.03	0.001404	0.02
CLCO102E408MH102E390		1999		Existing	assumed Mannings N	CO102E408	MH102E390	T15859	IRWD	PVC	{2C89F4FA-70D5-404C-82EA-7FC3E4F1F268}	CLCO102E408MH102E390	108.69	106.80	0.666666667	CO102E408	MH102E390				116	CLCO102E408MH102E390	8	0.0163	0.000990	0.02	0.001190	0.02	0.001410	0.03	0.001190	0.02
CLCO102E409MH102E391		1999		Existing	assumed Mannings N	CO102E409	MH102E391	T15859	IRWD	PVC	{EB53F2B1-5292-4312-83A7-558F7351E473}	CLCO102E409MH102E391	109.75	106.13	0.666666667	CO102E409	MH102E391				162	CLCO102E409MH102E391	8	0.0224	0.002576	0.03	0.003092	0.04	0.003666	0.04	0.003092	0.04
CLCO102E410MH102E334	29.49' E-W IS T15	1999		Existing	assumed Mannings N	CO102E410	MH102E334	T15859	IRWD	PVC	{011DDE6A-DBCB-45C2-A240-F61C87503778}	CLCO102E410MH102E334	111.48	109.73	0.666666667	CO102E410	MH102E334				176	CLCO102E410MH102E334	8	0.0099	0.001288	0.03	0.001547	0.03	0.001833	0.03	0.001547	0.03
CLCO102E411MH102E392		1999		Existing	assumed Mannings N	CO102E411	MH102E392	T15859	IRWD	PVC	{7359D5ED-12DF-418F-AFCA-F05DD915A18F}	CLCO102E411MH102E392	112.75	105.55	0.666666667	CO102E411	MH102E392				184	CLCO102E411MH102E392	8	0.0091	0.002041	0.03	0.002451	0.03	0.002904	0.03	0.002451	0.03
CLCO102E412MH102E389		1999		Existing	assumed Mannings N	CO102E412	MH102E389	T15859	IRWD	PVC	{9077608B-E81A-45D5-9FBA-D78C1BA66C90}	CLCO102E412MH102E389	109.01	107.41	0.666666667	CO102E412	MH102E389				172	CLCO102E412MH102E389	8	0.0093	0.002041	0.04	0.002451	0.04	0.002904	0.04	0.002451	0.04
CLCO102E413MH102E426	29.49' FROM E-W	1999		Existing	assumed Mannings N	CO102E413	MH102E426	T15859	IRWD	PVC	{F9047350-F565-428B-BDD6-8DC2F77F0B08}	CLCO102E413MH102E426	110.94	109.19	0.666666667	CO102E413	MH102E426				176	CLCO102E413MH102E426	8	0.0099	0.002219	0.04	0.002664	0.04	0.003158	0.04	0.002664	0.04
CLCO102E414MH102E390		1999		Existing	assumed Mannings N	CO102E414	MH102E390	T15859	IRWD	PVC	{F88E217E-BCBD-417C-9720-B9059684E67E}	CLCO102E414MH102E390	109.41	106.80	0.666666667	CO102E414	MH102E390				172	CLCO102E414MH102E390	8	0.0152	0.002198	0.03	0.002641	0.04	0.003130	0.04	0.002641	0.04
CLCO102E415MH102E391		1999		Existing	assumed Mannings N	CO102E415	MH102E391	T15859	IRWD	PVC	{EAABD042-1FF7-4E64-9365-987BD7D873C7}	CLCO102E415MH102E391	110.06	106.13	0.666666667	CO102E415	MH102E391				162	CLCO102E415MH102E391	8	0.0228	0.003011	0.04	0.003615	0.04	0.004286	0.04	0.003615	0.04
CLCO102E416MH102E394		1999		Existing	assumed Mannings N	CO102E416	MH102E394	T15859	IRWD	PVC	{9DECEFB9-F273-4523-8FE0-AD08BC236B0B}	CLCO102E416MH102E394	113.36	104.81	0.666666667	CO102E416	MH102E394				184	CLCO102E416MH102E394

| | | |

| | | |

CLCO106E042MH106O60		2014		Existing	assumed Mannings N	CO106E042	MH106O60	T17624	IRWD	PVC	{0DFF5F4E-1BF5-4E0C-832A-7F6B60E82943}	CLCO106E042MH106O60	314.22	313.57	0.666666667	CO106E042	MH106O60																				
CLCO106N022MH106N022		2014		Existing	assumed Mannings N	CO106N022	MH106N022	T17523B	IRWD	PVC	{9B5B9719-770C-44A2-93C5-D4D6AF27222F}	CLCO106N022MH106N022	276.57	276.37	0.666666667	CO106N022	MH106N022																				
CLCO106N023MH106N024		2014		Existing	assumed Mannings N	CO106N023	MH106N024	T17523B	IRWD	PVC	{0215F575-355C-45DE-9EFB-57A9433A273B}	CLCO106N023MH106N024	253.06	252.74	0.666666667	CO106N023	MH106N024																				
CLCO106N024MH106N024		2014		Existing	assumed Mannings N	CO106N024	MH106N024	T17523B	IRWD	PVC	{1AACD4D4-578C-4C53-91C6-E6927F65AB56}	CLCO106N024MH106N024	253.34	252.74	0.666666667	CO106N024	MH106N024																				
CLCO106N026MH106N021		2014		Existing	assumed Mannings N	CO106N026	MH106N021	T17523B	IRWD	PVC	{059644EF-FCDD-40A8-BDFD-94AC6AFBAFD5}	CLCO106N026MH106N021	277.29	277.11	0.666666667	CO106N026	MH106N021																				
CLCO106S064MH106S019		2011		Existing	assumed Mannings N	CO106S064	MH106S019	T17383	IRWD	PVC	{A55F3560-18C4-45D3-9289-B60F544B1B37}	CLCO106S064MH106S019	270.62	270.17	0.666666667	CO106S064	MH106S019																				
CLCO106S130MH106S097		2013		Existing	assumed Mannings N	CO106S130	MH106S097	T17444	IRWD	PVC	{0B3A8CDC-A8D7-4665-920F-9C10FE8A1AF8}	CLCO106S130MH106S097	274.99	273.61	0.666666667	CO106S130	MH106S097																				
CLCO106S131MH106S106		2013		Existing	assumed Mannings N	CO106S131	MH106S106	T17444	IRWD	PVC	{FCC50FFE-F59C-4758-995D-4AD92CE1B202}	CLCO106S131MH106S106	281.81	279.15	0.666666667	CO106S131	MH106S106																				
CLCO106S132MH106S111		2013		Existing	assumed Mannings N	CO106S132	MH106S111	T17444	IRWD	PVC	{EADDADBE-B3DD-428D-B547-31DB3A2F1DC9}	CLCO106S132MH106S111	278.04	275.68	0.666666667	CO106S132	MH106S111																				
CLCO106S133MH106S114		2013		Existing	assumed Mannings N	CO106S133	MH106S114	T17444	IRWD	PVC	{8A030C95-2DA0-4DFD-B825-9272FD93BF0F}	CLCO106S133MH106S114	276.43	273.92	0.666666667	CO106S133	MH106S114																				
CLCO106S134MH106S118		2013		Existing	assumed Mannings N	CO106S134	MH106S118	T17444	IRWD	PVC	{FD483416-9A7E-4A64-8B71-C94DCAC3C1F}	CLCO106S134MH106S118	270.08	268.92	0.666666667	CO106S134	MH106S118																				
CLCO106S173MH106S100		2013		Existing	assumed Mannings N	CO106S173	MH106S100	T17444	IRWD	PVC	{C82A70F8-517C-48AC-A9A2-1051FB9EB5DB}	CLCO106S173MH106S100	282.07	281.03	0.666666667	CO106S173	MH106S100																				
CLCO106S174MH106S020		2011		Existing	assumed Mannings N	CO106S174	MH106S020	T17383	IRWD	PVC	{B1777A9CC-0B68-44A0-B1F9-93068A8D485B}	CLCO106S174MH106S020	266.23	265.78	0.666666667	CO106S174	MH106S020																				
CLCO106S231MH106S219		2014		Existing	assumed Mannings N	CO106S231	MH106S219	T17752	IRWD	PVC	{B248A510-243A-405A-8046-3A6A9D9E93D}	CLCO106S231MH106S219	267.68	267.15	0.500000000	CO106S231	MH106S219																				
CLCO106S232MH106S220		2013		Existing	assumed Mannings N	CO106S232	MH106S220	T17752	IRWD	PVC	{5C3A7C79-4BDC-49D0-9586-177B2F4D4352}	CLCO106S232MH106S220	270.04	269.51	0.500000000	CO106S232	MH106S220																				
CLCO106S233MH106S226		2013		Existing	assumed Mannings N	CO106S233	MH106S226	T17552	IRWD	PVC	{2512F2B5-FD70-4340-966B-25107F1A0AC4}	CLCO106S233MH106S226	275.72	275.30	0.500000000	CO106S233	MH106S226																				
CLCO106S234MH106S229		2013		Existing	assumed Mannings N	CO106S234	MH106S229	T17552	IRWD	PVC	{239CF851-8971-4702-891E-D85AB56AA1D9}	CLCO106S234MH106S229	274.06	272.84	0.500000000	CO106S234	MH106S229																				
CLCO106S235MH106S230		2013		Existing	assumed Mannings N	CO106S235	MH106S230	T17552	IRWD	PVC	{41A75891-696D-40DA-83B0-02075258E186}	CLCO106S235MH106S230	279.27	278.58	0.500000000	CO106S235	MH106S230																				
CLCO106S236MH106S231		2013		Existing	assumed Mannings N	CO106S236	MH106S231	T17552	IRWD	PVC	{0B50120F-1120-4BD3-AFE2-C3E43149A3E6}	CLCO106S236MH106S231	274.66	273.22	0.500000000	CO106S236	MH106S231																				
CLCO106W001MH106W008		2014		Existing	assumed Mannings N	CO106W001	MH106W008	T17523B	IRWD	PVC	{2C3122CE-A1BD-45C0-81F3-928TAC013ASF}	CLCO106W001MH106W008	233.75	233.36	0.666666667	CO106W001	MH106W008																				
CLCO106W002MH106W008		2014		Existing	assumed Mannings N	CO106W002	MH106W008	T17523B	IRWD	PVC	{FC3259FF-B4A9-4CA0-A0CB-6AAACB452C06}	CLCO106W002MH106W008	233.91	233.36	0.666666667	CO106W002	MH106W008																				
CLCO106W003MH106W022		2014		Existing	assumed Mannings N	CO106W003	MH106W022	T17523B	IRWD	PVC	{BAD0BFBC-F4A9-4D51-ACD8-E91C2B43C77A}	CLCO106W003MH106W022	224.74	224.64	0.666666667	CO106W003	MH106W022																				
CLCO106W004MH106W021		2014		Existing	assumed Mannings N	CO106W004	MH106W021	T17523B	IRWD	PVC	{C2ECE038-7721-4EBF-94E7-7362FC5A9481}	CLCO106W004MH106W021	226.48	226.35	0.666666667	CO106W004	MH106W021																				
CLCO106W005MH106W020		2014		Existing	assumed Mannings N	CO106W005	MH106W020	T17523B	IRWD	PVC	{EADB6007-D5AA-41CF-8094-A8B5D8013070}	CLCO106W005MH106W020	228.10	228.00	0.666666667	CO106W005	MH106W020																				
CLCO106W006MH106W019		2014		Existing	assumed Mannings N	CO106W006	MH106W019	T17523B	IRWD	PVC	{B1F34C4F-3524-47DB-AB6C-3FAA99A8FE04}	CLCO106W006MH106W019	222.62	222.49	0.666666667	CO106W006	MH106W019																				
CLCO106W007MH106W032		2014		Existing	assumed Mannings N	CO106W007	MH106W032	T17523B	IRWD	PVC	{746C4CBE-A1D4-471A-9113-3A48B92C686E}	CLCO106W007MH106W032	233.18	232.89	0.666666667	CO106W007	MH106W032																				
CLCO106W008MH106W025		2014		Existing	assumed Mannings N	CO106W008	MH106W025	T17523B	IRWD	PVC	{9B6337AB-E0D5-4438-8C4A-55B06E0A391E}	CLCO106W008MH106W025	235.36	234.90	0.666666667	CO106W008	MH106W025																				
CLCO106W009MH106W026		2014		Existing	assumed Mannings N	CO106W009	MH106W026	T17523B	IRWD	PVC	{0A39665F5-6D68-4CB1-BCBC-01DB922BF21F}	CLCO106W009MH106W026	252.27	242.59	0.666666667	CO106W009	MH106W026																				
CLCO106W010MH106W029		2014		Existing	assumed Mannings N	CO106W010	MH106W029	T17523B	IRWD	PVC	{0F0DBB7F-9D5B-4F0E-AA33-5B8181B968AB}	CLCO106W010MH106W029	260.09	259.76	0.666666667	CO106W010	MH106W029																				
CLCO106W011MH106W013		2014		Existing	assumed Mannings N	CO106W011	MH106W013	T17523B	IRWD	PVC	{7E24135A-36E0-4271-9490-1D90EBC42FEA}	CLCO106W011MH106W013	255.75	255.40	0.666666667	CO106W011	MH106W013																				
CLCO107W018MH0825084		1999		Existing	assumed Mannings N	CO107W018	MH0825084	T15573	IRWD	PVC	{4718D03E-EF72-4A45-AA29-7318D29A0D29}	CLCO107W018MH0825084	284.99	283.35	0.666666667	CO107W018	MH0825084																				
CLCO107W019MH107W016		1999		Existing	assumed Mannings N	CO107W019	MH107W016	T15573	IRWD	PVC	{CA4D98AD-E9E0-4731-A135-EC4207TCE2D}	CLCO107W019MH107W016	313.67	310.35	0.666666667	CO107W019	MH107W016																				
CLCO119S003MH1195001		2006		Existing	assumed Mannings N	CO119S003	MH1195001	T16830	IRWD	PVC	{A50EB67E-A67C-489B-B0E4-32174B5340F6}	CLCO119S001MH1195001	423.47	422.36	0.666666667	CO119S003	MH1195001																				
CLCO119S004MH1195002		2006		Existing	assumed Mannings N	CO119S004	MH1195002	T16830	IRWD	PVC	{AB74272F-0DA3-4D40-B448-CF0F27D0D9A1}	CLCO119S002MH1195002	433.67	432.54	0.666666667	CO119S004	MH1195002																				
CLCO120E015MH120E002		2006		Existing	assumed Mannings N	CO120E015	MH120E002	T16830	IRWD	PVC	{4A852647-D2F9-4923-B72B-C6F8CFB6E023}	CLCO120E015MH120E002	421.55	420.92	0.666666667	CO120E015	MH120E002																				
CLCO120E016MH120E049		2006		Existing	assumed Mannings N	CO120E016	MH120E049	T16862	IRWD	PVC	{583D01FE-559B-4272-934D-BFD0EBF22666}	CLCO120E016MH120E049	418.79	414.63	0.666666667	CO120E016	MH120E049																				
CLCO120E072MH120E064		2010		Existing	assumed Mannings N	CO120E072	MH120E064	T17360	IRWD	PVC	{8443B2E1-8FCE-4CB2-B5E8-4788B9462B8B}	CLCO120E072MH120E064	393.13	391.32	0.500000000	CO120E072	MH120E064																				
CLCO120E073MH120E069		2010		Existing	assumed Mannings N	CO120E073	MH120E069	T17360	IRWD	PVC	{B585980S-7DE2-487C-B66B-678A13701E5B}	CLCO120E073MH120E069	408.75	407.50	0.500000000	CO120E073	MH120E069																				
CLCO120E110MH120E109		2013		Existing	assumed Mannings N	CO120E110	MH120E109	T17607B	IRWD	PVC	{EC0E529D-E124-4AAA-AAF6-F0213C1F8F73}	CLCO120E110MH120E109	373.50	372.15	0.666666667	CO120E110	MH120E109																				
CLCO120E111MH120E138		2014		Existing	assumed Mannings N	CO120E111	MH120E138	A02397	IRWD	PVC	{519FCB24-0AD9-429A-B9C3-F5411E3859FF}	CLCO120E111MH120E138	380.02	379.11	0.666666667	CO120E111	MH120E138																				
CLCO120E112MH120E104		2013		Existing	assumed Mannings N	CO120E112	MH120E104	T17607B	IRWD	PVC	{8B1AA5EA-6456-4D13-B99F-EDB3B7EFCFC4}	CLCO120E112MH120E104	359.81	358.32	0.666666667	CO120E112	MH120E104																				
CLCO120E141MH120E132		2014		Existing	assumed Mannings N	CO120E141	MH120E132	A02397	IRWD	PVC	{7879E207-9699-49D3-BF80-CCCE7345286F}	CLCO120E141MH120E132	371.77	370.32	0.666666667	CO120E141	MH120E132																				
CLCO120E142MH120E124	20" FROM E-W IS	2014		Existing	assumed Mannings N	CO120E142	MH120E124	A02397	IRWD	PVC	{731B0BDE-E1E7-433F-8083-579AC461OB16}	CLCO120E142MH120E124	372.70	371.38	0.666666667	CO120E142	MH120E124																				
CLCO120E143MH120E122	20.5' FROM E-W I	2014		Existing	assumed Mannings N	CO120E143	MH120E122	A02397	IRWD	PVC	{44BCA81B-E622-4182-BD28-C6FF2DFB4993}	CLCO120E143MH120E122	374.06	372.54	0.666666667	CO120E143	MH120E122																				
CLCO120E144MH120E121	20.5' FROM E-W I	2014		Existing	assumed Mannings N	CO120E144	MH120E121	A02397	IRWD	PVC	{B583D0CD-DCC5-4F6E-9F33-1D984C296360}	CLCO120E144MH120E121	375.35	373.84	0.666666667	CO120E144	MH120E121																				
CLCO120E145MH120E120	20.5' FROM E-W I	2014		Existing	assumed Mannings N	CO120E145	MH120E120	A02397	IRWD	PVC	{5843318F-35F3-47DF-8CC1-9ECF767818D3}	CLCO120E145MH120E120	376.66	375.14	0.666666667	CO120E145	MH120E120																				
CLCO120E146MH120E133		2014		Existing	assumed Mannings N	CO120E146	MH120E133	A02397	IRWD	PVC	{7CA5C401-588A-4DD0-A104-EAAC190D409E}	CLCO120E146MH120E133	377.99	376.95	0.666666667	CO120E146	MH120E133																				
CLCO120E147MH120E117	20.5' FROM S-N IS	2014		Existing	assumed Mannings N	CO120E147	MH120E117	A02397	IRWD	PVC	{B3390BBE-F7AD-4EE4-A8DA-8E023BE6EF3}	CLCO120E147MH120E117	378.79	377.26	0.666666667	CO120E147	MH120E117																				
CLCO120E148MH120E136		2014		Existing	assumed Mannings N	CO120E148	MH120E136	A02397	IRWD	PVC	{49C2598I-C173-4B72-9989-7392F6612B84}	CLCO120E148MH120E136	379.16	377.95	0.666666667	CO120E148	MH120E136																				
CLCO120E149MH120E116	20.5' FROM S-N IS	2014		Existing	assumed Mannings N	CO120E149	MH120E116	A02397	IRWD	PVC	{48CDA87D-911F-4C62-94B0-87A8D2677BF7}	CLCO120E149MH120E116	380.09	378.56	0.666666667	CO120E149	MH120E116																				
CLCO120E150MH120E116	32.5' FROM N-S IS	2014		Existing	assumed Mannings N	CO120E150	MH120E116	A02397	IRWD	PVC	{5FEC5960-7C53-4570-B82C-82E7E84EC19D}	CLCO120E150MH120E116	379.79	378.56	0.666666667	CO120E150	MH120E116																				
CLCO120E151MH120E114	20.5' FROM S-N IS	2014		Existing	assumed Mannings N	CO120E151	MH120E114	A02397	IRWD	PVC	{B0DF9C3A-E9A7-4AD6-89EA-264F4B255223}	CLCO120E151MH120E114	382.69	380.86	0.666666667	CO120E151	MH120E114																				
CLCO120E152MH120E115	20.5'FROM S-N IS	2014		Existing	assumed Mannings N	CO120E152	MH120E115	A02397	IRWD	PVC	{A7DC65FD-80F0-415F-93DC-F609A25F7E6F}	CLCO120E152MH120E115	381.36	379.86	0.666666667	CO120E152	MH120E115																				
CLCO120E153MH120E115	32.5' FROM N-S IS	2014		Existing	assumed Mannings N	CO120E153	MH120E115	A02397	IRWD	PVC	{7B520C96-FF42-4F6E-A015-50F3E745105A}	CLCO120E153MH120E115	381.88	379.86	0.666666667	CO120E153	MH120E115																				
CLCO120E154MH120E114	32.5' FROM N-S IS	2014		Existing	assumed Mannings N	CO120E154	MH120E114	A02397	IRWD	PVC	{F0088AE1-CFB4-4A60-BD61-D1A6274F3BA9}	CLCO120E154MH120E114	383.21	380.86	0.666666667	CO120E154	MH120E114																				
CLCO120E155MH120E113	20.5 FROM N-S IS	2014		Existing	assumed Mannings N	CO120E155	MH120E113	A02397	IRWD	PVC	{E5E68EF5-28B0-4D68-9CEB-43D8224787ZA}	CLCO120E155MH120E113	383.99	381.86	0.666666667	CO120E155	MH120E113																				
CLCO120E156MH120E113	32.82	2014		Existing	assumed Mannings N	CO120E156	MH120E113	A02397	IRWD	PVC	{E850F80F-AOC3-4C01-9045-119F87A10FD1}	CLCO120E156MH120E113	384.11	381.86	0.666666667	CO120E113	MH120E113																				
CLCO120E157MH120E140		2003		Existing	assumed Mannings N	CO120E157	MH120E140	A02397	IRWD	PVC	{5FCA73D3-A613-4433-9B20-1B72CC338DB3}	CLCO120E157MH120E140	379.64	378.71	0.666666667	CO120E157	MH120E140																				
CLCO120E158MH120E127	32.5 FROM E-W IS	2014		Existing	assumed Mannings N	CO120E158	MH120E127	A02397	IRWD	PVC	{7FAD1668-AD26-4092-9C17-2A7622449E35}	CLCO120E158MH120E127	377.67	377.34	0.666666667	CO120E158	MH120E127																				
CLCO120E159MH120E130	20.5' FROM N-S IS	2014		Existing	assumed Mannings N	CO120E159	MH120E130	A02397	IRWD	PVC	{57145950-1DFF-4190-B139-F7A62F4E4C07}	CLCO120E159MH120E130	375.35	375.14	0.666666667	CO120E159	MH120E130																				
CLCO120E160MH120E131	32.5' FROM S-N IS	2014		Existing	assumed Mannings N	CO120E160	MH120E131	A02397	IRWD	PVC	{9B80FA0C-4BA0-4028-B06A-F895AFBDA2C5}	CLCO120E160MH120E131	375.44	373.84	0.666666667	CO120E160	MH120E131																				
CLCO120E161MH120E137		2014		Existing	assumed Mannings N	CO120E161	MH120E137	A02397	IRWD	PVC	{D18FE30E-2CB9-48AD-B463-176638A4807A}	CLCO120E161MH120E137	375.83	375.51	0.666666667	CO120E161	MH120E137																				
CLCO120E162MH120E135		2014		Existing	assumed Mannings N	CO120E162	MH120E135	A02397	IRWD	PVC	{1A95064A-C169-487A-8602-05A611ECA34A}	CLCO120E162MH120E135	378.30	377.56	0.666666667	CO120E162	MH120E135																				
CLCO120N001MH120N030		2013		Existing	assumed Mannings N	CO120N001	MH120N030	T17443	IRWD	PVC	{B7505AF3-1E99-4F6D-864D-2B3E9D07CD51}	CLCO120N001MH120N030	317.29	316.84	0.500000000	CO120N001	MH120N030																				
CLCO120N002MH120N033		2013		Existing	assumed Mannings N	CO120N002	MH120N033	T17443	IRWD	PVC	{8FED0186-E5CD-4AAB-A7EA-D7E2E6404AD2}	CLCO120N002MH120N033	320.09	319.71	0.500000000	CO120N002	MH120N033																				
CLCO120N003MH120N031		2013		Existing	assumed Mannings N	CO120N003	MH120N031	T17443	IRWD	PVC	{329C7F75-46D6-4397-AD71-16920E298F1E}	CLCO120N003MH120N031	322.51	322.14	0.500000000	CO120N003	MH120N031																				
CLCO120N057MH120N056		2014		Existing	assumed Mannings N	CO120N057	MH120N056	A02352	IRWD	PVC	{691742C1-8BE3-4158-9CD6-F9876313F5C}	CLCO120N057MH120N056	315.94	315.85	0.666666667	CO120N057	MH120N056																				
CLCO120S149MH120E106		2014		Existing	assumed Mannings N	CO120S149	MH120E106	T17607B	IRWD	PVC	{ECAC4644-C747-4383-BC18-7F3E5A323B8E}	CLCO120S149MH120E106	364.21	359.52	0.666666667	CO120S149	MH120E106																				
CLCO120S150MH120E105		2013		Existing	assumed Mannings N	CO120S150	MH120E105	T17607B	IRWD	PVC	{893200AF-81C5-4A18-98B9-F259B0430601}	CLCO120S150MH120E105	363.29	358.80	0.666666667	CO120S150	MH120E105																				
CLCO120S152MH120E103		2013		Existing	assumed Mannings N	CO120S152	MH120E103	T17607B	IRWD	PVC	{722D2D8A-585D-4AE8-89F8-833B2AD46CF2}	CLCO120S152MH120E103	364.37	357.87	0.666666667	CO120S152	MH120E103																				
CLCO120S153MH120S008		2013		Existing	assumed Mannings N	CO120S153	MH120S008	T17607B	IRWD	PVC	{089F3874-816A-4557-881B-184F427FEC05}	CLCO120S153MH120S008	325.10	316.91	0.666666667	CO120S153	MH120S008																				
CLCO120W112MH120W015		2007		Existing	assumed Mannings N	CO120W112	MH120W015	T17086F	IRWD	PVC	{487C2E02-C10C-4ED2-8F8A-DAB22B011294}	CLCO120W112MH120W015	277.55	277.00	0.666666667	CO120W112	MH120W015																				
CLCO120W113MH120W014		2007		Existing	assumed Mannings N	CO120W113	MH120W014	T17086F	IRWD	PVC	{D8D2033C-DF18-40A4-A0E8-B5DB5BD6DD95}	CLCO120W113MH120W014	277.55	276.56	0.666666667	CO120W113	MH120W014																				
CLCO120W114MH120W011		2007		Existing	assumed Mannings N	CO120W114	MH120W011	T17086F	IRWD	PVC	{FC75DF2D-7704-4748-8E02-FF5729F0AA06}	CLCO120W114MH120W011	276.65	275.40	0.666666667	CO120W114	MH120W011																				
CLCO120W115MH120W010		2007		Existing	assumed Mannings N	CO120W115	MH120W010	T17086F	IRWD	PVC	{C7A3193C-CDEB-48D5-B40C-29EC45D8D816}	CLCO120W115MH120W010	276.65	275.90	0.666666667	CO120W115	MH120W010																				
CLCO120W116MH120W017		2007		Existing	assumed Mannings N	CO120W116	MH120W017	T17086F	IRWD	PVC	{256BF3D5-EF20-4F34-8B9B-3352A7295AF5}	CLCO120W116MH120W017	274.35	273.17	0.666666667	CO120W116	MH120W017																				
CLCO120W117MH120W016		2007		Existing	assumed Mannings N	CO120W117	MH120W016	T17086F	IRWD	PVC	{4C1FB25E-7BA7-4A47-AB7C-A3171958FCEf}	CLCO120W117MH120W016	274.35	273.60	0.666666667	CO120W117	MH120W016																				
CLCO120W118MH120W019		2007		Existing	assumed Mannings N	CO120W118	MH120W019	T17086F	IRWD	PVC	{4C533271-4C76-4358-AA46-5D51B1C95D9F}	CLCO120W118MH120W019	279.45	278.39	0.666666667	CO120W118	MH120W019																				
CLCO120W119MH120W018		2007		Existing	assumed Mannings N	CO120W119	MH120W018	T17086F	IRWD	PVC	{728F9788-D4A6-468C-A288-9119F8A2C7B9}	CLCO120W119MH120W018	279.45	278.83	0.666666667	CO120W119	MH120W018																				
CLCO120W120MH120W025		2007		Existing	assumed Mannings N	CO120W120	MH120W025	T17086F	IRWD	PVC	{F959A9E9-F6EE-464E-A975-A03742B64127}	CLCO120W120MH120W025	275.00	272.00	0.666666667	CO120W120	MH120W025																				
CLCO120W121MH120W024		2007		Existing	assumed Mannings N	CO120W121	MH120W024	T17086F	IRWD	PVC	{18669BAB-24A4-425A-9C44-AE73C4521AE3}	CLCO120W121MH120W024	275.00	272.50	0.666666667	CO120W121	MH120W024																				
CLCO120W122MH120W028		2007		Existing	assumed Mannings N	CO120W122	MH120W028	T17086F	IRWD	PVC	{E3A17786-C7A0-44F4-8D2F-2DE3750694B4}	CLCO120W122MH120W028	273.45	269.83	0.666666667	CO120W122	MH120W028																				
CLCO120W123MH120W027		2007		Existing	assumed Mannings N	CO120W123	MH120W027	T17086F	IRWD	PVC	{6EBF2B1D-9EFD-4056-B595-5CAA6C31EAA0}	CLCO120W123MH120W027	273.60	270.57	0.666666667	CO120W123	MH120W027																				
CLCO120W124MH120W041		2007		Existing	assumed Mannings N	CO120W124	MH120W041	T17086F	IRWD	PVC	{3F053E0B-BE02-4D37-AAD3-C1562FA56A9B}	CLCO120W124MH120W041	270.50	269.64	0.666666667	CO120W124	MH120W041																				
CLCO120W125MH120W040		2007		Existing	assumed Mannings N	CO120W125	MH120W040	T17086F	IRWD	PVC	{7F1956A0-C6A4-44E6-9032-152774BE8678}	CLCO120W125MH120W040	270.50	269.27	0.666666667	CO120W125	MH120W040																				
CLCO120W126MH120W038		2007		Existing	assumed Mannings N	CO120W126	MH120W038	T17086F	IRWD	PVC	{9824A7B3-ABC6-4226-926E-99FD22103FBF}	CLCO120W126MH120W038	269.95	269.25	0.666666667	CO120W126	MH120W038																				
CLCO120W127MH120W037		2007		Existing	assumed Mannings N	CO120W127	MH120W037	T17086F	IRWD	PVC	{7DEE26D4-E7CA-48D1-8957-914041AB4004}	CLCO120W127MH120W037	270.23	269.87	0.666666667	CO120W127	MH120W037																				
CLCO120W128MH120W047		2007		Existing	assumed Mannings N	CO120W128	MH120W047	T17086E	IRWD	PVC	{FC241E1A-B9EA-4261-B5A3-6D463BC3EE6}	CLCO120W128MH120W047	294.80	292.47	0.666666667	CO120W128	MH120W047																				
CLCO120W129MH120W042		2007		Existing	assumed Mannings N	CO120W129	MH120W042	T17086E	IRWD	PVC	{6AA8B099-3D6C-49D2-B6A7-D057981E67FC}	CLCO120W129MH120W042	289.24	287.86	0.666666667	CO120W129	MH120W042																				
CLCO120W130MH120W043		2007		Existing	assumed Mannings N	CO120W130	MH120W043	T17086E	IRWD	PVC	{D18CE42E-5EDD-4FC8-A299-4DFD35B4C7EA}	CLCO120W130MH120W043	292.40	289.32	0.666666667	CO120W130	MH120W043																				
CLCO120W131MH120W046		2007		Existing	assumed Mannings N	CO120W131	MH120W046	T17086E	IRWD	PVC	{EEB75ABC-7BCE-43D2-89D7-24E5778140FD}	CLCO120W131MH120W046	290.14	288.24	0.666666667	CO120W131	MH120W046																				
CLCO120W132MH120W047		2007		Existing	assumed Mannings N	CO120W132	MH120W047	T17086E	IRWD	PVC	{29CF0999-98E1-4A20-91D2-6F9B4803BCBF}	CLCO120W132MH120W047	292.60	292.47	0.666666667	CO120W132	MH120W047																				
CLCO120W133MH120W051		2007		Existing	assumed Mannings N	CO120W133	MH120W051	T17086E	IRWD	PVC	{F5FE133A8-7AB2-4EAF-9728-A8338EF98F60}	CLCO120W133MH120W051	298.95	297.38	0.666666667	CO120W133	MH120W051																				
CLCO120W134MH120W052		2007		Existing	assumed Mannings N	CO120W134	MH120W052	T17086E	IRWD	PVC	{E42C6685-B5B9-4C6C-9685-E750359D1986}	CLCO120W134MH120W052	300.61	297.20	0.666666667	CO120W134	MH120W052																				
CLCO120W135MH120W052		2007		Existing	assumed Mannings N	CO120W135	MH120W052	T17086E	IRWD	PVC	{A7124603-745F-4217-9FC5-627343125ED7}	CLCO120W135MH120W052	299.00	297.20	0.666666667	CO120W135	MH120W052																				
CLCO120W136MH120W056		2007		Existing	assumed Mannings N	CO120W136	MH120W056	T17086E	IRWD	PVC	{829C9685-75C7-434F-B242-BACA6E2C972}	CLCO120W136MH120W056	293.50	291.45	0.666666667	CO120W136	MH120W056																				
CLCO120W137MH120W064		2007		Existing	assumed Mannings N	CO120W137	MH120W064	T17086E	IRWD	PVC	{6198FDCE-F4F2-41F2-84EA-9F837E80FE93}	CLCO120W137MH120W064	291.20	290.84	0.666

CLC0121N075MH121N032			2005		Existing	assumed Mannings N	CO121N075	MH121N032		T16676	IRWD	PVC	{4834A3C1-419A-4A30-9B26-572F2F185A5F}	CLC0121N075MH121N032	242.00		236.44	0.500000000	CO121N075	MH121N032			123	CLC0121N075MH121N032	6	0.0452	0.001039	0.03	0.001248	0.03	0.001478	0.03	0.001248	0.03	
CLC0121N076MH121N040			2005		Existing	assumed Mannings N	CO121N076	MH121N040		T16676	IRWD	PVC	{449E842D-5292-4544-9D71-41B98F80497B}	CLC0121N076MH121N040	239.00		230.88	0.500000000	CO121N076	MH121N040			143	CLC0121N076MH121N040	6	0.0568	0.001991	0.03	0.002391	0.04	0.002833	0.04	0.002391	0.04	
CLC0121N077MH121N034			2005		Existing	assumed Mannings N	CO121N077	MH121N034		T16676	IRWD	PVC	{27CFD333-BA2F-4A53-B1FB-2F28580F0B26}	CLC0121N077MH121N034	243.71		237.88	0.500000000	CO121N077	MH121N034			123	CLC0121N077MH121N034	6	0.0474	0.001775	0.03	0.002130	0.04	0.002525	0.04	0.002130	0.04	
CLC0121N078MH121N026			2005		Existing	assumed Mannings N	CO121N078	MH121N026		T16676	IRWD	PVC	{8EC46AD3-898A-4F96-9346-10070910B374}	CLC0121N078MH121N026	246.23		239.94	0.500000000	CO121N078	MH121N026			155	CLC0121N078MH121N026	6	0.0405	0.001450	0.03	0.001741	0.03	0.002064	0.04	0.001741	0.03	
CLC0121N079MH121N029			2005		Existing	assumed Mannings N	CO121N079	MH121N029		T16676	IRWD	PVC	{F9006988-6506-4AFD-AF99-12AA382F30BA}	CLC0121N079MH121N029	248.11		243.41	0.500000000	CO121N079	MH121N029			155	CLC0121N079MH121N029	6	0.0303	0.001039	0.03	0.001248	0.03	0.001478	0.03	0.001248	0.03	
CLC0121N080MH121N031			2005		Existing	assumed Mannings N	CO121N080	MH121N031		T16676	IRWD	PVC	{3E719ACD-3853-46CC-AC10-C4252487374E}	CLC0121N080MH121N031	250.27		244.94	0.500000000	CO121N080	MH121N031			155	CLC0121N080MH121N031	6	0.0344	0.000908	0.03	0.001092	0.03	0.001293	0.03	0.001092	0.03	
CLC0121N081MH121N026			2005		Existing	assumed Mannings N	CO121N081	MH121N026		T16676	IRWD	PVC	{E1713317-EBD6-4883-88D1-2371591AD4CD}	CLC0121N081MH121N026	244.58		239.94	0.500000000	CO121N081	MH121N026			98	CLC0121N081MH121N026	6	0.0473	0.000931	0.03	0.001117	0.03	0.001325	0.03	0.001117	0.03	
CLC0121N082MH121N033			2005		Existing	assumed Mannings N	CO121N082	MH121N033		T16676	IRWD	PVC	{7B3DFA11-83E4-4353-B1B9-446747C74A6E}	CLC0121N082MH121N033	252.27		245.60	0.500000000	CO121N082	MH121N033			155	CLC0121N082MH121N033	6	0.0430	0.002035	0.04	0.002442	0.04	0.002895	0.04	0.002442	0.04	
CLC0121N083MH121N032			2005		Existing	assumed Mannings N	CO121N083	MH121N032		T16676	IRWD	PVC	{C10D53B7-75C2-47E6-A411-1DB8A08F48BB}	CLC0121N083MH121N032	243.03		236.44	0.500000000	CO121N083	MH121N032			123	CLC0121N083MH121N032	6	0.0540	0.000758	0.02	0.000910	0.02	0.001079	0.03	0.000910	0.02	
CLC0121N084MH121N030			2003		Existing	assumed Mannings N	CO121N084	MH121N030		T16495	IRWD	PVC	{B99E0BD9-3382-43B2-BBA6-E14C7EE1CCFC}	CLC0121N084MH121N030	258.83		256.95	0.500000000	CO121N084	MH121N030			38	CLC0121N084MH121N030	6	0.0495	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N085MH121N039			2005		Existing	assumed Mannings N	CO121N085	MH121N039		T16676	IRWD	PVC	{99131A59-B7D5-4EC1-A09A-E8D6092D40B2}	CLC0121N085MH121N039	261.48		255.50	0.500000000	CO121N085	MH121N039			167	CLC0121N085MH121N039	6	0.0358	0.001431	0.03	0.001692	0.04	0.002007	0.04	0.001692	0.04	
CLC0121N086MH121N043			2005		Existing	assumed Mannings N	CO121N086	MH121N043		T16676	IRWD	PVC	{240B684F-6F16-44D2-B369-63727BE817A7}	CLC0121N086MH121N043	240.41		235.67	0.500000000	CO121N086	MH121N043			142	CLC0121N086MH121N043	6	0.0334	0.001471	0.03	0.001767	0.04	0.002094	0.04	0.001767	0.04	
CLC0121N087MH121N042			2005		Existing	assumed Mannings N	CO121N087	MH121N042		T16676	IRWD	PVC	{E803B5C3-88CD-4180-AE3D-A6454CF926F3}	CLC0121N087MH121N042	262.54		257.22	0.500000000	CO121N087	MH121N042			155	CLC0121N087MH121N042	6	0.0343	0.001537	0.03	0.001844	0.04	0.002188	0.04	0.001844	0.04	
CLC0121N254MH121N130			2007		Existing	assumed Mannings N	CO121N254	MH121N130		T16755E	IRWD	PVC	{F2870708-8F95-4602-B983-919B212A770E5}	CLC0121N254MH121N130	265.57		264.15	0.500000000	CO121N254	MH121N130			138	CLC0121N254MH121N130	6	0.0103	0.002272	0.05	0.002728	0.06	0.003235	0.06	0.002728	0.06	
CLC0121N255MH121N120			2007		Existing	assumed Mannings N	CO121N255	MH121N120		T16755E	IRWD	PVC	{FE5DB950-73AE-4562-A9BA-B223BE10232C}	CLC0121N255MH121N120	270.50		265.70	0.500000000	CO121N255	MH121N120			192	CLC0121N255MH121N120	6	0.0250	0.005670	0.07	0.006807	0.07	0.008070	0.08	0.006807	0.07	
CLC0121N256MH121N114			2007		Existing	assumed Mannings N	CO121N256	MH121N114		T16755E	IRWD	PVC	{E0630DFB-1C39-40A2-A6CC-6DE3D82E9FD5}	CLC0121N256MH121N114	258.39		257.01	0.500000000	CO121N256	MH121N114			134	CLC0121N256MH121N114	6	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N257MH121N123			2007		Existing	assumed Mannings N	CO121N257	MH121N123		T16755E	IRWD	PVC	{9CE609B8-1943-42FD-AE97-6368211E882E}	CLC0121N257MH121N123	263.53		259.05	0.500000000	CO121N257	MH121N123			139	CLC0121N257MH121N123	6	0.0324	0.002510	0.04	0.003015	0.05	0.003572	0.05	0.003015	0.05	
CLC0121N258MH121N123			2007		Existing	assumed Mannings N	CO121N258	MH121N123		T16755E	IRWD	PVC	{990CB826-8C1D-4D87-A9E6-1629904E11CC}	CLC0121N258MH121N123	260.60		259.05	0.500000000	CO121N258	MH121N123			139	CLC0121N258MH121N123	6	0.0103	0.002510	0.06	0.003015	0.06	0.003572	0.07	0.003015	0.06	
CLC0121N259MH121N126			2007		Existing	assumed Mannings N	CO121N259	MH121N126		T16755E	IRWD	PVC	{FB079A06-19D7-4E62-977B-57898806509B}	CLC0121N259MH121N126	269.89		268.67	0.500000000	CO121N259	MH121N126			119	CLC0121N259MH121N126	6	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N260MH121N119			2007		Existing	assumed Mannings N	CO121N260	MH121N119		T16755E	IRWD	PVC	{4E56D322-24DD-4F50-BC6A-FC344F82C2A7}	CLC0121N260MH121N119	271.30		267.03	0.500000000	CO121N260	MH121N119			139	CLC0121N260MH121N119	6	0.0308	0.001991	0.04	0.002391	0.04	0.002833	0.05	0.002391	0.04	
CLC0121N261MH121N116			2007		Existing	assumed Mannings N	CO121N261	MH121N116		T16755E	IRWD	PVC	{B304A368-364B-448E-9F84-E80F9EA6E535}	CLC0121N261MH121N116	263.55		262.16	0.500000000	CO121N261	MH121N116			134	CLC0121N261MH121N116	6	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N262MH121N122			2007		Existing	assumed Mannings N	CO121N262	MH121N122		T16755E	IRWD	PVC	{C1A72B3E-D1B6-4BAE-818A-54E3F55FD0A6}	CLC0121N262MH121N122	263.30		261.75	0.500000000	CO121N262	MH121N122			150	CLC0121N262MH121N122	6	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N263MH121N118			2007		Existing	assumed Mannings N	CO121N263	MH121N118		T16755E	IRWD	PVC	{9B76B4D3-0DC8-414D-87D4-B54E3F652E19}	CLC0121N263MH121N118	273.20		268.90	0.500000000	CO121N263	MH121N118			139	CLC0121N263MH121N118	6	0.0311	0.001991	0.04	0.002391	0.04	0.002833	0.05	0.002391	0.04	
CLC0121N264MH121N117			2007		Existing	assumed Mannings N	CO121N264	MH121N117		T16755E	IRWD	PVC	{67B6E9B1-2418-4983-ADD6-E4FDCD91AE76}	CLC0121N264MH121N117	274.30		270.00	0.500000000	CO121N264	MH121N117			139	CLC0121N264MH121N117	6	0.0311	0.002272	0.04	0.002728	0.05	0.003235	0.05	0.002728	0.05	
CLC0121N265MH121N113			2007		Existing	assumed Mannings N	CO121N265	MH121N113		T16755E	IRWD	PVC	{80177D87-01FA-40A4-B78F-C4E260E709FD}	CLC0121N265MH121N113	272.10		268.40	0.500000000	CO121N265	MH121N113			139	CLC0121N265MH121N113	6	0.0267	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N266MH121N115			2007		Existing	assumed Mannings N	CO121N266	MH121N115		T16755E	IRWD	PVC	{1D5512DA-B5D2-476A-BC32-96FC3C94882B}	CLC0121N266MH121N115	269.40		265.86	0.500000000	CO121N266	MH121N115			139	CLC0121N266MH121N115	6	0.0256	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N267MH121N124			2007		Existing	assumed Mannings N	CO121N267	MH121N124		T16755E	IRWD	PVC	{7502CF8A-8EC8-41E4-AC72-4EED691B78E8}	CLC0121N267MH121N124	271.80		267.31	0.500000000	CO121N267	MH121N124			139	CLC0121N267MH121N124	6	0.0348	0.003312	0.05	0.003974	0.05	0.004713	0.06	0.003974	0.05	
CLC0121N268MH121N117			2007		Existing	assumed Mannings N	CO121N268	MH121N117		T16755E	IRWD	PVC	{3A107F33-7CC3-469B-AFE9-FD01FF1A115E}	CLC0121N268MH121N117	271.41		270.00	0.500000000	CO121N268	MH121N117			141	CLC0121N268MH121N117	6	0.0100	0.004328	0.07	0.005196	0.08	0.006160	0.09	0.005196	0.08	
CLC0121N269MH121N115			2007		Existing	assumed Mannings N	CO121N269	MH121N115		T16755E	IRWD	PVC	{FB68B370-3B6D-497E-BAC2-A6D8F4E15B1F}	CLC0121N269MH121N115	267.10		265.86	0.500000000	CO121N269	MH121N115			108	CLC0121N269MH121N115	6	0.0115	0.004518	0.07	0.005357	0.08	0.006351	0.09	0.005357	0.08	
CLC0121N270MH121N128			2007		Existing	assumed Mannings N	CO121N270	MH121N128		T16755E	IRWD	PVC	{8E2A7DAD-DF40-4315-953F-3A6646AA1751}	CLC0121N270MH121N128	260.90		259.51	0.500000000	CO121N270	MH121N128			134	CLC0121N270MH121N128	6	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N271MH121N131			2007		Existing	assumed Mannings N	CO121N271	MH121N131		T16755E	IRWD	PVC	{F82BD99F-50CE-4D63-8520-6F0680DC52CC}	CLC0121N271MH121N131	267.57		266.14	0.500000000	CO121N271	MH121N131			138	CLC0121N271MH121N131	6	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N272MH121N133			2007		Existing	assumed Mannings N	CO121N272	MH121N133		T16755E	IRWD	PVC	{2DCAF6B8-8912-4528-A4E4-5AEFFD8242B}	CLC0121N272MH121N133	275.26		271.90	0.500000000	CO121N272	MH121N133			144	CLC0121N272MH121N133	6	0.0234	0.002358	0.05	0.002831	0.05	0.003356	0.05	0.002831	0.05	
CLC0121N273MH121N132			2007		Existing	assumed Mannings N	CO121N273	MH121N132		T16755E	IRWD	PVC	{57D7B756-DCAA-4689-BE9F-A78BD88AE547}	CLC0121N273MH121N132	277.92		273.93	0.500000000	CO121N273	MH121N132			144	CLC0121N273MH121N132	6	0.0277	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N274MH121N112			2007		Existing	assumed Mannings N	CO121N274	MH121N112		T16755E	IRWD	PVC	{76BF7439-1CA3-4807-BC9B-5FDD51C7A9B2}	CLC0121N274MH121N112	274.24		270.40	0.500000000	CO121N274	MH121N112			127	CLC0121N274MH121N112	6	0.0277	0.002922	0.05	0.003508	0.05	0.004158	0.06	0.003508	0.05	
CLC0121N276MH121N121			2007		Existing	assumed Mannings N	CO121N276	MH121N121		T16755E	IRWD	PVC	{1002C06A-892F-4974-AFF1-095DCE755903}	CLC0121N276MH121N121	265.80		264.25	0.500000000	CO121N276	MH121N121			150	CLC0121N276MH121N121	6	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N277MH121N118			2007		Existing	assumed Mannings N	CO121N277	MH121N118		T16755E	IRWD	PVC	{5A1DC83F-67D9-4631-8D83-917A0374D426}	CLC0121N277MH121N118	270.37		268.90	0.500000000	CO121N277	MH121N118			141	CLC0121N277MH121N118	6	0.0104	0.008590	0.10	0.010313	0.11	0.012227	0.12	0.010313	0.11	
CLC0121N278MH121N119			2007		Existing	assumed Mannings N	CO121N278	MH121N119		T16755E	IRWD	PVC	{4F2E9CEF-1E26-4C25-98CD-A65EF070CECB}	CLC0121N278MH121N119	268.50		267.03	0.500000000	CO121N278	MH121N119			139	CLC0121N278MH121N119	6	0.0104	0.007380	0.09	0.008858	0.10	0.0105033	0.11	0.008858	0.10	
CLC0121N296MH121N161			2005		Existing	assumed Mannings N	CO121N296	MH121N161		T16676	IRWD	PVC	{3CBCF91D-EE55-4593-81A3-089B535485EA}	CLC0121N296MH121N161	248.78		243.25	0.500000000	CO121N296	MH121N161			125	CLC0121N296MH121N161	6	0.0442	0.002858	0.04	0.003429	0.05	0.004064	0.05	0.003429	0.05	
CLC0121N297MH121N163			2005		Existing	assumed Mannings N	CO121N297	MH121N163		T16676	IRWD	PVC	{56C48D01-58FA-46B0-BD86-853B9E152BAB}	CLC0121N297MH121N163	252.44		249.97	0.500000000	CO121N297	MH121N163			125	CLC0121N297MH121N163	6	0.0198	0.001962	0.04	0.002355	0.04	0.002793	0.04	0.002355	0.04	
CLC0121N298MH121N165			2005		Existing	assumed Mannings N	CO121N298	MH121N165		T16676	IRWD	PVC	{C76777CD-1E4C-4729-A5C3-8550D215FD53}	CLC0121N298MH121N165	255.25		252.77	0.500000000	CO121N298	MH121N165			125	CLC0121N298MH121N165	6	0.0198	0.002510	0.05	0.003015	0.05	0.003572	0.06	0.003015	0.05	
CLC0121N299MH121N166			2005		Existing	assumed Mannings N	CO121N299	MH121N166		T16676	IRWD	PVC	{13DDF75C-C7A5-40BE-9597-96BB8655ABA9}	CLC0121N299MH121N166	257.89		253.44	0.500000000	CO121N299	MH121N166			150	CLC0121N299MH121N166	6	0.0297	0.000196	0.01	0.000233	0.01	0.000278	0.01	0.000233	0.01	
CLC0121N300MH121N166			2005		Existing	assumed Mannings N	CO121N300	MH121N166		T16676	IRWD	PVC	{F9B24296-01CD-46FC-AE4D-064FC214CC1}	CLC0121N300MH121N166	254.77		253.44	0.500000000	CO121N300	MH121N166			134	CLC0121N300MH121N166	6	0.0099	0.002012	0.05	0.002416	0.06	0.002865	0.06	0.002416	0.06	
CLC0121N304MH121N172			2005		Existing	assumed Mannings N	CO121N304	MH121N172		T16676	IRWD	PVC	{F4BFF413-78CA-4CEB-9A37-E29BE14CACA}	CLC0121N304MH121N172	251.58		250.97	0.500000000	CO121N304	MH121N172			134	CLC0121N304MH121N172	6	0.0103	0.001203	0.06	0.001804	0.07	0.002569	0.08	0.001804	0.07	
CLC0121N305MH121N171			2005		Existing	assumed Mannings N	CO121N305	MH121N171		T16676	IRWD	PVC	{5819FF31-99F8-4ECA-BEEF-30EC1001C721}	CLC0121N305MH121N171	245.94		245.30	0.500000000	CO121N305	MH121N171			67	CLC0121N305MH121N171	6	0.0096	0.001645	0.05	0.001974	0.05	0.002342	0.06	0.001974	0.05	
CLC0121N306MH121N173			2005		Existing	assumed Mannings N	CO121N306	MH121N173		T16676	IRWD	PVC	{E5969282-AD2B-45E7-83D5-B3784C26D0B3}	CLC0121N306MH121N173	254.07		250.97	0.500000000	CO121N306	MH121N173			134	CLC0121N306MH121N173	6	0.0228	0.003008	0.05	0.003611	0.06	0.004282	0.06	0.003611	0.06	
CLC0121N307MH121N173			2005		Existing	assumed Mannings N	CO121N307	MH121N173		T16676	IRWD	PVC	{DCB219AC-97C3-4591-B67B-8F4565B4204E}	CLC0121N307MH121N173	251.53		250.97	0.500000000	CO121N307	MH121N173			59	CLC0121N307MH121N173	6	0.0095	0.002120	0.05	0.002547	0.06	0.003019	0.06	0.002547	0.06	
CLC0121N310MH121N171			2005		Existing	assumed Mannings N	CO121N310	MH121N171		T16676	IRWD	PVC	{37B9A01B-8F0F-4CC2-B662-EC6060CB2677}	CLC0121N310MH121N171	247.99		245.30	0.500000000	CO121N310	MH121N171			67	CLC0121N310MH121N171	6	0.0207	0.002272	0.05	0.002728	0.05	0.003235	0.05	0.002728	0.05	
CLC0121N345MH121N325			2002		Existing	assumed Mannings N	CO121N345	MH121N325		T16755C	IRWD	PVC	{E2FAAA33-F7F2-4F5D-A948-773839F4F072}	CLC0121N345MH121N325	281.76		281.22	0.500000000	CO121N345	MH121N325			62	CLC0121N345MH121N325	6	0.0200	0.005839	0.07	0.006234	0.07	0.007390	0.08	0.006234	0.07	
CLC0121N349MH121N313			2007		Existing	assumed Mannings N	CO121N349	MH121N313		T16755C	IRWD	PVC	{D0DE3AB0-4A61-4996-8FEB-C94184655BDB}	CLC0121N349MH121N313	272.42		271.97	0.500000000	CO121N349	MH121N313			23	CLC0121N349MH121N313	6	0.0195	0.009525	0.09	0.010168	0.09	0.012056	0.10	0.010168	0.09	
CLC0121N352MH121N333			2006		Existing	assumed Mannings N	CO121N352	MH121N333		T16676G	IRWD	PVC	{E0D025F6-217B-4DD6-A37B-42CD6079F75E}	CLC0121N352MH121N333	256.92		256.72	0.666666667	CO121N352	MH121N333			41	CLC0121N352MH121N333	6	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N353MH121N335			2006		Existing	assumed Mannings N	CO121N353	MH121N335		T16676G	IRWD	PVC	{7B72EDC8-C5EF-4EBE-B2A5-F593980C41DB}	CLC0121N353MH121N335	256.88		256.36	0.666666667	CO121N353	MH121N335			83	CLC0121N353MH121N335	8	0.0051	0.001795	0.04	0.002156	0.04	0.002557	0.05	0.002156	0.04	
CLC0121N354MH121N334			2006		Existing	assumed Mannings N	CO121N354	MH121N334		T16676G	IRWD	PVC	{B2FB3E2C-7B58-4FFC-AD7F-1E037AA579AC}	CLC0121N354MH121N334	257.45		256.94	0.666666667	CO121N354	MH121N334			105	CLC0121N354MH121N334	8	0.0049	0.002250	0.04	0.002703	0.05	0.003203	0.05	0.002703	0.05	
CLC0121N355MH121N337			2006		Existing	assumed Mannings N	CO121N355	MH121N337		T16676G	IRWD	PVC	{F6E66ED6-305C-42A6-AC43-D8802318F18F}	CLC0121N355MH121N337	256.05		255.77	0.666666667	CO121N355	MH121N337			60	CLC0121N355MH121N337	8	0.0047	0.002229	0.04	0.002675	0.05	0.003173	0.05	0.002675	0.05	
CLC0121N356MH121N341			2006		Existing	assumed Mannings N	CO121N356	MH121N341		T16676G	IRWD	PVC	{8F9F2716-120E-4750-BF36-12571E68AADF}	CLC0121N356MH121N341	253.14		252.61	0.666666667	CO121N356	MH121N341			84	CLC0121N356MH121N341	8	0.0039	0.002208	0.04	0.002649	0.05	0.003141	0.05	0.002649	0.05	
CLC0121N357MH121N341			2006		Existing	assumed Mannings N	CO121N357	MH121N341		T16676G	IRWD	PVC	{19AB85B4-41A5-4914-8289-3D1555B3DED0}	CLC0121N357MH121N341	253.30		252.61	0.666666667	CO121N357	MH121N341			141	CLC0121N357MH121N341	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121N358MH121N339			2006		Existing	assumed Mannings N	CO121N358	MH121N339		T16676G	IRWD	PVC	{FDD66C5C-5AC8-4246-834A-8CAFC1DD2F7F}	CLC0121N358MH121N339	254.71		254.19	0.666666667	CO121N358	MH121N339			102	CLC0121N358MH121N339	8	0.0051	0.002445	0.04	0.002936	0.05	0.003480	0.05	0.002936	0.05	
CLC0121N397MH121N394			2005		Existing	assumed Mannings N	CO121N397	MH121N394		T16666	IRWD	PVC	{AA2CB80D-C05F-4337-A9AB-29FD65A7C21D}	CLC0121N397MH121N394	291.57		290.00	0.666666667	CO121N397	MH121N394			223	CLC0121N397MH121N394	8	0.0070	0.003268	0.05	0.003925	0.06	0.004653	0.06	0.003925	0.05	
CLC0121N399MH121N167			2005		Existing	assumed Mannings N	CO121N399	MH121N167		T16676	IRWD	PVC	{8F88C50B-BC9F-490D-BDF0-041EF547FDBA}	CLC0121N399MH121N167	233.61		233.10	0.500000000	CO121N399	MH121N167			53	CLC0121N399MH121N167	6	0.0096	0.003137	0.06	0.003767	0.07	0.004465	0.08	0.003767	0.07	
CLC0121S036MH121S029			2011		Existing	assumed Mannings N	CO121S036	MH121S029		T17319D	IRWD	PVC	{C044BC70-13CC-41C2-82BD-162666AC7DB3}	CLC0121S036MH121S029	274.99		274.09	0.666666667	CO121S036	MH121S029			68	CLC0121S036MH121S029	8	0.0188	0.000771	0.02	0.000927	0.02	0.001100	0.02	0.000927	0.02	
CLC0121S043MH121S010			2011		Existing	assumed Mannings N	CO121S043	MH121S010		T17319C	IRWD	PVC	{60D0CBC3-4E31-433E-831E-97AC43BCFF77}	CLC0121S043MH121S010	267.16		262.69	0.500000000	CO121S043	MH121S010			162	CLC0121S043MH121S010	6	0.0277	0.001545	0.04	0.001854	0.04	0.002198	0.04	0.001854	0.04	
CLC0121S044MH121S016			2011		Existing	assumed Mannings N	CO121S044	MH121S016		T17319C	IRWD	PVC	{45718729-9035-4FB8-B9F0-154CC82901F}	CLC0121S044MH121S016	268.28		263.44	0.500000000	CO121S044	MH121S016			162	CLC0121S044MH121S016	6	0.0299	0.000752	0.03	0.000903	0.03	0.001073	0.03	0.000904	0.03	
CLC0121S053MH121S051			2011		Existing	assumed Mannings N	CO121S053	MH121S051		T16960A	IRWD	PVC	{8A514SD2-23E7-41A9-A27C-77234B1EBDE1}	CLC0121S053MH121S051	267.88		267.33	0.500000000	CO121S053	MH121S051			55	CLC0121S053MH121S051	6	0.0100	0.001643	0.05	0.001974	0.05	0.002339	0.05	0.001974	0.05	
CLC0121S054MH121S051			2011		Existing	assumed Mannings N	CO121S054	MH121S051		T16960A	IRWD	PVC	{3C8F852D-89CB-4008-BCBC-2F58BC5D4DE4}	CLC0121S054MH121S051	269.69		267.33	0.500000000	CO121S054	MH121S051			118	CLC0121S054MH121S051	6	0.0200	0.002001	0.04	0.002401	0.05	0.002848	0.05	0.002401	0.05	
CLC0121S055MH121S052			2011		Existing	assumed Mannings N	CO121S055	MH121S052		T16960A	IRWD	PVC	{05596907-F876-4F49-B19F-3627884FB60D}	CLC0121S055MH121S052	270.40		266.62	0.500000000	CO121S055	MH121S052			118	CLC0121S055MH121S052	6	0.0320	0.002139	0.04	0.002568	0.04	0.003045	0.05	0.002568	0.04	
CLC0121S056MH121S046			2011		Existing	assumed Mannings N	CO121S056	MH121S046		T16960A	IRWD	PVC	{FC40F5D9-4876-418C-98A0-254597147E28E}	CLC0121S056MH121S046	267.76		263.92	0.500000000	CO121S056	MH121S046			110	CLC0121S056MH121S046	6	0.0364	0.000792	0.02	0.000951	0.03	0.001128	0.03	0.000951	0.03	
CLC0121S057MH121S047			2011		Existing	assumed Mannings N	CO121S057	MH121S047		T16960A	IRWD	PVC	{D1D739F3-36F1-4F9B-83EB-66C46C31F008}	CLC0121S057MH121S047	266.36		264.25	0.500000000	CO121S057	MH121S047			106	CLC0121S057MH121S047	6	0.0200	0.000376	0.02	0.000453	0.02	0.000536	0.02	0.000453	0.02	
CLC0121S058MH121S047			2011		Existing	assumed Mannings N	CO121S058	MH121S047		T16960A	IRWD	PVC	{D4D2A58D-C296-4CFA-A0DE-26AAF99D126F}	CLC0121S058MH121S047	264.82		264.25	0.500000000	CO121S058	MH121S047			57	CLC0121S058MH121S047	6	0.0100	0.001526	0.04	0.001831	0.05	0.002171	0.05	0.001831	0.05	
CLC0121S134MH121S017			2011		Existing	assumed Mannings N	CO121S134	MH121S017		T17319C	IRWD	PVC	{8D522761-7530-4356-9DD6-6C7D09D76E36}	CLC0121S134MH121S017	268.83		264.58	0.666666667	CO121S134	MH121S017			150	CLC0121S134MH121S017	8	0.0283	0.001744	0.03	0.002093	0.03	0.002480	0.03	0.002094	0.03	
CLC0121S167MH141W160			2011		Existing	assumed Mannings N	CO121S167	MH141W160		T17742	IRWD	PVC	{B4974F58-E4BB-4078-9EF7-9DB42C3C6AB7}	CLC0121S167MH141W160	298.58		296.79	0.666666667	CO121S167	MH141W160			110	CLC0121S167MH141W160	8	0.0163	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLC0121S168MH121S158			2015		Existing	assumed Mannings N	CO121S168	MH121S158		T17742	IRWD	PVC	{2E4637FF-156F-464D-AC58-335062E2206C}	CLC0121S168MH

| | | |

| | | |

| | | |

CLC0137M067MH137N009		2002		Existing	assumed Mannings N	C0137N067	MH137N009		T16298	IRWD	PVC	{35E95260-AD18-48F1-8BEF-FD706964AA5D}	CLC0137M067MH137N009	265.89	264.00	0.500000000	C0137N067	MH137N009			108	CLC0137N067MH137N009	6	0.0175	0.000000	00	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0137N068MH137N013		2002		Existing	assumed Mannings N	C0137N068	MH137N013		T16285	IRWD	PVC	{0BAD9CEE-8552-4807-8E90-FE1BC245864A}	CLC0137N068MH137N013	262.07	260.73	0.666666667	C0137N068	MH137N013			134	CLC0137N068MH137N013	8	0.0100	0.000574	02	0.000688	02	0.000816	02	0.000688	02
CLC0137N069MH137N015		2002		Existing	assumed Mannings N	C0137N069	MH137N015		T16298	IRWD	PVC	{9F427B70-3C3D-4B3A-B8CE-8559CE4C65B}	CLC0137N069MH137N015	264.89	262.61	0.500000000	C0137N069	MH137N015			107	CLC0137N069MH137N015	6	0.0213	0.002556	05	0.003068	05	0.003636	06	0.003068	05
CLC0137N070MH137N016		2002		Existing	assumed Mannings N	C0137N070	MH137N016		T16285	IRWD	PVC	{A6137B0D-2086-486E-A62F-56CAB41AD730}	CLC0137N070MH137N016	263.35	259.19	0.666666667	C0137N070	MH137N016			139	CLC0137N070MH137N016	6	0.0299	0.001499	02	0.001801	03	0.002134	03	0.001801	03
CLC0137N071MH137N017		2002		Existing	assumed Mannings N	C0137N071	MH137N017		T16285	IRWD	PVC	{58A01BA3-C482-459B-9EE0-A8EEB0719190}	CLC0137N071MH137N017	263.60	261.97	0.666666667	C0137N071	MH137N017			55	CLC0137N071MH137N017	8	0.0296	0.000370	01	0.000444	01	0.000528	01	0.000444	01
CLC0137N072MH137N022		2002		Existing	assumed Mannings N	C0137N072	MH137N022		T16285	IRWD	PVC	{98EF7D4E-40ED-4A62-B1B5-A599770CEC9C}	CLC0137N072MH137N022	264.54	263.20	0.666666667	C0137N072	MH137N022			134	CLC0137N072MH137N022	8	0.0100	0.001592	03	0.001912	03	0.002267	04	0.001912	03
CLC0137N073MH137N035		2002		Existing	assumed Mannings N	C0137N073	MH137N035		T16298	IRWD	PVC	{2D48E112-1625-4CAF-AFD1-D30ABD1B812A}	CLC0137N073MH137N035	273.00	272.47	0.500000000	C0137N073	MH137N035			52	CLC0137N073MH137N035	6	0.0102	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0137N074MH137N027		2002		Existing	assumed Mannings N	C0137N074	MH137N027		T16298	IRWD	PVC	{7A6DF934-F386-4B30-BBFB-EB1825BA0A57}	CLC0137N074MH137N027	270.70	267.00	0.666666667	C0137N074	MH137N027			140	CLC0137N074MH137N027	8	0.0264	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0137N075MH137N033		2002		Existing	assumed Mannings N	C0137N075	MH137N033		T16285	IRWD	PVC	{EE61B2EAA-42DE-4113-80D9-3B0D62108A20}	CLC0137N075MH137N033	265.30	263.19	0.666666667	C0137N075	MH137N033			82	CLC0137N075MH137N033	8	0.0257	0.000889	02	0.001066	02	0.001266	02	0.001066	02
CLC0137N076MH137N032		2002		Existing	assumed Mannings N	C0137N076	MH137N032		T16285	IRWD	PVC	{48D1DCBA-C6F9-49B9-B489-572FB71FA642}	CLC0137N076MH137N032	266.63	262.60	0.666666667	C0137N076	MH137N032			134	CLC0137N076MH137N032	8	0.0301	0.002185	03	0.002622	03	0.003109	03	0.002622	03
CLC0137N077MH137N038		2002		Existing	assumed Mannings N	C0137N077	MH137N038		T16298	IRWD	PVC	{0A1C7E0C-7C09-4058-8A1A-6AA552194353}	CLC0137N077MH137N038	272.00	269.00	0.500000000	C0137N077	MH137N038			126	CLC0137N077MH137N038	8	0.0238	0.001740	04	0.002090	04	0.002476	05	0.002090	04
CLC0137N078MH137N036		2002		Existing	assumed Mannings N	C0137N078	MH137N036		T16285	IRWD	PVC	{CE88D744-F107-423A-B44F-796488F7BA2A}	CLC0137N078MH137N036	268.04	266.67	0.666666667	C0137N078	MH137N036			136	CLC0137N078MH137N036	8	0.0101	0.001814	03	0.002583	04	0.002177	04	0.002583	04
CLC0137N079MH137N041		2002		Existing	assumed Mannings N	C0137N079	MH137N041		T16298	IRWD	PVC	{3F934495F-B461-4164-9A96-D0B291F25392}	CLC0137N079MH137N041	276.50	275.10	0.500000000	C0137N079	MH137N041			139	CLC0137N079MH137N041	6	0.0101	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0137N080MH137N034		2002		Existing	assumed Mannings N	C0137N080	MH137N034		T16285	IRWD	PVC	{A8CC0352-AD55-480F-A305-2DCA240FD1A4}	CLC0137N080MH137N034	269.94	267.05	0.666666667	C0137N080	MH137N034			189	CLC0137N080MH137N034	8	0.0153	0.001351	03	0.001622	03	0.001923	03	0.001622	03
CLC0137N081MH137N040		2002		Existing	assumed Mannings N	C0137N081	MH137N040		T16298	IRWD	PVC	{E5B7CD18-2C73-4EC2-92DA-B25DF1DBE22F}	CLC0137N081MH137N040	275.39	274.50	0.500000000	C0137N081	MH137N040			78	CLC0137N081MH137N040	6	0.0114	0.001833	05	0.002201	05	0.002609	06	0.002201	05
CLC0137N082MH137N054		2002		Existing	assumed Mannings N	C0137N082	MH137N054		T16034	IRWD	PVC	{C2955145-5810-44E0-82B0-718A1C9183AF}	CLC0137N082MH137N054	325.79	319.58	0.666666667	C0137N082	MH137N054			255	CLC0137N082MH137N054	8	0.0244	0.004258	04	0.005113	05	0.006061	05	0.005113	05
CLC0137S006MH137S004		2007		Existing	assumed Mannings N	C0137S006	MH137S004		T15461	IRWD	PVC	{E9D55172-09DD-41D5-83C4-27FE64EC50C96}	CLC0137S001MH137S004	538.92	538.64	0.666666667	C0137S006	MH137S004			28	CLC0137S006MH137S004	8	0.0100	0.000971	02	0.001017	02	0.001229	03	0.008215	07
CLC0137W034MH137W023		2007		Existing	assumed Mannings N	C0137W034	MH137W023		T15461	IRWD	PVC	{B9405E7B-D5DF-4087-8B01-F3C5C0CE27EE}	CLC0137W001MH137W023	511.57	508.27	0.666666667	C0137W034	MH137W023			94	CLC0137W034MH137W023	8	0.0350	0.001037	02	0.001106	02	0.001313	02	0.003698	04
CLC0137W035MH137W026		2007		Existing	assumed Mannings N	C0137W035	MH137W026		T15461	IRWD	PVC	{B705ED5C5-6244-4041-BF8E-B184624B912D}	CLC0137W002MH137W026	497.02	496.73	0.666666667	C0137W035	MH137W026			58	CLC0137W035MH137W026	8	0.0050	0.000000	00	0.000000	00	0.000000	00	0.001002	03
CLC0137W036MH137W007		2007		Existing	assumed Mannings N	C0137W036	MH137W007		T15461	IRWD	PVC	{3C51DCDF-3D17-4FCB-9512-82B64EC887F1}	CLC0137W003MH137W007	492.19	491.38	0.666666667	C0137W036	MH137W007			31	CLC0137W036MH137W007	8	0.0260	0.000842	02	0.000899	02	0.001066	02	0.012334	07
CLC0137W037MH137W033		2004		Existing	assumed Mannings N	C0137W037	MH137W033		T16436	IRWD	PVC	{6062B8EC-E890-41BD-8A59-4B6B2441A5C2}	CLC0137W005MH137W033	462.97	451.21	0.666666667	C0137W037	MH137W033			59	CLC0137W037MH137W033	8	0.1200	0.001058	01	0.001130	02	0.001340	02	0.003286	03
CLC0138E001MH138E002		1992		Existing	assumed Mannings N	C0138E001	MH138E002		A00756	IRWD	VCP	{9AE43BB3-25D0-4F73-9D76-A9777B8BA1C8}	CLC0138E001MH138E002	157.66	157.10	0.666666667	C0138E001	MH138E002			142	CLC0138E001MH138E002	8	0.0039	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0138E006MH138E005		1992		Existing	assumed Mannings N	C0138E006	MH138E005		A00756	IRWD	VCP	{BAC96BC3-84D7-418E-90BD-CE82E1129189}	CLC0138E006MH138E005	172.94	172.69	0.666666667	C0138E006	MH138E005			63	CLC0138E006MH138E005	8	0.0040	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0138N042MH138N012	SLOPE NOT ON AS	1987		Existing	assumed Mannings N	C0138N042	MH138N012		A00506	IRWD	VCP	{B519EF00-473F-4ADF-8DAD-3D00774AA576}	CLC0138N042MH138N012	162.18	161.04	0.500000000	C0138N042	MH138N012			116	CLC0138N042MH138N012	6	0.0098	0.001149	04	0.001227	04	0.001454	05	0.001227	04
CLC0138S039MH138S035		2015		Existing	assumed Mannings N	C0138S039	MH138S035		T17179A	IRWD	PVC	{09275C4E-F605-4635-8A6C-7603BF0DE06E}	CLC0138S039MH138S035	265.44	264.04	0.500000000	C0138S039	MH138S035			140	CLC0138S039MH138S035	6	0.0100	0.000063	01	0.000063	01	0.000062	01	0.000047	02
CLC0138S053MH138S047		2011		Existing	assumed Mannings N	C0138S053	MH138S047		T17371	IRWD	PVC	{F32C65D5-DCBD-477E-A495-92B3C1CBDB71}	CLC0138S053MH138S047	270.40	269.63	0.500000000	C0138S053	MH138S047			41	CLC0138S053MH138S047	6	0.0189	0.002195	05	0.002634	05	0.003124	05	0.004459	06
CLC0138S054MH138S050		2011		Existing	assumed Mannings N	C0138S054	MH138S050		T17371	IRWD	PVC	{1F63AC4C-721B-4520-BCC4-BE83682026EE}	CLC0138S054MH138S050	271.47	271.03	0.500000000	C0138S054	MH138S050			44	CLC0138S054MH138S050	6	0.0100	0.004013	07	0.004818	08	0.005713	08	0.003399	07
CLC0138S055MH138S042		2011		Existing	assumed Mannings N	C0138S055	MH138S042		T17371	IRWD	PVC	{8EC9CE4E-280F-4ECD-A49A-0A4B13AF6150}	CLC0138S055MH138S042	271.85	271.43	0.500000000	C0138S055	MH138S042			62	CLC0138S055MH138S042	6	0.0100	0.003490	07	0.004192	07	0.004970	08	0.004358	07
CLC0138S056MH138S046		2011		Existing	assumed Mannings N	C0138S056	MH138S046		T17371	IRWD	PVC	{90C6F99C-F404-40DC-BA4E-B69F624CE}	CLC0138S056MH138S046	272.95	272.54	0.500000000	C0138S056	MH138S046			41	CLC0138S056MH138S046	6	0.0101	0.004541	02	0.000652	03	0.000773	03	0.006230	09
CLC0138W025MH138W005		2001		Existing	assumed Mannings N	C0138W025	MH138W005		T16177	IRWD	PVC	{9B3AD663-97D2-4855-B1B2-245AE97A8D98}	CLC0138W025MH138W005	226.85	211.11	0.666666667	C0138W025	MH138W005			127	CLC0138W025MH138W005	8	0.1249	0.000000	01	0.000000	02	0.000000	04	0.000000	02
CLC0138W026MH138W007		2002		Existing	assumed Mannings N	C0138W026	MH138W007		T16298	IRWD	PVC	{8AE447DF-DE6F-4F8F-A1EC-20F77828DF81}	CLC0138W026MH138W007	258.50	256.70	0.500000000	C0138W026	MH138W007			71	CLC0138W026MH138W007	6	0.0254	0.000870	03	0.001045	03	0.001239	03	0.001045	03
CLC0138W027MH138W010		2002		Existing	assumed Mannings N	C0138W027	MH138W010		T16298	IRWD	PVC	{36158D8E-5A0E-4D0D-B560-15C1B4248473}	CLC0138W027MH138W010	260.50	258.73	0.500000000	C0138W027	MH138W010			109	CLC0138W027MH138W010	6	0.0161	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0138W028MH138W010		2002		Existing	assumed Mannings N	C0138W028	MH138W010		T16298	IRWD	PVC	{9B83A30A-B90D-4863-B07E-6D68542A8D4F}	CLC0138W028MH138W010	259.70	258.73	0.500000000	C0138W028	MH138W010			93	CLC0138W028MH138W010	6	0.0104	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0138W029MH138W014		2002		Existing	assumed Mannings N	C0138W029	MH138W014		T16298	IRWD	PVC	{A64D903A-A268-4E48-A5E8-8751D5CBFE01}	CLC0138W029MH138W014	263.00	260.35	0.500000000	C0138W029	MH138W014			62	CLC0138W029MH138W014	6	0.0212	0.000889	03	0.001066	03	0.001265	03	0.001066	03
CLC0138W030MH138W016		2002		Existing	assumed Mannings N	C0138W030	MH138W016		T16298	IRWD	PVC	{50F843E8-E353-4E4D-A63A-E12CDC0B56A4}	CLC0138W030MH138W016	259.20	256.54	0.500000000	C0138W030	MH138W016			114	CLC0138W030MH138W016	6	0.0233	0.000796	03	0.000955	03	0.001132	03	0.000955	03
CLC0138W031MH138W017		2002		Existing	assumed Mannings N	C0138W031	MH138W017		T16298	IRWD	PVC	{4F72A1F8-BFD1-41E0-BD1F-AA4D315DBA20}	CLC0138W031MH138W017	266.50	262.89	0.500000000	C0138W031	MH138W017			156	CLC0138W031MH138W017	6	0.0231	0.001370	04	0.001645	04	0.001951	04	0.001645	04
CLC0138W032MH138W014		2002		Existing	assumed Mannings N	C0138W032	MH138W014		T16298	IRWD	PVC	{CCFF0ACA-63F1-4A07-8B22-CB3913660478}	CLC0138W032MH138W014	261.89	260.35	0.500000000	C0138W032	MH138W014			104	CLC0138W032MH138W014	6	0.0104	0.000832	03	0.001000	04	0.001186	04	0.001000	04
CLC0138W033MH138W016		2002		Existing	assumed Mannings N	C0138W033	MH138W016		T16298	IRWD	PVC	{88A81A72-337D-4B25-94B0-522E1F7585A}	CLC0138W033MH138W016	257.79	256.54	0.500000000	C0138W033	MH138W016			114	CLC0138W033MH138W016	6	0.0110	0.001721	05	0.002066	05	0.002451	06	0.002066	05
CLC0138W034MH138W017		2002		Existing	assumed Mannings N	C0138W034	MH138W017		T16298	IRWD	PVC	{91347285-BA6A-4E46-A872-05B8F5177778}	CLC0138W034MH138W017	264.50	262.89	0.500000000	C0138W034	MH138W017			159	CLC0138W034MH138W017	6	0.0101	0.001499	04	0.001801	05	0.002134	05	0.001801	05
CLC0138W035MH138W018		2002		Existing	assumed Mannings N	C0138W035	MH138W018		T16298	IRWD	PVC	{292D99D3-0A65-4E78-B63C-A4CD744630C14}	CLC0138W035MH138W018	261.60	259.79	0.500000000	C0138W035	MH138W018			109	CLC0138W035MH138W018	6	0.0166	0.001260	04	0.001511	04	0.001793	04	0.001511	04
CLC0138W036MH138W018		2002		Existing	assumed Mannings N	C0138W036	MH138W018		T16298	IRWD	PVC	{99CB7C8B-342A-48C7-A9AE-0B58D894F317}	CLC0138W036MH138W018	261.79	259.79	0.500000000	C0138W036	MH138W018			101	CLC0138W036MH138W018	6	0.0198	0.001148	03	0.001378	04	0.001634	04	0.001378	04
CLC0138W037MH138W021		2002		Existing	assumed Mannings N	C0138W037	MH138W021		T16298	IRWD	PVC	{944A3DFF-6266-4A59-8E1C-686E3FOCB89C}	CLC0138W037MH138W021	263.20	261.41	0.500000000	C0138W037	MH138W021			89	CLC0138W037MH138W021	6	0.0201	0.001334	04	0.001600	04	0.001897	04	0.001600	04
CLC0138W054MH138W047		2002		Existing	assumed Mannings N	C0138W054	MH138W047		T16225	IRWD	PVC	{FA603FC1-EF66-43C9-9790-3123ACDB8E0}	CLC0138W054MH138W047	186.42	184.83	0.666666667	C0138W054	MH138W047			131	CLC0138W054MH138W047	8	0.0069	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0138W055MH138W052		2002		Existing	assumed Mannings N	C0138W055	MH138W052		T16225	IRWD	PVC	{55BE7381-8D48-478E-B88D-BC17A3D6869D}	CLC0138W055MH138W052	186.27	184.83	0.666666667	C0138W055	MH138W052			29	CLC0138W055MH138W052	8	0.0497	0.003469	03	0.004166	03	0.004940	04	0.004166	03
CLC0138W056MH138W052		2002		Existing	assumed Mannings N	C0138W056	MH138W052		T16225	IRWD	PVC	{84DE0659-96B8-4821-854C-F1ED E203D19D}	CLC0138W056MH138W052	187.80	184.83	0.666666667	C0138W056	MH138W052			131	CLC0138W056MH138W052	8	0.0227	0.003971	04	0.004769	04	0.005653	05	0.004769	04
CLC0138W057MH138W053		2002		Existing	assumed Mannings N	C0138W057	MH138W053		T16225	IRWD	PVC	{8ADC729C-12B4-4C24-9ECB-593304589B50}	CLC0138W057MH138W053	183.02	181.69	0.666666667	C0138W057	MH138W053			245	CLC0138W057MH138W053	8	0.0054	0.008592	08	0.010315	09	0.012229	09	0.010315	09
CLC0138W059MH138W059		2002		Existing	assumed Mannings N	C0138W059	MH138W059		T16435	IRWD	PVC	{0C51FCB4-7A85-48BE-9F21-D7DC1B0A254E}	CLC0138W059MH138W059	194.19	188.44	0.500000000	C0138W059	MH138W059			123	CLC0138W059MH138W059	8	0.0467	0.000961	03	0.001154	03	0.001370	03	0.001154	03
CLC0138W071MH138W060		2003		Existing	assumed Mannings N	C0138W071	MH138W060		T16435	IRWD	PVC	{0FA75ABE-3BB8-4335-A668-56FE69C32B74}	CLC0138W071MH138W060	196.00	189.63	0.500000000	C0138W071	MH138W060			138	CLC0138W071MH138W060	6	0.0463	0.001045	03	0.001254	03	0.001487	03	0.001254	03
CLC0138W072MH138W061		2003		Existing	assumed Mannings N	C0138W072	MH138W061		T16435	IRWD	PVC	{0DAFF0FA-230C-40AC-976D-C2702B6F1076}	CLC0138W072MH138W061	197.19	190.25	0.500000000	C0138W072	MH138W061			174	CLC0138W072MH138W061	6	0.0399	0.001902	04	0.002284	04	0.002707	04	0.002284	04
CLC0138W073MH138W062		2003		Existing	assumed Mannings N	C0138W073	MH138W062		T16435	IRWD	PVC	{ACFCE6F9-E105-4949-B1C5-5DAFD6C25EA3}	CLC0138W073MH138W062	197.36	191.11	0.500000000	C0138W073	MH138W062			179	CLC0138W073MH138W062	6	0.0349	0.002445	04	0.002938	05	0.003480	05	0.002938	05
CLC0138W074MH138W063		2003		Existing	assumed Mannings N	C0138W074	MH138W063		T16435	IRWD	PVC	{1549AEC0-B4BA-493A-9E5A-6EF9C96CC14F}	CLC0138W074MH138W063	200.60	193.33	0.500000000	C0138W074	MH138W063			175	CLC0138W074MH138W063	6	0.0415	0.001526	03	0.001833	04	0.002173	04	0.001833	04
CLC0138W075MH138W064		2003		Existing	assumed Mannings N	C0138W075	MH138W064		T16435	IRWD	PVC	{06E0A05D-B716-4820-B8F1-807785BFB2F5}	CLC0138W075MH138W064	201.69	194.57	0.500000000	C0138W075	MH138W064			167	CLC0138W075MH138W064	6	0.0426	0.001672	03	0.002008	04	0.002380	04	0.002008	04
CLC0138W076MH138W065		2003		Existing	assumed Mannings N	C0138W076	MH138W065		T16435	IRWD	PVC	{72E1473F-6838-4B14-8997-9AA6124E33A1}	CLC0138W076MH138W065	200.47	197.94	0.500000000	C0138W076	MH138W065			121	CLC0138W076MH138W065	6	0.0199	0.001672	04	0.002008	04	0.002380	05	0.002008	04
CLC0138W077MH138W066		2003		Existing	assumed Mannings N	C0138W077	MH138W066		T16435	IRWD	PVC	{9ADE2994-DCF1-42F4-A0E4-40661C64FD68}	CLC0138W077MH138W066	202.38	196.32	0.500000000	C0138W077	MH138W066			127	CLC0138W077MH138W066	6	0.0477	0.001735	03	0.002083	04	0.002470	04	0.002083	04
CLC0138W078MH138W068		2003		Existing	assumed Mannings N	C0138W078	MH138W068		T16435	IRWD	PVC	{98D9966A-5393-4E4D-982A-F035F078C316}	CLC0138W078MH138W068	204.69	201.60	0.500000000	C0138W078	MH138W068			109	CLC0138W078MH138W068	6	0.0283	0.000731	03	0.000878	03	0.001040	03	0.000878	03
CLC0138W079MH138W069		2003		Existing	assumed Mannings N	C0138W079	MH138W069		T16435	IRWD	PVC	{EBF2E919-B627-465D-92A5-F55330413CC2}	CLC0138W079MH138W069	206.30	204.69	0.500000000	C0138W079	MH138W069			104	CLC0138W079MH138W069	6	0.0151	0.000752	03	0.000904	03	0.001070	03	0.000904	03
CLC0138W080MH138W042		2003		Existing	assumed Mannings N	C0138W080	MH138W042		A00982	IRWD	VCP	{D0027151A-1175-4CC8-8CF0-47C0284BA1D}	CLC0138W080MH138W042	226.47	220.68	0.666666667	C0138W080	MH138W042			142	CLC0138W080MH138W042	8	0.1466	0.001752	03	0.002168	04	0.002581	04	0.002168	02
CLC0138W137MH138W140		1993		Existing	assumed Mannings N	C0138W137	MH138W140		T16470	IRWD	PVC	{8A106B8F-C88F-489D-B413-ED58B50913A0}	CLC0138W131MH138W137	196.47	193.93	0.666666667	C0138W137	MH138W140			256	CLC0138W137MH138W140	8	0.0099	0.007024	06	0.008433	07	0.009997	08	0.008433	07
CLC0138W143MH138W084		2003		Existing	assumed Mannings N	C0138W143	MH138W084		T16225	IRWD	PVC	{5F609F57-C18C-4830-B80D-688AD39B87A0}	CLC0138W117MH138W084	193.60	191.50	0.666666667	C0138W143	MH138W084			108	CLC0138W143MH138W084	8	0.0198	0.000711	02	0.000852	02	0.001013	02	0.000852	02
CLC0138W144MH138W088		2003		Existing	assumed Mannings N	C0138W144	MH138W088		T16225	IRWD	PVC	{4ADD8E58-1E4C-466F-8965-F68111D5F668}	CLC0138W118MH138W088	195.00	193.52	0.500000000	C0138W144	MH138W088			30	CLC0138W144MH138W088	6	0.0493	0.002466	04	0.002961	04	0.003510	05	0.002961	04
CLC0138W145MH138W082		2003		Existing	assumed Mannings N	C0138W145	MH138W082		T16225	IRWD	PVC	{D4542C18-5367-4332-90DE-ACBA2D6318AA}	CLC0138W119MH138W082	192.78	189.33	0.666666667	C0138W145	MH138W082			69	CLC0138W145MH138W082	6	0.0500	0.000982	02	0.001179	02	0.001399	02	0.001179	02
CLC0138W146MH138W091		2003		Existing	assumed Mannings N	C0138W146	MH138W091		T16225	IRWD	PVC	{1E5FCA5D-1882-4C57-8143-1B761A9E0603}	CLC0138W119MH138W091	196.44	195.00	0.500000000	C0138W146	MH138W091			29	CLC0138W146MH138W091	6	0.0497	0.003135	04	0.003765	05	0.004463	05	0.003765	05
CLC0138W147MH138W096		2003		Existing	assumed Mannings N	C0138W147	MH138W096		T16225	IRWD	PVC	{40FCD14E-D256-408C-8C09-134DACBFFC11}	CLC0138W120MH138W096	195.55	195.17	0.666666667	C0138W147	MH138W096			72	CLC0138W147MH138W096	8	0.0053	0.003010	05	0.003615	05	0.004284	06	0.003615	05
CLC0138W148MH138W095		2003		Existing	assumed Mannings N	C0138W148	MH138W095		T16225	IRWD	PVC	{D159BFB6-2498-46E4-B3F5-CEAA4B848ECE}	CLC0138W121MH138W095	197.44	194.22	0.666666667	C0138W148	MH138W095			66	CLC0138W148MH138W095	8	0.0488	0.003692	03	0.003948	03	0.004679	04	0.003948	03
CLC0138W149MH138W100		2003		Existing	assumed Mannings N	C0138W149	MH138W100		T16225	IRWD	PVC	{8BF57B3E-6EBA-4AAB-BAFA-23631493F1EF}	CLC0138W122MH138W100	201.67	201.08	0.500000000	C0138W149	MH138W100			30	CLC0138W149MH138W100	6	0.0197	0.010030	09	0.012037	10	0.014272	11	0.012037	10
CLC0138W150MH138W103		2003		Existing	assumed Mannings N	C0138W150	MH138W103		T16225	IRWD	PVC	{8F078E85-E948-4257-83F0-C726322B5B2B}	CLC0138W123MH138W103	205.00	204.63	0.666666667	C0138W150	MH138W103			71	CLC0138W150MH138W103	8	0.0052	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLC0138W151MH138W110		2003		Existing	assumed Mannings N	C0138W151	MH138W110		T16225	IRWD	PVC	{0F8DD8F8-F0AA-4ADC-8E08-7196E4E1E788}	CLC0138W124MH138W110	206.39	205.69	0.666666667	C0138W151	MH138W110			68	CLC0138W151MH138W110	8	0.0100	0.004203	05	0.005044	06	0.005980	06	0.005044	06
CLC0138W152MH138W114		2003		Existing	assumed Mannings N	C0138W152	MH138W114		T16225	IRWD	PVC	{3547EB4D-F6AB-42CE-AAD6-D1CC1EEF62F7}	CLC0138W125MH138W114	202.67	201.19	0.500000000	C0138W152	MH138W114			34	CLC0138W152MH138W114	6	0.0493	0.003260	04	0.003916	05	0.004643	05	0.003916	05
CLC0138W153MH138W115		2003		Existing	assumed Mannings N	C0138W153	MH138W115		T16225	IRWD	PVC	{0F35825A-83A5-49A8-A427-243A89C57343}	CLC0138W126MH138W115	201.13	200.77	0.666666667	C0138W153	MH138W115			70	CLC0138W153MH138W115	8	0.0051	0.007150	07	0.008582	08	0.010176	09	0.008582	08
CLC0139E021MH139E022		1989		Existing	assumed Mannings N	C0139E021	MH139E022		A00647	IRWD	VCP	{9E20439A-5D22-42EB-B885-71A20C9E4D37}	CLC0139E021MH139E022	199.75	199.10	0.666666667	C0139E021	MH139E022			169	CLC0139E021MH139E022	8	0.0038	0.001128	03	0.001205	03	0.001429	04	0.001205	03
CLC0139E032MH139E039		1985		Existing	assumed Mannings N	C0139E032	MH139E039		A00476	IRWD	VCP	{719AA47A-B190-4549-8C99-F4E6F44E3D8B}	CLC0139E032MH139E039	194.66	193.90	0.666666667	C0139E032	MH139E039			165	CLC0139E032MH139E039	8	0.0165	0.006686	06	0.008464	07	0.007139	06	0.008464	07
CLC0139N043MH139N042		1989		Existing	assumed Mannings N	C0139N043	MH139N042		A00648	IRWD	VCP	{B049BE37-3866-4170-B794-107E405747F1}	CLC0139N043MH139N042	220.14	218.05	0.666666667	C0139N043	MH139N042			85	CLC0139N043MH139N042	8	0.0246	0.001736	03	0.001854	03	0.002198	03	0.001854	03
CLC0139N051MH139N055		1997		Existing	assumed Mannings N	C0139N051	MH139N055		A00773F	IRWD	PVC	{DC890E3E8-E1B1-4943-8C5A-E371BF0F5701}	CLC0139N051MH139N055	188.99	188.58	0.500000000	C0139N051	MH139N055			50	CLC0139N051MH139N055	6	0.0082	0.001938

| | | |

| | | |

| | | |

| | | |

DUMMY26		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	316.00	314.55	1.000000000	DUMMY26	MH173W012		30	DUMMY26	12	0.0484	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007717	0.14
DUMMY27		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	312.00	309.26	1.000000000	DUMMY27	MH173W010	223	DUMMY27	12	0.0123	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005751	0.05
DUMMY28		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	436.00	434.00	1.000000000	DUMMY28	PA1_0180	223	DUMMY28	12	0.0090	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016024	0.08
DUMMY29		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	502.00	499.00	1.000000000	DUMMY29	PA1_0540	223	DUMMY29	12	0.0135	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005053	0.04
DUMMY2		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	578.00	575.00	1.000000000	DUMMY3	DE016N100	223	DUMMY2	12	0.0135	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004000	0.05
DUMMY30		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	513.00	510.00	1.000000000	DUMMY30	PA1_0470	223	DUMMY30	12	0.0135	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013321	0.06
DUMMY31		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	425.00	421.00	1.000000000	DUMMY31	PA1_0200	223	DUMMY31	12	0.0179	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.074111	0.12
DUMMY33		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	770.00	767.95	1.000000000	DUMMY33	MH192W068	25	DUMMY33	12	0.0823	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004120	0.04
DUMMY34		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	255.00	252.94	1.000000000	DUMMY34	PA51_0730	223	DUMMY34	12	0.0092	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004918	0.16
DUMMY35		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	17.00	15.55	1.000000000	DUMMY35	DE059N020	30	DUMMY35	12	0.0484	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.126140	0.20
DUMMY36		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	14.00	11.63	1.000000000	DUMMY36	MH059N053	223	DUMMY36	12	0.0106	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.107684	0.14
DUMMY37		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	290.00	288.99	1.000000000	DUMMY37	MH1215145	223	DUMMY37	12	0.0045	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002148	0.13
DUMMY38		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	288.00	285.87	1.000000000	DUMMY38	MH1215146	223	DUMMY38	12	0.0096	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002829	0.16
DUMMY39		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	276.00	274.80	1.000000000	DUMMY39	PA51_0245	223	DUMMY39	12	0.0054	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002679	0.06
DUMMY3		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	567.00	563.00	1.000000000	DUMMY4	DE016E100	223	DUMMY3	12	0.0179	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.403164	0.25
DUMMY40		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	420.00	418.90	1.000000000	DUMMY40	PA51_0355	223	DUMMY40	12	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.030522	0.09
DUMMY41		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	303.00	301.64	1.000000000	DUMMY41	MH121E090	223	DUMMY41	12	0.0061	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001931	0.05
DUMMY43		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	236.00	233.38	1.000000000	DUMMY43	MH122E035	223	DUMMY43	12	0.0117	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.052592	0.11
DUMMY44		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	242.00	240.70	1.000000000	DUMMY44	PA1_0080	223	DUMMY44	12	0.0058	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.041021	0.12
DUMMY4		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	542.00	538.00	1.000000000	DUMMY5	DE016E101	223	DUMMY4	12	0.0179	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.041027	0.08
DUMMY5		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	569.00	567.00	1.000000000	DUMMY6	DUMMY4	223	DUMMY5	12	0.0090	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.380278	0.27
DUMMY6		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	573.00	569.00	1.000000000	DUMMY7	DUMMY5	223	DUMMY6	12	0.0179	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.121504	0.21
DUMMY7		2006		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	220.00	217.88	1.000000000	DUMMY8	PA39_0010	223	DUMMY7	12	0.0095	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.072241	0.13
DUMMY8		2014		Future		MH059N035	MH059N028		A0303BJ	PRIV	PVC	{A10B320E-DFDA-4658-946E-E83B550717FA}	CLMH059N035MH059N028	214.00	211.00	1.000000000	DUMMY9	DE157E023	223	DUMMY8	12	0.0135	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012750	0.05
FLCI043509#MH043512		1988		Existing		FI043509#	MH043512		A0062	IRWD	VCP	{DABFE5CF-9573-4533-B3FE-D6DC1CFC98F}	CLFI043509#MH043512	119.26	119.20	0.666666667	FI043509#	MH043512		CLFI043509#MH043512	8	0.0021	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI046S004#MH046S015		2014		Existing	assumed Mannings N	FI046S004	MH046S015		T1669SJ	IRWD	PVC	{DCD06EFA-CFF3-4184-AFE3-83018A09F3D1}	CLFI046S004#MH046S015	38.22	37.68	0.666666667	FI046S004	MH046S015	Future 8-in and less, d/D>0.50	CLFI046S004#MH046S015	8	0.0040	0.000000	0.18	0.000000	0.19	0.000000	0.22	0.066179	0.82
CLFI049N062#MH049N065		1986		Existing		FI049N062	MH049N065		A00375	IRWD	VCP	{AA43817F-D1ED-4253-BFB4-2FBD2C2A4A13}	CLFI049N062#MH049N065	32.55	30.57	0.500000000	FI049N062	MH049N065	95	CLFI049N062#MH049N065	6	0.0208	0.018622	0.13	0.019882	0.13	0.023571	0.14	0.019882	0.13
STFI063E003#MH063E038		1969		Existing		FI063E003	MH063E038		T0707J	IRWD	VCP	{20E73F66-52BD-48A2-93F5-7FCD6407F172}	STFI063E107#MH063E038	67.26	67.12	0.500000000	FI063E003	MH063E038	104	STFI063E003#MH063E038	6	0.043	0.000364	0.04	0.000438	0.04	0.000519	0.04	0.000438	0.04
CLFI082E001#MH082E003		2015	assumed Mannings N	Existing	assumed Mannings N	FI082E001	MH082E003		T1652J9	IRWD	PVC	{F724BCAA-0AB7-4267-9372-F9E3E81A88ED}	CLFI082E001#MH082E003	384.40	382.00	0.666666667	FI082E001	MH082E003	88	CLFI082E001#MH082E003	8	0.0258	0.000163	0.01	0.000175	0.01	0.000188	0.01	0.000163	0.04
CLFI082E002#MH082E001		2015	assumed Mannings N	Existing	assumed Mannings N	FI082E002	MH082E001		T1652J9	IRWD	PVC	{6574A807-521E-49A1-972E-EA410E9003681}	CLFI082E002#MH082E001	385.10	384.70	0.666666667	FI082E002	MH082E001	86	CLFI082E002#MH082E001	8	0.0047	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.118542	0.30
CLFI082S005#MH082S059		2006		Existing	assumed Mannings N	FI082S005	MH082S059		T1652J9	IRWD	PVC	{EE00D4D-F3E4-4441-B06A-769B69975 1C2}	CLFI082S005#MH082S059	297.30	294.78	0.666666667	FI082S005	MH082S059	109	CLFI082S005#MH082S059	8	0.0231	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006052	0.08
CLFI082S006#MH082S065		2006		Existing	assumed Mannings N	FI082S006	MH082S065		T1652J9	IRWD	PVC	{A1E4EB8D-B5F8-4D6D-8250-B88E7502F849}	CLFI082S006#MH082S065	342.00	337.50	0.666666667	FI082S006	MH082S065	122	CLFI082S006#MH082S065	8	0.0269	0.000233	0.00	0.000242	0.01	0.000251	0.01	0.057820	0.13
CLFI090S001#MH090S007	SLOPE NOT ON AS	2008		Existing		FI090S001	MH090S007		A02226	IRWD	PVC	{A713F1D1-2EE5-4557-B043-0F4387D55353}	CLFI090S001MH090S007	223.48	222.98	0.666666667	FI090S001	MH090S007	52	CLFI090S001#MH090S007	8	0.0096	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI091E001#MH091E002		2001		Existing	assumed Mannings N	FI091E001	MH091E002		A00892	IRWD	PVC	{8866D855-68AD-4BBB-B100-187A8C2AE51E}	CLFI091E001MH091E002	193.00	189.50	0.666666667	FI091E001	MH091E002	227	CLFI091E001#MH091E002	8	0.0154	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI091N001#MH091N004		2010	assumed Mannings N	Existing	assumed Mannings N	FI091N001	MH091N004		A00917	IRWD	VCP	{AD8F848E-63B0-4739-B361-28D0B973789C}	CLFI091N001MH091N004	120.44	119.00	0.666666667	FI091N001	MH091N004	31	CLFI091N001#MH091N004	8	0.0458	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
FMFI091S002FI091S003		1994		Existing		FI091S002	FI091S003		798	IRWD	DIP	{1D6E5AA4-268E-4284-9CEE-846707A5A3A4}	FMFI091S002FI091S003	163.70	184.11	1.000000000	FI091S002	FI091S003	Forcemain	FMFI091S002FI091S003	12	0.0280	1.760985	1.00	1.703650	1.00	1.723662	1.00	1.721940	1.00
FMFI091S003MH091S004		1994		Existing		FI091S003	MH091S004		798	IRWD	PVC	{12737A01-5F34-4D5F-97E0-97E260C58146}	FMFI091S003MH091S004	184.11	201.20	1.000000000	FI091S003	MH091S004	900	FMFI091S003MH091S004	12	0.0190	1.737307	0.77	1.535099	0.75	1.668534	0.76	1.938249	0.79
FMFI091S016FI091S002		2014		Existing		FI091S016	FI091S002		798	IRWD	PVC	{5492F407-1648-411F-89E2-0FB1B7298C62}	FMFI091S016FI091S002	157.36	163.70	1.000000000	FI091S016	FI091S002	Forcemain	FMFI091S016FI091S002	12	0.0393	1.791130	1.00	1.856683	1.00	1.778130	1.00	1.994471	1.00
CLFI102E014MH102E280		1999	assumed Mannings N	Existing	assumed Mannings N	FI102E014	MH102E280		T1553A	IRWD	PVC	{536998FE-89CA-4A73-8952-7890A1FC9689}	CLFI102E014MH102E280	116.37	114.47	0.500000000	FI102E014	MH102E280		CLFI102E014MH102E280	6	0.1723	0.002238	0.03	0.002688	0.03	0.003186	0.03	0.002688	0.03
CLFI104E150#MH104E095		1977	assumed Mannings N	Existing	assumed Mannings N	FI104E150	MH104E095		T17277	IRWD	PVC	{972958C4-E15B-4BD3-B522-B5DC9C942DC1E5F}	CLFI104E150#MH104E095	179.76	178.91	0.666666667	FI104E150	MH104E095	96	CLFI104E150#MH104E095	8	0.0096	0.000061	0.00	0.000075	0.00	0.000088	0.01	0.000173	0.03
CLFI105E003#MH105N055		1979		Existing		FI105E003	MH105N055		004	IRWD	VCP	{54575EAD-805C-4449-858E-E1DDEF401A9F}	CLFI105E003MH105N055	216.88	216.08	0.666666667	FI105E003	MH105N055	94	CLFI105E003#MH105N055	8	0.0085	0.000340	0.01	0.000365	0.01	0.000432	0.01	0.000365	0.01
CLFI122E199#MH122E085		2014		Existing	assumed Mannings N	FI122E199	MH122E085		170088	IRWD	PVC	{485DADE5-0075-4E11-8580-9FE3AB37F8B}	CLFI122E199MH122E085	295.49	295.12	0.666666667	FI122E199	MH122E085	227	CLFI122E199#MH122E085	8	0.0041	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012224	0.10
CLFI122E200#MH122E087		2014		Existing	assumed Mannings N	FI122E200	MH122E087		170080	IRWD	PVC	{69DB9A75-702A-4000-8D76-D1FD2D9E1716}	CLFI122E200MH122E087	313.12	312.80	0.666666667	FI122E200	MH122E087	80	CLFI122E200#MH122E087	8	0.0060	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011661	0.10
CLFI122E201#MH122E088		2014		Existing	assumed Mannings N	FI122E201	MH122E088		170080	IRWD	PVC	{846D2DFE-9461-4226-8048-7A9570A59799}	CLFI122E201MH122E088	309.37	308.91	0.666666667	FI122E201	MH122E088	93	CLFI122E201#MH122E088	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.036054	0.16
CLFI122E202#MH122E091		2014		Existing	assumed Mannings N	FI122E202	MH122E091		17723A	IRWD	PVC	{B754E06F-44B5-4C96-AD64-5540DCB80934}	CLFI122E202MH122E091	306.87	306.31	0.666666667	FI122E202	MH122E091	86	CLFI122E202#MH122E091	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.015588	0.09
CLFI122E204#MH122E093		2014		Existing	assumed Mannings N	FI122E204	MH122E093		17723A	IRWD	PVC	{91006ADE-BBAC-47DA-82AA-EAFE7A52EF3F}	CLFI122E204MH122E093	301.37	299.89	0.666666667	FI122E204	MH122E093	80	CLFI122E204#MH122E093	8	0.0185	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003128	0.04
CLFI123S027#MH123S014		2013		Existing	assumed Mannings N	FI123S027	MH123S014		A00773	IRWD	VCP	{FD365244-1B44-44F7-98BC-EE4178B9858B}	CLFI123S027MH123S014	147.58	147.40	0.833333333	FI123S027	MH123S014	34	CLFI123S027#MH123S014	10	0.0053	0.000306	0.02	0.000322	0.03	0.000316	0.02
FMFI129W001FI129W002		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W001	FI129W002	changed ds invert	14070	IRWD	PVC	{10ECCDDE-C485-409A-A54F-667FB9A6F3B6}	FMFI129W001FI129W002	545.33	543.09	0.333333333	FI129W001	FI129W002	Forcemain	FMFI129W001FI129W002	4	0.1188	0.323350	1.00	0.319141	1.00	0.317138	1.00	0.531937	1.00
FMFI129W002FI129W003		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W002	FI129W003	changed ds invert	14070	IRWD	PVC	{931A4392-A5F3-481C-A5EF-ED0D67B1E1B07}	FMFI129W002FI129W003	563.09	592.59	0.333333333	FI129W002	FI129W003	Forcemain	FMFI129W002FI129W003	4	0.2011	0.249819	1.00	0.245970	1.00	0.248694	1.00	0.323686	1.00
FMFI129W003FI129W004		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W003	FI129W004	changed ds invert	14070	IRWD	PVC	{6AB7778A-2462-4438-9E3E1-ADAE8E0E80}	FMFI129W003FI129W004	592.59	593.59	0.333333333	FI129W003	FI129W004	Forcemain	FMFI129W003FI129W004	4	0.0041	0.185296	1.00	0.195615	1.00	0.179852	1.00	0.266585	1.00
FMFI129W004FI129W005		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W004	FI129W005	changed ds invert	14070	IRWD	PVC	{2B7C1149-043A-421A-8F80-3290 2AD2FD59}	FMFI129W004FI129W005	593.59	604.60	0.333333333	FI129W004	FI129W005	Forcemain	FMFI129W004FI129W005	4	0.1096	0.187196	1.00	0.179241	1.00	0.175321	1.00	0.172766	1.00
FMFI129W005FI129W006		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W005	FI129W006	changed ds invert	14070	IRWD	PVC	{58D1A6AB-A78E-490E-90A8-636E4BE7BEC4}	FMFI129W005FI129W006	604.60	621.67	0.333333333	FI129W005	FI129W006	Forcemain	FMFI129W005FI129W006	4	0.3528	0.146813	1.00	0.148436	1.00	0.147007	1.00	0.151831	1.00
FMFI129W006FI129W007		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W006	FI129W007	changed ds invert	14070	IRWD	PVC	{C9FEE446-6E6C-441E-80C1-066A253EB74E}	FMFI129W006FI129W007	621.67	622.96	0.333333333	FI129W006	FI129W007	Forcemain	FMFI129W006FI129W007	4	0.0044	0.130453	1.00	0.130646	1.00	0.130444	1.00	0.131004	1.00
FMFI129W007FI129W008		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W007	FI129W008	changed DS invert	14070	IRWD	PVC	{51834EDA-D3E2-490A-B2CA-517A3B1BBB}	FMFI129W007FI129W008	622.96	623.33	0.333333333	FI129W007	FI129W008	Forcemain	FMFI129W007FI129W008	4	0.0067	0.131441	1.00	0.131527	1.00	0.131327	1.00	0.131556	1.00
FMFI129W008MH129W045		1999		Existing		FI129W008	MH129W045	changed DS invert	14070	IRWD	PVC	{B9B63283-4985-4273-B87D-4A45A26E3BEF}	FMFI129W008MH129W045	623.33	623.53	0.333333333	FI129W008	MH129W045	30	FMFI129W008MH129W045	4	0.0067	0.118359	0.86	0.119199	0.86	0.118442	0.88	0.123507	0.87
FMFI129W009FI129W001		1999	assumed Mannings N	Existing	assumed Mannings N	FI129W009	FI129W001	changed ds invert	14070	IRWD	PVC	{2AD4EDEC-54DF-4883-B803-5D9524AF2259}	FMFI129W048FI129W001	534.92	545.33	0.333333333	FI129W009	FI129W001	Forcemain	FMFI129W009FI129W001	4	0.1328	0.459970	1.00	0.449929	1.00	0.457669	1.00	0.750673	1.00
MFMI134W001MH134W528		2013	assumed Mannings N	Existing	assumed Mannings N	FI134W001	MH134W528		937	IRWD	PVC	{2768AC01-59D2-43BA-803A-1F043BE0AB8E}	FMFI134W001MH134W528	1072.68	1086.64	0.500000000	MH134W001	MH134W528	Forcemain	MFMI134W001MH134W528	8	0.0722	0.136808	0.71	0.138107	0.71	0.139053	0.71	0.139053	0.71
CLFI140N004#MH140N012		2014		Existing	assumed Mannings N	FI140N004	MH140N012		02184D	IRWD	PVC	{2918D545-F3B6-4DD4-A80E-7FE742727E7}	CLFI140N004MH140N012	262.10	259.50	1.000000000	FI140N004	MH140N012	65	CLFI140N004#MH140N012	12	0.0403	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013135	0.04
CLFI140N009#MH140N023		2014		Existing	assumed Mannings N	FI140N009	MH140N023		2370	IRWD	PVC	{D74E950E-BE46-40FD-AC08-53EBE16CA71D}	CLFI140N009MH140N023	278.80	277.77	0.666666667	FI140N009	MH140N023	68	CLFI140N009#MH140N023	8	0.0153	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.017060	0.09
CLFI140N010#MH140N024		2014		Existing	assumed Mannings N	FI140N010	MH140N024		2370	IRWD	PVC	{CB91290F-480F-4AE6-B7D3-299F09DC9C49}	CLFI140N010MH140N024	277.50	277.29	0.666666667	FI140N010	MH140N024	53	CLFI140N010#MH140N024	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI140N011#MH140N025		2014		Existing	assumed Mannings N	FI140N011	MH140N025		2370	IRWD	PVC	{9F74F091-A3D8-4E3F-AA28-E4F958D875 7C}	CLFI140N011MH140N025	277.52	277.10	0.666666667	FI140N011	MH140N025	43	CLFI140N011#MH140N025	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI140N012#MH140N027		2014		Existing	assumed Mannings N	FI140N012	MH140N027		17008G	IRWD	PVC	{9B6EA490-E3BA-489A-83D0-AF1DC1886F0C}	CLFI140N012MH140N027	268.10	267.65	0.666666667	FI140N012	MH140N027	46	CLFI140N012#MH140N027	8	0.0099	0.000000	0.00	0.000000	0.00	0.002961	0.04		
CLFI140N013#MH140N028		2014		Existing	assumed Mannings N	FI140N013	MH140N028		17008G	IRWD	PVC	{7D4F9F1A-8162-4464-A14A-ED3E50B6737A}	CLFI140N013MH140N028	265.60	265.00	0.666666667	FI140N013	MH140N028	60	CLFI140N013#MH140N028	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005700	0.06
CLFI140N014#MH140N029		2014		Existing	assumed Mannings N	FI140N014	MH140N029		17008G	IRWD	PVC	{F286492F-8464-4711-A410-03512979 0B34}	CLFI140N014MH140N029	260.47	259.82	0.666666667	FI140N014	MH140N029	65	CLFI140N014#MH140N029	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019053	0.10
CLFI140W001#MH140W003		2014		Existing	assumed Mannings N	FI140W001	MH140W003		02184D	IRWD	PVC	{C42E3E0E-E18C-4FF7-8C54-11152900A78C}	CLFI140W001MH140W003	230.92	230.45	1.000000000	FI140W001	MH140W003	54	CLFI140W001#MH140W003	12	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI140W002#MH140W003		2014		Existing	assumed Mannings N	FI140W002	MH140W003		02184D	IRWD	PVC	{266E178C-3D50-4652-B216-A9A035C00817}	CLFI140W002MH140W003	230.60	230.28	1.000000000	FI140W002	MH140W003	80	CLFI140W002#MH140W003	12	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.181154	0.22
CLFI140W003#MH140W006		2014		Existing	assumed Mannings N	FI140W003	MH140W006		02184D	IRWD	PVC	{5840E427-2125-4342-92E2-390C2391CE1E}	CLFI140W003MH140W006	219.97	219.49	1.000000000	FI140W003	MH140W006	48	CLFI140W003#MH140W006	12	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI140W005#MH140W007		2014		Existing	assumed Mannings N	FI140W005	MH140W007		02184D	IRWD	PVC	{1F17FCBF-A52F-428A-986A-0B83F3084C33}	CLFI140W005MH140W007	218.39	218.21	1.000000000	FI140W005	MH140W007	47	CLFI140W005#MH140W007	12	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI141N005#MH141N006		2014		Existing	assumed Mannings N	FI141N005	MH141N006		17723A	IRWD	PVC	{453DCE5C-2A26-4CA3-BA26-95958192BD70}	CLFI141N005MH141N006	320.51	318.67	0.666666667	FI141N005	MH141N006	46	CLFI141N005#MH141N006	8	0.0400	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI141N006#MH141N007		2014		Existing	assumed Mannings N	FI141N006	MH141N007		17723A	IRWD	PVC	{EF8DF7E2-C2E7-4FE9-A750-48E8BA203052}	CLFI141N006MH141N007	315.49	313.65	0.666666667	FI141N006	MH141N007	46	CLFI141N006#MH141N007	8	0.0400	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI141N012#MH141N013		2014		Existing	assumed Mannings N	FI141N012	MH141N013		17008D	IRWD	PVC	{AB6606BF-17B6-4CB8-ABD5-5514C7102196}	CLFI141N012MH141N013	330.12	328.87	0.666666667	FI141N012	MH141N013	50	CLFI141N012#MH141N013	8	0.0250	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLFI141N013#MH141N014		2014		Existing	assumed Mannings N	FI141N013	MH141N014		17008D	IRWD	PVC	{9F0A0D40-0CC2-4522-92C2-9A4E7439DD4D}	CLFI141N013MH141N014	332.09	330.75	0.666666667	FI141N013	MH141N014	51	CLFI141N013#MH141N014	8	0.0263	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011225	0.06
CLFI141N015#MH141N016		2014		Existing	assumed Mannings N	FI141N015	MH141N016		17008D	IRWD	PVC	{CF7115EA-ED80-4596-A493-7FB9AF

| | | |

| | | |

| | | |

| | | |

| | | |

| | | |

| | | |

| | | |

| | | |

CLMH043S100MH043S014		1995		Existing		MH043S100	MH043S014		T14447	IRWD	PVC	{63948D72-6E05-4AFC-8553-4D55D0261961}	CLMH043S100MH043S014	130.30	125.61	0.666666667	MH043S100	MH043S014			69	CLMH043S100MH043S014	8	0.0680	0.054170	0.11	0.065115	0.12	0.077097	0.14	0.065113	0.12
CLMH043S101MH043S100		1995		Existing		MH043S101	MH043S100		T14447	IRWD	PVC	{3818589F-241F-4B76-A4E7-0269C0F949C9}	CLMH043S101MH043S100	131.55	130.50	0.500000000	MH043S101	MH043S100			74	CLMH043S101MH043S100	6	0.0142	0.012595	0.11	0.015120	0.12	0.017927	0.13	0.015120	0.12
CLMH043S103MH043S100		1995		Existing		MH043S103	MH043S100		T14447	IRWD	PVC	{04A8259D-4941-4F04-8054-DDDB76074222C}	CLMH043S103MH043S100	134.60	130.41	0.666666667	MH043S103	MH043S100			386	CLMH043S103MH043S100	8	0.0109	0.041575	0.15	0.049306	0.16	0.059169	0.18	0.049906	0.16
CLMH043S104MH043S103		1995		Existing		MH043S104	MH043S103		T14447	IRWD	PVC	{7A7C0463-1B4F-401D-ACA6-A77F1D1BF34}	CLMH043S104MH043S103	140.85	134.69	0.666666667	MH043S104	MH043S103			251	CLMH043S104MH043S103	8	0.0245	0.017942	0.08	0.021540	0.09	0.025538	0.10	0.021540	0.09
CLMH043S107MH043S103		1995		Existing		MH043S107	MH043S103		T14447	IRWD	PVC	{539FF9D0-08CA-425C-94FE-F348F6A5937D}	CLMH043S107MH043S103	135.44	134.80	0.666666667	MH043S107	MH043S103			74	CLMH043S107MH043S103	8	0.0086	0.018032	0.10	0.021640	0.11	0.025658	0.12	0.021640	0.11
CLMH043S109MH043S107		1995		Existing		MH043S109	MH043S107		T14447	IRWD	PVC	{016A8698-0826-434D-ABA9-742D1AC17808}	CLMH043S109MH043S107	138.55	135.63	0.666666667	MH043S109	MH043S107			89	CLMH043S109MH043S107	8	0.0328	0.018032	0.08	0.021640	0.08	0.025658	0.09	0.021640	0.08
CLMH043S111MH043S109		1995		Existing		MH043S111	MH043S109		T14447	IRWD	PVC	{3CA77754-75E8-4F14-B908-8D85A36E9B7F}	CLMH043S111MH043S109	139.64	138.64	0.666666667	MH043S111	MH043S109			70	CLMH043S111MH043S109	8	0.0143	0.011333	0.07	0.013599	0.08	0.016123	0.09	0.013599	0.08
CLMH043S112MH043S111		1995		Existing		MH043S112	MH043S111		T14447	IRWD	PVC	{78123286-5385-43A2-8BDB-087E9CD4F585}	CLMH043S112MH043S111	145.55	139.85	0.666666667	MH043S112	MH043S111			387	CLMH043S112MH043S111	8	0.0147	0.011334	0.07	0.013600	0.08	0.016125	0.09	0.013600	0.08
CLMH043S113MH043S112		1995		Existing		MH043S113	MH043S112		T14447	IRWD	PVC	{0D83534E-9DA7-4348-A533-5F9D5DA3748B}	CLMH043S113MH043S112	146.85	145.75	0.666666667	MH043S113	MH043S112			77	CLMH043S113MH043S112	8	0.0143	0.011261	0.07	0.013522	0.08	0.016032	0.09	0.013522	0.08
CLMH043S116MH043S015		1988		Existing		MH043S116	MH043S015		A00602	IRWD	VCP	{B595756F-1B48-45C2-A3AA-366E0403884}	CLMH043S116MH043S015	129.05	128.41	0.833333333	MH043S116	MH043S015			350	CLMH043S116MH043S015	10	0.0018	0.092835	0.25	0.111394	0.27	0.132078	0.29	0.111393	0.27
CLMH043S117MH043S116		1995		Existing		MH043S117	MH043S116		T14447	IRWD	PVC	{3EC9C218-2EA8-4A55-9735-C39245A9304C}	CLMH043S117MH043S116	136.80	129.05	0.666666667	MH043S117	MH043S116			279	CLMH043S117MH043S116	15	0.0278	0.035201	0.24	0.042216	0.26	0.050050	0.29	0.042216	0.26
CLMH043S118MH043S117		1995		Existing		MH043S118	MH043S117		T14447	IRWD	PVC	{BC35AA59-9263-4274-AF41-BB9439CE314E}	CLMH043S118MH043S117	139.50	137.00	0.666666667	MH043S118	MH043S117			253	CLMH043S118MH043S117	8	0.0099	0.034953	0.14	0.041954	0.15	0.049738	0.16	0.041954	0.15
CLMH043S119MH043S118		1995		Existing		MH043S119	MH043S118		T14447	IRWD	PVC	{D311CBCF-0455-4AA6-911E-45ECE6BFBA3F}	CLMH043S119MH043S118	140.13	139.69	0.500000000	MH043S119	MH043S118			48	CLMH043S119MH043S118	6	0.0092	0.005778	0.09	0.006937	0.09	0.008223	0.10	0.006937	0.09
CLMH043S122MH043S118		1995		Existing		MH043S122	MH043S118		T14447	IRWD	PVC	{1E130371-B017-479D-8DFA-250D4B733DC}	CLMH043S122MH043S118	144.14	139.69	0.666666667	MH043S122	MH043S118			251	CLMH043S122MH043S118	8	0.0177	0.018501	0.09	0.022200	0.10	0.026320	0.11	0.022200	0.10
CLMH043S123MH043S122		1995		Existing		MH043S123	MH043S122		T14447	IRWD	PVC	{7ABFA4B9-4038-4AB1-BEDC-1067CDB16E58}	CLMH043S123MH043S122	147.85	144.35	0.666666667	MH043S123	MH043S122			186	CLMH043S123MH043S122	8	0.0188	0.018501	0.09	0.022200	0.10	0.026320	0.10	0.022200	0.10
CLMH043S124MH043S123		1995		Existing		MH043S124	MH043S123		T14447	IRWD	PVC	{71DE4EB1-3620-4E83-AFC8-6A7AD8230FC7}	CLMH043S124MH043S123	149.64	148.05	0.666666667	MH043S124	MH043S123			74	CLMH043S124MH043S123	8	0.0215	0.014368	0.08	0.017239	0.08	0.020438	0.09	0.017239	0.08
CLMH043S129MH043E205		1995		Existing		MH043S129	MH043E205		T14837	IRWD	PVC	{9535F6AA-8215-4F61-BCC4-97D259265AC5}	CLMH043S129MH043E205	165.05	164.27	0.666666667	MH043S129	MH043E205			158	CLMH043S129MH043E205	8	0.0049	0.012318	0.10	0.014790	0.11	0.017532	0.11	0.014790	0.11
CLMH043S130MH043S131		1995		Existing		MH043S130	MH043S131		T14837	IRWD	VCP	{4F13CBCD-CDCC-4AD8-BAA7-F8E738F3094D}	CLMH043S130MH043S131	163.77	159.38	0.666666667	MH043S130	MH043S131			317	CLMH043S130MH043S131	8	0.0138	0.000847	0.02	0.001017	0.02	0.001207	0.02	0.001017	0.02
CLMH043S131MH043E202		1995		Existing		MH043S131	MH043E202		T14837	IRWD	VCP	{9E3A669F-2C6A-498C-B6E3-516BEAA3F9F5}	CLMH043S131MH043E202	159.19	158.22	0.666666667	MH043S131	MH043E202			224	CLMH043S131MH043E202	8	0.0043	0.004531	0.06	0.005440	0.07	0.006452	0.07	0.005440	0.07
CLMH043S134MH043S136		2002		Existing	assumed Manning's N	MH043S134	MH043S136		T15874	IRWD	PVC	{0E330E53-8F01-4BDF-8846-D13BCA135B15}	CLMH043S134MH043S136	121.15	116.18	0.666666667	MH043S134	MH043S136			323	CLMH043S134MH043S136	8	0.0154	0.014640	0.08	0.017577	0.09	0.020837	0.10	0.017577	0.09
CLMH043S135MH043S145		2002		Existing	assumed Manning's N	MH043S135	MH043S145		T15874	IRWD	PVC	{DF60D3CA-AC11-43FD-AAED-745460SC75AE}	CLMH043S135DE043S100	119.94	117.68	0.666666667	MH043S135	MH043S145			57	CLMH043S135MH043S145	8	0.0198	0.006732	0.05	0.008080	0.05	0.009580	0.05	0.008080	0.05
CLMH043S136MH043S144		2002		Existing	assumed Manning's N	MH043S136	MH043S144		T15874	IRWD	PVC	{5CC5563D-D155-4BED-B374-D8913FCFCAC5}	CLMH043S136DE043S101	116.08	115.79	0.666666667	MH043S136	MH043S144			251	CLMH043S136MH043S144	8	0.0103	0.014640	0.09	0.017577	0.10	0.020837	0.11	0.017577	0.10
CLMH043S141MH043S004		2001		Existing	assumed Manning's N	MH043S141	MH043S004		T15871	IRWD	PVC	{19758540-B1AE-4841-9D32-F69E007FC952}	CLMH043S141MH043S004	126.16	124.60	0.666666667	MH043S141	MH043S004			56	CLMH043S141MH043S004	8	0.0085	0.004363	0.05	0.005236	0.06	0.006211	0.06	0.005236	0.06
CLMH043S142MH043S134		2002		Existing	assumed Manning's N	MH043S142	MH043S134		T15874	IRWD	PVC	{4905176C-A85F-4AF4-B1BB-EDC06914929B}	CLMH043S142MH043S134	123.19	121.25	0.666666667	MH043S142	MH043S134			194	CLMH043S142MH043S134	8	0.0100	0.006002	0.06	0.007206	0.07	0.008542	0.07	0.007206	0.07
CLMH043S143MH043S141		2001		Existing	assumed Manning's N	MH043S143	MH043S141		T15871	IRWD	PVC	{A9718427-98B2-4ABD-AE1E-EBF6495 1CF3D}	CLMH043S143MH043S141	129.30	128.83	0.666666667	MH043S143	MH043S141			113	CLMH043S143MH043S141	8	0.0042	0.003592	0.05	0.004311	0.06	0.005113	0.06	0.004311	0.06
CLMH043S144MH065W111		2001		Existing	assumed Manning's N	MH043S144	MH065W111		T15871	IRWD	PVC	{17D29AA5-3CD3-428C-A2A3-80886D9660D2}	CLMH043S144MH065W111	115.26	114.19	0.666666667	MH043S144	MH065W111			234	CLMH043S144MH065W111	8	0.0046	0.026323	0.14	0.031601	0.16	0.037466	0.17	0.031601	0.16
CLMH043S145MH043S144		2001		Existing	assumed Manning's N	MH043S145	MH043S144		T15871	IRWD	PVC	{E5587151-BFE1-4514-BECD-A100E3053F1F}	CLMH043S145MH043S144	116.16	115.36	0.666666667	MH043S145	MH043S144			201	CLMH043S145MH043S144	8	0.0040	0.006732	0.07	0.008080	0.08	0.009580	0.09	0.008080	0.08
CLMH043W001MH043W002		1988		Existing		MH043W001	MH043W002		567	IRWD	VCP	{B7073606-AB33-49A1-9A7E-27E3AA2294D2}	CLMH043W001MH043W002	125.58	121.87	1.000000000	MH043W001	MH043W002			376	CLMH043W001MH043W002	12	0.0099	0.367165	0.27	0.439519	0.30	0.521132	0.32	0.439528	0.30
CLMH043W002MH043W008		1988		Existing		MH043W002	MH043W008		A00567	IRWD	VCP	{5D6A4205-B593-43DE-9C20-CA835CA09C23}	CLMH043W002MH043W008	121.77	117.08	1.000000000	MH043W002	MH043W008			474	CLMH043W002MH043W008	12	0.0099	0.29567	0.31	0.574418	0.34	0.681101	0.37	0.574427	0.34
CLMH043W003MH043W002		1988		Existing		MH043W003	MH043W002		567	IRWD	VCP	{00BF626F-CA6C-437C-B613-CC4E242199AC}	CLMH043W003MH043W002	128.99	122.16	0.666666667	MH043W003	MH043W002			200	CLMH043W003MH043W002	8	0.0342	0.059954	0.14	0.071981	0.15	0.085334	0.16	0.071981	0.15
CLMH043W004MH043W002		1988		Existing		MH043W004	MH043W002		A00601	IRWD	VCP	{0CD93106-F261-4929-9AB2-683F4A02A661}	CLMH043W004MH043W002	127.34	122.26	0.666666667	MH043W004	MH043W002			200	CLMH043W004MH043W002	8	0.0254	0.052563	0.14	0.062984	0.15	0.074672	0.17	0.062984	0.15
CLMH043W005MH043W004		1982		Existing		MH043W005	MH043W004		A00601	IRWD	VCP	{4ED E12F8-BFCF-49BC-B855-E07546A3AF5E}	CLMH043W005MH043W004	130.58	127.44	0.666666667	MH043W005	MH043W004			207	CLMH043W005MH043W004	8	0.0152	0.021045	0.09	0.025236	0.10	0.029924	0.11	0.025236	0.10
CLMH043W006MH043W005		1988		Existing		MH043W006	MH043W005		A00601	IRWD	PVC	{2B78E9B3-D2B7-4C70-AF6C-9B772EC1B47A}	CLMH043W006MH043W005	134.94	130.69	0.666666667	MH043W006	MH043W005			368	CLMH043W006MH043W005	8	0.0115	0.001968	0.04	0.002101	0.04	0.002490	0.04	0.002101	0.04
CLMH043W007MH043W006		1988		Existing		MH043W007	MH043W006		A00601	IRWD	VCP	{88C71544-4929-4578-AA1F-3A526ABE9617}	CLMH043W007MH043W006	138.50	135.05	0.666666667	MH043W007	MH043W006			300	CLMH043W007MH043W006	8	0.0115	0.001968	0.04	0.002101	0.04	0.002490	0.04	0.002101	0.04
CLMH043W008MH043W009		1988		Existing		MH043W008	MH043W009		567	IRWD	VCP	{62EAF17F-F071-449C-BC82-BA5E8BC564C2}	CLMH043W008MH043W009	116.98	112.26	1.000000000	MH043W008	MH043W009			473	CLMH043W008MH043W009	12	0.0100	0.504239	0.32	0.604108	0.35	0.716339	0.38	0.604115	0.35
CLMH043W009MH043W010		1988		Existing		MH043W009	MH043W010		A00576	IRWD	VCP	{0B2581FB-0178-434B-84B5-D05A1D61AF77}	CLMH043W009MH043W010	112.01	110.46	1.250000000	MH043W009	MH043W010			387	CLMH043W009MH043W010	15	0.0040	0.537239	0.30	0.643863	0.33	0.763571	0.36	0.643864	0.33
CLMH043W010MH043W011		1990		Existing		MH043W010	MH043W011		A00576	IRWD	VCP	{8CACCDF5-F34B-4843-AEE3-3D761B2ECF2A}	CLMH043W010MH043W011	110.36	108.73	1.250000000	MH043W010	MH043W011			407	CLMH043W010MH043W011	15	0.0040	0.573308	0.31	0.687393	0.34	0.815323	0.37	0.687394	0.34
CLMH043W011MH043W012		1990		Existing		MH043W011	MH043W012		A00576	IRWD	VCP	{E5998740-7DBD-43EC-862A-BC3E7B99EDE}	CLMH043W011MH043W012	108.63	107.09	1.250000000	MH043W011	MH043W012			385	CLMH043W011MH043W012	15	0.0040	0.613551	0.32	0.735921	0.35	0.872996	0.38	0.735923	0.35
CLMH043W012MH04AN012		1988		Existing		MH043W012	MH04AN012		498	IRWD	VCP	{F89B2027-FA53-4DD7-9B4B-9465A133DF32}	CLMH043W012MH04AN012	106.99	103.11	1.250000000	MH043W012	MH04AN012			393	CLMH043W012MH04AN012	15	0.0099	0.613384	0.26	0.735787	0.29	0.872900	0.31	0.735789	0.29
CLMH043W013MH043W009		1988		Existing		MH043W013	MH043W009		A00601	IRWD	VCP	{D1869ACF-DAC4-4907-A97A-D6B52DA111F}	CLMH043W013MH043W009	123.76	112.05	0.666666667	MH043W013	MH043W009			386	CLMH043W013MH043W009	8	0.0303	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH043W014MH043W013		1988		Existing		MH043W014	MH043W013		A00601	IRWD	VCP	{727FFA17-D19B-47C5-BEAA-5EAB15 1EE43}	CLMH043W014MH043W013	128.54	123.86	0.666666667	MH043W014	MH043W013			234	CLMH043W014MH043W013	8	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH043W015MH043W014		1988		Existing		MH043W015	MH043W014		A00601	IRWD	VCP	{5AAA43EF-CA48-4283-9004-0B27A4BD78F2}	CLMH043W015MH043W014	133.36	128.64	0.666666667	MH043W015	MH043W014			222	CLMH043W015MH043W014	8	0.0213	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH043W016MH043W017		1988		Existing		MH043W016	MH043W017		T13701	IRWD	PVC	{F3BD88E2-9044-4C8E-8AB1-EACC6CADFF65}	CLMH043W016MH043W017	136.80	134.89	0.666666667	MH043W016	MH043W017			170	CLMH043W016MH043W017	8	0.0112	0.004505	0.06	0.005408	0.06	0.006418	0.06	0.005408	0.06
CLMH043W017MH043W018		1990		Existing		MH043W017	MH043W018		T13701	IRWD	PVC	{E081075D-29E0-4DE4-BA18-12A558D3A21D}	CLMH043W017MH043W018	134.69	132.39	0.666666667	MH043W017	MH043W018			186	CLMH043W017MH043W018	8	0.0124	0.002284	0.04	0.002742	0.04	0.003251	0.04	0.002742	0.04
CLMH043W017MH043W020		1990		Existing		MH043W017	MH043W020		T13701	IRWD	VCP	{70ABE28D-DFEA-4D81-A2E3-AC5138F0CB1B}	CLMH043W017MH043W020	134.69	130.60	0.666666667	MH043W017	MH043W020			354	CLMH043W017MH043W020	8	0.0117	0.002221	0.04	0.002666	0.04	0.003161	0.04	0.002666	0.04
CLMH043W018MH043W019		1990		Existing		MH043W018	MH043W019		T13701	IRWD	VCP	{A94C9B78-DB44-4866-8F0F-76ACDFCA62D9}	CLMH043W018MH043W019	132.19	130.89	0.666666667	MH043W018	MH043W019			223	CLMH043W018MH043W019	8	0.0058	0.008670	0.08	0.010408	0.09	0.012340	0.10	0.010408	0.09
CLMH043W019MH043W022		1990		Existing		MH043W019	MH043W022		T13701	IRWD	VCP	{5077A6D30-0574-462B-BA91-04AB1351E1AB}	CLMH043W019MH043W022	130.69	127.90	0.666666667	MH043W019	MH043W022			280	CLMH043W019MH043W022	8	0.0100	0.008670	0.07	0.010408	0.08	0.012340	0.09	0.010408	0.08
CLMH043W020MH043W023		1990		Existing		MH043W020	MH043W023		T13701	IRWD	VCP	{ED42F31B-E459-4249-B8BA-743302E8888F}	CLMH043W020MH043W023	130.39	128.64	0.666666667	MH043W020	MH043W023			174	CLMH043W020MH043W023	8	0.0098	0.005825	0.06	0.006992	0.07	0.008290	0.07	0.006992	0.07
CLMH043W021MH043W022		1990		Existing		MH043W021	MH043W022		T13701	IRWD	VCP	{2607DFF6-03AF-4488-B81B-89404FC30276}	CLMH043W021MH043W022	132.19	127.90	0.666666667	MH043W021	MH043W022			200	CLMH043W021MH043W022	8	0.0215	0.004290	0.04	0.005149	0.05	0.006106	0.05	0.005149	0.05
CLMH043W022MH043W024		1990		Existing		MH043W022	MH043W024		T13701	IRWD	VCP	{7D152188-58F2-49A3-95B9-395409D1AD7F}	CLMH043W022MH043W024	127.69	126.30	0.666666667	MH043W022	MH043W024			150	CLMH043W022MH043W024	8	0.0093	0.012960	0.09	0.015557	0.10	0.018446	0.11	0.015557	0.10
CLMH043W023MH043W025		1990		Existing		MH043W023	MH043W025		T13701	IRWD	VCP	{A2733686-9025-4535-82AC-34AAC3E505BB}	CLMH043W023MH043W025	128.50	126.09	0.666666667	MH043W023	MH043W025			209	CLMH043W023MH043W025	8	0.0115	0.009802	0.08	0.011765	0.08	0.013950	0.09	0.011765	0.08
CLMH043W024MH043W027		1990		Existing		MH043W024	MH043W027		T13701	IRWD	VCP	{71C9F5C1-58B3-4728-99A6-50761B610681}	CLMH043W024MH043W027	126.09	123.90	0.666666667	MH043W024	MH043W027			197	CLMH043W024MH043W027	8	0.0111	0.017680	0.10	0.021225	0.11	0.025165	0.12	0.021225	0.11
CLMH043W025MH043W026		1990		Existing		MH043W025	MH043W026		T13701	IRWD	VCP	{E18B23CA-E247-4572-9971-E9E39554E644}	CLMH043W025MH043W026	125.90	121.50	0.666666667	MH043W025	MH043W026			246	CLMH043W025MH043W026	8	0.0246	0.009802	0.06	0.011765	0.07	0.013950	0.08	0.011765	0.07
CLMH043W026MH043W042		1990		Existing		MH043W026	MH043W042		T13701	IRWD	VCP	{93E2628D-1E88-4BC4-8234-AA52486DDC70}	CLMH043W026MH043W042	123.30	116.69	0.666666667	MH043W026	MH043W042			185	CLMH043W026MH043W042	8	0.0249	0.033259	0.12	0.039927	0.13	0.047341	0.14	0.039927	0.13
CLMH043W027MH043W026		1990		Existing		MH043W027	MH043W026		T13701	IRWD	VCP	{3F699210-396F-4AC5-895B-D8E8F3D79B4A}	CLMH043W027MH043W026	123.69	121.50	0.666666667	MH043W027	MH043W026			144	CLMH043W027MH043W026	8	0.0152	0.019893	0.10	0.023883	0.11	0.028317	0.12	0.023883	0.11
CLMH043W028MH043W033		1990		Existing		MH043W028	MH043W033		T13990	IRWD	VCP	{6E593905-9212-4324-ABA9-2B8DCFE0F4B4}	CLMH043W028MH043W033	121.00	117.80	0.666666667	MH043W028	MH043W033			309	CLMH043W028MH043W033	8	0.0104	0.009500	0.08	0.011407	0.08	0.013522	0.09	0.011407	0.08
CLMH043W029MH043W028		1990		Existing		MH043W029	MH043W028		T13990	IRWD	VCP	{075702DA-E3B5-4325-8FCE-375308580D9E}	CLMH043W029MH043W028	122.19	121.19	0.666666667	MH043W029	MH043W028			144	CLMH043W029MH043W028	8	0.0061	0.004882	0.06	0.005611	0.06	0.006664	0.07	0.005621	0.06
CLMH043W030MH043W029		1990		Existing		MH043W030	MH043W029		T13990	IRWD	VCP	{A1D07B7D-8CF7-4DD1-BEBB-AB3A5805F4F2}	CLMH043W030MH043W029	123.80	122.40	0.666666667	MH043W030	MH043W029			208	CLMH043W030MH043W029	8	0.0067	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH043W030MH043W031		1990		Existing		MH043W030	MH043W031		T13990	IRWD	VCP	{765B14DE-C291-4AAF-9084-C46E9037FC48}	CLMH043W030MH043W031	123.80	121.00	0.666666667	MH043W030	MH043W031			310	CLMH043W030MH043W031	8	0.0090	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH043W031MH043W032		1990		Existing		MH043W031	MH043W032		T13990	IRWD	VCP	{DAC4BE41-94F4-412F-B183-A3414C1B88F8}	CLMH043W031MH043W032	120.80	119.40	0.666666667	MH043W031	MH043W032			194	CLMH043W031MH043W032	8	0.0072	0.006190	0.07	0.007431	0.07	0.008809	0.08	0.007431	0.07
CLMH043W032MH043W033		1990		Existing		MH043W032	MH043W033		T13990	IRWD	VCP	{D1BFE08A-81E8-4233-826D-0F88B01D1E8A}	CLMH043W032MH043W033	119.19	117.80	0.666666667	MH043W032	MH043W033			178	CLMH043W032MH043W033	8	0.0078	0.006190	0.07	0.007431	0.07	0.008809	0.08	0.007431	0.07
CLMH043W033MH043W034		1990		Existing		MH043W033	MH043W034		T13990	IRWD	VCP	{48DF9ACF-8D6E-4839-B31C-348D60A40BC9}	CLMH043W033MH043W034	117.59	115.30	0.666666667	MH043W033	MH043W034			336	CLMH043W033MH043W034	8	0.0068	0.023877	0.13	0.028668	0.14	0.033983	0.16	0.028668	0.14
CLMH043W034MH043W039		1990		Existing		MH043W034	MH043W039		T13990	IRWD	VCP	{3CFB9A0E-12F0-4C11-904B-CC2ACCC954B6}	CLMH043W034MH043W039	115.11	114.08	0.666666667	MH043W034	MH043W039			261	CLMH043W034MH043W039	8	0.0039	0.008020	0.08	0.009726	0.09	0.011521	0.10	0.009726	0.09
CLMH043W034MH043W041		1990		Existing		MH043W034	MH043W041		T13990	IRWD	VCP	{C58EC2DC-16E5-4485-A32A-3A17F87F9486}	CLMH043W034MH043W041	115.11	112.58	0.666666667	MH043W034	MH043W041			221	CLMH043W034MH043W041	8	0.0114	0.015858	0.10	0.018942	0.10	0.022463	0.11	0.018942	0.10
CLMH043W035MH043W036		1990		Existing		MH043W035	MH043W036		T13990	IRWD	VCP	{11051E69-2A2C-4ED4-9BDD-2EC2846A2AC0}	CLMH043W035MH043W036	111.65	111.47	0.666666667	MH043W035	MH043W036			50	CLMH043W035MH043W036	8	0.0036	0.019618	0.13	0.023457	0.14	0.027815	0.15	0.023457	0.14
CLMH043W036MH043W037		1990		Existing		MH043W036	MH043W037		T13990	IRWD	VCP	{E4DABCEC-DEBE-48B4-9A60-48046BC21D77}	CLMH043W036MH043W037	111.26	110.75	0.666666667	MH043W036	MH043W037			134	CLMH043W036MH043W037	8	0.0038	0.040642	0.18	0.048798	0.20	0.057848	0.22	0.048798	0.20
CLMH043W037MH043W038		1990		Existing		MH043W037	MH043W038		T13990	IRWD	VCP	{E0F54287-BD2F-4729-A6C7-00BC5047CF9}	CLMH043W037MH043W038	110.75	110.39	0.666666667	MH043W037	MH043W038			38	CLMH043W037MH043W038	8	0.0095	0.040642	0.16	0.048798	0.17	0.057848	0.19	0.048798	0.17
CLMH043W038MH043W011		1990		Existing		MH043W038	MH043W011		A00576	IRWD	VCP	{A1888E25-3FC2-4F02-98FB-785726D13419}	CLMH043W038MH043W011	110.24	109.26	0.666666667	MH043W038	MH043W011			97	CLMH043W038MH043W011	8	0.0101	0.040642	0.15	0.048798	0.17	0.057848	0.18	0.048798	0.17
CLMH043W039MH043W040		1990		Existing		MH043W039	MH043W040		T13990	IRWD	VCP	{D5DCC309-06F8-439B-B21A-EC368DC837C5}	CLMH043W039MH043W040	113.87	112.45	0.666666667	MH043W039	MH043W040			358	CLMH043W039MH043W040	8	0.0040	0.016011	0.12	0.019321	0.13	0.022895	0.14	0.019321	0.13
CLMH043W040MH043W036		1990		Existing		MH043W040	MH043W036		T13990	IRWD	VCP	{B9AD78E5-03CB-481E-A61A-56DA68F0907D}	CLMH043W040MH043W036	112.26	111.47	0.666666667	MH043W040	MH043W036			201	CLMH043W040MH043W036	8	0.0039	0.016010	0.12	0.019321	0.13	0.022895	0.14	0.019321	0.13
CLMH043W041MH043W035		1990		Existing		MH043W041	MH043W035		T13990	IRWD	VCP	{FEBA490A-2558-4043-ABE6-EE856C175C2F}	CLMH043W041MH043W035	112.37	111.84	0.666666667	MH043W041	MH043W035			137	CLMH043W041MH043W035	8	0.0039	0.015858	0.12	0.018942	0.13	0.022463	0.14	0.018942	0.13
CLMH043W042MH043W009		1990		Existing		MH043W042	MH043W009		T13701	IRWD	VCP	{C3DEA05D-A6CB-48C3-818E-EEBCB5DC9E88}	CLMH043W042MH043W009	116.68	112.58	0.666666667	MH043W042	MH043W009			384	CLMH043W042MH043W009	8	0.0107	0.033259	0.14	0.039927	0.15	0.047341	0.16	0.039927	0.15
CLMH043W043MH043W044		1990		Existing		MH043W043	MH043W044		T13908	IRWD	PVC	{0EF2BE24-2648-419F-AD6B-70EEF2EA7270}	CLMH043W043MH043W044	133.63	131.94	0.666666667	MH043W043	MH043W044	

CLMH044E021MH044E019		1988		Existing		MH044E021	MH044E019		A00539	IRWD	VCP	{990CD06E-498A-487E-9415-1C34C408E58}	CLMH044E021MH044E019	90.84	71.44	0.833333333	MH044E021	MH044E019			386	CLMH044E021MH044E019	10	0.0503	0.187060	0.16	0.224451	0.18	0.266287	0.20	0.224450	0.18
CLMH044E022MH044E021		1988		Existing		MH044E022	MH044E021		A00539	IRWD	VCP	{E284AA29-21C5-4C46-9F1E-4AE792A96409}	CLMH044E022MH044E021	98.38	91.05	0.833333333	MH044E022	MH044E021			309	CLMH044E022MH044E021	10	0.0237	0.187077	0.20	0.224467	0.22	0.266300	0.24	0.224467	0.22
CLMH044E023MH044E022		1988		Existing		MH044E023	MH044E022		A00539	IRWD	VCP	{5E867FF4-98A0-44BD-9C79-CDAF81DA63D5}	CLMH044E023MH044E022	105.50	98.48	0.833333333	MH044E023	MH044E022			309	CLMH044E023MH044E022	10	0.0227	0.187096	0.20	0.224486	0.22	0.266316	0.24	0.224485	0.22
CLMH044E024MH044E023		1988		Existing		MH044E024	MH044E023		A00539	IRWD	VCP	{C5EF5B1B-3676-46A3-A70C-FE1B724BE58E}	CLMH044E024MH044E023	107.59	105.59	0.833333333	MH044E024	MH044E023			212	CLMH044E024MH044E023	10	0.0094	0.187115	0.25	0.224506	0.27	0.266332	0.30	0.224505	0.27
CLMH044E025MH044E024		1988		Existing		MH044E025	MH044E024		A00542	IRWD	VCP	{4B3D2DD7-F756-4024-BCCB-2394795C7BC6}	CLMH044E025MH044E024	109.30	107.80	0.833333333	MH044E025	MH044E024			260	CLMH044E025MH044E024	10	0.0058	0.187133	0.28	0.224525	0.31	0.266347	0.34	0.224524	0.31
CLMH044E026MH044E007		1988		Existing		MH044E026	MH044E007	ERROR 23	535	IRWD	VCP	{585FEC90-A57D-4F71-AF87-230D4D77F910}	CLMH044E026MH044E007	93.49	89.44	2.000000000	MH044E026	MH044E007			270	CLMH044E026MH044E007	24	0.0150	1.529786	0.20	1.866822	0.22	2.216445	0.24	3.141831	0.28
CLMH044E027MH044E020		1988		Existing		MH044E027	MH044E020		498	IRWD	VCP	{89D8D48C-833F-47DC-A3C4-7C07C2805A22}	CLMH044E027MH044E020	74.26	73.69	1.250000000	MH044E027	MH044E020			30	CLMH044E027MH044E020	15	0.0190	0.033783	0.05	0.040487	0.06	0.048000	0.06	0.040487	0.06
CLMH044E028MH044E002		1989		Existing		MH044E028	MH044E002		T13038	IRWD	VCP	{4CBDA04E-2233-4D77-B603-E9AC5BCC13CD}	CLMH044E028MH044E002	91.51	90.81	0.666666667	MH044E028	MH044E002			179	CLMH044E028MH044E002	8	0.0039	0.055056	0.22	0.066058	0.24	0.078319	0.26	0.066058	0.24
CLMH044E029MH044E028		1989		Existing		MH044E029	MH044E028		T13038	IRWD	VCP	{1AC65792-BDD5-4466-925B-37377AAFB067}	CLMH044E029MH044E028	93.91	91.72	0.666666667	MH044E029	MH044E028			165	CLMH044E029MH044E028	8	0.0133	0.016917	0.09	0.020297	0.10	0.024060	0.11	0.020297	0.10
CLMH044E031MH044E028		1989		Existing		MH044E031	MH044E028		T13038	IRWD	VCP	{C4137268-734A-4F9F-83FA-C6111AED8851}	CLMH044E031MH044E028	92.76	91.72	0.666666667	MH044E031	MH044E028			138	CLMH044E031MH044E028	8	0.0075	0.038139	0.16	0.045762	0.18	0.054259	0.19	0.045762	0.18
CLMH044E032MH044E031		1989		Existing		MH044E032	MH044E031		T13038	IRWD	VCP	{802441C6-43F4-4CB4-9CF7-A38607D85C34}	CLMH044E032MH044E031	93.69	92.97	0.666666667	MH044E032	MH044E031			186	CLMH044E032MH044E031	8	0.0039	0.033235	0.17	0.039884	0.18	0.047290	0.20	0.039884	0.18
CLMH044E033MH044E032		1989		Existing		MH044E033	MH044E032		T13038	IRWD	VCP	{3892F160-1EDD-4971-86ED-0A8F794919EC}	CLMH044E033MH044E032	94.29	93.90	0.666666667	MH044E033	MH044E032			100	CLMH044E033MH044E032	8	0.0039	0.008353	0.09	0.010018	0.09	0.011878	0.10	0.010018	0.09
CLMH044E036MH044E029		1989		Existing		MH044E036	MH044E029		T13038	IRWD	VCP	{B8E38C43-1525-4954-8619-4F0956CD1CD3}	CLMH044E036MH044E029	98.69	94.12	0.666666667	MH044E036	MH044E029			267	CLMH044E036MH044E029	8	0.0171	0.012843	0.08	0.015406	0.09	0.018264	0.09	0.015406	0.09
CLMH044E038MH044E036		1989		Existing		MH044E038	MH044E036		T13038	IRWD	VCP	{42083DE9-01A9-4B5C-B1CE-43EF236JBFBF}	CLMH044E038MH044E036	100.50	98.90	0.666666667	MH044E038	MH044E036			294	CLMH044E038MH044E036	8	0.0054	0.004180	0.06	0.005019	0.06	0.005948	0.07	0.005019	0.06
CLMH044E039MH044E038		1989		Existing		MH044E039	MH044E038		T13038	IRWD	VCP	{38EDA839-581C-4196-BB15-B8BF0FBEED93}	CLMH044E039MH044E038	101.30	100.69	0.666666667	MH044E039	MH044E038			153	CLMH044E039MH044E038	8	0.0040	0.002702	0.05	0.003243	0.05	0.003844	0.06	0.003243	0.05
CLMH044E041MH044E045		1989		Existing		MH044E041	MH044E045		T13038	IRWD	VCP	{A2787CAS-AF6D-4DA4-A636-EC4FBB8E8B91}	CLMH044E041MH044E045	100.61	100.27	0.666666667	MH044E041	MH044E045			85	CLMH044E041MH044E045	8	0.0040	0.008445	0.09	0.010135	0.09	0.012017	0.10	0.010135	0.09
CLMH044E042MH044E041		1989		Existing		MH044E042	MH044E041		T13038	IRWD	VCP	{3A79FD4E-FBE4-42FC-8558-811AF2EEFC74}	CLMH044E042MH044E041	102.45	100.80	0.666666667	MH044E042	MH044E041			107	CLMH044E042MH044E041	8	0.0154	0.006944	0.06	0.008334	0.07	0.009881	0.07	0.008334	0.07
CLMH044E045MH044E047		1989		Existing		MH044E045	MH044E047		T13038	IRWD	VCP	{7859359A-0656-4B89-BAF7-B88D08A61952}	CLMH044E045MH044E047	100.08	99.69	0.666666667	MH044E045	MH044E047			89	CLMH044E045MH044E047	8	0.0044	0.014360	0.11	0.017232	0.12	0.020433	0.13	0.017232	0.12
CLMH044E047MH044E052		1989		Existing		MH044E047	MH044E052		T13038	IRWD	VCP	{527C403C-CF0A-40A5-944B-860A671C37D9}	CLMH044E047MH044E052	99.50	98.93	0.666666667	MH044E047	MH044E052			146	CLMH044E047MH044E052	8	0.0039	0.019374	0.13	0.023253	0.14	0.027571	0.15	0.023253	0.14
CLMH044E048MH044E047		1989		Existing		MH044E048	MH044E047		T13038	IRWD	VCP	{CDACE0E8-6243-47DE-A874-53C99BFCBC4C}	CLMH044E048MH044E047	101.94	99.69	0.666666667	MH044E048	MH044E047			121	CLMH044E048MH044E047	8	0.0186	0.005014	0.05	0.006021	0.05	0.007138	0.06	0.006021	0.05
CLMH044E049MH044E048		1989		Existing		MH044E049	MH044E048		T13038	IRWD	VCP	{152787DD-C9B5-406B-A81F-896EC833C7CD}	CLMH044E049MH044E048	102.50	102.13	0.666666667	MH044E049	MH044E048			93	CLMH044E049MH044E048	8	0.0040	0.003471	0.06	0.004168	0.06	0.004942	0.07	0.004168	0.06
CLMH044E052MH044E032		1989		Existing		MH044E052	MH044E032		T13038	IRWD	VCP	{83485D5C-3BC7-43F5-AE27-909E7217EA11}	CLMH044E052MH044E032	98.73	93.90	0.666666667	MH044E052	MH044E032			403	CLMH044E052MH044E032	8	0.0120	0.024883	0.12	0.029865	0.13	0.035412	0.14	0.029865	0.13
CLMH044E053MH044E052		1989		Existing		MH044E053	MH044E052		T13038	IRWD	VCP	{71D074F6-FD77-4793-9430-E1C3F5B9626}	CLMH044E053MH044E052	99.48	98.93	0.666666667	MH044E053	MH044E052			119	CLMH044E053MH044E052	8	0.0046	0.005508	0.07	0.006613	0.07	0.007841	0.08	0.006613	0.07
CLMH044E056MH044E005		1989		Existing		MH044E056	MH044E005		T13030	IRWD	PVC	{992FD9E6-5D16-43A8-AD81-C18668927828}	CLMH044E056MH044E005	86.69	86.41	0.666666667	MH044E056	MH044E005			75	CLMH044E056MH044E005	8	0.0037	0.022416	0.14	0.026811	0.15	0.031792	0.17	0.026811	0.15
CLMH044E057MH044E056		1989		Existing		MH044E057	MH044E056		T13030	IRWD	PVC	{4C49E17C-3C48-41B3-9ACB-50B0242497A92}	CLMH044E057MH044E056	87.47	86.80	0.666666667	MH044E057	MH044E056			172	CLMH044E057MH044E056	8	0.0039	0.021783	0.13	0.026143	0.15	0.030999	0.16	0.026143	0.15
CLMH044E058MH044E057		1989		Existing		MH044E058	MH044E057		T13030	IRWD	PVC	{B6FB1611-9DCD-4B5D-BFCD-0733886178J3C}	CLMH044E058MH044E057	89.69	87.66	0.666666667	MH044E058	MH044E057			90	CLMH044E058MH044E057	8	0.0226	0.006815	0.05	0.008183	0.06	0.009702	0.06	0.008183	0.06
CLMH044E059MH044E058		1989		Existing		MH044E059	MH044E058		T13030	IRWD	PVC	{83A2567D-0A1D-4DD2-91C6-E698D188B266}	CLMH044E059MH044E058	91.33	89.88	0.666666667	MH044E059	MH044E058			121	CLMH044E059MH044E058	8	0.0120	0.004822	0.05	0.005790	0.06	0.006865	0.06	0.005790	0.06
CLMH044E062MH044E057		1989		Existing		MH044E062	MH044E057		T13030	IRWD	PVC	{5FAB5AB4-2B05-4D11-AA29-6B99A845DCDE}	CLMH044E062MH044E057	88.40	87.56	0.666666667	MH044E062	MH044E057			211	CLMH044E062MH044E057	8	0.0040	0.014968	0.11	0.017960	0.12	0.021297	0.13	0.017960	0.12
CLMH044E063MH044E062		1989		Existing		MH044E063	MH044E062		T13030	IRWD	PVC	{B7968589-70B4-4CA3-AB96-B4834DA1FB78}	CLMH044E063MH044E062	88.94	88.59	0.666666667	MH044E063	MH044E062			72	CLMH044E063MH044E062	8	0.0049	0.005081	0.06	0.006098	0.07	0.007230	0.07	0.006098	0.07
CLMH044E065MH044E062		1989		Existing		MH044E065	MH044E062		T13030	IRWD	PVC	{353CDA35-AEEF-4772-9C23-B15361D6A247}	CLMH044E065MH044E062	88.98	88.50	0.666666667	MH044E065	MH044E062			125	CLMH044E065MH044E062	8	0.0038	0.007760	0.08	0.009315	0.09	0.011046	0.10	0.009315	0.09
CLMH044E067MH044E065		1989		Existing		MH044E067	MH044E065		T13030	IRWD	PVC	{355BFF78-736A-462B-B7FC-0D407557E46C}	CLMH044E067MH044E065	89.93	89.19	0.666666667	MH044E067	MH044E065			187	CLMH044E067MH044E065	8	0.0040	0.004480	0.06	0.005378	0.07	0.006377	0.07	0.005378	0.07
CLMH044E069MH044E081		1989		Existing		MH044E069	MH044E081		T13030	IRWD	PVC	{31C1EA88-746B-48E1-9001-707CB86QB22}	CLMH044E069MH044E081	83.59	81.56	0.666666667	MH044E069	MH044E081			143	CLMH044E069MH044E081	8	0.0145	0.013845	0.12	0.038908	0.13	0.046126	0.14	0.038908	0.13
CLMH044E070MH044E069		1989		Existing		MH044E070	MH044E069		T13030	IRWD	PVC	{EE2A3D16-7806-4D79-B898-C19ECD189963}	CLMH044E070MH044E069	85.52	83.69	0.666666667	MH044E070	MH044E069			173	CLMH044E070MH044E069	8	0.0106	0.007718	0.07	0.009266	0.07	0.010984	0.08	0.009266	0.07
CLMH044E071MH044E070		1989		Existing		MH044E071	MH044E070		T13030	IRWD	PVC	{5EE6BA33-67E6-4C56-93CE-E9A44A17D360}	CLMH044E071MH044E070	86.95	85.73	0.666666667	MH044E071	MH044E070			120	CLMH044E071MH044E070	8	0.0102	0.004545	0.05	0.005457	0.06	0.006467	0.06	0.005457	0.06
CLMH044E074MH044E069		1989		Existing		MH044E074	MH044E069		T13030	IRWD	PVC	{88969CFE-54E2-4739-920B-2994B10B30F5}	CLMH044E074MH044E069	84.79	83.80	0.666666667	MH044E074	MH044E069			167	CLMH044E074MH044E069	8	0.0059	0.024071	0.13	0.025748	0.13	0.030552	0.15	0.025748	0.13
CLMH044E075MH044E074		1989		Existing		MH044E075	MH044E074		T13030	IRWD	PVC	{0DF0B17E-3A88-431C-8F2E-821F8C464AC8}	CLMH044E075MH044E074	85.69	84.88	0.666666667	MH044E075	MH044E074			138	CLMH044E075MH044E074	8	0.0059	0.006240	0.07	0.007488	0.08	0.008877	0.08	0.007488	0.07
CLMH044E076MH044E075		1989		Existing		MH044E076	MH044E075		T13030	IRWD	PVC	{D9595A80-5F58-4841-9114-D1D68C8305BE}	CLMH044E076MH044E075	86.12	85.88	0.666666667	MH044E076	MH044E075			41	CLMH044E076MH044E075	8	0.0057	0.002916	0.05	0.003500	0.05	0.004149	0.05	0.003500	0.05
CLMH044E078MH044E075		1989		Existing		MH044E078	MH044E075		T13030	IRWD	PVC	{F10373JD-CB78-49AF-914C-A698E0D9B488}	CLMH044E078MH044E075	86.61	85.88	0.666666667	MH044E078	MH044E075			124	CLMH044E078MH044E075	8	0.0059	0.003323	0.05	0.003989	0.05	0.004728	0.06	0.003989	0.05
CLMH044E080MH044N079		1989		Existing		MH044E080	MH044N079		T13106	IRWD	PVC	{C0827CAC-FC86-4FB7-9B39-6159C518A727}	CLMH044E080MH044N079	84.33	84.23	0.666666667	MH044E080	MH044N079			55	CLMH044E080MH044N079	8	0.0018	0.006386	0.08	0.007666	0.09	0.009089	0.10	0.007666	0.09
CLMH044E081MH044E095		1989		Existing		MH044E081	MH044E095		T13030	IRWD	PVC	{B749C4EA-E2EB-4115-A68C-949C2513163S}	CLMH044E081MH044E095	81.47	69.87	0.666666667	MH044E081	MH044E095			122	CLMH044E081MH044E095	8	0.0059	0.034490	0.08	0.039608	0.09	0.046955	0.09	0.039608	0.09
CLMH044E082MH044E069		1989		Existing		MH044E082	MH044E069		T13030	IRWD	PVC	{79050656-6505-49C7-AAA2-C06AFD852F53}	CLMH044E082MH044E069	84.37	83.80	0.666666667	MH044E082	MH044E069			119	CLMH044E082MH044E069	8	0.0048	0.006538	0.07	0.007850	0.08	0.009307	0.09	0.007850	0.08
CLMH044E083MH044E082		1989		Existing		MH044E083	MH044E082		T13030	IRWD	PVC	{27E7C23E-80A0-4CD1-ACC2-06FB48CB88AD}	CLMH044E083MH044E082	85.16	84.56	0.666666667	MH044E083	MH044E082			122	CLMH044E083MH044E082	8	0.0049	0.002894	0.05	0.003474	0.05	0.004119	0.06	0.003474	0.05
CLMH044E086MH044E018		1989		Existing		MH044E086	MH044E018		T13096	IRWD	VCP	{57C8AA38-6361-48C4-9F7A-6A4FC6B45DC}	CLMH044E086MH044E018	81.19	69.98	0.666666667	MH044E086	MH044E018			54	CLMH044E086MH044E018	8	0.0503	0.008243	0.03	0.009863	0.03	0.011695	0.04	0.009863	0.03
CLMH044E087MH044E086		1989		Existing		MH044E087	MH044E086		T13096	IRWD	VCP	{93143887-C061-48AD-BCC7-3D4F99D935B0}	CLMH044E087MH044E086	87.26	81.19	0.666666667	MH044E087	MH044E086			40	CLMH044E087MH044E086	8	0.1518	0.008243	0.04	0.009863	0.04	0.011695	0.04	0.009863	0.04
CLMH044E088MH044E087		1989		Existing		MH044E088	MH044E087		T13096	IRWD	VCP	{FB07B180-E598-4A6A-A45C-FA0039424C2}	CLMH044E088MH044E087	88.47	87.47	0.666666667	MH044E088	MH044E087			88	CLMH044E088MH044E087	8	0.0159	0.008243	0.06	0.009863	0.07	0.011695	0.08	0.009863	0.07
CLMH044E089MH044E088		1989		Existing		MH044E089	MH044E088		T13096	IRWD	VCP	{23A2F382-885E-4ABC-B480-63A127FD4CD4}	CLMH044E089MH044E088	89.23	88.97	0.666666667	MH044E089	MH044E088			70	CLMH044E089MH044E088	8	0.0037	0.002602	0.05	0.003090	0.05	0.003663	0.06	0.003090	0.05
CLMH044E090MH044E089		1989		Existing		MH044E090	MH044E089		T13096	IRWD	VCP	{45F81E1E-6454-4D00-B462-C0F93895EDF9}	CLMH044E090MH044E089	89.58	89.43	0.666666667	MH044E090	MH044E089			44	CLMH044E090MH044E089	8	0.0034	0.001606	0.04	0.001929	0.04	0.002286	0.05	0.001929	0.04
CLMH044E093MH044E088		1989		Existing		MH044E093	MH044E088		T13096	IRWD	VCP	{33010486-9119-4B40-AA5F-E406F9BE3972}	CLMH044E093MH044E088	89.76	89.06	0.666666667	MH044E093	MH044E088			89	CLMH044E093MH044E088	8	0.0039	0.003741	0.06	0.004491	0.06	0.005326	0.07	0.004491	0.06
CLMH044E094MH044E093		1989		Existing		MH044E094	MH044E093		T13096	IRWD	VCP	{21E598E2-F2B1-44C4-B4B9-A7DC479EA7A2}	CLMH044E094MH044E093	89.98	89.87	0.666666667	MH044E094	MH044E093			32	CLMH044E094MH044E093	8	0.0034	0.002331	0.05	0.002799	0.05	0.003318	0.06	0.002799	0.05
CLMH044E095MH044E094		1989		Existing		MH044E095	MH044E094		T13096	IRWD	VCP	{C85A2851-3A33-40CC-9E2D-AD1605FD9EF}	CLMH044E095MH044E094	90.38	90.18	0.666666667	MH044E095	MH044E094			56	CLMH044E095MH044E094	8	0.0036	0.000686	0.02	0.000823	0.03	0.000976	0.03	0.000823	0.03
CLMH044E096MH044E095		1989		Existing		MH044E096	MH044E095		T13096	IRWD	VCP	{70D9569E-837E-45C4-ACBE-67E62ADE17E8}	CLMH044E096MH044E095	90.90	90.90	0.666666667	MH044E096	MH044E095			48	CLMH044E096MH044E095	8	0.0067	0.000686	0.02	0.000823	0.02	0.000976	0.02	0.000823	0.02
CLMH044E101MH044E102		1989		Existing		MH044E101	MH044E102		T13096	IRWD	VCP	{FCCF497A-65B3-4CD9-BE64-6CE8665FCF62}	CLMH044E101MH044E102	90.97	90.51	0.666666667	MH044E101	MH044E102			120	CLMH044E101MH044E102	8	0.0038	0.000515	0.02	0.000617	0.02	0.000732	0.02	0.000617	0.02
CLMH044E102MH044E103		1989		Existing		MH044E102	MH044E103		T13096	IRWD	VCP	{6CF9F56D-F297-4CE2-AE57-55D9DDF39FBF}	CLMH044E102MH044E103	90.30	89.87	0.666666667	MH044E102	MH044E103			149	CLMH044E102MH044E103	8	0.0039	0.003344	0.06	0.004160	0.07	0.004934	0.07	0.004014	0.06
CLMH044E103MH044E105		1989		Existing		MH044E103	MH044E105		T13096	IRWD	VCP	{9318C2A6-601E-434D-8F5C-021C5D6C15F72}	CLMH044E103MH044E105	89.68	89.41	0.666666667	MH044E103	MH044E105			145	CLMH044E103MH044E105	8	0.0039	0.004565	0.06	0.005482	0.07	0.006499	0.08	0.005482	0.07
CLMH044E105MH044E106		1989		Existing		MH044E105	MH044E106		T13096	IRWD	VCP	{C63A262E-D187-46D4-B6B2-E5C1CE9F3F1}	CLMH044E105MH044E106	89.22	89.11	0.666666667	MH044E105	MH044E106			31	CLMH044E105MH044E106	8	0.0035	0.004565	0.06	0.005482	0.07	0.006498	0.08	0.005482	0.07
CLMH044E106MH044E107		1989		Existing		MH044E106	MH044E107		T13096	IRWD	VCP	{D62B61C7-2EAE-4382-88F4-967DAFEABE27}	CLMH044E106MH044E107	89.01	88.80	0.666666667	MH044E106	MH044E107			54	CLMH044E106MH044E107	8	0.0039	0.005466	0.07	0.006563	0.08	0.007780	0.08	0.006563	0.08
CLMH044E107MH044E108		1989		Existing		MH044E107	MH044E108		T13096	IRWD	VCP	{950A4399-AABF-4155-BF87-020F73B2E3A3}	CLMH044E107MH044E108	88.61	88.30	0.666666667	MH044E107	MH044E108			147	CLMH044E107MH044E108	8	0.0039	0.010417	0.10	0.012507	0.10	0.014828	0.11	0.012507	0.10
CLMH044E108MH044E113		1989		Existing		MH044E108	MH044E113		T13096	IRWD	VCP	{F223943E-7600-4E3A-9207-28F1D6F7723E}	CLMH044E108MH044E113	88.20	87.91	0.666666667	MH044E108	MH044E113			78	CLMH044E108MH044E113	8	0.0037	0.011897	0.10	0.014282	0.11	0.016935	0.12	0.014282	0.11
CLMH044E109MH044E108		1989		Existing		MH044E109	MH044E108		T13096	IRWD	VCP	{DC4EF341-2729-4100-B7E7-7A244DDABDE0}	CLMH044E109MH044E108	88.70	88.41	0.666666667	MH044E109	MH044E108			79	CLMH044E109MH044E108	8	0.0037	0.001480	0.04	0.001775	0.04	0.002107	0.05	0.001775	0.04
CLMH044E113MH044E114		1989		Existing		MH044E113	MH044E114		T13096	IRWD	VCP	{E131E2AC-0DE0-49A7-B270-4C92661C6A8B}	CLMH044E113MH044E114	87.70	87.27	0.666666667	MH044E113	MH044E114			112	CLMH044E113MH044E114	8	0.0038	0.013248	0.11	0.015904	0.12	0.018857	0.13	0.015904	0.12
CLMH044E114MH044E118		1989		Existing		MH044E114	MH044E118		T13096	IRWD	VCP	{B646F4BC-EBA9-4F77-8D9A-FEAFB80C27CE}	CLMH044E114MH044E118	87.18	87.12	0.666666667	MH044E114	MH044E118			19	CLMH044E114MH044E118	8	0.0032	0.014663	0.11	0.017602	0.12	0.020872	0.13	0.017602	0.12
CLMH044E115MH044E114		1989		Existing		MH044E115	MH044E114		T13096	IRWD	VCP	{7E85BDD1-7773-4E42-B349-B299F6FC213B}	CLMH044E115MH044E114	87.69	87.37	0.666666667	MH044E115	MH044E114			80	CLMH044E115MH044E114	8	0.0040	0.001415	0.03	0.001699	0.04	0.002015	0.04	0.001699	0.04
CLMH044E118MH044E120		1989		Existing		MH044E118	MH044E120		T13096	IRWD	VCP	{AF1F6D4C-E1AB-4379-BC1F-E63C95F73F27}	CLMH044E118MH044E120	87.01	86.62	0.666666667	MH044E118	MH044E120			101	CLMH044E118MH044E120	8	0.0039	0.018051	0.13	0.021668	0.14	0.025691	0.15	0.021668	0.14
CLMH044E120MH044E121		1989		Existing		MH044E120	MH044E121		T13096	IRWD	VCP	{764B20C7-E9B8-40A9-BA76-F3B9EB755825}	CLMH044E120MH044E121	86.43	86.12	0.666666667	MH044E120	MH044E121			82	CLMH044E120MH044E121	8	0.0038	0.023967	0.14	0.028772	0.16	0.034113	0.17	0.028772	0.16
CLMH044E121MH044E006		1989		Existing		MH044E121	MH044E006		T13096	IRWD	VCP	{0085297C-879E-441A-8321-A962677FD789}	CLMH044E121MH044E006	86.01	85.51	0.666666667	MH044E121	MH044E006			129	CLMH044E121MH044E006	8	0.0039	0.026132	0.15	0.031369	0.16	0.037195	0.18	0.031369	0.16
CLMH044E123MH044E124		1997		Existing		MH044E123	MH044E124		T15316	IRWD	PVC	{784514A6-33A2-42A1-9344-620B2DB432C4}	CLMH044E123MH044E124	99.60	87.98	0.666666667	MH044E123	MH044E124			46	CLMH044E123MH044E124	8	0.2582	0.000940	0.03	0.001128	0.04	0.001337	0.04	0.001128	0.04
CLMH044E124MH044E290		1997		Existing		MH044E124	MH044E290		T15316	IRWD	PVC	{78C91095-BFDF-4916-BE94-268829785B8D}	CLMH044E124MH044E290	87.98	84.36	0.666666667	MH044E124	MH044E290			129	CLMH044E124MH044E290	8	0.0281	0.009010	0.06	0.010817	0.06	0.012823	0.07	0.010817	0.06
CLMH044E128MH044E130		1989		Existing		MH044E128	MH044E130		T13096	IRWD	VCP	{BFFB73E7-1260-4B36-95CF-77B3CC481E99}	CLMH044E128MH044E130	83.63	83.51	0.666666667	MH044E128	MH044E130			35	CLMH044E128MH044E130	8	0.0034	0.004799	0.07	0.005762	0.07	0.006830	0.08	0.005762	0.07
CLMH044E130MH044E131		1989		Existing		MH044E130	MH044E131		T13096	IRWD	VCP	{43104F70-4AC6-4651-87B1-D8899CAAED78}	CLMH044E130MH044E131	83.41	83.11	0.666666667	MH044E130	MH044E131			83	CLMH044E130MH044E131	8	0.0036	0.009205	0.09	0.011054	0.10	0.013103	0.11	0.011054	0.10
CLMH044E131MH044E136		1989		Existing		MH044E131	MH044E136		T13096	IRWD	VCP	{F08C252D-511C-4818-9188-ACD16526C37B}	CLMH044E131MH044E136	82.91	81.76	0.666666667	MH044E131	MH044E136			292	CLMH044E131MH044E136	8	0.0039	0.010969	0.10	0.013172	0.11	0.015611	0.12	0.013172	0.11
CLMH044E133MH044E130		1989		Existing		MH044E133	MH044E130		T13096	IRWD	VCP	{9532A99F-EAE2-4C1F-AD1E-07C6F080A4BA}	CLMH044E133MH044E130	85.83	83.62	0.666666667	MH044E133	MH044E130			185	CLMH044E133MH044E130	8	0.0119	0.004406	0.05	0.005292	0.06	0.006273	0.06	0.005292	0.06
CLMH044E136MH044E141		1989		Existing		MH044E136	MH044E141		T13096	IRWD	VCP	{B68DC1DD-3A74-492F-B760-1F9CE6C427E1}	CLMH044E136MH044E141	81.55	81.25	0.666666667	MH044E136	MH044E141			82	CLMH044E136MH044E141	8	0.0037	0.012673	0.11	0.015216	0.12	0.018036	0.13	0.015216	0.12
CLMH044E137MH044E136		1989		Existing		MH044E137	MH044E136		T13096	IRWD	VCP	{731E1A36-E888-47E2-A868-64AB433FBE08}	CLMH044E137MH044E136	84.88	81.66	0.666666667	MH044E137	MH044E136			65	CLMH044E137MH044E136	8	0.0495	0.001704	0.02	0.002045	0.03	0.002425	0.03	0.002045	0.03
CLMH044

CLMH044E285MH044E283		1999		Existing	assumed Mannings N	MH044E285	MH044E283		A00532B	IRWD	VCP	{F0568099-D333-4929-A6A3-45931B86B23C}	CLMH044E285MH044E283	99.80	97.63	0.666666667	MH044E285	MH044E283			217	CLMH044E285MH044E283	8	0.0100	0.013698	0.09	0.014624	0.09	0.017339	0.10	0.014624	0.09		
CLMH044E286MH044E287		1999		Existing	assumed Mannings N	MH044E286	MH044E287		A00532B	IRWD	VCP	{D72A14CC-3EC5-407F-B568-227AF10E60BD}	CLMH044E286MH044E287	90.62	89.55	0.666666667	MH044E286	MH044E287			71	CLMH044E286MH044E287	8	0.0151	0.044768	0.15	0.047797	0.15	0.056666	0.16	0.047797	0.15		
CLMH044E287MH044E282		1999		Existing	assumed Mannings N	MH044E287	MH044E282		A00532B	IRWD	VCP	{8FAD130F-3962-41F1-97F8-94A59859584A3}	CLMH044E287MH044E282	89.44	85.94	0.666666667	MH044E287	MH044E282			107	CLMH044E287MH044E282	8	0.0327	0.044811	0.12	0.047842	0.13	0.056721	0.14	0.047842	0.13		
CLMH044E288MH044E290		1999		Existing		MH044E288	MH044E290		T15316	IRWD	PVC	{9602B2FC-6F02-4CA7-9230-4D66BF473767}	CLMH044E288MH044E290	92.80	83.00	0.666666667	MH044E288	MH044E290			237	CLMH044E288MH044E290	8	0.0413	0.009128	0.09	0.010958	0.10	0.012990	0.11	0.010958	0.10		
CLMH044E289MH044E121		1989		Existing		MH044E289	MH044E121		T13096	IRWD	PVC	{7D5B6A76-3095-4676-B20E-4C2F73EF636C}	CLMH044E289MH044E121	86.72	86.22	0.666666667	MH044E289	MH044E121			130	CLMH044E289MH044E121	8	0.0038	0.002166	0.05	0.002598	0.05	0.003083	0.05	0.002598	0.05		
CLMH044E290MH044N128		1997		Existing		MH044E290	MH044N128		T15316	IRWD	PVC	{CEFCE92B-B995-4572-B81A-95B86825138}	CLMH044E290MH044N128	83.00	81.95	0.666666667	MH044E290	MH044N128			267	CLMH044E290MH044N128	8	0.0039	0.018137	0.11	0.021775	0.12	0.025813	0.13	0.021775	0.12		
CLMH044E291MH044E120		1989		Existing		MH044E291	MH044E120		T13096	IRWD	VCP	{17746740-C28J-188A-8DD2-B8AC9F22205C}	CLMH044E291MH044E120	87.08	86.62	0.666666667	MH044E291	MH044E120			114	CLMH044E291MH044E120	8	0.0040	0.002808	0.05	0.003371	0.06	0.003997	0.06	0.003371	0.06		
CLMH044N001MH044N002		1987		Existing		MH044N001	MH044N002		A00503	IRWD	PVC	{0756D4C1-D7CA-4A3A-BDDD-5817F85CD597}	CLMH044N001MH044N002	80.61	79.29	0.666666667	MH044N001	MH044N002			268	CLMH044N001MH044N002	8	0.0049	0.051760	0.20	0.062093	0.22	0.073626	0.23	0.062093	0.22		
CLMH044N002MH044E001		1987		Existing		MH044N002	MH044E001		A00503	IRWD	PVC	{2916CD75-24B4-4E8E-B5F1-11EE586DA906}	CLMH044N002MH044E001	79.19	75.37	0.666666667	MH044N002	MH044E001			269	CLMH044N002MH044E001	8	0.0142	0.051759	0.15	0.062093	0.17	0.073626	0.18	0.062093	0.17		
CLMH044N003MH044N013		1988		Existing		MH044N003	MH044N013		498	IRWD	VCP	{38882FCD-3F0F-468B-998C-CCD2F6B0772C}	CLMH044N003MH044N013	79.19	78.09	1.250000000	MH044N003	MH044N013			351	CLMH044N003MH044N013	15	0.0031	0.840010	0.39	1.008553	0.43	1.196907	0.48	1.008550	0.43		
CLMH044N004MH044N003		1989		Existing		MH044N004	MH044N003		A00503	IRWD	PVC	{E5066660C-FBFE-4E0D-94AA-7CD68C20573D}	CLMH044N004MH044N003	80.41	79.62	0.833333333	MH044N004	MH044N003			195	CLMH044N004MH044N003	10	0.0041	0.100004	0.22	0.119891	0.24	0.142159	0.26	0.119891	0.24		
CLMH044N005MH044N004		1989		Existing		MH044N005	MH044N004		A00503	IRWD	VCP	{2ABDCC22-4979-4C47-BEF0-B7037B24D80A}	CLMH044N005MH044N004	82.13	80.51	0.833333333	MH044N005	MH044N004			402	CLMH044N005MH044N004	10	0.0040	0.100014	0.22	0.119898	0.24	0.142165	0.26	0.119898	0.24		
CLMH044N006MH044N005		1987		Existing		MH044N006	MH044N005		A00503	IRWD	VCP	{DED0E0FA-2861-4237-98CB-8C152F8FC235}	CLMH044N006MH044N005	83.04	82.22	0.666666667	MH044N006	MH044N005			210	CLMH044N006MH044N005	8	0.0039	0.048168	0.20	0.057632	0.22	0.068331	0.24	0.057632	0.22		
CLMH044N007MH044N006		1987		Existing		MH044N007	MH044N006		A00503	IRWD	VCP	{0F9FE0F9-B73B-4865-9F95-DFE42175576C0}	CLMH044N007MH044N006	83.97	83.13	0.666666667	MH044N007	MH044N006			210	CLMH044N007MH044N006	8	0.0040	0.048170	0.20	0.057634	0.22	0.068333	0.24	0.057634	0.22		
CLMH044N008MH044N007		1987		Existing		MH044N008	MH044N007		A00503	IRWD	VCP	{3B54B09D-5A5B-4F27-BCAB-5F6FC906B52B}	CLMH044N008MH044N007	85.45	84.06	0.833333333	MH044N008	MH044N007			85	CLMH044N008MH044N007	10	0.0039	0.003280	0.05	0.003500	0.06	0.004150	0.07	0.003500	0.06		
CLMH044N009MH044N015		1988		Existing		MH044N009	MH044N015		A00539	IRWD	VCP	{C72CF744-B7A7-4F63-AA71-34B61929CF45}	CLMH044N009MH044N015	81.94	80.76	0.666666667	MH044N009	MH044N015			300	CLMH044N009MH044N015	8	0.0039	0.039113	0.18	0.046946	0.20	0.055653	0.22	0.046946	0.20		
CLMH044N010MH044N003		1988		Existing		MH044N010	MH044N003		498	IRWD	VCP	{02DD1F10-C5B8-4F54-B568-BEB6FA7614CE}	CLMH044N010MH044N003	86.62	79.44	1.000000000	MH044N010	MH044N003			364	CLMH044N010MH044N003	12	0.0197	0.701521	0.32	0.842233	0.35	0.999719	0.39	0.842231	0.35		
CLMH044N011MH044N116		1997		Existing		MH044N011	MH044N116		A00498	IRWD	VCP	{8B350D22-17CC-4E29-ACA2-650789F933A6}	CLMH044N011MH044N116	90.26	88.77	1.000000000	MH044N011	MH044N116			190	CLMH044N011MH044N116	12	0.0078	0.613219	0.38	0.735641	0.42	0.872787	0.46	0.735642	0.42		
CLMH044N012MH044N011		1988		Existing		MH044N012	MH044N011		498	IRWD	VCP	{050A8D7C-818D-480C-BCC0-25A779EC75AC}	CLMH044N012MH044N011	103.01	90.37	1.000000000	MH044N012	MH044N011			366	CLMH044N012MH044N011	12	0.0345	0.613365	0.26	0.735769	0.29	0.872885	0.33	0.735770	0.29		
CLMH044N013MH044N014		1988		Existing		MH044N013	MH044N014		A00498	IRWD	VCP	{08E6CEF3-C198-4104-A1DC-192D8970D439}	CLMH044N013MH044N014	78.00	76.83	1.250000000	MH044N013	MH044N014			372	CLMH044N013MH044N014	15	0.0031	0.839838	0.45	1.008392	0.50	1.196764	0.56	1.008388	0.50		
CLMH044N014MH044N129		1988		Existing		MH044N014	MH044N129		A00498	IRWD	VCP	{58618EFD-53F8-4CD5-9786-9937809BDFE1}	CLMH044N014MH044N129	76.73	76.29	1.250000000	MH044N014	MH044N129			372	CLMH044N014MH044N129	15	0.0012	0.839158	0.49	1.007754	0.54	1.196199	0.59	1.007748	0.54		
CLMH044N015MH044N003		1988		Existing		MH044N015	MH044N003		A00498	IRWD	VCP	{FE7CDA74-AF88-4429-A558-E52A538CAB03}	CLMH044N015MH044N003	80.66	79.80	0.666666667	MH044N015	MH044N003			224	CLMH044N015MH044N003	8	0.0038	0.039105	0.18	0.046941	0.20	0.055648	0.22	0.046941	0.20		
CLMH044N016MH044N007		1989		Existing		MH044N016	MH044N007		T13094	IRWD	PVC	{1A2AD949-3C69-4D10-BEF3-F440E2D74E67}	CLMH044N016MH044N007	84.79	84.16	0.666666667	MH044N016	MH044N007			151	CLMH044N016MH044N007	8	0.0042	0.046649	0.20	0.056009	0.23	0.056009	0.22	0.056009	0.22		
CLMH044N017MH044N016		1989		Existing		MH044N017	MH044N016		T13094	IRWD	PVC	{82948193-F479-4481-9288-3DDD1CC38E40}	CLMH044N017MH044N016	86.01	84.98	0.666666667	MH044N017	MH044N016			163	CLMH044N017MH044N016	8	0.0063	0.030276	0.15	0.036352	0.16	0.043098	0.18	0.036352	0.16		
CLMH044N018MH044N017		1989		Existing		MH044N018	MH044N017		T13094	IRWD	PVC	{98DDFB29-B346-4EC8-ACC1-166049766B8E}	CLMH044N018MH044N017	88.26	86.22	0.666666667	MH044N018	MH044N017			316	CLMH044N018MH044N017	8	0.0065	0.024480	0.13	0.029392	0.15	0.034847	0.16	0.029392	0.15		
CLMH044N019MH044N018		1989		Existing		MH044N019	MH044N018		T13094	IRWD	PVC	{BD672D54-813C-47F2-94FC-730227FD5BFD}	CLMH044N019MH044N018	89.93	88.47	0.666666667	MH044N019	MH044N018			319	CLMH044N019MH044N018	8	0.0046	0.010790	0.09	0.012954	0.10	0.015361	0.11	0.012954	0.10		
CLMH044N021MH044N019		1989		Existing		MH044N021	MH044N019		T13094	IRWD	VCP	{C11D1410-5C90-4DFD-BE34-F6917AAB4BC2}	CLMH044N021MH044N019	93.52	89.93	0.666666667	MH044N021	MH044N019			292	CLMH044N021MH044N019	8	0.0123	0.003741	0.08	0.004491	0.08	0.005324	0.09	0.004491	0.08		
CLMH044N022MH044N018		1989		Existing		MH044N022	MH044N018		T13094	IRWD	VCP	{C01E61CA-670B-4E84-A3CD-F29EABC1A6B1}	CLMH044N022MH044N018	91.93	88.47	0.666666667	MH044N022	MH044N018			265	CLMH044N022MH044N018	8	0.0131	0.013691	0.09	0.016438	0.09	0.019487	0.10	0.016438	0.09		
CLMH044N024MH044N022		1986		Existing		MH044N024	MH044N022		T13094	IRWD	VCP	{87261174-B86E-482F-8E99-D32B7972F46E}	CLMH044N024MH044N022	93.23	92.12	0.666666667	MH044N024	MH044N022			280	CLMH044N024MH044N022	8	0.0040	0.007659	0.08	0.009190	0.09	0.010900	0.10	0.009196	0.09		
CLMH044N025MH044N024		1989		Existing		MH044N025	MH044N024		T13094	IRWD	VCP	{A3222D08-96EF-4553-A972-39D2D0DB735}	CLMH044N025MH044N024	96.68	93.44	0.666666667	MH044N025	MH044N024			408	CLMH044N025MH044N024	8	0.0079	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH044N025MH044N026		1989		Existing		MH044N025	MH044N026		T13094	IRWD	VCP	{1CBD47C2-4328-4F8D-A3B9-EF1ED88C5FDB}	CLMH044N025MH044N026	96.68	95.59	0.666666667	MH044N025	MH044N026			220	CLMH044N025MH044N026	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH044N026MH044N027		1989		Existing		MH044N026	MH044N027		T13094	IRWD	VCP	{E3CDD07C-F683-42E2-B2D5-313B5398483E}	CLMH044N026MH044N027	95.40	91.91	0.666666667	MH044N026	MH044N027			217	CLMH044N026MH044N027	8	0.0069	0.006013	0.07	0.007219	0.07	0.008559	0.08	0.007219	0.07		
CLMH044N027MH044N028		1989		Existing		MH044N027	MH044N028		T13094	IRWD	VCP	{230E46C9-5336-4FD0-A779-1C213ACD48B2}	CLMH044N027MH044N028	93.70	91.33	0.666666667	MH044N027	MH044N028			344	CLMH044N027MH044N028	8	0.0069	0.010146	0.09	0.012180	0.09	0.014441	0.10	0.012180	0.09		
CLMH044N028MH044N016		1989		Existing		MH044N028	MH044N016		T13094	IRWD	VCP	{9ED7B877-F423-42E7-8DC9-02FA49A61227}	CLMH044N028MH044N016	91.12	84.98	0.666666667	MH044N028	MH044N016			326	CLMH044N028MH044N016	8	0.0188	0.013750	0.08	0.016507	0.09	0.019570	0.09	0.016507	0.09		
CLMH044N030MH044N005		1989		Existing		MH044N030	MH044N005		T13053	IRWD	VCP	{DC3B244E-6A2F-4860-9A74-4A4E6551 FD6}	CLMH044N030MH044N005	88.62	82.44	0.666666667	MH044N030	MH044N005			151	CLMH044N030MH044N005	8	0.0409	0.051869	0.12	0.062281	0.14	0.073845	0.15	0.062281	0.14		
CLMH044N031MH044N030		1989		Existing		MH044N031	MH044N030		T13053	IRWD	VCP	{0A09E037-99AD-4099-8DE6-48D206F02B56}	CLMH044N031MH044N030	89.73	88.83	0.666666667	MH044N031	MH044N030			219	CLMH044N031MH044N030	8	0.0041	0.050383	0.21	0.060459	0.23	0.071727	0.25	0.060496	0.23		
CLMH044N032MH044N031		1989		Existing		MH044N032	MH044N031		T13053	IRWD	VCP	{326D4360-B28B-4B05-96E0-6B9CA7AA62E3}	CLMH044N032MH044N031	95.77	89.93	0.666666667	MH044N032	MH044N031			354	CLMH044N032MH044N031	8	0.0166	0.004269	0.05	0.005125	0.05	0.006078	0.06	0.005125	0.05		
CLMH044N034MH044N031		1989		Existing		MH044N034	MH044N031		T13053	IRWD	VCP	{46AC6B12-F993-488A-9D20-86983A8B609B}	CLMH044N034MH044N031	91.04	89.93	0.666666667	MH044N034	MH044N031			274	CLMH044N034MH044N031	8	0.0041	0.042141	0.19	0.050600	0.21	0.059991	0.23	0.050600	0.21		
CLMH044N035MH044N034		1989		Existing		MH044N035	MH044N034		T13053	IRWD	VCP	{2F660062-D3E0-4958-9F72-E45DF6146567}	CLMH044N035MH044N034	93.15	91.23	0.666666667	MH044N035	MH044N034			269	CLMH044N035MH044N034	8	0.0071	0.038698	0.16	0.046464	0.18	0.055085	0.20	0.046464	0.18		
CLMH044N036MH044N035		1989		Existing		MH044N036	MH044N035		T13053	IRWD	VCP	{8597F6BF2-F9AD-4511-82BA-EB2FFDBB781B}	CLMH044N036MH044N035	96.37	93.34	0.666666667	MH044N036	MH044N035			245	CLMH044N036MH044N035	8	0.0124	0.007577	0.07	0.009233	0.07	0.010946	0.08	0.009233	0.07		
CLMH044N037MH044N036		1989		Existing		MH044N037	MH044N036		T13053	IRWD	VCP	{5529EA90-8F3A-4732-BC5E-9032DDD1EAB4}	CLMH044N037MH044N036	97.68	96.48	0.666666667	MH044N037	MH044N036			248	CLMH044N037MH044N036	8	0.0048	0.007577	0.08	0.009234	0.09	0.010947	0.09	0.009234	0.09		
CLMH044N038MH044N037		1989		Existing		MH044N038	MH044N037		T13053	IRWD	VCP	{B93BD5DA-5D0F-4E4D-A583-364F3049 9C72}	CLMH044N038MH044N037	98.84	97.87	0.666666667	MH044N038	MH044N037			247	CLMH044N038MH044N037	8	0.0039	0.001818	0.04	0.002320	0.05	0.002752	0.05	0.002320	0.05		
CLMH044N039MH044N038		1989		Existing		MH044N039	MH044N038		T13053	IRWD	VCP	{5D9D2561-27A9-4961-8F77-6B9E28E6E10D}	CLMH044N039MH044N038	100.23	99.05	0.666666667	MH044N039	MH044N038			302	CLMH044N039MH044N038	8	0.0039	0.001818	0.04	0.002320	0.05	0.002752	0.05	0.002320	0.05		
CLMH044N039MH044N040		1989		Existing		MH044N039	MH044N040		T13053	IRWD	VCP	{AFCACFA8-F88B-40DE-886A-6EFAA011DED1}	CLMH044N039MH044N040	100.23	96.23	0.666666667	MH044N039	MH044N040			219	CLMH044N039MH044N040	8	0.0183	0.005291	0.05	0.006215	0.05	0.007369	0.06	0.006215	0.05		
CLMH044N040MH044N035		1989		Existing		MH044N040	MH044N035		T13053	IRWD	VCP	{D87F2371-CEAE-4414-8BA3-67AB94E91D0C}	CLMH044N040MH044N035	96.04	93.25	0.666666667	MH044N040	MH044N035			262	CLMH044N040MH044N035	8	0.0106	0.025718	0.12	0.030741	0.13	0.036446	0.14	0.030741	0.13		
CLMH044N041MH044N040		1989		Existing		MH044N041	MH044N040		T13053	IRWD	VCP	{EA9A5764-BD52-4225-827D-64AC000044F36}	CLMH044N041MH044N040	101.52	96.13	0.666666667	MH044N041	MH044N040			270	CLMH044N041MH044N040	8	0.0200	0.020427	0.09	0.024526	0.10	0.029077	0.11	0.024526	0.10		
CLMH044N042MH044N041		1989		Existing		MH044N042	MH044N041		T13053	IRWD	VCP	{0A7A6D2F-7D65-480A-BA7F-D85B78C2D91}	CLMH044N042MH044N041	103.26	101.73	0.666666667	MH044N042	MH044N041			365	CLMH044N042MH044N041	8	0.0040	0.010570	0.10	0.012757	0.11	0.015245	0.12	0.012757	0.11		
CLMH044N043MH044N042		1989		Existing		MH044N043	MH044N042		T13053	IRWD	VCP	{2932AAFC-DC59-4855-AB4C-894C70027BC5}	CLMH044N043MH044N042	104.58	103.45	0.666666667	MH044N043	MH044N042			285	CLMH044N043MH044N042	8	0.0040	0.006262	0.07	0.007585	0.08	0.009111	0.09	0.007585	0.08		
CLMH044N044MH044N041		1989		Existing		MH044N044	MH044N041		T13053	IRWD	VCP	{E9388525-2B1D-4B17-BBFE-51744A673772}	CLMH044N044MH044N041	106.25	101.62	0.666666667	MH044N044	MH044N041			266	CLMH044N044MH044N041	8	0.0174	0.004452	0.05	0.005279	0.05	0.006139	0.06	0.005279	0.05		
CLMH044N045MH044N043		1989		Existing		MH044N045	MH044N043		T13053	IRWD	VCP	{3E5A99AA1-D7D8-4AAE-A9DF-A71C64054A04}	CLMH044N045MH044N043	106.25	104.79	0.666666667	MH044N045	MH044N043			370	CLMH044N045MH044N043	8	0.0039	0.001522	0.04	0.001804	0.04	0.002364	0.05	0.001804	0.04		
CLMH044N045MH044N001		1989		Existing		MH044N045	MH044N001		T13161	IRWD	VCP	{EA87F03B-337F-468D-ABD1-0B7568E1FAC6}	CLMH044N045MH044N001	80.70	80.61	0.666666667	MH044N045	MH044N001			38	CLMH044N045MH044N001	8	0.0024	0.026604	0.19	0.031923	0.21	0.037844	0.23	0.031923	0.21		
CLMH044N046MH044N045		1989		Existing		MH044N046	MH044N045		T13161	IRWD	VCP	{A653E0CA-9309-4147-A202-458130A7DBDD}	CLMH044N046MH044N045	86.80	80.80	0.666666667	MH044N046	MH044N045			112	CLMH044N046MH044N045	8	0.0536	0.026604	0.08	0.031923	0.09	0.037844	0.10	0.031923	0.09		
CLMH044N047MH044N046		1989		Existing		MH044N047	MH044N046		T13161	IRWD	VCP	{3AD597A5-D81C-4F8D-BD86-3361E7B1F71A}	CLMH044N047MH044N046	87.80	86.90	0.666666667	MH044N047	MH044N046			151	CLMH044N047MH044N046	8	0.0060	0.012644	0.10	0.015174	0.11	0.018003	0.12	0.015174	0.11		
CLMH044N048MH044N047		1989		Existing		MH044N048	MH044N047		T13161	IRWD	VCP	{81E5B539-8945-46BB-96FE-B5FD1FED9197}	CLMH044N048MH044N047	88.59	87.90	0.666666667	MH044N048	MH044N047			347	CLMH044N048MH044N047	8	0.0039	0.010549	0.10	0.012658	0.11	0.015021	0.11	0.012658	0.11		
CLMH044N049MH044N048		1989		Existing		MH044N049	MH044N048		T13161	IRWD	PVC	{0FE5FCE1-3A98-4BEA-8B51-B207E5563B1C}	CLMH044N049MH044N048	88.90	88.69	0.666666667	MH044N049	MH044N048			47	CLMH044N049MH044N048	8	0.0045	0.010549	0.09	0.012658	0.10	0.015021	0.11	0.012658	0.10		
CLMH044N050MH044N049		1989		Existing		MH044N050	MH044N049		T13161	IRWD	VCP	{C60DBF6F-9706-4095-92FB-3EDBC055E59FA}	CLMH044N050MH044N049	89.50	89.00	0.666666667	MH044N050	MH044N049			118	CLMH044N050MH044N049	8	0.0042	0.006063	0.07	0.007274	0.08	0.008637	0.09	0.007274	0.08		
CLMH044N051MH044N050		1989		Existing		MH044N051	MH044N050		T13161	IRWD	VCP	{654E1846-0A38-4E97-A249-182EA5FA2249}	CLMH044N051MH044N050	89.80	89.59	0.666666667	MH044N051	MH044N050			118	CLMH044N051MH044N050	8	0.0042	0.006063	0.07	0.007274	0.08	0.008637	0.09	0.007274	0.08		
CLMH044N052MH044N051		1989		Existing		MH044N052	MH044N051		T13161	IRWD	VCP	{9B9A82D5-EF9A-451B-AD43-6979556A09E5}	CLMH044N052MH044N051	90.30	89.90	0.666666667	MH044N052	MH044N051			100	CLMH044N052MH044N051	8	0.0040	0.006063	0.07	0.007274	0.08	0.008637	0.09	0.007274	0.08		
CLMH044N053MH044N052		1989		Existing		MH044N053	MH044N052		T13161	IRWD	VCP	{06103AC2-551A-453E-8AAB-C63532BD2AD9}	CLMH044N053MH044N052	90.80	90.40	0.666666667	MH044N053	MH044N052			97	CLMH044N053MH044N052	8	0.0041	0.002987	0.05	0.003582	0.06	0.004259	0.06	0.003582	0.06		
CLMH044N054MH044N053		1989		Existing		MH044N054	MH044N053		T13161	IRWD	VCP	{808844BA8-1458-4895-B9B8-4A28979370B1}	CLMH044N054MH044N053	91.00	90.90	0.666666667	MH044N054	MH044N053			36	CLMH044N054MH044N053	8	0.0028	0.002459	0.05	0.002947	0.06	0.003507	0.06	0.002947	0.06		
CLMH044N055MH044N054		1989		Existing		MH044N055	MH044N054		T13161	IRWD	VCP	{FE2DFF66-6193-42F6-ACF4-31FB178F0B28}	CLMH044N055MH044N054	91.59	91.09	0.666666667	MH044N055	MH044N054			86	CLMH044N055MH044N054	8	0.0058	0.001481	0.03	0.001772	0.04	0.002114	0.04	0.001772	0.04		
CLMH044N056MH044N055		1989		Existing		MH044N056	MH044N055		T13161	IRWD	VCP	{8AF99132-8C19-4829-997A-7313E09BA6F}	CLMH044N056MH044N055	91.59	90.40	0.666666667	MH044N056	MH044N055			306	CLMH044N056MH044N055	8	0.0039	0.000973	0.03	0.001156	0.03	0.001358	0.03	0.001156	0.03		
CLMH044N056MH044N058		1989		Existing		MH044N056	MH044N058		T13161	IRWD	VCP	{5202EDC5-88E8-44FA-A9E5-54CB0A4B202F}	CLMH044N056MH044N058	90.30	89.19	0.666666667	MH044N056	MH044N058			230	CLMH044N056MH044N058	8	0.0048	0.006576	0.07	0.007882	0.08	0.009331	0.09	0.007882	0.08		
CLMH044N058MH044N059		1989		Existing		MH044N058	MH044N059		T13161	IRWD	VCP	{88F64404-6185-498B-A7BA-CC200732CBCC}	CLMH044N058MH044N059	89.09	88.90	0.666666667	MH044N058	MH044N059			34	CLMH044N058MH044N059	8	0.0056	0.009768	0.09	0.011715	0.09	0.013876	0.10	0.011715	0.09		
CLMH044N059MH044N046		1989		Existing		MH044N059	MH044N046		T13161	IRWD	VCP	{EC50BF7F-5D00-4C92-B12E-5B0A50E42731}	CLMH044N059MH044N046	88.80	86.90	0.666666667	MH044N059	MH044N046			279	CLMH044N059MH044N046	8	0.0068	0.012255	0.09	0.014702	0.10	0.017416	0.11	0.014702	0.10		
CLMH044N060MH044N056		1989		Existing		MH044N060	MH044N056		T13161	IRWD	VCP	{C00E6F24-19F5-430A-922B-AA5BD6514FA7}	CLMH044N060MH044N056	90.90	90.40	0.666666667	MH044N060	MH044N056			93	CLMH044N060MH044N056	8	0.0054	0.005603	0.07	0.006726	0.07	0.007973	0.08	0.006726	0.07		
CLMH044N061MH044N060		1989		Existing		MH044N061	MH044N060		T13161	IRWD	VCP	{65DD53DA-6E04-46A3-BEB7-B740366 3ABC2}	CLMH044N061MH044N060	92.59	91.00	0.666666667	MH044N061	MH044N060			120	CLMH044N061MH044N060	8	0.0133	0.003017	0.04	0.003621	0.05	0.004294	0.05	0.003621	0.05		
CLMH044N062MH044N009		1989		Existing		MH044N062	MH044N009		T13080	IRWD	VCP	{AD739EE8-2118-4BC1-AA73-4B3CBE892EAB}	CLMH044N062MH044N009	82.27	82.15	0.666666667	MH044N062	MH044N009			38	CLMH044N062MH044N009	8	0.0032	0.039121	0.19	0.046952	0.20	0.055658	0.22	0.046952	0.20		
CLMH044N063MH044N062		1989		Existing		MH044N063	MH044N062		T13080	IRWD	VCP	{ADE5BC6C-214C-46D4-883B-D4F34F496A6F}	CLMH044N063MH044N062	83.08	82.48	0.666666667	MH044N063	MH044N062			156	CLMH044N063MH044N062	8	0.0038	0.039122	0.18	0.046952	0.20	0.055658	0.22	0.046952	0.20		
CLMH044N064MH044N063		1989		Existing		MH044N064	MH044N063		T13080	IRWD	VCP	{A376D5FF-C6C4-4D5F-98B0-B69391AF4763}	CLMH044N064MH044N063	85.90	83.29	0.666666667	MH044N064	MH044N063			415	CLMH044N064MH044N063	8	0.0063	0.004603	0.06	0.005527	0.06	0.006550	0.07	0.005527	0.06		
CLMH044N065MH044N064		1989		Existing		MH044N065	MH044N064		T13080	IRWD	VCP	{7B223247-55A2-411E-802C-D077D087AEAC}	CLMH044N065MH044N064	86.94	86.09	0.666666667	MH044N065	MH044N064			169	CLMH044N065MH044N064	8	0.0050	0.004604	0.06	0.005527	0.07	0.006551	0.07	0.005527	0.07		
CLMH044N066MH044N067		1989		Existing		MH044N066	MH044N067		T13080	IRWD	VCP	{4E65EF08-9753-436E-A367-73A2D8FD8DC7}	CLMH044N066MH044N067	87.37	84.27	0.666666667	MH044N066	MH044N067			251	CLMH044N066MH044N067	8	0.0124	0.002527	0.04	0.003034	0.04	0.003596	0.05	0.003034	0.04		
CLMH044N067MH044N063		1989		Existing		MH044N067	MH044N063

CLMH044S012MH044S018		1987		Existing		MH044S012	MH044S018		495	IRWD	VCP	{D14916F5-0C96-4AE0-AB41-C49DDE9D7662}	CLMH044S012MH044S018	59.43	58.70	1.250000000	MH044S012	MH044S018			207	CLMH044S012MH044S018	15	0.0035	0.222693	0.19	0.261638	0.21	0.310508	0.23	0.261636	0.21			
CLMH044S013MH044S014		1987		Existing		MH044S013	MH044S014		A00495	IRWD	VCP	{B797747D-5067-43B2-9CEC-BE13F3035A31}	CLMH044S013MH044S014	62.65	61.22	2.750000000	MH044S013	MH044S014			462	CLMH044S013MH044S014	33	0.0031	1.397487	0.28	4.106000	0.31	4.882236	0.33	5.171676	0.34			
CLMH044S014MH044S015		1987		Existing		MH044S014	MH044S015		A00495	IRWD	VCP	{70240A1AF-8F86-463E-8486-0E0C3CF047F3}	CLMH044S014MH044S015	61.13	60.99	2.750000000	MH044S014	MH044S015			50	CLMH044S014MH044S015	33	0.0028	1.397528	0.27	4.106063	0.30	4.882305	0.33	5.171712	0.34			
CLMH044S015MH044S016		1987		Existing		MH044S015	MH044S016		A00495	IRWD	VCP	{14506765-9637-4974-9508-CA1B0737F732}	CLMH044S015MH044S016	60.88	60.02	2.750000000	MH044S015	MH044S016			286	CLMH044S015MH044S016	33	0.0030	1.397340	0.28	4.105867	0.31	4.882163	0.33	5.171631	0.34			
CLMH044S016MH044S017		1987		Existing		MH044S016	MH044S017		A00495	IRWD	VCP	{F116ACB1-7AF5-4824-A8B4-0C66033A1BBE}	CLMH044S016MH044S017	59.91	58.86	2.750000000	MH044S016	MH044S017			344	CLMH044S016MH044S017	33	0.0031	3.486518	0.28	4.197675	0.31	4.990222	0.34	5.271431	0.35			
CLMH044S017MH044S018		1987		Existing		MH044S017	MH044S018		495	IRWD	VCP	{18AEDF19-6690-479C-BCF0-753C00D4634A}	CLMH044S017MH044S018	58.77	57.24	3.000000000	MH044S017	MH044S018			525	CLMH044S017MH044S018	36	0.0029	3.485194	0.25	4.198697	0.28	4.988677	0.30	5.270580	0.31			
CLMH045018MH045019	I110	1987		Existing		MH045018	MH045019		495	IRWD	VCP	{5931E7D0-3298-4211-9138-72C10C151C16}	CLMH045018MH045019	56.97	55.72	3.000000000	MH045018	MH045019			525	CLMH045018MH045019	36	0.0024	3.700831	0.27	4.448725	0.30	5.291289	0.32	5.511316	0.33			
CLMH044S019MH045E047		1987		Existing		MH044S019	MH045E047		495	IRWD	VCP	{62658982-10FF-4765-839F-74AF03153CCF}	MH044S019-MH045E047	55.65	54.13	3.000000000	MH044S019	MH045E047			631	CLMH044S019MH045E047	36	0.0024	3.699450	0.27	4.446690	0.30	5.289525	0.32	5.510995	0.33			
CLMH045021MH044S016		1988		Existing		MH045021	MH044S016		566	IRWD	VCP	{5C78ABB8-6D44-41D4-9476-D4D6FA56A6C5}	CLMH045021MH044S016	61.45	61.22	1.500000000	MH045021	MH044S016			164	CLMH045021MH044S016	18	0.0014	0.160560	0.15	0.171416	0.16	0.203230	0.17	0.171416	0.16			
CLMH045022MH045021		1988		Existing		MH045022	MH045021		566	IRWD	VCP	{7863462F-074F-460A-867A-D9AC341550DB}	CLMH045022MH045021	62.06	61.56	1.500000000	MH045022	MH045021			341	CLMH045022MH045021	18	0.0015	0.139898	0.15	0.149357	0.15	0.177076	0.16	0.149357	0.15			
CLMH045023MH045022		1988		Existing		MH045023	MH045022		566	IRWD	VCP	{91CB3B90-BA48-409B-8E2F-0A9A95F87768}	CLMH045023MH045022	62.70	62.15	1.500000000	MH045023	MH045022			338	CLMH045023MH045022	18	0.0016	0.087681	0.11	0.093608	0.12	0.110979	0.13	0.093608	0.12			
CLMH045024MH045023		1988		Existing		MH045024	MH045023			IRWD	VCP	{6104A6BA-EAFB-4A30-BB61-348723ID252E}	CLMH045024MH045023	63.45	62.79	1.500000000	MH045024	MH045023			63	CLMH045024MH045023	18	0.0015	0.084493	0.12	0.090205	0.12	0.106945	0.13	0.090205	0.12			
CLMH045025MH045024		1988		Existing		MH045025	MH045024		A00566	IRWD	VCP	{8F768992-2803-4B2F-AFA5-C85BFE5449A4}	CLMH045025MH045024	64.22	63.54	1.500000000	MH045025	MH045024			450	CLMH045025MH045024	18	0.0015	0.070372	0.11	0.075130	0.11	0.089071	0.12	0.075130	0.11			
CLMH045028MH045021		1988		Existing		MH045028	MH045021		A00608	IRWD	VCP	{563275AA-795E-47FD-87AA-C9CCD7F7140F}	CLMH045028MH045021	74.37	62.54	0.666666667	MH045028	MH045021			393	CLMH045028MH045021	8	0.0301	0.008970	0.06	0.009575	0.06	0.011354	0.06	0.009575	0.06			
CLMH045029MH045028		1989		Existing		MH045029	MH045028		A00608	IRWD	VCP	{A192C7C0-E94C-4AD4-A55D-EFC01A9E5729}	CLMH045029MH045028	75.66	74.48	0.666666667	MH045029	MH045028			302	CLMH045029MH045028	8	0.0039	0.003840	0.06	0.004099	0.06	0.004862	0.07	0.004099	0.06			
CLMH045030MH045029		1989		Existing		MH045030	MH045029		A00608	IRWD	VCP	{E7EBBF29-B190-4F42-B285-01169365D42D}	CLMH045030MH045029	77.34	75.76	0.666666667	MH045030	MH045029			400	CLMH045030MH045029	8	0.0040	0.003841	0.06	0.004099	0.06	0.004862	0.07	0.004099	0.06			
CLMH045031MH045030		1989		Existing		MH045031	MH045030		A00608	IRWD	VCP	{44983E8E-B8D0-4506-843E-A2B8E650C890}	CLMH045031MH045030	77.79	77.55	0.666666667	MH045031	MH045030			62	CLMH045031MH045030	8	0.0039	0.003841	0.06	0.004099	0.06	0.004862	0.07	0.004099	0.06			
CLMH045032MH045031		1989		Existing		MH045032	MH045031		A00608	IRWD	VCP	{0AEF818F-C034-47F6-A3C5-F3332486ZA8B}	CLMH045032MH045031	78.97	77.98	0.666666667	MH045032	MH045031			250	CLMH045032MH045031	8	0.0040	0.003841	0.06	0.004099	0.06	0.004862	0.07	0.004099	0.06			
CLMH045033MH045032		1989		Existing		MH045033	MH045032		A00608	IRWD	VCP	{4277002C-E914-4E0D-9F84-A0FE04DE69DE}	CLMH045033MH045032	80.55	79.16	0.666666667	MH045033	MH045032			350	CLMH045033MH045032	8	0.0040	0.003841	0.06	0.004099	0.06	0.004862	0.07	0.004099	0.06			
CLMH045034MH045033		1989		Existing		MH045034	MH045033		A00608	IRWD	VCP	{754897B6-80A2-48E2-8E51-8B2EB15935DD}	CLMH045034MH045033	82.00	80.65	0.666666667	MH045034	MH045033			340	CLMH045034MH045033	8	0.0040	0.001119	0.03	0.001194	0.03	0.001416	0.04	0.001194	0.03			
CLMH045035MH045034		1989		Existing		MH045035	MH045034		A00608	IRWD	VCP	{C4580006-C013-472E-857E-61473230DC74}	CLMH045035MH045034	82.62	82.09	0.666666667	MH045035	MH045034			135	CLMH045035MH045034	8	0.0039	0.001119	0.03	0.001194	0.03	0.001416	0.04	0.001194	0.03			
CLMH045036MH045023		1989		Existing		MH045036	MH045023		A00608	IRWD	VCP	{AE4FA734-9845-4F86-9C5C-FD81DD291LE7}	CLMH045036MH045023	64.65	63.77	0.666666667	MH045036	MH045023			224	CLMH045036MH045023	8	0.0039	0.003188	0.05	0.003403	0.06	0.004034	0.06	0.003403	0.06			
CLMH045037MH045036		1989		Existing		MH045037	MH045036		A00608	IRWD	VCP	{AB39E5AD-46EF-4649-A032-BF6E64CB7A8}	CLMH045037MH045036	65.54	64.66	0.666666667	MH045037	MH045036			224	CLMH045037MH045036	8	0.0040	0.003188	0.05	0.003403	0.06	0.004034	0.06	0.003403	0.06			
CLMH045038MH045037		1989		Existing		MH045038	MH045037		A00608	IRWD	VCP	{E349C38D-D2F1-4739-BE78-D5D044031E984}	CLMH045038MH045037	72.69	65.73	0.666666667	MH045038	MH045037			400	CLMH045038MH045037	8	0.0174	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH045039MH045111		1989		Existing		MH045039	MH045111		A00608	IRWD	VCP	{4AFF78AA-1DB1-4D01-9615-94B2281281101}	CLMH045039MH045111	79.59	78.68	0.666666667	MH045039	MH045111			40	CLMH045039MH045111	8	0.0228	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH045040MH045022		1989		Existing		MH045040	MH045022		A00640	IRWD	VCP	{958C7546-BFB8-4A76-AB71-DCAF7C0CED42}	CLMH045040MH045022	64.06	63.13	0.666666667	MH045040	MH045022			233	CLMH045040MH045022	8	0.0040	0.052217	0.21	0.055750	0.22	0.066097	0.24	0.055750	0.22			
CLMH045041MH045040		1989		Existing		MH045041	MH045040		A00640	IRWD	VCP	{0F823012-D3AE-492B-916E-9160DE975181}	CLMH045041MH045040	68.34	64.26	0.666666667	MH045041	MH045040			39	CLMH045041MH045040	8	0.1046	0.042107	0.09	0.044955	0.09	0.053301	0.10	0.044955	0.09			
CLMH045042MH045041		1989		Existing		MH045042	MH045041		A00640	IRWD	VCP	{68BE08D8-F324-4043-BBDF-AD85CDB272E6}	CLMH045042MH045041	74.00	68.55	0.666666667	MH045042	MH045041			79	CLMH045042MH045041	8	0.0690	0.017771	0.07	0.018972	0.07	0.022497	0.07	0.018972	0.07			
CLMH045043MH045042		1989		Existing		MH045043	MH045042		A00640	IRWD	VCP	{7929E9BD-DC7A-4E35-A560-9A60CA55D2B6}	CLMH045043MH045042	76.06	74.19	0.666666667	MH045043	MH045042			215	CLMH045043MH045042	8	0.0038	0.008787	0.07	0.017771	0.11	0.018972	0.11	0.018972	0.11			
CLMH045044MH045043		1989		Existing		MH045044	MH045043		A00640	IRWD	VCP	{43C1DFB2-9FCE-4033-A900-1FD904F33786}	CLMH045044MH045043	76.70	76.26	0.666666667	MH045044	MH045043			115	CLMH045044MH045043	8	0.0038	0.017771	0.12	0.018972	0.13	0.022497	0.14	0.018972	0.13			
CLMH045045MH045044		1989		Existing		MH045045	MH045044		A00640	IRWD	VCP	{37547587-F9E9-4030-B573-5E5B2F99D025}	CLMH045045MH045044	77.30	76.91	0.666666667	MH045045	MH045044			104	CLMH045045MH045044	8	0.0038	0.017771	0.12	0.018972	0.13	0.022497	0.14	0.018972	0.13			
CLMH045046MH045045		1989		Existing		MH045046	MH045045		A00640	IRWD	VCP	{C8928320-3250-4604-8459-04EAB57CE24B}	CLMH045046MH045045	78.68	77.51	0.666666667	MH045046	MH045045			297	CLMH045046MH045045	8	0.0039	0.017771	0.12	0.018972	0.13	0.022497	0.14	0.018972	0.13			
CLMH045047MH045046		1989		Existing		MH045047	MH045046		A00640	IRWD	VCP	{74159EAD-5E63-4F79-AC52-937DCA0B898A}	CLMH045047MH045046	80.45	78.87	0.666666667	MH045047	MH045046			400	CLMH045047MH045046	8	0.0040	0.009139	0.09	0.009757	0.09	0.011569	0.10	0.009757	0.09			
CLMH045048MH045047		1989		Existing		MH045048	MH045047		A00640	IRWD	VCP	{2D20348E-F6DF-46CC-AAFD-4379B9EE8194}	CLMH045048MH045047	82.23	80.66	0.666666667	MH045048	MH045047			403	CLMH045048MH045047	8	0.0039	0.007513	0.08	0.008022	0.08	0.009511	0.09	0.008022	0.08			
CLMH045049MH045048		1989		Existing		MH045049	MH045048		A00640	IRWD	VCP	{8F5A9105-4482-4FBC-AAD8-120AE3F59A00}	CLMH045049MH045048	83.52	82.44	0.666666667	MH045049	MH045048			276	CLMH045049MH045048	8	0.0039	0.005699	0.07	0.006084	0.07	0.007214	0.08	0.006084	0.07			
CLMH045050MH045112		2014		Existing		MH045050	MH045E0E		A00640E	IRWD	PVC	{F6B6E0B5-FA06-41BB-BC59-F767E7E5DA2B}	CLMH045050MH045112	72.90	72.27	0.666666667	MH045050	MH045112			65	CLMH045050MH045112	8	0.0097	0.024336	0.12	0.025982	0.12	0.030804	0.13	0.025982	0.12			
CLMH045051MH045050		1987		Existing		MH045051	MH045050		A00640	IRWD	VCP	{131F60A8-B2DA-457A-B154-835EEFA0EB15}	CLMH045051MH045050	73.80	73.00	0.666666667	MH045051	MH045050			118	CLMH045051MH045050	8	0.0043	0.023281	0.14	0.024856	0.14	0.029468	0.16	0.024856	0.14			
CLMH045052MH045051		1987		Existing		MH045052	MH045051		A00640	IRWD	VCP	{A6F10CC3-30C7-4319-94E0-28C20AE1149F}	CLMH045052MH045051	74.32	74.00	0.666666667	MH045052	MH045051			82	CLMH045052MH045051	8	0.0039	0.023281	0.14	0.024856	0.15	0.029468	0.16	0.024856	0.15			
CLMH045053MH045052		1989		Existing		MH045053	MH045052		A00640	IRWD	VCP	{802B2472-112F-40E4-9752-578DCAFBA57F}	CLMH045053MH045052	75.03	74.52	0.666666667	MH045053	MH045052			130	CLMH045053MH045052	8	0.0039	0.023281	0.14	0.024856	0.15	0.029468	0.16	0.024856	0.15			
CLMH045054MH045053		1987		Existing		MH045054	MH045053		A00640	IRWD	VCP	{EF98FB03-4440-44B9-82A0-1C6717FE0418}	CLMH045054MH045053	76.19	75.23	0.666666667	MH045054	MH045053			244	CLMH045054MH045053	8	0.0039	0.000730	0.02	0.000822	0.02	0.000822	0.02	0.000822	0.02			
CLMH045055MH045097		1989		Existing		MH045055	MH045097		A00640	IRWD	VCP	{E5192A2D-4290-4D09-A646-C8412F8E49F3}	CLMH045055MH045097	79.03	77.97	0.666666667	MH045055	MH045097			146	CLMH045055MH045097	8	0.0073	0.000000	0.00	0.000000	0.01	0.000000	0.01	0.000000	0.01			
CLMH045058MH045064		1992		Existing		MH045058	MH045064		T14610	IRWD	VCP	{C5AE685F-CF58-4274-B134-CAF333A41ACB}	CLMH045058MH045064	72.30	71.23	0.666666667	MH045058	MH045064			80	CLMH045058MH045064	8	0.0134	0.023597	0.11	0.025195	0.11	0.029868	0.12	0.025195	0.11			
CLMH045059MH045058		1992		Existing		MH045059	MH045058		T14610	IRWD	VCP	{CCD72479-0A15-40DB-89CF-AE4131E07FCB}	CLMH045059MH045058	77.44	72.41	0.666666667	MH045059	MH045058			106	CLMH045059MH045058	8	0.0475	0.023597	0.08	0.025195	0.08	0.029868	0.09	0.025195	0.08			
CLMH045060MH045059		1992		Existing		MH045060	MH045059		T14610	IRWD	VCP	{8F398BEB-C14C-495D-A32B-990663E66E2E}	CLMH045060MH045059	78.19	77.54	0.666666667	MH045060	MH045059			166	CLMH045060MH045059	8	0.0039	0.023345	0.14	0.024924	0.15	0.029548	0.16	0.024924	0.15			
CLMH045061MH045060		1992		Existing		MH045061	MH045060		T14610	IRWD	VCP	{7504178B-A488-4658-A493-338E3DB19398}	CLMH045061MH045060	79.25	78.29	0.666666667	MH045061	MH045060			246	CLMH045061MH045060	8	0.0039	0.023345	0.14	0.024924	0.15	0.029548	0.16	0.024924	0.15			
CLMH045062MH045060		1992		Existing		MH045062	MH045060		T14610	IRWD	VCP	{7AD135E9-BDF0-408A-94D1-52C0FD8B256A}	CLMH045062MH045060	80.37	78.38	0.666666667	MH045062	MH045060			231	CLMH045062MH045060	8	0.0086	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH045063MH045062		1992		Existing		MH045063	MH045062		T14610	IRWD	VCP	{5E540853-DA09-4B2B-A004-C71277203DAE1}	CLMH045063MH045062	82.47	80.48	0.666666667	MH045063	MH045062			186	CLMH045063MH045062	8	0.0086	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH045064MH045002		1992		Existing		MH045064	MH045002		T14610	IRWD	PVC	{88EF3188-B1BD-4873-B56C-DE3090B117B3}	CLMH045064MH045002	71.13	70.66	0.666666667	MH045064	MH045002			108	CLMH045064MH045002	8	0.0085	0.023597	0.12	0.025195	0.13	0.029868	0.14	0.025195	0.13			
CLMH045092MH045013		1987		Existing		MH045092	MH045013		495	IRWD	VCP	{1F47D0CF-AB48-4A43-A237-B3B12ADA7463}	CLMH045092MH045013	64.04	62.75	2.750000000	MH045092	MH045013			422	CLMH045092MH045013	33	0.0031	3.394957	0.28	4.103468	0.31	4.878924	0.34	5.168508	0.35			
CLMH045093MH045092		1987		Existing		MH045093	MH045092		495	IRWD	VCP	{27EFEFAE8-5CF2-4062-8F6A-1A2D81CA4049}	CLMH045093MH045092	65.36	64.23	2.750000000	MH045093	MH045092			186	CLMH045093MH045092	33	0.0030	2.255316	0.23	2.723687	0.25	3.236780	0.27	3.894183	0.30			
CLMH045094MH045093		1987		Existing		MH045094	MH045093		A00495	IRWD	VCP	{AFAAF4D3-5729-444B-A3EF-4C235099CE8A}	CLMH045094MH045093	66.29	65.45	2.750000000	MH045094	MH045093			281	CLMH045094MH045093	33	0.0030	2.255801	0.23	2.728277	0.25	3.237269	0.27	3.894490	0.30			
CLMH045095MH045094		1987		Existing		MH045095	MH045094		A00495	IRWD	VCP	{84BE8371-108C-4BCE-AB29-36351480A7F5}	CLMH045095MH045094	67.79	66.38	2.750000000	MH045095	MH045094			475	CLMH045095MH045094	33	0.0030	2.169951	0.22	2.626080	0.25	3.116402	0.27	3.806234	0.30			
CLMH045096MH045095		1987		Existing		MH045096	MH045095		495	IRWD	VCP	{CDA23975-4A21-4F7D-AD55-448D3CDE9DA5}	CLMH045096MH045095	69.48	67.88	2.750000000	MH045096	MH045095			541	CLMH045096MH045095	33	0.0030	2.139660	0.22	2.593093	0.24	3.077003	0.27	3.773052	0.30			
CLMH045097MH045054		1989		Existing		MH045097	MH045054		A00640	IRWD	VCP	{EFA3A0E0-692A-430A-8455-70F1EC2C5175}	CLMH045097MH045054	76.40	76.40	0.666666667	MH045097	MH045054			297	CLMH045097MH045054	8	0.0082	0.000601	0.07	0.008228	0.08	0.010064	0.08	0.008228	0.08			
CLMH045111MH045038		1989		Existing		MH045111	MH045038		A00608	IRWD	VCP	{D9BDA8AE-B1DA-4D6D-ACC4-DA9C7CB60F3}	CLMH045111MH045038	78.64	72.80	0.666666667	MH045111	MH045038			362	CLMH045111MH045038	8	0.0161	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH045112MH045113		2014		Existing		MH045112	MH045113		A00640E	IRWD	PVC	{8A3AC55E-6AA7-48BE-814B-A777C42D5EF7}	CLMH045112MH045113	72.07	71.60	0.666666667	MH045112	MH045113			71	CLMH045112MH045113	8	0.0079	0.024336	0.13	0.025982	0.13	0.030804	0.14	0.025982	0.13			
CLMH045113MH045041		1989		Existing		MH045113	MH045041		A00640	IRWD	VCP	{C3D225F5-D7F0-4B4A-BF26-E769B6566695}	CLMH045113MH045041	71.54	68.55	0.666666667	MH045113	MH045041			97	CLMH045113MH045041	8	0.0210	0.024336	0.08	0.025982	0.08	0.030804	0.09	0.025982	0.08			
CLMH044W001MH044W002		1985		Existing		MH044W001	MH044W002		A00455	IRWD	PVC	{38946D03-08E0-4E77-BC01-DDFE2BCC0E8}	CLMH044W001MH044W002	82.77	82.11	0.666666667	MH044W001	MH044W002			172	CLMH044W001MH044W002	8	0.0038	0.005768	0.07	0.006924	0.08	0.008208	0.08	0.006924	0.08			
CLMH044W002MH044W003		1985		Existing		MH044W002	MH044W003		A00455	IRWD	PVC	{09E97170-D0E8-4D67-89F3-5FE3EEE47FCF}	CLMH044W002MH044W003	82.01	81.11	0.666666667	MH044W002	MH044W003			229	CLMH044W002MH044W003	8	0.0039	0.029096	0.15	0.034939	0.17	0.041428	0.18	0.034939	0.17			
CLMH044W003MH044W004		1985		Existing		MH044W003	MH044W004		A00455	IRWD	PVC	{3890DE18-2F22-4EC7-985D-D686FA04778F}	CLMH044W003MH044W004	81.01	80.06	0.666666667	MH044W003	MH044W004			237	CLMH044W003MH044W004	8	0.0040	0.044761	0.19	0.053733	0.21	0.063713	0.23	0.053733	0.21			
CLMH044W004MH044W006		1985		Existing		MH044W004	MH044W006		A00455	IRWD	PVC	{DE19ABBF-B671-46ED-B825-69CB46A13C74}	CLMH044W004MH044W006	79.97	78.86	0.666666667	MH044W004	MH044W006			282	CLMH044W004MH044W006	8	0.0039	0.044753	0.19	0.053727	0.21	0.063709	0.23	0.053727	0.21			
CLMH044W005MH044W004		1985		Existing		MH044W005	MH044W004		A00455	IRWD	PVC	{EFB10DF1-5CD9-4852-B26D-E56E72BB375C}	CLMH044W005MH044W004	81.22	80.16	0.666666667	MH044W005	MH044W004			267	CLMH044W005MH044W004	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH044W006MH044W007		1985		Existing		MH044W006	MH044W007		A00455	IRWD	PVC	{58933086-6395-4407-AAF0-13D3EA731AD2}	CLMH044W006MH044W007	78.76	77.37	0.666666667	MH044W006	MH044W007			352	CLMH044W006MH044W007	8	0.0039	0.044838	0.19	0.053821	0.21	0.063823	0.23	0.053821	0.21			
CLMH044W007MH044W122		1985		Existing		MH044W007	MH044W122		A00455	IRWD	PVC	{60CBF7DA-6515-4D47-A9F7-BE179CC93D38}	CLMH044W007MH044W122	77.26	76.63	0.666666667	MH044W007	MH044W122			160	CLMH044W007MH044W122	8	0.0027	0.044828	0.20	0.053812	0.22	0.063814	0.24	0.053812	0.22			
CLMH044W008MH044W013		1985		Existing		MH044W008	MH044W013		A00455	IRWD	PVC	{F577B191-A91F-481E-90E2-69E2BDE093E9}	CLMH044W008MH044W013	75.48	74.02	0.833333333	MH044W008	MH044W013			367	CLMH044W008MH044W013	10	0.0040	0.088111	0.20	0.105791	0.22	0.125460	0.24	0.105791	0.22			
CLMH044W009MH044W008		1985		Existing		MH044W009	MH044W008		A00453	IRWD	PVC	{98C10DE6-9A3A-4D56-B36D-998782AF04ED}	CLMH044W009MH044W008	77.20	75.68	0.666666667	MH044W009	MH044W008			386	CLMH044W009MH044W008	8	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH044W010MH044W009		1985		Existing		MH044W010	MH044W009		A00453	IRWD	PVC	{7B9ACA92-9DB7-4150-B848-B9FC4590DF1F}	CLMH044W010MH044W009	78.83	77.30	0.666666667	MH044W010	MH044W009			386	CLMH044W010MH044W009	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH044W011MH044W008		1985		Existing		MH044W011	MH044W008		A00453	IRWD	PVC	{5C653731-3798-4B1D-B110-A5F718509A72}	CLMH044W011MH044W008	77.08	75.68	0.666666667	MH044W011	MH044W008			354	CLMH044W011MH044W008	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH044W012MH044W011		1985		Existing		MH044W012	MH044W011		A00453	IRWD	PVC	{8AC4FF41-423C-4EAC-83E7-409832029D0}	CLMH044W012MH044W011	78.58	77.18	0.666666667	MH044W012	MH044W011			354	CLMH044W012MH044W011	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH044W013MH044W030		1985		Existing		MH044W013	MH044W030		T12759	IRWD	PVC	{9A44E719-4101-409C-9E57-749A770B13A2}	CLMH044W013MH044W030	73.83	72.75	0.833333333	MH044W013	MH044W030			174	CLMH044W013MH044W030	10	0.0062	0.096756	0.19	0.116013	0.21	0.137595	0.23	0.116013	0.21			
CLMH044W026MH044W025		1986		Existing		MH044W026	MH044W025		T12759	IRWD	PVC	{4D954672-4A1C-434E-8F50-F413B93FA8B2}	CLMH044W026MH044W025	71.69	70.94	0.833333333	MH044W026	MH044W025			213	CLMH044W026MH044W025	10	0.0035	0.110641	0.23	0.132716	0.25	0.157416	0.27	0.132716	0.25			
CLMH044W015MH044W019		1985		Existing		MH044W015	MH044W019		452	IRWD	VCP	{19C6D5D0-10DD-4FD2-BAC4-312D83A5443D}	CLMH044W015MH044W019	69.56	68.13	1.000000000	MH044W015	MH044W019			426	CLMH044W015MH044W019	12	0.0034	0.186226	0.24	0.223110	0.26	0.264685	0.29	0.223109	0.26			
CLMH044W016MH044W015		1985		Existing		MH044W016	MH044W015		A00453	IRWD	PVC	{32159BB1-77B8-4C90-9ABC-12889BF82271}	CLMH044W016MH044W015	71.30	69.73	0.666666667	MH044W016	MH044W015			350	CLMH044W016MH044W015	8	0.0040	0.039493	0.17	0.046904	0.19	0.055886	0.21	0.046904	0.19			
CLMH044W017MH044W018		1985		Existing		MH044W017	MH044W018		A00453	IRWD	PVC	{F2E1A012-0953-4524-BE55-E6F9B0691DB3}	CLMH044W017MH044W018	72.84	71.40	0.666666667	MH044W017	MH044W018			386	CLMH044W017MH044W018	8	0.0039	0.035977	0.17	0.043180	0.19	0.051189	0.20	0.043180	0.19			
CLMH044W018MH044W017		1985		Existing		MH044W018	MH044W017		A00453	IRWD	PVC	{6854B410-802F-420B-91D0-DBF66A983F53}	CLMH044W

CLMH044W127MH044S001		1985			MH044W127	MH044S001		A00453	IRWD	VCP	{08EA3681-B41A-4305-93A7-4C71735DFB36}	MH044W127-MH044S001		75.51		72.34	0.666666667	MH044W127	MH044S001				432	CLMH044W127MH044S001	8	0.0073	0.000000	00	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLMH045E005MH045E046		1977			Existing	assumed Mannings N	MH045E005	MH045E046		A01679	IRWD	VCP	{2F7DE2C7-5ACE-4E96-87D4-095FBB5B2E78}	CLMH045E005MH045E046		62.47		61.25	0.833333333	MH045E005	MH045E046				346	CLMH045E005MH045E046	10	0.0035	0.038204	0.14	0.040789	0.15	0.048360	0.16	0.040789	0.15
CLMH045E010MH045E056		1977			Existing	assumed Mannings N	MH045E010	MH045E056		A01679	IRWD	VCP	{B12A168B-8AB3-4C9A-A028-E606A7E04DC}	CLMH045E010MH045E056		57.99		55.84	0.666666667	MH045E010	MH045E056				396	CLMH045E010MH045E056	8	0.0054	0.025328	0.13	0.027043	0.14	0.032061	0.15	0.027043	0.14
CLMH045E015MH045E055		1998			Existing		MH045E015	MH045E055		A00866A	IRWD	VCP	{68B90917-9DD4-452D-AFB7-9D9AD8246190}	CLMH045E015MH045E055		58.79		57.29	0.666666667	MH045E015	MH045E055				250	CLMH045E015MH045E055	8	0.0060	0.000696	02	0.000743	02	0.000881	02	0.000743	02
CLMH045E016MH045E057		1998			Existing		MH045E016	MH045E057		A00866A	IRWD	VCP	{183C998B-F6E8-4C31-B266-C3AD3135EA85}	CLMH045E016MH045E057		54.75		52.91	0.666666667	MH045E016	MH045E057				371	CLMH045E016MH045E057	8	0.0050	0.000463	02	0.000495	02	0.000587	02	0.000495	02
CLMH045E017MH045E015		1998			Existing		MH045E017	MH045E015		A00866A	IRWD	VCP	{8FFFF397-1888-4AE2-B732-57CA910B4434}	CLMH045E017MH045E015		60.56		59.00	0.666666667	MH045E017	MH045E015				267	CLMH045E017MH045E015	8	0.0058	0.000696	02	0.000743	02	0.000881	02	0.000743	02
CLMH045E018MH045E016		1998			Existing		MH045E018	MH045E016		A00866A	IRWD	VCP	{50899527-9ADF-4895-A93F-620F2E1623241}	CLMH045E018MH045E016		56.54		54.95	0.666666667	MH045E018	MH045E016				398	CLMH045E018MH045E016	8	0.0040	0.000400	02	0.000428	02	0.000507	02	0.000428	02
CLMH045E019MH045E018		1998			Existing		MH045E019	MH045E018		A00866A	IRWD	VCP	{6F105298-0CB8-4586-AE5A-016B900737BE}	CLMH045E019MH045E018		58.59		56.74	0.666666667	MH045E019	MH045E018				375	CLMH045E019MH045E018	8	0.0049	0.000400	02	0.000428	02	0.000507	02	0.000428	02
CLMH045E022MH045E023		1998			Existing		MH045E022	MH045E023		A00866B	IRWD	VCP	{A90A2EC6-EBEA-47FB-BED9-CB49269FCBEB}	CLMH045E022MH045E023		59.34		57.63	0.666666667	MH045E022	MH045E023				110	CLMH045E022MH045E023	8	0.0155	0.002870	04	0.003064	04	0.003633	04	0.003064	04
CLMH045E023MH045E027		1998			Existing	assumed Mannings N	MH045E023	MH045E027		A00866B	IRWD	VCP	{AE09B78F-408D-4EC9-A262-D9828215DAA2}	CLMH045E023MH045E027		57.43		56.36	0.833333333	MH045E023	MH045E027				185	CLMH045E023MH045E027	10	0.0058	0.032209	0.12	0.034388	0.12	0.040768	0.13	0.035743	0.12
CLMH045E024MH045E023		1998			Existing	assumed Mannings N	MH045E024	MH045E023		A00866B	IRWD	VCP	{6B426E69-61F6-4374-8F7D-7570754544551}	CLMH045E024MH045E023		60.36		57.43	0.666666667	MH045E024	MH045E023				66	CLMH045E024MH045E023	8	0.0444	0.021550	0.12	0.023008	0.12	0.027277	0.13	0.023008	0.12
CLMH045E025MH045E023		1998			Existing		MH045E025	MH045E023		A00866B	IRWD	VCP	{C91C99D2-8966-4462-B15F-223702F205A5}	CLMH045E025MH045E023		59.15		57.63	0.666666667	MH045E025	MH045E023				381	CLMH045E025MH045E023	8	0.0040	0.007788	08	0.008316	09	0.009858	09	0.009670	09
CLMH045E026MH045E025		1998			Existing		MH045E026	MH045E025		A00866B	IRWD	VCP	{DCDFF585-1E71-4783-959C-A1BCB1460F39}	CLMH045E026MH045E025		60.93		59.25	0.666666667	MH045E026	MH045E025				176	CLMH045E026MH045E025	8	0.0095	0.007788	07	0.008316	07	0.009858	08	0.008316	07
CLMH045E027MH045E045		1998			Existing		MH045E027	MH045E045		A00866B	IRWD	VCP	{2F42CCFA-BD32-41B7-8264-A42A9401508}	CLMH045E027MH045E045		56.15		55.04	0.833333333	MH045E027	MH045E045				104	CLMH045E027MH045E045	10	0.0059	0.032209	0.12	0.034388	0.12	0.040768	0.13	0.035743	0.12
CLMH045E028MH045S051		1998			Existing		MH045E028	MH045S051		A00866C	IRWD	VCP	{AFDB6EE3-528E-46DC-A9A7-D0A1C0BFCED1}	CLMH045E028MH045S051		49.98		49.27	0.666666667	MH045E028	MH045S051				121	CLMH045E028MH045S051	8	0.0059	0.006711	07	0.007165	07	0.008496	08	0.007165	07
CLMH045E029MH045E028		1998			Existing		MH045E029	MH045E028		A00866C	IRWD	VCP	{56D8347F-881E-4CB0-B8DD-F390F7B158E2}	CLMH045E029MH045E028		54.75		50.18	0.666666667	MH045E029	MH045E028				388	CLMH045E029MH045E028	8	0.0118	0.005381	06	0.005745	06	0.006812	06	0.005745	06
CLMH045E030MH045E029		1998			Existing	assumed Mannings N	MH045E030	MH045E029		A00866C	IRWD	VCP	{54A5EE83-DE57-4E79-9DCA-7354738C16FC}	CLMH045E030MH045E029		59.00		54.95	0.666666667	MH045E030	MH045E029				341	CLMH045E030MH045E029	8	0.0119	0.004748	05	0.005070	06	0.006011	06	0.005070	06
CLMH045E032MH045E035		2002			Existing	assumed Mannings N	MH045E032	MH045E035		A00589A	IRWD	VCP	{0B1261AD-3764-4934-BA4B-8B06B5100C5}	CLMH045E032MH045E035		62.12		60.88	0.666666667	MH045E032	MH045E035				192	CLMH045E032MH045E035	8	0.0064	0.021550	0.13	0.023008	0.13	0.027277	0.14	0.023008	0.13
CLMH045E033MH045E032		2002			Existing		MH045E033	MH045E032		A00589A	IRWD	VCP	{0491D3A7-FD15-40F4-A43B-8DB18B8673A5}	CLMH045E033MH045E032		63.34		62.32	0.666666667	MH045E033	MH045E032				156	CLMH045E033MH045E032	8	0.0065	0.021550	0.13	0.023008	0.13	0.027277	0.14	0.023008	0.13
CLMH045E035MH045E024		1998			Existing		MH045E035	MH045E024		A00866B	IRWD	VCP	{6A4FAA27-5324-471E-80FD-31AB067B937B}	CLMH045E035MH045E024		60.68		60.56	0.666666667	MH045E035	MH045E024				10	CLMH045E035MH045E024	8	0.0120	0.021550	0.11	0.023008	0.11	0.027277	0.12	0.023008	0.11
CLMH045E036MH045E005		1977			Existing	assumed Mannings N	MH045E036	MH045E005		A01679	IRWD	VCP	{12458E14-18AA-4570-9761-12F9766521B4}	CLMH045E036MH045E005		64.00		62.63	0.666666667	MH045E036	MH045E005				282	CLMH045E036MH045E005	8	0.0049	0.026003	0.14	0.027763	0.15	0.032914	0.16	0.027763	0.15
CLMH045E037MH045E039		1986			Existing		MH045E037	MH045E039		458	IRWD	VCP	{4CAED8A9-2330-4D7B-8007-C474FBA8CA85}	CLMH045E037MH045E039		52.18		51.04	3.000000000	MH045E037	MH045E039				427	CLMH045E037MH045E039	36	0.0027	3.720635	0.28	4.469082	0.30	5.316126	0.33	5.537651	0.34
CLMH045E038MH045E036		1977			Existing	assumed Mannings N	MH045E038	MH045E036		A01679	IRWD	VCP	{AB133C9C-949A-4824-971F-6F1A52BF8976}	CLMH045E038MH045E036		65.51		64.10	0.666666667	MH045E038	MH045E036				604	CLMH045E038MH045E036	8	0.0048	0.025623	0.14	0.027358	0.15	0.032433	0.16	0.027358	0.15
CLMH045E039MH045E041		1973			Existing		MH045E039	MH045E041		A00458	IRWD	VCP	{6FDD2ACA-DA62-4253-9AD2-0846F9C57FE}	CLMH045E039MH045E041		51.04		49.75	3.000000000	MH045E039	MH045E041				471	CLMH045E039MH045E041	36	0.0027	3.719271	0.28	4.467241	0.30	5.314519	0.33	5.536787	0.34
CLMH045E040MH045E042		1977			Existing	assumed Mannings N	MH045E040	MH045E042		A01679	IRWD	VCP	{4D21E4F05-0E88-49ED-8AC83-40A0967182E7}	CLMH045E040MH045E042		67.16		65.79	0.666666667	MH045E040	MH045E042				346	CLMH045E040MH045E042	8	0.0040	0.002621	0.05	0.003117	0.06	0.002798	0.05	0.003117	0.06
CLMH045E041MH045E043		1986			Existing		MH045E041	MH045E043		458	IRWD	VCP	{CBCAC364-9277-407B-B215-80DE18A0934E}	CLMH045E041MH045E043		49.75		48.46	3.000000000	MH045E041	MH045E043				471	CLMH045E041MH045E043	36	0.0027	3.721212	0.27	4.469165	0.30	5.316990	0.32	5.539046	0.33
CLMH045E042MH045E044		1977			Existing		MH045E042	MH045E044		A01679	IRWD	VCP	{0EC9ED19-EB5E-41EB-8BC2-C10A81D56DAC}	CLMH045E042MH045E044		65.79		61.43	0.666666667	MH045E042	MH045E044				396	CLMH045E042MH045E044	8	0.0110	0.002617	0.05	0.002795	0.05	0.003313	0.05	0.002795	0.05
CLMH045E043MH045S051		1986			Existing		MH045E043	MH045S051		458	IRWD	VCP	{4AA4C62E-4C56-478C-822D-FA9925557254}	CLMH045E043MH045S051		48.46		46.94	3.000000000	MH045E043	MH045S051				36	CLMH045E043MH045S051	36	0.0032	3.719521	0.28	4.466748	0.31	5.314415	0.33	5.537942	0.34
CLMH045E044MH045E042		1977			Existing	assumed Mannings N	MH045E044	MH045E042		A01679	IRWD	VCP	{0638DCA9-BC01-4C9C-91CE-E87A4BB1D1}	CLMH045E044MH045E042		61.43		59.68	0.666666667	MH045E044	MH045E042				344	CLMH045E044MH045E042	8	0.0044	0.002617	0.06	0.002795	0.06	0.003313	0.06	0.002795	0.06
CLMH045E045MH045E049		1987			Existing		MH045E045	MH045E049		495	IRWD	VCP	{51BDB58E-B931-404A-AB48-A5EC310DD621}	CLMH045E045MH045E049		53.09		52.70	3.000000000	MH045E045	MH045E049				196	CLMH045E045MH045E049	36	0.0020	3.720342	0.27	4.468705	0.30	5.315731	0.32	5.534595	0.33
CLMH045E046MH045E050		1977			Existing	assumed Mannings N	MH045E046	MH045E050		A01679	IRWD	VCP	{277BC06F-B632-41B1-82F5-526EED4EA95F}	CLMH045E046MH045E050		61.25		59.65	0.833333333	MH045E046	MH045E050				396	CLMH045E046MH045E050	10	0.0040	0.038201	0.16	0.040788	0.16	0.048360	0.18	0.040788	0.16
CLMH045E047MH045E049		1987			Existing		MH045E047	MH045E049		495	IRWD	VCP	{4CE0D0A8-D8C4-48AF-B182-A1AB320DC3E1}	CLMH045E047MH045E049		54.03		53.30	3.000000000	MH045E047	MH045E049				310	CLMH045E047MH045E049	36	0.0024	3.699238	0.27	4.446417	0.29	5.289349	0.32	5.510895	0.33
CLMH045E048MH045E010		1977			Existing	assumed Mannings N	MH045E048	MH045E010		A01679	IRWD	VCP	{5757DA6C-7ECS-46D7-9FAD-253895C564AA}	CLMH045E048MH045E010		59.68		57.99	0.666666667	MH045E048	MH045E010				396	CLMH045E048MH045E010	8	0.0043	0.004284	0.11	0.004576	0.11	0.005424	0.12	0.004576	0.11
CLMH045E049MH045E037		1986			Existing		MH045E049	MH045E037		458	IRWD	VCP	{9EAE39DD-A37E-4EA2-851E-E858CC1CF30A}	CLMH045E049MH045E037		52.59		52.27	3.000000000	MH045E049	MH045E037				36	CLMH045E049MH045E037	36	0.0025	3.720389	0.26	4.468777	0.29	5.315823	0.31	5.537380	0.32
CLMH045E050MH045E052		1977			Existing	assumed Mannings N	MH045E050	MH045E052		A01679	IRWD	VCP	{2F25F184-0080-4AC2-8977-CC926B0407FD}	CLMH045E050MH045E052		59.65		58.04	0.833333333	MH045E050	MH045E052				396	CLMH045E050MH045E052	10	0.0041	0.056174	0.17	0.057975	0.17	0.071109	0.19	0.059975	0.17
CLMH045E051MH045E039		1973			Existing	assumed Mannings N	MH045E051	MH045E039		A00866A	IRWD	VCP	{3381A063-7C03-4CBE-99CD-BD176C531827}	CLMH045E051MH045E039		61.59		53.13	0.666666667	MH045E051	MH045E039				59	CLMH045E051MH045E039	8	1459	0.000580	0.01	0.000584	0.01	0.000735	0.01	0.000584	0.01
CLMH045E052MH045E054		1977			Existing		MH045E052	MH045E054		A01679	IRWD	VCP	{D748DA9F-8ECA-4A8B-A896-5CF1B2553DAB}	CLMH045E052MH045E054		58.04		55.97	0.833333333	MH045E052	MH045E054				396	CLMH045E052MH045E054	10	0.0052	0.056161	0.16	0.057965	0.16	0.071091	0.18	0.059965	0.16
CLMH045E053MH045E057		1998			Existing	assumed Mannings N	MH045E053	MH045E057		A00866A	IRWD	VCP	{1DF314B4-5674-48B0-AA01-F93FE2E19EDD}	CLMH045E053MH045E057		55.45		52.72	0.666666667	MH045E053	MH045E057				259	CLMH045E053MH045E057	8	0.0105	0.003482	0.05	0.003717	0.05	0.004408	0.06	0.003717	0.05
CLMH045E054MH045S038		1977			Existing	assumed Mannings N	MH045E054	MH045S038		A01679	IRWD	VCP	{C2C58943-1B15-4AEA-AB53-CDB7D066A304}	CLMH045E054MH045S038		55.81		51.65	1.000000000	MH045E054	MH045S038				396	CLMH045E054MH045S038	12	0.0105	0.064429	0.11	0.068687	0.12	0.081429	0.13	0.068687	0.12
CLMH045E055MH045E053		1998			Existing		MH045E055	MH045E053		A00866A	IRWD	VCP	{F33CF2F6-764E-4817-A9A0-A7D5F6CCC2}	CLMH045E055MH045E053		57.09		55.65	0.666666667	MH045E055	MH045E053				396	CLMH045E055MH045E053	8	0.0048	0.000696	02	0.000743	02	0.000881	02	0.000743	02
CLMH045E056MH045S040		1977			Existing	assumed Mannings N	MH045E056	MH045S040		A01679	IRWD	VCP	{02706068-9B23-49AE-91BA-B84FF8A6B1B7}	CLMH045E056MH045S040		55.84		50.59	0.666666667	MH045E056	MH045S040				396	CLMH045E056MH045S040	8	0.0133	0.025328	0.13	0.027043	0.14	0.032061	0.15	0.027043	0.14
CLMH045E057MH045E041		1998			Existing		MH045E057	MH045E041		A00866A	IRWD	VCP	{89AEE5FA-CFC6-44D1-BE45-539949A099E6}	CLMH045E057MH045E041		52.72		52.03	0.666666667	MH045E057	MH045E041				69	CLMH045E057MH045E041	8	0.0101	0.003945	05	0.004212	05	0.004994	06	0.004212	05
CLMH045E058MH045E022		2006			Existing		MH045E058	MH045E022		A00589C	IRWD	VCP	{545C3719-C486-4695-B6B8-FC4139842566}	CLMH045E058MH045E022		62.05		61.85	0.666666667	MH045E058	MH045E022				301	CLMH045E058MH045E022	8	0.0100	0.002870	04	0.003064	04	0.003633	04	0.003064	04
CLMH045N007MH045N111		1973			Existing		MH045N007	MH045N111		T08029	IRWD	VCP	{5DA1A9F0-777E-4B65-B425-257AE72EB8B7}	CLMH045N007MH045N111		76.69		75.94	0.666666667	MH045N007	MH045N111				157	CLMH045N007MH045N111	8	0.0048	0.003374	05	0.004051	06	0.004803	06	0.004051	06
CLMH045N008MH045N009		1973			Existing		MH045N008	MH045N009		T08029	IRWD	VCP	{3810C92F-0E62-4DF0-B02B-D87ED1577791}	CLMH045N008MH045N009		76.40		75.90	0.666666667	MH045N008	MH045N009				116	CLMH045N008MH045N009	8	0.0040	0.005734	07	0.006884	08	0.008161	08	0.006884	08
CLMH045N009MH045N010		1973			Existing		MH045N009	MH045N010		T08029	IRWD	VCP	{F102C76F-2AA1-4B04-B94A-3881914D8B21}	CLMH045N009MH045N010		75.80		75.50	0.666666667	MH045N009	MH045N010				76	CLMH045N009MH045N010	8	0.0039	0.005734	07	0.006884	08	0.008161	08	0.006884	08
CLMH045N010MH045N014		1973			Existing		MH045N010	MH045N014		T08029	IRWD	VCP	{C34C3DDD-2755-493E-8D33-28862484D9F0}	CLMH045N010MH045N014		74.90		74.94	0.666666667	MH045N010	MH045N014				116	CLMH045N010MH045N014	8	0.0040	0.005734	07	0.006884	08	0.008161	09	0.006884	08
CLMH045N011MH045N010		1973			Existing		MH045N011	MH045N010		T08029	IRWD	VCP	{A7C020B7-B494-4699-89D8-ECA56528FB77}	CLMH045N011MH045N010		75.83		75.50	0.666666667	MH045N011	MH045N010				83	CLMH045N011MH045N010	8	0.0040	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLMH045N012MH045N011		1973			Existing		MH045N012	MH045N011		T08029	IRWD	VCP	{D616D3A6-F883-46D9-8E51-E84775101F6B}	CLMH045N012MH045N011		76.27		75.93	0.666666667	MH045N012	MH045N011				87	CLMH045N012MH045N011	8	0.0039	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLMH045N013MH045N012		1973			Existing		MH045N013	MH045N012		T08029	IRWD	VCP	{A3935BBD-9AF2-4841-8C8C-210F70F98299}	CLMH045N013MH045N012		76.69		76.37	0.666666667	MH045N013	MH045N012				80	CLMH045N013MH045N012	8	0.0040	0.000000	00	0.000000	00	0.000000	00	0.000000	00
CLMH045N014MH045N017		1973			Existing		MH045N014	MH045N017		T08029	IRWD	VCP	{C40ED894-4493-4F7E-A769-05B045A9A505}	CLMH045N014MH045N017		74.83		73.94	0.666666667	MH045N014	MH045N017				186	CLMH045N014MH045N017	8	0.0048	0.016964	0.12	0.020369	0.13	0.024147	0.14	0.020369	0.13
CLMH045N015MH045N014		1973			Existing		MH045N015	MH045N014		T08029	IRWD	VCP	{62B9A9DE-227B-4938-AD8C-29F286AB2170}	CLMH045N015MH045N014		75.22		74.94	0.666666667	MH045N015	MH045N014				70	CLMH045N015MH045N014	8	0.0040	0.003209	05	0.003852	06	0.004568	06	0.003852	06
CLMH045N016MH045N015		1973			Existing		MH045N016	MH045N015		T08029	IRWD	VCP	{2A653893-9729-4225-88CD-2DA1C913E292C}	CLMH045N016MH045N015		75.84		75.31	0.666666667	MH045N016	MH045N015				133	CLMH045N016MH045N015	8	0.0040	0.003209	05	0.003852	06	0.004568	06	0.003852	06
CLMH045N017MH045N016		1973			Existing		MH045N017	MH045N016		T08029	IRWD	VCP	{6C90E13B-1D3F-487A-BED5-D1C121D6F276}	CLMH045N017MH045N016		73.84		73.40	0.666666667	MH045N017	MH045N016				88	CLMH045N017MH045N016	8	0.0050	0.003061	13	0.024447	0.14	0.028981	0.15	0.024447	0.14
CLMH045N018MH045N017		1973			Existing		MH045N018	MH045N017		T08029	IRWD	VCP	{9A1CDCDE-00C5-4743-9D1F-B9931F0D0AAF}	CLMH045N018MH045N017		74.33		73.94	0.666666667	MH045N018	MH045N017				65	CLMH045N018MH045N017	8	0.0060	0.003397	05	0.004079	06	0.004835	06	0.004079	06
CLMH045N019MH045N018		1973			Existing		MH045N019	MH045N018		T08029	IRWD	VCP	{72106BE4-238C-4CB0-98E5-017F5D0F0522}	CLMH045N019MH045N018		75.12		74.43	0.666666667	MH045N019	MH045N018				137	CLMH045N019MH045N018	8	0.0050	0.003397	05	0.004079	06	0.004835	06	0.004079	06
CLMH045N020MH045N019		1973			Existing		MH045N020	MH045N019		T08029	IRWD	VCP	{0950119B-941D-48B6-945F-11145F0BF64E}	CLMH045N020MH045N019		71.30		72.94	0.666666667	MH045N020	MH045N019				114	CLMH045N020MH045N019	8	0.0032	0.003286	05	0.003945	06	0.004676	06	0.003945	06
CLMH045N021MH045N020		1973			Existing		MH045N021	MH045N020		T08029	IRWD	VCP	{789158CB-7C77-4272-B187-1305E2702FF3}	CLMH045N021MH045N020		74.48		73.40	0.666666667	MH045N021	MH045N020				227	CLMH045N021MH045N020	8	0.0048	0.002926	05	0.003512	05	0.004164	06	0.003512	05
CLMH045N022MH045N025		1973			Existing	assumed Mannings N	MH045N022	MH045N025		T08029	IRWD	VCP	{3F7E7947-C936-4C49-B86C-39F790D0EDB6}	CLMH045N022MH045N025		72.83		72.22	0.666666667	MH045N022	MH045N025				130	CLMH045N022MH045N025	8	0.0047	0.026517	0.15	0.031838	0.16	0.037745	0.17	0.031838	0.16
CLMH045N023MH045N022		1973			Existing		MH045N023	MH045N022		T08029	IRWD	VCP	{F324BA72-86E0-4952-8C95-EB7471216FC}	CLMH045N023MH045N022		73.08		72.94	0.666666667	MH045N023	MH045N022				58	CLMH045N023MH045N022	8	0.0024	0.003232	0.06	0.003880	0.07	0.004600	0.07	0.003880	0.07
CLMH045N024MH045N023		1973			Existing		MH045N024	MH045N023		T08029	IRWD	VCP	{BDBAD1CF-9CB5-4912-9F45-EE9FEA86A11B}	CLMH045N024MH045N023		73.70		73.18	0.666666667	MH045N024	MH045N023				113	CLMH045N024MH045N023	8	0.0046	0.003232	0.06	0.003880	0.06	0.004600	0.06	0.003880	0.06
CLMH045N025MH045N026		1973			Existing		MH045N025	MH045N026		T08029	IRWD	VCP	{7430223A-E2FD-468F-955C-9D4A2A49EC6A}	CLMH045N025MH045N026		72.12		72.01	0.666666667	MH045N025	MH045N026				20	CLMH045N025MH045N026	8	0.0055	0.032624	0.16	0.039133	0.17	0.046395	0.19	0.039133	0.17
CLMH045N026MH045N033		1973			Existing		MH045N026	MH045N033		T08033	IRWD	VCP	{A819A32A-A777-491B-B077-FA514DDAE085}	CLMH045N026MH045N033		71.91		70.62	0.666666667	MH045N026	MH045N033				335	CLMH045N026MH045N033	8	0.0039	0.032617	0.17	0.039128	0.18	0.046392	0.20	0.039128	0.18
CLMH045N027MH045N025		1973			Existing		MH045N027	MH045N025		T08029	IRWD	VCP	{8CA25DDB-73AD-4CA5-AECB-BAD2AEF255A9}	CLMH045N027MH045N025		72.58		72.22	0.666666667	MH045N027	MH045N025				79	CLMH045N027MH045N025	8	0.0046	0.004412	0.06	0.005296	07	0.006279	07	0.005296	07
CLMH045N028MH045N027		1973			Existing		MH045N028	MH045N027		T08029	IRWD	VCP	{254D7026-0A97-42FE-8F40-7CC516AA255D}	CLMH045N028MH045N027		72.81		72.69	0.666666667	MH045N028	MH045N027				301	CLMH045N028MH045N027	8	0.0039	0.002312	0.05	0.002775	0.05	0.003290	0.05	0.002775	0.05
CLMH045N029MH045N028		1973			Existing		MH045N029	MH045N028		T08029	IRWD	VCP	{0F08FB82-93E6-419C-A6CB-7D2661A746AC}	CLMH045N029MH045N028		73.33		72.91	0.666666667	MH045N029	MH045N028				51	CLMH045N029MH045N028	8	0.0082	0.002312	0.04	0.002775	0.04	0.003290	0.05	0.002775	0.04
CLMH045N030MH045N029		1973			Existing		MH045N030	MH045N029		T08029	IRWD	VCP	{824C1643-DB81-491F-8D51-CA84BE3249AE}	CLMH045N030MH045N029		73.88		73.43	0.666666667	MH045N030	MH045N029				77	CLMH045N030MH045N029	8	0.0058	0.002312	0.04	0.002775	0.05	0.003290	0.05	0.002775	0.05
CLMH045N031MH045N027		1973			Existing		MH045N031	MH045N027		T08029	IRWD	VCP	{7A1B2275-6715-489F-BEA1-D7CAFE684482}	CLMH045N031MH045N027		73.12		72.69	0.666666667	MH045N031	MH045N027				81	CLMH045N031MH045N027	8	0.0053	0.002100	0.04	0.002521	0.05	0.002989	0.05	0.002521	0.05
CLMH045N032MH045N031		1973			Existing		MH045N032	MH045N031		T08029	IRWD	VCP	{1E2DA6DB-EAE2-4317-9CEF-AD07146DD6A0}	CLMH045N032MH045N031		73.66		73.23	0.666666667	MH045N032	MH045N031				76	CLMH045N032MH045N031	8	0.0057	0.002100	0.04	0.002521	0.05	0.002989	0.05	0.002521	0.05
CLMH045N033MH045N035		1973			Existing		MH045N033	MH045N035		T08033	IRWD	VCP	{E0644256-7685-47E0-BAEF-CAED85FB942B}	CLMH045N033MH045N035		70.43		69.34	0.666666667	MH045N033	MH045N035				268	CLMH045N033MH045N035	8	0.0041	0.038529	0.18	0.046232	0.20	0.054818	0.22	0.046232	0.20
CLMH045N034MH045N033		1973			Existing		MH045N034	MH045N033		T08033	IRWD	VCP	{AFBA9CF8-3A46-4A66-B07B-618C766A6D17}	CLMH045N034MH045N033		73.94		73.43	0.666666667	MH045N034	MH045N033				263	CLMH045N034MH045N033	8	0.0101	0.038529	0.16	0.046232	0.18	0.054818	0.20	0.046232	0.18
CLMH045N035MH045N037		1973			Existing		MH045N035	MH045N037		T08033	IRWD	VCP	{9ADFA749-EAC7-4D2D-BAF7-F5BAC572E665}	CLMH045N035MH045N037		69.15		68.09	0.666666667	MH045N035	MH045N037				264	CLMH045N035MH045N037	8	0.0040	0.045167	0.20	0.054210	0.21	0.064283	0.23	0.054210	0.21
CLMH045N036MH045N035		1973			Existing

| | | |

CLMH046N044MH046N048		2006		Existing	assumed Manning's N	MH046N044	MH046N048		T16581	IRWD	PVC	{ECB44A58-310E-4372-AF5D-BA57A47ABF04}	CLMH046N044MH046N048	60.36	58.06	0.666666667	MH046N044	MH046N048			240	CLMH046N044MH046N048	8	0.0096	0.003844	0.06	0.004613	0.06	0.005469	0.07	0.004613	0.06		
CLMH046N045MH010E042		2006		Existing	assumed Manning's N	MH046N045	MH010E042		T16581	IRWD	PVC	{8F993C22-447D-4D43-975E-E90243A2A11B}	CLMH046N045MH010E042	55.34	52.91	0.666666667	MH046N045	MH010E042			125	CLMH046N045MH010E042	8	0.0194	0.011846	0.08	0.014220	0.10	0.016861	0.12	0.014220	0.10		
CLMH046N046MH046N045		2006		Existing	assumed Manning's N	MH046N046	MH046N045		T16581	IRWD	PVC	{FCC1B276-1821-42FC-8280-46D0A4242E64}	CLMH046N046MH046N045	56.18	55.65	0.666666667	MH046N046	MH046N045			22	CLMH046N046MH046N045	8	0.0241	0.007623	0.05	0.009151	0.06	0.010849	0.06	0.009151	0.06		
CLMH046N047MH010E043		2006		Existing	assumed Manning's N	MH046N047	MH010E043		T16581	IRWD	PVC	{56744317-EB97-48EF-B50A-508D948D8C82}	CLMH046N047MH010E043	53.54	52.54	0.666666667	MH046N047	MH010E043			70	CLMH046N047MH010E043	8	0.0143	0.008352	0.09	0.010027	0.12	0.011888	0.14	0.010027	0.12		
CLMH046N048MH046N047		2006		Existing	assumed Manning's N	MH046N048	MH046N047		T16581	IRWD	PVC	{C977B58E-DAEA-47AE-80FC-C30E56165BDC}	CLMH046N048MH046N047	58.06	53.65	0.666666667	MH046N048	MH046N047			301	CLMH046N048MH046N047	8	0.0147	0.008352	0.06	0.010027	0.07	0.011888	0.08	0.010027	0.07		
CLMH046N049MH046N048		2006		Existing	assumed Manning's N	MH046N049	MH046N048		T16581	IRWD	PVC	{4C415E5D-D59F-4E88-91ED-156EE7A1CB14}	CLMH046N049MH046N048	58.45	58.27	0.666666667	MH046N049	MH046N048			48	CLMH046N049MH046N048	8	0.0038	0.004509	0.06	0.005414	0.07	0.006418	0.07	0.005414	0.07		
CLMH046N050MH046N141	37.52' FROM W-E	2006		Existing	assumed Manning's N	MH046N050	MH046N141		T16581H	IRWD	PVC	{A6B17953-E730-4493-828D-30B9284CCF63}	CLMH046N050MH046N064	55.68	55.12	0.666666667	MH046N050	MH046N141			176	CLMH046N050MH046N141	8	0.0032	0.033645	0.17	0.040381	0.19	0.047877	0.20	0.040381	0.19		
CLMH046N051MH046N050		2006		Existing	assumed Manning's N	MH046N051	MH046N050		T16581H	IRWD	PVC	{1206BCCB-F2A4-45D6-A95A-871A24B34ADB}	CLMH046N051MH046N050	56.71	55.88	0.666666667	MH046N051	MH046N050			211	CLMH046N051MH046N050	8	0.0039	0.027803	0.15	0.033366	0.16	0.039560	0.18	0.033366	0.16		
CLMH046N052MH046N051		2006		Existing	assumed Manning's N	MH046N052	MH046N051		T16581H	IRWD	PVC	{0B782C07-C8F7-474C-8A95-2AAF158F9D20}	CLMH046N052MH046N051	56.89	56.81	0.666666667	MH046N052	MH046N051			24	CLMH046N052MH046N051	8	0.0033	0.027804	0.15	0.033366	0.16	0.039561	0.18	0.033366	0.16		
CLMH046N053MH046N060		2006		Existing	assumed Manning's N	MH046N053	MH046N060		T16581H	IRWD	PVC	{1F931DF6-E89E-486D-9F5E-FB60B8609238}	CLMH046N053MH046N060	58.53	57.98	0.666666667	MH046N053	MH046N060			141	CLMH046N053MH046N060	8	0.0039	0.023246	0.14	0.027909	0.15	0.033090	0.16	0.027909	0.15		
CLMH046N054MH046N053		2006		Existing	assumed Manning's N	MH046N054	MH046N053		T16581H	IRWD	PVC	{64FF573A-77FE-4169-9746-049AB91D44F7}	CLMH046N054MH046N053	60.40	58.63	0.666666667	MH046N054	MH046N053			447	CLMH046N054MH046N053	8	0.0040	0.014639	0.11	0.017577	0.12	0.020839	0.13	0.017577	0.12		
CLMH046N055MH046N062		2006		Existing	assumed Manning's N	MH046N055	MH046N062		T16581H	IRWD	PVC	{34DE8D7E-E9E1-4B02-870C-B241B3066EA6}	CLMH046N055MH046N062	61.23	61.18	0.666666667	MH046N055	MH046N062			18	CLMH046N055MH046N062	8	0.0028	0.004986	0.07	0.005987	0.07	0.007097	0.08	0.005987	0.07		
CLMH046N056MH046N057		2006		Existing	assumed Manning's N	MH046N056	MH046N057		T16581H	IRWD	PVC	{7D3B83D0-5C09-468E-A734-40549AA655A3}	CLMH046N056MH046N057	59.50	58.98	0.666666667	MH046N056	MH046N057			136	CLMH046N056MH046N057	8	0.0038	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046N057MH046N058		2006		Existing	assumed Manning's N	MH046N057	MH046N058		T16581H	IRWD	PVC	{C68A0F67-163D-49B9-8B36-9158BC51A2A2}	CLMH046N057MH046N058	58.88	58.80	0.666666667	MH046N057	MH046N058			25	CLMH046N057MH046N058	8	0.0032	0.004446	0.06	0.005337	0.07	0.006328	0.07	0.005337	0.07		
CLMH046N058MH046N061		2006		Existing	assumed Manning's N	MH046N058	MH046N061		T16581H	IRWD	PVC	{5C167E79-037F-4594-A92C-D1B6293D644E}	CLMH046N058MH046N061	58.70	58.15	0.666666667	MH046N058	MH046N061			141	CLMH046N058MH046N061	8	0.0039	0.004446	0.06	0.005337	0.07	0.006328	0.07	0.005337	0.07		
CLMH046N059MH046N056		2006		Existing	assumed Manning's N	MH046N059	MH046N056		T16581H	IRWD	PVC	{6B384958-F269-48F5-B4D6-EF1587E0A3BD}	CLMH046N059MH046N056	59.88	59.60	0.666666667	MH046N059	MH046N056			75	CLMH046N059MH046N056	8	0.0037	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046N060MH046N063		2006		Existing	assumed Manning's N	MH046N060	MH046N063		T16581H	IRWD	PVC	{2B3B440C-598F-4158-8F50-C68DB7C5AEEF}	CLMH046N060MH046N063	57.88	57.81	0.666666667	MH046N060	MH046N063			22	CLMH046N060MH046N063	8	0.0032	0.027692	0.15	0.033246	0.16	0.039418	0.18	0.033246	0.16		
CLMH046N061MH046N060		2006		Existing	assumed Manning's N	MH046N061	MH046N060		T16581H	IRWD	PVC	{FBE8A96E-42F3-4B92-9C84-933D3D2B8678}	CLMH046N061MH046N060	58.14	57.98	0.666666667	MH046N061	MH046N060			38	CLMH046N061MH046N060	8	0.0042	0.004446	0.06	0.005337	0.07	0.006328	0.07	0.005337	0.07		
CLMH046N062MH046N054		2006		Existing	assumed Manning's N	MH046N062	MH046N054		T16581H	IRWD	PVC	{98B00139-B8A5-487A-BFCC-830491AADF40}	CLMH046N062MH046N054	60.98	60.50	0.666666667	MH046N062	MH046N054			128	CLMH046N062MH046N054	8	0.0038	0.004986	0.07	0.005987	0.07	0.007097	0.08	0.005987	0.07		
CLMH046N063MH046N052		2006		Existing	assumed Manning's N	MH046N063	MH046N052		T16581H	IRWD	PVC	{80FF59A8-223C-40B9-9550-D58F1976F05C}	CLMH046N063MH046N052	57.71	56.99	0.666666667	MH046N063	MH046N052			184	CLMH046N063MH046N052	8	0.0039	0.027805	0.15	0.033367	0.16	0.039562	0.18	0.033367	0.16		
CLMH046N081MH046N082		2004		Existing	assumed Manning's N	MH046N081	MH046N082		A001852	IRWD	VCP	{A905C5A8-D8BC-4E8A-858A-8D9124D9F502}	CLMH046N081MH046N082	50.34	50.25	0.833333333	MH046N081	MH046N082			69	CLMH046N081MH046N082	10	0.0013	0.114101	0.26	0.136975	0.28	0.162398	0.30	0.136975	0.28		
CLMH046N089MH046N083		2004		Existing	assumed Manning's N	MH046N089	MH046N083		A001852	IRWD	VCP	{46B69EA2-A9B2-4E8B-8DB2-B8B52B71673D}	CLMH046N089MH046N083	50.15	49.84	0.833333333	MH046N089	MH046N083			110	CLMH046N089MH046N083	10	0.0028	0.114099	0.24	0.136973	0.27	0.162397	0.29	0.136973	0.27		
CLMH046N083MH046N090		2004		Existing	assumed Manning's N	MH046N083	MH046N090		A001852	IRWD	PVC	{728521A5-F982-4073-B1A4-A58958A0B426}	CLMH046N083MH046N090	49.97	48.96	0.833333333	MH046N083	MH046N090			252	CLMH046N083MH046N090	10	0.0040	0.000350	0.01	0.000388	0.02	0.000442	0.03	0.038376	0.13		
CLMH046N084MH046N083		2004		Existing	assumed Manning's N	MH046N084	MH046N083		A001852	IRWD	PVC	{5D076250-50FD-4B48-B4F2-2457CB037C26}	CLMH046N084MH046N083	50.95	50.07	0.833333333	MH046N084	MH046N083			221	CLMH046N084MH046N083	10	0.0040	0.000350	0.01	0.000374	0.01	0.000443	0.01	0.038376	0.13		
CLMH046N085MH046N087		2004		Existing	assumed Manning's N	MH046N085	MH046N087		A001852	IRWD	PVC	{15303569-3F1E-4CBE-A379-F723C7D385E4}	CLMH046N085MH046N087	53.20	52.26	0.833333333	MH046N085	MH046N087			234	CLMH046N085MH046N087	10	0.0040	0.000351	0.01	0.000375	0.01	0.000444	0.01	0.031129	0.08		
CLMH046N086MH046N085		2004		Existing	assumed Manning's N	MH046N086	MH046N085		1852	IRWD	PVC	{A6D31C2F-9D97-4997-BA82-1F0DB7E76F2C}	CLMH046N086MH046N085	54.42	53.30	0.833333333	MH046N086	MH046N085			279	CLMH046N086MH046N085	10	0.0040	0.000351	0.01	0.000375	0.01	0.000444	0.01	0.031129	0.08		
CLMH046N087MH046N084		2004		Existing	assumed Manning's N	MH046N087	MH046N084		A001852	IRWD	PVC	{89ACB519-86A3-4E0D-94D7-1F4FDFB5B382}	CLMH046N087MH046N084	52.16	51.05	0.833333333	MH046N087	MH046N084			277	CLMH046N087MH046N084	10	0.0040	0.000351	0.01	0.000374	0.01	0.000443	0.01	0.038376	0.13		
CLMH046N088MH046N150		2015		Existing	assumed Manning's N	MH046N088	MH046N150		A001852C	IRWD	PVC	{02CE90F9-A4C9-4BFE-938F-6B8209115150}	CLMH046N088MH046N150	47.66	45.10	0.833333333	MH046N088	MH046N150			249	CLMH046N088MH046N150	10	0.0103	0.114353	0.18	0.137452	0.20	0.162716	0.22	0.190752	0.23		
CLMH046N090MH046N088		2004		Existing	assumed Manning's N	MH046N090	MH046N088		A001852	IRWD	VCP	{59C15B88-C407-43BA-A8C2-712E1458FDCE41}	CLMH046N090MH046N088	49.74	48.86	0.833333333	MH046N090	MH046N088			314	CLMH046N090MH046N088	10	0.0028	0.114088	0.25	0.136967	0.27	0.162393	0.30	0.136967	0.27		
CLMH046N090MH046N088		2004		Existing	assumed Manning's N	MH046N090	MH046N088		A001852	IRWD	VCP	{B0CE6064-7D18-40F9-BA51-EEEF2649E4A4}	CLMH046N090MH046N088	48.76	47.86	0.833333333	MH046N090	MH046N088			208	CLMH046N090MH046N088	10	0.0043	0.114356	0.23	0.137256	0.25	0.162717	0.27	0.161334	0.27		
CLMH046N091MH046N092		2004		Existing	assumed Manning's N	MH046N091	MH046N092		A01852	IRWD	PVC	{894626BD-DB80-49B8-997C-2748EDAEECD3}	CLMH046N091MH046N092	53.55	53.04	1.250000000	MH046N091	MH046N092			340	CLMH046N091MH046N092	15	0.0015	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046N092MH046N028		2004		Existing	assumed Manning's N	MH046N092	MH046N028		A01852	IRWD	VCP	{33F2E771-7547-456B-9B1F-9B9141BBF373}	CLMH046N092MH046N028	52.94	52.60	1.250000000	MH046N092	MH046N028			223	CLMH046N092MH046N028	15	0.0015	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046N093MH046N132		2004		Existing	assumed Manning's N	MH046N093	MH046N132		A001852	IRWD	PVC	{6953CB8C-A32A-41AE-9B01-F8CE6C48C17B}	CLMH046N093MH046N132	52.03	51.64	1.250000000	MH046N093	MH046N132			256	CLMH046N093MH046N132	15	0.0015	0.086165	0.14	0.117573	0.18	0.126268	0.19	0.117575	0.18		
CLMH046N132MH010E068		2004		Existing	assumed Manning's N	MH046N132	MH010E068		A01852	IRWD	PVC	{A65B7DF4-E85F-4979-ABA9-A90763D26C70}	CLMH046N132MH010E068	51.54	51.23	1.250000000	MH046N132	MH010E068			212	CLMH046N132MH010E068	15	0.0015	0.199363	0.21	0.239091	0.23	0.283598	0.24	0.239090	0.23		
CLMH046N133MH046N132		2004		Existing	assumed Manning's N	MH046N133	MH046N132		T16581	IRWD	PVC	{FAE9C01F-7380-488C-9631-68444A7F174F}	CLMH046N133MH046N132	52.09	52.04	0.666666667	MH046N133	MH046N132			28	CLMH046N133MH046N132	8	0.0018	0.113283	0.32	0.136106	0.35	0.161425	0.38	0.136105	0.35		
CLMH046N134MH046N020		2004		Existing	assumed Manning's N	MH046N134	MH046N020		T16581	IRWD	PVC	{FGFA1003-8932-452E-98B5-2A5B82FF16E0}	CLMH046N134MH046N020	55.28	54.53	0.666666667	MH046N134	MH046N020			188	CLMH046N134MH046N020	8	0.0040	0.017988	0.12	0.021360	0.13	0.025325	0.14	0.021360	0.13		
CLMH046N135MH046N138		2005		Existing	assumed Manning's N	MH046N135	MH046N138		T16581	IRWD	PVC	{DB7AB21E-51DF-4076-80D1-65C5B699DE83}	CLMH046N135MH046N138	57.04	55.66	0.666666667	MH046N135	MH046N138			206	CLMH046N135MH046N138	8	0.0050	0.007793	0.08	0.009346	0.08	0.011079	0.09	0.009346	0.08		
CLMH046N136MH046N137		2005		Existing	assumed Manning's N	MH046N136	MH046N137		T16581	IRWD	PVC	{E19F69D8-F37F-43CC-8B76-463DF6F18530}	CLMH046N136MH046N137	57.59	56.83	0.666666667	MH046N136	MH046N137			195	CLMH046N136MH046N137	8	0.0039	0.007429	0.08	0.008922	0.09	0.010576	0.09	0.008922	0.09		
CLMH046N137MH046N142		2005		Existing	assumed Manning's N	MH046N137	MH046N142		T16581	IRWD	PVC	{4605C593-4CCD-46BE-8E56-BAA439A85E57}	CLMH046N137MH046N142	56.72	54.29	0.666666667	MH046N137	MH046N142			326	CLMH046N137MH046N142	8	0.0075	0.010286	0.08	0.012353	0.09	0.014644	0.10	0.012353	0.09		
CLMH046N138MH046N140		2005		Existing	assumed Manning's N	MH046N138	MH046N140		T16581	IRWD	PVC	{2859B81E-0B F7-48C8-865C-B0F1935EEE13}	CLMH046N138MH046N140	55.47	55.27	0.666666667	MH046N138	MH046N140			51	CLMH046N138MH046N140	8	0.0039	0.009094	0.09	0.010909	0.09	0.012931	0.10	0.010909	0.09		
CLMH046N139MH046N144		2005		Existing	assumed Manning's N	MH046N139	MH046N144		T16581	IRWD	PVC	{D1812B0E-88AA-47E4-A1AE-DA907E1D7393}	CLMH046N139MH046N144	53.68	52.56	1.000000000	MH046N139	MH046N144			299	CLMH046N139MH046N144	12	0.0037	0.058845	0.13	0.070252	0.14	0.083312	0.15	0.070252	0.14		
CLMH046N140MH046N141		2005		Existing	assumed Manning's N	MH046N140	MH046N141		T16581	IRWD	PVC	{71178F59-262A-4E4C-AECA-20B635CD7AFE}	CLMH046N140MH046N141	55.08	54.61	0.666666667	MH046N140	MH046N141			50	CLMH046N140MH046N141	8	0.0094	0.009094	0.09	0.010909	0.10	0.012931	0.11	0.010909	0.10		
CLMH046N141MH046N142		2005		Existing	assumed Manning's N	MH046N141	MH046N142		T16581	IRWD	PVC	{F1118BE3-CE06-4FA7-A0CB-ABA9-4576B8CE3911}	CLMH046N141MH046N142	54.52	54.18	0.666666667	MH046N141	MH046N142			141	CLMH046N141MH046N142	8	0.0023	0.042738	0.20	0.051290	0.22	0.060808	0.24	0.051290	0.22		
CLMH046N142MH046N030		2005		Existing	assumed Manning's N	MH046N142	MH046N030		T16581	IRWD	PVC	{EDFC7468-A2FC-4A14-857E-3DB73B533541}	CLMH046N142MH046N030	54.09	53.50	0.666666667	MH046N142	MH046N030			152	CLMH046N142MH046N030	8	0.0039	0.053023	0.21	0.063643	0.23	0.075452	0.25	0.063643	0.23		
CLMH046N144MH046N093		2004		Existing	assumed Manning's N	MH046N144	MH046N093		A001852	IRWD	PVC	{979FF36E-88F6-4CBD-BA1A-D52A7186B581}	CLMH046N144MH046N093	52.36	52.04	1.250000000	MH046N144	MH046N093			15	CLMH046N144MH046N093	15	0.0014	0.086194	0.14	0.103098	0.15	0.122259	0.16	0.103098	0.15		
CLMH046N145MH046N033		2005		Existing	assumed Manning's N	MH046N145	MH046N033		T16581	IRWD	PVC	{07E7D1E4-77A3-4E0D-ABBD-A947FDD5BFAC}	CLMH046N145MH046N033	52.91	52.18	0.666666667	MH046N145	MH046N033			125	CLMH046N145MH046N033	8	0.0058	0.081030	0.24	0.097270	0.26	0.115320	0.29	0.097270	0.26		
CLMH046N148MH046N149		2012		Existing	assumed Manning's N	MH046N148	MH046N149		T16695J	IRWD	PVC	{5D2D2D9B-44E8-4518-A53C-CD86D0564058}	CLMH046N148MH046N149	43.51	42.74	1.000000000	MH046N148	MH046N149			350	CLMH046N148MH046N149	12	0.0022	0.114321	0.20	0.137252	0.22	0.162701	0.24	0.190713	0.26		
CLMH046N149MH046E007		2012		Existing	assumed Manning's N	MH046N149	MH046E007		T16695J	IRWD	PVC	{6C09EF6C-3A30-441F-BC39-BCF850108CE1}	CLMH046N149MH046E007	42.64	41.76	1.000000000	MH046N149	MH046E007			424	CLMH046N149MH046E007	12	0.0024	0.114310	0.22	0.137235	0.24	0.162696	0.26	0.190695	0.28		
CLMH046N150MH046N148	132' FROM E-W IS	2015		Existing	assumed Manning's N	MH046N150	MH046N148		A01852C	IRWD	PVC	{09438645-9A71-489B-B31B-44B7952EAE55}	CLMH046N150FID46N029	45.10	43.83	0.833333333	MH046N150	MH046N148			116	CLMH046N150MH046N148	10	0.0109	0.114348	0.18	0.137329	0.20	0.162714	0.22	0.190745	0.23		
CLMH046N151MH046N086		2004		Existing	assumed Manning's N	MH046N151	MH046N086		1852	IRWD	PVC	{B73B2825-3ACA-4A03-95FF-AB7577CFE47}	CLMH046N151MH046N086	55.23	54.62	0.666666667	MH046N151	MH046N086			61	CLMH046N151MH046N086	8	0.0033	0.000351	0.01	0.000374	0.01	0.000443	0.01	0.000375	0.01		
CLMH046N152MH046N086		2004		Existing	assumed Manning's N	MH046N152	MH046N086		1852	IRWD	PVC	{5DB17F2F-AFA4-492D-AA2A-DDDE10930FBB}	CLMH046N152MH046N086	54.98	54.62	0.666666667	MH046N152	MH046N086			54	CLMH046N152MH046N086	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012759	0.09		
CLMH046S004MH047E003		1989		Existing	assumed Manning's N	MH046S004	MH047E003		A01671	IRWD	VCP	{72D95D28-D786-466F-ACB4-98B87ECA2DBD}	CLMH046S004MH047E003	40.59	39.74	0.833333333	MH046S004	MH047E003			260	CLMH046S004MH047E003	10	0.0033	0.038872	0.14	0.046528	0.15	0.055163	0.17	0.046528	0.15		
CLMH046S005MH047E054		2006		Existing	assumed Manning's N	MH046S005	MH047E054		T16695	IRWD	PVC	{F331631F-09A8-45D5-9BAA-718F00AB912C}	CLMH046S005MH047E054	33.33	33.01	1.666666667	MH046S005	MH047E054			275	CLMH046S005MH047E054	20	0.0012	0.076024	0.10	0.083615	0.10	0.100658	0.11	0.708334	0.27		
CLMH046S006MH046S005		2006		Existing	assumed Manning's N	MH046S006	MH046S005		T16695	IRWD	PVC	{F9386C1D-BAFD-474F-9B6D-A21ACF7493E3}	CLMH046S006MH046S005	33.76	33.43	1.666666667	MH046S006	MH046S005			277	CLMH046S006MH046S005	20	0.0012	0.076031	0.10	0.083619	0.10	0.100661	0.11	0.708913	0.27		
CLMH046S007MH047E060		2006		Existing	assumed Manning's N	MH046S007	MH047E060		T16695A	IRWD	PVC	{CFD31E04-1FD2-42B1-AFC3-65B4A51A2FBA}	CLMH046S007MH047E060	38.14	37.77	1.333333333	MH046S007	MH047E060			250	CLMH046S007MH047E060	16	0.0015	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046S008MH046S007		2006		Existing	assumed Manning's N	MH046S008	MH046S007		T16695A	IRWD	PVC	{36BCD38E-B6B1-4002-A223-3B3AE9CSE2CF}	CLMH046S008MH046S007	38.60	38.24	1.333333333	MH046S008	MH046S007			247	CLMH046S008MH046S007	16	0.0015	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046S009MH046S008		2006		Existing	assumed Manning's N	MH046S009	MH046S008		T16695A	IRWD	PVC	{BADDF205-0619-4E7F-8526-6AFD7B76FB6}	CLMH046S009MH046S008	38.83	38.70	1.333333333	MH046S009	MH046S008			16	CLMH046S009MH046S008	16	0.0014	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046S009MH046S017		2014		Existing	assumed Manning's N	MH046S009	MH046S017		T16695J	IRWD	PVC	{B1E8AA5F-86D7-416A-962D-06CEAC2875F4}	CLMH046S009MH046S017	35.60	35.06	1.500000000	MH046S009	MH046S017			449	CLMH046S009MH046S017	18	0.0012	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.307774	0.21		
CLMH046S010MH046S006	CONNECTS TO OT	2007		Existing	assumed Manning's N	MH046S010	MH046S006		A002175	IRWD	PVC	{495D5DAE-21AA-439C-9905-8904A5743253}	CLMH046S010MH046S006	39.16	33.96	0.666666667	MH046S010	MH046S006			104	CLMH046S010MH046S006	8	0.0500	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH046S011MH046S012		2012		Existing	assumed Manning's N	MH046S011	MH046S012		T16695J	IRWD	PVC	{1A571188-B81C-4885-9D78-1AE0B47DF43A}	CLMH046S011MH046S012	40.89	40.19	1.000000000	MH046S011	MH046S012			321	CLMH046S011MH046S012	12	0.0022	0.114133	0.20	0.137104	0.22	0.162598	0.24	0.190511	0.25		
CLMH046S012MH046S013		2012		Existing	assumed Manning's N	MH046S012	MH046S013		T16695J	IRWD	PVC	{BD226F9AA-A764-499F-8B1D-58BBB8BDF9CB}	CLMH046S012MH046S013	40.09	39.34	1.000000000	MH046S012	MH046S013			347	CLMH046S012MH046S013	12	0.0022	0.114052	0.20	0.137042	0.22	0.162548	0.24	0.519750	0.43		
CLMH046S013MH046S014		2014		Existing	assumed Manning's N	MH046S013	MH046S014		T16695J	IRWD	PVC	{F3AB719F-BC64-4C97-B8BC-B0DA74B211F2}	CLMH046S013MH046S014	39.24	38.48	1.000000000	MH046S013	MH046S014			366	CLMH046S013MH046S014	12	0.0021	0.113945	0.20	0.136959	0.22	0.162477	0.24	0.519307	0.44		
CLMH046S014MH046S015		2014		Existing	assumed Manning's N	MH046S014	MH046S015		T16695J	IRWD	PVC	{2?FE7FAE-A6DF-4CF5-8202-B1403F558F4F}	CLMH046S014MH046S015	38.38	37.68	1.000000000	MH046S014	MH046S015	Future Less than 15-in, d/D >0.50		320	CLMH046S014MH046S015	12	0.0022	0.113857	0.21	0.136889	0.23	0.165555	0.26	0.519133	0.68		
CLMH046S015MH046S016		2014		Existing	assumed Manning's N	MH046S015	MH046S016		T16695J	IRWD	PVC	{CF5C7DA0-F635-466A-B85A-D7D64F547404}	CLMH046S015MH046S016	37.48	36.57	1.000000000	MH046S015	MH046S016	Future Less than 15-in, d/D >0.50		4230	CLMH046S015MH046S016	12	0.0002	0.076050	0.29	0.083632	0.30	0.100668	0.33	0.394497	0.66		
CLMH046S016MH046S017		2014		Existing	assumed Manning's N	MH046S016	MH046S017		T16695J	IRWD	PVC	{718AF7D3-F002-48F9-BBAC-EA64CD46D8A5}	CLMH046S016MH046S017	36.47	34.32	1.000000000	MH046S016	MH046S017			431	CLMH046S016MH046S017	12	0.0050	0.076043	0.14	0.083627	0.15	0.100665	0.16	0.414584	0.33		
CLMH046S017MH046S006		2014		Existing	assumed Manning's N	MH046S017	MH046S006		T16695J	IRWD	PVC	{BD5A2461-10B6-4D95-9F0B-6AC561D99DA4}	CLMH046S017MH046S006	34.12	33.87	1.666666667	MH046S017	MH046S006			216	CLMH046S017MH046S006	20	0.0012	0.076038	0.10	0.083624	0.10	0.100664	0.11	0.710086	0.27		
CLMH046S018MH046S019		2014		Existing	assumed Manning's N	MH046S018	MH046S019		T16695J	IRWD	PVC	{B8EC8582-8A37-42A2-83B9-461560B3ECE2}	CLMH046S018MH046S019	36.48	36.11	1.500000000	MH046S018	MH046S019			308	CLMH046S018MH046S019	18	0.0012	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.309415	0.21		
CLMH046S019MH046S020		2014		Existing	assumed Manning's N	MH046S019	MH046S020		T16695J	IRWD	PVC	{97E61123-3FC6-4EEB-ABAA-6D5327C130EA}	CLMH046S019MH046S020	36.06	35.94	1.500000000	MH046S019	MH046S020			117	CLMH046S019MH046S020	18	0.0010	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.309371	0.20		
CLMH046S020MH046S009		2014		Existing	assumed Manning's N	MH046S020	MH046S009		T16695J	IRWD	PVC	{E4D9E674-9438-48B0-ABE4-8EA1F0932F0B}	CLMH046S020MH046S009	35.84	35.70	1.500000000	MH046S020	MH046S009			117	CLMH046S020MH046S009	18	0.0012	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.309279	0.20		
CLMH046S021MH046S022		2014		Existing	assumed Manning's N	MH046S021	MH046S022		T16695J	IRWD	PVC	{7309E274-FF9D-45C5-B8BB-3A1

CLMH047E051MH047E049		2006		Existing	assumed Mannings N	MH047E051	MH047E049		T16695D	IRWD	PVC	{6F415787-5E27-4E3F-890D-E57CD78CE11C}	CLMH047E051MH047E049	37.90	37.68	1.250000000	MH047E051	MH047E049				152	CLMH047E051MH047E049	15	0.0014	0.008541	0.05	0.009120	0.05	0.010811	0.05	0.009120	0.05		
CLMH047E052MH047E051		2006		Existing	assumed Mannings N	MH047E052	MH047E051		T16695D	IRWD	PVC	{C0EB6418-2FC9-4969-80F9-DA1167A4DA1D}	CLMH047E052MH047E051	38.38	38.00	1.250000000	MH047E052	MH047E051				258	CLMH047E052MH047E051	15	0.0015	0.008541	0.05	0.009120	0.05	0.010811	0.05	0.009120	0.05		
CLMH047E053MH047N022		2006		Existing	assumed Mannings N	MH047E053	MH047N022		T16695	IRWD	PVC	{4698A19E-F4F9-42D7-90FD-8E29AE4214E7}	CLMH047E053MH047N022	32.01	31.55	1.666666667	MH047E053	MH047N022				301	CLMH047E053MH047N022	20	0.0015	0.097392	0.11	0.107117	0.12	0.128331	0.13	0.728994	0.30		
CLMH047E054MH047E055		2006		Existing	assumed Mannings N	MH047E054	MH047E055		T16695	IRWD	PVC	{ADA0906F-7332-42B2-B88B-2A7BD130CF60}	CLMH047E054MH047E055	32.91	32.59	1.666666667	MH047E054	MH047E055				275	CLMH047E054MH047E055	20	0.0012	0.076016	0.10	0.083631	0.10	0.100655	0.11	0.707958	0.27		
CLMH047E055MH047E053		2006		Existing	assumed Mannings N	MH047E055	MH047E053		T16695	IRWD	PVC	{3ACD9CAA-5491-4A3C-B600-D0D58366D119}	CLMH047E053MH047E055	32.49	32.11	1.666666667	MH047E055	MH047E053				326	CLMH047E055MH047E053	20	0.0012	0.097393	0.11	0.107125	0.11	0.128332	0.12	0.729091	0.28		
CLMH047E056MH047E065		2006		Existing	assumed Mannings N	MH047E056	MH047E065		T16695A	IRWD	PVC	{5E3E1DD9-5C26-401A-A05D-051ED3751F9A}	CLMH047E065MH047E056	34.28	34.02	1.333333333	MH047E056	MH047E065				177	CLMH047E056MH047E065	16	0.0015	0.064560	0.11	0.068930	0.11	0.081718	0.12	0.068930	0.11		
CLMH047E058MH047E064		2006		Existing	assumed Mannings N	MH047E058	MH047E064		T16695A	IRWD	PVC	{E850AEC4-0001-4807-8B70-5201B09138EF}	CLMH047E064MH047E058	37.20	36.76	1.333333333	MH047E058	MH047E064				300	CLMH047E064MH047E058	16	0.0015	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH047E059MH047E055		2006		Existing	assumed Mannings N	MH047E059	MH047E055		T16695D	IRWD	PVC	{12BF075B-7006-4AB4-A495-9F42E769B18}	CLMH047E059MH047E055	34.53	32.69	1.000000000	MH047E059	MH047E055				98	CLMH047E059MH047E055	12	0.0189	0.022511	0.06	0.024034	0.06	0.028494	0.06	0.024034	0.20		
CLMH047E060MH047E058		2006		Existing	assumed Mannings N	MH047E060	MH047E058		T16695A	IRWD	PVC	{5AAAF28D-37E5-4D25-88AB-7D32BEC4DFB6}	CLMH047E058MH047E060	37.57	37.30	1.333333333	MH047E060	MH047E058				250	CLMH047E060MH047E058	16	0.0011	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH047E061MH047E062		2006		Existing	assumed Mannings N	MH047E061	MH047E062		T16695A	IRWD	PVC	{98F48DB9-6089-4796-A9AB-B3ACCA16A3F5}	CLMH047E062MH047E061	36.12	35.67	1.333333333	MH047E061	MH047E062				300	CLMH047E061MH047E062	16	0.0015	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH047E062MH047E038		2006		Existing	assumed Mannings N	MH047E062	MH047E038		T16695A	IRWD	PVC	{853C117C-C24A-4015-8FD3-881ACCEC5A32}	CLMH047E057MH047E062	35.57	35.27	1.333333333	MH047E062	MH047E038				200	CLMH047E062MH047E038	16	0.0015	0.002012	0.02	0.002149	0.02	0.002455	0.02	0.002149	0.02		
CLMH047E063MH047E056		2006		Existing	assumed Mannings N	MH047E063	MH047E056		T16695A	IRWD	PVC	{16BC3027-D83F-4B4D-B088-E898F1D96EBD}	CLMH047E056MH047E063	34.89	34.38	1.333333333	MH047E063	MH047E056				350	CLMH047E063MH047E056	16	0.0015	0.045044	0.10	0.048094	0.10	0.057016	0.11	0.048094	0.10		
CLMH047E064MH047E061		2006		Existing	assumed Mannings N	MH047E064	MH047E061		T16695A	IRWD	PVC	{27BE04FE-2AD2-45E8-B0A0-4A6A79645089}	CLMH047E061MH047E064	36.66	36.22	1.333333333	MH047E064	MH047E061				300	CLMH047E064MH047E061	16	0.0015	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH047E065MH047N028		2006		Existing	assumed Mannings N	MH047E065	MH047N028		T16695A	IRWD	PVC	{EE514779-DCDA-4516-9230-1A49FA09D02E}	CLMH047E065MH047N028	33.92	33.45	1.333333333	MH047E065	MH047N028				103	CLMH047E065MH047N028	16	0.0015	0.066734	0.12	0.071252	0.12	0.084471	0.13	0.071252	0.12		
CLMH047N001MH047N023		2006		Existing	assumed Mannings N	MH047N001	MH047N023		T16695	IRWD	PVC	{A97F5615-B26D-4121-B71B-ACF624483B07}	CLMH047N001MH047N023	31.04	30.69	1.666666667	MH047N001	MH047N023				217	CLMH047N001MH047N023	20	0.0016	0.097392	0.12	0.107085	0.13	0.128328	0.14	0.728549	0.31		
CLMH047N002MH047N001		2006		Existing	assumed Mannings N	MH047N002	MH047N001		16695D	IRWD	PVC	{8455A096-1248-44E3-AF2D-68F38B0C399D}	CLMH047N002MH047N001	33.09	31.23	1.000000000	MH047N002	MH047N001				84	CLMH047N002MH047N001	12	0.0221	0.000000	0.00	0.000000	0.00	0.000000	0.01	0.000000	0.15		
CLMH047N003MH047N002		2006		Existing	assumed Mannings N	MH047N003	MH047N002		16695D	IRWD	PVC	{D43FAF3A-EF15-4046-8890-7334D26AB387}	CLMH047N003MH047N002	39.06	33.09	1.000000000	MH047N003	MH047N002				301	CLMH047N003MH047N002	12	0.0198	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH047N004MH047N006		2006		Existing	assumed Mannings N	MH047N004	MH047N006		T16695D	IRWD	PVC	{85F5E47C-7A78-490E-B114-1E985FAC8651}	CLMH047N004MH047N006	36.13	35.45	0.666666667	MH047N004	MH047N006				124	CLMH047N004MH047N006	8	0.0055	0.001896	0.04	0.002023	0.04	0.002400	0.05	0.002023	0.04		
CLMH047N005MH047N004		2006		Existing	assumed Mannings N	MH047N005	MH047N004		T16695D	IRWD	PVC	{0257151F-0E2C-46F0-8F7D-1F1C72ED219C}	CLMH047N005MH047N004	37.18	36.13	0.666666667	MH047N005	MH047N004				230	CLMH047N005MH047N004	8	0.0046	0.001896	0.04	0.002024	0.04	0.002400	0.05	0.002024	0.04		
CLMH047N006MH047N008		2006		Existing	assumed Mannings N	MH047N006	MH047N008		T16695D	IRWD	PVC	{632D2A98-132E-4D65-A2A9-2DBC8CF4BAA7}	CLMH047N006MH047N008	35.45	34.25	0.666666667	MH047N006	MH047N008				248	CLMH047N006MH047N008	8	0.0048	0.001896	0.04	0.002023	0.04	0.002402	0.04	0.002023	0.04		
CLMH047N007MH047N017		2006		Existing	assumed Mannings N	MH047N007	MH047N017		T16695A	IRWD	PVC	{78FA3062-4AE9-4A1F-B6F2-F08A5FCC753E}	CLMH047N007MH047N017	32.45	31.88	1.333333333	MH047N007	MH047N017				252	CLMH047N007MH047N017	16	0.0023	0.184712	0.17	0.197214	0.17	0.233809	0.19	0.197214	0.17		
CLMH047N008MH047N007		2006		Existing	assumed Mannings N	MH047N008	MH047N007		T16695D	IRWD	PVC	{31609284-97B-458A-BCC3-476F8E4BD514}	CLMH047N008MH047N007	34.25	32.45	0.666666667	MH047N008	MH047N007				103	CLMH047N008MH047N007	8	0.0175	0.001896	0.21	0.002023	0.21	0.002400	0.23	0.002023	0.21		
CLMH047N009MH047N012		2006		Existing	assumed Mannings N	MH047N009	MH047N012		T16695D	IRWD	PVC	{EC65FD74-9033-43FF-B27E-835A31D8E065}	CLMH047N009MH047N012	35.72	33.93	1.333333333	MH047N009	MH047N012				400	CLMH047N009MH047N012	16	0.0045	0.000000	0.04	0.000000	0.05	0.000000	0.05	0.000000	0.04		
CLMH047N010MH047N016		2006		Existing	assumed Mannings N	MH047N010	MH047N016		T16695A	IRWD	PVC	{58C67EE3-F2FE-4918-B13E-EE43C6502109}	CLMH047N010MH047N016	33.36	33.09	1.333333333	MH047N010	MH047N016				45	CLMH047N010MH047N016	16	0.0060	0.116088	0.15	0.123943	0.15	0.146944	0.17	0.123943	0.15		
CLMH047N011MH047N010		2006		Existing	assumed Mannings N	MH047N011	MH047N010		T16695D	IRWD	PVC	{F6DE1F29-7792-4EE1-A2A9-654BBAC44B29}	CLMH047N011MH047N010	33.70	33.36	1.333333333	MH047N011	MH047N010				95	CLMH047N011MH047N010	16	0.0036	0.083842	0.11	0.089516	0.12	0.106128	0.13	0.089516	0.12		
CLMH047N012MH047N010		2006		Existing	assumed Mannings N	MH047N012	MH047N010		T16695D	IRWD	PVC	{4AD21E01-E78A-4CBD-B505-8AD08D9CBC66}	CLMH047N012MH047N010	33.93	33.36	1.250000000	MH047N012	MH047N010				327	CLMH047N012MH047N010	15	0.0017	0.032246	0.11	0.034427	0.11	0.040816	0.12	0.034427	0.11		
CLMH047N013MH047N012		2006		Existing	assumed Mannings N	MH047N013	MH047N012		T16695D	IRWD	PVC	{0DDDE20C-5CF6-44D7-BC62-D66C8E85E3FB}	CLMH047N013MH047N012	34.20	34.13	0.666666667	MH047N013	MH047N012				30	CLMH047N013MH047N012	8	0.0023	0.032246	0.17	0.034427	0.17	0.040816	0.19	0.034427	0.17		
CLMH047N014MH047N013		2006		Existing	assumed Mannings N	MH047N014	MH047N013		T16695D	IRWD	PVC	{FB6543EF-ABD7-473C-A893-DB992A2AB71C}	CLMH047N014MH047N013	34.61	34.20	0.666666667	MH047N014	MH047N013				106	CLMH047N014MH047N013	8	0.0039	0.032246	0.18	0.034427	0.18	0.040816	0.20	0.034427	0.18		
CLMH047N016MH047N029		2014		Existing	assumed Mannings N	MH047N016	MH047N029		T16695D	IRWD	PVC	{D45CB58F-565E-4974-BC11-F3AD2C4A5191}	CLMH047N016MH047N029	33.09	32.76	1.333333333	MH047N016	MH047N029				154	CLMH047N016MH047N029	8	0.0021	0.182821	0.19	0.195196	0.20	0.231414	0.22	0.195196	0.20		
CLMH047N017MH047N020		2006		Existing	assumed Mannings N	MH047N017	MH047N020		T16695A	IRWD	PVC	{9DD687C9-FD98-45EC-A043-BD90690BFE4}	CLMH047N017MH047N020	31.88	30.29	1.333333333	MH047N017	MH047N020				195	CLMH047N017MH047N020	16	0.0082	0.204763	0.14	0.218623	0.14	0.259190	0.16	0.218624	0.18		
CLMH047N020MH047N027		2014		Existing	assumed Mannings N	MH047N020	MH047N027		T16695X	IRWD	PVC	{59ECF187-A50F-4F63-B17B-BECCB04338BD}	CLMH047N020MH047N027	30.19	29.80	0.666666667	MH047N020	MH047N027				20	CLMH047N020MH047N027	20	0.0054	0.301085	0.18	0.323338	0.19	0.383723	0.20	0.914688	0.31		
CLMH047N021MH047N027		2014		Existing	assumed Mannings N	MH047N021	MH047N027		T16695X	IRWD	PVC	{A5FA31CA-7E7E-4681-98D6-53062FF20922}	CLMH047N021MH047N027	30.43	30.00	1.000000000	MH047N021	MH047N027				183	CLMH047N021MH047N027	12	0.0024	0.089114	0.17	0.106972	0.19	0.126839	0.20	0.211414	0.35		
CLMH047N022MH047N001		2006		Existing	assumed Mannings N	MH047N022	MH047N001		T16695	IRWD	PVC	{58FC80E3-BF37-4C70-A12A-4E015AD1200}	CLMH047N022MH047N001	31.55	31.04	1.666666667	MH047N022	MH047N001				350	CLMH047N022MH047N001	20	0.0015	0.097399	0.11	0.107099	0.12	0.128330	0.13	0.729090	0.30		
CLMH047N023MH047N020		2006		Existing	assumed Mannings N	MH047N023	MH047N020		16695D	IRWD	PVC	{D5A6F68D-3403-42F8-8C22-27B1F7AEE8DB}	CLMH047N023MH047N020	30.69	30.39	1.666666667	MH047N023	MH047N020				207	CLMH047N023MH047N020	20	0.0012	0.097381	0.11	0.107068	0.11	0.128324	0.12	0.728083	0.27		
CLMH047N024MH047N025		2014		Existing	assumed Mannings N	MH047N024	MH047N025		T16695X	IRWD	PVC	{2C7124AB-65AB-40A1-9708-92111CE62B66}	CLMH047N024MH047N025	28.86	28.51	1.666666667	MH047N024	MH047N025				606	CLMH047N024MH047N025	20	0.0006	0.353447	0.23	0.381646	0.24	0.455074	0.26	1.081176	0.39		
CLMH047N025MH047N067		2014		Existing	assumed Mannings N	MH047N025	MH047N067		T16695X	IRWD	PVC	{A1422EA1D-ED5E-40DC-913C-1F6B8D8B4531}	CLMH047N025MH047N067	28.41	27.92	1.666666667	MH047N025	MH047N067				418	CLMH047N025MH047N067	20	0.0012	0.133415	0.20	0.381596	0.21	0.455009	0.22	1.081089	0.34		
CLMH047N026MH047N024		2014		Existing	assumed Mannings N	MH047N026	MH047N024		T16695X	IRWD	PVC	{1EF10C1E-AC6C-4EB5-82D1-88D25E085EA2}	CLMH047N026MH047N024	29.50	28.96	1.666666667	MH047N026	MH047N024				49	CLMH047N026MH047N024	20	0.0110	0.353580	0.18	0.381951	0.19	0.455389	0.21	1.081546	0.33		
CLMH047N027MH047N026		2014		Existing	assumed Mannings N	MH047N027	MH047N026		T16695X	IRWD	PVC	{3B3FF92C-6ABF-47FB-B8A8-9022AAE40604}	CLMH047N027MH047N026	29.80	29.60	1.666666667	MH047N027	MH047N026				172	CLMH047N027MH047N026	20	0.0012	0.353580	0.19	0.381951	0.20	0.455389	0.21	1.081546	0.33		
CLMH047N028MH047N016		2006		Existing	assumed Mannings N	MH047N028	MH047N016		T16695A	IRWD	PVC	{2D630725-CF91-42DB-AEB8-647B7A72FB2C}	CLMH047N028MH047N016	33.35	33.09	1.333333333	MH047N028	MH047N016				112	CLMH047N028MH047N016	16	0.0023	0.066734	0.15	0.071252	0.15	0.084471	0.16	0.071252	0.15		
CLMH047N029MH047N027		2014		Existing	assumed Mannings N	MH047N029	MH047N027		T16695X	IRWD	PVC	{21158E56-FA85-40DF-B6F4-8545056526C}	CLMH047N029MH047N027	32.76	32.45	1.333333333	MH047N029	MH047N027				210	CLMH047N029MH047N027	16	0.0015	0.182820	0.20	0.195193	0.20	0.231411	0.22	0.195193	0.20		
CLMH047N040MH047N021		2014		Existing	assumed Mannings N	MH047N040	MH047N021		T17404	IRWD	PVC	{DAC543F1-A67F-4F54-BAF5-731C9864C90F}	CLMH047N040MH047N021	31.38	31.00	1.000000000	MH047N040	MH047N021				149	CLMH047N040MH047N021	12	0.0025	0.089115	0.17	0.106978	0.18	0.126839	0.20	0.211415	0.26		
CLMH047N041MH047N040		2014		Existing	assumed Mannings N	MH047N041	MH047N040		T17404	IRWD	PVC	{D5A266A9-DBE5-4166-836A-85DB4E9BD44C}	CLMH047N041MH047N040	31.90	31.48	1.000000000	MH047N041	MH047N040				173	CLMH047N041MH047N040	12	0.0024	0.089116	0.17	0.106978	0.19	0.126840	0.20	0.211415	0.26		
CLMH047N042MH047N041		2014		Existing	assumed Mannings N	MH047N042	MH047N041		T17404	IRWD	PVC	{37F1315C-8B99-41D5-B3CC-4A6947D8B29F}	CLMH047N042MH047N041	32.70	32.10	1.000000000	MH047N042	MH047N041				228	CLMH047N042MH047N041	12	0.0026	0.089116	0.17	0.106978	0.18	0.126840	0.20	0.170902	0.23		
CLMH047N043MH047N042		2014		Existing	assumed Mannings N	MH047N043	MH047N042		T17404	IRWD	PVC	{CE873B6F-F2E8-467D-9594-427F96D70AC1}	CLMH047N043MH047N042	33.20	32.90	1.000000000	MH047N043	MH047N042				118	CLMH047N043MH047N042	12	0.0025	0.066837	0.15	0.080234	0.16	0.095130	0.17	0.087813	0.17		
CLMH047N044MH047N043		2014		Existing	assumed Mannings N	MH047N044	MH047N043		T17404	IRWD	PVC	{543B04C3-1004-407D-9FC3-3BE21F5D15AB}	CLMH047N044MH047N043	33.40	33.30	1.000000000	MH047N044	MH047N043				41	CLMH047N044MH047N043	12	0.0024	0.066838	0.14	0.080234	0.16	0.095130	0.17	0.087813	0.16		
CLMH047N045MH047N044		2014		Existing	assumed Mannings N	MH047N045	MH047N044		T17404	IRWD	PVC	{D1324870-766E-46B1-AA8E-BA3F86A6EA46}	CLMH047N045MH047N044	38.15	33.60	0.666666667	MH047N045	MH047N044				165	CLMH047N045MH047N044	8	0.0276	0.011140	0.06	0.013372	0.07	0.015855	0.07	0.006323	0.05		
CLMH047N046MH047N045		2014		Existing	assumed Mannings N	MH047N046	MH047N045		T17404	IRWD	PVC	{DFE1D0F7-6513-4E59-B793-8B8F05DAFD82}	CLMH047N046MH047N045	34.53	33.50	1.000000000	MH047N046	MH047N045				133	CLMH047N046MH047N045	12	0.0028	0.055698	0.13	0.066862	0.15	0.079275	0.16	0.081491	0.16		
CLMH047N047MH047N046		2014		Existing	assumed Mannings N	MH047N047	MH047N046		T17404	IRWD	PVC	{D9AE60C1-0EB0-41F3-B6E4-41B515BA3C53}	CLMH047N047MH047N046	35.14	34.53	1.000000000	MH047N047	MH047N046				166	CLMH047N047MH047N046	12	0.0037	0.055698	0.14	0.066862	0.15	0.079275	0.17	0.081520	0.17		
CLMH047N048MH047N049		2014		Existing	assumed Mannings N	MH047N048	MH047N049		T17404	IRWD	PVC	{32CBEBF1-2D2C-4D89-BA7B-744E174495E2}	CLMH047N048MH047N049	39.03	35.71	0.666666667	MH047N048	MH047N049				122	CLMH047N048MH047N049	8	0.0273	0.011140	0.11	0.013372	0.12	0.015855	0.13	0.022570	0.16		
CLMH047N049MH047N047		2014		Existing	assumed Mannings N	MH047N049	MH047N047		T17404	IRWD	PVC	{FC0746F3-E74E-4B84-B7DC-95E4C5864C5C}	CLMH047N049MH047N047	35.71	35.14	1.000000000	MH047N049	MH047N047				146	CLMH047N049MH047N047	12	0.0039	0.033419	0.13	0.040117	0.14	0.047565	0.14	0.075679	0.15		
CLMH047N050MH047N049		2014		Existing	assumed Mannings N	MH047N050	MH047N049		T17404	IRWD	PVC	{07DCC598-84A8-433E-9D21-092D76319AA7}	CLMH047N050MH047N049	36.26	35.71	1.000000000	MH047N050	MH047N049				142	CLMH047N050MH047N049	12	0.0039	0.022279	0.09	0.026745	0.10	0.031710	0.11	0.065215	0.14		
CLMH047N051MH047N047		2014		Existing	assumed Mannings N	MH047N051	MH047N047		T17404	IRWD	PVC	{5E281888-89D3-4CCB-9AC5-80EFDF9A8DDD}	CLMH047N051MH047N047	42.74	35.14	0.666666667	MH047N051	MH047N047				128	CLMH047N051MH047N047	8	0.0597	0.011140	0.12	0.013372	0.14	0.015855	0.15	0.004688	0.14		
CLMH047N052MH047N047		2014		Existing	assumed Mannings N	MH047N052	MH047N047		T17404	IRWD	PVC	{63CC67C4-66CB-40B7-A201-7B30C1796BA8}	CLMH047N052MH047N047	41.33	35.14	0.666666667	MH047N052	MH047N047				282	CLMH047N052MH047N047	8	0.0219	0.011140	0.13	0.013372	0.14	0.015855	0.16	0.002608	0.14		
CLMH047N053MH047N042		2014		Existing	assumed Mannings N	MH047N053	MH047N042		T17404	IRWD	PVC	{E7C42920-F2C8-4936-B2AF-F27B5708C53E}	CLMH047N053MH047N042	38.21	32.80	0.666666667	MH047N053	MH047N042				89	CLMH047N053MH047N042	8	0.0607	0.022279	0.12	0.026745	0.14	0.031710	0.13	0.083109	0.18		
CLMH047N054MH047N050		2014		Existing	assumed Mannings N	MH047N054	MH047N050		T17404	IRWD	PVC	{32D3333E-670B-40CA-8B4E-5B47F4777175}	CLMH047N054MH047N050	41.50	36.26	0.666666667	MH047N054	MH047N050				270	CLMH047N054MH047N050	8	0.0194	0.011140	0.10	0.013372	0.11	0.015855	0.11	0.019229	0.14		
CLMH047N055MH047N063		2014		Existing	assumed Mannings N	MH047N055	MH047N063		17404C	IRWD	PVC	{11D39552-FAB7-4345-85B0-6AF3ADDF9280}	CLMH047N055MH047N063	42.61	42.14	0.666666667	MH047N055	MH047N063				95	CLMH047N055MH047N063	8	0.0049	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.055346	0.20		
CLMH047N056MH047N053		2014		Existing	assumed Mannings N	MH047N056	MH047N053		17404C	IRWD	PVC	{4515C007-E9B3-4DB7-A661-3D6D8A272181}	CLMH047N056MH047N053	39.26	38.46	0.666666667	MH047N056	MH047N053				180	CLMH047N056MH047N053	8	0.0044	0.022279	0.14	0.026745	0.14	0.031710	0.16	0.083109	0.25		
CLMH047N057MH047N056		2014		Existing	assumed Mannings N	MH047N057	MH047N056		17404C	IRWD	PVC	{0A80E654-A7D1-4502-92ED-3ADCE9FD449D}	CLMH047N057MH047N056	40.64	39.46	0.666666667	MH047N057	MH047N056				237	CLMH047N057MH047N056	8	0.0050	0.022279	0.13	0.026745	0.14	0.031710	0.15	0.083109	0.25		
CLMH047N058MH047N061		2014		Existing	assumed Mannings N	MH047N058	MH047N061		17404C	IRWD	PVC	{1E856512-EE01-4E93-B175-238B007A0D72}	CLMH047N058MH047N061	42.38	40.15	0.666666667	MH047N058	MH047N061				112	CLMH047N058MH047N061	8	0.0199	0.011140	0.07	0.013372	0.07	0.015855	0.08	0.022570	0.09		
CLMH047N059MH047N064		2014		Existing	assumed Mannings N	MH047N059	MH047N064		17404C	IRWD	PVC	{75175AA0-D82E-473A-98C5-B7C4D1D12646}	CLMH047N059MH047N064	41.91	41.21	0.666666667	MH047N059	MH047N064				140	CLMH047N059MH047N064	8	0.0050	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.027763	0.14		
CLMH047N060MH047N057		2014		Existing	assumed Mannings N	MH047N060	MH047N057		17404C	IRWD	PVC	{FDBEFCA0-0119-4A91-BAB1-2E2AF5965844}	CLMH047N060MH047N057	41.45	40.84	0.666666667	MH047N060	MH047N057				123	CLMH047N060MH047N057	8	0.0050	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.055346	0.20		
CLMH047N061MH047N065		2014		Existing	assumed Mannings N	MH047N061	MH047N065		17404C	IRWD	PVC	{3FE2610A-9FBF-42D3-A241-579210FA1F25}	CLMH047N061MH047N065	39.95	39.60	0.666666667	MH047N061	MH047N065				69	CLMH047N061MH047N065	8	0.0051	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.022570	0.13		
CLMH047N062MH047N059		2014		Existing	assumed Mannings N	MH047N062	MH047N059		17404C	IRWD	PVC	{6A9E198F-2CA3-4259-9843-548C59783FB}	CLMH047N062MH047N059	43.34	42.11	0.666666667	MH047N062	MH047N059				100	CLMH047N062MH047N059	8	0.0123	0.011140	0.08	0.013372	0.08	0.015855	0.09	0.027763	0.12		
CLMH047N063MH047N060		2014		Existing	assumed Mannings N	MH047N063	MH047N060		17404C	IRWD	PVC	{8B3D1E05-33F6-4576-8493-B9C7C09F10A5}	CLMH047N063MH047N060	41.94	41.65	0.666666667	MH047N063	MH047N060				58	CLMH047N063MH047N060	8	0.0050	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.055346	0.20		
CLMH047N064MH047N062		2014		Existing	assumed Mannings N	MH047N064	MH047N062		17404C	IRWD	PVC	{3E13E77E-9701-4BE1-8F6F-5710278F5E22}	CLMH047N064MH047N062	41.01	40.84	0.666666667	MH047N064	MH047N062				34	CLMH047N064MH047N062	8	0.0050	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.027763	0.14		
CLMH047N065MH047N048		2014		Existing	assumed Mannings N	MH047N065	MH047N048		17404C	IRWD	PVC	{5F53370E-7B4E-495E-BC3F-238DC5531E9}	CLMH047N065MH047N048	39.40	39.18	0.666666667	MH047N065	MH047N048				45	CLMH047N065MH047N048	8	0.0049	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.022570	0.13		
CLMH047N066MH047N045		2014		Existing	assumed Mannings N	MH047N066	MH047N045		T17404C	IRWD	PVC	{1C17C6F5-AD9F-4725-9764-F88C59F69434}	CLMH047N066MH047N045	38.55	38.25	0.666666667	MH047N066	MH047N045				60	CLMH047N066MH047N045	8	0.0050	0.011140	0.09	0.013372	0.10	0.015855	0.11	0.006323	0.07		
CLMH047N067MH047N068		2014		Existing	assumed Mannings N	MH047N067	MH047N068		T16695K	IRWD	PVC	{1747DF2E-0799-4B43-BA04-D7D3B4ABFD08}	CLMH047N067MH047N068	27.72	27.47	1.666666667	MH047N067	MH047N068				215	CLMH047N067MH047N068	20	0.0012	0.354240	0.19	0.382455	0.20	0.456035	0.22	1.081955	0.33		
CLMH047N068MH047N069		2014		Existing	assumed Mannings N	MH047N068	MH047N069		T16695K	IRWD	PVC	{09967C73-834E-4D5D-B618-864D7CBAC4FC}	CLMH047N068MH047N069	27.37	27.10	1.666666667	MH047N068	MH047N069				221	CLMH047N068MH047N069	20	0.0012	0.354234	0.19	0.382446	0.20	0.456024	0.22	1.081946	0.33		
CLMH047N069MH047N070		2014		Existing	assumed Mannings N	MH047N069	MH047N070		T16695K	IRWD	PVC	{AEABC385-FE8A-4780-88

CLMH0475085MH048E052	NO SLOPE INFO F	0		Existing	assumed Mannings N	MH0475085	MH048E052			IRWD	PVC	[308CA64D-5887-4B61-8AAB-890EE371E756]	26.95	26.62	1.000000000	MH0475085	MH048E052				150	CLMH0475085MH048E052	12	0.0022	0.000000	0.02	0.000000	0.03	0.000000	0.04	0.087683	0.18
CLMH0475086MH0475050		1973		Existing	assumed Mannings N	MH0475086	MH0475050		T07840	IRWD	VCP	{F8025388-3F0E-4A0D-9B09-81324F7762EE}	26.30	26.00	1.000000000	MH0475086	MH0475050				156	CLMH0475086MH0475050	12	0.0019	0.152495	0.24	0.163017	0.25	0.193326	0.27	0.163017	0.25
CLMH0475089MH0475086		1973		Existing	assumed Mannings N	MH0475089	MH0475086		T07840	IRWD	VCP	{8FF47492-8D6F-4C42-BA08-1895A1F6FBB8}	26.71	26.30	1.000000000	MH0475089	MH0475086				204	CLMH0475089MH0475086	12	0.0020	0.152529	0.27	0.163048	0.28	0.193350	0.30	0.163048	0.28
CLMH0475091MH0475068		1971		Existing	assumed Mannings N	MH0475091	MH0475068		T07840	IRWD	VCP	{16E38D58-662D-40A4-9F29-9A5B61535B08}	28.55	28.36	0.666666667	MH0475091	MH0475068				100	CLMH0475091MH0475068	8	0.0019	0.039269	0.21	0.046853	0.23	0.055547	0.24	0.046853	0.23
CLMH047W001MH047W003		1971		Existing	assumed Mannings N	MH047W001	MH047W003		A01672	IRWD	VCP	{FE56D6F0-7D24-4444-9EA8-E949BBA30FDB}	33.40	31.50	0.666666667	MH047W001	MH047W003				396	CLMH047W001MH047W003	8	0.0048	0.055693	0.21	0.059461	0.22	0.070494	0.24	0.059461	0.22
CLMH047W002MH047W004		1973		Existing	assumed Mannings N	MH047W002	MH047W004		T07840	IRWD	VCP	{6975554B-8E20-41C8-802F-28A6EA243138}	33.59	32.50	0.666666667	MH047W002	MH047W004				341	CLMH047W002MH047W004	8	0.0032	0.045280	0.21	0.048342	0.21	0.057313	0.23	0.048342	0.21
CLMH047W003MH047W005		1973		Existing	assumed Mannings N	MH047W003	MH047W005		A01672	IRWD	VCP	{07720B2FE-28D0-40D0-825E-E40A2B14F15E}	31.37	29.37	1.000000000	MH047W003	MH047W005				446	CLMH047W003MH047W005	12	0.0045	0.088571	0.17	0.094563	0.18	0.112111	0.21	0.094563	0.18
CLMH047W004MH047W006		1973		Existing	assumed Mannings N	MH047W004	MH047W006		T07840	IRWD	VCP	{AB100E69-C023-4022-A903-119516C22778}	32.47	31.20	0.666666667	MH047W004	MH047W006				396	CLMH047W004MH047W006	8	0.0032	0.045280	0.21	0.048342	0.21	0.057313	0.23	0.048342	0.21
CLMH047W005MH047W008		1973		Existing	assumed Mannings N	MH047W005	MH047W008		A01672	IRWD	VCP	{EE229BA5-2AB7-4554-B2AE-20376968C589}	29.20	28.53	0.666666667	MH047W005	MH047W008				439	CLMH047W005MH047W008	8	0.0013	0.113795	0.41	0.121492	0.43	0.144037	0.47	0.121492	0.43
CLMH047W006MH047W007		1973		Existing	assumed Mannings N	MH047W006	MH047W007		T07840	IRWD	VCP	{B4CC7715-B378-4E7F-847C-F1C24E0D4658}	31.03	30.22	0.833333333	MH047W006	MH047W007				396	CLMH047W006MH047W007	10	0.0020	0.060234	0.20	0.064306	0.20	0.076240	0.22	0.064306	0.20
CLMH047W007MH047S038		1973		Existing	assumed Mannings N	MH047W007	MH047S038		T07840	IRWD	VCP	{300A0859-38CF-439F-9B1B-32FFB53E4A0E}	30.03	29.56	0.833333333	MH047W007	MH047S038				439	CLMH047W007MH047S038	10	0.0011	0.068844	0.24	0.073499	0.25	0.087138	0.27	0.073499	0.25
CLMH047W008MH048W010		1971		Existing	assumed Mannings N	MH047W008	MH048W010		A01672	IRWD	VCP	{ED911A4E-0596-40E3-9F01-93AAB56EAC25}	28.20	26.61	1.000000000	MH047W008	MH048W010				432	CLMH047W008MH048W010	12	0.0032	0.113793	0.19	0.121490	0.20	0.121490	0.20	0.121490	0.20
CLMH047W009MH047W012		1973		Existing	assumed Mannings N	MH047W009	MH047W012		T07840	IRWD	VCP	{59852CAD-85F9-40C3-AD3F-D5D5ED61E596}	31.03	30.30	0.666666667	MH047W009	MH047W012				296	CLMH047W009MH047W012	8	0.0025	0.001686	0.05	0.001799	0.05	0.002132	0.05	0.001799	0.05
CLMH047W010MH048N004		1973		Existing	assumed Mannings N	MH047W010	MH048N004		A01672	IRWD	VCP	{9C986F29-059A-407F-985F-CD4F6763FC42}	26.36	25.56	1.250000000	MH047W010	MH048N004				496	CLMH047W010MH048N004	15	0.0016	0.117062	0.17	0.124980	0.17	0.148176	0.19	0.124980	0.17
CLMH047W011MH047S066		1973		Existing	assumed Mannings N	MH047W011	MH047S066		T07840	IRWD	VCP	{13777E1C-A5ED-4646-821F-9F7B2678B7CA}	29.34	28.80	0.833333333	MH047W011	MH047S066				263	CLMH047W011MH047S066	10	0.0021	0.001685	0.06	0.001799	0.06	0.002132	0.07	0.001799	0.06
CLMH047W012MH047W011		1973		Existing	assumed Mannings N	MH047W012	MH047W011		T07840	IRWD	VCP	{DDF75D31-8A4A-410C-85F1-150BA29A40EA}	30.27	29.34	0.666666667	MH047W012	MH047W011				304	CLMH047W012MH047W011	8	0.0031	0.001686	0.05	0.001799	0.05	0.002132	0.05	0.001799	0.05
CLMH0488E001MH048E052	NO SLOPE INFO F	0		Existing	assumed Mannings N	MH048E001	MH048E052		A00200	IRWD	VCP	{9CA008AE-798F-4249-A6D4-B5551A4E0FEF}	27.18	26.62	1.000000000	MH048E001	MH048E052				227	CLMH048E001MH048E052	12	0.0025	0.055861	0.14	0.064563	0.15	0.076579	0.16	0.182478	0.25
CLMH0488E002MH048E050	NO SLOPE INFO F	0		Existing	assumed Mannings N	MH048E002	MH048E050		A00200	IRWD	VCP	{32D3D33B-058D-41BD-9F88-41FA281F931C}	25.74	25.41	1.000000000	MH048E002	MH048E050	Future Less than 15-in, d/D >0.50			123	CLMH048E002MH048E050	12	0.0027	0.215614	0.29	0.231902	0.30	0.275109	0.33	0.647120	0.53
CLMH0488E003MH048E008		1972		Existing	assumed Mannings N	MH048E003	MH048E008		A01678	IRWD	VCP	{8675C5632-A8BD-4CA4-B2D3-C9BDB95716FC}	24.46	23.73	1.500000000	MH048E003	MH048E008				651	CLMH048E003MH048E008	18	0.0011	0.689149	0.38	0.737144	0.39	0.874141	0.43	1.238410	0.53
CLMH0488E004MH048E003		1973		Existing	assumed Mannings N	MH048E004	MH048E003	ERROR 23	T08018	IRWD	VCP	{FBA54A47-8C0B-409F-AE1C-68A011DF06DB}	26.88	25.29	0.666666667	MH048E004	MH048E003				340	CLMH048E004MH048E003	8	0.0047	0.060326	0.22	0.069676	0.24	0.082649	0.26	0.113264	0.30
CLMH0488E005MH048E004		1973		Existing	assumed Mannings N	MH048E005	MH048E004	ERROR 23	T08018	IRWD	VCP	{9AFCBD12-E2EE-4DF4-B1F4-764AF1CAAA68}	28.39	26.88	0.666666667	MH048E005	MH048E004				396	CLMH048E005MH048E004	8	0.0038	0.024847	0.19	0.026529	0.20	0.031454	0.21	0.026529	0.23
CLMH0488E006MH048E009		1973		Existing	assumed Mannings N	MH048E006	MH048E009		T08018	IRWD	VCP	{B6B9312E-EF92-44B6-B279-21ABF98CF73}	30.06	28.56	0.666666667	MH048E006	MH048E009				396	CLMH048E006MH048E009	8	0.0038	0.008029	0.09	0.008569	0.09	0.010160	0.10	0.008569	0.09
CLMH048E007MH048E006		1973		Existing	assumed Mannings N	MH048E007	MH048E006		T08018	IRWD	VCP	{3CF3A297-66EC-4222-9650-71B0D5907A84}	31.03	30.17	0.666666667	MH048E007	MH048E006				210	CLMH048E007MH048E006	8	0.0041	0.008028	0.08	0.008569	0.09	0.010160	0.09	0.008569	0.09
CLMH048E008MH048E012		1972		Existing	assumed Mannings N	MH048E008	MH048E012		A01678	IRWD	VCP	{A931A6A52-BAFE-48A0-9015-9061AB2D5721}	23.73	22.98	1.500000000	MH048E008	MH048E012				619	CLMH048E008MH048E012	18	0.0012	0.688819	0.37	0.736826	0.39	0.873856	0.42	1.281762	0.52
CLMH048E009MH048E014		1973		Existing	assumed Mannings N	MH048E009	MH048E014		T08018	IRWD	VCP	{184B07A4-115G-4B1C-AB45-2D0523397E2A}	28.46	27.02	0.666666667	MH048E009	MH048E014				360	CLMH048E009MH048E014	8	0.0040	0.008028	0.08	0.008569	0.09	0.010160	0.09	0.008569	0.09
CLMH048E010MH048E044		1972		Existing	assumed Mannings N	MH048E010	MH048E044		A01678	IRWD	VCP	{9513BCE0-0BED-49B2-BE93-335EBC1DFB80}	21.28	20.28	1.750000000	MH048E010	MH048E044				444	CLMH048E010MH048E044	21	0.0023	1.560821	0.54	1.608851	0.55	1.906870	0.61	2.094137	0.64
CLMH048E011MH048E010		1972		Existing	assumed Mannings N	MH048E011	MH048E010		A01678	IRWD	VCP	{F045595E7-E135-468D-BD7F-D6C2F0185833}	21.72	21.28	1.750000000	MH048E011	MH048E010				294	CLMH048E011MH048E010	21	0.0015	0.722896	0.34	0.773206	0.35	0.917043	0.38	1.319039	0.43
CLMH048E012MH048E011		1972		Existing	assumed Mannings N	MH048E012	MH048E011		A01678	IRWD	VCP	{9F E7C30F-597E-4574-B58E-1FDDD4B680B2}	22.98	21.98	1.500000000	MH048E012	MH048E011				588	CLMH048E012MH048E011	18	0.0017	0.708511	0.32	0.757851	0.33	0.898839	0.36	1.303350	0.44
CLMH048E013MH048E012		1973		Existing	assumed Mannings N	MH048E013	MH048E012		T08018	IRWD	VCP	{0E60B84F-3FC2-43B5-8687-B3B8FD6093B}	25.31	24.10	0.666666667	MH048E013	MH048E012				338	CLMH048E013MH048E012	8	0.0036	0.020897	0.14	0.022319	0.14	0.026451	0.15	0.022310	0.14
CLMH048E014MH048E013		1973		Existing	assumed Mannings N	MH048E014	MH048E013		T08018	IRWD	VCP	{EA9F1E27-7AE5-4BDC-BAC3-A8BAC36A33B7}	26.92	25.31	0.666666667	MH048E014	MH048E013				396	CLMH048E014MH048E013	8	0.0041	0.010344	0.13	0.011042	0.13	0.013093	0.14	0.011042	0.13
CLMH048E015MH048E017		1972		Existing	assumed Mannings N	MH048E015	MH048E017		T07814	IRWD	VCP	{441E2C41-289D-491D-BA1A-CE71D0679444}	29.68	29.10	0.666666667	MH048E015	MH048E017				164	CLMH048E015MH048E017	8	0.0035	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH048E015MH048E045		1973		Existing	assumed Mannings N	MH048E015	MH048E045	ERROR 23		IRWD	VCP	{0D11D2FD0-F31D-4A88-8209-DEC1938E080D}	29.68	28.60	1.000000000	MH048E015	MH048E045				162	CLMH048E015MH048E045	12	0.0067	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH048E016MH048E019		1973		Existing	assumed Mannings N	MH048E016	MH048E019		T08018	IRWD	VCP	{0D177BDE-5264-455F-952A-5E6F22C496B9}	29.06	27.63	0.666666667	MH048E016	MH048E019				382	CLMH048E016MH048E019	8	0.0037	0.002180	0.05	0.002327	0.05	0.002760	0.05	0.002327	0.05
CLMH048E017MH048E018		1972		Existing	assumed Mannings N	MH048E017	MH048E018		T07814	IRWD	VCP	{1DB438CD-1F4A-4F7B-A6AF-33EF70E2AB43}	29.10	28.58	0.666666667	MH048E017	MH048E018				144	CLMH048E017MH048E018	8	0.0036	0.000000	0.14	0.000000	0.17	0.000000	0.15	0.000000	0.17
CLMH048E018MH048E020		1972		Existing	assumed Mannings N	MH048E018	MH048E020		T07814	IRWD	VCP	{9ED63166-7001-400C-9D84-D0025B362D74}	28.54	27.45	0.666666667	MH048E018	MH048E020				304	CLMH048E018MH048E020	8	0.0036	0.111009	0.32	0.118519	0.33	0.140511	0.36	0.118519	0.33
CLMH048E019MH048E026		1973		Existing	assumed Mannings N	MH048E019	MH048E026		T08018	IRWD	VCP	{CDFC98F9-2597-4892-9E93-BE6B230CBA01}	27.54	26.23	0.666666667	MH048E019	MH048E026				320	CLMH048E019MH048E026	8	0.0041	0.002180	0.05	0.002327	0.05	0.002759	0.05	0.002327	0.05
CLMH048E020MH048E021		1972		Existing	assumed Mannings N	MH048E020	MH048E021		T07814	IRWD	VCP	{7B3BC4AD-6981-47DC-8556-D327CC6783F2}	27.28	26.15	0.833333333	MH048E020	MH048E021				210	CLMH048E020MH048E021	10	0.0029	0.111009	0.25	0.118519	0.25	0.140511	0.28	0.118519	0.25
CLMH048E021MH048E022		1972		Existing	assumed Mannings N	MH048E021	MH048E022		T07814	IRWD	VCP	{964F04CD-517D-4C9D-82A3-76A344FCAEF9}	26.12	25.00	0.833333333	MH048E021	MH048E022				404	CLMH048E021MH048E022	10	0.0028	0.111009	0.25	0.118519	0.25	0.140511	0.28	0.118519	0.25
CLMH048E022MH048E023		1972		Existing	assumed Mannings N	MH048E022	MH048E023		T07814	IRWD	VCP	{1FF4B2E7-C387-4869-92CF-D7E2F6FF99D8}	24.93	23.59	1.000000000	MH048E022	MH048E023				478	CLMH048E022MH048E023	12	0.0028	0.176822	0.29	0.189143	0.30	0.224242	0.33	0.189143	0.33
CLMH048E023MH048E024		1973		Existing	assumed Mannings N	MH048E023	MH048S004		A01620	IRWD	VCP	{0938D0F9-ADC5-4E19-BAE8-E2C1938E6D8D}	24.93	23.59	1.250000000	MH048E023	MH048S004				511	CLMH048E023MH048S004	12	0.0018	0.207340	0.21	0.221850	0.22	0.263009	0.23	0.343461	0.26
CLMH048E024MH048E023		1973		Existing	assumed Mannings N	MH048E024	MH048E023		T08018	IRWD	VCP	{D9C4055C-6645-47F6-9D41-7ECDE45E034F}	24.50	23.69	0.833333333	MH048E024	MH048E023				338	CLMH048E024MH048E023	10	0.0024	0.035471	0.21	0.040131	0.22	0.047624	0.24	0.203190	0.38
CLMH048E026MH048E056		1973		Existing	assumed Mannings N	MH048E026	MH048E056		T08018	IRWD	VCP	{0B5013E3C-51DA-4A44-9616-AEF7ECA715C7}	26.14	24.84	0.666666667	MH048E026	MH048E056				144	CLMH048E026MH048E056	8	0.0040	0.005038	0.08	0.006378	0.08	0.019244	0.25		
CLMH048E027MH048E028		1973		Existing	assumed Mannings N	MH048E027	MH048E028		A00200D	IRWD	PVC	{02407A5D-1202-4861-A8AD-D3EB9CFE774}	28.92	28.79	0.666666667	MH048E027	MH048E028				138	CLMH048E027MH048E028	8	0.0042	0.134599	0.32	0.143706	0.34	0.170370	0.37	0.271274	0.47
CLMH048E028MH048E002	NO SLOPE INFO F	0		Existing	assumed Mannings N	MH048E028	MH048E002		A00200D	IRWD	PVC	{8F8E0CC6-4843-4126-92C5-8F0A5C090F3C}	28.59	28.27	0.666666667	MH048E028	MH048E002	Future 8-in and less, d/D>0.50			68	CLMH048E028MH048E002	8	0.0047	0.151822	0.34	0.162093	0.35	0.192170	0.39	0.406911	0.59
CLMH048E029MH048E028		2006		Existing	assumed Mannings N	MH048E029	MH048E028		A00200D	IRWD	PVC	{D5A18389-72FA-4700-AB8F-B5C83603C183}	29.43	28.79	0.666666667	MH048E029	MH048E028				95	CLMH048E029MH048E028	8	0.0067	0.017223	0.11	0.018388	0.11	0.021799	0.12	0.135637	0.30
CLMH048E030MH048E029		2006		Existing	assumed Mannings N	MH048E030	MH048E029		A00200D	IRWD	PVC	{28CA7315-3930-4604-B1F5-A7341B3DC252}	29.92	29.53	0.666666667	MH048E030	MH048E029				61	CLMH048E030MH048E029	8	0.0064	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.135637	0.30
CLMH048E031MH048E030		2006		Existing	assumed Mannings N	MH048E031	MH048E030		A00200D	IRWD	PVC	{013CE8FE-33AD-427B-97D2-37E7D8AECA6E}	30.12	30.02	0.666666667	MH048E031	MH048E030				25	CLMH048E031MH048E030	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.135637	0.33
CLMH048E032MH048E031		2006		Existing	assumed Mannings N	MH048E032	MH048E031		A00200D	IRWD	PVC	{E34EFB14-51BD-462D-BDAA-CB1140BB97A9}	31.41	30.22	0.666666667	MH048E032	MH048E031				268	CLMH048E032MH048E031	8	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.135637	0.33
CLMH048E033MH048E027		2006		Existing	assumed Mannings N	MH048E033	MH048E027		A00200D	IRWD	PVC	{E50E510B-5800-47F0-9F71-CB845B78E414}	29.60	29.02	0.666666667	MH048E033	MH048E027				111	CLMH048E033MH048E027	8	0.0052	0.022207	0.16	0.023709	0.16	0.028108	0.19	0.135637	0.33
CLMH048E034MH048E033		2006		Existing	assumed Mannings N	MH048E034	MH048E033		A00200D	IRWD	PVC	{9A97C89C-B31E-45FC-8F78-A0C5F1F3F110}	30.52	29.80	0.666666667	MH048E034	MH048E033				107	CLMH048E034MH048E033	8	0.0067	0.016474	0.11	0.017584	0.11	0.020852	0.12	0.135637	0.30
CLMH048E035MH048E034		2006		Existing	assumed Mannings N	MH048E035	MH048E034		A00200D	IRWD	PVC	{4FD2B985-6394-40E9-955A-730E50B2D6A6}	31.03	30.72	0.666666667	MH048E035	MH048E034				71	CLMH048E035MH048E034	8	0.0044	0.016474	0.11	0.017588	0.12	0.020852	0.13	0.135637	0.33
CLMH048E036MH048E035		2006		Existing	assumed Mannings N	MH048E036	MH048E035		A00200D	IRWD	PVC	{68A3E553-0982-4DB6-828B-D4799A633305}	32.12	31.23	0.666666667	MH048E036	MH048E035				200	CLMH048E036MH048E035	8	0.0045	0.016474	0.11	0.017588	0.12	0.020852	0.13	0.135637	0.33
CLMH048E037MH048E038		2006		Existing	assumed Mannings N	MH048E037	MH048E038		A00200D	IRWD	PVC	{5043C500-CA8D-4670-AA83-3B1AF8E9B66F}	30.71	30.06	0.666666667	MH048E037	MH048E038				96	CLMH048E037MH048E038	8	0.0049	0.112392	0.29	0.119997	0.30	0.142262	0.33	0.135637	0.32
CLMH048E038MH048E027		2006		Existing	assumed Mannings N	MH048E038	MH048E027		A00200D	IRWD	PVC	{68D7336C-8FC0-4917-B458-A05A49211CCA}	29.86	29.12	0.666666667	MH048E038	MH048E027				169	CLMH048E038MH048E027	8	0.0049	0.112392	0.29	0.119997	0.30	0.142262	0.33	0.135637	0.32
CLMH048E039MH048E040		2006		Existing	assumed Mannings N	MH048E039	MH048E040		A00200D	IRWD	PVC	{B86ADBC1-9602-4F79-AC55-459A79CB8B11}	32.15	31.57	0.666666667	MH048E039	MH048E040				119	CLMH048E039MH048E040	8	0.0049	0.028783	0.15	0.030730	0.15	0.036432	0.17	0.135637	0.32
CLMH048E040MH048E037		2006		Existing	assumed Mannings N	MH048E040	MH048E037		A00200D	IRWD	PVC	{F88E5DFD-75B1-41D7-B6AE-8410A8361A2D}	31.37	30.91	0.666666667	MH048E040	MH048E037				96	CLMH048E040MH048E037	8	0.0048	0.028783	0.15	0.030730	0.15	0.036432	0.17	0.135637	0.32
CLMH048E041MH048E039		2006		Existing	assumed Mannings N	MH048E041	MH048E039		A00200D	IRWD	PVC	{5CC677CD-3FC8-46DC-A9AF-3EC85A23F5}	31.21	32.35	0.666666667	MH048E041	MH048E039				176	CLMH048E041MH048E039	8	0.0048	0.028783	0.15	0.030730	0.15	0.036432	0.17	0.135637	0.32
CLMH048E044MH048N017		1972		Existing	assumed Mannings N	MH048E044	MH048N017		A01678	IRWD	VCP	{890F72A2-29B4-4173-A1DA-FC8C3CF79DEC}	20.28	20.08	1.750000000	MH048E044	MH048E010	MH048N017	Future Greater than 15-in, d/D >0.75		362	CLMH048E044MH048N017	21	0.0006	2.552597	0.65	2.602920	0.66	3.085599	0.74	3.146929	0.75
CLMH048E045MH048E046		0		Existing	assumed Mannings N	MH048E045	MH048E046	ERROR 23		IRWD	PVC	{E1967735-3195-441D-A5DA-DEDE78141946}	28.60	27.85	1.000000000	MH048E045	MH048E046	Less than 15-in, d/D >0.50			250	CLMH048E045MH048E046	12	0.0030	1.057849	0.71	1.254309	0.80	1.457884	0.90	1.057884	0.71
CLMH048E046MH048E044		0		Existing	assumed Mannings N	MH048E046	MH048E044	assumed US invert, no plans		IRWD	PVC	{1C675982-8EBD-4347-8478-3931749F895A}	27.85	27.81	1.000000000	MH048E046	MH048E044	Less than 15-in, d/D >0.50			92	CLMH048E046MH048E044	12	0.0004	1.057849	0.65	1.254309	0.72	1.057884	0.65		
CLMH048E047MH048E048		2007		Existing	assumed Mannings N	MH048E047	MH048E048		A00200A	IRWD	PVC	{FFB7438C-3281-4231-AFB1-1824990287AC}	29.72	27.44	0.666666667	MH048E047	MH048E048				288	CLMH048E047MH048E048	8	0.0079	0.001638	0.03	0.001749	0.03	0.002073	0.04	0.000000	0.00		
CLMH048E048MH048E011		1972		Existing	assumed Mannings N	MH048E048	MH048E011		A01678	OCSD	VCP	{23244E3C-88E0-4E93-82B2-44C2618F4639}	27.20	21.98	0.666666667	MH048E048	MH048E011				234	CLMH048E048MH048E011	8	0.0223	0.001638	0.20	0.001749	0.21	0.002073	0.25	0.000000	0.33		
CLMH048E049MH048E003	NO SLOPE INFO F	1973		Existing	assumed Mannings N	MH048E049	MH048E003		A00200	IRWD	VCP	{3D7B0319-350F-4B7F-8269-29B96F0031D1}	24.91	24.47	1.000000000	MH048E049	MH048E003	Future Less than 15-in, d/D >0.50			192	CLMH048E049MH048E003	12	0.0023	0.215491	0.43	0.231363	0.45	0.274444	0.49	0.681349	0.69
CLMH048E050MH048E049	NO SLOPE INFO F	1973		Existing	assumed Mannings N	MH048E050	MH048E049		A00200	IRWD	VCP	{3C986DF4-F722-48AC-9DB7-2395B265113D}	25.41	24.91	1.000000000	MH048E050	MH048E049	Future Less than 15-in, d/D >0.50			184	CLMH048E050MH048E049	12	0.0027	0.215568	0.29	0.231688	0.30	0.274845	0.33	0.662763	0.56
CLMH048E051MH048E001	NO ASBUILT FOUN	1973		Existing	assumed Mannings N	MH048E051	MH048E001		A00200	IRWD	VCP	{9ABBF819-144D-4D01-BAA7-1E7EF485D1FA}	27.80	27.18	1.000000000	MH048E051	MH048E001				218	CLMH048E051MH048E001	12	0.0028	0.003135	0.10	0.003347	0.10	0.003969	0.11	0.135637	0.25
CLMH048E052MH048E002	NO SLOPE INFO F	1973		Existing	assumed Mannings N	MH048E052	MH048E002		A00200	IRWD	VCP	{3E922A88-C0A0-49A0-822E-6AE28CA1C9F8}	26.52	25.74	1.000000000	MH048E052	MH048E002				287	CLMH048E052MH048E002	12	0.0027	0.055843	0.22	0.064546	0.23	0.076561	0.25	0.233092	0.41
CLMH048E053MH048E024		2013		Existing	assumed Mannings N	MH048E053	MH048E024		A00014E	IRWD	PVC	{FA74791D-533E-4695-A238-5B686F96C9D7}	24.61	24.60	0.666666667	MH048E053	MH048E024				3	STMH048E053MH048E024	8	0.0040	0.033266	0.16	0.039647	0.17	0.047232	0.19	0.051443	0.31
CLMH048E056MH048E024		1973		Existing	assumed Mannings N	MH048E056	MH048E024		T08018	IRWD	VCP	{4265518S-3659-44AF-8E5D-78F2614962A5}	24.84	24.60	0.666666667	MH048E056	MH048E024				70	CLMH048E056MH048E024	8	0.0034	0.005038	0.07	0.005381	0.07	0.006378	0.08	0.135152	0.34
CLMH048N001MH008E007		1971		Existing	assumed Mannings N	MH048N001	MH008E007		A01629	IRWD	VCP	{27A32A73-1115-4953-9743-8A85589D7DBC9}	22.94	21.75	0.833333333	MH048N001	MH008E007				450	CLMH048N001MH008E007	10	0.0026	0.063484	0.34	0.067781	0.35	0.080359	0.38	0.067781	0.35
CLMH048N002MH048N001		1971		Existing	assumed Mannings N	MH048N002	MH048N001		A01629	IRWD	VCP	{22342A80-A0DA-4D04-8E00-CE3501831458}	24.32	22.94	0.833333333	MH048N002	MH048N001				450	CLMH048N002MH048N001	10	0.0031	0.035357	0.17	0.037751	0.18	0.044755	0.19	0.037751	0.18
CLMH048N003MH048N002		1971		Existing	assumed Mannings N	MH048N003	MH048N002		A01672	IRWD	VCP	{169CBEFD-0A8E-48D8-8DAF-0160E6DF7E62}	25.22	24.57	0.833333333	MH048N003	MH048N002				373	CLMH048N003MH048N002	10	0.0017	0.025459	0.14	0.027182	0.14	0.032227	0.15	0.027182	0.14
CLMH048N004MH048N010		1970		Existing	assumed Mannings N	MH048N004	MH048N010			IRWD	VCP	{165FA181-06C1-421F-8F1A-36FD1C6037C3}	25.46	24.09	1.250000000	MH048N004	MH048N010				348	CLMH048N004MH048N010	15	0.0039	0.131894	0.16	0.140817	0.17	0.166953	0.18	0.140817	0.17
CLMH048N005MH048N004		1992		Existing	assumed Mannings N	MH048N005	MH048N004		A01633	IRWD	VCP	{260C425E-5058-4C63-A4CD-D94334E60521}	29.72	25.77	0.666666667	MH048N005	MH048N004				66	CLMH048N005MH048N004	8	0.0598	0.010599	0.05	0.011318	0.06	0.011318	0.06		
CLMH048N006MH048N005		1996		Existing	assumed Mannings N	MH048N006	MH048N005		A01625	IRWD	VCP	{8731F730-8615-434A-9833-D61CEA78F777}	31.45	31.00	0.666666667	MH048N006	MH048N005				113	CLMH048N006MH048N005	8	0.0040	0.007675

| | | |

CLMH0499MH005MH0499018		1977		Existing	assumed Mannings N	MH0499N005	MH0499N018		T0839ZA	IRWD	VCP	{B7157BAC-579A-4C03-A809-476A53F23FE5}	25.43	24.51	0.666666667	MH0499N005	MH0499N018			381	CLMH0499N005MH0499N018	8	0.0024	0.006542	0.09	0.008263	0.10	0.009799	0.11	0.008263	0.10	
CLMH0499N008MH0077E007		1989		Existing	assumed Mannings N	MH0499N008	MH0077E007		A01613	IRWD	VCP	{25515BE9-4347-498d-9F32-BDE3D9046116}	21.34	20.88	1.000000000	MH0499N008	MH0077E007			262	CLMH0499N008MH0077E007	12	0.0018	0.069311	0.17	0.087535	0.19	0.103778	0.20	0.087535	0.19	
CLMH0499N009MH0499N008		1989		Existing	assumed Mannings N	MH0499N009	MH0499N008		A01613	IRWD	VCP	{69548C40-7A53-490B-B5F7-855733F14147}	22.36	22.04	1.000000000	MH0499N009	MH0499N008			76	CLMH0499N009MH0499N008	12	0.0042	0.049564	0.12	0.062595	0.13	0.074210	0.15	0.062595	0.13	
CLMH0499N010MH0499N009		1989		Existing	assumed Mannings N	MH0499N010	MH0499N009		A01613	IRWD	VCP	{095DE225-78E8-413A-B9F2-4C603CB020AF1}	22.76	22.45	1.000000000	MH0499N010	MH0499N009			75	CLMH0499N010MH0499N009	12	0.0042	0.049564	0.12	0.062595	0.13	0.074210	0.15	0.062595	0.13	
CLMH0499N014MH0499N010		1989		Existing	assumed Mannings N	MH0499N014	MH0499N010		A01613	IRWD	VCP	{9D48EFB5-B735-4092-8932-F7F36843BE0D}	23.87	22.86	1.000000000	MH0499N014	MH0499N010			253	CLMH0499N014MH0499N010	12	0.0040	0.049564	0.12	0.062595	0.14	0.074210	0.15	0.062595	0.14	
CLMH0499N015MH0499N014		1989		Existing	assumed Mannings N	MH0499N015	MH0499N014		A01613	IRWD	VCP	{6F42263C-ECF1-4970-A88C-12CD1DA5B5BE}	24.07	23.97	1.000000000	MH0499N015	MH0499N014			140	CLMH0499N015MH0499N014	12	0.0007	0.036529	0.14	0.046134	0.16	0.054693	0.17	0.046134	0.16	
CLMH0499N016MH0499N003		1977		Existing	assumed Mannings N	MH0499N016	MH0499N003			OCSD	RCP	{88E9E0E0D-04BD-48DE-8AA4-07AF846E881D}	13.89	13.39	4.000000000	MH0499N016	MH0499N003			531	CLMH0499N016MH0499N003	48	0.0009	1.644123	0.17	1.757698	0.18	2.084071	0.20	4.665402	0.30	
CLMH0499N017MH0499N066		1977		Existing	assumed Mannings N	MH0499N017	MH0499N066		T0839ZA	IRWD	VCP	{64ED52AC-733D-4EC9-B38E-2E55EFFF7454}	23.26	22.91	0.666666667	MH0499N017	MH0499N066			143	CLMH0499N017MH0499N066	8	0.0024	0.019092	0.16	0.024114	0.18	0.028591	0.19	0.024114	0.18	
CLMH0499N018MH0499N017		1977		Existing	assumed Mannings N	MH0499N018	MH0499N017		T0839ZA	IRWD	VCP	{79C7426D-91BD-42BF-B0E0-7914FC5896AE}	24.40	23.46	0.666666667	MH0499N018	MH0499N017			396	CLMH0499N018MH0499N017	8	0.0024	0.012992	0.12	0.016410	0.13	0.019457	0.15	0.016410	0.13	
CLMH0499N019MH0499N016		1984		Existing	assumed Mannings N	MH0499N019	MH0499N016			OCSD	VCP	{0811A385-B406-4A89-88A3-C141ACE9955C}	16.78	13.89	3.000000000	MH0499N019	MH0499N016			95	CLMH0499N019MH0499N016	36	0.0304	1.644157	0.16	1.757736	0.16	2.084115	0.18	4.665483	0.27	
CLMH0499N020MH0499N019		1984		Existing	assumed Mannings N	MH0499N020	MH0499N019			OCSD	VCP	{6E2363CC-BC12-41AA-ADC9-53FE0A1A58C}	17.69	16.78	3.500000000	MH0499N020	MH0499N019			315	CLMH0499N020MH0499N019	42	0.0029	1.644159	0.12	1.757738	0.12	2.084117	0.13	4.665486	0.20	
CLMH0499N021MH0499N022		1987		Existing	assumed Mannings N	MH0499N021	MH0499N022		A01623	IRWD	DIP	{201BF78A-B0EC-4D4E-B092-0CA5273319BE}	20.80	20.34	1.500000000	MH0499N021	MH0499N022			461	CLMH0499N021MH0499N022	18	0.0010	0.346135	0.25	0.369693	0.26	0.438556	0.28	0.368683	0.26	
CLMH0499N022MH0499N023		1987		Existing	assumed Mannings N	MH0499N022	MH0499N023		A01623	IRWD	DIP	{91DB781A-11EA-409E-ABBD-C39431C07A28}	20.34	19.89	1.500000000	MH0499N022	MH0499N023			148	CLMH0499N022MH0499N023	18	0.0030	0.346133	0.20	0.369691	0.20	0.438554	0.22	0.368681	0.20	
CLMH0499N023MH0499N020		1987		Existing	assumed Mannings N	MH0499N023	MH0499N020		A01623	IRWD	DIP	{BE3AAA45-FE4D-422C-A65E-1E4C47D84C1}	19.89	17.69	1.500000000	MH0499N023	MH0499N020			440	CLMH0499N023MH0499N020	18	0.0050	0.346132	0.27	0.369689	0.28	0.438552	0.30	0.368679	0.38	
CLMH0499N024MH0499N031		1984		Existing	assumed Mannings N	MH0499N024	MH0499N031			IRWD	VCP	{F59A2123-5B23-4890-B82C-94042B9E13E0}	29.48	28.84	0.833333333	MH0499N024	MH0499N031			360	CLMH0499N024MH0499N031	10	0.0018	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH0499N025MH0499N032		1984		Existing	assumed Mannings N	MH0499N025	MH0499N032		A01614	IRWD	VCP	{1BF1A33F-E1B7-453F-9344-F7FED7359F81}	30.06	29.60	1.250000000	MH0499N025	MH0499N032			296	CLMH0499N025MH0499N032	15	0.0016	0.156179	0.19	0.166746	0.20	0.197686	0.21	0.166746	0.20	
CLMH0499N026MH0499N025		1987		Existing	assumed Mannings N	MH0499N026	MH0499N025	ERROR 23	A01614	IRWD	VCP	{EB861BE0-1984-421E-BC2C-446FAD118E8F}	31.11	30.49	1.000000000	MH0499N026	MH0499N025			220	CLMH0499N026MH0499N025	12	0.0028	0.046569	0.13	0.049722	0.13	0.058945	0.14	0.049722	0.13	
CLMH0499N027MH0499N028		1987		Existing	assumed Mannings N	MH0499N027	MH0499N028		A01623	IRWD	VCP	{C80895F3-0912-47A4-86E3-1BDF6F836631}	21.22	20.98	1.500000000	MH0499N027	MH0499N028			241	CLMH0499N027MH0499N028	18	0.0010	0.329311	0.26	0.351730	0.27	0.417260	0.29	0.350720	0.27	
CLMH0499N028MH0499N021		1987		Existing	assumed Mannings N	MH0499N028	MH0499N021		A01623	IRWD	VCP	{B7873651-CB0E-4BFF-B596-EB6E3BAD675F}	20.98	20.80	1.500000000	MH0499N028	MH0499N021			136	CLMH0499N028MH0499N021	18	0.0013	0.329308	0.28	0.351727	0.29	0.417257	0.31	0.350717	0.29	
CLMH0499N029MH0499N020		1984		Existing	assumed Mannings N	MH0499N029	MH0499N020			OCSD	VCP	{A71D61BC-5D28-4A4C-A06D-586789AC840E}	18.77	17.69	3.500000000	MH0499N029	MH0499N020			370	CLMH0499N029MH0499N020	42	0.0029	1.223498	0.14	1.308582	0.14	1.551316	0.16	4.214597	0.24	
CLMH0499N030MH0499N029		1984		Existing	assumed Mannings N	MH0499N030	MH0499N029			OCSD	VCP	{2A143B04-9A3E-4A1B-A55D-98D6AA731DE3}	19.01	18.77	3.500000000	MH0499N030	MH0499N029			2	CLMH0499N030MH0499N029	42	0.1200	1.207275	0.10	1.291257	0.10	1.530773	0.11	4.197247	0.20	
CLMH0499N033MH0499N034		1982		Existing	assumed Mannings N	MH0499N033	MH0499N034		A01614	IRWD	VCP	{29A283B7-ACED-451D-BC3E-8AA2452B7A7B}	28.84	28.61	0.833333333	MH0499N033	MH0499N034			92	CLMH0499N033MH0499N034	10	0.0025	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH0499N032MH0499N035		1982		Existing	assumed Mannings N	MH0499N032	MH0499N035		A01614	IRWD	VCP	{1CE0DDB8-039A-4C13-B939-451D785AC904}	29.50	29.22	1.250000000	MH0499N032	MH0499N035			172	CLMH0499N032MH0499N035	15	0.0016	0.156179	0.18	0.166746	0.19	0.197686	0.21	0.166746	0.19	
CLMH0499N033MH0499N030		1984		Existing	assumed Mannings N	MH0499N033	MH0499N030			OCSD	VCP	{07888F44-ED91-4760-B197-F2E3C7993BC0}	19.95	19.01	3.500000000	MH0499N033	MH0499N030			328	CLMH0499N033MH0499N030	42	0.0029	1.196554	0.10	1.279823	0.11	1.517219	0.12	4.185873	0.20	
CLMH0499N034MH0499N033		1982		Existing	assumed Mannings N	MH0499N034	MH0499N033	slope does not match	A01614	IRWD	VCP	{ADB8AE12-3385-4646-8244-71EE994B8DC}	28.19	19.95	0.666666667	MH0499N034	MH0499N033		Future 8-in and less, d/D<0.50	15	0.6338	0.172070	0.40	0.183710	0.42	0.217801	0.45	0.183710	0.56	
CLMH0499N035MH0499N034		1982		Existing	assumed Mannings N	MH0499N035	MH0499N034		A01614	IRWD	VCP	{0E5B12F3-A3FD-4625-8F7C-C1104273C914}	29.18	28.79	1.250000000	MH0499N035	MH0499N034			167	CLMH0499N035MH0499N034	15	0.0023	0.172070	0.18	0.183710	0.19	0.217801	0.20	0.183710	0.19	
CLMH0499N036MH0499N027		1987		Existing	assumed Mannings N	MH0499N036	MH0499N027		A01623	IRWD	VCP	{806DD257-2CAE-4AF6-9F1F-E5BECFFD01C}	22.06	21.22	1.500000000	MH0499N036	MH0499N027			720	CLMH0499N036MH0499N027	18	0.0012	0.329320	0.26	0.351740	0.27	0.417271	0.29	0.350729	0.27	
CLMH0499N038MH0499N033		1982		Existing	assumed Mannings N	MH0499N038	MH0499N033		A01614	OCSD	VCP	{E2ADBF69-F448-482E-9789-FA4DE6AC415D}	21.48	19.95	3.500000000	MH0499N038	MH0499N033			532	CLMH0499N038MH0499N033	42	0.0029	1.024597	0.13	1.096235	0.13	1.299562	0.14	4.002232	0.23	
CLMH0499N039MH0499W007		1984		Existing	assumed Mannings N	MH0499N039	MH0499W007	siphon?	A01614	IRWD	VCP	{ECE2B036-12EC-4B1B-B52A-1A2A129CF5B7}	26.96	26.47	1.250000000	MH0499N039	MH0499W007			74	CLMH0499N039MH0499W007	15	0.0080	0.000000	0.08	0.000000	0.09	0.000000	0.09	0.000000	0.09	
CLMH0499N040MH0499N046		1990		Existing	assumed Mannings N	MH0499N040	MH0499N046		A01624	IRWD	VCP	{14B63975-6214-4627-8352-7B903A776C5C}	24.84	23.80	1.750000000	MH0499N040	MH0499N046			407	CLMH0499N040MH0499N046	21	0.0026	0.157434	0.11	0.185429	0.12	0.219890	0.13	0.260749	0.14	
CLMH0499N041MH0499N047		1966		Existing	assumed Mannings N	MH0499N041	MH0499N047		T0619O	IRWD	VCP	{1874BBC5-DEDC-4823-ADF5-733478A00236}	27.32	26.62	1.250000000	MH0499N041	MH0499N047			500	CLMH0499N041MH0499N047	15	0.0014	0.234833	0.24	0.250718	0.25	0.297244	0.27	0.281409	0.27	
CLMH0499N043MH0499W003		1966		Existing	assumed Mannings N	MH0499N043	MH0499W003		T0619O	IRWD	VCP	{6F893F45-0C5A-4FB8-B567-CF7EDA73E60E}	25.53	25.18	1.500000000	MH0499N043	MH0499W003			320	CLMH0499N043MH0499W003	18	0.0011	0.042019	0.10	0.044923	0.10	0.053510	0.11	0.045034	0.10	
CLMH0499N044MH0499N043		1966		Existing	assumed Mannings N	MH0499N044	MH0499N043		T0619O	IRWD	VCP	{D7185B3A-0C9F-409E-983C-074EDCB02D00}	25.87	25.53	1.500000000	MH0499N044	MH0499N043			320	CLMH0499N044MH0499N043	18	0.0011	0.020721	0.08	0.022185	0.08	0.026551	0.09	0.022297	0.08	
CLMH0499N046MH0499N038		1984		Existing	assumed Mannings N	MH0499N046	MH0499N038	check asbuilts. inverts do not reflec	OCSD	VCP	{68EBE648-E6F0-4D7F-BCA0-1A9811EBA}	22.21	21.48	3.000000000	MH0499N046	MH0499N038			124	CLMH0499N046MH0499N038	36	0.0059	1.019804	0.13	1.091113	0.13	1.293491	0.14	3.997079	0.25	
CLMH0499N047DS0499N045		1966		Existing	assumed Mannings N	MH0499N047	DS0499N045		T0619O	IRWD	VCP	{FFB72F20-A6F3-46FA-8154-0A6B610E844A}	26.37	26.29	1.500000000	MH0499N047	DS0499N045			6	CLMH0499N047DS0499N045	18	0.0133	0.335089	0.10	0.357757	0.10	0.426146	0.11	0.388421	0.11	
CLMH0499N048MH0499N046		1966		Existing	assumed Mannings N	MH0499N048	MH0499N046			OCSD	VCP	{6E3479FA-31CA-45EB-9875-957A0EDE9DA}	23.19	22.72	2.500000000	MH0499N048	MH0499N046			217	CLMH0499N048MH0499N046	30	0.0022	0.553300	0.13	0.635878	0.14	0.754380	0.15	3.424664	0.33	
CLMH0499N050MH0499N025		1982		Existing	assumed Mannings N	MH0499N050	MH0499N025		A00374	IRWD	VCP	{F4484B4E-F893-41AC-B5B6-14951D784440}	31.52	30.32	1.000000000	MH0499N050	MH0499N025			10	CLMH0499N050MH0499N025	12	0.1200	0.109610	0.08	0.117024	0.08	0.138741	0.09	0.117024	0.08	
CLMH0499N051MH0499N050		1982		Existing	assumed Mannings N	MH0499N051	MH0499N050		A00374	IRWD	VCP	{E2D8D835-77F4-47E8-AB34-1DBC92D71FC0}	32.82	31.52	0.833333333	MH0499N051	FJ0349N057			280	CLMH0499N051MH0499N050	10	0.0046	0.109610	0.18	0.117024	0.18	0.138741	0.20	0.117024	0.18	
CLMH0499N052MH0499N050		1982		Existing	assumed Mannings N	MH0499N052	MH0499N050		A00374	IRWD	VCP	{6A889E49-15B5-4730-A508-CC8D1EA23F1D}	33.93	31.57	1.000000000	MH0499N052	MH0499N050			205	CLMH0499N052MH0499N050	10	0.0115	0.000000	0.02	0.000000	0.02	0.000000	0.02	0.000000	0.02	
CLMH0499N063MH0499N026		2007		Existing	assumed Mannings N	MH0499N063	MH0499N026	ERROR 23	A00374A	RWD	PVC	{65578F5C-5E81-4650-B6BD-1D527270D0F}	31.39	31.22	0.833333333	MH0499N063	MH0499N026			37	CLMH0499N063MH0499N026	10	0.0046	0.045437	0.14	0.048513	0.14	0.057514	0.16	0.048513	0.14	
CLMH0499N064MH0499N063		2007		Existing	assumed Mannings N	MH0499N064	MH0499N063		A00375A	IRWD	PVC	{3868ZF3D-754B-4AD1-BC70-B8A341347847}	32.22	31.46	0.833333333	MH0499N064	MH0499N063			234	CLMH0499N064MH0499N063	10	0.0033	0.045437	0.15	0.048513	0.15	0.057514	0.17	0.048513	0.15	
CLMH0499N065MH0499N041	FIRST 68.82 FT FR	0		Existing	assumed Mannings N	MH0499N065	MH0499N041			IRWD	VCP	{CAA95F72-7784-4468-94C1-F7C8A42BAFDF}	30.48	27.82	0.666666667	MH0499N065	MH0499N041			257	CLMH0499N065MH0499N041	8	0.0103	0.025300	0.12	0.027010	0.13	0.032022	0.14	0.027010	0.13	
CLMH0499N066MH0499N004		1977		Existing	assumed Mannings N	MH0499N066	MH0499N004		T0839ZA	IRWD	VCP	{02620BC61-20F7-423D-A10A-7AABAB53AA0C}	22.91	22.42	0.666666667	MH0499N066	MH0499N004			203	CLMH0499N066MH0499N004	8	0.0024	0.019090	0.14	0.024111	0.16	0.028588	0.17	0.024111	0.16	
CLMH0499S001MH049E016		1966		Existing	assumed Mannings N	MH0499S001	MH049E016		T0619OA	IRWD	VCP	{CD224409A-2B78-4753-918F-725EBC089010}	31.38	30.37	0.666666667	MH0499S001	MH049E016			320	CLMH0499S001MH049E016	8	0.0032	0.204789	0.48	0.218650	0.49	0.259182	0.55	0.218648	0.49	
CLMH0499S002MH0499S093		1970		Existing	assumed Mannings N	MH0499S002	MH0499S093		A01643	IRWD	VCP	{41340A78-9DE2-4A88-84A1-431470649788}	15.58	15.21	0.833333333	MH0499S002	MH0499S093			10	CLMH0499S002MH0499S093	10	0.0049	0.142407	0.27	0.179008	0.30	0.202623	0.33	0.170908	0.30	
CLMH0499S003MH0499S001		1966		Existing	assumed Mannings N	MH0499S003	MH0499S001		T0619OA	IRWD	VCP	{8A5D87BC-7676-4288-BE3E-9B06A2717727}	32.41	31.38	0.666666667	MH0499S003	MH0499S001		Existing 8-in and less, d/D>0.50	320	CLMH0499S003MH0499S001	8	0.0032	0.204430	0.48	0.218260	0.50	0.258764	0.56	0.218260	0.50	
CLMH0499S004MH0499S002		1978		Existing	assumed Mannings N	MH0499S004	MH0499S002		A01643	IRWD	VCP	{AF4670D1-D5E0-4312-A5CE-9E32-F611A97BE3F}	17.63	15.68	0.833333333	MH0499S004	MH0499S002			320	CLMH0499S004MH0499S002	10	0.0076	0.142407	0.23	0.170908	0.25	0.202623	0.27	0.170908	0.25	
CLMH0499S005MH0499S003		1966		Existing	assumed Mannings N	MH0499S005	MH0499S003		T0619OA	IRWD	VCP	{3FDBCE0C-182A-4D5F-9E46-DFBDC0D247B6}	33.45	32.52	0.666666667	MH0499S005	MH0499S003			8	0.0029	0.000937	0.17	0.001001	0.18	0.001188	0.21	0.001001	0.18	
CLMH0499S006MH0499S089		1970		Existing	assumed Mannings N	MH0499S006	MH0499S089		A01643	IRWD	VCP	{C4318BC7-D900-468B-B9BF-26E3F8B0D7A9}	20.30	18.46	0.833333333	MH0499S006	MH0499S089			344	CLMH0499S006MH0499S089	10	0.0053	0.049123	0.17	0.058977	0.19	0.069920	0.20	0.058977	0.19	
CLMH0499S007MH0499S013		1987		Existing	assumed Mannings N	MH0499S007	MH0499S013			IRWD	VCP	{2000FFEB-672A-4D46-96A7-950B5381AA2E}	41.60	40.42	0.833333333	MH0499S007	MH0499S013			110	CLMH0499S007MH0499S013	10	0.0107	0.063719	0.14	0.076487	0.16	0.090681	0.17	0.076487	0.16	
CLMH0499S008MH0499S096		1970		Existing	assumed Mannings N	MH0499S008	MH0499S096		A01643	IRWD	VCP	{C83216D0-CF09-4E50-9DAB-68C8CE613B62}	23.99	21.13	0.666666667	MH0499S008	MH0499S096			312	CLMH0499S008MH0499S096	8	0.0092	0.049124	0.17	0.058978	0.19	0.069922	0.21	0.058978	0.19	
CLMH0499S009MH049W024		-99		Existing	assumed Mannings N	MH0499S009	MH049W024		A01661	IRWD	VCP	{05C1BC9D-1146-4C95-B306-B6517432D053}	31.64	30.46	0.833333333	MH0499S009	MH049W024			339	CLMH0499S009MH049W024	10	0.0035	0.122049	0.28	0.130307	0.29	0.154491	0.32	0.181744	0.34	
CLMH0499S010MH0499S009		-99		Existing	assumed Mannings N	MH0499S010	MH0499S009		A01661	IRWD	VCP	{EC1FFBCD-5A82-4CBE-ACBA-527ACCC665C4}	32.46	31.64	0.666666667	MH0499S010	MH0499S009			310	CLMH0499S010MH0499S009	8	0.0026	0.070694	0.31	0.081882	0.32	0.097081	0.35	0.115824	0.37	
CLMH0499S011MH0499S010		-99		Existing	assumed Mannings N	MH0499S011	MH0499S010		A01661	IRWD	VCP	{8F35EC11-CD4E-49CB-9047-9D663486D69E}	33.71	32.46	0.666666667	MH0499S011	MH0499S010			310	CLMH0499S011MH0499S010	8	0.0040	0.103381	0.26	0.056994	0.27	0.067572	0.29	0.091307	0.33	
CLMH0499S012MH0499S011		1966		Existing	assumed Mannings N	MH0499S012	MH0499S011	changed invert	T0619OA	IRWD	VCP	{B40A5187-2A0A-4038-ACFB-48DB5C50F7BA}	35.15	33.71	0.666666667	MH0499S012	MH0499S011			360	CLMH0499S012MH0499S011	8	0.0040	0.026070	0.19	0.027835	0.19	0.033000	0.21	0.027835	0.23	
CLMH0499S013MH0499S014		1992		Existing	assumed Mannings N	MH0499S013	MH0499S014		A01657	IRWD	VCP	{353EE4B0-7BCD-403A-9ABD-5DFE1B541268}	40.22	39.36	0.833333333	MH0499S013	MH0499S014			169	CLMH0499S013MH0499S014	10	0.0051	0.087955	0.20	0.105584	0.21	0.125177	0.23	0.105584	0.21	
CLMH0499S014MH0499S015		1989		Existing	assumed Mannings N	MH0499S014	MH0499S015		A01657	IRWD	VCP	{C463AD66-3990-4661-866C-92E68A14F78}	39.26	38.74	0.833333333	MH0499S014	MH0499S015			102	CLMH0499S014MH0499S015	10	0.0051	0.087955	0.20	0.105584	0.21	0.125177	0.23	0.105584	0.21	
CLMH0499S015MH0499S074		2002		Existing	assumed Mannings N	MH0499S015	MH0499S074		A01657	IRWD	VCP	{36F8E9E3-3317-457B-B6CB-D729107B1DF5}	38.51	38.07	1.000000000	MH0499S015	MH0499S074			237	CLMH0499S015MH0499S074	12	0.0019	0.087955	0.19	0.105584	0.20	0.125177	0.24	0.105584	0.20	
CLMH0499S017MH0499S009		1966		Existing	assumed Mannings N	MH0499S017	MH0499S009	ERROR 23	T0509O2	IRWD	VCP	{8057E388-1ACE-45FB-B08C-6F278F2884BD}	33.12	31.73	0.666666667	MH0499S017	MH0499S009			69	CLMH0499S017MH0499S009	8	0.0039	0.045355	0.20	0.048425	0.20	0.057411	0.22	0.078820	0.26	
CLMH0499S018MH0499S011		1966		Existing	assumed Mannings N	MH0499S018	MH0499S011		T0509O2	IRWD	VCP	{85EBFA5A-B348-4E57-B7AC-DF63EF653EFD}	34.84	33.71	0.666666667	MH0499S018	MH0499S011			356	CLMH0499S018MH0499S011	8	0.0032	0.027311	0.20	0.029159	0.20	0.034572	0.22	0.078906	0.29	
CLMH0499S022MH0499S017		1966		Existing	assumed Mannings N	MH0499S022	MH0499S017	ERROR 23	T0509O2	IRWD	VCP	{2CDCC1E8-136C-40C9-BC81-2C7574795F63}	34.65	33.22	0.666666667	MH0499S022	MH0499S017			370	CLMH0499S022MH0499S017	8	0.0039	0.037658	0.18	0.040207	0.19	0.047668	0.20	0.074889	0.25	
CLMH0499S023MH0499S018		1966		Existing	assumed Mannings N	MH0499S023	MH0499S018		T0509O2	IRWD	VCP	{B7379821-7A54-4B76-85A7-013F29790904}	35.97	34.84	0.666666667	MH0499S023	MH0499S018			355	CLMH0499S023MH0499S018	8	0.0032	0.003944	0.12	0.004211	0.12	0.004993	0.13	0.066266	0.28	
CLMH0499S024MH0499S033		1989		Existing	assumed Mannings N	MH0499S024	MH0499S033			IRWD	VCP	{F9714D6E-7915-42B4-B719-2A03F3573786}	33.52	33.00	1.250000000	MH0499S024	MH0499S033			275	CLMH0499S024MH0499S033	15	0.0019	0.235239	0.23	0.281950	0.26	0.334270	0.28	0.281950	0.26	
CLMH0499S030MH0499S031		0		Existing	assumed Mannings N	MH0499S030	MH0499S031		R4350	IRWD	PVC	{4DE07445-BC26-4C0A-8509-CB0FAF57C3B6}	34.65	31.68	0.666666667	MH0499S030	MH0499S031			262	CLMH0499S030MH0499S031	8	0.0113	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH0499S031MH0499S032		1970		Existing	assumed Mannings N	MH0499S031	MH0499S032		R4350	IRWD	PVC	{12E5B85B-A914-404A-8CF0-E1CE9FBDC5FA}	34.29	32.04	0.666666667	MH0499S031	MH0499S032			141	CLMH0499S031MH0499S032	8	0.0053	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH0499S032MH0499S053		1970		Existing	assumed Mannings N	MH0499S032	MH0499S053		R4350	IRWD	VCP	{95E40966-5844-4B95-B2B6-515E65B625B9}	28.64	26.94	0.666666667	MH0499S032	MH0499S053			284	CLMH0499S032MH0499S053	8	0.0060	0.000000	0.10	0.000000	0.11	0.000000	0.12	0.000000	0.11	
CLMH0499S033MH0500E008		1982		Existing	assumed Mannings N	MH0499S033	MH0500E008			IRWD	VCP	{CAA9BA2F-F639-438C-BFFF-934776BFABA6}	33.00	31.98	1.250000000	MH0499S033	MH0500E008			336	CLMH0499S033MH0500E008	15	0.0030	0.235239	0.23	0.281950	0.25	0.334270	0.27	0.281950	0.25	
CLMH0499S038MH0499S037		2002		Existing	assumed Mannings N	MH0499S038	MH0499S037		A01657	IRWD	VCP	{D229E6BB-5C09-4243-B57B-EBBD462D73D0}	38.59	37.02	0.666666667	MH0499S038	MH0499S037			325	CLMH0499S038MH0499S037	8	0.0048	0.037608	0.17	0.044837	0.19	0.053159	0.21	0.044837	0.19	
CLMH0499S047MH050E015		2002		Existing	assumed Mannings N	MH0499S047	MH050E015		A01657	IRWD	VCP	{7D57D0F3-77CF-45AE-8E27-10AA48D689AF}	36.93	34.88	0.666666667	MH0499S047	MH050E015			285	CLMH0499S047MH050E015	8	0.0072	0.037608	0.16	0.044837	0.18	0.053159	0.19	0.044837	0.18	
CLMH0499S050MH0499S055		2009		Existing	assumed Mannings N	MH0499S050	MH0499S055		T1664B	IRWD	VCP	{FF1D8E33-83F0-4E6B-B160-FE37A03798F5}	38.60	38.46	0.833333333	MH0499S050	MH0499S055			73	CLMH0499S050MH0499S055	10	0.0019	0.045845	0.16	0.055014	0.18	0.065223	0.19	0.055014	0.18	
CLMH0499S052MH0499S054		2009		Existing	assumed Mannings N	MH0499S052	MH0499S054		A01664B	IRWD	VCP	{5FC145SF-1165-4AC6-868A-80F001E60B3D}	39.06	38.93	0.833333333	MH0499S052	MH0499S054			70	CLMH0499S052MH0499S054	10	0.0019	0.045640	0.16	0.054795	0.18	0.064963	0.19	0.054795	0.18	
CLMH0499S097MH0499S097		1970		Existing	assumed Mannings N	MH0499S053	MH0499S097		A01643	IRWD	VCP	{CE0C495C-117B-4F12-97E6-C22CE8AAF38D}	26.94	26.49	0.666666667	MH0499S053	MH0499S097			84	CLMH0499S053MH0499S097	8	0.0054	0.049123	0.19	0.058976	0.21	0.069920	0.23	0.058976

CLMH049W040MH049W031		1974			Existing	assumed Mannings N	MH049W040	MH049W031	ERROR 23	T08299	IRWD	VCP	{B0DDA566-AC6A-4492-AC1E-686E71796DA2}	CLMH049W026MH049W031		36.27	35.75	0.666666667	MH049W040	MH049W031				247	CLMH049W040MH049W031	8	0.0021	0.116690	0.39	0.139796	0.43	0.165774	0.48	0.139784	0.43		
CLMH049W042MH049W021		2010			Existing	assumed Mannings N	MH049W042	MH049W021		A003078	IRWD	PVC	{709E3D00-61CA-47D5-B789-66A897717CAF}	CLMH049W042MH049W021		32.44	31.32	0.666666667	MH049W042	MH049W021				57	CLMH049W042MH049W021	8	0.0198	0.019137	0.09	0.022974	0.10	0.027283	0.11	0.021023	0.09		
CLMH050E001MH050N008		1962			Existing	assumed Mannings N	MH050E001	MH050N008		A01604	IRWD	PVC	{8496D805-413B-4B05-A0A3-ACOB30DB099F}	CLMH050E001MH050N008		36.36	35.00	1.000000000	MH050E001	MH050N008				679	CLMH050E001MH050N008	12	0.0020	0.035450	0.09	0.037848	0.09	0.044874	0.10	0.127080	0.17		
CLMH050E002MH050N009		1999			Existing	assumed Mannings N	MH050E002	MH050N009		A01655	IRWD	PVC	{1E86A739-51CB-4F7A-8F2B-4581112086A4}	CLMH050E002MH050N009		30.63	29.97	1.750000000	MH050E002	MH050N009				505	CLMH050E002MH050N009	21	0.0013	0.273313	0.20	0.327269	0.21	0.387915	0.23	2.725865	0.65		
CLMH050E003MH050E001		1962			Existing	assumed Mannings N	MH050E003	MH050E001		A01604	IRWD	PVC	{64602ABF-D3BB-4534-B7CB-3E6091A68169}	CLMH050E003MH050E001		37.36	36.45	1.000000000	MH050E003	MH050E001				638	CLMH050E003MH050E001	12	0.0014	0.035450	0.13	0.037849	0.14	0.044874	0.15	0.127118	0.25		
CLMH050E004MH050E003		1962			Existing	assumed Mannings N	MH050E004	MH050E003		A01602	IRWD	VCP	{2044D94C-9BCB-4F31-9BD3-4E1C1DC3A5B6}	CLMH050E004MH050E003		37.76	37.36	1.000000000	MH050E004	MH050E003				200	CLMH050E004MH050E003	12	0.0020	0.035451	0.15	0.037849	0.16	0.044874	0.17	0.127180	0.27		
CLMH050E005MH050E002		1990			Existing	assumed Mannings N	MH050E005	MH050E002		A01655	IRWD	PVC	{01F1EF46-E993-458B-9CF6-F8A119D1DF8A}	CLMH050E005MH050E002		31.37	30.63	1.750000000	MH050E005	MH050E002				555	CLMH050E005MH050E002	21	0.0013	0.275258	0.18	0.329479	0.20	0.390420	0.22	0.326772	0.43		
CLMH050E006MH050E005		1990			Existing	assumed Mannings N	MH050E006	MH050E005		A01655	IRWD	PVC	{62325260-E9ED-4FC6-AC60-CA9EFEC2EC3B}	CLMH050E006MH050E005		31.39	31.37	1.750000000	MH050E006	MH050E005				160	CLMH050E006MH050E005	21	0.0001	0.273037	0.21	0.327039	0.23	0.387745	0.25	0.326782	0.23		
CLMH050E007MH050E004		1962			Existing	assumed Mannings N	MH050E007	MH050E004		A01602	IRWD	VCP	{44553D3C-E3CD-4944-9F36-747CE8DE6964}	CLMH050E007MH050E004		38.34	37.76	1.000000000	MH050E007	MH050E004				441	CLMH050E007MH050E004	12	0.0013	0.023780	0.12	0.025389	0.13	0.030102	0.14	0.025389	0.16		
CLMH050E008MH050E006		1990			Existing	assumed Mannings N	MH050E008	MH050E006		A01655	IRWD	VCP	{38F4C32A-5636-4DD5-8BF9-BCFC1F92C34F}	CLMH050E008MH050E006		31.98	31.39	1.750000000	MH050E008	MH050E006				315	CLMH050E008MH050E006	21	0.0019	0.272845	0.20	0.326786	0.22	0.387428	0.24	0.326786	0.22		
CLMH050E009MH050E008		1990			Existing	assumed Mannings N	MH050E009	MH050E008		A01655	IRWD	VCP	{C5073D6E-291E-48A7-AAA6-7A63BAA1B70B}	CLMH050E009MH050E008		32.45	31.98	1.750000000	MH050E009	MH050E008				345	CLMH050E009MH050E008	21	0.0014	0.037607	0.12	0.044836	0.13	0.053158	0.14	0.044836	0.13		
CLMH050E010MH050E015		1962			Existing	assumed Mannings N	MH050E010	MH050E015		A01655	IRWD	VCP	{654AAB10-014D-4825-8DAB-095179EA8DBF}	CLMH050E010MH050E015		35.01	34.77	1.500000000	MH050E010	MH050E015				187	CLMH050E010MH050E015	21	0.0013	0.000000	0.02	0.000000	0.02	0.000000	0.02	0.000000	0.02		
CLMH050E015MH050E009		1990			Existing	assumed Mannings N	MH050E015	MH050E009		A01655	IRWD	VCP	{02140656-BF15-481D-B76F-C18BF498ED31}	CLMH050E015MH050E009		34.77	32.45	1.750000000	MH050E015	MH050E009				168	CLMH050E015MH050E009	21	0.0138	0.037608	0.06	0.044837	0.06	0.053159	0.07	0.044837	0.06		
CLMH050N001MH050N002		1974			Existing	assumed Mannings N	MH050N001	MH050N002		T08299	IRWD	VCP	{158C4887-2267-40E2-9836-053E7FCF3C3D}	CLMH050N001MH050N002		34.36	33.20	0.666666667	MH050N001	MH050N002				290	CLMH050N001MH050N002	8	0.0040	0.009663	0.10	0.010311	0.10	0.012224	0.11	0.010311	0.10		
CLMH050N002MH050N003		1974			Existing	assumed Mannings N	MH050N002	MH050N003		T08299	OCSD	VCP	{CBE1BFBF-19D1-4E15-8643-12831F2B38BE}	CLMH050N002MH050N003		33.20	32.50	1.000000000	MH050N002	MH050N003				210	CLMH050N002MH050N003	12	0.0033	0.009632	0.08	0.010283	0.08	0.012190	0.09	0.010283	0.08		
CLMH050N003MH050N004		1974			Existing	assumed Mannings N	MH050N003	MH050N004		T08299	OCSD	VCP	{94DABE78-D784-4151-99B2-8CF32FE8B33F}	CLMH050N003MH050N004		32.50	31.89	1.250000000	MH050N003	MH050N004				300	CLMH050N003MH050N004	15	0.0020	0.026209	0.13	0.027982	0.14	0.033174	0.15	0.027982	0.14		
CLMH050N004MH050N005		1974			Existing	assumed Mannings N	MH050N004	MH050N005		T08299	OCSD	VCP	{8C8D8489-1436-486E-9573-DC88FCA99C43}	CLMH050N004MH050N005		31.89	30.81	1.250000000	MH050N004	MH050N005				540	CLMH050N004MH050N005	15	0.0020	0.130665	0.17	0.154526	0.19	0.183262	0.20	0.154621	0.19		
CLMH050N005MH050N037		1974			Existing	assumed Mannings N	MH050N005	MH050N007		T08299	OCSD	VCP	{0875F13F-4DA5-4186-B1CB-A1C12791126}	CLMH050N005MH050N007		30.81	28.55	1.250000000	MH050N005	MH050N007				520	CLMH050N005MH050N007	15	0.0043	0.133370	0.19	0.157368	0.21	0.186626	0.23	0.157343	0.42		
CLMH050N007MH049W038		1984			Existing	assumed Mannings N	MH050N007	MH049W038					{70BD92AB-D9EC-4A0E-AED6-03E54C15D3A9}	CLMH050N007MH049W038		28.55	28.43	2.500000000	MH050N007	MH049W038				34	CLMH050N007MH049W038	30	0.0035	0.405420	0.13	0.483540	0.14	0.573650	0.15	3.068939	0.36		
CLMH050N008MH049W038		1984			Existing	assumed Mannings N	MH050N008	MH049W038					{A7BF412E-C584-48B9-90C1-D37AA9A343EC}	CLMH050N008MH049W038		35.00	28.43	1.250000000	MH050N008	MH049W038				21	CLMH050N008MH049W038	15	0.3285	0.035449	0.15	0.037848	0.16	0.044874	0.17	0.127073	0.40		
CLMH050N009MH050N007		1990			Existing	assumed Mannings N	MH050N009	MH050N007		A01655	IRWD	VCP	{62886A8A-6621-42F1-A868-DDF2DB4ABB45}	CLMH050N009MH050N007		29.97	29.31	1.750000000	MH050N009	MH050N007				505	CLMH050N009MH050N007	21	0.0013	0.272520	0.17	0.326564	0.18	0.387303	0.20	2.947430	0.56		
CLMH051E001MH051E002		1985			Existing	assumed Mannings N	MH051E001	MH051E002		A00694	IRWD	PVC	{83A7D27F-6ECB-4931-B04D-ECABF71B467C}	CLMH051E001MH051E002		45.29	43.84	0.666666667	MH051E001	MH051E002				366	CLMH051E001MH051E002	8	0.0040	0.007919	0.08	0.008456	0.08	0.010026	0.09	0.008456	0.08		
CLMH051E002MH051E003		1985			Existing	assumed Mannings N	MH051E002	MH051E003		A00694	IRWD	PVC	{C7C58683-7325-4D09-8256-44799AA8D8CD}	CLMH051E002MH051E003		43.63	41.75	0.666666667	MH051E002	MH051E003				238	CLMH051E002MH051E003	8	0.0079	0.026561	0.13	0.028358	0.13	0.033621	0.14	0.028358	0.13		
CLMH051E003MH051E004		1985			Existing	assumed Mannings N	MH051E003	MH051E004		A00694	IRWD	PVC	{39CE1FD8-42FE-4A43-9369-85D43C3C9193}	CLMH051E003MH051E004		41.61	36.08	0.666666667	MH051E003	MH051E004				287	CLMH051E003MH051E004	8	0.0193	0.037860	0.12	0.040497	0.13	0.047979	0.14	0.040497	0.13		
CLMH051E004MH051E003		1985			Existing	assumed Mannings N	MH051E004	MH051E003		A00694	IRWD	PVC	{A1CC869C-C11A-43E1-9FCE-82CB52EC0979}	CLMH051E004MH051E003		35.97	20.70	0.666666667	MH051E004	MH051E003				277	CLMH051E004MH051E003	8	0.0551	0.113711	0.16	0.121468	0.17	0.144003	0.18	0.121468	0.17		
CLMH051E005MH051E004		1985			Existing	assumed Mannings N	MH051E005	MH051E004		A00694	IRWD	PVC	{F648992D-DEF9-4039-AF8D-967C69E547D}	CLMH051E005MH051E004		40.91	36.18	0.666666667	MH051E005	MH051E004				300	CLMH051E005MH051E004	8	0.0158	0.075985	0.18	0.081126	0.19	0.096179	0.20	0.081126	0.19		
CLMH051E006MH051E005		1985			Existing	assumed Mannings N	MH051E006	MH051E005		A00694	IRWD	PVC	{7E966EA6-C8AD-47BC-A97B-E70C37ACC412}	CLMH051E006MH051E005		42.20	41.02	0.666666667	MH051E006	MH051E005				299	CLMH051E006MH051E005	8	0.0039	0.075985	0.25	0.081126	0.26	0.096179	0.28	0.081126	0.26		
CLMH051E007MH051E006		1985			Existing	assumed Mannings N	MH051E007	MH051E006		A00694	IRWD	PVC	{FF065A63-31F4-45F3-A14D-98ABABAE230B}	CLMH051E007MH051E006		43.99	42.29	0.666666667	MH051E007	MH051E006				306	CLMH051E007MH051E006	8	0.0056	0.075985	0.23	0.081126	0.24	0.096179	0.26	0.081126	0.24		
CLMH051E008MH051E007		1985			Existing	assumed Mannings N	MH051E008	MH051E007		A00694	IRWD	PVC	{FAB75B2E-F94E-4D36-B6C8-B015E1E95A2B}	CLMH051E008MH051E007		45.33	44.09	0.666666667	MH051E008	MH051E007				314	CLMH051E008MH051E007	8	0.0039	0.075985	0.25	0.081126	0.26	0.096179	0.28	0.081126	0.26		
CLMH051E009051E_WW001		1985			Existing	assumed Mannings N	MH051E009	LS051E049		A00694	IRWD	PVC	{DB2A0192-F1B4-471C-B3CB-7D468771988E}	CLMH051E009LS051E049		20.50	16.98	0.833333333	MH051E009	LS051E049				90	CLMH051E009051E_WW001	10	0.0391	0.113711	0.13	0.121468	0.14	0.144003	0.15	0.121468	0.14		
CLMH051E011051E_WW001		1985			Existing	assumed Mannings N	MH051E011	LS051E049		A00694	IRWD	PVC	{42B19AE3-3879-41C2-ABDE-322CD64F8A0D}	CLMH051E011LS051E049		36.95	16.86	0.666666667	MH051E011	LS051E049				376	CLMH051E011051E_WW001	8	0.1148	0.039663	0.08	0.047559	0.09	0.056385	0.10	0.047559	0.09		
CLMH051E013MH051E011		1985			Existing	assumed Mannings N	MH051E013	MH051E011		A00694	IRWD	PVC	{D1222E04E-474E-4234-92CE-3971CE7697DA}	CLMH051E013MH051E011		40.43	37.15	0.666666667	MH051E013	MH051E011				228	CLMH051E013MH051E011	8	0.0138	0.026931	0.06	0.030824	0.06	0.039866	0.07	0.030824	0.06		
CLMH051E015MH051E013		1985			Existing	assumed Mannings N	MH051E015	MH051E013		A00694	IRWD	PVC	{1E8264A1-D472-486B-8061-EF1017E7A6A5}	CLMH051E015MH051E013		41.75	40.52	0.666666667	MH051E015	MH051E013				107	CLMH051E015MH051E013	8	0.0115	0.006021	0.06	0.007230	0.06	0.008570	0.07	0.007230	0.06		
CLMH051E016MH051E015		1985			Existing	assumed Mannings N	MH051E016	MH051E015		A00694	IRWD	PVC	{2B6D84EB-A0C2-46AE-A2CB-19091E669C94}	CLMH051E016MH051E015		44.13	41.86	0.666666667	MH051E016	MH051E015				252	CLMH051E016MH051E015	8	0.0000	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH051E016MH051E017		1985			Existing	assumed Mannings N	MH051E016	MH051E017		A00694	IRWD	PVC	{3052847A-E3A4-422D-BBE1-86A680073655}	CLMH051E016MH051E017		43.84	41.84	0.666666667	MH051E016	MH051E017				254	CLMH051E016MH051E017	8	0.0079	0.003067	0.05	0.003681	0.05	0.004365	0.05	0.003681	0.05		
CLMH051E017MH051E016		1985			Existing	assumed Mannings N	MH051E017	MH051E016		A00694	IRWD	PVC	{ECB7E14-00A0-4B14-BF41-FF9D059B488C}	CLMH051E017MH051E016		42.00	40.72	0.666666667	MH051E017	MH051E016				234	CLMH051E017MH051E016	8	0.0055	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH051E017MH051E021		1985			Existing	assumed Mannings N	MH051E017	MH051E021		A00694	IRWD	PVC	{A1CBD916-77EB-4AF2-9BCE-34ED84DAEAED}	CLMH051E017MH051E021		41.74	40.84	0.666666667	MH051E017	MH051E021				230	CLMH051E017MH051E021	8	0.0039	0.006088	0.07	0.007309	0.08	0.008666	0.09	0.007309	0.08		
CLMH051E018MH051E020		1985			Existing	assumed Mannings N	MH051E018	MH051E020		A00694	IRWD	PVC	{8CB10736-4FB7-4F1A-9685-7AA6029F7CB6}	CLMH051E018MH051E020		40.61	38.11	0.666666667	MH051E018	MH051E020				235	CLMH051E018MH051E020	8	0.0106	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH051E019MH051E015		1985			Existing	assumed Mannings N	MH051E019	MH051E015		A00694	IRWD	PVC	{B00FF7F3-BC3F-42A1-88F5-43F1C7BD65A2}	CLMH051E019MH051E015		42.77	41.95	0.666666667	MH051E019	MH051E015				208	CLMH051E019MH051E015	8	0.0039	0.032423	0.05	0.034895	0.06	0.042117	0.06	0.034895	0.06		
CLMH051E020MH051E011		1985			Existing	assumed Mannings N	MH051E020	MH051E011		A00694	IRWD	PVC	{7B4AD992-E5D0-4884-9E58-DC2295BA2BDE}	CLMH051E020MH051E011		37.90	37.15	0.666666667	MH051E020	MH051E011				183	CLMH051E020MH051E011	8	0.0039	0.028974	0.15	0.034784	0.17	0.041239	0.18	0.034784	0.17		
CLMH051E021MH051E023		1985			Existing	assumed Mannings N	MH051E021	MH051E023		A00694	IRWD	PVC	{67616E6C-0013-43A4-8E70-100DBEC635BB}	CLMH051E021MH051E023		40.63	39.22	0.666666667	MH051E021	MH051E023				358	CLMH051E021MH051E023	8	0.0039	0.010997	0.10	0.013203	0.10	0.015654	0.11	0.013203	0.10		
CLMH051E023MH051E020		1985			Existing	assumed Mannings N	MH051E023	MH051E020		A00694	IRWD	PVC	{71728B2E-F851-4E78-A88A-D2CA616BE7AC}	CLMH051E023MH051E020		39.02	38.00	0.666666667	MH051E023	MH051E020				256	CLMH051E023MH051E020	8	0.0040	0.028974	0.15	0.034784	0.17	0.041239	0.18	0.034784	0.17		
CLMH051E025MH051E026		1985			Existing	assumed Mannings N	MH051E025	MH051E026		A00694	IRWD	PVC	{556287DE-655F-4759-AE2A-1FD0B5411493}	CLMH051E025MH051E026		41.74	40.41	0.666666667	MH051E025	MH051E026				258	CLMH051E025MH051E026	8	0.0052	0.007666	0.08	0.009204	0.08	0.010911	0.09	0.009204	0.08		
CLMH051E026MH051E023		1985			Existing	assumed Mannings N	MH051E026	MH051E023		A00694	IRWD	PVC	{1C732D86-54E1-47E1-9193-A04999382CBA}	CLMH051E026MH051E023		40.22	39.11	0.666666667	MH051E026	MH051E023				187	CLMH051E026MH051E023	8	0.0059	0.012489	0.09	0.014992	0.10	0.017774	0.11	0.014992	0.10		
CLMH051E027MH051E026		1985			Existing	assumed Mannings N	MH051E027	MH051E026		A00694	IRWD	PVC	{4671D198-9CF3-4CE4-872F-50ADFCBC885C}	CLMH051E027MH051E026		43.72	40.41	0.666666667	MH051E027	MH051E026				84	CLMH051E027MH051E026	8	0.0146	0.004822	0.05	0.005788	0.05	0.006862	0.06	0.005788	0.05		
CLMH051E028MH051E025		1985			Existing	assumed Mannings N	MH051E028	MH051E025		A00694	IRWD	PVC	{DD166A88-6003-4CA5-BC28-4C39C6F99F13}	CLMH051E028MH051E025		47.22	41.91	0.666666667	MH051E028	MH051E025				320	CLMH051E028MH051E025	8	0.0166	0.003156	0.04	0.003788	0.04	0.004491	0.05	0.003788	0.04		
CLMH051E028MH051E027		1985			Existing	assumed Mannings N	MH051E028	MH051E027		A00694	IRWD	PVC	{52CF8E0E-363D-4BA4-B7F3-EFC0DC0E0C41}	CLMH051E028MH051E027		47.66	43.93	0.666666667	MH051E028	MH051E027				271	CLMH051E028MH051E027	8	0.0138	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH051E029MH051E028		1985			Existing	assumed Mannings N	MH051E029	MH051E028		A00694	IRWD	PVC	{D43210AC-32E7-4FDE-B082-FF9E6F7A3A13}	CLMH051E029MH051E028		49.59	47.34	0.666666667	MH051E029	MH051E028				166	CLMH051E029MH051E028	8	0.0136	0.003156	0.04	0.003788	0.04	0.004491	0.05	0.003788	0.04		
CLMH051E030MH051E003		1987			Existing	assumed Mannings N	MH051E030	MH051E003		T12362	IRWD	VCP	{0AD5061A-256D-4B41-B223-257020AABE86}	CLMH051E030MH051E003		43.38	41.86	0.666666667	MH051E030	MH051E003				130	CLMH051E030MH051E003	8	0.0117	0.016964	0.10	0.020350	0.11	0.024131	0.12	0.020350	0.11		
CLMH051E031MH051E030		1987			Existing	assumed Mannings N	MH051E031	MH051E030		T12362	IRWD	VCP	{9D3A4C28-39A2-4720-8EAD-6C4ED98C5550}	CLMH051E031MH051E030		43.77	43.47	0.666666667	MH051E031	MH051E030				80	CLMH051E031MH051E030	8	0.0038	0.004587	0.05	0.005494	0.07	0.006516	0.08	0.005494	0.07		
CLMH051E032MH051E031		1987			Existing	assumed Mannings N	MH051E032	MH051E031		T12362	IRWD	VCP	{20EF3344-119C-4AE2-BC6C-FD4FCD2036B0}	CLMH051E032MH051E031		45.93	43.97	0.666666667	MH051E032	MH051E031				113	CLMH051E032MH051E031	8	0.0173	0.003543	0.04	0.004241	0.05	0.005029	0.05	0.004241	0.05		
CLMH051E033MH051E032		1987			Existing	assumed Mannings N	MH051E033	MH051E032		T12362	IRWD	VCP	{FC31EE50-6B45-48F9-A004-29338288826}	CLMH051E033MH051E032		46.54	46.04	0.666666667	MH051E033	MH051E032				128	CLMH051E033MH051E032	8	0.0039	0.002220	0.05	0.002665	0.05	0.003162	0.05	0.002665	0.05		
CLMH051E034MH051E033		1987			Existing	assumed Mannings N	MH051E034	MH051E033		T12362	IRWD	VCP	{4D347DE3-94C9-49D9-B208-5C99F15357F3}	CLMH051E034MH051E033		46.97	46.63	0.666666667	MH051E034	MH051E033				87	CLMH051E034MH051E033	8	0.0039	0.002220	0.05	0.002665	0.05	0.003162	0.05	0.002665	0.05		
CLMH051E035MH051E034		1987			Existing	assumed Mannings N	MH051E035	MH051E034		T12362	IRWD	VCP	{F2092F34-D54E-4FF9-A2E6-B4B248DC4298}	CLMH051E035MH051E034		47.24	47.06	0.666666667	MH051E035	MH051E034				183	CLMH051E035MH051E034	8	0.0039	0.002220	0.05	0.002665	0.05	0.003162	0.05	0.002665	0.05		
CLMH051E036MH051E035		1987			Existing	assumed Mannings N	MH051E036	MH051E035		T12362	IRWD	VCP	{2C6DEBF8-B2BB-4D00-B831-7430E4C34D9D}	CLMH051E036MH051E035		47.59	47.31	0.666666667	MH051E036	MH051E035				72	CLMH051E036MH051E035	8	0.0039	0.002220	0.05	0.002666	0.05	0.003162	0.05	0.002666	0.05		
CLMH051E037MH051E036		1987			Existing	assumed Mannings N	MH051E037	MH051E036		T12362	IRWD	VCP	{F8E951CB-80F8-48F9-8383-06E1721AC6CC}	CLMH051E037MH051E036		48.50	47.79	0.666666667	MH051E037	MH051E036				183	CLMH051E037MH051E036	8	0.0039	0.000843	0.03	0.001012	0.03	0.001201	0.03	0.001012	0.03		
CLMH051E038MH051E037		1987			Existing	assumed Mannings N	MH051E038	MH051E037		T12362	IRWD	VCP	{D1BF46E8-E7F7-4576-9266-94F4EED565CF}	CLMH051E038MH051E037		44.38	43.58	0.666666667	MH051E038	MH051E037				183	CLMH051E038MH051E037	8	0.0039	0.011910	0.10	0.014297	0.11	0.016951	0.12	0.014297	0.11		
CLMH051E039MH051E038		1987			Existing	assumed Mannings N	MH051E039	MH051E038		T12362	IRWD	VCP	{890F5E00-5993-4797-9284-CE1DF6E36830}	CLMH051E039MH051E038		45.56	44.58	0.666666667	MH051E039	MH051E038				248	CLMH051E039MH051E038	8	0.0040	0.009999	0.09	0.012003	0.10	0.014231	0.11	0.012003	0.10		
CLMH051E040MH051E039		1987			Existing	assumed Mannings N	MH051E040	MH051E039		T12362	IRWD	VCP	{7C3862B8-BD3A-497E-A015-E4655475D506}	CLMH051E040MH051E039		46.58	45.75	0.666666667	MH051E040	MH051E039				209	CLMH051E040MH051E039	8	0.0040	0.006690	0.08	0.008029	0.08	0.009518	0.09	0.008029	0.08		
CLMH051E042MH051E040		1987			Existing	assumed Mannings N	MH051E042	MH051E040		T12362	IRWD	VCP	{BCDA24A8-0B04-4707-9C26-BF01AA860921}	CLMH051E042MH051E040		47.02	46.77	0.666666667	MH051E042	MH051E040				63	CLMH051E042MH051E040	8	0.0040	0.005290	0.07	0.006348	0.07	0.007525	0.08	0.006348	0.07		
CLMH051E043MH051E042		1987			Existing	assumed Mannings N	MH051E043	MH051E042		T12362	IRWD	VCP	{BA1966ZD-FF18-4560-B435-9C8F7D280E4A1}	CLMH051E043MH051E042		48.02	47.22	0.666666667	MH051E043	MH051E042				206	CLMH051E043MH051E042	8	0.0039	0.002867	0.05	0.003440	0.06	0.004079	0.06	0.003440	0.06		
CLMH051E044MH051E043		1987			Existing	assumed Mannings N	MH051E044	MH051E043		T12362	IRWD	VCP	{42433010-F024-4523-A8F8-AA5EF6835498}	CLMH051E044MH051E043		48.40	48.22	0.666666667	MH051E044	MH051E043				46	CLMH051E044MH051E043	8	0.0039	0.001089	0.03	0.001305	0.03	0.001549	0.04	0.001305	0.03		
CLMH051E054MH057N100		1996			Existing	assumed Mannings N	MH051E054	MH057N100		14989	IRWD	PVC	{333BE4FB-E8D2-42EB-98B0-60051762D003}	CLMH051E054MH057N100		23.46	23.31	0.666666667	MH051E054	MH057N100				47	CLMH051E054MH057N100	8	0.0032	0.002347	0.05	0.002818	0.05	0.003339	0.06	0.002818	0.05		
CLMH051E055MH051E063		1996			Existing	assumed Mannings N	MH051E055	MH051E063		14989	IRWD	PVC	{FD041220-1684-48E5-81D6-778BF1765D0C}	CLMH051E055MH051E063		20.88	20.65	0.666666667	MH051E055	MH051E063				75	CLMH051E055MH051E063	8	0.0031	0.004693	0.07	0.005636	0.07	0.006679	0.08	0.005636	0.07		
CLMH051E056MH051E055		1996			Existing	assumed Mannings N	MH051E056	MH051E055		14989	IRWD	PVC	{659C3BC0-BD47-434E-83B0-77CDF58C089A}	CLMH051E056MH051E055		21.25	21.09	0.666666667	MH051E056	MH051E055				53	CLMH051E056MH051E055	8	0.0031	0.004693	0.07	0.005636	0.07	0.006679	0.08	0.005636	0.07		
CLMH051E063MH051E099		1996			Existing	assumed Mannings N	MH051E063	MH051E099		14989	IRWD	PVC	{1E843DE7-A077-41C9-8A4B-3E11FBD8DC7D}	CLMH051E063MH051E099		20.45	20.22	0.666666667	MH051E063	MH051E099				78	CLMH051E063MH051E099	8	0.0029	0.009386	0.09	0.011272	0.10	0.013357	0.11	0.011272	0.10		
CLMH051E064MH051E072		1996			Existing	assumed Mannings N	MH051E064	MH051E072		14989	IRWD	PVC	{E9AAFFF7-4038-408D-B56C-3E6F60DBCF1B}	CLMH051E064MH051E072		22.09	21.89	0.666666667	MH051E064	MH051E072				64	CLMH051E064MH051E072	8	0.0031	0.002347	0.05	0.002818	0.05	0.003339	0.06	0.002818	0.05		
CLMH051E072MH051E074		1996			Existing	assumed Mannings N	MH051E072	MH051E074		14989	IRWD	PVC	{261A3E9E-F765-4EC3-A419-C985A5583C4}	CLMH051E072MH051E074		21.70	21.37	0.666666667	MH051E072	MH051E074				103	CLMH051E072MH051E074	8	0.0032	0.002347	0.05	0.002818	0.05	0.003339	0.06	0.002818	0.05		
CLMH051E074MH051E081		1996			Existing	assumed Mannings N	MH051E074	MH051E081		14989	IRWD	PVC	{A016520F-04AB-4610-B92D-D27D510B994C}	CLMH051E074MH051E081		21.18	21.09	0.666666667	MH051E074	MH051E081				32	CLMH051E074MH051E081	8	0.0028	0.004693	0.07	0.005636	0.07

CLMH057N002MH057N003		1985		Existing			MH057N002	MH057N003		469	IRWD	PVC	{C468E015-E9FA-4F36-AB3C-910370BD6656}	CLMH057N002MH057N003	18.00	17.43	1.000000000	MH057N002	MH057N003					171	CLMH057N002MH057N003	12	0.0033	0.204040	0.24	0.242289	0.27	0.287119	0.29	0.242288	0.27
CLMH057N003MH057N247		1985		Existing			MH057N003	MH057N247		470	IRWD	VCP	{78E89A57-ABC3-49E6-BB27-55AA4A1BF302}	CLMH057N003MH057N247	16.00	11.51	2.000000000	MH057N003	MH057N247					473	CLMH057N003MH057N247	24	0.0095	0.945604	0.17	1.115105	0.19	1.337709	0.21	1.111424	0.19
CLMH057N010MH057N011	ELEVATION PROBE	1970		Existing			MH057N010	MH057N011		081	IRWD	VCP	{0B728050-A5C7-4890-81C5-CC7B87BF5838}	CLMH057N010MH057N011	2.15	1.61	2.250000000	MH057N010	MH057N011					270	CLMH057N010MH057N011	27	0.0020	1.124549	0.22	1.319248	0.24	1.577629	0.26	1.322172	0.24
CLMH057N011057N_WW005		1970		Existing			MH057N011	5057N063		080	IRWD	VCP	{1C257C30-DCEC-48AD-9584-F5B3B69F75A}	CLMH057N011LS057N063	1.51	1.10	2.500000000	MH057N011	057N_WW005					110	CLMH057N011057N_WW005	30	0.0037	1.145997	0.18	1.339972	0.23	1.617819	0.27	1.347457	0.20
CLMH057N013MH057N003		1985		Existing			MH057N013	MH057N003		470	IRWD	PVC	{B6DEFF51-F8AF-4A5A-AE88-575B83D1A425}	CLMH057N013MH057N003	20.57	17.43	0.666666667	MH057N013	MH057N003					106	CLMH057N013MH057N003	8	0.0297	0.015972	0.07	0.018891	0.08	0.022400	0.09	0.018891	0.08
CLMH057N014MH057N013		1985		Existing			MH057N014	MH057N013		12309	IRWD	PVC	{E31566C3-CB77-4DFA-86A6-13799E4A4B6B}	CLMH057N014MH057N013	24.91	20.78	0.666666667	MH057N014	MH057N013					172	CLMH057N014MH057N013	8	0.0240	0.004619	0.04	0.005544	0.05	0.006574	0.05	0.005544	0.05
CLMH057N016MH057N013		1985		Existing			MH057N016	MH057N013		12309	IRWD	PVC	{02A22109-315B-45A9-891F-6C0F2E39FE60}	CLMH057N016MH057N013	24.28	20.67	0.666666667	MH057N016	MH057N013					176	CLMH057N016MH057N013	8	0.0295	0.011353	0.07	0.013347	0.07	0.015826	0.08	0.013347	0.07
CLMH057N017MH057N016		1985		Existing			MH057N017	MH057N016		12309	IRWD	PVC	{BAF95EF6-ACF5-46D8-A87A-36E7DE573406}	CLMH057N017MH057N016	25.98	24.37	0.666666667	MH057N017	MH057N016					85	CLMH057N017MH057N016	8	0.0189	0.011353	0.07	0.013347	0.08	0.015826	0.08	0.013347	0.08
CLMH057N018MH057N017		1985		Existing			MH057N018	MH057N017		12309	IRWD	PVC	{8B040849-9D92-4546-BA1A-9CFAE8736743}	CLMH057N018MH057N017	28.12	26.19	0.666666667	MH057N018	MH057N017					165	CLMH057N018MH057N017	8	0.0117	0.004619	0.05	0.005544	0.06	0.006574	0.06	0.005544	0.06
CLMH057N020MH057N017		1985		Existing			MH057N020	MH057N017		12309	IRWD	PVC	{AD29EF77-549F-41AA-BCC7-A4DD0065FF18}	CLMH057N020MH057N017	29.52	26.09	0.666666667	MH057N020	MH057N017					178	CLMH057N020MH057N017	8	0.0193	0.007526	0.06	0.008054	0.06	0.009550	0.06	0.008054	0.06
CLMH057N021MH057N001		1985		Existing			MH057N021	MH057N001		469	IRWD	PVC	{C7D4A178-E6ED-4673-95F6-713E4E43A9BB}	CLMH057N021MH057N001	22.15	19.63	1.000000000	MH057N021	MH057N001					180	CLMH057N021MH057N001	12	0.0140	0.161843	0.16	0.191641	0.17	0.227255	0.19	0.191641	0.17
CLMH057N022MH057N050		1985		Existing			MH057N022	MH057N050		12309	IRWD	PVC	{2207FD95-7044-443A-B3E5-8B5B0403A419}	CLMH057N022MH057N050	27.34	26.77	0.666666667	MH057N022	MH057N050					175	CLMH057N022MH057N050	8	0.0093	0.004619	0.05	0.005544	0.06	0.006574	0.06	0.005544	0.06
CLMH057N024MH057N001		1985		Existing			MH057N024	MH057N001		469	IRWD	PVC	{BC2671A4-C669-4239-A6AD-E17DB1F84812}	CLMH057N024MH057N001	21.19	19.73	0.666666667	MH057N024	MH057N001					300	CLMH057N024MH057N001	8	0.0049	0.042262	0.18	0.050710	0.20	0.060124	0.21	0.050710	0.20
CLMH057N026MH057N010		1998		Existing	assumed Mannings N		MH057N026	A008051A		469	IRWD	VCP	{50682CFC-DD19-4482-968B-598D62E08C28}	CLMH057N026MH057N250	9.30	8.30	2.500000000	MH057N026	MH057N250					166	CLMH057N026MH057N250	30	0.0060	0.944631	0.15	1.133774	0.16	1.336010	0.17	1.110482	0.16
CLMH057N027MH057N251		1985		Existing			MH057N027	MH057N251		469	IRWD	PVC	{BEACD252-A079-4C2A-970C-AC3E04F57DAF}	CLMH057N027MH057N251	14.83	14.40	0.833333333	MH057N027	MH057N251					315	CLMH057N027MH057N251	10	0.0014	0.220623	0.39	0.241588	0.41	0.275232	0.44	0.238569	0.40
CLMH057N028MH057N027		1985		Existing			MH057N028	MH057N027		469	IRWD	PVC	{FD0B1793-6403-4B88-86CD-AAB51192A470}	CLMH057N028MH057N027	17.68	15.02	0.666666667	MH057N028	MH057N027					290	CLMH057N028MH057N027	8	0.0092	0.208699	0.35	0.228709	0.36	0.258771	0.39	0.227283	0.36
CLMH057N029MH057N028		1985		Existing			MH057N029	MH057N028		469	IRWD	PVC	{3A3A3D9C-46E8-47FB-8014-90D505045A27}	CLMH057N029MH057N028	21.20	17.78	0.666666667	MH057N029	MH057N028					290	CLMH057N029MH057N028	8	0.0118	0.221295	0.33	0.241722	0.35	0.270971	0.37	0.240182	0.35
CLMH057N030MH057N029		1985		Existing			MH057N030	MH057N029		469	IRWD	VCP	{E594966E4-98D7-4972-8FD1-D4CD10D2EA37}	CLMH057N030MH057N029	24.77	21.30	0.666666667	MH057N030	MH057N029					350	CLMH057N030MH057N029	8	0.0099	0.235584	0.38	0.265812	0.39	0.283853	0.42	0.254658	0.39
CLMH057N031MH057N030		1985		Existing			MH057N031	MH057N030		469	IRWD	VCP	{6A2E3300-26E2-4ECB-A98D-E4D4A7F696D}	CLMH057N031MH057N030	29.60	24.87	0.666666667	MH057N031	MH057N030					265	CLMH057N031MH057N030	8	0.0178	0.264409	0.34	0.282808	0.36	0.306751	0.37	0.282813	0.36
CLMH057N032MH057N024		1985		Existing			MH057N032	MH057N024		469	IRWD	PVC	{09370E28-3598-4114-A023-86D76F21D4F2}	CLMH057N032MH057N024	23.82	21.38	0.666666667	MH057N032	MH057N024					314	CLMH057N032MH057N024	8	0.0186	0.042268	0.13	0.050713	0.14	0.060127	0.15	0.050713	0.14
CLMH057N033MH057N032		1985		Existing			MH057N033	MH057N032		12271	IRWD	VCP	{A9CA518D-8C93-4FBB-A25E-485193ZCD1BD}	CLMH057N033MH057N032	26.10	23.93	0.666666667	MH057N033	MH057N032					193	CLMH057N033MH057N032	8	0.0112	0.008684	0.07	0.010388	0.08	0.012316	0.09	0.010388	0.08
CLMH057N035MH057N032		1986		Existing			MH057N035	MH057N032		12271	IRWD	VCP	{E7FEEED9-A9E7-4E09-BF3B-822CC09AC26F}	CLMH057N035MH057N032	27.89	23.93	0.666666667	MH057N035	MH057N032					180	CLMH057N035MH057N032	8	0.0220	0.008398	0.06	0.010082	0.07	0.011954	0.07	0.010082	0.07
CLMH057N036MH057N032		1986		Existing			MH057N036	MH057N032		12271	IRWD	VCP	{1F68F183-6C9A-42A6-B272-588E67E798E1}	CLMH057N036MH057N032	26.02	24.03	0.666666667	MH057N036	MH057N032					183	CLMH057N036MH057N032	8	0.0118	0.025187	0.12	0.030244	0.13	0.035858	0.14	0.030244	0.13
CLMH057N037MH057N036		1986		Existing			MH057N037	MH057N036		12271	IRWD	VCP	{DFEA702D-3C40-4A56-9934-EC3E8C282754}	CLMH057N037MH057N036	28.20	26.21	0.666666667	MH057N037	MH057N036					274	CLMH057N037MH057N036	8	0.0073	0.008398	0.08	0.010082	0.08	0.011954	0.09	0.010082	0.08
CLMH057N039MH057N036		1986		Existing			MH057N039	MH057N036		12271	IRWD	VCP	{31682ICB-17AF-47EB-8955-874AE1215028}	CLMH057N039MH057N036	26.96	26.21	0.666666667	MH057N039	MH057N036					191	CLMH057N039MH057N036	8	0.0039	0.016792	0.12	0.020163	0.13	0.023906	0.14	0.020163	0.13
CLMH057N040MH057N039		1986		Existing			MH057N040	MH057N039		12271	IRWD	VCP	{103302CD-B78D-4A24-BCAC-09F183D23CF0}	CLMH057N040MH057N039	28.89	27.17	0.666666667	MH057N040	MH057N039					253	CLMH057N040MH057N039	8	0.0068	0.016794	0.11	0.020163	0.12	0.023906	0.13	0.020163	0.12
CLMH057N041MH057N040		1986		Existing			MH057N041	MH057N040		12271	IRWD	VCP	{1C4222EB-CD96-4409-B55E-559SE3F897B6}	CLMH057N041MH057N040	32.09	29.10	0.666666667	MH057N041	MH057N040					240	CLMH057N041MH057N040	8	0.0125	0.016795	0.10	0.020164	0.10	0.023907	0.11	0.020164	0.10
CLMH057N050MH057N052		1985		Existing			MH057N050	MH057N052		12309	IRWD	PVC	{48485EAD-1C3A-4922-AF92-4690C12708FA}	CLMH057N050MH057N052	26.56	25.80	0.666666667	MH057N050	MH057N052					73	CLMH057N050MH057N052	8	0.0109	0.009238	0.07	0.011089	0.08	0.013148	0.09	0.011089	0.08
CLMH057N052MH057N053		1985		Existing			MH057N052	MH057N053		12309	IRWD	PVC	{CDB0AE35-A61B-436D-BAD8-07A078F3F360}	CLMH057N052MH057N053	25.70	25.02	0.666666667	MH057N052	MH057N053					195	CLMH057N052MH057N053	8	0.0093	0.013290	0.12	0.027930	0.13	0.033117	0.14	0.027930	0.13
CLMH057N055MH057N021		1985		Existing			MH057N055	MH057N021		12309	IRWD	PVC	{F703C30D-7E9D-4B8B-AD42-88CE21C0D100}	CLMH057N055MH057N021	24.81	22.50	0.666666667	MH057N055	MH057N021					166	CLMH057N055MH057N021	8	0.0139	0.023290	0.11	0.027930	0.11	0.033117	0.12	0.027930	0.11
CLMH057N057MH057N033		1986		Existing			MH057N057	MH057N033		12271	IRWD	VCP	{BEC218F8-BA8E-44E6-9734-EA29BA0B5891}	CLMH057N057MH057N033	27.25	26.29	0.666666667	MH057N057	MH057N033					151	CLMH057N057MH057N033	8	0.0064	0.008684	0.08	0.010388	0.09	0.012316	0.10	0.010388	0.09
CLMH057N061MH057N020		1985		Existing			MH057N061	MH057N020		12309	IRWD	VCP	{32448SEB-E102-4F6D-84D2-B4D798EC58BC}	CLMH057N061MH057N020	30.68	29.62	0.666666667	MH057N061	MH057N020					152	CLMH057N061MH057N020	8	0.0070	0.007526	0.07	0.008054	0.08	0.009550	0.08	0.008054	0.07
CLMH057N066MH057N011		1987		Existing			MH057N066	MH057N011		A005O7	IRWD	VCP	{E48E9024-F474-4695-871D-246261DC85CD}	CLMH057N066MH057N011	11.19	3.78	1.333333333	MH057N066	MH057N011					195	CLMH057N066MH057N011	16	0.0380	0.045844	0.05	0.048943	0.05	0.058030	0.06	0.048943	0.05
CLMH057N068MH057N069		1996		Existing			MH057N068	MH057N069		14989	IRWD	PVC	{27FFEF7FC-161C-465A-B51A-655306142FD5}	CLMH057N068MH057N069	25.44	22.97	0.666666667	MH057N068	MH057N069					240	CLMH057N068MH057N069	8	0.0240	0.002347	0.03	0.002818	0.03	0.003339	0.04	0.002818	0.03
CLMH057N069MH057N077		1996		Existing			MH057N069	MH057N077		14989	IRWD	PVC	{5A785F3B-31DA-4AA9-9814-0866FE388DEF}	CLMH057N069MH057N077	22.78	22.20	0.666666667	MH057N069	MH057N077					103	CLMH057N069MH057N077	8	0.0070	0.004693	0.06	0.005636	0.06	0.006679	0.07	0.005636	0.06
CLMH057N070MH057N069		1996		Existing			MH057N070	MH057N069		14989	IRWD	PVC	{3D7FE173-789A-491E-B420-BA3B28BD7579}	CLMH057N070MH057N069	24.94	22.97	0.666666667	MH057N070	MH057N069					43	CLMH057N070MH057N069	8	0.0458	0.002347	0.03	0.002818	0.03	0.003339	0.03	0.002818	0.03
CLMH057N077MH057N094		1996		Existing			MH057N077	MH057N094		14989	IRWD	PVC	{AEAD70DC-B7F1-4025-96E7-9A7422605B0E}	CLMH057N077MH057N094	22.00	21.45	0.666666667	MH057N077	MH057N094					78	CLMH057N077MH057N094	8	0.0071	0.004693	0.06	0.005636	0.06	0.006679	0.07	0.005636	0.06
CLMH057N078MH057N084		1996		Existing			MH057N078	MH057N084		14989	IRWD	PVC	{77E6B6E2-9E23-4FEB-A6FE-EA99BB2022E}	CLMH057N078MH057N084	27.29	25.61	0.666666667	MH057N078	MH057N084					89	CLMH057N078MH057N084	8	0.0189	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N085MH057N084		1996		Existing			MH057N085	MH057N084		14989	IRWD	PVC	{2E0ABD0A4-4B62-414C-9F24-834D38AAD251}	CLMH057N085MH057N084	25.40	23.45	0.666666667	MH057N085	MH057N084					102	CLMH057N085MH057N084	8	0.0191	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N085MH057N094		1996		Existing			MH057N085	MH057N094		14989	IRWD	PVC	{E1191666-7AEF-4EE7-BEF1-99690389BFD1}	CLMH057N085MH057N094	24.25	21.45	0.666666667	MH057N085	MH057N094					94	CLMH057N085MH057N094	8	0.0191	0.004693	0.05	0.005636	0.05	0.006679	0.05	0.005636	0.05
CLMH057N086MH057N085		1996		Existing			MH057N086	MH057N085		14989	IRWD	PVC	{FB53D7B7-1F42-46F6-88BF-41CCF711051F}	CLMH057N086MH057N085	27.04	23.45	0.666666667	MH057N086	MH057N085					110	CLMH057N086MH057N085	8	0.0326	0.002347	0.03	0.002818	0.03	0.003339	0.03	0.002818	0.03
CLMH057N094MH057N095		1996		Existing			MH057N094	MH057N095		14989	IRWD	PVC	{60BA8D03-CE0F-4157-A81C-B75D01BA2EEA}	CLMH057N094MH057N095	21.25	20.53	0.666666667	MH057N094	MH057N095					31	CLMH057N094MH057N095	8	0.0071	0.009386	0.08	0.011272	0.09	0.013357	0.09	0.011272	0.09
CLMH057N095MH057N129		1996		Existing			MH057N095	MH057N129		14989	IRWD	PVC	{17A72107-B157-4056-8800-62787E0B1413}	CLMH057N095MH057N129	20.32	20.12	0.666666667	MH057N095	MH057N129					64	CLMH057N095MH057N129	8	0.0033	0.016079	0.11	0.016908	0.12	0.020036	0.13	0.016908	0.12
CLMH057N100MH057N102		1996		Existing			MH057N100	MH057N102		14989	IRWD	PVC	{E2A1A2E1-FD29-47DE-881C-97C220C400C2}	CLMH057N100MH057N102	23.11	22.79	0.666666667	MH057N100	MH057N102					99	CLMH057N100MH057N102	8	0.0032	0.002347	0.05	0.002818	0.05	0.003339	0.06	0.002818	0.05
CLMH057N101MH057N068		1996		Existing			MH057N101	MH057N068		14989	IRWD	PVC	{3075B553-5AA7-42EB-B8D0-405563331FDB}	CLMH057N101MH057N068	27.12	25.63	0.666666667	MH057N101	MH057N068					64	CLMH057N101MH057N068	8	0.0233	0.002347	0.03	0.002818	0.03	0.003339	0.04	0.002818	0.03
CLMH057N102MH057N095		1996		Existing			MH057N102	MH057N095		14989	IRWD	PVC	{1D9B874E-E118-409B-B88A-21A7213A17B1}	CLMH057N102MH057N095	22.59	20.53	0.666666667	MH057N102	MH057N095					70	CLMH057N102MH057N095	8	0.0294	0.004693	0.04	0.005636	0.05	0.006679	0.05	0.005636	0.05
CLMH057N109MH057N102		1996		Existing			MH057N109	MH057N102		14989	IRWD	PVC	{1F59F8B2-56C6-443F-8204-6AB21CBB434E}	CLMH057N109MH057N102	24.04	22.79	0.666666667	MH057N109	MH057N102					74	CLMH057N109MH057N102	8	0.0169	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N111MH057N119		1996		Existing			MH057N111	MH057N119		14989	IRWD	PVC	{FDDB22D5-0917-4B45-ACA9-5B0AE4D74A54}	CLMH057N111MH057N119	21.29	21.05	0.666666667	MH057N111	MH057N119					75	CLMH057N111MH057N119	8	0.0032	0.002347	0.05	0.002818	0.05	0.003339	0.06	0.002818	0.05
CLMH057N119MH057N120		1996		Existing			MH057N119	MH057N120		14989	IRWD	PVC	{BCE5F85C-4DB9-4772-982B-B149630FE61A}	CLMH057N119MH057N120	20.86	20.54	0.666666667	MH057N119	MH057N120					103	CLMH057N119MH057N120	8	0.0031	0.002346	0.05	0.002818	0.05	0.003339	0.06	0.002818	0.05
CLMH057N129MH057N129		1996		Existing			MH057N129	MH057N129		14989	IRWD	PVC	{1605B81E-2D14-425F-A38F-F00EFFDB4D34}	CLMH057N129MH057N129	20.35	20.12	0.666666667	MH057N129	MH057N129					72	CLMH057N129MH057N129	8	0.0032	0.004693	0.07	0.005636	0.07	0.006679	0.08	0.005636	0.07
CLMH057N121MH057N120		1996		Existing			MH057N121	MH057N120		14989	IRWD	PVC	{A187A568-E769-4AB1-A6DB-7EA494E7BFDB}	CLMH057N121MH057N120	23.03	20.54	0.666666667	MH057N121	MH057N120					54	CLMH057N121MH057N120	8	0.0461	0.002347	0.03	0.002818	0.03	0.003339	0.03	0.002818	0.03
CLMH057N129MH057N130		1996		Existing			MH057N129	MH057N130		14989	IRWD	PVC	{90BA378E-2407-41B9-8E85-0BCECCAA7E11}	CLMH057N129MH057N130	19.93	19.60	0.666666667	MH057N129	MH057N130					108	CLMH057N129MH057N130	8	0.0031	0.018772	0.13	0.022544	0.14	0.026715	0.15	0.022544	0.14
CLMH057N130MH057N131		1996		Existing			MH057N130	MH057N131		14989	IRWD	PVC	{19047858-CFAC-4A5F-BDB4-967AC9D6BFD1}	CLMH057N130MH057N131	19.39	18.86	0.666666667	MH057N130	MH057N131					85	CLMH057N130MH057N131	8	0.0030	0.018772	0.13	0.022544	0.14	0.026715	0.15	0.022544	0.14
CLMH057N131MH057N169		1996		Existing			MH057N131	MH057N169		14989	IRWD	PVC	{4BD4738A-49F4-4CD4-96BD-ACF311E4FCC5}	CLMH057N131MH057N169	18.65	18.19	0.666666667	MH057N131	MH057N169					126	CLMH057N131MH057N169	8	0.0031	0.018158	0.16	0.021817	0.17	0.025844	0.19	0.021817	0.17
CLMH057N132MH057N140		1996		Existing			MH057N132	MH057N140		14989	IRWD	PVC	{1FC1AEF7-812A-40C0-82FB-B0C0001419BB}	CLMH057N132MH057N140	26.29	25.14	0.666666667	MH057N132	MH057N140					61	CLMH057N132MH057N140	8	0.0189	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N140MH057N149		1996		Existing			MH057N140	MH057N149		14989	IRWD	PVC	{10665DD9-99B1-4257-B5B0-4D9083BCDD40}	CLMH057N140MH057N149	24.95	22.97	0.666666667	MH057N140	MH057N149					103	CLMH057N140MH057N149	8	0.0192	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N142MH057N149		1996		Existing			MH057N142	MH057N149		14989	IRWD	PVC	{416C9264-9750-45DB-80C4-BCDF4831ED9D}	CLMH057N142MH057N149	24.78	22.97	0.666666667	MH057N142	MH057N149					126	CLMH057N142MH057N149	8	0.0453	0.002347	0.03	0.002818	0.03	0.003339	0.03	0.002818	0.03
CLMH057N149MH057N150		1996		Existing			MH057N149	MH057N150		14989	IRWD	PVC	{53AD9D56-6EF6-4DC5-8A35-5ABB9682DB1B}	CLMH057N149MH057N150	22.78	21.70	0.666666667	MH057N149	MH057N150					58	CLMH057N149MH057N150	8	0.0186	0.004693	0.05	0.005636	0.05	0.006679	0.05	0.005636	0.05
CLMH057N150MH057N131		1996		Existing			MH057N150	MH057N131		14989	IRWD	PVC	{FB50968F-8835-4A59-89C6-EEC887C6EC77}	CLMH057N150MH057N131	21.51	18.86	0.666666667	MH057N150	MH057N131					60	CLMH057N150MH057N131	8	0.0442	0.009386	0.05	0.011272	0.06	0.013357	0.06	0.011272	0.06
CLMH057N151MH057N159		1996		Existing			MH057N151	MH057N159		14989	IRWD	PVC	{AB4895B2-7A9D-4037-997E-30CAB46808E3C}	CLMH057N151MH057N159	25.59	24.15	0.666666667	MH057N151	MH057N159					76	CLMH057N151MH057N159	8	0.0189	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N159MH057N168		1996		Existing			MH057N159	MH057N168		14989	IRWD	PVC	{336F5894-7B09-4F56-A14E-C5341E6F4C40}	CLMH057N159MH057N168	23.95	22.02	0.666666667	MH057N159	MH057N168					101	CLMH057N159MH057N168	8	0.0191	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N160MH057N168		1996		Existing			MH057N160	MH057N168		14989	IRWD	PVC	{01906AE5-C1D5-4F14-9DFF-814965512F19}	CLMH057N160MH057N168	22.21	22.02	0.666666667	MH057N160	MH057N168					55	CLMH057N160MH057N168	8	0.0035	0.002347	0.05	0.002818	0.05	0.003339	0.05	0.002818	0.05
CLMH057N168MH057N150		1996		Existing			MH057N168	MH057N150		14989	IRWD	PVC	{7732CA80-E9A5-46E9-A21F-7352887EC949}	CLMH057N168MH057N150	21.81	21.70	0.666666667	MH057N168	MH057N150					83	CLMH057N168MH057N150	8	0.0013	0.004693	0.08	0.005636	0.09	0.006679	0.09	0.005636	0.09
CLMH057N169MH057N225		1996		Existing			MH057N169	MH057N225		14989	IRWD	PVC	{8AD6978F9-FC9E-4711-B40C-C6E6B4E855C}	CLMH057N169MH057N225	17.98	17.51	0.666666667	MH057N169	MH057N225					153	CLMH057N169MH057N225	8	0.0031	0.046930	0.20	0.056361	0.22	0.066787	0.24	0.056361	0.22
CLMH057N170MH057N169		1996		Existing			MH057N170	MH057N169		14989	IRWD	PVC	{BD8FFBA3-C62F-4127-A04E-C1CF269FD0C6}	CLMH057N170MH057N169	18.86	18.19	0.666666667	MH057N170	MH057N169					211	CLMH057N170MH057N169	8	0.0032	0.018772	0.13	0.022544	0.14	0.026715	0.15	0.022544	0.14
CLMH057N171MH057N178		1996		Existing			MH057N171	MH057N178		14989	IRWD	PVC	{AD55D29A-49C1-43F8-B2BF-646D8909A876}	CLMH057N171MH057N178	20.50	20.32	0.666666667	MH057N171	MH057N178					56	CLMH057N171MH057N178	8	0.0032	0.002347	0.05	0.002818	0.05	0.003339	0.06	0.002818	0.05
CLMH057N178MH057N182		1996		Existing			MH057N178	MH057N182		14989	IRWD	PVC	{DFF32182-2E57-40A0-91D4-048E874CE5B5}	CLMH057N178MH057N182	20.12	19.95	0.666666667	MH057N178	MH057N182					58	CLMH057N178MH057N182	8	0.0029	0.004693	0.07	0.005636	0.07	0.006679	0.08	0.005636	0.07
CLMH057N182MH057N183		1996		Existing			MH057N182	MH057N183		14989	IRWD	PVC	{7C0377B4-494F-4185-8F04-95A170A66824}	CLMH057N182MH057N183	19.75	19.63	0.666666667	MH057N182	MH057N183					38	CLMH057N182MH057N183	8	0.0032	0.004693	0.06	0.005636	0.07	0.006679	0.08	0.005636	0.07
CLMH057N183MH057N193		1996		Existing			MH057N183	MH057N193		14989	IRWD	PVC	{1C0EC755-ED3C-4C6F-8B98-5E053C79BEC6}	CLMH057N183MH057N193	19.44	19.23	0.666666667	MH057N183	MH057N193					69	CLMH057N183MH057N193	8	0.0030	0.004693	0.07	0.005636	0.07	0.006679	0.08	0.005636	0.07
CLMH057N186MH057N193		1996		Existing			MH057N186	MH057N193		14989	IRWD	PVC	{58979359-98F7-45F9-AC80-685100D4C48F}	CLMH057N186MH057N193	20.27	19.23	0.666666667	MH057N186	MH057N193					56	CLMH057N186MH057N193	8	0.0186	0.002347	0.03	0.002818	0.04	0.003339	0.04	0.002818	0.04
CLMH057N193MH057N194		1996		Existing			MH057N193	MH057N194		14989	IRWD	PVC	{569B8DE0-C541-48A6-B622-61CD276A1C03}	CLMH057N193MH057N194	19.04	18.71	0.666666667	MH057N193	MH057N194					103	CLMH057N193MH057N194	8	0.0032	0.007039	0.08	0.008454	0.09	0.010018	0.09	0.008454	0.09
CLMH057N194MH057N206		1996		Existing			MH057N194	MH057N206		14989	IRWD	PVC	{FF712EDE-3B5D-4838-A34D-7D926A8542B5}	CLMH057N194MH057N206	18.52	18.28	0.666666667	MH057N194	MH057N206					78	CLMH057N194MH057N206	8	0.0031	0.009386	0.09	0.011272	0.10	0.013357	0.11

CLMH057S132MH057S136		1999		Existing	assumed Mannings N	MH057S132	MH057S136		T15584	IRWD	PVC	{3A9E2777-A82E-477E-804B-1BFAE80AFDDE}	CLMH057S132MH057S136	121.69	112.30	0.666666667	MH057S132	MH057S136			267	CLMH057S132MH057S136	8	0.0352	0.108862	0.18	0.130627	0.19	0.154862	0.21	0.130627	0.19		
CLMH057S134MH057S135		1999		Existing	assumed Mannings N	MH057S134	MH057S135		T15584	IRWD	PVC	{43009854-D654-4942-844C-5F8CD394F7E5}	CLMH057S134MH057S135	133.64	127.59	0.666666667	MH057S134	MH057S135			361	CLMH057S134MH057S135	8	0.0167	0.068915	0.17	0.082667	0.19	0.098003	0.20	0.082667	0.19		
CLMH057S135MH057S132		1999		Existing	assumed Mannings N	MH057S135	MH057S132		T15584	IRWD	PVC	{7CC124B0-0DB2-403D-B8C3-657521767E6B}	CLMH057S135MH057S132	127.50	121.80	0.666666667	MH057S135	MH057S132			341	CLMH057S135MH057S132	8	0.0167	0.097857	0.20	0.117415	0.22	0.139200	0.24	0.117415	0.22		
CLMH057S136MH057S138		1999		Existing	assumed Mannings N	MH057S136	MH057S138		T15584	IRWD	PVC	{0F24D4F6-54EC-458D-8B95-665656445D69}	CLMH057S136MH057S138	112.19	98.69	0.666666667	MH057S136	MH057S138			175	CLMH057S136MH057S138	8	0.0773	0.115994	0.15	0.139190	0.16	0.165015	0.18	0.139190	0.16		
CLMH057S138MH057S139		1999		Existing	assumed Mannings N	MH057S138	MH057S139		T15584	IRWD	PVC	{6EC40D87-9B55-46F7-A48A-BAB9A0E2D94D}	CLMH057S138MH057S139	98.50	97.01	0.833333333	MH057S138	MH057S139			124	CLMH057S138MH057S139	10	0.0120	0.116085	0.18	0.139287	0.19	0.165131	0.21	0.139287	0.19		
CLMH057S139MH057S124		1997		Existing		MH057S139	MH057S124		A00871B	IRWD	VCP	{7E1ABFF1-833C-4776-AD25-FECA6499C043}	CLMH057S139MH057S124	96.83	92.40	0.833333333	MH057S139	MH057S124			103	CLMH057S139MH057S124	10	0.0430	0.116085	0.14	0.139287	0.15	0.165130	0.16	0.139287	0.15		
CLMH057S140MH057S134		1999		Existing		MH057S140	MH057S134		T15584	IRWD	PVC	{625A330B-C559-4ADF-8DAA-D4239E E965FC}	CLMH057S140MH057S134	135.80	133.85	0.666666667	MH057S140	MH057S134			64	CLMH057S140MH057S134	8	0.0207	0.068915	0.15	0.082667	0.16	0.098004	0.17	0.082667	0.16		
CLMH057S142MH057S143		2002		Existing		MH057S142	MH057S143		A00833B	IRWD	VCP	{9F84313C-D20C-4757-B1C6-2A79BDAF7358}	CLMH057S142MH057S143	98.26	97.26	0.666666667	MH057S142	MH057S143			202	CLMH057S142MH057S143	8	0.0050	0.013296	0.10	0.014198	0.11	0.016830	0.12	0.014198	0.11		
CLMH057S143MH057S147		2002		Existing		MH057S143	MH057S147		A00833B	IRWD	VCP	{B47456EB-779D-4D2F-BA75-19952F1B74ED}	CLMH057S143MH057S147	97.16	94.63	0.666666667	MH057S143	MH057S147			176	CLMH057S143MH057S147	8	0.0144	0.013296	0.08	0.014198	0.09	0.016830	0.09	0.014198	0.09		
CLMH057S144MH057S147		2002		Existing		MH057S144	MH057S147		A00833B	IRWD	VCP	{28B00628-6065-4CF5-A14C-CE413A2ACFA0}	CLMH057S144MH057S147	96.93	94.65	0.666666667	MH057S144	MH057S147			144	CLMH057S144MH057S147	8	0.0158	0.015953	0.09	0.017032	0.09	0.020194	0.10	0.017032	0.09		
CLMH057S145MH057S144		2002		Existing		MH057S145	MH057S144		A00833B	IRWD	VCP	{914FED E0-946E-4BAB-9B3F-B9B E1092D0D0}	CLMH057S145MH057S144	98.54	97.12	0.666666667	MH057S145	MH057S144			300	CLMH057S145MH057S144	8	0.0047	0.015953	0.11	0.017032	0.12	0.020194	0.13	0.017032	0.12		
CLMH057S146MH057S087		1986		Existing		MH057S146	MH057S087		469	IRWD	VCP	{3FD980CB-2B26-431F-AE52-1AF1398182DD}	CLMH057S146MH057S087	97.62	97.12	0.666666667	MH057S146	MH057S087			148	CLMH057S146MH057S087	8	0.0039	0.009549	0.09	0.011417	0.10	0.013539	0.11	0.011417	0.10		
CLMH057S147MH057S126		2003		Existing	assumed Mannings N	MH057S147	MH057S126		A00844A	IRWD	VCP	{3DDBAAAA-0E86-494D-8C9A-C553D5D61FCF}	CLMH057S147MH057S126	94.37	48.09	0.666666667	MH057S147	MH057S126			148	CLMH057S147MH057S126	8	0.3300	0.029249	0.06	0.031230	0.06	0.037024	0.06	0.031230	0.06		
CLMH057W001MH057W002		1972		Existing		MH057W001	MH057W002	changed length to exc	083	IRWD	VCP	{5C94F9AE-44F9-4401-82DF-8DCA74AEFE67}	CLMH057W001MH057W002	159.94	131.50	0.666666667	MH057W001	MH057W002			64	CLMH057W001MH057W002	8	0.6989	0.012501	0.04	0.013347	0.04	0.015824	0.04	0.013347	0.04		
CLMH057W002MH057W003		1972		Existing		MH057W002	MH057W003		083	IRWD	VCP	{2EBF238B-9E8E-4D0E-80B1-499869D06AD7}	CLMH057W002MH057W003	131.41	123.45	0.666666667	MH057W002	MH057W003			270	CLMH057W002MH057W003	8	0.0295	0.012501	0.07	0.013347	0.07	0.015824	0.08	0.013347	0.07		
CLMH057W003MH057W004		1972		Existing		MH057W003	MH057W004		083	IRWD	VCP	{B36BCD23-1FCB-411B-B485-AB46DCD57327}	CLMH057W003MH057W004	123.36	116.02	0.666666667	MH057W003	MH057W004			249	CLMH057W003MH057W004	8	0.0295	0.012501	0.07	0.013347	0.07	0.015824	0.08	0.013347	0.07		
CLMH057W004MH057W009		1972		Existing		MH057W004	MH057W009		083	IRWD	VCP	{3F0E9DC7-AE58-4BCB-AE91-1CDDA72EFA6A}	CLMH057W004MH057W009	115.93	114.22	0.666666667	MH057W004	MH057W009			9	CLMH057W004MH057W009	8	0.1900	0.029864	0.07	0.031887	0.07	0.037802	0.07	0.031887	0.07		
CLMH057W005MH057W004		1972		Existing		MH057W005	MH057W004		083	IRWD	VCP	{B3A8B496-A8A0-40EC-A0A9-CD05E10AE03A}	CLMH057W005MH057W004	117.23	116.02	0.666666667	MH057W005	MH057W004			346	CLMH057W005MH057W004	8	0.0035	0.017363	0.12	0.018540	0.13	0.021979	0.14	0.018540	0.13		
CLMH057W006MH057W005		1985		Existing		MH057W006	MH057W005		083	IRWD	VCP	{4CFF66B7-018B-4447-9413-C0060369A155}	CLMH057W006MH057W005	118.33	117.33	0.666666667	MH057W006	MH057W005			346	CLMH057W006MH057W005	8	0.0029	0.017363	0.13	0.018540	0.13	0.021979	0.14	0.018540	0.13		
CLMH057W007MH057W006		1972		Existing		MH057W007	MH057W006		083	IRWD	VCP	{E30FE812-A218-44E3-923D-DB66D2987FCF}	CLMH057W007MH057W006	119.41	118.43	0.666666667	MH057W007	MH057W006			340	CLMH057W007MH057W006	8	0.0029	0.017363	0.13	0.018540	0.14	0.021979	0.15	0.018540	0.14		
CLMH057W008MH057W007		1972		Existing		MH057W008	MH057W007		083	IRWD	VCP	{851B530E-AD09-4277-802B-13DAB852B1BD}	CLMH057W008MH057W007	120.51	119.51	0.666666667	MH057W008	MH057W007			346	CLMH057W008MH057W007	8	0.0029	0.015008	0.12	0.016024	0.13	0.018997	0.14	0.016024	0.13		
CLMH057S009MH057W010		1985		Existing		MH057S009	MH057W010		469	IRWD	VCP	{6DABB52D-B2DA-4107-A904-72B9341715161}	CLMH057S009MH057W010	114.01	112.91	0.666666667	MH057S009	MH057W010			278	CLMH057S009MH057W010	8	0.0040	0.029864	0.16	0.031887	0.16	0.037802	0.17	0.031887	0.16		
CLMH057W010MH057S011		1985		Existing		MH057W010	MH057S011		469	IRWD	VCP	{C36FC563-D494-4529-A009-881C64EA8BC9}	CLMH057W010MH057S011	112.72	95.70	0.666666667	MH057W010	MH057S011			350	CLMH057W010MH057S011	8	0.0486	0.038629	0.10	0.041245	0.10	0.048897	0.11	0.041245	0.10		
CLMH057W014MH057W015		1985		Existing		MH057W014	MH057W015		469	IRWD	PVC	{DB8900C3-3314-4C01-B821-B36DB3333D6A}	CLMH057W014MH057W015	94.79	91.13	0.666666667	MH057W014	MH057W015			225	CLMH057W014MH057W015	8	0.0163	0.057315	0.16	0.061315	0.16	0.072694	0.18	0.061315	0.16		
CLMH057S015MH057W016		1985		Existing		MH057S015	MH057W016		469	IRWD	PVC	{525040D58-96AA-4F44-8C0D-BCF2654 3DE7C}	CLMH057W015MH057W016	91.04	75.98	0.666666667	MH057W015	MH057W016			382	CLMH057W015MH057W016	8	0.0394	0.057314	0.13	0.061314	0.13	0.072693	0.14	0.061314	0.13		
CLMH057W016MH057W017		1985		Existing		MH057W016	MH057W017		469	IRWD	PVC	{F008CE19-44E1-4813-ACA4-5FEEFF7888DB}	CLMH057W016MH057W017	75.87	64.98	0.666666667	MH057W016	MH057W017			276	CLMH057W016MH057W017	8	0.0395	0.057313	0.13	0.061313	0.13	0.072692	0.14	0.061313	0.13		
CLMH057W017MH057W018		1985		Existing		MH057W017	MH057W018		469	IRWD	PVC	{46DC1B90-4A3F-49A0-9296-016B67E5FF09}	CLMH057W017MH057W018	64.88	55.31	0.666666667	MH057W017	MH057W018			195	CLMH057W017MH057W018	8	0.0491	0.057313	0.12	0.061313	0.12	0.072692	0.13	0.061313	0.12		
CLMH057W018MH057W039		1985		Existing		MH057W018	MH057W039		469	IRWD	PVC	{EF966CD1-7B38-440C-A749-905235FCB356}	CLMH057W018MH057W039	55.22	46.91	0.666666667	MH057W018	MH057W039			184	CLMH057W018MH057W039	8	0.0452	0.087480	0.15	0.102634	0.16	0.121704	0.18	0.102633	0.16		
CLMH057W019MH057W018		1985		Existing		MH057W019	MH057W018		12306	IRWD	PVC	{4A5F28B0-535D-4018-91AC-67C579BB88BA}	CLMH057W019MH057W018	65.79	55.41	0.666666667	MH057W019	MH057W018			183	CLMH057W019MH057W018	8	0.5683	0.041570	0.09	0.049886	0.10	0.059166	0.11	0.049886	0.10		
CLMH057W020MH057W019		1985		Existing		MH057W020	MH057W019		12306	IRWD	PVC	{00645BDF-09EE-4AF1-909A-96ABC2757A5A}	CLMH057W020MH057W019	66.76	65.98	0.666666667	MH057W020	MH057W019			195	CLMH057W020MH057W019	8	0.0040	0.009238	0.09	0.011089	0.10	0.013148	0.10	0.011089	0.10		
CLMH057W023MH057W019		1985		Existing		MH057W023	MH057W019		12306	IRWD	PVC	{9E459768-9949-4656-BA14-726C42BF09B7}	CLMH057W023MH057W019	71.23	65.88	0.666666667	MH057W023	MH057W019			68	CLMH057W023MH057W019	8	0.0787	0.032332	0.08	0.038810	0.09	0.046018	0.10	0.038810	0.09		
CLMH057W025MH057W023		1985		Existing		MH057W025	MH057W023		12306	IRWD	PVC	{2C770605-836F-4973-A5A8-BF1CD26B1440}	CLMH057W025MH057W023	72.38	71.44	0.666666667	MH057W025	MH057W023			194	CLMH057W025MH057W023	8	0.0048	0.027713	0.07	0.033264	0.08	0.039444	0.09	0.033264	0.08		
CLMH057W027MH057W025		1985		Existing		MH057W027	MH057W025		12306	IRWD	PVC	{A0DE4919-2360-4FAB-98B2-D876E283CFA2}	CLMH057W027MH057W025	72.91	72.58	0.666666667	MH057W027	MH057W025			67	CLMH057W027MH057W025	8	0.0049	0.023094	0.13	0.027721	0.14	0.032870	0.16	0.027721	0.14		
CLMH057W028MH057W027		1985		Existing		MH057W028	MH057W027		12306	IRWD	PVC	{E1030790-0976-4A68-8A30-F048886C2297}	CLMH057W028MH057W027	77.79	73.11	0.666666667	MH057W028	MH057W027			169	CLMH057W028MH057W027	8	0.0277	0.023094	0.09	0.027721	0.10	0.032870	0.11	0.027721	0.10		
CLMH057W029MH057W028		1985		Existing		MH057W029	MH057W028		12306	IRWD	PVC	{FA21878B-A78C-4DD2-BE4E-C5F87EA8D002}	CLMH057W029MH057W028	82.31	77.88	0.666666667	MH057W029	MH057W028			192	CLMH057W029MH057W028	8	0.0231	0.023094	0.09	0.027721	0.10	0.032870	0.11	0.027721	0.10		
CLMH057W030MH057W029		1985		Existing		MH057W030	MH057W029		12306	IRWD	PVC	{25E830DA-CC16-4973-B289-004B7F93E741}	CLMH057W030MH057W029	83.04	82.51	0.666666667	MH057W030	MH057W029			72	CLMH057W030MH057W029	8	0.0074	0.018476	0.11	0.022177	0.12	0.026296	0.13	0.022177	0.12		
CLMH057W032MH057W029		1985		Existing		MH057W032	MH057W029		12306	IRWD	PVC	{FBA9E168-F3C9-4D32-AD85-267A639CC479}	CLMH057W032MH057W029	84.76	82.41	0.666666667	MH057W032	MH057W029			90	CLMH057W032MH057W029	8	0.0261	0.004619	0.04	0.005544	0.05	0.006574	0.05	0.005544	0.05		
CLMH057W034MH057W030		1985		Existing		MH057W034	MH057W030		12306	IRWD	PVC	{6414EF46-6E11-4C03-9500-9CD24B1100D7}	CLMH057W034MH057W030	90.30	83.23	0.666666667	MH057W034	MH057W030			227	CLMH057W034MH057W030	8	0.0311	0.013857	0.07	0.016633	0.07	0.019722	0.08	0.016633	0.07		
CLMH057W036MH057W034		1989		Existing		MH057W036	MH057W034		12306	IRWD	PVC	{4C37CA38-7D26-4419-B020-A3E8831F0976}	CLMH057W036MH057W034	91.25	90.40	0.666666667	MH057W036	MH057W034			67	CLMH057W036MH057W034	8	0.0127	0.009238	0.07	0.011089	0.08	0.013148	0.08	0.011089	0.08		
CLMH057W039MH057W064		1985		Existing		MH057W039	MH057W064		469	IRWD	PVC	{58CC12EC-B44E-4308-8EE2-D4E597172588}	CLMH057W039MH057W064	46.81	36.84	0.666666667	MH057W039	MH057W064			266	CLMH057W039MH057W064	8	0.0473	0.121825	0.18	0.145595	0.20	0.170276	0.22	0.145595	0.20		
CLMH057W040MH057W039		1985		Existing		MH057W040	MH057W039		12309	IRWD	PVC	{20EBF9BE-1891-48B7-B005-9FA898626A65}	CLMH057W040MH057W039	49.00	47.02	0.666666667	MH057W040	MH057W039			202	CLMH057W040MH057W039	8	0.0098	0.034357	0.14	0.040971	0.15	0.048581	0.16	0.040971	0.15		
CLMH057W041MH057W040		1985		Existing		MH057W041	MH057W040		12309	IRWD	PVC	{D778D5E2-388D-8EDA-A479-E4746C94A191}	CLMH057W041MH057W040	52.56	49.09	0.666666667	MH057W041	MH057W040			166	CLMH057W041MH057W040	8	0.0209	0.034357	0.12	0.040971	0.13	0.048581	0.14	0.040971	0.13		
CLMH057W042MH057W041		1985		Existing		MH057W042	MH057W041		12309	IRWD	PVC	{90051215-4680-4D0A-A6BA-1C750A9DDA53}	CLMH057W042MH057W041	53.95	52.84	0.666666667	MH057W042	MH057W041			115	CLMH057W042MH057W041	8	0.0097	0.034357	0.14	0.040971	0.15	0.048581	0.16	0.040971	0.15		
CLMH057W043MH057W042		1985		Existing		MH057W043	MH057W042		12309	IRWD	PVC	{F2C410AC-6042-46F1-BFDA-1F346055567B}	CLMH057W043MH057W042	59.06	54.15	0.666666667	MH057W043	MH057W042			89	CLMH057W043MH057W042	8	0.0552	0.009238	0.05	0.011089	0.05	0.013148	0.06	0.011089	0.05		
CLMH057W045MH057W043		1985		Existing		MH057W045	MH057W043		12309	IRWD	PVC	{4392DEE6-A204-46CC-BC82-255D14B2C5C5}	CLMH057W045MH057W043	60.25	59.27	0.666666667	MH057W045	MH057W043			59	CLMH057W045MH057W043	8	0.0166	0.004619	0.05	0.005544	0.05	0.006574	0.06	0.005544	0.05		
CLMH057W046MH057W045		1985		Existing		MH057W046	MH057W045		12309	IRWD	PVC	{C27E5EC6-4045-4D0B-BCCF-014C1EC2502C}	CLMH057W046MH057W045	61.58	60.45	0.666666667	MH057W046	MH057W045			74	CLMH057W046MH057W045	8	0.0153	0.004619	0.05	0.005544	0.05	0.006574	0.06	0.005544	0.05		
CLMH057W048MH057W042		1985		Existing		MH057W048	MH057W042		12309	IRWD	PVC	{11D6F0CA-158B-4392-A3A8-E8643C3D7489}	CLMH057W048MH057W042	56.59	54.15	0.666666667	MH057W048	MH057W042			130	CLMH057W048MH057W042	8	0.0188	0.025119	0.10	0.029883	0.11	0.035433	0.12	0.029883	0.11		
CLMH057W049MH057W048		1985		Existing		MH057W049	MH057W048		12309	IRWD	PVC	{3C1FB70D-644C-4F48-A1B9-3899EDC1293A}	CLMH057W049MH057W048	57.50	56.79	0.666666667	MH057W049	MH057W048			58	CLMH057W049MH057W048	8	0.0122	0.025119	0.11	0.029883	0.12	0.035433	0.14	0.029883	0.12		
CLMH057W050MH057W049		1985		Existing		MH057W050	MH057W049		12309	IRWD	PVC	{40A7418A-2EA6-4AFB-961C-83126583942 3}	CLMH057W050MH057W049	58.52	57.70	0.666666667	MH057W050	MH057W049			83	CLMH057W050MH057W049	8	0.0099	0.025119	0.12	0.029883	0.13	0.035433	0.14	0.029883	0.13		
CLMH057W051MH057W050		1985		Existing		MH057W051	MH057W050		12309	IRWD	PVC	{26958CF9-2811-425C-8456-4914936OC945}	CLMH057W051MH057W050	60.09	58.72	0.666666667	MH057W051	MH057W050			105	CLMH057W051MH057W050	8	0.0130	0.011102	0.08	0.013079	0.08	0.015507	0.09	0.013079	0.08		
CLMH057W053MH057W051		1985		Existing		MH057W053	MH057W051		12309	IRWD	PVC	{9FABCAAB-C0E1-47CD-BDCE-478E00A0AE7C}	CLMH057W053MH057W051	60.72	60.29	0.666666667	MH057W053	MH057W051			110	CLMH057W053MH057W051	8	0.0039	0.007020	0.08	0.007743	0.08	0.009176	0.09	0.007743	0.08		
CLMH057S055MH057W050		1985		Existing		MH057S055	MH057W050		12309	IRWD	PVC	{D9140EC8-9500-4F50-B742-2998FB46FE62}	CLMH057S055MH057W050	64.44	58.72	0.666666667	MH057S055	MH057W050			232	CLMH057S055MH057W050	8	0.0247	0.014018	0.07	0.016804	0.08	0.019926	0.09	0.016804	0.08		
CLMH057S056MH057W055		1985		Existing		MH057S056	MH057W055		12309	IRWD	PVC	{9E91D657-415D-647D-98EE-0300A919FE4}	CLMH057S056MH057W055	67.45	64.63	0.666666667	MH057S056	MH057W055			132	CLMH057S056MH057W055	8	0.0214	0.009399	0.06	0.011260	0.07	0.013352	0.07	0.011260	0.07		
CLMH057S057MH057W056		1985		Existing		MH057S057	MH057W056		12309	IRWD	PVC	{9CAD1502-5874-4222-A082-486985SF8810}	CLMH057S057MH057W056	71.20	67.66	0.666666667	MH057S057	MH057W056			163	CLMH057S057MH057W056	8	0.0166	0.009399	0.07	0.011260	0.07	0.013352	0.08	0.011260	0.07		
CLMH057S058MH057W057		1985		Existing		MH057S058	MH057W057		12309	IRWD	PVC	{1314E0E2-AD0B-4167-BAAD-5965F6AF9115}	CLMH057S058MH057W057	74.09	71.41	0.666666667	MH057S058	MH057W057			163	CLMH057S058MH057W057	8	0.0164	0.009399	0.07	0.011260	0.07	0.013352	0.08	0.011260	0.07		
CLMH057W059MH057W058		1985		Existing		MH057W059	MH057W058		12309	IRWD	PVC	{10E99898-9BAF-451F-9069-3B41A26163C6}	CLMH057W059MH057W058	77.41	74.30	0.666666667	MH057W059	MH057W058			143	CLMH057W059MH057W058	8	0.0217	0.009399	0.06	0.011260	0.07	0.013352	0.07	0.011260	0.07		
CLMH057W065MH057W059		1985		Existing		MH057W065	MH057W059		469	IRWD	PVC	{19CFDB92-2C04-4CA7-811F-D9C0855FB0F7}	CLMH057W065MH057W059	68.47	64.63	0.666666667	MH057W065	MH057W059			132	CLMH057W065MH057W059	8	0.0217	0.009399	0.06	0.011260	0.07	0.013352	0.08	0.011260	0.07		
CLMH057W064MH057W065		1985		Existing		MH057W064	MH057W065		469	IRWD	PVC	{86365863-9847-4AAB-A0E6-CA2D192A5CD6}	CLMH057W064MH057W065	36.68	26.39	0.833333333	MH057W064	MH057W065			275	CLMH057W064MH057W065	10	0.0374	0.121814	0.14	0.143586	0.15	0.170267	0.16	0.143586	0.15		
CLMH057W065MH057W066		1985		Existing		MH057W065	MH057W066		469	IRWD	PVC	{1998FF43-F97C-44A5-A8A3-CAF0903E80E1}	CLMH057W065MH057W066	26.29	24.07	0.833333333	MH057W065	MH057W066			116	CLMH057W065MH057W066	10	0.0191	0.121809	0.16	0.143582	0.18	0.170263	0.19	0.143582	0.18		
CLMH057W066MH057N021		1985		Existing		MH057W066	MH057N021		469	IRWD	PVC	{2CBA786C-A7F5-4C40-A085-C5235228D766}	CLMH057W066MH057N021	23.97	22.26	0.833333333	MH057W066	MH057N021			176	CLMH057W066MH057N021	10	0.0097	0.138567	0.20	0.163717	0.22	0.194143	0.24	0.163717	0.22		
CLMH057S068MH057W052		1985		Existing		MH057S068	MH057W052		12309	IRWD	PVC	{08C3C9F9-678A-408B-9C85-87FA0F7D17A6}	CLMH057S068MH057W052	26.39	25.90	0.666666667	MH057S068	MH057W052			41	CLMH057S068MH057W052	8	0.0120	0.004619	0.06	0.005544	0.06	0.006574	0.06	0.005544	0.06		
CLMH057W070MH057W069		1985		Existing		MH057W070	MH057W069		12309	IRWD	PVC	{EC0E188Z-DD7D-472C-A70C-C432C3222FC5}	CLMH057W070MH057W069	27.75	26.60	0.666666667	MH057W070	MH057W069			86	CLMH057W070MH057W069	8	0.0134	0.004619	0.05	0.005544	0.05	0.006574	0.06	0.005544	0.05		
CLMH057W074MH057N052		1985		Existing		MH057W074	MH057N052		12309	IRWD	PVC	{6DF40182-2C20-4255-AB8B-DCA9337B0A94}	CLMH057W074MH057N052	27.36	25.80	0.666666667	MH057W074	MH057N052			158	CLMH057W074MH057N052	8	0.0099	0.009467	0.07	0.011333	0.08	0.013436	0.09	0.011333	0.08		
CLMH057W075MH057W074		1985		Existing		MH057W075	MH057W074		12309	IRWD	PVC	{E790B02A-A3D8-4B90-91B0-A10E10CBB398}	CLMH057W075MH057W074	28.29	27.55	0.666666667	MH057W075	MH057W074			134	CLMH057W075MH057W074	8	0.0055	0.009238	0.08	0.011089	0.09	0.013148	0.10	0.011089	0.09		
CLMH057W076MH057W075		1985		Existing		MH057W076	MH057W075		12309	IRWD	PVC	{6DCD24B2-53A3-4DB1-9797-0545C6ADFB0A1}	CLMH057W076MH057W075	31.20	28.48	0.666666667	MH057W076	MH057W075			223	CLMH057W076MH057W075	8	0.0122	0.004619	0.05	0.005544	0.06	0.006574	0.06	0.005544	0.06		
CLMH057W078MH057W075		1985		Existing		MH057W078	MH057W075		12309	IRWD	PVC	{19C3EC89-CED7-48BF-9C56-FD4248F9CD52}	CLMH057W078MH057W075	31.56	28.48	0.666666667	MH057W078	MH057W075			197	CLMH057W078MH057W075	8	0.0156	0.004619	0.05	0.005544	0.05	0.006574	0.06	0.005544	0.05		
CLMH057W081MH057N061		1985		Existing		MH057W081	MH057N061		12309	IRWD	PVC	{D20FFD08-DB2E-4C96-8E95-25C944EB2548}	CLMH057W081MH057N061	31.37	30.87	0.666666667	MH057W081	MH057N061			91	CLMH057W081MH057N061	8	0.0055	0.007537	0.07	0.008069	0.08	0.009566	0.08	0.008069	0.08		
CLMH057S084MH057S083		1985		Existing		MH057S084	MH057S083		12309	IRWD	PVC	{1E133EF1A-B152-43A0-8DE4-F4BB51EFF0C8}	CLMH057S084MH057S083	107.90	106.01	0.666666667	MH057S084	MH057S083			192	CLMH057S084MH057S083	8	0.0098	0.004619	0.05	0.005544	0.06	0.006574	0.06	0.005544	0.06		
CLMH057W097MH057W066		1986		Existing		MH057W097	MH057W066		12271	IRWD	VCP	{9E3603AB-83E4-4B88-8B3D-BA96F4F7D093}	CLMH057W097MH057W066	25.96	24.35	0.500000000	MH057W097	MH057W066			99	CLMH057W097MH057W066	6	0.0163	0.016796	0.13	0.020164	0.14	0.023908	0.15	0.020164	0.14		
CLMH057W098MH057W097		1986		Existing		MH057W098	MH057W097		12271	IRWD	VCP	{FE3CB86D-2F31-4006-B141-19A5130A87D2}	CLMH057W098MH057W097	27.79	26.17	0.500000000	MH057W098	MH057W097			112	CLMH057W098MH057W097	6	0.0145	0.016796	0.13	0.020164	0.15	0.023908	0.16	0.020164	0.15		
CLMH057W100MH057W101		1986		Existing		MH057W100	MH057W101		12271	IRWD	VCP	{FC050480-C4C90-4426-8670-8754447E44E4}	CLMH057W100MH057W101	33.00	31.10	0.666666667	MH057W100	MH057W101			262	CLMH057W100MH057W101	8	0.0073	0.008398	0.08	0.010082	0.08	0.011954	0.09	0.010082	0.08		
CLMH057W101MH057N035		1986		Existing		MH057W101	MH057N035		12271	IRWD	VCP	{1A7159A4-3065-40A5-9086-C86D065900B4}	CLMH057W101MH057N035	30.89	28.10	0.666666667	MH057W101	MH057N035			227	CLMH057W101MH057N035	8	0.0123	0.008398	0.07	0.010082	0.08	0.011954	0.08	0.010082	0.08		
CLMH057W102MH057W098		1986		Existing		MH057W102	MH057W098		12271	IRWD	VCP	{81E

CLMH058E075MH058E074		1984		Existing		MH058E075	MH058E074		T12048	IRWD	PVC	{71B9C2F6-EDB5-4699-A8FE-0794697A24C9}	CLMH058E075MH058E074	51.72	51.40	0.666666667	MH058E075	MH058E074		67	CLMH058E075MH058E074	8	0.0048	0.003380	0.05	0.004059	0.06	0.004811	0.06	0.004059	0.06				
CLMH058E076MH058E073		1984		Existing		MH058E076	MH058E073		T12048	IRWD	PVC	{CE9F53D5-5757-4885-9E91-88E75CFDB2ED}	CLMH058E076MH058E073	54.50	50.52	0.666666667	MH058E076	MH058E073		204	CLMH058E076MH058E073	8	0.0195	0.007165	0.06	0.008602	0.06	0.010198	0.07	0.008602	0.06				
CLMH058E077MH058E076		1984		Existing		MH058E077	MH058E076		T12048	IRWD	PVC	{A85C6C87-6673-4BD5-8DF6-D5325FF376E0}	CLMH058E077MH058E076	55.65	54.70	0.666666667	MH058E077	MH058E076		193	CLMH058E077MH058E076	8	0.0049	0.002476	0.04	0.002972	0.05	0.003523	0.05	0.002972	0.05				
CLMH058E078MH058E077		1984		Existing		MH058E078	MH058E077		T12048	IRWD	PVC	{71F9CE42-8323-4444-877D-707E53F63EFA}	CLMH058E078MH058E077	56.22	55.86	0.666666667	MH058E078	MH058E077		78	CLMH058E078MH058E077	8	0.0046	0.002476	0.05	0.002972	0.05	0.003523	0.05	0.002972	0.05				
CLMH058E084MH058E017		1984		Existing		MH058E084	MH058E017		T12046	IRWD	PVC	{A7611BC6-3343-4798-9FFE-9B4EC64F3ADA}	CLMH058E084MH058E017	49.97	29.46	0.666666667	MH058E084	MH058E017		166	CLMH058E084MH058E017	8	0.1243	0.009038	0.04	0.010851	0.04	0.012864	0.05	0.010851	0.04				
CLMH058E085MH058E084		1984		Existing		MH058E085	MH058E084		T12046	IRWD	PVC	{18207A41-E755-4102-AB86-6E5C03D6A9E9}	CLMH058E085MH058E084	50.83	50.16	0.666666667	MH058E085	MH058E084		137	CLMH058E085MH058E084	8	0.0049	0.006583	0.07	0.007905	0.08	0.009371	0.09	0.007905	0.08				
CLMH058E087MH058E085		1984		Existing		MH058E087	MH058E085		T12046	IRWD	PVC	{F3978892-A2C7-4A4A-8776-58A8969044A53}	CLMH058E087MH058E085	52.97	51.02	0.666666667	MH058E087	MH058E085		247	CLMH058E087MH058E085	8	0.0079	0.004359	0.05	0.005234	0.06	0.006204	0.06	0.005234	0.06				
CLMH058E088MH058E087		1984		Existing		MH058E088	MH058E087		T12046	IRWD	PVC	{D265DE90-2163-419C-BFA4-67A1C37A2960}	CLMH058E088MH058E087	53.59	53.16	0.666666667	MH058E088	MH058E087		91	CLMH058E088MH058E087	8	0.0047	0.002149	0.04	0.002581	0.05	0.003059	0.05	0.002581	0.05				
CLMH058E089MH058E088		1984		Existing		MH058E089	MH058E088		T12046	IRWD	PVC	{25F85622-D87F-40EC-B251-B5C07DECF028}	CLMH058E089MH058E088	54.29	53.83	0.666666667	MH058E089	MH058E088		97	CLMH058E089MH058E088	8	0.0047	0.002149	0.04	0.002581	0.05	0.003059	0.05	0.002581	0.05				
CLMH058E093MH058E094		1984		Existing		MH058E093	MH058E094		T12899	IRWD	PVC	{B176D0A3-D1D9-410A-A078-A265A2218DC5}	CLMH058E093MH058E094	47.86	46.72	0.666666667	MH058E093	MH058E094		115	CLMH058E093MH058E094	8	0.0099	0.033155	0.14	0.039771	0.15	0.047152	0.16	0.039771	0.15				
CLMH058E094MH058E013		1984		Existing		MH058E094	MH058E013		T12899	IRWD	PVC	{9D4900F7-9601-481C-9A32-3CB8524SC2E7}	CLMH058E094MH058E013	46.15	33.93	0.666666667	MH058E094	MH058E013		92	CLMH058E094MH058E013	8	0.1343	0.034343	0.07	0.041196	0.08	0.048842	0.09	0.041196	0.08				
CLMH058E095MH058E093		1984		Existing		MH058E095	MH058E093		T12899	IRWD	PVC	{1619EE12-0D3D-4B01-87A4-58654E2619F2}	CLMH058E095MH058E093	48.47	47.95	0.666666667	MH058E095	MH058E093		84	CLMH058E095MH058E093	8	0.0062	0.024700	0.13	0.029627	0.14	0.035123	0.16	0.029627	0.14				
CLMH058E099MH058E093		1984		Existing		MH058E099	MH058E093		T12899	IRWD	PVC	{E1E28691-1169-473A-BC45-00D97F320140}	CLMH058E099MH058E093	49.88	48.08	0.666666667	MH058E099	MH058E093		255	CLMH058E099MH058E093	8	0.0071	0.006865	0.07	0.008236	0.08	0.009766	0.08	0.008236	0.08				
CLMH058E101MH058E099		1984		Existing		MH058E101	MH058E099		T12899	IRWD	PVC	{AC447DC9-9316-4606-A0F1-042AFC482B79}	CLMH058E101MH058E099	50.27	49.99	0.666666667	MH058E101	MH058E099		57	CLMH058E101MH058E099	8	0.0049	0.004087	0.06	0.004903	0.06	0.005813	0.07	0.004903	0.06				
CLMH058E103MH058E101		1984		Existing		MH058E103	MH058E101		T12899	IRWD	PVC	{AC45C6E6-936D-4849-A38E-6FC5ED334E33}	CLMH058E103MH058E101	50.77	50.36	0.666666667	MH058E103	MH058E101		80	CLMH058E103MH058E101	8	0.0051	0.003241	0.05	0.003888	0.05	0.004611	0.06	0.003888	0.05				
CLMH058E125MH058E019		1979		Existing		MH058E125	MH058E019		A00340	IRWD	PVC	{1A4A40D6-51AC-4428-B78B-AEA6E0B889E1}	CLMH058E125MH058E019	39.95	38.95	0.666666667	MH058E125	MH058E019	Future 8-in and less, d/D>0.50	118	CLMH058E125MH058E019	8	0.0085	0.033245	0.14	0.035496	0.15	0.042079	0.16	0.133291	0.77				
CLMH058E126MH058E004		2001		Existing	assumed Mannings N	CLMH058E126	MH058E004		A00806	IRWD	PVC	{7DD39E52-6919-4438-AFDE-A0AD2F6D518}	CLMH058E126MH058E004	27.45	27.32	0.833333333	MH058E126	MH058E004		40	CLMH058E126MH058E004	10	0.0031	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH058E127MH058E131		2009		Existing	assumed Mannings N	CLMH058E127	MH058E131		A01799	IRWD	VCP	{FDF6C984-021D-4A9B-A493-516FA02681F}	CLMH058E127MH058E131	25.69	19.03	1.333333333	MH058E127	MH058E131		129	CLMH058E127MH058E131	16	0.0516	0.000000	0.19	0.000000	0.21	0.000000	0.23	0.000000	0.48				
CLMH058E128MH058E129		2009		Existing	assumed Mannings N	CLMH058E128	MH058E129		A01799	IRWD	VCP	{C72CAEB3-DC57-42A5-AC29-FD0A93F44403}	CLMH058E128MH058E129	19.60	18.65	2.250000000	MH058E128	MH058E129		57	CLMH058E128MH058E129	27	0.0167	4.098487	0.32	4.758238	0.33	5.233636	0.35	12.128467	0.59				
CLMH058E129MH058E130		2009		Existing	assumed Mannings N	CLMH058E129	MH058E130		A01799	IRWD	VCP	{A4E2B5D0-67D2-41D5-B5F6-6B7A35D8E9EC}	CLMH058E129MH058E130	18.55	18.40	2.250000000	MH058E129	MH058E130		90	CLMH058E129MH058E130	27	0.0017	3.872735	0.39	4.303786	0.42	4.738029	0.44	10.485618	0.70				
CLMH058E130MH058E132		2009		Existing	assumed Mannings N	CLMH058E130	MH058E132		A01799	IRWD	VCP	{F982A0E0-FD2A-4F8B-A604-4C0940B778B3}	CLMH058E130MH058E132	18.30	18.03	2.250000000	MH058E130	MH058E132		154	CLMH058E130MH058E132	27	0.0018	3.811545	0.40	4.290779	0.43	4.725397	0.45	10.222346	0.68				
CLMH058E131MH058E129		2009		Existing	assumed Mannings N	CLMH058E131	MH058E129	assumed US invert elev	A01799	IRWD	VCP	{03588937-BCAA-455C-9789-D63DCE99005A}	CLMH058E131MH058E129	19.03	18.65	1.333333333	MH058E131	MH058E129	Future Greater than 15-in, d/D >0.75	59	CLMH058E131MH058E129	16	0.0065	0.352791	0.49	0.530311	0.53	0.547782	0.57	1.310136	0.98				
CLMH058E132MH058E001		1964		Existing		MH058E132	MH058E001		234	IRWD	ACP	{14DE3033-3EF1-4566-BBCC-0223891B6962}	CLMH058E132MH058E001	17.97	15.92	2.250000000	MH058E132	MH058E001		678	CLMH058E132MH058E001	27	0.0030	3.434633	0.37	3.901691	0.40	4.542444	0.43	9.030493	0.64				
CLMH058E134MH058E135		2009		Existing	assumed Mannings N	CLMH058E134	MH058E135		A01799	IRWD	VCP	{7B2B3909-3611-4624-B26A-7B812FFE1C32}	CLMH058E134MH058E135	26.01	20.02	2.250000000	MH058E134	MH058E135		132	CLMH058E134MH058E135	27	0.0454	1.720566	0.17	1.837124	0.18	2.178029	0.20	7.051320	0.38				
CLMH058E135MH058E128		2009		Existing	assumed Mannings N	CLMH058E135	MH058E128		A01799	IRWD	VCP	{119D819F-667C-4E1E-98AD-C1C3EAF03171}	CLMH058E135MH058E128	19.92	19.70	2.250000000	MH058E135	MH058E128		58	CLMH058E135MH058E128	27	0.0038	1.720566	0.25	1.841715	0.26	2.178029	0.28	7.051322	0.51				
CLMH058E136MH058E127		2009		Existing	assumed Mannings N	CLMH058E136	MH058E127		A01799	IRWD	PVC	{74300F89-4FB0-4897-8683-64B146A17AB8}	CLMH058E136MH058E127	26.40	25.79	1.333333333	MH058E136	MH058E127		28	CLMH058E136MH058E127	16	0.0218	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH058S001MH058S002		1987		Existing		MH058S001	MH058S002		A00507	IRWD	VCP	{AFAD404C-EF76-4EFF-9A58-664030242DFE}	CLMH058S001MH058S002	40.33	39.68	1.250000000	MH058S001	MH058S002		344	CLMH058S001MH058S002	15	0.0019	0.041031	0.10	0.043804	0.10	0.051936	0.11	0.043804	0.10				
CLMH058S002MH058W001		1987		Existing		MH058S002	MH058W001		A00507	IRWD	VCP	{666597C7-D8C3-433D-9787-598D60DA64AC}	CLMH058S002MH058W001	39.58	39.00	1.250000000	MH058S002	MH058W001		311	CLMH058S002MH058W001	15	0.0019	0.044828	0.10	0.047857	0.11	0.056742	0.11	0.047857	0.11				
CLMH058S004MH058S003		1987		Existing		MH058S004	MH058S003		A00507	IRWD	VCP	{A90CD65E-394B-4EC1-BCF9-373CF83DF555}	CLMH058S004MH058S003	40.63	40.52	1.250000000	MH058S004	MH058S003		59	CLMH058S004MH058S003	15	0.0019	0.041032	0.09	0.043804	0.10	0.051937	0.10	0.043804	0.10				
CLMH058S005MH058S004		1997		Existing		MH058S005	MH058S004		A00829C	IRWD	VCP	{E2A86758-E137-48EB-BE7E-3B4A5D028DB4}	CLMH058S005MH058S004	49.15	40.74	1.000000000	MH058S005	MH058S004		340	CLMH058S005MH058S004	12	0.0247	0.041032	0.07	0.043804	0.08	0.051937	0.08	0.043804	0.08				
CLMH058W001MH058W002		1987		Existing		MH058W001	MH058W002		A00507	IRWD	VCP	{E0924BE3-EE27-4C80-BA58-30F6C63FB63D}	CLMH058W001MH058W002	38.79	31.20	1.250000000	MH058W001	MH058W002		202	CLMH058W001MH058W002	15	0.0376	0.045848	0.05	0.048946	0.06	0.058033	0.06	0.048946	0.06				
CLMH058W003MH058W002		1987		Existing		MH058W003	MH058W002		A00507	IRWD	VCP	{98F8F82E-3A62-4B79-A62A-CDC607EBAD2A}	CLMH058W003MH058W002	31.00	15.18	1.250000000	MH058W003	MH058W002		141	CLMH058W003MH058W002	15	0.0431	0.045847	0.05	0.048945	0.06	0.058032	0.06	0.048945	0.05				
CLMH058W003MH058W004		1987		Existing		MH058W003	MH058W004		A00507	IRWD	VCP	{891F40D9-C959-4064-B803-77D2C2388C7B}	CLMH058W003MH058W004	14.97	14.72	1.250000000	MH058W003	MH058W004		141	CLMH058W003MH058W004	15	0.0018	0.045847	0.10	0.048945	0.11	0.058032	0.11	0.048945	0.11				
CLMH058W004MH058W005	UFF21	1987		Existing		MH058W004	MH058W005		A00507	IRWD	VCP	{DE0D41C5-4DC0-47B9-A54E-620CCE8C33EF}	CLMH058W004MH058W005	14.52	12.60	1.250000000	MH058W004	MH058W005		278	CLMH058W004MH058W005	15	0.0069	0.045846	0.08	0.048944	0.08	0.058032	0.09	0.048944	0.08				
CLMH058W005MH057N066		1987		Existing		MH058W005	MH057N066		A00507	IRWD	VCP	{8EAA1AB0-43F4-488F-B482-BCAF6CFA1466}	CLMH058W005MH057N066	12.39	11.39	1.250000000	MH058W005	MH057N066		362	CLMH058W005MH057N066	15	0.0028	0.045845	0.09	0.048943	0.10	0.058031	0.11	0.048943	0.10				
CLMH059E001MH059S015		1976		Existing		MH059E001	MH059S015		A00095	IRWD	PVC	{89EA6A07-73CF-4543-AFE2-A2B9B3127730}	CLMH059E001MH059S015	46.31	45.77	0.666666667	MH059E001	MH059S015		250	CLMH059E001MH059S015	8	0.0022	0.067016	0.27	0.079741	0.32	0.094537	0.32	0.079741	0.30				
CLMH059E002MH059E001		1975		Existing		MH059E002	MH059E001		A00095	IRWD	VCP	{6F827B1B-9FF3-4A1F-AC5F-109F51C983C6}	CLMH059E002MH059E001	47.27	46.40	0.666666667	MH059E002	MH059E001		218	CLMH059E002MH059E001	8	0.0040	0.067016	0.24	0.079741	0.26	0.094537	0.28	0.079741	0.26				
CLMH059E003MH059E002		1975		Existing		MH059E003	MH059E002		A00095	IRWD	VCP	{9E1C127F-E470-4B21-AB76-43177090CDB8}	CLMH059E003MH059E002	48.31	47.38	0.666666667	MH059E003	MH059E002		235	CLMH059E003MH059E002	8	0.0040	0.067016	0.24	0.079741	0.26	0.094537	0.28	0.079741	0.26				
CLMH059E004MH059E003		1975		Existing		MH059E004	MH059E003		A00095	IRWD	VCP	{3F701DCF-838D-411D-9D42-770228E947D3}	CLMH059E004MH059E003	49.84	48.41	0.666666667	MH059E004	MH059E003		358	CLMH059E004MH059E003	8	0.0040	0.067016	0.24	0.079741	0.26	0.094537	0.28	0.079741	0.26				
CLMH059E005MH059E004		1975		Existing		MH059E005	MH059E004		A00095	IRWD	VCP	{53ADA787-4467-499C-8E7F-A7917C42E494}	CLMH059E005MH059E004	51.00	49.95	0.666666667	MH059E005	MH059E004		283	CLMH059E005MH059E004	8	0.0037	0.053536	0.20	0.063392	0.21	0.075134	0.26	0.063392	0.23				
CLMH059E006MH059E005		1975		Existing		MH059E006	MH059E005		A00095	IRWD	VCP	{58ADE02D-EED5-4A27-B7F1-D5DB17F38CBD}	CLMH059E006MH059E005	52.00	51.20	0.666666667	MH059E006	MH059E005		200	CLMH059E006MH059E005	8	0.0040	0.039914	0.18	0.047625	0.20	0.056462	0.22	0.047625	0.20				
CLMH059E007MH059E008		1978		Existing		MH059E007	MH059E008		T09371	IRWD	PVC	{1E74BA76-0198-48DD-BE6C-E636A298C77F}	CLMH059E007MH059E008	58.49	57.84	0.666666667	MH059E007	MH059E008		111	CLMH059E007MH059E008	8	0.0059	0.003469	0.05	0.004164	0.06	0.004937	0.06	0.004164	0.06				
CLMH059E008MH059E009		1978		Existing		MH059E008	MH059E009		T09371	IRWD	PVC	{21B9271C-BA5C-4524-BA3F-25D08FCD807D}	CLMH059E008MH059E009	57.75	57.40	0.666666667	MH059E008	MH059E009		62	CLMH059E008MH059E009	8	0.0056	0.003469	0.05	0.004164	0.06	0.004937	0.06	0.004164	0.06				
CLMH059E009MH059E010		1978		Existing		MH059E009	MH059E010		T09371	IRWD	PVC	{E7703485-5ED8-4DF9-9C5F-48F9ED596282}	CLMH059E009MH059E010	57.29	56.43	0.666666667	MH059E009	MH059E010		144	CLMH059E009MH059E010	8	0.0060	0.003469	0.05	0.004164	0.06	0.004937	0.06	0.004164	0.06				
CLMH059E010MH059E011		1978		Existing		MH059E010	MH059E011		T09371	IRWD	VCP	{02EA43AC-26A2-4267-A8E8-E6CC96599407}	CLMH059E010MH059E011	56.34	55.15	0.666666667	MH059E010	MH059E011		201	CLMH059E010MH059E011	8	0.0059	0.005609	0.07	0.006732	0.07	0.007982	0.08	0.006732	0.07				
CLMH059E011MH059E014		1978		Existing		MH059E011	MH059E014		T09371	IRWD	VCP	{FDBCDC8E-B883-4F1D-AAB8-53A17FCC1869}	CLMH059E011MH059E014	55.06	54.13	0.666666667	MH059E011	MH059E014		187	CLMH059E011MH059E014	8	0.0050	0.006353	0.07	0.007590	0.08	0.008998	0.09	0.007590	0.08				
CLMH059E012MH059E013		1978		Existing		MH059E012	MH059E013		T09371	IRWD	VCP	{32F41EBC-ABE0-487D-8D22-142542BFAE32}	CLMH059E012MH059E013	55.08	54.40	0.666666667	MH059E012	MH059E013		163	CLMH059E012MH059E013	8	0.0059	0.006456	0.07	0.007751	0.08	0.009189	0.09	0.007751	0.08				
CLMH059E013MH059E014		1978		Existing		MH059E013	MH059E014		T09371	IRWD	VCP	{DBE48F20-203A-4A95-9433-60CD4EBBDDB1}	CLMH059E013MH059E014	54.31	54.04	0.666666667	MH059E013	MH059E014		49	CLMH059E013MH059E014	8	0.0055	0.006456	0.07	0.007751	0.08	0.009189	0.08	0.007751	0.08				
CLMH059E014MH059E015		1978		Existing		MH059E014	MH059E015		T09371	IRWD	VCP	{94C03A0E-C652-4978-9830-44D73F7ABEF3}	CLMH059E014MH059E015	53.93	53.33	0.666666667	MH059E014	MH059E015		65	CLMH059E014MH059E015	8	0.0092	0.012809	0.09	0.015341	0.10	0.018187	0.11	0.015341	0.10				
CLMH059E015MH059E016		1978		Existing		MH059E015	MH059E016		T09371	IRWD	VCP	{586D6924-361D-4E6B-891F-A58C4C4C51C3}	CLMH059E015MH059E016	53.22	51.66	0.666666667	MH059E015	MH059E016		134	CLMH059E015MH059E016	8	0.0162	0.012809	0.08	0.015341	0.09	0.018187	0.09	0.015341	0.09				
CLMH059E016MH059E017		1978		Existing		MH059E016	MH059E017		T09371	IRWD	VCP	{40AAC25D-C557-470D-989E-D8FD25A2CBE2}	CLMH059E016MH059E017	50.97	50.79	0.666666667	MH059E016	MH059E017		38	CLMH059E016MH059E017	8	0.0047	0.014506	0.11	0.017377	0.12	0.020601	0.13	0.017377	0.12				
CLMH059E017MH059E018		1978		Existing		MH059E017	MH059E018		T09371	IRWD	VCP	{C1E8560E-FAA7-4950-9FB1-970BE55B0970}	CLMH059E017MH059E018	50.70	50.16	0.666666667	MH059E017	MH059E018		111	CLMH059E017MH059E018	8	0.0049	0.014506	0.11	0.017377	0.12	0.020601	0.13	0.017377	0.12				
CLMH059E018MH059E019		1978		Existing		MH059E018	MH059E019		T09371	IRWD	VCP	{242EDFE8-D6DD-48F4-9151-344758147A9A}	CLMH059E018MH059E019	50.06	49.70	0.666666667	MH059E018	MH059E019		69	CLMH059E018MH059E019	8	0.0048	0.014506	0.11	0.017377	0.12	0.020601	0.13	0.017377	0.12				
CLMH059E019MH059E020		1978		Existing		MH059E019	MH059E020		T09371	IRWD	VCP	{0F188E7A-8CAD-480E-90E4-49E4BF8CDA09}	CLMH059E019MH059E020	49.61	49.04	0.666666667	MH059E019	MH059E020		70	CLMH059E019MH059E020	8	0.0081	0.021232	0.12	0.025451	0.13	0.030173	0.14	0.025451	0.13				
CLMH059E020MH059E021		1978		Existing		MH059E020	MH059E021		T09371	IRWD	VCP	{A79ABF34-7D07-4110-A394-6D25517656ED}	CLMH059E020MH059E021	48.95	48.40	0.666666667	MH059E020	MH059E021		86	CLMH059E020MH059E021	8	0.0064	0.027475	0.14	0.032946	0.15	0.039061	0.17	0.032946	0.15				
CLMH059E021MH059E050		1978		Existing		MH059E021	MH059E050		T09371	IRWD	VCP	{1F44AC3D-419A-479B-A1F1-3B807A1EC162}	CLMH059E021MH059E050	48.31	43.40	0.666666667	MH059E021	MH059E050		225	CLMH059E021MH059E050	8	0.0218	0.031714	0.11	0.038035	0.13	0.045094	0.14	0.038035	0.13				
CLMH059E022MH059E020		1978		Existing		MH059E022	MH059E020		T09373	IRWD	VCP	{3F0E5B53-DD8A-4AB3-A496-9EF5454E9B86}	CLMH059E022MH059E020	50.25	49.15	0.666666667	MH059E022	MH059E020		187	CLMH059E022MH059E020	8	0.0059	0.006243	0.07	0.007496	0.08	0.008888	0.08	0.007496	0.08				
CLMH059E031MH059E032		1969		Existing		MH059E031	MH059E032		077	IRWD	ACP	{073ECE218-E726-4B3D-AB13-793176558000}	CLMH059E031MH059E032	24.22	23.62	2.000000000	MH059E031	MH059E032		607	CLMH059E031MH059E032	24	0.0010	2.177914	0.53	2.417408	0.56	2.865369	0.61	2.672122	0.59				
CLMH059E032MH059E033		1969		Existing		MH059E032	MH059E033		077	IRWD	ACP	{4AFC4CCB-E45A-4E0C-86FD-904BB4AB0BB0}	CLMH059E032MH059E033	23.62	23.46	2.000000000	MH059E032	MH059E033		495	CLMH059E032MH059E033	24	0.0003	2.176546	0.44	2.416013	0.46	2.863748	0.50	2.668732	0.49				
CLMH059E033MH059E034		1969		Existing		MH059E033	MH059E034		077	IRWD	ACP	{C6E13E013-2857-4865-A180-0B0CBA40E0A4}	CLMH059E033MH059E034	23.37	22.67	2.000000000	MH059E033	MH059E034		450	CLMH059E033MH059E034	24	0.0016	2.176405	0.45	2.415871	0.48	2.863572	0.53	2.668371	0.51				
CLMH059E034MH059E035		1969		Existing		MH059E034	MH059E035		077	IRWD	ACP	{B7FB1C74-A3B7-4943-9D86-D1DCC41647CC}	CLMH059E034MH059E035	22.56	22.20	2.000000000	MH059E034	MH059E035		550	CLMH059E034MH059E035	24	0.0007	2.175112	0.43	2.414559	0.45	2.862694	0.49	2.665196	0.47				
CLMH059E035MH059S021		1969		Existing		MH059E035	MH059S021		077	IRWD	ACP	{CE37EE1C-77C4-4ABD-9D9D-3EE842087FEC}	CLMH059E035MH059S021	22.12	21.67	2.000000000	MH059E035	MH059S021		500	CLMH059E035MH059S021	24	0.0009	2.174754	0.41	2.414220	0.43	2.861678	0.47	2.664324	0.45				
CLMH059E036I5059E084		1976		Existing	assumed length, need new plan	MH059E036	I5059E084		052	IRWD	RCP	{7DAB9059-FB25-4F74-BD6C-98DE2D8B160}	CLMH059E036I5059E084	10.18	9.40	4.250000000	MH059E036	I5059E084		455	CLMH059E036I5059E084	51	0.0017	23.647337	0.48	31.433216	0.56	35.872841	0.60	44.619278	0.70				
CLMH059E050MH059E051		1976		Existing		MH059E050	MH059E051		A00251	IRWD	VCP	{3E348F27-B2B8-4343-BA7D-5FC5CE99456C}	CLMH059E050MH059E051	43.31	43.13	0.666666667	MH059E050	MH059E051		118	CLMH059E050MH059E051	8	0.0015	0.032029	0.20	0.038365	0.22	0.045486	0.23	0.038365	0.22				
CLMH059E051MH059E052		1976		Existing		MH059E051	MH059E052		A00251	IRWD	VCP	{B008CE16-6CCA-4F8E-A77E-5AB9221E3F9D}	CLMH059E051MH059E052	43.02	42.63	0.666666667	MH059E051	MH059E052		227	CLMH059E051MH059E052	8	0.0017	0.032021	0.20	0.038363	0.22	0.045484	0.24	0.038363	0.22				
CLMH059E052MH059E053		1976		Existing		MH059E052	MH059E053		A00251	IRWD	VCP	{32479242-2A1E-4DFF-BFDB-73E9DB9971D8}	CLMH059E052MH059E053	42.52	41.02	0.666666667	MH059E052	MH059E053		43	CLMH059E052MH059E053	8	0.0349	0.032616	0.10	0.038993	0.11	0.046232	0.12	0.038993	0.11				
CLMH059E053MH060S109		1976		Existing		MH059E053	MH060S109		T09371	IRWD	VCP	{79CDC497-D74E-4C1E-967A-9F728280390 7}	CLMH059E053MH060S109	40.91	40.36	0.666666667	MH059E053	MH060S109		275	CLMH059E053MH060S109	8	0.0020	0.032513	0.19	0.038877	0.21	0.046100	0.23	0.038877	0.21				
CLMH059E070MH059E006		1975		Existing		MH059E070	MH059E006		A00095	IRWD	VCP	{FB9AE778-00C5-42B8-A206-7358840DF132}	CLMH059E070MH059E006	53.47	52.09	0.500000000	MH059E070	MH059E006		258	CLMH059E070MH059E006	6	0.0053	0.033610	0.23	0.040104	0.26	0.047546	0.28	0.040104	0.26				
CLMH059N009MH059N021	CAL28	1976		Existing		MH059N009	MH059N021		052	IRWD	RCP	{11B03157-B5EC-40B9-877A-0A6448F2ED48}	CLMH059N009MH059N021	13.11	11.68	4.250000000	MH059N009	MH059N021		812	CLMH059N009MH059N021	51	0.0018	23.869167	0.46	31.652426	0.54	36.123348	0.58	44.890575	0.69				
CLMH059N010MH059N009		1991		Existing		MH059N010	MH059N009		A00733A	IRWD	VCP	{08E7113C-F969-4D59-BCC9-78D4F7973273}	CLMH059N010MH059N009	16.41	16.12	1.500000000	MH059N010	MH059N009		22	CLMH059N010MH059N009	18	0.0129	3.428067	0.49	3.288746	0.47	3.424900	0.49	3.390503	0.48				
CLMH059N019MH059N026		1990		Existing	assumed Mannings N	MH059N019	MH059N026	ERROR 23	A01624	IRWD	VCP	{107543C4-278A-416F-A89F-B1E2D8448860}	CLMH059N019MH059N026	7.04	7.03	2.000000000	MH059N019	MH059N026		44	CLMH059N019MH059N026	24	0.0002	0.561077	0.23	0.619992	0.24	0.734916	0.26	1.799141	0.49				
CLMH059N020MH059N030		1975		Existing	assumed Mannings N	MH059N020	MH059N030		A01669

CLMH0595020MH0595019		1965			Existing			MH0595020	MH0595019		A00077	IRWD	ACP	{03F90925-F5D9-4F5C-B13E-6712DD2BFAF2}	CLMH0595020MH0595019	21.06	20.67	2.000000000	MH0595020	MH0595019			500	CLMH0595020MH0595019	24	0.0008	2.174032	0.41	2.413481	0.44	2.860851	0.48	2.662585	0.46
CLMH0595021MH0595020		1965			Existing			MH0595021	MH0595020		A00077	IRWD	ACP	{A5152D6F-CF07-4159-8C8C-D0BDAEFBE7B5}	CLMH0595021MH0595020	21.56	21.17	2.000000000	MH0595021	MH0595020			500	CLMH0595021MH0595020	24	0.0008	2.174392	0.41	2.413850	0.44	2.861264	0.48	2.663455	0.46
CLMH0595022MH0595024		1966			Existing			MH0595022	MH0595024		234	IRWD	ACP	{FFFA021A-D257-48BD-B0D2-7F6237A78B0B}	CLMH0595022MH0595024	13.00	11.50	2.250000000	MH0595022	MH0595024		Future Greater than 15-in, d/D >0.75	623	CLMH0595022MH0595024	27	0.0024	3.140128	0.37	3.553290	0.39	4.404980	0.47	8.359293	0.90
SIMH0595023MH0595023_101		1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	13.54	10.56	1.500000000	MH0595023	MH0595022_101		Siphon	13	SIMH0595023MH0595023_101	15	0.2390	1.733755	0.66	1.982928	0.70	2.401012	0.76	4.631494	1.00
SIMH0595023MH0595023_201		1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	13.54	10.56	1.250000000	MH0595023	MH0595023_201		Siphon	13	SIMH0595023MH0595023_201	15	0.2390	1.141925	0.70	1.304348	0.74	1.549973	0.81	2.859388	1.00
SIMH0595023MH0595023_301		1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	13.54	10.56	0.833333333	MH0595023	MH0595023_301		Siphon	13	SIMH0595023MH0595023_301	10	0.2390	0.433274	0.79	0.478179	0.86	0.526899	0.96	1.183496	1.00
SIMH0595023_101MH0595023_102	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	10.56	8.37	1.500000000	MH0595023_101	MH0595023_102		Siphon	9	SIMH0595023_101MH0595023_102	18	0.2388	1.734545	1.00	1.982335	1.00	2.401238	1.00	4.631683	1.00
SIMH0595023_102MH0595023_103	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	8.37	6.59	1.500000000	MH0595023_102	MH0595023_103		Siphon	8	SIMH0595023_102MH0595023_103	18	0.2389	1.734405	1.00	1.982307	1.00	2.401334	1.00	4.631923	1.00
SIMH0595023_103MH0595023_104	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	6.59	5.22	1.500000000	MH0595023_103	MH0595023_104		Siphon	6	SIMH0595023_103MH0595023_104	18	0.2387	1.734548	1.00	1.982428	1.00	2.401756	1.00	4.631041	1.00
SIMH0595023_104MH0595023_105	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	5.22	4.00	1.500000000	MH0595023_104	MH0595023_105		Siphon	10	SIMH0595023_104MH0595023_105	18	0.1220	1.734477	1.00	1.982637	1.00	2.401493	1.00	4.631024	1.00
SIMH0595023_105MH0595023_106	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	4.00	3.20	1.500000000	MH0595023_105	MH0595023_106		Siphon	24	SIMH0595023_105MH0595023_106	18	0.0333	1.735226	1.00	1.982640	1.00	2.401296	1.00	4.630403	1.00
SIMH0595023_106MH0595023_107	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	3.20	4.40	1.500000000	MH0595023_106	MH0595023_107		Siphon	16	SIMH0595023_106MH0595023_107	18	0.0750	1.734040	1.00	1.982449	1.00	2.400841	1.00	4.630691	1.00
SIMH0595023_107MH0595022		1966			Existing			MH0595023	MH0595022	slope .0848	234	IRWD	ACP	{81C0996A-C669-43B3-B462-5889A2CF64DC}	SIMH0595023MH0595022	4.40	13.08	1.500000000	MH0595023_107	MH0595022		Siphon	103	SIMH0595023_107MH0595022	18	0.0847	1.734286	0.77	1.981912	0.79	2.401359	0.83	4.630599	1.00
SIMH0595023_201MH0595023_202	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	10.56	8.37	1.250000000	MH0595023_202	MH0595023_202		Siphon	9	SIMH0595023_201MH0595023_202	15	0.2388	1.141939	1.00	1.303760	1.00	1.550242	1.00	2.859817	1.00
SIMH0595023_202MH0595023_203	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	8.37	6.59	1.250000000	MH0595023_202	MH0595023_203		Siphon	8	SIMH0595023_202MH0595023_203	15	0.2389	1.142476	1.00	1.304443	1.00	1.550172	1.00	2.859190	1.00
SIMH0595023_203MH0595023_204	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	6.59	5.22	1.250000000	MH0595023_203	MH0595023_204		Siphon	6	SIMH0595023_203MH0595023_204	15	0.2387	1.142179	1.00	1.304817	1.00	1.549994	1.00	2.858825	1.00
SIMH0595023_204MH0595023_205	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	5.22	4.00	1.250000000	MH0595023_204	MH0595023_205		Siphon	10	SIMH0595023_204MH0595023_205	15	0.1220	1.143031	1.00	1.304379	1.00	1.550196	1.00	2.858967	1.00
SIMH0595023_205MH0595023_206	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	4.00	3.20	1.250000000	MH0595023_205	MH0595023_206		Siphon	24	SIMH0595023_205MH0595023_206	15	0.0333	1.142627	1.00	1.304602	1.00	1.550365	1.00	2.858453	1.00
SIMH0595023_206MH0595023_207	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	3.20	4.40	1.250000000	MH0595023_206	MH0595023_207		Siphon	16	SIMH0595023_206MH0595023_207	15	0.0750	1.142319	1.00	1.304731	1.00	1.549719	1.00	2.857904	1.00
SIMH0595023_207MH0595022		1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{94F2E98B-3B11-49B5-9B2D-14F0B50190FF}	SIMH0595023MH0595022	4.40	13.08	1.250000000	MH0595023_207	MH0595022		Siphon	103	SIMH0595023_207MH0595022	15	0.0847	1.141761	0.83	1.303768	0.85	1.550347	0.90	2.857255	1.00
SIMH0595023_301MH0595023_302	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	10.56	8.37	0.833333333	MH0595023_301	MH0595023_302		Siphon	9	SIMH0595023_301MH0595023_302	10	0.2388	0.433318	1.00	0.478439	1.00	0.526926	1.00	1.133807	1.00
SIMH0595023_302MH0595023_303	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	8.37	6.59	0.833333333	MH0595023_302	MH0595023_303		Siphon	8	SIMH0595023_302MH0595023_303	10	0.2389	0.433213	0.80	0.477881	1.00	0.526737	1.00	1.085161	1.00
SIMH0595023_303MH0595023_304	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	6.59	5.22	0.833333333	MH0595023_303	MH0595023_304		Siphon	6	SIMH0595023_303MH0595023_304	10	0.2387	0.433143	1.00	0.477906	1.00	0.526798	1.00	0.999993	1.00
SIMH0595023_304MH0595023_305	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	5.22	4.00	0.833333333	MH0595023_304	MH0595023_305		Siphon	10	SIMH0595023_304MH0595023_305	10	0.1220	0.432832	1.00	0.478011	1.00	0.527066	1.00	0.975690	1.00
SIMH0595023_305MH0595023_306	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	4.00	3.20	0.833333333	MH0595023_305	MH0595023_306		Siphon	24	SIMH0595023_305MH0595023_306	10	0.0333	0.432910	1.00	0.478374	1.00	0.526776	1.00	0.975903	1.00
SIMH0595023_306MH0595023_307	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	3.20	4.40	0.833333333	MH0595023_306	MH0595023_307		Siphon	16	SIMH0595023_306MH0595023_307	10	0.0750	0.432936	1.00	0.478730	1.00	0.527021	1.00	0.975400	1.00
SIMH0595023_307MH0595022	Splitted conduit	1966			Existing			MH0595023	MH0595022		234	IRWD	ACP	{48080208-BFA1-447D-B48F-3BAB71BCE7DC}	SIMH0595023MH0595022	4.40	13.08	0.833333333	MH0595023_307	MH0595022		Siphon	103	SIMH0595023_307MH0595022	10	0.0847	0.432441	0.99	0.478536	1.00	0.526511	1.00	0.975139	1.00
SIMH0595024MH0595024_101		1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	10.75	4.78	1.250000000	MH0595024	MH0595024_101		Siphon	70	SIMH0595024MH0595024_101	15	0.0857	1.825519	0.98	1.963742	1.00	2.271585	1.00	2.995788	1.00
SIMH0595024MH0595024_201		1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	10.75	4.78	2.000000000	MH0595024_201	MH0595024_202		Siphon	70	SIMH0595024_201MH0595024_202	15	0.0857	1.827038	0.80	1.964090	0.85	2.700634	0.96	3.615336	1.00
SIMH0595024_101MH0595024_102	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	4.78	2.91	1.250000000	MH0595024_101	MH0595024_102		Siphon	25	SIMH0595024_101MH0595024_102	15	0.0748	1.826355	1.00	1.964389	1.00	2.271363	1.00	2.995863	1.00
SIMH0595024_102MH0595024_103	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	2.91	1.57	1.250000000	MH0595024_102	MH0595024_103		Siphon	25	SIMH0595024_102MH0595024_103	15	0.0536	1.826734	1.00	1.964083	1.00	2.271445	1.00	2.995783	1.00
SIMH0595024_103MH0595024_104	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	1.57	0.77	1.250000000	MH0595024_103	MH0595024_104		Siphon	25	SIMH0595024_103MH0595024_104	15	0.0320	1.826198	1.00	1.965278	1.00	2.272172	1.00	2.996031	1.00
SIMH0595024_104MH0595024_105	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	0.77	0.50	1.250000000	MH0595024_104	MH0595024_105		Siphon	25	SIMH0595024_104MH0595024_105	15	0.0108	1.826417	1.00	1.964761	1.00	2.271880	1.00	2.996321	1.00
SIMH0595024_105MH0595024_106	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	0.50	0.65	1.250000000	MH0595024_105	MH0595024_106		Siphon	25	SIMH0595024_105MH0595024_106	15	0.0060	1.827250	1.00	1.966362	1.00	2.271641	1.00	2.996244	1.00
SIMH0595024_106MH0595024_107	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	0.65	1.10	1.250000000	MH0595024_106	MH0595024_107		Siphon	25	SIMH0595024_106MH0595024_107	15	0.0180	1.826075	1.00	1.964182	1.00	2.271847	1.00	2.995637	1.00
SIMH0595024_107MH0595024_108	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	1.10	1.85	1.250000000	MH0595024_107	MH0595024_108		Siphon	25	SIMH0595024_107MH0595024_108	15	0.0300	1.826453	1.00	1.965468	1.00	2.271527	1.00	2.996056	1.00
SIMH0595024_108MH0595024_109	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	1.85	2.91	1.250000000	MH0595024_108	MH0595024_109		Siphon	25	SIMH0595024_108MH0595024_109	15	0.0424	1.826003	1.00	1.964179	1.00	2.271523	1.00	2.996045	1.00
SIMH0595024_109MH0595025		1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{78663561-25DA-4D76-AF4E-B1825648D502}	SIMH0595024MH0595025	2.91	10.25	1.250000000	MH0595024_109	MH0595025		Siphon	153	SIMH0595024_109MH0595025	15	0.0481	1.825232	0.88	1.963660	0.90	2.270937	0.95	2.995318	1.00
SIMH0595024_201MH0595024_202	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	4.78	2.91	2.000000000	MH0595024_201	MH0595024_202		Siphon	25	SIMH0595024_201MH0595024_202	24	0.0748	1.917965	1.00	1.694586	1.00	7.701690	1.00	10.616110	1.00
SIMH0595024_202MH0595024_203	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	2.91	1.57	2.000000000	MH0595024_202	MH0595024_203		Siphon	25	SIMH0595024_202MH0595024_203	24	0.0536	1.917636	1.00	1.694774	1.00	7.701630	1.00	10.616869	1.00
SIMH0595024_203MH0595024_204	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	1.57	0.77	2.000000000	MH0595024_203	MH0595024_204		Siphon	25	SIMH0595024_203MH0595024_204	24	0.0320	5.919137	1.00	6.494709	1.00	7.702140	1.00	10.616530	1.00
SIMH0595024_204MH0595024_205	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	0.77	0.50	2.000000000	MH0595024_204	MH0595024_205		Siphon	25	SIMH0595024_204MH0595024_205	24	0.0108	5.920303	1.00	6.494601	1.00	7.700432	1.00	10.614940	1.00
SIMH0595024_205MH0595024_206	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	0.50	0.65	2.000000000	MH0595024_205	MH0595024_206		Siphon	24	SIMH0595024_205MH0595024_206	24	0.0060	5.919973	1.00	6.497491	1.00	7.702266	1.00	10.616861	1.00
SIMH0595024_206MH0595024_207	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	0.65	1.10	2.000000000	MH0595024_206	MH0595024_207		Siphon	25	SIMH0595024_206MH0595024_207	24	0.0180	5.920925	1.00	6.496988	1.00	7.702981	1.00	10.615074	1.00
SIMH0595024_207MH0595024_208	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	1.10	1.85	2.000000000	MH0595024_207	MH0595024_208		Siphon	25	SIMH0595024_207MH0595024_208	24	0.0300	5.920211	1.00	6.494869	1.00	7.701529	1.00	10.615926	1.00
SIMH0595024_208MH0595024_209	Splitted conduit	1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	1.85	2.91	2.000000000	MH0595024_208	MH0595024_209		Siphon	25	SIMH0595024_208MH0595024_209	24	0.0424	5.918818	1.00	6.495621	1.00	7.701723	1.00	10.617295	1.00
SIMH0595024_209MH0595025		1976			Existing			MH0595024	MH0595025		234	IRWD	VCP	{DB27F845-F050-4AB5-BD9D-E51002A8E1C7}	SIMH0595024MH0595025	2.91	10.25	2.000000000	MH0595024_209	MH0595025		Siphon	153	SIMH0595024_209MH0595025	24	0.0481	5.918642	0.74	6.495418	0.75	7.701717	0.78	10.615364	0.86
CLMH0595025MH0595026		1976			Existing			MH0595025	MH0595026	changed downstream	234	IRWD	VCP	{1DDAA3A3-E02A-4C6C-9DAB-79E4017CEEB}	CLMH0595025MH0595026	9.94	8.50	3.250000000	MH0595025	MH0595026			690	CLMH0595025MH0595026	39	0.0021	7.711113	0.42	8.417062	0.44	9.945063	0.48	13.600285	0.57
CLMH0595026PA0595092	END AT TREATME	1976			Existing			MH0595026	PA0595092		234	IRWD	VCP	{29A496D9-479E-4CEF-AEEE-BDE4C0772DB0}	CLMH0595026PA0595092	8.50	7.85	4.000000000	MH0595026	PA0595092			887	CLMH0595026PA0595092	48	0.0007	7.616481	0.31	8.285336	0.33	9.844949	0.35	13.576333	0.41
CLMH0595027PA0595092	END AT TREATME	1976			Existing			MH0595027	A00052		234	IRWD	VCP	{25AD78A3-2999-4913-99F9-1097DA0501B}	CLMH0595027PA0595092	9.13	7.62	4.500000000	MH0595027	PA0595092			840	CLMH0595027PA0595092	54	0.0018	23.5240501	0.18	25.3005978	0.44	29.5964835	0.55	35.865871	0.68
CLMH0595035MH0595093		2008			Existing	assumed Mannings N		MH0595035	MH0595093	datum issue	A00290A	IRWD	PVC	{5A880389-A1B8-467E-A392-312FB11BF8BC}	CLMH0595035MH0595093	15.68	14.05	1.500000000	MH0595035	MH0595093			963	CLMH0595035MH0595093	18	0.0054	2.556892	0.48	2.829829	0.51	3.389764	0.57	2.823762	0.55
SIMH0595036MH0595036_101		1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	22.89	15.60	0.666666667	MH0595036	MH0595036_101	Siphon	58	SIMH0595036MH0595036_101	8	0.1267	0.242504	0.60	0.289070	0.60	0.343014	0.61	0.289069	0.60
CLMH0595036MH0595036_201		1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	22.89	15.60	0.666666667	MH0595036	MH0595036_201	Siphon	58	SIMH0595036MH0595036_201	8	0.1267	0.242504	0.60	0.289070	0.60	0.343014	0.61	0.289069	0.60
SIMH0595036_101MH0595036_102	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	15.60	13.41	0.666666667	MH0595036_101	MH0595036_102		Siphon	20	SIMH0595036_101MH0595036_102	8	0.1095	0.242896	1.00	0.289432	1.00	0.343311	1.00	0.289425	1.00
SIMH0595036_102MH0595036_103	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	13.41	11.87	0.666666667	MH0595036_102	MH0595036_103		Siphon	20	SIMH0595036_102MH0595036_103	8	0.0770	0.243256	1.00	0.289712	1.00	0.343416	1.00	0.289408	1.00
SIMH0595036_103MH0595036_104	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	11.87	11.02	0.666666667	MH0595036_103	MH0595036_104		Siphon	20	SIMH0595036_103MH0595036_104	8	0.0425	0.243310	1.00	0.289684	1.00	0.343468	1.00	0.289511	1.00
SIMH0595036_104MH0595036_105	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	11.02	10.83	0.666666667	MH0595036_104	MH0595036_105		Siphon	20	SIMH0595036_104MH0595036_105	8	0.0095	0.243410	1.00	0.289761	1.00	0.343691	1.00	0.289800	1.00
SIMH0595036_105MH0595036_106	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	10.83	11.32	0.666666667	MH0595036_105	MH0595036_106		Siphon	20	SIMH0595036_105MH0595036_106	8	0.0245	0.243194	1.00	0.289587	1.00	0.343570	1.00	0.289670	1.00
SIMH0595036_106MH0595036_107	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	11.32	12.46	0.666666667	MH0595036_106	MH0595036_107		Siphon	20	SIMH0595036_106MH0595036_107	8	0.0570	0.243154	1.00	0.289514	1.00	0.343419	1.00	0.289708	1.00
SIMH0595036_107MH0595035		1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{DF12028C-1346-4915-9979-286679302FD2}	CLMH0595036MH0595035	12.46	18.90	0.666666667	MH0595036_107	MH0595035		Siphon	87	SIMH0595036_107MH0595035	8	0.0744	0.242904	0.61	0.289350	0.62	0.343226	0.63	0.289472	0.62
SIMH0595036_201MH0595036_202		1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	15.60	13.41	0.666666667	MH0595036_201	MH0595036_202		Siphon	20	SIMH0595036_201MH0595036_202	8	0.1095	0.242896	1.00	0.289432	1.00	0.343311	1.00	0.289425	1.00
SIMH0595036_202MH0595036_203	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	13.41	11.87	0.666666667	MH0595036_202	MH0595036_203		Siphon	20	SIMH0595036_202MH0595036_203	8	0.0770	0.243256	1.00	0.289712	1.00	0.343416	1.00	0.289408	1.00
SIMH0595036_203MH0595036_204	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	11.87	11.02	0.666666667	MH0595036_203	MH0595036_204		Siphon	20	SIMH0595036_203MH0595036_204	8	0.0425	0.243310	1.00	0.289684	1.00	0.343468	1.00	0.289511	1.00
SIMH0595036_204MH0595036_205	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	11.02	10.83	0.666666667	MH0595036_204	MH0595036_205		Siphon	20	SIMH0595036_204MH0595036_205	8	0.0095	0.243410	1.00	0.290118	1.00	0.343691	1.00	0.289800	1.00
SIMH0595036_205MH0595036_206	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	10.83	11.32	0.666666667	MH0595036_205	MH0595036_206		Siphon	20	SIMH0595036_205MH0595036_206	8	0.0245	0.243194	1.00	0.289587	1.00	0.343570	1.00	0.289670	1.00
SIMH0595036_206MH0595036_207	Splitted conduit	1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	11.32	12.46	0.666666667	MH0595036_206	MH0595036_207		Siphon	20	SIMH0595036_206MH0595036_207	8	0.0570	0.243154	1.00	0.289514	1.00	0.343419	1.00	0.289708	1.00
SIMH0595036_207MH0595035		1967			Existing			MH0595036	MH0595035		A00290	IRWD	PVC	{408CCF12-FA80-4834-8F6C-76F09E06EC10}	CLMH0595036MH0595035	12.46	18.90	0.666666667	MH0595036_207	MH0595035		Siphon	87	SIMH0595036_207MH0595035	8	0.0744	0.242904	0.61	0.289350	0.62	0.343226	0.63	0.289472	0.62
CLMH0595037MH0595038		1985	

CLMH060E075MH060E081			1986			Existing		MH060E075	MH060E081		T12627	IRWD	VCP	{A786D269-343E-4984-98BA-35FA85E25B0B}	47.22	45.97	0.666666667	MH060E075	MH060E081					244	CLMH060E075MH060E081	8	0.0051	0.014915	0.11	0.017908	0.12	0.021228	0.13	0.017908	0.12
CLMH060E076MH060E075			1986			Existing		MH060E076	MH060E075		T12627	IRWD	VCP	{C879E036-DAC9-46A4-89F7-97C8322B3921}	49.22	47.43	0.666666667	MH060E076	MH060E075					225	CLMH060E076MH060E075	8	0.0080	0.001001	0.02	0.001203	0.03	0.001427	0.03	0.001203	0.03
CLMH060E077MH060E078			1986			Existing		MH060E077	MH060E078		T12627	IRWD	VCP	{9C355D61-1897-403C-AA0D-D4C9B404E8FA}	47.43	46.79	0.666666667	MH060E077	MH060E078					162	CLMH060E077MH060E078	8	0.0040	0.008189	0.09	0.009832	0.09	0.011657	0.10	0.009832	0.09
CLMH060E078MH060E081			1986			Existing		MH060E078	MH060E081		T12627	IRWD	VCP	{65BE71F0-B704-4E93-A9BD-2F58F92FB8AF}	46.70	45.88	0.666666667	MH060E078	MH060E081					210	CLMH060E078MH060E081	8	0.0039	0.019076	0.13	0.022903	0.14	0.027155	0.15	0.022903	0.14
CLMH060E079MH060E078			1986			Existing		MH060E079	MH060E078		T12627	IRWD	VCP	{340B4403-A47E-40B0-95EF-85ED92255B2F}	47.95	46.90	0.666666667	MH060E079	MH060E078					215	CLMH060E079MH060E078	8	0.0049	0.010887	0.09	0.013071	0.10	0.015498	0.11	0.013071	0.10
CLMH060E080MH060E079			1986			Existing		MH060E080	MH060E079		T12627	IRWD	VCP	{3884911C-36F1-4CCE-B145-6AC158ECBAB4}	48.95	48.06	0.666666667	MH060E080	MH060E079					184	CLMH060E080MH060E079	8	0.0048	0.005993	0.07	0.007196	0.08	0.008531	0.08	0.007196	0.08
CLMH060E081MH060E082			1986			Existing		MH060E081	MH060E082		T12627	IRWD	VCP	{68D1898B-5F23-4832-8A96-BD21CB5501ZD}	45.77	45.02	0.666666667	MH060E081	MH060E082					193	CLMH060E081MH060E082	8	0.0039	0.013991	0.17	0.040812	0.19	0.048383	0.20	0.040812	0.19
CLMH060E082MH060E084			1986			Existing		MH060E082	MH060E084		T12627	IRWD	VCP	{533D3CA5-4EC3-48CD-A586-A35C61219791}	44.91	43.95	0.666666667	MH060E082	MH060E084					244	CLMH060E082MH060E084	8	0.0039	0.036920	0.18	0.044328	0.19	0.052552	0.21	0.044328	0.19
CLMH060E083MH060E082			1986			Existing		MH060E083	MH060E082		T12627	IRWD	VCP	{87113B38-CF82-4C3A-BAB9-48BE052109OB}	47.84	45.11	0.666666667	MH060E083	MH060E082					277	CLMH060E083MH060E082	8	0.0099	0.002930	0.04	0.003517	0.05	0.004168	0.05	0.003517	0.05
CLMH060E084MH060E086			1986			Existing		MH060E084	MH060E086		T12627	IRWD	VCP	{AF193C94-B403-47EB-B7FA-1AFF88EC1E35}	43.86	38.00	0.666666667	MH060E084	MH060E086					175	CLMH060E084MH060E086	8	0.0335	0.041698	0.12	0.050064	0.13	0.059354	0.14	0.050064	0.13
CLMH060E085MH060E084			1986			Existing		MH060E085	MH060E084		T12627	IRWD	VCP	{B7670252-5973-4CB6-AC25-8BEE36B7B590}	46.79	44.08	0.666666667	MH060E085	MH060E084					277	CLMH060E085MH060E084	8	0.0098	0.004778	0.06	0.005737	0.06	0.006803	0.07	0.005737	0.06
CLMH060E086MH060E011			1969			Existing		MH060E011		A00079	IRWD	ACP	{B5682795-C134-4584-ABAF-9D7945A8B870}	36.61	36.00	2.000000000	MH060E086	MH060E011					361	CLMH060E086MH060E011	24	0.0017	1.166080	0.27	1.288958	0.28	1.520239	0.31	1.558133	0.31
CLMH060E087MH060E088			1986			Existing		MH060E087	MH060E088		T12627	IRWD	PVC	{10ADD185-1124-4658-853A-E4CC16514B6B}	49.54	47.00	0.666666667	MH060E087	MH060E088					348	CLMH060E087MH060E088	8	0.0073	0.002177	0.04	0.002615	0.04	0.003100	0.05	0.002615	0.04
CLMH060E088MH060E089			1986			Existing		MH060E088	MH060E089		T12627	IRWD	PVC	{18AD2E88-CB09-4F32-AA5E-0AE4753F02D8}	46.90	45.58	0.666666667	MH060E088	MH060E089					181	CLMH060E088MH060E089	8	0.0073	0.006629	0.07	0.007958	0.07	0.009437	0.08	0.007958	0.07
CLMH060E089MH060E090			1986			Existing		MH060E089	MH060E090		T12627	IRWD	PVC	{A741DB6A-4717-4892-BC23-6E2A5A50DE03}	45.38	44.00	0.666666667	MH060E089	MH060E090					279	CLMH060E089MH060E090	8	0.0049	0.006956	0.07	0.008351	0.08	0.009903	0.09	0.008351	0.08
CLMH060E090MH060E093			1986			Existing		MH060E090	MH060E093		T12627	IRWD	PVC	{F28B0EAC-AA10-41BC-AF61-26A07AEFE73E}	43.90	42.20	0.666666667	MH060E090	MH060E093					214	CLMH060E090MH060E093	8	0.0079	0.014769	0.10	0.017717	0.11	0.021007	0.11	0.017717	0.11
CLMH060E091MH060E090			1986			Existing		MH060E091	MH060E090		T12627	IRWD	PVC	{7245CBED-C6B1-4271-BD78-BAC23D09A9C3}	45.84	44.09	0.666666667	MH060E091	MH060E090					222	CLMH060E091MH060E090	8	0.0079	0.007814	0.07	0.009366	0.08	0.011105	0.08	0.009366	0.08
CLMH060E092MH060E091			1986			Existing		MH060E092	MH060E091		T12627	IRWD	PVC	{259F9704-35A9-495C-B5EB-A27404276095}	47.29	45.93	0.666666667	MH060E092	MH060E091					340	CLMH060E092MH060E091	8	0.0040	0.002563	0.05	0.003076	0.05	0.003647	0.06	0.003076	0.05
CLMH060E093MH060E094			1986			Existing		MH060E093	MH060E094		A00488	IRWD	PVC	{E6BEB6C2-85AF-4A39-B3E1-DBA1F779F4AA}	42.04	38.79	0.833333333	MH060E093	MH060E094					248	CLMH060E093MH060E094	10	0.0131	0.016714	0.07	0.020053	0.08	0.023778	0.08	0.020053	0.08
CLMH060E094MH060E095			1986			Existing		MH060E094	MH060E095		A00488	IRWD	PVC	{F27D185F-CFD5-496A-853D-D37EBCTA80E0}	38.68	37.41	0.833333333	MH060E094	MH060E095					318	CLMH060E094MH060E095	10	0.0040	0.019872	0.10	0.023846	0.10	0.028274	0.11	0.023846	0.10
CLMH060E095MH060E096			1986			Existing		MH060E095	MH060E096		A00488	IRWD	PVC	{DFB748C2-CB4E-4AB4-819B-AAFFBACCB07F}	37.31	34.79	0.833333333	MH060E095	MH060E096					328	CLMH060E095MH060E096	10	0.0077	0.019869	0.08	0.023844	0.09	0.028272	0.10	0.023844	0.09
CLMH060E096MH060E014			1986			Existing		MH060E096	MH060E014		A00488	IRWD	PVC	{106E108B-1DAB-4E2C-AF3F-C313BF2FDD0C}	34.70	33.63	0.833333333	MH060E096	MH060E014					23	CLMH060E096MH060E014	10	0.0465	0.020447	0.26	0.024538	0.28	0.029094	0.31	0.024538	0.28
CLMH060E100MH061S069			1986			Existing		MH060E100	MH061S069		T12670	IRWD	PVC	{8E752B7E-3034-4C69-9766-64032953DF04}	49.25	47.93	0.666666667	MH060E100	MH061S069					333	CLMH060E100MH061S069	8	0.0040	0.003214	0.05	0.003860	0.06	0.004576	0.06	0.003860	0.06
CLMH060E101MH060E163			1986			Existing		MH060E101	MH060E163		T12670	IRWD	PVC	{8E7721AB-0947-4215-A63A-C6F3F2BE0D3E}	45.43	44.52	0.666666667	MH060E101	MH060E163					230	CLMH060E101MH060E163	8	0.0040	0.009154	0.09	0.010988	0.10	0.013028	0.10	0.010988	0.10
CLMH060E104MH060E105			1986			Existing		MH060E104	MH060E105		T12670	IRWD	PVC	{58A295EC-98E6-4760-A30C-6F9D2CE6904A}	45.65	45.40	0.666666667	MH060E104	MH060E105					65	CLMH060E104MH060E105	8	0.0038	0.002764	0.05	0.003315	0.05	0.003935	0.06	0.003320	0.05
CLMH060E105MH060E163			1986			Existing		MH060E105	MH060E163		T12670	IRWD	PVC	{86D8BF3D-33D0-427D-A3EE-3E0C08254B4E}	45.20	44.20	0.666666667	MH060E105	MH060E163					198	CLMH060E105MH060E163	8	0.0039	0.002764	0.05	0.003320	0.05	0.003935	0.06	0.003320	0.05
CLMH060E106MH060E107			1986			Existing		MH060E106	MH060E107		12720	IRWD	PVC	{25FFE83E-E54E-4C9E-A80A-618FF1984B3B}	45.27	44.54	0.666666667	MH060E106	MH060E107					149	CLMH060E106MH060E107	8	0.0049	0.002890	0.05	0.003470	0.05	0.004115	0.06	0.003470	0.05
CLMH060E107MH060E108			1986			Existing		MH060E107	MH060E108		12720	IRWD	PVC	{3237F441-CA59-4AC9-915B-692AZB7173T6}	44.34	43.09	0.666666667	MH060E107	MH060E108					257	CLMH060E107MH060E108	8	0.0049	0.005280	0.06	0.006339	0.07	0.007516	0.08	0.006339	0.07
CLMH060E108MH060E111			1986			Existing		MH060E108	MH060E111		12721	IRWD	PVC	{F5128015-4A44-4AC1-8D44-447180A9B218}	42.88	41.65	0.666666667	MH060E108	MH060E111					280	CLMH060E108MH060E111	8	0.0053	0.009867	0.09	0.011845	0.09	0.014043	0.10	0.011845	0.09
CLMH060E109MH060E108			1986			Existing		MH060E109	MH060E108		12720	IRWD	PVC	{880FCAB4-010F-4654-9078-838F321898DA}	44.40	43.09	0.666666667	MH060E109	MH060E108					265	CLMH060E109MH060E108	8	0.0049	0.004587	0.06	0.005506	0.06	0.006527	0.07	0.005506	0.06
CLMH060E110MH060E109			1986			Existing		MH060E110	MH060E109		12720	IRWD	PVC	{E0B13895-B30D-470D-ADC2-068AF427F5A6}	45.18	44.50	0.666666667	MH060E110	MH060E109					141	CLMH060E110MH060E109	8	0.0048	0.004587	0.06	0.005506	0.06	0.006527	0.07	0.005506	0.06
CLMH060E111MH060E114			1986			Existing		MH060E111	MH060E114		12720	IRWD	PVC	{1D5E8244-523B-4AFF-9B96-1CFECB365095}	41.56	40.34	0.666666667	MH060E111	MH060E114					226	CLMH060E111MH060E114	8	0.0054	0.022547	0.13	0.027067	0.14	0.032092	0.15	0.027067	0.14
CLMH060E112MH060E111			1986			Existing		MH060E112	MH060E111		12720	IRWD	PVC	{221A562F-846B-47ED-AC08-46A94CE64FD0}	42.63	41.75	0.666666667	MH060E112	MH060E111					180	CLMH060E112MH060E111	8	0.0049	0.012680	0.10	0.015222	0.11	0.018049	0.12	0.015222	0.11
CLMH060E113MH060E112			1986			Existing		MH060E113	MH060E112		12720	IRWD	PVC	{1F5BCAC5-AF58-42B2-918E-FBDDCE35843B}	44.34	42.74	0.666666667	MH060E113	MH060E112					325	CLMH060E113MH060E112	8	0.0049	0.002795	0.05	0.003354	0.05	0.003978	0.06	0.003354	0.05
CLMH060E114MH060E118			1986			Existing		MH060E114	MH060E118		12720	IRWD	PVC	{4DB7881A-C8AD-4FD9-AE6C-4FCBF99ACE87}	40.25	39.72	0.666666667	MH060E114	MH060E118					209	CLMH060E114MH060E118	8	0.0025	0.026286	0.16	0.031556	0.17	0.037414	0.19	0.031556	0.17
CLMH060E115MH060E114			1986			Existing		MH060E115	MH060E114		12720	IRWD	PVC	{57DBDAFO-583A-4F5C-8C1A-C5D7DB089FFC}	41.27	40.45	0.666666667	MH060E115	MH060E114					169	CLMH060E115MH060E114	8	0.0049	0.003739	0.05	0.004489	0.06	0.005322	0.06	0.004489	0.06
CLMH060E116MH060E115			1986			Existing		MH060E116	MH060E115		12720	IRWD	PVC	{6B6ED112-B8AD-407E-95A0-85F3BC116429}	42.34	41.36	0.666666667	MH060E116	MH060E115					167	CLMH060E116MH060E115	8	0.0050	0.003739	0.05	0.004489	0.06	0.005322	0.06	0.004489	0.06
CLMH060E117MH060E116			1986			Existing		MH060E117	MH060E116		12720	IRWD	PVC	{FF0BF37B-26AC-4895-87FE-AB23A5C77D6C}	43.52	42.43	0.666666667	MH060E117	MH060E116					220	CLMH060E117MH060E116	8	0.0050	0.003739	0.05	0.004489	0.06	0.005322	0.06	0.004489	0.06
CLMH060E118MH060E122			1986			Existing		MH060E118	MH060E122		12720	IRWD	PVC	{FF8CD0AD-DE5B-4FC5-8145-012428A569BC}	39.02	37.84	0.666666667	MH060E118	MH060E122					241	CLMH060E118MH060E122	8	0.0049	0.013970	0.15	0.038379	0.17	0.045505	0.18	0.038379	0.17
CLMH060E119MH060E118			1986			Existing		MH060E119	MH060E118		12720	IRWD	PVC	{2DF3D976-61D1-415C-8199-26BD4DDAAF8C}	40.63	39.22	0.666666667	MH060E119	MH060E118					287	CLMH060E119MH060E118	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH060E119MH060E120			1986			Existing		MH060E119	MH060E120		12720	IRWD	PVC	{23DE3C9A-AA9E-42A6-832B-D90BD27E941E}	40.63	38.75	0.666666667	MH060E119	MH060E120					351	CLMH060E119MH060E120	8	0.0054	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH060E120MH060E121			1986			Existing		MH060E120	MH060E121		12720	IRWD	PVC	{1565A015-2569-4A34-ABC3-9015C98B9D25}	38.65	37.52	0.666666667	MH060E120	MH060E121					240	CLMH060E120MH060E121	8	0.0047	0.005415	0.06	0.006590	0.07	0.007706	0.08	0.006501	0.07
CLMH060E121MH060E124			1986			Existing		MH060E121	MH060E124		12720	IRWD	PVC	{8F052C80-8334-428E-828C-1E5D84F5CEC8}	37.31	34.56	0.666666667	MH060E121	MH060E124					168	CLMH060E121MH060E124	8	0.0164	0.006707	0.06	0.008053	0.06	0.009544	0.07	0.008053	0.06
CLMH060E122MH060E123			1986			Existing		MH060E122	MH060E123		12720	IRWD	PVC	{63B3DA5C-3B35-49C3-8695-645B8E4B268}	37.65	35.93	0.666666667	MH060E122	MH060E123					341	CLMH060E122MH060E123	8	0.0050	0.031968	0.15	0.038378	0.17	0.045505	0.18	0.038378	0.17
CLMH060E123MH060E124			1986			Existing		MH060E123	MH060E124		12720	IRWD	PVC	{5F1E8DFB-49EA-4384-9956-EDF443C93B39}	35.84	34.56	0.666666667	MH060E123	MH060E124					358	CLMH060E123MH060E124	8	0.0050	0.031965	0.15	0.038377	0.17	0.045504	0.18	0.038377	0.17
CLMH060E124MH060E125			1986			Existing		MH060E124	MH060E125		12720	IRWD	PVC	{C8C8BE88-D9ED-4218-83D0-6A6042708CDE}	34.36	32.40	0.666666667	MH060E124	MH060E125					319	CLMH060E124MH060E125	8	0.0061	0.046162	0.18	0.055425	0.20	0.065716	0.21	0.055425	0.20
CLMH060E125MH060E017			1986			Existing		MH060E125	MH060E017		A00079	IRWD	VCP	{43059275-4F59-4A2D-95DF-B5826F9F2EC4}	31.03	30.55	2.000000000	MH060E125	MH060E017					476	CLMH060E125MH060E017	24	0.0023	1.223063	0.26	1.351606	0.27	1.594802	0.30	1.420343	0.30
CLMH060E126MH061S102			1987			Existing		MH060E126	MH061S102		T12670	IRWD	PVC	{95F93FC3-6534-40F5-B50C-222C18A63BC0}	51.20	49.70	0.666666667	MH060E126	MH061S102					201	CLMH060E126MH061S102	8	0.0071	0.008787	0.08	0.010552	0.08	0.012509	0.09	0.010552	0.08
CLMH060E127MH060E126			1987			Existing		MH060E127	MH060E126		T12670	IRWD	PVC	{67DB947A-E550-4997-BDC6-FBD37CC4FD37}	54.16	51.40	0.666666667	MH060E127	MH060E126					350	CLMH060E127MH060E126	8	0.0079	0.003600	0.05	0.004324	0.05	0.005125	0.06	0.004324	0.05
CLMH060E163MH061S068			1988			Existing		MH060E163	MH061S068		T12670	IRWD	PVC	{31CCC1C8-B02F-4334-8051-874ABC717483}	44.22	43.75	0.666666667	MH060E163	MH061S068					123	CLMH060E163MH061S068	8	0.0038	0.013849	0.12	0.021668	0.13	0.025689	0.13	0.021668	0.13
CLMH060E164MH061S070			1986			Existing		MH060E164	MH061S070		T12670	IRWD	PVC	{3FB39609-53AA-470A-AACD-C9084F62491EC}	49.22	48.15	0.666666667	MH060E164	MH061S070					72	CLMH060E164MH061S070	8	0.0149	0.004309	0.05	0.005172	0.05	0.006132	0.06	0.005172	0.05
CLMH060E167MH060N002			1985			Existing		MH060E167	MH060N002		12786	IRWD	PVC	{5A2D1A83-F297-4572-BDB6-047BA90565C3}	31.40	31.30	1.250000000	MH060E167	MH060N002					193	CLMH060E167MH060N002	15	0.0005	0.285071	0.28	0.340090	0.30	0.403318	0.33	0.340089	0.30
CLMH060E201MH060E056			1988			Existing		MH060E201	MH060E056		T12628	IRWD	VCP	{9CF155C84-9B29-4524-9D93-25451F854D5B}	38.19	37.91	0.666666667	MH060E201	MH060E056					85	CLMH060E201MH060E056	8	0.0048	0.035569	0.17	0.042716	0.18	0.050645	0.20	0.042716	0.18
CLMH060E203MH060E002			1969			Existing		MH060E203	MH060E002		079	IRWD	PVC	{E0B93D4E-B5F7-4FDD-9080-6ABF0A28A707}	39.63	39.22	1.000000000	MH060E203	MH060E002					301	CLMH060E203MH060E002	36	0.0014	6.760003	0.18	7.617257	0.41	9.101433	0.45	8.649485	0.43
CLMH060N002MH060N003			1985			Existing		MH060N002	MH060N003		A00481	IRWD	VCP	{06A5694D-3939-4CD2-A15F-15A5D817CA6E}	31.20	30.62	1.250000000	MH060N002	MH060N003					194	CLMH060N002MH060N003	15	0.0030	0.316251	0.24	0.377601	0.26	0.447833	0.28	0.377600	0.26
CLMH060N003MH060N004			1985			Existing		MH060N003	MH060N004		A00481	IRWD	VCP	{18084B61-0738-45CD-B316-B3ED8659B4A7}	30.53	29.43	1.250000000	MH060N003	MH060N004					318	CLMH060N003MH060N004	15	0.0035	0.316126	0.23	0.377509	0.25	0.447765	0.28	0.377508	0.25
CLMH060N004MH060N005			1985			Existing		MH060N004	MH060N005		A00481	IRWD	VCP	{A7B2E097-CDC3-470E-A3F5-7953B75AC794C}	29.31	29.04	1.250000000	MH060N004	MH060N005					154	CLMH060N004MH060N005	15	0.0034	0.180986	0.24	0.214299	0.26	0.248313	0.28	0.214299	0.26
CLMH060N005MH060N006			1985			Existing		MH060N005	MH060N006		A00481	IRWD	VCP	{9801E2B1-CD56-4118-B548-02170568C76C}	28.95	28.26	1.250000000	MH060N005	MH060N006					327	CLMH060N005MH060N006	15	0.0021	0.343819	0.32	0.410801	0.36	0.487329	0.39	0.410800	0.36
CLMH060N006MH060N007			1985			Existing		MH060N006	MH060N007		A00481	IRWD	VCP	{1FE09A04-08BD-448B-8EE2-880D25AC0577}	28.15	28.12	1.250000000	MH060N006	MH060N007					271	CLMH060N006MH060N007	15	0.0001	0.345604	0.34	0.413391	0.37	0.490793	0.40	0.413388	0.37
CLMH060N007MH060N008			1985			Existing		MH060N007	MH060N008		A00481	IRWD	VCP	{86D30478-8D36-47C1-B885-9D7A1E655EBC}	27.45	27.27	1.250000000	MH060N007	MH060N008					77	CLMH060N007MH060N008	15	0.0023	0.440232	0.28	0.527212	0.31	0.625803	0.34	0.527208	0.31
CLMH060N008MH060N009			1985			Existing		MH060N008	MH060N009		A00481	IRWD	VCP	{895E693F-9630-432E-8518-6769E8A263D6}	27.12	26.95	1.250000000	MH060N008	MH060N009					205	CLMH060N008MH060N009	15	0.0026	0.439762	0.29	0.526829	0.32	0.625225	0.35	0.526825	0.32
CLMH060N009MH060N010			1985			Existing		MH060N009	MH060N010		A00481	IRWD	VCP	{6C2F159F-E178-48CD-B9FB-BF46D99293B7}	26.26	25.59	1.250000000	MH060N009	MH060N010					159	CLMH060N009MH060N010	15	0.0042	0.440696	0.27	0.527788	0.29	0.626661	0.32	0.527784	0.29
CLMH060N010MH060N030			1986			Existing		MH060N010	MH060N030		A00418	IRWD	RCP	{FE9DA93F-02BA-4813-8521-E51476B1862A}	22.18	21.97	4.500000000	MH060N010	MH060N030					443	CLMH060N010MH060N030	54	0.0005	9.248724	0.37	10.608238	0.40	12.664036	0.43	11.222188	0.41
CLMH060N011MH060N012			1985			Existing		MH060N011	MH060N012		A00481	IRWD	PVC	{DAE29A4C-15FB-4827-832A-C7CA653018F2}	43.25	39.22	0.666666667	MH060N011	MH060N012					332	CLMH060N011MH060N012	8	0.0121	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH060N012MH060N013			1985			Existing		MH060N012	MH060N013		A00481	IRWD	PVC	{C45CB782-CA9C-48AE-A84F-15CECC1192A1}	39.13	34.54	0.666666667	MH060N012	MH060N013					349	CLMH060N012MH060N013	8	0.0132	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH060N013MH060N014			1985			Existing		MH060N013	MH060N014		A00481	IRWD	PVC	{80BCC7F7-785F-400E-8CA0-B0A63E9C923}	34.43	31.70	0.666666667	MH060N013	MH060N014					360	CLMH060N013MH060N014	8	0.0076	0.004330	0.05	0.004627	0.06	0.005486	0.06	0.004627	0.06
CLMH060N014MH060N032			1985			Existing		MH060N014	MH060N032		A00481	IRWD	PVC	{4C0A7120-546F-4517-9733-953A1D564ABC}	31.60	30.67	0.666666667	MH060N014	MH060N032					179	CLMH060N014MH060N032	8	0.0073	0.004330	0.05	0.004627	0.06	0.005486	0.06	0.004627	0.06
CLMH060N015MH060N016			1985			Existing		MH060N015	MH060N016		A00481	IRWD	PVC	{A5489F46-9487-474C-8598-9A100CB4E77A}	27.81	25.12	0.666666667	MH060N015	MH060N016					186	CLMH060N015MH060N016	8	0.0145	0.056532	0.16	0.067651	0.17	0.080203	0.19	0.067651	0.17
CLMH060N016MH060N031	I8		1986			Existing		MH060N016	MH060N031		435	IRWD	RCP	{B755A4AD-B99A-4E7D-B81E-AAF588A845A}	21.74	21.47	4.500000000	MH060N016	MH060N031					547	CLMH060N016MH060N031	54	0.0005	9.308504	0.29	10.671778	0.31	12.741248	0.34	11.286990	0.32
CLMH060N018MH060E201			1987			Existing		MH060N018	MH060E201		T12628	IRWD	VCP	{9D0B921D-7BFE-4175-BE83-3B8FEE83BE5D}	38.71	38.29	0.833333333	MH060N018	MH060E201					149	CLMH060N018MH060E201	10	0.0028	0.029718	0.13	0.035692	0.14	0.042315	0.15	0.035692	0.14
CLMH060N019MH060N018			1987			Existing		MH060N019	MH060N018		T12628	IRWD	PVC	{F91281AF-D88D-4E71-8883-12AD4D33C975}	39.43	38.81	0.833333333	MH060N019	MH060N018					199	CLMH060N019MH060N018	10	0.0027	0.023978	0.11	0.028797	0.12	0.034140	0.13	0.028797	0.12
CLMH060N020MH060N019			1987			Existing		MH060N020	MH060N019		T12628	IRWD	PVC	{EC088BF9-FF5F-4B5F-9CAA-1012A68C294C}	40.09	39.54	0.833333333	MH060N020	MH060N019					199	CLMH060N020MH060N019	10	0.0028	0.014206	0.09	0.017063	0.10	0.020228	0.10	0.017063	0.10
CLMH060N021MH060N020			1987			Existing		MH060N021	MH060N020		T12628	IRWD	PVC	{31610966-F2B2-4AE4-B890-7A3FEC1A8AD4}	40.86	40.18	0.833333333	MH060N021	MH060N020					244	CLMH060N021MH060N020	10	0.0028	0.011293	0.08	0.013562	0.09	0.016079	0.10	0.013562	0.09
CLMH060N022MH060N021			1987			Existing		MH060N022	MH060N021		T12628	IRWD	VCP	{9A539D5A-AE00-4F75-9ECC-B3C587552E1D}	41.50	40.95	0.833333333	MH060N022	MH060N021					202	CLMH060N022MH060N021	10	0.0027	0.005272	0.06	0.006326	0.06	0.007506	0.06	0.006330	0.06
CLMH060N024MH060N023			1987			Existing		MH060N024	MH060N023		T12628	IRWD	VCP	{3D1A68A9-20B8-471A-A000-2DD27P59B8C3}	42.18	41.70	0.833333333	MH060N024	MH060N023					173	CLMH060N024MH060N023	10	0.0028	0.005272	0.06	0.006330	0.06	0.007506	0.07	0.006330	0.06
CLMH060N029MH060N010			1986			Existing		MH060N029	MH060N010		435	IRWD	RCP	{DA6329AC-0E5C-4FBB-B2A5-7350B679BB82}	22.50	22.18	4.500000000	MH060N029	MH060N010					622	CLMH060N029MH060N010	54	0.0005	8.870583	0.38	10.196732	0.41	12.171140	0.44	10.811116	0.42
CLMH060N030MH060N016			1986			Existing		MH060N030	MH060N016		435	IRWD	RCP	{FDFBAB07-0E3E-41DD-A678-1ED3973AE35C}	21.97	21.74

CLMH060N119MH060N118		1987		Existing		MH060N119	MH060N118		T12713	IRWD	PVC	{53242C42-0023-446F-895A-816B001FD518}	SLMH060N119MH060N118	39.59	36.38	0.666666667	MH060N120	MH060N118			394	CLMH060N119MH060N118	8	0.0081	0.004609	0.05	0.005534	0.06	0.006659	0.07	0.005534	0.06				
CLMH060N120MH060N118		1987		Existing		MH060N120	MH060N118		T12713	IRWD	ACP	{C6879750-BF95-46C8-BE87-561663480EBD}	CLMH060N120MH060N118	38.08	36.27	0.666666667	MH060N120	MH060N118			221	CLMH060N120MH060N118	8	0.0082	0.013096	0.09	0.015724	0.10	0.018641	0.11	0.015724	0.10				
CLMH060N121MH060N120	130' FROM W TO	1987		Existing		MH060N121	MH060N120		T12713	IRWD	VCP	{FD50BF20-085E-4B12-BE8C-4E63CA1FDE83}	CLMH060N121MH060N120	38.93	38.18	0.666666667	MH060N121	MH060N120			195	CLMH060N121MH060N120	8	0.0038	0.008637	0.09	0.010373	0.10	0.012296	0.10	0.010373	0.10				
CLMH060N122MH060N121		1987		Existing		MH060N122	MH060N121		T12713	IRWD	PVC	{F99B06EC-6F1C-4076-935B-D175658E3B6D}	CLMH060N122MH060N121	41.11	39.13	0.666666667	MH060N122	MH060N121			383	CLMH060N122MH060N121	8	0.0052	0.004501	0.06	0.005405	0.06	0.006407	0.07	0.005405	0.06				
CLMH060N123MH060N120		1987		Existing		MH060N123	MH060N120		T12713	IRWD	PVC	{E67B25D9-593E-45D6-8F5B-A46D541A3025}	CLMH060N123MH060N120	39.15	38.27	0.666666667	MH060N123	MH060N120			224	CLMH060N123MH060N120	8	0.0039	0.004459	0.06	0.005352	0.07	0.006345	0.07	0.005352	0.07				
CLMH060N124MH060N123		1987		Existing		MH060N124	MH060N123		T12713	IRWD	PVC	{E6E09037-31E1-4291-8909-1916930D3387}	CLMH060N124MH060N123	40.13	39.25	0.666666667	MH060N124	MH060N123			225	CLMH060N124MH060N123	8	0.0039	0.004459	0.06	0.005352	0.07	0.006345	0.07	0.005352	0.07				
CLMH060N125MH060N124		1987		Existing		MH060N125	MH060N124		T12713	IRWD	PVC	{9F9D8439-8E84-4450-81F5-9F6B2AD053Z7}	CLMH060N125MH060N124	41.00	40.34	0.666666667	MH060N125	MH060N124			170	CLMH060N125MH060N124	8	0.0039	0.004459	0.06	0.005352	0.07	0.006345	0.07	0.005352	0.07				
CLMH060N127MH060N115		1987		Existing		MH060N127	MH060N115		T12713	IRWD	PVC	{6993EE76-16AA-414B-9B03-A83022BFCAE6}	CLMH060N127MH060N115	35.43	34.02	0.666666667	MH060N127	MH060N115			184	CLMH060N127MH060N115	8	0.0077	0.006171	0.06	0.007412	0.07	0.008785	0.08	0.007412	0.07				
CLMH060N129MH060N127		1987		Existing		MH060N129	MH060N127		T12713	IRWD	PVC	{B1D9F2B9-68FB-4D8F-9FB4-4A5153F1F474}	CLMH060N129MH060N127	37.81	35.54	0.666666667	MH060N129	MH060N127			296	CLMH060N129MH060N127	8	0.0077	0.003707	0.05	0.004452	0.05	0.005277	0.06	0.004452	0.05				
CLMH060N132MH060W031		1987		Existing		MH060N132	MH060W031		T12714	IRWD	PVC	{C7417DD9-55C1-4D05-8995-A25464CF765B}	CLMH060N132MH060W031	33.40	32.50	0.666666667	MH060N132	MH060W031			227	CLMH060N132MH060W031	8	0.0040	0.003291	0.05	0.003955	0.06	0.004689	0.06	0.003955	0.06				
CLMH060N136MH060N007		1989		Existing		MH060N136	MH060N007		T12669	IRWD	PVC	{CE077BF4-E68E-4704-9828-DD6E6C441820}	CLMH060N136MH060N007	28.87	28.12	0.666666667	MH060N136	MH060N007			51	CLMH060N136MH060N007	8	0.0147	0.066355	0.17	0.079663	0.19	0.094446	0.20	0.079662	0.19				
CLMH060N137MH060N136		1989		Existing		MH060N137	MH060N136		T12669	IRWD	PVC	{7ABC6167-2D9D-6691-A455-6B3FE4B73558}	CLMH060N137MH060N136	35.56	29.07	0.666666667	MH060N137	MH060N136			193	CLMH060N137MH060N136	8	0.0336	0.011275	0.06	0.013537	0.07	0.016049	0.07	0.013537	0.07				
CLMH060N141MH060N144		1989		Existing		MH060N141	MH060N144		T12669	IRWD	PVC	{448E9D12-5638-415F-9205-4C2A032047B7}	CLMH060N141MH060N144	31.95	30.59	0.666666667	MH060N141	MH060N144			80	CLMH060N141MH060N144	8	0.0170	0.010997	0.07	0.013202	0.08	0.015652	0.08	0.013202	0.08				
CLMH060N144MH060N136		1989		Existing		MH060N144	MH060N136		T12669	IRWD	PVC	{9A91766E-20E4-4E89-A720-7AB909BCDDAC}	CLMH060N144MH060N136	30.38	28.97	0.666666667	MH060N144	MH060N136			168	CLMH060N144MH060N136	8	0.0084	0.055081	0.18	0.066126	0.20	0.078397	0.21	0.066126	0.20				
CLMH060N145MH060N144		1989		Existing		MH060N145	MH060N144		T12669	IRWD	PVC	{C5117184-6661-4117-8B0F-BCA73AFB833A}	CLMH060N145MH060N144	32.54	30.59	0.666666667	MH060N145	MH060N144			324	CLMH060N145MH060N144	8	0.0060	0.036543	0.16	0.043876	0.18	0.052018	0.19	0.043876	0.18				
CLMH060N146MH060N145		1989		Existing		MH060N146	MH060N145		T12669	IRWD	PVC	{F0F69301-F928-4FD1-A5F9-92FB34AA2036}	CLMH060N146MH060N145	34.20	32.74	0.666666667	MH060N146	MH060N145			136	CLMH060N146MH060N145	8	0.0107	0.008681	0.07	0.010422	0.08	0.012358	0.08	0.010422	0.08				
CLMH060N148MH060N145		1989		Existing		MH060N148	MH060N145		T12669	IRWD	PVC	{C848DC34-05FF-4E83-BEC6-652CA6A10572}	CLMH060N148MH060N145	32.93	32.74	0.666666667	MH060N148	MH060N145			51	CLMH060N148MH060N145	8	0.0037	0.027864	0.15	0.033456	0.16	0.039662	0.18	0.033456	0.16				
CLMH060N149MH060N148		1989		Existing		MH060N149	MH060N148		T12669	IRWD	PVC	{B79C9600-280F-4657-BEAC-53EF049E8CE6}	CLMH060N149MH060N148	34.25	33.93	0.666666667	MH060N149	MH060N148			278	CLMH060N149MH060N148	8	0.0012	0.027864	0.20	0.033456	0.22	0.039662	0.23	0.033456	0.22				
CLMH060N152MH060N149		1989		Existing		MH060N152	MH060N149		T12669	IRWD	PVC	{56793AC8-5E26-450D-9443-708E0B1AC775}	CLMH060N152MH060N149	37.34	34.36	0.666666667	MH060N152	MH060N149			376	CLMH060N152MH060N149	8	0.0079	0.011727	0.09	0.014080	0.10	0.016690	0.12	0.014080	0.10				
CLMH060N154MH060N152		1989		Existing		MH060N154	MH060N152		T12669	IRWD	PVC	{9A7719BD-1C6A-428A-86AC-38E7B5ED5C58}	CLMH060N154MH060N152	38.11	37.43	0.666666667	MH060N154	MH060N152			171	CLMH060N154MH060N152	8	0.0040	0.006690	0.07	0.008031	0.08	0.009520	0.09	0.008031	0.08				
CLMH060N155MH060N154		1989		Existing		MH060N155	MH060N154		T12669	IRWD	PVC	{F0EE232E-69CD-4BA3-9221-7C72F736D964}	CLMH060N155MH060N154	38.47	38.31	0.666666667	MH060N155	MH060N154			42	CLMH060N155MH060N154	8	0.0038	0.001094	0.03	0.001314	0.03	0.001558	0.04	0.001314	0.03				
CLMH060N156MH060N155		1989		Existing		MH060N156	MH060N155		T12669	IRWD	PVC	{E4ED7DB2-C214-4320-AE88-AA1D07696DA6}	CLMH060N156MH060N155	38.97	38.66	0.666666667	MH060N156	MH060N155			80	CLMH060N156MH060N155	8	0.0039	0.000279	0.01	0.000335	0.01	0.000397	0.02	0.000335	0.01				
CLMH060N160MH060N164		1969		Existing		MH060N160	MH060N164		T12669	IRWD	PVC	{69E7A528-FA3A-4A52-8519-28BBB4ABE081}	CLMH060N160MH060N164	37.04	30.67	0.500000000	MH060N160	MH060N164			97	CLMH060N160MH060N164	6	0.0708	0.011732	0.07	0.013970	0.08	0.016562	0.09	0.013970	0.08				
CLMH060N161MH060N160		1985		Existing		MH060N161	MH060N160		T12669	IRWD	PVC	{D75A223A-A449-4FD6-9C76-18A5CAF47846}	CLMH060N161MH060N160	39.13	37.25	0.500000000	MH060N161	MH060N160			93	CLMH060N161MH060N160	6	0.0202	0.007095	0.08	0.008518	0.09	0.010099	0.09	0.008518	0.09				
CLMH060N164MH060N004		1969		Existing		MH060N164	MH060N004		T12669	IRWD	PVC	{17D8F45D-632D-4B1B-AC71-52BC086AE520}	CLMH060N164MH060N004	30.56	29.80	0.666666667	MH060N164	MH060N004			51	CLMH060N164MH060N004	8	0.0149	0.024188	0.11	0.028921	0.11	0.034287	0.12	0.028921	0.11				
CLMH060N166MH060N164		1969		Existing		MH060N166	MH060N164		T12669	IRWD	PVC	{1F86F8F7-17B2-40E6-B067-343709D89D80}	CLMH060N166MH060N164	37.20	30.77	0.666666667	MH060N166	MH060N164			226	CLMH060N166MH060N164	8	0.0285	0.012456	0.07	0.014951	0.07	0.017725	0.08	0.014951	0.07				
CLMH060N169MH060N166		1985		Existing		MH060N169	MH060N166		T12669	IRWD	PVC	{A6E81B43-7393-486A-B7CF-86C07736D66B}	CLMH060N169MH060N166	37.65	37.40	0.666666667	MH060N169	MH060N166			67	CLMH060N169MH060N166	8	0.0037	0.008104	0.08	0.009728	0.09	0.011533	0.10	0.009728	0.09				
CLMH060N230MH060N113		1987		Existing		MH060N230	MH060N113		T12703	IRWD	PVC	{9D05E48F-EBEC-4704-B37F-AD11E248F8E89}	CLMH060N230MH060N113	40.36	39.72	0.666666667	MH060N230	MH060N113			132	CLMH060N230MH060N113	8	0.0048	0.013140	0.10	0.015776	0.11	0.018703	0.12	0.015776	0.11				
CLMH060S001MH060E032		1975		Existing		MH060S001	MH060E032		056		VCP	{391E3F7A-05D7-401C-9193-B7859CF24269}	CLMH060S001MH060E032	42.93	41.45	1.000000000	MH060S001	MH060E032			242	CLMH060S001MH060E032	36	0.0061	0.896386	0.36	0.841274	0.38	0.785663	0.41	0.841274	0.38	18.555603	0.55
CLMH060S002MH060E032		1971		Existing		MH060S002	MH060E032		T06952	IRWD	PVC	{F6F261D9-FC70-4DB9-95F1-A154380BAA52}	CLMH060S002MH060E032	49.27	47.63	0.666666667	MH060S002	MH060E032			410	CLMH060S002MH060E032	8	0.0040	0.006551	0.08	0.007866	0.08	0.009326	0.09	0.007866	0.08				
CLMH060S003MH060S004		1969		Existing		MH060S003	MH060S004		T06952	IRWD	VCP	{E4C6F88D-33A2-4E28-814A-B82E20C0C41B}	CLMH060S003MH060S004	44.13	42.90	0.666666667	MH060S003	MH060S004			400	CLMH060S003MH060S004	8	0.0031	0.015519	0.12	0.018645	0.13	0.022109	0.15	0.018645	0.13				
CLMH060S004MH060S005		1969		Existing		MH060S004	MH060S005		T06952	IRWD	VCP	{1502E8D9-710B-46DE-AEAC-27A08DA49DFC}	CLMH060S004MH060S005	42.79	41.70	0.666666667	MH060S004	MH060S005			281	CLMH060S004MH060S005	8	0.0039	0.010310	0.14	0.025247	0.15	0.029939	0.16	0.025247	0.15				
CLMH060S005MH060S006		1989		Existing		MH060S005	MH060S006		T06952	IRWD	VCP	{01268606-A835-4A57-83C9-C2A2B53E9629}	CLMH060S005MH060S006	44.15	41.70	0.666666667	MH060S005	MH060S006			217	CLMH060S005MH060S006	8	0.0113	0.004317	0.05	0.005183	0.06	0.006145	0.06	0.005183	0.06				
CLMH060S006MH060S007		1969		Existing		MH060S006	MH060S007		T06952	IRWD	VCP	{19A75141-B2DC-4F1C-934D-13A5F3CDE837}	CLMH060S006MH060S007	41.59	39.27	0.666666667	MH060S006	MH060S007			232	CLMH060S006MH060S007	8	0.0100	0.025313	0.12	0.030419	0.13	0.036074	0.15	0.030419	0.13				
CLMH060S007MH060S008		1969		Existing		MH060S007	MH060S008		T06952	IRWD	VCP	{53884195-C678-4A73-A037-B2677005FBF0}	CLMH060S007MH060S008	39.18	37.08	0.666666667	MH060S007	MH060S008			220	CLMH060S007MH060S008	8	0.0095	0.028591	0.13	0.034363	0.14	0.040751	0.16	0.034363	0.14				
CLMH060S008MH060S012		1969		Existing		MH060S008	MH060S012		T06952	IRWD	VCP	{644F3A56-6823-43BC-81FC-7153E0BDA1B0}	CLMH060S008MH060S012	36.97	35.90	0.666666667	MH060S008	MH060S012			295	CLMH060S008MH060S012	8	0.0036	0.038800	0.19	0.046639	0.20	0.055317	0.22	0.046639	0.20				
CLMH060S009MH060S010		1969		Existing		MH060S009	MH060S010		T06952	IRWD	VCP	{FBAED0B8-3575-4353-9581-E0415AA66219}	CLMH060S009MH060S010	41.36	38.09	0.666666667	MH060S009	MH060S010			219	CLMH060S009MH060S010	8	0.0042	0.003507	0.04	0.004211	0.05	0.004993	0.05	0.004211	0.05				
CLMH060S010MH060S008		1969		Existing		MH060S010	MH060S008		T06952	IRWD	VCP	{E0740DFA-EBF2-420B-9EDF-0A5AD144ABA7}	CLMH060S010MH060S008	37.99	37.13	0.666666667	MH060S010	MH060S008			216	CLMH060S010MH060S008	8	0.0040	0.006996	0.08	0.008399	0.09	0.009958	0.09	0.008399	0.09				
CLMH060S011MH060S010		1969		Existing		MH060S011	MH060S010		T06952	IRWD	VCP	{853D0A73A-E1F2-455E-8C6C-79B1C4666383}	CLMH060S011MH060S010	39.15	38.09	0.666666667	MH060S011	MH060S010			268	CLMH060S011MH060S010	8	0.0040	0.003488	0.06	0.004188	0.06	0.004965	0.07	0.004188	0.06				
CLMH060S012MH060S013		1969		Existing		MH060S012	MH060S013		T06952	IRWD	VCP	{FE5C5DCD-C5F6-4E3D-9573-432A80A86D6}	CLMH060S012MH060S013	35.79	35.04	0.666666667	MH060S012	MH060S013			303	CLMH060S012MH060S013	8	0.0034	0.041626	0.19	0.050052	0.21	0.059373	0.23	0.050052	0.21				
CLMH060S013MH060S014		1969		Existing		MH060S013	MH060S014		T06869	IRWD	VCP	{E9ABB702-5830-48C4-932C-0EE4C5F47B06}	CLMH060S013MH060S014	34.91	33.74	0.666666667	MH060S013	MH060S014			320	CLMH060S013MH060S014	8	0.0037	0.049314	0.21	0.059376	0.23	0.070556	0.25	0.059376	0.23				
CLMH060S014MH060S015		1969		Existing		MH060S014	MH060S015		T06869	IRWD	VCP	{F6E05282-2E47-46B6-9F83-D8EC37260DA7}	CLMH060S014MH060S015	33.63	32.47	0.666666667	MH060S014	MH060S015			316	CLMH060S014MH060S015	8	0.0037	0.049211	0.21	0.059286	0.23	0.070480	0.25	0.059285	0.23				
CLMH060S015MH060S016		1969		Existing		MH060S015	MH060S016		T06869	IRWD	VCP	{13487279-07AF-4446-9D30-739AC9906C47}	CLMH060S015MH060S016	32.38	31.16	0.666666667	MH060S015	MH060S016			278	CLMH060S015MH060S016	8	0.0168	0.054260	0.16	0.065388	0.17	0.077744	0.19	0.065388	0.17				
CLMH060S016MH060S017		1969		Existing		MH060S016	MH060S017		T06869	IRWD	VCP	{95D547AF-162B-4758-98C3-99A9099002ED}	CLMH060S016MH060S017	27.38	26.11	0.666666667	MH060S016	MH060S017	Existing 8-in and less, d/D<0.50		158	CLMH060S016MH060S017	8	0.0080	0.158838	0.53	0.191250	0.57	0.227388	0.63	0.191248	0.61				
CLMH060S017MH060S045		1969		Existing		MH060S017	MH060S045		077	IRWD	ACP	{75635E29-3089-4DCE-8489-A6D0B061DF7}	CLMH060S017MH060S045	25.99	25.01	2.000000000	MH060S017	MH060S045			24	CLMH060S017MH060S045	24	0.0017	1.344628	0.47	1.485691	0.50	1.755186	0.55	1.753994	0.54				
CLMH060S018MH060S017		1969		Existing		MH060S018	MH060S017		079	IRWD	ACP	{653CB8E5-4ACE-4AF9-B050-36A0D9A3D816}	CLMH060S018MH060S017	27.05	26.05	2.000000000	MH060S018	MH060S017			395	CLMH060S018MH060S017	24	0.0025	1.225171	0.28	1.353734	0.30	1.597367	0.33	1.621571	0.33				
CLMH060S019MH060S018		1969		Existing		MH060S019	MH060S018		079	IRWD	ACP	{E1C41708-8BE9-4002-A76C-3077516722B0}	CLMH060S019MH060S018	28.18	27.15	2.000000000	MH060S019	MH060S018			400	CLMH060S019MH060S018	24	0.0026	1.225281	0.26	1.353860	0.27	1.597531	0.30	1.621843	0.30				
CLMH060S020MH060S019		1969		Existing		MH060S020	MH060S019		079	IRWD	ACP	{B037DF98-A38E-4A41-9F0E-38E27F2E36CC}	CLMH060S020MH060S019	29.29	28.28	2.000000000	MH060S020	MH060S019			400	CLMH060S020MH060S019	24	0.0025	1.222498	0.26	1.350908	0.27	1.594013	0.30	1.619163	0.30				
CLMH060S021MH060S022		1969		Existing		MH060S021	MH060S022		T06869	IRWD	VCP	{8295E671-C838-4662-A929-FCE5214C110C}	CLMH060S021MH060S022	36.70	31.54	0.666666667	MH060S021	MH060S022			292	CLMH060S021MH060S022	8	0.0177	0.014348	0.12	0.017230	0.13	0.020432	0.15	0.017230	0.13				
CLMH060S022MH060S023		1969		Existing		MH060S022	MH060S023		T06869	IRWD	VCP	{ACB81328-79C3-4698-AF5F-925BC97C488E}	CLMH060S022MH060S023	31.44	29.64	0.666666667	MH060S022	MH060S023			380	CLMH060S022MH060S023	8	0.0047	0.030038	0.28	0.120336	0.31	0.143006	0.34	0.120335	0.31				
CLMH060S023MH060S016		1969		Existing		MH060S023	MH060S016		T06869	IRWD	VCP	{FBA5F9C1-76CC-49FC-9D4E-77A41D83722F}	CLMH060S023MH060S016	29.54	27.72	0.666666667	MH060S023	MH060S016			385	CLMH060S023MH060S016	8	0.0047	0.104643	0.29	0.125928	0.32	0.149707	0.35	0.125927	0.32				
CLMH060S024MH060S022		1969		Existing		MH060S024	MH060S022		T06869	IRWD	VCP	{5429BDD9-3074-4A58-9BAA-FBC286F5C2EB}	CLMH060S024MH060S022	32.75	31.57	0.666666667	MH060S024	MH060S022			238	CLMH060S024MH060S022	8	0.0050	0.085972	0.26	0.103411	0.29	0.122876	0.31	0.103410	0.29				
CLMH060S025MH060S024		1969		Existing		MH060S025	MH060S024		T06869	IRWD	VCP	{AE9AD62E-2589-458E-8480-CA622C58D248}	CLMH060S025MH060S024	33.47	32.95	0.666666667	MH060S025	MH060S024			324	CLMH060S025MH060S024	8	0.0034	0.072042	0.25	0.086706	0.28	0.103128	0.30	0.086705	0.28				
CLMH060S026MH060S025		1969		Existing		MH060S026	MH060S025		T06869	IRWD	VCP	{FEFCE5F7-E3F0-4699-B7F8-101C4F80F8CB}	CLMH060S026MH060S025	34.68	33.56	0.666666667	MH060S026	MH060S025			229	CLMH060S026MH060S025	8	0.0049	0.038404	0.17	0.046272	0.19	0.055107	0.21	0.046271	0.19				
CLMH060S027MH060S026		1969		Existing		MH060S027	MH060S026		T06869	IRWD	VCP	{2783EFB4-8594-4365-B6D2-6ECF84AD149E}	CLMH060S027MH060S026	38.75	34.77	0.666666667	MH060S027	MH060S026			129	CLMH060S027MH060S026	8	0.0309	0.013018	0.07	0.015533	0.07	0.018421	0.08	0.015533	0.07				
CLMH060S028MH060S027		1969		Existing		MH060S028	MH060S027		T06869	IRWD	VCP	{4ECDE2A8-E11F-4F79-8922-46CAB4E6DCEF}	CLMH060S028MH060S027	39.86	38.86	0.666666667	MH060S028	MH060S027			324	CLMH060S028MH060S027	8	0.0049	0.005772	0.07	0.006834	0.07	0.008103	0.08	0.006834	0.07				
CLMH060S029MH060S028		1969		Existing		MH060S029	MH060S028		T06869	IRWD	VCP	{21705B8D-9ECB-412B-9565-95F98C7B82A1}	CLMH060S029MH060S028	41.00	39.97	0.666666667	MH060S029	MH060S028			270	CLMH060S029MH060S028	8	0.0038	0.002811	0.05	0.003363	0.05	0.003987	0.06	0.003310	0.05				
CLMH060S030MH060S026		1969		Existing		MH060S030	MH060S026		T06869	IRWD	VCP	{AD80A57B-5A77-43BE-5967-303ECD65ECC2}	CLMH060S030MH060S026	35.59	34.77	0.666666667	MH060S030	MH060S026			270	CLMH060S030MH060S026	8	0.0030	0.025491	0.16	0.030841	0.17	0.036808	0.19	0.030840	0.17				
CLMH060S031MH060S032		1969		Existing		MH060S031	MH060S032		T06869	IRWD	VCP	{A767DCEA-9CA0-4EEF-9DFE-1FF153E94AA6}	CLMH060S031MH060S032	38.40	36.81	0.666666667	MH060S031	MH060S032			150	CLMH060S031MH060S032	8	0.0106	0.003969	0.05	0.004767	0.05	0.005651	0.06	0.004767	0.05				
CLMH060S032MH060S030		1969		Existing		MH060S032	MH060S030		T06869	IRWD	VCP	{3E2BA316-A7D0-4464-ACF3-FE9E085471Z9}	CLMH060S032MH060S030	36.70	35.70	0.666666667	MH060S032	MH060S030			314	CLMH060S032MH060S030	8	0.0032	0.021506	0.14	0.026010	0.16	0.031037	0.17	0.026009	0.16				
CLMH060S033MH060S032		1969		Existing		MH060S033	MH060S032		T06869	IRWD	VCP	{86FBAF83-7B41-4881-A898-598466C684D0}	CLMH060S033MH060S032	37.31	36.81	0.666666667	MH060S033	MH060S032			219	CLMH060S033MH060S032	8	0.0023	0.017694	0.14	0.021392	0.15	0.025509	0.17	0.021392	0.15				
CLMH060S034MH060S033		1969		Existing		MH060S034	MH060S033		T06869	IRWD	VCP	{6B29B7D3-2928-492D-9041-FE5F3589CA2E}	CLMH060S034MH060S033	39.40	37.40	0.666666667	MH060S034	MH060S033			155	CLMH060S034MH060S033	8	0.0129	0.003988	0.05	0.004790	0.05	0.005677	0.06	0.004790	0.05				
CLMH060S035MH060S033		1969		Existing		MH060S035	MH060S033		T06869	IRWD	VCP	{53F7D7B8-90FB-457C-AC73-81B628877640}	CLMH060S035MH060S033	38.24	37.40	0.666666667	MH060S035	MH060S033			358	CLMH060S035MH060S033	8	0.0023	0.013802	0.12	0.016697	0.14	0.019921	0.15	0.016697	0.14				
CLMH060S036MH060S037		1969		Existing		MH060S036	MH060S037		T06952	IRWD	VCP	{F6F60BE8-6AB1-4237-83DE-0FD2E3C40F86}	CLMH060S036MH060S037	42.89	39.74	0.666666667	MH060S036	MH060S037			128	CLMH060S036MH060S037	8	0.0246	0.003334	0.04	0.004002	0.04	0.004745	0.05	0.004002	0.04				
CLMH060S037MH060S035		1969		Existing		MH060S037	MH060S035		T06952	IRWD	VCP	{F7AA7D39-AE81-4DFC-91AB-B6B775460145}	CLMH060S037MH060S035	39.63	38.34	0.666666667	MH060S037	MH060S035			135	CLMH060S037MH060S035	8	0.0096	0.012535	0.09	0.015128	0.10	0.017996	0.11	0.015127	0.10				
CLMH060S038MH060S037		1969		Existing		MH060S038	MH060S037		T06952	IRWD	VCP	{A695CE61-0DF2-4159-AC6B-87AF67C4927D}	CLMH060S038MH060S037	40.25	39.64	0.666666667	MH060S038	MH060S037			255	CLMH060S038MH060S037	8	0.0024	0.009219	0.10	0.011141	0.11	0.013260	0.12	0.011141	0.11				
CLMH060S039MH060S013		1969		Existing		MH060S039	MH060S013		T06869	IRWD	VCP	{88EF4ACD-7FB1-4578-B37D-20D22C0DAD37}	CLMH060S039MH060S013	36.00	35.04	0.666666667	MH060S039	MH060S013			300	CLMH060S039MH060S013	8	0.0041	0.004074	0.06	0.004952	0.07	0.005975	0.07	0.004952	0.07				
CLMH060S040MH060S039		1969		Existing		MH060S040	MH060S039		T06869	IRWD	VCP	{0B558E0B-0B4E-486E-A90E-F78BCDDA2088}	CLMH060S040MH060S039	36.95	36.09	0.666666667	MH060S040	MH060S039			228	CLMH060S040MH060S039	8	0.0038	0.001530	0.04	0.001899	0.04	0.002354	0.05	0.001899	0.04				
CLMH060S040MH060S144		1969		Existing		MH060S040	MH060S144		T06869	IRWD	VCP	{2DA69021-8766-46B1-BC84-F188914312F1}	CLMH060S040MH060S144	36.95	35.00	0.666666667	MH060S040	MH060S144			247	CLMH060S040MH060S144	8	0.0079	0.003019	0.05	0.003562	0.05	0.004120	0.05	0.003562	0.05				
CLMH060S042MH060S144		1969		Existing		MH060S042	MH060S144		T06869	IRWD	VCP	{6C598FF5-B8DA-4225-94EC-3F5968443CCD}	CLMH060S042MH060S144	35.50	35.04	0.666666667	MH060S042	MH060S144			180	CLMH060S042MH060S144	8	0.0026	0.004759	0.07	0.005715	0.08	0.006775	0.09	0.005715	0.08				
CLMH060S043MH060S042		1976		Existing		MH060S043	MH060S042		052	IRWD	RCP	{A6AFF917-B948-40C4-969F-C74C9968C1C8}	CLMH060S043MH060S042	22.98	21.75	4.250000000	MH060S043	MH060S042			670	CLMH060S043MH060S042	51	0.0018	13.599737	0.37	14.929954	0.42	17.813637	0.47	14.758898	0.56				
CLMH060S044MH060S043		1976		Existing		MH060S044	MH060W002	split this pipe and use	052	IRWD	RCP	{26D65D92-7F7B-4675-B61D-39AA58F55F33}	CLMH060S044MH060W002	21.64	21.04	4.250000000	MH060S044	MH060S043	

| | | |

CLMH061E041MH061E042		1993		Existing		MH061E041	MH061E042		T14746	IRWD	PVC	{141FB726-50CA-4834-8BE2-7551F75533E0}	CLMH061E041MH061E042	47.97	47.06	0.666666667	MH061E041	MH061E042		188	CLMH061E041MH061E042	8	0.0048	0.005564	0.07	0.006653	0.07	0.007888	0.08	0.006653	0.07
CLMH061E042MH061E045		1993		Existing		MH061E042	MH061E045		T14746	IRWD	PVC	{E367625A-B3CA-4DF1-AC24-A9DD3989AD96}	CLMH061E042MH061E045	46.86	46.63	0.666666667	MH061E042	MH061E045		47	CLMH061E042MH061E045	8	0.0049	0.007257	0.07	0.008687	0.08	0.010298	0.09	0.008687	0.08
CLMH061E045MH061E048		1993		Existing		MH061E045	MH061E048		T14746	IRWD	PVC	{65AB183E-CF5C-4FC8-AE7E-0B48B1AAD82F}	CLMH061E045MH061E048	46.54	46.00	0.666666667	MH061E045	MH061E048		112	CLMH061E045MH061E048	8	0.0048	0.011373	0.09	0.013629	0.10	0.016157	0.11	0.013629	0.10
CLMH061E047MH061E048		1993		Existing		MH061E047	MH061E048		T14746	IRWD	PVC	{E3643B0E-DCF6-47A6-A9AA-352274A73752}	CLMH061E047MH061E048	46.15	46.00	0.666666667	MH061E047	MH061E048		35	CLMH061E047MH061E048	8	0.0043	0.004587	0.06	0.005502	0.07	0.006529	0.07	0.005508	0.07
CLMH061E048MH061E049		1993		Existing		MH061E048	MH061E049		T14746	IRWD	PVC	{4A8D83CC-3273-4F1D-A531-ACCA7BCCAB90}	CLMH061E048MH061E049	45.79	45.15	0.666666667	MH061E048	MH061E049		133	CLMH061E048MH061E049	8	0.0048	0.015959	0.11	0.019137	0.12	0.022686	0.13	0.019137	0.12
CLMH061E049MH061E051		1993		Existing		MH061E049	MH061E051		T14746	IRWD	PVC	{C698B3AE-C758-48ZD-9CCA-75F586A248581}	CLMH061E049MH061E051	44.95	44.31	0.666666667	MH061E049	MH061E051		113	CLMH061E049MH061E051	8	0.0057	0.015959	0.11	0.019137	0.12	0.022686	0.13	0.019137	0.12
CLMH061E051MH061E028		1993		Existing		MH061E051	MH061E028		T14746	IRWD	PVC	{35C0F743-335C-4CEC-9AF9-38BDF81B09A2}	CLMH061E051MH061E028	44.22	33.90	0.666666667	MH061E051	MH061E028		102	CLMH061E051MH061E028	8	0.1022	0.015959	0.07	0.019137	0.09	0.022686	0.11	0.019137	0.09
CLMH061E053MH061E056		1993		Existing		MH061E053	MH061E056		T14746	IRWD	PVC	{3FB8F2D8-DE43-4550-B0S8-E47ED97DDD04}	CLMH061E053MH061E056	46.34	45.91	0.666666667	MH061E053	MH061E056		90	CLMH061E053MH061E056	8	0.0048	0.005187	0.06	0.006228	0.07	0.007384	0.08	0.006228	0.07
CLMH061E055MH061E056		1993		Existing		MH061E055	MH061E056		T14746	IRWD	PVC	{B84FFEF5-795B-4CAE-A07F-F28C739BA6E1}	CLMH061E055MH061E056	47.08	46.00	0.666666667	MH061E055	MH061E056		218	CLMH061E055MH061E056	8	0.0050	0.003815	0.05	0.004581	0.06	0.005431	0.06	0.004581	0.06
CLMH061E056MH061E057		1993		Existing		MH061E056	MH061E057		T14746	IRWD	PVC	{CA03D12D-E04D-4621-901C-830AF11DFF29}	CLMH061E056MH061E057	45.81	45.18	0.666666667	MH061E056	MH061E057		129	CLMH061E056MH061E057	8	0.0049	0.009002	0.08	0.010809	0.09	0.012815	0.10	0.010809	0.09
CLMH061E057MH061E058		1993		Existing		MH061E057	MH061E058		T14746	IRWD	PVC	{785F69A4-551E-41F5-90DF-6CEEA6991917}	CLMH061E057MH061E058	45.09	44.31	0.666666667	MH061E057	MH061E058		158	CLMH061E057MH061E058	8	0.0049	0.015025	0.11	0.018041	0.12	0.021389	0.13	0.018041	0.12
CLMH061E058MH061E059		1993		Existing		MH061E058	MH061E059		T14746	IRWD	PVC	{AF543D94-2A62-47E2-B424-4ABD17E23F70}	CLMH061E058MH061E059	44.18	43.49	0.666666667	MH061E058	MH061E059		118	CLMH061E058MH061E059	8	0.0053	0.015025	0.10	0.018041	0.12	0.021389	0.13	0.018041	0.12
CLMH061E059MH061N011		1993		Existing		MH061E059	MH061N011		T14746	IRWD	PVC	{45B74702-FCE4-44E3-B2F5-F9667BAD2B2A}	CLMH061E059MH061N011	43.38	35.97	0.666666667	MH061E059	MH061N011		73	CLMH061E059MH061N011	8	0.1015	0.017587	0.06	0.021102	0.08	0.025019	0.10	0.021102	0.08
CLMH061E061MH061E064		1993		Existing		MH061E061	MH061E064		T14767	IRWD	VCP	{C778DF03-ABF1-4E39-895A-D8B06B0711C4}	CLMH061E061MH061E064	50.50	49.95	0.666666667	MH061E061	MH061E064		140	CLMH061E061MH061E064	8	0.0039	0.006924	0.08	0.008313	0.09	0.009854	0.09	0.008313	0.09
CLMH061E064MH061E066		1993		Existing		MH061E064	MH061E066		T14767	IRWD	VCP	{1378AD9D-E0E3-459b-897B-BEEBBD58F535}	CLMH061E064MH061E066	49.86	49.50	0.666666667	MH061E064	MH061E066		90	CLMH061E064MH061E066	8	0.0040	0.009002	0.09	0.010809	0.10	0.012813	0.10	0.010809	0.10
CLMH061E066MH061E103		1993		Existing		MH061E066	MH061E103		T14767	IRWD	VCP	{8C00AB4E-F0A9-462E-ACCC-3DBE02F3ADdF}	CLMH061E066MH061E103	49.31	47.77	0.666666667	MH061E066	MH061E103		107	CLMH061E066MH061E103	8	0.0144	0.012988	0.08	0.015596	0.09	0.018487	0.10	0.015596	0.09
CLMH061E067MH061E066		1993		Existing		MH061E067	MH061E066		T14767	IRWD	VCP	{34A57F62-0449-4DD5-9360-0058C1B0B68C}	CLMH061E067MH061E066	51.93	49.50	0.666666667	MH061E067	MH061E066		114	CLMH061E067MH061E066	8	0.0213	0.002293	0.03	0.002754	0.04	0.003265	0.04	0.002754	0.04
CLMH061E071MH061E073		1993		Existing		MH061E071	MH061E073		T14767	IRWD	VCP	{0DDCAC5F-17AC-411D-AD65-64B25370741F}	CLMH061E071MH061E073	51.00	49.81	0.666666667	MH061E071	MH061E073		111	CLMH061E071MH061E073	8	0.0107	0.003238	0.05	0.003886	0.05	0.004606	0.05	0.003886	0.05
CLMH061E073MH061E077		1993		Existing		MH061E073	MH061E077		T14767	IRWD	VCP	{2283BDC2-310A-421C-BB5F-13EBA4886A41}	CLMH061E073MH061E077	49.61	46.38	0.666666667	MH061E073	MH061E077		96	CLMH061E073MH061E077	8	0.0336	0.007011	0.05	0.008416	0.05	0.009975	0.06	0.008416	0.05
CLMH061E074MH061E073		1993		Existing		MH061E074	MH061E073		T14767	IRWD	VCP	{2D75A9A5-E3B3-489D-B26B-2BC0BCA001BA}	CLMH061E074MH061E073	50.52	49.81	0.666666667	MH061E074	MH061E073		68	CLMH061E074MH061E073	8	0.0104	0.003773	0.05	0.004529	0.05	0.005369	0.06	0.004529	0.05
CLMH061E077MH061E024		1993		Existing		MH061E077	MH061E024		T14767	IRWD	VCP	{3AA19DFE-1BAA-443A-BC4B-93DFC88001F}	CLMH061E077MH061E024	46.18	45.06	0.666666667	MH061E077	MH061E024		229	CLMH061E077MH061E024	8	0.0049	0.046183	0.19	0.055440	0.21	0.065729	0.23	0.055440	0.21
CLMH061E080MH061E081		1993		Existing		MH061E080	MH061E081		T14767	IRWD	VCP	{F46D0973-73DE-4227-BC3F-98DDB00059361}	CLMH061E080MH061E081	52.75	47.00	0.666666667	MH061E080	MH061E081		89	CLMH061E080MH061E081	8	0.0421	0.001951	0.03	0.002342	0.03	0.002777	0.03	0.002342	0.03
CLMH061E081MH061E077		1993		Existing		MH061E081	MH061E077		T14767	IRWD	VCP	{1A21A8FF-A3D7-44EC-AF1E-13B36D2CCD59}	CLMH061E081MH061E077	46.79	46.38	0.666666667	MH061E081	MH061E077		109	CLMH061E081MH061E077	8	0.0038	0.017081	0.12	0.020496	0.13	0.024301	0.15	0.020496	0.13
CLMH061E082MH061E081		1993		Existing		MH061E082	MH061E081		T14767	IRWD	VCP	{90CE0E9F-9DA6-4844-BD33-2CEA19346771}	CLMH061E082MH061E081	48.88	47.00	0.666666667	MH061E082	MH061E081		107	CLMH061E082MH061E081	8	0.0176	0.011507	0.07	0.013805	0.08	0.016368	0.09	0.013805	0.08
CLMH061E084MH061E082		1993		Existing		MH061E084	MH061E082		T14767	IRWD	VCP	{54090042-904F-41FE-A556-6928956CEBCF}	CLMH061E084MH061E082	49.65	49.08	0.666666667	MH061E084	MH061E082		146	CLMH061E084MH061E082	8	0.0039	0.008274	0.09	0.009933	0.09	0.011776	0.10	0.009933	0.09
CLMH061E086MH061E084		1993		Existing		MH061E086	MH061E084		T14767	IRWD	VCP	{87897C56-27E1-465D-B918-CF2F607C4BDD}	CLMH061E086MH061E084	50.50	49.75	0.500000000	MH061E086	MH061E084		192	CLMH061E086MH061E084	6	0.0039	0.007438	0.12	0.008928	0.13	0.010586	0.14	0.008928	0.13
CLMH061E088MH061E086		1993		Existing		MH061E088	MH061E086		T14767	IRWD	VCP	{E8BC7235-A6F4-425E-8B3E-BE1D06A30413}	CLMH061E088MH061E086	50.97	50.59	0.666666667	MH061E088	MH061E086		96	CLMH061E088MH061E086	8	0.0040	0.004887	0.07	0.005867	0.07	0.006956	0.08	0.005867	0.07
CLMH061E089MH061E088		1993		Existing		MH061E089	MH061E088		T14767	IRWD	VCP	{B1F3EC55-4E98-42BF-8B79-5D777F8855C0}	CLMH061E089MH061E088	51.22	51.06	0.666666667	MH061E089	MH061E088		43	CLMH061E089MH061E088	8	0.0037	0.002894	0.05	0.003474	0.06	0.004119	0.06	0.003474	0.06
CLMH061E090MH061E089		1993		Existing		MH061E090	MH061E089		T14767	IRWD	VCP	{3284CD0C-7423-4E56-8774-4E01FC416A7B}	CLMH061E090MH061E089	51.65	51.33	0.666666667	MH061E090	MH061E089		86	CLMH061E090MH061E089	8	0.0037	0.002894	0.05	0.003474	0.06	0.004119	0.06	0.003474	0.06
CLMH061E094MH061E097		1993		Existing		MH061E094	MH061E097		T14767	IRWD	VCP	{71C2941C-4FB6-4727-82E6-2A01D91164B1}	CLMH061E094MH061E097	51.56	50.33	0.666666667	MH061E094	MH061E097		311	CLMH061E094MH061E097	8	0.0040	0.003665	0.06	0.004401	0.06	0.005217	0.07	0.004401	0.06
CLMH061E097MH061E098		1993		Existing		MH061E097	MH061E098		T14767	IRWD	VCP	{BE68CCEC-EDAB-4FD3-BC37-6FAC1A93BDEE}	CLMH061E097MH061E098	50.13	49.72	0.666666667	MH061E097	MH061E098		106	CLMH061E097MH061E098	8	0.0039	0.006387	0.08	0.007670	0.08	0.009093	0.09	0.007670	0.08
CLMH061E098MH061E099		1993		Existing		MH061E098	MH061E099		T14767	IRWD	VCP	{260E2802-ED44-442F-B6C2-852F67E7201F}	CLMH061E098MH061E099	49.52	48.86	0.666666667	MH061E098	MH061E099		169	CLMH061E098MH061E099	8	0.0039	0.007973	0.08	0.009573	0.09	0.011351	0.10	0.009573	0.09
CLMH061E099MH061E101		1993		Existing		MH061E099	MH061E101		T14767	IRWD	VCP	{1C043322-068C-45A3-875C-37B207D68SA3}	CLMH061E099MH061E101	48.75	48.20	0.666666667	MH061E099	MH061E101		143	CLMH061E099MH061E101	8	0.0038	0.009109	0.09	0.010936	0.10	0.012968	0.11	0.010936	0.10
CLMH061E101MH061E102		1993		Existing		MH061E101	MH061E102		T14767	IRWD	VCP	{96595027-CC4E-4DC3-875F-DE08B697FD60}	CLMH061E101MH061E102	48.09	47.95	0.666666667	MH061E101	MH061E102		41	CLMH061E101MH061E102	8	0.0034	0.009109	0.09	0.010936	0.10	0.012968	0.11	0.010936	0.10
CLMH061E102MH061E103		1993		Existing		MH061E102	MH061E103		T14767	IRWD	VCP	{B5CB870A-C87D-4989-829A-E047CEFADCC4}	CLMH061E102MH061E103	47.84	47.68	0.666666667	MH061E102	MH061E103		47	CLMH061E102MH061E103	8	0.0034	0.009108	0.09	0.010935	0.10	0.012968	0.11	0.010935	0.10
CLMH061E103MH061E077		1993		Existing		MH061E103	MH061E077		T14767	IRWD	VCP	{8E5B3A39-16C2-4834-817F-D8C3113158B6}	CLMH061E103MH061E077	47.58	46.27	0.666666667	MH061E103	MH061E077		328	CLMH061E103MH061E077	8	0.0040	0.022093	0.14	0.026530	0.15	0.031454	0.16	0.026530	0.15
CLMH061E105MH061E106		1994		Existing		MH061E105	MH061E106		A00776	IRWD	PVC	{E3BF5DF6-615C-4C29-9640-BEF880415616}	CLMH061E105MH061E106	55.33	54.97	0.666666667	MH061E105	MH061E106		64	CLMH061E105MH061E106	8	0.0056	0.005235	0.06	0.006275	0.07	0.007441	0.07	0.006275	0.07
CLMH061E106MH061E112		1994		Existing		MH061E106	MH061E112		A00776	IRWD	PVC	{D8F507C6-DB54-40BA-A835-7B2652182ZF5}	CLMH061E106MH061E112	54.77	53.84	0.666666667	MH061E106	MH061E112		155	CLMH061E106MH061E112	8	0.0060	0.012974	0.10	0.015565	0.10	0.018455	0.11	0.015565	0.10
CLMH061E107MH061E106		1994		Existing		MH061E107	MH061E106		A00776	IRWD	PVC	{23341B55-3D5C-465A-A99E-8CEB6DF2D545}	CLMH061E107MH061E106	61.41	54.97	0.666666667	MH061E107	MH061E106		269	CLMH061E107MH061E106	8	0.0239	0.007739	0.06	0.009286	0.06	0.011014	0.06	0.009290	0.06
CLMH061E108MH061E107		1994		Existing		MH061E108	MH061E107		A00776	IRWD	PVC	{831350A0-D2D7-4D3B-B2B5-09C7044FBF53}	CLMH061E108MH061E107	62.59	61.61	0.666666667	MH061E108	MH061E107		68	CLMH061E108MH061E107	8	0.0144	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH061E111MH061E019		1992		Existing		MH061E111	MH061E019		A00776	IRWD	VCP	{720357D4-4C3B-401B-8EDF-0F9CD6605EB6}	CLMH061E111MH061E019	51.59	49.65	0.666666667	MH061E111	MH061E019		33	CLMH061E111MH061E019	8	0.0588	0.048436	0.11	0.058075	0.12	0.068860	0.15	0.058075	0.12
CLMH061E112MH061E111		1994		Existing		MH061E112	MH061E111		A00776	IRWD	PVC	{129F9433-8295-4868-BD61-B7B79B9A1F6E}	CLMH061E112MH061E111	53.64	51.79	0.666666667	MH061E112	MH061E111		220	CLMH061E112MH061E111	8	0.0084	0.048292	0.17	0.057923	0.18	0.068671	0.20	0.057923	0.18
CLMH061E113MH061E112		1994		Existing		MH061E113	MH061E112		A00776	IRWD	PVC	{7372A52E-1CB1-4745-9738-033F4D6E7992}	CLMH061E113MH061E112	57.30	53.84	0.666666667	MH061E113	MH061E112		74	CLMH061E113MH061E112	8	0.0467	0.035319	0.10	0.042358	0.10	0.050216	0.11	0.042358	0.10
CLMH061E114MH061E113		1994		Existing		MH061E114	MH061E113		A00776	IRWD	PVC	{99955271-095C-4AD0-BC6A-06FA70BFED96}	CLMH061E114MH061E113	57.90	57.50	0.666666667	MH061E114	MH061E113		69	CLMH061E114MH061E113	8	0.0058	0.030303	0.15	0.036336	0.16	0.043076	0.17	0.036336	0.16
CLMH061E118MH061E119		1994		Existing		MH061E118	MH061E119		A00776	IRWD	PVC	{9C2F7595-2FB8-4197-8A03-07A8A2AE8927}	CLMH061E118MH061E119	59.95	58.81	0.666666667	MH061E118	MH061E119		151	CLMH061E118MH061E119	8	0.0075	0.008381	0.08	0.010063	0.08	0.011930	0.09	0.010063	0.08
CLMH061E119MH061E114		1994		Existing		MH061E119	MH061E114		A00776	IRWD	PVC	{8EC218A2-12AB-4265-89E7-F81070DC8F53}	CLMH061E119MH061E114	58.61	58.09	0.666666667	MH061E119	MH061E114		126	CLMH061E119MH061E114	8	0.0041	0.030303	0.15	0.036336	0.17	0.043076	0.18	0.036336	0.17
CLMH061E122MH061E124		1994		Existing		MH061E122	MH061E124		A00776	IRWD	PVC	{C6F5C304-6C0E-436D-8153-A58C7705AA58}	CLMH061E122MH061E124	60.81	59.45	0.666666667	MH061E122	MH061E124		64	CLMH061E122MH061E124	8	0.0092	0.011297	0.08	0.013561	0.09	0.016079	0.10	0.013561	0.09
CLMH061E123MH061E119		1994		Existing		MH061E123	MH061E119		A00776	IRWD	PVC	{2AF28BF5-C369-4E75-B48B-7E9BAF70E83F}	CLMH061E123MH061E119	59.02	58.81	0.666666667	MH061E123	MH061E119		59	CLMH061E123MH061E119	8	0.0036	0.015941	0.12	0.019092	0.13	0.022634	0.14	0.019092	0.13
CLMH061E124MH061E123		1994		Existing		MH061E124	MH061E123		A00776	IRWD	PVC	{DBA7343C-38D1-4ED4-A744-0B727437F4AF5}	CLMH061E124MH061E123	59.36	59.22	0.666666667	MH061E124	MH061E123		19	CLMH061E124MH061E123	8	0.0074	0.011631	0.09	0.013919	0.10	0.016502	0.10	0.013919	0.10
CLMH061E125MH061E123		1994		Existing		MH061E125	MH061E123		A00776	IRWD	PVC	{24ACE849-2B1D-43BF-AE46-3BB8AD6F4858}	CLMH061E125MH061E123	63.63	59.22	0.666666667	MH061E125	MH061E123		146	CLMH061E125MH061E123	8	0.0302	0.004309	0.04	0.005173	0.04	0.006132	0.05	0.005173	0.04
CLMH061E128MH061E124		1994		Existing		MH061E128	MH061E124		A00776	IRWD	PVC	{04C43F17-9C2E-40B5-992A-D935846E8B23}	CLMH061E128MH061E124	59.91	59.36	0.666666667	MH061E128	MH061E124		64	CLMH061E128MH061E124	8	0.0038	0.000718	0.05	0.000767	0.06	0.000909	0.06	0.000767	0.06
CLMH061E133MH061E134		1973		Existing		MH061E133	MH061E134		A00776	IRWD	PVC	{07E799FA-12B2-4F34-9192-42CB9221E5DA}	CLMH061E133MH061E134	56.88	56.18	0.666666667	MH061E133	MH061E134		73	CLMH061E133MH061E134	8	0.0096	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH061E134MH061E137		1994		Existing		MH061E134	MH061E137		A00776	IRWD	PVC	{52C05D9E-8922-469E-95A3-C1CB2D03360B}	CLMH061E134MH061E137	55.88	55.40	0.666666667	MH061E134	MH061E137		67	CLMH061E134MH061E137	8	0.0069	0.004286	0.05	0.005147	0.06	0.006102	0.06	0.005147	0.06
CLMH061E135MH061E021		1994		Existing		MH061E135	MH061E021		A00776	IRWD	PVC	{CB2E458D-C07A-411A-9999-2C2A66E6252C}	CLMH061E135MH061E021	49.20	48.58	0.666666667	MH061E135	MH061E021		64	CLMH061E135MH061E021	8	0.0097	0.037662	0.14	0.045215	0.16	0.053607	0.17	0.045215	0.16
CLMH061E136MH061E135		1994		Existing		MH061E136	MH061E135		A00776	IRWD	PVC	{885FABF9-5FBD-4BB0-B0E9-63C30DBFD62B}	CLMH061E136MH061E135	54.47	49.40	0.666666667	MH061E136	MH061E135		164	CLMH061E136MH061E135	8	0.0309	0.037662	0.11	0.045215	0.12	0.053607	0.13	0.045215	0.12
CLMH061E137MH061E136		1994		Existing		MH061E137	MH061E136		A00776	IRWD	PVC	{4D340400-48E2-4A31-8966-69F6B86EE314}	CLMH061E137MH061E136	55.00	54.68	0.666666667	MH061E137	MH061E136		36	CLMH061E137MH061E136	8	0.0089	0.019076	0.11	0.022903	0.12	0.027155	0.13	0.022903	0.12
CLMH061E138MH061E137		1994		Existing		MH061E138	MH061E137		A00776	IRWD	PVC	{5D3670DE-A-DC8C-439C-8EA4-68E322D84A40}	CLMH061E138MH061E137	57.15	55.20	0.666666667	MH061E138	MH061E137		261	CLMH061E138MH061E137	8	0.0075	0.014790	0.10	0.017750	0.11	0.021053	0.12	0.017750	0.11
CLMH061E139MH061E138		1994		Existing		MH061E139	MH061E138		A00776	IRWD	PVC	{60341DD1-8D16-416F-8ACC-6E0BE82D0C72}	CLMH061E139MH061E138	57.65	57.34	0.666666667	MH061E139	MH061E138		31	CLMH061E139MH061E138	8	0.0100	0.014790	0.09	0.017757	0.10	0.021053	0.11	0.017757	0.10
CLMH061E140MH061E139		1994		Existing		MH061E140	MH061E139		A00776	IRWD	VCP	{E97A7E2C-0205-476D-B34F-A11343F4DC00}	CLMH061E140MH061E139	58.40	57.86	0.666666667	MH061E140	MH061E139		58	CLMH061E140MH061E139	8	0.0093	0.014790	0.10	0.017757	0.11	0.021053	0.11	0.017757	0.11
CLMH061E141MH061E140		1994		Existing		MH061E141	MH061E140		A00776	IRWD	VCP	{6CBB1698-1419-4F7A-BB16-812AC6F409C1}	CLMH061E141MH061E140	60.24	58.50	0.666666667	MH061E141	MH061E140		39	CLMH061E141MH061E140	8	0.0446	0.009538	0.05	0.011452	0.06	0.013578	0.06	0.011452	0.06
CLMH061E142MH061E141		1994		Existing		MH061E142	MH061E141		A00776	IRWD	VCP	{B3BE1B08-76AA-42F4-9E92-669B02C632C5}	CLMH061E142MH061E141	61.52	60.43	0.666666667	MH061E142	MH061E141		64	CLMH061E142MH061E141	8	0.0266	0.009538	0.06	0.011452	0.06	0.013578	0.07	0.011452	0.06
CLMH061E145MH061E140		1994		Existing		MH061E145	MH061E140		A00776	IRWD	PVC	{F7696C2B-B0F5-497C-81A6-86EBFB47119F}	CLMH061E145MH061E140	61.27	58.59	0.666666667	MH061E145	MH061E140		54	CLMH061E145MH061E140	8	0.0496	0.005252	0.04	0.006305	0.04	0.007476	0.05	0.006305	0.04
CLMH061E146MH061E136		1994		Existing		MH061E146	MH061E136		A00776	IRWD	PVC	{EE86C887-C75D-469E-8636-09127560DA241}	CLMH061E146MH061E136	55.47	54.88	0.666666667	MH061E146	MH061E136		69	CLMH061E146MH061E136	8	0.0086	0.018586	0.11	0.022312	0.12	0.026452	0.13	0.022312	0.12
CLMH061E148MH061E146		1994		Existing		MH061E148	MH061E146		A00776	IRWD	PVC	{76E513B78-5696-4EC9-A950-12ABCDCAF4DC}	CLMH061E148MH061E146	57.02	55.66	0.666666667	MH061E148	MH061E146		123	CLMH061E148MH061E146	8	0.0111	0.009711	0.07	0.011657	0.08	0.013821	0.09	0.011657	0.08
CLMH061E152MH061E179		1994		Existing		MH061E152	MH061E179		14741	IRWD	PVC	{F6CC05A2-AAF6-43E2-97D5-2A321A9B22E1}	CLMH061E152MH061E179	53.11	51.83	0.666666667	MH061E152	MH061E179		324	CLMH061E152MH061E179	8	0.0040	0.002745	0.05	0.003293	0.06	0.003904	0.06	0.003294	0.05
CLMH061E155MH061E180		1994		Existing		MH061E155	MH061E180		14741	IRWD	PVC	{E47A000D-B8AC-4190-B883-3E802AD9EF25}	CLMH061E155MH061E180	51.20	50.15	0.666666667	MH061E155	MH061E180		264	CLMH061E155MH061E180	8	0.0040	0.002979	0.05	0.003576	0.06	0.004241	0.06	0.003576	0.06
CLMH061E158MH061E181		1994		Existing		MH061E158	MH061E181		14741	IRWD	PVC	{51B9F9EA-9CD8-456A-8A39-3620B0B7F319}	CLMH061E158MH061E181	51.20	49.27	0.666666667	MH061E158	MH061E181		247	CLMH061E158MH061E181	8	0.0078	0.004566	0.05	0.005480	0.06	0.006497	0.07	0.005480	0.06
CLMH061E160MH061E163		1994		Existing		MH061E160	MH061E163		14741	IRWD	PVC	{580A78B2-AC7B-474E-9EA6-656C48D9DB46}	CLMH061E160MH061E163	48.97	47.59	0.666666667	MH061E160	MH061E163		73	CLMH061E160MH061E163	8	0.0189	0.003087	0.04	0.003707	0.04	0.004393	0.04	0.003707	0.04
CLMH061E163MH061E182		1994		Existing		MH061E163	MH061E182		14741	IRWD	PVC	{F9F6455D-9F33-45E0-BCFB-949E32AB83F3}	CLMH061E163MH061E182	47.49	46.65	0.666666667	MH061E163	MH061E182		213	CLMH061E163MH061E182	8	0.0039	0.006088	0.07	0.007309	0.08	0.008664	0.09	0.007309	0.08
CLMH061E165MH061E183		1994		Existing		MH061E165	MH061E183		14741	IRWD	PVC	{C2F31A98-19D5-4C31-B764-00EBC4EA79C4}	CLMH061E165MH061E183	49.77	46.06	0.666666667	MH061E165	MH061E183		243	CLMH061E165MH061E183	8	0.0153	0.004845	0.05	0.005816	0.05	0.006895	0.06	0.005816	0.05
CLMH061E167MH061E169		1994		Existing		MH061E167	MH061E169		14741	IRWD	PVC	{54F85B02-BFA2-488A-B800-F25CF231FF4D}	CLMH061E167MH061E169	52.22	51.72	0.666666667	MH061E167	MH061E169		86	CLMH061E167MH061E169	8	0.0058	0.001716	0.03	0.002060	0.04	0.002442	0.04	0.002060	0.04
CLMH061E169MH061E170		1994		Existing		MH061E169	MH061E170		14741	IRWD	PVC	{C79A5954-585B-4FCD-A303-C5F02A734861}	CLMH061E169MH061E170	51.63	51.22	0.666666667	MH061E169	MH061E170		70	CLMH061E169MH061E170	8	0.0059	0.007997	0.08	0.009599	0.08	0.011381	0.09	0.009599	0.08
CLMH061E170MH061E183		1994		Existing		MH061E170	MH061E183		14741	IRWD	PVC	{51025179-3A76-4FD5-8AF6-DEF6F0720945}	CLMH061E170MH061E183	51.13	46.06	0.666666667	MH061E170	MH061E183		287	CLMH061E170MH061E183	8	0.0177	0.007997	0.06	0.009599	0.07	0.011381	0.07	0.009599	0.07
CLMH061E174MH061E175		1994		Existing		MH061E174	MH061E175		14741

CLMH061N055MH061N067		1994		Existing		MH061N055	MH061N067		T14953	IRWD	PVC	{EBE15971-89DA-416B-8991-89EC795A4FC3}	CLMH061N055MH061N067	48.09	43.75	0.666666667	MH061N055	MH061N067				284	CLMH061N055MH061N067	8	0.0153	0.004609	0.05	0.005534	0.05	0.006659	0.06	0.005534	0.05				
CLMH061N057MH061N072		1994		Existing		MH061N057	MH061N072		T14953	IRWD	PVC	{50415E20-F160-4812-9090-114E6DF80C1E}	CLMH061N057MH061N072	40.00	39.00	0.666666667	MH061N057	MH061N072				49	CLMH061N057MH061N072	8	0.0204	0.081273	0.18	0.097498	0.19	0.115592	0.21	0.097498	0.19				
CLMH061N059MH061N057		1994		Existing		MH061N059	MH061N057		T14953	IRWD	PVC	{F67399BF-D99E-4593-8DD5-580F6AAD58A6}	CLMH061N059MH061N057	40.59	40.20	0.666666667	MH061N059	MH061N057				84	CLMH061N059MH061N057	8	0.0046	0.081273	0.25	0.097498	0.27	0.115592	0.30	0.097498	0.27				
CLMH061N061MH061N059		1994		Existing		MH061N061	MH061N059		T14953	IRWD	PVC	{87743E8B-AD7B-4BC1-8997-12D3A5B710A}	CLMH061N061MH061N059	41.18	40.79	0.666666667	MH061N061	MH061N059				81	CLMH061N061MH061N059	8	0.0048	0.076987	0.24	0.092351	0.26	0.109490	0.29	0.092351	0.26				
CLMH061N062MH061N061		1994		Existing		MH061N062	MH061N061		T14953	IRWD	PVC	{EA65529C-2C7B-40D8-90E8-DC4720A1F43E}	CLMH061N062MH061N061	41.75	41.38	0.666666667	MH061N062	MH061N061				79	CLMH061N062MH061N061	8	0.0047	0.073191	0.24	0.087781	0.26	0.104074	0.28	0.087781	0.26				
CLMH061N063MH061N062		1994		Existing		MH061N063	MH061N062		T14953	IRWD	PVC	{AA6ACAC6-4393-4F3D-A5C5-C3108F2F2943}	CLMH061N063MH061N062	42.36	41.95	0.666666667	MH061N063	MH061N062				84	CLMH061N063MH061N062	8	0.0049	0.011039	0.09	0.013255	0.10	0.015714	0.11	0.013255	0.10				
CLMH061N064MH061N063		1994		Existing		MH061N064	MH061N063		T14953	IRWD	PVC	{07E866AA-97C1-41DC-B0D3-0CFA8BAB6EFC}	CLMH061N064MH061N063	43.00	42.58	0.666666667	MH061N064	MH061N063				81	CLMH061N064MH061N063	8	0.0054	0.006002	0.07	0.007206	0.07	0.008544	0.08	0.007206	0.07				
CLMH061N065MH061N062		1994		Existing		MH061N065	MH061N062		T14953	IRWD	PVC	{ABEE067E-192C-49FD-B3FB-868AE63CB483}	CLMH061N065MH061N062	42.31	41.95	0.666666667	MH061N065	MH061N062				75	CLMH061N065MH061N062	8	0.0048	0.061824	0.22	0.074182	0.24	0.087950	0.26	0.074182	0.24				
CLMH061N066MH061N065		1994		Existing		MH061N066	MH061N065		T14953	IRWD	PVC	{EE47D0F3-95D4-48BF-8BDC-5D5B479ADE3A}	CLMH061N066MH061N065	42.97	42.50	0.666666667	MH061N066	MH061N065				96	CLMH061N066MH061N065	8	0.0049	0.061824	0.21	0.074182	0.24	0.087950	0.26	0.074182	0.24				
CLMH061N067MH061N066		1994		Existing		MH061N067	MH061N066		T14953	IRWD	PVC	{D86CA9F8-509E-49D7-9A56-D92DE18EA42D}	CLMH061N067MH061N066	43.54	43.16	0.666666667	MH061N067	MH061N066				81	CLMH061N067MH061N066	8	0.0047	0.051300	0.20	0.061546	0.22	0.072968	0.23	0.061546	0.22				
CLMH061N072MH061N010		1994		Existing		MH061N072	MH061N010		T14953	IRWD	VCP	{FF9831CD-A601-4209-9AA0-F75F289BDB6A}	CLMH061N072MH061N010	38.81	38.68	0.666666667	MH061N072	MH061N010				16	CLMH061N072MH061N010	8	0.0081	0.081273	0.23	0.097498	0.25	0.115592	0.27	0.097498	0.25				
CLMH061N076MH061N010		1994		Existing		MH061N076	MH061N010		T14814	IRWD	PVC	{7A327271-188B-4D99-8A4D-70B2729EDC54}	CLMH061N076MH061N010	43.45	38.77	0.666666667	MH061N076	MH061N010				80	CLMH061N076MH061N010	8	0.0289	0.002623	0.03	0.003134	0.03	0.003712	0.04	0.003134	0.03				
CLMH061N077MH061N076		1996		Existing		MH061N077	MH061N076		T14814	IRWD	PVC	{9E8BA4E7-0E9E-4BB3-8FCD-7EB760FF6AF9}	CLMH061N077MH061N076	44.40	43.65	0.666666667	MH061N077	MH061N076				113	CLMH061N077MH061N076	8	0.0066	0.000503	0.02	0.000539	0.02	0.000638	0.02	0.000539	0.02				
CLMH061N078MH061N079		1996		Existing		MH061N078	MH061N079		T14814	IRWD	PVC	{485DE1CD-F592-462C-AA11-9453CE37C1D2}	CLMH061N078MH061N079	44.00	38.20	0.666666667	MH061N078	MH061N079				104	CLMH061N078MH061N079	8	0.0244	0.005145	0.05	0.006177	0.05	0.007322	0.05	0.006177	0.05				
CLMH061N079MH061N011		1996		Existing		MH061N079	MH061N011		T14814	IRWD	PVC	{905D91D9-D69E-4DC8-A089-E4F933C43EF2}	CLMH061N079MH061N011	38.00	35.97	0.666666667	MH061N079	MH061N011				90	CLMH061N079MH061N011	8	0.0026	0.005429	0.05	0.006474	0.07	0.007675	0.09	0.006474	0.07				
CLMH061N080MH061E201		1995		Existing		MH061N080	MH061E201		T14873	IRWD	PVC	{22758A92-D03D-4387-B2E4-71A012832205}	CLMH061N080MH061E201	46.08	43.77	0.666666667	MH061N080	MH061E201				332	CLMH061N080MH061E201	8	0.0070	0.011183	0.09	0.013427	0.10	0.015918	0.10	0.013427	0.10				
CLMH061N081MH061N112		2005		Existing	assumed Mannings N	MH061N081	MH061N112		T16580	IRWD	PVC	{330B0A5E-2687-4173-9F69-B5E2A644F8C0}	CLMH061N081MH061N112	47.76	45.78	0.666666667	MH061N081	MH061N112				163	CLMH061N081MH061N112	8	0.0121	0.004866	0.05	0.005841	0.06	0.006927	0.06	0.005841	0.06				
CLMH061N082MH061N104		2006		Existing	assumed Mannings N	MH061N082	MH061N104		T16580	IRWD	PVC	{2AA66BF9-4BCF-486C-9E35-667E163DD81C}	CLMH061N082MH061N104	42.41	42.15	0.666666667	MH061N082	MH061N104				65	CLMH061N082MH061N104	8	0.0040	0.002058	0.04	0.002472	0.05	0.002929	0.05	0.002472	0.05				
CLMH061N083MH061N107		2005		Existing	assumed Mannings N	MH061N083	MH061N107		T16580	IRWD	PVC	{D54CE6D8-E7AA-4E43-BB94-6ED545D51DB3A}	CLMH061N083MH061N107	43.28	42.61	0.666666667	MH061N083	MH061N107				168	CLMH061N083MH061N107	8	0.0040	0.000901	0.02	0.001081	0.03	0.001282	0.03	0.001081	0.03				
CLMH061N084MH061N096		2005		Existing	assumed Mannings N	MH061N084	MH061N096		T16580	IRWD	PVC	{730B00C8-4A45-44D6-8FA9-20A3FCB06B8D}	CLMH061N084MH061N096	40.05	39.59	0.666666667	MH061N084	MH061N096				216	CLMH061N084MH061N096	8	0.0021	0.026977	0.17	0.032397	0.18	0.038407	0.20	0.032397	0.18				
CLMH061N085MH061N086		2005		Existing	assumed Mannings N	MH061N085	MH061N086		T16580	IRWD	PVC	{490F749D-17DC-40F3-89F5-2DF71A282AE7}	CLMH061N085MH061N086	42.47	41.51	0.666666667	MH061N085	MH061N086				240	CLMH061N085MH061N086	8	0.0040	0.004197	0.06	0.005042	0.06	0.005978	0.07	0.005042	0.06				
CLMH061N086MH061N084		2005		Existing	assumed Mannings N	MH061N086	MH061N084		T16580	IRWD	PVC	{08C790DC-A958-4CE6-942C-658A773045531}	CLMH061N086MH061N084	41.41	40.55	0.666666667	MH061N086	MH061N084				214	CLMH061N086MH061N084	8	0.0040	0.012725	0.10	0.015282	0.11	0.018121	0.12	0.015282	0.11				
CLMH061N087MH061N088		2005		Existing	assumed Mannings N	MH061N087	MH061N088		T16580	IRWD	PVC	{F7EA76E5-E015-41C8-A50F-581554406BEB}	CLMH061N087MH061N088	44.53	42.76	0.666666667	MH061N087	MH061N088				443	CLMH061N087MH061N088	8	0.0040	0.004199	0.06	0.005043	0.06	0.005979	0.07	0.005043	0.06				
CLMH061N088MH061N085		2005		Existing	assumed Mannings N	MH061N088	MH061N085		T16580	IRWD	PVC	{F412FB18-FDAD-40D3-BCB0-A3D90B5812E0}	CLMH061N088MH061N085	42.66	42.57	0.666666667	MH061N088	MH061N085				22	CLMH061N088MH061N085	8	0.0041	0.004199	0.06	0.005043	0.06	0.005979	0.07	0.005043	0.06				
CLMH061N089MH061N115		2005		Existing	assumed Mannings N	MH061N089	MH061N115		T16580	IRWD	PVC	{A3CC2BE1-2D36-438F-AD7C-2BFAC4A12552}	CLMH061N089MH061N115	43.26	42.90	0.666666667	MH061N089	MH061N115				44	CLMH061N089MH061N115	8	0.0081	0.002829	0.04	0.003397	0.05	0.004027	0.05	0.003397	0.05				
CLMH061N090MH061N110		2005		Existing	assumed Mannings N	MH061N090	MH061N110		T16580	IRWD	PVC	{2003E182-6589-46CE-B413-DFE4C5E029E9}	CLMH061N090MH061N110	40.27	39.23	0.666666667	MH061N090	MH061N110				260	CLMH061N090MH061N110	8	0.0040	0.006493	0.07	0.007795	0.08	0.009244	0.09	0.007795	0.08				
CLMH061N091MH061N105		2005		Existing	assumed Mannings N	MH061N091	MH061N105		T16580	IRWD	PVC	{8DDBC605-E3FA-4D58-B527-629270E83549}	CLMH061N091MH061N105	38.98	35.43	0.666666667	MH061N091	MH061N105				381	CLMH061N091MH061N105	8	0.0093	0.016055	0.10	0.019276	0.11	0.022852	0.11	0.019276	0.11				
CLMH061N092MH061N093		2005		Existing	assumed Mannings N	MH061N092	MH061N093		T16580	IRWD	PVC	{A41EC604-B6F8-4AD1-8F5A-923A28F17D10}	CLMH061N092MH061N093	42.84	42.09	0.666666667	MH061N092	MH061N093				185	CLMH061N092MH061N093	8	0.0041	0.002648	0.05	0.003188	0.05	0.003779	0.06	0.003188	0.05				
CLMH061N102MH061N102		2006		Existing	assumed Mannings N	MH061N102	MH061N102		T16580	IRWD	PVC	{07D86E5C-EE3C-4557-927A-2D15F97B6BC3}	CLMH061N102MH061N102	42.84	40.09	0.666666667	MH061N102	MH061N102				198	CLMH061N102MH061N102	8	0.0111	0.005083	0.05	0.006094	0.06	0.007227	0.06	0.006094	0.06				
CLMH061N093MH061N100		2005		Existing	assumed Mannings N	MH061N093	MH061N100		T16580	IRWD	PVC	{CD0FB0E1-880E-469B-BEED-19A65B45B85F}	CLMH061N093MH061N100	41.99	41.85	0.666666667	MH061N093	MH061N100				33	CLMH061N093MH061N100	8	0.0043	0.002648	0.05	0.003188	0.05	0.003779	0.06	0.003188	0.05				
CLMH061N094MH061N092		2005		Existing	assumed Mannings N	MH061N094	MH061N092		T16580	IRWD	PVC	{3857467C-9795-4538-965A-F71571A33495}	CLMH061N094MH061N092	44.07	42.94	0.666666667	MH061N094	MH061N092				217	CLMH061N094MH061N092	8	0.0052	0.003701	0.05	0.004443	0.06	0.005269	0.06	0.004443	0.06				
CLMH061N101MH061N094		2005		Existing	assumed Mannings N	MH061N101	MH061N094		T16580	IRWD	PVC	{793ECF0D-ACFF-402C-9082-F24F25FFB82D}	CLMH061N101MH061N094	44.07	42.81	0.666666667	MH061N101	MH061N094				250	CLMH061N101MH061N094	8	0.0050	0.003608	0.05	0.004332	0.06	0.005136	0.06	0.004332	0.06				
CLMH061N095MH061N097		2005		Existing	assumed Mannings N	MH061N095	MH061N097		T16580	IRWD	PVC	{624014E7E-5650-4329-A277-314DA74EDOC2}	CLMH061N095MH061N097	38.48	37.14	0.666666667	MH061N095	MH061N097				210	CLMH061N095MH061N097	8	0.0064	0.039604	0.16	0.047553	0.18	0.056378	0.20	0.047553	0.18				
CLMH061N096MH061N095		2005		Existing	assumed Mannings N	MH061N096	MH061N095		T16580	IRWD	PVC	{CD66226AA-F86B-483E-A2D2-0CA59458EAE7}	CLMH061N096MH061N095	39.49	38.58	0.666666667	MH061N096	MH061N095				227	CLMH061N096MH061N095	8	0.0040	0.032983	0.16	0.039608	0.18	0.046957	0.19	0.039608	0.18				
CLMH061N097MH061N106		2005		Existing	assumed Mannings N	MH061N097	MH061N106		T16580	IRWD	PVC	{1F397DF9-473A-4211-898F-AAC7114F9B04}	CLMH061N097MH061N106	36.94	36.08	0.833333333	MH061N097	MH061N106				308	CLMH061N097MH061N106	10	0.0028	0.083232	0.21	0.099706	0.23	0.118205	0.25	0.099706	0.23				
CLMH061N098MH061N097		2005		Existing	assumed Mannings N	MH061N098	MH061N097		T16580	IRWD	PVC	{F6E63CC6-2A51-4807-AADD-C2D9D5D8608B}	CLMH061N098MH061N097	38.22	37.04	0.833333333	MH061N098	MH061N097				242	CLMH061N098MH061N097	10	0.0049	0.041220	0.13	0.049476	0.14	0.058649	0.16	0.049476	0.14				
CLMH061N099MH061N098		2005		Existing	assumed Mannings N	MH061N099	MH061N098		T16580	IRWD	PVC	{FF1030F6-E3E8-45B0-BA69-9644786D337D}	CLMH061N099MH061N098	39.52	38.32	0.833333333	MH061N099	MH061N098				163	CLMH061N099MH061N098	10	0.0074	0.022077	0.09	0.026492	0.10	0.031406	0.11	0.026492	0.10				
CLMH061N100MH061N099		2005		Existing	assumed Mannings N	MH061N100	MH061N099		T16580	IRWD	PVC	{F25EBFEE-C3BF-4874-8692-626D610E773D}	CLMH061N100MH061N099	41.75	39.72	0.833333333	MH061N100	MH061N099				55	CLMH061N100MH061N099	10	0.0372	0.002648	0.02	0.003188	0.02	0.003779	0.03	0.003188	0.02				
CLMH061N101MH061N096		2005		Existing	assumed Mannings N	MH061N101	MH061N096		T16580	IRWD	PVC	{3CA49957-CA82-409F-860D-9A348D828DB1}	CLMH061N101MH061N096	42.71	39.59	0.666666667	MH061N101	MH061N096				250	CLMH061N101MH061N096	8	0.0125	0.003608	0.04	0.004332	0.05	0.005136	0.05	0.004332	0.05				
CLMH061N102MH061N095		2005		Existing	assumed Mannings N	MH061N102	MH061N095		T16580	IRWD	PVC	{26B668BC-6AD2-4B68-8288-5640C1D030F0}	CLMH061N102MH061N095	39.99	38.58	0.666666667	MH061N102	MH061N095				235	CLMH061N102MH061N095	8	0.0060	0.005083	0.06	0.006094	0.07	0.007227	0.07	0.006094	0.07				
CLMH061N103MH061N111		2005		Existing	assumed Mannings N	MH061N103	MH061N111		T16580	IRWD	PVC	{09FA8374-00AA-4834-A06D-58D91C55F88A}	CLMH061N103MH061N111	42.53	41.32	0.666666667	MH061N103	MH061N111				301	CLMH061N103MH061N111	8	0.0040	0.004866	0.06	0.005841	0.07	0.006927	0.08	0.005841	0.07				
CLMH061N104MH061N109		2005		Existing	assumed Mannings N	MH061N104	MH061N109		T16580	IRWD	PVC	{41498C3C-4DF1-488B-A58D-DB80C4AD15C7}	CLMH061N104MH061N109	42.05	41.33	0.666666667	MH061N104	MH061N109				179	CLMH061N104MH061N109	8	0.0040	0.005808	0.07	0.006976	0.08	0.008268	0.08	0.006976	0.08				
CLMH061N105MH061N114		2006		Existing	assumed Mannings N	MH061N105	MH061N114		T16580	IRWD	PVC	{6C077E1B-F2DF-4044-9B82-ED12B71867ZE}	CLMH061N105MH061N114	35.23	34.85	0.833333333	MH061N105	MH061N114				137	CLMH061N105MH061N114	10	0.0228	0.116250	0.24	0.139385	0.26	0.162528	0.29	0.139385	0.26				
CLMH061N106MH061N105		2005		Existing	assumed Mannings N	MH061N106	MH061N105		T16580	IRWD	PVC	{28989B09-D53E-4C2F-A216-9DAFED0731EE}	CLMH061N106MH061N105	35.98	35.38	0.833333333	MH061N106	MH061N105				235	CLMH061N106MH061N105	10	0.0026	0.100203	0.23	0.120114	0.25	0.142410	0.27	0.120114	0.25				
CLMH061N107MH061N086		2005		Existing	assumed Mannings N	MH061N107	MH061N086		T16580	IRWD	PVC	{C740EC75-7147-48D8-A63D-B156F3D253CF}	CLMH061N107MH061N086	42.51	41.51	0.666666667	MH061N107	MH061N086				214	CLMH061N107MH061N086	8	0.0040	0.008531	0.08	0.010242	0.09	0.012144	0.10	0.010242	0.09				
CLMH061N108MH061N089		2005		Existing	assumed Mannings N	MH061N108	MH061N089		T16580	IRWD	PVC	{67700342-B272-4D8A-A9E5-A946D0FE91BB}	CLMH061N108MH061N089	44.70	43.36	0.666666667	MH061N108	MH061N089				168	CLMH061N108MH061N089	8	0.0080	0.002829	0.04	0.003397	0.05	0.004027	0.05	0.003397	0.05				
CLMH061N109MH061N084		2005		Existing	assumed Mannings N	MH061N109	MH061N084		T16580	IRWD	PVC	{458403CE-2F9F-4FCE-8B34-E0DAC82AB811}	CLMH061N109MH061N084	41.23	40.55	0.666666667	MH061N109	MH061N084				170	CLMH061N109MH061N084	8	0.0040	0.015219	0.10	0.015033	0.11	0.017816	0.12	0.015033	0.11				
CLMH061N110MH061N106		2005		Existing	assumed Mannings N	MH061N110	MH061N106		T16580	IRWD	PVC	{3C496513-5707-42B2-B45F-C35798D648F9}	CLMH061N110MH061N106	39.13	36.38	0.666666667	MH061N110	MH061N106				89	CLMH061N110MH061N106	8	0.0084	0.017017	0.10	0.020430	0.11	0.024227	0.12	0.020430	0.11				
CLMH061N111MH061N090		2005		Existing	assumed Mannings N	MH061N111	MH061N090		T16580	IRWD	PVC	{6812D5F1-0781-449A-BE36-7B4910C7EDCF}	CLMH061N111MH061N090	41.22	40.37	0.666666667	MH061N111	MH061N090				211	CLMH061N111MH061N090	8	0.0060	0.006494	0.07	0.007796	0.08	0.009245	0.09	0.007796	0.08				
CLMH061N112MH061N103		2005		Existing	assumed Mannings N	MH061N112	MH061N103		T16580	IRWD	PVC	{60A46686-1A84-4FB7-BF08-0E45B8EE6F95}	CLMH061N112MH061N103	45.68	42.63	0.666666667	MH061N112	MH061N103				246	CLMH061N112MH061N103	8	0.0124	0.004866	0.06	0.005841	0.06	0.006927	0.07	0.005841	0.06				
CLMH061N113MH061N091		2005		Existing	assumed Mannings N	MH061N113	MH061N091		T16580	IRWD	PVC	{9109768D-D47D-4C81-B717-6010F54ED96F}	CLMH061N113MH061N091	41.06	39.08	0.666666667	MH061N113	MH061N091				248	CLMH061N113MH061N091	8	0.0080	0.008381	0.07	0.010063	0.08	0.011930	0.09	0.010063	0.08				
CLMH061N114MH061N014		2005		Existing	assumed Mannings N	MH061N114	MH061N014		T16580	IRWD	PVC	{6ED E58BA-558D-4F11-A82D-27D1895AA281}	CLMH061N114MH061N014	34.75	34.09	0.833333333	MH061N114	MH061N014				72	CLMH061N114MH061N014	10	0.0092	0.116249	0.19	0.139384	0.21	0.165257	0.23	0.139384	0.21				
CLMH061N115MH061N113		2005		Existing	assumed Mannings N	MH061N115	MH061N113		T16580	IRWD	PVC	{1E9C43A5-8E8B-4628-BCDF-B46583594977}	CLMH061N115MH061N113	42.80	41.16	0.666666667	MH061N115	MH061N113				213	CLMH061N115MH061N113	8	0.0077	0.008381	0.07	0.010063	0.08	0.011930	0.09	0.010063	0.08				
CLMH061N116MH061N118		2005		Existing	assumed Mannings N	MH061N116	MH061N118		T16662	IRWD	PVC	{0E581775-8F63-4A7C-BA09-3C9A0C78276}	CLMH061N116MH061N118	45.31	44.78	0.666666667	MH061N116	MH061N118				76	CLMH061N116MH061N118	8	0.0069	0.001072	0.03	0.001286	0.03	0.001525	0.03	0.001286	0.03				
CLMH061N117MH061N118		2005		Existing	assumed Mannings N	MH061N117	MH061N118		T16662	IRWD	PVC	{9775B60F-5478-494C-99C4-0ADFEED4E732}	CLMH061N117MH061N118	45.23	44.78	0.666666667	MH061N117	MH061N118				64	CLMH061N117MH061N118	8	0.0070	0.001866	0.04	0.002239	0.04	0.002654	0.04	0.002239	0.04				
CLMH061N118MH061N133		2005		Existing	assumed Mannings N	MH061N118	MH061N133		T16662	IRWD	PVC	{8923E6E5-C3BE-4D30-B731-CD53B8413C02}	CLMH061N118MH061N133	44.57	43.84	0.666666667	MH061N118	MH061N133				104	CLMH061N118MH061N133	8	0.0070	0.002937	0.05	0.003525	0.05	0.004179	0.05	0.003525	0.05				
CLMH061N119MH061N121		2005		Existing	assumed Mannings N	MH061N119	MH061N121		T16662	IRWD	PVC	{E1A676F9-4D3D-44DA-9E7E-6D6DCC37BE9F}	CLMH061N119MH061N121	46.67	46.22	0.666666667	MH061N119	MH061N121				64	CLMH061N119MH061N121	8	0.0070	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH061N120MH061N121		2005		Existing	assumed Mannings N	MH061N120	MH061N121		T16662	IRWD	PVC	{98B6D08D-A007-47D8-8591-5D31EF0A241C}	CLMH061N120MH061N121	46.75	46.22	0.666666667	MH061N120	MH061N121				76	CLMH061N120MH061N121	8	0.0069	0.000171	0.01	0.000205	0.01	0.000244	0.01	0.000205	0.01				
CLMH061N121MH061N137		2005		Existing	assumed Mannings N	MH061N121	MH061N137		T16662	IRWD	PVC	{EC636B61E-1A26-4E18-8416-5D243437ABEA}	CLMH061N121MH061N137	46.02	45.23	0.666666667	MH061N121	MH061N137				114	CLMH061N121MH061N137	8	0.0069	0.002873	0.05	0.003448	0.05	0.004087	0.05	0.003448	0.05				
CLMH061N122MH061N134		2005		Existing	assumed Mannings N	MH061N122	MH061N134		T16662	IRWD	PVC	{95F7766C-4C06-4C61-87DD-6E9EC3924D89}	CLMH061N122MH061N134	44.20	43.74	0.666666667	MH061N122	MH061N134				65	CLMH061N122MH061N134	8	0.0070	0.001543	0.03	0.001852	0.04	0.002196	0.04	0.001852	0.04				
CLMH061N123MH061N134		2005		Existing	assumed Mannings N	MH061N123	MH061N134		T16662	IRWD	PVC	{37A1E9E8-2947-4F66-92C1-38C1397C7442}	CLMH061N123MH061N134	44.28	43.74	0.666666667	MH061N123	MH061N134				77	CLMH061N123MH061N134	8	0.0070	0.003644	0.05	0.004376	0.05	0.005187	0.06	0.004376	0.05				
CLMH061N124MH061N127		2005		Existing	assumed Mannings N	MH061N124	MH061N127		T16662	IRWD	PVC	{25133826A-296F-40E2-8726-CCDD1BAC1C45}	CLMH061N124MH061N127	42.81	42.36	0.666666667	MH061N124	MH061N127				64	CLMH061N124MH061N127	8	0.0070	0.003344	0.05	0.004015	0.05	0.004760	0.06	0.004015	0.05				
CLMH061N125MH061N127		2005		Existing	assumed Mannings N	MH061N125	MH061N127		T16662	IRWD	PVC	{E5CF87D5-8831-483B-820E-5A67E1C32D15}	CLMH061N125MH061N127	42.90	42.36	0.666666667	MH061N125	MH061N127				77	CLMH061N125MH061N127	8	0.0070	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH061N126MH061N130		2005		Existing	assumed Mannings N	MH061N126	MH061N130		T16662	IRWD	PVC	{30DBE2C6-EE39-458A-8992-F13428F060555}	CLMH061N126MH061N130	46.64	45.59	0.666666667	MH061N126	MH061N130				60	CLMH061N126MH061N130	8	0.0175	0.001030	0.02	0.001235	0.02	0.001464	0.03	0.001235	0.02				
CLMH061N127MH061N132		2005		Existing	assumed Mannings N	MH061N127	MH061N132		T16662	IRWD	PVC	{43845184-EF1E-4FA1-83DE-032C417059E}	CLMH061N127MH061N132	42.16	41.31	0.666666667	MH061N127	MH061N132				122	CLMH061N127MH061N132	8	0.0070	0.003344	0.05	0.004015	0.05	0.004760	0.06	0.004015	0.05				
CLMH061N128MH061N135		2005		Existing	assumed Mannings N	MH061N128	MH061N135		T16662	IRWD	PVC	{6894A2AB-7494-463B-BA91-9ACB471C4129}	CLMH061N128MH061N135	42.96	40.75	0.666666667	MH061N128	MH061N135				68	CLMH061N128MH061N135	8	0.0323	0.002101	0.03	0.002521	0.03	0.002989	0.03	0.002521	0.03				
CLMH061N129MH061N140		2005		Existing	assumed Mannings N	MH061N129	MH061N140		T16662	IRWD	PVC	{28C7795E-C1E7-4AD8-8E8B-59E064FDBDB2}	CLMH061N129MH061N140	42.70	42.36	0.666666667	MH061N129	MH061N140				98	CLMH061N129MH061N140	8	0.0035	0.005187	0.07	0.006228	0.07	0.007384	0.08	0.006228	0.07				
CLMH061N130MH061N137		2005		Existing	assumed Mannings N	MH061N130	MH061N137		T16662	IRWD	PVC	{4EC83E1E-4785-4181-917B-D45AE2CCE15B}	CLMH061N130MH061N137	45.39	45.13	0.666666667	MH061N130	MH061N137				263	CLMH061N130MH061N137	8	0.0040	0.004224	0.06	0.005070	0.06	0.006010	0.07	0.005070	0.06				
CLMH061N131MH061N132		2005		Existing	assumed Mannings N	MH061N131	MH061N132		T16662	IRWD	PVC	{428C08A3-C0F4-48C7-8C94-810785338BF8}	CLMH061N131MH061N132	41.75	41.21	0.666666667	MH061N131	MH061N132				89	CLMH061N131MH061N132	8	0.0060	0.010769	0.09	0.012908	0.10	0.015301	0.10	0.012908	0.10				
CLMH061N132MH061N135		2005		Existing	assumed Mannings N	MH061N132	MH061N135		T16662	IRWD	PVC	{42DD24AD-35E2-4862-A5E6-5FEE22AD1835}	CLMH061N132MH

| | | |

CLMH061W093MH061W152		1992		Existing		MH061W093	MH061W152	742	IRWD	VCP	{35F8902A-1F91-40A1-8B9A-0255C1E23639}	CLMH061W093MH061W152	33.02	28.81	0.666666667	MH061W093	MH061W152					61	CLMH061W093MH061W152	8	0.0690	0.001710	0.02	0.001826	0.02	0.002165	0.02	0.006370	0.04
CLMH061W096MH061W013		1985		Existing		MH061W096	MH061W013	A00744	IRWD	PVC	{35D23972-146A-42A7-96A1-DA6CA3DF4F69}	CLMH061W096MH061W013	31.40	28.33	0.666666667	MH061W096	MH061W013					58	CLMH061W096MH061W013	8	0.0529	0.101170	0.15	0.121354	0.17	0.143872	0.18	0.121354	0.17
CLMH061W097MH061W096		1992		Existing		MH061W097	MH061W096	A00744	IRWD	PVC	{A0BC310B-C813-489F-8B36-E7DF166OBE0B}	CLMH061W097MH061W096	31.93	31.60	0.666666667	MH061W097	MH061W096					82	CLMH061W097MH061W096	8	0.0040	0.101170	0.28	0.121354	0.31	0.143872	0.34	0.121354	0.31
CLMH061W099MH061W097		1992		Existing		MH061W099	MH061W097	A00744	IRWD	PVC	{7951718C-C9DA-4C95-91D8-6C4BD9D77717}	CLMH061W099MH061W097	35.24	32.03	0.666666667	MH061W099	MH061W097					89	CLMH061W099MH061W097	8	0.0360	0.005466	0.09	0.006561	0.11	0.007781	0.13	0.006561	0.11
CLMH061W100MH061W099		1992		Existing		MH061W100	MH061W099	A00744	IRWD	PVC	{55017DC0-6C5C-405B-B24B-651736028AF6}	CLMH061W100MH061W099	35.79	35.43	0.666666667	MH061W100	MH061W099					77	CLMH061W100MH061W099	8	0.0047	0.005466	0.06	0.006561	0.07	0.007781	0.08	0.006561	0.07
CLMH061W102MH061W097		1992		Existing		MH061W102	MH061W097	A00744	IRWD	PVC	{B725E03C-0CD2-4827-95F7-12E0F5E65F19}	CLMH061W102MH061W097	33.10	32.15	0.666666667	MH061W102	MH061W097					187	CLMH061W102MH061W097	8	0.0051	0.088471	0.26	0.106111	0.28	0.125798	0.31	0.106111	0.28
CLMH061W104MH061W102		1992		Existing		MH061W104	MH061W102	A00744	IRWD	PVC	{52568967-2ED8-4B75-B6FE-9305394B1E2}	CLMH061W104MH061W102	33.83	33.68	0.666666667	MH061W104	MH061W102					41	CLMH061W104MH061W102	8	0.0041	0.008810	0.08	0.010578	0.09	0.012541	0.10	0.010578	0.09
CLMH061W105MH061W104		1992		Existing		MH061W105	MH061W104	A00744	IRWD	PVC	{7371C606-53DF-4BD8-B375-EE79898BCFF3}	CLMH061W105MH061W104	36.86	34.02	0.666666667	MH061W105	MH061W104					85	CLMH061W105MH061W104	8	0.0334	0.008810	0.05	0.010578	0.06	0.012541	0.06	0.010578	0.06
CLMH061W106MH061W102		1992		Existing		MH061W106	MH061W102	A00744	IRWD	PVC	{0A84716A-A9A8-446D-B78B-B7620F96F108}	CLMH061W106MH061W102	33.86	33.29	0.666666667	MH061W106	MH061W102					125	CLMH061W106MH061W102	8	0.0046	0.079737	0.25	0.095604	0.27	0.113342	0.30	0.095604	0.27
CLMH061W107MH061W106		1992		Existing		MH061W107	MH061W106	A00744	IRWD	PVC	{B3D1EE96-9A3A-486O-B150-5314B09147A0}	CLMH061W107MH061W106	34.40	33.95	0.666666667	MH061W107	MH061W106					100	CLMH061W107MH061W106	8	0.0045	0.079776	0.25	0.095646	0.27	0.113392	0.30	0.095646	0.27
CLMH061W108MH061W109		1992		Existing		MH061W108	MH061W109	A00744	IRWD	PVC	{0D143D1E-1C64-4898-8286-68F1E5796594}	CLMH061W108MH061W109	36.02	35.56	0.666666667	MH061W108	MH061W109					46	CLMH061W108MH061W109	6	0.0100	0.006753	0.06	0.008106	0.07	0.009610	0.07	0.008106	0.07
CLMH061W109MH061W110		1992		Existing		MH061W109	MH061W110	A00744	IRWD	PVC	{C7AE1835-D2C2-457B-A975-B5646F887885}	CLMH061W109MH061W110	35.36	35.13	0.666666667	MH061W109	MH061W110					56	CLMH061W109MH061W110	8	0.0088	0.006753	0.07	0.008106	0.07	0.009610	0.08	0.008106	0.07
CLMH061W110MH061W107		1992		Existing		MH061W110	MH061W107	A00744	IRWD	PVC	{30B06BB3-2239-49CD-82A8-C950ADF0B15E}	CLMH061W110MH061W107	34.93	34.50	0.666666667	MH061W110	MH061W107					83	CLMH061W110MH061W107	8	0.0052	0.079439	0.24	0.095286	0.27	0.112964	0.29	0.095286	0.27
CLMH061W111MH061W110		1992		Existing		MH061W111	MH061W110	A00744	IRWD	PVC	{995A2CB8-77A5-4DC9-86FC-83F0B2E0B8B9}	CLMH061W111MH061W110	35.38	35.02	0.666666667	MH061W111	MH061W110					56	CLMH061W111MH061W110	8	0.0064	0.072766	0.22	0.087271	0.24	0.103463	0.26	0.087271	0.24
CLMH061W112MH061W111		1992		Existing		MH061W112	MH061W111	A00744	IRWD	PVC	{88310C75-FE99-4822-B969-046EF4F8F827}	CLMH061W112MH061W111	35.88	35.49	0.666666667	MH061W112	MH061W111					82	CLMH061W112MH061W111	8	0.0048	0.072230	0.23	0.086704	0.26	0.102788	0.28	0.086704	0.26
CLMH061W113MH061W114		1992		Existing		MH061W113	MH061W114	A00744	IRWD	PVC	{434B6EFB-BE5F-475E-93FF-50F16064A0BF}	CLMH061W113MH061W114	39.84	39.18	0.666666667	MH061W113	MH061W114					50	CLMH061W113MH061W114	8	0.0132	0.008552	0.07	0.010268	0.07	0.012174	0.08	0.010268	0.07
CLMH061W114MH061W112		1992		Existing		MH061W114	MH061W112	A00744	IRWD	PVC	{29855CC8-51F7-45E9-B038-25CB39AB854F}	CLMH061W114MH061W112	39.09	35.88	0.666666667	MH061W114	MH061W112					193	CLMH061W114MH061W112	8	0.0167	0.008552	0.15	0.010268	0.16	0.012174	0.18	0.010268	0.16
CLMH061W117MH061W112		1992		Existing		MH061W117	MH061W112	A00744	IRWD	PVC	{25E7E627-94CA-42B1-9506-528A3074185D}	CLMH061W117MH061W112	36.68	35.97	0.666666667	MH061W117	MH061W112					152	CLMH061W117MH061W112	8	0.0047	0.063678	0.22	0.076436	0.24	0.090614	0.26	0.076436	0.24
CLMH061W118MH061W124		1992		Existing		MH061W118	MH061W124	A00744	IRWD	PVC	{4FD0904B-99A6-44A8-BFAE-68B9792EBCEE}	CLMH061W118MH061W124	39.80	38.96	0.666666667	MH061W118	MH061W124					145	CLMH061W118MH061W124	8	0.0058	0.012776	0.10	0.015338	0.10	0.018184	0.11	0.015338	0.10
CLMH061W120MH061W122		1992		Existing		MH061W120	MH061W122	A00744	IRWD	PVC	{5D42F7FB-C1A9-4CEE-BAF5-16E4EC9BA6F3}	CLMH061W120MH061W122	41.46	40.52	0.666666667	MH061W120	MH061W122					113	CLMH061W120MH061W122	8	0.0083	0.011339	0.08	0.013614	0.09	0.016139	0.10	0.013614	0.09
CLMH061W122MH061W123		1992		Existing		MH061W122	MH061W123	A00744	IRWD	PVC	{EEFCE354-6DBD-436B-82FD-15F80AC2F735}	CLMH061W122MH061W123	40.31	39.72	0.666666667	MH061W122	MH061W123					93	CLMH061W122MH061W123	8	0.0063	0.014727	0.10	0.017680	0.11	0.020959	0.12	0.017680	0.11
CLMH061W123MH061W124		1992		Existing		MH061W123	MH061W124	A00744	IRWD	PVC	{B98CAAFD-3DF7-4DA7-9969-956143C968A53}	CLMH061W123MH061W124	39.52	38.86	0.666666667	MH061W123	MH061W124					77	CLMH061W123MH061W124	8	0.0077	0.014727	0.10	0.017680	0.11	0.020959	0.12	0.017680	0.11
CLMH061W124MH061W117		1992		Existing		MH061W124	MH061W117	A00744	IRWD	PVC	{A3D3DFAB-C230-48DF-8895-EE8DA6A3CAAE}	CLMH061W124MH061W117	38.75	36.88	0.666666667	MH061W124	MH061W117					48	CLMH061W124MH061W117	8	0.0390	0.027503	0.09	0.033018	0.10	0.039143	0.11	0.033018	0.10
CLMH061W125MH061W117		1992		Existing		MH061W125	MH061W117	A00744	IRWD	PVC	{41F60071-A4C7-486F-B09A-909031465SA0}	CLMH061W125MH061W117	37.43	36.79	0.666666667	MH061W125	MH061W117					102	CLMH061W125MH061W117	8	0.0063	0.029625	0.14	0.035567	0.16	0.042164	0.17	0.035567	0.16
CLMH061W126MH061W125		1992		Existing		MH061W126	MH061W125	A00744	IRWD	PVC	{318CDF14-6C8F-4178-9825-6C2F4E5BDB61}	CLMH061W126MH061W125	38.20	37.52	0.666666667	MH061W126	MH061W125					167	CLMH061W126MH061W125	8	0.0041	0.029625	0.15	0.035567	0.17	0.042164	0.18	0.035567	0.17
CLMH061W127MH061W126		1992		Existing		MH061W127	MH061W126	A00744	IRWD	PVC	{911D9881-5723-4566-AEDA-D7EF73EFECD1}	CLMH061W127MH061W126	39.80	38.40	0.666666667	MH061W127	MH061W126					183	CLMH061W127MH061W126	8	0.0136	0.013441	0.08	0.016137	0.09	0.019130	0.10	0.016137	0.09
CLMH061W129MH061W126		1992		Existing		MH061W129	MH061W126	A00744	IRWD	PVC	{8DAD8823-CBC1-437C-A97B-E3109791A002}	CLMH061W129MH061W126	39.39	38.41	0.666666667	MH061W129	MH061W126					191	CLMH061W129MH061W126	8	0.0051	0.016184	0.11	0.019429	0.12	0.023034	0.13	0.019429	0.12
CLMH061W130MH061W129		1992		Existing		MH061W130	MH061W129	A00744	IRWD	PVC	{10C3E233-1499-4583-8012-5C760035F7F7}	CLMH061W130MH061W129	39.81	39.59	0.666666667	MH061W130	MH061W129					58	CLMH061W130MH061W129	8	0.0038	0.006238	0.07	0.007488	0.08	0.008877	0.09	0.007488	0.08
CLMH061W131MH061W130		1992		Existing		MH061W131	MH061W130	A00744	IRWD	PVC	{FECC5127-F545-4D09-A50A-F816385F225}	CLMH061W131MH061W130	40.24	39.91	0.666666667	MH061W131	MH061W130					55	CLMH061W131MH061W130	8	0.0060	0.006238	0.07	0.007488	0.08	0.008877	0.09	0.007488	0.08
CLMH061W132MH061W131		1992		Existing		MH061W132	MH061W131	A00744	IRWD	PVC	{6A04220F-4D2E-4E37-83A8-FB3DA926AAA2}	CLMH061W132MH061W131	40.70	40.43	0.666666667	MH061W132	MH061W131					67	CLMH061W132MH061W131	8	0.0040	0.006238	0.07	0.007488	0.08	0.008877	0.09	0.007488	0.08
CLMH061W133MH061W093		1992		Existing		MH061W133	MH061W093	742	IRWD	VCP	{F6C2A489-0643-425B-AC3E-2C4B041ACF04}	CLMH061W133MH061W093	36.66	33.22	0.666666667	MH061W133	MH061W093					497	CLMH061W133MH061W093	8	0.0069	0.001710	0.03	0.001826	0.04	0.002165	0.04	0.006370	0.07
CLMH061W134MH061W133		1992		Existing		MH061W134	MH061W133	A00742	IRWD	VCP	{4AAA2ED1-E11F-4000-B96F-3E6643DE6E3D}	CLMH061W134MH061W133	37.07	36.87	0.666666667	MH061W134	MH061W133					83	CLMH061W134MH061W133	8	0.0070	0.001710	0.03	0.001826	0.04	0.002165	0.04	0.001826	0.04
CLMH061W150MH061W084		1998		Existing		MH061W150	MH061W084	T13554	IRWD	PVC	{658D6D60-3AC0-4462-9AE8-B522769CEEC4}	CLMH061W150MH061W084	38.54	38.16	0.500000000	MH061W150	MH061W084					102	CLMH061W150MH061W084	6	0.0037	0.001157	0.05	0.001389	0.05	0.001877	0.07	0.001389	0.05
CLMH061W152MH061N006		1992		Existing		MH061N006	MH061N006	742	IRWD	VCP	{44A0E889-20E3-4A3B-BEFD-EEFD6B2DF26E}	CLMH061W152MH061N006	28.62	27.75	0.666666667	MH061W152	MH061N006					161	CLMH061W152MH061N006	8	0.0054	0.002428	0.05	0.002593	0.10	0.003074	0.20	0.007137	0.15
CLMH061W219MH061N006		1992		Existing		MH061W219	MH061N006	742	IRWD	PVC	{3FAE88DB-2794-42A5-96F6-91B3F0993903}	CLMH061W219MH061N006	37.65	29.36	0.666666667	MH061W219	MH061N006					161	CLMH061W219MH061N006	8	0.0747	0.003863	0.03	0.004123	0.03	0.004889	0.03	0.004123	0.03
CLMH061W221MH061W222		1998		Existing		MH061W221	MH061W222	T13554	IRWD	PVC	{9B4D0E26-4E21-4241-9A85-C293D9304081}	CLMH061W221MH061W222	43.90	39.50	0.500000000	MH061W221	MH061W222					113	CLMH061W221MH061W222	6	0.0389	0.001607	0.03	0.001929	0.04	0.002288	0.04	0.001929	0.04
CLMH061W222MH061W091		1989		Existing		MH061W222	MH061W091	T13554	IRWD	PVC	{9E12A377-CAD2-4243-B585-8744F1379FA8}	CLMH061W222MH061W091	39.31	39.00	0.666666667	MH061W222	MH061W091					183	CLMH061W222MH061W091	8	0.0038	0.009603	0.09	0.011529	0.10	0.013669	0.11	0.011529	0.10
CLMH061W225MH061W228		1998		Existing		MH061W225	MH061W228	T13554	IRWD	PVC	{EDA327B4-81C6-4491-A36E-ED4944213906}	CLMH061W225MH061W228	42.08	41.45	0.666666667	MH061W225	MH061W228					128	CLMH061W225MH061W228	8	0.0049	0.002122	0.04	0.002547	0.05	0.003021	0.05	0.002547	0.05
CLMH061W227MH061W228		1998		Existing		MH061W227	MH061W228	T13554	IRWD	PVC	{BCAF8B86-E4DA-4F45-B77F-856C9D5E8C6E}	CLMH061W227MH061W228	42.25	41.45	0.666666667	MH061W227	MH061W228					91	CLMH061W227MH061W228	8	0.0088	0.002222	0.04	0.002728	0.04	0.003235	0.05	0.002728	0.04
CLMH061W229MH061W094		1998		Existing		MH061W229	MH061W084	T13554	IRWD	PVC	{1C4E909A-43D1-4B78-ADAE-35E7F4B0D7A}	CLMH061W229MH061W084	41.25	38.27	0.666666667	MH061W229	MH061W084					122	CLMH061W229MH061W084	8	0.0244	0.004395	0.04	0.005275	0.05	0.006256	0.05	0.005275	0.05
CLMH061W229MH061W246		2003		Existing	assumed Mannings N	MH061W229	MH061W246	A00902A	IRWD	PVC	{01746A43-0549-4705-9271-9047D0C7EEA7}	CLMH061W229MH061W246	37.00	33.95	0.666666667	MH061W229	MH061W246					305	CLMH061W229MH061W246	8	0.0100	0.001397	0.03	0.001493	0.03	0.001767	0.03	0.001493	0.03
CLMH061W230MH061W015		2000		Existing	assumed Mannings N	MH061W230	MH061W015	A00902	IRWD	PVC	{C2F5ADFC-DC1B-6276-BAD8-BED01829DA3C}	CLMH061W230MH061W015	39.90	27.09	0.666666667	MH061W230	MH061W015					210	CLMH061W230MH061W015	8	0.0611	0.000370	0.01	0.000366	0.01	0.000346	0.01	0.000288	0.01
CLMH061W230MH061W229		2000		Existing	assumed Mannings N	MH061W230	MH061W229	A00902	IRWD	PVC	{05172B80-C809-4337-89B9-17317D20B0D}	CLMH061W230MH061W229	39.90	37.20	0.666666667	MH061W230	MH061W229					296	CLMH061W230MH061W229	8	0.0091	0.000090	0.01	0.000095	0.01	0.000112	0.01	0.000095	0.01
CLMH061W231MH061W230		2000		Existing	assumed Mannings N	MH061W231	MH061W230	A00902	IRWD	PVC	{59D456D7-9504-43D2-A70B-894CF6AA1124}	CLMH061W231MH061W230	40.61	40.11	0.666666667	MH061W231	MH061W230					36	CLMH061W231MH061W230	8	0.0139	0.000359	0.01	0.000384	0.01	0.000455	0.01	0.000384	0.01
CLMH061W232MH061W233		1998		Existing		MH061W232	MH061W233	A00557A	IRWD	VCP	{1D8C8834-2A23-4444-AB19-A1310D7E2AB8}	CLMH061W232MH061W233	32.11	31.00	0.666666667	MH061W232	MH061W233					277	CLMH061W232MH061W233	8	0.0040	0.001583	0.04	0.001689	0.04	0.002004	0.04	0.001689	0.04
CLMH061W233MH061W075		1987		Existing		MH061W233	MH061W075	A00557	IRWD	VCP	{B1165F55-2221-4AF0-B1C1-B7F78677638}	CLMH061W233MH061W075	30.80	29.03	0.833333333	MH061W233	MH061W075					78	CLMH061W233MH061W075	10	0.0227	0.014669	0.06	0.015661	0.06	0.018568	0.07	0.015661	0.06
CLMH061W246MH061W247		2003		Existing	assumed Mannings N	MH061W246	MH061W247	A00902A	IRWD	PVC	{131D81EC1-C50C-4FAF-A9C5-665DC27D7069}	CLMH061W246MH061W247	33.75	30.70	0.666666667	MH061W246	MH061W247					305	CLMH061W246MH061W247	8	0.0100	0.001397	0.03	0.001493	0.03	0.001767	0.03	0.001493	0.03
CLMH061W247MH061W249		2003		Existing	assumed Mannings N	MH061W247	MH061W249	A00902A	IRWD	PVC	{BDA13CF4-D88B-4AF3-B630-E76E16176CB1}	CLMH061W247MH061W249	30.50	27.23	0.666666667	MH061W247	MH061W249					297	CLMH061W247MH061W249	8	0.0110	0.001397	0.07	0.001493	0.07	0.001767	0.08	0.001493	0.07
CLMH061W249MH061W014		1987		Existing		MH061W249	MH061W014	A00557	IRWD	VCP	{8A9C4597-EA4F-440B-9687-EAF323FF2999C}	CLMH061W249MH061W014	27.23	26.52	1.250000000	MH061W249	MH061W014					143	CLMH061W249MH061W014	15	0.0050	0.017713	0.05	0.018912	0.05	0.022420	0.06	0.018912	0.05
CLMH061W251MH061S177		1989		Existing		MH061W251	MH061S177	T12355	IRWD	PVC	{82469863-08BD-4C73-8BA8-E44C2322031916}	CLMH061S177MH061W251	42.68	42.40	0.666666667	MH061W251	MH061S177					214	CLMH061S177MH061W251	8	0.0013	0.032295	0.20	0.038744	0.22	0.045933	0.24	0.038744	0.22
CLMH062E002MH062E183		1986		Existing		MH062E002	MH062E183	544	IRWD	VCP	{4E9FA95C-2765-4A20-96B5-2CEF3F423573}	CLMH062E002MH062E183	50.52	49.04	0.666666667	MH062E002	MH062E183					187	CLMH062E002MH062E183	8	0.0079	0.029318	0.14	0.031299	0.14	0.037108	0.16	0.031299	0.14
CLMH062E005MH062E255		1982		Existing		MH062E005	MH062E255	A00352	IRWD	VCP	{0310ABC4-909D-4E31-996C-3E507AD3AD54}	CLMH062E005MH062E255	55.38	53.63	0.666666667	MH062E005	MH062E255					342	CLMH062E005MH062E255	8	0.0051	0.008148	0.08	0.008698	0.08	0.010312	0.09	0.008698	0.08
CLMH062E006MH062E005		1982		Existing		MH062E006	MH062E005	A00352	IRWD	VCP	{7D4CF3D4-6203-4743-8784-B8EA-CD442172F631}	CLMH062E006MH062E005	57.11	55.58	0.666666667	MH062E006	MH062E005					324	CLMH062E006MH062E005	8	0.0047	0.008148	0.08	0.008698	0.09	0.010312	0.09	0.008698	0.09
CLMH062E007MH062E183		1986		Existing		MH062E007	MH062E183	544	IRWD	VCP	{CD005DEC-E56D-48AE-B1CF-E5CB90B15727}	CLMH062E007MH062E183	51.72	50.97	0.666666667	MH062E007	MH062E183					113	CLMH062E007MH062E183	8	0.0064	0.087614	0.25	0.093543	0.26	0.110901	0.28	0.093543	0.26
CLMH062E008MH062E007		1982		Existing		MH062E008	MH062E007	A00352	IRWD	VCP	{789E6928-00CB-4231-AA2C-38B33AA5E288}	CLMH062E008MH062E007	54.27	51.91	0.666666667	MH062E008	MH062E007					250	CLMH062E008MH062E007	8	0.0094	0.087614	0.23	0.093543	0.24	0.110901	0.26	0.093543	0.24
CLMH062E009MH062E008		1986		Existing		MH062E009	MH062E008	A00352	IRWD	VCP	{79119580-3D01-4E10-8B02-9F2324252FD7}	CLMH062E009MH062E008	56.66	54.38	0.666666667	MH062E009	MH062E008					242	CLMH062E009MH062E008	8	0.0094	0.087614	0.23	0.093543	0.24	0.110901	0.26	0.093543	0.24
CLMH062E010MH062E042		1982		Existing		MH062E010	MH062E042	A00401	IRWD	PVC	{58E8EF03-401C-4F7B-A2D4-1346513F5E80}	CLMH062E010MH062E042	47.04	45.77	1.000000000	MH062E010	MH062E042					220	CLMH062E010MH062E042	12	0.0058	0.186406	0.21	0.199228	0.22	0.236195	0.24	0.199228	0.22
CLMH062E011MH062E010		1981		Existing		MH062E011	MH062E010	A00353	IRWD	PVC	{77F49816-7FA1-4EC2-A7F6-D59745923BCE}	CLMH062E011MH062E010	47.74	47.22	0.833333333	MH062E011	MH062E010					191	CLMH062E011MH062E010	10	0.0027	0.157869	0.28	0.168803	0.29	0.200102	0.32	0.168801	0.29
CLMH062E012MH062E011		1981		Existing		MH062E012	MH062E011	A00353	IRWD	PVC	{70D8E83E-18E5-451F-94F9-5B67512DA621}	CLMH062E012MH062E011	48.34	47.84	0.833333333	MH062E012	MH062E011					187	CLMH062E012MH062E011	10	0.0027	0.157901	0.28	0.168836	0.29	0.200141	0.32	0.168834	0.29
CLMH062E013MH062E012		1981		Existing		MH062E013	MH062E012	A00353	IRWD	PVC	{723CC63B-AEED-4E12-A81D-FAF980FA4E1A}	CLMH062E013MH062E012	49.18	48.45	0.833333333	MH062E013	MH062E012					263	CLMH062E013MH062E012	10	0.0028	0.047538	0.16	0.056859	0.17	0.067408	0.19	0.056859	0.17
CLMH062E014MH062E013		1981		Existing		MH062E014	MH062E013	A00353	IRWD	PVC	{75DED95CB-3D71-4139-B5C2-474689234588}	CLMH062E014MH062E013	50.18	49.27	0.833333333	MH062E014	MH062E013					330	CLMH062E014MH062E013	10	0.0028	0.047541	0.16	0.056861	0.17	0.067409	0.19	0.056861	0.17
CLMH062E015MH062E014		1981		Existing		MH062E015	MH062E014	A00353	IRWD	PVC	{AA9CC942-896E-49CA-A131-FCD52B048909}	CLMH062E015MH062E014	52.02	50.36	0.833333333	MH062E015	MH062E014					420	CLMH062E015MH062E014	10	0.0040	0.047543	0.15	0.056862	0.16	0.067409	0.17	0.056862	0.16
CLMH062E016MH062E015		1981		Existing		MH062E016	MH062E015	A00353	IRWD	VCP	{67F79629-02C0-4AB4-B053-0B999CE3D63F}	CLMH062E016MH062E015	53.06	52.22	0.666666667	MH062E016	MH062E015					213	CLMH062E016MH062E015	8	0.0039	0.047544	0.20	0.056862	0.22	0.067409	0.24	0.056862	0.22
CLMH062E017MH062E016		1981		Existing		MH062E017	MH062E016	A00353	IRWD	VCP	{F0FF177C-FA08-4D34-A0B4-569360B7E9B3}	CLMH062E017MH062E016	54.49	53.15	0.666666667	MH062E017	MH062E016					324	CLMH062E017MH062E016	8	0.0041	0.025860	0.15	0.030998	0.16	0.036748	0.18	0.030998	0.16
CLMH062E019MH062E020		1970		Existing		MH062E019	MH062E020	079	IRWD	ACP	{07934AC2-15FD-4DDC-83A5-667BAFF4A546}	CLMH062E019MH062E020	53.20	52.75	3.250000000	MH062E019	MH062E020					507	CLMH062E019MH062E020	39	0.0009	0.430983	0.33	4.554433	0.35	5.430669	0.38	5.623069	0.39
CLMH062E020MH062E021		1970		Existing		MH062E020	MH062E021	079	IRWD	ACP	{758FCB75-13B4-439C-B75B-B1B5036614B1}	CLMH062E020MH062E021	52.75	52.68	3.250000000	MH062E020	MH062E021					140	CLMH062E020MH062E021	39	0.0005	4.313130	0.31	4.919494	0.33	5.796667	0.36	6.064813	0.37
CLMH062E021MH062E022		1970		Existing		MH062E021	MH062E022	079	IRWD	ACP	{2D97620A-893C-4DB7-9227-C23A417B11B}	CLMH062E021MH062E022	52.59	52.37	3.250000000	MH062E021	MH062E022					356	CLMH062E021MH062E022	39	0.0006	4.177124	0.29	4.712435	0.31	5.689743	0.33	5.869397	0.39
CLMH062E022MH062E023		1970		Existing		MH062E022	MH062E023	079	IRWD	ACP	{08F7B704-C869-4DD5-9F0A-05133F6429E4}	CLMH062E022MH062E023	52.27	51.88	3.250000000	MH062E022	MH062E023					502	CLMH062E022MH062E023	39	0.0008	4.175638	0.35	4.710315	0.38	5.628120	0.41	5.830950	0.42
CLMH062E023MH062E251		1970		Existing		MH062E023	MH062E251	079	IRWD	ACP	{3A842F43-8154-4D78-AA9A-5767E480E7FE}	CLMH062E023MH062E251	51.88	51.43	3.250000000	MH062E023	MH062E251					509	CLMH062E023MH062E251	39	0.0009	4.172441	0.35	4.723116	0.37	5.670736	0.41	5.852680	0.41
CLMH062E026MH062E027		1983		Existing		MH062E026	MH062E027	A00392	IRWD	PVC	{1182B82F-B1E5-4B60-9918-F124DD7A6EAE}	CLMH062E026MH062E027	58.30	57.57	0.666666667	MH062E026	MH062E027					155	CLMH062E026MH062E027	8	0.0047	0.004214	0.06	0.004499	0.06	0.005333	0.06	0.004499	0.06
CLMH062E027MH062E219		1983		Existing		MH062E027	MH062E219	A00392	IRWD	PVC	{EF0DE73F-A8F4-457A-BACE-2242A17AF403}	CLMH062E027MH062E219	57.47	56.93	0.666666667	MH062E027	MH062E219					155	CLMH062E027MH062E219	8	0.0035	0.004214	0.06	0.004499	0.06	0.005333	0.07	0.004499	0.06
CLMH062E029MH062E030		1983		Existing		MH062E029	MH062E030	A00392	IRWD	PVC	{E9F0FD8A-F455-497E-B4B0-EEC49C17B220}	CLMH062E029MH062E030	56.97	55.66	0.666666667	MH062E029	MH062E030					180	CLMH062E029MH062E030	8	0.0073	0.013470	0.09	0.016123	0.10	0.019114	0.11	0.016123	0.10
CLMH062E030MH062E031		1983		Existing		MH062E030	MH062E031	A00392	IRWD	PVC	{36AF3A28-41C7-4F7A-8393-86F6F6BD0B9B}	CLMH062E030MH062E031	55.56	55.29	0.666666667

CLMH062E144MH062E141		1984		Existing		MH062E144	MH062E141		T11982	IRWD	PVC	{0F51BE58-74EC-4AAA-A4C1-24E5E9222EEA}	CLMH062E144MH062E141	47.06	46.72	0.666666667	MH062E144	MH062E141		72	CLMH062E144MH062E141	8	0.0047	0.010363	0.09	0.012378	0.10	0.014679	0.11	0.012378	0.10	
CLMH062E146MH062E144		1984		Existing		MH062E146	MH062E144		T11948	IRWD	PVC	{E37F184F-CE20-47C4-9F57-9E83862310BD}	CLMH062E146MH062E144	47.56	47.27	0.666666667	MH062E146	MH062E144		64	CLMH062E146MH062E144	8	0.0045	0.008712	0.08	0.010397	0.09	0.012329	0.10	0.010397	0.09	
CLMH062E147MH062E146		1984		Existing		MH062E147	MH062E146		T11948	IRWD	PVC	{CA948004-138B-4B57-AF5A-88DE0F6501B9}	CLMH062E147MH062E146	48.15	47.75	0.666666667	MH062E147	MH062E146		83	CLMH062E147MH062E146	8	0.0048	0.001119	0.03	0.001195	0.03	0.001420	0.03	0.001195	0.03	
CLMH062E149MH062E146		1984		Existing		MH062E149	MH062E146		T11948	IRWD	PVC	{7527ECC1-03E2-4F89-A3A4-F62049A6E283}	CLMH062E149MH062E146	48.22	47.75	0.666666667	MH062E149	MH062E146		97	CLMH062E149MH062E146	8	0.0048	0.007756	0.08	0.009296	0.09	0.011022	0.09	0.009296	0.09	
CLMH062E150MH062E149		1984		Existing		MH062E150	MH062E149		T11948	IRWD	PVC	{FBA45D83-1C59-41FC-9A2A-C51D28E90FC}	CLMH062E150MH062E149	50.40	48.43	0.666666667	MH062E150	MH062E149		49	CLMH062E150MH062E149	8	0.0402	0.002250	0.03	0.002701	0.03	0.003203	0.03	0.002701	0.03	
CLMH062E152MH062E149		1984		Existing		MH062E152	MH062E149		T11948	IRWD	PVC	{3137AC75-EFF4-404E-885E-E4DF88224BD2}	CLMH062E152MH062E149	49.36	48.43	0.666666667	MH062E152	MH062E149		189	CLMH062E152MH062E149	8	0.0049	0.005507	0.06	0.006595	0.07	0.007819	0.08	0.006595	0.07	
CLMH062E154MH062E152		1984		Existing		MH062E154	MH062E152		T11948	IRWD	PVC	{73F00769-3EF0-4281-A797-779F29FDEA8C}	CLMH062E154MH062E152	49.95	49.58	0.666666667	MH062E154	MH062E152		84	CLMH062E154MH062E152	8	0.0046	0.002229	0.04	0.002675	0.05	0.003173	0.05	0.002675	0.05	
CLMH062E155MH062E154		1984		Existing		MH062E155	MH062E154		T11948	IRWD	PVC	{676DC838-3001-4017-B858-07016FCBA1A2}	CLMH062E155MH062E154	52.34	50.15	0.500000000	MH062E155	MH062E154		30	CLMH062E155MH062E154	6	0.0730	0.000642	0.02	0.000771	0.02	0.000914	0.02	0.000771	0.02	
CLMH062E157MH062E173		1984		Existing		MH062E173	MH062E157		T11948	IRWD	PVC	{4548CC1E-0342-41A8-A0D0-303671512AB8}	CLMH062E157MH062E173	46.74	44.15	0.666666667	MH062E157	MH062E173		326	CLMH062E157MH062E173	8	0.0079	0.018010	0.11	0.021574	0.12	0.025581	0.13	0.021574	0.12	
CLMH062E160MH062E157		1984		Existing		MH062E160	MH062E157		T11948	IRWD	PVC	{9F108585-8567-4247-83CB-077FB877147 6}	CLMH062E160MH062E157	47.33	46.93	0.666666667	MH062E160	MH062E157		82	CLMH062E160MH062E157	8	0.0049	0.006217	0.07	0.007463	0.08	0.008847	0.08	0.007463	0.08	
CLMH062E161MH062E157		1984		Existing		MH062E161	MH062E157		T11948	IRWD	PVC	{F7E468GC-3ACA-460F-9C71-31F9F6859B04}	CLMH062E161MH062E157	47.45	46.93	0.666666667	MH062E161	MH062E157		108	CLMH062E161MH062E157	8	0.0048	0.011793	0.09	0.014111	0.10	0.016734	0.11	0.014111	0.10	
CLMH062E162MH062E161		1984		Existing		MH062E162	MH062E161		T11948	IRWD	PVC	{3C2EFDE2-80F0-458F-A77D-9739DEDCDF5C}	CLMH062E162MH062E161	48.18	47.65	0.666666667	MH062E162	MH062E161		109	CLMH062E162MH062E161	8	0.0049	0.009671	0.09	0.011564	0.09	0.013713	0.10	0.011564	0.09	
CLMH062E164MH062E162		1984		Existing		MH062E164	MH062E162		T11948	IRWD	PVC	{9DACBF6C-0F50-4678-B9A6-54E8ACF63428}	CLMH062E164MH062E162	48.91	48.38	0.666666667	MH062E164	MH062E162		112	CLMH062E164MH062E162	8	0.0047	0.008985	0.08	0.010742	0.09	0.012736	0.10	0.010742	0.09	
CLMH062E165MH062E164		1984		Existing		MH062E165	MH062E164		T11948	IRWD	PVC	{6432C303-7982-4CFC-BA98-6D4FB71521E0}	CLMH062E165MH062E164	49.49	49.11	0.666666667	MH062E165	MH062E164		98	CLMH062E165MH062E164	8	0.0039	0.006906	0.08	0.008277	0.08	0.009814	0.09	0.008277	0.08	
CLMH062E168MH062E169		1984		Existing		MH062E168	MH062E169		T11948	IRWD	PVC	{3DB54E77-7C67-46C3-9D77-B03D462689D6D}	CLMH062E168MH062E169	51.24	51.04	0.666666667	MH062E168	MH062E169		44	CLMH062E168MH062E169	8	0.0045	0.003967	0.06	0.004760	0.06	0.005645	0.07	0.004760	0.06	
CLMH062E169MH062E165		1984		Existing		MH062E169	MH062E165		T11948	IRWD	PVC	{BBC57810-E679-47EC-8808-142107459181}	CLMH062E169MH062E165	50.84	49.68	0.666666667	MH062E169	MH062E165		234	CLMH062E169MH062E165	8	0.0050	0.003967	0.06	0.004760	0.06	0.005645	0.07	0.004760	0.06	
CLMH062E171MH062E164		1984		Existing		MH062E171	MH062E164		T11948	IRWD	PVC	{54D3D3FF-D8C2-4D6C-A64D-320374580707}	CLMH062E171MH062E164	49.63	49.11	0.666666667	MH062E171	MH062E164		63	CLMH062E171MH062E164	8	0.0050	0.002079	0.04	0.002465	0.04	0.002922	0.05	0.002465	0.04	
CLMH062E172MH062E173		1984		Existing		MH062E172	MH062E173		T11982	IRWD	PVC	{4CC10885-E698-4F0C-9F25-5F72E869130C}	CLMH062E172MH062E173	44.16	44.06	0.666666667	MH062E172	MH062E173		25	CLMH062E172MH062E173	8	0.0040	0.021277	0.13	0.025481	0.14	0.030208	0.15	0.025481	0.14	
CLMH062E173MH062E132		1984		Existing		MH062E173	MH062E132		T11982	IRWD	PVC	{2A9CD893-82C1-4CAB-BF68-3317872FD272}	CLMH062E173MH062E132	43.95	43.81	0.666666667	MH062E173	MH062E132		31	CLMH062E173MH062E132	8	0.0045	0.039286	0.17	0.047055	0.19	0.055788	0.21	0.047055	0.19	
CLMH062E174MH062E175		1985		Existing		MH062E174	MH062E175	ERROR 23	458	IRWD	RCP	{9C95E13E-E9B6-4139-BC10-97D21A6052C3}	CLMH062E174MH062E175	34.66	34.16	3.500000000	MH062E174	MH062E175		460	CLMH062E174MH062E175	42	0.0011	7.490519	0.39	8.705242	0.42	10.383696	0.46	9.318617	0.43	
CLMH062E175MH062E176		1985		Existing		MH062E175	MH062E176		458	IRWD	RCP	{A95C9667-76C9-4A9E-8F82-4EB43318B6EA}	CLMH062E175MH062E176	34.16	34.09	3.500000000	MH062E175	MH062E176		63	CLMH062E175MH062E176	42	0.0011	7.850658	0.37	9.581845	0.40	11.228021	0.44	10.287746	0.41	
CLMH062E176MH062E177		1985		Existing		MH062E176	MH062E177		458	IRWD	RCP	{3D056E8E-842C-4DCD-832A-A6C91D2EAC6}	CLMH062E176MH062E177	33.99	33.70	3.500000000	MH062E176	MH062E177		390	CLMH062E176MH062E177	42	0.0007	7.495795	0.35	8.710938	0.37	10.393528	0.41	9.329090	0.39	
CLMH062E177MH062E178		1985		Existing		MH062E177	MH062E178		A00458	IRWD	RCP	{9A58DDB4-B477-4102-ABC7-C5CC67CD703}	CLMH062E177MH062E178	33.61	33.33	3.500000000	MH062E177	MH062E178		308	CLMH062E177MH062E178	42	0.0009	7.494662	0.34	8.709388	0.36	10.391620	0.40	9.328005	0.38	
CLMH062E178MH062E179		1985		Existing		MH062E178	MH062E179		458	IRWD	RCP	{DA7C918E-C198-4BA5-A551-28C6CD9303F3}	CLMH062E178MH062E179	33.08	32.68	3.750000000	MH062E178	MH062E179		469	CLMH062E178MH062E179	45	0.0009	8.007319	0.38	9.411312	0.42	11.263286	0.46	10.052495	0.43	
CLMH062E179MH062E180		1985		Existing		MH062E179	MH062E180		458	IRWD	RCP	{95CA9CD5-D102-4FE5-941F-C25870B3C291}	CLMH062E179MH062E180	32.58	32.20	3.750000000	MH062E179	MH062E180		500	CLMH062E179MH062E180	45	0.0008	8.016700	0.41	9.332104	0.44	11.113954	0.49	10.003352	0.46	
CLMH062E180MH062E252		1986		Existing		MH062E180	MH062E252		A00458	IRWD	RCP	{971F44D5-5507-479A-87B3-0F4087BC3693}	CLMH062E180MH062E252	32.15	31.78	3.750000000	MH062E180	MH062E252		390	CLMH062E180MH062E252	45	0.0009	7.789768	0.44	9.018512	0.47	10.764199	0.51	9.631639	0.49	
CLMH062E181MH062E253		1986		Existing		MH062E181	MH062E253		544	IRWD	VCP	{676A0B89-BBA5-4892-9CA5-359BDFDF4FDA}	CLMH062E181MH062E253	50.88	49.04	0.666666667	MH062E181	MH062E253		273	CLMH062E181MH062E253	8	0.0067	0.123770	0.30	0.132146	0.31	0.156665	0.34	0.132146	0.31	
CLMH062E182MH062E010		1984		Existing		MH062E182	MH062E010		544	IRWD	VCP	{025ACCEA-CAEA-4EF6-9271-B2507646608B}	CLMH062E182MH062E010	47.58	47.22	0.666666667	MH062E182	MH062E010		68	CLMH062E182MH062E010	8	0.0042	0.029318	0.16	0.031299	0.16	0.037108	0.17	0.031299	0.16	
CLMH062E183MH062E182		1984		Existing		MH062E183	MH062E182		544	IRWD	VCP	{A778FCCC-5789-4F2D-8B76-BA2CF5DA3D04}	CLMH062E183MH062E182	48.81	47.68	0.666666667	MH062E183	MH062E182		259	CLMH062E183MH062E182	8	0.0044	0.029318	0.16	0.031299	0.16	0.037108	0.17	0.031299	0.16	
CLMH062E215MH062E216		1995		Existing		MH062E215	MH062E216		T14977	IRWD	PVC	{4448B52F-142E-419A-A91F-7C8C923B7402}	CLMH062E215MH062E216	53.08	51.79	0.666666667	MH062E215	MH062E216		256	CLMH062E215MH062E216	8	0.0050	0.003044	0.05	0.003653	0.05	0.004333	0.06	0.003653	0.05	
CLMH062E216MH062E082		1995		Existing		MH062E216	MH062E082		T14977	IRWD	PVC	{39F25856-5AD4-4697-93EF-712324F4D78C}	CLMH062E216MH062E082	51.59	50.50	0.666666667	MH062E216	MH062E082		220	CLMH062E216MH062E082	8	0.0050	0.006192	0.07	0.007400	0.08	0.008775	0.08	0.007400	0.08	
CLMH062E217MH062E082		1998		Existing		MH062E217	MH062E082		T14977	IRWD	PVC	{B854881B-9777-4CCE-982C-20735AAB1C7A}	CLMH062E217MH062E082	54.27	50.40	0.666666667	MH062E217	MH062E082		259	CLMH062E217MH062E082	8	0.0150	0.004587	0.05	0.005508	0.05	0.006529	0.06	0.005508	0.05	
CLMH062E218MH062S090		1995		Existing		MH062E218	MH062S090		T14977	IRWD	PVC	{3A1D2B47-80DE-4714-B248-7887F3B39E2E}	CLMH062E218MH062S090	54.29	53.22	0.666666667	MH062E218	MH062S090		225	CLMH062E218MH062S090	8	0.0048	0.002508	0.05	0.003010	0.05	0.003570	0.05	0.003010	0.05	
CLMH062E219MH062E220		1983		Existing		MH062E219	MH062E220		A00053B	IRWD	DIP	{8B786CC0-1CEE-4A91-BD55-C1D6CD1B00F0}	CLMH062E219MH062E220	54.19	53.99	3.000000000	MH062E219	MH062E220		36	CLMH062E219MH062E220	36	0.0006	3.364360	0.27	3.837418	0.28	4.575098	0.30	4.912941	0.31	
CLMH062E220MH062E221		1993		Existing		MH062E220	MH062E221		A00053B	IRWD	DIP	{BFA48F58-4D93-48A8-A8B0-E38E0FA95EBC}	CLMH062E220MH062E221	53.99	53.89	3.000000000	MH062E220	MH062E221		12	CLMH062E220MH062E221	36	0.0083	3.364532	0.20	3.837648	0.21	4.575373	0.23	4.913213	0.24	
CLMH062E221MH062E019		1970		Existing		MH062E221	MH062E019		A00079	IRWD	ACP	{D3B64A88-E2CA-4890-93C5-E0D285488BA3}	CLMH062E221MH062E019	53.63	53.21	3.250000000	MH062E221	MH062E019		38	CLMH062E221MH062E019	39	0.0113	4.031284	0.29	4.554798	0.31	5.431047	0.34	5.621047	0.35	
CLMH062E223MH062E224		1996		Existing		MH062E223	MH062E224		T13465	IRWD	PVC	{F52FC15F-D30F-42AA-93C1-E23AF96FD18C}	CLMH062E223MH062E224	50.56	49.49	0.666666667	MH062E223	MH062E224		255	CLMH062E223MH062E224	8	0.0042	0.002529	0.05	0.003036	0.05	0.003600	0.05	0.003036	0.05	
CLMH062E224MH062E227		1996		Existing		MH062E224	MH062E227		T13465	IRWD	PVC	{8BF99A82-2EAF-45FF-BA45-F262D0586640}	CLMH062E224MH062E227	49.29	48.16	0.666666667	MH062E224	MH062E227		188	CLMH062E224MH062E227	8	0.0060	0.008037	0.08	0.009651	0.08	0.011441	0.09	0.009651	0.08	
CLMH062E229MH062E229		1999		Existing		MH062E229	MH062E229		T13465	IRWD	PVC	{F1AB1B2B-ACF8-4647-9DF3-105EC74B0E33}	CLMH062E229MH062E229	47.95	47.00	0.666666667	MH062E229	MH062E229		180	CLMH062E229MH062E229	8	0.0053	0.013053	0.10	0.015673	0.11	0.018581	0.12	0.015673	0.11	
CLMH062E229MH062E231		1996		Existing		MH062E229	MH062E231		T13465	IRWD	PVC	{DA8224310-B1E2-4FF7-AF59-00898F497D9F}	CLMH062E229MH062E231	46.79	45.86	0.666666667	MH062E229	MH062E231		186	CLMH062E229MH062E231	8	0.0050	0.017919	0.12	0.021515	0.13	0.025508	0.14	0.021515	0.13	
CLMH062E231MH062E233		1996		Existing		MH062E231	MH062E233		T13465	IRWD	PVC	{E670BBAA-166F-4E6D-9D66-DB903C0131D7}	CLMH062E231MH062E233	45.65	42.36	0.666666667	MH062E231	MH062E233		192	CLMH062E231MH062E233	8	0.0171	0.022549	0.10	0.027074	0.11	0.032099	0.12	0.027074	0.11	
CLMH062E233MH062E234		1996		Existing		MH062E233	MH062E234		T13465	IRWD	PVC	{353CFDCB-E60F-439D-B535-A22E8E602543}	CLMH062E233MH062E234	42.15	41.97	0.666666667	MH062E233	MH062E234		44	CLMH062E233MH062E234	8	0.0041	0.052293	0.20	0.062644	0.22	0.074271	0.24	0.062644	0.22	
CLMH062E234MH062E235		1996		Existing		MH062E234	MH062E235		T13465	IRWD	PVC	{BA916CD5-63A0-4081-85D0-708EC0A258EF}	CLMH062E234MH062E235	41.77	37.90	0.666666667	MH062E234	MH062E235		125	CLMH062E234MH062E235	8	0.0310	0.052293	0.13	0.062644	0.14	0.074271	0.15	0.062644	0.14	
CLMH062E235MH062S042		1994		Existing		MH062E235	MH062S042		A00775	IRWD	VCP	{C12EA4A6-9D87-4FDC-8749-CBD283C287E}	CLMH062E235MH062S042	37.70	37.18	0.666666667	MH062E235	MH062S042		38	CLMH062E235MH062S042	8	0.0135	0.056752	0.17	0.067996	0.18	0.080616	0.20	0.067996	0.18	
CLMH062E237MH062E240		1996		Existing		MH062E237	MH062E240		T13465	IRWD	PVC	{6F275535-1C18-4EA6-8501-2D667C5324F}	CLMH062E237MH062E240	48.61	47.72	0.666666667	MH062E237	MH062E240		89	CLMH062E237MH062E240	8	0.0100	0.006175	0.06	0.007412	0.07	0.008787	0.07	0.007412	0.07	
CLMH062E239MH062E237		1996		Existing		MH062E239	MH062E237		T13465	IRWD	PVC	{E8027EED-CA9F-435A-BCEE-70EC4AA624BA}	CLMH062E239MH062E237	49.00	48.81	0.666666667	MH062E239	MH062E237		38	CLMH062E239MH062E237	8	0.0049	0.001801	0.04	0.002162	0.04	0.002564	0.05	0.002162	0.04	
CLMH062E240MH062E242		1996		Existing		MH062E240	MH062E242		T13465	IRWD	PVC	{4B128D51-13C4-425F-A45F-F8DB9D9BA37F}	CLMH062E240MH062E242	47.52	46.56	0.666666667	MH062E240	MH062E242		176	CLMH062E240MH062E242	8	0.0055	0.009413	0.08	0.011298	0.09	0.013394	0.10	0.011298	0.09	
CLMH062E242MH062E248		1996		Existing		MH062E242	MH062E248		T13465	IRWD	PVC	{F3CAA2A3-8AB6-4A25-B429-11602DDD82F5}	CLMH062E242MH062E248	46.36	45.39	0.666666667	MH062E242	MH062E248		195	CLMH062E242MH062E248	8	0.0050	0.022425	0.13	0.026783	0.14	0.031755	0.15	0.026783	0.14	
CLMH062E244MH062E246		1996		Existing		MH062E244	MH062E246		T13465	IRWD	PVC	{7D911CSA-5140-4188-9171-9F0A345592DE}	CLMH062E244MH062E246	47.52	47.02	0.666666667	MH062E244	MH062E246		104	CLMH062E244MH062E246	8	0.0048	0.003721	0.05	0.004073	0.06	0.004830	0.06	0.004073	0.06	
CLMH062E245MH062E244		1996		Existing		MH062E245	MH062E244		T13465	IRWD	PVC	{9E1F2FA0-CCEC-4923-80D8-0F467F54BA44}	CLMH062E245MH062E244	49.59	47.74	0.666666667	MH062E245	MH062E244		185	CLMH062E245MH062E244	8	0.0100	0.002090	0.04	0.002330	0.04	0.002645	0.04	0.002330	0.04	
CLMH062E246MH062E242		1996		Existing		MH062E246	MH062E242		T13465	IRWD	PVC	{FF04229EF-973F-49C4-9B09-26C72ECA8932}	CLMH062E246MH062E242	46.81	46.52	0.666666667	MH062E246	MH062E242		64	CLMH062E246MH062E242	8	0.0056	0.007787	0.08	0.009220	0.08	0.010932	0.09	0.009220	0.08	
CLMH062E248MH062E250		1996		Existing		MH062E248	MH062E250		T13465	IRWD	PVC	{B609DA7C-1067-41B0-9FF2-7A3C6217BEA9}	CLMH062E248MH062E250	45.19	44.25	0.666666667	MH062E248	MH062E250		188	CLMH062E248MH062E250	8	0.0050	0.025984	0.14	0.031056	0.15	0.036820	0.17	0.031056	0.15	
CLMH062E250MH062E233		1996		Existing		MH062E250	MH062E233		T13465	IRWD	PVC	{0AD42124-7FD9-48A6-92C8-1FA740AC0E00}	CLMH062E250MH062E233	44.04	42.36	0.666666667	MH062E250	MH062E233		337	CLMH062E250MH062E233	8	0.0050	0.025984	0.14	0.031056	0.15	0.036820	0.17	0.031056	0.15	
CLMH062E251MH062S011		2015	Existing_ICDI	Existing		MH062E251	079		ACP	IRWD	ACP	{02AB84EB-932D-81AB-311FBE3E7113}	CLMH062E251MH062S011	51.38	50.91	1.250000000	MH062E251	MH062S011		564	CLMH062E251MH062S011	39	0.0008	4.648311	0.31	5.312605	0.33	6.219345	0.36	6.269608	0.36	
CLMH062E252MH062S081		1986		Existing		MH062E252	MH062S081		A00458	IRWD	RCP	{48C2543E-29AE-4D40-AD4E-548923480D79}	CLMH062E252MH062S081	31.78	31.72	3.750000000	MH062E252	MH062S081		390	CLMH062E252MH062S081	45	0.0002	7.843492	0.42	9.075697	0.45	10.837416	0.49	9.689697	0.47	
CLMH062E253MH062E012		1982		Existing		MH062E253	MH062E012		544	IRWD	VCP	{5D3CB6A5-AC2D-43BF-9AD8-65A4B559627B}	CLMH062E253MH062E012	48.77	48.54	0.833333333	MH062E253	MH062E012		84	CLMH062E253MH062E012	10	0.0027	0.123770	0.25	0.132146	0.26	0.156665	0.28	0.132146	0.26	
CLMH062E254MH062E002		1982		Existing		MH062E254	MH062E002		A00352	IRWD	VCP	{8F59DE00-2F5C-4227-851D-AB212833F1EA}	CLMH062E254MH062E002	51.84	50.72	0.666666667	MH062E254	MH062E002		286	CLMH062E254MH062E002	8	0.0039	0.025878	0.15	0.032753	0.17	0.038572	0.19	0.032753	0.17	
CLMH062E255MH062E254		1982		Existing		MH062E255	MH062E254		A00352	IRWD	VCP	{6CD8E1B4-3C34-4480-BBD9-53FCA3DDCBE2}	CLMH062E255MH062E254	53.43	51.95	0.666666667	MH062E255	MH062E254		375	CLMH062E255MH062E254	8	0.0039	0.024886	0.15	0.026568	0.15	0.031498	0.16	0.026568	0.15	
CLMH062N024MH062N032		2006		Existing		MH062N024	MH062N032	ERROR 23	A00458	IRWD	RCP	{E3AEDA56-3AD2-4ADA-BFF9-FFEECCDEF72A}	CLMH062N024MH062N032	35.10	35.00	3.500000000	MH062N024	MH062N032		409	CLMH062N024MH062N032	42	0.0002	5.267233	0.43	6.149737	0.46	7.318464	0.51	7.234831	0.48	
CLMH062N025MH062N024		2006		Existing		MH062N025	MH062N024	ERROR 23	458	IRWD	RCP	{1F0EB21C-B97D-466A-92F9-B34D5273B901}	CLMH062N025MH062N024	35.54	35.10	3.500000000	MH062N025	MH062N024		410	CLMH062N025MH062N024	42	0.0011	5.263154	0.41	6.143104	0.44	7.309843	0.49	7.225403	0.47	
CLMH062N027MH062N025		2006		Existing		MH062N027	MH062N025		458	IRWD	RCP	{F4D57C3B-13AB-4A90-8177-D5B119F90F28}	CLMH062N027MH062N025	36.00	35.54	3.500000000	MH062N027	MH062N025		412	CLMH062N027MH062N025	42	0.0011	5.265605	0.36	6.144731	0.39	7.311172	0.44	7.223216	0.43	
SIMH062N028MH062N028_301		2006		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	37.30	34.66	2.000000000	MH062N028_301	MH062N028_301	Siphon	16	SIMH062N028MH062N028_301	24	0.1634	5.265541	0.60	6.147246	0.62	7.314221	0.68	7.224548	0.67	
SIMH062N028_301MH062N028_302	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	34.66	30.55	2.000000000	MH062N028_301	MH062N028_302	Siphon	7	SIMH062N028_301MH062N028_302	24	0.6896	5.266537	1.00	6.147494	1.00	7.314128	1.00	7.224320	1.00	
SIMH062N028_302MH062N028_303	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	30.55	26.44	2.000000000	MH062N028_302	MH062N028_303	Siphon	5	SIMH062N028_302MH062N028_303	24	0.6896	5.266667	1.00	6.147375	1.00	7.313890	1.00	7.224324	1.00	
SIMH062N028_303MH062N028_304	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	26.44	25.58	2.000000000	MH062N028_303	MH062N028_304	Siphon	24	SIMH062N028_303MH062N028_304	24	0.1748	5.267461	1.00	6.148499	1.00	7.315075	1.00	7.224959	1.00	
SIMH062N028_304MH062N028_305	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	25.58	23.09	2.000000000	MH062N028_304	MH062N028_305	Siphon	17	SIMH062N028_304MH062N028_305	24	0.1465	5.268235	1.00	6.147641	1.00	7.315667	1.00	7.225662	1.00	
SIMH062N028_305MH062N028_306	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	23.09	23.05	2.000000000	MH062N028_305	MH062N028_306	Siphon	33	SIMH062N028_305MH062N028_306	24	0.0012	5.269258	1.00	6.150527	1.00	7.318274	1.00	7.227697	1.00	
SIMH062N028_306MH062N028_307	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	23.05	24.39	2.000000000	MH062N028_306	MH062N028_307	Siphon	18	SIMH062N028_306MH062N028_307	24	0.0744	5.269465	1.00	6.149318	1.00	7.316041	1.00	7.225669	1.00	
SIMH062N028_307MH062N028_308	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	24.39	25.64	2.000000000	MH062N028_307	MH062N028_308	Siphon	32	SIMH062N028_307MH062N028_308	24	0.0388	5.269481	1.00	6.149339	1.00	7.315622	1.00	7.227069	1.00	
SIMH062N028_308MH062N028_309	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	25.64	26.14	2.000000000	MH062N028_308	MH062N028_309	Siphon	8	SIMH062N028_308MH062N028_309	24	0.0625	5.268864	1.00	6.148593	1.00	7.314865	1.00	7.224902	1.00	
SIMH062N028_309MH062N028_310	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	26.14	34.74	2.000000000	MH062N028_309	MH062N028_310	Siphon	32	SIMH062N028_309MH062N028_310	24	0.2809	5.269789	1.00	6.149791	1.00	7.314890	1.00	7.225666	1.00	
SIMH062N028_310MH062N027	Splitted conduit	1986		Existing		MH062N028	MH062N027		458	IRWD	VCP	{CC3B7258-7745-4132-A0C5-DC116F1A5D2E}	SIMH062N028MH062N027	34.74	36.20	2.000000000	MH062N028_310	MH062N027	Siphon	11	SIMH062N028_310MH062N027	24	0.1330	5.270384	0.75

CLMH062N154MH062N154		2006		Existing	assumed Mannings N	MH062N152	MH062N154		16474	IRWD	PVC	{E4F94FA0-EC29-4F8C-8EA7-D1976DCE267C}	CLMH062N152MH062N154	48.15	47.89	0.833333333	MH062N152	MH062N154			97	CLMH062N152MH062N154	10	0.0027	0.024179	0.11	0.029029	0.12	0.034417	0.13	0.029029	0.12
CLMH062N153MH062N131		2006		Existing	assumed Mannings N	MH062N153	MH062N131		16474	IRWD	PVC	{151B5594-5603-48EF-9C6C-835F7DBF9A99}	CLMH062N153MH062N131	49.43	48.95	0.666666667	MH062N153	MH062N131			101	CLMH062N153MH062N131	8	0.0048	0.010397	0.09	0.012482	0.10	0.014797	0.11	0.012482	0.10
CLMH062N154MH062N155		2006		Existing	assumed Mannings N	MH062N154	MH062N155		16474	IRWD	PVC	{003055F7B-55DA-4C33-B0ED-413B631D2B84}	CLMH062N154MH062N155	47.79	47.38	0.833333333	MH062N154	MH062N155			152	CLMH062N154MH062N155	10	0.0027	0.028898	0.12	0.034713	0.13	0.041187	0.15	0.034713	0.13
CLMH062N155MH062N158		2006		Existing	assumed Mannings N	MH062N155	MH062N158		16474	IRWD	PVC	{C34309F2B-B4D1-4BDC-9E64-FF73D9AC053A}	CLMH062N155MH062N158	47.28	47.09	0.833333333	MH062N155	MH062N158			71	CLMH062N155MH062N158	10	0.0027	0.032841	0.13	0.039425	0.14	0.046743	0.15	0.039425	0.14
CLMH062N156MH062N157		2006		Existing	assumed Mannings N	MH062N156	MH062N157		16474	IRWD	PVC	{4616CAE2-B6EB-4D7D-B61D-F209F4044E32}	CLMH062N156MH062N157	49.20	49.12	0.666666667	MH062N156	MH062N157			22	CLMH062N156MH062N157	8	0.0036	0.004201	0.06	0.005044	0.06	0.005980	0.07	0.005044	0.06
CLMH062N157MH062N143		2006		Existing	assumed Mannings N	MH062N157	MH062N143		16474	IRWD	PVC	{3495A1DC-683E-41DF-98F3-9A94894AB10B}	CLMH062N157MH062N143	49.02	48.43	0.666666667	MH062N157	MH062N143			152	CLMH062N157MH062N143	8	0.0039	0.004201	0.06	0.005044	0.06	0.005980	0.07	0.005044	0.06
CLMH062N158MH062N164		2006		Existing	assumed Mannings N	MH062N158	MH062N164		16474	IRWD	PVC	{1CF120D98-126B-478B-9516-6E759AA766AA}	CLMH062N158MH062N164	47.00	46.47	0.833333333	MH062N158	MH062N164			191	CLMH062N158MH062N164	10	0.0028	0.047334	0.16	0.056823	0.17	0.067373	0.18	0.056823	0.17
CLMH062N159MH062N158		2006		Existing	assumed Mannings N	MH062N159	MH062N158		16474	IRWD	PVC	{1B13A7A3-B57E-48AB-856A-DF22615E7220}	CLMH062N159MH062N158	47.55	47.20	0.666666667	MH062N159	MH062N158			93	CLMH062N159MH062N158	8	0.0038	0.014493	0.11	0.017398	0.12	0.020630	0.13	0.017398	0.12
CLMH062N160MH062N159		2006		Existing	assumed Mannings N	MH062N160	MH062N159		16474	IRWD	PVC	{8853E3D9-08C9-4F07-9A99-B10039548E97}	CLMH062N160MH062N159	48.19	47.75	0.666666667	MH062N160	MH062N159			99	CLMH062N160MH062N159	8	0.0044	0.006690	0.07	0.008029	0.08	0.009522	0.09	0.008029	0.08
CLMH062N161MH062N162		2006		Existing	assumed Mannings N	MH062N161	MH062N162		16474	IRWD	PVC	{87093B1A-5394-411F-9F85-45E46F4188C7}	CLMH062N161MH062N162	45.41	45.22	1.000000000	MH062N161	MH062N162			87	CLMH062N161MH062N162	12	0.0022	0.071627	0.15	0.085854	0.17	0.101785	0.18	0.085854	0.17
CLMH062N162MH062N137		2006		Existing	assumed Mannings N	MH062N162	MH062N137		16474	IRWD	PVC	{7C5F80E4-5FE6-42D0-ADED-A1874F3F3C2B}	CLMH062N162MH062N137	45.12	45.01	1.000000000	MH062N162	MH062N137			55	CLMH062N162MH062N137	12	0.0020	0.074650	0.16	0.089484	0.17	0.106086	0.19	0.089484	0.17
CLMH062N163MH062N142		2006		Existing	assumed Mannings N	MH062N163	MH062N142		16474	IRWD	PVC	{AE7BF2A8-580B-4B15-BAF6-CAE442D71510}	CLMH062N163MH062N142	43.96	43.53	1.000000000	MH062N163	MH062N142			216	CLMH062N163MH062N142	12	0.0020	0.090614	0.18	0.108653	0.20	0.128815	0.21	0.108653	0.20
CLMH062N164MH062N161		2006		Existing	assumed Mannings N	MH062N164	MH062N161		16474	IRWD	PVC	{E2213D72-E7F8-4814-B214-CE3B34B9BBFC}	CLMH062N164MH062N161	46.37	45.61	0.833333333	MH062N164	MH062N161			275	CLMH062N164MH062N161	10	0.0028	0.048621	0.16	0.058183	0.17	0.068983	0.19	0.058182	0.17
CLMH062N003MH062N004		1993		Existing	assumed Mannings N	MH062N003	MH062N004		458	IRWD	RCP	{321E94EA0-FB9A-4410-8FF4-5098760D2ABF}	CLMH062N003MH062N004	31.14	30.77	3.750000000	MH062N003	MH062N004			500	CLMH062N003MH062N004	45	0.0007	0.966212	0.33	0.210415	0.36	0.191167	0.39	0.827605	0.37
CLMH062N003MH062N004		1986		Existing	assumed Mannings N	MH062N003	MH062N004		458	IRWD	RCP	{FA6626E5-5B94-49B7-B3FC-588AB0B0EE62}	CLMH062N003MH062N004	30.67	30.29	3.750000000	MH062N003	MH062N004			500	CLMH062N003MH062N004	45	0.0008	7.965641	0.33	9.209793	0.36	10.992696	0.39	9.827374	0.37
CLMH062N004MH062N005		1986		Existing	assumed Mannings N	MH062N004	MH062N005		458	IRWD	RCP	{8E760964-DC9E-402E-952E-BE0733DA6644}	CLMH062N004MH062N005	30.19	29.80	3.750000000	MH062N004	MH062N005			500	CLMH062N004MH062N005	45	0.0008	8.096656	0.33	9.355988	0.36	11.166733	0.39	9.973462	0.37
CLMH062N005MH061N189		1986		Existing	assumed Mannings N	MH062N005	MH061N189		458	IRWD	RCP	{50268B2F-D88C-458D-93F9-39194A3B0064}	CLMH062N005MH061N189	29.70	29.34	3.750000000	MH062N005	MH061N189			500	CLMH062N005MH061N189	45	0.0007	8.096272	0.34	9.355488	0.36	11.166294	0.39	9.973204	0.37
CLMH062N006MH061E001		1970		Existing	assumed Mannings N	MH062N006	MH061E001		079	IRWD	ACP	{573FE6CD-4421-408E-B314-63F808E51A06}	CLMH062N006MH061E001	48.75	47.92	1.000000000	MH062N006	MH061E001			562	CLMH062N006MH061E001	36	0.0015	5.501676	0.25	6.195960	0.27	7.401713	0.41	7.239865	0.41
CLMH062N007MH062N006		1970		Existing	assumed Mannings N	MH062N007	MH062N006	adverse slope	079	IRWD	ACP	{8D05CDFD-6174-4CC7-9465-EC68042C97B5}	CLMH062N007MH062N006	48.90	48.80	3.250000000	MH062N007	MH062N006			136	CLMH062N007MH062N006	39	0.0007	5.857213	0.35	6.661406	0.37	7.783909	0.39	7.810078	0.41
CLMH062N008MH062N007		1970		Existing	assumed Mannings N	MH062N008	MH062N007		079	IRWD	ACP	{E4516AE3-FE0E-484C-89AA-0199E52CA904}	CLMH062N008MH062N007	49.25	48.90	3.250000000	MH062N008	MH062N007			352	CLMH062N008MH062N007	39	0.0010	6.645186	0.35	5.208751	0.38	6.216396	0.42	6.270978	0.41
CLMH062N009MH062N008		1970		Existing	assumed Mannings N	MH062N009	MH062N008		079	IRWD	ACP	{884CF51A-F10A-4959-82B9-584D3024B90B}	CLMH062N009MH062N008	49.74	49.34	3.250000000	MH062N009	MH062N008			505	CLMH062N009MH062N008	39	0.0008	6.644469	0.31	5.207654	0.33	6.214978	0.36	6.265912	0.36
CLMH062N010MH062N009		1970		Existing	assumed Mannings N	MH062N010	MH062N009		079	IRWD	ACP	{DA1A1A97-1544-4AEB-AEBC-2BF3BA6AFDF}	CLMH062N010MH062N009	50.24	49.84	3.250000000	MH062N010	MH062N009			493	CLMH062N010MH062N009	39	0.0008	6.645553	0.31	5.208810	0.33	6.215930	0.35	6.266711	0.36
CLMH062N011MH062N010	lil6	1970		Existing	assumed Mannings N	MH062N011	MH062N010		079	IRWD	ACP	{8B93F6F0-DB0E-4AAB-AB78-3136FC2FFBD4}	CLMH062N011MH062N010	50.81	50.34	3.250000000	MH062N011	MH062N010			517	CLMH062N011MH062N010	39	0.0008	6.646536	0.31	5.210261	0.33	6.216814	0.36	6.267187	0.36
CLMH062N013MH062N014		1993		Existing	assumed Mannings N	MH062N013	MH062N014		A00762	IRWD	VCP	{F5D59C2F-ED5D-412D-B586-57453203A48E}	CLMH062N013MH062N014	42.52	41.59	0.666666667	MH062N013	MH062N014			237	CLMH062N013MH062N014	8	0.0039	0.137031	0.35	0.164478	0.38	0.195005	0.42	0.164478	0.38
CLMH062N014MH062N015		1993		Existing	assumed Mannings N	MH062N014	MH062N015		A00762	IRWD	VCP	{213FB2FA-F928-4CEB-A7ED-6D93B1B84CFA}	CLMH062N014MH062N015	41.50	39.79	0.666666667	MH062N014	MH062N015			306	CLMH062N014MH062N015	8	0.0056	0.162894	0.36	0.195530	0.39	0.231828	0.43	0.195530	0.39
CLMH062N015MH062N016		1993		Existing	assumed Mannings N	MH062N015	MH062N016		A00762	IRWD	VCP	{4732AEB4-E1A6-40BA-B256-D1D14D7D06BD}	CLMH062N015MH062N016	39.61	38.06	0.833333333	MH062N015	MH062N016			286	CLMH062N015MH062N016	10	0.0054	0.164144	0.27	0.196841	0.29	0.233385	0.32	0.196841	0.29
CLMH062N016MH061E212		1993		Existing	assumed Mannings N	MH062N016	MH061E212		A00762	IRWD	VCP	{C1379447-7F0A-4B61-B671-CFB4973D7B6F}	CLMH062N016MH061E212	37.95	36.76	0.833333333	MH062N016	MH061E212			347	CLMH062N016MH061E212	10	0.0034	0.189319	0.31	0.227120	0.34	0.269301	0.37	0.227120	0.34
CLMH062N017MH062N013		1993		Existing	assumed Mannings N	MH062N017	MH062N013		T14769	IRWD	PVC	{B371519F-CB0C-4EB5-9115-58BF12A647F7}	CLMH062N017MH062N013	45.18	42.72	0.666666667	MH062N017	MH062N013			265	CLMH062N017MH062N013	8	0.0192	0.056817	0.15	0.068165	0.16	0.080816	0.18	0.068165	0.16
CLMH062N018MH062N017		1993		Existing	assumed Mannings N	MH062N018	MH062N017		T14769	IRWD	PVC	{37D0B507-2E42-46DE-9B6F-B7945SC85118}	CLMH062N018MH062N017	47.93	45.27	0.666666667	MH062N018	MH062N017			353	CLMH062N018MH062N017	8	0.0171	0.191931	0.15	0.062299	0.16	0.077859	0.18	0.062299	0.16
CLMH062N019MH062N018		1993		Existing	assumed Mannings N	MH062N019	MH062N018		T14769	IRWD	PVC	{337427D2-E5F6-406F-9999-0BD1E6EB1848}	CLMH062N019MH062N018	50.93	48.02	0.666666667	MH062N019	MH062N018			294	CLMH062N019MH062N018	8	0.0099	0.023227	0.11	0.027839	0.12	0.033007	0.14	0.027839	0.12
CLMH062N020MH062N019		1993		Existing	assumed Mannings N	MH062N020	MH062N019		T14769	IRWD	PVC	{E5A5E643-B625-4F04-BA48-E5303039A530}	CLMH062N020MH062N019	52.34	51.13	0.666666667	MH062N020	MH062N019			116	CLMH062N020MH062N019	8	0.0104	0.020698	0.11	0.024803	0.12	0.029407	0.13	0.024803	0.12
CLMH062N021MH062N020		1993		Existing	assumed Mannings N	MH062N021	MH062N020		T14769	IRWD	PVC	{94BBCAEC-DF06-49DA-8696-56B895CD07D}	CLMH062N021MH062N020	53.31	52.54	0.666666667	MH062N021	MH062N020			183	CLMH062N021MH062N020	8	0.0039	0.015519	0.11	0.018630	0.12	0.022089	0.13	0.018630	0.12
CLMH062N022MH062N021		1993		Existing	assumed Mannings N	MH062N022	MH062N021		T14769	IRWD	PVC	{82F55E2D-1E8B-4DCE-B834-CB77C089DAC3}	CLMH062N022MH062N021	54.40	53.52	0.666666667	MH062N022	MH062N021			225	CLMH062N022MH062N021	8	0.0039	0.015519	0.11	0.018630	0.12	0.022089	0.13	0.018630	0.12
CLMH062N023MH062N022		1993		Existing	assumed Mannings N	MH062N023	MH062N022		T14769	IRWD	PVC	{069E6DDD-EB55-4891-A2BF-E3D2459B002C}	CLMH062N023MH062N022	55.18	54.50	0.666666667	MH062N023	MH062N022			66	CLMH062N023MH062N022	8	0.0036	0.005917	0.07	0.007102	0.08	0.008420	0.09	0.007102	0.08
CLMH062N024MH062N022		1993		Existing	assumed Mannings N	MH062N024	MH062N022		T14769	IRWD	PVC	{17DB1CBE-046F-478E-A193-2E66CB334761}	CLMH062N024MH062N022	58.04	54.59	0.666666667	MH062N024	MH062N022			291	CLMH062N024MH062N022	8	0.0119	0.009603	0.07	0.011529	0.08	0.013669	0.08	0.011529	0.08
CLMH062N025MH062N024		1993		Existing	assumed Mannings N	MH062N025	MH062N024		T14769	IRWD	PVC	{47AAAA2C-73F9-4576-9647-835EB07790AA}	CLMH062N025MH062N024	59.06	58.25	0.666666667	MH062N025	MH062N024			168	CLMH062N025MH062N024	8	0.0048	0.004801	0.06	0.005764	0.07	0.006835	0.07	0.005764	0.07
CLMH062N026MH062N027		1993		Existing	assumed Mannings N	MH062N026	MH062N027		T14769	IRWD	PVC	{4602F7F0-8E59-4720-BC20-0F8485F468BB}	CLMH062N026MH062N027	58.00	55.61	0.666666667	MH062N026	MH062N027			223	CLMH062N026MH062N027	8	0.0098	0.003323	0.05	0.003989	0.05	0.004728	0.05	0.003989	0.05
CLMH062N027MH062N028		1993		Existing	assumed Mannings N	MH062N027	MH062N028		T14769	IRWD	PVC	{04894B6A-F453-46C7-810D-08114B98B609}	CLMH062N027MH062N028	55.61	53.65	0.666666667	MH062N027	MH062N028			200	CLMH062N027MH062N028	8	0.0098	0.009369	0.07	0.011247	0.08	0.013332	0.09	0.011247	0.08
CLMH062N028MH062N029		1993		Existing	assumed Mannings N	MH062N028	MH062N029		T14769	IRWD	PVC	{7ABC7D19-C57B-4D20-836A-F2821F9B1B71}	CLMH062N028MH062N029	53.56	51.20	0.666666667	MH062N028	MH062N029			237	CLMH062N028MH062N029	8	0.0100	0.015071	0.09	0.018092	0.10	0.021448	0.11	0.018092	0.10
CLMH062N029MH062N030		1993		Existing	assumed Mannings N	MH062N029	MH062N030		T14769	IRWD	PVC	{E7D6C649-9B87-49AA-BFD8-4D263F0FACAA0}	CLMH062N029MH062N030	51.11	49.81	0.666666667	MH062N029	MH062N030			264	CLMH062N029MH062N030	8	0.0049	0.017750	0.12	0.021310	0.13	0.025262	0.14	0.021310	0.13
CLMH062N030MH062N031		1993		Existing	assumed Mannings N	MH062N030	MH062N031		T14769	IRWD	PVC	{1B5E9371-2815-4152-B6CF-137D19EF0FA4}	CLMH062N030MH062N031	49.61	49.47	0.666666667	MH062N030	MH062N031			32	CLMH062N030MH062N031	8	0.0044	0.025553	0.14	0.030676	0.15	0.036368	0.17	0.030676	0.15
CLMH062N031MH062N032		1993		Existing	assumed Mannings N	MH062N031	MH062N032		T14769	IRWD	PVC	{A66F040F-9493-426E-B49E-05F76EDD129}	CLMH062N031MH062N032	49.27	48.59	0.666666667	MH062N031	MH062N032			142	CLMH062N031MH062N032	8	0.0048	0.025553	0.14	0.030676	0.15	0.036368	0.17	0.030676	0.15
CLMH062N032MH062N018		1993		Existing	assumed Mannings N	MH062N032	MH062N018		T14769	IRWD	PVC	{D4465516-0D1F-44A3-BF80-BCA7418668E0}	CLMH062N032MH062N018	48.49	48.13	0.666666667	MH062N032	MH062N018			74	CLMH062N032MH062N018	8	0.0049	0.028703	0.15	0.034460	0.16	0.040852	0.17	0.034460	0.16
CLMH062N033MH062N013		1993		Existing	assumed Mannings N	MH062N033	MH062N013		A00775	IRWD	VCP	{3EBB6223-D566-400D-B97E-66D03FDB4C0E}	CLMH062N033MH062N013	42.91	42.54	0.666666667	MH062N033	MH062N013			97	CLMH062N033MH062N013	8	0.0038	0.080219	0.31	0.096317	0.34	0.114192	0.38	0.096317	0.34
CLMH062N034MH062N033		1993		Existing	assumed Mannings N	MH062N034	MH062N033		A00775	IRWD	VCP	{0786C7EE-AC0D-41E9-9377-323D0DD5CDE7}	CLMH062N034MH062N033	44.02	43.02	0.666666667	MH062N034	MH062N033			258	CLMH062N034MH062N033	8	0.0039	0.031354	0.16	0.037646	0.18	0.044632	0.20	0.037646	0.18
CLMH062N035MH062N034		1993		Existing	assumed Mannings N	MH062N035	MH062N034		A00775	IRWD	VCP	{86829579-6829-4CBB-A597-33CC389C3303}	CLMH062N035MH062N034	45.02	44.13	0.666666667	MH062N035	MH062N034			233	CLMH062N035MH062N034	8	0.0038	0.031356	0.16	0.037648	0.18	0.044633	0.20	0.037648	0.18
CLMH062N036MH062N035		1993		Existing	assumed Mannings N	MH062N036	MH062N035		A00775	IRWD	VCP	{75601F95-83F1-4D5D-BA46-E1D26CF98B15}	CLMH062N036MH062N035	48.31	47.22	0.666666667	MH062N036	MH062N035			233	CLMH062N036MH062N035	8	0.0047	0.043407	0.19	0.052114	0.20	0.061789	0.22	0.052114	0.20
CLMH062N037MH062N038		1993		Existing	assumed Mannings N	MH062N037	MH062N038		A00775	IRWD	VCP	{0DC0162FC-93C1-4A62-9221-8634B2CFEE71}	CLMH062N037MH062N038	47.11	46.22	0.666666667	MH062N037	MH062N038			233	CLMH062N037MH062N038	8	0.0058	0.045565	0.18	0.054428	0.20	0.064527	0.22	0.054428	0.20
CLMH062N038MH062N039		1994		Existing	assumed Mannings N	MH062N038	MH062N039		A00775	IRWD	VCP	{7C64D2FE-C79D-493E-90AC-3ABA3DBA573C}	CLMH062N038MH062N039	46.13	44.08	0.666666667	MH062N038	MH062N039			278	CLMH062N038MH062N039	8	0.0074	0.045472	0.18	0.054311	0.19	0.064395	0.21	0.054311	0.19
CLMH062N039MH062N040		1994		Existing	assumed Mannings N	MH062N039	MH062N040		A00775	IRWD	VCP	{72CD9C86-FD2C-48EC-A77A-E1F4B157C5}	CLMH062N039MH062N040	43.97	40.95	0.666666667	MH062N039	MH062N040			233	CLMH062N039MH062N040	8	0.0130	0.107472	0.23	0.128758	0.26	0.152658	0.28	0.128758	0.26
CLMH062N040MH062N041		1994		Existing	assumed Mannings N	MH062N040	MH062N041		A00775	IRWD	VCP	{7960F64C-B6F7-493C-AE51-6ABA63F2D9E7}	CLMH062N040MH062N041	40.86	39.02	0.666666667	MH062N040	MH062N041			216	CLMH062N040MH062N041	8	0.0139	0.107471	0.23	0.128757	0.25	0.152657	0.28	0.128757	0.25
CLMH062N041MH062N042		1994		Existing	assumed Mannings N	MH062N041	MH062N042		A00775	IRWD	VCP	{0DD4FDBF-791C-4C4D-9A87-3673C0F1C0BB}	CLMH062N041MH062N042	38.84	37.18	0.666666667	MH062N041	MH062N042			242	CLMH062N041MH062N042	8	0.0069	0.111713	0.28	0.133851	0.31	0.158698	0.34	0.133851	0.31
CLMH062N042MH062N080		1994		Existing	assumed Mannings N	MH062N042	MH062N080		A00775	IRWD	VCP	{3FEA1780-8C58-4851-96CD-556643A77563}	CLMH062N042MH062N080	36.84	36.38	1.000000000	MH062N042	MH062N080			12	CLMH062N042MH062N080	12	0.0018	0.168848	0.22	0.202309	0.24	0.239862	0.27	0.202309	0.24
CLMH062N080MH062N081		1994		Existing	assumed Mannings N	MH062N080	MH062N081		A00775	IRWD	VCP	{9FA6707A-E73B-4B70-8BD6-71A1052728D3}	CLMH062N080MH062N081	36.18	31.82	1.000000000	MH062N080	MH062N081	Less than 15-in, d/D >0.50		253	CLMH062N080MH062N081	12	0.0172	0.188847	0.58	0.202307	0.59	0.239861	0.60	0.202307	0.59
CLMH062N081MH062N082		1986		Existing	assumed Mannings N	MH062N081	MH062N082		458	IRWD	RCP	{60F4788E4-9727-4713-917D-4DF01BC69C90}	CLMH062N081MH062N082	31.72	31.25	3.750000000	MH062N081	MH062N082			610	CLMH062N081MH062N082	45	0.0008	7.966974	0.34	9.211357	0.36	10.993401	0.39	9.828134	0.37
CLMH062N082MH062N085		1993		Existing	assumed Mannings N	MH062N082	MH062N085		T14977	IRWD	PVC	{F0BF0FD7-0E33-4603-8F41-49CCA5EAFC8E}	CLMH062N082MH062N085	50.29	49.77	0.666666667	MH062N082	MH062N085			133	CLMH062N082MH062N085	8	0.0039	0.010770	0.09	0.012908	0.10	0.015304	0.11	0.012908	0.10
CLMH062N085MH062N039		1993		Existing	assumed Mannings N	MH062N085	MH062N039		T14977	IRWD	PVC	{3578F84F-CA85-44E6-8E01-258D983689F9}	CLMH062N085MH062N039	49.66	44.18	0.666666667	MH062N085	MH062N039			250	CLMH062N085MH062N039	8	0.0295	0.013972	0.11	0.040751	0.13	0.048315	0.15	0.040751	0.13
CLMH062N086MH062N085		1993		Existing	assumed Mannings N	MH062N086	MH062N085		T14977	IRWD	PVC	{1F027241F-FED2-4E05-ADAE-958E038204D2}	CLMH062N086MH062N085	51.75	49.87	0.666666667	MH062N086	MH062N085			189	CLMH062N086MH062N085	8	0.0100	0.019593	0.10	0.023521	0.11	0.027886	0.12	0.023521	0.11
CLMH062N087MH062N086		1993		Existing	assumed Mannings N	MH062N087	MH062N086		T14977	IRWD	PVC	{C79D8A23-F8E9-4FD5-8EF5-A5066E1F7116}	CLMH062N087MH062N086	52.90	51.86	0.666666667	MH062N087	MH062N086			208	CLMH062N087MH062N086	8	0.0050	0.011704	0.09	0.014052	0.10	0.016658	0.11	0.014052	0.10
CLMH062N088MH062N087		1993		Existing	assumed Mannings N	MH062N088	MH062N087		T14977	IRWD	PVC	{581D6149-BFC7-4C66-9281-8F0BD1EC9260}	CLMH062N088MH062N087	54.58	53.10	0.666666667	MH062N088	MH062N087			296	CLMH062N088MH062N087	8	0.0050	0.005101	0.06	0.006125	0.07	0.007262	0.07	0.006125	0.07
CLMH062N089MH062N088		1993		Existing	assumed Mannings N	MH062N089	MH062N088		T14977	IRWD	PVC	{245C358B-4624-4CE9-88E8-899642D5188}	CLMH062N089MH062N088	56.06	54.68	0.666666667	MH062N089	MH062N088			275	CLMH062N089MH062N088	8	0.0050	0.005101	0.06	0.006125	0.07	0.007262	0.07	0.006125	0.07
CLMH062N090MH062N086		1993		Existing	assumed Mannings N	MH062N090	MH062N086		T14977	IRWD	PVC	{9D1BF92C-8967-4AC4-8568-F0C476310A4A}	CLMH062N090MH062N086	53.13	51.95	0.666666667	MH062N090	MH062N086			234	CLMH062N090MH062N086	8	0.0050	0.007889	0.08	0.009469	0.09	0.011227	0.09	0.009469	0.09
CLMH062N092MH062N036		1993		Existing	assumed Mannings N	MH062N092	MH062N036		T14921	IRWD	VCP	{4EC07575-E6A4-4F84-A0FA-430B3BA63007}	CLMH062N092MH062N036	52.38	48.61	0.666666667	MH062N092	MH062N036			188	CLMH062N092MH062N036	8	0.0200	0.043408	0.14	0.052115	0.15	0.061789	0.16	0.052115	0.15
CLMH062N093MH062N092		1993		Existing	assumed Mannings N	MH062N093	MH062N092		T14921	IRWD	VCP	{FF87D54D-5466-449E-B690-52B5B62B7E43}	CLMH062N093MH062N092	54.25	52.47	0.666666667	MH062N093	MH062N092			234	CLMH062N093MH062N092	8	0.0076	0.036141	0.16	0.043390	0.17	0.051445	0.19	0.043390	0.17
CLMH062N094MH062N093	113.26' FROM NE	1995		Existing	assumed Mannings N	MH062N094	MH062N093		T14921	IRWD	VCP	{AF80A55A-EF70-4AC7-BABC-595BD1BE9976}	CLMH062N094MH062N093	55.34	54.36	0.666666667	MH062N094	MH062N093			247	CLMH062N094MH062N093	8	0.0040	0.025744	0.15	0.030908	0.16	0.036647	0.18	0.030908	0.16
CLMH062N100MH062N099		1995		Existing	assumed Mannings N	MH062N100	MH062N099		T14956	IRWD	VCP	{8D5E874D-20BB-4FA1-8E8E-6DCE175BF2A2}	CLMH062N100MH062N099	57.88	55.43	0.666666667	MH062N100	MH062N099			389	CLMH062N100MH062N099	8	0.0063	0.008360	0.08	0.010037	0.09	0.011900	0.09	0.010037	0.09
CLMH062N101MH062N100		1995		Existing	assumed Mannings N	MH062N101	MH062N100		T14956	IRWD	VCP	{0018FE9A-09D9-448F-BDD8-E6A676703992}	CLMH062N101MH062N100	60.13	57.97	0.666666667	MH062N101	MH062N100			217	CLMH062N101MH062N100	8	0.0100	0.003838	0.05	0.004606	0.05	0.005463	0.06	0.004606	0.05
CLMH062N102MH062N099		1995		Existing	assumed Mannings N	MH062N102	MH062N099		T14956	IRWD	VCP	{2BD97505-E0FA-440A-951D-9C409FA5698B}	CLMH062N102MH062N099	56.83	55.54	0.666666667	MH062N102	MH062N099			249	CLMH062N102MH062N099	8	0.0052	0.005081	0.06	0.006100	0.07	0.007232	0.08	0.006100	0.07
CLMH062N107MH062N099		1995		Existing	assumed Mannings N	MH062N107	MH062N099		T14956	IRWD	VCP	{132AFDE7-961A-47EC-AED3-49068F1099AC}	CLMH062N107MH062N099	55.97	55.54	0.666666667	MH062N107	MH062N099			108	CLMH062N107MH062N099	8	0.0040	0.012304	0.10	0.014772	0.11	0.017515	0.12	0.014772	0.11
CLMH062N108MH062N107		1995		Existing	assumed Mannings N	MH062N108	MH062N107		T14956	IRWD	VCP	{2E27F215-91CC-423D-A6A5-357561D8EE5B}	CLMH062N108MH062N107	56.77	56.06	0.666666667	MH062N108	MH062N107			159	CLMH062N108MH062N107	8	0.0045	0.007889	0.08	0.009471	0.09	0.011229	0.10	0.009471	0.09
CLMH062N109MH062N108		1995		Existing	assumed Mannings N	MH062N109	MH062N108		T14956	IRWD	VCP	{3DBA1A26-F63

| | | |

CLMH063E074MH063E073		1972		Existing		MH063E074	MH063E073		T07040	IRWD	VCP	{E2EC7528-CC1A-4798-9636-7365AFD3C85C}	CLMH063E074MH063E073	76.08	75.93	0.666666667	MH063E074	MH063E073			50	CLMH063E074MH063E073	8	0.0030	0.006047	0.08	0.007372	0.08	0.008882	0.09	0.007372	0.08
CLMH063E074MH063E104		1972		Existing		MH063E074	MH063E104		T07040	IRWD	VCP	{615C6E1D-8743-4835-9343-19F3972237E8}	CLMH063E074MH063E104	76.08	74.50	0.500000000	MH063E074	MH063E104			204	CLMH063E074MH063E104	6	0.0077	0.009964	0.12	0.011853	0.13	0.013910	0.14	0.011853	0.13
CLMH063E075MH063E074		1972		Existing		MH063E075	MH063E074		T07040	IRWD	VCP	{12081386-CCE3-4101-8F03-E0CD779991A}	CLMH063E075MH063E074	78.27	76.27	0.666666667	MH063E075	MH063E074			250	CLMH063E075MH063E074	8	0.0080	0.016011	0.10	0.019224	0.11	0.022792	0.12	0.019224	0.11
CLMH063E076MH063E077		1971		Existing		MH063E076	MH063E077		7535	IRWD	VCP	{F1671B88-8A8D-4A3D-BC87-80C92ADA4D1B}	CLMH063E076MH063E077	73.73	73.41	0.500000000	MH063E076	MH063E077			92	CLMH063E076MH063E077	6	0.0035	0.013457	0.16	0.016046	0.17	0.018884	0.19	0.016046	0.17
CLMH063E077MH063E097		1971		Existing		MH063E077	MH063E097		7535	IRWD	VCP	{E91CCC46-3800-47CA-A5D8-B7F4859506A5}	CLMH063E077MH063E097	73.22	72.08	0.666666667	MH063E077	MH063E097			309	CLMH063E077MH063E097	8	0.0037	0.049120	0.21	0.058861	0.23	0.069648	0.25	0.058861	0.23
CLMH063E078MH063E079		1972		Existing		MH063E078	MH063E079		7535	IRWD	VCP	{3AA76898-7C19-4D50-87AE-0893753139A}	CLMH063E078MH063E079	76.37	74.41	0.500000000	MH063E078	MH063E079			212	CLMH063E078MH063E079	6	0.0092	0.005252	0.09	0.006305	0.09	0.007476	0.10	0.006305	0.09
CLMH063E079MH063E077		1971		Existing		MH063E079	MH063E077		7535	IRWD	VCP	{E81D8036-1E0F-4606-831F-6AB3628D84B9}	CLMH063E079MH063E077	74.15	73.41	0.666666667	MH063E079	MH063E077			178	CLMH063E079MH063E077	8	0.0042	0.035667	0.17	0.042818	0.19	0.050766	0.21	0.042818	0.19
CLMH063E080MH063E079		1971		Existing		MH063E080	MH063E079		7535	IRWD	VCP	{FB2E8704-F7B6-475C-852E-469D42F3269C}	CLMH063E080MH063E079	74.61	74.25	0.666666667	MH063E080	MH063E079			74	CLMH063E080MH063E079	8	0.0049	0.027823	0.15	0.033401	0.16	0.039599	0.18	0.033401	0.16
CLMH063E081MH063E080		1971		Existing		MH063E081	MH063E080		7535	IRWD	VCP	{219D1976-7A73-4306-99D8-C99AACF6C159}	CLMH063E081MH063E080	75.55	74.80	0.500000000	MH063E081	MH063E080			105	CLMH063E081MH063E080	6	0.0071	0.002058	0.06	0.002470	0.06	0.002929	0.07	0.002470	0.06
CLMH063E082MH063E083		1971		Existing		MH063E082	MH063E083		T07040	IRWD	VCP	{FC2E668B-B756-4D18-8AAE-5C72E41F77B}	CLMH063E082MH063E083	78.08	76.47	0.500000000	MH063E082	MH063E083			215	CLMH063E082MH063E083	6	0.0075	0.004930	0.09	0.005918	0.09	0.007016	0.10	0.005918	0.09
CLMH063E083MH063E080		1971		Existing		MH063E083	MH063E080		7535	IRWD	VCP	{7C9CC18A-3307-4A78-8BD5-DD6E5344B85E}	CLMH063E083MH063E080	76.26	74.70	0.666666667	MH063E083	MH063E080			207	CLMH063E083MH063E080	8	0.0075	0.025766	0.13	0.030971	0.15	0.036670	0.16	0.030931	0.15
CLMH063E084MH063E083		1970		Existing		MH063E084	MH063E083		T07040	IRWD	VCP	{4D3BC658-F13B-4A26-9D6F-3E75D4EF059B}	CLMH063E084MH063E083	76.97	76.47	0.500000000	MH063E084	MH063E083			69	CLMH063E084MH063E083	6	0.0050	0.020836	0.19	0.025013	0.20	0.029654	0.22	0.025013	0.20
CLMH063E085MH063E086		1970		Existing		MH063E085	MH063E086		T07040	IRWD	VCP	{DE67E6A8-A7B4-4960-8E72-3C84D4DD77DD}	CLMH063E085MH063E086	75.95	75.36	0.500000000	MH063E085	MH063E086			79	CLMH063E085MH063E086	6	0.0075	0.001201	0.04	0.001442	0.05	0.001709	0.05	0.001442	0.05
CLMH063E086MH063E087		1970		Existing		MH063E086	MH063E087		T07040	IRWD	VCP	{0CC29BC5-107F-4AB0-99C9-629563A502DF}	CLMH063E086MH063E087	75.26	74.84	0.500000000	MH063E086	MH063E087			63	CLMH063E086MH063E087	6	0.0067	0.001201	0.04	0.001442	0.05	0.001709	0.05	0.001442	0.05
CLMH063E087MH063E051		1970		Existing		MH063E087	MH063E051		T07040	IRWD	VCP	{CC7ADA06-26CF-4D7C-ACEA-0689DCFCA3A3}	CLMH063E087MH063E051	74.75	73.65	0.500000000	MH063E087	MH063E051			105	CLMH063E087MH063E051	6	0.0110	0.001201	0.04	0.001442	0.04	0.001709	0.05	0.001442	0.04
CLMH063E088MH063E089		1969		Existing		MH063E088	MH063E089		T07073	IRWD	VCP	{C337D44C-474A-4AF2-8DB4-9FC23310ABCF}	CLMH063E088MH063E089	65.33	64.58	0.500000000	MH063E088	MH063E089			105	CLMH063E088MH063E089	6	0.0071	0.001393	0.05	0.001673	0.05	0.001983	0.05	0.001673	0.05
CLMH063E089MH063E091		1969		Existing		MH063E089	MH063E091		T07073	IRWD	VCP	{D46D9349-117A-4330-866A-EB2D4297618B}	CLMH063E089MH063E091	64.38	62.75	0.500000000	MH063E089	MH063E091			216	CLMH063E089MH063E091	6	0.0075	0.004028	0.08	0.004839	0.09	0.005734	0.09	0.004839	0.09
CLMH063E090MH063E089		1969		Existing		MH063E090	MH063E089		T07073	IRWD	VCP	{9F5F5E63-AOFE-4439-9E2B-34A8D9854136}	CLMH063E090MH063E089	65.41	64.58	0.500000000	MH063E090	MH063E089			105	CLMH063E090MH063E089	6	0.0073	0.002143	0.06	0.002574	0.06	0.003051	0.07	0.002574	0.06
CLMH063E091MH063E094		1969		Existing		MH063E091	MH063E094		T07073	IRWD	VCP	{C3492943-5373-44A0-A215-DFE2AB7AF848}	CLMH063E091MH063E094	62.56	60.56	0.666666667	MH063E091	MH063E094			369	CLMH063E091MH063E094	8	0.0054	0.007072	0.07	0.008493	0.08	0.010067	0.09	0.008493	0.08
CLMH063E092MH063E093		1969		Existing		MH063E092	MH063E093		T07073	IRWD	VCP	{4085E23C-8C6A-47DD-8E5F-407DEE874260}	CLMH063E092MH063E093	64.19	63.20	0.500000000	MH063E092	MH063E093			138	CLMH063E092MH063E093	6	0.0072	0.005831	0.09	0.006999	0.10	0.008298	0.11	0.006999	0.10
CLMH063E093MH063E094		1969		Existing		MH063E093	MH063E094		T07073	IRWD	VCP	{D6893C82-068F-4189-A551-A4A9B732095C}	CLMH063E093MH063E094	63.00	60.43	0.500000000	MH063E093	MH063E094			339	CLMH063E093MH063E094	6	0.0076	0.005831	0.09	0.006999	0.10	0.008298	0.11	0.006999	0.10
CLMH063E094MH063E001		1969		Existing		MH063E094	MH063E001		T07073	IRWD	VCP	{E266427D-C85D-4AE2-8ADE-874172F4D4E6}	CLMH063E094MH063E001	60.24	59.29	0.500000000	MH063E094	MH063E001			283	CLMH063E094MH063E001	6	0.0034	0.012902	0.16	0.015492	0.17	0.018365	0.19	0.015492	0.17
CLMH063E095MH063E096		1970		Existing		MH063E095	MH063E096		7535	IRWD	VCP	{39BE3B11-E2DB-4C47-A1D6-2A6E627AC021}	CLMH063E095MH063E096	75.11	72.80	0.500000000	MH063E095	MH063E096			208	CLMH063E095MH063E096	6	0.0078	0.002251	0.06	0.002703	0.06	0.003203	0.07	0.002703	0.06
CLMH063E096MH063E097		1971		Existing		MH063E096	MH063E097		7535	IRWD	VCP	{4D4C98E3-72DA-47DE-823B-DA85D80CBC1A}	CLMH063E096MH063E097	72.59	72.08	0.666666667	MH063E096	MH063E097			45	CLMH063E096MH063E097	8	0.0113	0.002251	0.04	0.002703	0.04	0.003203	0.04	0.002703	0.04
CLMH063E097MH063E098		1971		Existing		MH063E097	MH063E098		7535	IRWD	VCP	{4A32FD08-353D-45BD-B132-31F54486AA07}	CLMH063E097MH063E098	71.83	71.72	0.500000000	MH063E097	MH063E098			32	CLMH063E097MH063E098	6	0.0034	0.051371	0.10	0.061563	0.13	0.072851	0.36	0.061563	0.33
CLMH063E098MH063E042		1971		Existing		MH063E098	MH063E042		7535	IRWD	VCP	{9622F886-4155-4B0F-8889-44FFE1E7E81A}	CLMH063E098MH063E042	71.62	70.04	0.666666667	MH063E098	MH063E042			326	CLMH063E098MH063E042	8	0.0048	0.055972	0.21	0.067090	0.23	0.079405	0.25	0.067090	0.23
CLMH063E099MH063E098		1971		Existing		MH063E099	MH063E098		7535	IRWD	VCP	{3D53AE0C-326F-4138-BB2C-04DB2EAA9593}	CLMH063E099MH063E098	71.72	71.62	0.500000000	MH063E099	MH063E098			73	CLMH063E099MH063E098	6	0.0014	0.004609	0.21	0.005534	0.23	0.006559	0.26	0.005534	0.23
CLMH063E100MH063S090		1970		Existing		MH063E100	MH063S090		T07466	IRWD	VCP	{2F053237-FB89-4ABD-AA18-9FD1A55FD570}	CLMH063E100MH063S090	61.68	59.41	0.500000000	MH063E100	MH063S090			420	CLMH063E100MH063S090	6	0.0054	0.001456	0.05	0.001755	0.05	0.002095	0.06	0.001755	0.05
CLMH063E100MH063E101		1970		Existing		MH063E100	MH063E101		T07466	IRWD	VCP	{85D14010-B70A-4AAB-96CB-33AE231ABAA8}	CLMH063E100MH063E101	62.43	61.88	0.500000000	MH063E100	MH063E101			140	CLMH063E100MH063E101	6	0.0041	0.001460	0.05	0.001758	0.06	0.002097	0.06	0.001758	0.06
CLMH063E101MH063E102		1971		Existing		MH063E101	MH063E102		T07466	IRWD	VCP	{A272EB77-798E-4DB7-AA57-1597299288A7}	CLMH063E101MH063E102	62.43	59.59	0.666666667	MH063E101	MH063E102			295	CLMH063E101MH063E102	8	0.0096	0.002977	0.04	0.003568	0.05	0.004218	0.05	0.003568	0.05
CLMH063E102MH063W010		1971		Existing		MH063E102	MH063W010		T07466	IRWD	VCP	{68924E1A-A63A-4813-9CA7-F0F250DE634A}	CLMH063E102MH063W010	59.50	58.20	0.666666667	MH063E102	MH063W010			350	CLMH063E102MH063W010	8	0.0037	0.011166	0.10	0.013398	0.11	0.015873	0.12	0.013398	0.11
CLMH063E103MH063E001		1969		Existing		MH063E103	MH063E001		A00088	IRWD	VCP	{1861A090-6CDE-4E11-8BDA-CF04FB1785F3}	CLMH063E103MH063E001	88.29	83.86	2.000000000	MH063E103	MH063E001			1005	CLMH063E103MH063E001	24	0.0074	0.340254	0.33	0.381655	0.35	0.431070	0.39	0.463621	0.41
CLMH063E104MH063E076		1972		Existing		MH063E104	MH063E076		7535	IRWD	VCP	{1A462B1D-6CDF-432D-B223-10CB46F9F940}	CLMH063E104MH063E076	74.40	73.83	0.500000000	MH063E104	MH063E076			200	CLMH063E104MH063E076	6	0.0029	0.009964	0.15	0.011852	0.16	0.013910	0.17	0.011852	0.16
CLMH063E105MH063N009		1996		Existing		MH063E105	MH063N009		842	IRWD	PVC	{3576388A-818D-486D-AEDF-C614CAF22D61}	CLMH063E105MH063N009	62.40	61.49	0.666666667	MH063E105	MH063N009			249	CLMH063E105MH063N009	8	0.0049	0.056394	0.21	0.067703	0.22	0.080270	0.25	0.067703	0.22
CLMH063E108MH063N028		1996		Existing		MH063E108	MH063N028		842	IRWD	PVC	{5F3B28E7-9C98-4357-962A-B860031DE0BA}	CLMH063E108MH063N028	65.30	60.61	0.666666667	MH063E108	MH063N028			351	CLMH063E108MH063N028	8	0.0134	0.004459	0.05	0.005352	0.05	0.006345	0.06	0.005352	0.05
CLMH063E110MH063E112		1996		Existing		MH063E110	MH063E112		842	IRWD	PVC	{21B1BE22-410D-405D-8687-792D7F361489}	CLMH063E110MH063E112	69.09	64.55	0.666666667	MH063E110	MH063E112			378	CLMH063E110MH063E112	8	0.0120	0.003065	0.04	0.003633	0.05	0.004263	0.05	0.003629	0.05
CLMH063E112MH063N009		1996		Existing		MH063E112	MH063N009		842	IRWD	PVC	{A8E84B86-07E7-4230-99F2-990F4F0F7D2F}	CLMH063E112MH063N009	64.34	61.49	0.666666667	MH063E112	MH063N009			115	CLMH063E112MH063N009	8	0.0248	0.005229	0.05	0.006279	0.05	0.007444	0.05	0.006279	0.05
CLMH063E116MH063E118		1996	assumed Mannings N	Existing	assumed Mannings N	MH063E116	MH063E118		T15092	IRWD	PVC	{0CA4E40F-9F99-4D50-A69D-534120B5D2F9}	CLMH063E116MH063E118	71.11	69.54	0.666666667	MH063E116	MH063E118			245	CLMH063E116MH063E118	8	0.0064	0.012946	0.09	0.015543	0.10	0.018427	0.11	0.015543	0.10
CLMH063E117MH063E116		1996	assumed Mannings N	Existing	assumed Mannings N	MH063E117	MH063E116		T15092	IRWD	PVC	{4980F0DD-B88E-4EDC-AF74-7F42C4DF27D9}	CLMH063E117MH063E116	73.11	71.30	0.666666667	MH063E117	MH063E116			281	CLMH063E117MH063E116	8	0.0064	0.007288	0.07	0.008749	0.08	0.010373	0.09	0.008749	0.08
CLMH063E118MH063E120		1996	assumed Mannings N	Existing	assumed Mannings N	MH063E118	MH063E120		T15092	IRWD	PVC	{2601F669-673F-411B-9DCE-8E2F960FC729}	CLMH063E118MH063E120	69.44	67.73	0.666666667	MH063E118	MH063E120			249	CLMH063E118MH063E120	8	0.0072	0.018798	0.11	0.022567	0.12	0.026757	0.13	0.022567	0.12
CLMH063E119MH063E117		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E119	MH063E117		T15092	IRWD	PVC	{80B407FB-4651-497E-B58E-60BBE5C4E6EA}	CLMH063E119MH063E117	74.91	73.20	0.666666667	MH063E119	MH063E117			267	CLMH063E119MH063E117	8	0.0064	0.007288	0.07	0.008749	0.08	0.010373	0.09	0.008749	0.08
CLMH063E120MH063N007		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E120	MH063N007		T15092	IRWD	PVC	{D4232D759-E746-4A39-A284-19E5D4BAC1FA}	CLMH063E120MH063N007	67.54	63.61	0.666666667	MH063E120	MH063N007			233	CLMH063E120MH063N007	8	0.0169	0.053736	0.15	0.064511	0.16	0.076487	0.18	0.064511	0.16
CLMH063E121MH063E120		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E121	MH063E120		T15092	IRWD	PVC	{4A99F4BC-9AD9-42EB-A175-8B6E8A47DF04}	CLMH063E121MH063E120	69.43	67.73	0.666666667	MH063E121	MH063E120			236	CLMH063E121MH063E120	8	0.0072	0.013824	0.10	0.016596	0.10	0.019679	0.11	0.016596	0.10
CLMH063E122MH063E120		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E122	MH063E120		T15092	IRWD	PVC	{6A4FE362-4AC2-4D3F-83B9-925721159231}	CLMH063E122MH063E120	69.66	67.73	0.666666667	MH063E122	MH063E120			296	CLMH063E122MH063E120	8	0.0065	0.014983	0.10	0.017987	0.11	0.021325	0.12	0.017987	0.11
CLMH063E123MH063E126		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E123	MH063E126		T15092	IRWD	PVC	{91604FFC-9348-4CCC-8B01-56115EE8FA6}	CLMH063E123MH063E126	71.95	71.06	0.666666667	MH063E123	MH063E126			328	CLMH063E123MH063E126	8	0.0039	0.012004	0.10	0.014411	0.11	0.017084	0.12	0.014411	0.11
CLMH063E124MH063E119		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E124	MH063E119		T15092	IRWD	PVC	{50524F46-F208-4AE8-9FCB-3C50A59DABC1}	CLMH063E124MH063E119	79.08	75.12	0.666666667	MH063E124	MH063E119			400	CLMH063E124MH063E119	8	0.0099	0.002529	0.04	0.003036	0.04	0.003600	0.05	0.003036	0.04
CLMH063E125MH063E123		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E125	MH063E123		T15092	IRWD	PVC	{ECDE8522-2979-45E4-91DE-36E3E1674701}	CLMH063E125MH063E123	75.98	72.16	0.666666667	MH063E125	MH063E123			328	CLMH063E125MH063E123	8	0.0243	0.003773	0.04	0.004529	0.04	0.005369	0.05	0.004529	0.04
CLMH063E126MH063E122		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E126	MH063E122		T15092	IRWD	PVC	{A7677708-95B7-4361-BF8B-435E8E62CA0}	CLMH063E126MH063E122	70.87	69.76	0.666666667	MH063E126	MH063E122			276	CLMH063E126MH063E122	8	0.0040	0.014983	0.11	0.017987	0.12	0.021325	0.13	0.017987	0.12
CLMH063E127MH063E121		1998	assumed Mannings N	Existing	assumed Mannings N	MH063E127	MH063E121		T15092	IRWD	PVC	{F320A753-0187-4A6C-B587-E634B026472E}	CLMH063E127MH063E121	71.93	69.62	0.666666667	MH063E127	MH063E121			387	CLMH063E127MH063E121	8	0.0060	0.009838	0.08	0.011811	0.09	0.014005	0.10	0.011811	0.09
CLMH063N019MH063N002		1969		Existing		MH063N019	MH063N002		T07073	IRWD	VCP	{B4EE4BEC-0766-4B8A-A5D9-5DF094D0F59}	CLMH063N019MH063N002	59.09	56.86	0.666666667	MH063N019	MH063N002			235	CLMH063N019MH063N002	8	0.0095	0.015866	0.16	0.019042	0.19	0.022576	0.22	0.019042	0.19
CLMH063N002MH063N003		1969		Existing		MH063N002	MH063N003		A00186	IRWD	VCP	{9F08BB30-97A9-46D7-A8A7-093E9A84C660}	CLMH063N002MH063N003	56.70	55.29	0.666666667	MH063N002	MH063N003			366	CLMH063N002MH063N003	8	0.0039	0.193161	0.42	0.230976	0.46	0.274432	0.51	0.230973	0.46
CLMH063N003MH063W008		1969		Existing		MH063N003	MH063W008		A00186	IRWD	VCP	{608D88B1-210D-48E8-9F70-ED92F681F145}	CLMH063N003MH063W008	55.20	52.93	0.666666667	MH063N003	MH063W008			360	CLMH063N003MH063W008	8	0.0063	0.193129	0.43	0.230901	0.48	0.274350	0.54	0.230899	0.48
CLMH063N004MH063N005		1998		Existing		MH063N004	MH063N005		842	IRWD	PVC	{F2B1F611-4E19-4C98-9098-CDF9D8C09FA7}	CLMH063N004MH063N005	62.74	61.81	0.666666667	MH063N004	MH063N005			194	CLMH063N004MH063N005	8	0.0049	0.030198	0.15	0.036150	0.16	0.042862	0.18	0.036150	0.16
CLMH063N005MH063N006		1998		Existing		MH063N005	MH063N006		842	IRWD	PVC	{67A24D62-ABF8-443E-8843-EA6E68CE7DFF}	CLMH063N005MH063N006	61.61	60.61	0.666666667	MH063N005	MH063N006			204	CLMH063N005MH063N006	8	0.0049	0.013047	0.16	0.039572	0.17	0.046919	0.19	0.039572	0.17
CLMH063N006MH063N011		1998		Existing		MH063N006	MH063N011		842	IRWD	PVC	{E0C9F288-B36E-468B-AC9B-CB2C016D4A96}	CLMH063N006MH063N011	60.40	59.40	0.666666667	MH063N006	MH063N011			204	CLMH063N006MH063N011	8	0.0049	0.041513	0.18	0.049737	0.19	0.058971	0.21	0.049737	0.19
CLMH063N007MH063E105		1969		Existing		MH063N007	MH063E105		842	IRWD	PVC	{2D147511-5648-4C70-BDFF-2CA823133C32F}	CLMH063N007MH063E105	63.50	62.59	0.666666667	MH063N007	MH063E105			185	CLMH063N007MH063E105	8	0.0049	0.053736	0.20	0.064511	0.22	0.076486	0.24	0.064511	0.22
CLMH063N008MH063N009		1969		Existing		MH063N008	MH063N009	Old CIP	842	IRWD	PVC	{711F9875-6F8B-4528-8995-B0AA2515ACA6}	CLMH063N008MH063N009	54.20	53.40	1.000000000	MH063N008	MH063N009			375	CLMH063N008MH063N009	12	0.0021	0.191482	0.26	0.229615	0.28	0.272544	0.31	0.229863	0.28
CLMH063N009MH063N010		1969		Existing		MH063N009	MH063N010		842	IRWD	PVC	{A95A6B1A-EBD3-468Z-B0CE-2A53AF64C50D}	CLMH063N009MH063N010	61.29	60.45	0.666666667	MH063N009	MH063N010			172	CLMH063N009MH063N010	8	0.0049	0.062629	0.22	0.075191	0.24	0.089147	0.26	0.075191	0.24
CLMH063N010MH063N011		1996		Existing		MH063N010	MH063N011		842	IRWD	PVC	{8784DCC5-5FE1-414A-B942-3D35C91F5E33}	CLMH063N010MH063N011	60.25	59.40	0.666666667	MH063N010	MH063N011			172	CLMH063N010MH063N011	8	0.0049	0.065478	0.22	0.078613	0.24	0.093204	0.26	0.078613	0.24
CLMH063N011MH063N012		1996		Existing		MH063N011	MH063N012	Old CIP	A00842	IRWD	PVC	{45059F54-8526-4D5C-AF42-8F0119DAAAD1}	CLMH063N011MH063N012	59.20	58.59	0.666666667	MH063N011	MH063N012			227	CLMH063N011MH063N012	8	0.0027	0.106987	0.32	0.128348	0.35	0.152173	0.38	0.128348	0.35
CLMH063N012MH063N013		1996		Existing		MH063N012	MH063N013	Old CIP	842	IRWD	PVC	{F44C4887-F38F-4036-90F5-A68857E2A225}	CLMH063N012MH063N013	58.49	57.81	0.666666667	MH063N012	MH063N013			245	CLMH063N012MH063N013	8	0.0028	0.152529	0.38	0.183026	0.42	0.217004	0.46	0.183026	0.42
CLMH063N013MH063N014		1996		Existing		MH063N013	MH063N014	Old CIP	A00842	IRWD	PVC	{37DDD587-1D59-4A12-88C1-45B3D92D7EAB}	CLMH063N013MH063N014	57.70	56.84	0.666666667	MH063N013	MH063N014			315	CLMH063N013MH063N014	8	0.0027	0.152518	0.38	0.183018	0.42	0.216999	0.46	0.183018	0.42
CLMH063N014MH063N015		1996		Existing		MH063N014	MH063N015	Old CIP	842	IRWD	PVC	{53D19FCE-04B3-4835-941D-7FA4939E01D2}	CLMH063N014MH063N015	56.74	55.97	0.666666667	MH063N014	MH063N015			279	CLMH063N014MH063N015	8	0.0028	0.152507	0.38	0.183010	0.42	0.216993	0.46	0.183010	0.42
CLMH063N015MH063N016		1996		Existing		MH063N015	MH063N016	Old CIP	842	IRWD	PVC	{13848E02-2817-444D-9669-33AA657920C1}	CLMH063N015MH063N016	55.86	55.25	0.666666667	MH063N015	MH063N016			227	CLMH063N015MH063N016	8	0.0027	0.191574	0.43	0.229934	0.48	0.272640	0.52	0.229934	0.48
CLMH063N016MH063N008		1996		Existing		MH063N016	MH063N008	Old CIP	842	IRWD	PVC	{A928E02A-184B-46E1-8F2C-1E534A3E2897}	CLMH063N016MH063N008	55.04	54.40	0.666666667	MH063N016	MH063N008			204	CLMH063N016MH063N008	8	0.0027	0.191548	0.43	0.229912	0.47	0.272623	0.52	0.229912	0.47
CLMH063N017MH063N015		1996		Existing		MH063N017	MH063N015		842	IRWD	PVC	{8B573D76-DF04-4A0F-8541-82D10EF24496}	CLMH063N017MH063N015	58.56	56.06	0.666666667	MH063N017	MH063N015			261	CLMH063N017MH063N015	8	0.0096	0.012152	0.13	0.014590	0.16	0.017299	0.20	0.014590	0.16
CLMH063N018MH063N017		1996		Existing		MH063N018	MH063N017		842	IRWD	PVC	{84405103-0C9A-4BBB-BAF3-0BDAB0682A64}	CLMH063N018MH063N017	60.70	58.75	0.666666667	MH063N018	MH063N017			251	CLMH063N018MH063N017	8	0.0078	0.006409	0.07	0.007694	0.07	0.009123	0.08	0.007694	0.07
CLMH063N019MH063N018		1996		Existing		MH063N019	MH063N018		A00842	IRWD	PVC	{7BBBABB4-89A3-458B-9357-4DEC2EA84C18}	CLMH063N019MH063N018	62.00	60.90	0.666666667	MH063N019	MH063N018			277	CLMH063N019MH063N018	8	0.0040	0.003515	0.05	0.004220	0.06	0.005004	0.06	0.004220	0.06
CLMH063N020MH063N022		1996		Existing		MH063N020	MH063N022		842	IRWD	PVC	{42133FAC-05EC-4093-909E-27F077AA6CBD}	CLMH063N020MH063N022	60.24	59.70	0.666666667	MH063N020	MH063N022			138	CLMH063N020MH063N022	8	0.0039	0.004374	0.06	0.005249	0.07	0.006224	0.07	0.005249	0.07
CLMH063N021MH063N022		1996		Existing		MH063N021	MH063N022		842	IRWD	PVC	{9F62D2C7-3F23-4BCE-A2E2-6D27C6584517}	CLMH063N021MH063N022	61.93	59.70	0.666666667	MH063N021	MH063N022			239	CLMH063N021MH063N022	8	0.0093	0.004395	0.05	0.005275	0.06	0.006254	0.06	0.005275	0.06
CLMH063N023MH063N024		1996		Existing		MH063N023	MH063N024		842	IRWD	PVC	{7CE78B5F-5417-4ADF-8E46-A4EA7C21CD1}	CLMH063N023MH063N024	59.50	58.49	0.666666667	MH063N023	MH063N024			256	CLMH063N023MH063N024	8	0.0039	0.008768	0.09	0.010524	0.09	0.012477	0.10	0.010524	0.09
CLMH063N024MH063N015		1996		Existing		MH063N024	MH063N015		842	IRWD	PVC	{2A81698D-680F-4B03-B4C2-139EF05075DA}	CLMH063N024MH063N015	58.29	56.96	0.666666667	MH063N024	MH063N015			348	CLMH063N024MH063N015	8	0.0040	0.015777	0.11	0.018940	0.12	0.022455	0.13	0.018940	0.12
CLMH063N024MH063N016

| | | |

| | | |

CLMH064N033MH064N080		2001		Existing	assumed Mannings N	MH064N033	MH064N080		T16075	IRWD	PVC	{A6521834-5F1D-4AF2-AD2A-6E7585E48271}	CLMH064N033MH064N080	89.44		88.15	0.666666667	MH064N033	MH064N080			262	CLMH064N033MH064N080	8	0.0050	0.090612	0.26	0.108746	0.29	0.128925	0.31	0.108746	0.29
CLMH064N035MH064W016		1998		Existing	assumed Mannings N	MH064N035	MH064W016		A00877A	IRWD	VCP	{E25C11CF-1B2E-4FE5-9088-194BF67D5039}	CLMH064N035MH064W016	84.09		82.79	1.250000000	MH064N035	MH064W016			180	CLMH064N035MH064W016	15	0.0072	0.935839	0.35	1.122185	0.39	1.331417	0.42	1.122174	0.39
CLMH064N036MH064N037		2000		Existing	assumed Mannings N	MH064N036	MH064N037		T15922	IRWD	PVC	{6000188A-638C-4DB0-B060-0C4868745184}	CLMH064N036MH064N037	89.58		89.08	0.666666667	MH064N036	MH064N037			114	CLMH064N036MH064N037	8	0.0044	0.002614	0.05	0.003141	0.05	0.003722	0.05	0.003141	0.05
CLMH064N037MH064N039		2000		Existing	assumed Mannings N	MH064N037	MH064N039		T15922	IRWD	PVC	{293E76CE-C169-4069-A2B9-45E131BC2DE1}	CLMH064N037MH064N039	88.87		88.09	0.666666667	MH064N037	MH064N039			180	CLMH064N037MH064N039	8	0.0043	0.008402	0.08	0.010089	0.09	0.011960	0.10	0.010089	0.09
CLMH064N038MH064N039		2000		Existing	assumed Mannings N	MH064N038	MH064N039		T15922	IRWD	PVC	{58F5912F-6CAA-4047-A1D4-4C95F2715B02}	CLMH064N038MH064N039	88.75		88.19	0.666666667	MH064N038	MH064N039			93	CLMH064N038MH064N039	8	0.0060	0.003580	0.05	0.004299	0.06	0.005096	0.06	0.004299	0.06
CLMH064N039MH064N041		2000		Existing	assumed Mannings N	MH064N039	MH064N041		T15922	IRWD	PVC	{9B0640B0-288F-47BC-B636-BBACE6113571}	CLMH064N039MH064N041	88.00		87.15	0.666666667	MH064N039	MH064N041			66	CLMH064N039MH064N041	8	0.0129	0.011981	0.08	0.014387	0.09	0.017056	0.09	0.014387	0.09
CLMH064N040MH064N041		2000		Existing	assumed Mannings N	MH064N040	MH064N041		T15922	IRWD	PVC	{D853E92F-ABAA-4595-8D3C-A8D7F3D979B8}	CLMH064N040MH064N041	93.20		87.05	0.666666667	MH064N040	MH064N041			93	CLMH064N040MH064N041	8	0.0661	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH064N041MH064N042		2000		Existing	assumed Mannings N	MH064N041	MH064N042		T15922	IRWD	PVC	{5D58B010-619E-4DDD-A7D2-D45B2E68D28E}	CLMH064N041MH064N042	86.94		86.20	0.666666667	MH064N041	MH064N042			87	CLMH064N041MH064N042	8	0.0085	0.011981	0.09	0.014387	0.09	0.017056	0.10	0.014387	0.09
CLMH064N042MH064N046		2000		Existing	assumed Mannings N	MH064N042	MH064N046		T15922	IRWD	PVC	{F3C5B97A-7CCD-4220-A898-0B7D727756533}	CLMH064N042MH064N046	86.11		84.52	0.666666667	MH064N042	MH064N046			175	CLMH064N042MH064N046	8	0.0091	0.026709	0.12	0.032041	0.14	0.037985	0.15	0.032041	0.14
CLMH064N043MH064N042		2000		Existing	assumed Mannings N	MH064N043	MH064N042		T15922	IRWD	PVC	{A09F1AA7-2BE4-48EF-BEF2-7D98C66ABC23}	CLMH064N043MH064N042	89.18		86.30	0.666666667	MH064N043	MH064N042			56	CLMH064N043MH064N042	8	0.0514	0.014728	0.06	0.017654	0.07	0.020929	0.07	0.017654	0.07
CLMH064N044MH064N045		2000		Existing	assumed Mannings N	MH064N044	MH064N045		T15922	IRWD	PVC	{0B3E6751-2466-410D-B149-D43B1053EB7A}	CLMH064N044MH064N045	95.55		91.48	0.666666667	MH064N044	MH064N045			166	CLMH064N044MH064N045	8	0.0245	0.004522	0.04	0.005431	0.05	0.006437	0.05	0.005431	0.05
CLMH064N045MH064N054		2000		Existing	assumed Mannings N	MH064N045	MH064N054		T15922	IRWD	PVC	{9FA405DD-6C93-4C19-B97E-37A226340117}	CLMH064N045MH064N054	91.29		89.09	0.666666667	MH064N045	MH064N054			64	CLMH064N045MH064N054	8	0.0068	0.004522	0.06	0.005431	0.06	0.006437	0.07	0.005431	0.06
CLMH064N046MH064N048		2000		Existing	assumed Mannings N	MH064N046	MH064N048		T15922	IRWD	PVC	{40E11B95-3C84-489C-9A9F-F40AC334AA3D}	CLMH064N046MH064N048	84.43		82.83	0.666666667	MH064N046	MH064N048			180	CLMH064N046MH064N048	8	0.0089	0.035691	0.14	0.042824	0.16	0.050768	0.17	0.042824	0.16
CLMH064N047MH064N046		2000		Existing	assumed Mannings N	MH064N047	MH064N046		T15922	IRWD	PVC	{CBD9FE89-450B-4426-A07B-42EA1803C44A}	CLMH064N047MH064N046	87.97		84.65	0.666666667	MH064N047	MH064N046			176	CLMH064N047MH064N046	8	0.0189	0.008981	0.06	0.010783	0.07	0.012783	0.07	0.010783	0.07
CLMH064N048MH064N055		2000		Existing	assumed Mannings N	MH064N048	MH064N055		T15922	IRWD	PVC	{B2EB82D8-5AE2-498D-9CA1-D2E57554300E}	CLMH064N048MH064N055	82.73		81.13	0.666666667	MH064N048	MH064N055			180	CLMH064N048MH064N055	8	0.0089	0.047951	0.17	0.057545	0.18	0.068219	0.20	0.057545	0.18
CLMH064N049MH064N048		2000		Existing	assumed Mannings N	MH064N049	MH064N048		T15922	IRWD	PVC	{6A8A198C-4E0C-42CF-8021-AFAF9DA8780B}	CLMH064N049MH064N048	91.51		82.86	0.666666667	MH064N049	MH064N048			176	CLMH064N049MH064N048	8	0.0491	0.012261	0.06	0.014721	0.06	0.017451	0.07	0.014721	0.06
CLMH064N050MH064N051		2000		Existing	assumed Mannings N	MH064N050	MH064N051		T15922	IRWD	PVC	{BC592309-FAA2-4D30-A0CC-18CB0D58EBCB}	CLMH064N050MH064N051	97.12		94.62	0.666666667	MH064N050	MH064N051			122	CLMH064N050MH064N051	8	0.0205	0.009240	0.06	0.011093	0.07	0.013150	0.07	0.011093	0.07
CLMH064N051MH064N059		2000		Existing	assumed Mannings N	MH064N051	MH064N059		T15922	IRWD	PVC	{EA08D648-6275-4983-83B7-15E9F5D954551}	CLMH064N051MH064N059	94.52		92.34	0.666666667	MH064N051	MH064N059			348	CLMH064N051MH064N059	8	0.0063	0.009318	0.08	0.011176	0.09	0.013249	0.10	0.011176	0.09
CLMH064N052MH064N020		2000		Existing	assumed Mannings N	MH064N052	MH064N020		T15922	IRWD	PVC	{E2ADB802-7C38-47D8-9FEA-C9D7897C884D}	CLMH064N052MH064N020	78.18		77.30	0.666666667	MH064N052	MH064N020			91	CLMH064N052MH064N020	8	0.0097	0.144863	0.28	0.173701	0.31	0.205934	0.34	0.173701	0.31
CLMH064N053MH064N051		2000		Existing	assumed Mannings N	MH064N053	MH064N051		T15922	IRWD	PVC	{34438254-7766-404C-8830-08DF620BD894}	CLMH064N053MH064N051	96.52		94.73	0.666666667	MH064N053	MH064N051			52	CLMH064N053MH064N051	8	0.0344	0.000195	0.01	0.000204	0.01	0.000213	0.01	0.000180	0.01
CLMH064N054MH064N060		2000		Existing	assumed Mannings N	MH064N054	MH064N060		T15922	IRWD	PVC	{EEC61228-3C3E-4BE9-8493-75CDA78F98EF}	CLMH064N054MH064N060	89.00		86.73	0.666666667	MH064N054	MH064N060			323	CLMH064N054MH064N060	8	0.0070	0.004522	0.06	0.005431	0.06	0.006437	0.07	0.005431	0.06
CLMH064N055MH064N058		2000		Existing	assumed Mannings N	MH064N055	MH064N058		T15922	IRWD	PVC	{010DA56C8-719D-4D53-BA17-CD3111ADD08C}	CLMH064N055MH064N058	81.04		80.23	0.666666667	MH064N055	MH064N058			125	CLMH064N055MH064N058	8	0.0065	0.065066	0.21	0.078046	0.23	0.092524	0.25	0.078046	0.23
CLMH064N056MH064N055		2000		Existing	assumed Mannings N	MH064N056	MH064N055		T15922	IRWD	PVC	{2516EE0F-D6AE-4582-8911-416151FA808E}	CLMH064N056MH064N055	91.62		81.16	0.666666667	MH064N056	MH064N055			176	CLMH064N056MH064N055	8	0.0594	0.017115	0.06	0.020501	0.07	0.024306	0.08	0.020501	0.07
CLMH064N057MH064N052		2000		Existing	assumed Mannings N	MH064N057	MH064N052		T15922	IRWD	PVC	{0AE0C21A-69AD-4D60-B78E-2F76393FC70C}	CLMH064N057MH064N052	88.12		78.37	0.666666667	MH064N057	MH064N052			203	CLMH064N057MH064N052	8	0.0480	0.002110	0.03	0.002254	0.03	0.002672	0.04	0.002254	0.03
CLMH064N058MH064N052		2000		Existing	assumed Mannings N	MH064N058	MH064N052		T15922	IRWD	PVC	{6AC922EA-E70B-4D23-B26E-BA7FE441E37A}	CLMH064N058MH064N052	80.04		78.27	0.666666667	MH064N058	MH064N052			174	CLMH064N058MH064N052	8	0.0102	0.143855	0.28	0.172627	0.31	0.204658	0.33	0.172627	0.31
CLMH064N059MH064N064		2000		Existing	assumed Mannings N	MH064N059	MH064N064		T15922	IRWD	PVC	{0668A656-42D6-4B17-8923-7CCB4983B316}	CLMH064N059MH064N064	92.25		88.83	0.666666667	MH064N059	MH064N064			348	CLMH064N059MH064N064	8	0.0098	0.030839	0.13	0.037013	0.14	0.043883	0.16	0.037013	0.14
CLMH064N060MH064N067		2000		Existing	assumed Mannings N	MH064N060	MH064N067		T15922	IRWD	PVC	{63935B3F-12A7-4906-B882-19B9E2CC6498}	CLMH064N060MH064N067	86.62		83.38	0.666666667	MH064N060	MH064N067			323	CLMH064N060MH064N067	8	0.0100	0.012216	0.08	0.014669	0.09	0.017391	0.10	0.014669	0.09
CLMH064N061MH064N058		2000		Existing	assumed Mannings N	MH064N061	MH064N058		T15922	IRWD	PVC	{F5F2BA49-0E36-4329-A486-49D7205FD523}	CLMH064N061MH064N058	81.25		80.13	0.666666667	MH064N061	MH064N058			105	CLMH064N061MH064N058	8	0.0107	0.078788	0.20	0.094581	0.22	0.112133	0.24	0.094581	0.22
CLMH064N062MH064N061		2000		Existing	assumed Mannings N	MH064N062	MH064N061		T15922	IRWD	PVC	{446BE63B-B4FE-45A3-AC7A-A17B2107A41E}	CLMH064N062MH064N061	82.18		81.34	0.666666667	MH064N062	MH064N061			76	CLMH064N062MH064N061	8	0.0111	0.078788	0.20	0.094581	0.22	0.112133	0.24	0.094581	0.22
CLMH064N063MH064N062		2000		Existing	assumed Mannings N	MH064N063	MH064N062		T15922	IRWD	PVC	{DAA2727E-ECD2-439B-A069-8C04E01EE613}	CLMH064N063MH064N062	84.58		82.37	0.666666667	MH064N063	MH064N062			63	CLMH064N063MH064N062	8	0.0351	0.004737	0.04	0.005687	0.04	0.006743	0.05	0.005687	0.04
CLMH064N064MH064N069		2000		Existing	assumed Mannings N	MH064N064	MH064N069		T15922	IRWD	PVC	{DAA845521-FC99-41F3-8E13-A88D512A0E33}	CLMH064N064MH064N069	88.73		85.33	0.666666667	MH064N064	MH064N069			348	CLMH064N064MH064N069	8	0.0098	0.044151	0.16	0.052994	0.17	0.062829	0.19	0.052994	0.17
CLMH064N065MH064N063		2000		Existing	assumed Mannings N	MH064N065	MH064N063		T15922	IRWD	PVC	{167727D8-ACB2-47FB-B27B-3EFCB84B2745}	CLMH064N065MH064N063	84.91		84.69	0.666666667	MH064N065	MH064N063			48	CLMH064N065MH064N063	8	0.0046	0.001928	0.04	0.002316	0.04	0.002745	0.05	0.002316	0.04
CLMH064N066MH064N065		2000		Existing	assumed Mannings N	MH064N066	MH064N065		T15922	IRWD	PVC	{01D55FCE-40AF-4D72-A09D-BEF341CF555B}	CLMH064N066MH064N065	85.87		85.12	0.666666667	MH064N066	MH064N065			152	CLMH064N066MH064N065	8	0.0049	0.001928	0.04	0.002316	0.04	0.002745	0.05	0.002316	0.04
CLMH064N067MH064N062		2000		Existing	assumed Mannings N	MH064N067	MH064N062		T15922	IRWD	PVC	{229ACB7A-4896-4F48-B4DE-5B0AEACA3065}	CLMH064N067MH064N062	83.19		82.27	0.666666667	MH064N067	MH064N062			94	CLMH064N067MH064N062	8	0.0098	0.074052	0.20	0.088894	0.22	0.105391	0.24	0.088894	0.22
CLMH064N068MH064N063		2000		Existing	assumed Mannings N	MH064N068	MH064N063		T15922	IRWD	PVC	{734DF7E8-5931-484C-B2DC-53F84C366EF8}	CLMH064N068MH064N063	87.50		84.77	0.666666667	MH064N068	MH064N063			130	CLMH064N068MH064N063	8	0.0210	0.002808	0.04	0.003371	0.04	0.003971	0.04	0.003371	0.04
CLMH064N069MH064N065		2000		Existing	assumed Mannings N	MH064N069	MH064N065		T15922	IRWD	PVC	{81E873FF-3090-42EE-A5F2-60B17787AA2E}	CLMH064N069MH064N065	85.23		83.29	0.666666667	MH064N069	MH064N065			182	CLMH064N069MH064N065	8	0.0107	0.049917	0.16	0.059916	0.18	0.071036	0.19	0.059916	0.18
CLMH064N070MH064N069		2000		Existing	assumed Mannings N	MH064N070	MH064N069		T15922	IRWD	PVC	{8BCEA1E4-208F-421D-9AAA-DFBC071A357E}	CLMH064N070MH064N069	85.95		85.33	0.666666667	MH064N070	MH064N069			58	CLMH064N070MH064N069	8	0.0107	0.005766	0.06	0.006922	0.06	0.008206	0.07	0.006922	0.06
CLMH064N074MH064N075		2001		Existing	assumed Mannings N	MH064N074	MH064N075		T16081	IRWD	PVC	{4D6C1DE8-7369-4145-B74D-BD71048B1C9A}	CLMH064N074MH064N075	97.55		94.41	0.666666667	MH064N074	MH064N075			262	CLMH064N074MH064N075	8	0.0120	0.010760	0.08	0.012917	0.08	0.015317	0.09	0.012917	0.08
CLMH064N075MH064N077		2001		Existing	assumed Mannings N	MH064N075	MH064N077		T16081	IRWD	PVC	{EB6E5CF6-C889-4812-B11E-EBE65A258A26}	CLMH064N075MH064N077	94.20		91.80	0.666666667	MH064N075	MH064N077			204	CLMH064N075MH064N077	8	0.0118	0.024688	0.11	0.029644	0.12	0.035146	0.13	0.029644	0.12
CLMH064N076MH064N075		2001		Existing	assumed Mannings N	MH064N076	MH064N075		T16081	IRWD	PVC	{9BF5457D-9626-45C5-A775-4737AC53BF}	CLMH064N076MH064N075	94.91		94.41	0.666666667	MH064N076	MH064N075			101	CLMH064N076MH064N075	8	0.0050	0.011614	0.09	0.013947	0.10	0.016534	0.11	0.013947	0.10
CLMH064N077MH064N033		2001		Existing	assumed Mannings N	MH064N077	MH064N033		T16081	IRWD	PVC	{56DCA50D-7442-4054-A78B-396F581259C6}	CLMH064N077MH064N033	91.59		89.55	0.666666667	MH064N077	MH064N033			205	CLMH064N077MH064N033	8	0.0100	0.024688	0.12	0.029644	0.13	0.035146	0.15	0.029644	0.13
CLMH064N078MH064N033		2001		Existing	assumed Mannings N	MH064N078	MH064N033		T16081	IRWD	PVC	{DB77C996-C998-4606-916D-56C857AE6E68}	CLMH064N078MH064N033	94.66		89.65	0.666666667	MH064N078	MH064N033			251	CLMH064N078MH064N033	8	0.0200	0.004009	0.04	0.004811	0.05	0.005704	0.05	0.004811	0.05
CLMH064N080MH064N035		2002		Existing	assumed Mannings N	MH064N080	MH064N035		T16075	IRWD	PVC	{63616FC0-F2F2-499B-B7PD-075D960025D0}	CLMH064N080MH064N035	87.94		84.80	0.666666667	MH064N080	MH064N035			394	CLMH064N080MH064N035	8	0.0080	0.095262	0.24	0.114330	0.26	0.135546	0.29	0.114330	0.26
CLMH064N081MH064N076		2000		Existing	assumed Mannings N	MH064N081	MH064N076		T16080	IRWD	PVC	{38BE0E1E-64FD-44B3-AB73-6FD0952AD1C9}	CLMH064N081MH064N076	95.51		95.20	0.666666667	MH064N081	MH064N076			104	CLMH064N081MH064N076	8	0.0030	0.004372	0.06	0.005249	0.07	0.006224	0.08	0.005249	0.07
CLMH064N082MH064N032		2002		Existing	assumed Mannings N	MH064N082	MH064N032		T16080	IRWD	PVC	{EB56CFAC-8687-4434-9957-3EE7A9D5F7A4}	CLMH064N082MH064N032	94.55		91.68	0.666666667	MH064N082	MH064N032			62	CLMH064N082MH064N032	8	0.0052	0.003836	0.04	0.004606	0.04	0.005461	0.05	0.004606	0.04
CLMH064N085MH064N092		1998		Existing	assumed Mannings N	MH064N085	MH064N092		A00532D	IRWD	VCP	{41655407-29EF-4925-9013-9FF7A5D2F0F3}	CLMH064N085MH064N092	101.56		99.10	0.833333333	MH064N085	MH064N092			382	CLMH064N085MH064N092	10	0.0064	0.280735	0.33	0.336643	0.37	0.399120	0.40	0.336643	0.37
CLMH064N086MH064N087		1998		Existing	assumed Mannings N	MH064N086	MH064N087		A00532D	IRWD	VCP	{E597CC70-8963-48FC-B376-621C6D5D19FF}	CLMH064N086MH064N087	94.66		89.04	0.833333333	MH064N086	MH064N087			213	CLMH064N086MH064N087	10	0.0149	0.351222	0.31	0.421216	0.34	0.499400	0.37	0.421216	0.34
CLMH064N087MH064N088		1998		Existing	assumed Mannings N	MH064N087	MH064N088		A00532D	IRWD	VCP	{5BF703FA-9851-4776-AB72-EB6753BED0EE}	CLMH064N087MH064N088	88.94		86.48	0.833333333	MH064N087	MH064N088			264	CLMH064N087MH064N088	10	0.0093	0.429634	0.39	0.515236	0.43	0.610870	0.47	0.515235	0.43
CLMH064N088MH064N008	12.49 FROM S-N	1998		Existing	assumed Mannings N	MH064N088	MH064N008		A00532D	IRWD	VCP	{66864147-0068-4804-B348-E8961CD6D28C}	CLMH064N088MH064N008	86.37		83.94	0.833333333	MH064N088	MH064N008			263	CLMH064N088MH064N008	10	0.0093	0.429617	0.39	0.515223	0.43	0.610859	0.47	0.515223	0.43
CLMH064N089MH064N091		2002		Existing	assumed Mannings N	MH064N089	MH064N091		T15871B	IRWD	PVC	{78F19861-16A7-4836-873D-99A070AA721E}	CLMH064N089MH064N091	109.26		105.30	0.666666667	MH064N089	MH064N091			66	CLMH064N089MH064N091	8	0.0600	0.002229	0.02	0.002677	0.03	0.003173	0.03	0.002677	0.03
CLMH064N090MH064N095		2002		Existing	assumed Mannings N	MH064N090	MH064N095		T15871	IRWD	PVC	{9AF64180-30AB-464C-A140-08975F96762C}	CLMH064N090MH064N095	109.75		108.30	0.666666667	MH064N090	MH064N095			127	CLMH064N090MH064N095	8	0.0114	0.055766	0.17	0.066894	0.18	0.079307	0.20	0.066894	0.18
CLMH064N091MH064N092		2002		Existing	assumed Mannings N	MH064N091	MH064N092		T15871B	IRWD	PVC	{98BFF324-C981-4336-98BC-111906EA6EA8}	CLMH064N091MH064N092	105.11		100.62	0.666666667	MH064N091	MH064N092			168	CLMH064N091MH064N092	8	0.0267	0.070532	0.15	0.084602	0.17	0.100301	0.18	0.084602	0.17
CLMH064N092MH064N086		1998		Existing	assumed Mannings N	MH064N092	MH064N086		A00532D	IRWD	VCP	{2F80E415-8F30-471F-886F-6A2795E88901}	CLMH064N092MH064N086	99.10		94.76	0.833333333	MH064N092	MH064N086			382	CLMH064N092MH064N086	10	0.0114	0.351238	0.33	0.421227	0.36	0.499408	0.40	0.421227	0.36
CLMH064N093MH064N094		2002		Existing	assumed Mannings N	MH064N093	MH064N094		T15873	IRWD	PVC	{1876F294-59CF-485C-9120-4635416D7508}	CLMH064N093MH064N094	113.56		109.43	0.666666667	MH064N093	MH064N094			69	CLMH064N093MH064N094	8	0.0048	0.003224	0.04	0.003757	0.05	0.003270	0.05	0.003757	0.05
CLMH064N094MH064N090		2002		Existing	assumed Mannings N	MH064N094	MH064N090		T15875	IRWD	PVC	{EE5D0904-7E9C-49DA-B673-369AF9CE832E}	CLMH064N094MH064N090	113.12		109.94	0.666666667	MH064N094	MH064N090			95	CLMH064N094MH064N090	8	0.0335	0.002324	0.03	0.002757	0.03	0.003270	0.03	0.002757	0.03
CLMH064N095MH064N091		2002		Existing	assumed Mannings N	MH064N095	MH064N091		T15871B	IRWD	PVC	{32436F87-CE63-4523-A7D0-91F9918524A9}	CLMH064N095MH064N091	108.11		105.20	0.666666667	MH064N095	MH064N091			132	CLMH064N095MH064N091	8	0.0220	0.065388	0.15	0.078426	0.17	0.092979	0.18	0.078426	0.17
CLMH064N096MH064N097		2002		Existing	assumed Mannings N	MH064N096	MH064N097		T15871	IRWD	PVC	{50782278-A159-4794-8133-88681515D722}	CLMH064N096MH064N097	116.87		111.93	0.666666667	MH064N096	MH064N097			105	CLMH064N096MH064N097	8	0.0210	0.009046	0.06	0.010860	0.06	0.012875	0.07	0.010860	0.06
CLMH064N097MH064N095		2002		Existing	assumed Mannings N	MH064N097	MH064N095		T15871	IRWD	PVC	{3853987F-6D50-4BD2-B640-25DF84E462EE}	CLMH064N097MH064N095	113.76		108.20	0.666666667	MH064N097	MH064N095			348	CLMH064N097MH064N095	8	0.0160	0.009622	0.07	0.011532	0.07	0.013672	0.08	0.011532	0.07
CLMH064N098MH064N099		2002		Existing	assumed Mannings N	MH064N098	MH064N099		T15871	IRWD	PVC	{1E057A57-BDAD-4AAE-A76E-F8C3E3E41944}	CLMH064N098MH064N099	116.62		115.26	0.666666667	MH064N098	MH064N099			118	CLMH064N098MH064N099	8	0.0115	0.000593	0.02	0.000672	0.02	0.000797	0.02	0.000672	0.02
CLMH064N099MH064N097		2002		Existing	assumed Mannings N	MH064N099	MH064N097		T15871	IRWD	PVC	{F69CF6A8-AD4B-4DB6-B3F8-ADE64D05E086E2}	CLMH064N099MH064N097	115.05		113.86	0.666666667	MH064N099	MH064N097			182	CLMH064N099MH064N097	8	0.0065	0.000593	0.02	0.000672	0.02	0.000797	0.02	0.000672	0.02
CLMH064N100MH064N101		2003		Existing	assumed Mannings N	MH064N100	MH064N101		T15922A	IRWD	PVC	{A0A2EC72-EA7B-4FB1-A975-CA4D0A79ED34}	CLMH064N100MH064N101	106.05		103.52	0.666666667	MH064N100	MH064N101			140	CLMH064N100MH064N101	8	0.0181	0.001328	0.02	0.001596	0.03	0.001891	0.03	0.001596	0.03
CLMH064N101MH064N104		2003		Existing	assumed Mannings N	MH064N101	MH064N104		T15922A	IRWD	PVC	{3FBFE54F-B031-4832-A03A-46FC21C91368}	CLMH064N101MH064N104	103.43		102.75	0.666666667	MH064N101	MH064N104			168	CLMH064N101MH064N104	8	0.0040	0.001328	0.03	0.001596	0.04	0.001891	0.04	0.001596	0.04
CLMH064N102MH064N103		2003		Existing	assumed Mannings N	MH064N102	MH064N103		T15922A	IRWD	PVC	{B42356C9-3898-48F4-9491-66983E49F711}	CLMH064N102MH064N103	105.06		104.05	0.666666667	MH064N102	MH064N103			74	CLMH064N102MH064N103	8	0.0136	0.005651	0.05	0.006713	0.06	0.007958	0.06	0.006713	0.06
CLMH064N103MH064N110		2003		Existing	assumed Mannings N	MH064N103	MH064N110		T15922A	IRWD	PVC	{3E960EDA-139A-4AFB-A1DE-4BB8F1B4BDB}	CLMH064N103MH064N110	103.94		101.61	0.666666667	MH064N103	MH064N110			180	CLMH064N103MH064N110	8	0.0129	0.005651	0.05	0.006713	0.06	0.007958	0.06	0.006713	0.06
CLMH064N104MH064N106		2003		Existing	assumed Mannings N	MH064N104	MH064N106		T15922A	IRWD	PVC	{1C1CF28E-EFC1-4C2E-A291-0A60CF579CB4}	CLMH064N104MH064N106	102.55		102.44	0.666666667	MH064N104	MH064N106			23	CLMH064N104MH064N106	8	0.0048	0.030159	0.09	0.012199	0.10	0.014462	0.10	0.012199	0.10
CLMH064N105MH064N102		2003		Existing	assumed Mannings N	MH064N105	MH064N102		T15922A	IRWD	PVC	{328F2FE3-4B43-4518-9D80-42170D26B154}	CLMH064N105MH064N102	107.05		105.26	0.666666667	MH064N105	MH064N102			179	CLMH064N105MH064N102	8	0.0100	0.001182	0.03	0.001263	0.03	0.001497	0.03	0.001263	0.03
CLMH064N106MH064N110		2003		Existing	assumed Mannings N	MH064N106	MH064N110		T15922A	IRWD	PVC	{6DDA6B2A-F3CD-4CCD-ACE4-FFA36CC9A2E0}	CLMH064N106MH064N110	102.34		101.70	0.666666667	MH064N106	MH064N110			158	CLMH064N106MH064N110	8	0.0041	0.010159	0.09	0.012199	0.10	0.014462	0.11	0.012199	0.10
CLMH064N107MH064N087		2003		Existing	assumed Mannings N	MH064N107	MH064N087		T15922A	IRWD	PVC	{F2F39243-41DE-4093-95F2-ABEC5F668CA4}	CLMH064N107MH064N087	93.72		89.30	0.666666667	MH064N107	MH064N087			74	CLMH064N107MH064N087	8	0.0596	0.078439	0.13	0.094042	0.15	0.111490	0.16	0.094042	0.15
CLMH064N108MH064N112		2003		Existing	assumed Mannings N	MH064N108	MH064N112		T15922A	IRWD	PVC	{A41A3A83-24EA-44A2-8933-D3389380B98}	CLMH064N108MH064N112	104.51		103.84	0.666666667	MH064N108	MH064N112			169	CLMH064N108MH064N112	8	0.0040	0.009346	0.09	0.011219	0.10	0.013304	0.10	0.011219	0.10
CLMH064N109MH064N108		2003		Existing	assumed Mannings N	MH064N109	MH064N108		T15922A	IRWD	PVC	{1C156A68-648D-4C9D-B02A-AB20429A7912}	CLMH064N109MH064N108	105.05		104.72	0.666666667	MH064N109	MH064N108			33	CLMH064N109MH064N108	8	0.0100	0.003023	0.04	0.003628	0.05	0.004303	0.05	0.003628	0.05
CLMH064N110MH064N113		2003		Existing	assumed Mannings N	MH064N110	MH064N113

CLMH0645063MH0645002		1998		Existing	assumed Mannings N	MH0645063	MH0645002		A00880	IRWD	VCP	{38C0FAE4-98E0-48DC-AF25-E1CD3984E233}	CLMH0645063MH0645002	106.97		104.11	1.000000000	MH0645063	MH0645002						400	CLMH0645063MH0645002	12	0.0072	0.100938	0.15	0.121051	0.17	0.143536	0.18	0.121051	0.17
CLMH0645064MH0645006		2003		Existing	assumed Mannings N	MH0645064	MH0645006		A00879C	IRWD	PVC	{36E41FFF-1102-4C2D-85AF-41C2842CB6BD}	CLMH0645064MH0645006	86.30		85.95	0.833333333	MH0645064	MH0645006						163	CLMH0645064MH0645006	10	0.0021	0.013994	0.09	0.014941	0.09	0.017713	0.10	0.014941	0.09
CLMH0645098MH0645040		2001		Existing	assumed Mannings N	MH0645098	MH0645040		A00883C	IRWD	VCP	{5C567F89-BA13-400E-80E1-3E4F3F9854BB}	CLMH0645021MH0645040	91.14		89.98	0.666666667	MH0645098	MH0645040						95	CLMH0645098MH0645040	8	0.0122	0.055244	0.17	0.066089	0.19	0.078350	0.20	0.066089	0.19
CLMH0645099MH0645098		2005		Existing	assumed Mannings N	MH0645099	MH0645098		T16521	IRWD	PVC	{CC3EF867-E6EA-4C6F-A72F-4BD2839094581}	CLMH0645099MH0645098	95.43		93.49	0.666666667	MH0645099	MH0645098						122	CLMH0645099MH0645098	8	0.0159	0.033228	0.12	0.039785	0.13	0.047168	0.14	0.039785	0.13
CLMH0645100MH0645099		2005		Existing	assumed Mannings N	MH0645100	MH0645099		T16521	IRWD	PVC	{C7748888-E8FA-40BF-8742-CC75BE106D6E}	CLMH0645100MH0645099	96.29		95.63	0.666666667	MH0645100	MH0645099						34	CLMH0645100MH0645099	8	0.0194	0.027612	0.11	0.033042	0.11	0.039176	0.12	0.033042	0.11
CLMH0645101MH0645100		2005		Existing	assumed Mannings N	MH0645101	MH0645100		T16521	IRWD	PVC	{F6CA9050-D266-49FC-92FA-4073DA29405A}	CLMH0645101MH0645100	97.58		96.49	0.666666667	MH0645101	MH0645100						74	CLMH0645101MH0645100	8	0.0147	0.017429	0.09	0.020923	0.10	0.024805	0.11	0.020923	0.10
CLMH0645102MH0645101		2005		Existing	assumed Mannings N	MH0645102	MH0645101		T16521	IRWD	PVC	{7E4CE4A2-932A-4057-9FBA-1DD38C790472}	CLMH0645102MH0645101	101.30		97.78	0.666666667	MH0645102	MH0645101						185	CLMH0645102MH0645101	8	0.0190	0.011727	0.07	0.014077	0.08	0.016688	0.08	0.014077	0.08
CLMH0645103MH0645102		2005		Existing	assumed Mannings N	MH0645103	MH0645102		T16521	IRWD	PVC	{C4E2620F-DF4C-471A-9FFF-AB64C2D05F9D}	CLMH0645103MH0645102	105.02		101.50	0.666666667	MH0645103	MH0645102						208	CLMH0645103MH0645102	8	0.0169	0.006131	0.05	0.007360	0.06	0.008726	0.06	0.007360	0.06
CLMH0645104MH0645100		2005		Existing	assumed Mannings N	MH0645104	MH0645100		T16521	IRWD	PVC	{F635FCB9-F643-4719-80B4-BD8A88A6443C}	CLMH0645104MH0645100	97.82		96.49	0.666666667	MH0645104	MH0645100						74	CLMH0645104MH0645100	8	0.0180	0.010183	0.07	0.012119	0.07	0.014371	0.08	0.012119	0.07
CLMH0645105MH0645104		2005		Existing	assumed Mannings N	MH0645105	MH0645104		T16521	IRWD	PVC	{C15CF61C-B991-406E-8763-C408D4520B2B}	CLMH0645105MH0645104	101.33		98.02	0.666666667	MH0645105	MH0645104						178	CLMH0645105MH0645104	8	0.0186	0.010183	0.07	0.012119	0.07	0.014371	0.08	0.012119	0.07
CLMH0645106MH0645105		2005		Existing	assumed Mannings N	MH0645106	MH0645105		T16521	IRWD	PVC	{19CE6DAF-0123-4CFC-877F-E19067349B85}	CLMH0645106MH0645105	104.75		101.53	0.666666667	MH0645106	MH0645105						173	CLMH0645106MH0645105	8	0.0186	0.003995	0.04	0.004791	0.05	0.005682	0.05	0.004791	0.05
CLMH0645107MH0645104		2005		Existing	assumed Mannings N	MH0645107	MH0645104		T16521	IRWD	PVC	{A848FD65-98D6-4E06-988F-D56A60131F5B}	CLMH0645107MH0645104	99.88		98.02	0.666666667	MH0645107	MH0645104						128	CLMH0645107MH0645104	8	0.0145	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH0645108MH0645099		2005		Existing	assumed Mannings N	MH0645108	MH0645099		T16521	IRWD	PVC	{18777892-1F3C-4386-AF92-2C69FF1C9D57}	CLMH0645108MH0645099	98.61		95.63	0.666666667	MH0645108	MH0645099						199	CLMH0645108MH0645099	8	0.0150	0.005616	0.05	0.006743	0.06	0.007993	0.06	0.006743	0.06
CLMH0645109MH0645108		2005		Existing	assumed Mannings N	MH0645109	MH0645108		T16523	IRWD	PVC	{1F47E190-3BF8-4316-B450-E7D62FF3A1B}	CLMH0645109MH0645108	100.42		98.83	0.666666667	MH0645109	MH0645108						161	CLMH0645109MH0645108	8	0.0100	0.005616	0.06	0.006743	0.06	0.007993	0.07	0.006743	0.06
CLMH0645110MH0645109		2005		Existing	assumed Mannings N	MH0645110	MH0645109		T16521	IRWD	PVC	{5C4E9EF0-111E-46A1-811E-A01E4DBF7CF1}	CLMH0645110MH0645109	102.18		100.62	0.666666667	MH0645110	MH0645109						156	CLMH0645110MH0645109	8	0.0101	0.005616	0.06	0.006743	0.06	0.007993	0.07	0.006743	0.06
CLMH064W001MH0445025		1988		Existing		MH064W001	MH0445025		566	IRWD	VCP	{0AEDC739-88EF-4967-90B7-C767126F8FFD}	MH064W001-MH0445025	64.96		64.32	1.500000000	MH064W001	MH0445025						225	CLMH064W001MH0445025	18	0.0028	0.070372	0.09	0.075130	0.09	0.089071	0.10	0.075130	0.09
CLMH064W002MH064W001		1995		Existing	assumed Mannings N	MH064W002	MH064W001		A00814	IRWD	VCP	{FA24EB6C-874C-4175-B250-3D1701EEE1DB}	CLMH064W002MH064W001	65.98		65.29	0.666666667	MH064W002	MH064W001						180	CLMH064W002MH064W001	8	0.0038	0.070372	0.25	0.075130	0.25	0.089071	0.28	0.075130	0.25
CLMH064W003MH064W002		1995		Existing	assumed Mannings N	MH064W003	MH064W002		A00814	IRWD	VCP	{B1452EA2-91C2-480B-8B14-90AA21F30F69}	CLMH064W003MH064W002	67.41		66.08	0.666666667	MH064W003	MH064W002						339	CLMH064W003MH064W002	8	0.0039	0.038352	0.18	0.040944	0.19	0.048543	0.20	0.040944	0.19
CLMH064W004MH064W003		1995		Existing	assumed Mannings N	MH064W004	MH064W003		A00814	IRWD	VCP	{C35AFA41-89CB-46A5-96F2-07138D894EC}	CLMH064W004MH064W003	72.80		67.51	0.666666667	MH064W004	MH064W003						283	CLMH064W004MH064W003	8	0.0187	0.038352	0.13	0.040944	0.13	0.048543	0.15	0.040944	0.13
CLMH064W005MH064W002		1995		Existing	assumed Mannings N	MH064W005	MH064W002		A00814	IRWD	VCP	{E01BE8A4-4D5A-498D-B163-8C18FD9B3922}	CLMH064W005MH064W002	78.76		66.19	0.666666667	MH064W005	MH064W002						65	CLMH064W005MH064W002	8	0.1964	0.005974	0.03	0.006378	0.03	0.007560	0.03	0.006378	0.03
CLMH064W006MH064W002		1995		Existing	assumed Mannings N	MH064W006	MH064W002		A00814	IRWD	VCP	{B0A46F12-047A-408B-B02D-3A2E81478B3B}	CLMH064W006MH064W002	73.76		66.19	0.666666667	MH064W006	MH064W002						136	CLMH064W006MH064W002	8	0.0557	0.026046	0.08	0.027808	0.09	0.032968	0.09	0.027808	0.09
CLMH064W007MH064W006		1995		Existing	assumed Mannings N	MH064W007	MH064W006		A00814	IRWD	VCP	{7C3EE9A0-F3B4-4377-BA0D-DAA435A06921}	CLMH064W007MH064W006	80.00		78.86	0.666666667	MH064W007	MH064W006						290	CLMH064W007MH064W006	8	0.0039	0.003316	0.01	0.000339	0.01	0.000400	0.02	0.000339	0.01
CLMH064W008MH064W006		1995		Existing	assumed Mannings N	MH064W008	MH064W006		A00814	IRWD	VCP	{023CEBCC-B79C-472A-ABE2-6F95C4EB4165}	CLMH064W008MH064W006	76.52		73.87	0.666666667	MH064W008	MH064W006						275	CLMH064W008MH064W006	8	0.0096	0.022078	0.12	0.023571	0.12	0.027945	0.13	0.023571	0.12
CLMH064W009MH064W004		1995		Existing	assumed Mannings N	MH064W009	MH064W004		A00814	IRWD	VCP	{B4526E8E-F98B-493B-AF1D-783FDF78BA28}	CLMH064W009MH064W004	74.48		72.91	0.666666667	MH064W009	MH064W004						347	CLMH064W009MH064W004	8	0.0045	0.001921	0.04	0.002050	0.04	0.002430	0.05	0.002050	0.04
CLMH064W010MH064W009		1995		Existing	assumed Mannings N	MH064W010	MH064W009		A00814	IRWD	VCP	{F0A48798-B6DB-4D7C-9F45-920ADF32FC3C}	CLMH064W010MH064W009	76.02		74.58	0.666666667	MH064W010	MH064W009						363	CLMH064W010MH064W009	8	0.0040	0.000907	0.03	0.000969	0.03	0.001149	0.03	0.000969	0.03
CLMH064W011MH064W004		1995		Existing	assumed Mannings N	MH064W011	MH064W004		A00814	IRWD	VCP	{7037ECB4-D149-4CBC-B0EC-C24887592399}	CLMH064W011MH064W004	80.36		73.01	0.666666667	MH064W011	MH064W004						372	CLMH064W011MH064W004	8	0.0198	0.036431	0.12	0.038893	0.13	0.046113	0.14	0.038893	0.13
CLMH064W012MH064W011		1995		Existing	assumed Mannings N	MH064W012	MH064W011		A00814	IRWD	VCP	{08C02A97-97DD-4768-888A-7316705A4B60}	CLMH064W012MH064W011	82.04		80.45	0.666666667	MH064W012	MH064W011						400	CLMH064W012MH064W011	8	0.0040	0.034426	0.17	0.036753	0.18	0.043574	0.19	0.036753	0.18
CLMH064W013MH064W012		1995		Existing	assumed Mannings N	MH064W013	MH064W012		A00814	IRWD	VCP	{10004854-BAD4-4094-9D31-B8E486267B7F}	CLMH064W013MH064W012	86.73		82.13	0.666666667	MH064W013	MH064W012						402	CLMH064W013MH064W012	8	0.0114	0.033307	0.14	0.035559	0.14	0.042158	0.15	0.035559	0.14
CLMH064W014MH064W006		0.98		Existing	assumed Mannings N	MH064W014	MH064W006		A00495	IRWD	VCP	{A7320A59-178C-4BD5-BF50-7729BE1F775}	MH064W014-MH064W006	71.83		70.99	1.250000000	MH064W014	MH064W006						154	CLMH064W014MH064W006	15	0.0023	0.583128	0.34	0.699078	0.38	0.829826	0.41	0.699078	0.38
CLMH064W015MH064W047		1987		Existing	assumed Mannings N	MH064W015	MH064W047	ERROR 23	A00495	IRWD	VCP	{0460A3B0-96AA-4AA7-A528-B0524CFFD4E6}	MH064W015MH064W047	72.62		72.54	1.250000000	MH064W015	MH064W047						374	CLMH064W015MH064W047	15	0.0002	0.030030	0.34	0.036581	0.39	0.043779	0.43	0.036579	0.39
CLMH064W016MH064W017		1998		Existing	assumed Mannings N	MH064W016	MH064W017		A00877A	IRWD	PVC	{0A29727A7-D78C-4A34-95EA-DA25A3DBA003}	CLMH064W016MH064W017	82.59		80.76	1.250000000	MH064W016	MH064W017						281	CLMH064W016MH064W017	15	0.0065	0.036735	0.38	0.243486	0.42	1.475499	0.46	1.243472	0.42
CLMH064W017MH064W018		1998		Existing	assumed Mannings N	MH064W017	MH064W018		877	IRWD	VCP	{9875AED0-9C76-419A-9170-4166E2AA27A5}	CLMH064W017MH064W018	80.66		79.83	1.250000000	MH064W017	MH064W018						131	CLMH064W017MH064W018	15	0.0063	0.036700	0.38	0.243439	0.42	1.475479	0.47	1.243425	0.42
CLMH064W018MH064W019		1998		Existing	assumed Mannings N	MH064W018	MH064W019		877	IRWD	VCP	{3CA736D1-9F76-477F-B887-05DB39C8D723}	CLMH064W018MH064W019	79.73		78.20	1.250000000	MH064W018	MH064W019						249	CLMH064W018MH064W019	15	0.0061	0.036564	0.39	0.243283	0.43	1.475383	0.47	1.243269	0.43
CLMH064W019MH064W020		1998		Existing	assumed Mannings N	MH064W019	MH064W020		877	IRWD	VCP	{5845BE08-3B56-4A48-A4B7-263863646DCF}	CLMH064W019MH064W020	78.11		76.66	1.250000000	MH064W019	MH064W020						239	CLMH064W019MH064W020	15	0.0061	0.036482	0.39	0.243164	0.43	1.475301	0.47	1.243150	0.43
CLMH064W020MH064W021		1998		Existing	assumed Mannings N	MH064W020	MH064W021		877	IRWD	VCP	{3F25AFFD-144E-4F1A-AEEA-C0F60D35FB8F}	CLMH064W020MH064W021	76.55		76.20	1.250000000	MH064W020	MH064W021						58	CLMH064W020MH064W021	15	0.0060	0.036485	0.39	0.243168	0.43	1.475304	0.47	1.243154	0.43
CLMH064W021MH064W022		1998		Existing	assumed Mannings N	MH064W021	MH064W022		A00877	IRWD	PVC	{13499A84-86C5-4C48-B26A-532D3CB47ED7}	CLMH064W021MH064W022	76.11		74.80	1.250000000	MH064W021	MH064W022						216	CLMH064W021MH064W022	15	0.0061	0.036436	0.39	0.243087	0.43	1.475244	0.47	1.243073	0.43
CLMH064W022MH064W023		1998		Existing	assumed Mannings N	MH064W022	MH064W023		877	IRWD	VCP	{23006300-FE08-4D57-ADC5-58A18EAD850C}	CLMH064W022MH064W023	74.69		73.97	1.250000000	MH064W022	MH064W023						120	CLMH064W022MH064W023	15	0.0060	0.036432	0.39	0.243076	0.43	1.475235	0.47	1.243061	0.43
CLMH064W023MH064W024		1998		Existing	assumed Mannings N	MH064W023	MH064W024		877	IRWD	VCP	{A31352FE-0667-4EC4-82FD-0C7A1F022B7A}	CLMH064W023MH064W024	73.72		70.98	1.500000000	MH064W023	MH064W024						312	CLMH064W023MH064W024	18	0.0088	1.167881	0.29	1.400646	0.32	1.662876	0.35	1.400620	0.32
CLMH064W024MH064W025		1998		Existing	assumed Mannings N	MH064W024	MH064W025		877	IRWD	VCP	{65733E8E-F812-47DB-A200-A42BFA60E90}	CLMH064W024MH064W025	70.88		68.26	1.500000000	MH064W024	MH064W025						300	CLMH064W024MH064W025	18	0.0087	1.168607	0.29	1.403167	0.32	1.663779	0.35	1.401341	0.32
CLMH064W025MH064W026		1998		Existing	assumed Mannings N	MH064W025	MH064W026		877	IRWD	VCP	{93198AD2-AA2D-4A0C-8557-D1CD7726CA19}	CLMH064W025MH064W026	68.16		65.90	1.500000000	MH064W025	MH064W026						210	CLMH064W025MH064W026	18	0.0108	1.257725	0.29	1.507396	0.31	1.789495	0.34	1.507370	0.31
CLMH064W026MH064W027		1998		Existing	assumed Mannings N	MH064W026	MH064W027		877	IRWD	VCP	{50E43AAF-BE34-4E76-9C2C-900A5AEBDFA6}	CLMH064W026MH064W027	65.80		64.76	1.500000000	MH064W026	MH064W027						97	CLMH064W026MH064W027	18	0.0107	1.259807	0.29	1.509621	0.31	1.792134	0.34	1.509595	0.31
CLMH064W027MH064W028		1998		Existing	assumed Mannings N	MH064W027	MH064W028		877	IRWD	VCP	{03CE2EB4-F78E-4C0A-848D-C2ABB52217D2}	CLMH064W027MH064W028	64.66		60.33	1.500000000	MH064W027	MH064W028						241	CLMH064W027MH064W028	18	0.0180	1.259760	0.25	1.509551	0.28	1.792065	0.30	1.509525	0.28
CLMH064W028MH064W029		1998		Existing	assumed Mannings N	MH064W028	MH064W029		877	IRWD	VCP	{45A95623C-8F86-45CC-9C96-0D27A5F730}	CLMH064W028MH064W029	59.45		59.34	1.500000000	MH064W028	MH064W029						176	CLMH064W028MH064W029	18	0.0006	1.259721	0.43	1.509494	0.47	1.792002	0.51	1.509466	0.47
CLMH064W029MH063N060		1998		Existing	assumed Mannings N	MH064W029	MH063N060		877	IRWD	VCP	{A72D63A8-698D-4150-B8BA-29BE1E5ACD5C}	CLMH064W029MH063N060	59.15		56.63	1.750000000	MH064W029	MH063N060						360	CLMH064W029MH063N060	21	0.0070	1.264248	0.26	1.514091	0.28	1.797435	0.31	1.514064	0.28
CLMH064W030MH064W016		1998		Existing	assumed Mannings N	MH064W030	MH064W016		A00880	IRWD	VCP	{8EACD5EB-461D-459C-944A-04DC300EF47C}	CLMH064W030MH064W016	88.91		82.84	0.666666667	MH064W030	MH064W016						80	CLMH064W030MH064W016	12	0.0706	0.101378	0.16	0.121651	0.19	0.144358	0.22	0.121651	0.19
CLMH064W031MH064W030		1998		Existing	assumed Mannings N	MH064W031	MH064W030		A00880	IRWD	VCP	{85E7BA7C-AE8B-4983-96AA-2E2A42EA7BB5}	CLMH064W031MH064W030	93.80		89.01	1.000000000	MH064W031	MH064W030						400	CLMH064W031MH064W030	12	0.0120	0.100867	0.14	0.120997	0.15	0.143499	0.16	0.120997	0.15
CLMH064W032MH064W031		2001		Existing	assumed Mannings N	MH064W032	MH064W031		A00883C	IRWD	VCP	{78B0D90E-8DCE-4D90-9CE1-E56C128B5C3}	CLMH064W032MH064W031	82.05		79.01	0.666666667	MH064W032	MH064W031						334	CLMH064W032MH064W031	8	0.0076	0.001921	0.04	0.002050	0.04	0.002432	0.04	0.002050	0.04
CLMH064W033MH064W023		1998		Existing	assumed Mannings N	MH064W033	MH064W023		A00879	IRWD	VCP	{5CB20FFC-5962-4742-AA4D-C8FF080FAFAC}	CLMH064W033MH064W023	78.72		74.22	1.000000000	MH064W033	MH064W023						74	CLMH064W033MH064W023	12	0.1216	0.134278	0.09	0.159687	0.10	0.189327	0.11	0.159687	0.10
CLMH064W034MH064W036		2001		Existing	assumed Mannings N	MH064W034	MH064W036		A00883C	IRWD	VCP	{6D177650-C1FA-4EE3-8B00-BC66EE4DD539}	CLMH064W034MH064W036	78.81		77.36	0.666666667	MH064W034	MH064W036						290	CLMH064W034MH064W036	8	0.0050	0.001921	0.04	0.002050	0.04	0.002432	0.05	0.002050	0.04
CLMH064W035MH064W033		2002		Existing	assumed Mannings N	MH064W035	MH064W033		A00879	IRWD	VCP	{1F503520-CB75-4509-B75C-E8B1B6B725C4}	CLMH064W035MH064W033	81.18		78.72	1.000000000	MH064W035	MH064W033						370	CLMH064W035MH064W033	12	0.0060	0.025143	0.08	0.026868	0.08	0.031857	0.09	0.026868	0.08
CLMH064W036MH064W038		2001		Existing	assumed Mannings N	MH064W036	MH064W038		A00883C	IRWD	VCP	{1343EF88-2461-4F75-A4F3-6B925DFBC63E}	CLMH064W036MH064W038	77.26		76.02	0.666666667	MH064W036	MH064W038						284	CLMH064W036MH064W038	8	0.0050	0.009014	0.09	0.009622	0.09	0.011408	0.10	0.009622	0.09
CLMH064W037MH064W025		1998		Existing	assumed Mannings N	MH064W037	MH064W025		A00883	IRWD	VCP	{C291B89A-0E19-4EA0-A77A-10E227026A4}	CLMH064W037MH064W025	72.31		68.26	0.833333333	MH064W037	MH064W025						65	CLMH064W037MH064W025	10	0.0623	0.090019	0.25	0.106982	0.28	0.126853	0.31	0.106981	0.28
CLMH064W038MH064W048		2003		Existing	assumed Mannings N	MH064W038	MH064W048		A00883C	IRWD	VCP	{FB88D17C-AD7C-4683-B812-2C95D218E98B}	CLMH064W038MH064W048	75.73		74.80	0.666666667	MH064W038	MH064W048						163	CLMH064W038MH064W048	8	0.0057	0.009014	0.08	0.009622	0.09	0.011408	0.09	0.009622	0.09
CLMH064W040MH064W037		1998		Existing	assumed Mannings N	MH064W040	MH064W037		A00883	IRWD	VCP	{2553462F-A25E-4964-BE86-19E7D3CD6065}	CLMH064W040MH064W037	73.30		72.41	0.833333333	MH064W040	MH064W037						277	CLMH064W040MH064W037	10	0.0032	0.090020	0.21	0.106981	0.23	0.126854	0.26	0.106982	0.23
CLMH064W047MH064W014		1987		Existing	assumed Mannings N	MH064W047	MH064W014		495	IRWD	VCP	{732BED15-B8AB-4354-B198-7D6F1ACF28B7}	CLMH064W047MH064W014	72.44		71.93	1.250000000	MH064W047	MH064W014						374	CLMH064W047MH064W014	15	0.0014	0.583758	0.38	0.699537	0.41	0.830230	0.45	0.699533	0.41
CLMH064W048MH064W029		2001		Existing	assumed Mannings N	MH064W048	MH064W029		A00883C	IRWD	VCP	{A8BF6048-587A-4911-8133-F87E242717AC}	CLMH064W048MH064W029	74.59		60.22	0.666666667	MH064W048	MH064W029						106	CLMH064W048MH064W029	8	0.1369	0.009014	0.04	0.009622	0.04	0.011408	0.05	0.009622	0.04
CLMH064W049MH064W050		1998		Existing	assumed Mannings N	MH064W049	MH064W050		960	IRWD	PVC	{A1B7C4E9-B7D9-4B50-9E11-1F0A9955E6D9}	CLMH064W049MH064W050	93.52		91.02	0.666666667	MH064W049	MH064W050						111	CLMH064W049MH064W050	8	0.0079	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH064W050MH064W055		2002		Existing	assumed Mannings N	MH064W050	MH064W055		960	IRWD	PVC	{E0271510-4714-4ACD-8063-B4D032701A03}	CLMH064W050MH064W055	92.83		91.94	0.666666667	MH064W050	MH064W055						178	CLMH064W050MH064W055	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH064W051MH064W052		2002		Existing	assumed Mannings N	MH064W051	MH064W052		960	IRWD	PVC	{08AD199A-C58E-4F35-8955-697D730AB6FA}	CLMH064W051MH064W052	92.22		89.83	0.666666667	MH064W051	MH064W052						199	CLMH064W051MH064W052	8	0.0120	0.006979	0.06	0.008288	0.07	0.009826	0.07	0.008288	0.07
CLMH064W052MH064W057		2002		Existing	assumed Mannings N	MH064W052	MH064W057		960	IRWD	PVC	{209D74CB-DFC9-4FBC-98DC-151620512D90}	CLMH064W052MH064W057	89.62		88.62	0.666666667	MH064W052	MH064W057						202	CLMH064W052MH064W057	8	0.0050	0.006979	0.07	0.008288	0.08	0.009826	0.09	0.008288	0.08
CLMH064W053MH064W058		2002		Existing	assumed Mannings N	MH064W053	MH064W058		960	IRWD	PVC	{D7F2DE72-0720-4CD5-8772-DCA1EF04BCDF}	CLMH064W053MH064W058	98.45		94.76	0.666666667	MH064W053	MH064W058						199	CLMH064W053MH064W058	8	0.0185	0.005016	0.05	0.006023	0.05	0.007140	0.06	0.006023	0.05
CLMH064W054MH064W058		2002		Existing	assumed Mannings N	MH064W054	MH064W058		960	IRWD	PVC	{AA41260F-A3CF-4DED-9C39-4A71FE76B46E}	CLMH064W054MH064W058	95.93		94.87	0.666666667	MH064W054	MH064W058						212	CLMH064W054MH064W058	8	0.0050	0.008852	0.08	0.010629	0.09	0.012601	0.10	0.010629	0.09
CLMH064W055MH064W056		2002		Existing	assumed Mannings N	MH064W055	MH064W056		960	IRWD	PVC	{AD740C73-ED68-4F20-8E6A-AA71AC18F3DF}	CLMH064W055MH064W056	91.73		89.80	0.666666667	MH064W055	MH064W056						88	CLMH064W055MH064W056	8	0.0219	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH064W056MH064W057		2002		Existing	assumed Mannings N	MH064W056	MH064W057		960	IRWD	PVC	{10AF7D97-F540-49A5-961A-193F59D9F90C}	CLMH064W056MH064W057	89.61		88.62	0.666666667	MH064W056	MH064W057						198	CLMH064W056MH064W057	8	0.0050	0.001887	0.04	0.002265	0.04	0.002686	0.05	0.002265	0.04
CLMH064W057MH064W059		2002		Existing	assumed Mannings N	MH064W057	MH064W059		960	IRWD	PVC	{4DAE3E17-B3A9-4F3F-B2AC-6177C7067CD9}	CLMH064W057MH064W059	88.41		88.08	0.666666667	MH064W057	MH064W059						68	CLMH064W057MH064W059	8	0.0049	0.008866	0.08	0.010553	0.09	0.012512	0.10	0.010553	0.09
CLMH064W058MH064W061		2002		Existing	assumed Mannings N	MH064W058	MH064W061		960	IRWD	PVC	{C596856C-6732-47FB-8084-B6B2A7B7CBEC}	CLMH064W058MH064W061	94.66		94.33	0.666666667	MH064W058	MH064W061						68	CLMH064W058MH064W061	8	0.0049	0.018369	0.12	0.022057	0.13	0.026149	0.14	0.022057	0.13
CLMH064W059MH064W064		2002		Existing	assumed Mannings N	MH064W059	MH064W064		960	IRWD	PVC	{ABFC22D3-3090-41C6-A8DD-9692DEABB63C}	CLMH064W059MH064W064	87.98		86.66	0.666666667	MH064W059	MH064W064						211	CLMH064W059MH064W064	8	0.0063	0.016776	0.11	0.020050	0.12	0.023769	0.13	0.020050	0.12
CLMH064W060MH064W064		2002		Existing	assumed Mannings N	MH064W060	MH064W064		960	IRWD	PVC	{3D6E6610-6E0B-4E65-9D66-A3A181F5DAD6}	CLMH064W060MH064W064	88.33		86.76	0.666666667	MH064W060	MH064W064						202	CLMH064W060MH064W064	8	0.0078	0.004030	0.05	0.004839	0.06	0.005737	0.06	0.004839	0.06
CLMH064W061MH064W065		2002		Existing	assumed Mannings N	MH064W061	MH064W065		A00960	IRWD	PVC	{E99770DC-CE01-44B1-B6AD-EA97DB5EF6D}	CLMH064W061MH064W065	94.12		93.06	0.666666667	MH064W061	MH064W065						212	CLMH064W061MH064W065	8	0.0050	0.018369	0.12	0.022057	0.13	0.026149	0.14	0.022057	0.13
CLMH064W062MH064W063		2002		Existing	assumed Mannings N	MH064W062	MH064

CLMH065E149MH065E147		1999		Existing	assumed Mannings N	MH065E149	MH065E147		T15747	IRWD	PVC	{271D9967-1DD2-48B9-9376-B807FA76DA70}	CLMH065E149MH065E147	149.69	146.91	0.666666667	MH065E149	MH065E147			277	CLMH065E149MH065E147	8	0.0100	0.007710	0.07	0.009260	0.07	0.010975	0.08	0.009260	0.07
CLMH065E150MH065E148		1999		Existing	assumed Mannings N	MH065E150	MH065E148		T15747	IRWD	PVC	{67D404C1-B6E1-4D2C-81A1-1CEAB1492A4E}	CLMH065E150MH065E148	161.80	159.94	0.666666667	MH065E150	MH065E148			275	CLMH065E150MH065E148	8	0.0068	0.011612	0.09	0.013940	0.10	0.016528	0.11	0.013940	0.10
CLMH065E151MH065E150		1999		Existing	assumed Mannings N	MH065E151	MH065E150		T15747	IRWD	PVC	{A2AF8DFB-B15F-4715-9ED8-C8CCD0DAB8EAA}	CLMH065E151MH065E150	162.06	162.00	0.666666667	MH065E151	MH065E150			16	CLMH065E151MH065E150	8	0.0038	0.003654	0.05	0.004386	0.06	0.005200	0.06	0.004386	0.06
CLMH065E152MH065S028		1999		Existing	assumed Mannings N	MH065E152	MH065S028		T15747	IRWD	PVC	{0D8E43B0-F30B-4DF3-B6CE-8E17988AA220}	CLMH065E152MH065S028	152.21	147.52	0.666666667	MH065E152	MH065S028			271	CLMH065E152MH065S028	8	0.0173	0.030216	0.11	0.036155	0.12	0.042868	0.13	0.036155	0.12
CLMH065E159MH065E160		2000		Existing	assumed Mannings N	MH065E159	MH065E160		T15975	IRWD	PVC	{2C32C220-FBC7-4256-8EFC-07D4DFD238F9}	CLMH065E159MH065E160	192.57	185.58	0.666666667	MH065E159	MH065E160			205	CLMH065E159MH065E160	8	0.0341	0.004362	0.04	0.005237	0.04	0.006211	0.05	0.005237	0.04
CLMH065E160MH065E081		2000		Existing	assumed Mannings N	MH065E160	MH065E081		T15975	IRWD	PVC	{1A830DA4-44FF-4B08-9777-9C218DC2C656}	CLMH065E160MH065E081	185.49	179.99	0.666666667	MH065E160	MH065E081			141	CLMH065E160MH065E081	8	0.0391	0.007015	0.15	0.008420	0.17	0.009986	0.19	0.008420	0.38
CLMH065E161MH065N115		2000		Existing	assumed Mannings N	MH065E161	MH065N115		T15975	IRWD	PVC	{E3A3C6CC-6014-4410-987D-8A44B4FFCDDA}	CLMH065E161MH065N115	185.58	180.63	0.666666667	MH065E161	MH065N115			107	CLMH065E161MH065N115	8	0.0463	0.001448	0.02	0.001739	0.02	0.002064	0.03	0.001739	0.02
CLMH065E162MH065E161		2000		Existing	assumed Mannings N	MH065E162	MH065E161		T15975	IRWD	PVC	{B07D9089-10F9-4A24-9381-711184EF9DB8}	CLMH065E162MH065E161	186.25	185.69	0.666666667	MH065E162	MH065E161			107	CLMH065E162MH065E161	8	0.0052	0.001001	0.03	0.001203	0.03	0.001427	0.03	0.001203	0.03
CLMH065E163MH065E164		2003		Existing	assumed Mannings N	MH065E163	MH065E164		T15980	IRWD	PVC	{5BDA215C-FECA-43DF-B06D-C9858D68C68A}	CLMH065E163MH065E164	190.08	186.69	0.666666667	MH065E163	MH065E164			170	CLMH065E163MH065E164	8	0.0199	0.000963	0.02	0.001158	0.02	0.001372	0.02	0.001158	0.02
CLMH065E164MH065E166		2003		Existing	assumed Mannings N	MH065E164	MH065E166		T15980	IRWD	PVC	{319A7290-A9FA-4867-8F4B-073AA6690C30}	CLMH065E164MH065E166	186.49	185.39	0.666666667	MH065E164	MH065E166			273	CLMH065E164MH065E166	8	0.0040	0.003743	0.06	0.004495	0.06	0.005328	0.07	0.004495	0.06
CLMH065E165MH065E166		2003		Existing	assumed Mannings N	MH065E165	MH065E166		T15980	IRWD	PVC	{F3F1E416-7204-41CB-A642-21C56413EADC}	CLMH065E165MH065E166	191.92	185.50	0.666666667	MH065E165	MH065E166			179	CLMH065E165MH065E166	8	0.0359	0.003407	0.03	0.004091	0.04	0.004850	0.04	0.004091	0.04
CLMH065E166MH065E003	67.04' FROM S-N	2003		Existing	assumed Mannings N	MH065E166	MH065E003		T15980	IRWD	PVC	{5DB2C62C-AA78-422D-B43F-99C674FBD02F}	CLMH065E166MH065E003	185.30	184.50	0.666666667	MH065E166	MH065E003			199	CLMH065E166MH065E003	8	0.0040	0.007150	0.08	0.008587	0.08	0.010178	0.09	0.008587	0.08
CLMH065E167MH065E168		2003		Existing	assumed Mannings N	MH065E167	MH065E168		T15980	IRWD	PVC	{76857582-E318-4E52-B2EF-F87DF0CE88FD}	CLMH065E167MH065E168	181.47	176.82	0.666666667	MH065E167	MH065E168			248	CLMH065E167MH065E168	8	0.0188	0.004332	0.04	0.005200	0.05	0.006165	0.05	0.005200	0.05
CLMH065E168MH065E170		2003		Existing	assumed Mannings N	MH065E168	MH065E170		T15980	IRWD	PVC	{86A4D111-657B-4E2B-860C-A51C55E74639}	CLMH065E168MH065E170	176.61	175.52	0.666666667	MH065E168	MH065E170			314	CLMH065E168MH065E170	8	0.0040	0.007134	0.08	0.008565	0.08	0.010154	0.09	0.008565	0.08
CLMH065E169MH065E005	67.54' FROM S-N	2003		Existing	assumed Mannings N	MH065E169	MH065E005		T15980	IRWD	PVC	{7D6F831E-71F2-458D-ADF2-0E7D92562275}	CLMH065E169MH065E005	183.25	182.50	0.666666667	MH065E169	MH065E005			150	CLMH065E169MH065E005	8	0.0050	0.004456	0.06	0.005350	0.06	0.006342	0.07	0.005350	0.06
CLMH065E169MH065E167		2003		Existing	assumed Mannings N	MH065E169	MH065E167		T15980	IRWD	PVC	{CA2E6267-F27E-46DB-B9CF-1AA94EC2C2A2}	CLMH065E169MH065E167	183.25	181.67	0.666666667	MH065E169	MH065E167			326	CLMH065E169MH065E167	8	0.0048	0.004332	0.06	0.005200	0.06	0.006165	0.07	0.005200	0.06
CLMH065E170MH065E226		2000		Existing	assumed Mannings N	MH065E170	MH065E226		T15980	IRWD	PVC	{20257E85-1E98-4EF0-A26A-504470AD3B4B}	CLMH065E170MH065E226	175.42	175.35	0.666666667	MH065E170	MH065E226			214	CLMH065E170MH065E226	8	0.0037	0.012783	0.10	0.015346	0.11	0.018196	0.12	0.015346	0.11
CLMH065E175MH065E177		2002		Existing	assumed Mannings N	MH065E175	MH065E177		T15978	IRWD	PVC	{59CA82A3-AD1F-4E02-BDAF-A53698E431EA}	CLMH065E175MH065E177	173.97	167.83	0.666666667	MH065E175	MH065E177			245	CLMH065E175MH065E177	8	0.0251	0.011432	0.07	0.013727	0.07	0.016274	0.08	0.013727	0.07
CLMH065E176MH065E178		2000		Existing	assumed Mannings N	MH065E176	MH065E178		T15978	IRWD	PVC	{410AB808-3190-42A9-A3F1-92BCFAA3BD45}	CLMH065E176MH065E178	176.27	169.55	0.666666667	MH065E176	MH065E178			240	CLMH065E176MH065E178	8	0.0280	0.010541	0.06	0.012646	0.07	0.014991	0.07	0.012646	0.07
CLMH065E177MH065E089		2000		Existing	assumed Mannings N	MH065E177	MH065E089		T15978	IRWD	PVC	{5FEE14A8-5236-4191-9B26-4876729CF6F0}	CLMH065E177MH065E089	167.63	166.32	0.666666667	MH065E177	MH065E089			210	CLMH065E177MH065E089	8	0.0062	0.035199	0.16	0.042253	0.17	0.050092	0.19	0.042253	0.17
CLMH065E178MH065E177		2000		Existing	assumed Mannings N	MH065E178	MH065E177		T15978	IRWD	PVC	{925860DF-0104-45C9-825D-DAE6E0C6D84C}	CLMH065E178MH065E177	169.36	167.73	0.666666667	MH065E178	MH065E177			272	CLMH065E178MH065E177	8	0.0060	0.023767	0.13	0.028526	0.14	0.033818	0.15	0.028526	0.14
CLMH065E179MH065E176		2000		Existing	assumed Mannings N	MH065E179	MH065E176		T15978	IRWD	PVC	{34E052BF-8EE3-4367-824A-BAD0CFA59B85}	CLMH065E179MH065E176	180.58	176.47	0.666666667	MH065E179	MH065E176			314	CLMH065E179MH065E176	8	0.0131	0.005071	0.05	0.006078	0.06	0.007206	0.06	0.006078	0.06
CLMH065E180MH065E178		2000		Existing	assumed Mannings N	MH065E180	MH065E178		T15978	IRWD	PVC	{5AECBD29-AF90-4142-AB9C-329B1DA5EEA1}	CLMH065E180MH065E178	176.06	169.46	0.666666667	MH065E180	MH065E178			315	CLMH065E180MH065E178	8	0.0210	0.002466	0.03	0.002961	0.04	0.003510	0.04	0.002961	0.04
CLMH065E186MH065N148		2000		Existing	assumed Mannings N	MH065E186	MH065N148		T15977	IRWD	PVC	{715FE9AF-04A2-4855-9CBD-6A8C914590ED}	CLMH065E186MH065N148	165.28	164.41	0.666666667	MH065E186	MH065N148			183	CLMH065E186MH065N148	8	0.0048	0.003855	0.05	0.004630	0.06	0.005491	0.07	0.004630	0.06
CLMH065E190MH065E193		2000		Existing	assumed Mannings N	MH065E190	MH065E193		T15974	IRWD	PVC	{F3B5E004-7C22-43A9-B440-AB7DDE6AA5CB}	CLMH065E190MH065E193	200.99	193.46	0.666666667	MH065E190	MH065E193			269	CLMH065E190MH065E193	8	0.0280	0.006815	0.05	0.008183	0.05	0.009700	0.06	0.008183	0.05
CLMH065E191MH065E192		2000		Existing	assumed Mannings N	MH065E191	MH065E192		T15974	IRWD	PVC	{6B17B020-FD7B-4612-9696-4B444FC407DC}	CLMH065E191MH065E192	205.35	205.02	0.500000000	MH065E191	MH065E192			33	CLMH065E191MH065E192	6	0.0099	0.004438	0.07	0.005328	0.08	0.006318	0.09	0.005328	0.08
CLMH065E192MH065E195		2000		Existing	assumed Mannings N	MH065E192	MH065E195		T15974	IRWD	PVC	{A02C39DA-118D-4344-864C-AED13554043D}	CLMH065E192MH065E195	204.82	197.61	0.666666667	MH065E192	MH065E195			228	CLMH065E192MH065E195	8	0.0316	0.010513	0.06	0.012623	0.06	0.014966	0.07	0.012623	0.06
CLMH065E193MH065E194		2000		Existing	assumed Mannings N	MH065E193	MH065E194		T15974	IRWD	PVC	{4F303592-268D-4ACD-B184-82E0DF8763C5}	CLMH065E193MH065E194	193.25	192.60	0.666666667	MH065E193	MH065E194			114	CLMH065E193MH065E194	8	0.0057	0.011883	0.15	0.014265	0.16	0.016911	0.18	0.014265	0.16
CLMH065E194MH065E002		2000		Existing	assumed Mannings N	MH065E194	MH065E002		T15974	IRWD	PVC	{0B1DB535-E7C1-49C5-93BF-6E68F23E81DB}	CLMH065E194MH065E002	192.60	191.97	0.666666667	MH065E194	MH065E002			228	CLMH065E194MH065E002	8	0.0026	0.035175	0.18	0.042228	0.20	0.050065	0.22	0.042228	0.20
CLMH065E195MH065E194		2000		Existing	assumed Mannings N	MH065E195	MH065E194		T15974	IRWD	PVC	{45D72237-575B-4053-949A-8D3D45291D33}	CLMH065E195MH065E194	197.41	192.80	0.666666667	MH065E195	MH065E194			126	CLMH065E195MH065E194	8	0.0366	0.023292	0.08	0.027963	0.09	0.033154	0.10	0.027963	0.09
CLMH065E196MH065E192		2000		Existing	assumed Mannings N	MH065E196	MH065E192		T15974	IRWD	PVC	{BC5E5D92-C689-40FA-8AD0-6EBE32188281}	CLMH065E196MH065E192	208.52	205.02	0.666666667	MH065E196	MH065E192			214	CLMH065E196MH065E192	8	0.0124	0.006074	0.06	0.007294	0.06	0.008649	0.07	0.007294	0.06
CLMH065E197MH065E195		2000		Existing	assumed Mannings N	MH065E197	MH065E195		T15974	IRWD	PVC	{AA110622-390E-4F42-815F-B4C84EF6BD52}	CLMH065E197MH065E195	201.02	197.50	0.666666667	MH065E197	MH065E195			205	CLMH065E197MH065E195	8	0.0088	0.005717	0.06	0.006862	0.07	0.008138	0.07	0.006862	0.07
CLMH065E198MH065E197		2000		Existing	assumed Mannings N	MH065E198	MH065E197		T15974	IRWD	PVC	{97F1A7D9-F975-4C61-95D6-04A090EC69FE}	CLMH065E198MH065E197	201.45	201.23	0.500000000	MH065E198	MH065E197			29	CLMH065E198MH065E197	6	0.0075	0.001794	0.05	0.002154	0.06	0.002553	0.06	0.002154	0.06
CLMH065E206MH065E079		2000		Existing	assumed Mannings N	MH065E206	MH065E079		T15972	IRWD	PVC	{DB6728CA-0E19-4526-977E-CE9E3FA5A869}	CLMH065E206MH065E079	196.19	195.41	0.666666667	MH065E206	MH065E079			196	CLMH065E206MH065E079	8	0.0040	0.022030	0.13	0.026448	0.15	0.031358	0.16	0.026448	0.15
CLMH065E207MH065E070		2000		Existing	assumed Mannings N	MH065E207	MH065E070		T15972	IRWD	PVC	{AE0E2E1B-0F48-4DAD-9482-56785759E0E9}	CLMH065E207MH065E070	200.58	191.71	0.666666667	MH065E207	MH065E070			247	CLMH065E207MH065E070	8	0.0359	0.004364	0.04	0.005237	0.04	0.006209	0.05	0.005237	0.04
CLMH065E208MH065E091		2000		Existing	assumed Mannings N	MH065E208	MH065E091		T15979	IRWD	PVC	{68BBD813-4A78-46D5-BC46-836021E0D7CF}	CLMH065E208MH065E091	167.02	162.61	0.666666667	MH065E208	MH065E091			113	CLMH065E208MH065E091	8	0.0390	0.004731	0.04	0.005678	0.04	0.006732	0.05	0.005678	0.04
CLMH065E209MH065E009		2002		Existing	assumed Mannings N	MH065E209	MH065E009		T15979	IRWD	PVC	{A87E1C89-B1D9-4857-84A1-2CDE3033A103}	CLMH065E209MH065E009	157.80	156.46	0.666666667	MH065E209	MH065E009			130	CLMH065E209MH065E009	8	0.0103	0.013786	0.09	0.016552	0.10	0.019624	0.10	0.016552	0.10
CLMH065E210MH065E211		2002		Existing	assumed Mannings N	MH065E210	MH065E211		T15979	IRWD	PVC	{1543CB0D-0338-480F-8B70-6DD893090D89}	CLMH065E210MH065E211	169.53	168.67	0.666666667	MH065E210	MH065E211			216	CLMH065E210MH065E211	8	0.0040	0.000336	0.01	0.000403	0.02	0.000478	0.02	0.000403	0.02
CLMH065E211MH065E213		2002		Existing	assumed Mannings N	MH065E211	MH065E213		T15979	IRWD	PVC	{EF7BF199-A7E1-495A-9A42-B0D73F6BF15F}	CLMH065E211MH065E213	168.58	167.80	0.666666667	MH065E211	MH065E213			195	CLMH065E211MH065E213	8	0.0040	0.007599	0.08	0.009122	0.09	0.010817	0.09	0.009122	0.09
CLMH065E212MH065E213		2002		Existing	assumed Mannings N	MH065E212	MH065E213		T15979	IRWD	PVC	{44594DEE-415A-4006-A4CE-E1A6E4482B52}	CLMH065E212MH065E213	178.25	167.69	0.666666667	MH065E212	MH065E213			210	CLMH065E212MH065E213	8	0.0503	0.002601	0.03	0.003121	0.03	0.003700	0.03	0.003121	0.03
CLMH065E213MH065E215		2002		Existing	assumed Mannings N	MH065E213	MH065E215		T15979	IRWD	PVC	{CA560972-8921-4EEC-BEBE-C378960C7EC8}	CLMH065E213MH065E215	167.60	166.83	0.666666667	MH065E213	MH065E215			193	CLMH065E213MH065E215	8	0.0040	0.010200	0.09	0.012243	0.10	0.014517	0.11	0.012243	0.10
CLMH065E214MH065E209		2002		Existing	assumed Mannings N	MH065E214	MH065E209		T15979	IRWD	PVC	{2BE2738C-2D0A-46E5-AAFE-7200DF2BZA53}	CLMH065E214MH065E209	163.75	157.89	0.666666667	MH065E214	MH065E209			396	CLMH065E214MH065E209	8	0.0148	0.009572	0.07	0.011492	0.07	0.013625	0.08	0.011492	0.07
CLMH065E215MH065E148	176' FROM S-N IS	2002		Existing	assumed Mannings N	MH065E215	MH065E148		T15979	IRWD	PVC	{CC884E19-B538-4A05-853B-2DFBB1E87F96}	CLMH065E215MH065E148	166.72	162.66	0.666666667	MH065E215	MH065E148			422	CLMH065E215MH065E148	8	0.0096	0.013361	0.09	0.016037	0.10	0.019016	0.10	0.016037	0.10
CLMH065E216MH065E217		2002		Existing	assumed Mannings N	MH065E216	MH065E217		T15979	IRWD	PVC	{A9DDB421-53D9-468A-841B-EA02E0790EEB}	CLMH065E216MH065E217	177.86	165.15	0.666666667	MH065E216	MH065E217			346	CLMH065E216MH065E217	8	0.0367	0.002825	0.03	0.003391	0.03	0.004021	0.04	0.003391	0.03
CLMH065E217MH065E150	193' FROM S-N IS	2002		Existing	assumed Mannings N	MH065E217	MH065E150		T15979	IRWD	PVC	{4AEFE732-71DB-4D07-9F16-C15155D4C83E}	CLMH065E217MH065E150	164.59	162.00	0.666666667	MH065E217	MH065E150			209	CLMH065E217MH065E150	8	0.0059	0.007959	0.08	0.009554	0.08	0.011328	0.09	0.009554	0.08
CLMH065E226MH065E006		1998		Existing	assumed Mannings N	MH065E226	MH065E006		A008828	IRWD	PVC	{D6C58194-5A2B-4855-BAC0-025C68D268EB}	CLMH065E226MH065E006	174.39	172.89	0.666666667	MH065E226	MH065E006			355	CLMH065E226MH065E006	8	0.0042	0.099416	0.28	0.119340	0.31	0.141488	0.34	0.119340	0.31
CLMH065E227MH065E235		2000		Existing	assumed Mannings N	MH065E227	MH065E235		T15494	IRWD	PVC	{723B1FBF-3022-4779-8AA0-B3D29E1478DF}	CLMH065E227MH065E235	158.38	157.56	0.833333333	MH065E227	MH065E235			164	CLMH065E227MH065E235	10	0.0050	0.091776	0.23	0.110141	0.21	0.130582	0.23	0.110141	0.21
CLMH065E235MH065E009		2000		Existing	assumed Mannings N	MH065E235	MH065E009		T15494	IRWD	PVC	{E3198701-6438-4181-9CCA-45A8239DF2C}	CLMH065E235MH065E009	157.37	156.36	0.833333333	MH065E235	MH065E009			57	CLMH065E235MH065E009	10	0.0196	0.091776	0.14	0.110141	0.15	0.130582	0.17	0.110141	0.15
CLMH065N001MH065N003		2000		Existing	assumed Mannings N	MH065N001	MH065N003		T15432	IRWD	PVC	{97CCA320-438D-415D-B2BD-26F70C36C828}	CLMH065N001MH065N003	181.86	179.21	0.666666667	MH065N001	MH065N003			265	CLMH065N001MH065N003	8	0.0100	0.003114	0.04	0.003739	0.05	0.004433	0.05	0.003739	0.05
CLMH065N002MH065N006		2000		Existing	assumed Mannings N	MH065N002	MH065N006		T15432	IRWD	PVC	{02257518-0E48-4A26-860A-2D9C54FA48}	CLMH065N002MH065N006	175.83	172.68	0.666666667	MH065N002	MH065N006			326	CLMH065N002MH065N006	8	0.0097	0.002852	0.04	0.003425	0.05	0.004059	0.05	0.003425	0.05
CLMH065N003MH065N004		2000		Existing	assumed Mannings N	MH065N003	MH065N004		T15432	IRWD	PVC	{31F9FD93-7284-4072-9C9F-777E0AFCDE24}	CLMH065N003MH065N004	179.11	177.46	0.666666667	MH065N003	MH065N004			165	CLMH065N003MH065N004	8	0.0100	0.007630	0.07	0.009161	0.07	0.010862	0.08	0.009161	0.07
CLMH065N004MH065N035		1998		Existing	assumed Mannings N	MH065N004	MH065N035		T15432	IRWD	PVC	{D1A1498A-46AB-4809-8465-141B0E996925}	CLMH065N004MH065N035	177.36	176.70	0.666666667	MH065N004	MH065N035			171	CLMH065N004MH065N035	8	0.0039	0.007630	0.08	0.009161	0.09	0.010862	0.10	0.009161	0.09
CLMH065N005MH065N008		2002		Existing	assumed Mannings N	MH065N005	MH065N008		T15432	IRWD	PVC	{CD105FC8-188F-4931-B3F8-91A1967AA3E1}	CLMH065N005MH065N008	176.86	172.75	0.666666667	MH065N005	MH065N008			209	CLMH065N005MH065N008	8	0.0180	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH065N005MH065N010		2002		Existing	assumed Mannings N	MH065N005	MH065N010		T15432	IRWD	PVC	{D4371D2F-8DE1-473D-B508-0E272272026C}	CLMH065N005MH065N010	176.83	173.17	0.666666667	MH065N005	MH065N010			244	CLMH065N005MH065N010	8	0.0150	0.001372	0.03	0.001647	0.03	0.001953	0.03	0.001647	0.03
CLMH065N006MH065N011		2000		Existing	assumed Mannings N	MH065N006	MH065N011		T15432	IRWD	PVC	{1877AC7C-24DA-4604-9C3A-32E70A641861}	CLMH065N006MH065N011	172.46	170.74	0.666666667	MH065N006	MH065N011			226	CLMH065N006MH065N011	8	0.0076	0.002852	0.04	0.003425	0.05	0.004059	0.05	0.003425	0.05
CLMH065N007MH065N012		1998		Existing	assumed Mannings N	MH065N007	MH065N012		T15432	IRWD	PVC	{8CCBF188-0A91-4138-9C75-B12B26D65525}	CLMH065N007MH065N012	166.63	163.38	0.666666667	MH065N007	MH065N012			250	CLMH065N007MH065N012	8	0.0130	0.003855	0.05	0.004628	0.05	0.005487	0.06	0.004628	0.05
CLMH065N008MH065N013		2000		Existing	assumed Mannings N	MH065N008	MH065N013		T15432	IRWD	PVC	{73F79C3C-9918-4C9B-A801-985385C18489}	CLMH065N008MH065N013	172.55	169.78	0.666666667	MH065N008	MH065N013			253	CLMH065N008MH065N013	8	0.0221	0.003253	0.04	0.003906	0.04	0.004630	0.04	0.003906	0.04
CLMH065N009MH065N007		1998		Existing	assumed Mannings N	MH065N009	MH065N007		T15435	IRWD	PVC	{615B8FCE-5AA5-4785-91D1-882067A9DF27}	CLMH065N009MH065N007	170.61	166.83	0.666666667	MH065N009	MH065N007			189	CLMH065N009MH065N007	8	0.0200	0.003855	0.04	0.004628	0.05	0.005487	0.05	0.004628	0.05
CLMH065N010MH065N015		2000		Existing	assumed Mannings N	MH065N010	MH065N015		T15432	IRWD	PVC	{B4CBBABF-78C1-4F59-B883-EADF189770D8}	CLMH065N010MH065N015	173.08	169.72	0.666666667	MH065N010	MH065N015			225	CLMH065N010MH065N015	8	0.0149	0.005689	0.05	0.006830	0.06	0.008097	0.06	0.006830	0.06
CLMH065N011MH065N015		2000		Existing	assumed Mannings N	MH065N011	MH065N015		T15432	IRWD	PVC	{CA38246F-D860-411A-9B6F-4892785B83FD}	CLMH065N011MH065N015	170.53	169.61	0.666666667	MH065N011	MH065N015			230	CLMH065N011MH065N015	8	0.0040	0.005749	0.07	0.006905	0.08	0.008185	0.08	0.006905	0.08
CLMH065N012MH065N016		2000		Existing	assumed Mannings N	MH065N012	MH065N016		T15432	IRWD	PVC	{A8884610-4EA2-4CA2-BAFB-16ACD79904B1}	CLMH065N012MH065N016	163.29	153.39	0.666666667	MH065N012	MH065N016			247	CLMH065N012MH065N016	8	0.0400	0.005706	0.04	0.006850	0.05	0.008119	0.05	0.006850	0.05
CLMH065N013MH065N019		2000		Existing	assumed Mannings N	MH065N013	MH065N019		T15432	IRWD	PVC	{BF842FB1-A037-4166-BF52-5E6FD944FB51}	CLMH065N013MH065N019	169.69	167.33	0.666666667	MH065N013	MH065N019			335	CLMH065N013MH065N019	8	0.0070	0.015667	0.10	0.018814	0.11	0.022307	0.12	0.018814	0.11
CLMH065N014MH065N020		1998		Existing	assumed Mannings N	MH065N014	MH065N020		T15435	IRWD	PVC	{EACDE75A-3C84-401F-87FD-D9C108583AA2}	CLMH065N014MH065N020	161.47	159.97	0.666666667	MH065N014	MH065N020			302	CLMH065N014MH065N020	8	0.0050	0.001989	0.04	0.002389	0.04	0.002831	0.05	0.002389	0.04
CLMH065N015MH065N019		2000		Existing	assumed Mannings N	MH065N015	MH065N019		T15432	IRWD	PVC	{840D3BDF-2B60-4903-A009-7102E7DB1BE3}	CLMH065N015MH065N019	169.52	167.44	0.666666667	MH065N015	MH065N019			240	CLMH065N015MH065N019	8	0.0087	0.011438	0.08	0.013735	0.09	0.016282	0.10	0.013735	0.09
CLMH065N016MH065N018		2000		Existing	assumed Mannings N	MH065N016	MH065N018		T15432	IRWD	PVC	{89ABCAEE-416B-4773-B683-9654FAFB67D2D}	CLMH065N016MH065N018	153.19	152.81	0.833333333	MH065N016	MH065N018			137	CLMH065N016MH065N018	10	0.0028	0.052979	0.16	0.063622	0.18	0.075428	0.19	0.063622	0.18
CLMH065N017MH065N099		1988		Existing	assumed Mannings N	MH065N017	MH065N099	535	IRWD	PVC	{0D147045-D66F-4371-85A5-895EAE35661}	CLMH065N017MH065N099	150.97	149.89	1.000000000	MH065N017	MH065N099	Less than 15-in, d/D >0.50	92	CLMH065N017MH065N099	12	0.0117	1.401772	0.51	1.711592	0.58	2.034063	0.65	3.017781	0.95
CLMH065N018MH065N017		2000		Existing	assumed Mannings N	MH065N018	MH065N017		T15432	IRWD	PVC	{43B041DC-811C-4314-96AF-BBA296C3CC54}	CLMH065N018MH065N017	152.71	152.40	0.833333333	MH065N018	MH065N017			111	CLMH065N018MH065N017	10	0.0028	0.052976	0.16	0.063620	0.18	0.075427	0.19	0.063620	0.18
CLMH065N019MH065N023		2000		Existing	assumed Mannings N	MH065N019	MH065N023		T15432	IRWD	PVC	{F54C7D19-0717-403C-B131-8BEFFFA23E96}	CLMH065N019MH065N023	167.24	156.36	0.666666667	MH065N019	MH065N023			380	CLMH065N019MH065N023	8	0.0286	0.031298	0.10	0.037583	0.11	0.044558	0.12	0.037583	0.11
CLMH065N020MH065N022		1998		Existing	assumed Mannings N	MH065N020	MH065N022		T15435	IRWD	PVC	{EE7728EC4-CA28-4286-8C3B-ABDCD2848C7E}	CLMH065N020MH065N022	159.86	155.05	0.666666667	MH065N020	MH065N022			244	CLMH065N020MH065N022	8	0.0197	0.005704	0.05	0.006850	0.05	0.008119	0.06	0.006850	0.05
CLMH065N021MH065N016		2000		Existing	assumed Mannings N	MH065N021	MH065N016		T15432	IRWD	PVC	{B09C345F-A959-45BF-BB7C-44DFACFF12CC}	CLMH065N021MH065N016	154.04	153.39	0.833333333	MH065N021	MH065N016			231	CLMH065N021MH065N016	10	0.0028	0.047276	0.15	0.056774	0.17	0.067311	0.18	0.056774	0.17
CLMH065N022MH065N021		2000		Existing	assumed Mannings N	MH065N022	MH065N021		T15432	I

CLMH0655041MH0655042		1999		Existing	assumed Mannings N	MH0655042	MH0655043		T15652	IRWD	PVC	{74081838-A2A7-47FA-830A-C61F025358E6}	CLMH0655042MH0655043	124.90	124.58	0.66666667	MH0655041	MH0655042															
CLMH0655042MH0655043		1999		Existing	assumed Mannings N	MH0655042	MH0655043		T15652	IRWD	PVC	{3FC6B05C-824A-4561-AF9A-156D3F0D3FF6}	CLMH0655042MH0655043	124.37	123.86	0.66666667	MH0655042	MH0655043		103	CLMH0655042MH0655043	8	0.0049	0.005806	0.07	0.006964	0.07	0.008256	0.08	0.006964	0.07
CLMH0655043MH0655044		1999		Existing	assumed Mannings N	MH0655043	MH0655044		T15652	IRWD	PVC	{EA3A79E3-7DFF-458E-B21C-70266E2424CA}	CLMH0655043MH0655044	123.66	122.30	0.66666667	MH0655043	MH0655044		271	CLMH0655043MH0655044	8	0.0050	0.009064	0.08	0.010876	0.09	0.012894	0.10	0.010876	0.09
CLMH0655044MH0655045		1999		Existing	assumed Mannings N	MH0655044	MH0655045		T15652	IRWD	PVC	{A2AF6AE9-9AC1-4559-A2AB-1C1C5971F153EB}	CLMH0655044MH0655045	122.11	121.16	0.66666667	MH0655044	MH0655045		189	CLMH0655044MH0655045	8	0.0050	0.019481	0.11	0.017979	0.12	0.021314	0.13	0.017979	0.12
CLMH0655045MH0655053		1999		Existing	assumed Mannings N	MH0655045	MH0655053		T15652	IRWD	PVC	{3D31BCEC-FEAD-45C1-9A28-49E154241D9B}	CLMH0655045MH0655053	123.05	122.26	0.66666667	MH0655045	MH0655053		161	CLMH0655045MH0655053	8	0.0049	0.009152	0.08	0.010988	0.09	0.013026	0.10	0.010988	0.09
CLMH0655046MH0655054		1999		Existing	assumed Mannings N	MH0655046	MH0655054		T15652	IRWD	PVC	{D1B0AD56-A9AB-4014-8088-D8AC7128A563}	CLMH0655046MH0655054	127.91	124.69	0.66666667	MH0655046	MH0655054		147	CLMH0655046MH0655054	8	0.0172	0.003279	0.04	0.003938	0.04	0.004668	0.05	0.003938	0.04
CLMH0655047MH0655137		1999		Existing	assumed Mannings N	MH0655137	MH0655047		T15652	IRWD	PVC	{32211981-2D6D-4A8F-A624-5ADBA54DE8F8}	CLMH0655047MH0655137	120.63	120.11	0.66666667	MH0655137	MH0655047		187	CLMH0655047MH0655137	8	0.0160	0.006559	0.06	0.007875	0.07	0.009337	0.07	0.007875	0.07
CLMH0655050MH0655051		1999		Existing	assumed Mannings N	MH0655050	MH0655051		T15652	IRWD	PVC	{8B09ED56-178E-4C88-827E-0C8DF07EAD9C}	CLMH0655050MH0655051	123.63	121.16	0.66666667	MH0655050	MH0655051		52	CLMH0655050MH0655051	8	0.0478	0.002487	0.03	0.002985	0.03	0.003540	0.03	0.002985	0.03
CLMH0655051MH0655137		1999		Existing	assumed Mannings N	MH0655051	MH0655137		T15652	IRWD	PVC	{127764D2-CBE5-4BBD-B368-8757A9AE1F3F}	CLMH0655051MH0655137	120.72	120.11	0.66666667	MH0655051	MH0655137		120	CLMH0655051MH0655137	8	0.0051	0.060768	0.23	0.083698	0.25	0.099232	0.27	0.083698	0.25
CLMH0655053MH0655051		1999		Existing	assumed Mannings N	MH0655053	MH0655051		T15652	IRWD	PVC	{34DD6A91-8F2D-420F-B5FC-B213A09AE051}	CLMH0655053MH0655051	122.05	121.16	0.66666667	MH0655053	MH0655051		191	CLMH0655053MH0655051	8	0.0047	0.052301	0.20	0.062736	0.22	0.074378	0.24	0.062736	0.22
CLMH0655054MH0655053		1999		Existing	assumed Mannings N	MH0655054	MH0655053		T15652	IRWD	PVC	{3E2EEF63-B522-4D33-9316-7A2B169AFEDC}	CLMH0655054MH0655053	124.48	124.40	0.66666667	MH0655054	MH0655053		4	CLMH0655054MH0655053	8	0.0189	0.035989	0.12	0.043153	0.13	0.051160	0.14	0.043153	0.13
CLMH0655055MH0655056		1999		Existing	assumed Mannings N	MH0655055	MH0655056		T15652	IRWD	PVC	{E79B3459-4523-4CB3-8DB9-E8C9F2A98096}	CLMH0655055MH0655056	135.13	132.77	0.66666667	MH0655055	MH0655056		118	CLMH0655055MH0655056	8	0.0200	0.004030	0.04	0.004839	0.05	0.005737	0.05	0.004839	0.05
CLMH0655056MH0655057		1999		Existing	assumed Mannings N	MH0655056	MH0655057		T15652	IRWD	PVC	{60FF0F5C-85B9-47FC-BACB-48CEF998F8EB}	CLMH0655056MH0655057	132.58	131.86	0.66666667	MH0655056	MH0655057		88	CLMH0655056MH0655057	8	0.0081	0.004030	0.05	0.004839	0.06	0.005737	0.06	0.004839	0.06
CLMH0655057MH0655062		1999		Existing	assumed Mannings N	MH0655057	MH0655062		T15652	IRWD	PVC	{B1915088-0660-4C30-B85A-047816ABF492}	CLMH0655057MH0655062	131.08	130.46	0.66666667	MH0655057	MH0655062		64	CLMH0655057MH0655062	8	0.0097	0.004030	0.05	0.004839	0.05	0.005737	0.06	0.004839	0.05
CLMH0655058MH0655059		1999		Existing	assumed Mannings N	MH0655059	MH0655058		T15652	IRWD	PVC	{9E933607-0AB1-478B-931C-7F3D45FD3774}	CLMH0655058MH0655059	128.44	127.05	0.66666667	MH0655058	MH0655059		52	CLMH0655058MH0655059	8	0.0269	0.003173	0.04	0.003809	0.04	0.004517	0.04	0.003809	0.04
CLMH0655059MH0655054		1999		Existing	assumed Mannings N	MH0655059	MH0655054		T15652	IRWD	PVC	{7C53218F-7B64-44D3-9A62-B3827C224532}	CLMH0655059MH0655054	125.97	124.69	0.66666667	MH0655059	MH0655054		257	CLMH0655059MH0655054	8	0.0050	0.032710	0.16	0.039215	0.17	0.046492	0.19	0.039215	0.17
CLMH0655061MH0655059		1999		Existing	assumed Mannings N	MH0655061	MH0655059		T15652	IRWD	PVC	{2B970DCD-50FA-463C-B41D-FACAF6335E75}	CLMH0655061MH0655059	127.34	126.16	0.66666667	MH0655061	MH0655059		52	CLMH0655061MH0655059	8	0.0226	0.026687	0.10	0.031983	0.11	0.037918	0.12	0.031983	0.11
CLMH0655062MH0655061		1999		Existing	assumed Mannings N	MH0655062	MH0655061		T15652	IRWD	PVC	{66489441E-9188-4868-A5DE-EADE4045D4D5}	CLMH0655062MH0655061	130.25	127.65	0.66666667	MH0655062	MH0655061		174	CLMH0655062MH0655061	8	0.0150	0.013097	0.08	0.015725	0.09	0.018643	0.09	0.015725	0.09
CLMH0655063MH0655061		1999		Existing	assumed Mannings N	MH0655063	MH0655061		T15652	IRWD	PVC	{1B43548D-2062-486F-9CEB-9E5E84CB2632}	CLMH0655063MH0655061	130.80	127.65	0.66666667	MH0655063	MH0655061		295	CLMH0655063MH0655061	8	0.0107	0.009410	0.07	0.011239	0.08	0.013325	0.09	0.011239	0.08
CLMH0655064MH0655063		1999		Existing	assumed Mannings N	MH0655064	MH0655063		T15652	IRWD	PVC	{4104F140-C786-43CC-93E4-378A493B67BC}	CLMH0655064MH0655063	131.55	131.00	0.66666667	MH0655064	MH0655063		310	CLMH0655064MH0655063	8	0.0110	0.005958	0.06	0.007155	0.06	0.008482	0.07	0.007155	0.06
CLMH0655067MH0655037		1998		Existing	assumed Mannings N	MH0655067	MH0655037		A0088ZB	HWD	VCP	{E9E598F7-B29E-445A-B143-D252251E7E88D}	CLMH0655067MH0655037	132.77	131.69	1.000000000	MH0655067	MH0655037		86	CLMH0655067MH0655037	12	0.0125	0.222089	0.20	0.266315	0.22	0.315914	0.24	0.266315	0.22
CLMH0655068MH0655001		1998		Existing	assumed Mannings N	MH0655068	MH0655001		A0088ZB	HWD	VCP	{739D0A86-C98B-407A-A126-C2D4F2294D9}	CLMH0655068MH0655001	128.28	126.95	1.000000000	MH0655068	MH0655001		126	CLMH0655068MH0655001	12	0.0150	0.240158	0.20	0.287986	0.22	0.341611	0.24	0.287986	0.22
CLMH0655070MH0655082		1999		Existing	assumed Mannings N	MH0655070	MH0655082		T15742	IRWD	PVC	{43770B5F-BFF1-4BAD-9341-5259F7A16AD4}	CLMH0655070MH0655082	150.97	149.76	0.66666667	MH0655070	MH0655082		243	CLMH0655070MH0655082	8	0.0050	0.026091	0.14	0.031328	0.15	0.037143	0.17	0.031328	0.15
CLMH0655071MH0655145		1999		Existing	assumed Mannings N	MH0655071	MH0655145		T15742	IRWD	PVC	{BB12FDD7-F3F3-4029-9C28-762D2AFD4FDC}	CLMH0655071MH0655145	162.39	157.69	0.66666667	MH0655071	MH0655145		228	CLMH0655071MH0655145	8	0.0206	0.008966	0.06	0.010766	0.07	0.012764	0.07	0.010766	0.07
CLMH0655074MH0655145		1999		Existing	assumed Mannings N	MH0655074	MH0655145		T15742	IRWD	PVC	{82288A41-C139-4E7E-9586-14E4EED0D8B6}	CLMH0655074MH0655145	159.33	157.80	0.66666667	MH0655074	MH0655145		69	CLMH0655074MH0655145	8	0.0050	0.003901	0.05	0.004683	0.06	0.005553	0.06	0.004683	0.06
CLMH0655075MH0655086		1999		Existing	assumed Mannings N	MH0655075	MH0655086		T15742	IRWD	PVC	{6F8F270C-A2D2-4590-BA1D-D95930BE83BD}	CLMH0655075MH0655086	148.22	147.35	0.66666667	MH0655075	MH0655086		220	CLMH0655075MH0655086	8	0.0040	0.036381	0.17	0.043681	0.19	0.051789	0.20	0.043681	0.19
CLMH0655079MH0655144		1999		Existing	assumed Mannings N	MH0655079	MH0655144		T15743	IRWD	PVC	{45888D08-722B-47E0-9CAB-0119A702F504}	CLMH0655079MH0655144	167.39	163.60	0.66666667	MH0655079	MH0655144		370	CLMH0655079MH0655144	8	0.0102	0.003811	0.05	0.004574	0.05	0.005425	0.06	0.004574	0.05
CLMH0655080MH0655081		1998		Existing	assumed Mannings N	MH0655080	MH0655081		T15743	IRWD	PVC	{152F5350-884E-48DA-9920-F728B7B3F3F2}	CLMH0655080MH0655081	160.80	153.69	0.66666667	MH0655080	MH0655081		363	CLMH0655080MH0655081	8	0.0190	0.004550	0.04	0.005463	0.05	0.006478	0.05	0.005463	0.05
CLMH0655083MH0655084		1998		Existing	assumed Mannings N	MH0655083	MH0655084		T15743	IRWD	PVC	{6F506475-A04C-4B79-95FF-1C3D2F0ED22AA}	CLMH0655083MH0655084	153.60	151.33	0.66666667	MH0655083	MH0655084		83	CLMH0655083MH0655084	8	0.0064	0.021898	0.12	0.026286	0.13	0.031167	0.15	0.026286	0.13
CLMH0655082MH0655075		1998		Existing	assumed Mannings N	MH0655082	MH0655075		T15742	IRWD	PVC	{9AAB3101-09B0-4C39-A518-DFAADADCB295}	CLMH0655082MH0655075	149.56	148.41	0.66666667	MH0655082	MH0655075		285	CLMH0655082MH0655075	8	0.0040	0.029678	0.15	0.035635	0.17	0.042247	0.18	0.035635	0.17
CLMH0655083MH0655084		1999		Existing	assumed Mannings N	MH0655083	MH0655084		T15743	IRWD	PVC	{13303F68-3CB4-44A4-95AB-406CBCF5C1A5}	CLMH0655083MH0655084	151.13	149.08	0.66666667	MH0655083	MH0655084		255	CLMH0655083MH0655084	8	0.0080	0.027660	0.13	0.033201	0.14	0.039366	0.15	0.033201	0.14
CLMH0655084MH0655087		1999		Existing	assumed Mannings N	MH0655084	MH0655087		T15743	IRWD	PVC	{AA46FCF8-C492-48CA-B274-1D610EF1DEF1}	CLMH0655084MH0655087	148.88	146.88	0.66666667	MH0655084	MH0655087		173	CLMH0655084MH0655087	8	0.0116	0.032457	0.15	0.038961	0.17	0.046194	0.18	0.038960	0.17
CLMH0655086MH0655087		1999		Existing	assumed Mannings N	MH0655086	MH0655087		T15743	IRWD	PVC	{15AFD485-EE1A-4E1F-A4EC-6ADB3CB82AF1D}	CLMH0655086MH0655087	147.14	146.88	0.66666667	MH0655086	MH0655087		46	CLMH0655086MH0655087	8	0.0056	0.009968	0.07	0.011958	0.09	0.013966	0.09	0.011958	0.09
CLMH0655087MH0655024		1999		Existing	assumed Mannings N	MH0655087	MH0655024		T15743	IRWD	PVC	{FB29382AF-A751-442B-9CE3-2FCA18CE62B7}	CLMH0655087MH0655024	146.88	145.10	0.66666667	MH0655087	MH0655024		146	CLMH0655087MH0655024	8	0.0160	0.072424	0.18	0.086948	0.19	0.103089	0.21	0.086948	0.19
CLMH0655090MH0655036		1999		Existing	assumed Mannings N	MH0655090	MH0655036		T15739	IRWD	PVC	{F3AF2906-8C47-477D-A206-08C00F702AE8}	CLMH0655090MH0655036	139.08	130.60	0.66666667	MH0655090	MH0655036		330	CLMH0655090MH0655036	8	0.0257	0.005806	0.05	0.006971	0.06	0.008264	0.08	0.006971	0.06
CLMH0655091MH0655068		1999		Existing	assumed Mannings N	MH0655091	MH0655068		T15739	IRWD	PVC	{CCD03674-1B29-4021-9E6E-A0B19CAB2A67}	CLMH0655091MH0655068	133.25	128.49	0.66666667	MH0655091	MH0655068		108	CLMH0655091MH0655068	8	0.0441	0.001704	0.02	0.002045	0.03	0.002425	0.03	0.002045	0.03
CLMH0655092MH0655091		1999		Existing	assumed Mannings N	MH0655092	MH0655091		T15739	IRWD	PVC	{9344713E-8B23-4622-8EBE-04F48BA80EBDE}	CLMH0655092MH0655091	137.60	133.46	0.66666667	MH0655092	MH0655091		317	CLMH0655092MH0655091	8	0.0131	0.001704	0.03	0.002045	0.03	0.002425	0.04	0.002045	0.03
CLMH0655094MH0655021		1999		Existing	assumed Mannings N	MH0655094	MH0655021		T15744	IRWD	PVC	{5D06A69C-3F02-4051-9E37-C8A432D117E6}	CLMH0655094MH0655021	164.44	160.80	0.66666667	MH0655094	MH0655021		269	CLMH0655094MH0655021	8	0.0135	0.015694	0.09	0.018840	0.10	0.022335	0.10	0.018840	0.10
CLMH0655097MH0655098		1999		Existing	assumed Mannings N	MH0655097	MH0655098		T15740	IRWD	PVC	{1555135A-BFF2-4384-AFCC-DAFC6F46137B}	CLMH0655097MH0655098	143.11	142.24	0.66666667	MH0655097	MH0655098		213	CLMH0655097MH0655098	8	0.0078	0.002937	0.04	0.003525	0.05	0.004181	0.05	0.003525	0.05
CLMH0655098MH0655100		1998		Existing	assumed Mannings N	MH0655098	MH0655100		T15740	IRWD	PVC	{6A33ABB6-F946-479D-89F2-BDE1CE3C8146}	CLMH0655098MH0655100	142.13	141.36	0.66666667	MH0655098	MH0655100		110	CLMH0655098MH0655100	8	0.0070	0.005269	0.06	0.006324	0.07	0.007499	0.07	0.006324	0.07
CLMH0655100MH0655101		1999		Existing	assumed Mannings N	MH0655100	MH0655101		T15740	IRWD	PVC	{9BF1B821-EE45-4A77-A5DF-701CEF69B12C}	CLMH0655100MH0655101	141.25	135.19	0.66666667	MH0655100	MH0655101		114	CLMH0655100MH0655101	8	0.0532	0.013292	0.06	0.015960	0.06	0.018923	0.07	0.015960	0.06
CLMH0655101MH0655067		1999		Existing	assumed Mannings N	MH0655101	MH0655067		T15740	IRWD	PVC	{F155007A-F975-4D22-8670-38A265A66A2F}	CLMH0655101MH0655067	135.00	133.08	0.66666667	MH0655101	MH0655067		84	CLMH0655101MH0655067	8	0.0269	0.014347	0.07	0.017225	0.08	0.020423	0.09	0.017225	0.08
CLMH0655119MH0655023		1998		Existing	assumed Mannings N	MH0655119	MH0655023		15746	IRWD	PVC	{8A8CE805-C107-4658-953E-1C5813E09321}	CLMH0655119MH0655023	153.58	152.19	0.66666667	MH0655119	MH0655023		143	CLMH0655119MH0655023	8	0.0097	0.005358	0.06	0.006433	0.07	0.007625	0.08	0.006433	0.07
CLMH0655125MH0655012		1998		Existing	assumed Mannings N	MH0655125	MH0655012		A0088ZA	HWD	PVC	{3A2AD50F-C434-4009-A5BD-3CC3A04C2D94}	CLMH0655125MH0655012	137.13	136.25	0.66666667	MH0655125	MH0655012		220	CLMH0655125MH0655012	8	0.0040	0.019736	0.13	0.021070	0.13	0.024982	0.14	0.021070	0.13
CLMH0655126MH0655125		1998		Existing	assumed Mannings N	MH0655126	MH0655125		A0088ZA	HWD	PVC	{09B24670-0987-486D-B761-76CB352D4E9E}	CLMH0655126MH0655125	140.64	137.22	0.66666667	MH0655126	MH0655125		280	CLMH0655126MH0655125	8	0.0122	0.019736	0.10	0.021070	0.10	0.024982	0.11	0.021070	0.10
CLMH0655127MH0655126		1998		Existing	assumed Mannings N	MH0655127	MH0655126		A0088ZA	HWD	PVC	{7A014496-E3B0-4F26-A9E0-8639AE8D3E81}	CLMH0655127MH0655126	141.41	140.77	0.66666667	MH0655127	MH0655126		127	CLMH0655127MH0655126	8	0.0050	0.017287	0.11	0.018456	0.12	0.021882	0.13	0.018456	0.12
CLMH0655128MH0655127		1998		Existing	assumed Mannings N	MH0655128	MH0655127		A0088ZA	HWD	PVC	{D178E4CA-3E56-401B-9CF1-3F1DBF6E4D3A}	CLMH0655128MH0655127	143.25	141.50	0.66666667	MH0655128	MH0655127		340	CLMH0655128MH0655127	8	0.0051	0.007916	0.08	0.008455	0.08	0.010018	0.09	0.008455	0.08
CLMH0655130MH0655015		1998		Existing	assumed Mannings N	MH0655130	MH0655015		A0088ZA	HWD	PVC	{0DE27742D-CBE8-4F35-BDE4-096350A498B3}	CLMH0655130MH0655015	134.63	133.21	0.66666667	MH0655130	MH0655015		316	CLMH0655130MH0655015	8	0.0038	0.007957	0.08	0.008494	0.09	0.010073	0.09	0.008494	0.09
CLMH0655131MH0655130		1998		Existing	assumed Mannings N	MH0655131	MH0655130		A0088ZA	HWD	PVC	{BA2CD32E-E6CD-48E8-9713-483455D119A9}	CLMH0655131MH0655130	139.58	134.72	0.66666667	MH0655131	MH0655130		316	CLMH0655131MH0655130	8	0.0154	0.004580	0.05	0.004889	0.05	0.005798	0.05	0.004889	0.05
CLMH0655132MH0655131		1998		Existing	assumed Mannings N	MH0655132	MH0655131		A0088ZA	HWD	PVC	{A3B9B3D0-C213-4146-B32E-6F9B4EB3F5DD}	CLMH0655132MH0655131	142.39	139.67	0.66666667	MH0655132	MH0655131		131	CLMH0655132MH0655131	8	0.0118	0.002977	0.04	0.003577	0.04	0.003768	0.05	0.003177	0.04
CLMH0655133MH0655134		1999		Existing	assumed Mannings N	MH0655134	MH0655133		T15652	IRWD	PVC	{ED6A8029-CFAB-4CED-9695-A5C94EE35F15}	CLMH0655133MH0655134	127.19	124.65	0.66666667	MH0655134	MH0655133		48	CLMH0655133MH0655134	8	0.0535	0.006774	0.04	0.008132	0.05	0.009640	0.05	0.008132	0.05
CLMH0655134MH0655135		1999		Existing	assumed Mannings N	MH0655134	MH0655135		T15652	IRWD	PVC	{94D03C85-3C07-49C2-ABCB-132BA81A178B}	CLMH0655134MH0655135	124.44	124.11	0.66666667	MH0655134	MH0655135		69	CLMH0655134MH0655135	8	0.0048	0.006774	0.07	0.008132	0.08	0.009640	0.09	0.008132	0.08
CLMH0655135MH0655045		1999		Existing	assumed Mannings N	MH0655135	MH0655045		T15652	IRWD	PVC	{37ABAD15-C557-4826-BB7C-30E7F4C9BD21}	CLMH0655135MH0655045	123.91	123.26	0.66666667	MH0655135	MH0655045		131	CLMH0655135MH0655045	8	0.0050	0.006774	0.07	0.008132	0.08	0.009640	0.09	0.008132	0.08
CLMH0655136MH0655018		1999		Existing	assumed Mannings N	MH0655136	MH0655018		T15652	IRWD	PVC	{3615E9C3-07FE-4CB1-8654-1FB95AD1E095}	CLMH0655136MH0655018	114.41	111.15	0.66666667	MH0655136	MH0655018		114	CLMH0655136MH0655018	8	0.0652	0.076327	0.17	0.091573	0.41	0.108568	0.45	0.091573	0.41
CLMH0655137MH0655136		1999		Existing	assumed Mannings N	MH0655137	MH0655136		T15652	IRWD	PVC	{66236E7E-C328-41A6-A400-DB5271F3CADE}	CLMH0655137MH0655136	119.91	114.61	0.66666667	MH0655137	MH0655136		53	CLMH0655137MH0655136	8	0.1012	0.076327	0.12	0.091573	0.13	0.108568	0.14	0.091573	0.13
CLMH0655138MH0655053		1999		Existing	assumed Mannings N	MH0655138	MH0655053		T15652	IRWD	PVC	{5AA8C0FE-75EA-4208-8738-AAFFE8B8960B}	CLMH0655138MH0655053	125.19	122.26	0.66666667	MH0655138	MH0655053		52	CLMH0655138MH0655053	8	0.0567	0.007159	0.04	0.008595	0.05	0.010191	0.05	0.008595	0.05
CLMH0655139MH0655062		1999		Existing	assumed Mannings N	MH0655139	MH0655062		T15652	IRWD	PVC	{8E676EA5-5A77-42C1-A34E-523E8AB0602F}	CLMH0655139MH0655062	132.74	130.46	0.66666667	MH0655139	MH0655062		52	CLMH0655139MH0655062	8	0.0441	0.006344	0.04	0.007617	0.05	0.009031	0.05	0.007617	0.05
CLMH0655140MH0655143		1999		Existing	assumed Mannings N	MH0655140	MH0655143		T15743	IRWD	PVC	{78590DCF-2907-49BE-9C1A-7537DFC1B24B}	CLMH0655140MH0655143	156.77	155.02	0.66666667	MH0655140	MH0655143		437	CLMH0655140MH0655143	8	0.0069	0.004817	0.06	0.005781	0.07	0.006854	0.08	0.005781	0.07
CLMH0655141MH0655028		1998		Existing	assumed Mannings N	MH0655141	MH0655028		A0088ZB	HWD	PVC	{697EF081-2F37-4238-84EC-BD3A211693F7}	CLMH0655141MH0655028	150.80	147.62	0.66666667	MH0655141	MH0655028		259	CLMH0655141MH0655028	8	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH0655142MH0655W012		1998		Existing	assumed Mannings N	MH0655142	MH0655W012		A0088ZB	HWD	VCP	{AC45CC34-796C-40C8-A56E-DD15BC869389}	CLMH0655142MH0655W012	139.22	136.80	1.000000000	MH0655142	MH0655W012		158	CLMH0655142MH0655W012	12	0.0153	0.192505	0.18	0.230794	0.19	0.273801	0.21	0.230794	0.19
CLMH0655143MH0655081		1998		Existing	assumed Mannings N	MH0655143	MH0655081		T15743	IRWD	PVC	{5C3B68DB-7105-42A9-837E-E6CA477549D8}	CLMH0655143MH0655081	154.83	153.78	0.66666667	MH0655143	MH0655081		259	CLMH0655143MH0655081	8	0.0041	0.017349	0.12	0.020824	0.13	0.024689	0.14	0.020824	0.13
CLMH0655144MH0655143		1999		Existing	assumed Mannings N	MH0655144	MH0655143		T15743	IRWD	PVC	{F1AF97C2-FAC9-4826-8E58-78ED23730223}	CLMH0655144MH0655143	163.50	155.02	0.66666667	MH0655144	MH0655143		249	CLMH0655144MH0655143	8	0.0341	0.008138	0.05	0.009768	0.06	0.011582	0.06	0.009768	0.06
CLMH0655145MH0655070		1999		Existing	assumed Mannings N	MH0655145	MH0655070		T15742	IRWD	PVC	{115BD394-2F2C-41B4-823A-6D666667D698}	CLMH0655145MH0655070	157.60	151.07	0.66666667	MH0655145	MH0655070		213	CLMH0655145MH0655070	8	0.0307	0.018493	0.08	0.022205	0.09	0.026326	0.09	0.022205	0.09
CLMH0655146MH0655159		2002		Existing	assumed Mannings N	MH0655146	MH0655159		T15652A	IRWD	PVC	{423F82C3-154B-486E-B0E5-B7774D950938}	CLMH0655146MH0655159	136.50	133.00	0.66666667	MH0655146	MH0655159		276	CLMH0655146MH0655159	8	0.0127	0.017784	0.09	0.021297	0.10	0.025247	0.11	0.021297	0.10
CLMH0655147MH0655159		2002		Existing	assumed Mannings N	MH0655147	MH0655159		T15652A	IRWD	PVC	{68466E78C-0491-4CC5-82FB-BDB5E9936E4F}	CLMH0655147MH0655159	136.70	133.00	0.66666667	MH0655147	MH0655159		197	CLMH0655147MH0655159	8	0.0188	0.011782	0.07	0.014133	0.08	0.016758	0.08	0.014133	0.08
CLMH0655148MH0655147		2002		Existing	assumed Mannings N	MH0655148	MH0655147		T15652A	IRWD	PVC	{49FEBF5D-113A-46A5-A236-E5E50AA75D66}	CLMH0655148MH0655147	139.67	136.90	0.66666667	MH0655148	MH0655147		329	CLMH0655148MH0655147	8	0.0084	0.006302	0.06	0.007565	0.07	0.008969	0.08	0.007565	0.07
CLMH0655149MH0655157		2002		Existing	assumed Mannings N	MH0655149	MH0655157		T15652A	IRWD	PVC	{46A3D86C-CB05-40E8-900A-D0DD8315FAEA}	CLMH0655149MH0655157	132.09	129.70	0.66666667	MH0655149	MH0655157		255	CLMH0655149MH0655157	8	0.0094	0.002808	0.04	0.003371	0.05	0.003997	0.05	0.003371	0.05
CLMH0655150MH0655151		2002		Existing	assumed Mannings N	MH0655150	MH0655151		T15652A	IRWD	PVC	{2031B54F-2B02-4E4B-86E8-F930B9A2901C}	CLMH0655150MH0655151	134.96	134.50	0.66666667	MH0655150	MH0655151		50	CLMH0655150MH0655151	8	0.0092	0.004630	0.05	0.005559	0.06	0.006591	0.06	0.005559	0.06
CLMH0655151MH0655156		2002		Existing	assumed Mannings N	MH0655151	MH0655156		T15652A	IRWD	PVC	{63E3EC50-E9A9-4007-AECE-0843FD770DE3}	CLMH0655151MH0655156	134.30	133.49	0.66666667	MH0655151	MH0655156		206	CLMH0655151MH0655156	8	0.0039	0.005937	0.07	0.007130	0.08	0.008452	0.08	0.007130	0.08
CLMH0655152MH0655151		2002		Existing	assumed Mannings N	MH0655152	MH0655151		T15652A	IRWD	PVC	{1AC6D6D4-1D62-4E8F-85AB-9E6489BDFFF1}	CLMH0655152MH0655151	137.00	134.50	0.66666667	MH0655152	MH0655151		118	CLMH0655152MH0655151	8	0.0212	0.001307	0.02	0.001570	0.03	0.001861	0.03	0.001570	0.03
CLMH0655153MH0655155		2002		Existing	assumed Mannings N	MH0655153	MH0655155		T15652A	IRWD	PVC	{09418657-EB93-4E98-B4B1-FB3219C93CBB}	CLMH0655153MH0655155	141.90	141.27	0.66666667	MH0655153	MH0655155		163	CLMH0655153MH0655155	8	0.0039	0.003559	0.06	0.004273	0.06	0.005066	0

CLMH065S158MH065S160		2002		Existing	assumed Mannings N	MH065S158	MH065S160		T15652A	IRWD	PVC	{47E4451F-3672-41FA-AE1C-ABD7FC6CD3D7}	CLMH065S158MH065S160	132.46	128.71	0.666666667	MH065S158	MH065S160																	
CLMH065S159MH065S158		2002		Existing	assumed Mannings N	MH065S159	MH065S158		T15652A	IRWD	PVC	{A5B2B64F-92B0-405A-8D40-0D7FD152F870}	CLMH065S159MH065S158	132.80	132.66	0.666666667	MH065S159	MH065S158		39	CLMH065S159MH065S158	8	0.0036	0.029567	0.09	0.035430	0.10	0.042005	0.18	0.035430	0.17		
CLMH065S160MH065S164		2002		Existing	assumed Mannings N	MH065S160	MH065S164		T15652A	IRWD	PVC	{58E0CCF4-02C4-486D-ADDA-14604EF00CA6}	CLMH065S160MH065S164	128.51	127.70	0.666666667	MH065S160	MH065S164		207	CLMH065S160MH065S164	8	0.0039	0.041871	0.18	0.050204	0.20	0.059520	0.22	0.050204	0.20		
CLMH065S161MH065S165		2002		Existing	assumed Mannings N	MH065S161	MH065S165		T15652A	IRWD	PVC	{67072A1B-635E-420A-8319-018AA916A24F}	CLMH065S161MH065S165	126.54	125.73	0.666666667	MH065S161	MH065S165		208	CLMH065S161MH065S165	8	0.0039	0.053575	0.21	0.064256	0.23	0.076178	0.25	0.064256	0.23		
CLMH065S162MH065S161		2002		Existing	assumed Mannings N	MH065S162	MH065S161		T15652A	IRWD	PVC	{936DA010-C5AB-4DEF-8332-2FAF76AECB95}	CLMH065S162MH065S161	128.92	126.74	0.666666667	MH065S162	MH065S161		48	CLMH065S162MH065S161	8	0.0454	0.002422	0.03	0.002908	0.03	0.003448	0.03	0.002908	0.03		
CLMH065S163MH065S164		2002		Existing	assumed Mannings N	MH065S163	MH065S164		T15652A	IRWD	PVC	{B7D7ABB1-293F-4F16-88ED-A13F91D30B02}	CLMH065S163MH065S164	129.90	127.70	0.666666667	MH065S163	MH065S164		48	CLMH065S163MH065S164	8	0.0458	0.009281	0.05	0.011144	0.06	0.013210	0.06	0.011144	0.06		
CLMH065S164MH065S161		2002		Existing	assumed Mannings N	MH065S164	MH065S161		T15652A	IRWD	PVC	{4F3DD277-4603-465B-B701-C37F57A3A8A8}	CLMH065S164MH065S161	127.50	126.74	0.666666667	MH065S164	MH065S161		193	CLMH065S164MH065S161	8	0.0039	0.051152	0.20	0.061348	0.22	0.072730	0.24	0.061348	0.22		
CLMH065S165MH065S173		2002		Existing	assumed Mannings N	MH065S165	MH065S173		T15652A	IRWD	PVC	{B8D3E160-4ECD-4F13-9903-ACF9A5566048}	CLMH065S165MH065S173	125.53	124.42	0.666666667	MH065S165	MH065S173		380	CLMH065S165MH065S173	8	0.0029	0.067357	0.25	0.080805	0.27	0.095796	0.30	0.080805	0.27		
CLMH065S166MH065S165		2002		Existing	assumed Mannings N	MH065S166	MH065S165		T15652A	IRWD	PVC	{0A606704-B81C-4A1B-BA6B-7DC6CF574927}	CLMH065S166MH065S165	130.40	125.73	0.666666667	MH065S166	MH065S165		98	CLMH065S166MH065S165	8	0.0477	0.013783	0.06	0.016547	0.07	0.019617	0.07	0.016549	0.07		
CLMH065S167MH065S166		2002		Existing	assumed Mannings N	MH065S167	MH065S166		T15652A	IRWD	PVC	{C9A4508A-868E-4F47-9184-515DC3A4D8B0}	CLMH065S167MH065S166	135.40	130.60	0.666666667	MH065S167	MH065S166		196	CLMH065S167MH065S166	8	0.0245	0.002614	0.03	0.003141	0.04	0.003722	0.04	0.003141	0.04		
CLMH065S168MH065S173		2002		Existing	assumed Mannings N	MH065S168	MH065S173		T15652A	IRWD	PVC	{E9845142-7E4E-4839-B80B-D97B2597CD0E}	CLMH065S168MH065S173	133.20	124.42	0.666666667	MH065S168	MH065S173		293	CLMH065S168MH065S173	8	0.0300	0.004074	0.04	0.004890	0.04	0.005796	0.05	0.004890	0.04		
CLMH065S169MH065W249		2002		Existing	assumed Mannings N	MH065S169	MH065W249		T15652A	IRWD	PVC	{15DD0BE3-62D1-419F-A05D-DB97BE7D3011}	CLMH065S169MH065W249	130.00	129.30	0.666666667	MH065S169	MH065W249		160	CLMH065S169MH065W249	8	0.0086	0.004917	0.06	0.005881	0.06	0.006971	0.07	0.005881	0.06		
CLMH065S170MH065S171		2002		Existing	assumed Mannings N	MH065S170	MH065S171		T15652A	IRWD	PVC	{92B6E83E-C5CB-441A-85A3-CA61D1E2BA16}	CLMH065S170MH065S171	129.80	127.20	0.666666667	MH065S170	MH065S171		47	CLMH065S170MH065S171	8	0.0553	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH065S171MH065S172		2002		Existing	assumed Mannings N	MH065S171	MH065S172		T15652A	IRWD	PVC	{4DB3054A-0909-4EA5-9B79-29FD99B1A4F2}	CLMH065S171MH065S172	127.00	123.40	0.666666667	MH065S171	MH065S172		76	CLMH065S171MH065S172	8	0.0474	0.009110	0.05	0.010937	0.06	0.012967	0.06	0.010937	0.06		
CLMH065S172MH065W251		2002		Existing	assumed Mannings N	MH065S172	MH065W251		T15652A	IRWD	PVC	{492EC873-91E9-4EC9-9625-CD9FA1F984DC}	CLMH065S172MH065W251	123.20	122.09	0.666666667	MH065S172	MH065W251		207	CLMH065S172MH065W251	8	0.0054	0.080540	0.24	0.096632	0.27	0.114559	0.29	0.096632	0.27		
CLMH065S173MH065S172		2002		Existing	assumed Mannings N	MH065S173	MH065S172		T15652A	IRWD	PVC	{04D21764-3C53-4A47-AB8F-E55D52F00280}	CLMH065S173MH065S172	124.22	123.40	0.666666667	MH065S173	MH065S172		208	CLMH065S173MH065S172	8	0.0039	0.071430	0.24	0.085695	0.26	0.101592	0.29	0.085695	0.26		
CLMH065S177MH065S070		1999		Existing	assumed Mannings N	MH065S177	MH065S070		T15742	IRWD	PVC	{E68048F9-7514-4B4F-BD82-E350BEC14A30}	CLMH065S177MH065S070	154.58	151.16	0.666666667	MH065S177	MH065S070		398	CLMH065S177MH065S070	8	0.0086	0.005424	0.06	0.006512	0.06	0.007721	0.07	0.006512	0.06		
CLMH065S216MH064E008		1998		Existing	assumed Mannings N	MH065S216	MH064E008		A00882	IRWD	VCP	{32299713-ED8F-442A-ABF6-599901DA2B06}	CLMH065S216MH064E008	127.74	127.24	0.666666667	MH065S216	MH064E008		129	CLMH065S216MH064E008	8	0.0039	0.031028	0.16	0.037213	0.17	0.039277	0.18	0.037213	0.17		
CLMH065W002MH043E024		1998		Existing	assumed Mannings N	MH065W002	MH043E024		A00860	IRWD	PVC	{8D1B4FDA-5A4D-49BC-8FCC-2CBC546ADE02}	CLMH065W002MH043E024	145.52	144.00	0.666666667	MH065W002	MH043E024		383	CLMH065W002MH043E024	8	0.0040	0.068083	0.23	0.081625	0.26	0.096777	0.28	0.081625	0.26		
CLMH065W003MH065W002		1998		Existing	assumed Mannings N	MH065W003	MH065W002		A00860	IRWD	PVC	{DB396C02-7E3C-4DBD-B5C4-4BF18CAA9381}	CLMH065W003MH065W002	147.19	145.61	0.666666667	MH065W003	MH065W002		367	CLMH065W003MH065W002	8	0.0040	0.067999	0.23	0.081534	0.26	0.096667	0.28	0.081534	0.26		
CLMH065W004MH065W003		1998		Existing	assumed Mannings N	MH065W004	MH065W003		A00860	IRWD	PVC	{B1087174-3076-4D97-B47D-404CC25B14F3}	CLMH065W004MH065W003	148.77	147.30	0.666666667	MH065W004	MH065W003		367	CLMH065W004MH065W003	8	0.0040	0.067287	0.23	0.080789	0.26	0.095780	0.28	0.080789	0.26		
CLMH065W005MH065W004		1998		Existing	assumed Mannings N	MH065W005	MH065W004		T15512	IRWD	PVC	{D4022023-9B48-45CA-B5C0-0CBC6B2134EF}	CLMH065W005MH065W004	149.74	148.97	0.666666667	MH065W005	MH065W004		364	CLMH065W005MH065W004	8	0.0103	0.007584	0.06	0.007598	0.06	0.008537	0.07	0.007598	0.06		
CLMH065W006MH065W005		1998		Existing	assumed Mannings N	MH065W006	MH065W005		T15512	IRWD	PVC	{ACF43B74-DEC8-4296-AC06-2320E4C2B31C}	CLMH065W006MH065W005	151.36	149.83	0.666666667	MH065W006	MH065W005		364	CLMH065W006MH065W005	8	0.0058	0.005997	0.07	0.007199	0.07	0.008537	0.08	0.007199	0.07		
CLMH065W007MH065W006		1998		Existing	assumed Mannings N	MH065W007	MH065W006		T15512	IRWD	PVC	{D833D615-4448-4172-B3F2-E0823FA908BF}	CLMH065W007MH065W006	152.91	151.47	0.666666667	MH065W007	MH065W006		364	CLMH065W007MH065W006	8	0.0040	0.002652	0.05	0.003183	0.05	0.003175	0.06	0.003183	0.05		
CLMH065W008MH065W010	UFF2	1998		Existing	assumed Mannings N	MH065W008	MH065W010		877	IRWD	VCP	{41FA9326-6A46-412B-9874-EF3B1C728AB8}	CLMH065W008MH065W010	119.51	118.23	1.000000000	MH065W008	MH065W010		186	CLMH065W008MH065W010	12	0.0069	0.496019	0.35	0.595073	0.42	0.595073	0.38	0.705715	0.42		
CLMH065W010MH065W011		1998		Existing	assumed Mannings N	MH065W010	MH065W011		877	IRWD	VCP	{71360E1F-1C25-4136-A551-56F8676F2FBB}	CLMH065W010MH065W011	118.12	116.19	1.000000000	MH065W010	MH065W011		73	CLMH065W010MH065W011	12	0.0264	0.496018	0.26	0.595073	0.29	0.705715	0.32	0.595072	0.29		
CLMH065W011MH065S016		1998		Existing	assumed Mannings N	MH065W011	MH065S016		A00877	IRWD	VCP	{F3D8A649-4D29-439A-9A25-1E42E0401F5B}	CLMH065W011MH065S016	116.08	114.02	1.000000000	MH065W011	MH065S016		293	CLMH065W011MH065S016	12	0.0070	0.584441	0.38	0.701172	0.42	0.831511	0.46	0.701171	0.42		
CLMH065W012MH065W066		1998		Existing	assumed Mannings N	MH065W012	MH065W066		A00882B	IRWD	VCP	{65B8EC15-9A8E-4305-B1FD-29FBE3369EF3}	CLMH065W012MH065W066	136.60	134.80	1.000000000	MH065W012	MH065W066		116	CLMH065W012MH065W066	12	0.0255	0.200326	0.16	0.240184	0.17	0.284934	0.19	0.240184	0.17		
CLMH065W013MH065W012		1998		Existing	assumed Mannings N	MH065W013	MH065W012		A00882B	IRWD	VCP	{861421AA-F8C5-4978-BC08-5D5C7F5E72F2}	CLMH065W013MH065W012	134.60	132.97	1.000000000	MH065W013	MH065W012		35	CLMH065W013MH065W012	12	0.0460	0.394292	0.14	0.473151	0.16	0.547580	0.16	0.473151	0.16		
CLMH065W069MH065W073		2000		Existing	assumed Mannings N	MH065W069	MH065W073		T15877	IRWD	PVC	{1D74D045-BF0F-40B1-B671-3DFE0B0E04B9}	CLMH065W069MH065W073	127.58	125.50	0.666666667	MH065W069	MH065W073		163	CLMH065W069MH065W073	8	0.0128	0.003108	0.04	0.003732	0.05	0.004425	0.05	0.003732	0.05		
CLMH065W070MH065W110		2000		Existing	assumed Mannings N	MH065W070	MH065W110		T15877	IRWD	PVC	{D755AF68-381C-4331-BA88-ED827BAC6BF0}	CLMH065W070MH065W110	122.68	120.97	0.666666667	MH065W070	MH065W110		160	CLMH065W070MH065W110	8	0.0179	0.006409	0.05	0.007694	0.06	0.009123	0.06	0.007694	0.06		
CLMH065W072MH065W070		2000		Existing	assumed Mannings N	MH065W072	MH065W070		T15877	IRWD	PVC	{6C77C29E-C683-41EA-8E52-DD4B6FA2C3F7}	CLMH065W072MH065W070	125.72	122.87	0.666666667	MH065W072	MH065W070		95	CLMH065W072MH065W070	8	0.0302	0.002829	0.03	0.003397	0.04	0.004027	0.04	0.003397	0.04		
CLMH065W073MH065W242		2000		Existing	assumed Mannings N	MH065W073	MH065W242		T15877	IRWD	PVC	{077E4916-364F-4A30-990D-A1C0566EA65F}	CLMH065W073MH065W242	125.40	123.33	0.666666667	MH065W073	MH065W242		162	CLMH065W073MH065W242	8	0.0128	0.007801	0.06	0.009369	0.07	0.011106	0.08	0.009369	0.07		
CLMH065W076MH065W077		2000		Existing	assumed Mannings N	MH065W076	MH065W077		T15877	IRWD	PVC	{094CEE7E-7E72-4F56-970E-495922D754E84}	CLMH065W076MH065W077	121.27	120.52	0.666666667	MH065W076	MH065W077		186	CLMH065W076MH065W077	8	0.0040	0.017854	0.12	0.021440	0.13	0.025416	0.14	0.021440	0.13		
CLMH065W077MH065W116		2000		Existing	assumed Mannings N	MH065W077	MH065W116		T15877	IRWD	PVC	{8D6EF1C3-A09D-40E2-B7EB-E73C34056972}	CLMH065W077MH065W116	120.43	118.51	0.666666667	MH065W077	MH065W116		96	CLMH065W077MH065W116	8	0.0201	0.022247	0.09	0.026715	0.10	0.031670	0.11	0.026715	0.10		
CLMH065W078MH065W083		2000		Existing	assumed Mannings N	MH065W078	MH065W083		T15875	IRWD	PVC	{152D1A8A-FB9C-45CA-B1B0-4D30A2AF6018}	CLMH065W078MH065W083	127.25	124.06	0.666666667	MH065W078	MH065W083		265	CLMH065W078MH065W083	8	0.0120	0.003923	0.05	0.004709	0.05	0.005585	0.06	0.004709	0.05		
CLMH065W079MH065W070		2000		Existing	assumed Mannings N	MH065W079	MH065W070		T15877	IRWD	PVC	{6B72A95D-B2C6-49EE-BCD3-F75A829CC657}	CLMH065W079MH065W070	126.08	122.77	0.666666667	MH065W079	MH065W070		183	CLMH065W079MH065W070	8	0.0181	0.002079	0.03	0.002495	0.04	0.002959	0.04	0.002495	0.03		
CLMH065W080MH065W077		2000		Existing	assumed Mannings N	MH065W080	MH065W077		T15877	IRWD	PVC	{1ABA3715-5937-403E-8A4F-5EDF06AF340A}	CLMH065W080MH065W077	123.06	120.62	0.666666667	MH065W080	MH065W077		96	CLMH065W080MH065W077	8	0.0255	0.002915	0.03	0.003500	0.04	0.004149	0.04	0.003500	0.04		
CLMH065W081MH065W243		2000		Existing	assumed Mannings N	MH065W081	MH065W243		T15877	IRWD	PVC	{DF1C2A72-B002-4179-A501-07727154115}	CLMH065W081MH065W243	123.69	122.86	0.666666667	MH065W081	MH065W243		65	CLMH065W081MH065W243	8	0.0129	0.000836	0.02	0.001004	0.02	0.001190	0.02	0.001004	0.02		
CLMH065W083MH065W115		2000		Existing	assumed Mannings N	MH065W083	MH065W115		T15875	IRWD	PVC	{4DA900A4-2D40-4241-822E-2F3159BD2A25}	CLMH065W083MH065W115	123.96	116.71	0.666666667	MH065W083	MH065W115		300	CLMH065W083MH065W115	8	0.0050	0.010461	0.09	0.012561	0.10	0.014889	0.11	0.012561	0.10		
CLMH065W085MH065W078		2000		Existing	assumed Mannings N	MH065W085	MH065W078		T15875	IRWD	PVC	{881FB937-C312-4D6E-9ACD-7EE0C01C97C9}	CLMH065W085MH065W078	129.40	127.45	0.666666667	MH065W085	MH065W078		181	CLMH065W085MH065W078	8	0.0108	0.000965	0.02	0.001158	0.02	0.001374	0.03	0.001158	0.02		
CLMH065W089MH065W012		2000		Existing	assumed Mannings N	MH065W089	MH065W012		T15740	IRWD	PVC	{FCAB1AB9-3D09-40C5-83C9-1B613D7E2696}	CLMH065W089MH065W012	143.69	136.80	0.666666667	MH065W089	MH065W012		63	CLMH065W089MH065W012	8	0.1111	0.003789	0.03	0.004549	0.03	0.005393	0.03	0.004549	0.03		
CLMH065W098MH065W099		2000		Existing	assumed Mannings N	MH065W098	MH065W099		T15873	IRWD	PVC	{BAA7A93A-6228-4027-B7A9-56F729706ACE}	CLMH065W098MH065W099	139.69	135.47	0.666666667	MH065W098	MH065W099		232	CLMH065W098MH065W099	8	0.0182	0.014747	0.08	0.017705	0.09	0.020989	0.09	0.017705	0.09		
CLMH065W099MH065W100		2000		Existing	assumed Mannings N	MH065W099	MH065W100		T15871	IRWD	PVC	{D938DC2F-6F8D-428E-8BCC-7D0B7A2A3637}	CLMH065W099MH065W100	135.38	131.44	0.666666667	MH065W099	MH065W100		232	CLMH065W099MH065W100	8	0.0170	0.038602	0.13	0.046348	0.14	0.054946	0.15	0.046348	0.14		
CLMH065W100MH065W102		2000		Existing	assumed Mannings N	MH065W100	MH065W102		T15871	IRWD	PVC	{AA48E1BE-A5EF-4627-B574-3F018DD7B661}	CLMH065W100MH065W102	131.33	127.27	0.666666667	MH065W100	MH065W102		239	CLMH065W100MH065W102	8	0.0170	0.053606	0.15	0.064363	0.16	0.076305	0.18	0.064363	0.16		
CLMH065W101MH065W103		2000		Existing	assumed Mannings N	MH065W101	MH065W103		T15871	IRWD	PVC	{2653EF05-E096-4811-90AF-800E1F3E3BDC}	CLMH065W101MH065W103	126.09	123.58	0.666666667	MH065W101	MH065W103		239	CLMH065W101MH065W103	8	0.0120	0.064984	0.18	0.078027	0.20	0.092503	0.21	0.078027	0.20		
CLMH065W102MH065W101		2000		Existing	assumed Mannings N	MH065W102	MH065W101		T15871	IRWD	PVC	{2501987D-2257-4E14-8105-540E6B72F26B}	CLMH065W102MH065W101	127.08	126.30	0.666666667	MH065W102	MH065W101		194	CLMH065W102MH065W101	8	0.0040	0.057526	0.21	0.069073	0.23	0.081887	0.26	0.069073	0.23		
CLMH065W103MH065W106		2000		Existing	assumed Mannings N	MH065W103	MH065W106		T15873	IRWD	PVC	{7AD46133-056F-4932-90DF-BAA7E9C28933}	CLMH065W103MH065W106	123.48	121.41	0.666666667	MH065W103	MH065W106		216	CLMH065W103MH065W106	8	0.0117	0.073514	0.19	0.088268	0.21	0.104646	0.23	0.088268	0.21		
CLMH065W104MH065W108		2000		Existing	assumed Mannings N	MH065W104	MH065W108		T15871	IRWD	PVC	{3E4FE8DB-DD7C-4FEE-ABAB-9DDB7ADAE686}	CLMH065W104MH065W108	121.23	117.90	0.666666667	MH065W104	MH065W108		281	CLMH065W104MH065W108	8	0.0119	0.006431	0.06	0.007721	0.06	0.009153	0.07	0.007721	0.06		
CLMH065W105MH065W102		2000		Existing	assumed Mannings N	MH065W105	MH065W102		T15873	IRWD	PVC	{891A1BFB-3FFE-40CF-B55C-9663176198D29}	CLMH065W105MH065W102	127.95	127.18	0.666666667	MH065W105	MH065W102		192	CLMH065W105MH065W102	8	0.0040	0.004455	0.07	0.005185	0.08	0.005835	0.10	0.005186	0.08		
CLMH065W106MH065W112		2000		Existing	assumed Mannings N	MH065W106	MH065W112		T15871	IRWD	PVC	{4DC505D6-E8BD-4F19-AF71-45EBE64EFB8A}	CLMH065W106MH065W112	121.20	115.69	0.666666667	MH065W106	MH065W112		391	CLMH065W106MH065W112	8	0.0141	0.077777	0.19	0.093388	0.21	0.110718	0.23	0.093388	0.21		
CLMH065W107MH065W110		2000		Existing	assumed Mannings N	MH065W107	MH065W110		T15871	IRWD	PVC	{B216B8A1-98E8-4214-B254-C2AEF70F5CFC}	CLMH065W107MH065W110	123.03	120.87	0.666666667	MH065W107	MH065W110		270	CLMH065W107MH065W110	8	0.0080	0.041728	0.16	0.049823	0.17	0.059067	0.19	0.049823	0.17		
CLMH065W108MH065W109		2000		Existing	assumed Mannings N	MH065W108	MH065W109		T15871	IRWD	PVC	{8D9FC98C-612E-424A-B328-61140B9EE7A6}	CLMH065W108MH065W109	117.59	114.81	0.666666667	MH065W108	MH065W109		90	CLMH065W108MH065W109	8	0.0309	0.029154	0.14	0.035002	0.17	0.041491	0.20	0.035002	0.17		
CLMH065W109MH065W113		2000		Existing	assumed Mannings N	MH065W109	MH065W113		T15873	IRWD	PVC	{57438C9B-C751-4B9D-8E95-A41AD6B1C45}	CLMH065W109MH065W113	114.62	113.73	0.666666667	MH065W109	MH065W113		222	CLMH065W109MH065W113	8	0.0040	0.225058	0.44	0.269928	0.48	0.320012	0.53	0.269928	0.48		
CLMH065W110MH065W116		2000		Existing	assumed Mannings N	MH065W110	MH065W116		T15873	IRWD	PVC	{F9C37893-DD94-47E5-8B0B-C28A59FEBDC8}	CLMH065W110MH065W116	120.76	118.41	0.666666667	MH065W110	MH065W116		361	CLMH065W110MH065W116	8	0.0065	0.050838	0.18	0.060760	0.20	0.072033	0.22	0.060760	0.20		
CLMH065W111MH065W114		2001		Existing	assumed Mannings N	MH065W111	MH065W114		T15873	IRWD	PVC	{D1D163F8-D15E-48F3-AA74-5F71401660C}	CLMH065W111MH065W114	114.08	113.08	0.666666667	MH065W111	MH065W114		254	CLMH065W111MH065W114	8	0.0039	0.033161	0.16	0.039810	0.18	0.047200	0.19	0.039810	0.18		
CLMH065W112MH065W109		2002		Existing	assumed Mannings N	MH065W112	MH065W109		T15871	IRWD	PVC	{97CB27ED-3DE4-47DA-9E27-033D28FFDF7F}	CLMH065W112MH065W109	115.50	114.81	0.666666667	MH065W112	MH065W109		171	CLMH065W112MH065W109	8	0.0040	0.189908	0.44	0.227892	0.49	0.234828	0.44	0.227892	0.49		
CLMH065W113MH065W117		2000		Existing	assumed Mannings N	MH065W113	MH065W117		T15871	IRWD	PVC	{9481BCF3-8E2C-4ADA-859F-C62847201F7B}	CLMH065W113MH065W117	113.52	112.94	0.666666667	MH065W113	MH065W117		146	CLMH065W113MH065W117	8	0.0040	0.226728	0.44	0.271709	0.48	0.322126	0.53	0.271709	0.48		
CLMH065W114MH065W118		2001		Existing	assumed Mannings N	MH065W114	MH065W118		T15871	IRWD	PVC	{F64FEEE8-6DC1-41FF-BF62-6BF451F2E51B}	CLMH065W114MH065W118	112.98	111.76	0.666666667	MH065W114	MH065W118		258	CLMH065W114MH065W118	8	0.0050	0.052281	0.20	0.062766	0.22	0.074417	0.24	0.062766	0.22		
CLMH065W115MH065W112		2002		Existing	assumed Mannings N	MH065W115	MH065W112		T15871	IRWD	PVC	{75C0B778-A9CB-4D5D-9124-9C9D3106SCAB}	CLMH065W115MH065W112	116.51	115.59	0.666666667	MH065W115	MH065W112		229	CLMH065W115MH065W112	8	0.0040	0.118134	0.31	0.141541	0.34	0.167804	0.37	0.141541	0.34		
CLMH065W116MH065W120		2002		Existing	assumed Mannings N	MH065W116	MH065W120		T15871	IRWD	PVC	{8CCC6842-23EF-4142-B8EF-675764068311C}	CLMH065W116MH065W120	118.31	117.73	0.666666667	MH065W116	MH065W120		148	CLMH065W116MH065W120	8	0.0039	0.075249	0.25	0.090071	0.27	0.106784	0.29	0.090075	0.27		
CLMH065W117MH065W119		2002		Existing	assumed Mannings N	MH065W117	MH065W119		T15871	IRWD	PVC	{37002032-DA0D-418A-92BD-4E9E597658621}	CLMH065W117MH065W119	112.73	112.30	0.666666667	MH065W117	MH065W119		108	CLMH065W117MH065W119	8	0.0040	0.226686	0.43	0.271660	0.48	0.322070	0.53	0.271660	0.48		
CLMH065W118MH065W121		2001		Existing	assumed Mannings N	MH065W118	MH065W121		T15871	IRWD	PVC	{A34314FE-14C5-4381-9EA7-0F9129F183C5}	CLMH065W118MH065W121	111.66	109.55	0.666666667	MH065W118	MH065W121		250	CLMH065W118MH065W121	8	0.0084	0.054318	0.26	0.065210	0.29	0.077316	0.32	0.065210	0.29		
CLMH065W119MH065W121		2002		Existing	assumed Mannings N	MH065W119	MH065W121		A00532D	IRWD	VCP	{15AA5F60-8437-40E6-952E-463A29686B1E}	CLMH065W119MH065W121	111.94	109.55	0.833333333	MH065W119	MH065W121		212	CLMH065W119MH065W121	10	0.0113	0.226659	0.27	0.271631	0.30	0.322037	0.32	0.271631	0.30		
CLMH065W120MH065W119		2002		Existing	assumed Mannings N	MH065W120	MH065W119		A00532D	IRWD	VCP	{150BFC6D-C264-4191-8269-3D0DE7C77906}	CLMH065W120MH065W119	117.53	116.61	0.666666667	MH065W120	MH065W119		230	CLMH065W120MH065W119	10	0.0040	0.134747	0.30	0.129090	0.32	0.153037	0.35	0.129090	0.32		
CLMH065W122MH065W123		2002		Existing	assumed Mannings N	MH065W122	MH065W123		T15872	IRWD	PVC	{F8D77E09-6E7F-481C-9FCA-208ED7B4BA6}	CLMH065W122MH065W123	145.82	142.89	0.666666667	MH065W122	MH065W123		85	CLMH065W122MH065W123	8	0.0080	0.003473	0.05	0.004168	0.05	0.004942	0.06	0.004168	0.05		
CLMH065W123MH065W125		2002		Existing	assumed Mannings N	MH065W123	MH065W125		T15872	IRWD	PVC	{81B9D5EE-A195-44D8-BC5A-1CC9088F531C}	CLMH065W123MH065W125	142.69	141.69	0.666666667	MH065W123	MH065W125		253	CLMH065W123MH065W125	8	0.0039	0.012283	0.10	0.014746	0.11	0.017481	0.12	0.014746	0.11		
CLMH065W124MH065W127		2002		Existing	assumed Mannings N	MH065W124	MH065W127		T15872	IRWD	PVC	{70B7EBD6-59EE-4679-84A0-B7A0CCB0AE27}	CLMH065W124MH065W127	139.75	137.36	0.666666667	MH065W124	MH065W127		396	CLMH065W124MH065W127	8	0.0060	0.004136	0.05	0.004967	0.06	0.005888	0.06	0.004967	0.06		
CLMH065W125MH065W098		2002		Existing	assumed Mannings N	MH065W125	MH065W098		T15872	IRWD	PVC	{89888D2D-6809-4C14-84FA-C9A83D64B6BE}	CLMH065W125MH065W098	141.49	140.13	0.666666667	MH065W125	MH065W098		337	CLMH065W125MH065W098	8	0.0040	0.012283	0.10	0.014746	0.11	0.017481	0.12	0.014746	0.11		
CLMH065W126MH065W128		2002		Existing	assumed Mannings N	MH065W126	MH065W128		T15872	IRWD	PVC	{250BAB08-4126-472D-A965-C9FD9F5F1E7F}	CLMH065W126MH065W128	136.50	133.33	0.666666667	MH065W126	MH065W128		396	CLMH065W126MH065W128	8	0.0080	0.010674	0.08	0.012817	0.09	0.015195	0.10	0.012817	0.09		
CLMH065W127MH065W099		2002		Existing	assumed Mannings N	MH065W127	MH065W099		T15872	IRW

| | | |

CLMH066520MH066519		2007		Existing	assumed Manningis N	MH066520	MH066519		T16529P	IRWD	PVC	{F5E4DE9B-B032-4746-B992-6E6E4154A7E6}	CLMH066520MH066519	214.00	211.80	0.833333333	MH066520	MH066519				183	CLMH066520MH066519	10	0.0120	0.093450	0.16	0.112268	0.17	0.133429	0.19	0.702147	0.45
CLMH066521MH066522		2007		Existing	assumed Manningis N	MH066521	MH066522		T16529D	IRWD	PVC	{E7DD331F-A7FF-4EA1-825A-13D48F82167D}	CLMH066521MH066522	227.00	226.70	0.833333333	MH066521	MH066522	Future Less than 15-in, d/D >0.50		51	CLMH066521MH066522	10	0.0059	0.027257	0.10	0.032799	0.11	0.039177	0.12	0.624309	0.52
CLMH066522MH066518		2007		Existing	assumed Manningis N	MH066522	MH066518		T16529I	IRWD	PVC	{30E21B2B-5863-49C7-96FD-1746EC690ECF}	CLMH066522MH066518	226.50	223.40	0.833333333	MH066522	MH066518			211	CLMH066522MH066518	10	0.0147	0.027184	0.08	0.032718	0.09	0.039095	0.10	0.624095	0.40
CLMH066523MH066502		2007		Existing	assumed Manningis N	MH066523	MH066502		T15494	IRWD	VCP	{1DC859FC-95FB-400B-99E6-10F89CE0B230}	CLMH066523MH066502	205.97	204.84	1.250000667	MH066523	MH066502			54	CLMH066523MH066502	15	0.0208	0.094770	0.09	0.113882	0.09	0.135359	0.10	0.703131	0.23
CLMH066524MH066525		2007		Existing	assumed Manningis N	MH066524	MH066525		T16529D	IRWD	PVC	{90C090F7-CE24-49FB-A27F-E8D5CA1D1F10}	CLMH066524MH066525	230.88	229.35	0.833333333	MH066524	MH066525			177	CLMH066524MH066525	10	0.0086	0.021541	0.09	0.025932	0.09	0.031007	0.10	0.618546	0.46
CLMH066525MH066527		2007		Existing	assumed Manningis N	MH066525	MH066527		T16529D	IRWD	PVC	{A2FA3392-0F65-4FA7-A77B-DF0A82FDD124}	CLMH066525MH066527	229.15	228.10	0.833333333	MH066525	MH066527			97	CLMH066525MH066527	10	0.0108	0.024376	0.09	0.029347	0.09	0.035067	0.10	0.621352	0.43
CLMH066526MH066529		2014		Existing	assumed Manningis N	MH066526	MH066529		T16529D	IRWD	PVC	{A9490E67-0CBB-47B5-B420-009BEAF43657}	CLMH066526MH066529	253.40	251.90	0.833333333	MH066526	MH066529			148	CLMH066526MH066529	10	0.0101	0.045674	0.04	0.005552	0.04	0.006672	0.05	0.054180	0.18
CLMH066527MH066521		2007		Existing	assumed Manningis N	MH066527	MH066521		T16529D	IRWD	PVC	{31E3211A-07B4-41D1-93B6-96DBABEA9CF1}	CLMH066527MH066521	227.90	227.20	0.833333333	MH066527	MH066521	Future Less than 15-in, d/D >0.50		137	CLMH066527MH066521	10	0.0051	0.027285	0.11	0.032830	0.12	0.039209	0.13	0.624325	0.53
CLMH066528MH066526		2007		Existing	assumed Manningis N	MH066528	MH066526		T16529C	IRWD	PVC	{DAE427D2-35A5-4F40-9244-19EBEC14FFD1}	CLMH066528MH066526	257.80	253.60	0.833333333	MH066528	MH066526			293	CLMH066528MH066526	10	0.0143	0.001557	0.02	0.001939	0.02	0.002379	0.03	0.050464	0.11
CLMH066529MH066530		2007		Existing	assumed Manningis N	MH066529	MH066530		T16529D	IRWD	PVC	{DCF2EF59-7652-4FC5-9F11-6C3E41153C37}	CLMH066529MH066530	251.70	249.90	0.833333333	MH066529	MH066530			362	CLMH066529MH066530	10	0.0050	0.014412	0.08	0.017348	0.09	0.020727	0.09	0.489913	0.47
CLMH066530MH066517		2007		Existing	assumed Manningis N	MH066530	MH066517		T16529D	IRWD	PVC	{BF339A57-571B-48B5-A261-B9B1BE6E98B6}	CLMH066530MH066517	249.70	248.35	0.833333333	MH066530	MH066517			269	CLMH066530MH066517	10	0.0050	0.014484	0.08	0.017421	0.09	0.020813	0.09	0.494047	0.47
CLMH066531MH066532		2007		Existing	assumed Manningis N	MH066531	MH066532		T17004D	IRWD	PVC	{E72C2E32-61DD-4B2F-BA37-A74C88D3B5EB}	CLMH066531MH066532	230.09	228.62	0.666666667	MH066531	MH066532			166	CLMH066531MH066532	8	0.0089	0.002605	0.04	0.003126	0.05	0.003707	0.05	0.003126	0.05
CLMH066532MH066533		2006		Existing	assumed Manningis N	MH066532	MH066533		T17004D	IRWD	PVC	{19B75E38-9ED9-4E62-A710-526B338BE0D2}	CLMH066532MH066533	228.42	226.76	0.666666667	MH066532	MH066533			168	CLMH066532MH066533	8	0.0099	0.005286	0.06	0.006345	0.06	0.007523	0.07	0.006345	0.06
CLMH066533MH066537		2006		Existing	assumed Manningis N	MH066533	MH066537		T17004D	IRWD	PVC	{1842AC86-02CA-4F9A-AE32-92FB2FAE53E7}	CLMH066533MH066537	226.56	225.50	0.666666667	MH066533	MH066537			192	CLMH066533MH066537	8	0.0055	0.005286	0.06	0.006345	0.07	0.007523	0.07	0.006345	0.07
CLMH066534MH066535		2006		Existing	assumed Manningis N	MH066534	MH066535		T17004D	IRWD	PVC	{ED60F275-E7D7-4DA3-B6AE-6E0FBAC3CD2D3}	CLMH066534MH066535	220.88	220.19	0.666666667	MH066534	MH066535			173	CLMH066534MH066535	8	0.0040	0.001586	0.04	0.001906	0.04	0.002258	0.04	0.001906	0.04
CLMH066535MH066536		2006		Existing	assumed Manningis N	MH066535	MH066536		T17004D	IRWD	PVC	{07503908-5E08-4A4B-BA19-78BEB26E40DF}	CLMH066535MH066536	220.09	219.42	0.666666667	MH066535	MH066536			167	CLMH066535MH066536	8	0.0040	0.007644	0.08	0.009176	0.09	0.010879	0.09	0.009176	0.09
CLMH066536MH066539		2006		Existing	assumed Manningis N	MH066536	MH066539		T17004D	IRWD	PVC	{12372A34-21D6-4D26-A3FF-A8FFEEE575C5}	CLMH066536MH066539	219.32	219.26	0.666666667	MH066536	MH066539			14	CLMH066536MH066539	8	0.0043	0.007644	0.08	0.009176	0.08	0.010879	0.09	0.009176	0.08
CLMH066537MH066538		2006		Existing	assumed Manningis N	MH066537	MH066538		T17004D	IRWD	PVC	{3DC3B919-9A1F-4AC4-853C-651D228B6265}	CLMH066537MH066538	225.30	223.63	0.666666667	MH066537	MH066538			178	CLMH066537MH066538	8	0.0094	0.005286	0.06	0.006345	0.06	0.007523	0.07	0.006345	0.06
CLMH066538MH066539		2006		Existing	assumed Manningis N	MH066538	MH066539		T17004D	IRWD	PVC	{3468FCDA-65EB-425A-A6E9-A4101777972A}	CLMH066538MH066539	223.43	219.26	0.666666667	MH066538	MH066539			148	CLMH066538MH066539	8	0.0281	0.007967	0.05	0.009565	0.06	0.011338	0.06	0.009565	0.06
CLMH066539MH066540		2006		Existing	assumed Manningis N	MH066539	MH066540		T17004D	IRWD	PVC	{B663D9DC-4AF7-430B-A373-B88AB5D72077}	CLMH066539MH066540	219.06	218.82	0.666666667	MH066539	MH066540			61	CLMH066539MH066540	8	0.0040	0.015610	0.11	0.018741	0.12	0.022218	0.13	0.018741	0.12
CLMH066540MH066541		2006		Existing	assumed Manningis N	MH066540	MH066541		T17004D	IRWD	PVC	{98529EED-7C12-43AB-BA78-F94376A672AB}	CLMH066540MH066541	218.62	217.96	0.666666667	MH066540	MH066541			165	CLMH066540MH066541	8	0.0040	0.024440	0.14	0.029343	0.15	0.034787	0.17	0.029343	0.15
CLMH066541MH066542		2006		Existing	assumed Manningis N	MH066541	MH066542		T17004D	IRWD	PVC	{D6A8AF9A1-E41A-41B4-B56B-17B8EDDC8D9B}	CLMH066541MH066542	217.86	217.23	0.666666667	MH066541	MH066542			159	CLMH066541MH066542	8	0.0040	0.032161	0.16	0.038613	0.18	0.045777	0.19	0.038613	0.18
CLMH066542MH066545		2006		Existing	assumed Manningis N	MH066542	MH066545		T17004D	IRWD	PVC	{8448998E7-91D2-42EC-BF8C-2476EC0A519E}	CLMH066542MH066545	217.13	216.41	0.666666667	MH066542	MH066545			179	CLMH066542MH066545	8	0.0040	0.032161	0.16	0.038613	0.18	0.045777	0.19	0.038613	0.18
CLMH066543MH066544		2006		Existing	assumed Manningis N	MH066543	MH066544		T17004D	IRWD	PVC	{662A70CB-31E8-489A-A70C-3AEF08BECC0A}	CLMH066543MH066544	229.68	224.93	0.666666667	MH066543	MH066544			158	CLMH066543MH066544	8	0.0300	0.002651	0.03	0.003181	0.03	0.003773	0.04	0.003181	0.03
CLMH066544MH066545		2006		Existing	assumed Manningis N	MH066544	MH066545		T17004D	IRWD	PVC	{B6658565-CAB5-4276-B84E-7ED91D51FC0}	CLMH066544MH066545	224.73	216.58	0.666666667	MH066544	MH066545			163	CLMH066544MH066545	8	0.0500	0.008369	0.05	0.010038	0.06	0.011904	0.06	0.010038	0.05
CLMH066545MH066580		2006		Existing	assumed Manningis N	MH066545	MH066580		T17004D	IRWD	PVC	{8F4FA01F-2318-4603-A1EF-8A29DB76FF5A}	CLMH066545MH066580	216.21	215.64	0.666666667	MH066545	MH066580			142	CLMH066545MH066580	8	0.0040	0.040531	0.18	0.048651	0.20	0.057680	0.21	0.048651	0.20
CLMH066546MH066551		2006		Existing	assumed Manningis N	MH066546	MH066551		T17004	IRWD	PVC	{E6F49EAA-0920-4446-99F2-398D7D0A81B7}	CLMH066546MH066551	220.76	220.53	0.666666667	MH066546	MH066551			58	CLMH066546MH066551	8	0.0040	0.014003	0.11	0.014948	0.11	0.017723	0.12	0.016058	0.11
CLMH066547MH066548		2006		Existing	assumed Manningis N	MH066547	MH066548		T17004	IRWD	PVC	{B0B51917-1706-427C-A351-5A537FFCD797}	CLMH066547MH066548	223.42	222.64	0.666666667	MH066547	MH066548			195	CLMH066547MH066548	8	0.0040	0.004325	0.06	0.004617	0.06	0.005474	0.07	0.004617	0.06
CLMH066548MH066549		2006		Existing	assumed Manningis N	MH066548	MH066549		T17004	IRWD	PVC	{88852937-4B4F-40B1-AC72-4C454FC5179A}	CLMH066548MH066549	222.44	221.92	0.666666667	MH066548	MH066549			129	CLMH066548MH066549	8	0.0040	0.004325	0.06	0.004617	0.06	0.005474	0.07	0.016058	0.11
CLMH066549MH066550		2006		Existing	assumed Manningis N	MH066549	MH066550		T17004	IRWD	PVC	{A732140D-E4DE-48D9-94CF-CC103E9733B5}	CLMH066549MH066550	221.72	221.54	0.666666667	MH066549	MH066550			46	CLMH066549MH066550	8	0.0040	0.014003	0.11	0.014948	0.11	0.017723	0.12	0.016058	0.11
CLMH066550MH066546		2006		Existing	assumed Manningis N	MH066550	MH066546		T17004	IRWD	PVC	{21F21222-1391-4ACC-B685-F2CED1BF42AE}	CLMH066550MH066546	221.34	220.96	0.666666667	MH066550	MH066546			95	CLMH066550MH066546	8	0.0040	0.014003	0.11	0.014948	0.11	0.017723	0.12	0.016058	0.11
CLMH066551MH066554		2006		Existing	assumed Manningis N	MH066551	MH066554		T17004	IRWD	PVC	{FFCE0785-BC3E-492D-9ADE-1BF59AA8AA42}	CLMH066551MH066554	220.33	219.78	0.666666667	MH066551	MH066554			139	CLMH066551MH066554	8	0.0040	0.014003	0.11	0.014948	0.11	0.017723	0.12	0.016058	0.11
CLMH066552MH066553		2006		Existing	assumed Manningis N	MH066552	MH066553		T17004	IRWD	PVC	{B91AB2F2-670B-455F-827A-D47FAEE1D2BA}	CLMH066552MH066553	219.85	218.40	0.666666667	MH066552	MH066553			361	CLMH066552MH066553	8	0.0040	0.007586	0.08	0.008101	0.08	0.009603	0.09	0.011781	0.10
CLMH066553MH066556		2006		Existing	assumed Manningis N	MH066553	MH066556		T17004	IRWD	PVC	{90EFF41E-94CE-4596-9767-31867C3079E3}	CLMH066553MH066556	218.30	216.86	0.666666667	MH066553	MH066556			361	CLMH066553MH066556	8	0.0040	0.007586	0.08	0.008101	0.08	0.009603	0.09	0.011781	0.10
CLMH066554MH066555		2006		Existing	assumed Manningis N	MH066554	MH066555		T17004	IRWD	PVC	{CC97DA40-825E-4161-A742-A08672A53F05}	CLMH066554MH066555	219.58	218.55	0.666666667	MH066554	MH066555			256	CLMH066554MH066555	8	0.0040	0.014250	0.11	0.015210	0.11	0.018035	0.12	0.016058	0.11
CLMH066555MH066556		2006		Existing	assumed Manningis N	MH066555	MH066556		T17004	IRWD	PVC	{857F8D4C-10FF-4AFA-8E89-9AF3616B8672}	CLMH066555MH066556	218.45	216.66	0.666666667	MH066555	MH066556			210	CLMH066555MH066556	8	0.0085	0.013352	0.09	0.016387	0.09	0.019411	0.10	0.016058	0.10
CLMH066556MH066557		2006		Existing	assumed Manningis N	MH066556	MH066557		T17004	IRWD	PVC	{103D1279-F51D-45FB-AF4D-9C19939F96D8}	CLMH066556MH066557	216.66	213.62	0.666666667	MH066556	MH066557			81	CLMH066556MH066557	8	0.0277	0.022939	0.08	0.024488	0.09	0.029034	0.09	0.027838	0.09
CLMH066557GB0665081		2006		Existing	assumed Manningis N	MH066557	GB0665081		T17004	IRWD	PVC	{D5974FC4-D699-404F-A3F6-8F143BF91229}	CLMH066557GB0665081	213.42	212.87	0.666666667	MH066557	GB0665081			138	CLMH066557GB0665081	8	0.0040	0.025367	0.15	0.027081	0.15	0.032108	0.16	0.027838	0.15
CLMH066558MH066559		2014		Existing	assumed Manningis N	MH066558	MH066559		T16741	IRWD	PVC	{18E10F40-CCF1-4AB3-98AE-B82A6D310AB0}	CLMH066558MH066559	269.60	264.00	0.666666667	MH066558	MH066559			280	CLMH066558MH066559	8	0.0200	0.000126	0.01	0.000147	0.01	0.000173	0.01	0.006647	0.05
CLMH066559MH066573		2014		Existing	assumed Manningis N	MH066559	MH066573		T16741	IRWD	PVC	{B121444E3-549F-45E6-8A24-DFEC4EFA317B}	CLMH066559MH066573	263.90	258.25	0.666666667	MH066559	MH066573			36	CLMH066559MH066573	8	0.0200	0.001592	0.03	0.000380	0.00	0.000452	0.00	0.006647	0.03
CLMH066560MH066561		2007		Existing	assumed Manningis N	MH066560	MH066561		T16741	IRWD	PVC	{C9A219FB-5F5C-4C50-BA3D-355BA11AA764}	CLMH066560MH066561	267.00	261.97	0.666666667	MH066560	MH066561			252	CLMH066560MH066561	8	0.0200	0.000126	0.01	0.000147	0.01	0.000173	0.01	0.007048	0.05
CLMH066561MH066575		2007		Existing	assumed Manningis N	MH066561	MH066575		T16741	IRWD	PVC	{5A3273AD-7843-4845-B1BA-CB4ECEE17DA6}	CLMH066561MH066575	261.87	256.74	0.666666667	MH066561	MH066575			361	CLMH066561MH066575	8	0.1445	0.000343	0.01	0.000358	0.00	0.000341	0.00	0.007048	0.03
CLMH066562MH066563		2007		Existing	assumed Manningis N	MH066562	MH066563		T16741	IRWD	PVC	{393E883F-3D15-4E10-B9F1-6658A6742F6}	CLMH066562MH066563	271.70	264.51	0.666666667	MH066562	MH066563			320	CLMH066562MH066563	8	0.0225	0.000141	0.01	0.000147	0.01	0.000173	0.01	0.006749	0.05
CLMH066563MH066571		2007		Existing	assumed Manningis N	MH066563	MH066571		T16741	IRWD	PVC	{40EE128C-EFBB-4232-9909-1038B887A2B1}	CLMH066563MH066571	264.41	259.91	0.666666667	MH066563	MH066571			36	CLMH066563MH066571	8	0.1268	0.000317	0.00	0.000330	0.01	0.000333	0.01	0.006749	0.04
CLMH066564MH066569		2007		Existing	assumed Manningis N	MH066564	MH066569		T16741	IRWD	PVC	{2294A93C-CDE9-40C7-9CB0-50E712BC4212}	CLMH066564MH066569	269.55	261.78	0.666666667	MH066564	MH066569			289	CLMH066564MH066569	8	0.0200	0.000126	0.01	0.000147	0.01	0.000172	0.01	0.005711	0.05
CLMH066565MH066567		2007		Existing	assumed Manningis N	MH066565	MH066567		T16741	IRWD	PVC	{32CBF555-C122-4DBD-BAD8-4623AD537036}	CLMH066565MH066567	267.28	263.29	0.666666667	MH066565	MH066567			399	CLMH066565MH066567	8	0.0100	0.000120	0.01	0.000145	0.01	0.000171	0.01	0.007296	0.07
CLMH066566MH066567		2007		Existing	assumed Manningis N	MH066566	MH066567	ERROR 23	T16741	IRWD	PVC	{85DED000-67AF-4B82-A8F1-AF5D7A3117944}	CLMH066566MH066567	263.83	263.19	0.666666667	MH066566	MH066567			153	CLMH066566MH066567	8	0.0050	0.000122	0.01	0.000147	0.01	0.000173	0.01	0.006993	0.07
CLMH066567MH066568		2007		Existing	assumed Manningis N	MH066567	MH066568		T16741	IRWD	PVC	{39EC7662-1BA9-4C91-8F05-9BF6B83E8231}	CLMH066567MH066568	263.09	262.24	0.666666667	MH066567	MH066568			69	CLMH066567MH066568	8	0.0050	0.000239	0.01	0.000290	0.01	0.000341	0.01	0.014289	0.10
CLMH066568MH066569		2007		Existing	assumed Manningis N	MH066568	MH066569		T16741	IRWD	PVC	{3B6FF110-28E2-4CC4-98CD-272ABE774F44}	CLMH066568MH066569	262.14	261.68	0.666666667	MH066568	MH066569			91	CLMH066568MH066569	8	0.0051	0.000236	0.01	0.000287	0.01	0.000339	0.01	0.019280	0.12
CLMH066569MH066570		2007		Existing	assumed Manningis N	MH066569	MH066570		T16741	IRWD	PVC	{7C4F58B0-097C-4ECD-959C-2D21F87B7C57}	CLMH066569MH066570	261.58	260.66	0.666666667	MH066569	MH066570			183	CLMH066569MH066570	8	0.0050	0.000350	0.01	0.000427	0.02	0.000505	0.02	0.024991	0.14
CLMH066570MH066571		2007		Existing	assumed Manningis N	MH066570	MH066571		T16741	IRWD	PVC	{60D170F5-0F97-4EA0-965C-5ADBE6E43F01}	CLMH066570MH066571	260.56	259.81	0.666666667	MH066570	MH066571			63	CLMH066570MH066571	8	0.0050	0.000346	0.01	0.000422	0.02	0.000500	0.02	0.029183	0.15
CLMH066571MH066572		2007		Existing	assumed Manningis N	MH066571	MH066572		T16741	IRWD	PVC	{8BD79AC3-974B-449F-8E0B-2EDFDED68BD9}	CLMH066571MH066572	259.71	258.94	0.666666667	MH066571	MH066572			155	CLMH066571MH066572	8	0.0050	0.000450	0.02	0.000549	0.02	0.000653	0.02	0.035932	0.16
CLMH066572MH066573		2007		Existing	assumed Manningis N	MH066572	MH066573		T16741	IRWD	PVC	{E5677511-5402-433E-9E42-B6D85A0B04B7}	CLMH066572MH066573	258.84	258.15	0.666666667	MH066572	MH066573			138	CLMH066572MH066573	8	0.0050	0.000559	0.02	0.000686	0.02	0.000815	0.02	0.040198	0.17
CLMH066573MH066574		2007		Existing	assumed Manningis N	MH066573	MH066574		T16741	IRWD	PVC	{CB8F982A-4A53-4AFE-A732-1C1761FF9}	CLMH066573MH066574	258.05	257.45	0.666666667	MH066573	MH066574			120	CLMH066573MH066574	8	0.0050	0.000663	0.02	0.000817	0.02	0.000968	0.02	0.046845	0.19
CLMH066574MH066575		2007		Existing	assumed Manningis N	MH066574	MH066575		T16741	IRWD	PVC	{853BF9FF-62B6-48C6-A4DB-83E020D66CE6}	CLMH066574MH066575	257.35	256.64	0.666666667	MH066574	MH066575			142	CLMH066574MH066575	8	0.0050	0.000659	0.02	0.000808	0.02	0.000963	0.02	0.050135	0.19
CLMH066575MH066155	Main after junctio	2014		Existing	assumed Manningis N	MH066575	MH066155		T16741	IRWD	PVC	{5CA83056-FABA-4EA6-BA3F-5FCE32FC28B}	CLMH066575MH066155	256.54	254.86	0.666666667	MH066575	MH066155			356	CLMH066575MH066155	8	0.0050	0.000750	0.02	0.000902	0.02	0.001092	0.03	0.059850	0.21
CLMH066576MH066577		2006		Existing	assumed Manningis N	MH066576	MH066577		T17004D	IRWD	PVC	{DAFBB82E-CDA2-4721-8B98-E7D4F27303D1}	CLMH066576MH066577	230.87	229.02	0.666666667	MH066576	MH066577			161	CLMH066576MH066577	8	0.0115	0.009091	0.07	0.010915	0.08	0.012739	0.08	0.010915	0.08
CLMH066577MH066578		2006		Existing	assumed Manningis N	MH066577	MH066578		T17004D	IRWD	PVC	{9929A461-81AA-4683-B885-6839C51A58C}	CLMH066577MH066578	228.92	224.82	0.666666667	MH066577	MH066578			169	CLMH066577MH066578	8	0.0242	0.013359	0.07	0.016039	0.08	0.019013	0.08	0.016039	0.08
CLMH066578MH066518		2006		Existing	assumed Manningis N	MH066578	MH066518		T17004D	IRWD	PVC	{13C54C3A-9CD6-43B5-8045-D7DD2057AEBE}	CLMH066578MH066518	224.62	224.07	0.666666667	MH066578	MH066518			103	CLMH066578MH066518	8	0.0053	0.013359	0.10	0.016039	0.11	0.019013	0.12	0.016039	0.11
CLMH066579MH066580		2006		Existing	assumed Manningis N	MH066579	MH066580		T17004D	IRWD	PVC	{79265EE8-390F-4EB2-9403-04EEACEB85A5}	CLMH066579MH066580	223.60	215.69	0.666666667	MH066579	MH066580			285	CLMH066579MH066580	8	0.0278	0.005908	0.06	0.007070	0.07	0.008380	0.08	0.007070	0.07
CLMH066580MH066520		2006		Existing	assumed Manningis N	MH066580	MH066520		T17004D	IRWD	PVC	{E6978C2A-580F-47BB-86A3-C24DD7C165DD}	CLMH066580MH066520	215.59	215.14	0.666666667	MH066580	MH066520			123	CLMH066580MH066520	8	0.0037	0.048956	0.20	0.058730	0.22	0.069629	0.24	0.058730	0.22
CLMH066513MH066514		2014		Existing	assumed Manningis N	MH066513	MH066514		16703	IRWD	PVC	{7ED24388-EDBB-43B6-BFF7-77BAAB3AA17F}	CLMH066513MH066514	262.16	258.37	0.666666667	MH066513	MH066514			168	CLMH066513MH066514	8	0.0225	0.003038	0.04	0.003647	0.04	0.004324	0.04	0.003728	0.04
CLMH066514MH066526	Main after junctio	2014		Existing	assumed Manningis N	MH066514	MH066526		16703	IRWD	PVC	{3081591A-9F63-49E8-8CF4-50674C4F8F57}	CLMH066514MH066526	258.17	253.40	0.666666667	MH066514	MH066526			216	CLMH066514MH066526	8	0.0221	0.003038	0.04	0.003647	0.05	0.004324	0.05	0.003728	0.10
CLMH066515MH066518	Main after junctio	2014		Existing	assumed Manningis N	MH066515	MH066518		16703	IRWD	PVC	{544C1188-88EA-4F96-BFF3-64DC07717C1B}	CLMH066515MH066518	264.80	259.33	0.666666667	MH066515	MH066518			110	CLMH066515MH066518	8	0.0500	0.000311	0.01	0.000329	0.01	0.000346	0.01	0.004141	0.03
CLMH066516MH066517		2014		Existing	assumed Manningis N	MH066516	MH066517		16703	IRWD	PVC	{8CD7C62A-48BB-4F53-BC27-3B76BA80C548}	CLMH066516MH066517	276.62	271.79	0.666666667	MH066516	MH066517			207	CLMH066516MH066517	8	0.0233	0.000147	0.01	0.000153	0.01	0.000173	0.01	0.013347	0.07
CLMH066517MH066528	Main after junctio	2014		Existing	assumed Manningis N	MH066517	MH066528		16703	IRWD	PVC	{F460838A-44B1-496E-8623-3A71D8E7AAF6}	CLMH066517MH066528	271.59	257.80	0.666666667	MH066517	MH066528			272	CLMH066517MH066528	8	0.0507	0.000121	0.02	0.000147	0.02	0.000173	0.02	0.013347	0.10
CLMH066518MH066528		2014		Existing	assumed Manningis N	MH066518	MH066528		16529C	IRWD	PVC	{03442D54-BE33-4434-BFCF-622E433D7404}	CLMH066518MH066528	259.13	258.00	0.666666667	MH066518	MH066528			284	CLMH066518MH066528	8	0.0040	0.001464	0.03	0.001836	0.04	0.002246	0.04	0.037142	0.17
CLMH066519MH066528		2014		Existing	assumed Manningis N	MH066519	MH066528		T16722	IRWD	PVC	{383C36E7-3F85-41C0-90B4-6C6D02F53468}	CLMH066519MH066528	292.75	289.84	0.666666667	MH066519	MH066528			242	CLMH066519MH066528	8	0.0120	0.000993	0.02	0.001191	0.02	0.001435	0.03	0.038034	0.14
CLMH066520MH066519		2014		Existing	assumed Manningis N	MH066520	MH066519		T16722	IRWD	PVC	{F2D73538-23DF-40CD-A211-3FC608DCB693}	CLMH066520MH066519	295.21	292.75	0.666666667	MH066520	MH066519			197	CLMH066520MH066519	8	0.0125	0.000757	0.02	0.000906	0.03	0.001087	0.03	0.031319	0.13
CLMH066521MH066520		2014		Existing	assumed Manningis N	MH066521	MH066520		T16722	IRWD	PVC	{57D51EC55-CE2B-44FE-A90F-E792E8911DB1}	CLMH066521MH066520	297.67	295.31	0.666666667	MH066521	MH066520			197	CLMH066521MH066520	8	0.0120	0.000383	0.01	0.000458	0.01	0.000549	0.02	0.011238	0.08
CLMH066522MH066523		2014		Existing	assumed Manningis N	MH066522	MH066523		T16722	IRWD	PVC	{B4E98996-B9CD-4CEC-832D-F51F42E1B53D}	CLMH066522MH066523	298.30	296.60	0.666666667	MH066522	MH066523			170	CLMH066522MH066523	8	0.0100	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002784	0.04
CLMH066523MH066519		2014		Existing	assumed Manningis N	MH066523	MH066519		T16722	IRWD	PVC	{F5232044-51AC-412D-AEF2-D82440905B7B}	CLMH066523MH066519	296.50	292.95	0.666666667	MH066523	MH066519			202	CLMH066523MH066519	8	0.0176	0.000129	0.01	0.000153	0.01	0.000183	0.01	0.002784	0.04
CLMH066524MH066525		2014		Existing	assumed Manningis N	MH066524	MH066525		T16722	IRWD	PVC	{5891F139-2AC5-4727-8E98-5E480D856FC2}	CLMH066524MH066525	305.30	303.14	0.666666667	MH066524	MH066525			216	CLMH066524MH066525	8	0.0100	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.004632	0.05
CLMH066525MH066526		2014		Existing	assumed Manningis N	MH066525	MH066526		T16722	I

CLMH066W017MH066W021		1998		Existing	assumed Mannings N	MH066W017	MH066W021		T15641	IRWD	PVC	{2952AB84-FF34-458D-BE5B-3151FFE42845}	CLMH066W017MH066W021	214.38	210.11	0.666666667	MH066W017	MH066W021			207	CLMH066W017MH066W021	8	0.0206	0.003229	0.04	0.003877	0.04	0.004597	0.04	0.003877	0.04			
CLMH066W018MH066W010		1998		Existing	assumed Mannings N	MH066W018	MH066W010		T15555	IRWD	PVC	{833F2AA0-C56E-4FF6-8C65-18CFD9262153}	CLMH066W018MH066W010	200.80	194.00	0.666666667	MH066W018	MH066W010			334	CLMH066W018MH066W010	8	0.0204	0.002806	0.04	0.003369	0.04	0.003993	0.04	0.003369	0.04			
CLMH066W019MH066W024		1998		Existing	assumed Mannings N	MH066W019	MH066W024		T15641	IRWD	PVC	{2C73C203-3084-49B1-B692-45AA50FE0C5A}	CLMH066W019MH066W024	216.41	208.80	0.666666667	MH066W019	MH066W024			137	CLMH066W019MH066W024	8	0.0555	0.004502	0.04	0.005402	0.04	0.006407	0.04	0.005402	0.04			
CLMH066W020MH066W025		1998		Existing	assumed Mannings N	MH066W020	MH066W025		T15641	IRWD	PVC	{88ACB8DD-CE69-452D-BE04-06347445A70D}	CLMH066W020MH066W025	207.33	200.80	0.666666667	MH066W020	MH066W025			272	CLMH066W020MH066W025	8	0.0240	0.010554	0.06	0.012668	0.07	0.015021	0.08	0.012668	0.07			
CLMH066W021MH066W022		1998		Existing	assumed Mannings N	MH066W021	MH066W022		T15641	IRWD	PVC	{BF96A7C4-5CFC-4391-96FD-EC2637C0EBC}	CLMH066W021MH066W022	209.91	203.69	0.666666667	MH066W021	MH066W022			129	CLMH066W021MH066W022	8	0.0482	0.003229	0.03	0.003877	0.03	0.004597	0.04	0.003877	0.03			
CLMH066W022MH065N074		1998		Existing	assumed Mannings N	MH066W022	MH065N074		T15641	IRWD	PVC	{98FD66FF-DC68-488E-A6C2-F6CE742BC683}	CLMH066W022MH065N074	203.50	194.50	0.666666667	MH066W022	MH065N074			316	CLMH066W022MH065N074	8	0.0285	0.003229	0.04	0.003877	0.04	0.004597	0.04	0.003877	0.04			
CLMH066W023MH066W020		1998		Existing	assumed Mannings N	MH066W023	MH066W020		T15641	IRWD	PVC	{1B45C7D9-F8CB-467D-9713-367CCCCFFA87}	CLMH066W023MH066W020	207.88	207.53	0.666666667	MH066W023	MH066W020			71	CLMH066W023MH066W020	8	0.0049	0.006229	0.07	0.007474	0.08	0.008864	0.08	0.007474	0.08			
CLMH066W024MH066W023		1998		Existing	assumed Mannings N	MH066W024	MH066W023		T15641	IRWD	PVC	{665128D1-A4C2-4FB9-BBB0-2FDC9444ED86}	CLMH066W024MH066W023	208.61	207.97	0.666666667	MH066W024	MH066W023			130	CLMH066W024MH066W023	8	0.0049	0.006229	0.07	0.007474	0.08	0.008864	0.08	0.007474	0.08			
CLMH066W025MH066W028		1998		Existing	assumed Mannings N	MH066W025	MH066W028		T15641	IRWD	PVC	{CA2DC3BC-6391-451C-8B28-D922A0D126A9}	CLMH066W025MH066W028	200.69	200.14	0.666666667	MH066W025	MH066W028			96	CLMH066W025MH066W028	8	0.0057	0.014964	0.10	0.017962	0.11	0.021296	0.12	0.017962	0.11			
CLMH066W026MH066W024		1998		Existing	assumed Mannings N	MH066W026	MH066W024		T15641	IRWD	PVC	{37FA5B88-CD28-484A-A869-0D8ABCA57AA4}	CLMH066W026MH066W024	209.44	208.80	0.666666667	MH066W026	MH066W024			129	CLMH066W026MH066W024	8	0.0050	0.001727	0.04	0.002072	0.04	0.002457	0.04	0.002072	0.04			
CLMH066W027MH066W026		1998		Existing	assumed Mannings N	MH066W027	MH066W026		T15641	IRWD	PVC	{56698D45-BAF1-4AAC-8916-CFCA4D512938}	CLMH066W027MH066W026	204.02	200.89	0.666666667	MH066W027	MH066W026			149	CLMH066W027MH066W026	8	0.0210	0.004410	0.04	0.005294	0.05	0.006275	0.05	0.005294	0.05			
CLMH066W028MH066W030		1998		Existing	assumed Mannings N	MH066W028	MH066W030		T15641	IRWD	PVC	{8CBFC14D-2B7F-4BBB-AD4A-3171F692BAD5}	CLMH066W028MH066W030	200.05	199.30	0.666666667	MH066W028	MH066W030			82	CLMH066W028MH066W030	8	0.0082	0.014964	0.10	0.017962	0.11	0.021296	0.11	0.017962	0.11			
CLMH066W029MH066W027		1998		Existing	assumed Mannings N	MH066W029	MH066W027		T15641	IRWD	PVC	{94F54B60-9B81-4494-9501-DD05C0BDB8ED}	CLMH066W029MH066W027	204.74	204.11	0.666666667	MH066W029	MH066W027			108	CLMH066W029MH066W027	8	0.0058	0.001619	0.03	0.001944	0.04	0.002303	0.04	0.001944	0.04			
CLMH066W030MH065N080		1998		Existing	assumed Mannings N	MH066W030	MH065N080		T15641	IRWD	PVC	{4E092D88-4032-48DC-8C9C-5A7715A1B43F}	CLMH066W030MH065N080	199.19	192.49	0.666666667	MH066W030	MH065N080			80	CLMH066W030MH065N080	8	0.0838	0.020097	0.06	0.024126	0.07	0.028602	0.08	0.024126	0.07			
CLMH066W031MH066W029		1998		Existing	assumed Mannings N	MH066W031	MH066W029		T15641	IRWD	PVC	{26F99C5C-90B6-4165-B3D8-D6F2704BB2BF}	CLMH066W031MH066W029	205.38	204.83	0.666666667	MH066W031	MH066W029			93	CLMH066W031MH066W029	8	0.0059	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH066W032MH066W030		1998		Existing	assumed Mannings N	MH066W032	MH066W030		T15641	IRWD	PVC	{6810B3A4-46C3-4831-8347-243C3BFB926D}	CLMH066W032MH066W030	201.57	199.39	0.666666667	MH066W032	MH066W030			338	CLMH066W032MH066W030	8	0.0064	0.001818	0.04	0.002184	0.04	0.002589	0.04	0.002184	0.04			
CLMH066W041MH066W045		1998		Existing	assumed Mannings N	MH066W041	MH066W045		T15711	IRWD	PVC	{8F853CD6-21F9-4181-9915-426532F10F5D}	CLMH066W041MH066W045	237.33	236.16	0.666666667	MH066W041	MH066W045			300	CLMH066W041MH066W045	8	0.0039	0.005288	0.07	0.006348	0.07	0.007527	0.08	0.006348	0.07			
CLMH066W042MH066W046		1998		Existing	assumed Mannings N	MH066W042	MH066W046		T15712	IRWD	PVC	{F1A645AA-EE89-4A2A-A3BA-4CB87B0B2BF9}	CLMH066W042MH066W046	230.30	228.50	0.666666667	MH066W042	MH066W046			164	CLMH066W042MH066W046	8	0.0110	0.000416	0.01	0.000500	0.01	0.000592	0.02	0.000500	0.01			
CLMH066W043MH066W044		1999		Existing	assumed Mannings N	MH066W043	MH066W044		T15711	IRWD	PVC	{E12BE289-5666-4A1C-98FC-EFB5FF80264C}	CLMH066W043MH066W044	248.30	239.00	0.666666667	MH066W043	MH066W044			173	CLMH066W043MH066W044	8	0.0538	0.000986	0.02	0.001184	0.02	0.001404	0.02	0.001184	0.02			
CLMH066W044MH066W045		1999		Existing	assumed Mannings N	MH066W044	MH066W045		T15711	IRWD	PVC	{7D4D0CDC-480D-4319-8ED8-C2C87E001345}	CLMH066W044MH066W045	238.80	236.05	0.666666667	MH066W044	MH066W045			54	CLMH066W044MH066W045	8	0.0509	0.000986	0.02	0.001184	0.02	0.001404	0.02	0.001184	0.02			
CLMH066W045MH066W047		1999		Existing	assumed Mannings N	MH066W045	MH066W047		T15711	IRWD	PVC	{E4969668-F701-4476-B300-32CAB4FB165B}	CLMH066W045MH066W047	235.96	235.03	0.666666667	MH066W045	MH066W047			158	CLMH066W045MH066W047	8	0.0059	0.006274	0.07	0.007531	0.07	0.008931	0.08	0.007531	0.07			
CLMH066W046MH066W048		1998		Existing	assumed Mannings N	MH066W046	MH066W048		T15712	IRWD	PVC	{B2D86F29-0CF1-4B1D-B55F-FB56B22E2733}	CLMH066W046MH066W048	228.30	225.52	0.666666667	MH066W046	MH066W048			133	CLMH066W046MH066W048	8	0.0209	0.003454	0.04	0.004147	0.04	0.004914	0.05	0.004147	0.04			
CLMH066W047MH066W052		1999		Existing	assumed Mannings N	MH066W047	MH066W052		T15711	IRWD	PVC	{5051EB3D-2B82-448D-BCBB-C9FACB8F2F35}	CLMH066W047MH066W052	234.94	230.72	0.666666667	MH066W047	MH066W052			303	CLMH066W047MH066W052	8	0.0139	0.008921	0.07	0.010671	0.07	0.012653	0.08	0.010671	0.07			
CLMH066W048MH066W051		1999		Existing	assumed Mannings N	MH066W048	MH066W051		T15712	IRWD	PVC	{695E9007-83F1-4767-B424-FCCA9AE10EA7}	CLMH066W048MH066W051	225.41	222.00	0.666666667	MH066W048	MH066W051			175	CLMH066W048MH066W051	8	0.0195	0.006846	0.05	0.008219	0.06	0.009740	0.06	0.008219	0.06			
CLMH066W049MH066W046		1999		Existing	assumed Mannings N	MH066W049	MH066W046		T15712	IRWD	PVC	{A5F82A73-8281-4921-B3CC-9029112B1364}	CLMH066W049MH066W046	231.30	228.50	0.666666667	MH066W049	MH066W046			181	CLMH066W049MH066W046	8	0.0155	0.001712	0.03	0.002055	0.03	0.002405	0.03	0.002055	0.03			
CLMH066W050MH066W056		1999		Existing	assumed Mannings N	MH066W050	MH066W056		T15711	IRWD	PVC	{E9A746E7-140C-4D45-968F-20C3332E429F}	CLMH066W050MH066W056	242.77	234.89	0.666666667	MH066W050	MH066W056			398	CLMH066W050MH066W056	8	0.0198	0.004919	0.05	0.005903	0.05	0.006999	0.05	0.005903	0.05			
CLMH066W051MH066W054		1999		Existing	assumed Mannings N	MH066W051	MH066W054		T15712	IRWD	PVC	{36DD979F-E305-41C0-82FC-F0490FB23D45}	CLMH066W051MH066W054	221.89	217.72	0.666666667	MH066W051	MH066W054			187	CLMH066W051MH066W054	8	0.0223	0.009791	0.06	0.011755	0.07	0.013930	0.07	0.011755	0.07			
CLMH066W052MH066W053		1999		Existing	assumed Mannings N	MH066W052	MH066W053		T15711	IRWD	PVC	{AB21965A-2737-485C-BD8E-70BC248969B7}	CLMH066W052MH066W053	230.61	229.67	0.666666667	MH066W052	MH066W053			52	CLMH066W052MH066W053	8	0.0181	0.018881	0.09	0.022627	0.10	0.026829	0.11	0.022627	0.10			
CLMH066W053MH066W057		1999		Existing	assumed Mannings N	MH066W053	MH066W057		T15711	IRWD	PVC	{14B34B5E-B61D-4B13-B2A8-CC1CF7693116}	CLMH066W053MH066W057	229.58	226.03	0.666666667	MH066W053	MH066W057			181	CLMH066W053MH066W057	8	0.0196	0.010733	0.09	0.012870	0.10	0.015088	0.11	0.012870	0.10			
CLMH066W054MH066W058		1999		Existing	assumed Mannings N	MH066W054	MH066W058		T15712	IRWD	PVC	{213B83AE-1952-4683-9FDB-1903D8740098}	CLMH066W054MH066W058	217.63	214.27	0.666666667	MH066W054	MH066W058			164	CLMH066W054MH066W058	8	0.0205	0.013522	0.07	0.016233	0.08	0.019239	0.09	0.016233	0.08			
CLMH066W055MH066W059		1999		Existing	assumed Mannings N	MH066W055	MH066W059		T15712	IRWD	PVC	{20AFC701-BEF7-4B24-918F-163DEBEBF981}	CLMH066W055MH066W059	210.89	210.28	0.666666667	MH066W055	MH066W059			157	CLMH066W055MH066W059	8	0.0039	0.017160	0.12	0.020602	0.13	0.024418	0.14	0.020602	0.13			
CLMH066W056MH066W052		1999		Existing	assumed Mannings N	MH066W056	MH066W052		T15713	IRWD	PVC	{1D126CAA-E14B-485E-8883-FBB15F5AFD81}	CLMH066W056MH066W052	234.69	230.82	0.666666667	MH066W056	MH066W052			262	CLMH066W056MH066W052	8	0.0148	0.008700	0.07	0.011956	0.08	0.014176	0.08	0.011956	0.08			
CLMH066W057MH066W060		1999		Existing	assumed Mannings N	MH066W057	MH066W060		T15711	IRWD	PVC	{DFEC1834-EBCC-4081-8722-F5038272CD5}	CLMH066W057MH066W060	225.94	219.63	0.666666667	MH066W057	MH066W060			181	CLMH066W057MH066W060	8	0.0349	0.027115	0.09	0.032512	0.10	0.038548	0.11	0.032512	0.10			
CLMH066W058MH066W055		1999		Existing	assumed Mannings N	MH066W058	MH066W055		T15712	IRWD	PVC	{09CBE818-938B-438B-B648-398C90F915FB}	CLMH066W058MH066W055	214.07	211.10	0.666666667	MH066W058	MH066W055			214	CLMH066W058MH066W055	8	0.0186	0.015449	0.08	0.018547	0.09	0.021983	0.10	0.018547	0.09			
CLMH066W059MH025004		1998		Existing	assumed Mannings N	MH066W059	MH025004		A00830	IRWD	VCP	{30EC5D0E-3DDA-447B-A3CB-133576976EFE}	CLMH066W059MH025004	210.09	209.77	0.833333333	MH066W059	MH025004			100	CLMH066W059MH025004	10	0.0032	0.059273	0.17	0.071122	0.19	0.084315	0.21	0.071122	0.19			
CLMH066W060MH066W061		1999		Existing	assumed Mannings N	MH066W060	MH066W061		T15711	IRWD	PVC	{3C7B879C-2807-424F-8E42-C1CE7C929D3B5}	CLMH066W060MH066W061	219.57	214.05	0.666666667	MH066W060	MH066W061			115	CLMH066W060MH066W061	8	0.0402	0.028703	0.09	0.034418	0.09	0.040808	0.10	0.034418	0.09			
CLMH066W061MH066W064		1999		Existing	assumed Mannings N	MH066W061	MH066W064		T15711	IRWD	PVC	{B6C78269-C323-49D1-A4DC-82966EGA951E}	CLMH066W061MH066W064	213.94	213.14	0.666666667	MH066W061	MH066W064			210	CLMH066W061MH066W064	8	0.0038	0.030276	0.16	0.036306	0.17	0.043047	0.19	0.036306	0.17			
CLMH066W062MH066W057		1999		Existing	assumed Mannings N	MH066W062	MH066W057		T15711	IRWD	PVC	{8FCC5033-C73A-44DC-BD50-D24EFD0B976D}	CLMH066W062MH066W057	231.69	226.13	0.666666667	MH066W062	MH066W057			400	CLMH066W062MH066W057	8	0.0139	0.003131	0.04	0.003758	0.04	0.004455	0.05	0.003758	0.04			
CLMH066W063MH066W065		1999		Existing	assumed Mannings N	MH066W063	MH066W065		T15711	IRWD	PVC	{1C39F2E7-29E6-4C8F-912D-1D666B9102AF}	CLMH066W063MH066W065	215.47	214.72	0.666666667	MH066W063	MH066W065			191	CLMH066W063MH066W065	8	0.0039	0.010621	0.09	0.012753	0.10	0.015118	0.11	0.012753	0.10			
CLMH066W064MH066W065		1999		Existing	assumed Mannings N	MH066W064	MH066W065		A00830	IRWD	VCP	{1CC1B908-CE77-481C-9049-0128EAF91177}	CLMH066W064MH066W065	212.95	211.41	0.833333333	MH066W064	MH066W065			266	CLMH066W064MH066W065	10	0.0058	0.041759	0.13	0.050095	0.14	0.059394	0.16	0.050095	0.14			
CLMH066W065MH066W064		1998		Existing	assumed Mannings N	MH066W065	MH066W064		A00830	IRWD	VCP	{047CD116-A6D5-4069-AF2D-DCDAF13A2743}	CLMH066W065MH066W064	214.52	213.05	0.833333333	MH066W065	MH066W064			151	CLMH066W065MH066W064	10	0.0097	0.011484	0.06	0.013789	0.07	0.016346	0.08	0.013789	0.07			
CLMH066W066MH066W063		1999		Existing	assumed Mannings N	MH066W066	MH066W063		T15711	IRWD	PVC	{9FEF0A20-A29A-445E-AAE7-D28EAFB6CBF8}	CLMH066W066MH066W063	221.19	215.66	0.666666667	MH066W066	MH066W063			221	CLMH066W066MH066W063	8	0.0225	0.006397	0.05	0.007681	0.06	0.009106	0.06	0.007681	0.06			
CLMH066W067MH066W123		2014		Existing	assumed Mannings N	MH066W067	MH066W123		16704	IRWD	PVC	{CA0DA753-7079-46CD-9E64-536E41AE8A80}	CLMH066W067MH066W123	273.36	268.95	0.666666667	MH066W067	MH066W123			180	CLMH066W067MH066W123	8	0.0245	0.000154	0.00	0.000184	0.01	0.000215	0.01	0.000184	0.01			
CLMH066W090MH066W092		2000		Existing	assumed Mannings N	MH066W090	MH066W092		T15972	IRWD	PVC	{98FABAF3-643A-4F3F-ABB8-9B741CD57DB0}	CLMH066W090MH066W092	209.16	201.64	0.666666667	MH066W090	MH066W092			218	CLMH066W090MH066W092	8	0.0345	0.003051	0.03	0.003664	0.04	0.004346	0.04	0.003664	0.04			
CLMH066W091MH066W093		2000		Existing	assumed Mannings N	MH066W091	MH066W093		T15972	IRWD	PVC	{CF9F5DDD-2CC6-4E92-85C6-649F1B4ECE65}	CLMH066W091MH066W093	211.11	207.91	0.666666667	MH066W091	MH066W093			216	CLMH066W091MH066W093	8	0.0173	0.003654	0.04	0.004386	0.05	0.005200	0.05	0.004386	0.05			
CLMH066W092MH065N161		2000		Existing	assumed Mannings N	MH066W092	MH065N161		T15972	IRWD	PVC	{E0A5E162-D1BE-4019-8641-D8D0B4622C1C}	CLMH066W092MH065N161	201.55	198.21	0.666666667	MH066W092	MH065N161			171	CLMH066W092MH065N161	8	0.0195	0.005442	0.05	0.006533	0.05	0.007747	0.06	0.006533	0.05			
CLMH066W093MH065N162		2000		Existing	assumed Mannings N	MH066W093	MH065N162		T15972	IRWD	PVC	{2ADA8FAA-D405-4220-B02F-D7B8E57FEA22}	CLMH066W093MH065N162	207.80	197.32	0.666666667	MH066W093	MH065N162			302	CLMH066W093MH065N162	8	0.0347	0.010205	0.06	0.012253	0.06	0.014526	0.07	0.012253	0.06			
CLMH066W098MH066N006		2002		Existing	assumed Mannings N	MH066W098	MH066N006		A00669C	IRWD	VCP	{93C08121-1673-49B1-A13A-C81A2A1CDFA7}	CLMH066W098MH066N006	253.77	252.83	0.666666667	MH066W098	MH066N006			265	CLMH066W098MH066N006	8	0.0051	0.000471	0.02	0.000503	0.02	0.000595	0.02	0.000503	0.02			
CLMH066W099MH066W098		2002		Existing	assumed Mannings N	MH066W099	MH066W098		A00669C	IRWD	VCP	{708DB2E8-2A25-401D-9695-E8B180B856F3}	CLMH066W099MH066W098	254.83	253.94	0.666666667	MH066W099	MH066W098			192	CLMH066W099MH066W098	8	0.0046	0.000471	0.02	0.000503	0.02	0.000595	0.02	0.000503	0.02			
CLMH066W100MH066W099		2002		Existing	assumed Mannings N	MH066W100	MH066W099		A00669C	IRWD	VCP	{98272C1D-DF86-49B8-A66E-0C7C3E107730}	CLMH066W100MH066W099	256.42	255.03	0.666666667	MH066W100	MH066W099			238	CLMH066W100MH066W099	8	0.0058	0.000471	0.02	0.000503	0.02	0.000595	0.02	0.000503	0.02			
CLMH066W101MH066W100		2002		Existing	assumed Mannings N	MH066W101	MH066W100		A00669C	IRWD	VCP	{B236D17F-9FC5-410A-8763-4DD639F740F5}	CLMH066W101MH066W100	256.95	256.63	0.666666667	MH066W101	MH066W100			62	CLMH066W101MH066W100	8	0.0052	0.000471	0.02	0.000503	0.02	0.000595	0.02	0.000503	0.02			
CLMH066W102MH066W101		2002		Existing	assumed Mannings N	MH066W102	MH066W101		A00669C	IRWD	VCP	{0634607C-E30B-4C51-A2C7-DF79D5E4BD96}	CLMH066W102MH066W101	257.64	257.04	0.666666667	MH066W102	MH066W101			101	CLMH066W102MH066W101	8	0.0059	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH066W103MH065024		2007		Existing	assumed Mannings N	MH066W103	MH065024		T16529D	IRWD	PVC	{AE8BC766-B6AE-4FAA-A42A-382C5541F4ED}	CLMH066W103MH065024	232.27	231.08	0.833333333	MH066W103	MH065024			172	CLMH066W103MH065024	10	0.0069	0.021621	0.09	0.026018	0.10	0.031092	0.11	0.618859	0.49			
CLMH066W104MH065388		2007		Existing	assumed Mannings N	MH066W104	MH065388		T16529D	IRWD	PVC	{8843608C-618A-4ABE-A4E4-3965750B2FE}	CLMH066W104MH065388	233.15	232.47	0.833333333	MH066W104	MH065388		Future Less than 15-in, d/D >0.50	134	CLMH066W104MH065388	10	0.0051	0.015888	0.08	0.019115	0.09	0.022871	0.10	0.613343	0.53			
CLMH066W105MH066W106		2007		Existing	assumed Mannings N	MH066W105	MH066W106		T16529D	IRWD	PVC	{E9C5B40F-4E4D-4DBE-AEA5-3F023163F9}	CLMH066W105MH066W106	246.95	245.80	0.833333333	MH066W105	MH066W106			141	CLMH066W105MH066W106	10	0.0082	0.015799	0.08	0.019034	0.08	0.022747	0.09	0.585014	0.45			
CLMH066W106MH066W107		2007		Existing	assumed Mannings N	MH066W106	MH066W107		T16529D	IRWD	PVC	{37952D97-BE88-468B-B861-9261E0EB901E5}	CLMH066W106MH066W107	245.60	245.30	0.833333333	MH066W106	MH066W107		Future Less than 15-in, d/D >0.50	59	CLMH066W106MH066W107	10	0.0051	0.015908	0.08	0.019163	0.09	0.022900	0.10	0.613799	0.53			
CLMH066W107MH066W108		2007		Existing	assumed Mannings N	MH066W107	MH066W108		T16529D	IRWD	PVC	{7F1DAA7C-ED53-4C08-A710-ECA81BDE8A49}	CLMH066W107MH066W108	245.10	234.00	0.833333333	MH066W107	MH066W108			320	CLMH066W107MH066W108	10	0.0147	0.015157	0.06	0.018188	0.07	0.021887	0.08	0.613537	0.31			
CLMH066W108MH066W104		2007		Existing	assumed Mannings N	MH066W108	MH066W104		T16529D	IRWD	PVC	{D038F9DB-B13E-45AF-9150-238D56BB7101}	CLMH066W108MH066W104	233.80	233.35	0.833333333	MH066W108	MH066W104		Future Less than 15-in, d/D >0.50	93	CLMH066W108MH066W104	10	0.0048	0.015895	0.08	0.019144	0.09	0.022881	0.10	0.613467	0.53			
CLMH066W109MH066W111		2007		Existing	assumed Mannings N	MH066W109	MH066W111		T16529D	IRWD	PVC	{37C85995-BDC7-482A-95ED-3802CDA5D26D}	CLMH066W109MH066W111	256.95	254.20	0.833333333	MH066W109	MH066W111			279	CLMH066W109MH066W111	10	0.0099	0.009242	0.06	0.011108	0.06	0.013234	0.07	0.431570	0.36			
CLMH066W110MH066W113		2007		Existing	assumed Mannings N	MH066W110	MH066W113		T16529D	IRWD	PVC	{105F4C78-03F9-4558-A553-38216C5C2173}	CLMH066W110MH066W113	267.09	264.90	0.833333333	MH066W110	MH066W113			292	CLMH066W110MH066W113	10	0.0075	0.005271	0.04	0.006348	0.05	0.007589	0.05	0.375668	0.36			
CLMH066W111MH066W029		2007		Existing	assumed Mannings N	MH066W111	MH066W029		T16529D	IRWD	PVC	{1FEF21DE-3681-4974-99F4-B703E1BCCE87}	CLMH066W111MH066W029	254.00	251.90	0.833333333	MH066W111	MH066W029			126	CLMH066W111MH066W029	10	0.0167	0.009350	0.05	0.011217	0.05	0.013384	0.06	0.436345	0.32			
CLMH066W112MH066W109		2007		Existing	assumed Mannings N	MH066W112	MH066W109		T16529D	IRWD	PVC	{CDE44CCF-0BD2-48AA-BD59-8146294AE817}	CLMH066W112MH066W109	259.30	257.15	0.833333333	MH066W112	MH066W109			178	CLMH066W112MH066W109	10	0.0121	0.009045	0.05	0.010868	0.06	0.012954	0.06	0.375567	0.32			
CLMH066W113MH066W112		2007		Existing	assumed Mannings N	MH066W113	MH066W112		T16529D	IRWD	PVC	{83E0D008-6186-4876-AE5F-FF48264BDD84}	CLMH066W113MH066W112	264.70	259.50	0.833333333	MH066W113	MH066W112			348	CLMH066W113MH066W112	10	0.0149	0.009068	0.05	0.010899	0.05	0.012986	0.06	0.375588	0.30			
CLMH066W114MH066W115		2006		Existing	assumed Mannings N	MH066W114	MH066W115		T17004D	IRWD	PVC	{2408612E-A6CB-4EFB-A072-47CB82AF1029}	CLMH066W114MH066W115	234.81	234.31	0.666666667	MH066W114	MH066W115			73	CLMH066W114MH066W115	8	0.0069	0.003144	0.05	0.003775	0.05	0.004474	0.06	0.003775	0.05			
CLMH066W115MH065076		2006		Existing	assumed Mannings N	MH066W115	MH065076		T17004D	IRWD	PVC	{C768A077-C532-4C93-A0CF-B61473B936DC}	CLMH066W115MH065076	234.11	230.97	0.666666667	MH066W115	MH065076			168	CLMH066W115MH065076	8	0.0187	0.009091	0.06	0.010915	0.07	0.012939	0.07	0.010915	0.07			
CLMH066W121MH066W122		2014		Existing	assumed Mannings N	MH066W121	MH066W122		16703	IRWD	PVC	{3F087BD8-CA0A-4AEB-BC36-F4471E2C8567}	CLMH066W121MH066W122	262.72	260.61	0.666666667	MH066W121	MH066W122			141	CLMH066W121MH066W122	8	0.0150	0.000122	0.01	0.000147	0.01	0.000173	0.01	0.001049	0.02			
CLMH066W122MH066W109	Main after junctio	2014		Existing	assumed Mannings N	MH066W122	MH066W109		16703	IRWD	PVC	{6A4DD90C-DB1B-404A-B5B6-21E88A009F54}	CLMH066W122MH066W109	260.41	256.95	0.666666667	MH066W122	MH066W109			284	CLMH066W122MH066W109	8	0.0122	0.000242	0.04	0.000293	0.04	0.000345	0.05	0.057549	0.31			
CLMH066W123MH066W122		2014		Existing	assumed Mannings N	MH066W123	MH066W122		16703	IRWD	PVC	{3F3A97AB-4CFB-4C3C-BAC5-A1A4923B604C}	CLMH066W123MH066W122	268.75	260.61	0.666666667	MH066W123	MH066W122			277	CLMH066W123MH066W122	8	0.0294	0.000186	0.00	0.000223	0.01	0.000261	0.01	0.056500	0.13			
CLMH066W124MH066W125		2014		Existing	assumed Mannings N	MH066W124	MH066W125		16703	IRWD	PVC	{312E3E11-537D-44B4-BAFD-81ABFC663940}	CLMH066W124MH066W125	259.57	256.52	0.666666667	MH066W124	MH066W125			204	CLMH066W124MH066W125	8	0.0150	0.000122	0.01	0.000147	0.01	0.000173	0.01	0.004944	0.05			
CLMH066W125MH066W111	Main after junctio	2014		Existing	assumed Mannings N	MH066W125	MH066W111		16703

CLMH082N024MH082N023		2013		Existing	assumed Mannings N	MH082N024	MH082N023		T17015A	IRWD	PVC	{9184FA68-2583-470E-B31B-0B9ECCA85BE}	CLMH082N024MH082N023	333.39	331.43	0.666666667	MH082N024	MH082N023			98	CLMH082N024MH082N023	8	0.0200	0.002757	0.04	0.003311	0.04	0.003972	0.04	0.113686	0.21				
CLMH082N025MH082N024		2013		Existing	assumed Mannings N	MH082N025	MH082N024		T17015A	IRWD	PVC	{D7068ZFE-E26E-47BC-B1FB-E28CD7FE2336}	CLMH082N025MH082N024	334.86	333.49	0.666666667	MH082N025	MH082N024			69	CLMH082N025MH082N024	8	0.0200	0.002759	0.04	0.003313	0.04	0.003974	0.04	0.113694	0.21				
CLMH082N026MH082N025		2013		Existing	assumed Mannings N	MH082N026	MH082N025		T17015A	IRWD	PVC	{69E92EDF-8CE5-4376-90C1-88F83C18CCB6}	CLMH082N026MH082N025	337.06	334.96	0.666666667	MH082N026	MH082N025			105	CLMH082N026MH082N025	8	0.0200	0.002760	0.04	0.003315	0.04	0.003975	0.04	0.113699	0.21				
CLMH082N027MH082N026		2013		Existing	assumed Mannings N	MH082N027	MH082N026		T17015A	IRWD	PVC	{BBAF5255-582F-44F8-8C0F-3BCBC0EF5783}	CLMH082N027MH082N026	344.02	337.16	0.666666667	MH082N027	MH082N026			168	CLMH082N027MH082N026	8	0.0200	0.002765	0.04	0.003318	0.04	0.003982	0.04	0.113714	0.21				
CLMH082N028MH082N027		2013		Existing	assumed Mannings N	MH082N028	MH082N027		T17015A	IRWD	PVC	{02DD1590-A3DE-4D8C-9E06-773EECB25E91}	CLMH082N028MH082N027	344.79	344.12	0.666666667	MH082N028	MH082N027			168	CLMH082N028MH082N027	8	0.0040	0.001909	0.04	0.002287	0.05	0.002729	0.05	0.088472	0.27				
CLMH082N029MH082N030		2013		Existing	assumed Mannings N	MH082N029	MH082N030		T17015A	IRWD	PVC	{8579AB71-3146-4DF9-801F-B36D1EF785B8}	CLMH082N029MH082N030	331.29	330.45	0.666666667	MH082N029	MH082N030			42	CLMH082N029MH082N030	8	0.0200	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.000154	0.01				
CLMH082N030MH082W235		2013		Existing	assumed Mannings N	MH082N030	MH082W235		T17015A	IRWD	PVC	{65611EC7-B70F-4D9C-853F-2FD308AA09BA}	CLMH082N030MH082W235	330.25	327.45	0.666666667	MH082N030	MH082W235			140	CLMH082N030MH082W235	8	0.0200	0.002859	0.04	0.003430	0.04	0.004117	0.04	0.113820	0.21				
CLMH082N031MH082N032		2013		Existing	assumed Mannings N	MH082N031	MH082N032		T16725	IRWD	PVC	{7F8E887D-162C-40AB-AD45-8958BD33B725}	CLMH082N031MH082N032	342.65	341.50	0.666666667	MH082N031	MH082N032			108	CLMH082N031MH082N032	8	0.0106	0.000628	0.02	0.000753	0.02	0.000906	0.02	0.018632	0.10				
CLMH082N033MH082N033		2013		Existing	assumed Mannings N	MH082N033	MH082N033		T16725	IRWD	PVC	{CE8E4E82-E5E8-4C6D-94AD-6D0F7F9D8E70}	CLMH082N033MH082N033	341.40	338.39	0.666666667	MH082N033	MH082N033			141	CLMH082N033MH082N033	8	0.0153	0.000748	0.02	0.000898	0.02	0.001083	0.02	0.021196	0.10				
CLMH082N026MH082N025	66.19' S-N IS T17015A	2013		Existing	assumed Mannings N	MH082N026	MH082N025		T16725	IRWD	PVC	{B762A974-CA9A-4B4E-8E96-3CEFCB047FA3}	CLMH082N033MH082N026	338.29	337.26	0.666666667	MH082N033	MH082N026			118	CLMH082N033MH082N026	8	0.0087	0.000857	0.02	0.001033	0.02	0.001252	0.03	0.025347	0.12				
CLMH082N034MH082N035		2013		Existing	assumed Mannings N	MH082N034	MH082N035		T16725	IRWD	PVC	{43C7A481-07FB-4094-8173-3FADBE8B4D37}	CLMH082N034MH082N035	340.25	338.90	0.666666667	MH082N034	MH082N035			162	CLMH082N034MH082N035	8	0.0083	0.000126	0.01	0.000150	0.01	0.000181	0.01	0.004523	0.05				
CLMH082N035MH082N036		2013		Existing	assumed Mannings N	MH082N035	MH082N036		T16725	IRWD	PVC	{ACO51A0B-AB6A-4499-BFCF-B2729DF6191C}	CLMH082N035MH082N036	338.10	338.00	0.666666667	MH082N035	MH082N036			138	CLMH082N035MH082N036	8	0.0051	0.000249	0.01	0.000298	0.01	0.000359	0.01	0.006841	0.07				
CLMH082N036MH082N037		2013		Existing	assumed Mannings N	MH082N036	MH082N037		T16725	IRWD	PVC	{74962AC6-EB55-4C2C-8EA4-46402FD67B10}	CLMH082N036MH082N037	338.00	335.26	0.666666667	MH082N036	MH082N037			72	CLMH082N036MH082N037	8	0.0379	0.000373	0.01	0.000448	0.01	0.000539	0.01	0.010089	0.06				
CLMH082N037MH082N038		2013		Existing	assumed Mannings N	MH082N037	MH082N038		T16725	IRWD	PVC	{CF853ED1-4699-40DB-A84A-1757951C066F}	CLMH082N037MH082N038	335.16	334.30	0.666666667	MH082N037	MH082N038			86	CLMH082N037MH082N038	8	0.0100	0.001127	0.02	0.001350	0.03	0.001622	0.03	0.035274	0.14				
CLMH082N038MH082N039		2013		Existing	assumed Mannings N	MH082N038	MH082N039		T16725	IRWD	PVC	{1094AAFE-C5E2-44E5-9CB0-C93CD68BC825}	CLMH082N038MH082N039	334.20	326.07	0.666666667	MH082N038	MH082N039			138	CLMH082N038MH082N039	8	0.0591	0.001252	0.02	0.001500	0.02	0.001802	0.02	0.037774	0.09				
CLMH082N039MH082W234	67' S-N IS T17015	2013		Existing	assumed Mannings N	MH082N039	MH082W234		T16725	IRWD	PVC	{B79F308B-435E-44F9-83B0-EA376295D234}	CLMH082N039MH082W234	325.97	322.99	0.666666667	MH082N039	MH082W234			255	CLMH082N039MH082W234	8	0.0117	0.001614	0.03	0.001937	0.03	0.002325	0.04	0.046405	0.15				
CLMH082N040MH082N041		2013		Existing	assumed Mannings N	MH082N040	MH082N041		T16725	IRWD	PVC	{89E8E88E-922F-4140-B6F0-A6B8AD4CE6EE}	CLMH082N040MH082N041	342.10	339.40	0.666666667	MH082N040	MH082N041			209	CLMH082N040MH082N041	8	0.0129	0.000255	0.01	0.000305	0.01	0.000365	0.01	0.005380	0.05				
CLMH082N041MH082N042		2013		Existing	assumed Mannings N	MH082N041	MH082N042		T16725	IRWD	PVC	{EECF69A8-5465-4EB6-8A86-0C7791E432C}	CLMH082N041MH082N042	339.30	335.90	0.666666667	MH082N041	MH082N042			232	CLMH082N041MH082N042	8	0.0147	0.000379	0.01	0.000453	0.01	0.000544	0.01	0.008031	0.06				
CLMH082N042MH082N037		2013		Existing	assumed Mannings N	MH082N042	MH082N037		T16725	IRWD	PVC	{F52E41C0-A19A-4D80-A2CD-1C5493A23ECB}	CLMH082N042MH082N037	335.80	335.36	0.666666667	MH082N042	MH082N037			108	CLMH082N042MH082N037	8	0.0041	0.000758	0.02	0.000907	0.02	0.001086	0.03	0.025185	0.14				
CLMH082N043MH082N044		2013		Existing	assumed Mannings N	MH082N043	MH082N044		T16725	IRWD	PVC	{B3A09AD7-21FF-482A-93E7-5DD29A1B651D}	CLMH082N043MH082N044	342.00	339.12	0.666666667	MH082N043	MH082N044			231	CLMH082N043MH082N044	8	0.0125	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.005019	0.05				
CLMH082N044MH082N045		2013		Existing	assumed Mannings N	MH082N044	MH082N045		T16725	IRWD	PVC	{1CE6CF95-690A-401B-A135-F8E5F2E42C6E}	CLMH082N044MH082N045	339.02	337.00	0.666666667	MH082N044	MH082N045			175	CLMH082N044MH082N045	8	0.0115	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.005019	0.05				
CLMH082N045MH082N042		2013		Existing	assumed Mannings N	MH082N045	MH082N042		T16725	IRWD	PVC	{A50D8A77-FC44-4398-B141-7BF607CA90FD}	CLMH082N045MH082N042	336.80	336.00	0.666666667	MH082N045	MH082N042			120	CLMH082N045MH082N042	8	0.0067	0.000256	0.01	0.000305	0.01	0.000366	0.01	0.008764	0.08				
CLMH082N046MH082N045		2013		Existing	assumed Mannings N	MH082N046	MH082N045		T16725	IRWD	PVC	{F44B1B84-18C2-4938-98F8-5FE78E3ABDB4}	CLMH082N046MH082N045	337.70	336.90	0.666666667	MH082N046	MH082N045			56	CLMH082N046MH082N045	8	0.0142	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003745	0.04				
CLMH082N047MH082N048		2013		Existing	assumed Mannings N	MH082N047	MH082N048		T16725	IRWD	PVC	{9CAB2005-7251-43A5-BFF3-983AC1657AD5}	CLMH082N047MH082N048	342.10	340.80	0.666666667	MH082N047	MH082N048			125	CLMH082N047MH082N048	8	0.0104	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.008390	0.07				
CLMH082N048MH082N042		2013		Existing	assumed Mannings N	MH082N048	MH082N042		T16725	IRWD	PVC	{C7B44066-CE8A-43BE-8046-C6256E2AEA7A}	CLMH082N048MH082N042	340.70	336.00	0.666666667	MH082N048	MH082N042			282	CLMH082N048MH082N042	8	0.0167	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.008390	0.06				
CLMH082N049MH082N050		2013		Existing	assumed Mannings N	MH082N049	MH082N050		T16725	IRWD	PVC	{FBA0035F-BF62-4A95-9656-4A2FB2C47A7A}	CLMH082N049MH082N050	347.70	345.90	0.666666667	MH082N049	MH082N050			123	CLMH082N049MH082N050	8	0.0146	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002342	0.04				
CLMH082N050MH082N040		2013		Existing	assumed Mannings N	MH082N050	MH082N040		T16725	IRWD	PVC	{30692EAA-7B6D-4BCF-90CB-337AAC3DD4C1}	CLMH082N050MH082N040	345.80	342.30	0.666666667	MH082N050	MH082N040			282	CLMH082N050MH082N040	8	0.0124	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.002342	0.04				
CLMH082N051MH082N040		2013		Existing	assumed Mannings N	MH082N051	MH082N040		T16725	IRWD	PVC	{D366D675-958B-44E5-A5E0-80BA11CBEF01}	CLMH082N051MH082N040	344.70	342.30	0.666666667	MH082N051	MH082N040			140	CLMH082N051MH082N040	8	0.0133	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003038	0.04				
CLMH082N052MH082N053		2014		Existing	assumed Mannings N	MH082N052	MH082N053		T16725	IRWD	PVC	{D3D52834-22AC-42FF-8D04-B9B2E51180B2}	CLMH082N052MH082N053	344.30	343.00	0.666666667	MH082N052	MH082N053			123	CLMH082N052MH082N053	8	0.0105	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002651	0.04				
CLMH082N053MH082N041		2013		Existing	assumed Mannings N	MH082N053	MH082N041		T16725	IRWD	PVC	{A5E5D7E2-F98B-4C16-9AC4-921A6ED7E7E7}	CLMH082N053MH082N041	342.90	339.50	0.666666667	MH082N053	MH082N041			282	CLMH082N053MH082N041	8	0.0121	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.002651	0.04				
CLMH082N054MH082N055		2014		Existing	assumed Mannings N	MH082N054	MH082N055		T16724	IRWD	PVC	{EFC6602A-A18B-41A0-8000-90ED08010FC6}	CLMH082N054MH082N055	336.00	330.58	0.666666667	MH082N054	MH082N055			336	CLMH082N054MH082N055	8	0.0361	0.000258	0.01	0.000308	0.01	0.000367	0.01	0.004100	0.04				
CLMH082N055MH082N039	65'E-W IS T16725	2014		Existing	assumed Mannings N	MH082N055	MH082N039		T16724	IRWD	PVC	{7F5FDE84-8C25-460D-A80E-333DF96BDB99}	CLMH082N055MH082N039	330.48	326.17	0.666666667	MH082N055	MH082N039			95	CLMH082N055MH082N039	8	0.0454	0.000388	0.01	0.000465	0.01	0.000551	0.01	0.008632	0.05				
CLMH082N056MH082N057		2014		Existing	assumed Mannings N	MH082N056	MH082N057		T16724	IRWD	PVC	{0ED012B6-08B2-4291-88E6-D9E202D6FA6B}	CLMH082N056MH082N057	340.45	340.20	0.666666667	MH082N056	MH082N057			25	CLMH082N056MH082N057	8	0.0101	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002500	0.04				
CLMH082N057MH082N058		2014		Existing	assumed Mannings N	MH082N057	MH082N058		T16724	IRWD	PVC	{5E7444F4-B553-4696-88B6-CCBEFA8DF05B}	CLMH082N057MH082N058	340.00	338.54	0.666666667	MH082N057	MH082N058			109	CLMH082N057MH082N058	8	0.0133	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002500	0.04				
CLMH082N058MH082N038	30.5' E-W IS T167	2014		Existing	assumed Mannings N	MH082N058	MH082N038		T16724	IRWD	PVC	{0A28F9D8-C3B1-4172-A636-AA4A6ECCF441}	CLMH082N058MH082N038	338.44	334.40	0.666666667	MH082N058	MH082N038			215	CLMH082N058MH082N038	8	0.0188	0.000129	0.01	0.000153	0.01	0.000183	0.01	0.002500	0.03				
CLMH082N059MH082N060		2014		Existing	assumed Mannings N	MH082N059	MH082N060		T16724	IRWD	PVC	{FBF05C6F-CE3B-489E-98CC-E8D719A22717}	CLMH082N059MH082N060	341.80	341.55	0.666666667	MH082N059	MH082N060			25	CLMH082N059MH082N060	8	0.0103	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003248	0.04				
CLMH082N060MH082N061		2014		Existing	assumed Mannings N	MH082N060	MH082N061		T16724	IRWD	PVC	{80A06157-F154-4817-92C8-F540AEE0B335}	CLMH082N060MH082N061	341.35	340.05	0.666666667	MH082N060	MH082N061			127	CLMH082N060MH082N061	8	0.0102	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003248	0.04				
CLMH082N061MH082N036	30.5' FROM E-W S	2014		Existing	assumed Mannings N	MH082N061	MH082N036		T16724	IRWD	PVC	{AF24CBED-5E85-45C4-ABC3-C6E1852D762F}	CLMH082N061MH082N036	339.95	338.20	0.666666667	MH082N061	MH082N036			198	CLMH082N061MH082N036	8	0.0088	0.000127	0.01	0.000152	0.01	0.000182	0.01	0.003248	0.05				
CLMH082N062MH082N063		2014		Existing	assumed Mannings N	MH082N062	MH082N063		T16724	IRWD	PVC	{58540EF7-B765-4A26-B360-4A68A005FDFA}	CLMH082N062MH082N063	343.70	343.45	0.666666667	MH082N062	MH082N063			25	CLMH082N062MH082N063	8	0.0101	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002318	0.04				
CLMH082N063MH082N064		2014		Existing	assumed Mannings N	MH082N063	MH082N064		T16724	IRWD	PVC	{0379F7D9-B015-45AE-A73B-63FD389C04DF}	CLMH082N063MH082N064	343.25	341.87	0.666666667	MH082N063	MH082N064			134	CLMH082N063MH082N064	8	0.0103	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002318	0.04				
CLMH082N064MH082N035	30.5' FROM E-W S	2014		Existing	assumed Mannings N	MH082N064	MH082N035		T16724	IRWD	PVC	{11EC47D6-C22F-4E63-B92C-20197317F569}	CLMH082N064MH082N035	341.77	339.00	0.666666667	MH082N064	MH082N035			191	CLMH082N064MH082N035	8	0.0145	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.002318	0.04				
CLMH082N065MH082N066		2014		Existing	assumed Mannings N	MH082N065	MH082N066		T16724	IRWD	PVC	{BCFA1101-DE9F-4F34-8EA1-72338922723E}	CLMH082N065MH082N066	344.75	344.50	0.666666667	MH082N065	MH082N066			24	CLMH082N065MH082N066	8	0.0105	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.004523	0.05				
CLMH082N066MH082N067		2014		Existing	assumed Mannings N	MH082N066	MH082N067		T16724	IRWD	PVC	{BAAB7C5C-5A9B-4329-8233-5E0B5882940D}	CLMH082N066MH082N067	344.30	342.93	0.666666667	MH082N066	MH082N067			135	CLMH082N066MH082N067	8	0.0102	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.004523	0.05				
CLMH082N067MH082N034	30.5' FROM E-W	2014		Existing	assumed Mannings N	MH082N067	MH082N034		T16724	IRWD	PVC	{550DD2E1-E55B-492A-B3D9-EEE0178FAA90}	CLMH082N067MH082N034	342.83	340.45	0.666666667	MH082N067	MH082N034			191	CLMH082N067MH082N034	8	0.0125	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.004523	0.05				
CLMH082N068MH082N069		2013		Existing	assumed Mannings N	MH082N068	MH082N069		T16726	IRWD	PVC	{310EBE1B-028E-40CE-A1EC-7B64E558A6F2}	CLMH082N068MH082N069	352.50	350.80	0.666666667	MH082N068	MH082N069			160	CLMH082N068MH082N069	8	0.0106	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.004957	0.05				
CLMH082N069MH082N070		2013		Existing	assumed Mannings N	MH082N069	MH082N070		T16726	IRWD	PVC	{CA36A831-355D-4DD4-8064-C5814C2DABA1}	CLMH082N069MH082N070	350.70	347.35	0.666666667	MH082N069	MH082N070			205	CLMH082N069MH082N070	8	0.0163	0.000129	0.01	0.000153	0.01	0.000183	0.01	0.004957	0.05				
CLMH082N070MH082N071		2013		Existing	assumed Mannings N	MH082N070	MH082N071		T16726	IRWD	PVC	{1BA01B95-9DAB-4C7C-B4DA-B63EB8722A09}	CLMH082N070MH082N071	347.15	346.70	0.666666667	MH082N070	MH082N071			26	CLMH082N070MH082N071	8	0.0170	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.004957	0.05				
CLMH082N071MH082N072		2013		Existing	assumed Mannings N	MH082N071	MH082N072		T16726	IRWD	PVC	{C3709DAD-D02D-4A2E-A80F-651B35F06F42}	CLMH082N071MH082N072	346.60	345.90	0.666666667	MH082N071	MH082N072			164	CLMH082N071MH082N072	8	0.0053	0.000255	0.01	0.000305	0.01	0.000365	0.01	0.008360	0.08				
CLMH082N072MH082N073		2013		Existing	assumed Mannings N	MH082N072	MH082N073		T16726	IRWD	PVC	{8465598FO-9B8E-40D4-AD91-74DABFEFBD42}	CLMH082N072MH082N073	345.80	345.50	0.666666667	MH082N072	MH082N073			32	CLMH082N072MH082N073	8	0.0095	0.000382	0.01	0.000457	0.01	0.000547	0.02	0.010691	0.08				
CLMH082N073MH082N074		2013		Existing	assumed Mannings N	MH082N073	MH082N074		T16726	IRWD	PVC	{00CF1003-AE91-415F-A1D1-3977A4AFE909}	CLMH082N073MH082N074	345.40	344.82	0.666666667	MH082N073	MH082N074			103	CLMH082N073MH082N074	8	0.0057	0.000507	0.02	0.000607	0.02	0.000728	0.02	0.016417	0.11				
CLMH082N074MH082N075		2013		Existing	assumed Mannings N	MH082N074	MH082N075		T16726	IRWD	PVC	{328CB79B-C9AE-4027-90C9-A507EF1810DF}	CLMH082N074MH082N075	344.62	343.70	0.666666667	MH082N074	MH082N075			99	CLMH082N074MH082N075	8	0.0093	0.000631	0.02	0.000757	0.02	0.000909	0.02	0.018632	0.10				
CLMH082N075MH082N031		2013		Existing	assumed Mannings N	MH082N075	MH082N031		T16725	IRWD	PVC	{A3746B54-388A-4B26-A49A-FFBB376650C6}	CLMH082N075MH082N031	343.50	342.85	0.666666667	MH082N075	MH082N031			59	CLMH082N075MH082N031	8	0.0110	0.000630	0.02	0.000755	0.02	0.000908	0.02	0.018632	0.10				
CLMH082N076MH082N077		2013		Existing	assumed Mannings N	MH082N076	MH082N077		T16726	IRWD	PVC	{648DF028-7360-623A-8E24-40AC169AE899}	CLMH082N076MH082N077	345.50	341.36	0.666666667	MH082N076	MH082N077			138	CLMH082N076MH082N077	8	0.0301	0.000190	0.01	0.000197	0.01	0.000188	0.01	0.004151	0.04				
CLMH082N077MH082N033		2013		Existing	assumed Mannings N	MH082N077	MH082N033		T16725	IRWD	PVC	{5FCAC928-8DBF-4297-A2B0-025382C6C980}	CLMH082N077MH082N033	340.60	338.49	0.666666667	MH082N077	MH082N033			23	CLMH082N077MH082N033	8	0.0496	0.000215	0.01	0.000204	0.01	0.000254	0.01	0.004151	0.03				
CLMH082N078MH082N079		2013		Existing	assumed Mannings N	MH082N078	MH082N079		T16726	IRWD	PVC	{499FFF09-2DE7-4FDB-BF8E-2F6CA1347506}	CLMH082N078MH082N079	347.80	345.30	0.666666667	MH082N078	MH082N079			262	CLMH082N078MH082N079	8	0.0095	0.000129	0.01	0.000153	0.01	0.000183	0.01	0.002564	0.04				
CLMH082N079MH082N080		2013		Existing	assumed Mannings N	MH082N079	MH082N080		T16726	IRWD	PVC	{61DD3024-C494-4613-9446-D99027177D18}	CLMH082N079MH082N080	345.20	344.13	0.666666667	MH082N079	MH082N080			60	CLMH082N079MH082N080	8	0.0178	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.002564	0.04				
CLMH082N080MH082N032	42.5' FROM W-E	2013		Existing	assumed Mannings N	MH082N080	MH082N032		T16725	IRWD	PVC	{693D1902-B66E-4B83-9F63-2F9A0061FCB1}	CLMH082N080MH082N032	343.93	341.60	0.666666667	MH082N080	MH082N032			80	CLMH082N080MH082N032	8	0.0281	0.000241	0.01	0.000289	0.01	0.000347	0.01	0.002564	0.03				
CLMH082N081MH082N082		2013		Existing	assumed Mannings N	MH082N081	MH082N082		T16726	IRWD	PVC	{37DA87E6-DCF4-4BA7-B81A-3F50A845FF79}	CLMH082N081MH082N082	348.20	347.23	0.666666667	MH082N081	MH082N082			242	CLMH082N081MH082N082	8	0.0040	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003403	0.05				
CLMH082N082MH082N071		2013		Existing	assumed Mannings N	MH082N082	MH082N071		T16726	IRWD	PVC	{5EFF47C1-E483-48E5-8FBB-64F15319E427}	CLMH082N082MH082N071	347.03	346.80	0.666666667	MH082N082	MH082N071			58	CLMH082N082MH082N071	8	0.0040	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003403	0.05				
CLMH082N083MH082N084		2013		Existing	assumed Mannings N	MH082N083	MH082N084		T16726	IRWD	PVC	{C8F3FB8C-EF83-44EA-8383-C16345563E89}	CLMH082N083MH082N084	347.10	346.60	0.666666667	MH082N083	MH082N084			123	CLMH082N083MH082N084	8	0.0041	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.005726	0.07				
CLMH082N084MH082N073		2013		Existing	assumed Mannings N	MH082N084	MH082N073		T16726	IRWD	PVC	{852EA0B8-6CD4-48BD-BC75-1ED79F40DC60}	CLMH082N084MH082N073	346.40	345.60	0.666666667	MH082N084	MH082N073			52	CLMH082N084MH082N073	8	0.0155	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.005726	0.05				
CLMH082N085MH082N086		2013		Existing	assumed Mannings N	MH082N085	MH082N086		T16726	IRWD	PVC	{4479EFAE-7E70-4739-83B4-3579CDDDFB40}	CLMH082N085MH082N086	353.00	351.60	0.666666667	MH082N085	MH082N086			30	CLMH082N085MH082N086	8	0.0467	0.000139	0.00	0.000174	0.00	0.000184	0.01	0.002331	0.03				
CLMH082N086MH082N087		2013		Existing	assumed Mannings N	MH082N086	MH082N087		T16726	IRWD	PVC	{496FDB6E-224F-4745-9B89-5E9F673F66DF}	CLMH082N086MH082N087	351.40	350.00	0.666666667	MH082N086	MH082N087			121	CLMH082N086MH082N087	8	0.0115	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002331	0.04				
CLMH082N087MH082N072		2013		Existing	assumed Mannings N	MH082N087	MH082N072		T16726	IRWD	PVC	{58ABEED8-C5E5-4099-8907-520B328BF159F}	CLMH082N087MH082N072	349.90	346.00	0.666666667	MH082N087	MH082N072			239	CLMH082N087MH082N072	8	0.0163	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.002331	0.03				
CLMH082N088MH082N089		2013		Existing	assumed Mannings N	MH082N088	MH082N089		T16726	IRWD	PVC	{CC80A816-B8BE-4BC3-BE1E-C9059D0DE2C3}	CLMH082N088MH082N089	349.05	347.60	0.666666667	MH082N088	MH082N089			143	CLMH082N088MH082N089	8	0.0101	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002216	0.04				
CLMH082N089MH082N074		2013		Existing	assumed Mannings N	MH082N089	MH082N074		T16726	IRWD	PVC	{14972B0E-C605-458E-B008-F9C777A0B174}	CLMH082N089MH082N074	347.50	344.82	0.666666667	MH082N089	MH082N074			263	CLMH082N089MH082N074	8	0.0102	0.000127	0.01	0.000152	0.01	0.000182	0.01	0.002216	0.04				
CLMH082S001MH082S002		1998		Existing	assumed Mannings N	MH082S001	MH082S002	A00818A	IRWD	VCP	{2F8BC7B6-0C5A-48D4-8B16-47CCC04F1DF2}	CLMH082S001MH082S002	275.45	267.18	1.250000000	MH082S001	MH082S002			125	CLMH082001MH082S002	15	0.0276	0.011785	0.03	0.012581	0.03	0.014916	0.03	0.012581	0.03				
CLMH082S002MH082S077		1998		Existing	assumed Mannings N	MH082S002	MH082S077	A00818	IRWD	VCP	{FB8ECDBA-3C18-47C4-BB71-EE4EDC191D53}	CLMH082S002MH082S077	267.08	266.38	1.250000000	MH082S002	MH082S077			47	CLMH082S002MH082S077	15	0.0149	0.011785	0.04	0.012581	0.04	0.014916	0.04	0.012581	0.11				
CLMH082S003MH082S004		1998		Existing	assumed Mannings N	MH082S003	MH082S004	A00818	IRWD	VCP	{1E9D7976-E518-4E28-B62E-48235B7B5EC9}	CLMH082S003MH082S004	263.51	259.15	1.250000000	MH082S003

CLMH082W179MH083N521		1999		Existing	assumed Mannings N	MH082W179	MH083N521		T15685	IRWD	PVC	{F5D36239-F9A1-446D-B80A-384694FA0A90}	CLMH082W179MH083N521	255.08	254.50	0.66666667	MH082W179	MH083N521					8	0.0093	0.012715	0.09	0.015263	0.09	0.018098	0.10	0.015263	0.09
CLMH082W180MH082W181		1999		Existing	assumed Mannings N	MH082W180	MH082W181		T15685	IRWD	PVC	{0E279760-2806-4DAB-B4D9-638D964CA4B2}	CLMH082W180MH082W181	260.29	259.80	0.66666667	MH082W180	MH082W181		52	CLMH082W180MH082W181	8	0.0094	0.003956	0.05	0.004749	0.05	0.005630	0.06	0.004749	0.05
CLMH082W181MH082W182		1999		Existing	assumed Mannings N	MH082W181	MH082W182		T15685	IRWD	PVC	{78711764-1A31-47E1-87D0-99998EE1C0F5}	CLMH082W181MH082W182	259.60	259.42	0.66666667	MH082W181	MH082W182		22	CLMH082W181MH082W182	8	0.0082	0.006023	0.06	0.007232	0.07	0.008574	0.07	0.007232	0.07
CLMH082W182MH082W183		1999		Existing	assumed Mannings N	MH082W182	MH082W184		T15685	IRWD	PVC	{88083909-8A6A-44CD-999C-AB0E54116E6F5}	CLMH082W182MH082W184	259.23	255.52	0.66666667	MH082W182	MH082W184		147	CLMH082W182MH082W184	8	0.0253	0.007228	0.05	0.008679	0.06	0.010289	0.06	0.008679	0.06
CLMH082W183MH082W182		1999		Existing	assumed Mannings N	MH082W183	MH082W182		T15685	IRWD	PVC	{5788058A-80C9-4112-9D39-B0248B030D47}	CLMH082W183MH082W182	260.95	259.42	0.66666667	MH082W183	MH082W182		80	CLMH082W183MH082W182	8	0.0191	0.001205	0.02	0.001446	0.03	0.001716	0.03	0.001446	0.03
CLMH082W184MH083N529		1999		Existing	assumed Mannings N	MH082W184	MH083N529		T15685	IRWD	PVC	{B081C423-9D7A-487F-B307-88CB6D7939F8}	CLMH082W184MH083N529	255.33	254.13	0.66666667	MH082W184	MH083N529		124	CLMH082W184MH083N529	8	0.0097	0.009213	0.07	0.011063	0.08	0.013116	0.09	0.011063	0.08
CLMH082W185MH082W184		1999		Existing	assumed Mannings N	MH082W185	MH082W184		T15685	IRWD	PVC	{1424E88D-FC3A-408A-B902-08FF98D8E7F0}	CLMH082W185MH082W184	257.82	255.52	0.66666667	MH082W185	MH082W184		73	CLMH082W185MH082W184	8	0.0115	0.001985	0.03	0.002384	0.03	0.002827	0.03	0.002384	0.03
CLMH082W186MH082W004		2006		Existing	assumed Mannings N	MH082W186	MH082W004		T16529	IRWD	PVC	{87C479D3-F4B7-448F-A2FB-97EC4081F72E}	CLMH082W186MH082W004	217.90	212.25	0.833333333	MH082W186	MH082W004		196	CLMH082W186MH082W004	10	0.0288	0.010754	0.05	0.012507	0.05	0.015053	0.05	0.361184	0.25
CLMH082W200MH082W201		2016		Existing	assumed Mannings N	MH082W200	MH082W201		16727A	IRWD	PVC	{9CB21788-A300-4A97-AD32-5B61EEF36502}	CLMH082W200MH082W201	348.54	348.19	0.66666667	MH082W200	MH082W201		70	CLMH082W200MH082W201	8	0.0050	0.000129	0.01	0.000153	0.01	0.000184	0.01	0.002600	0.05
CLMH082W201MH082W202		2014		Existing	assumed Mannings N	MH082W201	MH082W202		16727A	IRWD	PVC	{CC0337A0-89C7-4519-B35D-EE1832688FA9}	CLMH082W201MH082W202	348.09	347.89	0.66666667	MH082W201	MH082W202		40	CLMH082W201MH082W202	8	0.0050	0.000258	0.01	0.000307	0.01	0.000367	0.01	0.004972	0.06
CLMH082W202MH082W203		2014		Existing	assumed Mannings N	MH082W202	MH082W203		16727A	IRWD	PVC	{EC595E30-31E4-4475-81BC-14EF176D010A}	CLMH082W202MH082W203	347.79	347.44	0.66666667	MH082W202	MH082W203		70	CLMH082W202MH082W203	8	0.0050	0.000386	0.01	0.000460	0.02	0.000550	0.02	0.007300	0.07
CLMH082W203MH082W204		2014		Existing	assumed Mannings N	MH082W203	MH082W204		16727A	IRWD	PVC	{FD5B7550-6B22-442B-B5A1-BEEOF56C070A}	CLMH082W203MH082W204	347.34	347.29	0.66666667	MH082W203	MH082W204		142	CLMH082W203MH082W204	8	0.0042	0.000515	0.02	0.000613	0.02	0.000733	0.02	0.008262	0.08
CLMH082W204MH082N028	148.23' FROM W	2014		Existing	assumed Mannings N	MH082W204	MH082N028		16727A	IRWD	PVC	{934B2CCE-C79E-4ABE-89AA-47D18DE719FC}	CLMH082W204MH082N028	347.09	344.89	0.66666667	MH082W204	MH082N028		313	CLMH082W204MH082N028	8	0.0070	0.001916	0.04	0.002291	0.04	0.002738	0.04	0.032761	0.15
CLMH082W208MH082W209		2014		Existing	assumed Mannings N	MH082W208	MH082W209		T16722	IRWD	PVC	{54B03981-0A5B-4B57-997C-C3E00FB523F5}	CLMH082W208MH082W209	283.38	281.81	0.66666667	MH082W208	MH082W209		157	CLMH082W208MH082W209	8	0.0100	0.002723	0.04	0.003270	0.05	0.003943	0.05	0.075224	0.20
CLMH082W209MH082W230		2013		Existing	assumed Mannings N	MH082W209	MH082W230		T17015A	IRWD	PVC	{739028FB-4959-4EBC-BDDB-1A9CC822077D}	CLMH082W209MH082W230	281.61	275.74	0.66666667	MH082W209	MH082W230		195	CLMH082W209MH082W230	8	0.0302	0.007060	0.05	0.008490	0.05	0.010245	0.06	0.235016	0.27
CLMH082W210MH082W208		2014		Existing	assumed Mannings N	MH082W210	MH082W208		T16722	IRWD	PVC	{10BF4E30-5683-4DE9-B385-78B6310B533A}	CLMH082W210MH082W208	286.35	283.58	0.66666667	MH082W210	MH082W208		57	CLMH082W210MH082W208	8	0.0483	0.002730	0.03	0.003278	0.03	0.003953	0.03	0.075224	0.14
CLMH082W211MH082W210		2014		Existing	assumed Mannings N	MH082W211	MH082W210		T16722	IRWD	PVC	{0CE3C8D8-2AF2-4F76-A483-C6508545A614}	CLMH082W211MH082W210	287.85	286.55	0.66666667	MH082W211	MH082W210		130	CLMH082W211MH082W210	8	0.0100	0.001354	0.03	0.001629	0.03	0.001966	0.04	0.046990	0.16
CLMH082W212MH082W211		2014		Existing	assumed Mannings N	MH082W212	MH082W211		T16722	IRWD	PVC	{0E2408BC-A2CF-4281-858C-E75CB2AB8FEA}	CLMH082W212MH082W211	289.74	287.95	0.66666667	MH082W212	MH082W211		179	CLMH082W212MH082W211	8	0.0100	0.001233	0.03	0.001482	0.03	0.001789	0.03	0.044301	0.16
CLMH082W213MH082W214		2014		Existing	assumed Mannings N	MH082W213	MH082W214		T16722	IRWD	PVC	{9E4251F7-A37C-4D15-ACD2-7F6FB1B4B953}	CLMH082W213MH082W214	292.43	289.83	0.66666667	MH082W213	MH082W214		145	CLMH082W213MH082W214	8	0.0180	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002690	0.04
CLMH082W214MH082W211		2014		Existing	assumed Mannings N	MH082W214	MH082W211		T16722	IRWD	PVC	{DD3002E2-3BA8-46F5-B9EE-74CE2EAE0FEB}	CLMH082W214MH082W211	289.73	288.05	0.66666667	MH082W214	MH082W211		56	CLMH082W214MH082W211	8	0.0298	0.000189	0.00	0.000197	0.01	0.000188	0.01	0.002690	0.03
CLMH082W215MH082W216		2014		Existing	assumed Mannings N	MH082W215	MH082W216		T16722	IRWD	PVC	{C3694146-5831-498F-8459-D6A85A51CB87}	CLMH082W215MH082W216	294.62	293.30	0.66666667	MH082W215	MH082W216		132	CLMH082W215MH082W216	8	0.0100	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003211	0.04
CLMH082W216MH082W217		2014		Existing	assumed Mannings N	MH082W216	MH082W217		T16722	IRWD	PVC	{A53600C6-F896-464F-9FA2-429C5079A7D0}	CLMH082W216MH082W217	293.10	291.36	0.66666667	MH082W216	MH082W217		80	CLMH082W216MH082W217	8	0.0220	0.000138	0.01	0.000154	0.01	0.000184	0.01	0.003211	0.04
CLMH082W217MH082W212		2014		Existing	assumed Mannings N	MH082W217	MH082W212		T16722	IRWD	PVC	{4895B5B0-A06B-4283-94C3-9A16CBDB6E5F}	CLMH082W217MH082W212	291.16	289.94	0.66666667	MH082W217	MH082W212		33	CLMH082W217MH082W212	8	0.0370	0.000131	0.00	0.000154	0.01	0.000184	0.01	0.003211	0.03
CLMH082W218MH082W212		2014		Existing	assumed Mannings N	MH082W218	MH082W212		T16722	IRWD	PVC	{2C7B1907-7886-4811-B137-CA97C2C6FD49}	CLMH082W218MH082W212	296.08	289.94	0.66666667	MH082W218	MH082W212		205	CLMH082W218MH082W212	8	0.0300	0.000189	0.00	0.000197	0.01	0.000187	0.01	0.003055	0.03
CLMH082W219MH066S119		2013		Existing	assumed Mannings N	MH082W219	MH066S119		T16722	IRWD	PVC	{2FBDAA88-D6E3-4729-8CF4-A4B0153405C20}	CLMH082W219MH066S119	298.68	292.95	0.66666667	MH082W219	MH066S119		218	CLMH082W219MH066S119	8	0.0263	0.000165	0.01	0.000173	0.01	0.000184	0.01	0.003931	0.04
CLMH082W220MH082W221		2014		Existing	assumed Mannings N	MH082W220	MH082W221		T16722	IRWD	PVC	{0844EB7F-16FB-4C44-845B-BACEA03F07DB}	CLMH082W220MH082W221	291.81	291.71	0.66666667	MH082W220	MH082W221		53	CLMH082W220MH082W221	8	0.0019	0.001138	0.04	0.001361	0.04	0.001636	0.04	0.027926	0.17
CLMH082W221MH082W222		2014		Existing	assumed Mannings N	MH082W221	MH082W222		T16722	IRWD	PVC	{8173AB9E-0206-4C0A-874C-4B4AC1E81CC0}	CLMH082W221MH082W222	291.08	289.28	0.66666667	MH082W221	MH082W222		123	CLMH082W221MH082W222	8	0.0147	0.001136	0.02	0.001359	0.03	0.001634	0.03	0.027926	0.11
CLMH082W222MH082W210		2014		Existing	assumed Mannings N	MH082W222	MH082W210		T16722	IRWD	PVC	{AA92E709-C78B-43A3-B505-01E59A272B9B}	CLMH082W222MH082W210	289.18	286.55	0.66666667	MH082W222	MH082W210		220	CLMH082W222MH082W210	8	0.0160	0.001382	0.03	0.001656	0.03	0.001991	0.03	0.028234	0.11
CLMH082W223MH082W222		2014		Existing	assumed Mannings N	MH082W223	MH082W222		T16722	IRWD	PVC	{F4242320A-935A-457E-88FC-3089849AF911}	CLMH082W223MH082W222	292.42	289.38	0.66666667	MH082W223	MH082W222		117	CLMH082W223MH082W222	8	0.0117	0.000129	0.01	0.000154	0.01	0.000199	0.01	0.000154	0.01
CLMH082W224MH082W225		2014		Existing	assumed Mannings N	MH082W224	MH082W225		T16722	IRWD	PVC	{700DC286-169B-47B5-9135-776EDC1534E3}	CLMH082W224MH082W225	298.97	295.77	0.66666667	MH082W224	MH082W225		107	CLMH082W224MH082W225	8	0.0300	0.000190	0.00	0.000197	0.01	0.000188	0.01	0.001679	0.03
CLMH082W225MH082W220		2014		Existing	assumed Mannings N	MH082W225	MH082W220		T16722	IRWD	PVC	{9D8618CA-8A86-466D-9A32-DB119234E7FB}	CLMH082W225MH082W220	295.67	291.91	0.66666667	MH082W225	MH082W220		125	CLMH082W225MH082W220	8	0.0300	0.000189	0.00	0.000198	0.01	0.000188	0.01	0.001679	0.03
CLMH082W226MH082W220		2014		Existing	assumed Mannings N	MH082W226	MH082W220		T16722	IRWD	PVC	{3CACD013-02BC-40A3-B626-7C769EA388C1}	CLMH082W226MH082W220	296.09	291.91	0.66666667	MH082W226	MH082W220		209	CLMH082W226MH082W220	8	0.0200	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.001018	0.03
CLMH082W227MH082W228		2014		Existing	assumed Mannings N	MH082W227	MH082W228		T16722	IRWD	PVC	{6031202C-598A-45EF-BFDD-107F0B440163}	CLMH082W227MH082W228	300.34	297.49	0.66666667	MH082W227	MH082W228		186	CLMH082W227MH082W228	8	0.0153	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.000664	0.02
CLMH082W228MH082N013		2014		Existing	assumed Mannings N	MH082W228	MH082N013		T16722	IRWD	PVC	{45A12ABC-98D0-4353-807B-B938B444A0B4}	CLMH082W228MH082N013	297.39	294.97	0.66666667	MH082W228	MH082N013		121	CLMH082W228MH082N013	8	0.0200	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.000664	0.02
CLMH082W229MH082W236		2013		Existing	assumed Mannings N	MH082W229	MH082W236		T17015A	IRWD	PVC	{B55892B2-EF17-4C11-AF88-12FA6460FA54}	CLMH082W229MH082W236	274.32	270.86	0.66666667	MH082W229	MH082W236		269	CLMH082W229MH082W236	8	0.0129	0.007049	0.06	0.008473	0.07	0.010225	0.07	0.236227	0.34
CLMH082W230MH082W229		2013		Existing	assumed Mannings N	MH082W230	MH082W229		T17015A	IRWD	PVC	{5FC5293A-2D4D-4908-8775-E2E576F39A5F}	CLMH082W230MH082W229	275.54	274.52	0.66666667	MH082W230	MH082W229		30	CLMH082W230MH082W229	8	0.0345	0.007060	0.05	0.008489	0.05	0.010244	0.06	0.235166	0.26
CLMH082W231MH082W209		2013		Existing	assumed Mannings N	MH082W231	MH082W209		T17015A	IRWD	PVC	{8A89E763-FF63-4039-B552-7181C6687291}	CLMH082W231MH082W209	290.25	281.71	0.66666667	MH082W231	MH082W209		296	CLMH082W231MH082W209	8	0.0289	0.004421	0.04	0.005311	0.04	0.006395	0.05	0.159924	0.23
CLMH082W232MH082W231		2013		Existing	assumed Mannings N	MH082W232	MH082W231		T17015A	IRWD	PVC	{16783233-9FA7-4E5F-86FA-656AC8DD50DD}	CLMH082W232MH082W231	300.82	290.35	0.66666667	MH082W232	MH082W231		261	CLMH082W232MH082W231	8	0.0401	0.004422	0.04	0.005320	0.04	0.006404	0.04	0.159963	0.21
CLMH082W233MH082W232		2013		Existing	assumed Mannings N	MH082W233	MH082W232		T17015A	IRWD	PVC	{A6F05EC8-A6B9-420C-9786-008CF1A00AAA}	CLMH082W233MH082W232	310.32	300.92	0.66666667	MH082W233	MH082W232		174	CLMH082W233MH082W232	8	0.0540	0.004432	0.04	0.005325	0.04	0.006410	0.04	0.159992	0.19
CLMH082W234MH082W233		2013		Existing	assumed Mannings N	MH082W234	MH082W233		T17015A	IRWD	PVC	{A43F5CF4-06B8-4D90-B4C2-C47D1C67ACA2}	CLMH082W234MH082W233	322.79	310.42	0.66666667	MH082W234	MH082W233		240	CLMH082W234MH082W233	8	0.0516	0.004433	0.04	0.005328	0.04	0.006413	0.04	0.160005	0.20
CLMH082W235MH082W234		2013		Existing	assumed Mannings N	MH082W235	MH082W234		T17015A	IRWD	PVC	{AC47D3DC-550C-40DB-B7B3-E2C30AA1B09}	CLMH082W235MH082W234	327.35	322.89	0.66666667	MH082W235	MH082W234		194	CLMH082W235MH082W234	8	0.0230	0.002855	0.03	0.003426	0.04	0.004114	0.04	0.113801	0.20
CLMH082W236MH066S140		2013		Existing	assumed Mannings N	MH082W236	MH066S140		T17015A	IRWD	PVC	{018CA4D1-06E7-42B9-ABB3-4E2A2E895B7F}	CLMH082W236MH066S140	270.76	266.62	0.66666667	MH082W236	MH066S140		296	CLMH082W236MH066S140	8	0.0410	0.007034	0.06	0.008455	0.07	0.010204	0.07	0.237153	0.33
CLMH082W237MH082N054		2014		Existing	assumed Mannings N	MH082W237	MH082N054		T16724	IRWD	PVC	{36168BF5-7F64-4628-A827-CD78E8CBFC0D}	CLMH082W237MH082N054	339.40	336.10	0.66666667	MH082W237	MH082N054		147	CLMH082W237MH082N054	8	0.0224	0.000341	0.01	0.000154	0.01	0.000184	0.01	0.001803	0.03
CLMH082W238MH082N054		2014		Existing	assumed Mannings N	MH082W238	MH082N054		T16724	IRWD	PVC	{36A27207-CC81-4912-963F-84998CC45EAE}	CLMH082W238MH082N054	337.60	336.20	0.66666667	MH082W238	MH082N054		112	CLMH082W238MH082N054	8	0.0125	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.002297	0.04
CLMH082W239MH082N055		2014		Existing	assumed Mannings N	MH082W239	MH082N055		T16724	IRWD	PVC	{2DDF7D06-1558-41CD-AD9F-775A4B2D2342}	CLMH082W239MH082N055	336.00	330.68	0.66666667	MH082W239	MH082N055		112	CLMH082W239MH082N055	8	0.0474	0.000299	0.00	0.000311	0.00	0.000297	0.01	0.004532	0.04
CLMH082W246MH082W248		2014		Existing	assumed Mannings N	MH082W246	MH082W248		16719	IRWD	PVC	{A1404905-6305-4DA0-8051-E5D4DA275FB7}	CLMH082W246MH082W248	241.76	240.47	0.66666667	MH082W246	MH082W248		257	CLMH082W246MH082W248	8	0.0050	0.000129	0.01	0.000152	0.01	0.000182	0.01	0.003714	0.05
CLMH082W247MH082W249		2014		Existing	assumed Mannings N	MH082W247	MH082W249		16719	IRWD	PVC	{9E78CC82-6056-4455-8AE2-86A407F715DA}	CLMH082W247MH082W249	241.49	240.26	0.66666667	MH082W247	MH082W249		246	CLMH082W247MH082W249	8	0.0050	0.000129	0.01	0.000153	0.01	0.000182	0.01	0.005605	0.07
CLMH082W248MH082W250		2014		Existing	assumed Mannings N	MH082W248	MH082W250		16719	IRWD	PVC	{2D04A8B6-541A-49B3-B9A6-5F0C84166F5D}	CLMH082W248MH082W250	240.27	239.84	0.66666667	MH082W248	MH082W250		86	CLMH082W248MH082W250	8	0.0050	0.000129	0.01	0.000151	0.01	0.000180	0.01	0.003714	0.05
CLMH082W249MH082W251		2014		Existing	assumed Mannings N	MH082W249	MH082W251		16719	IRWD	PVC	{37A4AADD-79F1-468F-BA9F-425F3609E097}	CLMH082W249MH082W251	240.06	239.54	0.66666667	MH082W249	MH082W251		103	CLMH082W249MH082W251	8	0.0051	0.000129	0.01	0.000151	0.01	0.000180	0.01	0.005605	0.06
CLMH082W250MH082W251		2014		Existing	assumed Mannings N	MH082W250	MH082W251		16719	IRWD	PVC	{1F98BDB0-932E-41C9-BC28-0C9618F5F54A}	CLMH082W250MH082W251	239.64	239.54	0.66666667	MH082W250	MH082W251		20	CLMH082W250MH082W251	8	0.0050	0.000129	0.01	0.000153	0.01	0.000179	0.01	0.003714	0.05
CLMH082W251MH082W252		2014		Existing	assumed Mannings N	MH082W251	MH082W252		16719	IRWD	PVC	{F9677083-776E-4017-ABEB-47045008305A}	CLMH082W251MH082W252	239.34	238.83	0.66666667	MH082W251	MH082W252		101	CLMH082W251MH082W252	8	0.0051	0.000256	0.01	0.000299	0.01	0.000356	0.01	0.009319	0.08
CLMH082W252MH082W253		2014		Existing	assumed Mannings N	MH082W252	MH082W253		16719	IRWD	PVC	{9B25E0F1-DB9B-4E0B-95F3-C717000ED82D}	CLMH082W252MH082W253	238.63	236.65	0.66666667	MH082W252	MH082W253		198	CLMH082W252MH082W253	8	0.0100	0.000253	0.01	0.000296	0.01	0.000352	0.01	0.017820	0.10
CLMH082W253MH082W254		2014		Existing	assumed Mannings N	MH082W253	MH082W254		16719	IRWD	PVC	{78886A1D-D923-4288-8994-9F714F480FB7}	CLMH082W253MH082W254	236.45	236.14	0.66666667	MH082W253	MH082W254		31	CLMH082W253MH082W254	8	0.0101	0.000252	0.01	0.000296	0.01	0.000351	0.01	0.017820	0.10
CLMH082W254MH082W255		2014		Existing	assumed Mannings N	MH082W254	MH082W255		16719	IRWD	PVC	{CD340096-03CB-4E55-BE7F-5813C3547A0D}	CLMH082W254MH082W255	235.94	234.77	0.66666667	MH082W254	MH082W255		54	CLMH082W254MH082W255	8	0.0228	0.000252	0.01	0.000295	0.01	0.000351	0.01	0.017820	0.08
CLMH082W255MH082W256		2014		Existing	assumed Mannings N	MH082W255	MH082W256		16719	IRWD	PVC	{88DC7984-D0C3-4CC2-B862-20FEE8F0AA7A}	CLMH082W255MH082W256	234.57	231.64	0.66666667	MH082W255	MH082W256		30	CLMH082W255MH082W256	8	0.0988	0.000370	0.01	0.000431	0.01	0.000511	0.01	0.018742	0.06
CLMH082W256MH066S006	Main after junctio	2014		Existing	assumed Mannings N	MH082W256	MH066S006		16719	IRWD	PVC	{54EADC33-ED28-4559-BDB3-31DDCC48D29D}	CLMH082W256MH066S006	231.44	222.90	0.66666667	MH082W256	MH066S006		155	CLMH082W256MH066S006	8	0.0551	0.000369	0.01	0.000429	0.01	0.000509	0.01	0.018742	0.07
CLMH082W257MH082N255		2014		Existing	assumed Mannings N	MH082W257	MH082N255		16719	IRWD	PVC	{81F2D55B-A31C-4401-B9D7-E9A29B013F1}	CLMH082W257MH082N255	243.02	234.77	0.66666667	MH082W257	MH082N255		92	CLMH082W257MH082N255	8	0.0900	0.000370	0.01	0.000431	0.01	0.000505	0.01	0.001605	0.02
CLMH082W258MH082W257		2014		Existing	assumed Mannings N	MH082W258	MH082W257		16719	IRWD	PVC	{B1627E7C-711E-43EB-B805-660986592F38}	CLMH082W258MH082W257	244.65	243.22	0.66666667	MH082W258	MH082W257		29	CLMH082W258MH082W257	8	0.0501	0.000139	0.00	0.000154	0.00	0.000184	0.01	0.001605	0.02
CLMH082W259MH082W258		2014		Existing	assumed Mannings N	MH082W259	MH082W258		16719	IRWD	PVC	{5AD33148-9584-45F6-A799-53053A7F34C7}	CLMH082W259MH082W258	246.19	244.85	0.66666667	MH082W259	MH082W258		134	CLMH082W259MH082W258	8	0.0100	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.001605	0.03
CLMH082W260MH082W266		2014		Existing	assumed Mannings N	MH082W260	MH082W266		16719	IRWD	PVC	{168AF678-A958-408E-8F41-FDEAF577C4F9}	CLMH082W260MH082W266	260.42	257.89	0.66666667	MH082W260	MH082W266		104	CLMH082W260MH082W266	8	0.0244	0.002783	0.04	0.002970	0.04	0.003526	0.04	0.017022	0.08
CLMH082W261MH082W262		2014		Existing	assumed Mannings N	MH082W261	MH082W262		16719	IRWD	PVC	{EDD795F0-618C-4ECC-83F6-0091AAAC128D}	CLMH082W261MH082W262	266.01	261.31	0.66666667	MH082W261	MH082W262		235	CLMH082W261MH082W262	8	0.0200	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003517	0.04
CLMH082W262MH082W260		2014		Existing	assumed Mannings N	MH082W262	MH082W260		16719	IRWD	PVC	{E500A2CD-1131-418D-881A-A2A14AD18458}	CLMH082W262MH082W260	261.11	260.62	0.66666667	MH082W262	MH082W260		98	CLMH082W262MH082W260	8	0.0050	0.000253	0.01	0.000300	0.01	0.000360	0.01	0.007320	0.07
CLMH082W263MH082W264		2014		Existing	assumed Mannings N	MH082W263	MH082W264		16719	IRWD	PVC	{0FD47E8E-1CDD-4A4C-8C74-89363D390750}	CLMH082W263MH082W264	264.91	262.80	0.66666667	MH082W263	MH082W264		211	CLMH082W263MH082W264	8	0.0100	0.000129	0.01	0.000153	0.01	0.000183	0.01	0.003803	0.05
CLMH082W264MH082W265		2014		Existing	assumed Mannings N	MH082W264	MH082W265		16719	IRWD	PVC	{7918A442-401C-4FF4-82F0-2489C15CD971}	CLMH082W264MH082W265	262.60	262.23	0.66666667	MH082W264	MH082W265		36	CLMH082W264MH082W265	8	0.0104	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.003803	0.05
CLMH082W265MH082W266		2014		Existing	assumed Mannings N	MH082W265	MH082W266		16719	IRWD	PVC	{8FAA877C-BE86-409E-9002-088CDA06ACE1}	CLMH082W265MH082W266	262.03	261.21	0.66666667	MH082W265	MH082W266		163	CLMH082W265MH082W266	8	0.0050	0.000128	0.01	0.000150	0.01	0.000180	0.01	0.003803	0.05
CLMH082W266MH082W267		2014		Existing	assumed Mannings N	MH082W266	MH082W267		16719	IRWD	PVC	{A3228884-C99D-4147-8E17-EF9C100C6AF3}	CLMH082W266MH082W267	257.89	257.43	0.66666667	MH082W266	MH082W267		26	CLMH082W266MH082W267	8	0.0180	0.002783	0.04	0.002970	0.04	0.003526	0.04	0.017022	0.09
CLMH082W267MH066S147		2014		Existing	assumed Mannings N	MH082W267	MH066S147		16719	IRWD	PVC	{8896899E-FBB1-40F7-87CD-0C661BAF3F41}	CLMH082W267MH066S147	257.23	257.07	0.66666667	MH082W267	MH066S147		16	CLMH082W267MH066S147	8	0.0100	0.002783	0.04	0.002970	0.04	0.003526	0.05	0.017022	0.10
CLMH082W268MH082W269		2014		Existing	assumed Mannings N	MH082W268	MH082W269		16719	IRWD	PVC	{A6942578-3190-44E7-BAEE-5738569745D}	CLMH082W268MH082W269	257.97	255.27	0.66666667	MH082W268	MH082W269		270	CLMH082W268MH082W269	8	0.0100	0.000128	0.01	0.000153	0.01	0.000183	0.01	0.003613	0.05
CLMH082W269MH082W271		2014		Existing	assumed Mannings N	MH082W269	MH082W271		16719	IRWD	PVC	{4E0B449C-C8A5-4902-9EAD-FBC4DA800E05}	CLMH082W269MH082W271	255.07	254.75	0.66666667	MH082W269	MH082W271		64	CLMH082W269MH082W271	8	0.0050	0.000128	0.01	0.000152	0.01	0.000182	0.01	0.003613	0.05
CLMH082W270MH082W271		2014		Existing	assumed Mannings N	MH082W270	MH082W271		16719	IRWD	PVC	{28972888-35A4-44BB-93BA-89D99331B038}	CLMH082W270MH082W271	256.78	254.85	0.66666667	MH082W270	MH082W271		193	CLMH082W270MH082W271	8	0.0100	0.000129	0.01	0.000154	0.01	0.000184	0.01	0.003596	0.05
CLMH082W271MH066S148		2014		Existing	assumed Mannings N	MH082W271	MH066S148		16719	IRWD	PVC	{3F7127CE-0B4C-4AA3-9F6A-E6EE83EFFD56}	CLMH082W271MH066S148	254.65	254.10	0.66666667	MH082W271	MH066S148		107	CLMH082W271MH066S148	8	0.0051	0.000254	0.01	0.000303	0.01	0.000363

CLMH083E110MH083E066		1997		Existing		MH083E110	MH083E066		T15384	IRWD	PVC	{A1CB2F44-1454-4DD7-A2A3-DD7F5D95D6BC}	CLMH083E110MH083E066	241.21	237.10	0.666666667	MH083E110	MH083E066		196	CLMH083E110MH083E066	8	0.0210	0.029742	0.11	0.035712	0.12	0.042337	0.13	0.035712	0.12	
CLMH083E111MH083E110		1997		Existing		MH083E111	MH083E110		T15384	IRWD	PVC	{ABD5BABE-E1B3-4B15-A994-FDA87E4F742C}	CLMH083E111MH083E110	242.00	241.41	0.666666667	MH083E111	MH083E110		60	CLMH083E111MH083E110	8	0.0098	0.014227	0.09	0.017086	0.10	0.020252	0.11	0.017086	0.10	
CLMH083E112MH083E111		1997		Existing		MH083E112	MH083E111		T15384	IRWD	PVC	{17917B52-C525-6894-BC68-7736A6697C53}	CLMH083E112MH083E111	243.96	242.11	0.666666667	MH083E112	MH083E111		105	CLMH083E112MH083E111	8	0.0176	0.010435	0.07	0.012531	0.07	0.014853	0.08	0.012531	0.07	
CLMH083E113MH083E112		1997		Existing		MH083E113	MH083E112		T15384	IRWD	PVC	{C09EB638-3E78-410F-A908-39FD1D289F6A}	CLMH083E113MH083E112	245.96	244.05	0.666666667	MH083E113	MH083E112		152	CLMH083E113MH083E112	8	0.0126	0.008286	0.07	0.009950	0.07	0.011794	0.08	0.009950	0.07	
CLMH083E114MH083E113		1997		Existing		MH083E114	MH083E113		T15384	IRWD	PVC	{DE52B92D-043A-4035-B83E-18F5229885C8}	CLMH083E114MH083E113	250.36	246.05	0.666666667	MH083E114	MH083E113		259	CLMH083E114MH083E113	8	0.0166	0.005470	0.05	0.006568	0.06	0.007785	0.06	0.006568	0.06	
CLMH083E115MH083E114		1997		Existing		MH083E115	MH083E114		T15384	IRWD	PVC	{5A209976-9D93-49DC-829F-689508B39D32}	CLMH083E115MH083E114	255.25	250.96	0.666666667	MH083E115	MH083E114		177	CLMH083E115MH083E114	8	0.0242	0.005470	0.05	0.006568	0.05	0.007785	0.06	0.006568	0.05	
CLMH083E116MH083E115		1997		Existing		MH083E116	MH083E115		T15384	IRWD	PVC	{AEA2597DE-32B7-4472-9554-FCA6F8145EC1}	CLMH083E116MH083E115	244.32	241.41	0.666666667	MH083E116	MH083E115		58	CLMH083E116MH083E115	8	0.0502	0.015515	0.06	0.018626	0.07	0.022085	0.08	0.018626	0.07	
CLMH083E117MH083E116		1997		Existing		MH083E117	MH083E116		T15384	IRWD	PVC	{01833D17-3A9E-45BA-9707-967C11210DA8}	CLMH083E117MH083E116	246.08	244.41	0.666666667	MH083E117	MH083E116		236	CLMH083E117MH083E116	8	0.0071	0.015515	0.10	0.018626	0.11	0.022085	0.12	0.018626	0.11	
CLMH083E118MH083E117		1997		Existing		MH083E118	MH083E117		T15384	IRWD	PVC	{885BF7D9-35DD-49D3-8B20-19C68DF52202}	CLMH083E118MH083E117	247.13	246.19	0.666666667	MH083E118	MH083E117		136	CLMH083E118MH083E117	8	0.0069	0.015515	0.10	0.018626	0.11	0.022085	0.12	0.018626	0.11	
CLMH083E119MH083E118		1997		Existing		MH083E119	MH083E118		T15384	IRWD	PVC	{FCFDA587-A3C6-422A-8353-936683FFB3D0}	CLMH083E119MH083E118	247.74	247.24	0.666666667	MH083E119	MH083E118		76	CLMH083E119MH083E118	8	0.0066	0.011674	0.09	0.014013	0.10	0.016616	0.11	0.014013	0.10	
CLMH083E120MH083E119		1997		Existing		MH083E120	MH083E119		T15384	IRWD	PVC	{D34C1355-CB6D-4C50-B98C-B8567ACF765F}	CLMH083E120MH083E119	248.44	247.94	0.666666667	MH083E120	MH083E119		54	CLMH083E120MH083E119	8	0.0093	0.001742	0.03	0.002092	0.04	0.002478	0.04	0.002092	0.04	
CLMH083E122MH083E119		1997		Existing		MH083E122	MH083E119		T15384	IRWD	PVC	{F623ED6D-3D9A-4E38-A2DA-0E4EF6E2CDCB}	CLMH083E122MH083E119	248.47	247.83	0.666666667	MH083E122	MH083E119		87	CLMH083E122MH083E119	8	0.0077	0.009931	0.08	0.011922	0.09	0.014137	0.10	0.011922	0.09	
CLMH083E123MH083E122		1997		Existing		MH083E123	MH083E122		T15384	IRWD	PVC	{1A03210E-A059-48E9-A1C7-352E509971D9}	CLMH083E123MH083E122	253.17	248.57	0.666666667	MH083E123	MH083E122		234	CLMH083E123MH083E122	8	0.0197	0.007034	0.06	0.008443	0.06	0.010012	0.07	0.008443	0.06	
CLMH083E124MH083E123		1997		Existing		MH083E124	MH083E123		T15384	IRWD	PVC	{91AF3AD0-172D-4473-A4EC-EA7631EA11B21}	CLMH083E124MH083E123	256.23	253.27	0.666666667	MH083E124	MH083E123		215	CLMH083E124MH083E123	8	0.0138	0.003941	0.05	0.004730	0.05	0.005608	0.05	0.004730	0.05	
CLMH083E125MH083E124		1997		Existing		MH083E125	MH083E124		T15384	IRWD	PVC	{7CDDFDF4-A600-4DE6-B485-4CD6CAD3AA20}	CLMH083E125MH083E124	257.05	256.32	0.666666667	MH083E125	MH083E124		126	CLMH083E125MH083E124	8	0.0039	0.003941	0.06	0.004730	0.06	0.005608	0.07	0.004730	0.06	
CLMH083E127MH083E113		1997		Existing		MH083E127	MH083E113		T15384	IRWD	PVC	{54BFA141-389D-4AFA-A05E-420FD41CF81E}	CLMH083E127MH083E113	246.72	246.16	0.666666667	MH083E127	MH083E113		60	CLMH083E127MH083E113	8	0.0093	0.002816	0.04	0.003382	0.05	0.004008	0.05	0.003382	0.05	
CLMH083E140MH083E051		1995		Existing		MH083E140	MH083E051		A00804	IRWD	PVC	{90A884D2-FA67-4738-991E-71A5C106A051}	CLMH083E140MH083E051	252.42	250.73	0.666666667	MH083E140	MH083E051		312	CLMH083E140MH083E051	8	0.0054	0.061632	0.21	0.073969	0.23	0.087702	0.25	0.073969	0.23	
CLMH083E141MH083E140		1995		Existing	assumed Mannings N	MH083E141	MH083E140		T15181	IRWD	PVC	{CB1A8A18-3225-4663-9241-66E85E49F31E}	CLMH083E141MH083E140	254.28	252.62	0.666666667	MH083E141	MH083E140		138	CLMH083E141MH083E140	8	0.0120	0.038565	0.14	0.046302	0.15	0.054895	0.16	0.046302	0.15	
CLMH083E142MH083E141		1995		Existing		MH083E142	MH083E141		T15181	IRWD	PVC	{7B08B571-8CBB-4B06-A630-9E42BB1CF559}	CLMH083E142MH083E141	256.61	254.49	0.666666667	MH083E142	MH083E141		189	CLMH083E142MH083E141	8	0.0112	0.005405	0.06	0.006489	0.06	0.007694	0.07	0.006489	0.06	
CLMH083E143MH083E142		1997		Existing		MH083E143	MH083E142		T15181	IRWD	PVC	{DCFD91C7-7977-484F-9538-781C6957A0E6}	CLMH083E143MH083E142	257.82	256.72	0.666666667	MH083E143	MH083E142		263	CLMH083E143MH083E142	8	0.0042	0.005405	0.07	0.006489	0.07	0.007694	0.08	0.006489	0.07	
CLMH083E144MH083E141		1997		Existing		MH083E144	MH083E141		T15181	IRWD	PVC	{F40A0709-6A64-4E25-9282-E536F8FAD84C}	CLMH083E144MH083E141	266.83	254.49	0.666666667	MH083E144	MH083E141		370	CLMH083E144MH083E141	8	0.0334	0.002295	0.03	0.002756	0.03	0.003267	0.03	0.002756	0.03	
CLMH083E145MH083E144		1997		Existing		MH083E145	MH083E144		T15181	IRWD	PVC	{113F688B-031D-4E27-AFA1-372AC7E296AA}	CLMH083E145MH083E144	257.67	254.38	0.666666667	MH083E145	MH083E144		276	CLMH083E145MH083E144	8	0.0119	0.029514	0.12	0.035435	0.13	0.042012	0.15	0.035435	0.13	
CLMH083E146MH083E145		1997		Existing		MH083E146	MH083E145		T15181	IRWD	PVC	{6B98EED9-0535-45F6-8CCD-BD939AD3D592}	CLMH083E146MH083E145	259.17	257.88	0.666666667	MH083E146	MH083E145		312	CLMH083E146MH083E145	8	0.0041	0.009736	0.09	0.011689	0.10	0.013857	0.11	0.011689	0.10	
CLMH083E147MH083E146		1997		Existing		MH083E147	MH083E146		T15181	IRWD	PVC	{ED1EADDE1-E3E4-430B-BC6E-8F681F8D902A}	CLMH083E147MH083E146	260.50	259.26	0.666666667	MH083E147	MH083E146		246	CLMH083E147MH083E146	8	0.0050	0.003386	0.05	0.004066	0.06	0.004820	0.06	0.004066	0.06	
CLMH083E148MH083E145		1997		Existing		MH083E148	MH083E145		T15181	IRWD	PVC	{A2AFBAED-6275-4632-82C6-A6B870AD1C01}	CLMH083E148MH083E145	270.23	257.88	0.666666667	MH083E148	MH083E145		390	CLMH083E148MH083E145	8	0.0317	0.004575	0.04	0.005493	0.04	0.006512	0.05	0.005493	0.04	
CLMH083E149MH083E145		1997		Existing		MH083E149	MH083E145		T15181	IRWD	PVC	{15362FD1-A8FF-4899-B1B3-DB6D543D93B1}	CLMH083E149MH083E145	267.69	257.77	0.666666667	MH083E149	MH083E145		263	CLMH083E149MH083E145	8	0.0377	0.015203	0.07	0.018254	0.07	0.021643	0.08	0.018254	0.07	
CLMH083E150MH083E149		1997		Existing		MH083E150	MH083E149		T15181	IRWD	PVC	{607F18C8-6EB9-4367-B447-09E118452554}	CLMH083E150MH083E149	269.39	267.89	0.666666667	MH083E150	MH083E149		364	CLMH083E150MH083E149	8	0.0041	0.008041	0.08	0.009655	0.09	0.011447	0.10	0.009655	0.09	
CLMH083E151MH083E150		1997		Existing		MH083E151	MH083E150		T15181	IRWD	PVC	{C5D29942-E338-4F74-B409-6088EBAD9D94}	CLMH083E151MH083E150	270.64	269.50	0.666666667	MH083E151	MH083E150		280	CLMH083E151MH083E150	8	0.0041	0.004851	0.06	0.005824	0.07	0.006905	0.08	0.005824	0.07	
CLMH083E152MH083E151		1997		Existing		MH083E152	MH083E151		T15181	IRWD	PVC	{8D7579D3-B042-4668-8676-588E150A4836}	CLMH083E152MH083E151	271.92	270.85	0.666666667	MH083E152	MH083E151		110	CLMH083E152MH083E151	8	0.0097	0.004851	0.05	0.005824	0.06	0.006905	0.06	0.005824	0.06	
CLMH083E153MH083E149		1997		Existing		MH083E153	MH083E149		T15181	IRWD	PVC	{15C850E1-23D0-49B1-8B61-4ADE6D0970EA}	CLMH083E153MH083E149	276.61	267.89	0.666666667	MH083E153	MH083E149		368	CLMH083E153MH083E149	8	0.0237	0.007163	0.05	0.008599	0.06	0.010195	0.06	0.008599	0.06	
CLMH083E154MH083E155		1998		Existing	assumed Mannings N	MH083E154	MH083E155		T15721	IRWD	PVC	{06BE5CCF-4817-42EC-B75A-24CDCEBBA526}	CLMH083E154MH083E155	270.17	266.11	0.666666667	MH083E154	MH083E155		204	CLMH083E154MH083E155	8	0.0199	0.000880	0.02	0.001055	0.02	0.001252	0.02	0.001055	0.02	
CLMH083E155MH083E160		1998		Existing	assumed Mannings N	MH083E155	MH083E160		T15721	IRWD	PVC	{ACC39708-31C6-4827-85A9-4615F3B2B80B}	CLMH083E155MH083E160	266.01	264.41	0.666666667	MH083E155	MH083E160		312	CLMH083E155MH083E160	8	0.0047	0.004233	0.06	0.005083	0.06	0.006025	0.07	0.005083	0.06	
CLMH083E156MH083E157		1998		Existing	assumed Mannings N	MH083E156	MH083E157		T15720	IRWD	PVC	{6CE6DB7F-D562-42E1-B452-88D724E4DEC1}	CLMH083E156MH083E157	273.33	271.07	0.666666667	MH083E156	MH083E157		230	CLMH083E156MH083E157	8	0.0098	0.007294	0.07	0.008755	0.07	0.010381	0.08	0.008755	0.07	
CLMH083E157MH083E162		1998		Existing	assumed Mannings N	MH083E157	MH083E162		15720	IRWD	PVC	{13A518A2A-2685-4E79-8DE4-3B74111C6582}	CLMH083E157MH083E162	270.97	270.41	0.666666667	MH083E157	MH083E162		171	CLMH083E157MH083E162	8	0.0033	0.016184	0.12	0.019427	0.13	0.023034	0.14	0.019427	0.13	
CLMH083E159MH083E048		1998		Existing	assumed Mannings N	MH083E159	MH083E048		A00804C	IRWD	PVC	{0FA6A467-E1FE-49F3-B758-AF6089179B9C}	CLMH083E159MH083E048	261.08	256.73	0.666666667	MH083E159	MH083E048		62	CLMH083E159MH083E048	8	0.0702	0.023130	0.07	0.027726	0.08	0.032878	0.08	0.027726	0.08	
CLMH083E160MH083E161		1998		Existing	assumed Mannings N	MH083E160	MH083E161		15720	IRWD	PVC	{8D847794-3AC7-4E65-93DD-815C3CC66896}	CLMH083E160MH083E161	264.20	262.95	0.666666667	MH083E160	MH083E161		73	CLMH083E160MH083E161	8	0.0171	0.006692	0.06	0.008033	0.06	0.009525	0.07	0.008033	0.06	
CLMH083E161MH083E159		1999		Existing	assumed Mannings N	MH083E161	MH083E159		A00804C	IRWD	PVC	{3F9E4D1E-92AE-42F1-AFDB-3996E0A1C4851}	CLMH083E161MH083E159	262.66	261.35	0.666666667	MH083E161	MH083E159		134	CLMH083E161MH083E159	8	0.0098	0.022876	0.11	0.027460	0.12	0.032558	0.13	0.027460	0.12	
CLMH083E162MH083E163		1998		Existing	assumed Mannings N	MH083E162	MH083E163		15720	IRWD	PVC	{348135EF-DE9E-4A59-8391-B1DE933BED77}	CLMH083E162MH083E163	270.30	269.70	0.666666667	MH083E162	MH083E163		155	CLMH083E162MH083E163	8	0.0039	0.016184	0.12	0.019427	0.13	0.023034	0.14	0.019427	0.13	
CLMH083E163MH083E164		1998		Existing	assumed Mannings N	MH083E163	MH083E164		15720	IRWD	PVC	{018AF9A0-03A1-440D-848D-358B42935CAA}	CLMH083E163MH083E164	269.50	266.01	0.666666667	MH083E163	MH083E164		58	CLMH083E163MH083E164	8	0.0602	0.016184	0.06	0.019427	0.07	0.023034	0.07	0.019427	0.07	
CLMH083E164MH083E161		1999		Existing	assumed Mannings N	MH083E164	MH083E161		A00804C	IRWD	PVC	{7D5E6658-8592-4167-99AE-FC6CABE8E75}	CLMH083E164MH083E161	265.82	262.76	0.666666667	MH083E164	MH083E161		310	CLMH083E164MH083E161	8	0.0099	0.016184	0.10	0.019427	0.10	0.023034	0.11	0.019427	0.10	
CLMH083E166MH083N529		1999		Existing	assumed Mannings N	MH083E166	MH083N529		T15685	IRWD	PVC	{BAC3EADD-2009-4371-B838-39E7B3030D27}	CLMH083E166MH083N529	257.50	254.13	0.666666667	MH083E166	MH083N529		108	CLMH083E166MH083N529	8	0.0312	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH083E168MH083E169		1999		Existing	assumed Mannings N	MH083E168	MH083E169		15573	IRWD	PVC	{AD10563F-D29C-4BDD-B159-94BD154AA9F9}	CLMH083E168MH083E169	281.66	280.94	0.666666667	MH083E168	MH083E169		281	CLMH083E168MH083E169	8	0.0040	0.007212	0.08	0.008659	0.08	0.010266	0.09	0.008659	0.08	
CLMH083E169MH082S082		1999		Existing	assumed Mannings N	MH083E169	MH082S082	ERROR 23	15573	IRWD	PVC	{826861BC-407A-42E8-A1A7-39C05734BC1}	MH083E169MH082S082	280.84	280.27	0.666666667	MH083E169	MH082S082		365	MH083E169MH082S082	8	0.0020	0.010273	0.09	0.012334	0.10	0.014622	0.11	0.012334	0.10	
CLMH083E170MH082S081		1999		Existing		MH083E170	MH082S081		T15573	IRWD	PVC	{0DA8A3CB-06FD-416C-B21C-979856A98D6B}	CLMH083E170MH082S081	280.25	279.35	0.666666667	MH083E170	MH082S081		224	CLMH083E170MH082S081	8	0.0040	0.003403	0.05	0.004085	0.06	0.004843	0.06	0.004085	0.06	
CLMH083N002MH083N004		1995		Existing		MH083N002	MH083N004		T15010	IRWD	PVC	{6ECB1235-0509-4529-9A16-D0DB8EEA6AA8}	CLMH083N002MH083N004	219.10	215.11	0.666666667	MH083N002	MH083N004		327	CLMH083N002MH083N004	8	0.0122	0.010437	0.07	0.012528	0.08	0.014853	0.09	0.012528	0.08	
CLMH083N003MH083N002		1995		Existing		MH083N003	MH083N002		T15010	IRWD	PVC	{BAB29B85-C88F-41F4-AD37-FB7B76089D42}	CLMH083N003MH083N002	221.90	219.20	0.666666667	MH083N003	MH083N002		150	CLMH083N003MH083N002	8	0.0180	0.005519	0.05	0.006625	0.05	0.007856	0.06	0.006625	0.05	
CLMH083N004MH083N084		1995		Existing		MH083N004	MH083N084		15103	IRWD	PVC	{82842E06-1F36-4790-AFA3-68899FC6D4F1}	CLMH083N004MH083N084	215.02	212.80	0.666666667	MH083N004	MH083N084		202	CLMH083N004MH083N084	8	0.0110	0.023149	0.11	0.027778	0.12	0.032951	0.13	0.027778	0.12	
CLMH083N050MH083N004		1995		Existing		MH083N050	MH083N004		15103	IRWD	PVC	{E3317FA1-0BD5-477C-92B7-378D944EFE15}	CLMH083N050MH083N004	216.19	215.22	0.666666667	MH083N050	MH083N004		208	CLMH083N050MH083N004	8	0.0048	0.007260	0.07	0.008717	0.08	0.010336	0.09	0.008717	0.08	
CLMH083N052MH083N050		1995		Existing		MH083N052	MH083N050		15103	IRWD	PVC	{3243CEC8-EE1F-4F87-0066-642E3C7D3B73}	CLMH083N052MH083N050	220.50	216.39	0.666666667	MH083N052	MH083N050		374	CLMH083N052MH083N050	8	0.0110	0.003418	0.04	0.004104	0.05	0.004867	0.05	0.004104	0.05	
CLMH083N053MH083N077		1995		Existing		MH083N053	MH083N077		A00792	IRWD	PVC	{500D08DC-4379-48D0-9188-7AF0B1CD46CB}	CLMH083N053MH083N077	174.91	170.58	1.500000000	MH083N053	MH083N077		439	CLMH083N053MH083N077	18	0.0099	0.143407	0.17	0.495100	0.18	0.588415	0.20	1.144817	0.28	
CLMH083N054MH083N053		1995		Existing		MH083N054	MH083N053		A00792	IRWD	PVC	{8F892DBA-6B02-417A-AEC3-78EC5A981ED8}	CLMH083N054MH083N053	178.67	175.02	1.500000000	MH083N054	MH083N053		371	CLMH083N054MH083N053	18	0.0098	0.414847	0.17	0.495347	0.18	0.588647	0.20	1.145404	0.28	
CLMH083N055MH083N054		1995		Existing		MH083N055	MH083N054		A00792	IRWD	PVC	{36CE1278-248B-49B3-BDFE-A5B2F1FC3B5E}	CLMH083N055MH083N054	190.41	178.85	1.500000000	MH083N055	MH083N054		221	CLMH083N055MH083N054	18	0.0523	0.058354	0.05	0.063478	0.05	0.075833	0.06	0.418501	0.14	
CLMH083N056MH083N055		1995		Existing		MH083N056	MH083N055		A00792	IRWD	PVC	{F10CCC09-2486-4334-AF1A-E98FA1057E44}	CLMH083N056MH083N055	195.56	190.50	1.500000000	MH083N056	MH083N055		354	CLMH083N056MH083N055	18	0.0143	0.058354	0.06	0.063492	0.06	0.075849	0.07	0.418506	0.15	
CLMH083N057MH083N054		1995		Existing		MH083N057	MH083N054		A00792	IRWD	PVC	{81CB7213E-F95C-403F-A6FF-5ICD046E5C1F}	CLMH083N057MH083N054	185.77	178.88	1.500000000	MH083N057	MH083N054		199	CLMH083N057MH083N054	18	0.0346	0.380937	0.12	0.432132	0.13	0.513059	0.14	0.727583	0.16	
CLMH083N058MH083N057		1995		Existing		MH083N058	MH083N057		A00792	IRWD	VCP	{8B59235C-0926-4DA0-A792-49F520ED212A}	CLMH083N058MH083N057	190.33	185.91	1.500000000	MH083N058	MH083N057		321	CLMH083N058MH083N057	18	0.0138	0.346863	0.14	0.415187	0.16	0.492917	0.17	0.711402	0.20	
CLMH083N059MH083N058		1995		Existing		MH083N059	MH083N058		A00792	IRWD	VCP	{4F876A3F-D9B3-4467-973B-E5323S0E76F}	CLMH083N059MH083N058	192.96	190.42	1.500000000	MH083N059	MH083N058		294	CLMH083N059MH083N058	18	0.0086	0.325056	0.15	0.389028	0.17	0.461863	0.18	0.685782	0.22	
CLMH083N060MH083N059		1995		Existing		MH083N060	MH083N059		A00792	IRWD	VCP	{2DF19339-49C4-4BEF-B7FD-77F4A06A424C}	CLMH083N060MH083N059	195.61	193.05	1.500000000	MH083N060	MH083N059		259	CLMH083N060MH083N059	18	0.0087	0.325166	0.15	0.388138	0.17	0.461951	0.18	0.686050	0.22	
CLMH083N061MH083N060		1995		Existing		MH083N061	MH083N060		A00792	IRWD	VCP	{8568B05E-97A4-4D15-A775-52DF4A5887C1}	CLMH083N061MH083N060	202.95	195.80	1.500000000	MH083N061	MH083N060		289	CLMH083N061MH083N060	18	0.0247	0.222458	0.10	0.266512	0.11	0.316433	0.12	0.565145	0.16	
CLMH083N062MH083N061		1995		Existing		MH083N062	MH083N061		A00792	IRWD	VCP	{0D0363FD-C287-4422-9F8F-E9F983DCB06C}	CLMH083N062MH083N061	208.70	203.20	1.500000000	MH083N062	MH083N061		261	CLMH083N062MH083N061	18	0.0216	0.222525	0.10	0.266576	0.11	0.316492	0.12	0.565269	0.16	
CLMH083N063MH083N062		1995		Existing		MH083N063	MH083N062		A00792	IRWD	VCP	{2E15981F-E008-422E-90E7-5D785916B000}	CLMH083N063MH083N062	214.00	208.80	1.500000000	MH083N063	MH083N062		243	CLMH083N063MH083N062	18	0.0214	0.194643	0.10	0.233032	0.11	0.276654	0.11	0.533347	0.16	
CLMH083N064MH083N063		1995		Existing		MH083N064	MH083N063	ERROR 23	A00792	IRWD	VCP	{36AE0491-F028-43CD-B486-FFDEC5934695}	CLMH083N064MH083N063	218.84	214.10	1.500000000	MH083N064	MH083N063		233	CLMH083N064MH083N063	18	0.0203	0.194686	0.10	0.233070	0.11	0.276691	0.12	0.533431	0.16	
CLMH083N065MH083N064		1995		Existing		MH083N065	MH083N064	ERROR 23	A00792	IRWD	VCP	{7A5738FE-31BB-4667-BC3A-32EBCC407B83}	CLMH083N065MH083N064	223.47	219.04	1.250000000	MH083N065	MH083N064		251	CLMH083N065MH083N064	15	0.0176	0.179253	0.12	0.214528	0.13	0.254698	0.15	0.515421	0.21	
CLMH083N066MH083N065		1995		Existing		MH083N066	MH083N065		A00792	IRWD	VCP	{352DEDE4-8CEA-416F-84A9-AD5F07BDEF06}	CLMH083N066MH083N065	229.41	223.58	1.250000000	MH083N066	MH083N065		328	CLMH083N066MH083N065	15	0.0178	0.137000	0.11	0.163783	0.12	0.194508	0.13	0.467823	0.20	
CLMH083N067MH083N066		1995		Existing		MH083N067	MH083N066		A00792	IRWD	VCP	{C3823B7E-7384-4CD6-9783-A1A96FFEE405}	CLMH083N067MH083N066	238.71	229.52	1.250000000	MH083N067	MH083N066		515	CLMH083N067MH083N066	15	0.0178	0.134965	0.11	0.161270	0.12	0.191487	0.13	0.466059	0.20	
CLMH083N068MH083N067		1995		Existing		MH083N068	MH083N067		A00792	IRWD	VCP	{1D7140D2-C337-4EE6-B186-DCB667315 1ED}	CLMH083N068MH083N067	241.71	238.80	1.250000000	MH083N068	MH083N067		326	CLMH083N068MH083N067	15	0.0231	0.135032	0.10	0.161340	0.11	0.191558	0.12	0.466387	0.18	
CLMH083N069MH083N068		1995		Existing		MH083N069	MH083N068		A00792	IRWD	VCP	{DB31EDE4-76DE-421D-A95C-5FECD66B0BFD}	CLMH083N069MH083N068	248.66	241.80	1.250000000	MH083N069	MH083N068		325	CLMH083N069MH083N068	15	0.0211	0.135040	0.10	0.161349	0.11	0.191570	0.12	0.466403	0.19	
CLMH083N070MH083N060		1995		Existing		MH083N070	MH083N060		A00792A	IRWD	PVC	{A0B96488-0390-4BCD-B640-822E9AFB83D0}	CLMH083N070MH083N060	206.07	196.44	0.666666667	MH083N070	MH083N060		187	CLMH083N070MH083N060	8	0.0515	0.102856	0.16	0.122763	0.17	0.145628	0.19	0.122762	0.17	
CLMH083N071MH083N070		1995		Existing		MH083N071	MH083N070		A00792A	IRWD	PVC	{B88ADAE8-F4A3-48D7-8436-A638CF89458}	CLMH083N071MH083N070	213.94	206.16	0.666666667	MH083N071	MH083N070		319	CLMH083N071MH083N070	8	0.0244	0.097922	0.18	0.116833	0.20	0.138592	0.22	0.116832	0.20	
CLMH083N072MH083N071		1995		Existing		MH083N072	MH083N071		A00792A	IRWD	PVC	{7C9E2423-8450-4179-86B7-09978882FE1}	CLMH083N072MH083N071	217.60	214.03	0.666666667	MH083N072	MH083N071		292	CLMH083N072MH083N071	8	0.0122	0.090797	0.21	0.108256	0.23	0.128401	0.25	0.108256	0.23	
CLMH083N073MH083N072		1995		Existing		MH083N073	MH083N072		A00792A	IRWD	PVC	{374A8FA6-35A7-4BD4-8DFF-D4D6ED675ECF}	CLMH083N073MH083N072	222.84	217.80	0.666666667	MH083N073	MH083N072		354	CLMH083N073MH083N072	8	0.0142	0.088362	0.19	0.105973	0.21	0.125775	0.23	0.105972	0.21	
CLMH083N074MH083N073		1995		Existing		MH083N074	MH083N073		A00792A	IRWD	PVC	{3801F481-8EBD-4D78-8251-A9FC5B04B4D9}	CLMH083N074MH083N073	227.69	222.94	0.666666667	MH083N074	MH083N073		354	CLMH083N074MH083N073	8	0.0134	0.068463	0.18	0.081038	0.19	0.096119	0.21	0.081037	0.19	
CLMH083N075MH083W147		1995		Existing		MH083N075	MH083W147		A00792A	IRWD	PVC	{8B56E849-A80C-47F3-BC9E-C91DC3F373FC}	CLMH083N075MH083W147	189.50	187.50	0.666666667	MH083N075	MH083W147		201	CLMH083N075MH083W147	8	0.0100	0.123272	0.26	0.147998	0.28	0.175481	0.31	0.147998	0.28	
CLMH083N076MH083N075		1995		Existing		MH083N076	MH083N075		A00792A	IRWD	PVC	{A0603083-B71A-49D5-812B-A4E9394EA2E0}	CLMH083N076MH083N075

| | | |

CLMH083W114MH083S115			1982		Existing		MH083S114	MH083S115		T11592	IRWD	VCP	{B7496DFD-D185-4639-884B-3074B7D32A54}	CLMH083S114MH083S115	198.25	197.66	0.666666667	MH083S114	MH083S115			163	CLMH083S114MH083S115	8	0.0036	0.012915	0.10	0.015485	0.11	0.018353	0.12	0.015485	0.11
CLMH083S115MH083S116			1982		Existing		MH083S115	MH083S116		T11592	IRWD	VCP	{8932DDC4-FC1B-4D8B-B0E0-D0BE6E8F6650}	CLMH083S115MH083S116	197.41	196.50	0.666666667	MH083S115	MH083S116			234	CLMH083S115MH083S116	8	0.0039	0.015463	0.11	0.018544	0.12	0.021981	0.13	0.018544	0.12
CLMH083S116MH083S123			1982		Existing		MH083S116	MH083S123		T11592	IRWD	VCP	{B741E19B-B11D-49EC-A5D9-1C779B3DB7D1}	CLMH083S116MH083S123	196.30	194.02	0.666666667	MH083S116	MH083S123			89	CLMH083S116MH083S123	8	0.0256	0.017644	0.08	0.021164	0.09	0.025085	0.09	0.021164	0.09
CLMH083S123MH083S057			1978		Existing		MH083S123	MH083S057		T10116	IRWD	VCP	{75C9C4F6-074F-4618-8DAA-1AADE1B0A1AE}	CLMH083S123MH083S057	193.83	192.05	0.666666667	MH083S123	MH083S057			182	CLMH083S123MH083S057	8	0.0098	0.017644	0.10	0.021164	0.11	0.025085	0.12	0.021164	0.11
CLMH083S124MH083S024			1977		Existing		MH083S124	MH083S024		T09363	IRWD	VCP	{05BCB809-324B-4FBB-B955-F81258957D2}	CLMH083S124MH083S024	205.15	202.82	0.666666667	MH083S124	MH083S024			393	CLMH083S124MH083S024	8	0.0059	0.024701	0.14	0.029527	0.15	0.035012	0.16	0.029527	0.15
CLMH083W001MH083W017			1977		Existing		MH083W001	MH083W017		A00126	IRWD	VCP	{54479CC7-047C-4485-A557-40CCD9298D10}	CLMH083W001MH083W017	166.08	163.00	1.000000000	MH083W001	MH083W017			265	CLMH083W001MH083W017	12	0.0116	0.280550	0.23	0.336944	0.25	0.399711	0.27	0.336943	0.25
CLMH083W002MH083W030			1977		Existing		MH083W002	MH083W030		A00126	IRWD	VCP	{48DA064D-0B1B-4A91-8B38-F5179904C480}	CLMH083W002MH083W030	169.44	166.19	1.000000000	MH083W002	MH083W030			275	CLMH083W002MH083W001	12	0.0118	0.280629	0.23	0.337010	0.25	0.399767	0.27	0.337009	0.25
CLMH083W003MH083W052			1978		Existing		MH083W003	MH083W052		9443	IRWD	VCP	{2F044D75-34DC-402F-B58B-C374E9225F6D}	CLMH083W003MH083W052	161.47	156.89	0.666666667	MH083W003	MH083W052			194	CLMH083W003MH083W052	8	0.0236	0.003826	0.04	0.004591	0.04	0.005444	0.05	0.004591	0.04
CLMH083W004MH083W003			1978		Existing		MH083W004	MH083W003		9443	IRWD	VCP	{7C76EA8C-B1DE-4516-BA7A-58497CAC9940}	CLMH083W004MH083W003	167.91	161.57	0.666666667	MH083W004	MH083W003			396	CLMH083W004MH083W003	6	0.0160	0.000448	0.01	0.000585	0.02	0.000694	0.02	0.000585	0.02
CLMH083W005MH083W008			1978		Existing		MH083W005	MH083W008		9443	IRWD	VCP	{98A77332-16F3-430B-A662-147A271A1449}	CLMH083W005MH083W008	167.66	164.49	0.500000000	MH083W005	MH083W008			296	CLMH083W005MH083W008	6	0.0107	0.002181	0.05	0.002619	0.06	0.003104	0.06	0.002619	0.06
CLMH083W006MH083W053			1978		Existing		MH083W006	MH083W053		9865	IRWD	VCP	{E4280EC05-D9D9-4927-9278-BA3688943118}	CLMH083W006MH083W053	159.47	154.69	0.666666667	MH083W006	MH083W053			152	CLMH083W006MH083W053	8	0.0314	0.004379	0.04	0.005258	0.04	0.006232	0.05	0.005258	0.04
CLMH083W007MH083W006			1977		Existing		MH083W007	MH083W006		9443	IRWD	VCP	{A57F55E5A-5880-4C29-9B26-C784SEA0893F}	CLMH083W007MH083W006	165.11	159.67	0.500000000	MH083W007	MH083W006			301	CLMH083W007MH083W006	6	0.0181	0.003257	0.06	0.003910	0.06	0.004634	0.07	0.003910	0.06
CLMH083W008MH083W009			1978		Existing		MH083W008	MH083W009		9443	IRWD	VCP	{A80467AA-0A8E-4838-AA88-125F1E3A2669}	CLMH083W008MH083W009	164.28	162.69	0.500000000	MH083W008	MH083W009			125	CLMH083W008MH083W009	6	0.0127	0.003321	0.06	0.003987	0.07	0.004726	0.08	0.003987	0.07
CLMH083W009MH083W010			1978		Existing		MH083W009	MH083W010		9443	IRWD	VCP	{AD88B263-8D5B-436F-A2C4-9AF91D34F842}	CLMH083W009MH083W010	162.49	159.45	0.666666667	MH083W009	MH083W010			219	CLMH083W009MH083W010	8	0.0138	0.004315	0.05	0.005179	0.05	0.006140	0.06	0.005179	0.05
CLMH083W010MH083W064			1978		Existing		MH083W010	MH083W064		T09174	IRWD	VCP	{A882F3A1-E3A6-4471-B92D-9ED4FC00FC8E}	CLMH083W010MH083W064	159.26	152.63	0.666666667	MH083W010	MH083W064			231	CLMH083W010MH083W064	8	0.0287	0.004689	0.04	0.005628	0.05	0.006672	0.05	0.005628	0.05
CLMH083W011MH083W110			1977		Existing		MH083W011	MH083W110		T09418	IRWD	VCP	{BCEE77CD-9A7F-4334-853F-500826F8A24B}	CLMH083W011MH083W110	169.72	168.20	0.666666667	MH083W011	MH083W110			386	CLMH083W011MH083W110	8	0.0039	0.011651	0.10	0.015931	0.12	0.015931	0.12	0.015931	0.12
CLMH083W012MH083W011			1977		Existing		MH083W012	MH083W011		T09318	IRWD	VCP	{12F94880-1D51-408D-B205-C3702B297E89}	CLMH083W012MH083W011	178.31	169.82	0.666666667	MH083W012	MH083W011			360	CLMH083W012MH083W011	8	0.0236	0.008965	0.06	0.012680	0.07	0.017039	0.08	0.012680	0.07
CLMH083W012MH083W062			1977		Existing		MH083W012	MH083W062		T09180	IRWD	VCP	{F0A77F8D-043C-4EA3-8017-08C37C1225DE}	CLMH083W012MH083W062	178.25	174.79	0.500000000	MH083W012	MH083W062			247	CLMH083W012MH083W062	6	0.0140	0.038334	0.20	0.044063	0.22	0.050243	0.23	0.044063	0.22
CLMH083W013MH083W014			1977		Existing		MH083W013	MH083W014		T09318	IRWD	VCP	{22486898-40F8-4FA9-A2AC-63687DD8E2D9}	CLMH083W013MH083W014	181.53	175.15	0.666666667	MH083W013	MH083W014			352	CLMH083W013MH083W014	8	0.0181	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH083W014MH083W015	210' FROM N-S IS		1977		Existing		MH083W014	MH083W015		T09416	IRWD	VCP	{9885CABA-E333-427F-97EB-27B0DE34A8E2}	CLMH083W014MH083W015	175.05	166.94	0.666666667	MH083W014	MH083W015			360	CLMH083W014MH083W015	8	0.0225	0.010469	0.07	0.012569	0.07	0.014902	0.08	0.012569	0.07
CLMH083W015MH083W016			1977		Existing		MH083W015	MH083W016		T09416	IRWD	VCP	{4C1091F1-89A5-498B-A93B-DE627B7D6194}	CLMH083W015MH083W016	166.72	165.62	0.666666667	MH083W015	MH083W016			236	CLMH083W015MH083W016	8	0.0047	0.013646	0.12	0.016960	0.14	0.020765	0.15	0.016960	0.14
CLMH083W016MH083W017			1978		Existing		MH083W016	MH083W017		T09416	IRWD	VCP	{F43CB83E-65E0-40E0-ADB0-51D359FDBA60}	CLMH083W016MH083W017	165.61	163.19	0.666666667	MH083W016	MH083W017			155	CLMH083W016MH083W017	8	0.0109	0.040141	0.15	0.048747	0.17	0.058459	0.18	0.048747	0.17
CLMH083W017MH083W059			1977		Existing		MH083W017	MH083W059		A00126	IRWD	VCP	{AF1D6E3C-FF8F-46A1-9A5F-80E16CB0E9AC}	CLMH083W017MH083W059	162.80	158.72	1.000000000	MH083W017	MH083W059			350	CLMH083W017MH083W059	12	0.0117	0.320330	0.24	0.385435	0.27	0.457967	0.29	0.385433	0.27
CLMH083W018MH083W016			1977		Existing		MH083W018	MH083W016		T09416	IRWD	VCP	{C1E09838-9003-4FCC-BA6F-0EED8E52CA21}	CLMH083W018MH083W016	172.10	165.82	0.666666667	MH083W018	MH083W016			260	CLMH083W018MH083W016	8	0.0242	0.022776	0.09	0.027309	0.10	0.032378	0.11	0.027309	0.10
CLMH083W019MH083W018			1978		Existing		MH083W019	MH083W018		T09416	IRWD	VCP	{39ACBE85-4CA4-467E-96C7-B961E5DF97CF}	CLMH083W019MH083W018	175.33	172.35	0.666666667	MH083W019	MH083W018			317	CLMH083W019MH083W018	8	0.0094	0.007830	0.07	0.009398	0.08	0.011144	0.08	0.009398	0.08
CLMH083W020MH083W019	65' FROM S-N IS		1978		Existing		MH083W020	MH083W019		T09318	IRWD	VCP	{365B138D-B75D-41A6-8B7B-964D5777A092B}	CLMH083W020MH083W019	181.52	175.33	0.666666667	MH083W020	MH083W019			320	CLMH083W020MH083W019	8	0.0193	0.007830	0.07	0.009399	0.07	0.011144	0.08	0.009399	0.07
CLMH083W021MH083W013			1977		Existing		MH083W021	MH083W013		T09318	IRWD	VCP	{0F7FD833-663F-4289-A95F-8555F60E7A1E}	CLMH083W021MH083W013	186.21	181.79	0.666666667	MH083W021	MH083W013			254	CLMH083W021MH083W013	8	0.0174	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH083W021MH083W020			1977		Existing		MH083W021	MH083W020		T09318	IRWD	VCP	{80343AAA-501E-444B-8FD4-43CE7002EE9C}	CLMH083W021MH083W020	186.11	181.67	0.666666667	MH083W021	MH083W020			326	CLMH083W021MH083W020	8	0.0136	0.007830	0.07	0.009399	0.07	0.011144	0.08	0.009399	0.07
CLMH083W023MH083W024			1978		Existing		MH083W023	MH083W024		T09045	IRWD	VCP	{86457E89-E32A-40CE-8B00-E563F70BD7A}	CLMH083W023MH083W024	194.42	187.75	0.666666667	MH083W023	MH083W024			266	CLMH083W023MH083W024	8	0.0251	0.036359	0.05	0.007636	0.06	0.009052	0.06	0.007636	0.06
CLMH083W023MH083W024	206' FROM S-N IS		1978		Existing		MH083W023	MH083W024		T09045	IRWD	VCP	{5C00A9C1-0AA1-420A-B06F-B949A3625492}	CLMH083W023MH083W024	187.65	186.34	0.666666667	MH083W023	MH083W024			336	CLMH083W023MH083W024	8	0.0039	0.006359	0.08	0.007636	0.08	0.009052	0.09	0.007636	0.08
CLMH083W024MH083W025			1978		Existing		MH083W024	MH083W025		T09282	IRWD	VCP	{57B29F4F-4B03-4CEB-9CEE-72C1CA5ACF7A}	CLMH083W024MH083W025	186.24	182.45	0.666666667	MH083W024	MH083W025			325	CLMH083W024MH083W025	8	0.0117	0.014325	0.09	0.017201	0.10	0.020393	0.11	0.017201	0.10
CLMH083W025MH083W026			1978		Existing		MH083W025	MH083W026		T09282	IRWD	VCP	{8A42ACSD-37B4-45B1-A250-3416F3A47B2}	CLMH083W025MH083W026	182.25	180.80	0.666666667	MH083W025	MH083W026			171	CLMH083W025MH083W026	8	0.0085	0.007366	0.13	0.032857	0.15	0.038957	0.16	0.032857	0.15
CLMH083W026MH083W027			1978		Existing		MH083W026	MH083W027		T09282	IRWD	VCP	{A5D4DD1D-58F4-4611-B48C-E2085B44AD0E}	CLMH083W026MH083W027	180.55	179.78	0.666666667	MH083W026	MH083W027			205	CLMH083W026MH083W027	8	0.0038	0.028950	0.16	0.034758	0.17	0.044422	0.22	0.034758	0.17
CLMH083W027MH083W038			1978		Existing		MH083W027	MH083W038		T09359	IRWD	VCP	{60CDBA2C-0656-4E12-B149-3151C7D7C18}	CLMH083W027MH083W038	179.53	179.17	0.833333333	MH083W027	MH083W038			139	CLMH083W027MH083W038	10	0.0026	0.235759	0.36	0.282939	0.39	0.335535	0.43	0.282938	0.39
CLMH083W028MH083W027			1978		Existing		MH083W028	MH083W027		T09282	IRWD	VCP	{DAA6892B-44AF-461B-B2C6-96303900E6FB}	CLMH083W028MH083W027	184.58	179.78	0.666666667	MH083W028	MH083W027			248	CLMH083W028MH083W027	8	0.0194	0.206850	0.30	0.248210	0.33	0.294358	0.36	0.248210	0.33
CLMH083W029MH083W028			1978		Existing		MH083W029	MH083W028		T09282	IRWD	VCP	{66559092F-72A5-48F5-8491-B38C73E01412}	CLMH083W029MH083W028	184.47	182.50	0.666666667	MH083W029	MH083W028			185	CLMH083W029MH083W028	8	0.0106	0.013042	0.09	0.015656	0.10	0.018564	0.10	0.015656	0.10
CLMH083W030MH083W029			1978		Existing		MH083W030	MH083W029		T09282	IRWD	VCP	{554A2423-830C-4A64-A187-A920BD377BE1}	CLMH083W030MH083W029	189.41	184.64	0.666666667	MH083W030	MH083W029			282	CLMH083W030MH083W029	8	0.0169	0.007095	0.06	0.008516	0.06	0.010099	0.07	0.008516	0.06
CLMH083W031MH083W030			1978		Existing		MH083W031	MH083W030		T09282	IRWD	VCP	{79F59F69-88D3-4826-B619-C24847653F17}	CLMH083W031MH083W030	192.82	189.52	0.666666667	MH083W031	MH083W030			252	CLMH083W031MH083W030	8	0.0131	0.002295	0.04	0.002756	0.04	0.003269	0.04	0.002756	0.04
CLMH083W032MH083W022			1978		Existing		MH083W032	MH083W022		T09045	IRWD	VCP	{B3E8265A-ACB3-47D1-BA5D-8C0B65E64EC4B}	CLMH083W032MH083W022	197.53	194.63	0.666666667	MH083W032	MH083W022			313	CLMH083W032MH083W022	8	0.0093	0.006359	0.06	0.007636	0.07	0.009052	0.08	0.007636	0.07
CLMH083W033MH083S005			1978		Existing		MH083W033	MH083S005		T09045	IRWD	VCP	{0E84E8A5-D348-4787-A67B-2CE852AC12A}	CLMH083W033MH083S005	199.74	195.35	0.666666667	MH083W033	MH083S005			365	CLMH083W033MH083S005	8	0.0108	0.038495	0.07	0.010200	0.08	0.012091	0.09	0.010200	0.08
CLMH083W034MH083W036			1978		Existing		MH083W034	MH083W036		T09359	IRWD	VCP	{67AE7388-D37A-4E00-B982-E0190CB51E41}	CLMH083W034MH083W036	180.38	177.75	0.500000000	MH083W034	MH083W036			180	CLMH083W034MH083W036	6	0.0146	0.001607	0.04	0.001929	0.05	0.002288	0.06	0.001929	0.05
CLMH083W035MH083W036			1978		Existing		MH083W035	MH083W036		T09359	IRWD	VCP	{A09D111A-6B06-498D-A428-328CC6F2DD0E}	CLMH083W035MH083W036	179.80	177.75	0.500000000	MH083W035	MH083W036			90	CLMH083W035MH083W036	6	0.0228	0.001767	0.04	0.002122	0.05	0.002517	0.06	0.002122	0.05
CLMH083W036MH083W045			1978		Existing		MH083W036	MH083W045		T09359	IRWD	VCP	{B6458895-0D75-4AC5-AE88-795F41CB5555}	CLMH083W036MH083W045	177.55	175.12	0.833333333	MH083W036	MH083W045			107	CLMH083W036MH083W045	10	0.0208	0.164851	0.23	0.293902	0.26	0.348555	0.28	0.293902	0.26
CLMH083W037MH083W002			1977		Existing		MH083W037	MH083W002		A00126	IRWD	VCP	{8985D239-63BD-4F00-B98C-C897B1955799}	CLMH083W037MH083W002	171.94	169.63	1.000000000	MH083W037	MH083W002			100	CLMH083W037MH083W002	12	0.0231	0.280730	0.19	0.337087	0.21	0.399830	0.23	0.337086	0.21
CLMH083W038MH083W036			1978		Existing		MH083W038	MH083W036		T09359	IRWD	VCP	{BE174CC6-BA99-49F1-BEC8-884D0EEDFE67}	CLMH083W038MH083W036	178.93	177.80	0.833333333	MH083W038	MH083W036			260	CLMH083W038MH083W036	10	0.0071	0.241539	0.31	0.289888	0.34	0.343778	0.37	0.289887	0.34
CLMH083W039MH083W040			1978		Existing		MH083W039	MH083W040		T09359	IRWD	VCP	{1330DC86-AB7F-4416-9E3B-3977BAFC0993}	CLMH083W039MH083W040	184.64	182.42	0.500000000	MH083W039	MH083W040			70	CLMH083W039MH083W040	6	0.0317	0.001562	0.04	0.001874	0.04	0.002222	0.04	0.001874	0.04
CLMH083W040MH083W038			1978		Existing		MH083W040	MH083W038		T09359	IRWD	VCP	{CD831C5D-589A-415C-82D0-4DD3D0A59734}	CLMH083W040MH083W038	182.13	179.17	0.666666667	MH083W040	MH083W038			207	CLMH083W040MH083W038	8	0.0143	0.005810	0.06	0.006971	0.06	0.008266	0.08	0.006971	0.06
CLMH083W041MH083W042			1978		Existing		MH083W041	MH083W042		T09359	IRWD	VCP	{E5E3148C-C052-4810-8B34-CD98902DAA5F}	CLMH083W041MH083W042	184.05	183.01	0.500000000	MH083W041	MH083W042			90	CLMH083W041MH083W042	6	0.0104	0.000849	0.03	0.001019	0.04	0.001209	0.04	0.001019	0.04
CLMH083W042MH083W040			1978		Existing		MH083W042	MH083W040		T09359	IRWD	VCP	{06827E3A-040E-48E4-B7E2-3C5FB43ABF4D}	CLMH083W042MH083W040	182.86	182.42	0.666666667	MH083W042	MH083W040			126	CLMH083W042MH083W040	8	0.0035	0.004248	0.06	0.005098	0.07	0.006044	0.08	0.005098	0.07
CLMH083W043MH083W042			1978		Existing		MH083W043	MH083W042		T09359	IRWD	VCP	{346FA74E-16EC-4485-8A9F-07F1E35509BC}	CLMH083W043MH083W042	183.27	183.11	0.500000000	MH083W043	MH083W042			49	CLMH083W043MH083W042	6	0.0033	0.000399	0.03	0.000479	0.04	0.000569	0.04	0.000479	0.04
CLMH083W044MH083W043			1978		Existing		MH083W044	MH083W043		T09359	IRWD	VCP	{F39158B1-621C-4E80-9627-25CA207F7449}	CLMH083W044MH083W043	183.86	183.57	0.500000000	MH083W044	MH083W043			75	CLMH083W044MH083W043	6	0.0039	0.001585	0.06	0.001901	0.06	0.002254	0.07	0.001901	0.06
CLMH083W045MH083W047			1978		Existing		MH083W045	MH083W047		T09359	IRWD	VCP	{0221911B-0A06-426A-8FF4-C280422EA3D2}	CLMH083W045MH083W047	175.11	173.22	0.833333333	MH083W045	MH083W047			59	CLMH083W045MH083W047	10	0.0320	0.245309	0.21	0.294467	0.23	0.349230	0.25	0.294466	0.23
CLMH083W046MH083W047			1978		Existing		MH083W046	MH083W047		T09359	IRWD	VCP	{32C33377-16ED-4A41-8FBA-4170580F6C7}	CLMH083W046MH083W047	173.96	173.33	0.500000000	MH083W046	MH083W047			135	CLMH083W046MH083W047	6	0.0047	0.001423	0.05	0.002016	0.07	0.002404	0.11	0.002035	0.07
CLMH083W047MH083W049			1978		Existing		MH083W047	MH083W049		T09359	IRWD	VCP	{88137926-A9F1-4FAB-AF19-CB12AB93D23C}	CLMH083W047MH083W049	173.02	172.86	0.833333333	MH083W047	MH083W049			43	CLMH083W047MH083W049	10	0.0037	0.266723	0.40	0.296161	0.44	0.351241	0.49	0.296160	0.44
CLMH083W048MH083W049			1978		Existing		MH083W048	MH083W049		T09359	IRWD	VCP	{46D37E08-983C-4991-AC E8-DA4830FFC43B}	CLMH083W048MH083W049	176.39	172.96	0.500000000	MH083W048	MH083W049			110	CLMH083W048MH083W049	6	0.0312	0.003873	0.28	0.004638	0.32	0.005499	0.36	0.004638	0.32
CLMH083W049MH083W050			1978		Existing		MH083W049	MH083W050		T09359	IRWD	VCP	{945090A8-EACA-418E-93CB-C7CC75811333}	CLMH083W049MH083W050	172.86	172.44	0.833333333	MH083W049	MH083W050			169	CLMH083W049MH083W050	10	0.0025	0.250459	0.38	0.300702	0.41	0.356662	0.45	0.300701	0.41
CLMH083W050MH083W037			1978		Existing		MH083W050	MH083W037		T09359	IRWD	VCP	{FA8B0287-2F98-45C6-8D03-0952DE5C112E}	CLMH083W050MH083W037	172.25	172.08	0.833333333	MH083W050	MH083W037			120	CLMH083W050MH083W037	10	0.0031	0.290452	0.35	0.350655	0.39	0.406040	0.42	0.306069	0.39
CLMH083W052MH083W053			1977		Existing		MH083W052	MH083W053		A00126	IRWD	VCP	{9F8245D7-70C2-47AA-A9EB-433052587F87}	CLMH083W052MH083W053	155.96	153.72	1.500000000	MH083W052	MH083W053			297	CLMH083W052MH083W053	18	0.0075	0.649817	0.22	0.779180	0.25	0.927187	0.27	1.409577	0.33
CLMH083W053MH083W054			1977		Existing		MH083W053	MH083W054		A00126	IRWD	VCP	{A3B26D86-580E-40C8-B1C4-4EAF990F5E8D}	CLMH083W053MH083W054	153.63	151.91	1.500000000	MH083W053	MH083W054			354	CLMH083W053MH083W054	18	0.0048	0.653354	0.25	0.783444	0.28	0.932488	0.30	1.413158	0.37
CLMH083W054MH083W055			1977		Existing		MH083W054	MH083W055		T09174	IRWD	VCP	{B123E37C-EF91-42CF-8A7D-F9E6562AC4DC}	CLMH083W054MH083W055	151.75	147.66	1.500000000	MH083W054	MH083W055			357	CLMH083W054MH083W055	18	0.0117	0.653190	0.20	0.783249	0.22	0.932315	0.24	1.412996	0.30
CLMH083W055MH083W056			1977		Existing		MH083W055	MH083W056		T09174	IRWD	VCP	{CAC65AFA-B48F-40DD-8FB9-7ABCA7BC121B}	CLMH083W055MH083W056	147.57	145.89	1.500000000	MH083W055	MH083W056			144	CLMH083W055MH083W056	18	0.0117	0.749137	0.22	1.070027	0.26	1.518799	0.31	1.895906	0.34
CLMH083W056MH084N047	II7		1977		Existing		MH083W056	MH084N047		A00126	IRWD	VCP	{306DA152-C2E3-4130-BF21-80206E1F1E28}	CLMH083W056MH084N047	140.52	140.41	1.500000000	MH083W056	MH084N047			140	CLMH083W056MH084N047	18	0.0011	1.069720	0.37	1.284880	0.40	1.528515	0.44	1.900750	0.49
CLMH083W057MH083W056			1977		Existing		MH083W057	MH083W056		A00126	IRWD	VCP	{EC42FB57-E789-4967-A23E-A1CB82B8FDCC}	CLMH083W057MH083W056	150.13	146.50	1.000000000	MH083W057	MH083W056			350	CLMH083W057MH083W056	12	0.0104	0.319878	0.25	0.385028	0.27	0.457612	0.30	0.385025	0.27
CLMH083W058MH083W057	UFF4		1977		Existing		MH083W058	MH083W057		A00126	IRWD	VCP	{E8665ED5-32F0-4F4D-A114-193AB3E1F428}	CLMH083W058MH083W057	154.38	150.24	1.000000000	MH083W058	MH083W057			350	CLMH083W058MH083W057	12	0.0118	0.320026	0.24	0.385165	0.27	0.457731	0.29	0.385162	0.27
CLMH083W059MH083W058			1978		Existing		MH083W059	MH083W058		A00126	IRWD	VCP	{90C50DBD-3639-4414-A27E-43F75CDF88E3}	CLMH083W059MH083W058	158.61	154.47	1.000000000	MH083W059	MH083W058			350	CLMH083W059MH083W058	12	0.0118	0.320171	0.24	0.385295	0.27	0.457845	0.29	0.385293	0.27
CLMH083W060MH083W061			1977		Existing		MH083W060	MH083W061		T09180	IRWD	VCP	{927F3489-AE04-4A65-ACE2-7FA1E085D37A}	CLMH083W060MH083W061	168.29	165.13	0.666666667	MH083W060	MH083W061			320	CLMH083W060MH083W061	8	0.0099	0.002540	0.04	0.003049	0.04	0.003615	0.05	0.003049	0.04
CLMH083W061MH083W100			1977		Existing		MH083W061	MH083W100		T09180	IRWD	VCP	{1A90B8AB-17C8-428F-A9CA-CB92873GF913}	CLMH083W061MH083W100	165.08	162.28	0.666666667	MH083W061	MH083W100			320	CLMH083W061MH083W100	8	0.0088	0.009118	0.08	0.010945	0.09	0.012977	0.09	0.010945	0.09
CLMH083W062MH083W060			1977		Existing		MH083W062	MH083W060		T09180	IRWD	VCP	{F4ECB24B-DE02-4106-9547-97A2E804F6CB}	CLMH083W062MH083W060	174.97	168.59	0.500000000	MH083W062	MH083W060			250	CLMH083W062MH083W060	6	0.0255	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH083W062MH083W063			1977		Existing		MH083W062	MH083W063		T09180	IRWD	VCP	{EDC993CC-F56B-493B-BC52-9879A0A16EAF}	CLMH083W062MH083W063	174.53	169.42	0.666666667	MH083W062	MH083W063			316	CLMH083W062MH083W063	8	0.0162	0.046567	0.15	0.053949	0.16	0.061966	0.17	0.053949	0.16
CLMH083W063MH083W104			1977		Existing		MH083W063	MH083W104		T09180	IRWD	VCP	{D63BFBA1-C535-4EA2-B822-B872E566E8FC}	CLMH083W063MH083W104	169.27	164.77	0.666666667	MH083W063	MH083W104			321	CLMH083W063MH083W104	8	0.0140	0.046564	0.16	0.053946	0.17	0.061965	0.18	0.053946	0.17
CLMH083W064MH083W065			1978		Existing		MH083W064	MH083W065		T09174	IRWD	VCP	{95C407C3-2D49-4645-B46B-9A7420A88B62}	CLMH083W064MH083W065	152.52	151.69	0.666666667	MH083W064	MH083W065			233	CLMH083W064MH083W065	8	0.0036	0.009036	0.09	0.010847	0.10	0.012860	0.11	0.010847	0.10
CLMH083W065MH083W055			1978		Existing		MH083W065	MH083W055		T09174	IRWD	VCP	{98DD9DDA-1CBB-4F9A-A038-0F3B67FB0B0C}	CLMH083W065MH083W055	151.41	148.35	0.666666667	MH083W065	MH083W055			273	CLMH083W065MH083W055	8	0.0112	0.098789	0.23	0.118136	0.26	0.139602	0.28	0.118135	0.26
CLMH083W066MH083W065			1978		Existing		MH083W066	MH083W065		T09174	IRWD	VCP	{6E2D7708-9432-4B47-A5C3-237A3E05D5DE}	CLMH083W066MH083W065	154.55	151.

CLMH084E016MH084E014			1977		Existing		MH084E016	MH084E014		T09162	IRWD	VCP	{E200DCCB-93B0-4D5D-A0EB-4C0DD3784048}	CLMH084E016MH084E014	167.97	164.63	0.666666667	MH084E016	MH084E014			283	CLMH084E016MH084E014	8	0.0118	0.000741	0.07	0.008265	0.07	0.009798	0.08	0.008265	0.07		
CLMH084E017MH084E013			1977		Existing		MH084E017	MH084E013		T09162	IRWD	VCP	{8D6AFD76-5D7C-49DA-AEFB-B01E0953C260}	CLMH084E017MH084E013	170.13	167.35	0.500000000	MH084E017	MH084E013			283	CLMH084E017MH084E013	6	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH084E017MH084E016			1977		Existing		MH084E017	MH084E016		T09162	IRWD	VCP	{8C6CC562-AB23-495B-ADA3-3A3BCF648A51}	CLMH084E017MH084E016	170.00	168.17	0.500000000	MH084E017	MH084E016			222	CLMH084E017MH084E016	6	0.0082	0.003566	0.07	0.003808	0.07	0.004514	0.08	0.003808	0.07		
CLMH084E018MH084E012			1977		Existing		MH084E018	MH084E012		T09162	IRWD	VCP	{12C1F83B-5013-4D49-B75D-A6F34FFA709D}	CLMH084E018MH084E012	171.99	170.33	0.500000000	MH084E018	MH084E012			287	CLMH084E018MH084E012	6	0.0058	0.005841	0.10	0.006236	0.10	0.007393	0.11	0.006236	0.10		
CLMH084E019MH084E011			1977		Existing		MH084E019	MH084E011		T09162	IRWD	VCP	{2078FA06-5CC1-45B5-AEDE-D3A643523118}	CLMH084E019MH084E011	176.02	172.00	0.666666667	MH084E019	MH084E011			284	CLMH084E019MH084E011	8	0.0142	0.004568	0.05	0.004875	0.05	0.005780	0.06	0.004875	0.05		
CLMH084E020MH084E010			1977		Existing		MH084E020	MH084E010		T09162	IRWD	VCP	{4E7BD464-6370-4CF5-89DB-067F97E10181}	CLMH084E020MH084E010	177.88	173.59	0.500000000	MH084E020	MH084E010			279	CLMH084E020MH084E010	6	0.0154	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH084E020MH084E019			1977		Existing		MH084E020	MH084E019		T09162	IRWD	VCP	{69279B8F-714D-4796-98CA-B02696831120}	CLMH084E020MH084E019	177.55	176.22	0.500000000	MH084E020	MH084E019			283	CLMH084E020MH084E019	6	0.0047	0.004568	0.09	0.004875	0.09	0.005780	0.10	0.004875	0.09		
CLMH084E021MH084E022			1978		Existing		MH084E021	MH084E022		T09346	IRWD	VCP	{79D19323-50F6-4D59-A9BD-72994FA5D8E3}	CLMH084E021MH084E022	180.41	177.11	0.666666667	MH084E021	MH084E022			226	CLMH084E021MH084E022	8	0.0146	0.002880	0.04	0.003076	0.04	0.003646	0.05	0.003076	0.04		
CLMH084E022MH084E023			1978		Existing		MH084E022	MH084E023		T09346	IRWD	VCP	{509A0A07-70B1-42B5-B878-6B215B02766A}	CLMH084E022MH084E023	176.86	174.91	0.666666667	MH084E022	MH084E023			228	CLMH084E022MH084E023	8	0.0086	0.011054	0.09	0.011803	0.09	0.013992	0.10	0.011803	0.09		
CLMH084E023MH084E024			1978		Existing		MH084E023	MH084E024		T09346	IRWD	VCP	{D1F6A5F3-A0CE-45DC-A1B0-80B7D1CAD1C2}	CLMH084E023MH084E024	174.66	172.74	0.666666667	MH084E023	MH084E024			228	CLMH084E023MH084E024	8	0.0084	0.035670	0.15	0.038085	0.16	0.045151	0.17	0.038085	0.16		
CLMH084E024MH084E025			1978		Existing		MH084E024	MH084E025		T09346	IRWD	VCP	{210BA0C7-0FFF-4445-803F-D2FFBE1E9B5D}	CLMH084E024MH084E025	172.49	170.61	0.666666667	MH084E024	MH084E025			226	CLMH084E024MH084E025	8	0.0083	0.041786	0.16	0.044613	0.17	0.052892	0.18	0.044613	0.17		
CLMH084E025MH084E215			1978		Existing		MH084E025	MH084E215		T09346	IRWD	VCP	{0A4D04BC-243E-4BD5-8537-FF4166195E5CB}	CLMH084E025MH084E215	170.36	169.02	0.666666667	MH084E025	MH084E215			228	CLMH084E025MH084E215	8	0.0059	0.046940	0.19	0.050117	0.19	0.059416	0.21	0.050117	0.19		
CLMH084E028MH084E025			1978		Existing		MH084E028	MH084E025		T09346	IRWD	VCP	{8CB746AA-D367-4A58-A4FE-6CC975AB451D}	CLMH084E028MH084E025	172.87	170.57	0.666666667	MH084E028	MH084E025			229	CLMH084E028MH084E025	8	0.0128	0.005155	0.05	0.005504	0.06	0.006525	0.06	0.005504	0.06		
CLMH084E029MH084E024			1978		Existing		MH084E029	MH084E024		T09346	IRWD	VCP	{9C292750-6C7F-4D98-A261-698A4E981A72}	CLMH084E029MH084E024	175.10	172.69	0.666666667	MH084E029	MH084E024			229	CLMH084E029MH084E024	8	0.0135	0.006116	0.06	0.006528	0.06	0.007741	0.07	0.006528	0.06		
CLMH084E030MH084E023			1978		Existing		MH084E030	MH084E023		T09346	IRWD	VCP	{29010C0F-AC7B-4A8B-AEA8-2C1E02D40EF4}	CLMH084E030MH084E023	180.44	174.87	0.666666667	MH084E030	MH084E023			279	CLMH084E030MH084E023	8	0.0279	0.024616	0.09	0.026282	0.10	0.031160	0.11	0.026282	0.10		
CLMH084E031MH084E022			1978		Existing		MH084E031	MH084E022		T09346	IRWD	VCP	{0338A143-10EB-41F0-88DA-A36781857AF3}	CLMH084E031MH084E022	180.28	177.06	0.666666667	MH084E031	MH084E022			179	CLMH084E031MH084E022	8	0.0180	0.008174	0.06	0.008727	0.06	0.010345	0.07	0.008727	0.06		
CLMH084E032MH084E021			1978		Existing		MH084E032	MH084E021		T09346	IRWD	VCP	{5118F938-1ED4-401A-948A-76EC12C624BE}	CLMH084E032MH084E021	182.05	180.62	0.666666667	MH084E032	MH084E021			182	CLMH084E032MH084E021	8	0.0080	0.002880	0.05	0.003076	0.05	0.003646	0.05	0.003076	0.05		
CLMH084E033MH084E040			1978		Existing		MH084E033	MH084E040		T09344	IRWD	VCP	{AFEA9F43-6634-45DB-A9C1-B9FDEF0D9E2A}	CLMH084E033MH084E040	194.77	193.30	0.666666667	MH084E033	MH084E040			259	CLMH084E033MH084E040	8	0.0057	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH084E034MH084E039			1978		Existing		MH084E034	MH084E039		T09344	IRWD	VCP	{FB85A82B-EDDE-472C-B3D2-934FB02B90AF}	CLMH084E034MH084E039	192.44	191.71	0.666666667	MH084E034	MH084E039			155	CLMH084E034MH084E039	8	0.0047	0.011098	0.10	0.011848	0.10	0.014047	0.11	0.011848	0.10		
CLMH084E035MH084E038			1978		Existing		MH084E035	MH084E038		T09344	IRWD	VCP	{F7F2486C-8ABA-45EB-ABAF-1ADF0920975A}	CLMH084E035MH084E038	189.92	189.38	0.500000000	MH084E035	MH084E038			155	CLMH084E035MH084E038	6	0.0035	0.004970	0.10	0.005307	0.10	0.006293	0.11	0.005307	0.10		
CLMH084E036MH084E046			1978		Existing		MH084E036	MH084E046		T09344	IRWD	VCP	{947A80FC-E900-42CE-8F44-25DD3EB8D234}	CLMH084E036MH084E046	186.19	182.57	0.666666667	MH084E036	MH084E046			166	CLMH084E036MH084E046	8	0.0218	0.022173	0.10	0.023672	0.10	0.028067	0.11	0.023677	0.13		
CLMH084E037MH084E036			1978		Existing		MH084E037	MH084E036		T09344	IRWD	VCP	{41029E54-A1A9-4AC8-B0C8-A6CFD313C547}	CLMH084E037MH084E036	188.03	186.38	0.666666667	MH084E037	MH084E036			162	CLMH084E037MH084E036	8	0.0102	0.019490	0.11	0.020809	0.11	0.024671	0.12	0.020809	0.11		
CLMH084E038MH084E037			1978		Existing		MH084E038	MH084E037		T09344	IRWD	VCP	{95D5C346-F402-478B-B4B9-448A245A3388}	CLMH084E038MH084E037	189.19	188.24	0.666666667	MH084E038	MH084E037			242	CLMH084E038MH084E037	8	0.0039	0.016068	0.12	0.017155	0.12	0.020340	0.13	0.017155	0.12		
CLMH084E039MH084E038			1978		Existing		MH084E039	MH084E038		T09344	IRWD	VCP	{1E01828B-A1E7-424F-92F8-1A6AC54D4443}	CLMH084E039MH084E038	191.50	189.30	0.666666667	MH084E039	MH084E038			155	CLMH084E039MH084E038	8	0.0142	0.011098	0.08	0.011848	0.08	0.014047	0.09	0.011848	0.08		
CLMH084E040MH084E039			1978		Existing		MH084E040	MH084E039		T09344	IRWD	VCP	{38320A31-28E6-408F-AB31-FD1B8DCAEC23}	CLMH084E040MH084E039	193.19	191.71	0.666666667	MH084E040	MH084E039			270	CLMH084E040MH084E039	8	0.0055	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH084E041MH084S036			1977		Existing		MH084E041	MH084S036		A00126	IRWD	VCP	{229286C9-4908-4590-9D42-BE3A83C3BB85}	CLMH084E041MH084S036	154.80	153.02	1.250000000	MH084E041	MH084S036			154	CLMH084E041MH084S036	15	0.0053	0.549877	0.29	0.587252	0.30	0.696667	0.33	1.091785	0.41		
CLMH084E042MH084E074			1977		Existing		MH084E042	MH084E074		A00126	IRWD	VCP	{AA03CC3D-AB20-438C-855C-0FD909AC92D5}	CLMH084E042MH084E074	161.92	158.77	1.250000000	MH084E042	MH084E074			248	CLMH084E042MH084E074	15	0.0127	0.368126	0.19	0.393089	0.20	0.466201	0.21	0.886289	0.29		
CLMH084E043MH084E042			1977		Existing		MH084E043	MH084E042		A00126	IRWD	VCP	{B6D6A55D-072F-4638-8EDC-D306C0875550A}	CLMH084E043MH084E042	167.69	162.02	1.250000000	MH084E043	MH084E042			335	CLMH084E043MH084E042	15	0.0169	0.368151	0.18	0.393113	0.18	0.466221	0.20	0.886304	0.27		
CLMH084E044MH084E043			1977		Existing		MH084E044	MH084E043		A00126	IRWD	VCP	{7F8F210D-5320-4F6A-A685-504B01CD7E17}	CLMH084E044MH084E043	173.94	167.80	1.250000000	MH084E044	MH084E043			360	CLMH084E044MH084E043	15	0.0171	0.368190	0.18	0.393147	0.18	0.466253	0.20	0.886507	0.27		
CLMH084E045MH084E044			1977		Existing		MH084E045	MH084E044		A00126	IRWD	VCP	{06D59CF3-A62F-43AA-9F26-2A455ABE2DB7}	CLMH084E045MH084E044	176.66	174.32	1.250000000	MH084E045	MH084E044			226	CLMH084E045MH084E044	15	0.0104	0.326422	0.19	0.348543	0.19	0.413348	0.21	0.842347	0.30		
CLMH084E046MH084E045			1977		Existing		MH084E046	MH084E045		A00126	IRWD	VCP	{4F76444E-E1ED-4E2E-477D-B8C7-688BA75EF28F}	CLMH084E046MH084E045	182.36	176.77	1.250000000	MH084E046	MH084E045			269	CLMH084E046MH084E045	15	0.0208	0.322607	0.16	0.344471	0.16	0.408458	0.18	0.839243	0.25		
CLMH084E047MH084E046		UFF5	1978		Existing		MH084E047	MH084E046		A00126	IRWD	VCP	{C63F8DF7-56DA-4233-8654-E38D2A50CAF8}	CLMH084E047MH084E046	187.50	182.47	1.250000000	MH084E047	MH084E046			360	CLMH084E047MH084E046	15	0.0129	0.301502	0.17	0.321929	0.18	0.381769	0.19	0.816901	0.28		
CLMH084E048MH084E047			1977		Existing		MH084E048	MH084E047		A00126	IRWD	VCP	{399F5455-DF8A-4628-AF48-1632DBEA32F4}	CLMH084E048MH084E047	191.38	187.60	1.000000000	MH084E048	MH084E047			290	CLMH084E048MH084E047	12	0.0130	0.289520	0.22	0.309118	0.23	0.366532	0.25	0.804155	0.38		
CLMH084E049MH084E048			1977		Existing		MH084E049	MH084E048		A00126	IRWD	VCP	{A0C99011-CEBA-46FD-BCBF-C297265EDAC0}	CLMH084E049MH084E048	195.25	191.47	1.000000000	MH084E049	MH084E048			290	CLMH084E049MH084E048	12	0.0130	0.282605	0.22	0.301731	0.23	0.357760	0.25	0.796662	0.38		
CLMH084E050MH084E044			1978		Existing		MH084E050	MH084E044		T09155	IRWD	VCP	{70F727CD-5665-4D5F-BED9-515B09D042D2}	CLMH084E050MH084E044	177.94	174.32	0.666666667	MH084E050	MH084E044			204	CLMH084E050MH084E044	8	0.0177	0.040290	0.13	0.043020	0.14	0.051008	0.15	0.043020	0.14		
CLMH084E051MH084E050			1978		Existing		MH084E051	MH084E050		T09155	IRWD	VCP	{4CFAE2C1-77C5-4F07-B6C1-45AF5CB42097}	CLMH084E051MH084E050	182.02	178.05	0.666666667	MH084E051	MH084E050			382	CLMH084E051MH084E050	8	0.0104	0.016177	0.10	0.017276	0.10	0.020484	0.11	0.017276	0.10		
CLMH084E052MH084E051		62' FROM E-W IS	1978		Existing		MH084E052	MH084E051		T09155	IRWD	VCP	{583E3F12-A432-449A-829B-9C595CC220B4}	CLMH084E052MH084E051	185.72	182.12	0.666666667	MH084E052	MH084E051			391	CLMH084E052MH084E051	8	0.0092	0.016182	0.10	0.017280	0.10	0.020487	0.11	0.017280	0.10		
CLMH084E054MH084E050			1978		Existing		MH084E054	MH084E050		T09155	IRWD	VCP	{CEF5388C-FC44-4B5C-8A81-C1599E5C3090}	CLMH084E054MH084E050	180.08	178.15	0.666666667	MH084E054	MH084E050			253	CLMH084E054MH084E050	8	0.0076	0.024116	0.13	0.025747	0.13	0.030525	0.14	0.025747	0.13		
CLMH084E055MH084E054			1978		Existing		MH084E055	MH084E054		T09155	IRWD	VCP	{1FF3C28F-F8D5-48C6-AC88-644D922E04B8}	CLMH084E055MH084E054	184.72	180.29	0.666666667	MH084E055	MH084E054			346	CLMH084E055MH084E054	8	0.0128	0.024117	0.11	0.025747	0.12	0.030525	0.13	0.025747	0.12		
CLMH084E056MH084E055			1978		Existing		MH084E056	MH084E055		T09155	IRWD	VCP	{EBD73135-0C31-4585-9F7F-D8A0AF6D1C81}	CLMH084E056MH084E055	188.00	184.82	0.666666667	MH084E056	MH084E055			346	CLMH084E056MH084E055	8	0.0092	0.008301	0.07	0.008862	0.08	0.010507	0.08	0.008862	0.08		
CLMH084E057MH084E056			1978		Existing		MH084E057	MH084E056		T09155	IRWD	VCP	{29E2D777-E884-4E67-B468-3436D853A091}	CLMH084E057MH084E056	190.80	189.04	0.666666667	MH084E057	MH084E056			337	CLMH084E057MH084E056	8	0.0052	0.008301	0.08	0.008862	0.08	0.010507	0.09	0.008862	0.08		
CLMH084E058MH084E002			1978		Existing		MH084E058	MH084E002		T09484	IRWD	VCP	{E9369E37-D543-44CC-B9D1-0A6C79A748B7}	CLMH084E058MH084E002	178.41	175.91	0.666666667	MH084E058	MH084E002			290	CLMH084E058MH084E002	8	0.0096	0.008485	0.07	0.009059	0.08	0.010741	0.08	0.009059	0.08		
CLMH084E059MH084E058			1978		Existing		MH084E059	MH084E058		T09155	IRWD	VCP	{4834E31F-5073-407E-A298-9A8E3CSA7A1}	CLMH084E059MH084E058	180.66	178.50	0.666666667	MH084E059	MH084E058			349	CLMH084E059MH084E058	8	0.0441	0.008485	0.05	0.009059	0.05	0.010741	0.06	0.009059	0.05		
CLMH084E060MH084E059			1978		Existing		MH084E060	MH084E059		T09155	IRWD	VCP	{FC836C0C-10E2-4426-92E8-41287C12C81F}	CLMH084E060MH084E059	186.77	180.80	0.666666667	MH084E060	MH084E059			298	CLMH084E060MH084E059	8	0.0200	0.008485	0.06	0.009059	0.06	0.010741	0.07	0.009059	0.06		
CLMH084E061MH084E003	63' FROM N-S IS T		1978		Existing		MH084E061	MH084E003		T09484	IRWD	VCP	{ED8C7138-E0AA-4044-9985-534B8D870FCE}	CLMH084E061MH084E003	179.47	173.08	0.666666667	MH084E061	MH084E003			274	CLMH084E061MH084E003	8	0.0170	0.008392	0.06	0.008960	0.07	0.010623	0.07	0.008960	0.07		
CLMH084E062MH084E061			1978		Existing		MH084E062	MH084E061		T09155	IRWD	VCP	{C2563C8F-C919-44E6-A4DA-FBCFA39E645A}	CLMH084E062MH084E061	184.31	179.57	0.666666667	MH084E062	MH084E061			237	CLMH084E062MH084E061	8	0.0200	0.008392	0.06	0.008960	0.06	0.010623	0.07	0.008960	0.06		
CLMH084E063MH084E009			1978		Existing		MH084E063	MH084E009		T09484	IRWD	VCP	{7CDA2DF5-050B-4ECB-80EC-2891846512B6}	CLMH084E063MH084E009	175.55	173.36	0.666666667	MH084E063	MH084E009			274	CLMH084E063MH084E009	8	0.0365	0.001387	0.02	0.001482	0.02	0.001756	0.03	0.001482	0.02		
CLMH084E064MH084E063			1978		Existing		MH084E064	MH084E063		T09155	IRWD	VCP	{154633CC-7AD7-4E84-87FD-F8FADF0C1A71}	CLMH084E064MH084E063	182.96	175.75	0.666666667	MH084E064	MH084E063			393	CLMH084E064MH084E063	8	0.0183	0.001387	0.03	0.001482	0.03	0.001756	0.03	0.001482	0.03		
CLMH084E065MH084E064			1978		Existing		MH084E065	MH084E064		T09155	IRWD	VCP	{B84D368E-A91A-4599-804F-716AC4388BFA}	CLMH084E065MH084E064	184.71	183.17	0.666666667	MH084E065	MH084E064			176	CLMH084E065MH084E064	8	0.0088	0.001387	0.03	0.001482	0.03	0.001756	0.03	0.001482	0.03		
CLMH084E066MH084E030			1978		Existing		MH084E066	MH084E030		T09154	IRWD	VCP	{3872BB7F-B890-427F-A9DB-8E0662D4F881}	CLMH084E066MH084E030	180.97	180.49	0.666666667	MH084E066	MH084E030			115	CLMH084E066MH084E030	8	0.0042	0.024616	0.14	0.026282	0.15	0.031160	0.16	0.026282	0.15		
CLMH084E067MH084E066			1978		Existing		MH084E067	MH084E066		T09641	IRWD	VCP	{3799B2D8-7B12-473A-B9CF-B0CA004D9C8B}	CLMH084E067MH084E066	187.07	181.15	0.500000000	MH084E067	MH084E066			207	CLMH084E067MH084E066	6	0.0200	0.003253	0.06	0.003473	0.06	0.004119	0.06	0.003473	0.06		
CLMH084E068MH084E069			1977		Existing		MH084E068	MH084E069		T09641	IRWD	VCP	{EA4DEF97-07A7-45F2-9748-0A560B3FF68F}	CLMH084E068MH084E069	185.89	182.07	0.666666667	MH084E068	MH084E069			256	CLMH084E068MH084E069	8	0.0149	0.005214	0.05	0.005567	0.05	0.006599	0.06	0.005567	0.05		
CLMH084E069MH084E211			1978		Existing		MH084E069	MH084E211		T09641	IRWD	VCP	{2E380BA7-563C-40E6-9A43-2847D69E040}	CLMH084E069MH084E211	181.86	177.89	0.666666667	MH084E069	MH084E211			263	CLMH084E069MH084E211	8	0.0151	0.012289	0.08	0.013121	0.08	0.015555	0.09	0.013121	0.08		
CLMH084E070MH084E069			1977		Existing		MH084E070	MH084E069		T09641	IRWD	VCP	{95CD8D14-28F3-4FBE-B6EA-638B759A7582}	CLMH084E070MH084E069	183.66	181.97	0.500000000	MH084E070	MH084E069			310	CLMH084E070MH084E069	6	0.0055	0.007076	0.11	0.007554	0.11	0.008957	0.12	0.007554	0.11		
CLMH084E071MH084E068			1977		Existing		MH084E071	MH084E068		T09641	IRWD	VCP	{65BF0261-F2CB-400D-A6F4-AE92A345CBCE}	CLMH084E071MH084E068	187.69	186.07	0.500000000	MH084E071	MH084E068			310	CLMH084E071MH084E068	6	0.0052	0.005214	0.09	0.005567	0.10	0.006599	0.10	0.005567	0.10		
CLMH084E072MH084E073			1977		Existing		MH084E072	MH084E073		T09641	IRWD	VCP	{7526A1D8-6A58-462B-88D3-3197A7F38A5A}	CLMH084E072MH084E073	184.07	181.51	0.500000000	MH084E072	MH084E073			146	CLMH084E072MH084E073	6	0.0176	0.004391	0.07	0.005555	0.08	0.006486	0.07	0.005555	0.08		
CLMH084E073MH084E217			1977		Existing		MH084E073	MH084E217		T09641	IRWD	VCP	{B10FCD72-213F-45AC-9012-36F3B0F2DE9}	CLMH084E073MH084E217	181.34	175.05	0.666666667	MH084E073	MH084E217			274	CLMH084E073MH084E217	8	0.0165	0.004391	0.05	0.005555	0.05	0.006486	0.05	0.005555	0.05		
CLMH084E074MH084E041			1977		Existing		MH084E074	MH084E041		A00126	IRWD	VCP	{6EFC346E-077C-46D7-B0F9-FACE461C5380}	CLMH084E074MH084E041	156.47	154.89	1.250000000	MH084E074	MH084E041			76	CLMH084E074MH084E041	15	0.0208	0.550069	0.21	0.587431	0.22	0.696815	0.24	1.092136	0.32		
CLMH084E075MH084E074			1977		Existing		MH084E075	MH084E074		T09316	IRWD	VCP	{B6EAF11B-1F1C-4D6B-A3A7-63455BAD58CB}	CLMH084E075MH084E074	161.44	158.67	0.666666667	MH084E075	MH084E074			181	CLMH084E075MH084E074	8	0.0153	0.181984	0.29	0.194378	0.30	0.230642	0.33	0.206698	0.31		
CLMH084E076MH084E075			1977		Existing		MH084E076	MH084E075		T09316	IRWD	VCP	{01CCD48A-2882-4849-A214-ABCB68C4F6F4}	CLMH084E076MH084E075	163.25	161.58	0.666666667	MH084E076	MH084E075			171	CLMH084E076MH084E075	8	0.0098	0.176242	0.32	0.188236	0.34	0.223340	0.37	0.200608	0.35		
CLMH084E077MH084E076			1977		Existing		MH084E077	MH084E076		T09316	IRWD	VCP	{0C2AE84B-98EC-4976-BAC6-FB51FAD737FC}	CLMH084E077MH084E076	168.24	163.56	0.666666667	MH084E077	MH084E076			279	CLMH084E077MH084E076	8	0.0168	0.023491	0.10	0.025080	0.11	0.029735	0.12	0.025080	0.11		
CLMH084E078MH084E077			1978		Existing		MH084E078	MH084E077		T09316	IRWD	VCP	{7F344BAC-619B-47A1-9B4D-2CF5A00F7995}	CLMH084E078MH084E077	172.30	168.31	0.666666667	MH084E078	MH084E077			238	CLMH084E078MH084E077	8	0.0168	0.017387	0.09	0.018563	0.09	0.022009	0.10	0.018563	0.09		
CLMH084E079MH084E078			1978		Existing		MH084E079	MH084E078		T09756	IRWD	VCP	{0AD07CE1-8956-4909-B7F0-5304C8486824}	CLMH084E079MH084E078	173.38	172.58	0.666666667	MH084E079	MH084E078			200	CLMH084E079MH084E078	8	0.0040	0.011907	0.10	0.012713	0.11	0.015073	0.11	0.012713	0.11		
CLMH084E080MH084E079			1978		Existing		MH084E080	MH084E079		T09756	IRWD	VCP	{45167B7C-20B3-404B-A0FE-6E290A2B9A53}	CLMH084E080MH084E079	174.71	173.49	0.666666667	MH084E080	MH084E079			320	CLMH084E080MH084E079	8	0.0038	0.005734	0.07	0.006122	0.07	0.007258	0.08	0.006122	0.07		
CLMH084E081MH084E078		107' FROM S-N IS	1978		Existing		MH084E081	MH084E078		T09756	IRWD	VCP	{91002D4BA-2A5C-45E4-80F6-F563A7A75F6}	CLMH084E081MH084E078	176.80	172.41	0.666666667	MH084E081	MH084E078			212	CLMH084E081MH084E078	8	0.0207	0.005480	0.05	0.005850	0.05	0.006937	0.06	0.005850	0.05		
CLMH084E082MH084E081			1978		Existing		MH084E082	MH084E081		T09756	IRWD	VCP	{4B7F6739-C659-4E85-A0D7-8E13F4549FF6}	CLMH084E082MH084E081	179.94	178.47	0.666666667	MH084E082	MH084E081			141	CLMH084E082MH084E081	8	0.0104	0.003029	0.04	0.003234	0.05	0.003834	0.05	0.003234	0.05		
CLMH084E083MH084E082			1978		Existing		MH084E083	MH084E082		T09756	IRWD	VCP	{8590E07-F0F8-468E-9822-D9A106652B8C}	CLMH084E083MH084E082	182.91	180.05	0.666666667	MH084E083	MH084E082			280	CLMH084E083MH084E082	8	0.0102	0.001433	0.03	0.001531	0.03	0.001814	0.03	0.001531	0.03		
CLMH084E084MH084E066			1977		Existing		MH084E084	MH084E066		T09641	IRWD	VCP	{C8E778CF-151F-4222-864E-ED02B734E4E}	CLMH084E084MH084E066	182.61	181.19	0.666666667	MH084E084	MH084E066			270	CLMH084E084MH084E066	8	0.0053	0.021363	0.13	0.022809	0.13	0.027041	0.14	0.022809	0.13		
CLMH084E087MH084E084			1977		Existing		MH084E087	MH084E084		T09154	IRWD	VCP	{067EDF42-6668-4B5A-B360-CD624BF383B1}	CLMH084E087MH084E084	188.01	182.81	0.666666667	MH084E087	MH084E084			322	CLMH084E087MH084E084	8	0.0162	0.011427	0.08	0.012200	0.08	0.014463	0.08	0.012200	0.08		
CLMH084E088MH084E087			1977		Existing		MH084E088	MH084E087		T09154	IRWD	VCP	{0F548771-3AD5-4DFC-8563-229052DE79C5}	CLMH084E088MH084E087	189.22	188.11	0.500000000	MH084E088	MH084E087			219	CLMH084E088MH084E087	6	0.0051	0.004233	0.09	0.004520	0.09	0.005358	0.10	0.004520	0.09		
CLMH084E089MH084E088			1977		Existing		MH084E089	MH084E088		T09154	IRWD	VCP	{D6888D55-6C40-430D-9F48-1855490B8CC4}	CLMH084E089MH084E088	190.44	189.42	0.500000000	MH084E089	MH084E088			197	CLMH084E089MH084E088	6	0.0054	0.001412	0.05	0.001507	0.05	0.001786	0.06	0.001507	0.05		
CLMH084E090MH084E084			1977		Existing		MH084E090	MH084E084		T09154	IRWD	VCP	{2E75B044-1E6C-4858-B8B1-A7BF8939ACEC}	CLMH084E090MH084E084	185.47	182.80	0.666666667	MH084E090	MH084E084			256	CLMH084E090MH084E084	8

CLMH084N060MH084N059			1978			Existing		MH084N060	MH084N059		T09639	IRWD	VCP	{66B21155-A018-45FE-9E62-E6DDC4309C79}	CLMH084N060MH084N059	175.94	172.97	0.500000000	MH084N060	MH084N059			305	CLMH084N060MH084N059	6	0.0097	0.004174	0.08	0.004457	0.08	0.005284	0.08	0.004457	0.08				
CLMH084N061MH084N064			1978			Existing		MH084N061	MH084N064		T09639	IRWD	VCP	{3129C9EE-FA0B-45EE-8517-93179527 3EAB}	CLMH084N061MH084N064	166.00	165.25	0.666666667	MH084N061	MH084N064			187	CLMH084N061MH084N064	8	0.0040	0.034902	0.17	0.037268	0.18	0.044181	0.19	0.037268	0.18				
CLMH084N062MH084N061			1978			Existing		MH084N062	MH084N061		T09639	IRWD	VCP	{AF0D4E56-E853-4A7D-A1AA-E660E098F737}	CLMH084N062MH084N061	166.52	166.25	0.666666667	MH084N062	MH084N061			85	CLMH084N062MH084N061	8	0.0032	0.005428	0.07	0.005797	0.07	0.006872	0.08	0.005797	0.07				
CLMH084N063MH084N062			1978			Existing		MH084N063	MH084N062		T09639	IRWD	VCP	{0C12A225-3DED-608B-A9F5-AAB3D76E82B5}	CLMH084N063MH084N062	168.35	166.69	0.500000000	MH084N063	MH084N062			301	CLMH084N063MH084N062	6	0.0055	0.005428	0.09	0.005797	0.10	0.006872	0.11	0.005797	0.10				
CLMH084N064MH084N065			1978			Existing		MH084N064	MH084N065		9640	IRWD	VCP	{46ED8521-2A27-44A3-AB51-CF4EB8529 1E1}	CLMH084N064MH084N065	165.14	163.17	0.666666667	MH084N064	MH084N065			251	CLMH084N064MH084N065	8	0.0078	0.040527	0.16	0.043272	0.17	0.051300	0.18	0.043272	0.17				
CLMH084N065MH084N078			1978			Existing		MH084N065	MH084N078		T08387	IRWD	VCP	{5023A561-0197-4AF8-BDBC-7D2202CF846A}	CLMH084N065MH084N078	163.08	159.61	0.666666667	MH084N065	MH084N078			252	CLMH084N065MH084N078	8	0.0138	0.046033	0.15	0.049152	0.16	0.058271	0.17	0.049151	0.16				
CLMH084N066MH084N065			1978			Existing		MH084N066	MH084N065		T09639	IRWD	VCP	{2557F09D-FE54-4BE8-AD46-BBDC0D9476 12}	CLMH084N066MH084N065	164.89	164.26	0.666666667	MH084N066	MH084N065			158	CLMH084N066MH084N065	8	0.0040	0.005508	0.07	0.005880	0.07	0.006971	0.08	0.005880	0.07				
CLMH084N067MH084N066			1978			Existing		MH084N067	MH084N066		T09639	IRWD	VCP	{0D8ADD71-5B06-41EA-AB7C-688DE53BC153}	CLMH084N067MH084N066	168.08	164.99	0.666666667	MH084N067	MH084N066			207	CLMH084N067MH084N066	8	0.0150	0.005508	0.05	0.005880	0.06	0.006971	0.06	0.005880	0.06				
CLMH084N068MH084N076			1978			Existing		MH084N068	MH084N076		T08387	IRWD	VCP	{9B22E6A1-620B-4F75-96CD-FBAE506BF091}	CLMH084N068MH084N076	159.55	157.32	0.666666667	MH084N068	MH084N076			99	CLMH084N068MH084N076	8	0.0225	0.014591	0.08	0.018472	0.09	0.015581	0.08	0.018472	0.09				
CLMH084N069MH084N068			1978			Existing		MH084N069	MH084N068		T09639	IRWD	VCP	{0AA50B7D-98D8-4679-A8B3-CC8C75F206D2}	CLMH084N069MH084N068	162.94	159.66	0.666666667	MH084N069	MH084N068			391	CLMH084N069MH084N068	8	0.0084	0.014592	0.10	0.015581	0.10	0.018473	0.11	0.015581	0.10				
CLMH084N070MH084N011			1978			Existing		MH084N070	MH084N011		T09163	IRWD	VCP	{841521D9-B6FE-4224-BC10-B03B7ACA6E8D}	CLMH084N070MH084N011	160.46	153.88	0.666666667	MH084N070	MH084N011			306	CLMH084N070MH084N011	8	0.0215	0.005586	0.05	0.005964	0.05	0.007070	0.06	0.005964	0.05				
CLMH084N071MH084E213			1978			Existing		MH084N071	MH084E213		T09161	IRWD	VCP	{F091E8CE-831E-4DAE-A043-1EEA252E3E06}	CLMH084N071MH084E213	164.27	163.52	0.666666667	MH084N071	MH084E213			167	CLMH084N071MH084E213	8	0.0045	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH084N071MH084N070			1978			Existing		MH084N071	MH084N070		T09161	IRWD	VCP	{0DD41D7C-41D7-463E-AB94-7587B7E4F39}	CLMH084N071MH084N070	163.42	160.66	0.666666667	MH084N071	MH084N070			346	CLMH084N071MH084N070	8	0.0080	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH084N073MH084N012			1978			Existing		MH084N073	MH084N012		T09163	IRWD	VCP	{648B8032-8EBA-494A-89FA-D145EA24ECFD}	CLMH084N073MH084N012	158.57	157.80	0.500000000	MH084N073	MH084N012			6	CLMH084N073MH084N012	6	0.0073	0.004568	0.08	0.004875	0.09	0.005780	0.09	0.004875	0.09				
CLMH084N074MH084N051			1978			Existing		MH084N074	MH084N051		A00126	IRWD	VCP	{C9C57A4E-C6FA-4807-92CE-7DB12C665D39}	CLMH084N074MH084N051	153.92	146.14	0.666666667	MH084N074	MH084N051			210	CLMH084N074MH084N051	8	0.0300	0.123699	0.20	0.132077	0.21	0.156597	0.23	0.132077	0.21				
CLMH084N075MH084N074			1978			Existing		MH084N075	MH084N074		T08387	IRWD	VCP	{D3E60404-4F32-4C4E-AEA2-E74DF5929AC1}	CLMH084N075MH084N074	155.30	154.13	0.666666667	MH084N075	MH084N074			150	CLMH084N075MH084N074	8	0.0078	0.122802	0.29	0.131118	0.30	0.155458	0.32	0.131118	0.30				
CLMH084N076MH084N075			1978			Existing		MH084N076	MH084N075		T08387	IRWD	VCP	{F52F597D-81D5-48FD-B125-7FC778A54B49}	CLMH084N076MH084N075	157.22	155.55	0.666666667	MH084N076	MH084N075			196	CLMH084N076MH084N075	8	0.0085	0.014589	0.10	0.015579	0.10	0.018471	0.11	0.015579	0.10				
CLMH084N077MH084N076			1978			Existing		MH084N077	MH084N076		T08387	IRWD	VCP	{8D65B337-781E-46A4-9099-74D1CE4767B0}	CLMH084N077MH084N076	157.91	155.55	0.666666667	MH084N077	MH084N076			159	CLMH084N077MH084N076	8	0.0148	0.108217	0.23	0.115542	0.24	0.136988	0.26	0.115542	0.24				
CLMH084N078MH084N077			1978			Existing		MH084N078	MH084N077		T08387	IRWD	VCP	{FBF5F3AC-2AE6-4A19-B6A0-34B80893012}	CLMH084N078MH084N077	159.52	158.11	0.666666667	MH084N078	MH084N077			87	CLMH084N078MH084N077	8	0.0162	0.106180	0.22	0.113368	0.23	0.134408	0.25	0.113368	0.23				
CLMH084N079MH084N078			1978			Existing		MH084N079	MH084N078		T08387	IRWD	VCP	{C08BCDED-443D-40A7-B5E7-7E4C26669B81}	CLMH084N079MH084N078	162.72	159.72	0.666666667	MH084N079	MH084N078			221	CLMH084N079MH084N078	8	0.0136	0.055443	0.17	0.059196	0.17	0.070184	0.19	0.059196	0.17				
CLMH084N080MH084N079			1978			Existing		MH084N080	MH084N079		T08387	IRWD	VCP	{D7D1470C-E779-4F60-B513-35764D001319}	CLMH084N080MH084N079	163.50	162.85	0.666666667	MH084N080	MH084N079			134	CLMH084N080MH084N079	8	0.0049	0.055444	0.21	0.059197	0.22	0.070184	0.24	0.059197	0.22				
CLMH084N083MH084N080			1978			Existing		MH084N083	MH084N080		T08387	IRWD	VCP	{59338DF2-F369-4BC8-9316-2BE3CB8D2358}	CLMH084N083MH084N080	165.00	163.69	0.666666667	MH084N083	MH084N080			145	CLMH084N083MH084N080	8	0.0090	0.055445	0.18	0.059198	0.19	0.070185	0.21	0.059198	0.19				
CLMH084N082MH084N081			1978			Existing		MH084N082	MH084N081		T08387	IRWD	VCP	{08909813AC-60AC-4AE8-8699-B3EF7A1FDC9C}	CLMH084N082MH084N081	166.61	165.10	0.666666667	MH084N082	MH084N081			112	CLMH084N082MH084N081	8	0.0135	0.052799	0.16	0.056373	0.17	0.066835	0.18	0.056373	0.17				
CLMH084N083MH084N082			1978			Existing		MH084N083	MH084N082		T08387	IRWD	VCP	{47B95 2F8-1C26-4D6A-9188-F38CF94D111D}	CLMH084N083MH084N082	168.28	166.82	0.666666667	MH084N083	MH084N082			105	CLMH084N083MH084N082	8	0.0139	0.003979	0.05	0.004248	0.05	0.005037	0.05	0.004248	0.05				
CLMH084N106MH084N107			1980			Existing		MH084N106	MH084N107		T10503	IRWD	VCP	{C260B148-F225-4B27-95F5-37ACCE8CA7B9}	CLMH084N106MH084N107	165.41	164.08	0.666666667	MH084N106	MH084N107			350	CLMH084N106MH084N107	8	0.0038	0.004270	0.06	0.004561	0.06	0.005407	0.07	0.004561	0.06				
CLMH084N107MH084N108			1980			Existing		MH084N107	MH084N108		T10503	IRWD	VCP	{57AD1D64-9146-4509-899D-F3230F0C21FB}	CLMH084N107MH084N108	163.80	163.63	0.666666667	MH084N107	MH084N108			24	CLMH084N107MH084N108	8	0.0033	0.004270	0.06	0.004561	0.06	0.005407	0.07	0.004561	0.06				
CLMH084N108MH084N069			1980			Existing		MH084N108	MH084N069		T10503	IRWD	VCP	{31D798C2-D802-4491-A4DC-AAB6A0822BFB}	CLMH084N108MH084N069	163.71	163.03	0.666666667	MH084N108	MH084N069			110	CLMH084N108MH084N069	8	0.0062	0.011085	0.09	0.011839	0.09	0.014034	0.10	0.011839	0.09				
CLMH084N109MH084N108			1980			Existing		MH084N109	MH084N108		T10503	IRWD	VCP	{56B51A7D-B3FF-438F-ABAD-DB886C185B17}	CLMH084N109MH084N108	164.94	163.91	0.666666667	MH084N109	MH084N108			257	CLMH084N109MH084N108	8	0.0040	0.006816	0.08	0.007278	0.08	0.008627	0.09	0.007278	0.08				
CLMH084N110MH084N109			1980			Existing		MH084N110	MH084N109		T10503	IRWD	VCP	{5FC58ECB-EC1D-4E2E-B785-1A14718D4CBF}	CLMH084N110MH084N109	165.88	165.13	0.666666667	MH084N110	MH084N109			187	CLMH084N110MH084N109	8	0.0040	0.006816	0.08	0.007278	0.08	0.008627	0.09	0.007278	0.08				
CLMH084N113MH084N128			1981			Existing		MH084N113	MH084N128		T11545	IRWD	VCP	{D4FF8DC5-FAB1-43BD-B7A7-CDDE1F6FCE85}	CLMH084N113MH084N128	121.52	119.98	0.500000000	MH084N113	MH084N128			77	CLMH084N113MH084N128	6	0.0200	0.023872	0.15	0.025492	0.15	0.030220	0.16	0.025492	0.15				
CLMH084N114MH084N126			1981			Existing		MH084N114	MH084N126		T11545	IRWD	VCP	{947039C0-427E-4E0D-BA82-DA5D4EEA7BA9}	CLMH084N114MH084N126	129.74	125.79	0.666666667	MH084N114	MH084N126			296	CLMH084N114MH084N126	8	0.0133	0.002392	0.04	0.003027	0.04	0.002554	0.04	0.003027	0.04				
CLMH084N115MH084N116			1981			Existing		MH084N115	MH084N116		T11545	IRWD	VCP	{95F906BD-829C-4B71-9EF4-98F5FE2A246 7}	CLMH084N115MH084N116	131.05	126.01	0.666666667	MH084N115	MH084N116			206	CLMH084N115MH084N116	8	0.0245	0.002821	0.04	0.003013	0.04	0.003572	0.04	0.003013	0.04				
CLMH084N116MH084N117			1981			Existing		MH084N116	MH084N117		T11545	IRWD	VCP	{DFE43BC9-7156-451C-B1AC-F2A0C0A6BC68}	CLMH084N116MH084N117	125.91	123.77	0.666666667	MH084N116	MH084N117			212	CLMH084N116MH084N117	8	0.0101	0.012366	0.09	0.013206	0.09	0.015656	0.10	0.013206	0.09				
CLMH084N117MH084N118			1981			Existing		MH084N117	MH084N118		T11545	IRWD	VCP	{D80CE8CC-BC5F-4A01-A680-EEA9B7F94C75}	CLMH084N117MH084N118	123.68	123.26	0.666666667	MH084N117	MH084N118			68	CLMH084N117MH084N118	8	0.0061	0.015426	0.11	0.016473	0.11	0.019529	0.12	0.016473	0.11				
CLMH084N118MH084N113			1981			Existing		MH084N118	MH084N113		T11545	IRWD	VCP	{11CE319A-4119-4CD4-95FF-319B93DA7DBF}	CLMH084N118MH084N113	123.06	121.73	0.666666667	MH084N118	MH084N113			224	CLMH084N118MH084N113	8	0.0059	0.019345	0.12	0.020658	0.12	0.024490	0.13	0.020658	0.12				
CLMH084N119MH084N116			1981			Existing		MH084N119	MH084N116		T11545	IRWD	VCP	{46938E8A-E98C-4207-8FEC-32F68A831869}	CLMH084N119MH084N116	132.88	126.11	0.666666667	MH084N119	MH084N116			210	CLMH084N119MH084N116	8	0.0322	0.009545	0.06	0.010193	0.06	0.012084	0.07	0.010193	0.06				
CLMH084N120MH084N119			1981			Existing		MH084N120	MH084N119		T11545	IRWD	VCP	{EC5CCB13-B281-4C43-BCBD-B13606274DC1}	CLMH084N120MH084N119	134.05	133.08	0.666666667	MH084N120	MH084N119			102	CLMH084N120MH084N119	8	0.0095	0.003273	0.05	0.003495	0.05	0.004144	0.05	0.003495	0.05				
CLMH084N121MH084N120			1981			Existing		MH084N121	MH084N120		T11545	IRWD	VCP	{F9D08A7C-3B6E-4990-9FAA-CB92056AFBDC}	CLMH084N121MH084N120	136.50	134.25	0.666666667	MH084N121	MH084N120			285	CLMH084N121MH084N120	8	0.0079	0.000881	0.02	0.000942	0.02	0.001117	0.03	0.000942	0.02				
CLMH084N122MH084N123			1981			Existing		MH084N122	MH084N123		T11545	IRWD	VCP	{C7FF938E-FCE2-4D38-ADCC-3C1058AF77 5D}	CLMH084N122MH084N123	135.75	130.97	0.500000000	MH084N122	MH084N123			6	CLMH084N122MH084N123	6	0.0135	0.001077	0.04	0.001154	0.04	0.001364	0.04	0.001154	0.04				
CLMH084N124MH084N118			1981			Existing		MH084N124	MH084N118		T11545	IRWD	VCP	{554A5F06-6399-4DE7-A410-FA640C462971}	CLMH084N124MH084N118	130.88	125.69	0.500000000	MH084N124	MH084N118			82	CLMH084N124MH084N118	6	0.0633	0.007603	0.53	0.008118	0.53	0.009625	0.54	0.008118	0.53				
CLMH084N124MH084N123			1981			Existing		MH084N124	MH084N123		T11545	IRWD	VCP	{2545BB7D-5262-4EBA-856E-B59943743958}	CLMH084N124MH084N123	132.19	131.08	0.666666667	MH084N124	MH084N123			142	CLMH084N124MH084N123	8	0.0078	0.006526	0.07	0.006967	0.07	0.008261	0.08	0.006967	0.07				
CLMH084N125MH084N124			1981			Existing		MH084N125	MH084N124		T11545	IRWD	VCP	{F0D4E52D-CAFE-4E8C-A312-5FEFAF4930BF}	CLMH084N125MH084N124	135.86	132.39	0.666666667	MH084N125	MH084N124			411	CLMH084N125MH084N124	8	0.0084	0.003332	0.05	0.003557	0.05	0.004218	0.05	0.003557	0.05				
CLMH084N126MH084N113			1981			Existing		MH084N126	MH084N113		T11545	IRWD	VCP	{42D53725-B7B1-4525-AF74-AA1E3D583C4A}	CLMH084N126MH084N113	125.69	121.62	0.500000000	MH084N126	MH084N113			202	CLMH084N126MH084N113	6	0.0201	0.002392	0.05	0.002554	0.05	0.003027	0.05	0.002554	0.05				
CLMH084N127MH084N117			1981			Existing		MH084N127	MH084N117		T11545	IRWD	VCP	{7F0F434B-7DAC-40A1-925A-102DB2C14C14}	CLMH084N127MH084N117	127.01	123.87	0.666666667	MH084N127	MH084N117			313	CLMH084N127MH084N117	8	0.0100	0.003061	0.04	0.003268	0.05	0.003874	0.05	0.003268	0.05				
CLMH084N128MH084N042			1977			Existing		MH084N128	MH084N042		A00126	IRWD	VCP	{8EF5D083-0794-4C67-9AFB-1F7DE4F6701B}	CLMH084N128MH084N042	119.09	118.41	1.500000000	MH084N128	MH084N042			140	CLMH084N128MH084N042	18	0.0068	1.242530	0.32	1.751254	0.38	2.081697	0.42					
CLMH084N134MH084N119			1981			Existing		MH084N134	MH084N119		T11545	IRWD	VCP	{0CB8B688-F030-4AEF-B3AB-32D55C574F40}	CLMH084N134MH084N119	135.46	132.99	0.666666667	MH084N134	MH084N119			252	CLMH084N134MH084N119	8	0.0098	0.003606	0.05	0.003851	0.05	0.004566	0.05	0.003851	0.05				
CLMH084N135MH084N045			1977			Existing		MH084N135	MH084N045		A00126	IRWD	VCP	{8509AAFE-44D8-4202-8134-1DEBD9493934}	CLMH084N135MH084N045	131.30	130.10	1.500000000	MH084N135	MH084N045			99	CLMH084N135MH084N045	18	0.0121	1.219217	0.37	1.645035	0.30	1.718921	0.33	1.258414	0.36				
CLMH084N136MH084N135			1981			Existing		MH084N136	MH084N135		T10990	IRWD	VCP	{23337962-5368-45B7-93F1-B9A253F1C6AC}	CLMH084N136MH084N135	135.07	132.62	0.666666667	MH084N136	MH084N135			428	CLMH084N136MH084N135	8	0.0182	0.142617	0.25	0.152302	0.26	0.180629	0.28	0.152302	0.26				
CLMH084N137MH084N136			1983		assumed Mannings N	Existing		MH084N137	MH084N136		T10990	IRWD	VCP	{2326C21F-F7F1-4127-86F4-6D9423418B1A}	CLMH084N137MH084N136	136.25	135.17	0.666666667	MH084N137	MH084N136			226	CLMH084N137MH084N136	8	0.0048	0.129705	0.32	0.138513	0.34	0.164276	0.37	0.138512	0.34				
CLMH084N138MH084N137			1983			Existing		MH084N138	MH084N137		T10990	IRWD	VCP	{32AFDA6EC-903A-4625-835C-0B7CD513CDC}	CLMH084N138MH084N137	137.46	136.44	0.666666667	MH084N138	MH084N137			225	CLMH084N138MH084N137	8	0.0045	0.125294	0.32	0.133784	0.33	0.158627	0.36	0.133784	0.33				
CLMH084N139MH084N157			1983			Existing		MH084N139	MH084N157		T10990	IRWD	VCP	{505E97E3-0237-4ECC-AA35-8559B3EC51B2}	CLMH084N139MH084N157	137.39	137.24	0.666666667	MH084N139	MH084N157			41	CLMH084N139MH084N157	8	0.0037	0.010201	0.10	0.010893	0.10	0.012912	0.11	0.010893	0.10				
CLMH084N140MH084N139			1983			Existing		MH084N140	MH084N139		T10990	IRWD	VCP	{120EB9C7-FD88-4571-8A36-D52AA424AB3D}	CLMH084N140MH084N139	141.19	137.60	0.666666667	MH084N140	MH084N139			310	CLMH084N140MH084N139	8	0.0116	0.005703	0.06	0.006089	0.06	0.007218	0.07	0.006089	0.06				
CLMH084N141MH084N139			1983			Existing		MH084N141	MH084N139		T10990	IRWD	VCP	{E0318D61-47F3-43E8-B2FB-92ADA2D018A6}	CLMH084N141MH084N139	140.39	137.50	0.666666667	MH084N141	MH084N139			234	CLMH084N141MH084N139	8	0.0124	0.004498	0.05	0.004804	0.05	0.005694	0.06	0.004804	0.05				
CLMH084N142MH084N141			1983			Existing		MH084N142	MH084N141		T10990	IRWD	VCP	{A1F9B80F-E0F5-4911-9509-07B95ED04484}	CLMH084N142MH084N141	145.94	140.60	0.500000000	MH084N142	MH084N141			220	CLMH084N142MH084N141	6	0.0187	0.001509	0.04	0.001611	0.04	0.001909	0.04	0.001611	0.04				
CLMH084N143MH084N140			1983			Existing		MH084N143	MH084N140		T10990	IRWD	VCP	{C9286AFE-F1E2-4433-A049-FB6F4372B814}	CLMH084N143MH084N140	146.80	141.39	0.666666667	MH084N143	MH084N140			337	CLMH084N143MH084N140	8	0.0161	0.002588	0.04	0.002763	0.04	0.003274	0.04	0.002763	0.04				
CLMH084N144MH084N145			1983			Existing		MH084N144	MH084N145		T10990	IRWD	VCP	{747DF627-F746-4623-895A-A78FAD6C9A10}	CLMH084N144MH084N145	146.77	142.69	0.666666667	MH084N144	MH084N145			293	CLMH084N144MH084N145	8	0.0139	0.004469	0.05	0.004771	0.05	0.005656	0.06	0.004771	0.05				
CLMH084N145MH084N146			1983			Existing		MH084N145	MH084N146		T10990	IRWD	VCP	{691D58F2-0201-422D-B8D0-CFFA8ACBA801}	CLMH084N145MH084N146	142.60	140.27	0.666666667	MH084N145	MH084N146			79	CLMH084N145MH084N146	8	0.0295	0.009809	0.06	0.010570	0.06	0.012527	0.07	0.010570	0.06				
CLMH084N146MH084N046			1977			Existing		MH084N146	MH084N046		A00126	IRWD	VCP	{57E89830-A3AB-458C-B849-6C435524D7DF}	CLMH084N146MH084N046	139.53	135.22	1.500000000	MH084N146	MH084N046			433	CLMH084N146MH084N046	18	0.0100	1.078500	0.27	1.294461	0.30	1.540104	0.32	1.909446	0.36				
CLMH084N147MH084N145			1983			Existing		MH084N147	MH084N145		T10990	IRWD	VCP	{1D24187F3-C996-4D64-A72A-79ADDF2E0B35}	CLMH084N147MH084N145	146.00	142.80	0.666666667	MH084N147	MH084N145			140	CLMH084N147MH084N145	8	0.0142	0.005430	0.05	0.005799	0.06	0.006870	0.06	0.005799	0.06				
CLMH084N148MH084N147			1983			Existing		MH084N148	MH084N147		T10990	IRWD	VCP	{7C0F22CA-718C-400F-866F-44AE35411087}	CLMH084N148MH084N147	147.50	146.20	0.666666667	MH084N148	MH084N147			229	CLMH084N148MH084N147	8	0.0057	0.004645	0.06	0.004961	0.06	0.005879	0.07	0.004961	0.06				
CLMH084N149MH084N143			1983			Existing		MH084N149	MH084N143		T10990	IRWD	VCP	{512233C7F-3BE8-4F30-AE45-EA2F122C130}	CLMH084N149MH084N143	148.94	146.89	0.666666667	MH084N149	MH084N143			281	CLMH084N149MH084N143	8	0.0073	0.001843	0.04	0.002331	0.04	0.002761	0.04	0.002331	0.04				
CLMH084N157MH084N136			1983			Existing		MH084N157	MH084N136		T10990	IRWD	VCP	{75FD9258-A55D-4BBA-A802-3100EC22F18D}	CLMH084N157MH084N136	137.13	135.27	0.666666667	MH084N157	MH084N136			193	CLMH084N157MH084N136	8	0.0096	0.012926	0.09	0.013802	0.09	0.016360	0.10	0.013802	0.09				
CLMH084S001MH084S056			1977			Existing		MH084S001	MH084S056		A00126	IRWD	VCP	{F6CDF3C4-6929-48D3-9213-007D87F03AF4}	CLMH084S001MH084S056	126.80	123.30	1.500000000	MH084S001	MH084S056			459	CLMH084S001MH084S056	18	0.0076	0.954566	0.27	1.056367	0.29	1.255368	0.31	1.555592	0.35				
CLMH084S002MH084S001			1976			Existing		MH084S002	MH084S001		A00126	IRWD	VCP	{88F6110B-65F3-41D4-ADE2-57E3AAD00450}	CLMH084S002MH084S001	133.10	126.90	0.833333333	MH084S002	MH084S001			160	CLMH084S002MH084S001	10	0.0388	0.264773	0.29	0.319755	0.31	0.380837	0.35	0.319747	0.37				
CLMH084S003MH084S002			1976			Existing		MH084S003	MH084S002		T09156	IRWD	VCP	{8A03EA89-8383-45AD-AD85-797CE26B1B94}	CLMH084S003MH084S002	136.39	133.35	0.666666667	MH084S003	MH084S002			361	CLMH084S003MH084S002	8	0.0084	0.017750	0.11	0.021344	0.12	0.025332	0.13	0.021344	0.12				
CLMH084S004MH084S003			1976			Existing		MH084S004	MH084S003		T09159	IRWD	VCP	{10F38D01-2859-4069-9E11-45BEA88EDA2E}	CLMH084S004MH084S003	138.05	137.50	0.666666667	MH084S004	MH084S003			296	CLMH084S004MH084S003	8	0.0019	0.013519	0.13	0.016249	0.14	0.019278	0.16	0.016249	0.14				
CLMH084S005MH084S004			1976			Existing		MH084S005	MH084S004		T09159	IRWD	VCP	{98EE116D-F9C0-42D8-9AF4-0745568BF009}	CLMH084S005MH084S004	139.52	138.14	0.666666667	MH084S005	MH084S004			265	CLMH084S005MH084S004	8	0.0052	0.013543	0.10	0.016264	0.11	0.019286	0.12	0.016264	0.11				
CLMH084S006MH084S005			1976			Existing		MH084S006	MH084S005		T09159	IRWD	VCP	{E57D1450-097E-4889-A007-2B355F626456}	CLMH084S006MH084S005	141.81	139.73	0.666666667	MH084S006	MH084S005			324	CLMH084S006MH084S005	8	0.0064	0.013546	0.10	0.016266	0.11	0.019288	0.12	0.016266	0.11				
CLMH084S007MH084S006			1976			Existing		MH084S007	MH084S006		T09159	IRWD	VCP	{15E220B9-1D55-400D-818D-750492F80393}	CLMH084S007MH084S006	142.91	142.00	0.666666667	MH084S007	MH084S006			245	CLMH084S007MH084S006	8	0.0037	0.001778	0.04	0.002137	0.05	0.002534	0.05	0.002137	0.05				
CLMH084S008MH084S032			1978			Existing		MH084S008	MH084S032		0126	IRWD	VCP	{9B619E4-CFB4-44D0-83D7-50D64C190C9C}	CLMH084S008MH084S032	138.85	135.07	1.500000000	MH084S008	MH084S032			428	CLMH084S008MH084S032	18	0.0088	0.682393	0.22	0.728985	0.23	0.865267	0.25	1.229547	0.30				
CLMH084S009MH084S008			1978			Existing		MH084S009	MH084S008		0126	IRWD	VCP	{61C5334E-DB79-4BEA-B683-F8B724DE751B}	CLMH084S009MH084S008	140.91	139.05	0.666666667	MH084S009	MH084S008			209	CLMH084S009MH084S008	8	0.0089	0.123237	0.28	0.131573	0.29	0.156008	0.31	0.131576

CLMH084W031MH084114		1984		Existing		MH084S113	MH084S114		T12058	IRWD	VCP	{B7F680BE-751D-4D00-9045-753D8DB7511C}	CLMH084S113MH084S114	129.82	126.62	0.666666667	MH084S113	MH084S114					338	CLMH084S113MH084S114	8	0.0095	0.018672	0.11	0.022427	0.12	0.026597	0.13	0.022427	0.12
CLMH084S114MH084S115		1984		Existing		MH084S114	MH084S115		T12058	IRWD	VCP	{E6C0CCAF-9459-46CC-90A2-D8B29C4A7CFC}	CLMH084S114MH084S115	126.41	124.97	0.666666667	MH084S114	MH084S115					244	CLMH084S114MH084S115	8	0.0059	0.018667	0.12	0.022422	0.13	0.026594	0.14	0.022422	0.13
CLMH084S115MH084S122		1984		Existing		MH084S115	MH084S122		T12148	IRWD	VCP	{A9778735-47D4-4B08-91F5-73539F33DDDD}	CLMH084S115MH084S122	124.72	123.19	0.666666667	MH084S115	MH084S122					232	CLMH084S115MH084S122	8	0.0066	0.029588	0.15	0.035524	0.16	0.042129	0.17	0.035524	0.16
CLMH084S116MH084S115		1984		Existing		MH084S116	MH084S115		T12058	IRWD	VCP	{D69CF7A7-D11D-449F-B9DC-32FB26D58A57}	CLMH084S116MH084S115	128.17	124.97	0.666666667	MH084S116	MH084S115					322	CLMH084S116MH084S115	8	0.0099	0.010925	0.08	0.013106	0.09	0.015539	0.10	0.013106	0.09
CLMH084S117MH084S113		1984		Existing		MH084S117	MH084S113		T12058	IRWD	VCP	{88D05826-6389-4400-8E2B-A9A1D00D4291}	CLMH084S117MH084S113	132.61	130.02	0.666666667	MH084S117	MH084S113					313	CLMH084S117MH084S113	8	0.0083	0.012678	0.09	0.015231	0.10	0.018063	0.11	0.015231	0.10
CLMH084S117MH084S120		1984		Existing		MH084S117	MH084S120		T12058	IRWD	VCP	{A1D696A7-AEFE-4084-9F0F-2FCEFFECB548}	CLMH084S117MH084S120	133.41	129.53	0.666666667	MH084S117	MH084S120					342	CLMH084S117MH084S120	8	0.0113	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH084S118MH084S117		1984		Existing		MH084S118	MH084S117		A00502	IRWD	VCP	{0DDE024D-CD4B-40F9-87C5-F46D269B8D5A}	CLMH084S118MH084S117	133.00	132.82	0.666666667	MH084S118	MH084S117					234	CLMH084S118MH084S117	8	0.0008	0.001001	0.05	0.001210	0.05	0.001439	0.06	0.001210	0.05
CLMH084S118MH084S119		1984		Existing		MH084S118	MH084S119		A00502	IRWD	VCP	{AB541899-B132-4198-A35E-7CB67A09D01}	CLMH084S118MH084S119	134.02	132.16	0.666666667	MH084S118	MH084S119					367	CLMH084S118MH084S119	8	0.0051	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH084S119MH084S120		1984		Existing		MH084S119	MH084S120		A00502	IRWD	VCP	{EE8BD1BF-C43F-4FBC-B21E-C70ED1FBDEF7}	CLMH084S119MH084S120	132.05	129.53	0.666666667	MH084S119	MH084S120					226	CLMH084S119MH084S120	8	0.0112	0.001256	0.03	0.001508	0.03	0.001788	0.03	0.001508	0.03
CLMH084S120MH084S121		1984		Existing		MH084S120	MH084S121		A00502	IRWD	VCP	{19566065-451C-4012-A0D7-B670EE8F5D4E}	CLMH084S120MH084S121	129.24	125.19	0.666666667	MH084S120	MH084S121					406	CLMH084S120MH084S121	8	0.0100	0.001256	0.03	0.001508	0.03	0.001788	0.03	0.001508	0.03
CLMH084S121MH084S122		1984		Existing		MH084S121	MH084S122		T12148	IRWD	VCP	{F0E7D5E4-E02E-4D24-8D60-961A333EEF33}	CLMH084S121MH084S122	124.88	123.19	0.666666667	MH084S121	MH084S122					240	CLMH084S121MH084S122	8	0.0070	0.006431	0.07	0.007721	0.07	0.009155	0.08	0.007721	0.07
CLMH084S121MH084W066		1984		Existing		MH084S121	MH084W066		T12148	IRWD	VCP	{105D3C46-1D31-41FB-BE68-99ECB152C050}	MH084S121-MH084W066	126.50	122.09	0.666666667	MH084S121	MH084W066					371	CLMH084S121MH084W066	8	0.0119	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH084S122MH084W067		1984		Existing		MH084S122	MH084W067		T12058	IRWD	VCP	{9B2CAF56-DBA6-493F-8289-B140581FA1D1}	MH084S122-MH084W067	122.94	115.62	0.666666667	MH084S122	MH084W067					373	CLMH084S122MH084W067	8	0.0196	0.036014	0.12	0.043241	0.14	0.051280	0.15	0.043241	0.14
CLMH084S123MH084S112		1984		Existing		MH084S123	MH084S112		T12123	IRWD	ACP	{3870C2A4-1D0C-4F12-9F55-E3AAFFCDA0E80}	CLMH084S123MH084S112	129.07	127.87	0.666666667	MH084S123	MH084S112					156	CLMH084S123MH084S112	8	0.0077	0.038782	0.16	0.046554	0.18	0.055200	0.19	0.046554	0.18
CLMH084S124MH084S123		1984		Existing		MH084S124	MH084S123		T12123	IRWD	ACP	{8CFD46F1-7E55-43FE-AB5B-035AADAA0124}	CLMH084S124MH084S123	134.96	129.32	0.666666667	MH084S124	MH084S123					146	CLMH084S124MH084S123	8	0.0386	0.019981	0.08	0.023983	0.09	0.028441	0.09	0.023983	0.09
CLMH084S125MH084S124		1984		Existing		MH084S125	MH084S124		T12123	IRWD	ACP	{70AE0CB2-0F04-4EF5-9AEC-2FF44937578F}	CLMH084S125MH084S124	138.52	135.05	0.666666667	MH084S125	MH084S124					244	CLMH084S125MH084S124	8	0.0142	0.012578	0.08	0.015093	0.09	0.017903	0.10	0.015093	0.09
CLMH084S126MH084S125		1984		Existing		MH084S126	MH084S125		T12123	IRWD	ACP	{48C3704A-E502-4978-B890-68D86F5F1BA4}	CLMH084S126MH084S125	144.19	138.72	0.666666667	MH084S126	MH084S125					376	CLMH084S126MH084S125	8	0.0145	0.008315	0.07	0.009976	0.07	0.011836	0.08	0.009976	0.07
CLMH084S127MH084S126		1984		Existing		MH084S127	MH084S126		T12123	IRWD	ACP	{04A3950A-5FAC-4CBF-AF49-0CA2387A8B88}	CLMH084S127MH084S126	149.38	144.28	0.666666667	MH084S127	MH084S126					367	CLMH084S127MH084S126	8	0.0139	0.002765	0.04	0.003314	0.04	0.003937	0.05	0.003314	0.04
CLMH084S128MH084S127		1984		Existing		MH084S128	MH084S127		T12123	IRWD	ACP	{86C65213-22AF-4102-92C4-0663CB21CCFF}	CLMH084S128MH084S127	152.80	149.47	0.666666667	MH084S128	MH084S127					238	CLMH084S128MH084S127	8	0.0140	0.002765	0.04	0.003314	0.04	0.003937	0.05	0.003314	0.04
CLMH084S128MH084S129		1984		Existing		MH084S128	MH084S129		T12123	IRWD	ACP	{9627F264-31B4-4E0E-8301-2D1E87A8B99F}	CLMH084S128MH084S129	152.80	150.33	0.666666667	MH084S128	MH084S129					272	CLMH084S128MH084S129	8	0.0091	0.002187	0.04	0.002630	0.04	0.003109	0.05	0.002630	0.04
CLMH084S129MH084W102		1984		Existing		MH084S129	MH084W102		T12123	IRWD	ACP	{3525B8AD-3F36-48DA-889E-558B9F3E2926}	CLMH084S129MH084W102	150.22	147.83	0.666666667	MH084S129	MH084W102					320	CLMH084S129MH084W102	8	0.0075	0.004280	0.05	0.005144	0.06	0.006090	0.07	0.005144	0.06
CLMH084S130MH085S131		1984		Existing		MH084S130	MH085S131		T12123	IRWD	ACP	{F3150E9F-67A3-4CBC-A0FE-6A62F2CD0215}	CLMH084S130MH085S131	150.00	146.75	0.666666667	MH084S130	MH085S131					318	CLMH084S130MH085S131	8	0.0105	0.001944	0.04	0.002335	0.04	0.002767	0.04	0.002335	0.04
CLMH084S131MH084S132		1984		Existing		MH084S131	MH084S132		T12123	IRWD	VCP	{8DDE69BD-5C9B-45CD-85F9-13CE3B43E0B7}	CLMH084S131MH084S132	146.66	141.99	0.666666667	MH084S131	MH084S132					319	CLMH084S131MH084S132	8	0.0146	0.007402	0.06	0.008890	0.07	0.010537	0.07	0.008890	0.07
CLMH084S132MH084S124		1984		Existing		MH084S132	MH084S124		T12123	IRWD	VCP	{27945DAC-59F0-4148-AE77-D8B3270F794D}	CLMH084S132MH084S124	141.88	135.16	0.666666667	MH084S132	MH084S124					310	CLMH084S132MH084S124	8	0.0217	0.007402	0.06	0.008890	0.06	0.010537	0.07	0.008890	0.06
CLMH084S142MH084S065		1984		Existing		MH084S142	MH084S065		T10502	IRWD	VCP	{0A1A0094-774C-4F55-B5D9-1095C1D6760B}	CLMH084S142MH084S065	145.80	142.07	0.500000000	MH084S142	MH084S065					284	CLMH084S142MH084S065	6	0.0132	0.002812	0.06	0.003376	0.06	0.004002	0.07	0.003376	0.06
CLMH084W001MH063E103		1969		Existing		MH084W001	MH063E103		088	IRWD	VCP	{6869C6EB-22C0-4E03-8431-19270E732BA6}	CLMH084W001MH063E103	89.81	89.37	1.750000000	MH084W001	MH063E103					63	CLMH084W001MH063E103	21	0.0070	2.941042	0.40	4.382549	0.44	4.032049	0.48	4.464557	0.51
CLMH084W002MH084W052		1977		Existing		MH084W002	MH084W052		A00088	IRWD	VCP	{673D8503-F724-4556-B868-850EBE27EF75}	CLMH084W002MH084W052	92.84	92.43	1.500000000	MH084W002	MH084W052					100	CLMH084W002MH084W052	18	0.0041	1.471446	0.39	1.719183	0.42	2.049974	0.46	2.317349	0.50
CLMH084W003MH084W002		1977		Existing		MH084W003	MH084W002		A00126	IRWD	VCP	{229DDDB1-E3F8-4F68-9000-12C17A222C28}	CLMH084W003MH084W002	98.33	92.94	1.500000000	MH084W003	MH084W002					142	CLMH084W003MH084W002	18	0.0121	1.471655	0.32	1.719423	0.35	2.050231	0.38	2.317663	0.41
CLMH084W004MH084W003		1977		Existing		MH084W004	MH084W003		A00126	IRWD	VCP	{6D144B96-068A-423B-BF55-3F47F7F536AC}	CLMH084W004MH084W003	105.11	98.61	0.666666667	MH084W004	MH084W003					384	CLMH084W004MH084W003	8	0.0169	0.10535	0.23	0.13802	0.27	0.16994	0.31	0.13802	0.33
CLMH084W005MH084W004		1970		Existing		MH084W005	MH084W004		T06781	IRWD	PVC	{9CC0886A-FB25-46A4-ACA0-7BC13875EAAD}	CLMH084W005MH084W004	107.19	105.20	0.666666667	MH084W005	MH084W004					260	CLMH084W005MH084W004	8	0.0077	0.055192	0.19	0.058926	0.20	0.069818	0.22	0.058926	0.20
CLMH084W006MH084W005		1970		Existing		MH084W006	MH084W005		T06781	IRWD	VCP	{4DFFEFDA-3B6F-4CAD-B5FA-37151C365E0A}	CLMH084W006MH084W005	110.05	107.29	0.666666667	MH084W006	MH084W005					260	CLMH084W006MH084W005	8	0.0106	0.047197	0.16	0.050391	0.17	0.059698	0.18	0.050391	0.17
CLMH084W007MH084W006		1970		Existing		MH084W007	MH084W006		T06781	IRWD	VCP	{18724D74-9307-4531-894E-0E56471F71EA}	CLMH084W007MH084W006	113.13	110.15	0.666666667	MH084W007	MH084W006					250	CLMH084W007MH084W006	8	0.0119	0.029115	0.11	0.024457	0.12	0.028930	0.13	0.024457	0.12
CLMH084W008MH084W007		1970		Existing		MH084W008	MH084W007		T06781	IRWD	PVC	{916D8984-3842-441C-8F25-2A9CFD6A94BF}	CLMH084W008MH084W007	115.83	113.33	0.666666667	MH084W008	MH084W007					259	CLMH084W008MH084W007	8	0.0097	0.019250	0.11	0.020543	0.11	0.024291	0.12	0.020543	0.11
CLMH084W009MH084W008		1970		Existing		MH084W009	MH084W008		T06781	IRWD	PVC	{8FF9EC2C-A3A5-41BB-B7AF-02E87E0037AF}	CLMH084W009MH084W008	118.18	115.93	0.666666667	MH084W009	MH084W008					314	CLMH084W009MH084W008	8	0.0096	0.015232	0.10	0.016253	0.10	0.019204	0.11	0.016253	0.10
CLMH084W010MH084W006		1970		Existing		MH084W010	MH084W006		T06781	IRWD	PVC	{04181035-DA60-400C-8C26-C05C4D7AD8A9}	CLMH084W010MH084W006	122.22	110.25	0.500000000	MH084W010	MH084W006					314	CLMH084W010MH084W006	6	0.0063	0.021167	0.18	0.022608	0.19	0.026823	0.20	0.022608	0.19
CLMH084W011MH084W010		1970		Existing		MH084W011	MH084W010		T06781	IRWD	PVC	{8F31CF07-E119-4675-AE75-2C5A054113B3}	CLMH084W011MH084W010	115.05	112.31	0.500000000	MH084W011	MH084W010					284	CLMH084W011MH084W010	6	0.0090	0.022425	0.13	0.013276	0.13	0.015758	0.14	0.013276	0.13
CLMH084W012MH084W005		1970		Existing		MH084W012	MH084W005		T06781	IRWD	PVC	{890B69D0-10A9-4596-9F20-5E2966942977}	CLMH084W012MH084W005	109.36	107.38	0.500000000	MH084W012	MH084W005					314	CLMH084W012MH084W005	6	0.0063	0.003488	0.07	0.003724	0.08	0.004415	0.08	0.003724	0.08
CLMH084W013MH084W012		1970		Existing		MH084W013	MH084W012		T06781	IRWD	PVC	{442A16A7-5231-489C-B577-0C6D7003E34F}	CLMH084W013MH084W012	112.13	109.45	0.500000000	MH084W013	MH084W012					278	CLMH084W013MH084W012	6	0.0096	0.003488	0.07	0.003724	0.07	0.004416	0.08	0.003724	0.07
CLMH084W014MH084W013		1970		Existing		MH084W014	MH084W013		T07084	IRWD	VCP	{2F137817-B40Q-42BD-B18B-337660ZA888F}	CLMH084W014MH084W013	114.52	112.23	0.500000000	MH084W014	MH084W013					139	CLMH084W014MH084W013	6	0.0096	0.003488	0.07	0.003724	0.07	0.004416	0.08	0.003724	0.07
CLMH084W015MH084W004		1970		Existing		MH084W015	MH084W004		T06781	IRWD	PVC	{41C8E02D-8E3E-4259-BC1E-8D421C37C32}	CLMH084W015MH084W004	106.72	105.30	0.666666667	MH084W015	MH084W004					263	CLMH084W015MH084W004	8	0.0057	0.051564	0.20	0.055101	0.20	0.065380	0.22	0.055101	0.20
CLMH084W016MH084W015		1970		Existing		MH084W016	MH084W015		T06781	IRWD	PVC	{04A41CE1-7A71-479b-8701-6969E30E7554}	CLMH084W016MH084W015	107.83	106.98	0.666666667	MH084W016	MH084W015					235	CLMH084W016MH084W015	8	0.0036	0.008252	0.09	0.008810	0.09	0.010444	0.10	0.008810	0.09
CLMH084W017MH084W016		1970		Existing		MH084W017	MH084W016		T06781	IRWD	VCP	{C690ZE35-E3D9-4784-837C-D1418636484D}	CLMH084W017MH084W016	108.58	108.02	0.666666667	MH084W017	MH084W016					165	CLMH084W017MH084W016	8	0.0034	0.002998	0.05	0.003201	0.06	0.003796	0.06	0.003201	0.06
CLMH084W018MH084W017		1970		Existing		MH084W018	MH084W017		T07084	IRWD	VCP	{6C71F905-EC56-4D87-ACA8-025AAD214858}	CLMH084W018MH084W017	108.87	106.88	0.666666667	MH084W018	MH084W017					325	CLMH084W018MH084W017	8	0.0061	0.013357	0.18	0.046295	0.18	0.054939	0.20	0.046295	0.18
CLMH084W019MH084W018		1970		Existing		MH084W019	MH084W018		T07084	IRWD	PVC	{C89C856B-B59B-4561-868C-94B4568D91F2}	CLMH084W019MH084W018	112.06	108.97	0.666666667	MH084W019	MH084W018					319	CLMH084W019MH084W018	8	0.0097	0.039011	0.15	0.041654	0.16	0.049434	0.17	0.041654	0.16
CLMH084W020MH084W019		1970		Existing		MH084W020	MH084W019		T07084	IRWD	VCP	{D0F10EF9-4662-4677-A5C6-EA1F31AD3183}	CLMH084W020MH084W019	115.05	112.26	0.500000000	MH084W020	MH084W019					195	CLMH084W020MH084W019	6	0.0143	0.004252	0.07	0.004541	0.07	0.005383	0.08	0.004541	0.07
CLMH084W021MH084W020		1970		Existing		MH084W021	MH084W020		T07084	IRWD	VCP	{835A506A-A570-4C7E-B8A8-985418D06929}	CLMH084W021MH084W020	117.94	115.15	0.500000000	MH084W021	MH084W020					195	CLMH084W021MH084W020	6	0.0143	0.001450	0.04	0.001548	0.04	0.001835	0.05	0.001548	0.04
CLMH084W022MH084W021		1970		Existing		MH084W022	MH084W021		T07084	IRWD	VCP	{37B130DE-1F53-408F-B81C-E179074924 1F}	CLMH084W022MH084W021	118.16	115.16	0.500000000	MH084W022	MH084W021					195	CLMH084W022MH084W021	6	0.0096	0.009740	0.11	0.010408	0.12	0.012359	0.13	0.010408	0.12
CLMH084W023MH084W022		1970		Existing		MH084W023	MH084W022		T07084	IRWD	VCP	{C3AA330C-AF63-47E6-A5D9-74BE9F691FE4}	CLMH084W023MH084W022	119.94	118.26	0.500000000	MH084W023	MH084W022					182	CLMH084W023MH084W022	6	0.0065	0.006957	0.10	0.007436	0.11	0.008836	0.12	0.007436	0.11
CLMH084W024MH084W023		1970		Existing		MH084W024	MH084W023		T07084	IRWD	VCP	{B3B6363B-535E-46FF-9707-EAC5CBE0CECA}	CLMH084W024MH084W023	121.69	120.13	0.500000000	MH084W024	MH084W023					83	CLMH084W024MH084W023	6	0.0188	0.003333	0.06	0.003557	0.06	0.004218	0.07	0.003557	0.06
CLMH084W025MH084W024		1970		Existing		MH084W025	MH084W024		T06989	IRWD	PVC	{7918D4ED-02F0-48F1-9F4E-85C51DACC6D0}	CLMH084W025MH084W024	120.98	120.13	0.666666667	MH084W025	MH084W024					260	CLMH084W025MH084W024	8	0.0033	0.003824	0.06	0.003880	0.06	0.004618	0.07	0.003880	0.06
CLMH084W025MH084W026		1970		Existing		MH084W025	MH084W026		T06989	IRWD	PVC	{25C63709-51FC-48CF-B1EF-5E7E201CA8B6}	CLMH084W025MH084W026	120.98	119.05	0.500000000	MH084W025	MH084W026					274	CLMH084W025MH084W026	6	0.0077	0.006214	0.10	0.006625	0.10	0.007836	0.11	0.006625	0.10
CLMH084W026MH084W027		1970		Existing		MH084W026	MH084W027		T06989	IRWD	PVC	{26F6BB4D-45A0-4D93-B146-EC3DA2E0289D}	CLMH084W026MH084W027	118.95	116.51	0.500000000	MH084W026	MH084W027					255	CLMH084W026MH084W027	6	0.0096	0.006214	0.09	0.006625	0.09	0.007836	0.10	0.006625	0.09
CLMH084W027MH084W028		1970		Existing		MH084W027	MH084W028		T07084	IRWD	VCP	{AD11DDB3-A74E-4A0C-81E2-B03B2E6EF744}	CLMH084W027MH084W028	116.30	114.33	0.666666667	MH084W027	MH084W028					260	CLMH084W027MH084W028	8	0.0076	0.032430	0.15	0.041102	0.17	0.034626	0.15	0.041102	0.17
CLMH084W028MH084W019		1970		Existing		MH084W028	MH084W019		T07084	IRWD	VCP	{50B44772-690F-488B-B80B-DE83E8FCB27}	CLMH084W028MH084W019	114.12	112.26	0.666666667	MH084W028	MH084W019					246	CLMH084W028MH084W019	8	0.0069	0.034761	0.15	0.037115	0.16	0.044053	0.17	0.037115	0.16
CLMH084W029MH084W027		1970		Existing		MH084W029	MH084W027		T06989	IRWD	PVC	{CF901422-6150-41B1-965D-9CA1E43BB222}	CLMH084W029MH084W027	118.38	116.41	0.666666667	MH084W029	MH084W027					260	CLMH084W029MH084W027	8	0.0076	0.026217	0.13	0.028002	0.14	0.033266	0.15	0.028002	0.14
CLMH084W030MH084W029		1970		Existing		MH084W030	MH084W029		T06989	IRWD	VCP	{4CA6429C-6E15-4366-975E-545BD581DB4F}	CLMH084W030MH084W029	120.52	118.58	0.500000000	MH084W030	MH084W029					255	CLMH084W030MH084W029	6	0.0076	0.014759	0.15	0.015757	0.15	0.018683	0.16	0.015757	0.15
CLMH084W031MH084W030		1970		Existing		MH084W031	MH084W030		T06989	IRWD	VCP	{2875 1FFE-8AA0-4AD0-8953-FB893DC42CAC}	CLMH084W031MH084W030	122.56	120.62	0.500000000	MH084W031	MH084W030					255	CLMH084W031MH084W030	6	0.0076	0.014759	0.15	0.015757	0.15	0.018683	0.16	0.015757	0.15
CLMH084W032MH084W031		1970		Existing		MH084W032	MH084W031		T07177	IRWD	PVC	{CCE09957-F984-4AE7-9958-344F743C33B1}	CLMH084W032MH084W031	124.58	122.66	0.500000000	MH084W032	MH084W031					255	CLMH084W032MH084W031	6	0.0075	0.006390	0.10	0.006821	0.10	0.008088	0.11	0.006821	0.10
CLMH084W033MH084W032		1970		Existing		MH084W033	MH084W032		T07177	IRWD	PVC	{2CEBC731-852E-4D97-9B11-C6DE06C7E86F}	CLMH084W033MH084W032	127.72	124.77	0.500000000	MH084W033	MH084W032					190	CLMH084W033MH084W032	6	0.0155	0.006390	0.08	0.006821	0.09	0.008088	0.09	0.006821	0.09
CLMH084W034MH084W029		1970		Existing		MH084W034	MH084W029		T06989	IRWD	PVC	{1287882F-18E8-4338-B368-BD274A6BD630}	CLMH084W034MH084W029	120.47	118.48	0.666666667	MH084W034	MH084W029					260	CLMH084W034MH084W029	8	0.0077	0.011459	0.09	0.012246	0.09	0.014584	0.10	0.012246	0.09
CLMH084W035MH084W034		1970		Existing		MH084W035	MH084W034		T06989	IRWD	PVC	{191E6445-92EA-402D-B3A6-FFCB16A01E28}	CLMH084W035MH084W034	122.56	120.66	0.500000000	MH084W035	MH084W034					250	CLMH084W035MH084W034	6	0.0076	0.007599	0.11	0.008124	0.11	0.009698	0.12	0.008124	0.11
CLMH084W036MH084W035		1970		Existing		MH084W036	MH084W035		T06989	IRWD	PVC	{CBFFBFE2-A0D9-4A68-8883-EAEC09A9B66C}	CLMH084W036MH084W035	124.61	122.66	0.500000000	MH084W036	MH084W035					255	CLMH084W036MH084W035	6	0.0076	0.000797	0.03	0.000863	0.04	0.001089	0.04	0.000863	0.04
CLMH084W037MH084W036		1970		Existing		MH084W037	MH084W036		T07177	IRWD	PVC	{021A5A8E-09ED-48DA-94C8-B8687FA479E4}	CLMH084W037MH084W036	128.91	124.70	0.500000000	MH084W037	MH084W036					256	CLMH084W037MH084W036	6	0.0164	0.000798	0.03	0.000863	0.03	0.001089	0.04	0.000863	0.03
CLMH084W038MH084W037		1970		Existing		MH084W038	MH084W037		T07177	IRWD	PVC	{62342123-B71A-4A52-A161-21E343911923}	CLMH084W038MH084W037	129.94	129.00	0.500000000	MH084W038	MH084W037					260	CLMH084W038MH084W037	6	0.0036	0.000798	0.04	0.000863	0.04	0.001089	0.05	0.000863	0.04
CLMH084W039MH084W038		1970		Existing		MH084W039	MH084W038		T07177	IRWD	PVC	{EBE77935-C8CA-4E4B-A0C5-63171AF5AA2C}	CLMH084W039MH084W038	129.94	126.75	0.666666667	MH084W039	MH084W038					300	CLMH084W039MH084W038	8	0.0106	0.002396	0.04	0.002547	0.04	0.002954	0.04	0.002547	0.04
CLMH084W039MH084W040		1970		Existing		MH084W039	MH084W040		T07177	IRWD	PVC	{39BD386D-650C-450B-A7CB-C0BE0704E3E5}	CLMH084W039MH084W040	126.65	123.23	0.666666667	MH084W039	MH084W040					320	CLMH084W039MH084W040	8	0.0107	0.006766	0.06	0.007214	0.07	0.008487	0.07	0.007214	0.07
CLMH084W040MH084W041		1970		Existing		MH084W040	MH084W041		T07177	IRWD	PVC	{46C5AD73-8127-4576-B60F-E78C348569F3}	CLMH084W040MH084W041	123.12	121.01	0.666666667	MH084W040	MH084W041					270	CLMH084W040MH084W041	8	0.0070	0.009705	0.08	0.010352	0.09	0.012209	0.09	0.010352	0.09
CLMH084W041MH084W042		1977		Existing		MH084W041	MH084W042		A00126	IRWD	VCP	{DE8012AA-A9FA-47E3-A9EC-9060FDD70F9C}	CLMH084W041MH084W042	120.91	118.27	0.666666667	MH084W041	MH084W042					275	CLMH084W041MH084W042	18	0.0096	0.015232	0.10	0.016254	0.10	0.019204	0.11	0.016254	0.10
CLMH084W042MH084W003		1977		Existing		MH084W042	MH084W003		A00126	IRWD	VCP	{B4E7D672-E8EB-47A7-AAED-A19A03A8D44E}	CLMH084W042MH084W003	102.87	98.77	1.500000000	MH084W042	MH084W003					490	CLMH084W042MH084W003	18	0.0084	1.372523	0.32	1.611947	0.35	1.921036	0.38	2.215528	0.41
CLMH084W043MH084W042		1977		Existing		MH084W043	MH084W042		A00126	IRWD	VCP	{36656405-151D-40A0-85A1-EE0146BFACS2}	CLMH084W043MH084W042	107.77	102.98	1.500000000	MH084W043	MH084W042					490	CLMH084W043MH084W042	18	0.0098	1.372885	0.31	1.612346	0.33	1.921472	0.37	2.216087	0.40
CLMH084W044MH084W043		1977		Existing		MH084W044	MH084W043		A00126	IRWD	VCP	{5A562B62-8C16-4AF7-9668-E2145CF1F2B3}	CLMH084W044MH084W043	112.37	107.87	1.500000000	MH084W044	MH084W043					460	CLMH084W044MH084W043	18	0.0098	1.370858	0.31	1.610190	0.33	1.918924	0.37	2.214090	0.40
CLMH084W045MH084W044		1977		Existing		MH084W045	MH084W044		A00126	IRWD	VCP	{91775F51-CED4-4C50-B104-0F5A1F4E969C}	CLMH084W045MH084W044	114.47	113.12	1.500000000	MH084W045	MH084W044					200	CLMH084W045MH084W044	18	0.0068	0.953907	0.28	1.055586	0.29	1.254571	0.32	1.554823	0.36
CLMH084W046MH084W068		1977		Existing		MH084W046	MH084W068		A00126	IRWD	VCP	{E7E86BCA5-8553-43A

CLMH085E006MH085E003			1976			Existing		MH085E006	MH085E003		T09643	IRWD	VCP	{8DB836B8-AC05-4B08-9878-09770EE643D}	CLMH085E006MH085E003	108.68	107.91	0.666666667	MH085E006	MH085E003			206	CLMH085E006MH085E003	8	0.0037	0.021318	0.14	0.022762	0.14	0.026986	0.15	0.022762	0.14
CLMH085E007MH085E006			1976			Existing		MH085E007	MH085E006		T09643	IRWD	VCP	{EE514AD3-F70B-4C92-8F1D-DD3C0FDFF76F}	CLMH085E007MH085E006	110.50	108.77	0.666666667	MH085E007	MH085E006			43	CLMH085E007MH085E006	8	0.0402	0.018733	0.08	0.020001	0.08	0.023712	0.09	0.020001	0.08
CLMH085E008MH085E007			1976			Existing		MH085E008	MH085E007		T09643	IRWD	VCP	{AE27B184-8DF1-4D59-8DE9-65DA2B6D2CEA}	CLMH085E008MH085E007	112.59	110.69	0.666666667	MH085E008	MH085E007			140	CLMH085E008MH085E007	8	0.0136	0.011305	0.08	0.012070	0.08	0.014312	0.09	0.012070	0.08
CLMH085E009MH085E002			1976			Existing		MH085E009	MH085E002		T09643	IRWD	VCP	{0FDF98BA-3283-4E19-9A76-2386B78E8AB}	CLMH085E009MH085E002	113.00	109.44	0.500000000	MH085E009	MH085E002			192	CLMH085E009MH085E002	6	0.0185	0.002449	0.05	0.002616	0.05	0.003101	0.06	0.002616	0.05
CLMH085E010MH085E011			1976			Existing		MH085E010	MH085E011		T09643	IRWD	VCP	{85ABCDA6-9EA3-41C0-99D9-D881F02E91D6}	CLMH085E010MH085E011	115.01	114.80	0.666666667	MH085E010	MH085E011			56	CLMH085E010MH085E011	8	0.0038	0.005992	0.07	0.006397	0.08	0.007587	0.08	0.006397	0.08
CLMH085E011MH085E001			1976			Existing		MH085E011	MH085E001		T09643	IRWD	VCP	{94C0C200-364F-4861-B497-30400FFF6557}	CLMH085E011MH085E001	114.59	110.80	0.666666667	MH085E011	MH085E001			263	CLMH085E011MH085E001	8	0.0144	0.033107	0.13	0.035347	0.13	0.041908	0.14	0.035347	0.13
CLMH085E012MH085E011			1976			Existing		MH085E012	MH085E011		T09643	IRWD	VCP	{FC579510-8E06-4051-82B7-52F0843C418}	CLMH085E012MH085E011	117.09	114.80	0.666666667	MH085E012	MH085E011			216	CLMH085E012MH085E011	8	0.0106	0.027117	0.13	0.028951	0.13	0.034323	0.14	0.028951	0.13
CLMH085E013MH085E012			1976			Existing		MH085E013	MH085E012		T09643	IRWD	VCP	{ECC6CAB9-16E5-491A-B770-4653B29C3590}	CLMH085E013MH085E012	118.26	117.30	0.500000000	MH085E013	MH085E012			177	CLMH085E013MH085E012	6	0.0054	0.002352	0.06	0.002512	0.06	0.002977	0.07	0.002512	0.06
CLMH085E014MH085E012			1976			Existing		MH085E014	MH085E012		T09643	IRWD	VCP	{65DD7310-52E8-49EE-8234-657770BCDAB7}	CLMH085E014MH085E012	121.75	117.30	0.666666667	MH085E014	MH085E012			301	CLMH085E014MH085E012	8	0.0148	0.023659	0.11	0.025257	0.11	0.029944	0.12	0.025257	0.11
CLMH085E015MH085E014			1976			Existing		MH085E015	MH085E014		T09643	IRWD	VCP	{1228CB55-5F9F-47AA-95FF-B7748FC6CAA9}	CLMH085E015MH085E014	123.02	122.00	0.500000000	MH085E015	MH085E014			192	CLMH085E015MH085E014	6	0.0053	0.002470	0.06	0.002637	0.07	0.003125	0.07	0.002637	0.07
CLMH085E016MH085E017			1976			Existing		MH085E016	MH085E017		T09643	IRWD	VCP	{627FA15A-0BAD-47A2-A612-4ABB781D358Z}	CLMH085E016MH085E017	125.30	124.33	0.500000000	MH085E016	MH085E017			177	CLMH085E016MH085E017	6	0.0055	0.004057	0.08	0.004332	0.09	0.005136	0.09	0.004332	0.09
CLMH085E017MH085E018			1976			Existing		MH085E017	MH085E018		T09643	IRWD	VCP	{6E9953D1-763F-42B9-BC19-CD69BC308EF7}	CLMH085E017MH085E018	124.13	123.98	0.666666667	MH085E017	MH085E018			82	CLMH085E017MH085E018	8	0.0047	0.014387	0.11	0.015360	0.11	0.018210	0.12	0.015360	0.11
CLMH085E018MH085E014			1976			Existing		MH085E018	MH085E014		T09643	IRWD	VCP	{A6C5ECEA-708B-4952-8D01-AD84ED96BACF}	CLMH085E018MH085E014	123.77	122.00	0.666666667	MH085E018	MH085E014			229	CLMH085E018MH085E014	8	0.0077	0.017856	0.11	0.019063	0.11	0.022600	0.12	0.019063	0.11
CLMH085E019MH085E018			1976			Existing		MH085E019	MH085E018		T09643	IRWD	VCP	{7C368111-DA80-4857-B8D5-CB073A128CCC}	CLMH085E019MH085E018	125.40	123.98	0.500000000	MH085E019	MH085E018			320	CLMH085E019MH085E018	6	0.0054	0.003469	0.08	0.003703	0.08	0.004391	0.09	0.003703	0.08
CLMH085E020MH085E014			1976			Existing		MH085E020	MH085E014		T09643	IRWD	VCP	{D1783384E-BC73-4D2E-A9B8-75BFBD5CB8BD}	CLMH085E020MH085E014	123.66	121.84	0.500000000	MH085E020	MH085E014			307	CLMH085E020MH085E014	6	0.0059	0.003333	0.07	0.003557	0.08	0.004218	0.08	0.003557	0.08
CLMH085E021MH085E022			1976			Existing		MH085E021	MH085E022		T09643	IRWD	VCP	{4D5B60EC-DB01-471C-ABEA-61FD43813E42}	CLMH085E021MH085E022	121.26	119.19	0.500000000	MH085E021	MH085E022			376	CLMH085E021MH085E022	6	0.0055	0.001920	0.06	0.002049	0.06	0.002432	0.06	0.002049	0.06
CLMH085E022MH085E023			1976			Existing		MH085E022	MH085E023		T09643	IRWD	VCP	{FC5B823D-3ECC-4AA2-8661-70DBC0284D8C}	CLMH085E022MH085E023	119.00	116.01	0.666666667	MH085E022	MH085E023			395	CLMH085E022MH085E023	8	0.0076	0.001917	0.04	0.002047	0.04	0.002429	0.04	0.002047	0.04
CLMH085E023MH085E010			1976			Existing		MH085E023	MH085E010		T09643	IRWD	VCP	{BF683E4D-FC78-4AD9-8461-6CEB0A67C24D}	CLMH085E023MH085E010	115.81	115.20	0.666666667	MH085E023	MH085E010			153	CLMH085E023MH085E010	8	0.0040	0.005993	0.07	0.006398	0.08	0.007587	0.08	0.006398	0.08
CLMH085E024MH085E008			1976			Existing		MH085E024	MH085E008		T09643	IRWD	VCP	{833BBE6A-EA10-4EFD-BC57-D9E7AD78DC5C}	CLMH085E024MH085E008	113.50	112.80	0.666666667	MH085E024	MH085E008			116	CLMH085E024MH085E008	8	0.0060	0.011306	0.09	0.012070	0.09	0.014313	0.10	0.012070	0.09
CLMH085E025MH085E024			1976			Existing		MH085E025	MH085E024		T09643	IRWD	VCP	{78C8CD68-2BA8-46EE-A6B2-04940AE2197}	CLMH085E025MH085E024	114.19	113.59	0.666666667	MH085E025	MH085E024			88	CLMH085E025MH085E024	8	0.0068	0.007818	0.08	0.008347	0.08	0.009897	0.08	0.008347	0.08
CLMH085E026MH085E025			1976			Existing		MH085E026	MH085E025		T09643	IRWD	VCP	{5FDCADA1-254D-40F6-BC8E-4E0E3AD754D}	CLMH085E026MH085E025	116.30	114.30	0.666666667	MH085E026	MH085E025			248	CLMH085E026MH085E025	8	0.0081	0.007818	0.07	0.008347	0.08	0.009898	0.08	0.008347	0.08
CLMH085E027MH085E026			1976			Existing		MH085E027	MH085E026		T09643	IRWD	VCP	{D68A234F-23D2-412C-AC56-5DE5C16B2426}	CLMH085E027MH085E026	118.00	116.40	0.500000000	MH085E027	MH085E026			181	CLMH085E027MH085E026	6	0.0088	0.001625	0.05	0.001736	0.05	0.002059	0.05	0.001736	0.05
CLMH085E028MH085E027			1976			Existing		MH085E028	MH085E027		T09643	IRWD	VCP	{CEFF085B-5578-4BCF-B702-2C6923D945B9}	CLMH085E028MH085E027	120.08	118.19	0.500000000	MH085E028	MH085E027			340	CLMH085E028MH085E027	6	0.0056	0.001626	0.05	0.001736	0.05	0.002059	0.06	0.001736	0.05
CLMH085E029MH085E030			1976			Existing		MH085E029	MH085E030		T09643	IRWD	VCP	{79EB5356-1169-4FAD-AD7E-89D663110C78}	CLMH085E029MH085E030	119.50	118.19	0.500000000	MH085E029	MH085E030			173	CLMH085E029MH085E030	6	0.0076	0.000844	0.04	0.000901	0.04	0.001066	0.04	0.000901	0.04
CLMH085E030MH085E033			1976			Existing		MH085E030	MH085E033		T09643	IRWD	VCP	{25268302-2470-44GD-80C6-7F82916AC999}	CLMH085E030MH085E033	118.00	116.90	0.666666667	MH085E030	MH085E033			222	CLMH085E030MH085E033	8	0.0050	0.000843	0.02	0.000900	0.02	0.001065	0.03	0.000900	0.02
CLMH085E031MH085E032			1976			Existing		MH085E031	MH085E032		T09643	IRWD	VCP	{95D0898F-780B-47AF-96AB-A3403CA292CB}	CLMH085E031MH085E032	115.00	113.90	0.500000000	MH085E031	MH085E032			169	CLMH085E031MH085E032	6	0.0065	0.004096	0.08	0.004374	0.08	0.005185	0.09	0.004374	0.08
CLMH085E032MH085E007			1976			Existing		MH085E032	MH085E007		T09643	IRWD	VCP	{56F7C475-CB59-46B9-AA43-93F81D90FA58}	CLMH085E032MH085E007	113.80	110.69	0.666666667	MH085E032	MH085E007			225	CLMH085E032MH085E007	8	0.0138	0.007428	0.06	0.007932	0.07	0.009400	0.07	0.007932	0.07
CLMH085E033MH085E032			1976			Existing		MH085E033	MH085E032		T09643	IRWD	VCP	{B8155FC1-6787-48C6-B335-6CAFCB0EE78}	CLMH085E033MH085E032	116.69	114.00	0.666666667	MH085E033	MH085E032			213	CLMH085E033MH085E032	8	0.0155	0.000843	0.02	0.000900	0.02	0.001065	0.02	0.000900	0.02
CLMH085E034MH085E080			1969			Existing		MH085E034	7060		A00348	IRWD	VCP	{70889738-B0CF-47FD-8D43-2A250DC86C24}	CLMH085E034MH085E080	126.69	118.73	0.666666667	MH085E034	MH085E080			180	CLMH085E034MH085E080	8	0.0442	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH085E035MH085E036			1976			Existing		MH085E035	MH085E036		A00344	IRWD	VCP	{FA243473-9DD3-45CF-9284-BD230E5F8BD5}	CLMH085E035MH085E036	112.73	111.26	0.666666667	MH085E035	MH085E036			368	CLMH085E035MH085E036	8	0.0040	0.003672	0.06	0.003921	0.06	0.004649	0.06	0.003921	0.06
CLMH085E036MH085E037			1976			Existing		MH085E036	MH085E037		A00344	IRWD	VCP	{5814FF86-B079-4A18-B43D-D23E841D9AA3}	CLMH085E036MH085E037	111.06	109.55	0.666666667	MH085E036	MH085E037			382	CLMH085E036MH085E037	8	0.0040	0.003672	0.06	0.003921	0.06	0.004649	0.06	0.003921	0.06
CLMH085E037MH085E038			1976			Existing		MH085E037	MH085E038		A00344	IRWD	VCP	{60C1A373-CBEF-4ECF-91A0-BEC659FB21FA}	CLMH085E037MH085E038	109.45	107.94	0.666666667	MH085E037	MH085E038			382	CLMH085E037MH085E038	8	0.0040	0.008224	0.09	0.008782	0.09	0.010411	0.10	0.008782	0.09
CLMH085E038MH085E039			1976			Existing		MH085E038	MH085E039		A00344	IRWD	VCP	{5C888E0C-84F5-4541-94A8-6CB6407C4E9B}	CLMH085E038MH085E039	107.75	107.13	0.666666667	MH085E038	MH085E039			65	CLMH085E038MH085E039	8	0.0095	0.008224	0.07	0.008782	0.08	0.010411	0.08	0.008782	0.08
CLMH085E039MH085E040			1976			Existing		MH085E039	MH085E040		A00344	IRWD	VCP	{712D45FC-DFFE-4E48-B446-0F13F7B6758}	CLMH085E039MH085E040	106.94	103.90	0.666666667	MH085E039	MH085E040			203	CLMH085E039MH085E040	8	0.0150	0.008224	0.07	0.008782	0.07	0.010411	0.07	0.008782	0.07
CLMH085E040MH085E201			1976			Existing		MH085E040	MH085E201		257	IRWD	VCP	{04924987-14C2-4E00-AA5F-6A179AABFE18}	CLMH085E040MH085E201	103.65	97.36	0.666666667	MH085E040	MH085E201			754	CLMH085E040MH085E201	8	0.0083	0.063904	0.20	0.068260	0.21	0.081009	0.23	0.068260	0.21
CLMH085E054MH085E042			1984			Existing		MH085E054	MH085E042		A00405	IRWD	VCP	{FD40327E-EBFA-4D04-B7C5-0618751D10A9}	CLMH085E054MH085E042	124.23	118.90	1.000000000	MH085E054	MH085E042			527	CLMH085E054MH085E042	12	0.0103	0.246655	0.21	0.292218	0.23	0.346912	0.25	0.292218	0.23
CLMH085E043MH085E042			1984			Existing		MH085E043	MH085E042		A00483	IRWD	PVC	{508DA65D-D610-4DE3-B5A0-1F3A81F7FF8B}	CLMH085E043MH085E042	128.41	124.51	0.666666667	MH085E043	MH085E042			340	CLMH085E043MH085E042	8	0.0098	0.002346	0.04	0.002819	0.04	0.003340	0.05	0.002819	0.04
CLMH085E046MH085E129			1984			Existing		MH085E046	MH085E129		A00483	IRWD	PVC	{EFE640EB-E6B0-4FCC-B99D-A146AE8CB65F}	CLMH085E046MH085E129	127.30	126.05	1.000000000	MH085E046	MH085E129			340	CLMH085E046MH085E129	12	0.0037	0.176230	0.23	0.207490	0.25	0.246270	0.27	0.207489	0.25
CLMH085E047MH085E046			1984			Existing		MH085E047	MH085E046		A00483	IRWD	PVC	{A91AD0F68-220B-4AF9-BEFA-1F9075115CF9A}	CLMH085E047MH085E046	131.50	127.70	1.000000000	MH085E047	MH085E046			425	CLMH085E047MH085E046	12	0.0089	0.087349	0.13	0.094300	0.14	0.111871	0.15	0.094300	0.14
CLMH085E049MH085E156			1976			Existing		MH085E049	MH085E156		A00344	IRWD	VCP	{0AA8C851-1F2B-40B5-9D0A-E13B6094BF2F}	CLMH085E049MH085E156	133.31	132.83	0.666666667	MH085E049	MH085E156			125	CLMH085E049MH085E156	8	0.0063	0.002626	0.06	0.003921	0.06	0.004649	0.06	0.003921	0.06
CLMH085E052MH085N068			1984			Existing		MH085E052	MH085N068		A00405	IRWD	PVC	{5C9EC206-81AA-4DC9-91DD-C2C0303E1350}	CLMH085E052MH085N068	113.37	112.79	1.250000000	MH085E052	MH085N068			400	CLMH085E052MH085N068	15	0.0015	0.266373	0.24	0.316218	0.27	0.375926	0.29	0.316215	0.27
CLMH085E053MH085E052			1984			Existing		MH085E053	MH085E052		A00405	IRWD	PVC	{3C9D6900-5747-4748-B9DA-BBE51FC71E9D}	CLMH085E053MH085E052	114.13	113.48	1.250000000	MH085E053	MH085E052			448	CLMH085E053MH085E052	15	0.0015	0.266806	0.25	0.316659	0.27	0.376292	0.29	0.316656	0.27
CLMH085E054MH085E053			1984			Existing		MH085E054	MH085E053		A00405	IRWD	PVC	{C97AEA2E-64CD-4565-A9EB-2CB28AB431C6}	CLMH085E054MH085E053	118.80	114.38	1.000000000	MH085E054	MH085E053			517	CLMH085E054MH085E053	12	0.0085	0.147318	0.22	0.293067	0.24	0.348082	0.26	0.293065	0.24
CLMH085E057MH085N069			1984			Existing		MH085E057	MH085N069		T11614	IRWD	PVC	{CD86F91A-07A5-4ABF-B8F8-85EDF54E65D5}	CLMH085E057MH085N069	114.48	113.80	0.666666667	MH085E057	MH085N069			117	CLMH085E057MH085N069	8	0.0058	0.002611	0.04	0.003124	0.05	0.003702	0.05	0.003124	0.05
CLMH085E058MH085E057			1984			Existing		MH085E058	MH085E057		T11614	IRWD	PVC	{68FFA43E-4E1E-48E3-B88B-362E536C2437}	CLMH085E058MH085E057	118.00	114.69	0.666666667	MH085E058	MH085E057			230	CLMH085E058MH085E057	8	0.0144	0.002101	0.03	0.002513	0.04	0.002978	0.04	0.002513	0.04
CLMH085E060MH085E061			1984			Existing		MH085E060	MH085E061		T11614	IRWD	PVC	{AFA2E0C6-C6C7-423E-BA29-DAA8F19934DB}	CLMH085E060MH085E061	117.72	117.26	0.500000000	MH085E060	MH085E061			50	CLMH085E060MH085E061	6	0.0092	0.002035	0.05	0.002442	0.06	0.002895	0.06	0.002442	0.06
CLMH085E061MH085E063			1984			Existing		MH085E061	MH085E063		T11614	IRWD	PVC	{CFF7ABCC-44F0-46ED-AD0D-5F7F2DC728B0}	CLMH085E061MH085E063	117.05	116.22	0.666666667	MH085E061	MH085E063			155	CLMH085E061MH085E063	8	0.0054	0.003156	0.05	0.003788	0.05	0.004491	0.06	0.003788	0.05
CLMH085E063MH085E065			1984			Existing		MH085E063	MH085E065		T11614	IRWD	PVC	{9EA2D072-9D40-41C5-950D-313B86576818}	CLMH085E063MH085E065	116.01	115.72	0.666666667	MH085E063	MH085E065			257	CLMH085E063MH085E065	8	0.0050	0.006697	0.07	0.008016	0.08	0.009502	0.09	0.008016	0.08
CLMH085E065MH085E053			1984			Existing		MH085E065	MH085E053		T11614	IRWD	PVC	{5F61D56E-288A-4281-92B0-4E5BABE29E37}	CLMH085E065MH085E053	115.51	114.76	0.666666667	MH085E065	MH085E053			203	CLMH085E065MH085E053	8	0.0037	0.019923	0.13	0.023872	0.14	0.028303	0.15	0.023872	0.14
CLMH085E066MH085E065			1984			Existing		MH085E066	MH085E065		T11614	IRWD	PVC	{3852D7F9-2E2E-4D87-BB1E-2B6724917A29}	CLMH085E066MH085E065	118.75	115.72	0.666666667	MH085E066	MH085E065			235	CLMH085E066MH085E065	8	0.0129	0.013226	0.09	0.015804	0.09	0.018800	0.10	0.015856	0.09
CLMH085E067MH085E066			1984			Existing		MH085E067	MH085E066		T11614	IRWD	PVC	{E1394A20-E61F-48D4-843C-3A2E7BD9718}	CLMH085E067MH085E066	123.75	118.94	0.666666667	MH085E067	MH085E066			274	CLMH085E067MH085E066	8	0.0275	0.003695	0.04	0.004435	0.04	0.005258	0.04	0.004435	0.04
CLMH085E068MH085E067			1984			Existing		MH085E068	MH085E067		T11614	IRWD	PVC	{054E5C42-C351-43F1-A9E0-9516EB447B09}	CLMH085E068MH085E067	124.40	123.94	0.666666667	MH085E068	MH085E067			65	CLMH085E068MH085E067	8	0.0071	0.002124	0.04	0.002549	0.04	0.003023	0.05	0.002549	0.04
CLMH085E071MH085E066			1984			Existing		MH085E071	MH085E066		T11614	IRWD	PVC	{82A0A0F6-2918-4683-B8AF-C74C9EABC6D2}	CLMH085E071MH085E066	119.75	119.20	0.666666667	MH085E071	MH085E066			205	CLMH085E071MH085E066	8	0.0037	0.008140	0.08	0.009750	0.09	0.011562	0.10	0.009750	0.09
CLMH085E074MH085E071			1984			Existing		MH085E074	MH085E071		T11614	IRWD	PVC	{85C3D8C0-5373-4763-AB58-3FBACCD754F1}	CLMH085E074MH085E071	120.15	119.94	0.500000000	MH085E074	MH085E071			66	CLMH085E074MH085E071	6	0.0038	0.004655	0.09	0.005567	0.10	0.006601	0.11	0.005567	0.10
CLMH085E076MH085E042			1985			Existing		MH085E076	MH085E042		A00405	IRWD	PVC	{35D0F9A1-D901-423F-A22F-E4AD9550C63D}	CLMH085E076MH085E042	127.38	124.62	0.666666667	MH085E076	MH085E042			131	CLMH085E076MH085E042	8	0.0211	0.028735	0.11	0.034469	0.11	0.040861	0.12	0.034469	0.11
CLMH085E077MH085E076			1985			Existing		MH085E077	MH085E076		T12194	IRWD	PVC	{5A065258-45EA-4D01-9942-BF5F05EFEF65}	CLMH085E077MH085E076	129.47	127.58	0.666666667	MH085E077	MH085E076			121	CLMH085E077MH085E076	8	0.0156	0.009604	0.07	0.011503	0.07	0.013633	0.08	0.011500	0.07
CLMH085E078MH085E077			1985			Existing		MH085E078	MH085E077		T12194	IRWD	PVC	{703277BD-0CDA-4DEC-9119-D85D1AADD2D3}	CLMH085E078MH085E077	133.61	129.72	0.666666667	MH085E078	MH085E077			165	CLMH085E078MH085E077	8	0.0216	0.003038	0.04	0.003615	0.04	0.004286	0.04	0.003616	0.04
CLMH085E079MH085E077			1985			Existing		MH085E079	MH085E077		T12194	IRWD	PVC	{09860578-2F39-4DBD-9BC4-8ED9CB143F9F}	CLMH085E079MH085E077	130.19	129.66	0.666666667	MH085E079	MH085E077			136	CLMH085E079MH085E077	8	0.0039	0.006566	0.07	0.007884	0.08	0.009347	0.09	0.007884	0.08
CLMH085E080MH085E079			1985			Existing		MH085E080	MH085E079		T12194	IRWD	PVC	{CA725A8F-4A4E-42ED-A1EB-5A1FEAAFBE1F}	CLMH085E080MH085E079	133.30	130.44	0.666666667	MH085E080	MH085E079			355	CLMH085E080MH085E079	8	0.0081	0.003904	0.05	0.004687	0.06	0.005557	0.06	0.004687	0.06
CLMH085E081MH085E080			1985			Existing		MH085E081	MH085E080		T12194	IRWD	PVC	{06C3AFA0-67A4-48D1-AFF2-A5EA85935652}	CLMH085E081MH085E080	136.33	133.63	0.666666667	MH085E081	MH085E080			226	CLMH085E081MH085E080	8	0.0119	0.003904	0.05	0.004688	0.05	0.005557	0.06	0.004688	0.05
CLMH085E082MH085E081			1985			Existing		MH085E082	MH085E081		T12194	IRWD	PVC	{D859C14A-748E-45CA-96E3-009BFF08A444}	CLMH085E082MH085E081	137.36	136.44	0.666666667	MH085E082	MH085E081			236	CLMH085E082MH085E081	8	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH085E082MH085E089			1985			Existing		MH085E082	MH085E089		T12194	IRWD	PVC	{52250B6B-2623-454D-99A5-2C0727234ABF}	CLMH085E082MH085E089	137.11	133.46	0.666666667	MH085E082	MH085E089			336	CLMH085E082MH085E089	8	0.0109	0.003574	0.05	0.004292	0.05	0.005087	0.05	0.004292	0.05
CLMH085E083MH085E082			1985			Existing		MH085E083	MH085E082		T12194	IRWD	PVC	{DE564D00-6CF0-48D0-944A-BAD0381A9F52}	CLMH085E083MH085E082	139.44	137.36	0.666666667	MH085E083	MH085E082			210	CLMH085E083MH085E082	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH085E083MH085E088			1985			Existing		MH085E083	MH085E088		T12194	IRWD	PVC	{DCFEE5F7-17C5-4D6F-87C2-04F9AFD685D3}	CLMH085E083MH085E088	139.19	135.24	0.666666667	MH085E083	MH085E088			366	CLMH085E083MH085E088	8	0.0108	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH085E084MH085E083			1985			Existing		MH085E084	MH085E083		T12194	IRWD	PVC	{F4566C13-671E-46AD-B70A-0B75C594A648}	CLMH085E084MH085E083	141.55	139.44	0.666666667	MH085E084	MH085E083			211	CLMH085E084MH085E083	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH085E084MH085E087			1985			Existing		MH085E084	MH085E087		T12194	IRWD	PVC	{7921069D-AC35-4F17-9B11-326A94A9595}	CLMH085E084MH085E087	141.30	136.25	0.666666667	MH085E084	MH085E087			371	CLMH085E084MH085E087	8	0.0136	0.006249	0.06	0.007538	0.06	0.008981	0.07	0.007538	0.06
CLMH085E085MH085E084			1985			Existing		MH085E085	MH085E084		T12194	IRWD	PVC	{B43DB714-FCDD-495C-B692-0F40E2C84A90}	CLMH085E085MH085E084	144.27	141.55	0.666666667	MH085E085	MH085E084			210	CLMH085E085MH085E084	8	0.0130	0.000059	0.00	0.000086	0.00	0.000146	0.01	0.000086	0.00
CLMH085E086MH085E085			1985			Existing		MH085E086	MH085E085		T12194	IRWD	PVC	{F3BE957E-7F16-43D1-8B11-5A0C2B24551D}	CLMH085E086MH085E085	144.25	139.05	0.666666667	MH085E086	MH085E085			376	CLMH085E086MH085E085	8	0.0138	0.002233	0.04	0.002645	0.04	0.003091	0.04	0.002645	0.04
CLMH085E086MH085E087			1985			Existing		MH085E086	MH085E087		T12194	IRWD	PVC	{75E56D22-D094-4AF2-99F9-02E6364E8E07}	CLMH085E086MH085E087	138.85	136.21	0.666666667	MH085E086	MH085E087			210	CLMH085E086MH085E087	8	0.0126	0.002233	0.04	0.002645	0.04	0.003091	0.04	0.002645	0.04
CLMH085E087MH085E088			1985			Existing		MH085E087	MH085E088		T12194	IRWD	PVC	{249A332A-B472-4323-83CF-047E075AD1DB}	CLMH085E087MH085E088	136.00	135.19	0.666666667	MH085E087	MH085E088			210	CLMH085E087MH085E088	8	0.0039	0.008481	0.08	0.010183	0.09	0.012071	0.10	0.010183	0.09
CLMH085E088MH085E089			1985			Existing		MH085E088	MH085E089		T12194	IRWD	PVC	{8909C407-CB98-44E0-8F0D-FF5D4111FB84}	CLMH085E088MH085E089	134.99	133.41	0.666666667	MH085E088	MH085E089			210	CLMH085E088MH085E089	8	0.0075	0.014465	0.10	0.017365	0.11	0.020587	0.11	0.017365	0.11
CLMH085E089MH085E076			1985			Existing		MH085E089	MH085E076		T12194	IRWD	PVC	{D3D6907C-7098-4DAE-9681-E2D9F3CBA198}	CLMH085E089MH085E076	133.21	127.58	0.666666667	MH085E089	MH085E076			90	CLMH085E089MH085E076	8	0.0626	0.018038	0.07	0.021658	0.07	0.025674	0.08	0.021658	0.07
CLMH085E090MH085N071			1985			Existing		MH085E090	MH085N071

CLMH085033MH085N032		1976		Existing		MH085N034	MH085N032		T07597	IRWD	VCP	{DF798388-F007-4558-897B-263BAE4BCD70}	CLMH085N034MH085N032	96.06	95.45	0.666666667	MH085N034	MH085N032			152	CLMH085N034MH085N032	8	0.0040	0.013406	0.11	0.014315	0.11	0.016969	0.12	0.014315	0.11
CLMH085N035MH085N034		1976		Existing		MH085N035	MH085N034		T07597	IRWD	VCP	{FC79EAD0-0216-4D5C-AB1C-F2168AD2F83C}	CLMH085N035MH085N034	96.69	96.26	0.666666667	MH085N035	MH085N034			121	CLMH085N035MH085N034	8	0.0036	0.003665	0.06	0.003914	0.06	0.004640	0.07	0.003914	0.06
CLMH085N037MH085W116		1974		Existing		MH085W037	MH085W116		A00021	IRWD	VCP	{7F787516-2135-44C7-BF08-F688C9DB918F}	CLMH085N037MH085W116	69.95	69.45	1.000000000	MH085N037	MH085W116			18	CLMH085N037MH085W116	12	0.0278	0.266382	0.18	0.284450	0.18	0.337231	0.20	0.284449	0.18
CLMH085N038MH085N037		1974		Existing		MH085N038	MH085N037		A00021	IRWD	VCP	{01950AD9-9035-47EA-9704-FB018BA71B69}	CLMH085N038MH085N037	74.16	70.19	1.000000000	MH085N038	MH085N037			396	CLMH085N038MH085N037	12	0.0100	0.230406	0.21	0.246039	0.22	0.291694	0.24	0.246038	0.22
CLMH085N039MH085N001		1974		Existing		MH085N039	MH085N001		A00247	IRWD	VCP	{3F9D8E9C-A76D-493C-B779-8231CA33E3AD}	CLMH085N039MH085N001	78.22	77.09	1.000000000	MH085N039	MH085N001			156	CLMH085N039MH085N001	12	0.0072	0.106461	0.16	0.113664	0.16	0.134745	0.18	0.113663	0.16
CLMH085N040MH085N039		1974		Existing		MH085N040	MH085N039		A00247	IRWD	VCP	{45251643-3DC5-46D0-B3E2-EC23F5CDF6E5}	CLMH085N040MH085N039	82.27	78.31	1.000000000	MH085N040	MH085N039			396	CLMH085N040MH085N039	12	0.0100	0.106101	0.15	0.113279	0.15	0.134288	0.16	0.113279	0.15
CLMH085N041MH085N040		1974		Existing		MH085N041	MH085N040		A00247	IRWD	VCP	{FC4474AD-A79C-44AB-AF6E-AD223F8980F7}	CLMH085N041MH085N040	83.52	82.37	0.833333333	MH085N041	MH085N040			85	CLMH085N041MH085N040	10	0.0135	0.105691	0.17	0.112845	0.18	0.133774	0.19	0.112844	0.18
CLMH085N042MH085N041		1974		Existing		MH085N042	MH085N041		A00247	IRWD	VCP	{C8A4FFFA-5844-4AD0-9FD5-47DE497E9F0B}	CLMH085N042MH085N041	85.58	83.62	0.833333333	MH085N042	MH085N041			219	CLMH085N042MH085N041	10	0.0089	0.105694	0.19	0.112846	0.20	0.133776	0.21	0.112845	0.20
CLMH085N043MH085N042		1974		Existing		MH085N043	MH085N042		A00247	IRWD	VCP	{8F507374-0906-4BD9-9B32-FEC7D0AE4076}	CLMH085N043MH085N042	89.65	85.69	0.833333333	MH085N043	MH085N042			396	CLMH085N043MH085N042	10	0.0100	0.085229	0.17	0.091024	0.17	0.107992	0.19	0.091024	0.17
CLMH085N044MH085N043		1974		Existing		MH085N044	MH085N043		A00247	IRWD	VCP	{4C6F5C87-FBE1-44B2-AB04-351D30B8BA5C}	CLMH085N044MH085N043	93.71	89.75	0.833333333	MH085N044	MH085N043			396	CLMH085N044MH085N043	10	0.0100	0.085445	0.17	0.091255	0.17	0.108266	0.19	0.091255	0.17
CLMH085N044MH085W001		1970		Existing		MH085N044	MH085W001		T07213	IRWD	VCP	{030F1EE6-55A9-4E1D-A5C3-0F7314050AC1}	CLMH085W159MH085W044	95.00	94.90	0.666666667	MH085N044	MH085W001			53	CLMH085N044MH085W001	6	0.0019	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH085N048MH085N104		1982		Existing		MH085N048	MH085N104		T11701	IRWD	PVC	{45BD3EDA-0A2A-4066-A42E-4EAB51140A95}	CLMH085N048MH085N104	105.08	104.47	0.666666667	MH085N048	MH085N104			156	CLMH085N048MH085N104	8	0.0034	0.027367	0.15	0.029223	0.16	0.036446	0.17	0.029223	0.16
CLMH085N049MH085N048		1982		Existing		MH085N049	MH085N048		T11701	IRWD	PVC	{624ZD096-680C-4672-B3D3-2FEC1F1A21E2}	CLMH085N049MH085N048	107.55	105.33	0.666666667	MH085N049	MH085N048			170	CLMH085N049MH085N048	8	0.0131	0.014129	0.08	0.015087	0.09	0.017887	0.09	0.015087	0.09
CLMH085N050MH085N049		1982		Existing		MH085N050	MH085N049		T11701	IRWD	PVC	{06C6F4B2-05EF-48F9-A805-98B5B93DA965}	CLMH085N050MH085N049	110.22	107.80	0.666666667	MH085N050	MH085N049			252	CLMH085N050MH085N049	8	0.0096	0.004958	0.06	0.005292	0.06	0.006276	0.06	0.005292	0.06
CLMH085N051MH084W046		1982		Existing		MH085N051	MH084W046		370	IRWD	PVC	{8CE2BB7C-FD08-4229-87AA-FF0A00B1340F}	CLMH085N051MH084W046	110.15	110.01	1.250000000	MH085N051	MH084W046			185	CLMH085N051MH084W046	15	0.0008	0.310598	0.27	0.369498	0.30	0.439811	0.32	0.369491	0.30
CLMH085N052MH085N050		1982		Existing		MH085N052	MH085N050		T11701	IRWD	PVC	{7A785347-80A3-44E1-ABF1-44A2CAC7214C}	CLMH085N052MH085N050	112.97	110.47	0.666666667	MH085N052	MH085N050			113	CLMH085N052MH085N050	8	0.0221	0.002018	0.03	0.002153	0.03	0.002554	0.03	0.002153	0.03
CLMH085N053MH085N051		1982		Existing		MH085N053	MH085N051		370	IRWD	PVC	{3D323431-0612-4CFF-824F-C55E6A22F732}	CLMH085N053MH085N051	110.77	110.34	1.250000000	MH085N053	MH085N051			286	CLMH085N053MH085N051	15	0.0015	0.310670	0.26	0.369575	0.28	0.439878	0.31	0.369569	0.28
CLMH085N054MH085N053		1982		Existing		MH085N054	MH085N053		370	IRWD	PVC	{DA2630A0A-942E-4C11-A2C2-918423E02949}	CLMH085N054MH085N053	111.37	110.98	1.250000000	MH085N054	MH085N053			264	CLMH085N054MH085N053	15	0.0015	0.310890	0.26	0.369805	0.28	0.440086	0.31	0.369799	0.28
CLMH085N055MH085N054		1982		Existing		MH085N055	MH085N054		370	IRWD	PVC	{AE8F051B-6D1D-457D-B461-131898B293EA}	CLMH085N055MH085N054	111.84	111.48	1.250000000	MH085N055	MH085N054			244	CLMH085N055MH085N054	15	0.0015	0.308663	0.26	0.367366	0.28	0.437141	0.30	0.367360	0.28
CLMH085N056MH085N057		1982		Existing		MH085N056	MH085N057		T11701	IRWD	PVC	{7110CEAF-7020-4483-A978-C1DBD6374BA4}	CLMH085N056MH085N057	109.01	108.20	0.666666667	MH085N056	MH085N057			206	CLMH085N056MH085N057	8	0.0039	0.002979	0.05	0.003181	0.05	0.003771	0.06	0.003181	0.05
CLMH085N057MH085N058		1982		Existing		MH085N057	MH085N058		T11701	IRWD	PVC	{66103302-7536-48B4-A951-FE9A3F9D02C1}	CLMH085N057MH085N058	108.01	107.26	0.666666667	MH085N057	MH085N058			151	CLMH085N057MH085N058	8	0.0050	0.009525	0.09	0.010171	0.09	0.012057	0.10	0.010171	0.09
CLMH085N058MH085N060		1982		Existing		MH085N058	MH085N060		T11701	IRWD	PVC	{15A426CB-454F-4167-B172-CD7D1A8FECEA}	CLMH085N058MH085N060	107.06	106.69	0.666666667	MH085N058	MH085N060			249	CLMH085N058MH085N060	8	0.0015	0.009524	0.11	0.010170	0.12	0.012057	0.13	0.010170	0.12
CLMH085N059MH085N049		1982		Existing		MH085N059	MH085N049		T11701	IRWD	PVC	{E1144A5C-BA13-4E7C-B420-013850968ZE1}	CLMH085N059MH085N049	109.06	107.80	0.500000000	MH085N059	MH085N049			136	CLMH085N059MH085N049	6	0.0093	0.006604	0.09	0.007053	0.09	0.008360	0.10	0.007053	0.09
CLMH085N060MH085N048		1982		Existing		MH085N060	MH085N048		T11701	IRWD	PVC	{00A54C2E-19E8-4F14-9022-F789AEBEE79D}	CLMH085N060MH085N048	105.88	105.33	0.666666667	MH085N060	MH085N048			157	CLMH085N060MH085N048	8	0.0035	0.013239	0.11	0.014137	0.11	0.016759	0.12	0.014137	0.11
CLMH085N061MH085N060		1982		Existing		MH085N061	MH085N060		T11701	IRWD	PVC	{0C23E56F-FFD1-444E-A89E-9A696ED122F3}	CLMH085N061MH085N060	106.37	106.08	0.666666667	MH085N061	MH085N060			75	CLMH085N061MH085N060	8	0.0039	0.003715	0.06	0.003967	0.06	0.004702	0.06	0.003967	0.06
CLMH085N067MH085N055		1984		Existing		MH085N067	MH085N055		A00405	IRWD	PVC	{1118718C-89D9-4E85-8DCC-48C7AFF5F418}	CLMH085N067MH085N055	112.33	111.94	1.250000000	MH085N067	MH085N055			184	CLMH085N067MH085N055	15	0.0021	0.308816	0.24	0.367539	0.26	0.437303	0.29	0.367534	0.26
CLMH085N068MH085N067		1984		Existing		MH085N068	MH085N067	changed invert	A00405	IRWD	PVC	{E29C1B03-0913-43D5-83F5-4DCC038BB8B5}	CLMH085N068MH085N067	112.69	112.33	1.250000000	MH085N068	MH085N067			180	CLMH085N068MH085N067	15	0.0020	0.269035	0.26	0.319357	0.28	0.379776	0.30	0.319353	0.28
CLMH085N069MH085N068		1984		Existing		MH085N069	MH085N068		A00405	IRWD	PVC	{E8E11780-7355-40C8-B462-F656DEA49CCB}	CLMH085N069MH085N068	113.60	113.27	1.250000000	MH085N069	MH085N068			71	CLMH085N069MH085N068	15	0.0046	0.002611	0.02	0.003102	0.02	0.003702	0.02	0.003124	0.02
CLMH085N070MH085N069		1984		Existing		MH085N070	MH085N069		T12288	IRWD	PVC	{34D45280-D42D-44AB-82C4-DC3B88B9B912}	CLMH085N070MH085N069	113.80	113.01	0.666666667	MH085N070	MH085N069			200	CLMH085N070MH085N069	8	0.0039	0.003878	0.18	0.004605	0.20	0.005512	0.22	0.004605	0.20
CLMH085N071MH085N070		1985		Existing		MH085N071	MH085N070		T12288	IRWD	PVC	{CE2EA2E4-A8B7-484C-A89C-81856F217EA5}	CLMH085N071MH085N070	114.98	114.00	0.666666667	MH085N071	MH085N070			249	CLMH085N071MH085N070	8	0.0039	0.018828	0.12	0.022583	0.14	0.026774	0.15	0.022583	0.14
CLMH085N072MH085N070		1985		Existing		MH085N072	MH085N070		T12288	IRWD	PVC	{63895F3B3-2EC9-4C97-9C5F-173AD07A8AED}	CLMH085N072MH085N070	114.75	113.90	0.666666667	MH085N072	MH085N070			216	CLMH085N072MH085N070	8	0.0039	0.022048	0.13	0.026469	0.15	0.031379	0.16	0.026469	0.15
CLMH085N073MH085N072		1985		Existing		MH085N073	MH085N072		T12288	IRWD	PVC	{52186DC8-26A8-4D2E-93D5-B8B9C2518FF1}	CLMH085N073MH085N072	115.56	114.84	0.666666667	MH085N073	MH085N072			183	CLMH085N073MH085N072	8	0.0039	0.020387	0.13	0.024476	0.14	0.029016	0.15	0.024476	0.14
CLMH085N104MH085N121		1978		Existing		MH085N104	MH085N121		A00278	IRWD	VCP	{D2B68933-0AE9-4159-A255-79AB0794B3FB}	CLMH085N104MH085N121	104.37	101.41	0.666666667	MH085N104	MH085N121			296	CLMH085N104MH085N121	8	0.0100	0.027366	0.13	0.029222	0.13	0.034645	0.14	0.029222	0.13
CLMH085N121MH084W049		1978		Existing		MH085N121	MH084W049		A00278	IRWD	VCP	{59FF6D58-F6D3-4308-BA33-C7C0DB05B29C}	CLMH085N121MH084W049	101.30	98.44	0.666666667	MH085N121	MH084W049			286	CLMH085N121MH084W049	8	0.0100	0.030668	0.14	0.032745	0.14	0.038837	0.15	0.032745	0.14
CLMH085N122MH085N034		2005		Existing	assumed Mannings N	MH085N122	MH085N034		16597	IRWD	PVC	{30C83712-DCCA-470F-A21C-69FA66AD61FA}	CLMH085N122MH085N034	96.72	96.27	0.666666667	MH085N122	MH085N034			115	CLMH085N122MH085N034	8	0.0039	0.009741	0.09	0.010401	0.09	0.012329	0.10	0.010401	0.09
CLMH085N123MH085N122		2005		Existing	assumed Mannings N	MH085N123	MH085N122		16597	IRWD	PVC	{0DC2AC68-093A-420F-970A-ABADBAD77BE5}	CLMH085N123MH085N122	97.81	96.92	0.666666667	MH085N123	MH085N122			221	CLMH085N123MH085N122	8	0.0040	0.009741	0.09	0.010401	0.09	0.012329	0.10	0.010401	0.09
CLMH085S004MH085S005		1969		Existing		MH085S004	MH085S005	adverse slope	079	IRWD	VCP	{6458F828-59F0-4E78-8AF5-76790A1A36E}	CLMH085S004MH085S005	92.95	90.49	1.000000000	MH085S004	MH085S005			256	CLMH085S004MH085S005	12	0.0096	0.438028	0.30	0.467783	0.31	0.554965	0.34	0.467782	0.31
CLMH085S005MH085S006		1969		Existing		MH085S005	MH085S006		079	IRWD	VCP	{B88FFD96-DA3C-4001-AC56-57F6391A0AB4}	CLMH085S005MH085S006	90.44	89.35	1.000000000	MH085S005	MH085S006			135	CLMH085S005MH085S006	12	0.0081	0.438017	0.31	0.467772	0.32	0.554955	0.35	0.467771	0.32
CLMH085S006MH085S008		1969		Existing		MH085S006	MH085S008		079	IRWD	VCP	{38603129C-C066-4E75-B234-AAB31930B7A2}	CLMH085S006MH085S008	89.25	86.43	1.000000000	MH085S006	MH085S008			308	CLMH085S006MH085S008	12	0.0092	0.519538	0.33	0.554869	0.34	0.658449	0.37	0.554866	0.34
CLMH085S008MH085S009		1969		Existing		MH085S008	MH085S009		079	IRWD	VCP	{4858F097-A077-4D7D-AB6A-DCAE8CEB63DC}	CLMH085S008MH085S009	86.33	83.99	1.000000000	MH085S008	MH085S009			308	CLMH085S008MH085S009	12	0.0091	0.522396	0.33	0.557944	0.34	0.662181	0.38	0.557941	0.34
CLMH085S009MH085S010		1969		Existing		MH085S009	MH085S010		079	IRWD	VCP	{F3E8B84D-C1B0-40E3-A90C-2FFAAB7E6DD9}	CLMH085S009MH085S010	83.89	81.55	1.000000000	MH085S009	MH085S010			256	CLMH085S009MH085S010	12	0.0091	0.522261	0.33	0.557810	0.34	0.662059	0.38	0.557807	0.34
CLMH085S010MH085S011		1969		Existing		MH085S010	MH085S011		079	IRWD	VCP	{2841B641-03F4-45DD-BC62-58825EF3F06E}	CLMH085S010MH085S011	81.47	79.07	1.000000000	MH085S010	MH085S011			256	CLMH085S010MH085S011	12	0.0094	0.527079	0.33	0.562990	0.34	0.668317	0.38	0.562987	0.34
CLMH085S011MH085S012		1969		Existing		MH085S011	MH085S012		079	IRWD	VCP	{1B9B8496-7837-4B87-8011-AE8A3DACC354}	CLMH085S011MH085S012	78.82	77.38	1.000000000	MH085S011	MH085S012			256	CLMH085S011MH085S012	12	0.0056	0.529912	0.38	0.566051	0.39	0.672048	0.43	0.566046	0.39
CLMH085S012MH085W103		1969		Existing		MH085S012	MH085W103		079	IRWD	VCP	{89B867E5-923D-4A50-A643-C18F9A7F1D88}	CLMH085S012MH085W103	77.30	75.95	1.000000000	MH085S012	MH085W103			254	CLMH085S012MH085W103	12	0.0053	0.533158	0.38	0.569555	0.40	0.676331	0.44	0.569551	0.40
CLMH085S013MH085W013		1971		Existing		MH085S013	MH085W013		T07234	IRWD	VCP	{240CE21A-8C9D-452D-94F3-D274F0D2A0AB}	CLMH085S013MH085W013	76.22	75.71	0.666666667	MH085S013	MH085W013			54	CLMH085S013MH085W013	8	0.0094	0.053687	0.18	0.057495	0.19	0.068700	0.20	0.057495	0.19
CLMH085S014MH085S013		1971		Existing		MH085S014	MH085S013		T07234	IRWD	VCP	{08FDF82F-A416-47DC-AA93-102F22032E8B}	CLMH085S014MH085S013	81.08	76.31	0.666666667	MH085S014	MH085S013			167	CLMH085S014MH085S013	8	0.0286	0.049706	0.13	0.053235	0.14	0.063633	0.15	0.053235	0.14
CLMH085S015MH085S014		1971		Existing		MH085S015	MH085S014		T07234	IRWD	VCP	{2998D1C62-76F6-46D6-9036-30F1847DD3DE}	CLMH085S015MH085S014	82.04	81.19	0.666666667	MH085S015	MH085S014			104	CLMH085S015MH085S014	8	0.0082	0.049732	0.18	0.053264	0.19	0.063664	0.20	0.053263	0.19
CLMH085S016MH085S015		1971		Existing		MH085S016	MH085S015		T07234	IRWD	VCP	{78314A82-B121-4607-925E-BC70A56B4056}	CLMH085S016MH085S015	83.41	82.13	0.666666667	MH085S016	MH085S015			158	CLMH085S016MH085S015	8	0.0085	0.044766	0.17	0.047946	0.17	0.057338	0.19	0.047946	0.17
CLMH085S017MH085S016		1971		Existing		MH085S017	MH085S016		T07234	IRWD	VCP	{23BAAA2A-F21A-4887-BE2E-FD6743C94D60}	CLMH085S017MH085S016	84.11	83.51	0.666666667	MH085S017	MH085S016			123	CLMH085S017MH085S016	8	0.0049	0.044800	0.19	0.047982	0.19	0.057377	0.21	0.047981	0.19
CLMH085S018MH085S017		1971		Existing		MH085S018	MH085S017		T07235	IRWD	VCP	{F57CA2EF-6889-4565-96E5-59FCA9261EC2}	CLMH085S018MH085S017	85.61	84.20	0.666666667	MH085S018	MH085S017			268	CLMH085S018MH085S017	8	0.0053	0.039227	0.17	0.042023	0.18	0.050297	0.20	0.042022	0.18
CLMH085S019MH085S018		1971		Existing		MH085S019	MH085S018		T07235	IRWD	VCP	{F647D1A1-9716-4052-8DEA-694C297C0C34}	CLMH085S019MH085S018	86.58	85.80	0.666666667	MH085S019	MH085S018			268	CLMH085S019MH085S018	8	0.0029	0.034322	0.18	0.036777	0.19	0.044058	0.21	0.036776	0.19
CLMH085S020MH085S019		1971		Existing		MH085S020	MH085S019		T07235	IRWD	VCP	{10685BD7-A312-4CFC-802B-5171A234F40B}	CLMH085S020MH085S019	94.95	86.77	0.666666667	MH085S020	MH085S019			305	CLMH085S020MH085S019	8	0.0268	0.005666	0.05	0.006048	0.05	0.007171	0.05	0.006048	0.05
CLMH085S021MH085S020		1971		Existing		MH085S021	MH085S020		T07235	IRWD	VCP	{B11EC09C-6F91-4191-B6E5-CB8AA7941E8E}	CLMH085S021MH085S020	98.90	95.16	0.666666667	MH085S021	MH085S020			334	CLMH085S021MH085S020	8	0.0112	0.003391	0.05	0.003619	0.05	0.004292	0.05	0.003619	0.05
CLMH085S022MH085S019		1971		Existing		MH085S022	MH085S019		T07235	IRWD	VCP	{29CD7789-8011-49A8-8116-953BD0BC5542}	CLMH085S022MH085S019	87.87	86.77	0.666666667	MH085S022	MH085S019			500	CLMH085S022MH085S019	8	0.0022	0.028818	0.18	0.030905	0.19	0.037070	0.20	0.030905	0.19
CLMH085S023MH085S018		1971		Existing		MH085S023	MH085S018		T07235	IRWD	VCP	{D6FB411C-B7D5-414C-9CE4-6D616509558E}	CLMH085S023MH085S018	87.65	85.80	0.500000000	MH085S023	MH085S018			485	CLMH085S023MH085S018	6	0.0038	0.005052	0.10	0.005396	0.10	0.006399	0.11	0.005396	0.10
CLMH085S024MH085S017		1971		Existing		MH085S024	MH085S017		T07235	IRWD	VCP	{D2C39A98-964B-4672-81D1-3EB92FF96D2F}	CLMH085S024MH085S017	85.94	84.30	0.500000000	MH085S024	MH085S017			485	CLMH085S024MH085S017	6	0.0034	0.005680	0.11	0.006064	0.11	0.007192	0.12	0.006064	0.11
CLMH085S025MH085S015		1971		Existing		MH085S025	MH085S015		T07234	IRWD	VCP	{E10D564C-5EAC-4885-A761-E33B31776B80}	CLMH085S025MH085S015	86.05	82.19	0.500000000	MH085S025	MH085S015			485	CLMH085S025MH085S015	6	0.0083	0.005115	0.09	0.005462	0.09	0.006475	0.10	0.005462	0.09
CLMH085S026MH085S013		1971		Existing		MH085S026	MH085S013		T07234	IRWD	VCP	{890B98AB-C865-414B-A73E-338D454AFBCD}	CLMH085S026MH085S013	84.98	76.37	0.500000000	MH085S026	MH085S013			542	CLMH085S026MH085S013	6	0.0159	0.004077	0.07	0.004353	0.07	0.005160	0.07	0.004353	0.07
CLMH085S027MH085S022		1971		Existing		MH085S027	MH085S022		T07235	IRWD	VCP	{04112BC1-2843-460E-908E-B71D7EB61FF3}	CLMH085S027MH085S022	88.48	87.98	0.666666667	MH085S027	MH085S022			256	CLMH085S027MH085S022	8	0.0020	0.022856	0.17	0.025414	0.17	0.029473	0.19	0.025414	0.17
CLMH085S028MH085S027		1971		Existing		MH085S028	MH085S027		T07235	IRWD	VCP	{3FCF74D7-F7F4-4E27-99D8-A39C8A0AFDFE}	CLMH085S028MH085S027	96.56	88.62	0.666666667	MH085S028	MH085S027			505	CLMH085S028MH085S027	8	0.0157	0.003802	0.05	0.004060	0.05	0.004813	0.05	0.004060	0.05
CLMH085S029MH085W009		1970		Existing		MH085S029	MH085W009		T07213	IRWD	VCP	{66AB273F-0347-477D-8D9A-B3122D4426D0}	CLMH085S029MH085W009	87.40	85.44	0.500000000	MH085S029	MH085W009			233	CLMH085S029MH085W009	6	0.0084	0.003960	0.08	0.004227	0.08	0.005012	0.09	0.004227	0.08
CLMH085S030MH085S027		1971		Existing		MH085S030	MH085S027		T07235	IRWD	VCP	{A08D7FDC-7B10-4466-A536-405B44DC34A7}	CLMH085S030MH085S027	89.44	88.69	0.666666667	MH085S030	MH085S027			274	CLMH085S030MH085S027	8	0.0027	0.019173	0.14	0.020574	0.14	0.024782	0.16	0.020574	0.14
CLMH085S031MH085S030		1971		Existing		MH085S031	MH085S030		T07213	IRWD	VCP	{4AAB61CA-0F08-4FF5-B91F-13FC72CCA0D1}	CLMH085S031MH085S030	90.41	89.55	0.666666667	MH085S031	MH085S030			488	CLMH085S031MH085S030	8	0.0018	0.009910	0.12	0.010688	0.12	0.013043	0.13	0.010688	0.12
CLMH085S032MH085S031		1971		Existing		MH085S032	MH085S031		T07213	IRWD	VCP	{1CC488E3-64D6-4886-B345-088826E0E60D}	CLMH085S032MH085S031	90.75	90.51	0.666666667	MH085S032	MH085S031			138	CLMH085S032MH085S031	8	0.0017	0.006170	0.09	0.006677	0.09	0.008231	0.10	0.006677	0.09
CLMH085S033MH085S032		1971		Existing		MH085S033	MH085S032		T07213	IRWD	VCP	{F83E43A2-ACOD-4E80-B617-6910BD2D2DDF}	CLMH085S033MH085S032	90.75	88.44	0.666666667	MH085S033	MH085S032			127	CLMH085S033MH085S032	8	0.0182	0.032246	0.12	0.034343	0.12	0.040437	0.13	0.034342	0.12
CLMH085S033MH085W007		1971		Existing		MH085S033	MH085W007		T07213	IRWD	VCP	{CA16CB79-4F60-4999-A361-D51F51B495BC}	CLMH085S033MH085W007	88.34	81.61	0.666666667	MH085S033	MH085W007			227	CLMH085S033MH085W007	8	0.0296	0.036975	0.11	0.039393	0.12	0.046430	0.13	0.039393	0.12
CLMH085S034MH085S035		1971		Existing		MH085S034	MH085S035		T06923	IRWD	VCP	{21CE410B-BA8A-47CE-B1E4-CE501A0B0DAC}	CLMH085S034MH085S035	97.95	97.05	0.666666667	MH085S034	MH085S035			315	CLMH085S034MH085S035	8	0.0082	0.006802	0.07	0.007262	0.07	0.008609	0.08	0.007262	0.07
CLMH085S035MH085S036		1971		Existing		MH085S035	MH085S036		T06923	IRWD	VCP	{4B40D28F-8D1A-4E2E-9843-E5C74AC9ACF8}	CLMH085S035MH085S036	96.94	95.52	0.666666667	MH085S035	MH085S036			515	CLMH085S035MH085S036	8	0.0028	0.034072	0.19	0.036378	0.19	0.043157	0.21	0.036378	0.19
CLMH085S036MH085S032		1971		Existing		MH085S036	MH085S032		T07235	IRWD	VCP	{61E84DB5-9DC6-4EE1-81C6-05528D642F93}	CLMH085S036MH085S032	95.43	90.94	0.666666667	MH085S036	MH085S032			212	CLMH085S036MH085S032	8	0.0212	0.038429	0.13	0.041032	0.13	0.048679	0.14	0.041032	0.13
CLMH085S037MH085W005		1971		Existing		MH085S037	MH085W005		T07233	IRWD	VCP	{EE124F7A-D54E-4D02-972A-C15418146045}	CLMH085S037MH085W005	89.95	84.12	0.666666667	MH085S037	MH085W005			234	CLMH085S037MH085W005	8	0.0249	0.004037	0.04	0.004311	0.04	0.005111	0.05	0.004311	0.04
CLMH085S038MH085W004		1970		Existing		MH085S038	MH085W004		T07213	IRWD	VCP	{E30D1FF8-9521-443E-8929-320315C05576}	CLMH085S038MH085W004	95.50	88.38	0.666666667	MH085S038	MH085W004			234	CLMH085S038MH085W004	8	0.0305	0.004391	0.06	0.004687	0.06	0.005557	0.07	0.004687	0.06
CLMH085S039MH085W003		1970		Existing		MH085S039	MH085W003		T07213	IRWD	VCP	{41F008FB-BCA4-44C0-9808-813F79815512}	CLMH085S039MH085W003	95.37	90.22	0.500000000	MH085S039	MH085W003			234	CLMH085S039MH085W003	6	0.0220	0.002647	0.05	0.002825	0.05	0.003350	0.06	0.002825	0.05
CLMH085S040MH085W002		1970		Existing		MH085S040	MH085W002		T07213	IRWD	VCP	{C134DBD7-77BC-4460-9EEB-D91E60E410AF}	CLMH085S040MH085W002	96.91	92.12	0.500000000	MH085S040	MH085W002			264	CLMH085S040MH085W002	6	0.0205	0.004959	0.07	0.005293	0.07	0.006278	0.08

CLMH085W004MH085W006		1970		Existing		MH085W004	MH085W006		T07213	IRWD	VCP	{3CD15CB4-BF93-47CB-B167-87ED02C8F314}	CLMH085W004MH085W006	88.16	85.09	0.666666667	MH085W004	MH085W006			264	CLMH085W004MH085W006	8	0.0116	0.031931	0.13	0.034087	0.14	0.0404	17	0.15	0.034087	0.14					
CLMH085W005MH085W007		1970		Existing		MH085W005	MH085W007		T07213	IRWD	VCP	{36E00734-1858-46F3-9432-0826883046 11}	CLMH085W005MH085W007	83.93	81.61	0.666666667	MH085W005	MH085W007			264	CLMH085W005MH085W007	8	0.0088	0.039040	0.16	0.041697	0.16	0.049533	18	0.14	0.041697	0.16					
CLMH085W006MH085W005		1970		Existing		MH085W006	MH085W005		T07213	IRWD	VCP	{3C2B87AE-76A2-4FB3-9239-F898E80BD6CB}	CLMH085W006MH085W005	84.86	84.12	0.666666667	MH085W006	MH085W005			196	CLMH085W006MH085W005	8	0.0038	0.035009	0.17	0.037393	0.18	0.044429	20	0.20	0.037393	0.18					
CLMH085W007MH085W008		1970		Existing		MH085W007	MH085W008		T07213	IRWD	VCP	{776B1ODC-6A62-4EC1-8B2A-B04A0A497A20}	CLMH085W007MH085W008	81.41	81.04	0.666666667	MH085W007	MH085W008			198	CLMH085W007MH085W008	8	0.0019	0.075979	0.30	0.081054	0.31	0.095932	33	0.33	0.081054	0.31					
CLMH085W008MH085W009		1970		Existing		MH085W008	MH085W009		T07213	IRWD	VCP	{BED4BC8F-77EC-4FC1-BAF2-178E243D3001}	CLMH085W008MH085W009	80.83	80.30	0.666666667	MH085W008	MH085W009			264	CLMH085W008MH085W009	8	0.0020	0.083878	0.31	0.089500	0.32	0.105966	39	0.35	0.089500	0.32					
CLMH085W009MH085W010		1971		Existing		MH085W009	MH085W010		T07213	IRWD	VCP	{C1A54670-BD1A-4112-AB46-2C5848D2618C}	CLMH085W009MH085W010	80.25	79.38	0.666666667	MH085W009	MH085W010			379	CLMH085W009MH085W010	8	0.0023	0.093495	0.32	0.099793	0.33	0.118206	36	0.36	0.099792	0.33					
CLMH085W010MH085W011		1971		Existing		MH085W010	MH085W011		T07213	IRWD	VCP	{A40214A8-3897-448C-A92A-9D75S1D23342}	CLMH085W010MH085W011	79.29	78.47	0.666666667	MH085W010	MH085W011			365	CLMH085W010MH085W011	8	0.0022	0.098039	0.33	0.104684	0.34	0.124067	37	0.37	0.104683	0.34					
CLMH085W011MH085W012		1971		Existing		MH085W011	MH085W012		T07213	IRWD	VCP	{FF183649-191E-457C-A005-75CF81B841CA}	CLMH085W011MH085W012	78.37	75.35	0.666666667	MH085W011	MH085W012		15	CLMH085W011MH085W012	8	0.2013	0.060512	0.26	0.064513	0.27	0.076459	29	0.29	0.064512	0.27					
CLMH085W011MH085W013		1971		Existing		MH085W011	MH085W013		T07213	IRWD	PVC	{137AB3BC-0945-4B74-80CA-0871A389EE07}	CLMH085W011MH085W013	78.37	75.71	0.666666667	MH085W011	MH085W013		40	CLMH085W011MH085W013	8	0.0665	0.037520	0.09	0.040166	0.10	0.047604	11	0.11	0.040166	0.10					
CLMH085W012MH085W084		1970		Existing		MH085W012	MH085W084	adverse slope	079	IRWD	ACP	{BA1475C7-B790-41A3-9842-D577938DA4E8}	CLMH085W012MH085W084	75.35	75.06	0.833333333	MH085W012	MH085W084		139	CLMH085W012MH085W084	10	0.0021	0.151538	0.30	0.161982	0.31	0.192563	33	0.33	0.161980	0.31					
CLMH085W013MH085W012		1971		Existing		MH085W013	MH085W012		T07213	IRWD	PVC	{C50E96C4-54A0-4990-80F2-48E9E9FD1179}	CLMH085W013MH085W012	75.59	75.35	0.666666667	MH085W013	MH085W012		45	CLMH085W013MH085W012	8	0.0053	0.091195	0.35	0.097637	0.36	0.116277	43	0.39	0.097636	0.36					
CLMH085W014MH085W015		1971		Existing		MH085W014	MH085W015		T07295	IRWD	VCP	{BA79A8AB-872D-4B32-8000-7CC3D4930734}	CLMH085W014MH085W015	93.94	93.31	0.666666667	MH085W014	MH085W015		260	CLMH085W014MH085W015	8	0.0024	0.002058	0.05	0.002196	0.05	0.002604	06	0.06	0.002196	0.05					
CLMH085W015MH085W016		1971		Existing		MH085W015	MH085W016		T07295	IRWD	VCP	{B4405D85-847E-41FD-B238-9045097F8813}	CLMH085W015MH085W016	93.12	88.52	0.666666667	MH085W015	MH085W016		265	CLMH085W015MH085W016	8	0.0174	0.003960	0.04	0.004226	0.05	0.005011	05	0.05	0.004226	0.05					
CLMH085W016MH085W017		1971		Existing		MH085W016	MH085W017		T07295	IRWD	VCP	{17B22B73-8115-4FFC-83FE-6E4BEA84B566}	CLMH085W016MH085W017	88.33	87.62	0.666666667	MH085W016	MH085W017		98	CLMH085W016MH085W017	8	0.0072	0.006743	0.07	0.007197	0.07	0.008533	08	0.08	0.007197	0.07					
CLMH085W017MH085W018		1971		Existing		MH085W017	MH085W018		T07297	IRWD	VCP	{6B3FC1A2-5CAE-4E56-9ABD-64571D31EDAB}	CLMH085W017MH085W018	87.43	86.91	0.666666667	MH085W017	MH085W018		260	CLMH085W017MH085W018	8	0.0020	0.022169	0.16	0.023687	0.17	0.028162	18	0.18	0.023687	0.17					
CLMH085W018MH085W019		1971		Existing		MH085W018	MH085W019		T07297	IRWD	VCP	{7CC811ECD-B56A-4152-A26C-81604036AD6A}	CLMH085W018MH085W019	86.81	86.80	0.666666667	MH085W018	MH085W019		262	CLMH085W018MH085W019	8	0.0000	0.001608	0.08	0.001765	0.08	0.002295	09	0.09	0.001765	0.08					
CLMH085W018MH085W024		1972		Existing		MH085W018	MH085W024		T07298	IRWD	VCP	{51DB02CD-F4F9-4F6F-8687-7B9A687DAAFF}	CLMH085W018MH085W024	86.81	84.36	0.666666667	MH085W018	MH085W024		84	CLMH085W018MH085W024	8	0.0061	0.020446	0.12	0.021799	0.13	0.025767	14	0.14	0.021799	0.13					
CLMH085W019MH085W020		1971		Existing		MH085W019	MH085W020		T07300	IRWD	VCP	{28E5C0C6-B9E1-45A7-9F57-5295BC0FB09C}	CLMH085W019MH085W020	86.69	85.91	0.666666667	MH085W019	MH085W020		156	CLMH085W019MH085W020	8	0.0050	0.003091	0.05	0.003319	0.05	0.004026	06	0.06	0.003319	0.05					
CLMH085W019MH085W025		1972		Existing		MH085W019	MH085W025		T07297	IRWD	VCP	{6F281A0D-5DC8-4C96-A8B1-28A6026B842B}	CLMH085W019MH085W025	86.69	83.58	0.666666667	MH085W019	MH085W025		400	CLMH085W019MH085W025	8	0.0078	0.004236	0.05	0.004549	0.06	0.005515	06	0.06	0.004549	0.06					
CLMH085W020MH085W006		1972		Existing		MH085W020	MH085W006		T07213	IRWD	VCP	{0110DA33-CCFB-4547-B719-8DD264100199}	CLMH085W020MH085W006	85.81	85.09	0.666666667	MH085W020	MH085W006		125	CLMH085W020MH085W006	8	0.0058	0.003084	0.05	0.003312	0.05	0.004019	06	0.06	0.003312	0.05					
CLMH085W020MH085W021		1972		Existing		MH085W020	MH085W021		T07300	IRWD	VCP	{6AE8A768-64CB-44F1-8155-2B107692A685}	CLMH085W020MH085W021	85.87	84.00	0.666666667	MH085W020	MH085W021		88	CLMH085W020MH085W021	8	0.0212	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00					
CLMH085W021MH085W022		1972		Existing		MH085W021	MH085W022		T07300	IRWD	VCP	{0D0D5E02-13E7-494F-A01C-D9D9A7CA2183}	CLMH085W021MH085W022	84.00	79.86	0.666666667	MH085W021	MH085W022		254	CLMH085W021MH085W022	8	0.0163	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00					
CLMH085W021MH085W026		1972		Existing		MH085W021	MH085W026		T07300	IRWD	VCP	{29DE9675-1A38-4D6D-9C88-45898E50DD71}	CLMH085W021MH085W026	82.00	76.90	0.666666667	MH085W021	MH085W026		360	CLMH085W021MH085W026	8	0.0142	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00					
CLMH085W022MH085W027		1972		Existing		MH085W022	MH085W027		T07300	IRWD	VCP	{1430F6CD-95A0-46A3-A73E-610D527885961}	CLMH085W022MH085W027	79.70	75.87	0.666666667	MH085W022	MH085W027		403	CLMH085W022MH085W027	8	0.0095	0.006076	0.06	0.006487	0.07	0.007691	07	0.07	0.006487	0.07					
CLMH085W023MH085W017		1971		Existing		MH085W023	MH085W017		T07295	IRWD	VCP	{613AA9E3-CF62-4EFB-BC27-B830AF83783A}	CLMH085W023MH085W017	88.26	87.62	0.666666667	MH085W023	MH085W017		354	CLMH085W023MH085W017	8	0.0018	0.015488	0.14	0.016549	0.15	0.019671	16	0.16	0.016549	0.15					
CLMH085W024MH085W044		1972		Existing		MH085W024	MH085W044		T07298	IRWD	VCP	{DF902A33-498C-438C-8E00-440E432824E3}	CLMH085W024MH085W044	84.26	81.75	0.666666667	MH085W024	MH085W044		84	CLMH085W024MH085W044	8	0.0062	0.026594	0.14	0.028374	0.14	0.033623	16	0.16	0.028373	0.14					
CLMH085W025MH085W043		1972		Existing		MH085W025	MH085W043		T07297	IRWD	VCP	{209AC736-1488-4C48-A376-D7FE0C1C9E3C}	CLMH085W025MH085W043	83.48	80.22	0.666666667	MH085W025	MH085W043		408	CLMH085W025MH085W043	8	0.0080	0.010373	0.08	0.011101	0.09	0.013286	10	0.10	0.011101	0.09					
CLMH085W026MH085W042		1972		Existing		MH085W026	MH085W042		T07300	IRWD	VCP	{15F0EB20-7BA4-4A64-8DD0-A1AA03EE63EA}	CLMH085W026MH085W042	76.80	74.38	0.666666667	MH085W026	MH085W042		360	CLMH085W026MH085W042	8	0.0067	0.008084	0.08	0.008559	0.09	0.009948	10	0.10	0.008559	0.09					
CLMH085W027MH085W041		1972		Existing		MH085W027	MH085W041		T07300	IRWD	VCP	{30E75523-62EF-4741-8F65-825402ADBAA3}	CLMH085W027MH085W041	75.77	74.79	0.666666667	MH085W027	MH085W041		403	CLMH085W027MH085W041	8	0.0024	0.006069	0.08	0.006480	0.07	0.007687	08	0.09	0.006480	0.07					
CLMH085W028MH085W040		1972		Existing		MH085W028	MH085W040		T07301	IRWD	VCP	{76F8EA94-163C-4570-B11C-1604DA7991DC}	CLMH085W028MH085W040	74.16	71.95	0.666666667	MH085W028	MH085W040		360	CLMH085W028MH085W040	8	0.0061	0.007819	0.08	0.008348	0.08	0.010235	09	0.09	0.008348	0.08					
CLMH085W029MH085W028		1972		Existing		MH085W029	MH085W028		T07301	IRWD	VCP	{C2B5D879-8D53-4773-AB6C-AB7AE49D4AC2}	CLMH085W029MH085W028	75.54	74.26	0.666666667	MH085W029	MH085W028		341	CLMH085W029MH085W028	8	0.0038	0.004723	0.07	0.005042	0.07	0.005979	07	0.07	0.005042	0.07					
CLMH085W030MH085W029		1972		Existing		MH085W030	MH085W029		T07301	IRWD	VCP	{F98FABB8-CA6E-47AC-A18E-0E8D828BF3D2}	CLMH085W030MH085W029	77.44	75.79	0.500000000	MH085W030	MH085W029		257	CLMH085W030MH085W029	6	0.0064	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00					
CLMH085W030MH085W031		1972		Existing		MH085W030	MH085W031		T07302	IRWD	VCP	{9304A809-508A-4343-8111-017BEC430850}	CLMH085W030MH085W031	77.44	76.25	0.500000000	MH085W030	MH085W031		257	CLMH085W030MH085W031	6	0.0046	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00					
CLMH085W030MH085W039		1972		Existing		MH085W030	MH085W039		T07301	IRWD	VCP	{BF898EE7-8D12-4B22-9CC6-F0364785FC79}	CLMH085W030MH085W039	77.01	75.15	0.666666667	MH085W030	MH085W039		349	CLMH085W030MH085W039	8	0.0053	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00					
CLMH085W033MH085W033		1972		Existing		MH085W033	MH085W033		T07302	IRWD	VCP	{12990786-8ECC-44B4-B180-9A0753578586}	CLMH085W033MH085W033	76.05	75.48	0.666666667	MH085W033	MH085W033		278	CLMH085W033MH085W033	8	0.0021	0.007506	0.10	0.008014	0.10	0.009501	11	0.11	0.008014	0.10					
CLMH085W032MH085W031		1972		Existing		MH085W032	MH085W031		T07302	IRWD	VCP	{421F9C03-B8D4-498B-ADF4-242F976051O6}	CLMH085W032MH085W031	77.41	76.25	0.500000000	MH085W032	MH085W031		254	CLMH085W032MH085W031	6	0.0046	0.002117	0.06	0.002259	0.06	0.002679	07	0.07	0.002259	0.06					
CLMH085W033MH085W035		1972		Existing		MH085W033	MH085W035		T07302	IRWD	VCP	{6FA24A59-4B12-4881-851A-DA28960C1A19}	CLMH085W033MH085W035	75.37	74.83	0.666666667	MH085W033	MH085W035		271	CLMH085W033MH085W035	8	0.0020	0.012031	0.12	0.012845	0.13	0.015229	14	0.14	0.012845	0.13					
CLMH085W034MH085W033		1972		Existing		MH085W034	MH085W033		T07302	IRWD	VCP	{34626B38-5DBD-4595-94EF-BA55F12A5DD5}	CLMH085W034MH085W033	76.75	75.48	0.500000000	MH085W034	MH085W033		253	CLMH085W034MH085W033	6	0.0050	0.004528	0.09	0.004834	0.09	0.005730	10	0.10	0.004834	0.09					
CLMH085W035MH085W037		1972		Existing		MH085W035	MH085W037		T07302	IRWD	VCP	{63FE2482-A795-4E66-9473-FC79FC751D46}	CLMH085W035MH085W037	74.73	74.20	0.666666667	MH085W035	MH085W037		156	CLMH085W035MH085W037	8	0.0034	0.012850	0.12	0.013799	0.13	0.015856	12	0.12	0.013799	0.13	0.015856	0.12
CLMH085W036MH085W032		1972		Existing		MH085W036	MH085W032		T07302	IRWD	VCP	{EE7AF4D1-5E07-4859-B6C4-DFEA03BA37CA}	CLMH085W036MH085W032	75.44	74.87	0.666666667	MH085W036	MH085W032		253	CLMH085W036MH085W032	8	0.0035	0.002823	0.06	0.003012	0.06	0.003571	07	0.07	0.003012	0.06	0.003571	0.06
CLMH085W037MH085W038		1972		Existing		MH085W037	MH085W038		T07302	IRWD	VCP	{BC914479-48B5-422C-906F-B52D2FA95366}	CLMH085W037MH085W038	74.01	73.08	0.666666667	MH085W037	MH085W038		257	CLMH085W037MH085W038	8	0.0036	0.017410	0.13	0.018592	0.13	0.022045	14	0.14	0.018592	0.13		
CLMH085W038MH085W040		1972		Existing		MH085W038	MH085W040		T07301	IRWD	VCP	{07300F2B-2FC4-479C-B6A9-15ABF9BE5A98}	CLMH085W038MH085W040	72.98	72.05	0.666666667	MH085W038	MH085W040		257	CLMH085W038MH085W040	8	0.0036	0.026898	0.15	0.028724	0.16	0.034063	17	0.17	0.028724	0.16		
CLMH085W038MH085W039		1972		Existing		MH085W038	MH085W039		T07301	IRWD	VCP	{DACD756C-2693-4793-BCAC-238ZC740BA0A}	CLMH085W038MH085W039	75.05	73.18	0.666666667	MH085W038	MH085W039		352	CLMH085W038MH085W039	8	0.0053	0.005998	0.07	0.006403	0.07	0.007592	08	0.08	0.006403	0.07		
CLMH085W040MH085W073		1972		Existing		MH085W040	MH085W073		T07301	IRWD	VCP	{F47FCB3E-78BA-41D1-A686-D1B825A45E0D}	CLMH085W040MH085W073	71.86	70.13	0.666666667	MH085W040	MH085W073		454	CLMH085W040MH085W073	8	0.0038	0.038970	0.18	0.041621	0.19	0.049361	21	0.21	0.041621	0.19		
CLMH085W041MH085W071		1972		Existing		MH085W041	MH085W071		T07303	IRWD	VCP	{70875F80-91C6-4BDB-932B-23C0751EF68B}	CLMH085W041MH085W071	74.69	68.84	0.666666667	MH085W041	MH085W071		403	CLMH085W041MH085W071	8	0.0145	0.011002	0.08	0.011747	0.08	0.013935	08	0.08	0.011747	0.08		
CLMH085W042MH085W067		1972		Existing		MH085W042	MH085W067		T07300	IRWD	VCP	{FB83D180-FC4A-489D-9854-252062289C33}	CLMH085W042MH085W067	74.29	74.01	0.666666667	MH085W042	MH085W067		263	CLMH085W042MH085W067	8	0.0009	0.014287	0.16	0.015254	0.16	0.018093	18	0.18	0.015254	0.16		
CLMH085W043MH085W062		1972		Existing		MH085W043	MH085W062		T07297	IRWD	VCP	{729C02A8-4843-4F0B-ABAC-5DCA74C4198T}	CLMH085W043MH085W062	80.12	77.08	0.666666667	MH085W043	MH085W062		334	CLMH085W043MH085W062	8	0.0091	0.038906	0.16	0.043705	0.16	0.051980	18	0.18	0.043704	0.16		
CLMH085W044MH085W043		1972		Existing		MH085W044	MH085W043		T07297	IRWD	VCP	{67BAF65E-D5C6-447D-AADF-B7EC5EEB2F8E}	CLMH085W044MH085W043	81.55	80.37	0.666666667	MH085W044	MH085W043		548	CLMH085W044MH085W043	8	0.0048	0.030660	0.16	0.032726	0.16	0.038728	16	0.16	0.032726	0.16		
CLMH085W045MH085W023		1971		Existing		MH085W045	MH085W023		T07295	IRWD	VCP	{EE0E9847-B09F-4A31-8BA1-90E7A015E8D8}	CLMH085W045MH085W023	89.08	88.37	0.666666667	MH085W045	MH085W023		343	CLMH085W045MH085W023	8	0.0021	0.009728	0.11	0.010392	0.11	0.012339	12	0.12	0.010392	0.11		
CLMH085W046MH085W047		1971		Existing		MH085W046	MH085W047		T07295	IRWD	VCP	{0AEA0791-6AEF-489B-A073-1E7410A3DAA4}	CLMH085W046MH085W047	90.47	90.02	0.666666667	MH085W046	MH085W047		224	CLMH085W046MH085W047	8	0.0020	0.004136	0.07	0.004415	0.08	0.005234	08	0.08	0.004415	0.08		
CLMH085W047MH085W045		1971		Existing		MH085W047	MH085W045		T07295	IRWD	VCP	{1274DB15-8867-4EDE-ACA6-67F8CDC28CE3}	CLMH085W047MH085W045	89.83	89.29	0.666666667	MH085W047	MH085W045		256	CLMH085W047MH085W045	8	0.0021	0.004130	0.07	0.004411	0.08	0.005232	08	0.08	0.004411	0.08		
CLMH085W048MH085W047		1971		Existing		MH085W048	MH085W047		T07295	IRWD	VCP	{F2C6BFAF-E576-42A7-8FAD-08F768AF2955}	CLMH085W048MH085W047	90.54	90.02	0.666666667	MH085W048	MH085W047		252	CLMH085W048MH085W047	8	0.0021	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00		
CLMH085W048MH085W049		1971		Existing		MH085W048	MH085W049		T07295	IRWD	VCP	{24AD498C-EC2E-4D98-951C-8ACA523F7DC}	CLMH085W048MH085W049	90.54	82.06	0.500000000	MH085W048	MH085W049		216	CLMH085W048MH085W049	6	0.0393	0.000000	0.00	0.000000	0.00	0.000000	00	0.00	0.000000	0.00		
CLMH085W049MH085W053		1972		Existing		MH085W049	MH085W053		T07296	IRWD	VCP	{7FA77F9D-CD74-4C34-8E38-B67ECFE285A6}	CLMH085W049MH085W053	81.84	81.19	0.666666667	MH085W049	MH085W053		265	CLMH085W049MH085W053	8	0.0025	0.012699	0.12	0.013559	0.12	0.016076	13	0.13	0.013559	0.12		
CLMH085W050MH085W049		1971		Existing		MH085W050	MH085W049		T07296	IRWD	VCP	{1D56413A-327B-486B-8089-27C0176EF9E}	CLMH085W050MH085W049	82.94	82.06	0.666666667	MH085W050	MH085W049		349	CLMH085W050MH085W049	8	0.0025	0.008721	0.10	0.009311	0.10	0.011040	11	0.11	0.009311	0.10		
CLMH085W051MH085W045		1971		Existing		MH085W051	MH085W045		T07295	IRWD	VCP	{8872BCFF-99D9-4385-A3BF-EF641FA7296}	CLMH085W051MH085W045	89.45	89.19	0.666666667	MH085W051	MH085W045		154	CLMH085W051MH085W045	8	0.0017	0.005626	0.09	0.006007	0.09	0.007121	10	0.10	0.006007	0.09		
CLMH085W052MH085W053		1971		Existing		MH085W052	MH085W053		T07296	IRWD	VCP	{10595457-9EE3-485C-A9FD-C98EE87C68A}	CLMH085W052MH085W053	82.63	81.09	0.666666667	MH085W052	MH085W053		208	CLMH085W052MH085W053	8	0.0128	0.003705	0.05	0.004089	0.05	0.003956	05	0.05	0.003956	0.05		
CLMH085W053MH085W054		1971		Existing		MH085W053	MH085W054		T07296	IRWD	VCP	{C13EAA9E-F792-4119-9CE4-A0E56B5170FD}	CLMH085W053MH085W054	81.00	77.63	0.666666667	MH085W053	MH085W054		403	CLMH085W053MH085W054	8	0.0084	0.016402	0.10	0.017513	0.11	0.020764	12	0.12	0.017513	0.11		
CLMH085W054MH085W055		1971		Existing		MH085W054	MH085W055		T07296	IRWD	VCP	{EF5D4FF7-26A8-48A6-9A8F-A260 1A2BED01}	CLMH085W054MH085W055	77.54	74.30	0.666666667	MH085W054	MH085W055		418	CLMH085W054MH085W055	8	0.0078	0.016398	0.11	0.017508	0.11	0.020759	12	0.12	0.017508	0.11		
CLMH085W055MH085W059		1971		Existing		MH085W055	MH085W059		T07297	IRWD	VCP	{BAE1C29F-D52A-4C21-9ED6-47934150A900}	CLMH085W055MH085W059	74.09	72.30	0.666666667	MH085W055	MH085W059		250	CLMH085W055MH085W059	8	0.0072	0.025507	0.13	0.027235	0.14	0.033291	15	0.15	0.027235	0.14		
CLMH085W056MH085W055		1971		Existing		MH085W056	MH085W055		T07258	IRWD	VCP	{C6D78EF6-9BFC-4FA9-B7EE-B0F6A3B77090}	CLMH085W056MH085W055	74.81	74.30	0.666666667	MH085W056	MH085W055		108	CLMH085W056MH085W055	8	0.0047	0.009114	0.09	0.009731	0.09	0.011537	10	0.10	0.009731	0.09		
CLMH085W057MH085W056		1971		Existing		MH085W057	MH085W056		T07258	IRWD	VCP	{70ABC7DC-88FA-485B-AADE-FB1CD188 2BB0}	CLMH085W057MH085W056	75.86	75.01	0.666666667	MH085W057	MH085W056		260	CLMH085W057MH085W056	8	0.0033	0.004723	0.07	0.005044	0.07	0.005979	08	0.08	0.005044	0.07		
CLMH085W058MH085W057		1971		Existing		MH085W058	MH085W057		T07258	IRWD	VCP	{00E01ED8-6CAA-4297-8A00-C8817AFE29C6}	CLMH085W058MH085W057	77.38	76.05	0.500000000	MH085W058	MH085W057		273	CLMH085W058MH085W057	6	0.0049	0.003743	0.08	0.003998	0.08	0.004739	09	0.09	0.003998	0.08		
CLMH085W059MH085W064		1972		Existing		MH085W059	MH085W064		T07297	IRWD	VCP	{E9916493-B124-4CF0-9B31-4B95B627B0A5}	CLMH085W059MH085W064	72.19	71.26	0.666666667	MH085W059	MH085W064		260	CLMH085W059MH085W064	8	0.0036	0.040700	0.19	0.043459	0.20	0.051532	21	0.21	0.043459	0.20		
CLMH085W060MH085W059		1972		Existing		MH085W060	MH085W059		T07297	IRWD	VCP	{5873CCDC-01DC-406B-920S-258F336 3B5F}	CLMH085W060MH085W059	75.00	72.40	0.666666667	MH085W060	MH085W059		422	CLMH085W060MH085W059	8	0.0062	0.013911	0.09	0.012719	0.10	0.015081	11	0.11	0.012719	0.10		
CLMH085W061MH085W060		1972		Existing		MH085W061	MH085W060		T07297	IRWD	VCP	{EA72454A-50E8-4CA3-B276-547A070C2704}	CLMH085W061MH085W060	77.19	75.09	0.666666667	MH085W061	MH085W060		422	CLMH085W061MH085W060	8	0.0050	0.002820	0.05	0.003012	0.05	0.003571	05	0.05	0.003012	0.05		
CLMH085W062MH085W063		1972		Existing		MH085W062	MH085W063		T07297	IRWD	VCP	{DE3036C2-A9F1-4938-A325-735D465E1DBC}	CLMH085W062MH085W063	75.98	73.72	0.666666667	MH085W062	MH085W063		422	CLMH085W062MH085W063	8	0.0054	0.045251	0.19	0.048370	0.19	0.057574	21	0.21	0.048369	0.19		
CLMH085W063MH085W064		1972		Existing		MH085W063	MH085W064		T07297	IRWD	VCP	{F83950A2-027C-485E-AFAA-97B91E522O9A}	CLMH085W063MH085W064	73.62	71.36	0.666666667	MH085W063	MH085W064		422	CLMH085W063MH085W064	8	0.0054	0.044984	0.19	0.048104	0.19	0.057306	21	0.21	0.048103	0.19		
CLMH085W064MH085W065		1972		Existing		MH085W064	MH085W065		T07297	IRWD	VCP	{47BCC611-670F-46ED-B58D-EC954FC3A37B}	CLMH085W064MH085W065	71.16	70.22	0.666666667	MH085W064	MH085W065		200	CLMH085W064MH085W065	8	0.0047	0.090797	0.27	0.097051	0.28	0.115408	31	0.31	0.097050	0.28		
CLMH085W065MH085W068		1972		Existing		MH085W065	MH085W068		T07297	IRWD	VCP	{3DFE053B-4396-43E4-B8D1-A2C8741BCD40}	CLMH085W065MH085W068	70.12	63.08	0.666666667	MH085W065	MH085W068		216	CLMH085W065MH085W068	8	0.0326	0.117702	0.20	0.125791	0.20	0.149538	22	0.22	0.125789	0.20		
CLMH085W066MH085W065		1972		Existing		MH085W066	MH085W065		T07297	IRWD	VCP	{72914A16-57CB-4FBD-B4ED-98AC020DB3AC}	CLMH085W066MH085W065	72.33	70.31	0.666666667	MH085W066	MH085W065		330	CLMH085W066MH085W065

CLMH086E050MH086E049		1976		Existing		MH086E050	MH086E049		T08691	IRWD	VCP	{8478A341-EC3B-4889-9062-9EA1ADCE19B1}	CLMH086E050MH086E049	77.06	75.55	0.666666667	MH086E050	MH086E049				236	CLMH086E050MH086E049	8	0.0064	0.000836	0.02	0.000891	0.02	0.001049	0.03	0.000891	0.02
CLMH086E050MH086E051		1976		Existing		MH086E050	MH086E051		T08691	IRWD	VCP	{D7A18CAA-8E27-48B2-96EB-EDC6FAB64841}	CLMH086E050MH086E051	77.06	74.15	0.666666667	MH086E050	MH086E051				218	CLMH086E050MH086E051	8	0.0133	0.001398	0.03	0.001496	0.03	0.001781	0.03	0.001496	0.03
CLMH086E051MH086E052		1976		Existing		MH086E051	MH086E052		T08691	IRWD	VCP	{8C9EBB12-35F5-45DF-9F8F-79703CB88072}	CLMH086E051MH086E052	73.91	73.01	0.666666667	MH086E051	MH086E052				226	CLMH086E051MH086E052	8	0.0040	0.024596	0.15	0.026263	0.15	0.031145	0.16	0.026263	0.15
CLMH086E052MH086E053		1976		Existing		MH086E052	MH086E053		T08691	IRWD	VCP	{F0E63EFF-0282-4F0F-A525-B63B00450EA0}	CLMH086E052MH086E053	72.91	72.02	0.666666667	MH086E052	MH086E053				232	CLMH086E052MH086E053	8	0.0038	0.027984	0.16	0.029879	0.16	0.035435	0.18	0.029879	0.16
CLMH086E053MH086E054		1976		Existing		MH086E053	MH086E054		T08691	IRWD	VCP	{1FB63959-B8EE-40BC-B696-1A83BFBCD8B8}	CLMH086E053MH086E054	71.83	70.50	0.666666667	MH086E053	MH086E054				246	CLMH086E053MH086E054	8	0.0054	0.055280	0.21	0.059023	0.21	0.069989	0.23	0.059023	0.21
CLMH086E054MH086E057		1975		Existing		MH086E054	MH086E057		T08691	IRWD	VCP	{7180954A-309B-4879-BE2A-ED8122CE3D46}	CLMH086E054MH086E057	70.40	69.22	0.666666667	MH086E054	MH086E057				227	CLMH086E054MH086E057	8	0.0052	0.073552	0.24	0.078535	0.25	0.093142	0.27	0.078535	0.25
CLMH086E055MH086E054		1976		Existing		MH086E055	MH086E054		T08691	IRWD	VCP	{B7B29481-AFC5-4EBB-84AA-CF3CC7A4D556}	CLMH086E055MH086E054	72.59	70.59	0.666666667	MH086E055	MH086E054				346	CLMH086E055MH086E054	8	0.0058	0.015563	0.11	0.016616	0.11	0.019713	0.12	0.016616	0.11
CLMH086E056MH086E055		1976		Existing		MH086E056	MH086E055		T08691	IRWD	VCP	{620ECE1D-587F-46FC-A598-51F51B674BE1}	CLMH086E056MH086E055	74.11	72.69	0.666666667	MH086E056	MH086E055				352	CLMH086E056MH086E055	8	0.0040	0.010791	0.10	0.011521	0.10	0.013666	0.11	0.011521	0.10
CLMH086E057MH086N009		1975		Existing		MH086E057	MH086N009		T08690	IRWD	VCP	{497C5AFD-4C6F-442D-9E28-6E7F98EA555C}	CLMH086E057MH086N009	69.12	67.94	0.666666667	MH086E057	MH086N009				226	CLMH086E057MH086N009	8	0.0052	0.085586	0.26	0.091385	0.27	0.108387	0.29	0.091385	0.27
CLMH086E058MH086E057		1975		Existing		MH086E058	MH086E057		T08690	IRWD	VCP	{F2EBD86C-1FD3-4959-A017-9D257D50E052}	CLMH086E058MH086E057	71.80	69.34	0.666666667	MH086E058	MH086E057				396	CLMH086E058MH086E057	8	0.0062	0.010308	0.09	0.011006	0.09	0.013049	0.10	0.011006	0.09
CLMH086E059MH086E058		1975		Existing		MH086E059	MH086E058		T08690	IRWD	VCP	{8C030274-C24C-422F-8671-D0910B7205D2}	CLMH086E059MH086E058	74.33	71.91	0.666666667	MH086E059	MH086E058				390	CLMH086E059MH086E058	8	0.0062	0.001784	0.04	0.001904	0.04	0.002257	0.04	0.001904	0.04
CLMH086E060MH086E051		1974		Existing		MH086E060	MH086E051		T08691	IRWD	VCP	{2F471A3F-D93B-4827-B85C-3546584AF0F0}	CLMH086E060MH086E051	74.61	74.01	0.666666667	MH086E060	MH086E051				127	CLMH086E060MH086E051	8	0.0040	0.021044	0.13	0.022466	0.14	0.026638	0.15	0.022466	0.14
CLMH086E061MH086E060		1976		Existing		MH086E061	MH086E060		T08691	IRWD	VCP	{EEAD89CE-48B3-4FA2-A639-EB96A50DE11B}	CLMH086E061MH086E060	74.94	74.62	0.666666667	MH086E061	MH086E060				80	CLMH086E061MH086E060	8	0.0040	0.019482	0.13	0.020799	0.13	0.024661	0.14	0.020799	0.13
CLMH086E062MH086E045		1974		Existing		MH086E062	MH086E045		T08692	IRWD	VCP	{A316FA53-3351-42C5-9831-8F3A8ADFFAF3}	CLMH086E062MH086E045	83.06	79.23	0.666666667	MH086E062	MH086E045				227	CLMH086E062MH086E045	8	0.0169	0.004096	0.05	0.004374	0.05	0.005185	0.05	0.004374	0.05
CLMH086E062MH086E063		1976		Existing		MH086E062	MH086E063		T08692	IRWD	VCP	{8A26C933-BA94-47EB-9745-31193832BA3B}	CLMH086E062MH086E063	83.19	82.00	0.666666667	MH086E062	MH086E063				272	CLMH086E062MH086E063	8	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH086E063MH086E064		1976		Existing		MH086E063	MH086E064		T08692	IRWD	VCP	{2D9C125A-2B80-498D-BA7D-F2040C274238}	CLMH086E063MH086E064	81.80	78.83	0.666666667	MH086E063	MH086E064				412	CLMH086E063MH086E064	8	0.0072	0.003764	0.05	0.004018	0.05	0.004763	0.06	0.004018	0.05
CLMH086E064MH086E065		1975		Existing		MH086E064	MH086E065		T08692	IRWD	VCP	{0500FE6E-A2A7-483A-9806-B68E846D31B4}	CLMH086E064MH086E065	78.51	76.45	0.666666667	MH086E064	MH086E065				332	CLMH086E064MH086E065	8	0.0062	0.006624	0.07	0.007073	0.07	0.008386	0.08	0.007073	0.07
CLMH086E065MH086E061		1976		Existing		MH086E065	MH086E061		T08691	IRWD	VCP	{D3BB58B2-7A93-49E8-8647-3E343E0D0089}	CLMH086E065MH086E061	76.36	75.06	0.666666667	MH086E065	MH086E061				179	CLMH086E065MH086E061	8	0.0073	0.019482	0.12	0.020800	0.12	0.024661	0.13	0.020800	0.12
CLMH086E066MH086E065		1976		Existing		MH086E066	MH086E065		T08692	IRWD	VCP	{E1B47FB3-C119-4F23-8BF6-65FEAAE2A133}	CLMH086E066MH086E065	78.31	76.55	0.666666667	MH086E066	MH086E065				371	CLMH086E066MH086E065	8	0.0047	0.007488	0.08	0.007993	0.08	0.009477	0.09	0.007993	0.08
CLMH086E067MH086E066		1974		Existing		MH086E067	MH086E066		T08692	IRWD	VCP	{FDD1D648-376B-4E5D-BC95-EFE18D1D5CAB}	CLMH086E067MH086E066	79.79	78.41	0.666666667	MH086E067	MH086E066				265	CLMH086E067MH086E066	8	0.0052	0.003587	0.05	0.003828	0.06	0.004541	0.06	0.003828	0.06
CLMH086E068MH086E056		1976		Existing		MH086E068	MH086E056		T08691	IRWD	VCP	{9CC4D98B-4AFF-4EAA-8337-127667311887}	CLMH086E068MH086E056	74.95	74.20	0.666666667	MH086E068	MH086E056				189	CLMH086E068MH086E056	8	0.0040	0.010797	0.10	0.011526	0.10	0.013669	0.11	0.011526	0.10
CLMH086E069MH086E068		1978		Existing		MH086E069	MH086E068		T08405	IRWD	VCP	{4AAAF6DD-CB48-478D-90A1-18B4095D7E795}	CLMH086E069MH086E068	76.94	75.05	0.666666667	MH086E069	MH086E068				328	CLMH086E069MH086E068	8	0.0058	0.001666	0.04	0.001778	0.04	0.002109	0.04	0.001778	0.04
CLMH086E070MH086E071		1976		Existing		MH086E070	MH086E071		T08405	IRWD	VCP	{CB048A0A-6A71-4C49-8749-4179D530C77B}	CLMH086E070MH086E071	78.52	77.95	0.666666667	MH086E070	MH086E071				142	CLMH086E070MH086E071	8	0.0040	0.000745	0.02	0.000796	0.02	0.000942	0.03	0.000796	0.02
CLMH086E071MH086E072		1976		Existing		MH086E071	MH086E072		T08405	IRWD	VCP	{EA89D066-15B9-43D0-9515-B78A468BE7C}	CLMH086E071MH086E072	77.86	76.66	0.666666667	MH086E071	MH086E072				300	CLMH086E071MH086E072	8	0.0040	0.004331	0.06	0.004624	0.06	0.005483	0.07	0.004624	0.06
CLMH086E072MH086E068		1975		Existing		MH086E072	MH086E068		T08405	IRWD	VCP	{A726B112-0D82-4064-AC5D-5F48CC256173}	CLMH086E072MH086E068	76.55	75.16	0.666666667	MH086E072	MH086E068				293	CLMH086E072MH086E068	8	0.0047	0.009132	0.09	0.009749	0.09	0.011561	0.10	0.009749	0.09
CLMH086E073MH086E074		1974		Existing		MH086E073	MH086E074		A00267	IRWD	VCP	{5C70328B-BF68-487E-AEF2-CC3747E9733A}	CLMH086E073MH086E074	77.97	76.23	0.666666667	MH086E073	MH086E074				338	CLMH086E073MH086E074	8	0.0051	0.023355	0.14	0.024962	0.14	0.029688	0.15	0.024962	0.14
CLMH086E074MH086E075		1975		Existing		MH086E074	MH086E075		A00267	IRWD	VCP	{13F67050-27AA-4B5E-A583-9826935A43A7}	CLMH086E074MH086E075	76.13	74.65	0.666666667	MH086E074	MH086E075				301	CLMH086E074MH086E075	8	0.0049	0.023301	0.14	0.024910	0.14	0.029639	0.15	0.024910	0.14
CLMH086E075MH086N048		1975		Existing		MH086E075	MH086N048		A00267	IRWD	VCP	{3A58D083-319E-4A86-8917-F105AC620332}	CLMH086E075MH086N048	74.55	70.94	0.666666667	MH086E075	MH086N048				329	CLMH086E075MH086N048	8	0.0110	0.023263	0.12	0.024871	0.12	0.029606	0.13	0.024871	0.12
CLMH086E076MH086E073	NO ASBUILT FOUND	0		Existing		MH086E076	MH086E073					{CFA00742-9D85-45E9-AB52-0FE05ED91DEC}	CLMH086E076MH086E073	79.98	77.97	0.666666667	MH086E076	MH086E073				338	CLMH086E076MH086E073	8	0.0059	0.023471	0.14	0.025076	0.14	0.029784	0.16	0.025076	0.14
CLMH086E077MH086E076	NO ASBUILT FOUND	0		Existing		MH086E077	MH086E076					{E3206AA7-6D78-480E-99A6-EC3796AF1E38}	CLMH086E077MH086E076	80.90	79.98	0.666666667	MH086E077	MH086E076				338	CLMH086E077MH086E076	8	0.0027	0.006408	0.11	0.006843	0.11	0.008113	0.12	0.006843	0.11
CLMH086E078MH086E077	NO ASBUILT FOUND	0		Existing		MH086E078	MH086E077					{22F84585-BBAE-4120-B2EC-3685E1798F5E}	CLMH086E078MH086E077	86.50	80.90	0.666666667	MH086E078	MH086E077				338	CLMH086E078MH086E077	8	0.0166	0.002449	0.06	0.002616	0.06	0.003101	0.07	0.002616	0.06
CLMH086E079MH086E080	NO ASBUILT FOUND	0		Existing		MH086E079	MH086E080					{EDC5C54E-15F2-4D2D-8753-27821BE61AF}	CLMH086E079MH086E080	86.59	81.50	0.666666667	MH086E079	MH086E080				338	CLMH086E079MH086E080	8	0.0151	0.003137	0.08	0.003348	0.08	0.003969	0.09	0.003348	0.08
CLMH086E080MH086E076	NO ASBUILT FOUND	0		Existing		MH086E080	MH086E076					{33DFBC9C-3561-4F67-BAB4-A96F60BF03DC}	CLMH086E080MH086E076	81.50	79.98	0.666666667	MH086E080	MH086E076				338	CLMH086E080MH086E076	8	0.0045	0.015683	0.13	0.016752	0.13	0.019891	0.14	0.016752	0.13
CLMH086E081MH086E082	NO ASBUILT FOUND	0		Existing		MH086E081	MH086E082					{506A77AB-7151-45DC-8163-29E6FE3A1EE4}	CLMH086E081MH086E082	85.32	82.30	0.666666667	MH086E081	MH086E082				338	CLMH086E081MH086E082	8	0.0089	0.006743	0.09	0.007199	0.10	0.008535	0.10	0.007199	0.10
CLMH086E082MH086E080	NO ASBUILT FOUND	0		Existing		MH086E082	MH086E080					{ABFC13C9C-EE40-4FBC-ABD4-08721B71B7CA}	CLMH086E082MH086E080	82.30	81.50	0.666666667	MH086E082	MH086E080				338	CLMH086E082MH086E080	8	0.0024	0.010986	0.12	0.011731	0.12	0.013922	0.13	0.011731	0.12
CLMH086E083MH086E081	NO ASBUILT FOUND	0		Existing		MH086E083	MH086E081					{0F2724D0-9AAD-428E-A82A-3E0B64CA5326}	CLMH086E083MH086E081	87.01	85.32	0.666666667	MH086E083	MH086E081				338	CLMH086E083MH086E081	8	0.0050	0.002725	0.06	0.002909	0.06	0.003448	0.07	0.002909	0.06
CLMH086E084MH086E082	NO ASBUILT FOUND	0		Existing		MH086E084	MH086E082					{388E4D88-6159-4AA8-9F79-8B3229280AA1}	CLMH086E084MH086E082	82.90	82.30	0.666666667	MH086E084	MH086E082				338	CLMH086E084MH086E082	8	0.0018	0.003798	0.10	0.004054	0.10	0.004812	0.11	0.004054	0.10
CLMH086E085MH086E084	NO ASBUILT FOUND	0		Existing		MH086E085	MH086E084					{A84D5F80-15AA-426B-976F-2540438E1CA}	CLMH086E085MH086E084	84.59	82.90	0.666666667	MH086E085	MH086E084				338	CLMH086E085MH086E084	8	0.0050	0.001921	0.06	0.002050	0.06	0.002432	0.07	0.002050	0.06
CLMH086E086MH086E087		1975		Existing		MH086E086	MH086E087		T08693	IRWD	VCP	{10C7285A-6BF2-457C-9885-0593F07229B2}	CLMH086E086MH086E087	84.65	82.01	0.666666667	MH086E086	MH086E087				165	CLMH086E086MH086E087	8	0.0160	0.000726	0.02	0.000775	0.02	0.000918	0.02	0.000775	0.02
CLMH086E087MH086E088		1975		Existing		MH086E087	MH086E088		T08693	IRWD	VCP	{595D0051F-A55C-4321-81CD-E8C93F953334}	CLMH086E087MH086E088	81.91	81.51	0.666666667	MH086E087	MH086E088				208	CLMH086E087MH086E088	8	0.0040	0.001607	0.04	0.001718	0.04	0.002035	0.04	0.001718	0.04
CLMH086E088MH086E089		1975		Existing		MH086E088	MH086E089		T08693	IRWD	VCP	{9647B813-2D7D-4E6F-87EB-41D4F73AA1A3}	CLMH086E088MH086E089	81.41	80.69	0.666666667	MH086E088	MH086E089				182	CLMH086E088MH086E089	8	0.0040	0.003156	0.05	0.003371	0.06	0.003996	0.06	0.003371	0.06
CLMH086E089MH086E090		1975		Existing		MH086E089	MH086E090		T08693	IRWD	VCP	{34513C9E-E343-4ED1-B9FC-07405FC5E361}	CLMH086E089MH086E090	80.58	80.04	0.666666667	MH086E089	MH086E090				135	CLMH086E089MH086E090	8	0.0040	0.005390	0.07	0.005757	0.07	0.006825	0.08	0.005757	0.07
CLMH086E090MH086E097		1975		Existing		MH086E090	MH086E097		T08693	IRWD	VCP	{91155D9F-D909-46EC-8ECD-1292BAAF1DDD}	CLMH086E090MH086E097	79.94	79.12	0.666666667	MH086E090	MH086E097				205	CLMH086E090MH086E097	8	0.0040	0.008212	0.09	0.008770	0.09	0.010397	0.10	0.008770	0.09
CLMH086E091MH086E092		1975		Existing		MH086E091	MH086E092		T08693	IRWD	VCP	{1C3309B5-423B-42AB-8794-F8DCDC2E8A6C}	CLMH086E091MH086E092	83.91	82.31	0.666666667	MH086E091	MH086E092				160	CLMH086E091MH086E092	8	0.0100	0.000353	0.01	0.000376	0.01	0.000446	0.01	0.000376	0.01
CLMH086E092MH086E094		1975		Existing		MH086E092	MH086E094		T08693	IRWD	VCP	{54D7BB12-0229-49AA-A35C-2E7F7389CF5E}	CLMH086E092MH086E094	82.22	81.37	0.666666667	MH086E092	MH086E094				204	CLMH086E092MH086E094	8	0.0040	0.001843	0.04	0.001966	0.04	0.002331	0.05	0.001966	0.04
CLMH086E093MH086E092		1975		Existing		MH086E093	MH086E092		T08693	IRWD	VCP	{3C7763AF-9582-4F07-93F2-E213E4204DF0}	CLMH086E093MH086E092	83.93	82.31	0.666666667	MH086E093	MH086E092				134	CLMH086E093MH086E092	8	0.0121	0.001490	0.03	0.001590	0.03	0.001885	0.03	0.001590	0.03
CLMH086E094MH086E095		1975		Existing		MH086E094	MH086E095		T08693	IRWD	VCP	{F7246606-AE42-4D6F-9DC2-43CCF8AF24BF}	CLMH086E094MH086E095	81.27	80.27	0.666666667	MH086E094	MH086E095				165	CLMH086E094MH086E095	8	0.0061	0.002882	0.05	0.003076	0.05	0.003646	0.05	0.003076	0.05
CLMH086E095MH086E096		1975		Existing		MH086E095	MH086E096		T08693	IRWD	VCP	{AF57B144-A7DF-468E-81A3-1964DBD949DB}	CLMH086E095MH086E096	80.18	79.91	0.666666667	MH086E095	MH086E096				68	CLMH086E095MH086E096	8	0.0040	0.005470	0.07	0.005838	0.07	0.006921	0.08	0.005838	0.07
CLMH086E096MH086E097		1975		Existing		MH086E096	MH086E097		T08693	IRWD	VCP	{EC1DC06D-9B06-45A1-B707-AF283E25CD0A}	CLMH086E096MH086E097	79.80	79.08	0.666666667	MH086E096	MH086E097				90	CLMH086E096MH086E097	8	0.0080	0.005470	0.06	0.005838	0.06	0.006921	0.07	0.005838	0.06
CLMH086E097MH086E098		1975		Existing		MH086E097	MH086E098		T08693	IRWD	VCP	{73867428-CD5A-473E-81C8-CEE2F890E174}	CLMH086E097MH086E098	78.98	77.02	0.666666667	MH086E097	MH086E098				82	CLMH086E097MH086E098	8	0.0239	0.013681	0.07	0.014609	0.08	0.017318	0.08	0.014609	0.08
CLMH086E098MH086E102		1975		Existing		MH086E098	MH086E102		T08693	IRWD	VCP	{73843332-6001-46B8-AB64-02E59DED381A}	CLMH086E098MH086E102	76.93	76.41	0.666666667	MH086E098	MH086E102				131	CLMH086E098MH086E102	8	0.0040	0.022027	0.14	0.023523	0.14	0.027883	0.15	0.023523	0.14
CLMH086E099MH086E098		1975		Existing		MH086E099	MH086E098		T08693	IRWD	VCP	{47F5D819-540E-4D3D-A23C-22C18BDF5CB5}	CLMH086E099MH086E098	77.37	77.02	0.666666667	MH086E099	MH086E098				84	CLMH086E099MH086E098	8	0.0042	0.008347	0.08	0.008915	0.09	0.010566	0.10	0.008915	0.09
CLMH086E100MH086E099		1975		Existing		MH086E100	MH086E099		T08693	IRWD	VCP	{FB87CF92-422F-4040-9F18-6C567CE3F970}	CLMH086E100MH086E099	77.80	77.47	0.666666667	MH086E100	MH086E099				83	CLMH086E100MH086E099	8	0.0040	0.007230	0.08	0.007722	0.08	0.009152	0.09	0.007722	0.08
CLMH086E102MH086E103		1974		Existing		MH086E102	MH086E103		T08693	IRWD	VCP	{3A68AA66-2704-4413-83EF-4DE8EAC89F3}	CLMH086E102MH086E103	76.30	76.00	0.666666667	MH086E102	MH086E103				75	CLMH086E102MH086E103	8	0.0040	0.022458	0.14	0.023983	0.14	0.028428	0.15	0.023983	0.14
CLMH086E103MH086E108		1975		Existing		MH086E103	MH086E108		T08693	IRWD	VCP	{8FEB94AD-D2AC-43CB-BDF8-9745BADE9CA1}	CLMH086E103MH086E108	75.88	74.90	0.666666667	MH086E103	MH086E108				246	CLMH086E103MH086E108	8	0.0040	0.024063	0.14	0.025696	0.15	0.030462	0.16	0.025696	0.15
CLMH086E105MH086E107		1975		Existing		MH086E105	MH086E107		T08693	IRWD	VCP	{B983BC37-5171-4AB0-9AE1-D237D0D4BA5A}	CLMH086E105MH086E107	76.81	74.37	0.666666667	MH086E105	MH086E107				102	CLMH086E105MH086E107	8	0.0120	0.002520	0.04	0.002700	0.04	0.003200	0.04	0.002700	0.04
CLMH086E106MH086E105		1975		Existing		MH086E106	MH086E105		T08693	IRWD	VCP	{03B2E25D-FD19-4AB2-97AA-305209D0F0F7}	CLMH086E106MH086E105	78.97	77.00	0.666666667	MH086E106	MH086E105				153	CLMH086E106MH086E105	8	0.0140	0.001784	0.03	0.001904	0.03	0.002257	0.04	0.001904	0.03
CLMH086E107MH086N049		1975		Existing		MH086E107	MH086N049		T08693	IRWD	VCP	{6279228C-B80C-4093-9C74-75BE04FEE63B}	CLMH086E107MH086N049	74.27	73.18	0.666666667	MH086E107	MH086N049				130	CLMH086E107MH086N049	8	0.0084	0.032252	0.14	0.034439	0.15	0.040830	0.16	0.034439	0.15
CLMH086E108MH086E107		1975		Existing		MH086E108	MH086E107		T08693	IRWD	VCP	{7305D810-FC52-43FB-BD90-9CB1FA43AF65}	CLMH086E108MH086E107	74.80	74.37	0.666666667	MH086E108	MH086E107				103	CLMH086E108MH086E107	8	0.0042	0.025746	0.15	0.027494	0.15	0.032595	0.16	0.027494	0.15
CLMH086E110MH086E107		1975		Existing		MH086E110	MH086E107		T08693	IRWD	VCP	{F7E79087-9613-45AC-A889-B76CE1890695}	CLMH086E110MH086E107	77.41	74.37	0.666666667	MH086E110	MH086E107				189	CLMH086E110MH086E107	8	0.0161	0.001940	0.03	0.002071	0.03	0.002457	0.04	0.002071	0.03
CLMH086E111MH086E112		1975		Existing		MH086E111	MH086E112		T08693	IRWD	VCP	{4E985D5A-97C5-4C30-BA4B-A7ACE3F145220}	CLMH086E111MH086E112	79.84	79.31	0.666666667	MH086E111	MH086E112				133	CLMH086E111MH086E112	8	0.0040	0.000921	0.03	0.000984	0.03	0.001167	0.03	0.000984	0.03
CLMH086E112MH086E113		1975		Existing		MH086E112	MH086E113		T08693	IRWD	VCP	{EAAA5542-3AF4-4517-B029-B1900CF5AF6A}	CLMH086E112MH086E113	79.22	77.83	0.666666667	MH086E112	MH086E113				138	CLMH086E112MH086E113	8	0.0101	0.001980	0.04	0.002115	0.04	0.002506	0.04	0.002115	0.04
CLMH086E113MH086N052		1975		Existing		MH086E113	MH086N052		T08693	IRWD	VCP	{11DA148C-27B2-4523-9F15-2A09CD9531C5}	CLMH086E113MH086N052	77.73	75.51	0.666666667	MH086E113	MH086N052				279	CLMH086E113MH086N052	8	0.0080	0.003450	0.05	0.003684	0.05	0.004366	0.05	0.003684	0.05
CLMH086E114MH086E035		1975		Existing		MH086E114	MH086E035		7641	IRWD	VCP	{10C584C2-3CA3-4DDC-8958-83B87BCED786}	CLMH086E114MH086E035	90.19	89.65	0.666666667	MH086E114	MH086E035				171	CLMH086E114MH086E035	8	0.0032	0.049640	0.21	0.053003	0.22	0.062858	0.24	0.053003	0.22
CLMH086E115MH086E114		1975		Existing		MH086E115	MH086E114		T08693	IRWD	VCP	{95F29056-6D01-4B75-9089-7167752A08BD}	CLMH086E115MH086E114	79.84	79.41	0.666666667	MH086E115	MH086E114				111	CLMH086E115MH086E114	8	0.0039	0.002322	0.05	0.002481	0.05	0.002940	0.05	0.002481	0.05
CLMH086E116MH086E100		1975		Existing		MH086E116	MH086E100		T08693	IRWD	VCP	{84A086A7-4C90-4A77-821E-61932FC18D6D}	CLMH086E116MH086E100	79.29	77.91	0.666666667	MH086E116	MH086E100				346	CLMH086E116MH086E100	8	0.0040	0.004583	0.06	0.004897	0.07	0.005802	0.07	0.004897	0.07
CLMH086E128MH086E064		1976		Existing		MH086E128	MH086E064		T08405	IRWD	VCP	{EE1CE7C9-3AE0-4F9D-9777-D65FF542EFF1}	CLMH086E128MH086E064	79.41	78.83	0.666666667	MH086E128	MH086E064				146	CLMH086E128MH086E064	8	0.0040	0.000940	0.03	0.001005	0.03	0.001191	0.03	0.001005	0.03
CLMH086E071MH086E072		1975		Existing		MH086E071	MH086E072		T08693	IRWD	VCP	{D84F2CCB-314E-42DC-B44A-62742BD7B28}	CLMH086E071MH086E072	81.55	79.94	0.666666667	MH086E071	MH086E072				161	CLMH086E071MH086E072	8	0.0100	0.001791	0.03	0.001914	0.04	0.002269	0.04	0.001914	0.04
CLMH086N001MH062E251		1969		Existing		MH086N001	MH062E251		362	IRWD	VCP	{948AA78C-EC0B-607E-B5AE-C4F88F3888D0}	CLMH086N001MH062E251	54.63	53.19	1.500000000	MH086N001	MH062E251				415	CLMH086N001MH062E251	18	0.0035	0.495758	0.23	0.530194	0.24	0.631680	0.26	0.530182	0.24
CLMH086N002MH086N001		1969		Existing		MH086N002	MH086N001		362	IRWD	VCP	{4F5E7C48-6B89-45E2-BEEA-64C900467BD1}	CLMH086N002MH086N001	55.06	54.63	1.500000000	MH086N002	MH086N001				125	CLMH086N002MH086N001	18	0.0034	0.479158	0.24	0.512418	0.25	0.610472	0.27	0.512408	0.25
CLMH086N003MH086N002		1969		Existing		MH086N003	MH086N002		362	IRWD	VCP	{5EC5C573-0B55-425B-8B7A-7CBE922AD80E}	CLMH086N003MH086N002	55.72	55.11	1.500000000	MH086N003	MH086N002				195	CLMH086N003MH086N002	18	0.0031	0.313191	0.20	0.334818	0.20	0.398902	0.23	0.334809	0.20
CLMH086N004MH086N003		1969		Existing		MH086N004	MH086N003		362	IRWD	VCP	{46F190B8-01F5-468F-B88A-CD1EBFF07D6}	CLMH086N004MH086N003	57.04	55.81	1.500000000	MH086N004	MH086N003				334	CLMH086N004MH086N003	18	0.0037	0.313224	0.18	0.334851	0.19	0.398942	0.20	0.334843	0.19
CLMH086N005MH086N004		1969		Existing		MH086N005	MH086N004		A00362	IRWD	VCP	{05A4C396-27E8-4B76-909D-5EE72E70B20D}	CLMH086N005MH086N004	58.38	57.15	1.500000000	MH086N005	MH086N004				329	CLMH086N005M

| | | |

CLMH086S097MH086S190		1975		Existing		MH086S097	MH086S190		T09657	IRWD	VCP	{8ED9928-5437-4AAF-8AA6-F4F822DAF00E}	CLMH086S097MH086S190	76.55	75.37	0.666666667	MH086S097	MH086S190				10	CLMH086S097MH086S190	8	0.0061	0.011217	0.09	0.013470	0.10	0.015968	0.11	0.013470	0.10
CLMH086S098MH086S099		1978		Existing		MH086S098	MH086S099		T09657	IRWD	VCP	{AB411184-5C8F-4719-8F37-DBE59DE529CD}	CLMH086S098MH086S099	85.84	84.80	0.500000000	MH086S098	MH086S099			193	CLMH086S098MH086S099	6	0.0054	0.002483	0.06	0.002983	0.07	0.003536	0.08	0.002983	0.07
CLMH086S099MH086S101		1978		Existing		MH086S099	MH086S101		T09657	IRWD	VCP	{F5D51CA6-ABFD-421A-93AD-241CBC9199AC}	CLMH086S099MH086S101	84.61	83.66	0.500000000	MH086S099	MH086S101			174	CLMH086S099MH086S101	6	0.0055	0.002844	0.07	0.003416	0.08	0.004049	0.08	0.003416	0.08
CLMH086S100MH086S099		1978		Existing		MH086S100	MH086S099		T09657	IRWD	VCP	{2B7F98B5-A5A7-48FE-82D2-09795F7FCB28}	CLMH086S100MH086S099	85.48	84.80	0.500000000	MH086S100	MH086S099			127	CLMH086S100MH086S099	6	0.0054	0.000361	0.02	0.000434	0.02	0.000513	0.03	0.000434	0.02
CLMH086S101MH086S077		1978		Existing		MH086S101	MH086S077		T09657	IRWD	VCP	{4D5589A7-EB2B-40B5-BCFE-22CA1CC9190A}	CLMH086S101MH086S077	83.47	82.83	0.500000000	MH086S101	MH086S077			120	CLMH086S101MH086S077	6	0.0053	0.006950	0.11	0.008347	0.12	0.009894	0.13	0.008347	0.12
CLMH086S102MH086S101		1978		Existing		MH086S102	MH086S101		T09657	IRWD	VCP	{30856EED-44C1-4586-972F-9DCC1C5CE6EC}	CLMH086S102MH086S101	83.94	83.66	0.500000000	MH086S102	MH086S101			53	CLMH086S102MH086S101	6	0.0053	0.004106	0.08	0.004931	0.09	0.005846	0.10	0.004931	0.09
CLMH086S103MH086S104		1978		Existing		MH086S103	MH086S104		T09656	IRWD	PVC	{CC06AOF-9606-44B2-A8B2-3519FD414266}	CLMH086S103MH086S104	87.59	85.44	0.666666667	MH086S103	MH086S104			176	CLMH086S103MH086S104	8	0.0122	0.009095	0.07	0.010919	0.08	0.012945	0.09	0.010919	0.08
CLMH086S104MH086S086		1978		Existing		MH086S104	MH086S086		T09656	IRWD	VCP	{3A149B26-C161-49D8-835B-4B692817B1AC}	CLMH086S104MH086S086	85.25	79.69	0.666666667	MH086S104	MH086S086			45	CLMH086S104MH086S086	8	0.1236	0.010858	0.05	0.013037	0.05	0.015453	0.05	0.013037	0.05
CLMH086S105MH086S106		1978		Existing		MH086S105	MH086S106		T09655	IRWD	PVC	{D1E9670C-A575-411D-BF66-2B9310333D71}	CLMH086S105MH086S106	85.83	85.04	0.666666667	MH086S105	MH086S106			200	CLMH086S105MH086S106	8	0.0040	0.001322	0.03	0.001587	0.04	0.001882	0.04	0.001587	0.04
CLMH086S106MH086S111		1978		Existing		MH086S106	MH086S111		T09655	IRWD	PVC	{B7D068CF-0172-4E1F-A371-B9175EC323D6}	CLMH086S106MH086S111	84.83	84.27	0.500000000	MH086S106	MH086S111			113	CLMH086S106MH086S111	6	0.0050	0.007053	0.11	0.008465	0.12	0.010037	0.13	0.008465	0.12
CLMH086S107MH086S106		1978		Existing		MH086S107	MH086S106		T09655	IRWD	PVC	{B4BD683E-7977-463E-9B28-66F E0BCE13E8}	CLMH086S107MH086S106	85.83	85.04	0.500000000	MH086S107	MH086S106			204	CLMH086S107MH086S106	8	0.0039	0.002666	0.07	0.003198	0.08	0.003792	0.08	0.003198	0.08
CLMH086S108MH086S109		1978		Existing		MH086S108	MH086S109		T09655	IRWD	PVC	{760CF402-CA2A-4181-8900-E6A41E609DBA}	CLMH086S108MH086S109	81.48	80.77	0.666666667	MH086S108	MH086S109			182	CLMH086S108MH086S109	8	0.0039	0.002443	0.05	0.002933	0.05	0.003478	0.05	0.002933	0.05
CLMH086S109MH086S110		1978		Existing		MH086S109	MH086S110		T09655	IRWD	PVC	{A95D5E49-8332-490D-9341-B74B9AF67C7}	CLMH086S109MH086S110	80.68	79.79	0.666666667	MH086S109	MH086S110			221	CLMH086S109MH086S110	8	0.0040	0.004406	0.06	0.005290	0.07	0.006273	0.07	0.005290	0.07
CLMH086S110MH087E047	SLOPE NOT ON AS	1978		Existing		MH086S110	MH087E047		T09655	IRWD	PVC	{B54A0919-6EF8-4157-8141-3BDF753GF159}	CLMH086S110MH087E047	79.69	78.90	0.500000000	MH086S110	MH087E047			202	CLMH086S110MH087E047	6	0.0039	0.007510	0.11	0.009018	0.13	0.010693	0.14	0.009018	0.13
CLMH086S111MH086S112		1978		Existing		MH086S111	MH086S112		T09802	IRWD	VCP	{CE276656-957B-4121-92FC-838CB36DE6DB}	CLMH086S111MH086S112	84.08	83.87	0.666666667	MH086S111	MH086S112			55	CLMH086S111MH086S112	8	0.0038	0.007053	0.08	0.008465	0.09	0.010037	0.09	0.008465	0.09
CLMH086S112MH086S113		1978		Existing		MH086S112	MH086S113		T09802	IRWD	VCP	{30BCED8B-DF33-4EC9-B091-6CFADE566BAF}	CLMH086S112MH086S113	83.66	83.29	0.666666667	MH086S112	MH086S113			100	CLMH086S112MH086S113	8	0.0037	0.007053	0.08	0.008465	0.09	0.010037	0.10	0.008465	0.09
CLMH086S113MH086S114		1978		Existing		MH086S113	MH086S114		T09802	IRWD	VCP	{282F57BA-B8D0-46ED-B691-7D8827FC7CF4}	CLMH086S113MH086S114	83.08	82.02	0.666666667	MH086S113	MH086S114			270	CLMH086S113MH086S114	8	0.0039	0.009155	0.09	0.010990	0.10	0.013030	0.11	0.010990	0.10
CLMH086S114MH086S069		1978		Existing		MH086S114	MH086S069		T09802	IRWD	VCP	{B5582716-DC73-4E0D-B692-3BBC02EC57B5}	CLMH086S114MH086S069	81.83	80.22	0.666666667	MH086S114	MH086S069			409	CLMH086S114MH086S069	8	0.0039	0.009148	0.09	0.010983	0.10	0.013027	0.11	0.010983	0.10
CLMH086S115MH086S116		1978		Existing		MH086S115	MH086S116		T09802	IRWD	VCP	{B190926E-60B1-42E9-BEAD-5798DA688DBC}	CLMH086S115MH086S116	85.95	84.25	0.666666667	MH086S115	MH086S116			315	CLMH086S115MH086S116	8	0.0054	0.002183	0.04	0.002621	0.05	0.003108	0.05	0.002621	0.05
CLMH086S116MH086S117		1978		Existing		MH086S116	MH086S117		T09802	IRWD	VCP	{211ED776-1F0A-4390-8F7C-A3B8327931 5E}	CLMH086S116MH086S117	84.05	82.58	0.666666667	MH086S116	MH086S117			382	CLMH086S116MH086S117	8	0.0038	0.006649	0.08	0.007983	0.09	0.009466	0.09	0.007983	0.09
CLMH086S117MH086S118		1978		Existing		MH086S117	MH086S118		T09802	IRWD	VCP	{8ECBD750-FEB9-4275-AAB7-040E69E4801A}	CLMH086S117MH086S118	82.33	81.95	0.666666667	MH086S117	MH086S118			100	CLMH086S117MH086S118	8	0.0038	0.011116	0.10	0.013346	0.11	0.015824	0.12	0.013346	0.11
CLMH086S118MH086S070		1978		Existing		MH086S118	MH086S070		T09802	IRWD	VCP	{CB059CCF-4885-4170-BFE9-146403AF1226}	CLMH086S118MH086S070	81.86	80.70	0.666666667	MH086S118	MH086S070			182	CLMH086S118MH086S070	8	0.0187	0.011116	0.07	0.013345	0.08	0.015823	0.09	0.013345	0.08
CLMH086S119MH086S079		1978		Existing		MH086S119	MH086S079		T09802	IRWD	VCP	{D2BF5D23-3AB3-4A17-AC1B-2D0B2BE767DA}	CLMH086S119MH086S079	85.01	80.02	0.500000000	MH086S119	MH086S079			71	CLMH086S119MH086S079	6	0.0703	0.003585	0.04	0.004305	0.05	0.005104	0.05	0.004305	0.05
CLMH086S176MH087N179		1975		Existing		MH086S176	MH087N179		T09060	IRWD	VCP	{CAD8A9F3-6D60-4C3E-AB56-CB35406 5D9D5}	CLMH086S176MH087N179	78.02	73.80	0.666666667	MH086S176	MH087N179			279	CLMH086S176MH087N179	8	0.0151	0.004509	0.05	0.005410	0.05	0.006416	0.06	0.005410	0.05
CLMH086S182MH086S085		1978		Existing		MH086S182	MH086S085		T09659	IRWD	VCP	{76EABBFE-5209-4426-BC02-97CF5DC68DB4}	CLMH086S182MH086S085	85.26	85.06	0.666666667	MH086S182	MH086S085			42	CLMH086S182MH086S085	8	0.0048	0.007050	0.08	0.008467	0.08	0.010035	0.09	0.008467	0.08
CLMH086S183MH086S182		1978		Existing		MH086S183	MH086S182		T09659	IRWD	VCP	{65A626C3-434B-422D-BF24-104AF1316EA6}	CLMH086S183MH086S182	85.73	85.36	0.666666667	MH086S183	MH086S182			76	CLMH086S183MH086S182	8	0.0049	0.006549	0.07	0.007866	0.08	0.009321	0.09	0.007866	0.08
CLMH086S184MH086S183		1980		Existing		MH086S184	MH086S183		T09659	IRWD	VCP	{D743CAAD-BE1D-4D3D-BCE3-042145FBED42}	CLMH086S184MH086S183	87.72	85.94	0.666666667	MH086S184	MH086S183			355	CLMH086S184MH086S183	8	0.0050	0.003165	0.05	0.003801	0.06	0.004504	0.06	0.003801	0.06
CLMH086S185MH086S186		1978		Existing		MH086S185	MH086S186		T09060	IRWD	VCP	{7D71B81B-3053-4441-ADFA-9EE73C415AE5}	CLMH086S185MH086S186	87.48	76.00	0.666666667	MH086S185	MH086S186			250	CLMH086S185MH086S186	8	0.0059	0.002945	0.05	0.003536	0.05	0.004192	0.06	0.003536	0.05
CLMH086S186MW0128		1978		Existing		MH086S186	MW0128		T09060	IRWD	VCP	{CB4FE3A6-CF81-4D32-AE4D-0952320DD0FC}	CLMH086S186MW0128	75.90	72.44	0.666666667	MH086S186	MW0128			248	CLMH086S186MW0128	8	0.0140	0.009156	0.07	0.010992	0.08	0.013031	0.08	0.010992	0.08
CLMH086S187MH086S176		1975		Existing		MH086S187	MH086S176		T09060	IRWD	VCP	{11B0F8BF-86C1-4630-B8A3-3D4185125447}	CLMH086S187MH086S176	79.11	78.13	0.666666667	MH086S187	MH086S176			246	CLMH086S187MH086S176	8	0.0040	0.001904	0.04	0.002284	0.05	0.002709	0.05	0.002284	0.05
CLMH086S190MH086S001		1975		Existing		MH086S190	MH086S001		T09657	IRWD	VCP	{62CFC429-FB9A-479F-B499-64FA40A22461}	CLMH086S190MH086S001	75.27	75.06	0.666666667	MH086S190	MH086S001			53	CLMH086S190MH086S001	8	0.0040	0.011216	0.10	0.013470	0.11	0.015967	0.12	0.013470	0.11
CLMH086S224MH086S010		1978		Existing		MH086S224	MH086S010		T15404	IRWD	PVC	{7A58A9A6-2C1B-4B98-8233-04DBAAABBA6D}	CLMH086S224MH086S010	73.00	68.76	0.666666667	MH086S224	MH086S010			274	CLMH086S224MH086S010	8	0.0155	0.011136	0.07	0.013367	0.08	0.015667	0.09	0.013367	0.08
CLMH086W001MH062S007		1978		Existing		MH086W001	MH062S007		A00047	IRWD	VCP	{7B2072A8-9CBC-4391-A498-DBF4D2C83C48}	CLMH086W001MH062S007	51.25	50.86	1.500000000	MH086W001	MH062S007			400	CLMH086W001MH062S007	18	0.0010	0.953033	0.39	1.148260	0.43	1.371228	0.47	1.148221	0.43
CLMH086W002MH086W001	CALL7	1975		Existing		MH086W002	MH086W001		A00047	IRWD	VCP	{D9DBA9EC-5613-4E53-92F7-B150A5A2EE1F}	CLMH086W002MH086W001	51.75	51.36	1.500000000	MH086W002	MH086W001			405	CLMH086W002MH086W001	18	0.0010	0.953973	0.39	1.149455	0.43	1.372448	0.47	1.149418	0.43
CLMH086W003MH086W002		1975		Existing		MH086W003	MH086W002		A00047	IRWD	VCP	{10E3C16B-D651-407B-A152-5E8BA30F9E93}	CLMH086W003MH086W002	52.18	51.86	1.500000000	MH086W003	MH086W002			644	CLMH086W003MH086W002	18	0.0005	0.745596	0.40	0.897625	0.43	1.071463	0.47	0.897596	0.43
CLMH086W004MH086W003		1975		Existing		MH086W004	MH086W003		A00047	IRWD	VCP	{A0301A07-A5E1-41BC-A508-561A31CCCAC80}	CLMH086W004MH086W003	53.18	52.49	1.500000000	MH086W004	MH086W003			597	CLMH086W004MH086W003	18	0.0012	0.719815	0.34	0.866544	0.38	1.033676	0.41	0.866521	0.38
CLMH086W005MH086W004		1975		Existing		MH086W005	MH086W004		A00047	IRWD	VCP	{C20916EE-060C-442B-B0FA-ECEB59B2DDDC}	CLMH086W005MH086W004	55.45	53.41	1.250000000	MH086W005	MH086W004			458	CLMH086W005MH086W004	15	0.0045	0.511684	0.31	0.616510	0.35	0.735089	0.39	0.616493	0.35
CLMH086W006MH086W005		1975		Existing		MH086W006	MH086W005		A00047	IRWD	VCP	{9C34CF1A-0975-4BEE-9813-B244A3683F69}	CLMH086W006MH086W005	59.47	55.56	1.250000000	MH086W006	MH086W005			500	CLMH086W006MH086W005	15	0.0078	0.499777	0.25	0.601674	0.27	0.715854	0.30	0.601664	0.27
CLMH086W007MH086W008		1978		Existing		MH086W007	MH086W008		T09285	IRWD	VCP	{7306C33F-B195-4CC3-B86D-E8F7FC0776D0}	CLMH086W007MH086W008	58.11	57.38	0.666666667	MH086W007	MH086W008			186	CLMH086W007MH086W008	8	0.0039	0.045867	0.20	0.054563	0.22	0.064784	0.23	0.054563	0.22
CLMH086W008MH086W009		1978		Existing		MH086W008	MH086W009		T09285	IRWD	VCP	{0B1C3EFF-F584-4370-967F-F12DB9217E23}	CLMH086W008MH086W009	57.18	55.77	0.666666667	MH086W008	MH086W009			127	CLMH086W008MH086W009	8	0.0111	0.077303	0.21	0.092487	0.23	0.109672	0.25	0.092487	0.23
CLMH086W009MH086W010		1976		Existing		MH086W009	MH086W010		T09285	IRWD	VCP	{09AF24D0-93D1-44A4-ABD9-5900E4DB2BCE}	CLMH086W009MH086W010	55.58	54.54	0.666666667	MH086W009	MH086W010			89	CLMH086W009MH086W010	8	0.0117	0.077297	0.20	0.092483	0.22	0.109669	0.24	0.092483	0.22
CLMH086W010MH086W004		1976		Existing		MH086W010	MH086W004		A00047	IRWD	VCP	{976CEB98-1FC5-4D5E-9C75-A92873DBDAF3}	CLMH086W010MH086W004	54.45	54.02	0.666666667	MH086W010	MH086W004			112	CLMH086W010MH086W004	8	0.0038	0.077287	0.26	0.092476	0.28	0.109663	0.31	0.092476	0.28
CLMH086W011MH086W004		1976		Existing		MH086W011	MH086W004		A00047	IRWD	VCP	{CBAF94AB-5398-47CF-A788-BEBF641F77B5}	CLMH086W011MH086W004	54.86	54.02	0.666666667	MH086W011	MH086W004			245	CLMH086W011MH086W004	8	0.0039	0.130795	0.34	0.158289	0.37	0.188697	0.41	0.158285	0.37
CLMH086W012MH086W011		1975		Existing		MH086W012	MH086W011		A00047	IRWD	VCP	{ECABFEB5-AEDF-4869-BAC2-67AB907EE903}	CLMH086W012MH086W011	59.79	54.97	0.666666667	MH086W012	MH086W011			114	CLMH086W012MH086W011	8	0.0423	0.131255	0.20	0.158770	0.23	0.189168	0.26	0.158766	0.23
CLMH086W013MH086W012		1975		Existing		MH086W013	MH086W012		A00093	IRWD	VCP	{405EAD2C-4818-4683-BC8F-7E4A83D11CF6}	CLMH086W013MH086W012	62.15	59.90	0.666666667	MH086W013	MH086W012			270	CLMH086W013MH086W012	8	0.0083	0.085434	0.23	0.103265	0.26	0.123138	0.28	0.103262	0.26
CLMH086W014MH086W013		1978		Existing		MH086W014	MH086W013		A00093	IRWD	VCP	{C86BD155-79A5-43AD-8966-81FBF3DB7F66}	CLMH086W014MH086W013	64.06	62.27	0.666666667	MH086W014	MH086W013			364	CLMH086W014MH086W013	8	0.0049	0.085552	0.26	0.103415	0.29	0.123288	0.31	0.103413	0.29
CLMH086W015MH086W014		1978		Existing		MH086W015	MH086W014		A00093	IRWD	VCP	{376AA452-50E1-40D5-9FDF-2934BA2BEB6E}	CLMH086W015MH086W014	66.23	64.16	0.666666667	MH086W015	MH086W014			364	CLMH086W015MH086W014	8	0.0059	0.068329	0.23	0.082449	0.25	0.098172	0.27	0.082447	0.25
CLMH086W016MH086W015		1978		Existing		MH086W016	MH086W015		A00093	IRWD	VCP	{27E0F73E-010D-4153-AD6E-E87D05D04E26}	CLMH086W016MH086W015	68.66	66.33	0.666666667	MH086W016	MH086W015			268	CLMH086W016MH086W015	8	0.0090	0.068544	0.21	0.082679	0.23	0.098382	0.25	0.082678	0.23
CLMH086W017MH086W018		1978		Existing		MH086W017	MH086W018		T08983	IRWD	VCP	{63EE8C33-57B9-41D7-9AC3-65583CE0E0A}	CLMH086W017MH086W018	61.86	60.68	0.666666667	MH086W017	MH086W018			296	CLMH086W017MH086W018	8	0.0040	0.005008	0.07	0.006012	0.07	0.007130	0.08	0.006012	0.07
CLMH086W018MH086W019		1978		Existing		MH086W018	MH086W019		T08983	IRWD	VCP	{0F6209B2F-7B04-4A34-834E-396D8AFE012}	CLMH086W018MH086W019	60.49	59.45	0.666666667	MH086W018	MH086W019			261	CLMH086W018MH086W019	8	0.0040	0.005008	0.07	0.006012	0.07	0.007129	0.08	0.006012	0.07
CLMH086W019MH086W023		1975		Existing		MH086W019	MH086W023		T08983	IRWD	VCP	{B82C99D7-A4E0-47C6-A09A-1FA54F997CE8}	CLMH086W019MH086W023	59.36	58.18	0.666666667	MH086W019	MH086W023			296	CLMH086W019MH086W023	8	0.0040	0.019972	0.13	0.023975	0.14	0.028426	0.16	0.023975	0.14
CLMH086W020MH086W019		1975		Existing		MH086W020	MH086W019		T08983	IRWD	VCP	{EBD8AF7C-37EC-47E0-9C73-5E469D1FDD6C}	CLMH086W020MH086W019	60.54	59.56	0.666666667	MH086W020	MH086W019			248	CLMH086W020MH086W019	8	0.0040	0.009676	0.09	0.011615	0.10	0.013770	0.11	0.011615	0.10
CLMH086W021MH086W020		1978		Existing		MH086W021	MH086W020		T08983	IRWD	VCP	{E1D13EE1-8607-4CE2-9770-70CE6EFD6813}	CLMH086W021MH086W020	61.88	60.74	0.666666667	MH086W021	MH086W020			218	CLMH086W021MH086W020	8	0.0040	0.006230	0.07	0.007479	0.08	0.008866	0.09	0.007479	0.08
CLMH086W022MH086W021		1978		Existing		MH086W022	MH086W021		T08983	IRWD	VCP	{67BC77E0-F50C-45BB-A960-55A0240EB2DE}	CLMH086W022MH086W021	63.11	61.97	0.666666667	MH086W022	MH086W021			287	CLMH086W022MH086W021	8	0.0040	0.001984	0.04	0.002380	0.05	0.002822	0.05	0.002380	0.05
CLMH086W023MH086W024		1978		Existing		MH086W023	MH086W024		T09285	IRWD	VCP	{88E21EC3-FAA0-4F0B-B749-D331F5C129D0}	CLMH086W023MH086W024	57.99	57.47	0.666666667	MH086W023	MH086W024			132	CLMH086W023MH086W024	8	0.0039	0.027080	0.15	0.032513	0.17	0.038546	0.18	0.032513	0.17
CLMH086W024MH086W003		1975		Existing		MH086W024	MH086W003		A00047	IRWD	VCP	{EC1C2771-B4E9-4443-8F9A-A3AC2469 8FB}	CLMH086W024MH086W003	57.38	53.00	0.666666667	MH086W024	MH086W003			205	CLMH086W024MH086W003	8	0.0214	0.027840	0.11	0.033427	0.12	0.039665	0.15	0.033427	0.12
CLMH086W025MH086W023		1978		Existing		MH086W025	MH086W023		T09285	IRWD	VCP	{133EF115-49CB-4643-82BD-F27E1FE1F30}	CLMH086W025MH086W023	58.54	58.18	0.666666667	MH086W025	MH086W023			94	CLMH086W025MH086W023	8	0.0038	0.007110	0.08	0.008539	0.09	0.010122	0.09	0.008539	0.09
CLMH086W026MH086W025		1978		Existing		MH086W026	MH086W025		T09285	IRWD	VCP	{E1388559-CD45-4D3B-B08B-F2BA628B7161}	CLMH086W026MH086W025	60.06	58.75	0.500000000	MH086W026	MH086W025			332	CLMH086W026MH086W025	6	0.0039	0.007110	0.12	0.008539	0.13	0.010122	0.14	0.008539	0.13
CLMH086W027MH086W026		1978		Existing		MH086W027	MH086W026		T09285	IRWD	VCP	{EBEFAA38-608S-40BB-BC4C-EABOFD64DBEB}	CLMH086W027MH086W026	61.54	60.27	0.500000000	MH086W027	MH086W026			323	CLMH086W027MH086W026	6	0.0039	0.003245	0.08	0.003897	0.09	0.004619	0.09	0.003897	0.09
CLMH086W028MH086W094		1978		Existing		MH086W028	MH086W094		T09285	IRWD	VCP	{92E86171-F163-4C46-B2D7-36567B11E25E}	CLMH086W028MH086W094	62.56	62.08	0.666666667	MH086W028	MH086W094			194	CLMH086W028MH086W094	8	0.0025	0.012677	0.12	0.015181	0.13	0.017908	0.14	0.015181	0.13
CLMH086W029MH086W030		1978		Existing		MH086W029	MH086W030		T09285	IRWD	VCP	{AC111ED0-9FO4-4337-BF53-405OB1893FF7}	CLMH086W029MH086W030	61.72	60.16	0.666666667	MH086W029	MH086W030			383	CLMH086W029MH086W030	8	0.0041	0.017639	0.12	0.021142	0.13	0.024977	0.15	0.021142	0.13
CLMH086W030MH086W031		1978		Existing		MH086W030	MH086W031		T09285	IRWD	VCP	{83F51EDC-F2FD-4AF4-8E2D-A470CBC285BC}	CLMH086W030MH086W031	60.06	59.13	0.666666667	MH086W030	MH086W031			236	CLMH086W030MH086W031	8	0.0039	0.024784	0.15	0.029724	0.16	0.035154	0.17	0.029724	0.16
CLMH086W030MH086W032		1978		Existing		MH086W030	MH086W032		T09285	IRWD	VCP	{1DC1DEF8-9DF3-4935-8449-A07DC7C6E963}	CLMH086W030MH086W032	60.27	59.11	0.666666667	MH086W030	MH086W032			241	CLMH086W030MH086W032	8	0.0048	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH086W031MH086W008		1978		Existing		MH086W031	MH086W008		T09285	IRWD	VCP	{B028869C-2468-4390-B80E-533398727 1FB}	CLMH086W031MH086W008	58.93	57.40	0.666666667	MH086W031	MH086W008			386	CLMH086W031MH086W008	8	0.0040	0.030471	0.16	0.036562	0.18	0.043269	0.19	0.036562	0.18
CLMH086W032MH086W007		1978		Existing		MH086W032	MH086W007		T09285	IRWD	VCP	{F0BD9FFA-107D-4FFF-8668-11A96AE6A552}	CLMH086W032MH086W007	58.91	58.31	0.666666667	MH086W032	MH086W007			154	CLMH086W032MH086W007	8	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH086W033MH087N091		1975		Existing		MH086W033	MH087N091		T08980	IRWD	VCP	{88F5E2C5-67B8-46C9-ACDF-23D883ACC3D7}	CLMH086W033MH087N091	71.11	69.88	0.666666667	MH086W033	MH087N091			158	CLMH086W033MH087N091	8	0.0078	0.000000	0.02	0.000000	0.02	0.000000	0.02	0.000000	0.02
CLMH086W034MH086W035		1975		Existing		MH086W034	MH086W035		8981	IRWD	VCP	{D801F4A4-4F94-4B67-95A4-3BFCAD3B7AC3}	CLMH086W034MH086W035	71.66	68.98	0.666666667	MH086W034	MH086W035			450	CLMH086W034MH086W035	8	0.0060	0.001621	0.03	0.001948	0.04	0.002309	0.04	0.001948	0.04
CLMH086W035MH086W036		1975		Existing		MH086W035	MH086W036		8981	IRWD	VCP	{806DB1D8-DD71-4A3F-A412-1AD5708635 5B}	CLMH086W035MH086W036	68.87	67.26	0.666666667	MH086W035	MH086W036			410	CLMH086W035MH086W036	8	0.0039	0.008490	0.09	0.010194	0.10	0.012088	0.10	0.010194	0.10
CLMH086W036MH087N023		1975		Existing		MH086W036	MH087N023		8981	IRWD	VCP	{95043632-B442-4576-9097-F067F760C43C}	CLMH086W036MH087N023	67.05	65.88	0.666666667	MH086W036	MH087N023			232	CLMH086W036MH087N023	8	0.0050	0.012235	0.10	0.014690	0.11	0.017420	0.12	0.014690	0.11
CLMH086W037MH086W014		1978		Existing		MH086W037	MH086W014		T09130	IRWD	VCP	{0326D0AB-36F9-460C-B7AD-41B0098DA9AA}	CLMH086W037MH086W014	64.81	64.26	0.666666667	MH086W037	MH086W014			140	CLMH086W037MH086W014	8	0.0039	0.011197	0.10	0.013443	0.11	0.015941	0.12	0.013443	0.11
CLMH086W038MH086W037		1978		Existing		MH086W038	MH086W037		T09130	IRWD	VCP	{ADA2D E01-ABE4-4366-B32-67EFFB3DA657}	CLMH086W038MH086W037	67.94	64.91	0.666666667	MH086W038	MH086W037			118	CLMH086W038MH086W037	8	0.0257	0.004207	0.04	0.005051	0.05	0.005989	0.05	0.005051	0.05
CLMH086W038MH086W039		1976		Existing		MH086W038	MH086W039		T09130	IRWD	VCP	{20AFE91E-93EE-4757-B586-14F085AA893E}	CLMH086W038MH086W039	68.26	67.06	0.666666667	MH086W038	MH086W039			300	CLMH086W038MH086W039	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH086W039MH086W040		1976		Existing		MH086W039	MH086W040		T09130	IRWD	VCP	{93727463-10E5-45FA-89ED-5C2772 9BF9A}	CLMH086W039MH086W040	66.97	65.91	0.666666667	MH086W039	MH086W040			269	CLMH086W039MH086W040	8	0.0039	0.000000	0

CLMH086W128MH086W016		1975		Existing		MH086W128	MH086W016		T09060	IRWD	VCP	{7D7A81B1-307B-4A08-9002-D1105FB807CF}	CLMH086W128MH086W016	72.23	68.91	0.666666667	MH086W128	MH086W016			177	CLMH086W128MH086W016	8	0.0188	0.016349	0.09	0.019626	0.09	0.023268	0.10	0.019626	0.09				
CLMH086W141MH086W143		1976		Existing		MH086W141	MH086W143		T08896	IRWD	VCP	{7EC00A24-F388-40DD-B9BF-0BB2C7A2BDAF}	CLMH086W141MH086W143	67.69	66.31	0.500000000	MH086W141	MH086W143			251	CLMH086W141MH086W143	6	0.0055	0.002364	0.06	0.002837	0.07	0.003365	0.07	0.002837	0.07				
CLMH086W142MH086W141		1976		Existing		MH086W142	MH086W141		T08896	IRWD	VCP	{21EC79AE-C249-4CBC-A990-7F66F39F1AB4}	CLMH086W142MH086W141	69.80	67.88	0.500000000	MH086W142	MH086W141			63	CLMH086W142MH086W141	6	0.0305	0.001022	0.03	0.001226	0.03	0.001455	0.04	0.001226	0.03				
CLMH086W143MH086W037		1976		Existing		MH086W143	MH086W037		T08896	IRWD	VCP	{99F8D8E5-D11B-4C98-9DBA-4ABD156B0F0A}	CLMH086W143MH086W037	66.11	65.01	0.500000000	MH086W143	MH086W037			109	CLMH086W143MH086W037	6	0.0101	0.005649	0.09	0.006781	0.09	0.008042	0.10	0.006781	0.09				
CLMH086W144MH086W143		1976		Existing		MH086W144	MH086W143		T08896	IRWD	VCP	{A4543C6B-5E1D-4267-9F29-F477E43A2AB0}	CLMH086W144MH086W143	68.36	66.30	0.500000000	MH086W144	MH086W143			56	CLMH086W144MH086W143	6	0.0368	0.003285	0.05	0.003944	0.05	0.004677	0.06	0.003944	0.05				
CLMH086W175MH086W016		1976		Existing		MH086W175	MH086W016		A00093	IRWD	VCP	{9BBEEB96-D60D-4278-9A20-916E062EB572}	CLMH086S012MH086W016	68.85	68.76	0.666666667	MH086W175	MH086W016			21	CLMH086W175MH086W016	8	0.0043	0.052702	0.20	0.063438	0.22	0.075399	0.24	0.063436	0.22				
CLMH087E002MH087E137		1976		Existing		MH087E002	MH087E137		T09301	IRWD	VCP	{EF950BFE-6A47-480F-8AD0-650902C31058}	CLMH087E002MH087E137	75.61	74.69	0.666666667	MH087E002	MH087E137			112	CLMH087E002MH087E137	8	0.0082	0.012622	0.09	0.015152	0.10	0.017964	0.11	0.015152	0.10				
CLMH087E003MH087E002		1976		Existing		MH087E003	MH087E002		T09301	IRWD	VCP	{F02A38F7-CC36-4B8D-A5AA-5124AA5E2B94}	CLMH087E003MH087E002	76.50	75.80	0.666666667	MH087E003	MH087E002			181	CLMH087E003MH087E002	8	0.0039	0.010999	0.10	0.013204	0.11	0.015654	0.12	0.013204	0.11				
CLMH087E004MH087E003		1976		Existing		MH087E004	MH087E003		T08899	IRWD	VCP	{3AA09B90-5716-4094-B982-1B0BF55ECF0F}	CLMH087E004MH087E003	76.83	76.59	0.666666667	MH087E004	MH087E003			65	CLMH087E004MH087E003	8	0.0037	0.010999	0.10	0.013204	0.11	0.015654	0.12	0.013204	0.11				
CLMH087E005MH087E004		1976		Existing		MH087E005	MH087E004		T08899	IRWD	VCP	{50D85ED8-8894-468C-AF4E-9F2330780510}	CLMH087E005MH087E004	79.88	76.94	0.666666667	MH087E005	MH087E004			78	CLMH087E005MH087E004	8	0.0377	0.008014	0.05	0.009621	0.06	0.011405	0.06	0.009621	0.06				
CLMH087E006MH087E005		1976		Existing		MH087E006	MH087E005		T08899	IRWD	VCP	{D2EE82EE-4940-4C4A-B10A-BEDF4D3F73A8}	CLMH087E006MH087E005	81.69	80.08	0.666666667	MH087E006	MH087E005			142	CLMH087E006MH087E005	8	0.0113	0.005871	0.06	0.007046	0.07	0.008354	0.07	0.007046	0.07				
CLMH087E007MH087E006		1976		Existing		MH087E007	MH087E006		T08899	IRWD	VCP	{3C411284-767E-4DB5-B4E7-B000BBE63706}	CLMH087E007MH087E006	82.27	81.80	0.666666667	MH087E007	MH087E006			87	CLMH087E007MH087E006	8	0.0038	0.004628	0.06	0.005555	0.07	0.006587	0.08	0.005555	0.07				
CLMH087E008MH087E007		1976		Existing		MH087E008	MH087E007		T08899	IRWD	VCP	{FE4A411B-1F4F-4503-8E6A-4D5211D4935F}	CLMH087E008MH087E007	82.59	82.37	0.666666667	MH087E008	MH087E007			60	CLMH087E008MH087E007	8	0.0037	0.003787	0.06	0.004544	0.06	0.005388	0.07	0.004544	0.06				
CLMH087E009MH087E008		1976		Existing		MH087E009	MH087E008		T08899	IRWD	VCP	{38510F46-68A1-4E64-8CFD-C29DE86991C7}	CLMH087E009MH087E008	85.58	82.69	0.666666667	MH087E009	MH087E008			114	CLMH087E009MH087E008	8	0.0254	0.001581	0.03	0.001899	0.03	0.002252	0.03	0.001899	0.03				
CLMH087E010MH087E020		1976		Existing		MH087E010	MH087E020		T08968	IRWD	VCP	{82451113-5EBD-4159-9F18-5A918D7744FC}	CLMH087E010MH087E020	86.02	85.04	0.666666667	MH087E010	MH087E020			201	CLMH087E010MH087E020	8	0.0049	0.005932	0.07	0.007119	0.08	0.008441	0.08	0.007119	0.08				
CLMH087E011MH087E010		1976		Existing		MH087E011	MH087E010		T08899	IRWD	VCP	{BE88EEC2-52AC-4141-A753-A8BD1B1C2E31}	CLMH087E011MH087E010	86.97	86.12	0.666666667	MH087E011	MH087E010			182	CLMH087E011MH087E010	8	0.0047	0.002785	0.05	0.003344	0.05	0.003963	0.06	0.003344	0.05				
CLMH087E012MH087E011		1976		Existing		MH087E012	MH087E011		T08899	IRWD	VCP	{64EAD6F4-D298-E9E5-90CA-0F7859EEEE8B}	CLMH087E012MH087E011	87.79	87.16	0.666666667	MH087E012	MH087E011			117	CLMH087E012MH087E011	8	0.0054	0.001203	0.03	0.001442	0.03	0.001711	0.04	0.001442	0.03				
CLMH087E013MH087E008		1976		Existing		MH087E013	MH087E008		T08899	IRWD	VCP	{22E3EA3D-8D23-4ABE-966D-90FBFB2728EF}	CLMH087E013MH087E008	83.08	82.80	0.500000000	MH087E013	MH087E008			56	CLMH087E013MH087E008	6	0.0050	0.002204	0.06	0.002645	0.07	0.003136	0.07	0.002645	0.07				
CLMH087E014MH087E007		1976		Existing		MH087E014	MH087E007		T08899	IRWD	VCP	{89C4DE86-6266-489C-A51C-E490A4A43C29}	CLMH087E014MH087E007	83.33	82.48	0.500000000	MH087E014	MH087E007			156	CLMH087E014MH087E007	6	0.0054	0.000842	0.04	0.001011	0.04	0.001199	0.05	0.001011	0.04				
CLMH087E015MH087E005		1976		Existing		MH087E015	MH087E005		T08899	IRWD	VCP	{3CBFC83B-EA4C-4B05-80BE-B257D06A8574}	CLMH087E015MH087E005	81.29	80.08	0.666666667	MH087E015	MH087E005			49	CLMH087E015MH087E005	8	0.0247	0.001243	0.02	0.001491	0.03	0.001767	0.03	0.001491	0.03				
CLMH087E016MH087E004		1976		Existing		MH087E016	MH087E004		T08899	IRWD	VCP	{D5E77F09-4129-4114-965B-A106C2A0EB18}	CLMH087E016MH087E004	77.94	77.04	0.500000000	MH087E016	MH087E004			165	CLMH087E016MH087E004	6	0.0055	0.002985	0.07	0.003583	0.08	0.004250	0.08	0.003583	0.08				
CLMH087E017MH087E002		1976		Existing		MH087E017	MH087E002		T09301	IRWD	VCP	{B0D12EFF-182D-4BB8-94D1-BEA150625B2C}	CLMH087E017MH087E002	82.51	75.90	0.500000000	MH087E017	MH087E002			156	CLMH087E017MH087E002	6	0.0624	0.001623	0.03	0.001949	0.03	0.002310	0.04	0.001949	0.03				
CLMH087E018MH087E019		1976		Existing		MH087E018	MH087E019		T08968	IRWD	VCP	{0D14BF58-DCDF-4A58-B028-9F2E08BC5184}	CLMH087E018MH087E019	86.63	86.26	0.666666667	MH087E018	MH087E019			74	CLMH087E018MH087E019	8	0.0047	0.001944	0.04	0.002333	0.05	0.002767	0.05	0.002333	0.05				
CLMH087E019MH087E010		1976		Existing		MH087E019	MH087E010		T08968	IRWD	VCP	{87F07229-5EEF-418D-BCC1-3F1EC2CBA90A}	CLMH087E019MH087E010	86.16	86.12	0.666666667	MH087E019	MH087E010			15	CLMH087E019MH087E010	8	0.0027	0.001944	0.04	0.002333	0.05	0.002767	0.05	0.002333	0.05				
CLMH087E020MH087E021		1976		Existing		MH087E020	MH087E021		T08968	IRWD	VCP	{C6973B12-4044-4827-AE88-EC58CDCE50AB}	CLMH087E020MH087E021	84.94	84.23	0.666666667	MH087E020	MH087E021			140	CLMH087E020MH087E021	8	0.0051	0.007816	0.08	0.009379	0.09	0.011121	0.09	0.009379	0.09				
CLMH087E021MH087E022		1982		Existing		MH087E021	MH087E022		047	IRWD	VCP	{F9CA2B32-A5DC-4845-BAD2-5EBA95C95B5F}	CLMH087E021MH087E022	84.00	78.48	0.666666667	MH087E021	MH087E022			100	CLMH087E021MH087E022	8	0.0552	0.010121	0.05	0.012146	0.06	0.014400	0.06	0.012146	0.06				
CLMH087E022MH087N007		1976		Existing		MH087E022	MH087N007		047	IRWD	VCP	{EE9F5E3C-5DE6-46DB-BF5C-30454AF9F10C}	CLMH087E022MH087N007	77.84	77.23	1.250000000	MH087E022	MH087N007			316	CLMH087E022MH087N007	15	0.0019	0.185561	0.20	0.214032	0.21	0.253367	0.23	0.214030	0.21				
CLMH087E023MH087E022		1982		Existing		MH087E023	MH087E022		047	IRWD	VCP	{B271D496-6776-4F80-A07A-0C0F97D3A794}	CLMH087E023MH087E022	83.00	78.48	0.666666667	MH087E023	MH087E022			110	CLMH087E023MH087E022	8	0.0411	0.011152	0.06	0.013389	0.07	0.015908	0.06	0.014119	0.07	0.011908	0.06
CLMH087E024MH087E022		1976		Existing		MH087E024	MH087E022		047	IRWD	VCP	{8356BE21-B8D6-4801-B7CB-78CE8AEE88DC}	CLMH087E024MH087E022	78.33	77.94	1.250000000	MH087E024	MH087E022			384	CLMH087E024MH087E022	15	0.0010	0.170374	0.22	0.197459	0.24	0.233666	0.24	0.225	0.24	0.197449	0.24
CLMH087E025MH087E024		1975		Existing		MH087E025	MH087E024		047	IRWD	VCP	{EE21E691-88AE-4616-8DEC-E183771EEE0C}	CLMH087E025MH087E024	78.80	78.43	1.250000000	MH087E025	MH087E024			374	CLMH087E025MH087E024	15	0.0010	0.168032	0.22	0.195004	0.23	0.230713	0.25	0.195004	0.23		
CLMH087E026MH087E025		1975		Existing		MH087E026	MH087E025		047	IRWD	VCP	{2D1A0CA1-658A-488C-B05F-B2C033F93E7C}	CLMH087E026MH087E025	83.55	79.06	1.000000000	MH087E026	MH087E025			472	CLMH087E026MH087E025	12	0.0095	0.160884	0.18	0.187521	0.20	0.221822	0.21	0.187520	0.20		
CLMH087E027MH087E026		1975		Existing		MH087E027	MH087E026		047	IRWD	VCP	{0AFCE7E5-24B7-477D-B852-4D0E72BF8F72}	CLMH087E027MH087E026	86.91	83.66	1.000000000	MH087E027	MH087E026			433	CLMH087E027MH087E026	12	0.0075	0.156325	0.19	0.182665	0.20	0.216066	0.22	0.182667	0.20		
CLMH087E028MH087E027		1975		Existing		MH087E028	MH087E027		047	IRWD	VCP	{548A4B08-4235-4870-BE8B-315FC5B4EDF7}	CLMH087E028MH087E027	87.58	87.26	0.666666667	MH087E028	MH087E027			74	CLMH087E028MH087E027	8	0.0043	0.013604	0.11	0.016331	0.12	0.019361	0.13	0.016331	0.12		
CLMH087E029MH087E027		1981		Existing		MH087E029	MH087E027		047	IRWD	VCP	{07781BD0-E81D-48F4-A0C4-14A95B806D84}	CLMH087E029MH087E027	87.55	87.26	0.666666667	MH087E029	MH087E027			87	CLMH087E029MH087E027	8	0.0034	0.019603	0.13	0.020927	0.14	0.024815	0.15	0.020927	0.14		
CLMH087E030MH087E027		1975		Existing		MH087E030	MH087E027		093	IRWD	PVC	{78DB93B4-1DC7-4251-A37E-8C125B7F21F6}	CLMH087E030MH087E027	88.58	87.28	0.666666667	MH087E030	MH087E027			296	CLMH087E030MH087E027	8	0.0044	0.132485	0.32	0.156654	0.35	0.185303	0.39	0.156654	0.35		
CLMH087E031MH087E030		1975		Existing		MH087E031	MH087E030		093	IRWD	PVC	{464DCBF0-843C-4DBE-B822-ABCEA6E53E88}	CLMH087E031MH087E030	89.66	88.68	0.666666667	MH087E031	MH087E030			248	CLMH087E031MH087E030	8	0.0040	0.111056	0.13	0.155343	0.36	0.183746	0.39	0.155342	0.36		
CLMH087E032MH087E031		1975		Existing		MH087E032	MH087E031		093	IRWD	PVC	{F082A9DD-D16D-4518-B76C-0124F2DF0875}	CLMH087E032MH087E031	91.11	89.76	0.666666667	MH087E032	MH087E031			357	CLMH087E032MH087E031	8	0.0057	0.112978	0.29	0.132860	0.32	0.156993	0.35	0.132860	0.32		
CLMH087E033MH086S015		1976		Existing		MH086S033	MH086S015		A00093	IRWD	VCP	{1F1FD29C-FD4F-411D-85ED-38219FCD57CF}	CLMH087E033MH086S015	73.63	73.19	0.666666667	MH087E033	MH086S015			100	CLMH087E033MH086S015	8	0.0044	0.032418	0.16	0.038931	0.18	0.046115	0.19	0.038931	0.18		
CLMH087E034MH087E033		1976		Existing		MH087E034	MH087E033		A00093	IRWD	VCP	{04110BA7-52C9-431F-A12C-E83100CE01AB}	CLMH087E034MH087E033	75.31	73.73	0.666666667	MH087E034	MH087E033			400	CLMH087E034MH087E033	8	0.0040	0.032421	0.17	0.038934	0.18	0.046117	0.20	0.038934	0.18		
CLMH087E035MH087E036		1976		Existing		MH087E035	MH087E036		093	IRWD	PVC	{8B7728B-0E60-4B79-ACFF-1CC7A0CF9AAB}	CLMH087E035MH087E036	77.75	71.45	0.666666667	MH087E035	MH087E036			182	CLMH087E035MH087E036	8	0.0126	0.012750	0.10	0.020709	0.11	0.024551	0.11	0.020709	0.11		
CLMH087E036MH087N114		1976		Existing		MH087E036	MH087N114		093	IRWD	VCP	{584FDEE9-3606-497E-B17D-358C0DDF22DF}	CLMH087E036MH087N114	71.26	70.94	0.666666667	MH087E036	MH087N114			201	CLMH087E036MH087N114	8	0.0016	0.017249	0.15	0.020709	0.17	0.024550	0.18	0.020709	0.17		
CLMH087E037MH086S019		1976		Existing		MH087E037	MH086S019		9211	IRWD	VCP	{32B34290-EE61-4F3F-9F08-875938889776}	CLMH087E037MH086S019	79.04	77.55	0.666666667	MH087E037	MH086S019			124	CLMH087E037MH086S019	8	0.0120	0.002964	0.04	0.003563	0.05	0.004206	0.05	0.003562	0.05		
CLMH087E038MH087E039		1976		Existing		MH087E038	MH087E039		242	IRWD	PVC	{88BCB13A0-62A8-4065-A1ED-625.3CF8603F5}	CLMH087E038MH087E039	86.23	85.27	0.666666667	MH087E038	MH087E039			238	CLMH087E038MH087E039	8	0.0040	0.007242	0.08	0.008700	0.09	0.010376	0.10	0.008700	0.09		
CLMH087E039MH087E040		1978		Existing		MH087E039	MH087E040		242	IRWD	VCP	{73FE8D19-033F-489B-B211-CCDF15BA9ACF}	CLMH087E039MH087E040	85.08	83.84	0.666666667	MH087E039	MH087E040			307	CLMH087E039MH087E040	8	0.0040	0.011884	0.10	0.014277	0.11	0.016988	0.12	0.014277	0.11		
CLMH087E040MH087E041		1978		Existing		MH087E040	MH087E041		242	IRWD	VCP	{7F745F5A-B742-488B-B19B-27FDDFB43245}	CLMH087E040MH087E041	83.65	82.37	0.666666667	MH087E040	MH087E041			183	CLMH087E040MH087E041	8	0.0040	0.012774	0.11	0.015214	0.11	0.018103	0.12	0.015214	0.11		
CLMH087E041MH086S071		1978		Existing		MH087E041	MH086S071		242	IRWD	VCP	{002FCFAE-1776-4047-902E-158E2797E929}	CLMH087E041MH086S071	82.18	81.33	0.833333333	MH087E041	MH086S071			302	CLMH087E041MH086S071	10	0.0028	0.079658	0.21	0.095953	0.23	0.114384	0.25	0.095953	0.23		
CLMH087E042MH087E034		1978		Existing		MH087E042	MH087E034		A00093	IRWD	VCP	{08B71377-8F51-463A-BA36-7E9038BDC5F4}	CLMH087E042MH087E034	77.00	75.41	0.666666667	MH087E042	MH087E034			400	CLMH087E042MH087E034	8	0.0040	0.032445	0.17	0.038955	0.18	0.046132	0.20	0.038955	0.18		
CLMH087E043MH087E042		1978		Existing		MH087E043	MH087E042		242	IRWD	PVC	{9271F151-1D1F-4BDE-B28B-BDEF4F9ABC3E}	CLMH087E043MH087E042	77.93	77.04	0.666666667	MH087E043	MH087E042			327	CLMH087E043MH087E042	8	0.0039	0.024906	0.14	0.029900	0.16	0.035390	0.17	0.029900	0.16		
CLMH087E044MH087E043		1978		Existing		MH087E044	MH087E043		242	IRWD	PVC	{350A1DA8-BFDB-4156-9E32-A7EF4E93D888}	CLMH087E044MH087E043	78.56	78.12	0.666666667	MH087E044	MH087E043			115	CLMH087E044MH087E043	8	0.0038	0.024907	0.14	0.029901	0.16	0.035390	0.17	0.029901	0.16		
CLMH087E045MH087E044		1978		Existing		MH087E045	MH087E044		242	IRWD	PVC	{0B7C0F27-2D1F-4381-820F-1218953F96A1}	CLMH087E045MH087E044	79.86	78.76	0.666666667	MH087E045	MH087E044			276	CLMH087E045MH087E044	8	0.0040	0.024907	0.14	0.029902	0.15	0.035391	0.17	0.029902	0.15		
CLMH087E046MH087E117		1978		Existing		MH087E046	MH087E117		242	IRWD	PVC	{1FDBBE86-2CB2-4F0D-A249-E2A7FAB94305}	CLMH087E046MH087E117	80.65	80.48	0.666666667	MH087E046	MH087E117			58	CLMH087E046MH087E117	8	0.0029	0.008840	0.09	0.010612	0.10	0.012519	0.11	0.010612	0.10		
CLMH087E047MH087E042		1975		Existing		MH087E047	MH087E042		242	IRWD	PVC	{BCC85970-2B1F-4944-BA5C-1CCDF9AA4F24}	CLMH087E047MH087E042	78.69	77.09	0.666666667	MH087E047	MH087E042			419	CLMH087E047MH087E042	8	0.0038	0.007554	0.08	0.009066	0.09	0.010750	0.10	0.009066	0.09		
CLMH087E048MH102N009		1978		Existing		MH087E048	MH102N009		T10163	IRWD	PVC	{00375405-8248-49E7-8F82-1230B72A7AD9}	CLMH087E048MH102N009	99.12	97.87	0.500000000	MH087E048	MH102N009			315	CLMH087E048MH102N009	6	0.0040	0.002443	0.07	0.002933	0.07	0.003478	0.08	0.002933	0.07		
CLMH087E056MH087E057		1977		Existing		MH087E056	MH087E057		T09885	IRWD	VCP	{594DBE22-E765-402D-B48F-B68F8FF96133}	CLMH087E056MH087E057	92.94	91.76	0.666666667	MH087E056	MH087E057			296	CLMH087E056MH087E057	8	0.0040	0.011940	0.11	0.014321	0.12	0.017940	0.12	0.014321	0.12		
CLMH087E057MH087E058		1977		Existing		MH087E057	MH087E058		T09885	IRWD	VCP	{5C604AEE-4CB6-4539-9D74-49591C4EB909}	CLMH087E057MH087E058	91.66	90.52	0.666666667	MH087E057	MH087E058			285	CLMH087E057MH087E058	8	0.0040	0.018585	0.13	0.022316	0.14	0.026461	0.15	0.022316	0.14		
CLMH087E058MH087E031		1977		Existing		MH087E058	MH087E031		T09885	IRWD	VCP	{3ABD A9A7-6100-484C-B127-FCDCF28A16D1}	CLMH087E058MH087E031	90.43	89.86	0.666666667	MH087E058	MH087E031			135	CLMH087E058MH087E031	8	0.0042	0.020347	0.13	0.024433	0.14	0.028968	0.16	0.024433	0.14		
CLMH087E059MH087E061		1977		Existing		MH087E059	MH087E061		T09885	IRWD	VCP	{C3044CB8-ADA3-4F02-A12C-DAB3F1717F66}	CLMH087E059MH087E061	99.27	95.30	0.666666667	MH087E059	MH087E061			309	CLMH087E059MH087E061	8	0.0095	0.002063	0.04	0.002478	0.04	0.002918	0.04	0.002478	0.04		
CLMH087E061MH087E056		1977		Existing		MH087E061	MH087E056		T09885	IRWD	VCP	{28122162-6876-6AF5-89E3-E78362178EC2}	CLMH087E061MH087E056	95.09	93.15	0.666666667	MH087E061	MH087E056			220	CLMH087E061MH087E056	8	0.0088	0.012800	0.09	0.015370	0.10	0.018222	0.11	0.015370	0.10		
CLMH087E064MH087E025		1975		Existing		MH087E064	MH087E025		A00288	IRWD	VCP	{15F826BE-6A51-42F2-8C03-1E72A6361D94}	CLMH087E064MH087E025	80.12	79.55	0.500000000	MH087E064	MH087E025			68	CLMH087E064MH087E025	6	0.0084	0.011107	0.13	0.011861	0.13	0.014061	0.14	0.011861	0.13		
CLMH087E065MH087E064		1975		Existing		MH087E065	MH087E064		A00288	IRWD	VCP	{FC38929E-87A7-40D5-9086-C72C648DC698}	CLMH087E065MH087E064	89.13	80.33	0.500000000	MH087E065	MH087E064			172	CLMH087E065MH087E064	6	0.0512	0.008922	0.07	0.009528	0.08	0.011294	0.08	0.009528	0.08		
CLMH087E066MH087E065		1975		Existing		MH087E066	MH087E065		A00288	IRWD	VCP	{0DA3B045-FDF7-4142-A2F6-D0FB52CCFE45}	CLMH087E066MH087E065	91.51	89.33	0.500000000	MH087E066	MH087E065			221	CLMH087E066MH087E065	6	0.0099	0.008088	0.10	0.008638	0.11	0.010239	0.12	0.008638	0.11		
CLMH087E068MH087E026		1975		Existing		MH087E068	MH087E026		A00288	IRWD	VCP	{34D1399F-2E0C-4A97-BB54-C3B65BF6D395}	CLMH087E068MH087E026	86.97	84.19	0.500000000	MH087E068	MH087E026			167	CLMH087E068MH087E026	6	0.0166	0.006963	0.09	0.007433	0.09	0.008814	0.09	0.007433	0.09		
CLMH087E070MH087E046		1975		Existing		MH087E070	MH087E046		242	IRWD	VCP	{CBE6116C-ABF4-4FB6-86D3-D0B60BCAAAC0}	CLMH087E070MH087E046	86.61	80.84	0.666666667	MH087E070	MH087E046			210	CLMH087E070MH087E046	8	0.0275	0.008840	0.06	0.010612	0.06	0.012520	0.07	0.010612	0.06		
CLMH087E071MH087E072		1979		Existing		MH087E071	MH087E072		T09804	IRWD	VCP	{39EEA238-540C-40D4-BBA9-4A1B5D47CC35}	CLMH087E071MH087E072	89.27	88.45	0.500000000	MH087E071	MH087E072			150	CLMH087E071MH087E072	6	0.0055	0.002384	0.06	0.002863	0.07	0.003393	0.08	0.002863	0.07		
CLMH087E072MH087E070		1979		Existing		MH087E072	MH087E070		T09804	IRWD	VCP	{926C9098-F31B-493D-8B9A-A1D3BAB439F1}	CLMH087E072MH087E070	88.36	86.80	0.500000000	MH087E072	MH087E070			290	CLMH087E072MH087E070	6	0.0054	0.003853	0.08	0.004623	0.09	0.005420	0.09	0.004623	0.09		
CLMH087E072MH087E073		1979		Existing		MH087E072	MH087E073		T09804	IRWD	VCP	{8BAF87C3-3CD9-475A-83C5-0D1DCAB4599F}	CLMH087E072MH087E073	88.36	87.75	0.500000000	MH087E072	MH087E073			151	CLMH087E072MH087E073	6	0.0040	0.003017	0.08	0.003628	0.08	0.004361	0.09	0.003628	0.08		
CLMH087E073MH087E038		1979		Existing		MH087E073	MH087E038		T09804	IRWD	VCP	{F367892C-96A0-4A3C-94AF-792A76611B81}	CLMH087E073MH087E038	87.65	86.44	0.500000000	MH087E073	MH087E038			297	CLMH087E073MH087E038	6	0.0041	0.007243	0.12	0.008701	0.13	0.010377	0.14	0.008701	0.13		
CLMH087E074MH087E039		1979		Existing		MH087E074	MH087E039		T09804	IRWD	VCP	{FFA74012-A8D8-4537-99D4-957554AECACF}	CLMH087E074MH087E039	86.43	85.27	0.666666667	MH087E074	MH087E039			237	CLMH087E074MH087E039	8	0.0049	0.004647	0.06	0.005581	0.07	0.006615	0.07	0.005581	0.07		
CLMH087E075MH087E072		1979		Existing		MH087E075	MH087E072		T09804	IRWD	VCP	{65A5B602-4420-48CD-923E-0A665B866B1B}	CLMH087E075MH087E072	89.55	88.55	0.666666667	MH087E075	MH087E072			250	CLMH087E075MH087E072	8	0.0040	0.004486	0.06	0.005388	0.07	0.006388	0.08	0.005388	0.07		
CLMH087E076MH087E075		1979		Existing		MH087E076	MH087E075		T09804	IRWD	VCP	{4F22C1A5-10DC-4847-9889-D0D36FE77DE2}	CLMH087E076MH087E075	91.04	89.76	0.500000000	MH087E076	MH087E075			232	CLMH087E076MH087E075	6	0.0055	0.001301	0.05	0.001564	0.05	0.001854	0.06	0.001564	0.05		
CLMH087E077MH087E028		1979		Existing		MH087E077	MH087E028		T08978	IRWD	VCP	{037E82D4-DE80-4101-B0E8-2D02EDB00DAB}	CLMH087E077MH087E028	88.52	87.69	0.666666667	MH087E077	MH087E028			75	CLMH087E077MH087E028	8	0.0111	0.013604	0.09	0.016331	0.10	0.019361	0.11	0.016331	0.10		
CLMH087E078MH087E077		1979		Existing		MH087E078	MH087E077		8895	IRWD	VCP	{E65B87D-1DBD-4F1D-AAAF-DE83A7D08A3E}	CLMH087E078MH087E077	89.94	88.62	0.666666667	MH087E078	MH087E077			328	CLMH087E078MH087E077	8	0.0040	0.011740	0.10	0.014094	0.11

| | | |

CLMH0875059MH0875060		1983		Existing		MH0875059	MH0875060		T11610	IRWD	PVC	FFF8EBF58-0B43-47D1-8288-628677FFF865)	CLMH0875059	72.91	71.58	0.666666667	MH0875059	MH0875060			240	CLMH0875059MH0875060	8	0.0055	0.007531	0.07	0.009044	0.08	0.010719	0.09	0.009044	0.08
CLMH0875060MH0875061		1983		Existing		MH0875060	MH0875061		T11610	IRWD	PVC	40B1A7B6-3AE7-487C-B290-360C135D4731)	CLMH0875060	71.48	70.77	0.666666667	MH0875060	MH0875061			131	CLMH0875060MH0875061	8	0.0054	0.015304	0.11	0.018376	0.12	0.021784	0.13	0.018376	0.12
CLMH0875061MH0875036		1983		Existing		MH0875061	MH0875036		T11610	IRWD	PVC	513B898E-358A-45F4-841A-488A6C0E603C)	CLMH0875061	70.68	69.80	0.666666667	MH0875061	MH0875036			142	CLMH0875061MH0875036	8	0.0062	0.016967	0.11	0.020371	0.12	0.024151	0.13	0.020371	0.12
CLMH0875068MH0875038		1979		Existing		MH0875068	MH0875038		10362	IRWD	PVC	74386B58-C128-4F16-ACA4-39E7C1E8E32)	CLMH0875068	78.41	75.93	0.500000000	MH0875068	MH0875038			57	CLMH0875068MH0875038	6	0.0435	0.009600	0.02	0.000722	0.02	0.000855	0.02	0.000722	0.02
CLMH0875069MH0875044		1984		Existing		MH0875069	MH0875044		T12069	IRWD	PVC	(46940B74-3299-4832-B174-7F29C7977534)	CLMH0875069	76.41	75.87	0.500000000	MH0875069	MH0875044			150	CLMH0875069MH0875044	6	0.0036	0.021813	0.20	0.026188	0.22	0.031051	0.23	0.026188	0.22
CLMH0875070MH0875069		1984		Existing		MH0875070	MH0875069		T12069	IRWD	PVC	(82602BFF-8809-4F88-9D93-257228B7E25D)	CLMH0875070	77.33	76.51	0.666666667	MH0875070	MH0875069			210	CLMH0875070MH0875069	8	0.0039	0.009755	0.09	0.011711	0.10	0.013887	0.11	0.011711	0.10
CLMH0875071MH0875070		1984		Existing		MH0875071	MH0875070		T12069	IRWD	PVC	(99049631-2B9D-422F-9051-B330CC3E50B)	CLMH0875071	78.91	77.44	0.666666667	MH0875071	MH0875070			370	CLMH0875071MH0875070	8	0.0040	0.003446	0.05	0.004136	0.06	0.004905	0.06	0.004136	0.06
CLMH0875072MH0875071		1984		Existing		MH0875072	MH0875071		T12069	IRWD	PVC	(31138154-E290-41FF-AC7B-10C9D4AAB3F4)	CLMH0875072	80.55	79.01	0.666666667	MH0875072	MH0875071			390	CLMH0875072MH0875071	8	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH0875072MH0875073		1984		Existing		MH0875072	MH0875073		T12069	IRWD	PVC	(A0488F05-6631-4975-9B0D-059619BA6855)	CLMH0875072	80.55	79.97	0.666666667	MH0875072	MH0875073			84	CLMH0875072MH0875073	8	0.0069	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH0875073MH0875074		1984		Existing		MH0875073	MH0875074		T12069	IRWD	PVC	(DCB861B2-A756-439B-B78E-72C01A565825)	CLMH0875073	79.87	79.13	0.666666667	MH0875073	MH0875074			187	CLMH0875073MH0875074	8	0.0040	0.004406	0.06	0.005290	0.07	0.006273	0.07	0.005290	0.07
CLMH0875074MH0875075		1984		Existing		MH0875074	MH0875075		T12069	IRWD	PVC	(45C223E5-DE7B-4DAD-B632-D9231607646F)	CLMH0875074	79.04	78.33	0.666666667	MH0875074	MH0875075			183	CLMH0875074MH0875075	8	0.0039	0.008453	0.08	0.010148	0.09	0.012033	0.10	0.010148	0.09
CLMH0875075MH0875069		1984		Existing		MH0875075	MH0875069		T12069	IRWD	PVC	(8C0B2E96-D67D-417D-BCAD-1292A3F88D67)	CLMH0875075	78.23	76.62	0.666666667	MH0875075	MH0875069			406	CLMH0875075MH0875069	8	0.0040	0.012059	0.10	0.014477	0.11	0.017165	0.12	0.014477	0.11
CLMH0875077MH0875074		1984		Existing		MH0875077	MH0875074		T12069	IRWD	PVC	(80E8603C-AA22-425E-B901-6C585AF95C8B6)	CLMH0875077	80.12	79.23	0.666666667	MH0875077	MH0875074			225	CLMH0875077MH0875074	8	0.0040	0.004047	0.06	0.004858	0.06	0.005760	0.07	0.004858	0.06
CLMH0875079MH102W138		1984		Existing		MH0875079	MH102W138		T12081	IRWD	PVC	(2378326C-850C-4D1B-A2E3-86C94D6EA61E)	CLMH0875079	91.83	90.53	0.666666667	MH0875079	MH102W138			268	CLMH0875079MH102W138	8	0.0049	0.007353	0.08	0.008826	0.08	0.010465	0.09	0.008826	0.08
CLMH0875080MH0875081		1980		Existing		MH0875080	MH0875081		T11533	IRWD	PVC	(737713F6-2B32-42ED-8DDF-7A5BA615B603)	CLMH0875080	96.05	83.94	0.666666667	MH0875080	MH0875081			326	CLMH0875080MH0875081	8	0.0065	0.003184	0.05	0.003824	0.05	0.004534	0.06	0.003824	0.05
CLMH0875081MH0875052		1984		Existing		MH0875081	MH0875052		T11533	IRWD	PVC	(99CC4DCE-74CF-42D8-84A5-F55F4BFB31AE)	CLMH0875081	83.59	76.91	0.666666667	MH0875081	MH0875052			72	CLMH0875081MH0875052	8	0.0928	0.007112	0.10	0.008537	0.12	0.010123	0.15	0.008537	0.12
CLMH0875082MH0875083		1984		Existing		MH0875082	MH0875083		T11533	IRWD	PVC	(7D05E894-1422-4FF1-9326-70081D4690D5)	CLMH0875082	87.80	85.59	0.666666667	MH0875082	MH0875083			373	CLMH0875082MH0875083	8	0.0059	0.004467	0.06	0.005363	0.06	0.006358	0.07	0.005363	0.06
CLMH0875083MH0875084		1984		Existing		MH0875083	MH0875084		T11533	IRWD	PVC	(B9641F08-D28C-422C-B9DD-E9D8B0615BD4)	CLMH0875083	85.45	84.33	0.666666667	MH0875083	MH0875084			285	CLMH0875083MH0875084	8	0.0039	0.004466	0.06	0.005362	0.07	0.006358	0.07	0.005362	0.07
CLMH0875084MH0875085		1984		Existing		MH0875084	MH0875085		T11533	IRWD	PVC	(740766D4-5003-401C-B41B-E428FF33A487)	CLMH0875084	84.12	83.18	0.666666667	MH0875084	MH0875085			241	CLMH0875084MH0875085	8	0.0039	0.011858	0.10	0.014237	0.11	0.016880	0.12	0.014237	0.11
CLMH0875085MH0875087		1984		Existing		MH0875085	MH0875087		T11533	IRWD	PVC	(5F7DEABD-7FCD-4897-A5C4-41349B7445A)	CLMH0875085	83.08	82.48	0.666666667	MH0875085	MH0875087			152	CLMH0875085MH0875087	8	0.0039	0.027396	0.15	0.032897	0.16	0.039005	0.18	0.032897	0.16
CLMH0875086MH0875085		1984		Existing		MH0875086	MH0875085		T11533	IRWD	PVC	(348B8C62-5A8C-4A25-A349-9E74CF3253A1)	CLMH0875086	84.80	83.27	0.666666667	MH0875086	MH0875085			184	CLMH0875086MH0875085	8	0.0083	0.015540	0.10	0.018661	0.11	0.022125	0.12	0.018661	0.11
CLMH0875087MH0875056		1984		Existing		MH0875087	MH0875056		A00349	IRWD	PVC	(58CB6743-A0A5-49BD-BF92-1CCF686B39D8)	CLMH0875087	82.29	80.48	0.666666667	MH0875087	MH0875056			280	CLMH0875087MH0875056	8	0.0106	0.045827	0.16	0.055023	0.17	0.065237	0.19	0.055023	0.17
CLMH0875089MH0875090		1984		Existing		MH0875089	MH0875090		T12068	IRWD	PVC	(1E7EF9FD-B568-4FC9-AA62-844D97FD1CB8)	CLMH0875089	93.56	92.84	0.666666667	MH0875089	MH0875090			93	CLMH0875089MH0875090	8	0.0040	0.005425	0.07	0.006517	0.07	0.007727	0.08	0.006517	0.07
CLMH0875090MH0875092		1984		Existing		MH0875090	MH0875092		T12068	IRWD	PVC	(88567A63-6CB8-472A-B533-A5C912DE72E3)	CLMH0875090	92.65	80.20	0.666666667	MH0875090	MH0875092			143	CLMH0875090MH0875092	8	0.0877	0.013920	0.05	0.016715	0.06	0.019818	0.06	0.016715	0.06
CLMH0875092MH0875055		1984		Existing		MH0875092	MH0875055		T12068	IRWD	PVC	(6E0B8F49-B29F-47D3-ABD2-EE99F4B516A)	CLMH0875092	80.11	80.01	0.666666667	MH0875092	MH0875055			26	CLMH0875092MH0875055	8	0.0038	0.014130	0.13	0.016715	0.16	0.019815	0.19	0.016715	0.16
CLMH0875094MH102W250		1978		Existing		MH0875094	MH102W250		T11978	IRWD	PVC	(665CD968-6C0B-4199-AB63-907272406ZA9)	CLMH0875094	88.66	82.69	0.666666667	MH0875094	MH102W250			70	CLMH0875094MH102W250	8	0.0853	0.007614	0.11	0.009090	0.11	0.010777	0.13	0.009090	0.11
CLMH0875095MH0875011		1984		Existing		MH0875095	MH0875011		A00499	IRWD	PVC	(42FE3D3D-5FA3-4EAA-A1C2-13011D1FDB0B)	CLMH0875095	86.48	85.20	0.666666667	MH0875095	MH0875011			200	CLMH0875095MH0875011	8	0.0064	0.026593	0.14	0.031843	0.15	0.037749	0.16	0.031843	0.15
CLMH0875096MH0875095		1984		Existing		MH0875096	MH0875095		A00499	IRWD	PVC	(10B43122C-9047-4F26-ABF4-7F5962ED0B07)	CLMH0875096	87.58	86.59	0.666666667	MH0875096	MH0875095			232	CLMH0875096MH0875095	8	0.0043	0.016305	0.11	0.019516	0.12	0.023136	0.14	0.019516	0.12
CLMH0875097MH0875096		1984		Existing		MH0875097	MH0875096		A00499	IRWD	PVC	(98EF359E-CD87-491D-97EF-AAF1BF148FCB)	CLMH0875097	88.90	87.79	0.666666667	MH0875097	MH0875096			281	CLMH0875097MH0875096	8	0.0040	0.016305	0.12	0.019516	0.13	0.023136	0.14	0.019516	0.13
CLMH0875099MH0875095		1984		Existing		MH0875099	MH0875095		A00499	IRWD	PVC	(1B54666E6-28F8-454E-B68C-BBA9BD11C5B6)	CLMH0875099	87.30	86.68	0.666666667	MH0875099	MH0875095			163	CLMH0875099MH0875095	8	0.0038	0.010289	0.09	0.012328	0.10	0.014614	0.11	0.012328	0.10
CLMH0875102MH0875049		1984		Existing		MH0875102	MH0875049		T11654	IRWD	VCP	(5E1E2EA1B-19F5-4BAF-B107-1A2A47ABD6DE)	CLMH0875102	82.30	82.22	0.666666667	MH0875102	MH0875049			28	CLMH0875102MH0875049	8	0.0029	0.023780	0.15	0.028546	0.16	0.033847	0.17	0.028546	0.16
CLMH0875103MH0875102		1984		Existing		MH0875103	MH0875102		T11654	IRWD	VCP	(D04F3AFE-DB95-4382-B9A2-B9D5C296A31)	CLMH0875103	82.62	82.40	0.666666667	MH0875103	MH0875102			60	CLMH0875103MH0875102	8	0.0037	0.023780	0.14	0.028546	0.16	0.033847	0.17	0.028546	0.16
CLMH0875104MH0875103		1984		Existing		MH0875104	MH0875103		T11654	IRWD	VCP	(F664A642-6998-8446-90FB-7BDF29FBC15F)	CLMH0875104	83.11	82.72	0.666666667	MH0875104	MH0875103			103	CLMH0875104MH0875103	8	0.0038	0.023780	0.14	0.028546	0.16	0.033847	0.17	0.028546	0.16
CLMH0875106MH0875104		1984		Existing		MH0875106	MH0875104		T11654	IRWD	VCP	(6D30555C9-E0CE-4261-ACAF-73F5F3F61690)	CLMH0875106	86.51	83.50	0.666666667	MH0875106	MH0875104			80	CLMH0875106MH0875104	8	0.0642	0.002284	0.03	0.002741	0.03	0.003252	0.03	0.002741	0.03
CLMH0875108MH0875109		1984		Existing		MH0875108	MH0875109		T12490	IRWD	PVC	(4B59F8A2-C882-453F-8963-4FDF539085671)	CLMH0875108	76.25	75.36	0.666666667	MH0875108	MH0875109			224	CLMH0875108MH0875109	8	0.0040	0.018711	0.12	0.022465	0.13	0.026634	0.15	0.022465	0.13
CLMH0875109MH0875041		1985		Existing		MH0875109	MH0875041		T12490	IRWD	PVC	(1CC6C8F8-51C0-4CD8-9488-A1D241482960)	CLMH0875109	75.26	71.50	0.666666667	MH0875109	MH0875041			370	CLMH0875109MH0875041	8	0.0102	0.018711	0.10	0.022465	0.11	0.026634	0.12	0.022465	0.11
CLMH0875110MH0875108		1984		Existing		MH0875110	MH0875108		T12490	IRWD	PVC	(7A501C91-CD2A-48D1-B062-5F62F8B7220D)	CLMH0875110	77.38	76.44	0.666666667	MH0875110	MH0875108			73	CLMH0875110MH0875108	8	0.0039	0.012361	0.10	0.014840	0.11	0.017594	0.12	0.014840	0.11
CLMH0875111MH0875110		1984		Existing		MH0875111	MH0875110		T12490	IRWD	PVC	(AA7FF855-1816-4B2A-9FCD-35A73C741158)	CLMH0875111	78.59	77.58	0.666666667	MH0875111	MH0875110			253	CLMH0875111MH0875110	8	0.0040	0.012361	0.10	0.014840	0.11	0.017594	0.12	0.014840	0.11
CLMH0875114MH0875116		1984		Existing		MH0875114	MH0875116		T11654	IRWD	VCP	(31F1A22F-DFE8-4FF1-ACCB-A43237B365EB)	CLMH0875114	87.87	87.25	0.500000000	MH0875114	MH0875116			66	CLMH0875114MH0875116	6	0.0094	0.003646	0.07	0.004376	0.08	0.005190	0.08	0.004376	0.08
CLMH0875116MH0875175		1984		Existing		MH0875116	MH0875175		T11654	IRWD	VCP	(C0369701-616D-41D3-BE64-31F2D0E35272)	CLMH0875116	87.05	86.65	0.500000000	MH0875116	MH0875175			44	CLMH0875116MH0875175	6	0.0091	0.003646	0.07	0.004376	0.08	0.005190	0.08	0.004376	0.08
CLMH0875117MH0875118		1985		Existing		MH0875117	MH0875118		T11654	IRWD	VCP	(A753AC99-83E5-4771-AED5-1A52FEAAFC6B)	CLMH0875117	86.44	85.41	0.500000000	MH0875117	MH0875118			108	CLMH0875117MH0875118	6	0.0095	0.004908	0.08	0.005890	0.09	0.006986	0.09	0.005890	0.09
CLMH0875118MH0875123		1985		Existing		MH0875118	MH0875123		T11654	IRWD	VCP	(A9998768-80CC-486D-A7E4-F9225CA2B9CD)	CLMH0875118	85.23	84.61	0.666666667	MH0875118	MH0875123			161	CLMH0875118MH0875123	8	0.0039	0.006070	0.07	0.007286	0.08	0.008640	0.09	0.007286	0.08
CLMH0875121MH0875123		1983		Existing		MH0875121	MH0875123		T11654	IRWD	VCP	(98F4AE3C-3059-4C66-89AC-D8A65457AE0F)	CLMH0875121	87.69	84.77	0.500000000	MH0875121	MH0875123			64	CLMH0875121MH0875123	6	0.0456	0.000802	0.02	0.000961	0.03	0.001141	0.03	0.000961	0.03
CLMH0875123MH0875124		1984		Existing		MH0875123	MH0875124		T11654	IRWD	PVC	(48C3588B-5534-4F6D-90CB-AF5B77B75076)	CLMH0875123	84.51	83.59	0.666666667	MH0875123	MH0875124			79	CLMH0875123MH0875124	8	0.0116	0.010138	0.07	0.012167	0.08	0.014428	0.09	0.012167	0.08
CLMH0875124MH0875104		1984		Existing		MH0875124	MH0875104		T11654	IRWD	VCP	(ECCFBA4E-0487-45E0-AF5F-E24AE5B7D017)	CLMH0875124	83.48	83.40	0.666666667	MH0875124	MH0875104			44	CLMH0875124MH0875104	8	0.0041	0.010138	0.09	0.012167	0.10	0.014428	0.11	0.012167	0.10
CLMH0875125MH0875104		1984		Existing		MH0875125	MH0875104		T11654	IRWD	VCP	(5E15CA35-48D8-4DEF-A758-F4C99B448950)	CLMH0875125	83.65	83.30	0.666666667	MH0875125	MH0875104			87	CLMH0875125MH0875104	8	0.0040	0.011358	0.10	0.013637	0.11	0.016167	0.12	0.013637	0.11
CLMH0875126MH0875125		1984		Existing		MH0875126	MH0875125		T11654	IRWD	VCP	(C5023646-102E-46AB-A4D7-C455E615F69A)	CLMH0875126	84.08	83.75	0.666666667	MH0875126	MH0875125			85	CLMH0875126MH0875125	8	0.0038	0.008434	0.08	0.010125	0.09	0.012003	0.10	0.010125	0.09
CLMH0875128MH0875126		1984		Existing		MH0875128	MH0875126		T11654	IRWD	VCP	(C6C1AAA9-D9D7-4F26-AD88-593EA8B978A3)	CLMH0875128	84.48	84.18	0.666666667	MH0875128	MH0875126			84	CLMH0875128MH0875126	8	0.0037	0.008434	0.08	0.010125	0.09	0.012003	0.10	0.010125	0.09
CLMH0875129MH0875128		1984		Existing		MH0875129	MH0875128		T11654	IRWD	PVC	(B9CB168B-179B-456A-AD4B-19940DAC2EFB)	CLMH0875129	85.86	84.86	0.500000000	MH0875129	MH0875128			46	CLMH0875129MH0875128	6	0.0217	0.002504	0.05	0.003006	0.05	0.003564	0.06	0.003006	0.05
CLMH0875131MH0875129		1985		Existing		MH0875131	MH0875129		T11654	IRWD	VCP	(9D47FF4B-2FCF-4115-817F-122467E58F8F)	CLMH0875131	85.01	84.69	0.666666667	MH0875131	MH0875128			85	CLMH0875131MH0875128	8	0.0038	0.005930	0.07	0.007119	0.08	0.008439	0.08	0.007119	0.08
CLMH0875134MH0875135		1985		Existing		MH0875134	MH0875135		T11654	IRWD	VCP	(48E6E023-3F02-4605-87D3-938B972062BB)	CLMH0875134	87.22	85.84	0.500000000	MH0875134	MH0875135			63	CLMH0875134MH0875135	6	0.0282	0.004809	0.06	0.005773	0.07	0.006843	0.07	0.005773	0.07
CLMH0875135MH0875131		1986		Existing		MH0875135	MH0875131		T11654	IRWD	PVC	(F3E66CCA-E22E-44E9-9C94-CB0E2AF7A792)	CLMH0875135	85.58	85.11	0.666666667	MH0875135	MH0875131			119	CLMH0875135MH0875131	8	0.0039	0.004809	0.06	0.005773	0.07	0.006843	0.08	0.005773	0.07
CLMH0875136MH0875135		1985		Existing		MH0875136	MH0875135		T11654	IRWD	PVC	(DD3398B0-5704-4536-A302-4F94016F33A2)	CLMH0875136	87.54	85.68	0.500000000	MH0875136	MH0875135			190	CLMH0875136MH0875135	6	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH0875138MH0875007		1989		Existing		MH0875138	MH0875007		A00003	IRWD	VCP	(DDD3C4DC-7080-4662-988E-F4BD273BCF31)	CLMH0875138	85.40	80.81	0.666666667	MH0875138	MH0875007			85	CLMH0875138MH0875007	8	0.0540	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH0875139MH0875140		1989		Existing		MH0875139	MH0875140		T13549	IRWD	VCP	(05B28B0F-F714-4934-BA78-73695FFF0CEB)	CLMH0875139	85.19	75.65	0.666666667	MH0875139	MH0875140			116	CLMH0875139MH0875140	8	0.0822	0.001763	0.02	0.002117	0.02	0.002508	0.03	0.002117	0.02
CLMH0875140MH0875141		1989		Existing		MH0875140	MH0875141		T13549	IRWD	VCP	(B782444F-3E78-43B2-B4EC-1515DE660CC2)	CLMH0875140	74.84	74.81	0.666666667	MH0875140	MH0875141	Existing 8-in and less, d/D=0.50		22	CLMH0875140MH0875141	8	0.0014	0.440898	0.65	0.529904	0.72	0.628960	0.79	0.529898	0.72
CLMH0875141MH0875043		1983		Existing		MH0875141	MH0875043		A00349	IRWD	VCP	(60D5D892-6FE5-4C0A-8B07-F5C85005503)	CLMH0875141	74.69	74.50	1.250000000	MH0875141	MH0875043			129	CLMH0875141MH0875043	15	0.0015	0.464487	0.31	0.537184	0.33	0.638126	0.36	0.537180	0.33
CLMH0875142MH0875141		1984		Existing		MH0875142	MH0875141		T13549	IRWD	VCP	(E60B7AE0-CBAB-4005-AE8E-B9174F629632)	CLMH0875142	85.16	75.41	0.666666667	MH0875142	MH0875141			193	CLMH0875142MH0875141	8	0.0505	0.006811	0.05	0.008179	0.05	0.009693	0.05	0.008179	0.05
CLMH0875143MH0875142		1984		Existing		MH0875143	MH0875142		T13549	IRWD	VCP	(65D21F44-458A-4BAA-9AC7-BFE259B80844)	CLMH0875143	86.58	85.26	0.666666667	MH0875143	MH0875142			224	CLMH0875143MH0875142	8	0.0059	0.002223	0.04	0.002671	0.05	0.003164	0.05	0.002671	0.05
CLMH0875144MH0875140		1984		Existing		MH0875144	MH0875140		T13549	IRWD	VCP	(41EBFC22-BD7D-4DAF-9F5B-F1DC93976011)	CLMH0875144	75.00	74.91	1.250000000	MH0875144	MH0875140			140	CLMH0875144MH0875140	15	0.0006	0.439509	0.33	0.528324	0.35	0.627069	0.38	0.528318	0.35
CLMH0875151MH0875011		1984		Existing		MH0875151	MH0875011		A00003	IRWD	VCP	(B7370AED-609C-4824-981D-B72B777E6616)	CLMH0875151	88.58	85.11	0.666666667	MH0875151	MH0875011			346	CLMH0875151MH0875011	8	0.0100	0.003020	0.04	0.003623	0.05	0.004228	0.05	0.003623	0.05
CLMH0875094MH0875097		1979		Existing		MH0875094	MH0875097		A00311	IRWD	VCP	(C9C74ADC-2009-41F4-BA4A-ABEF6D5ED436)	CLMH0875094	60.06	58.77	1.250000000	MH0875094	MH0875097			346	CLMH0875094MH0875097	15	0.0037	0.599421	0.34	0.712941	0.38	0.847875	0.42	0.712927	0.38
CLMH0875095MH0875096		1984		Existing		MH0875095	MH0875096		T13347	IRWD	PVC	(754D2A12-3A41-406D-A92A-F0564D6AB964)	CLMH0875095	72.13	68.98	0.666666667	MH0875095	MH0875096			234	CLMH0875095MH0875096	8	0.0135	0.005449	0.05	0.006542	0.06	0.007756	0.06	0.006542	0.06
CLMH0875096MH0875097		1984		Existing		MH0875096	MH0875097		T13347	IRWD	PVC	(4F101026-65C5-4856-8E05-29683089310B)	CLMH0875096	68.87	63.34	0.666666667	MH0875096	MH0875097			176	CLMH0875096MH0875097	8	0.0314	0.031274	0.10	0.037543	0.11	0.044510	0.12	0.037543	0.11
CLMH0875097MH0875161		1980		Existing		MH0875097	MH0875161		A00338	IRWD	PVC	(559C1985-0582-4F23-98F2-CE86C5ABD7E9)	CLMH0875097	63.09	62.27	0.666666667	MH0875097	MH0875161			171	CLMH0875097MH0875161	8	0.0048	0.059596	0.21	0.071409	0.23	0.084667	0.25	0.071409	0.23
CLMH0875099MH0875096		1984		Existing		MH0875099	MH0875096		T13347	IRWD	PVC	(5F95B1AB-23B6-4465-ACB6-48C1E5D1EBFA)	CLMH0875099	69.69	69.08	0.666666667	MH0875099	MH0875096			119	CLMH0875099MH0875096	8	0.0051	0.025825	0.14	0.031001	0.15	0.036754	0.16	0.031001	0.15
CLMH0875100MH0875099		1984		Existing		MH0875100	MH0875099		T13347	IRWD	PVC	(CE0ED406-1F75-4161-89C7-39CAAB79E23B)	CLMH0875100	72.88	69.98	0.666666667	MH0875100	MH0875099			228	CLMH0875100MH0875099	8	0.0127	0.006851	0.06	0.008226	0.07	0.009753	0.07	0.008226	0.07
CLMH0875101MH0875100		1984		Existing		MH0875101	MH0875100		T13347	IRWD	PVC	(FBAE1398-2CE4-4329-A580-34F486E0F2D)	CLMH0875101	77.01	72.98	0.666666667	MH0875101	MH0875100			83	CLMH0875101MH0875100	8	0.0161	0.000961	0.02	0.001154	0.02	0.001370	0.03	0.001154	0.02
CLMH0875104MH0875105		1980		Existing		MH0875104	MH0875105		T13347	IRWD	PVC	(95DCF55A-4101-4A7B-905E-9760DE950BAF)	CLMH0875104	81.02	76.26	0.666666667	MH0875104	MH0875105			251	CLMH0875104MH0875105	8	0.0190	0.001341	0.02	0.001611	0.03	0.001910	0.03	0.001611	0.03
CLMH0875105MH0875106		1980		Existing		MH0875105	MH0875106		T13347	IRWD	PVC	(AC110FEC-E44F-4596-9A93-556BA02154DE)	CLMH0875105	76.16	71.05	0.666666667	MH0875105	MH0875106			255	CLMH0875105MH0875106	8	0.0200	0.007412	0.06	0.008899	0.06	0.010550	0.07	0.008899	0.06
CLMH0875106MH0875099		1979		Existing		MH0875106	MH0875099		T13347	IRWD	PVC	(99781EC9-0A95-481C-8770-F90D7173B1EB)	CLMH0875106	70.86	69.98	0.666666667	MH0875106	MH0875099			209	CLMH0875106MH0875099	8	0.0042	0.016148	0.11	0.019385	0.12	0.022980	0.13	0.019385	0.12
CLMH0875109MH0875106		1980		Existing		MH0875109	MH0875106		T13347	IRWD	PVC	(CF8F1F2A-6F1A-4DD2-95AC-CB51F842C785)	CLMH0875109	71.48	70.95	0.666666667	MH0875109	MH0875106			105	CLMH0875109MH0875106	8	0.0050	0.004208	0.06	0.005051	0.06	0.005987	0.07	0.005051	0.06
CLMH0875110MH0875109		1980		Existing		MH0875110	MH0875109		T13347	IRWD	PVC	(3668B54B-4175-4C4A-A024-AA0629555E2B)	CLMH0875110	75.88	71.69	0.666666667	MH0875110	MH0875109			216	CLMH0875110MH0875109	8	0.0194	0.002966	0.04	0.003559	0.04	0.004220	0.04	0.003559	0.04
CLMH0875111MH0875110		1980		Existing		MH0875111	MH0875110		T13347	IRWD	PVC	(08A295EF-CD72-4F03-AC68-47909E883D15)	CLMH0875111	79.27	75.98	0.666666667	MH0875111	MH0875110			310	CLMH0875111MH0875110	8	0.0106	0.002966	0.04	0.003559	0.05	0.004220	0.05	0.003559	0.05
CLMH0875113MH0875118		1980		Existing		MH0875113	MH0875118		T10361	IRWD	VCP	(B5B9E00B-1A24-458C-AAAE-86A7B37FC2CF)	CLMH0875113	80.93	80.41	0.666666667	MH0875113	MH0875118			127	CLMH0875113MH0875118

CLMH088T21MH087W118		1980		Existing		MH087W121	MH087W118		T10361	IRWD	VCP	{475A2436-1148-4EF7-9F1F-5C185BE83F12}	CLMH088T21MH087W118	80.93	80.41	0.666666667	MH087W121	MH087W118				128	CLMH087W121MH087W118	8	0.0041	0.002424	0.05	0.002910	0.05	0.003450	0.06	0.002910	0.05		
CLMH087W122MH087S040		1980		Existing		MH087W122	MH087S040		T10361	IRWD	VCP	{6E586DC8-6FC2-45FD-8E1E-58D5B768E5EE}	CLMH088T22MH087S040	78.44	71.59	0.666666667	MH087W122	MH087S040				269	CLMH087W122MH087S040	8	0.0255	0.001062	0.02	0.001275	0.02	0.001511	0.03	0.001275	0.02		
CLMH087W123MH087W122		1980		Existing		MH087W123	MH087W122		T10361	IRWD	VCP	{A2385E7F-1573-482C-B081-CFD6688AE8B5}	CLMH088T23MH087W122	79.15	78.63	0.500000000	MH087W123	MH087W122				50	CLMH087W123MH087W122	6	0.0104	0.001062	0.04	0.001275	0.04	0.001511	0.05	0.001275	0.04		
CLMH087W124MH087W034		1980		Existing		MH087W124	MH087W034		T10336	IRWD	PVC	{7C0859AE-B021-4993-82D0-1FCA10BB92F3}	CLMH087W124MH087W034	72.00	68.34	0.666666667	MH087W124	MH087W034				194	CLMH087W124MH087W034	8	0.0189	0.008900	0.06	0.010678	0.07	0.012661	0.07	0.010678	0.07		
CLMH087W129MH087W130		1982		Existing		MH087W129	MH087W130		T10371	IRWD	VCP	{6446BDB5-EFCD-406D-A56C-A4DBCE7CF997}	CLMH087W129MH087W130	64.54	64.15	0.500000000	MH087W129	MH087W130				42	CLMH087W129MH087W130	6	0.0093	0.003065	0.07	0.003679	0.07	0.004363	0.08	0.003679	0.07		
CLMH087W130MH087W131		1982		Existing		MH087W130	MH087W131		T10371	IRWD	VCP	{5FC7942C-8F3E-415B-AC45-025FF4AD9E61}	CLMH087W130MH087W131	63.95	63.06	0.500000000	MH087W130	MH087W131				90	CLMH087W130MH087W131	6	0.0099	0.003906	0.07	0.004690	0.08	0.005561	0.09	0.004690	0.08		
CLMH087W131MH087W132		1982		Existing		MH087W131	MH087W132		T10371	IRWD	VCP	{31FF2DBA-A699-498B-8EC3-C77DFFF6F95F7}	CLMH087W131MH087W132	62.77	57.59	0.500000000	MH087W131	MH087W132				56	CLMH087W131MH087W132	6	0.0925	0.003906	0.04	0.004690	0.05	0.005561	0.05	0.004690	0.05		
CLMH087W132MH087W208		1982		Existing		MH087W132	MH087W208		A00338	IRWD	VCP	{1C2AFBFD-F4C7-4A53-B215-99AE54E9140F}	CLMH087W132MH087W208	57.40	57.11	0.666666667	MH087W132	MH087W208				39	CLMH087W132MH087W208	8	0.0074	0.047661	0.18	0.057214	0.20	0.067834	0.21	0.057214	0.20		
CLMH087W133MH087W132		1982		Existing		MH087W133	MH087W132		T10371	IRWD	PVC	{DA224DD9-00E5-4A7B-BD47-018AF132DA6E}	CLMH087W133MH087W132	60.38	57.59	0.666666667	MH087W133	MH087W132				105	CLMH087W133MH087W132	8	0.0266	0.043755	0.12	0.052524	0.13	0.062273	0.14	0.052524	0.13		
CLMH087W134MH087W133		1982		Existing		MH087W134	MH087W133		047	IRWD	VCP	{2F98EF67-28F9-4C5E-8F95-E1BADF38F24}	CLMH087W134MH087W133	60.84	60.58	0.666666667	MH087W134	MH087W133				58	CLMH087W134MH087W133	8	0.0045	0.037666	0.17	0.045213	0.19	0.053605	0.21	0.045213	0.19		
CLMH087W135MH087W134		1982		Existing		MH087W135	MH087W134		T10371	IRWD	VCP	{67821105-608e-4E76-8AD0-585SBDF11724}	CLMH087W135MH087W134	64.58	60.95	0.500000000	MH087W135	MH087W134				341	CLMH087W135MH087W134	6	0.0106	0.006291	0.09	0.007550	0.10	0.008954	0.11	0.007550	0.10		
CLMH087W136MH087W137		1982		Existing		MH087W136	MH087W137		T10371	IRWD	PVC	{C73D6181-F4F2-40A6-AE51-168E237EC6C5}	CLMH087W136MH087W137	67.72	62.40	0.500000000	MH087W136	MH087W137				264	CLMH087W136MH087W137	6	0.0202	0.003887	0.06	0.004666	0.06	0.005531	0.07	0.004666	0.06		
CLMH087W137MH087W134		1982		Existing		MH087W137	MH087W134		T10371	IRWD	PVC	{328BA494-EB3F-48C2-ABA5-698BC90SB718}	CLMH087W137MH087W134	62.20	61.04	0.666666667	MH087W137	MH087W134				290	CLMH087W137MH087W134	8	0.0040	0.031375	0.16	0.037662	0.18	0.044651	0.19	0.037662	0.18		
CLMH087W138MH087W137		1983		Existing		MH087W138	MH087W137		T10371	IRWD	PVC	{938B5FD9-78E5-4A2B-8F6C-F64F39ED847B}	CLMH087W138MH087W137	64.48	62.40	0.666666667	MH087W138	MH087W137				299	CLMH087W138MH087W137	8	0.0070	0.004028	0.05	0.004833	0.06	0.005732	0.06	0.004833	0.06		
CLMH087W139MH087W137		1982		Existing		MH087W139	MH087W137		T10371	IRWD	PVC	{8B7A4AAD-7E77-4408-A533-17B01D456F77}	CLMH087W139MH087W137	63.68	62.31	0.666666667	MH087W139	MH087W137				49	CLMH087W139MH087W137	8	0.0101	0.023459	0.11	0.028164	0.12	0.033387	0.14	0.028164	0.12		
CLMH087W140MH087W139		1982		Existing		MH087W140	MH087W139		T10371	IRWD	PVC	{8148AE60-02D1-41EB-BC57-8C6F5F8DFD74}	CLMH087W140MH087W139	64.15	63.88	0.666666667	MH087W140	MH087W139				65	CLMH087W140MH087W139	8	0.0042	0.019914	0.13	0.023905	0.14	0.028341	0.15	0.023905	0.14		
CLMH087W141MH087W140		1982		Existing		MH087W141	MH087W140		T10371	IRWD	PVC	{58BD99F8-C843-496D-B8B3-2BD684968196}	CLMH087W141MH087W140	66.81	64.34	0.500000000	MH087W141	MH087W140				250	CLMH087W141MH087W140	6	0.0099	0.006851	0.09	0.008226	0.10	0.009751	0.11	0.008226	0.10		
CLMH087W142MH087W140		1982		Existing		MH087W142	MH087W140		T10371	IRWD	VCP	{C3B41EFF-7D67-406D-AAA9-7FD323E6DF8B2}	CLMH087W142MH087W140	64.69	64.34	0.666666667	MH087W142	MH087W140				82	CLMH087W142MH087W140	8	0.0043	0.013063	0.10	0.015680	0.11	0.018590	0.12	0.015680	0.11		
CLMH087W143MH087W141		1982		Existing		MH087W143	MH087W141		T10371	IRWD	VCP	{0121AAD1-1F59-475A-B8C2-7FB6B7660EC2}	CLMH087W143MH087W141	68.33	67.01	0.500000000	MH087W143	MH087W141				135	CLMH087W143MH087W141	6	0.0098	0.003125	0.07	0.003752	0.07	0.004448	0.08	0.003752	0.07		
CLMH087W144MH087W145		1982		Existing		MH087W144	MH087W145		T10371	IRWD	VCP	{C01E8E1C-9203-467A-AA6D-AB9CA0614FCF}	CLMH087W144MH087W145	68.62	65.80	0.500000000	MH087W144	MH087W145				84	CLMH087W144MH087W145	6	0.0336	0.004307	0.06	0.005170	0.06	0.006130	0.07	0.005170	0.06		
CLMH087W145MH087W142		1982		Existing		MH087W145	MH087W142		T10371	IRWD	VCP	{237D9674-6B22-4C49-B8C1-ECF128B0CA20}	CLMH087W145MH087W142	65.59	64.88	0.666666667	MH087W145	MH087W142				165	CLMH087W145MH087W142	8	0.0043	0.011339	0.10	0.013612	0.11	0.016137	0.12	0.013612	0.11		
CLMH087W146MH087W145		1982		Existing		MH087W146	MH087W145		T10371	IRWD	VCP	{655D06CD-3EDF-4DF3-AF73-2FF955C68CE2}	CLMH087W146MH087W145	66.58	65.80	0.500000000	MH087W146	MH087W145				341	CLMH087W146MH087W145	6	0.0094	0.003906	0.10	0.004641	0.11	0.010007	0.12	0.008441	0.11		
CLMH087W147MH087W146		1982		Existing		MH087W147	MH087W146		T10371	IRWD	PVC	{F72FF37D-F4AE-4E16-8F3C-DC59671058B3}	CLMH087W147MH087W146	67.19	66.73	0.500000000	MH087W147	MH087W146				49	CLMH087W147MH087W146	6	0.0094	0.003426	0.07	0.004113	0.08	0.004876	0.08	0.004113	0.08		
CLMH087W148MH087W147		1982		Existing		MH087W148	MH087W147		T10371	IRWD	PVC	{FF4955EB-BA69-4912-ACB9-C1823E0ED3CF}	CLMH087W148MH087W147	68.29	67.38	0.500000000	MH087W148	MH087W147				94	CLMH087W148MH087W147	6	0.0097	0.003426	0.07	0.004113	0.08	0.004876	0.08	0.004113	0.08		
CLMH087W161MH087W187		1982		Existing		MH087W161	MH087W187		A00338	IRWD	PVC	{C82DF282-CF69-48FD-B6DB-D4FB66078AFD}	CLMH087W161MH087W187	62.06	61.75	0.666666667	MH087W161	MH087W187				114	CLMH087W161MH087W187	8	0.0027	0.059591	0.24	0.071496	0.25	0.084665	0.28	0.071496	0.25		
CLMH087W162MH087W135		1982		Existing		MH087W162	MH087W135		T10371	IRWD	PVC	{6DA0B0B0-CE69-44A5-AE93-81CD1B0F75B0}	CLMH087W162MH087W135	65.23	64.77	0.500000000	MH087W162	MH087W135				50	CLMH087W162MH087W135	6	0.0092	0.002204	0.06	0.002645	0.06	0.003136	0.07	0.002645	0.06		
CLMH087W163MH087W196		1980		Existing		MH087W163	MH087W196		A00338	IRWD	PVC	{3F42D737-E35B-40FD-8018-B1AD18A75228}	CLMH087W163MH087W196	65.98	64.06	0.666666667	MH087W163	MH087W196				407	CLMH087W163MH087W196	8	0.0047	0.028434	0.15	0.033956	0.16	0.040256	0.17	0.033956	0.16		
CLMH087W179MH088N167		1980		Existing		MH087W179	MH088N167		T10344	IRWD	VCP	{E516DCBE-6A93-4185-B00C-B598BD6C586B}	CLMH087W179MH088N167	63.56	61.34	0.500000000	MH087W179	MH088N167				386	CLMH087W179MH088N167	6	0.0058	0.005408	0.09	0.006532	0.10	0.007769	0.11	0.006532	0.10		
CLMH087W187MH087W008		1980		Existing		MH087W187	MH087W008		A00338	IRWD	PVC	{5D88C1FE-44EA-4118-925A-7A0B874D9748}	CLMH087W187MH087W008	61.54	60.56	0.666666667	MH087W187	MH087W008				218	CLMH087W187MH087W008	8	0.0045	0.009130	0.23	0.082870	0.25	0.098261	0.28	0.082870	0.25		
CLMH087W196MH087W097		1980		Existing		MH087W196	MH087W097		A00338	IRWD	PVC	{F9769C55-8E9B-46A2-B6A3-C9E53AB00355}	CLMH087W196MH087W097	63.86	63.20	0.666666667	MH087W196	MH087W097				140	CLMH087W196MH087W097	8	0.0047	0.028417	0.15	0.033939	0.16	0.040235	0.17	0.033939	0.16		
CLMH087W208MH087W052		1979		Existing		MH087W208	MH087W052		A00338	IRWD	PVC	{0F77F61B-8DBC-4DF7-9E7F-610B4E2AA652}	CLMH087W208MH087W052	57.02	55.58	0.666666667	MH087W208	MH087W052				346	CLMH087W208MH087W052	8	0.0042	0.047661	0.19	0.057214	0.21	0.067834	0.23	0.057214	0.21		
CLMH088E001MH088N002		1975		Existing		MH088E001	MH088N002		056	IRWD	VCP	{90CC515D-28CE-42D8-93BD-6BD01AB2A680}	CLMH088E001MH088N002	72.19	69.27	1.000000000	MH088E001	MH088N002				396	CLMH088E001MH088N002	12	0.0074	0.819097	0.33	0.759078	0.35	1.556571	0.38	1.469273	0.50		
CLMH088E002MH088E001		1975		Existing		MH088E002	MH088E001		056	IRWD	VCP	{96C8F64D-88F1-4883-8F49-8559A46F2522}	CLMH088E002MH088E001	73.37	72.29	3.500000000	MH088E002	MH088E001				398	CLMH088E002MH088E001	42	0.0027	8.819142	0.33	9.759190	0.35	11.556603	0.38	14.469273	0.49		
CLMH088E003MH088E002		1975		Existing		MH088E003	MH088E002		056	IRWD	VCP	{447AFA69-486B-4389-A099-9D55D98C085C}	CLMH088E003MH088E002	74.54	73.47	3.500000000	MH088E003	MH088E002				395	CLMH088E003MH088E002	42	0.0027	8.819143	0.33	9.759243	0.35	11.556572	0.38	14.469189	0.49		
CLMH088E004MH088E077		1975		Existing		MH088E004	MH088E077		056	IRWD	VCP	{C6AEF7AC-EC2B-4497-9D12-77BDF3A51DDF}	CLMH088E004MH088E077	75.70	74.84	3.500000000	MH088E004	MH088E077				319	CLMH088E004MH088E077	42	0.0027	8.810871	0.33	9.750370	0.35	11.545999	0.38	14.459861	0.49		
CLMH088E005MH088E004		1975		Existing		MH088E005	MH088E004		056	IRWD	VCP	{6A3DE284-3534-4243-9EFA-0978051CAAB}	CLMH088E005MH088E004	76.77	75.80	3.500000000	MH088E005	MH088E004				362	CLMH088E005MH088E004	42	0.0027	8.810867	0.33	9.750321	0.35	11.545980	0.38	14.459864	0.49		
CLMH088E006MH088E005		1980		Existing		MH088E006	MH088E005		056	IRWD	VCP	{928D4490-2915-41AA-831D-383B67C7B0F4}	CLMH088E006MH088E005	77.84	76.87	3.500000000	MH088E006	MH088E005				402	CLMH088E006MH088E005	42	0.0027	8.808900	0.33	9.748202	0.35	11.543449	0.38	14.457663	0.49		
CLMH088E007MH088E006		1975		Existing		MH088E007	MH088E006		056	IRWD	VCP	{D6ED6A8F-AB18-448D-B9A3-2F96B4710697}	CLMH088E007MH088E006	79.80	77.94	3.500000000	MH088E007	MH088E006				406	CLMH088E007MH088E006	42	0.0046	8.805208	0.31	9.744848	0.33	11.538631	0.36	14.453817	0.47		
CLMH088E008MH088E007		1975		Existing		MH088E008	MH088E007		056	IRWD	VCP	{4C1CC766-A58B-41FE-8764-947FC8A195AC}	CLMH088E008MH088E007	81.76	79.90	3.500000000	MH088E008	MH088E007				409	CLMH088E008MH088E007	42	0.0045	8.803596	0.30	9.743252	0.32	11.536441	0.35	14.451794	0.45		
CLMH088E009MH088S114		1973		Existing		MH088E009	MH088S114		T06592	IRWD	VCP	{EBAC78BE-DC63-4A62-AB21-A6F8B043887E}	CLMH088E009MH088S114	86.12	83.98	0.500000000	MH088E009	MH088S114				170	CLMH088E009MH088S114	6	0.0126	0.041493	0.07	0.005036	0.08	0.005967	0.08	0.005036	0.08		
CLMH088E010MH088S113		1973		Existing		MH088E010	MH088S113		T06592	IRWD	VCP	{4CC4211A-D28D-4EDC-AD6E-16FCA77B0F31}	CLMH088E010MH088S113	89.66	87.43	0.500000000	MH088E010	MH088S113				179	CLMH088E010MH088S113	6	0.0125	0.002394	0.06	0.002874	0.06	0.003406	0.06	0.002874	0.06		
CLMH088E012MH088S013		1973		Existing		MH088E012	MH088S013		T06592	IRWD	VCP	{E6512474-0716-49B2-A266-3F2B571383381}	CLMH088E012MH088S013	94.04	92.19	0.500000000	MH088E012	MH088S013				394	CLMH088E012MH088S013	6	0.0126	0.002894	0.06	0.003474	0.07	0.004119	0.07	0.003474	0.07		
CLMH088E013MH088S112		1973		Existing		MH088E013	MH088S112		T06592	IRWD	VCP	{0E4F0594-C09E-401B-B8C2-334B6C609FF9}	CLMH088E013MH088S112	91.77	91.51	0.833333333	MH088E013	MH088S112				35	CLMH088E013MH088S112	10	0.0074	0.202701	0.18	0.244334	0.30	0.290997	0.33	0.244349	0.30		
CLMH088E014MH088E015		1973		Existing		MH088E014	MH088E015		T06592	IRWD	PVC	{A5839723-AFEA-404D-A6E4-4988FCAC6905}	CLMH088E014MH088E015	94.88	93.05	0.500000000	MH088E014	MH088E015				147	CLMH088E014MH088E015	6	0.0124	0.001482	0.04	0.001778	0.05	0.002109	0.09	0.001778	0.05		
CLMH088E015MH088S013		1973		Existing		MH088E015	MH088S013		T06592	IRWD	VCP	{D9AE2B1A-51EF-4190-8051-9156FAD9584E}	CLMH088E015MH088S013	92.72	91.87	0.833333333	MH088E015	MH088S013				332	CLMH088E015MH088S013	10	0.0026	0.200476	0.34	0.241089	0.37	0.287057	0.41	0.241085	0.37		
CLMH088E016MH088E015		1973		Existing		MH088E016	MH088E015		T06592	IRWD	VCP	{72231935-D9EE-4611-9061-CB9035897930}	CLMH088E016MH088E015	96.80	93.05	0.500000000	MH088E016	MH088E015				165	CLMH088E016MH088E015	6	0.0227	0.001913	0.04	0.002299	0.05	0.002729	0.05	0.002299	0.05		
CLMH088E017MH088E018		1973		Existing		MH088E017	MH088E018		T06592	IRWD	VCP	{D4022CCD-C8DF-46EE-A90D-86A65C3EC98B}	CLMH088E017MH088E018	99.44	94.11	0.500000000	MH088E017	MH088E018				205	CLMH088E017MH088E018	6	0.0260	0.005035	0.07	0.006046	0.07	0.007168	0.08	0.006046	0.07		
CLMH088E018MH088E015		1973		Existing		MH088E018	MH088E015		T06592	IRWD	VCP	{E4658290-21F4-4610-9A14-CDA561FB1CED}	CLMH088E018MH088E015	93.68	92.76	0.833333333	MH088E018	MH088E015				305	CLMH088E018MH088E015	10	0.0030	0.196380	0.32	0.280603	0.39	0.235777	0.36	0.280603	0.39		
CLMH088E019MH088E018		1973		Existing		MH088E019	MH088E018		T08261	IRWD	VCP	{FCA37D46-FCCD-4FA0-8D51-3196F17132B8}	CLMH088E019MH088E018	94.41	93.77	0.833333333	MH088E019	MH088E018				249	CLMH088E019MH088E018	10	0.0026	0.192616	0.33	0.231065	0.36	0.274289	0.40	0.231063	0.36		
CLMH088E020MH088E019		1973		Existing		MH088E020	MH088E019		T08261	IRWD	VCP	{9CE5DE48-630A-40DE-A90B-D7209CF666A2}	CLMH088E020MH088E019	94.91	94.61	0.833333333	MH088E020	MH088E019				166	CLMH088E020MH088E019	10	0.0018	0.189756	0.34	0.227924	0.38	0.270525	0.41	0.227922	0.38		
CLMH088E021MH088E020		1973		Existing		MH088E021	MH088E020		T08261	IRWD	VCP	{D54F36B7-B354-4078-9AE5-3A0CD183AB40}	CLMH088E021MH088E020	95.86	95.01	0.833333333	MH088E021	MH088E020				147	CLMH088E021MH088E020	10	0.0048	0.189801	0.29	0.227970	0.32	0.272544	0.36	0.227968	0.32		
CLMH088E022MH088E021		1973		Existing		MH088E022	MH088E021		T08261	IRWD	VCP	{60FD1DCD-836D-4DF1-915D-C95B5678786F}	CLMH088E022MH088E021	96.02	95.95	0.833333333	MH088E022	MH088E021				18	CLMH088E022MH088E021	10	0.0039	0.189834	0.29	0.228002	0.32	0.270634	0.35	0.228000	0.32		
CLMH088E023MH088E022		1973		Existing		MH088E023	MH088E022		T08261	IRWD	VCP	{B8673131-9839-4870-B2D9-4681CA711320}	CLMH088E023MH088E022	97.44	96.12	0.833333333	MH088E023	MH088E022				487	CLMH088E023MH088E022	10	0.0027	0.189833	0.33	0.228001	0.36	0.270633	0.39	0.227999	0.36		
CLMH088E026MH088N025		1974		Existing		MH088E026	MH088N025		T10348	IRWD	VCP	{A1D42731-E602-4C7C-B188-F46 1F506FF2D}	CLMH088E026MH088N025	69.47	68.19	0.500000000	MH088E026	MH088N025				263	CLMH088E026MH088N025	6	0.0056	0.009637	0.13	0.011569	0.14	0.013714	0.15	0.011569	0.14		
CLMH088E027MH088E026		1980		Existing		MH088E027	MH088E026		T10345	IRWD	VCP	{7851E947-C9E6-4DD8-A25B-170D6960B16}	CLMH088E027MH088E026	70.59	69.66	0.500000000	MH088E027	MH088E026				92	CLMH088E027MH088E026	6	0.0101	0.004429	0.08	0.005316	0.08	0.006301	0.09	0.005316	0.08		
CLMH088E028MH088E027		1980		Existing		MH088E028	MH088E027		T10345	IRWD	VCP	{92137SA0-D6FF-4089-B3FC-BA6023250DA8}	CLMH088E028MH088E027	72.34	70.80	0.500000000	MH088E028	MH088E027				154	CLMH088E028MH088E027	6	0.0100	0.001965	0.05	0.002357	0.06	0.002792	0.06	0.002357	0.06		
CLMH088E030MH088E026		1980		Existing		MH088E030	MH088E026		T10345	IRWD	VCP	{9FF91ACB-820C-4A11-9775-1FC366D0F58}	CLMH088E030MH088E026	73.80	69.66	0.500000000	MH088E030	MH088E026				206	CLMH088E030MH088E026	6	0.0182	0.005208	0.07	0.006254	0.08	0.007414	0.09	0.006254	0.08		
CLMH088E031MH088E030		1980		Existing		MH088E031	MH088E030		T10345	IRWD	VCP	{A5D7A247-650B-4B6F-AFD6-2B446FAD96B7}	CLMH088E031MH088E030	74.77	74.00	0.500000000	MH088E031	MH088E030				68	CLMH088E031MH088E030	6	0.0113	0.002443	0.06	0.002933	0.06	0.003478	0.07	0.002933	0.06		
CLMH088E033MH088N021		1980		Existing		MH088E033	MH088N021		T10345	IRWD	VCP	{33CFAA05-178D-4859-8E4E-FF863E3D2875}	CLMH088E033MH088N021	72.94	71.59	0.500000000	MH088E033	MH088N021				135	CLMH088E033MH088N021	6	0.0100	0.003827	0.07	0.004594	0.08	0.005446	0.09	0.004594	0.08		
CLMH088E034MH088E033		1980		Existing		MH088E034	MH088E033		T10345	IRWD	PVC	{AFEE6C08-1033-4F9A-841E-758D84550D82}	CLMH088E034MH088E033	73.80	73.05	0.500000000	MH088E034	MH088E033				74	CLMH088E034MH088E033	6	0.0101	0.003827	0.07	0.004594	0.08	0.005446	0.09	0.004594	0.08		
CLMH088E122MH088E123		1979		Existing		MH088E122	MH088E108		A00338	IRWD	PVC	{203FBA83-A245-46F0-90FB-20C6A716A653}	CLMH088E122MH088E123	70.30	68.72	0.666666667	MH088E122	MH088E108				400	CLMH088E122MH088E108	8	0.0040	0.056142	0.21	0.067322	0.23	0.079819	0.25	0.067322	0.23		
CLMH088E037MH088E036		1980		Existing		MH088E037	MH088E036		A00338	IRWD	PVC	{3EE57A7F-C517-4A9F-A189-4F3B6CD6C82A}	CLMH088E037MH088E036	71.19	70.81	0.666666667	MH088E037	MH088E036				83	CLMH088E037MH088E036	8	0.0043	0.019051	0.13	0.022873	0.14	0.027119	0.15	0.022873	0.14		
CLMH088E038MH088E037		1980		Existing		MH088E038	MH088E037		T10370	IRWD	VCP	{88005880-0F2C-4EBC-ADB3-44CB616B0603}	CLMH088E038MH088E037	73.00	71.40	0.666666667	MH088E038	MH088E037				127	CLMH088E038MH088E037	8	0.0126	0.016106	0.09	0.019337	0.10	0.022927	0.11	0.019337	0.10		
CLMH088E039MH088E038		1980		Existing		MH088E039	MH088E038		T10370	IRWD	VCP	{5EAED374-9E78-412E-82C3-6F01FB2FF9FD}	CLMH088E039MH088E038	74.80	73.22	0.666666667	MH088E039	MH088E038				190	CLMH088E039MH088E038	8	0.0083	0.012300	0.09	0.014767	0.10	0.017509	0.11	0.014767	0.10		
CLMH088E040MH088E039		1980		Existing		MH088E040	MH088E039		T10370	IRWD	VCP	{99B89041-D25C-422E-ABE4-A65CB524B036}	CLMH088E040MH088E039	82.00	75.00	0.666666667	MH088E040	MH088E039				400	CLMH088E040MH088E039	8	0.0175	0.004948	0.05	0.005942	0.05	0.007044	0.06	0.005942	0.05		
CLMH088E042MH088E043		1980		Existing		MH088E042	MH088E043		T10370	IRWD	PVC	{32A3EA53-B4BA-4DBA-83D1-F3E17EEF23E2}	CLMH088E042MH088E043	78.69	76.22	0.666666667	MH088E042	MH088E043				222	CLMH088E042MH088E043	8	0.0111	0.004588	0.05	0.005506	0.06	0.006529	0.06	0.005506	0.06		
CLMH088E043MH088E039		1980		Existing		MH088E043	MH088E039		T10370	IRWD	PVC	{60176894-42F8-416C-9E83-CA4201C23839}	CLMH088E043MH088E039	75.97	75.00	0.666666667	MH088E043	MH088E039				242	CLMH088E043MH088E039	8	0.0040	0.007353	0.08	0.008826	0.09	0.010465	0.10	0.008826	0.09		
CLMH088E044MH088E043		1980		Existing		MH088E044	MH088E043		T10370	IRWD	PVC	{EA101C39-BE3F-4007-B0B9-18814002 9CCB}	CLMH088E044MH088E043	77.00	76.22	0.666666667	MH088E044	MH088E043				176	CLMH088E044MH088E043	8	0.0044	0.002764	0.05	0.003320	0.05	0.003935	0.06	0.003320	0.05		
CLMH088E045MH088E046		1980		Existing		MH088E045	MH088E046		T10370	IRWD	PVC	{2A6EC4C9-323B-496A-BAC5-CBF4AE7D516D}	CLMH088E045MH088E046	76.52	76.25	0.666666667	MH088E045	MH088E046				70	CLMH088E045MH088E046	8	0.0039	0.003325	0.06	0.003991	0.06	0.004735	0.07	0.003991	0.06		
CLMH088E046MH088E047		1980		Existing		MH088E046	MH088E047		T10370	IRWD	VCP	{66E14273-3F00-4CE0-AD04-82D34E2DDE5D}	CLMH088E046MH088E047	76.05	74.41	0.666666667	MH088E046	MH088E047				217	CLMH088E046MH088E047	8	0.0076	0.003324	0.05	0.003991	0.05	0.004734	0.06	0.003991	0.05		
CLMH088E047MH088E048		1980		Existing		MH088E047	MH088E048		T10370	IRWD	VCP	{9C8FC1D1-2085-45E5-94D0-3C487E7D6F41}	CLMH088E047MH088E048	74.22	70.62	0.666666667	MH088E047	MH088E048				327	CLMH088E047MH088E048	8	0.0110	0.007530	0.07	0.009041	0.07	0.010723	0.08	0.009041	0.07		
CLMH088E048MH087S022		1980		Existing		MH088E048	MH087S022		A00338	IRWD	VCP	{16A1CC8C-14A8-4405-8029-AB139E7B54B1}	CLMH088E048MH087S022	70.41	69.31	0.666666667	MH088E048	MH087S022				267	CLMH088E048MH087S022	8	0.0041	0.013718	0.11	0.016473	0.12	0.019534

| | | |

| | | |

CLMH088S105MH101W022		1973		Existing		MH088S105	MH101W022	T0826 3	IRWD	VCP	{2AC9D5CD-9C1D-4D6E-A4CB-5FBEEB09CCA0}	CLMH088S105MH101W022	104.22	103.83	0.666666667	MH088S105	MH101W022			94	CLMH088S105MH101W022	8	0.0041	0.006903	0.08	0.008287	0.08	0.009824	0.09	0.008287	0.08				
CLMH088S106MH088S107		1973		Existing		MH088S106	MH088S107	T0826 3	IRWD	VCP	{8395BAB2-E334-4C68-9438-361EB2BE572B}	CLMH088S106MH088S107	103.73	102.18	0.666666667	MH088S106	MH088S107			310	CLMH088S106MH088S107	8	0.0050	0.001590	0.04	0.001908	0.04	0.002263	0.04	0.001908	0.04				
CLMH088S107MH088S108		1973		Existing		MH088S107	MH088S108	T0826 3	IRWD	VCP	{78C50F77-E88E-4F2F-BFE2-324BE4EAEBE1}	CLMH088S107MH088S108	101.98	100.83	0.666666667	MH088S107	MH088S108			298	CLMH088S107MH088S108	8	0.0039	0.001587	0.04	0.001907	0.04	0.002262	0.05	0.001907	0.04				
CLMH088S108MH088S109		1973		Existing		MH088S108	MH088S109	T0826 3	IRWD	VCP	{7130CF15-A187-4267-B128-42DB0922B8DE}	CLMH088S108MH088S109	100.72	100.29	0.666666667	MH088S108	MH088S109			96	CLMH088S108MH088S109	8	0.0045	0.005349	0.07	0.006425	0.07	0.007619	0.08	0.006425	0.07				
CLMH088S109MH088S110		1973		Existing		MH088S109	MH088S110	T0826 3	IRWD	VCP	{0AD5F987-EAD9-4714-990E-91779F51B2DD}	CLMH088S109MH088S110	100.13	89.52	0.666666667	MH088S109	MH088S110			154	CLMH088S109MH088S110	8	0.0689	0.008670	0.05	0.010411	0.05	0.012345	0.06	0.010411	0.05				
CLMH088S110MH088S003		1973		Existing		MH088S110	MH088S003	T0826 3	IRWD	VCP	{D9522D59-14E1-4266-96CF-82836A28F444}	CLMH088S110MH088S003	89.36	87.35	0.666666667	MH088S110	MH085S003			75	CLMH088S110MH088S003	8	0.0268	0.054414	0.14	0.065357	0.15	0.077509	0.17	0.065357	0.15				
CLMH088S111MH085S072		1973		Existing		MH088S111	MH085S072	T0826 1	IRWD	VCP	{4C11F155-CA08-4665-A897-6CD5756F4F58}	CLMH088S111MH085S072	90.98	90.81	0.833333333	MH088S111	MH085S072			100	CLMH088S111MH085S072	10	0.0017	0.203449	0.35	0.245120	0.38	0.291951	0.42	0.245115	0.38				
CLMH088S112MH088S111		1973		Existing		MH088S112	MH088S111	T0826 1	IRWD	VCP	{53022048-3DDB-4542-AAED-C50C7E80B16D}	CLMH088S112MH088S111	91.41	91.08	0.833333333	MH088S112	MH088S111			126	CLMH088S112MH088S111	10	0.0026	0.203457	0.33	0.245154	0.36	0.291992	0.40	0.245149	0.36				
CLMH088S113MH088E009		1973		Existing		MH088S113	MH088E009	T0652 9	IRWD	VCP	{D6936D27-3FA7-4C14-A57C-4E2CF6DD184A}	CLMH088S113MH088E009	87.23	86.31	0.500000000	MH088S113	MH088E009			65	CLMH088S113MH088E009	6	0.0142	0.004193	0.07	0.005036	0.08	0.005967	0.08	0.005036	0.08				
CLMH088S114MH088S116		1973		Existing		MH088S114	MH088S116	T0652 9	IRWD	VCP	{AEAFA769-BFFD-4AE4-9735-3F05DA618D84}	CLMH088S114MH088S116	83.81	81.72	0.666666667	MH088S114	MH088S116			262	CLMH088S114MH088S116	8	0.0080	0.006221	0.07	0.007471	0.07	0.008854	0.08	0.007471	0.07				
CLMH088S115MH088S114		1973		Existing		MH088S115	MH088S114	T0652 9	IRWD	VCP	{2BBE303C-9093-44A7-9037-009BA87F6263}	CLMH088S115MH088S114	89.51	83.98	0.500000000	MH088S115	MH088S114			184	CLMH088S115MH088S114	6	0.0301	0.002027	0.04	0.002436	0.05	0.002886	0.05	0.002436	0.05				
CLMH088S116MH088S117		1973		Existing		MH088S116	MH088S117	T0652 9	IRWD	VCP	{9E96F0E1-CBC0-473B-AC3D-FB0E59D10C2F}	CLMH088S116MH088S117	81.51	80.84	0.500000000	MH088S116	MH088S117			61	CLMH088S116MH088S117	6	0.0122	0.008544	0.10	0.010262	0.11	0.012161	0.12	0.010262	0.11				
CLMH088S117MH088S118		1973		Existing		MH088S117	MH088S118	T0659 1	IRWD	VCP	{03B9EA0E-749B-4570-9E50-AB28BC226376}	CLMH088S117MH088S118	80.65	76.75	0.666666667	MH088S117	MH088S118			236	CLMH088S117MH088S118	8	0.0165	0.008909	0.07	0.010700	0.07	0.012680	0.08	0.010700	0.07				
CLMH088S118MH085S119		1969		Existing		MH088S118	MH085S119	T0659 1	IRWD	VCP	{00F538BD-FACA-4095-9182-4D1CF371C352}	CLMH088S118MH085S119	76.55	75.75	0.666666667	MH088S118	MH085S119			299	CLMH088S118MH085S119	8	0.0027	0.011984	0.11	0.014393	0.12	0.017058	0.13	0.014393	0.12				
CLMH088S119MH088W034		1969		Existing		MH088S119	MH088W034	T0659 1	IRWD	VCP	{68F829B7-54A4-49DF-A39F-1C164A1B83EE}	CLMH088S119MH088W034	75.55	74.76	0.666666667	MH088S119	MH088W034			248	CLMH088S119MH088W034	8	0.0032	0.014716	0.12	0.017676	0.13	0.020950	0.14	0.017676	0.13				
CLMH088S120MH088W034		1969		Existing		MH088S120	MH088W034	T0659 1	IRWD	VCP	{56865C9E-903B-4ABE-91AB-2FFDAE688698}	CLMH088S120MH088W034	76.02	74.76	0.666666667	MH088S120	MH088W034			212	CLMH088S120MH088W034	8	0.0059	0.001868	0.04	0.002243	0.04	0.002660	0.05	0.002243	0.04				
CLMH088S121MH088W025		1969		Existing		MH088S121	MH088W025	T0652 1	IRWD	VCP	{A9AF1493-C5CF-4053-8101-81001912A2409}	CLMH088S121MH088W025	78.41	74.08	0.833333333	MH088S121	MH088W025			11	CLMH088S121MH088W025	10	0.4330	0.002939	0.01	0.003530	0.02	0.004183	0.02	0.003530	0.02				
CLMH088S199MH101W021		1969		Existing		MH088S199	MH101W021	T0826 3	IRWD	VCP	{95A0DE34-283C-406C-9C5D-BDAEF9B19700}	CLMH088S199MH101W021	103.84	103.31	0.666666667	MH088S199	MH101W021			80	CLMH088S199MH101W021	8	0.0066	0.003884	0.05	0.004662	0.06	0.005527	0.06	0.004662	0.06				
CLMH088S200MH088S073		1969		Existing		MH088S200	MH088S073	T0652 6	IRWD	VCP	{8EBE3F3C-6E5E-43F5-912A-589813BA3AB7}	CLMH088S200MH088S073	96.56	95.41	0.666666667	MH088S200	MH088S073			361	CLMH088S200MH088S073	8	0.0032	0.015151	0.12	0.018192	0.13	0.021568	0.14	0.018192	0.13				
CLMH088S202MH088S203		1996		Existing		MH088S202	MH088S203	T1513 2	IRWD	PVC	{3D5A8AA5-6064-421E-9AAE-F03CC2452BD1}	CLMH088S202MH088S203	100.50	94.19	0.666666667	MH088S202	MH088S203			370	CLMH088S202MH088S203	8	0.0171	0.003321	0.04	0.003987	0.04	0.004726	0.05	0.003987	0.04				
CLMH088S203MH088S204		1996		Existing		MH088S203	MH088S204	T1513 2	IRWD	PVC	{F7CE6095-BFE6-4E9E-918C-12DA25A0401C}	CLMH088S203MH088S204	94.09	86.30	0.666666667	MH088S203	MH088S204			208	CLMH088S203MH088S204	8	0.0375	0.005757	0.04	0.006909	0.05	0.008191	0.05	0.006909	0.05				
CLMH088S204MH088S002		1996		Existing		MH088S204	MH088S002	T1513 2	IRWD	PVC	{6A8610DC-399B-44EC-8072-0E335C8E98B1}	CLMH088S204MH088S002	86.19	85.59	0.666666667	MH088S204	MH088S002			122	CLMH088S204MH088S002	8	0.0049	0.006167	0.24	0.007313	0.27	0.008549	0.34	0.007323	0.26				
CLMH088W001MH088W083		1965		Existing		MH088W001	MH088W083	T0578 8	IRWD	VCP	{AAA39DA3-8164-463A-AFDC-B4F31A61B416}	CLMH088W001MH088W083	45.43	44.11	1.000000000	MH088W001	MH088W083			296	CLMH088W001MH088W083	12	0.0045	0.607892	0.42	0.722895	0.47	0.862275	0.52	0.722873	0.47				
CLMH088W002MH088W001		1965		Existing		MH088W002	MH088W001	T0578 8	IRWD	VCP	{4E084E58-7A72-4387-B363-95D7DE469EC6}	CLMH088W002MH088W001	47.68	45.54	1.000000000	MH088W002	MH088W001			300	CLMH088W002MH088W001	12	0.0071	0.601820	0.38	0.716218	0.42	0.854577	0.46	0.716195	0.42				
CLMH088W003MH088W002		1965		Existing		MH088W003	MH088W002	T0578 8	IRWD	VCP	{04068668-526F-4303-90CC-B4CB6A831514}	CLMH088W003MH088W002	49.38	47.88	1.000000000	MH088W003	MH088W002			260	CLMH088W003MH088W002	12	0.0058	0.601909	0.40	0.716276	0.44	0.854857	0.49	0.716253	0.44				
CLMH088W004MH088W003		1965		Existing		MH088W004	MH088W003	T0578 8	IRWD	VCP	{F51B74D7-F33C-4CC6-8D26-F3556ED1D79C}	CLMH088W004MH088W003	50.43	50.00	0.666666667	MH088W004	MH088W003			410	CLMH088W004MH088W003	8	0.0010	0.004208	0.09	0.005072	0.10	0.006045	0.10	0.005072	0.10				
CLMH088W005MH088W006		1965		Existing		MH088W005	MH088W006	T0578 8	IRWD	VCP	{2E5D2313-2913-429D-9E3F-538BCC01B33E}	CLMH088W005MH088W006	52.61	51.36	0.666666667	MH088W005	MH088W006			406	CLMH088W005MH088W006	8	0.0031	0.006539	0.08	0.007851	0.09	0.009308	0.10	0.007851	0.09				
CLMH088W006MH088W003		1965		Existing		MH088W006	MH088W003	T0578 8	IRWD	VCP	{78CBC953-DAAD-82F6-8117-1C352CB9662F}	CLMH088W006MH088W003	50.93	49.47	1.000000000	MH088W006	MH088W003			260	CLMH088W006MH088W003	12	0.0056	0.594366	0.40	0.707523	0.44	0.844566	0.49	0.707501	0.44				
CLMH088W007MH088W006		1965		Existing		MH088W007	MH088W006	T0578 8	IRWD	VCP	{615F90AB-07FD-48FE-8921-7E9438B0EE47}	CLMH088W007MH088W006	51.70	51.04	1.000000000	MH088W007	MH088W006			147	CLMH088W007MH088W006	12	0.0045	0.589107	0.42	0.701276	0.46	0.836870	0.50	0.701257	0.46				
CLMH088W008MH088W007		1965		Existing		MH088W008	MH088W007	T0578 8	IRWD	VCP	{A078F91C-509F-41AE-9034-E897911436ZA}	CLMH088W008MH088W007	52.68	51.79	1.000000000	MH088W008	MH088W007			175	CLMH088W008MH088W007	12	0.0051	0.475771	0.36	0.569134	0.40	0.678124	0.44	0.569118	0.40				
CLMH088W009MH088W008		1965		Existing		MH088W009	MH088W008	T0578 8	IRWD	VCP	{662BFB11-A54D-44D8-92E4-D2498397F103}	CLMH088W009MH088W008	53.88	53.11	0.666666667	MH088W009	MH088W008			8	CLMH088W009MH088W008	8	0.0019	0.007150	0.10	0.008588	0.11	0.010177	0.12	0.008588	0.11				
CLMH088W010MH088W008		1965		Existing		MH088W010	MH088W008	T0578 8	IRWD	VCP	{02A594DE-A93B-4053-B824-5A1A60B0A1BD}	CLMH088W010MH088W008	53.06	52.72	1.000000000	MH088W010	MH088W008			298	CLMH088W010MH088W008	12	0.0043	0.609879	0.37	0.742841	0.40	0.896881	0.44	0.742825	0.40				
CLMH088W011MH088W010		1965		Existing		MH088W011	MH088W010	T0578 8	IRWD	VCP	{173C09E7-C94F-4C6D-BFAB-2DBCEE245CF4}	CLMH088W011MH088W010	54.41	53.16	1.000000000	MH088W011	MH088W010			237	CLMH088W011MH088W010	12	0.0053	0.461829	0.36	0.553363	0.39	0.659191	0.43	0.553347	0.39				
CLMH088W012MH088W011		1965		Existing		MH088W012	MH088W011	T0578 8	IRWD	VCP	{90431C07-369D-4CC5-B1DD-C011E1F1B999}	CLMH088W012MH088W011	55.24	54.54	0.666666667	MH088W012	MH088W011			336	CLMH088W012MH088W011	8	0.0021	0.011064	0.23	0.013294	0.26	0.015789	0.30	0.013294	0.26				
CLMH088W013MH088W012		1965		Existing		MH088W013	MH088W012	T0578 8	IRWD	VCP	{82E33898-98DE-4891-B088-87307DACAE07}	CLMH088W013MH088W012	55.56	55.34	0.666666667	MH088W013	MH088W012			336	CLMH088W013MH088W012	8	0.0007	0.003423	0.09	0.004120	0.09	0.004907	0.10	0.004120	0.09				
CLMH088W014MH088W013		1965		Existing		MH088W014	MH088W013	T0578 8	IRWD	VCP	{34FF9001-A0D5-463A-ABD5-F9D76F2C7D57}	CLMH088W014MH088W013	58.84	58.09	0.666666667	MH088W014	MH088W013			400	CLMH088W014MH088W013	8	0.0019	0.003314	0.08	0.003964	0.08	0.004678	0.08	0.003942	0.08				
CLMH088W015MH088W016		1965		Existing		MH088W015	MH088W016	T0578 8	IRWD	VCP	{2E82D6DB-FCB6-47D9-90C7-4765AE2933FA}	CLMH088W015MH088W016	58.09	57.50	0.666666667	MH088W015	MH088W016			271	CLMH088W015MH088W016	8	0.0022	0.005175	0.10	0.005542	0.13	0.005500	0.16	0.005543	0.13				
CLMH088W016MH088W011		1965		Existing		MH088W016	MH088W011	T0578 8	IRWD	VCP	{07337573-14AB-44F6-A261-BE016BA78177}	CLMH088W016MH088W011	57.27	54.52	0.833333333	MH088W016	MH088W011			277	CLMH088W016MH088W011	10	0.0099	0.439017	0.38	0.527430	0.42	0.628245	0.47	0.527415	0.42				
CLMH088W017MH088W016		1965		Existing		MH088W017	MH088W016	T0578 8	IRWD	VCP	{8D5A5BE8-1758-43A5-975C-3A2B557AB108}	CLMH088W017MH088W016	60.45	57.33	0.833333333	MH088W017	MH088W016			300	CLMH088W017MH088W016	10	0.0104	0.425509	0.37	0.511934	0.41	0.609738	0.45	0.511934	0.41				
CLMH088W018MH088W017		1965		Existing		MH088W018	MH088W017	T0578 8	IRWD	VCP	{14D156C0-BAC9-43E5-AF05-BC8C153D77AF}	CLMH088W018MH088W017	63.43	60.50	0.833333333	MH088W018	MH088W017			292	CLMH088W018MH088W017	10	0.0100	0.452624	0.38	0.543125	0.42	0.659943	0.46	0.543112	0.42				
CLMH088W019MH088W018		1965		Existing		MH088W019	MH088W018	T0578 8	IRWD	VCP	{3E67B1A1-DC37-4615-B981-6F7DE8F7E1F3}	CLMH088W019MH088W018	66.93	63.65	0.666666667	MH088W019	MH088W018			229	CLMH088W019MH088W018	8	0.0143	0.034222	0.13	0.040468	0.17	0.047989	0.20	0.040467	0.17				
CLMH088W020MH088W019		1965		Existing		MH088W020	MH088W019	T0578 8	IRWD	VCP	{2DDE418B-B7EC-4834-BB53-FFAEA7B9F97F}	CLMH088W020MH088W019	67.26	67.13	0.666666667	MH088W020	MH088W019			309	CLMH088W020MH088W019	8	0.0012	0.032811	0.21	0.038990	0.22	0.046241	0.24	0.038990	0.22				
CLMH088W021MH088W020		1965		Existing		MH088W021	MH088W020	T0626 3	IRWD	VCP	{A36A5D68-C574-46C5-81AA-318274FDF1B2}	CLMH088W021MH088W020	68.47	67.47	0.666666667	MH088W021	MH088W020			297	CLMH088W021MH088W020	8	0.0034	0.009596	0.10	0.012723	0.11	0.015082	0.12	0.012723	0.11				
CLMH088W022MH088W021		1965		Existing		MH088W022	MH088W021	T0626 3	IRWD	VCP	{27D22079-01E3-4DF1-96F9-807195AE1027}	CLMH088W022MH088W021	69.12	68.66	0.666666667	MH088W022	MH088W021			144	CLMH088W022MH088W021	8	0.0032	0.004148	0.06	0.004980	0.07	0.005903	0.08	0.004980	0.07				
CLMH088W023MH088W018		1965		Existing		MH088W023	MH088W018	T0578 8	IRWD	VCP	{228B41CD-55DA-457B-9274-19748A068E51}	CLMH088W023MH088W018	66.51	63.54	0.833333333	MH088W023	MH088W018			275	CLMH088W023MH088W018	10	0.0108	0.391932	0.35	0.472353	0.39	0.562710	0.43	0.472341	0.39				
CLMH088W024MH088W023		1965		Existing		MH088W024	MH088W023	T0578 8	IRWD	VCP	{A0650605F-6374-4450-BF4B-17E8169B22D3}	CLMH088W024MH088W023	69.59	66.62	0.833333333	MH088W024	MH088W023			275	CLMH088W024MH088W023	10	0.0108	0.392013	0.35	0.472492	0.39	0.562882	0.43	0.472480	0.39				
CLMH088W025MH088W024		1965		Existing		MH088W025	MH088W024	T0659 1	IRWD	VCP	{1F1C87A0-0C24-4250-883C-B5EE29ECF788}	CLMH088W025MH088W024	73.87	71.12	0.666666667	MH088W025	MH088W024			160	CLMH088W025MH088W024	8	0.0172	0.005970	0.06	0.007168	0.06	0.008497	0.06	0.007168	0.06				
CLMH088W026MH088W028		1968		Existing		MH088W026	MH088W028	T0652 9	IRWD	VCP	{FC0BD2D5-6884-49A2-8D99-19E6CFA3599E}	CLMH088W026MH088W028	70.93	70.41	0.666666667	MH088W026	MH088W028			208	CLMH088W026MH088W028	8	0.0033	0.009273	0.09	0.011135	0.10	0.013199	0.11	0.011135	0.10				
CLMH088W027MH088W026		1969		Existing		MH088W027	MH088W026	T0659 1	IRWD	VCP	{02875272-6093-448A-970C-510244D68C4E}	CLMH088W027MH088W026	74.12	71.12	0.500000000	MH088W027	MH088W026			134	CLMH088W027MH088W026	6	0.0224	0.001391	0.04	0.001668	0.04	0.001978	0.04	0.001668	0.04				
CLMH088W028MH088W029		1968		Existing		MH088W028	MH088W029	T0659 1	IRWD	VCP	{70EF6B96-E96F-424F-8834-7AE88E3B4B82}	CLMH088W028MH088W029	70.22	67.69	0.666666667	MH088W028	MH088W029			321	CLMH088W028MH088W029	8	0.0079	0.012258	0.09	0.014718	0.10	0.017449	0.11	0.014718	0.10				
CLMH088W029MH088W038		1969		Existing		MH088W029	MH088W038	T0659 1	IRWD	VCP	{147DA87A-9FA5-4D61-AC43-56E790C65CBF}	CLMH088W029MH088W038	66.63	63.90	0.666666667	MH088W029	MH088W038			205	CLMH088W029MH088W038	8	0.0133	0.049888	0.16	0.059908	0.17	0.071021	0.19	0.059908	0.17				
CLMH088W030MH088W029		1969		Existing		MH088W030	MH088W029	T0659 1	IRWD	VCP	{1B88C288-558C-4429-BEC2-2CA1FAE5CD18}	CLMH088W030MH088W029	68.40	67.65	0.666666667	MH088W030	MH088W029			231	CLMH088W030MH088W029	8	0.0032	0.002916	0.05	0.003502	0.06	0.004151	0.06	0.003502	0.06				
CLMH088W031MH088W029		1969		Existing		MH088W031	MH088W029	T0659 1	IRWD	VCP	{887FFA85-EF97-4616-A90C-930DADF08FC1}	CLMH088W031MH088W029	67.77	66.83	0.666666667	MH088W031	MH088W029			249	CLMH088W031MH088W029	8	0.0038	0.030114	0.16	0.036163	0.18	0.042872	0.19	0.036163	0.18				
CLMH088W032MH088W031		1969		Existing		MH088W032	MH088W031	T0659 1	IRWD	VCP	{66D2E87C-474B-4882-8973-C6E6695B0BD5}	CLMH088W032MH088W031	68.26	67.98	0.666666667	MH088W032	MH088W031			90	CLMH088W032MH088W031	8	0.0031	0.024535	0.15	0.029466	0.16	0.034928	0.18	0.029466	0.16				
CLMH088W033MH088W032		1969		Existing		MH088W033	MH088W032	T0659 1	IRWD	VCP	{789A176A-C697-46B7-94FA-0E11004070E0}	CLMH088W033MH088W032	69.09	68.47	0.666666667	MH088W033	MH088W032			196	CLMH088W033MH088W032	8	0.0032	0.002234	0.05	0.002681	0.05	0.003177	0.06	0.002681	0.05				
CLMH088W034MH088W032		1969		Existing		MH088W034	MH088W032	T0659 1	IRWD	VCP	{8E2217DD-61F8-4FE6-9CBC-2CDAD218767C}	CLMH088W034MH088W032	74.55	68.51	0.666666667	MH088W034	MH088W032			180	CLMH088W034MH088W032	8	0.0336	0.019704	0.08	0.023666	0.09	0.028053	0.10	0.023666	0.09				
CLMH088W035MH088W031		1969		Existing		MH088W035	MH088W031	T0659 1	IRWD	VCP	{79F9A66A-C097-43BE-9645-AA9719B5D9E7}	CLMH088W035MH088W031	74.43	67.98	0.666666667	MH088W035	MH088W031			183	CLMH088W035MH088W031	8	0.0208	0.005584	0.05	0.006700	0.06	0.007946	0.06	0.006700	0.06				
CLMH088W036MH088W035		1969		Existing		MH088W036	MH088W035	T0659 1	IRWD	VCP	{5C9B0ED8-C94C-4BA5-956B-A014C3E40235}	CLMH088W036MH088W035	75.80	74.62	0.500000000	MH088W036	MH088W035			84	CLMH088W036MH088W035	6	0.0140	0.003920	0.07	0.004705	0.07	0.005578	0.08	0.004705	0.07				
CLMH088W037MH088W035		1965		Existing		MH088W037	MH088W035	T0578 8	IRWD	VCP	{E9F56550-2B30-4DF3-B870-EA1402341004E}	CLMH088W037MH088W035	77.13	74.62	0.500000000	MH088W037	MH088W035			179	CLMH088W037MH088W035	6	0.0140	0.001664	0.05	0.001996	0.05	0.002367	0.05	0.001996	0.05				
CLMH088W038MH088W039		1969		Existing		MH088W038	MH088W039	T0659 1	IRWD	VCP	{2C5D94FF-CF93-45A4-9082-5DC01FAF854C}	CLMH088W038MH088W039	63.79	57.86	0.666666667	MH088W038	MH088W039			302	CLMH088W038MH088W039	8	0.0196	0.049885	0.20	0.059906	0.22	0.071020	0.24	0.059906	0.22				
CLMH088W039MH088W040		1969		Existing		MH088W039	MH088W040	T0578 8	IRWD	VCP	{0CD4E781-FC3A-46B4-91AE-F1F997F31018}	CLMH088W039MH088W040	57.81	57.52	0.666666667	MH088W039	MH088W040			176	CLMH088W039MH088W040	8	0.0016	0.060058	0.27	0.072140	0.29	0.085538	0.32	0.072140	0.29				
CLMH088W040MH088W061		1965		Existing		MH088W040	MH088W061	T0578 8	IRWD	VCP	{3733AA18-C874-4D73-94A3-556D772914F9}	CLMH088W040MH088W061	57.27	56.09	0.666666667	MH088W040	MH088W061			236	CLMH088W040MH088W061	8	0.0050	0.100121	0.28	0.120265	0.31	0.142598	0.34	0.120265	0.31				
CLMH088W041MH088W040		1965		Existing		MH088W041	MH088W040	T0578 8	IRWD	VCP	{74AFFF0A-A78A-4D03-B19D-738F82A45D7}	CLMH088W041MH088W040	59.27	57.36	0.666666667	MH088W041	MH088W040			202	CLMH088W041MH088W040	8	0.0095	0.040098	0.16	0.048148	0.18	0.057077	0.20	0.048148	0.18				
CLMH088W042MH088W041		1965		Existing		MH088W042	MH088W041	T0578 8	IRWD	VCP	{48A7CCEF-6A3D-46D4-B3C4-D3E6E4B466E5}	CLMH088W042MH088W041	71.00	59.36	0.666666667	MH088W042	MH088W041			340	CLMH088W042MH088W041	8	0.0342	0.006335	0.05	0.007606	0.05	0.009016	0.06	0.007606	0.05				
CLMH088W043MH088W042		1965		Existing		MH088W043	MH088W042	T0578 8	IRWD	VCP	{8324B8AD-A0D4-4775-B73F-368961727F41}	CLMH088W043MH088W042	71.50	71.19	0.500000000	MH088W043	MH088W042			103	CLMH088W043MH088W042	6	0.0030	0.004535	0.10	0.005444	0.11	0.006454	0.12	0.005444	0.11				
CLMH088W044MH088W042		1965		Existing		MH088W044	MH088W042	T0578 8	IRWD	VCP	{BF1EA072-6267-462B-BEDC-1F53F1D06FBF}	CLMH088W044MH088W042	71.72	71.19	0.500000000	MH088W044	MH088W042			133	CLMH088W044MH088W042	6	0.0040	0.001799	0.06	0.002162	0.06	0.002562	0.07	0.002162	0.06				
CLMH088W045MH088W041		1965		Existing		MH088W045	MH088W041	T0578 8	IRWD	VCP	{F4669404-607A-4763-A27B-5F53AFA2DF34}	CLMH088W045MH088W041	60.65	59.36	0.666666667	MH088W045	MH088W041			172	CLMH088W045MH088W041	8	0.0075	0.030483	0.14	0.036602	0.16	0.043391	0.17	0.036602	0.16				
CLMH088W046MH088W045		1965		Existing		MH088W046	MH088W045	T0578 8	IRWD	VCP	{C16A5FDD-2E69-422B-9CF9-4FC61B64E4F6}	CLMH088W046MH088W045	61.50	60.90	0.666666667	MH088W046	MH088W045			305	CLMH088W046MH088W045	8	0.0020	0.007063	0.10	0.008482	0.10	0.010053	0.11	0.008482	0.10				
CLMH088W047MH088W046		1965		Existing		MH088W047	MH088W046	T0578 8	IRWD	VCP	{25CF686A-C4AE-48B7-885A-321267E2D24D}	CLMH088W047MH088W046	62.11	61.70	0.500000000	MH088W047	MH088W046			141	CLMH088W047MH088W046	6	0.0029	0.002734	0.08	0.003284	0.09	0.003893	0.09	0.003284	0.09				
CLMH088W048MH088W046		1965		Existing		MH088W048	MH088W046	T0578 8	IRWD	VCP	{16120611-C05F-42EC-B5F9-20470EA608BC}	CLMH088W048MH088W046	62.61	61.70	0.500000000	MH088W048	MH088W046			95	CLMH088W048MH088W046	6	0.0096	0.004330	0.08	0.005198	0.08	0.006162	0.09	0.005198	0.08				
CLMH088W049MH088W048		1965		Existing		MH088W049	MH088W048	T0578 8	IRWD	VCP	{C9107227-3624-498B-87A5-AB3B44ACCE66}	CLMH088W049MH088W048	63.27	60.75	0.666666667	MH088W049	MH088W048			328	CLMH088W049MH088W048	8	0.0077	0.020117	0.12	0.024154	0.13	0.028637	0.14	0.024154	0.13				
CLMH088W050MH088W049		1965		Existing		MH088W050	MH088W049	T0578 8	IRWD	VCP	{025735CE-6C43-4716-8189-71DD910ACDF5}	CLMH088W050MH088W

| | | |

CLMH089S038MH089S039		1979			Existing		MH089S038	MH089S039		T1048	IRWD	VCP	{49F89E9A-FB3B-48BA-9FE7-70B4DAF973C0}	CLMH089S038MH089S039	80.19	76.36	0.666666667	MH089S038	MH089S039				285	CLMH089S038MH089S039	8	0.0134	0.012576	0.08	0.015099	0.09	0.017902	0.10	0.015099	0.09		
CLMH089S039MH089S040		1979			Existing		MH089S039	MH089S040		A00505	IRWD	VCP	{E6CCD913-88CA-45E0-9224-935AF92D3B15}	CLMH089S039MH089S040	76.16	74.30	0.666666667	MH089S039	MH089S040				116	CLMH089S039MH089S040	8	0.0160	0.018572	0.09	0.022299	0.10	0.026437	0.11	0.022299	0.10		
CLMH089S040MH089S041		1979			Existing		MH089S040	MH089S041		A00505	IRWD	VCP	{EB6FDC37-A603-4676-BCC7-B42538CAD482}	CLMH089S040MH089S041	74.09	70.76	0.666666667	MH089S040	MH089S041				254	CLMH089S040MH089S041	8	0.0131	0.020664	0.10	0.024811	0.11	0.029415	0.12	0.024811	0.11		
CLMH089S041MH089W019		1979			Existing		MH089S041	MH089W019		A00505	IRWD	VCP	{476E1AFC-838E-4D90-9E1F-0DA614822BCE}	CLMH089S041MH089W019	70.55	66.69	0.666666667	MH089S041	MH089W019				394	CLMH089S041MH089W019	8	0.0098	0.029278	0.13	0.035152	0.15	0.041675	0.16	0.035152	0.15		
CLMH089S042MH089S041		1979			Existing		MH089S042	MH089S041		T1048	IRWD	VCP	{14934EF2-3276-4401-92EF-05731D49BC1E}	CLMH089S042MH089S041	71.25	70.76	0.666666667	MH089S042	MH089S041				21	CLMH089S042MH089S041	8	0.0233	0.008615	0.06	0.010341	0.07	0.012259	0.07	0.010341	0.07		
CLMH089S043MH089S042		1979			Existing		MH089S043	MH089S042		T1048	IRWD	VCP	{F63CC2EF-9940-43C3-9DB9-2113D403CE86}	CLMH089S043MH089S042	73.90	71.34	0.666666667	MH089S043	MH089S042				170	CLMH089S043MH089S042	8	0.0151	0.006279	0.06	0.007538	0.06	0.008937	0.07	0.007538	0.06		
CLMH089S044MH089S043		1979			Existing		MH089S044	MH089S043		T1048	IRWD	VCP	{10E825ZD-25BF-4348-8EA6-48E3BACF0E8B}	CLMH089S044MH089S043	74.70	74.09	0.500000000	MH089S044	MH089S043				60	CLMH089S044MH089S043	6	0.0102	0.003703	0.07	0.004446	0.08	0.005271	0.08	0.004446	0.08		
CLMH089S045MH089S044		1979			Existing		MH089S045	MH089S044		T1048	IRWD	VCP	{06A930FC-3E1F-418B-971B-E80F9F52930B}	CLMH089S045MH089S044	75.34	74.91	0.500000000	MH089S045	MH089S044				44	CLMH089S045MH089S044	6	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH089S047MH089S048		1979			Existing		MH089S047	MH089S048		T1048	IRWD	VCP	{ECDB390D-4ABF-492F-8D1C-59E6DEAD5B19}	CLMH089S047MH089S048	75.48	75.29	0.500000000	MH089S047	MH089S048				52	CLMH089S047MH089S048	6	0.0037	0.002818	0.07	0.003382	0.08	0.004010	0.09	0.003382	0.08		
CLMH089S048MH089S049		1979			Existing		MH089S048	MH089S049		T1048	IRWD	VCP	{4E1248DC5-5EA0-405D-BC21-0CA25D211E070}	CLMH089S048MH089S049	75.02	74.84	0.500000000	MH089S048	MH089S049				35	CLMH089S048MH089S049	6	0.0051	0.002818	0.07	0.003382	0.08	0.004010	0.08	0.003382	0.08		
CLMH089S049MH089S050		1979			Existing		MH089S049	MH089S050		T1048	IRWD	VCP	{46837DA2-BAED-43B1-B4B4-CB0327776E4C}	CLMH089S049MH089S050	74.65	73.84	0.666666667	MH089S049	MH089S050				161	CLMH089S049MH089S050	8	0.0050	0.004427	0.06	0.005316	0.06	0.006301	0.07	0.005316	0.06		
CLMH089S050MH089S051		1979			Existing		MH089S050	MH089S051		T1048	IRWD	PVC	{045C05D0-6DB2-4CFE-A649-DD563CC7D61C}	CLMH089S050MH089S051	73.65	72.43	0.666666667	MH089S050	MH089S051				73	CLMH089S050MH089S051	8	0.0098	0.007767	0.07	0.009326	0.07	0.011054	0.08	0.009326	0.07		
CLMH089S051MH089W042		1979			Existing		MH089S051	MH089W042		T1048	IRWD	PVC	{CADE2DBC-7E78-4E8D-B6D9-78BE964CBAC6}	CLMH089S051MH089W042	72.23	71.12	0.666666667	MH089S051	MH089W042				117	CLMH089S051MH089W042	8	0.0095	0.007767	0.07	0.009326	0.07	0.011054	0.08	0.009326	0.07		
CLMH089S052MH089S127		1979			Existing		MH089S052	MH089S127		T1048	IRWD	PVC	{01515E0A-B4F0-4159-B2AD-F7013686477A}	CLMH089S052MH089S127	78.01	77.61	0.666666667	MH089S052	MH089S127				78	CLMH089S052MH089S127	8	0.0038	0.005996	0.07	0.007200	0.08	0.008535	0.09	0.007200	0.08		
CLMH089S053MH089S052		1979			Existing		MH089S053	MH089S052		T1048	IRWD	PVC	{740CFF41-332D-46AD-895D-32788191C908}	CLMH089S053MH089S052	80.69	78.20	0.666666667	MH089S053	MH089S052				192	CLMH089S053MH089S052	8	0.0130	0.003260	0.04	0.003914	0.05	0.004641	0.05	0.003914	0.05		
CLMH089S054MH089S053		1979			Existing		MH089S054	MH089S053		T1048	IRWD	PVC	{555D84AC-8512-459C-92A7-23A5C727BD11}	CLMH089S054MH089S053	82.30	80.88	0.666666667	MH089S054	MH089S053				151	CLMH089S054MH089S053	8	0.0094	0.001087	0.02	0.001305	0.03	0.001547	0.03	0.001305	0.03		
CLMH089S055MH089S128		1979			Existing		MH089S055	MH089S128		T1048	IRWD	PVC	{C7998F75-4F5D-4011-9807-0F52CD046B78}	CLMH089S055MH089S128	83.30	82.44	0.666666667	MH089S055	MH089S128				119	CLMH089S055MH089S128	8	0.0072	0.010383	0.09	0.012464	0.09	0.014780	0.10	0.012464	0.09		
CLMH089S056MH089S055		1979			Existing		MH089S056	MH089S055		T1048	IRWD	PVC	{09FCE2C5-F30F-410A-9397-62C68AD920A7}	CLMH089S056MH089S055	83.69	83.51	0.666666667	MH089S056	MH089S055				51	CLMH089S056MH089S055	8	0.0035	0.008189	0.08	0.009830	0.09	0.011659	0.10	0.009830	0.09		
CLMH089S057MH089S056		1979			Existing		MH089S057	MH089S056		T1048	IRWD	PVC	{F3B2A9E7-5F4F-497E-9569-868E9326C6DB}	CLMH089S057MH089S056	84.19	83.90	0.666666667	MH089S057	MH089S056				77	CLMH089S057MH089S056	8	0.0038	0.007123	0.08	0.008550	0.08	0.010140	0.09	0.008550	0.08		
CLMH089S058MH089S057		1979			Existing		MH089S058	MH089S057		T1048	IRWD	PVC	{82716F19-95B4-4F52-81EE-AD00FF2828C4}	CLMH089S058MH089S057	84.81	84.38	0.666666667	MH089S058	MH089S057				111	CLMH089S058MH089S057	8	0.0039	0.005614	0.07	0.006739	0.07	0.007993	0.08	0.006739	0.07		
CLMH089S059MH089S058		1979			Existing		MH089S059	MH089S058		T1048	IRWD	PVC	{A34A300F-C0A8-4EEF-8301-52817D56AD64}	CLMH089S059MH089S058	85.30	85.01	0.666666667	MH089S059	MH089S058				75	CLMH089S059MH089S058	8	0.0039	0.005132	0.07	0.006160	0.07	0.007305	0.08	0.006160	0.07		
CLMH089S060MH089S059		1979			Existing		MH089S060	MH089S059		T1048	IRWD	PVC	{F998E86A-78B1-4784-AE65-88AAFB8D539E}	CLMH089S060MH089S059	86.09	85.50	0.666666667	MH089S060	MH089S059				151	CLMH089S060MH089S059	8	0.0039	0.002818	0.05	0.003382	0.06	0.004010	0.06	0.003382	0.05		
CLMH089S085MH089S087		1979			Existing		MH089S085	MH089S087		T1048	IRWD	PVC	{936E8291-4813-47CA-973A-354C55BCD36A}	CLMH089S085MH089S087	81.83	80.97	0.666666667	MH089S085	MH089S087				219	CLMH089S085MH089S087	8	0.0039	0.003239	0.05	0.003891	0.06	0.004613	0.06	0.003891	0.06		
CLMH089S086MH089S085		1979			Existing		MH089S086	MH089S085		T1048	IRWD	PVC	{EEA6DA17-5FA4-4AC8-A832-5AE83D88BF4E}	CLMH089S086MH089S085	83.01	82.04	0.666666667	MH089S086	MH089S085				57	CLMH089S086MH089S085	8	0.0170	0.002073	0.03	0.002489	0.04	0.002951	0.04	0.002489	0.04		
CLMH089S087MH089S088		1979			Existing		MH089S087	MH089S088		T1048	IRWD	PVC	{6C09876F-E826-4E2F-9E83-4A5C04E768A1}	CLMH089S087MH089S088	80.76	80.04	0.666666667	MH089S087	MH089S088				181	CLMH089S087MH089S088	8	0.0040	0.006521	0.07	0.007828	0.08	0.009281	0.09	0.007828	0.08		
CLMH089S088MH089S089		1979			Existing		MH089S088	MH089S089		T1048	IRWD	PVC	{47382165-3AB0-4FBC-8C2F-8396C2FE6414}	CLMH089S088MH089S089	79.83	78.65	0.666666667	MH089S088	MH089S089				45	CLMH089S088MH089S089	8	0.0262	0.008029	0.05	0.009640	0.06	0.011428	0.06	0.009640	0.06		
CLMH089S089MH089S125		1979			Existing		MH089S089	MH089S125		T1048	IRWD	VCP	{0FD6648F-FB1A-4743-926E-8E99831C3437}	CLMH089S089MH089S125	78.43	78.05	0.666666667	MH089S089	MH089S125				96	CLMH089S089MH089S125	8	0.0040	0.014632	0.11	0.017564	0.12	0.020822	0.13	0.017564	0.12		
CLMH089S090MH089S089		1979			Existing		MH089S090	MH089S089		T1048	IRWD	PVC	{EF5BACFB-56E5-4A71-9997-3E87F3E886E8}	CLMH089S090MH089S089	82.11	78.65	0.666666667	MH089S090	MH089S089				183	CLMH089S090MH089S089	8	0.0189	0.004932	0.05	0.005918	0.05	0.007016	0.06	0.005918	0.05		
CLMH089S091MH089S090		1979			Existing		MH089S091	MH089S090		T1048	IRWD	PVC	{34023183-B6D0-460B-B06D-4F159F15EB41}	CLMH089S091MH089S090	82.72	82.30	0.666666667	MH089S091	MH089S090				103	CLMH089S091MH089S090	8	0.0041	0.001913	0.04	0.002295	0.04	0.002720	0.05	0.002295	0.04		
CLMH089S092MH089S091		1979			Existing		MH089S092	MH089S091		T1048	IRWD	PVC	{0B5D82D5-4178-429C-9439-8073D6BF5BB7}	CLMH089S092MH089S091	83.69	83.12	0.500000000	MH089S092	MH089S091				57	CLMH089S092MH089S091	6	0.0100	0.000906	0.03	0.001087	0.04	0.001288	0.04	0.001087	0.04		
CLMH089S095MH089S096		1979			Existing		MH089S095	MH089S096		T1048	IRWD	PVC	{4E479100-D0B-868A-4AEC-A031-98B2B86B761B}	CLMH089S095MH089S096	75.23	73.30	0.500000000	MH089S095	MH089S096				260	CLMH089S095MH089S096	6	0.0074	0.007948	0.11	0.009542	0.12	0.011313	0.12	0.009542	0.12		
CLMH089S096MH089S031		1979			Existing		MH089S096	MH089S031		T1048	IRWD	PVC	{7543433C-7B17-486B-836C-B0B1A1DFFDBE}	CLMH089S096MH089S031	73.20	72.66	0.500000000	MH089S096	MH089S031				33	CLMH089S096MH089S031	6	0.0164	0.007948	0.09	0.009542	0.10	0.011313	0.10	0.009542	0.10		
CLMH089S097MH089S098		1979			Existing		MH089S097	MH089S098		T1048	IRWD	PVC	{4B496A5A-8883-40D4-8027-4901363326BF}	CLMH089S097MH089S098	79.59	78.69	0.500000000	MH089S097	MH089S098				164	CLMH089S097MH089S098	6	0.0055	0.003621	0.08	0.004350	0.08	0.005155	0.09	0.004350	0.08		
CLMH089S098MH089S035		1979			Existing		MH089S098	MH089S035		T1048	IRWD	PVC	{EC59D7E7-43D1-40D9-9096-C97964688F49}	CLMH089S098MH089S035	78.50	77.63	0.500000000	MH089S098	MH089S035				73	CLMH089S098MH089S035	6	0.0088	0.004949	0.08	0.005944	0.09	0.007046	0.10	0.005944	0.09		
CLMH089S102MH089W041		1984			Existing		MH089S102	MH089W041		S04	IRWD	ACP	{F177AC60-39AE-40AA-97B4-7A7A20060FFC}	CLMH089S102MH089W041	80.91	68.61	0.666666667	MH089S102	MH089W041				244	CLMH089S102MH089W041	8	0.0504	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH089S103MH090E001		1974			Existing		MH089S103	MH090E001		A00233	IRWD	VCP	{09E71EC9-9587-4316-A058-B4CA49F2D6E4}	CLMH089S103MH090E001	81.23	72.72	0.666666667	MH089S103	MH090E001				176	CLMH089S103MH090E001	8	0.0443	0.004686	0.04	0.005003	0.04	0.005342	0.04	0.005003	0.04		
CLMH089S125MH089S034		1979			Existing		MH089S125	MH089S034		T1048	IRWD	VCP	{73F097D6-4045-4660-A020-1DED5A585FBA}	CLMH089S125MH089S034	77.95	77.34	0.666666667	MH089S125	MH089S034				21	CLMH089S125MH089S034	8	0.0290	0.014632	0.07	0.017564	0.08	0.020822	0.09	0.017564	0.08		
CLMH089S127MH089S039		1979			Existing		MH089S127	MH089S039		T1048	IRWD	VCP	{941E2865-14F0-429B-8F60-A147FEE49A1D}	CLMH089S127MH089S039	77.51	76.36	0.666666667	MH089S127	MH089S039				33	CLMH089S127MH089S039	8	0.0348	0.005996	0.05	0.007200	0.05	0.008535	0.05	0.007200	0.05		
CLMH089S128MH089S037		1979			Existing		MH089S128	MH089S037		T1048	IRWD	VCP	{B7002D2E-7A7F-4977-893E-8E0F434DF431}	CLMH089S128MH089S037	82.34	81.43	0.666666667	MH089S128	MH089S037				34	CLMH089S128MH089S037	8	0.0268	0.010383	0.06	0.012464	0.07	0.014780	0.08	0.012464	0.07		
CLMH089S137MH089S138		2002	assumed Mannings N		Existing		MH089S137	MH089S138		A00950	IRWD	PVC	{1AD19A973-9655-47FE-BEE0-FD3369A9427F}	CLMH089S137MH089S138	116.59	111.12	0.833333333	MH089S137	MH089S138				104	CLMH089S137MH089S138	10	0.0434	0.655004	0.44	0.730901	0.49	0.809388	0.54	0.730901	0.49		
CLMH089S900MH089S006		1967			Existing		MH089S056	MH089S006		239	IRWD	VCP	{0A381E9E-0427-4C17-BCA6-C488F900DCBC}	CLMH089S056MH089S006	94.28	91.54	0.833333333	MH089S900	MH089S006				105	CLMH089S900MH089S006	10	0.0261	0.864906	0.43	0.925369	0.44	1.101997	0.49	0.925349	0.44		
CLMH089W002MH059S086		1965			Existing		MH089W002	MH059S086		A00100	IRWD	VCP	{41C7A564-CC11-4899-BDD4-17F53A781B89}	CLMH089W002MH059S086	28.21	25.21	1.500000000	MH089W002	MH059S086				421	CLMH089W002MH059S086	18	0.0071	2.090161	0.42	2.241987	0.43	2.690350	0.48	2.233343	0.43		
CLMH089W003MH089W002		1965			Existing		MH089W003	MH089W002		A00100	IRWD	VCP	{CACF29E-6D00-48A9-860C-137006A05779}	CLMH089W003MH089W002	37.27	28.35	1.500000000	MH089W003	MH089W002				421	CLMH089W003MH089W002	18	0.0212	2.090338	0.32	2.242223	0.33	2.690652	0.37	2.235460	0.33		
CLMH089W004MH089W003		1965			Existing		MH089W004	MH089W003		A00100	IRWD	VCP	{1839E366-D212-43D2-9AB3-4F094C72A3F3}	CLMH089W004MH089W003	37.77	37.40	1.500000000	MH089W004	MH089W003				138	CLMH089W004MH089W003	18	0.0027	2.090348	0.49	2.242236	0.51	2.692808	0.57	2.235600	0.51		
CLMH089W005MH089W004		1974			Existing		MH089W005	MH089W004		A00095	IRWD	VCP	{A47C13FA-3624-49DE-A894-4B01B04F8C4D}	CLMH089W005MH089W004	39.06	38.65	0.666666667	MH089W005	MH089W004				40	CLMH089W005MH089W004	8	0.0093	0.030412	0.14	0.036489	0.15	0.043263	0.16	0.036489	0.15		
CLMH089W006MH089W005		1974			Existing		MH089W006	MH089W005		A00095	IRWD	VCP	{2529E31B-C5AF-492F-B0AD-7D07D4751E5E}	CLMH089W006MH089W005	51.58	39.15	0.666666667	MH089W006	MH089W005				216	CLMH089W006MH089W005	8	0.0575	0.030412	0.09	0.036489	0.10	0.043263	0.10	0.036489	0.10		
CLMH089W007MH089W006		1974			Existing		MH089W007	MH089W006		A00095	IRWD	VCP	{8BC15B8D-6D6A-4839-A85F-857B1891735C}	CLMH089W006MH089W007	62.13	51.72	0.666666667	MH089W007	MH089W006				147	CLMH089W006MH089W007	8	0.0708	0.021088	0.07	0.025318	0.08	0.030018	0.08	0.025318	0.08		
CLMH089W008MH089W007		1975			Existing		MH089W008	MH089W007		A00095	IRWD	VCP	{11440A5C-ECF3-49F5-BA42-9960CBD63834}	CLMH089W008MH089W007	64.45	62.24	0.666666667	MH089W008	MH089W007				84	CLMH089W008MH089W007	8	0.0100	0.014307	0.09	0.017175	0.10	0.020365	0.11	0.017175	0.10		
CLMH089W009MH089W004		1965			Existing		MH089W009	MH089W004		A00100	IRWD	VCP	{52C1F29C-A5F8-4AA0-A385-CC1BE01FCF89}	CLMH089W009MH089W004	38.70	37.88	1.500000000	MH089W009	MH089W004				287	CLMH089W009MH089W004	18	0.0029	2.069125	0.50	2.219435	0.52	2.662261	0.58	2.209841	0.52		
CLMH089W010MH089W009		1965			Existing		MH089W010	MH089W009		A00100	IRWD	VCP	{E1273938-3EEE-44CA-9389-FC9CB211B6DA}	CLMH089W010MH089W009	40.20	38.84	1.500000000	MH089W010	MH089W009				421	CLMH089W010MH089W009	18	0.0032	2.069167	0.49	2.219450	0.51	2.662899	0.57	2.210425	0.51		
CLMH089W011MH089N001		1966			Existing		MH089W011	MH089N001		239	IRWD	VCP	{A1298B75-6FE5-4528-8765-343A33F46CA4}	CLMH089W011MH089N001	43.31	41.75	1.250000000	MH089W011	MH089N001				368	CLMH089W011MH089N001	15	0.0042	1.505662	0.51	1.622223	0.54	1.930364	0.59	1.622186	0.54		
CLMH089W012MH089W011		1966			Existing		MH089W012	MH089W011		239	IRWD	VCP	{592AC384-EBAA-432B-B8A1-3EE5D9CB3F42}	CLMH089W012MH089W011	45.04	43.41	1.250000000	MH089W012	MH089W011				368	CLMH089W012MH089W011	15	0.0044	1.506581	0.51	1.623239	0.53	1.931409	0.59	1.623203	0.53		
CLMH089W013MH089W012		1965			Existing		MH089W013	MH089W012		239	IRWD	VCP	{8F0141E6-DF19-4E58-89B0-98285EC93A93}	CLMH089W013MH089W012	46.81	45.13	1.250000000	MH089W013	MH089W012				379	CLMH089W013MH089W012	15	0.0044	1.507501	0.51	1.624219	0.53	1.932442	0.59	1.624184	0.53		
CLMH089W014MH089W013		1965			Existing		MH089W014	MH089W013		049	IRWD	VCP	{51180228-DC9A-431D-96A4-72F0F8286D0D}	CLMH089W014MH089W013	47.15	46.90	1.250000000	MH089W014	MH089W013				90	CLMH089W014MH089W013	15	0.0028	1.508496	0.53	1.625265	0.55	1.933535	0.61	1.625233	0.55		
CLMH089W015MH089W014		1975			Existing		MH089W015	MH089W014		049	IRWD	VCP	{67EBC1DE-405C-4B49-9135-3D227D2EA755}	CLMH089W015MH089W014	47.93	47.38	0.666666667	MH089W015	MH089W014	Existing 8-in and less, d/D=0.50			110	CLMH089W015MH089W014	8	0.0050	0.091478	0.50	0.109921	0.53	0.130488	0.61	0.109921	0.53		
CLMH089W016MH089W017		1980			Existing		MH089W016	MH089W017		T1048	IRWD	VCP	{DC89CBA4-9565-44F0-BBCB-2B67632SACB2}	CLMH089W016MH089W017	70.27	69.81	0.666666667	MH089W016	MH089W017				34	CLMH089W016MH089W017	8	0.0135	0.011048	0.08	0.013263	0.09	0.015723	0.10	0.013263	0.09		
CLMH089W017MH089W018		1980			Existing		MH089W017	MH089W018		T1048	IRWD	VCP	{5D1C7699-B95E-4B90-9479-F1A4E687F08E}	CLMH089W017MH089W018	69.81	68.00	0.666666667	MH089W017	MH089W018				185	CLMH089W017MH089W018	8	0.0098	0.011048	0.08	0.013263	0.09	0.015723	0.10	0.013263	0.09		
CLMH089W018MH089W019		1980			Existing		MH089W018	MH089W019		T1048	IRWD	VCP	{A1D0E85D-4173-41B8-BC44-938805420CB5}	CLMH089W018MH089W019	67.62	66.54	0.666666667	MH089W018	MH089W019				127	CLMH089W018MH089W019	8	0.0085	0.013342	0.09	0.016017	0.10	0.018987	0.11	0.016017	0.10		
CLMH089W019MH089W020		1978			Existing		MH089W019	MH089W020		T1048	IRWD	VCP	{13669CA3-BCE0-4459-BCF2-1B4A9A74FFCE}	CLMH089W019MH089W020	66.44	65.37	0.666666667	MH089W019	MH089W020				126	CLMH089W019MH089W020	8	0.0085	0.042620	0.16	0.051169	0.18	0.060662	0.20	0.051169	0.18		
CLMH089W020MH089W021		1978			Existing		MH089W020	MH089W021		A00505	IRWD	VCP	{A61CB736-09CF-4E86-AD57-AAB04904A303}	CLMH089W020MH089W021	65.16	64.27	0.666666667	MH089W020	MH089W021				227	CLMH089W020MH089W021	8	0.0039	0.042898	0.19	0.051463	0.21	0.061010	0.23	0.051463	0.21		
CLMH089W021MH089W040		1978			Existing		MH089W021	MH089W040		S04	IRWD	VCP	{E8478075-A47A-40CA-ABA4-B32835690741}	CLMH089W021MH089W040	64.08	60.09	0.666666667	MH089W021	MH089W040				388	CLMH089W021MH089W040	8	0.0103	0.042878	0.16	0.051444	0.17	0.060988	0.19	0.051444	0.17		
CLMH089W022MH089W023		1981			Existing		MH089W022	MH089W023		T1048	IRWD	PVC	{123A0638-ADFB-43AC-9C87-4CB9B56931 1D}	CLMH089W022MH089W023	52.88	51.72	0.666666667	MH089W022	MH089W023				296	CLMH089W022MH089W023	8	0.0039	0.002193	0.04	0.002634	0.05	0.003121	0.05	0.002634	0.05		
CLMH089W023MH089W024		1981			Existing		MH089W023	MH089W024		T1048	IRWD	PVC	{00E4E430-2043-45AE-AA5A-3EA45B17A025}	CLMH089W023MH089W024	51.63	51.13	0.666666667	MH089W023	MH089W024				126	CLMH089W023MH089W024	8	0.0040	0.003279	0.05	0.003939	0.06	0.004668	0.06	0.003939	0.06		
CLMH089W024MH089W025		1981			Existing		MH089W024	MH089W025		T1048	IRWD	PVC	{1A1CFB81-DC25-4489-BCD4-65D368EB6079}	CLMH089W024MH089W025	51.04	50.54	0.666666667	MH089W024	MH089W025				128	CLMH089W024MH089W025	8	0.0039	0.003279	0.05	0.003939	0.06	0.004668	0.06	0.003939	0.06		
CLMH089W025MH089W026		1981			Existing		MH089W025	MH089W026		T1048	IRWD	PVC	{93989678-268D-4516-AC82-35D0BC46E65C}	CLMH089W025MH089W026	50.45	50.04	0.666666667	MH089W025	MH089W026				97	CLMH089W025MH089W026	8	0.0038	0.003279	0.05	0.003939	0.06	0.004668	0.06	0.003939	0.06		
CLMH089W026MH089W027		1981			Existing		MH089W026	MH089W027		T1048	IRWD	PVC	{5EBE1F00-5D83-4769-92F0-A264875FD120}	CLMH089W026MH089W027	49.88	49.41	0.666666667	MH089W026	MH089W027				120	CLMH089W026MH089W027	8	0.0039	0.004164	0.06	0.005002	0.06	0.005928	0.07	0.005002	0.06		
CLMH089W027MH089W028		1981			Existing		MH089W027	MH089W028		T1048	IRWD	PVC	{8FD585AF-351A-44FB-BAC7-FD2D00BFD666}	CLMH089W027MH089W028	49.22	48.74	0.666666667	MH089W027	MH089W028				123	CLMH089W027MH089W028	8	0.0039	0.004527	0.06	0.005437	0.07	0.006442	0.07	0.005437	0.07		
CLMH089W028MH089W029		1981			Existing		MH089W028	MH089W029		T1048	IRWD	PVC	{80575A14-ACA2-4DA9-81FE-5E65A620302A}	CLMH089W028MH089W029	48.54	48.06	0.666666667	MH089W028	MH089W029				120	CLMH089W028MH089W029	8	0.0040	0.004526	0.06	0.005436	0.07	0.006441	0.07	0.005436	0.07		
CLMH089W029MH089W030		1981			Existing		MH089W029	MH089W030		T1048	IRWD	PVC	{06E70794-9A5A-4DD3-A193-09A26D772475}	CLMH089W029MH089W030	47.97	47.54	0.666666667	MH089W029	MH089W030				112	CLMH089W029MH089W030	8	0.0038	0.004525	0.06	0.005435	0.07	0.006440	0.07	0.005435	0.07		
CLMH089W030MH089W031		1981			Existing		MH089W030	MH089W031		T1048	IRWD	PVC	{1801055C-2C53-48AA-BC02-A8B807F5A0E6}	CLMH089W030MH089W031	47.43	46.83	0.666666667	MH089W030	MH089W031				157	CLMH089W030MH089W031	8	0.0038	0.005588	0.07	0.006711	0.08	0.007957	0.08	0.006711	0.08		
CLMH089W031MH089W033		1981			Existing		MH089W031	MH089W033		T1048	IRWD	PVC	{3DC3D4CD-65A0-4791-87E9-75736001549E}	CLMH089W031MH089W033	46.72	45.95	0.666666667	MH089W031	MH089W033				197	CLMH089W031MH089W033	8	0.0039	0.005578	0.07	0.006705	0.07	0.007953	0.08	0.006705	0.07		
CLMH089W032MH089W031		1981			Existing		MH089W032	MH089W031		T1048	IRWD	PVC	{04741BBA-A433-4A28-9082-BC7B18B87146}	CLMH089W032MH089W031	63.43	46.95	0.666666667	MH089W032	MH089W031				127	CLMH089W032MH089W031

CLMH0910M077MH090N162		1985		Existing		MH090N077	MH090N162	ERROR 23	T12425	IRWD	VCP	{15ZEF3EE-DEBD-48DB-89E3-6E485FC16DAA}	CLMH0910M077MH090N162	48.71	48.46	0.666666667	MH090N077	MH090N162			222	CLMH090N077MH090N162	8	0.0011	0.038859	0.24	0.046443	0.26	0.055064	0.28	0.046443	0.26						
CLMH090N077MH090N077		1985		Existing		MH090N078	MH090N077		T12425	IRWD	VCP	{7CB823C5-C97A-4ACF-924C-EF28D846E12D}	CLMH090N078MH090N077	48.95	48.90	0.666666667	MH090N078	MH090N077			14	CLMH090N078MH090N077	8	0.0036	0.038859	0.18	0.046443	0.19	0.055064	0.21	0.046443	0.19						
CLMH090N079MH090N078		1985		Existing		MH090N079	MH090N078		T12425	IRWD	PVC	{1FF59DC3-B86D-4001-91AD-CA05B065560F}	CLMH090N079MH090N078	49.22	49.15	0.666666667	MH090N079	MH090N078			25	CLMH090N079MH090N078	8	0.0028	0.026503	0.15	0.031817	0.16	0.037722	0.18	0.031817	0.16						
CLMH090N080MH090N079		1985		Existing		MH090N080	MH090N079		T12425	IRWD	PVC	{BD698EAD-4AB2-4332-AE34-A2BC2D2F8905}	CLMH090N080MH090N079	49.79	49.43	0.666666667	MH090N080	MH090N079			94	CLMH090N080MH090N079	8	0.0038	0.026503	0.15	0.031817	0.16	0.037722	0.17	0.031817	0.16						
CLMH090N083MH090N078		1985		Existing		MH090N083	MH090N078		T12425	IRWD	PVC	{3F099887-A51E-49EE-B8CF-B203B0CF9199}	CLMH090N083MH090N078	49.54	49.15	0.666666667	MH090N083	MH090N078			102	CLMH090N083MH090N078	8	0.0038	0.005392	0.07	0.006474	0.07	0.007676	0.08	0.006474	0.07						
CLMH090N085MH090N078		1985		Existing		MH090N085	MH090N078		T12425	IRWD	PVC	{400331EE-A9D3-4F63-9E22-E66369BEF63C}	CLMH090N085MH090N078	49.63	49.15	0.666666667	MH090N085	MH090N078			127	CLMH090N085MH090N078	8	0.0038	0.006964	0.08	0.008152	0.08	0.009666	0.09	0.008152	0.08						
CLMH090N086MH090N085		1985		Existing		MH090N086	MH090N085		T12425	IRWD	PVC	{96598B92-B22C-454E-83DF-629A736QE22D}	CLMH090N086MH090N085	50.00	49.74	0.666666667	MH090N086	MH090N085			72	CLMH090N086MH090N085	8	0.0036	0.006964	0.08	0.008152	0.08	0.009666	0.09	0.008152	0.08						
CLMH090N088MH090N086		1985		Existing		MH090N088	MH090N086		T12425	IRWD	PVC	{E88AFE92-1684-4A1A-9CEF-C88B2DB4BFA9}	CLMH090N088MH090N086	50.34	50.11	0.666666667	MH090N088	MH090N086			62	CLMH090N088MH090N086	8	0.0037	0.006650	0.07	0.007816	0.08	0.009268	0.09	0.007816	0.08						
CLMH090N090MH058E125		1979		Existing		MH090N090	MH058E125		A00340	IRWD	PVC	{EA4F3B43-CA53-4BC2-9E17-1A97A19D6561}	CLMH090N090MH058E125	45.70	40.15	0.666666667	MH090N090	MH058E125			269	CLMH090N090MH058E125	8	0.0206	0.031539	0.11	0.033674	0.11	0.039920	0.12	0.033674	0.18						
CLMH090N091MH090N090		1985		Existing		MH090N091	MH090N090		A00472	IRWD	VCP	{CAE90428-9569-413F-A093-50BEFCCBCD6}	CLMH090N091MH090N090	46.63	45.95	0.666666667	MH090N091	MH090N090			93	CLMH090N091MH090N090	8	0.0073	0.031539	0.15	0.033674	0.15	0.039920	0.17	0.033674	0.15						
CLMH090N092MH090N091		1985		Existing		MH090N092	MH090N091		A00472	IRWD	VCP	{6GD66D86-FBA9-47C4-8D5E-1625776D9495}	CLMH090N092MH090N091	47.75	46.84	0.666666667	MH090N092	MH090N091			232	CLMH090N092MH090N091	8	0.0039	0.031539	0.16	0.033674	0.17	0.039920	0.18	0.033674	0.17						
CLMH090N093MH090N092		1985		Existing		MH090N093	MH090N092		A00472	IRWD	PVC	{F34897EA-6948-45F6-99F2-1B4320CA5F48}	CLMH090N093MH090N092	48.41	47.95	0.666666667	MH090N093	MH090N092			118	CLMH090N093MH090N092	8	0.0039	0.031539	0.16	0.033674	0.16	0.039920	0.18	0.033674	0.16						
CLMH090N094MH090N093		1985		Existing		MH090N094	MH090N093		A00472	IRWD	PVC	{5F80C128-85EF-4E2A-BDEF-5B182D366105}	CLMH090N094MH090N093	49.16	48.66	0.666666667	MH090N094	MH090N093			141	CLMH090N094MH090N093	8	0.0035	0.023533	0.14	0.025127	0.14	0.029788	0.16	0.025127	0.14						
CLMH090N095MH090N094		1985		Existing		MH090N095	MH090N094		A00472	IRWD	PVC	{AF899B0C-C6F7-4863-8807-A4389CEAEB60}	CLMH090N095MH090N094	50.20	49.36	0.666666667	MH090N095	MH090N094			215	CLMH090N095MH090N094	8	0.0039	0.023533	0.14	0.025127	0.14	0.029788	0.16	0.025127	0.14						
CLMH090N096MH090N095		1985		Existing		MH090N096	MH090N095		A00472	IRWD	PVC	{F6ABC9C98-6F09-4D04-8525-971E311EF61}	CLMH090N096MH090N095	51.34	50.40	0.666666667	MH090N096	MH090N095			238	CLMH090N096MH090N095	8	0.0039	0.005818	0.07	0.006213	0.07	0.007364	0.08	0.006213	0.07						
CLMH090N097MH090N011		1978		Existing		MH090N097	MH090N011		504	IRWD	VCP	{09CAA171-984E-4E29-A7F0-57C6759257 9D}	CLMH090N097MH090N011	49.40	42.33	0.666666667	MH090N097	MH090N011			365	CLMH090N097MH090N011	8	0.0194	0.094785	0.20	0.111289	0.22	0.131939	0.24	0.111289	0.22						
CLMH090N098MH090N097		1985		Existing		MH090N098	MH090N097		A00590	IRWD	PVC	{48E700F4-9135-43C0-B2E1-DF692F662954}	CLMH090N098MH090N097	51.52	49.88	0.666666667	MH090N098	MH090N097			197	CLMH090N098MH090N097	8	0.0083	0.018216	0.11	0.021787	0.12	0.025829	0.13	0.021787	0.12						
CLMH090N099MH090N098		1985		Existing		MH090N099	MH090N098		A00590	IRWD	VCP	{55A7D43F-26D3-4A23-9A8E-3C603EE512F5}	CLMH090N099MH090N098	52.43	51.72	0.666666667	MH090N099	MH090N098			183	CLMH090N099MH090N098	8	0.0039	0.006611	0.08	0.007936	0.08	0.009407	0.09	0.007936	0.08						
CLMH090N100MH090N098		1985		Existing		MH090N100	MH090N098		A00590	IRWD	PVC	{8F91D3DE-A0BD-4E57-A88F-3F6315EE744B}	CLMH090N100MH090N098	54.52	51.72	0.666666667	MH090N100	MH090N098			145	CLMH090N100MH090N098	8	0.0193	0.011604	0.07	0.013851	0.08	0.016422	0.08	0.013851	0.08						
CLMH090N101MH090N100		1985		Existing		MH090N101	MH090N100		A00590	IRWD	PVC	{ABD33551-0CCF-4888-9F59-8D20C5CE1845}	CLMH090N101MH090N100	57.50	54.72	0.666666667	MH090N101	MH090N100			224	CLMH090N101MH090N100	8	0.0124	0.011604	0.08	0.013851	0.08	0.016422	0.09	0.013851	0.08						
CLMH090N102MH090N101		1985		Existing		MH090N102	MH090N101		A00590	IRWD	PVC	{3E544229-C9F0-4146-82B7-DFADEDF18258}	CLMH090N102MH090N101	59.40	57.70	0.666666667	MH090N102	MH090N101			171	CLMH090N102MH090N101	8	0.0099	0.002977	0.04	0.003577	0.05	0.004239	0.05	0.003577	0.05						
CLMH090N103MH090N045		1984		Existing		MH090N103	MH090N045		A00550	IRWD	VCP	{6E7AAD38-B3FF-4E89-85CA-26C28EDAEC45}	CLMH090N103MH090N045	50.13	47.97	0.666666667	MH090N103	MH090N045			108	CLMH090N103MH090N045	8	0.0200	0.003566	0.04	0.003807	0.04	0.004513	0.05	0.003807	0.04						
CLMH090N105MH090N053		1978		Existing		MH090N105	MH090N053		T12899	IRWD	PVC	{CB44CF31-7D03-4EBB-BC1F-E76486D8A87D}	CLMH090N105MH090N053	48.84	38.08	0.666666667	MH090N105	MH090N053			153	CLMH090N105MH090N053	8	0.0703	0.012737	0.05	0.015293	0.06	0.018130	0.06	0.015293	0.06						
CLMH090N106MH090N105		1987		Existing		MH090N106	MH090N105		T12899	IRWD	PVC	{B7F2E7E7-716A-4CDD-93D2-66C24F7C487B}	CLMH090N106MH090N105	49.70	49.13	0.666666667	MH090N106	MH090N105			145	CLMH090N106MH090N105	8	0.0039	0.011974	0.10	0.014374	0.11	0.017043	0.12	0.014374	0.11						
CLMH090N108MH090N106		1987		Existing		MH090N108	MH090N106		T12899	IRWD	PVC	{928CF4CB-8E26-4D0D-A905-9C13BB112E30}	CLMH090N108MH090N106	50.11	49.79	0.666666667	MH090N108	MH090N106			84	CLMH090N108MH090N106	8	0.0038	0.009599	0.08	0.011364	0.11	0.011524	0.10	0.011364	0.10						
CLMH090N111MH090N108		1987		Existing		MH090N111	MH090N108		T12899	IRWD	PVC	{4F522CBF-A265-4E24-8F8F-67A3354476D1}	CLMH090N111MH090N108	50.68	50.22	0.666666667	MH090N111	MH090N108			112	CLMH090N111MH090N108	8	0.0041	0.006460	0.07	0.007756	0.08	0.009193	0.09	0.007756	0.08						
CLMH090N113MH090N111		1987		Existing		MH090N113	MH090N111		T12899	IRWD	PVC	{B828AC03-0915-4FD5-AE0C-BE00D1676500}	CLMH090N113MH090N111	51.11	50.79	0.666666667	MH090N113	MH090N111			87	CLMH090N113MH090N111	8	0.0037	0.006460	0.07	0.007756	0.08	0.009193	0.09	0.007756	0.08						
CLMH090N116MH090N117		1987		Existing		MH090N116	MH090N117		T12899	IRWD	PVC	{E7FF492F-B6A7-4D6D-A9E3-FB352590E44F}	CLMH090N116MH090N117	52.74	52.09	0.666666667	MH090N116	MH090N117			169	CLMH090N116MH090N117	8	0.0038	0.002476	0.05	0.002972	0.05	0.003523	0.06	0.002972	0.05						
CLMH090N117MH090N113		1987		Existing		MH090N117	MH090N113		T12899	IRWD	PVC	{40CB1F9E-AB1B-434F-BFEA-42A340BF0BF1}	CLMH090N117MH090N113	51.90	51.22	0.666666667	MH090N117	MH090N113			133	CLMH090N117MH090N113	8	0.0040	0.004427	0.06	0.005316	0.07	0.006301	0.07	0.005316	0.07						
CLMH090N122MH058E095		1987		Existing		MH090N122	MH058E095		T12899	IRWD	PVC	{FA65A7AC-4C05-484D-B230-DE7BE0A93D40}	CLMH090N122MH058E095	50.77	48.58	0.666666667	MH090N122	MH058E095			112	CLMH090N122MH058E095	8	0.0196	0.021622	0.09	0.025931	0.10	0.030741	0.11	0.025931	0.10						
CLMH090N123MH090N122		1987		Existing		MH090N123	MH090N122		T12899	IRWD	PVC	{26604588-833D-4368-81B6-0F0111212604}	CLMH090N123MH090N122	51.84	50.97	0.666666667	MH090N123	MH090N122			72	CLMH090N123MH090N122	8	0.0121	0.004910	0.05	0.005885	0.06	0.006989	0.06	0.005895	0.06						
CLMH090N124MH090N122		1987		Existing		MH090N124	MH090N122		T12899	IRWD	PVC	{F1CDC915-15B7-4813-BAF3-92D6391FA469}	CLMH090N124MH090N122	51.86	50.86	0.666666667	MH090N124	MH090N122			122	CLMH090N124MH090N122	8	0.0059	0.015706	0.11	0.018829	0.12	0.022321	0.13	0.018829	0.12						
CLMH090N125MH090N124		1987		Existing		MH090N125	MH090N124		T12899	IRWD	PVC	{AC51C416-763B-4954-A519-4E0529E421AA}	CLMH090N125MH090N124	55.15	51.95	0.666666667	MH090N125	MH090N124			182	CLMH090N125MH090N124	8	0.0176	0.012983	0.08	0.015584	0.08	0.018474	0.09	0.015584	0.08						
CLMH090N127MH090N125		1987		Existing		MH090N127	MH090N125		T12899	IRWD	PVC	{CADDD050-F9BD-42ED-B076-BC0A2816CD94}	CLMH090N127MH090N125	55.63	55.25	0.666666667	MH090N127	MH090N125			68	CLMH090N127MH090N125	8	0.0056	0.010970	0.09	0.013167	0.10	0.015609	0.11	0.013167	0.10						
CLMH090N129MH090N127		1987		Existing		MH090N129	MH090N127		T12899	IRWD	PVC	{65F11616-5F81-4BE9-8A77-498CE700639A}	CLMH090N129MH090N127	56.97	55.74	0.666666667	MH090N129	MH090N127			184	CLMH090N129MH090N127	8	0.0067	0.002839	0.05	0.003406	0.05	0.004038	0.05	0.003406	0.05						
CLMH090N132MH090N003		1965		Existing		MH090N132	MH090N003		A00080	IRWD	VCP	{10BA0991D-3998-4390-8F8C-B1AF651284A2}	CLMH090N132MH090N003	46.40	43.02	1.000000000	MH090N132	MH090N003			259	CLMH090N132MH090N003	12	0.0113	0.032938	0.08	0.035166	0.08	0.041696	0.09	0.032482	0.08						
CLMH090N134MH089W058		1990		Existing		MH090N134	MH089W058		A00702	IRWD	PVC	{06D89C48-FDCF-4C29-9258-44A58CBC549C}	CLMH090N134MH089W058	51.70	48.09	0.666666667	MH090N134	MH089W058			137	CLMH090N134MH089W058	8	0.0246	0.012666	0.07	0.015111	0.07	0.017912	0.08	0.015111	0.07						
CLMH090N135MH090N011		1990		Existing		MH090N135	MH090N011		A00702	IRWD	PVC	{1FED8336-5BF8-408F-A642-4B54FB0C22D7}	CLMH090N135MH090N011	43.38	42.33	0.666666667	MH090N135	MH090N011			219	CLMH090N135MH090N011	8	0.0048	0.028729	0.15	0.034379	0.16	0.040756	0.18	0.034379	0.16						
CLMH090N162MH090N053		1979		Existing		MH090N162	MH090N053	ERROR 23	A00340	IRWD	VCP	{C8E94805-F808-4EFA-86A6-53263C87C93D}	CLMH090N162MH090N053	48.26	38.80	0.666666667	MH090N162	MH090N053			232	CLMH090N162MH090N053	8	0.0409	0.042883	0.11	0.051276	0.12	0.060702	0.13	0.051276	0.12						
CLMH090N165MH090N103		1984		Existing		MH090N165	MH090N103		A00550	OTHER	VCP	{20252055B-3474-4019-9243-1A8C259D6E5}	CLMH090N165MH090N103	51.16	50.33	0.666666667	MH090N165	MH090N103			124	CLMH090N165MH090N103	8	0.0047	0.003566	0.05	0.003807	0.05	0.004513	0.06	0.003807	0.05						
CLMH090N169MH090N134		1990		Existing		MH090N169	MH090N134		A00702	IRWD	PVC	{07678339-E3C5-4CCA-A6C2-026100634142}	CLMH090N169MH090N134	54.20	51.90	0.666666667	MH090N169	MH090N134			308	CLMH090N169MH090N134	8	0.0075	0.003530	0.05	0.004142	0.05	0.004909	0.06	0.004142	0.05						
CLMH090N179MH090N135		1990		Existing		MH090N179	MH090N135		A00702	IRWD	PVC	{E939BC02-101B-4CE3-8299-96E7AE4E89E1}	CLMH090N179MH090N135	44.36	43.58	0.666666667	MH090N179	MH090N135			203	CLMH090N179MH090N135	8	0.0038	0.028729	0.15	0.034379	0.17	0.040756	0.18	0.034379	0.17						
CLMH090N181MH090N182		1981		Existing		MH090N181	MH090N182		T10483	IRWD	VCP	{72AFDAE91-7709-46F9-BE21-445A4E2906660}	CLMH090N181MH090N182	45.20	44.90	0.666666667	MH090N181	MH090N182			75	CLMH090N181MH090N182	8	0.0040	0.016875	0.12	0.018056	0.12	0.021395	0.13	0.018056	0.12						
CLMH090N182MH090N056		1981		Existing		MH090N182	MH090N056		T10483	IRWD	PVC	{D370E9DB-A216-45EF-80FD-2F001301B042}	CLMH090N182MH090N056	44.70	44.38	0.666666667	MH090N182	MH090N056			86	CLMH090N182MH090N056	8	0.0037	0.033923	0.17	0.039967	0.18	0.047391	0.20	0.039967	0.18						
CLMH095S001MH091E036		2007		Existing	assumed Mannings N	MH095S001	MH091E036		A00829U	PRIV	PVC	{3C07743C-396E-433F-A9F6-1BCBAA8A48C3}	CLMH095S001MH091E036	257.56	256.34	0.666666667	MH095S001	MH091E036			154	CLMH095S001MH091E036	8	0.0078	0.026191	0.13	0.031445	0.14	0.037280	0.15	0.031445	0.14						
CLMH095S002MH095S001		2007		Existing	assumed Mannings N	MH095S002	MH095S001		A00829U	PRIV	PVC	{7C37A759-FAAA-4DE6-A07C-EA930CBAFFA7}	CLMH095S002MH095S001	258.16	257.76	0.666666667	MH095S002	MH095S001			54	CLMH095S002MH095S001	8	0.0075	0.026191	0.13	0.031445	0.14	0.037280	0.15	0.031445	0.14						
CLMH095S003MH095S002		2007		Existing	assumed Mannings N	MH095S003	A02226	PRIV	A00829U	PRIV	PVC	{38BB0972-96FB-450A-A6EB-607BAA024242}	CLMH095S003MH095S002	235.88	230.39	0.666666667	MH095S003	MH095S002			279	CLMH095S003MH095S002	8	0.0197	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH095S004MH090S008		2008		Existing	assumed Mannings N	MH095S004	MH090S008		A02226	PRIV	PVC	{103E31E1-3663-4AFC-A5DE-D2BAFAB382E7D}	CLMH095S004MH090S008	230.29	229.63	0.666666667	MH095S004	MH090S008			70	CLMH095S004MH090S008	8	0.0095	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH095S005MH090S006		2008		Existing	assumed Mannings N	MH095S005	MH090S006		A02226	PRIV	PVC	{2AD14138-4F12-4BF8-AC5C-1B2C1E76DDC3}	CLMH095S005MH090S006	246.34	235.96	0.666666667	MH095S005	MH090S006			344	CLMH095S005MH090S006	8	0.0302	0.026191	0.09	0.031445	0.10	0.037280	0.11	0.031445	0.10						
CLMH095S006MH090S008		2008		Existing	assumed Mannings N	MH095S006	MH090S008		A02226	PRIV	PVC	{C79E9B02-CC4D-47C1-85A4-69DEA3023E0}	CLMH095S006MH090S008	235.86	229.53	0.666666667	MH095S006	MH090S008			215	CLMH095S006MH090S008	8	0.0295	0.026191	0.09	0.031445	0.10	0.037280	0.11	0.031445	0.10						
CLMH095S007MH091E039		2008		Existing	assumed Mannings N	MH095S007	MH091E039		A02226	PRIV	PVC	{0B82AF31-4ED8-4FFA-AA7C-A0C130B95488}	CLMH095S007MH091E039	222.78	217.30	0.666666667	MH095S007	MH091E039			222	CLMH095S007MH091E039	8	0.0285	0.026191	0.09	0.031445	0.10	0.037280	0.11	0.031445	0.10						
CLMH095S008MH090S007		2008		Existing	assumed Mannings N	MH095S008	MH090S007		A02226	PRIV	PVC	{A12087F2-6F82-4199-A393-14A281649DD2}	CLMH095S008MH090S007	229.43	222.98	0.666666667	MH095S008	MH090S007			222	CLMH095S008MH090S007	8	0.0291	0.026191	0.09	0.031445	0.10	0.037280	0.11	0.031445	0.10						
CLMH091E001MH091E002		2001		Existing	assumed Mannings N	MH091E001	MH091E002		A00892	IRWD	VCP	{A22B3282-6AFE-4D90-BA79-60E8691688B9}	CLMH091E001MH091E002	186.60	176.50	1.250000000	MH091E001	MH091E002			431	CLMH091E001MH091E002	15	0.0234	0.275585	0.18	0.326222	0.20	0.388153	0.22	0.326215	0.20						
CLMH091E002MH091E004		2001		Existing	assumed Mannings N	MH091E002	MH091E004		A00892	IRWD	VCP	{8FE25339-F565-4695-ADC3-0E7F12BD40A}	CLMH091E002MH091E004	176.40	176.00	1.250000000	MH091E002	MH091E004			210	CLMH091E002MH091E004	15	0.0019	0.188780	0.26	0.380967	0.28	0.454810	0.31	0.380956	0.28						
CLMH091E003MH091E002		2001		Existing	assumed Mannings N	MH091E003	MH091E002		A00892	IRWD	VCP	{3D94BC7A-F0E5-4277-97E7-3CAA75B550B2}	CLMH091E003MH091E002	177.60	177.19	0.833333333	MH091E003	MH091E002			78	CLMH091E003MH091E002	10	0.0053	0.049911	0.15	0.059651	0.16	0.070724	0.17	0.059651	0.16						
CLMH091E004MH091E005		2001		Existing	assumed Mannings N	MH091E004	MH091E005		A00892	IRWD	VCP	{88E47BAA-582B-4239-8886-9F6541CB43F0}	CLMH091E004MH091E005	175.90	167.41	1.250000000	MH091E004	MH091E005			185	CLMH091E004MH091E005	15	0.0176	0.369950	0.17	0.443320	0.19	0.528879	0.21	0.443320	0.19						
CLMH091E005MH091E006		2001		Existing	assumed Mannings N	MH091E005	MH091E006		A00892	IRWD	VCP	{52BD3FAB-775A-4541-851C-12B9F997E308}	CLMH091E005MH091E006	167.24	162.17	1.250000000	MH091E005	MH091E006			372	CLMH091E005MH091E006	15	0.0136	0.369882	0.23	0.443227	0.26	0.528764	0.28	0.443216	0.26						
CLMH091E006MH091E007	CAL27	2001		Existing	assumed Mannings N	MH091E006	MH091E007		A00892	IRWD	VCP	{D4FF3695-8DB3-4BDB-BA96-01DFC944B893}	CLMH091E006MH091E007	162.07	161.39	1.250000000	MH091E006	MH091E007			450	CLMH091E006MH091E007	15	0.0015	0.367663	0.30	0.440457	0.32	0.525883	0.35	0.440443	0.32						
CLMH091E007MH091E008		2001		Existing	assumed Mannings N	MH091E007	MH091E008		A00892	IRWD	VCP	{7A005354-8770-40FA-A6CC-F4C9E690B50}	CLMH091E007MH091E008	161.30	161.10	1.250000000	MH091E007	MH091E008			118	CLMH091E007MH091E008	15	0.0017	0.367635	0.27	0.440422	0.30	0.525850	0.32	0.440408	0.30						
CLMH091E008MH091S016		2001		Existing	assumed Mannings N	MH091E008	MH091S016		A00892	IRWD	VCP	{0B0593FD-6F3D-4F28-A20B-CC98A5EB6504}	CLMH091E008MH091S016	161.00	150.50	1.250000000	MH091E008	MH091S016			81	CLMH091E008MH091S016	15	0.1312	0.367632	0.11	0.440417	0.12	0.525846	0.13	0.440403	0.12						
CLMH091E011MH091E013		2002		Existing	assumed Mannings N	MH091E011	MH091E013		T16169	IRWD	PVC	{D4A6083E-C4CC-4D5F-A8C5-D2C529EF8D0D}	CLMH091E011MH091E013	195.31	177.85	0.666666667	MH091E011	MH091E013			117	CLMH091E011MH091E013	8	0.1509	0.049911	0.14	0.059651	0.09	0.070724	0.10	0.059651	0.09						
CLMH091E012MH091E018		2002		Existing	assumed Mannings N	MH091E012	MH091E018		T16169	IRWD	PVC	{D7B8619D-5758-472B-BBCE-978CBE8626F}	CLMH091E012MH091E018	201.97	201.66	0.666666667	MH091E012	MH091E018			75	CLMH091E012MH091E018	8	0.0041	0.007071	0.08	0.008456	0.08	0.010023	0.09	0.008456	0.08						
CLMH091E013MH091E003		2002		Existing	assumed Mannings N	MH091E013	MH091E003		T16169	IRWD	PVC	{8C241875-5A0F-48C8-98D5-21774A393BC9}	CLMH091E013MH091E003	177.75	177.61	0.833333333	MH091E013	MH091E003			26	CLMH091E013MH091E003	10	0.0054	0.049911	0.14	0.059651	0.16	0.070724	0.17	0.059651	0.16						
CLMH091E014MH091E015		2002		Existing	assumed Mannings N	MH091E014	MH091E015		T16169	IRWD	PVC	{848D39AF-19A8-4E87-98D2-5A9CF5AA0DBA}	CLMH091E014MH091E015	202.89	202.50	0.666666667	MH091E014	MH091E015			84	CLMH091E014MH091E015	8	0.0046	0.038966	0.17	0.046753	0.19	0.055432	0.21	0.046753	0.19						
CLMH091E015MH091E011		2002		Existing	assumed Mannings N	MH091E015	MH091E011		T16169	IRWD	PVC	{8F295337-B6CB-4A30-9F77-8E37F7451E13}	CLMH091E015MH091E011	202.39	195.55	0.666666667	MH091E015	MH091E011			189	CLMH091E015MH091E011	8	0.0728	0.038966	0.09	0.046753	0.10	0.055432	0.11	0.046753	0.10						
CLMH091E016MH091E018		2002		Existing	assumed Mannings N	MH091E016	MH091E018		T16169	IRWD	PVC	{F57FD33E-0951-4851-8B35-47576918AD71}	CLMH091E016MH091E018	202.71	201.66	0.666666667	MH091E016	MH091E018			99	CLMH091E016MH091E018	8	0.0106	0.003467	0.05	0.003702	0.05	0.004390	0.05	0.003702	0.05						
CLMH091E017MH098N052		2002		Existing	assumed Mannings N	MH091E017	MH098N052		T16169	IRWD	PVC	{5574E269-13A8-4D93-B822-2BA7DB330DCD}	CLMH091E017MH098N060	197.26	196.34	0.666666667	MH091E017	MH098N052			217	CLMH091E017MH098N052	8	0.0042	0.010945	0.09	0.012898	0.10	0.015292	0.11	0.012898	0.10						
CLMH091E018MH091E017		2002		Existing	assumed Mannings N	MH091E018	MH091E017		T16169	IRWD	PVC	{CD2E8298-2D1D-481F-A27A-2958BCBF67F7}	CLMH091E018MH091E017	201.46	197.36	0.666666667	MH091E018	MH091E017			222	CLMH091E018MH091E017	8	0.0139	0.007986	0.05	0.010305	0.06	0.012216	0.06	0.010305	0.06						
CLMH091E019MH091E004		2001		Existing	assumed Mannings N	MH091E019	MH091E004		A00892	IRWD	VCP	{B469B8DB-29AF-49C5-8453-66A1F3DC9C92}	CLLDE091E002MH091E004	176.63	176.00	0.833333333	MH091E019	MH091E004			41	CLMH091E019MH091E004	10	0.0154	0.052442	0.13	0.062913	0.15	0.074560	0.17	0.062916	0.15						
CLMH091E020MH091E019		2007		Existing	assumed Mannings N	MH091E020	MH091E019		A00829U	IRWD	PVC	{83E0A85C-E927-4565-AAF8-934CC79149CD}	CLMH091E020MH091E019	181.16	176.73	0.666666667	MH091E020	MH091E019			104	CLMH091E020MH091E019	8	0.0426	0.052383	0.12	0.062890	0.13	0.074560	0.14	0.062890	0

| | | |

CLMH096S021MH096S020		1990		Existing	assumed Mannings N	MH096S021	MH096S020		T14249	IRWD	DIP	{119BA02B-CF0F-465E-BD23-526A655BA543}	CLMH096S021MH096S020	302.60	301.76	0.666666667	MH096S021	MH096S020			214	CLMH096S021MH096S020	8	0.0039	0.032133	0.17	0.038604	0.18	0.045772	0.20	0.038604	0.18		
CLMH096S022MH096S001		1991		Existing	assumed Mannings N	MH096S022	MH096S001		T14249	IRWD	VCP	{BDF4BE46-8CC5-434F-8653-C9033F2BE55C}	CLMH096S022MH096S001	289.89	289.00	0.666666667	MH096S022	MH096S001			234	CLMH096S022MH096S001	8	0.0038	0.066699	0.24	0.080165	0.26	0.095085	0.29	0.080165	0.26		
CLMH096S023MH096S021		1992		Existing	assumed Mannings N	MH096S023	MH096S021		T14249	IRWD	VCP	{A8659DA7-978F-43F4-AC8C-43277370E03E}	CLMH096S023MH096S021	304.32	302.79	0.666666667	MH096S023	MH096S021			386	CLMH096S023MH096S021	8	0.0040	0.031428	0.16	0.037749	0.18	0.044755	0.20	0.037749	0.18		
CLMH096S024MH096S023		1995		Existing	assumed Mannings N	MH096S024	MH096S023		T14065	IRWD	VCP	{93EFDCC5-DE1D-4C48-BA26-C4A5249DAF7F}	CLMH096S024MH096S023	305.42	304.51	0.666666667	MH096S024	MH096S023			233	CLMH096S024MH096S023	8	0.0039	0.030960	0.16	0.037175	0.18	0.044071	0.19	0.037175	0.18		
CLMH096S025MH096S024		1993		Existing	assumed Mannings N	MH096S025	MH096S024		T14065	IRWD	VCP	{C1328249-EA22-4116-98B1-CF8FD92D6C25}	CLMH096S025MH096S024	306.41	305.52	0.666666667	MH096S025	MH096S024			26	CLMH096S025MH096S024	8	0.0349	0.025436	0.09	0.030542	0.10	0.036205	0.11	0.030542	0.10		
CLMH096S026MH096S025		1993		Existing	assumed Mannings N	MH096S026	MH096S025		T14065	IRWD	VCP	{6FFD18CC-3DBC-48CF-8483-8EB4788679 1A}	CLMH096S026MH096S025	306.76	306.60	0.666666667	MH096S026	MH096S025			42	CLMH096S026MH096S025	8	0.0038	0.025436	0.15	0.030542	0.16	0.036205	0.17	0.030542	0.16		
CLMH096S027MH096S024		1993		Existing	assumed Mannings N	MH096S027	MH096S024		T14065	IRWD	VCP	{156BABF1-2D5D-4CBB-BC8C-9BD0E39C414D}	CLMH096S027MH096S024	306.30	305.63	0.666666667	MH096S027	MH096S024			175	CLMH096S027MH096S024	8	0.0038	0.002415	0.05	0.002899	0.05	0.003438	0.06	0.002899	0.05		
CLMH096S030MH096S024		1990		Existing	assumed Mannings N	MH096S030	MH096S024		T14065	IRWD	VCP	{27C39318-F78B-423A-B1D6-E4BBF732614}	CLMH096S030MH096S024	354.95	305.58	0.666666667	MH096S030	MH096S024			364	CLMH096S030MH096S024	8	0.1368	0.003114	0.02	0.003737	0.03	0.004431	0.03	0.003737	0.03		
CLMH096S032MH096S033		1993		Existing	assumed Mannings N	MH096S032	MH096S033		T14065	IRWD	VCP	{31C532FC-4CC8-449D-9676-7B1CEF0BED A1}	CLMH096S032MH096S033	368.01	346.60	0.666666667	MH096S032	MH096S033			268	CLMH096S032MH096S033	8	0.0896	0.002500	0.02	0.003002	0.03	0.003557	0.03	0.003002	0.03		
CLMH096S033MH096S034		1993		Existing	assumed Mannings N	MH096S033	MH096S034		T14065	IRWD	VCP	{7F899F3B-3F62-42BC-A981-0610B84C1B05}	CLMH096S033MH096S034	346.50	345.85	0.666666667	MH096S033	MH096S034			165	CLMH096S033MH096S034	8	0.0039	0.016725	0.12	0.020088	0.13	0.023815	0.14	0.020088	0.13		
CLMH096S034MH096S008		1993		Existing	assumed Mannings N	MH096S034	MH096S008		T14249	IRWD	VCP	{44DB666C-575D-4851-8B23-4715E0BA68BA}	CLMH096S034MH096S008	345.64	334.22	0.666666667	MH096S034	MH096S008			152	CLMH096S034MH096S008	8	0.0751	0.016725	0.06	0.020088	0.07	0.023815	0.07	0.020088	0.07		
CLMH096S060MH096S032		1993		Existing	assumed Mannings N	MH096S060	MH096S032		T14065	IRWD	VCP	{8F11FD07-60E3-4CEE-AE79-64125FA70CEB}	CLMH096S060MH096S032	386.23	368.10	0.666666667	MH096S060	MH096S032			268	CLMH096S060MH096S032	8	0.1112	0.001357	0.02	0.001628	0.02	0.001929	0.02	0.001628	0.02		
CLMH097E001MH129N012		1992		Existing		MH097E001	MH129N012		741	IRWD	VCP	{817BDDDA-5150-480C-B7D6-A6A173D3A166}	CLMH097E001MH129N012	599.95	599.34	1.000000000	MH097E001	MH129N012			272	CLMH097E001MH129N012	12	0.0022	0.128844	0.22	0.154777	0.24	0.183635	0.26	0.154776	0.24		
CLMH097E002MH097E056		1992		Existing		MH097E002	MH097E056		741	IRWD	VCP	{6DE88BF28-E302-4192-B98A-4E2CFAE23F9F4}	CLMH097E002MH097E056	600.66	600.26	1.000000000	MH097E002	MH097E056			200	CLMH097E002MH097E056	12	0.0020	0.099964	0.19	0.119996	0.23	0.142318	0.23	0.119995	0.21		
CLMH097E003MH097E121		1992		Existing		MH097E003	MH097E121		741	IRWD	VCP	{E38D7FEB-BD42-4316-B0D8-9E53C46C466F}	CLMH097E003MH097E121	601.61	601.44	1.000000000	MH097E003	MH097E121			77	CLMH097E003MH097E121	12	0.0022	0.100054	0.22	0.120067	0.24	0.142373	0.26	0.120066	0.24		
CLMH097E004MH097E003		1992		Existing		MH097E004	MH097E003		741	IRWD	VCP	{A5E830D2-8977-44DB-AEF2-914D38212CDE}	CLMH097E004MH097E003	601.88	601.71	0.833333333	MH097E004	MH097E003			81	CLMH097E004MH097E003	10	0.0021	0.100057	0.24	0.120069	0.26	0.142375	0.28	0.120069	0.26		
CLMH097E005MH097E012		1992		Existing		MH097E005	MH097E012		741	IRWD	VCP	{4A0A370F-95F1-4F91-8DAC-99213253A36B}	CLMH097E005MH097E012	602.85	602.65	0.833333333	MH097E005	MH097E012			98	CLMH097E005MH097E012	10	0.0020	0.083324	0.22	0.099967	0.24	0.118529	0.26	0.099967	0.24		
CLMH097E006MH097E005		1992		Existing		MH097E006	MH097E005		741	IRWD	VCP	{4D990FDC-902B-4292-815A-C2FD539D5762}	CLMH097E006MH097E005	604.51	602.96	0.833333333	MH097E006	MH097E005			401	CLMH097E006MH097E005	10	0.0039	0.083326	0.20	0.099969	0.22	0.118531	0.24	0.099969	0.22		
CLMH097E008MH097E055		1992		Existing		MH097E008	MH097E055		14509	IRWD	VCP	{62ADE933-E820-4CDF-9442-D345B4BDC6E4}	CLMH097E008MH097E055	606.64	605.84	0.833333333	MH097E008	MH097E055			109	CLMH097E008MH097E055	10	0.0073	0.049705	0.14	0.059648	0.15	0.070717	0.16	0.059648	0.15		
CLMH097E009MH097E008		1992		Existing		MH097E009	MH097E008		T14581	IRWD	VCP	{5CB7E5B8-36BF-4651-9FEA-B6BF87E0CEFA}	CLMH097E009MH097E008	608.33	606.84	0.666666667	MH097E009	MH097E008			378	CLMH097E009MH097E008	8	0.0039	0.022919	0.14	0.027516	0.15	0.032622	0.17	0.027516	0.15		
CLMH097E010MH097E008		1992		Existing		MH097E010	MH097E008		14509	IRWD	VCP	{F4DF6DB2-7C2B-405B-B3CE-F5CA957B72F2}	CLMH097E010MH097E008	607.57	606.73	0.666666667	MH097E010	MH097E008			212	CLMH097E010MH097E008	8	0.0040	0.026786	0.15	0.032132	0.17	0.038095	0.18	0.032132	0.17		
CLMH097E011MH097E010		1992		Existing		MH097E011	MH097E010		T14617	IRWD	PVC	{D5443BF1-0E42-426F-BC7B-45CD765F359}	CLMH097E011MH097E010	608.30	607.77	0.666666667	MH097E011	MH097E010			157	CLMH097E011MH097E010	8	0.0034	0.011811	0.10	0.014154	0.11	0.016779	0.12	0.014154	0.11		
CLMH097E012MH097E004		1992		Existing		MH097E012	MH097E004		741	IRWD	VCP	{7D11EF3E-3F93-45D8-849A-133932F22A15}	CLMH097E012MH097E004	602.55	601.97	1.000000000	MH097E012	MH097E004			269	CLMH097E012MH097E004	12	0.0022	0.100062	0.19	0.120074	0.21	0.142379	0.23	0.120074	0.21		
CLMH097E013MH097E010		1992		Existing		MH097E013	MH097E010		14509	IRWD	VCP	{688CE6F-6A71-43C2-BCB8-D1AB32426SA6}	CLMH097E013MH097E010	613.04	607.66	0.666666667	MH097E013	MH097E010			224	CLMH097E013MH097E010	8	0.0260	0.014976	0.08	0.017978	0.09	0.021316	0.09	0.017978	0.09		
CLMH097E014MH097E079		1992		Existing		MH097E014	MH097E079		14509	IRWD	VCP	{8CC4037D-A067-4D18-85C1-17952E84A788}	CLMH097E014MH097E079	618.92	617.59	0.666666667	MH097E014	MH097E079			60	CLMH097E014MH097E079	8	0.0222	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH097E015MH097E012		1993		Existing		MH097E015	MH097E012		T14617	IRWD	PVC	{30F5C75E-E908-487A-ABC1-9C9F1AA3F9F4}	CLMH097E015MH097E012	611.80	602.65	0.666666667	MH097E015	MH097E012			76	CLMH097E015MH097E012	8	0.1220	0.016777	0.12	0.020143	0.14	0.023880	0.16	0.020143	0.14		
CLMH097E016MH097E015		1993		Existing		MH097E016	MH097E015		T14617	IRWD	PVC	{B4137694-C49A-494E-937E-ADAE78E1E139}	CLMH097E016MH097E015	617.46	612.01	0.666666667	MH097E016	MH097E015			177	CLMH097E016MH097E015	8	0.0308	0.011269	0.06	0.013531	0.07	0.016041	0.07	0.013531	0.07		
CLMH097E017MH097E016		1993		Existing		MH097E017	MH097E016		T14617	IRWD	PVC	{45B53CD9-CC6C-40C1-88E1-E9523B8E663E}	CLMH097E017MH097E016	620.48	617.55	0.666666667	MH097E017	MH097E016			160	CLMH097E017MH097E016	8	0.0183	0.007307	0.06	0.008775	0.06	0.010403	0.07	0.008775	0.06		
CLMH097E018MH097E017		1993		Existing		MH097E018	MH097E017		T14617	IRWD	PVC	{9FF474DD-EB02-404A-AB24-63A3E40A114E}	CLMH097E018MH097E017	621.66	620.59	0.666666667	MH097E018	MH097E017			245	CLMH097E018MH097E017	8	0.0044	0.003135	0.05	0.003765	0.06	0.004463	0.06	0.003765	0.06		
CLMH097E018MH097E024		1993		Existing		MH097E018	MH097E024		T14617	IRWD	PVC	{6E606417-77FC-41A5-8D1D-408C53B4FA10}	CLMH097E018MH097E024	621.86	620.96	0.666666667	MH097E018	MH097E024			180	CLMH097E018MH097E024	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH097E021MH097E015		1993		Existing		MH097E021	MH097E015		T14617	IRWD	PVC	{14459069-9211-43A9-B052-150B2525B661}	CLMH097E021MH097E015	613.78	612.01	0.666666667	MH097E021	MH097E015			196	CLMH097E021MH097E015	8	0.0090	0.005508	0.06	0.006612	0.06	0.007839	0.07	0.006612	0.06		
CLMH097E023MH097E022		1993		Existing		MH097E023	MH097E022		T14617	IRWD	PVC	{90005EF7-BA2B-40CE-9094-D1A6692211E5D}	CLMH097E023MH097E022	617.32	613.97	0.666666667	MH097E023	MH097E022			273	CLMH097E023MH097E022	8	0.0123	0.003114	0.04	0.003739	0.05	0.004431	0.05	0.003739	0.05		
CLMH097E024MH097E023		1993		Existing		MH097E024	MH097E023		T14617	IRWD	PVC	{14123224-2C7F-4681-BA65-B27BF0EE63FE}	CLMH097E024MH097E023	620.76	617.42	0.666666667	MH097E024	MH097E023			316	CLMH097E024MH097E023	8	0.0106	0.003114	0.04	0.003739	0.05	0.004431	0.05	0.003739	0.05		
CLMH097E027MH097E029		1993		Existing		MH097E027	MH097E029		T14617	IRWD	VCP	{A5E83C3E-28BA-4351-BE0F-1C152F896B4A}	CLMH097E027MH097E029	621.26	617.82	0.666666667	MH097E027	MH097E029			335	CLMH097E027MH097E029	8	0.0103	0.003466	0.05	0.004134	0.05	0.004900	0.06	0.004134	0.05		
CLMH097E029MH097E030		1993		Existing		MH097E029	MH097E030		T14617	IRWD	VCP	{8C1DFFA8-4877-4CDA-AA5D-50DEAD7630142}	CLMH097E029MH097E030	617.71	610.65	0.666666667	MH097E029	MH097E030			221	CLMH097E029MH097E030	8	0.0319	0.003466	0.04	0.004134	0.04	0.004900	0.04	0.004134	0.04		
CLMH097E030MH097E011		1993		Existing		MH097E030	MH097E011		T14617	IRWD	VCP	{E98D2F77-45F2-4EBF-9347-A5BA58AD067E}	CLMH097E030MH097E011	610.46	608.51	0.666666667	MH097E030	MH097E011			137	CLMH097E030MH097E011	8	0.0142	0.011811	0.08	0.014154	0.09	0.016779	0.09	0.014154	0.09		
CLMH097E031MH097E030		1993		Existing		MH097E031	MH097E030		T14617	IRWD	PVC	{A392DD71-84DC-4E97-8CA1-D8E6583FDF57}	CLMH097E031MH097E030	619.66	610.55	0.666666667	MH097E031	MH097E030			268	CLMH097E031MH097E030	8	0.0268	0.001609	0.03	0.001934	0.03	0.002290	0.03	0.001934	0.03		
CLMH097E033MH097E034		1993		Existing		MH097E033	MH097E034		T14581	IRWD	VCP	{B6405994-411F-48C9-A8EA-7AC2B2B87BBA}	CLMH097E033MH097E034	613.91	610.51	0.666666667	MH097E033	MH097E034			345	CLMH097E033MH097E034	8	0.0099	0.005592	0.06	0.006713	0.07	0.007961	0.07	0.006713	0.07		
CLMH097E034MH097E038		1993		Existing		MH097E034	MH097E038		T14581	IRWD	VCP	{57249294-74E0-4469-ADDD-30179C09E131}	CLMH097E034MH097E038	610.30	609.38	0.666666667	MH097E034	MH097E038			159	CLMH097E034MH097E038	8	0.0058	0.014828	0.11	0.017801	0.12	0.021107	0.13	0.017801	0.12		
CLMH097E035MH097E038		1993		Existing		MH097E035	MH097E038		T14581	IRWD	VCP	{31CE3897-F568-4186-B5E0-F48E6A71690F}	CLMH097E035MH097E038	610.69	609.38	0.666666667	MH097E035	MH097E038			260	CLMH097E035MH097E038	8	0.0040	0.010127	0.09	0.012157	0.10	0.014413	0.11	0.012157	0.10		
CLMH097E036MH097E035		1993		Existing		MH097E036	MH097E035		T14581	IRWD	VCP	{8B20D11B-A37B-4348-83E0-C159F15752B0}	CLMH097E036MH097E035	614.59	610.89	0.666666667	MH097E036	MH097E035			374	CLMH097E036MH097E035	8	0.0099	0.008092	0.07	0.009715	0.08	0.011516	0.08	0.009715	0.08		
CLMH097E038MH097E009		1993		Existing		MH097E038	MH097E009		T14581	IRWD	PVC	{0C445489-3DDB-45B1-A365-A5F7912E43FB}	CLMH097E038MH097E009	609.17	608.53	0.666666667	MH097E038	MH097E009			164	CLMH097E038MH097E009	8	0.0039	0.022920	0.14	0.027516	0.15	0.032622	0.17	0.027516	0.15		
CLMH097E039MH097E040		1993		Existing		MH097E039	MH097E040		T14571	IRWD	PVC	{3D518E1E-A7E8-40EA-9FAC-A9709AFC77D5}	CLMH097E039MH097E040	616.86	616.11	0.666666667	MH097E039	MH097E040			191	CLMH097E039MH097E040	8	0.0039	0.004279	0.06	0.005136	0.07	0.006091	0.07	0.005136	0.07		
CLMH097E040MH097E041		1993		Existing		MH097E040	MH097E041		T14571	IRWD	PVC	{0E9FF23B-EB24-4AD9-B024-BA933E8E28BAA}	CLMH097E040MH097E041	616.02	615.48	0.666666667	MH097E040	MH097E041			136	CLMH097E040MH097E041	8	0.0040	0.009044	0.09	0.010858	0.09	0.012875	0.10	0.010858	0.09		
CLMH097E041MH097E043		1993		Existing		MH097E041	MH097E043		T14571	IRWD	PVC	{E33D40CE-1E5F-49C3-81A7-328F3DD7EF3F}	CLMH097E041MH097E043	615.28	615.08	0.666666667	MH097E041	MH097E043			30	CLMH097E041MH097E043	8	0.0067	0.011204	0.09	0.013451	0.10	0.015949	0.10	0.013451	0.10		
CLMH097E043MH097E045		1993		Existing		MH097E043	MH097E045		T14571	IRWD	PVC	{467C5544-47ED-40DE-8F3A-B3C41B33B8D9}	CLMH097E043MH097E045	614.97	613.59	0.666666667	MH097E043	MH097E045			145	CLMH097E043MH097E045	8	0.0095	0.012358	0.09	0.015919	0.10	0.018874	0.10	0.015919	0.10		
CLMH097E045MH097E046		1993		Existing		MH097E045	MH097E046		T14571	IRWD	PVC	{1B4F20F3-5F03-492E-984B-D0B58FEB0ED4}	CLMH097E045MH097E046	613.50	609.20	0.666666667	MH097E045	MH097E046			255	CLMH097E045MH097E046	8	0.0180	0.015164	0.08	0.018207	0.09	0.021587	0.10	0.018207	0.09		
CLMH097E046MH097E047		1993		Existing		MH097E046	MH097E047		T14571	IRWD	PVC	{F1E7BEB3-B2DF-4D7B-B49D-BB3059F55099}	CLMH097E046MH097E047	609.09	607.44	0.666666667	MH097E046	MH097E047			107	CLMH097E046MH097E047	8	0.0106	0.018616	0.10	0.022352	0.11	0.022352	0.11	0.022352	0.11		
CLMH097E047MH097E054		1993		Existing		MH097E047	MH097E054		T14571	IRWD	PVC	{B5002B9E-E196-4FCB-B90E-FAAF12E3E388}	CLMH097E047MH097E054	607.34	606.82	0.666666667	MH097E047	MH097E054			30	CLMH097E047MH097E054	8	0.0173	0.033640	0.12	0.040347	0.13	0.047837	0.14	0.040347	0.13		
CLMH097E048MH097E049		1993		Existing		MH097E048	MH097E049		T14571	IRWD	PVC	{CFB33BB7-89C6-4231-B8C9-1D9E24EDC06E}	CLMH097E048MH097E049	618.34	615.96	0.666666667	MH097E048	MH097E049			252	CLMH097E048MH097E049	8	0.0094	0.002329	0.04	0.002797	0.04	0.003316	0.05	0.002797	0.04		
CLMH097E049MH097E050		1993		Existing		MH097E049	MH097E050		T14571	IRWD	PVC	{1B58AAE1-8CFB-4529-BF6D-DEF40276EF42}	CLMH097E049MH097E050	615.85	615.54	0.666666667	MH097E049	MH097E050			244	CLMH097E049MH097E050	8	0.0013	0.002327	0.06	0.002790	0.07	0.003308	0.07	0.002790	0.07		
CLMH097E050MH097E051		1993		Existing		MH097E050	MH097E051		T14571	IRWD	PVC	{30D46E81-B10C-4A1F-A45A-F8ABC0602A13}	CLMH097E050MH097E051	615.45	610.72	0.666666667	MH097E050	MH097E051			287	CLMH097E050MH097E051	8	0.0165	0.006276	0.05	0.007497	0.06	0.008890	0.06	0.007497	0.06		
CLMH097E051MH097E052		1993		Existing		MH097E051	MH097E052		T14571	IRWD	PVC	{759B4738-5496-4FA4-A8EB-1B4BCAFE4672}	CLMH097E051MH097E052	610.63	609.00	0.666666667	MH097E051	MH097E052			372	CLMH097E051MH097E052	8	0.0094	0.006275	0.06	0.007494	0.07	0.008887	0.07	0.007494	0.07		
CLMH097E052MH097E047		1993		Existing		MH097E052	MH097E047		T14571	IRWD	PVC	{5AAC711A-5507-46ED-9A9D-233D1C55462}	CLMH097E052MH097E047	608.79	607.44	0.666666667	MH097E052	MH097E047			182	CLMH097E052MH097E047	8	0.0074	0.015024	0.10	0.017995	0.11	0.021336	0.12	0.017995	0.11		
CLMH097E054MH097E055		1993		Existing		MH097E054	MH097E055		T14571	IRWD	PVC	{8B91BFA3-46AF-481C-B0F5-2BCA6F8A1EE2}	CLMH097E054MH097E055	606.71	606.00	0.666666667	MH097E054	MH097E055			159	CLMH097E054MH097E055	8	0.0045	0.033639	0.16	0.040345	0.18	0.047835	0.19	0.040345	0.18		
CLMH097E055MH097E006		1993		Existing		MH097E055	MH097E006		14509	IRWD	VCP	{6ED6EA88-225E-42CD-B2E3-178A1EFEAE2A}	CLMH097E055MH097E006	605.73	604.60	0.833333333	MH097E055	MH097E006			109	CLMH097E055MH097E006	10	0.0028	0.083337	0.21	0.099982	0.23	0.118542	0.26	0.099982	0.23		
CLMH097E056MH097E075		1993		Existing		MH097E056	MH097E075		741	IRWD	VCP	{9EED46FA-EDA9-4064-B34A-7357756749D0}	CLMH097E056MH097E075	600.15	600.04	1.000000000	MH097E056	MH097E075			79	CLMH097E056MH097E075	12	0.0014	0.128957	0.22	0.154868	0.24	0.183702	0.26	0.154868	0.24		
CLMH097E059MH097E061		1993		Existing		MH097E059	MH097E061		T14798	IRWD	PVC	{989CA093-42CB-4272-98EE-675BD06CE0B9}	CLMH097E059MH097E061	643.93	643.09	0.500000000	MH097E059	MH097E061			67	CLMH097E059MH097E061	6	0.0125	0.001949	0.05	0.002339	0.05	0.002773	0.06	0.002339	0.05		
CLMH097E061MH097E062		1993		Existing		MH097E061	MH097E062		T14798	IRWD	PVC	{DAA60B8E-AD5A-4264-89C3-936FD3FA0704}	CLMH097E061MH097E062	642.88	642.08	0.666666667	MH097E061	MH097E062			131	CLMH097E061MH097E062	8	0.0061	0.005487	0.06	0.006585	0.07	0.007809	0.07	0.006585	0.07		
CLMH097E062MH097E063		1993		Existing		MH097E062	MH097E063		T14798	IRWD	PVC	{99582D30-6AF3-4817-A5DF-0335816 7D0E1}	CLMH097E062MH097E063	641.88	641.78	0.666666667	MH097E062	MH097E063			29	CLMH097E062MH097E063	8	0.0034	0.006906	0.08	0.008290	0.08	0.009828	0.09	0.008290	0.08		
CLMH097E063MH129N045		1993		Existing		MH097E063	MH129N045		T14798	IRWD	PVC	{5EFF7093-45C3-4397-AE0B-918A75FC65CE}	CLMH097E063MH129N045	641.58	640.43	0.666666667	MH097E063	MH129N045			287	CLMH097E063MH129N045	8	0.0040	0.006906	0.08	0.008290	0.08	0.009828	0.09	0.008290	0.08		
CLMH097E065MH097E066		1993		Existing		MH097E065	MH097E066		T14798	IRWD	PVC	{C596424A-926C-4EAC-96BC-7FE38F43C5C8}	CLMH097E065MH097E066	640.25	639.88	0.500000000	MH097E065	MH097E066			41	CLMH097E065MH097E066	6	0.0090	0.001567	0.05	0.001882	0.05	0.002231	0.05	0.001882	0.05		
CLMH097E066MH129N121		1993		Existing		MH097E066	MH129N121		T14798	IRWD	PVC	{6886D863-72A4-4A47-8D9C-539A9E9C5072}	CLMH097E066MH129N121	639.69	638.51	0.666666667	MH097E066	MH129N121			300	CLMH097E066MH129N121	8	0.0039	0.001567	0.04	0.001882	0.04	0.002230	0.04	0.001882	0.04		
CLMH097E069MH097E071		1993		Existing		MH097E069	MH097E071		T14798	IRWD	PVC	{0CF8A662-38E9-4AD0-BB48-FF019672227A}	CLMH097E069MH097E071	639.63	638.75	0.500000000	MH097E069	MH097E071			92	CLMH097E069MH097E071	6	0.0096	0.003327	0.07	0.003991	0.07	0.004732	0.08	0.003991	0.07		
CLMH097E071MH097E073		1993		Existing		MH097E071	MH097E073		T14798	IRWD	PVC	{0DD94E8D-E7CB-4245-BA25-DEA97D7CA478}	CLMH097E071MH097E073	638.56	638.38	0.666666667	MH097E071	MH097E073			47	CLMH097E071MH097E073	8	0.0038	0.003327	0.05	0.003991	0.06	0.004732	0.06	0.003991	0.06		
CLMH097E073MH097E075		1993		Existing		MH097E073	MH097E075		T14798	IRWD	PVC	{3E6B4489-668E-4FF7-A1A0-15136OOD9759}	CLMH097E073MH097E075	638.18	637.63	0.666666667	MH097E073	MH097E075			141	CLMH097E073MH097E075	8	0.0039	0.005212	0.07	0.006254	0.07	0.007416	0.08	0.006254	0.07		
CLMH097E075MH097E078		1993		Existing		MH097E075	MH097E078		T14798	IRWD	PVC	{E561B431-B0B6-4574-A144-35362B707C66}	CLMH097E075MH097E078	637.43	636.90	0.666666667	MH097E075	MH097E078			136	CLMH097E075MH097E078	8	0.0039	0.006504	0.07	0.007805	0.08	0.009255	0.09	0.007805	0.08		
CLMH097E078MH129N047		1993		Existing		MH097E078	MH129N047		T14798	IRWD	PVC	{18BEA815-C046-4574-B60C-0A5F21CBF2B}	CLMH097E078MH129N047	636.71	636.16	0.666666667	MH097E078	MH129N047			138	CLMH097E078MH129N047	8	0.0040	0.008622	0.08	0.010347	0.09	0.012270	0.10	0.010347	0.09		
CLMH097E079MH097E013		1992		Existing		MH097E079	MH097E013		14509	IRWD	VCP	{B15FA644-DC91-4568-884D-DF79A415B02D}	CLMH097E079MH097E013	617.50	613.15	0.666666667	MH097E079	MH097E013			181	CLMH097E079MH097E013	8	0.0240	0.014976	0.08	0.017979	0.09	0.021316	0.09	0.017979	0.09		
CLMH097E080MH097E079		1994		Existing		MH097E080	MH097E079		T14912	IRWD	VCP	{F1270BCD-2F98-4B88-952E-13FD1E0075D0}	CLMH097E080MH097E079	618.60	617.70	0.666666667	MH097E080	MH097E079			232	CLMH097E080MH097E079	8	0.0039	0.014976	0.11	0.017979	0.13	0.021316	0.14	0.017979	0.13		
CLMH097E081MH097E080		1994		Existing		MH097E081	MH097E080		T14912	IRWD	VCP	{372F1DF6-2375-4E7F-A418-656BCC5FB475}	CLMH097E081MH097E080	619.69	618.71	0.666666667	MH097E081	MH097E080			249	CLMH097E081MH097E080	8	0.0039	0.008071	0.08	0.009689	0.09	0.011488	0.10	0.009689	0.09		
CLMH097E084MH129N060		1993		Existing		MH097E084	MH129N060		T14583	IRWD	PVC	{DF9B077C-56F1-4B29-A0AF-D58584E12739}	CLMH097E084MH129N060	639.25	630.45	0.666666667	MH097E084	MH129N060			289	CLMH097E084MH129N060	8	0.0304	0.008368

| | | |

CLMH099E010MH0995004		1969		Existing		MH099E010	MH099S004		T07312	IRWD	VCP	{2A52428E-188C-4C06-B55F-599B86AF72FA}	CLMH099E010MH0995004	245.44	242.91	0.666666667	MH099E010	MH099S004			300	CLMH099N010MH099S004	8	0.0084	0.091700	0.24	0.097914	0.25	0.116113	0.27	0.097913	0.25	
CLMH099E011MH099E010		1971		Existing		MH099E011	MH099E010		T07312	IRWD	VCP	{43138314-A575-4133-9C20-642E8DCD0BA1}	CLMH099E011MH099E010	249.41	245.55	0.666666667	MH099E011	MH099E010			243	CLMH099E011MH099E010	8	0.0159	0.081156	0.19	0.086653	0.20	0.102754	0.22	0.086652	0.20	
CLMH099E012MH099E011		1971		Existing		MH099E012	MH099E011		T07312	IRWD	VCP	{21DDDCBB-828B-4933-885F-8A0B21871DDB}	CLMH099E012MH099E011	258.25	249.52	0.666666667	MH099E012	MH099E011			255	CLMH099E012MH099E011	8	0.0342	0.081163	0.16	0.086659	0.17	0.102758	0.18	0.086659	0.17	
CLMH099E013MH099E012		1973		Existing		MH099E013	MH099E012		T07312	IRWD	VCP	{8F305A68-2970-4372-9478-51ACGFE1A222}	CLMH099E013MH099E012	259.35	258.39	0.666666667	MH099E013	MH099E012			275	CLMH099E013MH099E012	8	0.0035	0.012232	0.11	0.013028	0.11	0.015295	0.12	0.013028	0.11	
CLMH099E014MH099E015		1971		Existing		MH099E014	MH099E015		T06959	IRWD	VCP	{C7D1BF63-17D3-46CF-81A1-F81B496FD39A}	CLMH099E014MH099E015	264.79	263.85	0.666666667	MH099E014	MH099E015			250	CLMH099E014MH099E015	8	0.0038	0.004290	0.06	0.004601	0.07	0.005555	0.07	0.004601	0.07	
CLMH099E015MH099E012		1971		Existing		MH099E015	MH099E012		T07312	IRWD	VCP	{C8DD5E3C-2EF2-4831-AC8C-772938A63E2A}	CLMH099E015MH099E012	263.70	258.35	0.666666667	MH099E015	MH099E012			262	CLMH099E015MH099E012	8	0.0204	0.059935	0.16	0.064024	0.16	0.076071	0.18	0.064024	0.16	
CLMH099E016MH099E015		1971		Existing		MH099E016	MH099E015		T07312	IRWD	VCP	{14F14154-5C41-44DB-824A-FB06F8AE0B45}	CLMH099E016MH099E015	268.51	263.79	0.666666667	MH099E016	MH099E015			182	CLMH099E016MH099E015	8	0.0259	0.055650	0.14	0.059427	0.15	0.070519	0.16	0.059427	0.15	
CLMH099E017MH099E016		1971		Existing		MH099E017	MH099E016		T07312	IRWD	VCP	{36FE64AD-BCDC-4600-91E7-ACD5DD775E73}	CLMH099E017MH099E016	269.48	268.66	0.666666667	MH099E017	MH099E016			220	CLMH099E017MH099E016	8	0.0037	0.001347	0.03	0.001449	0.04	0.001768	0.04	0.001449	0.04	
CLMH099E018MH099E017		1971		Existing		MH099E018	MH099E017		T07312	IRWD	VCP	{0B59F059-445B-4DBB-A920-76AB1426DA23}	CLMH099E018MH099E017	270.44	269.58	0.666666667	MH099E018	MH099E017			224	CLMH099E018MH099E017	8	0.0038	0.001347	0.03	0.001449	0.04	0.001768	0.04	0.001449	0.04	
CLMH099E018MH095006		1971		Existing		MH099E018	MH095006		T07312	IRWD	VCP	{A4EC002C1-8E87-4E94-B29B-4FFF7B21EBAF}	CLMH099E018MH095006	270.44	265.89	0.666666667	MH099E018	MH095006			252	CLMH099E018MH095006	8	0.0181	0.004175	0.05	0.004447	0.05	0.005221	0.05	0.004447	0.05	
CLMH099E019MH099E016		1971		Existing		MH099E019	MH099E016		T07312	IRWD	VCP	{AB990FBE-968A-4341-B568-3CC4673BBD53}	CLMH099E019MH099E016	274.67	268.60	0.666666667	MH099E019	MH099E016			247	CLMH099E019MH099E016	8	0.0246	0.054306	0.14	0.057981	0.15	0.068752	0.16	0.057981	0.15	
CLMH099E020MH099E019		1971		Existing		MH099E020	MH099E019		T06959	IRWD	VCP	{ADE2DF31-9924-4A24-AF45-B976BE7E7F39}	CLMH099E020MH099E019	279.53	274.78	0.666666667	MH099E020	MH099E019			180	CLMH099E020MH099E019	8	0.0132	0.047346	0.16	0.050549	0.16	0.059940	0.18	0.050549	0.16	
CLMH099E021MH099E020		1971		Existing		MH099E021	MH099E020		T06959	IRWD	VCP	{D08C73DD-9F1C-4999-8D72-032B3B2FAE63}	CLMH099E021MH099E020	283.04	279.63	0.666666667	MH099E021	MH099E020			280	CLMH099E021MH099E020	8	0.0122	0.043045	0.15	0.045956	0.16	0.054491	0.17	0.045956	0.16	
CLMH099E022MH099E021		1971		Existing		MH099E022	MH099E021		T07407	IRWD	VCP	{52A1E1FD-00A2-4741-A500-7F5A4D45A3F6}	CLMH099E022MH099E021	286.41	285.03	0.666666667	MH099E022	MH099E021			345	CLMH099E022MH099E021	8	0.0040	0.023027	0.14	0.024583	0.15	0.029150	0.16	0.024583	0.15	
CLMH099E023MH099E022		1972		Existing		MH099E023	MH099E022		T07407	IRWD	VCP	{A66142E7-7DBD-4152-A30E-1A6AFB443877}	CLMH099E023MH099E022	287.48	286.51	0.666666667	MH099E023	MH099E022			258	CLMH099E023MH099E022	8	0.0038	0.015037	0.12	0.016052	0.12	0.019033	0.13	0.016052	0.12	
CLMH099E024MH099E023		1971		Existing		MH099E024	MH099E023		T07407	IRWD	VCP	{933FB78C-8BAE-47D8-B8F8-A531D207F929}	CLMH099E024MH099E023	289.22	287.73	0.666666667	MH099E024	MH099E023			317	CLMH099E024MH099E023	8	0.0047	0.004181	0.06	0.004462	0.06	0.005291	0.07	0.004462	0.06	
CLMH099E025MH099E021		1971		Existing		MH099E025	MH099E021		T07407	IRWD	VCP	{FFBE6651-0DAC-4B27-8FDB-784FC299ABFB}	CLMH099E025MH099E021	290.34	284.93	0.666666667	MH099E025	MH099E021			271	CLMH099E025MH099E021	8	0.0200	0.020020	0.09	0.021375	0.10	0.025342	0.10	0.021375	0.10	
CLMH099E026MH099E023		1971		Existing		MH099E026	MH099E023		T07407	IRWD	VCP	{8C6EE0A0-B334-4990-922C-74F863278ZF5}	CLMH099E026MH099E023	288.41	287.58	0.666666667	MH099E026	MH099E023			228	CLMH099E026MH099E023	8	0.0036	0.010858	0.10	0.011591	0.10	0.013742	0.11	0.011591	0.10	
CLMH099E027MH099E028		1972		Existing		MH099E027	MH099E028		T06992	IRWD	VCP	{FECD49AF-58C4-49C8-8342-94A106CAA3CD}	CLMH099E027MH099E028	282.75	276.69	0.500000000	MH099E027	MH099E028			407	CLMH099E027MH099E028	6	0.0149	0.002383	0.05	0.002544	0.05	0.003015	0.06	0.002544	0.05	
CLMH099E028MH099E029		1972		Existing		MH099E028	MH099E029		T06992	IRWD	VCP	{6794FDD6-B86C-46A8-A777-A3B859D65BEC}	CLMH099E028MH099E029	276.58	269.58	0.500000000	MH099E028	MH099E029			390	CLMH099E028MH099E029	6	0.0179	0.002382	0.05	0.002544	0.05	0.003015	0.06	0.002544	0.05	
CLMH099E029MH099E030		1972		Existing		MH099E029	MH099E030		T07759	IRWD	VCP	{B8B43E8E-C777-47F9-B579-0141670BE1EC}	CLMH099E029MH099E030	269.48	261.58	0.500000000	MH099E029	MH099E030			396	CLMH099E029MH099E030	6	0.0199	0.004970	0.07	0.005308	0.07	0.006290	0.08	0.005308	0.07	
CLMH099E030MH099E031		1972		Existing		MH099E030	MH099E031		T07759	IRWD	VCP	{D3612ZCEA-FC67-4124-88A7-BE5113EE683C}	CLMH099E030MH099E031	261.48	257.95	0.500000000	MH099E030	MH099E031			388	CLMH099E030MH099E031	6	0.0098	0.004968	0.08	0.005306	0.08	0.006288	0.09	0.005306	0.08	
CLMH099E031MH099E032		1972		Existing		MH099E031	MH099E032		T07759	IRWD	VCP	{69F9F8E6-8368-44FC-9000-888E42D4576C}	CLMH099E031MH099E032	257.85	255.72	0.500000000	MH099E031	MH099E032			100	CLMH099E031MH099E032	6	0.0213	0.008174	0.09	0.008729	0.09	0.010348	0.10	0.008729	0.09	
CLMH099E032MH099E033		1972		Existing		MH099E032	MH099E033		T07759	IRWD	VCP	{2D94E8A8-B33C-457A-B5CC-26B13974F183}	CLMH099E032MH099E033	255.61	239.82	0.500000000	MH099E032	MH099E033			166	CLMH099E032MH099E033	6	0.0957	0.008174	0.06	0.008729	0.06	0.010348	0.07	0.008729	0.06	
CLMH099E033MH099W032		1973		Existing		MH099E033	MH099W032		T07081	IRWD	VCP	{6A9E4296-DDB9-4A51-8888-07671C66F036}	CLMH099E033MH099W032	239.72	238.02	0.500000000	MH099E033	MH099W032			302	CLMH099E033MH099W032	6	0.0056	0.009773	0.13	0.010435	0.13	0.012373	0.14	0.010435	0.13	
CLMH099E034MH099N036		1970		Existing		MH099E034	MH099N036		T07081	IRWD	VCP	{1D8AED00-ED4E-4AF1-BC5F-7731C0CE1273}	CLMH099E034MH099N036	260.22	258.94	0.500000000	MH099E034	MH099N036			407	CLMH099E034MH099N036	6	0.0031	0.010342	0.15	0.011044	0.15	0.013096	0.16	0.011044	0.15	
CLMH099E035MH099E034		1972		Existing		MH099E035	MH099E034		T07383	IRWD	VCP	{DEDF7894-E91A-45DF-B9E4-3FA774135760}	CLMH099E035MH099E034	272.10	260.32	0.500000000	MH099E035	MH099E034			153	CLMH099E035MH099E034	6	0.0770	0.008911	0.07	0.009515	0.07	0.011278	0.07	0.009515	0.07	
CLMH099E036MH099E035		1972		Existing		MH099E036	MH099E035		T07383	IRWD	VCP	{76846780-3F32-43C7-BC6C-2C02B2D6F0}	CLMH099E036MH099E035	279.67	272.23	0.500000000	MH099E036	MH099E035			407	CLMH099E036MH099E035	6	0.0183	0.005817	0.08	0.006213	0.08	0.007364	0.09	0.006213	0.08	
CLMH099E037MH099E036		1972		Existing		MH099E037	MH099E036		T07383	IRWD	VCP	{7E96AB2F-18DE-426B-BCC4-C2CDF832141F}	CLMH099E037MH099E036	286.85	279.77	0.500000000	MH099E037	MH099E036			257	CLMH099E037MH099E036	6	0.0257	0.005818	0.07	0.006213	0.07	0.007364	0.08	0.006213	0.07	
CLMH099E038MH099E037		1972		Existing		MH099E038	MH099E037		T07383	IRWD	VCP	{ADF24EEB-2B9B-4D3E-A26D-294C782EB40B}	CLMH099E038MH099E037	288.13	286.95	0.500000000	MH099E038	MH099E037			247	CLMH099E038MH099E037	6	0.0048	0.005818	0.10	0.006213	0.10	0.007364	0.11	0.006213	0.10	
CLMH099E039MH099E038		1972		Existing		MH099E039	MH099E038		T06992	IRWD	VCP	{31A3D329-385E-41D1-8F15-F485326F92E3}	CLMH099E039MH099E038	293.95	288.23	0.500000000	MH099E039	MH099E038			184	CLMH099E039MH099E038	6	0.0311	0.005016	0.06	0.006350	0.07	0.005356	0.06		
CLMH099E040MH099E039		1970		Existing		MH099E040	MH099E039		T06992	IRWD	VCP	{8C8F941C-89EE-4076-81B2-333A83ECFD2C}	CLMH099E040MH099E039	300.29	294.04	0.500000000	MH099E040	MH099E039			315	CLMH099E040MH099E039	6	0.0198	0.005356	0.07	0.006350	0.08	0.005356	0.07		
CLMH099E041MH099E042		1972		Existing		MH099E041	MH099E042		T06992	IRWD	VCP	{04655BEE-83C7-4833-9781-FE2ED0996AB6}	CLMH099E041MH099E042	317.08	311.85	0.500000000	MH099E041	MH099E042			264	CLMH099E041MH099E042	6	0.0198	0.001947	0.04	0.002079	0.05	0.002464	0.05	0.002079	0.05	
CLMH099E042MH099E043		1972		Existing		MH099E042	MH099E043		T07383	IRWD	VCP	{4AA05F72-D228-45DF-B1F2-E8616F26E613}	CLMH099E042MH099E043	311.75	306.35	0.500000000	MH099E042	MH099E043			183	CLMH099E042MH099E043	6	0.0295	0.001947	0.04	0.002079	0.04	0.002464	0.05	0.002079	0.04	
CLMH099E043MH099E044		1972		Existing		MH099E043	MH099E044		T07383	IRWD	VCP	{B19BC565-2D0E-414B-9203-8F279158987Z}	CLMH099E043MH099E044	306.25	305.50	0.500000000	MH099E043	MH099E044			163	CLMH099E043MH099E044	6	0.0046	0.005314	0.10	0.005673	0.10	0.006726	0.11	0.005673	0.10	
CLMH099E044MH099E045		1972		Existing		MH099E044	MH099E045		T07383	IRWD	VCP	{CA2283EC-AA78-4D7B-A624-D9A3DA924Z97}	CLMH099E044MH099E045	305.39	298.25	0.500000000	MH099E044	MH099E045			362	CLMH099E044MH099E045	6	0.0197	0.009414	0.09	0.010055	0.10	0.011917	0.11	0.010055	0.10	
CLMH099E045MH099E050		1972		Existing		MH099E045	MH099E050		T07383	IRWD	VCP	{6687FF64-A88F-43FF-8D56-B1D5118E6415}	CLMH099E045MH099E050	298.14	292.60	0.500000000	MH099E045	MH099E050			275	CLMH099E045MH099E050	6	0.0250	0.014041	0.11	0.014791	0.12	0.017774	0.12	0.014991	0.11	
CLMH099E046MH099E047		1971		Existing		MH099E046	MH099E047		T06992	IRWD	VCP	{FA2C29A0-7D06-400B-A6A9-313A5CAFE006}	CLMH099E046MH099E047	334.61	333.01	0.500000000	MH099E046	MH099E047			262	CLMH099E046MH099E047	6	0.0061	0.003779	0.08	0.004036	0.08	0.004784	0.09	0.004036	0.08	
CLMH099E047MH099E048		1970		Existing		MH099E047	MH099E048		T07383	IRWD	VCP	{07500062-B0E8-45DB-B8B9-572D3123D0B9}	CLMH099E047MH099E048	332.91	320.79	0.500000000	MH099E047	MH099E048			261	CLMH099E047MH099E048	6	0.0464	0.005383	0.06	0.005747	0.06	0.006813	0.07	0.005747	0.06	
CLMH099E048MH099E049		1970		Existing		MH099E048	MH099E049		T07383	IRWD	VCP	{0CD5D582-121D-4D96-9EF2-6A0023FFECDD}	CLMH099E048MH099E049	320.60	320.20	0.500000000	MH099E048	MH099E049			74	CLMH099E048MH099E049	6	0.0054	0.005383	0.09	0.005747	0.10	0.006813	0.11	0.005747	0.10	
CLMH099E049MH099E050		1970		Existing		MH099E049	MH099E050		T07383	IRWD	VCP	{2FA24C42-C9A5-499F-9F0B-0F919E21B85C}	CLMH099E049MH099E050	320.00	292.45	0.500000000	MH099E049	MH099E050			226	CLMH099E049MH099E050	6	0.1230	0.008499	0.06	0.009074	0.06	0.010756	0.07	0.009074	0.06	
CLMH099E050MH099E051		1970		Existing		MH099E050	MH099E051		T07383	IRWD	VCP	{508605AD-7CAE-4141-82AD-1CECA6DBCF2F}	CLMH099E050MH099E051	292.35	284.39	0.500000000	MH099E050	MH099E051			66	CLMH099E050MH099E051	6	0.1034	0.022540	0.10	0.024065	0.10	0.028530	0.11	0.024065	0.10	
CLMH099E051MH099E052		1970		Existing		MH099E051	MH099E052		T07383	IRWD	VCP	{6ACFB007-EAA9-4F03-854C-B72D5F8221D5}	CLMH099E051MH099E052	284.00	282.52	0.500000000	MH099E051	MH099E052			77	CLMH099E051MH099E052	6	0.0051	0.024075	0.20	0.025703	0.21	0.030472	0.22	0.025703	0.21	
CLMH099E052MH099E053		1970		Existing		MH099E052	MH099E053		T07383	IRWD	VCP	{18BB389A-AB10-4A8F-9BE4-B54BB2532D79}	CLMH099E052MH099E053	282.42	279.47	0.500000000	MH099E052	MH099E053			312	CLMH099E052MH099E053	6	0.0095	0.027808	0.19	0.029689	0.20	0.035197	0.21	0.029689	0.20	
CLMH099E053MH099N037		1970		Existing		MH099E053	MH099N037		T07383	IRWD	VCP	{9750AF02-6B3A-40CB-B09F-B7F42B5F8883}	CLMH099E053MH099N037	279.29	259.36	0.500000000	MH099E053	MH099N037			195	CLMH099E053MH099N037	6	0.1027	0.046478	0.14	0.049622	0.14	0.058830	0.15	0.049622	0.14	
CLMH099E054MH099E053		1971		Existing		MH099E054	MH099E053		T07383	IRWD	VCP	{FD5D8051-762A-4AC6-A4B5-95E760D64DA1}	CLMH099E054MH099E053	287.07	279.47	0.500000000	MH099E054	MH099E053			148	CLMH099E054MH099E053	6	0.0514	0.006207	0.06	0.006629	0.06	0.007858	0.07	0.006629	0.06	
CLMH099E055MH099E054		1971		Existing		MH099E055	MH099E054		T07383	IRWD	VCP	{6CE0FBEA-59A8-46CA-8A6E-503424B1DAC2}	CLMH099E055MH099E054	296.02	287.17	0.500000000	MH099E055	MH099E054			318	CLMH099E055MH099E054	6	0.0278	0.002383	0.05	0.002544	0.05	0.003015	0.05	0.002544	0.05	
CLMH099E056MH099E053		1973		Existing		MH099E056	MH099E053		T07383	IRWD	VCP	{073B619A-CED6-4ED1-B4CA-78CE9F282F74}	CLMH099E056MH099E053	300.98	279.39	0.500000000	MH099E056	MH099E053			264	CLMH099E056MH099E053	6	0.1064	0.011683	0.07	0.012472	0.07	0.014788	0.08	0.012472	0.07	
CLMH099E057MH099E056		1971		Existing		MH099E057	MH099E056		T07383	IRWD	VCP	{59FBC5E0-D03C-4063-9488-B8632EDCCAED}	CLMH099E057MH099E056	301.92	301.08	0.500000000	MH099E057	MH099E056			22	CLMH099E057MH099E056	6	0.0382	0.006735	0.07	0.007190	0.07	0.008523	0.08	0.007190	0.07	
CLMH099E058MH099E057		1971		Existing		MH099E058	MH099E057		T07383	IRWD	VCP	{010DA8C0-CD96-48E6-B8D9-EA8E10DA278F}	CLMH099E058MH099E057	329.17	302.01	0.500000000	MH099E058	MH099E057			364	CLMH099E058MH099E057	6	0.0748	0.006735	0.06	0.007190	0.06	0.008523	0.07	0.007190	0.06	
CLMH099E059MH099E058		1973		Existing		MH099E059	MH099E058		T07383	IRWD	VCP	{5385FD02-841F-47CA-A2E5-5409EF0773F0}	CLMH099E059MH099E058	336.73	329.27	0.500000000	MH099E059	MH099E058			314	CLMH099E059MH099E058	6	0.0238	0.001535	0.04	0.001638	0.04	0.001942	0.04	0.001638	0.04	
CLMH099E060MH099E061		1971		Existing		MH099E060	MH099E061		T07383	IRWD	VCP	{4FBBFDD1-835A-4D5A-A5B9-DEC861A1918D}	CLMH099E060MH099E061	351.89	341.11	0.500000000	MH099E060	MH099E061			268	CLMH099E060MH099E061	6	0.0402	0.001809	0.04	0.001932	0.04	0.002291	0.04	0.001932	0.04	
CLMH099E061MH099E062		1971		Existing		MH099E061	MH099E062		T07383	IRWD	VCP	{8A225230-6887-4EE4-AC83-A2D2E0CB3CFE}	CLMH099E061MH099E062	341.01	337.85	0.500000000	MH099E061	MH099E062			89	CLMH099E061MH099E062	6	0.0355	0.001809	0.04	0.001932	0.04	0.002291	0.04	0.001932	0.04	
CLMH099E062MH099E063		1973		Existing		MH099E062	MH099E063		T07383	IRWD	VCP	{B0676GDD-1FF1-4FBD-B688-F7F4750875ZA}	CLMH099E062MH099E063	337.76	303.50	0.500000000	MH099E062	MH099E063			217	CLMH099E062MH099E063	6	0.1601	0.001809	0.03	0.001932	0.03	0.002291	0.03	0.001932	0.03	
CLMH099E063MH099E056		1971		Existing		MH099E063	MH099E056		T07383	IRWD	VCP	{80A30308-1ECB-463B-9418-4D1AA4060B03}	CLMH099E063MH099E056	303.35	301.08	0.500000000	MH099E063	MH099E056			69	CLMH099E063MH099E056	6	0.0329	0.004948	0.06	0.005282	0.06	0.006264	0.07	0.005282	0.06	
CLMH099E064MH099E063		1973		Existing		MH099E064	MH099E063		T07383	IRWD	VCP	{D9E77DF1-836A-4AA0-B917-D33D0E2C5228}	CLMH099E064MH099E063	315.01	303.45	0.500000000	MH099E064	MH099E063			142	CLMH099E064MH099E063	6	0.0814	0.003139	0.04	0.003350	0.04	0.003973	0.04	0.003350	0.04	
CLMH099E065MH099E064		1973		Existing		MH099E065	MH099E064		T07383	IRWD	VCP	{86CF9C05-8A78-401C-B9F0-95E6BF222E06}	CLMH099E065MH099E064	320.60	315.10	0.500000000	MH099E065	MH099E064			308	CLMH099E065MH099E064	6	0.0179	0.003139	0.04	0.003350	0.04	0.003973	0.06	0.003350	0.06	
CLMH099E066MH099E067		1976		Existing		MH099E066	MH099E067		9350	IRWD	VCP	{09E4D34A-6994-44A2-B6F7-209880CBE6C1}	CLMH099E066MH099E067	356.54	351.60	0.666666667	MH099E066	MH099E067			337	CLMH099E066MH099E067	8	0.0147	0.023410	0.11	0.024991	0.11	0.029630	0.12	0.024991	0.11	
CLMH099E067MH1127N046		1967		Existing		MH099E067	MH1127N046		9350	IRWD	VCP	{40D08DA1-8F0A-4592-9073-9E62D4034F7}	CLMH099E067MH1127N046	351.41	346.17	0.666666667	MH099E067	MH1127N046			315	CLMH099E067MH1127N046	8	0.0140	0.035741	0.13	0.038156	0.14	0.045239	0.15	0.038156	0.14	
CLMH099E068MH099E069		1976		Existing		MH099E068	MH099E069		9350	IRWD	VCP	{82888E1E1-29B0-488A-B863-E86A2D68BF8F}	CLMH099E068MH099E069	342.16	335.16	0.666666667	MH099E068	MH099E069			296	CLMH099E068MH099E069	8	0.0236	0.001512	0.03	0.001613	0.03	0.001913	0.03	0.001613	0.03	
CLMH099E069MH1127N044		1976		Existing		MH099E069	MH1127N044		9350	IRWD	VCP	{41415746-0D70-499E-A15E-1BAB87BA938E}	CLMH099E069MH1127N044	334.95	332.42	0.666666667	MH099E069	MH1127N044			396	CLMH099E069MH1127N044	8	0.0064	0.001511	0.03	0.001612	0.03	0.001913	0.04	0.001612	0.03	
CLMH099E070MH099N010		1968		Existing		MH099E070	MH099N010		T06287	IRWD	VCP	{E5134DB0-5B63-4E2D-930D-D9121AA88578}	CLMH099E070MH099N010	253.07	250.94	0.666666667	MH099E070	MH099N010			213	CLMH099E070MH099N010	8	0.0123	0.000503	0.01	0.000538	0.02	0.000638	0.02	0.000538	0.02	
CLMH099E071MH099E066		1985		Existing		MH099E071	MH099E066		T12281	IRWD	PVC	{214BD16C-413E-43C9-9F8E-F09CDE562E68}	CLMH099E071MH099E066	394.66	356.76	0.666666667	MH099E071	MH099E066			382	CLMH099E071MH099E066	8	0.0997	0.020214	0.06	0.021578	0.06	0.025585	0.07	0.021578	0.06	
CLMH099E073MH099E071		1985		Existing		MH099E073	MH099E071		T12281	IRWD	PVC	{6423A908-C4FD-4AA7-BE46-63A0054E759}	CLMH099E073MH099E071	399.97	394.98	0.666666667	MH099E073	MH099E071			152	CLMH099E073MH099E071	8	0.0328	0.018162	0.08	0.019388	0.08	0.022988	0.09	0.019388	0.08	
CLMH099E075MH099E073		1985		Existing		MH099E075	MH099E073		T12281	IRWD	PVC	{B18B490F-2632-488C-9062-54210BABF5E8}	CLMH099E075MH099E073	416.93	400.26	0.666666667	MH099E075	MH099E073			217	CLMH099E075MH099E073	8	0.0771	0.011618	0.05	0.012403	0.05	0.014704	0.06	0.012403	0.05	
CLMH099E076MH099E077		2000		Existing	assumed Mannings N	MH099E076	MH099E077		903	IRWD	PVC	{05DCC997-1282-443C-8233-A269D0B9E839}	CLMH099E076MH099E077	300.10	288.73	0.666666667	MH099E076	MH099E077			396	CLMH099E076MH099E077	8	0.0287	0.107852	0.19	0.115149	0.19	0.136525	0.21	0.115149	0.19	
CLMH099E077MH099S007		2000		Existing	assumed Mannings N	MH099E077	MH099S007		903	IRWD	PVC	{E10DC397-E454-4E68-8793-9DB7F3F60F77}	CLMH099E077MH099S007	288.57	279.14	0.666666667	MH099E077	MH099S007			320	CLMH099E077MH099S007	8	0.0295	0.107851	0.18	0.115148	0.19	0.136524	0.21	0.115148	0.19	
CLMH099N001MH099N001		1969		Existing		MH099N001	MH099N001		T06983	IRWD	VCP	{7F0CA0EB-3106-463A-B0DD-41CA2CB8AB84}	CLMH099N001MH099N001	240.75	239.52	0.666666667	MH099N001	MH099N001			330	CLMH099N001MH099N001	8	0.0037	0.017554	0.12	0.018758	0.13	0.022238	0.14	0.018758	0.13	
CLMH099N002MH099N001		1969		Existing		MH099N002	MH099N001		T06983	IRWD	VCP	{09F6428E-49A3-4418-AB02-18C4901AD4B5}	CLMH099N002MH099N001	242.61	240.85	0.666666667	MH099N002	MH099N001			252	CLMH099N002MH099N001	8	0.0070	0.013616	0.10	0.014553	0.10	0.017252	0.11	0.014553	0.10	
CLMH099N002MH099N003		1969		Existing		MH099N002	MH099N003		T06983	IRWD	VCP	{ADC1A457-1162-4AEA-AB1D-F0EDCABE8523}	CLMH099N002MH099N003	242.86	239.25	0.666666667	MH099N002	MH099N003			136	CLMH099N002MH099N003	8	0.0265	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH099N003MH099W004		1969		Existing		MH099N003	MH099W004		T06983	IRWD	VCP	{8AE8D8AF7-498D-428C-8531-CB2F0C12F6D6}	CLMH099N003MH099W004	239.14	237.85	0.666666667	MH099N003	MH099W004			280	CLMH099N003MH099W004	8	0.0046	0.004834	0.06	0.005160	0.07	0.006118	0.07	0.005160	0.07	
CLMH099N004MH099N002		1969		Existing		MH099N004	MH099N002		T06983	IRWD	VCP	{AF7E50B2-A6E0-464C-B030-832144A6ED E0}	CLMH099N004MH099N002	244.36	242.71	0.666666667	MH099N004	MH099N002			257	CLMH099N004MH099N002	8	0.0064	0.008211	0.08	0.008781	0.08	0.010409	0.09	0.008781	0.08	
CLMH099N005MH099N004		1969		Existing		MH099N005	MH099N004		T06983	IRWD	VCP	{D7A800D6-27B6-4AED-8E21-2EACD747F814}	CLMH099N005MH099N004	244.55	240.64	0.666666667	MH099N005	MH099

CLMH099S029MH099S094		2006		Existing	assumed Mannings N	MH099S029	MH099S094		T16312C	IRWD	PVC	{887A85D1-6C17-45F0-8690-7E057FFB4FA1}	CLMH099S029MH099S094	431.79	431.45	0.666666667	MH099S029	MH099S094			86	CLMH099S029MH099S094	8	0.0040	0.008067	0.08	0.009685	0.09	0.011482	0.10	0.009685	0.09		
CLMH099S030MH099S033		2006		Existing	assumed Mannings N	MH099S030	MH099S033		T16312C	IRWD	PVC	{68C37D77-F4FD-484D-BC9B-9149C357F652}	CLMH099S030MH099S033	463.57	461.70	0.666666667	MH099S030	MH099S033			75	CLMH099S030MH099S033	8	0.0249	0.013355	0.07	0.016032	0.08	0.019006	0.08	0.016032	0.08		
CLMH099S031MH099S094		2006		Existing	assumed Mannings N	MH099S031	MH099S094		T16312C	IRWD	PVC	{E0D779B2-0F7F-4E5D-910D-711BDAAAA47B}	CLMH099S031MH099S094	450.76	431.54	0.666666667	MH099S031	MH099S094			65	CLMH099S031MH099S094	8	0.3100	0.013355	0.04	0.016032	0.04	0.019006	0.05	0.016032	0.04		
CLMH099S032MH099S034		2006		Existing	assumed Mannings N	MH099S032	MH099S034		T16312C	IRWD	PVC	{AD179A53-550A-4001-A413-BF75941662155}	CLMH099S032MH099S034	485.35	470.39	0.666666667	MH099S032	MH099S034			284	CLMH099S032MH099S034	8	0.0527	0.009766	0.05	0.011727	0.06	0.013900	0.06	0.011727	0.06		
CLMH099S033MH099S031		2006		Existing	assumed Mannings N	MH099S033	MH099S031		T16312C	IRWD	PVC	{6AF49457-B4D4-452B-A9B6-8B118AE82500}	CLMH099S033MH099S031	461.50	450.85	0.666666667	MH099S033	MH099S031			108	CLMH099S033MH099S031	8	0.0995	0.013355	0.05	0.016032	0.06	0.019006	0.06	0.016032	0.06		
CLMH099S034MH099S035		2006		Existing	assumed Mannings N	MH099S034	MH099S035		T16312C	IRWD	PVC	{97A695C1-C9AF-4935-9E15-A860521D43D7}	CLMH099S034MH099S035	470.19	469.85	0.666666667	MH099S034	MH099S035			84	CLMH099S034MH099S035	8	0.0040	0.010587	0.09	0.012712	0.10	0.015069	0.11	0.012712	0.10		
CLMH099S035MH098E027		2006		Existing	assumed Mannings N	MH099S035	MH098E027		T16312C	IRWD	PVC	{86D21EAA8-56FA-4E3E-91A4-8772883C3A46}	CLMH099S035MH098E027	469.76	467.36	0.666666667	MH099S035	MH098E027			148	CLMH099S035MH098E027	8	0.0162	0.015225	0.08	0.018282	0.09	0.021671	0.10	0.018282	0.09		
CLMH099S036MH098E034		2002		Existing	assumed Mannings N	MH099S036	MH098E034		T16273	IRWD	PVC	{F27D80D5-049B-4530-A0B3-0723E0954EDE}	CLMH099S036MH098E034	490.32	489.77	0.666666667	MH099S036	MH098E034			56	CLMH099S036MH098E034	8	0.0098	0.001195	0.03	0.001436	0.03	0.001703	0.03	0.001436	0.03		
CLMH099S037MH099S041		2007		Existing	assumed Mannings N	MH099S037	MH099S041		A00983	IRWD	PVC	{33C766A2-FB44-4FAC-AA57-7E80AA6BE495}	CLMH099S037MH099S041	536.78	508.01	0.666666667	MH099S037	MH099S041			364	CLMH099S037MH099S041	8	0.0793	0.016867	0.06	0.020179	0.07	0.023923	0.07	0.020179	0.07		
CLMH099S038MH099S037		2007		Existing	assumed Mannings N	MH099S038	MH099S037		A00983	IRWD	PVC	{D8FFC5F7-658C-42C3-A666-03CD19185AC5}	CLMH099S038MH099S037	554.47	536.88	0.666666667	MH099S038	MH099S037			238	CLMH099S038MH099S037	8	0.0742	0.005370	0.04	0.006377	0.04	0.007561	0.04	0.006377	0.04		
CLMH099S039MH099S040		2007		Existing	assumed Mannings N	MH099S039	MH099S040		A00983	IRWD	PVC	{2BB78E32-1F39-41D4-85B0-E24F9432DCDC}	CLMH099S039MH099S040	526.58	510.00	0.666666667	MH099S039	MH099S040			137	CLMH099S039MH099S040	8	0.1219	0.007822	0.04	0.009392	0.04	0.011133	0.04	0.009392	0.04		
CLMH099S040MH099S041		2007		Existing	assumed Mannings N	MH099S040	MH099S041		A00983	IRWD	PVC	{AD08E3B9-F4DD-4E8F-A348-37E8C13BB85F}	CLMH099S040MH099S041	509.89	508.10	0.666666667	MH099S040	MH099S041			60	CLMH099S040MH099S041	8	0.0298	0.007822	0.05	0.009392	0.06	0.011133	0.06	0.009392	0.06		
CLMH099S041MH099S045		2007		Existing	assumed Mannings N	MH099S041	MH099S045		A00983	IRWD	PVC	{BD8B1514-60FE-4C33-ABEA-42DBF59F0D6C}	CLMH099S041MH099S045	507.91	498.60	0.666666667	MH099S041	MH099S045			347	CLMH099S041MH099S045	8	0.0268	0.038462	0.11	0.046106	0.12	0.054659	0.14	0.046106	0.12		
CLMH099S043MH099S041		2007		Existing	assumed Mannings N	MH099S043	MH099S041		A00983	IRWD	PVC	{2146C161-70FC-40A1-BFCD-959D5CDF7AF3}	CLMH099S043MH099S041	520.33	508.10	0.666666667	MH099S043	MH099S041			93	CLMH099S043MH099S041	8	0.1329	0.013773	0.05	0.016534	0.05	0.019603	0.06	0.016534	0.05		
CLMH099S044MH099S043		2007		Existing	assumed Mannings N	MH099S044	MH099S043		A00983	IRWD	PVC	{8C0D4968-6311-462C-9760-6EE361388349}	CLMH099S044MH099S043	521.50	520.42	0.666666667	MH099S044	MH099S043			218	CLMH099S044MH099S043	8	0.0050	0.013773	0.10	0.016534	0.11	0.019603	0.12	0.016534	0.11		
CLMH099S045MH098E070		2007		Existing	assumed Mannings N	MH099S045	MH098E070		A00983	IRWD	PVC	{2D507C56-210E-46EC-8E75-E46190810A3F}	CLMH099S045MH098E070	498.50	480.70	0.666666667	MH099S045	MH098E070			282	CLMH099S045MH098E070	8	0.0633	0.038476	0.09	0.046121	0.10	0.054677	0.11	0.046121	0.10		
CLMH099S046MH099S010		2001		Existing	assumed Mannings N	MH099S046	MH099S010		903	IRWD	PVC	{EA06C538-250C-456A-80E1-5CB824DDD73E}	CLMH099S046MH099S010	251.38	251.08	0.666666667	MH099S046	MH099S010			175	CLMH099S046MH099S010	8	0.0017	0.024709	0.17	0.026388	0.17	0.031278	0.19	0.026388	0.17		
CLMH099S047MH099S046		2002		Existing	assumed Mannings N	MH099S047	MH099S046		T16291	IRWD	PVC	{D228AA48-0B45-4A99-854C-74DCC0DE786C}	CLMH099S047MH099S046	258.29	256.27	0.666666667	MH099S047	MH099S046			68	CLMH099S047MH099S046	8	0.0297	0.023702	0.09	0.025312	0.09	0.030003	0.10	0.025312	0.09		
CLMH099S048MH099S047		2002		Existing	assumed Mannings N	MH099S048	MH099S047		T16291	IRWD	PVC	{47E0B96B-5F15-415D-9F31-834EB9240D9A}	CLMH099S048MH099S047	260.82	258.39	0.666666667	MH099S048	MH099S047			103	CLMH099S048MH099S047	8	0.0236	0.022764	0.09	0.024309	0.09	0.028814	0.10	0.024309	0.09		
CLMH099S049MH099S048		2002		Existing	assumed Mannings N	MH099S049	MH099S048		T16291	IRWD	PVC	{0D097251-E537-4908-8F97-F8DDBB3674B9}	CLMH099S049MH099S048	264.33	260.92	0.666666667	MH099S049	MH099S048			140	CLMH099S049MH099S048	8	0.0341	0.021137	0.08	0.022573	0.08	0.026754	0.09	0.022573	0.08		
CLMH099S050MH099S051		2002		Existing	assumed Mannings N	MH099S050	MH099S051		T16291	IRWD	PVC	{C61D9AD7-9CDF-49EA-A422-DFB13B3F40FA}	CLMH099S050MH099S051	270.00	267.88	0.500000000	MH099S050	MH099S051			67	CLMH099S050MH099S051	8	0.0316	0.001421	0.03	0.001516	0.03	0.001797	0.04	0.001516	0.03		
CLMH099S051MH099S049		2002		Existing	assumed Mannings N	MH099S051	MH099S049		T16291	IRWD	PVC	{E6B27995-1DB1-49DC-946C-9D93C75B53ED}	CLMH099S051MH099S049	267.67	264.44	0.666666667	MH099S051	MH099S049			84	CLMH099S051MH099S049	8	0.0385	0.019602	0.08	0.020935	0.08	0.024812	0.09	0.020935	0.08		
CLMH099S052MH099S054		2002		Existing	assumed Mannings N	MH099S052	MH099S054		T16291	IRWD	PVC	{4B55FEEE-3F9E-4EB9-BD5B-012F18E63194}	CLMH099S052MH099S054	274.00	273.00	0.500000000	MH099S052	MH099S054			81	CLMH099S052MH099S054	6	0.0123	0.003093	0.06	0.003302	0.06	0.003914	0.07	0.003302	0.06		
CLMH099S053MH099S051		2002		Existing	assumed Mannings N	MH099S053	MH099S051		T16291	IRWD	PVC	{58682064-2FCF-4C6B-B517-FD5E1D612A54}	CLMH099S053MH099S051	269.63	267.77	0.666666667	MH099S053	MH099S051			75	CLMH099S053MH099S051	8	0.0248	0.018181	0.08	0.019419	0.08	0.023015	0.09	0.019419	0.08		
CLMH099S054MH099S053		2002		Existing	assumed Mannings N	MH099S054	MH099S053		T16291	IRWD	PVC	{21C21C05-9728-4CE9-A4FD-162E500E9E0B}	CLMH099S054MH099S053	272.79	269.73	0.666666667	MH099S054	MH099S053			154	CLMH099S054MH099S053	8	0.0199	0.016669	0.08	0.017804	0.09	0.021102	0.09	0.017804	0.09		
CLMH099S055MH099S062		2002		Existing	assumed Mannings N	MH099S055	MH099S062	ERROR 23	T16291	IRWD	PVC	{DFE66A3C-BF0C-4688-AFFA-BCBCBFDDB8EF}	CLMH099S055MH099S062	281.45	280.09	0.500000000	MH099S055	MH099S062			116	CLMH099S055MH099S062	6	0.0117	0.003893	0.07	0.004159	0.07	0.004929	0.08	0.004159	0.07		
CLMH099S056MH099S061		2002		Existing	assumed Mannings N	MH099S056	MH099S061		T16291	IRWD	PVC	{515CAC3D-3A98-4449-9AF1-238FC3E97158}	CLMH099S056MH099S061	289.20	287.98	0.500000000	MH099S056	MH099S061			63	CLMH099S056MH099S061	6	0.0194	0.001558	0.04	0.001664	0.04	0.001972	0.04	0.001664	0.04		
CLMH099S057MH099S054		2002		Existing	assumed Mannings N	MH099S057	MH099S054		T16291	IRWD	PVC	{5A336A19-2A4D-4CCD-9617-63EA5D9BF71B}	CLMH099S057MH099S054	274.10	272.89	0.666666667	MH099S057	MH099S054			169	CLMH099S057MH099S054	8	0.0072	0.012642	0.09	0.013503	0.09	0.016005	0.10	0.013503	0.09		
CLMH099S058MH099S059		2002		Existing	assumed Mannings N	MH099S058	MH099S059		T16291	IRWD	PVC	{3E4A4853-96C7-46EB-BA1C-42CC43DBC8B78}	CLMH099S058MH099S059	293.00	288.83	0.666666667	MH099S058	MH099S059			258	CLMH099S058MH099S059	8	0.0359	0.004077	0.04	0.004355	0.04	0.005160	0.04	0.004355	0.04		
CLMH099S059MH099S061		2002		Existing	assumed Mannings N	MH099S059	MH099S061		T16291	IRWD	PVC	{48BDE258-5FE0-40F4-89A8-B7B1A3AED2A4}	CLMH099S059MH099S061	288.73	287.89	0.666666667	MH099S059	MH099S061			67	CLMH099S059MH099S061	8	0.0125	0.004535	0.05	0.004843	0.05	0.005740	0.06	0.004843	0.05		
CLMH099S060MH099S057		2002		Existing	assumed Mannings N	MH099S060	MH099S057		T16291	IRWD	PVC	{B0AA1361-4CD9-4CA6-AB3B-FE4215855F5D}	CLMH099S060MH099S057	278.91	274.20	0.666666667	MH099S060	MH099S057			117	CLMH099S060MH099S057	8	0.0403	0.012574	0.06	0.013431	0.06	0.015918	0.07	0.013431	0.06		
CLMH099S061MH099S062		2002		Existing	assumed Mannings N	MH099S061	MH099S062		T16291	IRWD	PVC	{CD2F8EE9-A463-46CD-A50E-B553C63CECD0}	CLMH099S061MH099S062	287.79	285.89	0.666666667	MH099S061	MH099S062			112	CLMH099S061MH099S062	8	0.0170	0.006093	0.05	0.006508	0.05	0.007712	0.06	0.006508	0.05		
CLMH099S062MH099S060		2002		Existing	assumed Mannings N	MH099S062	MH099S060	ERROR 23	T16291	IRWD	PVC	{3DBC08AC-4ED8-4AA8-98A2-4D1B550EACE4}	CLMH099S062MH099S060	279.89	279.01	0.666666667	MH099S062	MH099S060			22	CLMH099S062MH099S060	8	0.0400	0.011269	0.06	0.012037	0.06	0.014265	0.07	0.012037	0.06		
CLMH099S063MH099S062		2002		Existing	assumed Mannings N	MH099S063	MH099S062	ERROR 23	T16291	IRWD	PVC	{6C947BF4-5347-40BE-9643-F8976ECA8309}	CLMH099S063MH099S062	285.79	279.98	0.666666667	MH099S063	MH099S062			126	CLMH099S063MH099S062	8	0.0841	0.007376	0.05	0.007877	0.05	0.009337	0.05	0.007877	0.05		
CLMH099S084MH099S085		2006		Existing	assumed Mannings N	MH099S084	MH099S085		T16312E	IRWD	VCP	{AC856360-B54D-48F0-9F50-C15F6B380985}	CLMH099S084MH099S085	535.16	533.07	0.666666667	MH099S084	MH099S085			210	CLMH099S084MH099S085	8	0.0100	0.004250	0.05	0.005102	0.06	0.006048	0.06	0.005102	0.06		
CLMH099S085MH099S087		2006		Existing	assumed Mannings N	MH099S085	MH099S087		T16312E	IRWD	VCP	{07E7A78B-40C3-4CAB-B98-10E143B90B4B}	CLMH099S085MH099S087	532.86	529.40	0.666666667	MH099S085	MH099S087			45	CLMH099S085MH099S087	8	0.0769	0.004250	0.03	0.005102	0.03	0.006048	0.04	0.005102	0.03		
CLMH099S086MH099S084		2006		Existing	assumed Mannings N	MH099S086	MH099S084		T16312E	IRWD	VCP	{1A5AFBD5-6E76-408D-90AF-9C70273D9F7}	CLMH099S086MH099S084	537.39	535.27	0.666666667	MH099S086	MH099S084			142	CLMH099S086MH099S084	8	0.0149	0.001182	0.02	0.001419	0.03	0.001681	0.03	0.001419	0.03		
CLMH099S087MH099S039		2006		Existing	assumed Mannings N	MH099S087	MH099S039		T16312E	IRWD	VCP	{B642297F8-F905-4F1C-B6F8-D789076BF391}	CLMH099S087MH099S039	529.21	526.67	0.666666667	MH099S087	MH099S039			253	CLMH099S087MH099S039	8	0.0100	0.004250	0.05	0.005102	0.06	0.006048	0.06	0.005102	0.06		
CLMH099S088MH099S032		2006		Existing	assumed Mannings N	MH099S088	MH099S032		T16312E	IRWD	VCP	{8CE5CDEA-E8C6-472F-8E5E-17E0F13CB0C1}	CLMH099S088MH099S032	494.17	485.54	0.666666667	MH099S088	MH099S032			156	CLMH099S088MH099S032	8	0.0553	0.003773	0.03	0.004532	0.04	0.005371	0.04	0.004532	0.04		
CLMH099S090MH099S088		2004		Existing	assumed Mannings N	MH099S090	MH099S088		T16312	IRWD	PVC	{E4DD2A77-959D-4F9F-B012-E1888BBDDC1}	CLMH099S090MH099S088	496.92	494.26	0.666666667	MH099S090	MH099S088			162	CLMH099S090MH099S088	8	0.0164	0.003773	0.04	0.004532	0.05	0.005371	0.05	0.004532	0.05		
CLMH099S091MH099S090		2004		Existing	assumed Mannings N	MH099S091	MH099S090		T16312	IRWD	PVC	{2445A084-F77D-4A35-BA0B-18A1C2890725}	CLMH099S091MH099S090	500.98	497.01	0.666666667	MH099S091	MH099S090			241	CLMH099S091MH099S090	8	0.0165	0.003773	0.04	0.004532	0.05	0.005371	0.05	0.004532	0.05		
CLMH099S094MH098E021		2006		Existing	assumed Mannings N	MH099S094	MH098E021		T16312C	IRWD	PVC	{391A1926-3002-4FFC-AAA1-E3F89C3B3121}	CLMH099S094MH098E021	431.35	431.07	0.666666667	MH099S094	MH098E021			71	CLMH099S094MH098E021	8	0.0039	0.021422	0.13	0.025717	0.14	0.030488	0.16	0.025717	0.14		
CLMH099S095MH099S002		2003		Existing	assumed Mannings N	MH099S095	MH099S002		T06853	IRWD	VCP	{836C782C-C809-4CE2-8027-BC8F88DA4C0A}	CLMH099S095MH099S002	241.86	240.86	0.666666667	MH099S095	MH099S002			262	CLMH099S095MH099S002	8	0.0038	0.013038	0.31	0.120702	0.33	0.143175	0.36	0.120702	0.33		
CLMH099S096MH099S037		2007		Existing	assumed Mannings N	MH099S096	MH099S037	ERROR 23	A00983	IRWD	ACP	{123D2B11-301C-4E41-85EA-F7FF4CE0BABB}	CLMH099S096MH099S037	554.69	536.97	0.666666667	MH099S096	MH099S037			177	CLMH099S096MH099S037	8	0.1007	0.011497	0.05	0.013802	0.05	0.016361	0.06	0.013802	0.05		
CLMH099S097MH099S044		2002		Existing	assumed Mannings N	MH099S097	MH099S044		A00983	IRWD	PVC	{6CA9D533-9B25-4672-9510-AE0BCE15E9EB}	CLMH099S097MH099S044	521.79	521.59	0.666666667	MH099S097	MH099S044			64	CLMH099S097MH099S044	8	0.0044	0.013773	0.10	0.016534	0.11	0.019603	0.12	0.016534	0.11		
CLMH099W001MH099W002		1969		Existing	assumed Mannings N	MH099W001	MH099W002		T06983	IRWD	VCP	{B78FD909-DD58-4120-ACAD-0C80EFF56698}	CLMH099W001MH099W002	239.42	238.24	0.666666667	MH099W001	MH099W002			324	CLMH099W001MH099W002	8	0.0036	0.024535	0.15	0.026213	0.15	0.031078	0.17	0.026213	0.15		
MH099W002MH099W000	New Conduit	0		Existing				added by akm from plans						231.59	228.18	0.833333333	MH099W002	MH099W000			53	MH099W002MH099W000	10	0.0643	0.165694	0.15	0.176987	0.15	0.210033	0.16	0.176986	0.15		
CLMH099W003MH099W002		1969		Existing	assumed Mannings N	MH099W003	MH099W002		T06983	IRWD	VCP	{0C012B20-4F94-454C-9A45-A68DA37C3F9}	CLMH099W003MH099W002	233.52	232.69	0.833333333	MH099W003	MH099W002			232	CLMH099W003MH099W002	10	0.0036	0.141168	0.26	0.150782	0.27	0.178962	0.30	0.150782	0.27		
CLMH099W004MH099W003		1969		Existing	assumed Mannings N	MH099W004	MH099W003		T06983	IRWD	VCP	{E0BF506D-5CE8-4D73-ABE0-0FD3E046E6A7}	CLMH099W004MH099W003	237.75	233.80	0.666666667	MH099W004	MH099W003			280	CLMH099W004MH099W003	8	0.0141	0.004834	0.05	0.005160	0.05	0.006118	0.06	0.005160	0.05		
CLMH099W005MH099W003		1969		Existing	assumed Mannings N	MH099W005	MH099W003		T06983	IRWD	VCP	{ACE67B4E-7318-4BB5-9C87-0A77B7BAAA90}	CLMH099W005MH099W003	238.30	233.80	0.833333333	MH099W005	MH099W003			266	CLMH099W005MH099W003	10	0.0169	0.127549	0.18	0.136227	0.18	0.161663	0.20	0.136227	0.18		
CLMH099W006MH099W005		1969		Existing	assumed Mannings N	MH099W006	MH099W005		T06983	IRWD	VCP	{269BEE25-4FD5-47D3-822F-6823F1A71CD4}	CLMH099W006MH099W005	239.50	238.52	0.666666667	MH099W006	MH099W005			66	CLMH099W006MH099W005	8	0.0038	0.005934	0.07	0.006335	0.08	0.007511	0.08	0.006335	0.08		
CLMH099W008MH099W009		2000		Existing	assumed Mannings N	MH099W008	MH099W009		903	IRWD	PVC	{F251ADBE-A42C-43B1-975C-B3F15BFBEBF1}	CLMH099W008MH099W009	230.41	229.33	0.833333333	MH099W008	MH099W009			268	CLMH099W008MH099W009	10	0.0040	0.132424	0.24	0.141422	0.25	0.167745	0.27	0.141421	0.25		
CLMH099W009MH099W010		2003		Existing	assumed Mannings N	MH099W009	MH099W010		903	IRWD	PVC	{64CB460E-1C4A-4408-9815-D50ECBD3E231}	CLMH099W009MH099W010	229.17	227.96	0.833333333	MH099W009	MH099W010			283	CLMH099W009MH099W010	10	0.0043	0.132399	0.24	0.141398	0.25	0.167730	0.27	0.141397	0.25		
CLMH099W010MH099W505		2006		Existing	assumed Mannings N	MH099W010	A00950		A00950	IRWD	PVC	{E02F8153-9327-4066-9B07-C7DCCDBFAF}	CLMH099W010MH099W505	227.49	227.33	0.833333333	MH099W010	A00950			62	CLMH099W010MH099W505	10	0.0026	0.132398	0.25	0.141397	0.26	0.167729	0.29	0.141396	0.26		
CLMH099W014MH099W015		2002		Existing	assumed Mannings N	MH099W014	MH099W015		A00945	IRWD	PVC	{745FF969-DE0B-4A37-B164-C24E40AB01C9}	CLMH099W014MH099W015	264.05	262.00	0.666666667	MH099W014	MH099W015			330	CLMH099W014MH099W015	8	0.0062	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH099W015MH099W016		2002		Existing	assumed Mannings N	MH099W015	MH099W016		A00945	IRWD	PVC	{8775D8B8-72E1-4C36-AC17-573B8DC25B36}	CLMH099W015MH099W016	261.89	251.13	0.666666667	MH099W015	MH099W016			334	CLMH099W015MH099W016	8	0.0322	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH099W016MH099W017		2002		Existing	assumed Mannings N	MH099W016	MH099W017		A00945	IRWD	PVC	{A6CB9EE8-FA1B-48B9-B822-BA4168B40C8}	CLMH099W016MH099W017	251.01	246.94	0.666666667	MH099W016	MH099W017			417	CLMH099W016MH099W017	8	0.0160	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH099W017MH099W018		2002		Existing	assumed Mannings N	MH099W017	MH099W018	changed ds invert	A00945	IRWD	PVC	{78321300-FF2C-448F-AF07-F24C2B162C1C}	CLMH099W017MH099W018	246.85	240.52	0.666666667	MH099W017	MH099W018			391	CLMH099W017MH099W018	8	0.0162	0.015049	0.16	0.016067	0.17	0.019051	0.19	0.016067	0.17		
CLMH099W018MH099W024		2001		Existing	assumed Mannings N	MH099W018	MH099W024	changed ds invert	985	IRWD	VCP	{75CB803D-A2A7-4ACE-BD26-0C34D7DBF4CC}	CLMH099W018MH099W024	240.52	223.21	1.250000000	MH099W018	MH099W024			756	CLMH099W018MH099W024	15	0.0229	0.234889	0.12	0.280800	0.13	0.332942	0.15	0.280800	0.13		
CLMH099W019MH099W020		2001		Existing	assumed Mannings N	MH099W019	MH099W020		A00892	IRWD	VCP	{1256F088-7499-4B49-9171-9195C5B87F53}	CLMH099W019MH099W020	204.50	202.80	1.250000000	MH099W019	MH099W020			385	CLMH099W019MH099W020	15	0.0044	0.237849	0.19	0.283967	0.21	0.336751	0.23	0.283966	0.21		
CLMH099W020MH099W021		2001		Existing	assumed Mannings N	MH099W020	MH099W021		A00892	IRWD	VCP	{100CB8D0-9FC3-463D-94D1-C243927AFFE1}	CLMH099W020MH099W021	202.69	193.19	1.250000000	MH099W020	MH099W021			380	CLMH099W020MH099W021	15	0.0250	0.237822	0.16	0.283937	0.18	0.336718	0.20	0.283936	0.18		
CLMH099W021MH099W022		2001		Existing	assumed Mannings N	MH099W021	MH099W022		A00892	IRWD	VCP	{01029433-A290-4398-85B4-A89607A0E828}	CLMH099W021MH099W022	193.10	192.30	1.250000000	MH099W021	MH099W022			380	CLMH099W021MH099W022	15	0.0021	0.248894	0.23	0.295674	0.25	0.350768	0.27	0.295672	0.25		
CLMH099W022MH098N048		2001		Existing	assumed Mannings N	MH099W022	MH098N048		A00892	IRWD	VCP	{6385E48C-F620-45C5-AA15-838A273BEE9B}	CLMH099W022MH098N048	192.19	191.80	1.250000000	MH099W022	MH098N048			200	CLMH099W022MH098N048	15	0.0020	0.248790	0.23	0.295550	0.25	0.350638	0.27	0.295548	0.25		
CLMH099W024MH099W512		2001		Existing	assumed Mannings N	MH099W024	MH099W512		985	IRWD	VCP	{B23D22C3-4F67-461A-8B60-8605CC8F30F7}	CLMH099W024MH099W512	223.21	205.58	1.250000000	MH099W024	MH099W512			371	CLMH099W024MH099W512	15	0.0476	0.238062	0.11	0.284202	0.12	0.336993	0.13	0.284202	0.12		
CLMH099W025MH099W021		2001		Existing	assumed Mannings N	MH099W025	MH099W021		A00892	IRWD	VCP	{18FEA923-3BAE-41AE-A37F-B89C469F9EFF}	CLMH099W025MH099W021	197.70	194.50	1.000000000	MH099W025	MH099W021			120	STMH099W025MH099W021	15	0.0267	0.017659	0.05	0.018854	0.05	0.022353	0.06	0.018854	0.05		
CLMH099W505MH099W508		2002		Existing	assumed Mannings N	MH099W505	MH099W508		A00950	IRWD	PVC	{74D8F6AB-B4E4-40C8-9FB7-B98B87696E0A}	CLMH099W505MH099W508	227.13	226.02	0.833333333	MH099W505	MH099W508			400	CLMH099W505MH099W508	10	0.0028	0.132375	0.29	0.141376	0.30	0.167714	0.34	0.141375	0.30		
CLMH099W506MH099N047		2002		Existing	assumed Mannings N	MH099W506	MH099N047		A00950	IRWD	PVC	{7D68E225-7949-4C1B-A434-B3E79C912AFA}	CLMH099W506MH099N047	224.44	223.33	0.833333333	MH099W506	MH099N047			400	CLMH099W506MH099N047	10	0.0028	0.296459	0.40	0.316855	0.41	0.376488	0.45	0.316851	0.41		
CLMH099W507MH099W506		2002		Existing	assumed Mannings N	MH099W507	MH099W506		A00950	IRWD	PVC	{68702407-C4EA-4909-8F15-8A1D4663 2CD7}	CLMH099W507MH099W506	224.91	224.63	0.833333333	MH099W507	MH099W506			105	CLMH099W507MH099W506	10	0.0027	0.296877	0.39	0.317268	0.40	0.376867	0.44	0.317265	0.40		
CLMH099W508MH099W507		2002		Existing	assumed Mannings N	MH099W508	MH099W507		A00950	IRWD	PVC	{48364947-D37B-4F6E-B5DF-8A7B0592A15D}	CLMH099W508MH099W507	225.91	225.11	0.833333333	MH099W508	MH099W507			290	CLMH099W508MH099W507	10	0.0028	0.296908	0.40	0.317298	0.41	0.376916	0.45	0.317295	0.41		
CLMH099W509MH099W510		2002		Existing	assumed Mannings N	MH099W509	MH099W510		T16169A	IRWD	PVC	{4DF305D3-9A74-4F68-8E33-33017280A55A}	CLMH099W509MH099W510	282.35	254.32	0.666666667	MH099W509	MH099W510			348	CLMH099W509MH099W510	8	0.0808	0.001985	0.02

CLMH100E074MH100E074			1990		Existing		MH100E074	MH100E073		14018	IRWD	VCP	{8E188295-DAA3-4B92-A7D7-B309831038A5}	CLMH100E074MH100E073	328.79	327.10	0.666666667	MH100E074	MH100E073			74	CLMH100E074MH100E073	8	0.0228	0.004910	0.05	0.005895	0.05	0.006989	0.06	0.005895	0.05				
CLMH100E077MH100N085			1990		Existing		MH100E077	MH100N085		T14115	IRWD	VCP	{0D59C68D-6393-4F55-9381-9EE320FECC67}	CLMH100E077MH100N085	241.00	226.52	0.666666667	MH100E077	MH100N085			210	CLMH100E077MH100N085	8	0.0690	0.010421	0.05	0.012513	0.06	0.014838	0.06	0.012513	0.06				
CLMH100E080MH100E081			1990		Existing		MH100E081	MH100E080		T12022	IRWD	VCP	{0818BC1E-3A10-408B-9186-C183AF25E0C2}	CLMH100E080MH100E081	308.04	307.72	0.666666667	MH100E080	MH100E081			135	CLMH100E080MH100E081	8	0.0024	0.002702	0.06	0.002886	0.06	0.003420	0.06	0.002886	0.06				
CLMH100E081MH100E084			1990		Existing		MH100E081	MH100E084		T12022	IRWD	VCP	{84619660-1910-41B7-A383-A99E5CB851D3}	CLMH100E081MH100E084	307.51	305.45	0.666666667	MH100E081	MH100E084			92	CLMH100E081MH100E084	8	0.0224	0.003733	0.04	0.003986	0.04	0.004725	0.05	0.003986	0.04				
CLMH100E082MH100E080			1990		Existing		MH100E082	MH100E080		T12022	IRWD	VCP	{98AB0184-AF1A-43A8-875C-1681242DAD45}	CLMH100E082MH100E080	308.50	308.23	0.666666667	MH100E082	MH100E080			44	CLMH100E082MH100E080	8	0.0061	0.001786	0.04	0.001908	0.04	0.002261	0.04	0.001908	0.04				
CLMH100E084MH126N087			1990		Existing		MH100E084	MH126N087		T12022	IRWD	VCP	{C2647EF8-4EA1-4F46-9163-12CB8F70664A}	CLMH100E084MH126N087	305.35	303.72	0.666666667	MH100E084	MH126N087			86	CLMH100E084MH126N087	8	0.0190	0.009093	0.07	0.009709	0.07	0.011510	0.07	0.009709	0.07				
CLMH100E087MH126N088			1990		Existing		MH100E087	MH126N088		T12022	IRWD	VCP	{240BFF19-15FC-4FCB-981D-91355C9988C7}	CLMH100E087MH126N088	305.50	302.79	0.666666667	MH100E087	MH126N088			141	CLMH100E087MH126N088	8	0.0192	0.001146	0.02	0.001224	0.02	0.001450	0.03	0.001224	0.02				
CLMH100E089MH100E090			1990		Existing		MH100E089	MH100E090		T12022	IRWD	VCP	{1ECSF54C-04D1-432C-9121-88FA03ABCEBF}	CLMH100E089MH100E090	285.77	285.58	0.666666667	MH100E089	MH100E090			50	CLMH100E089MH100E090	8	0.0038	0.002426	0.05	0.002591	0.05	0.003071	0.05	0.002591	0.05				
CLMH100E090MH100E091			1990		Existing		MH100E090	MH100E091		T12022	IRWD	VCP	{CBEC2A7C-C3A3-4F51-AD08-6E785D146DEC}	CLMH100E090MH100E091	285.48	282.60	0.666666667	MH100E090	MH100E091			126	CLMH100E090MH100E091	8	0.0229	0.006412	0.05	0.006847	0.05	0.008115	0.06	0.006847	0.05				
CLMH100E091MH100E092			1990		Existing		MH100E091	MH100E092		A00173	IRWD	VCP	{C6DF571C-799F-4395-BE85-BCBA00FC914E}	CLMH100E091MH100E092	282.39	281.92	0.666666667	MH100E091	MH100E092			124	CLMH100E091MH100E092	8	0.0038	0.041424	0.19	0.042433	0.19	0.052433	0.21	0.042433	0.19				
CLMH100E092MH100E104			1990		Existing		MH100E092	MH100E104		T12022A	IRWD	VCP	{2AAD0136-0C1F-4B4C-9510-841A6AEE9E83}	CLMH100E092MH100E104	281.73	280.89	0.666666667	MH100E092	MH100E104			159	CLMH100E092MH100E104	8	0.0053	0.041423	0.18	0.042432	0.18	0.052433	0.20	0.042432	0.18				
CLMH100E093MH100E091			1990		Existing		MH100E093	MH100E091		T12022	IRWD	VCP	{A61D2259-266E-4C03-9683-10E07468S059}	CLMH100E093MH100E091	283.60	282.60	0.666666667	MH100E093	MH100E091			83	CLMH100E093MH100E091	8	0.0233	0.035011	0.12	0.037385	0.12	0.043418	0.13	0.037385	0.12				
CLMH100E096MH100E093			1990		Existing		MH100E096	MH100E093		T12022	IRWD	VCP	{D17B1B20-6463-45FF-B0EC-411541EBA5CC}	CLMH100E096MH100E093	285.07	283.80	0.666666667	MH100E096	MH100E093			101	CLMH100E096MH100E093	8	0.0126	0.032966	0.13	0.035202	0.14	0.041729	0.15	0.035202	0.14				
CLMH100E097MH100E096			1990		Existing		MH100E097	MH100E096		T12022	IRWD	VCP	{955D70CD-6C9C-45B8-9387-E701CB150143}	CLMH100E097MH100E096	286.27	285.27	0.666666667	MH100E097	MH100E096			21	CLMH100E097MH100E096	8	0.0476	0.003253	0.03	0.003473	0.03	0.004117	0.04	0.003473	0.03				
CLMH100E098MH126N099			1990		Existing		MH100E098	MH126N099		T12022	IRWD	VCP	{40EB0A44-8D9D-485F-AFCD-BDBF3D1625CB}	CLMH100E098MH126N099	297.89	294.26	0.666666667	MH100E098	MH126N099			84	CLMH100E098MH126N099	8	0.0359	0.003628	0.04	0.003874	0.04	0.004592	0.04	0.003874	0.04				
CLMH100E099MH100E096			1990		Existing		MH100E099	MH100E096		T12022	IRWD	VCP	{6024C886-F014-4D73-8F63-3026C11F8857}	CLMH100E099MH100E096	288.63	285.17	0.666666667	MH100E099	MH100E096			112	CLMH100E099MH100E096	8	0.0309	0.026827	0.10	0.028647	0.10	0.033958	0.11	0.028647	0.10				
CLMH100E100MH100E099			1990		Existing		MH100E100	MH100E099		T12022	IRWD	VCP	{F4980DC2-B4EC-4E2B-964F-68822A6C78DA}	CLMH100E100MH100E099	291.64	288.73	0.666666667	MH100E100	MH100E099			39	CLMH100E100MH100E099	8	0.0151	0.026827	0.11	0.028647	0.12	0.033958	0.13	0.028647	0.12				
CLMH100E101MH100E100			1990		Existing		MH100E101	MH100E100		T12022	IRWD	VCP	{C12297A0-5A53-4153-ADD2-03FF26EA4DCE}	CLMH100E101MH100E100	293.52	291.75	0.666666667	MH100E101	MH100E100			73	CLMH100E101MH100E100	8	0.0242	0.025155	0.10	0.026861	0.10	0.031842	0.11	0.026861	0.10				
CLMH100E102MH100E097			1990		Existing		MH100E102	MH100E097		T12022	IRWD	ACP	{1160A768-E3AD-4A92-BF7A-27AF84D4C017}	CLMH100E102MH100E097	291.72	286.48	0.666666667	MH100E102	MH100E097			225	CLMH100E102MH100E097	8	0.0233	0.003253	0.04	0.003473	0.04	0.004117	0.04	0.003473	0.04				
CLMH100E104MH100E108			1990		Existing		MH100E104	MH100E108		T12022A	IRWD	VCP	{D25A35F2-8808-4FBC-911B-FBEAA576EE69}	CLMH100E104MH100E108	280.79	280.00	0.666666667	MH100E104	MH100E108			152	CLMH100E104MH100E108	8	0.0052	0.041423	0.18	0.042432	0.18	0.052433	0.20	0.042432	0.18				
CLMH100E105MH100E107			1990		Existing		MH100E105	MH100E107		T12022A	IRWD	VCP	{A095CD0F-4C71-4ED6-BED2-E1DC5C48B978}	CLMH100E105MH100E107	293.14	292.14	0.666666667	MH100E105	MH100E107			104	CLMH100E105MH100E107	8	0.0096	0.001419	0.03	0.001516	0.03	0.001797	0.03	0.001516	0.03				
CLMH100E106MH100E107			1990		Existing		MH100E106	MH100E107		T12022A	IRWD	VCP	{51578445-FAC1-4A12-BF55-E8D0AEF87BD7}	CLMH100E106MH100E107	292.60	292.14	0.666666667	MH100E106	MH100E107			90	CLMH100E106MH100E107	8	0.0051	0.001879	0.04	0.002006	0.04	0.002377	0.05	0.002006	0.04				
CLMH100E107MH100E108			1990		Existing		MH100E107	MH100E108		T12022A	IRWD	VCP	{0D599A73-C5A4-4AAC-B2DC-850E4467E326}	CLMH100E107MH100E108	291.95	280.00	0.666666667	MH100E107	MH100E108			192	CLMH100E107MH100E108	8	0.0622	0.003298	0.03	0.003523	0.03	0.004174	0.03	0.003523	0.03				
CLMH100E108MH100E111			1990		Existing		MH100E108	MH100E111		T12022A	IRWD	VCP	{0E5D36AC-C456-4A80-B287-A2317381D84D}	CLMH100E108MH100E111	279.79	279.23	0.666666667	MH100E108	MH100E111			119	CLMH100E108MH100E111	8	0.0047	0.044721	0.19	0.047755	0.19	0.056607	0.21	0.047755	0.19				
CLMH100E109MH100E110			1990		Existing		MH100E109	MH100E110		T12022A	IRWD	VCP	{97ADF775-EAF2-4D64-98B6-232ED0BD8067}	CLMH100E109MH100E110	287.29	285.08	0.666666667	MH100E109	MH100E110			114	CLMH100E109MH100E110	8	0.0194	0.000961	0.02	0.001028	0.02	0.001218	0.02	0.001028	0.02				
CLMH100E110MH100E111			1990		Existing		MH100E110	MH100E111		T12022A	IRWD	VCP	{CFE99257-20EC-4ED8-83F7-7ABD74D56D25}	CLMH100E110MH100E111	284.89	279.23	0.666666667	MH100E110	MH100E111			117	CLMH100E110MH100E111	8	0.0484	0.006591	0.04	0.007038	0.05	0.008344	0.05	0.007038	0.05				
CLMH100E111MH100E113			1990		Existing		MH100E111	MH100E113		T12022A	IRWD	VCP	{439D0FDA-A9E0-493A-8E04-748CE62D2A66}	CLMH100E111MH100E113	279.04	278.11	0.666666667	MH100E111	MH100E113			187	CLMH100E111MH100E113	8	0.0050	0.051312	0.20	0.054793	0.21	0.064950	0.23	0.054793	0.21				
CLMH100E112MH100E113			1990		Existing		MH100E112	MH100E113		T12022A	IRWD	VCP	{5F4393A7-5754-4885-B23A-BB156D967E04}	CLMH100E112MH100E113	283.08	278.11	0.666666667	MH100E112	MH100E113			211	CLMH100E112MH100E113	8	0.0236	0.004720	0.05	0.005039	0.05	0.005974	0.05	0.005039	0.05				
CLMH100E113MH100E116			1990		Existing		MH100E113	MH100E116		T12022A	IRWD	VCP	{D2D9074C-F80A-44AE-9FED-C2778AF50E58}	CLMH100E113MH100E116	277.92	274.79	0.666666667	MH100E113	MH100E116			250	CLMH100E113MH100E116	8	0.0125	0.056031	0.17	0.059831	0.18	0.070923	0.19	0.059831	0.18				
CLMH100E114MH100E115			1990		Existing		MH100E114	MH100E115		T12022A	IRWD	VCP	{ACAD888E-2729-478B-BA38-A7F4D31574F6}	CLMH100E114MH100E115	278.48	277.19	0.666666667	MH100E114	MH100E115			85	CLMH100E114MH100E115	8	0.0152	0.004765	0.05	0.005086	0.05	0.006031	0.06	0.005086	0.05				
CLMH100E115MH100E116			1990		Existing		MH100E115	MH100E116		T12022A	IRWD	VCP	{3A76485A-2938-4C00-BD99-86AE2AA6EE4}	CLMH100E115MH100E116	276.98	274.79	0.666666667	MH100E115	MH100E116			264	CLMH100E115MH100E116	8	0.0083	0.004765	0.06	0.005086	0.06	0.006031	0.06	0.005086	0.06				
CLMH100E116MH100E117			1990		Existing		MH100E116	MH100E117		T12022A	IRWD	VCP	{0FC8D878-4A6E-488F-8332-FE5A9CB0FB82}	CLMH100E116MH100E117	274.60	273.17	0.666666667	MH100E116	MH100E117			143	CLMH100E116MH100E117	8	0.0057	0.060795	0.21	0.064916	0.22	0.076952	0.24	0.064916	0.22				
CLMH100E117MH100E118			1990		Existing		MH100E117	MH100E118		T12022A	IRWD	VCP	{7DBE82FC-187E-4F5F-A7B1-A7D52D27B91B}	CLMH100E117MH100E118	272.97	271.30	0.666666667	MH100E117	MH100E118			35	CLMH100E117MH100E118	8	0.0479	0.060795	0.13	0.064916	0.13	0.076952	0.14	0.064916	0.13				
CLMH100E118MH100E017			1990		Existing		MH100E118	MH100E017		A00128	IRWD	VCP	{90E70940-A08F-478E-AD9A-A4F86C55A9CD}	CLMH100E118MH100E017	270.90	266.89	0.666666667	MH100E118	MH100E017			57	CLMH100E118MH100E017	8	0.0729	0.061024	0.12	0.065160	0.12	0.077242	0.13	0.065160	0.12				
CLMH100E119MH100E065			1990		Existing		MH100E119	MH100E065		14018	IRWD	VCP	{BC0349A4-4140-4404-A46C-8845E2ED27E3}	CLMH100E119MH100E065	323.54	323.20	0.666666667	MH100E119	MH100E065			85	CLMH100E119MH100E065	8	0.0040	0.003528	0.06	0.003766	0.06	0.004465	0.06	0.003766	0.06				
CLMH100E120MH100E119			1990		Existing		MH100E120	MH100E119		T13244	IRWD	VCP	{6475E25C-320C-4D8E-834D-34D63A494397}	CLMH100E120MH100E119	324.29	323.64	0.666666667	MH100E120	MH100E119			170	CLMH100E120MH100E119	8	0.0038	0.003528	0.06	0.003766	0.06	0.004465	0.06	0.003766	0.06				
CLMH100E121MH100E120			1990		Existing		MH100E121	MH100E120		T13244	IRWD	VCP	{D9CFF6F8-DFC9-43AE-94F8-478D0AC47D049}	CLMH100E121MH100E120	328.82	324.39	0.666666667	MH100E121	MH100E120			228	CLMH100E121MH100E120	8	0.0218	0.003528	0.04	0.003766	0.04	0.004465	0.05	0.003766	0.04				
CLMH100E124MH100E125			1990		Existing		MH100E124	MH100E125		T13244	IRWD	VCP	{8E0E8D54-59B7-46D2-89B5-8CBAFA9A78B}	CLMH100E124MH100E125	298.67	297.64	0.666666667	MH100E124	MH100E125			88	CLMH100E124MH100E125	8	0.0117	0.002153	0.04	0.002299	0.04	0.002726	0.04	0.002299	0.04				
CLMH100E125MH100E040			1990		Existing		MH100E125	MH100E040		14018	IRWD	VCP	{DB42CEE0-818A-4CE7-9758-9511C48B674D}	CLMH100E125MH100E040	297.54	288.69	0.666666667	MH100E125	MH100E040			152	CLMH100E125MH100E040	8	0.0582	0.007009	0.04	0.007484	0.05	0.008873	0.05	0.007484	0.05				
CLMH100E126MH100E125			1990		Existing		MH100E126	MH100E125		T13244	IRWD	VCP	{5E860CAE-C25D-406C-98D8-A5256C8E7964}	CLMH100E126MH100E125	299.20	297.75	0.666666667	MH100E126	MH100E125			143	CLMH100E126MH100E125	8	0.0101	0.004856	0.06	0.005185	0.06	0.006144	0.06	0.005185	0.06				
CLMH100E130MH100E062			1992		Existing		MH100E130	MH100E062		T14115	IRWD	PVC	{531697BB-1F7B-497D-A995-BF042338ZDF0}	CLMH100E130MH100E062	287.95	287.35	0.666666667	MH100E130	MH100E062			151	CLMH100E130MH100E062	8	0.0040	0.007058	0.08	0.007535	0.08	0.008934	0.09	0.007535	0.08				
CLMH100E131MH100E130			1992		Existing		MH100E131	MH100E130		T14115	IRWD	PVC	{7A2F4BA8-17CA-405D-B179-2C42F53F347D}	CLMH100E131MH100E130	288.72	288.16	0.666666667	MH100E131	MH100E130			55	CLMH100E131MH100E130	8	0.0102	0.007058	0.07	0.007535	0.07	0.008934	0.07	0.007535	0.07				
CLMH100E132MH100E131			1992		Existing		MH100E132	MH100E131		T14115	IRWD	PVC	{06A696E6-85FA-479A-8CDA-656086364C06}	CLMH100E132MH100E131	289.48	288.82	0.666666667	MH100E132	MH100E131			70	CLMH100E132MH100E131	8	0.0094	0.007058	0.07	0.007535	0.07	0.008934	0.08	0.007535	0.07				
CLMH100E133MH100E132			1992		Existing		MH100E133	MH100E132		T14115	IRWD	PVC	{295368F5-FC43-4C75-997C-52442003E2FD}	CLMH100E133MH100E132	290.13	289.57	0.666666667	MH100E133	MH100E132			141	CLMH100E133MH100E132	8	0.0040	0.007058	0.08	0.007535	0.08	0.008934	0.09	0.007535	0.08				
CLMH100E135MH100E138			1992		Existing		MH100E135	MH100E138		T14115	IRWD	PVC	{8511CAEE-70D9-4EE3-8C5A-8670?BFFE6EB}	CLMH100E135MH100E138	267.19	253.46	0.666666667	MH100E135	MH100E138			279	CLMH100E135MH100E138	8	0.0492	0.004507	0.04	0.005412	0.04	0.006416	0.04	0.005412	0.04				
CLMH100E136MH100E135			1992		Existing		MH100E136	MH100E135		T14115	IRWD	PVC	{06221072-8D14-4DF9-9369-15CDAC60CD1E}	CLMH100E136MH100E135	271.22	267.39	0.666666667	MH100E136	MH100E135			387	CLMH100E136MH100E135	8	0.0099	0.004507	0.05	0.005412	0.06	0.006416	0.06	0.005412	0.06				
CLMH100E138MH100E139			1992		Existing		MH100E138	MH100E139		T14115	IRWD	PVC	{A4140B91-B57D-4066-A463-592D4DCFCA46}	CLMH100E138MH100E139	253.36	244.74	0.666666667	MH100E138	MH100E139			161	CLMH100E138MH100E139	8	0.0535	0.004507	0.04	0.005412	0.04	0.006416	0.04	0.005412	0.04				
CLMH100E139MH100E077			1992		Existing		MH100E139	MH100E077		T14115	IRWD	PVC	{7487936F-45F5-4BEC-B887-00E0C47F31F9}	CLMH100E139MH100E077	244.53	241.19	0.666666667	MH100E139	MH100E077			174	CLMH100E139MH100E077	8	0.0172	0.008309	0.06	0.009977	0.07	0.011830	0.08	0.009977	0.07				
CLMH100E145MH100E064			1992		Existing		MH100E145	MH100E064		T13244	IRWD	VCP	{5F97699D-010E-4655-8E6C-CBD81BD73C65}	CLMH100E145MH100E064	338.89	322.44	0.666666667	MH100E145	MH100E064			300	CLMH100E145MH100E064	8	0.0548	0.010330	0.05	0.011029	0.06	0.013076	0.06	0.011029	0.06				
CLMH100E146MH100E145			1992		Existing		MH100E146	MH100E145		T13244	IRWD	VCP	{97FD3115C-9C03-4CB7-97E1-ECA1654507?D}	CLMH100E146MH100E145	341.27	339.00	0.666666667	MH100E146	MH100E145			335	CLMH100E146MH100E145	8	0.0052	0.005039	0.06	0.005381	0.06	0.006378	0.07	0.005381	0.06				
CLMH100E147MH100E146			1992		Existing		MH100E147	MH100E146		T13244	IRWD	VCP	{A37ABDC6-794A-4DB4-889E-B42CABF2CB6B}	CLMH100E147MH100E146	342.00	341.48	0.666666667	MH100E147	MH100E146			80	CLMH100E147MH100E146	8	0.0087	0.005039	0.06	0.005381	0.06	0.006378	0.07	0.005381	0.06				
CLMH100E148MH100E147			1992		Existing		MH100E148	MH100E147		T13244	IRWD	VCP	{4DEFDF69-9A9C-49E4-9651-25663AFAE870}	CLMH100E148MH100E147	343.20	342.20	0.666666667	MH100E148	MH100E147			59	CLMH100E148MH100E147	8	0.0169	0.005039	0.05	0.005381	0.05	0.006378	0.06	0.005381	0.05				
CLMH100E149MH100E063			1992		Existing		MH100E149	MH100E063		T13244	IRWD	VCP	{65E33C73-5971-4445-AFD5-6AC2DEB7894C}	CLMH100E149MH100E063	315.79	310.66	0.666666667	MH100E149	MH100E063			285	CLMH100E149MH100E063	8	0.0180	0.005956	0.05	0.006359	0.06	0.007539	0.06	0.006359	0.06				
CLMH100E150MH100E149			1992		Existing		MH100E150	MH100E149		T13244	IRWD	VCP	{0D8A903F-EE8F-4787-A2CA-C03650A4A278}	CLMH100E150MH100E149	316.26	315.89	0.666666667	MH100E150	MH100E149			54	CLMH100E150MH100E149	8	0.0069	0.005956	0.07	0.006359	0.07	0.007539	0.07	0.006359	0.07				
CLMH100E152MH100E155			1994		Existing		MH100E152	MH100E155		14019	IRWD	PVC	{55EECF3A-55A4-4303-8B07-9F5DCAE9614D}	CLMH100E152MH100E155	317.95	316.94	0.666666667	MH100E152	MH100E155			256	CLMH100E152MH100E155	8	0.0039	0.018691	0.13	0.022440	0.14	0.026606	0.15	0.022440	0.14				
CLMH100E153MH100E152			1994		Existing		MH100E153	MH100E152		14019	IRWD	PVC	{79C13E11-238E-4FC0-9027-F42DEE9B593F}	CLMH100E153MH100E152	318.83	318.16	0.666666667	MH100E153	MH100E152			174	CLMH100E153MH100E152	8	0.0039	0.001911	0.04	0.002295	0.05	0.002720	0.05	0.002295	0.05				
CLMH100E154MH100E153			1994		Existing		MH100E154	MH100E153		14019	IRWD	PVC	{F2756CA7-281A-46A6-9511-06FFD64145281}	CLMH100E154MH100E153	319.39	319.04	0.666666667	MH100E154	MH100E153			355	CLMH100E154MH100E153	8	0.0039	0.001911	0.04	0.002295	0.05	0.002721	0.05	0.002295	0.05				
CLMH100E155MH100E156			1994		Existing		MH100E155	MH100E156		14019	IRWD	PVC	{4C16A250-FEC4-4DF2-88BD-888F81997B6D}	CLMH100E155MH100E156	316.83	316.29	0.666666667	MH100E155	MH100E156			140	CLMH100E155MH100E156	8	0.0039	0.023499	0.14	0.028215	0.16	0.033450	0.17	0.028215	0.16				
CLMH100E156MH126N067			1997		Existing		MH100E156	MH126N067		T14018	IRWD	VCP	{C7F7F4F9-A2EE-437F-8463-B5B176A76F2D}	CLMH100E156MH126N067	316.20	313.80	0.666666667	MH100E156	MH126N067			268	CLMH100E156MH126N067	8	0.0087	0.023499	0.12	0.028214	0.13	0.033449	0.15	0.028214	0.13				
CLMH100E182MH100E021			1976		Existing		MH100E182	MH100E021		128	IRWD	VCP	{F7A54D0A-85CA-4F24-BC19-F6FD16F89114}	CLMH100E182MH100E021	249.77	242.16	0.666666667	MH100E182	MH100E021			396	CLMH100E182MH100E021	8	0.0192	0.050441	0.15	0.059259	0.16	0.070266	0.17	0.059259	0.16				
CLMH100N001MH100W076			1976		Existing		MH100N001	MH100W076		T08997	IRWD	VCP	{D7744D0A-F75D-41A1-9CD0-888F8FBF9388}	CLMH100N001MH100W076	185.55	182.47	0.500000000	MH100N001	MH100W076			307	CLMH100N001MH100W076	6	0.0100	0.002565	0.06	0.002740	0.06	0.003247	0.07	0.002740	0.06				
CLMH100N002MH100W094			1976		Existing		MH100N002	MH100W094		T08999	IRWD	VCP	{6ED8A49A-C1D8-4F99-B515-099D48A2D374}	CLMH100N002MH100W094	197.72	197.02	0.666666667	MH100N002	MH100W094			171	CLMH100N002MH100W094	8	0.0041	0.002818	0.05	0.003008	0.05	0.003566	0.06	0.003008	0.05				
CLMH100N003MH100N002			1976		Existing		MH100N003	MH100N002		T08999	IRWD	VCP	{852CB173-160B-44D5-8113-74B35E5C06FC}	CLMH100N003MH100N002	198.69	197.82	0.666666667	MH100N003	MH100N002			179	CLMH100N003MH100N002	8	0.0049	0.002818	0.05	0.003008	0.05	0.003566	0.05	0.003008	0.05				
CLMH100N004MH100W089			1978		Existing		MH100N004	MH100W089		T08999	IRWD	VCP	{F52CC7C5-78A9-4A88-B347-2CE269377432}	CLMH100N004MH100W089	159.35	157.94	0.666666667	MH100N004	MH100W089			352	CLMH100N004MH100W089	8	0.0040	0.006139	0.07	0.006555	0.08	0.007771	0.08	0.006555	0.08				
CLMH100N005MH100N004			1976		Existing		MH100N005	MH100N004		T08999	IRWD	VCP	{58D70A0B-B05B-4E15-89F7-1299CCF0E3AF}	CLMH100N005MH100N004	160.32	159.52	0.500000000	MH100N005	MH100N004			53	CLMH100N005MH100N004	6	0.0151	0.000756	0.03	0.000807	0.03	0.000958	0.03	0.000807	0.03				
CLMH100N008MH100N009			1978		Existing		MH100N008	MH100N009		T08592	IRWD	VCP	{B9EE2567-4A1A-4187-BAF6-7B7D70F77FC3}	CLMH100N008MH100N009	136.94	134.33	0.666666667	MH100N008	MH100N009			349	CLMH100N008MH100N009	8	0.0075	0.001307	0.03	0.001570	0.03	0.001861	0.04	0.001570	0.03				
CLMH100N009MH089E062			1978		Existing		MH100N009	MH089E062		T08592	IRWD	VCP	{61A4A60A-90A5-49FF-82AA-A65C072EA2FB}	CLMH100N009MH089E062	134.13	114.06	0.666666667	MH100N009	MH089E062			255	CLMH100N009MH089E062	8	0.0790	0.004586	0.03	0.005508	0.04	0.006529	0.04	0.005508	0.04				
CLMH100N010MH100N009			1978		Existing		MH100N010	MH100N009		T08592	IRWD	VCP	{C3B0D05A-1AEE-46B3-82FA-A64B483A4D1A}	CLMH100N010MH100N009	140.69	134.13	0.666666667	MH100N010	MH100N009			106	CLMH100N010MH100N009	8	0.0619	0.003279	0.03	0.003938	0.04	0.004668	0.04	0.003938	0.04				
CLMH100N011MH100N012			1978		Existing		MH100N011	MH100N012		T08592	IRWD	VCP	{8F0C18E6-9848-4D58-A105-620BABEAB2D2}	CLMH100N011MH100N012	152.85	149.85	0.666666667	MH100N011	MH100N012			225	CLMH100N011MH100N012	8	0.0133	0.000802	0.02	0.000857	0.02	0.001015	0.02	0.000857	0.02				
CLMH100N012MH100N014			1978		Existing		MH100N012	MH100N014		T08592	IRWD	VCP	{42981556-8C30-4A14-8E8E-162E3EB39C7}	CLMH100N012MH100N014	143.60	131.42	0.666666667	MH100N012	MH100N014			187	CLMH100N012MH100N014	8	0.0651	0.003711	0.03	0.003963	0.03	0.004697	0.04	0.003963	0.03				
CLMH100N013MH100N012			1978		Existing		MH100N013	MH100N012		T08592	IRWD	VCP	{45E36405-0D1B-4BC8-9161-94AD45F056B0}	CLMH100N013MH100N012	144.75	143.89	0.500000000	MH100N013	MH100N012			6	CLMH100N013MH100N012	6	0.0051	0.002909	0.07	0.003162	0.08	0.003682	0.08	0.003162	0.08				
CLMH100N014MH100N015			1978		Existing		MH100N014	MH100N015		T08592	IRWD	VCP	{70884FB9-206C-4

| | | |

| | | |

CLMH1015039MH1015038		1997		Existing	assumed Mannings N	MH1015039	MH1015038		834	IRWD	VCP	{CE7E35F7-C787-4D52-913B-FF630058F20}	CLMH1015039MH1015038	131.80	131.13	1.250000000	MH1015039	MH1015038				357	CLMH1015039MH1015038	15	0.0019	0.656684	0.42	0.702657	0.44	0.834760	0.48	0.692796	0.43					
CLMH1W001MH1W002		1976		Existing		MH1W001	MH1W002		S65	IRWD	VCP	{A94CDD68-F2E8-48DA-BEEE-15CA041EFCEC}	CLMH1W001MH1W002	204.83	184.77	0.666666667	MH1W001	MH1W002				336	CLMH1W001MH1W002	8	0.0599	0.083620	0.14	0.089277	0.15	0.105844	0.16	0.089277	0.15					
CLMH1W002MH1W003		1976		Existing		MH1W002	MH1W003		S65	IRWD	VCP	{10CBF750-6E40-4DD6-93BC-C1A1289FB7A}	CLMH1W002MH1W003	184.67	153.97	0.666666667	MH1W002	MH1W003				441	CLMH1W002MH1W003	8	0.0698	0.083620	0.14	0.089277	0.14	0.105844	0.15	0.089277	0.14					
CLMH1W003MH1W004		1976		Existing		MH1W003	MH1W004		S65	IRWD	VCP	{3E1FAEF7-8476-4A32-8EA5-186B48F6C918}	CLMH1W003MH1W004	153.88	136.77	0.833333333	MH1W003	MH1W004				275	CLMH1W003MH1W004	10	0.0624	0.083620	0.11	0.089277	0.11	0.105844	0.12	0.089277	0.11					
CLMH1W004MH1W005		1976		Existing		MH1W004	MH1W005		S65	IRWD	VCP	{4EF809FF-439A-4D61-9A51-57C88D927382}	CLMH1W004MH1W005	136.66	114.76	0.833333333	MH1W004	MH1W005				351	CLMH1W004MH1W005	10	0.0626	0.115088	0.12	0.123096	0.13	0.145911	0.14	0.123096	0.13					
CLMH1W005MH1W009		1976		Existing		MH1W005	MH1W009		A00241	IRWD	VCP	{EBE62066-987D-4C82-BDDA-8866988DABDF}	CLMH1W005MH1W009	114.66	104.94	0.833333333	MH1W005	MH1W009				202	CLMH1W005MH1W009	10	0.0481	0.115076	0.13	0.123080	0.14	0.145895	0.15	0.123080	0.14					
CLMH1W006MH1W007		1976		Existing		MH1W006	MH1W007		128	IRWD	VCP	{049AB8E0-5F93-475B-A417-16AF1FA1B47C}	CLMH1W006MH1W007	116.87	113.08	0.833333333	MH1W006	MH1W007				396	CLMH1W006MH1W007	10	0.0096	0.080462	0.16	0.095313	0.18	0.113032	0.19	0.095313	0.18					
CLMH1W007MH1W008		1976		Existing		MH1W007	MH1W008		128	IRWD	VCP	{AB71F225-820E-4B84-A5A7-58E768B8A370}	CLMH1W007MH1W008	112.98	109.45	0.833333333	MH1W007	MH1W008				382	CLMH1W007MH1W008	10	0.0092	0.080432	0.16	0.095287	0.18	0.113011	0.19	0.095287	0.18					
CLMH1W008MH1W009		1976		Existing		MH1W008	MH1W009		128	IRWD	VCP	{0C736EC5-27ED-4169-B9B9-F5CD0E38C154}	CLMH1W008MH1W009	109.34	104.97	0.833333333	MH1W008	MH1W009				210	CLMH1W008MH1W009	10	0.0208	0.080425	0.14	0.095282	0.15	0.113006	0.16	0.095281	0.15					
CLMH1W009MH1W010		1965		Existing		MH1W009	MH1W010		A00100	IRWD	VCP	{495A951F-FB38-4EEF-ADFE-50348D8BA7CD}	CLMH1W009MH1W010	104.84	103.37	0.833333333	MH1W009	MH1W010				228	CLMH1W009MH1W010	10	0.0064	0.095981	0.20	0.107984	0.21	0.125821	0.22	0.107983	0.21					
CLMH1W009MH1W047		1965		Existing		MH1W009	MH1W047		128	IRWD	VCP	{40B3D1A6-5F21-487B-912B-8F52730A3896}	CLMH1W009MH1W047	104.87	103.58	1.000000000	MH1W009	MH1W047				155	CLMH1W009MH1W047	12	0.0083	0.080521	0.13	0.093104	0.14	0.112565	0.16	0.093103	0.14					
CLMH1W010MH1W011		1966		Existing		MH1W010	MH1W011	check asbuilt. Why Abs	A00100	IRWD	VCP	{31D7A0E8-A284-4F8E-BD24-C11FEE2DF9BC}	CLMH1W010MH1W011	103.25	98.58	0.833333333	MH1W010	MH1W011				207	CLMH1W010MH1W011	10	0.0157	0.095853	0.16	0.107835	0.17	0.125640	0.18	0.107835	0.17					
CLMH1W011MH1W087		1966		Existing		MH1W011	MH1W087	check asbuilt. Why Abs	A00100	IRWD	VCP	{5234F6DE-6796-431A-B0C7-7633ADA91297}	CLMH1W011MH1W087	98.40	98.01	1.000000000	MH1W011	MH1W087				80	CLMH1W011MH1W087	12	0.0049	0.095845	0.35	0.107824	0.37	0.125627	0.42	0.107824	0.36					
CLMH1W012MH1W013		1966		Existing		MH1W012	MH1W013	check asbuilt. Why Abs	A00100	IRWD	VCP	{7550E350-3743-4F26-86D4-25F80F3868B7B}	CLMH1W012MH1W013	97.67	95.25	1.000000000	MH1W012	MH1W013		Less than 15-in, d/D >0.50		407	CLMH1W012MH1W013	12	0.0059	0.744694	0.50	0.796632	0.52	0.943153	0.57	0.786903	0.53					
CLMH1W013MH1W014		1965		Existing		MH1W013	MH1W014		A00100	IRWD	VCP	{17C78265-62E0-4642-813D-7B4B817FE954}	CLMH1W013MH1W014	95.22	94.90	1.000000000	MH1W013	MH1W014		Less than 15-in, d/D >0.50		130	CLMH1W013MH1W014	12	0.0025	0.744348	0.51	0.796274	0.53	0.942810	0.58	0.786540	0.53					
CLMH1W014MH1W015		1965		Existing		MH1W014	MH1W015		A00100	IRWD	VCP	{DAF698EB-2F29-47F9-92C0-50ACZ2301ASF}	CLMH1W014MH1W015	94.80	93.89	1.000000000	MH1W014	MH1W015		Less than 15-in, d/D >0.50		280	CLMH1W014MH1W015	12	0.0033	0.813139	0.53	0.870004	0.55	1.030198	0.61	0.860270	0.55					
CLMH1W015MH1W016		1965		Existing		MH1W015	MH1W016	Old CIP	A00100	IRWD	VCP	{DD6A6211-670E-4E90-8B41-120F6621DEC2}	CLMH1W015MH1W016	93.86	92.50	1.000000000	MH1W015	MH1W016		Less than 15-in, d/D >0.50		409	CLMH1W015MH1W016	12	0.0033	0.890049	0.61	0.953740	0.64	1.131352	0.73	0.944004	0.64					
CLMH1W016MH1W017		1965		Existing		MH1W016	MH1W017	Old CIP	A00100	IRWD	VCP	{587D1FDD-2901-47B5-8333-FE266BC68AF6}	CLMH1W016MH1W017	92.50	91.17	1.000000000	MH1W016	MH1W017		Less than 15-in, d/D >0.50		409	CLMH1W016MH1W017	12	0.0033	0.888824	0.56	0.952484	0.59	1.129930	0.66	0.942752	0.58					
CLMH1W017MH1W018		1965		Existing		MH1W017	MH1W018	Old CIP	A00100	IRWD	VCP	{0A5399D5-9C32-4887-814B-B860A95759CB}	CLMH1W017MH1W018	91.14	88.91	1.000000000	MH1W017	MH1W018		Less than 15-in, d/D >0.50		409	CLMH1W017MH1W018	12	0.0055	0.889805	0.51	0.953558	0.53	1.131185	0.58	0.943827	0.52					
CLMH1W018MH0885003		1965		Existing		MH1W018	MH0885003	Old CIP	A00100	IRWD	VCP	{E7504A19-E0C2-427F-BA20-B1B101CC0D1E}	CLMH1W018MH0885003	88.88	86.65	1.000000000	MH1W018	MH0885003		Less than 15-in, d/D >0.50		409	CLMH1W018MH0885003	12	0.0055	0.889705	0.57	0.953454	0.59	1.131068	0.67	0.943723	0.59					
CLMH1W019MH0885110		1973		Existing		MH1W019	MH0885110		T0826З	IRWD	VCP	{447D41AA-F725-4433-9615-D8D37F218EC1}	CLMH1W019MH0885110	91.47	89.52	0.666666667	MH1W019	MH0885110				284	CLMH1W019MH0885110	8	0.0069	0.045749	0.18	0.054948	0.20	0.065166	0.21	0.054948	0.20					
CLMH1W020MH1W019		1973		Existing		MH1W020	MH1W019		T0826З	IRWD	VCP	{11A9A0F6-7DC6-427B-B78E-214987076507}	CLMH1W020MH1W019	102.05	92.16	0.666666667	MH1W020	MH1W019				247	CLMH1W020MH1W019	8	0.0400	0.045749	0.06	0.054948	0.07	0.065422	0.06	0.051170	0.06	0.054922	0.06	
CLMH1W021MH1W020		1973		Existing		MH1W021	MH1W020		T0826З	IRWD	VCP	{8846522E-C388-427F-A6FD-B85168909F96}	CLMH1W021MH1W020	103.23	102.16	0.666666667	MH1W021	MH1W020				241	CLMH1W021MH1W020	8	0.0076	0.003884	0.05	0.004662	0.06	0.005527	0.06	0.004662	0.06					
CLMH1W022MH1W023		1973		Existing		MH1W022	MH1W023		T0826З	IRWD	VCP	{68635599-A15B-4066-9CD3-DA015EC55DFD}	CLMH1W022MH1W023	103.72	102.61	0.666666667	MH1W022	MH1W023				243	CLMH1W022MH1W023	8	0.0046	0.011109	0.10	0.013336	0.10	0.015810	0.11	0.013336	0.10					
CLMH1W023MH1W024		1973		Existing		MH1W023	MH1W024		T0826З	IRWD	VCP	{B89C9C75-D486-4D56-977E-FF3A724BD5CE}	CLMH1W023MH1W024	102.48	93.55	0.666666667	MH1W023	MH1W024				157	CLMH1W023MH1W024	8	0.0569	0.011109	0.06	0.013336	0.06	0.015810	0.07	0.013336	0.06					
CLMH1W024MH1W019		1973		Existing		MH1W024	MH1W019		T0826З	IRWD	VCP	{D54C47A2-F720-47DC-97BF-C8F94CF5795D}	CLMH1W024MH1W019	93.04	91.59	0.666666667	MH1W024	MH1W019				385	CLMH1W024MH1W019	8	0.0038	0.037927	0.18	0.045541	0.20	0.054006	0.22	0.045541	0.20					
CLMH1W025MH1W024		1973		Existing		MH1W025	MH1W024		T0826З	IRWD	VCP	{FC680540-CEA9-4599-8A4A-456D8D17A567}	CLMH1W025MH1W024	94.33	93.16	0.666666667	MH1W025	MH1W024				314	CLMH1W025MH1W024	8	0.0037	0.026843	0.15	0.032221	0.17	0.038206	0.18	0.032221	0.17					
CLMH1W026MH1W032		1973		Existing		MH1W026	MH1W032		T0826З	IRWD	VCP	{33C40304-4AC2-4A9B-A221-AB134AFD32CC}	CLMH1W026MH1W032	103.11	101.12	0.666666667	MH1W026	MH1W032				230	CLMH1W026MH1W032	8	0.0087	0.011990	0.09	0.014397	0.10	0.017070	0.11	0.014397	0.10					
CLMH1W027MH1W026		1973		Existing		MH1W027	MH1W026		T0826З	IRWD	VCP	{E3B6D8CE-3CF8-4F9A-9E5C-F81BCA432214}	CLMH1W027MH1W026	103.80	103.20	0.666666667	MH1W027	MH1W026				86	CLMH1W027MH1W026	8	0.0070	0.007384	0.07	0.008866	0.08	0.010511	0.09	0.008866	0.08					
CLMH1W028MH1W027		1973		Existing		MH1W028	MH1W027		T0826З	IRWD	VCP	{82202B89-EC78-487B-9229-0FA7FFC288CC}	CLMH1W028MH1W027	105.11	103.93	0.666666667	MH1W028	MH1W027				158	CLMH1W028MH1W027	8	0.0075	0.007384	0.07	0.008866	0.08	0.010511	0.09	0.008866	0.08					
CLMH1W029MH1W028		1973		Existing		MH1W029	MH1W028		T0826З	IRWD	VCP	{1F5A9B3D-797D-420A-B254-487A4315CBAB}	CLMH1W029MH1W028	106.31	105.23	0.666666667	MH1W029	MH1W028				148	CLMH1W029MH1W028	8	0.0073	0.007384	0.07	0.008866	0.08	0.010511	0.09	0.008866	0.08					
CLMH1W030MH1W031		1973		Existing		MH1W030	MH1W031		T0826З	IRWD	VCP	{8926CDED-1201-4981-8BAE-4AD0073D7E24}	CLMH1W030MH1W031	104.19	102.44	0.666666667	MH1W030	MH1W031				151	CLMH1W030MH1W031	8	0.0116	0.010886	0.08	0.013073	0.09	0.015496	0.09	0.013073	0.09					
CLMH1W031MH1W032		1973		Existing		MH1W031	MH1W032		T0826З	IRWD	VCP	{20E61093-EA5E-4573-89F6-57DACD434E70}	CLMH1W031MH1W032	102.23	100.98	0.666666667	MH1W031	MH1W032				241	CLMH1W031MH1W032	8	0.0052	0.010885	0.09	0.013070	0.10	0.015496	0.11	0.013070	0.10					
CLMH1W032MH1W033		1973		Existing		MH1W032	MH1W033		T0826З	IRWD	VCP	{6025EE2F-882F-48AD-BA71-C830A271D090}	CLMH1W032MH1W033	100.87	96.08	0.666666667	MH1W032	MH1W033				407	CLMH1W032MH1W033	8	0.0413	0.022875	0.08	0.027466	0.09	0.032565	0.10	0.027466	0.09					
CLMH1W033MH1W034		1973		Existing		MH1W033	MH1W034		T0826З	IRWD	VCP	{8FB8B74E-0EE6-4514-97C6-0992A0310A39}	CLMH1W033MH1W034	95.83	95.69	0.666666667	MH1W033	MH1W034				24	CLMH1W033MH1W034	8	0.0058	0.026853	0.14	0.032227	0.15	0.038210	0.17	0.032227	0.15					
CLMH1W034MH1W025		1973		Existing		MH1W034	MH1W025		T0826З	IRWD	VCP	{9B931DB4-F43D-43C0-825F-93F7B255E513}	CLMH1W034MH1W025	95.58	94.47	0.666666667	MH1W034	MH1W025				194	CLMH1W034MH1W025	8	0.0057	0.026851	0.14	0.032220	0.16	0.038210	0.17	0.032220	0.16					
CLMH1W035MH1W033		1973		Existing		MH1W035	MH1W033		T0826З	IRWD	VCP	{901C166A-C334-4FCF-BECF-828F0F6F638F}	CLMH1W035MH1W033	99.66	95.98	0.666666667	MH1W035	MH1W033				183	CLMH1W035MH1W033	8	0.0201	0.003979	0.04	0.004761	0.05	0.005645	0.05	0.004761	0.05					
CLMH1W036MH1W035		1973		Existing		MH1W036	MH1W035		T0829З	IRWD	VCP	{1524DC73-5ECD-485C-AADE-7C450EDA589C}	CLMH1W036MH1W035	101.01	99.88	0.666666667	MH1W036	MH1W035				282	CLMH1W036MH1W035	8	0.0040	0.002490	0.05	0.002973	0.05	0.003526	0.06	0.002973	0.05					
CLMH1W037MH0885094		1973		Existing		MH1W037	MH0885094		T0826З	IRWD	VCP	{06F655570-58D3-4D49-9590-69C200703C1F}	CLMH1W037MH0885094	107.70	104.69	0.666666667	MH1W037	MH0885094				236	CLMH1W037MH0885094	8	0.0128	0.003737	0.05	0.004474	0.05	0.005292	0.06	0.004474	0.05					
CLMH1W038MH1W037		1973		Existing		MH1W038	MH1W037		T0826З	IRWD	VCP	{8E4645E1-3495-4DC2-A25A-B8B450280A1F}	CLMH1W038MH1W037	107.73	107.04	0.666666667	MH1W038	MH1W037				235	CLMH1W038MH1W037	8	0.0029	0.000000	0.00	0.000013	0.00	0.000015	0.00	0.000013	0.00					
CLMH1W038MH0885091		1973		Existing		MH1W038	MH0885091		T0826З	IRWD	VCP	{7558ZCDF-B025-4792-BB19-BB384BA8F620}	CLMH1W038MH0885091	106.87	104.76	0.666666667	MH1W038	MH0885091				337	CLMH1W038MH0885091	8	0.0063	0.002939	0.05	0.003542	0.05	0.004211	0.06	0.003542	0.05					
CLMH1W039MH1W038		1973		Existing		MH1W039	MH1W038		T0826З	IRWD	VCP	{D07C26E9-9600-4CD3-82A5-D9829F6B413A}	CLMH1W039MH1W038	107.43	106.98	0.666666667	MH1W039	MH1W038				97	CLMH1W039MH1W038	8	0.0046	0.002939	0.05	0.003530	0.05	0.004183	0.06	0.003530	0.05					
CLMH1W040MH1W014		1973		Existing		MH1W040	MH1W014		A00261	IRWD	VCP	{1C494206-8F8E-44F7-9F0A-F67E75A8B536}	CLMH1W040MH1W014	100.20	96.30	0.666666667	MH1W040	MH1W014				325	CLMH1W040MH1W014	8	0.0120	0.075026	0.20	0.088176	0.22	0.104539	0.24	0.088176	0.22					
CLMH1W041MH1W040		1973		Existing		MH1W041	MH1W040		A00261	IRWD	VCP	{B8B7B59F-2C01-48D3-BB77-1917B42E134F}	CLMH1W041MH1W040	102.59	100.40	0.666666667	MH1W041	MH1W040				184	CLMH1W041MH1W040	8	0.0119	0.061745	0.18	0.072231	0.20	0.085635	0.21	0.072231	0.20					
CLMH1W042MH1W041		1973		Existing		MH1W042	MH1W041		A00261	IRWD	VCP	{B3E71FDB-4417-4EAF-92D6-A826EC190523}	CLMH1W042MH1W041	103.36	102.80	0.666666667	MH1W042	MH1W041				142	CLMH1W042MH1W041	8	0.0122	0.061745	0.18	0.072231	0.20	0.085635	0.21	0.072231	0.20					
CLMH1W043MH1W042		1973		Existing		MH1W043	MH1W042		A00261	IRWD	VCP	{68BE0001-B840-4EAE-B82C-33AB2133C098}	CLMH1W043MH1W042	104.61	103.55	0.666666667	MH1W043	MH1W042				73	CLMH1W043MH1W042	8	0.0145	0.061745	0.17	0.072231	0.19	0.085635	0.20	0.072231	0.19					
CLMH1W044MH1W043		1973		Existing		MH1W044	MH1W043		A00261	IRWD	VCP	{0FCAC790-6C21-4143-B86D-73BFD050AA49}	CLMH1W044MH1W043	105.51	104.70	0.666666667	MH1W044	MH1W043				72	CLMH1W044MH1W043	8	0.0113	0.061745	0.18	0.072231	0.20	0.085635	0.22	0.072231	0.20					
CLMH1W045MH1W044		1973		Existing		MH1W045	MH1W044		A00261	IRWD	VCP	{A707364D-0AA0-4E60-B650-BA6464757E46}	CLMH1W045MH1W044	106.69	105.72	0.666666667	MH1W045	MH1W044				104	CLMH1W045MH1W044	8	0.0118	0.061745	0.18	0.072231	0.20	0.085635	0.21	0.072231	0.20					
CLMH1W046MH1W045		1973		Existing		MH1W046	MH1W045		A00261	IRWD	VCP	{019846FB-DEDC-4545-8883-728AFCC72AA5}	CLMH1W046MH1W045	110.84	106.90	0.666666667	MH1W046	MH1W045				329	CLMH1W046MH1W045	8	0.0120	0.061745	0.18	0.072231	0.20	0.085635	0.21	0.072231	0.20					
CLMH1W047MH1W048		1973		Existing		MH1W047	MH1W048		128	IRWD	VCP	{16B48EF2A-4F5D-4BCF-88B9-45AB110674779}	CLMH1W047MH1W048	103.48	101.80	1.000000000	MH1W047	MH1W048				265	CLMH1W047MH1W048	12	0.0063	0.080310	0.14	0.092857	0.15	0.112276	0.17	0.092857	0.15					
CLMH1W048MH1W015		1976		Existing		MH1W048	MH1W015		128	IRWD	VCP	{E0F21F96-997A-4B4E-BEB7-AB4F4FD2F8AF}	CLMH1W048MH1W015	98.58	96.44	1.000000000	MH1W048	MH1W015				102	CLMH1W048MH1W015	12	0.0121	0.080260	0.12	0.092795	0.13	0.112206	0.14	0.092794	0.13					
CLMH1W049MH1W030		1973		Existing		MH1W049	MH1W030		T0826З	IRWD	VCP	{29E3D9B5-4269-40C9-AAAD-AC2A007E6B80}	CLMH1W049MH1W030	106.73	104.34	0.666666667	MH1W049	MH1W030				171	CLMH1W049MH1W030	8	0.0140	0.006077	0.06	0.007296	0.06	0.008651	0.07	0.007296	0.06					
CLMH1W076MH1W004		1965		Existing		MH1W076	MH1W004		T1468Z	IRWD	PVC	{7F3C252B-B177-49F7-9080-54E169759EED}	CLMH1W076MH1W004	137.19	136.75	0.666666667	MH1W076	MH1W004				48	CLMH1W076MH1W004	8	0.0092	0.047131	0.16	0.056561	0.18	0.067061	0.19	0.056561	0.18					
CLMH1W077MH1W076		1965		Existing		MH1W077	MH1W076		T1468Z	IRWD	PVC	{6965A111-718A-483E-AE4C-0B26E444B929}	CLMH1W077MH1W076	144.39	137.39	0.666666667	MH1W077	MH1W076				102	CLMH1W077MH1W076	8	0.0686	0.047131	0.10	0.056561	0.11	0.067061	0.12	0.056561	0.11					
CLMH1W078MH1W077		1995		Existing		MH1W078	MH1W077		T1468Z	IRWD	PVC	{A8826A83-A98D-42A2-8E90-06C1D21718E0}	CLMH1W078MH1W077	167.19	144.50	0.666666667	MH1W078	MH1W077				262	CLMH1W078MH1W077	8	0.0869	0.047131	0.09	0.056561	0.10	0.067061	0.11	0.056561	0.10					
CLMH1W079MH1W086		1995		Existing		MH1W079	MH1W086		T1468Z	IRWD	PVC	{2FA9CE2A-C6AD-42A2-A546-FCBB721F671E}	CLMH1W079MH1W086	191.10	182.10	0.666666667	MH1W079	MH1W086				185	CLMH1W079MH1W086	8	0.0486	0.010866	0.05	0.013046	0.06	0.015466	0.06	0.013046	0.06					
CLMH1W080MH1W078		1995		Existing		MH1W080	MH1W078		T1468Z	IRWD	PVC	{1ADACSCA-C0D0-4154-A074-34970C55C21}	CLMH1W080MH1W078	173.89	167.39	0.666666667	MH1W080	MH1W078				88	CLMH1W080MH1W078	8	0.0244	0.036266	0.11	0.043515	0.12	0.051595	0.13	0.043516	0.12					
CLMH1W081MH1W080		1995		Existing		MH1W081	MH1W080		T1468Z	IRWD	PVC	{2A1F1409-3D60-4625-B6E0-5EE23EEE7CB}	CLMH1W081MH1W080	181.89	174.00	0.666666667	MH1W081	MH1W080				198	CLMH1W081MH1W080	8	0.0398	0.028310	0.09	0.033989	0.10	0.040301	0.11	0.033989	0.10					
CLMH1W082MH1W081		1995		Existing		MH1W082	MH1W081		T1468Z	IRWD	PVC	{DBCBD9FA-B789-4685-9E6F-48663FD72582}	CLMH1W082MH1W081	194.60	182.00	0.666666667	MH1W082	MH1W081				280	CLMH1W082MH1W081	8	0.0450	0.022696	0.08	0.027248	0.09	0.032310	0.09	0.027248	0.09					
CLMH1W083MH1W082		1995		Existing		MH1W083	MH1W082		T1468Z	IRWD	PVC	{ACBFF583-53F5-44F0-9169-B7B565E1E4FB}	CLMH1W083MH1W082	196.00	194.69	0.666666667	MH1W083	MH1W082				133	CLMH1W083MH1W082	8	0.0098	0.022696	0.11	0.027249	0.12	0.032310	0.13	0.027249	0.12					
CLMH1W084MH1W083		1995		Existing		MH1W084	MH1W083		T1468Z	IRWD	PVC	{F68CCE4F-D11A-4F07-90A7-363ABC9B93E4}	CLMH1W084MH1W083	215.10	196.19	0.666666667	MH1W084	MH1W083				254	CLMH1W084MH1W083	8	0.0747	0.003769	0.04	0.005726	0.04	0.006788	0.04	0.005726	0.04					
CLMH1W085MH1W084		1995		Existing		MH1W085	MH1W084		T1468Z	IRWD	PVC	{6196F0EE-7FDF-46B2-A173-3122F88DC6F1}	CLMH1W085MH1W084	215.30	208.89	0.666666667	MH1W085	MH1W084				211	CLMH1W085MH1W084	8	0.0304	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00					
CLMH1W079MH1W085		1995		Existing		MH1W079	MH1W085		T1468Z	IRWD	PVC	{42F78883-A3A3-406A-BF87-859C799C0D1E}	CLMH1W079MH1W085	208.80	191.19	0.666666667	MH1W079	MH1W085				279	CLMH1W079MH1W085	8	0.0633	0.004708	0.03	0.005653	0.04	0.006702	0.04	0.005653	0.04					
CLMH1W086MH1W078		1995		Existing		MH1W086	MH1W078		T1468Z	IRWD	PVC	{4929F48C-959C-49D4-9609-FC39B05B6E4A}	CLMH1W086MH1W078	182.00	167.30	0.666666667	MH1W086	MH1W078				223	CLMH1W086MH1W078	8	0.0659	0.010866	0.05	0.013046	0.06	0.015466	0.06	0.013046	0.06					
CLMH1W087MH1W075		1966		Existing		MH1W087	MH1W012	check asbuilt. Why Abs	A00100	IRWD	VCP	{4A50314B-D08B-46F2-A852-B75D75F709E}	CLMH1W087MH1W012	98.01	97.70	1.000000000	MH1W087	MH1W012		Less than 15-in, d/D >0.50		100	CLMH1W087MH1W012	12	0.0031	0.744804	0.49	0.796752	0.51	0.943282	0.56	0.787024	0.51					
CLMH1W087MH1W087		1997		Existing	assumed Mannings N	MH1W087	MH1W087		A00834	IRWD	VCP	{16BB5A7B-F10B-49BF-BF37-4DA062DB1EBF}	CLMH1W087MH1W087	108.44	98.20	1.250000000	MH1W087	MH1W087				257	CLMH1W087MH1W087	15	0.0398	0.652797	0.23	0.698893	0.24	0.831471	0.28	0.688993	0.24					
CLMH1W088MH1W087		1997		Existing	assumed Mannings N	MH1W088	MH1W087		A00834	IRWD	VCP	{FA445BA2-4044-4A1E-BFB7-73209A1BDE48}	CLMH1W088MH1W087	115.37	108.54	1.250000000	MH1W088	MH1W087				355	CLMH1W088MH1W087	15	0.0192	0.652803	0.23	0.698900	0.23	0.831477	0.26	0.689000	0.23					
CLMH1W089MH1W088		1997		Existing	assumed Mannings N	MH1W089	MH1W088		834	IRWD	VCP	{A591EFC5-8E20-4BB7-B0E5-432916696A35}	CLMH1W089MH1W088	116.95	115.58	1.250000000	MH1W089	MH1W088				212	CLMH1W089MH1W088	15	0.0065	0.652875	0.30	0.698970	0.31	0.831541	0.34	0.689070	0.31					
CLMH1W090MH1W089		1997		Existing	assumed Mannings N	MH1W090	MH1W089		834	IRWD	VCP	{0A883BC2-E0E8-4997-9657-DB23CA1316A0}	CLMH1W090MH1W089	117.76	117.05	1.250000000	MH1W090	MH1W089				283	CLMH1W090MH1W089	15	0.0025	0.652920	0.36	0.699014	0.37	0.831578	0.40	0.689114	0.37					
CLMH1W092MH1W090		1997		Existing	assumed Mannings N	MH1W092	MH1W090		834	IRWD	VCP	{A9CB738A-E302-42D9-8A73-D9BF9692778E}	CLMH1W092MH1W090	117.76	117.05	1.250000000	MH1W092	MH1W090				283	CLMH1W092MH1W090	15	0.0025	0.652920	0.36	0.699014	0.37	0.831578	0.40	0.689114	0.37					

CLMH102E020MH102E019		1998		Existing		MH102E020	MH102E019		A00874A	IRWD	PVC	{9E320D0D-041F-49CA-ABCD-E55A5842D9FF}	CLMH102E020MH102E019	107.24	104.62	0.666666667	MH102E020	MH102E019		267	CLMH102E020MH102E019	8	0.0098	0.134194	0.27	0.161060	0.30	0.190942	0.32	0.161060	0.30				
CLMH102E021MH102E014		1998		Existing		MH102E021	MH102E014		A00862A	IRWD	VCP	{53E1256A-C805-4A33-9B73-2C80897E935}	CLMH102E021MH102E014	99.26	98.55	1.250000000	MH102E021	MH102E014		397	CLMH102E021MH102E014	15	0.0018	0.465264	0.32	0.556713	0.35	0.660267	0.38	0.558754	0.35				
CLMH102E022MH102E020		1998		Existing		MH102E022	MH102E020		A00874A	IRWD	PVC	{6F03024D-2876-4777-8BBC-A0C105AA084B}	CLMH102E022MH102E020	108.86	107.34	0.666666667	MH102E022	MH102E020		155	CLMH102E022MH102E020	8	0.0098	0.091008	0.22	0.109209	0.24	0.129472	0.27	0.109209	0.24				
CLMH102E023MH102E022		1998		Existing		MH102E023	MH102E022		A00874A	IRWD	PVC	{F133730D-BC02-42AB-88EA-4E16C600A29E}	CLMH102E023MH102E022	109.86	108.96	0.666666667	MH102E023	MH102E022		105	CLMH102E023MH102E022	8	0.0086	0.088790	0.23	0.106545	0.25	0.126314	0.27	0.106545	0.25				
CLMH102E024MH102E021		1998		Existing		MH102E024	MH102E021		A00862A	IRWD	VCP	{F95F7068-7429-450B-A887-77096696CB9C}	CLMH102E024MH102E021	99.76	99.37	1.250000000	MH102E024	MH102E021		226	CLMH102E024MH102E021	15	0.0017	0.461491	0.31	0.552693	0.34	0.655448	0.37	0.554734	0.34				
CLMH102E025MH102E024		1998		Existing		MH102E025	MH102E024		A00862A	IRWD	VCP	{53865424-20D6-4E92-BD39-E86821436B8F}	CLMH102E025MH102E024	100.41	99.87	1.250000000	MH102E025	MH102E024		304	CLMH102E025MH102E024	15	0.0018	0.461541	0.32	0.552731	0.35	0.655477	0.38	0.554772	0.35				
CLMH102E026MH102E035		1998		Existing		MH102E026	MH102E035		A00862	IRWD	VCP	{0F290B46-78FA-47CD-823D-10FA1919FC82}	CLMH102E026MH102E035	104.69	102.27	0.833333333	MH102E026	MH102E035		327	CLMH102E026MH102E035	10	0.0074	0.076302	0.17	0.091610	0.19	0.108613	0.20	0.091610	0.19				
CLMH102E027MH102E026		1998		Existing		MH102E027	MH102E026		A00874	IRWD	PVC	{8A18E577-29E2-48F4-86F6-DB185EE75857}	CLMH102E027MH102E026	105.55	104.69	0.833333333	MH102E027	MH102E026		135	CLMH102E027MH102E026	10	0.0064	0.076308	0.17	0.091613	0.19	0.108616	0.20	0.091613	0.19				
CLMH102E028MH102E027		1998		Existing		MH102E028	MH102E027		A00874	IRWD	PVC	{113ED0D2-765B-473D-B682-613755DEF839}	CLMH102E028MH102E027	106.30	105.66	0.833333333	MH102E028	MH102E027		100	CLMH102E028MH102E027	10	0.0063	0.076309	0.17	0.091613	0.19	0.108616	0.20	0.091613	0.19				
CLMH102E029MH102E028		1998		Existing		MH102E029	MH102E028		A00874	IRWD	PVC	{A1229252C-B887-43E5-B055-6C93E1257F6F}	CLMH102E029MH102E028	107.19	106.50	0.833333333	MH102E029	MH102E028		139	CLMH102E029MH102E028	10	0.0050	0.076309	0.18	0.091613	0.20	0.108616	0.21	0.091613	0.20				
CLMH102E030MH102E029		1998		Existing		MH102E030	MH102E029		A00874	IRWD	PVC	{E1967518-C95A-4582-903D-DB963B5F4142}	CLMH102E030MH102E029	109.12	107.29	0.833333333	MH102E030	MH102E029		356	CLMH102E030MH102E029	10	0.0051	0.040711	0.13	0.048873	0.14	0.057945	0.15	0.048873	0.14				
CLMH102E033MH102E025		1998		Existing		MH102E033	MH102E025		A00862	IRWD	VCP	{56EB1DA5-C5F4-43D8-BCB2-A0FFDC581443}	CLMH102E033MH102E025	104.04	100.88	0.833333333	MH102E033	MH102E025		104	CLMH102E033MH102E025	10	0.0133	0.199883	0.24	0.238470	0.28	0.284370	0.28	0.241854	0.26				
CLMH102E034MH102E033		1998		Existing		MH102E034	MH102E033		A00862	IRWD	VCP	{9B3A8784-BFC0-4983-B0AA-E870338084AF}	CLMH102E034MH102E033	105.26	104.14	0.833333333	MH102E034	MH102E033		256	CLMH102E034MH102E033	10	0.0044	0.199889	0.30	0.239821	0.33	0.284373	0.37	0.241858	0.34				
CLMH102E035MH102E025		1998		Existing		MH102E035	MH102E025		A00862	IRWD	VCP	{25A90F76-5575-4E1C-8DAB-D0AFC6C9C2B3}	CLMH102E035MH102E025	102.18	101.36	0.833333333	MH102E035	MH102E025		209	CLMH102E035MH102E025	10	0.0039	0.076339	0.19	0.091651	0.21	0.108663	0.23	0.091651	0.21				
CLMH102E036MH102E034		1998		Existing		MH102E036	MH102E034		A00862	IRWD	VCP	{4B2206FE-C131-42BD-9533-1A60E4F902E5}	CLMH102E036MH102E034	107.37	105.36	0.833333333	MH102E036	MH102E034		386	CLMH102E036MH102E034	10	0.0052	0.199902	0.30	0.239831	0.32	0.284380	0.36	0.241868	0.33				
CLMH102E037MH102E036		1998		Existing		MH102E037	MH102E036		A00862	IRWD	VCP	{23CCF848-CF22-4A2C-84AC-516E6DAA71F6}	CLMH102E037MH102E036	109.21	107.47	0.833333333	MH102E037	MH102E036		394	CLMH102E037MH102E036	10	0.0044	0.199925	0.30	0.239847	0.33	0.284392	0.37	0.241884	0.34				
CLMH102E260MH102E029		1998		Existing	assumed Mannings N	MH102E260	MH102E029		T15557	IRWD	PVC	{C236CEBD-4673-4F3F-8490-6ACBE6E09EA4}	CLMH102E260MH102E029	107.58	107.38	0.666666667	MH102E260	MH102E029		44	CLMH102E260MH102E029	8	0.0045	0.010558	0.09	0.012678	0.10	0.015030	0.11	0.012678	0.10				
CLMH102E261MH102E260		1998		Existing	assumed Mannings N	MH102E261	MH102E260		T15557	IRWD	PVC	{90ED61AB-5D5D-4F5D-B162-B8A74DE03D43}	CLMH102E261MH102E260	113.23	107.69	0.666666667	MH102E261	MH102E260		166	CLMH102E261MH102E260	8	0.0334	0.010558	0.06	0.012678	0.06	0.015030	0.07	0.012678	0.06				
CLMH102E262MH102E261		1998		Existing	assumed Mannings N	MH102E262	MH102E261		T15557	IRWD	PVC	{A1840DD3-513F-4FBB-B73E-77B1595AD471}	CLMH102E262MH102E261	114.04	113.43	0.666666667	MH102E262	MH102E261		126	CLMH102E262MH102E261	8	0.0048	0.005388	0.06	0.006469	0.07	0.007670	0.08	0.006469	0.07				
CLMH102E263MH102E262		1998		Existing	assumed Mannings N	MH102E263	MH102E262		T15557	IRWD	PVC	{C228AC65-3DF6-4593-93AB-5D41FFA35B2A}	CLMH102E263MH102E262	115.72	114.23	0.666666667	MH102E263	MH102E262		300	CLMH102E263MH102E262	8	0.0050	0.005388	0.06	0.006469	0.07	0.007670	0.08	0.006469	0.07				
CLMH102E264MH102E015		1998		Existing		MH102E264	MH102E015		A00862A	IRWD	VCP	{08E3FDF0-2F2F-4CB8-9009-D4CA9F500ED4}	CLMH102E264MH102E015	98.86	98.69	0.666666667	MH102E264	MH102E015		36	CLMH102E264MH102E015	8	0.0047	0.039107	0.18	0.046950	0.19	0.055662	0.21	0.046950	0.19				
CLMH102E265MH102E264		1999		Existing	assumed Mannings N	MH102E265	MH102E264		T15534	IRWD	PVC	{86A30679-82AA-475C-AE58-DB515B22FFE8}	CLMH102E265MH102E264	102.98	101.29	0.666666667	MH102E265	MH102E264		26	CLMH102E265MH102E264	8	0.0650	0.039107	0.09	0.046950	0.10	0.055662	0.11	0.046950	0.10				
CLMH102E266MH102E265		1999		Existing	assumed Mannings N	MH102E266	MH102E265		T15534	IRWD	PVC	{75FEC098-D389-4CA7-9029-AFD7E248DC3C}	CLMH102E266MH102E265	104.90	103.18	0.666666667	MH102E266	MH102E265		104	CLMH102E266MH102E265	8	0.0128	0.039107	0.14	0.046950	0.15	0.055662	0.16	0.046950	0.15				
CLMH102E267MH102E266		1999		Existing	assumed Mannings N	MH102E267	MH102E266		T15534	IRWD	PVC	{9A12ECB1-3F9C-4DD8-91A5-E6ABF9A6200F}	CLMH102E267MH102E266	107.37	105.09	0.666666667	MH102E267	MH102E266		28	CLMH102E267MH102E266	8	0.0814	0.019456	0.06	0.023356	0.07	0.027689	0.08	0.023356	0.07				
CLMH102E268MH102E266		1999		Existing	assumed Mannings N	MH102E268	MH102E266		T15534	IRWD	PVC	{48747E9A-0135-4921-A731-1B41E80D8B75}	CLMH102E268MH102E266	107.62	105.09	0.666666667	MH102E268	MH102E266		78	CLMH102E268MH102E266	8	0.0324	0.016462	0.07	0.019765	0.08	0.023413	0.09	0.019765	0.08				
CLMH102E269MH102E268		1999		Existing	assumed Mannings N	MH102E269	MH102E268		T15534	IRWD	PVC	{DAAA3508-1DAA-4E96-848A-25CE65940F79}	CLMH102E269MH102E268	107.93	107.83	0.666666667	MH102E269	MH102E268		23	CLMH102E269MH102E268	8	0.0043	0.015035	0.11	0.018051	0.12	0.021404	0.13	0.018051	0.12				
CLMH102E270MH102E267		1999		Existing	assumed Mannings N	MH102E270	MH102E267		T15534	IRWD	PVC	{DA6A3FBE-15DA-445C-9A1E-0878890CBC39}	CLMH102E270MH102E267	108.15	107.58	0.666666667	MH102E270	MH102E267		118	CLMH102E270MH102E267	8	0.0048	0.019159	0.12	0.022999	0.13	0.027266	0.14	0.022999	0.13				
CLMH102E271MH102E269		1999		Existing	assumed Mannings N	MH102E271	MH102E269		T15534	IRWD	PVC	{164BA23C-21E8-434E-AD4E-5C67F46C9859}	CLMH102E271MH102E269	108.76	108.12	0.666666667	MH102E271	MH102E269		120	CLMH102E271MH102E269	8	0.0053	0.015035	0.10	0.018051	0.12	0.021404	0.13	0.018051	0.12				
CLMH102E272MH102E270		1999		Existing	assumed Mannings N	MH102E272	MH102E270		T15534	IRWD	PVC	{29158DFE-3BAD-4384-B4A8-168701E3C098B}	CLMH102E272MH102E270	108.54	108.34	0.666666667	MH102E272	MH102E270		38	CLMH102E272MH102E270	8	0.0053	0.019159	0.12	0.022999	0.13	0.027266	0.14	0.022999	0.13				
CLMH102E273MH102E271		1999		Existing	assumed Mannings N	MH102E273	MH102E271		T15534	IRWD	PVC	{C3009663-9256-4DB8-9353-4C1BF94F688B}	CLMH102E273MH102E271	110.01	108.87	0.666666667	MH102E273	MH102E271		222	CLMH102E273MH102E271	8	0.0051	0.013530	0.10	0.016244	0.11	0.019261	0.12	0.016244	0.11				
CLMH102E274MH102E273		1999		Existing	assumed Mannings N	MH102E274	MH102E273		T15534	IRWD	PVC	{AA83F37C-10FD-4543-9582-85AAD1EAB931}	CLMH102E274MH102E273	111.11	110.12	0.666666667	MH102E274	MH102E273		201	CLMH102E274MH102E273	8	0.0049	0.011252	0.09	0.013509	0.10	0.016017	0.11	0.013509	0.10				
CLMH102E275MH102E272		1999		Existing	assumed Mannings N	MH102E275	MH102E272		T15534	IRWD	PVC	{9FCB919D-2E14-48DE-A6D2-842A2A86C865}	CLMH102E275MH102E272	111.19	108.73	0.666666667	MH102E275	MH102E272		294	CLMH102E275MH102E272	8	0.0084	0.013572	0.09	0.016283	0.10	0.019314	0.11	0.016283	0.10				
CLMH102E276MH102E274		1999		Existing	assumed Mannings N	MH102E276	MH102E274		T15534	IRWD	PVC	{CA93ED16-8C29-44F4-85CB-49A7E4956E3F}	CLMH102E276MH102E274	112.08	111.20	0.666666667	MH102E276	MH102E274		176	CLMH102E276MH102E274	8	0.0050	0.006298	0.07	0.007563	0.08	0.008967	0.08	0.007563	0.08				
CLMH102E277MH102E276		1999		Existing	assumed Mannings N	MH102E277	MH102E276		T15534	IRWD	PVC	{C1D58148-DC05-4BFC-8DE6-683CE6BDC2EF}	CLMH102E277MH102E276	112.98	112.29	0.666666667	MH102E277	MH102E276		76	CLMH102E277MH102E276	8	0.0092	0.002436	0.04	0.002925	0.04	0.003468	0.05	0.002925	0.04				
CLMH102E278MH102E275		1999		Existing	assumed Mannings N	MH102E278	MH102E275		T15534	IRWD	PVC	{A45F8E9D-BC2C-493E-8F7C-068730E2399}	CLMH102E278MH102E275	112.68	111.29	0.666666667	MH102E278	MH102E275		282	CLMH102E278MH102E275	8	0.0049	0.008837	0.08	0.010608	0.09	0.012576	0.10	0.010608	0.09				
CLMH102E279MH102E277		1999		Existing	assumed Mannings N	MH102E279	MH102E277		T15534	IRWD	PVC	{3FBE4D9A-338D-45E9-87E8-B6CEBAA6ECDF}	CLMH102E279MH102E277	113.95	113.19	0.666666667	MH102E279	MH102E277		60	CLMH102E279MH102E277	8	0.0127	0.002436	0.04	0.002925	0.04	0.003468	0.04	0.002925	0.04				
CLMH102E280MH102E278		1999		Existing	assumed Mannings N	MH102E280	MH102E278		T15534	IRWD	PVC	{B7BAA20A-A74C-4F51-B8BE-8B5A23F83CEA}	CLMH102E280MH102E278	114.26	112.77	0.666666667	MH102E280	MH102E278		206	CLMH102E280MH102E278	8	0.0050	0.004340	0.06	0.005209	0.07	0.006175	0.07	0.005209	0.06				
CLMH102E316MH102E317		1998		Existing		MH102E316	MH102E317		T15606	IRWD	PVC	{DAEAE81B-7E5F-4267-9DB4-CB108BFD1774}	CLMH102E316MH102E317	116.73	115.97	0.666666667	MH102E316	MH102E317		158	CLMH102E316MH102E317	8	0.0048	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E316MH102E319		1998		Existing		MH102E316	MH102E319		T15606	IRWD	PVC	{3D73EF09-538B-4BF0-B309-9093C8397FDC}	CLMH102E316MH102E319	116.73	115.36	0.666666667	MH102E316	MH102E319		235	CLMH102E316MH102E319	8	0.0058	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E317MH102E318		1998		Existing		MH102E317	MH102E318		T15606	IRWD	PVC	{6C98E004-98D0-4398-B8B0-B3B8B075A0CB}	CLMH102E317MH102E318	115.76	114.01	0.666666667	MH102E317	MH102E318		157	CLMH102E317MH102E318	8	0.0111	0.005468	0.06	0.006566	0.06	0.007783	0.07	0.006566	0.06				
CLMH102E318MH102E322		1998		Existing		MH102E318	MH102E322		T15606	IRWD	PVC	{7C434A90-4866-4565-9DB4-C00711E568B8}	CLMH102E318MH102E322	113.80	113.37	0.666666667	MH102E318	MH102E322		92	CLMH102E318MH102E322	8	0.0047	0.018702	0.12	0.022453	0.13	0.026619	0.14	0.022453	0.13				
CLMH102E319MH102E322		1998		Existing		MH102E319	MH102E322		T15606	IRWD	PVC	{66DB6F2A-9C19-4CC5-AD88-B8634855098E}	CLMH102E319MH102E322	115.16	113.37	0.666666667	MH102E319	MH102E322		116	CLMH102E319MH102E322	8	0.0132	0.006340	0.06	0.007610	0.06	0.009022	0.07	0.007610	0.06				
CLMH102E320MH102E321		1998		Existing		MH102E320	MH102E321		T15606	IRWD	PVC	{7AB37D95-D135-4F44-8021-457F39F9B08D}	CLMH102E320MH102E321	118.80	115.12	0.666666667	MH102E320	MH102E321		206	CLMH102E320MH102E321	8	0.0179	0.002438	0.03	0.002925	0.04	0.003468	0.04	0.002925	0.04				
CLMH102E321MH102E318		1998		Existing		MH102E321	MH102E318		T15606	IRWD	PVC	{3E6808F4-061B-8013-AA80-59A5698DE44A}	CLMH102E321MH102E318	114.93	114.01	0.666666667	MH102E321	MH102E318		187	CLMH102E321MH102E318	8	0.0049	0.013233	0.10	0.015887	0.11	0.018836	0.12	0.015887	0.11				
CLMH102E322MH102E458		1998		Existing		MH102E322	MH102E458		T15606	IRWD	PVC	{2787F7B6-9265-4F34-9887-C47B34B23565}	CLMH102E322MH102E458	113.17	107.64	0.666666667	MH102E322	MH102E458		143	CLMH102E322MH102E458	8	0.0551	0.025042	0.08	0.030063	0.09	0.035641	0.09	0.030063	0.09				
CLMH102E323MH102E324		1998		Existing		MH102E323	MH102E324		T15606	IRWD	PVC	{32C83C06-D46C-431E-B055-58320A5045D6}	CLMH102E323MH102E324	118.30	117.22	0.666666667	MH102E323	MH102E324		198	CLMH102E323MH102E324	8	0.0055	0.002991	0.05	0.003591	0.05	0.004258	0.06	0.003591	0.05				
CLMH102E324MH102E321		1998		Existing		MH102E324	MH102E321		T15606	IRWD	PVC	{C50CA485-CE91-4B2E-8E12-5285B8779605}	CLMH102E324MH102E321	117.01	115.12	0.666666667	MH102E324	MH102E321		182	CLMH102E324MH102E321	8	0.0104	0.002991	0.04	0.003591	0.05	0.004258	0.05	0.003591	0.05				
CLMH102E325MH102E327		1998		Existing		MH102E325	MH102E327		15590	IRWD	PVC	{598E8B8F-A21D-47F0-8496-564B6D1584C8}	CLMH102E325MH102E327	109.37	108.58	0.666666667	MH102E325	MH102E327		84	CLMH102E325MH102E327	8	0.0048	0.004697	0.06	0.005638	0.07	0.006683	0.07	0.005638	0.07				
CLMH102E327MH102E016		1998		Existing		MH102E327	MH102E016		15590	IRWD	PVC	{08BAF3F5-6ADD-4AAA-A844-D5AD11FA6F8A}	CLMH102E327MH102E016	108.38	102.87	0.666666667	MH102E327	MH102E016		93	CLMH102E327MH102E016	8	0.0592	0.009709	0.17	0.011655	0.19	0.013817	0.21	0.011655	0.19				
CLMH102E329MH102E018		1998		Existing		MH102E329	MH102E018		15590	IRWD	PVC	{495F8F24-8F31-4B45-9C29-89AE2851E8A8}	CLMH102E329MH102E018	112.20	104.08	0.666666667	MH102E329	MH102E018		145	CLMH102E329MH102E018	8	0.0560	0.003289	0.03	0.003948	0.03	0.004681	0.04	0.003948	0.03				
CLMH102E332MH102E424		1998		Existing		MH102E332	MH102E424		T15831	IRWD	PVC	{E08BCEE8-2999-4DA9-9D3E-2DAEEAD15622}	CLMH102E332MH102E424	108.36	107.97	0.666666667	MH102E332	MH102E424		98	CLMH102E332MH102E424	8	0.0040	0.032154	0.16	0.038607	0.18	0.045764	0.19	0.038607	0.18				
CLMH102E334MH102E426		1998		Existing		MH102E334	MH102E426		T15831	IRWD	PVC	{011AAB57-FFD5-4ED4-BF00-18910A6C5A1E}	CLMH102E334MH102E426	109.53	109.08	0.666666667	MH102E334	MH102E426		111	CLMH102E334MH102E426	8	0.0041	0.003486	0.05	0.004188	0.06	0.004963	0.06	0.004188	0.06				
CLMH102E336MH102E327		1998		Existing		MH102E336	MH102E327		15590	IRWD	PVC	{CBCEAFE0-A005-4DBE-A8B2-7CACCE21A002}	CLMH102E336MH102E327	111.86	108.48	0.666666667	MH102E336	MH102E327		206	CLMH102E336MH102E327	8	0.0164	0.005012	0.05	0.006016	0.05	0.007134	0.06	0.006016	0.05				
CLMH102E337MH102E329		1998		Existing		MH102E337	MH102E329		15590	IRWD	PVC	{1CABAA1F-8D78-4887-8039-6B3B527702S0}	CLMH102E337MH102E329	112.94	112.37	0.666666667	MH102E337	MH102E329		140	CLMH102E337MH102E329	8	0.0046	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E338MH102E337		1998		Existing		MH102E338	MH102E337		15590	IRWD	PVC	{A26AFF62-B4AC-4D9C-B583-CBFD584F2931}	CLMH102E338MH102E337	113.80	113.15	0.666666667	MH102E338	MH102E337		51	CLMH102E338MH102E337	8	0.0127	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E342MH102E435		1998		Existing		MH102E342	MH102E435		15590	IRWD	PVC	{CE797D50-558B-448A-9667-7E958D3804FA}	CLMH102E342MH102E435	115.18	115.02	0.666666667	MH102E342	MH102E435		22	CLMH102E342MH102E435	8	0.0073	0.001390	0.03	0.001509	0.03	0.001789	0.03	0.001509	0.03				
CLMH102E346MH102E014		1998		Existing	assumed Mannings N	MH102E346	MH102E014		A00862B	IRWD	VCP	{8C04B03C-0E6C-4475-9414-2B1C710582BC}	CLMH102E346MH102E014	101.19	99.02	0.666666667	MH102E346	MH102E014		124	CLMH102E346MH102E014	8	0.0151	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E347MH102E346		1999		Existing	assumed Mannings N	MH102E347	MH102E346		A00862B	IRWD	VCP	{F6E8DB20-86E4-4151-8DE5-2009E57852C5}	CLMH102E347MH102E346	108.23	101.40	0.666666667	MH102E347	MH102E346		158	CLMH102E347MH102E346	8	0.0434	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E348MH102E349		1999		Existing	assumed Mannings N	MH102E348	MH102E349		A00862B	IRWD	VCP	{3F1FDE67-3987-492F-BD77-093227D38264}	CLMH102E348MH102E349	105.95	102.87	0.666666667	MH102E348	MH102E349		190	CLMH102E348MH102E349	8	0.0162	0.001059	0.02	0.001130	0.02	0.001341	0.03	0.001130	0.02				
CLMH102E349MH102E012	56'FROM E-W IS A	1999		Existing	assumed Mannings N	MH102E349	MH102E012		A00862B	IRWD	VCP	{CAD771AC-8372-48E0-A48D-ACA27C151EC5}	CLMH102E349MH102E012	102.66	101.36	0.666666667	MH102E349	MH102E012		156	CLMH102E349MH102E012	8	0.0083	0.001059	0.22	0.001130	0.23	0.001341	0.26	0.001130	0.23				
CLMH102E351MH102E352		1998		Existing		MH102E351	MH102E352		A00862B	IRWD	VCP	{2A49FA9F-AF9D-4038-A319-71C3537AC941}	CLMH102E351MH102E352	105.16	103.31	0.666666667	MH102E351	MH102E352		412	CLMH102E351MH102E352	8	0.0045	0.018995	0.13	0.022810	0.13	0.026404	0.14	0.022810	0.13				
CLMH102E352MH102E012	56' FROM S-N IS A	1999		Existing	assumed Mannings N	MH102E352	MH102E012		A00862B	IRWD	VCP	{801AEC06-95D8-469D-AC82-EC2E0CCC2931}	CLMH102E352MH102E012	103.12	101.50	0.666666667	MH102E352	MH102E012		320	CLMH102E352MH102E012	8	0.0051	0.019829	0.15	0.021171	0.17	0.025099	0.19	0.021171	0.17				
CLMH102E355MH102E438		1998		Existing		MH102E355	MH102E438		A00912	IRWD	PVC	{47214CE0-FFF8-4BDD-B3F0-21A33EF71758}	CLMH102E355MH102E438	103.75	102.50	0.666666667	MH102E355	MH102E438		130	CLMH102E355MH102E438	8	0.0096	0.045897	0.16	0.055021	0.17	0.065230	0.19	0.055021	0.17				
CLMH102E356MH102E355		1999		Existing	assumed Mannings N	MH102E356	MH102E355		A00912	IRWD	PVC	{D2027C93-E2CB-46E6-B189-7B77A811310C}	CLMH102E356MH102E355	114.36	103.94	0.666666667	MH102E356	MH102E355		212	CLMH102E356MH102E355	8	0.0492	0.003369	0.03	0.004044	0.03	0.004794	0.04	0.004044	0.03				
CLMH102E357MH102E359		1999		Existing	assumed Mannings N	MH102E357	MH102E359		A00912	IRWD	PVC	{D8A03CBD-330F-42EE-8938-35F2312E68C1}	CLMH102E357MH102E359	104.62	104.52	0.666666667	MH102E357	MH102E359		17	CLMH102E357MH102E359	8	0.0059	0.016621	0.11	0.019955	0.12	0.023658	0.13	0.019955	0.12				
CLMH102E358MH102E357		1999		Existing	assumed Mannings N	MH102E358	MH102E357		A00912	IRWD	PVC	{E3FD8EC2-6126-4B2A-A4E8-2AD1F3C9DB60}	CLMH102E358MH102E357	104.91	104.81	0.666666667	MH102E358	MH102E357		28	CLMH102E358MH102E357	8	0.0036	0.016621	0.12	0.019955	0.13	0.023658	0.14	0.019955	0.13				
CLMH102E359MH102E355		1999		Existing	assumed Mannings N	MH102E359	MH102E355		A00912	IRWD	PVC	{0B99CCFB-1B7E-416A-8C3A-D7158E95F3E8}	CLMH102E359MH102E355	104.33	103.75	0.666666667	MH102E359	MH102E355		109	CLMH102E359MH102E355	8	0.0053	0.040685	0.17	0.048765	0.18	0.057814	0.20	0.048765	0.18				
CLMH102E360MH102E358		1999		Existing	assumed Mannings N	MH102E360	MH102E358		A00912	IRWD	PVC	{F3365E3D-1B4D-473B-A7F1-90FBECC468DE}	CLMH102E360MH102E358	105.81	105.12	0.666666667	MH102E360	MH102E358		180	CLMH102E360MH102E358	8	0.0038	0.015274	0.11	0.018338	0.12	0.021741	0.13	0.018338	0.12				
CLMH102E361MH102E360		1999		Existing	assumed Mannings N	MH102E361	MH102E360		A00912	IRWD	PVC	{A6FF3A76-610A-4B59-ACD3-6C1431152183}	CLMH102E361MH102E360	115.93	106.01	0.666666667	MH102E361	MH102E360		198	CLMH102E361MH102E360	8	0.0501	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E362MH102E363		1999		Existing	assumed Mannings N	MH102E362	MH102E363		A00912	IRWD	PVC	{A99A5FF8-79A8-448E-BA5A-B7D752E95314}	CLMH102E362MH102E363	114.11	105.62	0.666666667	MH102E362	MH102E363		174	CLMH102E362MH102E363	8	0.0488	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH102E363MH102E359		1999		Existing	assumed Mannings N	MH102E363	MH102E359		A00912	IRWD	PVC	{900C52C6-C854-48DD-B3F0-A0741CF3AA85}	CLMH102E363MH102E359	105.41	104.52	0.666666667	MH102E363	MH102E359		223

CLMH102N012MH102N011		1984			Existing		MH102N012	MH102N011		003	IRWD	VCP	{76586B4F-7A44-431B-9D43-865443C2ABF9}	CLMH102N012MH102N011	94.38	85.50	0.666666667	MH102N012	MH102N011			271	CLMH102N012MH102N011	8	0.0328	0.100534	0.18	0.107461	0.19	0.127399	0.22	0.107461	0.19
CLMH102N013MH102N012		1984			Existing		MH102N013	MH102N012		003	IRWD	VCP	{3B0A353D-57B5-4E75-A5ED-50351243EB5D}	CLMH102N013MH102N012	95.56	94.48	0.666666667	MH102N013	MH102N012			271	CLMH102N013MH102N012	8	0.0040	0.100534	0.29	0.107461	0.30	0.127399	0.33	0.107461	0.30
CLMH102N014MH102N013		1984			Existing		MH102N014	MH102N013		003	IRWD	VCP	{5452A2A5-F8B9-6960-AB9B-98E97BF94E68}	CLMH102N014MH102N013	96.75	95.66	0.666666667	MH102N014	MH102N013			271	CLMH102N014MH102N013	8	0.0040	0.100535	0.29	0.107462	0.30	0.127400	0.33	0.107462	0.30
CLMH102N015MH102N014		1984			Existing		MH102N015	MH102N014		003	IRWD	VCP	{C505CDA4-8939-4BBC-A718-A85A57A68D51}	CLMH102N015MH102N014	98.00	96.84	0.666666667	MH102N015	MH102N014			280	CLMH102N015MH102N014	8	0.0041	0.052396	0.21	0.056064	0.22	0.066465	0.24	0.056064	0.22
CLMH102N016MH102N015		1984			Existing		MH102N016	MH102N015		003	IRWD	VCP	{A28BC7AA-525D-4C8F-81AA-B0012816 1F3E}	CLMH102N016MH102N015	99.27	98.09	0.666666667	MH102N016	MH102N015			296	CLMH102N016MH102N015	8	0.0040	0.052398	0.21	0.056064	0.22	0.066465	0.24	0.056064	0.22
CLMH102N017MH087E061		1977			Existing		MH087E061	MH087E061		T09885	IRWD	VCP	{A71B5CDE-3E25-4089-9F68-380FBB4782F1}	CLMH102N017MH087E061	98.44	95.32	0.666666667	MH102N017	MH087E061			230	CLMH102N017MH087E061	8	0.0136	0.006230	0.06	0.007480	0.06	0.008869	0.07	0.007480	0.06
CLMH102N018MH102N017		1977			Existing		MH102N018	MH102N017		T09885	IRWD	VCP	{7E74CC1A-7D1D-E942-A6A9-194B7162CCCE}	CLMH102N018MH102N017	100.73	98.63	0.666666667	MH102N018	MH102N017			229	CLMH102N018MH102N017	8	0.0092	0.002924	0.04	0.003512	0.05	0.004164	0.05	0.003512	0.05
CLMH102N019MH102N017		1977			Existing		MH102N019	MH102N017		T09885	IRWD	VCP	{A59CB3CB-30B6-4897-908B-F7B6E602A04F}	CLMH102N019MH102N017	100.79	98.63	0.666666667	MH102N019	MH102N017			167	CLMH102N019MH102N017	8	0.0129	0.003306	0.04	0.003968	0.05	0.004705	0.05	0.003968	0.05
CLMH102N023MH087E136		1975			Existing		MH102N023	MH087E136	ERROR 23	A00093	IRWD	VCP	{C746AEA9-D6DB-4700-8FCD-7D00DDA8CBED}	CLMH102N023MH087E136	93.39	92.89	0.666666667	MH102N023	MH087E136			396	CLMH102N023MH087E136	8	0.0013	0.104259	0.39	0.123893	0.43	0.146344	0.47	0.123893	0.43
CLMH102N024MH102N023		1975			Existing		MH102N024	MH102N023		093	IRWD	VCP	{A0E226E6-046C-4481-B75B-0155BF982A07}	CLMH102N024MH102N023	95.66	93.49	0.666666667	MH102N024	MH102N023			396	CLMH102N024MH102N023	8	0.0055	0.104256	0.33	0.123917	0.36	0.146361	0.40	0.123917	0.36
CLMH102N025MH102N024		1975			Existing		MH102N025	MH102N024		093	IRWD	VCP	{86A9A4A2-ED4B-4805-9187-6A90ADF168CA}	CLMH102N025MH102N024	97.19	95.76	0.666666667	MH102N025	MH102N024			261	CLMH102N025MH102N024	8	0.0055	0.076002	0.24	0.091101	0.26	0.108008	0.29	0.091101	0.26
CLMH102N026MH102N025		1975			Existing		MH102N026	MH102N025		093	IRWD	VCP	{694DCCFB-A2BD-4721-8E3F-DF8992C7AEA5}	CLMH102N026MH102N025	97.93	97.29	0.666666667	MH102N026	MH102N025			131	CLMH102N026MH102N025	8	0.0049	0.076004	0.24	0.091102	0.27	0.108008	0.29	0.091102	0.27
CLMH102N027MH102N026		1975			Existing		MH102N027	MH102N026		093	IRWD	VCP	{F337FBC3-92AC-415C-9C0B-C0E2AD636EA5}	CLMH102N027MH102N026	100.20	98.02	0.666666667	MH102N027	MH102N026			396	CLMH102N027MH102N026	8	0.0055	0.076004	0.24	0.091102	0.26	0.108009	0.29	0.091102	0.26
CLMH102N028MH102N027		1975			Existing		MH102N028	MH102N027		093	IRWD	VCP	{9E78C660-FCE3-4E41-8C68-5E547D9FDD59}	CLMH102N028MH102N027	102.48	100.30	0.666666667	MH102N028	MH102N027			396	CLMH102N028MH102N027	8	0.0055	0.076006	0.24	0.091104	0.26	0.108010	0.29	0.091104	0.26
CLMH102N031MH102N032		1980			Existing		MH102N031	MH102N032		T09662	IRWD	VCP	{36034CCE-70CA-47A0-9021-174C4F007FC2}	CLMH102N031MH102N032	101.50	96.20	0.500000000	MH102N031	MH102N032			244	CLMH102N031MH102N032	6	0.0218	0.002905	0.05	0.003489	0.06	0.004134	0.06	0.003489	0.06
CLMH102N032MH102N005		1980			Existing		MH102N032	MH102N005		T09662	IRWD	VCP	{4BD0C550-19E7-4033-954A-F463B48592E3}	CLMH102N032MH102N005	96.00	94.90	0.500000000	MH102N032	MH102N005			138	CLMH102N032MH102N005	6	0.0080	0.009658	0.12	0.011593	0.13	0.013744	0.14	0.011593	0.13
CLMH102N035MH102N036		1980			Existing		MH102N035	MH102N036		T09662	IRWD	VCP	{710F2404-A709-4C59-9E4D-708E71E46A37}	CLMH102N035MH102N036	99.19	97.40	0.500000000	MH102N035	MH102N036			69	CLMH102N035MH102N036	6	0.0259	0.002966	0.05	0.003559	0.06	0.004222	0.06	0.003559	0.06
CLMH102N036MH102N032		1980			Existing		MH102N036	MH102N032		T09662	IRWD	VCP	{E9A78A92-BAD4-480A-BA63-2A19498D8AE6}	CLMH102N036MH102N032	97.19	96.19	0.666666667	MH102N036	MH102N032			174	CLMH102N036MH102N032	8	0.0057	0.004469	0.06	0.005363	0.06	0.006360	0.07	0.005363	0.06
CLMH102N038MH102N003		1978			Existing		MH102N038	MH102N003		T09884	IRWD	VCP	{B01918DE-E673-4447-9EAC-4D0D53CC53DE}	CLMH102N038MH102N003	91.31	91.15	0.666666667	MH102N038	MH102N003			44	CLMH102N038MH102N003	8	0.0036	0.008033	0.08	0.009644	0.09	0.011435	0.10	0.009644	0.09
CLMH102N039MH102N038		1978			Existing		MH102N039	MH102N038		T09884	IRWD	VCP	{D9C39A9C-8B3E-4F60-9D9E-2E488C242D3C}	CLMH102N039MH102N038	93.66	91.51	0.666666667	MH102N039	MH102N038			89	CLMH102N039MH102N038	8	0.0242	0.006089	0.05	0.007311	0.06	0.008668	0.06	0.007311	0.06
CLMH102N041MH102N039		1978			Existing		MH102N041	MH102N039		T09884	IRWD	VCP	{AFF69220-DE33-4E31-A587-E1B9E107B1BE}	CLMH102N041MH102N039	95.49	93.87	0.666666667	MH102N041	MH102N039			79	CLMH102N041MH102N039	8	0.0205	0.004286	0.04	0.005147	0.05	0.006102	0.05	0.005147	0.05
CLMH102N042MH102N041		1978			Existing		MH102N042	MH102N041		T09884	IRWD	VCP	{9D5A290F-D5F9-42E2-96DD-A5477322534Z}	CLMH102N042MH102N041	97.37	95.69	0.666666667	MH102N042	MH102N041			186	CLMH102N042MH102N041	8	0.0090	0.003866	0.05	0.004643	0.06	0.005504	0.06	0.004643	0.06
CLMH102N045MH102N042		1978			Existing		MH102N045	MH102N042		T09884	IRWD	VCP	{839FC9C9-7A0E-438B-BA9D-DCCE65A6B81F}	CLMH102N045MH102N042	99.20	97.37	0.666666667	MH102N045	MH102N042			295	CLMH102N045MH102N042	8	0.0042	0.001623	0.04	0.001949	0.05	0.002310	0.05	0.001949	0.05
CLMH102N046MH102N024		1978			Existing		MH102N046	MH102N024		T09884	IRWD	VCP	{FE7DC42C-56AB-43C2-9291-627DD1577806}	CLMH102N046MH102N024	96.36	95.86	0.666666667	MH102N046	MH102N024			126	CLMH102N046MH102N024	8	0.0040	0.009764	0.09	0.011264	0.10	0.012799	0.11	0.011264	0.10
CLMH102N048MH102N002		1978			Existing		MH102N048	MH102N002		T09884	IRWD	VCP	{04909BC82-6B44-4ADF-85F6-731ED4938TC5}	CLMH102N048MH102N002	89.23	88.90	0.666666667	MH102N048	MH102N002			39	CLMH102N048MH102N002	8	0.0085	0.006539	0.07	0.008311	0.08	0.010409	0.08	0.008311	0.08
CLMH102N049MH102N001		1978			Existing		MH102N049	MH102N001		T10163	IRWD	VCP	{2491868E-CFC2-4F7F-B791-C15589119929}	CLMH102N049MH102N001	85.87	85.80	0.500000000	MH102N049	MH102N001			106	CLMH102N049MH102N001	6	0.0039	0.004528	0.09	0.005435	0.10	0.006444	0.11	0.005435	0.10
CLMH102N051MH102N071		1982			Existing		MH102N051	MH102N071		T11549A	IRWD	PVC	{A01FCA6A-D392-46FC-9A62-2D815E40B1CF}	CLMH102N051MH102N071	99.75	99.62	0.666666667	MH102N051	MH102N071			38	CLMH102N051MH102N071	8	0.0034	0.028844	0.15	0.034568	0.17	0.040980	0.18	0.034568	0.17
CLMH102N052MH102N051		1982			Existing		MH102N052	MH102N051		T11549A	IRWD	PVC	{A1EA0F61-D51B-604D-863C-8F50C2D4BE3F}	CLMH102N052MH102N051	101.77	99.84	0.666666667	MH102N052	MH102N051			170	CLMH102N052MH102N051	8	0.0114	0.028844	0.12	0.034568	0.13	0.040980	0.15	0.034568	0.13
CLMH102N053MH102N052		1982			Existing		MH102N053	MH102N052		T11549A	IRWD	PVC	{E9468270-0FAB-4733-99F7-BB61C85A6745}	CLMH102N053MH102N052	102.09	101.77	0.666666667	MH102N053	MH102N052			182	CLMH102N053MH102N052	8	0.0040	0.021852	0.13	0.026174	0.14	0.031028	0.16	0.026174	0.14
CLMH102N054MH102N053		1982			Existing		MH102N054	MH102N053		T11549A	IRWD	PVC	{EBADD79C-5D2D-4077-8069-9859CBFAC55D}	CLMH102N054MH102N053	102.70	102.19	0.666666667	MH102N054	MH102N053			154	CLMH102N054MH102N053	8	0.0033	0.016017	0.12	0.019220	0.13	0.022784	0.14	0.019220	0.13
CLMH102N055MH102N054		1982			Existing		MH102N055	MH102N054		T11549A	IRWD	PVC	{40BF4DAC-3A6A-410A-9918-689E6DD5D60}	CLMH102N055MH102N054	103.09	102.80	0.666666667	MH102N055	MH102N054			99	CLMH102N055MH102N054	8	0.0029	0.007203	0.09	0.008638	0.09	0.010239	0.10	0.008638	0.09
CLMH102N056MH102N055		1982			Existing		MH102N056	MH102N055		T11549A	IRWD	PVC	{91438686-98B9-435A-809E-BE459900A738}	CLMH102N056MH102N055	103.22	103.19	0.666666667	MH102N056	MH102N055			207	CLMH102N056MH102N055	8	0.0011	0.007203	0.09	0.008638	0.10	0.010239	0.11	0.008638	0.10
CLMH102N057MH102N056		1982			Existing		MH102N057	MH102N056		T11549A	IRWD	PVC	{1A20F100-2769-47EE-94AA-A1C82D817B69}	CLMH102N057MH102N056	104.45	103.31	0.666666667	MH102N057	MH102N056			149	CLMH102N057MH102N056	8	0.0077	0.007203	0.07	0.008638	0.08	0.010239	0.08	0.008638	0.08
CLMH102N058MH102N057		1982			Existing		MH102N058	MH102N057		T11549A	IRWD	PVC	{9A49D271-27A8-405D-BA26-508C0DDAA4AA}	CLMH102N058MH102N057	104.81	104.55	0.666666667	MH102N058	MH102N057			30	CLMH102N058MH102N057	8	0.0087	0.002785	0.04	0.003344	0.05	0.003963	0.05	0.003344	0.05
CLMH102N059MH102N054		1982			Existing		MH102N059	MH102N054		T11549A	IRWD	PVC	{D48F3218-FF10-436D-BC09-624A955686A}	CLMH102N059MH102N054	104.44	102.80	0.666666667	MH102N059	MH102N054			121	CLMH102N059MH102N054	8	0.0136	0.008814	0.07	0.010582	0.07	0.012546	0.08	0.010582	0.07
CLMH102N060MH102N053		1982			Existing		MH102N060	MH102N053		T11549A	IRWD	PVC	{AF7C0DE8-22CB-4CCE-BA32-5E0D5C3761391}	CLMH102N060MH102N053	102.72	102.19	0.666666667	MH102N060	MH102N053			156	CLMH102N060MH102N053	8	0.0043	0.005835	0.07	0.006994	0.08	0.008244	0.09	0.006954	0.08
CLMH102N061MH102N058		1982			Existing		MH102N061	MH102N058		T11549A	IRWD	PVC	{18C87C63-C492-4E3E-A543-8CF9C79C4CDB}	CLMH102N061MH102N058	105.88	104.91	0.666666667	MH102N061	MH102N058			90	CLMH102N061MH102N058	8	0.0108	0.002785	0.04	0.003344	0.05	0.003963	0.05	0.003344	0.05
CLMH102N062MH102N059		1982			Existing		MH102N062	MH102N059		T11549A	IRWD	PVC	{EE1BA974-157E-47A4-B72C-19480751 0ED5}	CLMH102N062MH102N059	104.81	104.54	0.666666667	MH102N062	MH102N059			86	CLMH102N062MH102N059	8	0.0031	0.005749	0.07	0.006903	0.08	0.008183	0.09	0.006903	0.08
CLMH102N063MH102N052		1984			Existing		MH102N063	MH102N052		T11549A	IRWD	PVC	{4655F706-6305-48AC-8125-503618SEEEA2}	CLMH102N063MH102N052	102.11	101.87	0.666666667	MH102N063	MH102N052			72	CLMH102N063MH102N052	8	0.0033	0.006992	0.08	0.008394	0.09	0.009952	0.09	0.008394	0.09
CLMH102N060MH102N053		1982			Existing		MH102N060	MH102N053		T11549A	IRWD	PVC	{2AF56585-FC1F-4FC0-88BE-B377B47138E6}	CLMH102N060MH102N053	103.19	102.81	0.666666667	MH102N060	MH102N053			123	CLMH102N060MH102N053	8	0.0033	0.001182	0.03	0.001419	0.04	0.001681	0.04	0.001419	0.04
CLMH102N065MH087E114		1982			Existing		MH087E114	A00395	IRWD	PVC	{609EE1C6-22E8-4F3C-AB23-6A1132C9AD7}	CLMH102N065MH087E114	95.60	94.30	0.666666667	MH102N065	MH087E114			337	CLMH102N065MH087E114	8	0.0039	0.001059	0.03	0.001130	0.03	0.001341	0.03	0.001130	0.03
CLMH102N066MH102N065		1982			Existing		MH102N066	MH102N065		A00395	IRWD	PVC	{98665299-3253-42F0-956E-0BCBAFE14AB8}	CLMH102N066MH102N065	96.20	95.79	0.666666667	MH102N066	MH102N065			110	CLMH102N066MH102N065	8	0.0037	0.001059	0.03	0.001130	0.03	0.001341	0.03	0.001130	0.03
CLMH102N069MH102W121		1982			Existing		MH102N069	MH102W121		T11626	IRWD	PVC	{FCA55CCC-B2CD-499C-8329-F8C2623A6694}	CLMH102N069MH102W121	102.94	101.63	0.666666667	MH102N069	MH102W121			241	CLMH102N069MH102W121	8	0.0040	0.003306	0.05	0.003967	0.06	0.004705	0.06	0.003967	0.06
CLMH102N071MH102N016		1982			Existing		MH102N071	MH102N016		T11549A	IRWD	PVC	{5C550CD5-2E26-403B-BF7D-6E94B7E74A00}	CLMH102N071MH102N016	99.52	99.37	0.666666667	MH102N071	MH102N016			40	CLMH102N071MH102N016	8	0.0038	0.028844	0.15	0.034568	0.17	0.040980	0.18	0.034568	0.17
CLMH102N072MH102N057		0			Existing		MH102N072	MH102N057			IRWD	PVC	{5373F858-FDC1-4FCF-B892-5B0883211285}	CLMH102N072MH102N057	106.73	104.55	0.666666667	MH102N072	MH102N057			108	CLMH102N072MH102N057	8	0.0202	0.004418	0.05	0.005294	0.05	0.006275	0.05	0.005294	0.05
CLMH102N074MH102N011		1984			Existing		MH102N074	MH102N011		T11978	IRWD	PVC	{15F139CC-9913-451A-B9F8-3444D0B0D5C3}	CLMH102N074MH102N011	85.95	85.66	0.666666667	MH102N074	MH102N011			75	CLMH102N074MH102N011	8	0.0039	0.017616	0.12	0.021130	0.13	0.025057	0.14	0.021130	0.13
CLMH102N075MH102N074		1984			Existing		MH102N075	MH102N074		T11978	IRWD	PVC	{837E938F-3581-435C-97FA-FF727639139}	CLMH102N075MH102N074	86.34	86.05	0.666666667	MH102N075	MH102N074			77	CLMH102N075MH102N074	8	0.0038	0.016177	0.12	0.019399	0.13	0.023005	0.14	0.019399	0.13
CLMH102N076MH102N075		1984			Existing		MH102N076	MH102N075		T11978	IRWD	PVC	{A25F4B57-A457-499A-A66C-E66D0393FED}	CLMH102N076MH102N075	86.81	86.44	0.666666667	MH102N076	MH102N075			96	CLMH102N076MH102N075	8	0.0039	0.016179	0.11	0.019400	0.13	0.023005	0.14	0.019400	0.13
CLMH102N077MH102N076		1984			Existing		MH102N077	MH102N076		T11978	IRWD	PVC	{8FC085B5-77B8-4862-958F-413BC4786D30}	CLMH102N077MH102N076	87.29	86.91	0.666666667	MH102N077	MH102N076			96	CLMH102N077MH102N076	8	0.0040	0.016182	0.11	0.019402	0.13	0.023006	0.14	0.019402	0.13
CLMH102N078MH102N077		1984			Existing		MH102N078	MH102N077		T11978	IRWD	PVC	{0E5542B0-4095-4057-A80A-90A2A2ED4B20}	CLMH102N078MH102N077	88.15	87.38	0.666666667	MH102N078	MH102N077			195	CLMH102N078MH102N077	8	0.0039	0.004946	0.06	0.005909	0.07	0.007009	0.08	0.005909	0.07
CLMH102N079MH102N077		1984			Existing		MH102N079	MH102N077		T11978	IRWD	PVC	{9E5B63F3-D51E-4558-9ABD-A7BD1FBE64BA}	CLMH102N079MH102N077	89.86	87.48	0.666666667	MH102N079	MH102N077			208	CLMH102N079MH102N077	8	0.0114	0.008934	0.07	0.010727	0.08	0.012719	0.08	0.010727	0.08
CLMH102N081MH102W246		1984			Existing		MH102N081	MH102W246		T12090	IRWD	PVC	{D7B31552-C7FA-4A80-B722-A601A1707DB2}	CLMH102N081MH102W246	103.31	99.88	0.666666667	MH102N081	MH102W246			400	CLMH102N081MH102W246	8	0.0086	0.001683	0.03	0.002021	0.04	0.002395	0.04	0.002021	0.04
CLMH102N082MH102N081		1986			Existing		MH102N082	MH102N081		T12090	IRWD	PVC	{F11F9B38-E2E8-4AAA-98EF-A456D69C852E}	CLMH102N082MH102N081	104.73	103.51	0.666666667	MH102N082	MH102N081			239	CLMH102N082MH102N081	8	0.0051	0.001683	0.04	0.002021	0.04	0.002395	0.04	0.002021	0.04
CLMH102N083MH102N024		1984			Existing		MH102N083	MH102N024		A00610	IRWD	PVC	{597A3A28-4090-435B-AF93-FD790FB3C96}	CLMH102N083MH102N024	97.06	95.86	0.666666667	MH102N083	MH102N024			305	CLMH102N083MH102N024	8	0.0039	0.019388	0.13	0.022252	0.14	0.026394	0.15	0.022252	0.14
CLMH102N084MH102N083		1989			Existing		MH102N084	MH102N083		A00610	IRWD	PVC	{37717272-AA7B-4973-B251-3F9C53A40ACF}	CLMH102N084MH102N083	98.26	97.16	0.666666667	MH102N084	MH102N083			277	CLMH102N084MH102N083	8	0.0040	0.017377	0.12	0.020295	0.13	0.024055	0.14	0.020295	0.13
CLMH102N085MH102N084		1989			Existing		MH102N085	MH102N084		A00610	IRWD	PVC	{4DCCC1BA-9FAE-4F06-95B0-0E7241BEE379}	CLMH102N085MH102N084	98.93	98.36	0.666666667	MH102N085	MH102N084			146	CLMH102N085MH102N084	8	0.0039	0.016037	0.12	0.018902	0.13	0.022399	0.14	0.018902	0.13
CLMH102N086MH102N085		1989			Existing		MH102N086	MH102N085		A00610	IRWD	PVC	{90B5D93E-53C1-4D10-B145-969A7DA1A3A1}	CLMH102N086MH102N085	99.76	99.02	0.666666667	MH102N086	MH102N085			188	CLMH102N086MH102N085	8	0.0039	0.016112	0.12	0.018972	0.13	0.022481	0.14	0.018972	0.13
CLMH102N087MH102N016		1989			Existing		MH102N087	MH102N016		A00684	IRWD	VCP	{4623AA97-526D-45F2-BBD8-C3BF8E5F2DAA}	CLMH102N087MH102N016	99.98	99.55	0.666666667	MH102N087	MH102N016			110	CLMH102N087MH102N016	8	0.0039	0.033079	0.17	0.035316	0.17	0.041870	0.19	0.035316	0.17
CLMH102N088MH102N087		1989			Existing		MH102N088	MH102N087		A00684	IRWD	VCP	{38FA145C-8C7F-463E-8D67-30DF8960CB85}	CLMH102N088MH102N087	100.70	100.08	0.666666667	MH102N088	MH102N087			162	CLMH102N088MH102N087	8	0.0038	0.033079	0.17	0.035316	0.17	0.041870	0.19	0.035316	0.17
CLMH102N089MH102N088		1989			Existing		MH102N089	MH102N088		A00684	IRWD	VCP	{ECCF557E-F998-4F18-92B2-492D636C679F}	CLMH102N089MH102N088	102.88	100.91	0.666666667	MH102N089	MH102N088			70	CLMH102N089MH102N088	8	0.0281	0.003289	0.04	0.003512	0.04	0.004165	0.04	0.003512	0.04
CLMH102N090MH102N088		1989			Existing		MH102N090	MH102N088		A00684	IRWD	VCP	{56D90BE4-64A2-461F-9703-A5047797F915}	CLMH102N090MH102N088	101.97	100.91	0.666666667	MH102N090	MH102N088			269	CLMH102N090MH102N088	8	0.0039	0.009014	0.09	0.009624	0.09	0.011408	0.10	0.009624	0.09
CLMH102N091MH102N161		1989			Existing		MH102N091	MH102N161		A00684	IRWD	VCP	{A46AC05D-4E7E-40AD-9A41-E5F8C08C427A}	CLMH102N091MH102N161	102.92	102.37	0.666666667	MH102N091	MH102N161			95	CLMH102N091MH102N161	8	0.0058	0.009014	0.09	0.009624	0.09	0.011408	0.10	0.009624	0.09
CLMH102N092MH102N091		1989			Existing		MH102N092	MH102N091		A00684	IRWD	VCP	{AAA735F3-A12A-4328-94A3-95FBFEAD4788}	CLMH102N092MH102N091	104.34	103.01	0.666666667	MH102N092	MH102N091			137	CLMH102N092MH102N091	8	0.0097	0.009014	0.08	0.009624	0.08	0.011408	0.08	0.009624	0.08
CLMH102N148MH102N078		1984			Existing		MH102N148	MH102N078		T11978	IRWD	PVC	{E804A1A1-136D-459F-8F93-D678DFC143D7}	CLMH102N148MH102N078	88.90	88.25	0.666666667	MH102N148	MH102N078			166	CLMH102N148MH102N078	8	0.0039	0.004950	0.06	0.005912	0.07	0.007011	0.08	0.005912	0.07
CLMH102N151MH102N152		1994			Existing		MH102N151	MH102N152		A00799	IRWD	VCP	{5EACE75C-EE35-4F2D-BFDE-5BD9569631000}	CLMH102N151MH102N152	99.44	98.93	0.666666667	MH102N151	MH102N152			135	CLMH102N151MH102N152	8	0.0038	0.013902	0.11	0.014843	0.11	0.017597	0.12	0.014843	0.11
CLMH102N152MH102N014		1994			Existing		MH102N152	MH102N014		A00799	IRWD	VCP	{2DEDD95E-912D-4D66-BED5-F4DFF7F5C3E0}	CLMH102N152MH102N014	98.73	98.15	0.666666667	MH102N152	MH102N014			150	CLMH102N152MH102N014	8	0.0039	0.039838	0.18	0.042532	0.19	0.050425	0.21	0.042532	0.19
CLMH102N153MH102N086		1995			Existing		MH102N153	MH102N086		86040	IRWD	VCP	{5591CC11-984A-4E12-B40F-558B1A85A281}	CLMH102N153MH102N086	98.05	96.94	0.666666667	MH102N153	MH102N086			279	CLMH102N153MH102N086	8	0.0040	0.048152	0.20	0.051409	0.21	0.060949	0.23	0.051409	0.21
CLMH102N154MH102N086		1995			Existing		MH102N154	MH102N086		86040	IRWD	VCP	{D5188089-1143-434B-B61E-2BD363D02B72}	CLMH102N154MH102N086	100.16	99.87	0.666666667	MH102N154	MH102N086			78	CLMH102N154MH102N086	8	0.0037	0.013877	0.11	0.016626	0.12	0.019709	0.13	0.016626	0.12
CLMH102N155MH102N154		1995			Existing		MH102N155	MH102N154		86040	IRWD	VCP	{8B4656E3-DB43-4C7F-AAAA-B7F3482CD5A5}	CLMH102N155MH102N154	100.70	100.26	0.666666667	MH102N155	MH102N154			114	CLMH102N155MH102N154	8	0.0039	0.013877	0.11	0.016626	0.12	0.019709	0.13	0.016626	0.12
CLMH102N156MH102N157		2004			Existing	assumed Mannings N	MH102N156	MH102N157		A000718	IRWD	PVC	{9A350C5F-3FB4-4329-8F86-0800C2F489BD}	CLMH102N156MH102N157	95.98	95.22	0.666666667	MH102N156	MH102N157			190	CLMH102N156MH102N157	8	0.0040	0.000045	0.01	0.000056	0.01	0.000068	0.01	0.000056	0.01
CLMH102N157MH102N158		2004			Existing	assumed Mannings N	MH102N157	MH102N158		A000718	IRWD	PVC	{F7987A9F-BEE8-4291-B705-8396848A1030}	CLMH102N157MH102N158	95.02	93.43	0.666666667	MH102N157	MH102N158			397	CLMH102N157MH102N158	8	0.0040	0.001330	0.03	0.001420	0.03	0.001682	0.04	0.001420	0.03
CLMH102N158MH087E136		2004			Existing	assumed Mannings N	MH102N158	MH087E136	ERROR 23	A000718	IRWD	PVC	{3406CC86-A0CA-44C5-A7B9-57DA8FDFA2CA}	CLMH102N158MH087E136	93.23	92.89	0.666666667	MH102N158	MH087E136			84	CLMH102N158MH087E136	8	0.0041	0.001938	0.15	0.002069	0.16	0.002452	0.18	0.002069	0.16
CLMH102N161MH102N090		1989			Existing		MH102N161	MH102N090		A00684	IRWD	VCP	{90643CBE-5D6F-4441-9A86-CFBA8E33F0F5}	CLMH102N161MH102N090	102.37	102.07	0.666666667

| | | |

| | | |

| | | |

CLMH103W048MH103W047		1978		Existing		MH103W047	MH103W047		T09658	IRWD	VCP	{0E7D47A1-E279-4AAF-BA81-FC10D35FECD1}	CLMH103W148MH103W047	110.23	109.83	0.500000000	MH103W048	MH103W047			61	CLMH103W048MH103W047	6	0.0066	0.001222	0.04	0.001466	0.05	0.001739	0.05	0.001466	0.05
CLMH103W049MH103W050		1978		Existing		MH103W049	MH103W050		T09658	IRWD	VCP	{FB293D3D-AE56-4CEB-9747-428E85BAF9F8}	CLMH103W049MH103W050	101.87	101.12	0.500000000	MH103W049	MH103W050			99	CLMH103W049MH103W050	6	0.0076	0.003165	0.07	0.003799	0.08	0.004506	0.08	0.003799	0.08
CLMH103W050MH103W015		1978		Existing		MH103W050	MH103W015		T09658	IRWD	VCP	{7F37ADBE-AAC1-4306-B8FE-C08E671CF060}	CLMH103W050MH103W015	100.91	100.43	0.666666667	MH103W050	MH103W015			127	CLMH103W050MH103W015	8	0.0038	0.008174	0.09	0.009811	0.09	0.011635	0.10	0.009811	0.09
CLMH103W051MH103W050		1978		Existing		MH103W051	MH103W050		T09658	IRWD	VCP	{37361DF5-AB2D-46FB-B897-F2AEF6032F5E}	CLMH103W051MH103W050	101.31	101.01	0.500000000	MH103W051	MH103W050			59	CLMH103W051MH103W050	6	0.0051	0.005008	0.09	0.006012	0.10	0.007130	0.11	0.006012	0.10
CLMH103W052MH103W051		1978		Existing		MH103W052	MH103W051		T09658	IRWD	VCP	{A0858583-D0F1-4AC5-B3D1-C8A614433AA6}	CLMH103W052MH103W051	102.58	101.51	0.500000000	MH103W052	MH103W051			197	CLMH103W052MH103W051	6	0.0054	0.003065	0.07	0.003679	0.08	0.004363	0.09	0.003679	0.08
CLMH103W053MH103W054		1978		Existing		MH103W053	MH103W054		T09658	IRWD	VCP	{942701BF-0D55-4544-868A-A4194EA57B91}	CLMH103W053MH103W054	106.95	105.91	0.500000000	MH103W053	MH103W054			193	CLMH103W053MH103W054	6	0.0054	0.001723	0.05	0.002068	0.06	0.002453	0.06	0.002068	0.06
CLMH103W054MH103W017		1978		Existing		MH103W054	MH103W017		T09658	IRWD	VCP	{209AF6DE-079F-4BDB-A1A8-B49295E3CA3A}	CLMH103W054MH103W017	105.72	105.23	0.666666667	MH103W054	MH103W017			123	CLMH103W054MH103W017	8	0.0040	0.007114	0.08	0.008537	0.09	0.010125	0.09	0.008537	0.09
CLMH103W055MH103W054		1955		Existing		MH103W055	MH103W054		T09658	IRWD	VCP	{1D1B04A6-B704-4994-938A-B9921E07D61F}	CLMH103W055MH103W054	106.29	105.91	0.500000000	MH103W055	MH103W054			71	CLMH103W055MH103W054	6	0.0054	0.004429	0.09	0.005316	0.09	0.006303	0.10	0.005316	0.09
CLMH103W056MH103W057		1978		Existing		MH103W056	MH103W057		T09661	IRWD	VCP	{423E3CED-F416-423D-BAE3-DB28A5EDBC9F}	CLMH103W056MH103W057	96.22	93.41	0.666666667	MH103W056	MH103W057			144	CLMH103W056MH103W057	8	0.0195	0.003486	0.04	0.004361	0.05	0.004961	0.05	0.004185	0.04
CLMH103W057MH103W009		1978		Existing		MH103W057	MH103W009		T09661	IRWD	VCP	{40788A50-C052-4792-854B-510B870A7996}	CLMH103W057MH103W009	93.22	91.80	0.666666667	MH103W057	MH103W009			142	CLMH103W057MH103W009	8	0.0100	0.005229	0.06	0.006279	0.06	0.007441	0.07	0.006279	0.06
CLMH103W058MH103W057		1978		Existing		MH103W058	MH103W057		T09661	IRWD	VCP	{9AB8749B-6BCA-4E17-A153-9C3D5FD31C7C}	CLMH103W058MH103W057	96.65	93.41	0.666666667	MH103W058	MH103W057			105	CLMH103W058MH103W057	8	0.0309	0.001742	0.03	0.002094	0.03	0.002480	0.03	0.002094	0.03
CLMH103W059MH103W058		1978		Existing		MH103W059	MH103W058		T09661	IRWD	VCP	{C56435A4-D26C-4C8A-B67D-1B2527076058}	CLMH103W059MH103W058	101.23	96.85	0.666666667	MH103W059	MH103W058			223	CLMH103W059MH103W058	8	0.0196	0.000680	0.02	0.000818	0.02	0.000970	0.02	0.000818	0.02
CLMH103W060MH103W061		1978		Existing		MH103W060	MH103W061		T09661	IRWD	VCP	{C2C41C27-53D2-4DBB-BE2C-D57B1097D790}	CLMH103W060MH103W061	102.18	99.51	0.666666667	MH103W060	MH103W061			271	CLMH103W060MH103W061	8	0.0099	0.000680	0.02	0.000818	0.02	0.000970	0.02	0.000818	0.02
CLMH103W061MH103W062		1978		Existing		MH103W061	MH103W062		T09661	IRWD	VCP	{45672F8C-5FD7-43E6-AACE-C9042CAF7BAD}	CLMH103W061MH103W062	99.41	98.52	0.666666667	MH103W061	MH103W062			204	CLMH103W061MH103W062	8	0.0044	0.003946	0.06	0.004739	0.06	0.005617	0.07	0.004739	0.06
CLMH103W062MH103W014		1978		Existing		MH103W062	MH103W014		T09661	IRWD	VCP	{1158C34B-DBD7-419E-B1DB-C690D285838E}	CLMH103W062MH103W014	98.33	97.87	0.666666667	MH103W062	MH103W014			115	CLMH103W062MH103W014	8	0.0040	0.005648	0.07	0.006783	0.08	0.008040	0.08	0.006783	0.08
CLMH103W063MH103W020		1978		Existing		MH103W063	MH103W020		T09882	IRWD	VCP	{52D141C7-3AD3-4212-A92E-851DE9438F82}	CLMH103W063MH103W020	109.90	108.52	0.500000000	MH103W063	MH103W020			61	CLMH103W063MH103W020	6	0.0226	0.002924	0.05	0.003512	0.06	0.004164	0.06	0.003512	0.06
CLMH103W064MH103W063		1978		Existing		MH103W064	MH103W063		T10161	IRWD	VCP	{B2C2F484-BA01-4504-9CFC-00C25314A5A5}	CLMH103W064MH103W063	112.05	110.09	0.500000000	MH103W064	MH103W063			200	CLMH103W064MH103W063	6	0.0098	0.002924	0.06	0.003512	0.07	0.004164	0.08	0.003512	0.07
CLMH103W065MH103W003		1978		Existing		MH103W065	MH103W010		T09661	IRWD	VCP	{DA59EB12-7B55-44B2-A1DC-2AABD6A6C41F}	CLMH103W065MH103W010	93.95	93.05	0.666666667	MH103W065	MH103W010			226	CLMH103W065MH103W010	8	0.0040	0.003545	0.06	0.004258	0.06	0.005046	0.07	0.004258	0.06
CLMH103W066MH103W003		1978		Existing		MH103W066	MH103W003		242	IRWD	VCP	{4EED8A6C-48E9-48F8-ACA7-3ACD71CE575B}	CLMH103W066MH103W003	98.80	95.50	0.666666667	MH103W066	MH103W003			401	CLMH103W066MH103W003	8	0.0082	0.004582	0.06	0.005507	0.06	0.006525	0.07	0.005507	0.06
CLMH103W067MH103W066		1978		Existing		MH103W067	MH103W066		242	IRWD	VCP	{1F58FF24-3161-478F-B8F7-EC88F190121E3}	CLMH103W067MH103W066	100.90	98.98	0.666666667	MH103W067	MH103W066			390	CLMH103W067MH103W066	8	0.0049	0.001882	0.04	0.002260	0.04	0.002677	0.05	0.002260	0.04
CLMH103W068MH103W067		1978		Existing		MH103W068	MH103W067		242	IRWD	VCP	{BEF65202-C96F-489A-B352-E91216EA0B1F}	CLMH103W068MH103W067	101.69	101.00	0.666666667	MH103W068	MH103W067			140	CLMH103W068MH103W067	8	0.0049	0.000481	0.02	0.000577	0.02	0.000684	0.02	0.000577	0.02
CLMH103W069MH102N006		1978		Existing		MH103W069	MH102N006		242	IRWD	VCP	{ADF2526EC-7F11-4D4A-9B4D-A4BAA4D43F61}	CLMH103W069MH102N006	105.02	103.70	0.666666667	MH103W069	MH102N006			258	CLMH103W069MH102N006	8	0.0051	0.075021	0.24	0.090055	0.27	0.106766	0.29	0.090055	0.27
CLMH103W071MH0865103		1978		Existing		MH103W071	MH0865103		T09656	IRWD	VCP	{9EE150AB-FCB1-4F06-8796-88C0115CFAD0}	CLMH103W071MH103W103	88.44	87.80	0.666666667	MH103W071	MH0865103			142	CLMH103W071MH0865103	8	0.0045	0.009095	0.09	0.010920	0.10	0.012945	0.10	0.010920	0.10
CLMH103W072MH103W071		1978		Existing		MH103W072	MH103W071		T09656	IRWD	VCP	{DAFEB6E8-C9CC-4F5E-9ED6-DCB1B0328541}	CLMH103W072MH103W071	88.86	88.63	0.666666667	MH103W072	MH103W071			58	CLMH103W072MH103W071	8	0.0040	0.009095	0.09	0.010920	0.10	0.012945	0.11	0.010920	0.10
CLMH103W073MH103W072		1978		Existing		MH103W073	MH103W072		T09656	IRWD	VCP	{DC634F6A-96A0-4C51-972A-C8C23CA99C47}	CLMH103W073MH103W072	89.78	89.06	0.666666667	MH103W073	MH103W072			180	CLMH103W073MH103W072	8	0.0040	0.009095	0.09	0.010920	0.10	0.012945	0.11	0.010920	0.10
CLMH103W074MH103W073		1978		Existing		MH103W074	MH103W073		T09656	IRWD	VCP	{278F3CE3-3074-4C99-B39B-D463A786A91F}	CLMH103W074MH103W073	90.40	89.98	0.666666667	MH103W074	MH103W073			110	CLMH103W074MH103W073	8	0.0038	0.004647	0.06	0.005581	0.07	0.006615	0.08	0.005581	0.07
CLMH103W075MH103W074		1978		Existing		MH103W075	MH103W074		T09656	IRWD	VCP	{A04D42EF-A2DC-4D3A-BAC8-6C031C94EFD4}	CLMH103W075MH103W074	91.31	90.59	0.666666667	MH103W075	MH103W074			184	CLMH103W075MH103W074	8	0.0039	0.003426	0.06	0.004113	0.06	0.004876	0.07	0.004113	0.06
CLMH103W076MH103W075		1978		Existing		MH103W076	MH103W075		T09656	IRWD	VCP	{AEFF4D04-259E-4D68-AD69-F3CF83301F71}	CLMH103W076MH103W075	91.75	91.51	0.666666667	MH103W076	MH103W075			60	CLMH103W076MH103W075	6	0.0040	0.003086	0.05	0.003705	0.06	0.004391	0.06	0.003705	0.06
CLMH103W077MH102N003		1977		Existing		MH103W077	MH102N003		T09883	IRWD	VCP	{D4438037-3B32-4F7B-AD69-F2E49DD322F9}	CLMH103W077MH102N003	92.50	91.15	0.666666667	MH103W077	MH102N003			342	CLMH103W077MH102N003	8	0.0039	0.010015	0.09	0.012026	0.10	0.014257	0.11	0.012026	0.10
CLMH103W078MH103W077		1977		Existing		MH103W078	MH103W077		T09883	IRWD	VCP	{0FDD7060-1E66-4DDD-9C64-27C7C90C50DE}	CLMH103W078MH103W077	94.32	92.60	0.666666667	MH103W078	MH103W077			344	CLMH103W078MH103W077	8	0.0050	0.003425	0.05	0.004113	0.06	0.004875	0.06	0.004113	0.06
CLMH103W079MH103W080		1978		Existing		MH103W079	MH103W080		T09883	IRWD	VCP	{DB5952D8-17C7-4FE2-ADE8-960066F35378}	CLMH103W079MH103W080	95.81	94.47	0.666666667	MH103W079	MH103W080			336	CLMH103W079MH103W080	8	0.0040	0.002803	0.05	0.003367	0.06	0.003991	0.06	0.003367	0.06
CLMH103W080MH102N004		1978		Existing		MH103W080	MH102N004		T09883	IRWD	VCP	{EA712D22D-E587-459F-A93D-1B3EFA58709}	CLMH103W080MH102N004	94.37	92.99	0.666666667	MH103W080	MH102N004			204	CLMH103W080MH102N004	8	0.0048	0.009914	0.09	0.011903	0.10	0.014113	0.11	0.011903	0.10
CLMH103W115MH103W028		1978		Existing		MH103W115	MH103W028		T09664	IRWD	VCP	{2635312A-7AB9-48BA-BE09-63EB81AC206C}	CLMH103W115MH103W028	101.38	100.27	0.666666667	MH103W115	MH103W028			226	CLMH103W115MH103W028	8	0.0049	0.028768	0.15	0.034531	0.17	0.040952	0.18	0.034531	0.17
CLMH103W116MH103W115		1978		Existing		MH103W116	MH103W115		T09664	IRWD	VCP	{FE8B017B-93B3-465C-A58C-D432D839A4BD}	CLMH103W116MH103W115	102.66	101.48	0.666666667	MH103W116	MH103W115			102	CLMH103W116MH103W115	8	0.0050	0.016890	0.12	0.020271	0.13	0.024040	0.14	0.020271	0.13
CLMH103W117MH103W116		1978		Existing		MH103W117	MH103W116		T10162	IRWD	VCP	{3A3D8EF3-B170-4522-AD48-4906E3F5CA8B}	CLMH103W117MH103W116	103.98	102.86	0.500000000	MH103W117	MH103W116			60	CLMH103W117MH103W116	6	0.0187	0.003266	0.06	0.003918	0.06	0.004649	0.07	0.003918	0.06
CLMH103W121MH103W116		1978		Existing		MH103W121	MH103W116		T09664	IRWD	VCP	{DCCD0C4B-2A1A-4820-B247-44EF86D1D54E}	CLMH103W121MH103W116	103.58	102.76	0.666666667	MH103W121	MH103W116			180	CLMH103W121MH103W116	8	0.0046	0.013624	0.11	0.016353	0.12	0.019391	0.13	0.016353	0.12
CLMH103W123MH103W121		1978		Existing		MH103W123	MH103W121		T10162	IRWD	VCP	{19BE8BF5-50DA-4BD3-ACB3-B8425153878D}	CLMH103W123MH103W121	107.33	103.79	0.500000000	MH103W123	MH103W121			60	CLMH103W123MH103W121	6	0.0244	0.004568	0.06	0.005482	0.07	0.006501	0.08	0.005482	0.07
CLMH103W126MH103W123		1978		Existing		MH103W126	MH103W123		T10162	IRWD	VCP	{C28AC98E-B1F8-4E5A-86F3-56E3439EA0D4}	CLMH103W126MH103W123	109.16	107.54	0.500000000	MH103W126	MH103W123			81	CLMH103W126MH103W123	6	0.0200	0.002584	0.05	0.003102	0.06	0.003679	0.06	0.003102	0.06
CLMH103W127MH103W121		1978		Existing		MH103W127	MH103W121		T09664	IRWD	VCP	{88CE2F83-BEE8-4862-B6BC-F43DF4DCDF7D}	CLMH103W127MH103W121	103.93	103.79	0.666666667	MH103W127	MH103W121			59	CLMH103W127MH103W121	8	0.0024	0.008175	0.09	0.009813	0.10	0.011635	0.11	0.009813	0.10
CLMH103W130MH103W011		1978		Existing		MH103W130	MH103W011		T09841	IRWD	VCP	{D9F52C6C-324D-4DB4-9513-49F98A1E8BD8}	CLMH103W130MH103W011	94.22	93.11	0.500000000	MH103W130	MH103W011			50	CLMH103W130MH103W011	6	0.0222	0.008212	0.09	0.009864	0.09	0.011691	0.10	0.009864	0.09
CLMH103W131MH103W130		1978		Existing		MH103W131	MH103W130		272	IRWD	VCP	{B4BFC3C9-B17C-4689-BD90-6413BEC82117}	CLMH103W131MH103W130	97.81	94.31	0.500000000	MH103W131	MH103W130			408	CLMH103W131MH103W130	6	0.0086	0.003524	0.07	0.004235	0.08	0.005019	0.08	0.004235	0.08
CLMH103W142MH103W005		1978		Existing		MH103W142	MH103W005		272	IRWD	VCP	{4071B1B5-364D-4BD8-9648-5F4233945EC2}	CLMH103W142MH103W005	95.13	87.69	0.500000000	MH103W142	MH103W005			105	CLMH103W142MH103W005	6	0.0513	0.003705	0.05	0.004450	0.05	0.005275	0.06	0.004450	0.05
CLMH103W145MH102N005		1978		Existing		MH103W145	MH102N005		T09805	IRWD	VCP	{8B162311-3EA1-4462-A5FC-1A07F93C1F34}	CLMH103W145MH102N005	96.12	94.90	0.666666667	MH103W145	MH102N005			254	CLMH103W145MH102N005	8	0.0054	0.010898	0.10	0.013084	0.10	0.015513	0.11	0.013084	0.10
CLMH103W146MH103W145		1978		Existing		MH103W146	MH103W145		T09805	IRWD	VCP	{8F8FAD27-7A9A-4D46-A538-E76EB2EE0499}	CLMH103W146MH103W145	97.08	96.23	0.666666667	MH103W146	MH103W145			214	CLMH103W146MH103W145	8	0.0040	0.007653	0.08	0.009187	0.09	0.010894	0.10	0.009187	0.09
CLMH103W147MH103W146		1978		Existing		MH103W147	MH103W146		T09805	IRWD	VCP	{405CE8DA-E06D-4385-A100-21E9532F80BB}	CLMH103W147MH103W146	97.80	97.19	0.666666667	MH103W147	MH103W146			155	CLMH103W147MH103W146	8	0.0039	0.003686	0.06	0.004425	0.06	0.005247	0.07	0.004425	0.06
CLMH103W148MH103W149		1978		Existing		MH103W148	MH103W149		T09805	IRWD	VCP	{26B8050C-7003-46C6-BFE4-DCA436A8DA3D}	CLMH103W148MH103W149	99.16	98.54	0.666666667	MH103W148	MH103W149			155	CLMH103W148MH103W149	8	0.0040	0.003967	0.06	0.004762	0.07	0.005647	0.07	0.004762	0.07
CLMH103W149MH103W146		1978		Existing		MH103W149	MH103W146		T09805	IRWD	VCP	{549F9B75-A411-408F-A1FA-CB814BF06ED1}	CLMH103W149MH103W146	98.33	97.29	0.666666667	MH103W149	MH103W146			262	CLMH103W149MH103W146	8	0.0040	0.003967	0.06	0.004762	0.07	0.005647	0.07	0.004762	0.07
CLMH103W150MH103W003		1978		Existing		MH103W150	MH103W003		T09660	IRWD	VCP	{F21CFB9D-5512-406B-BBAC-5195C2CB8FEF}	CLMH103W150MH103W003	92.55	91.69	0.666666667	MH103W150	MH103W003			154	CLMH103W150MH103W003	8	0.0041	0.002626	0.05	0.003151	0.05	0.003735	0.06	0.003151	0.05
CLMH103W151MH103W150		1978		Existing		MH103W151	MH103W150		T09660	IRWD	VCP	{EE94977B-6281-48A9-B005-1DB1B0793982}	CLMH103W151MH103W150	100.58	92.75	0.666666667	MH103W151	MH103W150			376	CLMH103W151MH103W150	8	0.0208	0.001463	0.03	0.001756	0.03	0.002081	0.03	0.001756	0.03
CLMH103W152MH103W153		1978		Existing		MH103W152	MH103W153		T09660	IRWD	VCP	{635A8D01-97B0-4958-A698-8FD1E80FF71F}	CLMH103W152MH103W153	100.84	98.65	0.500000000	MH103W152	MH103W153			220	CLMH103W152MH103W153	6	0.0100	0.001562	0.05	0.001876	0.05	0.002224	0.05	0.001876	0.05
CLMH103W153MH103W155		1978		Existing		MH103W153	MH103W155		T09660	IRWD	VCP	{058F3197-B9BA-4DDB-B43E-0CFEA9868491}	CLMH103W153MH103W155	98.44	98.00	0.666666667	MH103W153	MH103W155			112	CLMH103W153MH103W155	8	0.0039	0.002183	0.05	0.002621	0.05	0.003109	0.05	0.002621	0.05
CLMH103W154MH103W155		1978		Existing		MH103W154	MH103W155		T09660	IRWD	VCP	{62E76B2C-B48C-4D9C-BA98-0456B6B6AF3}	CLMH103W154MH103W155	99.73	98.09	0.500000000	MH103W154	MH103W155			169	CLMH103W154MH103W155	6	0.0097	0.002884	0.06	0.003463	0.07	0.004106	0.08	0.003463	0.07
CLMH103W155MH103W156		1978		Existing		MH103W155	MH103W156		T09660	IRWD	VCP	{ADCB64D0-21A9-4A0F-9C61-F04A17701AA6}	CLMH103W155MH103W156	97.90	97.11	0.666666667	MH103W155	MH103W156			198	CLMH103W155MH103W156	8	0.0040	0.005067	0.07	0.006085	0.07	0.007215	0.08	0.006085	0.07
CLMH103W156MH103W160		1978		Existing		MH103W156	MH103W160		T09660	IRWD	VCP	{3B025188-655B-49E6-AC47-F1A5E877B869}	CLMH103W156MH103W160	97.01	95.58	0.666666667	MH103W156	MH103W160			115	CLMH103W156MH103W160	8	0.0124	0.007912	0.07	0.009501	0.08	0.011264	0.08	0.009501	0.07
CLMH103W157MH103W156		1980		Existing		MH103W157	MH103W156		T09660	IRWD	VCP	{41566160-346D-44AD-8E39-CBA59CF886D2}	CLMH103W157MH103W156	98.98	97.20	0.500000000	MH103W157	MH103W156			176	CLMH103W157MH103W156	6	0.0101	0.002844	0.06	0.003416	0.07	0.004049	0.07	0.003416	0.07
CLMH103W158MH103W159		1978		Existing		MH103W158	MH103W159		T09660	IRWD	VCP	{C69DE4BC-D3D2-421C-B261-0197ACB0B2AD}	CLMH103W158MH103W159	96.94	95.23	0.500000000	MH103W158	MH103W159			170	CLMH103W158MH103W159	6	0.0101	0.001984	0.05	0.002380	0.06	0.002822	0.06	0.002380	0.06
CLMH103W159MH103W033		1978		Existing		MH103W159	MH103W033		T09660	IRWD	VCP	{228473DB-A3BA-472A-A557-FF5C86CCDC62}	CLMH103W159MH103W033	95.04	94.47	0.666666667	MH103W159	MH103W033			89	CLMH103W159MH103W033	8	0.0064	0.011554	0.13	0.025877	0.14	0.030682	0.15	0.025877	0.14
CLMH103W160MH103W159		1978		Existing		MH103W160	MH103W159		T09660	IRWD	VCP	{510055DF-4DA3-4588-A496-C1734B788828}	CLMH103W160MH103W159	95.48	95.13	0.666666667	MH103W160	MH103W159			84	CLMH103W160MH103W159	8	0.0042	0.019571	0.13	0.023497	0.14	0.027860	0.15	0.023497	0.14
CLMH103W161MH103W160		1978		Existing		MH103W161	MH103W160		T09660	IRWD	VCP	{0D67197EC-E33B-41E5-85DE-D08E310272CCB}	CLMH103W161MH103W160	96.05	95.68	0.666666667	MH103W161	MH103W160			93	CLMH103W161MH103W160	8	0.0040	0.011659	0.10	0.013996	0.11	0.016596	0.12	0.013996	0.11
CLMH103W162MH103W161		1978		Existing		MH103W162	MH103W161		T09660	IRWD	VCP	{0B7770BF-FA32-484E-BAC9-620449906737}	CLMH103W162MH103W161	96.55	96.25	0.666666667	MH103W162	MH103W161			76	CLMH103W162MH103W161	8	0.0039	0.011660	0.10	0.013996	0.11	0.016596	0.12	0.013996	0.11
CLMH103W163MH103W162		1978		Existing		MH103W163	MH103W162		T09660	IRWD	VCP	{77D28583-2746-467B-9F38-D8D4039C2D58}	CLMH103W163MH103W162	98.44	96.75	0.500000000	MH103W163	MH103W162			301	CLMH103W163MH103W162	6	0.0056	0.002124	0.06	0.002549	0.06	0.003023	0.07	0.002549	0.06
CLMH103W164MH103W165		1978		Existing		MH103W164	MH103W165		T09660	IRWD	VCP	{EE4EBD91-7CFE-496B-A7A2-F0EA5E73210F}	CLMH103W164MH103W165	99.38	97.59	0.500000000	MH103W164	MH103W165			319	CLMH103W164MH103W165	6	0.0056	0.002183	0.06	0.002621	0.07	0.003109	0.07	0.002621	0.07
CLMH103W165MH103W162		1978		Existing		MH103W165	MH103W162		T09660	IRWD	VCP	{DDF1C595-6B79-4DA8-8E0E-7CFDC5421658}	CLMH103W165MH103W162	97.40	96.65	0.666666667	MH103W165	MH103W162			187	CLMH103W165MH103W162	8	0.0040	0.006710	0.08	0.008057	0.08	0.009552	0.09	0.008057	0.08
CLMH103W166MH103W165		1978		Existing		MH103W166	MH103W165		T09660	IRWD	VCP	{E8552170-067A-401D-941F-0DCFD28DB223}	CLMH103W166MH103W165	98.01	97.50	0.500000000	MH103W166	MH103W165			98	CLMH103W166MH103W165	6	0.0052	0.004528	0.09	0.005435	0.10	0.006444	0.10	0.005435	0.10
CLMH103W167MH103W166		1980		Existing		MH103W167	MH103W166		T09660	IRWD	VCP	{58C22102-F26D-4F7C-B3BC-528DB67AF455}	CLMH103W167MH103W166	99.54	98.22	0.500000000	MH103W167	MH103W166			236	CLMH103W167MH103W166	6	0.0056	0.002504	0.06	0.003006	0.07	0.003564	0.08	0.003006	0.07
CLMH103W169MH103W170		1978		Existing		MH103W169	MH103W170		T09664	IRWD	VCP	{A90B81AF-F6F5-451D-AE68-C5CC9F8E5E9}	CLMH103W169MH103W170	104.37	103.94	0.500000000	MH103W169	MH103W170			76	CLMH103W169MH103W170	6	0.0057	0.001803	0.05	0.002164	0.06	0.002566	0.06	0.002164	0.06
CLMH103W170MH103W176		1978		Existing		MH103W170	MH103W176		T09664	IRWD	VCP	{F0102B9A-0FDD-4923-93CD-5EAFBCA210F2}	CLMH103W170MH103W176	103.84	102.80	0.500000000	MH103W170	MH103W176			188	CLMH103W170MH103W176	6	0.0055	0.002884	0.07	0.003463	0.08	0.004106	0.08	0.003463	0.08
CLMH103W171MH103W170		1978		Existing		MH103W171	MH103W170		T09664	IRWD	VCP	{0B115259-CD3F-4580-B03F-C418D7ED5EB5}	CLMH103W171MH103W170	104.62	104.05	0.500000000	MH103W171	MH103W170			103	CLMH103W171MH103W170	6	0.0055	0.001081	0.04	0.001299	0.05	0.001540	0.05	0.001299	0.05
CLMH103W174MH103W175		1978		Existing		MH103W174	MH103W175		T09664	IRWD	VCP	{09FCE588-8D99-4814-860F-15ADA42B75E3}	CLMH103W174MH103W175	104.70	103.98	0.500000000	MH103W174	MH103W175			131	CLMH103W174MH103W175	6	0.0055	0.001142	0.05	0.001372	0.05	0.001626	0.05	0.001372	0.05
CLMH103W175MH103W176		1978		Existing		MH103W175	MH103W176		T09664	IRWD	VCP	{D95C1D3D-CDE9-4490-AA74-906AC4D04BBE}	CLMH103W175MH103W176	103.79	102.91	0.500000000	MH103W175	MH103W176			160	CLMH103W175MH103W176	6	0.0055	0.002504	0.06	0.003006	0.07	0.003566	0.08	0.003006	0.07
CLMH103W176MH103W115		1978		Existing		MH103W176	MH103W115		T09664	IRWD	VCP	{24BAA68D-4B73-487B-BBB8-47B7FA2E5663}	CLMH103W176MH103W115	102.70	101.58	0.666666667	MH103W176	MH103W115			225	CLMH103W176MH103W115	8	0.0050	0.009996	0.09	0.012001	0.10	0.014231	0.11	0.012001	0.10
CLMH103W177MH103W176		1978		Existing		MH103W177	MH103W176		T09664	IRWD	VCP	{2F88A3F7-533F-4BFD-AEA9-E434ACE8E963}	CLMH103W177MH103W176	103.29	102.91	0.500000000	MH103W177	MH103W176			68	CLMH103W177MH103W176	6	0.0056	0.004608	0.09	0.005531	0.09	0.006559	0.10	0.005531	0.09
CLMH103W180MH103W182		1978		Existing		MH103W180	MH103W182		T09664	IRWD	VCP	{0D84886A7-0EBB-4197-8A86-D57A69CDD542}	CLMH103W180MH103W182	107.44	106.88	0.500000000	MH103W180	MH103W182			102	CLMH103W180MH103W182	6	0.0055	0.001681	0

| | | |

CLMH104E190MH104E186		2014		Existing	assumed Mannings N	MH104E190	MH104E186		T17394D	IRWD	PVC	{DA7E650B-E0C4-4324-AB7C-E18CE49AA625}	CLMH104E190MH104E186	167.84	159.63	0.666666667	MH104E190	MH104E186			203	CLMH104E190MH104E186	8	0.0405	0.000284	0.02	0.000305	0.03	0.000361	0.05	0.058382	0.13
CLMH104E312MH104E313		2014		Existing	assumed Mannings N	MH104E312	MH104E313		T17495	IRWD	PVC	{1BF5C18C-D3EB-45AB-9323-900754C7A3DD}	CLMH104E312MH104E313	187.40	186.58	0.666666667	MH104E312	MH104E313			207	CLMH104E312MH104E313	8	0.0040	0.000000	0.02	0.000000	0.03	0.000000	0.00	0.002948	0.05
CLMH104E313MH122N314		2014		Existing	assumed Mannings N	MH104E313	MH122N314		T17495	IRWD	PVC	{8E390DC0-7179-4127-ACDB-515CC2E97CF9}	CLMH104E313MH122N314	186.48	185.58	0.666666667	MH104E313	MH122N314			226	CLMH104E313MH122N314	8	0.0040	0.000000	0.02	0.000000	0.03	0.000000	0.00	0.002948	0.05
CLMH104E318MH104E319		2014		Existing	assumed Mannings N	MH104E318	MH104E319		T17495	IRWD	PVC	{E4746A89-063B-4C2F-A301-C14A60C7C9C9}	CLMH104E318MH104E319	182.80	178.75	0.666666667	MH104E318	MH104E319			188	CLMH104E318MH104E319	8	0.0216	0.000000	0.02	0.000000	0.03	0.000000	0.00	0.019375	0.09
CLMH104E319MH104E320		2014		Existing	assumed Mannings N	MH104E319	MH104E320		T17495	IRWD	PVC	{E15327E5-E6EA-4D96-9F96-ED74C184DFD2}	CLMH104E319MH104E320	178.65	170.88	0.666666667	MH104E319	MH104E320			123	CLMH104E319MH104E320	8	0.0634	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.023729	0.07
CLMH104E320MH104E047		2011		Existing	assumed Mannings N	MH104E320	MH104E047		T17277	IRWD	PVC	{0913889C-9C61-4E8C-A11F-48671E50BF4A}	CLMH104E320MH104E047	170.04	165.19	0.666666667	MH104E320	MH104E047			142	CLMH104E320MH104E047	8	0.0341	0.000712	0.01	0.000868	0.02	0.001033	0.02	0.049458	0.12
CLMH104E324MH122N323		2004		Existing	assumed Mannings N	MH104E324	MH122N323		T17495	IRWD	PVC	{E7768175-7823-4191-828E-09A8529EE26C}	CLMH104E324MH122N323	189.46	188.54	0.666666667	MH104E324	MH122N323			187	CLMH104E324MH122N323	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003384	0.05
CLMH104E325MH104E324		2014		Existing	assumed Mannings N	MH104E325	MH104E324		T17495	IRWD	PVC	{88611935-B70B-46A8-BC05-E78D756BCB02}	CLMH104E325MH104E324	190.48	189.56	0.666666667	MH104E325	MH104E324			189	CLMH104E325MH104E324	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003384	0.05
CLMH104E326MH104E332		2004		Existing	assumed Mannings N	MH104E326	MH104E332		1703	IRWD	VCP	{8CDB8BD0-D64F-40DA-A6F2-0699CE7D19D}	CLMH104E326MH104E332	184.64	180.85	1.750000000	MH104E326	MH104E332			241	CLMH104E326MH104E332	21	0.0110	0.119317	0.26	1.302619	0.28	1.552727	0.31	3.002055	0.43
CLMH104E327MH104E326		2004		Existing	assumed Mannings N	MH104E327	MH104E326		1703	IRWD	VCP	{57CE12FB-0768-4032-B603-C91EB9A436C5}	CLMH104E327MH104E326	187.98	184.74	1.666666667	MH104E327	MH104E326			333	CLMH104E327MH104E326	20	0.0097	1.116115	0.24	1.299122	0.26	1.548574	0.28	2.998587	0.40
CLMH104E328MH104E327		2004		Existing	assumed Mannings N	MH104E328	MH104E327		1703	IRWD	VCP	{E0783677-FD32-4CAA-B7FC-B5111370716Z}	CLMH104E328MH104E327	190.25	188.08	1.666666667	MH104E328	MH104E327			305	CLMH104E328MH104E327	20	0.0071	1.064907	0.25	1.243096	0.27	1.482131	0.30	2.942465	0.43
CLMH104E329MH104E328		2004		Existing	assumed Mannings N	MH104E328	MH104E328		1703	IRWD	VCP	{93BBA322-BB64-4D25-B786-9CE269DE38B0}	CLMH104E329MH104E328	192.83	190.25	1.666666667	MH104E329	MH104E328			296	CLMH104E329MH104E328	20	0.0087	1.057537	0.25	1.235065	0.27	1.472565	0.29	2.934554	0.42
CLMH104E330MH105S168		2004		Existing	assumed Mannings N	MH104E330	MH105S168		1703	IRWD	VCP	{1CECE9AA-DB62-45C9-B66D-25E1436EC881}	CLMH104E330MH105S168	177.01	173.75	1.750000000	MH104E330	MH105S168			329	CLMH104E330MH105S168	21	0.0099	1.119048	0.22	1.302308	0.24	1.552408	0.26	3.001651	0.37
CLMH104E331MH104E330		2004		Existing	assumed Mannings N	MH104E331	MH104E330		1703	IRWD	VCP	{9C9FCA15-3798-423B-8E79-C76F1E997B9D}	CLMH104E331MH104E330	180.71	177.21	1.750000000	MH104E331	MH104E330			395	CLMH104E331MH104E330	21	0.0089	1.119128	0.23	1.302399	0.25	1.552503	0.27	3.001768	0.38
CLMH104E332MH104E331		2004		Existing	assumed Mannings N	MH104E332	MH104E331		1703	IRWD	VCP	{AB7F5F50-CDD3-4875-A17E-296897EFF51B}	CLMH104E332MH104E331	180.85	180.80	1.750000000	MH104E332	MH104E331			32	CLMH104E332MH104E331	21	0.0016	1.119256	0.29	1.302552	0.31	1.552663	0.34	3.001975	0.47
CLMH104N001MH104N002		1985		Existing		MH104N001	MH104N002		T09643	IRWD	VCP	{6C893E46-EEA4-4864-9980-FC4426287 3C7}	CLMH104N001MH104N002	126.43	125.40	0.500000000	MH104N001	MH104N002			191	CLMH104N001MH104N002	6	0.0054	0.002960	0.07	0.003160	0.07	0.003747	0.08	0.003160	0.07
CLMH104N002MH085E017		1985		Existing		MH104N002	MH085E017		T09643	IRWD	VCP	{CE98D93F-433A-4A6E-96A4-73E682F64A21}	CLMH104N002MH085E017	125.19	124.23	0.666666667	MH104N002	MH085E017			280	CLMH104N002MH085E017	8	0.0040	0.010330	0.10	0.011028	0.10	0.013074	0.11	0.011028	0.10
CLMH104N003MH104N002		1985		Existing		MH104N003	MH104N002		T09643	IRWD	VCP	{7F2F1A98-6E80-4FCA-9E19-A1B0B9FCE1D58}	CLMH104N003MH104N002	126.09	125.40	0.500000000	MH104N003	MH104N002			131	CLMH104N003MH104N002	6	0.0053	0.004155	0.08	0.004436	0.09	0.005259	0.09	0.004436	0.09
CLMH104N004MH104N003		1985		Existing		MH104N004	MH104N003		T09643	IRWD	VCP	{3410E7F2-8E0C-4A3E-BCCB-8FB8DC616AD4}	CLMH104N004MH104N003	126.98	126.30	0.500000000	MH104N004	MH104N003			123	CLMH104N004MH104N003	6	0.0055	0.004155	0.08	0.004436	0.09	0.005259	0.09	0.004436	0.09
CLMH104N005MH104N002		1985		Existing		MH104N005	MH104N002		T09643	IRWD	VCP	{A179C163-5DA8-4385-9850-974BDAA4CBCE}	CLMH104N005MH104N002	126.00	125.30	0.666666667	MH104N005	MH104N002			160	CLMH104N005MH104N002	8	0.0044	0.003215	0.05	0.003431	0.05	0.004068	0.06	0.003431	0.05
CLMH104N006MH104W026		1982		Existing		MH104N006	MH104W026		T09677	IRWD	VCP	{A0156DCD-D30D-42FD-8D34-1C43F9684DE1}	CLMH104N006MH104W026	132.55	131.91	0.666666667	MH104N006	MH104W026			119	CLMH104N006MH104W026	8	0.0054	0.009461	0.09	0.010102	0.09	0.011990	0.10	0.010102	0.09
CLMH104N008MH104W060		1982		Existing		MH104N008	MH104W060		T09677	IRWD	VCP	{477E8CBD-615F-4C89-B540-6892D043B4B4}	CLMH104N008MH104W060	135.89	135.71	0.666666667	MH104N008	MH104W060			52	CLMH104N008MH104W060	8	0.0035	0.007311	0.08	0.007809	0.08	0.009262	0.09	0.007809	0.08
CLMH104N009MH104N008		1982		Existing		MH104N009	MH104N008		T09677	IRWD	VCP	{50325AA6-B26A-4C87-8DD0-FD87FF095866}	CLMH104N009MH104N008	136.58	136.00	0.666666667	MH104N009	MH104N008			152	CLMH104N009MH104N008	8	0.0038	0.003736	0.06	0.003993	0.06	0.004737	0.07	0.003993	0.06
CLMH104N010MH104N009		1982		Existing		MH104N010	MH104N009		T09677	IRWD	VCP	{5FAF34A6-8870-46EE-9D1D-4098D7998E0E}	CLMH104N010MH104N009	137.91	136.78	0.666666667	MH104N010	MH104N009			287	CLMH104N010MH104N009	8	0.0039	0.001505	0.04	0.001608	0.04	0.001909	0.04	0.001608	0.04
CLMH104N011MH104N119		1985		Existing		MH104N011	MH104N119		A00486	IRWD	PVC	{19B29E10-2893-4513-875E-80CE0F07C542}	CLMH104N011MH104N119	137.03	135.58	0.833333333	MH104N011	MH104N119			196	CLMH104N011MH104N119	10	0.0074	0.086202	0.17	0.092282	0.18	0.109403	0.19	0.092282	0.18
CLMH104N012MH104N011		1985		Existing		MH104N012	MH104N011		A00486	IRWD	PVC	{96962FD5-A97C-4FEB-BCB9-29B45E1C9FB0}	CLMH104N012MH104N011	139.38	137.13	0.833333333	MH104N012	MH104N011			171	CLMH104N012MH104N011	10	0.0132	0.083501	0.15	0.089380	0.15	0.105962	0.17	0.089380	0.15
CLMH104N013MH104N012		1985		Existing		MH104N013	MH104N012		A00486	IRWD	PVC	{0CE4251D-AFCA-4B88-91B3-5A2B0118E134}	CLMH104N013MH104N012	140.69	139.49	0.833333333	MH104N013	MH104N012			257	CLMH104N013MH104N012	10	0.0047	0.080550	0.18	0.086208	0.19	0.102201	0.21	0.086208	0.19
CLMH104N014MH104N015		1985		Existing		MH104N014	MH104N015		A00486	IRWD	PVC	{08F8928C-BE47-4880-96C6-D718E216F5B}	CLMH104N014MH104N015	144.80	142.82	0.666666667	MH104N014	MH104N015			400	CLMH104N014MH104N015	8	0.0050	0.001570	0.03	0.001886	0.04	0.002235	0.04	0.001886	0.04
CLMH104N015MH104N013		1985		Existing		MH104N015	MH104N013		A00486	IRWD	PVC	{42D83910-C02D-4C92-B936-788A139BCE7A}	CLMH104N015MH104N013	142.44	140.78	0.833333333	MH104N015	MH104N013			219	CLMH104N015MH104N013	10	0.0076	0.080329	0.17	0.085970	0.17	0.101919	0.19	0.085970	0.17
CLMH104N016MH104N015		1985		Existing		MH104N016	MH104N015		A00486	IRWD	PVC	{E5E4AA05-7215-4F9D-A978-16579A868E17}	CLMH104N016MH104N015	148.38	142.64	0.833333333	MH104N016	MH104N015			175	CLMH104N016MH104N015	10	0.0328	0.060579	0.10	0.064749	0.11	0.076766	0.11	0.064749	0.11
CLMH104N017MH104N016		1985		Existing		MH104N017	MH104N016		A00486	IRWD	PVC	{7FEA7C4F-7ED8-466A-B74F-C2CD841FE466}	CLMH104N017MH104N016	150.69	148.47	0.833333333	MH104N017	MH104N016			210	CLMH104N017MH104N016	10	0.0122	0.060579	0.13	0.064749	0.13	0.076766	0.14	0.064749	0.13
CLMH104N018MH104N133		1985		Existing		MH104N018	MH104N133		A00486	IRWD	PVC	{54EC575F-67D8-4087-9748-E6CC1AB3D90D}	CLMH104N018MH104N133	153.78	152.51	0.833333333	MH104N018	MH104N133			140	CLMH104N018MH104N133	10	0.0051	0.049325	0.15	0.052661	0.15	0.062434	0.16	0.052661	0.15
CLMH104N019MH104N018		1985		Existing		MH104N019	MH104N018		A00486	IRWD	PVC	{43F54996-311F-4A58-9619-3B4270026758}	CLMH104N019MH104N018	156.33	153.78	0.833333333	MH104N019	MH104N018			245	CLMH104N019MH104N018	10	0.0104	0.049325	0.13	0.052661	0.14	0.062434	0.15	0.052661	0.14
CLMH104N020MH104N019		1985		Existing		MH104N020	MH104N019		A00486	IRWD	PVC	{5CA93B09-CCB9-4524-9DCA-390831C13BA0}	CLMH104N020MH104N019	159.50	156.44	0.833333333	MH104N020	MH104N019			246	CLMH104N020MH104N019	10	0.0124	0.042227	0.11	0.045084	0.11	0.053448	0.12	0.045084	0.11
CLMH104N021MH104N020		1985		Existing		MH104N021	MH104N020		A00486	IRWD	PVC	{8BD9888D-1FA6-409F-A9C3-95CEFDF8D19B}	CLMH104N021MH104N020	165.80	159.60	0.833333333	MH104N021	MH104N020			249	CLMH104N021MH104N020	10	0.0253	0.042227	0.09	0.045084	0.09	0.053448	0.10	0.045084	0.09
CLMH104N023MH104N025		2002		Existing	assumed Mannings N	MH104N023	MH104N025		T12151	IRWD	PVC	{4B731SC6-1BD5-46FD-A95C-D60F1D13B1B8}	CLMH104N023MH104N025	148.42	147.88	0.666666667	MH104N023	MH104N025			141	CLMH104N023MH104N025	8	0.0038	0.008414	0.08	0.009931	0.09	0.011756	0.10	0.009916	0.09
CLMH104N025MH104N026		2002		Existing	assumed Mannings N	MH104N025	MH104N026		T12151	IRWD	PVC	{E873B88E-0A3C-45C3-A9A4-C1A60CD8B30B}	CLMH104N025MH104N026	147.67	146.36	0.666666667	MH104N025	MH104N026			237	CLMH104N025MH104N026	8	0.0055	0.011210	0.09	0.013235	0.10	0.015691	0.11	0.013235	0.10
CLMH104N026MH104N028		1985		Existing		MH104N026	MH104N028		T12151	IRWD	PVC	{4B8827FD-E5B9-487C-B260-C7B0501BAFE}	CLMH104N026MH104N028	146.16	145.19	0.666666667	MH104N026	MH104N028			67	CLMH104N026MH104N028	8	0.0145	0.014277	0.08	0.016916	0.09	0.020056	0.10	0.016916	0.09
CLMH104N028MH104N031		1985		Existing		MH104N028	MH104N031		T12151	IRWD	PVC	{6F53102-FDE8-4D38-A167-BE2C8907FFF9}	CLMH104N028MH104N031	144.99	143.30	0.666666667	MH104N028	MH104N031			192	CLMH104N028MH104N031	8	0.0088	0.017148	0.10	0.020336	0.11	0.024112	0.12	0.020336	0.11
CLMH104N029MH104N028		1985		Existing		MH104N029	MH104N028		T12151	IRWD	PVC	{4DF77689-22F2-4C78-A672-62EDC3EEEA2}	CLMH104N029MH104N028	146.92	145.19	0.666666667	MH104N029	MH104N028			140	CLMH104N029MH104N028	8	0.0124	0.002872	0.04	0.003420	0.04	0.004056	0.05	0.003420	0.04
CLMH104N031MH104N034		1985		Existing		MH104N031	MH104N034		485	IRWD	PVC	{C7336BF9-BCF5-4722-8319-22F5D3CD25BD}	CLMH104N031MH104N034	142.89	142.07	0.833333333	MH104N031	MH104N034			77	CLMH104N031MH104N034	10	0.0106	0.027548	0.09	0.029493	0.09	0.034965	0.10	0.029493	0.09
CLMH104N032MH104N031		1985		Existing		MH104N032	MH104N031		485	IRWD	PVC	{40F8CAAF-CE28-4513-B178-4E30BFCAD1CB}	CLMH104N032MH104N031	146.36	144.10	0.833333333	MH104N032	MH104N031			156	CLMH104N032MH104N031	10	0.0081	0.013666	0.07	0.014607	0.07	0.017313	0.08	0.014607	0.07
CLMH104N033MH104N032		1985		Existing		MH104N033	MH104N032		485	IRWD	PVC	{3FAAA26A-C7CF-411D-8A1A-7A09A3978A1E}	CLMH104N033MH104N032	144.97	144.47	0.833333333	MH104N033	MH104N032			183	CLMH104N033MH104N032	10	0.0027	0.011919	0.08	0.012727	0.08	0.015088	0.09	0.012727	0.08
CLMH104N034MH104N035		1985		Existing		MH104N034	MH104N035		485	IRWD	PVC	{675D6197-2B9F-445F-969A-6DDFADDC5B5B}	CLMH104N034MH104N035	141.97	139.66	0.833333333	MH104N034	MH104N035			417	CLMH104N034MH104N035	10	0.0055	0.028050	0.11	0.030271	0.11	0.035946	0.12	0.030271	0.11
CLMH104N035MH104N045		1985		Existing		MH104N035	MH104N045		485	IRWD	PVC	{253150F2-6FE0-4052-B553-B985BF384EF9}	CLMH104N035MH104N045	139.46	136.13	0.833333333	MH104N035	MH104N045			419	CLMH104N035MH104N045	10	0.0079	0.050865	0.13	0.060043	0.14	0.071260	0.16	0.060043	0.14
CLMH104N038MH104N035		1985		Existing		MH104N038	MH104N035		T12151	IRWD	PVC	{16895SC3-8C17-43AB-BA8E-B3360AB849A2}	CLMH104N038MH104N035	140.53	139.86	0.666666667	MH104N038	MH104N035			417	CLMH104N038MH104N035	8	0.0016	0.024920	0.18	0.029819	0.19	0.035358	0.21	0.029819	0.19
CLMH104N039MH104N038		1985		Existing		MH104N039	MH104N038		T12151	IRWD	PVC	{50C54F65-A2E8-4181-99E7-5E0647B892DC}	CLMH104N039MH104N038	142.80	140.74	0.666666667	MH104N039	MH104N038			417	CLMH104N039MH104N038	8	0.0079	0.012188	0.09	0.014557	0.10	0.017258	0.10	0.014557	0.10
CLMH104N041MH104N039		1985		Existing		MH104N041	MH104N039		T12151	IRWD	PVC	{4C74485AC-E6D9-4D0B-A6A7-FEB154DA0DFE}	CLMH104N041MH104N039	143.72	143.00	0.666666667	MH104N041	MH104N039			143	CLMH104N041MH104N039	8	0.0075	0.009912	0.08	0.011858	0.09	0.014057	0.10	0.011858	0.09
CLMH104N042MH104N041		1985		Existing		MH104N042	MH104N041		T12151	IRWD	PVC	{0221F7D2-90E5-4C55-BA80-2138631E9E45}	CLMH104N042MH104N041	144.86	143.92	0.666666667	MH104N042	MH104N041			239	CLMH104N042MH104N041	8	0.0039	0.008287	0.08	0.009921	0.09	0.011762	0.10	0.009921	0.09
CLMH104N043MH104N042		1985		Existing		MH104N043	MH104N042		T12151	IRWD	PVC	{71779DF9A-3B81-4956-97C9-B59B36716165}	CLMH104N043MH104N042	145.94	145.07	0.666666667	MH104N043	MH104N042			223	CLMH104N043MH104N042	8	0.0039	0.004682	0.06	0.005621	0.07	0.006664	0.07	0.005621	0.07
CLMH104N045MH104N055		1985		Existing		MH104N045	MH104N055		485	IRWD	PVC	{8F7E7858-8FDB-4907-8595-5DCD54F36BD6}	CLMH104N045MH104N055	135.94	133.00	0.833333333	MH104N045	MH104N055			406	CLMH104N045MH104N055	10	0.0072	0.069519	0.16	0.082432	0.17	0.097819	0.19	0.082431	0.17
CLMH104N048MH104N045		1985		Existing		MH104N048	MH104N045		T12151	IRWD	PVC	{953EDAB7-1FBC-4DEA-A03F-E0D8DA782D88}	CLMH104N048MH104N045	136.94	136.35	0.666666667	MH104N048	MH104N045			167	CLMH104N048MH104N045	8	0.0035	0.017944	0.12	0.021517	0.13	0.025509	0.15	0.021517	0.13
CLMH104N049MH104N048		1985		Existing		MH104N049	MH104N048		T12151	IRWD	PVC	{20ADF14E-3987-4B06-B464-86A9717C421D}	CLMH104N049MH104N048	139.72	137.14	0.666666667	MH104N049	MH104N048			156	CLMH104N049MH104N048	8	0.0165	0.009763	0.07	0.011693	0.08	0.013865	0.08	0.011693	0.08
CLMH104N050MH104N049		1985		Existing		MH104N050	MH104N049		T12151	IRWD	PVC	{5CF112CE-F9D7-473A-9222-4633040F2681}	CLMH104N050MH104N049	140.30	139.91	0.666666667	MH104N050	MH104N049			208	CLMH104N050MH104N049	8	0.0038	0.008446	0.08	0.010112	0.09	0.011991	0.10	0.010112	0.09
CLMH104N053MH104N050		1985		Existing		MH104N053	MH104N050		T12151	IRWD	PVC	{444F2CAF-AF23-4288-B8DC-78D120EB7CBF}	CLMH104N053MH104N050	142.30	140.50	0.666666667	MH104N053	MH104N050			93	CLMH104N053MH104N050	8	0.0194	0.003067	0.04	0.003681	0.04	0.004365	0.04	0.003681	0.04
CLMH104N055MH085E155		1985		Existing		MH104N055	MH085E155		485	IRWD	PVC	{0FFBDBAA-934F-401D-B154-95CFA8F38060}	CLMH104N055MH085E155	132.80	131.85	0.833333333	MH104N055	MH085E155			188	CLMH104N055MH085E155	10	0.0077	0.077461	0.16	0.091878	0.18	0.109021	0.19	0.091878	0.18
CLMH104N056MH104N055		1985		Existing		MH104N056	MH104N055		T12151	IRWD	PVC	{758954A8-9DDA-49E2-9416-3CBAE5EA9195}	CLMH104N056MH104N055	134.11	133.16	0.666666667	MH104N056	MH104N055			215	CLMH104N056MH104N055	8	0.0047	0.007954	0.06	0.009460	0.09	0.011214	0.09	0.009460	0.09
CLMH104N058MH104N056		1985		Existing		MH104N058	MH104N056		T12151	IRWD	PVC	{45606143-EE1E-4AD3-994D-FD81795E05AB4}	CLMH104N058MH104N056	136.61	134.30	0.666666667	MH104N058	MH104N056			210	CLMH104N058MH104N056	8	0.0110	0.007004	0.06	0.008342	0.07	0.009890	0.07	0.008342	0.07
CLMH104N059MH104N058		1985		Existing		MH104N059	MH104N058		T12151	IRWD	PVC	{C05546F2-D224-4C6E-8355-9FBE4255AF2A}	CLMH104N059MH104N058	138.49	136.82	0.666666667	MH104N059	MH104N058			213	CLMH104N059MH104N058	8	0.0078	0.004786	0.06	0.005747	0.06	0.006813	0.07	0.005747	0.06
CLMH104N060MH104N059		1985		Existing		MH104N060	MH104N059		T12151	IRWD	PVC	{4A60A400-CFF3-4D81-BCC4-162BA3AD3D20}	CLMH104N060MH104N059	139.25	138.69	0.666666667	MH104N060	MH104N059			146	CLMH104N060MH104N059	8	0.0038	0.003051	0.05	0.003664	0.06	0.004344	0.06	0.003664	0.06
CLMH104N062MH104N011		1985		Existing		MH104N062	MH104N011		A00486	IRWD	PVC	{5D803298-6E0D-4359-B3CE-E791791FCB0}	CLMH104N062MH104N011	137.83	137.36	0.666666667	MH104N062	MH104N011			100	CLMH104N062MH104N011	8	0.0047	0.004188	0.06	0.005027	0.06	0.005961	0.07	0.005027	0.06
CLMH104N064MH104N065		1985		Existing		MH104N064	MH104N065		T12415	IRWD	PVC	{89E7A974-CA75-4484-9340-2FBAFB032E20}	CLMH104N064MH104N065	139.19	135.30	0.666666667	MH104N064	MH104N065			264	CLMH104N064MH104N065	8	0.0147	0.002656	0.04	0.003179	0.04	0.003768	0.04	0.003179	0.04
CLMH104N065MH085E118		1985		Existing		MH104N065	MH085E118		T12415	IRWD	PVC	{2F069351-7D8C-4752-BAD8-9E367649F6E6}	CLMH104N065MH085E118	135.19	132.00	0.666666667	MH104N065	MH085E118			251	CLMH104N065MH085E118	8	0.0127	0.004765	0.05	0.005711	0.06	0.006770	0.06	0.005711	0.06
CLMH104N067MH104N120		1985		Existing		MH104N067	MH104N120		T12415	IRWD	PVC	{9108FE70-020C-4099-AD06-94A58C6E7A60}	CLMH104N067MH104N120	139.80	134.50	0.666666667	MH104N067	MH104N120			279	CLMH104N067MH104N120	8	0.0190	0.003067	0.04	0.003681	0.04	0.004363	0.04	0.003681	0.04
CLMH104N068MH104N122		1985		Existing		MH104N068	MH104N122		T12415	IRWD	PVC	{8B406A7E-CD57-41BF-A75B-274DBDEDAFE6}	CLMH104N068MH104N122	138.50	135.94	0.666666667	MH104N068	MH104N122			167	CLMH104N068MH104N122	8	0.0153	0.001615	0.03	0.001940	0.03	0.002299	0.03	0.001940	0.03
CLMH104N069MH104N067		1985		Existing		MH104N069	MH104N067		T12415	IRWD	PVC	{1011D92A-706F-41A0-87D5-C9CDC5D466EF}	CLMH104N069MH104N067	141.50	140.00	0.666666667	MH104N069	MH104N067			145	CLMH104N069MH104N067	8	0.0103	0.000703	0.02	0.000844	0.02	0.001000	0.02	0.000844	0.02
CLMH104N071MH104N072		1985		Existing		MH104N071	MH104N072		T12415	IRWD	PVC	{BEBAF784-0685-4E81-BD17-67CD0C318DF}	CLMH104N071MH104N072	141.38	140.86	0.666666667	MH104N071	MH104N072			110	CLMH104N071MH104N072	8	0.0047	0.000418	0.02	0.000502	0.02	0.000596	0.02	0.000502	0.02
CLMH104N072MH104N012		1985		Existing		MH104N072	MH104N012		T12415	IRWD	PVC	{F56FC404-FDAE-425A-9619-E37DF511837B}	CLMH104N072MH104N012	140.66	139.71	0.666666667	MH104N072	MH104N012			200	CLMH104N072MH104N012	8	0.0048	0.004575	0.06	0.005495	0.07	0.006514	0.07	0.005495	0.07
CLMH104N073MH104N072		1985		Existing		MH104N073	MH104N072		T12415	IRWD	PVC	{6D5A43DD-986D-475C-B7D0-46A3E2116EFB}	CLMH104N073MH104N072	141.80	140.86	0.666666667	MH104N073	MH104N072			99	CLMH104N073MH104N072	8	0.0095	0.004157	0.05	0.004993	0.06	0.005918	0.06	0.004993	0.06
CLMH104N074MH104N073		1985		Existing		MH104N074	MH104N073		T12415	IRWD	PVC	{C0FF1991-451A-476D-99E7-B9A5FF055644}	CLMH104N074MH104N073	143.30	142.00	0.666666667	MH104N074	MH104N073			63	CLMH104N074MH104N073	8	0.0165	0.000657	0.02	0.000791	0.02	0.000936	0.02	0.000791	0.02
CLMH104N075MH104N015		1988		Existing		MH104N075	MH104N015		T13099	IRWD	PVC	{2930BECC-E33A-43F8-AC41-586E0ADEAA32}	CLMH104N075MH104N015	142.91	142.80	0.666666667	MH104N075	MH104N015			25	CLMH104N075MH104N015	8	0.0044	0.028697	0.15	0.034442	0.16	0.040828	0.18	0.034442	0.16
CLMH104N076MH104N075		1988		Existing		MH104N076	MH104N075		T13099	IRWD	PVC	{3B158A9A-2382-40F4-B617-7924737E3AF2F7}	CLMH104N076MH104N075	143.41	143.00	0.666666667	MH104N076	MH104N075			110	CLMH104N076MH104N075	8	0.0037	0.028697	0.15	0.034442	0.17	0.040828	0.18	0.034442	0.17
CLMH104N077MH104N076		1988		Existing		MH104N077	MH104N076		T13099	IRWD	PVC	{6594EBA8-458E-4CB8-A493-DBE56E

CLMH104N196MH104N033		2008		Existing	assumed Mannings N	MH104N196	MH104N033		A001862	IRWD	PVC	{FC0E98CD-5851-4D0F-AEC7-3097CBDF5DDD}	CLMH104N196MH104N033	145.34	145.17	0.833333333	MH104N196	MH104N033			17	CLMH104N196MH104N033	10	0.0099	0.011919	0.06	0.012727	0.06	0.015088	0.07	0.012727	0.06
CLMH104N197MH104N198		2008		Existing	assumed Mannings N	MH104N197	MH104N198		A001862	IRWD	PVC	{DA72F0E0-C9A0-47C5-B7FF-C1B1316BCF81}	CLMH104N197MH104N198	159.15	156.97	0.666666667	MH104N197	MH104N198			218	CLMH104N197MH104N198	8	0.0100	0.000834	0.02	0.000891	0.02	0.001055	0.02	0.000891	0.02
CLMH104N198MH104N199		2008		Existing	assumed Mannings N	MH104N198	MH104N199		A001862	IRWD	PVC	{F6721260-4CC2-44EF-ACA7-B08BC58B45BC}	CLMH104N198MH104N199	156.77	156.53	0.666666667	MH104N198	MH104N199			24	CLMH104N198MH104N199	8	0.0100	0.000834	0.02	0.000891	0.02	0.001055	0.02	0.000891	0.02
CLMH104N199MH104N204		2008		Existing	assumed Mannings N	MH104N199	MH104N204		A001862	IRWD	PVC	{CD2CE98A-4D15-41E6-8032-2B2D118EFF94}	CLMH104N199MH104N204	156.33	152.78	0.666666667	MH104N199	MH104N204			112	CLMH104N199MH104N204	8	0.0117	0.000834	0.02	0.000891	0.02	0.001055	0.02	0.000891	0.02
CLMH104N200MH104N177		2008		Existing	assumed Mannings N	MH104N200	MH104N177		A001862	IRWD	PVC	{3E6E8BA9-A2FB-47F5-9328-43AA49669D60}	CLMH104N200MH104N177	156.00	150.58	0.666666667	MH104N200	MH104N177			342	CLMH104N200MH104N177	8	0.0159	0.000180	0.01	0.000193	0.01	0.000228	0.01	0.000193	0.01
CLMH104N201MH104N202		2008		Existing	assumed Mannings N	MH104N201	MH104N202		A001862	IRWD	PVC	{6E8148CB-E708-402A-905F-AA9786A41447}	CLMH104N201MH104N202	157.09	152.68	0.666666667	MH104N201	MH104N202			176	CLMH104N201MH104N202	8	0.0250	0.000630	0.01	0.000674	0.02	0.000799	0.02	0.000674	0.02
CLMH104N202MH104N179		2008		Existing	assumed Mannings N	MH104N202	MH104N179		A001862	IRWD	PVC	{82008E17-E002-49CE-A285-AA5BAF0EF8DC}	CLMH104N202MH104N179	152.58	149.09	0.666666667	MH104N202	MH104N179			142	CLMH104N202MH104N179	8	0.0245	0.001532	0.03	0.001635	0.03	0.001940	0.03	0.001635	0.03
CLMH104N203MH104N204		2008		Existing	assumed Mannings N	MH104N203	MH104N204		A001862	IRWD	PVC	{25C0EC0F-6F13-4464-A872-858A02803FA}	CLMH104N203MH104N204	158.67	152.68	0.666666667	MH104N203	MH104N204			240	CLMH104N203MH104N204	8	0.0250	0.000157	0.00	0.000164	0.00	0.000156	0.01	0.000120	0.00
CLMH104N204MH104N174		2008		Existing	assumed Mannings N	MH104N204	MH104N174		A001862	IRWD	PVC	{FE1BEA65-884A-462E-9409-200E67FF8F83}	CLMH104N204MH104N174	152.58	151.82	0.666666667	MH104N204	MH104N174			149	CLMH104N204MH104N174	8	0.0045	0.000947	0.03	0.001010	0.03	0.001197	0.03	0.001010	0.03
CLMH104S001MH104S007		2007		Existing	assumed Mannings N	MH104S001	MH104S007		A01782A	IRWD	PVC	{9400D695-F0B8-40F6-AC1B-613707266BE6}	CLMH104S001MH104S007	136.59	135.13	1.000000000	MH104S001	MH104S007			61	CLMH104S001MH104S007	12	0.0239	0.027594	0.06	0.029467	0.06	0.034943	0.07	0.263079	0.18
CLMH104S002MH104S014		2003		Existing	assumed Mannings N	MH104S002	MH104S014		01782	IRWD	VCP	{07E8CFA4-8C0A-4977-ABAF-F434E1F23F56}	CLMH104S002MH104S014	126.75	126.40	1.000000000	MH104S002	MH104S014			78	CLMH104S002MH104S014	12	0.0045	0.027593	0.09	0.029466	0.10	0.034943	0.10	0.263078	0.27
CLMH104S003MH104S001		1971		Existing	assumed Mannings N	MH104S003	MH104S001		A00089	IRWD	VCP	{EF3E111B-2710-4A67-B062-68A58AC1933}	CLMH104S003MH104S001	139.89	136.59	1.000000000	MH104S003	MH104S001			829	CLMH104S003MH104S001	12	0.0040	0.027595	0.08	0.029467	0.08	0.034944	0.09	0.263080	0.24
CLMH104S004MH104S003		1971		Existing	assumed Mannings N	MH104S004	MH104S003		A00089	IRWD	VCP	{E8CD91D7-0723-4626-9A98-4F67F4EE69AC}	CLMH104S004MH104S003	150.33	140.00	1.000000000	MH104S004	MH104S003			870	CLMH104S004MH104S003	12	0.0119	0.027598	0.07	0.029470	0.08	0.034946	0.08	0.263082	0.22
CLMH104S005MH104S006		2003		Existing	assumed Mannings N	MH104S005	MH104S006		01782	IRWD	VCP	{04A69D7B-3157-4630-9686-419F806640AA}	CLMH104S005MH104S006	150.05	148.27	2.500000000	MH104S005	MH104S006			368	CLMH104S005MH104S006	30	0.0048	2.652225	0.26	3.161313	0.28	3.782580	0.31	5.401399	0.37
CLMH104S006MH104S015		2003		Existing	assumed Mannings N	MH104S006	MH104S015		01782	IRWD	VCP	{8064C23F-DFDB-4BF1-A7C5-02F63E489F75}	CLMH104S006MH104S015	148.27	145.96	2.500000000	MH104S006	MH104S015			468	CLMH104S006MH104S015	30	0.0049	2.652025	0.25	3.161121	0.28	3.782427	0.30	5.415256	0.37
CLMH104S007MH104S002		2007		Existing	assumed Mannings N	MH104S007	MH104S002		A01782A	IRWD	PVC	{9CA08E25-560F-4568-8736-65C088B958A3}	CLMH104S007MH104S002	135.13	126.75	1.000000000	MH104S007	MH104S002			349	CLMH104S007MH104S002	12	0.0240	0.027594	0.08	0.029466	0.08	0.034943	0.09	0.263078	0.23
CLMH104S009MH103E045		2003		Existing	assumed Mannings N	MH104S009	MH103E045		01708	IRWD	VCP	{5F496078-33E0-4909-9886-1F4ED2938F9C}	CLMH104S009MH103E045	129.03	108.84	3.000000000	MH104S009	MH103E045			658	CLMH104S009MH103E045	36	0.0006	2.660678	0.34	3.169887	0.38	3.791699	0.41	5.552073	0.51
CLMH104S011MH104S020		2003		Existing	assumed Mannings N	MH104S011	MH104S020		01708	IRWD	VCP	{2E35ACE1-0F2C-4246-AA35-0B771C012083}	CLMH104S011MH104S020	124.01	123.26	3.000000000	MH104S011	MH104S020			202	CLMH104S011MH104S020	36	0.0144	2.662322	0.15	3.171937	0.17	3.795079	0.18	5.560338	0.22
CLMH104S012MH104S011		2003		Existing	assumed Mannings N	MH104S012	MH104S011		01782	IRWD	VCP	{A39005ED-98FF-4F3D-A407-9740E333B495}	CLMH104S012MH104S011	124.33	124.01	2.500000000	MH104S012	MH104S011			17	CLMH104S012MH104S011	30	0.0188	2.662303	0.18	3.171916	0.20	3.795058	0.22	5.560357	0.27
CLMH104S014MH104S012		2003		Existing	assumed Mannings N	MH104S014	MH104S012		01782	IRWD	VCP	{D213642E-8A7A-4B27-BFE8-000964188067}	CLMH104S014MH104S012	126.40	126.02	1.000000000	MH104S014	MH104S012			73	CLMH104S014MH104S012	12	0.0052	0.027593	0.09	0.029465	0.09	0.034943	0.10	0.263077	0.27
CLMH104S015MH104S016		2003		Existing	assumed Mannings N	MH104S015	MH104S016		01782	IRWD	VCP	{2318D874-12A2-4DED-9C45-9FD7A7DD7E1F}	CLMH104S015MH104S016	145.96	143.92	2.500000000	MH104S015	MH104S016			369	CLMH104S015MH104S016	30	0.0055	2.651807	0.23	3.160924	0.25	3.782245	0.28	5.414892	0.33
CLMH104S017MH104S019		2003		Existing	assumed Mannings N	MH104S017	MH104S019		01782	IRWD	VCP	{FC8AEBEB-82C1-4ADC-9244-86C958C22AD2}	CLMH104S017MH104S019	143.92	140.72	2.500000000	MH104S017	MH104S019			340	CLMH104S017MH104S019	30	0.0107	2.651646	0.24	3.160772	0.26	3.782086	0.28	5.414531	0.34
CLMH104S017MH104S019		2003		Existing	assumed Mannings N	MH104S017	MH104S019		01782	IRWD	VCP	{FCE5F941-2674-473B-A487-CB80DBC3234F}	CLMH104S017MH104S019	140.72	139.10	2.500000000	MH104S017	MH104S019			140	CLMH104S017MH104S019	30	0.0047	2.651693	0.25	3.160838	0.27	3.782197	0.30	5.414546	0.36
CLMH104S018MH104S012		2003		Existing	assumed Mannings N	MH104S018	MH104S012		01782	IRWD	VCP	{041EE24E-D0E1-40E3-A117-CC1A370CFEB}	CLMH104S018MH104S012	135.69	124.33	2.500000000	MH104S018	MH104S012			252	CLMH104S018MH104S012	30	0.0451	2.651495	0.17	3.160657	0.18	3.782023	0.20	5.414196	0.24
CLMH104S019MH103E045		2003		Existing	assumed Mannings N	MH104S019	MH103E045		01782	IRWD	VCP	{5C0F1660-02A2-4621-9625-752E1409AA2A}	CLMH104S019MH103E045	139.10	135.69	2.500000000	MH104S019	MH103E045			394	CLMH104S019MH103E045	30	0.0087	2.651547	0.19	3.160707	0.21	3.782076	0.23	5.414311	0.27
CLMH104S020MH104S021		2003		Existing	assumed Mannings N	MH104S020	MH104S021		01708	IRWD	VCP	{2E6D1D19-699C-4923-9E6C-DC4C40440CBC}	CLMH104S020MH104S021	123.26	119.09	3.000000000	MH104S020	MH104S021			202	CLMH104S020MH104S021	36	0.0206	2.662318	0.12	3.171933	0.13	3.795079	0.14	5.560348	0.17
CLMH104S021MH104S009		2003		Existing	assumed Mannings N	MH104S021	MH104S009		01708	IRWD	VCP	{406A7DC6-A92E-418D-A8BD-648919C111DE}	CLMH104S021MH104S009	119.09	109.23	3.000000000	MH104S021	MH104S009			86	CLMH104S021MH104S009	36	0.1160	2.662305	0.22	3.171921	0.24	3.795067	0.26	5.560322	0.32
CLMH104S022MH104S080		2014		Existing	assumed Mannings N	MH104S022	MH104S080	ERROR 23	A02297	IRWD	PVC	{5A67B5C4-3B20-43E7-B343-775047C5C197}	CLMH104S022MH104S080	165.77	165.75	1.000000000	MH104S022	MH104S080			118	CLMH104S022MH104S080	12	0.0002	0.025248	0.12	0.030376	0.13	0.036017	0.14	0.254951	0.34
CLMH104S023MH104S084		2008		Existing	assumed Mannings N	MH104S023	MH104S084		A02297	IRWD	PVC	{7605C896-130C-4ABB-9E49-E9208B55B65}	CLMH104S023MH104S084	166.60	166.56	1.000000000	MH104S023	MH104S084			12	CLMH104S023MH104S084	12	0.0006	0.00641	0.09	0.000486	0.10	0.000563	0.10	0.002292	0.28
CLMH104S024MH104S025		2012		Existing	assumed Mannings N	MH104S024	MH104S025		T1739AA	IRWD	PVC	{9680CFD9-D15C-43A4-A5A2-A19FE7F64DA1}	CLMH104S024MH104S025	160.33	159.93	0.666666667	MH104S024	MH104S025			68	CLMH104S024MH104S025	8	0.0059	0.035384	0.16	0.042474	0.17	0.050351	0.19	0.043143	0.17
CLMH104S025MH104S027		2012		Existing	assumed Mannings N	MH104S025	MH104S027		T1739AA	IRWD	PVC	{E4682041-D339-443B-B005-D0B9AACB33D1}	CLMH104S025MH104S027	159.73	158.96	0.666666667	MH104S025	MH104S027			159	CLMH104S025MH104S027	8	0.0048	0.046290	0.19	0.055366	0.20	0.065872	0.22	0.055316	0.20
CLMH104S026MH104S025		2012		Existing	assumed Mannings N	MH104S026	MH104S025		T1739AA	IRWD	PVC	{C8E4D3A6-9ECF-4324-ADEB-781D0C56FF89}	CLMH104S026MH104S025	162.65	159.94	0.666666667	MH104S026	MH104S025			65	CLMH104S026MH104S025	8	0.0417	0.010906	0.06	0.013093	0.06	0.015522	0.07	0.012174	0.06
CLMH104S027MH104S045		2012		Existing	assumed Mannings N	MH104S027	MH104S045		T1739AA	IRWD	PVC	{A1674163-3C06-41FC-9F96-540B188D0B0C}	CLMH104S027MH104S045	158.86	158.50	0.666666667	MH104S027	MH104S045			62	CLMH104S027MH104S045	8	0.0058	0.065725	0.22	0.078849	0.24	0.093473	0.26	0.088706	0.25
CLMH104S028MH104S027		2012		Existing	assumed Mannings N	MH104S028	MH104S027		T1739AA	IRWD	PVC	{65955C99-F006-424D-929B-D9FA82F7B765}	CLMH104S028MH104S027	165.50	158.96	0.666666667	MH104S028	MH104S027			273	CLMH104S028MH104S027	8	0.0240	0.019434	0.09	0.023282	0.09	0.027600	0.10	0.033389	0.11
CLMH104S029MH104S028		2012		Existing	assumed Mannings N	MH104S029	MH104S028		T1739AA	IRWD	PVC	{98B13360-7D97-4211-88CD-897E162183FF}	CLMH104S029MH104S028	170.43	165.70	0.666666667	MH104S029	MH104S028			368	CLMH104S029MH104S028	8	0.0129	0.007559	0.06	0.009023	0.07	0.010696	0.07	0.008174	0.07
CLMH104S030MH104S065		2012		Existing	assumed Mannings N	MH104S030	MH104S065		T1739AA	IRWD	PVC	{8B47DFF8-CF48-4424-A23E-4C97158789F5}	CLMH104S030MH104S065	173.59	172.11	0.666666667	MH104S030	MH104S065			78	CLMH104S030MH104S065	8	0.0190	0.001629	0.03	0.001857	0.03	0.002202	0.03	0.005410	0.05
CLMH104S031MH104S032		2012		Existing	assumed Mannings N	MH104S031	MH104S032		T1739AA	IRWD	PVC	{D5A2D06F-15FA-4D70-A79A-E310ABE221981}	CLMH104S031MH104S032	167.32	167.07	0.666666667	MH104S031	MH104S032			58	CLMH104S031MH104S032	8	0.0086	0.011875	0.09	0.014259	0.09	0.016904	0.10	0.021109	0.11
CLMH104S032MH104S028		2012		Existing	assumed Mannings N	MH104S032	MH104S028		T1739AA	IRWD	PVC	{B725B2AF-BF4E-448C-ADA1-98A3A1C0BC79}	CLMH104S032MH104S028	166.87	165.70	0.666666667	MH104S032	MH104S028			121	CLMH104S032MH104S028	8	0.0097	0.011875	0.08	0.014259	0.09	0.016904	0.10	0.021109	0.11
CLMH104S033MH104S031		2012		Existing	assumed Mannings N	MH104S033	MH104S031		T1739AA	IRWD	PVC	{012DF9C3-F0B0-4910-98B4-38BDE4E4AFC7}	CLMH104S033MH104S031	168.84	167.52	0.666666667	MH104S033	MH104S031			136	CLMH104S033MH104S031	8	0.0097	0.011875	0.08	0.014259	0.09	0.016904	0.10	0.021109	0.11
CLMH104S034MH104S035		2012		Existing	assumed Mannings N	MH104S034	MH104S035		T1739AA	IRWD	PVC	{012AFA19-63A3-48BB-A6CD-B5CDF33F016}	CLMH104S034MH104S035	169.56	169.03	0.666666667	MH104S034	MH104S035			55	CLMH104S034MH104S035	8	0.0066	0.006184	0.06	0.007427	0.07	0.008805	0.07	0.010428	0.08
CLMH104S035MH104S034		2012		Existing	assumed Mannings N	MH104S035	MH104S034		T1739AA	IRWD	PVC	{38FC945C-C2F8-4773-9AD9-E7FEA13885C7}	CLMH104S035MH104S034	171.14	169.76	0.666666667	MH104S035	MH104S034			142	CLMH104S035MH104S034	8	0.0097	0.002736	0.04	0.003286	0.05	0.003895	0.05	0.007108	0.07
CLMH104S036MH104S035		2012		Existing	assumed Mannings N	MH104S036	MH104S035		T1739AA	IRWD	PVC	{FBA32FD3-4C23-43E6-9031-23290D251D99}	CLMH104S036MH104S035	171.73	171.14	0.666666667	MH104S036	MH104S035			43	CLMH104S036MH104S035	8	0.0091	0.002736	0.04	0.003286	0.05	0.003895	0.05	0.007108	0.07
CLMH104S037MH104S036		2012		Existing	assumed Mannings N	MH104S037	MH104S036		T1739AA	IRWD	PVC	{0629868C-3B2D-4ACD-9F03-2324289E66F}	CLMH104S037MH104S036	171.26	169.77	0.666666667	MH104S037	MH104S036			153	CLMH104S037MH104S036	8	0.0097	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005775	0.06
CLMH104S038MH104S037		2012		Existing	assumed Mannings N	MH104S038	MH104S037		T1739AA	IRWD	PVC	{C1BFA3F7-6852-4E55-B718-516752823E03}	CLMH104S038MH104S037	171.82	171.45	0.666666667	MH104S038	MH104S037			40	CLMH104S038MH104S037	8	0.0093	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005775	0.06
CLMH104S039MH104S033		2012		Existing	assumed Mannings N	MH104S039	MH104S033		T1739AA	IRWD	PVC	{B40B8A68-7F32-4683-9280-1FAAFBA0112A}	CLMH104S039MH104S033	169.57	168.84	0.666666667	MH104S039	MH104S033			58	CLMH104S039MH104S033	8	0.0126	0.005690	0.07	0.006833	0.08	0.008100	0.08	0.010680	0.09
CLMH104S040MH104S039		2012		Existing	assumed Mannings N	MH104S040	MH104S039		T1739AA	IRWD	PVC	{D8D60C7F-0832-46C1-8DCA-6CC2D4A3A0D3}	CLMH104S040MH104S039	171.48	169.77	0.666666667	MH104S040	MH104S039			90	CLMH104S040MH104S039	8	0.0190	0.005690	0.05	0.006833	0.05	0.008100	0.06	0.004905	0.05
CLMH104S041MH104S034		2012		Existing	assumed Mannings N	MH104S041	MH104S034		T1739AA	IRWD	PVC	{4F81AC1C-A70A-419A-B178-A15ABA0B35B8}	CLMH104S041MH104S034	170.50	169.76	0.666666667	MH104S041	MH104S034			78	CLMH104S041MH104S034	8	0.0095	0.003448	0.05	0.004141	0.05	0.004910	0.06	0.003320	0.05
CLMH104S042MH104S043		2012		Existing	assumed Mannings N	MH104S042	MH104S043		T1739AA	IRWD	PVC	{642DCB13-195D-4BC9-8D4E-C497FA06D471}	CLMH104S042MH104S043	165.71	162.43	0.666666667	MH104S042	MH104S043			0426	CLMH104S042MH104S043	8	0.0426	0.006325	0.04	0.007593	0.05	0.009005	0.05	0.017829	0.07
CLMH104S043MH104S044		2012		Existing	assumed Mannings N	MH104S043	MH104S044		T1739AA	IRWD	PVC	{5CCA7E33-E0BD-498D-B80A-D3BF571ABCDC}	CLMH104S043MH104S044	162.23	161.93	0.666666667	MH104S043	MH104S044			52	CLMH104S043MH104S044	8	0.0058	0.035384	0.16	0.042474	0.17	0.050351	0.19	0.043143	0.18
CLMH104S044MH104S024		2012		Existing	assumed Mannings N	MH104S044	MH104S024		T1739AA	IRWD	PVC	{34594662-8B82-4522-9AE3-350C5F1715E5}	CLMH104S044MH104S024	161.73	160.53	0.666666667	MH104S044	MH104S024			196	CLMH104S044MH104S024	8	0.0061	0.035384	0.16	0.042474	0.17	0.050351	0.19	0.043143	0.17
CLMH104S045MH104E048		2011		Existing	assumed Mannings N	MH104S045	MH104E048		T1727?	IRWD	PVC	{622A6769-E860-47A6-9887-CB1F2477AABA}	CLMH104S045MH104E048	158.30	157.94	0.666666667	MH104S045	MH104E048			347	CLMH104S045MH104E048	8	0.0037	0.065725	0.23	0.078849	0.25	0.093473	0.28	0.088706	0.27
CLMH104S046MH104S043		2012		Existing	assumed Mannings N	MH104S046	MH104S043		T1739AA	IRWD	PVC	{54185BD0-560B-4708-85C0-006D94F89F5F}	CLMH104S046MH104S043	163.46	162.43	0.666666667	MH104S046	MH104S043			169	CLMH104S046MH104S043	8	0.0061	0.029059	0.14	0.034880	0.16	0.041350	0.17	0.025313	0.13
CLMH104S047MH104S046		2012		Existing	assumed Mannings N	MH104S047	MH104S046		T1739AA	IRWD	PVC	{569A08A8-7571-4A2F-A722-EF638898A799}	CLMH104S047MH104S046	163.81	163.66	0.666666667	MH104S047	MH104S046			61	CLMH104S047MH104S046	8	0.0054	0.029059	0.14	0.034880	0.16	0.041350	0.17	0.025313	0.14
CLMH104S048MH104S047		2012		Existing	assumed Mannings N	MH104S048	MH104S047		T1739AA	IRWD	PVC	{8846302?-4133-41BD-B17F-13B1C2F7C6D9}	CLMH104S048MH104S047	164.72	164.01	0.666666667	MH104S048	MH104S047			177	CLMH104S048MH104S047	8	0.0061	0.029059	0.14	0.034880	0.16	0.041350	0.17	0.025313	0.13
CLMH104S049MH104S048		2012		Existing	assumed Mannings N	MH104S049	MH104S048		T1739AA	IRWD	PVC	{4003B3A9-FF91-40B7-AA99-7C512913DA2C}	CLMH104S049MH104S048	166.78	164.92	0.666666667	MH104S049	MH104S048			299	CLMH104S049MH104S048	8	0.0062	0.026798	0.14	0.032167	0.15	0.038132	0.16	0.025313	0.13
CLMH104S050MH104S049		2012		Existing	assumed Mannings N	MH104S050	MH104S049		T1739AA	IRWD	PVC	{05D55A51-EA78-4405-90F6-CF80FAF A7334}	CLMH104S050MH104S049	167.96	166.98	0.666666667	MH104S050	MH104S049			159	CLMH104S050MH104S049	8	0.0062	0.020950	0.12	0.025144	0.13	0.029808	0.14	0.025313	0.13
CLMH104S051MH104S050		2012		Existing	assumed Mannings N	MH104S051	MH104S050		T1739AA	IRWD	PVC	{8F370134-CC1E-4FC1-B39C-50F801BF46B}	CLMH104S051MH104S050	168.96	168.16	0.666666667	MH104S051	MH104S050			85	CLMH104S051MH104S050	8	0.0094	0.003192	0.04	0.003833	0.04	0.004542	0.05	0.007918	0.07
CLMH104S052MH104S051		2012		Existing	assumed Mannings N	MH104S052	MH104S051		T1739AA	IRWD	PVC	{2D1C18D0-7BB5-4675-9343-8DB2A9D6DA45}	CLMH104S052MH104S051	169.67	169.16	0.666666667	MH104S052	MH104S051			55	CLMH104S052MH104S051	8	0.0093	0.003192	0.05	0.003833	0.05	0.004542	0.05	0.007918	0.07
CLMH104S053MH104S052		2012		Existing	assumed Mannings N	MH104S053	MH104S052		T1739AA	IRWD	PVC	{EA998A35-0431-467B-913F-D23AB0B913F7}	CLMH104S053MH104S052	172.08	169.67	0.666666667	MH104S053	MH104S052			151	CLMH104S053MH104S052	8	0.0146	0.003192	0.04	0.003833	0.04	0.004542	0.05	0.007918	0.06
CLMH104S054MH104S053		2012		Existing	assumed Mannings N	MH104S054	MH104S053		T1739AA	IRWD	PVC	{20890C29-A412-4881-9586-FCE994B5753D}	CLMH104S054MH104S053	173.47	172.28	0.666666667	MH104S054	MH104S053			79	CLMH104S054MH104S053	8	0.0151	0.003192	0.04	0.003833	0.04	0.004542	0.05	0.007918	0.06
CLMH104S055MH104S083		2012		Existing	assumed Mannings N	MH104S055	MH104S083		T1739AA	IRWD	PVC	{8F81E586-E258-46A6-9737-5BAD4D4821CA}	CLMH104S055MH104S083	172.25	170.81	0.666666667	MH104S055	MH104S083			56	CLMH104S055MH104S083	8	0.0189	0.002795	0.04	0.003356	0.04	0.003978	0.04	0.002049	0.03
CLMH104S056MH104S057		2012		Existing	assumed Mannings N	MH104S056	MH104S057		T1739AA	IRWD	PVC	{DC6D23B0-A8AD-45AC-A64A-7D7EA07AD027}	CLMH104S056MH104S057	170.61	169.97	0.666666667	MH104S056	MH104S057			68	CLMH104S056MH104S057	8	0.0094	0.009833	0.08	0.011804	0.08	0.013994	0.09	0.009296	0.07
CLMH104S057MH104S058		2012		Existing	assumed Mannings N	MH104S057	MH104S058		T1739AA	IRWD	PVC	{8E37E45C-8C08-4071-96F9-9175C2A84CD1}	CLMH104S057MH104S058	169.77	169.39	0.666666667	MH104S057	MH104S058			64	CLMH104S057MH104S058	8	0.0059	0.015483	0.10	0.018588	0.11	0.022036	0.13	0.017395	0.11
CLMH104S058MH104S050		2012		Existing	assumed Mannings N	MH104S058	MH104S050		T1739AA	IRWD	PVC	{CC4F7E94-08BA-4B2B-B9F8-C486CB050080}	CLMH104S058MH104S050	169.19	168.16	0.666666667	MH104S058	MH104S050			167	CLMH104S058MH104S050	8	0.0062	0.015483	0.10	0.018588	0.11	0.022036	0.12	0.017395	0.11
CLMH104S059MH104S058		2012		Existing	assumed Mannings N	MH104S059	MH104S058		T1739AA	IRWD	PVC	{82B25345-249C-4975-B45E-50CB27D8A77}	CLMH104S059MH104S058	170.42	169.39	0.666666667	MH104S059	MH104S058			147	CLMH104S059MH104S058	8	0.0184	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008100	0.06
CLMH104S060MH104S056		2012		Existing	assumed Mannings N	MH104S060	MH104S056		T1739AA	IRWD	PVC	{E3EA3500-A087-4AE3-85D6-2DB58FD8CCC1}	CLMH104S060MH104S056	172.48	170.81	0.666666667	MH104S060	MH104S056			171	CLMH104S060MH104S056	8	0.0098	0.007038	0.07	0.008448	0.07	0.010016	0.08	0.007247	0.07
CLMH104S061MH104S060		2012		Existing	assumed Mannings N	MH104S061	MH104S060		T1739AA	IRWD	PVC	{45B6899A-958F-4033-8030-F62639B3CB06}	CLMH104S061MH104S060	174.00	172.68	0.666666667	MH104S061	MH104S060			70	CLMH104S061MH104S060	8	0.0189	0.003469	0.04	0.004164	0.04	0.004937	0.05	0.002532	0.03
CLMH104S062MH104S063		2012		Existing	assumed Mannings N	MH104S062	MH104S063		T1739AA	IRWD	PVC	{7C57A409-C515-4595-B1BC-8CED3832A9B1}	CLMH104S062MH104S063	174.11	173.55	0.666666667	MH104S062	MH104S063			32	CLMH104S062MH104S063	8	0.0175	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001536	0.03
CLMH104S063MH104S060		2012		Existing	assumed Mannings N	MH104S063	MH104S060		T1739AA	IRWD	PVC	{07B4109A-275B-4927-B41B-BAEADE6E5CBF}	CLMH104S063MH104S060	173.35	172.68	0.666666667	MH104S063	MH104S060			71	CLMH104S063MH104S060	8	0.0094	0.003568	0.05	0.004284	0.05	0.005078	0.06	0.004715	0.05
CLMH104S064MH104S063		2012		Existing	assumed Mannings N	MH104S064	MH104S063		T1739AA	IRWD	PVC	{C7537B5A-997C-440E-BAD8-B49F147A951F}	CLMH104S064MH104S063	174.27	173.55	0.666666667	MH104S064	MH104S063			274	CLMH104S064MH104S063	8	0.0094	0.003568	0.05	0.004284	0.05	0.005078	0.06	0.003179	0.05
CLMH104S065MH104S029		2012		Existing	assumed Mannings N	MH104S065	MH104S029		T1739AA	IRWD	PVC	{0AE5

CLMH104W055MH104W054		1979		Existing		MH104W055	MH104W054	023	IRWD	VCP	{6246C627-4FD7-4771-901E-089731CCDFF3}	CLMH104W055MH104W054	138.05	137.00	0.666666667	MH104W055	MH104W054			275	CLMH104W055MH104W054	8	0.0038	0.067959	0.24	0.072557	0.25	0.086020	0.27	0.072557	0.25					
CLMH104W059MH104N010		1982		Existing		MH104W059	MH104N010	T09677	IRWD	VCP	{30DB80F8-52C8-420C-A227-55A795CC57F2}	CLMH104W059MH104N010	139.19	138.11	0.666666667	MH104W059	MH104N010			272	CLMH104W059MH104N010	8	0.0040	0.001508	0.04	0.001611	0.04	0.001909	0.04	0.001611	0.04					
CLMH104W060MH104N006		1982		Existing	assumed Mannings N	MH104W060	MH104N006	T09677	IRWD	VCP	{3F32F68A-0E08-44F4-8DF1-3F281A1D2DBC}	CLMH104W060MH104N006	135.50	132.75	0.666666667	MH104W060	MH104N006			390	CLMH104W060MH104N006	8	0.0071	0.007302	0.07	0.007802	0.07	0.009258	0.08	0.007802	0.07					
CLMH104W076MH085S071		1979		Existing		MH104W076	MH085S071	T07065	IRWD	VCP	{E701966F-8538-4A7C-8655-C18DC97D9E7C}	CLMH104W076MH085S071	111.26	106.88	0.666666667	MH104W076	MH085S071			130	CLMH104W076MH085S071	8	0.0337	0.003891	0.10	0.004151	0.11	0.004916	0.12	0.004151	0.11					
CLMH104W080MH104W001		1971		Existing	assumed Mannings N	MH104W080	MH104W001	A00082	IRWD	VCP	{F3365CA5-B5BE-4C76-A193-5774A21DA95D}	CLMH104W080MH104W001	129.89	124.59	0.666666667	MH104W080	MH104W001			410	CLMH104W080MH104W001	8	0.0129	0.070403	0.19	0.075166	0.20	0.089114	0.21	0.075166	0.20					
CLMH104W081MH104W024		1969		Existing	assumed Mannings N	MH104W081	MH104W024	7060	IRWD	VCP	{1BDF8DF8-F7FA-4C24-A988-CA25D2630750}	CLMH104W081MH104W024	128.30	122.00	0.500000000	MH104W081	MH104W024			315	CLMH104W081MH104W024	6	0.0200	0.002880	0.05	0.003076	0.06	0.003646	0.06	0.003076	0.06					
CLMH104W083MH104W033		1971		Existing	assumed Mannings N	MH104W083	MH104W033	T07401	IRWD	VCP	{C4DD5047-7942-4655-819E-AE2BDB8BF964}	CLMH104W083MH104W033	123.40	120.15	0.666666667	MH104W083	MH104W033			268	CLMH104W083MH104W033	8	0.0121	0.052553	0.17	0.056121	0.17	0.066562	0.19	0.056121	0.17					
CLMH105E024MH105E217		2009		Existing	assumed Mannings N	MH105E024	MH105E217	T16495B	IRWD	PVC	{1A31A228-D0A6-4C41-B79A-CBDE7D943B2B}	CLMH105E024MH105E217	228.32	225.70	0.666666667	MH105E024	MH105E217			296	CLMH105E024MH105E217	8	0.0089	0.009889	0.08	0.011873	0.09	0.014075	0.09	0.011873	0.09					
CLMH105E025MH105E024		2004		Existing	assumed Mannings N	MH105E025	MH105E024	T16495B	IRWD	PVC	{F27E602D-9FF7-42FF-A1FC-99D16F62BE45}	CLMH105E025MH105E024	231.49	228.42	0.666666667	MH105E025	MH105E024			219	CLMH105E025MH105E024	8	0.0140	0.002533	0.04	0.003004	0.04	0.003040	0.04	0.003004	0.04					
CLMH105E026MH105E150		2004		Existing	assumed Mannings N	MH105E026	MH105E150	T16539	IRWD	PVC	{AA683777-229F-45EB-B013-B16EBEBA4CA8}	CLMH105E026MH105E150	227.42	222.08	0.666666667	MH105E026	MH105E150			76	CLMH105E026MH105E150	8	0.0703	0.013566	0.06	0.016289	0.06	0.019310	0.07	0.016289	0.06					
CLMH105E027MH105E058		2004		Existing	assumed Mannings N	MH105E027	MH105E058	T16495	IRWD	PVC	{BA162900-2F9E-44ED-B47D-5893ABE44B34}	CLMH105E027MH105E058	241.08	239.08	0.666666667	MH105E027	MH105E058			183	CLMH105E027MH105E058	8	0.0109	0.019734	0.10	0.023631	0.11	0.028014	0.12	0.023631	0.11					
CLMH105E028MH105E060		2004		Existing	assumed Mannings N	MH105E028	MH105E060	T16495	IRWD	PVC	{21336D8C-A2FC-497B-B719-CDB80AAFDCC4}	CLMH105E028MH105E060	251.63	249.97	0.666666667	MH105E028	MH105E060			165	CLMH105E028MH105E060	8	0.0101	0.008569	0.07	0.010287	0.08	0.012197	0.08	0.010287	0.08					
CLMH105E029MH105E037		2004		Existing	assumed Mannings N	MH105E029	MH105E037	T16495	IRWD	PVC	{B7222C02-3E1A-482F-B150-EF9F459994EF}	CLMH105E029MH105E037	246.67	244.86	0.666666667	MH105E029	MH105E037			172	CLMH105E029MH105E037	8	0.0105	0.013957	0.09	0.016757	0.10	0.019867	0.10	0.016757	0.10					
CLMH105E030MH105E036		2004		Existing	assumed Mannings N	MH105E030	MH105E036	T16495	IRWD	PVC	{FAA41A72-4AD8-4A72-8882-433750130D09}	CLMH105E030MH105E036	236.77	233.52	0.666666667	MH105E030	MH105E036			85	CLMH105E030MH105E036	8	0.0282	0.039988	0.11	0.047949	0.12	0.056846	0.13	0.047949	0.12					
CLMH105E031MH105E032		2004		Existing	assumed Mannings N	MH105E031	MH105E032	T16495	IRWD	PVC	{77342EE1-50B2-4E50-A415-519CFBF7B190}	CLMH105E031MH105E032	242.22	241.13	0.666666667	MH105E031	MH105E032			27	CLMH105E031MH105E032	8	0.0404	0.006428	0.04	0.007715	0.05	0.009149	0.05	0.007715	0.05					
CLMH105E032MH105E030		2004		Existing	assumed Mannings N	MH105E032	MH105E030	T16495	IRWD	PVC	{BAC244EE-A074-487A-845D-F58C14252D65}	CLMH105E032MH105E030	240.92	236.97	0.666666667	MH105E032	MH105E030			75	CLMH105E032MH105E030	8	0.0527	0.009219	0.05	0.011067	0.05	0.013122	0.06	0.011067	0.05					
CLMH105E033MH105E111		2004		Existing	assumed Mannings N	MH105E033	MH105E111	T16495	IRWD	PVC	{B8823E84-4D61-408A-AE6A-271207A91944}	CLMH105E033MH105E111	243.13	239.86	0.666666667	MH105E033	MH105E111			265	CLMH105E033MH105E111	8	0.0123	0.001795	0.03	0.002156	0.04	0.002557	0.04	0.002156	0.04					
CLMH105E034MH105E113		2004		Existing	assumed Mannings N	MH105E034	MH105E113	T16495	IRWD	PVC	{E7F37F86-B13D-45DA-9FC1-D2855C99A28F}	CLMH105E034MH105E113	240.82	235.94	0.666666667	MH105E034	MH105E113			278	CLMH105E034MH105E113	8	0.0176	0.007617	0.06	0.009144	0.06	0.010841	0.07	0.009144	0.06					
CLMH105E035MH105E117		2004		Existing	assumed Mannings N	MH105E035	MH105E117	T16495	IRWD	PVC	{E02EAF0C-AF44-4D64-B0EE-4BE2212609Z0}	CLMH105E035MH105E117	237.35	231.58	0.666666667	MH105E035	MH105E117			259	CLMH105E035MH105E117	8	0.0223	0.007400	0.05	0.008884	0.06	0.010533	0.06	0.008884	0.06					
CLMH105E036MH105E166		2003		Existing	assumed Mannings N	MH105E036	MH105E166	T1716	IRWD	PVC	{57F7E209-3AD9-4CA7-AA91-A203ABEA8EE5}	CLMH105E036MH105E166	233.07	230.69	0.666666667	MH105E036	MH105E166			64	CLMH105E036MH105E166	8	0.0372	0.042888	0.11	0.051429	0.12	0.060974	0.13	0.051429	0.12					
CLMH105E037MH105E040		2004		Existing	assumed Mannings N	MH105E037	MH105E040	T16495	IRWD	PVC	{40390AA2-11DE-4E4C-B0CC-5B1EB8CF98BD}	CLMH105E037MH105E040	244.66	242.92	0.666666667	MH105E037	MH105E040			173	CLMH105E037MH105E040	8	0.0101	0.021870	0.11	0.026246	0.12	0.031116	0.13	0.026246	0.12					
CLMH105E038MH105E026		2004		Existing	assumed Mannings N	MH105E038	MH105E026	T16539	IRWD	PVC	{90CE9007-E5F9-4197-B081-23A76AD63799}	CLMH105E038MH105E026	233.67	227.63	0.666666667	MH105E038	MH105E026			336	CLMH105E038MH105E026	8	0.0180	0.008806	0.06	0.010574	0.07	0.012535	0.07	0.010574	0.07					
CLMH105E039MH105E042		2004		Existing	assumed Mannings N	MH105E039	MH105E042	T16495	IRWD	PVC	{577F0B59-507E-4133-A276-E4E6B866ACF9}	CLMH105E039MH105E042	250.39	248.33	0.666666667	MH105E039	MH105E042			172	CLMH105E039MH105E042	8	0.0120	0.002662	0.04	0.003196	0.04	0.003788	0.05	0.003196	0.04					
CLMH105E040MH105E043		2004		Existing	assumed Mannings N	MH105E040	MH105E043	T16495	IRWD	PVC	{30B51382-253C-4D59-97AF-ABA51031F3E}	CLMH105E040MH105E043	242.72	241.33	0.666666667	MH105E040	MH105E043			114	CLMH105E040MH105E043	8	0.0122	0.027129	0.12	0.032559	0.13	0.038600	0.14	0.032559	0.13					
CLMH105E041MH105E045		2004		Existing	assumed Mannings N	MH105E041	MH105E045	T16495	IRWD	PVC	{38BDF4E7-B7E1-4812-A59E-F67BB7C35E2}	CLMH105E041MH105E045	248.80	246.64	0.666666667	MH105E041	MH105E045			139	CLMH105E041MH105E045	8	0.0155	0.008050	0.06	0.009663	0.07	0.011458	0.07	0.009663	0.07					
CLMH105E042MH105E037		2004		Existing	assumed Mannings N	MH105E042	MH105E037	T16495	IRWD	PVC	{C5FB65D9-94AE-49ED-BA2A-ABB048E37DBE}	CLMH105E042MH105E037	248.13	244.86	0.666666667	MH105E042	MH105E037			273	CLMH105E042MH105E037	8	0.0120	0.002662	0.04	0.003196	0.04	0.003788	0.05	0.003196	0.04					
CLMH105E043MH105E171		2003		Existing	assumed Mannings N	MH105E043	MH105E171	T16495	IRWD	PVC	{0E87DB86-39C0-4373-BF1E-D587A1184284}	CLMH105E043MH105E171	237.50	235.52	0.666666667	MH105E043	MH105E171			70	CLMH105E043MH105E171	8	0.0283	0.040372	0.12	0.048457	0.13	0.057451	0.14	0.048457	0.13					
CLMH105E044MH105E038		2004		Existing	assumed Mannings N	MH105E044	MH105E038	T16539	IRWD	PVC	{B705EE36-B526-4D3C-B1EF-30A0EA5C3D2E}	CLMH105E044MH105E038	237.94	233.77	0.666666667	MH105E044	MH105E038			347	CLMH105E044MH105E038	8	0.0120	0.002510	0.04	0.003015	0.04	0.003572	0.04	0.003015	0.04					
CLMH105E045MH105E046		2004		Existing	assumed Mannings N	MH105E045	MH105E046	T16495	IRWD	PVC	{4CC9F4CA-6D42-4E87-8471-E6B0731903D0}	CLMH105E045MH105E046	246.44	244.30	0.666666667	MH105E045	MH105E046			71	CLMH105E045MH105E046	8	0.0301	0.008050	0.05	0.009663	0.06	0.011458	0.06	0.009663	0.06					
CLMH105E046MH105E043		2004		Existing	assumed Mannings N	MH105E046	MH105E043	T16495	IRWD	PVC	{7FC10046-FDF3-4D9C-B7FF-200999541179}	CLMH105E046MH105E043	244.11	241.33	0.666666667	MH105E046	MH105E043			155	CLMH105E046MH105E043	8	0.0179	0.013243	0.08	0.015898	0.08	0.018850	0.09	0.015898	0.08					
CLMH105E047MH105E035		2004		Existing	assumed Mannings N	MH105E047	MH105E035	T16495	IRWD	PVC	{88F2498B-BE61-4311-B06D-6F789D4982E}	CLMH105E047MH105E035	241.86	237.55	0.666666667	MH105E047	MH105E035			269	CLMH105E047MH105E035	8	0.0160	0.002747	0.04	0.003299	0.04	0.003912	0.04	0.003299	0.04					
CLMH105E048MH105E047		2004		Existing	assumed Mannings N	MH105E048	MH105E047	T16495	IRWD	PVC	{166C3D3F-A632-40A4-9CC5-D2163Z1CFCC}	CLMH105E048MH105E047	244.94	241.96	0.666666667	MH105E048	MH105E047			240	CLMH105E048MH105E047	8	0.0124	0.002747	0.04	0.003299	0.04	0.003912	0.04	0.003299	0.04					
CLMH105E049MH105E051		2004		Existing	assumed Mannings N	MH105E049	MH105E051	T16495	IRWD	PVC	{8D569368-330A-482F-A5EF-110B212D711D}	CLMH105E049MH105E051	246.36	245.38	0.666666667	MH105E049	MH105E051			165	CLMH105E049MH105E051	8	0.0059	0.000951	0.02	0.001138	0.03	0.001350	0.03	0.001138	0.03					
CLMH105E050MH105E055		2004		Existing	assumed Mannings N	MH105E050	MH105E055	T16495	IRWD	PVC	{B03CA95C-76C2-44FE-8600-73A8893F4103}	CLMH105E050MH105E055	242.08	241.16	0.666666667	MH105E050	MH105E055			172	CLMH105E050MH105E055	8	0.0100	0.007573	0.07	0.009093	0.07	0.010781	0.08	0.009093	0.07					
CLMH105E051MH105E052		2004		Existing	assumed Mannings N	MH105E051	MH105E052	T16495	IRWD	PVC	{2C8BD033-1207-43D1-8264-C6832804A585}	CLMH105E051MH105E052	245.17	244.71	0.666666667	MH105E051	MH105E052			79	CLMH105E051MH105E052	8	0.0058	0.008264	0.08	0.009919	0.09	0.011761	0.09	0.009919	0.09					
CLMH105E052MH105E056		2004		Existing	assumed Mannings N	MH105E052	MH105E056	T16495	IRWD	PVC	{57CDE538-7484-406B-9C92-7A3ABFCB8E7C}	CLMH105E052MH105E056	244.50	242.49	0.666666667	MH105E052	MH105E056			175	CLMH105E052MH105E056	8	0.0115	0.012701	0.08	0.015246	0.09	0.018075	0.10	0.015246	0.09					
CLMH105E053MH105E024		2009		Existing	assumed Mannings N	MH105E053	MH105E024	T16495B	IRWD	PVC	{CD4CB2E1-D7E1-4BA9-B9E0-79556BE54026}	CLMH105E053MH105E024	230.32	229.67	0.666666667	MH105E053	MH105E024			190	CLMH105E053MH105E024	8	0.0034	0.007357	0.08	0.008832	0.09	0.010471	0.10	0.008832	0.09					
CLMH105E054MH105E052		2004		Existing	assumed Mannings N	MH105E054	MH105E052	T16495	IRWD	PVC	{F4A596A1-5309-43BB-968F-07D55134DD04}	CLMH105E054MH105E052	248.55	244.71	0.666666667	MH105E054	MH105E052			82	CLMH105E054MH105E052	8	0.0468	0.004436	0.04	0.005326	0.04	0.006313	0.04	0.005326	0.04					
CLMH105E055MH105E058		2004		Existing	assumed Mannings N	MH105E055	MH105E058	T16495	IRWD	PVC	{5A5F8ACA-EAB7-4BEA-BA22-2F924F76B757}	CLMH105E055MH105E058	240.97	239.08	0.666666667	MH105E055	MH105E058			114	CLMH105E055MH105E058	8	0.0166	0.007573	0.06	0.009093	0.06	0.010781	0.07	0.009093	0.06					
CLMH105E056MH105E027		2004		Existing	assumed Mannings N	MH105E056	MH105E027	T16495	IRWD	PVC	{9882154A-6866-4231-B910-5F09918AF127}	CLMH105E056MH105E027	242.28	241.27	0.666666667	MH105E056	MH105E027			172	CLMH105E056MH105E027	8	0.0059	0.019734	0.12	0.023631	0.13	0.028014	0.14	0.023631	0.13					
CLMH105E057MH105E029		2004		Existing	assumed Mannings N	MH105E057	MH105E029	T16495	IRWD	PVC	{07D81837-3742-447C-907D-0712516FDA99}	CLMH105E057MH105E029	248.52	246.88	0.666666667	MH105E057	MH105E029			175	CLMH105E057MH105E029	8	0.0094	0.008569	0.07	0.010287	0.08	0.012197	0.09	0.010287	0.08					
CLMH105E058MH105E030		2004		Existing	assumed Mannings N	MH105E058	MH105E030	T16495	IRWD	PVC	{F79B6AB4-7171-4BAD-B574-0243E4FBCE5C}	CLMH105E058MH105E030	238.88	236.97	0.666666667	MH105E058	MH105E030			216	CLMH105E058MH105E030	8	0.0088	0.027308	0.13	0.032724	0.14	0.038794	0.15	0.032724	0.14					
CLMH105E059MH105E165		2003		Existing	assumed Mannings N	MH105E059	MH105E165	T1716	IRWD	PVC	{8FFFD171-3361-4F3E-8C51-EE7C08E154B8}	CLMH105E059MH105E165	228.41	227.82	0.666666667	MH105E059	MH105E165			77	CLMH105E059MH105E165	8	0.0077	0.002143	0.04	0.002604	0.04	0.003098	0.04	0.002604	0.04					
CLMH105E060MH105E057		2004		Existing	assumed Mannings N	MH105E060	MH105E057	T16495	IRWD	PVC	{973CEFAA-1519-4699-8211-0F8EDF251206}	CLMH105E060MH105E057	249.77	248.72	0.666666667	MH105E060	MH105E057			33	CLMH105E060MH105E057	8	0.0318	0.008569	0.05	0.010287	0.06	0.012197	0.06	0.010287	0.06					
CLMH105E061MH105E174		2004		Existing	assumed Mannings N	MH105E061	MH105E174	T16537	IRWD	PVC	{40378ECE-9F87-453D-8AD8-2BB6933E7F76}	CLMH105E061MH105E174	217.47	216.67	0.666666667	MH105E061	MH105E174			164	CLMH105E061MH105E174	8	0.0080	0.002554	0.04	0.003066	0.05	0.003634	0.05	0.003066	0.05					
CLMH105E062MH105E185		2003		Existing	assumed Mannings N	MH105E062	MH105E185	T1716	IRWD	PVC	{B161D8BD-4FB5-427A-98A8-6D62AA3656AC}	CLMH105E062MH105E185	215.27	214.53	0.666666667	MH105E062	MH105E185			91	CLMH105E062MH105E185	8	0.0081	0.003137	0.05	0.003769	0.05	0.004467	0.05	0.003769	0.05					
CLMH105E063MH105E062		2003		Existing	assumed Mannings N	MH105E063	MH105E062	T16537	IRWD	PVC	{A7122E35-397A-4C9D-B0B2-255F1C57AD0A}	CLMH105E063MH105E062	221.11	215.80	0.666666667	MH105E063	MH105E062			110	CLMH105E063MH105E062	8	0.0483	0.002899	0.03	0.003483	0.03	0.004128	0.03	0.003483	0.03					
CLMH105E064MH105E065		2004		Existing	assumed Mannings N	MH105E064	MH105E065	T16537	IRWD	PVC	{1000AD48-669F-477E-96B0-40F329826D9B}	CLMH105E064MH105E065	227.36	223.19	0.666666667	MH105E064	MH105E065			148	CLMH105E064MH105E065	8	0.0248	0.001233	0.02	0.001481	0.02	0.001756	0.03	0.001481	0.02					
CLMH105E065MH105E219		2003		Existing	assumed Mannings N	MH105E065	MH105E219	T1716	IRWD	PVC	{2321B3D2-90F8-40AD-B1AF-47ECE07B4492}	CLMH105E065MH105E219	222.35	222.11	0.666666667	MH105E065	MH105E219			37	CLMH105E065MH105E219	8	0.0065	0.004349	0.05	0.005222	0.06	0.006192	0.07	0.005222	0.06					
CLMH105E066MH105E068		2004		Existing	assumed Mannings N	MH105E066	MH105E068	T16537	IRWD	PVC	{4DADD29C-AB3A-4BDB-B4F0-B97B3936154}	CLMH105E066MH105E068	231.55	229.16	0.666666667	MH105E066	MH105E068			119	CLMH105E066MH105E068	8	0.0201	0.001775	0.03	0.002130	0.03	0.002525	0.03	0.002130	0.03					
CLMH105E067MH105E191		2003		Existing	assumed Mannings N	MH105E067	MH105E191	T1716	IRWD	PVC	{3EC69B1B-DA6D-41EC-8BC2-C74C9EAD73FA}	CLMH105E067MH105E191	222.10	221.67	0.666666667	MH105E067	MH105E191			55	CLMH105E067MH105E191	8	0.0073	0.003614	0.05	0.004337	0.05	0.005143	0.06	0.004337	0.05					
CLMH105E068MH105E067		2004		Existing	assumed Mannings N	MH105E068	MH105E067	T16537	IRWD	PVC	{8FE79337-822B8-4ECF-8B3F-E6A2D38B748E}	CLMH105E068MH105E067	228.97	222.99	0.666666667	MH105E068	MH105E067			124	CLMH105E068MH105E067	8	0.0482	0.002770	0.03	0.003324	0.03	0.003942	0.03	0.003324	0.03					
CLMH105E069MH105E071		2003		Existing	assumed Mannings N	MH105E069	MH105E071	T16537	IRWD	PVC	{F5FCD4D6-6497-43CA-9E5F-3418927123D0}	CLMH105E069MH105E071	234.38	231.88	0.666666667	MH105E069	MH105E071			119	CLMH105E069MH105E071	8	0.0210	0.002316	0.03	0.002780	0.04	0.003295	0.04	0.002780	0.04					
CLMH105E070MH105E194		2004		Existing	assumed Mannings N	MH105E070	MH105E194	T1716	IRWD	PVC	{73097621-FF3B-4F1E-9E1C-4FE2E175520A}	CLMH105E070MH105E194	224.89	224.47	0.666666667	MH105E070	MH105E194			279	CLMH105E070MH105E194	8	0.0076	0.004609	0.06	0.005534	0.06	0.006559	0.07	0.005534	0.06					
CLMH105E071MH105E070		2004		Existing	assumed Mannings N	MH105E071	MH105E070	T16537	IRWD	PVC	{99EFE6FD-F4D4-434D-8284-524C6C4D0EBC}	CLMH105E071MH105E070	231.69	225.78	0.666666667	MH105E071	MH105E070			122	CLMH105E071MH105E070	8	0.0484	0.003895	0.03	0.004677	0.04	0.005542	0.04	0.004677	0.04					
CLMH105E103MH105E108		2003		Existing	assumed Mannings N	MH105E103	MH105E108	A01706	IRWD	VCP	{8F9D381D-CAA8-4351-82D3-08DA23125558}	CLMH105E103MH105E108	247.05	245.21	1.250000000	MH105E103	MH105E108			396	CLMH105E103MH105E108	15	0.0046	0.602832	0.31	0.724968	0.34	0.861648	0.37	0.899698	0.38					
CLMH105E104MH105E222		2004		Existing	assumed Mannings N	MH105E104	MH105E222	A01706	IRWD	VCP	{99978289-301F-4990-8E42-16D3762E2EF}	CLMH105E104MH105E222	234.80	229.19	1.250000000	MH105E104	MH105E222			396	CLMH105E104MH105E222	15	0.0228	0.602725	0.31	0.724801	0.33	0.861468	0.25	0.902147	0.26					
CLMH105E105MH105E103		2003		Existing	assumed Mannings N	MH105E105	MH105E103	A01706	IRWD	VCP	{8E53FAAD-2253-4405-A37C-8C24F4A1E74D}	CLMH105E105MH105E103	249.02	247.14	1.250000000	MH105E105	MH105E103			396	CLMH105E105MH105E103	15	0.0047	0.603140	0.31	0.725402	0.34	0.862098	0.37	0.899984	0.38					
CLMH105E106MH105E116		2003		Existing	assumed Mannings N	MH105E106	MH105E116	A01706	IRWD	VCP	{7348156D-358E-430A-BDF0-5D3CA0F73C6B}	CLMH105E106MH105E116	229.10	223.86	1.250000000	MH105E106	MH105E116			396	CLMH105E106MH105E116	15	0.0132	0.602686	0.24	0.724743	0.27	0.861403	0.30	0.902106	0.31					
CLMH105E107MH105S319	159' FROM N-S IS	2004		Existing	assumed Mannings N	MH105E107	MH105S319	A01703	IRWD	VCP	{96E234C8-ODDE-4871-8C09-E39388AE8E8F}	CLMH105E107MH105S319	208.71	201.55	1.250000000	MH105E107	MH105S319			514	CLMH105E107MH105S319	15	0.0139	0.601719	0.24	0.723466	0.26	0.860073	0.28	0.901161	0.29					
CLMH105E108MH105E109		2003		Existing	assumed Mannings N	MH105E108	MH105E109	A01706	IRWD	VCP	{7FCDC302-36FF-4402-A6D8-DC8BCAFCBD95}	CLMH105E108MH105E109	240.42	244.97	1.250000000	MH105E108	MH105E109			26	CLMH105E108MH105E109	15	0.0012	0.602821	0.33	0.724949	0.36	0.861627	0.39	0.902231	0.40					
CLMH105E109MH105E110		2003		Existing	assumed Mannings N	MH105E109	MH105E110	A01706	IRWD	VCP	{5B0A5FE2-15B2-434D-9010-ADF5A370D8D5}	CLMH105E109MH105E110	244.86	240.52	1.250000000	MH105E109	MH105E110			215	CLMH105E109MH105E110	15	0.0202	0.602796	0.22	0.724909	0.24	0.861584	0.26	0.902214	0.26					
CLMH105E110MH105E104		2003		Existing	assumed Mannings N	MH105E110	MH105E104	A01706	IRWD	VCP	{7CECEEEB-E063-4751-A10B-B48C23F1A969}	CLMH105E110MH105E104	240.41	234.91	1.250000000	MH105E110	MH105E104			266	CLMH105E110MH105E104	15	0.0207	0.602756	0.21	0.724848	0.23	0.861517	0.26	0.902178	0.26					
CLMH105E111MH105E113		2004		Existing	assumed Mannings N	MH105E111	MH105E113	T16495	IRWD	PVC	{72678741-FC15-49B2-B357-F87BE8313B96}	CLMH105E111MH105E113	238.71	234.50	0.666666667	MH105E111	MH105E113			298	CLMH105E111MH105E113	8	0.0141	0.004674	0.05	0.005610	0.05	0.006553	0.06	0.005610	0.05					
CLMH105E112MH105E108		2003		Existing	assumed Mannings N	MH105E112	MH105E108	A01706	IRWD	VCP	{D9612AE4-EFA7-48B1-8087-F72AE79A79DA}	CLMH105E112MH105E108	250.36	249.11	1.250000000	MH105E112	MH105E108			246	CLMH105E112MH105E108	15	0.0051	0.603534	0.30	0.725919	0.33	0.862622	0.37	0.903409	0.38					
CLMH105E113MH105E117		2004		Existing	assumed Mannings N	MH105E113	MH105E117	T16495	IRWD	PVC	{1543F2FB-5216-434D-916B-DD35F37E24C3}	CLMH105E113MH105E117	234.41	229.97	0.666666667	MH105E113	MH105E117			276	CLMH105E113MH105E117	8	0.0161	0.012291	0.08	0.014755	0.08	0.017494	0.09	0.014755	0.08					
CLMH105E114MH105E112		2003		Existing	assumed Mannings N	MH105E114	MH105E112	A01706	IRWD	VCP	{EBE3746B-564A-4112-A526-940C9E85FF8F}	CLMH105E114MH105E112	252.01	250.47	1.250000000	MH105E114	MH105E112			260	CLMH105E114MH105E112	15	0.0057	0.475807	0.26	0.572114	0.29	0.679724	0.32	0.620798	0.30					
CLMH105E115MH105E160		2003		Existing	assumed Mannings N	MH105E115	MH105E160	T1716	IRWD	PVC	{3E9ACCB4-3D50-481B-A496-8403E891B9E0}	CLMH105E115MH105E160	234.33	233.75	0.666666667	MH105E115	MH105E160			297	CLMH105E115MH105E160	8	0.0020	0.002572	0.06	0.003089	0.06	0.003664	0.07	0.003089	0.06					
CLMH105E116MH105E120		2003		Existing	assumed Mannings N	MH105E116	MH105E120	A01706	IRWD	VCP	{E1570833-1F45-455F-A71D-65902F1709D1}	CLMH105E116MH105E120	223.75	222.22	1.250000000	MH105E116	MH105E120			379	CLMH105E116MH105E120	15	0.0040	0.602119	0.32	0.723982	0.35	0.860612	0.38	0.901553	0.39					
CLMH105E117MH105E217		2003		Existing	assumed Mannings N	MH105E117	MH105E217	T1716	IRWD

CLMH105E197MH105E200		2003		Existing	assumed Mannings N	MH105E197	MH105E200		T16495	IRWD	PVC	{01658B20-BF7A-4ED4-89FA-D92DB9FEE5E0}	CLMH105E197MH105E200	222.60	220.47	0.666666667	MH105E197	MH105E200				92	CLMH105E197MH105E200	8	0.0105	0.007986	0.07	0.009587	0.07	0.011364	0.08	0.009587	0.07	
CLMH105E198MH105E199		2003		Existing	assumed Mannings N	MH105E198	MH105E199		T16495	IRWD	PVC	{0F4E63AE-81CF-4604-82B0-09E94A406ADE}	CLMH105E198MH105E199	220.57	219.86	0.666666667	MH105E198	MH105E199				92	CLMH105E198MH105E199	8	0.0077	0.010885	0.09	0.013067	0.11	0.015492	0.14	0.013067	0.11	
CLMH105E199MH105E204		2003		Existing	assumed Mannings N	MH105E199	MH105E204		T1716	IRWD	PVC	{F59A3DBE-74B3-45A5-AE8E-58F43B5F3D0F}	CLMH105E199MH105E204	219.66	217.33	0.666666667	MH105E199	MH105E204				303	CLMH105E199MH105E204	8	0.0077	0.239650	0.39	0.286439	0.43	0.339627	0.48	0.286439	0.43	
CLMH105E203MH105E203		2003		Existing	assumed Mannings N	MH105E200	MH105E203		T16495	IRWD	PVC	{3D15S0D8-2044-4069-AA0D-C5097487D26AE}	CLMH105E200MH105E203	220.27	218.44	0.666666667	MH105E200	MH105E203				186	CLMH105E200MH105E203	8	0.0098	0.007986	0.07	0.009587	0.08	0.011364	0.08	0.009587	0.08	
CLMH105E201MH105E206		2003		Existing	assumed Mannings N	MH105E201	MH105E206		T16495	IRWD	PVC	{863185DD-162C-4CED-B1E1-EC61643624329}	CLMH105E201MH105E206	213.50	208.41	0.666666667	MH105E201	MH105E206				299	CLMH105E201MH105E206	8	0.0170	0.001687	0.03	0.002025	0.03	0.002401	0.03	0.002025	0.03	
CLMH105E202MH105E205		2003		Existing	assumed Mannings N	MH105E202	MH105E205		T16495	IRWD	PVC	{28FB4FAD-1571-4FE5-AEA3-33D321647623}	CLMH105E202MH105E205	216.30	215.25	0.666666667	MH105E202	MH105E205				268	CLMH105E202MH105E205	8	0.0039	0.002791	0.05	0.003352	0.05	0.003974	0.06	0.003352	0.05	
CLMH105E203MH105E204		2003		Existing	assumed Mannings N	MH105E203	MH105E204		T16495	IRWD	PVC	{8CD397D5-511E-43D4-ABA4-D55C263BF913}	CLMH105E203MH105E204	218.25	217.44	0.666666667	MH105E203	MH105E204				105	CLMH105E203MH105E204	8	0.0077	0.007986	0.07	0.009587	0.09	0.011364	0.12	0.009587	0.09	
CLMH105E204MH105E168		2003		Existing	assumed Mannings N	MH105E204	MH105E168		T16495	IRWD	PVC	{25F0B48E-F867-4ECB-9B70-204C7CB1B0C3}	CLMH105E204MH105E168	217.24	214.17	0.666666667	MH105E204	MH105E168				299	CLMH105E204MH105E168	8	0.0103	0.247623	0.37	0.296011	0.41	0.350977	0.45	0.296010	0.41	
CLMH105E205MH105E168		2003		Existing	assumed Mannings N	MH105E205	MH105E168		T16495	IRWD	PVC	{8A353E50-8997-473C-A941-639FB71E9506}	CLMH105E205MH105E168	215.14	214.27	0.666666667	MH105E205	MH105E168				214	CLMH105E205MH105E168	8	0.0041	0.003065	0.06	0.003674	0.11	0.003460	0.09	0.003674	0.11	
CLMH105E206MH105E207		2003		Existing	assumed Mannings N	MH105E206	MH105E207		T16495	IRWD	PVC	{49C7A9F7-A68F-4489-94FB-526A839A6F03}	CLMH105E206MH105E207	208.21	206.80	0.666666667	MH105E206	MH105E207				201	CLMH105E206MH105E207	8	0.0070	0.001687	0.03	0.002025	0.04	0.002401	0.04	0.002025	0.04	
CLMH105E207MH105E209		2003		Existing	assumed Mannings N	MH105E207	MH105E209		T16495	IRWD	PVC	{23B7E88E-831C-4013-8E7C-6C2AA1764BC6}	CLMH105E207MH105E209	206.60	205.36	0.666666667	MH105E207	MH105E209				158	CLMH105E207MH105E209	8	0.0078	0.001687	0.03	0.002025	0.04	0.002401	0.04	0.002025	0.04	
CLMH105E208MH105E210		2003		Existing	assumed Mannings N	MH105E208	MH105E210		T16495	IRWD	PVC	{58E5BAE6-21AF-42BC-B726-FA3FB8D00F8F}	CLMH105E208MH105E210	211.50	208.66	0.666666667	MH105E208	MH105E210				291	CLMH105E208MH105E210	8	0.0149	0.009608	0.07	0.011535	0.07	0.013676	0.08	0.011535	0.07	
CLMH105E209MH105E178		2003		Existing	assumed Mannings N	MH105E209	MH105E178		T1716	IRWD	PVC	{77EFF88D-3DD5-4AD8-B342-FB949D53EDCC}	CLMH105E209MH105E178	205.16	202.85	0.666666667	MH105E209	MH105E178				268	CLMH105E209MH105E178	8	0.0086	0.003418	0.05	0.004104	0.05	0.004865	0.06	0.004104	0.05	
CLMH105E210MH105E211		2003		Existing	assumed Mannings N	MH105E210	MH105E211		T16495	IRWD	PVC	{33E1BB9A-031B-48E2-9005-328A35CDBD36}	CLMH105E210MH105E211	208.47	208.00	0.666666667	MH105E210	MH105E211				50	CLMH105E210MH105E211	8	0.0294	0.009608	0.08	0.011535	0.08	0.013676	0.09	0.011535	0.08	
CLMH105E211MH105E212		2003		Existing	assumed Mannings N	MH105E211	MH105E212		T16495	IRWD	PVC	{12F4E2C4-8A79-4FDD-9C4F-201E5C3E6B12}	CLMH105E211MH105E212	207.80	206.55	0.666666667	MH105E211	MH105E212				130	CLMH105E211MH105E212	8	0.0096	0.009608	0.08	0.011535	0.08	0.013676	0.09	0.011535	0.08	
CLMH105E212MH105E213		2003		Existing	assumed Mannings N	MH105E212	MH105E213		T16495	IRWD	PVC	{2E4B1E1A-4468-4D58-8753-9B6BD37B3C2F}	CLMH105E212MH105E213	206.35	205.39	0.666666667	MH105E212	MH105E213				122	CLMH105E212MH105E213	8	0.0079	0.009608	0.08	0.011535	0.09	0.013676	0.09	0.011535	0.09	
CLMH105E213MH105E184		2003		Existing	assumed Mannings N	MH105E213	MH105E184		T1716	IRWD	PVC	{C14B39AE-EEFE-4803-89CA-AD3573770905}	CLMH105E213MH105E184	205.19	200.14	0.666666667	MH105E213	MH105E184	Existing 8-in and less, d/D>0.50			117	CLMH105E213MH105E184	8	0.0432	0.339903	0.49	0.406826	0.60	0.482353	0.68	0.406826	0.60	
CLMH105E214MH105E186		2004		Existing	assumed Mannings N	MH105E214	MH105E186		T16536	IRWD	PVC	{30888EBF-EA80-4DE6-8EEB-D4D660B38B41}	CLMH105E214MH105E186	212.88	211.17	0.666666667	MH105E214	MH105E186				217	CLMH105E214MH105E186	8	0.0079	0.015559	0.10	0.018680	0.11	0.022145	0.12	0.018680	0.11	
CLMH105E215MH105E214		2004		Existing	assumed Mannings N	MH105E215	MH105E214		T16536	IRWD	PVC	{146AC2CF-B7AD-415D-9ED7-F9332F659EFE}	CLMH105E215MH105E214	219.86	213.00	0.666666667	MH105E215	MH105E214				232	CLMH105E215MH105E214	8	0.0296	0.009652	0.06	0.011588	0.06	0.013736	0.07	0.011588	0.06	
CLMH105E216MH105E215		2004		Existing	assumed Mannings N	MH105E216	MH105E215		T16536	IRWD	PVC	{8276AD10-88D9-4889-94F8-F471D3009F01}	CLMH105E216MH105E215	220.49	219.96	0.666666667	MH105E216	MH105E215				136	CLMH105E216MH105E215	8	0.0039	0.003874	0.06	0.004651	0.06	0.005512	0.07	0.004651	0.06	
CLMH105E217MH105E163		2003		Existing	assumed Mannings N	MH105E217	MH105E163		T1716	IRWD	PVC	{B8086D75-22FC-4A9F-9137-71A5B979728B}	CLMH105E217MH105E163	225.50	221.13	0.666666667	MH105E217	MH105E163				296	CLMH105E217MH105E163	8	0.0148	0.041588	0.21	0.049925	0.24	0.059196	0.28	0.049925	0.24	
CLMH105E218MH105E172		2003		Existing	assumed Mannings N	MH105E218	MH105E172		T1716	IRWD	PVC	{AB2D4A2F-B67E-4120-B797-9D1D90F1B55A}	CLMH105E218MH105E172	219.82	217.53	0.666666667	MH105E218	MH105E172				114	CLMH105E218MH105E172	8	0.0201	0.028215	0.11	0.033878	0.12	0.040162	0.13	0.033878	0.12	
CLMH105E219MH105E188		2003		Existing	assumed Mannings N	MH105E188	MH105E188		T1716	IRWD	PVC	{F18F5E9D-508F-4E5F-8D34-E40FE08912CA}	CLMH105E219MH105E188	221.91	218.46	0.666666667	MH105E219	MH105E188				143	CLMH105E219MH105E188	8	0.0241	0.004826	0.05	0.005794	0.07	0.006869	0.08	0.005794	0.07	
CLMH105E249MH105E194		2003		Existing	assumed Mannings N	MH105E249	MH105E194		T1716	IRWD	PVC	{8917E041-7FE0-4694-B14F-5B6721BF5CA9}	CLMH105E249MH105E194	225.26	224.38	0.666666667	MH105E249	MH105E194				78	CLMH105E249MH105E194	8	0.0113	0.056639	0.17	0.067155	0.18	0.079614	0.20	0.067155	0.18	
CLMH105E251MH105E114		2004		Existing	assumed Mannings N	MH105E251	MH105E114	ERROR 23	A01706	IRWD	VCP	{041B158B-C73E-4D47-BE6C-3AE46ACA71B7}	CLMH105E251MH105E114	252.48	252.11	1.000000000	MH105E251	MH105E114				12	CLMH105E251MH105E114	12	0.0044	0.475893	0.37	0.572201	0.41	0.679840	0.45	0.620869	0.43	
CLMH105E252MH105E125		2005		Existing	assumed Mannings N	MH105E252	MH105E125		A01706	IRWD	VCP	{66166DB7-D504-488E-A5FC-A9E0C6F85C3A}	CLMH105E252MH105E125	261.50	259.20	0.666666667	MH105E252	MH105E125				21	CLMH105E252MH105E125	8	0.1095	0.095091	0.18	0.114027	0.21	0.135195	0.25	0.114027	0.23	
CLMH105N001MH105N004		1978		Existing		MH105N001	MH105N004		T09379	IRWD	VCP	{0166EE67-D8F5-4841-89DD-729228D83BB8}	CLMH105N001MH105N004	191.47	189.78	0.666666667	MH105N001	MH105N004				75	CLMH105N001MH105N004	8	0.0225	0.021292	0.09	0.022735	0.10	0.026952	0.10	0.022735	0.10	
CLMH105N001MH105N106		1978		Existing		MH105N001	MH105N106		T09155	IRWD	VCP	{B0FBACD4-B7AC-46A6-9637-11E0B05C4E16}	CLMH105N001MH105N106	191.47	189.85	0.666666667	MH105N001	MH105N106				174	CLMH105N001MH105N106	8	0.0093	0.013688	0.09	0.014616	0.10	0.017327	0.10	0.014616	0.10	
CLMH105N002MH084E001		1978		Existing		MH105N002	MH084E001		T09480	IRWD	VCP	{84824E25-DA99-46A2-8899-41B8896BA0F7}	CLMH105N002MH084E001	178.92	177.53	0.666666667	MH105N002	MH084E001				205	CLMH105N002MH084E001	8	0.0068	0.108111	0.28	0.115449	0.29	0.136927	0.31	0.128113	0.30	
CLMH105N003MH105N002		1978		Existing		MH105N003	MH105N002		T09480	IRWD	VCP	{ADD6620D-8B00-453C-9B3C-20F544A8E7F8}	CLMH105N003MH105N002	184.26	179.17	0.666666667	MH105N003	MH105N002				218	CLMH105N003MH105N002	8	0.0233	0.062999	0.16	0.067303	0.16	0.079989	0.18	0.072386	0.17	
CLMH105N004MH105N003		1978		Existing		MH105N004	MH105N003		T09379	IRWD	VCP	{92931B93-7967-491F-A832-DF625E3BC210}	CLMH105N004MH105N003	189.69	184.46	0.666666667	MH105N004	MH105N003				214	CLMH105N004MH105N003	8	0.0242	0.021292	0.09	0.022735	0.09	0.026952	0.10	0.022735	0.09	
CLMH105N005MH105N016		1978		Existing		MH105N005	MH105N016		T09379	IRWD	VCP	{957A3171-7164-4A62-BC43-628690CF3A8B}	CLMH105N005MH105N016	192.04	187.32	0.666666667	MH105N005	MH105N016				221	CLMH105N005MH105N016	8	0.0214	0.021468	0.07	0.022424	0.07	0.026516	0.08	0.022424	0.07	
CLMH105N006MH105N017		1978		Existing		MH105N006	MH105N017		T09379	IRWD	VCP	{945032E4-048D-4939-96C3-110F92C7647C}	CLMH105N006MH105N017	194.85	189.15	0.666666667	MH105N006	MH105N017				381	CLMH105N006MH105N017	8	0.0150	0.006936	0.06	0.007406	0.06	0.008780	0.07	0.007406	0.06	
CLMH105N007MH105N018		1978		Existing		MH105N007	MH105N018		T09379	IRWD	VCP	{A3FED9D4-B1A4-48B9-8C6F-133D8F822A62}	CLMH105N007MH105N018	197.50	190.16	0.666666667	MH105N007	MH105N018				391	CLMH105N007MH105N018	8	0.0188	0.005386	0.05	0.005751	0.05	0.006819	0.06	0.005751	0.05	
CLMH105N008MH105N019		1978		Existing		MH105N008	MH105N019		T09379	IRWD	VCP	{550BC3D8-48F5-4FF2-B0D5-6C8760B715E2}	CLMH105N008MH105N019	199.78	191.18	0.666666667	MH105N008	MH105N019				391	CLMH105N008MH105N019	8	0.0220	0.003399	0.04	0.003629	0.04	0.004302	0.04	0.003629	0.04	
CLMH105N009MH105N010		1978		Existing		MH105N009	MH105N010		T09379	IRWD	VCP	{72807B5F-7230-42C1-8909-FC0G013250AA}	CLMH105N009MH105N010	201.25	199.30	0.666666667	MH105N009	MH105N010				200	CLMH105N009MH105N010	8	0.0098	0.001016	0.02	0.001087	0.02	0.001288	0.03	0.001087	0.02	
CLMH105N010MH105N011		1978		Existing		MH105N010	MH105N011		T09379	IRWD	VCP	{1AD9B042-F7E7-4F60-A5E5-4FBC436ECE2E}	CLMH105N010MH105N011	199.19	192.19	0.666666667	MH105N010	MH105N011				290	CLMH105N010MH105N011	8	0.0350	0.004577	0.04	0.004889	0.04	0.005795	0.05	0.004889	0.04	
CLMH105N011MH105N019		1978		Existing		MH105N011	MH105N019		T09480	IRWD	VCP	{ED034EB4-533E-4D43-B261-DF6588EF9149}	CLMH105N011MH105N019	191.94	191.13	0.666666667	MH105N011	MH105N019				219	CLMH105N011MH105N019	8	0.0037	0.035138	0.18	0.037521	0.18	0.044496	0.20	0.054034	0.22	
CLMH105N012MH105N011		1978		Existing		MH105N012	MH105N011		T09480	IRWD	VCP	{ED8DB67C-795B-4324-B016-CA3971FD02EF}	CLMH105N012MH105N011	193.39	192.19	0.666666667	MH105N012	MH105N011				320	CLMH105N012MH105N011	8	0.0038	0.029763	0.16	0.031779	0.17	0.037686	0.18	0.050324	0.21	
CLMH105N013MH105N014		1978		Existing		MH105N013	MH105N014		T09480	IRWD	VCP	{529B5057-47BA-4F2C-9301-F6BB15E8915F}	CLMH105N013MH105N014	188.97	187.67	0.666666667	MH105N013	MH105N014				265	CLMH105N013MH105N014	8	0.0049	0.028823	0.15	0.030752	0.16	0.036299	0.17	0.038383	0.17	
CLMH105N014MH105N015		1978		Existing		MH105N014	MH105N015		T09480	IRWD	VCP	{D748BA67-3D8C-4288-95CF-CB7CDB63DFC1}	CLMH105N014MH105N015	187.58	184.35	0.666666667	MH105N014	MH105N015				323	CLMH105N014MH105N015	8	0.0100	0.033829	0.14	0.036092	0.15	0.042634	0.16	0.043709	0.16	
CLMH105N015MH105N002		1978		Existing		MH105N015	MH105N002		T09480	IRWD	VCP	{5FB14720-FF6C-47F5-BE89-053F5B04A4DC}	CLMH105N015MH105N002	184.25	179.13	0.666666667	MH105N015	MH105N002				184	CLMH105N015MH105N002	8	0.0148	0.040952	0.14	0.043701	0.15	0.051661	0.16	0.051302	0.16	
CLMH105N016MH105N003		1978		Existing		MH105N016	MH105N003		T09480	IRWD	VCP	{92F1574D-20DC-460B-985C-23E96A5597FA}	CLMH105N016MH105N003	187.12	184.46	0.666666667	MH105N016	MH105N003				236	CLMH105N016MH105N003	8	0.0113	0.039702	0.15	0.042428	0.15	0.050497	0.17	0.047516	0.16	
CLMH105N017MH105N016		1978		Existing		MH105N017	MH105N016		T09480	IRWD	VCP	{508DC3E3-865C-43AA-87A3-28ED83B75DAC}	CLMH105N017MH105N016	188.95	187.32	0.666666667	MH105N017	MH105N016				227	CLMH105N017MH105N016	8	0.0072	0.028244	0.14	0.030195	0.15	0.035989	0.16	0.035289	0.16	
CLMH105N018MH105N017		1978		Existing		MH105N018	MH105N017		T09480	IRWD	VCP	{3D93355F-7290-4A70-B276-DAF3013A1FCB}	CLMH105N018MH105N017	189.96	189.05	0.666666667	MH105N018	MH105N017				227	CLMH105N018MH105N017	8	0.0040	0.021318	0.14	0.022799	0.14	0.027217	0.15	0.027899	0.15	
CLMH105N019MH105N013		1978		Existing		MH105N019	MH105N013		T09480	IRWD	VCP	{14CC09A5-FC59-4DB3-946A-13C23F4DF89E}	CLMH105N019MH105N013	190.98	189.17	0.666666667	MH105N019	MH105N013				227	CLMH105N019MH105N013	8	0.0080	0.025423	0.13	0.027113	0.13	0.031980	0.15	0.035617	0.15	
CLMH105N019MH105N018		1978		Existing		MH105N019	MH105N018		T09480	IRWD	VCP	{41207DB5-8B48-49AB-B180-2B09B2B771A2}	CLMH105N019MH105N018	190.98	190.06	0.666666667	MH105N019	MH105N018				232	CLMH105N019MH105N018	8	0.0040	0.019343	0.12	0.020406	0.13	0.022714	0.13	0.022714	0.14	
CLMH105N020MH105N012		1978		Existing		MH105N020	MH105N012		T10030	IRWD	VCP	{209596A4-F8E3-4BCA-ADB3-2C629FACCB5B}	CLMH105N020MH105N012	193.89	193.60	0.666666667	MH105N020	MH105N012				170	CLMH105N020MH105N012	8	0.0040	0.027995	0.15	0.029891	0.16	0.035444	0.17	0.049099	0.20	
CLMH105N021MH105N020		1978		Existing		MH105N021	MH105N020		T10030	IRWD	VCP	{AD411E3C0-112A-406F-9040-1CD3E620F689}	CLMH105N021MH105N020	194.61	194.00	0.666666667	MH105N021	MH105N020				160	CLMH105N021MH105N020	8	0.0038	0.026217	0.15	0.027993	0.16	0.033192	0.17	0.047873	0.20	
CLMH105N022MH105N021		1978		Existing		MH105N022	MH105N021		T10030	IRWD	VCP	{F8FBF9C4-C2E4-4A5C-8ACA-0E9A2AE09AC1}	CLMH105N022MH105N021	195.36	194.61	0.666666667	MH105N022	MH105N021				143	CLMH105N022MH105N021	8	0.0038	0.026220	0.15	0.027997	0.16	0.033195	0.17	0.031843	0.17	
CLMH105N023MH105N022		1978		Existing		MH105N023	MH105N022		T10030	IRWD	VCP	{B16CB8AB-B98D-46ED-B9B6-B8F241D65954}	CLMH105N023MH105N022	198.78	195.50	0.666666667	MH105N023	MH105N022				410	CLMH105N023MH105N022	8	0.0080	0.017831	0.11	0.019039	0.11	0.022575	0.12	0.022975	0.12	
CLMH105N024MH105N023		1978		Existing		MH105N024	MH105N023		T10030	IRWD	VCP	{A521F2BD-224B-4D59-BFD5-0B2B122F3333}	CLMH105N024MH105N023	202.02	199.02	0.666666667	MH105N024	MH105N023				238	CLMH105N024MH105N023	8	0.0126	0.002519	0.04	0.002690	0.04	0.003190	0.04	0.002690	0.04	
CLMH105N025MH105N026		1978		Existing		MH105N025	MH105N026		T10030	IRWD	VCP	{48F0245E-B408-481C-BCF7-105D3555C397}	CLMH105N025MH105N026	205.19	201.94	0.666666667	MH105N025	MH105N026				215	CLMH105N025MH105N026	8	0.0158	0.003270	0.04	0.003493	0.04	0.004140	0.05	0.011738	0.08	
CLMH105N026MH105N027		1978		Existing		MH105N026	MH105N027		T10030	IRWD	VCP	{F8C5E147-59F2-487D-88F7-E35E6FAEA7E9}	CLMH105N026MH105N027	201.83	200.25	0.666666667	MH105N026	MH105N027				317	CLMH105N026MH105N027	8	0.0068	0.004714	0.06	0.005035	0.06	0.005969	0.07	0.013279	0.10	
CLMH105N027MH105N023		1978		Existing		MH105N027	MH105N023		T10030	IRWD	VCP	{D79A5072-1EA6-4858-804E-63D6CBF289D3}	CLMH105N027MH105N023	200.00	199.02	0.666666667	MH105N027	MH105N023				57	CLMH105N027MH105N023	8	0.0172	0.015316	0.09	0.016353	0.09	0.019389	0.10	0.021240	0.10	
CLMH105N028MH105N027		1978		Existing		MH105N028	MH105N027		T10030	IRWD	VCP	{21EA9D00-C54B-40B3-B9E9-5F6CF9C7CAA8}	CLMH105N028MH105N027	203.45	200.20	0.666666667	MH105N028	MH105N027				226	CLMH105N028MH105N027	8	0.0144	0.011560	0.08	0.012342	0.08	0.014634	0.09	0.012342	0.08	
CLMH105N028MH105N028		1978		Existing		MH105N028	MH105N028		T10030	IRWD	VCP	{021362EC-824D-4ABE-9502-B9CD0B5F1C8E}	CLMH105N028MH105N028	207.58	203.65	0.666666667	MH105N028	MH105N028				317	CLMH105N028MH105N028	8	0.0124	0.019144	0.04	0.020455	0.05	0.023357	0.05	0.003980	0.05	
CLMH105N030MH105N031		1978		Existing		MH105N030	MH105N031		T10030	IRWD	VCP	{70853CF6-E773-49F1-B86B-7DFF8D2DDDBF}	CLMH105N030MH105N031	211.85	207.87	0.666666667	MH105N030	MH105N031				298	CLMH105N030MH105N031	8	0.0134	0.004022	0.05	0.004296	0.05	0.005092	0.05	0.004296	0.05	
CLMH105N031MH105N028		1978		Existing		MH105N031	MH105N028		T10030	IRWD	VCP	{93CAE59F-6DDC-4130-9325-5FDD5F8CAC70}	CLMH105N031MH105N028	208.35	203.65	0.666666667	MH105N031	MH105N028				250	CLMH105N031MH105N028	8	0.0188	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH105N031MH105N032		1978		Existing		MH105N031	MH105N032		T10030	IRWD	VCP	{E4D186BB-13FC-44A0-BCCC-9F994A4C31D5}	CLMH105N031MH105N032	207.77	206.47	0.666666667	MH105N031	MH105N032				249	CLMH105N031MH105N032	8	0.0052	0.010866	0.09	0.011603	0.10	0.013754	0.10	0.011603	0.10	
CLMH105N032MH105N009		1978		Existing		MH105N032	MH105N009		T09679	IRWD	VCP	{E754CA171-4543-4B4F-B706-BBCDEA34EA61}	CLMH105N032MH105N009	206.57	201.36	0.666666667	MH105N032	MH105N009				324	CLMH105N032MH105N009	8	0.0161	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH105N032MH105N033		1978		Existing		MH105N032	MH105N033		T09679	IRWD	VCP	{114811CA4-83F7-433D-9B88-5699316CD1B0}	CLMH105N032MH105N033	206.36	201.31	0.666666667	MH105N032	MH105N033				381	CLMH105N032MH105N033	8	0.0133	0.014427	0.09	0.015405	0.09	0.018261	0.10	0.015405	0.09	
CLMH105N033MH105N034		1978		Existing		MH105N033	MH105N034		T09679	IRWD	VCP	{684D791C-571A-44F5-BC6C-E5FB58E307EE}	CLMH105N033MH105N034	201.26	197.49	0.666666667	MH105N033	MH105N034				377	CLMH105N033MH105N034	8	0.0100	0.021364	0.11	0.022811	0.12	0.027041	0.13	0.022811	0.12	
CLMH105N034MH105N035		1978		Existing		MH105N034	MH105N035		T09679	IRWD	VCP	{103834F1-3B83-4CDC-B8C0-61C10EF0D95D}	CLMH105N034MH105N035	197.39	193.62	0.666666667	MH105N034	MH105N035				377	CLMH105N034MH105N035	8	0.0100	0.028507	0.13	0.030440	0.13	0.036085	0.15	0.030440	0.13	
CLMH105N035MH105N001		1978		Existing		MH105N035	MH105N001		T09679	IRWD	VCP	{7740C203-66AC-4D3B-BC96-D280CE306FC5}	CLMH105N035MH105N001	193.41	191.72	0.666666667	MH105N035	MH105N001				252	CLMH105N035MH105N001	8	0.0067	0.034980	0.16	0.037352	0.16	0.044279	0.18	0.037352	0.16	
CLMH105N036MH105N006		1978		Existing		MH105N036	MH105N006		T09679	IRWD	VCP	{7F841468-AF6E-4F75-9ACB-E41F5F9FB3D0}	CLMH105N036MH105N006	195.78	194.94	0.666666667	MH105N036	MH105N006				66	CLMH105N036MH105N006	8	0.0127	0.004231	0.05	0.004518	0.05	0.005356	0.06	0.004518	0.05	
CLMH105N037MH105N036		1978		Existing		MH105N037	MH105N036		T09679	IRWD	VCP	{9BEBA05E-D04A-427D-B7CE-60E18ABA56AF}	CLMH105N037MH105N036	196.17	195.99	0.666666667	MH105N037	MH105N036				29	CLMH105N037MH105N036	8	0.0062	0.004231	0.06	0.004518	0.06	0.005356	0.06	0.004518	0.06	
CLMH105N038MH105N037		1978		Existing		MH105N038	MH105N037		T09679	IRWD	VCP	{88A992DC-A458-4D5C-A7E7-27F70D9AD3D5}	CLMH105N038MH105N037	198.77	196.38	0.666666667	MH105N038	MH105N037				290	CLMH105N038MH105N037	8	0.0082	0.004231	0.05	0.004518	0.06	0.005356	0.06	0.004518	0.06	
CLMH105N039MH105N038		1978		Existing		MH105N039	MH105N038		T09679	IRWD	VCP	{C98C17B9-079F-4E7E-B183-DCF3C57AC045}	CLMH105N039MH105N038	201.48	198.88	0.666666667	MH105N039	MH105N038				310	CLMH105N039MH105N038	8	0.0084	0.001132	0.03	0.001210	0.03	0.001434	0.03	0.001210	0.03	
CLMH105N055MH105N056		1979		Existing		MH105N055	MH105N056		004	IRWD	VCP	{D627566D3-F6D0-4EF3-BCDD-EEA93E8BAA69}	CLMH105N055MH105N056	215.58	214.55	0.666666667	MH105N055	MH105N056				243	CLMH105N055MH105N056	8	0.0058	0.000340	0.01	0.000365	0.01	0.000432	0.02	0.008610	0.08	
CLMH105N056MH105N058		1979		Existing		MH105N056	MH105N058		004	IRWD	VCP	{C9A3AF54-2696-41CD-AD50-54FDDCC266A2}	CLMH105N056MH105N058	214.30	212.21	0.666666667	MH105N056	MH105N058				243	CLMH105N056MH105N058	8	0.0086	0.003270	0.05	0.003493	0.05	0.004140	0.05	0.011738	0.09	
CLMH105N058MH105N059

CLMH105S238MH105S236		2004		Existing	assumed Mannings N	MH105S238	MH105S236		T16336	IRWD	PVC	{F15CB491-A2A6-46A5-8640-06170AE9761F}	CLMH105S238MH105S236	210.53	209.44	0.833333333	MH105S238	MH105S236		114	CLMH105S238MH105S236	10	0.0096	0.200809	0.25	0.237071	0.27	0.281115	0.29	0.237070	0.27	
CLMH105S240MH105S238		2004		Existing	assumed Mannings N	MH105S240	MH105S238		T16336	IRWD	PVC	{D8370E29-9AF5-4ECA-ABF5-427C02A917B8}	CLMH105S240MH105S238	211.75	210.63	0.833333333	MH105S240	MH105S238		114	CLMH105S240MH105S238	10	0.0098	0.199460	0.24	0.235443	0.27	0.279182	0.29	0.235443	0.27	
CLMH105S241MH105S317		2004		Existing	assumed Mannings N	MH105S241	MH105S317		T16336	IRWD	PVC	{E01E669A-A8FC-4216-A127-8BC83131D2CFA}	CLMH105S241MH105S317	212.27	205.50	0.666666667	MH105S241	MH105S317		109	CLMH105S241MH105S317	8	0.0621	0.004997	0.04	0.006001	0.04	0.007110	0.05	0.006001	0.04	
CLMH105S242MH105S237		2004		Existing	assumed Mannings N	MH105S242	MH105S237		T16336	IRWD	PVC	{03A5214B-5BF1-40CD-8997-DA2B72E90EEA}	CLMH105S242MH105S237	198.19	190.89	0.666666667	MH105S242	MH105S237		267	CLMH105S242MH105S237	8	0.0273	0.246827	0.28	0.292417	0.31	0.346811	0.35	0.292417	0.31	
CLMH105S243MH105S240		2004		Existing	assumed Mannings N	MH105S243	MH105S240		T16336	IRWD	PVC	{BC616C77-A34D-4038-B189-FED5728E8607}	CLMH105S243MH105S240	212.69	211.86	0.833333333	MH105S243	MH105S240		107	CLMH105S243MH105S240	10	0.0078	0.198542	0.26	0.234262	0.28	0.277772	0.31	0.234262	0.28	
CLMH105S244MH105S241		2004		Existing	assumed Mannings N	MH105S244	MH105S241		T16336	IRWD	PVC	{68117D11-F60C-4FFD-A286-DFDD266C118E}	CLMH105S244MH105S241	214.69	212.38	0.666666667	MH105S244	MH105S241		114	CLMH105S244MH105S241	8	0.0203	0.004110	0.04	0.004935	0.05	0.005848	0.05	0.004935	0.05	
CLMH105S245MH105S244		2004		Existing	assumed Mannings N	MH105S245	MH105S244		T16336	IRWD	PVC	{21528FB5-7769-428B-9CFF-ACC02FF41600}	CLMH105S245MH105S244	216.41	214.80	0.666666667	MH105S245	MH105S244		114	CLMH105S245MH105S244	8	0.0141	0.002271	0.04	0.002726	0.04	0.003231	0.04	0.002726	0.04	
CLMH105S246MH105S242		2004		Existing	assumed Mannings N	MH105S246	MH105S242		T16336	IRWD	PVC	{2235AAD0-EB8E-4946-966E-0F56DE315CE4}	CLMH105S246MH105S242	202.19	198.30	0.666666667	MH105S246	MH105S242		235	CLMH105S246MH105S242	8	0.0166	0.237429	0.32	0.281105	0.35	0.333371	0.38	0.281105	0.35	
CLMH105S248MH105S245		2004		Existing	assumed Mannings N	MH105S248	MH105S245		T16336	IRWD	PVC	{1FEE4D0F-F703-4A7A-84CC-2496012526F1}	CLMH105S248MH105S245	218.24	216.50	0.666666667	MH105S248	MH105S245		114	CLMH105S248MH105S245	8	0.0153	0.001104	0.02	0.001325	0.03	0.001570	0.03	0.001325	0.03	
CLMH105S249MH105S246		2004		Existing	assumed Mannings N	MH105S249	MH105S246		T16336	IRWD	PVC	{E4829C5E-A73D-4F47-9A6A-A59978F190DC}	CLMH105S249MH105S246	205.97	202.30	0.666666667	MH105S249	MH105S246		227	CLMH105S249MH105S246	8	0.0162	0.027502	0.13	0.033024	0.15	0.039145	0.17	0.033024	0.15	
CLMH105S250MH105S252		2004		Existing	assumed Mannings N	MH105S250	MH105S252		T16336	IRWD	PVC	{3EACDA5A-B2CA-4565-9275-E4F9AEF22494}	CLMH105S250MH105S252	219.52	207.89	0.666666667	MH105S250	MH105S252		180	CLMH105S250MH105S252	8	0.0646	0.008525	0.05	0.010236	0.05	0.012133	0.05	0.010236	0.05	
CLMH105S252MH105S249		2004		Existing	assumed Mannings N	MH105S252	MH105S249		T16336	IRWD	PVC	{C9EEF7C5-D7E5-4AB4-8E8D-33D6537F8E19}	CLMH105S252MH105S249	207.69	206.08	0.666666667	MH105S252	MH105S249		207	CLMH105S252MH105S249	8	0.0050	0.022722	0.13	0.027281	0.14	0.032338	0.15	0.027281	0.14	
CLMH105S265MH105S290		2009		Existing	assumed Mannings N	MH105S265	MH105S290	ERROR 23	T17246	IRWD	PVC	{9C63C33B-C769-4B1E-AE76-07D88F5ACD07}	CLMH105S265MH105S290	193.07	188.97	0.666666667	MH105S265	MH105S290		78	CLMH105S265MH105S290	8	0.0526	0.044092	0.10	0.052942	0.11	0.062764	0.12	0.052942	0.11	
CLMH105S266MH105S274		2009		Existing	assumed Mannings N	MH105S266	MH105S274		T17246	IRWD	PVC	{4A2F3E18-858A-4143-9B9A-AE80B4080AF7}	CLMH105S266MH105S274	196.37	195.21	0.666666667	MH105S266	MH105S274		231	CLMH105S266MH105S274	8	0.0050	0.001385	0.03	0.001662	0.04	0.001972	0.04	0.001662	0.04	
CLMH105S267MH105S276		2009		Existing	assumed Mannings N	MH105S267	MH105S276		T17246	IRWD	PVC	{87F55229-C34C-42A6-9750-762E68B6B683}	CLMH105S267MH105S276	197.72	196.52	0.666666667	MH105S267	MH105S276		241	CLMH105S267MH105S276	8	0.0050	0.000952	0.02	0.001143	0.03	0.001354	0.03	0.001143	0.03	
CLMH105S268MH105S269		2009		Existing	assumed Mannings N	MH105S268	MH105S269		T17246	IRWD	PVC	{0F8883C3-56D9-4189-B49B-4154CC38F8BD}	CLMH105S268MH105S269	196.02	195.36	0.666666667	MH105S268	MH105S269		131	CLMH105S268MH105S269	8	0.0050	0.001558	0.03	0.001869	0.04	0.002218	0.04	0.001869	0.04	
CLMH105S269MH105S270		2009		Existing	assumed Mannings N	MH105S269	MH105S270		T17246	IRWD	PVC	{84F8711A-B082-4C22-A034-681034C652AB}	CLMH105S269MH105S270	195.26	194.60	0.666666667	MH105S269	MH105S270		131	CLMH105S269MH105S270	8	0.0050	0.004847	0.06	0.005818	0.07	0.006899	0.07	0.005818	0.07	
CLMH105S270MH105S271		2009		Existing	assumed Mannings N	MH105S270	MH105S271		T17246	IRWD	PVC	{9F8FF3F7-4F24-4528-838A-CDC5CD2442DE}	CLMH105S270MH105S271	194.50	193.75	0.666666667	MH105S270	MH105S271		151	CLMH105S270MH105S271	8	0.0050	0.008071	0.08	0.009689	0.09	0.011488	0.09	0.009689	0.09	
CLMH105S271MH105S265		2009		Existing	assumed Mannings N	MH105S271	MH105S265		T17246	IRWD	PVC	{E0851906-6A28-4DB7-BF49-CF329968CC65}	CLMH105S271MH105S265	193.55	193.17	0.666666667	MH105S271	MH105S265		77	CLMH105S271MH105S265	8	0.0050	0.042339	0.18	0.050837	0.19	0.060269	0.21	0.050837	0.19	
CLMH105S272MH105S271		2009		Existing	assumed Mannings N	MH105S272	MH105S271		T17246	IRWD	PVC	{B989357A-1012-4673-B29E-CF691F16A7EC}	CLMH105S272MH105S271	193.94	193.65	0.666666667	MH105S272	MH105S271		59	CLMH105S272MH105S271	8	0.0050	0.034268	0.16	0.041148	0.17	0.048781	0.19	0.041148	0.17	
CLMH105S273MH105S272		2009		Existing	assumed Mannings N	MH105S273	MH105S272		T17246	IRWD	PVC	{AD9E1148-9628-4275-8F1E-68F872D79628}	CLMH105S273MH105S272	194.74	194.04	0.666666667	MH105S273	MH105S272		139	CLMH105S273MH105S272	8	0.0050	0.032689	0.16	0.039251	0.17	0.046534	0.19	0.039251	0.17	
CLMH105S274MH105S273		2009		Existing	assumed Mannings N	MH105S274	MH105S273		T17246	IRWD	PVC	{7DBF794D-D08C-4916-ADE4-B9B591CCA5A4}	CLMH105S274MH105S273	195.01	194.84	0.666666667	MH105S274	MH105S273		34	CLMH105S274MH105S273	8	0.0051	0.029618	0.15	0.035562	0.16	0.042160	0.18	0.035562	0.16	
CLMH105S275MH105S274		2009		Existing	assumed Mannings N	MH105S275	MH105S274		T17246	IRWD	PVC	{2C611D66-38FF-4124-BA30-B9414C4C6146}	CLMH105S275MH105S274	195.61	195.11	0.666666667	MH105S275	MH105S274		114	CLMH105S275MH105S274	8	0.0049	0.028233	0.15	0.033900	0.16	0.040189	0.17	0.033900	0.16	
CLMH105S276MH105S275		2009		Existing	assumed Mannings N	MH105S276	MH105S275		T17246	IRWD	PVC	{C16CAE1B-34A7-48DD-B079-344F81CE84C0}	CLMH105S276MH105S275	196.32	195.71	0.666666667	MH105S276	MH105S275		122	CLMH105S276MH105S275	8	0.0050	0.022478	0.13	0.026991	0.14	0.031995	0.15	0.026991	0.14	
CLMH105S280MH105S283		2009		Existing	assumed Mannings N	MH105S280	MH105S283		T17246F	IRWD	PVC	{1B12E83D-A9A1-4334-AA39-FC544A642FC3}	CLMH105S280MH105S283	200.66	199.98	0.666666667	MH105S280	MH105S283		136	CLMH105S280MH105S283	8	0.0050	0.005972	0.07	0.007170	0.07	0.008499	0.08	0.007170	0.07	
CLMH105S281MH105S280		2010		Existing	assumed Mannings N	MH105S281	MH105S280		T17246F	IRWD	PVC	{31014E99-F09F-4BC5-83A9-918E0F0ACE30}	CLMH105S281MH105S280	201.44	200.76	0.666666667	MH105S281	MH105S280		136	CLMH105S281MH105S280	8	0.0050	0.001168	0.03	0.001404	0.03	0.001662	0.04	0.001404	0.03	
CLMH105S282MH105S287		2010		Existing	assumed Mannings N	MH105S282	MH105S287		T17246E	IRWD	PVC	{2A828913-C55E-44EB-A144-27ACC0B53DC02}	CLMH105S282MH105S287	198.98	197.77	0.666666667	MH105S282	MH105S287		241	CLMH105S282MH105S287	8	0.0050	0.000475	0.02	0.000572	0.02	0.000677	0.02	0.000572	0.02	
CLMH105S283MH105S289		2010		Existing	assumed Mannings N	MH105S283	MH105S289		T17246F	IRWD	PVC	{8F376D8B-EE8E-4625-B1FD-C71B583B0CE7}	CLMH105S283MH105S289	199.88	199.10	0.666666667	MH105S283	MH105S289		59	CLMH105S283MH105S289	8	0.0050	0.009498	0.09	0.011405	0.09	0.013520	0.10	0.011405	0.09	
CLMH105S284MH105S276		2010		Existing	assumed Mannings N	MH105S284	MH105S276		T17246E	IRWD	PVC	{F2409AF1-BDAB-458C-B117-3F7C9C805015B}	CLMH105S284MH105S276	196.99	196.42	0.666666667	MH105S284	MH105S276		139	CLMH105S284MH105S276	8	0.0049	0.021527	0.13	0.025840	0.14	0.030641	0.15	0.025840	0.14	
CLMH105S285MH105S289		2010		Existing	assumed Mannings N	MH105S285	MH105S289		T17246F	IRWD	PVC	{8AB1A9CD-F252-4B3A-B729-93209AA77F9A}	CLMH105S285MH105S289	202.48	199.00	0.666666667	MH105S285	MH105S289		70	CLMH105S285MH105S289	8	0.0501	0.002747	0.03	0.003299	0.03	0.003912	0.03	0.003299	0.03	
CLMH105S286MH105S288		2010		Existing	assumed Mannings N	MH105S286	MH105S288		T17246F	IRWD	PVC	{1C40288A-E192-4247-88B1-71354C2D1A70}	CLMH105S286MH105S288	198.50	197.83	0.666666667	MH105S286	MH105S288		134	CLMH105S286MH105S288	8	0.0050	0.014128	0.10	0.016964	0.11	0.020111	0.12	0.016964	0.11	
CLMH105S287MH105S284		2010		Existing	assumed Mannings N	MH105S287	MH105S284		T17246E	IRWD	PVC	{6558B92B-0FBA-4682-8525-9ED28627A9BF}	CLMH105S287MH105S284	197.57	197.24	0.666666667	MH105S287	MH105S284		117	CLMH105S287MH105S284	8	0.0050	0.017611	0.13	0.021146	0.14	0.025067	0.15	0.021146	0.14	
CLMH105S288MH105S287		2010		Existing	assumed Mannings N	MH105S288	MH105S287		T17246E	IRWD	PVC	{D6EEF1B0-355F-405D-923E-690CC126DE40}	CLMH105S288MH105S287	197.73	197.67	0.666666667	MH105S288	MH105S287		13	CLMH105S288MH105S287	8	0.0046	0.017136	0.11	0.020575	0.12	0.024390	0.13	0.020575	0.12	
CLMH105S289MH105S286		2010		Existing	assumed Mannings N	MH105S289	MH105S286		T17246F	IRWD	PVC	{53CC6E0A-EEDB-4486-98B1-07F028B9B44A}	CLMH105S289MH105S286	198.90	198.60	0.666666667	MH105S289	MH105S286		114	CLMH105S289MH105S286	8	0.0051	0.012245	0.10	0.014703	0.10	0.017432	0.11	0.014703	0.10	
CLMH105S290MH105S227		2007		Existing	assumed Mannings N	MH105S290	MH105S227	ERROR 23	T16336	IRWD	PVC	{1E788523-6910-4840-96DB-5266A90DC2E7}	CLMH105S290MH105S227	187.98	187.62	1.250000000	MH105S290	MH105S227		82	CLMH105S290MH105S227	15	0.0044	0.747535	0.34	0.888637	0.37	1.058756	0.41	0.888633	0.37	
CLMH105S291MH105S288		2010		Existing	assumed Mannings N	MH105S291	MH105S288		T17246C	IRWD	PVC	{CBD80EF6-C1A3-4A01-8C37-C5677F04D329}	CLMH105S291MH105S288	207.09	197.93	0.666666667	MH105S291	MH105S288		170	CLMH105S291MH105S288	8	0.0050	0.003008	0.03	0.003611	0.03	0.004279	0.03	0.003611	0.03	
CLMH105S292MH105S286		2010		Existing	assumed Mannings N	MH105S292	MH105S286		T17246C	IRWD	PVC	{D4D564CB-FD77-4DE5-9E0F-032B5C56FC48}	CLMH105S292MH105S286	208.03	198.70	0.666666667	MH105S292	MH105S286		170	CLMH105S292MH105S286	8	0.0050	0.001883	0.02	0.002260	0.03	0.002679	0.03	0.002260	0.03	
CLMH105S293MH105S285		2010		Existing	assumed Mannings N	MH105S293	MH105S285		T17246C	IRWD	PVC	{B77FDA02-DF76-47FF-AFF6-D7924C5C4B77}	CLMH105S293MH105S285	209.68	202.68	0.666666667	MH105S293	MH105S285		170	CLMH105S293MH105S285	8	0.0413	0.001623	0.02	0.001949	0.03	0.002310	0.03	0.001949	0.03	
CLMH105S294MH105S284		2010		Existing	assumed Mannings N	MH105S294	MH105S284		T17246C	IRWD	PVC	{713A3EC4-C62B-4A05-B291-C6D1DA5CA1EE}	CLMH105S294MH105S284	205.65	197.09	0.666666667	MH105S294	MH105S284		170	CLMH105S294MH105S284	8	0.0505	0.003916	0.03	0.004702	0.04	0.005574	0.04	0.004702	0.04	
CLMH105S295MH105S275		2009		Existing	assumed Mannings N	MH105S295	MH105S275		T17246A	IRWD	PVC	{69013FBA-4379-4465-829F-58CBADA35A}	CLMH105S295MH105S275	203.33	195.81	0.666666667	MH105S295	MH105S275		170	CLMH105S295MH105S275	8	0.0444	0.005755	0.04	0.006909	0.05	0.008194	0.05	0.006909	0.05	
CLMH105S296MH105S273		2010		Existing	assumed Mannings N	MH105S296	MH105S273		T17246D	IRWD	PVC	{4D54B208-2CBD-4911-A728-05C2107C1429}	CLMH105S296MH105S273	201.86	194.94	0.666666667	MH105S296	MH105S273		170	CLMH105S296MH105S273	8	0.0408	0.003072	0.03	0.003690	0.03	0.004373	0.04	0.003690	0.03	
CLMH105S297MH105S272		2009		Existing	assumed Mannings N	MH105S297	MH105S272		T17246A	IRWD	PVC	{FC6E264C-9843-44F1-B232-0C169DB015E4}	CLMH105S297MH105S272	204.30	194.14	0.666666667	MH105S297	MH105S272		170	CLMH105S297MH105S272	8	0.0367	0.001579	0.02	0.001897	0.03	0.002248	0.03	0.001897	0.03	
CLMH105S298MH105S265		2009		Existing	assumed Mannings N	MH105S298	MH105S265		T17246A	IRWD	PVC	{4BDEB995-6911-4AA1-B8F5-187144E807DF}	CLMH105S298MH105S265	198.89	193.27	0.666666667	MH105S298	MH105S265		170	CLMH105S298MH105S265	8	0.0312	0.001754	0.03	0.002106	0.03	0.002495	0.03	0.002104	0.03	
CLMH105S299MH105S270		2009		Existing	assumed Mannings N	MH105S299	MH105S270		T17246A	IRWD	PVC	{441E42F9-AC78-42C9-BC66-77CB60CBC7D7}	CLMH105S299MH105S270	200.20	194.70	0.666666667	MH105S299	MH105S270		101	CLMH105S299MH105S270	8	0.0547	0.003224	0.03	0.003871	0.03	0.004589	0.04	0.003871	0.03	
CLMH105S300MH105S269		2009		Existing	assumed Mannings N	MH105S300	MH105S269		T17246A	IRWD	PVC	{24853386-558A-4FD9-AA3E-568D4C593189}	CLMH105S300MH105S269	200.26	195.46	0.666666667	MH105S300	MH105S269		101	CLMH105S300MH105S269	8	0.0478	0.003289	0.03	0.003948	0.04	0.004681	0.04	0.003948	0.03	
CLMH105S301MH105S268		2009		Existing	assumed Mannings N	MH105S301	MH105S268		T17246A	IRWD	PVC	{C9548173-18E4-48EE-A14B-3741331CCC25}	CLMH105S301MH105S268	198.59	196.22	0.666666667	MH105S301	MH105S268		101	CLMH105S301MH105S268	8	0.0236	0.001558	0.03	0.001869	0.03	0.002218	0.03	0.001869	0.03	
CLMH105S302MH105S283		2009		Existing	assumed Mannings N	MH105S302	MH105S283		T17246C	IRWD	PVC	{ABEAF9B8-87CA-4B21-A2E1-F7282F5EFB46}	CLMH105S302MH105S283	205.11	200.08	0.666666667	MH105S302	MH105S283		101	CLMH105S302MH105S283	8	0.0500	0.003526	0.03	0.004231	0.03	0.005021	0.04	0.004235	0.03	
CLMH105S303MH105S280		2010		Existing	assumed Mannings N	MH105S303	MH105S280		T17246C	IRWD	PVC	{3014BDE5-8DAF-494F-BB71-77679AF5446A}	CLMH105S303MH105S280	202.37	200.86	0.666666667	MH105S303	MH105S280		101	CLMH105S303MH105S280	8	0.0150	0.004803	0.05	0.005766	0.05	0.006837	0.06	0.005766	0.05	
CLMH105S304MH105S281		2010		Existing	assumed Mannings N	MH105S304	MH105S281		T17246C	IRWD	PVC	{B8FF86F5-BAAF-439A-B898-389F84EA4B83}	CLMH105S304MH105S281	202.37	201.64	0.666666667	MH105S304	MH105S281		101	CLMH105S304MH105S281	8	0.0073	0.001168	0.03	0.001404	0.03	0.001662	0.03	0.001404	0.03	
CLMH105S305MH105S282		2010		Existing	assumed Mannings N	MH105S305	MH105S282		T17246D	IRWD	PVC	{707570CC-9229-4CF9-A48E-9503B107583}	CLMH105S305MH105S282	199.90	199.08	0.666666667	MH105S305	MH105S282		246	CLMH105S305MH105S282	8	0.0050	0.000477	0.02	0.000572	0.02	0.000677	0.02	0.000573	0.02	
CLMH105S307MH105S308		2004		Existing	assumed Mannings N	MH105S307	MH105S308		T16543	IRWD	PVC	{9045E3DB-9C61-472C-82B6-42C5587A051D}	CLMH105S307MH105S308	221.66	220.64	0.666666667	MH105S307	MH105S308		196	CLMH105S307MH105S308	8	0.0052	0.005734	0.07	0.006884	0.07	0.008161	0.08	0.006884	0.07	
CLMH105S308MH105S250		2004		Existing	assumed Mannings N	MH105S308	MH105S250		T16543	IRWD	PVC	{A2614E76-C321-45A4-A71C-512EF434AA2D}	CLMH105S308MH105S250	220.44	219.72	0.666666667	MH105S308	MH105S250		141	CLMH105S308MH105S250	8	0.0051	0.007725	0.08	0.009275	0.08	0.010994	0.09	0.009275	0.08	
CLMH105S312MH105S313		2004		Existing	assumed Mannings N	MH105S312	MH105S313		T16540	IRWD	PVC	{F74010E2-E4C1-416C-9067-3F460342A2B3}	CLMH105S312MH105S313	200.22	198.91	0.666666667	MH105S312	MH105S313		213	CLMH105S312MH105S313	8	0.0078	0.008459	0.07	0.010159	0.08	0.012044	0.09	0.010159	0.08	
CLMH105S313MH105S226		2004		Existing	assumed Mannings N	MH105S313	MH105S226		1716	IRWD	PVC	{73383D73-4023-4C6E-BC96-E57B2D41C7}	CLMH105S313MH105S226	197.24	196.60	0.666666667	MH105S313	MH105S226		198	CLMH105S313MH105S226	8	0.0032	0.014924	0.12	0.017909	0.15	0.022342	0.18	0.019069	0.15	
CLMH105S317MH105S246		2004		Existing	assumed Mannings N	MH105S317	MH105S246		T16336	IRWD	PVC	{902B1C20-8712-4F4F-8E5B-843B7A0A15C8}	CLMH105S317MH105S246	205.30	202.39	1.000000000	MH105S317	MH105S246		302	CLMH105S317MH105S246	12	0.0096	0.209987	0.20	0.248133	0.21	0.294266	0.23	0.248132	0.21	
CLMH105S318MH105S202		2011		Existing	assumed Mannings N	MH105S318	MH105S202		T16577J	IRWD	PVC	{310B886B-EED0-4736-9D45-31770D61A10B}	CLMH105S318MH105S202	210.40	208.00	0.666666667	MH105S318	MH105S202		210	CLMH105S318MH105S202	8	0.0093	0.004537	0.05	0.005446	0.06	0.006457	0.06	0.005446	0.06	
CLMH105S319MH105S320		2009		Existing	assumed Mannings N	MH105S319	MH105S320		A01703	IRWD	VCP	{496BB26D-4DE0-4CBC-A180-74A2F91AAADB}	CLMH105S319MH105S320	201.45	199.08	1.250000000	MH105S319	MH105S320		346	CLMH105S319MH105S320	15	0.0068	0.001590	0.28	0.223302	0.31	0.859905	0.34	0.901037	0.35	
CLMH105S320MH105S321		2004		Existing	assumed Mannings N	MH105S320	MH105S321		A01703	IRWD	VCP	{EB89117E-7DD5-4369-BCD0-2CAA7245AEFE}	CLMH105S320MH105S321	198.98	195.50	1.250000000	MH105S320	MH105S321		346	CLMH105S320MH105S321	15	0.0101	0.601487	0.26	0.723177	0.28	0.859775	0.31	0.900940	0.31	
CLMH105S321MH105S157		2004		Existing	assumed Mannings N	MH105S321	MH105S157		A01703	IRWD	VCP	{7C46EA10-98B1-47BD-A769-DE4BD3C82AF8}	CLMH105S321MH105S157	195.40	183.50	1.250000000	MH105S321	MH105S157		360	CLMH105S321MH105S157	15	0.0331	0.601471	0.27	0.723156	0.30	0.859753	0.33	0.900924	0.33	
CLMH105S322MH104E332		2014		Existing	assumed Mannings N	MH105S322	MH104E332	changed DS invert to n	A01703C	IRWD	VCP	{C9489C70-919E-47DD-B277-935D2AED2835}	CLMH105S322MH104E332	190.81	181.93	0.666666667	MH105S322	MH104E332		114	CLMH105S322MH104E332	8	0.0779	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH105W01MH105W026		1977		Existing		MH105W01	MH105W026		T09496	IRWD	VCP	{8F863B3D-A4A6-4313-A464-9074752858BB}	CLMH105W01MH105W026	150.80	149.49	0.666666667	MH105W001	MH105W026		328	CLMH105W01MH105W026	6	0.0040	0.025733	0.19	0.029862	0.23	0.035404	0.26	0.029862	0.23	
CLMH105W002MH105W001		1977		Existing		MH105W002	MH105W001		T09496	IRWD	VCP	{D628BA23-7129-4AF1-BC8F-94442C81F002}	CLMH105W002MH105W001	152.02	151.00	0.666666667	MH105W002	MH105W001		255	CLMH105W002MH105W001	8	0.0040	0.020145	0.13	0.024187	0.14	0.028676	0.16	0.024187	0.14	
CLMH105W003MH105W002		1977		Existing		MH105W003	MH105W002		T09496	IRWD	VCP	{2F9CD0DB-A6F9-486D-AE35-D291E5AD8392}	CLMH105W003MH105W002	153.46	152.11	0.666666667	MH105W003	MH105W002		256	CLMH105W003MH105W002	8	0.0053	0.017109	0.12	0.020543	0.13	0.024354	0.14	0.020543	0.13	
CLMH105W004MH105W002		1977		Existing		MH105W004	MH105W002		T09496	IRWD	VCP	{EF613DC5-B3E6-4EFD-B57D-9ABD731FE553}	CLMH105W004MH105W002	153.13	152.22	0.500000000	MH105W004	MH105W002		138	CLMH105W004MH105W002	6	0.0066	0.003036	0.07	0.003645	0.08	0.004322	0.08	0.003645	0.08	
CLMH105W005MH105W003		1977		Existing		MH105W005	MH105W003		T09496	IRWD	VCP	{074FCDF9-AAD2-408B-A815-2F7B3F8C51D1}	CLMH105W005MH105W003	155.39	153.66	0.500000000	MH105W005	MH105W003		65	CLMH105W005MH105W003	6	0.0113	0.003650	0.07	0.004382	0.07	0.005194	0.08	0.004382	0.07	
CLMH105W006MH0845107		1977		Existing		MH105W006	MH0845107		T09496	IRWD	VCP	{71DCDB60-25D4-4A7C-A1E1-F1969122947D}	CLMH105W006MH0845107	149.28	148.80	0.833333333	MH105W006	MH0845107		254	CLMH105W006MH0845107	10	0.0019	0.214486	0.37	0.258063	0.41	0.306325	0.45	0.258061	0.41	
CLMH105W007MH105W006		1977		Existing		MH105W007	MH105W006		T09496	IRWD	VCP	{D3651638-424B-4C6C-BAC5-4A7EDBB29C36}	CLMH105W007MH105W006	155.92	149.39	0.666666667	MH105W007	MH105W006		321	CLMH105W007MH105W006	8	0.0203	0.186850	0.33	0.224598	0.37	0.266422	0.42	0.224598	0.37	
CLMH105W008MH105W006		1977		Existing		MH105W008	MH105W006		T09496	IRWD	VCP	{376C7897-E232-4C45-A0EE-CEBF9B82277A}	CLMH105W008MH105W006	152.75	149.58	0.500000000	MH105W008	MH105W006		24	CLMH105W008MH105W006	6	0.1321	0.001915	0.08	0.002299	0.12	0.002724	0.16	0.002299	0.12	
CLMH105W009MH105W007		1976		Existing		MH105W009	MH105W007		T09496	IRWD	VCP	{64019983-0841-43C1-B006-225C0DF23F7B}	CLMH105W009MH105W007	157.63	156.11	0.666666667	MH105W009	MH105W007		256	CLMH105W009MH105W007	8	0.0059	0.068733	0.23	0.082544	0.25	0.097889	0.27	0.082544	0.25	
CLMH105W010MH105W067		1976		Existing		MH105W010	MH105W067		T09372	IRWD	VCP	{23E56303-636F-4E6D-8C34-B885D6A1F7AE}	CLMH105W010MH105W067	166.72	164.21	0.666666667	MH105W010	MH105W067		187	CLMH105W010MH105W067	8	0.0134	0.012863	0.08	0.015443	0.09	0.018308	0.10	0.015443	0.09	
CLMH105W011MH105W012		1978		Existing		MH105W011	MH105W012		T09372	IRWD	VCP	{00038A78-F670-455E-92BA-4E1CEFC4558D}	CLMH105W011MH105W012	177.01	171.92	0.666666667	MH105W011	MH105W012		340	CLMH105W011MH105W012	8	0.0150	0.000000	0.00

| | | |

CLMH1065016MH1065005		2010		Existing	assumed Mannings N	MH1065016	MH1065005		T17383	IRWD	PVC	{0ADC79CF-0106-4C7A-A6F3-1403D9E350A9}	CLMH1065016MH1065005	264.36	263.84	0.666666667	MH1065016	MH1065005					104	CLMH1065016MH1065005	8	0.0050	0.026167	0.14	0.031413	0.15	0.037242	0.17	0.017637	0.11
CLMH1065017MH1065016		2010		Existing	assumed Mannings N	MH1065017	MH1065016		T17383	IRWD	PVC	{3F8AE6B4-084B-4DB4-B822-BD75FC037141}	CLMH1065017MH1065016	265.57	264.56	0.666666667	MH1065017	MH1065016					203	CLMH1065017MH1065016	8	0.0050	0.019080	0.12	0.022906	0.13	0.027155	0.14	0.017637	0.12
CLMH1065018MH1065017		2010		Existing	assumed Mannings N	MH1065018	MH1065017		T17383A	IRWD	PVC	{48660780-2478-475A-AF98-02D38E82E341}	CLMH1065018MH1065017	266.83	265.77	0.666666667	MH1065018	MH1065017					211	CLMH1065018MH1065017	8	0.0050	0.005048	0.06	0.006059	0.07	0.007185	0.07	0.006010	0.07
CLMH1065019MH1065102		2010		Existing	assumed Mannings N	MH1065019	MH1065102		T17383	IRWD	PVC	{0F7BA2C0-EF83-4716-8744-7007485FFDC5}	CLMH1065019MH1065102	270.03	269.03	0.666666667	MH1065019	MH1065102					429	CLMH1065019MH1065102	8	0.0023	0.004165	0.10	0.004999	0.11	0.005927	0.11	0.005410	0.11
CLMH1065020MH1065117		2011		Existing	assumed Mannings N	MH1065020	MH1065117		T17383	IRWD	PVC	{37B8E2A5-7DC9-49C6-AF9A-BF928BFFA626}	CLMH1065020MH1065117	265.58	265.20	0.666666667	MH1065020	MH1065117					223	CLMH1065020MH1065117	8	0.0017	0.024249	0.19	0.029117	0.21	0.034526	0.23	0.041309	0.25
CLMH1065021MH1065024		2011		Existing	assumed Mannings N	MH1065021	MH1065024		T17403A	IRWD	PVC	{32E87387-2DAF-4093-825F-2694FE8C0DD9}	CLMH1065021MH1065024	269.29	268.12	0.666666667	MH1065021	MH1065024					117	CLMH1065021MH1065024	8	0.0100	0.001674	0.03	0.002008	0.04	0.002382	0.04	0.002459	0.04
CLMH1065022MH1065021		2011		Existing	assumed Mannings N	MH1065022	MH1065021		T17403A	IRWD	PVC	{8F50E342-8CCF-43E7-8914-91AFB4D682F7}	CLMH1065022MH1065021	270.12	269.49	0.666666667	MH1065022	MH1065021					126	CLMH1065022MH1065021	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001006	0.03
CLMH1065023MH1065021		2011		Existing	assumed Mannings N	MH1065023	MH1065021		T17403A	IRWD	PVC	{11BC9CD9-FD73-4463-B103-2D76111488BD}	CLMH1065023MH1065021	269.86	269.39	0.666666667	MH1065023	MH1065021					47	CLMH1065023MH1065021	8	0.0100	0.001674	0.03	0.002008	0.04	0.002382	0.04	0.001453	0.03
CLMH1065024MH1065018		2011		Existing	assumed Mannings N	MH1065024	MH1065018		T17403A	IRWD	PVC	{BC5FBCA4-48FE-4B26-A235-D6C62F3767D2}	CLMH1065024MH1065018	267.92	267.03	0.666666667	MH1065024	MH1065018					179	CLMH1065024MH1065018	8	0.0050	0.005048	0.06	0.006059	0.07	0.007185	0.07	0.006010	0.07
CLMH1065025MH1065024		2011		Existing	assumed Mannings N	MH1065025	MH1065024		T17403A	IRWD	PVC	{DE966C65-37D9-41BF-B888-6CCB20F853CC}	CLMH1065025MH1065024	271.22	268.02	0.666666667	MH1065025	MH1065024					160	CLMH1065025MH1065024	8	0.0200	0.003374	0.04	0.004051	0.04	0.004803	0.05	0.003551	0.04
CLMH1065026MH1065025		2011		Existing	assumed Mannings N	MH1065026	MH1065025		T17403A	IRWD	PVC	{B7D85E55-BA1B-4BF5-919F-0781EA83DA58}	CLMH1065026MH1065025	272.59	271.42	0.666666667	MH1065026	MH1065025					117	CLMH1065026MH1065025	8	0.0100	0.003374	0.05	0.004051	0.05	0.004803	0.05	0.003551	0.05
CLMH1065027MH1065026		2011		Existing	assumed Mannings N	MH1065027	MH1065026		T17403A	IRWD	PVC	{15C60EFF-5674-4BBD-AE61-894C27587737}	CLMH1065027MH1065026	273.16	272.69	0.666666667	MH1065027	MH1065026					42	CLMH1065027MH1065026	8	0.0100	0.003374	0.05	0.004051	0.05	0.004803	0.05	0.001348	0.03
CLMH1065028MH1065026		2011		Existing	assumed Mannings N	MH1065028	MH1065026		T17403A	IRWD	PVC	{39ECF743-920D-432A-8B34-6A33CBF59706}	CLMH1065028MH1065026	274.10	272.79	0.666666667	MH1065028	MH1065026					131	CLMH1065028MH1065026	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002203	0.04
CLMH1065029MH1065049		2011		Existing	assumed Mannings N	MH1065029	MH1065049		T17403A	IRWD	PVC	{13038EFF-ADE7-43B5-9144-788E85D03206}	CLMH1065029MH1065049	271.65	269.15	0.666666667	MH1065029	MH1065049					250	CLMH1065029MH1065049	8	0.0100	0.004256	0.05	0.005108	0.06	0.006057	0.06	0.003873	0.05
CLMH1065030MH1065031		2011		Existing	assumed Mannings N	MH1065030	MH1065031		T17403A	IRWD	PVC	{4770566C-A47B-4450-B844-9C4136749154}	CLMH1065030MH1065031	268.43	267.66	0.666666667	MH1065030	MH1065031					154	CLMH1065030MH1065031	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH1065031MH1065032		2011		Existing	assumed Mannings N	MH1065031	MH1065032		T17403A	IRWD	PVC	{E404CCDD-2CA5-4632-8014-624E487248D4}	CLMH1065031MH1065032	267.46	266.99	0.666666667	MH1065031	MH1065032					93	CLMH1065031MH1065032	8	0.0051	0.003543	0.05	0.004256	0.06	0.005044	0.06	0.002292	0.04
CLMH1065032MH1065051		2011		Existing	assumed Mannings N	MH1065032	MH1065051		T17403A	IRWD	PVC	{58F8A39A-AF37-494D-A8BC-FFA2894A10D50}	CLMH1065032MH1065051	266.79	266.52	0.666666667	MH1065032	MH1065051					55	CLMH1065032MH1065051	8	0.049	0.006485	0.07	0.007788	0.08	0.009230	0.08	0.005482	0.06
CLMH1065033MH1065034		2011		Existing	assumed Mannings N	MH1065033	MH1065034		T17403A	IRWD	PVC	{3BDD8713-9ABA-482B-AE46-DB58BD4F82EA}	CLMH1065033MH1065034	265.18	261.03	0.666666667	MH1065033	MH1065034					117	CLMH1065033MH1065034	8	0.0356	0.003998	0.04	0.004801	0.04	0.005692	0.04	0.001658	0.02
CLMH1065034MH1065035		2011		Existing	assumed Mannings N	MH1065034	MH1065035		T17403A	IRWD	PVC	{E68CB159-5E7B-4C42-B79B-BDF7E06F7F24}	CLMH1065034MH1065035	260.83	260.44	0.666666667	MH1065034	MH1065035					79	CLMH1065034MH1065035	8	0.0050	0.012035	0.10	0.014451	0.10	0.017133	0.11	0.010930	0.09
CLMH1065035MH1065058		2011		Existing	assumed Mannings N	MH1065035	MH1065058		T17403A	IRWD	PVC	{8C5942A6-393C-4050-8497-26BFB960D3FD}	CLMH1065035MH1065058	260.34	259.50	0.666666667	MH1065035	MH1065058					127	CLMH1065035MH1065058	8	0.0066	0.015042	0.16	0.018062	0.17	0.021412	0.19	0.014526	0.18
CLMH1065036MH1065035		2011		Existing	assumed Mannings N	MH1065036	MH1065035		T17403A	IRWD	PVC	{6C1B7C4E-0917-45BC-B4D5-3FE8149ADE20}	CLMH1065036MH1065035	261.47	260.54	0.666666667	MH1065036	MH1065035					187	CLMH1065036MH1065035	8	0.0050	0.003008	0.05	0.003611	0.05	0.004279	0.06	0.003596	0.05
CLMH1065037MH1065036		2011		Existing	assumed Mannings N	MH1065037	MH1065036		T17403A	IRWD	PVC	{AA4BCD7C-3B1D-4A06-8972-8F7305129EF}	CLMH1065037MH1065036	262.61	261.67	0.666666667	MH1065037	MH1065036					163	CLMH1065037MH1065036	8	0.0200	0.002128	0.03	0.002555	0.03	0.003027	0.04	0.001235	0.02
CLMH1065038MH1065036		2011		Existing	assumed Mannings N	MH1065038	MH1065036		T17403A	IRWD	PVC	{CC53BD67-80C9-4A5D-923C-ACC620FE29A7}	CLMH1065038MH1065036	262.25	261.67	0.666666667	MH1065038	MH1065036					58	CLMH1065038MH1065036	8	0.0100	0.000880	0.02	0.001055	0.02	0.001252	0.03	0.002361	0.04
CLMH1065039MH1065040		2011		Existing	assumed Mannings N	MH1065039	MH1065040		T17403A	IRWD	PVC	{9171D2C9-F8DE-479B-A88F-386C96BD4B9D}	CLMH1065039MH1065040	264.76	264.10	0.666666667	MH1065039	MH1065040					66	CLMH1065039MH1065040	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001854	0.03
CLMH1065040MH1065041		2011		Existing	assumed Mannings N	MH1065040	MH1065041		T17403A	IRWD	PVC	{7FCF4A6E-750C-479C-AC08-6890DEB1BC63}	CLMH1065040MH1065041	263.90	263.00	0.666666667	MH1065040	MH1065041					180	CLMH1065040MH1065041	8	0.0050	0.002858	0.05	0.003431	0.05	0.004068	0.06	0.006140	0.07
CLMH1065041MH1065034		2011		Existing	assumed Mannings N	MH1065041	MH1065034		T17403A	IRWD	PVC	{04DFFF19-3C17-479A-AC59-56B70A668668}	CLMH1065041MH1065034	262.80	260.93	0.666666667	MH1065041	MH1065034					84	CLMH1065041MH1065034	8	0.0222	0.008037	0.06	0.009651	0.06	0.011441	0.07	0.009272	0.06
CLMH1065042MH1065041		2011		Existing	assumed Mannings N	MH1065042	MH1065041		T17403A	IRWD	PVC	{7D7F3B7C-F905-4BE7-8183-4FE3606098FD}	CLMH1065042MH1065041	266.48	262.90	0.666666667	MH1065042	MH1065041					72	CLMH1065042MH1065041	8	0.0500	0.005179	0.04	0.006219	0.04	0.007373	0.05	0.003132	0.03
CLMH1065043MH1065040		2011		Existing	assumed Mannings N	MH1065043	MH1065040		T17403A	IRWD	PVC	{DA7E7CBD-E2FB-4D25-998C-5C130B9656BC}	CLMH1065043MH1065040	265.77	264.10	0.666666667	MH1065043	MH1065040					167	CLMH1065043MH1065040	8	0.0100	0.000623	0.02	0.000748	0.02	0.000887	0.02	0.004286	0.05
CLMH1065044MH1065043		2011		Existing	assumed Mannings N	MH1065044	MH1065043		T17403A	IRWD	PVC	{CE1DCDB4-6CE2-438C-8B27-D7F85D5E1E1E}	CLMH1065044MH1065043	266.92	265.97	0.666666667	MH1065044	MH1065043					95	CLMH1065044MH1065043	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004286	0.05
CLMH1065045MH1065046		2011		Existing	assumed Mannings N	MH1065045	MH1065046		T17403A	IRWD	PVC	{EFFC4EDC-B889-4D94-8C39-66B99E0248FE}	CLMH1065045MH1065046	269.17	268.05	0.666666667	MH1065045	MH1065046					112	CLMH1065045MH1065046	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001893	0.03
CLMH1065046MH1065042		2011		Existing	assumed Mannings N	MH1065046	MH1065042		T17403A	IRWD	PVC	{754FA259-E7DC-43F7-94CE-4C6434546568}	CLMH1065046MH1065042	267.85	266.68	0.666666667	MH1065046	MH1065042					167	CLMH1065046MH1065042	8	0.0100	0.000815	0.02	0.000979	0.02	0.001160	0.02	0.003132	0.04
CLMH1065047MH1065057		2011		Existing	assumed Mannings N	MH1065047	MH1065057		T17403A	IRWD	PVC	{71306E97-9CB9-4669-98BE-820D2C2880E3E}	CLMH1065047MH1065057	268.82	267.89	0.666666667	MH1065047	MH1065057					93	CLMH1065047MH1065057	8	0.0101	0.001357	0.03	0.001628	0.03	0.001929	0.03	0.003190	0.04
CLMH1065048MH1065047		2011		Existing	assumed Mannings N	MH1065048	MH1065047		T17403A	IRWD	PVC	{ACD0414D-9D22-4D35-8986-E1ADOF7795BF}	CLMH1065048MH1065047	270.14	269.02	0.666666667	MH1065048	MH1065047					112	CLMH1065048MH1065047	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002164	0.04
CLMH1065049MH1065051		2011		Existing	assumed Mannings N	MH1065049	MH1065051		T17403A	IRWD	PVC	{B16E855C-1E30-4DB3-B98F-13151F8334C9}	CLMH1065049MH1065051	268.95	266.94	0.666666667	MH1065049	MH1065051					173	CLMH1065049MH1065051	8	0.0173	0.007547	0.06	0.009059	0.06	0.010740	0.07	0.006145	0.05
CLMH1065050MH1065033		2011		Existing	assumed Mannings N	MH1065050	MH1065033		T17403A	IRWD	PVC	{E333176F-8B4E-4D9A-94E1-EF5FE0BF6A95}	CLMH1065050MH1065033	266.15	265.38	0.666666667	MH1065050	MH1065033					154	CLMH1065050MH1065033	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH1065051MH1065017		2011		Existing	assumed Mannings N	MH1065051	MH1065017		T17403A	IRWD	PVC	{1DD7ADEF-50EF-4F67-B639-F73FDCFEB847}	CLMH1065051MH1065017	266.42	265.67	0.666666667	MH1065051	MH1065017					151	CLMH1065051MH1065017	8	0.0050	0.014031	0.10	0.016845	0.11	0.019970	0.12	0.011627	0.09
CLMH1065052MH1065049		2011		Existing	assumed Mannings N	MH1065052	MH1065049		T17403A	IRWD	PVC	{A584D501-84D8-4DD9-843D-D69F224F9AB2}	CLMH1065052MH1065049	269.63	269.15	0.666666667	MH1065052	MH1065049					95	CLMH1065052MH1065049	8	0.0051	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002271	0.04
CLMH1065053MH1065046		2011		Existing	assumed Mannings N	MH1065053	MH1065046		T17403A	IRWD	PVC	{FD65ACB1-E043-4BE6-82C3-B4161D3C4E33}	CLMH1065053MH1065046	268.46	267.95	0.666666667	MH1065053	MH1065046					51	CLMH1065053MH1065046	8	0.0100	0.000815	0.02	0.000979	0.02	0.001160	0.02	0.001239	0.03
CLMH1065054MH1065047		2011		Existing	assumed Mannings N	MH1065054	MH1065047		T17403A	IRWD	PVC	{7C4431F8-996A-45FE-8F2F-08D01BAAED2C}	CLMH1065054MH1065047	269.23	268.92	0.666666667	MH1065054	MH1065047					62	CLMH1065054MH1065047	8	0.0050	0.001357	0.03	0.001628	0.03	0.001929	0.04	0.001026	0.03
CLMH1065055MH1065031		2011		Existing	assumed Mannings N	MH1065055	MH1065031		T17403A	IRWD	PVC	{C6AE74D3-4D18-437E-8297-378B1B74282B}	CLMH1065055MH1065031	267.87	267.56	0.666666667	MH1065055	MH1065031					62	CLMH1065055MH1065031	8	0.0050	0.003543	0.05	0.004256	0.06	0.005044	0.06	0.000491	0.02
CLMH1065056MH1065033		2011		Existing	assumed Mannings N	MH1065056	MH1065033		T17403A	IRWD	PVC	{B59578C7-11D9-4BDC-80E1-C2F4E017C94E}	CLMH1065056MH1065033	267.10	265.28	0.666666667	MH1065056	MH1065033					51	CLMH1065056MH1065033	8	0.0357	0.001376	0.02	0.001652	0.02	0.001959	0.03	0.001658	0.02
CLMH1065057MH1065032		2011		Existing	assumed Mannings N	MH1065057	MH1065032		T17403A	IRWD	PVC	{8840F2FD-B0AD-4B59-BF3E-F3661251E8B9}	CLMH1065057MH1065032	267.69	266.89	0.666666667	MH1065057	MH1065032					160	CLMH1065057MH1065032	8	0.0050	0.002941	0.05	0.003532	0.05	0.004185	0.06	0.003190	0.05
CLMH1065058MH1065026		2011		Existing	assumed Mannings N	MH1065058	MH1065081		T17447	IRWD	PVC	{04C99538-EF3B-424E-B1C6-65AA78BB39AD}	CLMH1065058MH1065081	259.50	258.87	0.666666667	MH1065058	MH1065081					121	CLMH1065058MH1065081	8	0.0052	0.003100	0.04	0.003720	0.04	0.004344	0.04	0.089949	0.26
CLMH1065059MH1065058		2011		Existing	assumed Mannings N	MH1065059	MH1065058		T17403	IRWD	PVC	{E6DB68C6-6791-4409-B04B-927383A2EB53}	CLMH1065059MH1065058	261.14	259.70	0.666666667	MH1065059	MH1065058					288	CLMH1065059MH1065058	8	0.0050	0.047427	0.19	0.056969	0.21	0.067562	0.22	0.079598	0.24
CLMH1065060MH1065059		2011		Existing	assumed Mannings N	MH1065060	MH1065059		T17403	IRWD	PVC	{244A90F8-9ECE-49ED-A66E-033497A54D1D}	CLMH1065060MH1065059	261.43	261.24	0.666666667	MH1065060	MH1065059					36	CLMH1065060MH1065059	8	0.0050	0.047441	0.19	0.056980	0.21	0.067570	0.22	0.079616	0.24
CLMH1065061MH1065060		2011		Existing	assumed Mannings N	MH1065061	MH1065060		T17403	IRWD	PVC	{C77AABF7-423F-4EAA-A31E-39675CE9F17E}	CLMH1065061MH1065060	262.78	261.53	0.666666667	MH1065061	MH1065060					250	CLMH1065061MH1065060	8	0.0050	0.047441	0.19	0.056981	0.21	0.067571	0.22	0.079618	0.24
CLMH1065062MH1065061		2011		Existing	assumed Mannings N	MH1065062	MH1065061		T17403	IRWD	PVC	{4A22DBD13-E33F-44EF-8B75-553F9CC730AC}	CLMH1065062MH1065061	264.27	262.88	0.666666667	MH1065062	MH1065061					278	CLMH1065062MH1065061	8	0.0050	0.047451	0.19	0.056989	0.21	0.067575	0.22	0.079623	0.24
CLMH1065063MH1065089		2012		Existing	assumed Mannings N	MH1065063	MH1065089		T17383	IRWD	PVC	{18578085-F2E7-45CE-B597-E9319B12DFAA}	CLMH1065063MH1065089	259.63	259.27	0.666666667	MH1065063	MH1065089					63	CLMH1065063MH1065089	8	0.0048	0.022180	0.13	0.026502	0.14	0.031472	0.15	0.138963	0.33
CLMH1065067MH1065070		2013		Existing	assumed Mannings N	MH1065067	MH1065070		T17447	IRWD	PVC	{ADAE63F4-DF3E-4AB4-9AF4-C261C26661EB}	CLMH1065067MH1065070	258.22	257.31	0.666666667	MH1065067	MH1065070					171	CLMH1065067MH1065070	8	0.0053	0.002386	0.04	0.002865	0.05	0.003397	0.05	0.001891	0.04
CLMH1065068MH1065078		2013		Existing	assumed Mannings N	MH1065068	MH1065078		T17447	IRWD	PVC	{7F2C72E7-A5AE-4E13-8186-9FE26FF4D106}	CLMH1065068MH1065078	259.86	258.10	0.666666667	MH1065068	MH1065078					171	CLMH1065068MH1065078	8	0.0103	0.005654	0.06	0.006790	0.06	0.008048	0.07	0.001917	0.04
CLMH1065069MH1065072		2011		Existing	assumed Mannings N	MH1065069	MH1065072		T17383B	IRWD	PVC	{2F94403B-BEE7-4D23-969B-351F882CBF93}	CLMH1065069MH1065072	262.72	261.43	0.666666667	MH1065069	MH1065072					129	CLMH1065069MH1065072	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH1065070MH1065125		2013		Existing	assumed Mannings N	MH1065070	MH1065125		T17447	IRWD	PVC	{A020A69A-359E-4E66-A895-B40C42C201195}	CLMH1065070MH1065125	257.11	256.76	0.666666667	MH1065070	MH1065125					71	CLMH1065070MH1065125	8	0.0049	0.073492	0.23	0.088343	0.26	0.104811	0.28	0.100449	0.27
CLMH1065071MH1065081		2013		Existing	assumed Mannings N	MH1065071	MH1065081		T17447	IRWD	PVC	{395B5CCC-2261-4CAA-A77C-6F723F0EC6B7}	CLMH1065071MH1065081	260.78	259.02	0.666666667	MH1065071	MH1065081					171	CLMH1065071MH1065081	8	0.0103	0.002430	0.04	0.002918	0.04	0.003459	0.05	0.002617	0.04
CLMH1065072MH1065073		2013		Existing	assumed Mannings N	MH1065072	MH1065073		T17383B	IRWD	PVC	{471C304A-D05B-4021-99D0-9650739B14A6E}	CLMH1065072MH1065073	261.33	259.28	0.666666667	MH1065072	MH1065073					241	CLMH1065072MH1065073	8	0.0070	0.003543	0.05	0.004256	0.05	0.005044	0.06	0.004749	0.06
CLMH1065073MH1065079		2011		Existing	assumed Mannings N	MH1065073	MH1065079		T17383B	IRWD	PVC	{4D6B429C-AE7F-4B67-B5DB-7A2440FBED36}	CLMH1065073MH1065079	259.08	257.56	0.666666667	MH1065073	MH1065079					65	CLMH1065073MH1065079	8	0.0236	0.007087	0.05	0.008510	0.06	0.010086	0.06	0.010285	0.06
CLMH1065074MH1065073		2011		Existing	assumed Mannings N	MH1065074	MH1065073		T17383B	IRWD	PVC	{8E4A3134-B810-487A-A2DE-555BCD9F83C6}	CLMH1065074MH1065073	259.94	259.28	0.666666667	MH1065074	MH1065073					131	CLMH1065074MH1065073	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002102	0.04
CLMH1065075MH1065067		2011		Existing	assumed Mannings N	MH1065075	MH1065067		T17447	IRWD	PVC	{4F6A52D8-609A-428E-9E5F-FE6D3F5CEC14}	CLMH1065075MH1065067	259.13	258.22	0.666666667	MH1065075	MH1065067					171	CLMH1065075MH1065067	8	0.0053	0.002422	0.05	0.002903	0.05	0.003445	0.05	0.001920	0.04
CLMH1065076MH1065071		2013		Existing	assumed Mannings N	MH1065076	MH1065071		T17447	IRWD	PVC	{15A10FEC-08A5-44F2-BC47-70748A7F6A78}	CLMH1065076MH1065071	261.69	260.78	0.666666667	MH1065076	MH1065071					171	CLMH1065076MH1065071	8	0.0053	0.002436	0.04	0.002926	0.05	0.003466	0.05	0.002624	0.04
CLMH1065078MH1065070		2013		Existing	assumed Mannings N	MH1065078	MH1065070		T17447	IRWD	PVC	{9AF9211A-2465-40A0-81C7-D042E3224398}	CLMH1065078MH1065070	257.95	257.16	0.666666667	MH1065078	MH1065070					138	CLMH1065078MH1065070	8	0.0057	0.071116	0.23	0.085486	0.25	0.101420	0.27	0.098569	0.27
CLMH1065079MH1065125		2013		Existing	assumed Mannings N	MH1065079	MH1065125		T17447	IRWD	PVC	{EBA06D75-8CD9-4E09-8F18-E5A1871365FE}	CLMH1065079MH1065125	257.46	256.86	0.666666667	MH1065079	MH1065125					143	CLMH1065079MH1065125	8	0.0042	0.007087	0.08	0.008510	0.08	0.010086	0.09	0.010285	0.09
CLMH1065080MH1065068		2013		Existing	assumed Mannings N	MH1065080	MH1065068		T17447	IRWD	PVC	{79D2307F-3851-4798-B8FB-BEBA-CF61878B427B}	CLMH1065080MH1065068	261.62	259.86	0.666666667	MH1065080	MH1065068					171	CLMH1065080MH1065068	8	0.0103	0.002063	0.04	0.002478	0.05	0.002923	0.06	0.001881	0.03
CLMH1065081MH1065078		2013		Existing	assumed Mannings N	MH1065081	MH1065078		T17447	IRWD	PVC	{D1875438-EF9F-4805-BE5E-04D105A1B13F}	CLMH1065081MH1065078	258.87	257.95	0.666666667	MH1065081	MH1065078					65	CLMH1065081MH1065078	8	0.0057	0.065508	0.22	0.078731	0.24	0.093396	0.26	0.096721	0.26
CLMH1065082MH1065124		2012		Existing	assumed Mannings N	MH1065082	MH1065124		A0031SB	IRWD	PVC	{95AA2002-84F4-4846-B609-37E980CB1665}	CLMH1065082MH1065124	255.61	255.39	1.000000000	MH1065082	MH1065124					116	CLMH1065082MH1065124	12	0.0019	0.096824	0.18	0.115837	0.20	0.137403	0.22	0.246981	0.29
CLMH1065083MH1065120		2012		Existing	assumed Mannings N	MH1065083	MH1065120		A0031SB	IRWD	PVC	{006F1553-3727-421C-9C36-C8F1E323B4E9}	CLMH1065083MH1065120	256.51	256.30	1.000000000	MH1065083	MH1065120					84	CLMH1065083MH1065120	12	0.0025	0.081911	0.18	0.098228	0.19	0.116516	0.21	0.227134	0.29
CLMH1065084MH1065119		2012		Existing	assumed Mannings N	MH1065084	MH1065119		A0031SB	IRWD	PVC	{753D844A-6F8F-4E24-AD8C-C03235BF5156}	CLMH1065084MH1065119	257.32	257.09	1.000000000	MH1065084	MH1065119					93	CLMH1065084MH1065119	12	0.0025	0.045307	0.15	0.054278	0.16	0.064405	0.17	0.165485	0.26
CLMH1065085MH1065123		2012		Existing	assumed Mannings N	MH1065085	MH1065123		A0031SB	IRWD	PVC	{CDD6ADD2-B268-427E-9012-6294C4948F96}	CLMH1065085MH1065123	254.69	254.32	1.000000000	MH1065085	MH1065123					138	CLMH1065085MH1065123	12	0.0027	0.106576	0.18	0.127678	0.20	0.151465	0.22	0.255061	0.28
CLMH1065086MH1065122		2012		Existing	assumed Mannings N	MH1065086	MH1065122		A0031SB	IRWD	PVC	{CF105E48-1CB4-4E45-B824-09B3C8957B2F}	CLMH1065086MH1065122	253.63	252.63	1.000000000	MH1065086	MH1065122					41	CLMH1065086MH1065122	12	0.0241	0.129362	0.12	0.155057	0.14	0.183939	0.15	0.280632	0.18
CLMH1065087MH1065168		2013		Existing	assumed Mannings N	MH1065087	MH1065168		A0226BA	IRWD	PVC	{869885B9-0C69-4A5D-92A4-A4C4158D6479}	CLMH1065087MH1065168	267.95	265.01	0.666666667	MH1065087	MH1065168					400	CLMH1065087MH1065168	8	0.0074	0.017741	0.11	0.021175	0.12	0.025156	0.13	0.138965	0.30
CLMH1065088MH1065091		2012		Existing	assumed Mannings N	MH1065088	MH1065091		A0226BA	IRWD	PVC	{58B76B13-7A62-4050-84D0-4B0295AA4459}	CLMH1065088MH1065091	264.91	262.03	0.666666667	MH1065088	MH1065091					400	CLMH1065088MH1065091	8	0.0072	0.021457	0.12	0.025638	0.13	0.030446	0.14	0.138963	0.30
CLMH1065089MH1065090		2013		Existing	assumed Mannings N	MH1065089	MH1065090		T17403B	IRWD	PVC	{AED0FFA9-8327-44FA-8566-4EACBD687BF4}	CLMH1065089MH1065090	259.07	258.34	0.666666667	MH1065089	MH1065090					159	CLMH

| | | |

CLMH1250154MH1195016			2005		Existing	assumed Mannings N	MH1195015	MH1195016		T16562B	IRWD	PVC	{989CB0C5-7853-4F96-9AA8-9B1783F0E958}	CLMH1195015MH1195016	431.35	430.18	0.666666667	MH1195015	MH1195016			259	CLMH1195015MH1195016	8	0.0045	0.005604	0.07	0.006728	0.07	0.007980	0.08	0.006728	0.07				
CLMH1195016MH1195005			2005		Existing	assumed Mannings N	MH1195016	MH1195005		T16562B	IRWD	PVC	{01521585-9C74-47D9-86D1-F32CCC868F3F}	CLMH1195016MH1195005	430.08	429.10	0.666666667	MH1195016	MH1195005			242	CLMH1195016MH1195005	8	0.0040	0.005603	0.07	0.006727	0.07	0.007980	0.08	0.006727	0.07				
CLMH1195017MH1195009			2005		Existing	assumed Mannings N	MH1195017	MH1195009		T16562B	IRWD	PVC	{D7376741-81A3-42CA-8996-CD8E953A60EE}	CLMH1195017MH1195017	488.92	488.18	0.666666667	MH1195017	MH1195009			152	CLMH1195017MH1195009	8	0.0049	0.000606	0.02	0.000726	0.02	0.000861	0.02	0.000726	0.02				
CLMH1195018MH1195008			2005		Existing	assumed Mannings N	MH1195018	MH1195008		T16562B	IRWD	PVC	{3026CB48-06C2-4020-B529-726BC992BCF1}	CLMH1195018MH1195008	486.92	484.06	0.666666667	MH1195018	MH1195008			259	CLMH1195018MH1195008	8	0.0548	0.001250	0.02	0.001500	0.02	0.001780	0.02	0.001500	0.02				
CLMH1195024MH120E055			2011		Existing	assumed Mannings N	MH1195024	MH120E055		T16798A	IRWD	PVC	{74483F64-73E2-4B88-8E4A-CE3BB4906DFF}	CLMH1195024F120E316	428.49	424.86	0.666666667	MH1195024	MH120E055			259	CLMH1195024MH120E055	8	0.0140	0.003980	0.05	0.004779	0.05	0.005666	0.05	0.003602	0.04				
CLMH1195026MH1195028			2010		Existing	assumed Mannings N	MH1195026	MH1195028		T17367	IRWD	PVC	{1C2AC86C-0C55-4808-BD83-859021FE4A20F}	CLMH1195026MH1195028	432.46	430.70	0.666666667	MH1195026	MH1195028			143	CLMH1195026MH1195028	8	0.0123	0.001212	0.02	0.001455	0.03	0.001726	0.03	0.000716	0.02				
CLMH1195027MH1195029			2010		Existing	assumed Mannings N	MH1195027	MH1195029		T17367	IRWD	PVC	{F3192350-A585-4223-A713-4B9B1615ACB8}	CLMH1195027MH1195029	435.13	429.47	0.666666667	MH1195027	MH1195029			156	CLMH1195027MH1195029	8	0.0364	0.001681	0.02	0.002017	0.03	0.002393	0.03	0.001931	0.03				
CLMH1195028MH1195029			2010		Existing	assumed Mannings N	MH1195028	MH1195029		T17367	IRWD	PVC	{1CD82A05-73E4-4607-BB30-ED7C46CC506C}	CLMH1195028MH1195029	430.50	429.37	0.666666667	MH1195028	MH1195029			114	CLMH1195028MH1195029	8	0.0099	0.001212	0.03	0.001455	0.03	0.001726	0.03	0.000716	0.02				
CLMH1195029MH1195005			2010		Existing	assumed Mannings N	MH1195029	MH1195005		T17367	IRWD	PVC	{DA46AA7F-1489-45ED-A1B5-B097001DE8CB}	CLMH1195029MH1195005	429.27	428.89	0.666666667	MH1195029	MH1195005			39	CLMH1195029MH1195005	8	0.0039	0.002894	0.05	0.003472	0.05	0.004119	0.06	0.002647	0.05				
CLMH1195030MH1195034			2010		Existing	assumed Mannings N	MH1195030	MH1195034		T17367	IRWD	PVC	{314F0536-C8AD-4BE4-8BD3-4889986E9FA6}	CLMH1195030MH1195034	440.36	437.53	0.666666667	MH1195030	MH1195034			147	CLMH1195030MH1195034	8	0.0193	0.001579	0.03	0.001897	0.03	0.002248	0.03	0.001043	0.02				
CLMH1195031MH1195033			2010		Existing	assumed Mannings N	MH1195031	MH1195033		T17367	IRWD	PVC	{AFB45689-299A-44B3-8E58-7E0B282E9538}	CLMH1195031MH1195033	441.38	440.10	0.666666667	MH1195031	MH1195033			106	CLMH1195031MH1195033	8	0.0121	0.001750	0.03	0.002100	0.04	0.002489	0.04	0.001666	0.03				
CLMH1195032MH1195035			2010		Existing	assumed Mannings N	MH1195032	MH1195035		T17367	IRWD	PVC	{C22CC6D5-EA6D-493A-A52E-FB468D6DA628}	CLMH1195032MH1195035	436.95	431.58	0.666666667	MH1195032	MH1195035			158	CLMH1195032MH1195035	8	0.0500	0.001957	0.02	0.002348	0.03	0.002784	0.03	0.001910	0.02				
CLMH1195033MH1195034			2010		Existing	assumed Mannings N	MH1195033	MH1195034		T17367	IRWD	PVC	{560F6CCE-3B77-4678-8CB1-4958652F8FF8}	CLMH1195033MH1195034	439.90	437.43	0.666666667	MH1195033	MH1195034			113	CLMH1195033MH1195034	8	0.0219	0.001750	0.03	0.002100	0.03	0.002489	0.03	0.001666	0.03				
CLMH1195034MH1195035			2010		Existing	assumed Mannings N	MH1195034	MH1195035		T17367	IRWD	PVC	{390538DC-7A90-44B8-859C-3F5157A45581}	CLMH1195034MH1195035	437.33	431.48	0.666666667	MH1195034	MH1195035			117	CLMH1195034MH1195035	8	0.0499	0.003329	0.03	0.003997	0.03	0.004737	0.04	0.002709	0.03				
CLMH1195035MH1195005			2010		Existing	assumed Mannings N	MH1195035	MH1195005		T17367	IRWD	PVC	{53D648CC-45A6-4272-98EC-B332E8335CF3}	CLMH1195035MH1195005	431.38	428.89	0.666666667	MH1195035	MH1195005			119	CLMH1195035MH1195005	8	0.0210	0.005286	0.05	0.006345	0.05	0.007521	0.06	0.004619	0.04				
CLMH1195036MH1195042			2010		Existing	assumed Mannings N	MH1195036	MH1195042		T17367	IRWD	PVC	{DA25C772-798E-4996-B131-F38628CF378A}	CLMH1195036MH1195042	428.28	423.22	0.666666667	MH1195036	MH1195042			30	CLMH1195036MH1195042	8	0.1707	0.001830	0.02	0.002198	0.02	0.002604	0.02	0.001786	0.02				
CLMH1195037MH1195039			2010		Existing	assumed Mannings N	MH1195037	MH1195039		T17367	IRWD	PVC	{FA6B62C2-D0E7-4805-8C43-B4840F34E720}	CLMH1195037MH1195039	426.64	424.50	0.666666667	MH1195037	MH1195039			8	CLMH1195037MH1195039	8	0.0221	0.000608	0.01	0.000729	0.02	0.000863	0.02	0.001867	0.03				
CLMH1195038MH1195040			2010		Existing	assumed Mannings N	MH1195038	MH1195040		T17367	IRWD	PVC	{41ACDCF0-FA0D-4D08-B2E7-92B920DF8B56}	CLMH1195038MH1195040	428.68	423.84	0.500000000	MH1195038	MH1195040			97	CLMH1195038MH1195040	6	0.0500	0.000845	0.02	0.001015	0.03	0.001203	0.03	0.001837	0.03				
CLMH1195039MH1195040			2010		Existing	assumed Mannings N	MH1195039	MH1195040		T17367	IRWD	PVC	{1523B296-C433-4E9B-BE22-089474EB4E72}	CLMH1195039MH1195040	424.30	423.70	0.666666667	MH1195039	MH1195040			112	CLMH1195039MH1195040	8	0.0054	0.001752	0.04	0.002102	0.04	0.002491	0.04	0.002983	0.05				
CLMH1195040MH1195042			2010		Existing	assumed Mannings N	MH1195040	MH1195042		T17367	IRWD	PVC	{6947952C-5B8E-459F-A39F-51D313753D41}	CLMH1195040MH1195042	423.64	423.22	0.666666667	MH1195040	MH1195042			85	CLMH1195040MH1195042	8	0.0050	0.003473	0.05	0.004168	0.06	0.004940	0.06	0.006399	0.07				
CLMH1195041MH1195006			2005		Existing	assumed Mannings N	MH1195041	MH1195006		T16562B	IRWD	PVC	{EE22B411-A587-46FB-ABA2-4E2CF2FDE80B}	CLMH1195041MH1195006	415.80	415.68	0.666666667	MH1195041	MH1195006			57	CLMH1195041MH1195006	8	0.0021	0.019293	0.14	0.023160	0.16	0.027460	0.17	0.022178	0.15				
CLMH1195042MH1195010			2010		Existing	assumed Mannings N	MH1195042	MH1195010		T17367	IRWD	PVC	{5D1FE79B-AB9F-49B7-866C-C01936B40961}	CLMH1195042MH1195041	423.02	420.06	0.666666667	MH1195042	MH1195041			74	CLMH1195042MH1195041	8	0.0401	0.005303	0.04	0.006367	0.04	0.007544	0.05	0.008185	0.05				
CLMH1195043MH1195044			2011		Existing	assumed Mannings N	MH1195043	MH1195044		16562C	IRWD	PVC	{2D4CB110-7595-42E2-9E87-BBA1B2360B83}	CLMH1195043MH1195044	423.43	422.26	0.666666667	MH1195043	MH1195044			233	CLMH1195043MH1195044	8	0.0050	0.006462	0.07	0.007758	0.08	0.009196	0.08	0.007286	0.07				
CLMH1195044MH1195011			2011		Existing	assumed Mannings N	MH1195044	MH1195011		16562C	IRWD	PVC	{2216A190-5CE8-49C6-9762-AF2E0E27F53C}	CLMH1195044MH1195011	422.21	419.54	0.666666667	MH1195044	MH1195011			53	CLMH1195044MH1195011	8	0.0505	0.007617	0.07	0.009144	0.08	0.010839	0.08	0.007286	0.07				
CLMH1195045MH1195024			2010		Existing	assumed Mannings N	MH1195045	MH1195024		T16798A	IRWD	PVC	{F2CE8D5C-75F3-45F4-AA17-8B52E8F3F5F5}	CLMH1195045MH1195024	432.06	428.59	0.666666667	MH1195045	MH1195024			238	CLMH1195045MH1195024	8	0.0146	0.001265	0.02	0.001519	0.03	0.001801	0.03	0.003602	0.04				
CLMH1195046MH1195043			2011		Existing	assumed Mannings N	MH1195046	MH1195043		16562C	IRWD	PVC	{264D76A0-2C0D-4A45-90B2-3C6A9ABD8240}	CLMH1195046MH1195043	430.77	423.53	0.666666667	MH1195046	MH1195043			291	CLMH1195046MH1195043	8	0.0249	0.002217	0.03	0.002662	0.03	0.003156	0.04	0.007286	0.05				
CLMH120E001MH120E005			2006		Existing	assumed Mannings N	MH120E001	MH120E005		T16830	IRWD	PVC	{F35C67EA-E184-427E-95D2-F30665AF817E}	CLMH120E001MH120E005	429.08	428.15	0.666666667	MH120E001	MH120E005			187	CLMH120E001MH120E005	8	0.0050	0.000568	0.02	0.000682	0.02	0.000808	0.02	0.000682	0.02				
CLMH120E002MH120E040			2006		Existing	assumed Mannings N	MH120E002	MH120E040		T16830	IRWD	PVC	{C251ED47-6368-4C29-B4CD-5CF94FD139D0}	CLMH120E002MH120E040	420.72	416.98	0.666666667	MH120E002	MH120E040			114	CLMH120E002MH120E040	8	0.0329	0.000587	0.01	0.000705	0.01	0.000835	0.02	0.000705	0.01				
CLMH120E003MH120E044			2006		Existing	assumed Mannings N	MH120E003	MH120E044		T16830	IRWD	PVC	{6259F5E6-200E-45CE-A21E-E28F9767137}	CLMH120E003MH120E004	421.56	415.02	0.666666667	MH120E003	MH120E004			374	CLMH120E003MH120E004	8	0.0175	0.002614	0.04	0.003139	0.04	0.003720	0.04	0.003139	0.04				
CLMH120E004MH120E044			2006		Existing	assumed Mannings N	MH120E004	MH120E044		T16830	IRWD	PVC	{C4D04000-C7E1-4C60-BFEC-E1FCB1FD1B6A}	CLMH120E004DE120E002	414.92	403.42	0.666666667	MH120E004	MH120E044			291	CLMH120E004MH120E044	8	0.0395	0.007003	0.05	0.008407	0.05	0.009967	0.06	0.008407	0.05				
CLMH120E005MH142N028			2006		Existing	assumed Mannings N	MH120E005	MH142N028		T16830	IRWD	PVC	{2140DDB8-9FCA-45A4-92E7-19932DFC60F4}	CLMH120E005MH142N028	427.95	427.40	0.666666667	MH120E005	MH142N028			111	CLMH120E005MH142N028	8	0.0050	0.001423	0.03	0.001709	0.04	0.002025	0.04	0.001709	0.04				
CLMH120E006MH120E005			2006		Existing	assumed Mannings N	MH120E006	MH120E005		T16830	IRWD	PVC	{78AF39C1-069D-4A08-8A28-B7252428209}	CLMH120E006MH120E002	424.69	420.92	0.666666667	MH120E006	MH120E002			218	CLMH120E006MH120E002	8	0.0173	0.000587	0.01	0.000705	0.02	0.000835	0.02	0.000705	0.02				
CLMH120E007MH120E008		C-900	2005		Existing	assumed Mannings N	MH120E007	MH120E008		A01753	IRWD	PVC	{93F9E34E-A26E-4C53-97C9-C2D71DE41161}	CLMH120E007MH120E008	367.73	367.45	1.000000000	MH120E007	MH120E008			22	CLMH120E007MH120E008	12	0.0127	0.218195	0.19	0.261751	0.21	0.310361	0.22	0.274911	0.21				
CLMH120E008MH120E011			2005		Existing	assumed Mannings N	MH120E008	MH120E011		A01753	IRWD	PVC	{AC449946E-3C5F-4B8B-B295-D8C6297C9A09}	CLMH120E008F120E168	367.25	361.87	1.000000000	MH120E008	MH120E011			102	CLMH120E008MH120E011	12	0.0207	0.218186	0.17	0.261745	0.18	0.310357	0.20	0.274906	0.19				
CLMH120E009MH120E010		C-900	2005		Existing	assumed Mannings N	MH120E009	MH120E010		A01753	IRWD	PVC	{93144318-D691-48AC-9330-EF43118E7119}	CLMH120E009MH120E010	370.57	370.26	1.000000000	MH120E009	MH120E010			19	CLMH120E009MH120E010	12	0.0167	0.218199	0.18	0.261754	0.19	0.310363	0.21	0.274913	0.20				
CLMH120E010MH120E007		C-900	2005		Existing	assumed Mannings N	MH120E010	MH120E007		A01753	IRWD	PVC	{D1BDF01C-CB23-4A60-91A9-48E2D4F64F628}	CLMH120E010MH120E007	370.05	367.92	1.000000000	MH120E010	MH120E007			127	CLMH120E010MH120E007	12	0.0168	0.218195	0.18	0.261751	0.19	0.310361	0.21	0.274911	0.20				
CLMH120E011MH120E012			2004		Existing	assumed Mannings N	MH120E011	MH120E012		A00334	IRWD	VCP	{929EDC12-7CC9-4D28-8745-D95643D965F8}	CLMH120E011MH120E012	361.67	359.98	1.000000000	MH120E011	MH120E012			238	CLMH120E011MH120E012	12	0.0204	0.218184	0.17	0.261744	0.19	0.310357	0.21	0.274906	0.20				
CLMH120E012MH120E102			2004		Existing	assumed Mannings N	MH120E012	MH120E102		A00334	IRWD	VCP	{D0A2FFB7-6E41-425B-A1A9-EEE967D62B89}	CLMH120E012MH120E102	359.77	353.37	1.000000000	MH120E012	MH120E102			427	CLMH120E012MH120E102	12	0.0150	0.218174	0.21	0.261737	0.23	0.310353	0.25	0.274900	0.26				
CLMH120E013MH120E014		C-900	2005		Existing	assumed Mannings N	MH120E013	MH120E014		A01753	IRWD	PVC	{A59DDED5-8838-4010-9C41-A4E9937467AA0}	CLMH120E013MH120E014	383.51	374.60	1.000000000	MH120E013	MH120E014			240	CLMH120E013MH120E014	12	0.0372	0.218209	0.14	0.261761	0.16	0.310367	0.17	0.274919	0.16				
CLMH120E014MH120E009		C-900	2005		Existing	assumed Mannings N	MH120E014	MH120E009		A01753	IRWD	PVC	{BA678239-9FB9-43B4-8F0C-527D0E075803}	CLMH120E014MH120E009	374.39	370.76	1.000000000	MH120E014	MH120E009			238	CLMH120E014MH120E009	12	0.0152	0.218199	0.18	0.261754	0.20	0.310363	0.21	0.274913	0.20				
CLMH120E019MH120E020			2005		Existing	assumed Mannings N	MH120E019	MH120E020		T16562B	IRWD	PVC	{7A655FAE-32DD-4C0F-A6F1-2864CB880A41}	CLMH120E019MH120E020	414.96	413.90	0.666666667	MH120E019	MH120E020			217	CLMH120E019MH120E020	8	0.0049	0.019289	0.12	0.023158	0.13	0.027459	0.14	0.022175	0.13				
CLMH120E020MH120E021			2005		Existing	assumed Mannings N	MH120E020	MH120E021		T16562B	IRWD	PVC	{0C2C56A2B-3771-4B24-BAC4-FC3117B8FC45}	CLMH120E020MH120E021	413.80	413.52	0.666666667	MH120E020	MH120E021			81	CLMH120E020MH120E021	8	0.0047	0.019289	0.12	0.023158	0.13	0.027459	0.14	0.022175	0.13				
CLMH120E021MH120E022			2005		Existing	assumed Mannings N	MH120E021	MH120E022		T16562B	IRWD	PVC	{2BBA985E2-D75C-42B6-98FA-71F1B29FC1E8}	CLMH120E021MH120E022	413.32	410.44	0.666666667	MH120E021	MH120E022			313	CLMH120E021MH120E022	8	0.0092	0.004042	0.15	0.048505	0.17	0.057569	0.18	0.045512	0.16				
CLMH120E022MH120E023			2005		Existing	assumed Mannings N	MH120E022	MH120E023		T16562B	IRWD	PVC	{543E94E6-3954-4AE6-9CCC-4B205CCD058A}	CLMH120E022MH120E023	410.34	403.88	0.666666667	MH120E022	MH120E023			193	CLMH120E022MH120E023	8	0.0335	0.004068	0.11	0.048853	0.12	0.057923	0.13	0.045810	0.12				
CLMH120E023MH120E026			2005		Existing	assumed Mannings N	MH120E023	MH120E026		T16562B	IRWD	PVC	{D82222CC-C6EF-47E3-9B4E-32B05FA29B5E}	CLMH120E023MH120E026	403.78	402.59	0.666666667	MH120E023	MH120E026			8	CLMH120E023MH120E026	8	0.0397	0.004067	0.11	0.048852	0.12	0.057923	0.13	0.045809	0.11				
CLMH120E024MH120E025			2005		Existing	assumed Mannings N	MH120E024	MH120E025		T16562B	IRWD	PVC	{1F3F5100-E8B8-484C-A1D8-63D682BC27EA}	CLMH120E024MH120E025	406.22	402.28	0.666666667	MH120E024	MH120E025			285	CLMH120E024MH120E025	8	0.0138	0.007712	0.06	0.009260	0.07	0.010973	0.07	0.012283	0.08				
CLMH120E025MH120E031			2005		Existing	assumed Mannings N	MH120E025	MH120E031		T16562B	IRWD	PVC	{B7C334F4-53C9-4956-9F66-266CE27E46B3B8}	CLMH120E025MH120E031	402.18	400.87	0.666666667	MH120E025	MH120E031			133	CLMH120E025MH120E031	8	0.0049	0.015274	0.11	0.018340	0.12	0.021739	0.13	0.023557	0.13				
CLMH120E026MH120E027			2005		Existing	assumed Mannings N	MH120E026	MH120E027		T16562B	IRWD	PVC	{92BEBDCD-D88F-4D6E-858E-F16F82CEBC55}	CLMH120E026MH120E027	402.39	401.65	0.666666667	MH120E026	MH120E027			8	CLMH120E026MH120E027	8	0.0071	0.075070	0.22	0.089956	0.24	0.106657	0.26	0.086913	0.24				
CLMH120E027MH120E031			2005		Existing	assumed Mannings N	MH120E027	MH120E031		T16562B	IRWD	PVC	{63B9D345-5F9C-4DBF-B00F-17A1883SD9B0}	CLMH120E027MH120E031	401.55	400.77	0.666666667	MH120E027	MH120E031			137	CLMH120E027MH120E031	8	0.0057	0.082945	0.24	0.099414	0.27	0.117869	0.29	0.095978	0.26				
CLMH120E028MH120E044			2005		Existing	assumed Mannings N	MH120E028	MH120E044		T16562B	IRWD	PVC	{AAFF5D08-4704-488F-A4AC-9197B1352709}	CLMH120E028MH120E044	407.69	403.76	0.666666667	MH120E028	MH120E044			204	CLMH120E028MH120E044	8	0.0193	0.027381	0.11	0.032698	0.11	0.038768	0.12	0.032698	0.11				
CLMH120E029MH120E028			2005		Existing	assumed Mannings N	MH120E029	MH120E028		T16562B	IRWD	PVC	{3E4C68C4-9B94-4945-8F91-D0A4C314EF6A}	CLMH120E029MH120E028	422.82	407.79	0.666666667	MH120E029	MH120E028			337	CLMH120E029MH120E028	8	0.0446	0.026501	0.08	0.031505	0.09	0.037354	0.10	0.031505	0.09				
CLMH120E030MH120E029			2005		Existing	assumed Mannings N	MH120E030	MH120E029		T16562B	IRWD	PVC	{4AD511F2-E10C-43F1-968B-1659FE5FC55A}	CLMH120E030MH120E029	424.12	422.92	0.666666667	MH120E030	MH120E029			245	CLMH120E030MH120E029	8	0.0049	0.024098	0.13	0.028928	0.15	0.034297	0.16	0.028928	0.15				
CLMH120E031MH120E032			2005		Existing	assumed Mannings N	MH120E031	MH120E032		T16562B	IRWD	PVC	{4CCC62C0-CA75-46C6-B62B-BA8634B125CC}	CLMH120E031MH120E032	400.61	396.84	0.833333333	MH120E031	MH120E032			10	CLMH120E031MH120E032	10	0.0196	0.098782	0.15	0.118431	0.16	0.140412	0.17	0.119531	0.16				
CLMH120E032MH120E037			2005		Existing	assumed Mannings N	MH120E032	MH120E037		T16562B	IRWD	PVC	{CAAD0365-5240-453C-96C5-44BC4FE0A1D0}	CLMH120E032MH120E037	396.74	389.88	0.833333333	MH120E032	MH120E037			247	CLMH120E032MH120E037	10	0.0278	0.102875	0.14	0.123447	0.15	0.146243	0.16	0.119531	0.15				
CLMH120E033MH120E034			2005		Existing	assumed Mannings N	MH120E033	MH120E034		T16562B	IRWD	PVC	{A3F5A75E-A579-4EEA-9224-11A5596285F3}	CLMH120E033MH120E034	387.30	386.37	0.833333333	MH120E033	MH120E034			192	CLMH120E033MH120E034	10	0.0048	0.107803	0.21	0.129274	0.23	0.153276	0.25	0.125434	0.23				
CLMH120E034MH120E041			2005		Existing	assumed Mannings N	MH120E034	MH120E041		T16562B	IRWD	PVC	{A7E78925-8EF8-423D-A451-9F246E831DCC}	CLMH120E034MH120E041	386.27	386.03	0.833333333	MH120E034	MH120E041			51	CLMH120E034MH120E041	10	0.0047	0.110071	0.22	0.132000	0.24	0.156510	0.26	0.125431	0.23				
CLMH120E035MH120E030			2005		Existing	assumed Mannings N	MH120E035	MH120E030		T16562B	IRWD	PVC	{A9A7909C-4EAD-4070-B34A-7F3B9265AF7F}	CLMH120E035MH120E030	424.91	424.22	0.666666667	MH120E035	MH120E030			8	CLMH120E035MH120E030	8	0.0049	0.023201	0.14	0.027852	0.16	0.033020	0.16	0.027852	0.14				
CLMH120E036MH120E042			2005		Existing	assumed Mannings N	MH120E036	MH120E042		T16562B	IRWD	PVC	{5106D98D-FE77-49C3-A9AE-1CC7DE4750AE}	CLMH120E036MH120E042	412.74	412.27	0.666666667	MH120E036	MH120E042			51	CLMH120E036MH120E042	8	0.0092	0.025532	0.12	0.030657	0.13	0.036344	0.14	0.030657	0.13				
CLMH120E037MH120E033			2005		Existing	assumed Mannings N	MH120E037	MH120E033		T16562B	IRWD	PVC	{0EA2D1DE-98C8-464B-9359-C35DF4E41743}	CLMH120E037MH120E033	389.68	387.40	0.833333333	MH120E037	MH120E033			274	CLMH120E037MH120E033	10	0.0083	0.104477	0.18	0.125274	0.20	0.148532	0.22	0.119526	0.20				
CLMH120E038MH120E040			2005		Existing	assumed Mannings N	MH120E038	MH120E040		T16562B	IRWD	PVC	{98395E36-6803-49AF-A7A3-7D9771714641}	CLMH120E038MH120E040	421.38	416.88	0.666666667	MH120E038	MH120E040			252	CLMH120E038MH120E040	8	0.0179	0.018840	0.09	0.022621	0.10	0.026820	0.11	0.022621	0.10				
CLMH120E039MH120E038			2005		Existing	assumed Mannings N	MH120E039	MH120E038		T16562B	IRWD	PVC	{889A55D1-5E08-432B-8BE9-E4552AE12F31}	CLMH120E039MH120E038	422.26	421.57	0.666666667	MH120E039	MH120E038			73	CLMH120E039MH120E038	8	0.0095	0.014548	0.09	0.020709	0.11	0.017466	0.10	0.014565	0.09				
CLMH120E040MH120E036			2005		Existing	assumed Mannings N	MH120E040	MH120E036		T16562B	IRWD	PVC	{346BCFB3-E3E0-41EB-9B3E-6D4654AD39C7}	CLMH120E040MH120E036	416.78	412.84	0.666666667	MH120E040	MH120E036			296	CLMH120E040MH120E036	8	0.0133	0.019427	0.10	0.023326	0.11	0.027655	0.12	0.023326	0.11				
CLMH120E041MH120E013		C-900	2005		Existing	assumed Mannings N	MH120E041	MH120E013		A01753	IRWD	PVC	{CDAA2DE8-08B1-496D-941F-DE27BC282C9}	CLMH120E041MH120E013	385.73	383.64	1.000000000	MH120E041	MH120E013			106	CLMH120E041MH120E013	12	0.0197	0.126499	0.13	0.151727	0.14	0.179898	0.15	0.152123	0.14				
CLMH120E042MH120E046			2005		Existing	assumed Mannings N	MH120E042	MH120E046		T16562B	IRWD	PVC	{9CA790C2-8890-4382-9C79-24A5810FE7C5}	CLMH120E042MH120E046	412.17	411.20	0.666666667	MH120E042	MH120E046			101	CLMH120E042MH120E046	8	0.0096	0.032362	0.13	0.038856	0.15	0.046070	0.16	0.038856	0.15				
CLMH120E043MH120E021			2005		Existing	assumed Mannings N	MH120E043	MH120E021		T16562B	IRWD	PVC	{0DB3BC25-0738-4C95-98DB-540626ED3D60}	CLMH120E043MH120E021	416.35	413.42	0.666666667	MH120E043	MH120E021			8	CLMH120E043MH120E021	8	0.0252	0.023158	0.09	0.027460	0.10	0.032112	0.10	0.027460	0.09				
CLMH120E044MH120E026			2005		Existing	assumed Mannings N	MH120E044	MH120E026		T16562B	IRWD	PVC	{ECCCB86A-888C-4004-81F2-4D7271953576}	CLMH120E044MH120E026	403.22	402.49	0.666666667	MH120E044	MH120E026			152	CLMH120E044MH120E026	8	0.0048	0.034385	0.16	0.041105	0.18	0.048735	0.19	0.041105	0.18				
CLMH120E046MH120E056			2005		Existing	assumed Mannings N	MH120E046	MH120E056		16562	IRWD	PVC	{B0BE690E-C6E5-4846-A4F4-86D9F5FE6A1D}	CLMH120E046MH120E056	411.00	409.07	0.666666667	MH120E046	MH120E056			387	CLMH120E046MH120E056	8	0.0050	0.087553	0.26	0.105038	0.28	0.124538	0.31	0.122802	0.30				
CLMH120E048MH120E027			2005		Existing	assumed Mannings N	MH120E048	MH120E027		T16862	IRWD	PVC	{E70FC555-81B3-493E-9AAC-8DE01AF546BB}	CLMH120E048MH120E027	403.77	402.39	0.666666667	MH120E048	MH120E027			92	CLMH120E048MH120E027	8	0.0150	0.007551	0.06	0.009067	0.07	0.010747	0.07	0.009067	0.07				
CLMH120E049MH120E048			2005		Existing	assumed Mannings N	MH120E049	MH120E048		T16862	IRWD	PVC	{7A2DDD59-23D8-4CC2-85E5-8AEF196698E7}	CLMH120E049MH120E048	414.52	403.88	0.666666667	MH120E049	MH120E048			306	CLMH120E049MH120E

CLMH120E133MH120E134		2014		Existing	assumed Mannings N	MH120E133	MH120E134		A02397	IRWD	PVC	{A96C69F5-8DB2-4FF1-8BA1-4A75C00A37F7}	CLMH120E133MH120E134	376.85	376.55	0.666666667	MH120E133	MH120E134				CLMH120E133MH120E134	8	0.0100	0.000061	0.00	0.000072	0.00	0.000089	0.01	0.004100	0.05
CLMH120E134MH120E119	14.89' FROM S-N	2014		Existing	assumed Mannings N	MH120E134	MH120E119		A02397	IRWD	PVC	{C66EFFAF-0E08-49DC-BC9A-062395AEA4EC}	CLMH120E134MH120E119	376.35	376.02	0.666666667	MH120E134	MH120E119			31	CLMH120E134MH120E119	8	0.0106	0.000060	0.00	0.000072	0.00	0.000088	0.01	0.004100	0.05
CLMH120E135MH120E133		2014		Existing	assumed Mannings N	MH120E135	MH120E133		A02397	IRWD	PVC	{89852646-D749-424F-A471-14F5173B05A7}	CLMH120E135MH120E133	377.36	377.05	0.666666667	MH120E135	MH120E133			31	CLMH120E135MH120E133	8	0.0100	0.000047	0.00	0.000049	0.00	0.000046	0.00	0.002995	0.04
CLMH120E136MH120E117	32.5' FROM N-S ST	2014		Existing	assumed Mannings N	MH120E136	MH120E117		A02379	IRWD	PVC	{CC7EAAAF-F0CA-4981-B287-AAFBB0E2FC89}	CLMH120E136MH120E117	377.75	377.26	0.666666667	MH120E136	MH120E117			154	CLMH120E136MH120E117	8	0.0032	0.000026	0.00	0.000033	0.01	0.000039	0.01	0.002416	0.05
CLMH120E137MH120E131	20.5' FROM N-S ST	2014		Existing	assumed Mannings N	MH120E137	MH120E131		A02397	IRWD	PVC	{467BF22A-D4E9-41AF-9941-C1AB40A84FFF}	CLMH120E137MH120E131	375.31	373.84	0.666666667	MH120E137	MH120E131			147	CLMH120E137MH120E131	8	0.0100	0.000066	0.00	0.000066	0.00	0.000062	0.00	0.002222	0.04
CLMH120E138MH120E139		2014		Existing	assumed Mannings N	MH120E138	MH120E139		A02397	IRWD	PVC	{BE027503-FE10-47E2-97A5-04E27BC1A5B9}	CLMH120E138MH120E139	378.91	378.64	0.666666667	MH120E138	MH120E139			26	CLMH120E138MH120E139	8	0.0102	0.000041	0.00	0.000042	0.00	0.000045	0.00	0.000754	0.02
CLMH120E139MH120E126	7.32' FROM N-S ST	2014		Existing	assumed Mannings N	MH120E139	MH120E126		T17632	IRWD	PVC	{A2F52A28-C09D-4DFA-AB1E-7B19A0121255}	CLMH120E139MH120E126	378.44	377.93	0.666666667	MH120E139	MH120E126			340	CLMH120E139MH120E126	8	0.0165	0.000073	0.00	0.000076	0.00	0.000069	0.00	0.000754	0.02
CLMH120E140MH120E126	6.72' FROM E-W S	2014		Existing	assumed Mannings N	MH120E140	MH120E126		T17632	IRWD	PVC	{DF69D281-9642-4679-ADE5-3B2BA30CEAC2}	CLMH120E140MH120E126	378.51	378.03	0.666666667	MH120E140	MH120E126			27	CLMH120E140MH120E126	8	0.0176	0.000069	0.00	0.000071	0.00	0.000063	0.00	0.001831	0.03
CLMH120N009MH120N010		2012		Existing	assumed Mannings N	MH120N009	MH120N010		T17328	IRWD	PVC	{08A54389-8FFC-4D05-AF33-616B4B2603C7}	CLMH120N009MH120N010	311.76	308.64	0.666666667	MH120N009	MH120N010			340	CLMH120N009MH120N010	8	0.0092	0.012820	0.09	0.015392	0.09	0.018250	0.10	0.012305	0.09
CLMH120N010MH120W230		2014		Existing	assumed Mannings N	MH120N010	MH120W230		T17328	IRWD	PVC	{159BAC56-FB4C-47C1-A117-2BAE3E2C6EDA}	CLMH120N010MH120W230	308.64	305.30	0.666666667	MH120N010	MH120W230			332	CLMH120N010MH120W230	8	0.0101	0.012819	0.09	0.015391	0.09	0.018250	0.10	0.012304	0.08
CLMH120N011MH120N022		2013		Existing	assumed Mannings N	MH120N011	MH120N022		T17451	IRWD	PVC	{ACE23A45-568B-487B-97AB-15A091C2CAB2}	CLMH120N011MH120N022	313.44	313.05	0.666666667	MH120N011	MH120N022			23	CLMH120N011MH120N022	8	0.0173	0.000000	0.02	0.000000	0.02	0.000000	0.02	0.003282	0.05
CLMH120N012MH120N011		2013		Existing	assumed Mannings N	MH120N012	MH120N011		T17451	IRWD	PVC	{E7581731-FECC-4537-AE0A-A197293B88FA}	CLMH120N012MH120N011	313.91	313.44	0.666666667	MH120N012	MH120N011			31	CLMH120N012MH120N011	8	0.0151	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003282	0.04
CLMH120N013MH120N009		2013		Existing	assumed Mannings N	MH120N013	MH120N009		T17451	IRWD	PVC	{728C7715-9145-408B-B187-AC98E47892B0}	CLMH120N013MH120N009	313.67	311.86	0.666666667	MH120N013	MH120N009	119	CLMH120N013MH120N009	8	0.0152	0.012109	0.08	0.014539	0.08	0.017240	0.09	0.012304	0.08
CLMH120N014MH120N013		2013		Existing	assumed Mannings N	MH120N014	MH120N013		T17451	IRWD	PVC	{CB401SAE-EF5B-4179-AC14-7AD1D72B45AB}	CLMH120N014MH120N013	316.57	313.67	0.666666667	MH120N014	MH120N013	201	CLMH120N014MH120N013	8	0.0144	0.008835	0.07	0.010608	0.08	0.012578	0.08	0.007392	0.07
CLMH120N015MH120N014		2013		Existing	assumed Mannings N	MH120N015	MH120N014		T17451	IRWD	PVC	{BAD52B21-9160-44A1-9805-2ABE24FD75EE}	CLMH120N015MH120N014	319.00	316.57	0.666666667	MH120N015	MH120N014	173	CLMH120N015MH120N014	8	0.0140	0.004976	0.06	0.005976	0.06	0.007085	0.07	0.005455	0.06
CLMH120N016MH120N025		2013		Existing	assumed Mannings N	MH120N016	MH120N025		T17451	IRWD	PVC	{7FFD283F-79E3-45D9-AA0F-50EC1D593F88}	CLMH120N016MH120N025	323.33	320.81	0.666666667	MH120N016	MH120N025	162	CLMH120N016MH120N025	8	0.0156	0.002464	0.03	0.002960	0.04	0.003512	0.04	0.003186	0.04
CLMH120N017MH120N023		2014		Existing	assumed Mannings N	MH120N017	MH120N023		T17451	IRWD	PVC	{86430004-605E-45EB-98CA-2FEAF58E9C9}	CLMH120N017MH120N023	320.25	318.87	0.666666667	MH120N017	MH120N023	164	CLMH120N017MH120N023	8	0.0084	0.003036	0.04	0.003645	0.05	0.004322	0.05	0.002134	0.04
CLMH120N018MH120W323		2014		Existing	assumed Mannings N	MH120N018	MH120W323		T17451	IRWD	PVC	{0B21F318-E75D-4066-9CF2-498D39C6F6F9}	CLMH120N018MH120W323	317.82	317.28	0.666666667	MH120N018	MH120W323	53	CLMH120N018MH120W323	8	0.0101	0.010169	0.08	0.012210	0.08	0.014477	0.09	0.005309	0.06
CLMH120N019MH120N013		2013		Existing	assumed Mannings N	MH120N019	MH120N013		T17451	IRWD	PVC	{CE6ABF15-D72E-4515-9CA0-EFC38DBDEF49}	CLMH120N019MH120N013	315.27	313.72	0.666666667	MH120N019	MH120N013	146	CLMH120N019MH120N013	8	0.0107	0.000000	0.00	0.000000	0.00	0.000000	0.01	0.002852	0.04
CLMH120N020MH120N027		2013		Existing	assumed Mannings N	MH120N020	MH120N027		T17451	IRWD	PVC	{296BFB39-7E70-4CBF-986D-358B57B77773}	CLMH120N020MH120N027	317.39	315.38	0.666666667	MH120N020	MH120N027	162	CLMH120N020MH120N027	8	0.0124	0.001947	0.03	0.002337	0.04	0.002773	0.04	0.002207	0.04
CLMH120N021MH120N012		2013		Existing	assumed Mannings N	MH120N021	MH120N012		T17451	IRWD	PVC	{F1948D03-FF37-435C-B486-9DAA33354B13}	CLMH120N021MH120N012	314.51	314.01	0.666666667	MH120N021	MH120N012	59	CLMH120N021MH120N012	8	0.0085	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003282	0.05
CLMH120N022MH120W325		2013		Existing	assumed Mannings N	MH120N022	MH120W325		T17451	IRWD	PVC	{0A223F52-CBCD-4F07-885A-6D8FDF479E0}	CLMH120N022MH120W325	313.05	312.31	0.666666667	MH120N022	MH120W325	109	CLMH120N022MH120W325	8	0.0139	0.001940	0.03	0.002329	0.04	0.002761	0.04	0.005481	0.06
CLMH120N023MH120N024		2013		Existing	assumed Mannings N	MH120N023	MH120N024		T17451	IRWD	PVC	{F23758AB-80E8-42CC-949F-013B592BADB8}	CLMH120N023MH120N024	318.67	318.41	0.666666667	MH120N023	MH120N024	31	CLMH120N023MH120N024	8	0.0083	0.004974	0.06	0.005972	0.06	0.007083	0.07	0.002134	0.04
CLMH120N024MH120N018		2013		Existing	assumed Mannings N	MH120N024	MH120N018		T17451	IRWD	PVC	{F440A502-5615-4AC1-90CA-4CAA23D33B47}	CLMH120N024MH120N018	318.21	318.02	0.666666667	MH120N024	MH120N018	23	CLMH120N024MH120N018	8	0.0084	0.005730	0.06	0.006880	0.07	0.008159	0.07	0.002134	0.04
CLMH120N025MH120N026		2013		Existing	assumed Mannings N	MH120N025	MH120N026		T17451	IRWD	PVC	{3630BD19-EBEC-4596-AA6D-B6DE7ABF5218}	CLMH120N025MH120N026	320.81	320.09	0.666666667	MH120N025	MH120N026	35	CLMH120N025MH120N026	8	0.0208	0.002456	0.04	0.002950	0.04	0.003498	0.05	0.003177	0.04
CLMH120N026MH120N018		2013		Existing	assumed Mannings N	MH120N026	MH120N018		T17451	IRWD	PVC	{AFB2BD17-2043-41F6-9023-C3172742ABF5}	CLMH120N026MH120N018	320.09	318.02	0.666666667	MH120N026	MH120N018	118	CLMH120N026MH120N018	8	0.0176	0.004439	0.05	0.005331	0.05	0.006318	0.05	0.003175	0.04
CLMH120N027MH120N028		2013		Existing	assumed Mannings N	MH120N027	MH120N028		T17451	IRWD	PVC	{110B85F4-1328-4F1C-9684-07C3701209 1D}	CLMH120N027MH120N028	315.38	314.83	0.666666667	MH120N027	MH120N028	39	CLMH120N027MH120N028	8	0.0141	0.001944	0.03	0.002333	0.04	0.002768	0.04	0.002206	0.03
CLMH120N028MH120N022		2013		Existing	assumed Mannings N	MH120N028	MH120N022		T17451	IRWD	PVC	{9B313B4F-8FE0-4656-84FA-A0332854A539}	CLMH120N028MH120N022	314.83	313.05	0.666666667	MH120N028	MH120N022	122	CLMH120N028MH120N022	8	0.0146	0.001942	0.03	0.002331	0.04	0.002765	0.04	0.002201	0.04
CLMH120N029MH120N015		2013		Existing	assumed Mannings N	MH120N029	MH120N015		T17443	IRWD	PVC	{1064FEA5-0401-4612-8972-23E2A22CD929}	CLMH120N029MH120N015	322.47	319.00	0.666666667	MH120N029	MH120N015	217	CLMH120N029MH120N015	8	0.0160	0.001896	0.04	0.002278	0.04	0.002701	0.05	0.003288	0.05
CLMH120N030MH120N013		2013		Existing	assumed Mannings N	MH120N030	MH120N013		T17443	IRWD	PVC	{F42CC649-4081-47AE-8E13-C12856746 7A7}	CLMH120N030MH120N013	316.84	313.72	0.666666667	MH120N030	MH120N013	254	CLMH120N030MH120N013	8	0.0123	0.003274	0.04	0.003931	0.05	0.004662	0.05	0.002060	0.03
CLMH120N031MH120N015		2013		Existing	assumed Mannings N	MH120N031	MH120N015		T17443	IRWD	PVC	{49C87D39-0D65-4299-8020-D0E41CA839BE}	CLMH120N031MH120N015	322.14	319.00	0.666666667	MH120N031	MH120N015	322	CLMH120N031MH120N015	8	0.0125	0.003080	0.05	0.003698	0.05	0.004384	0.05	0.002166	0.04
CLMH120N029MH120N029		2013		Existing	assumed Mannings N	MH120N029	MH120N029		T17443	IRWD	PVC	{5B797E6D-6907-4FEA-9DB6-FFA737D21759}	CLMH120N029MH120N029	325.30	322.47	0.666666667	MH120N029	MH120N029	195	CLMH120N029MH120N029	8	0.0145	0.001909	0.03	0.002293	0.03	0.002719	0.04	0.003314	0.04
CLMH120N033MH120N014		2013		Existing	assumed Mannings N	MH120N033	MH120N014		T17443	IRWD	PVC	{43F738BC-18C9-4517-9AE7-8F25581BA22D}	CLMH120N033MH120N014	319.71	316.57	0.666666667	MH120N033	MH120N014	251	CLMH120N033MH120N014	8	0.0125	0.003859	0.06	0.004632	0.06	0.005493	0.07	0.001938	0.05
CLMH120N034MH120N037		2013		Existing	assumed Mannings N	MH120N034	MH120N037		17490	IRWD	PVC	{BDA88613-3536-423D-96FD-178DCA38AB55}	CLMH120N034MH120N037	300.68	293.32	0.666666667	MH120N034	MH120N037	258	CLMH120N034MH120N037	8	0.0288	0.004592	0.04	0.005512	0.04	0.006535	0.05	0.014599	0.07
CLMH120N035MH120N034		2013		Existing	assumed Mannings N	MH120N035	MH120N034		17490A	IRWD	PVC	{374AE5A9-A582-456B-9E61-349A9970D865}	CLMH120N035MH120N034	305.13	300.88	0.666666667	MH120N035	MH120N034	236	CLMH120N035MH120N034	8	0.0180	0.000114	0.00	0.000118	0.00	0.000113	0.00	0.014599	0.08
CLMH120N036MH120N035		2013		Existing	assumed Mannings N	MH120N036	MH120N035		17490A	IRWD	PVC	{E2D3DAEF-92CD-4B1E-A4DF-F93C596A883F}	CLMH120N036MH120N035	308.23	305.33	0.666666667	MH120N036	MH120N035	161	CLMH120N036MH120N035	8	0.0180	0.000113	0.00	0.000113	0.00	0.000113	0.00	0.014599	0.08
CLMH120N037MH1065204		2013		Existing	assumed Mannings N	MH120N037	MH1065204		17490	IRWD	PVC	{E400763F-E7C9-43CF-B60A-E373AE264102}	CLMH120N037MH1065204	293.12	291.33	0.666666667	MH120N037	MH1065204	159	CLMH120N037MH1065204	8	0.0100	0.004592	0.05	0.005512	0.06	0.006535	0.06	0.014599	0.09
CLMH120N041MH120W338		2015		Existing	assumed Mannings N	MH120N041	MH120W338		T17327	IRWD	PVC	{05B1C3F8-1A3C-47FE-96C1-8FB0431E9BE2}	CLMH120N041MH120W338	296.36	291.51	0.666666667	MH120N041	MH120W338	396	CLMH120N041MH120W338	8	0.0123	0.000077	0.00	0.000081	0.00	0.000077	0.00	0.010407	0.07
CLMH120N042MH120N041		2013		Existing	assumed Mannings N	MH120N042	MH120N041		T17327	IRWD	PVC	{7AC36FC7-0D13-4E99-AB6D-19EA7C705750}	CLMH120N042MH120N041	314.32	296.46	0.666666667	MH120N042	MH120N041	386	CLMH120N042MH120N041	8	0.0463	0.000290	0.00	0.000303	0.00	0.000288	0.00	0.010407	0.05
CLMH120N043MH120W339		2015		Existing	assumed Mannings N	MH120N043	MH120W339		T17327	IRWD	PVC	{45228E55C-2839-406F-BAFB-007A7768BD20}	CLMH120N043MH120W339	299.27	294.47	0.666666667	MH120N043	MH120W339	201	CLMH120N043MH120W339	8	0.0128	0.000080	0.00	0.000084	0.00	0.000080	0.00	0.005591	0.05
CLMH120N044MH120W340		2015		Existing	assumed Mannings N	MH120N044	MH120W340		T17327	IRWD	PVC	{FCD41677-201A-413C-BAB2-D9246613D156}	CLMH120N044MH120W340	301.82	296.77	0.666666667	MH120N044	MH120W340	370	CLMH120N044MH120W340	8	0.0136	0.001917	0.03	0.002301	0.04	0.002728	0.04	0.007794	0.06
CLMH120N045MH120W341		2015		Existing	assumed Mannings N	MH120N045	MH120W341		T17327	IRWD	PVC	{0E413BF8-E728-4178-8C7C-248ECB4BF5CB}	CLMH120N045MH120W341	300.59	299.93	0.666666667	MH120N045	MH120W341	67	CLMH120N045MH120W341	8	0.0099	0.002194	0.04	0.002632	0.04	0.003123	0.04	0.015248	0.09
CLMH120N046MH120N045		2015		Existing	assumed Mannings N	MH120N046	MH120N045		T17327	IRWD	PVC	{C1303775-980C-4A61-98BC-64E1ADCA504}	CLMH120N046MH120N045	302.07	300.79	0.666666667	MH120N046	MH120N045	128	CLMH120N046MH120N045	8	0.0100	0.002194	0.04	0.002632	0.04	0.003123	0.04	0.015248	0.09
CLMH120N047MH120N046		2015		Existing	assumed Mannings N	MH120N047	MH120N046		T17327	IRWD	PVC	{52137811-81FE-4516-B916-3815A0830D44}	CLMH120N047MH120N046	309.83	302.27	0.666666667	MH120N047	MH120N046	211	CLMH120N047MH120N046	8	0.0358	0.001121	0.02	0.001346	0.02	0.001596	0.02	0.001346	0.02
CLMH120N048MH120N049		2013		Existing	assumed Mannings N	MH120N048	MH120N049		T17486	IRWD	PVC	{BFD22F1B-E2F3-48F3-990D-76A6BC2113C5}	CLMH120N048MH120N049	314.75	312.85	0.666666667	MH120N048	MH120N049	190	CLMH120N048MH120N049	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002102	0.04
CLMH120N049MH120N050		2013		Existing	assumed Mannings N	MH120N049	MH120N050		T17486	IRWD	PVC	{267DEA34-2869-408E-990A-EF69FBA3CB0F}	CLMH120N049MH120N050	312.65	310.59	0.666666667	MH120N049	MH120N050	228	CLMH120N049MH120N050	8	0.0090	0.000990	0.02	0.001188	0.03	0.001408	0.03	0.002102	0.04
CLMH120N050MH120N052	59FT N-S IS T1748	2013		Existing	assumed Mannings N	MH120N050	MH120N052		T17486	IRWD	PVC	{4A96E91A-00CC-4F72-A77F-277C6A9D0F05}	CLMH120N050MH120N052	310.49	305.57	0.666666667	MH120N050	MH120N052	396	CLMH120N050MH120N052	8	0.0178	0.001033	0.02	0.001237	0.02	0.001468	0.03	0.006469	0.05
CLMH120N051MH120N050		2013		Existing	assumed Mannings N	MH120N051	MH120N050		T17486	IRWD	PVC	{38FC4E55-976D-4BB0-A865-EB34ED014FAD}	CLMH120N051MH120N050	315.37	310.59	0.666666667	MH120N051	MH120N050	154	CLMH120N051MH120N050	8	0.0244	0.000153	0.00	0.000160	0.00	0.000152	0.00	0.004367	0.04
CLMH120N052MH120N046	206.5' S-N IS T173	2013		Existing	assumed Mannings N	MH120N052	MH120N046		T17327A	IRWD	PVC	{92619302-7DF7-40C4-BEB4-A49BC09C5505}	CLMH120N052MH120N046	305.37	302.17	0.666666667	MH120N052	MH120N046	320	CLMH120N052MH120N046	8	0.0100	0.001073	0.02	0.001286	0.03	0.001527	0.03	0.013902	0.09
CLMH120N053MH120N052		2013		Existing	assumed Mannings N	MH120N053	MH120N052		T17327A	IRWD	PVC	{20CCB173-501C-4B0A-A727-E7505E84706}	CLMH120N053MH120N052	312.00	305.47	0.666666667	MH120N053	MH120N052	193	CLMH120N053MH120N052	8	0.0139	0.000213	0.00	0.000242	0.00	0.000212	0.00	0.007431	0.05
CLMH120N054MH120N044	47' S-N IS T17327	2013		Existing	assumed Mannings N	MH120N054	MH120N044		T17327A	IRWD	PVC	{8FAB7914-46B8-4AB4-BCBD-3BFE841BBCE6}	CLMH120N054MH120N044	312.27	301.92	0.666666667	MH120N054	MH120N044	328	CLMH120N054MH120N044	8	0.0316	0.000198	0.00	0.000207	0.00	0.000197	0.00	0.007794	0.05
CLMH120N055MH120N043	24.5' IS T17327	2013		Existing	assumed Mannings N	MH120N055	MH120N043	assumed length based	T17327A	IRWD	PVC	{D36B12E8-D550-4E37-936C-95E48B1278C4}	CLMH120N055MH120N043	313.91	299.37	0.666666667	MH120N055	MH120N043	364	CLMH120N055MH120N043	8	0.0400	0.000251	0.00	0.000262	0.00	0.000249	0.00	0.005591	0.04
CLMH120N056MH120N048		2014		Existing	assumed Mannings N	MH120N056	MH120N048		A02352	IRWD	PVC	{C4A79968-29E8-4ABE-8466-977BF98F3BDF}	CLMH120N056MH120N048	315.41	313.66	0.666666667	MH120N056	MH120N048	205	CLMH120N056MH120N048	8	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH120S001MH120S001	C-905	2014		Existing	assumed Mannings N	MH120S001	MH120S001		A01753	IRWD	PVC	{23117578-73B5-49A0-A6BE-046220F1FE45}	CLMH120S001MH120S062	323.69	321.82	1.333333333	MH120S001	MH120S062	207	CLMH120S001MH120S062	16	0.0112	0.327323	0.16	0.393716	0.18	0.468203	0.19	1.882539	0.40
CLMH125002MH120S001		2006		Existing	assumed Mannings N	MH125002	MH120S001		A00864A	IRWD	PVC	{FE80C94A-F887-47BB-9C08-D8DE5AB461E5}	CLMH125002MH120S001	328.34	323.85	1.333333333	MH125002	MH120S001	237	CLMH125002MH120S001	16	0.0190	0.327343	0.14	0.393754	0.16	0.468221	0.17	1.882628	0.34
CLMH125003MH125002		2006		Existing	assumed Mannings N	MH125003	MH125002		A00864A	IRWD	PVC	{B9D3BACF-E0B9-4987-AC30-047DC3D4BF87}	CLMH125003MH125002	336.04	328.44	1.333333333	MH125003	MH125002	396	CLMH125003MH125002	16	0.0192	0.327372	0.14	0.393788	0.16	0.468251	0.17	1.882894	0.34
CLMH125004MH120S019		2006		Existing	assumed Mannings N	MH125004	MH120S019		A01753	IRWD	PVC	{76ADE3BC-51F8-430B-B5EF-DA09B2390923}	CLMH125004MH120S019	315.50	315.01	1.250000000	MH125004	MH120S019	251	Future Equal to 15-in, d/D >0.67	20	0.0017	0.513734	0.31	0.736694	0.37	0.617151	0.40	2.164679	0.75
CLMH125005MH125009	C-905	2005		Existing	assumed Mannings N	MH125005	MH125009		A01753	IRWD	PVC	{2F21F241-D114-4450-9AF0-388D0B051427}	CLMH125005MH125009	317.78	316.66	1.333333333	MH125005	MH125009	175	CLMH125005MH125009	16	0.0064	0.514160	0.23	0.617633	0.26	0.737181	0.28	2.155531	0.51
CLMH125006MH125005	C-905	2005		Existing	assumed Mannings N	MH125006	MH125005		A01753	IRWD	PVC	{3947D096-F069-4331-BEE6-E94447032DA0}	CLMH125006MH125005	318.62	317.98	1.333333333	MH125006	MH125005	98	CLMH125006MH125005	16	0.0066	0.514193	0.23	0.617667	0.25	0.737213	0.28	2.155659	0.50
CLMH125007MH125006	C-905	2005		Existing	assumed Mannings N	MH125007	MH125006		A01753	IRWD	PVC	{F038A226-B8A7-4A4E-AA41-CCA6A63117C3}	CLMH125007MH125006	319.26	318.82	1.333333333	MH125007	MH125006	207	CLMH125007MH125006	16	0.0021	0.514198	0.29	0.617672	0.31	0.737216	0.34	2.155619	0.61
CLMH125008MH125004		2005		Existing	assumed Mannings N	MH125008	MH125004		A01753	IRWD	VCP	{700A8C72-37A1-44AC-BCCA-5CA2A07758B0}	CLMH125008MH125004	316.13	315.70	1.250000000	MH125008	MH125004	254	Future Equal to 15-in, d/D >0.67	20	0.0017	0.513975	0.33	0.617436	0.37	0.736986	0.40	2.166307	0.74
CLMH125009MH125008		2005		Existing	assumed Mannings N	MH125009	MH125008		A01753	IRWD	VCP	{A1D85A50-2F4D-45CF-83EA-23A24DE10B03}	CLMH125009MH125008	316.42	316.32	1.250000000	MH125009	MH125008	44	Future Equal to 15-in, d/D >0.67	20	0.0023	0.514161	0.30	0.617635	0.33	0.737184	0.36	2.290073	0.74
CLMH125010MH125011		2004		Existing	assumed Mannings N	MH125010	MH125011		A00334	IRWD	VCP	{14FBC1F5-F86A-44C1-A3D8-4369EAC3B517}	CLMH125010MH125011	350.67	345.97	1.000000000	MH125010	MH125011	227	CLMH125010MH125011	12	0.0207	0.218452	0.17	0.262151	0.19	0.310960	0.21	0.347189	0.22
CLMH125011MH125012		2004		Existing	assumed Mannings N	MH125011	MH125012		A00334	IRWD	VCP	{8E60E05E-5033-4A5B-833E-9CBC208E48EA}	CLMH125011MH125012	345.76	339.73	1.000000000	MH125011	MH125012	291	CLMH125011MH125012	12	0.0207	0.218433	0.17	0.262136	0.19	0.310948	0.21	0.347151	0.22
CLMH125012MH125148		2004		Existing	assumed Mannings N	MH125012	MH125148		A00334	IRWD	VCP	{8F575A61-4616-4E7E-A8BF-F292E18CE80D}	CLMH125012MH125148	339.54	336.51	1.000000000	MH125012	MH125148	280	CLMH125012MH125148	12	0.0108	0.218424	0.21	0.262128	0.23	0.310943	0.25	0.347132	0.27
CLMH125013MH120W006		2004		Existing	assumed Mannings N	MH125013	MH120W006		A00334	IRWD	VCP	{624FA03D-B14A-4D55-A27C-EDA08CDAFD3D}	CLMH125013MH120W006	306.05	304.51	1.500000000	MH125013	MH120W006	280	CLMH125013MH120W006	18	0.0055	0.740864	0.26	0.888968	0.28	1.061516	0.31	2.585375	0.51
CLMH125014MH125017		2004		Existing	assumed Mannings N	MH125014	MH125017		A00334	IRWD	VCP	{43EEB9C6-E698-4E1C-AF06-11996DFC818F}	CLMH125014MH125017	333.51	310.08	1.000000000	MH125014	MH125017	443	CLMH125014MH125017	12	0.0530	0.218360	0.30	0.262076	0.33	0.310905	0.37	0.377762	0.59
CLMH125015MH125014		2004		Existing	assumed Mannings N	MH125015	MH125014		2258	IRWD	PVC	{59608601-04FE-4804-BEBE-847455AF887D}	CLMH125015MH125014	308.98	308.50	1.500000000	MH125015	MH125014	111	CLMH125015MH125014	18	0.0043	0.723559	0.26	0.869942	0.29	1.038898	0.31	2.565628	0.51
CLMH125017MH125015		2004		Existing	assumed Mannings N	MH125017	MH125015		A00334	IRWD	VCP	{D2526F21-C90B-4F90-9C25-7A7EF9A63347}	CLMH125017MH125015	309.98	309.22	1.500000000	MH125017	MH125015	471	CLMH125017MH125015	18	0.0016	0.718331	0.32	0.864201	0.35	1.032086	0.38	2.559760	0.64
CLMH125018MH120S147		2005		Existing	assumed Mannings N	MH125018	MH120S147		A01753	IRWD	VCP	{309C69EF-D761-4BA1-A71B-1457F80A95B5}	CLMH125018MH120S147	313.98	313.28	1.250000000	MH125018	MH120S147	339	Future Equal to 15-in, d/D >0.67	20	0.0021	0.513665	0.31	0.617094	0.34	0.736633	0.37	2.163893	0.71
CLMH125019MH125018		2004		Existing	assumed Mannings N	MH125019	MH125018		A01753	IRWD	VCP	{26C924DC-2291-4EA0-8732-BAAE8275EAB4}	CLMH125019MH125018	314.76	314.23	1.250000000	MH125019	MH125018	47	CLMH125019MH125018	15	0.0112	0.513719	0.23	0.617152	0.25	0.736696	0.28	2.164597

CLMH1205096MH1205077		2014		Existing	assumed Mannings N	MH1205096	MH1205077		T17467	IRWD	PVC	{8B59F0BA-0445-4514-BA8C-7885OAD5AAA2}	CLMH1205096MH1205077	381.08	374.81	0.666666667	MH1205096	MH1205077			211	CLMH1205096MH1205077	8	0.0298	0.018399	0.15	0.022094	0.16	0.026189	0.17	0.014981	0.11
CLMH1205097MH1205081		2014		Existing	assumed Mannings N	MH1205097	MH1205081		T17467	IRWD	PVC	{45AFCD17-4321-461D-9BF7-7E106B810EA1}	CLMH1205097MH1205081	372.04	367.26	0.666666667	MH1205097	MH1205081			209	CLMH1205097MH1205081	8	0.0229	0.030923	0.17	0.037129	0.19	0.044018	0.21	0.029548	0.15
CLMH1205098MH1205083		2014		Existing	assumed Mannings N	MH1205098	MH1205083		T17467	IRWD	PVC	{8C96F088-3F8E-4E4E-8606-800AEAB470BB}	CLMH1205098MH1205083	356.67	356.33	0.666666667	MH1205098	MH1205083			222	CLMH1205098MH1205083	8	0.0015	0.021180	0.17	0.025414	0.18	0.030118	0.20	0.066293	0.25
CLMH1205100MH1205084	89 FEET GOING EA	2013		Existing	assumed Mannings N	MH1205100	MH1205084		T17473	IRWD	PVC	{ABEAC9B8-BB27-4EFA-BF4D-413BA0A3D159}	CLMH1205100MH1205084	357.76	349.97	0.666666667	MH1205100	MH1205084			329	CLMH1205100MH1205084	8	0.0237	0.029481	0.14	0.031990	0.16	0.037912	0.18	0.014494	0.13
CLMH1205111MH1205110		2013		Existing	assumed Mannings N	MH1205111	MH1205110		T17473	IRWD	PVC	{DDE52E4E-DE23-47EB-A205-D9B823CCADAC}	CLMH1205111MH1205110	359.14	357.76	0.666666667	MH1205111	MH1205110			259	CLMH1205111MH1205110	8	0.0053	0.011427	0.10	0.013720	0.10	0.016266	0.11	0.014495	0.09
CLMH1205112MH1205111		2013		Existing	assumed Mannings N	MH1205112	MH1205111		T17473	IRWD	PVC	{46CBCEFF-BEC1-4876-A352-B28E54D9E86A}	CLMH1205112MH1205111	361.72	359.14	0.666666667	MH1205112	MH1205111			212	CLMH1205112MH1205111	8	0.0121	0.007805	0.08	0.009372	0.09	0.011111	0.09	0.009281	0.09
CLMH1205113MH1205110		2013		Existing	assumed Mannings N	MH1205113	MH1205110		T17473	IRWD	PVC	{54C87B17-33A3-492A-BC81-59D788BE41BF}	CLMH1205113MH1205110	362.99	357.76	0.666666667	MH1205113	MH1205110			143	CLMH1205113MH1205110	8	0.0367	0.004287	0.07	0.005145	0.07	0.006099	0.08	0.000000	0.04
CLMH1205114MH1205113		2013		Existing	assumed Mannings N	MH1205114	MH1205113		T17473	IRWD	PVC	{A37FF1C6-FAE4-430A-AECE-BA1F53976D62}	CLMH1205114MH1205113	370.21	362.99	0.666666667	MH1205114	MH1205113			339	CLMH1205114MH1205113	8	0.0213	0.004291	0.04	0.005148	0.04	0.006102	0.05	0.000000	0.00
CLMH1205115MH1205114		2013		Existing	assumed Mannings N	MH1205115	MH1205114		T17473	IRWD	PVC	{26747659-C933-4625-A9EE-57A47FF475B5}	CLMH1205115MH1205114	375.89	370.21	0.666666667	MH1205115	MH1205114			258	CLMH1205115MH1205114	8	0.0220	0.004327	0.04	0.005191	0.05	0.006149	0.05	0.000000	0.00
CLMH1205116MH1205111		0		Existing	assumed Mannings N	MH1205116	MH1205111		T17473	IRWD	PVC	{38825101D-9580-41F9-98B0-C48CC69D70F8}	CLMH1205116MH1205111	365.83	359.39	0.666666667	MH1205116	MH1205111			131	CLMH1205116MH1205111	8	0.0493	0.003623	0.03	0.004350	0.04	0.005155	0.04	0.005216	0.04
CLMH1205117MH1205116		2013		Existing	assumed Mannings N	MH1205117	MH1205116		T17473	IRWD	PVC	{AAC65A14-B8DE-4FB2-B598-45CEBE722843}	CLMH1205117MH1205116	371.06	365.83	0.666666667	MH1205117	MH1205116			231	CLMH1205117MH1205116	8	0.0226	0.001927	0.03	0.002314	0.03	0.002741	0.04	0.005223	0.04
CLMH1205118MH1205117		0		Existing	assumed Mannings N	MH1205118	MH1205117		T17473	IRWD	PVC	{DC0CD018-CEDD-4C65-97EE-BB691EC168CB}	CLMH1205118MH1205117	376.21	371.06	0.666666667	MH1205118	MH1205117			182	CLMH1205118MH1205117	8	0.0240	0.001941	0.03	0.002331	0.03	0.002761	0.03	0.005244	0.05
CLMH1205119MH1205112		2013		Existing	assumed Mannings N	MH1205119	MH1205112		T17473	IRWD	PVC	{23C43CF9-2A90-4128-9011-CB0BF466FF89}	CLMH1205119MH1205112	363.56	361.92	0.666666667	MH1205119	MH1205112			164	CLMH1205119MH1205112	8	0.0100	0.007806	0.07	0.009372	0.07	0.011112	0.08	0.009282	0.07
CLMH1205120MH1205119		2013		Existing	assumed Mannings N	MH1205120	MH1205119		T17473	IRWD	PVC	{94DE2791-B91D-4B09-8461-1825E0266398}	CLMH1205120MH1205119	372.34	363.61	0.666666667	MH1205120	MH1205119			349	CLMH1205120MH1205119	8	0.0250	0.003664	0.04	0.004398	0.04	0.005214	0.05	0.003913	0.04
CLMH1205121MH1205119		2013		Existing	assumed Mannings N	MH1205121	MH1205119		T17473	IRWD	PVC	{AD233ACO-9F05-4DB2-B4D9-F875BA5DF658}	CLMH1205121MH1205119	364.20	363.61	0.666666667	MH1205121	MH1205119			80	CLMH1205121MH1205119	8	0.0074	0.004143	0.05	0.004976	0.06	0.005899	0.06	0.005369	0.06
CLMH1205122MH1205121		2013		Existing	assumed Mannings N	MH1205122	MH1205121		T17473	IRWD	PVC	{A36A8AED-2BE8-448A-95B1-1DF516B32EFE}	CLMH1205122MH1205121	367.44	364.20	0.666666667	MH1205122	MH1205121			286	CLMH1205122MH1205121	8	0.0113	0.000185	0.03	0.000223	0.04	0.000264	0.04	0.005369	0.06
CLMH1205123MH1205122		2013		Existing	assumed Mannings N	MH1205123	MH1205122		T17473	IRWD	PVC	{E667A298-260D-4532-8011-BD2EB6EB5C54}	CLMH1205123MH1205122	368.99	367.44	0.666666667	MH1205123	MH1205122			122	CLMH1205123MH1205122	8	0.0127	0.000187	0.01	0.000225	0.01	0.000266	0.01	0.005382	0.05
CLMH1205124MH1205123		2013		Existing	assumed Mannings N	MH1205124	MH1205123		T17473	IRWD	PVC	{30A8900A-CB0D-47B9-B106-68AE41D73AF7}	CLMH1205124MH1205123	369.66	368.99	0.666666667	MH1205124	MH1205123			43	CLMH1205124MH1205123	8	0.0157	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.005369	0.05
CLMH1205125MH1205124		0		Existing	assumed Mannings N	MH1205125	MH1205124		T17473	IRWD	PVC	{03B37A98-0A8C-4ABB-A9D7-F3FAC467FA7C}	CLMH1205125MH1205124	373.78	369.66	0.666666667	MH1205125	MH1205124			177	CLMH1205125MH1205124	8	0.0233	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.005369	0.05
CLMH1205126MH1205120		2013		Existing	assumed Mannings N	MH1205126	MH1205120		T17473	IRWD	PVC	{659CB818-DDCC-4BA1-9A61-6F873DA63AA3}	CLMH1205126MH1205120	374.48	372.34	0.666666667	MH1205126	MH1205120			366	CLMH1205126MH1205120	8	0.0058	0.001832	0.04	0.002199	0.04	0.002605	0.05	0.003925	0.05
CLMH1205127MH1205126		2013		Existing	assumed Mannings N	MH1205127	MH1205126		T17473	IRWD	PVC	{B203BFEB-294B-4385-BE9B-F19B1B524BCB}	CLMH1205127MH1205126	377.22	374.48	0.666666667	MH1205127	MH1205126			36	CLMH1205127MH1205126	8	0.0765	0.001828	0.03	0.002194	0.03	0.002600	0.04	0.003912	0.04
CLMH1205128MH1205078	52' FROM W-E IS	2013		Existing	assumed Mannings N	MH1205128	MH1205078		T17474	IRWD	PVC	{B72BA97A-39E1-4D63-B3B9-0F2BA6A642DC}	CLMH1205128MH1205078	380.11	373.00	0.666666667	MH1205128	MH1205078			157	CLMH1205128MH1205078	8	0.0453	0.003386	0.10	0.000224	0.11	0.000265	0.12	0.002459	0.09
CLMH1205129MH1205079	52' FROM W-E IS	0		Existing	assumed Mannings N	MH1205129	MH1205079		T17474	IRWD	PVC	{78DC7902-302D-4786-A28A-FAA683FD9C24}	CLMH1205129MH1205079	378.38	371.27	0.666666667	MH1205129	MH1205079			157	CLMH1205129MH1205079	8	0.0453	0.000000	0.10	0.000000	0.11	0.000000	0.12	0.000650	0.08
CLMH1205130MH1205080	52' FROM W-E IS	2013		Existing	assumed Mannings N	MH1205130	MH1205080		T17474	IRWD	PVC	{5FA5A728-D199-4785-A88E-DAF904498520}	CLMH1205130MH1205080	376.78	369.54	0.666666667	MH1205130	MH1205080			157	CLMH1205130MH1205080	8	0.0461	0.001668	0.11	0.002004	0.12	0.002376	0.13	0.001914	0.09
CLMH1205131MH1205060	A0023378	2013		Existing	assumed Mannings N	MH1205131	MH1205060		T17467	IRWD	PVC	{90CCB9DC-D439-4D32-B797-CCDF5F3590CC}	CLMH1205131MH1205060	332.40	325.47	0.666666667	MH1205131	MH1205060			240	CLMH1205131MH1205060	8	0.0289	0.001109	0.02	0.001336	0.02	0.001579	0.03	0.034210	0.11
CLMH1205132MH1205131		2013		Existing	assumed Mannings N	MH1205132	MH1205131		T17469	IRWD	PVC	{C39939CC-7EFF-49B3-9632-BF93A68855F5}	CLMH1205132MH1205131	335.82	332.60	0.666666667	MH1205132	MH1205131			145	CLMH1205132MH1205131	8	0.0222	0.001110	0.02	0.001338	0.02	0.001581	0.03	0.034210	0.11
CLMH1205133MH1205091		2014		Existing	assumed Mannings N	MH1205133	MH1205091		T17467	IRWD	PVC	{20388398-AA15-41A6-A118-5533CA97EDF9}	CLMH1205133MH1205091	337.98	334.30	0.666666667	MH1205133	MH1205091			239	CLMH1205133MH1205091	8	0.0154	0.000238	0.03	0.000275	0.05	0.000294	0.07	0.003589	0.05
CLMH1205134MH1205132		2013		Existing	assumed Mannings N	MH1205134	MH1205132		T17469	IRWD	PVC	{82000D1F-BF08-4AFF-AF45-7461957060 3C}	CLMH1205134MH1205132	337.42	335.92	0.666666667	MH1205134	MH1205132			150	CLMH1205134MH1205132	8	0.0100	0.000925	0.02	0.001115	0.02	0.001318	0.03	0.028495	0.13
CLMH1205135MH1205134		2014		Existing	assumed Mannings N	MH1205135	MH1205134		T17469	IRWD	PVC	{47AF25CD-3C94-420D-9A99-5098D6CFABF2}	CLMH1205135MH1205134	339.37	337.64	0.666666667	MH1205135	MH1205134			359	CLMH1205135MH1205134	8	0.0048	0.000183	0.01	0.000220	0.01	0.000261	0.01	0.008642	0.08
CLMH1205136MH1205089		2013		Existing	assumed Mannings N	MH1205136	MH1205089		T17469	IRWD	PVC	{436D6ECC-858B-437B-B495-D7D4D68D536E}	CLMH1205136MH1205089	343.02	338.07	0.666666667	MH1205136	MH1205089			240	CLMH1205136MH1205089	8	0.0206	0.000217	0.04	0.000224	0.06	0.000265	0.07	0.004002	0.06
CLMH1205137MH1205088		2013		Existing	assumed Mannings N	MH1205137	MH1205088		T17469	IRWD	PVC	{F48F318A-711F-476D-B130-3CD015902931A}	CLMH1205137MH1205088	345.34	340.25	0.666666667	MH1205137	MH1205088			241	CLMH1205137MH1205088	8	0.0211	0.000218	0.04	0.000224	0.05	0.000265	0.07	0.003299	0.06
CLMH1205138MH1205139		2013		Existing	assumed Mannings N	MH1205138	MH1205139		T17469	IRWD	PVC	{A1A5FCC8-6D3B-4DDD-B84F-AD6551 1F8F5}	CLMH1205138MH1205139	346.28	343.60	0.666666667	MH1205138	MH1205139			132	CLMH1205138MH1205139	8	0.0203	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.002677	0.03
CLMH1205139MH1205141		2013		Existing	assumed Mannings N	MH1205139	MH1205141	ERROR 23	T17469	IRWD	PVC	{21C97547-CD92-4CD7-B928-E0B21E7D8DCE}	CLMH1205139MH1205141	343.50	340.94	0.666666667	MH1205139	MH1205141			147	CLMH1205139MH1205141	8	0.0174	0.000372	0.01	0.000449	0.01	0.000530	0.01	0.008349	0.06
CLMH1205140MH1205139		2013		Existing	assumed Mannings N	MH1205140	MH1205139		T17469	IRWD	PVC	{48D3A417-C6AE-43C1-B87E-8F255D2C5645}	CLMH1205140MH1205139	345.72	343.70	0.666666667	MH1205140	MH1205139			124	CLMH1205140MH1205139	8	0.0124	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.005672	0.06
CLMH1205141MH1205134		2013		Existing	assumed Mannings N	MH1205141	MH1205134	ERROR 23	T17469	IRWD	PVC	{2FC3FFAD-F954-451F-814D-10E95B2A1D7B}	CLMH1205141MH1205134	340.58	337.52	0.666666667	MH1205141	MH1205134			141	CLMH1205141MH1205134	8	0.0218	0.000557	0.01	0.000672	0.02	0.000794	0.02	0.014731	0.08
CLMH1205142MH1205141		2013		Existing	assumed Mannings N	MH1205142	MH1205141	ERROR 23	T17469	IRWD	PVC	{910DE6F3-7409-4C6D-82CE-471A3E43656E}	CLMH1205142MH1205141	345.07	340.78	0.666666667	MH1205142	MH1205141			333	CLMH1205142MH1205141	8	0.0129	0.000186	0.01	0.000224	0.01	0.000264	0.01	0.006382	0.06
CLMH1205143MH1205134		2013		Existing	assumed Mannings N	MH1205143	MH1205134		T17469	IRWD	PVC	{30153295-45AC-4B89-A1AF-40EC5941D179}	CLMH1205143MH1205134	342.94	337.64	0.666666667	MH1205143	MH1205134			160	CLMH1205143MH1205134	8	0.0160	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.005121	0.05
CLMH1205144MH1205093		2014		Existing	assumed Mannings N	MH1205144	MH1205093		T17467	IRWD	PVC	{D183191F-ADC2-4470-BDFE-5E2718E4519F}	CLMH1205144MH1205093	336.53	332.84	0.666666667	MH1205144	MH1205093			45	CLMH1205144MH1205093	8	0.0820	0.000303	0.00	0.000316	0.01	0.000305	0.02	0.012223	0.05
CLMH1205145MH1205144		2013		Existing	assumed Mannings N	MH1205145	MH1205144		T17469	IRWD	PVC	{58B45682-D145-415A-819C-816086276F18}	CLMH1205145MH1205144	337.27	336.73	0.666666667	MH1205145	MH1205144			62	CLMH1205145MH1205144	8	0.0087	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.012223	0.09
CLMH1205146MH1205132		2013		Existing	assumed Mannings N	MH1205146	MH1205132		T17469	IRWD	PVC	{167E56B0-3289-421A-993E-EGFD5158DD09}	CLMH1205146MH1205132	338.70	336.02	0.666666667	MH1205146	MH1205132			166	CLMH1205146MH1205132	8	0.0161	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.005715	0.05
CLMH1205147MH1205017		2005		Existing	assumed Mannings N	MH1205147	MH1205017		A01753	IRWD	VCP	{E84C5BBC-0521-4F33-B504-2B699C73AE42}	CLMH1205147MH1205017	313.28	310.23	1.250000000	MH1205147	MH1205017			339	CLMH1205147MH1205017	15	0.0090	0.513491	0.25	0.616889	0.28	0.736411	0.32	2.196281	0.62
CLMH1205148MH1205014		2004		Existing	assumed Mannings N	MH1205148	MH1205014		A00334	IRWD	VCP	{7F7CF8D0-9A98-406F-A992-1457865C1F0A}	CLMH1205148MH1205014	336.51	333.72	1.000000000	MH1205148	MH1205014			12	CLMH1205148MH1205014	12	0.0100	0.218369	0.21	0.262084	0.23	0.3109 10	0.25	0.377799	0.27
CLMH1205156MH1205157		2014		Existing	assumed Mannings N	MH1205156	MH1205157		17470	IRWD	PVC	{22E2FF44-3FE6-45E4-9887-4CEA7D211368}	CLMH1205156MH1205157	352.40	348.42	0.666666667	MH1205156	MH1205157			49	CLMH1205156MH1205157	8	0.0821	0.000327	0.00	0.000341	0.01	0.000325	0.01	0.005534	0.04
CLMH1205157MH1205164		2013		Existing	assumed Mannings N	MH1205157	MH1205164		17470	IRWD	PVC	{D42F9848-8E79-4778-B860-AA6EEAD9A0D6}	CLMH1205157MH1205164	348.32	345.17	0.666666667	MH1205157	MH1205164			333	CLMH1205157MH1205164	8	0.0095	0.000185	0.01	0.000223	0.01	0.000263	0.01	0.005534	0.06
CLMH1205158MH1205159		2013		Existing	assumed Mannings N	MH1205158	MH1205159		17470	IRWD	PVC	{5E29AD33-96D1-4283-820F-F643AFAF2D98}	CLMH1205158MH1205159	349.11	345.63	0.666666667	MH1205158	MH1205159			149	CLMH1205158MH1205159	8	0.0220	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.008839	0.06
CLMH1205159MH1205160		2013		Existing	assumed Mannings N	MH1205159	MH1205160		17470	IRWD	PVC	{58DE2069-AC6E-469B-93D9-AD781440 2DF1}	CLMH1205159MH1205160	345.53	341.37	0.666666667	MH1205159	MH1205160			139	CLMH1205159MH1205160	8	0.0300	0.000189	0.01	0.000224	0.01	0.000265	0.01	0.008839	0.06
CLMH1205160MH1205165		2013		Existing	assumed Mannings N	MH1205160	MH1205165		17470	IRWD	PVC	{B560BDE8-75C3-4926-9F7F-2A215BE2A085}	CLMH1205160MH1205165	341.17	335.72	0.666666667	MH1205160	MH1205165			293	CLMH1205160MH1205165	8	0.0186	0.000185	0.01	0.000223	0.01	0.000263	0.01	0.008839	0.06
CLMH1205161MH1205162		2013		Existing	assumed Mannings N	MH1205161	MH1205162		17470	IRWD	PVC	{CD24D4D1-0F06-4309-B0AE-DAD072B6244F}	CLMH1205161MH1205162	346.24	341.93	0.666666667	MH1205161	MH1205162			254	CLMH1205161MH1205162	8	0.0170	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.008623	0.06
CLMH1205162MH1205163		2013		Existing	assumed Mannings N	MH1205162	MH1205163		17470	IRWD	PVC	{770A3EEB-957D-4681-A0D6-A15D1DC29BC0}	CLMH1205162MH1205163	341.83	337.23	0.666666667	MH1205162	MH1205163			219	CLMH1205162MH1205163	8	0.0210	0.000186	0.01	0.000224	0.01	0.000265	0.01	0.008623	0.06
CLMH1205163MH1205165		2013		Existing	assumed Mannings N	MH1205163	MH1205165		17470	IRWD	PVC	{2A2742E6-828G-4CA5-92CC-6970977A90}	CLMH1205163MH1205165	337.13	335.82	0.666666667	MH1205163	MH1205165			73	CLMH1205163MH1205165	8	0.0179	0.000185	0.01	0.000224	0.01	0.000264	0.01	0.008623	0.06
CLMH1205164MH1205088	Main after junctio	2013		Existing	assumed Mannings N	MH1205164	MH1205088		17470	IRWD	PVC	{0119E20D-386D-4AD3-AC19-C53F310CE42E}	CLMH1205164MH1205088	345.07	340.25	0.666666667	MH1205164	MH1205088			359	CLMH1205164MH1205088	8	0.0134	0.000182	0.04	0.000219	0.05	0.000260	0.07	0.005534	0.07
CLMH1205165MH1205094	Main after junctio	2013		Existing	assumed Mannings N	MH1205165	MH1205094		17470	IRWD	PVC	{109522A9-80B2-4676-96D3-7BCBA2E8D58D}	CLMH1205165MH1205094	335.62	334.64	0.666666667	MH1205165	MH1205094			196	CLMH1205165MH1205094	8	0.0050	0.000366	0.01	0.000443	0.02	0.000525	0.02	0.017462	0.11
CLMH1205166MH1205198		2014		Existing	assumed Mannings N	MH1205166	MH1205198		T17635	IRWD	PVC	{69580F72-B8B4-4567-8ED8-1AEE80887215}	CLMH1205166MH1205198	338.83	336.34	0.666666667	MH1205166	MH1205198			83	CLMH1205166MH1205198	8	0.0141	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001633	0.08
CLMH1205167MH1205204		2014		Existing	assumed Mannings N	MH1205167	MH1205204		T17635	IRWD	PVC	{49356D1F-0EFC-47AF-B35B-E2A5C6D1A423}	CLMH1205167MH1205204	339.29	338.77	0.666666667	MH1205167	MH1205204			104	CLMH1205167MH1205204	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.010063	0.09
CLMH1205168MH1205167		2014		Existing	assumed Mannings N	MH1205168	MH1205167		T17635	IRWD	PVC	{19511EFB-E9B8-4331-8607-55565E39C353}	CLMH1205168MH1205167	340.59	339.49	0.666666667	MH1205168	MH1205167			111	CLMH1205168MH1205167	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003489	0.05
CLMH1205169MH1205167		2014		Existing	assumed Mannings N	MH1205169	MH1205167		T17635	IRWD	PVC	{FB3F9104-C8EE-451E-9FF7-E86263533A11D}	CLMH1205169MH1205167	340.95	339.49	0.666666667	MH1205169	MH1205167			147	CLMH1205169MH1205167	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003577	0.05
CLMH1205170MH1205205		2014		Existing	assumed Mannings N	MH1205170	MH1205205		T17635	IRWD	PVC	{719ED734-A88C-4F04-9E87-452389600AE}	CLMH1205170MH1205205	341.35	339.89	0.666666667	MH1205170	MH1205205			146	CLMH1205170MH1205205	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003079	0.04
CLMH1205171MH1205208		2014		Existing	assumed Mannings N	MH1205171	MH1205208		T17635	IRWD	PVC	{791ED814-CD7D-45AE-8620-EB8286C41BA6}	CLMH1205171MH1205208	341.87	341.29	0.666666667	MH1205171	MH1205208			68	CLMH1205171MH1205208	8	0.0085	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011422	0.08
CLMH1205172MH1205171		2014		Existing	assumed Mannings N	MH1205172	MH1205171		T17635	IRWD	PVC	{B042DAB0-1697-44D0-9111-38199EF5C990}	CLMH1205172MH1205171	343.61	342.07	0.666666667	MH1205172	MH1205171			154	CLMH1205172MH1205171	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007093	0.06
CLMH1205173MH1205171		2014		Existing	assumed Mannings N	MH1205173	MH1205171		T17635	IRWD	PVC	{E18A3E8D-B661-4E71-95C7-6EF88D45C07A}	CLMH1205173MH1205171	343.70	342.07	0.666666667	MH1205173	MH1205171			163	CLMH1205173MH1205171	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004329	0.05
CLMH1205174MH1205203		2014		Existing	assumed Mannings N	MH1205174	MH1205203		T17635	IRWD	PVC	{0A4931EFD-6F0D-4D4F-AA33-4C5914797548}	CLMH1205174MH1205203	339.22	338.01	0.666666667	MH1205174	MH1205203			121	CLMH1205174MH1205203	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005260	0.06
CLMH1205175MH1205177		2014		Existing	assumed Mannings N	MH1205175	MH1205177		T17634	IRWD	PVC	{C23EE8B3-F7BF-4DA5-BDD4-A5E616FC7657}	CLMH1205175MH1205177	357.83	356.65	0.666666667	MH1205175	MH1205177			117	CLMH1205175MH1205177	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007589	0.07
CLMH1205176MH1205175		2014		Existing	assumed Mannings N	MH1205176	MH1205175		T17634	IRWD	PVC	{7F75DD8F-34DC-4BF5-AF2B-48AC5546EA4D}	CLMH1205176MH1205175	358.43	357.93	0.666666667	MH1205176	MH1205175			50	CLMH1205176MH1205175	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003254	0.04
CLMH1205177MH1205183		2014		Existing	assumed Mannings N	MH1205177	MH1205183		T17634	IRWD	PVC	{DAC3DFAD-6E79-4FA6-89D1-2DBB159F7697}	CLMH1205177MH1205183	356.45	356.11	0.666666667	MH1205177	MH1205183			24	CLMH1205177MH1205183	8	0.0142	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007589	0.06
CLMH1205178MH1205179		2014		Existing	assumed Mannings N	MH1205178	MH1205179		T17634	IRWD	PVC	{C0625167-634D-4DCB-964A-67F4BF48E804}	CLMH1205178MH1205179	360.95	360.20	0.666666667	MH1205178	MH1205179			50	CLMH1205178MH1205179	8	0.0150	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002519	0.04
CLMH1205179MH1205175		2014		Existing	assumed Mannings N	MH1205179	MH1205175		T17634	IRWD	PVC	{CD4A442C-A5CC-4761-8A43-D1E5954BBAA6}	CLMH1205179MH1205175	360.00	358.03	0.666666667	MH1205179	MH1205175			130	CLMH1205179MH1205175	8	0.0151	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004335	0.05
CLMH1205180MH1205188		2014		Existing	assumed Mannings N	MH1205180	MH1205188		T17634	IRWD	PVC	{8AB4FFB1-A192-4EC6-8E74-F5F755DDD050}	CLMH1205180MH1205188	353.13	351.28	0.666666667	MH1205180	MH1205188			185	CLMH1205180MH1205188	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019333	0.10
CLMH1205181MH1205180		2014		Existing	assumed Mannings N	MH1205181	MH1205180		T17634	IRWD	PVC	{EF5849B0-ED30-433A-90E1-FC0FF8E88B13}	CLMH1205181MH1205180	355.54	353.33	0.666666667	MH1205181	MH1205180			64	CLMH1205181MH1205180	8	0.0451	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004626	0.04
CLMH1205182MH1205180		2014		Existing	assumed Mannings N	MH1205182	MH1205180		T17634	IRWD	PVC	{28FC93A8-0639-4FD3-9C73-924BB2A18BDE}	CLMH1205182MH1205180	354.25	353.33	0.666666667	MH1205182	MH1205180			92	CLMH1205182MH1205180	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.014708	0.09
CLMH1205183MH1205191		2014		Existing	assumed Mannings N	MH1205183	MH1205191		T17634	IRWD	PVC	{0B132F2C-9D26-489E-9690-0CBA993888BB}	CLMH1205183MH1205191	356.11	355.92	0.666666667	MH1205183	MH1205191			36	CLMH1205183MH1205191	8	0.0096	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007589	0.07
CLMH1205184MH1205148	

CLMH120W049MH120W061		2007		Existing	assumed Mannings N	MH120W049	MH120W061	T1708E	IRWD	PVC	{CEF7731E-4C10-4C21-91DA-74A352E6F835}	CLMH120W049MH120W061	291.36	289.89	0.666666667	MH120W049	MH120W061			124	CLMH120W049MH120W061	8	0.0118	0.017104	0.09	0.020534	0.10	0.024346	0.11	0.020534	0.10
CLMH120W050MH120W051		2007		Existing	assumed Mannings N	MH120W050	MH120W051	T1708E	IRWD	PVC	{6857B78A-DAE5-420E-9661-F4FF75F943D3}	CLMH120W050MH120W051	299.62	297.36	0.666666667	MH120W050	MH120W051			249	CLMH120W050MH120W051	8	0.0091	0.006228	0.06	0.007476	0.07	0.008864	0.07	0.007476	0.07
CLMH120W051MH120W053		2007		Existing	assumed Mannings N	MH120W051	MH120W053	T1708E	IRWD	PVC	{B7B226A0-860E-4D8E-9267-71B6482BAA3}	CLMH120W051MH120W053	297.16	295.13	0.666666667	MH120W051	MH120W053			78	CLMH120W051MH120W053	8	0.0262	0.010748	0.06	0.012902	0.07	0.015297	0.07	0.012902	0.07
CLMH120W052MH120W053		2007		Existing	assumed Mannings N	MH120W052	MH120W053	T1708E	IRWD	PVC	{7C882A47-9A45-4D2D-8BDB-E4C0F34E0A88}	CLMH120W052MH120W053	297.00	295.13	0.666666667	MH120W052	MH120W053			301	CLMH120W052MH120W053	8	0.0062	0.004497	0.06	0.005397	0.06	0.006401	0.07	0.005397	0.06
CLMH120W053MH120W054		2007		Existing	assumed Mannings N	MH120W053	MH120W054	T1708E	IRWD	PVC	{F784D90B-FCC6-4969-ABFC-652006B94D2F}	CLMH120W053MH120W054	294.93	293.59	0.666666667	MH120W053	MH120W054			88	CLMH120W053MH120W054	8	0.0152	0.018705	0.09	0.022453	0.10	0.026623	0.11	0.022453	0.10
CLMH120W054MH120W062		2007		Existing	assumed Mannings N	MH120W054	MH120W062	T1708E	IRWD	PVC	{9BD4BC99-092E-4F3B-BD31-1E25CDDF318F}	CLMH120W054MH120W062	293.39	292.60	0.666666667	MH120W054	MH120W062			52	CLMH120W054MH120W062	8	0.0152	0.019022	0.09	0.022785	0.10	0.027018	0.11	0.022785	0.10
CLMH120W055MH120W056		2007		Existing	assumed Mannings N	MH120W055	MH120W056	T1708E	IRWD	PVC	{8E24493E-2138-410A-90C2-11F5608958E1}	CLMH120W055MH120W056	295.60	291.45	0.666666667	MH120W055	MH120W056			267	CLMH120W055MH120W056	8	0.0156	0.005124	0.05	0.006151	0.05	0.007294	0.06	0.006151	0.05
CLMH120W056MH120W058		2007		Existing	assumed Mannings N	MH120W056	MH120W058	T1708E	IRWD	PVC	{569A4902-B20C-4F1D-B1E7-1AAF12EDED E7}	CLMH120W056MH120W058	291.25	290.80	0.666666667	MH120W056	MH120W058			76	CLMH120W056MH120W058	8	0.0059	0.011524	0.09	0.013834	0.10	0.016402	0.11	0.013834	0.10
CLMH120W057MH120W058		2007		Existing	assumed Mannings N	MH120W057	MH120W058	T1708E	IRWD	PVC	{236ADE79-580C-487B-915E-45DF6AFACO38}	CLMH120W057MH120W058	297.98	290.80	0.666666667	MH120W057	MH120W058			262	CLMH120W057MH120W058	8	0.0274	0.003524	0.04	0.004230	0.04	0.005017	0.04	0.004230	0.04
CLMH120W059MH120W059		2007		Existing	assumed Mannings N	MH120W058	MH120W059	T1708E	IRWD	PVC	{540CB66F-3375-4ACA-9EAF-A6711CB36FB5}	CLMH120W058MH120W059	290.60	289.36	0.666666667	MH120W058	MH120W059			122	CLMH120W058MH120W059	8	0.0102	0.015048	0.09	0.018064	0.10	0.021419	0.11	0.018064	0.10
CLMH120W059MH120W060		2007		Existing	assumed Mannings N	MH120W059	MH120W060	T1708E	IRWD	PVC	{98CF4191-B534-43EB-AB7D-A02A485E{D4BF}	CLMH120W059MH120W060	289.16	288.24	0.666666667	MH120W059	MH120W060			43	CLMH120W059MH120W060	8	0.0216	0.016496	0.08	0.019803	0.09	0.023480	0.10	0.019803	0.09
CLMH120W060MH120W063		2007		Existing	assumed Mannings N	MH120W060	MH120W063	T1708E	IRWD	PVC	{B7BE86DE-2573-4B7D-92AE-68B83B0034B9}	CLMH120W060MH120W063	288.04	284.71	0.666666667	MH120W060	MH120W063			219	CLMH120W060MH120W063	8	0.0152	0.054872	0.16	0.065833	0.17	0.078057	0.18	0.065833	0.17
CLMH120W061MH120W060		2007		Existing	assumed Mannings N	MH120W061	MH120W060	T1708E	IRWD	PVC	{556F8E09-96B2-4EC2-A102-167CF05EF0BA}	CLMH120W061MH120W060	289.69	288.24	0.666666667	MH120W061	MH120W060			117	CLMH120W061MH120W060	8	0.0124	0.038376	0.14	0.046030	0.15	0.054577	0.16	0.046030	0.15
CLMH120W062MH120W061		2007		Existing	assumed Mannings N	MH120W062	MH120W061	T1708E	IRWD	PVC	{E1278F76-9CCA-48FD-B8FD-A0B1A8CE74}	CLMH120W062MH120W061	292.40	289.89	0.666666667	MH120W062	MH120W061			143	CLMH120W062MH120W061	8	0.0175	0.019006	0.09	0.022771	0.10	0.027002	0.11	0.022771	0.10
CLMH120W063MH120W069		2007		Existing	assumed Mannings N	MH120W063	MH120W069	T1708E	IRWD	PVC	{8391B375-596B-494D-9565-16A121CF9C04}	CLMH120W063MH120W069	284.51	280.98	0.666666667	MH120W063	MH120W069			206	CLMH120W063MH120W069	8	0.0171	0.054872	0.15	0.065833	0.17	0.078057	0.18	0.065833	0.17
CLMH120W064MH120W065		2007		Existing	assumed Mannings N	MH120W064	MH120W065	T1708E	IRWD	PVC	{2C65E929-70D1-4CF1-AE58-F35D13314DB6}	CLMH120W064MH120W065	290.64	287.91	0.666666667	MH120W064	MH120W065			182	CLMH120W064MH120W065	8	0.0150	0.005774	0.05	0.006931	0.06	0.008217	0.06	0.006931	0.06
CLMH120W065MH120W067		2007		Existing	assumed Mannings N	MH120W065	MH120W067	T1708E	IRWD	PVC	{12CB0C3D-23DE-4C4E-92E6-E9FACA79DE21}	CLMH120W065MH120W067	287.71	284.77	0.666666667	MH120W065	MH120W067			143	CLMH120W065MH120W067	8	0.0206	0.017881	0.08	0.021466	0.09	0.025450	0.10	0.021466	0.09
CLMH120W066MH120W065		2007		Existing	assumed Mannings N	MH120W066	MH120W065	T1708E	IRWD	PVC	{94689660-D5EA-492F-8360-73E646FF7A9A}	CLMH120W066MH120W065	288.30	287.91	0.666666667	MH120W066	MH120W065			78	CLMH120W066MH120W065	8	0.0050	0.007372	0.07	0.008852	0.08	0.010495	0.09	0.008852	0.08
CLMH120W067MH120W069		2007		Existing	assumed Mannings N	MH120W067	MH120W069	T1708E	IRWD	PVC	{9990D2CE-1D01-4FEB-BAE1-498ECCE4A792}	CLMH120W067MH120W069	284.57	280.98	0.666666667	MH120W067	MH120W069			141	CLMH120W067MH120W069	8	0.0255	0.020368	0.09	0.024452	0.09	0.028990	0.10	0.024452	0.09
CLMH120W068MH120W067		2007		Existing	assumed Mannings N	MH120W068	MH120W067	T1708E	IRWD	PVC	{23D91E1-911E-475B-B16E-7D794428541 7}	CLMH120W068MH120W067	285.24	285.04	0.666666667	MH120W068	MH120W067			10	CLMH120W068MH120W067	8	0.0205	0.002488	0.03	0.002988	0.04	0.003542	0.04	0.002988	0.04
CLMH120W069MH120W071		2007		Existing	assumed Mannings N	MH120W069	MH120W071	T1708E	IRWD	PVC	{0E6BD867-C2B6-4302-A40A-BE449541D0A7}	CLMH120W069MH120W071	280.78	277.83	0.666666667	MH120W069	MH120W071			100	CLMH120W069MH120W071	8	0.0296	0.094924	0.17	0.113848	0.19	0.134983	0.21	0.113848	0.19
CLMH120W070MH120W071		2007		Existing	assumed Mannings N	MH120W070	MH120W071	T1708E	IRWD	PVC	{EF5D772D-FBDB-4541-81B1-53FD17591EA0}	CLMH120W070MH120W071	282.85	277.83	0.666666667	MH120W070	MH120W071			88	CLMH120W070MH120W071	8	0.0570	0.003861	0.01	0.000385	0.01	0.000456	0.01	0.000385	0.01
CLMH120W071MH121N312	83" FROM S-N IS A	2007		Existing	assumed Mannings N	MH120W071	MH121N312	T1708E	IRWD	PVC	{3ED3DFB7-40A5-4A62-98D8-2A949CE39F07}	CLMH120W071MH121N312	277.50	275.49	0.666666667	MH120W071	MH121N312			231	CLMH120W071MH121N312	8	0.0087	0.095092	0.23	0.114028	0.26	0.135195	0.28	0.114028	0.26
CLMH120W072MH120W268		2007		Existing	assumed Mannings N	MH120W072	MH120W268	T1708EA	IRWD	PVC	{ADD39679-E1A3-4487-B6C3-CAF500F32E0}	CLMH120W072MH120W268	300.36	296.27	0.666666667	MH120W072	MH120W268			235	CLMH120W072MH120W268	8	0.0174	0.028138	0.12	0.033784	0.14	0.040059	0.16	0.033137	0.15
CLMH120W076MH120W086		2007		Existing	assumed Mannings N	MH120W076	MH120W086	T1708EA	IRWD	PVC	{F7EDA30D-15FD-46A1-8281-B4263234C274}	CLMH120W076MH120W086	293.73	290.50	0.666666667	MH120W076	MH120W086			328	CLMH120W076MH120W086	8	0.0098	0.063361	0.19	0.077408	0.21	0.091854	0.22	0.083588	0.21
CLMH120W078MH120W072		2007		Existing	assumed Mannings N	MH120W078	MH120W072	T1708EA	IRWD	PVC	{A5A47598-B5BD-478E-8B56-B641CB84413D}	CLMH120W078MH120W072	302.37	300.46	0.666666667	MH120W078	MH120W072			195	CLMH120W078MH120W072	8	0.0098	0.028138	0.13	0.033784	0.14	0.040059	0.15	0.033137	0.13
CLMH120W079MH120W080		2007		Existing	assumed Mannings N	MH120W079	MH120W080	T1708EA	IRWD	PVC	{B5933E40-1ABE-4CCE-991D-96D63D8123AE}	CLMH120W079MH120W080	287.99	285.51	0.666666667	MH120W079	MH120W080			226	CLMH120W079MH120W080	8	0.0110	0.007520	0.07	0.009015	0.07	0.010695	0.08	0.039040	0.14
CLMH120W080MH120W081		2007		Existing	assumed Mannings N	MH120W080	MH120W081	T1708EA	IRWD	PVC	{B7B903EA-DA2B-4EF1-8DAD-DA8BD03C0293}	CLMH120W080MH120W081	285.41	282.77	0.666666667	MH120W080	MH120W081			240	CLMH120W080MH120W081	8	0.0110	0.010665	0.08	0.012651	0.08	0.015008	0.09	0.039040	0.14
CLMH120W081MH120W082		2007		Existing	assumed Mannings N	MH120W081	MH120W082	T1708EA	IRWD	PVC	{111E8742-6616-4559-AC4B-713E26C4CE74}	CLMH120W081MH120W082	282.67	281.09	0.666666667	MH120W081	MH120W082			205	CLMH120W081MH120W082	8	0.0077	0.014196	0.10	0.016891	0.10	0.020037	0.11	0.045747	0.17
CLMH120W082MH120W083		2007		Existing	assumed Mannings N	MH120W082	MH120W083	T1708EA	IRWD	PVC	{AC9F2E1A-BC60-4F42-8BEA-95978F6A63DD}	CLMH120W082MH120W083	280.99	279.46	0.666666667	MH120W082	MH120W083			191	CLMH120W082MH120W083	8	0.0080	0.014620	0.10	0.017403	0.10	0.020644	0.11	0.045746	0.17
CLMH120W083MH120W089		2007		Existing	assumed Mannings N	MH120W083	MH120W089	T1708EA	IRWD	PVC	{C8FEE779-E332-4445-A1B1-5DB89A0A86F7}	CLMH120W083MH120W089	279.36	277.16	0.666666667	MH120W083	MH120W089			275	CLMH120W083MH120W089	8	0.0080	0.057437	0.19	0.068809	0.20	0.081593	0.22	0.114014	0.26
CLMH120W084MH120W269		2007		Existing	assumed Mannings N	MH120W084	MH120W269	T1708EA	IRWD	PVC	{B56A613E-98FB-4D6E-B71A-1F62073550 3D}	CLMH120W084MH120W269	297.08	294.25	0.666666667	MH120W084	MH120W269			212	CLMH120W084MH120W269	8	0.0133	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000295	0.07
CLMH120W085MH120W086		2007		Existing	assumed Mannings N	MH120W085	MH120W086	T1708EA	IRWD	PVC	{620BA82D-7927-438D-AD5A-41795268AD9F}	CLMH120W085MH120W086	292.11	290.40	0.666666667	MH120W085	MH120W086			103	CLMH120W085MH120W086	8	0.0166	0.026408	0.11	0.031706	0.12	0.037585	0.13	0.019435	0.09
CLMH120W086MH120W087		2007		Existing	assumed Mannings N	MH120W086	MH120W087	T1708EA	IRWD	PVC	{3B962089-5FF5-4F40-89EA-80C445338TDC}	CLMH120W086MH120W087	290.30	287.91	0.666666667	MH120W086	MH120W087			294	CLMH120W086MH120W087	8	0.0100	0.090648	0.22	0.109003	0.24	0.129335	0.26	0.102963	0.24
CLMH120W087MH120W088		2007		Existing	assumed Mannings N	MH120W087	MH120W088	T1708EA	IRWD	PVC	{40CC3003-3C0F-4F07-854C-3937976841DB}	CLMH120W087MH120W088	287.27	284.33	0.666666667	MH120W087	MH120W088			294	CLMH120W087MH120W088	8	0.0100	0.090616	0.22	0.108972	0.24	0.129305	0.26	0.102931	0.24
CLMH120W088MH120W089		2007		Existing	assumed Mannings N	MH120W088	MH120W089	T1708EA	IRWD	PVC	{3DCCA028-6873-404C-9F28-DA9511DC1A31}	CLMH120W088MH120W089	284.23	277.06	0.666666667	MH120W088	MH120W089			299	CLMH120W088MH120W089	8	0.0242	0.091126	0.18	0.109534	0.20	0.130015	0.21	0.101924	0.19
CLMH120W089MH120W092		2007		Existing	assumed Mannings N	MH120W089	MH120W092	T1708EA	IRWD	PVC	{B445C900-24CE-4A57-BAE1-5DD9FDA10CB9}	CLMH120W089MH120W092	276.96	272.36	0.666666667	MH120W089	MH120W092			479	CLMH120W089MH120W092	8	0.0096	0.148191	0.29	0.178119	0.31	0.211440	0.34	0.216569	0.35
CLMH120W090MH120W091		2007		Existing	assumed Mannings N	MH120W090	MH120W091	T1708EA	IRWD	PVC	{05E550AD-1C51-462D-9A5A-5169136E4BB6}	CLMH120W090MH120W091	271.92	269.82	0.666666667	MH120W090	MH120W091			256	CLMH120W090MH120W091	8	0.0082	0.022815	0.12	0.027390	0.13	0.032477	0.14	0.025209	0.12
CLMH120W091MH120W095		2007		Existing	assumed Mannings N	MH120W091	MH120W095	T1708EA	IRWD	PVC	{50FF9E1B-F838-4B3A-956C-17A35A5BA713}	CLMH120W091MH120W095	269.72	267.64	0.666666667	MH120W091	MH120W095			231	CLMH120W091MH120W095	8	0.0090	0.022815	0.12	0.027390	0.13	0.032477	0.14	0.025209	0.12
CLMH120W092MH120W093		2007		Existing	assumed Mannings N	MH120W092	MH120W093	T1708EA	IRWD	PVC	{471D070F-38B0-41DC-A845-ED9C41792F8B}	CLMH120W092MH120W093	272.16	270.96	0.833333333	MH120W092	MH120W093			150	CLMH120W092MH120W093	10	0.0080	0.148412	0.22	0.178346	0.24	0.211708	0.27	0.217479	0.27
CLMH120W093MH120W172		2007		Existing	assumed Mannings N	MH120W093	MH120W172	T1708EA	IRWD	PVC	{C2541B76-19C9-42ED-9E96-E6B84E978813}	CLMH120W093MH120W172	270.86	269.20	0.833333333	MH120W093	MH120W172			257	CLMH120W093MH120W172	10	0.0065	0.148388	0.30	0.178319	0.33	0.211682	0.36	0.217461	0.37
CLMH120W094MH120W095		2007		Existing	assumed Mannings N	MH120W094	MH120W095	T1708EA	IRWD	PVC	{47DD7FAD-0BA3-425F-8198-FAE2C0CA8C07}	CLMH120W094MH120W095	268.70	267.54	0.833333333	MH120W094	MH120W095			150	CLMH120W094MH120W095	10	0.0080	0.150446	0.22	0.180798	0.25	0.214698	0.27	0.230927	0.28
CLMH120W096MH120W095		2007		Existing	assumed Mannings N	MH120W096	MH120W095	T1708EA	IRWD	PVC	{AAD12DE9-A9B4-4502-8AFE-04605459358}	CLMH120W096MH120W095	267.44	265.14	0.833333333	MH120W096	MH120W095			288	CLMH120W096MH120W095	10	0.0080	0.148412	0.21	0.177928	0.24	0.211708	0.27	0.256042	0.29
CLMH120W096MH120W097		2007		Existing	assumed Mannings N	MH120W096	MH120W097	T1708EA	IRWD	PVC	{272351BE-22D7-4EA6-85D0-918D86975E6}	CLMH120W096MH120W097	265.04	264.00	0.833333333	MH120W096	MH120W097			130	CLMH120W096MH120W097	10	0.0080	0.260345	0.30	0.313120	0.32	0.371948	0.36	0.361536	0.35
CLMH120W097MH120W002	16" FROM S-N IS A	2007		Existing	assumed Mannings N	MH120W097	MH120W002	T1708EA	IRWD	PVC	{FB37C0A3-C2E7-4438-B3E8-7E7D67866F50}	CLMH120W097MH120W002	263.90	259.70	0.833333333	MH120W097	MH120W002			254	CLMH120W097MH120W002	10	0.0165	0.260278	0.25	0.313031	0.27	0.371858	0.29	0.361457	0.29
CLMH120W098MH120W099		2007		Existing	assumed Mannings N	MH120W098	MH120W099	T1708EF	IRWD	PVC	{FC995C35-7DBB-4376-B967-B86E276041FC}	CLMH120W098MH120W099	267.13	266.75	0.666666667	MH120W098	MH120W099			94	CLMH120W098MH120W099	8	0.0040	0.083549	0.26	0.100192	0.28	0.118792	0.31	0.100192	0.28
CLMH120W099MH120W100		2007		Existing	assumed Mannings N	MH120W099	MH120W100	T1708EF	IRWD	PVC	{71489795-9E29-45DC-A188-E5E1F4FD0C3D}	CLMH120W099MH120W100	266.66	266.21	0.666666667	MH120W099	MH120W100			240	CLMH120W099MH120W100	8	0.0066	0.085691	0.24	0.102762	0.26	0.121839	0.29	0.102762	0.26
CLMH120W100MH120W096		2007		Existing	assumed Mannings N	MH120W100	MH120W096	T1708EF	IRWD	PVC	{24577DE7-11C6-4D3A-BA16-BA15CA35B12C}	CLMH120W100MH120W096	266.11	265.22	0.666666667	MH120W100	MH120W096			146	CLMH120W100MH120W096	8	0.0081	0.088503	0.23	0.106138	0.25	0.125841	0.27	0.106138	0.25
CLMH120W101MH120W102		2007		Existing	assumed Mannings N	MH120W101	MH120W102	T1708EF	IRWD	PVC	{58SC4977-5E69-485D-8497-0BE1AE419030}	CLMH120W101MH120W102	275.15	274.83	0.666666667	MH120W101	MH120W102			67	CLMH120W101MH120W102	8	0.0050	0.022826	0.13	0.027373	0.14	0.032454	0.15	0.027373	0.14
CLMH120W102MH120W103		2007		Existing	assumed Mannings N	MH120W102	MH120W103	T1708EF	IRWD	PVC	{C9A21D08-CF81-4509-A1C7-BC345DF9FD59}	CLMH120W102MH120W103	274.71	274.23	0.666666667	MH120W102	MH120W103			100	CLMH120W102MH120W103	8	0.0048	0.022826	0.13	0.027373	0.14	0.032454	0.16	0.027373	0.14
CLMH120W103MH120W020		2007		Existing	assumed Mannings N	MH120W103	MH120W020	T1708EF	IRWD	PVC	{AB68688D-3DB8-47E4-987D-1CE42BF99FE1}	CLMH120W103MH120W020	274.03	273.69	0.666666667	MH120W103	MH120W020			68	CLMH120W103MH120W020	8	0.0050	0.025096	0.14	0.030100	0.15	0.035687	0.16	0.030100	0.15
CLMH120W104MH120W105		2007		Existing	assumed Mannings N	MH120W104	MH120W105	T1708EF	IRWD	PVC	{E2D8C2A8-5501-4B09-A2A9-313CDAA9BD64}	CLMH120W104MH120W105	274.95	274.10	0.666666667	MH120W104	MH120W105			67	CLMH120W104MH120W105	8	0.0126	0.003767	0.05	0.004450	0.05	0.005276	0.05	0.004450	0.05
CLMH120W105MH120W106		2007		Existing	assumed Mannings N	MH120W105	MH120W106	T1708EF	IRWD	PVC	{80AC6A04-70C7-4C92-BA29-024930BAD407}	CLMH120W105MH120W106	274.00	273.10	0.666666667	MH120W105	MH120W106			63	CLMH120W105MH120W106	8	0.0131	0.006059	0.06	0.007202	0.06	0.008539	0.07	0.007202	0.06
CLMH120W106MH120W027		2007		Existing	assumed Mannings N	MH120W106	MH120W027	T1708EF	IRWD	PVC	{17B6A27F-2F87-47AD-91C6-2ED6065 1CAED}	CLMH120W106MH120W027	272.90	270.47	0.666666667	MH120W106	MH120W027			146	CLMH120W106MH120W027	8	0.0298	0.010976	0.06	0.013225	0.07	0.015681	0.07	0.013225	0.07
CLMH120W107MH120W106		2007		Existing	assumed Mannings N	MH120W107	MH120W106	T1708EF	IRWD	PVC	{633ZC5C8-293D-4FDB-B047-967D01D7DB4D}	CLMH120W107MH120W106	273.66	273.10	0.666666667	MH120W107	MH120W106			22	CLMH120W107MH120W106	8	0.0257	0.005018	0.04	0.006023	0.05	0.007142	0.05	0.006023	0.05
CLMH120W108MH120W107		2007		Existing	assumed Mannings N	MH120W108	MH120W107	T1708EF	IRWD	PVC	{18C09FB0-F068-4CC3-ABCE-2BC32D3D5CB}	CLMH120W108MH120W107	274.10	273.76	0.666666667	MH120W108	MH120W107			67	CLMH120W108MH120W107	8	0.0050	0.002704	0.05	0.003245	0.05	0.003848	0.05	0.003245	0.05
CLMH120W109MH120W098		2007		Existing	assumed Mannings N	MH120W109	MH120W098	T1708EF	IRWD	PVC	{2A6AA620-FE8E-4E13-6A8-4302B466E93E}	CLMH120W109MH120W098	270.04	267.33	0.666666667	MH120W109	MH120W098			224	CLMH120W109MH120W098	8	0.0198	0.004756	0.06	0.005711	0.06	0.006768	0.06	0.005711	0.04
CLMH120W110MH120W109		2007		Existing	assumed Mannings N	MH120W110	MH120W109	T1708EF	IRWD	PVC	{B8EBD6F2-2BB5-45F8-B0E6-307C58995CC4}	CLMH120W110MH120W109	270.71	270.24	0.666666667	MH120W110	MH120W109			95	CLMH120W110MH120W109	8	0.0050	0.004756	0.06	0.005711	0.07	0.006768	0.07	0.005711	0.07
CLMH120W111MH120W110		2007		Existing	assumed Mannings N	MH120W111	MH120W110	T1708EF	IRWD	PVC	{A7861616-E18F-49F7-BDDE-1AB4697B308B}	CLMH120W111MH120W110	271.15	270.81	0.666666667	MH120W111	MH120W110			146	CLMH120W111MH120W110	8	0.0050	0.001881	0.04	0.002258	0.04	0.002677	0.05	0.002258	0.04
CLMH120W156MH120W004		2004		Existing	assumed Mannings N	MH120W156	MH120W004	A00334	IRWD	VCP	{05AE7CEF-95F1-474D-A180-C5443D18FD95}	CLMH120W156MH120W004	321.06	319.42	0.666666667	MH120W156	MH120W004			95	CLMH120W156MH120W004	8	0.0173	0.002432	0.04	0.002599	0.04	0.003079	0.04	0.002599	0.04
CLMH120W157MH120W009		2004		Existing	assumed Mannings N	MH120W157	MH120W009	A00334	IRWD	VCP	{89B1B314-B8D8-433B-B137-B568786083 66}	CLMH120W157MH120W009	285.86	283.91	1.500000000	MH120W157	MH120W009			88	CLMH120W157MH120W009	18	0.0222	0.754777	0.22	0.904296	0.20	1.079733	0.22	2.601143	0.35
CLMH120W158MH120W163		2010		Existing	assumed Mannings N	MH120W158	MH120W163	T17357	IRWD	VCP	{B27CE3BF-9917-4872-92CC-84307612D28C}	CLMH120W158MH120W163	297.53	287.96	0.666666667	MH120W158	MH120W163			146	CLMH120W158MH120W163	8	0.0751	0.016204	0.06	0.019443	0.07	0.023061	0.07	0.019443	0.07
CLMH120W159MH1205054		2010		Existing	assumed Mannings N	MH120W159	MH1205054	T17357A	IRWD	PVC	{D758GF58-90D1-45C1-A1A4-BEDA10548E98}	CLMH120W159MH1205054	315.30	314.54	0.666666667	MH120W159	MH1205054			191	CLMH120W159MH1205054	8	0.0040	0.003169	0.05	0.003805	0.06	0.004512	0.06	0.003805	0.06
CLMH120W160MH1205058		2010		Existing	assumed Mannings N	MH120W160	MH1205058	T17357A	IRWD	PVC	{68208CAA-726C-4563-9087-B65AA29E2AC7}	CLMH120W160MH1205058	309.91	308.87	0.666666667	MH120W160	MH1205058			260	CLMH120W160MH1205058	8	0.0040	0.000931	0.03	0.001117	0.03	0.001324	0.03	0.001117	0.03
CLMH120W161MH1205056		2010		Existing	assumed Mannings N	MH120W161	MH1205056	T17357A	IRWD	PVC	{C2A2DFAD-510F-410A-A37C-596C5B120877}	CLMH120W161MH1205056	312.57	311.59	0.666666667	MH120W161	MH1205056			246	CLMH120W161MH1205056	8	0.0040	0.001248	0.03	0.001498	0.03	0.001775	0.04	0.001498	0.03
CLMH120W162MH1205059		2010		Existing	assumed Mannings N	MH120W162	MH1205059	T17357A	IRWD	PVC	{63DEF86A-E5FD-4F3D-BFAA-E7617BD526FE}	CLMH120W162MH1205059	308.12	307.14	0.666666667	MH120W162	MH1205059			245	CLMH120W162MH1205059	8	0.0040	0.000912	0.03	0.001093	0.03	0.001297	0.03	0.001093	0.03
CLMH120W163MH120W157		2010		Existing	assumed Mannings N	MH120W163	MH120W157	T17357	IRWD	VCP	{31AB05B0-59EE-4CD5-9092-CDDD33D5106A}	CLMH120W163MH120W157	287.86	286.69	0.666666667	MH120W163	MH120W157			67	CLMH120W163MH120W157	8	0.0378	0.016204	0.07	0.019443	0.08	0.023061	0.09	0.019443	0.08
CLMH120W240MH120W167		2011		Existing	assumed Mannings N	MH120W240	MH120W167	T17382	IRWD	PVC	{DA81EAB3-CAA9-4C55-A22E-9FCE3B0DA013}	CLMH120W240MH120W167	273.76	272.42	0.666666667	MH120W240	MH120W167			146	CLMH120W240MH120W167	8	0.0097	0.000621	0.03	0.000746	0.03	0.000885	0.03	0.005119	0.07
CLMH120W165MH120W164		2011		Existing	assumed Mannings N	MH120W165	MH120W164	T17382	IRWD	PVC	{B98750ED-9F6A-4E1E-9722-B2F6FA07D85E}	CLMH120W165MH120W164	277.46	273.96	0.666666667	MH120W165	MH120W164			179	CLMH120W165MH120W164	8	0.0196	0.000471	0.01	0.000566	0.01	0.000671	0.02	0.002207	0.03
CLMH120W166MH120W164		2011		Existing	assumed Mannings N	MH120W166	MH120W164	T17382	IRWD	PVC	{D6F2978F-DB13-4215-B449-AB72A93563ED}	CLMH120W166MH120W164	276.42	273.78	0.666666667	MH120W166	MH120W164			127	CLMH120W166MH120W164	8	0.0208	0.000150	0.01	0.000179	0.01	0.000212	0.04	0.002912	0.04
CLMH120W167MH120W170		2011		Existing	assumed Mannings N	MH120W167	MH120W170	T17382	IRWD	PVC	{5E2E66E9-B987-4A1E-8C64-7DC9736D1AA}	CL

CLMH120W248MH120W245		2011		Existing	assumed Mannings N	MH120W248	MH120W245		T17329	IRWD	PVC	{2E8CA2F0-DAF3-4454-8E5A-69900B122755}	CLMH120W248MH120W245	314.89	311.90	0.66666667	MH120W248	MH120W245			150	CLMH120W248MH120W245	8	0.0199	0.001744	0.03	0.002094	0.03	0.002483	0.03	0.000697	0.02				
CLMH120W249MH120W244		2011		Existing	assumed Mannings N	MH120W249	MH120W244		T17329	IRWD	PVC	{5E449AA6-7DD4-4E57-A612-D9469A604631}	CLMH120W249MH120W244	311.48	308.05	0.66666667	MH120W249	MH120W244			150	CLMH120W249MH120W244	8	0.0229	0.000367	0.01	0.000440	0.01	0.000521	0.01	0.000440	0.01				
CLMH120W250MH120W258		2011		Existing	assumed Mannings N	MH120W250	MH120W258		T17329	IRWD	PVC	{20EC00E7-8261-4260-A200-861A83A9883C}	CLMH120W250MH120W258	311.71	308.20	0.66666667	MH120W250	MH120W258			152	CLMH120W250MH120W258	8	0.0231	0.001723	0.03	0.002068	0.03	0.002451	0.03	0.000808	0.02				
CLMH120W251MH120W259		2011		Existing	assumed Mannings N	MH120W251	MH120W259		T17329	IRWD	PVC	{3FC53A56-D90D-4CB1-A044-A7E398DC90E3}	CLMH120W251MH120W259	310.21	306.01	0.66666667	MH120W251	MH120W259			152	CLMH120W251MH120W259	8	0.0276	0.002242	0.03	0.002692	0.03	0.003190	0.04	0.000526	0.01				
CLMH120W252MH120W257		2011		Existing	assumed Mannings N	MH120W252	MH120W257		T17329	IRWD	PVC	{5958410F-F476-43CB-ABCD-D31B251AD5F2}	CLMH120W252MH120W257	313.21	309.60	0.66666667	MH120W252	MH120W257			152	CLMH120W252MH120W257	8	0.0238	0.001440	0.03	0.001731	0.03	0.002051	0.03	0.001594	0.03				
CLMH120W253MH120W255		2011		Existing	assumed Mannings N	MH120W253	MH120W255		T17329	IRWD	PVC	{C1582707-3471-4FEA-93E3-299D8F32649F}	CLMH120W253MH120W255	316.70	314.75	0.66666667	MH120W253	MH120W255			150	CLMH120W253MH120W255	8	0.0130	0.001507	0.03	0.001810	0.03	0.002145	0.03	0.000724	0.02				
CLMH120W254MH120W255		2011		Existing	assumed Mannings N	MH120W254	MH120W255		T17329	IRWD	PVC	{86644E06F-3BD1-45D2-8FA1-A631D9B13E14}	CLMH120W254MH120W255	316.45	314.75	0.66666667	MH120W254	MH120W255			94	CLMH120W254MH120W255	8	0.0181	0.001830	0.03	0.002196	0.03	0.002604	0.04	0.000602	0.02				
CLMH120W255MH120W245		2011		Existing	assumed Mannings N	MH120W255	MH120W245		T17329	IRWD	PVC	{64BEC21A-558E-4A6A-B7FB-28328E2A2847}	CLMH120W255MH120W245	314.55	311.80	0.66666667	MH120W255	MH120W245			152	CLMH120W255MH120W245	8	0.0181	0.004070	0.04	0.004888	0.05	0.005794	0.05	0.002786	0.04				
CLMH120W256MH120W255		2011		Existing	assumed Mannings N	MH120W256	MH120W255		T17329	IRWD	PVC	{05547946-12C4-4B25-AF5B-5CDF7A580786}	CLMH120W256MH120W255	317.40	314.65	0.66666667	MH120W256	MH120W255			152	CLMH120W256MH120W255	8	0.0278	0.000733	0.02	0.000882	0.02	0.001045	0.02	0.001459	0.02				
CLMH120W257MH120W258		2011		Existing	assumed Mannings N	MH120W257	MH120W258		T17329	IRWD	PVC	{00B43685-1B0E-4E6B-BAC8-F45C79825D1A}	CLMH120W257MH120W258	309.40	307.92	0.66666667	MH120W257	MH120W258			152	CLMH120W257MH120W258	8	0.0097	0.003659	0.05	0.004397	0.05	0.005211	0.06	0.003132	0.04				
CLMH120W258MH120W259		2011		Existing	assumed Mannings N	MH120W258	MH120W259		T17329	IRWD	PVC	{053CF1F6-1A68-4270-BCA5-A4B228F792D}	CLMH120W258MH120W259	307.82	305.91	0.66666667	MH120W258	MH120W259			152	CLMH120W258MH120W259	8	0.0126	0.006802	0.06	0.008170	0.07	0.009683	0.07	0.004728	0.05				
CLMH120W259MH120W260		2011		Existing	assumed Mannings N	MH120W259	MH120W260		T17329	IRWD	PVC	{2015B342-DEE4-439A-B54C-8EC5044CA904}	CLMH120W259MH120W260	305.81	304.23	0.66666667	MH120W259	MH120W260			152	CLMH120W259MH120W260	8	0.0104	0.011263	0.08	0.013528	0.09	0.016032	0.09	0.005873	0.06				
CLMH120W260MH120W261		2011		Existing	assumed Mannings N	MH120W260	MH120W261		T17329	IRWD	PVC	{ACCCD4F0-416A-4673-9AE5-E60DEF6EBBF0}	CLMH120W260MH120W261	304.13	302.55	0.66666667	MH120W260	MH120W261			152	CLMH120W260MH120W261	8	0.0104	0.014427	0.09	0.017325	0.10	0.020534	0.11	0.009306	0.07				
CLMH120W261MH120W262		2011		Existing	assumed Mannings N	MH120W261	MH120W262		T17329	IRWD	PVC	{07CD464B-2A85-4E68-8660-3D2DFE63A2CC}	CLMH120W261MH120W262	302.45	298.47	0.66666667	MH120W261	MH120W262			105	CLMH120W261MH120W262	8	0.0379	0.016817	0.07	0.020194	0.08	0.023933	0.08	0.012590	0.06				
CLMH120W262MH120W268		2011		Existing	assumed Mannings N	MH120W262	MH120W268		T17329	IRWD	PVC	{3855301A-4645-40FA-AA2F-2773E4FE88EA}	CLMH120W262MH120W268	298.37	296.37	0.66666667	MH120W262	MH120W268			257	CLMH120W262MH120W268	8	0.0078	0.036649	0.15	0.044003	0.16	0.052161	0.18	0.052653	0.18				
CLMH120W263MH120W262		2011		Existing	assumed Mannings N	MH120W263	MH120W262		T17329	IRWD	PVC	{3BCC45DA-E19E-4296-A98C-1D518211F7DA}	CLMH120W263MH120W262	302.38	298.57	0.66666667	MH120W263	MH120W262			120	CLMH120W263MH120W262	8	0.0318	0.019832	0.08	0.023809	0.09	0.028228	0.09	0.040064	0.11				
CLMH120W264MH120W263		2011		Existing	assumed Mannings N	MH120W264	MH120W263		T17329	IRWD	PVC	{F1D69350-EFC2-4F44-919E-B142239A2DAA}	CLMH120W264MH120W263	305.82	302.58	0.66666667	MH120W264	MH120W263			146	CLMH120W264MH120W263	8	0.0222	0.001165	0.02	0.001397	0.02	0.001658	0.03	0.004455	0.04				
CLMH120W265MH120W261		2011		Existing	assumed Mannings N	MH120W265	MH120W261		T17329	IRWD	PVC	{B5ABDAF8-02EA-4E73-AB73-BF56816C6C875}	CLMH120W265MH120W261	307.11	302.65	0.66666667	MH120W265	MH120W261			152	CLMH120W265MH120W261	8	0.0293	0.000925	0.02	0.001111	0.02	0.001316	0.02	0.002241	0.03				
CLMH120W266MH120W239		2011		Existing	assumed Mannings N	MH120W266	MH120W239		T17329	IRWD	PVC	{E024B06D-5939-44DD-918F-C23C54B88296}	CLMH120W266MH120W239	309.68	306.07	0.66666667	MH120W266	MH120W239			150	CLMH120W266MH120W239	8	0.0241	0.002801	0.03	0.003361	0.04	0.003985	0.04	0.004183	0.04				
CLMH120W267MH120W260		2011		Existing	assumed Mannings N	MH120W267	MH120W260		T17329	IRWD	PVC	{6499CAE8-822A-4520-BECD-58829E41C689}	CLMH120W267MH120W260	308.61	304.33	0.66666667	MH120W267	MH120W260			152	CLMH120W267MH120W260	8	0.0282	0.002626	0.03	0.003151	0.03	0.003737	0.04	0.003151	0.03				
CLMH120W268MH120W076		2007		Existing	assumed Mannings N	MH120W268	MH120W076		T17086A	IRWD	PVC	{AAC75334-A810-4B75-9077-95D9F592C45E}	CLMH120W268MH120W076	296.17	293.83	0.66666667	MH120W268	MH120W076			938	CLMH120W268MH120W076	8	0.0025	0.064396	0.25	0.077443	0.28	0.091888	0.30	0.083627	0.29				
CLMH120W269MH120W085		2007		Existing	assumed Mannings N	MH120W269	MH120W085		T17086A	IRWD	PVC	{768AD31F-5909-4D56-816F-4EA3F66AD809}	CLMH120W269MH120W085	294.25	292.21	0.66666667	MH120W269	MH120W085			291	CLMH120W269MH120W085	8	0.0054	0.016408	0.14	0.031706	0.15	0.037585	0.17	0.019435	0.12				
CLMH120W270MH120W271		2011		Existing	assumed Mannings N	MH120W270	MH120W271		T17086J	IRWD	PVC	{607E0122-C7B9-458E-8B38-48258354EA46}	CLMH120W270MH120W271	283.69	282.70	0.66666667	MH120W270	MH120W271			51	CLMH120W270MH120W271	8	0.0193	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH120W271MH120W273		2011		Existing	assumed Mannings N	MH120W271	MH120W273		T17086J	IRWD	PVC	{208AB7C2-BFF0-4C30-B8D8-C57E654142F2}	CLMH120W271MH120W273	282.50	281.08	0.66666667	MH120W271	MH120W273			71	CLMH120W271MH120W273	8	0.0200	0.005942	0.05	0.007112	0.06	0.008431	0.06	0.007112	0.06				
CLMH120W272MH120W273		2011		Existing	assumed Mannings N	MH120W272	MH120W273		T17086J	IRWD	PVC	{0A77D1D2-8E64-49EF-A16D-340A00407CF7}	CLMH120W272MH120W273	282.19	281.18	0.66666667	MH120W272	MH120W273			101	CLMH120W272MH120W273	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH120W273MH120W281		2011		Existing	assumed Mannings N	MH120W273	MH120W281		T17086J	IRWD	PVC	{07D275C7-9166-412A-B427-C3B8CD52761D}	CLMH120W273MH120W281	280.88	280.56	0.66666667	MH120W273	MH120W281			16	CLMH120W273MH120W281	8	0.0202	0.005942	0.05	0.007112	0.06	0.008431	0.06	0.007112	0.06				
CLMH120W274MH120W281		2011		Existing	assumed Mannings N	MH120W274	MH120W281		T17086J	IRWD	PVC	{17C3D45A-09F9-4D2A-883D-A51984C223C6}	CLMH120W274MH120W281	280.88	280.46	0.66666667	MH120W274	MH120W281			70	CLMH120W274MH120W281	8	0.0060	0.002077	0.04	0.002491	0.04	0.002955	0.05	0.002491	0.04				
CLMH120W275MH120W101		2007		Existing	assumed Mannings N	MH120W275	MH120W101		T17086F	IRWD	PVC	{2AF0F40E-9AF6-408C-8BDE-DA98C6234026}	CLMH120W275MH120W101	276.25	275.35	0.66666667	MH120W275	MH120W101			143	CLMH120W275MH120W101	8	0.0102	0.022826	0.11	0.027373	0.12	0.032454	0.13	0.027373	0.12				
CLMH120W276MH120W275		2011		Existing	assumed Mannings N	MH120W276	MH120W275		T17086J	IRWD	PVC	{A2AD6F92C-54FE-4E1D-A456-7A6D1DDEB806}	CLMH120W276MH120W275	277.54	276.45	0.66666667	MH120W276	MH120W275			109	CLMH120W276MH120W275	8	0.0100	0.019993	0.11	0.023972	0.12	0.028421	0.13	0.023972	0.12				
CLMH120W277MH120W279		2011		Existing	assumed Mannings N	MH120W277	MH120W279		T17086J	IRWD	PVC	{7682A012-AE6A-432C-865E-0322F219CC4D}	CLMH120W277MH120W279	288.52	287.36	0.66666667	MH120W277	MH120W279			77	CLMH120W277MH120W279	8	0.0151	0.000127	0.01	0.000135	0.01	0.000161	0.01	0.000135	0.01				
CLMH120W278MH120W271		2011		Existing	assumed Mannings N	MH120W278	MH120W271		T17086J	IRWD	PVC	{71560608-5812-425C-9FA0-67030735B6AF}	CLMH120W278MH120W271	283.83	282.80	0.66666667	MH120W278	MH120W271			101	CLMH120W278MH120W271	8	0.0102	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH120W279MH120W280		2011		Existing	assumed Mannings N	MH120W279	MH120W280		T17086J	IRWD	PVC	{F892F18F-E7D4-4B67-B4CB-469FEFEF6B75}	CLMH120W279MH120W280	287.16	278.73	0.66666667	MH120W279	MH120W280			66	CLMH120W279MH120W280	8	0.1281	0.008212	0.04	0.009852	0.04	0.011680	0.05	0.009852	0.04				
CLMH120W280MH120W276		2011		Existing	assumed Mannings N	MH120W280	MH120W276		T17086J	IRWD	PVC	{80E1146F-4701-4D3C-AF7F-BF44C4343E18}	CLMH120W280MH120W276	278.43	277.74	0.66666667	MH120W280	MH120W276			69	CLMH120W280MH120W276	8	0.0100	0.016231	0.10	0.019456	0.10	0.023067	0.11	0.019456	0.10				
CLMH120W281MH120W282		2011		Existing	assumed Mannings N	MH120W281	MH120W282		T17086J	IRWD	PVC	{80320458-1C4B-4BAB-AD47-9F8A469CE0C6}	CLMH120W281MH120W282	280.26	279.93	0.66666667	MH120W281	MH120W282			62	CLMH120W281MH120W282	8	0.0050	0.008019	0.08	0.009603	0.09	0.011386	0.09	0.009603	0.09				
CLMH120W282MH120W280		2011		Existing	assumed Mannings N	MH120W282	MH120W280		T17086J	IRWD	PVC	{A781CB6E-AAED-4A1E-8F65-2DE67B632EF0}	CLMH120W282MH120W280	279.73	278.63	0.66666667	MH120W282	MH120W280			220	CLMH120W282MH120W280	8	0.0050	0.008019	0.08	0.009603	0.09	0.011386	0.09	0.009603	0.09				
CLMH120W283MH120W271		2011		Existing	assumed Mannings N	MH120W283	MH120W271		T17086J	IRWD	PVC	{02837042-1F1E-489F-9ADF-22C7C395F787}	CLMH120W283MH120W271	284.02	282.80	0.66666667	MH120W283	MH120W271			122	CLMH120W283MH120W271	8	0.0100	0.005942	0.05	0.007112	0.06	0.008431	0.07	0.007112	0.06				
CLMH120W284MH120W285		2012		Existing	assumed Mannings N	MH120W284	MH120W285		T17329A	IRWD	PVC	{EC98776A-E81D-4838-A2F1-898BC49777FF}	CLMH120W284MH120W285	303.50	301.04	0.66666667	MH120W284	MH120W285			143	CLMH120W284MH120W285	8	0.0168	0.001463	0.03	0.001756	0.03	0.002081	0.03	0.001959	0.03				
CLMH120W285MH120W286		2012		Existing	assumed Mannings N	MH120W285	MH120W286		T17329A	IRWD	PVC	{07E48D1A-C59C-4173-8B73-730AE0A16364}	CLMH120W285MH120W286	300.94	298.47	0.66666667	MH120W285	MH120W286			49	CLMH120W285MH120W286	8	0.0500	0.003749	0.03	0.004499	0.04	0.005333	0.04	0.003239	0.03				
CLMH120W286MH120W287		2012		Existing	assumed Mannings N	MH120W286	MH120W287		T17329A	IRWD	PVC	{026D04BD-648A-4C06-8400-581053B03304}	CLMH120W286MH120W287	298.37	297.50	0.66666667	MH120W286	MH120W287			87	CLMH120W286MH120W287	8	0.0100	0.024945	0.13	0.029950	0.13	0.035502	0.14	0.017406	0.10				
CLMH120W287MH120W288		2012		Existing	assumed Mannings N	MH120W287	MH120W288		T17329A	IRWD	PVC	{419C0F79-22DA-4E89-A60B-6FD605BC9044}	CLMH120W287MH120W288	297.40	295.36	0.66666667	MH120W287	MH120W288			49	CLMH120W287MH120W288	8	0.0416	0.025848	0.09	0.031033	0.09	0.036789	0.10	0.019141	0.07				
CLMH120W288MH120W269		2011		Existing	assumed Mannings N	MH120W288	MH120W269		T17329	IRWD	PVC	{1A245877-CE12-4669-9A0A-93B7CBC54133}	CLMH120W288MH120W269	295.25	294.45	0.66666667	MH120W288	MH120W269			85	CLMH120W288MH120W269	8	0.0094	0.026408	0.12	0.031706	0.13	0.037586	0.15	0.019141	0.11				
CLMH120W289MH120W310		2012		Existing	assumed Mannings N	MH120W289	MH120W310		T17329A	IRWD	PVC	{0E6D2773-E957-428B-B32F-E8D46D159EBC}	CLMH120W289MH120W310	305.09	301.25	0.66666667	MH120W289	MH120W310			173	CLMH120W289MH120W310	8	0.0284	0.002046	0.03	0.002457	0.03	0.002914	0.03	0.000776	0.02				
CLMH120W290MH120W294		2012		Existing	assumed Mannings N	MH120W290	MH120W294		T17329A	IRWD	PVC	{0E74E91C-FCA9-4B23-9946-F4F2437D1D72}	CLMH120W290MH120W294	303.59	299.67	0.66666667	MH120W290	MH120W294			135	CLMH120W290MH120W294	8	0.0290	0.004690	0.02	0.005627	0.02	0.006981	0.02	0.001011	0.02				
CLMH120W291MH120W285		2012		Existing	assumed Mannings N	MH120W291	MH120W285		T17329A	IRWD	PVC	{37F8A175-DA84-48A1-B2C6-5F4C86564C47}	CLMH120W291MH120W285	303.62	301.14	0.66666667	MH120W291	MH120W285			147	CLMH120W291MH120W285	8	0.0169	0.002286	0.03	0.002743	0.04	0.003252	0.04	0.001280	0.02				
CLMH120W292MH120W304		2012		Existing	assumed Mannings N	MH120W292	MH120W304		T17329A	IRWD	PVC	{BA24BA2B-E7E3-4EBC-8F2D-74FBE8A84CFE}	CLMH120W292MH120W304	306.65	302.82	0.66666667	MH120W292	MH120W304			135	CLMH120W292MH120W304	8	0.0284	0.001873	0.03	0.002250	0.03	0.002666	0.03	0.000876	0.02				
CLMH120W293MH120W296		2012		Existing	assumed Mannings N	MH120W293	MH120W296		T17329A	IRWD	PVC	{4DCDEF5A-588A-4207-8F46-5D2DC7D06DFA}	CLMH120W293MH120W296	307.57	305.55	0.66666667	MH120W293	MH120W296			113	CLMH120W293MH120W296	8	0.0179	0.000600	0.02	0.000720	0.02	0.000855	0.02	0.001613	0.03				
CLMH120W294MH120W286		2012		Existing	assumed Mannings N	MH120W294	MH120W286		T17329A	IRWD	PVC	{4D8915C8-6877-4E1D-9762-D229AA49B80B}	CLMH120W294MH120W286	299.47	298.57	0.66666667	MH120W294	MH120W286			94	CLMH120W294MH120W286	8	0.0096	0.021196	0.11	0.025435	0.12	0.030170	0.13	0.014167	0.09				
CLMH120W295MH120W304		2012		Existing	assumed Mannings N	MH120W295	MH120W304		T17329A	IRWD	PVC	{8BE26B2F-256C-457C-BD9A-BD9F53E349B0}	CLMH120W295MH120W304	304.05	302.72	0.66666667	MH120W295	MH120W304			152	CLMH120W295MH120W304	8	0.0088	0.010577	0.08	0.012702	0.09	0.015056	0.10	0.007766	0.07				
CLMH120W296MH120W295		2012		Existing	assumed Mannings N	MH120W296	MH120W295		T17329A	IRWD	PVC	{83D53E55-7E9A-479C-BA47-7C4735627562}	CLMH120W296MH120W295	305.45	304.15	0.66666667	MH120W296	MH120W295			152	CLMH120W296MH120W295	8	0.0086	0.005472	0.06	0.006570	0.06	0.007788	0.07	0.005448	0.06				
CLMH120W297MH120W296		2012		Existing	assumed Mannings N	MH120W297	MH120W296		T17329A	IRWD	PVC	{4A303E4DC-7B4F-4218-B247-E1091D51934F4}	CLMH120W297MH120W296	309.69	305.65	0.66666667	MH120W297	MH120W296			135	CLMH120W297MH120W296	8	0.0299	0.001875	0.03	0.002252	0.03	0.002669	0.03	0.000752	0.02				
CLMH120W298MH120W295		2012		Existing	assumed Mannings N	MH120W298	MH120W295		T17329A	IRWD	PVC	{06789947-EE08-495B-A39E-7D559665DD3B3}	CLMH120W298MH120W295	308.19	304.25	0.66666667	MH120W298	MH120W295			135	CLMH120W298MH120W295	8	0.0292	0.001830	0.03	0.002198	0.03	0.002607	0.03	0.000959	0.02				
CLMH120W299MH120W296		2012		Existing	assumed Mannings N	MH120W299	MH120W296		T17329A	IRWD	PVC	{1CB7C9A9-99E8-4EB5-8B84-F80EFCF38531}	CLMH120W299MH120W296	309.65	305.65	0.66666667	MH120W299	MH120W296			179	CLMH120W299MH120W296	8	0.0223	0.002996	0.04	0.003598	0.04	0.004264	0.04	0.003083	0.04				
CLMH120W300MH120W299		2012		Existing	assumed Mannings N	MH120W300	MH120W299		T17329A	IRWD	PVC	{47E27A2F-B540-4940-BFEF-B038978SDCF4}	CLMH120W300MH120W299	310.24	309.75	0.66666667	MH120W300	MH120W299			53	CLMH120W300MH120W299	8	0.0092	0.000150	0.01	0.000214	0.01	0.001500	0.03						
CLMH120W301MH120W299		2012		Existing	assumed Mannings N	MH120W301	MH120W299		T17329A	IRWD	PVC	{6CE47689-8B40-4B4C-8DDE-4AA0CC666178}	CLMH120W301MH120W299	311.04	309.85	0.66666667	MH120W301	MH120W299			103	CLMH120W301MH120W299	8	0.0116	0.000864	0.02	0.001038	0.03	0.001231	0.03	0.001583	0.03				
CLMH120W302MH120W284		2012		Existing	assumed Mannings N	MH120W302	MH120W284		T17329A	IRWD	PVC	{4EE7EFE99-18B5-4DF4-97AD-9DD094E7BE06}	CLMH120W302MH120W284	305.12	303.70	0.66666667	MH120W302	MH120W284			147	CLMH120W302MH120W284	8	0.0097	0.001463	0.03	0.001756	0.03	0.002081	0.04	0.001959	0.04				
CLMH120W303MH120W287		2012		Existing	assumed Mannings N	MH120W303	MH120W287		T17329A	IRWD	PVC	{E482A0C3-D65B-402A-B8FE-DBE2084GD990}	CLMH120W303MH120W287	302.79	297.60	0.66666667	MH120W303	MH120W287			152	CLMH120W303MH120W287	8	0.0328	0.000902	0.02	0.001083	0.02	0.001286	0.02	0.001735	0.03				
CLMH120W304MH120W310		2012		Existing	assumed Mannings N	MH120W304	MH120W310		T17329A	IRWD	PVC	{773AA24E-9ADC-4EFA-8DF0-7AE4FBF6FBA1}	CLMH120W304MH120W310	302.62	301.15	0.66666667	MH120W304	MH120W310			152	CLMH120W304MH120W310	8	0.0097	0.004734	0.04	0.005680	0.04	0.006972	0.05	0.002972	0.03				
CLMH120W305MH120W259		2011		Existing	assumed Mannings N	MH120W305	MH120W259		T17329A	IRWD	PVC	{7FB1D5B1-BC4C-4A1D-815B-A1D39E88D38D}	CLMH120W305MH120W259	306.19	306.01	0.66666667	MH120W305	MH120W259			137	CLMH120W305MH120W259	8	0.0013	0.002219	0.06	0.002666	0.06	0.003160	0.07	0.000620	0.03				
CLMH120W306MH120W258		2011		Existing	assumed Mannings N	MH120W306	MH120W258		T17329A	IRWD	PVC	{EB7547BD-9840-4A45-A8F2-A85664A52526}	CLMH120W306MH120W258	310.69	308.02	0.66666667	MH120W306	MH120W258			137	CLMH120W306MH120W258	8	0.0195	0.001419	0.03	0.001705	0.03	0.002021	0.03	0.000788	0.02				
CLMH120W307MH120W260		2012		Existing	assumed Mannings N	MH120W307	MH120W260		T17329A	IRWD	PVC	{3815B133-3F5F-4BE0-978B-342190A810BC}	CLMH120W307MH120W260	307.69	304.33	0.66666667	MH120W307	MH120W260			137	CLMH120W307MH120W260	8	0.0245	0.000538	0.01	0.000645	0.01	0.000765	0.02	0.000282	0.01				
CLMH120W308MH120W261		2012		Existing	assumed Mannings N	MH120W308	MH120W261		T17329A	IRWD	PVC	{37D95959-991E-4FCC-98AF-321FB7F2227EA}	CLMH120W308MH120W261	306.09	302.65	0.66666667	MH120W308	MH120W261			137	CLMH120W308MH120W261	8	0.0251	0.001465	0.03	0.001758	0.03	0.002083	0.03	0.001043	0.02				
CLMH120W309MH120W257		2011		Existing	assumed Mannings N	MH120W309	MH120W257		T17329A	IRWD	PVC	{BDEE9F4F-AA9D-40EC-B866-AD43FFF037FA}	CLMH120W309MH120W257	312.19	309.60	0.66666667	MH120W309	MH120W257			152	CLMH120W309MH120W257	8	0.0189	0.002219	0.03	0.002666	0.04	0.003160	0.04	0.001538	0.03				
CLMH120W310MH120W294		2012		Existing	assumed Mannings N	MH120W310	MH120W294		T17329A	IRWD	PVC	{923EBED8-D4BB-4782-839D-DBBAB777D885}	CLMH120W310MH120W294	301.05	299.57	0.66666667	MH120W310	MH120W294			152	CLMH120W310MH120W294	8	0.0097	0.018546	0.10	0.022269	0.11	0.026399	0.12	0.011712	0.08				
CLMH120W311MH120W294		2012		Existing	assumed Mannings N	MH120W311	MH120W294		T17329A	IRWD	PVC	{67BBE13F-308E-49DA-A677-88143E1CCA56}	CLMH120W311MH120W294	303.12	299.67	0.66666667	MH120W311	MH120W294			147	CLMH120W311MH120W294	8	0.0235	0.001961	0.03	0.002354	0.03	0.002790	0.03	0.001444	0.03				
CLMH120W312MH120W310		2012		Existing	assumed Mannings N	MH120W312	MH120W310		T17329A	IRWD	PVC	{5923F4FF-5FD9-4DB1-9F2D-2DA7720EF245}	CLMH120W312MH120W310	304.75	301.25	0.66666667	MH120W312	MH120W310			173	CLMH120W312MH120W310	8	0.0233	0.001765	0.03	0.002119	0.03	0.002513	0.03	0.001051	0.02				
CLMH120W313MH120W304		2012		Existing	assumed Mannings N	MH120W313	MH120W304		T17329A	IRWD	PVC	{10466OEB-74F5-4356-88B9-082ACEB99F83}	CLMH120W313MH120W304	306.65	302.82	0.66666667	MH120W313	MH120W304			190	CLMH120W313MH120W304	8	0.0202	0.002284	0.03	0.002741	0.04	0.003250	0.04	0.001243	0.02				
CLMH120W314MH120W295		2012		Existing	assumed Mannings N	MH120W314	MH120W295		T17329A	IRWD	PVC	{08DD2EB9-0B04-408C-9475-7B33FDCA9AD0}	CLMH120W314MH120W295	307.08	304.23	0.66666667	MH120W314	MH120W295			232	CLMH120W314MH120W295	8	0.0123	0.003276	0.04	0.003933	0.05	0.004662	0.05	0.001359	0.03				
CLMH120W315MH120W230		2013		Existing	assumed Mannings N	MH120W315	MH120W230		T17451	IRWD	PVC	{89348F36-4913-429F-BBAA-710A95931F73}	CLMH120W315MH120W230	306.64	305.20	0.66666667	MH120W315	MH120W230			81	CLMH120W315MH120W230	8	0.0178	0.015320	0.08	0.018393	0.09	0.021810	0.10	0.019034	0.09				
CLMH120W316MH120W315		2013		Existing	assumed Mannings N	MH120W316	MH120W315		T17451	IRWD	PVC	{B882B831-3517-41FE-A74D-7A6F53E99196}	CLMH120W316MH120W315	307.23	306.64	0.66666667	MH120W316	MH120W315			28	CLMH120W316MH120W315	8	0.0214	0.015320	0.08	0.018393	0.09	0.021810	0.09	0.019034	0.09				
CLMH120W317MH120W316		2013		Existing	assumed Mannings N	MH120W317	MH120W316		T17451	IRWD

CLMH121E072MH121E074			2009		Existing	assumed Mannings N	MH121E072	MH121E074		T16666I	IRWD	PVC	{FE23F41D-1E13-4CF0-BC02-0FEC33265C30}	CLMH121E072MH121E074	296.89	294.97	0.666666667	MH121E072	MH121E074				133	CLMH121E072MH121E074	8	0.0144	0.003447	0.04	0.004138	0.05	0.004905	0.05	0.004138	0.05
CLMH121E073MH121N395			2009		Existing	assumed Mannings N	MH121E073	MH121N395		T16666I	IRWD	PVC	{D1100642-9B16-4EE1-82C3-914EFB864FE9}	CLMH121E073MH121N395	292.34	287.98	0.666666667	MH121E073	MH121N395				359	CLMH121E073MH121N395	8	0.0121	0.006479	0.06	0.007777	0.06	0.009221	0.07	0.007777	0.06
CLMH121E074MH121E065			2009		Existing	assumed Mannings N	MH121E074	MH121E065		T16666I	IRWD	PVC	{E7A7B98B-8539-4BD2-835A-3E9E35D0A20F}	CLMH121E074MH121E065	294.77	293.56	0.666666667	MH121E074	MH121E065				83	CLMH121E074MH121E065	8	0.0147	0.003447	0.04	0.004138	0.05	0.004905	0.05	0.004138	0.05
CLMH121E085MH121E086			2014		Existing	assumed Mannings N	MH121E085	MH121E086		7700BI	IRWD	PVC	{63B2F257-BD4D-4B32-9047-6EE6A10AFDE4}	CLMH121E085MH121E086	294.92	294.51	0.833333333	MH121E085	MH121E086				101	CLMH121E085MH121E086	10	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.224054	0.32
CLMH121E086MH121S147			2014		Existing	assumed Mannings N	MH121E086	MH121S147		7700BB	IRWD	PVC	{5520E7D8-BDD5-48E7-89FD-63A305A81237}	CLMH121E086MH121S147	294.41	292.83	0.833333333	MH121E086	MH121S147				395	CLMH121E086MH121S147	10	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.224045	0.32
CLMH121E087MH121E088			2014		Existing	assumed Mannings N	MH121E087	MH121E088		7700BC	IRWD	PVC	{E31A4F90-7903-4D99-AC18-5827982745A3}	CLMH121E087MH121E088	312.60	308.81	0.666666667	MH121E087	MH121E088				263	CLMH121E087MH121E088	8	0.0144	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011661	0.08
CLMH121E088MH121E089			2014		Existing	assumed Mannings N	MH121E088	MH121E089		7700BC	IRWD	PVC	{670F6E11-5F12-4A6A-AD6D-6312D97D2D E6}	CLMH121E088MH121E089	308.71	305.94	0.666666667	MH121E088	MH121E089				205	CLMH121E088MH121E089	8	0.0135	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.041477	0.14
CLMH121E089MH121E090			2014		Existing	assumed Mannings N	MH121E089	MH121E090		7700BC	IRWD	PVC	{A65CD3E3-A9B1-450F-B8F8-9C5AA614F156}	CLMH121E089MH121E090	305.84	301.74	0.666666667	MH121E089	MH121E090				396	CLMH121E089MH121E090	8	0.0104	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.041477	0.15
CLMH121E090MH121E085	Main after junctio		2014		Existing	assumed Mannings N	MH121E090	MH121E085		7700BC	IRWD	PVC	{265E75A0-F868-41E5-83E0-0D559D0794AC}	CLMH121E090MH121E085	301.64	295.15	0.666666667	MH121E090	MH121E085				396	CLMH121E090MH121E085	8	0.0164	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.042378	0.14
CLMH121E091MH121E092			2014		Existing	assumed Mannings N	MH121E091	MH121E092		17723A	IRWD	PVC	{825C542B-DE15-4D9F-ADF7-0C4205C5606E}	CLMH121E091MH121E092	306.11	304.28	0.666666667	MH121E091	MH121E092				118	CLMH121E091MH121E092	8	0.0155	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.082775	0.19
CLMH121E092MH121E093			2014		Existing	assumed Mannings N	MH121E092	MH121E093		17723A	IRWD	PVC	{E9884657-33F3-4706-8309-D3090E498AD5}	CLMH121E092MH121E093	304.18	299.79	0.666666667	MH121E092	MH121E093				252	CLMH121E092MH121E093	8	0.0174	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.167068	0.26
CLMH121E093MH121E085	Main after junctio		2014		Existing	assumed Mannings N	MH121E093	MH121E085		17723A	IRWD	PVC	{3D21E850-225D-43FA-9705-63925C9ACFDB}	CLMH121E093MH121E085	299.69	295.12	0.666666667	MH121E093	MH121E085				276	CLMH121E093MH121E085	8	0.0166	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.170194	0.27
CLMH121E094MH121E095			2014		Existing	assumed Mannings N	MH121E094	MH121E095		7700BH	IRWD	PVC	{BC8DA89D-CEA2-4452-8FA7-300DAB3190 3C}	CLMH121E094MH121E095	307.23	304.64	0.666666667	MH121E094	MH121E095				217	CLMH121E094MH121E095	8	0.0119	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.015964	0.09
CLMH121E095MH141W028	Main after junctio		2014		Existing	assumed Mannings N	MH121E095	MH141W028		7700BH	IRWD	PVC	{99EA4ACC-8C3D-4E0F-889A-2B0D923EFDA0}	CLMH121E095MH141W028	304.54	300.37	0.666666667	MH121E095	MH141W028				247	CLMH121E095MH141W028	8	0.0169	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.015964	0.08
CLMH121E096MH121E097			2014		Existing	assumed Mannings N	MH121E096	MH121E097		7700BJ	IRWD	PVC	{4EE87049-64A9-4ACB-BEC8-6EC453D1949F}	CLMH121E096MH121E097	316.17	314.71	0.666666667	MH121E096	MH121E097				122	CLMH121E096MH121E097	8	0.0119	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.075035	0.19
CLMH121E097MH121E098			2014		Existing	assumed Mannings N	MH121E097	MH121E098		7700BJ	IRWD	PVC	{425897E3-7592-4E5E-8996-444F012DA090}	CLMH121E097MH121E098	314.61	309.69	0.666666667	MH121E097	MH121E098				271	CLMH121E097MH121E098	8	0.0181	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.075034	0.17
CLMH121E098MH121E099			2014		Existing	assumed Mannings N	MH121E098	MH121E099		7700BJ	IRWD	PVC	{EE408DFD-C511-47A4-8E54-378E17F23F37}	CLMH121E098MH121E099	309.59	307.19	0.666666667	MH121E098	MH121E099				228	CLMH121E098MH121E099	8	0.0105	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.084297	0.21
CLMH121E099MH121E092	Main after junctio		2014		Existing	assumed Mannings N	MH121E099	MH121E092		7700BJ	IRWD	PVC	{4E1F3CF5-E3C9-463D-AB52-5A727AA2C2F2}	CLMH121E099MH121E092	307.09	304.38	0.666666667	MH121E099	MH121E092				252	CLMH121E099MH121E092	8	0.0108	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.084296	0.21
CLMH121E100MH121E101			2015		Existing	assumed Mannings N	MH121E100	MH121E101		2338C	IRWD	PVC	{910B6686-1861-4DC2-B714-468D4C561F70}	CLMH121E100MH121E101	311.13	310.52	0.666666667	MH121E100	MH121E101				123	CLMH121E100MH121E101	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006157	0.07
CLMH121E101MH121E098	Main after junctio		2015		Existing	assumed Mannings N	MH121E101	MH121E098		2338C	IRWD	PVC	{3939D287-8964-4A06-AB19-9D97AOA11714}	CLMH121E101MH121E098	310.42	309.79	0.666666667	MH121E101	MH121E098				125	CLMH121E101MH121E098	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009264	0.08
CLMH121E107MH121E114			2014		Existing	assumed Mannings N	MH121E107	MH121E114		17734	IRWD	PVC	{E3E83203-D711-468F-B6E7-AB157E6857AC}	CLMH121E107MH121E114	316.20	313.44	0.666666667	MH121E107	MH121E114				173	CLMH121E107MH121E114	8	0.0159	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002854	0.04
CLMH121E108MH121E107			2014		Existing	assumed Mannings N	MH121E108	MH121E107		17734	IRWD	PVC	{3F8AD13F-A6D9-4F3C-9F37-EFE5C32A9754}	CLMH121E108MH121E107	318.40	316.30	0.666666667	MH121E108	MH121E107				158	CLMH121E108MH121E107	8	0.0133	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001451	0.03
CLMH121E109MH121E108			2014		Existing	assumed Mannings N	MH121E109	MH121E108		17734	IRWD	PVC	{40D7C433-BD46-48BC-9A01-3318DF0715A9}	CLMH121E109MH121E108	318.90	318.60	0.666666667	MH121E109	MH121E108				27	CLMH121E109MH121E108	8	0.0113	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001451	0.03
CLMH121E110MH121E109			2014		Existing	assumed Mannings N	MH121E110	MH121E109		17734	IRWD	PVC	{C1D7B0E8-F13D-4765-B4F6-C154E9FA925}	CLMH121E110MH121E109	319.50	319.10	0.666666667	MH121E110	MH121E109				35	CLMH121E110MH121E109	8	0.0115	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001451	0.03
CLMH121E111MH121E115			2014		Existing	assumed Mannings N	MH121E111	MH121E115		17734	IRWD	PVC	{02CE33ED-6D09-4725-8FD5-769F1987EF94}	CLMH121E111MH121E115	318.70	314.23	0.666666667	MH121E111	MH121E115				250	CLMH121E111MH121E115	8	0.0179	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003106	0.04
CLMH121E112MH121E111			2014		Existing	assumed Mannings N	MH121E112	MH121E111		17734	IRWD	PVC	{7DB14995-B84A-4B07-8E28-B06675DC90AD}	CLMH121E112MH121E111	319.99	318.80	0.666666667	MH121E112	MH121E111				119	CLMH121E112MH121E111	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003106	0.04
CLMH121E113MH121E112			2014		Existing	assumed Mannings N	MH121E113	MH121E112		17734	IRWD	PVC	{78EFA78C-77F8-48E8-857C-0989F4E7EAC3}	CLMH121E113MH121E112	323.60	320.19	0.666666667	MH121E113	MH121E112				216	CLMH121E113MH121E112	8	0.0158	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001643	0.03
CLMH121E114MH121E100	Main before junct		2015		Existing	assumed Mannings N	MH121E114	MH121E100		2338C	IRWD	PVC	{6A31BA15-E07F-4E96-99AD-74241445C943}	CLMH121E114MH121E100	313.34	311.33	0.666666667	MH121E114	MH121E100				125	CLMH121E114MH121E100	8	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006157	0.05
CLMH121E115MH121E100	Main after junctio		2014		Existing	assumed Mannings N	MH121E115	MH121E100		17734	IRWD	PVC	{4C4C1473-CB32-436A-A12A-E1E1593476D4&A1}	CLMH121E115MH121E100	314.13	310.60	0.666666667	MH121E115	MH121E100				198	CLMH121E115MH121E100	8	0.0178	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003106	0.04
CLMH121N024MH121N028			2003		Existing	assumed Mannings N	MH121N024	MH121N028		T16495	IRWD	PVC	{55C424CB-E9CF-46BB-9323-ED6299BA8CS8}	CLMH121N024MH121N028	260.11	255.94	0.666666667	MH121N024	MH121N028				154	CLMH121N024MH121N028	8	0.0271	0.003549	0.04	0.004260	0.04	0.005051	0.04	0.004260	0.04
CLMH121N025MH121N027			2003		Existing	assumed Mannings N	MH121N025	MH121N027		T16495	IRWD	PVC	{61CCB0E2-0520-4573-BCBD-076039AF12D7}	CLMH121N025MH121N027	258.11	255.52	0.666666667	MH121N025	MH121N027				125	CLMH121N025MH121N027	8	0.0235	0.003787	0.04	0.004547	0.04	0.005390	0.05	0.004547	0.04
CLMH121N026MH121N135	44.14' FROM W-E		2003		Existing	assumed Mannings N	MH121N026	MH121N135		T16676A	IRWD	PVC	{9F134987-431D-459F-B8CE-8D2E405B8846}	CLMH121N026MH121N135	239.75	238.76	0.666666667	MH121N026	MH121N135				70	CLMH121N026MH121N135	8	0.0100	0.003457	0.04	0.003457	0.04	0.004116	0.04	0.003828	0.04
CLMH121N027MH121N150			2003		Existing	assumed Mannings N	MH121N027	MH121N150		1716	IRWD	PVC	{769A277C-4655-4691-B761-778996C288FF}	CLMH121N027MH121N150	254.19	253.32	0.666666667	MH121N027	MH121N150				73	CLMH121N027MH121N150	8	0.0119	0.014926	0.09	0.017847	0.10	0.021158	0.10	0.017847	0.10
CLMH121N028MH121N027			2003		Existing	assumed Mannings N	MH121N028	MH121N027		T16495	IRWD	PVC	{731A7987-1678-4D78-ACE7-3E307E0F9E33}	CLMH121N028MH121N027	255.74	255.55	0.666666667	MH121N028	MH121N027				146	CLMH121N028MH121N027	8	0.0136	0.011139	0.07	0.013301	0.08	0.015767	0.09	0.013301	0.08
CLMH121N029MH121N026			2004		Existing	assumed Mannings N	MH121N029	MH121N026		T16676	IRWD	PVC	{44FOCD22-92EE-4B56-BA87-C2732EE63678}	CLMH121N029MH121N026	243.22	239.94	0.666666667	MH121N029	MH121N026				105	CLMH121N029MH121N026	8	0.0312	0.013077	0.07	0.015669	0.07	0.018578	0.08	0.015669	0.07
CLMH121N030MH121N028			2003		Existing	assumed Mannings N	MH121N030	MH121N028		T16495	IRWD	PVC	{64120NA7-11C1-4697-AA69-2B2259528D0}	CLMH121N030MH121N028	256.76	255.94	0.666666667	MH121N030	MH121N028				64	CLMH121N030MH121N028	8	0.0128	0.007590	0.06	0.009043	0.07	0.010716	0.07	0.009043	0.07
CLMH121N031MH121N029			2004		Existing	assumed Mannings N	MH121N031	MH121N029		T16676	IRWD	PVC	{A6E68B77-684B-4D0F-A6D4-57C0B7912BFB}	CLMH121N031MH121N029	244.38	243.41	0.666666667	MH121N031	MH121N029				104	CLMH121N031MH121N029	8	0.0093	0.010523	0.08	0.012603	0.09	0.014943	0.09	0.012603	0.09
CLMH121N032MH121N134	27.4' FROM E-W S		2007		Existing	assumed Mannings N	MH121N032	MH121N134		T16538	IRWD	PVC	{689B1BF3-049C-4ECE-8A2F-38869D888F31}	CLMH121N032MH121N134	236.24	235.10	0.666666667	MH121N032	MH121N134				104	CLMH121N032MH121N134	8	0.0110	0.013332	0.09	0.016005	0.09	0.018972	0.10	0.016005	0.09
CLMH121N033MH121N031			2004		Existing	assumed Mannings N	MH121N033	MH121N031		T16676	IRWD	PVC	{D827BA58-50A0-49F7-90D4-8F2SE7F36F7}	CLMH121N033MH121N031	245.41	244.94	0.666666667	MH121N033	MH121N031				104	CLMH121N033MH121N031	8	0.0045	0.009615	0.09	0.011531	0.09	0.013651	0.10	0.011513	0.09
CLMH121N034MH121N032			2004		Existing	assumed Mannings N	MH121N034	MH121N032		T16676	IRWD	PVC	{CDB78234-154B-446F-B742-02D59AB5690B}	CLMH121N034MH121N032	237.69	236.44	0.666666667	MH121N034	MH121N032				104	CLMH121N034MH121N032	8	0.0120	0.011535	0.08	0.013847	0.09	0.016415	0.09	0.013847	0.09
CLMH121N035MH121N033			2004		Existing	assumed Mannings N	MH121N035	MH121N033		T16676	IRWD	PVC	{89DCE01E-4FF3-4CFC-840E-5287A73BBC11}	CLMH121N035MH121N033	249.88	245.61	0.666666667	MH121N035	MH121N033				104	CLMH121N035MH121N033	8	0.0411	0.007580	0.05	0.009069	0.05	0.010756	0.06	0.009069	0.05
CLMH121N036MH121N035			2004		Existing	assumed Mannings N	MH121N036	MH121N035		T16676	IRWD	PVC	{A2892418-82D9-4C28-8949-14C69FFBA2DB}	CLMH121N036MH121N035	252.11	250.08	0.666666667	MH121N036	MH121N035				104	CLMH121N036MH121N035	8	0.0195	0.006086	0.05	0.007277	0.06	0.008630	0.06	0.007277	0.06
CLMH121N037MH121N036			2004		Existing	assumed Mannings N	MH121N037	MH121N036		T16676	IRWD	PVC	{489F4ED4-8890-468A-A172-44C7D9518C8}	CLMH121N037MH121N036	240.14	237.88	0.666666667	MH121N037	MH121N036				197	CLMH121N037MH121N036	8	0.0115	0.008938	0.07	0.010730	0.08	0.012719	0.08	0.010730	0.08
CLMH121N038MH121N036			2004		Existing	assumed Mannings N	MH121N038	MH121N036		T16676	IRWD	PVC	{76A76A59-7403-4916-810F-CEEA67CF2F1B}	CLMH121N038MH121N036	253.55	252.30	0.666666667	MH121N038	MH121N036				104	CLMH121N038MH121N036	8	0.0120	0.004701	0.05	0.005615	0.06	0.006658	0.06	0.005615	0.06
CLMH121N039MH121N038			2004		Existing	assumed Mannings N	MH121N039	MH121N038		T16676	IRWD	PVC	{2908C7D4-87D2-45CE-80CD-B29155F87E2E}	CLMH121N039MH121N038	255.30	253.75	0.666666667	MH121N039	MH121N038				43	CLMH121N039MH121N038	8	0.0378	0.003554	0.03	0.004239	0.04	0.005026	0.04	0.004239	0.04
CLMH121N040MH121N152			2004		Existing	assumed Mannings N	MH121N040	MH121N152		T16676	IRWD	PVC	{1C0998DF-D751-4368-801C-54E096EA55FC}	CLMH121N040MH121N152	230.67	230.00	0.666666667	MH121N040	MH121N152				100	CLMH121N040MH121N152	8	0.0067	0.021710	0.12	0.025869	0.13	0.030663	0.14	0.025869	0.13
CLMH121N042MH121N039			2004		Existing	assumed Mannings N	MH121N042	MH121N039		T16676	IRWD	PVC	{9EABF599-C373-442B-BA70-1B77B8224D90}	CLMH121N042MH121N039	257.01	255.50	0.666666667	MH121N042	MH121N039				92	CLMH121N042MH121N039	8	0.0164	0.002122	0.03	0.002547	0.04	0.003019	0.04	0.002547	0.04
CLMH121N043MH121N164			2004		Existing	assumed Mannings N	MH121N043	MH121N164		T16676	IRWD	PVC	{E9EFDAAA-67D7-40FB-916D-41A13A57F4BE}	CLMH121N043MH121N164	235.47	231.24	0.666666667	MH121N043	MH121N164				65	CLMH121N043MH121N164	8	0.0455	0.012816	0.06	0.015191	0.07	0.018004	0.07	0.015191	0.07
CLMH121N044MH121N359			2004		Existing	assumed Mannings N	MH121N044	MH121N359		T16676	IRWD	PVC	{9E5D340F-EF3D-44D7-A2D9-609E2BCB190B}	CLMH121N044MH121N359	251.55	249.95	0.666666667	MH121N044	MH121N359				72	CLMH121N044MH121N359	8	0.0222	0.005497	0.05	0.006600	0.05	0.007822	0.06	0.006600	0.05
CLMH121N045MH121N043			2004		Existing	assumed Mannings N	MH121N045	MH121N043		T16676	IRWD	PVC	{256687F62-95F5-4BE1-81CA-79929757827B}	CLMH121N045MH121N043	238.39	235.67	0.666666667	MH121N045	MH121N043				141	CLMH121N045MH121N043	8	0.0193	0.011345	0.07	0.013424	0.08	0.015910	0.08	0.013424	0.08
CLMH121N046MH121N151	51.33' FROM W-E		2004		Existing	assumed Mannings N	MH121N046	MH121N151		T16755A	IRWD	PVC	{A051D28E-7CF2-4715-90B9-CB4F9395B011}	CLMH121N046MH121N151	259.04	255.78	0.666666667	MH121N046	MH121N151				210	CLMH121N046MH121N151	8	0.0100	0.017771	0.10	0.018972	0.10	0.022493	0.11	0.018972	0.10
CLMH121N047MH121N361			2004		Existing	assumed Mannings N	MH121N047	MH121N361		T16676	IRWD	PVC	{B3CB63C6-D867-4D5E-B02B-75ABC1CACEA1}	CLMH121N047MH121N361	245.30	243.50	0.666666667	MH121N047	MH121N361				88	CLMH121N047MH121N361	8	0.0205	0.009233	0.06	0.010767	0.07	0.012751	0.07	0.010767	0.07
CLMH121N048MH121N363			2004		Existing	assumed Mannings N	MH121N048	MH121N363	ERROR 23	T16676	IRWD	PVC	{D8559CEA-4E3F-4881-898A-2B7FE1E54BF2}	CLMH121N048MH121N363	240.25	238.85	0.666666667	MH121N048	MH121N363				57	CLMH121N048MH121N363	8	0.0246	0.011345	0.07	0.013424	0.07	0.015910	0.08	0.013424	0.07
CLMH121N049MH121N050			2004		Existing	assumed Mannings N	MH121N049	MH121N050		T16755	IRWD	PVC	{7FD5A092-6889-45CD-A4D2-091FD60DE8B}	CLMH121N049MH121N050	264.51	263.29	0.666666667	MH121N049	MH121N050				181	CLMH121N049MH121N050	8	0.0067	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH121N050MH121N059			2004		Existing	assumed Mannings N	MH121N050	MH121N059		T16755	IRWD	PVC	{9B790872-EB7E-43CB-B3D6-ED12BD8CAFD4}	CLMH121N050MH121N059	263.20	259.98	0.666666667	MH121N050	MH121N059				322	CLMH121N050MH121N059	8	0.0100	0.017429	0.10	0.018608	0.10	0.022061	0.11	0.018608	0.10
CLMH121N051MH121N372			2004		Existing	assumed Mannings N	MH121N051	MH121N372		T16676	IRWD	PVC	{4CDBC327-9400-4036-900B-80B440237F0B}	CLMH121N051MH121N372	252.27	251.50	0.666666667	MH121N051	MH121N372				73	CLMH121N051MH121N372	8	0.0105	0.003483	0.05	0.004357	0.05	0.005183	0.05	0.004183	0.05
CLMH121N052MH121N373			2004		Existing	assumed Mannings N	MH121N052	MH121N373		T16676	IRWD	PVC	{2DADA318-F7A3-4CBB-B718-2ABBACC86859}	CLMH121N052MH121N373	248.75	246.97	0.666666667	MH121N052	MH121N373				54	CLMH121N052MH121N373	8	0.0156	0.005605	0.04	0.006728	0.05	0.008007	0.05	0.006728	0.05
CLMH121N053MH121N054			2004		Existing	assumed Mannings N	MH121N053	MH121N054		T16676	IRWD	PVC	{0BF65E4-8D5F-4FB4-87E4-4E1262B86985}	CLMH121N053MH121N054	242.50	237.88	0.666666667	MH121N053	MH121N054				84	CLMH121N053MH121N054	8	0.0550	0.029022	0.08	0.034787	0.09	0.041242	0.10	0.034787	0.09
CLMH121N054MH121N055			2004		Existing	assumed Mannings N	MH121N054	MH121N055		T16676	IRWD	PVC	{244F68BE-3B32-42E6-A1F0-9CB4BBEE3CE2}	CLMH121N054MH121N055	237.67	237.38	0.666666667	MH121N054	MH121N055				53	CLMH121N054MH121N055	8	0.0055	0.029260	0.14	0.035073	0.15	0.041582	0.16	0.035073	0.15
CLMH121N055MH121N058			2010		Existing	assumed Mannings N	MH121N055	MH121N058		T16676H	IRWD	PVC	{97DD7A2E-E651-4AC6-A79C-2D849523F670}	CLMH121N055MH121N058	237.38	235.21	0.666666667	MH121N055	MH121N058				178	CLMH121N055MH121N058	8	0.0122	0.032332	0.13	0.038763	0.14	0.045955	0.15	0.038763	0.14
CLMH121N057MH121N053			2004		Existing	assumed Mannings N	MH121N057	MH121N053		T16676	IRWD	PVC	{92808CDC-073E-4F21-B208-B6F0EB8BF599}	CLMH121N057MH121N053	245.51	242.69	0.666666667	MH121N057	MH121N053				104	CLMH121N057MH121N053	8	0.0275	0.021795	0.09	0.026111	0.09	0.030957	0.10	0.026111	0.09
CLMH121N058MH121N169			2004		Existing	assumed Mannings N	MH121N058	MH121N169		T16676	IRWD	PVC	{8377C4ED-5E9F-4C66-9FB1-D51752304AD9}	CLMH121N058MH121N169	235.01	233.42	0.666666667	MH121N058	MH121N169				116	CLMH121N058MH121N169	8	0.0090	0.038458	0.15	0.046115	0.16	0.054672	0.18	0.046115	0.16
CLMH121N059MH121N061			2004		Existing	assumed Mannings N	MH121N059	MH121N061		T16755	IRWD	PVC	{B54FFF03-7B54-45E3-9DDD-5F46250D305E}	CLMH121N059MH121N061	259.88	255.58	0.666666667	MH121N059	MH121N061				208	CLMH121N059MH121N061	8	0.0207	0.060556	0.15	0.064651	0.16	0.076649	0.17	0.064651	0.16
CLMH121N060MH121N057			2004		Existing	assumed Mannings N	MH121N060	MH121N057		T16676	IRWD	PVC	{1A269103-FFBF-463F-8168-84042F0B0E42}	CLMH121N060MH121N057	248.69	245.75	0.666666667	MH121N060	MH121N057				316	CLMH121N060MH121N057	8	0.0093	0.021795	0.11	0.026111	0.12	0.030957	0.13	0.026111	0.12
CLMH121N061MH121N064			2004		Existing	assumed Mannings N	MH121N061	MH121N064		T16755	IRWD	PVC	{BC668D7A-0095-465E-9FA1-20D1BAA609E6}	CLMH121N061MH121N064	255.49	252.72	0.666666667	MH121N061	MH121N064				196	CLMH121N061MH121N064	8	0.0141	0.060556	0.17	0.064651	0.17	0.076649	0.19	0.064651	0.17
CLMH121N062MH121N059			2004		Existing	assumed Mannings N	MH121N062	MH121N059		T16755	IRWD	PVC	{6B658848-D0E0-478F-B868-FC0E06EE2070}	CLMH121N062MH121N059	262.38	260.07	0.666666667	MH121N062	MH121N059				271	CLMH121N062MH121N059	8	0.0085	0.043127	0.16	0.046044	0.16	0.054588	0.18	0.046044	0.16
CLMH121N063MH121N060			2004		Existing	assumed Mannings N	MH121N063	MH121N060		T16676	IRWD	PVC	{506AC6B0-6748-4A19-877C-64C9FA289CD6}	CLMH121N063MH121N060	251.13	248.89	0.666666667	MH121N063	MH121N060				213	CLMH121N063MH121N060	8	0.0113	0.021514	0.11	0.025773	0.12	0.030557	0.13	0.025773	0.12
CLMH121N064MH121N066			2004		Existing	assumed Mannings N	MH121N064	MH121N066		T16755	IRWD	PVC	{660A8045-E790-46C7-B676-4B53F07BE7C}	CLMH121N064MH121N066	252.61	249.16	0.666666667	MH121N064	MH121N066				218	CLMH121N064MH121N066	8	0.0158	0.073930	0.18	0.089303	0.19	0.107903	0.20	0.089303	0.19
CLMH121N065MH121N062			2004		Existing	assumed Mannings N	MH121N065	MH121N062		T16755	IRWD	PVC	{924E5D69-85D0-453A-9109-6577A0DAC9A8}	CLMH121N065MH121N062	264.79	262.48	0.666666667	MH121N065	MH121N062				271	CLMH121N065MH121N062	8	0.0085	0.043127	0.16	0.046044	0.16	0.054588	0.18	0.046044	0.16
CLMH121N066MH121N177			2004		Existing	assumed Mannings N	MH121N066	MH121N177		T16755	IRWD	PVC	{E7FC6B05-F62E-4A54-8B3C-345B068F3A64}	C

CLMH121N173MH121N172		2005		Existing	assumed Mannings N	MH121N173	MH121N172		T16676	IRWD	PVC	{8B43B7CA-4E79-45EE-ABC5-BA6D0AC51C6D}	CLMH121N173MH121N172	250.60	244.94	0.666666667	MH121N173	MH121N172		192	CLMH121N173MH121N172	8	0.0295	0.005128	0.04	0.006157	0.05	0.007300	0.05	0.006157	0.05				
CLMH121N174MH121N160		2004		Existing	assumed Mannings N	MH121N174	MH121N160		T16755	IRWD	PVC	{2888A351-9AC5-48E0-9473-8C1A8860DAE7}	CLMH121N174MH121N160	230.71	228.19	0.666666667	MH121N174	MH121N160		129	CLMH121N174MH121N160	8	0.0195	0.149585	0.24	0.175725	0.26	0.208340	0.28	0.175724	0.26				
CLMH121N175MH121N174		2004		Existing	assumed Mannings N	MH121N175	MH121N174		T16755	IRWD	PVC	{A3237BCF-3C58-62FB-953E-44D1B27BC7C3}	CLMH121N175MH121N174	234.99	230.80	0.666666667	MH121N175	MH121N174		358	CLMH121N175MH121N174	8	0.0117	0.110904	0.24	0.122286	0.25	0.146984	0.27	0.122285	0.25				
CLMH121N176MH121N175		2004		Existing	assumed Mannings N	MH121N176	MH121N175		T16755	IRWD	PVC	{A7EFA1C8-C442-49A3-8900-2B06FC7AB72C}	CLMH121N176MH121N175	239.25	235.08	0.666666667	MH121N176	MH121N175		356	CLMH121N176MH121N175	8	0.0117	0.110639	0.23	0.121798	0.25	0.144403	0.27	0.121798	0.25				
CLMH121N177MH121N176		2004		Existing	assumed Mannings N	MH121N177	MH121N176		T16755	IRWD	PVC	{91EF74E3-04E2-4478-A39E-A12F1AE71ED}	CLMH121N177MH121N176	243.50	239.36	0.666666667	MH121N177	MH121N176		353	CLMH121N177MH121N176	8	0.0117	0.104595	0.23	0.111963	0.24	0.132739	0.26	0.111963	0.24				
CLMH121N178MH121N155		2004		Existing	assumed Mannings N	MH121N178	MH121N155		A00334	IRWD	VCP	{E34B36FE-DE6E-4E80-B892-2900F7DB1D2F}	CLMH121N178MH121N155	278.60	273.85	1.500000000	MH121N178	MH121N155		368	CLMH121N178MH121N155	18	0.0129	0.753927	0.21	0.902921	0.23	1.078235	0.25	2.598120	0.40				
CLMH121N179MH121N154		2004		Existing	assumed Mannings N	MH121N179	MH121N154		A00334	IRWD	VCP	{061ACFA8-76AD-46AD-AA89-7AA45F1FA560}	CLMH121N179MH121N154	281.04	280.40	1.500000000	MH121N179	MH121N154		328	CLMH121N179MH121N154	18	0.0020	0.754486	0.31	0.903674	0.34	1.079043	0.37	2.599759	0.61				
CLMH121N302MH121N398		2010		Existing	assumed Mannings N	MH121N302	MH121N398		T16676H	IRWD	PVC	{3443FA31-1C4D-4CC6-B294-97F18CA943AD}	CLMH121N302MH121N398	240.60	236.05	0.666666667	MH121N302	MH121N398		125	CLMH121N302MH121N398	8	0.0364	0.000237	0.01	0.000286	0.01	0.000340	0.01	0.000286	0.01				
CLMH121N303MH121N398		2010		Existing	assumed Mannings N	MH121N303	MH121N398		T16676H	IRWD	PVC	{AF39721E-2140-48A8-96F5-32F5E13E37B0}	CLMH121N303MH121N398	239.70	235.95	0.666666667	MH121N303	MH121N398		100	CLMH121N303MH121N398	8	0.0375	0.000237	0.01	0.000246	0.01	0.000278	0.01	0.000233	0.01				
CLMH121N308MH121N169		2010		Existing	assumed Mannings N	MH121N308	MH121N169		T16676H	IRWD	PVC	{41007F68-D98E-4AD7-B2B2-7A0930B1AC57}	CLMH121N308MH121N169	239.58	233.52	0.666666667	MH121N308	MH121N169		216	CLMH121N308MH121N169	8	0.0281	0.002250	0.03	0.002703	0.03	0.003203	0.04	0.002703	0.03				
CLMH121N309MH121N170		2010		Existing	assumed Mannings N	MH121N309	MH121N170		T16676	IRWD	PVC	{710474DA-CFF4-4856-8D98-7C13C99AAF56}	CLMH121N309MH121N170	243.96	238.22	0.666666667	MH121N309	MH121N170		123	CLMH121N309MH121N170	8	0.0466	0.002208	0.03	0.002649	0.03	0.003141	0.03	0.002649	0.03				
CLMH121N312MH121N400		2006		Existing	assumed Mannings N	MH121N312	MH121N400		A01836	IRWD	VCP	{4D2A58ZE-9D53-4425-B146-2974DFAA4B64}	CLMH121N312MH121N400	275.29	271.36	0.666666667	MH121N312	MH121N400		275	CLMH121N312MH121N400	8	0.0127	0.095092	0.22	0.114028	0.24	0.135195	0.27	0.114028	0.24				
CLMH121N313MH121N314		2007		Existing	assumed Mannings N	MH121N313	MH121N314		T16755C	IRWD	PVC	{9F7D968F-5153-4EC9-B08C-9B8820289748}	CLMH121N313MH121N314	271.76	266.32	0.666666667	MH121N313	MH121N314		180	CLMH121N313MH121N314	8	0.0303	0.009525	0.06	0.010168	0.06	0.012056	0.06	0.010168	0.06				
CLMH121N314MH121N315		2007		Existing	assumed Mannings N	MH121N314	MH121N315		T16755C	IRWD	PVC	{D57D4583-0A4D-4173-9434-03B28B9B98DA}	CLMH121N314MH121N315	266.13	265.11	0.666666667	MH121N314	MH121N315		33	CLMH121N314MH121N315	8	0.0305	0.009525	0.06	0.010168	0.06	0.012056	0.06	0.010168	0.06				
CLMH121N315MH101N050		2007		Existing	assumed Mannings N	MH121N315	MH121N050		T16755C	IRWD	PVC	{B7BFB89E-446D-49D7-83FE-3C0783F858F5}	CLMH121N315MH101N050	264.92	263.39	0.666666667	MH121N315	MH101N050		76	CLMH121N315MH121N050	8	0.0200	0.009525	0.06	0.010168	0.07	0.012056	0.07	0.010168	0.07				
CLMH121N316MH121N317		2007		Existing	assumed Mannings N	MH121N316	MH121N317		T16755C	IRWD	PVC	{B9546BE4-421F-4C59-9CE4-8838B1F035C3}	CLMH121N316MH121N317	273.50	271.70	0.666666667	MH121N316	MH121N317		358	CLMH121N316MH121N317	8	0.0050	0.005689	0.07	0.006075	0.07	0.007201	0.07	0.006075	0.07				
CLMH121N317MH121N318		2007		Existing	assumed Mannings N	MH121N317	MH121N318		T16755C	IRWD	PVC	{53060F47-C533-4646-8076-35CD689C2105}	CLMH121N317MH121N318	271.51	271.07	0.666666667	MH121N317	MH121N318		88	CLMH121N317MH121N318	8	0.0050	0.005689	0.07	0.006075	0.07	0.007201	0.07	0.006075	0.07				
CLMH121N318MH121N320		2006		Existing	assumed Mannings N	MH121N318	MH121N320		T16755C	IRWD	PVC	{252509CB3-6241-4C9D-AF95-62D5B79281E3F}	CLMH121N318MH121N320	270.86	266.73	0.666666667	MH121N318	MH121N320		303	CLMH121N318MH121N320	8	0.0136	0.005689	0.05	0.006075	0.06	0.007201	0.06	0.006075	0.06				
CLMH121N320MH121N321		2007		Existing	assumed Mannings N	MH121N320	MH121N321		T16755C	IRWD	PVC	{13172876-AF5D-4913-B6DD-5CEF7AEF09A2}	CLMH121N320MH121N321	266.52	265.26	0.666666667	MH121N320	MH121N321		252	CLMH121N320MH121N321	8	0.0050	0.005689	0.07	0.006075	0.07	0.007201	0.07	0.006075	0.07				
CLMH121N321MH121N322		2007		Existing	assumed Mannings N	MH121N321	MH121N322		T16755C	IRWD	PVC	{55E41820-94F8-4243-A327-D08A8AD0E40B}	CLMH121N321MH121N322	265.07	261.01	0.666666667	MH121N321	MH121N322		178	CLMH121N321MH121N322	8	0.0228	0.016961	0.08	0.018108	0.08	0.021468	0.09	0.018108	0.08				
CLMH121N322MH121N323		2007		Existing	assumed Mannings N	MH121N322	MH121N323		T16755C	IRWD	PVC	{57D3B2D0-41C3-405C-A48E-689287B23CAE}	CLMH121N322MH121N323	260.82	259.79	0.666666667	MH121N322	MH121N323		45	CLMH121N322MH121N323	8	0.0228	0.016961	0.08	0.018108	0.08	0.021468	0.09	0.018108	0.08				
CLMH121N323MH121N046		2004		Existing	assumed Mannings N	MH121N323	MH121N046		T16755	IRWD	PVC	{F7EF721F-E4DC-4E77-8072-0399152D6645}	CLMH121N323MH121N046	259.58	259.23	0.666666667	MH121N323	MH121N046		62	CLMH121N323MH121N046	8	0.0057	0.017771	0.11	0.018972	0.12	0.022493	0.13	0.018972	0.12				
CLMH121N324MH121N326		2007		Existing	assumed Mannings N	MH121N324	MH121N326		T16755C	IRWD	PVC	{C61964DB-4EC7-4C15-AF62-CBDAF90CD4B1}	CLMH121N324MH121N326	284.26	280.44	0.666666667	MH121N324	MH121N326		249	CLMH121N324MH121N326	8	0.0153	0.003048	0.04	0.003253	0.04	0.003856	0.04	0.003253	0.04				
CLMH121N325MH121N326		2007		Existing	assumed Mannings N	MH121N325	MH121N326		T16755C	IRWD	PVC	{1091CD20-C60A-4138-BC2F-B853078EC1EF}	CLMH121N325MH121N326	281.11	280.44	0.666666667	MH121N325	MH121N326		136	CLMH121N325MH121N326	8	0.0049	0.005839	0.07	0.006234	0.07	0.007390	0.08	0.006234	0.07				
CLMH121N326MH121N327		2007		Existing	assumed Mannings N	MH121N326	MH121N327		T16755C	IRWD	PVC	{D68FAAF4-AFB4-4124-956E-ADDAEFF69AA4}	CLMH121N326MH121N327	280.23	279.76	0.666666667	MH121N326	MH121N327		96	CLMH121N326MH121N327	8	0.0049	0.008887	0.08	0.009487	0.09	0.011246	0.09	0.009487	0.09				
CLMH121N327MH121N328		2007		Existing	assumed Mannings N	MH121N327	MH121N328		T16755C	IRWD	PVC	{34067E42-1308-4CB6-974C-E1AA1FD3481A}	CLMH121N327MH121N328	279.55	279.33	0.666666667	MH121N327	MH121N328		44	CLMH121N327MH121N328	8	0.0050	0.008887	0.08	0.009487	0.09	0.011246	0.09	0.009487	0.09				
CLMH121N328MH121N329		2007		Existing	assumed Mannings N	MH121N328	MH121N329		T16755C	IRWD	PVC	{D5F65D82-1637-4A45-BA39-FCF8B84D691F}	CLMH121N328MH121N329	279.14	277.44	0.666666667	MH121N328	MH121N329		328	CLMH121N328MH121N329	8	0.0052	0.019882	0.12	0.021225	0.13	0.025163	0.14	0.021225	0.13				
CLMH121N329MH121N330		2007		Existing	assumed Mannings N	MH121N329	MH121N330		T16755C	IRWD	PVC	{57027CAF-5A20-45AA-A889-9E945685A84D}	CLMH121N329MH121N330	277.23	276.89	0.666666667	MH121N329	MH121N330		70	CLMH121N329MH121N330	8	0.0048	0.030834	0.15	0.032918	0.16	0.039026	0.17	0.032918	0.16				
CLMH121N330MH121N331		2007		Existing	assumed Mannings N	MH121N330	MH121N331		T16755C	IRWD	PVC	{A48ED04F-CE1F-46E3-B8D6-FAC8A23E3CD8}	CLMH121N330MH121N331	276.69	271.95	0.666666667	MH121N330	MH121N331		328	CLMH121N330MH121N331	8	0.0145	0.030834	0.12	0.032918	0.12	0.039026	0.13	0.032918	0.12				
CLMH121N331MH121N332		2007		Existing	assumed Mannings N	MH121N331	MH121N332		T16755C	IRWD	PVC	{3DD4A2EA-A71B-4654-BDB4-EF24F195FB8C}	CLMH121N331MH121N332	271.76	266.64	0.666666667	MH121N331	MH121N332		343	CLMH121N331MH121N332	8	0.0149	0.033049	0.12	0.035284	0.13	0.041830	0.14	0.035284	0.13				
CLMH121N332MH121N065		2007		Existing	assumed Mannings N	MH121N332	MH121N065		T16755C	IRWD	PVC	{ACF9D1F0-C202-4677-B7F3-AEDBC023FA22}	CLMH121N332MH121N065	266.44	264.98	0.666666667	MH121N332	MH121N065		145	CLMH121N332MH121N065	8	0.0100	0.033049	0.13	0.035284	0.14	0.041830	0.15	0.035284	0.14				
CLMH121N333MH121N337		2006		Existing	assumed Mannings N	MH121N333	MH121N337		T16676G	IRWD	PVC	{9CCEF2EB-7E5D-4B8E-997F-1A3D2D1E3E11}	CLMH121N333MH121N337	256.51	255.86	0.666666667	MH121N333	MH121N337		130	CLMH121N333MH121N337	8	0.0050	0.003874	0.05	0.004651	0.06	0.005512	0.06	0.004651	0.06				
CLMH121N334MH121N336		2006		Existing	assumed Mannings N	MH121N334	MH121N336		T16676G	IRWD	PVC	{835011E7-2451-48BD-B185-ED7C6EE819CE}	CLMH121N334MH121N336	256.73	255.99	0.666666667	MH121N334	MH121N336		149	CLMH121N334MH121N336	8	0.0050	0.004721	0.06	0.005615	0.07	0.006656	0.07	0.005615	0.07				
CLMH121N335MH121N336		2006		Existing	assumed Mannings N	MH121N335	MH121N336		T16676G	IRWD	PVC	{8F1E21CA-E692-48E5-B379-9FE7C82613CA}	CLMH121N335MH121N336	256.17	255.99	0.666666667	MH121N335	MH121N336		37	CLMH121N335MH121N336	8	0.0049	0.001795	0.04	0.002156	0.04	0.002557	0.05	0.002156	0.04				
CLMH121N336MH121N338		2006		Existing	assumed Mannings N	MH121N336	MH121N338		T16676G	IRWD	PVC	{B76808DD-98CE-4517-8986-A7A3827EFAA8}	CLMH121N336MH121N338	255.78	255.47	0.666666667	MH121N336	MH121N338		61	CLMH121N336MH121N338	8	0.0051	0.006517	0.07	0.007771	0.08	0.009214	0.08	0.007771	0.08				
CLMH121N337MH121N338		2006		Existing	assumed Mannings N	MH121N337	MH121N338		T16676G	IRWD	PVC	{B15B8D20-D6B0-4A1B-AC78-0159FCBEE7DF}	CLMH121N337MH121N338	255.66	255.47	0.666666667	MH121N337	MH121N338		38	CLMH121N337MH121N338	8	0.0050	0.006103	0.07	0.007326	0.07	0.008685	0.08	0.007326	0.07				
CLMH121N338MH121N339		2006		Existing	assumed Mannings N	MH121N338	MH121N339		T16676G	IRWD	PVC	{490AE92A-8232-4F93-B301-592BCAE3F420}	CLMH121N338MH121N339	255.27	254.30	0.666666667	MH121N338	MH121N339		65	CLMH121N338MH121N339	8	0.0050	0.012620	0.10	0.015097	0.11	0.017898	0.12	0.015097	0.11				
CLMH121N339MH121N340		2006		Existing	assumed Mannings N	MH121N339	MH121N340		T16676G	IRWD	PVC	{2F692B3B-16D1-42C6-868B-D429E72DEAC3}	CLMH121N339MH121N340	254.10	253.92	0.666666667	MH121N339	MH121N340		33	CLMH121N339MH121N340	8	0.0055	0.015065	0.10	0.018032	0.11	0.021379	0.12	0.018032	0.11				
CLMH121N340MH121N341		2006		Existing	assumed Mannings N	MH121N340	MH121N341		T16676G	IRWD	PVC	{D47C5370-4E70-45BF-9A98-1123A9159E91}	CLMH121N340MH121N341	253.72	252.50	0.666666667	MH121N340	MH121N341		61	CLMH121N340MH121N341	8	0.0200	0.015065	0.08	0.018032	0.09	0.021379	0.09	0.018032	0.09				
CLMH121N341MH121N063		2006		Existing	assumed Mannings N	MH121N341	MH121N063		T16676G	IRWD	PVC	{EA4360965-BADC-4786-9587-C0E6065144FD}	CLMH121N341MH121N063	252.41	251.27	0.666666667	MH121N341	MH121N063		63	CLMH121N341MH121N063	8	0.0100	0.012723	0.10	0.014574	0.11	0.016459	0.12	0.014574	0.11				
CLMH121N342MH121N324		2007		Existing	assumed Mannings N	MH121N342	MH121N324		T16755C	IRWD	PVC	{142EAC95-BEDE-4F4E-9EEB-32B40FC67A97}	CLMH121N342MH121N324	285.08	284.46	0.500000000	MH121N342	MH121N324		122	CLMH121N342MH121N324	6	0.0051	0.003048	0.07	0.003253	0.07	0.003856	0.08	0.003253	0.07				
CLMH121N359MH121N360		2004		Existing	assumed Mannings N	MH121N359	MH121N360		T16676	IRWD	PVC	{5E7D6999-ED46-4222-BF69-B23F4ACD558E}	CLMH121N359MH121N360	249.66	245.92	0.666666667	MH121N359	MH121N360		175	CLMH121N359MH121N360	8	0.0214	0.006753	0.05	0.008106	0.06	0.009608	0.06	0.008106	0.06				
CLMH121N360MH121N047		2004		Existing	assumed Mannings N	MH121N360	MH121N047		T16676	IRWD	PVC	{3DEE0D37-03CC-4861-A801-DE4A10F2E7C2}	CLMH121N360MH121N047	245.83	245.50	0.666666667	MH121N360	MH121N047		17	CLMH121N360MH121N047	8	0.0194	0.009278	0.06	0.010810	0.07	0.012802	0.07	0.010810	0.07				
CLMH121N361MH121N362		2004		Existing	assumed Mannings N	MH121N361	MH121N362		T16676	IRWD	PVC	{8B4B781A-751B-4476-A350-81A24D23BC1C}	CLMH121N361MH121N362	243.41	241.24	0.666666667	MH121N361	MH121N362		105	CLMH121N361MH121N362	8	0.0207	0.010977	0.07	0.012981	0.07	0.015387	0.08	0.012981	0.07				
CLMH121N362MH121N048		2004		Existing	assumed Mannings N	MH121N362	MH121N048		T16676	IRWD	PVC	{93CB9C00-52D7-45A9-8FA4-C10656D32D98}	CLMH121N362MH121N048	241.15	240.44	0.666666667	MH121N362	MH121N048		89	CLMH121N362MH121N048	8	0.0192	0.011345	0.07	0.013424	0.08	0.015910	0.08	0.013424	0.08				
CLMH121N363MH121N045		2004		Existing	assumed Mannings N	MH121N363	MH121N045	ERROR 23	T16676	IRWD	PVC	{702F5D19-A8AD-4130-AF49-3F663D55C1B9}	CLMH121N363MH121N045	238.82	238.60	0.666666667	MH121N363	MH121N045		12	CLMH121N363MH121N045	8	0.0183	0.011345	0.07	0.013424	0.08	0.015910	0.08	0.013424	0.08				
CLMH121N364MH121N052		2004		Existing	assumed Mannings N	MH121N364	MH121N052		T16676	IRWD	PVC	{5AC9D106-42F7-49C6-9871-B6A503A34269}	CLMH121N364MH121N052	242.76	241.24	0.666666667	MH121N364	MH121N052		54	CLMH121N364MH121N052	8	0.0104	0.005605	0.06	0.006728	0.06	0.007976	0.07	0.006728	0.06				
CLMH121N365MH121N044		2010		Existing	assumed Mannings N	MH121N365	MH121N044		T17349	IRWD	PVC	{7358411C-F944-4961-A1BE-E1E8321BCF9}	CLMH121N365MH121N044	253.43	251.75	0.666666667	MH121N365	MH121N044		84	CLMH121N365MH121N044	8	0.0602	0.005497	0.04	0.006600	0.04	0.007822	0.04	0.006600	0.04				
CLMH121N366MH121N365		2010		Existing	assumed Mannings N	MH121N366	MH121N365		T17349	IRWD	PVC	{7A568A36-617E-44EA-AA58-4FB9AFEE0448}	CLMH121N366MH121N365	257.66	253.63	0.666666667	MH121N366	MH121N365		101	CLMH121N366MH121N365	8	0.0400	0.002791	0.03	0.003352	0.03	0.003972	0.04	0.003352	0.03				
CLMH121N367MH121N366		2010		Existing	assumed Mannings N	MH121N367	MH121N366		T17349	IRWD	PVC	{03D90260-7111-42D8-BE3C-BDB349FCF7BB}	CLMH121N367MH121N366	260.63	257.86	0.666666667	MH121N367	MH121N366		111	CLMH121N367MH121N366	8	0.0250	0.001904	0.03	0.002289	0.03	0.002709	0.03	0.002286	0.03				
CLMH121N368MH121N367		2010		Existing	assumed Mannings N	MH121N368	MH121N367		T17349	IRWD	PVC	{6017C3DF-33D2-4DBA-AF87-911B8EE232D9}	CLMH121N368MH121N367	262.80	260.83	0.666666667	MH121N368	MH121N367		101	CLMH121N368MH121N367	8	0.0196	0.000952	0.02	0.001143	0.02	0.001355	0.02	0.001143	0.02				
CLMH121N369MH121N370		2010		Existing	assumed Mannings N	MH121N369	MH121N370		T17349	IRWD	PVC	{8F59CEAD-FB10-4DFD-B724-A7BCB4B9F490}	CLMH121N369MH121N370	260.32	257.80	0.666666667	MH121N369	MH121N370		101	CLMH121N369MH121N370	8	0.0250	0.001860	0.03	0.002235	0.03	0.002647	0.03	0.002235	0.03				
CLMH121N370MH121N371		2010		Existing	assumed Mannings N	MH121N370	MH121N371		T17349	IRWD	PVC	{EF9A79FB-FF6D-473C-A37C-7F256CE82A1B}	CLMH121N370MH121N371	257.60	254.07	0.666666667	MH121N370	MH121N371		101	CLMH121N370MH121N371	8	0.0351	0.002791	0.03	0.003352	0.03	0.003972	0.04	0.003352	0.03				
CLMH121N371MH121N051		2010		Existing	assumed Mannings N	MH121N371	MH121N051		T17349	IRWD	PVC	{B620CA20-7A17-4F9C-B6AA-C15C2CA370}	CLMH121N371MH121N051	253.87	252.47	0.666666667	MH121N371	MH121N051		28	CLMH121N371MH121N051	8	0.0501	0.003483	0.03	0.004183	0.04	0.004957	0.04	0.004183	0.03				
CLMH121N372MH121N364		2004		Existing	assumed Mannings N	MH121N372	MH121N364		T16676	IRWD	PVC	{8A20B0B5-5D8E-4986-AA23-5E0496098AD7}	CLMH121N372MH121N364	251.46	249.56	0.666666667	MH121N372	MH121N364		175	CLMH121N372MH121N364	8	0.0109	0.004349	0.05	0.005222	0.06	0.006189	0.06	0.005222	0.06				
CLMH121N373MH121N053		2004		Existing	assumed Mannings N	MH121N373	MH121N053		T16676	IRWD	PVC	{15540964-660A-4F6E-864D-1551D8016228F}	CLMH121N373MH121N053	246.82	242.69	0.666666667	MH121N373	MH121N053		110	CLMH121N373MH121N053	8	0.0375	0.006557	0.05	0.007871	0.05	0.009330	0.05	0.007871	0.05				
CLMH121N374MH121N369		2010		Existing	assumed Mannings N	MH121N374	MH121N369		T17349	IRWD	PVC	{9E02B265-ED47-4901-A62E-1F539F71C15E}	CLMH121N374MH121N369	262.03	260.52	0.666666667	MH121N374	MH121N369		101	CLMH121N374MH121N369	8	0.0150	0.000952	0.02	0.001143	0.02	0.001355	0.02	0.001143	0.02				
CLMH121N376MH121N363		2010		Existing	assumed Mannings N	MH121N376	MH121N363	ERROR 23	T17349A	IRWD	PVC	{C25DB7DE-751E-4189-B1CE-9990C05583E3}	CLMH121N376MH121N363	244.37	239.02	0.666666667	MH121N376	MH121N363		86	CLMH121N376MH121N363	8	0.0621	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH121N377MH121N362		2010		Existing	assumed Mannings N	MH121N377	MH121N362		T17349A	IRWD	PVC	{54813929-02DB-4FE3-AA50-2E61EE671260}	CLMH121N377MH121N362	246.42	241.35	0.666666667	MH121N377	MH121N362		57	CLMH121N377MH121N362	8	0.0897	0.000394	0.01	0.000442	0.01	0.000523	0.01	0.000442	0.01				
CLMH121N378MH121N361		2010		Existing	assumed Mannings N	MH121N378	MH121N361		T17349A	IRWD	PVC	{CD1E0B88-C6C2-4D85-A3C9-0A353854D080}	CLMH121N378MH121N361	248.68	243.61	0.666666667	MH121N378	MH121N361		57	CLMH121N378MH121N361	8	0.0897	0.001947	0.02	0.002337	0.02	0.002771	0.03	0.002337	0.02				
CLMH121N379MH121N360		2010		Existing	assumed Mannings N	MH121N379	MH121N360		T17349A	IRWD	PVC	{8D084B2F5-F111-46BB-9AD3-1661C19F81DF}	CLMH121N379MH121N360	251.10	246.03	0.666666667	MH121N379	MH121N360		57	CLMH121N379MH121N360	8	0.0897	0.003690	0.03	0.003944	0.03	0.004675	0.03	0.003944	0.03				
CLMH121N380MH121N359		2010		Existing	assumed Mannings N	MH121N380	MH121N359		T17349A	IRWD	PVC	{2396A382-52CB-413D-AB02-7EB31EEDBE28}	CLMH121N380MH121N359	254.98	250.06	0.666666667	MH121N380	MH121N359		54	CLMH121N380MH121N359	8	0.0911	0.001256	0.02	0.001506	0.02	0.001786	0.02	0.001506	0.02				
CLMH121N381MH121N365		2010		Existing	assumed Mannings N	MH121N381	MH121N365		T17349A	IRWD	PVC	{8041F872-BDCB-4EC3-88E3-911A019023DE}	CLMH121N381MH121N365	258.55	253.63	0.666666667	MH121N381	MH121N365		54	CLMH121N381MH121N365	8	0.0911	0.002706	0.02	0.003248	0.03	0.003850	0.03	0.003248	0.03				
CLMH121N382MH121N366		2010		Existing	assumed Mannings N	MH121N382	MH121N366		T17349A	IRWD	PVC	{A627BC32-AE66-42DE-98D4-EF1E88B36065}	CLMH121N382MH121N366	261.96	257.86	0.666666667	MH121N382	MH121N366		54	CLMH121N382MH121N366	8	0.0759	0.000887	0.02	0.001066	0.02	0.001263	0.02	0.001066	0.02				
CLMH121N383MH121N367		2010		Existing	assumed Mannings N	MH121N383	MH121N367		T17349A	IRWD	PVC	{E2ABA781-C06D-4F31-9B75-75BFEBDA3B0F}	CLMH121N383MH121N367	261.70	260.83	0.666666667	MH121N383	MH121N367		54	CLMH121N383MH121N367	8	0.0161	0.000952	0.02	0.001143	0.02	0.001355	0.02	0.001143	0.02				
CLMH121N384MH121N368		2010		Existing	assumed Mannings N	MH121N384	MH121N368		T17349A	IRWD	PVC	{E1AEFAB2-0A1C-4C69-BCF2-59F6C57F066E}	CLMH121N384MH121N368	265.29	263.00	0.666666667	MH121N384	MH121N368		54	CLMH121N384MH121N368	8	0.0424	0.000952	0.02	0.001143	0.02	0.001355	0.02	0.001143	0.02				
CLMH121N385MH121N374		2010		Existing	assumed Mannings N	MH121N385	MH121N374		T17349A	IRWD	PVC	{8DE188C2-22DE-45D0-8548-FF6950BCDD70}	CLMH121N385MH121N374	264.58	262.23	0.666666667	MH121N385	MH121N374		54	CLMH121N385MH121N374	8	0.0420	0.000952	0.02	0.001143	0.02	0.001355	0.02	0.001143	0.02				
CLMH121N386MH121N369		2010		Existing	assumed Mannings N	MH121N386	MH121N369		T17349A	IRWD	PVC	{1E99AE47-0AB1-487A-B544-E9899F5BB7A8}	CLMH121N386MH121N369	263.81	260.52	0.666666667	MH121N386	MH121N369		56	CLMH121N386MH121N369	8	0.0588	0.000908	0.02	0.001092	0.02	0.001293	0.02	0.001092	0.02				
CLMH121N387MH121N370		2010		Existing	assumed Mannings N	MH121N387	MH121N370		T17349A	IRWD	PVC	{40270FE3-91E3-4D56-AC88-8B57EE56B1F7}	CLMH121N387MH121N370	261.56	257.80	0.666666667	MH121N387	MH121N370		56	CLMH121N387MH121N370	8	0.0671	0.000931	0.02	0.001117	0.02	0.001325	0.02	0.001117	0.02				
CLMH121N388MH121N371		2010		Existing	assumed Mannings N	MH121N388	MH121N371		T17349A	IRW

CLMH1215097MH1215118		2009		Existing	assumed Mannings N	MH1215097	MH1215118		T1732OC	IRWD	PVC	{B80B0747-DFF1-4E3F-ADB0-B2A1C2729AFB}	CLMH1215097MH1215118	265.45	264.51	0.666666667	MH1215097	MH1215118			93	CLMH1215097MH1215118	8	0.0101	0.000931	0.02	0.001117	0.02	0.001325	0.03	0.001117	0.02				
CLMH1215098MH1215117		2009		Existing	assumed Mannings N	MH1215098	MH1215117		T1732OC	IRWD	PVC	{D5DB0BD3-AEDE-4C0E-960B-8A92B13A68CD}	CLMH1215098MH1215117	266.81	265.87	0.666666667	MH1215098	MH1215117			93	CLMH1215098MH1215117	8	0.0101	0.000872	0.02	0.001047	0.02	0.001241	0.03	0.001047	0.02				
CLMH1215099MH1215116		2009		Existing	assumed Mannings N	MH1215099	MH1215116		T1732OC	IRWD	PVC	{06CA832D-2FF3-4EC9-8813-557115B502EE}	CLMH1215099MH1215116	267.95	267.01	0.666666667	MH1215099	MH1215116			93	CLMH1215099MH1215116	8	0.0101	0.001664	0.03	0.001998	0.04	0.002369	0.04	0.001998	0.04				
CLMH1215100MH1215127		2009		Existing	assumed Mannings N	MH1215100	MH1215127		T1732OC	IRWD	PVC	{4B109B95-1D15-404B-995F-BFCB79AE6AAB}	CLMH1215100MH1215127	269.71	268.21	0.666666667	MH1215100	MH1215127			129	CLMH1215100MH1215127	8	0.0116	0.001307	0.03	0.001570	0.03	0.001861	0.03	0.001570	0.03				
CLMH1215101MH1215126		2009		Existing	assumed Mannings N	MH1215101	MH1215126		T1732OC	IRWD	PVC	{566EF777-252A-49EE-82A9-836B60DE24E5}	CLMH1215101MH1215126	268.39	266.89	0.666666667	MH1215101	MH1215126			149	CLMH1215101MH1215126	8	0.0101	0.001150	0.02	0.001380	0.03	0.001634	0.03	0.001380	0.03				
CLMH1215102MH1215125		2009		Existing	assumed Mannings N	MH1215102	MH1215125		T1732OC	IRWD	PVC	{614D4861-6EB9-42C1-8F42-E70EC8DE7438}	CLMH1215102MH1215125	267.07	265.57	0.666666667	MH1215102	MH1215125			149	CLMH1215102MH1215125	8	0.0101	0.001070	0.02	0.001284	0.03	0.001523	0.03	0.001284	0.03				
CLMH1215103MH1215123		2009		Existing	assumed Mannings N	MH1215103	MH1215123		T1732OC	IRWD	PVC	{86B44E5F-1F58-4C07-89F8-9B30B8B59B31}	CLMH1215103MH1215123	265.81	264.31	0.666666667	MH1215103	MH1215123			150	CLMH1215103MH1215123	8	0.0100	0.001606	0.03	0.001927	0.03	0.002284	0.04	0.001927	0.03				
CLMH1215104MH1215130		2009		Existing	assumed Mannings N	MH1215104	MH1215130	ERROR 23	T1732OC	IRWD	PVC	{1C595108-3055-4712-8823-44FB13DDD981}	CLMH1215104MH1215130	270.76	269.25	0.666666667	MH1215104	MH1215130			151	CLMH1215104MH1215130	8	0.0100	0.000773	0.02	0.000927	0.02	0.001100	0.02	0.000927	0.02				
CLMH1215105MH1215121		2009		Existing	assumed Mannings N	MH1215105	MH1215121		T1732OC	IRWD	PVC	{5B50EDE1-AC89-429B-B09F-42A152F82B0D}	CLMH1215105MH1215121	269.61	268.55	0.666666667	MH1215105	MH1215121			105	CLMH1215105MH1215121	8	0.0101	0.000851	0.02	0.001023	0.02	0.001214	0.03	0.001023	0.02				
CLMH1215106MH1215119		2009		Existing	assumed Mannings N	MH1215106	MH1215119		T1732OC	IRWD	PVC	{AF60FECE-748D-4A83-8EC2-1BA661A6527E}	CLMH1215106MH1215119	268.30	267.24	0.666666667	MH1215106	MH1215119			105	CLMH1215106MH1215119	8	0.0101	0.001168	0.02	0.001404	0.03	0.001664	0.03	0.001404	0.03				
CLMH1215107MH1215120		2009		Existing	assumed Mannings N	MH1215107	MH1215120		T1732OC	IRWD	PVC	{CEFD307E-A259-4B3B-9395-19A72E2B570D}	CLMH1215107MH1215120	266.99	265.93	0.666666667	MH1215107	MH1215120			105	CLMH1215107MH1215120	8	0.0101	0.000813	0.02	0.000976	0.02	0.001156	0.02	0.000974	0.02				
CLMH1215108MH1215128		2009		Existing	assumed Mannings N	MH1215108	MH1215128		T1732OA	IRWD	PVC	{EFD53F27-B82B-4584-84FC-756AC24D990C}	CLMH1215108MH1215128	269.04	268.00	0.666666667	MH1215108	MH1215128			99	CLMH1215108MH1215128	8	0.0200	0.001051	0.02	0.001261	0.02	0.001496	0.03	0.001261	0.02				
CLMH1215109MH1215129		2009		Existing	assumed Mannings N	MH1215109	MH1215129		T1732OC	IRWD	PVC	{5490B3E4-BC00-4388-86AA-D112800DA326}	CLMH1215109MH1215129	268.89	267.89	0.666666667	MH1215109	MH1215129			99	CLMH1215109MH1215129	8	0.0101	0.001011	0.02	0.001214	0.03	0.001438	0.03	0.001214	0.03				
CLMH1215110MH1215130		2009		Existing	assumed Mannings N	MH1215110	MH1215130	ERROR 23	T1732OC	IRWD	PVC	{680FFAA4-E67C-4B08-8C24-E723E1A64272}	CLMH1215110MH1215130	271.33	269.25	0.666666667	MH1215110	MH1215130			104	CLMH1215110MH1215130	8	0.0200	0.000693	0.02	0.000832	0.02	0.000998	0.02	0.000832	0.02				
CLMH1215111MH1215131		2009		Existing	assumed Mannings N	MH1215111	MH1215131		T1732OC	IRWD	PVC	{9832D365-A98A-427B-B7CA-2AC1DBE8FADC}	CLMH1215111MH1215131	271.52	270.52	0.666666667	MH1215111	MH1215131			91	CLMH1215111MH1215131	8	0.0101	0.001467	0.03	0.001760	0.03	0.002087	0.04	0.001760	0.03				
CLMH1215112MH1215117		2006		Existing	assumed Mannings N	MH1215112	MH1215117		T16666A	IRWD	PVC	{93D44B73-11D7-48A2-B234-26E4137DABC5}	CLMH1215112MH1215117	265.83	265.67	0.666666667	MH1215112	MH1215117			16	CLMH1215112MH1215117	8	0.0100	0.005290	0.06	0.006350	0.06	0.007529	0.07	0.006350	0.06				
CLMH1215113MH1215116		2009		Existing	assumed Mannings N	MH1215113	MH1215116		T1732OB	IRWD	PVC	{FD90B754-AFF2-4E89-B2B3-69198D98F8FB}	CLMH1215113MH1215116	266.98	266.91	0.666666667	MH1215113	MH1215116			84	CLMH1215113MH1215116	8	0.0050	0.001486	0.03	0.001784	0.04	0.002115	0.04	0.001784	0.04				
CLMH1215114MH1215118		2006		Existing	assumed Mannings N	MH1215114	MH1215118		T16666A	IRWD	PVC	{DAB34B46-6D8F-46ED-AE35-E0AA4CAD783C}	CLMH1215114MH1215118	264.52	264.31	0.666666667	MH1215114	MH1215118			15	CLMH1215114MH1215118	8	0.0140	0.006162	0.06	0.007397	0.06	0.008770	0.07	0.007397	0.06				
CLMH1215115MH1215005		2006		Existing	assumed Mannings N	MH1215115	MH1215005		T16666A	IRWD	PVC	{B280846A-C4C7-45DF-8FC6-B85A7E42B2AB}	CLMH1215115MH1215005	262.97	261.31	0.666666667	MH1215115	MH1215005			131	CLMH1215115MH1215005	8	0.0127	0.009728	0.07	0.011678	0.08	0.013845	0.08	0.011678	0.08				
CLMH1215116MH1215008		2009		Existing	assumed Mannings N	MH1215116	MH1215008		T1732OB	IRWD	PVC	{C83C64AB-C8C4-4866-A204-7AB171A23041}	CLMH1215116MH1215008	266.81	266.70	0.666666667	MH1215116	MH1215008			22	CLMH1215116MH1215008	8	0.0050	0.003150	0.05	0.003782	0.05	0.004485	0.06	0.003782	0.05				
CLMH1215117MH1215007		2006		Existing	assumed Mannings N	MH1215117	MH1215007		T16666A	IRWD	PVC	{C8F9D918-BDEF-40FE-BCFE-BE7357D3A83B}	CLMH1215117MH1215007	265.67	264.87	0.666666667	MH1215117	MH1215007			79	CLMH1215117MH1215007	8	0.0101	0.006162	0.06	0.007397	0.07	0.008770	0.07	0.007397	0.07				
CLMH1215118MH1215115		2009		Existing	assumed Mannings N	MH1215118	MH1215115		T16666A	IRWD	PVC	{991A7AE4-2AEC-475F-B1EB-5507B86CA5C7}	CLMH1215118MH1215115	264.31	262.97	0.666666667	MH1215118	MH1215115			103	CLMH1215118MH1215115	8	0.0130	0.007093	0.07	0.008514	0.08	0.010095	0.08	0.008514	0.07				
CLMH1215119MH1215126		2009		Existing	assumed Mannings N	MH1215119	MH1215126		T1732OB	IRWD	PVC	{BA9D0747-65D7-4C6A-827A-424BF54003E8}	CLMH1215119MH1215126	267.04	266.79	0.666666667	MH1215119	MH1215126			84	CLMH1215119MH1215126	8	0.0100	0.003327	0.05	0.003997	0.05	0.004739	0.05	0.003997	0.05				
CLMH1215120MH1215125		2009		Existing	assumed Mannings N	MH1215120	MH1215125		T1732OB	IRWD	PVC	{4A3A2B0E-712C-47EC-9A1D-3E4572E1CDD8}	CLMH1215120MH1215125	265.83	265.47	0.666666667	MH1215120	MH1215125			26	CLMH1215120MH1215125	8	0.0139	0.005290	0.05	0.006352	0.06	0.007529	0.06	0.006352	0.06				
CLMH1215121MH1215127		2009		Existing	assumed Mannings N	MH1215121	MH1215127		T1732OB	IRWD	PVC	{E5D9BD1A-B8EF-4B9F-9CEA-CCE3E78BB88F}	CLMH1215121MH1215127	268.35	268.11	0.666666667	MH1215121	MH1215127			24	CLMH1215121MH1215127	8	0.0100	0.000851	0.02	0.001023	0.02	0.001214	0.03	0.001023	0.02				
CLMH1215123MH1215124		2009		Existing	assumed Mannings N	MH1215123	MH1215124		T1732OB	IRWD	PVC	{B752BA17-06A7-4E9A-ABAC-7B62ABF23A78}	CLMH1215123MH1215124	264.11	263.30	0.666666667	MH1215123	MH1215124			81	CLMH1215123MH1215124	8	0.0100	0.007965	0.07	0.009563	0.07	0.011336	0.08	0.009563	0.07				
CLMH1215124MH1215010		2006		Existing	assumed Mannings N	MH1215124	MH1215010		T16666A	IRWD	PVC	{C08DA85A-4385-4ADF-9790-F9CB7A7BB130}	CLMH1215124MH1215010	263.10	262.69	0.666666667	MH1215124	MH1215010			86	CLMH1215124MH1215010	8	0.0048	0.029407	0.15	0.035207	0.16	0.041741	0.18	0.035207	0.16				
CLMH1215125MH1215123		2009		Existing	assumed Mannings N	MH1215125	MH1215123		T1732OB	IRWD	PVC	{F038D483-6A7F-4873-ADBA-2AF62D684D09}	CLMH1215125MH1215123	265.37	264.21	0.666666667	MH1215125	MH1215123			116	CLMH1215125MH1215123	8	0.0100	0.006359	0.06	0.007636	0.07	0.009052	0.07	0.007636	0.07				
CLMH1215126MH1215120		2009		Existing	assumed Mannings N	MH1215126	MH1215120		T1732OB	IRWD	PVC	{76CA3061-ACBF-4764-A6BC-B0F5D2F27652}	CLMH1215126MH1215120	266.69	265.83	0.666666667	MH1215126	MH1215120			84	CLMH1215126MH1215120	8	0.0100	0.004476	0.05	0.005378	0.06	0.006373	0.06	0.005378	0.06				
CLMH1215127MH1215119		2009		Existing	assumed Mannings N	MH1215127	MH1215119		T1732OB	IRWD	PVC	{ADCAD80F-C913-4DA8-9402-FC07623E1B8}	CLMH1215127MH1215119	268.01	267.14	0.666666667	MH1215127	MH1215119			81	CLMH1215127MH1215119	8	0.0107	0.002158	0.04	0.002594	0.04	0.003074	0.04	0.002594	0.04				
CLMH1215128MH1215132		2009		Existing	assumed Mannings N	MH1215128	MH1215132		T1732OA	IRWD	PVC	{B06A198A-209F-445D-B59C-6F979F7FCDB5}	CLMH1215128MH1215132	266.90	266.49	0.666666667	MH1215128	MH1215132			84	CLMH1215128MH1215132	8	0.0051	0.010583	0.09	0.012604	0.10	0.014946	0.11	0.012604	0.10				
CLMH1215129MH1215128		2009		Existing	assumed Mannings N	MH1215129	MH1215128		T1732OA	IRWD	PVC	{9A6B182B-8D39-438F-82ED-0A41994B787}	CLMH1215129MH1215128	267.69	267.10	0.666666667	MH1215129	MH1215128			116	CLMH1215129MH1215128	8	0.0051	0.008226	0.08	0.009656	0.09	0.011449	0.09	0.009656	0.09				
CLMH1215130MH1215129		2009		Existing	assumed Mannings N	MH1215130	MH1215129	ERROR 23	T1732OB	IRWD	PVC	{97B40125-4D28-437B-995F-A8984385546 3}	CLMH1215130MH1215129	269.05	267.79	0.666666667	MH1215130	MH1215129			126	CLMH1215130MH1215129	8	0.0100	0.005233	0.06	0.006182	0.06	0.007332	0.07	0.006182	0.06				
CLMH1215131MH1215130		2009		Existing	assumed Mannings N	MH1215131	MH1215130	ERROR 23	T1732OB	IRWD	PVC	{4303C7A5-4215-44F1-AB1E-912447E232DD}	CLMH1215131MH1215130	270.32	269.15	0.666666667	MH1215131	MH1215130			147	CLMH1215131MH1215130	8	0.0100	0.003766	0.05	0.004422	0.05	0.005244	0.06	0.004422	0.05				
CLMH1215132MH1215006		2006		Existing	assumed Mannings N	MH1215132	MH1215006		T16666A	IRWD	PVC	{B0928FE8-E08C-4100-B249-F9ABDA1293BD}	CLMH1215132MH1215006	266.29	265.21	0.666666667	MH1215132	MH1215006			113	CLMH1215132MH1215006	8	0.0096	0.018016	0.10	0.021530	0.11	0.025528	0.12	0.021530	0.11				
CLMH1215133MH1215128		2009		Existing	assumed Mannings N	MH1215133	MH1215128		T1732OA	IRWD	PVC	{7E102E01-1E7B-45C1-A2FE-E747D8AA2923}	CLMH1215133MH1215128	271.60	267.10	0.666666667	MH1215133	MH1215128			150	CLMH1215133MH1215128	8	0.0300	0.001406	0.02	0.001688	0.03	0.001988	0.03	0.001688	0.03				
CLMH1215135MH1215114		2011		Existing	assumed Mannings N	MH1215135	MH1215114		T17320	IRWD	CML&C	{6DD8990B-60B7-4609-9610-9DA89BAFEDDE}	CLMH1215135MH1215114	266.34	264.72	0.666666667	MH1215135	MH1215114			162	CLMH1215135MH1215114	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH1215136MH1215115		2011		Existing	assumed Mannings N	MH1215136	MH1215115		T17320	IRWD	PVC	{58DA97F8-59DF-4073-B8AA-5EE8FD841E33}	CLMH1215136MH1215115	264.79	263.17	0.666666667	MH1215136	MH1215115			162	CLMH1215136MH1215115	8	0.0100	0.002635	0.04	0.003164	0.04	0.003750	0.05	0.003164	0.04				
CLMH1215140MH1215141		2011		Existing	assumed Mannings N	MH1215140	MH1215141	error 23, assumed OS	T17319D	IRWD	PVC	{29A4229C-604F-4188-BC83-63851F1109F5}	CLMH1215140MH1215141	272.64	272.44	0.666666667	MH1215140	MH1215141			123	CLMH1215140MH1215141	8	0.0016	0.001502	0.05	0.001802	0.05	0.002136	0.06	0.001802	0.05				
CLMH1215141MH1215033		2011		Existing	assumed Mannings N	MH1215033	MH1215141		T17319D	IRWD	PVC	{8F25D205-6B9D-4546-9CB1-CD845F5344AE}	CLMH1215141MH1215033	272.44	272.29	0.666666667	MH1215141	MH1215033			29	CLMH1215141MH1215033	8	0.0016	0.001495	0.03	0.001798	0.04	0.002128	0.04	0.001798	0.04				
CLMH1215142MH1215129		2009		Existing	assumed Mannings N	MH1215142	MH1215129	ERROR 23	T1732OC	IRWD	PVC	{3069CBA9-8687-4DF0-ACBD-3C300BEADBA2}	CLMH1215142MH1215129	268.17	267.89	0.666666667	MH1215142	MH1215129			30	CLMH1215142MH1215129	8	0.0093	0.001883	0.03	0.002260	0.04	0.002679	0.04	0.002260	0.04				
CLMH1215144MH1215145		2014		Existing	assumed Mannings N	MH1215144	MH1215145		02184E	IRWD	PVC	{6FAE9A07-19FF-4285-8730-16FA50A6715A}	CLMH1215144MH1215145	291.03	289.09	1.000000000	MH1215144	MH1215145			372	CLMH1215144MH1215145	12	0.0052	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.292122	0.27				
CLMH1215145MH1215146		2014		Existing	assumed Mannings N	MH1215145	MH1215146		02184E	IRWD	PVC	{FAF6329D-61AA-4118-950B-77B8EAE8BCF}	CLMH1215145MH1215146	288.99	285.97	1.000000000	MH1215145	MH1215146			389	CLMH1215145MH1215146	12	0.0078	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.293713	0.25				
CLMH1215146MH141W007		2014		Existing	assumed Mannings N	MH1215146	MH141W007		02184E	IRWD	PVC	{C1EE2F7A-002B-4251-B8B1-245638B8AFCA}	CLMH1215146MH141W007	285.87	284.33	1.000000000	MH1215146	MH141W007			307	CLMH1215146MH141W007	12	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.327976	0.29				
CLMH1215147MH1215144	Main after junctio	2014		Existing	assumed Mannings N	MH1215147	MH1215144		17008B	IRWD	PVC	{C9461E96-F1D1-4F84-A670-A12D704ECC33}	CLMH1215147MH1215144	292.73	291.19	0.833333333	MH1215147	MH1215144			383	CLMH1215147MH1215144	10	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.243342	0.33				
CLMH1215148MH1215149		2014		Existing	assumed Mannings N	MH1215148	MH1215149		1700BI	IRWD	PVC	{C3739E3C-28FE-4BD4-A5A9-8016CE50DC3}	CLMH1215148MH1215149	297.95	294.61	0.666666667	MH1215148	MH1215149			108	CLMH1215148MH1215149	8	0.0309	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.036985	0.11				
CLMH1215149MH1215144	Main after junctio	2014		Existing	assumed Mannings N	MH1215149	MH1215144		1700BI	IRWD	PVC	{7EEC9369-5E69-4674-9235-E1CC09FB02}	CLMH1215149MH1215144	294.51	291.36	0.666666667	MH1215149	MH1215144			315	CLMH1215149MH1215144	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.048800	0.16				
CLMH1215152MH1215153		2015		Existing	assumed Mannings N	MH1215152	MH1215153		T17742	IRWD	PVC	{B60BCA0C-AE5D-4DDB-A38A-3ABC31C0F1B5}	CLMH1215152MH1215153	302.37	302.01	0.666666667	MH1215152	MH1215153			83	CLMH1215152MH1215153	8	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002739	0.04				
CLMH1215153MH1215154		2015		Existing	assumed Mannings N	MH1215153	MH1215154		T17742	IRWD	PVC	{69A844ED-8857-4D01-9418-D3224C7265DA}	CLMH1215153MH1215154	301.81	301.59	0.666666667	MH1215153	MH1215154			23	CLMH1215153MH1215154	8	0.0094	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002739	0.04				
CLMH1215154MH1215155		2015		Existing	assumed Mannings N	MH1215154	MH1215155		T17742	IRWD	PVC	{E6E564B2-9ED4-4C65-B03E-1B4604AAC136}	CLMH1215154MH1215155	301.49	301.40	0.666666667	MH1215154	MH1215155			16	CLMH1215154MH1215155	8	0.0055	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004679	0.06				
CLMH1215155MH1215156		2015		Existing	assumed Mannings N	MH1215155	MH1215156		T17742	IRWD	PVC	{419BEBA7-0C9C-4749-928F-835447135A3B1}	CLMH1215155MH1215156	301.20	300.71	0.666666667	MH1215155	MH1215156			69	CLMH1215155MH1215156	8	0.0071	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004679	0.06				
CLMH1215156MH1215157		2015		Existing	assumed Mannings N	MH1215156	MH1215157		T17742	IRWD	PVC	{C08BE357-5914-406F-90BD-73143F2F527B}	CLMH1215156MH1215157	300.61	300.05	0.666666667	MH1215156	MH1215157			56	CLMH1215156MH1215157	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005888	0.06				
CLMH1215157MH1215158		2015		Existing	assumed Mannings N	MH1215157	MH1215158		T17742	IRWD	PVC	{E79F5293-075A-476C-A15E-6777363AF167}	CLMH1215157MH1215158	299.95	299.18	0.666666667	MH1215157	MH1215158			78	CLMH1215157MH1215158	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006918	0.06				
CLMH1215158MH1215159		2015		Existing	assumed Mannings N	MH1215158	MH1215159		T17742	IRWD	PVC	{1F7FE211-432D-41A3-AE09-9C3AB7ED52D6}	CLMH1215158MH1215159	299.08	298.56	0.666666667	MH1215158	MH1215159			250	CLMH1215158MH1215159	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008416	0.07				
CLMH1215162MH1215163		2015		Existing	assumed Mannings N	MH1215162	MH1215163		T17742	IRWD	PVC	{3DFD58AB-3895-4117-BD8C-D007445244C0}	CLMH1215162MH1215163	303.32	302.67	0.666666667	MH1215162	MH1215163			65	CLMH1215162MH1215163	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001940	0.03				
CLMH1215163MH1215154		2015		Existing	assumed Mannings N	MH1215163	MH1215154		T17742	IRWD	PVC	{78AAAC83F-9117-40F4-AE15-83FC9C9658OB}	CLMH1215163MH1215154	302.47	301.69	0.666666667	MH1215163	MH1215154			28	CLMH1215163MH1215154	8	0.0203	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001940	0.03				
CLMH1215090MH1215029		2007		Existing	assumed Mannings N	MH1215090	MH1215029		T16577J	IRWD	PVC	{C46144B4-21DC-4CBE-8FFD-E55A0CA55EF}	CLMH1215090MH1215029	209.92	208.07	0.666666667	MH1215090	MH1215029			186	CLMH1215090MH1215029	8	0.0048	0.002730	0.04	0.002731	0.04	0.002731	0.04	0.002307	0.04				
CLMH1215011MH1215010		2007		Existing	assumed Mannings N	MH1215011	MH1215010		T16577J	IRWD	PVC	{0DD5S336C-B1BF-459F-9270-903286FEE25B}	CLMH1215011MH1215010	223.22	210.02	0.666666667	MH1215011	MH1215010			398	CLMH1215011MH1215010	8	0.0332	0.001921	0.03	0.002307	0.03	0.002735	0.03	0.002307	0.03				
CLMH1215012MH1055204		2011		Existing	assumed Mannings N	MH1215012	MH1055204		T16577J	IRWD	PVC	{70A08D34-2B7D-4077-9EE5-D98C1C4DB196}	CLMH1215012MH1055204	212.00	210.13	0.666666667	MH1215012	MH1055204			264	CLMH1215012MH1055204	8	0.0071	0.017539	0.11	0.021018	0.12	0.024921	0.13	0.021018	0.12				
CLMH1215013MH1055211		2007		Existing	assumed Mannings N	MH1215013	MH1055211		T16577	IRWD	PVC	{DD18EB29-59EF-477B-854F-28C0CAD9FC5F}	CLMH1215013MH1055211	213.43	210.56	0.666666667	MH1215013	MH1055211			233	CLMH1215013MH1055211	8	0.0123	0.006122	0.06	0.007350	0.06	0.008715	0.07	0.007350	0.06				
CLMH1215014MH121W135		2007		Existing	assumed Mannings N	MH1215014	MH121W135		T16577	IRWD	PVC	{4FFD30A3-80AC-4725-B0B8-400BEDAE629C}	CLMH1215014MH121W135	222.58	218.08	0.666666667	MH1215014	MH121W135			75	CLMH1215014MH121W135	8	0.0601	0.003486	0.03	0.004183	0.03	0.004963	0.04	0.004185	0.03				
CLMH1215015MH121W016		2007		Existing	assumed Mannings N	MH1215015	MH121W016		T16653	IRWD	PVC	{96719039-0303-4A2F-A78D-1AA1DF176AAE}	CLMH1215015MH121W016	248.95	242.90	0.666666667	MH1215015	MH121W016			326	CLMH1215015MH121W016	8	0.0186	0.002516	0.03	0.003021	0.04	0.003581	0.04	0.003021	0.04				
CLMH1215016MH121W017		2007		Existing	assumed Mannings N	MH1215016	MH121W017		T16653	IRWD	PVC	{7E64CD2D-38C7-453F-BB4C-7B40B81EF9BO}	CLMH1215016MH121W017	242.80	238.87	0.666666667	MH1215016	MH121W017			318	CLMH1215016MH121W017	8	0.0124	0.002516	0.04	0.003021	0.04	0.003581	0.04	0.003021	0.04				
CLMH1215017MH121W022		2007		Existing	assumed Mannings N	MH1215017	MH121W022		T16653	IRWD	PVC	{8E1C5E8F-4777-43BC-AE8C-D28E337141FE}	CLMH1215017MH121W022	238.77	236.25	0.666666667	MH1215017	MH121W022			217	CLMH1215017MH121W022	8	0.0116	0.017474	0.10	0.020976	0.10	0.024869	0.11	0.020976	0.10				
CLMH1215018MH121W332		2007		Existing	assumed Mannings N	MH1215018	MH121W332		T16653	IRWD	PVC	{C75797CA-1F1B-4A57-9003-CACDBA9026D5}	CLMH1215018MH121W332	235.27	227.85	0.666666667	MH1215018	MH121W332			195	CLMH1215018MH121W332	8	0.0381	0.029974	0.09	0.035985	0.10	0.042664	0.11	0.035985	0.10				
CLMH1215019MH121W029		2007		Existing	assumed Mannings N	MH1215019	MH121W029		T16653	IRWD	PVC	{CA8554F7-B61D-41D1-87E1-8E92D2D9D52F}	CLMH1215019MH121W029	235.61	232.22	0.666666667	MH1215019	MH121W029			309	CLMH1215019MH121W029	8	0.0110	0.001605	0.03	0.001927	0.03	0.002284	0.04	0.001927	0.03				
CLMH1215020MH121W026		2007		Existing	assumed Mannings N	MH1215020	MH121W026		T16653	IRWD	PVC	{3EFD31E2-2B6D-4F37-A253-C2E600257478}	CLMH1215020MH121W026	239.67	236.92	0.666666667	MH1215020	MH121W026			275	CLMH1215020MH121W026	8	0.0100	0.005052	0.06	0.006063	0.06	0.007191	0.07	0.006063	0.06				
CLMH1215021MH121W254		2007		Existing	assumed Mannings N	MH1215021	MH121W254	ERROR 23	T16653	IRWD	PVC	{5103CE42-232B-4DF0-93EB-CAE89A1CA52D}	CLMH1215021MH121W254	246.64	243.34	0.666666667	MH1215021	MH121W254			114	CLMH1215021MH121W254	8	0.0289	0.000000	0.04	0.000000	0.04	0.000000	0.05	0.000000	0.04				
CLMH1215022MH121W018		2007		Existing	assumed Mannings N	MH1215022	MH121W018		T16653	IRWD	PVC	{C0F5D479-AE4C-4218-9E34-067CFDF9809E}	CLMH1215022MH121W018	236.15	235.37	0.666666667	MH1215022	MH121W018		

CLMH121W100MH121W237		2005		Existing	assumed Mannings N	MH121W100	MH121W237	ERROR 23	T16928	IRWD	PVC	{832EF4B7-D270-4BD3-BA49-C9A2A656D289}	CLMH121W100MH121W237	231.96	231.12	0.66666667	MH121W100	MH121W237			249	CLMH121W100MH121W237	8	0.0034	0.008660	0.09	0.010394	0.10	0.012326	0.10	0.010394	0.10		
CLMH121W101MH121W100		2005		Existing	assumed Mannings N	MH121W101	MH121W100		T16928	IRWD	PVC	{91B01666-CF1C-48FE-AECD-B866906FB54}	CLMH121W101MH121W100	234.28	232.13	0.66666667	MH121W101	MH121W100			99	CLMH121W101MH121W100	8	0.0217	0.007380	0.06	0.008858	0.06	0.010503	0.07	0.008858	0.06		
CLMH121W102MH121W100		2005		Existing	assumed Mannings N	MH121W102	MH121W100		T16928	IRWD	PVC	{AC5FD645-204F-435D-BF97-4FA936B0E611}	CLMH121W102MH121W100	237.46	232.22	0.66666667	MH121W102	MH121W100			214	CLMH121W102MH121W100	8	0.0245	0.001281	0.02	0.001536	0.03	0.001822	0.03	0.001536	0.03		
CLMH121W103MH121W101		2005		Existing	assumed Mannings N	MH121W103	MH121W101		T16928	IRWD	PVC	{C9EABA28-B1D4-438B-AB61-D03D5C7F430D}	CLMH121W103MH121W101	236.38	234.38	0.66666667	MH121W103	MH121W101			92	CLMH121W103MH121W101	8	0.0217	0.004674	0.04	0.005610	0.05	0.006653	0.05	0.005610	0.05		
CLMH121W104MH121W103		2005		Existing	assumed Mannings N	MH121W104	MH121W103		T16928	IRWD	PVC	{6524EF6C-1E2B-45A5-BD91-B051622FEB46}	CLMH121W104MH121W103	238.42	236.47	0.66666667	MH121W104	MH121W103			199	CLMH121W104MH121W103	8	0.0098	0.001645	0.03	0.001974	0.04	0.002342	0.04	0.001974	0.04		
CLMH121W105MH121W107		2010		Existing	assumed Mannings N	MH121W105	MH121W107		T16928C	IRWD	PVC	{C85D1949-BCE7-4DB1-90E5-29268E3DE037}	CLMH121W105MH121W107	241.13	238.19	0.66666667	MH121W105	MH121W107			83	CLMH121W105MH121W107	8	0.0354	0.005430	0.04	0.006521	0.05	0.007732	0.05	0.006521	0.05		
CLMH121W107MH121W108		2010		Existing	assumed Mannings N	MH121W107	MH121W108		T16928C	IRWD	PVC	{3F1C5708-7B76-4341-91EF-EC73A621D421}	CLMH121W107MH121W108	238.08	237.69	0.66666667	MH121W107	MH121W108			43	CLMH121W107MH121W108	8	0.0091	0.007247	0.07	0.008702	0.07	0.010319	0.08	0.008702	0.07		
CLMH121W108MH121W096		2006		Existing	assumed Mannings N	MH121W108	MH121W096		T16928	IRWD	PVC	{71DBDABF-AEE0-4F1B-B3D8-A0D103382229}	CLMH121W108MH121W096	237.50	234.38	0.66666667	MH121W108	MH121W096			110	CLMH121W108MH121W096	8	0.0284	0.015947	0.07	0.019147	0.08	0.022703	0.09	0.019147	0.08		
CLMH121W109MH121W105		2010		Existing	assumed Mannings N	MH121W109	MH121W105		T16928C	IRWD	PVC	{7EABEE1A-EF96-4917-BCEC-76189F1B2AAE}	CLMH121W109MH121W105	245.44	241.33	0.66666667	MH121W109	MH121W105			210	CLMH121W109MH121W105	8	0.0196	0.003635	0.04	0.004365	0.04	0.005175	0.05	0.004365	0.04		
CLMH121W110MH121W108		2006		Existing	assumed Mannings N	MH121W110	MH121W108		T16928	IRWD	PVC	{5A8E458B-2AEF-4DF7-8B11-9093B6875C9D}	CLMH121W110MH121W108	240.46	237.69	0.66666667	MH121W110	MH121W108			107	CLMH121W110MH121W108	8	0.0259	0.008223	0.06	0.009873	0.06	0.011706	0.07	0.009873	0.06		
CLMH121W111MH121W110		2006		Existing	assumed Mannings N	MH121W111	MH121W110		T16928	IRWD	PVC	{15438E6E-4553-4155-A3B4-B47036757BE4}	CLMH121W111MH121W110	243.22	240.66	0.66666667	MH121W111	MH121W110			117	CLMH121W111MH121W110	8	0.0219	0.006774	0.05	0.008132	0.06	0.009642	0.06	0.008132	0.06		
CLMH121W112MH121W115		2010		Existing	assumed Mannings N	MH121W112	MH121W115		T16928C	IRWD	PVC	{EFE53C48-5C43-4536-BDB9-B6E691AF0EE9}	CLMH121W112MH121W115	247.64	246.61	0.66666667	MH121W112	MH121W115			109	CLMH121W112MH121W115	8	0.0096	0.002597	0.04	0.003117	0.04	0.003696	0.05	0.003117	0.04		
CLMH121W113MH121W111		2006		Existing	assumed Mannings N	MH121W113	MH121W111		T16928	IRWD	PVC	{DB8E4E995-2E08-406D-82F1-04AEE3F5D6C1}	CLMH121W113MH121W111	245.25	243.41	0.66666667	MH121W113	MH121W111			117	CLMH121W113MH121W111	8	0.0157	0.005692	0.05	0.006833	0.06	0.008102	0.06	0.006833	0.06		
CLMH121W114MH121W081		2006		Existing	assumed Mannings N	MH121W114	MH121W081		T16690	IRWD	PVC	{B5DDC895-15C5-4ED2-8609-F12D0B3A2D5E}	CLMH121W114MH121W081	235.46	230.85	0.66666667	MH121W114	MH121W081			102	CLMH121W114MH121W081	8	0.0452	0.006946	0.05	0.008339	0.05	0.009888	0.05	0.008339	0.05		
CLMH121W115MH121W067		2014		Existing	assumed Mannings N	MH121W115	MH121W113		T16928	IRWD	PVC	{78660868-5675-4ECA-B23F-C9EA01DD4989}	CLMH121W115MH121W113	246.41	245.44	0.66666667	MH121W115	MH121W113			87	CLMH121W115MH121W113	8	0.0111	0.004155	0.05	0.004989	0.05	0.005914	0.06	0.004989	0.05		
CLMH121W116MH121W115		2006		Existing	assumed Mannings N	MH121W116	MH121W115		T16928	IRWD	PVC	{D568E399-37C9-456D-9B56-A95093F1028C}	CLMH121W116MH121W115	247.27	246.61	0.66666667	MH121W116	MH121W115			30	CLMH121W116MH121W115	8	0.0220	0.001558	0.03	0.001872	0.03	0.002218	0.03	0.001872	0.03		
CLMH121W117MH121W121		2010		Existing	assumed Mannings N	MH121W117	MH121W121		T16928C	IRWD	PVC	{C281CFA7-AD9B-4A80-94EE-799C0B26A61F}	CLMH121W117MH121W121	244.03	238.16	0.66666667	MH121W117	MH121W121			326	CLMH121W117MH121W121	8	0.0180	0.002654	0.04	0.003186	0.04	0.003777	0.04	0.003186	0.04		
CLMH121W118MH121W084		2005		Existing	assumed Mannings N	MH121W118	MH121W084	ERROR 23	T16690	IRWD	PVC	{C046A3F8-BBB8-481A-863E-71A638E(E23D}	CLMH121W118MH121W084	244.46	242.26	0.66666667	MH121W118	MH121W084			117	CLMH121W118MH121W084	8	0.0188	0.001385	0.03	0.001662	0.03	0.001972	0.03	0.001662	0.03		
CLMH121W119MH121W122		2010		Existing	assumed Mannings N	MH121W119	MH121W122		T16928C	IRWD	PVC	{3A75E3B3-615F-48BA-948F-613348940424C}	CLMH121W119MH121W122	246.97	244.36	0.66666667	MH121W119	MH121W122			330	CLMH121W119MH121W122	8	0.0079	0.002061	0.04	0.002474	0.04	0.002931	0.04	0.002474	0.04		
CLMH121W120MH121W089		2004		Existing	assumed Mannings N	MH121W120	MH121W089		T16755	IRWD	PVC	{52F6983D-6DEA-4599-82C3-7E533D7961DA}	CLMH121W120MH121W089	231.30	230.80	0.66666667	MH121W120	MH121W089			178	CLMH121W120MH121W089	8	0.0028	0.009232	0.09	0.011080	0.10	0.013139	0.11	0.011080	0.10		
CLMH121W121MH121W120		2010		Existing	assumed Mannings N	MH121W121	MH121W120		T16928C	IRWD	PVC	{59708D09-ACB4-4C04-9C58-6B94AD731991}	CLMH121W121MH121W120	237.96	231.71	0.66666667	MH121W121	MH121W120			112	CLMH121W121MH121W120	8	0.0560	0.007469	0.04	0.008965	0.05	0.010629	0.05	0.008965	0.05		
CLMH121W122MH121W121		2010		Existing	assumed Mannings N	MH121W122	MH121W121		T16928C	IRWD	PVC	{AA61CE9D-B0E4-4118-BB28-D172B573D4AA}	CLMH121W122MH121W121	244.17	238.06	0.66666667	MH121W122	MH121W121			233	CLMH121W122MH121W121	8	0.0256	0.004815	0.04	0.005779	0.05	0.006852	0.05	0.005779	0.05		
CLMH121W123MH121W129		2011		Existing	assumed Mannings N	MH121W123	MH121W129		T16577J	IRWD	PVC	{1E9D5E66-6DE0-6663-83FF-7F08C113CA9B}	CLMH121W123MH121W129	215.76	214.24	0.66666667	MH121W123	MH121W129			81	CLMH121W123MH121W129	8	0.0116	0.002022	0.03	0.002427	0.04	0.002876	0.04	0.002427	0.04		
CLMH121W125MH121W131		2011		Existing	assumed Mannings N	MH121W125	MH121W131		T16577J	IRWD	PVC	{7CC38519-535C-49EC-859C-2C021B8D7AE1}	CLMH121W125MH121W131	217.37	211.79	0.66666667	MH121W125	MH121W131			115	CLMH121W125MH121W131	8	0.0486	0.006519	0.04	0.007826	0.05	0.009277	0.05	0.007826	0.05		
CLMH121W127MH121W125		2011		Existing	assumed Mannings N	MH121W127	MH121W125		T16577J	IRWD	PVC	{7F0CCB70-F10F-4CCA-AFFF-CEAAAF4113B4}	CLMH121W127MH121W125	220.17	217.37	0.66666667	MH121W127	MH121W125			187	CLMH121W127MH121W125	8	0.0150	0.003803	0.04	0.004564	0.04	0.005411	0.05	0.004564	0.04		
CLMH121W129MH122N325		2011		Existing	assumed Mannings N	MH121W129	MH122N325		T16577J	IRWD	PVC	{D6828E51-72CD-4D2C-9369-95626ACO2E63}	MH121W129-MH122N325	214.14	195.98	0.66666667	MH121W129	MH122N325			153	CLMH121W129MH122N325	8	0.1193	0.004022	0.03	0.004829	0.03	0.005724	0.03	0.004845	0.12		
CLMH121W131MH122N327		2011		Existing	assumed Mannings N	MH121W131	MH122N327		T16577J	IRWD	PVC	{FD077BD8-4080-4297-88F0-138F389FA923}	MH121W131-MH122N327	211.69	200.97	0.66666667	MH121W131	MH122N327			110	CLMH121W131MH122N327	8	0.0978	0.009232	0.04	0.011084	0.05	0.013140	0.05	0.011084	0.17		
CLMH121W133MH121W125		2011		Existing	assumed Mannings N	MH121W133	MH121W125		T16577J	IRWD	PVC	{D6AC455A-9831-4BAE-8E4F-30F659AC1734}	CLMH121W133MH121W125	220.25	217.47	0.66666667	MH121W133	MH121W125			153	CLMH121W133MH121W125	8	0.0101	0.004716	0.05	0.005662	0.06	0.006711	0.06	0.005662	0.06		
CLMH121W135MH121W012		2008		Existing	assumed Mannings N	MH121W135	MH121W012		T16577	IRWD	PVC	{51485EFC-9DBA-44BD-9A2F-BBC47CEC4E1E}	CLMH121W135MH121W012	217.98	212.10	0.66666667	MH121W135	MH121W012			167	CLMH121W135MH121W012	8	0.0224	0.012422	0.07	0.014913	0.08	0.017682	0.08	0.014913	0.08		
CLMH121W137MH121W014		2007		Existing	assumed Mannings N	MH121W137	MH121W014		T16577	IRWD	PVC	{0EE1158A-CF5C-42E4-BAB3-426DEC52FB31}	CLMH121W137MH121W014	224.44	222.76	0.66666667	MH121W137	MH121W014			118	CLMH121W137MH121W014	8	0.0142	0.001921	0.03	0.002307	0.04	0.002735	0.04	0.002307	0.04		
CLMH121W139MH121W013		2007		Existing	assumed Mannings N	MH121W139	MH121W013		T16577	IRWD	PVC	{8FE038ZC-77F8-4D89-B127-C70596QCEFF3}	CLMH121W139MH121W013	214.23	213.63	0.66666667	MH121W139	MH121W013			149	CLMH121W139MH121W013	8	0.0040	0.004655	0.06	0.005589	0.07	0.006627	0.07	0.005589	0.07		
CLMH121W148MH121W021		2009		Existing	assumed Mannings N	MH121W148	MH121W021		T16755H	IRWD	PVC	{AC8CZEE9-3A5A-4DB4-AC6A-B0A7BFC48366}	CLMH121W148MH121W021	247.30	246.84	0.66666667	MH121W148	MH121W021			186	CLMH121W148MH121W021	8	0.0025	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W149MH121W155		2009		Existing	assumed Mannings N	MH121W149	MH121W155		T16755H	IRWD	PVC	{A681B28B-0D9C-4CED-AE0C-46DD7828C18E}	CLMH121W149MH121W155	253.57	251.89	0.66666667	MH121W149	MH121W155			130	CLMH121W149MH121W155	8	0.0130	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W150MH121W151		2009		Existing	assumed Mannings N	MH121W150	MH121W151		T16755H	IRWD	PVC	{EAFFA517-64A6-48C3-99EA-5CE27A910E50}	CLMH121W150MH121W151	253.97	253.78	0.66666667	MH121W150	MH121W151			48	CLMH121W150MH121W151	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W151MH121W155		2009		Existing	assumed Mannings N	MH121W151	MH121W155		T16755H	IRWD	PVC	{70419012-B8FE-4523-A020-152F09D2E212}	CLMH121W151MH121W155	253.68	251.89	0.66666667	MH121W151	MH121W155			61	CLMH121W151MH121W155	8	0.0294	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W152MH121W148		2009		Existing	assumed Mannings N	MH121W152	MH121W148		T16755H	IRWD	PVC	{DC08C70C-FA3B-47F3-9292-E42B9B6009331}	CLMH121W152MH121W148	249.30	247.50	0.66666667	MH121W152	MH121W148			55	CLMH121W152MH121W148	8	0.0326	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W153MH121W152		2009		Existing	assumed Mannings N	MH121W153	MH121W152		T16755H	IRWD	PVC	{A2718AF2-508A-4D1A-8E9C-F8D2A805FF5}	CLMH121W153MH121W152	250.66	249.50	0.66666667	MH121W153	MH121W152			167	CLMH121W153MH121W152	8	0.0072	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W154MH121W153		2009		Existing	assumed Mannings N	MH121W154	MH121W153		T16755H	IRWD	PVC	{298BE269-563B-4220-ADE8-F9F47291ED2}	CLMH121W154MH121W153	253.67	250.76	0.66666667	MH121W154	MH121W153			60	CLMH121W154MH121W153	8	0.0489	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W155MH121W153		2009		Existing	assumed Mannings N	MH121W155	MH121W153		T16755H	IRWD	PVC	{36870B6A-B6B2-470E-B2E4-F64279714BF3}	CLMH121W155MH121W153	251.69	250.86	0.66666667	MH121W155	MH121W153			205	CLMH121W155MH121W153	8	0.0041	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH121W156MH121W018		2009		Existing	assumed Mannings N	MH121W156	MH121W018		T16653E	IRWD	PVC	{76F8B34C-F206-43AA-92D1-4A0248587ABC}	CLMH121W156MH121W018	237.89	235.47	0.66666667	MH121W156	MH121W018			240	CLMH121W156MH121W018	8	0.0100	0.003922	0.05	0.004709	0.05	0.005585	0.06	0.004709	0.05		
CLMH121W157MH121W156		2009		Existing	assumed Mannings N	MH121W157	MH121W156		T16653E	IRWD	PVC	{21B2315C-B060-406A-BA2C-A2516A4E0BD0}	CLMH121W157MH121W156	245.57	237.96	0.66666667	MH121W157	MH121W156			253	CLMH121W157MH121W156	8	0.0301	0.003922	0.04	0.004709	0.04	0.005585	0.04	0.004709	0.04		
CLMH121W158MH121W157		2009		Existing	assumed Mannings N	MH121W158	MH121W157		T16653E	IRWD	PVC	{8A290DF8-B528-448B-BAB9-6D918163B2B1}	CLMH121W158MH121W157	247.89	245.77	0.66666667	MH121W158	MH121W157			241	CLMH121W158MH121W157	8	0.0150	0.000950	0.02	0.001141	0.02	0.001355	0.03	0.001141	0.02		
CLMH121W159MH121W160		2009		Existing	assumed Mannings N	MH121W159	MH121W160		T16653E	IRWD	PVC	{004F0062-BD8E-4084-B412-598D3A8C4489}	CLMH121W159MH121W160	246.61	239.06	0.66666667	MH121W159	MH121W160			149	CLMH121W159MH121W160	8	0.0350	0.001288	0.02	0.001547	0.02	0.001813	0.03	0.001547	0.02		
CLMH121W160MH121W022		2009		Existing	assumed Mannings N	MH121W160	MH121W022		T16653E	IRWD	PVC	{206DCFED-2BA8-4687-B726-9058586C651B}	CLMH121W160MH121W022	238.96	236.35	0.66666667	MH121W160	MH121W022			261	CLMH121W160MH121W022	8	0.0100	0.008578	0.07	0.010300	0.08	0.012210	0.08	0.010300	0.08		
CLMH121W161MH121W163		2009		Existing	assumed Mannings N	MH121W161	MH121W163		T16653D	IRWD	PVC	{725781D6-C067-4F82-86F5-FF52858CC241}	CLMH121W161MH121W163	254.32	247.68	0.66666667	MH121W161	MH121W163			163	CLMH121W161MH121W163	8	0.0250	0.002318	0.03	0.002782	0.03	0.003299	0.04	0.002782	0.03		
CLMH121W162MH121W163		2009		Existing	assumed Mannings N	MH121W162	MH121W163		T16653D	IRWD	PVC	{2E9A2EAC-6A53-440A-A023-C9565058B5C4}	CLMH121W162MH121W163	252.60	247.58	0.66666667	MH121W162	MH121W163			107	CLMH121W162MH121W163	8	0.0470	0.002814	0.03	0.003378	0.03	0.004004	0.03	0.003378	0.03		
CLMH121W163MH121W024		2009		Existing	assumed Mannings N	MH121W163	MH121W024		T16653D	IRWD	PVC	{1CDA0D75D-518A-4D25-9555-CD0D24C92EF2}	CLMH121W163MH121W024	247.28	245.93	0.66666667	MH121W163	MH121W024			155	CLMH121W163MH121W024	8	0.0087	0.005132	0.06	0.006160	0.06	0.007303	0.07	0.006160	0.06		
CLMH121W164MH121W024		2009		Existing	assumed Mannings N	MH121W164	MH121W024		T16653F	IRWD	PVC	{BBC16E1E-491B-478E-B77C-1ABCBF4568 7C}	CLMH121W164MH121W024	248.13	245.42	0.66666667	MH121W164	MH121W024			211	CLMH121W164MH121W024	8	0.0100	0.003606	0.05	0.004329	0.05	0.005132	0.06	0.004329	0.05		
CLMH121W165MH121W023		2010		Existing	assumed Mannings N	MH121W165	MH121W023		T16653F	IRWD	PVC	{DCC9052C-4B59-4F9A-BAB5-59A9B588A110}	CLMH121W165MH121W023	245.43	242.68	0.66666667	MH121W165	MH121W023			276	CLMH121W165MH121W023	8	0.0100	0.002913	0.04	0.003495	0.05	0.004145	0.05	0.003495	0.05		
CLMH121W230MH121W079		2010		Existing	assumed Mannings N	MH121W230	MH121W079		T16690	IRWD	PVC	{3F7FD9D9-4BA9-4F47-82D4-5E9BF51B5F1B}	CLMH121W230MH121W079	224.57	221.66	0.66666667	MH121W230	MH121W079			188	CLMH121W230MH121W079	8	0.0388	0.005128	0.04	0.006157	0.04	0.007300	0.05	0.006157	0.04		
CLMH121W231MH121W236		2010		Existing	assumed Mannings N	MH121W231	MH121W236	ERROR 23	T17348	IRWD	PVC	{14E138C4-BC50-460C-88E5-7A651D23825E}	CLMH121W231MH121W236	222.89	222.53	0.66666667	MH121W231	MH121W236			72	CLMH121W231MH121W236	8	0.0050	0.012618	0.10	0.015148	0.11	0.017957	0.12	0.015148	0.11		
CLMH121W232MH121W236		2010		Existing	assumed Mannings N	MH121W232	MH121W236	ERROR 23	T17348	IRWD	PVC	{77559423-A718-4378-B223-21740B11F99C}	CLMH121W232MH121W236	227.74	222.73	0.66666667	MH121W232	MH121W236			167	CLMH121W232MH121W236	8	0.0300	0.000908	0.02	0.001092	0.02	0.001293	0.02	0.001092	0.02		
CLMH121W233MH121W231		2010		Existing	assumed Mannings N	MH121W233	MH121W231		T17348	IRWD	PVC	{DBDB83F0-6856-4386-BF88-8F4917EAFAFE}	CLMH121W233MH121W231	223.66	222.99	0.66666667	MH121W233	MH121W231			134	CLMH121W233MH121W231	8	0.0050	0.008527	0.08	0.010236	0.09	0.012135	0.10	0.010236	0.09		
CLMH121W234MH121W233		2010		Existing	assumed Mannings N	MH121W234	MH121W233		T17348	IRWD	PVC	{B040FFD7-A6D1-4123-B4C9-43F6A9AB3D00}	CLMH121W234MH121W233	225.63	223.76	0.66666667	MH121W234	MH121W233			143	CLMH121W234MH121W233	8	0.0140	0.004524	0.05	0.005429	0.05	0.006437	0.06	0.005429	0.05		
CLMH121W235MH121W250		2010		Existing	assumed Mannings N	MH121W235	MH121W250		T17348	IRWD	PVC	{86E87614-CD07-489D-ABE5-897E14BF5E18}	CLMH121W235MH121W250	217.55	216.30	0.66666667	MH121W235	MH121W250			92	CLMH121W235MH121W250	8	0.0136	0.014197	0.08	0.017045	0.09	0.020205	0.10	0.017045	0.09		
CLMH121W236MH121W235		2010		Existing	assumed Mannings N	MH121W236	MH121W235	ERROR 23	T17348	IRWD	PVC	{13E2580C-AA88-4201-BF54-B1FF1971D2CE}	CLMH121W236MH121W235	222.33	217.75	0.66666667	MH121W236	MH121W235			110	CLMH121W236MH121W235	8	0.0418	0.013526	0.06	0.016240	0.07	0.019250	0.07	0.016240	0.07		
CLMH121W237MH121W080		2010		Existing	assumed Mannings N	MH121W237	MH121W080	ERROR 23	T16928	IRWD	PVC	{96B8F38D-C2E0-4BF6-8C57-ABF3300ADA4A}	CLMH121W237MH121W080	231.02	227.74	0.66666667	MH121W237	MH121W080			138	CLMH121W237MH121W080	8	0.0238	0.011322	0.08	0.013590	0.09	0.016114	0.10	0.013590	0.09		
CLMH121W238MH121W080		2005		Existing	assumed Mannings N	MH121W238	MH121W080	ERROR 23	T16928	IRWD	PVC	{9F3E4A13-8969-40AC-B5EE-01E1570C6B48}	CLMH121W238MH121W080	227.74	226.28	0.66666667	MH121W238	MH121W080			249	CLMH121W238MH121W080	8	0.0059	0.013009	0.10	0.015616	0.11	0.018515	0.12	0.015616	0.13		
CLMH121W239MH121W101		2010		Existing	assumed Mannings N	MH121W239	MH121W101		T17348	IRWD	PVC	{899B3E5F-2072-4B31-84C7-FA91AAC1C1A5}	CLMH121W239MH121W101	236.17	234.79	0.66666667	MH121W239	MH121W101			95	CLMH121W239MH121W101	8	0.0145	0.002706	0.04	0.003248	0.04	0.003850	0.04	0.003248	0.04		
CLMH121W240MH121W239		2010		Existing	assumed Mannings N	MH121W240	MH121W239		T17348	IRWD	PVC	{EB400794-7958-4D91-823D-B85BAEA6B098}	CLMH121W240MH121W239	236.63	236.27	0.66666667	MH121W240	MH121W239			73	CLMH121W240MH121W239	8	0.0049	0.000606	0.02	0.000726	0.02	0.000863	0.02	0.000726	0.02		
CLMH121W241MH121W239		2010		Existing	assumed Mannings N	MH121W241	MH121W239		T17348	IRWD	PVC	{CED1F2A5-168D-43AA-8C44-C594CE42936C}	CLMH121W241MH121W239	238.05	236.42	0.66666667	MH121W241	MH121W239			84	CLMH121W241MH121W239	8	0.0194	0.001623	0.03	0.001949	0.03	0.002310	0.03	0.001949	0.03		
CLMH121W242MH121W231		2010		Existing	assumed Mannings N	MH121W242	MH121W231		T17348	IRWD	PVC	{D5EE08F7-FC71-489D-B9E7-3AADD85B1CC2}	CLMH121W242MH121W231	228.10	223.14	0.66666667	MH121W242	MH121W231			167	CLMH121W242MH121W231	8	0.0297	0.002381	0.03	0.002859	0.03	0.003389	0.04	0.002859	0.03		
CLMH121W243MH121W231		2010		Existing	assumed Mannings N	MH121W243	MH121W231		T17348	IRWD	PVC	{8D1AC8DC-8893-4104-952A-3F9E84C321A4}	CLMH121W243MH121W231	227.74	223.14	0.66666667	MH121W243	MH121W231			155	CLMH121W243MH121W231	8	0.0297	0.001710	0.03	0.002053	0.03	0.002433	0.03	0.002053	0.03		
CLMH121W244MH121W233		2010		Existing	assumed Mannings N	MH121W244	MH121W233		T17348	IRWD	PVC	{DF7D600C-EC1D-489E-A801-25F619A85A80}	CLMH121W244MH121W233	228.04	223.86	0.66666667	MH121W244	MH121W233			167	CLMH121W244MH121W233	8	0.0250	0.002012	0.03	0.002416	0.03	0.002865	0.03	0.002416	0.03		
CLMH121W245MH121W234		2010		Existing	assumed Mannings N	MH121W245	MH121W234		T17348	IRWD	PVC	{C4EF7079-B411-4EDE-BE0B-B0147095D476}	CLMH121W245MH121W234	227.50	225.88	0.66666667	MH121W245	MH121W234			167	CLMH121W245MH121W234	8	0.0097	0.002100	0.04	0.002519	0.04	0.002987	0.04	0.002519	0.04		
CLMH121W246MH121W233		2010		Existing	assumed Mannings N	MH121W246	MH121W233		T17348	IRWD	PVC	{06AB0487-0672-49B3-90C1-E27C2E8A273D}	CLMH121W246MH121W233	226.19	223.91	0.66666667	MH121W246	MH121W233			155	CLMH121W246MH121W233	8	0.0147	0.001991	0.03	0.002391	0.04	0.002833	0.04	0.002391	0.04		
CLMH121W247MH121W234		2010		Existing	assumed Mannings N	MH121W247	MH121W234		T17348	IRWD	PVC	{1EAB1455-11FD-4882-8D31-8011B122ED6A}	CLMH121W247MH121W234	227.38	225.83	0.66666667	MH121W247	MH121W234			167	CLMH121W247MH121W234	8	0.0100	0.002424	0.04	0.002910	0.04	0.003450	0.05	0.002910	0.04		
CLMH121W248MH121W237		2011		Existing	assumed Mannings N	MH121W248	MH121W237	ERROR 23	T17348	IRWD	PVC	{46419A94-C105-4420-AE5D-A930EDCC36F1}	CLMH121W248MH121W237	237.54	231.22	0.66666667	MH121W248	MH121W237			158	CLMH121W248MH121W237	8	0.0400	0.002662	0.03	0.003196	0.03	0.003788	0.03	0.003196	0.03		
CLMH121W249MH121W238		2011		Existing	assumed Mannings N	MH121W249	MH121W238	ERROR 23	T17348	IRWD	PVC	{5ED23682-ABE0-4336-874B-4873ODE82BA1}	CLMH121W249MH121W238	234.26	227.94	0.66666667	MH121W249	MH121W238			158	CLMH121W249MH121W238	8	0.0400	0.001687	0.02	0.002025	0.03	0.002401	0.03	0.002025	0.03		
CLMH121W250MH121W068		2004		Existing	assumed Mannings N	MH121W250	MH121W068		T16336	IRWD	PVC	{8EB67962-E456-4A2C-98FA-B8030C29CE55}	CLMH121

CLMH122E044MH122E043		2014		Existing	assumed Mannings N	MH122E044	MH122E043		T17612A	IRWD	PVC	{330A8DDB-9359-4979-A2FC-CF1C7A58FE5}	CLMH122E044MH122E043	234.32	232.08	0.666666667	MH122E044	MH122E043				23	CLMH122E044MH122E043	8	0.0992	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000821	0.01
CLMH122E045MH122E040		2014		Existing	assumed Mannings N	MH122E045	MH122E040		T17612A	IRWD	PVC	{E5CE7D1B-2168-4F3E-A75E-153B443982CB}	CLMH122E045MH122E040	230.80	230.05	0.666666667	MH122E045	MH122E040			150	CLMH122E045MH122E040	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003094	0.05
CLMH122E046MH122E045		2014		Existing	assumed Mannings N	MH122E046	MH122E045		T17612A	IRWD	PVC	{D2D78D91-38C4-43E0-881D-7EEC96C979CB}	CLMH122E046MH122E045	235.58	231.00	0.666666667	MH122E046	MH122E045			85	CLMH122E046MH122E045	8	0.0540	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001566	0.02
CLMH122E047MH122E048		2014		Existing	assumed Mannings N	MH122E047	MH122E048		T17612A	IRWD	PVC	{C8AF7D99-E353-43D0-91DF-4DE6E4135513A}	CLMH122E047MH122E048	226.83	225.87	0.666666667	MH122E047	MH122E048			96	CLMH122E047MH122E048	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002718	0.04
CLMH122E048MH122E049		2014		Existing	assumed Mannings N	MH122E048	MH122E049		T17612A	IRWD	PVC	{39C72115-9729-4236-AA4F-0F889C0DDB68}	CLMH122E048MH122E049	225.67	225.12	0.666666667	MH122E048	MH122E049			55	CLMH122E048MH122E049	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002718	0.04
CLMH122E049MH122E027		2014		Existing	assumed Mannings N	MH122E049	MH122E027		T17612A	IRWD	PVC	{69727D9F-04E8-4A44-9985-9D2F9C317349}	CLMH122E049MH122E027	224.92	223.96	0.666666667	MH122E049	MH122E027			151	CLMH122E049MH122E027	8	0.0063	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002718	0.04
CLMH122E050MH122E055		2014		Existing	assumed Mannings N	MH122E050	MH122E055		T17612A	IRWD	PVC	{68D16D83-D5BB-4D90-9966-917BC008CD4C}	CLMH122E050MH122E055	233.58	230.87	0.666666667	MH122E050	MH122E055			136	CLMH122E050MH122E055	8	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002324	0.03
CLMH122E051MH122E055		2014		Existing	assumed Mannings N	MH122E051	MH122E055		T17612A	IRWD	PVC	{E550F5D7-9C3A-4EEA-AA2C-D0A6EF22511D}	CLMH122E051MH122E055	231.82	230.77	0.666666667	MH122E051	MH122E055			212	CLMH122E051MH122E055	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007425	0.08
CLMH122E052MH122E051		2014		Existing	assumed Mannings N	MH122E052	MH122E051		T17612A	IRWD	PVC	{C11FFD57-7FE6-4A77-9D09-86E93B793954}	CLMH122E052MH122E051	234.85	232.02	0.666666667	MH122E052	MH122E051			141	CLMH122E052MH122E051	8	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001001	0.02
CLMH122E053MH122E008		2014		Existing	assumed Mannings N	MH122E053	MH122E008		T17612A	IRWD	PVC	{F89C3B80-F49A-49D8-84A0-50F89844115F5}	CLMH122E053MH122E008	237.20	235.32	0.666666667	MH122E053	MH122E008			94	CLMH122E053MH122E008	8	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002471	0.03
CLMH122E054MH122E051		2014		Existing	assumed Mannings N	MH122E054	MH122E051		T17612A	IRWD	PVC	{EDA25574-E942-4802-AEDA-0FCC1591444}	CLMH122E054MH122E051	232.27	231.92	0.666666667	MH122E054	MH122E051			71	CLMH122E054MH122E051	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004256	0.06
CLMH122E055MH122E021		2014		Existing	assumed Mannings N	MH122E055	MH122E021		T17612A	IRWD	PVC	{79A69058-B727-44DB-9F76-BA79FE258C46}	CLMH122E055MH122E021	230.42	230.10	0.666666667	MH122E055	MH122E021			58	CLMH122E055MH122E021	8	0.0055	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009749	0.08
CLMH122E056MH122E060		2014		Existing	assumed Mannings N	MH122E056	MH122E060		T17612A	IRWD	PVC	{89CE0369-9EDB-43E8-9652-A75B054F42C1}	CLMH122E056MH122E060	232.23	229.79	0.666666667	MH122E056	MH122E060			138	CLMH122E056MH122E060	8	0.0177	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000765	0.02
CLMH122E057MH122E056		2014		Existing	assumed Mannings N	MH122E057	MH122E056		T17612A	IRWD	PVC	{E278FFD1-54D0-4CAC-8664-90B0745A04A6}	CLMH122E057MH122E056	233.84	232.43	0.666666667	MH122E057	MH122E056			80	CLMH122E057MH122E056	8	0.0176	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000765	0.02
CLMH122E058MH122E057		2014		Existing	assumed Mannings N	MH122E058	MH122E057		T17612A	IRWD	PVC	{A0093AC5-6862-43AF-B17B-F868FB68DE7F}	CLMH122E058MH122E057	234.97	234.04	0.666666667	MH122E058	MH122E057			117	CLMH122E058MH122E057	8	0.0079	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000765	0.02
CLMH122E059MH122E020		2014		Existing	assumed Mannings N	MH122E059	MH122E020		T17612A	IRWD	PVC	{E4919A87-54A2-4AC5-88F7-C0DB1005D74B}	CLMH122E059MH122E020	233.29	232.20	0.666666667	MH122E059	MH122E020			109	CLMH122E059MH122E020	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001630	0.03
CLMH122E060MH122E061		2014		Existing	assumed Mannings N	MH122E060	MH122E061		T17612A	IRWD	PVC	{83BEEC88-8D64-49EF-AC2E-66CB8D37465C}	CLMH122E060MH122E061	229.59	227.62	0.666666667	MH122E060	MH122E061			128	CLMH122E060MH122E061	8	0.0154	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002395	0.04
CLMH122E061MH122E030		2014		Existing	assumed Mannings N	MH122E061	MH122E030		T17612A	IRWD	PVC	{FE566912-E693-481E-9034-F0147561AB84}	CLMH122E061MH122E030	227.42	226.41	0.833333333	MH122E061	MH122E030			201	CLMH122E061MH122E030	10	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.057677	0.15
CLMH122N003MH122N324		2003		Existing	assumed Mannings N	MH122N003	MH122N324		1703	IRWD	VCP	{05BBDE8A-67BD-44E6-8470-53BC5F581BF7}	CLMH122N003MH122N324	232.77	231.16	1.666666667	MH122N003	MH122N324			262	CLMH122N003MH122N324	20	0.0061	0.891209	0.24	1.053133	0.26	1.256711	0.29	2.750544	0.43
CLMH122N004MH104E136		2011		Existing	assumed Mannings N	MH122N004	MH104E136		T17420	IRWD	PVC	{2ED8F3EB-FEFE-4D44-852C-B556089AD6BE}	MH122N004-MH104E136	194.74	192.53	0.666666667	MH122N004	MH104E136			344	CLMH122N004MH104E136	8	0.0064	0.084406	0.24	0.101243	0.26	0.120130	0.28	0.133032	0.30
CLMH122N005MH122N004		2011		Existing	assumed Mannings N	MH122N005	MH122N004		T17420	IRWD	PVC	{79E4B7D8-5F38-4394-964A-F064BB744CC6}	CLMH122N005MH122N004	202.28	194.84	0.666666667	MH122N005	MH122N004			344	CLMH122N005MH122N004	8	0.0216	0.042301	0.13	0.050935	0.14	0.060466	0.15	0.089059	0.18
CLMH122N006MH122N005		2011		Existing	assumed Mannings N	MH122N006	MH122N005		T17420	IRWD	PVC	{B0076C3-15EE-43F0-90E6-280FEBAA97D6}	CLMH122N006MH122N005	206.13	202.38	0.666666667	MH122N006	MH122N005			379	CLMH122N006MH122N005	8	0.0099	0.042323	0.15	0.050962	0.17	0.060491	0.18	0.089060	0.22
CLMH122N007MH122N006		2011		Existing	assumed Mannings N	MH122N007	MH122N006		T17420	IRWD	PVC	{D11C3D2F-A833-4F6A-9ABF-CB2BC10C3FF0}	CLMH122N007MH122N006	210.44	206.23	0.666666667	MH122N007	MH122N006			348	CLMH122N007MH122N006	8	0.0129	0.004177	0.05	0.005145	0.05	0.006129	0.06	0.060677	0.17
CLMH122N008MH122N007		2011		Existing	assumed Mannings N	MH122N008	MH122N007		T17420	IRWD	PVC	{48B60DE2-71B4-4274-952C-38CDB9106388}	CLMH122N008MH122N007	212.76	210.54	0.666666667	MH122N008	MH122N007			281	CLMH122N008MH122N007	8	0.0079	0.004201	0.05	0.005175	0.06	0.006159	0.06	0.060677	0.19
CLMH122N009MH122N167		2011		Existing	assumed Mannings N	MH122N009	MH122N167		T17420	IRWD	PVC	{D8ADA57D-E1BB-48C7-9179-B04B6EF71270}	CLMH122N009MH122N167	219.89	218.84	0.666666667	MH122N009	MH122N167			48	CLMH122N009MH122N167	8	0.0220	0.000804	0.02	0.001004	0.02	0.001191	0.02	0.022777	0.09
CLMH122N015MH104E138		2012		Existing	assumed Mannings N	MH122N015	MH104E138		T17420A	IRWD	PVC	{B9FC1E98-DCAC-46E0-BC2D-32DA6D423216}	MH122N015-MH104E138	178.02	174.02	0.666666667	MH122N015	MH104E138			405	CLMH122N015MH104E138	8	0.0099	0.030182	0.13	0.036176	0.14	0.042890	0.15	0.045471	0.16
CLMH122N022MH122N033		2012		Existing	assumed Mannings N	MH122N022	MH122N033		T17420A	IRWD	PVC	{C7AD46AC-D047-4916-BACO-FD41BF257842}	CLMH122N022MH122N033	202.54	200.36	0.666666667	MH122N022	MH122N033			223	CLMH122N022MH122N033	8	0.0098	0.000062	0.00	0.000074	0.00	0.000087	0.01	0.000074	0.00
CLMH122N023MH122N024		2012		Existing	assumed Mannings N	MH122N023	MH122N024		T17420A	IRWD	PVC	{95C58F4D-0FE6-41F0-9962-01E69FDCFC1F}	CLMH122N023MH122N024	197.97	195.87	0.666666667	MH122N023	MH122N024			214	CLMH122N023MH122N024	8	0.0098	0.000062	0.00	0.000070	0.00	0.000082	0.00	0.002344	0.04
CLMH122N025MH122N024		2012		Existing	assumed Mannings N	MH122N025	MH122N024		T17420A	IRWD	PVC	{F5ED2407-BD70-43B7-A8AE-F3B1E64AC28}	CLMH122N025MH122N024	195.77	193.67	0.666666667	MH122N025	MH122N024			214	CLMH122N025MH122N024	8	0.0098	0.000062	0.00	0.000068	0.00	0.000080	0.00	0.002344	0.04
CLMH122N025MH122W024		2012		Existing	assumed Mannings N	MH122N025	MH122W024	ERROR 23	T17420A	IRWD	PVC	{3B532FCB-A42E-4D18-A617-11A743B063ED}	MH122N025-MH122W024	193.57	191.16	0.666666667	MH122N025	MH122W024			246	CLMH122N025MH122W024	8	0.0098	0.025302	0.12	0.030383	0.13	0.036017	0.14	0.029105	0.13
CLMH122N026MH122W015		2012		Existing	assumed Mannings N	MH122N026	MH122W015		T17420A	IRWD	PVC	{09F6CCF9-1706-4227-9338-DD1E31A993E4}	MH122N026-MH122W015	199.44	195.97	0.666666667	MH122N026	MH122W015			352	CLMH122N026MH122W015	8	0.0099	0.000062	0.00	0.000071	0.00	0.000083	0.00	0.080019	0.21
CLMH122N028MH122N035		2013		Existing	assumed Mannings N	MH122N028	MH122N035		T17420C	IRWD	PVC	{CBC588ZA-5E82-4CAC-897B-A4D2E3B7D92}	CLMH122N028MH122N035	211.82	204.58	0.666666667	MH122N028	MH122N035			246	CLMH122N028MH122N035	8	0.0295	0.000185	0.00	0.000193	0.00	0.000184	0.00	0.036242	0.11
CLMH122N033MH122N023		2012		Existing	assumed Mannings N	MH122N033	MH122N023		T17420A	IRWD	PVC	{96CE6400-92FF-4C02-9380-62CBC2A2A749}	CLMH122N033MH122N023	200.26	198.07	0.666666667	MH122N033	MH122N023			222	CLMH122N033MH122N023	8	0.0099	0.000062	0.00	0.000073	0.00	0.000085	0.01	0.002344	0.04
CLMH122N034MH122N145		2012		Existing	assumed Mannings N	MH122N034	MH122N145		17420C	IRWD	PVC	{C425CC12-995B-4A19-BF04-4B50CB0EA86A}	CLMH122N034MH122N145	196.91	195.09	0.666666667	MH122N034	MH122N145			98	CLMH122N034MH122N145	8	0.0098	0.012876	0.09	0.015464	0.09	0.018332	0.10	0.022189	0.11
CLMH122N035MH122N026		2013		Existing	assumed Mannings N	MH122N035	MH122N026		17420C	IRWD	PVC	{6F27024D-600E-4F6C-9358-64F1F11AA291}	CLMH122N035MH122N026	204.48	199.64	0.666666667	MH122N035	MH122N026			246	CLMH122N035MH122N026	8	0.0196	0.000124	0.00	0.000129	0.00	0.000123	0.00	0.080019	0.18
CLMH122N037MH122N004	52.5 FROM S-N IS	2013		Existing	assumed Mannings N	MH122N037	MH122N004		17420B	IRWD	PVC	{C7817E65-26F3-45D2-8843-EE8D157DC35A}	CLMH122N037MH122N004	196.16	194.74	0.666666667	MH122N037	MH122N004			185	CLMH122N037MH122N004	8	0.0077	0.042150	0.20	0.050378	0.22	0.059733	0.24	0.043980	0.23
CLMH122N038MH122N037		2015		Existing	assumed Mannings N	MH122N038	MH122N037		T17420	IRWD	PVC	{EE4E3909-02EA-45E8-829D-B38F8D9ECBF2}	CLMH122N038MH122N037	196.58	196.16	0.666666667	MH122N038	MH122N037			54	CLMH122N038MH122N037	8	0.0078	0.036589	0.16	0.043534	0.17	0.051547	0.18	0.036185	0.16
CLMH122N039MH122N038		2015		Existing	assumed Mannings N	MH122N039	MH122N038		T17420	IRWD	PVC	{5C48BDBC-C96A-4D52-9DFC-78AF44AB8304}	CLMH122N039MH122N038	197.50	196.58	0.666666667	MH122N039	MH122N038			131	CLMH122N039MH122N038	8	0.0070	0.034632	0.15	0.041590	0.16	0.049312	0.18	0.033631	0.15
CLMH122N040MH122N039		2015		Existing	assumed Mannings N	MH122N040	MH122N039		T17420	IRWD	PVC	{9220D78D-3789-4BC2-B4E4-9C3986A16C6A}	CLMH122N040MH122N039	209.22	197.64	0.666666667	MH122N040	MH122N039			121	CLMH122N040MH122N039	8	0.0961	0.005438	0.03	0.006530	0.04	0.007742	0.04	0.010530	0.05
CLMH122N041MH122N040		2015		Existing	assumed Mannings N	MH122N041	MH122N040		T17420	IRWD	PVC	{C738F881-D008-408D-B8D9-1A0339AFA4}	CLMH122N041MH122N040	210.07	209.22	0.666666667	MH122N041	MH122N040			164	CLMH122N041MH122N040	8	0.0052	0.005439	0.05	0.006531	0.06	0.007742	0.06	0.008051	0.07
CLMH122N042MH122N041		2015		Existing	assumed Mannings N	MH122N042	MH122N041		T17420	IRWD	PVC	{0B94C258-95EF-4DBD-AB10-CC1AA41E6424}	CLMH122N042MH122N041	210.96	210.07	0.666666667	MH122N042	MH122N041			163	CLMH122N042MH122N041	8	0.0055	0.005439	0.07	0.006531	0.08	0.007743	0.08	0.004975	0.08
CLMH122N043MH122N042		2015		Existing	assumed Mannings N	MH122N043	MH122N042		T17420	IRWD	PVC	{4CC866A5-FBF5-4015-98E3-2AF3F9373687}	CLMH122N043MH122N042	211.81	210.96	0.666666667	MH122N043	MH122N042			162	CLMH122N043MH122N042	8	0.0052	0.002468	0.06	0.002963	0.06	0.003512	0.07	0.002410	0.05
CLMH122N044MH122N006		2015		Existing	assumed Mannings N	MH122N044	MH122N006		T17420	IRWD	PVC	{C5DCA6A2-2E54-4E85-A1A6-5398A813CC4F30}	CLMH122N044MH122N006	215.45	211.81	0.666666667	MH122N044	MH122N006			208	CLMH122N044MH122N006	8	0.0254	0.048311	0.12	0.045978	0.13	0.054506	0.14	0.028384	0.12
CLMH122N045MH122N040		2013		Existing	assumed Mannings N	MH122N045	MH122N040		T17413A	IRWD	PVC	{BC84AE90-02F7-4CB8-A82C-FE526768303}	CLMH122N045MH122N040	212.52	209.32	0.666666667	MH122N045	MH122N040			365	CLMH122N045MH122N040	8	0.0088	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002480	0.04
CLMH122N046MH122N041		2013		Existing	assumed Mannings N	MH122N046	MH122N041		T17413A	IRWD	PVC	{06A330C2-03FB-4DD4-A904-BB6EB6A91EF0}	CLMH122N046MH122N041	214.16	210.22	0.666666667	MH122N046	MH122N041			366	CLMH122N046MH122N041	8	0.0108	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003076	0.04
CLMH122N047MH122N045		2013		Existing	assumed Mannings N	MH122N047	MH122N045		T17413A	IRWD	PVC	{87074658-3E3E-4928-BCA8-DB092688ACB9}	CLMH122N047MH122N045	216.58	212.52	0.666666667	MH122N047	MH122N045			337	CLMH122N047MH122N045	8	0.0120	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002480	0.04
CLMH122N048MH122N046		2013		Existing	assumed Mannings N	MH122N048	MH122N046		T17413A	IRWD	PVC	{81A93928-9E99-4387-B3A4-B1877F7B4F0}	CLMH122N048MH122N046	218.13	214.16	0.666666667	MH122N048	MH122N046			366	CLMH122N048MH122N046	8	0.0120	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003103	0.04
CLMH122N049MH122N042		2013		Existing	assumed Mannings N	MH122N049	MH122N042		T17413A	IRWD	PVC	{98ACF38C-1AFA-4736-A500-E88DB8FA70974}	CLMH122N049MH122N042	215.77	211.11	0.666666667	MH122N049	MH122N042			247	CLMH122N049MH122N042	8	0.0128	0.002972	0.04	0.003568	0.04	0.004230	0.05	0.002566	0.04
CLMH122N050MH122N049		2013		Existing	assumed Mannings N	MH122N050	MH122N049		T17413A	IRWD	PVC	{44EFF4F6-A7F7-4759-9BCB-944741CB6253}	CLMH122N050MH122N049	219.83	215.77	0.666666667	MH122N050	MH122N049			338	CLMH122N050MH122N049	8	0.0120	0.002996	0.04	0.003601	0.04	0.004266	0.05	0.002584	0.04
CLMH122N051MH122N052		2013		Existing	assumed Mannings N	MH122N051	MH122N052		T17413A	IRWD	PVC	{573D41AA-F2D3-4A3C-A709-17F3068F0934}	CLMH122N051MH122N052	221.37	217.40	0.666666667	MH122N051	MH122N052			331	CLMH122N051MH122N052	8	0.0120	0.002484	0.04	0.002985	0.04	0.003544	0.04	0.002426	0.04
CLMH122N052MH122N043		2013		Existing	assumed Mannings N	MH122N052	MH122N043		T17413A	IRWD	PVC	{AAE107C9-25AD-4D9E-8DDA-0105BA8675FF}	CLMH122N052MH122N043	221.40	217.40	0.666666667	MH122N052	MH122N043			365	CLMH122N052MH122N043	8	0.0148	0.002468	0.04	0.002963	0.04	0.003512	0.04	0.002410	0.04
CLMH122N060MH122N044		2015		Existing	assumed Mannings N	MH122N060	MH122N044		T17420	IRWD	PVC	{52D98641-0410-4860-989F-B3FB373F5941}	CLMH122N060MH122N044	212.96	212.54	0.666666667	MH122N060	MH122N044			296	CLMH122N060MH122N044	8	0.0014	0.032334	0.20	0.038818	0.22	0.046017	0.24	0.021227	0.17
CLMH122N061MH122N060		2013		Existing	assumed Mannings N	MH122N061	MH122N060		T17415	IRWD	PVC	{36A3F419-7769-4CF7-A1B0-CB969CB38A56}	CLMH122N061MH122N060	217.00	213.07	0.666666667	MH122N061	MH122N060			311	CLMH122N061MH122N060	8	0.0126	0.015274	0.09	0.018333	0.10	0.021735	0.12	0.012086	0.08
CLMH122N062MH122N061		2013		Existing	assumed Mannings N	MH122N062	MH122N061		T17415	IRWD	PVC	{6FC0F2DC-AA05-4AFA-813B-CF4B8955B96B0}	CLMH122N062MH122N061	219.97	217.10	0.666666667	MH122N062	MH122N061			222	CLMH122N062MH122N061	8	0.0129	0.001883	0.02	0.002256	0.04	0.002675	0.04	0.004899	0.05
CLMH122N063MH122N062		2013		Existing	assumed Mannings N	MH122N063	MH122N062		T17415	IRWD	PVC	{22A880E3-83EB-4BFC-A5F1-B1BB805F37A2}	CLMH122N063MH122N062	220.63	220.17	0.666666667	MH122N063	MH122N062			50	CLMH122N063MH122N062	8	0.0092	0.001883	0.03	0.002256	0.04	0.002675	0.04	0.004899	0.06
CLMH122N064MH122N063		2013		Existing	assumed Mannings N	MH122N064	MH122N063		T17415	IRWD	PVC	{755E8458-CEAS-495B-96E0-27DD360BA1A3}	CLMH122N064MH122N063	221.68	220.83	0.666666667	MH122N064	MH122N063			66	CLMH122N064MH122N063	8	0.0130	0.001583	0.03	0.001897	0.03	0.002250	0.04	0.004899	0.05
CLMH122N065MH122N064		2013		Existing	assumed Mannings N	MH122N065	MH122N064		T17415	IRWD	PVC	{DOEAF7AE-87BB-4E1A-9AAD-595037772D16}	CLMH122N065MH122N064	224.03	221.78	0.666666667	MH122N065	MH122N064			254	CLMH122N065MH122N064	8	0.0174	0.001322	0.02	0.001585	0.03	0.001880	0.03	0.003649	0.04
CLMH122N066MH122N065		2013		Existing	assumed Mannings N	MH122N066	MH122N065		T17415	IRWD	PVC	{F011C4BB-C7DE-458C-9D3A-3CCC656A94C1}	CLMH122N066MH122N065	226.38	224.13	0.666666667	MH122N066	MH122N065			129	CLMH122N066MH122N065	8	0.0174	0.000644	0.02	0.000771	0.02	0.000914	0.02	0.002564	0.04
CLMH122N067MH122N066		2013		Existing	assumed Mannings N	MH122N067	MH122N066		T17415	IRWD	PVC	{385612EF-5784-4115-899E-4B84CE96AB66}	CLMH122N067MH122N066	228.68	226.48	0.666666667	MH122N067	MH122N066			129	CLMH122N067MH122N066	8	0.0171	0.000441	0.01	0.000528	0.01	0.000626	0.02	0.001483	0.03
CLMH122N068MH122N067		2013		Existing	assumed Mannings N	MH122N068	MH122N067		T17415	IRWD	PVC	{1651A168-4585-4678-8ED9-CEA892D371C1}	CLMH122N068MH122N067	230.11	228.68	0.666666667	MH122N068	MH122N067			76	CLMH122N068MH122N067	8	0.0189	0.000441	0.02	0.000528	0.02	0.000626	0.02	0.001489	0.03
CLMH122N069MH122N066		2013		Existing	assumed Mannings N	MH122N069	MH122N066		T17415	IRWD	PVC	{57BEB544-F05F-44F6-8F03-D9A0614D4ABA}	CLMH122N069MH122N066	228.02	226.58	0.666666667	MH122N069	MH122N066			76	CLMH122N069MH122N066	8	0.0189	0.000203	0.01	0.000244	0.01	0.000290	0.01	0.001081	0.02
CLMH122N070MH122N065		2013		Existing	assumed Mannings N	MH122N070	MH122N065		T17415	IRWD	PVC	{2CFBD3FC-AECF-48C6-A056-153E6AD47B5}	CLMH122N070MH122N065	225.67	224.23	0.666666667	MH122N070	MH122N065			76	CLMH122N070MH122N065	8	0.0189	0.000678	0.02	0.000814	0.02	0.000966	0.02	0.001085	0.02
CLMH122N071MH122N064		2013		Existing	assumed Mannings N	MH122N071	MH122N064		T17415	IRWD	PVC	{3765D108-C2AB-423F-8931-2748768985B8}	CLMH122N071MH122N064	223.32	221.88	0.666666667	MH122N071	MH122N064			76	CLMH122N071MH122N064	8	0.0189	0.000260	0.01	0.000312	0.01	0.000370	0.01	0.001250	0.02
CLMH122N072MH122N061		2013		Existing	assumed Mannings N	MH122N072	MH122N061		T17415	IRWD	PVC	{381E1302-FF06-4D9B-BD41-939AC035D00E}	CLMH122N072MH122N061	217.61	217.20	0.666666667	MH122N072	MH122N061			106	CLMH122N072MH122N061	8	0.0039	0.009302	0.09	0.011170	0.10	0.013242	0.10	0.007187	0.08
CLMH122N073MH122N072		2013		Existing	assumed Mannings N	MH122N073	MH122N072		T17415	IRWD	PVC	{F9199124-7A2A-4727-A75E-F32502A5A811}	CLMH122N073MH122N072	219.87	217.71	0.666666667	MH122N073	MH122N072			129	CLMH122N073MH122N072	8	0.0167	0.006669	0.06	0.008010	0.06	0.009495	0.07	0.004143	0.04
CLMH122N074MH122N073		2013		Existing	assumed Mannings N	MH122N074	MH122N073		T17415	IRWD	PVC	{690F456C-1061-47D5-8DDA-09879ACBCF42}	CLMH122N074MH122N073	222.22	219.97	0.666666667	MH122N074	MH122N073			129	CLMH122N074MH122N073	8	0.0174	0.004632	0.05	0.005561	0.05	0.006593	0.05	0.002927	0.04
CLMH122N075MH122N074		2013		Existing	assumed Mannings N	MH122N075	MH122N074		T17415	IRWD	PVC	{B0B98D4E-7858-43CE-B37E-00F33A2CD740}	CLMH122N075MH122N074	224.57	222.32	0.666666667	MH122N075	MH122N074			129	CLMH122N075MH122N074	8	0.0174	0.001940	0.03	0.002329	0.03	0.002760	0.04	0.001711	0.03
CLMH122N076MH122N075		2013		Existing	assumed Mannings N	MH122N076	MH122N075		T17415	IRWD	PVC	{FA3D138A-F947-40A3-BAE0-599332D2FBF4}	CLMH122N076MH122N075	226.75	224.77	0.666666667	MH122N076	MH122N075			129	CLMH122N076MH122N075	8	0.0192	0.000682	0.02	0.000820	0.02	0.000972	0.02	0.000902	0.02
CLMH122N077MH122N075		2013		Existing	assumed Mannings N	MH122N077	MH122N075		T17415	IRWD	PVC	{C48E5207-9ECA-4F81-AB78-548C168DEC32}	CLMH122N077MH122N075	227.10	224.77	0.666666667	MH122N077	MH122N075			119	CLMH122N077MH122N075	8	0.0197	0.001258	0.02	0.001508	0.03	0.001788	0.03	0.000810	0.02
CLMH122N078MH122N074		2013		Existing	assumed Mannings N	MH122N078	MH122N074		T17415	IRWD	PVC	{E9F2AE6C-7F24-43E2-B088-BA704CC3FB7C}	CLMH122N078MH122N074	224.40	222.42	0.666666667	MH122N078	MH122N074			103	CLMH122N078MH122N074	8	0.0192	0.000920	0.02	0.001105	0.02	0.001310	0.02	0.000641	0.02
CLMH122N079MH122N074		2013		Existing	assumed Mannings N	MH122N079	MH122N074		T17415	IRWD	PVC	{

CLMH122N151MH122N154		2013		Existing	assumed Mannings N	MH122N151	MH122N154	17513	IRWD	PVC	{8D8D31B4-D7C2-441D-9856-22A413BC0F39}	CLMH122N151MH122N154	207.57	204.81	0.666666667	MH122N151	MH122N154				280	CLMH122N151MH122N154	8	0.0099	0.002508	0.04	0.003013	0.04	0.003570	0.05	0.003991	0.05
CLMH122N152MH122N155		2013		Existing	assumed Mannings N	MH122N152	MH122N155	17513	IRWD	PVC	{31C0ABC3-35E9-4050-A15E-66ED2B2A35C0}	CLMH122N152MH122N155	204.33	201.67	0.666666667	MH122N152	MH122N155				270	CLMH122N152MH122N155	8	0.0099	0.000062	0.00	0.000070	0.00	0.000082	0.00	0.004767	0.05
CLMH122N153MH122N156		2013		Existing	assumed Mannings N	MH122N153	MH122N156	17513	IRWD	PVC	{FB8ED9F7-ECF6-47C5-A729-407F3868F3B}	CLMH122N153MH122N156	201.39	198.73	0.666666667	MH122N153	MH122N156				270	CLMH122N153MH122N156	8	0.0099	0.006616	0.06	0.007944	0.07	0.009413	0.07	0.004185	0.05
CLMH122N154MH122N157		2013		Existing	assumed Mannings N	MH122N154	MH122N157	17513	IRWD	PVC	{77638B1F-32EE-4546-8FA4-7FE018DEF722}	CLMH122N154MH122N157	204.61	201.79	0.666666667	MH122N154	MH122N157				287	CLMH122N154MH122N157	8	0.0098	0.002507	0.04	0.003012	0.04	0.003569	0.05	0.003991	0.05
CLMH122N155MH122N147		2013		Existing	assumed Mannings N	MH122N155	MH122N147	17513	IRWD	PVC	{EE2BDBAC-2634-429A-ABA8-946DFF48DD7D}	CLMH122N155MH122N147	201.47	197.72	0.666666667	MH122N155	MH122N147				296	CLMH122N155MH122N147	8	0.0127	0.007424	0.06	0.008917	0.07	0.010570	0.07	0.004767	0.05
CLMH122N156MH122N146		2013		Existing	assumed Mannings N	MH122N156	MH122N146	17513	IRWD	PVC	{2063179E-CD11-4A9E-B25B-829F8A895588}	CLMH122N156MH122N146	198.53	195.77	0.666666667	MH122N156	MH122N146				294	CLMH122N156MH122N146	8	0.0094	0.008111	0.07	0.009738	0.08	0.011541	0.08	0.004185	0.05
CLMH122N157MH122N147		2013		Existing	assumed Mannings N	MH122N157	MH122N147	17513	IRWD	PVC	{B109CEE1-8A38-4303-B5D7-6B7C033AC4B7}	CLMH122N157MH122N147	201.59	197.72	0.666666667	MH122N157	MH122N147				139	CLMH122N157MH122N147	8	0.0279	0.005454	0.04	0.006549	0.05	0.007764	0.05	0.017423	0.08
CLMH122N158MH122N153		2013		Existing	assumed Mannings N	MH122N158	MH122N153	17513	IRWD	PVC	{08F04D51-2A4B-4A1D-8E5F-FEB70F002C68}	CLMH122N158MH122N153	205.88	201.59	0.666666667	MH122N158	MH122N153				300	CLMH122N158MH122N153	8	0.0143	0.004406	0.05	0.005290	0.05	0.006269	0.06	0.004185	0.05
CLMH122N159MH122N152		2013		Existing	assumed Mannings N	MH122N159	MH122N152	17513	IRWD	PVC	{2EF0A075-3D31-4F3A-89E9-2D8D4DA245F9}	CLMH122N159MH122N152	208.82	204.53	0.666666667	MH122N159	MH122N152				300	CLMH122N159MH122N152	8	0.0143	0.000090	0.00	0.000090	0.00	0.000089	0.00	0.004767	0.05
CLMH122N160MH122N151		2013		Existing	assumed Mannings N	MH122N160	MH122N151	17513	IRWD	PVC	{B553426D-2251-48E6-B62E-ECD4026B2279}	CLMH122N160MH122N151	210.73	207.77	0.666666667	MH122N160	MH122N151				300	CLMH122N160MH122N151	8	0.0099	0.000062	0.00	0.000072	0.00	0.000084	0.01	0.003991	0.05
CLMH122N161MH10E180		2013		Existing	assumed Mannings N	MH10E180	MH122N161	T17613	IRWD	PVC	{E8DCB881-6B4B-4DD1-AE93-7C377651E7C8}	MH122N161-MH10E180	192.25	191.07	0.666666667	MH122N161	MH10E180				300	MH122N161MH10E180	8	0.0039	0.000686	0.02	0.000835	0.02	0.000989	0.03	0.022959	0.14
CLMH122N162MH122N163		2013		Existing	assumed Mannings N	MH122N162	MH122N163	T17613	IRWD	PVC	{6ACEEC15-504E-4DCA-B3B1-18EB265A6C7E}	CLMH122N162MH122N163	193.35	193.19	0.666666667	MH122N162	MH122N163				47	CLMH122N162MH122N163	8	0.0034	0.000048	0.01	0.000057	0.01	0.000067	0.01	0.004463	0.06
CLMH122N163MH122N161		2013		Existing	assumed Mannings N	MH122N163	MH122N161	T17613	IRWD	PVC	{B4025728-7B53-4587-9CDB-0F25DB86F796}	CLMH122N163MH122N161	193.09	192.45	0.666666667	MH122N163	MH122N161				164	CLMH122N163MH122N161	8	0.0039	0.000099	0.01	0.000114	0.01	0.000137	0.01	0.010516	0.09
CLMH122N164MH122N165		2013		Existing	assumed Mannings N	MH122N164	MH122N165	T17613	IRWD	PVC	{8E535A37-11F0-4241-8C2F-AE56E8595F57}	CLMH122N164MH122N165	193.68	193.41	0.666666667	MH122N164	MH122N165				59	CLMH122N164MH122N165	8	0.0045	0.000497	0.02	0.000602	0.02	0.000712	0.02	0.005502	0.07
CLMH122N165MH122N161		2013		Existing	assumed Mannings N	MH122N165	MH122N161	T17613	IRWD	PVC	{29DE7A05-36AD-4BED-B2B2-326D1BEB05E7}	CLMH122N165MH122N161	193.21	192.45	0.666666667	MH122N165	MH122N161				155	CLMH122N165MH122N161	8	0.0049	0.000607	0.02	0.000732	0.02	0.000868	0.02	0.012443	0.10
CLMH122N166MH122N009		2011		Existing	assumed Mannings N	MH122N166	MH122N009	T17420	IRWD	PVC	{F132EF99-86CF-4DAE-84CB-22D7ED943DEC}	CLMH122N166MH122N009	224.16	219.99	0.666666667	MH122N166	MH122N009				224	CLMH122N166MH122N009	8	0.0186	0.000804	0.02	0.001005	0.02	0.001192	0.02	0.022777	0.10
CLMH122N167MH122N008		2011		Existing	assumed Mannings N	MH122N167	MH122N008	T17420	IRWD	PVC	{0EAE6553-FFAB-4DDE-8ECF-009E4840B8BD}	CLMH122N167MH122N008	218.74	212.86	0.666666667	MH122N167	MH122N008				247	CLMH122N167MH122N008	8	0.0238	0.004230	0.04	0.005207	0.05	0.006184	0.05	0.060677	0.15
CLMH122N170MH122N171		2014		Existing	assumed Mannings N	MH122N170	MH122N171	T17621	IRWD	PVC	{685SF868-F161-419C-AFBC-A90B0768789C}	CLMH122N170MH122N171	234.92	233.18	0.666666667	MH122N170	MH122N171				129	CLMH122N170MH122N171	8	0.0135	0.000242	0.01	0.000299	0.01	0.000350	0.01	0.005747	0.05
CLMH122N171MH122N172		2014		Existing	assumed Mannings N	MH122N171	MH122N172	T17621	IRWD	PVC	{D7007605-D342-44ED-9708-460B85E41539}	CLMH122N171MH122N172	233.08	230.55	0.666666667	MH122N171	MH122N172				129	CLMH122N171MH122N172	8	0.0196	0.000363	0.01	0.000447	0.01	0.000525	0.01	0.007871	0.06
CLMH122N172MH122N173		2014		Existing	assumed Mannings N	MH122N172	MH122N173	T17621	IRWD	PVC	{17912037-571D-4B92-830C-BB409CEF8A8D}	CLMH122N172MH122N173	230.45	228.47	0.666666667	MH122N172	MH122N173				96	CLMH122N172MH122N173	8	0.0207	0.000484	0.01	0.000596	0.01	0.000699	0.02	0.010608	0.07
CLMH122N173MH122N174		2014		Existing	assumed Mannings N	MH122N173	MH122N174	T17621	IRWD	PVC	{B7ACF35C-FA99-4D62-A120-DF8AD080EC9D}	CLMH122N173MH122N174	228.37	227.82	0.666666667	MH122N173	MH122N174				117	CLMH122N173MH122N174	8	0.0047	0.001752	0.04	0.002156	0.04	0.002554	0.05	0.027277	0.14
CLMH122N174MH122N175		2014		Existing	assumed Mannings N	MH122N174	MH122N175	T17621	IRWD	PVC	{C06C7E19-6FAE-4C79-9DE2-B771E0EB5656}	CLMH122N174MH122N175	227.72	226.53	0.666666667	MH122N174	MH122N175				129	CLMH122N174MH122N175	8	0.0092	0.003123	0.04	0.003809	0.05	0.004515	0.05	0.030067	0.13
CLMH122N175MH122N176		2014		Existing	assumed Mannings N	MH122N175	MH122N176	T17621	IRWD	PVC	{F87CCE32-CB3D-4A6E-BF49-06D731C9D30B}	CLMH122N175MH122N176	226.43	225.18	0.666666667	MH122N175	MH122N176				129	CLMH122N175MH122N176	8	0.0097	0.003233	0.05	0.003949	0.05	0.004681	0.05	0.032155	0.13
CLMH122N176MH122N177		2014		Existing	assumed Mannings N	MH122N176	MH122N177	T17621	IRWD	PVC	{35A2F1A1-F588-4D8B-AE67-74D49D3DB795}	CLMH122N176MH122N177	225.08	223.05	0.666666667	MH122N176	MH122N177				129	CLMH122N176MH122N177	8	0.0157	0.003345	0.04	0.004090	0.04	0.004849	0.05	0.034300	0.12
CLMH122N177MH122N167	55.17 ET FROM N	2011		Existing	assumed Mannings N	MH122N177	MH122N167	T17420	IRWD	PVC	{38EA6E63-EB0D-4B45-B5E8-528E1DFAFC6}	CLMH122N177MH122N167	222.95	218.94	0.666666667	MH122N177	MH122N167				123	CLMH122N177MH122N167	8	0.0326	0.003458	0.04	0.004231	0.04	0.005017	0.04	0.037900	0.11
CLMH122N178MH122N177		2014		Existing	assumed Mannings N	MH122N178	MH122N177	T17621	IRWD	PVC	{B7385250-265E-41AD-A834-481349D26A40}	CLMH122N178MH122N177	224.87	223.15	0.666666667	MH122N178	MH122N177				119	CLMH122N178MH122N177	8	0.0145	0.000091	0.00	0.000095	0.00	0.000090	0.00	0.001090	0.02
CLMH122N179MH122N177		2014		Existing	assumed Mannings N	MH122N179	MH122N177	T17621	IRWD	PVC	{CE05C50F-880F-49DA-AA8F-8E757C3365B7}	CLMH122N179MH122N177	224.69	223.15	0.666666667	MH122N179	MH122N177				103	CLMH122N179MH122N177	8	0.0149	0.000094	0.00	0.000098	0.00	0.000093	0.00	0.002510	0.04
CLMH122N180MH122N176		2014		Existing	assumed Mannings N	MH122N180	MH122N176	T17621	IRWD	PVC	{CEFA4D51-9CC3-482A-908B-C6F597989510}	CLMH122N180MH122N176	227.01	225.28	0.666666667	MH122N180	MH122N176				118	CLMH122N180MH122N176	8	0.0145	0.000091	0.00	0.000095	0.00	0.000091	0.00	0.000724	0.02
CLMH122N181MH122N176		2014		Existing	assumed Mannings N	MH122N181	MH122N176	T17621	IRWD	PVC	{87EF398C-1C7B-4C2D-B60F-69D836248ED}	CLMH122N181MH122N176	226.85	225.28	0.666666667	MH122N181	MH122N176				118	CLMH122N181MH122N176	8	0.0152	0.000096	0.00	0.000100	0.00	0.000095	0.00	0.001421	0.03
CLMH122N182MH122N175		2014		Existing	assumed Mannings N	MH122N182	MH122N175	T17621	IRWD	PVC	{217809C2-36FE-415C-884B-2F03046EC492}	CLMH122N182MH122N175	228.35	226.63	0.666666667	MH122N182	MH122N175				118	CLMH122N182MH122N175	8	0.0146	0.000092	0.00	0.000096	0.00	0.000091	0.00	0.000682	0.02
CLMH122N183MH122N175		2014		Existing	assumed Mannings N	MH122N183	MH122N175	T17621	IRWD	PVC	{D33FE2DD-9974-4C64-BAF0-664320077990}	CLMH122N183MH122N175	228.20	226.63	0.666666667	MH122N183	MH122N175				103	CLMH122N183MH122N175	8	0.0151	0.000095	0.00	0.000099	0.00	0.000094	0.00	0.001406	0.03
CLMH122N184MH122N174		2014		Existing	assumed Mannings N	MH122N184	MH122N174	T17621	IRWD	PVC	{718F3431-33E8-4612-85F9-8554B8624543}	CLMH122N184MH122N174	229.49	227.92	0.666666667	MH122N184	MH122N174				103	CLMH122N184MH122N174	8	0.0153	0.000764	0.02	0.000919	0.02	0.001087	0.02	0.001846	0.03
CLMH122N185MH122N174		2014		Existing	assumed Mannings N	MH122N185	MH122N174	T17621	IRWD	PVC	{974EE9AB-C142-4257-BE99-BE974F5185F5}	CLMH122N185MH122N174	229.64	227.92	0.666666667	MH122N185	MH122N174				119	CLMH122N185MH122N174	8	0.0145	0.000619	0.02	0.000744	0.02	0.000880	0.02	0.000944	0.02
CLMH122N186MH122N172		2014		Existing	assumed Mannings N	MH122N186	MH122N172	T17621	IRWD	PVC	{A315864F-E3E4-4A9E-9724-53D140946CCA}	CLMH122N186MH122N172	232.37	230.65	0.666666667	MH122N186	MH122N172				119	CLMH122N186MH122N172	8	0.0145	0.000091	0.00	0.000095	0.00	0.000090	0.00	0.000902	0.02
CLMH122N187MH122N172		2014		Existing	assumed Mannings N	MH122N187	MH122N172	T17621	IRWD	PVC	{C14879AD-670B-4891-9E75-89A3178261 1C}	CLMH122N187MH122N172	232.22	230.65	0.666666667	MH122N187	MH122N172				104	CLMH122N187MH122N172	8	0.0152	0.000096	0.00	0.000100	0.00	0.000095	0.00	0.001835	0.03
CLMH122N188MH122N171		2014		Existing	assumed Mannings N	MH122N188	MH122N171	T17621	IRWD	PVC	{E35E09B8-1FEB-45C1-A2ED-C01B627CF03A}	CLMH122N188MH122N171	235.00	233.28	0.666666667	MH122N188	MH122N171				119	CLMH122N188MH122N171	8	0.0145	0.000091	0.00	0.000095	0.00	0.000090	0.00	0.000750	0.02
CLMH122N189MH122N171		2014		Existing	assumed Mannings N	MH122N189	MH122N171	T17621	IRWD	PVC	{778994D1-9D5B-41DA-874A-004756726E02}	CLMH122N189MH122N171	234.85	233.28	0.666666667	MH122N189	MH122N171				103	CLMH122N189MH122N171	8	0.0152	0.000096	0.00	0.000100	0.00	0.000095	0.00	0.001374	0.03
CLMH122N190MH122N170		2014		Existing	assumed Mannings N	MH122N190	MH122N170	T17621	IRWD	PVC	{C7202C48-9047-474C-925E-2D8514A3DF5C}	CLMH122N190MH122N170	236.84	235.12	0.666666667	MH122N190	MH122N170				118	CLMH122N190MH122N170	8	0.0145	0.000092	0.00	0.000095	0.00	0.000091	0.00	0.000639	0.02
CLMH122N191MH122N170		2014		Existing	assumed Mannings N	MH122N191	MH122N170	T17621	IRWD	PVC	{08ED2C33-103D-48FA-A7BC-677BDE43459A}	CLMH122N191MH122N170	236.69	235.12	0.666666667	MH122N191	MH122N170				104	CLMH122N191MH122N170	8	0.0151	0.000095	0.00	0.000099	0.00	0.000094	0.00	0.001203	0.02
CLMH122N192MH122N258		2014		Existing	assumed Mannings N	MH122N192	MH122N258	T17621	IRWD	PVC	{07FCCAE2-209C-48BF-A073-0C1BFC864859}	CLMH122N192MH122N258	238.24	236.52	0.666666667	MH122N192	MH122N258				107	CLMH122N192MH122N258	8	0.0160	0.000101	0.00	0.000105	0.00	0.000100	0.00	0.001387	0.03
CLMH122N193MH122N258		2014		Existing	assumed Mannings N	MH122N193	MH122N258	T17621	IRWD	PVC	{70F4AEFE-F8B9-478F-87A0-FB2295FA921B}	CLMH122N193MH122N258	238.00	236.52	0.666666667	MH122N193	MH122N258				104	CLMH122N193MH122N258	8	0.0143	0.000090	0.00	0.000094	0.00	0.000089	0.00	0.002519	0.04
CLMH122N194MH122N195		2014		Existing	assumed Mannings N	MH122N194	MH122N195	T17620	IRWD	PVC	{38584F2D-072D-4F81-8320-97DD573D00BB}	CLMH122N194MH122N195	244.38	243.72	0.666666667	MH122N194	MH122N195				51	CLMH122N194MH122N195	8	0.0128	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002367	0.04
CLMH122N195MH122N196		2014		Existing	assumed Mannings N	MH122N195	MH122N196	T17620	IRWD	PVC	{1077A4DA-A0A9-4F98-813A-2 756B2F93B17}	CLMH122N195MH122N196	243.62	242.97	0.666666667	MH122N195	MH122N196				51	CLMH122N195MH122N196	8	0.0129	0.000123	0.01	0.000147	0.01	0.000175	0.01	0.002968	0.04
CLMH122N196MH122N197		2014		Existing	assumed Mannings N	MH122N196	MH122N197	T17620	IRWD	PVC	{FABA6687-A892-4F42-8E3C-AC4B606D7F84}	CLMH122N196MH122N197	242.87	241.65	0.666666667	MH122N196	MH122N197				87	CLMH122N196MH122N197	8	0.0141	0.000184	0.01	0.000222	0.01	0.000263	0.01	0.005525	0.05
CLMH122N197MH122N198		2014		Existing	assumed Mannings N	MH122N197	MH122N198	T17620	IRWD	PVC	{04377F4E-6353-47B5-819A-35FACF830427}	CLMH122N197MH122N198	241.55	240.74	0.666666667	MH122N197	MH122N198				141	CLMH122N197MH122N198	8	0.0160	0.000307	0.01	0.000369	0.01	0.000438	0.01	0.006215	0.05
CLMH122N198MH122N199		2014		Existing	assumed Mannings N	MH122N198	MH122N199	T17620	IRWD	PVC	{6A9756E1-3112-486B-87A0-B8F798E6FAD7}	CLMH122N198MH122N199	240.64	239.91	0.666666667	MH122N198	MH122N199				46	CLMH122N198MH122N199	8	0.0160	0.000368	0.01	0.000444	0.01	0.000525	0.01	0.007976	0.06
CLMH122N199MH122N200		2014		Existing	assumed Mannings N	MH122N199	MH122N200	T17620	IRWD	PVC	{7898AD49-DDA2-42BE-A812-817A8AE5F16d}	CLMH122N199MH122N200	239.81	239.21	0.666666667	MH122N199	MH122N200				32	CLMH122N199MH122N200	8	0.0189	0.000368	0.01	0.000444	0.01	0.000525	0.01	0.007976	0.06
CLMH122N200MH122N201		2014		Existing	assumed Mannings N	MH122N200	MH122N201	T17620	IRWD	PVC	{158B8ACB-6B4A-44B1-8F77-3E4D176F3540}	CLMH122N200MH122N201	239.11	238.45	0.666666667	MH122N200	MH122N201				103	CLMH122N200MH122N201	8	0.0143	0.000428	0.01	0.000512	0.01	0.000612	0.02	0.009830	0.07
CLMH122N201MH122N202		2014		Existing	assumed Mannings N	MH122N201	MH122N202	T17620	IRWD	PVC	{70218606-158B-4B2F-8B66-5255815FF9B0}	CLMH122N201MH122N202	238.35	238.00	0.666666667	MH122N201	MH122N202				38	CLMH122N201MH122N202	8	0.0093	0.000487	0.01	0.000592	0.02	0.000699	0.02	0.010599	0.08
CLMH122N202MH122N203		2014		Existing	assumed Mannings N	MH122N202	MH122N203	T17620	IRWD	PVC	{CC9AE53A-6A9C-4018-9403-F4B9BA7CDC0D}	CLMH122N202MH122N203	237.90	237.29	0.666666667	MH122N202	MH122N203				48	CLMH122N202MH122N203	8	0.0128	0.000547	0.02	0.000665	0.02	0.000786	0.02	0.011862	0.08
CLMH122N203MH122N204		2014		Existing	assumed Mannings N	MH122N203	MH122N204	T17620	IRWD	PVC	{7E053C93-EA89-4DD8-BA3E-08F5130EFB9}	CLMH122N203MH122N204	237.19	236.26	0.666666667	MH122N203	MH122N204				107	CLMH122N203MH122N204	8	0.0116	0.000605	0.02	0.000739	0.02	0.000873	0.02	0.012567	0.08
CLMH122N204MH122N205		2014		Existing	assumed Mannings N	MH122N204	MH122N205	T17620	IRWD	PVC	{B7A02512-6E2C-477C-9987-4A39660B9E93}	CLMH122N204MH122N205	236.16	235.42	0.666666667	MH122N204	MH122N205				57	CLMH122N204MH122N205	8	0.0130	0.000665	0.02	0.000812	0.02	0.000960	0.02	0.015304	0.09
CLMH122N205MH122N206		2014		Existing	assumed Mannings N	MH122N205	MH122N206	T17620	IRWD	PVC	{395EF9F1-0127-48A1-BF19-31C2F60199F0}	CLMH122N205MH122N206	235.32	234.02	0.666666667	MH122N205	MH122N206				99	CLMH122N205MH122N206	8	0.0131	0.000721	0.02	0.000884	0.02	0.001045	0.02	0.016669	0.09
CLMH122N206MH122N173	49.01' FROM E-W	2014		Existing	assumed Mannings N	MH122N206	MH122N173	T17621	IRWD	PVC	{E4D5F8EE-8F7B-4BB1-8DC2-310A7D14444E}	CLMH122N206MH122N173	233.82	228.57	0.666666667	MH122N206	MH122N173				271	CLMH122N206MH122N173	8	0.0194	0.000716	0.02	0.000879	0.02	0.001042	0.02	0.016669	0.08
CLMH122N207MH122N208		2014		Existing	assumed Mannings N	MH122N207	MH122N208	T17620	IRWD	PVC	{2F232BF8-98EF-4C70-B08B-41A5C199A325}	CLMH122N207MH122N208	234.30	232.69	0.666666667	MH122N207	MH122N208				111	CLMH122N207MH122N208	8	0.0145	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001325	0.03
CLMH122N208MH122N209		2014		Existing	assumed Mannings N	MH122N208	MH122N209	T17620	IRWD	PVC	{6FC4C9B1-8DD1-47D7-A082-C055E618AE88}	CLMH122N208MH122N209	232.49	231.39	0.666666667	MH122N208	MH122N209				111	CLMH122N208MH122N209	8	0.0114	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001325	0.03
CLMH122N209MH122N210		2014		Existing	assumed Mannings N	MH122N209	MH122N210	T17620	IRWD	PVC	{FCB9EF32-86D6-4D7C-815A-42A81BF5F690}	CLMH122N209MH122N210	231.29	229.67	0.666666667	MH122N209	MH122N210				111	CLMH122N209MH122N210	8	0.0124	0.000601	0.02	0.000721	0.02	0.000860	0.02	0.011969	0.08
CLMH122N210MH122N211		2014		Existing	assumed Mannings N	MH122N210	MH122N211	T17620	IRWD	PVC	{38782641-1FF5-6CAF-9066-148090FAC466}	CLMH122N210MH122N211	229.57	228.13	0.666666667	MH122N210	MH122N211				101	CLMH122N210MH122N211	8	0.0143	0.000516	0.01	0.000647	0.02	0.000768	0.02	0.014127	0.08
CLMH122N211MH122N212		2014		Existing	assumed Mannings N	MH122N211	MH122N212	T17620	IRWD	PVC	{35089894-1B73-4897-AADE-B9309B85DE9C}	CLMH122N211MH122N212	228.03	227.60	0.666666667	MH122N211	MH122N212				212	CLMH122N211MH122N212	8	0.0119	0.000755	0.02	0.000942	0.02	0.001115	0.02	0.021480	0.11
CLMH122N212MH122N166	60' FROM S-N IS T	2014		Existing	assumed Mannings N	MH122N212	MH122N166	T17620	IRWD	PVC	{6F2D94E2-FEFC-45DF-8055-16368E7BDD6F}	CLMH122N212MH122N166	227.50	224.36	0.666666667	MH122N212	MH122N166				142	CLMH122N212MH122N166	8	0.0221	0.000808	0.02	0.001010	0.02	0.001197	0.02	0.022777	0.09
CLMH122N213MH122N214		2014		Existing	assumed Mannings N	MH122N213	MH122N214	T17620	IRWD	PVC	{3D4B3DFC-BC15-4017-AF58-60C22F13196C}	CLMH122N213MH122N214	233.16	231.77	0.666666667	MH122N213	MH122N214				97	CLMH122N213MH122N214	8	0.0143	0.000090	0.00	0.000094	0.00	0.000093	0.00	0.000951	0.02
CLMH122N214MH122N209		2014		Existing	assumed Mannings N	MH122N214	MH122N209	T17620	IRWD	PVC	{EC1BA90F-59E0-4699-96FE-0946AC2B54AD}	CLMH122N214MH122N209	231.67	231.49	0.666666667	MH122N214	MH122N209				16	CLMH122N214MH122N209	8	0.0114	0.000061	0.00	0.000075	0.00	0.000088	0.00	0.000951	0.02
CLMH122N215MH122N210		2014		Existing	assumed Mannings N	MH122N215	MH122N210	T17620	IRWD	PVC	{CCF7740C-863C-409D-A665-127A21CAD8B0}	CLMH122N215MH122N210	230.49	229.77	0.666666667	MH122N215	MH122N210				52	CLMH122N215MH122N210	8	0.0137	0.000087	0.00	0.000090	0.00	0.000088	0.00	0.001370	0.03
CLMH122N216MH122N210		2014		Existing	assumed Mannings N	MH122N216	MH122N210	T17620	IRWD	PVC	{0344CDD3-EBC6-4C27-8312-8DFC0DE9B4D2}	CLMH122N216MH122N210	231.38	229.77	0.666666667	MH122N216	MH122N210				111	CLMH122N216MH122N210	8	0.0144	0.000091	0.00	0.000095	0.00	0.000090	0.00	0.000788	0.02
CLMH122N217MH122N212		2014		Existing	assumed Mannings N	MH122N217	MH122N212	T17620	IRWD	PVC	{1A5E097C-5D36-4912-BE5C-65E687AB61AD}	CLMH122N217MH122N212	229.13	227.70	0.666666667	MH122N217	MH122N212				111	CLMH122N217MH122N212	8	0.0145	0.000091	0.00	0.000095	0.00	0.000091	0.00	0.001297	0.03
CLMH122N218MH122N219		2014		Existing	assumed Mannings N	MH122N218	MH122N219	T17620	IRWD	PVC	{9EC32105-62F1-4F1D-B09F-99C1495A7933}	CLMH122N218MH122N219	233.47	232.07	0.666666667	MH122N218	MH122N219				97	CLMH122N218MH122N219	8	0.0144	0.000091	0.00	0.000095	0.00	0.000090	0.00	0.001771	0.03
CLMH122N219MH122N220		2014		Existing	assumed Mannings N	MH122N219	MH122N220	T17620	IRWD	PVC	{DD97174A-56D7-4A0A-9A0D-EB947397CA9}	CLMH122N219MH122N220	231.87	231.45	0.666666667	MH122N219	MH122N220				34	CLMH122N219MH122N220	8	0.0125	0.000061	0.00	0.000075	0.00	0.000088	0.00	0.001771	0.03
CLMH122N220MH122N221		2014		Existing	assumed Mannings N	MH122N220	MH122N221	T17620	IRWD	PVC	{4ECDCAA9-35B0-4274-A847-38CB36211DB8}	CLMH122N220MH122N221	231.35	229.84	0.666666667	MH122N220	MH122N221				103	CLMH122N220MH122N221	8	0.0146	0.000121	0.01	0.000149	0.01	0.000175	0.01	0.004788	0.05
CLMH122N221MH122N222		2014		Existing	assumed Mannings N	MH122N221	MH122N222	T17620	IRWD	PVC	{56F1C775-D75F-494B-BDCE-671BFBC9E3FB}	CLMH122N221MH122N222	229.74	229.25	0.666666667	MH122N221	MH122N222				34	CLMH122N221MH122N222	8	0.0146	0.000181	0.01	0.000224	0.01	0.000262	0.01	0.005433	0.05
CLMH122N222MH122N211		2014		Existing	assumed Mannings N	MH122N222	MH122N211	T17620	IRWD	PVC	{25222A37-0748-4958-985F-F4EE7F0B1436}	CLMH122N222MH122N211	229.15	228.23	0.666666667	MH122N222	MH122N211				94	CLMH122N222MH122N211	8	0.0098	0.000241	0.01	0.000297	0.01	0.000349	0.01	0.007354	0.07
CLMH122N223MH122N222		2014		Existing	assumed Mannings N	MH122N223	MH122N222	T17620	IRWD	PVC	{C0A79482-78E2-4

| | | |

| | | |

| | | |

| | | |

| | | |

| | | |

| | | |

CLMH126N015MH126N014		1979		Existing		MH126N015	MH126N014		10544	IRWD	VCP	{7168SD1E-9478-4A79-ABC0-A9425A0F7AD3}	CLMH126N015MH126N014	299.07		294.19	0.666666667	MH126N015	MH126N014					252	CLMH126N015MH126N014	8	0.0194	0.014122	0.08	0.015078	0.08	0.017877	0.09	0.015078	0.08
CLMH126N016MH126N015		1979		Existing		MH126N016	MH126N015		10544	IRWD	VCP	{2D810CA5-62B2-4D80-B2F5-C4BA233B76E6}	CLMH126N016MH126N015	299.88		299.17	0.666666667	MH126N016	MH126N015					182	CLMH126N016MH126N015	8	0.0039	0.004643	0.06	0.004957	0.07	0.005877	0.07	0.004957	0.07
CLMH126N017MH126N016		1979		Existing		MH126N017	MH126N016		10544	IRWD	VCP	{B7E9105A-453E-4090-A489-B68825664EAB}	CLMH126N017MH126N016	302.32		299.98	0.666666667	MH126N017	MH126N016					289	CLMH126N017MH126N016	8	0.0081	0.004644	0.06	0.004957	0.06	0.005877	0.06	0.004957	0.06
CLMH126N018MH126N017		1979		Existing		MH126N018	MH126N017		10544	IRWD	VCP	{D15A412A-B6F2-4936-BAE7-069EBA75CEAE}	CLMH126N018MH126N017	303.23		302.42	0.666666667	MH126N018	MH126N017					208	CLMH126N018MH126N017	8	0.0039	0.001944	0.04	0.002075	0.04	0.002460	0.05	0.002075	0.04
CLMH126N019MH126N015		1979		Existing		MH126N019	MH126N015		10544	IRWD	VCP	{9FB752D8-7933-4159-BE1B-CE51A7B890B4}	CLMH126N019MH126N015	306.36		299.27	0.666666667	MH126N019	MH126N015					177	CLMH126N019MH126N015	8	0.0401	0.007319	0.05	0.007817	0.05	0.009266	0.06	0.007817	0.05
CLMH126N020MH126N019		1979		Existing		MH126N020	MH126N019		10544	IRWD	VCP	{22FCB972-ECAF-489D-B662-483E03C3DE4B}	CLMH126N020MH126N019	320.14		306.57	0.666666667	MH126N020	MH126N019					357	CLMH126N020MH126N019	8	0.0380	0.007319	0.05	0.007817	0.05	0.009266	0.06	0.007817	0.05
CLMH126N021MH126N020		1979		Existing		MH126N021	MH126N020		10544	IRWD	VCP	{72706AA4-3501-418F-9C59-E6C867EC1D1A}	CLMH126N021MH126N020	327.85		320.39	0.666666667	MH126N021	MH126N020					239	CLMH126N021MH126N020	8	0.0312	0.004598	0.04	0.004912	0.04	0.005822	0.05	0.004912	0.04
CLMH126N022MH126N033		1978		Existing		MH126N022	MH126N033		10473	IRWD	VCP	{14F97F61-A34E-43DE-8327-68E65197A234}	CLMH126N022MH126N033	292.01		284.04	0.666666667	MH126N022	MH126N033					181	CLMH126N022MH126N033	8	0.0442	0.020912	0.08	0.022328	0.08	0.026472	0.09	0.022328	0.08
CLMH126N023MH126W035		1979		Existing		MH126N023	MH126W035		10473	IRWD	VCP	{A1F20999-7D24-4C33-82C3-561785A0C604}	CLMH126N023MH126W035	280.77		280.07	0.666666667	MH126N023	MH126W035					379	CLMH126N023MH126W035	8	0.0018	0.037875	0.22	0.040443	0.22	0.047953	0.24	0.040442	0.22
CLMH126N028MH126N029		1979		Existing		MH126N028	MH126N029	T10497	10544	IRWD	VCP	{D2673AED-47BE-445A-932A-107CB2AF080}	CLMH126N028MH126N029	304.20		301.10	0.500000000	MH126N028	MH126N029					131	CLMH126N028MH126N029	6	0.0237	0.000692	0.03	0.000737	0.03	0.000874	0.03	0.000737	0.03
CLMH126N029MH126N022		1979		Existing		MH126N029	MH126N022	T10497	10544	IRWD	VCP	{321F04BB-BDCD-425E-AFE3-32AE9DEA4E61}	CLMH126N029MH126N022	300.89		292.20	0.666666667	MH126N029	MH126N022					153	CLMH126N029MH126N022	8	0.0568	0.006790	0.04	0.007250	0.05	0.008596	0.05	0.007250	0.05
CLMH126N030MH126N029		1979		Existing		MH126N030	MH126N029	T10497	10544	IRWD	VCP	{851B5D69-9ADA-4214-88A1-60D7CCD3162F}	CLMH126N030MH126N029	304.20		301.10	0.666666667	MH126N030	MH126N029					180	CLMH126N030MH126N029	8	0.0172	0.002179	0.03	0.002329	0.04	0.002761	0.04	0.002329	0.04
CLMH126N031MH126N030		1979		Existing		MH126N031	MH126N030	T10497	10544	IRWD	VCP	{448F370C-6DAD-4294-9297-82E351385C69}	CLMH126N031MH126N030	304.89		304.29	0.666666667	MH126N031	MH126N030					79	CLMH126N031MH126N030	8	0.0076	0.002179	0.04	0.002329	0.04	0.002761	0.04	0.002329	0.04
CLMH126N032MH126N031		1979		Existing		MH126N032	MH126N031	T10497	10544	IRWD	VCP	{82E8EFE9-A8DE-4BF3-8AC1-CB073E36D383}	CLMH126N032MH126N031	308.60		305.10	0.500000000	MH126N032	MH126N031					244	CLMH126N032MH126N031	6	0.0143	0.002179	0.05	0.002329	0.05	0.002761	0.06	0.002329	0.05
CLMH126N033MH126N023		1979		Existing		MH126N033	MH126N023	10473	IRWD	VCP	{45353328-DB70-4B88-A93A-49823A663CB7}	CLMH126N033MH126N023	283.85		281.67	0.666666667	MH126N033	MH126N023					53	CLMH126N033MH126N023	8	0.0041	0.037885	0.11	0.040451	0.11	0.047958	0.12	0.040451	0.11
CLMH126N034MH126N033		1984		Existing		MH126N034	MH126N033	T11602	IRWD	PVC	{D16C272D-EDD8-46D6-B7EC-D92555386A0B}	CLMH126N034MH126N033	284.73		284.05	0.666666667	MH126N034	MH126N033					171	CLMH126N034MH126N033	8	0.0040	0.016973	0.12	0.018123	0.12	0.021486	0.13	0.018123	0.12
CLMH126N035MH126N034		1984		Existing		MH126N035	MH126N034	T11602	IRWD	PVC	{6D6B180A-96FC-4797-AD88-C0B1C8321D5A}	CLMH126N035MH126N034	285.19		284.92	0.666666667	MH126N035	MH126N034					68	CLMH126N035MH126N034	8	0.0040	0.006915	0.08	0.007383	0.08	0.008752	0.09	0.007383	0.08
CLMH126N036MH126N035		1984		Existing		MH126N036	MH126N035	T11602	IRWD	PVC	{CEAB328D-0034-4E3D-9644-2C4990C5E7C}	CLMH126N036MH126N035	286.48		285.39	0.666666667	MH126N036	MH126N035					281	CLMH126N036MH126N035	8	0.0039	0.006915	0.08	0.007383	0.08	0.008752	0.09	0.007383	0.08
CLMH126N037MH126N036		1984		Existing		MH126N037	MH126N036	T11602	IRWD	PVC	{7402E265-3DF8-4897-800A-CE8E362228BF}	CLMH126N037MH126N036	287.01		286.58	0.666666667	MH126N037	MH126N036					110	CLMH126N037MH126N036	8	0.0039	0.002359	0.05	0.002517	0.05	0.002984	0.05	0.002517	0.05
CLMH126N038MH126N037		1984		Existing		MH126N038	MH126N037	T11602	IRWD	PVC	{67877297-99E8-46FA-A4F7-DE9D3FB49B9B}	CLMH126N038MH126N037	287.51		287.10	0.666666667	MH126N038	MH126N037					100	CLMH126N038MH126N037	8	0.0041	0.002359	0.05	0.002517	0.05	0.002984	0.05	0.002517	0.05
CLMH126N039MH126N038		1984		Existing		MH126N039	MH126N038	T11602	IRWD	PVC	{28B46E0A-9E53-418D-813A-FA7DE62D2AD1}	CLMH126N039MH126N038	288.75		287.72	0.666666667	MH126N039	MH126N038					260	CLMH126N039MH126N038	8	0.0040	0.002359	0.05	0.002517	0.05	0.002984	0.05	0.002517	0.05
CLMH126N040MH126N039		1984		Existing		MH126N040	MH126N039	T11602	IRWD	PVC	{79C7A521-2EE2-4A23-A8B4-871183D255E3}	CLMH126N040MH126N039	288.75		288.13	0.666666667	MH126N040	MH126N039					158	CLMH126N040MH126N039	8	0.0039	0.002350	0.05	0.002508	0.05	0.002975	0.05	0.002508	0.05
CLMH126N041MH126N041		1984		Existing		MH126N041	MH126N041	T11602	IRWD	PVC	{81DE97EE-3968-4A20-869A-49C265A7262B}	CLMH126N041MH126N041	288.02		287.55	0.666666667	MH126N041	MH126N041					288	CLMH126N041MH126N041	8	0.0040	0.002350	0.05	0.002508	0.05	0.002975	0.05	0.002508	0.05
CLMH126N042MH126N042		1984		Existing		MH126N042	MH126N042	T11602	IRWD	PVC	{615B1C40-94B9-4239-981D-B74F9C20FEEE}	CLMH126N042MH126N042	287.45		286.10	0.666666667	MH126N042	MH126N042					342	CLMH126N041MH126N042	8	0.0039	0.006214	0.07	0.006635	0.07	0.007867	0.08	0.006635	0.07
CLMH126N043MH126N034		1984		Existing		MH126N043	MH126N034	T11602	IRWD	PVC	{9C5FE4DB-573D-4940-B439-07113E2FB30D}	CLMH126N043MH126N034	285.91		284.92	0.666666667	MH126N043	MH126N034					135	CLMH126N042MH126N034	8	0.0073	0.010059	0.08	0.012734	0.09	0.016074	0.10	0.012734	0.09
CLMH126N045MH126N046		1984		Existing		MH126N045	MH126N046	12131	IRWD	PVC	{568F6979-2BB3-48AD-906B-31AB4BFC0588}	CLMH126N045MH126N046	233.16		232.58	0.666666667	MH126N045	MH126N046					113	CLMH126N045MH126N046	8	0.0051	0.005092	0.06	0.006113	0.07	0.007247	0.07	0.006113	0.07
CLMH126N046MH100E024		1984		Existing		MH126N046	MH100E024	12131	IRWD	PVC	{1E2A5297-2B68-4A44-AABE-0F82C71C46F9}	CLMH126N046MH100E024	232.38		230.24	0.666666667	MH126N046	MH100E024					376	CLMH126N046MH100E024	8	0.0057	0.005092	0.06	0.006113	0.07	0.007247	0.07	0.006113	0.07
CLMH126N047MH126N008		1984		Existing		MH126N047	MH126N008	T12003	IRWD	PVC	{8A161EDD-CC68-4F24-8FF0-3C1FCE158FC9}	CLMH126N047MH126N008	267.22		266.72	0.666666667	MH126N047	MH126N008					129	CLMH126N047MH126N008	8	0.0039	0.016470	0.12	0.019712	0.13	0.023372	0.14	0.019712	0.13
CLMH126N048MH126N047		1985		Existing		MH126N048	MH126N047	T12003	IRWD	PVC	{EDF6ED8D-D1F3-43AA-801C-339F2A6733A}	CLMH126N048MH126N047	268.17		267.42	0.666666667	MH126N048	MH126N047					196	CLMH126N048MH126N047	8	0.0038	0.015645	0.11	0.018721	0.12	0.022197	0.13	0.018721	0.12
CLMH126N049MH126N048		1985		Existing		MH126N049	MH126N048	T12003	IRWD	PVC	{3342BE48-4039-4E4F-8E5C-C4A3AB013F0E}	CLMH126N049MH126N048	268.98		268.38	0.666666667	MH126N049	MH126N048					157	CLMH126N049MH126N048	8	0.0038	0.002375	0.05	0.002850	0.05	0.003380	0.05	0.002850	0.05
CLMH126N050MH126N049		1985		Existing		MH126N050	MH126N049	T12003	IRWD	PVC	{66203AD7-167E-4B66-9157-442FCF073F99}	CLMH126N050MH126N049	269.58		269.19	0.666666667	MH126N050	MH126N049					104	CLMH126N050MH126N049	8	0.0038	0.002375	0.05	0.002850	0.05	0.003380	0.05	0.002850	0.05
CLMH126N052MH126N048		1985		Existing		MH126N052	MH126N048	T12003	IRWD	PVC	{F8958698-8642-4E8B-9E37-248DE8AE5C19}	CLMH126N052MH126N048	268.95		268.48	0.666666667	MH126N052	MH126N048					124	CLMH126N052MH126N048	8	0.0038	0.023270	0.10	0.015870	0.11	0.018817	0.12	0.015870	0.11
CLMH126N053MH126N052		1985		Existing		MH126N053	MH126N052	T12003	IRWD	PVC	{D1F67215-08DC-428A-A81C-853D89BA054E}	CLMH126N053MH126N052	272.08		269.16	0.666666667	MH126N053	MH126N052					47	CLMH126N053MH126N052	8	0.0621	0.010364	0.05	0.012441	0.05	0.014750	0.06	0.012441	0.05
CLMH126N054MH126N053		1985		Existing		MH126N054	MH126N053	T12003	IRWD	PVC	{F0EF680F-8CE3-4A09-8BA9-27E06C2CBF12}	CLMH126N054MH126N053	275.93		272.29	0.666666667	MH126N054	MH126N053					52	CLMH126N054MH126N053	8	0.0701	0.010364	0.05	0.012441	0.05	0.014750	0.06	0.012441	0.05
CLMH126N055MH126N054		1985		Existing		MH126N055	MH126N054	T12003	IRWD	PVC	{5FEE0020-80C4-4AD3-B17B-0DB7017201F5}	CLMH126N055MH126N054	276.79		276.13	0.666666667	MH126N055	MH126N054					93	CLMH126N055MH126N054	8	0.0071	0.006359	0.07	0.007634	0.07	0.009050	0.08	0.007634	0.07
CLMH126N056MH126N055		1985		Existing		MH126N056	MH126N055	T12003	IRWD	PVC	{293CD81A-60E2-47A2-AE88-A4BC8D67FE88}	CLMH126N056MH126N055	278.64		276.98	0.666666667	MH126N056	MH126N055					211	CLMH126N056MH126N055	8	0.0079	0.006359	0.06	0.007634	0.07	0.009050	0.08	0.007634	0.07
CLMH126N058MH126N056		1985		Existing		MH126N058	MH126N056	T12003	IRWD	PVC	{5667259F-C47D-4D06-9935-6ABD356F8F75}	CLMH126N058MH126N056	280.27		278.85	0.666666667	MH126N058	MH126N056					182	CLMH126N058MH126N056	8	0.0078	0.003220	0.05	0.003865	0.05	0.004583	0.05	0.003865	0.05
CLMH126N059MH126N058		1985		Existing		MH126N059	MH126N058	T12003	IRWD	PVC	{622877SD-614B-441B-920F-EBB24B111FB}	CLMH126N059MH126N058	281.41		280.48	0.666666667	MH126N059	MH126N058					160	CLMH126N059MH126N058	8	0.0077	0.003220	0.05	0.003865	0.05	0.004583	0.06	0.003865	0.05
CLMH126N061MH126N054		1987		Existing		MH126N061	MH126N054	T12003	IRWD	PVC	{96685B9F-150D-4A82-9575-C7E83BCAD620}	CLMH126N061MH126N054	285.61		276.13	0.666666667	MH126N061	MH126N054					110	CLMH126N061MH126N054	8	0.0866	0.004005	0.03	0.004807	0.03	0.005700	0.04	0.004807	0.03
CLMH126N063MH126N061		1985		Existing		MH126N063	MH126N061	T12003	IRWD	PVC	{1EAB68AF-1244-4A16-B534-29F9C2445F4F}	CLMH126N063MH126N061	286.70		285.80	0.666666667	MH126N063	MH126N061					404	CLMH126N063MH126N061	8	0.0049	0.003300	0.05	0.003961	0.06	0.004698	0.06	0.003961	0.06
CLMH126N064MH126N063		1985		Existing		MH126N064	MH126N063	T12003	IRWD	PVC	{35A5D7E7-7C52-4D2D-BA15-369FC20648AA}	CLMH126N064MH126N063	287.85		286.91	0.666666667	MH126N064	MH126N063					73	CLMH126N064MH126N063	8	0.0129	0.003300	0.04	0.003961	0.05	0.004698	0.05	0.003961	0.05
CLMH126N067MH126N006		1976		Existing		MH126N067	MH126N006	128	IRWD	VCP	{625AF9FA-7C45-426A-BE84-D8CD681474A9}	CLMH126N067MH126N006	313.60		311.54	0.666666667	MH126N067	MH126N006					158	CLMH126N067MH126N006	8	0.0130	0.032953	0.13	0.038312	0.14	0.045430	0.15	0.038312	0.14
CLMH126N084MH100E084		1997		Existing		MH126N084	MH100E084	T12022	IRWD	VCP	{32A17568-A650-4F54-B707-F881957620DE}	CLMH126N084MH100E084	308.95		305.55	0.666666667	MH126N084	MH100E084					100	CLMH126N084MH100E084	8	0.0340	0.005360	0.04	0.005723	0.05	0.006785	0.05	0.005723	0.05
CLMH126N087MH126N088		1990		Existing		MH126N087	MH126N088	T12022	IRWD	VCP	{F4AD1541-4473-4502-A870-600BC916A31B}	CLMH126N087MH126N088	303.61		302.70	0.666666667	MH126N087	MH126N088					59	CLMH126N087MH126N088	8	0.0154	0.011314	0.08	0.012082	0.08	0.014322	0.08	0.012082	0.08
CLMH126N088MH126N089		1979		Existing		MH126N088	MH126N089	T12022	IRWD	VCP	{332CF3A7-FB66-4C6A-B44D-ABDA263E5243}	CLMH126N088MH126N089	302.60		300.27	0.666666667	MH126N088	MH126N089					213	CLMH126N088MH126N089	8	0.0133	0.012460	0.08	0.013306	0.08	0.015772	0.09	0.013306	0.08
CLMH126N089MH126N091		1990		Existing		MH126N089	MH126N091	T12022	IRWD	VCP	{25B3EE5F-A91A-428A-8F99-67B04D4CF38}	CLMH126N089MH126N091	300.17		294.60	0.666666667	MH126N089	MH126N091					174	CLMH126N089MH126N091	8	0.0320	0.015850	0.07	0.016925	0.08	0.020064	0.08	0.016925	0.08
CLMH126N091MH126W110		1976		Existing		MH126N091	MH126W110	T12022	IRWD	VCP	{E895305E-396C-4324-83D9-B0A42757FF21}	CLMH126N091MH126W110	294.50		294.16	0.666666667	MH126N091	MH126W110					59	CLMH126N091MH126W110	8	0.0060	0.017862	0.12	0.020610	0.13	0.025610	0.13	0.019073	0.12
CLMH126N092MH126N091		1990		Existing		MH126N092	MH126N091	T12022	IRWD	VCP	{5D479479-FA75-4CE6-A4FB-05D9247BAF4B}	CLMH126N092MH126N091	294.98		294.70	0.666666667	MH126N092	MH126N091					98	CLMH126N092MH126N091	8	0.0039	0.002012	0.04	0.002148	0.05	0.002546	0.05	0.002148	0.05
CLMH126N093MH126N092		1990		Existing		MH126N093	MH126N092	T12022	IRWD	VCP	{DD133B79-EC62-43F8-815F-B7E3CD62CBE}	CLMH126N093MH126N092	296.04		295.17	0.666666667	MH126N093	MH126N092					222	CLMH126N093MH126N092	8	0.0039	0.002012	0.04	0.002148	0.05	0.002546	0.05	0.002148	0.05
CLMH126N099MH100E101		1997		Existing		MH126N099	MH100E101	T12022	IRWD	VCP	{950B5D08-8B99-4CCE-83F3-DC6FFD4BDE1A}	CLMH126N099MH100E101	294.05		293.63	0.666666667	MH126N099	MH100E101					98	CLMH126N099MH100E101	8	0.0043	0.021496	0.14	0.022947	0.14	0.027202	0.15	0.022947	0.14
CLMH126N104MH126W112		1977		Existing		MH126N104	MH126W112	9988	IRWD	VCP	{E263006B-0E85-4353-B126-11F2302DEE24}	CLMH126N104MH126W112	289.15		285.06	0.666666667	MH126N104	MH126W112					170	CLMH126N104MH126W112	8	0.0240	0.012154	0.07	0.012978	0.07	0.015386	0.08	0.012978	0.07
CLMH126N106MH125W022		1997		Existing	assumed Mannings N	MH126N106	MH125W022	834	IRWD	VCP	{AB70C0BE-E2DB-4C65-90A1-0848520B7120}	CLMH126N106MH125W022	201.17		200.80	1.250000000	MH126N106	MH125W022					184	CLMH126N106MH125W022	15	0.0020	0.658762	0.36	0.704572	0.38	0.836494	0.41	0.694712	0.37
CLMH126N107MH126N106		1997		Existing	assumed Mannings N	MH126N107	MH126N106	834	IRWD	VCP	{78DC540A-188F-47CB-A54F-53B4AA20E83}	CLMH126N107MH126N106	201.55		201.38	1.250000000	MH126N107	MH126N106					75	CLMH126N107MH126N106	15	0.0023	0.658806	0.35	0.704613	0.36	0.836530	0.39	0.694752	0.36
CLMH126N108MH126N107		1997		Existing	assumed Mannings N	MH126N108	MH126N107	834	IRWD	VCP	{57D3E713-BBA0-4AB9-81F8-9D5AF7B0F2C3}	CLMH126N108MH126N107	202.24		201.75	1.250000000	MH126N108	MH126N107					165	CLMH126N108MH126N107	15	0.0023	0.658807	0.36	0.704613	0.37	0.836530	0.41	0.694751	0.37
CLMH126N109MH126N108		1997		Existing	assumed Mannings N	MH126N109	MH126N108	834	IRWD	VCP	{58357893-2ABB-4598-9437-357220AEC8BB}	CLMH126N109MH126N108	203.19		203.05	1.250000000	MH126N109	MH126N108					74	CLMH126N109MH126N108	15	0.0019	0.658877	0.35	0.704677	0.36	0.836588	0.40	0.694813	0.36
CLMH126N110MH126N109		1997		Existing	assumed Mannings N	MH126N110	MH126N109	834	IRWD	VCP	{47AEF03A-888F-427E-877D-541A039DB307}	CLMH126N110MH126N109	203.86		203.38	1.250000000	MH126N110	MH126N109					245	CLMH126N110MH126N109	15	0.0020	0.593505	0.35	0.634689	0.36	0.753571	0.40	0.617946	0.36
CLMH126N111MH126N110		1997		Existing	assumed Mannings N	MH126N111	MH126N110	834	IRWD	VCP	{9D2B92EA-844A-49C9-AA18-23EA039A0C04}	CLMH126N111MH126N110	204.55		204.07	1.250000000	MH126N111	MH126N110					101	CLMH126N111MH126N110	15	0.0020	0.593628	0.35	0.634807	0.36	0.753678	0.40	0.618062	0.36
CLMH126N112MH126N109		2000		Existing	assumed Mannings N	MH126N112	MH126N109	941	IRWD	PVC	{99F60208-52D1-409B-B5D9-D0F00A0C1F37}	CLMH126N112MH126N109	218.07		203.97	0.666666667	MH126N112	MH126N109					159	CLMH126N112MH126N109	8	0.0892	0.078843	0.12	0.084244	0.12	0.100054	0.14	0.092671	0.13
CLMH126N113MH126N112		2000		Existing	assumed Mannings N	MH126N113	MH126N112	941	IRWD	PVC	{7E1FFD5F-FB9B-47B0-BD21-33A8C5D4A619}	CLMH126N113MH126N112	225.49		218.27	0.666666667	MH126N113	MH126N112					76	CLMH126N113MH126N112	8	0.0950	0.078849	0.12	0.084249	0.12	0.100050	0.13	0.092678	0.13
CLMH126S001MH126S002		1979		Existing		MH126S001	MH126S002	10544	IRWD	VCP	{EEC28530-C301-42CD-972F-31485A68B285}	CLMH126S001MH126S002	289.64		288.47	0.666666667	MH126S001	MH126S002					108	CLMH126S001MH126S002	8	0.0108	0.004794	0.05	0.005119	0.06	0.006069	0.06	0.005119	0.06
CLMH126S002MH126S003		1979		Existing		MH126S002	MH126S003	10544	IRWD	VCP	{556EC6B9-81624-450B-AA45-EFEAD63F6339}	CLMH126S002MH126S003	288.32		286.14	0.666666667	MH126S002	MH126S003					108	CLMH126S002MH126S003	8	0.0202	0.006781	0.06	0.007239	0.06	0.008584	0.06	0.007239	0.06
CLMH126S003MH126S004		1979		Existing		MH126S003	MH126S004	T10457	IRWD	VCP	{1A934EDF-8A9A-404C-95E0-A8E9B23A698B}	CLMH126S003MH126S004	286.04		270.66	0.666666667	MH126S003	MH126S004					84	CLMH126S003MH126S004	8	0.1748	0.006781	0.03	0.007239	0.03	0.008584	0.04	0.007239	0.03
CLMH126S004MH126S026		1979		Existing		MH126S004	MH126S026	T10457	IRWD	VCP	{01C79857-9530-4B69-BEE0-BF3D0E6F2903}	CLMH126S004MH126S026	269.92		258.14	0.666666667	MH126S004	MH126S026					164	CLMH126S004MH126S026	8	0.0718	0.007002	0.04	0.007474	0.04	0.008863	0.05	0.007474	0.04
CLMH126S005MH126S006		1979		Existing		MH126S005	MH126S006	10378	IRWD	PVC	{0C33B253-5F90-44AE-8915-13E6CE267632}	CLMH126S005MH126S006	224.58		224.08	0.666666667	MH126S005	MH126S006					126	CLMH126S005MH126S006	8	0.0040	0.004189	0.06	0.004473	0.06	0.005303	0.07	0.004473	0.06
CLMH126S006MH126S007		1979		Existing		MH126S006	MH126S007	10378	IRWD	PVC	{2B9B27C6-6645-4AA6-A0DF-5A7B9ED7DA1E}	CLMH126S006MH126S007	223.99		223.19	0.666666667	MH126S006	MH126S007					159	CLMH126S006MH126S007	8	0.0040	0.004189	0.06	0.004473	0.06	0.005303	0.07	0.004473	0.06
CLMH126S007MH126S008		1979		Existing		MH126S007	MH126S008	10378	IRWD	VCP	{6645320A-54EC-4FE9-9E36-887CE0929B25}	CLMH126S007MH126S008	223.09		222.80	1.000000000	MH126S007	MH126S008					171	CLMH126S007MH126S008	12	0.0017	0.394127	0.39	0.421194	0.40	0.499973	0.44	0.421190	0.40
CLMH126S008MH126S080		2001		Existing	assumed Mannings N	MH126S008	MH126S080	A00834A	IRWD	PVC	{2A46B1B6-1FA6-47EC-8639-016166295279}	CLMH126S008MH126S080	221.65		220.47	1.000000000	MH126S008	MH126S080					132	CLMH126S008MH126S080	12	0.0109	0.397213	0.26	0.424490	0.27	0.503881	0.30	0.424486	0.27
CLMH126S009MH126S007		1979		Existing		MH126S009	MH126S007	10378	IRWD	VCP	{0F173F49-0E19-424F-9D20-25240C7D640C}	CLMH126S009MH126S007	223.97		223.19	1.000000000	MH126S009	MH126S007					142	CLMH126S009MH126S007	12	0.0040	0.390118	0.34	0.416901	0.35	0.495059	0.41	0.416897	0.35
CLMH126S010MH126S009		1979		Existing		MH126S010	MH126S009	10378	IRWD	PVC	{64C735FB-FC05-43FE-A2DE-5EFF755EF1B2}	CLMH126S010MH126S009	224.27		223.97	1.000000000	MH126S010	MH126S009					82	CLMH126S010MH126S009	12	0.0037	0.385372	0.35	0.411744	0.36	0.488701	0.40	0.411741	0.36
CLMH126S011MH126S010		1979		Existing		MH126S011	MH126S010	10378	IRWD	PVC	{B9015B1A-354C-47FD-BE1B-8045196BB7B7}	CLMH126S011MH126S010	224.92		224.47	1.000000000	MH126S011	MH126S010					115	CLMH126S011MH126S010	12	0.0039	0.384414	0.33	0.410716	0.34	0.487471	0.37	0.410713	0.34
CLMH126S012MH126S011		1979		Existing		MH126S012	MH126S011	10378	IRWD	PVC	{55FED2E6-4A3F-43FC-8B27-E46FFE601858}	CLMH126S012MH126S011	225.30		225.02	1.000000000	MH126S012	MH126S011					72	CLMH126S012MH126S011	12	0.0039	0.382389	0.33	0.408574	0.34	0.484787	0.37	0.408573	0.34
CLMH126S013MH126S012		1979		Existing		MH126S013	MH126S012	10378	IRWD	PVC	{C0BB4604-F90E-46A2-B40D-2A9E5D9F13A2}	CLMH126S013MH126S012	228.39		225.39	1.000000000	MH126S013	MH126S012					92	CLMH126S013MH126S012	12	0.0326	0.379129	0.22	0.405004	0.23	0.480679	0.26	0

CLMH126W027MH126W029		1977		Existing		MH126W027	MH126W029		T09424	IRWD	VCP	{526490BD-EFEE-49C7-951D-2D0B952E86EC}	CLMH126W027MH126W029	285.60	280.15	0.666666667	MH126W027	MH126W029			273	CLMH126W027MH126W029	8	0.0200	0.002979	0.04	0.003182	0.04	0.003771	0.04	0.003182	0.04			
CLMH126W029MH126W030		1977		Existing		MH126W029	MH126W030		T09424	IRWD	VCP	{C231E845-74E9-4838-B38A-38A6D8F0026}	CLMH126W029MH126W030	280.04	277.73	0.666666667	MH126W029	MH126W030			289	CLMH126W029MH126W030	8	0.0080	0.006046	0.06	0.006456	0.07	0.007653	0.07	0.006456	0.07			
CLMH126W030MH126W031		1977		Existing		MH126W030	MH126W031		T09424	IRWD	VCP	{501FA279-526F-41F9-A526-43DE8C0F1034}	CLMH126W030MH126W031	277.64	274.98	0.666666667	MH126W030	MH126W031			332	CLMH126W030MH126W031	8	0.0080	0.012869	0.09	0.013741	0.10	0.016291	0.11	0.013741	0.10			
CLMH126W031MH126W047		1977		Existing		MH126W031	MH126W047		T09424	IRWD	VCP	{AA6AF923-1817-4818-96E4-B6B8FEFD85D3}	CLMH126W031MH126W047	274.77	272.41	0.666666667	MH126W031	MH126W047			74	CLMH126W031MH126W047	8	0.0319	0.043419	0.12	0.046359	0.12	0.054966	0.14	0.046359	0.12			
CLMH126W035MH126W037		1977		Existing		MH126W035	MH126W037		9988	IRWD	VCP	{2A78D320-F4E6-4E31-9CB6-5CF15E144107}	CLMH126W035MH126W037	279.88	276.46	0.666666667	MH126W035	MH126W037			244	CLMH126W035MH126W037	8	0.0140	0.053716	0.16	0.057358	0.17	0.068010	0.18	0.057358	0.17			
CLMH126W037MH126W040		1977		Existing		MH126W037	MH126W040		9988	IRWD	VCP	{B3676484-103F-434D-B834-71029D448CEF}	CLMH126W037MH126W040	276.35	268.70	0.666666667	MH126W037	MH126W040			379	CLMH126W037MH126W040	8	0.0202	0.053713	0.15	0.057355	0.16	0.068008	0.18	0.057355	0.16			
CLMH126W040MH126W042		1977		Existing		MH126W040	MH126W042		9987	IRWD	VCP	{4CB6C5F4-821A-4F3E-9667-B627913779D2}	CLMH126W040MH126W042	268.68	265.40	0.666666667	MH126W040	MH126W042			356	CLMH126W040MH126W042	8	0.0092	0.059197	0.19	0.063214	0.20	0.074963	0.21	0.063214	0.20			
CLMH126W042MH126W043		1977		Existing		MH126W042	MH126W043		9987	IRWD	VCP	{549AD847-B15B-4CEC-9065-4EA1DF72BA20}	CLMH126W042MH126W043	265.29	263.23	0.666666667	MH126W042	MH126W043			396	CLMH126W042MH126W043	8	0.0052	0.066935	0.23	0.071481	0.24	0.084780	0.26	0.071480	0.24			
CLMH126W043MH126W044		1976		Existing		MH126W043	MH126W044		T09424	IRWD	VCP	{2D10B1C9-0745-4EBC-BE9E-C0D3168545A3}	CLMH126W043MH126W044	263.02	262.51	0.833333333	MH126W043	MH126W044			127	CLMH126W043MH126W044	10	0.0040	0.120419	0.24	0.128589	0.25	0.152496	0.27	0.128589	0.25			
CLMH126W044MH126W058		1976		Existing		MH126W044	MH126W058		T09424	IRWD	VCP	{2803EDE3-6DD9-4187-BAF5-4BCF0165E52F}	CLMH126W044MH126W058	262.32	257.64	0.833333333	MH126W044	MH126W058			117	CLMH126W044MH126W058	10	0.0400	0.125122	0.15	0.133613	0.16	0.158455	0.18	0.133613	0.16			
CLMH126W045MH126W044		1977		Existing		MH126W045	MH126W044		9986	IRWD	VCP	{E7F86CF8-9473-457D-BEEF-9526B7156133}	CLMH126W045MH126W044	267.01	262.51	0.666666667	MH126W045	MH126W044			109	CLMH126W045MH126W044	8	0.0413	0.004750	0.04	0.005073	0.04	0.006013	0.04	0.005073	0.04			
CLMH126W046MH126W045		1977		Existing		MH126W046	MH126W045		9986	IRWD	VCP	{56BCB1E9-8BA4-407A-9D44-F1723BA27D72}	CLMH126W046MH126W045	269.07	267.11	0.666666667	MH126W046	MH126W045			158	CLMH126W046MH126W045	8	0.0052	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH126W047MH126W043		1977		Existing		MH126W047	MH126W043		T09424	IRWD	VCP	{F65AB96C-C68D-4440-BAD4-F98D180B19CE}	CLMH126W047MH126W043	272.30	263.23	0.666666667	MH126W047	MH126W043			255	CLMH126W047MH126W043	8	0.0356	0.053004	0.13	0.056595	0.13	0.067102	0.15	0.056595	0.13			
CLMH126W048MH126W047		1977		Existing		MH126W048	MH126W047		T09424	IRWD	VCP	{0FF6BA74-C3F6-402B-B563-CC6C1661BC24}	CLMH126W048MH126W047	283.60	272.45	0.666666667	MH126W048	MH126W047			158	CLMH126W048MH126W047	8	0.0706	0.009587	0.05	0.010237	0.05	0.012137	0.05	0.010237	0.05			
CLMH126W049MH126W048		1977		Existing		MH126W049	MH126W048		9986	IRWD	VCP	{5F775F6E-1FE8-4B2A-9140-E3C1779F9CE1}	CLMH126W049MH126W048	285.36	283.79	0.666666667	MH126W049	MH126W048			302	CLMH126W049MH126W048	8	0.0052	0.006089	0.07	0.006502	0.07	0.007708	0.08	0.006502	0.07			
CLMH126W050MH126W049		1977		Existing		MH126W050	MH126W049		9986	IRWD	VCP	{32F71B01-D1EF-4213-9E12-75095F5E9B67}	CLMH126W050MH126W049	286.67	285.47	0.666666667	MH126W050	MH126W049			230	CLMH126W050MH126W049	8	0.0052	0.002612	0.05	0.002789	0.05	0.003308	0.05	0.002789	0.05			
CLMH126W051MH126W026		1974		Existing		MH126W051	MH126W026		T09424	IRWD	VCP	{6EFF99F6-2DE0-48F8-8B73-073681D24405}	CLMH126W051MH126W026	294.08	284.07	0.666666667	MH126W051	MH126W026			116	CLMH126W051MH126W026	8	0.0863	0.025650	0.07	0.027385	0.08	0.032471	0.08	0.027385	0.08			
CLMH126W051MH126W052		1977		Existing		MH126W051	MH126W052		9985	IRWD	VCP	{697D0775-5573-4F74-85CB-D7E0DCDE1647}	CLMH126W051MH126W052	305.08	294.29	0.666666667	MH126W051	MH126W052			81	CLMH126W051MH126W052	8	0.1349	0.016280	0.05	0.017381	0.06	0.020608	0.06	0.017381	0.06			
CLMH126W053MH126W052		1977		Existing		MH126W053	MH126W052		9985	IRWD	VCP	{622C42AA-5775-41AA-A12A-9D403D150969}	CLMH126W053MH126W052	307.01	305.19	0.666666667	MH126W053	MH126W052			350	CLMH126W053MH126W052	8	0.0052	0.016281	0.11	0.017381	0.12	0.020608	0.13	0.017381	0.12			
CLMH126W054MH126W053		1977		Existing		MH126W054	MH126W053		9985	IRWD	VCP	{3D5FFF6D-8401-4845-B50C-B8F2C2CF9B2C}	CLMH126W054MH126W053	308.89	307.10	0.666666667	MH126W054	MH126W053			352	CLMH126W054MH126W053	8	0.0051	0.012999	0.10	0.013879	0.10	0.016454	0.11	0.013879	0.10			
CLMH126W055MH126W054		1977		Existing		MH126W055	MH126W054		9985	IRWD	VCP	{B2466E1D-9ABA-4910-B3F2-AED2CCB0CE1B}	CLMH126W055MH126W054	330.57	309.08	0.666666667	MH126W055	MH126W054			299	CLMH126W055MH126W054	8	0.0721	0.013000	0.06	0.013879	0.06	0.016454	0.06	0.013879	0.06			
CLMH126W056MH126W055		1977		Existing		MH126W056	MH126W055		9985	IRWD	VCP	{FA07A658-A6BF-4BCF-A505-B2CC2C6FE4C2}	CLMH126W056MH126W055	331.73	330.67	0.666666667	MH126W056	MH126W055			264	CLMH126W056MH126W055	8	0.0040	0.006262	0.07	0.006686	0.08	0.007927	0.08	0.006686	0.08			
CLMH126W057MH126W056		1977		Existing		MH126W057	MH126W056		9985	IRWD	VCP	{B5EC76D5-0F9E-45FD-9FF1-96283D831EDE}	CLMH126W057MH126W056	332.80	331.82	0.666666667	MH126W057	MH126W056			246	CLMH126W057MH126W056	8	0.0040	0.006262	0.07	0.006686	0.08	0.007927	0.08	0.006686	0.08			
CLMH126W058MH126W209		1976		Existing		MH126W058	MH126W209		T09424	IRWD	VCP	{5CA4618C-AF73-4C03-AD3D-D309CFD38A23}	CLMH126W058MH126W209	257.54	257.18	0.833333333	MH126W058	MH126W209			117	CLMH126W058MH126W209	10	0.0031	0.125100	0.25	0.133593	0.26	0.158440	0.28	0.133593	0.26			
CLMH126W059MH126W061		1977		Existing		MH126W059	MH126W061		T10457	IRWD	VCP	{E58FAF13-8FEC-447E-A80B-F63A7F12D857}	CLMH126W059MH126W061	265.00	260.84	0.666666667	MH126W059	MH126W061			218	CLMH126W059MH126W061	8	0.0191	0.002873	0.04	0.003067	0.04	0.003635	0.04	0.003067	0.04			
CLMH126W061MH126W064		1979		Existing		MH126W061	MH126W064		T10457	IRWD	VCP	{CD541AC1-3178-4F03-97BC-80CE3AD1224}	CLMH126W061MH126W064	260.74	256.54	0.666666667	MH126W061	MH126W064			229	CLMH126W061MH126W064	8	0.0183	0.002873	0.04	0.003067	0.04	0.003635	0.04	0.003067	0.04			
CLMH126W062MH126S027		1979		Existing		MH126W062	MH126S027		T10457	IRWD	VCP	{E16C2794-2A77-417C-8041-42FF8CD7D243}	CLMH126W062MH126S027	260.62	256.72	0.666666667	MH126W062	MH126S027			402	CLMH126W062MH126S027	8	0.0097	0.006262	0.06	0.006686	0.07	0.007927	0.07	0.006686	0.07			
CLMH126W064MH126W066		1979		Existing		MH126W064	MH126W066		T10457	IRWD	VCP	{D8AD59EF-CBE0-489A-837E-F17940C0F774}	CLMH126W064MH126W066	256.34	253.13	0.666666667	MH126W064	MH126W066			170	CLMH126W064MH126W066	8	0.0189	0.007148	0.06	0.007632	0.06	0.009046	0.07	0.007632	0.06			
CLMH126W067MH126W067		1979		Existing		MH126W067	MH126W067		T10457	IRWD	VCP	{B75E243F-6064-4B8D-B30B-AAF8FE2959A3}	CLMH126W067MH126W067	252.92	250.57	0.666666667	MH126W067	MH126W067			143	CLMH126W067MH126W067	8	0.0164	0.028357	0.12	0.030276	0.12	0.035894	0.13	0.030276	0.12			
CLMH126W067MH126W205		1979		Existing		MH126W067	MH126W205		T10457	IRWD	VCP	{DASA3CE6-5102-4211-BD68-18A70C32B076}	CLMH126W067MH126W205	250.36	249.00	0.666666667	MH126W067	MH126W205			209	CLMH126W067MH126W205	8	0.0065	0.028357	0.14	0.030276	0.15	0.035894	0.16	0.030276	0.15			
CLMH126W068MH126S030		1979		Existing		MH126W068	MH126S030		T10457	IRWD	VCP	{8A96961A-4C3F-4A3C-9760-598B880D6DA27}	CLMH126W068MH126S030	244.60	239.86	0.666666667	MH126W068	MH126S030			281	CLMH126W068MH126S030	8	0.0251	0.017925	0.08	0.019135	0.09	0.022686	0.09	0.019135	0.09			
CLMH126W070MH126W068		1979		Existing		MH126W070	MH126W068		T10457	IRWD	VCP	{9E442658-981D-4C31-BEDF-FA6DFF95F177}	CLMH126W070MH126W068	249.44	244.90	0.666666667	MH126W070	MH126W068			262	CLMH126W070MH126W068	8	0.0173	0.028931	0.11	0.030276	0.12	0.035894	0.14	0.030276	0.12			
CLMH126W071MH126W070		1979		Existing		MH126W071	MH126W070		T10457	IRWD	VCP	{41F5DA68-3093-428E-AD74-9DC62D2FB4FF}	CLMH126W071MH126W070	250.92	249.63	0.666666667	MH126W071	MH126W070			141	CLMH126W071MH126W070	8	0.0091	0.003931	0.05	0.004195	0.05	0.004974	0.06	0.004195	0.05			
CLMH126W072MH126W073		1979		Existing		MH126W072	MH126W073		T10457	IRWD	VCP	{EDCEA2AF-E4B2-4AF0-BA59-0C21F13D8A49}	CLMH126W072MH126W073	251.00	250.27	0.666666667	MH126W072	MH126W073			151	CLMH126W072MH126W073	8	0.0048	0.001469	0.03	0.001567	0.04	0.001858	0.04	0.001567	0.04			
CLMH126W073MH126W074		1979		Existing		MH126W073	MH126W074		T10457	IRWD	VCP	{48F69BD0-C6EE-4CCD-A58D-FD4E4A4D5A83}	CLMH126W073MH126W074	250.07	248.47	0.666666667	MH126W073	MH126W074			205	CLMH126W073MH126W074	8	0.0078	0.003866	0.05	0.004127	0.05	0.004892	0.06	0.004127	0.05			
CLMH126W074MH126W027		1979		Existing		MH126W074	MH126W027		T10457	IRWD	VCP	{3E02C534-3197-4FE0-B945-4BCB887A8417}	CLMH126W074MH126W027	248.27	246.88	0.666666667	MH126W074	MH126W027			229	CLMH126W074MH126W027	8	0.0061	0.006716	0.07	0.007173	0.07	0.008501	0.08	0.007173	0.07			
CLMH126W075MH126W068		1979		Existing		MH126W075	MH126W068		T10457	IRWD	VCP	{E80CA0BC-6EC1-4794-92F8-8C1CE74457BD}	CLMH126W075MH126W068	246.77	245.00	0.666666667	MH126W075	MH126W068			228	CLMH126W075MH126W068	8	0.0078	0.013993	0.10	0.014940	0.10	0.017712	0.11	0.014940	0.10			
CLMH126W076MH126W110		1976		Existing		MH126W076	MH126W110		9351	IRWD	VCP	{D85A0A48-8854-48A7-9AC5-8926EB52ZF2}	CLMH126W076MH126W110	266.64	264.10	0.666666667	MH126W076	MH126W110			174	CLMH126W076MH126W110	8	0.0146	0.098536	0.22	0.105206	0.23	0.124748	0.25	0.105206	0.23			
CLMH126W078MH126W076		1976		Existing		MH126W078	MH126W076		9351	IRWD	VCP	{9F6EEA29-C97F-44F0-A6F0-F58A916585BC}	CLMH126W078MH126W076	270.64	266.64	0.666666667	MH126W078	MH126W076			180	CLMH126W078MH126W076	8	0.0100	0.070000	0.20	0.074737	0.21	0.088616	0.23	0.074737	0.21			
CLMH126W079MH126W078		1976		Existing		MH126W079	MH126W078		9351	IRWD	VCP	{F03A1284-48CD-4A0F-9567-4D7B8870D422}	CLMH126W079MH126W078	295.15	291.02	0.666666667	MH126W079	MH126W078			410	CLMH126W079MH126W078	10	0.0284	0.297655	0.24	0.313284	0.25	0.377010	0.27	0.317860	0.25			
CLMH126W080MH126W079		1976		Existing		MH126W080	MH126W079		9351	IRWD	VCP	{44471B8E-13F9-4A82-AC70-49C91BFA4E41}	CLMH126W080MH126W079	293.57	292.10	0.666666667	MH126W080	MH126W079			375	CLMH126W080MH126W079	8	0.0039	0.025649	0.15	0.027385	0.15	0.032472	0.17	0.027385	0.15			
CLMH126W081MH126W082		1976		Existing		MH126W081	MH126W082		9351	IRWD	VCP	{A4E23777-AC10-4373-A2C3-C45BD4D9FC16}	CLMH126W081MH126W082	322.41	320.70	0.666666667	MH126W081	MH126W082			332	CLMH126W081MH126W082	8	0.0052	0.003735	0.06	0.003988	0.06	0.004729	0.06	0.003988	0.06			
CLMH126W082MH127N067		1976		Existing		MH126W082	MH127N067		9351	IRWD	VCP	{FB092ED8-DC0C-4B28-827F-F07BE57206AE}	CLMH126W082MH127N067	320.60	317.20	0.666666667	MH126W082	MH127N067			345	CLMH126W082MH127N067	8	0.0099	0.009868	0.08	0.010535	0.08	0.012492	0.09	0.010535	0.08			
CLMH126W083MH126W084		1976		Existing		MH126W083	MH126W084		9351	IRWD	VCP	{871FF519-DD66-4A76-B96A-E1DD7158A5FE}	CLMH126W083MH126W084	290.82	270.08	0.666666667	MH126W083	MH126W084			68	CLMH126W083MH126W084	8	0.3191	0.028541	0.06	0.030473	0.06	0.036135	0.06	0.030473	0.06			
CLMH126W084MH126W076		1976		Existing		MH126W084	MH126W076		9351	IRWD	VCP	{0838D262-73FE-43A8-9A0B-2C3A840CB674}	CLMH126W084MH126W076	269.98	266.80	0.666666667	MH126W084	MH126W076			129	CLMH126W084MH126W076	8	0.0289	0.028540	0.10	0.030472	0.10	0.036134	0.11	0.030472	0.10			
CLMH126W087MH126W088		1984		Existing		MH126W087	MH126W088		A00477	IRWD	VCP	{98BD64AD-0CC1-4481-B8CE-7D3146E8DAAA}	CLMH126W087MH126W088	427.52	407.48	0.666666667	MH126W087	MH126W088			253	CLMH126W087MH126W088	8	0.0795	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH126W089MH126W090		1984		Existing		MH126W089	MH126W090		A00477	IRWD	VCP	{D4D165C1-9E6E-45BB-A8E5-C90738113F49}	CLMH126W089MH126W090	407.27	388.89	0.666666667	MH126W089	MH126W090			240	CLMH126W089MH126W090	8	0.0607	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH126W089MH126W090		1984		Existing		MH126W089	MH126W090		A00477	IRWD	VCP	{265FE630-54DC-4700-AA1B-723CEB21EC59}	CLMH126W089MH126W090	388.70	368.95	0.666666667	MH126W089	MH126W090			150	CLMH126W089MH126W090	8	0.0590	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH126W090MH126W006		1978		Existing		MH126W090	MH126W006		A00217	IRWD	VCP	{B552CA2C-407B-488B-8B2A-18CF34697061}	CLMH126W090MH126W006	368.75	354.69	0.666666667	MH126W090	MH126W006			237	CLMH126W090MH126W006	8	0.0593	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH126W093MH126W101		1989		Existing		MH126W093	MH126W101		T10405	IRWD	VCP	{02D20A4C-1C1D-4AC8-85A9-7A73617F6B44}	CLMH126W093MH126W101	391.80	389.19	0.666666667	MH126W093	MH126W101			76	CLMH126W093MH126W101	8	0.0143	0.002616	0.03	0.002793	0.03	0.003312	0.04	0.002793	0.03			
CLMH126W094MH126W093		1986		Existing		MH126W094	MH126W093		T10405	IRWD	VCP	{35ACB7CE-A432-4F73-BB1A-157863254F79}	CLMH126W094MH126W093	409.80	392.01	0.666666667	MH126W094	MH126W093			168	CLMH126W094MH126W093	8	0.1065	0.002616	0.02	0.002793	0.03	0.003312	0.03	0.002793	0.03			
CLMH126W095MH126W094		1986		Existing		MH126W095	MH126W094		T10405	IRWD	VCP	{C29A1B50-B4E5-43FD-B917-3AC30D9F701C}	CLMH126W095MH126W094	410.38	410.01	0.666666667	MH126W095	MH126W094			41	CLMH126W095MH126W094	8	0.0090	0.002616	0.04	0.002793	0.04	0.003312	0.05	0.002793	0.04			
CLMH126W096MH126W101		1986		Existing		MH126W096	MH126W101		T10405	IRWD	VCP	{4CD5DF79-45AD-458D-B875-513848B0DEF5}	CLMH126W096MH126W101	405.82	388.98	0.666666667	MH126W096	MH126W101			362	CLMH126W096MH126W101	8	0.0465	0.006854	0.05	0.007320	0.05	0.008681	0.05	0.007320	0.05			
CLMH126W097MH126W096		1989		Existing		MH126W097	MH126W096		T10405	IRWD	VCP	{03CC2034-7421-4238-8A8E-C124E0E28B11}	CLMH126W097MH126W096	411.38	406.10	0.666666667	MH126W097	MH126W096			180	CLMH126W097MH126W096	8	0.0293	0.004562	0.04	0.004873	0.04	0.005779	0.05	0.004873	0.04			
CLMH126W098MH126W097		1987		Existing		MH126W098	MH126W097		T10405	IRWD	VCP	{5DFBC680-7359-4176-803A-A990571204D7}	CLMH126W098MH126W097	418.05	411.73	0.666666667	MH126W098	MH126W097			74	CLMH126W098MH126W097	8	0.0854	0.004563	0.03	0.004873	0.03	0.005780	0.04	0.004873	0.03			
CLMH126W099MH126W098		1987		Existing		MH126W099	MH126W098		T10405	IRWD	VCP	{3386CB04-A12C-4BF9-B121-F1E4C950C37C}	CLMH126W099MH126W098	423.23	418.26	0.666666667	MH126W099	MH126W098			278	CLMH126W099MH126W098	8	0.0637	0.004563	0.04	0.004874	0.04	0.005780	0.04	0.004874	0.04			
CLMH126W100MH126W099		1987		Existing		MH126W100	MH126W099		T10405	IRWD	VCP	{4C579C01-AC2D-4F19-B824-73F363CAACB}	CLMH126W100MH126W099	436.06	423.43	0.666666667	MH126W100	MH126W099			181	CLMH126W100MH126W099	8	0.0700	0.004564	0.03	0.004874	0.04	0.005780	0.04	0.004874	0.04			
CLMH126W101MH126W102		1986		Existing		MH126W101	MH126W102		T10405	IRWD	VCP	{39E3BECC-D025-4684-BA8F-59AF06F9090A}	CLMH126W101MH126W102	388.79	348.92	0.666666667	MH126W101	MH126W102			288	CLMH126W101MH126W102	8	0.1399	0.009469	0.04	0.010112	0.04	0.011992	0.05	0.010112	0.04			
CLMH126W102MH126N002		1986		Existing		MH126W102	N002		A00217	IRWD	VCP	{F19BAF3E-F802-462D-B8F1-26EBD9C275DF}	CLMH126W102MH126N002	348.82	340.01	0.666666667	MH126W102	MH126N002			170	CLMH126W102MH126N002	8	0.0518	0.009469	0.05	0.010111	0.05	0.011992	0.06	0.010111	0.05			
CLMH126W110MH126W003		1976		Existing		MH126W110	MH126W003		128	IRWD	VCP	{4C7B2B68-E71A-4F6F-9B31-50B49EE69447}	CLMH126W110MH126W003	263.95	262.85	0.833333333	MH126W110	MH126W003			293	CLMH126W110MH126W003	10	0.0038	0.172753	0.29	0.184449	0.30	0.218707	0.33	0.184449	0.30			
CLMH126W112MH126W035		1978		Existing		MH126W112	MH126W035		9988	IRWD	VCP	{771120B71-5CD4-4A4F-957F-629FB12BC889}	CLMH126W112MH126W035	284.95	279.88	0.666666667	MH126W112	MH126W035			62	CLMH126W112MH126W035	8	0.0819	0.012154	0.11	0.012978	0.11	0.015386	0.12	0.012978	0.11			
CLMH126W159MH126N104		1978		Existing		MH126W159	MH126N104		T09939	IRWD	VCP	{3697BB2A-6ADB-4B68-A61C-6FCF322CFD14}	CLMH126W159MH126N104	319.57	289.35	0.666666667	MH126W159	MH126N104			118	CLMH126W159MH126N104	8	0.2651	0.008850	0.03	0.009449	0.04	0.011204	0.04	0.009449	0.04			
CLMH126W200MH126S024		1979		Existing		MH126W200	MH126S024		10378	IRWD	PVC	{2588B409-A802-41FA-AD57-961824055DED}	CLMH126W200MH126S024	235.36	234.64	0.833333333	MH126W200	MH126S024			73	CLMH126W200MH126S024	10	0.0099	0.299132	0.30	0.319450	0.31	0.378954	0.34	0.319450	0.31			
CLMH126W201MH126S022		1979		Existing		MH126W201	MH126S022		10378	IRWD	PVC	{8C86F74E-D714-444A-B267-FF381F09E284}	CLMH126W201MH126S022	235.32	234.64	0.666666667	MH126W201	MH126S022			170	CLMH126W201MH126S022	8	0.0040	0.001208	0.03	0.001292	0.03	0.001531	0.04	0.001292	0.03			
CLMH126W205MH126S030		1979		Existing		MH126W205	MH126S030		T10457	IRWD	VCP	{99F28B48-E4DA-4822-AA1C-98E1C6059AE9}	CLMH126W205MH126S030	248.80	243.21	0.666666667	MH126W205	MH126S030			176	CLMH126W205MH126S030	8	0.0318	0.028357	0.10	0.030276	0.10	0.035894	0.11	0.030276	0.10			
CLMH126W206MH126W207		2000		Existing	assumed Mannings N	MH126W206	MH126W207		903	IRWD	PVC	{BF0F5A3E-500F-4CD1-A70E-A752903499FA}	CLMH126W206MH126W207	259.29	246.00	0.666666667	MH126W206	MH126W207			400	CLMH126W206MH126W207	8	0.0332	0.049172	0.12	0.052520	0.13	0.062322	0.14	0.052520	0.13			
CLMH126W207MH126S033		2000		Existing	assumed Mannings N	MH126W207	MH126S033		903	IRWD	PVC	{B316B451-7F76-4A54-9E6E-034E4F6B39B}	CLMH126W207MH126S033	245.89	245.22	0.666666667	MH126W207	MH126S033			196	CLMH126W207MH126S033	8	0.0039	0.050155	0.20	0.053572	0.21	0.063572	0.23	0.053572	0.21			
CLMH126W209MH126W210		1999		Existing	assumed Mannings N	MH126W209	MH126W210	ERROR 23	A00834B	IRWD	VCP	{2A0FDFB1-98DB-4F19-89B8-9FC3B3146768}	CLMH126W209MH126W210	256.84	256.76	0.833333333	MH126W209	MH126W210			296	CLMH126W209MH126W210	10	0.0107	0.125096	0.22	0.133589	0.23	0.158436	0.28	0.133589	0.23			
CLMH126W210MH126W211		1976		Existing		MH126W210	MH126W211	ERROR 23	128	IRWD	VCP	{55F83312-FED0-42EA-9083-A603F236ACDF}	CLMH126W210MH126W211	256.46	256.22	0.833333333	MH126W210	MH126W211			216	CLMH126W210MH126W211	10	0.0011	0.297691	0.47	0.317894	0.49	0.377036	0.53	0.317893	0.49			
CLMH126W211MH126W212	NO ASBUILT FOUN	0		Existing	assumed Mannings N	MH126W211	MH126W212			IRWD	VCP	{75CC5373-2DF6-45DC-806F-05A5C95E66DB}	CLMH126W211MH126W212	256.02	255.25	0.833333333	MH126W211	MH126W212			62	CLMH126W211MH126W212	10	0.0123	0.297690	0.29	0.317892	0.30	0.377035	0.33	0.317891	0.30			
CLMH126W212MH126W016		1979		Existing		MH126W212	MH126W016		10378	IRWD	VCP	{A14F996C-D258-4621-87AF-D988EE4D7E22}	CLMH126W212MH126W016	255.15	243.52	0.833333333	MH126W212	MH126W016			410	CLMH126W212MH126W016	10	0.0284	0.297655	0.24	0.317860	0.25	0.377010	0.27	0.317860	0.25			
CLMH126W900MH126W210	Splitted conduit	1976		Existing		MH126W003	MH126W210	ERROR 23	128	IRWD	VCP	{CD5071CE-415F-4144-ABCD-CE1B68DFD28A}	CLMH126W003MH126W210	256.54	256.49	0.833333333	MH126W900	MH126W210	Less than 15-in, d/D >0.50

CLMH127M031MH127N032			1972			Existing			MH127N031	MH127N032		T07687	IRWD	VCP	{08B96AF4-F2AC-49AC-BAFD-A3D31BFB1016}	CLMH127M031MH127N032	275.92	275.51	0.666666667	MH127N031	MH127N032				103	CLMH127N031MH127N032	8	0.0040	0.008810	0.09	0.009406	0.09	0.011150	0.10	0.009406	0.09
CLMH127N032MH127N035			1972			Existing			MH127N032	MH127N035		T07687	IRWD	VCP	{03A1F328-193D-44D4-9B46-51C3B7CA1797}	CLMH127N032MH127N035	275.32	274.66	0.666666667	MH127N032	MH127N035				152	CLMH127N032MH127N035	8	0.0043	0.068303	0.24	0.072929	0.24	0.086461	0.27	0.072929	0.24
CLMH127N033MH127N032			1972			Existing			MH127N033	MH127N032		T07687	IRWD	VCP	{C6049195-62CF-457F-8836-771A0CBCA062}	CLMH127N033MH127N032	277.01	275.51	0.666666667	MH127N033	MH127N032				143	CLMH127N033MH127N032	8	0.0105	0.059494	0.18	0.063524	0.19	0.075312	0.21	0.063524	0.19
CLMH127N034MH127N033			1972			Existing			MH127N034	MH127N033		T07687	IRWD	VCP	{CF140179-1A9A-4798-9F90-C484DF928D20}	CLMH127N034MH127N033	279.64	277.26	0.666666667	MH127N034	MH127N033				344	CLMH127N034MH127N033	8	0.0069	0.006500	0.07	0.006937	0.07	0.008227	0.08	0.006939	0.07
CLMH127N035MH127N038			1972			Existing			MH127N035	MH127N038		128	IRWD	VCP	{1CA18431-50B1-4511-8084-BA914D34E638}	CLMH127N035MH127N038	274.45	269.94	0.833333333	MH127N035	MH127N038				284	CLMH127N035MH127N038	10	0.0159	0.072492	0.14	0.077401	0.14	0.091764	0.15	0.077401	0.14
CLMH127N038MH126W001			1972			Existing			MH127N038	MH126W001		128	IRWD	VCP	{A9D48D82-5E02-488D-BAC8-A1886575A713}	CLMH127N038MH126W001	269.73	267.32	0.833333333	MH127N038	MH126W001				396	CLMH127N038MH126W001	10	0.0061	0.074239	0.17	0.079266	0.18	0.093975	0.20	0.079266	0.18
CLMH127N039MH127N048	77' FROM NE TO S		1972			Existing			MH127N039	MH127N048		T09085	IRWD	VCP	{968DAF19-BBC7-44C1-87E6-0E54F490B3DD}	CLMH127N039MH127N048	280.63	277.43	0.666666667	MH127N039	MH127N048				320	CLMH127N039MH127N048	8	0.0100	0.054573	0.18	0.058263	0.18	0.069079	0.20	0.058263	0.18
CLMH127N040MH127N039			1976			Existing			MH127N040	MH127N039		T09348	IRWD	VCP	{6F7BE6ED-BE31-4297-9DB9-BB18A44E6AF2}	CLMH127N040MH127N039	288.01	280.73	0.666666667	MH127N040	MH127N039				493	CLMH127N040MH127N039	8	0.0148	0.003844	0.05	0.004105	0.05	0.004865	0.05	0.004105	0.05
CLMH127N041MH127N039			1976			Existing			MH127N041	MH127N039		T09348	IRWD	VCP	{18E6D4E4-EFDD-4DC4-A3D2-1A59797CE86E}	CLMH127N041MH127N039	301.92	280.82	0.666666667	MH127N041	MH127N039				273	CLMH127N041MH127N039	8	0.0776	0.047880	0.10	0.051115	0.11	0.060606	0.11	0.051115	0.11
CLMH127N042MH127N041			1976			Existing			MH127N042	MH127N041		T09348	IRWD	VCP	{0315EA1D-198A-43AD-A708-63863FA3D899}	CLMH127N042MH127N041	309.44	302.16	0.666666667	MH127N042	MH127N041				455	CLMH127N042MH127N041	8	0.0160	0.047880	0.15	0.051115	0.15	0.060607	0.17	0.051115	0.15
CLMH127N043MH127N042			1976			Existing			MH127N043	MH127N042		T09348	IRWD	VCP	{EAAA8787-6D14-49D1-A98A-AD93E8CB434C}	CLMH127N043MH127N042	328.79	309.64	0.666666667	MH127N043	MH127N042				193	CLMH127N043MH127N042	8	0.0997	0.043973	0.09	0.046944	0.10	0.055659	0.10	0.046944	0.10
CLMH127N044MH127N043			1976			Existing			MH127N044	MH127N043		T09348	IRWD	VCP	{C36CC48C-4696-471D-932D-1F47D71C7EC}	CLMH127N044MH127N043	332.32	329.10	0.666666667	MH127N044	MH127N043				824	CLMH127N044MH127N043	8	0.0240	0.001511	0.03	0.001611	0.03	0.001912	0.03	0.001611	0.03
CLMH127N045MH127N043			1973			Existing			MH127N045	MH127N043		T09348	IRWD	VCP	{47197D3F-E3AB-4C44-9C84-D6089431C0C5}	CLMH127N045MH127N043	330.54	329.00	0.666666667	MH127N045	MH127N043				97	CLMH127N045MH127N043	8	0.0159	0.042462	0.14	0.045333	0.15	0.053747	0.16	0.045333	0.15
CLMH127N046MH127N045			1974			Existing			MH127N046	MH127N045		T09348	IRWD	VCP	{08F0B918-9DAF-441A-9703-E64B883DAEF1}	CLMH127N046MH127N045	345.95	330.64	0.666666667	MH127N046	MH127N045				77	CLMH127N046MH127N045	8	0.0241	0.035741	0.07	0.038156	0.07	0.045239	0.08	0.038156	0.07
CLMH127N047MH127N045			1974			Existing			MH127N047	MH127N045		T09085	IRWD	VCP	{B957139C9-E681-4833-8223-C38CC2D2F6EB}	CLMH127N047MH127N045	332.00	330.85	0.666666667	MH127N047	MH127N045				287	CLMH127N047MH127N045	8	0.0040	0.006722	0.08	0.007177	0.08	0.008508	0.09	0.007177	0.08
CLMH127N048MH127N049			1976			Existing			MH127N048	MH127N049		T09085	IRWD	VCP	{902007C6-23F8-4509-852A-980FD32BAC6C}	CLMH127N048MH127N049	277.02	274.03	0.666666667	MH127N048	MH127N049				330	CLMH127N048MH127N049	8	0.0091	0.057594	0.19	0.061489	0.19	0.072905	0.21	0.061489	0.19
CLMH127N049MH126W078			1976			Existing			MH127N049	MH126W078		T09085	IRWD	VCP	{26E9AB60-191A-4F18-9C74-D98B83BC1301}	CLMH127N049MH126W078	273.92	270.73	0.666666667	MH127N049	MH126W078				384	CLMH127N049MH126W078	8	0.0083	0.062686	0.20	0.066927	0.21	0.079353	0.23	0.066927	0.21
CLMH127N050MH127N052			1976			Existing			MH127N050	MH127N052		T09085	IRWD	VCP	{B7EA853F-666A-4272-8073-377A61DBC1D}	CLMH127N050MH127N052	296.32	295.23	0.666666667	MH127N050	MH127N052				273	CLMH127N050MH127N052	8	0.0040	0.003973	0.06	0.004243	0.06	0.005029	0.07	0.004243	0.06
CLMH127N052MH126W080			1976			Existing			MH127N052	MH126W080		T09085	IRWD	VCP	{01C6B449-39B3-4B37-A1EC-A78A40EE1EDE}	CLMH127N052MH126W080	295.04	293.68	0.666666667	MH127N052	MH126W080				340	CLMH127N052MH126W080	8	0.0040	0.017727	0.12	0.018927	0.13	0.022442	0.14	0.018927	0.13
CLMH127N053MH127N067			1976			Existing			MH127N053	MH127N067		T09085	IRWD	VCP	{262E4F12-00CE-44C2-A72B-19E26564F05D}	CLMH127N053MH127N067	317.89	317.20	0.666666667	MH127N053	MH127N067				175	CLMH127N053MH127N067	8	0.0039	0.003887	0.06	0.004150	0.06	0.004921	0.07	0.004150	0.06
CLMH127N067MH127N052			1976			Existing			MH127N067	MH127N052		9357	IRWD	VCP	{184D1328-8B25-4584-A686-97DA3883C650}	CLMH127N067MH127N052	317.00	295.23	0.666666667	MH127N067	MH127N052				272	CLMH127N067MH127N052	8	0.0789	0.013756	0.06	0.014685	0.06	0.017413	0.06	0.014685	0.06
CLMH127N068MH126W206			2000		assumed Mannings N	Existing		assumed Mannings N	MH127N068	MH126W206		903	IRWD	PVC	{E4808A4D-5061-4632-B174-1D23F0F300E2}	CLMH127N068MH126W206	270.26	259.39	0.666666667	MH127N068	MH126W206				400	CLMH127N068MH126W206	8	0.0272	0.049186	0.13	0.052533	0.13	0.062332	0.14	0.052533	0.13
CLMH127N069MH127N068			2000		assumed Mannings N	Existing		assumed Mannings N	MH127N069	MH127N068		903	IRWD	PVC	{5A657565-3B15-47F3-BD7E-D7847B4CD79C}	CLMH127N069MH127N068	271.51	270.35	0.666666667	MH127N069	MH127N068				282	CLMH127N069MH127N068	8	0.0041	0.049202	0.20	0.052548	0.20	0.062341	0.22	0.052547	0.20
CLMH127N070MH127N069			2000		assumed Mannings N	Existing		assumed Mannings N	MH127N070	MH127N069		903	IRWD	PVC	{9362EF85-500A-434E-B8CC-C368BF561BF2}	CLMH127N070MH127N069	274.57	271.61	0.666666667	MH127N070	MH127N069				283	CLMH127N070MH127N069	8	0.0105	0.049226	0.16	0.052569	0.17	0.062354	0.18	0.052568	0.17
CLMH127N071MH127N101			2000		assumed Mannings N	Existing		assumed Mannings N	MH127N071	MH127N101		903	IRWD	PVC	{C216E153-2884-4FF1-97CD-B6F12C2D4E98}	CLMH127N071MH127N101	292.51	283.51	0.666666667	MH127N071	MH127N072				321	CLMH127N071MH127N101	8	0.0379	0.026150	0.09	0.027921	0.09	0.033103	0.10	0.027921	0.09
CLMH127N078MH127N081			2002			Existing			MH127N078	MH127N081		T15949	IRWD	PVC	{173DD6A4-3481-42F8-8445-58DE081DA0D4}	CLMH127N078MH127N081	363.14	359.48	0.666666667	MH127N078	MH127N081				295	CLMH127N078MH127N081	8	0.0124	0.002246	0.04	0.002398	0.04	0.002842	0.04	0.002398	0.04
CLMH127N079MH127N078			2002			Existing			MH127N079	MH127N078		T15949	IRWD	PVC	{CD02EDAE-6A0E-4E8A-8110-4D6C38D94126}	CLMH127N079MH127N078	364.30	363.35	0.666666667	MH127N079	MH127N078				96	CLMH127N079MH127N078	8	0.0099	0.002246	0.04	0.002398	0.04	0.002842	0.04	0.002398	0.04
CLMH127N080MH127N109			2002			Existing			MH127N080	MH127N109		T15949	IRWD	PVC	{1EFBB912-06CE-4F93-9115-6E87FED67474}	CLMH127N080MH127N109	373.04	362.64	0.666666667	MH127N080	MH127N109				285	CLMH127N080MH127N109	8	0.0365	0.011774	0.06	0.012570	0.06	0.014904	0.07	0.012570	0.06
CLMH127N081MH127N110			2002			Existing			MH127N081	MH127N110		T15949	IRWD	PVC	{AAD4FD6E-D8BA-46DF-9CC7-E6AB4391438F}	CLMH127N081MH127N110	359.29	343.28	0.666666667	MH127N081	MH127N110				290	CLMH127N081MH127N110	8	0.0552	0.030341	0.08	0.032401	0.08	0.039167	0.09	0.032401	0.08
CLMH127N082MH127N080			2002			Existing			MH127N082	MH127N080		T15949	IRWD	PVC	{D71787E8-E61F-475C-AE1C-87D43B844C0A}	CLMH127N082MH127N080	389.17	373.23	0.666666667	MH127N082	MH127N080				259	CLMH127N082MH127N080	8	0.0615	0.009071	0.05	0.009684	0.05	0.011482	0.05	0.009684	0.05
CLMH127N083MH127N084			2002			Existing			MH127N083	MH127N084		T15949	IRWD	PVC	{DD1B62A0-F981-4CFA-9DA5-AC5B3A5CD136}	CLMH127N083MH127N084	385.29	379.10	0.666666667	MH127N083	MH127N084				214	CLMH127N083MH127N084	8	0.0289	0.005744	0.05	0.006133	0.05	0.007271	0.05	0.006133	0.05
CLMH127N084MH127N083			2002			Existing			MH127N084	MH127N083		T15949	IRWD	PVC	{41EA8AA8-3DC1-454F-A25F-0D329772527D}	CLMH127N084MH127N083	378.89	359.48	0.666666667	MH127N084	MH127N083				299	CLMH127N084MH127N083	8	0.0651	0.013604	0.06	0.014524	0.06	0.017222	0.06	0.014526	0.06
CLMH127N085MH127N086			2002			Existing			MH127N085	MH127N086		T15949	IRWD	PVC	{1ACFF996-A248-47CD-9589-2FEE6E39F980}	CLMH127N085MH127N086	400.35	397.50	0.666666667	MH127N085	MH127N086				190	CLMH127N085MH127N086	8	0.0150	0.004685	0.05	0.005003	0.05	0.005932	0.05	0.005003	0.05
CLMH127N086MH127N084			2002			Existing			MH127N086	MH127N084		T15949	IRWD	PVC	{6A0AAE62-6930-4389-ACA3-486554CCF435}	CLMH127N086MH127N084	397.29	379.10	0.666666667	MH127N086	MH127N084				328	CLMH127N086MH127N084	8	0.0556	0.004685	0.04	0.005003	0.04	0.005932	0.04	0.005003	0.04
CLMH127N087MH127N084			2002			Existing			MH127N087	MH127N084		T15949	IRWD	PVC	{06958E65-5089-450F-A331-09090A0E2974}	CLMH127N087MH127N084	395.89	379.10	0.666666667	MH127N087	MH127N084				158	CLMH127N087MH127N084	8	0.1069	0.003175	0.03	0.003390	0.03	0.004018	0.03	0.003390	0.03
CLMH127N088MH127N087			2002			Existing			MH127N088	MH127N087		T15949	IRWD	PVC	{2C31CC18-EF27-4C91-8071-D4F4C7B05F63}	CLMH127N088MH127N087	410.00	396.10	0.666666667	MH127N088	MH127N087				158	CLMH127N088MH127N087	8	0.0885	0.003175	0.03	0.003390	0.03	0.004018	0.03	0.003390	0.03
CLMH127N089MH127N088			2002			Existing			MH127N089	MH127N088		T15949	IRWD	PVC	{28429CF3-67FC-447B-8E65-299D57E4D33F}	CLMH127N089MH127N088	415.00	410.20	0.666666667	MH127N089	MH127N088				43	CLMH127N089MH127N088	8	0.0329	0.003175	0.03	0.003390	0.03	0.004018	0.04	0.003390	0.03
CLMH127N090MH127N070			2001			Existing			MH127N090	MH127N070		T15941	IRWD	PVC	{10CA4042-88EC-4E9E-905A-AE374ADE816F}	CLMH127N090MH127N070	275.50	274.77	0.666666667	MH127N090	MH127N070				187	CLMH127N090MH127N070	8	0.0039	0.023117	0.14	0.024681	0.14	0.029268	0.15	0.024681	0.14
CLMH127N091MH127N090			2004			Existing			MH127N091	MH127N090		T15941	IRWD	PVC	{7A48B2B3-8FA9-4A02-9816-7EF412FDCC40}	CLMH127N091MH127N090	276.17	275.60	0.666666667	MH127N091	MH127N090				150	CLMH127N091MH127N090	8	0.0038	0.023120	0.14	0.024684	0.14	0.029270	0.15	0.024684	0.14
CLMH127N093MH127N106			2007			Existing			MH127N093	MH127N106		A00983	IRWD	PVC	{C5114FF7-0364-4206-9187-8B61241758F6}	CLMH127N093MH127N106	331.14	316.07	0.666666667	MH127N093	MH127N106				262	CLMH127N093MH127N106	8	0.0623	0.107856	0.26	0.115152	0.16	0.136526	0.17	0.115152	0.16
CLMH127N094MH127N093			2007			Existing			MH127N094	MH127N093		A00983	IRWD	PVC	{A06D332B-3DB8-4908-9487-1DDD991FA30F}	CLMH127N094MH127N093	333.57	333.32	0.666666667	MH127N094	MH127N093				65	CLMH127N094MH127N093	8	0.0038	0.021968	0.13	0.023454	0.14	0.027806	0.15	0.023454	0.14
CLMH127N095MH127N094			2007			Existing			MH127N095	MH127N094		A00983	IRWD	PVC	{12152C1E-361D-4A12-BCF3-056FC7C4D87D}	CLMH127N095MH127N094	356.14	333.67	0.666666667	MH127N095	MH127N094				374	CLMH127N095MH127N094	8	0.2996	0.021968	0.05	0.023454	0.05	0.027806	0.06	0.023454	0.05
CLMH127N098MH127N064			2006			Existing			MH127N098	MH127N064		A00983	IRWD	PVC	{5D43A8A4-1108-42F1-8038-2DBC6685D05}	CLMH127N098MH127N104	342.06	300.81	0.666666667	MH127N098	MH127N104				127	CLMH127N098MH127N104	8	0.1436	0.018065	0.05	0.019562	0.06	0.023161	0.06	0.027506	0.05
CLMH127N100MH127N098			2007			Existing			MH127N100	MH127N098		A00983	IRWD	PVC	{AFD358AF-672C-447F-978B-C54CFF974673}	CLMH127N100MH127N098	342.85	342.16	0.666666667	MH127N100	MH127N098				137	CLMH127N100MH127N098	8	0.0050	0.023041	0.13	0.024601	0.14	0.029167	0.15	0.024601	0.14
CLMH127N101MH127N070			2000			Existing			MH127N101	MH127N070		903	IRWD	PVC	{E60FD786-7C1C-461A-BCB4-313727089F88}	CLMH127N101MH127N070	283.36	274.77	0.666666667	MH127N101	MH127N070				369	CLMH127N101MH127N070	8	0.0233	0.026150	0.10	0.027920	0.10	0.033102	0.11	0.027920	0.10
CLMH127N102MH127N072			2000			Existing			MH127N102	MH127N072		903	IRWD	PVC	{D8EEB39B-87D1-4681-9CB7-4CAEC9BAC9F5}	CLMH127N102MH127N072	300.32	292.67	0.666666667	MH127N102	MH127N072				237	CLMH127N102MH127N072	8	0.0323	0.026152	0.09	0.027922	0.09	0.033104	0.10	0.027922	0.09
CLMH127N103MH127N105			2004			Existing			MH127N103	MH127N105		903	IRWD	PVC	{4C80D953-76D0-467F-84F8-847D11D1BF1}	CLMH127N103MH127N105	315.22	306.30	0.666666667	MH127N103	MH127N105				396	CLMH127N103MH127N105	8	0.0225	0.107854	0.20	0.115150	0.20	0.136525	0.22	0.115150	0.20
CLMH127N104MH127N102			2004			Existing			MH127N104	MH127N102		903	IRWD	PVC	{0361C459-F6E4-414C-BC4E-35F6FC666F36}	CLMH127N104MH127N102	300.71	300.51	0.666666667	MH127N104	MH127N102				50	CLMH127N104MH127N102	8	0.0040	0.026161	0.14	0.027932	0.15	0.033116	0.16	0.027932	0.15
CLMH127N105MH099E076			2004			Existing			MH127N105	MH099E076		903	IRWD	PVC	{DCAA184F-BC1D-4AE0-A8D7-781997721ZF3}	CLMH127N105MH099E076	306.14	300.26	0.666666667	MH127N105	MH099E076				183	CLMH127N105MH099E076	8	0.0322	0.107854	0.18	0.115150	0.19	0.136525	0.20	0.115150	0.19
CLMH127N106MH127N103			2004			Existing			MH127N106	MH127N103		903	IRWD	PVC	{25E50553-CF81-4DB6-A8B0-2380DC01FA66}	CLMH127N106MH127N103	315.73	315.42	0.666666667	MH127N106	MH127N103				77	CLMH127N106MH127N103	8	0.0040	0.107855	0.29	0.115151	0.30	0.136527	0.33	0.115151	0.30
CLMH127N107MH127N108			2002			Existing			MH127N107	MH127N108		T15949	IRWD	PVC	{78B765BA-41CA-44FE-AEAF-1732C7C9E143}	CLMH127N107MH127N108	357.20	356.57	0.666666667	MH127N107	MH127N108				156	CLMH127N107MH127N108	8	0.0040	0.021968	0.13	0.023454	0.14	0.027806	0.15	0.023454	0.14
CLMH127N108MH127N095			2007			Existing			MH127N108	MH127N095		A00983	IRWD	PVC	{32FF80D0-D765-4337-8122-85B2E4D2E7A5}	CLMH127N108MH127N095	356.48	356.25	0.666666667	MH127N108	MH127N095				65	CLMH127N108MH127N095	8	0.0035	0.021968	0.14	0.023454	0.14	0.027806	0.15	0.023454	0.14
CLMH127N109MH127N107			2002			Existing			MH127N109	MH127N107		T15949	IRWD	PVC	{F1CEEE84-A62A-4D29-AD8C-DB13341CA547}	CLMH127N109MH127N107	362.45	357.30	0.666666667	MH127N109	MH127N107				261	CLMH127N109MH127N107	8	0.0197	0.011774	0.07	0.012570	0.07	0.014904	0.08	0.012570	0.07
CLMH127N110MH127N043			2004			Existing			MH127N110	MH127N043		A00983	IRWD	ACP	{0DC85B28-4E60-4F16-8017-C5AA5675155}	CLMH127N110MH127N043	343.18	342.95	0.666666667	MH127N110	MH127N043				48	CLMH127N110MH127N043	8	0.0048	0.023041	0.13	0.024601	0.14	0.029167	0.15	0.024601	0.14
CLMH127S001MH127W045			2007			Existing			MH127S001	MH127W045		A00983	IRWD	ACP	{61D87097-4905-442E-8B3D-C2ABEEDF04C4}	CLMH127S001MH127W045	560.77	553.88	0.666666667	MH127S001	MH127W045				266	CLMH127S001MH127W045	8	0.0259	0.011636	0.07	0.012424	0.07	0.014731	0.08	0.012424	0.07
CLMH127S002MH127S003			2004			Existing			MH127S002	MH127S003		T15949B	IRWD	VCP	{CF7D48EF-20AD-44E6-96C1-3716EC7C2059}	CLMH127S002MH127S003	681.54	679.71	0.666666667	MH127S002	MH127S003				183	CLMH127S002MH127S003	8	0.0100	0.001600	0.03	0.001921	0.04	0.002275	0.04	0.001921	0.04
CLMH127S003MH127S004			2004			Existing			MH127S003	MH127S004		T15949B	IRWD	VCP	{C734166A-6BE4-4B99-B77A-A57BA442A8D}	CLMH127S003MH127S004	679.52	676.19	0.666666667	MH127S003	MH127S004				214	CLMH127S003MH127S004	8	0.0114	0.002983	0.04	0.003583	0.05	0.004243	0.05	0.003583	0.05
CLMH127S004MH127W061			2004			Existing			MH127S004	MH127W061		T15949B	IRWD	PVC	{A5EE939F-3D99-488E-8A11-A121B261AA0F}	CLMH127S004MH127W061	674.99	661.00	0.666666667	MH127S004	MH127W061				234	CLMH127S004MH127W061	8	0.0600	0.005432	0.04	0.006521	0.04	0.007728	0.04	0.006521	0.04
CLMH127S005MH127S006			2004			Existing			MH127S005	MH127S006		T15949B	IRWD	PVC	{FDD45212-4F63-4538-A5DD-BEC3ABC6B4FE}	CLMH127S005MH127S006	722.04	709.76	0.666666667	MH127S005	MH127S006				192	CLMH127S005MH127S006	8	0.0640	0.002449	0.03	0.002940	0.03	0.003485	0.03	0.002940	0.03
CLMH127S006MH127S007			2004			Existing			MH127S006	MH127S007		T15949B	IRWD	PVC	{3D5D1786-CE19-4054-B07D-835CFC138882}	CLMH127S006MH127S007	709.56	700.76	0.666666667	MH127S006	MH127S007				138	CLMH127S006MH127S007	8	0.0640	0.002449	0.03	0.002940	0.03	0.003485	0.03	0.002940	0.03
CLMH127S007MH127S004			2004			Existing			MH127S007	MH127S004		T15949B	IRWD	PVC	{08DE952E-024E-4895-8053-5A856E8B76F}	CLMH127S007MH127S004	700.56	676.19	0.666666667	MH127S007	MH127S004				256	CLMH127S007MH127S004	8	0.0956	0.002449	0.02	0.002940	0.03	0.003485	0.03	0.002940	0.03
CLMH127S081MH127W080			2003			Existing			MH127S081	MH127W080		T16312B	IRWD	PVC	{339DBBFE-A80E-4846-B195-BA039EA61BFC}	CLMH127S081MH127W080	510.01	509.48	0.666666667	MH127S081	MH127W080				132	CLMH127S081MH127W080	8	0.0040	0.003918	0.06	0.004182	0.06	0.004959	0.06	0.004182	0.06
CLMH127S082MH127S081			2003			Existing			MH127S082	MH127S081		T16312B	IRWD	PVC	{37179326-38D7-44F0-B734-8D16F2BE7921}	CLMH127S082MH127S081	511.07	510.21	0.666666667	MH127S082	MH127S081				216	CLMH127S082MH127S081	8	0.0040	0.003918	0.06	0.004182	0.06	0.004959	0.06	0.004182	0.06
CLMH127S083MH127W077			2003			Existing			MH127S083	MH127W077		T16312B	IRWD	PVC	{E0D9670F-39D9-43A8-B421-9A7714DAD1AE}	CLMH127S083MH127W077	544.01	541.93	0.666666667	MH127S083	MH127W077				139	CLMH127S083MH127W077	8	0.0150	0.006734	0.06	0.007192	0.06	0.008523	0.06	0.007192	0.06
CLMH127W002MH127W001			2002			Existing			MH127W002	MH127W001		T15949	IRWD	PVC	{999C4E7C-AF16-465A-9E24-019CE0D3E377}	CLMH127W002MH127W001	405.70	401.35	0.666666667	MH127W002	MH127W001				272	CLMH127W002MH127W001	8	0.0160	0.006093	0.05	0.006506	0.06	0.007712	0.06	0.006506	0.06
CLMH127W002MH127N082			2002			Existing			MH127W002	MH127N082		T15949	IRWD	PVC	{8D61D1A8-973B-4B7F-8B53-A1D55B83B021}	CLMH127W002MH127N082	401.14	389.36	0.666666667	MH127W002	MH127N082				247	CLMH127W002MH127N082	8	0.0477	0.006093	0.04	0.006506	0.04	0.007712	0.05	0.006506	0.04
CLMH127W003MH127W039			2007			Existing			MH127W003	MH127W039		A00983	IRWD	PVC	{206FA0D0-5FD5-4BFE-B351-0D143BCFAA1C}	CLMH127W003MH127W039	372.64	372.22	0.666666667	MH127W003	MH127W039				210	CLMH127W003MH127W039	8	0.0040	0.085879	0.26	0.091687	0.27	0.108706	0.30	0.091687	0.27
CLMH127W003MH127W087			2002			Existing			MH127W003	MH127W087		T16312D	IRWD	PVC	{AA721C63-D292-4E5A-90F4-3BB2FF238EC2}	CLMH127W003MH127W087	386.10	372.89	0.666666667	MH127W003	MH127W087				73	CLMH127W003MH127W087	8	0.1835	0.085879	0.11	0.091687	0.11	0.108706	0.12	0.091687	0.11
CLMH127W005MH127W041			2003			Existing			MH127W005	MH127W041		T16312A	IRWD	PVC	{69781601-C449-463A-8C6D-F17442785559}	CLMH127W005MH127W041	585.97	582.21	0.666666667	MH127W005	MH127W041				55	CLMH127W005MH127W041	8	0.0684	0.004854	0.03	0.005828	0.04	0.006909	0.04	0.005828	0.04
CLMH127W006MH127W004			2003			Existing			MH127W006	MH127W004		T16312A	IRWD	PVC	{B9393704-4911-4FDA-B3D7-3E92E1935E03}	CLMH127W006MH127W004	453.82	386.29	0.666666667	MH127W006	MH127W004				402	CLMH127W006MH127W004	8	0.1705	0.085879	0.11	0.091688	0.11	0.108706	0.12	0.091688	0.11
CLMH127W007MH127W006			2004			Existing			MH127W007	MH127W006		T16312D	IRWD	PVC	{ABE1850A-D06D-418F-9289-7D8B899E92E4}	CLMH127W007MH127W006	454.32	454.02	0.666666667	MH127W007	MH127W006				71	CLMH127W007MH127W006	8	0.0042	0.046616	0.19	0.049770	0.20	0.059006	0.21	0.049770	0.20
CLMH127W008MH099S096			2003			Existing		assumed Mannings N	MH127W008	MH099S096	ERROR 23		T16312A	IRWD	PVC	{058D7AFD-61A8-4D70-9A24-EF59C4B381CD}	CLMH127W008

CLMH128N002MH128N005		1999		Existing	assumed Mannings N	MH128N002	MH128N005		A00701D	IRWD	PVC	{7366ABC1-7671-44F2-BA31-685D617F8500}	CLMH128N002MH128N005	482.29	465.10	0.666666667	MH128N002	MH128N005			394	CLMH128N002MH128N005	8	0.0436	0.006909	0.05	0.007375	0.05	0.008744	0.05	0.007375	0.05				
CLMH128N003MH128N002		1999		Existing	assumed Mannings N	MH128N003	MH128N002		A00701C	IRWD	PVC	{4E343D2A-397C-4062-886D-CFB0EC86F23A}	CLMH128N003MH128N002	485.39	484.89	0.666666667	MH128N003	MH128N002			120	CLMH128N003MH128N002	8	0.0042	0.001916	0.04	0.002045	0.04	0.002425	0.05	0.002045	0.04				
CLMH128N004MH128N003		1999		Existing	assumed Mannings N	MH128N004	MH128N003		A00701C	IRWD	PVC	{FC0D925A-4EBA-4ACE-A22E-6E7D7E2311BA}	CLMH128N004MH128N003	486.01	485.48	0.666666667	MH128N004	MH128N003			131	CLMH128N004MH128N003	8	0.0040	0.001916	0.04	0.002045	0.04	0.002425	0.05	0.002045	0.04				
CLMH128N005MH098E012		2002		Existing	assumed Mannings N	MH128N005	MH098E012		A00701D	IRWD	PVC	{28DC1F2B-016B-41D5-8719-BEE660B24628}	CLMH128N005MH098E012	464.89	453.75	0.666666667	MH128N005	MH098E012			393	CLMH128N005MH098E012	8	0.0283	0.006909	0.05	0.007375	0.05	0.008744	0.06	0.007375	0.05				
CLMH128N007MH098E042		2002		Existing	assumed Mannings N	MH128N007	MH098E042		T16273	IRWD	PVC	{43105101-1C3E-41FD-817B-F427E8B0B53E}	CLMH128N007MH098E042	484.98	480.05	0.666666667	MH128N007	MH098E042			262	CLMH128N007MH098E042	8	0.0188	0.081825	0.18	0.098178	0.20	0.116402	0.21	0.098178	0.20				
CLMH128N008MH128N007		2002		Existing	assumed Mannings N	MH128N008	MH128N007		T16273	IRWD	PVC	{616B40A8-6CAC-422A-A3EC-72BB17CB781S}	CLMH128N008MH128N007	488.26	485.17	0.666666667	MH128N008	MH128N007			271	CLMH128N008MH128N007	8	0.0114	0.077372	0.20	0.092897	0.22	0.110139	0.24	0.092897	0.22				
CLMH128N009MH128N008		2002		Existing	assumed Mannings N	MH128N009	MH128N008		T16273	IRWD	PVC	{08950D7E-FE91-4EFB-A119-69F8F2042F34}	CLMH128N009MH128N008	490.85	488.45	0.666666667	MH128N009	MH128N008			83	CLMH128N009MH128N008	8	0.0289	0.073445	0.15	0.088179	0.17	0.104543	0.18	0.088179	0.17				
CLMH128N010MH098E046		2002		Existing	assumed Mannings N	MH128N010	MH098E046		T16273	IRWD	PVC	{28168135-939E-443D-9C87-3D7B70B08AE6}	CLMH128N010MH098E046	491.45	489.05	0.666666667	MH128N010	MH098E046			240	CLMH128N010MH098E046	8	0.0100	0.003673	0.05	0.004410	0.05	0.005228	0.06	0.004410	0.05				
CLMH128N011MH128N008		2002		Existing	assumed Mannings N	MH128N011	MH128N008		T16273	IRWD	PVC	{8929048B-5090-4011-8830-408C13FC890B}	CLMH128N011MH128N008	492.67	488.35	0.666666667	MH128N011	MH128N008			87	CLMH128N011MH128N008	8	0.0497	0.003934	0.05	0.004722	0.06	0.005598	0.07	0.004722	0.06				
CLMH128N012MH128N009		2002		Existing	assumed Mannings N	MH128N012	MH128N009		T16273	IRWD	PVC	{2F00AA07-831E-4B31-9E92-CD720E842282}	CLMH128N012MH128N009	493.10	490.95	0.666666667	MH128N012	MH128N009			108	CLMH128N012MH128N009	8	0.0199	0.071112	0.17	0.085379	0.18	0.101221	0.20	0.085379	0.18				
CLMH128N013MH128N010		2002		Existing	assumed Mannings N	MH128N013	MH128N010		T16273	IRWD	PVC	{9994A064-EEF9-465C-8F55-A57E4B871492}	CLMH128N013MH128N010	493.76	491.66	0.666666667	MH128N013	MH128N010			39	CLMH128N013MH128N010	8	0.0538	0.000994	0.02	0.001194	0.02	0.001434	0.02	0.001194	0.02				
CLMH128N014MH128N012		2002		Existing	assumed Mannings N	MH128N014	MH128N012		T16273	IRWD	PVC	{492D2025-1E79-4F28-8783-E1E69BD73F3A}	CLMH128N014MH128N012	493.73	493.20	0.666666667	MH128N014	MH128N012			108	CLMH128N014MH128N012	8	0.0049	0.070177	0.23	0.084256	0.25	0.099889	0.27	0.084256	0.25				
CLMH128N015MH128N014		2002		Existing	assumed Mannings N	MH128N015	MH128N014		T16273	IRWD	PVC	{EA9F5500-F604-4520-8E68-5AE6CB6D597F}	CLMH128N015MH128N014	493.92	493.82	0.666666667	MH128N015	MH128N014			18	CLMH128N015MH128N014	8	0.0056	0.069301	0.22	0.083202	0.25	0.098640	0.27	0.083202	0.25				
CLMH128N016MH128N011		2002		Existing	assumed Mannings N	MH128N016	MH128N011		T16273	IRWD	PVC	{18DB1E7D-03B1-4325-9E4E-6FBED682DC17}	CLMH128N016MH128N011	498.17	492.77	0.666666667	MH128N016	MH128N011			108	CLMH128N016MH128N011	8	0.0500	0.002751	0.03	0.003303	0.03	0.003963	0.03	0.003916	0.03				
CLMH128N017MH128N015		2002		Existing	assumed Mannings N	MH128N017	MH128N015		T16273	IRWD	PVC	{FC1DAFCD-22FE-4F97-8F87-CB2BE0567F12}	CLMH128N017MH128N015	497.80	494.01	0.666666667	MH128N017	MH128N015			86	CLMH128N017MH128N015	8	0.0441	0.009133	0.07	0.010969	0.08	0.012999	0.10	0.010969	0.08				
CLMH128N018MH128N013		2002		Existing	assumed Mannings N	MH128N018	MH128N013		T16273	IRWD	PVC	{BCE885B2-AA31-4DB1-A38A-17ABC308C096}	CLMH128N018MH128N013	497.67	493.95	0.666666667	MH128N018	MH128N013			224	CLMH128N018MH128N013	8	0.0166	0.000994	0.02	0.001194	0.02	0.001414	0.03	0.001194	0.02				
CLMH128N019MH128N015		2002		Existing	assumed Mannings N	MH128N019	MH128N015		T16273	IRWD	PVC	{FB3052B4-A71F-4FC7-82E2-18DD9D55AD47}	CLMH128N019MH128N015	494.54	494.11	0.666666667	MH128N019	MH128N015			87	CLMH128N019MH128N015	8	0.0049	0.060169	0.21	0.072234	0.23	0.085642	0.25	0.072234	0.23				
CLMH128N020MH128N017		2002		Existing	assumed Mannings N	MH128N020	MH128N017		T16273	IRWD	PVC	{5AE89620-BCBE-4C73-BA4C-14C4678047B1}	CLMH128N020MH128N017	498.42	497.91	0.666666667	MH128N020	MH128N017			108	CLMH128N020MH128N017	8	0.0047	0.008111	0.08	0.009740	0.09	0.011544	0.09	0.009740	0.09				
CLMH128N021MH128N020		2002		Existing	assumed Mannings N	MH128N021	MH128N020		T16273	IRWD	PVC	{767FE89D-7E4A-4CA5-B209-0D9D87E47BC2}	CLMH128N021MH128N020	499.01	498.52	0.666666667	MH128N021	MH128N020			100	CLMH128N021MH128N020	8	0.0049	0.007089	0.07	0.008512	0.08	0.010089	0.09	0.008512	0.08				
CLMH128N022MH128N018		2002		Existing	assumed Mannings N	MH128N022	MH128N018		T16273	IRWD	PVC	{246AD05F-8095-4A52-A116-0DE9CCDC7AEA}	CLMH128N022MH128N018	499.94	497.88	0.500000000	MH128N022	MH128N018			81	CLMH128N022MH128N018	6	0.0254	0.000994	0.03	0.001194	0.03	0.001414	0.04	0.001194	0.03				
CLMH128N023MH128N021		2002		Existing	assumed Mannings N	MH128N023	MH128N021		T16273	IRWD	PVC	{26642CFF-FC20-4F83-9045-A3F8C263E610}	CLMH128N023MH128N021	499.38	499.20	0.666666667	MH128N023	MH128N021			34	CLMH128N023MH128N021	8	0.0053	0.005316	0.06	0.006384	0.07	0.007568	0.07	0.006384	0.07				
CLMH128N024MH128N019		2002		Existing	assumed Mannings N	MH128N024	MH128N019		T16273	IRWD	PVC	{4A925EA6-29DD-4E95-BFDC-3C6F18E3E2D6}	CLMH128N024MH128N019	499.73	499.64	0.666666667	MH128N024	MH128N019			108	CLMH128N024MH128N019	8	0.0008	0.057953	0.27	0.069570	0.29	0.082484	0.32	0.069570	0.29				
CLMH128N025MH128N021		2002		Existing	assumed Mannings N	MH128N025	MH128N021		T16273	IRWD	PVC	{46096A4C-0871-4251-84D0-AEFDFF88DFF0}	CLMH128N025MH128N021	505.04	499.20	0.500000000	MH128N025	MH128N021			108	CLMH128N025MH128N021	6	0.0541	0.000591	0.02	0.000709	0.02	0.000840	0.02	0.000709	0.02				
CLMH128N026MH128N023		2002		Existing	assumed Mannings N	MH128N026	MH128N023		T16273	IRWD	PVC	{1B290D08-208C-4AC4-859D-073F5F052872}	CLMH128N026MH128N023	499.85	499.57	0.666666667	MH128N026	MH128N023			58	CLMH128N026MH128N023	8	0.0048	0.005316	0.06	0.006384	0.07	0.007568	0.08	0.006384	0.07				
CLMH128N027MH128N024		2002		Existing	assumed Mannings N	MH128N027	MH128N024		T16273	IRWD	PVC	{8E8EAB17-78B9-4233-9478-1E9C4EF0E7F7}	CLMH128N027MH128N024	500.35	499.83	0.666666667	MH128N027	MH128N024			108	CLMH128N027MH128N024	8	0.0048	0.054971	0.20	0.065991	0.22	0.078240	0.24	0.065991	0.22				
CLMH128N028MH128N026		2002		Existing	assumed Mannings N	MH128N028	MH128N026		T16273	IRWD	PVC	{507ACF32-E6A0-4822-8A4C-9B6683E02C05}	CLMH128N028MH128N026	501.57	499.95	0.666666667	MH128N028	MH128N026			108	CLMH128N028MH128N026	8	0.0150	0.003530	0.04	0.004239	0.05	0.005025	0.05	0.004239	0.05				
CLMH128N029MH128N027		2002		Existing	assumed Mannings N	MH128N029	MH128N027		T16273	IRWD	PVC	{CF6C7515-4ED7-4565-8BED-A873EDA83F4}	CLMH128N029MH128N027	502.36	500.45	0.666666667	MH128N029	MH128N027			92	CLMH128N029MH128N027	8	0.0208	0.053243	0.14	0.063917	0.16	0.075781	0.17	0.063917	0.16				
CLMH128N030MH128N028		2002		Existing	assumed Mannings N	MH128N030	MH128N028		T16273	IRWD	PVC	{00689951-9D51-4A22-8401-765132580500}	CLMH128N030MH128N028	503.29	501.67	0.666666667	MH128N030	MH128N028			108	CLMH128N030MH128N028	8	0.0150	0.001729	0.03	0.002077	0.03	0.002461	0.04	0.002077	0.03				
CLMH128N031MH128N029		2002		Existing	assumed Mannings N	MH128N031	MH128N029		T16273	IRWD	PVC	{AF218284-F14D-4C33-B78E-0B61B0B1059C}	CLMH128N031MH128N029	505.16	502.57	0.666666667	MH128N031	MH128N029			127	CLMH128N031MH128N029	8	0.0204	0.053243	0.14	0.063917	0.16	0.075781	0.17	0.063917	0.16				
CLMH128N032MH128N031		2002		Existing	assumed Mannings N	MH128N032	MH128N031		T16273	IRWD	PVC	{EA277806-2443-4338-A9F3-2CBDF9032537}	CLMH128N032MH128N031	505.77	505.26	0.666666667	MH128N032	MH128N031			109	CLMH128N032MH128N031	8	0.0047	0.052596	0.20	0.063139	0.22	0.074858	0.24	0.063139	0.22				
CLMH128N033MH128N032		2002		Existing	assumed Mannings N	MH128N033	MH128N032		T16273	IRWD	PVC	{8921550F-F817-4AE3-B905-54100F5730EA}	CLMH128N033MH128N032	506.38	505.88	0.666666667	MH128N033	MH128N032			108	CLMH128N033MH128N032	8	0.0048	0.051920	0.20	0.062328	0.22	0.073895	0.24	0.062328	0.22				
CLMH128N034MH128N033		2002		Existing	assumed Mannings N	MH128N034	MH128N033		T16273	IRWD	PVC	{8E13081F-FB57-4DCE-B7AC-E725AA17050B7}	CLMH128N034MH128N033	506.91	506.48	0.666666667	MH128N034	MH128N033			108	CLMH128N034MH128N033	8	0.0040	0.053128	0.20	0.063777	0.22	0.076422	0.24	0.063777	0.22				
CLMH128N061MH128N062		2003		Existing	assumed Mannings N	MH128N061	MH128N062		T15949A	IRWD	PVC	{CE77E19E-CB96-4268-AFF3-19DB414B0BDC}	CLMH128N061MH128N062	590.70	568.65	0.666666667	MH128N061	MH128N062			187	CLMH128N061MH128N062	8	0.1185	0.037559	0.08	0.045085	0.09	0.053453	0.09	0.045085	0.09				
CLMH128N062MH128N063		2003		Existing	assumed Mannings N	MH128N062	MH128N063		T15949A	IRWD	PVC	{AC94607A-F78D-4C00-9ADC-BAD8FFA1AEAD}	CLMH128N062MH128N063	568.55	563.73	0.666666667	MH128N062	MH128N063			186	CLMH128N062MH128N063	8	0.0260	0.042816	0.12	0.051398	0.13	0.060938	0.14	0.051398	0.13				
CLMH128N063MH128N087		2003		Existing	assumed Mannings N	MH128N063	MH128N087		T15949A	IRWD	PVC	{720BAF84-C52E-48EB-B6D7-2BD7F82393B0}	CLMH128N063MH128N087	563.63	561.51	0.666666667	MH128N063	MH128N087			140	CLMH128N063MH128N087	8	0.0152	0.043133	0.14	0.051778	0.15	0.061388	0.16	0.051778	0.15				
CLMH128N064MH128N086		2003		Existing	assumed Mannings N	MH128N064	MH128N086		T15949A	IRWD	PVC	{3BF39DFC-7B7B-40C9-97AB-C490A78B5FF5}	CLMH128N064MH128N086	629.78	628.57	0.666666667	MH128N064	MH128N086			29	CLMH128N064MH128N086	8	0.0417	0.006108	0.04	0.007333	0.05	0.008696	0.05	0.007333	0.05				
CLMH128N065MH128N067		2003		Existing	assumed Mannings N	MH128N065	MH128N067		T15949A	IRWD	PVC	{8F70A591-F102-4461-A6A4-288D6503B67C}	CLMH128N065MH128N067	601.46	600.46	0.666666667	MH128N065	MH128N067			260	CLMH128N065MH128N067	8	0.0070	0.005907	0.06	0.007091	0.07	0.008407	0.08	0.007091	0.07				
CLMH128N066MH128N064		2003		Existing	assumed Mannings N	MH128N066	MH128N064		T15949A	IRWD	PVC	{AD2DA847-D564-4F58-A6B9-5F6B283CCFAD}	CLMH128N066MH128N064	641.05	629.88	0.666666667	MH128N066	MH128N064			136	CLMH128N066MH128N064	8	0.0821	0.006108	0.04	0.007333	0.04	0.008696	0.04	0.007333	0.04				
CLMH128N067MH128N070		2003		Existing	assumed Mannings N	MH128N067	MH128N070		T15949A	IRWD	PVC	{0918FFA4-58FE-4693-A855-A6F8489C0955}	CLMH128N067MH128N070	600.35	599.42	0.666666667	MH128N067	MH128N070			124	CLMH128N067MH128N070	8	0.0075	0.005907	0.06	0.007091	0.07	0.008407	0.08	0.007091	0.07				
CLMH128N068MH127W062		2004		Existing	assumed Mannings N	MH128N068	MH127W062		T15949B	IRWD	PVC	{99A422E8-1FB5-4ACE-B5E5-F2556098D8A70}	CLMH128N068MH127W062	690.13	669.29	0.666666667	MH128N068	MH127W062			261	CLMH128N068MH127W062	8	0.0802	0.004150	0.03	0.004980	0.03	0.005905	0.04	0.004980	0.03				
CLMH128N069MH128N066		2003		Existing	assumed Mannings N	MH128N069	MH128N066		T15949A	IRWD	PVC	{364C73A9-0A10-49D9-BD9D-D963D85039AE}	CLMH128N069MH128N066	646.38	641.15	0.666666667	MH128N069	MH128N066			174	CLMH128N069MH128N066	8	0.0301	0.003198	0.03	0.003839	0.04	0.004553	0.04	0.003839	0.04				
CLMH128N070MH128N073		2003		Existing	assumed Mannings N	MH128N070	MH128N073		T15949A	IRWD	PVC	{11261663-BC19-44CF-A104-12870999F6DDF}	CLMH128N070MH128N073	599.33	596.96	0.666666667	MH128N070	MH128N073			259	CLMH128N070MH128N073	8	0.0092	0.005907	0.06	0.007091	0.07	0.008407	0.07	0.007091	0.07				
CLMH128N071MH128N068		2003		Existing	assumed Mannings N	MH128N071	MH128N068		T15949B	IRWD	PVC	{07D2D6EF-D51C-4454-A6F2-655CA6F1E701}	CLMH128N071MH128N068	693.15	690.13	0.666666667	MH128N071	MH128N068			283	CLMH128N071MH128N068	8	0.0100	0.004980	0.05	0.005905	0.06	0.007080	0.07	0.005905	0.06				
CLMH128N072MH128N069		2003		Existing	assumed Mannings N	MH128N072	MH128N069		T15949A	IRWD	PVC	{59629391-33A2-44A9-B229-86A3FC680745}	CLMH128N072MH128N069	648.76	646.47	0.666666667	MH128N072	MH128N069			228	CLMH128N072MH128N069	8	0.0100	0.003198	0.04	0.003839	0.05	0.004553	0.05	0.003839	0.05				
CLMH128N073MH128N078		2004		Existing	assumed Mannings N	MH128N073	MH128N078		T16312J	IRWD	PVC	{DD5DC1E5-1E22-4BD9-B336-B8F38550E242}	CLMH128N073MH128N078	596.86	596.53	0.666666667	MH128N073	MH128N078			62	CLMH128N073MH128N078	8	0.0053	0.007765	0.08	0.009322	0.08	0.011052	0.09	0.009322	0.08				
CLMH128N074MH128N071		2004		Existing	assumed Mannings N	MH128N074	MH128N071		T15949B	IRWD	PVC	{1AF46158-1B45-4299-BC1D-F09E8B376019}	CLMH128N074MH128N071	695.86	693.35	0.666666667	MH128N074	MH128N071			250	CLMH128N074MH128N071	8	0.0100	0.004150	0.05	0.004980	0.05	0.005905	0.06	0.004980	0.05				
CLMH128N075MH128N072		2004		Existing	assumed Mannings N	MH128N075	MH128N072		T15949A	IRWD	PVC	{7999A45D-2C79-45C5-B1E5-E4E3413E1AE7}	CLMH128N075MH128N072	651.61	648.85	0.666666667	MH128N075	MH128N072			251	CLMH128N075MH128N072	8	0.0110	0.003198	0.04	0.003839	0.05	0.004553	0.05	0.003839	0.05				
CLMH128N078MH128N079		2004		Existing	assumed Mannings N	MH128N078	MH128N079		T16312J	IRWD	PVC	{66300266-8B19-4479-8189-03DAD8E0EB82}	CLMH128N078MH128N079	596.43	595.90	0.666666667	MH128N078	MH128N079			143	CLMH128N078MH128N079	8	0.0040	0.007765	0.08	0.009322	0.09	0.011052	0.10	0.009322	0.09				
CLMH128N079MH128N080		2004		Existing	assumed Mannings N	MH128N079	MH128N080		T16312J	IRWD	PVC	{9B40B74B-61D8-4233-8371-49990313A3D99}	CLMH128N079MH128N080	595.80	560.50	0.666666667	MH128N079	MH128N080			244	CLMH128N079MH128N080	8	0.1465	0.007765	0.10	0.009322	0.11	0.011052	0.12	0.009322	0.11				
CLMH128N080MH128N081		2004		Existing	assumed Mannings N	MH128N080	MH128N081		T16312J	IRWD	PVC	{93815901-BE3F-497D-9223-A4C4151250AE}	CLMH128N080MH128N081	560.50	559.57	0.666666667	MH128N080	MH128N081			83	CLMH128N080MH128N081	8	0.0112	0.050899	0.17	0.061100	0.19	0.072440	0.20	0.061100	0.19				
CLMH128N081MH128N082		2004		Existing	assumed Mannings N	MH128N081	MH128N082		T16312J	IRWD	PVC	{58EEB092-102D-4611-8189-DEA6D7FCA22C}	CLMH128N081MH128N082	559.57	558.92	0.666666667	MH128N081	MH128N082			86	CLMH128N081MH128N082	8	0.0075	0.050898	0.18	0.061100	0.19	0.072440	0.21	0.061100	0.19				
CLMH128N082MH128N001		2004		Existing	assumed Mannings N	MH128N082	MH128N001		T16312J	IRWD	PVC	{6AD895AB-8C2D-40F1-A76D-6FA644C4E4A3}	CLMH128N082MH128N001	558.82	509.59	0.666666667	MH128N082	MH128N001			231	CLMH128N082MH128N001	8	0.2178	0.050898	0.08	0.061100	0.09	0.072440	0.09	0.061100	0.09				
CLMH128N083MH128N084	NO ASBUILT FOUND	2003		Existing	assumed Mannings N	MH128N083	MH128N084	assumed inverts based	T15949	IRWD	PVC	{0E039381-B73A-4003-9073-F6D226489198}	CLMH128N083MH128N084	622.00	613.60	0.666666667	MH128N083	MH128N084			158	CLMH128N083MH128N084	8	0.0532	0.027345	0.08	0.032823	0.09	0.038917	0.10	0.032823	0.09				
CLMH128N084MH128N063	NO ASBUILT FOUND	2003		Existing	assumed Mannings N	MH128N084	MH128N063		T15949	IRWD	PVC	{CB883AC8-2C6A1-4C69-AAD8-5E75A9256BD0}	CLMH128N084MH128N063	613.40	590.80	0.666666667	MH128N084	MH128N063			476	CLMH128N084MH128N063	8	0.0476	0.038582	0.09	0.046312	0.10	0.054994	0.11	0.046312	0.10				
CLMH128N086MH128N083	NO ASBUILT FOUND	2003		Existing	assumed Mannings N	MH128N086	MH128N083	assumed inverts based	T15949	IRWD	PVC	{6442D986-E843-4278-B699-638423C7C3D0}	CLMH128N086MH128N083	627.00	622.00	0.666666667	MH128N086	MH128N083			136	CLMH128N086MH128N083	8	0.0368	0.027345	0.09	0.032823	0.10	0.038917	0.10	0.032823	0.10				
CLMH128N087MH128N080		2004		Existing	assumed Mannings N	MH128N087	MH128N080		T16312J	IRWD	PVC	{ED8C6098-7B85-4898-81AE-0A6C6657EDEA}	CLMH128N087MH128N080	561.41	560.50	0.666666667	MH128N087	MH128N080			152	CLMH128N087MH128N080	8	0.0060	0.043133	0.17	0.051778	0.18	0.061388	0.20	0.051778	0.18				
CLMH128N088MH128N084		2003		Existing	assumed Mannings N	MH128N088	MH128N084		T15949	IRWD	PVC	{0367B1CE-D1DF-486A-8C59-B4114B01F9D}	CLMH128N088MH128N084	614.20	613.60	0.666666667	MH128N088	MH128N084			68	CLMH128N088MH128N084	8	0.0088	0.027345	0.08	0.032823	0.09	0.038917	0.10	0.032823	0.09				
CLMH128N090MH127W070		2005		Existing	assumed Mannings N	MH128N090	MH127W070		T15949C	IRWD	PVC	{8892FAA4-0756-4721-B855-B683096466B}	CLMH128N090MH127W070	587.74	580.47	0.666666667	MH128N090	MH127W070			242	CLMH128N090MH127W070	8	0.0300	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH128S001MH129E138		1995		Existing	assumed Mannings N	MH128S001	MH129E138		A00718A	IRWD	VCP	{52D1D5AC-9CBE-4B83-BC04-1190D4FFF845}	CLMH128S001MH129E138	760.71	736.52	0.666666667	MH128S001	MH129E138			247	CLMH128S001MH129E138	8	0.0983	0.401603	0.27	0.416247	0.28	0.432926	0.28	0.416397	0.28				
CLMH128S002MH128S001		1995		Existing	assumed Mannings N	MH128S002	MH128S001		A00718A	IRWD	VCP	{A4179900-0E35-4216-9623-36B7FDB19A4}	CLMH128S002MH128S001	800.71	761.11	0.666666667	MH128S002	MH128S001			402	CLMH128S002MH128S001	8	0.0990	0.401664	0.27	0.416296	0.28	0.432962	0.28	0.416446	0.28				
CLMH128S003MH128S002		1995		Existing	assumed Mannings N	MH128S003	MH128S002		A00718A	IRWD	VCP	{7F58F152-DA87-453A-AE39-B45CD7DFD4F}	CLMH128S003MH128S002	819.88	801.12	0.666666667	MH128S003	MH128S002			186	CLMH128S003MH128S002	8	0.1014	0.401883	0.27	0.416481	0.28	0.433094	0.28	0.416630	0.28				
CLMH128S004MH128S003		1995		Existing	assumed Mannings N	MH128S004	MH128S003		A00718A	IRWD	VCP	{64E3C2B1-42B7-4B0B-A796-3BEF48365335}	CLMH128S004MH128S003	837.89	820.27	0.666666667	MH128S004	MH128S003			286	CLMH128S004MH128S003	8	0.0952	0.369781	0.26	0.377957	0.27	0.387407	0.27	0.378107	0.27				
CLMH128S005MH128S004		1995		Existing	assumed Mannings N	MH128S005	MH128S004		A00718A	IRWD	VCP	{375D1DA9-4E20-4863-8CBF-EE79F9771A05}	CLMH128S005MH128S004	858.11	838.28	0.666666667	MH128S005	MH128S004			213	CLMH128S005MH128S004	8	0.0935	0.369814	0.27	0.377985	0.27	0.387428	0.27	0.378135	0.27				
CLMH128S006MH128S005		1995		Existing	assumed Mannings N	MH128S006	MH128S005		A00718A	IRWD	VCP	{AF0C7383-41CA-4901-A604-E0DC43403BF4}	CLMH128S006MH128S005	882.00	858.52	0.666666667	MH128S006	MH128S005			207	CLMH128S006MH128S005	8	0.1140	0.331755	0.24	0.332813	0.24	0.333769	0.24	0.332801	0.24				
CLMH128S007MH129E002		1995		Existing	assumed Mannings N	MH128S007	MH129E002		A00700	IRWD	VCP	{53B38FA5-836D-4D38-B77C-D7DABEC14CD0}	CLMH128S007MH129E002	612.48	609.97	0.833333333	MH128S007	MH129E002			213	CLMH128S007MH129E002	10	0.0118	0.082303	0.16	0.094877	0.17	0.112498	0.18	0.094877	0.17				
CLMH128S015MH128S020		1998		Existing	assumed Mannings N	MH128S015	MH128S020		T15484	IRWD	PVC	{E664D513-A8A9-4F6D-8810-F0E8135C5791}	CLMH128S015MH128S020	656.91	656.11	0.666666667	MH128S015	MH128S020			200	CLMH128S015MH128S020	8	0.0040	0.004385	0.06	0.005264	0.07	0.006241	0.07	0.005264	0.07				
CLMH128S016MH128S018		1998		Existing	assumed Mannings N	MH128S016	MH128S018		T15484	IRWD	PVC	{3B7781BE-2E2D-4BC7-A17F-09EF2C5EFCC3}	CLMH128S016MH128S018	654.44	616.20	0.666666667	MH128S016	MH128S018			129	CLMH128S016MH128S018	8	0.3093	0.061364	0.08	0.073673	0.09	0.087343	0.09	0.073673	0.09				
CLMH128S017MH128S016		1998		Existing	assumed Mannings N	MH128S017	MH128S016		T15484	IRWD	PVC	{94034022-620C-46FB-9B25-2FCE7CB13F0C}	CLMH128S017MH128S016	655.02	654.44	0.666666667	MH128S017	MH128S016			145	CLMH128S017MH128S016	8	0.0040	0.060179	0.17	0.072248	0.18	0.085655	0.20	0.072248	0.18				
CLMH128S018MH128S007	SLOPE NOT ON AS	1998		Existing	assumed Mannings N	MH128S018	MH128S007		T15484	IRWD	PVC	{2B0AAFFF-45E7-4631-8052-D43A1DC5679E}	CLMH128S018MH128S007	616.00	612.68	0.666666667	MH128S018	MH128S007			50	CLMH128S018MH128S007	8	0.0664	0.061364	0.12	0.073673	0.13	0.087343	0.14	0.073673	0.13

CLMH129E048MH129E049		1992		Existing		MH129E048	MH129E049		A00700	IRWD	VCP	{EEBE85C3-6C22-4921-B712-A333986F0CF5}	CLMH129E048MH129E049	591.39	591.21	0.666666667	MH129E048	MH129E049	1_verified sufficient with Mannings n and pump ca*	45	CLMH129E048MH129E049	8	0.0040	0.042903	0.19	0.431734	0.63	0.059023	0.22	0.069748	0.24		
CLMH129E049MH129E006		1992		Existing		MH129E049	MH129E006		A00700	IRWD	VCP	{07BC864C-5868-4489-AD7A-AF07E500DDF1}	CLMH129E049MH129E006	591.02	586.58	0.666666667	MH129E049	MH129E006		28	CLMH129E049MH129E006	8	0.1615	0.042865	0.08	0.431858	0.25	0.058976	0.09	0.069664	0.10		
CLMH129E050MH129E051		1993		Existing		MH129E050	MH129E051		T14772	IRWD	VCP	{DE762627-C433-4935-A351-8DA364F2BB98}	CLMH129E050MH129E051	657.60	653.08	0.666666667	MH129E050	MH129E051		155	CLMH129E050MH129E051	8	0.0292	0.005740	0.05	0.006892	0.05	0.008170	0.06	0.006892	0.05		
CLMH129E051MH129E061		1993		Existing		MH129E051	MH129E061		T14772	IRWD	VCP	{F8913E01-228E-4DD8-9672-B2D092D0DA48}	CLMH129E051MH129E061	652.88	638.78	0.666666667	MH129E051	MH129E061		131	CLMH129E051MH129E061	8	0.1085	0.023066	0.07	0.027689	0.07	0.033828	0.08	0.027689	0.07		
CLMH129E052MH129E053		1993		Existing		MH129E052	MH129E053		T14772	IRWD	VCP	{0F5F622B-950F-4B75-BF22-21054A38C346}	CLMH129E052MH129E053	686.51	685.45	0.666666667	MH129E052	MH129E053		176	CLMH129E052MH129E053	8	0.0060	0.005147	0.06	0.006179	0.07	0.007326	0.07	0.006179	0.07		
CLMH129E053MH129E058		1993		Existing		MH129E053	MH129E058		T14772	IRWD	VCP	{4E975C7F-65E4-4524-BFFD-89D191002605}	CLMH129E053MH129E058	685.25	663.70	0.666666667	MH129E053	MH129E058		198	CLMH129E053MH129E058	8	0.1094	0.011672	0.05	0.016614	0.06	0.014011	0.05				
CLMH129E054MH129E053		1993		Existing		MH129E054	MH129E053		T14772	IRWD	VCP	{F0F92DE7-C45D-4752-B8DE-8C5A58C3354A}	CLMH129E054MH129E053	685.67	685.45	0.666666667	MH129E054	MH129E053		61	CLMH129E054MH129E053	8	0.0036	0.006525	0.08	0.007832	0.08	0.009287	0.09	0.007832	0.08		
CLMH129E055MH129E054		1993		Existing		MH129E055	MH129E054		T14772	IRWD	VCP	{FE5BA2AF-A29B-4466-938C-623A159A29F9}	CLMH129E055MH129E054	686.20	685.78	0.666666667	MH129E055	MH129E054		108	CLMH129E055MH129E054	8	0.0039	0.006525	0.08	0.007832	0.08	0.009287	0.09	0.007832	0.08		
CLMH129E056MH129E055		1993		Existing		MH129E056	MH129E055		T14772	IRWD	VCP	{13726844-80F6-4274-9B2E-33238985BAF9}	CLMH129E056MH129E055	686.72	686.29	0.666666667	MH129E056	MH129E055		110	CLMH129E056MH129E055	8	0.0039	0.002966	0.05	0.003559	0.06	0.004222	0.06	0.003559	0.06		
CLMH129E057MH129E056		1993		Existing		MH129E057	MH129E056		T14772	IRWD	VCP	{6ECCF21D-4AFD-4DCF-89A3-0090Z4028F9}	CLMH129E057MH129E056	687.23	686.83	0.666666667	MH129E057	MH129E056		107	CLMH129E057MH129E056	8	0.0037	0.002966	0.05	0.003559	0.06	0.004222	0.06	0.003559	0.06		
CLMH129E058MH129E051		1993		Existing		MH129E058	MH129E051		T14772	IRWD	VCP	{60B0EC9D-290B-4F70-B83A-C947CC92686C}	CLMH129E058MH129E051	663.59	652.97	0.666666667	MH129E058	MH129E051		205	CLMH129E058MH129E051	8	0.0518	0.015780	0.07	0.018040	0.07	0.022458	0.08	0.018040	0.07		
CLMH129E059MH129E058		1993		Existing		MH129E059	MH129E058		T14772	IRWD	VCP	{9A1E508S-B45E-4F61-A712-DDCCB5165D28}	CLMH129E059MH129E058	664.40	663.79	0.666666667	MH129E059	MH129E058		63	CLMH129E059MH129E058	8	0.0049	0.004108	0.06	0.004928	0.06	0.005844	0.07	0.004928	0.06		
CLMH129E060MH129E059		1993		Existing		MH129E060	MH129E059		T14772	IRWD	VCP	{88DCACB4-0BE2-4DD0-BEF6-8E27FF883D23}	CLMH129E060MH129E059	665.63	664.50	0.666666667	MH129E060	MH129E059		230	CLMH129E060MH129E059	8	0.0049	0.004108	0.06	0.004928	0.06	0.005844	0.07	0.004928	0.06		
CLMH129E061MH129E062		1993		Existing		MH129E061	MH129E062		T14772	IRWD	VCP	{F13B3B66-065C-478C-9D05-08F67CB0F9A}	CLMH129E061MH129E062	638.58	638.26	0.666666667	MH129E061	MH129E062		85	CLMH129E061MH129E062	8	0.0038	0.023066	0.14	0.027689	0.15	0.032828	0.16	0.027689	0.15		
CLMH129E062MH129E063		1993		Existing		MH129E062	MH129E063		T14772	IRWD	VCP	{5C8326CB-24A5-4842-BCD8-8354DB2131C}	CLMH129E062MH129E063	638.05	637.91	0.666666667	MH129E062	MH129E063		39	CLMH129E062MH129E063	8	0.0036	0.024210	0.14	0.029063	0.16	0.034456	0.17	0.029063	0.16		
CLMH129E063MH129E064		1990		Existing		MH129E063	MH129E064		T14772	IRWD	VCP	{38865A38-850A-457B-B941-0B3540693860}	CLMH129E063MH129E064	637.82	636.92	0.666666667	MH129E063	MH129E064		227	CLMH129E063MH129E064	8	0.0040	0.025276	0.15	0.030339	0.16	0.035969	0.18	0.030339	0.16		
CLMH129E064MH129E065		1990		Existing		MH129E064	MH129E065		T14772	IRWD	VCP	{D9BE640F-CE98-4095-A3E7-983A52267 1CE}	CLMH129E064MH129E065	636.83	636.53	0.666666667	MH129E064	MH129E065		77	CLMH129E064MH129E065	8	0.0039	0.029597	0.16	0.035527	0.17	0.042120	0.19	0.035527	0.17		
CLMH129E065MH129E066		1990		Existing		MH129E065	MH129E066		T14772	IRWD	VCP	{9C119774-8E68-456B-9B90-3CA01892341D}	CLMH129E065MH129E066	636.44	622.88	0.666666667	MH129E065	MH129E066		65	CLMH129E065MH129E066	8	0.2119	0.029597	0.06	0.035527	0.07	0.042120	0.08	0.035527	0.07		
CLMH129E066MH129E009		1990		Existing		MH129E066	MH129E009		T14772	IRWD	VCP	{7A82D7A7-A025-44F3-B8E4-715F95DD4A9E}	CLMH129E066MH129E009	622.67	609.04	0.666666667	MH129E066	MH129E009		328	CLMH129E066MH129E009	8	0.0416	0.296051	0.29	0.355989	0.32	0.422460	0.35	0.355988	0.32		
CLMH129E068MH129E069		1994		Existing		MH129E068	MH129E069		T14773	IRWD	VCP	{602A9232-3975-4B06-930F-3B228B390F51}	CLMH129E068MH129E069	844.21	842.94	0.666666667	MH129E068	MH129E069		186	CLMH129E068MH129E069	8	0.0068	0.001737	0.04	0.002087	0.04	0.002472	0.04	0.002087	0.04		
CLMH129E069MH129E070		1994		Existing		MH129E069	MH129E070		T14773	IRWD	VCP	{F061189F-E407-4BE9-BC2B-D6F83E728A7F}	CLMH129E069MH129E070	842.84	842.38	0.666666667	MH129E069	MH129E070		96	CLMH129E069MH129E070	8	0.0048	0.001737	0.04	0.002087	0.04	0.002472	0.05	0.002087	0.04		
CLMH129E070MH129E071		1994		Existing		MH129E070	MH129E071		T14773	IRWD	VCP	{0E0B1868-1727-48BC-9916-F500B05AE0A9}	CLMH129E070MH129E071	842.28	840.28	0.666666667	MH129E070	MH129E071		62	CLMH129E070MH129E071	8	0.0323	0.002436	0.03	0.002927	0.03	0.003468	0.04	0.002927	0.03		
CLMH129E071MH129E078		1994		Existing		MH129E071	MH129E078		T14773	IRWD	VCP	{6A16A118-7813-4109-87F1-6D5AA252F5F5}	CLMH129E071MH129E078	840.09	817.89	0.666666667	MH129E071	MH129E078		196	CLMH129E071MH129E078	8	0.1138	0.004362	0.03	0.005241	0.03	0.006211	0.04	0.005241	0.03		
CLMH129E072MH129E071		1994		Existing		MH129E072	MH129E071		T14773	IRWD	VCP	{4E677E2C-ABCB-4E69-B8C5-497160F3E2DA}	CLMH129E072MH129E071	847.71	840.28	0.666666667	MH129E072	MH129E071		140	CLMH129E072MH129E071	8	0.0531	0.001927	0.02	0.002314	0.03	0.002743	0.03	0.002314	0.03		
CLMH129E075MH129E076		1994		Existing		MH129E075	MH129E076		T14773	IRWD	VCP	{D8222DAB-F299-41F2-8E0F-7EE69F5FD9F4}	CLMH129E075MH129E076	823.60	823.21	0.666666667	MH129E075	MH129E076		103	CLMH129E075MH129E076	8	0.0038	0.001716	0.04	0.002060	0.04	0.002442	0.05	0.002060	0.04		
CLMH129E076MH129E077		1994		Existing		MH129E076	MH129E077		T14773	IRWD	VCP	{0B723088-370C-4A94-ADB1-F015ABDCC81C}	CLMH129E076MH129E077	823.10	822.23	0.666666667	MH129E076	MH129E077		222	CLMH129E076MH129E077	8	0.0039	0.001716	0.04	0.002060	0.04	0.002442	0.05	0.002060	0.04		
CLMH129E077MH129E078		1994		Existing		MH129E077	MH129E078		T14773	IRWD	VCP	{998DA437-5A06-473C-A0B0-588048E007A5}	CLMH129E077MH129E078	822.14	817.98	0.666666667	MH129E077	MH129E078		125	CLMH129E077MH129E078	8	0.0333	0.003644	0.04	0.004373	0.04	0.005185	0.04	0.004373	0.04		
CLMH129E078MH129E079		1994		Existing		MH129E078	MH129E079		T14773	IRWD	VCP	{E486CFD6-F6CB-4485-AF52-FE3409A40E64}	CLMH129E078MH129E079	817.78	812.28	0.666666667	MH129E078	MH129E079		52	CLMH129E078MH129E079	8	0.1058	0.008006	0.04	0.009614	0.04	0.011396	0.05	0.009614	0.04		
CLMH129E079MH129E088		1994		Existing		MH129E079	MH129E088		T14773	IRWD	VCP	{468D4D90-638B-49CA-B40B-E8F524D91889}	CLMH129E079MH129E088	812.17	797.79	0.666666667	MH129E079	MH129E088		129	CLMH129E079MH129E088	8	0.1123	0.010908	0.05	0.013097	0.05	0.015528	0.06	0.013097	0.05		
CLMH129E080MH129E079		1994		Existing		MH129E080	MH129E079		T14773	IRWD	VCP	{139FA58C-6012-4377-ABC2-2200BECD59F1}	CLMH129E080MH129E079	817.78	812.38	0.666666667	MH129E080	MH129E079		119	CLMH129E080MH129E079	8	0.0454	0.002901	0.03	0.003483	0.03	0.004132	0.04	0.003483	0.03		
CLMH129E081MH129E080		1994		Existing		MH129E081	MH129E080		T14773	IRWD	VCP	{01030F4B-0C41-4855-9B75-22AD167D3D90}	CLMH129E081MH129E080	819.00	817.88	0.666666667	MH129E081	MH129E080		190	CLMH129E081MH129E080	8	0.0059	0.001440	0.03	0.001728	0.04	0.002051	0.04	0.001728	0.04		
CLMH129E085MH129E075		1994		Existing		MH129E085	MH129E075		T14773	IRWD	VCP	{6C3C06F7-BA46-4224-9C19-F32F6C72EED1}	CLMH129E085MH129E075	790.35	786.03	0.666666667	MH129E085	MH129E075		184	CLMH129E085MH129E075	8	0.0235	0.001716	0.03	0.002060	0.03	0.002442	0.03	0.002060	0.03		
CLMH129E085MH129E086		1994		Existing		MH129E085	MH129E086		T14773	IRWD	VCP	{A0B57302-9A9C-4473-A71F-9616A5C11E7D}	CLMH129E085MH129E086	785.92	783.01	0.666666667	MH129E085	MH129E086		143	CLMH129E085MH129E086	8	0.0203	0.003135	0.04	0.003765	0.04	0.004461	0.05	0.003765	0.04		
CLMH129E086MH129E093		1994		Existing		MH129E086	MH129E093		T14773	IRWD	PVC	{0AA151A6-C473-434C-85F0-1714E2200CBA}	CLMH129E086MH129E093	782.80	773.03	0.666666667	MH129E086	MH129E093		112	CLMH129E086MH129E093	8	0.0872	0.017432	0.06	0.020929	0.06	0.024813	0.07	0.020929	0.06		
CLMH129E088MH129E086		1994		Existing		MH129E088	MH129E086		T14773	IRWD	PVC	{37C36D07-8839-4DE9-ADBD-A2DCC135E49B}	CLMH129E088MH129E086	797.70	782.90	0.666666667	MH129E088	MH129E086		143	CLMH129E088MH129E086	8	0.1042	0.013260	0.05	0.015919	0.05	0.018876	0.06	0.015919	0.05		
CLMH129E089MH129E088		1994		Existing		MH129E089	MH129E088		T14773	IRWD	PVC	{CACDF014-88D9-449F-ABC2-5183BEF755C4}	CLMH129E089MH129E088	798.77	797.90	0.666666667	MH129E089	MH129E088		91	CLMH129E089MH129E088	8	0.0090	0.002352	0.04	0.002822	0.04	0.003348	0.05	0.002822	0.04		
CLMH129E092MH129E093		1994		Existing		MH129E092	MH129E093		T14773	IRWD	VCP	{AFF93331B-CD98-4EDF-9767-DC0D3D5F55A5}	CLMH129E092MH129E093	775.92	773.13	0.666666667	MH129E092	MH129E093		121	CLMH129E092MH129E093	8	0.0231	0.002012	0.03	0.002416	0.03	0.002865	0.04	0.002416	0.03		
CLMH129E093MH129E094		1994		Existing		MH129E093	MH129E094		T14773	IRWD	PVC	{CB8BCFF9-6C28-4AC6-90AC-8DC0DA72728E}	CLMH129E093MH129E094	772.92	760.36	0.666666667	MH129E093	MH129E094		121	CLMH129E093MH129E094	8	0.1047	0.019444	0.06	0.023346	0.07	0.027678	0.07	0.023346	0.07		
CLMH129E094MH129E099		1994		Existing		MH129E094	MH129E099		T14773	IRWD	VCP	{A1E04812-A950-427D-814A-2F9327D2FCB9}	CLMH129E094MH129E099	760.27	745.08	0.666666667	MH129E094	MH129E099		167	CLMH129E094MH129E099	8	0.0915	0.023024	0.07	0.027644	0.08	0.032774	0.08	0.027644	0.08		
CLMH129E095MH129E094		1994		Existing		MH129E095	MH129E094		T14773	IRWD	PVC	{1B8BE67E-F253-4B44-8333-ADBF2E1AA558}	CLMH129E095MH129E094	760.83	760.46	0.666666667	MH129E095	MH129E094		94	CLMH129E095MH129E094	8	0.0039	0.003580	0.06	0.004299	0.06	0.005096	0.07	0.004299	0.06		
CLMH129E098MH129E099		1994		Existing		MH129E098	MH129E099		T14773	IRWD	VCP	{02C3FCD8-7C33-487D-AD4A-9E87C2A344F5}	CLMH129E098MH129E099	749.98	745.17	0.666666667	MH129E098	MH129E099		116	CLMH129E098MH129E099	8	0.0415	0.001948	0.03	0.002335	0.03	0.002768	0.03	0.002335	0.03		
CLMH129E099MH129E100		1994		Existing		MH129E099	MH129E100		T14773	IRWD	VCP	{9CCFECAC-E975-4F86-B609-B5C14B47B6C0}	CLMH129E099MH129E100	744.97	741.67	0.666666667	MH129E099	MH129E100		169	CLMH129E099MH129E100	8	0.0195	0.024971	0.10	0.029979	0.11	0.035541	0.12	0.029979	0.11		
CLMH129E100MH129E101		1994		Existing		MH129E100	MH129E101		T14773	IRWD	VCP	{790F4C8F-53AB-46E5-A7AB-7C3366117F4F}	CLMH129E100MH129E101	741.58	739.17	0.666666667	MH129E100	MH129E101		99	CLMH129E100MH129E101	8	0.0243	0.024971	0.10	0.029979	0.11	0.035541	0.12	0.029979	0.11		
CLMH129E101MH129E013		1990		Existing		MH129E101	MH129E013		A00700C	IRWD	VCP	{40C6AD06-693B-451F-9824-2B44A3BB8016}	CLMH129E101MH129E013	738.97	703.90	0.666666667	MH129E101	MH129E013		358	CLMH129E101MH129E013	8	0.0985	0.230147	0.21	0.276336	0.23	0.327643	0.25	0.276336	0.23		
CLMH129E105MH129E006		1990		Existing		MH129E105	MH129E006		A00700	IRWD	VCP	{F0E4FBCC-CCD0-4761-9F6B-3DE5489FFC43}	CLMH129E105MH129E006	586.71	585.75	0.833333333	MH129E105	MH129E006		220	CLMH129E105MH129E006	10	0.0044	0.310145	0.38	0.372992	0.42	0.442677	0.46	0.372991	0.42		
CLMH129E131MH129E005		1990		Existing		MH129E131	MH129E005		A00700	IRWD	VCP	{5227DECD-ACE7-48FD-BC7D-E8BAD68BC063}	CLMH129E131MH129E005	595.08	586.69	0.666666667	MH129E131	MH129E005		41	CLMH129E131MH129E005	8	0.2098	0.422899	0.42	0.442418	0.45	0.464088	0.48	0.442569	0.45		
CLMH129E131MH129E132		1993		Existing		MH129E131	MH129E132		A00718A	IRWD	VCP	{B8628E6A-B3EF-40A4-99D4-218E775624AB}	CLMH129E131MH129E132	601.02	595.17	0.666666667	MH129E131	MH129E132		208	CLMH129E131MH129E132	8	0.0281	0.422903	0.39	0.442419	0.40	0.464089	0.41	0.442570	0.40		
CLMH129E133MH129E132		1993		Existing		MH129E133	MH129E132		A00718A	IRWD	VCP	{FC804C02-2D95-4B56-B62D-CFAC7CCA306D}	CLMH129E133MH129E132	613.72	601.11	0.666666667	MH129E133	MH129E132		108	CLMH129E133MH129E132	8	0.0808	0.423181	0.30	0.442501	0.30	0.464149	0.31	0.442651	0.30		
CLMH129E134MH129E133		1993		Existing		MH129E134	MH129E133		A00718A	IRWD	VCP	{EE31CFD4-299B-4E0F-9125-C01FD6FC45E2}	CLMH129E134MH129E133	631.42	614.13	0.666666667	MH129E134	MH129E133		149	CLMH129E134MH129E133	8	0.1168	0.423240	0.27	0.442518	0.28	0.464162	0.28	0.442669	0.28		
CLMH129E135MH129E134		1993		Existing		MH129E135	MH129E134		A00718A	IRWD	VCP	{AB705D04-3AC0-4834-A20A-4F9418A47F79}	CLMH129E135MH129E134	655.91	631.53	0.666666667	MH129E135	MH129E134		249	CLMH129E135MH129E134	8	0.0983	0.422781	0.28	0.442002	0.29	0.463544	0.30	0.442152	0.29		
CLMH129E136MH129E151		1995		Existing		MH129E136	MH129E151		A00718A	IRWD	VCP	{D8B5C55C-B21E-4912-9C54-827AC0BDDCE9}	CLMH129E136MH129E151	680.71	664.75	0.666666667	MH129E136	MH129E151		161	CLMH129E136MH129E151	8	0.1134	0.401377	0.26	0.416102	0.27	0.432814	0.27	0.416252	0.27		
CLMH129E137MH129E136		1995		Existing		MH129E137	MH129E136		A00718A	IRWD	VCP	{B0A85FB7-E76C-40E6-A771-5BC0952DB79A}	CLMH129E137MH129E136	709.28	681.11	0.666666667	MH129E137	MH129E136		310	CLMH129E137MH129E136	8	0.0912	0.401401	0.28	0.416113	0.28	0.432823	0.29	0.416263	0.28		
CLMH129E138MH129E137		1995		Existing		MH129E138	MH129E137		A00718A	IRWD	VCP	{A57CDF93-B5C4-446D-B2B6-769E8CFBAF07}	CLMH129E138MH129E137	736.11	709.69	0.666666667	MH129E138	MH129E137		246	CLMH129E138MH129E137	8	0.1078	0.401545	0.27	0.416202	0.27	0.432892	0.28	0.416352	0.27		
CLMH129E142MH128S026		1998		Existing		MH129E142	MH128S026		T15484	IRWD	PVC	{27CC29F6-1210-41EB-A124-44D4282E8D3B}	CLMH129E142MH128S026	687.14	686.55	0.666666667	MH129E142	MH128S026		145	CLMH129E142MH128S026	8	0.0041	0.009529	0.07	0.006638	0.07	0.007869	0.08	0.006638	0.07		
CLMH129E143MH129E144		1998		Existing		MH129E143	MH129E144		T15484	IRWD	PVC	{AF8D2F35-6864-49DB-A310-F4895ABF2026}	CLMH129E143MH129E144	719.75	709.95	0.666666667	MH129E143	MH129E144		193	CLMH129E143MH129E144	8	0.0509	0.005405	0.04	0.006446	0.04	0.007642	0.05	0.006446	0.04		
CLMH129E144MH129E145		1998		Existing		MH129E144	MH129E145		T15484	IRWD	PVC	{62AA2490-0770-4DC2-9434-8A90FC66FFD0}	CLMH129E144MH129E145	709.75	709.15	0.666666667	MH129E144	MH129E145		142	CLMH129E144MH129E145	8	0.0042	0.014576	0.11	0.017458	0.12	0.020698	0.13	0.017458	0.12		
CLMH129E145MH129E146		1998		Existing		MH129E145	MH129E146		T15484	IRWD	PVC	{27CBA68F-8E9F-4B2D-8F19-2D4102D97301}	CLMH129E145MH129E146	709.04	697.09	0.666666667	MH129E145	MH129E146		113	CLMH129E145MH129E146	8	0.1059	0.014576	0.06	0.017458	0.06	0.020698	0.06	0.017458	0.06		
CLMH129E146MH129E148		1998		Existing		MH129E146	MH129E148		T15484	IRWD	PVC	{D55ED087-CB5E-42BD-93EA-E331A0A42A98}	CLMH129E146MH129E148	697.00	684.45	0.666666667	MH129E146	MH129E148		179	CLMH129E146MH129E148	8	0.0702	0.014576	0.06	0.017458	0.06	0.020698	0.07	0.017458	0.06		
CLMH129E147MH128S034		1998		Existing		MH129E147	MH128S034		T15484	IRWD	PVC	{5A85767A-DA52-499E-868D-DBDE173540A6}	CLMH129E147MH128S034	738.54	728.70	0.666666667	MH129E147	MH128S034		184	CLMH129E147MH128S034	8	0.0535	0.005405	0.04	0.006446	0.04	0.007642	0.05	0.006446	0.04		
CLMH129E148MH129E150		1998		Existing		MH129E148	MH129E150		T15484	IRWD	PVC	{3FC58F45-8D89-4279-823E-7CF07936FA1F}	CLMH129E148MH129E150	684.34	682.03	0.666666667	MH129E148	MH129E150		94	CLMH129E148MH129E150	8	0.0246	0.019829	0.09	0.023765	0.09	0.028176	0.10	0.023765	0.09		
CLMH129E149MH129E144		1998		Existing		MH129E149	MH129E144		T15484	IRWD	PVC	{AFD8D68D-52BD-42A3-8C43-1923CF963961}	CLMH129E149MH129E144	710.67	709.95	0.666666667	MH129E149	MH129E144		182	CLMH129E149MH129E144	8	0.0040	0.005464	0.07	0.006561	0.07	0.007779	0.08	0.006561	0.07		
CLMH129E150MH129E151		1998		Existing		MH129E150	MH129E151		15484	IRWD	PVC	{1B34762D-AF6E-4982-B48D-46BA2E2EDEF9D}	CLMH129E150MH129E151	681.93	664.85	0.666666667	MH129E150	MH129E151		161	CLMH129E150MH129E151	8	0.1345	0.021652	0.06	0.025952	0.06	0.030770	0.07	0.025952	0.06		
CLMH129E151MH129E135		1995		Existing		MH129E151	MH129E135		A00718A	IRWD	VCP	{D1AD5572-FBF1-476F-B083-366E80EC4B3C}	CLMH129E151MH129E135	664.65	656.32	0.666666667	MH129E151	MH129E135		108	CLMH129E151MH129E135	8	0.0774	0.422903	0.30	0.442047	0.31	0.463578	0.31	0.442197	0.31		
CLMH129E541MH129E543		1998		Existing	assumed Mannings N	MH129E541	MH129E543		15394	IRWD	PVC	{7DADC1B8-3B2B-4D1C-B737-4116B5B1E104}	CLMH129E541MH129E543	885.95	884.73	0.666666667	MH129E541	MH129E543		159	CLMH129E541MH129E543	8	0.0077	0.035180	0.15	0.042239	0.16	0.050080	0.18	0.042239	0.16		
CLMH129E542MH129E541		1998		Existing	assumed Mannings N	MH129E542	MH129E541		15394	IRWD	PVC	{C1F94EAF-FB1C-4D90-B0B9-8B8BF4DD67 1F}	CLMH129E542MH129E541	887.15	886.15	0.666666667	MH129E542	MH129E541		162	CLMH129E542MH129E541	8	0.0062	0.031325	0.15	0.037611	0.17	0.044593	0.18	0.037611	0.17		
CLMH129E543MH129E544		1998		Existing	assumed Mannings N	MH129E543	MH129E544		15394	IRWD	PVC	{FCBA18A7-E47D-4D9C-A220-2BD021E0E6E2}	CLMH129E543MH129E544	884.53	883.59	0.666666667	MH129E543	MH129E544		104	CLMH129E543MH129E544	8	0.0090	0.035180	0.14	0.042239	0.15	0.050080	0.17	0.042239	0.15		
CLMH129E544MH129E545		1998		Existing	assumed Mannings N	MH129E544	MH129E545		15394	IRWD	PVC	{E0185748-30D2-4BF3-80E1-2125C98BE153}	CLMH129E544MH129E545	883.59	882.57	0.666666667	MH129E544	MH129E545		94	CLMH129E544MH129E545	8	0.0109	0.035180	0.14	0.042239	0.15	0.050080	0.16	0.042239	0.15		
CLMH129E545MH133N054		1998		Existing	assumed Mannings N	MH129E545	MH133N054		15394	IRWD	PVC	{E4ABF808-CAAC-4C42-95B2-2E4FAEEA56AE}	CLMH129E545MH133N054	882.36	880.45	0.666666667	MH129E545	MH133N054		250	CLMH129E545MH133N054	8	0.0076	0.035180	0.15	0.042239	0.16	0.050080	0.18	0.042239	0.16		
CLMH129E546MH129E547		2001		Existing	assumed Mannings N	MH129E546	MH129E547		A00946	IRWD	VCP	{22EE3EF9-A4A5-4AEA-BFED-D3C42A2D673F}	CLMH129E546MH129E547	598.40	598.20	0.666666667	MH129E546	MH129E547		41	CLMH129E546MH129E547	8	0.0049	0.013307	0.10	0.014207	0.11	0.016843	0.12	0.014207	0.11		
CLMH129E547MH129E548		2001		Existing	assumed Mannings N	MH129E547	MH129E548		A00946	IRWD	PVC	{7394A379-2CF1-4D56-8B5E-B150211 6C3CE}	CLMH129E547MH129E548	596.78	596.19	0.666666667	MH129E547	MH129E548		362	CLMH129E547MH129E548	8	0.0016	0.018125	0.15	0.019352	0.15	0.022942	0.17	0.019352	0.15		
CLMH129E548MH129E549		2001		Existing	assumed Mannings N	MH129E548	MH129E549		A00946	IRWD	VCP	{DFFA2D84-6F06-428F-9F34-B49142FB1183}	CLMH129E548MH129E549	595.98	595.78	0.666666667	MH129E548	MH129E549		42	CLMH129E548MH129E549	8	0.0048	0.018125	0.12	0.019352	0.12	0.022942	0.13	0.019352	0.12		
CLMH129E550MH129E551		2001		Existing	assumed Mannings N	MH129E550	MH129E551		A00946	IRWD	VCP	{5BFB18BA-67A1-48E9-98DA-BBA2E57A7061}	CLMH129E550MH129E551	595.58	594.34	0.666666667	MH129E550	MH129E551		246	CLMH129E550MH129E551	8	0.0050	0.018125	0.12	0.019352	0.12	0.022942	0.13	0.019352	0.12		
CLMH129E552MH129E030		2001		Existing	assumed Mann

CLMH1295126MH1295125		1995		Existing		MH129L126	MH129L125		T14907	IRWD	VCP	{E62B8511-CB10-4A54-B11B-8DF6890E5518}	CLMH1295126MH1295125	615.51	614.97	0.666666667	MH129L126	MH129L125			136	CLMH129N126MH129N125	8	0.0040	0.017419	0.12	0.020911	0.13	0.024790	0.15	0.020911	0.13					
CLMH129N127MH129N128		1995		Existing		MH129N127	MH129N128		T14907	IRWD	VCP	{41722B84-4363-4F24-9B1B-49CEB21695E5}	CLMH129N127MH129N128	615.80	609.16	0.666666667	MH129N127	MH129N128			205	CLMH129N127MH129N128	8	0.0324	0.007245	0.05	0.008696	0.06	0.010311	0.06	0.008696	0.06					
CLMH129N128MH129N129		1995		Existing		MH129N128	MH129N129		T14907	IRWD	VCP	{3F0B08C9-4C76-4716-BA19-42BA1DA172E6}	CLMH129N128MH129N129	609.07	608.46	0.666666667	MH129N128	MH129N129			130	CLMH129N128MH129N129	8	0.0047	0.027516	0.15	0.033035	0.16	0.039164	0.18	0.033035	0.16					
CLMH129N129MH129N117		1995		Existing		MH129N129	MH129N117		T14907	IRWD	PVC	{26760E E0-28CE-409C-B1A2-AF42C77A699A}	CLMH129N129MH129N117	608.35	595.73	0.666666667	MH129N129	MH129N117			258	CLMH129N129MH129N117	8	0.0489	0.028524	0.15	0.034103	0.19	0.040434	0.22	0.034103	0.19					
CLMH129N130MH129N124		1995		Existing		MH129N130	MH129N124		T14907	IRWD	PVC	{5C26235F-E0DA-4E16-98DB-B33A7548656D}	CLMH129N130MH129N124	612.34	609.57	0.666666667	MH129N130	MH129N124			143	CLMH129N130MH129N124	8	0.0194	0.019255	0.09	0.023115	0.10	0.027407	0.11	0.023115	0.10					
CLMH129N131MH129N130		1995		Existing		MH129N131	MH129N130		T14907	IRWD	PVC	{4F880A48-D685-4C96-AD14-5031BE7FBED8}	CLMH129N131MH129N130	612.78	612.45	0.666666667	MH129N131	MH129N130			73	CLMH129N131MH129N130	8	0.0045	0.010083	0.09	0.012103	0.10	0.014353	0.11	0.012103	0.10					
CLMH129N133MH129N131		1995		Existing		MH129N133	MH129N131		T14907	IRWD	PVC	{2157780F-AD12-4733-A369-D88AA6533E9B}	CLMH129N133MH129N131	614.40	612.98	0.666666667	MH129N133	MH129N131			240	CLMH129N133MH129N131	8	0.0059	0.004492	0.06	0.005390	0.06	0.006392	0.07	0.005390	0.06					
CLMH129N137MH129N124		1995		Existing		MH129N137	MH129N124		T14907	IRWD	PVC	{98B89AFD-C400-40EA-A192-9857032508F9}	CLMH129N137MH129N124	609.97	609.57	0.666666667	MH129N137	MH129N124			107	CLMH129N137MH129N124	8	0.0037	0.019975	0.13	0.023980	0.14	0.028433	0.15	0.023980	0.14					
CLMH129N138MH129N137		1995		Existing		MH129N138	MH129N137		T14907	IRWD	PVC	{4109FE7B-17FA-4901-80A5-A33FE4024EFC}	CLMH129N138MH129N137	610.55	610.08	0.666666667	MH129N138	MH129N137			125	CLMH129N138MH129N137	8	0.0038	0.013790	0.11	0.016554	0.12	0.019628	0.13	0.016554	0.12					
CLMH129N139MH129N138		1995		Existing		MH129N139	MH129N138		T14907	IRWD	PVC	{44183210-D159-43D7-8532-9CE8689C1BBE}	CLMH129N139MH129N138	611.08	610.65	0.666666667	MH129N139	MH129N138			110	CLMH129N139MH129N138	8	0.0039	0.008833	0.09	0.010604	0.09	0.012573	0.10	0.010604	0.09					
CLMH129N142MH129N137		1995		Existing		MH129N142	MH129N137		T14907	IRWD	PVC	{6E5AC134-58F9-4601-9146-0E5ADE8D3B97}	CLMH129N142MH129N137	615.16	610.09	0.666666667	MH129N142	MH129N137			189	CLMH129N142MH129N137	8	0.0268	0.006184	0.05	0.007427	0.05	0.008805	0.06	0.007427	0.05					
CLMH129N145MH129N138		1995		Existing		MH129N145	MH129N138		T14907	IRWD	PVC	{B7461019-32AF-4543-B6F0-5CA0A0A147B7}	CLMH129N145MH129N138	616.19	610.76	0.666666667	MH129N145	MH129N138			251	CLMH129N145MH129N138	8	0.0216	0.004957	0.05	0.005950	0.05	0.007055	0.05	0.005950	0.05					
CLMH129N147MH129N145		1995		Existing		MH129N147	MH129N145		T14907	IRWD	PVC	{CB243DD1-F77F-41C6-AE82-27DD0C198F8C}	CLMH129N147MH129N145	616.90	616.39	0.666666667	MH129N147	MH129N145			105	CLMH129N147MH129N145	8	0.0049	0.001695	0.04	0.002034	0.04	0.002412	0.04	0.002034	0.04					
CLMH129N149MH129N125		1995		Existing		MH129N149	MH129N125		T14907	IRWD	PVC	{18325D0B-DF7D-49EF-8325-FC6E207463E5}	CLMH129N149MH129N125	615.21	615.08	0.666666667	MH129N149	MH129N125			38	CLMH129N149MH129N125	8	0.0034	0.004492	0.06	0.005390	0.07	0.006392	0.07	0.005390	0.07					
CLMH129N151MH129N126		1995		Existing		MH129N151	MH129N126		T14907	IRWD	PVC	{7F9C650C-4A0F-45BA-A413-8015B79FDE20}	CLMH129N151MH129N126	616.23	615.71	0.666666667	MH129N151	MH129N126			109	CLMH129N151MH129N126	8	0.0048	0.017391	0.11	0.020880	0.13	0.024754	0.14	0.020880	0.13					
CLMH129N152MH129N151		1995		Existing		MH129N152	MH129N151		T14907	IRWD	PVC	{E91DB821-CF3F-46BC-B21B-D9A8354AF257}	CLMH129N152MH129N151	617.25	616.44	0.666666667	MH129N152	MH129N151			140	CLMH129N152MH129N151	8	0.0058	0.013663	0.10	0.016404	0.11	0.019447	0.12	0.016404	0.11					
CLMH129N153MH129N152		1995		Existing		MH129N153	MH129N152		T14907	IRWD	PVC	{1F9A5AAA-FF61-493F-8AF7-513550C9B153}	CLMH129N153MH129N152	617.58	617.34	0.666666667	MH129N153	MH129N152			63	CLMH129N153MH129N152	8	0.0038	0.007817	0.08	0.009386	0.09	0.011125	0.10	0.009386	0.09					
CLMH129N154MH129N153		1995		Existing		MH129N154	MH129N153		T14907	IRWD	PVC	{A6338230-05F1-446C-810B-C513363DE0F8}	CLMH129N154MH129N153	618.88	617.78	0.666666667	MH129N154	MH129N153			280	CLMH129N154MH129N153	8	0.0039	0.003600	0.06	0.004324	0.06	0.005125	0.07	0.004324	0.06					
CLMH129N160MH129N127		1995		Existing		MH129N160	MH129N127		T14907	IRWD	PVC	{2652A001-8CA2-4D68-8E7D-9C58DC16A0BB}	CLMH129N160MH129N127	616.46	615.90	0.666666667	MH129N160	MH129N127			116	CLMH129N160MH129N127	8	0.0048	0.007245	0.07	0.008696	0.08	0.010311	0.09	0.008696	0.08					
CLMH129N163MH129N128		1995		Existing		MH129N163	MH129N128		T14907	IRWD	PVC	{977295AB-BDA6-4FE5-BA67-B261922SE3C2}	CLMH129N163MH129N128	609.65	609.16	0.666666667	MH129N163	MH129N128			127	CLMH129N163MH129N128	8	0.0039	0.020271	0.13	0.024339	0.14	0.028854	0.15	0.024339	0.14					
CLMH129N164MH129N163		1995		Existing		MH129N164	MH129N163		T14907	IRWD	PVC	{EADE7D35-44C7-4EA1-88DA-D5593E8C1F99}	CLMH129N164MH129N163	610.21	609.76	0.666666667	MH129N164	MH129N163			50	CLMH129N164MH129N163	8	0.0090	0.013047	0.09	0.015667	0.10	0.018573	0.10	0.015667	0.10					
CLMH129N165MH129N164		1995		Existing		MH129N165	MH129N164		T14907	IRWD	PVC	{7ACBB09C-BABC-4EAC-8363-64AA3A1BDAC2}	CLMH129N165MH129N164	610.78	610.41	0.666666667	MH129N165	MH129N164			80	CLMH129N165MH129N164	8	0.0038	0.013047	0.10	0.015667	0.11	0.018573	0.12	0.015667	0.11					
CLMH129N166MH129N165		1995		Existing		MH129N166	MH129N165		T14907	IRWD	PVC	{2E5D111D-15F0-4FF4-A0CD-F868C66433DD}	CLMH129N166MH129N165	612.69	610.89	0.666666667	MH129N166	MH129N165			79	CLMH129N166MH129N165	8	0.0228	0.008662	0.06	0.010403	0.06	0.012332	0.07	0.010403	0.06					
CLMH129N167MH129N166		1995		Existing		MH129N167	MH129N166		T14907	IRWD	PVC	{1FDB1127-77E2-4923-A360-83196365BAD4}	CLMH129N167MH129N166	613.77	612.78	0.666666667	MH129N167	MH129N166			102	CLMH129N167MH129N166	8	0.0097	0.008662	0.07	0.010403	0.08	0.012332	0.08	0.010403	0.08					
CLMH129N169MH129N163		1995		Existing		MH129N169	MH129N163		T14907	IRWD	PVC	{E8EDC257-0BAB-4A6D-8BE8-22052037C60A}	CLMH129N169MH129N163	610.04	609.85	0.666666667	MH129N169	MH129N163			52	CLMH129N169MH129N163	8	0.0037	0.007224	0.08	0.008672	0.09	0.010281	0.09	0.008672	0.09					
CLMH129N173MH129N165		1995		Existing		MH129N173	MH129N165		T14907	IRWD	PVC	{08432988-B516-4D13-B860-09B69543478D}	CLMH129N173MH129N165	613.41	610.98	0.666666667	MH129N173	MH129N165			48	CLMH129N173MH129N165	8	0.0506	0.004385	0.04	0.005264	0.04	0.006241	0.04	0.005264	0.04					
CLMH129N184MH129N001		1992		Existing		MH129N184	MH129N001		741	IRWD	VCP	{4E00E556-165D-4DEC-B829-33024C30D206}	CLMH129N184MH129N001	588.62	588.21	1.250000000	MH129N184	MH129N001			290	CLMH129N184MH129N001	15	0.0014	0.365301	0.29	0.439358	0.32	0.524996	0.35	0.439344	0.32					
CLMH129N185MH129N184		1995		Existing		MH129N185	MH129N184		T14895	IRWD	PVC	{E90C7834-A58A-4939-93E1-3995612BA683}	CLMH129N185MH129N184	594.15	589.34	0.833333333	MH129N185	MH129N184			106	CLMH129N185MH129N184	10	0.0290	0.025161	0.07	0.030205	0.08	0.035810	0.08	0.030205	0.08					
CLMH129N186MH129N185		1995		Existing		MH129N186	MH129N185		T14895	IRWD	PVC	{9B1E632F-A6CB-4C7D-9471-2171ACE03D8D}	CLMH129N186MH129N185	594.67	594.25	0.833333333	MH129N186	MH129N185			160	CLMH129N186MH129N185	10	0.0026	0.013537	0.09	0.016250	0.09	0.019267	0.10	0.016250	0.09					
CLMH129N187MH129N186		1995		Existing		MH129N187	MH129N186		T14895	IRWD	PVC	{38548FC6-6DFA-4351-BAAF-B52051C616DB}	CLMH129N187MH129N186	595.34	594.78	0.833333333	MH129N187	MH129N186			207	CLMH129N187MH129N186	10	0.0027	0.007182	0.06	0.008621	0.07	0.010221	0.07	0.008621	0.07					
CLMH129N189MH129N187		1995		Existing		MH129N189	MH129N187		T14895	IRWD	PVC	{A44885C2-3735-48D7-AFE5-134EBCAE2A7C}	CLMH129N189MH129N187	596.35	595.54	0.666666667	MH129N189	MH129N187			208	CLMH129N189MH129N187	8	0.0039	0.002542	0.05	0.003051	0.05	0.003617	0.06	0.003051	0.05					
CLMH129N190MH129N189		1995		Existing		MH129N190	MH129N189		T14895	IRWD	PVC	{1D9F9356-D2CC-41FE-843D-D76F02F5FDC4}	CLMH129N190MH129N189	596.90	596.46	0.666666667	MH129N190	MH129N189			114	CLMH129N190MH129N189	8	0.0039	0.002542	0.05	0.003051	0.05	0.003617	0.06	0.003051	0.05					
CLMH129N192MH129N185		1995		Existing		MH129N192	MH129N185		T14895	IRWD	PVC	{1300B22D-AC34-4FA0-868C-22196553CED2}	CLMH129N192MH129N185	602.39	594.34	0.666666667	MH129N192	MH129N185			334	CLMH129N192MH129N185	8	0.0241	0.003304	0.04	0.003968	0.04	0.004702	0.04	0.003968	0.04					
CLMH129N193MH129N185		1995		Existing		MH129N193	MH129N185		T14895	IRWD	PVC	{8942DC69-98E5-44DC-BCF0-71C44C7CF8AE}	CLMH129N193MH129N185	595.50	594.34	0.833333333	MH129N193	MH129N185			415	CLMH129N193MH129N185	10	0.0028	0.008321	0.07	0.009988	0.07	0.011840	0.08	0.009988	0.07					
CLMH129N194MH129N193		1995		Existing		MH129N194	MH129N193		T14895	IRWD	PVC	{15295947-6C80-4972-84C7-5A83056600C21}	CLMH129N194MH129N193	596.80	595.70	0.666666667	MH129N194	MH129N193			281	CLMH129N194MH129N193	8	0.0039	0.004256	0.06	0.005108	0.07	0.006054	0.07	0.005108	0.07					
CLMH129N196MH129N020		1995		Existing		MH129N196	MH129N020		T14565	IRWD	VCP	{54B74F64-AE2E-4575-AE31-9BEFBBD53E17}	CLMH129N196MH129N020	606.13	606.04	0.666666667	MH129N196	MH129N020			21	CLMH129N196MH129N020	8	0.0043	0.016792	0.13	0.020085	0.14	0.023815	0.15	0.020085	0.14					
CLMH129N197MH129N196		1995		Existing		MH129N197	MH129N196		T14565	IRWD	PVC	{239562CD-DC34-4167-9286-29EB63192378}	CLMH129N197MH129N196	606.89	606.22	0.833333333	MH129N197	MH129N196			224	CLMH129N197MH129N196	10	0.0030	0.014612	0.09	0.017466	0.09	0.020708	0.10	0.017466	0.09					
CLMH129N199MH129N197		1995		Existing		MH129N199	MH129N197		T14565	IRWD	PVC	{8EC3D1EE-AF21-4996-B595-5CCB04A2D04D}	CLMH129N199MH129N197	607.79	607.09	0.833333333	MH129N199	MH129N197			215	CLMH129N199MH129N197	10	0.0033	0.009890	0.07	0.011797	0.08	0.013985	0.08	0.011797	0.08					
CLMH129N200MH129N199		1995		Existing		MH129N200	MH129N199		T14565	IRWD	PVC	{E9919B8D-37A7-495C-9179-6CF16EA3EEE1}	CLMH129N200MH129N199	608.61	607.90	0.833333333	MH129N200	MH129N199			243	CLMH129N200MH129N199	10	0.0029	0.009890	0.07	0.011797	0.08	0.013985	0.09	0.011797	0.08					
CLMH129N205MH129N200		1995		Existing		MH129N205	MH129N200		T14565	IRWD	PVC	{5045C183-9590-49AB-9737-22CC53B919D3}	CLMH129N205MH129N200	608.97	608.71	0.666666667	MH129N205	MH129N200			69	CLMH129N205MH129N200	8	0.0038	0.009890	0.09	0.011797	0.10	0.013985	0.11	0.011797	0.10					
CLMH129N202MH097E104		1994		Existing		MH129N202	MH097E104		T14902	IRWD	PVC	{CF19EFD5-FAC7-418B-B394-D200F93B7E28}	CLMH129N202MH097E104	613.89	609.20	0.666666667	MH129N202	MH097E104			395	CLMH129N202MH097E104	8	0.0119	0.005527	0.06	0.006633	0.06	0.007863	0.07	0.006633	0.06					
CLMH129N204MH097E110		1994		Existing		MH129N204	MH097E110		T14902	IRWD	PVC	{29515DD6-77FF-4228-B510-FFFB08FE7416}	CLMH129N204MH097E110	616.55	613.77	0.666666667	MH129N204	MH097E110			283	CLMH129N204MH097E110	8	0.0098	0.004110	0.05	0.004935	0.05	0.005848	0.06	0.004935	0.05					
CLMH129N208MH097E112		1994		Existing		MH129N208	MH097E112		T14902	IRWD	PVC	{1D402C5B-5064-4FFC-8F74-8398CF646644}	CLMH129N208MH097E112	617.96	615.85	0.666666667	MH129N208	MH097E112			180	CLMH129N208MH097E112	8	0.0117	0.004725	0.05	0.005670	0.06	0.006724	0.06	0.005670	0.06					
CLMH129N211MH129N213		2002		Existing	assumed Mannings N	MH129N211	MH129N213		T16266	IRWD	PVC	{599D2AA0-A7C8-4856-925C-EB242B3D2D09}	CLMH129N211MH129N213	597.63	597.11	0.666666667	MH129N211	MH129N213			127	CLMH129N211MH129N213	8	0.0041	0.003135	0.05	0.003765	0.06	0.004461	0.06	0.003765	0.06					
CLMH129N212MH129E546		2001		Existing	assumed Mannings N	A00946	HVCP		A00946	IRWD	VCP	{A301C857-A9E6-4C89-BF9B-29CF23CAC7F5}	CLMH129N212MH129E546	599.61	598.60	0.666666667	MH129N212	MH129E546			203	CLMH129N212MH129E546	8	0.0043	0.014207	0.11	0.016843	0.12	0.014207	0.11					
CLMH129N213MH129N214		2002		Existing	assumed Mannings N	MH129N213	MH129N214		T16266	IRWD	PVC	{CF4838FE-4D70-47A3-9033-88A84A6E760C}	CLMH129N213MH129N214	597.02	596.55	0.666666667	MH129N213	MH129N214			115	CLMH129N213MH129N214	8	0.0041	0.005613	0.07	0.006739	0.07	0.007988	0.08	0.006739	0.07					
CLMH129N214MH129N215		2002		Existing	assumed Mannings N	MH129N214	MH129N215		T16266	IRWD	PVC	{AA636493-E15D-411C-B1A7-B1C7F1653D8F}	CLMH129N214MH129N215	596.46	596.15	0.666666667	MH129N214	MH129N215			96	CLMH129N214MH129N215	8	0.0042	0.008090	0.08	0.009713	0.09	0.011516	0.10	0.009713	0.09					
CLMH129N215MH129N216		2002		Existing	assumed Mannings N	MH129N215	MH129N216		T16266	IRWD	PVC	{71894D32-98DA-40F6-BB09-A9FE7923A377}	CLMH129N215MH129N216	595.96	595.45	0.666666667	MH129N215	MH129N216			126	CLMH129N215MH129N216	8	0.0040	0.012953	0.10	0.015535	0.11	0.018416	0.12	0.015535	0.11					
CLMH129N216MH129N184		2002		Existing	assumed Mannings N	MH129N216	MH129N184		T16266	IRWD	PVC	{712F7E0F-CA47-4EBC-BEC6-6F78C25A4B64}	CLMH129N216MH129N184	595.35	591.30	0.666666667	MH129N216	MH129N184			45	CLMH129N216MH129N184	8	0.0910	0.012953	0.05	0.015535	0.06	0.018416	0.06	0.015535	0.06					
CLMH129N217MH129N215		2002		Existing	assumed Mannings N	MH129N217	MH129N215		T16266	IRWD	PVC	{A5D19235-5295-4AED-A47A-888E3F1778A4}	CLMH129N217MH129N215	600.44	596.15	0.666666667	MH129N217	MH129N215			71	CLMH129N217MH129N215	8	0.0604	0.004861	0.04	0.005823	0.04	0.006901	0.04	0.005823	0.04					
CLMH129N218MH129N217		2002		Existing	assumed Mannings N	MH129N218	MH129N217		T16266	IRWD	PVC	{9DE3BCAD-6A3F-4515-9AF2-8F504E73DE17}	CLMH129N218MH129N217	600.89	600.53	0.666666667	MH129N218	MH129N217			87	CLMH129N218MH129N217	8	0.0041	0.003220	0.05	0.003867	0.06	0.004583	0.06	0.003867	0.06					
CLMH129S001MH129E010		1990		Existing		MH129S001	MH129E010		A00700	IRWD	VCP	{055D1A51-FC21-4374-BA28-8F12429BE65A}	CLMH129S001MH129E010	633.02	627.20	0.666666667	MH129S001	MH129E010			368	CLMH129S001MH129E010	8	0.0158	0.014297	0.08	0.017169	0.09	0.020352	0.10	0.017169	0.09					
CLMH129S002MH129S001		1990		Existing		MH129S002	MH129S001		A00700	IRWD	VCP	{31728B66-5E00-4CCE-A273-F99E032F2306}	CLMH129S002MH129S001	636.13	633.21	0.666666667	MH129S002	MH129S001			368	CLMH129S002MH129S001	8	0.0079	0.014297	0.10	0.017169	0.11	0.020352	0.12	0.017169	0.11					
CLMH129S003MH129S002		1990		Existing		MH129S003	MH129S002		A00700	IRWD	VCP	{8931B7F9-2141-4884-8791-364CB0B68CC6}	CLMH129S003MH129S002	637.41	636.33	0.666666667	MH129S003	MH129S002			368	CLMH129S003MH129S002	8	0.0077	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00					
CLMH129S004MH129S003		1990		Existing		MH129S004	MH129S003		A00700	IRWD	VCP	{31F92863-1336-4DDC-A67E-0CD6E3AA2C43}	CLMH129S004MH129S003	643.65	637.61	0.666666667	MH129S004	MH129S003			306	CLMH129S004MH129S003	8	0.0197	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00					
CLMH129S005MH129S004		1990		Existing		MH129S005	MH129S004		A00700A	IRWD	VCP	{01B5E345-16C9-4F86-BAF2-FB1AF499E1E1}	CLMH129S005MH129S004	645.85	645.22	1.250000000	MH129S005	MH129S004			325	CLMH129S005MH129S004	15	0.0252	0.000000	0.15	0.000000	0.15	0.000000	0.15	0.000000	0.15					
CLMH129S006MH129S005		1990		Existing		MH129S006	MH129S005		A00700A	IRWD	VCP	{3F99A379-8319-4B5F-92C5-2D2CAE9D26}	CLMH129S006MH129S005	641.21	637.02	1.250000000	MH129S006	MH129S005			325	CLMH129S006MH129S005	15	0.0129	1.934984	0.45	1.963230	0.45	1.992981	0.45	1.973771	0.45					
CLMH129S007MH129S008		1990		Existing		MH129S007	MH129S008		A00700A	IRWD	VCP	{4860E1F4-14F6-45D9-B02F-7FA82EEADD87}	CLMH129S007MH129S008	636.86	625.08	1.250000000	MH129S007	MH129S008			325	CLMH129S007MH129S008	15	0.0362	1.918013	0.33	1.957852	0.34	1.967213	0.34	1.967178	0.34					
CLMH129S008MH130E001		1990		Existing		MH129S008	MH130E001		A00700A	IRWD	VCP	{37B326A3-EA0D-4BC3-9690-8D94E71AD4A8}	CLMH129S008MH130E001	624.89	606.14	1.250000000	MH129S008	MH130E001			338	CLMH129S008MH130E001	15	0.0556	1.903106	0.30	1.954526	0.30	1.963567	0.30	1.963537	0.30					
CLMH129S010MH129S011		1990		Existing		MH129S010	MH129S011		T14038	IRWD	PVC	{185C841C-4C87-4679-9743-B650CE83ACF2}	CLMH129S010MH129S011	673.79	657.40	0.666666667	MH129S010	MH129S011			215	CLMH129S010MH129S011	8	0.0766	0.002605	0.03	0.003128	0.03	0.003709	0.03	0.003128	0.03					
CLMH129S011MH129S012		1990		Existing		MH129S011	MH129S012		T14038	IRWD	PVC	{8CAD31EA6-A224-4637-8780-6CCBF7C1EF56}	CLMH129S011MH129S012	657.20	656.59	0.666666667	MH129S011	MH129S012			50	CLMH129S011MH129S012	8	0.0122	0.046559	0.15	0.055893	0.17	0.066270	0.18	0.055893	0.17					
CLMH129S012MH129S013		1990		Existing		MH129S012	MH129S013		T14038	IRWD	PVC	{CBCC1FBE-B0E0-4420-B5C5-6AD7FF3C04B6}	CLMH129S012MH129S013	656.40	655.70	0.666666667	MH129S012	MH129S013			551	CLMH129S012MH129S013	8	0.0137	0.046559	0.15	0.055898	0.16	0.066270	0.18	0.055898	0.16					
CLMH129S013MH129S014		1990		Existing		MH129S013	MH129S014		T14038	IRWD	PVC	{043B38EC-C62C-4ED4-9957-73836E8FD1CB}	CLMH129S013MH129S014	655.50	654.50	0.666666667	MH129S013	MH129S014			48	CLMH129S013MH129S014	8	0.0208	0.046559	0.13	0.055898	0.15	0.066270	0.16	0.055898	0.15					
CLMH129S014MH129S015		1990		Existing		MH129S014	MH129S015		T14038	IRWD	PVC	{193A5F83-2165-4DCE-BFFF-E719B6554BFE}	CLMH129S014MH129S015	654.29	642.72	0.666666667	MH129S014	MH129S015			171	CLMH129S014MH129S015	8	0.0677	0.046559	0.10	0.055898	0.11	0.066270	0.12	0.055898	0.11					
CLMH129S015MH130E014		1990		Existing		MH129S015	MH130E014		T14038	IRWD	PVC	{27480CA5-0687-46E4-AB34-F4991C705CD0}	CLMH129S015MH130E014	642.53	613.54	0.666666667	MH129S015	MH130E014			196	CLMH129S015MH130E014	8	0.2180	0.047300	0.08	0.056789	0.08	0.067326	0.09	0.056789	0.08					
CLMH129S016MH129S011		1991		Existing		MH129S016	MH129S011		T14038	IRWD	PVC	{DB81C698-057E-44B0-A57A-DB52A1AEC8F2}	CLMH129S016MH129S011	664.00	657.40	0.666666667	MH129S016	MH129S011			115	CLMH129S016MH129S011	8	0.0574	0.043955	0.10	0.052770	0.11	0.062561	0.12	0.052770	0.11					
CLMH129S017MH129S016		1991		Existing		MH129S017	MH129S016		T14038	IRWD	PVC	{2D4DF126-E286-4807-B8F9-A607EE10C089}	CLMH129S017MH129S016	673.20	664.20	0.666666667	MH129S017	MH129S016			115	CLMH129S017MH129S016	8	0.0783	0.037261	0.09	0.044734	0.09	0.053035	0.10	0.044734	0.09					
CLMH129S018MH129S017		1991		Existing		MH129S018	MH129S017		T14038	IRWD	PVC	{4121FCBE-299F-435F-81E7-6BFE80A9CA5E}	CLMH129S018MH129S017	684.17	673.50	0.666666667	MH129S018	MH129S017			129	CLMH129S018MH129S017	8	0.0827	0.037261	0.09	0.044734	0.09	0.053035	0.10	0.044734	0.09					
CLMH129S019MH129S018		1991		Existing		MH129S019	MH129S018		T14038	IRWD	PVC	{52990D30-FAE9-4C15-A51D-78803C4CD05A}	CLMH129S019MH129S018	689.79	684.38	0.666666667	MH129S019	MH129S018			80	CLMH129S019MH129S018	8	0.0676	0.017222	0.06	0.020675	0.07	0.024512	0.07	0.020675	0.07					
CLMH129S020MH129S019		1991		Existing		MH129S020	MH129S019		T14038	IRWD	PVC	{09739A6D-76BB-4CB2-B7F7-53414777EDF2}	CLMH129S020MH129S019	703.90	690.00	0.666666667	MH129S020	MH129S019			135	CLMH129S020MH129S019	8	0.1037	0.017222	0.06	0.020675	0.06	0.024512	0.07	0.020675	0.06					
CLMH129S021MH129S020		1991		Existing		MH129S021	MH129S020		T14038	IRWD	PVC	{AD87830F-91D7-4100-A8F7-51208FBE8922}	CLMH129S021MH129S020	720.90	704.09	0.666666667	MH129S021	MH129S020			211	CLMH129S021MH129S020	8	0.0800	0.035717	0.06	0.042871	0.07	0.050823	0.08	0.042871	0.07					
CLMH129S022MH129S021		1991		Existing		MH129S022	M

| | | |

| | | |

| | | |

CLMH132E073MH132E072		2005		Existing	assumed Manningis N	MH132E073	MH132E072		15613	IRWD	PVC	{C406AEC2-1274-48F5-8B21-DB3395563EBC}	CLMH132E073MH132E072	618.50	601.10	0.666666667	MH132E073	MH132E072			86	CLMH132E073MH132E072	8	0.2072	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003739	0.02		
CLMH132E074MH132E073		2005		Existing	assumed Manningis N	MH132E074	MH132E073		15613	IRWD	PVC	{AF3F2722-B244-4410-8B63-0917440DC71C}	CLMH132E074MH132E073	626.20	618.70	0.666666667	MH132E074	MH132E073			255	CLMH132E074MH132E073	8	0.0295	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003739	0.04		
CLMH132E075MH132E076		2005		Existing	assumed Manningis N	MH132E075	MH132E076		15613	IRWD	PVC	{EC15A337-8E71-404A-B47B-A5995242C661}	CLMH132E075MH132E076	516.53	512.92	0.666666667	MH132E075	MH132E076			244	CLMH132E075MH132E076	8	0.0148	0.007868	0.06	0.009446	0.07	0.011201	0.07	0.013415	0.08		
CLMH132E076MH132N016	142'FROM N-S IS	2005		Existing	assumed Manningis N	MH132E076	MH132N016		T16456	IRWD	PVC	{9A949027-CBC7-4896-93F0-5F5F01F3DF45}	CLDE132E005MH132N016	512.72	503.32	0.666666667	MH132E076	MH132N016			305	CLMH132E076MH132N016	8	0.0308	0.007867	0.05	0.009445	0.06	0.011200	0.06	0.013414	0.07		
CLMH132E077MH132E049		2005		Existing	assumed Manningis N	MH132E077	MH132E049		15613	IRWD	PVC	{0D4AA4E50-CF4D-4F0E-B206-A00B9882756}	CLMH132E077MH132E049	551.03	550.59	0.666666667	MH132E077	MH132E049			34	CLMH132E077MH132E049	8	0.0129	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003577	0.04		
CLMH132E078MH132E079		2005		Existing	assumed Manningis N	MH132E078	MH132E079		15613	IRWD	PVC	{AFA31A85-D8F2-48E7-BA11-63980F4FDD37}	CLMH132E078MH132E079	581.63	573.02	0.666666667	MH132E078	MH132E079			172	CLMH132E078MH132E079	8	0.0501	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.05		
CLMH132E079MH132E080		2005		Existing	assumed Manningis N	MH132E079	MH132E080		15613	IRWD	PVC	{89A31790-4455-4BFF-BF84-DDC620781EEA}	CLMH132E079MH132E080	572.82	572.05	0.666666667	MH132E079	MH132E080			80	CLMH132E079MH132E080	8	0.0096	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.07		
CLMH132E080MH132E081		2005		Existing	assumed Manningis N	MH132E080	MH132E081		15613	IRWD	PVC	{4F4080FC-6F82-4BA3-945B-134624986537}	CLMH132E080MH132E081	571.85	569.88	0.666666667	MH132E080	MH132E081			202	CLMH132E080MH132E081	8	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.07		
CLMH132E081MH132E082		2005		Existing	assumed Manningis N	MH132E081	MH132E082		15613	IRWD	PVC	{25B0279A-5412-40A0-B688-2830CE33A46B}	CLMH132E081MH132E082	569.67	566.91	0.666666667	MH132E081	MH132E082			280	CLMH132E081MH132E082	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.07		
CLMH132E082MH132E083		2005		Existing	assumed Manningis N	MH132E082	MH132E083		15613	IRWD	PVC	{E98C2227-EE14-472E-A931-133AC8301034}	CLMH132E082MH132E083	566.71	565.20	0.666666667	MH132E082	MH132E083			156	CLMH132E082MH132E083	8	0.0097	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.07		
CLMH132E083MH132E084		2005		Existing	assumed Manningis N	MH132E083	MH132E084		15613	IRWD	PVC	{080FDC6D-1804-40A9-9312-16177B1430AF}	CLMH132E083MH132E084	565.00	563.98	0.666666667	MH132E083	MH132E084			104	CLMH132E083MH132E084	8	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.07		
CLMH132E084MH132E085		2005		Existing	assumed Manningis N	MH132E084	MH132E085		15613	IRWD	PVC	{CB303A69-0D19-4CBC-BAD0-75730B04ABAD}	CLMH132E084MH132E085	563.78	563.69	0.666666667	MH132E084	MH132E085			89	CLMH132E084MH132E085	8	0.0010	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.11		
CLMH132E085MH132E086		2005		Existing	assumed Manningis N	MH132E085	MH132E086		15613	IRWD	PVC	{E17408CA-1DD2-4558-A281-819716791774}	CLMH132E085MH132E086	562.78	561.28	0.666666667	MH132E085	MH132E086			58	CLMH132E085MH132E086	8	0.0259	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.06		
CLMH132E086MH132E087		2005		Existing	assumed Manningis N	MH132E086	MH132E087		15613	IRWD	PVC	{206721AA-5AFC-4D1E-BCF8-B68F2F4901551}	CLMH132E086MH132E087	561.09	559.66	0.666666667	MH132E086	MH132E087			149	CLMH132E086MH132E087	8	0.0096	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.07		
CLMH132E087MH132E010		2005		Existing	assumed Manningis N	MH132E087	MH132E010		15613	IRWD	PVC	{77A11FAE-F10C-4A6F-A231-CE34B53178B}	CLMH132E087MH132E010	559.46	557.48	0.666666667	MH132E087	MH132E010			221	CLMH132E087MH132E010	8	0.0090	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008802	0.07		
CLMH132E088MH132E089		2005		Existing	assumed Manningis N	MH132E088	MH132E089		T16457	IRWD	PVC	{55461CFC-78FD-4DD8-81FB-4038CB556F82}	CLMH132E088MH132E089	540.45	535.40	0.666666667	MH132E088	MH132E089			340	CLMH132E088MH132E089	8	0.0149	0.036371	0.13	0.043668	0.14	0.051770	0.15	0.033483	0.12		
CLMH132E089MH132E090		2005		Existing	assumed Manningis N	MH132E089	MH132E090		T16457	IRWD	PVC	{F9DB10CA-06E4-4FA5-BAFF-173148E908C5}	CLMH132E089MH132E090	535.30	532.46	0.666666667	MH132E089	MH132E090			152	CLMH132E089MH132E090	8	0.0146	0.036371	0.13	0.043668	0.14	0.051770	0.15	0.033476	0.12		
CLMH132E090MH132E091		2005		Existing	assumed Manningis N	MH132E090	MH132E091		T16457	IRWD	PVC	{7E72AA0B-4660-4EFB-B7EA-3520DC61F137}	CLMH132E090MH132E091	532.36	529.46	0.666666667	MH132E090	MH132E091			198	CLMH132E090MH132E091	8	0.0146	0.036371	0.13	0.043668	0.14	0.051770	0.15	0.033469	0.12		
CLMH132E091MH132S070		2005		Existing	assumed Manningis N	MH132E091	MH132S070		T16457	IRWD	PVC	{FBD09353-27AE-44D1-9AAC-04FA6FB7B0B7}	CLMH132E091MH132S070	529.35	526.46	0.666666667	MH132E091	MH132S070			197	CLMH132E091MH132S070	8	0.0147	0.036371	0.13	0.043668	0.14	0.051770	0.15	0.033462	0.12		
CLMH132E093MH132E094		2005		Existing	assumed Manningis N	MH132E093	MH132E094		T16457A	IRWD	PVC	{C9AB0189-9238-429E-BCC7-C13D09BD6AED}	CLMH132E093MH132E094	627.59	626.14	0.666666667	MH132E093	MH132E094			319	CLMH132E093MH132E094	8	0.0046	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH132E094MH132E095		2005		Existing	assumed Manningis N	MH132E094	MH132E095		T16457A	IRWD	PVC	{D9475EF0-D7C1-44B4-B747-9474BAC02CC3}	CLMH132E094MH132E095	626.04	624.85	0.666666667	MH132E094	MH132E095			215	CLMH132E094MH132E095	8	0.0055	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH132E095MH132S082		2005		Existing	assumed Manningis N	A016457A	MH132S082		A016457A	IRWD	PVC	{D1E73933-E9CA-465B-B87C-3931A1458B82}	CLMH132E095MH132S082	624.75	622.04	0.666666667	MH132E095	MH132S082			119	CLMH132E095MH132S082	8	0.0124	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH132E096MH132E098		2005		Existing	assumed Manningis N	MH132E096	MH132E098		T16457A	IRWD	PVC	{6094EB75-C222-4DAD-B2D8-E00750DE757F}	CLMH132E098MH132E096	662.67	657.99	0.666666667	MH132E096	MH132E098			233	CLMH132E096MH132E098	8	0.0201	0.002612	0.03	0.003136	0.04	0.003715	0.04	0.003136	0.04		
CLMH132E097MH132E096		2005		Existing	assumed Manningis N	MH132E097	MH132E096		T16457A	IRWD	PVC	{D7979C67-58CE-467A-B577-CBA7C9DDF63F}	CLMH132E096MH132E097	666.38	662.77	0.666666667	MH132E097	MH132E096			209	CLMH132E097MH132E096	8	0.0173	0.002212	0.03	0.002656	0.04	0.003147	0.04	0.002656	0.04		
CLMH132E098MH132E099		2005		Existing	assumed Manningis N	MH132E098	MH132E099		T16457A	IRWD	PVC	{D1910791-1CCB-4E39-B88F-71A29EA97E13}	CLMH132E099MH132E098	657.79	640.44	0.666666667	MH132E098	MH132E099			229	CLMH132E098MH132E099	8	0.0624	0.002612	0.03	0.003136	0.03	0.003715	0.03	0.003136	0.03		
CLMH132E099MH132E100		2005		Existing	assumed Manningis N	MH132E099	MH132E100		T16457A	IRWD	PVC	{0DA69E30-6524-4D5A-AC5C-2C5A477F937D}	CLMH132E100MH132E099	640.24	636.64	0.666666667	MH132E099	MH132E100			134	CLMH132E099MH132E100	8	0.0269	0.002612	0.03	0.003136	0.04	0.003715	0.04	0.003136	0.04		
CLMH132E100MH132E101		2005		Existing	assumed Manningis N	MH132E100	MH132E101		T16457A	IRWD	PVC	{5C83D882-FCB1-4C74-99BE-118C724BF92C}	CLMH132E101MH132E100	636.44	631.87	0.666666667	MH132E100	MH132E101			66	CLMH132E100MH132E101	8	0.0690	0.002612	0.03	0.003136	0.03	0.003715	0.03	0.003136	0.03		
CLMH132E101MH132S084		2005		Existing	assumed Manningis N	MH132E101	MH132S084		T16457A	IRWD	PVC	{92ZD5298-9487-4FF8-B781-C15249BC6E90}	CLMH132E101MH132S084	631.72	626.09	0.666666667	MH132E101	MH132S084			105	CLMH132E101MH132S084	8	0.0540	0.002612	0.03	0.003136	0.03	0.003715	0.03	0.003136	0.03		
CLMH132E102MH132E103		2005		Existing	assumed Manningis N	A016457A	MH132E103		A016457A	IRWD	PVC	{91C2F28C-D1DB-4A1C-B5CF-B7F1D5E1D9A8}	CLMH132E102MH132E093	628.68	627.69	0.666666667	MH132E102	MH132E093			203	CLMH132E102MH132E093	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH132N008MH132N009		1990		Existing	assumed Manningis N	MH132N008	MH132N009		A007004	IRWD	VCP	{BB81963B-5FC1-4CDD-BD9C-8E83B0904784}	CLMH132N008MH132N009	449.77	427.51	1.250000000	MH132N008	MH132N009			376	CLMH132N008MH132N009	15	0.0594	1.901568	0.29	2.127635	0.31	2.218778	0.32	2.108357	0.31		
CLMH132N009MH132W058		1990		Existing	assumed Manningis N	MH132N009	MH132W058		A007004	IRWD	VCP	{78A0EABA-5F92-4DC5-85A1-92A9D0433F2}	MH132N009-MH132W058	427.27	405.57	1.250000000	MH132N009	MH132W058			376	CLMH132N009MH132W058	15	0.0579	1.875822	0.29	2.117098	0.31	2.217996	0.32	2.103787	0.31		
CLMH132N010MH132N011		2005		Existing	assumed Manningis N	MH132N011	MH132N010		15613	IRWD	PVC	{108BAF66-98C3-4E6D-812C-430C04E55875}	CLMH132N010MH132N011	543.61	540.84	0.666666667	MH132N010	MH132N011			175	CLMH132N010MH132N011	8	0.0158	0.007870	0.06	0.009448	0.07	0.011202	0.07	0.013417	0.08		
CLMH132N011MH132N012		2005		Existing	assumed Manningis N	MH132N011	MH132N012		15613	IRWD	PVC	{F743CAF3-9FBA-4391-997B-3A3FEDA4C3B2}	CLMH132N011MH132N012	540.84	535.44	0.666666667	MH132N011	MH132N012			365	CLMH132N011MH132N012	8	0.0148	0.007870	0.06	0.009448	0.07	0.011202	0.07	0.013417	0.08		
CLMH132N012MH132N013		2005		Existing	assumed Manningis N	MH132N012	MH132N013		15613	IRWD	PVC	{C472A4C4-74DD-4563-81E0-C212BF825A13}	CLMH132N012MH132N013	535.23	533.46	0.666666667	MH132N012	MH132N013			123	CLMH132N012MH132N013	8	0.0144	0.007870	0.06	0.009448	0.07	0.011202	0.07	0.013417	0.08		
CLMH132N013MH132N014		2005		Existing	assumed Manningis N	MH132N013	MH132N014		15613	IRWD	PVC	{DC27B357-D522-454D-804C-F84A08DC2FB2}	CLMH132N013MH132N014	533.26	531.88	0.666666667	MH132N013	MH132N014			96	CLMH132N013MH132N014	8	0.0144	0.007870	0.06	0.009448	0.07	0.011202	0.07	0.013417	0.08		
CLMH132N014MH132N015		2005		Existing	assumed Manningis N	MH132N014	MH132N015		15613	IRWD	PVC	{FC057A1E-0D1A-4F69-BF4D-CBC485BA3FB3}	CLMH132N014MH132N015	531.67	530.52	0.666666667	MH132N014	MH132N015			82	CLMH132N014MH132N015	8	0.0140	0.007870	0.06	0.009448	0.07	0.011202	0.07	0.013417	0.08		
CLMH132N015MH132E028		2005		Existing	assumed Manningis N	MH132N015	MH132E028		15613	IRWD	PVC	{A4F9332E-D9DD-4B98-AA82-84F0998034BA}	CLMH132N015MH132E028	530.32	528.22	0.666666667	MH132N015	MH132E028			147	CLMH132N015MH132E028	8	0.0147	0.007870	0.06	0.009447	0.07	0.011202	0.07	0.013417	0.08		
CLMH132N016MH132N017		2004		Existing	assumed Manningis N	MH132N016	MH132N017		T16456	IRWD	PVC	{93FC9469-6764-4D47-AF55-AADA0606FE80}	CLMH132N016MH132N017	503.23	500.55	0.666666667	MH132N016	MH132N017			100	CLMH132N016MH132N017	8	0.0268	0.007866	0.05	0.009445	0.06	0.011200	0.06	0.013414	0.07		
CLMH132N017MH132N018		2004		Existing	assumed Manningis N	MH132N017	MH132N018		T16456	IRWD	PVC	{68AB783C-5316-48AE-96E6-67C2706068AA}	CLMH132N017MH132N018	500.45	490.80	0.666666667	MH132N017	MH132N018			106	CLMH132N017MH132N018	8	0.0910	0.007866	0.04	0.009445	0.04	0.011200	0.05	0.013413	0.05		
CLMH132N018MH132W034		2004		Existing	assumed Manningis N	MH132N018	MH132W034		T16456	IRWD	PVC	{5A319333-7CE9-434E-8E38-B6635159AEB}	CLMH132N018MH132W034	496.70	481.85	0.666666667	MH132N018	MH132W034			376	CLMH132N018MH132W034	8	0.0903	0.007866	0.04	0.009445	0.04	0.011200	0.05	0.013413	0.05		
CLMH132S003MH132S080		1999		Existing	assumed Manningis N	MH132S003	H132S080		T15818	IRWD	PVC	{7E5FCE57-788D-449F-BF99-DF07B13D0E96}	CLMH132S003MH132S080	299.29	294.42	0.666666667	MH132S003	MH132S080			135	CLMH132S003MH132S080	8	0.0362	0.006842	0.05	0.008215	0.05	0.009738	0.06	0.008215	0.05		
CLMH132S005MH132S007		1999		Existing	assumed Manningis N	MH132S005	MH132S007		T15818	IRWD	PVC	{0A909B33-349E-4E5D-A36F-DFE6D8DE5D1E}	CLMH132S005MH132S007	253.42	250.25	0.666666667	MH132S005	MH132S007			138	CLMH132S005MH132S007	8	0.0316	0.010625	0.06	0.012757	0.07	0.015124	0.07	0.012757	0.07		
CLMH132S006MH132S005		2002		Existing	assumed Manningis N	MH132S006	MH132S005		T15817	IRWD	PVC	{EEFE22FB-B1F2-412A-8672-8088E24EF221}	CLMH132S006MH132S005	243.83	243.30	0.666666667	MH132S006	MH132S005			138	CLMH132S006MH132S005	8	0.0038	0.044924	0.19	0.054472	0.21	0.065569	0.23	0.063444	0.23		
CLMH132S007MH132S006		1999		Existing	assumed Manningis N	MH132S007	MH132S006		T15818	IRWD	PVC	{3E5C7800-5485-47A2-9FF3-FCC580919367}	CLMH132S007MH132S006	250.05	244.03	0.666666667	MH132S007	MH132S006			343	CLMH132S007MH132S006	8	0.0176	0.045031	0.14	0.054642	0.15	0.065801	0.16	0.063678	0.16		
CLMH132S008MH233E131		2005		Existing	assumed Manningis N	MH132S008	MH233E131		T15817	IRWD	PVC	{ACF03F6E-1744-4FE8-B0BE-5CB79A44ABB3}	CLMH132S008MH233E131	275.85	269.89	0.666666667	MH132S008	MH233E131			285	CLMH132S008MH233E131	8	0.0253	0.006842	0.05	0.008215	0.06	0.009738	0.06	0.008215	0.06		
CLMH132S010MH132S013		2002		Existing	assumed Manningis N	MH132S010	MH132S013		T16421	IRWD	PVC	{5203C48B-F90F-462C-9161-92B03DC7BA60}	CLMH132S010MH132S013	301.66	294.00	0.666666667	MH132S010	MH132S013			51	CLMH132S010MH132S013	8	0.1532	0.056282	0.09	0.067567	0.10	0.080106	0.11	0.060703	0.09		
CLMH132S011MH132S010		2002		Existing	assumed Manningis N	MH132S011	MH132S010		T16421	IRWD	PVC	{9A7439E7-DD64-42B4-B4C2-4ED74F95B55}	CLMH132S011MH132S010	302.29	301.85	0.666666667	MH132S011	MH132S010			22	CLMH132S011MH132S010	8	0.0200	0.049567	0.14	0.059506	0.15	0.070550	0.16	0.052642	0.14		
CLMH132S012MH132S011		2002		Existing	assumed Manningis N	MH132S012	MH132S011		T16421	IRWD	PVC	{6F32C236-445F-44F1-9AE2-4BF598A6048B}	CLMH132S012MH132S011	389.73	302.39	0.666666667	MH132S012	MH132S011			308	CLMH132S012MH132S011	8	0.4006	0.049567	0.07	0.059506	0.07	0.070550	0.08	0.052642	0.07		
CLMH132S013MH132S014		2002		Existing	assumed Manningis N	MH132S013	MH132S014		T15729	IRWD	PVC	{3FF74987-81BD-41A3-9239-38208F07ED97}	CLMH132S013MH132S014	293.89	287.17	0.666666667	MH132S013	MH132S014			54	CLMH132S013MH132S014	8	0.1244	0.056282	0.09	0.067567	0.10	0.080106	0.11	0.060703	0.10		
CLMH132S014MH233E142		2002		Existing	assumed Manningis N	MH132S014	MH233E142		T16421	IRWD	PVC	{1A5CA648-74DC-445B-AC4E-E2E774BB8D43}	CLMH132S014MH233E142	287.07	286.45	0.666666667	MH132S014	MH233E142			62	CLMH132S014MH233E142	8	0.0700	0.056282	0.17	0.067567	0.19	0.080106	0.21	0.060703	0.18		
CLMH132S015MH132W057		2004		Existing	assumed Manningis N	MH132S015	MH132W057		T16455	IRWD	PVC	{7FC8C8FB-41D0-427F-9A98-09CE0C341D16}	MH132S015-MH132W057	384.20	335.32	0.666666667	MH132S015	MH132W057			376	MH132S015-MH132W057	8	0.3442	0.023318	0.05	0.027956	0.05	0.033144	0.06	0.030502	0.06		
CLMH132S016MH132S015		2004		Existing	assumed Manningis N	MH132S016	MH132S015		T16455	IRWD	PVC	{58ACD72D-3F34-4AD6-92AB-B99F5C7F2B5F}	CLMH132S016MH132S015	390.33	384.41	0.666666667	MH132S016	MH132S015			213	CLMH132S016MH132S015	8	0.0278	0.023319	0.09	0.027956	0.10	0.033144	0.11	0.030502	0.10		
CLMH132S017MH132S016		2004		Existing	assumed Manningis N	MH132S017	MH132S016		T16455	IRWD	PVC	{DD7BAA5F-26C5-4F72-8932-70CB96669CA0}	CLMH132S017MH132S016	391.13	390.54	0.666666667	MH132S017	MH132S016			147	CLMH132S017MH132S016	8	0.0040	0.006605	0.07	0.007932	0.08	0.009404	0.09	0.004847	0.06		
CLMH132S018MH132S017		2004		Existing	assumed Manningis N	MH132S018	MH132S017		T16455	IRWD	PVC	{0036ADB8-70A1-4F0A-8E38-B5B043FB71B4}	CLMH132S018MH132S017	392.76	391.23	0.666666667	MH132S018	MH132S017			385	CLMH132S018MH132S017	8	0.0040	0.006605	0.07	0.007932	0.08	0.009404	0.09	0.004848	0.06		
CLMH132S019MH132S018		2004		Existing	assumed Manningis N	MH132S019	MH132S018		T16455	IRWD	PVC	{657F98FA-CE83-4A34-8A09-ECED9F6155BE}	CLMH132S019MH132S018	394.00	392.86	0.666666667	MH132S019	MH132S018			287	CLMH132S019MH132S018	8	0.0040	0.003093	0.05	0.003713	0.06	0.004403	0.06	0.004850	0.06		
CLMH132S020MH132S016		2004		Existing	assumed Manningis N	MH132S020	MH132S016		T16455	IRWD	VCP	{C2D519F0-D47F-4111-90CA-3DB31EC05F50}	CLMH132S020MH132S016	417.58	390.44	0.666666667	MH132S020	MH132S016			265	CLMH132S020MH132S016	8	0.1028	0.016720	0.06	0.020027	0.06	0.023743	0.07	0.025658	0.07		
CLMH132S021MH132S020		2004		Existing	assumed Manningis N	MH132S021	MH132S020		T16455	IRWD	VCP	{6492AAE1-8F7A-477C-874C-3F76B9B1F85}	CLMH132S021MH132S020	426.32	418.45	0.666666667	MH132S021	MH132S020			274	CLMH132S021MH132S020	8	0.0158	0.002082	0.03	0.002502	0.03	0.002965	0.03	0.004749	0.04		
CLMH132S022MH132S021		2004		Existing	assumed Manningis N	MH132S022	MH132S021		T16455	IRWD	PVC	{44C0208C-5E41-4407-B265-2DD8E6988F7A}	CLMH132S022MH132S021	441.83	426.42	0.666666667	MH132S022	MH132S021			203	CLMH132S022MH132S021	8	0.0763	0.002082	0.02	0.002502	0.02	0.002965	0.03	0.004749	0.03		
CLMH132S023MH132S022		2004		Existing	assumed Manningis N	MH132S023	MH132S022		T16455	IRWD	VCP	{DD33FAE4-FF16-49D3-AFB0-CB7D19497B8B}	CLMH132S023MH132S022	450.80	441.94	0.666666667	MH132S023	MH132S022			152	CLMH132S023MH132S022	8	0.0406	0.002082	0.03	0.002502	0.03	0.002965	0.03	0.004749	0.04		
CLMH132S024MH132S020		2004		Existing	assumed Manningis N	MH132S024	MH132S020		T16455	IRWD	VCP	{1A451D55-4D44-4E7B-AF4C-BA4EC422E94B}	CLMH132S024MH132S020	437.89	417.69	0.666666667	MH132S024	MH132S020			208	CLMH132S024MH132S020	8	0.0976	0.014642	0.06	0.017527	0.06	0.020779	0.07	0.020910	0.07		
CLMH132S025MH132S024		2004		Existing	assumed Manningis N	MH132S025	MH132S024		T16455	IRWD	VCP	{5B0B1ED3-BDB8-4FB2-BDD8-1AA795133B5}	CLMH132S025MH132S024	442.39	438.10	0.666666667	MH132S025	MH132S024			73	CLMH132S025MH132S024	8	0.0588	0.002421	0.03	0.002906	0.03	0.003444	0.03	0.007715	0.04		
CLMH132S026MH132S025		2004		Existing	assumed Manningis N	MH132S026	MH132S025		T16455	IRWD	VCP	{20A86EAE-C441-4BB7-A1D9-22DAABC7686F}	CLMH132S026MH132S025	453.33	442.50	0.666666667	MH132S026	MH132S025			219	CLMH132S026MH132S025	8	0.0495	0.002421	0.03	0.002906	0.03	0.003444	0.03	0.007715	0.04		
CLMH132S027MH132S024		2004		Existing	assumed Manningis N	MH132S027	MH132S024		T16455	IRWD	PVC	{6EDEF528-9CFF-4A54-8A3D-F018A0D9C8EA}	CLMH132S027MH132S024	460.39	438.00	0.666666667	MH132S027	MH132S024			228	CLMH132S027MH132S024	8	0.0986	0.012225	0.05	0.014623	0.05	0.017336	0.06	0.013798	0.05		
CLMH132S028MH132S027		2004		Existing	assumed Manningis N	MH132S028	MH132S027		T16455	IRWD	PVC	{3AED0184-83FB-45D3-9951-748DAA86D8A3}	CLMH132S028MH132S027	478.48	460.48	0.666666667	MH132S028	MH132S027			206	CLMH132S028MH132S027	8	0.0878	0.010715	0.05	0.012806	0.05	0.015183	0.06	0.013799	0.05		
CLMH132S029MH132S028		2004		Existing	assumed Manningis N	MH132S029	MH132S028		T16455	IRWD	VCP	{5D2D8FCB-B4BD-4990-86CA-47D19C34C46A}	CLMH132S029MH132S028	482.57	478.57	0.666666667	MH132S029	MH132S028			97	CLMH132S029MH132S028	8	0.0412	0.010717	0.06	0.012807	0.06	0.015183	0.07	0.013799	0.07		
CLMH132S030MH132S029		2004		Existing	assumed Manningis N	MH132S030	MH132S029		T16455	IRWD	VCP	{2EA1D799-5EED-4EEC-A565-C68D0CA7B2B5}	CLMH132S030MH132S029	486.08	482.67	0.666666667	MH132S030	MH132S029			222	CLMH132S030MH132S029	8	0.0154	0.010718	0.07	0.012808	0.08	0.015184	0.09	0.013800	0.08		
CLMH132S031MH132S030		2004		Existing	assumed Manningis N	MH132S031	MH132S030		T16455	IRWD	VCP	{F4590A51-9E68-47FD-A18E-EF7FE990330E}	CLMH132S031MH132S030	492.47	486.19	0.666666667	MH132S031	MH132S030			226	CLMH132S031MH132S030	8	0.0278	0.010722	0.06	0.012809	0.07	0.015186	0.08	0.013801	0.07		
CLMH132S032MH132S031		2004		Existing	assumed Manningis N	MH132S032	MH132S031		T16455	IRWD	VCP	{ACB74771-1772-4F02-AC88-B335B9935730}	CLMH132S032MH132S031	494.47	492.57	0.666666667	MH132S032	MH132S031			384	CLMH132S032MH132S031	8	0.0049	0.007378	0.08	0.008794	0.08	0.010424	0.09	0.011151	0.09		
CLMH132S033MH132S032		2004		Existing	assumed Manningis N	MH132S033	MH132S032		T16455	IRWD	PVC	{F2502609-4D47-49CD-A99D-1AEE54D31CBC}	CLMH132S033MH132S032	495.20	494.57	0.666666667	MH132S033	MH132S032			126	CLMH132S033MH132S032	8	0.0050	0.007381	0.07	0.008795	0.08	0.010426	0.09	0.011153	0.09		
CLMH132S034MH132S033		2004		Existing	assumed Manningis N	MH132S034	MH132S033		T16455	IRWD	PVC	{4BC40399-0D76-4E7F-9915-365A76DFD5B7}	CLMH132S034MH132S033	496.38	495.29	0.666666667	MH132S034	MH132S033			94	CLMH132S034MH132S

| | | |

| | | |

CLMH134S075MH1345076		2003		Existing	assumed Mannings N	MH134S076	MH134S076	T16464	IRWD	PVC	{2A5C70A0-A650-4B0D-9E59-B920554FD6D7}	CLMH134S075MH1345076	906.75	906.34	0.666666667	MH134S075	MH134S076					80	CLMH134S075MH134S076	8	0.0051	0.012779	0.10	0.015342	0.11	0.018192	0.12	0.015342	0.11		
CLMH134S076MH134S077		2002		Existing	assumed Mannings N	MH134S076	MH134S077	15811	IRWD	PVC	{AB73D067-7BAB-47C0-BA71-85D651A7C6BF}	CLMH134S076MH134S077	906.25	889.59	0.666666667	MH134S076	MH134S077					67	CLMH134S076MH134S077	8	0.2563	0.012779	0.04	0.015342	0.04	0.018192	0.05	0.015342	0.04		
CLMH134S077MH134S081		2002		Existing	assumed Mannings N	MH134S077	MH134S081	15811	IRWD	PVC	{6A3CA108-05C9-4D8E-802C-8D6800283137}	CLMH134S077MH134S081	889.50	889.17	0.666666667	MH134S077	MH134S081					32	CLMH134S077MH134S081	8	0.0103	0.012779	0.09	0.015342	0.09	0.018192	0.10	0.015342	0.09		
CLMH134S078MH134S084		2002		Existing	assumed Mannings N	MH134S078	MH134S084	15811	IRWD	PVC	{0D88B086-6099-4E0A-8732-076B88F18D57}	CLMH134S078MH134S084	846.45	844.04	0.666666667	MH134S078	MH134S084					240	CLMH134S078MH134S084	8	0.0100	0.024101	0.12	0.028935	0.13	0.034302	0.14	0.028935	0.13		
CLMH134S079MH133E004		2002		Existing	assumed Mannings N	MH134S079	MH133E004	15811	IRWD	VCP	{D246A426-CD41-4D9C-991A-82D36DC4E256}	CLMH134S079MH133E004	887.84	881.40	0.666666667	MH134S079	MH133E004					347	CLMH134S079MH133E004	8	0.0186	0.012779	0.08	0.015342	0.08	0.018192	0.09	0.015342	0.08		
CLMH134S080MH134S087		2002		Existing	assumed Mannings N	MH134S080	MH134S087	15811	IRWD	PVC	{37DA7883-6549-448E-9EF1-040660565C16}	CLMH134S080MH134S087	895.82	847.54	0.666666667	MH134S080	MH134S087					157	CLMH134S080MH134S087	8	0.3240	0.100886	0.10	0.121985	0.11	0.145345	0.12	0.121982	0.11		
CLMH134S081MH134S079		2002		Existing	assumed Mannings N	MH134S081	MH134S079	15811	IRWD	PVC	{AACA55E8D-9A94-42B1-AACE-FA09815C6FEC}	CLMH134S081MH134S079	888.97	887.94	0.666666667	MH134S081	MH134S079					63	CLMH134S081MH134S079	8	0.0163	0.012779	0.08	0.015342	0.08	0.018192	0.09	0.015342	0.08		
CLMH134S082MH134S078		2003		Existing	assumed Mannings N	MH134S082	MH134S078	T16461	IRWD	PVC	{0970BA4D-2312-4FFB-A0F1-68914621BEC5}	CLMH134S082MH134S078	851.50	846.78	0.666666667	MH134S082	MH134S078					100	CLMH134S082MH134S078	8	0.0472	0.021063	0.08	0.025288	0.08	0.029980	0.09	0.025288	0.08		
CLMH134S083MH134S082		2003		Existing	assumed Mannings N	MH134S083	MH134S082	T16461	IRWD	PVC	{37098E1D-1035-4836-9252-07D2FEE081A2}	CLMH134S083MH134S082	868.40	851.70	0.666666667	MH134S083	MH134S082					342	CLMH134S083MH134S082	8	0.0488	0.021063	0.07	0.025288	0.08	0.029980	0.09	0.025288	0.08		
CLMH134S084MH134S086		2002		Existing	assumed Mannings N	MH134S084	MH134S086	15811	IRWD	VCP	{F59DD151-674C-4912-A902-7078D0A77677}	CLMH134S084MH134S086	843.95	843.40	0.666666667	MH134S084	MH134S086					59	CLMH134S084MH134S086	8	0.0093	0.024101	0.12	0.028935	0.13	0.034328	0.15	0.028935	0.13		
CLMH134S085MH133E006		2003		Existing	assumed Mannings N	MH134S085	MH133E006	15811	IRWD	VCP	{11613ACE-F20B-4F19-A6D5-B44D28FA38BD}	CLMH134S085MH133E006	889.28	885.80	0.666666667	MH134S085	MH133E006					199	CLMH134S085MH133E006	8	0.0175	0.002240	0.03	0.002690	0.04	0.003190	0.04	0.002690	0.04		
CLMH134S086134S_WW029		2002		Existing	assumed Mannings N	MH134S086	LS134S001	15811	IRWD	PVC	{7F3CCCF1-1E82-45B2-A689-66728B8530A}	CLMH134S086LS134S001	843.21	843.17	0.666666667	MH134S086	134S_WW029					106	CLMH134S086134S_WW029	8	0.0036	0.164002	0.36	0.198433	0.39	0.236060	0.43	0.198429	0.39		
CLMH134S087MH134S088		2002		Existing	assumed Mannings N	MH134S087	MH134S088	15811	IRWD	PVC	{440D5F94-EDFF-4665-858D-E8EA56E2631E}	CLMH134S087MH134S088	847.45	843.96	0.666666667	MH134S087	MH134S088					41	CLMH134S087MH134S088	8	0.0851	0.100884	0.14	0.121983	0.15	0.145343	0.16	0.121980	0.15		
CLMH134S088MH134S086		2002		Existing	assumed Mannings N	MH134S088	MH134S086	15811	IRWD	PVC	{9F6E1068-E50F-4F2A-AC5F-38BE01484182}	CLMH134S088MH134S086	843.76	843.40	0.666666667	MH134S088	MH134S086					84	CLMH134S088MH134S086	8	0.0106	0.139977	0.27	0.169528	0.30	0.201822	0.33	0.169524	0.30		
CLMH134S089MH134S083		2003		Existing	assumed Mannings N	MH134S089	MH134S083	T16461	IRWD	PVC	{026E6794-45C1-414B-A303-2ECF14ABF4B2}	CLMH134S089MH134S083	869.40	868.59	0.666666667	MH134S089	MH134S083					159	CLMH134S089MH134S083	8	0.0051	0.003701	0.05	0.004444	0.06	0.005269	0.06	0.004444	0.06		
CLMH134S090MH134S089		2003		Existing	assumed Mannings N	MH134S090	MH134S089	T16461	IRWD	PVC	{D8433B967-B326-4A9D-AB14-70FFC80096F6}	CLMH134S090MH134S089	870.50	869.59	0.666666667	MH134S090	MH134S089					175	CLMH134S090MH134S089	8	0.0052	0.003701	0.05	0.004444	0.06	0.005269	0.06	0.004444	0.06		
CLMH134S091MH134S088		2002		Existing	assumed Mannings N	MH134S091	MH134S088	15811	IRWD	VCP	{6FD5663F-57D1-4487-8776-A1B09112SCA8}	CLMH134S091MH134S088	846.61	843.85	0.666666667	MH134S091	MH134S088					317	CLMH134S091MH134S088	8	0.0087	0.040037	0.16	0.048085	0.17	0.057025	0.19	0.048085	0.17		
CLMH134W001MH128S006		1995		Existing		MH134W001	MH128S006	A0071BA	IRWD	VCP	{9O990EAB-CAF6-4353-85D4-2688838775541}	CLMH134W001MH128S006	920.71	882.40	0.666666667	MH134W001	MH128S006					402	CLMH134W001MH128S006	8	0.0958	0.331797	0.25	0.332846	0.25	0.331793	0.25	0.332834	0.25		
CLMH134W002MH134W001		1995		Existing		MH134W002	MH134W001	A0071BA	IRWD	VCP	{E4ADD783-9D84-485D-9006-A0BCFAD55A70}	CLMH134W002MH134W001	960.71	921.11	0.666666667	MH134W002	MH134W001					402	CLMH134W002MH134W001	8	0.0990	0.332081	0.25	0.333072	0.25	0.333958	0.25	0.333062	0.25		
CLMH134W003MH134W002		1995		Existing		MH134W003	MH134W002	A0071BA	IRWD	VCP	{5FC5C67F-E74A-421F-9366-60E0BA5CB09B}	CLMH134W003MH134W002	987.57	961.07	0.666666667	MH134W003	MH134W002					275	CLMH134W003MH134W002	8	0.0967	0.332389	0.25	0.333308	0.25	0.334132	0.25	0.333302	0.25		
CLMH134W004MH134W003		1995		Existing		MH134W004	MH134W003	A0071BA	IRWD	VCP	{92005A19-4349-483F-8451-071B2977479B}	CLMH134W004MH134W003	1006.91	987.96	0.666666667	MH134W004	MH134W003					264	CLMH134W004MH134W003	8	0.0881	0.332498	0.26	0.333392	0.26	0.334193	0.26	0.333386	0.26		
CLMH134W005MH134W004		1995		Existing		MH134W005	MH134W004	A0071BA	IRWD	VCP	{81701603-061D-41A9-B7F5-81CA769160D6}	CLMH134W005MH134W004	1020.36	1007.27	0.666666667	MH134W005	MH134W004					350	CLMH134W005MH134W004	8	0.0374	0.333453	0.32	0.333442	0.32	0.334230	0.32	0.333437	0.32		
CLMH134W006MH134W005		1995		Existing		MH134W006	MH134W005	A0071BA	IRWD	VCP	{927CB674-E5C4-40D3-8B45-C4D0644048F4}	CLMH134W006MH134W005	1036.27	1020.60	0.666666667	MH134W006	MH134W005					264	CLMH134W006MH134W005	8	0.0594	0.333467	0.28	0.334155	0.28	0.334760	0.28	0.334151	0.28		
CLMH134W007MH134W006		1995		Existing		MH134W007	MH134W006	A0071BA	IRWD	VCP	{D129E1D5-ABF5-48B1-B2A6-EB5D1D6D8B7}	CLMH134W007MH134W006	1066.68	1036.46	0.666666667	MH134W007	MH134W006					277	CLMH134W007MH134W006	8	0.1099	0.333762	0.24	0.334383	0.24	0.334927	0.24	0.334380	0.24		
CLMH134W008MH134W007		1995		Existing		MH134W008	MH134W007	A0071BA	IRWD	VCP	{0EF4C75A-6885-4907-A9A7-AA58-D3B87EF4DAA7}	CLMH134W008MH134W007	1081.06	1067.14	0.666666667	MH134W008	MH134W007					275	CLMH134W008MH134W007	8	0.0506	0.333951	0.30	0.334529	0.30	0.335034	0.30	0.334529	0.30		
CLMH134W010MH134W008		1995		Existing		MH134W010	MH134W008	A0071BA	IRWD	VCP	{E3BB1FE2-AF6E-4D10-A41B-0B31C3E08563}	CLMH134W010MH134W008	1083.08	1081.26	0.666666667	MH134W010	MH134W008					41	CLMH134W010MH134W008	8	0.0444	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH134W012MH134W010		1995		Existing		MH134W012	MH134W010	A0074GA	IRWD	PVC	{4DF60036-25E3-4D49-ADD6-807443B025ED}	CLMH134W012MH134W010	1117.75	1083.18	0.666666667	MH134W012	MH134W010					84	CLMH134W012MH134W010	8	0.4490	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH134W013MH134W012		1995		Existing		MH134W013	MH134W012	A0074GA	IRWD	PVC	{8EDF22FA-346D-44DD-BC7C-FFD9668F2336}	CLMH134W013MH134W012	1119.50	1117.84	0.666666667	MH134W013	MH134W012					84	CLMH134W013MH134W012	8	0.0198	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH134W015MH134W013		1995		Existing		MH134W015	MH134W013	A0074GA	IRWD	PVC	{5166F82D-9647-44B1-AF44-968080F71074}	CLMH134W015MH134W013	1120.44	1119.59	0.666666667	MH134W015	MH134W013					84	CLMH134W015MH134W013	8	0.0193	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH134W016MH134W015		1995		Existing		MH134W016	MH134W015	A0080I6	IRWD	PVC	{5A3E0FEB-E61C-424A-A4C3-BA0A846BDA9E}	CLMH134W016MH134W015	1122.94	1120.55	0.666666667	MH134W016	MH134W015					78	CLMH134W016MH134W015	8	0.0306	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH134W018MH134W019		1998		Existing		MH134W018	MH134W019	A0084SA	IRWD	PVC	{E8D380E1-0499-4807-AE27-A03CCB5EF354}	CLMH134W018MH134W019	1026.52	1022.86	0.666666667	MH134W018	MH134W019					366	CLMH134W018MH134W019	8	0.0100	0.039767	0.15	0.047740	0.16	0.056596	0.18	0.047740	0.16		
CLMH134W019MH134W020		1998		Existing		MH134W019	MH134W020	A0084SA	IRWD	PVC	{CAE777D02-2E19-4735-8F74-3D1A1626D015}	CLMH134W019MH134W020	1022.71	1018.76	0.666666667	MH134W019	MH134W020					400	CLMH134W019MH134W020	8	0.0099	0.039767	0.15	0.047740	0.16	0.056596	0.18	0.047740	0.16		
CLMH134W020MH134W021		1998		Existing		MH134W020	MH134W021	A0084SA	IRWD	PVC	{FCAB43A7-6D87-4C22-9114-1EE820CA1A0E}	CLMH134W020MH134W021	1018.66	1002.51	0.666666667	MH134W020	MH134W021					207	CLMH134W020MH134W021	8	0.0784	0.039767	0.09	0.047740	0.10	0.056596	0.11	0.047740	0.10		
CLMH134W021MH134W022		1998		Existing		MH134W021	MH134W022	A0084SA	IRWD	PVC	{4B187B2F-D730-4E35-ABD8-5129F87866CA}	CLMH134W021MH134W022	1002.41	976.81	0.666666667	MH134W021	MH134W022					261	CLMH134W021MH134W022	8	0.0985	0.039767	0.09	0.047739	0.09	0.056596	0.10	0.047739	0.09		
CLMH134W022MH134W023		1998		Existing		MH134W022	MH134W023	A0084SA	IRWD	PVC	{DD9048A9-CF07-47D1-9E10-3AC1E8A7617}	CLMH134W022MH134W023	976.71	948.35	0.666666667	MH134W022	MH134W023					186	CLMH134W022MH134W023	8	0.1545	0.039767	0.08	0.047739	0.08	0.056596	0.09	0.047739	0.08		
CLMH134W023MH134W024		1998		Existing		MH134W023	MH134W024	A0084SA	IRWD	PVC	{5559C6AE-30AC-483A-B1F0-6663150F23E10}	CLMH134W023MH134W024	948.25	928.91	0.666666667	MH134W023	MH134W024					194	CLMH134W023MH134W024	8	0.1000	0.039767	0.09	0.047739	0.09	0.056596	0.10	0.047739	0.09		
CLMH134W024MH133N008		1998		Existing		MH134W024	MH133N008	A0084SA	IRWD	PVC	{ED5BD21C-F988-453D-94EE-AC9420AF5749}	CLMH134W024MH133N008	928.81	917.98	0.666666667	MH134W024	MH133N008					221	CLMH134W024MH133N008	8	0.0490	0.039767	0.10	0.047739	0.11	0.056596	0.12	0.047739	0.11		
CLMH134W029MH134W532		1998		Existing		MH134W029	MH134W532	T15078	IRWD	PVC	{941679A1-4FE8-4C72-B356-07D7143DD96B}	CLMH134W029MH134W532	915.96	911.86	0.666666667	MH134W029	MH134W532					200	CLMH134W029MH134W532	8	0.0205	0.002690	0.03	0.003228	0.04	0.003831	0.04	0.003228	0.04		
CLMH134W030MH134W532		1998		Existing		MH134W030	MH134W532	T15078	IRWD	PVC	{4E70B187-4E91-423B-8250-6BF2BFCB59E6}	CLMH134W030MH134W532	931.78	911.77	0.666666667	MH134W030	MH134W532					253	CLMH134W030MH134W532	8	0.0794	0.002690	0.02	0.003228	0.02	0.002743	0.03	0.002314	0.02		
CLMH134W031MH128S051		1998		Existing		MH134W031	MH128S051	15337	IRWD	PVC	{CA2202A6-8C4B-4DC6-8470-09BF958E8750}	CLMH134W031MH128S051	884.91	882.34	0.666666667	MH134W031	MH128S051					262	CLMH134W031MH128S051	8	0.0098	0.010125	0.08	0.012152	0.08	0.014413	0.09	0.012152	0.08		
CLMH134W033MH134W032		1998		Existing		MH134W033	MH134W032	15337	IRWD	PVC	{75C3DB7E-4702-4631-8EDD-BA2826087ZC9}	CLMH134W033MH134W032	889.98	885.11	0.666666667	MH134W033	MH134W032					115	CLMH134W033MH134W032	8	0.0423	0.006927	0.05	0.008313	0.05	0.009860	0.05	0.008313	0.05		
CLMH134W037MH134W039		1998		Existing	assumed Mannings N	MH134W037	MH134W039	T15467	IRWD	PVC	{41ZE501F-ECF2-481A-9ED3-1DE243A35F9B}	CLMH134W037MH134W039	1000.09	969.25	0.666666667	MH134W037	MH134W039					369	CLMH134W037MH134W039	8	0.0838	0.044694	0.09	0.053659	0.10	0.063617	0.11	0.053659	0.10		
CLMH134W038MH134W037		1998		Existing	assumed Mannings N	MH134W038	MH134W037	T15467	IRWD	PVC	{277E9FD0-CF64-4F19-9445-EAAF3DACC8E7}	CLMH134W038MH134W037	1001.23	1000.29	0.666666667	MH134W038	MH134W037					240	CLMH134W038MH134W037	8	0.0039	0.011142	0.10	0.013377	0.10	0.015857	0.11	0.013377	0.10		
CLMH134W039MH134W042		1998		Existing	assumed Mannings N	MH134W039	MH134W042	T15467	IRWD	PVC	{D3D8C140-9F6D-4C3F-A0DF-0F1E49A62532}	CLMH134W039MH134W042	969.05	964.58	0.666666667	MH134W039	MH134W042					82	CLMH134W039MH134W042	8	0.0549	0.044694	0.10	0.053659	0.11	0.063617	0.12	0.053659	0.11		
CLMH134W040MH134W041		1998		Existing	assumed Mannings N	MH134W040	MH134W041	T15467	IRWD	VCP	{C6C06A02-5882-411A-9516-0A0BACE20688}	CLMH134W040MH134W041	966.22	965.41	0.666666667	MH134W040	MH134W041					207	CLMH134W040MH134W041	8	0.0049	0.005867	0.07	0.007044	0.08	0.008352	0.09	0.007044	0.08		
CLMH134W041MH134W042		1998		Existing	assumed Mannings N	MH134W041	MH134W042	T15467	IRWD	VCP	{F284317C-94C0-4114-B1A3-9B1B5247AD2F}	CLMH134W041MH134W042	965.21	964.58	0.666666667	MH134W041	MH134W042					163	CLMH134W041MH134W042	8	0.0039	0.005867	0.07	0.007044	0.08	0.008352	0.09	0.007044	0.08		
CLMH134W043MH134W041		1998		Existing	assumed Mannings N	MH134W043	MH134W041	T15467	IRWD	VCP	{57B1D688-C697-4AE8-B7FD-152BD4CD0437}	CLMH134W043MH134W041	964.38	929.20	0.666666667	MH134W043	MH134W041					389	CLMH134W043MH134W041	8	0.0908	0.005061	0.10	0.006703	0.11	0.007968	0.12	0.006703	0.11		
CLMH134W043MH133N022		1998		Existing	assumed Mannings N	MH134W043	MH133N022	T15467	IRWD	PVC	{8D627D4B-15C4-4CF7-9212-DAD1F5285286}	CLMH134W043MH133N022	929.00	920.00	0.666666667	MH134W043	MH133N022					255	CLMH134W043MH133N022	8	0.0353	0.057991	0.13	0.068534	0.15	0.079614	0.14	0.068525	0.15		
CLMH134W057MH134W058		2001		Existing	assumed Mannings N	MH134W057	MH134W058	T15705	IRWD	PVC	{C0FCBF54-62E4-4973-BEEA-0BCE7B2D1BE4}	CLMH134W057MH134W058	1003.35	1001.21	0.666666667	MH134W057	MH134W058					215	CLMH134W057MH134W058	8	0.0100	0.002457	0.04	0.002951	0.04	0.003497	0.05	0.002951	0.04		
CLMH134W058MH134W037		2001		Existing	assumed Mannings N	MH134W058	MH134W037	T15467	IRWD	PVC	{90B6D3CA-9897-4043-B3A4-10F3916AF459}	CLMH134W058MH134W037	1000.59	1000.29	0.666666667	MH134W058	MH134W037					71	CLMH134W058MH134W037	8	0.0042	0.007592	0.07	0.006715	0.07	0.007961	0.08	0.006715	0.07		
CLMH134W059MH134W060		2001		Existing	assumed Mannings N	MH134W059	MH134W060	T15705	IRWD	PVC	{D36418AF-79FF-417E-AF87-1CB0D90372D6}	CLMH134W059MH134W060	1035.86	1034.59	0.666666667	MH134W059	MH134W060					106	CLMH134W059MH134W060	8	0.0120	0.002669	0.04	0.003205	0.04	0.003799	0.05	0.003205	0.04		
CLMH134W060MH134W061		2001		Existing	assumed Mannings N	MH134W060	MH134W061	T15705	IRWD	PVC	{DAB090C4-1A99-434B-B37D-861743352CF0}	CLMH134W060MH134W061	1034.50	1030.22	0.666666667	MH134W060	MH134W061					213	CLMH134W060MH134W061	8	0.0201	0.002669	0.03	0.003205	0.04	0.003799	0.04	0.003205	0.04		
CLMH134W061MH134W522		2001		Existing	assumed Mannings N	MH134W061	MH134W522	T15705	IRWD	PVC	{A3C39655-455F-410E-9140-978C56E1956F4}	CLMH134W061MH134W522	1030.13	1029.83	0.666666667	MH134W061	MH134W522					15	CLMH134W061MH134W522	8	0.0205	0.005867	0.05	0.007044	0.05	0.008352	0.06	0.007004	0.05		
CLMH134W062MH134W063		2001		Existing	assumed Mannings N	MH134W062	MH134W063	T15705	IRWD	PVC	{5B145AF2-E288-4B8C-B7CB-D4872C73DE77}	CLMH134W062MH134W063	1036.84	1036.27	0.666666667	MH134W062	MH134W063					162	CLMH134W062MH134W063	8	0.0137	0.003501	0.05	0.004153	0.05	0.004933	0.05	0.004933	0.05		
CLMH134W063MH134W064		2001		Existing	assumed Mannings N	MH134W063	MH134W064	T15705	IRWD	PVC	{39730195-840D-4CDD-B3A3-AC588TE539SD}	CLMH134W063MH134W064	1036.06	1033.80	0.666666667	MH134W063	MH134W064					162	CLMH134W063MH134W064	8	0.0139	0.004110	0.05	0.004933	0.05	0.005850	0.05	0.004933	0.05		
CLMH134W064MH134W522		2001		Existing	assumed Mannings N	MH134W064	MH134W522	T15705	IRWD	PVC	{0DC4E501-666C-480B-B0BC-90A91D13057F}	CLMH134W064MH134W522	1033.60	1029.68	0.666666667	MH134W064	MH134W522					148	CLMH134W064MH134W522	8	0.0271	0.008749	0.06	0.010503	0.06	0.012452	0.07	0.010501	0.06		
CLMH134W065MH134W066		2001		Existing	assumed Mannings N	MH134W065	MH134W066	T15705	IRWD	PVC	{1DB22455-9E23-4169-BAE0-84DF8AD32DEF0}	CLMH134W065MH134W066	1070.90	1070.34	0.666666667	MH134W065	MH134W066					36	CLMH134W065MH134W066	8	0.0126	0.009634	0.04	0.012052	0.04	0.014470	0.05	0.012052	0.04		
CLMH134W066MH134W067		2001		Existing	assumed Mannings N	MH134W066	MH134W067	T15705	IRWD	PVC	{B093A41A-F552-437D-AFCB-19103FA131CD}	CLMH134W066MH134W067	1070.25	1067.26	0.666666667	MH134W066	MH134W067					241	CLMH134W066MH134W067	8	0.0124	0.006226	0.06	0.007476	0.06	0.008864	0.07	0.007476	0.06		
CLMH134W067MH134W068		1998		Existing	assumed Mannings N	MH134W067	MH134W068	T15705	IRWD	PVC	{2A00BDFC-94D7-4070-8E11-372A69CC7889}	CLMH134W067MH134W068	1067.16	1058.11	0.666666667	MH134W067	MH134W068					210	CLMH134W067MH134W068	8	0.0431	0.006226	0.04	0.007476	0.04	0.008864	0.05	0.007476	0.05		
CLMH134W068MH134W523		1998		Existing	assumed Mannings N	MH134W068	MH134W523	T15705	IRWD	PVC	{0D39DCD2-F9A2-4151-B9A2-9ED903813829}	CLMH134W068MH134W523	1057.84	1056.78	0.666666667	MH134W068	MH134W523					7	CLMH134W068MH134W523	8	0.1604	0.006226	0.03	0.007476	0.03	0.008864	0.04	0.007476	0.03		
CLMH134W073MH134W523		1998		Existing	assumed Mannings N	MH134W073	MH134W523	T15401	IRWD	VCP	{D39D1C50-04D1-4E72-9A88-0B5498D0BD04}	CLMH134W073MH134W523	1061.05	1058.30	0.666666667	MH134W073	MH134W523					266	CLMH134W073MH134W523	8	0.0103	0.006333	0.03	0.007604	0.04	0.009014	0.04	0.007604	0.04		
CLMH134W073MH134W074		1998		Existing	assumed Mannings N	MH134W073	MH134W074	T15401	IRWD	VCP	{3AA51ABE-4E71-4563-A992-489818836AD}	CLMH134W073MH134W074	1058.19	1054.55	0.666666667	MH134W073	MH134W074					295	CLMH134W073MH134W074	8	0.0124	0.006333	0.06	0.007604	0.07	0.009014	0.07	0.007604	0.07		
CLMH134W074MH134W549		1998		Existing	assumed Mannings N	MH134W074	MH134W549	T15401	IRWD	VCP	{D5192060-2C9A-4DCC-9DEC-1F177C7FE5D6}	CLMH134W074MH134W549	1054.44	1053.40	0.666666667	MH134W074	MH134W549					263	CLMH134W074MH134W549	8	0.0040	0.016585	0.12	0.019912	0.13	0.023606	0.14	0.019912	0.13		
CLMH134W076MH134W077		1999		Existing	assumed Mannings N	MH134W076	MH134W077	15400	IRWD	PVC	{CC7CCC7FF-D88E-45AB-909C-4989290F5393}	CLMH134W076MH134W077	1097.06	1083.11	0.666666667	MH134W076	MH134W077					288	CLMH134W076MH134W077	8	0.0485	0.005233	0.04	0.006281	0.04	0.007448	0.05	0.006281	0.04		
CLMH134W078MH134W549		1999		Existing	assumed Mannings N	MH134W078	MH134W549	15400	IRWD	PVC	{D30A338F-122F-4EB3-96D5-230C8CCE9061}	CLMH134W078MH134W549	1064.09	1053.30	0.666666667	MH134W078	MH134W549					188	CLMH134W078MH134W549	8	0.0576	0.012329	0.06	0.014802	0.06	0.017547	0.07	0.014802	0.06		
CLMH134W079MH134W540		1998		Existing	assumed Mannings N	MH134W079	MH134W540	T15401	IRWD	VCP	{29A77351-BA96-402C-B966-69D52D82DD65}	CLMH134W079MH134W540	1047.90	1036.09	0.666666667	MH134W079	MH134W540					137	CLMH134W079MH134W540	8	0.0868	0.028914	0.08	0.034714	0.09	0.041154	0.09	0.034714	0.09		
CLMH134W522MH134W037		1999		Existing	assumed Mannings N	MH134W522	MH134W037	T15467	IRWD	PVC	{80DE258C-CC20-4165-8565-19461B0F767E}	CLMH134W522MH134W037	1028.39	1000.30	0.666666667	MH134W522	MH134W037					82	CLMH134W522MH134W037	8	0.0732	0.027960	0.08	0.033567	0.08	0.039799	0.09	0.033567	0.08		
CLMH134W523MH134W522		1999		Existing	assumed Mannings N	MH134W523	MH134W522	T15467	IRWD	PVC	{1E187818-9C0E-4236-942B-3F1D3187CF2}	CLMH134W523MH134W522	1056.58	1028.39	0.666666667	MH134W523	MH134W522					355	CLMH134W523MH134W522	8	0.0796	0.013344	0.07	0.016020	0.07	0.018996	0.08	0.016020	0.07		
CLMH134W524MH134W523		1999		Existing	assumed Mannings N	MH134W524	MH134W523	T15467	IRWD	PVC	{4D40C4EE-E228-48A2-8B41-089F6F448255}	CLMH134W524MH134W523	1065.90	1056.58	0.666666667	MH134W524	MH134W523					105	CLMH134W524MH134W523	8	0.0888	0.007120	0.05	0.008546	0.05	0.010133	0.05	0.008546	0.05		
CLMH134W525MH134W524		1999		Existing	assumed Mannings N	MH134W525	MH134W524	T15467	IRWD	PVC	{97606558-6E54-428E-ACAA-D089CE297ACB}	CLMH134W525MH134W524	1070.37	1065.90	0.666666667	MH134W525	MH134W524					156	CLMH134W525MH134W524	8	0.0287	0.007129	0.05	0.008553	0.05	0.010142	0.05	0.008553	0.05

CLMH137N014MH137N012		2002		Existing	assumed Mannings N	MH137N014	MH137N012		T16060	IRWD	PVC	{C6C50E7F-364C-447F-9256-46410E155OD7}	CLMH137N014MH137N012	318.23	314.72	0.66666667	MH137N014	MH137N012					CLMH137N014MH137N012	8	0.0826	0.022643	0.07	0.024175	0.07	0.028669	0.08	0.029620	0.08
CLMH137N015MH137N014		2002		Existing	assumed Mannings N	MH137N015	MH137N014		T16060	IRWD	PVC	{46740271-76E8-422F-B5F7-CCDBD4C31965}	CLMH137N015MH137N014	322.83	318.32	0.66666667	MH137N015	MH137N014		122			CLMH137N015MH137N014	8	0.0371	0.019469	0.08	0.020786	0.08	0.024650	0.09	0.026230	0.09
CLMH137N016MH137N015		2002		Existing	assumed Mannings N	MH137N016	MH137N015		T16060	IRWD	PVC	{A7B459C7-CB12-41D1-8F94-FB703E657611}	CLMH137N016MH137N015	356.01	322.94	0.66666667	MH137N016	MH137N015		343			CLMH137N016MH137N015	8	0.0968	0.017937	0.06	0.019150	0.06	0.022711	0.07	0.024593	0.07
CLMH137N017MH137N018		2002		Existing	assumed Mannings N	MH137N017	MH137N018		T15461	IRWD	PVC	{0DD8BD09-F6B6-4FC1-B858-92CBBC053B38}	CLMH137N017MH137N018	404.26	401.00	0.66666667	MH137N017	MH137N018		147			CLMH137N017MH137N018	8	0.0222	0.013325	0.07	0.014223	0.07	0.016864	0.08	0.019870	0.09
CLMH137N018MH137N019		2002		Existing	assumed Mannings N	MH137N018	MH137N019		T15461	IRWD	PVC	{A60729B8-50FE-40DD-AD76-B842E68771A0}	CLMH137N018MH137N019	400.93	400.12	0.66666667	MH137N018	MH137N019		203			CLMH137N018MH137N019	8	0.0040	0.013518	0.10	0.014430	0.11	0.017109	0.12	0.019870	0.13
CLMH137N019MH137N022		2007		Existing	assumed Mannings N	MH137N019	MH137N022		T15461	IRWD	PVC	{91F03972-48FB-4A14-BAA8-F0B04381C4CF}	CLMH137N019MH137N022	400.02	399.15	0.66666667	MH137N019	MH137N022		217			CLMH137N019MH137N022	8	0.0040	0.013518	0.10	0.014430	0.11	0.017109	0.12	0.019870	0.13
CLMH137N020MH137N017		2002		Existing	assumed Mannings N	MH137N020	MH137N017		T15461	IRWD	PVC	{0DFE6687-5AC1-4C2E-95EA-B1D5FA6B2854}	CLMH137N020MH137N017	408.80	404.36	0.66666667	MH137N020	MH137N017		131			CLMH137N020MH137N017	8	0.0340	0.012979	0.06	0.013855	0.07	0.016427	0.07	0.019870	0.08
CLMH137N021MH137N020		2007		Existing	assumed Mannings N	MH137N021	MH137N020		T15461	IRWD	PVC	{A9509B64-BEB9-4A00-B65E-97D111616653}	CLMH137N021MH137N020	427.62	408.90	0.66666667	MH137N021	MH137N020		261			CLMH137N021MH137N020	8	0.0720	0.012979	0.05	0.013855	0.06	0.016427	0.06	0.019870	0.07
CLMH137N022MH137N010		2002		Existing	assumed Mannings N	MH137N022	MH137N010		T15461	IRWD	PVC	{1805B0FC-5F9B-44AE-B37B-2B10B8241BF7}	CLMH137N022MH137N010	399.05	398.52	0.66666667	MH137N022	MH137N010		31			CLMH137N022MH137N010	8	0.0173	0.013518	0.08	0.014430	0.08	0.017109	0.09	0.019870	0.09
CLMH137N023MH137W016		2002		Existing	assumed Mannings N	MH137N023	MH137W016		T15461	IRWD	VCP	{3CE5B7C0-B3F2-41A7-8F01-717EE8B34494}	CLMH137N023MH137W016	550.32	549.53	0.66666667	MH137N023	MH137W016		79			CLMH137N023MH137W016	8	0.0101	0.000885	0.02	0.000946	0.02	0.001121	0.02	0.007168	0.07
CLMH137T001MH137T048		2002		Existing	assumed Mannings N	MH137T001	MH137T048		T16301	IRWD	PVC	{44B96EA0-55AB-4957-A368-EE2DA56D1A8}	CLMH137T001MH137T048	346.73	341.17	0.66666667	MH137T001	MH137T048		256			CLMH137T001MH137T048	8	0.0217	0.006424	0.05	0.007713	0.06	0.009142	0.06	0.007713	0.06
CLMH137E003MH137E014		2003		Existing	assumed Mannings N	MH137E003	MH137E014		A00982	IRWD	PVC	{E451038C-8E30-4623-BAA4-6E3ACBOFE866}	CLMH137E003MH137E014	336.76	335.51	0.66666667	MH137E003	MH137E014		247			CLMH137E003MH137E014	8	0.0087	0.006220	0.07	0.007467	0.08	0.008854	0.09	0.007467	0.08
CLMH137E004MH137E005		2002		Existing	assumed Mannings N	MH137E004	MH137E005		T16301	IRWD	PVC	{A91D6476-5573-418E-BC27-4B5C9D31D644}	CLMH137E004MH137E005	354.14	351.57	0.66666667	MH137E004	MH137E005		191			CLMH137E004MH137E005	8	0.0135	0.005869	0.06	0.007046	0.06	0.008354	0.07	0.007046	0.06
CLMH137E005MH137E006		2002		Existing	assumed Mannings N	MH137E005	MH137E006		T16301	IRWD	PVC	{56526C41-7D1F-4664-B0E3-AB6407323B5B}	CLMH137E005MH137E006	351.47	349.42	0.66666667	MH137E005	MH137E006		134			CLMH137E005MH137E006	8	0.0153	0.005869	0.05	0.007046	0.06	0.008354	0.06	0.007046	0.06
CLMH137E006MH137E015		2002		Existing	assumed Mannings N	MH137E006	MH137E015		T16301	IRWD	PVC	{472D26D0-B771-46C3-A9BA-F100EBF45E2B}	CLMH137E006MH137E015	349.32	342.17	0.66666667	MH137E006	MH137E015		230			CLMH137E006MH137E015	8	0.0311	0.005869	0.05	0.007046	0.05	0.008354	0.05	0.007046	0.05
CLMH137E007MH137E008		2002		Existing	assumed Mannings N	MH137E007	MH137E008		T16301	IRWD	PVC	{3BC6EB6A-4142-4019-806B-AD8CADEB0952}	CLMH137E007MH137E008	360.20	356.20	0.66666667	MH137E007	MH137E008		228			CLMH137E007MH137E008	8	0.0175	0.005331	0.05	0.006401	0.05	0.007589	0.06	0.006401	0.05
CLMH137E008MH137E016		2002		Existing	assumed Mannings N	MH137E008	MH137E016		T16301	IRWD	PVC	{4871BAB2-8531-4221-B188-2E90AA54A0C3}	CLMH137E008MH137E016	356.10	350.80	0.66666667	MH137E008	MH137E016		219			CLMH137E008MH137E016	8	0.0242	0.005331	0.05	0.006401	0.05	0.007589	0.05	0.006401	0.05
CLMH137E009MH137E010		2002		Existing	assumed Mannings N	MH137E009	MH137E010		T16301	IRWD	PVC	{AD8C1C64-844F-414B-9944-053B1CDE5F3E}	CLMH137E009MH137E010	368.04	366.61	0.66666667	MH137E009	MH137E010		142			CLMH137E009MH137E010	8	0.0101	0.006034	0.06	0.007245	0.07	0.008591	0.07	0.007245	0.07
CLMH137E010MH137E017		2002		Existing	assumed Mannings N	MH137E010	MH137E017		T16301	IRWD	PVC	{5F032800-BAD7-4485-AB16-1B7F05E86841}	CLMH137E010MH137E017	366.51	361.38	0.66666667	MH137E010	MH137E017		259			CLMH137E010MH137E017	8	0.0198	0.006034	0.05	0.007245	0.06	0.008591	0.06	0.007245	0.06
CLMH137E011MH137E023		2002		Existing	assumed Mannings N	MH137E011	MH137E023		T16301	IRWD	PVC	{08B9B104-0C68-4452-9E6B-10BFC103167B}	CLMH137E011MH137E018	392.61	383.99	0.66666667	MH137E011	MH137E023		347			CLMH137E011MH137E023	8	0.0249	0.000703	0.02	0.000844	0.02	0.001002	0.02	0.000844	0.02
CLMH137E013MH137N096		2003		Existing	assumed Mannings N	MH137E013	MH137N096		A00982	IRWD	PVC	{F8CC2970-3DAF-4013-90B6-2F0030DC555D}	CLMH137E013MH137N096	336.60	325.05	0.66666667	MH137E013	MH137N096		251			CLMH137E013MH137N096	8	0.0460	0.012977	0.06	0.015475	0.07	0.018346	0.07	0.015475	0.07
CLMH137E014MH137N099		2003		Existing	assumed Mannings N	MH137E014	MH137N099		A00982	IRWD	PVC	{7EA2E85B-2CB8-4E62-88AE-F2012893E8A5}	CLMH137E014MH137N099	335.32	331.88	0.66666667	MH137E014	MH137N099		304			CLMH137E014MH137N099	8	0.0113	0.083156	0.22	0.099838	0.22	0.118366	0.24	0.099838	0.22
CLMH137E015MH137E014		2003		Existing	assumed Mannings N	MH137E015	MH137E014		A00982	IRWD	PVC	{D37A0E1D-7CF8-44AC-8F3D-8A98E0DE3F87}	CLMH137E015MH137E014	340.54	335.42	0.66666667	MH137E015	MH137E014		196			CLMH137E015MH137E014	8	0.0196	0.076936	0.17	0.092371	0.19	0.109513	0.21	0.092371	0.19
CLMH137E016MH137E015		2013		Existing	assumed Mannings N	MH137E016	MH137E015		A00982	IRWD	PVC	{AD4C9EE8-0B8B-4FB3-9510-061CB0AC6682}	CLMH137E016MH137E015	349.36	340.64	0.66666667	MH137E016	MH137E015		283			CLMH137E016MH137E015	8	0.0308	0.065736	0.14	0.078924	0.16	0.093570	0.17	0.078924	0.16
CLMH137E017MH137E016		2013		Existing	assumed Mannings N	MH137E017	MH137E016		A00982	IRWD	PVC	{E81DAD75-355E-4C9E-AAD6-E5CE6E87DA53}	CLMH137E017MH137E016	360.23	349.47	0.66666667	MH137E017	MH137E016		320			CLMH137E017MH137E016	8	0.0336	0.057201	0.13	0.068678	0.14	0.081422	0.16	0.068678	0.14
CLMH137E018MH137E017		2003		Existing	assumed Mannings N	MH137E018	MH137E017		A00982	IRWD	PVC	{DC4AAA45-D1BF-4C60-8921-1CDD271A582E}	CLMH137E018MH137E017	378.00	360.32	0.66666667	MH137E018	MH137E017		355			CLMH137E018MH137E017	8	0.0498	0.044169	0.11	0.053032	0.12	0.062871	0.12	0.053032	0.12
CLMH137E019MH137E020		2003		Existing	assumed Mannings N	MH137E019	MH137E020		T16300	IRWD	PVC	{6D5F5535-720C-4AB2-82A5-F67AA288E826}	CLMH137E019MH137E020	422.14	379.95	0.66666667	MH137E019	MH137E020		290			CLMH137E019MH137E020	8	0.1470	0.032822	0.07	0.039408	0.08	0.046719	0.08	0.039408	0.08
CLMH137E020MH137E022		2003		Existing	assumed Mannings N	MH137E020	MH137E022		T16300	IRWD	PVC	{2D8C4792-6A7C-44C3-ADB5-586A2DF015FB}	CLMH137E020MH137E022	379.85	379.22	0.66666667	MH137E020	MH137E022		325			CLMH137E020MH137E022	8	0.0039	0.034747	0.17	0.041719	0.18	0.049458	0.20	0.041719	0.18
CLMH137E021MH137E019		2003		Existing	assumed Mannings N	MH137E021	MH137E019		T16300	IRWD	PVC	{213A1368-4172-434E-B8E4-E1E6AF85B4B4}	CLMH137E021MH137E019	431.45	422.23	0.66666667	MH137E021	MH137E019		603			CLMH137E021MH137E019	8	0.0603	0.028897	0.08	0.034697	0.09	0.041132	0.10	0.034697	0.09
CLMH137E022MH137E030		2003		Existing	assumed Mannings N	MH137E022	MH137E030		T16300	IRWD	PVC	{1660E763-632C-4282-BAA3-7E7BAFCDAC90}	CLMH137E022MH137E030	379.12	378.48	0.66666667	MH137E022	MH137E030		159			CLMH137E022MH137E030	8	0.0040	0.034747	0.17	0.041719	0.18	0.049458	0.20	0.041719	0.18
CLMH137E023MH137E018		2002		Existing	assumed Mannings N	MH137E023	MH137E018		T16301	IRWD	PVC	{79A73535-F694-4756-9A9A-CCF40AB680D6}	CLMH137E011MH137E018	383.89	378.20	0.66666667	MH137E011	MH137E018		383			CLMH137E023MH137E018	8	0.1448	0.000703	0.01	0.000844	0.01	0.001002	0.01	0.000844	0.01
CLMH137E024MH137E021		2002		Existing	assumed Mannings N	MH137E024	MH137E021		T16300	IRWD	PVC	{51CD4BE1-7D44-422F-BC73-A10ED9D65B90}	CLMH137E024MH137E021	456.58	431.45	0.66666667	MH137E024	MH137E021		296			CLMH137E024MH137E021	8	0.0852	0.019771	0.07	0.023739	0.08	0.028142	0.09	0.023739	0.08
CLMH137E025MH137E024		2003		Existing	assumed Mannings N	MH137E025	MH137E024		T16300	IRWD	PVC	{C7AF33D7-102B-4F2F-90AC-078BF2914A76}	CLMH137E025MH137E024	461.95	456.69	0.66666667	MH137E025	MH137E024		105			CLMH137E025MH137E024	8	0.0501	0.019771	0.07	0.023739	0.08	0.028142	0.09	0.023739	0.08
CLMH137E026MH137E025		2003		Existing	assumed Mannings N	MH137E026	MH137E025		T16300	IRWD	PVC	{83505B0D-5EF6-450D-8541-DCBD193701B1}	CLMH137E026MH137E025	470.38	462.04	0.66666667	MH137E026	MH137E025		470			CLMH137E026MH137E025	8	0.0758	0.019771	0.07	0.023739	0.07	0.028142	0.08	0.023739	0.07
CLMH137E027MH137E028		2003		Existing	assumed Mannings N	MH137E027	MH137E028		T16300	IRWD	PVC	{08E76E89-B3B6-4195-AA01-A09000AE8A14}	CLMH137E027MH137E028	482.51	480.00	0.66666667	MH137E027	MH137E028		112			CLMH137E027MH137E028	8	0.0224	0.017476	0.08	0.020983	0.09	0.024875	0.10	0.020983	0.09
CLMH137E028MH137E029		2003		Existing	assumed Mannings N	MH137E028	MH137E029		T16300	IRWD	PVC	{16AD4821-BA5E-49B0-9A0D-B8B8FA3E328}	CLMH137E028MH137E029	479.89	478.41	0.66666667	MH137E028	MH137E029		153			CLMH137E028MH137E029	8	0.0097	0.017476	0.10	0.020983	0.11	0.024875	0.12	0.020983	0.11
CLMH137E029MH137E026		2003		Existing	assumed Mannings N	MH137E029	MH137E026		T16300	IRWD	PVC	{AA5Z353D-AAA6-488D-973C-O60FDE8EC8A7}	CLMH137E029MH137E026	478.30	470.48	0.66666667	MH137E029	MH137E026		110			CLMH137E029MH137E026	8	0.0711	0.017476	0.06	0.020983	0.07	0.024875	0.07	0.020983	0.07
CLMH137E030MH137E018		2013		Existing	assumed Mannings N	MH137E030	MH137E018		A00982	IRWD	PVC	{54268E2A-5ACC-482E-9EFA-6DDF81245133}	CLMH137E023MH137E018	378.38	378.20	0.66666667	MH137E023	MH137E030		50			CLMH137E030MH137E018	8	0.0036	0.043466	0.19	0.052188	0.21	0.061869	0.22	0.052188	0.21
CLMH137N052MH137N094		2003		Existing	assumed Mannings N	MH137N052	MH137N094		A00982	IRWD	PVC	{0451ADF1-3673-4ACC-B439-C8FE473F03B}	CLMH137N052MH137N094	319.52	315.55	0.66666667	MH137N052	MH137N094		48			CLMH137N052MH137N094	8	0.0142	0.009496	0.07	0.011403	0.07	0.013516	0.08	0.011403	0.07
CLMH137N053MH137N052		2008		Existing	assumed Mannings N	MH137N053	MH137N052		T16302	IRWD	PVC	{0A554DB6-06D7-405D-B715-27C7667319ED}	CLMH137N053MH137N052	319.58	316.33	0.66666667	MH137N053	MH137N052		282			CLMH137N053MH137N052	8	0.0115	0.009496	0.07	0.011403	0.08	0.013516	0.09	0.011403	0.08
CLMH137N054MH137N051		2002		Existing	assumed Mannings N	MH137N054	MH137N051		T16034	IRWD	PVC	{6D2D1022-FBB3-43FF-A073-553A50AF404D}	CLMH137N054MH137N051	319.48	313.32	0.66666667	MH137N054	MH137N051		205			CLMH137N054MH137N051	8	0.0300	0.004258	0.04	0.005113	0.04	0.006061	0.05	0.005113	0.04
CLMH137N055MH137N095		2003		Existing	assumed Mannings N	MH137N055	MH137N095		A00982	IRWD	PVC	{7B77145F-6C52-4E4C-BADF-2D649D490B0D}	CLMH137N055MH137N095	324.04	322.85	0.66666667	MH137N055	MH137N095		35			CLMH137N055MH137N095	8	0.0229	0.009831	0.06	0.011802	0.07	0.013992	0.07	0.011802	0.07
CLMH137N056MH137N055		2003		Existing	assumed Mannings N	MH137N056	MH137N055		T16034	IRWD	PVC	{A1103460-FFA5-4315-A202-8314FBA1F0F7}	CLMH137N056MH137N055	335.04	324.14	0.66666667	MH137N056	MH137N055		195			CLMH137N056MH137N055	8	0.0559	0.009831	0.05	0.011802	0.05	0.013992	0.06	0.011802	0.05
CLMH137N057MH137N053		2002		Existing	assumed Mannings N	MH137N057	MH137N053		T16302	IRWD	PVC	{539E02CB-0554-4343-813D-711374D1744F}	CLMH137N057MH137N053	323.41	319.69	0.66666667	MH137N057	MH137N053		310			CLMH137N057MH137N053	8	0.0120	0.002573	0.04	0.003089	0.04	0.003662	0.05	0.003089	0.04
CLMH137N058MH137N056		2002		Existing	assumed Mannings N	MH137N058	MH137N056		T16034	IRWD	PVC	{66738831-1EC5-42D2-A45C-8545A2A2D28B}	CLMH137N058MH137N056	348.00	335.14	0.66666667	MH137N058	MH137N056		348			CLMH137N058MH137N056	8	0.0418	0.009831	0.05	0.011802	0.06	0.013992	0.06	0.011802	0.06
CLMH137N059MH137N097		2002		Existing	assumed Mannings N	MH137N059	MH137N097		T16302	IRWD	PVC	{8C93D9C0-A087-4850-B278-B0DA6C038801}	CLMH137N059MH137N097	347.10	344.64	0.66666667	MH137N059	MH137N097		182			CLMH137N059MH137N097	8	0.0135	0.007387	0.06	0.008869	0.07	0.010514	0.07	0.008869	0.07
CLMH137N060MH137N058		2002		Existing	assumed Mannings N	MH137N060	MH137N058		T16034	IRWD	PVC	{230AEC5D-D40B-49A5-B5F1-B71F9C50EC31}	CLMH137N060MH137N058	355.32	348.10	0.66666667	MH137N060	MH137N058		302			CLMH137N060MH137N058	8	0.0239	0.009831	0.06	0.011802	0.07	0.013992	0.07	0.011802	0.07
CLMH137N061MH137N059		2002		Existing	assumed Mannings N	MH137N061	MH137N059		T16302	IRWD	PVC	{45E50F81-EA7A-47A4-820-30C5F97B14E4}	CLMH137N061MH137N059	351.67	347.20	0.66666667	MH137N061	MH137N059		261			CLMH137N061MH137N059	8	0.0120	0.007387	0.06	0.008869	0.07	0.010514	0.07	0.008869	0.07
CLMH137N083MH125E097		2003		Existing	assumed Mannings N	MH137N083	MH125E097		A00982	IRWD	PVC	{C29BCAB3-66E4-4583-952E-B5ABE1C0BC12}	CLMH137N083MH125E097	248.61	235.63	0.66666667	MH137N083	MH125E097		340			CLMH137N083MH125E097	8	0.0382	0.059867	0.13	0.071872	0.14	0.085213	0.15	0.071872	0.14
CLMH137N084MH138W042		2003		Existing	assumed Mannings N	MH137N084	MH138W042		A00982	IRWD	PVC	{73565367-A1BB-4659-90CD-B7596A1D256}	CLMH137N084MH138W042	235.58	220.58	0.66666667	MH137N084	MH138W042		246			CLMH137N084MH138W042	8	0.0610	0.210705	0.21	0.252863	0.23	0.299790	0.26	0.252863	0.23
CLMH137N085MH137N083		2003		Existing	assumed Mannings N	MH137N085	MH137N083		A00982	IRWD	PVC	{D7DD47CD-333B-4466-8512-1CF1315F53C6}	CLMH137N085MH137N083	255.69	248.72	0.66666667	MH137N085	MH137N083		204			CLMH137N085MH137N083	8	0.0342	0.059868	0.13	0.071873	0.15	0.085214	0.16	0.071873	0.15
CLMH137N086MH137N084		2003		Existing	assumed Mannings N	MH137N086	MH137N084		A00982	IRWD	PVC	{077FCA82-859F-441B-8E9D-C90D72A70857}	CLMH137N086MH137N084	242.30	235.77	0.66666667	MH137N086	MH137N084		134			CLMH137N086MH137N084	8	0.0487	0.210706	0.23	0.252863	0.25	0.299791	0.27	0.252863	0.25
CLMH137N087MH137N085		2003		Existing	assumed Mannings N	MH137N087	MH137N085		A00982	IRWD	PVC	{F616A6E8-24C3-41EF-A0FF-C3768394C1B9}	CLMH137N087MH137N085	262.23	255.78	0.66666667	MH137N087	MH137N085		215			CLMH137N087MH137N085	8	0.0223	0.037466	0.12	0.044983	0.13	0.053331	0.14	0.044983	0.13
CLMH137N088MH137N086		2003		Existing	assumed Mannings N	MH137N088	MH137N086		A00982	IRWD	PVC	{00B383A1-7633-4ECA-9401-67B1B131524}	CLMH137N088MH137N086	263.77	242.39	0.66666667	MH137N088	MH137N086		141			CLMH137N088MH137N086	8	0.0631	0.175032	0.19	0.210033	0.21	0.249012	0.23	0.210033	0.21
CLMH137N089MH137N087		2003		Existing	assumed Mannings N	MH137N089	MH137N087		A00982	IRWD	PVC	{701C218F-9E95-4ABC-B2C2-AB015DDAAFBA}	CLMH137N089MH137N087	281.00	262.42	0.66666667	MH137N089	MH137N087		359			CLMH137N089MH137N087	8	0.0518	0.037467	0.10	0.044983	0.11	0.053331	0.11	0.044983	0.11
CLMH137N090MH137N088		2003		Existing	assumed Mannings N	MH137N090	MH137N088		A00982	IRWD	PVC	{5565B8BD-7C59-45FF-B2F1-F103F5F214FB}	CLMH137N090MH137N088	278.60	263.88	0.66666667	MH137N090	MH137N088		284			CLMH137N090MH137N088	8	0.0518	0.175032	0.20	0.210033	0.22	0.249013	0.24	0.210033	0.22
CLMH137N091MH137N089		2003		Existing	assumed Mannings N	MH137N091	MH137N089		A00982	IRWD	PVC	{8A86D5F8-B310-4379-82E3-BFC03A3612F7}	CLMH137N091MH137N089	295.23	281.10	0.66666667	MH137N091	MH137N089		303			CLMH137N091MH137N089	8	0.0466	0.037468	0.10	0.044984	0.11	0.053331	0.12	0.044984	0.11
CLMH137N092MH137N090		2003		Existing	assumed Mannings N	MH137N092	MH137N090		A00982	IRWD	PVC	{4AD4DC05-0FEC-45F7-B760-0A44AA87E43B}	CLMH137N092MH137N090	300.07	278.70	0.66666667	MH137N092	MH137N090		301			CLMH137N092MH137N090	8	0.0712	0.150061	0.17	0.180052	0.19	0.213468	0.21	0.180052	0.19
CLMH137N093MH137N091		2003		Existing	assumed Mannings N	MH137N093	MH137N091		A00982	IRWD	PVC	{34566F70-D022-4169-B6A1-DB8997777CE2}	CLMH137N093MH137N091	303.80	295.32	0.66666667	MH137N093	MH137N091		142			CLMH137N093MH137N091	8	0.0597	0.027045	0.08	0.032470	0.09	0.038495	0.09	0.032470	0.08
CLMH137N094MH137N093		2003		Existing	assumed Mannings N	MH137N094	MH137N093		A00982	IRWD	PVC	{54314F91-3121-486C-96E8-A1644E75A2F7}	CLMH137N094MH137N093	315.35	303.80	0.66666667	MH137N094	MH137N093		143			CLMH137N094MH137N093	8	0.0808	0.027045	0.08	0.032470	0.08	0.038495	0.09	0.032470	0.08
CLMH137N095MH137N092		2003		Existing	assumed Mannings N	MH137N095	MH137N092		A00982	IRWD	PVC	{723021C0-829F-43B0-9134-E3CAA8873EFB}	CLMH137N095MH137N092	322.64	300.17	0.66666667	MH137N095	MH137N092		352			CLMH137N095MH137N092	8	0.0640	0.123957	0.16	0.148716	0.18	0.176314	0.19	0.148716	0.18
CLMH137N096MH137N095		2003		Existing	assumed Mannings N	MH137N096	MH137N095		A00982	IRWD	PVC	{9625AA3D-1BCC-4C2E-B84C-5945051A9F3F}	CLMH137N096MH137N095	324.95	322.64	0.66666667	MH137N096	MH137N095		142			CLMH137N096MH137N095	8	0.0163	0.023955	0.13	0.028653	0.15	0.033971	0.16	0.028653	0.15
CLMH137N097MH137N094		2003		Existing	assumed Mannings N	MH137N097	MH137N094		A00982	IRWD	PVC	{088913C4-D5E2-4957-95F3-1017E4339108}	CLMH137N097MH137N094	343.82	315.45	0.66666667	MH137N097	MH137N094		383			CLMH137N097MH137N094	8	0.0743	0.017549	0.06	0.021068	0.07	0.024980	0.07	0.021068	0.07
CLMH137N098MH137N095		2003		Existing	assumed Mannings N	MH137N098	MH137N095		A00982	IRWD	PVC	{DD2310A7-0D37-48BB-A8E1-D36C9090721Z}	CLMH137N098MH137N095	330.80	322.75	0.66666667	MH137N098	MH137N095		311			CLMH137N098MH137N095	8	0.0259	0.090172	0.17	0.108262	0.19	0.128352	0.21	0.108261	0.19
CLMH137N099MH137N098		2003		Existing	assumed Mannings N	MH137N099	MH137N098		A00982	IRWD	PVC	{0728F3A4-3782-4E29-9B56-3BD0C83BE34}	CLMH137N099MH137N098	331.77	330.91	0.66666667	MH137N099	MH137N098		41			CLMH137N099MH137N098	8	0.0210	0.083156	0.18	0.099838	0.19	0.118366	0.21	0.099838	0.19
CLMH137N100MH137N097		2003		Existing	assumed Mannings N	MH137N100	MH137N097		A00982	IRWD	PVC	{3674FCD8-5A84-49E1-98BB-9D46E92214A0}	CLMH137N100MH137N097	346.13	343.92	0.66666667	MH137N100	MH137N097		115			CLMH137N100MH137N097	8	0.0192	0.010163	0.07	0.012199	0.07	0.014466	0.08	0.012199	0.07
CLMH137N101MH137N100		2003		Existing	assumed Mannings N	MH137N101	MH137N100		A00982	IRWD	PVC	{B1F3A4AF-843F-4C5F-99EF-869821AF57DD}	CLMH137N101MH137N100	361.54	346.23	0.66666667	MH137N101	MH137N100		232			CLMH137N101MH137N100	8	0.0663	0.010163	0.05	0.012199	0.05	0.014466	0.06	0.012199	0.05
CLMH137N102MH137N103		2003		Existing	assumed Mannings N	MH137N102	MH137N103		T16300	IRWD	PVC	{E7F3D01E-DF89-4F68-9C29-6CD728777539}	CLMH137N102MH137N103	366.70	365.97	0.66666667	MH137N102	MH137N103		46			CLMH137N102MH137N103	8	0.0159	0.010163	0.07	0.012199	0.08	0.014466	0.08	0.012199	0.08
CLMH137N103MH137N101		2003		Existing	assumed Mannings N	MH137N103	MH137N101		T16300	IRWD	PVC	{D57C2263-5526-438C-9048-C5D7935F5A43}	CLMH137N103MH137N101	365.86	361.75	0.66666667	MH137N103	MH137N101		80			CLMH137N103MH137N101	8	0.0514	0.010163	0.05	0.012199	0.06	0.014466	0.06	0.012199	0.06
CLMH137N104MH137N102		2003		Existing	assumed Mannings N	MH137N104	MH137N102		T16300	IRWD	PVC	{EDCB060B-86D1-48DB-99DE-F2180A7E03C5}	CLMH137N104MH137N102	367.85	366.80	0.66666667	MH137N104	MH137N102		109			CLMH137N104MH137N102	8	0.0096	0.010163	0.08	0.012199	0.08	0.014466	0.09	0.012199	0.08
CLMH137N105MH137N106		2003		Exist

CLMH137N110MH137N109			2003		Existing	assumed Mannings N	MH137N110	MH137N109		T16300	IRWD	PVC	{3FC115E2-4453-408D-9010-E37F12E21653}	CLMH137N110MH137N109	418.73	400.54	0.666666667	MH137N110	MH137N109					161	CLMH137N110MH137N109	8	0.1137	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH137N111MH137N110			2003		Existing	assumed Mannings N	MH137N111	MH137N110		T16300	IRWD	PVC	{C216B568-90C7-441F-A50E-8C4DFBE4336C}	CLMH137N111MH137N110	423.29	419.13	0.666666667	MH137N111	MH137N110					71	CLMH137N111MH137N110	8	0.0586	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH137N112MH137N111			2003		Existing	assumed Mannings N	MH137N112	MH137N111		T16300	IRWD	PVC	{38ACA8D8-8AFD-4C20-A3B1-749F85074C87}	CLMH137N112MH137N111	429.00	423.70	0.666666667	MH137N112	MH137N111					70	CLMH137N112MH137N111	8	0.0757	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH137N113MH137N114			2004		Existing	assumed Mannings N	MH137N113	MH137N114		T16177D	IRWD	PVC	{BE50BE81-FE27-4800-9D15-4F863A5B3B73}	CLMH137N113MH137N114	395.91	391.14	0.666666667	MH137N113	MH137N114					201	CLMH137N113MH137N114	8	0.0237	0.002775	0.03	0.003333	0.04	0.003953	0.04	0.003333	0.04	0.003953	0.04
CLMH137N114MH137N115			2004		Existing	assumed Mannings N	MH137N114	MH137N115		T16177D	IRWD	PVC	{048AF2D4-AEFE-4F9F-B8BD-E41916A3EEAE}	CLMH137N114MH137N115	391.04	385.66	0.666666667	MH137N114	MH137N115					345	CLMH137N114MH137N115	8	0.0156	0.002776	0.04	0.003333	0.04	0.003953	0.04	0.003333	0.04	0.003953	0.04
CLMH137N115MH137N107			2004		Existing	assumed Mannings N	MH137N115	MH137N107		T16177D	IRWD	PVC	{D2F061CB-AB36-4CF4-83FD-DCF0AD6D5726}	CLMH137N115MH137N107	385.55	382.39	0.666666667	MH137N115	MH137N107					244	CLMH137N115MH137N107	8	0.0129	0.002776	0.04	0.003333	0.04	0.003953	0.05	0.003333	0.04	0.003953	0.05
CLMH137N116MH137N109			2004		Existing	assumed Mannings N	MH137N116	MH137N109		T16300	IRWD	PVC	{24BE09CC-5259-49FD-974B-E03D8AA29A920}	CLMH137N116MH137N109	401.00	400.64	0.666666667	MH137N116	MH137N109					133	CLMH137N116MH137N109	8	0.0027	0.005073	0.07	0.006089	0.08	0.007219	0.08	0.006089	0.08	0.007219	0.08
CLMH137N117MH137N118			2004		Existing	assumed Mannings N	MH137N117	MH137N118		T16177D	IRWD	PVC	{3997810D-9FE6-4FBD-A7E0-E57393F7B07F}	CLMH137N117MH137N118	422.86	416.18	0.666666667	MH137N117	MH137N118					371	CLMH137N117MH137N118	8	0.0180	0.005073	0.05	0.006089	0.05	0.007219	0.06	0.006089	0.05	0.007219	0.06
CLMH137N118MH137N116			2004		Existing	assumed Mannings N	MH137N118	MH137N116		T16177D	IRWD	PVC	{7752F95C-CD2A-4A2C-A72F-F0E9B45C4C1}	CLMH137N118MH137N116	416.08	402.96	0.666666667	MH137N118	MH137N116					133	CLMH137N118MH137N116	8	0.0800	0.005073	0.03	0.006089	0.04	0.007219	0.04	0.006089	0.04	0.007219	0.04
CLMH137N119MH137N112			2004		Existing	assumed Mannings N	MH137N119	MH137N112		T16177D	IRWD	PVC	{A364058D-BA79-4E46-A259-A3AB1843937F}	CLMH137N119MH137N112	449.39	429.39	0.666666667	MH137N119	MH137N112					308	CLMH137N119MH137N112	8	0.0651	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH137N120MH137N006			2002		Existing	assumed Mannings N	MH137N120	MH137N006		T16285	IRWD	PVC	{9B540D28-C5C6-4268-91C3-0364A31F0D2}	CLMH137N120MH137N006	258.27	258.07	0.666666667	MH137N120	MH137N006					54	CLMH137N120MH137N006	8	0.0037	0.010567	0.09	0.012715	0.10	0.015114	0.11	0.012715	0.10	0.015114	0.11
CLMH137N121MH137N090			2003		Existing	assumed Mannings N	MH137N121	MH137N090		A00982	IRWD	PVC	{B0184926-F9CD-42B8-8729-A6916E78ACF3}	CLMH137N121MH137N090	284.67	278.79	0.666666667	MH137N121	MH137N090					63	CLMH137N121MH137N090	8	0.0933	0.013792	0.05	0.016558	0.06	0.019630	0.06	0.016558	0.06	0.019630	0.06
CLMH137S001MH137S002			2007		Existing	assumed Mannings N	MH137S001	MH137S002		T15461	IRWD	PVC	{C50C67DA-4DED-4276-B83A-C29FD78CD47B}	CLMH137S001MH137S002	536.50	532.80	0.666666667	MH137S001	MH137S002					124	CLMH137S001MH137S002	8	0.0300	0.000971	0.02	0.001037	0.02	0.001229	0.02	0.008215	0.05	0.001229	0.02
CLMH137S002MH137S003			2007		Existing	assumed Mannings N	MH137S002	MH137S003		T15461	IRWD	PVC	{A12A0B71-95F1-4670-8D8F-78D5A2B33B0A}	CLMH137S002MH137S003	532.70	523.49	0.666666667	MH137S002	MH137S003					256	CLMH137S002MH137S003	8	0.0360	0.000971	0.02	0.001037	0.02	0.001229	0.02	0.008215	0.05	0.001229	0.02
CLMH137S003MH137W019			2007		Existing	assumed Mannings N	MH137S003	MH137W019		T15461	IRWD	PVC	{AD6EC5F9-8972-4586-892A-CE2CBA2B93DA}	CLMH137S003MH137W019	523.39	519.49	0.666666667	MH137S003	MH137W019					390	CLMH137S003MH137W019	8	0.0100	0.003475	0.05	0.003712	0.05	0.004400	0.05	0.008215	0.07	0.004400	0.05
CLMH137S004MH137S005			2007		Existing	assumed Mannings N	MH137S004	MH137S005		T15461	IRWD	PVC	{D66F0E60-F8EA-48D4-BC62-ECD0B6BF3352}	CLMH137S004MH137S005	538.54	538.15	0.666666667	MH137S004	MH137S005					39	CLMH137S004MH137S005	8	0.0099	0.000971	0.02	0.001037	0.02	0.001229	0.03	0.008215	0.07		
CLMH137S005MH137S001			2007		Existing	assumed Mannings N	MH137S005	MH137S001		T15461	IRWD	PVC	{5EF11524-FC49-4494-A68A-F4E331681A8C}	CLMH137S005MH137S001	538.05	536.60	0.666666667	MH137S005	MH137S001					145	CLMH137S005MH137S001	8	0.0100	0.000971	0.02	0.001037	0.02	0.001229	0.03	0.008215	0.07		
CLMH137W001MH137W002			2003		Existing	assumed Mannings N	MH137W001	MH137W002		T16436	IRWD	PVC	{A938C569-9545-4DA6-98FD-B1B1F31772E3}	CLMH137W001MH137W002	427.23	408.70	0.666666667	MH137W001	MH137W002					360	CLMH137W001MH137W002	8	0.0515	0.023162	0.08	0.024741	0.08	0.029388	0.09	0.033200	0.09		
CLMH137W002MH1255013			2003		Existing	assumed Mannings N	MH137W002	MH1255013		T16436	IRWD	PVC	{8B4379FD-EF38-49FC-B8BD-0022E02EE047}	CLMH137W002MH1255013	408.60	399.14	0.666666667	MH137W002	MH1255013					296	CLMH137W002MH1255013	8	0.0320	0.024833	0.09	0.026535	0.09	0.031523	0.10	0.035000	0.10		
CLMH137W003MH137W031			2004		Existing	assumed Mannings N	MH137W003	MH137W031		T16436	IRWD	PVC	{70362DFF-D559-477F-A1B4-9AB46918FF00}	CLMH137W003MH137W031	466.18	458.84	0.666666667	MH137W003	MH137W031					230	CLMH137W003MH137W031	8	0.0320	0.022147	0.08	0.023658	0.09	0.028021	0.10	0.028922	0.10		
CLMH137W004MH137W003			2004		Existing	assumed Mannings N	MH137W004	MH137W003		T16436	IRWD	PVC	{F9C96484-A63D-4723-86A4-914E29F2D000}	CLMH137W004MH137W003	472.96	466.28	0.666666667	MH137W004	MH137W003					176	CLMH137W004MH137W003	8	0.0380	0.013509	0.06	0.014428	0.07	0.017108	0.07	0.019674	0.08		
CLMH137W005MH137W004			2004		Existing	assumed Mannings N	MH137W005	MH137W004		T16436	IRWD	PVC	{4AFA360C-BBF9-49F3-A6DB-5A9B43ABB21D}	CLMH137W005MH137W004	512.83	497.27	0.666666667	MH137W005	MH137W004					310	CLMH137W005MH137W004	8	0.0503	0.013511	0.06	0.014431	0.06	0.017109	0.07	0.015383	0.06		
CLMH137W006MH137W004			2004		Existing	assumed Mannings N	MH137W006	MH137W004		T16436	IRWD	PVC	{5CB017CD-3C76-4866-8162-08C90A0765EE}	CLMH137W006MH137W004	497.17	473.06	0.666666667	MH137W006	MH137W004					310	CLMH137W006MH137W004	8	0.0780	0.013510	0.05	0.014429	0.06	0.017108	0.06	0.019675	0.06		
CLMH137W007MH137W008			2007		Existing	assumed Mannings N	MH137W007	MH137W008		T15461	IRWD	PVC	{AD687808-100D-4E97-9FFB-859397384176}	CLMH137W007MH137W008	491.28	489.07	0.666666667	MH137W007	MH137W008					85	CLMH137W007MH137W008	8	0.0260	0.004231	0.04	0.004518	0.04	0.005358	0.05	0.012334	0.07		
CLMH137W008MH137W022			2007		Existing	assumed Mannings N	MH137W008	MH137W022		T15461	IRWD	PVC	{53FFC265-3E56-4B79-A7D4-74C9F36AD225}	CLMH137W008MH137W022	488.97	482.84	0.666666667	MH137W008	MH137W022					236	CLMH137W008MH137W022	8	0.0260	0.004231	0.04	0.004518	0.04	0.005358	0.05	0.012334	0.07		
CLMH137W009MH136N021			2007		Existing	assumed Mannings N	MH137W009	MH136N021		T15461	IRWD	PVC	{A86D5566-87FE-4F81-8FC8-68828519B4BF}	CLMH137W009MH136N021	447.15	427.72	0.666666667	MH137W009	MH136N021					263	CLMH137W009MH136N021	8	0.0740	0.012979	0.05	0.013855	0.06	0.016427	0.06	0.019870	0.07		
CLMH137W010MH137W009			2007		Existing	assumed Mannings N	MH137W010	MH137W009		T15461	IRWD	PVC	{4635AFE5-EC0A-4E3C-BA9A-3422F8BD981C}	CLMH137W010MH137W009	472.09	447.25	0.666666667	MH137W010	MH137W009					360	CLMH137W010MH137W009	8	0.0692	0.009329	0.05	0.009958	0.05	0.011808	0.05	0.019870	0.07		
CLMH137W011MH137W023			2007		Existing	assumed Mannings N	MH137W011	MH137W023		T15461	IRWD	PVC	{58B2FECD-F409-4C66-A9F9-4B42EAE1DA97}	CLMH137W011MH137W023	521.49	508.37	0.666666667	MH137W011	MH137W023					133	CLMH137W011MH137W023	8	0.0340	0.003175	0.03	0.003388	0.03	0.004017	0.04	0.003837	0.04		
CLMH137W012MH137W029			2007		Existing	assumed Mannings N	MH137W012	MH137W029		T15461	IRWD	PVC	{15D1BBB1-B490-46CC-A139-9E5F1ED02251}	CLMH137W012MH137W029	517.65	515.99	0.666666667	MH137W012	MH137W029					332	CLMH137W012MH137W029	8	0.0050	0.001434	0.03	0.001532	0.03	0.001823	0.04	0.002127	0.04		
CLMH137W013MH137W026			2007		Existing	assumed Mannings N	MH137W013	MH137W026		T15461	IRWD	PVC	{1A631257-A4D7-4851-84A0-E0C1E1A3C031}	CLMH137W013MH137W026	514.60	496.63	0.666666667	MH137W013	MH137W026					268	CLMH137W013MH137W026	8	0.0672	0.004616	0.03	0.004932	0.04	0.005862	0.04	0.004467	0.03		
CLMH137W014MH137W025			2007		Existing	assumed Mannings N	MH137W014	MH137W025		T15461	IRWD	PVC	{8CCB1C25-2DE6-4694-A3AA-FD9E43DAB824}	CLMH137W014MH137W025	495.86	475.20	0.666666667	MH137W014	MH137W025					351	CLMH137W014MH137W025	8	0.0590	0.004606	0.04	0.004922	0.04	0.005854	0.04	0.005447	0.04		
CLMH137W015MH137W017			2007		Existing	assumed Mannings N	MH137W015	MH137W017		T15461	IRWD	PVC	{03EE2169-78B6-4D26-9AA3-5182E6FF7733}	CLMH137W015MH137W017	544.52	535.59	0.666666667	MH137W015	MH137W017					248	CLMH137W015MH137W017	8	0.0360	0.008885	0.02	0.009046	0.02	0.011221	0.02	0.007168	0.05		
CLMH137W016MH137W015			2007		Existing	assumed Mannings N	MH137W016	MH137W015		T15461	IRWD	VCP	{A318F909-90E8-4AE0-ABBD-D62A6E983CE9}	CLMH137W016MH137W015	549.43	544.62	0.666666667	MH137W016	MH137W015					172	CLMH137W016MH137W015	8	0.0280	0.000885	0.02	0.000946	0.02	0.001121	0.02	0.007168	0.05		
CLMH137W017MH137W018			2007		Existing	assumed Mannings N	MH137W017	MH137W018		T15461	IRWD	PVC	{5E00E3A6-98F3-4655-BEEF-AD058CCFCF07}	CLMH137W017MH137W018	535.49	517.72	0.666666667	MH137W017	MH137W018					301	CLMH137W017MH137W018	8	0.0592	0.000885	0.02	0.000946	0.02	0.001121	0.02	0.007168	0.04		
CLMH137W018MH137W024			2007		Existing	assumed Mannings N	MH137W018	MH137W024		T15461	IRWD	PVC	{543E8F0A-7CE4-41CD-BDCC-914682340DAD}	CLMH137W018MH137W024	517.62	516.80	0.666666667	MH137W018	MH137W024					204	CLMH137W018MH137W024	8	0.0040	0.005398	0.07	0.005765	0.07	0.006834	0.08	0.007168	0.08		
CLMH137W019MH137W024			2007		Existing	assumed Mannings N	MH137W019	MH137W024		T15461	IRWD	PVC	{A48B5D27-7E37-4247-B5DF-DD119A27B826}	CLMH137W019MH137W024	519.39	516.70	0.666666667	MH137W019	MH137W024					197	CLMH137W019MH137W024	8	0.0138	0.003475	0.04	0.003712	0.04	0.004400	0.05	0.008215	0.06		
CLMH137W020MH137W028			2007		Existing	assumed Mannings N	MH137W020	MH137W028		T15461	IRWD	PVC	{74A7C651-916B-47AA-B770-46CC9A92CAB4}	CLMH137W020MH137W028	526.35	525.32	0.666666667	MH137W020	MH137W028					274	CLMH137W020MH137W028	8	0.0049	0.000539	0.02	0.000576	0.02	0.000684	0.02	0.002352	0.04		
CLMH137W021MH137W011			2007		Existing	assumed Mannings N	MH137W021	MH137W011		T15461	IRWD	PVC	{428783C3-BD1E-4F29-A45E-F0CA389FB474}	CLMH137W021MH137W011	530.38	521.59	0.666666667	MH137W021	MH137W011					314	CLMH137W021MH137W011	8	0.0280	0.001360	0.02	0.001452	0.02	0.001721	0.03	0.003837	0.04		
CLMH137W022MH137W010			2007		Existing	assumed Mannings N	MH137W022	MH137W010		T15461	IRWD	PVC	{109C9E06-852F-431A-8F91-C142791D7068}	CLMH137W022MH137W010	482.64	472.19	0.666666667	MH137W022	MH137W010					136	CLMH137W022MH137W010	8	0.0770	0.009325	0.05	0.009958	0.05	0.011808	0.05	0.019870	0.07		
CLMH137W023MH137W022			2007		Existing	assumed Mannings N	MH137W023	MH137W022		T15461	IRWD	PVC	{A6A54C1B-A2C5-422D-9A98-0D7D3F341031}	CLMH137W023MH137W022	508.17	482.74	0.666666667	MH137W023	MH137W022					340	CLMH137W023MH137W022	8	0.0709	0.005098	0.03	0.005440	0.04	0.006450	0.04	0.007535	0.04		
CLMH137W024MH137W027			2007		Existing	assumed Mannings N	MH137W024	MH137W027		T15461	IRWD	PVC	{BFE02D94-E9A1-4F6D-A9ED-C05D868725DF}	CLMH137W024MH137W027	516.60	514.82	0.666666667	MH137W024	MH137W027					296	CLMH137W024MH137W027	8	0.0060	0.008872	0.08	0.009476	0.08	0.011234	0.09	0.015383	0.10		
CLMH137W025MH137W003			2007		Existing	assumed Mannings N	MH137W025	MH137W003		T15461	IRWD	PVC	{CC2C768E-CE1A-4F91-B48A-B7A02A21C212}	CLMH137W025MH137W003	475.10	468.14	0.666666667	MH137W025	MH137W003					269	CLMH137W025MH137W003	8	0.0259	0.005580	0.05	0.005964	0.05	0.007098	0.05	0.009257	0.06		
CLMH137W026MH137W014			2007		Existing	assumed Mannings N	MH137W026	MH137W014		T15461	IRWD	PVC	{EBDF5C15-B1E8-49A3-B08C-D193813F7A28}	CLMH137W026MH137W014	496.53	495.96	0.666666667	MH137W026	MH137W014					115	CLMH137W026MH137W014	8	0.0050	0.004612	0.06	0.004928	0.06	0.005854	0.07	0.005457	0.07		
CLMH137W027MH137W005			2004		Existing	assumed Mannings N	MH137W027	MH137W005		T16436	IRWD	PVC	{5D143E65-1DB8-4FFA-A1C1-6969E1F8490}	CLMH137W027MH137W005	514.72	513.29	0.666666667	MH137W027	MH137W005					238	CLMH137W027MH137W005	8	0.0060	0.010360	0.09	0.011065	0.09	0.013120	0.10	0.015383	0.10		
CLMH137W028MH137W029			2007		Existing	assumed Mannings N	MH137W028	MH137W029		T15461	IRWD	PVC	{1728F F60-94B7-4EA6-81D3-0E04AD96935D}	CLMH137W028MH137W029	525.22	516.09	0.666666667	MH137W028	MH137W029					381	CLMH137W028MH137W029	8	0.0240	0.003195	0.04	0.003412	0.04	0.004047	0.04	0.002352	0.03		
CLMH137W029MH137W013			2007		Existing	assumed Mannings N	MH137W029	MH137W013		T15461	IRWD	VCP	{10660AFB-B03C-4DB7-99DA-26F3932F88D2}	CLMH137W029MH137W013	515.89	514.70	0.666666667	MH137W029	MH137W013					231	CLMH137W029MH137W013	8	0.0052	0.004620	0.06	0.004935	0.06	0.005864	0.07	0.004470	0.06		
CLMH137W031MH137W033			2007		Existing	assumed Mannings N	MH137W031	MH137W033		T15461	IRWD	VCP	{35203BA86-67C2-4B36-9A68-4F9E4B4B7C28}	CLMH137W031MH137W033	458.74	451.11	0.666666667	MH137W031	MH137W033					133	CLMH137W031MH137W033	8	0.0455	0.022141	0.08	0.023655	0.08	0.028077	0.09	0.028917	0.09		
CLMH137W032MH137W001			2004		Existing	assumed Mannings N	MH137W032	MH137W001		T16436	IRWD	PVC	{F2S5F5AS-3BCF-4C27-B0DF-1C103DA864BE}	CLMH137W032MH137W001	441.67	427.34	0.666666667	MH137W032	MH137W001					308	CLMH137W032MH137W001	8	0.0380	0.023175	0.08	0.024753	0.09	0.029398	0.09	0.032174	0.10		
CLMH137W033MH137W032			2004		Existing	assumed Mannings N	MH137W033	MH137W032		T16436	IRWD	PVC	{0B765566E-642B-4BAA-B8EF-96D1893558B4}	CLMH137W033MH137W032	451.01	441.77	0.666666667	MH137W033	MH137W032					206	CLMH137W033MH137W032	8	0.0450	0.023190	0.08	0.024775	0.08	0.029410	0.09	0.032192	0.09		
CLMH138I002MH138I003			1992		Existing	assumed Mannings N	MH138I002	MH138I003		A00756	IRWD	DIP	{FB38D006-63ED-4E12-8A78-DA01A977F8A1}	CLMH138I002MH138I003	156.89	156.77	0.666666667	MH138I002	MH138I003					42	CLMH138I002MH138I003	8	0.0029	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH138I003MH138I004			1992		Existing	assumed Mannings N	MH138I003	MH138I004		A00756	IRWD	VCP	{AD7A08B7-3EE6-476A-90CB-20FOCFD88F53}	CLMH138I003MH138I004	156.55	155.60	0.666666667	MH138I003	MH138I004					246	CLMH138I003MH138I004	8	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH138I004MH138N020			1992		Existing	assumed Mannings N	MH138I004	MH138N020		A00756	IRWD	DIP	{0B9D2F49-CA1A-45F8-BF67-3177E83E1F70}	CLMH138I004MH138N020	155.39	154.53	0.666666667	MH138I004	MH138N020					219	CLMH138I004MH138N020	8	0.0039	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH138I005MH138I004			1992		Existing	assumed Mannings N	MH138I005	MH138I004		A00756	IRWD	DIP	{EF3A6E35-C137-456F-BEDD-79ABD6AC38D7}	CLMH138I005MH138I004	0.00	152.60	155.50	0.666666667	MH138I005	MH138I004					141	CLMH138I005MH138I004	8	0.1315	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH138I008MH138I002			1988		Existing	assumed Mannings N	MH138I008	MH138I002		475	IRWD	VCP	{8E4AE4AC-3310-4156-A085-2B5B894E3665}	CLMH138I008MH138I002	164.97	164.95	1.000000000	MH138I008	MH138I002					297	CLMH138I008MH138I002	36	0.0013	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH138I009MH138I010			1995		Existing	assumed Mannings N	MH138I009	MH138I010		793	IRWD	DIP	{7EAFE4D3-DC4B-4E79-B9DE-7E0FE2359F33}	CLMH138I009MH138I010	173.77	173.19	2.000000000	MH138I009	MH138I010					205	CLMH138I009MH138I010	24	0.0028	0.628454	0.19	0.671207	0.20	0.795062	0.22	1.228725	0.25		
CLMH138I010MH138I011			1995		Existing	assumed Mannings N	MH138I010	MH138I011		793	IRWD	VCP	{BF1F8F32-5FF4-4CFC-9025-724B3413F5D4}	CLMH138I010MH138I011	173.16	171.49	2.000000000	MH138I010	MH138I011					405	CLMH138I010MH138I011	24	0.0041	0.883695	0.20	0.945662	0.21	1.121123	0.23	1.555045	0.27		
CLMH138I011MH138I012			1995		Existing	assumed Mannings N	MH138I011	MH138I012		793	IRWD	VCP	{6A457260-134B-4B01-BA27-B3170AC47352}	CLMH138I011MH138I012	171.27	169.64	2.000000000	MH138I011	MH138I012					184	CLMH138I011MH138I012	24	0.0037	0.883564	0.21	0.945520	0.22	1.120960	0.23	1.551798	0.28		
CLMH138I012MH138I013			1995		Existing	assumed Mannings N	MH138I012	MH138I013		793	IRWD	VCP	{EB18A904-334B-4E37-9020-709785A37B94}	CLMH138I012MH138I013	169.63	167.58	2.000000000	MH138I012	MH138I013					493	CLMH138I012MH138I013	24	0.0042	0.883413	0.20	0.945354	0.21	1.120771	0.23	1.549198	0.27		
CLMH138I013MH138I014			1995		Existing	assumed Mannings N	MH138I013	MH138I014		793	IRWD	VCP	{6A9E9943-3CAE-418E-81CC-B1AB22EEF374}	CLMH138I013MH138I014	167.57	166.64	2.000000000	MH138I013	MH138I014					226	CLMH138I013MH138I014	24	0.0041	0.904269	0.21	0.967764	0.21	1.147341	0.23	1.581416	0.27		
CLMH138I014MH138I015			1995		Existing	assumed Mannings N	MH138I014	MH138I015		793	IRWD	VCP	{80C73659-B20A-410A-A9E1-A854C080F8E0}	CLMH138I014MH138I015	166.63	166.05	2.000000000	MH138I014	MH138I015					144	CLMH138I014MH138I015	24	0.0040	0.904264	0.21	0.967759	0.21	1.147336	0.23	1.580714	0.28		
CLMH138I015MH138I016			1995		Existing	assumed Mannings N	MH138I015	MH138I008		793	IRWD	VCP	{D657CA64-1093-4CD4-855E-A1957499935}	CLMH138I015MH138I008	166.02	165.99	2.000000000	MH138I015	MH138I008					15	CLMH138I015MH138I008	24	0.0020	0.904268	0.21	0.967763	0.22	1.147340	0.24	1.580794	0.28		
CLMH138I016MH1395142			2007		Existing	assumed Mannings N	MH138I016	MH1395142		A007568	IRWD	PVC	{51090BF7-24CC-4CE7-ACA5-C2AC70BD944F}	CLMH138I016MH1395142	181.36	175.66	0.666666667	MH138I016	MH1395142					349	CLMH138I016MH1395142	8	0.0163	0.029456	0.11	0.035364	0.12	0.041925	0.13	0.035364	0.12		
CLMH138I017MH138I016			2007		Existing	assumed Mannings N	MH138I017	MH138I016		A007568	IRWD	PVC	{75511EA3-2C35-4832-B045-B2276914983E}	CLMH138I017MH138I016	181.89	181.56	0.666666667	MH138I017	MH138I016					37	CLMH138I017MH138I016	8	0.0089	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH138I018MH138I017			2007		Existing	assumed Mannings N	MH138I018	MH138I017		A007568	IRWD	PVC	{C13E4C7D-70F9-4393-B8F9-DFAE7CFEA4B7}	CLMH138I018MH138I017	183.19	182.09	0.666666667	MH138I018	MH138I017					114	CLMH138I018MH138I017	8	0.0096	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH138I020MH1395025			1985		Existing	assumed Mannings N	MH138I020	MH1395025		A00420A	IRWD	VCP	{65B5E948-6EA0-4A62-96F5-C19ACC841C62}	CLMH138I020MH1395025	165.23	165.07	3.500000000	MH138I020	MH1395025					76	CLMH138I020MH1395025	42	0.0021	3.025890	0.19	3.432025	0.20	4.062392	0.22	8.201085	0.32		
CLMH138I020MH1395025			1985		Existing	assumed Mannings N	MH138I020	MH1395025		475	IRWD	VCP	{F68842C4-E6E0-45CC-A57C-C42434A5C101}	CLMH138I020MH1395025	164.95	164.03	3.000000000	MH138I020	MH1395025					231	CLMH138I020MH1395025	36	0.0040	3.876963	0.25	4.300459	0.27	5.090020	0.29	9.753938	0.41		
CLMH138I024MH138I010			2008		Existing	assumed Mannings N	MH138I024	MH138I010		A00440C	IRWD	VCP	{38AACD01-6CB3-41D2-AF59-CD04DDE5D4CE}	CLMH138I010MH138I024	184.87	174.45	0.666666667	MH138I024	MH138I010					126	CLMH138I024MH138I010	8	0.0827	0.103094	0.15	0.123773	0.16	0.146740	0.17	0.123773	0.16		
CLMH138I025MH138I010			2008		Existing	assumed Mannings N	MH138I025	MH138I010		A002163	IRWD	PVC	{4C299656-521C-421B-B54B-EB960C91BDF0}	CLMH138I025MH138I010	174.56	173.30	1.333333333	MH138I025	MH138I010					287	CLMH138I025M

CLMH138N022MH138N021		1976		Existing		MH138N022	MH138N021		420	IRWD	VCP	{A6EF59A8-DCA1-46CE-A8F1-810E9846188Z}	CLMH138N022MH138N021	158.02	157.70	1.000000000	MH138N022	MH138N021			104	CLMH138N022MH138N021	36	0.0031	4.173584	0.27	4.611434	0.29	5.457858	0.31	10.629421	0.44
CLMH138N024MH138N025		1987		Existing		MH138N024	MH138N025		540	IRWD	VCP	{7D241105-F73D-46A3-9749-B6689A492016}	CLMH138N024MH138N025	162.22	160.86	0.833333333	MH138N024	MH138N025			344	CLMH138N024MH138N025	10	0.0040	0.007706	0.06	0.008226	0.06	0.009753	0.07	0.008226	0.06
CLMH138N025MH138N039		1987		Existing		MH138N025	MH138N039		540	IRWD	VCP	{75385ACF-57DA-4593-AB9F-E64CD4ABE1F2}	CLMH138N025MH138N039	160.77	158.61	0.833333333	MH138N025	MH138N039			322	CLMH138N025MH138N039	10	0.0067	0.011289	0.07	0.012052	0.07	0.014288	0.08	0.012052	0.07
CLMH138N027MH138N031		1987		Existing		MH138N027	MH138N031		A006553	IRWD	VCP	{C850F0AA-D307-4E65-BA2F-F61DE5D70F4}	CLMH138N027MH138N031	156.13	149.08	0.833333333	MH138N027	MH138N031			293	CLMH138N027MH138N031	10	0.0241	0.025981	0.08	0.027737	0.08	0.032884	0.09	0.027737	0.08
CLMH138N028MH138N037		1987		Existing		MH138N028	MH138N037		579	IRWD	VCP	{1B0CCBD7-CA1C-4555-ACB8-E2537C4C64DE}	CLMH138N028MH138N037	146.61	145.58	0.833333333	MH138N028	MH138N037			262	CLMH138N028MH138N037	10	0.0039	0.034068	0.13	0.036373	0.13	0.043121	0.14	0.036373	0.13
CLMH138N029MH138N028		1987		Existing		MH138N029	MH138N028		579	IRWD	VCP	{F4CF64C1-8525-4F6E-A27E-08242E00E38Z}	CLMH138N029MH138N028	148.52	146.77	0.666666667	MH138N029	MH138N028			88	CLMH138N029MH138N028	8	0.0199	0.007300	0.06	0.007794	0.06	0.009240	0.06	0.007794	0.06
CLMH139N010MH139N029		1988		Existing		MH139N030	MH139N029		A00595	IRWD	VCP	{CC034EEF-B6C7-44F8-A886-F8A756DA169A}	CLMH139N030MH139N029	148.88	148.63	0.666666667	MH139N030	MH139N029			60	CLMH139N030MH139N029	8	0.0042	0.007300	0.08	0.007794	0.08	0.009240	0.09	0.007794	0.08
CLMH138N031MH138N032		1988		Existing		MH138N031	MH138N032		A00653	IRWD	VCP	{94D47373-39A3-41F4-BC31-D8BE5EAC50B1}	CLMH138N031MH138N032	148.99	145.94	0.833333333	MH138N031	MH138N032			294	CLMH138N031MH138N032	10	0.0104	0.025981	0.09	0.027737	0.10	0.032884	0.10	0.027737	0.10
CLMH138N032MH124E056		1988		Existing		MH138N032	MH124E056		A00653	IRWD	VCP	{0A648FA3-ED50-40D3-979B-DE46C446326C}	CLMH138N032MH124E056	145.83	143.86	0.833333333	MH138N032	MH124E056			304	CLMH138N032MH124E056	10	0.0065	0.025981	0.10	0.027737	0.11	0.032884	0.12	0.027737	0.11
CLMH138N033MH138W001		1976		Existing		MH138N033	MH138W001		064	IRWD	VCP	{EC5DED85-688E-4743-8F46-47B1E67A7415}	CLMH138N033MH138W001	145.46	144.94	3.500000000	MH138N033	MH138W001			240	CLMH138N033MH138W001	42	0.0022	4.294130	0.24	4.754132	0.25	5.629117	0.27	10.986760	0.38
STMH138N035MH138N025		1987		Existing		MH138N035	MH138N025		540	IRWD	VCP	{6EAF1FA2-ABA3-4C21-996D-43BD0EF4B3E9}	STMH138N035MH138N025	161.47	161.05	0.666666667	MH138N035	MH138N025			106	STMH138N035MH138N025	8	0.0040	0.003583	0.06	0.003826	0.06	0.004535	0.06	0.003826	0.06
CLMH138N037MH124E018		1987		Existing		MH138N037	MH124E018		579	IRWD	VCP	{F5ABD368-34FE-4C74-9A7B-55D41FFE9F8B}	CLMH138N037MH124E018	145.47	144.50	0.833333333	MH138N037	MH124E018			246	CLMH138N037MH124E018	10	0.0039	0.034068	0.13	0.036373	0.13	0.043121	0.14	0.036373	0.13
CLMH138N038MH124E027		1988		Existing		MH138N038	MH124E027		A00595	IRWD	VCP	{4F4863B8-9038-4871-8F40-E734CC347937}	CLMH138N038MH124E027	150.27	149.80	0.666666667	MH138N038	MH124E027			8	0.0036	0.007300	0.08	0.007794	0.08	0.009240	0.09	0.007794	0.08
CLMH138N039MH138N027		1987		Existing		MH138N039	MH138N027		540	IRWD	VCP	{57975E8E8-8DBB-4C36-9004-3F298EE40CD1}	CLMH138N039MH138N027	158.50	156.33	0.833333333	MH138N039	MH138N027			316	CLMH138N039MH138N027	10	0.0069	0.011289	0.07	0.012052	0.07	0.014288	0.08	0.012052	0.07
CLMH138N040MH138N041		2008		Existing	assumed Mannings N	MH138N040	MH138N041		A00981D	IRWD	PVC	{E48CEF77-786D-4B84-8DC9-1F01249FE91F}	CLMH138N040MH138N041	185.44	178.55	1.250000000	MH138N040	MH138N041			392	CLMH138N040MH138N041	15	0.0176	0.164043	0.11	0.196836	0.12	0.233408	0.13	0.367925	0.17
CLMH138N041MH138W141		2008		Existing	assumed Mannings N	MH138N041	MH138W141		A00981D	IRWD	PVC	{5CFA595C-872B-4610-917F-6B1E08336C9B}	CLMH138N041MH138W141	178.45	166.34	1.250000000	MH138N041	MH138W141			339	CLMH138N041MH138W141	15	0.0357	0.164036	0.10	0.196831	0.10	0.233407	0.11	0.385583	0.16
CLMH135001MH137E001		2002		Existing	assumed Mannings N	MH135001	MH137E001		T16301	IRWD	PVC	{2DA63200-21CB-6676-854A-604CC811F27A}	CLMH135001MH137E001	349.97	346.82	0.666666667	MH135001	MH137E001			185	CLMH135001MH137E001	8	0.0170	0.003017	0.04	0.003624	0.04	0.004294	0.05	0.003624	0.04
CLMH135002MH137E003		2002		Existing	assumed Mannings N	MH135002	MH137E003		T16301	IRWD	PVC	{65279217A-EC4C-4FD6-A618-B65728ZF6F2C}	CLMH135002MH137E003	351.01	346.86	0.666666667	MH135002	MH137E003			399	CLMH135002MH137E003	8	0.0104	0.006221	0.06	0.007467	0.07	0.008854	0.07	0.007467	0.07
CLMH135007MH138S008		2008		Existing	assumed Mannings N	MH135007	MH138S008		A00981D	IRWD	PVC	{4E3E8DFE-36DA-4BFA-B4BF-006E3500C51A}	CLMH135007MH138S008	203.63	200.53	1.250000000	MH135007	MH138S008			310	CLMH135007MH138S008	15	0.0100	0.164074	0.13	0.196859	0.14	0.233423	0.15	0.369209	0.19
CLMH135008MH138S009		2008		Existing	assumed Mannings N	MH135008	MH138S009		A00981D	IRWD	PVC	{C48CD179-D441-47D3-9294-12E8702418F}	CLMH135008MH138S009	200.43	194.25	1.250000000	MH135008	MH138S009			375	CLMH135008MH138S009	15	0.0165	0.164064	0.12	0.196852	0.13	0.233418	0.14	0.368773	0.17
CLMH135009MH138N040		2008		Existing	assumed Mannings N	MH135009	MH138N040		A00981D	IRWD	PVC	{66C1F68F-CE87-4876-9EE0-94CD532D5026}	CLMH135009MH138N040	194.15	185.54	1.250000000	MH135009	MH138N040			391	CLMH135009MH138N040	15	0.0220	0.164055	0.11	0.196844	0.12	0.233414	0.13	0.368368	0.16
CLMH135010MH138S014		2008		Existing	assumed Mannings N	MH135010	MH138S014		A00981D	IRWD	PVC	{D2863C1F-3909-4C2A-B88F-A88BC0604680}	CLMH135010MH138S014	215.00	211.33	1.000000000	MH135010	MH138S014			368	CLMH135010MH138S014	12	0.0100	0.164099	0.17	0.196880	0.19	0.233433	0.21	0.294322	0.23
CLMH135013MH138S010		2008		Existing	assumed Mannings N	MH135013	MH138S010		A00981D	IRWD	PVC	{6FCAFCB6-386F-42D8-9F96-2B6CF1218E65}	CLMH135013MH138S010	238.89	215.20	1.000000000	MH135013	MH138S010			266	CLMH135013MH138S010	12	0.0893	0.164104	0.10	0.196886	0.11	0.233436	0.12	0.294550	0.14
CLMH135014MH138S015	UFF13	2008		Existing	assumed Mannings N	MH135014	MH138S015		A00981D	IRWD	PVC	{C35E9065-6FC5-4953-B95D-E65A7754E3A6}	CLMH135014MH138S015	211.13	207.48	1.250000000	MH135014	MH138S015			365	CLMH135014MH138S015	15	0.0100	0.164092	0.13	0.196873	0.14	0.233430	0.15	0.334613	0.18
CLMH135015MH138S007		2008		Existing	assumed Mannings N	MH135015	MH138S007		A00981D	IRWD	PVC	{D7488EB8-EE32-4DF7-843E-37FA9QC8159}	CLMH135015MH138S007	207.38	203.73	1.250000000	MH135015	MH138S007			365	CLMH135015MH138S007	15	0.0100	0.164082	0.13	0.196866	0.14	0.233426	0.15	0.333985	0.18
CLMH135016MH138S035		2010		Existing	assumed Mannings N	MH135016	MH138S035		T17179A	IRWD	PVC	{A68FC189-A74C-49C4-A7B3-1673CB7C7263}	CLMH135016MH138S035	268.03	263.94	0.666666667	MH135016	MH138S035			356	CLMH135016MH138S035	8	0.0115	0.033195	0.13	0.039692	0.14	0.047052	0.15	0.149832	0.27
CLMH135017MH138S018		2010		Existing	assumed Mannings N	MH135017	MH138S018		T17179	IRWD	PVC	{7FCE58FC-935B-489A-ACA2-5E6EB8BC65CB}	CLMH135017MH138S018	261.65	261.47	0.666666667	MH135017	MH138S018			43	CLMH135017MH138S018	8	0.0042	0.033217	0.16	0.039714	0.18	0.047077	0.19	0.154160	0.35
CLMH135018MH138S037		2010		Existing	assumed Mannings N	MH135018	MH138S037		T17179	IRWD	PVC	{839CF938-CB7A-4D40-A53A-0BC037370161}	CLMH135018MH138S037	261.37	258.70	0.666666667	MH135018	MH138S037			224	CLMH135018MH138S037	8	0.0119	0.033217	0.13	0.039714	0.14	0.047076	0.15	0.154081	0.28
CLMH135019MH138S020		2010		Existing	assumed Mannings N	MH135019	MH138S020		T17179	IRWD	PVC	{037E3FEC-7B9C-4943-9F3D-569F14E7AAC1}	CLMH135019MH138S020	255.82	251.10	0.833333333	MH135019	MH138S020			245	CLMH135019MH138S020	10	0.0245	0.088148	0.13	0.105685	0.14	0.125274	0.16	0.192036	0.19
CLMH135020MH138S021		2010		Existing	assumed Mannings N	MH135020	MH138S021		T17179	IRWD	PVC	{64AB5AB9-E9F9-4EB0-AEB8-8A26C71A99A8}	CLMH135020MH138S021	250.90	243.31	0.833333333	MH135020	MH138S021			316	CLMH135020MH138S021	10	0.0241	0.107184	0.14	0.128529	0.16	0.152382	0.17	0.217963	0.20
CLMH135021MH138S025		2010		Existing	assumed Mannings N	MH135021	MH138S025		T17179	IRWD	PVC	{78CBFD53-BE56-4142-BA95-D50F52E3B2A2}	CLMH135021MH138S025	243.11	242.51	1.000000000	MH135021	MH138S025			119	CLMH135021MH138S025	12	0.0050	0.155733	0.20	0.186829	0.22	0.221506	0.24	0.282392	0.27
CLMH135022MH138S023		2010		Existing	assumed Mannings N	MH135022	MH138S023		T17179	IRWD	PVC	{A1765DC8-01CC-408E-9738-E1391DA4456}	CLMH135022MH138S023	245.17	243.31	0.666666667	MH135022	MH138S023			315	CLMH135022MH138S023	8	0.0059	0.000002	0.17	0.048037	0.18	0.056953	0.20	0.052082	0.19
CLMH135023MH138S025		2010		Existing	assumed Mannings N	MH135023	MH138S025		T17179	IRWD	PVC	{5332ECE56-DE2E-4655-9C63-DE89DE3269CD}	CLMH135023MH138S025	263.43	242.84	0.666666667	MH135023	MH138S025			50	CLMH135023MH138S025	8	0.4476	0.000859	0.01	0.001030	0.01	0.001220	0.01	0.002154	0.02
CLMH135024MH138S025		2010		Existing	assumed Mannings N	MH135024	MH138S025		T17179	IRWD	PVC	{6BF388F9-5E6A-4847-B650-C5EF66DC8546}	CLMH135024MH138S025	263.54	242.84	0.666666667	MH135024	MH138S025			8	3.6231	0.000986	0.01	0.001130	0.01	0.001340	0.01	0.001987	0.02
CLMH135025MH138S026		2010		Existing	assumed Mannings N	MH135025	MH138S026		T17179	IRWD	PVC	{159A2053-5D8C-4DB1-8E68-A23B865F581B}	CLMH135025MH138S026	242.41	241.71	1.000000000	MH135025	MH138S026			141	CLMH135025MH138S026	12	0.0050	0.157528	0.20	0.188988	0.22	0.224065	0.24	0.286362	0.27
CLMH135026MH138S031		2010		Existing	assumed Mannings N	MH135026	MH138S031		T17179	IRWD	PVC	{C91C498D-2687-479F-ABDB-1407CE23102B}	CLMH135026MH138S031	241.61	240.90	1.000000000	MH135026	MH138S031			144	CLMH135026MH138S031	12	0.0050	0.180451	0.20	0.192499	0.22	0.228231	0.24	0.289223	0.27
CLMH135027MH138S026		2010		Existing	assumed Mannings N	MH135027	MH138S026	changed length to exclu	T17179	IRWD	PVC	{4A73EC94-421D-4A49-A177-8F26F81DA3D7}	CLMH135027MH138S026	265.00	242.04	0.666666667	MH135027	MH138S026			52	CLMH135027MH138S026	8	0.4938	0.001421	0.01	0.001705	0.01	0.002023	0.01	0.001551	0.01
CLMH135028MH138S026		2010		Existing	assumed Mannings N	MH135028	MH138S026		T17179	IRWD	PVC	{A9210AA1-9BA1-4D50-908E-61F476D84172}	CLMH135028MH138S026	265.11	242.04	0.666666667	MH135028	MH138S026			62	CLMH135028MH138S026	8	0.4035	0.001505	0.01	0.001808	0.01	0.002143	0.02	0.001462	0.01
CLMH135029MH138S031		2010		Existing	assumed Mannings N	MH135029	MH138S031	changed length to exclu	T17179	IRWD	PVC	{D3023AD0-83D2-4300-A171-C2C0E1EB7BFE}	CLMH135029MH138S031	266.54	241.23	0.666666667	MH135029	MH138S031			58	CLMH135029MH138S031	8	0.4867	0.001150	0.01	0.001380	0.01	0.001637	0.01	0.001498	0.01
CLMH135030MH138S031		2010		Existing	assumed Mannings N	MH135030	MH138S031	changed length to exclu	T17179	IRWD	PVC	{9ABF0A8C-E797-4878-86E5-197B94B71B71}	CLMH135030MH138S031	266.65	241.23	0.666666667	MH135030	MH138S031			63	CLMH135030MH138S031	8	0.4465	0.001061	0.01	0.001250	0.01	0.001484	0.01	0.001389	0.01
CLMH135031MH138S032		2010		Existing	assumed Mannings N	MH135031	MH138S032		T17179	IRWD	PVC	{39C74938-E642-45DB-907F-A5BF4A8E3D68}	CLMH135031MH138S032	240.80	240.16	1.000000000	MH135031	MH138S032			129	CLMH135031MH138S032	12	0.0050	0.162413	0.21	0.194856	0.22	0.231027	0.24	0.291923	0.28
CLMH135032MH138S013		2010		Existing	assumed Mannings N	MH135032	MH138S013		T17179	IRWD	PVC	{5646CB65-3320-41C5-82C5-6671CA1FAACF}	CLMH135032MH138S013	239.96	239.10	1.000000000	MH135032	MH138S013			21	CLMH135032MH138S013	12	0.0419	0.163123	0.12	0.195708	0.13	0.232039	0.15	0.293294	0.16
CLMH135033MH138S032		2010		Existing	assumed Mannings N	MH135033	MH138S032		T17179	IRWD	PVC	{D4D86696-0998-448A-B0C5-D111CF9938B8}	CLMH135033MH138S032	267.98	240.49	0.666666667	MH135033	MH138S032			58	CLMH135033MH138S032	8	1.5372	0.001042	0.01	0.001253	0.01	0.001488	0.01	0.001464	0.01
CLMH135034MH138S013		2010		Existing	assumed Mannings N	MH135034	MH138S013		T17179	IRWD	PVC	{495C2F81-4AA5-478B-AC97-D0BFA348AD2A}	CLMH135034MH138S013	265.80	239.43	0.666666667	MH135034	MH138S013			40	CLMH135034MH138S013	8	0.8861	0.000982	0.01	0.001179	0.01	0.001397	0.01	0.001402	0.01
CLMH135035MH138S036		2010		Existing	assumed Mannings N	MH135035	MH138S036		T17179	IRWD	PVC	{90990679-EC38-436D-8AB8-F06CD61FA01D}	CLMH135035MH138S036	263.84	262.35	0.666666667	MH135035	MH138S036			83	CLMH135035MH138S036	8	0.0055	0.033217	0.16	0.039714	0.17	0.047077	0.18	0.149835	0.33
CLMH135036MH138S017		2010		Existing	assumed Mannings N	MH135036	MH138S017		T17179	IRWD	PVC	{76985000-3FD8-4F84-BA66-4CD08A40C859}	CLMH135036MH138S017	262.25	261.75	0.666666667	MH135036	MH138S017			126	CLMH135036MH138S017	8	0.0040	0.033217	0.16	0.039714	0.18	0.047077	0.19	0.154180	0.35
CLMH135037MH138S019		2010		Existing	assumed Mannings N	MH135037	MH138S019		T17179	IRWD	PVC	{165B88ED-5022-4C83-A41A-1D7D73952FAB}	CLMH135037MH138S019	258.60	256.02	0.833333333	MH135037	MH138S019			141	CLMH135037MH138S019	10	0.0183	0.062896	0.12	0.075300	0.13	0.089327	0.14	0.170736	0.19
CLMH135038MH138S019		2010		Existing	assumed Mannings N	MH135038	MH138S019		T17179	IRWD	PVC	{FB073365-F32B-4125-AA15-600C698DD8BC}	CLMH135038MH138S019	262.37	256.02	0.666666667	MH135038	MH138S019			8	0.2029	0.025253	0.10	0.030315	0.11	0.035947	0.11	0.021339	0.09
CLMH135041MH138S048		2011		Existing	assumed Mannings N	MH135041	MH138S048		T17371	IRWD	PVC	{68892860-0141-45F6-B8AA-6D45147563SA}	CLMH135041MH138S048	273.62	269.13	0.666666667	MH135041	MH138S048			316	CLMH135041MH138S048	8	0.0142	0.010953	0.07	0.013152	0.08	0.015592	0.09	0.003978	0.05
CLMH135042MH138S043		2011		Existing	assumed Mannings N	MH135042	MH138S043		T17371	IRWD	PVC	{CA641099-6560-4D0C-B8CE-BEC42F4FAFA}	CLMH135042MH138S043	271.23	270.93	0.500000000	MH135042	MH138S043			30	CLMH135042MH138S043	6	0.0100	0.003490	0.07	0.004192	0.07	0.004970	0.08	0.004358	0.07
CLMH135043MH138S044		2011		Existing	assumed Mannings N	MH135043	MH138S044		T17371	IRWD	PVC	{524860F3-212E-48FF-83C9-C22AD69B16B9}	CLMH135043MH138S044	270.73	270.31	0.666666667	MH135043	MH138S044			104	CLMH135043MH138S044	8	0.0040	0.009908	0.09	0.011896	0.10	0.014105	0.11	0.008928	0.09
CLMH135044MH138S038		2011		Existing	assumed Mannings N	MH135044	MH138S038		T17371	IRWD	PVC	{DAFBDC45-8001-42B5-A3A8-B16A12673588}	CLMH135044MH138S038	270.11	262.57	0.666666667	MH135044	MH138S038			152	CLMH135044MH138S038	8	0.0497	0.025253	0.08	0.030315	0.09	0.035947	0.10	0.021339	0.07
CLMH135045MH138S044		2011		Existing	assumed Mannings N	MH135045	MH138S044		T17371	IRWD	PVC	{0DCF7834-F932-4C44-B7F2-5A0A2584FA8E}	CLMH135045MH138S044	271.84	270.31	0.666666667	MH135045	MH138S044			87	CLMH135045MH138S044	8	0.0177	0.015344	0.08	0.018419	0.09	0.021842	0.10	0.012411	0.07
CLMH135046MH138S045		2011		Existing	assumed Mannings N	MH135046	MH138S045		T17371	IRWD	PVC	{E76C0E5E-443C-4A07-A12A-5AD8B8BF4F4B}	CLMH135046MH138S045	272.34	272.04	0.500000000	MH135046	MH138S045			30	CLMH135046MH138S045	6	0.0100	0.002278	0.05	0.002735	0.06	0.003243	0.06	0.006230	0.09
CLMH135047MH138S048		2011		Existing	assumed Mannings N	MH135047	MH138S048		T17371	IRWD	PVC	{9C2052D4-24C0-4182-ACEB-199733F39EF3}	CLMH135047MH138S048	269.43	269.13	0.500000000	MH135047	MH138S048			30	CLMH135047MH138S048	6	0.0100	0.004410	0.07	0.005294	0.08	0.006277	0.09	0.004459	0.07
CLMH135048MH138S049		2011		Existing	assumed Mannings N	MH135048	MH138S049		T17371	IRWD	PVC	{DF490A54-8E10-4C6A-B928-938075E293B7}	CLMH135048MH138S049	268.93	268.56	0.666666667	MH135048	MH138S049			92	CLMH135048MH138S049	8	0.0040	0.015363	0.11	0.018447	0.12	0.021869	0.13	0.008437	0.08
CLMH135049MH138S037		2011		Existing	assumed Mannings N	MH135049	MH138S037		T17371	IRWD	PVC	{1E42AABD-776D-4B1E-8CBA-F0D5516670D0}	CLMH135049MH138S037	268.36	258.80	0.666666667	MH135049	MH138S037			144	CLMH135049MH138S037	8	0.0630	0.029682	0.08	0.035617	0.09	0.042572	0.10	0.016686	0.06
CLMH135050MH138S051		2011		Existing	assumed Mannings N	MH135050	MH138S051		T17371	IRWD	PVC	{C485F7A3-6CEF-4AD6-A4C1-5A5E58A8A7A7}	CLMH135050MH138S051	270.83	270.53	0.500000000	MH135050	MH138S051			30	CLMH135050MH138S051	6	0.0100	0.004013	0.07	0.004818	0.08	0.005713	0.08	0.003399	0.07
CLMH135051MH138S049		2011		Existing	assumed Mannings N	MH135051	MH138S049		T17371	IRWD	PVC	{44833B58-1675-447F-8EAB-FDDDD8AF569B}	CLMH135051MH138S049	270.33	268.56	0.666666667	MH135051	MH138S049			99	CLMH135051MH138S049	8	0.0180	0.014318	0.08	0.017190	0.09	0.020382	0.09	0.008249	0.06
CLMH135052MH138S051		2011		Existing	assumed Mannings N	MH135052	MH138S051		T17371	IRWD	PVC	{76CA60EC-A558-47DE-8563-A6F883C83B85}	CLMH135052MH138S051	274.58	270.53	0.666666667	MH135052	MH138S051			316	CLMH135052MH138S051	8	0.0128	0.010306	0.07	0.012373	0.08	0.014669	0.09	0.004850	0.05
CLMH135057MH138S058		2011		Existing	assumed Mannings N	MH135057	MH138S058		T17371	IRWD	PVC	{52E7C069-938C-4104-AAA5-0D1073952FAB}	CLMH135057MH138S058	257.65	256.24	0.666666667	MH135057	MH138S058			141	CLMH135057MH138S058	8	0.0100	0.001547	0.03	0.001857	0.03	0.002203	0.04	0.001284	0.03
CLMH135058MH138S051		2011		Existing	assumed Mannings N	MH135058	MH138S051		T17371	IRWD	PVC	{8859267D-AC38-4B6F-B168-892D897FEB9B}	CLMH135058MH138E051	256.00	252.73	0.666666667	MH135058	MH138E051			125	CLMH135058MH138E051	8	0.0269	0.002236	0.03	0.002686	0.03	0.003186	0.04	0.002709	0.03
CLMH135059MH138S065		2011		Existing	assumed Mannings N	MH135059	MH138S065		T17373	IRWD	PVC	{103BA0B3-BAE1-46F0-ACC7-E250152CE20F}	CLMH135059MH138S065	264.42	263.14	0.666666667	MH135059	MH138S065			128	CLMH135059MH138S065	8	0.0100	0.000376	0.01	0.000451	0.01	0.000536	0.02	0.002107	0.04
CLMH135060MH138S066		2011		Existing	assumed Mannings N	MH135060	MH138S066		T17373	IRWD	PVC	{CD98AE34-AFDA-4881-BA1D-A7376B2B0354}	CLMH135060MH138S066	262.14	260.86	0.666666667	MH135060	MH138S066			128	CLMH135060MH138S066	8	0.0100	0.001045	0.02	0.001254	0.03	0.001487	0.03	0.001094	0.02
CLMH135061MH138S067		2011		Existing	assumed Mannings N	MH135061	MH138S067		T17373	IRWD	PVC	{F9BCC054-32F1-426A-BAC2-BA42CE92F218}	CLMH135061MH138S067	258.46	257.03	0.666666667	MH135061	MH138S067			128	CLMH135061MH138S067	8	0.0112	0.001735	0.03	0.002083	0.04	0.002470	0.04	0.001540	0.03
CLMH135062MH138S065		2011		Existing	assumed Mannings N	MH135062	MH138S065		T17373	IRWD	PVC	{8A8095A1C-6FCD-466D-8B9B-E4633E675404}	CLMH135062MH138S065	264.54	263.14	0.666666667	MH135062	MH138S065			140	CLMH135062MH138S065	8	0.0100	0.001129	0.02	0.001355	0.03	0.001607	0.03	0.001825	0.03
CLMH135063MH138S066		2011		Existing	assumed Mannings N	MH135063	MH138S066		T17373	IRWD	PVC	{C3E54515-07C7-4E1C-B280-E193308F5B8C}	CLMH135063MH138S066	262.26	260.86	0.666666667	MH135063	MH138S066			140	CLMH135063MH138S066	8	0.0100	0.001609	0.03	0.001934	0.03	0.002290	0.04	0.001019	0.02
CLMH135064MH138S067		2011		Existing	assumed Mannings N	MH135064	MH138S067		T17373	IRWD	PVC	{F48C48AB-2B4D-4782-BC2E-D4D0553EC173}	CLMH135064MH138S067	258.58	257.03	0.666666667	MH135064	MH138S067			140	CLMH135064MH138S067	8	0.0111	0.001463	0.03	0.001756	0.03	0.002083	0.04	0.001434	0.03
CLMH135065MH138S066		2011		Existing	assumed Mannings N	MH135065	MH138S066		T17373	IRWD	PVC	{337B3122-FF99-491D-BC74-BF5C680FD8A3}	CLMH135065MH138S066	262.91	260.76	0.666666667	MH135065	MH138S066			133	CLMH135065MH138S066	8	0.0162	0.001505	0.03	0.001805	0.03	0.002143	0.03	0.003931	0.04
CLMH135066MH138S067		2011		Existing	assumed Mannings N	MH135066	MH138S067		T17373	IRWD	PVC	{04D2FE5E-2838-45D9-B073-A26A4BE5C461}	CLMH135066MH138S067	260.66	256.93	0.666666667	MH135066	MH138S067			133	CLMH135066MH138S067	8	0.0281	0.004159	0.04	0.004993	0.04	0.005920	0.05	0.006044	0.05
CLMH135067MH138S022		2011		Existing	assumed Mannings N	MH135067	MH138S022		T17373	IRWD	PVC	{2866046E-705D-4D50-A595-98168DCAD86D}	CLMH135067MH138S022	256.83	245.37	0.666666667	MH135067	MH138S022			114	CLMH135067MH138S022	8	0.1007	0.007357	0.04	0.008832	0.04	0.010473	0.05	0.009018	0.04
CLMH135068MH138S034		2011		Existing	assumed Mannings N	MH135068	MH138S034		T17370	IRWD	PVC	{111307A7-E8F4-45D7-B159-DA373ECD1161}	CLMH135068MH138S034	267.95	266.05	0.666666667	MH135068	MH138S034			68	CLMH135068MH138S034	8	0.0281	0.000439	0.01	0.000528	0.01	0.000624	0.01	0.001402	0.02
CLMH135069MH138S029		2011		Existing	assumed Mannings N	MH135069	MH138S029		T17370	IRW

CLMH138W053MH1245076		2002		Existing	assumed Mannings N	MH138W053	MH1245076		T16225	IRWD	PVC	{28EA38A7-F031-434E-AF32-F27FE10B18CE}	CLMH138W053MH1245076	181.50	180.10	0.666666667	MH138W053	MH1245076					279	CLMH138W053MH1245076	8	0.0050	0.008592	0.08	0.010315	0.09	0.012229	0.10	0.010315	0.09		
CLMH138W058MH1245106		2003		Existing	assumed Mannings N	MH138W058	MH1245106		T16435	IRWD	PVC	{B67686A5-613C-41BD-96F0-0740E07F595B}	CLMH138W058MH1245106	186.25	184.96	0.666666667	MH138W058	MH1245106					119	CLMH138W058MH1245106	8	0.0108	0.016239	0.09	0.019500	0.10	0.023115	0.11	0.019500	0.10		
CLMH138W059MH138W058		2003		Existing	assumed Mannings N	MH138W059	MH138W058		T16435	IRWD	PVC	{399361C5-460C-4279-ACD5-297EEC8908D7}	CLMH138W059MH138W058	188.25	186.35	0.666666667	MH138W059	MH138W058					117	CLMH138W059MH138W058	8	0.0162	0.014923	0.08	0.017919	0.09	0.021241	0.10	0.017919	0.09		
CLMH138W060MH138W059		2003		Existing	assumed Mannings N	MH138W060	MH138W059		T16435	IRWD	PVC	{1DBDBFF0-4F02-4202-9DB3-07F1A0606682}	CLMH138W060MH138W059	189.42	188.44	0.666666667	MH138W060	MH138W059					118	CLMH138W060MH138W059	8	0.0083	0.013961	0.09	0.016765	0.10	0.019872	0.11	0.016765	0.10		
CLMH138W061MH138W060		2003		Existing	assumed Mannings N	MH138W061	MH138W060		T16435	IRWD	PVC	{A70F1559-2330-4B1B-BFDA-90CBE5A0DDFD}	CLMH138W061MH138W060	190.05	189.63	0.666666667	MH138W061	MH138W060					86	CLMH138W061MH138W060	8	0.0049	0.012916	0.10	0.015511	0.11	0.018385	0.12	0.015511	0.11		
CLMH138W062MH138W061		2003		Existing	assumed Mannings N	MH138W062	MH138W061		T16435	IRWD	PVC	{C8966SDE-90B5-4743-9712-799F07B36F86}	CLMH138W062MH138W061	190.91	190.25	0.666666667	MH138W062	MH138W061					133	CLMH138W062MH138W061	8	0.0050	0.011014	0.09	0.013227	0.10	0.015678	0.11	0.013227	0.10		
CLMH138W063MH138W062		2003		Existing	assumed Mannings N	MH138W063	MH138W062		T16435	IRWD	PVC	{C580C7F8-1BCA-442E-8DE3-3140608E3CDD4}	CLMH138W063MH138W062	193.62	193.13	0.666666667	MH138W063	MH138W062					109	CLMH138W063MH138W062	8	0.0185	0.008569	0.06	0.010292	0.07	0.012197	0.07	0.010292	0.07		
CLMH138W064MH138W063		2003		Existing	assumed Mannings N	MH138W064	MH138W063		T16435	IRWD	PVC	{80198B7B-B371-4966-B89E-89A205269AB9}	CLMH138W064MH138W063	194.36	193.22	0.666666667	MH138W064	MH138W063					107	CLMH138W064MH138W063	8	0.0107	0.007043	0.06	0.008458	0.07	0.010025	0.08	0.008458	0.07		
CLMH138W065MH138W066		2003		Existing	assumed Mannings N	MH138W065	MH138W066		T16435	IRWD	PVC	{F23D775B-1D8D-41A1-8B53-B64E0ECDB78D}	CLMH138W065MH138W066	197.75	196.22	0.666666667	MH138W065	MH138W066					108	CLMH138W065MH138W066	8	0.0142	0.001672	0.03	0.002080	0.04	0.002380	0.04	0.002008	0.03		
CLMH138W066MH138W067		2003		Existing	assumed Mannings N	MH138W066	MH138W067		T16435	IRWD	PVC	{42298577-26CE-4349-813F-0DE5711D1628}	CLMH138W066MH138W067	196.11	195.57	0.666666667	MH138W066	MH138W067					61	CLMH138W066MH138W067	8	0.0089	0.003407	0.05	0.004091	0.05	0.004850	0.06	0.004091	0.05		
CLMH138W067MH138W064		2003		Existing	assumed Mannings N	MH138W067	MH138W064		T16435	IRWD	PVC	{BEB3E6D1-D5B3-444D-B03F-366487AA5D38}	CLMH138W067MH138W064	195.47	194.47	0.666666667	MH138W067	MH138W064					111	CLMH138W067MH138W064	8	0.0090	0.005371	0.06	0.006450	0.06	0.007644	0.07	0.006450	0.06		
CLMH138W068MH138W067		2003		Existing	assumed Mannings N	MH138W068	MH138W067		T16435	IRWD	PVC	{98130DC8-C3FC-4078-AA09-E5CAFEAD5256}	CLMH138W068MH138W067	201.50	195.66	0.500000000	MH138W068	MH138W067					21	CLMH138W068MH138W067	6	0.2920	0.001965	0.02	0.002359	0.03	0.002759	0.03	0.002359	0.03		
CLMH138W069MH138W068		2003		Existing	assumed Mannings N	MH138W069	MH138W068		T16435	IRWD	PVC	{E0FB728S-A753-498E-934E-587438C171EC}	CLMH138W069MH138W068	204.60	201.69	0.500000000	MH138W069	MH138W068					112	CLMH138W069MH138W068	6	0.0260	0.001233	0.03	0.001481	0.04	0.001754	0.04	0.001481	0.04		
CLMH138W085MH138W051		2003		Existing	assumed Mannings N	MH138W085	MH138W051		T16225	IRWD	PVC	{C513EC17-547C-4CAC-9AC6-BC233AFGC224}	CLMH138W085MH138W051	184.32	183.94	0.666666667	MH138W085	MH138W051					76	CLMH138W085MH138W051	8	0.0050	0.057729	0.21	0.069115	0.23	0.081944	0.25	0.069115	0.23		
CLMH138W082MH138W081		2003		Existing	assumed Mannings N	MH138W082	MH138W081		T16225	IRWD	PVC	{15A03C4D-EE49-4AC2-87FD-CDAC602527 1B}	CLMH138W082MH138W081	189.13	184.52	0.666666667	MH138W082	MH138W081					93	CLMH138W082MH138W081	8	0.0496	0.000982	0.02	0.001179	0.02	0.001401	0.02	0.001179	0.02		
CLMH138W083MH138W087		2003		Existing	assumed Mannings N	MH138W083	MH138W087		T16225	IRWD	PVC	{7715602A-6D81-4C74-BACA-49471FB64458}	CLMH138W083MH138W087	190.58	189.61	0.666666667	MH138W083	MH138W087					194	CLMH138W083MH138W087	8	0.0050	0.005538	0.06	0.006649	0.07	0.007886	0.08	0.006649	0.07		
CLMH138W084MH138W083		2003		Existing	assumed Mannings N	MH138W084	MH138W083		T16225	IRWD	PVC	{CAF8F69E-98E5-4509-A7D1-DA06C7F9ED51}	CLMH138W084MH138W083	191.30	190.77	0.666666667	MH138W084	MH138W083					106	CLMH138W084MH138W083	8	0.0050	0.003177	0.05	0.003814	0.05	0.004523	0.06	0.003814	0.05		
CLMH138W085MH138W081		2003		Existing	assumed Mannings N	MH138W085	MH138W081		T16225	IRWD	PVC	{6CC8D4C5-4B86-4C1E-99BD-CC6BCE3E3D92}	CLMH138W085MH138W081	188.49	184.41	0.666666667	MH138W085	MH138W081					192	CLMH138W085MH138W081	8	0.0213	0.056747	0.15	0.067936	0.16	0.080545	0.17	0.067936	0.16		
CLMH138W086MH138W084		2003		Existing	assumed Mannings N	MH138W086	MH138W084		T16225	IRWD	PVC	{8B0DAF36-66CE-47B2-A171-BCB76FE29600}	CLMH138W086MH138W084	192.77	191.50	0.666666667	MH138W086	MH138W084					64	CLMH138W086MH138W084	8	0.0198	0.002466	0.03	0.002961	0.04	0.002961	0.04	0.002961	0.04		
CLMH138W087MH138W085		2003		Existing	assumed Mannings N	MH138W087	MH138W085		T16225	IRWD	PVC	{FC6B05D0-62CC-48DA-9D62-9D73430C9ABC}	CLMH138W087MH138W085	189.41	188.69	0.666666667	MH138W087	MH138W085					147	CLMH138W087MH138W085	8	0.0049	0.017788	0.12	0.021357	0.13	0.025322	0.14	0.021357	0.13		
CLMH138W088MH138W086		2003		Existing	assumed Mannings N	MH138W088	MH138W086		T16225	IRWD	PVC	{EE430610-3C5E-4047-81AA-2510 1AA9DE4}	CLMH138W088MH138W086	193.32	192.97	0.666666667	MH138W088	MH138W086					70	CLMH138W088MH138W086	8	0.0050	0.002466	0.04	0.002961	0.05	0.003510	0.05	0.002961	0.05		
CLMH138W089MH138W085		2003		Existing	assumed Mannings N	MH138W089	MH138W085		T16225	IRWD	PVC	{0D962733-AE85-4FF5-94B7-0056033542F0}	CLMH138W089MH138W085	192.58	188.58	0.666666667	MH138W089	MH138W085					220	CLMH138W089MH138W085	8	0.0182	0.034359	0.12	0.041058	0.13	0.048677	0.14	0.041058	0.13		
CLMH138W090MH138W093		2003		Existing	assumed Mannings N	MH138W090	MH138W093		T16225	IRWD	PVC	{F6593938-FBE5-4F6A-80EC-1ED97A90DA9D}	CLMH138W090MH138W093	194.25	193.50	0.666666667	MH138W090	MH138W093					148	CLMH138W090MH138W093	8	0.0051	0.003135	0.05	0.003765	0.05	0.004463	0.06	0.003765	0.05		
CLMH138W091MH138W090		2003		Existing	assumed Mannings N	MH138W091	MH138W090		T16225	IRWD	PVC	{E29EEBA0-9F6A-4628-A94B-4B198C54224B}	CLMH138W091MH138W090	194.80	194.44	0.666666667	MH138W091	MH138W090					70	CLMH138W091MH138W090	8	0.0051	0.003135	0.05	0.003765	0.05	0.004463	0.06	0.003765	0.05		
CLMH138W092MH138W087		2003		Existing	assumed Mannings N	MH138W092	MH138W087		T16225	IRWD	PVC	{5AFA6B89-7950-4452-828F-673BDB354693}	CLMH138W092MH138W087	192.52	189.61	0.666666667	MH138W092	MH138W087					188	CLMH138W092MH138W087	8	0.0155	0.012249	0.08	0.014708	0.08	0.017436	0.09	0.014708	0.08		
CLMH138W093MH138W092		2003		Existing	assumed Mannings N	MH138W093	MH138W092		T16225	IRWD	PVC	{1944E992-8A43-44D8-BAEB-4DDC82DA3478}	CLMH138W093MH138W092	193.30	192.72	0.666666667	MH138W093	MH138W092					115	CLMH138W093MH138W092	8	0.0050	0.006145	0.07	0.007380	0.07	0.008747	0.08	0.007380	0.07		
CLMH138W094MH138W093		2003		Existing	assumed Mannings N	MH138W094	MH138W093		T16225	IRWD	PVC	{DF82A3F0-D10C-46CF-AC11-C147640CBEF0}	CLMH138W094MH138W093	194.42	193.50	0.666666667	MH138W094	MH138W093					65	CLMH138W094MH138W093	8	0.0142	0.003010	0.04	0.003615	0.04	0.004284	0.05	0.003615	0.04		
CLMH138W095MH138W089		2003		Existing	assumed Mannings N	MH138W095	MH138W089		T16225	IRWD	PVC	{24515E73-14EF-49AF-884B-99FA3799CDCE}	CLMH138W095MH138W089	194.02	192.69	0.666666667	MH138W095	MH138W089					191	CLMH138W095MH138W089	8	0.0070	0.033318	0.15	0.039685	0.16	0.047048	0.17	0.039685	0.16		
CLMH138W096MH138W094		2003		Existing	assumed Mannings N	MH138W096	MH138W094		T16225	IRWD	PVC	{17D0CD8D-2F4A-4105-B8D0-1EB02D1B38B4}	CLMH138W096MH138W094	194.97	194.63	0.666666667	MH138W096	MH138W094					280	CLMH138W096MH138W094	8	0.0049	0.003010	0.05	0.003615	0.05	0.004284	0.06	0.003615	0.05		
CLMH138W097MH138W095		2003		Existing	assumed Mannings N	MH138W097	MH138W095		T16225	IRWD	PVC	{5DDC19D2-62B0-441B-99FC-9710F5918 2F}	CLMH138W097MH138W095	195.63	194.22	0.666666667	MH138W097	MH138W095					283	CLMH138W097MH138W095	8	0.0050	0.030664	0.15	0.036808	0.17	0.043640	0.18	0.036808	0.17		
CLMH138W098MH138W097		2003		Existing	assumed Mannings N	MH138W098	MH138W097		T16225	IRWD	PVC	{C84FE0DC-DD14-4EFD-BA02-CC42E9071B84}	CLMH138W098MH138W097	196.13	195.83	0.666666667	MH138W098	MH138W097					147	CLMH138W098MH138W097	8	0.0053	0.030664	0.15	0.036808	0.16	0.043640	0.18	0.036808	0.16		
CLMH138W099MH138W101		2003		Existing	assumed Mannings N	MH138W099	MH138W101		T16225	IRWD	PVC	{56509BE3-E539-404C-8623-E39B426AA3BA}	CLMH138W099MH138W101	200.33	199.71	0.666666667	MH138W099	MH138W101					123	CLMH138W099MH138W101	8	0.0050	0.030810	0.09	0.012037	0.10	0.014272	0.10	0.012037	0.10		
CLMH138W100MH138W099		2003		Existing	assumed Mannings N	MH138W100	MH138W099		T16225	IRWD	PVC	{801AD24D-4F2D-4430-A1DD-9F5084C201F4}	CLMH138W100MH138W099	200.88	200.52	0.666666667	MH138W100	MH138W099					70	CLMH138W100MH138W099	8	0.0051	0.010030	0.09	0.012037	0.09	0.014272	0.10	0.012037	0.09		
CLMH138W101MH138W108		2003		Existing	assumed Mannings N	MH138W101	MH138W108		T16225	IRWD	PVC	{57B6F957-169D-4066-A957-AC0BC4C1F195}	CLMH138W101MH138W108	199.00	196.63	0.666666667	MH138W101	MH138W108					101	CLMH138W101MH138W108	8	0.0050	0.010030	0.09	0.012037	0.10	0.014272	0.10	0.012037	0.10		
CLMH138W102MH138W098		2003		Existing	assumed Mannings N	MH138W102	MH138W098		T16225	IRWD	PVC	{27D49348-50D3-4C24-879C-368 5CF111322}	CLMH138W102MH138W098	197.16	196.33	0.666666667	MH138W102	MH138W098					183	CLMH138W102MH138W098	8	0.0045	0.030664	0.15	0.036808	0.17	0.043640	0.18	0.036808	0.17		
CLMH138W103MH138W104		2003		Existing	assumed Mannings N	MH138W103	MH138W104		T16225	IRWD	PVC	{9E00B87F-9CB7-4CDF-B17F-494BA9CCB37}	CLMH138W103MH138W104	204.44	204.27	0.666666667	MH138W103	MH138W104					33	CLMH138W103MH138W104	8	0.0052	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH138W104MH138W107		2003		Existing	assumed Mannings N	MH138W104	MH138W107		T16225	IRWD	PVC	{589D9D7F-5139-4899-BCA1-0D3A7A410836}	CLMH138W104MH138W107	204.07	203.83	0.666666667	MH138W104	MH138W107					48	CLMH138W104MH138W107	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH138W105MH138W102		2003		Existing	assumed Mannings N	MH138W105	MH138W102		T16225	IRWD	PVC	{88189555-D9C3-47C2-A4E2-83445EF0C1B2}	CLMH138W105MH138W102	199.17	197.36	0.666666667	MH138W105	MH138W102					37	CLMH138W105MH138W102	8	0.0489	0.010224	0.05	0.012272	0.06	0.014550	0.06	0.012272	0.06		
CLMH138W106MH138W102		2003		Existing	assumed Mannings N	MH138W106	MH138W102		T16225	IRWD	PVC	{5856F603-2916-4A7A-9F13-1F3FDC598D0}	CLMH138W106MH138W102	197.55	197.36	0.666666667	MH138W106	MH138W102					31	CLMH138W106MH138W102	8	0.0061	0.020440	0.12	0.024536	0.13	0.029090	0.14	0.024536	0.13		
CLMH138W109MH138W107		2003		Existing	assumed Mannings N	MH138W109	MH138W107		T16225	IRWD	PVC	{28EAD350-06A7-4692-B544-33457BC48BD8}	CLMH138W109MH138W107	203.63	201.80	0.666666667	MH138W109	MH138W107					91	CLMH138W109MH138W107	8	0.0201	0.004203	0.04	0.005044	0.05	0.005980	0.05	0.005044	0.05		
CLMH138W108MH138W106		2003		Existing	assumed Mannings N	MH138W108	MH138W106		T16225	IRWD	PVC	{D4990C04-D927-4EF9-8574-68C7244DB832}	CLMH138W108MH138W106	198.78	197.75	0.666666667	MH138W108	MH138W106					208	CLMH138W108MH138W106	8	0.0050	0.020440	0.12	0.024536	0.14	0.029090	0.15	0.024536	0.14		
CLMH138W109MH138W105		2003		Existing	assumed Mannings N	MH138W109	MH138W105		T16225	IRWD	PVC	{382DAD83-2655-4D17-B369-57E813260799}	CLMH138W109MH138W105	201.61	199.38	0.666666667	MH138W109	MH138W105					80	CLMH138W109MH138W105	8	0.0279	0.010224	0.06	0.012272	0.07	0.014550	0.07	0.012272	0.07		
CLMH138W110MH138W107		2003		Existing	assumed Mannings N	MH138W110	MH138W107		T16225	IRWD	PVC	{94E60B76-7AAC-4735-92A2-A2FEF888EF7D}	CLMH138W110MH138W107	205.50	203.83	0.666666667	MH138W110	MH138W107					77	CLMH138W110MH138W107	8	0.0217	0.004203	0.04	0.005044	0.05	0.005980	0.05	0.005044	0.05		
CLMH138W111MH138W108		2003		Existing	assumed Mannings N	MH138W111	MH138W108		T16225	IRWD	PVC	{CB78413F-6110-4466-AED7-E0BB71E53716}	CLMH138W111MH138W108	199.50	198.99	0.666666667	MH138W111	MH138W108					103	CLMH138W111MH138W108	8	0.0050	0.010410	0.09	0.012499	0.10	0.014819	0.11	0.012499	0.10		
CLMH138W112MH138W111		2003		Existing	assumed Mannings N	MH138W112	MH138W111		T16225	IRWD	PVC	{A362AE4A-BA0C-4E29-90C4-ECT96EE6C74}	CLMH138W112MH138W111	200.44	199.71	0.666666667	MH138W112	MH138W111					144	CLMH138W112MH138W111	8	0.0049	0.003260	0.05	0.004643	0.06	0.003916	0.05	0.004643	0.06		
CLMH138W113MH138W111		2003		Existing	assumed Mannings N	MH138W113	MH138W111		T16225	IRWD	PVC	{A64E4D78-1FF9-4569-BBE2-A898933DA601}	CLMH138W113MH138W111	200.02	199.71	0.666666667	MH138W113	MH138W111					63	CLMH138W113MH138W111	8	0.0049	0.007150	0.07	0.008582	0.08	0.010176	0.09	0.008582	0.08		
CLMH138W114MH138W112		2003		Existing	assumed Mannings N	MH138W114	MH138W112		T16225	IRWD	PVC	{14BA6E15-EC64-42F3-8970-7D8GC81A9FA41}	CLMH138W114MH138W112	201.00	200.64	0.666666667	MH138W114	MH138W112					70	CLMH138W114MH138W112	8	0.0051	0.003260	0.05	0.003916	0.05	0.004643	0.06	0.003916	0.05		
CLMH138W115MH138W113		2003		Existing	assumed Mannings N	MH138W115	MH138W113		T16225	IRWD	PVC	{C7AA36CB-FD67-4872-BCD6-B1FB54C91C3D}	CLMH138W115MH138W113	200.58	200.22	0.666666667	MH138W115	MH138W113					70	CLMH138W115MH138W113	8	0.0051	0.007150	0.07	0.008582	0.08	0.010176	0.09	0.008582	0.08		
CLMH138W116MH138W117		2006		Existing	assumed Mannings N	MH138W116	MH138W117		T16225G	IRWD	PVC	{955CAE26-3A16-4A7F-B459-A7135CA1C37A}	CLMH138W116MH138W117	179.87	179.63	0.666666667	MH138W116	MH138W117					60	CLMH138W116MH138W117	8	0.0040	0.012192	0.10	0.014413	0.11	0.017092	0.12	0.014413	0.11		
CLMH138W117MH138W127		2006		Existing	assumed Mannings N	MH138W117	MH138W127		T16225G	IRWD	PVC	{B83BA0ED-EDC5-4E34-9790-1240934A43}	CLMH138W117MH138W127	179.43	178.52	0.666666667	MH138W117	MH138W127					228	CLMH138W117MH138W127	8	0.0040	0.020074	0.13	0.023798	0.14	0.027947	0.15	0.023798	0.14		
CLMH138W118MH138W127		2006		Existing	assumed Mannings N	MH138W118	MH138W127		T16225G	IRWD	PVC	{D092D456-5F44-49A6-AA14-2DBCF5F38DBB}	CLMH138W118MH138W127	191.20	178.52	0.666666667	MH138W118	MH138W127					191	CLMH138W118MH138W127	8	0.1043	0.012970	0.05	0.015565	0.05	0.018455	0.06	0.015565	0.05		
CLMH138W119MH138W118		2006		Existing	assumed Mannings N	MH138W119	MH138W118		T16225G	IRWD	PVC	{A98EF858-379C-4C78-9F97-4B97EC6502 1B}	CLMH138W119MH138W118	192.60	191.40	0.666666667	MH138W119	MH138W118					52	CLMH138W119MH138W118	8	0.0231	0.012970	0.07	0.015565	0.08	0.018455	0.08	0.015565	0.08		
CLMH138W120MH138W116		2006		Existing	assumed Mannings N	MH138W120	MH138W116		T16225G	IRWD	PVC	{756A2761-6557-4F79-8BCA-4858BD8274BB}	CLMH138W120MH138W116	180.63	180.07	0.666666667	MH138W120	MH138W116					138	CLMH138W120MH138W116	8	0.0041	0.010682	0.09	0.012825	0.10	0.015206	0.11	0.012825	0.10		
CLMH138W121MH138W119		2006		Existing	assumed Mannings N	MH138W121	MH138W119		T16225G	IRWD	PVC	{3C6AD2C2-4343-4752-B152-C58C25F846C}	CLMH138W121MH138W119	194.64	192.80	0.666666667	MH138W121	MH138W119					152	CLMH138W121MH138W119	8	0.0121	0.005101	0.05	0.006123	0.06	0.007260	0.06	0.006123	0.06		
CLMH138W122MH138W121		2006		Existing	assumed Mannings N	MH138W122	MH138W121		T16225G	IRWD	PVC	{6857713E-0D34-4DE4-805D-B8B20F08FC2B}	CLMH138W122MH138W121	194.97	194.89	0.666666667	MH138W122	MH138W121					19	CLMH138W122MH138W121	8	0.0042	0.005101	0.06	0.006123	0.07	0.007260	0.08	0.006123	0.07		
CLMH138W123MH138W122		2006		Existing	assumed Mannings N	MH138W123	MH138W122		T16225G	IRWD	PVC	{8B26BA7B-195B-405A-A74B-6333B76E7 5E8}	CLMH138W123MH138W122	196.84	195.17	0.666666667	MH138W123	MH138W122					145	CLMH138W123MH138W122	8	0.0115	0.005101	0.05	0.006123	0.06	0.007260	0.06	0.006123	0.06		
CLMH138W124MH138W123		2006		Existing	assumed Mannings N	MH138W124	MH138W123		T16225G	IRWD	PVC	{51D1A2B3-FEFC-4CB2-98ED-E01A80A4A88B}	CLMH138W124MH138W123	195.51	195.17	0.666666667	MH138W124	MH138W123					42	CLMH138W124MH138W123	8	0.0090	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH138W125MH138W120		2006		Existing	assumed Mannings N	MH138W125	MH138W120		T16225G	IRWD	PVC	{7DDCFD9C-94B0-47E4-89F8-09602983D64}	CLMH138W125MH138W120	181.83	180.73	0.500000000	MH138W125	MH138W120					51	CLMH138W125MH138W120	6	0.0217	0.010682	0.09	0.012825	0.10	0.015206	0.11	0.012825	0.10		
CLMH138W126MH138W154		2003		Existing	assumed Mannings N	MH138W126	MH138W154		T16177	IRWD	PVC	{4811A8AC-8D28-40CA-898D-E48C9CD20410}	CLMH138W126MH138W154	169.48	168.96	0.666666667	MH138W126	MH138W154					155	CLMH138W126MH138W154	8	0.0033	0.029828	0.16	0.035639	0.17	0.042253	0.19	0.035639	0.17		
CLMH138W127MH138W128		2006		Existing	assumed Mannings N	MH138W127	MH138W128		T16225G	IRWD	PVC	{5ECBAC3B-8E0C-442F-B89E-60E6CBF2090B}	CLMH138W127MH138W128	178.32	177.42	0.666666667	MH138W127	MH138W128					225	CLMH138W127MH138W128	8	0.0040	0.029828	0.15	0.035639	0.17	0.042253	0.18	0.035639	0.17		
CLMH138W128MH138W126		2006		Existing	assumed Mannings N	MH138W128	MH138W126		T16225G	IRWD	PVC	{45586BC4-01EF-4138-B72F-6E669ECEE8}	CLMH138W128MH138W126	177.22	169.68	0.666666667	MH138W128	MH138W126					202	CLMH138W128MH138W126	8	0.0374	0.029828	0.09	0.035639	0.10	0.042253	0.11	0.035639	0.10		
CLMH138W138MH145130		1993		Existing	assumed Mannings N	MH138W138	MH145130		T16470	IRWD	PVC	{66128B64D-19D1-4DDE-AC11-764C660A2E07}	CLMH138W138MH145130	190.00	186.90	0.666666667	MH138W138	MH145130					302	CLMH138W138MH145130	8	0.0103	0.015344	0.09	0.018421	0.10	0.021839	0.11	0.018421	0.10		
CLMH138W139MH138W138		1993		Existing	assumed Mannings N	MH138W139	MH138W138		T16470	IRWD	PVC	{2EDEAF0A-DDAA-4AEB-BCB7-3D90E7A72FA7}	CLMH138W139MH138W138	191.84	190.10	0.666666667	MH138W139	MH138W138					152	CLMH138W139MH138W138	8	0.0115	0.012418	0.08	0.014909	0.09	0.017673	0.10	0.014909	0.09		
CLMH138W140MH138W139		1993		Existing	assumed Mannings N	MH138W140	MH138W139		T16470	IRWD	PVC	{671ECDA8-BEF9-4356-A6E8-2EADA29164C5}	CLMH138W140MH138W139	193.83	191.94	0.666666667	MH138W140	MH138W139					173	CLMH138W140MH138W139	8	0.0109	0.007024	0.06	0.008433	0.07	0.009997	0.07	0.008433	0.07		
CLMH138W141MH138W140		2003		Existing	assumed Mannings N	MH138W141	MH138W140		A00981	IRWD	DIP	{38BE4043-6304-44E4-A2A9-741A0502D8A4}	CLMH138W141MH138W140	166.24	165.87	1.333333333	MH138W141	MH138W140					86	CLMH138W141MH138W140	16	0.0043	0.164034	0.15	0.196829	0.16	0.233401	0.18	0.240605	0.23		
CLMH138W154MH138W155		2003		Existing	assumed Mannings N	MH138W154	MH138W155		T16177	IRWD	PVC	{56B6B081-A6OD-414B-9B5B-96867540A1D4}	CLMH138W154MH138W155	168.76	167.46	0.666666667	MH138W154	MH138W155					175	CLMH138W154MH138W155	8	0.0074	0.029828	0.14	0.035639	0.15	0.042253	0.16	0.035639	0.15		
CLMH138W155MH138W156		2003		Existing	assumed Mannings N	MH138W155	MH138W156		T16177	IRWD	PVC	{81E8AF20-CF5F-495B-A1AB-CE2F338SDD1B}	CLMH138W155MH138W156	167.36	164.56	0.666666667	MH138W155	MH138W156					378	CLMH138W155MH138W156	8	0.0074	0.029828	0.14	0.035639	0.15	0.042253	0.16	0.035639	0.15		
CLMH138W156MH138W040		2003		Existing	assumed Mannings N	MH138W156	MH138W040		T16177	IRWD	PVC	{961047EA-FBAD-4309-8F7D-9E9AD837E9D4}	CLMH138W156MH138W040	164.46	163.88	0.666666667	MH138W156	MH138W040					74	CLMH138W156MH138W040	8	0.0078	0.029828	0.14	0.035639	0.15	0.042553	0.16	0.035639	0.15		
CLMH139E002MH139N017		1985		Existing	assumed Mannings N	MH139E002	MH139N017		A00465	IRWD	VCP	{F8EB2F8E-7F43-4B25-986B-1A502EFD62C0}	CLMH139E002MH139N017	204.11	203.50	0.833333333	MH139E002	MH139N017					400	CLMH139E002MH139N017	10	0.0015	0.017193	0.12	0.018357	0.12	0.021764	0.13	0.018357	0.12		
CLMH139E004MH139E002		1986		Existing	assumed

| | | |

CLMH141N003MH140W004		2014		Existing	assumed Mannings N	MH140W003	MH140W004		02184D	IRWD	PVC	{9873EC85-B723-489A-94AA-CC308FF344F}	CLMH141N003MH140W004	230.06	227.93	1.000000000	MH140W003	MH140W004		277	CLMH140W003MH140W004	12	0.0077	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.610506	0.36
CLMH140W004MH140W005		2014		Existing	assumed Mannings N	MH140W004	MH140W005		02184D	IRWD	PVC	{E0CD101A-88F7-40B3-B0B4-AC4711B04D68}	CLMH141W004MH140W005	227.83	225.47	1.000000000	MH140W004	MH140W005		299	CLMH140W004MH140W005	12	0.0079	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.610342	0.36
CLMH140W005MH140W006		2014		Existing	assumed Mannings N	MH140W005	MH140W006		02184D	IRWD	PVC	{50430023-1061-460F-8760-BE9C7DAFF72C}	CLMH141W005MH140W006	225.37	219.21	1.000000000	MH140W005	MH140W006		285	CLMH140W005MH140W006	12	0.0216	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.610312	0.35
CLMH140W006MH140W007		2014		Existing	assumed Mannings N	MH140W006	MH140W007		02184D	IRWD	PVC	{C7FD7D32-664D-4EF2-8FD6-264FBA2306B2}	CLMH141W006MH140W007	219.11	217.92	1.000000000	MH140W006	MH140W007		395	CLMH140W006MH140W007	12	0.0030	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.726180	0.49
CLMH140W007MH140W011	Main after junctio	2014		Existing	assumed Mannings N	MH140W007	MH140W011		02184D	IRWD	PVC	{218A162E-8672-464C-8EA9-CF19A56CC563}	CLMH141W007MH140W011	217.82	216.24	1.000000000	MH140W007	MH140W011		359	CLMH140W007MH140W011	12	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.759290	0.47
CLMH140W008MH140W012		2014		Existing	assumed Mannings N	MH140W008	MH140W012		02351	IRWD	PVC	{0746CAEF-158E-44A8-A363-870DE67BC9FB}	CLMH141W008MH140W012	214.49	212.89	1.000000000	MH140W008	MH140W012		334	CLMH140W008MH140W012	12	0.0048	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.762895	0.46
CLMH140W009MH139N063		2014		Existing	assumed Mannings N	MH140W009	MH139N063		02351	IRWD	PVC	{F7AF8428-1F2B-49DE-89DD-92D2AC71AD80}	CLMH141W009MH139N063	209.86	209.42	1.000000000	MH140W009	MH139N063	Future Less than 15-in, d/D >0.50	200	CLMH140W009MH139N063	12	0.0022	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.962827	0.60
CLMH140W010MH140W008		2014		Existing	assumed Mannings N	MH140W010	MH140W008		02351	IRWD	PVC	{876C9F01-03CD-4E45-A4B9-DE5CFC70ABB9}	CLMH141W010MH140W008	214.85	214.69	1.000000000	MH140W010	MH140W008		33	CLMH140W010MH140W008	12	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.759089	0.46
CLMH140W011MH140W010		2014		Existing	assumed Mannings N	MH140W011	MH140W010		02351	IRWD	PVC	{60049572-79FD-4115-959D-0E0E1009FE7C}	CLMH141W011MH140W010	216.04	215.05	1.000000000	MH140W011	MH140W010		185	CLMH140W011MH140W010	12	0.0053	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.759067	0.45
CLMH140W012MH140W009		2014		Existing	assumed Mannings N	MH140W012	MH140W009		02351	IRWD	PVC	{56BE1786-EC79-4401-8DB3-788ECFD4A0C}	CLMH141W012MH140W009	212.69	210.06	1.000000000	MH140W012	MH140W009		303	CLMH140W012MH140W009	12	0.0087	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.964427	0.46
CLMH141E001MH141E002		2006		Existing	assumed Mannings N	MH141E001	MH141E002		A008646A	IRWD	PVC	{4B003400-D4D4-40F3-BC7B-7A29F42869F2}	CLMH141E001MH141E002	398.09	397.16	1.000000000	MH141E001	MH141E002		372	CLMH141E001MH141E002	12	0.0025	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.590823	0.45
CLMH141E002MH141E006		2006		Existing	assumed Mannings N	MH141E002	MH141E006		A008646A	IRWD	PVC	{0A115D83-E49A-48E7-84B1-59654E87C305}	CLMH141E002MH141E006	396.04	395.15	1.000000000	MH141E002	MH141E006		396	CLMH141E002MH141E006	12	0.0028	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.589508	0.44
CLMH141E003MH141E001		2006		Existing	assumed Mannings N	MH141E003	MH141E001		A008646A	IRWD	PVC	{ED53C282-006A-4970-B6D7-5199C2ADCE55}	CLMH141E003MH141E001	398.37	398.09	1.000000000	MH141E003	MH141E001		112	CLMH141E003MH141E001	12	0.0025	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.590991	0.49
CLMH141E004MH141E005		2006		Existing	assumed Mannings N	MH141E004	MH141E005		A008646A	IRWD	PVC	{8221C677-8E20-4038-8AEC-418AE8FA78BC}	CLMH141E004MH141E005	380.72	379.03	1.000000000	MH141E004	MH141E005		206	CLMH141E004MH141E005	12	0.0082	0.001779	0.02	0.001901	0.02	0.002253	0.02	0.714740	0.39
CLMH141E005MH141N001		2006		Existing	assumed Mannings N	MH141E005	MH141N001		A008646A	IRWD	PVC	{138SEC3C-7905-4878-9AC3-8691271FFA99}	CLMH141E005MH141N001	378.93	371.70	1.000000000	MH141E005	MH141N001		370	CLMH141E005MH141N001	12	0.0195	0.001779	0.10	0.001901	0.11	0.002253	0.13	0.714298	0.49
CLMH141E006MH141E007		2006		Existing	assumed Mannings N	MH141E006	MH141E007		A008646A	IRWD	PVC	{6DB868D3-AA54-4502-8F44-5DEF5991D1FA}	CLMH141E006MH141E007	395.85	394.07	1.000000000	MH141E006	MH141E007		396	CLMH141E006MH141E007	12	0.0045	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.588697	0.41
CLMH141E007MH141E004		2006		Existing	assumed Mannings N	MH141E007	MH141E004		A008646A	IRWD	PVC	{29367B95-38EA-4508-9984-714078A4EF05}	CLMH141E007MH141E004	393.97	380.82	1.000000000	MH141E007	MH141E004		186	CLMH141E007MH141E004	12	0.0708	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.586686	0.24
CLMH141N001MH142W009		2014		Existing	assumed Mannings N	MH141N001	MH142W009		A008646A	IRWD	PVC	{D8D23B31-986Z-48F2-B80A-F3362F05CA5C}	CLMH141N001MH142W009	371.51	371.21	1.333333333	MH141N001	MH142W009		201	CLMH141N001MH142W009	16	0.0015	0.328338	0.24	0.394792	0.26	0.469194	0.29	1.792663	0.57
PA51_600	GP-GPN	0	assumed mannings N	Future			566.248500146						PA51_600	380.05	377.00	1.250000000	MH141N001	PA51_0260		229	PA51_600	15	0.0133	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH141N004MH141N005		2014		Existing	assumed Mannings N	MH141N004	MH141N005		17723A	IRWD	PVC	{F74FA386-65D7-4A94-89B6-EA6A94AF1985}	CLMH141N004MH141N005	324.58	322.91	0.666666667	MH141N004	MH141N005		229	CLMH141N004MH141N005	8	0.0073	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.018224	0.11
CLMH141N005MH141N009	Main after junctio	2014		Existing	assumed Mannings N	MH141N005	MH141N009		17723A	IRWD	PVC	{6A7D558A-8B2B-42A8-8711-167BF9F6767D}	CLMH141N005MH141N009	322.81	320.72	0.666666667	MH141N005	MH141N009		275	CLMH141N005MH141N009	8	0.0076	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.018224	0.11
CLMH141N006MH141N007		2014		Existing	assumed Mannings N	MH141N006	MH141N007		17723A	IRWD	PVC	{03952D67-BF11-4A2E-A929-753FAFD3A2E3}	CLMH141N006MH141N007	318.47	313.55	0.666666667	MH141N006	MH141N007		314	CLMH141N006MH141N007	8	0.0157	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.051687	0.15
CLMH141N007MH141N008		2014		Existing	assumed Mannings N	MH141N007	MH141N008		17723A	IRWD	PVC	{CBA6F5F9-7B2D-4AB3-B2B2-D124ECC338D2}	CLMH141N007MH141N008	313.45	309.54	0.666666667	MH141N007	MH141N008		252	CLMH141N007MH141N008	8	0.0155	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.067187	0.17
CLMH141N008MH121E091		2014		Existing	assumed Mannings N	MH141N008	MH121E091		17723A	IRWD	PVC	{B69FF53F-105B-408C-B80F-2BEAD68CB70D}	CLMH141N008MH121E091	309.44	306.21	0.666666667	MH141N008	MH121E091		211	CLMH141N008MH121E091	8	0.0153	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.067187	0.17
CLMH141N009MH141N006	Main before junct	2014		Existing	assumed Mannings N	MH141N009	MH141N006		17723A	IRWD	PVC	{D688A596-E87C-47D4-98DC-738D617CE109}	CLMH141N009MH141N006	320.62	318.57	0.666666667	MH141N009	MH141N006		197	CLMH141N009MH141N006	8	0.0104	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.042784	0.15
CLMH141N010MH121E096	Main before junct	2014		Existing	assumed Mannings N	MH141N010	MH121E096		17008J	IRWD	PVC	{6C18CD2E-B69B-478A-871E-28D6009A5A3C}	CLMH141N010MH121E096	318.02	316.27	0.666666667	MH141N010	MH121E096		292	CLMH141N010MH121E096	8	0.0060	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.075035	0.23
CLMH141N011MH141N010		2014		Existing	assumed Mannings N	MH141N011	MH141N010		17008D	IRWD	PVC	{DD22ACBA-DE86-4082-B03B-0BEFD8E9A650}	CLMH141N011MH141N010	319.22	318.22	0.666666667	MH141N011	MH141N010		215	CLMH141N011MH141N010	8	0.0047	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.049288	0.19
CLMH141N012MH141N011		2014		Existing	assumed Mannings N	MH141N012	MH141N011		17008D	IRWD	PVC	{D84314F2-D55A-4E34-8B19-6BDBADC3D127}	CLMH141N012MH141N011	326.50	319.32	0.666666667	MH141N012	MH141N011		205	CLMH141N012MH141N011	8	0.0351	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.044631	0.12
CLMH141N013MH141N012		2014		Existing	assumed Mannings N	MH141N013	MH141N012		17008D	IRWD	PVC	{11249088-EC6D-478D-9A02-DFF1E02DDE00A}	CLMH141N013MH141N012	328.87	326.60	0.666666667	MH141N013	MH141N012		160	CLMH141N013MH141N012	8	0.0162	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011225	0.07
CLMH141N014MH141N013		2014		Existing	assumed Mannings N	MH141N014	MH141N013		17008D	IRWD	PVC	{E9916FDC-56CE-42B6-BC6D-C0FE84CC52F6}	CLMH141N014MH141N013	330.55	328.97	0.666666667	MH141N014	MH141N013		107	CLMH141N014MH141N013	8	0.0147	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011225	0.07
CLMH141N015MH141N016		2014		Existing	assumed Mannings N	MH141N015	MH141N016		17008D	IRWD	PVC	{50DB3722-C015-4871-AE70-BA0351002E1E}	CLMH141N015MH141N016	329.39	327.70	0.666666667	MH141N015	MH141N016		115	CLMH141N015MH141N016	8	0.0147	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011311	0.07
CLMH141N016MH141N017		2014		Existing	assumed Mannings N	MH141N016	MH141N017		17008D	IRWD	PVC	{DCDG09F5-F222-4CDC-B278-B80B0CB318A}	CLMH141N016MH141N017	327.60	321.57	0.666666667	MH141N016	MH141N017		268	CLMH141N016MH141N017	8	0.0568	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.018203	0.07
CLMH141N017MH141N009		2014		Existing	assumed Mannings N	MH141N017	MH141N009		17008D	IRWD	PVC	{C24D168C-188D-4F58-A62C-FE55D3144CA5}	CLMH141N017MH141N009	321.47	320.82	0.666666667	MH141N017	MH141N009		105	CLMH141N017MH141N009	8	0.0062	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.024559	0.13
CLMH141N018MH141N019		2014		Existing	assumed Mannings N	MH141N018	MH141N019		17008D	IRWD	PVC	{1945A28A-4309-4D89-8031-54A58E07A79F}	CLMH141N018MH141N019	317.99	314.76	0.666666667	MH141N018	MH141N019		141	CLMH141N018MH141N019	8	0.0107	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.050776	0.16
CLMH141N019MH141W013		2014		Existing	assumed Mannings N	MH141N019	MH141W013		17008D	IRWD	PVC	{2F634C3B-854A-474F-BECE-192D20AAAA50}	CLMH141N019MH141W013	314.66	311.53	0.666666667	MH141N019	MH141W013		295	CLMH141N019MH141W013	8	0.0106	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.056799	0.17
CLMH141N020MH141N010	Main after junctio	2014		Existing	assumed Mannings N	MH141N020	MH141N010		17725	IRWD	PVC	{D7E8AAFF-8778-41B5-8612-E0B418CDA1D7}	CLMH141N020MH141N010	320.22	318.12	0.666666667	MH141N020	MH141N010		171	CLMH141N020MH141N010	8	0.0123	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.025747	0.11
CLMH141N021MH141N020		2014		Existing	assumed Mannings N	MH141N021	MH141N020		17725	IRWD	PVC	{97001A8A-AEDC-46D0-9C11-A84E11698A2C}	CLMH141N021MH141N020	323.64	320.32	0.666666667	MH141N021	MH141N020		219	CLMH141N021MH141N020	8	0.0151	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.023811	0.10
CLMH141N022MH141N021		2014		Existing	assumed Mannings N	MH141N022	MH141N021		17725	IRWD	PVC	{276FDA75-48C7-44A7-9FF9-1219DE1F9397}	CLMH141N022MH141N021	326.99	323.74	0.666666667	MH141N022	MH141N021		214	CLMH141N022MH141N021	8	0.0152	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019598	0.09
CLMH141N023MH141N022		2014		Existing	assumed Mannings N	MH141N023	MH141N022		17725	IRWD	PVC	{8DB41446-E78F-4D0E-9A2C-F8A2409BE43}	CLMH141N023MH141N022	330.17	327.09	0.666666667	MH141N023	MH141N022		203	CLMH141N023MH141N022	8	0.0151	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016026	0.09
CLMH141N024MH141N023		2014		Existing	assumed Mannings N	MH141N024	MH141N023		17725	IRWD	PVC	{89EA1CB4-FE3C-48A2-8AF3-58AD47FEAAF5}	CLMH141N024MH141N023	335.04	330.27	0.666666667	MH141N024	MH141N023		250	CLMH141N024MH141N023	8	0.0191	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012898	0.07
CLMH141N025MH141N024		2014		Existing	assumed Mannings N	MH141N025	MH141N024		17725	IRWD	PVC	{E3F3A0B1-EDC1-4313-9984-73BBF15DE2A9}	CLMH141N025MH141N024	337.76	335.14	0.666666667	MH141N025	MH141N024		239	CLMH141N025MH141N024	8	0.0110	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009988	0.07
CLMH141N026MH141N025		2014		Existing	assumed Mannings N	MH141N026	MH141N025		17725	IRWD	PVC	{B78783E8-0D77-4531-A302-04FEA25F251B}	CLMH141N026MH141N025	347.16	337.86	0.666666667	MH141N026	MH141N025		304	CLMH141N026MH141N025	8	0.0306	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007226	0.05
CLMH141N027MH141N026		2014		Existing	assumed Mannings N	MH141N027	MH141N026		17725	IRWD	PVC	{C4B40F8D-2ABB-4789-B228-BDAFD1E2AAC4}	CLMH141N027MH141N026	350.88	347.27	0.666666667	MH141N027	MH141N026		309	CLMH141N027MH141N026	8	0.0117	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004350	0.05
CLMH141N028MH141N029		2014		Existing	assumed Mannings N	MH141N028	MH141N029		A0233BB	IRWD	PVC	{771559E7-8922-4C69-9675-9A96EE53E03D}	CLMH141N028MH141N029	337.64	337.24	0.666666667	MH141N028	MH141N029		40	CLMH141N028MH141N029	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.001733	0.03
CLMH141N029MH141N030		2014		Existing	assumed Mannings N	MH141N029	MH141N030		A0233BB	IRWD	PVC	{480652A5-0ECE-48EB-8381-2C672315F38B}	CLMH141N029MH141N030	337.14	336.48	0.666666667	MH141N029	MH141N030		66	CLMH141N029MH141N030	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004551	0.05
CLMH141N030MH141N031		2014		Existing	assumed Mannings N	MH141N030	MH141N031		A0233BB	IRWD	PVC	{E690B37D-E04E-403A-8C3D-DCD0B7A40E29}	CLMH141N030MH141N031	336.38	334.92	0.666666667	MH141N030	MH141N031		146	CLMH141N030MH141N031	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006288	0.06
CLMH141N031MH141N032		2014		Existing	assumed Mannings N	MH141N031	MH141N032		A0233BB	IRWD	PVC	{2DDB218A-D803-4312-B0F0-F343DB831F5B}	CLMH141N031MH141N032	334.82	331.55	0.666666667	MH141N031	MH141N032		309	CLMH141N031MH141N032	8	0.0156	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009960	0.07
CLMH141N032MH141N004	80.33 FROM S-N	2014		Existing	assumed Mannings N	MH141N032	MH141N004		A0233BB	IRWD	PVC	{0DE941D2-5DDE-442A-A9A6-5AB44B403991}	CLMH141N032MH141N004	331.45	324.65	0.666666667	MH141N032	MH141N004		324	CLMH141N032MH141N004	8	0.0347	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.014836	0.07
CLMH141N033MH141N034		2014		Existing	assumed Mannings N	MH141N033	MH141N034		A0233BB	IRWD	PVC	{F599E640-C02A-42C2-BF2D-0249C37CDEF}	CLMH141N033MH141N034	349.35	348.31	0.666666667	MH141N033	MH141N034		80	CLMH141N033MH141N034	8	0.0130	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000985	0.02
CLMH141N034MH141N035		2014		Existing	assumed Mannings N	MH141N034	MH141N035		A0233BB	IRWD	PVC	{68932967-037E-44BB-A2A4-E37418D016AE}	CLMH141N034MH141N035	348.21	344.68	0.666666667	MH141N034	MH141N035		206	CLMH141N034MH141N035	8	0.0171	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002192	0.03
CLMH141N035MH141N036		2014		Existing	assumed Mannings N	MH141N035	MH141N036		A0233BB	IRWD	PVC	{070C0AF9-ED04-4A80-ADB1-FAB02687D723}	CLMH141N035MH141N036	344.58	341.27	0.666666667	MH141N035	MH141N036		206	CLMH141N035MH141N036	8	0.0161	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003446	0.04
CLMH141N036MH141N037		2014		Existing	assumed Mannings N	MH141N036	MH141N037		A0233BB	IRWD	PVC	{A1E2829A-F966-40BA-A17C-C4A51CF460CD}	CLMH141N036MH141N037	341.17	338.71	0.666666667	MH141N036	MH141N037		205	CLMH141N036MH141N037	8	0.0120	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005239	0.05
CLMH141N037MH141N038		2014		Existing	assumed Mannings N	MH141N037	MH141N038		A0233BB	IRWD	PVC	{D9408744-935E-4589-BE05-04FAD8123276}	CLMH141N037MH141N038	338.61	336.91	0.666666667	MH141N037	MH141N038		184	CLMH141N037MH141N038	8	0.0092	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006311	0.06
CLMH141N038MH141N039		2014		Existing	assumed Mannings N	MH141N038	MH141N039		A0233BB	IRWD	PVC	{C9FD77C0-C9B3-467A-9CDD-17A481D240D0}	CLMH141N038MH141N039	336.81	332.30	0.666666667	MH141N038	MH141N039		196	CLMH141N038MH141N039	8	0.0230	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008258	0.06
CLMH141N039MH141N040		2014		Existing	assumed Mannings N	MH141N039	MH141N040		A0233BB	IRWD	PVC	{E1281080-238C-415C-BD02-6B45FB53E23B}	CLMH141N039MH141N040	332.20	328.89	0.666666667	MH141N039	MH141N040		180	CLMH141N039MH141N040	8	0.0184	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012941	0.07
CLMH141N040MH141N041		2014		Existing	assumed Mannings N	MH141N040	MH141N041		A0233BB	IRWD	PVC	{693A0F12-40F1-42AC-8D6F-A172816F71EE}	CLMH141N040MH141N041	328.79	327.89	0.666666667	MH141N040	MH141N041		50	CLMH141N040MH141N041	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012941	0.10
CLMH141N041MH141N012	29.32' FROM E-W	2014		Existing	assumed Mannings N	MH141N041	MH141N012		17008D	IRWD	PVC	{EACF6274-AFCA-4794-AA64-3E4585F522B9}	CLMH141N041MH141N012	327.79	326.50	0.666666667	MH141N041	MH141N012		109	CLMH141N041MH141N012	8	0.0118	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012941	0.10
CLMH141N042MH141N043		2014		Existing	assumed Mannings N	MH141N042	MH141N043		A0233BB	IRWD	PVC	{C55BC826-7F2A-49EC-B493-E246A0418135}	CLMH141N042MH141N043	332.85	332.45	0.666666667	MH141N042	MH141N043		40	CLMH141N042MH141N043	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011311	0.08
CLMH141N043MH141N044		2014		Existing	assumed Mannings N	MH141N043	MH141N044		A0233BB	IRWD	PVC	{C2238B7BE-DCFD-4378-83FD-397B506EEC6F}	CLMH141N043MH141N044	332.25	331.81	0.666666667	MH141N043	MH141N044		44	CLMH141N043MH141N044	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011311	0.08
CLMH141N044MH141N015	62' FROM W-E IS	2014		Existing	assumed Mannings N	MH141N044	MH141N015		A0233BB	IRWD	PVC	{CDCDD8D6-5D99-487C-867D-BFD0E2EA5E84}	CLMH141N044MH141N015	331.61	329.49	0.666666667	MH141N044	MH141N015		202	CLMH141N044MH141N015	8	0.0105	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011311	0.08
CLMH141N045MH141N011	59.5' FROM W-E	2014		Existing	assumed Mannings N	MH141N045	MH141N011		A0233BB	IRWD	PVC	{C6271D17-A036-4DE5-A0FA-A2068A338D5}	CLMH141N045MH141N011	325.46	319.27	0.666666667	MH141N045	MH141N011		198	CLMH141N045MH141N011	8	0.0313	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004658	0.08
CLMH141N059MH141N060		2014		Existing	assumed Mannings N	MH141N059	MH141N060		2380	IRWD	PVC	{97A6C98B-28E9-47FD-9A29-32CF315CDAC3}	CLMH141N059MH141N060	346.17	339.57	1.333333333	MH141N059	MH141N060		176	CLMH141N059MH141N060	16	0.0163	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.069535	0.07
CLMH141N060MH141N061		2014		Existing	assumed Mannings N	MH141N060	MH141N061		2380	IRWD	PVC	{D31A412C-6CFB-485A-A49F-36EAF385F57F}	CLMH141N060MH141N061	339.47	334.42	1.333333333	MH141N060	MH141N061		305	CLMH141N060MH141N061	16	0.0166	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.073803	0.07
CLMH141N061MH141N062		2014		Existing	assumed Mannings N	MH141N061	MH141N062		2380	IRWD	PVC	{50FB64EA-F43E-4406-ACB1-A35516E614BF}	CLMH141N061MH141N062	334.32	326.77	1.333333333	MH141N061	MH141N062		305	CLMH141N061MH141N062	16	0.0248	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.077802	0.08
CLMH141N062MH141N063		2014		Existing	assumed Mannings N	MH141N062	MH141N063		2380	IRWD	PVC	{D2CC1CAD-27BD-4C3B-8F93-09778284727C}	CLMH141N062MH141N063	326.67	325.22	1.333333333	MH141N062	MH141N063		363	CLMH141N062MH141N063	16	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.194050	0.16
CLMH141N063MH141N064		2014		Existing	assumed Mannings N	MH141N063	MH141N064		2380	IRWD	PVC	{A1EA5690-A7B9-4A10-833A-2DDE18A5CEA2}	CLMH141N063MH141N064	325.12	323.66	1.333333333	MH141N063	MH141N064		364	CLMH141N063MH141N064	16	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.193955	0.16
CLMH141N064MH141N065		2014		Existing	assumed Mannings N	MH141N064	MH141N065		2380	IRWD	PVC	{981D1139-E339-4492-8078-47E758F951F7}	CLMH141N064MH141N065	323.56	322.76	1.333333333	MH141N064	MH141N065		220	CLMH141N064MH141N065	16	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.193915	0.16
CLMH141N065MH141N058		2014		Existing	assumed Mannings N	MH141N065	MH141N058		2380	IRWD	PVC	{345F4C45-2C52-4A07-9C01-29005A446404}	CLMH141N065MH141W058	322.66	321.16	1.333333333	MH141N065	MH141W058		375	CLMH141N065MH141W058	16	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.193818	0.16
CLMH141N066MH141N067		2015		Existing	assumed Mannings N	MH141N066	MH141N067		17726	IRWD	PVC	{C9E87442-0A02-4109-89FD-7C7188205C84}	CLMH141N066MH141N067	334.89	328.43	0.666666667	MH141N066	MH141N067		245	CLMH141N066MH141N067	8	0.0264	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005241	0.04
CLMH141N067MH141N069		2015		Existing	assumed Mannings N	MH141N067	MH141N069		17726	IRWD	PVC	{5A2E2D74-9DF6-4072-8D8B-8417CE79BA86}	CLMH141N067MH141N069	328.23	324.36	0.666666667	MH141N067	MH141N069		283	CLMH141N067MH141N069	8	0.0137	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.026164	0.11
CLMH141N068MH141N069		2015		Existing	assumed Mannings N	MH141N068	MH141N069		17726	IRWD	PVC	{A768F5A4-F465-47DB-98B4-8079A7318982}	CLMH141N068MH141N069	331.00	324.46	0.666666667	MH141N

| | | |

CLMH142E267MH142E266		2012		Existing	assumed Mannings N	MH142E267	MH142E266		T1744O	IRWD	PVC	{3ADC76C7-E42A-4867-8659-247DCDA20457}	CLMH142E267MH142E266	456.16	454.91	0.666666667	MH142E267	MH142E266		129	CLMH142E267MH142E266	8	0.0097	0.024561	0.12	0.029482	0.13	0.034956	0.14	0.029482	0.13		
CLMH142E268MH142E269		2012		Existing	assumed Mannings N	MH142E268	MH142E269		T1744OB	IRWD	PVC	{69FC187A-17AC-4C93-8A3A-FFFE56405D38}	CLMH142E268MH142E269	468.57	467.95	0.666666667	MH142E268	MH142E269		66	CLMH142E268MH142E269	8	0.0094	0.001611	0.03	0.001934	0.03	0.002292	0.04	0.001934	0.03		
CLMH142E269MH142E271		2012		Existing	assumed Mannings N	MH142E269	MH142E271		T1744OB	IRWD	PVC	{B416ACAD-5E07-4103-811F-D47F2F28A7FE}	CLMH142E269MH142E271	467.75	463.52	0.666666667	MH142E269	MH142E271		205	CLMH142E269MH142E271	8	0.0206	0.001611	0.05	0.001934	0.05	0.002292	0.05	0.001934	0.05		
CLMH142E270MH142E285		2012		Existing	assumed Mannings N	MH142E270	MH142E285		T1744OB	IRWD	PVC	{A3013563-148B-452A-B7F5-920A714C6B01}	CLMH142E270MH142E285	470.00	466.02	0.666666667	MH142E270	MH142E285		155	CLMH142E270MH142E285	8	0.0257	0.002200	0.04	0.002641	0.05	0.003130	0.05	0.002641	0.05		
CLMH142E271MH142E272		2012		Existing	assumed Mannings N	MH142E271	MH142E272	changed length to mat	T1744O	IRWD	PVC	{CB4945F3-455F-490D-92C6-5ACB842896A7}	CLMH142E271MH142E272	463.52	461.36	0.666666667	MH142E271	MH142E272		108	CLMH142E271MH142E272	8	0.0200	0.009331	0.06	0.011197	0.07	0.013278	0.07	0.011197	0.07		
CLMH142E272MH142E273		2012		Existing	assumed Mannings N	MH142E272	MH142E273		T1744O	IRWD	PVC	{63321108-1104-46BA-990F-FE20E0D916BA}	CLMH142E272MH142E273	461.26	461.00	0.666666667	MH142E272	MH142E273		30	CLMH142E272MH142E273	8	0.0087	0.009986	0.08	0.011984	0.09	0.014212	0.09	0.011984	0.09		
CLMH142E273MH142E274		2012		Existing	assumed Mannings N	MH142E273	MH142E274		T1744O	IRWD	PVC	{25CE787E-911D-44FA-8EFD-4C5813CA2E18}	CLMH142E273MH142E274	460.90	460.55	0.666666667	MH142E273	MH142E274		39	CLMH142E273MH142E274	8	0.0090	0.012382	0.09	0.014859	0.09	0.017622	0.10	0.014859	0.09		
CLMH142E274MH142E259		2012		Existing	assumed Mannings N	MH142E274	MH142E259		T1744O	IRWD	PVC	{59F0A523-66CF-4C87-BC56-45E369018E13}	CLMH142E274MH142E259	460.45	459.65	0.666666667	MH142E274	MH142E259		85	CLMH142E274MH142E259	8	0.0094	0.013982	0.09	0.016780	0.10	0.019897	0.11	0.016780	0.10		
CLMH142E275MH142E274		2012		Existing	assumed Mannings N	MH142E275	MH142E274		T1744OA	IRWD	PVC	{ABF4A4FF-08B7-413F-A9B6-2DA4F29DEF22}	CLMH142E275MH142E274	462.12	460.45	0.666666667	MH142E275	MH142E274		63	CLMH142E275MH142E274	8	0.0265	0.001600	0.06	0.001921	0.06	0.002275	0.07	0.001921	0.06		
CLMH142E276MH142E275		2012		Existing	assumed Mannings N	MH142E276	MH142E275		T1744OA	IRWD	PVC	{98E6FC83-4E86-4F79-BC2C-C6A418443279}	CLMH142E276MH142E275	465.90	462.22	0.666666667	MH142E276	MH142E275		143	CLMH142E276MH142E275	8	0.0257	0.000308	0.01	0.000370	0.01	0.000438	0.01	0.000370	0.01		
CLMH142E277MH142E272		2012		Existing	assumed Mannings N	MH142E277	MH142E272		T1744OB	IRWD	PVC	{74FD48A3-8B2E-4C00-B372-D44CFEF9F631}	CLMH142E277MH142E272	465.01	461.26	0.666666667	MH142E277	MH142E272		146	CLMH142E277MH142E272	8	0.0257	0.000655	0.05	0.000786	0.05	0.000934	0.06	0.000786	0.05		
CLMH142E278MH142E271		2012		Existing	assumed Mannings N	MH142E278	MH142E271		T1744OB	IRWD	PVC	{8736D3CB-2B57-4140-AA1A-40B65B635414}	CLMH142E278MH142E271	467.27	463.52	0.666666667	MH142E278	MH142E271		146	CLMH142E278MH142E271	8	0.0257	0.000874	0.04	0.001049	0.04	0.001243	0.05	0.001049	0.04		
CLMH142E279MH142E285		2012		Existing	assumed Mannings N	MH142E279	MH142E285		T1744OB	IRWD	PVC	{54BB8962-B812-4B58-89E8-21D79F1B4EE8}	CLMH142E279MH142E285	469.77	466.02	0.666666667	MH142E279	MH142E285		146	CLMH142E279MH142E285	8	0.0257	0.000458	0.03	0.000549	0.04	0.000652	0.04	0.000549	0.04		
CLMH142E280MH142E286		2012		Existing	assumed Mannings N	MH142E280	MH142E286		T1744OB	IRWD	PVC	{FDEFB257-47C6-4B10-9662-99EDB98C5996}	CLMH142E280MH142E286	472.27	468.52	0.666666667	MH142E280	MH142E286		146	CLMH142E280MH142E286	8	0.0257	0.000637	0.03	0.000763	0.03	0.000906	0.04	0.000763	0.03		
CLMH142E281MH142E283		2012		Existing	assumed Mannings N	MH142E281	MH142E283		T1744O	IRWD	PVC	{713C364D-EB43-4E97-BEAC-413B4F1382A8}	CLMH142E281MH142E283	476.68	472.42	0.666666667	MH142E281	MH142E283		146	CLMH142E281MH142E283	8	0.0292	0.000557	0.01	0.000669	0.01	0.000793	0.02	0.000669	0.01		
CLMH142E282MH142E286		2012		Existing	assumed Mannings N	MH142E282	MH142E286		T1744OB	IRWD	PVC	{02FD4EC7-7532-4613-BF1D-E57ECBEE48F4}	CLMH142E282MH142E286	471.55	468.52	0.666666667	MH142E282	MH142E286		117	CLMH142E282MH142E286	8	0.0259	0.002994	0.04	0.003594	0.04	0.004262	0.05	0.003594	0.04		
CLMH142E283MH142E286		2012		Existing	assumed Mannings N	MH142E283	MH142E286		T1744O	IRWD	PVC	{66268F4A-A3F3-408E-B069-47F4DE3265F9E}	CLMH142E283MH142E286	472.22	468.62	0.666666667	MH142E283	MH142E286		32	CLMH142E283MH142E286	8	0.0290	0.000557	0.01	0.000669	0.01	0.000793	0.02	0.000669	0.01		
CLMH142E284MH142E215		2012		Existing	assumed Mannings N	MH142E284	MH142E215		A01805B	IRWD	PVC	{152CFE7E-447A-477C-8B00-80CD9AA32CB8}	CLMH142E284MH142E215	451.85	449.30	0.666666667	MH142E284	MH142E215		64	CLMH142E284MH142E215	8	0.0398	0.049771	0.12	0.059609	0.13	0.070666	0.14	0.117321	0.20		
CLMH142E285MH142E271		2012		Existing	assumed Mannings N	MH142E285	MH142E271		T1744O	IRWD	PVC	{AFF9465E-6A07-4483-B730-FFED39CC1CF0}	CLMH142E285MH142E271	466.02	463.72	0.666666667	MH142E285	MH142E271		124	CLMH142E285MH142E271	8	0.0185	0.006846	0.06	0.008215	0.06	0.009743	0.07	0.008215	0.06		
CLMH142E286MH142E285		2012		Existing	assumed Mannings N	MH142E286	MH142E285		T1744O	IRWD	PVC	{DB92BE34-640B-47DC-941E-DB8EFC7B93EE}	CLMH142E286MH142E285	468.52	466.12	0.666666667	MH142E286	MH142E285		124	CLMH142E286MH142E285	8	0.0194	0.004188	0.04	0.005025	0.05	0.005961	0.05	0.005025	0.05		
CLMH142E287MH142E251		2012		Existing	assumed Mannings N	MH142E287	MH142E251		T1744OB	IRWD	PVC	{BC68CB8D-4DD6-489D-91D0-837EFDA9BBE0}	CLMH142E287MH142E251	461.51	459.65	0.666666667	MH142E287	MH142E251		46	CLMH142E287MH142E251	8	0.0404	0.003540	0.05	0.003789	0.05	0.004491	0.06	0.003789	0.08		
CLMH142E288MH142E213		2007		Existing	assumed Mannings N	MH142E288	MH142E213		A02162	IRWD	PVC	{52CFC6F4-BAF2-4CC4-A3D3-B40BCEE17551}	CLMH142E288MH142E213	447.91	447.15	0.666666667	MH142E288	MH142E213	Future 8-in and less, d/D>0.50	183	CLMH142E288MH142E213	8	0.0042	0.077821	0.26	0.093216	0.29	0.110523	0.31	0.292556	0.54		
CLMH142E289MH142E212		2007		Existing	assumed Mannings N	MH142E289	MH142E212		A02162	IRWD	PVC	{A0786C7E-E297-4B94-ABF9-39346999370E}	CLMH142E289MH142E212	446.51	446.13	0.666666667	MH142E289	MH142E212	Future 8-in and less, d/D>0.50	98	CLMH142E289MH142E212	8	0.0039	0.077815	0.25	0.093212	0.27	0.110521	0.30	0.303810	0.51		
CLMH142E290MH142E291		2013		Existing	assumed Mannings N	MH142E290	MH142E291		T1751O	IRWD	PVC	{78C8486C-6AFE-4FD3-8DA1-FECA231433AC}	CLMH142E290MH142E291	452.62	452.38	0.666666667	MH142E290	MH142E291		36	CLMH142E290MH142E291	8	0.0068	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003035	0.06
CLMH142E291MH142E293		2013		Existing	assumed Mannings N	MH142E291	MH142E293		T1751O	IRWD	PVC	{FA46236A-A65D-411A-9C4D-117C9CDA198C}	CLMH142E291MH142E293	452.38	451.92	0.666666667	MH142E291	MH142E293		65	CLMH142E291MH142E293	8	0.0071	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005991	0.07
CLMH142E292MH142E291		2013		Existing	assumed Mannings N	MH142E292	MH142E291		T1751O	IRWD	PVC	{CA1D7D59-8460-4F43-AFAB-15B1ACE80365}	CLMH142E292MH142E291	452.75	452.38	0.666666667	MH142E292	MH142E291		69	CLMH142E292MH142E291	8	0.0054	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002959	0.06
CLMH142E293MH142E294		2013		Existing	assumed Mannings N	MH142E293	MH142E294		T1751O	IRWD	PVC	{EC3565C1-DF65-4E57-847A-72669C7EE436}	CLMH142E293MH142E294	451.92	451.19	0.666666667	MH142E293	MH142E294		145	CLMH142E293MH142E294	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005991	0.07
CLMH142E294MH142E302	29.66' FROM W-E	2013		Existing	assumed Mannings N	MH142E294	MH142E302		T1751O	IRWD	PVC	{C1CDB7A4-D8B4-40A2-B165-5E4501380FAA}	CLMH142E294MH142E302	451.14	450.93	0.666666667	MH142E294	MH142E302		32	CLMH142E294MH142E302	8	0.0040	0.001094	0.03	0.001167	0.03	0.001384	0.03	0.006484	0.08		
CLMH142E295MH142E290		2013		Existing	assumed Mannings N	MH142E295	MH142E290		T1751O	IRWD	PVC	{B47A58BC-B1B5-4EC0-B5A8-5A5D92CCC16C}	CLMH142E295MH142E290	452.93	452.62	0.666666667	MH142E295	MH142E290		59	CLMH142E295MH142E290	8	0.0059	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003050	0.05
CLMH142E296MH142E297		2014		Existing	assumed Mannings N	MH142E296	MH142E297		T1749ZJ	IRWD	PVC	{375CE87D-0FA2-4CF3-AD59-EE4F04F50414}	CLMH142E296MH142E297	455.38	453.79	0.666666667	MH142E296	MH142E297		211	CLMH142E296MH142E297	8	0.0075	0.011415	0.09	0.013699	0.10	0.016244	0.10	0.065702	0.20		
CLMH142E297MH142E298		2014		Existing	assumed Mannings N	MH142E297	MH142E298		T1749ZJ	IRWD	PVC	{CE6130A6-0502-454D-AA19-05FE2E0D75AD}	CLMH142E297MH142E298	453.79	453.52	0.666666667	MH142E297	MH142E298		259	CLMH142E297MH142E298	8	0.0098	0.012928	0.10	0.015516	0.11	0.018397	0.12	0.071795	0.24		
CLMH142E298MH142E299		2014		Existing	assumed Mannings N	MH142E298	MH142E299		T1749ZJ	IRWD	PVC	{69974ZC1-D13F-4598-B742-8E25FFE466AB}	CLMH142E298MH142E299	453.52	452.55	0.666666667	MH142E298	MH142E299		175	CLMH142E298MH142E299	8	0.0055	0.014826	0.11	0.017795	0.12	0.021099	0.13	0.106072	0.29		
CLMH142E299MH142E300		2014		Existing	assumed Mannings N	MH142E299	MH142E300		T1749ZJ	IRWD	PVC	{42D231DE-228B-460C-902D-892D750B4646}	CLMH142E299MH142E300	452.55	451.59	0.666666667	MH142E299	MH142E300		181	CLMH142E299MH142E300	8	0.0053	0.016638	0.11	0.019970	0.12	0.023679	0.13	0.111122	0.27		
CLMH142E300MH142E301		2014		Existing	assumed Mannings N	MH142E300	MH142E301		T1749ZJ	IRWD	PVC	{55A6905F-412E-4E03-82F1-68F5E53BA545}	CLMH142E300MH142E301	451.59	451.29	0.666666667	MH142E300	MH142E301		31	CLMH142E300MH142E301	8	0.0097	0.016638	0.09	0.019970	0.10	0.023679	0.11	0.111122	0.23		
CLMH142E301MH142E302		2014		Existing	assumed Mannings N	MH142E301	MH142E302		T1749ZJ	IRWD	PVC	{8E751B11-E050-4ECF-99F7-F8DDE1DB228E}	CLMH142E301MH142E302	451.29	450.78	0.666666667	MH142E301	MH142E302		21	CLMH142E301MH142E302	8	0.0248	0.016638	0.10	0.019970	0.11	0.023679	0.11	0.118166	0.25		
CLMH142E302MH142E303		2014		Existing	assumed Mannings N	MH142E302	MH142E303		T1749ZJ	IRWD	PVC	{8D10E247-B593-44DB-B0C5-E04FFFB0A539}	CLMH142E302MH142E303	450.78	450.28	0.666666667	MH142E302	MH142E303		98	CLMH142E302MH142E303	8	0.0053	0.017241	0.12	0.020663	0.13	0.024435	0.14	0.124157	0.31		
CLMH142E303MH142E304		2014		Existing	assumed Mannings N	MH142E303	MH142E304		T1749ZJ	IRWD	PVC	{416CCB2A-535C-455D-9347-3B578ACBBE92}	CLMH142E303MH142E304	450.28	449.72	0.666666667	MH142E303	MH142E304		116	CLMH142E303MH142E304	8	0.0048	0.017688	0.12	0.021146	0.13	0.025074	0.14	0.130349	0.32		
CLMH142E304MH142E215		2014		Existing	assumed Mannings N	MH142E304	MH142E215		T1749ZJ	IRWD	PVC	{BCCB30AB-D17B-49C2-8DF3-336490D8ACE3}	CLMH142E304MH142E215	449.67	449.30	0.666666667	MH142E304	MH142E215		92	CLMH142E304MH142E215	8	0.0040	0.017683	0.12	0.021145	0.13	0.025074	0.14	0.136750	0.33		
CLMH142E312MH142E304	38.37' E-W IS T12	2013		Existing	assumed Mannings N	MH142E312	MH142E304		T1751I	IRWD	PVC	{D8788B26C-7143-47C5-ACD9-EA3181FF6771}	CLMH142E312MH142E304	451.51	449.72	0.666666667	MH142E312	MH142E304		164	CLMH142E312MH142E304	8	0.0109	0.000000	0.03	0.000000	0.03	0.000000	0.04	0.006403	0.17		
CLMH142E313MH142E303	37.5'FROM E-W IS	2013		Existing	assumed Mannings N	MH142E313	MH142E303		T1751O	IRWD	PVC	{03441FF3-6FDC-4E41-9C47-71B07982570}	CLMH142E313MH142E303	452.06	450.28	0.666666667	MH142E313	MH142E303		163	CLMH142E313MH142E303	8	0.0109	0.000528	0.07	0.006635	0.08	0.007552	0.08	0.006192	0.19		
CLMH142E314MH142N151	37.5' FROM W-E IS	2013		Existing	assumed Mannings N	MH142E314	MH142N151		T1751I	IRWD	PVC	{B1966E6C-9A53-4BAF-B245-4EC0AFC5E7F9}	CLMH142E314MH142N151	465.14	463.34	0.666666667	MH142E314	MH142N151		164	CLMH142E314MH142N151	8	0.0110	0.001939	0.04	0.002329	0.04	0.002764	0.04	0.006048	0.09		
CLMH142E315MH142N152	37.5' FROM W-E IS	2013		Existing	assumed Mannings N	MH142E315	MH142N152		T1751I	IRWD	PVC	{F1F10C30-551F-4347-88D1-6D8CBC81592F}	CLMH142E315C01N2N167	464.08	462.28	0.666666667	MH142E315	MH142N152		164	CLMH142E315MH142N152	8	0.0114	0.001473	0.04	0.001767	0.04	0.002096	0.05	0.003841	0.09		
CLMH142E316MH142N154	37.5' FROM W-E IS	2013		Existing	assumed Mannings N	MH142E316	MH142N154		T1751I	IRWD	PVC	{6643A271-A1D4-4A82-896F-667F2AA09771}	CLMH142E316MH142N154	462.76	460.96	0.666666667	MH142E316	MH142N154		164	CLMH142E316MH142N154	8	0.0110	0.001681	0.04	0.002017	0.05	0.002393	0.05	0.003803	0.09		
CLMH142E317MH142N156	37.5' FROM W-E IS	2013		Existing	assumed Mannings N	MH142E317	MH142N156		T1751I	IRWD	PVC	{DCF5393A-ADE3-411A-8D3F-719803BF3096}	CLMH142E317MH142N156	461.44	459.64	0.666666667	MH142E317	MH142N156		164	CLMH142E317MH142N156	8	0.0110	0.001153	0.04	0.001384	0.05	0.001641	0.05	0.003782	0.10		
CLMH142E318MH142N158	37.5' FROM W-E IS	0		Existing	assumed Mannings N	MH142E318	MH142N158		T1751I	IRWD	PVC	{F6A6407A-9C62-4867-B6F9-83C934386BA4}	CLMH142E318MH142N158	461.11	458.32	0.666666667	MH142E318	MH142N158		164	CLMH142E318MH142N158	8	0.0170	0.001172	0.05	0.001408	0.05	0.001669	0.06	0.005100	0.11		
CLMH142E319MH142E320		2013		Existing	assumed Mannings N	MH142E319	MH142E320		T1751I	IRWD	PVC	{3C0A0125-9F42-4E15-A067-155BCA2E69BD}	CLMH142E319MH142E320	480.61	459.16	0.666666667	MH142E319	MH142E320		85	CLMH142E319MH142E320	8	0.2616	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002698	0.03		
CLMH142E320MH142E321		2013		Existing	assumed Mannings N	MH142E320	MH142E321		T1751I	IRWD	PVC	{E7E1FC8F-B589-4FF1-A2D0-4FB7B6890AA5}	CLMH142E320MH142E321	459.16	456.79	0.666666667	MH142E320	MH142E321		120	CLMH142E320MH142E321	8	0.0198	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002703	0.04		
CLMH142E321MH142E322		2013		Existing	assumed Mannings N	MH142E321	MH142E322		T1751I	IRWD	PVC	{8B116705-47C9-47C6-91D8-768F9EDFD9A4}	CLMH142E321MH142E322	456.79	456.01	0.666666667	MH142E321	MH142E322		38	CLMH142E321MH142E322	8	0.0208	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002700	0.05		
CLMH142E322MH142E323		2013		Existing	assumed Mannings N	MH142E322	MH142E323		T1751I	IRWD	PVC	{4BA6D4C2-E8F4-407F-BFAD-749610706489}	CLMH142E322MH142E323	456.01	455.60	0.666666667	MH142E322	MH142E323		79	CLMH142E322MH142E323	8	0.0052	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006801	0.09		
CLMH142E323MH142E324		2013		Existing	assumed Mannings N	MH142E323	MH142E324		T1751I	IRWD	PVC	{FC134877-7C83-4953-827B-B8A4C98D5359}	CLMH142E323MH142E324	455.60	455.37	0.666666667	MH142E323	MH142E324		33	CLMH142E323MH142E324	8	0.0069	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013541	0.13		
CLMH142E324MH142E325		2013		Existing	assumed Mannings N	MH142E324	MH142E325		T1751I	IRWD	PVC	{720390DC7-7329-4CA4-AFF6-89A3F5C967B1}	CLMH142E324MH142E325	455.37	454.93	0.666666667	MH142E324	MH142E325		81	CLMH142E324MH142E325	8	0.0052	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.017462	0.11		
CLMH142E325MH142E326		2013		Existing	assumed Mannings N	MH142E325	MH142E326		T1751I	IRWD	PVC	{10567876-D271-4FB0-AE2C-96AF634A66E3}	CLMH142E325MH142E326	454.93	454.72	0.666666667	MH142E325	MH142E326		27	CLMH142E325MH142E326	8	0.0077	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019803	0.12		
CLMH142E326MH142E327		2013		Existing	assumed Mannings N	MH142E326	MH142E327		T1751I	IRWD	PVC	{6F77E839-E282-464B-B679-1A0F571DC42C}	CLMH142E326MH142E327	454.72	454.28	0.666666667	MH142E326	MH142E327		85	CLMH142E326MH142E327	8	0.0052	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.023015	0.13		
CLMH142E327MH142E328		2013		Existing	assumed Mannings N	MH142E327	MH142E328		T1751I	IRWD	PVC	{97809AF2-F551-4742-9189-92B8E2E328AB}	CLMH142E327MH142E328	454.28	454.07	0.666666667	MH142E327	MH142E328		82	CLMH142E327MH142E328	8	0.0077	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.028441	0.14		
CLMH142E328MH142E298	58.14' FROM S-N	2013		Existing	assumed Mannings N	MH142E328	MH142E298		T1751I	IRWD	PVC	{7C76F44F-B4D4-41EB-81AB-636D09713344}	CLMH142E328MH142E298	454.07	453.52	0.666666667	MH142E328	MH142E298		87	CLMH142E328MH142E298	8	0.0063	0.001898	0.07	0.002280	0.08	0.002703	0.09	0.034276	0.22		
CLMH142E329MH142E322		2013		Existing	assumed Mannings N	MH142E329	MH142E322		T1751I	IRWD	PVC	{81822B10-59EF-4D65-8205-85336F067409}	CLMH142E329MH142E322	468.30	456.01	0.666666667	MH142E329	MH142E322		152	CLMH142E329MH142E322	8	0.0809	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004102	0.05		
CLMH142E330MH142E324		2013		Existing	assumed Mannings N	MH142E330	MH142E324		T1751I	IRWD	PVC	{4A194311-1D75-49AB-8DE7-CFE99A66579A}	CLMH142E330MH142E324	457.04	455.37	0.666666667	MH142E330	MH142E324		152	CLMH142E330MH142E324	8	0.0110	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003921	0.08		
CLMH142E331MH142E326		2013		Existing	assumed Mannings N	MH142E331	MH142E326		T1751I	IRWD	PVC	{C2C770F-FBCF-4572-AA08-C4BBE7201604}	CLMH142E331MH142E326	456.39	454.72	0.666666667	MH142E331	MH142E326		152	CLMH142E331MH142E326	8	0.0110	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003211	0.09		
CLMH142E332MH142E328		2013		Existing	assumed Mannings N	MH142E332	MH142E328		T1751I	IRWD	PVC	{14E95716-721B-4118-B412-30F432DD168A}	CLMH142E332MH142E328	456.08	454.07	0.666666667	MH142E332	MH142E328		156	CLMH142E332MH142E328	8	0.0132	0.001898	0.04	0.002280	0.04	0.002703	0.04	0.005835	0.10		
CLMH142E333MH142E323		2013		Existing	assumed Mannings N	MH142E333	MH142E323		T1751I	IRWD	PVC	{76062B7F-C248-42AA-9394-682336124411}	CLMH142E333MH142E323	457.39	455.60	0.666666667	MH142E333	MH142E323		164	CLMH142E333MH142E323	8	0.0109	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006741	0.08		
CLMH142E334MH142E325		2013		Existing	assumed Mannings N	MH142E334	MH142E325		T1751I	IRWD	PVC	{FD088A7F-EFE2-4937-9493-AC52BDC83982}	CLMH142E334MH142E325	456.06	454.93	0.666666667	MH142E334	MH142E325		164	CLMH142E334MH142E325	8	0.0069	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002342	0.08		
CLMH142E335MH142E327		2013		Existing	assumed Mannings N	MH142E335	MH142E327		T1751I	IRWD	PVC	{5DA02900-FA2E-4EF7-84A3-26C24FD245EE}	CLMH142E335MH142E327	455.25	454.28	0.666666667	MH142E335	MH142E327		164	CLMH142E335MH142E327	8	0.0059	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005427	0.10		
CLMH142E336MH142E301	37.28' FROM N-S	2013		Existing	assumed Mannings N	MH142E336	MH142E301		T1749ZB	IRWD	PVC	{D5D28962-171A-4465-BC63-EF1B564CD847}	CLMH142E336MH142E301	452.71	451.44	0.666666667	MH142E336	MH142E301		127	CLMH142E336MH142E301	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007044	0.06		
CLMH142E337MH142E336		2013		Existing	assumed Mannings N	MH142E337	MH142E336		T1749ZB	IRWD	PVC	{80CC02EB-D486-42FA-A674-D73478A2331F}	CLMH142E337MH142E336	453.41	452.91	0.666666667	MH142E337	MH142E336		63	CLMH142E337MH142E336	8	0.0080	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003871	0.05		
CLMH142E338MH142E336		2013		Existing	assumed Mannings N	MH142E338	MH142E336		T1749ZB	IRWD	PVC	{A315E859-D0F4-40C1-926C-4D6496DF98F8}	CLMH142E338MH142E336	454.23	452.91	0.666666667	MH142E338	MH142E336		53	CLMH142E338MH142E336	8	0.0260	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003173	0.04		
CLMH142E339MH142E299	25.5' FROM N-S IS	2013		Existing	assumed Mannings N	MH142E339	MH142E299		T1749ZB	IRWD	PVC	{208060D42-9222-4B35-8C09-90EC70B7977A}	CLMH142E339MH142E299	453.81	452.70	0.666666667	MH142E339	MH142E299		111	CLMH142E339MH142E299	8	0.0100	0.001813	0.03	0.002175	0.04	0.002581	0.04	0.005051	0.06		
CLMH142E340MH142E339		2013		Existing	assumed Mannings N	MH142E340	MH142E339		T1749ZB	IRWD	PVC	{1EC48075-1629-4245-A3FA-15D288B24A45}	CLMH142E340MH142E339	454.01	453.81	0.666666667	MH142E340	MH142E339		68	CLMH142E340MH142E339	8	0.0159	0.000878	0.02	0.001053	0.02	0.001250	0.02	0.002602	0.04		
CLMH142E341MH142E339		2013		Existing	assumed Mannings N	MH142E341	MH142E339		T1749ZB	IRWD	PVC	{10ACDF1C-C067-45E3-BBD0-4EB978SD4B02}	CLMH142E341MH142E339	455.78	454.01	0.666666667	MH142E341	MH142E339		51	CLMH142E341MH142E339	8	0.0349	0.000935	0.02	0.001122	0.02	0.001331	0.02	0.002448	0.03		
CLMH142E342MH142E297	25.5' FROM N-S IS	2013		Existing	assumed Mannings N	MH142E342	MH142E297		T1749ZB	IRWD	PVC	{A216A006-3954-4C52-B82-6EFE0DF42AEB}	CLMH142E342MH142E297	455.05	453.94	0.666666667	MH142E342	MH142E297		111	CLMH142E342MH142E297	8	0.0100	0.001514	0.03	0.001818	0.03	0.002154	0.04

CLMH142N082MH142N077		2004		Existing	assumed Mannings N	MH142N082	MH142N077		T1678OE	IRWD	PVC	{2AF07202-A259-4D52-8B6F-17BD409C201D}	CLMH142N082MH142N077	414.26	413.18	0.666666667	MH142N082	MH142N077			209	CLMH142N082MH142N077	8	0.0052	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH142N083MH142N084		2004		Existing	assumed Mannings N	MH142N083	MH142N084		T1678OE	IRWD	PVC	{EBD93CAC-4C05-46A8-A3F4-CB7C7FCC7025}	CLMH142N083MH142N084	425.11	423.84	0.666666667	MH142N083	MH142N084			44	CLMH142N083MH142N084	8	0.0291	0.012000	0.06	0.014407	0.07	0.017079	0.08	0.014407	0.07		
CLMH142N084MH142N086		2004		Existing	assumed Mannings N	MH142N084	MH142N086		T1678OE	IRWD	PVC	{E558BC79-82E3-4168-BCA2-958386C3BA73}	CLMH142N084MH142N086	423.74	420.25	0.666666667	MH142N084	MH142N086			59	CLMH142N084MH142N086	8	0.0597	0.024295	0.08	0.029163	0.08	0.034573	0.09	0.029163	0.08		
CLMH142N085MH142N072		2004		Existing	assumed Mannings N	MH142N085	MH142N072		T1678OE	IRWD	PVC	{A3884D9A-0A0A-4D1E-B679-5E7928B0B56D}	CLMH142N085MH142N072	417.57	416.61	0.666666667	MH142N085	MH142N072			192	CLMH142N085MH142N072	8	0.0050	0.035490	0.16	0.042602	0.18	0.050505	0.19	0.042602	0.18		
CLMH142N086MH142N073		2004		Existing	assumed Mannings N	MH142N086	MH142N073		T1678OE	IRWD	PVC	{91D2AC71-2001-40F2-8556-66147A2EC505}	CLMH142N086MH142N073	420.15	418.76	0.666666667	MH142N086	MH142N073			279	CLMH142N086MH142N073	8	0.0050	0.029913	0.15	0.035906	0.16	0.042568	0.18	0.035906	0.16		
CLMH142N087MH142N097		2004		Existing	assumed Mannings N	MH142N087	MH142N097		T1678OE	IRWD	PVC	{22E4243B-F4E9-41F1-99EC-66EA0DD65182}	CLMH142N087MH142N097	423.80	422.47	0.666666667	MH142N087	MH142N097			265	CLMH142N087MH142N097	8	0.0050	0.013260	0.10	0.015919	0.11	0.018876	0.12	0.015919	0.11		
CLMH142N088MH142N093		2004		Existing	assumed Mannings N	MH142N088	MH142N093		T1678OE	IRWD	PVC	{9194F4E8-6A58-44A8-8E7F-D8C3B3E661EC}	CLMH142N088MH142N093	411.65	410.63	0.666666667	MH142N088	MH142N093			236	CLMH142N088MH142N093	8	0.0043	0.017105	0.12	0.020534	0.13	0.024350	0.14	0.020534	0.13		
CLMH142N089MH142N085		2004		Existing	assumed Mannings N	MH142N089	MH142N085		T1678OE	IRWD	VCP	{B8B58265-F45A-45E5-A650-D7BFA695D9F7}	CLMH142N089MH142N085	417.95	417.67	0.666666667	MH142N089	MH142N085			56	CLMH142N089MH142N085	8	0.0050	0.034228	0.16	0.041087	0.18	0.048708	0.19	0.041087	0.18		
CLMH142N090MH142N096		2004		Existing	assumed Mannings N	MH142N090	MH142N096		T1678OE	IRWD	PVC	{83EDDB16-7254-4A3B-9613-CAF753D19189}	CLMH142N090MH142N096	418.73	407.92	0.666666667	MH142N090	MH142N096			45	CLMH142N090MH142N096	8	0.2474	0.015253	0.07	0.018314	0.09	0.021709	0.11	0.018314	0.09		
CLMH142N091MH142N096		2004		Existing	assumed Mannings N	MH142N091	MH142N096		T1678OE	IRWD	PVC	{2DAA8876-1CD6-4808-B2A2-BB23194EC230}	CLMH142N091MH142N096	409.20	408.02	0.666666667	MH142N091	MH142N096			286	CLMH142N091MH142N096	8	0.0041	0.073244	0.24	0.087931	0.26	0.104251	0.29	0.087931	0.26		
CLMH142N092MH142N091		2004		Existing	assumed Mannings N	MH142N092	MH142N091		T1678OE	IRWD	PVC	{7A77D467-42F3-4CF3-A3E2-A7D85F654FD0}	CLMH142N092MH142N091	409.34	409.30	0.666666667	MH142N092	MH142N091			10	CLMH142N092MH142N091	8	0.0041	0.073155	0.24	0.087823	0.26	0.104123	0.28	0.087823	0.26		
CLMH142N093MH142N092		2004		Existing	assumed Mannings N	MH142N093	MH142N092		T1678OE	IRWD	PVC	{6CA442AC-2E5B-411F-ACA1-FEA5339FFC81}	CLMH142N093MH142N092	410.43	409.44	0.666666667	MH142N093	MH142N092			232	CLMH142N093MH142N092	8	0.0043	0.073155	0.24	0.087823	0.26	0.104123	0.29	0.087823	0.26		
CLMH142N094MH142N093		2004		Existing	assumed Mannings N	MH142N094	MH142N093		T1678OE	IRWD	PVC	{37AFDBAA-F2D2-477F-BD93-56C38C30C47B}	CLMH142N094MH142N093	421.18	410.53	0.666666667	MH142N094	MH142N093			305	CLMH142N094MH142N093	8	0.0349	0.017150	0.09	0.020592	0.10	0.024415	0.12	0.020592	0.10		
CLMH142N095MH142N001		2004		Existing	assumed Mannings N	MH142N095	MH142N001		T1678OE	IRWD	PVC	{9328130B-FD3C-42C1-808E-016F49F889FB}	CLMH142N095MH142N001	407.24	398.48	0.666666667	MH142N095	MH142N001			285	CLMH142N095MH142N001	8	0.0308	0.090939	0.17	0.109178	0.18	0.129439	0.20	0.109178	0.18	0.129439	0.27
CLMH142N096MH142N095		2004		Existing	assumed Mannings N	MH142N096	MH142N095		T1678OE	IRWD	PVC	{99EBE479-693B-4DB3-B856-F5547F4BFE29}	CLMH142N096MH142N095	407.81	407.44	0.666666667	MH142N096	MH142N095			81	CLMH142N096MH142N095	8	0.0046	0.090811	0.26	0.109023	0.29	0.129254	0.32	0.109023	0.29		
CLMH142N097MH142N094		2004		Existing	assumed Mannings N	MH142N097	MH142N094		T1678OE	IRWD	PVC	{36D12FE5-93D9-43C7-917A-01098084SE78}	CLMH142N097MH142N094	422.27	421.28	0.666666667	MH142N097	MH142N094			194	CLMH142N097MH142N094	8	0.0051	0.015020	0.11	0.018034	0.12	0.021384	0.13	0.018034	0.12		
CLMH142N098MH142N091		2006		Existing	assumed Mannings N	MH142N098	MH142N091		T1678OE	IRWD	PVC	{553EC489-5070-4F1D-804C-F838C946358E}	CLMH142N098MH142N091	413.04	409.44	0.666666667	MH142N098	MH142N091			41	CLMH142N098MH142N091	8	0.0814	0.000296	0.01	0.000309	0.00	0.000294	0.00	0.000229	0.01		
CLMH142N110MH142N111		2006		Existing	assumed Mannings N	MH142N110	MH142N111		T1656Z	IRWD	PVC	{5E664AD2-D741-4F09-84A1-618228ZAAE5F}	CLMH142N110MH142N111	425.03	417.13	0.666666667	MH142N110	MH142N111			246	CLMH142N110MH142N111	8	0.0322	0.055197	0.13	0.066184	0.14	0.078473	0.15	0.083949	0.16		
CLMH142N111MH120E046		2005		Existing	assumed Mannings N	MH142N111	MH120E046		T1656Z	IRWD	PVC	{618431D9-4712-4545-968B-35B13A3967A4}	CLMH142N111MH120E046	417.03	411.10	0.666666667	MH142N111	MH120E046			266	CLMH142N111MH120E046	8	0.0223	0.055197	0.14	0.066183	0.16	0.078472	0.17	0.083948	0.17		
CLMH142N112MH142N110		2005		Existing	assumed Mannings N	MH142N112	MH142N110		T1656Z	IRWD	PVC	{FFD72290-AEAE-4551-A284-B041A0B8D6CB}	CLMH142N112MH142N110	429.70	426.98	0.666666667	MH142N112	MH142N110			263	CLMH142N112MH142N110	8	0.0103	0.055197	0.17	0.066184	0.19	0.078473	0.20	0.083949	0.21		
CLMH142N113MH142N112		2005		Existing	assumed Mannings N	MH142N113	MH142N112		T1656Z	IRWD	PVC	{BF12ACE2-0513-4490-A9FB-520308C65F65}	CLMH142N113MH142N112	432.21	429.80	0.666666667	MH142N113	MH142N112			257	CLMH142N113MH142N112	8	0.0094	0.055198	0.18	0.066185	0.19	0.078474	0.21	0.083949	0.22		
CLMH142N114MH142N113		2005		Existing	assumed Mannings N	MH142N114	MH142N113		T1656Z	IRWD	PVC	{45E39AF2-4A83-4E65-97A5-3B3211EF5690}	CLMH142N114MH142N113	434.27	432.31	0.666666667	MH142N114	MH142N113			103	CLMH142N114MH142N113	8	0.0100	0.055198	0.17	0.066185	0.19	0.078475	0.21	0.083950	0.21		
CLMH142N115MH142N033		2005		Existing	assumed Mannings N	MH142N115	MH142N033		T1656Z	IRWD	PVC	{9497DC66-728A-40A6-9F0A-0A15E9F97606}	CLMH142N115MH142N033	440.78	437.06	0.666666667	MH142N115	MH142N033			40	CLMH142N115MH142N033	8	0.0251	0.039207	0.12	0.047024	0.13	0.055757	0.14	0.059289	0.14		
CLMH142N116MH142E241		2005		Existing	assumed Mannings N	MH142N116	MH142E241		T1656Z	IRWD	PVC	{72F6D51A-8C3A-4002-8DC9-3DBA39504A90}	CLMH142N116MH142E241	441.80	439.04	0.666666667	MH142N116	MH142E241			322	CLMH142N116MH142E241	8	0.0086	0.039358	0.15	0.047249	0.17	0.056023	0.18	0.053320	0.18		
CLMH142N117MH142N119		2013		Existing	assumed Mannings N	MH142N117	MH142N119		A01803B	IRWD	PVC	{2B6EFEAC-2708-4465-8095-BAC34F8D7159}	CLMH142N117MH142N119	480.50	471.60	0.666666667	MH142N117	MH142N119			343	CLMH142N117MH142N119	8	0.0260	0.003464	0.04	0.004158	0.04	0.004931	0.04	0.014904	0.07		
CLMH142N118BMH142N120		2013		Existing	assumed Mannings N	MH142N118	MH142N120		A01803B	IRWD	PVC	{BADB2E45-3B1A-4222-9C76-918975776222}	CLMH142N118MH142N120	470.66	461.90	0.666666667	MH142N118	MH142N120			324	CLMH142N118MH142N120	8	0.0271	0.017707	0.08	0.021256	0.09	0.025202	0.09	0.019656	0.08		
CLMH142N119MH142N139		2013		Existing	assumed Mannings N	MH142N119	MH142N139		A01803B	IRWD	VCP	{BDE5974E-AAE7-4634-AC06-FB78B1A8580B}	CLMH142N119MH142N139	471.50	467.58	0.666666667	MH142N119	MH142N139			218	CLMH142N119MH142N139	8	0.0180	0.009726	0.07	0.011676	0.07	0.013845	0.08	0.014904	0.08		
CLMH142N120MH142N136		2013		Existing	assumed Mannings N	MH142N120	MH142N136		A01803B	IRWD	PVC	{F21A3DDA-F682-4A49-B293-151D1196C05C}	CLMH142N120MH142N136	461.80	456.75	0.666666667	MH142N120	MH142N136			189	CLMH142N120MH142N136	8	0.0175	0.022659	0.10	0.027199	0.11	0.032250	0.12	0.019656	0.09		
CLMH142N121MH142N138		2013		Existing	assumed Mannings N	MH142N121	MH142N138		A01803B	IRWD	PVC	{DA77EFC1-05F5-4AE8-9E93-683B1DE5CD97}	CLMH142N121MH142N138	466.18	463.16	0.666666667	MH142N121	MH142N138			177	CLMH142N121MH142N138	8	0.0170	0.001647	0.03	0.001978	0.03	0.002346	0.03	0.013761	0.09		
CLMH142N122MH142N023		2013		Existing	assumed Mannings N	MH142N122	MH142N023		A01803B	IRWD	PVC	{CB21946E-348B-4D42-B3F7-112F3AC349E0}	CLMH142N122MH142N023	449.35	444.48	0.666666667	MH142N122	MH142N023			83	CLMH142N122MH142N023	8	0.0587	0.002502	0.03	0.003004	0.03	0.003562	0.03	0.008999	0.05		
CLMH142N123MH142N128		2013		Existing	assumed Mannings N	MH142N123	MH142N128		A01803B	IRWD	PVC	{EEAEA01D-4A68-4FAA-85A8-052280C087C8}	CLMH142N123MH142N128	465.75	453.61	0.666666667	MH142N123	MH142N128			127	CLMH142N123MH142N128	8	0.0957	0.002502	0.02	0.003004	0.03	0.003562	0.03	0.008999	0.04		
CLMH142N124MH142N125		2013		Existing	assumed Mannings N	MH142N124	MH142N125		A01803B	IRWD	PVC	{49FD658A-20F6-4DC0-98A7-ACB4338BB869}	CLMH142N124MH142N125	464.83	462.26	0.666666667	MH142N124	MH142N125			128	CLMH142N124MH142N125	8	0.0200	0.002592	0.03	0.003111	0.04	0.003690	0.04	0.009663	0.06		
CLMH142N125MH142N126		2013		Existing	assumed Mannings N	MH142N125	MH142N126		A01803B	IRWD	PVC	{0F8659C1-FCF2-405B-A73F-E9ED7B308AF0}	CLMH142N125MH142N126	462.06	457.10	0.666666667	MH142N125	MH142N126			130	CLMH142N125MH142N126	8	0.0382	0.007374	0.05	0.008854	0.05	0.010497	0.06	0.009663	0.05		
CLMH142N126MH142N140		2013		Existing	assumed Mannings N	MH142N126	MH142N140		A01803B	IRWD	PVC	{221E9FCE-7090-4185-A0DF-673E133D9A5B}	CLMH142N126MH142N140	456.80	455.14	0.666666667	MH142N126	MH142N140			189	CLMH142N126MH142N140	8	0.0088	0.011294	0.08	0.013558	0.09	0.016075	0.10	0.018282	0.10		
CLMH142N127MH142N126		2013		Existing	assumed Mannings N	MH142N127	MH142N126		A01803B	IRWD	PVC	{1C92315C-885B-4801-B215-528ZA789044A}	CLMH142N127MH142N126	458.17	457.00	0.666666667	MH142N127	MH142N126			235	CLMH142N127MH142N126	8	0.0050	0.003920	0.05	0.004705	0.06	0.005578	0.07	0.008619	0.08		
CLMH142N128MH142N122		2013		Existing	assumed Mannings N	MH142N128	MH142N122		A01803B	IRWD	PVC	{77863B85-DCBD-4B5C-B824-DFB0D0A50A7C}	CLMH142N128MH142N122	453.51	449.45	0.666666667	MH142N128	MH142N122			75	CLMH142N128MH142N122	8	0.0539	0.002502	0.03	0.003004	0.03	0.003562	0.03	0.008999	0.05		
CLMH142N129MH142N123		2013		Existing	assumed Mannings N	MH142N129	MH142N123		A01803B	IRWD	PVC	{803C5CD1C-D906-4498-8561-A98A0B0F2D2F}	CLMH142N129MH142N123	474.14	465.85	0.666666667	MH142N129	MH142N123			174	CLMH142N129MH142N123	8	0.0717	0.000754	0.01	0.000906	0.02	0.001075	0.02	0.008999	0.05		
CLMH142N130MH142N131		2014		Existing	assumed Mannings N	MH142N130	MH142N131		T1686R	IRWD	PVC	{900DF688-895B-4D46-BC02-21A47F38FC74}	CLMH142N130MH142N131	466.01	464.17	0.666666667	MH142N130	MH142N131			219	CLMH142N130MH142N131	8	0.0084	0.021059	0.11	0.025239	0.12	0.029929	0.13	0.032302	0.14		
CLMH142N131MH142N142		2014		Existing	assumed Mannings N	MH142N131	MH142N142		T1686R	IRWD	PVC	{7C63F309-574B-4527-BC47-4D8B2C63FB79}	CLMH142N131MH142N142	464.07	460.18	0.666666667	MH142N131	MH142N142			362	CLMH142N131MH142N142	8	0.0107	0.021058	0.11	0.025239	0.12	0.029928	0.13	0.032301	0.13		
CLMH142N132MH142N130		2014		Existing	assumed Mannings N	MH142N132	MH142N130		T1686R	IRWD	VCP	{BC258633-F865-426E-8F06-700C5635A}	CLMH142N132MH142N130	467.39	466.21	0.666666667	MH142N132	MH142N130			225	CLMH142N132MH142N130	8	0.0052	0.000165	0.01	0.000198	0.01	0.000233	0.01	0.000193	0.01		
CLMH142N133MH142N116		2014		Existing	assumed Mannings N	MH142N133	MH142N116		T1686R	IRWD	PVC	{C3A559F2-110D-45C2-AD74-C4036622E489}	CLMH142N133MH142N116	445.09	441.80	0.666666667	MH142N133	MH142N116			309	CLMH142N133MH142N116	8	0.0106	0.039359	0.15	0.047250	0.16	0.056023	0.18	0.053321	0.17		
CLMH142N134MH142N115		2014		Existing	assumed Mannings N	MH142N134	MH142N115		T1686R	IRWD	PVC	{76829D0E-37FE-46FE-ACFB-F3B1147D7E176}	CLMH142N134MH142N115	453.47	440.88	0.666666667	MH142N134	MH142N115			181	CLMH142N134MH142N115	8	0.0698	0.039207	0.09	0.047024	0.10	0.055758	0.11	0.059289	0.11		
CLMH142N135MH142N133		2014		Existing	assumed Mannings N	MH142N135	MH142N133		T1686R	IRWD	PVC	{E3188C64-500B-46F6-A258-7756E43175F1}	CLMH142N135MH142N133	455.04	445.19	0.666666667	MH142N135	MH142N133			74	CLMH142N135MH142N133	8	0.1345	0.039359	0.08	0.047250	0.09	0.056023	0.09	0.053321	0.09		
CLMH142N136MH142N135		2013		Existing	assumed Mannings N	MH142N136	MH142N135		A01803B	IRWD	PVC	{A5272300-4150-424A-978C-485F0416E32C}	CLMH142N136MH142N135	456.65	455.14	0.666666667	MH142N136	MH142N135			151	CLMH142N136MH142N135	8	0.0100	0.025309	0.12	0.030381	0.13	0.036021	0.14	0.019656	0.10		
CLMH142N137MH142N135		2013		Existing	assumed Mannings N	MH142N137	MH142N135		T1686R	IRWD	PVC	{EBE8FDF3-8336-4575-9CE7-47D32FAB71F1}	CLMH142N137MH142N135	462.10	455.24	0.666666667	MH142N137	MH142N135			162	CLMH142N137MH142N135	8	0.0558	0.012365	0.06	0.014847	0.06	0.017603	0.07	0.033665	0.09		
CLMH142N138MH142N137		2014		Existing	assumed Mannings N	MH142N138	MH142N137		T1686R	IRWD	PVC	{97351E77-F245-4F8E-9386-293EA3C7B131}	CLMH142N138MH142N137	463.06	462.30	0.666666667	MH142N138	MH142N137			121	CLMH142N138MH142N137	8	0.0063	0.012365	0.09	0.014847	0.10	0.017603	0.11	0.033665	0.15		
CLMH142N139MH142N138		2014		Existing	assumed Mannings N	MH142N139	MH142N138		T1686R	IRWD	PVC	{16558925-FCE6-428E-B0F0-8BDB05B88183}	CLMH142N139MH142N138	467.48	463.26	0.666666667	MH142N139	MH142N138			207	CLMH142N139MH142N138	8	0.0203	0.009726	0.06	0.011676	0.07	0.013845	0.08	0.014904	0.08		
CLMH142N140MH142N134		2014		Existing	assumed Mannings N	MH142N140	MH142N134		T1686R	IRWD	PVC	{0D353F2A-EFE2-4475-B945-DF5640E7AA35}	CLMH142N140MH142N134	455.04	453.57	0.666666667	MH142N140	MH142N134			324	CLMH142N140MH142N134	8	0.0205	0.037240	0.12	0.044663	0.13	0.052959	0.14	0.059289	0.15		
CLMH142N141MH142N140		2014		Existing	assumed Mannings N	MH142N141	MH142N140		T1686R	IRWD	PVC	{CAEC7157-5BEE-4FA5-8DBD-305F128D425E}	CLMH142N141MH142N140	458.66	455.24	0.666666667	MH142N141	MH142N140			179	CLMH142N141MH142N140	8	0.0192	0.025947	0.10	0.031105	0.11	0.036884	0.12	0.032301	0.11		
CLMH142N142MH142N141		2014		Existing	assumed Mannings N	MH142N142	MH142N141		T1686R	IRWD	PVC	{63F750D0-EF28-4A3D-802A-A5C021295C36}	CLMH142N142MH142N141	460.08	458.76	0.666666667	MH142N142	MH142N141			51	CLMH142N142MH142N141	8	0.0259	0.024476	0.10	0.029341	0.10	0.034793	0.11	0.032301	0.11		
CLMH142N143MH142N132		2012		Existing	assumed Mannings N	MH142N143	5627R5		MH142N143	IRWD	PVC	{6A44431B-E3B6-43DF-9C6D-CD4CB32222D6}	CLMH142N143MH142N132	470.98	467.49	0.666666667	MH142N143	MH142N132			45	CLMH142N143MH142N132	8	0.0771	0.000293	0.00	0.000306	0.01	0.000292	0.01	0.000221	0.01		
CLMH142N144MH142N143		2012		Existing	assumed Mannings N	MH142N144	MH142N143		5627R5	IRWD	PVC	{2B4E65AB-61D2-43F7-AC1C-9A32A525E7FC}	CLMH142N144MH142N143	471.40	471.08	0.666666667	MH142N144	MH142N143			64	CLMH142N144MH142N143	8	0.0050	0.000165	0.01	0.000195	0.01	0.000233	0.01	0.000195	0.01		
CLMH142N145MH142N144		2012		Existing	assumed Mannings N	MH142N145	MH142N144		5627R5	IRWD	PVC	{B98CB785-2E75-4889-835F-CD0949990D53}	CLMH142N145MH142N144	472.02	471.50	0.666666667	MH142N145	MH142N144			102	CLMH142N145MH142N144	8	0.0051	0.000036	0.00	0.000043	0.01	0.000047	0.01	0.000037	0.01		
CLMH142N146MH142N130		2014		Existing	assumed Mannings N	MH142N146	MH142N130		T1686R	IRWD	PVC	{A4054EFF-DCB6-4469-A1D1-613059026A86}	CLMH142N146MH142N130	476.14	466.21	0.666666667	MH142N146	MH142N130			146	CLMH142N146MH142N130	8	0.0632	0.019693	0.07	0.023641	0.08	0.028031	0.08	0.032110	0.09		
CLMH142N147MH142N148		2014		Existing	assumed Mannings N	MH142N147	MH142N148		T1749Z	IRWD	PVC	{DE824A0F7-CCEA-4C10-9BAE-59EF8AD66FB0}	CLMH142N147MH142N148	464.45	464.05	0.666666667	MH142N147	MH142N148			61	CLMH142N147MH142N148	8	0.0065	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004874	0.06		
CLMH142N148MH142N149		2014		Existing	assumed Mannings N	MH142N148	MH142N149		T1749Z	IRWD	PVC	{7A025432-CC68-41A9-997D-6813D97E80CD}	CLMH142N148MH142N149	464.05	463.78	0.666666667	MH142N148	MH142N149			41	CLMH142N148MH142N149	8	0.0065	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004858	0.08		
CLMH142N149MH142N151		2014		Existing	assumed Mannings N	MH142N149	MH142N151		T1749Z	IRWD	PVC	{CAC66ACD-4049-455E-8A26-709BA0B40083}	CLMH142N149MH142N151	463.78	463.34	0.666666667	MH142N149	MH142N151			211	CLMH142N149MH142N151	8	0.0063	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012911	0.10		
CLMH142N150MH142N149		2014		Existing	assumed Mannings N	MH142N150	MH142N149		T1749Z	IRWD	PVC	{A1A45582B-86E3-4EE7-9386-4C62C21237A2}	CLMH142N150MH142N149	464.29	463.93	0.666666667	MH142N150	MH142N149			31	CLMH142N150MH142N149	8	0.0117	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008055	0.07		
CLMH142N151MH142N152		2014		Existing	assumed Mannings N	MH142N151	MH142N152		T1749Z	IRWD	PVC	{7342267F-9EFA-4118-82D2-187D871F79D1}	CLMH142N151MH142N152	463.34	462.28	0.666666667	MH142N151	MH142N152			116	CLMH142N151MH142N152	8	0.0091	0.001927	0.04	0.002314	0.04	0.002743	0.05	0.022198	0.12		
CLMH142N152MH142N153		2014		Existing	assumed Mannings N	MH142N152	MH142N153		T1749Z	IRWD	PVC	{99CF2307-687A-4C62-B83D-75B5DA335EFB}	CLMH142N152MH142N153	462.28	461.15	0.666666667	MH142N152	MH142N153			103	CLMH142N152MH142N153	8	0.0109	0.003399	0.04	0.004081	0.05	0.004839	0.05	0.029396	0.12		
CLMH142N153MH142N154		2014		Existing	assumed Mannings N	MH142N153	MH142N154		T1749Z	IRWD	PVC	{9CB83562-C9C2-43C5-941F-2598C15D0E4EB}	CLMH142N153MH142N154	461.15	460.96	0.666666667	MH142N153	MH142N154			9	CLMH142N153MH142N154	8	0.0220	0.003399	0.04	0.004081	0.05	0.004839	0.05	0.032640	0.12		
CLMH142N154MH142N155		2014		Existing	assumed Mannings N	MH142N154	MH142N155		T1749Z	IRWD	PVC	{A08FAEB1-7BEA-634A-826C-BB27225AA6EE}	CLMH142N154MH142N155	460.96	459.94	0.666666667	MH142N154	MH142N155			92	CLMH142N154MH142N155	8	0.0111	0.005081	0.05	0.006098	0.06	0.007232	0.06	0.036443	0.14		
CLMH142N155MH142N156		0		Existing	assumed Mannings N	MH142N155	MH142N156		T1749Z	IRWD	PVC	{98B81A5D-842F-4EB4-8F96-2DC674EDD860}	CLMH142N155MH142N156	459.94	459.64	0.666666667	MH142N155	MH142N156			20	CLMH142N155MH142N156	8	0.0149	0.005210	0.06	0.006254	0.06	0.007416	0.07	0.039718	0.14		
CLMH142N156MH142N157		2014		Existing	assumed Mannings N	MH142N156	MH142N157		T1749Z	IRWD	PVC	{90A0BE7F-B303-41DF-9616-445527906BFA}	CLMH142N156MH142N157	459.64	458.74	0.666666667	MH142N156	MH142N157			80	CLMH142N156MH142N157	8	0.0112	0.006363	0.06	0.007638	0.07	0.009057	0.07	0.043499	0.15		
CLMH142N157MH142N158		0		Existing	assumed Mannings N	MH142N157	MH142N158		T1749Z	IRWD	PVC	{CFE5C2AA-B047-459A-AF08-2109BA8EF0BF}	CLMH142N157MH142N158	458.74	458.32	0.666666667	MH142N157	MH142N158			185	CLMH142N157MH142N158	8	0.0133	0.008006	0.07	0.009610	0.07	0.011396	0.08	0.046785	0.16		
CLMH142N158MH142N159		2014		Existing	assumed Mannings N	MH142N158	MH142N159		T1749Z	IRWD	PVC	{394EE0EA-CD2D-4530-B898-09DBD8B43904}	CLMH142N158MH142N159	458.32	457.53	0.666666667	MH142N158	MH142N159			69	CLMH142N158MH142N159	8	0.0115	0.009180	0.07	0.011019	0.08	0.013066	0.08	0.051885	0.16		
CLMH142N159MH142N160		2014		Existing	assumed Mannings N	MH142N159	MH142N160		T1749Z	IRWD	PVC	{8262EF00-E76C-4D6A-9D7E-8BE71FC57022}	CLMH142N159MH142N160	457.53	457.03	0.666666667	MH142N159	MH142N160			40	CLMH142N159MH142N160	8	0.0124	0.009198	0.07	0.011037	0.08	0.013085	0.08	0.056628	0.17		
CLMH142N160MH142N161		2014		Existing	assumed Mannings N	MH142N160	MH142N161		T1749Z	IRWD	PVC	{76D6B01C-C927-4849-A38C-BA94A5BCFD9}	CLMH142N160MH142N161	457.03	456.50	0.666666667	MH142N160	MH142N161			43	CLMH142N160MH142N161	8	0.0123	0.009656	0.07	0.011588	0.08	0.013738	0.09	0.056628	0.17		
CLMH142N161MH142E296		2014		Existing	assumed Mannings N	MH142N161	MH142E296		T1749Z	IRWD	PVC	{24768DC6-2B03-46EF-8873-8C592AB2A5F8}	CLMH142N161MH142E296	456.50	455.38	0.666666667	MH142N161	MH142E296			102	CLMH142N161MH142E296	8	0.0109	0.009654	0.08	0.011586	0.09	0.013738	0.09	0.060673	0.19		
CLMH142N177MH142N178		2013		Existing	assumed Mannings N	MH142N177	MH142N178		T1747Y	IRWD	PVC	{A71FF6ED-5D30-4F09-B1FB-ED7A45023EF5}	CLMH142N177MH142N178	414.11	411.80	0.666666667	MH142N177

| | | |

| | | |

CLMH156S028MH156S025		1998		Existing		MH156S028	MH156S025		A0123B	IRWD	VCP	{01CCC8DF-042E-4743-B489-DD36BC2421DA}	CLMH156S028MH156S025	231.28	229.73	2.750000000	MH156S028	MH156S025				155	CLMH156S028MH156S025	33	0.0100	2.578424	0.19	2.960824	0.20	3.509734	0.22	6.300025	0.31				
CLMH156S029MH156S028		1998		Existing		MH156S029	MH156S028		A0123BB	IRWD	VCP	{3744AF4F-9B85-48CB-BF67-2830495A7745}	CLMH156S029MH156S028	231.43	231.38	2.750000000	MH156S029	MH156S028				32	CLMH156S029MH156S028	33	0.0016	2.578436	0.24	2.960834	0.26	3.509742	0.28	6.300031	0.38				
CLMH156S030MH156S029		1998		Existing		MH156S030	MH156S029		A0123BB	IRWD	VCP	{39FC90EE-E9A2-4A50-9354-11696CD6AD23}	CLMH156S030MH156S029	232.20	231.53	2.750000000	MH156S030	MH156S029				468	CLMH156S030MH156S029	33	0.0014	2.578417	0.27	2.960817	0.29	3.509727	0.31	6.300017	0.42				
CLMH156S031MH156S030		1998		Existing		MH156S031	MH156S030		A0123BB	IRWD	VCP	{01E88A91-F174-495F-AB32-CB62F96AA86F}	CLMH156S031MH156S030	232.80	232.30	2.750000000	MH156S031	MH156S030				356	CLMH156S031MH156S030	33	0.0014	2.579051	0.27	2.961241	0.29	3.510104	0.31	6.300153	0.42				
CLMH156S032MH156S031		1998		Existing		MH156S032	MH156S031		A0123BB	IRWD	VCP	{B30B088A-4F94-4363-B134-826941BFDFBF}	CLMH156S032MH156S031	233.35	232.89	2.750000000	MH156S032	MH156S031				313	CLMH156S032MH156S031	33	0.0015	2.579322	0.26	2.961413	0.28	3.510241	0.31	6.300155	0.41				
CLMH156S033MH156S032		1998		Existing		MH156S033	MH156S032		A0123BB	IRWD	VCP	{528F4800-DF68-49C8-948E-C936020B18CD}	CLMH156S033MH156S032	233.77	233.45	2.750000000	MH156S033	MH156S032				226	CLMH156S033MH156S032	33	0.0014	2.579494	0.26	2.961521	0.28	3.510321	0.30	6.300138	0.41				
CLMH156S034MH156S033		1998		Existing		MH156S034	MH156S033		A0123BB	IRWD	VCP	{63302E91-E75B-435D-B6AC-FDA3A685EF5A}	CLMH156S034MH156S033	234.22	233.87	2.750000000	MH156S034	MH156S033				248	CLMH156S034MH156S033	33	0.0014	2.579533	0.26	2.961540	0.28	3.510326	0.31	6.300103	0.41				
CLMH156S035MH156S034		1998		Existing		MH156S035	MH156S034		A0123BB	IRWD	VCP	{9E565396-5B63-440F-A758-1E43C7DA3480}	CLMH156S035MH156S034	234.52	234.32	2.750000000	MH156S035	MH156S034				145	CLMH156S035MH156S034	33	0.0014	2.579597	0.26	2.961577	0.27	3.510344	0.30	6.300069	0.40				
CLMH156S036MH156S035		1998		Existing		MH156S036	MH156S035		A0123BB	IRWD	VCP	{3C804895-0B23-4729-9501-02CC57A199B3}	CLMH156S036MH156S035	234.82	234.63	2.750000000	MH156S036	MH156S035				33	CLMH156S036MH156S035	33	0.0014	2.579585	0.26	2.961565	0.27	3.510327	0.30	6.630569	0.38				
CLMH156S139MH156S140		2002		Existing	assumed Mannings N	MH156S139	MH156S140		A0078BF	IRWD	VCP	{668BCA50-115E-45A8-B5D7-3A50F58C4D72}	CLMH156S139MH156S140	209.41	208.41	0.666666667	MH156S139	MH156S140				200	CLMH156S139MH156S140	8	0.0050	0.021199	0.13	0.022633	0.13	0.026833	0.15	0.022633	0.13				
CLMH156S140MH156S145		2004		Existing	assumed Mannings N	MH156S140	MH156S145		A0078BH	IRWD	VCP	{AC1B4B91-C1C4-4E0B-AB7D-CED5F928E5F0}	CLMH156S140MH156S145	208.19	208.00	0.833333333	MH156S140	MH156S145				51	CLMH156S140MH156S145	10	0.0037	0.021199	0.10	0.022633	0.10	0.026833	0.11	0.022633	0.10				
CLMH156S143MH156S139		2002		Existing	assumed Mannings N	MH156S143	MH156S139		A0078BF	IRWD	VCP	{568E4BAD-BDB1-4B2A-9A52-F6D5F71823DE}	CLMH156S143MH156S139	212.66	209.61	0.666666667	MH156S143	MH156S139				30	CLMH156S143MH156S139	8	0.1017	0.021199	0.07	0.022633	0.07	0.026833	0.07	0.022633	0.07				
CLMH156S145MH156W103		2004		Existing	assumed Mannings N	MH156S145	MH156W103		A0078BH	IRWD	VCP	{62ED0B88-ECBB-4A3C-B742-F0FBF085C009}	CLMH156S145MH156W103	207.80	207.39	0.833333333	MH156S145	MH156W103				110	CLMH156S145MH156W103	10	0.0037	0.027104	0.11	0.028937	0.12	0.034307	0.13	0.028937	0.12				
CLMH156S146MH156S145		2004		Existing	assumed Mannings N	MH156S146	MH156S145		A0078BH	IRWD	VCP	{2C7CB25F-375D-42AB-A1C1-7B021F76BAA6}	CLMH156S146MH156S145	209.63	208.00	0.666666667	MH156S146	MH156S145				46	CLMH156S146MH156S145	8	0.0154	0.005905	0.05	0.006304	0.05	0.006304	0.05	0.007474	0.05				
CLMH156S147MH156S146		2004		Existing	assumed Mannings N	MH156S147	MH156S146		A0078BH	IRWD	VCP	{CB287D14-757D-4BF7-83C7-70F59DAD9649}	CLMH156S147MH156S146	211.86	209.83	0.666666667	MH156S147	MH156S146				204	CLMH156S147MH156S146	8	0.0100	0.005905	0.06	0.006304	0.06	0.007474	0.07	0.006304	0.06				
CLMH156S148MH156S149		2003		Existing	assumed Mannings N	MH156S148	MH156S149		A0080BY	IRWD	PVC	{5F8C7F72-98A3-43FE-A760-5D3F1B4708EC}	CLMH156S148MH156S149	227.11	219.64	0.666666667	MH156S148	MH156S149				162	CLMH156S148MH156S149	8	0.0461	0.001708	0.02	0.001824	0.02	0.002161	0.03	0.009119	0.05				
CLMH156S149MH156S012		2003		Existing	assumed Mannings N	MH156S149	MH156S012		A0080BZ	IRWD	VCP	{A6FBAB07-4318-43C0-949F-B63DDDE48DD5}	CLMH156S149MH156S012	219.45	218.36	0.666666667	MH156S149	MH156S012				100	CLMH156S149MH156S012	8	0.0109	0.003992	0.05	0.004266	0.05	0.005055	0.06	0.015801	0.10				
CLMH156S150MH156S151		2003		Existing	assumed Mannings N	MH156S150	MH156S151		A0080DY	IRWD	PVC	{48E791CB-4729-498B-BF8A-B6CFE47DB7AA}	CLMH156S150MH156S151	229.87	228.85	0.666666667	MH156S150	MH156S151				105	CLMH156S150MH156S151	8	0.0097	0.000520	0.02	0.000566	0.02	0.000669	0.02	0.003119	0.04				
CLMH156S151MH156S152		2003		Existing	assumed Mannings N	MH156S151	MH156S152		A0080DY	IRWD	PVC	{8D565C18-991E-4047-A42C-10C4119F833}	CLMH156S151MH156S152	228.64	228.20	0.666666667	MH156S151	MH156S152				44	CLMH156S151MH156S152	8	0.0100	0.000780	0.02	0.000834	0.02	0.000990	0.02	0.003119	0.04				
CLMH156S152MH156S155		2003		Existing	assumed Mannings N	MH156S152	MH156S155		A0080DY	IRWD	PVC	{27A2B22F-5609-4CAB-A155-6FC88A9F6FF4}	CLMH156S152MH156S155	228.01	227.27	0.666666667	MH156S152	MH156S155				74	CLMH156S152MH156S155	8	0.0100	0.002284	0.04	0.002441	0.04	0.002894	0.04	0.006683	0.06				
CLMH156S153MH156S154		2003		Existing	assumed Mannings N	MH156S153	MH156S154		A0080DY	IRWD	PVC	{96CA841A-E961-4689-BAAE-161D54A4EBF9}	CLMH156S153MH156S154	230.87	228.87	0.666666667	MH156S153	MH156S154				202	CLMH156S153MH156S154	8	0.0099	0.001302	0.03	0.001390	0.03	0.001648	0.03	0.003564	0.05				
CLMH156S154MH156S152		2003		Existing	assumed Mannings N	MH156S154	MH156S152		A0080DY	IRWD	PVC	{F12CCECD-F8C1-4653-B443-E737F2E18833}	CLMH156S154MH156S152	228.68	228.20	0.666666667	MH156S154	MH156S152				47	CLMH156S154MH156S152	8	0.0102	0.001504	0.03	0.001607	0.03	0.001905	0.03	0.003564	0.05				
CLMH156S155MH156S149		2003		Existing	assumed Mannings N	MH156S155	MH156S149		A0080BY	IRWD	PVC	{C6BD7C83-932D-42AB-9ECA-DB10777SAA95}	CLMH156S155MH156S149	227.06	219.64	0.666666667	MH156S155	MH156S149				64	CLMH156S155MH156S149	8	0.0304	0.002284	0.03	0.002441	0.03	0.002894	0.03	0.006683	0.05				
CLMH156S156MH156S158		2003		Existing	assumed Mannings N	MH156S156	MH156S158		A0080DZ	IRWD	PVC	{5C88CC61-0343-460E-A0EA-192DE885F8F}	CLMH156S156MH156S158	232.66	230.25	0.666666667	MH156S156	MH156S158				242	CLMH156S156MH156S158	8	0.0100	0.001708	0.03	0.001824	0.03	0.002161	0.04	0.006690	0.06				
CLMH156S157MH156S009		2003		Existing	assumed Mannings N	MH156S157	MH156S009		A0080BZ	IRWD	PVC	{C7B47E89-759AE-4BD1-9C35-72FB80A61675}	CLMH156S157MH156S009	221.62	220.63	0.666666667	MH156S157	MH156S009				100	CLMH156S157MH156S009	8	0.0099	0.002056	0.04	0.002195	0.04	0.002600	0.04	0.006690	0.06				
CLMH156S158MH156S157		2003		Existing	assumed Mannings N	MH156S158	MH156S157		A0080BZ	IRWD	PVC	{035464CF-991D-499E-ABD2-0D9E1BCF555A}	CLMH156S158MH156S157	230.04	221.82	0.666666667	MH156S158	MH156S157				68	CLMH156S158MH156S157	8	0.1209	0.001708	0.02	0.001824	0.02	0.002161	0.02	0.006690	0.04				
CLMH156S161MH156S147		2006		Existing	assumed Mannings N	MH156S161	MH156S147		A0078BK	IRWD	VCP	{69435A68-A3E7-4FE6-BC1B-2FFB4D15A4D}	CLMH156S161MH156S147	213.57	212.07	0.666666667	MH156S161	MH156S147				409	CLMH156S161MH156S147	8	0.0037	0.005905	0.07	0.006304	0.08	0.007474	0.08	0.006304	0.08				
CLMH156W002MH156W033		1976		Existing		MH156W002	MH156W033		043	IRWD	VCP	{BAFBE1FF-362A-45E7-AFD7-45529FE456DB}	CLMH156W033MH156W033	215.82	212.25	2.000000000	MH156W002	MH156W033				349	CLMH156W002MH156W033	24	0.0102	2.577751	0.28	2.962622	0.30	3.509284	0.33	6.299775	0.46				
CLMH156W003MH156W002		1976		Existing		MH156W003	MH156W002		043	IRWD	VCP	{E4B03C6B-73C3-4ACS-9139-47AE1B4FDE37}	CLMH156W003MH156W002	220.94	215.98	2.000000000	MH156W003	MH156W002				500	CLMH156W003MH156W002	24	0.0099	2.577854	0.28	2.962622	0.30	3.509353	0.33	6.299798	0.46				
CLMH156W004MH156W008		1985		Existing		MH156W004	MH156W008		420	IRWD	VCP	{AC905B66-8ADF-4BAB-9D6E-D77BE116722A}	CLMH156W004MH156W008	190.58	187.52	2.500000000	MH156W004	MH156W008				375	CLMH156W004MH156W008	30	0.0082	2.750764	0.23	3.135787	0.24	3.710457	0.27	7.882090	0.39				
CLMH156W005MH156W004		1985		Existing		MH156W005	MH156W004		420	IRWD	VCP	{C5931281-5543-4B76-9CEB-76B1A3064FBC}	CLMH156W005MH156W004	193.00	191.16	2.500000000	MH156W005	MH156W004				156	CLMH156W005MH156W004	30	0.0118	2.750906	0.21	3.135937	0.22	3.710575	0.24	7.882134	0.36				
CLMH156W007MH156W005		1985		Existing		MH156W007	MH156W005		073	IRWD	VCP	{59A30D46-A52F-49A9-902A-ADCADA7CE01D}	CLMH156W007MH156W005	185.91	185.22	0.833333333	MH156W007	MH156W005				73	CLMH156W007MH156W005	10	0.0095	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W008MH156W009		1985		Existing		MH156W008	MH156W009		420	IRWD	VCP	{48676A3D-EB8A-484F-8D74-247E727FE6Z}	CLMH156W008MH156W009	187.41	183.55	2.500000000	MH156W008	MH156W009				500	CLMH156W008MH156W009	30	0.0077	2.750454	0.23	3.135459	0.25	3.710197	0.27	7.881938	0.40				
CLMH156W009MH139S030		1985		Existing		MH156W009	MH139S030		420	IRWD	VCP	{E58196FE-DEBC-4A91-8803-4E5B57238ZB}	CLMH156W009MH139S030	183.41	181.10	2.500000000	MH156W009	MH139S030				30	CLMH156W009MH139S030	30	0.0077	2.750379	0.23	3.135380	0.25	3.710138	0.27	7.881932	0.40				
CLMH156W010MH139S034		1985		Existing		MH156W010	MH139S034		A0047A	IRWD	VCP	{C48D01F7-B3E4-406D-ADC2-9572D6C4675A}	CLMH156W010MH139S034	200.33	198.80	0.666666667	MH156W010	MH139S034				301	CLMH156W010MH139S034	8	0.0051	0.014687	0.10	0.015681	0.10	0.018590	0.11	0.015681	0.10				
CLMH156S013MH156Y010		1985		Existing		MH156W010	MH156Y010		A0047A	IRWD	VCP	{C9398E72-2023-4FDB-8D1F-577490B7BA100}	CLMH156W011MH156W010	201.41	200.44	0.666666667	MH156W011	MH156W010				221	CLMH156W011MH156W010	8	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W012MH156W013		1985		Existing		MH156W012	MH156W013		410	IRWD	VCP	{A13E3235-B5E8-4AD4-A01C-6D33AAE508B1}	CLMH156W012MH156W013	206.02	202.40	0.666666667	MH156W012	MH156W013				416	CLMH156W012MH156W013	8	0.0087	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W013MH156W014		1985		Existing		MH156W013	MH156W014		A0047A	IRWD	VCP	{4E9E5A5F-2181-4D2A-A52C-D3583DEA6A88}	CLMH156W013MH156W014	202.36	200.24	0.666666667	MH156W013	MH156W014				245	CLMH156W013MH156W014	8	0.0087	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W014MH156W025		1989		Existing		MH156W014	MH156W025		A0067B	IRWD	VCP	{9A13A8D1-945B-43C0-A103-79A96AC1F432}	CLMH156W014MH156W025	200.03	198.86	0.666666667	MH156W014	MH156W025				136	CLMH156W014MH156W025	8	0.0086	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W015MH156W016		1985		Existing		MH156W015	MH156W016		474	IRWD	VCP	{3E690CF2-99E7-4D64-ACC5-954202526CC5}	CLMH156W015MH156W016	195.88	192.19	0.833333333	MH156W015	MH156W016				369	CLMH156W015MH156W016	10	0.0100	0.020577	0.08	0.024705	0.09	0.029289	0.10	0.024705	0.09				
CLMH156W016MH156W040		1985		Existing		MH156W016	MH156W040		474	IRWD	VCP	{657FFF67-1243-4C18-9701-846C3A0E463D}	CLMH156W016MH156W040	191.92	189.92	1.000000000	MH156W016	MH156W040				181	CLMH156W016MH156W040	12	0.0110	0.332316	0.25	0.354986	0.26	0.420863	0.28	0.354986	0.26				
CLMH156W017MH156W007		1985		Existing		MH156W017	MH156W007		A0059J	IRWD	VCP	{215E8999-AEA6-4F7F-8F34-9F7B9D5168FB}	CLMH156W017MH156W007	199.02	186.11	0.666666667	MH156W017	MH156W007				93	CLMH156W017MH156W007	8	0.1403	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W021MH156W023		1989		Existing		MH156W021	MH156W023		A0067B	IRWD	VCP	{9DDEF82D-FCF8-4BA0-9081-7421982139A8}	CLMH156W021MH156W023	193.60	192.66	1.000000000	MH156W021	MH156W023				149	CLMH156W021MH156W023	12	0.0063	0.185387	0.28	0.326051	0.29	0.386557	0.31	0.326051	0.29				
CLMH156W022MH156W021		1989		Existing		MH156W022	MH156W021		A0067B	IRWD	VCP	{F5D50EA6-30B7-4F5F-8B19-DB12DB7726EE}	CLMH156W022MH156W021	201.57	193.77	0.833333333	MH156W022	MH156W021				71	CLMH156W022MH156W021	10	0.1099	0.015361	0.08	0.016403	0.09	0.019446	0.11	0.016403	0.09				
CLMH156W023MH156W016		1985		Existing		MH156W023	MH156W016		474	IRWD	VCP	{D88E0488-EF07-4015-8574-CBFE0C9CAC16}	CLMH156W023MH156W016	192.46	192.02	1.000000000	MH156W023	MH156W016				65	CLMH156W023MH156W016	12	0.0068	0.305387	0.27	0.326051	0.28	0.386557	0.31	0.326051	0.28				
CLMH156W024MH156W021	UFF23	1989		Existing		MH156W024	MH156W021		A0067B	IRWD	VCP	{8C0B2CF1-AB23-4ACB-98F6-7676F18C5FCB}	CLMH156W024MH156W021	195.91	193.80	1.000000000	MH156W024	MH156W021				285	CLMH156W024MH156W021	12	0.0074	0.290026	0.26	0.309648	0.27	0.367111	0.29	0.309648	0.27				
CLMH156W025MH156W024		1989		Existing		MH156W025	MH156W024		A0067B	IRWD	VCP	{710CC2E0-97B0-4A9A-85BD-EBA9D0E60934}	CLMH156W025MH156W024	198.86	195.91	0.833333333	MH156W025	MH156W024				399	CLMH156W025MH156W024	10	0.0074	0.007157	0.04	0.076355	0.25	0.090525	0.27	0.076355	0.25				
CLMH156W026MH156W024		1989		Existing		MH156W026	MH156W024		A0067B	IRWD	VCP	{78604375-0FE8-48C1-BD49-9765D0B43F7}	CLMH156W026MH156W024	198.66	196.30	0.833333333	MH156W026	MH156W024				399	CLMH156W026MH156W024	10	0.0059	0.182513	0.28	0.194862	0.29	0.231023	0.31	0.194862	0.29				
CLMH156W027MH156W026		1989		Existing		MH156W027	MH156W026		A0067B	IRWD	VCP	{E2300E28-85B2-402A-8047-7E9C7B5780CC}	CLMH156W027MH156W026	200.09	198.86	0.833333333	MH156W027	MH156W026				369	CLMH156W027MH156W026	10	0.0033	0.164594	0.29	0.175731	0.30	0.208341	0.33	0.175731	0.30				
CLMH156S028MH156Y106		1989		Existing		MH156W028	MH156Y106		A0067B	IRWD	VCP	{4DF621DA-2D3B-4B1A-BC05-3D9EEA39B7F8}	CLMH156W028MH156Y106	203.86	201.60	0.833333333	MH156W028	MH156Y106				355	CLMH156W028MH156Y106	10	0.0064	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W033MH156N041		1976		Existing		MH156W033	MH156N041		A0066J	IRWD	VCP	{F4414ED5-EC00-4CD3-AD3D-3001F4A34344}	CLMH156W033MH156N041	212.19	210.89	2.000000000	MH156W033	MH156N041				173	CLMH156W033MH156N041	24	0.0075	2.577744	0.31	2.960319	0.33	3.509285	0.36	6.299725	0.50				
CLMH156W034MH156W024		1995		Existing		MH156W034	MH156W024		A0078B	IRWD	VCP	{E0476A5B-F5E5-4C2F-AD33-809A05AA8DAA}	CLMH156W034MH156W024	196.88	196.11	0.833333333	MH156W034	MH156W024				101	CLMH156W034MH156W024	10	0.0076	0.030657	0.11	0.032731	0.11	0.038805	0.12	0.032731	0.11				
CLMH156W035MH156W034		1995		Existing		MH156W035	MH156W034		A0078B	IRWD	VCP	{66D2EC82-1639-422E-8B79-0D9017478D10}	CLMH156W035MH156W034	198.64	197.17	0.833333333	MH156W035	MH156W034				140	CLMH156W035MH156W034	10	0.0075	0.016947	0.08	0.018093	0.08	0.021450	0.09	0.018093	0.08				
CLMH156W040MH156W043		1995		Existing		MH156W040	MH156W043		793	IRWD	VCP	{77E3D540-59C6-4FC6-8877-AD0B24EACF2A}	CLMH156W040MH156W043	182.44	182.27	1.750000000	MH156W040	MH156W043				41	CLMH156W040MH156W043	21	0.0041	0.604143	0.20	0.645140	0.21	0.761480	0.22	1.201785	0.28				
CLMH156W041MH156W025		1989		Existing		MH156W041	MH156W025		A0067B	IRWD	VCP	{E30B836C-4802-4C01-B6AD-14F722CF0524}	CLMH156W041MH156W025	200.74	198.86	0.666666667	MH156W041	MH156W025				77	CLMH156W041MH156W025	8	0.0244	0.071517	0.18	0.076355	0.19	0.090525	0.21	0.076355	0.19				
CLMH156W042MH156W040		1995		Existing		MH156W042	MH156W040		793	IRWD	VCP	{0011E063E-1C77-4836-8BAD-7BAC6F2BABE5}	CLMH156W042MH156W040	183.77	182.55	1.750000000	MH156W042	MH156W040				361	CLMH156W042MH156W040	21	0.0034	0.299463	0.15	0.320256	0.15	0.380026	0.17	0.900886	0.26				
CLMH156W043MH156W044		1995		Existing		MH156W043	MH156W044		793	IRWD	VCP	{156BE20F-CC04-40D3-89FD-0E6CBC323C2B}	CLMH156W043MH156W044	182.02	178.03	1.750000000	MH156W043	MH156W044				224	CLMH156W043MH156W044	21	0.0150	0.604098	0.17	0.645090	0.17	0.764098	0.18	1.201650	0.23				
CLMH156W044MH138E009		1995		Existing		MH156W044	MH138E009		793	IRWD	VCP	{C5887BAA-5649-42A3-BE5E-3C166772F0A}	CLMH156W044MH138E009	178.01	174.00	1.750000000	MH156W044	MH138E009				394	CLMH156W044MH138E009	21	0.0102	0.622243	0.17	0.664578	0.17	0.787200	0.19	1.222168	0.23				
CLMH156W045MH156W042		1995		Existing		MH156W045	MH156W042		793	IRWD	VCP	{0B4CF083-6F72-494D-8FA9-6BDCEA13D013}	CLMH156W045MH156W042	184.86	183.86	1.750000000	MH156W045	MH156W042				300	CLMH156W045MH156W042	21	0.0033	0.284213	0.14	0.303896	0.15	0.360484	0.16	0.891596	0.25				
CLMH156W088MH156W089		1998		Existing		MH156W088	MH156W089		A0078BC	IRWD	VCP	{9EEF5CF9-5686-43C1-9F4D-0BC562F875DB}	CLMH156W088MH156W089	202.44	202.02	0.833333333	MH156W088	MH156W089				102	CLMH156W088MH156W089	10	0.0041	0.119821	0.24	0.127928	0.24	0.151665	0.27	0.127928	0.24				
CLMH156W089MH156W091		1998		Existing		MH156W089	MH156W091		A0078BC	IRWD	VCP	{CA302BED-C767-47CC-8370-CC9128EAB191}	CLMH156W089MH156W091	201.92	201.55	0.833333333	MH156W089	MH156W091				98	CLMH156W089MH156W091	10	0.0038	0.161903	0.28	0.172857	0.29	0.204932	0.31	0.172857	0.29				
CLMH156W090MH156W088		1998		Existing		MH156W090	MH156W088		A0078BC	IRWD	VCP	{6005FD3F-BD35-421F-8F57-E403F29713D7}	CLMH156W090MH156W088	202.94	202.54	0.833333333	MH156W090	MH156W088				106	CLMH156W090MH156W088	10	0.0038	0.119821	0.24	0.127928	0.25	0.151665	0.27	0.127928	0.25				
CLMH156W091MH156W027		1998		Existing		MH156W091	MH156W027		A0078BC	IRWD	VCP	{BF7A78F3-CAE1-48B1-ABB1-A5C6AD8393BB}	CLMH156W091MH156W027	201.45	201.10	0.833333333	MH156W091	MH156W027				93	CLMH156W091MH156W027	10	0.0038	0.161903	0.28	0.172857	0.29	0.204932	0.31	0.172857	0.29				
CLMH156W093MH156W090		1998		Existing		MH156W093	MH156W090		A0078BC	IRWD	VCP	{EBA97FA0-9A52-4362-A576-26EC67884ZC0}	CLMH156W093MH156W090	203.51	203.04	0.833333333	MH156W093	MH156W090				123	CLMH156W093MH156W090	10	0.0038	0.084391	0.20	0.090099	0.21	0.106818	0.23	0.090099	0.21				
CLMH156W094MH156W093		1998		Existing		MH156W094	MH156W093		A0078BC	IRWD	VCP	{C0DA78B5-2921-4966-9A57-A4E0D1CBACB6}	CLMH156W094MH156W093	204.66	203.61	0.833333333	MH156W094	MH156W093				310	CLMH156W094MH156W093	10	0.0034	0.036426	0.14	0.038890	0.14	0.046106	0.15	0.038890	0.14				
CLMH156W096MH156W026		1989		Existing		MH156W096	MH156W026		A0067B	IRWD	VCP	{26A10B86-71E2-41EC-B225-B86C1CDE2CE7}	CLMH156W096MH156W026	204.74	204.01	0.666666667	MH156W096	MH156W026				55	CLMH156W096MH156W026	8	0.0133	0.017919	0.10	0.019131	0.10	0.022682	0.11	0.019131	0.10				
CLMH156W101MH156W094		1998		Existing		MH156W101	MH156W094		A0078BC	IRWD	VCP	{513B2A24-7650-4CB2-A2E9-39E294E53C7D}	CLMH156W101MH156W094	205.05	204.76	0.833333333	MH156W101	MH156W094				26	CLMH156W101MH156W094	10	0.0112	0.036426	0.11	0.038890	0.11	0.046106	0.12	0.038890	0.11				
CLMH156W102MH156W101		1998		Existing		MH156W102	MH156W101		A0078BH	IRWD	VCP	{AE567810-7159-4EEF-83E0-9230FB09F62E}	CLMH156W102MH156W101	205.77	205.14	0.833333333	MH156W102	MH156W101				166	CLMH156W102MH156W101	10	0.0038	0.036426	0.13	0.038890	0.14	0.046106	0.15	0.038890	0.14				
CLMH156W103MH156W102		2004		Existing		MH156W103	MH156W102		A0078BH	IRWD	VCP	{827BEE3B-D381-47DC-BABD-884FD58E8994}	CLMH156W103MH156W102	207.30	205.97	0.833333333	MH156W103	MH156W102				356	CLMH156W103MH156W102	10	0.0037	0.036199	0.13	0.038649	0.14	0.045820	0.15	0.038649	0.14				
CLMH156W106MH156W027		1989		Existing		MH156W106	MH156W027		A0067B	IRWD	VCP	{8D2E09A8-5122-4FA8-B677-09AA02AE9F9B}	CLMH156W106MH156W027	201.40	200.90	0.833333333	MH156W106	MH156W027				92	CLMH156W106MH156W027	10	0.0054	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH156W107MH156W106		2014		Existing	assumed Mannings N	MH156W107	MH156W106		A0067BB	IRWD	VCP	{33569B9C-685C-41B0-B257

CLMH157N038MH157N039		2012		Existing	assumed Mannings N	MH157N038	MH157N039		T1721GC	IRWD	PVC	{E05DDF14-8F1B-453E-B125-7389C1C61949}	CLMH157N038MH157N039	197.14	194.66	0.666666667	MH157N038	MH157N039				326	CLMH157N038MH157N039	8	0.0076	0.008995	0.09	0.010800	0.10	0.012804	0.11	0.001905	0.09		
CLMH157N039MH157N057		2012		Existing	assumed Mannings N	MH157N039	MH157N057		T1721GC	IRWD	PVC	{17BA1E0C-3D68-4AB2-B06D-B1FF39D4D3AE}	CLMH157N039MH157N057	194.66	192.11	0.666666667	MH157N039	MH157N057				298	CLMH157N039MH157N057	8	0.0086	0.016990	0.10	0.020399	0.11	0.024185	0.12	0.030865	0.13		
CLMH157N040MH157N052		2012		Existing	assumed Mannings N	MH157N040	MH157N052		T1721GC	IRWD	PVC	{F95A35A9-51D6-45C7-847C-F6532346ABF5}	CLMH157N040MH157N052	210.50	196.63	0.666666667	MH157N040	MH157N052				211	CLMH157N040MH157N052	8	0.0659	0.002058	0.04	0.002470	0.04	0.002929	0.04	0.014526	0.09		
CLMH157N041MH157N045		2012		Existing	assumed Mannings N	MH157N041	MH157N045		T1721GC	IRWD	PVC	{95E49278-224B-40E5-98B2-2D2D0B697AFE}	CLMH157N041MH157N045	192.08	191.42	0.666666667	MH157N041	MH157N045				58	CLMH157N041MH157N045	8	0.0113	0.029989	0.12	0.035901	0.13	0.042563	0.14	0.049588	0.15		
CLMH157N042MH157N039		2012		Existing	assumed Mannings N	MH157N042	MH157N039		T1721GC	IRWD	PVC	{D8C996DB-7197-4552-A577-2EC0FE5654AA}	CLMH157N042MH157N039	195.90	194.76	0.666666667	MH157N042	MH157N039				98	CLMH157N042MH157N039	8	0.0117	0.007995	0.07	0.009599	0.07	0.011381	0.08	0.028960	0.12		
CLMH157N043MH157N044		2012		Existing	assumed Mannings N	MH157N043	MH157N044		T1721GC	IRWD	PVC	{FF17C3DD-AFD3-4933-80AB-0B099CFCCFD1}	CLMH157N043MH157N044	191.70	191.21	0.666666667	MH157N043	MH157N044				45	CLMH157N043MH157N044	8	0.0110	0.025838	0.12	0.031022	0.13	0.036780	0.14	0.051974	0.16		
CLMH157N044MH157N053		2012		Existing	assumed Mannings N	MH157N044	MH157N053		T1721GC	IRWD	PVC	{8AA9DB19-6FF0-4EF3-A430-A8D759E8B7E8}	CLMH157N044MH157N053	191.11	190.11	0.666666667	MH157N044	MH157N053				58	CLMH157N044MH157N053	8	0.0172	0.055827	0.17	0.066923	0.18	0.079343	0.20	0.101562	0.22		
CLMH157N045MH157N044		2012		Existing	assumed Mannings N	MH157N045	MH157N044		T1721GC	IRWD	PVC	{85ECA58D-A430-412A-9988-D7D2B4831D76}	CLMH157N045MH157N044	191.42	191.11	0.666666667	MH157N045	MH157N044				14	CLMH157N045MH157N044	8	0.0222	0.029989	0.13	0.035901	0.14	0.042563	0.15	0.049588	0.17		
CLMH157N046MH157N043		2012		Existing	assumed Mannings N	MH157N046	MH157N043		T1721GC	IRWD	PVC	{F73ABC19-32C7-4FE4-B3CB-1A5F69503586}	CLMH157N046MH157N043	194.14	191.80	0.666666667	MH157N046	MH157N043				287	CLMH157N046MH157N043	8	0.0082	0.005527	0.06	0.006634	0.07	0.007867	0.07	0.021109	0.11		
CLMH157N047MH157N041		2012		Existing	assumed Mannings N	MH157N047	MH157N041		T1721GC	IRWD	PVC	{2291760Z-31E0-4103-AE6B-B6330EBCD0F7}	CLMH157N047MH157N041	195.80	192.18	0.666666667	MH157N047	MH157N041				34	CLMH157N047MH157N041	8	0.1071	0.003293	0.03	0.003953	0.03	0.004685	0.03	0.016483	0.06		
CLMH157N048MH157N041		2012		Existing	assumed Mannings N	MH157N048	MH157N041		T1721GC	IRWD	PVC	{BCD4D8BD-9515-4A73-8D73-FC8E0BBB4BD6}	CLMH157N048MH157N041	193.49	192.08	0.666666667	MH157N048	MH157N041				155	CLMH157N048MH157N041	8	0.0091	0.026697	0.13	0.031949	0.14	0.037877	0.15	0.033105	0.15		
CLMH157N049MH157N048		2012		Existing	assumed Mannings N	MH157N049	MH157N048		T1721GC	IRWD	PVC	{3CA6A0B7-18D4-4EE7-A04A-874BDFF8FA1F}	CLMH157N049MH157N048	197.30	193.59	0.666666667	MH157N049	MH157N048				90	CLMH157N049MH157N048	8	0.0412	0.003057	0.03	0.003671	0.03	0.004352	0.04	0.005153	0.04		
CLMH157N050MH157N055		2012		Existing	assumed Mannings N	MH157N050	MH157N055		T1721GC	IRWD	PVC	{8204AE25-07E8-4C4E-822D-27D1FA25C756}	CLMH157N050MH157N055	199.50	196.92	0.666666667	MH157N050	MH157N055				111	CLMH157N050MH157N055	8	0.0233	0.005763	0.05	0.006918	0.05	0.008202	0.06	0.009505	0.06		
CLMH157N051MH157N052		2012		Existing	assumed Mannings N	MH157N051	MH157N052		T1721GC	IRWD	PVC	{A6C1179C-F54B-4320-9016-1CB8F65D82D4}	CLMH157N051MH157N052	200.74	196.73	0.666666667	MH157N051	MH157N052				35	CLMH157N051MH157N052	8	0.1163	0.001471	0.02	0.001765	0.02	0.002092	0.02	0.006583	0.04		
CLMH157N052MH157N046		2012		Existing	assumed Mannings N	MH157N052	MH157N046		T1721GC	IRWD	PVC	{2B1CCF08-5A22-4D93-80BD-DD2B1E1DD0BA}	CLMH157N052MH157N046	196.63	194.14	0.666666667	MH157N052	MH157N046				292	CLMH157N052MH157N046	8	0.0085	0.003528	0.05	0.004235	0.06	0.005021	0.06	0.021251	0.11		
CLMH157N053MH157N017	56' FROM W-E IS	2012		Existing	assumed Mannings N	MH157N053	MH157N017		T1721GC	IRWD	PVC	{5FD37553-5E39-4898-8C55-31EBF3843FCA}	CLMH157N053FI157N007	190.11	188.88	0.666666667	MH157N053	MH157N017				127	CLMH157N053MH157N017	8	0.0097	0.058398	0.18	0.070008	0.20	0.083001	0.21	0.101562	0.24		
CLMH157N054MH157N048		2012		Existing	assumed Mannings N	MH157N054	MH157N048		T1721GC	IRWD	PVC	{C63D4750-0DED-4808-BED0-B31A4D15C8FC}	CLMH157N049MH157N048	196.70	193.59	0.666666667	MH157N054	MH157N048				78	CLMH157N054MH157N048	8	0.0398	0.003262	0.03	0.003918	0.04	0.004645	0.04	0.013133	0.06		
CLMH157N055MH157N059		2012		Existing	assumed Mannings N	MH157N055	MH157N059		T1721GC	IRWD	PVC	{92560FAD-FA51-4C0E-8A02-A4A4E81855AC}	CLMH157N055MH157N059	196.62	195.64	0.666666667	MH157N055	MH157N059				93	CLMH157N055MH157N059	8	0.0105	0.011675	0.08	0.013914	0.09	0.016495	0.10	0.014819	0.09		
CLMH157N056MH157N055		2012		Existing	assumed Mannings N	MH157N056	MH157N055		T1721GC	IRWD	PVC	{CD2CBDB3-C1A1-4CB0-B755-B9FA536099A7}	CLMH157N056MH157N055	197.79	196.62	0.666666667	MH157N056	MH157N055				78	CLMH157N056MH157N055	8	0.0150	0.005913	0.07	0.006996	0.07	0.008293	0.08	0.001737	0.06		
CLMH157N057MH157N043		2012		Existing	assumed Mannings N	MH157N057	MH157N043		T1721GC	IRWD	PVC	{01A0D800-3BED-460E-B8F8-19D242ACC780}	CLMH157N057MH157N043	192.11	191.70	0.666666667	MH157N057	MH157N043				36	CLMH157N057MH157N043	8	0.0115	0.020311	0.11	0.024388	0.12	0.028913	0.13	0.030865	0.15		
CLMH157N058MH157N048		2012		Existing	assumed Mannings N	MH157N058	MH157N048		T1721GC	IRWD	PVC	{6CD257A2-1D63-41F7-911F-E9CB33F163DE}	CLMH157N058MH157N048	194.63	193.49	0.666666667	MH157N058	MH157N048				126	CLMH157N058MH157N048	8	0.0091	0.020377	0.12	0.024360	0.13	0.028880	0.14	0.014819	0.12		
CLMH157N059MH157N058		2012		Existing	assumed Mannings N	MH157N059	MH157N058		T1721GC	IRWD	PVC	{9D90FC51-D6C7-4CD9-B1CE-41ADC1BD9402}	CLMH157N059MH157N058	195.64	194.63	0.666666667	MH157N059	MH157N058				67	CLMH157N059MH157N058	8	0.0152	0.016967	0.10	0.020266	0.11	0.024026	0.12	0.014819	0.09		
CLMH157N060MH157N055		2012		Existing	assumed Mannings N	MH157N060	MH157N055		T1721GC	IRWD	PVC	{8BCB945E-A18E-464E-8F34-90E298A7DFA1}	CLMH157N060MH157N055	198.21	196.92	0.666666667	MH157N060	MH157N055				123	CLMH157N060MH157N055	8	0.0105	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003577	0.05		
CLMH157N061MH157N064		2012		Existing	assumed Mannings N	MH157N061	MH157N064		T1721GC	IRWD	PVC	{87DC51F3-5C32-4526-A38C-52CAFD920CA8}	CLMH157N061MH157N064	198.58	198.18	0.666666667	MH157N061	MH157N064				60	CLMH157N061MH157N064	8	0.0066	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.03		
CLMH157N062MH157N060		2012		Existing	assumed Mannings N	MH157N062	MH157N060		T1721GC	IRWD	PVC	{09115B87-D498-4ABD-A589-B8B113DB7F74}	CLMH157N062MH157N060	197.62	197.07	0.666666667	MH157N062	MH157N060				60	CLMH157N062MH157N060	8	0.0091	0.007790	0.11	0.009354	0.12	0.011089	0.13	0.013321	0.11		
CLMH157N063MH157N062		2012		Existing	assumed Mannings N	MH157N063	MH157N062		T1721GC	IRWD	PVC	{3EEE070F-738C-43F5-A601-5451FFB7C3C4}	CLMH157N063MH157N062	200.80	197.72	0.666666667	MH157N063	MH157N062				127	CLMH157N063MH157N062	8	0.0243	0.007790	0.05	0.009354	0.06	0.011089	0.06	0.009012	0.06		
CLMH157N064MH157N062		2012		Existing	assumed Mannings N	MH157N064	MH157N062		T1721GC	IRWD	PVC	{1C83FBDE-9D10-4998-A97F-E2952E3E8E2A}	CLMH157N064MH157N062	198.18	197.62	0.666666667	MH157N064	MH157N062				73	CLMH157N064MH157N062	8	0.0077	0.000000	0.03	0.000000	0.04	0.000000	0.04	0.004309	0.07		
CLMH157N065MH157N064		2012		Existing	assumed Mannings N	MH157N065	MH157N064		T1721GC	IRWD	PVC	{DA497720D-BAD1-4E17-AA6B-B55238B7483D}	CLMH157N065MH157N064	200.20	198.18	0.666666667	MH157N065	MH157N064				129	CLMH157N065MH157N064	8	0.0158	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004309	0.05		
CLMH157N066MH157N071		2012		Existing	assumed Mannings N	MH157N066	MH157N071		T1721GC	IRWD	PVC	{0F836D75-E3DA-429E-B115-79E1A6D604BC}	CLMH157N066MH157N071	197.07	196.31	0.666666667	MH157N066	MH157N071				111	CLMH157N066MH157N071	8	0.0068	0.031773	0.15	0.037992	0.16	0.045042	0.17	0.021774	0.12		
CLMH157N067MH157N066		2012		Existing	assumed Mannings N	MH157N067	MH157N066		T1721GC	IRWD	PVC	{1EFFC19C-FBF4-48DD-A2CC-7A328A0996BB}	CLMH157N067MH157N066	197.64	197.07	0.666666667	MH157N067	MH157N066				69	CLMH157N067MH157N066	8	0.0083	0.023983	0.13	0.028638	0.14	0.033953	0.16	0.008453	0.10		
CLMH157N068MH157N067		2012		Existing	assumed Mannings N	MH157N068	MH157N067		T1721GC	IRWD	PVC	{340F6450-E8F8-4AA6-95CD-F54CEECAF92A}	CLMH157N068MH157N067	198.24	197.64	0.666666667	MH157N068	MH157N067				70	CLMH157N068MH157N067	8	0.0085	0.023983	0.12	0.028638	0.13	0.033953	0.14	0.008453	0.07		
CLMH157N069MH157N068		2012		Existing	assumed Mannings N	MH157N069	MH157N068		T1721GC	IRWD	PVC	{BA2495DD-A7D1-429B-8DEC-CE5F2BD12331}	CLMH157N069MH157N068	198.99	198.24	0.666666667	MH157N069	MH157N068				76	CLMH157N069MH157N068	8	0.0098	0.015547	0.11	0.018509	0.12	0.021944	0.13	0.008453	0.07		
CLMH157N070MH157N069		2012		Existing	assumed Mannings N	MH157N070	MH157N069		T1721GC	IRWD	PVC	{64884F05-A733-49B0-BCDC-978BDFA58E49}	CLMH157N070MH157N069	202.90	199.09	0.666666667	MH157N070	MH157N069				109	CLMH157N070MH157N069	8	0.0349	0.014375	0.07	0.017259	0.07	0.020461	0.08	0.007202	0.05		
CLMH157N071MH157N078		2012		Existing	assumed Mannings N	MH157N071	MH157N078		T1721GC	IRWD	PVC	{BC734BED-EF5F-41A4-B68E-BDFE0FB117B4}	CLMH157N071MH157N078	196.31	195.80	0.666666667	MH157N071	MH157N078				68	CLMH157N071MH157N078	8	0.0081	0.035742	0.16	0.042756	0.17	0.050691	0.19	0.021774	0.13		
CLMH157N072MH157N069		2012		Existing	assumed Mannings N	MH157N072	MH157N069		T1721GC	IRWD	PVC	{C7090809-8C0E-46E9-A2A7-93087248743D}	CLMH157N093MH157N093	199.93	198.99	0.666666667	MH157N072	MH157N069				74	CLMH157N072MH157N069	8	0.0127	0.002518	0.06	0.002688	0.06	0.003188	0.07	0.002688	0.05		
CLMH157N073MH157N072		2012		Existing	assumed Mannings N	MH157N073	MH157N072		T1721GC	IRWD	PVC	{95F0D573-0FEC-4629-AE3F-1112E8ED2660}	CLMH157N073MH157N072	202.21	199.93	0.666666667	MH157N073	MH157N072				103	CLMH157N073MH157N072	8	0.0223	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.02		
CLMH157N074MH157N073		2012		Existing	assumed Mannings N	MH157N074	MH157N073		T1721GC	IRWD	PVC	{0306253A-EFC9-4F42-95E0-9812A0623976}	CLMH157N074MH157N073	203.77	202.21	0.666666667	MH157N074	MH157N073				67	CLMH157N074MH157N073	8	0.0232	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH157N075MH157N074		2012		Existing	assumed Mannings N	MH157N075	MH157N074		T1721GC	IRWD	PVC	{18153728-5ADF-452A-83B1-00D2CBF1AAD2}	CLMH157N075MH157N074	204.56	203.77	0.666666667	MH157N075	MH157N074				29	CLMH157N075MH157N074	8	0.0271	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH157N076MH157N075		2012		Existing	assumed Mannings N	MH157N076	MH157N075		T1721GC	IRWD	PVC	{3DC519D3-25F1-4D79-8D5F-E903CE8A8740}	CLMH157N076MH157N075	206.30	204.56	0.666666667	MH157N076	MH157N075				82	CLMH157N076MH157N075	8	0.0213	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH157N077MH157N072		2012		Existing	assumed Mannings N	MH157N077	MH157N072		T1721GC	IRWD	PVC	{AD0B0457-B015-4A5C-8B54-2550755118981}	CLMH157N077MH157N072	203.00	200.03	0.666666667	MH157N077	MH157N072				84	CLMH157N077MH157N072	8	0.0153	0.002518	0.03	0.002688	0.03	0.003188	0.03	0.002688	0.03		
CLMH157N078MH157N165	End of main belo	2012		Existing	assumed Mannings N	MH157N078	MH157N165		T1721GC	IRWD	PVC	{CAFECABF-56EF-4022-9B6F-AE52347F3317}	CLMH157N078MH157N165	195.80	194.86	0.666666667	MH157N078	MH157N165				168	CLMH157N078MH157N165	8	0.0056	0.038858	0.17	0.046497	0.18	0.055126	0.20	0.027760	0.14		
CLMH157N079MH157N078		2012		Existing	assumed Mannings N	MH157N079	MH157N078		T1721GC	IRWD	PVC	{4F4A1567-885E-4EEA-9F7C-A8BAA56CB93B}	CLMH157N079MH157N078	198.06	195.80	0.666666667	MH157N079	MH157N078				68	CLMH157N079MH157N078	8	0.0329	0.003117	0.10	0.003742	0.11	0.004436	0.12	0.005988	0.09		
CLMH157N080MH157N079		2012		Existing	assumed Mannings N	MH157N080	MH157N079		T1721GC	IRWD	PVC	{6DCF0472-F2F2-4951-AEFC-1293AA13133}	CLMH157N093MH157N093	198.66	198.06	0.666666667	MH157N080	MH157N079				12	CLMH157N080MH157N079	8	0.0484	0.003118	0.03	0.003743	0.03	0.004438	0.04	0.005991	0.04		
CLMH157N081MH157N080		2012		Existing	assumed Mannings N	MH157N081	MH157N080		T1721GC	IRWD	PVC	{80A59790-98B4-4173-B336-5EF48F34EFC4}	CLMH157N093MH157N093	203.83	198.66	0.666666667	MH157N081	MH157N080				181	CLMH157N081MH157N080	8	0.0286	0.003125	0.03	0.003752	0.04	0.004450	0.04	0.006009	0.04		
CLMH157N082MH157N025	61' FROM S-N IS T	2012		Existing	assumed Mannings N	MH157N082	MH157N025		T1721GC	IRWD	PVC	{2D40BF52-0D1A-4581-80E1-DE84F1125652}	CLMH157N083MH157N025	200.58	199.68	0.666666667	MH157N082	MH157N025				148	CLMH157N082MH157N025	8	0.0061	0.018489	0.15	0.022198	0.16	0.026320	0.17	0.016521	0.15		
CLMH157N083MH157N082		2012		Existing	assumed Mannings N	MH157N083	MH157N082		T1721GC	IRWD	PVC	{8870284E-086C-4D67-8203-24F43893284}	CLMH157N083MH157N082	201.78	200.78	0.666666667	MH157N083	MH157N082				128	CLMH157N083MH157N082	8	0.0078	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH157N084MH157N082		2012		Existing	assumed Mannings N	MH157N084	MH157N082		T1721GC	IRWD	PVC	{4934EDEE-E599-4113-9C7D-64 3F116DF7C38}	CLMH157N083MH157N083	201.19	200.68	0.666666667	MH157N084	MH157N082				64	CLMH157N084MH157N082	8	0.0080	0.018489	0.11	0.022198	0.12	0.026320	0.13	0.016521	0.10		
CLMH157N085MH157N091		2012		Existing	assumed Mannings N	MH157N085	MH157N091		T1721GC	IRWD	PVC	{967C1343-6CA2-4F76-9FAC-6630772CE3B3}	CLMH157N091MH157N085	205.70	204.09	0.666666667	MH157N085	MH157N091				98	CLMH157N085MH157N091	8	0.0208	0.003439	0.04	0.004130	0.04	0.004809	0.05	0.004130	0.04		
CLMH157N086MH157N084		2012		Existing	assumed Mannings N	MH157N086	MH157N084		T1721GC	IRWD	PVC	{3E717923-CB50-4E54-AFF0-BF96F25A8182}	CLMH157N088MH157N084	205.20	201.29	0.666666667	MH157N086	MH157N084				78	CLMH157N086MH157N084	8	0.0501	0.011611	0.06	0.013941	0.06	0.016528	0.07	0.013941	0.06		
CLMH157N087MH157N084		2012		Existing	assumed Mannings N	MH157N087	MH157N084		T1721GC	IRWD	PVC	{0EA17B2A-8231-40DF-A7DA-D0DF8032276}	CLMH157N088MH157N083	202.26	201.19	0.666666667	MH157N087	MH157N084				173	CLMH157N087MH157N084	8	0.0062	0.006878	0.09	0.008254	0.10	0.009792	0.11	0.005547	0.08		
CLMH157N088MH157N087		2012		Existing	assumed Mannings N	MH157N088	MH157N087		T1721GC	IRWD	PVC	{E3731DBE-B7AE-480B-BDAE-43FD9CB28194}	CLMH157N088MH157N087	206.80	202.36	0.666666667	MH157N088	MH157N087				79	CLMH157N088MH157N087	8	0.0566	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004563	0.04		
CLMH157N089MH157N087		2012		Existing	assumed Mannings N	MH157N089	MH157N087		T1721GC	IRWD	PVC	{0DC7041C-766A-4FF1-A75E-B8F4BCF8D79D}	CLMH157N083MH157N083	205.39	202.26	0.666666667	MH157N089	MH157N087				52	CLMH157N089MH157N087	8	0.0600	0.006878	0.06	0.008258	0.06	0.009792	0.07	0.000984	0.04		
CLMH157N090MH157N091		2012		Existing	assumed Mannings N	MH157N090	MH157N091		T1721GC	IRWD	PVC	{D7EC82AC-0226-4663-8E42-749C94995AA3}	CLMH157N090MH157N091	206.60	203.99	0.666666667	MH157N090	MH157N091				69	CLMH157N090MH157N091	8	0.0378	0.005766	0.06	0.006921	0.06	0.008205	0.07	0.000382	0.03		
CLMH157N091MH157N161	End of main belo	2012		Existing	assumed Mannings N	MH157N091	MH157N161		T1721GC	IRWD	PVC	{13AD4E82-0994-4E31-9F63-847E5687CF9}	CLMH157N091MH157N161	203.99	201.95	0.666666667	MH157N091	MH157N161				193	CLMH157N091MH157N161	8	0.0133	0.009202	0.07	0.011048	0.07	0.013097	0.08	0.004307	0.05		
CLMH157N092MH157N090		2012		Existing	assumed Mannings N	MH157N092	MH157N090		T1721GC	IRWD	PVC	{4E267D4C-68F8-4717-8C14-56D3CA6E1D4F}	CLMH157N092MH157N090	207.25	206.70	0.666666667	MH157N092	MH157N090				109	CLMH157N092MH157N090	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH157N093MH157N090		2012		Existing	assumed Mannings N	MH157N093	MH157N090		T1721GC	IRWD	PVC	{6F495E72-1FA9-4D25-BA65-AE84913SF0AD}	CLMH157N093MH157N093	209.00	206.60	0.666666667	MH157N093	MH157N090				79	CLMH157N093MH157N090	8	0.0305	0.005798	0.04	0.006956	0.05	0.008245	0.05	0.000382	0.01		
CLMH157N094MH157N089		2012		Existing	assumed Mannings N	MH157N094	MH157N089		T1721GC	IRWD	PVC	{54970690-5D24-4E13-A4C4-0BA3C3D3151D}	CLMH157N094MH157N089	209.10	205.39	0.666666667	MH157N094	MH157N089				193	CLMH157N094MH157N089	8	0.0577	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000985	0.02		
CLMH157N095MH157E058		2012		Existing	assumed Mannings N	MH157N095	MH157E058		T1721GB	IRWD	PVC	{3BE2E283-ADDC-4807-AAE9-6E28E9DAF4B1}	CLMH157N095MH157E058	212.01	211.54	0.666666667	MH157N095	MH157E058				78	CLMH157N095MH157E058	8	0.0060	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.010287	0.09		
CLMH157N096MH157N097		2012		Existing	assumed Mannings N	MH157N096	MH157N097		T1721GB	IRWD	PVC	{07E81B86-CABE-4116-B6BB-669CD6AEB461}	CLMH157N096MH157N097	209.06	207.01	0.666666667	MH157N096	MH157N097				96	CLMH157N096MH157N097	8	0.0070	0.007906	0.07	0.009487	0.08	0.011246	0.09	0.010287	0.08		
CLMH157N097MH157N098		2012		Existing	assumed Mannings N	MH157N097	MH157N098		T1721GB	IRWD	PVC	{23187 3E9-DF22-43AE-B686-BE1F80CBA41B}	CLMH157N097MH157N098	206.81	206.22	0.666666667	MH157N097	MH157N098				84	CLMH157N097MH157N098	8	0.0071	0.007906	0.07	0.009487	0.08	0.011246	0.09	0.010287	0.08		
CLMH157N098MH157N099		2012		Existing	assumed Mannings N	MH157N098	MH157N099		T1721GB	IRWD	PVC	{B765C1F1-7817-41A1-907D-375494A250AC}	CLMH157N098MH157N099	206.02	205.34	0.666666667	MH157N098	MH157N099				98	CLMH157N098MH157N099	8	0.0070	0.007906	0.07	0.009487	0.08	0.011246	0.09	0.010287	0.08		
CLMH157N099MH157N100		2012		Existing	assumed Mannings N	MH157N099	MH157N100		T1721GB	IRWD	PVC	{893830A3-8073-40E1-85D3-160D6822E9C}	CLMH157N099MH157N100	205.14	203.98	0.666666667	MH157N099	MH157N100				166	CLMH157N099MH157N100	8	0.0070	0.007906	0.07	0.009487	0.08	0.011246	0.09	0.010287	0.08		
CLMH157N100MH157N101		2012		Existing	assumed Mannings N	MH157N100	MH157N101		T1721GB	IRWD	PVC	{31F9701A-A5F7-4CB6-9A8C-1472A960B125}	CLMH157N100MH157N101	203.78	201.08	0.666666667	MH157N100	MH157N101				138	CLMH157N100MH157N101	8	0.0196	0.014609	0.08	0.017533	0.08	0.020786	0.09	0.010287	0.07		
CLMH157N101MH157N028	End of main belo	2012		Existing	assumed Mannings N	MH157N101	MH157N028		T1721GB	IRWD	PVC	{B75F131B-D4A3-4514-8E00-5D36F2760138}	CLMH157N101MH157N028	200.88	192.71	0.666666667	MH157N101	MH157N028				272	CLMH157N101MH157N028	8	0.0300	0.014609	0.24	0.017533	0.24	0.020786	0.26	0.010287	0.38		
CLMH157N102MH157N103		2012		Existing	assumed Mannings N	MH157N102	MH157N103		T1721GB	IRWD	PVC	{796BE612-DBE7-4045-A64A-EBD23AEE07C9}	CLMH157N102MH157N103	203.80	201.58	0.666666667	MH157N102	MH157N103				213	CLMH157N102MH157N103	8	0.0104	0.007613	0.07	0.009140	0.07	0.010836	0.08	0.024072	0.11		
CLMH157N103MH157N104		2012		Existing	assumed Mannings N	MH157N103	MH157N104		T1721GB	IRWD	PVC	{A58AAB17-3825-47B4-8333-9CF7DEC9124}	CLMH157N103MH157N104	201.38	194.92	0.666666667	MH157N103	MH157N104				351	CLMH157N103MH157N104	8	0.0184	0.015198	0.08	0.018246	0.09	0.021632	0.09	0.024072	0.10		
CLMH157N104MH157N012		2012		Existing	assumed Mannings N	MH157N104	MH157N012		T1721GB	IRWD	PVC	{1786C869-033C-482E-877C-F05C2353AD15}	CLMH157N104MH157N012	194.72	184.78	0.666666667	MH157N104	MH157N012				299	CLMH157N104MH157N012	8	0.0333	0.019108	0.12	0.022940	0.15	0.027198	0.17	0.024072	0.15		
CLMH157N106MH157N006	End of main belo	2012		Existing	assumed Mannings N	MH157N106	MH157N006		T1721GB	IRWD	PVC	{7447BC11F-E496-426B-9CB3-3DB864CF255C}	CLMH157N106MH157N006	190.96	183.39	0.666666667	MH157N106	MH157N006				125	CLMH157N106MH157N006	8	0.0605	0.003352	0.25	0.004023	0.27	0.004771	0.29	0.010911	0.29		
CLMH157N107MH157N108		2012		Existing	assumed Mannings N	MH157N107	MH157N108		T1721GB	IRWD	PVC	{EE8E8A53-6098-4A3C-9599-57B101828748}	CLMH157N107MH157N108	191.14	190.46	0.666666667	MH157N107	MH157N108				131	CLMH157N107MH157N108	8	0.0052	0.000000	0.00	0.000000	0

CLMH157W008MH157W009		2010		Existing	assumed Mannings N	MH157W008	MH157W009		T17179A	IRWD	PVC	{F770DEFB-BBB6-4D60-822B-ACE4F22CC121}	CLMH157W008MH157W009	274.28	273.04	0.666666667	MH157W008	MH157W009		309	CLMH157W008MH157W009	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119428	0.31		
CLMH157W009MH157W010		2010		Existing	assumed Mannings N	MH157W009	MH157W010		T17179A	IRWD	PVC	{96FDAC39-7B51-40DC-B89C-EB17AF36D1C0}	CLMH157W009MH157W010	272.95	272.11	0.666666667	MH157W009	MH157W010		208	CLMH157W009MH157W010	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119427	0.31		
CLMH157W010MH157W011		2010		Existing	assumed Mannings N	MH157W010	MH157W011		T17179A	IRWD	PVC	{0EA01515-CD8E-4FB3-9510-999F23FFE7F4}	CLMH157W010MH157W011	272.01	271.20	0.666666667	MH157W010	MH157W011		202	CLMH157W010MH157W011	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119427	0.31		
CLMH157W011MH157W012		2010		Existing	assumed Mannings N	MH157W011	MH157W012		T17179A	IRWD	PVC	{5D01A8B3-98D0-42D6-9A61-40F1F7BD1D22}	CLMH157W011MH157W012	271.10	270.02	0.666666667	MH157W011	MH157W012		272	CLMH157W011MH157W012	8	0.0040	0.000000	0.00	0.000000	0.02	0.000000	0.00	0.119426	0.31		
CLMH157W012MH157W013		2010		Existing	assumed Mannings N	MH157W012	MH157W013		T17179A	IRWD	PVC	{CBFA6C08-714F-4B42-9A65-985B1206966E}	CLMH157W012MH157W013	269.92	268.96	0.666666667	MH157W012	MH157W013		240	CLMH157W012MH157W013	8	0.0040	0.033195	0.16	0.039692	0.18	0.047052	0.19	0.149856	0.35		
CLMH157W013MH1385016		2010		Existing	assumed Mannings N	MH157W013	MH1385016		T17179A	IRWD	PVC	{0954D7A4-F2BC-4EC9-AAD7-549F047BF0AE}	CLMH157W013MH1385016	268.86	268.13	0.666666667	MH157W013	MH1385016		181	CLMH157W013MH1385016	8	0.0040	0.033195	0.16	0.039692	0.18	0.047052	0.19	0.149848	0.35		
CLMH157W014MH157W008		2010		Existing	assumed Mannings N	MH157W014	MH157W008		T17179A	IRWD	PVC	{0E71EF22-6E1B-4E43-8CE9-93C02F002066}	CLMH157W014MH157W008	274.90	274.38	0.666666667	MH157W014	MH157W008		129	CLMH157W014MH157W008	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119428	0.31		
CLMH157W015MH157W012		2010		Existing	assumed Mannings N	MH157W015	MH157W012		T17179A	IRWD	PVC	{E7343445-1104-4423-9C14-D5B2CAF431F9}	CLMH157W015MH157W012	275.14	270.12	0.666666667	MH157W015	MH157W012		392	CLMH157W015MH157W012	8	0.0128	0.033195	0.13	0.039692	0.14	0.047052	0.15	0.030467	0.12		
CLMH157W016MH157W015		2010		Existing	assumed Mannings N	MH157W016	MH157W015		T17179A	IRWD	PVC	{D2AF5EA4-6902-467C-9755-E0DD0BFD3811}	CLMH157W016MH157W015	276.60	275.34	0.666666667	MH157W016	MH157W015		159	CLMH157W016MH157W015	8	0.0079	0.033195	0.14	0.039692	0.16	0.047052	0.17	0.030467	0.14		
CLMH157W017MH157W018		2011		Existing	assumed Mannings N	MH157W017	MH157W018		T17371	IRWD	PVC	{311E8F59-FF8F-42F0-8067-26C08B0D2942}	CLMH157W017MH157W018	286.09	285.79	0.500000000	MH157W017	MH157W018		30	CLMH157W017MH157W018	6	0.0100	0.002612	0.06	0.003136	0.06	0.003720	0.07	0.006181	0.09		
CLMH157W018MH157W024		2011		Existing	assumed Mannings N	MH157W018	MH157W024		T17371	IRWD	PVC	{3F634748-2E67-46FF-9CE4-59CB85B5D046}	CLMH157W018MH157W024	285.59	280.97	0.666666667	MH157W018	MH157W024		312	CLMH157W018MH157W024	8	0.0148	0.002612	0.04	0.003136	0.04	0.003720	0.04	0.006181	0.06		
CLMH157W019MH157W025		2011		Existing	assumed Mannings N	MH157W019	MH157W025		T17371	IRWD	PVC	{6B7CFF2F-CA4C-4834-BFAB-B15209CC8DD9}	CLMH157W019MH157W025	284.43	279.96	0.666666667	MH157W019	MH157W025		85	CLMH157W019MH157W025	8	0.0142	0.001776	0.03	0.002132	0.03	0.002530	0.04	0.004570	0.05		
CLMH157W020MH157W019		2011		Existing	assumed Mannings N	MH157W020	MH157W019		T17371	IRWD	PVC	{3565Z911-65F7-4ABB-B5A6-CD1779E5D6B7}	CLMH157W020MH157W019	284.93	284.63	0.500000000	MH157W020	MH157W019		30	CLMH157W020MH157W019	6	0.0100	0.001776	0.05	0.002132	0.05	0.002530	0.06	0.004570	0.08		
CLMH157W021MH157W023		2011		Existing	assumed Mannings N	MH157W021	MH157W023		T17371	IRWD	PVC	{3E838E0E-AEEE-481F-89A1-5052FA5313E0}	CLMH157W021MH157W023	282.33	277.96	0.666666667	MH157W021	MH157W023		317	CLMH157W021MH157W023	8	0.0138	0.003720	0.04	0.004467	0.05	0.005296	0.05	0.003978	0.05		
CLMH157W022MH157W021		2011		Existing	assumed Mannings N	MH157W022	MH157W021		T17371	IRWD	PVC	{6B83CF91-F2C2-46B9-AAF0-07BA16AD3D70}	CLMH157W022MH157W021	282.83	282.53	0.500000000	MH157W022	MH157W021		30	CLMH157W022MH157W021	6	0.0100	0.003720	0.07	0.004467	0.07	0.005296	0.08	0.003978	0.07		
CLMH157W023MH1385041		2011		Existing	assumed Mannings N	MH157W023	MH1385041		T17371	IRWD	PVC	{4580D5DD-D0FC-4966-8EB2-39CE628546SD}	CLMH157W023MH1385041	277.76	273.82	0.666666667	MH157W023	MH1385041		282	CLMH157W023MH1385041	8	0.0140	0.006709	0.06	0.008057	0.06	0.009552	0.07	0.003978	0.05		
CLMH157W024MH157W027		2011		Existing	assumed Mannings N	MH157W024	MH157W027		T17371	IRWD	PVC	{1BECE354-B8C1-471C-A334-7939C9249E41}	CLMH157W024MH157W027	280.77	276.78	0.666666667	MH157W024	MH157W027		286	CLMH157W024MH157W027	8	0.0140	0.007798	0.06	0.009360	0.07	0.011099	0.07	0.006181	0.06		
CLMH157W025MH157W026		2011		Existing	assumed Mannings N	MH157W025	MH157W026		T17371	IRWD	PVC	{0B5DA22A-D18D-4CF5-B3C1-62AF74C1B370}	CLMH157W025MH157W026	279.76	275.71	0.666666667	MH157W025	MH157W026		283	CLMH157W025MH157W026	8	0.0143	0.006418	0.06	0.007704	0.06	0.009136	0.07	0.004570	0.05		
CLMH157W026MH1385043		2011		Existing	assumed Mannings N	MH157W026	MH1385043		T17371	IRWD	PVC	{93B06263-9477-4296-B4F6-40D0019BE669}	CLMH157W026MH1385043	275.51	270.93	0.666666667	MH157W026	MH1385043		316	CLMH157W026MH1385043	8	0.0145	0.006418	0.06	0.007704	0.06	0.009136	0.07	0.004570	0.05		
CLMH157W027MH1385045		2011		Existing	assumed Mannings N	MH157W027	MH1385045		T17371	IRWD	PVC	{85811E21-183F-4387-B83A-1AB84AAB9000}	CLMH157W027MH1385045	276.58	272.04	0.666666667	MH157W027	MH1385045		316	CLMH157W027MH1385045	8	0.0144	0.013066	0.08	0.015684	0.09	0.018598	0.09	0.006181	0.06		
CLMH157W028MH1385052		2011		Existing	assumed Mannings N	MH157W028	MH1385052		T17371	IRWD	PVC	{86C1842F-965C-41DE-9773-8E0AF9E145E4}	CLMH157W028MH1385052	278.39	274.78	0.666666667	MH157W028	MH1385052		282	CLMH157W028MH1385052	8	0.0128	0.006124	0.06	0.007354	0.06	0.008719	0.07	0.004850	0.05		
CLMH157W029MH157W028		2011		Existing	assumed Mannings N	MH157W029	MH157W028		T17371	IRWD	PVC	{59C6B159-7F1D-4F6F-8E93-377ED79F29B}	CLMH157W029MH157W028	282.71	278.59	0.666666667	MH157W029	MH157W028		316	CLMH157W029MH157W028	8	0.0130	0.002947	0.04	0.003538	0.04	0.004196	0.05	0.004850	0.05		
CLMH157W030MH157W029		2011		Existing	assumed Mannings N	MH157W030	MH157W029		T17371	IRWD	PVC	{46FBF7F1-ECDA-420D-B045-6A86B42007E9}	CLMH157W030MH157W029	283.21	282.91	0.500000000	MH157W030	MH157W029		30	CLMH157W030MH157W029	6	0.0100	0.002947	0.06	0.003538	0.07	0.004196	0.07	0.004850	0.08		
CLMH157W031MH157W017		2011		Existing	assumed Mannings N	MH157W031	MH157W017		T17371	IRWD	PVC	{CB39DFEC-265A-4537-999D-E8B1E78975FF}	CLMH157W031MH157W017	287.75	286.29	0.500000000	MH157W031	MH157W017		42	CLMH157W031MH157W017	6	0.0350	0.002612	0.04	0.003136	0.05	0.003720	0.05	0.006181	0.06		
CLMH157W036MH157W016		2011		Existing	assumed Mannings N	MH157W036	MH157W016		T17179A	IRWD	PVC	{E94CECEE-4AFE-412B-BEF8-955D8DA72C9F}	CLMH157W036MH157W016	279.12	276.70	0.666666667	MH157W036	MH157W016		243	CLMH157W036MH157W016	8	0.0100	0.025336	0.12	0.030422	0.13	0.036062	0.14	0.024435	0.12		
CLMH157W037MH157W038		2011		Existing	assumed Mannings N	MH157W037	MH157W038		T17372	IRWD	PVC	{A7005E08-7423-4A2B-A1A8-4B3FD2A13A1D}	CLMH157W037MH157W038	292.68	292.52	0.666666667	MH157W037	MH157W038		31	CLMH157W037MH157W038	8	0.0051	0.000523	0.02	0.000628	0.02	0.000744	0.02	0.004282	0.06		
CLMH157W038MH157W039		2011		Existing	assumed Mannings N	MH157W038	MH157W039		T17372	IRWD	PVC	{403C209E-942D-4D6F-9F7D-34216AC323B5}	CLMH157W038MH157W039	292.32	291.52	0.666666667	MH157W038	MH157W039		160	CLMH157W038MH157W039	8	0.0050	0.005227	0.06	0.006275	0.07	0.007439	0.08	0.004282	0.06		
CLMH157W039MH157W044		2011		Existing	assumed Mannings N	MH157W039	MH157W044		T17372	IRWD	PVC	{6E21D464-5E51-49F5-BAC1-A66E18B747AF}	CLMH157W039MH157W044	291.32	283.08	0.666666667	MH157W039	MH157W044		233	CLMH157W039MH157W044	8	0.0354	0.010306	0.06	0.012375	0.06	0.014669	0.07	0.009087	0.05		
CLMH157W040MH157W039		2011		Existing	assumed Mannings N	MH157W040	MH157W039		T17372	IRWD	PVC	{AD7C5A42-6B56-4638-B1F9-A59A93522ZC3}	CLMH157W040MH157W039	294.50	291.52	0.666666667	MH157W040	MH157W039		139	CLMH157W040MH157W039	8	0.0215	0.005079	0.05	0.006100	0.06	0.007230	0.06	0.004805	0.05		
CLMH157W041MH157W040		2011		Existing	assumed Mannings N	MH157W041	MH157W040		T17372	IRWD	PVC	{51896DDD-9BA8-4E72-B62A-3C7838EADCA3}	CLMH157W041MH157W040	297.07	294.60	0.666666667	MH157W041	MH157W040		227	CLMH157W041MH157W040	8	0.0109	0.001588	0.03	0.001908	0.03	0.002260	0.04	0.004805	0.05		
CLMH157W042MH157W043		2011		Existing	assumed Mannings N	MH157W042	MH157W043		T17372	IRWD	PVC	{75D51E75-F264-42F6-B78D-B7B8247FB2B0}	CLMH157W042MH157W043	295.45	291.52	0.666666667	MH157W042	MH157W043		257	CLMH157W042MH157W043	8	0.0153	0.001965	0.03	0.002359	0.04	0.002797	0.04	0.003085	0.04		
CLMH157W044MH157W043		2011		Existing	assumed Mannings N	MH157W044	MH157W043		T17372	IRWD	PVC	{39F967B8-6344-41F7-84EA-D410A1BBBAD5}	CLMH157W044MH157W043	291.42	283.18	0.666666667	MH157W044	MH157W043		196	CLMH157W044MH157W043	8	0.0421	0.006784	0.05	0.008157	0.05	0.009670	0.05	0.003085	0.03		
CLMH157W044MH157W036		2011		Existing	assumed Mannings N	MH157W044	MH157W036		T17372	IRWD	PVC	{6D98D434-8D69-45E4-B5B2-09F9CBF0EFBB}	CLMH157W044MH157W036	282.98	279.22	0.666666667	MH157W044	MH157W036		221	CLMH157W044MH157W036	8	0.0170	0.017100	0.09	0.020532	0.09	0.024339	0.10	0.014244	0.08		
CLMH157W045MH157W044		2011		Existing	assumed Mannings N	MH157W045	MH157W044		T17372	IRWD	PVC	{C9CB723D-B741-4DE1-800B-8107AD69C16E}	CLMH157W045MH157W044	288.65	283.18	0.666666667	MH157W045	MH157W044		300	CLMH157W045MH157W044	8	0.0183	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002072	0.03		
CLMH157W046MH157W036		2011		Existing	assumed Mannings N	MH157W046	MH157W036		T17372	IRWD	PVC	{39928340-A84C-49EE-8FE2-76981D09EB2B}	CLMH157W046MH157W036	285.96	279.32	0.666666667	MH157W046	MH157W036		303	CLMH157W046MH157W036	8	0.0219	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006736	0.05		
CLMH157W047MH157W036		2011		Existing	assumed Mannings N	MH157W047	MH157W036		T17372	IRWD	PVC	{A9CEF13E-4494-417A-88B9-E5849AC32A1F}	CLMH157W047MH157W036	288.96	279.32	0.666666667	MH157W047	MH157W036		223	CLMH157W047MH157W036	8	0.0432	0.008236	0.05	0.009883	0.05	0.011723	0.06	0.003455	0.03		
CLMH157W048MH157W047		2011		Existing	assumed Mannings N	MH157W048	MH157W047		T17372	IRWD	PVC	{3A5F1A38-9892-442F-B015-A11745E0EB1D}	CLMH157W048MH157W047	292.88	289.06	0.666666667	MH157W048	MH157W047		82	CLMH157W048MH157W047	8	0.0164	0.002592	0.04	0.003113	0.04	0.003690	0.04	0.003455	0.04		
CLMH157W049MH157W050		2011		Existing	assumed Mannings N	MH157W049	MH157W050		T17372	IRWD	PVC	{181C3964-FBF0-4E64-AB72-02404CE3675E}	CLMH157W049MH157W050	290.00	286.63	0.666666667	MH157W049	MH157W050		321	CLMH157W049MH157W050	8	0.0105	0.002842	0.04	0.003414	0.05	0.004047	0.05	0.006031	0.06		
CLMH157W050MH157W016		2012		Existing	assumed Mannings N	MH157W050	MH157W016		T17372	IRWD	PVC	{F38F498D-AC1B-4BC7-B388-A50A5145CF80}	CLMH157W050MH157W016	286.53	276.80	0.666666667	MH157W050	MH157W016		145	CLMH157W050MH157W016	8	0.0672	0.007858	0.04	0.009270	0.05	0.010990	0.05	0.006031	0.04		
CLMH157W051MH157W002	20'FROM N-S IS T	2014		Existing	assumed Mannings N	MH157W051	MH157W002		T17028	IRWD	PVC	{0D667224-60FA-487D-B157-FC3F1FA4FE07}	CLMH157W051MH157W002	298.31	297.36	0.666666667	MH157W051	MH157W002		90	CLMH157W051MH157W002	8	0.0105	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119429	0.25		
CLMH157W052MH157W051		2014		Existing	assumed Mannings N	MH157W052	MH157W051		T17028	IRWD	PVC	{80D1FBCB-2951-406F-859A-89C7DB64AF5A}	CLMH157W052MH157W051	298.84	298.36	0.666666667	MH157W052	MH157W051		95	CLMH157W052MH157W051	8	0.0051	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119429	0.30		
CLMH157W053MH157W052		2014		Existing	assumed Mannings N	MH157W053	MH157W052		T17028	IRWD	PVC	{4A3DF003-5F5D-4FA9-9C1F-23C62E8AE5DB}	CLMH157W053MH157W052	299.48	298.94	0.666666667	MH157W053	MH157W052		108	CLMH157W053MH157W052	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119429	0.30		
CLMH158056MH1385055		2014		Existing	assumed Mannings N	MH158056	MH1385055		T17028	IRWD	PVC	{6F480C03-EF28-405B-9FDC-1312E1BBD8A4}	CLMH158056MH1385055	317.57	303.77	0.666666667	MH158056	MH1385055		271	CLMH158056MH1385055	8	0.0510	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.119429	0.17		
CLMH158E057MH158E056		2014		Existing	assumed Mannings N	MH158E057	MH158E056		T17028	IRWD	PVC	{36D1027D-9CD2-48EE-BFED-DAB73ED54604}	CLMH158E057MH158E056	331.25	317.67	0.666666667	MH158E057	MH158E056		249	CLMH158E057MH158E056	8	0.0547	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.117008	0.16		
CLMH158E058MH158E057		2014		Existing	assumed Mannings N	MH158E058	MH158E057		T17028	IRWD	PVC	{9C1574C7-0D25-4918-8DDA-908CF5AB4DCE}	CLMH158E058MH158E057	346.89	331.35	0.666666667	MH158E058	MH158E057		226	CLMH158E058MH158E057	8	0.0563	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.105315	0.16		
CLMH158E059MH158E058		2014		Existing	assumed Mannings N	MH158E059	MH158E058		T17028	IRWD	PVC	{1C233558-9455-4F6B-8E61-31AD207F15BA}	CLMH158E059MH158E058	354.12	346.99	0.666666667	MH158E059	MH158E058		116	CLMH158E059MH158E058	8	0.0616	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.105315	0.15		
CLMH158E060MH158E061		2014		Existing	assumed Mannings N	MH158E060	MH158E061		T17028	IRWD	PVC	{90CC170C-240D-4DF0-B7E7-5A5F4F5A547B}	CLMH158E060MH158E061	372.11	367.80	0.666666667	MH158E060	MH158E061		176	CLMH158E060MH158E061	8	0.0244	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.066604	0.15		
CLMH158E061MH158E059		2014		Existing	assumed Mannings N	MH158E061	MH158E059		T17028	IRWD	PVC	{8A68BA68-07FA-4ED0-BF7D-921773F1834B}	CLMH158E061MH158E059	367.60	354.22	0.666666667	MH158E061	MH158E059		202	CLMH158E061MH158E059	8	0.0493	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.096154	0.15		
CLMH158E062MH158E060		2014		Existing	assumed Mannings N	MH158E062	MH158E060		T17028	IRWD	PVC	{C05B97D8-C56F-40C3-B492-3DAA545E6E15}	CLMH158E062MH158E060	379.06	372.21	0.666666667	MH158E062	MH158E060		237	CLMH158E062MH158E060	8	0.0289	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.057652	0.14		
CLMH158E063MH158E062		2014		Existing	assumed Mannings N	MH158E063	MH158E062		T17028	IRWD	PVC	{3CB72D82-780C-4AF8-B1DD-C1E0CF9435E5}	CLMH158E063MH158E062	384.86	379.16	0.666666667	MH158E063	MH158E062		237	CLMH158E063MH158E062	8	0.0241	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.057652	0.14		
CLMH158E064MH158E063		2014		Existing	assumed Mannings N	MH158E064	MH158E063		T17028	IRWD	PVC	{3CC465D6-939F-48DC-8D92-D0440EB087C5}	CLMH158E064MH158E063	396.22	384.96	0.666666667	MH158E064	MH158E063		275	CLMH158E064MH158E063	8	0.0410	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.038316	0.10		
CLMH158E065MH158E064		2014		Existing	assumed Mannings N	MH158E065	MH158E064		T17028	IRWD	PVC	{E5CB655C1-CE66-4B7A-92A2-B772718B42C5}	CLMH158E065MH158E064	407.11	396.32	0.666666667	MH158E065	MH158E064		148	CLMH158E065MH158E064	8	0.0733	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.030565	0.08		
CLMH158E066MH158E065		2014		Existing	assumed Mannings N	MH158E066	MH158E065		T17028	IRWD	PVC	{FF91C800-3F88-4281-8DB2-C6A43EDB8192}	CLMH158E066MH158E065	414.91	407.21	0.666666667	MH158E066	MH158E065		108	CLMH158E066MH158E065	8	0.0718	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.026488	0.08		
CLMH158E067MH158E066		2014		Existing	assumed Mannings N	MH158E067	MH158E066		T17028	IRWD	PVC	{00B992B8-A668-45ZC-BA77-12A710D083EF}	CLMH158E067MH158E066	432.22	415.01	0.666666667	MH158E067	MH158E066		175	CLMH158E067MH158E066	8	0.0988	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.026488	0.07		
CLMH158E068MH158E067		2014		Existing	assumed Mannings N	MH158E068	MH158E067		T17028	IRWD	PVC	{FBD3313D0-5D75-41E6-B952-5B86DA566A1D}	CLMH158E068MH158E067	437.59	432.32	0.666666667	MH158E068	MH158E067		77	CLMH158E068MH158E067	8	0.0690	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020293	0.07		
CLMH158E069MH158E068		2014		Existing	assumed Mannings N	MH158E069	MH158E068		T17028	IRWD	PVC	{C0023309-4A4E-458F-8ED0-35A3C4CCE27A}	CLMH158E069MH158E068	441.98	437.69	0.666666667	MH158E069	MH158E068		64	CLMH158E069MH158E068	8	0.0676	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020293	0.07		
CLMH158E070MH158E069		2014		Existing	assumed Mannings N	MH158E070	MH158E069		T17028	IRWD	PVC	{FE397E71-B38A-4189-91FE-97FCB4792CBC2B}	CLMH158E070MH158E069	448.40	442.08	0.666666667	MH158E070	MH158E069		211	CLMH158E070MH158E069	8	0.0656	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020293	0.07		
CLMH158E071MH158E070		2014		Existing	assumed Mannings N	MH158E071	MH158E070		T17028	IRWD	PVC	{66F2B723-52EB-4FD0-BD26-C961424CA6ED}	CLMH158E071MH158E070	463.14	448.50	0.666666667	MH158E071	MH158E070		226	CLMH158E071MH158E070	8	0.0650	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020293	0.07		
CLMH158E072MH158E071		2014		Existing	assumed Mannings N	MH158E072	MH158E071		T17028	IRWD	PVC	{8BABD7DC-D823-4FB1-8F19-D1DE377715BD}	CLMH158E072MH158E071	474.06	463.24	0.666666667	MH158E072	MH158E071		320	CLMH158E072MH158E071	8	0.0338	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020293	0.08		
CLMH158E073MH158E072		2014		Existing	assumed Mannings N	MH158E073	MH158E072		T17028	IRWD	PVC	{8ED97EC9-085C-4F94-8475-DDDCC3026537}	CLMH158E073MH158E072	487.17	474.16	0.666666667	MH158E073	MH158E072		269	CLMH158E073MH158E072	8	0.0484	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005707	0.04		
CLMH158E075MH158E076		2014		Existing	assumed Mannings N	MH158E075	MH158E076		T17028	IRWD	PVC	{50EA2893-1542-42CC-8E21-2B0CE5AB06B0}	CLMH158E075MH158E076	488.01	486.42	0.666666667	MH158E075	MH158E076		89	CLMH158E075MH158E076	8	0.0180	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH158E076MH158E077		2014		Existing	assumed Mannings N	MH158E076	MH158E077		T17028	IRWD	PVC	{C9518781-EF75-4261-9C9F-93368F186A49}	CLMH158E076MH158E077	486.22	477.97	0.666666667	MH158E076	MH158E077		202	CLMH158E076MH158E077	8	0.0409	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009070	0.05		
CLMH158E077MH158E078		2014		Existing	assumed Mannings N	MH158E077	MH158E078		T17028	IRWD	PVC	{CB5AFDF6-6BA3-4922-AEF8-C0D762DBCB76}	CLMH158E077MH158E078	477.87	468.18	0.666666667	MH158E077	MH158E078		179	CLMH158E077MH158E078	8	0.0541	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009070	0.05		
CLMH158E078MH158E079		2014		Existing	assumed Mannings N	MH158E078	MH158E079		T17028	IRWD	PVC	{67985C01-9B17-4026-818D-40CAA3CE40CB}	CLMH158E078MH158E079	468.08	456.05	0.666666667	MH158E078	MH158E079		227	CLMH158E078MH158E079	8	0.0531	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009070	0.05		
CLMH158E079MH158E080		2014		Existing	assumed Mannings N	MH158E079	MH158E080		T17028	IRWD	PVC	{03A6D90B-2D53-4518-8CD0-F931DD49CB59}	CLMH158E079MH158E080	455.95	447.15	0.666666667	MH158E079	MH158E080		211	CLMH158E079MH158E080	8	0.0416	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011289	0.06		
CLMH158E080MH158E081		2014		Existing	assumed Mannings N	MH158E080	MH158E081		T17028	IRWD	PVC	{62467C0D-29FA-4A12-9D40-F90D7F90B7ED}	CLMH158E080MH158E081	446.95	435.73	0.666666667	MH158E080	MH158E081		257	CLMH158E080MH158E081	8	0.0437	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020440	0.08		
CLMH158E081MH158E082		2014		Existing	assumed Mannings N	MH158E081	MH158E082		T17028	IRWD	PVC	{C1A8906A-5B49-43D0-8359-60664D9EF26B}	CLMH158E081MH158E082	435.63	429.56	0.666666667	MH158E081	MH158E082		90	CLMH158E081MH158E082	8	0.0680	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020468	0.07		
CLMH158E082MH158E083		2014		Existing	assumed Mannings N	MH158E082	MH158E083		T17028	IRWD	PVC	{260BA038-2739-44AB-B1A1-4B78FB87BF1}	CLMH158E082MH158E083	429.46	409.48	0.666666667	MH158E082	MH158E083		295	CLMH158E082MH158E083	8	0.0680	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020468	0.07		
CLMH158E083MH158E084		2014		Existing	assumed Mannings N	MH158E083	MH158E084		T17028	IRWD	PVC	{C4A54207-96F0-4E0B-BBAB-AE7A53BA07E5}	CLMH158E083MH158E084	409.38	389.40	0.666666667	MH158E083	MH158E084		295	CLMH158E083MH158E084	8	0.0680	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020468	0.07		
CLMH158E084MH158E085		2014		Existing	assumed Mannings N	MH158E084	MH158E085		T17028	IRWD	PVC	{E1DB87A0-57F8-4CB3-B16B-2EBBA7CB63AE}	CLMH158E084MH158E085	389.30	377.00	0.666666667	MH158E084	MH158E085		233	CLMH158E084MH158E085	8	0.0528	0.000000	0.00	0.000000

CLMH163W019MH163W020		2001		Existing	assumed Mannings N	MH163W019	MH163W020		T15918	IRWD	PVC	{24720B53-7685-4837-8540-64C1525D3B01}	CLMH163W019MH163W020	401.79	401.05	0.666666667	MH163W019	MH163W020			153	CLMH163W019MH163W020	8	0.0048	0.024056	0.13	0.028879	0.15	0.034238	0.16	0.020716	0.13				
CLMH163W020MH163W021		2001		Existing	assumed Mannings N	MH163W020	MH163W021		T15918	IRWD	PVC	{C03A1DC1-DDAA-4C96-A048-FA55E80D50F2}	CLMH163W020MH163W021	400.96	355.42	0.666666667	MH163W020	MH163W021			131	CLMH163W020MH163W021	8	0.3702	0.024056	0.05	0.028879	0.05	0.034238	0.06	0.020716	0.05				
CLMH163W021MH163W022		2001		Existing	assumed Mannings N	MH163W021	MH163W022		T15918	IRWD	PVC	{7AE86457-CEEC-4F80-BA4E-A6249080DA666}	CLMH163W021MH163W022	355.32	353.76	0.666666667	MH163W021	MH163W022			29	CLMH163W021MH163W022	8	0.0538	0.024056	0.08	0.028879	0.08	0.034238	0.09	0.020716	0.07				
CLMH163W022MH163W023		2001		Existing	assumed Mannings N	MH163W022	MH163W023		T15918	IRWD	PVC	{9A0E4C78-F3F8-4054-8186-048B1C808627}	CLMH163W022MH163W023	353.64	325.55	0.666666667	MH163W022	MH163W023			277	CLMH163W022MH163W023	8	0.1018	0.066400	0.11	0.080451	0.12	0.096369	0.13	0.056161	0.10				
CLMH163W023MH163W024		2001		Existing	assumed Mannings N	MH163W023	MH163W024		T15918	IRWD	PVC	{773F62FA-C05A-46B9-B10E-31015D132ED6}	CLMH163W023MH163W024	325.35	318.20	0.666666667	MH163W023	MH163W024			46	CLMH163W023MH163W024	8	0.1589	0.066397	0.10	0.080444	0.11	0.096360	0.12	0.056142	0.09				
CLMH163W024MH163W063		2001		Existing	assumed Mannings N	MH163W024	MH163W063		T15918	IRWD	PVC	{1126432D-7456-4CAF-A956-B779065A09DC}	CLMH163W024MH163W063	318.00	305.54	0.666666667	MH163W024	MH163W063			110	CLMH163W024MH163W063	8	0.1143	0.066391	0.10	0.080430	0.12	0.096348	0.13	0.056135	0.10				
CLMH163W039MH163W040		2005		Existing	assumed Mannings N	MH163W039	MH163W040		T16457	IRWD	PVC	{8B7922AC-935D-44E2-90A5-B9B4D70AD0A8}	CLMH163W039MH163W040	505.04	500.11	0.666666667	MH163W039	MH163W040			119	CLMH163W039MH163W040	8	0.0414	0.038976	0.10	0.046800	0.11	0.055483	0.12	0.036423	0.10				
CLMH163W040MH163W041		2005		Existing	assumed Mannings N	MH163W040	MH163W041		T16457	IRWD	PVC	{08BABCC8-F25F-4F6B-ACCC-A80A6203A10C}	CLMH163W040MH163W041	500.01	492.26	0.666666667	MH163W040	MH163W041			173	CLMH163W040MH163W041	8	0.0448	0.038976	0.10	0.046800	0.11	0.055483	0.12	0.036429	0.10				
CLMH163W041MH163W043		2005		Existing	assumed Mannings N	MH163W041	MH163W043		T16457	IRWD	PVC	{ED037B69-1E4A-44BF-B46B-756629FFDEAD}	CLMH163W041MH163W043	492.17	490.20	0.666666667	MH163W041	MH163W043			44	CLMH163W041MH163W043	8	0.0448	0.038976	0.10	0.046800	0.11	0.055483	0.12	0.036428	0.10				
CLMH163W042MH163W039		2005		Existing	assumed Mannings N	MH163W042	MH163W039		T16457	IRWD	PVC	{958611D95-2800-4DDF-9080-C9CE89B0E58A}	CLMH163W042MH163W039	507.75	505.25	0.666666667	MH163W042	MH163W039			68	CLMH163W042MH163W039	8	0.0368	0.038977	0.11	0.046800	0.12	0.055483	0.13	0.036435	0.10				
CLMH163W043MH163W044		2005		Existing	assumed Mannings N	MH163W043	MH163W044		T16457	IRWD	PVC	{CEA993CD-8015-4FD7-9B88-6C654B2662BD}	CLMH163W043MH163W044	490.10	488.58	0.666666667	MH163W043	MH163W044			36	CLMH163W043MH163W044	8	0.0422	0.038976	0.10	0.046800	0.11	0.055483	0.12	0.036428	0.10				
CLMH163W044MH163W045		2005		Existing	assumed Mannings N	MH163W044	MH163W045		T16457	IRWD	PVC	{CC012C17-3E58-4D2C-9662-C77E28973176}	CLMH163W044MH163W045	488.48	483.75	0.666666667	MH163W044	MH163W045			103	CLMH163W044MH163W045	8	0.0459	0.038976	0.10	0.046799	0.11	0.055483	0.12	0.036426	0.10				
CLMH163W045MH163W006		2005		Existing	assumed Mannings N	MH163W045	MH163W006		T16457	IRWD	PVC	{01993965-CB64-4883-9901-CBFE46CC02D8}	CLMH163W045MH163W006	483.64	477.95	0.666666667	MH163W045	MH163W006			117	CLMH163W045MH163W006	8	0.0486	0.038976	0.10	0.046799	0.11	0.055483	0.12	0.036424	0.10				
CLMH163W046MH163W047		2002		Existing	assumed Mannings N	MH163W046	MH163W047		T15919	IRWD	PVC	{45607F95E-B82F-47BC-A1F2-3DDF21F1D66F}	CLMH163W046MH163W047	302.79	301.20	0.666666667	MH163W046	MH163W047			33	CLMH163W046MH163W047	8	0.0482	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH163W047MH164N089		2002		Existing	assumed Mannings N	MH163W047	MH164N089		T15919	IRWD	VCP	{1CAD0B5A-E66C-4DF7-832D-A4490B6EB0D3}	CLMH163W047MH164N089	301.00	298.95	0.666666667	MH163W047	MH164N089			201	CLMH163W047MH164N089	8	0.0102	0.005413	0.06	0.006500	0.06	0.007706	0.07	0.006500	0.06				
CLMH163W048MH163W046		2002		Existing	assumed Mannings N	MH163W048	MH163W046		T15919	IRWD	PVC	{0C258591-D675-4E77-85D9-490E7745EA6C}	CLMH163W048MH163W046	307.48	302.89	0.666666667	MH163W048	MH163W046			183	CLMH163W048MH163W046	8	0.0251	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH163W049MH163W048		2002		Existing	assumed Mannings N	MH163W049	MH163W048		T15919	IRWD	PVC	{146F84F1-8F45-42CD-8869-836914F1A5A7}	CLMH163W049MH163W048	309.82	307.58	0.666666667	MH163W049	MH163W048			139	CLMH163W049MH163W048	8	0.0161	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH163W049MH163W061	60' FROM W-E IS	2002		Existing	assumed Mannings N	MH163W049	MH163W061		T16421	IRWD	PVC	{09042423-B510-427A-ABFB-5B0917B1AAFC}	CLDE163W001MH163W061	310.57	309.45	1.000000000	MH163W049	MH163W061			113	STMH163W049MH163W061	12	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH163W050MH163W051		2002		Existing	assumed Mannings N	MH163W050	MH163W051		T15919	IRWD	PVC	{79F364EB-BE4C-4EF6-BC62-B1B63C25E2B7}	CLMH163W050MH163W051	330.76	328.26	0.666666667	MH163W050	MH163W051			310	CLMH163W050MH163W051	8	0.0081	0.005481	0.06	0.006580	0.07	0.007803	0.07	0.006580	0.07				
CLMH163W051MH163W053		2002		Existing	assumed Mannings N	MH163W051	MH163W053		T15919	IRWD	PVC	{8AE56EEE-51EB-4727-9F9A-3889266AEC22}	CLMH163W051MH163W053	326.17	321.01	0.666666667	MH163W051	MH163W053			255	CLMH163W051MH163W053	8	0.0202	0.013175	0.09	0.015817	0.09	0.018752	0.10	0.015817	0.09				
CLMH163W052MH163W063		2002		Existing	assumed Mannings N	MH163W052	MH163W063		T15919	IRWD	PVC	{FF0B523E-00EF-4065-8ACB-37CB8CF886E4}	CLMH163W052MH163W063	320.76	305.41	0.666666667	MH163W052	MH163W063			147	CLMH163W052MH163W063	8	0.1051	0.013175	0.05	0.015817	0.05	0.018752	0.06	0.015817	0.05				
CLMH163W053MH163W052		2002		Existing	assumed Mannings N	MH163W053	MH163W052		T15919	IRWD	PVC	{C92338AE-59EB-4BA3-BA43-37AAB54C3CDF}	CLMH163W053MH163W052	321.00	320.86	0.666666667	MH163W053	MH163W052			37	CLMH163W053MH163W052	8	0.0038	0.013175	0.10	0.015817	0.11	0.018752	0.12	0.015817	0.11				
CLMH163W054MH163W055		2002		Existing	assumed Mannings N	MH163W054	MH163W055		T15919	IRWD	PVC	{DBD362AA-69AF-4E3D-9EBC-401B79CA8713}	CLMH163W054MH163W055	277.64	276.10	0.666666667	MH163W054	MH163W055			22	CLMH163W054MH163W055	8	0.0700	0.078516	0.13	0.095712	0.15	0.114823	0.16	0.071435	0.13				
CLMH163W055MH163W058		2002		Existing	assumed Mannings N	MH163W055	MH163W058		T15919	IRWD	PVC	{5967CE89-03D4-4959-B9A7-1B0E4B3A556A}	CLMH163W055MH163W058	276.10	250.19	0.666666667	MH163W055	MH163W058			355	CLMH163W055MH163W058	8	0.0732	0.090655	0.14	0.110938	0.15	0.133322	0.16	0.086687	0.13				
CLMH163W056MH163W057		2002		Existing	assumed Mannings N	MH163W056	MH163W057		T15919	IRWD	PVC	{5B777359-B954-48BC-A928-26D2B9D9654A}	CLMH163W056MH163W057	254.83	254.57	0.666666667	MH163W056	MH163W057			40	CLMH163W056MH163W057	8	0.0065	0.019551	0.12	0.023472	0.13	0.027828	0.14	0.023472	0.13				
CLMH163W057MH163W058		2002		Existing	assumed Mannings N	MH163W057	MH163W058		T15919	IRWD	PVC	{5E2C0B38-2017-42B9-A370-49A93B19EB71}	CLMH163W057MH163W058	254.27	250.28	0.666666667	MH163W057	MH163W058			110	CLMH163W057MH163W058	8	0.0363	0.019551	0.08	0.023472	0.08	0.027828	0.09	0.023472	0.08				
CLMH163W058MH163W059		2002		Existing	assumed Mannings N	MH163W058	MH163W059		T15919	IRWD	PVC	{AC9CEF83-2DE0-479F-9C83-5C9F8BACA248}	CLMH163W058MH163W059	250.08	244.07	0.666666667	MH163W058	MH163W059			109	CLMH163W058MH163W059	8	0.0551	0.109587	0.16	0.134065	0.18	0.160959	0.19	0.109853	0.16				
CLMH163W059MH164N061		2002		Existing	assumed Mannings N	MH163W059	MH164N061		T15919	IRWD	PVC	{952F62AB-64E4-4E3E-9207-B3B58F5883BA}	CLMH163W059MH164N061	243.97	218.52	0.666666667	MH163W059	MH164N061			453	CLMH163W059MH164N061	8	0.0630	0.109327	0.15	0.133775	0.17	0.160742	0.19	0.109645	0.15				
CLMH163W062MH163W003		2002		Existing	assumed Mannings N	MH163W062	MH163W003		T16421	IRWD	PVC	{4C3F0FC3-9067-45DA-9728-BE2887B7510}	CLMH163W062MH163W003	309.35	299.10	0.666666667	MH163W062	MH163W003			128	CLMH163W062MH163W003	8	0.0801	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH163W062MH163W003		2002		Existing	assumed Mannings N	MH163W062	MH163W003		T16421	IRWD	PVC	{3F61F3D5-EE8C-4A30-9EB2-C76A2E04FB6E}	CLMH163W062MH163W003	299.00	273.38	0.666666667	MH163W062	MH163W003			321	CLMH163W062MH163W003	8	0.0801	0.009506	0.05	0.011411	0.05	0.013528	0.05	0.011411	0.05				
CLMH163W063MH163W054		2002		Existing	assumed Mannings N	MH163W063	MH163W054		T15919	IRWD	PVC	{110065FB-0614-45F1-913B-8605B8DF4A77}	CLMH163W063MH163W054	305.20	277.73	0.666666667	MH163W063	MH163W054			370	CLMH163W063MH163W054	8	0.0744	0.078516	0.13	0.095716	0.14	0.114827	0.15	0.071441	0.12				
CLMH163W064MH163W002		2002		Existing	assumed Mannings N	MH163W064	MH163W002		T16423	IRWD	PVC	{861B08DE-8ABB-45B9-8A04-514DE5F2F25A}	CLMH163W064MH163W002	256.32	256.14	0.666666667	MH163W064	MH163W002			48	CLMH163W064MH163W002	8	0.0038	0.078511	0.12	0.020421	0.13	0.020421	0.14	0.020421	0.13				
CLMH163W065MH163W070		2006		Existing	assumed Mannings N	MH163W065	MH163W070		T16422	IRWD	PVC	{DEEEF8F6-2A0E-499E-A4D8-9CCB58F72695}	CLMH163W065MH163W070	288.60	288.27	0.666666667	MH163W065	MH163W070			33	CLMH163W065MH163W070	8	0.0100	0.013268	0.09	0.015930	0.09	0.018885	0.10	0.015930	0.09				
CLMH163W066MH163W065		2006		Existing	assumed Mannings N	MH163W066	MH163W065		T16422	IRWD	PVC	{76AC21C3-3FDD-4544-BF75-BBCF0313D7D1}	CLMH163W066MH163W065	295.30	288.40	0.666666667	MH163W066	MH163W065			112	CLMH163W066MH163W065	8	0.0580	0.013268	0.06	0.015930	0.06	0.018885	0.07	0.015930	0.06				
CLMH163W067MH163W068		2006		Existing	assumed Mannings N	MH163W067	MH163W068		T16422	IRWD	PVC	{105DAA59-F593-4EF4-86C9-D2E71CBD36F}	CLMH163W067MH163W068	330.80	314.50	0.666666667	MH163W067	MH163W068			307	CLMH163W067MH163W068	8	0.0531	0.003716	0.03	0.004463	0.04	0.005290	0.04	0.004463	0.04				
CLMH163W068MH163W069		2006		Existing	assumed Mannings N	MH163W068	MH163W069		T16422	IRWD	PVC	{21ACD832-85D8-43C5-8A30-1331C9FCBB50}	CLMH163W068MH163W069	314.40	298.00	0.666666667	MH163W068	MH163W069			362	CLMH163W068MH163W069	8	0.0453	0.003716	0.03	0.004463	0.04	0.005290	0.04	0.004463	0.04				
CLMH163W069MH163W066		2006		Existing	assumed Mannings N	MH163W069	MH163W066		T16422	IRWD	PVC	{8E68F51A-218E-4C34-AFCE-64C5099CEDFB}	CLMH163W069MH163W066	297.90	295.40	0.666666667	MH163W069	MH163W066			154	CLMH163W069MH163W066	8	0.0162	0.013268	0.08	0.015930	0.08	0.018885	0.09	0.015930	0.08				
CLMH163W070MH163W055		2004		Existing	assumed Mannings N	MH163W070	MH163W055		T15919	IRWD	PVC	{B50BE540-6852-4E88-9F0D-B1E1F2D0978C}	CLMH163W070MH163W055	288.07	276.10	0.666666667	MH163W070	MH163W055			130	CLMH163W070MH163W055	8	0.0928	0.013268	0.09	0.015930	0.10	0.018885	0.11	0.015930	0.09				
CLMH164N001MH164N002		2002		Existing	assumed Mannings N	MH164N001	MH164N002		A00791B	IRWD	PVC	{315A578C-BAF5-47B7-ACFA-F973CF2F14F5}	CLMH164N001MH164N002	174.17	173.41	0.666666667	MH164N001	MH164N002			194	CLMH164N001MH164N002	8	0.0039	0.016209	0.11	0.019474	0.13	0.023088	0.14	0.019474	0.13				
CLMH164N002MH164N003		2002		Existing	assumed Mannings N	MH164N002	MH164N003		A00791B	IRWD	PVC	{568395A0-B22F-4A1F-8F62-8B0F3397188}	CLMH164N002MH164N003	173.12	172.89	0.666666667	MH164N002	MH164N003			109	CLMH164N002MH164N003	8	0.0039	0.016209	0.11	0.019474	0.13	0.023088	0.14	0.019473	0.13				
CLMH164N003MH164N102		2002		Existing	assumed Mannings N	MH164N003	MH164N102		A00791B	IRWD	PVC	{A0B0CB21-D7DB-41F4-9D9B-2EBA20C21431}	CLMH164N003MH164N102	172.80	170.30	0.666666667	MH164N003	MH164N102			131	CLMH164N003MH164N102	8	0.0191	0.016207	0.08	0.019472	0.09	0.023087	0.10	0.019472	0.09				
CLMH164N005MH164N006		2002		Existing	assumed Mannings N	MH164N005	MH164N006		A00791B	IRWD	PVC	{F0AC640E-1EFF-4560-B089-31A585682F01}	CLMH164N005MH164N006	159.36	156.97	0.666666667	MH164N005	MH164N006			281	CLMH164N005MH164N006	8	0.0373	0.018886	0.08	0.022689	0.08	0.026903	0.09	0.022689	0.08				
CLMH164N006MH164N007		2002		Existing	assumed Mannings N	MH164N006	MH164N007		A00791B	IRWD	PVC	{4FC64F66-7331-4CA1-9978-C91D2BB2C05A5}	CLMH164N006MH164N007	156.88	151.10	0.666666667	MH164N006	MH164N007			186	CLMH164N006MH164N007	8	0.0311	0.018884	0.08	0.022688	0.09	0.026902	0.09	0.022688	0.09				
CLMH164N007MH164N008		2002		Existing	assumed Mannings N	MH164N007	MH164N008		A00791B	IRWD	PVC	{2ACAEE41-286E-402A-B686-B2CA325C612C}	CLMH164N007MH164N008	150.89	142.89	0.666666667	MH164N007	MH164N008			209	CLMH164N007MH164N008	8	0.0383	0.209372	0.24	0.255962	0.27	0.307582	0.29	0.233848	0.25				
CLMH164N008MH164N009	CAL1	2002		Existing	assumed Mannings N	MH164N008	MH164N009		A00791B	IRWD	PVC	{1A14F130-ED1B-45F0-BA70-BCE5B3C22AFE}	CLMH164N008MH164N009	142.80	137.35	0.666666667	MH164N008	MH164N009			47	CLMH164N008MH164N009	8	0.1470	0.209411	0.17	0.256001	0.19	0.307630	0.21	0.233889	0.18				
CLMH164N009MH164N027		2002		Existing	assumed Mannings N	MH164N009	MH164N027		A00791B	IRWD	PVC	{8C8F906BA-5C35-45C6-925A-97812D1D292F}	CLMH164N009MH164N027	137.25	111.60	0.666666667	MH164N009	MH164N027			186	CLMH164N009MH164N027	8	0.1391	0.209357	0.17	0.255917	0.19	0.307548	0.21	0.233842	0.18				
CLMH164N011MH164N105		2002		Existing	assumed Mannings N	MH164N011	MH164N105		A00791B	IRWD	PVC	{2EFE0C16-33CC-497E-B773-E4A7574ABBB5}	CLMH164N011MH164N105	96.48	85.93	0.666666667	MH164N011	MH164N105			113	CLMH164N011MH164N105	8	0.0934	0.215831	0.20	0.263531	0.22	0.316615	0.24	0.241547	0.21				
CLMH164N014MH164N015		1999		Existing	assumed Mannings N	MH164N014	MH164N015		T15810	IRWD	PVC	{AFAB20C3-D9B8-436A-AD3B-972147D0BE16}	CLMH164N014MH164N015	149.34	149.36	0.666666667	MH164N014	MH164N015			208	CLMH164N014MH164N015	8	0.0038	0.001609	0.04	0.001934	0.04	0.002292	0.05	0.001934	0.04				
CLMH164N015MH164N016		1999		Existing	assumed Mannings N	MH164N015	MH164N016		T15810	IRWD	PVC	{8513C3C6-CF84-4DE5-8B50-C2ED0C28B82C}	CLMH164N015MH164N016	149.25	148.97	0.666666667	MH164N015	MH164N016			102	CLMH164N015MH164N016	8	0.0027	0.001609	0.04	0.001934	0.04	0.002292	0.05	0.001934	0.04				
CLMH164N016MH164N017		1999		Existing	assumed Mannings N	MH164N016	MH164N017		T15810	IRWD	PVC	{E3CB8A2E-8469-4019-9451-E528BDAC8D99}	CLMH164N016MH164N017	148.77	148.08	0.666666667	MH164N016	MH164N017			175	CLMH164N016MH164N017	8	0.0039	0.001609	0.04	0.001934	0.04	0.002292	0.05	0.001934	0.04				
CLMH164N017MH164N018		1999		Existing	assumed Mannings N	MH164N017	MH164N018		T15810	IRWD	PVC	{FC10D1DA-E99D-43F5-95ED-321FE531F556}	CLMH164N017MH164N018	147.99	147.57	0.666666667	MH164N017	MH164N018			110	CLMH164N017MH164N018	8	0.0038	0.003579	0.06	0.004299	0.06	0.005096	0.07	0.004299	0.06				
CLMH164N018MH164N019		1999		Existing	assumed Mannings N	MH164N018	MH164N019		T15810	IRWD	PVC	{785E581F-586B-4CBE-93F8-98A91DFB9848}	CLMH164N018MH164N019	147.47	147.35	0.666666667	MH164N018	MH164N019			36	CLMH164N018MH164N019	8	0.0033	0.003579	0.06	0.004299	0.06	0.005096	0.07	0.004299	0.06				
CLMH164N019MH164N020		1999		Existing	assumed Mannings N	MH164N019	MH164N020		T15810	IRWD	PVC	{5818F248-0715-4CA6-AA87-26A4C35C3119}	CLMH164N019MH164N020	147.25	146.74	0.666666667	MH164N019	MH164N020			132	CLMH164N019MH164N020	8	0.0039	0.003896	0.06	0.004681	0.06	0.005548	0.07	0.004681	0.06				
CLMH164N020MH164N021		1999		Existing	assumed Mannings N	MH164N020	MH164N021		T15810	IRWD	PVC	{2CCD1728-E0A4-45F1-8A61-18F7D45C3394}	CLMH164N020MH164N021	146.63	146.27	0.666666667	MH164N020	MH164N021			98	CLMH164N020MH164N021	8	0.0037	0.003436	0.06	0.005572	0.07	0.006604	0.07	0.005572	0.07				
CLMH164N021MH164N022		1999		Existing	assumed Mannings N	MH164N021	MH164N022		T15810	IRWD	PVC	{C7671483-F646-47C7-A0DD-4ECEDCF37AE9}	CLMH164N021MH164N022	146.16	146.05	0.666666667	MH164N021	MH164N022			33	CLMH164N021MH164N022	8	0.0033	0.004635	0.06	0.005572	0.07	0.006604	0.08	0.005572	0.07				
CLMH164N022MH164N023		1999		Existing	assumed Mannings N	MH164N022	MH164N023		T15810	IRWD	PVC	{4E120DDE-CC91-4402-B518-108BEC3C71A5}	CLMH164N022MH164N023	145.94	140.91	0.666666667	MH164N022	MH164N023			146	CLMH164N022MH164N023	8	0.0606	0.004635	0.03	0.005571	0.04	0.006604	0.04	0.005571	0.04				
CLMH164N023MH164N024		1999		Existing	assumed Mannings N	MH164N023	MH164N024		T15810	IRWD	PVC	{34122AC3-A8D2-4CDE-8158-BCD26BF9F46}	CLMH164N023MH164N024	140.80	113.81	0.666666667	MH164N023	MH164N024			102	CLMH164N023MH164N024	8	0.2754	0.005630	0.03	0.006760	0.03	0.008020	0.03	0.006760	0.03				
CLMH164N024MH164N025		1999		Existing	assumed Mannings N	MH164N024	MH164N025		T15810	IRWD	PVC	{B1C9C67E-6214-4B05-9AD4-40B052C2CEEC}	CLMH164N024MH164N025	113.72	113.40	0.666666667	MH164N024	MH164N025			23	CLMH164N024MH164N025	8	0.0139	0.005630	0.05	0.006765	0.06	0.008020	0.06	0.006765	0.06				
CLMH164N025MH164N026		1999		Existing	assumed Mannings N	MH164N025	MH164N026		T15810	IRWD	PVC	{98812732-A99B-4A01-A405-67FD296FD88D}	CLMH164N025MH164N026	113.19	112.66	0.666666667	MH164N025	MH164N026			136	CLMH164N025MH164N026	8	0.0039	0.005626	0.07	0.006764	0.08	0.008020	0.08	0.006764	0.08				
CLMH164N026MH164N027		2002		Existing	assumed Mannings N	MH164N026	MH164N027		A00791B	IRWD	PVC	{D658AECA-F362-411B-BAEA-5F698D86870E}	CLMH164N026MH164N027	112.57	111.70	0.666666667	MH164N026	MH164N027			123	CLMH164N026MH164N027	8	0.0071	0.005623	0.06	0.006763	0.07	0.008020	0.07	0.006763	0.07				
CLMH164N027MH164N011		2002		Existing	assumed Mannings N	MH164N027	MH164N011		A00791B	IRWD	PVC	{66988ED6-5382-4EAD-9A31-FEAAAF4941F4}	CLMH164N027MH164N011	111.50	96.59	0.666666667	MH164N027	MH164N011			220	CLMH164N027MH164N011	8	0.0678	0.214875	0.21	0.262524	0.23	0.315414	0.26	0.240525	0.22				
CLMH164N033MH164N034		2000		Existing	assumed Mannings N	MH164N033	MH164N034		T15942	IRWD	VCP	{41A3DB2E-738A-4249-9E53-B149BAE0B2F7}	CLMH164N033MH164N034	103.91	103.50	0.666666667	MH164N033	MH164N034			81	CLMH164N033MH164N034	8	0.0050	0.035479	0.17	0.037879	0.17	0.044906	0.19	0.037879	0.17				
CLMH164N034MH164N035		2000		Existing	assumed Mannings N	MH164N034	MH164N035		T15942	IRWD	VCP	{8F336BAB-C483-42EB-9A1E-0A20E23884DB}	CLMH164N034MH164N035	103.40	102.88	0.666666667	MH164N034	MH164N035			61	CLMH164N034MH164N035	8	0.0085	0.035587	0.15	0.037989	0.16	0.044985	0.17	0.037990	0.16				
CLMH164N035MH164N036		2000		Existing	assumed Mannings N	MH164N035	MH164N036		T15942	IRWD	VCP	{88A03286-CEA5-4018-A18F-98BD978698F0}	CLMH164N035MH164N036	102.79	95.69	0.666666667	MH164N035	MH164N036			146	CLMH164N035MH164N036	8	0.0487	0.040732	0.11	0.043483	0.11	0.051507	0.12	0.043483	0.11				
CLMH164N036MH164N103		2001		Existing	assumed Mannings N	MH164N036	MH164N103		T15942	IRWD	DIP	{EBA47F33-57DD-4C6F-808D-BA908C4648A1}	CLMH164N036MH164N103	95.44	84.37	0.666666667	MH164N036	MH164N103			108	CLMH164N036MH164N103	8	0.1035	0.060067	0.11	0.064125	0.11	0.075981	0.12	0.064125	0.11				
CLMH164N037MH164N036		2000		Existing	assumed Mannings N	MH164N037	MH164N036		T15942	IRWD	VCP	{8E809C8E-10DB-431E-BCF3-C98F8F9A747D}	CLMH164N037MH164N036	102.84	95.69	0.500000000	MH164N037	MH164N036			80	CLMH164N037MH164N036	8	0.0900	0.019335	0.09	0.020643	0.10	0.024475	0.10	0.020643	0.10				
CLMH164N038MH164N037		2000		Existing	assumed Mannings N	MH164N038	MH164N037		T15942	IRWD	VCP	{AE6D8CEC-7D50-4561-A1BF-6C64D8281806}	CLMH164N038MH164N037	108.33	102.94	0.500000000	MH164N038	MH164N037			212	CLMH164N038MH164N037	8	0.0254	0.019335	0.13	0.020643	0.13	0.024475	0.14	0.020643	0.13				
CLMH164N109MH164N110		2003		Existing	assumed Mannings N	MH164N109	MH164N110		T16427	IRWD	PVC	{2105FFD4-A8F8-4BF9-ABB4-BBB262079A49}	CLMH164N109MH164N110	275.44	274.40	0.666666667	MH164N109	MH164N110			71	CLMH164N109MH164N110	8	0.0146	0.004541	0.05	0.005452	0.05	0.006463	0.06	0.005452	0.05				
CLMH164N045MH164N110		2002		Existing	assumed Mannings N	MH164N045	MH164N110		T16409	IRWD	PVC	{B4D74A00-ABE5-49A2-9C4E-E208SC58E1BB}	CLMH164N045DE164N081	246.30	239.58	0.666666667	MH164N045	MH164N110			136	CLMH164N045MH164N110	8	0.0494	0.007482	0.05	0.008982	0.05	0.010648	0.05	0.008982	0.05

| | | |

CLMH171W007MH171W006		1999		Existing	assumed Mannings N	MH171W007	MH171W006		A00885	IRWD	VCP	{0DAECA19-606F-4459-A085-CDD3FD1C770A}	CLMH171W007MH171W006	230.30	225.97	0.666666667	MH171W007	MH171W006			221	CLMH171W007MH171W006	8	0.0196	0.001070	0.02	0.001143	0.02	0.001356	0.03	0.005805	0.05	
CLMH171W008MH171W007		1999		Existing	assumed Mannings N	MH171W008	MH171W007		A00885	IRWD	VCP	{4F11DC79-FFE8-44A9-A6BB-158B620819DB}	CLMH171W008MH171W007	233.33	230.40	0.666666667	MH171W008	MH171W007			146	CLMH171W008MH171W007	8	0.0200	0.001070	0.02	0.001143	0.02	0.001356	0.03	0.005805	0.05	
CLMH171W009MH171W010		2008		Existing	assumed Mannings N	MH171W009	MH171W010		A001809	IRWD	PVC	{A09A1497-1350-64E5-B255-5DB5424717CE}	CLMH171W009MH171W010	220.25	219.87	0.666666667	MH171W009	MH171W010			94	CLMH171W009MH171W010	8	0.0040	0.002460	0.05	0.002627	0.05	0.003115	0.05	0.002627	0.05	
CLMH171W010MH171W011		2008		Existing	assumed Mannings N	MH171W010	MH171W011		A001809	IRWD	PVC	{FA1CC46A-5E4F-421E-98CE-273EC9D3ABBD}	CLMH171W010MH171W011	219.67	219.30	0.666666667	MH171W010	MH171W011			92	CLMH171W010MH171W011	8	0.0040	0.002980	0.05	0.003182	0.05	0.003775	0.06	0.003182	0.05	
CLMH171W011MH171N067		2008		Existing	assumed Mannings N	MH171W011	MH171N067		A01809	IRWD	PVC	{4C8191A5-824B-4F48-AB6A-56D55C1B6BEA}	CLMH171W011MH171N067	219.09	218.58	0.666666667	MH171W011	MH171N067			127	CLMH171W011MH171N067	8	0.0040	0.004254	0.06	0.004542	0.06	0.005386	0.07	0.004542	0.06	
CLMH171W012MH171W013		2008		Existing	assumed Mannings N	MH171W012	MH171W013		A01809	IRWD	PVC	{98F548D8-6055-4628-88EB-5E2670BF8029}	CLMH171W012MH171W013	221.17	219.57	0.666666667	MH171W012	MH171W013			24	CLMH171W012MH171W013	8	0.0669	0.001274	0.02	0.001360	0.02	0.001611	0.02	0.001360	0.02	
CLMH171W013MH171W011		2008		Existing	assumed Mannings N	MH171W013	MH171W011		A01809	IRWD	PVC	{7BE8E5F95-550A-4EEB-8B3A-AB5D763B58A5}	CLMH171W013MH171W011	219.35	219.19	0.666666667	MH171W013	MH171W011			41	CLMH171W013MH171W011	8	0.0039	0.001274	0.03	0.001360	0.03	0.001611	0.04	0.001360	0.03	
CLMH171W014MH171W013		2008		Existing	assumed Mannings N	MH171W014	MH171W013		A01809	IRWD	PVC	{FCAAE228-8DF4-4F48-A8AB-36BA897F6231}	CLMH171W014MH171W013	219.81	219.61	0.666666667	MH171W014	MH171W013			41	CLMH171W014MH171W013	8	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH171W015MH171W014		2008		Existing	assumed Mannings N	MH171W015	MH171W014		A01809	IRWD	PVC	{7A97DCB9-B7DE-4C3C-848B-DBE23BD3744B}	CLMH171W015MH171W014	220.48	219.81	0.666666667	MH171W015	MH171W014			168	CLMH171W015MH171W014	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH172E001MH172E046		1978		Existing		MH172E001	MH172E046		A00274	IRWD	VCP	{F1FB8AC3-77AD-496A-A697-B1B76BC57713}	CLMH172E001MH172E046	306.80	301.87	0.666666667	MH172E001	MH172E046			352	CLMH172E001MH172E046	8	0.0140	0.003908	0.05	0.004172	0.05	0.004947	0.05	0.004172	0.05	
CLMH172E002MH172E001		1978		Existing		MH172E002	MH172E001		A00274	IRWD	VCP	{5D083EDC-FA14-41E5-B468-E341EF5485E1}	CLMH172E002MH172E001	310.14	306.89	0.666666667	MH172E002	MH172E001			354	CLMH172E002MH172E001	8	0.0092	0.001534	0.03	0.001637	0.03	0.001942	0.04	0.001637	0.03	
CLMH172E003MH172E002		1978		Existing		MH172E003	MH172E002		A00274	IRWD	VCP	{16CC685B-1976-4843-95A0-BEF11FAD210D}	CLMH172E003MH172E002	317.29	310.26	0.666666667	MH172E003	MH172E002			182	CLMH172E003MH172E002	8	0.0182	0.001534	0.03	0.001637	0.03	0.001942	0.03	0.001637	0.03	
CLMH172E004MH172E003		1978		Existing		MH172E004	MH172E003		A00274	IRWD	VCP	{3158C222-053D-4D09-9A7F-837BEAD2501E}	CLMH172E004MH172E003	322.79	317.39	0.666666667	MH172E004	MH172E003			389	CLMH172E004MH172E003	8	0.0139	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH172E005MH172E020		1978		Existing		MH172E005	MH172E020		A00274	IRWD	VCP	{6409CD21-35E7-4AC7-A5ED-5F2770AFD6DE}	CLMH172E005MH172E020	302.32	295.25	0.666666667	MH172E005	MH172E020			380	CLMH172E005MH172E020	8	0.0186	0.013315	0.08	0.014217	0.08	0.016855	0.09	0.014217	0.08	
CLMH172E006MH172E007		1978		Existing		MH172E006	MH172E007		A00274	IRWD	VCP	{FC414A30-00A3-449A-8DF5-AE478CEF7DFD}	CLMH172E006MH172E007	291.75	290.04	0.666666667	MH172E006	MH172E007			391	CLMH172E006MH172E007	8	0.0044	0.018639	0.12	0.019904	0.13	0.023597	0.14	0.019904	0.13	
CLMH172E007MH172E027		1978		Existing		MH172E007	MH172E027		A00274	IRWD	VCP	{734E784B-E0D5-498E-A33A-C2FA29F98A0D}	CLMH172E007MH172E027	289.95	288.69	0.666666667	MH172E007	MH172E027			318	CLMH172E007MH172E027	8	0.0040	0.018639	0.13	0.019904	0.13	0.023597	0.14	0.019904	0.13	
CLMH172E008MH172E016		1978		Existing		MH172E008	MH172E016		A00274	IRWD	VCP	{A3BF5959-B70A-4238-8193-E20CEE3019111}	CLMH172E008MH172E016	287.14	286.11	0.833333333	MH172E008	MH172E016			260	CLMH172E008MH172E016	10	0.0040	0.039017	0.14	0.041662	0.14	0.049391	0.15	0.052487	0.16	
CLMH172E009MH172E028		1978		Existing		MH172E009	MH172E028		A00274	IRWD	VCP	{15AE52D0-C60D-40B2-BB5E-80FCB282B800}	CLMH172E009MH172E028	298.60	296.54	0.666666667	MH172E009	MH172E028			340	CLMH172E009MH172E028	8	0.0061	0.000926	0.02	0.000990	0.03	0.001173	0.03	0.001814	0.09	
CLMH172E010MH172E029		1978		Existing		MH172E010	MH172E029		A00274	IRWD	VCP	{5A1CB07B-192F-4065-97C2-0D2E55EC0BAE}	CLMH172E010MH172E029	310.60	305.63	0.666666667	MH172E010	MH172E029			340	CLMH172E010MH172E029	8	0.0146	0.000840	0.02	0.000896	0.02	0.001063	0.02	0.000896	0.02	
CLMH172E011MH172E014		1978		Existing		MH172E011	MH172E014		A00274	IRWD	VCP	{983D4BF4-6944-4995-A2ED-1D258F20BD0A}	CLMH172E011MH172E014	300.51	299.33	0.666666667	MH172E011	MH172E014			295	CLMH172E011MH172E014	8	0.0040	0.010971	0.10	0.011713	0.10	0.013885	0.11	0.011713	0.10	
CLMH172E012MH172E011		1978		Existing		MH172E012	MH172E011		A00274	IRWD	VCP	{496F5F59-841A-4ABF-8787-EA56D4D0F4EF}	CLMH172E012MH172E011	306.23	300.80	0.666666667	MH172E012	MH172E011			182	CLMH172E012MH172E011	8	0.0298	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH172E013MH172E012		1978		Existing		MH172E013	MH172E012		A00274	IRWD	VCP	{66459821-8CE7-4068-A058-B0B069A1E557}	CLMH172E013MH172E012	309.13	306.33	0.666666667	MH172E013	MH172E012			264	CLMH172E013MH172E012	8	0.0115	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH172E014MH172E015		1978		Existing		MH172E014	MH172E015		A00274	IRWD	VCP	{1C9A7608-7F60-4428-A4D7-3BF1AF1A435S1}	CLMH172E014MH172E015	299.23	296.01	0.666666667	MH172E014	MH172E015			391	CLMH172E014MH172E015	8	0.0115	0.013315	0.09	0.014217	0.09	0.016853	0.10	0.014217	0.09	
CLMH172E015MH172E008		1978		Existing		MH172E015	MH172E008		A00274	IRWD	VCP	{C07EB6D0-18C1-4D78-A785-568FCD6FDF78}	CLMH172E015MH172E008	295.92	287.57	0.666666667	MH172E015	MH172E008			61	CLMH172E015MH172E008	8	0.1392	0.013315	0.05	0.014217	0.05	0.016853	0.05	0.014217	0.05	
CLMH172E016MH172E017		1978		Existing		MH172E016	MH172E017		A00274	IRWD	VCP	{1CF795D5-A1B4-4DAC-8B31-0A3DC4D9C7FF}	CLMH172E016MH172E017	286.01	285.00	0.833333333	MH172E016	MH172E017			258	CLMH172E016MH172E017	10	0.0039	0.039451	0.14	0.042126	0.14	0.049941	0.15	0.052951	0.16	
CLMH172E017MH172E019		1978		Existing		MH172E017	MH172E019		A00274	IRWD	VCP	{794E1303-9757-46A8-993C-2BB136F68E2B}	CLMH172E017MH172E019	284.79	283.38	0.833333333	MH172E017	MH172E019			390	CLMH172E017MH172E019	10	0.0039	0.041129	0.14	0.043918	0.14	0.052066	0.16	0.054743	0.16	
CLMH172E018MH172E017		1978		Existing		MH172E018	MH172E017		A00274	IRWD	VCP	{26E6D952-6C98-4865-AC65-F70F591589CF}	CLMH172E018MH172E017	291.01	285.23	0.666666667	MH172E018	MH172E017			230	CLMH172E018MH172E017	8	0.0251	0.001678	0.03	0.001792	0.03	0.002125	0.03	0.001792	0.03	
CLMH172E019MH172S038		1978		Existing		MH172E019	MH172S038		A00274	IRWD	VCP	{8C846099-9EF8-435F-843C-27B1B779FC4F}	CLMH172E019MH172S038	283.27	281.70	0.833333333	MH172E019	MH172S038			396	CLMH172E019MH172S038	10	0.0040	0.041129	0.14	0.043918	0.14	0.052066	0.16	0.054743	0.16	
CLMH172E006MH172E026		1978		Existing		MH172E006	MH172E026		A00274	IRWD	VCP	{8AC3A269-C3FF-4A4B-BC88-AEF16FC0FEB0}	CLMH172E006MH172E026	295.14	291.85	0.666666667	MH172E006	MH172E026			379	CLMH172E006MH172E026	8	0.0087	0.015485	0.10	0.016575	0.10	0.019603	0.11	0.016535	0.10	
CLMH172E021MH172E022		1978		Existing		MH172E021	MH172E022		A00274	IRWD	VCP	{AFB3C68D-48DC-4995-AC00-EAF47C67D884}	CLMH172E021MH172E022	322.95	317.98	0.666666667	MH172E021	MH172E022			309	CLMH172E021MH172E022	8	0.0161	0.001042	0.02	0.001113	0.02	0.001319	0.03	0.001113	0.02	
CLMH172E022MH172E023		1978		Existing		MH172E022	MH172E023		A00274	IRWD	VCP	{566F3DDA-25A3-483A-9B06-09709B371C7E}	CLMH172E022MH172E023	317.89	310.32	0.666666667	MH172E022	MH172E023			280	CLMH172E022MH172E023	8	0.0270	0.003474	0.04	0.004397	0.04	0.005210	0.04	0.003710	0.04	
CLMH172E023MH172E024		1978		Existing		MH172E023	MH172E024		A00274	IRWD	VCP	{77B778ZD-510B-4003-98A7-FF9D6AF813CF}	CLMH172E023MH172E024	310.23	307.50	0.666666667	MH172E023	MH172E024			277	CLMH172E023MH172E024	8	0.0099	0.012918	0.09	0.015315	0.10	0.018158	0.10	0.012918	0.09	
CLMH172E024MH172E025		1978		Existing		MH172E024	MH172E025		A00274	IRWD	VCP	{48CD86C7-8C45-47ED-B0C3-023DE98B7CBB}	CLMH172E024MH172E025	307.39	303.04	0.666666667	MH172E024	MH172E025			324	CLMH172E024MH172E025	8	0.0134	0.014067	0.09	0.015019	0.09	0.017807	0.10	0.015019	0.09	
CLMH172E025MH172E026		1978		Existing		MH172E025	MH172E026		A00274	IRWD	VCP	{AAA44579-BE80-443B-A7F4-3E4268DF4583}	CLMH172E025MH172E026	302.88	299.67	0.666666667	MH172E025	MH172E026			321	CLMH172E025MH172E026	8	0.0100	0.014067	0.09	0.015019	0.10	0.017807	0.10	0.015019	0.10	
CLMH172E026MH172E030		1978		Existing		MH172E026	MH172E030		A00274	IRWD	VCP	{D6068FEB-C8F4-40BC-830F-D1D3D045B7CD}	CLMH172E026MH172E030	299.50	294.00	0.666666667	MH172E026	MH172E030			243	CLMH172E026MH172E030	8	0.0226	0.014531	0.08	0.015513	0.08	0.018392	0.09	0.015513	0.08	
CLMH172E027MH172E008		1978		Existing		MH172E027	MH172E008		A00274	IRWD	VCP	{FB0A468B-6993-4D56-A9FB-FA096SF4C73C}	CLMH172E027MH172E008	288.58	287.50	0.666666667	MH172E027	MH172E008			258	CLMH172E027MH172E008	8	0.0042	0.024776	0.14	0.026456	0.15	0.031365	0.16	0.026456	0.15	
CLMH172E028MH172E008		1978		Existing		MH172E028	MH172E008		A00274	IRWD	VCP	{72CBC74C-44AC-423C-BE41-88D6A7E56434}	CLMH172E028MH172E008	296.44	287.76	0.666666667	MH172E028	MH172E008			367	CLMH172E028MH172E008	8	0.1550	0.000926	0.01	0.000990	0.01	0.001173	0.02	0.001814	0.04	
CLMH172E029MH172E011		1978		Existing		MH172E029	MH172E011		A00274	IRWD	VCP	{40550F38-BF4D-436C-8EDA-CB513B925814}	CLMH172E029MH172E011	305.52	300.60	0.666666667	MH172E029	MH172E011			328	CLMH172E029MH172E011	8	0.0150	0.010971	0.08	0.011713	0.08	0.013885	0.08	0.011713	0.08	
CLMH172E030MH172E031		1978		Existing		MH172E030	MH172E031		A00274	IRWD	VCP	{6FA69CA8-F37D-4601-80SD-2FB06F2C7S1}	CLMH172E030MH172E031	293.79	282.39	0.666666667	MH172E030	MH172E031			316	CLMH172E030MH172E031	8	0.0361	0.014531	0.07	0.015513	0.07	0.018392	0.08	0.015513	0.07	
CLMH172E031MH172E035		1978		Existing		MH172E031	MH172E035		A00274	IRWD	VCP	{973F21C4-F1AA-4792-8642-525313DE589}	CLMH172E031MH172E035	282.26	274.04	0.666666667	MH172E031	MH172E035			367	CLMH172E031MH172E035	8	0.0161	0.019045	0.11	0.020034	0.11	0.024110	0.12	0.020034	0.11	
CLMH172E032MH172E031		1978		Existing		MH172E032	MH172E031		A00274	IRWD	VCP	{8F2B3D07-08B5-4162-9C7C-FC4C642E4E92}	CLMH172E032MH172E031	292.79	282.47	0.666666667	MH172E032	MH172E031			362	CLMH172E032MH172E031	8	0.0285	0.001794	0.03	0.001916	0.03	0.002273	0.03	0.001916	0.03	
CLMH172E033MH172E032		1978		Existing		MH172E033	MH172E032		A00273	IRWD	ACP	{56E133C3-0189-42DF-9973-97C64F15CB31}	CLMH172E033MH172E032	304.04	292.89	0.666666667	MH172E033	MH172E032			316	CLMH172E033MH172E032	8	0.0287	0.000376	0.01	0.000402	0.01	0.000477	0.01	0.000402	0.01	
CLMH172E034MH172E033		1978		Existing		MH172E034	MH172E033		A00273	IRWD	ACP	{03E3E901-2325-4185-A276-E20667ZEF673}	CLMH172E034MH172E033	309.20	304.14	0.666666667	MH172E034	MH172E033			176	CLMH172E034MH172E033	8	0.0288	0.000376	0.01	0.000402	0.01	0.000477	0.01	0.000402	0.01	
CLMH172E035MH172S023		1978		Existing		MH172E035	MH172S023		A00274	IRWD	VCP	{C4632D3D-B54B-4785-B08A-68B84775AF36}	CLMH172E035MH172S023	274.04	270.98	0.666666667	MH172E035	MH172S023			298	CLMH172E035MH172S023	8	0.0103	0.030568	0.13	0.032635	0.14	0.038691	0.15	0.032635	0.14	
CLMH172E036MH172E035		1978		Existing		MH172E036	MH172E035		A00273	IRWD	VCP	{55E4D9F2-2583-4B34-886E-3123FF33ZB7C}	CLMH172E036MH172E035	276.39	274.04	0.666666667	MH172E036	MH172E035			44	CLMH172E036MH172E035	8	0.0534	0.011523	0.10	0.012301	0.10	0.014581	0.11	0.012301	0.10	
CLMH172E037MH172E036		1978		Existing		MH172E037	MH172E036		A00273	IRWD	VCP	{3F102EFF-E783-4038-A0A1-072A407057DB}	CLMH172E037MH172E036	279.82	276.60	0.666666667	MH172E037	MH172E036			271	CLMH172E037MH172E036	8	0.0119	0.011523	0.08	0.012301	0.08	0.014581	0.09	0.012301	0.08	
CLMH172E038MH172E037		1978		Existing		MH172E038	MH172E037		A00273	IRWD	VCP	{3A138F52-55EA-4EDA-AFFD-E4427C0F0576}	CLMH172E038MH172E037	292.83	279.92	0.666666667	MH172E038	MH172E037			391	CLMH172E038MH172E037	8	0.0330	0.004054	0.04	0.004327	0.04	0.005128	0.04	0.004327	0.04	
CLMH172E039MH172E038		1978		Existing		MH172E039	MH172E038		A00273	IRWD	ACP	{2ECF470D-ADB0-4AC5-AAC2-9F07753EB3F7}	CLMH172E039MH172E038	298.89	292.94	0.666666667	MH172E039	MH172E038			284	CLMH172E039MH172E038	8	0.0245	0.002404	0.03	0.002565	0.03	0.003040	0.04	0.002565	0.03	
CLMH172E040MH172E039		1978		Existing		MH172E040	MH172E039		A00273	IRWD	ACP	{B2F16C2F-698E-48FA-9ED4-001ECC3F02A4}	CLMH172E040MH172E039	303.29	299.10	0.666666667	MH172E040	MH172E039			356	CLMH172E040MH172E039	8	0.0118	0.000898	0.02	0.000958	0.02	0.001136	0.02	0.000958	0.02	
CLMH172E041MH196N134		1978		Existing		MH172E041	MH196N134		A00274	IRWD	VCP	{F1ABDFAE-FADD-4BE3-B146-8265087315C17}	CLMH172E041MH196N134	308.95	304.22	0.666666667	MH172E041	MH196N134			263	CLMH172E041MH196N134	8	0.0180	0.009203	0.07	0.009827	0.07	0.011652	0.07	0.009827	0.07	
CLMH172E042MH172E041		1976		Existing		MH172E042	MH172E041		A00274	IRWD	VCP	{ACDEC25A-F882-42D0-AD61-830972F960B2}	CLMH172E042MH172E041	309.17	309.05	0.666666667	MH172E042	MH172E041			290	CLMH172E042MH172E041	8	0.0004	0.009203	0.14	0.009827	0.15	0.011652	0.16	0.009827	0.15	
CLMH172E043MH172E042		1978		Existing		MH172E043	MH172E042		A00274	IRWD	VCP	{8E2B5F1B-563E-4AE4-8687-B2213EFDF97D}	CLMH172E043MH172E042	312.07	309.27	0.666666667	MH172E043	MH172E042			96	CLMH172E043MH172E042	8	0.0292	0.009203	0.06	0.009828	0.06	0.011652	0.07	0.009828	0.06	
CLMH172E044MH172E108		1978		Existing		MH172E044	MH172E108		A00274	IRWD	VCP	{33952172-5C46-472C-B8B6-789C5832F30}	CLMH172E044MH172E108	321.41	317.63	0.666666667	MH172E044	MH172E108			316	CLMH172E044MH172E108	8	0.0120	0.005904	0.06	0.006305	0.07	0.007474	0.07	0.006305	0.07	
CLMH172E045MH172E044		1978		Existing		MH172E045	MH172E044		A00274	IRWD	VCP	{3B42D846-CD65-41E6-A2A6-D09EEBBDB8C2}	CLMH172E045MH172E044	327.20	321.51	0.666666667	MH172E045	MH172E044			316	CLMH172E045MH172E044	8	0.0180	0.004110	0.05	0.004389	0.05	0.005203	0.05	0.004389	0.05	
CLMH172E046MH172N010		1978		Existing		MH172E046	MH172N010		A00274	IRWD	VCP	{0311748E-12C9-436B-BC06-3E14DB205E82}	CLMH172E046MH172N010	301.77	296.29	0.666666667	MH172E046	MH172N010			352	CLMH172E046MH172N010	8	0.0156	0.004226	0.05	0.004512	0.05	0.005349	0.05	0.004512	0.05	
STMH172E047MH172E009		1978		Existing		MH172E047	MH172E009		A00274	IRWD	VCP	{4F74012E-0885-4F88-A8E2-1FFA1192D84B}	STMH172E047MH172E009	299.50	298.79	0.666666667	MH172E047	MH172E009			25	STMH172E047MH172E009	8	0.0284	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	
CLMH172E048MH172E106		2005		Existing	assumed Mannings N	MH172E048	MH172E106		A00809Z	IRWD	PVC	{9300A351-534F-42D5-8DE7-EB7314A9079C}	CLMH172E048MH172E106	234.47	232.86	0.666666667	MH172E048	MH172E106			161	CLMH172E048MH172E106	8	0.0100	0.001708	0.03	0.001824	0.03	0.002161	0.04	0.006090	0.06	
CLMH172E106MH172E001		1978		Existing		MH172E106	MH172E001		A00274	IRWD	VCP	{68238DFB-9D62-4DB5-B9C1-1994D7923266}	CLMH172E106MH172E001	307.50	307.00	0.666666667	MH172E106	MH172E001			25	CLMH172E106MH172E001	8	0.0200	0.002374	0.03	0.002535	0.04	0.003005	0.04	0.002535	0.04	
CLMH172E107MH172E108		2006		Existing	assumed Mannings N	MH172E107	MH172E108		A00275A	IRWD	PVC	{52613C06-5A2C-4FA5-9CAC-973089E3CE47}	CLMH172E107MH172E108	320.00	317.79	0.666666667	MH172E107	MH172E108			213	CLMH172E107MH172E108	8	0.0101	0.003298	0.05	0.003523	0.05	0.004178	0.05	0.003523	0.05	
CLMH172E108MH172E043		1978		Existing		MH172E108	MH172E043		A00274	IRWD	VCP	{1AFAC208-26FA-459C-A0A4-952F51A6D246}	CLMH172E108MH172E043	317.63	312.17	0.666666667	MH172E108	MH172E043			316	CLMH172E108MH172E043	8	0.0173	0.009203	0.07	0.009828	0.07	0.011652	0.07	0.009828	0.07	
CLMH172N002MH172N014		2000		Existing	assumed Mannings N	MH172N002	MH172N014		A02176	IRWD	PVC	{681AB599-6EC3-421A-B227-D5559F4F5731}	CLMH172N002MH172N014	273.45	268.84	1.000000000	MH172N002	MH172N014			430	CLMH172N002MH172N014	24	0.0107	2.436587	0.27	2.810379	0.29	3.331971	0.32	5.172980	0.40	
CLMH172N003MH172N002		1979		Existing		MH172N003	MH172N002		269	IRWD	VCP	{115988FA-9990-4DC1-9C2D-9651AE7C22DC}	CLMH172N003MH172N002	273.98	273.55	1.500000000	MH172N003	MH172N002		Future Greater than 15-in, d/D >0.75	395	CLMH172N003MH172N002	18	0.0011	2.436821	0.64	2.810474	0.70	3.332106	0.78	5.173411	0.87	
CLMH172N004MH172N003		1979		Existing		MH172N004	MH172N003		269	IRWD	VCP	{3E1A6CC5-8ED3-459E-846A-396937217ODE}	CLMH172N004MH172N003	276.82	274.08	1.500000000	MH172N004	MH172N003		Future Greater than 15-in, d/D >0.75	342	CLMH172N004MH172N003	18	0.0080	2.438617	0.58	2.811134	0.64	3.334166	0.72	5.173417	1.00	
CLMH172N005MH172N004		1978		Existing		MH172N005	MH172N004		A00274	IRWD	VCP	{0C926672-698E-442F-8B3E-5C7B807BACDD}	CLMH172N005MH172N004	277.79	277.64	0.666666667	MH172N005	MH172N004		Future 8-in and less, d/D>0.50	40	CLMH172N005MH172N004	8	0.0038	0.011637	0.10	0.012424	0.10	0.014727	0.11	0.121345	1.00	
CLMH172N006MH172N005		1978		Existing		MH172N006	MH172N005		A00274	IRWD	VCP	{F85A71C5-ACE0-4715-B8E6-596D9F2CC440}	CLMH172N006MH172N005	279.61	277.98	0.666666667	MH172N006	MH172N005		Future 8-in and less, d/D>0.50	410	CLMH172N006MH172N005	8	0.0040	0.011637	0.10	0.012424	0.10	0.014727	0.11	0.016682	0.56	
CLMH172N007MH172N006		1978		Existing		MH172N007	MH172N006		A00274	IRWD	VCP	{8F7ABBCA-A840-46E2-9A2C-9DBA02DABD94}	CLMH172N007MH172N006	282.07	279.72	0.666666667	MH172N007	MH172N006			400	CLMH172N007MH172N006	8	0.0059	0.011637	0.09	0.012424	0.10	0.014727	0.11	0.016682	0.11	
CLMH172N008MH172N007		1978		Existing		MH172N008	MH172N007		A00274	IRWD	VCP	{A7569023-1B66-4911-821B-4D6E643CA711}	CLMH172N008MH172N007	282.79	282.26	0.666666667	MH172N008	MH172N007			114	CLMH172N008MH172N007	8	0.0046	0.011637	0.10	0.012424	0.10	0.014727	0.11	0.016682	0.12	
CLMH172N009MH172N008		1978		Existing		MH172N009	MH172N008		A00274	IRWD	VCP	{1E1F37C7-3547-4756-B4BD-C080567914E2}	CLMH172N009MH172N008	287.58	282.89	0.666666667	MH172N009	MH172N008			385	CLMH172N009MH172N008	8	0.0154	0.010913	0.07	0.011652	0.08	0.013811	0.08	0.015910	0.09	
CLMH172N010MH172N009		1978		Existing		MH172N010	MH172N009		A00274	IRWD	VCP	{4E7BD38A-71E4-4CD2-BBD1-9E9B89F6C79C}	CLMH172N010MH172N009	296.08	287.69	0.666666667	MH172N010	MH172N009			385	CLMH172N010MH172N009	8	0.0218	0.006628	0.05	0.007077	0.06	0.008389	0.06	0.011136	0.07	
CLMH172N011MH172N004		1979		Existing		MH172N011	MH172N004		283	IRWD	VCP	{0D701864-AF57-40EC-A2F9-95ED255A5E83}	CLMH172N011MH172N004	282.36	276.92	1.500000000	MH172N011	MH172N004		Future Greater than 15-in, d/D >0.75	295	CLMH172N011MH172N004	18	0.0184	2.430381	0.36	2.802728	0.39	3.324608	0.44	5.156695	0.77	
CLMH172N012MH172N011		1984		Existing	assumed Mannings N	MH172N012	MH172N011		283	IRWD	VCP	{0F803704-29C9-48DF-8729-CC416CB00F14}	CLMH172N012MH172N011	284.86	282.47	1.500000000	MH172N012	MH172N011		Future Greater than 15-in, d/D >0.75	368	CLMH172N012MH172N011	18	0.0065	2.430409	0.47	2.802735	0.51	3.324632	0.56	5.145752	0.75	
CLMH172N013MH172N012		1984		Existing	assumed Mannings N	MH172N013	MH172N012		283	IRWD	VCP	{53A64888-7FEF-459D-AFFA-106E4F8F87EC}	CLMH172N013MH172N012	287.27	284.97	1.500000000	MH172N013	MH172N012		Future Greater than

CLMH1731E018MH173E014		1985		Existing	assumed Mannings N	MH173E018	MH173E014		A00459	IRWD	VCP	{6ECCC752-B1DD-4B38-86A1-16E2588185FD}	CLMH1731E018MH173E014	370.26	367.20	0.666666667	MH173E018	MH173E014		261	CLMH1731E018MH173E014	8	0.0117	0.031024	0.13	0.033125	0.14	0.039271	0.15	0.042141	0.15		
CLMH1731E019MH173E018		1985		Existing	assumed Mannings N	MH173E019	MH173E018		A00459	IRWD	VCP	{60BE9E4B-22D7-455F-811A-DA229845709}	CLMH1731E019MH173E018	371.85	370.36	0.666666667	MH173E019	MH173E018		280	CLMH1731E019MH173E018	8	0.0053	0.006067	0.07	0.006479	0.07	0.007680	0.08	0.042141	0.18		
STMH1731E020MH173E010		1980		Existing	assumed Mannings N	MH173E020	MH173E010		A00328	IRWD	VCP	{B3395830-23A5-4239-B068-78E8FABF7AC5}	STMH1731E020MH173E010	362.05	362.04	0.833333333	MH173E020	MH173E010		10	STMH1731E020MH173E010	10	0.0010	0.000000	0.00	0.000056	0.01	0.001531	0.08	0.049849	0.32		
CLMH1731E021MH173E019		1985		Existing	assumed Mannings N	MH173E021	MH173E019		A00459	IRWD	VCP	{31C920A7-FE24-4C86-AF34-14E6994DE2ZC}	CLMH1731E021MH173E019	373.04	372.05	0.666666667	MH173E021	MH173E019		49	CLMH1731E021MH173E019	8	0.0202	0.006067	0.05	0.006479	0.05	0.007680	0.06	0.006479	0.05		
CLMH1731E022MH173S033		1979		Existing	assumed Mannings N	MH173E022	MH173S033		A00313	IRWD	VCP	{97874CB3-C303-4ACE-9ADD-A1B8A32C11C4}	CLMH1731E022MH173S033	336.57	334.92	0.666666667	MH173E022	MH173S033		343	CLMH1731E022MH173S033	8	0.0048	0.009639	0.09	0.010290	0.09	0.012200	0.10	0.007747	0.08		
CLMH1731E047MH173N001		1979		Existing	assumed Mannings N	MH173E047	MH173N001		282	IRWD	VCP	{490906A8-04C5-406B-BECA-20456F6837AA}	CLMH1731E047MH173N001	340.02	333.35	1.250000000	MH173E047	MH173N001	Future Equal to 15-in, d/D >0.67	361	CLMH1731E047MH173N001	15	0.0185	2.098633	0.42	2.478420	0.46	2.945209	0.51	4.624562	0.69		
CLMH1731E048MH173E010		1980		Existing	assumed Mannings N	MH173E048	MH173E010		A00328	IRWD	VCP	{5E320AEF-0107-468F-BF4F-07351389118D}	CLMH1731E048MH173E010	368.73	361.61	1.250000000	MH173E048	MH173E010		341	CLMH1731E048MH173E010	15	0.0209	2.077539	0.40	2.457274	0.44	2.919956	0.49	4.522664	0.65		
CLMH1731E055MH173S056		1971		Existing	assumed Mannings N	MH173E055	MH173S056		A01113	IRWD	VCP	{7C4D80F1-EA8F-49B1-BC88-947E07D28347}	CLMH1731E055MH173S056	360.13	358.14	2.000000000	MH173E055	MH173S056		494	CLMH1731E055MH173S056	24	0.0040	1.938955	0.31	2.072351	0.32	3.663686	0.44	2.842299	0.38		
CLMH1731E057MH173E055		1971		Existing	assumed Mannings N	MH173E057	MH173E055		A01243	IRWD	VCP	{6D184198-05CD-43BE-A86D-6ADD6ECBB190}	CLMH1731E057MH173E055	361.07	360.63	1.500000000	MH173E057	MH173E055		117	CLMH1731E057MH173E055	18	0.0038	0.779931	0.28	0.817879	0.29	1.447085	0.39	0.888414	0.30		
SIMH1731E058MH173E113		1975		Existing	assumed Mannings N	MH173E058	MH173E113		A01250	IRWD	ACP	{F86A2989-B140-4579-ACED-8BADA9A1759C}	CLMH1731E058MH173E113	361.51	353.38	1.250000000	MH173E058	MH173E113	Siphon	23	SIMH1731E058MH173E113	15	0.3701	0.779971	0.56	0.817928	0.56	1.447257	0.64	0.888531	0.56		
CLMH1731E059MH173E058		1975		Existing	assumed Mannings N	MH173E059	MH173E058		T08892	IRWD	VCP	{1459F71F7-3DC2-489F-819E-647A32E76E8A}	CLMH1731E059MH173E058	363.04	361.51	1.500000000	MH173E059	MH173E058		323	CLMH1731E059MH173E058	18	0.0047	0.779983	0.20	0.817942	0.21	1.447642	0.32	0.888563	0.22		
CLMH1731E063MH195N062		1975		Existing	assumed Mannings N	MH173E063	MH195N062		T08892	IRWD	VCP	{540F35E7-0DA2-4C3E-8E2D-8845FA5CBA40}	CLMH1731E063MH195N062	370.55	368.86	0.666666667	MH173E063	MH195N062		188	CLMH1731E063MH195N062	8	0.0090	0.004982	0.06	0.005602	0.06	0.009794	0.08	0.005602	0.06		
CLMH1731E065MH195N064		1975		Existing	assumed Mannings N	MH173E065	MH195N064		T08892	IRWD	VCP	{70DB1185-E1AB-48F9-8311-C2F250C38D01}	CLMH1731E065MH195N064	371.72	370.38	0.666666667	MH173E065	MH195N064		160	CLMH1731E065MH195N064	8	0.0084	0.008225	0.17	0.009249	0.18	0.016167	0.23	0.009249	0.18		
CLMH1731E068MH195N067		1975		Existing	assumed Mannings N	MH173E068	MH195N067		T08892	IRWD	VCP	{0E592562-071F-4510-900C-48B2409F3D01}	CLMH1731E068MH195N067	376.01	374.26	0.666666667	MH173E068	MH195N067		167	CLMH1731E068MH195N067	8	0.0105	0.006346	0.14	0.007136	0.15	0.012473	0.20	0.007136	0.15		
CLMH1731E069MH173E068		1975		Existing	assumed Mannings N	MH173E069	MH173E068		T08892	IRWD	VCP	{5DD047A7-867E-42BB-AF05-492185204C39}	CLMH1731E069MH173E068	381.00	376.01	0.666666667	MH173E069	MH173E068		130	CLMH1731E069MH173E068	8	0.0085	0.006346	0.05	0.007136	0.06	0.012473	0.08	0.007136	0.06		
CLMH1731E072MH195N071		1975		Existing	assumed Mannings N	MH173E072	MH195N071		T08892	IRWD	VCP	{9FBB30FB-7A1A-4DEB-894E-98C79CA87444}	CLMH1731E072MH195N071	391.44	385.95	0.666666667	MH173E072	MH195N071		179	CLMH1731E072MH195N071	8	0.0307	0.005077	0.09	0.005709	0.09	0.009978	0.12	0.005709	0.09		
CLMH1731E082MH173E083		1975		Existing	assumed Mannings N	MH173E082	MH173E083		T08892	IRWD	VCP	{A9AC6726-0E81-41C1-8880-B6A2DF821263}	CLMH1731E082MH173E083	370.29	366.23	1.500000000	MH173E082	MH173E083		400	CLMH1731E082MH173E083	18	0.0102	0.477471	0.18	0.847458	0.18	0.842276	0.24	0.548452	0.19		
CLMH1731E083MH173E059		1975		Existing	assumed Mannings N	MH173E083	MH173E059		A01243	IRWD	VCP	{76E1421C-D01E-4678-867E-4912D53CB279}	CLMH1731E083MH173E059	366.23	363.45	1.500000000	MH173E083	MH173E059		302	CLMH1731E083MH173E059	18	0.0092	0.477123	0.18	0.477110	0.18	0.841789	0.24	0.548095	0.20		
CLMH1731E111MH173E065		1975		Existing	assumed Mannings N	MH173E111	MH173E065		T08892	IRWD	VCP	{48F4078F-904F-4C4C-BC93-225FA14488FF}	CLMH1731E111MH173E065	372.89	371.92	0.666666667	MH173E111	MH173E065		182	CLMH1731E111MH173E065	8	0.0053	0.004018	0.06	0.004519	0.06	0.007899	0.08	0.004519	0.06		
CLMH1731E112MH173E082		1975		Existing	assumed Mannings N	MH173E112	MH173E082		A01250	IRWD	VCP	{88BEC960-4E00-43F6-8F22-DFD6DE840C30}	CLMH1731E112MH173E082	383.20	370.29	1.500000000	MH173E112	MH173E082		400	CLMH1731E112MH173E082	18	0.0323	0.477739	0.16	0.477727	0.16	0.842683	0.21	0.548724	0.17		
SIMH1731E113MH173E114		1975		Existing	assumed Mannings N	MH173E113	MH173E114	adverse slope	A01250	IRWD	ACP	{3F73ABB8-531E-4B80-A5E8-1C0D5A260BD7}	CLMH1731E113MH173E114	353.38	353.38	1.250000000	MH173E113	MH173E114	Siphon	44	SIMH1731E113MH173E114	15	0.0000	0.781933	1.00	0.819663	1.00	1.448921	1.00	0.890324	1.00		
SIMH1731E114MH173E057		1975		Existing	assumed Mannings N	MH173E114	MH173E057	siphon	A01250	IRWD	ACP	{CB32170D-943D-4EEC-BA50-E19FBFF0CDFC}	CLMH1731E114MH173E057	353.38	361.07	1.250000000	MH173E114	MH173E057	Siphon	48	SIMH1731E114MH173E057	15	1.1619	0.780194	0.68	0.818191	0.68	1.447353	0.74	0.888708	0.69		
CLMH1731E115MH173E047		1979		Existing	assumed Mannings N	MH173E115	MH173E047		282	IRWD	VCP	{494C3DDF-2951-4D6E-9E73-1F10CF8DB7AE}	CLMH1731E115MH173E047	345.42	340.13	1.500000000	MH173E115	MH173E047		360	CLMH1731E115MH173E047	18	0.0147	2.098783	0.34	2.478534	0.38	2.945321	0.41	4.625027	0.54		
CLMH1731E116MH173E112	CAL14	1979		Existing	assumed Mannings N	MH173E116	MH173E112		A01250	IRWD	VCP	{AD54F389-13EE-4A4F-B8F1-02E96375FE33}	CLMH1731E116MH173E112	390.42	383.20	1.500000000	MH173E116	MH173E112		300	CLMH1731E116MH173E112	18	0.0241	0.477846	0.14	0.477834	0.14	0.842858	0.19	0.548829	0.15		
CLMH1731N001MH173W008		1979		Existing	assumed Mannings N	MH173N001	MH173W008		282	IRWD	VCP	{5F803E98-3B88-4BA5-81DA-221A6585B10A6}	CLMH1731N001MH173W008	333.25	325.95	1.250000000	MH173N001	MH173W008	Future Equal to 15-in, d/D >0.67	397	CLMH1731N001MH173W008	15	0.0184	2.098942	0.42	2.478652	0.46	2.945513	0.51	4.623971	0.69		
CLMH1731N003MH173N004		1979		Existing	assumed Mannings N	MH173N003	MH173N004		A00313	IRWD	VCP	{0A405C95-3A2F-4FD4-8DB9-3C3DBC9CFF69}	CLMH1731N003MH173N004	324.39	323.29	0.666666667	MH173N003	MH173N004		274	CLMH1731N003MH173N004	8	0.0040	0.034631	0.17	0.036974	0.18	0.043836	0.19	0.147498	0.36		
CLMH1731N004MH173W015		1979		Existing	assumed Mannings N	MH173N004	MH173W015		A00313	IRWD	VCP	{23A57868-7FDD-43A5-BEFB-DA2657775320}	CLMH1731N004MH173W015	323.04	320.92	0.833333333	MH173N004	MH173W015		331	CLMH1731N004MH173W015	10	0.0064	0.037060	0.15	0.039565	0.15	0.046908	0.17	0.166607	0.26		
CLMH1731N005MH173N004		1979		Existing	assumed Mannings N	MH173N005	MH173N004		A00313	IRWD	VCP	{3D7F8D7C-751C-4D63-960E-2C9BD7AE7AEC}	CLMH1731N005MH173N004	330.67	323.29	0.666666667	MH173N005	MH173N004		168	CLMH1731N005MH173N004	8	0.0439	0.000563	0.01	0.000601	0.01	0.000713	0.01	0.007953	0.05		
CLMH1731N005MH173N005		1979		Existing	assumed Mannings N	MH173N005	MH173N005		A00313	IRWD	VCP	{C68FF98D-B32A-4FDF-8E52-37605F715E28}	CLMH1731N005MH173N005	333.73	330.76	0.666666667	MH173N005	MH173N005		206	CLMH1731N005MH173N005	8	0.0144	0.000563	0.02	0.000601	0.02	0.000713	0.02	0.007953	0.07		
CLMH1731N007MH173N014		1979		Existing	assumed Mannings N	MH173N007	MH173N014		A00313	IRWD	VCP	{3FDDE4FD-18C7-4307-A384-4611DE90C708}	CLMH1731N007MH173N014	351.64	349.04	0.666666667	MH173N007	MH173N014		265	CLMH1731N007MH173N014	8	0.0098	0.007001	0.07	0.007472	0.07	0.008858	0.08	0.061044	0.19		
CLMH1731N008MH173N007		1979		Existing	assumed Mannings N	MH173N008	MH173N007		028	IRWD	VCP	{7FBC5D02-F026-4122-898E-CB3CA0698BA9}	CLMH1731N008MH173N007	353.75	351.75	0.666666667	MH173N008	MH173N007		353	CLMH1731N008MH173N007	8	0.0059	0.007001	0.07	0.007472	0.08	0.008858	0.08	0.049237	0.19		
CLMH1731N009MH173N008		1979		Existing	assumed Mannings N	MH173N009	MH173N008		028	IRWD	VCP	{93821273-271C-413B-8133-BF5BEA25D0DE}	CLMH1731N009MH173N008	355.98	353.85	0.666666667	MH173N009	MH173N008		360	CLMH1731N009MH173N008	8	0.0059	0.007001	0.07	0.007472	0.08	0.008858	0.08	0.049237	0.19		
CLMH1731N010MH173N009		1984		Existing	assumed Mannings N	MH173N010	MH173N009		A00313	IRWD	VCP	{89080AD3-B1DD-4D4D-A984-9FBC8A0009C7}	CLMH1731N010MH173N009	357.94	356.08	0.666666667	MH173N010	MH173N009		127	CLMH1731N010MH173N009	8	0.0146	0.007001	0.06	0.007472	0.06	0.008858	0.07	0.048233	0.15		
CLMH1731N012MH173E048		1980		Existing	assumed Mannings N	MH173E048	MH173N012		A00328	IRWD	VCP	{193D2A4E-0E1B-495A-A854-8D244DB17EB6}	CLMH1731N012MH173E048	375.25	368.85	1.250000000	MH173N012	MH173E048	Future Equal to 15-in, d/D >0.67	341	CLMH1731N012MH173E048	15	0.0188	2.077621	0.42	2.457363	0.46	2.920038	0.51	4.522988	0.67		
CLMH1731N013MH173N012		1980		Existing	assumed Mannings N	MH173N013	MH173N012		A00328	IRWD	VCP	{1E58CBF6-4023-48E8-B0E8-8EC328675A97}	CLMH1731N013MH173N012	380.98	375.36	1.250000000	MH173N013	MH173N012	Future Equal to 15-in, d/D >0.67	390	CLMH1731N013MH173N012	15	0.0144	2.077709	0.45	2.457458	0.49	2.920130	0.55	4.523338	0.74		
CLMH1731N014MH173E115		1979		Existing	assumed Mannings N	MH173N014	MH173E115		A00313	IRWD	VCP	{546A80AC-6623-4FB4-93CE-87C0D5EABBC6}	CLMH1731N014MH173E115	348.94	346.07	0.666666667	MH173N014	MH173E115		207	CLMH1731N014MH173E115	8	0.0139	0.027631	0.12	0.029505	0.12	0.034974	0.13	0.061044	0.20		
CLMH1731N016MH173N007		1979		Existing	assumed Mannings N	MH173N016	MH173N007	ERROR 23, assumed im	A00415	IRWD	VCP	{DF157447-BD5E-4DB1-810A-01B28771D57D}	CLMH1731N016MH173N007	351.93	351.85	0.666666667	MH173N016	MH173N007		40	CLMH1731N016MH173N007	8	0.0020	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH1731N017MH173N010		1984		Existing	assumed Mannings N	MH173N017	MH173N010		A00415	IRWD	VCP	{E88C1B10-7B18-4895-801A-CF4A0B888B89}	CLMH1731N017MH173N010	363.14	358.14	0.666666667	MH173N017	MH173N010		362	CLMH1731N017MH173N010	8	0.0138	0.007001	0.06	0.007472	0.06	0.008858	0.07	0.017614	0.10		
CLMH1731N018MH173N017		1984		Existing	assumed Mannings N	MH173N018	MH173N017		A00415	IRWD	VCP	{11100A30-6F15-4210-9E9A-7DF1FDE73E1C}	CLMH1731N018MH173N017	367.45	363.35	0.666666667	MH173N018	MH173N017		278	CLMH1731N018MH173N017	8	0.0147	0.006877	0.06	0.007341	0.06	0.008703	0.07	0.017483	0.09		
CLMH1731N019MH173N018		1984		Existing	assumed Mannings N	MH173N019	MH173N018		A00415	IRWD	VCP	{0F527B9A-0707-4B5E-A6DC-70B723765C6F}	CLMH1731N019MH173N018	375.07	367.55	0.666666667	MH173N019	MH173N018		380	CLMH1731N019MH173N018	8	0.0198	0.003412	0.04	0.003643	0.04	0.004318	0.05	0.013784	0.08		
CLMH1731N020MH173N019		1984		Existing	assumed Mannings N	MH173N020	MH173N019		A00415	IRWD	VCP	{716FBBED-2355-441C-8D15-62D583E8A7AA}	CLMH1731N020MH173N019	381.20	375.27	0.666666667	MH173N020	MH173N019		215	CLMH1731N020MH173N019	8	0.0276	0.002357	0.03	0.002516	0.03	0.002982	0.04	0.012658	0.07		
CLMH1731N022MH173N013		1980		Existing	assumed Mannings N	MH173N022	MH173N013		A00328	IRWD	VCP	{9C2CF6AE-A0ED-4185-BA78-AB50EEF4DD3F}	CLMH1731N022MH173N013	383.76	381.10	1.250000000	MH173N022	MH173N013	Future Equal to 15-in, d/D >0.67	383	CLMH1731N022MH173N013	15	0.0134	2.077860	0.46	2.457618	0.50	2.920288	0.56	4.524187	0.77		
CLMH1731S001MH173W016		1979		Existing	assumed Mannings N	MH173S001	MH173W016		A00313	IRWD	VCP	{E65B66E-917B-4026-9048-83A1C2A8E1A7}	CLMH1731S001MH173W016	323.29	320.54	0.666666667	MH173S001	MH173W016		383	CLMH1731S001MH173W016	8	0.0072	0.002866	0.05	0.003061	0.05	0.003628	0.05	0.019711	0.12		
CLMH1731S002MH173W017		1979		Existing	assumed Mannings N	MH173S002	MH173W017		282	IRWD	VCP	{F5522139-D730-462D-B99B-65DA60961704}	CLMH1731S002MH173W017	308.48	306.35	1.250000000	MH173S002	MH173W017		371	CLMH1731S002MH173W017	15	0.0057	0.210864	0.17	0.225127	0.18	0.266907	0.20	0.326167	0.22		
CLMH1731S003MH173S002		1979		Existing	assumed Mannings N	MH173S003	MH173S002		A00313	IRWD	VCP	{D8A0C360-3486-469A-A7BF-E0D41E7707DF}	CLMH1731S003MH173S002	310.66	308.57	1.250000000	MH173S003	MH173S002		346	CLMH1731S003MH173S002	15	0.0060	0.210864	0.17	0.225127	0.18	0.266907	0.19	0.314526	0.21		
CLMH1731S004MH173S003		1979		Existing	assumed Mannings N	MH173S004	MH173S003		A00313	IRWD	VCP	{AA9EC182-86D4-4F47-B9B8-503199980A98}	CLMH1731S004MH173S003	314.07	311.08	0.833333333	MH173S004	MH173S003		355	CLMH1731S004MH173S003	10	0.0084	0.030867	0.11	0.032955	0.11	0.039069	0.12	0.089391	0.18		
CLMH1731S005MH173S004		1979		Existing	assumed Mannings N	MH173S005	MH173S004		A00313	IRWD	VCP	{5A7528B5-F01D-4D9C-9E3E-D5E8C0C1E0EA}	CLMH1731S005MH173S004	318.05	314.17	0.833333333	MH173S005	MH173S004		346	CLMH1731S005MH173S004	10	0.0112	0.030867	0.10	0.032955	0.10	0.039069	0.11	0.080843	0.16		
CLMH1731S006MH173S005		1979		Existing	assumed Mannings N	MH173S006	MH173S005		A00313	IRWD	VCP	{31EFA0F6-6E13-4E87-9791-CAFFD173FFDD}	CLMH1731S006MH173S005	322.04	318.16	0.833333333	MH173S006	MH173S005		102	CLMH1731S006MH173S005	10	0.0112	0.030216	0.10	0.032261	0.10	0.038246	0.11	0.080843	0.16		
CLMH1731S007MH173S006		1979		Existing	assumed Mannings N	MH173S007	MH173S006		A00313	IRWD	VCP	{E4C38C75-0DB9-4901-B4B5-FE9A12FDFDBF}	CLMH1731S007MH173S006	325.55	322.14	0.833333333	MH173S007	MH173S006		356	CLMH1731S007MH173S006	10	0.0096	0.024957	0.09	0.026647	0.10	0.031589	0.10	0.069003	0.15		
CLMH1731S008MH173S007		1979		Existing	assumed Mannings N	MH173S008	MH173S007		A00313	IRWD	VCP	{2196704F7-B4EE-4E07-B932-1ED87A8E8D86}	CLMH1731S008MH173S007	331.76	325.66	0.833333333	MH173S008	MH173S007		246	CLMH1731S008MH173S007	10	0.0248	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011781	0.06		
CLMH1731S010MH173S058		1979		Existing	assumed Mannings N	MH173S010	MH173S058		A00313	IRWD	VCP	{999E5943-B40A-4DF4-869D-747FA0C48DF6}	CLMH1731S010MH173S058	329.08	327.67	0.666666667	MH173S010	MH173S058		271	CLMH1731S010MH173S058	8	0.0052	0.010166	0.09	0.010855	0.09	0.012868	0.10	0.055222	0.21		
CLMH1731S011MH173S010		1979		Existing	assumed Mannings N	MH173S011	MH173S010		A00313	IRWD	VCP	{96910CB0-B658-4CD7-B185-C2E82DC240F5}	CLMH1731S011MH173S010	330.95	329.19	0.666666667	MH173S011	MH173S010		339	CLMH1731S011MH173S010	8	0.0052	0.006842	0.07	0.007306	0.08	0.008660	0.08	0.037612	0.17		
CLMH1731S012MH173S011		1979		Existing	assumed Mannings N	MH173S012	MH173S011		A00313	IRWD	VCP	{C698C048-CD6C-4CB8-8928-088C16010A0D}	CLMH1731S012MH173S011	334.26	331.05	0.666666667	MH173S012	MH173S011		314	CLMH1731S012MH173S011	8	0.0100	0.000511	0.02	0.000544	0.02	0.000645	0.02	0.018529	0.11		
CLMH1731S013MH173S012		1979		Existing	assumed Mannings N	MH173S013	MH173S012		A00313	IRWD	VCP	{6FDFF88A-1275-4907-94BF-C7B2791AFA6}	CLMH1731S013MH173S012	337.13	334.36	0.666666667	MH173S013	MH173S012		297	CLMH1731S013MH173S012	8	0.0100	0.000511	0.02	0.000544	0.02	0.000645	0.02	0.015625	0.10		
CLMH1731S014MH173S015		1979		Existing	assumed Mannings N	MH173S014	MH173S015		A00313	IRWD	VCP	{4A06248B-B530-40F7-9EEB-B73D93BF1334}	CLMH1731S014MH173S015	335.80	333.19	0.666666667	MH173S014	MH173S015		251	CLMH1731S014MH173S015	8	0.0104	0.083646	0.22	0.089309	0.23	0.105883	0.25	0.152357	0.30		
CLMH1731S015MH173S016		1979		Existing	assumed Mannings N	MH173S015	MH173S016		A00313	IRWD	VCP	{07AD55E8-B36A-4CC9-A188-2239AEDF7D2D}	CLMH1731S015MH173S016	333.08	329.54	0.666666667	MH173S015	MH173S016		184	CLMH1731S015MH173S016	8	0.0192	0.084297	0.19	0.090003	0.19	0.106706	0.21	0.152357	0.25		
CLMH1731S016MH173S060		1979		Existing	assumed Mannings N	MH173S016	MH173S060		A00313	IRWD	VCP	{AE93EC84-A652-4C66-A77E-2D9A3988C}	CLMH1731S016MH173S060	329.35	327.98	0.833333333	MH173S016	MH173S060		308	CLMH1731S016MH173S060	10	0.0044	0.066029	0.21	0.102527	0.22	0.121555	0.24	0.160104	0.27		
CLMH1731S018MH173S019		1979		Existing	assumed Mannings N	MH173S018	MH173S019		A00313	IRWD	VCP	{7DE7745C-8531-48BC-B330-BF502DF90773}	CLMH1731S018MH173S019	326.04	323.30	0.833333333	MH173S018	MH173S019		311	CLMH1731S018MH173S019	10	0.0088	0.103733	0.19	0.110751	0.20	0.131306	0.21	0.177202	0.25		
CLMH1731S019MH173S020		1979		Existing	assumed Mannings N	MH173S019	MH173S020		A00313	IRWD	VCP	{3A8B6AEA-BF6A-453E-900F-68616D0351EA}	CLMH1731S019MH173S020	323.20	321.17	0.833333333	MH173S019	MH173S020		310	CLMH1731S019MH173S020	10	0.0065	0.105280	0.20	0.112403	0.21	0.133265	0.23	0.196350	0.28		
CLMH1731S020MH173S021		1979		Existing	assumed Mannings N	MH173S020	MH173S021		A00313	IRWD	VCP	{021E6816-1394-41A2-A16E-D1F88F29F26A}	CLMH1731S020MH173S021	321.00	320.52	0.833333333	MH173S020	MH173S021		70	CLMH1731S020MH173S021	10	0.0069	0.106001	0.20	0.113174	0.21	0.134178	0.23	0.196350	0.28		
CLMH1731S021MH173S022		1979		Existing	assumed Mannings N	MH173S021	MH173S022		A00313	IRWD	VCP	{B6E2BEEC-174C-4F4B-A9EF-2C2C31EBF10E}	CLMH1731S021MH173S022	320.42	317.30	0.833333333	MH173S021	MH173S022		389	CLMH1731S021MH173S022	10	0.0080	0.106001	0.21	0.113174	0.22	0.134178	0.24	0.196350	0.27		
CLMH1731S022MH173S023		1979		Existing	assumed Mannings N	MH173S022	MH173S023		A00313	IRWD	VCP	{80826AC8-980E-4DB9-B3BC-242F705FFA56}	CLMH1731S022MH173S023	317.20	315.36	0.833333333	MH173S022	MH173S023		229	CLMH1731S022MH173S023	10	0.0080	0.115254	0.20	0.123050	0.21	0.145887	0.23	0.210965	0.28		
CLMH1731S023MH173S024		1979		Existing	assumed Mannings N	MH173S023	MH173S024		A00313	IRWD	VCP	{77D23720-045D-434F-B309-01517A37CC5E}	CLMH1731S023MH173S024	315.26	313.51	0.833333333	MH173S023	MH173S024		214	CLMH1731S023MH173S024	10	0.0082	0.121445	0.21	0.129660	0.21	0.153724	0.23	0.210965	0.27		
CLMH1731S024MH173S003		1979		Existing	assumed Mannings N	MH173S024	MH173S003		A00313	IRWD	VCP	{AC606891-2D87-430D-896C-4F2561A8B294}	CLMH1731S024MH173S003	313.30	310.94	1.000000000	MH173S024	MH173S003		378	CLMH1731S024MH173S003	12	0.0062	0.135815	0.18	0.145001	0.19	0.171913	0.21	0.225135	0.24		
CLMH1731S025MH173S024		1979		Existing	assumed Mannings N	MH173S025	MH173S024		A00313	IRWD	VCP	{60B28E68-4F78-49A2-8630-24CF0FF668DF}	CLMH1731S025MH173S024	324.58	313.51	0.666666667	MH173S025	MH173S024		309	CLMH1731S025MH173S024	8	0.0358	0.014370	0.07	0.015341	0.07	0.018188	0.08	0.014170	0.07		
CLMH1731S026MH173S025		1979		Existing	assumed Mannings N	MH173S026	MH173S025		A00313	IRWD	VCP	{501F7783-9EBF-46FB-9C03-E366E24A22DC}	CLMH1731S026MH173S025	327.41	324.69	0.666666667	MH173S026	MH173S025		308	CLMH1731S026MH173S025	8	0.0088	0.008759	0.08	0.009351	0.08	0.011087	0.09	0.014170	0.10		
CLMH1731S027MH173S026		1979		Existing	assumed Mannings N	MH173S027	MH173S026		A00313	IRWD	VCP	{B121C86A-1C39-49AD-94D5-3E0F234BE87C}	CLMH1731S027MH173S026	330.10	327.51	0.666666667	MH173S027	MH173S026		308	CLMH1731S027MH173S026	8	0.0084	0.008179	0.07	0.008731	0.08	0.010351	0.08	0.014170	0.10		
CLMH1731S028MH173S056		1979		Existing	assumed Mannings N	MH173S028	MH173S056		A00594	IRWD	VCP	{9ADBF1BA-C35A-4D3E-B5A6-DC1A7CF0454E}	CLMH1731S028MH173S056	337.73	335.42	0.666666667	MH173S028	MH173S056		106	CLMH1731S028MH173S056	8	0.0218	0.006789	0.05	0.007248	0.06	0.008593	0.06	0.012686	0.07		
CLMH1731S029MH173S022		1979		Existing	assumed Mannings N	MH173S029	MH173S022		A00313	IRWD	VCP	{B456145B-A9B9-4AE6-ACDF-135F887498A}	CLMH1731S029MH173S022	326.44	317.41	0.666666667	MH173S029	MH173S022		396

| | | |

CLMH176E051MH192N047			1994		Existing		MH176E051	MH192N047		14881	IRWD	VCP	{8D86D4B6-DD3A-4DFE-BFFE-155D48EA87A9}	CLMH176E051MH192N047	793.64	789.57	0.666666667	MH176E051	MH192N047			190	CLMH176E051MH192N047	8	0.0214	0.001247	0.02	0.001506	0.03	0.001776	0.03	0.001506	0.03		
CLMH176E053MH176E043			1993		Existing		MH176E053	MH176E043		T14730	IRWD	VCP	{33173D04-D724-4861-8F86-476527A2562C}	CLMH176E053MH176E043	775.97	774.96	0.666666667	MH176E053	MH176E043			106	CLMH176E053MH176E043	8	0.0095	0.019483	0.11	0.023371	0.12	0.027704	0.13	0.023371	0.12		
CLMH176E054MH176E053			1993		Existing		MH176E054	MH176E053		T14730	IRWD	VCP	{78E289FA-BAA5-4A20-88D6-586A66EC5CF1}	CLMH176E054MH176E053	777.73	776.17	0.666666667	MH176E054	MH176E053			133	CLMH176E054MH176E053	8	0.0117	0.012998	0.09	0.015585	0.09	0.018475	0.10	0.015585	0.09		
CLMH176E055MH176E054			1993		Existing		MH176E055	MH176E054		T14730	IRWD	VCP	{18430FD3-A340-41CB-BF79-E0E8DC7098B9}	CLMH176E055MH176E054	778.59	777.84	0.666666667	MH176E055	MH176E054			75	CLMH176E055MH176E054	8	0.0095	0.012998	0.09	0.015585	0.10	0.018475	0.11	0.015585	0.10		
CLMH176E056MH176E055			1993		Existing		MH176E056	MH176E055		T14730	IRWD	VCP	{88F0FE68-B66C-44D0-BDFD-9DF08BA204BE}	CLMH176E056MH176E055	779.40	778.69	0.666666667	MH176E056	MH176E055			76	CLMH176E056MH176E055	8	0.0093	0.008265	0.07	0.009902	0.08	0.011738	0.09	0.009902	0.08		
CLMH176E057MH176E056			1994		Existing		MH176E057	MH176E056		T14730	IRWD	VCP	{98889644-7FDA-4201-B60A-88630DCE06E8}	CLMH176E057MH176E056	781.23	779.51	0.666666667	MH176E057	MH176E056			177	CLMH176E057MH176E056	8	0.0097	0.003853	0.05	0.004606	0.05	0.005459	0.06	0.004606	0.05		
CLMH176E058MH176E060			1994		Existing		MH176E058	MH176E060		14881	IRWD	VCP	{54D1B82C-0395-4A50-ACF9-D8E3E3288C70}	CLMH176E058MH176E060	776.39	770.96	0.666666667	MH176E058	MH176E060			349	CLMH176E058MH176E060	8	0.0156	0.059341	0.17	0.071238	0.18	0.084459	0.20	0.071238	0.18		
CLMH176E060MH176E061			1994		Existing		MH176E060	MH176E061		14881	IRWD	VCP	{6023FA7D-113D-4F59-9572-81F66DCBA879}	CLMH176E060MH176E061	770.77	756.60	0.666666667	MH176E060	MH176E061			123	CLMH176E060MH176E061	8	0.1161	0.062806	0.11	0.075398	0.12	0.089392	0.13	0.075398	0.12		
CLMH176E061MH176E062			1994		Existing		MH176E061	MH176E062		A00750	IRWD	VCP	{ED35F57A-6DD5-4121-AB29-0C128F960BCC}	CLMH176E061MH176E062	756.40	752.10	0.666666667	MH176E061	MH176E062			400	CLMH176E061MH176E062	8	0.0108	0.148677	0.29	0.178459	0.32	0.211581	0.35	0.178459	0.32		
CLMH176E062MH192N042			1994		Existing		MH176E062	MH192N042		A00750	IRWD	VCP	{785616AD-CC98-488A-BFC4-215538438E19}	CLMH176E062MH192N042	752.01	730.84	0.666666667	MH176E062	MH192N042			209	CLMH176E062MH192N042	8	0.1018	0.153215	0.19	0.183905	0.21	0.218039	0.24	0.183905	0.21		
CLMH176E063MH176E061			1994		Existing		MH176E063	MH176E061		A00750	IRWD	VCP	{701947F0-9A76-482C-8F9E-659F1E1B4DA}	CLMH176E063MH176E061	758.60	756.60	0.666666667	MH176E063	MH176E061			118	CLMH176E063MH176E061	8	0.0169	0.045739	0.14	0.054895	0.16	0.065078	0.17	0.054895	0.16		
CLMH176E064MH176E063			1992		Existing		MH176E064	MH176E063		A00750	IRWD	VCP	{B80D263F-C145-473A-9928-5397A7367258}	CLMH176E064MH176E063	759.77	758.71	0.666666667	MH176E064	MH176E063			218	CLMH176E064MH176E063	8	0.0049	0.045739	0.19	0.054895	0.21	0.065078	0.23	0.054895	0.21		
CLMH176E067MH176E068			1995		Existing		MH176E067	MH176E068		T15052	IRWD	PVC	{90BC13EC-9C1F-4862-821B-2F3AF62EE78E}	CLMH176E067MH176E068	768.27	767.59	0.666666667	MH176E067	MH176E068			70	CLMH176E067MH176E068	8	0.0097	0.004716	0.05	0.005662	0.06	0.006713	0.06	0.005662	0.06		
CLMH176E068MH176E069			1995		Existing		MH176E068	MH176E069		T15052	IRWD	PVC	{0D5503F50-186C-47EA-9B05-E67F6065AFD1}	CLMH176E068MH176E069	767.48	765.64	0.666666667	MH176E068	MH176E069			153	CLMH176E068MH176E069	8	0.0120	0.004716	0.05	0.005662	0.06	0.006713	0.06	0.005662	0.06		
CLMH176E069MH176E071			1995		Existing		MH176E069	MH176E071		T15052	IRWD	PVC	{6D529762-B779-4D08-9182-EC939041E5D4}	CLMH176E069MH176E071	765.44	763.97	0.666666667	MH176E069	MH176E071			248	CLMH176E069MH176E071	8	0.0059	0.009682	0.08	0.011623	0.09	0.013781	0.10	0.011623	0.09		
CLMH176E070MH176E069			1995		Existing		MH176E070	MH176E069		T15052	IRWD	PVC	{BAE2C00D-00F9-470B-AF41-331E4E902AC7}	CLMH176E070MH176E069	769.69	765.64	0.666666667	MH176E070	MH176E069			85	CLMH176E070MH176E069	8	0.0476	0.004967	0.04	0.005961	0.04	0.007068	0.04	0.005961	0.04		
CLMH176E071MH176E073			1995		Existing		MH176E071	MH176E073		T15052	IRWD	PVC	{A2EF82F0-C133-482C-8DE5-8094E651AF88}	CLMH176E071MH176E073	763.78	762.45	0.666666667	MH176E071	MH176E073			226	CLMH176E071MH176E073	8	0.0059	0.014362	0.10	0.017242	0.11	0.020442	0.12	0.017242	0.11		
CLMH176E072MH176E071			1995		Existing		MH176E072	MH176E071		T15052	IRWD	PVC	{B4298F25-2786-46C5-9818-A57CC875865}	CLMH176E072MH176E071	769.47	763.97	0.666666667	MH176E072	MH176E071			219	CLMH176E072MH176E071	8	0.0251	0.004680	0.04	0.005619	0.05	0.006662	0.05	0.005619	0.05		
CLMH176E073MH176E074			1995		Existing		MH176E073	MH176E074		T15052	IRWD	PVC	{A37337B2-A020-4ACC-9C49-6052BFD974B7}	CLMH176E073MH176E074	762.25	761.26	0.666666667	MH176E073	MH176E074			171	CLMH176E073MH176E074	8	0.0058	0.018858	0.12	0.022629	0.13	0.026830	0.14	0.022629	0.13		
CLMH176E074MH176E076			1995		Existing		MH176E074	MH176E076		T15052	IRWD	PVC	{48A96050-65C5-4F8F-98CF-4F7B62B14775}	CLMH176E074MH176E076	761.03	759.69	0.666666667	MH176E074	MH176E076			230	CLMH176E074MH176E076	8	0.0058	0.022841	0.13	0.027411	0.14	0.032500	0.15	0.027411	0.14		
CLMH176E075MH176E074			1995		Existing		MH176E075	MH176E074		T15052	IRWD	PVC	{C1DE6E92-A4DC-4ABD-8597-09E0459F4DB}	CLMH176E075MH176E074	764.55	761.26	0.666666667	MH176E075	MH176E074			137	CLMH176E075MH176E074	8	0.0889	0.003982	0.03	0.004782	0.03	0.005670	0.04	0.004782	0.03		
CLMH176E076MH176E078			1995		Existing		MH176E076	MH176E078		T15052	IRWD	PVC	{939B12FF-16CA-45BC-BEC8-C48BD3137B43}	CLMH176E076MH176E078	759.59	758.36	0.666666667	MH176E076	MH176E078			208	CLMH176E076MH176E078	8	0.0059	0.027378	0.14	0.032857	0.15	0.038959	0.17	0.032857	0.15		
CLMH176E077MH176E076			1995		Existing		MH176E077	MH176E076		T15052	IRWD	PVC	{AEF81ABC-4716-4943-898F-F5DBA12A4D44}	CLMH176E077MH176E076	769.96	759.78	0.666666667	MH176E077	MH176E076			208	CLMH176E077MH176E076	8	0.0489	0.004537	0.04	0.005446	0.04	0.006459	0.04	0.005446	0.04		
CLMH176E078MH176E081			1995		Existing		MH176E078	MH176E081		T15052	IRWD	PVC	{462DE243-EAE1-481C-B8CE-C5216C23C32F}	CLMH176E078MH176E081	758.16	757.15	0.666666667	MH176E078	MH176E081			200	CLMH176E078MH176E081	8	0.0051	0.034755	0.16	0.041712	0.18	0.049457	0.19	0.041712	0.18		
CLMH176E079MH176E080			1995		Existing		MH176E079	MH176E080		T15052	IRWD	PVC	{D8489831D-1097-4B1D-9748-07A3ACCE590}	CLMH176E079MH176E080	762.34	761.09	0.666666667	MH176E079	MH176E080			211	CLMH176E079MH176E080	8	0.0059	0.001875	0.04	0.002252	0.04	0.002669	0.04	0.002252	0.04		
CLMH176E080MH176E078			1995		Existing		MH176E080	MH176E078		T15052	IRWD	PVC	{2B1A0CD8-BF06-41A5-885A-BC5D51C995C0}	CLMH176E080MH176E078	760.90	758.36	0.666666667	MH176E080	MH176E078			228	CLMH176E080MH176E078	8	0.0111	0.007378	0.06	0.008856	0.07	0.010499	0.08	0.008856	0.07		
CLMH176E081MH176E061			1995		Existing		MH176E081	MH176E061		T15052	IRWD	PVC	{78295814-5237-4965-BCD9-B602A2E020BF}	CLMH176E081MH176E061	757.05	756.44	0.666666667	MH176E081	MH176E061			124	CLMH176E081MH176E061	8	0.0049	0.040132	0.20	0.048167	0.23	0.057110	0.25	0.048167	0.23		
CLMH176S001MH176S003			1994		Existing		MH176S001	MH176S003		A00767	IRWD	VCP	{44358752-0338-4686-B737-607C21291531}	CLMH176S001MH176S003	696.28	676.54	0.666666667	MH176S001	MH176S003			390	CLMH176S001MH176S003	8	0.0506	0.204142	0.23	0.244835	0.25	0.290270	0.28	0.244835	0.25		
CLMH176S002MH176S003			1994		Existing		MH176S002	MH176S003		A00766	IRWD	VCP	{349B765C-23FA-40F0-A1A7-668B87BC54B7}	CLMH176S002MH176S003	674.77	673.39	0.666666667	MH176S002	MH176S003			350	CLMH176S002MH176S003	8	0.0039	0.207485	0.43	0.248614	0.48	0.294539	0.53	0.250157	0.48		
CLMH176S003MH176S002			1994		Existing		MH176S003	MH176S002		A00766	IRWD	VCP	{4E2DD7D4-53E1-4716-812F-B19CAD7F29BF}	CLMH176S003MH176S002	676.34	674.96	0.666666667	MH176S003	MH176S002			350	CLMH176S003MH176S002	8	0.0039	0.207409	0.43	0.248334	0.48	0.294440	0.53	0.248334	0.48		
CLMH176S004MH176S003			1994		Existing		MH176S004	MH176S003		A00767	IRWD	VCP	{B7B1F3CA-2854-43FA-9B05-DAF027EA913A}	CLMH176S004MH176S003	677.40	676.54	0.666666667	MH176S004	MH176S003			213	CLMH176S004MH176S003	8	0.0039	0.007265	0.12	0.007757	0.14	0.009195	0.18	0.007757	0.14		
CLMH176S005MH176S003			1994		Existing		MH176S005	MH176S003		A00766	IRWD	VCP	{749CDA28-818E-4DA7-800A-75BC27846269}	CLMH176S005MH176S003	673.19	671.94	0.666666667	MH176S005	MH176S003			119	CLMH176S005MH176S003	8	0.0039	0.217475	0.43	0.259047	0.47	0.303723	0.52	0.260763	0.48		
CLMH176S006MH176S021			1997		Existing	assumed Mannings N	MH176S006	MH176S021		A00766E	IRWD	VCP	{7F9102EE-880C-4336-A9E3-B8D58C6B29EA}	CLMH176S006MH176S021	671.60	670.57	1.000000000	MH176S006	MH176S021			266	CLMH176S006MH176S021	12	0.0039	0.217897	0.25	0.259516	0.28	0.307702	0.30	0.262706	0.28		
CLMH176S010MH176S004			1994		Existing		MH176S010	MH176S004		A00767	IRWD	VCP	{C0B7585A-4D4A-43F7-8924-75FBDD07C968}	CLMH176S010MH176S004	678.03	677.60	0.666666667	MH176S010	MH176S004			107	CLMH176S010MH176S004	8	0.0040	0.007265	0.08	0.007757	0.08	0.009195	0.09	0.007757	0.08		
CLMH176S011MH176S010			1994		Existing		MH176S011	MH176S010		A00767	IRWD	VCP	{97AD8E17-925C-4AD1-9FD0-C7F0A33743F1}	CLMH176S011MH176S010	679.42	678.22	0.666666667	MH176S011	MH176S010			303	CLMH176S011MH176S010	8	0.0040	0.007265	0.08	0.007757	0.08	0.009195	0.09	0.007757	0.08		
CLMH176S012MH176S011			1994		Existing		MH176S012	MH176S011		A00767	IRWD	VCP	{3CD79ZC9-0ACB-438C-AA4D-DB1BCD5B111C}	CLMH176S012MH176S011	679.82	679.63	0.666666667	MH176S012	MH176S011			53	CLMH176S012MH176S011	8	0.0036	0.007265	0.08	0.007757	0.08	0.009195	0.09	0.007757	0.08		
CLMH176S013MH176S012			1994		Existing		MH176S013	MH176S012		A00767	IRWD	VCP	{DA65D4AA-71C0-43AA-AD4E-B330C02D20A9}	CLMH176S013MH176S012	681.09	680.02	0.666666667	MH176S013	MH176S012			271	CLMH176S013MH176S012	8	0.0039	0.007265	0.08	0.007757	0.08	0.009195	0.09	0.007757	0.08		
CLMH176S014MH176S013			1994		Existing		MH176S014	MH176S013		A00767	IRWD	VCP	{1AC296AF-B72F-42F2-A1C3-99FA4609D67A}	CLMH176S014MH176S013	682.02	681.25	0.666666667	MH176S014	MH176S013			186	CLMH176S014MH176S013	8	0.0041	0.007265	0.08	0.007757	0.08	0.009195	0.09	0.007757	0.08		
CLMH176S015MH176S014			1994		Existing		MH176S015	MH176S014		A00767	IRWD	VCP	{AA5EA853-19EF-42B5-AADF-48A8DD4723B2}	CLMH176S015MH176S014	682.84	682.21	0.666666667	MH176S015	MH176S014			162	CLMH176S015MH176S014	8	0.0039	0.007265	0.08	0.007757	0.08	0.009195	0.09	0.007757	0.08		
CLMH176S017MH176S015			1994		Existing		MH176S017	MH176S015		A00767	IRWD	VCP	{0DF05BC8-FE81-4A91-890F-3A20F17B02B5}	CLMH176S017MH176S015	686.08	683.04	0.666666667	MH176S017	MH176S015			349	CLMH176S017MH176S015	8	0.0039	0.007265	0.07	0.007757	0.07	0.009195	0.08	0.007757	0.07		
CLMH176S018MH176S017			1994		Existing		MH176S018	MH176S017		A00767	IRWD	VCP	{7AE298F6-BC59-4CFB-8D0E-9F73D0087245}	CLMH176S018MH176S017	696.65	686.28	0.666666667	MH176S018	MH176S017			85	CLMH176S018MH176S017	8	0.1225	0.004080	0.03	0.004357	0.03	0.005165	0.03	0.004357	0.03		
CLMH176S019MH176S006			1997		Existing	assumed Mannings N	MH176S019	MH176S006		A00766E	IRWD	VCP	{43AA6CB9-1936-4BE9-B762-15474E206DD4}	CLMH176S019MH176S006	671.96	671.94	0.666666667	MH176S019	MH176S006			8	CLMH176S019MH176S006	8	0.0017	0.000557	0.02	0.000632	0.02	0.000690	0.03	0.002185	0.05		
CLMH176S021MH192W077			2018		Existing	assumed Mannings N	MH176S021	MH192W077		A00766E	IRWD	VCP	{6FA90FA7-B62B-4C93-90AF-ABAFDA4973B5}	CLMH176S021MH192W077	670.46	669.45	1.000000000	MH176S021	MH192W077			256	CLMH176S021MH192W077	12	0.0039	0.217769	0.25	0.259363	0.28	0.307546	0.30	0.262534	0.28		
CLMH177S001MH177S002			1990		Existing		MH177S001	MH177S002		T13752	IRWD	PVC	{0D88DD65-42FB-43D5-B688-37A42BD07893}	CLMH177S001MH177S002	969.96	964.48	0.666666667	MH177S001	MH177S002			253	CLMH177S001MH177S002	8	0.0217	0.006589	0.05	0.007912	0.06	0.009379	0.06	0.007912	0.06		
CLMH177S002MH177S003			1990		Existing		MH177S002	MH177S003		T13753	IRWD	PVC	{C6DEAAE5-6F2F-4697-8E2A-1DE6D9680209}	CLMH177S002MH177S003	964.39	960.32	0.666666667	MH177S002	MH177S003			233	CLMH177S002MH177S003	8	0.0175	0.006589	0.05	0.007912	0.06	0.009379	0.06	0.007912	0.06		
CLMH177S003MH177S009			1990		Existing		MH177S003	MH177S009		T13753	IRWD	PVC	{40AE48CD-0D6C-4FCB-9A7B-3561ABABAA37}	CLMH177S003MH177S009	960.07	955.72	0.666666667	MH177S003	MH177S009			193	CLMH177S003MH177S009	8	0.0225	0.012929	0.07	0.015524	0.08	0.018404	0.08	0.015524	0.08		
CLMH177S004MH177S003			1990		Existing		MH177S004	MH177S003		T13753	IRWD	PVC	{CDF5B396-CF02-4660-9748-55F130F35D22}	CLMH177S004MH177S003	963.15	960.32	0.666666667	MH177S004	MH177S003			194	CLMH177S004MH177S003	8	0.0146	0.006340	0.06	0.007612	0.06	0.009025	0.07	0.007612	0.06		
CLMH177S005MH177S004			1990		Existing		MH177S005	MH177S004		T13753	IRWD	PVC	{9AB8281C-5EE6-497F-BA14-460A16ED1D05}	CLMH177S005MH177S004	967.35	963.25	0.666666667	MH177S005	MH177S004			274	CLMH177S005MH177S004	8	0.0150	0.006340	0.06	0.007612	0.06	0.009025	0.07	0.007612	0.06		
CLMH177S006MH177S005			1990		Existing		MH177S006	MH177S005		T13753	IRWD	PVC	{10A178DB-27DA-433B-A038-41F2B1D140B5}	CLMH177S006MH177S005	971.66	967.46	0.666666667	MH177S006	MH177S005			132	CLMH177S006MH177S005	8	0.0318	0.001567	0.02	0.001882	0.03	0.002231	0.03	0.001882	0.03		
CLMH177S007MH191W079			1990		Existing		MH177S007	MH191W079		T13752	IRWD	PVC	{0B9BA650-C005-4341-908C-695776C998E7}	CLMH177S007MH191W079	945.80	941.70	0.666666667	MH177S007	MH191W079			220	CLMH177S007MH191W079	8	0.0186	0.038232	0.20	0.045857	0.22	0.053999	0.24	0.045857	0.22		
CLMH177S008MH191W108			1990		Existing		MH177S008	MH191W108		T13753	IRWD	PVC	{695E5A08-D3BA-48B2-9402-ECA7570ACBA6}	CLMH177S008MH191W108	928.47	922.38	0.666666667	MH177S008	MH191W108			163	CLMH177S008MH191W108	8	0.0312	0.036738	0.11	0.044110	0.12	0.052295	0.13	0.044110	0.12		
CLMH177S009MH177S008			1990		Existing		MH177S009	MH177S008		T13753	IRWD	PVC	{C37F9C05-08DF-46DE-AB2F-AB2FA87F46F2}	CLMH177S009MH177S008	955.63	928.58	0.666666667	MH177S009	MH177S008			401	CLMH177S009MH177S008	8	0.0676	0.019108	0.07	0.022944	0.07	0.027200	0.08	0.022944	0.07		
CLMH177S010MH177S008			1990		Existing		MH177S010	MH177S008		T13753	IRWD	PVC	{4A6D800C-72DB-4021-8DF9-FE45A2F98694}	CLMH177S010MH177S008	934.40	928.67	0.666666667	MH177S010	MH177S008			265	CLMH177S010MH177S008	8	0.0216	0.006732	0.05	0.008082	0.06	0.009582	0.06	0.008082	0.06		
CLMH177S011MH177S010			1990		Existing		MH177S011	MH177S010		T13753	IRWD	PVC	{A41C0FED-122A-47CC-860F-61A1568954D0}	CLMH177S011MH177S010	937.90	934.60	0.666666667	MH177S011	MH177S010			360	CLMH177S011MH177S010	8	0.0092	0.006732	0.06	0.008082	0.07	0.009582	0.08	0.008082	0.07		
CLMH177S012MH177S011			1990		Existing		MH177S012	MH177S011		T13753	IRWD	PVC	{F28ED783-DD86-45E0-AE60-2DCE9FAA731E}	CLMH177S012MH177S011	940.72	938.00	0.666666667	MH177S012	MH177S011			291	CLMH177S012MH177S011	8	0.0093	0.006732	0.06	0.008082	0.07	0.009582	0.08	0.008082	0.07		
CLMH177S013MH177S005			1990		Existing		MH177S013	MH177S005		T13753	IRWD	PVC	{144EE36D-4907-4478-A395-7B665ADA0A17}	CLMH177S013MH177S005	968.21	967.55	0.666666667	MH177S013	MH177S005			170	CLMH177S013MH177S005	8	0.0039	0.004773	0.06	0.005730	0.07	0.006794	0.08	0.005730	0.07		
CLMH177S015MH192N080			1990		Existing		MH177S015	MH192N080		T13754	IRWD	PVC	{B2466EEA-AD69-4255-AF70-1E686EB56C0}	CLMH177S015MH192N080	895.52	892.30	0.666666667	MH177S015	MH192N080			154	CLMH177S015MH192N080	8	0.0215	0.007721	0.12	0.045283	0.13	0.053691	0.14	0.045283	0.13		
CLMH177S016MH177S015			1990		Existing		MH177S016	MH177S015		T13754	IRWD	PVC	{9F4670FC-A2D6-48FB-8F76-B3246A3312AF}	CLMH177S016MH177S015	908.46	895.61	0.666666667	MH177S016	MH177S015			255	CLMH177S016MH177S015	8	0.0504	0.034800	0.09	0.041777	0.10	0.049533	0.11	0.041777	0.10		
CLMH177S017MH177S016			1990		Existing		MH177S017	MH177S016		T13754	IRWD	PVC	{B00144CC-87F4-451E-9A10-B97687918BE9}	CLMH177S017MH177S016	910.80	908.71	0.666666667	MH177S017	MH177S016			273	CLMH177S017MH177S016	8	0.0077	0.030276	0.14	0.036346	0.15	0.043093	0.16	0.036346	0.15		
CLMH177S018MH177S017			1990		Existing		MH177S018	MH177S017		T13754	IRWD	PVC	{60A6F168-5E70-4077-898B-99E3C31DFE49}	CLMH177S018MH177S017	912.92	910.90	0.666666667	MH177S018	MH177S017			149	CLMH177S018MH177S017	8	0.0136	0.026074	0.11	0.031300	0.12	0.037111	0.13	0.031300	0.12		
CLMH177S019MH177S018			1990		Existing		MH177S019	MH177S018		T13754	IRWD	PVC	{DAFF3B9F-1AF8-409B-A216-73E3E642A898}	CLMH177S019MH177S018	915.52	913.13	0.666666667	MH177S019	MH177S018			89	CLMH177S019MH177S018	8	0.0269	0.018042	0.12	0.021656	0.09	0.025679	0.09	0.021656	0.09		
CLMH177S020MH177S019			1990		Existing		MH177S020	MH177S019		T13754	IRWD	PVC	{F56C65CB-C789-4C9B-9E30-5E31EA66FAF1}	CLMH177S020MH177S019	935.14	915.61	0.666666667	MH177S020	MH177S019			216	CLMH177S020MH177S019	8	0.0953	0.014765	0.05	0.017722	0.06	0.021015	0.06	0.017722	0.06		
CLMH177S021MH177S020			1990		Existing		MH177S021	MH177S020		T13754	IRWD	PVC	{B5E28122-D10B-4A69-9EF9-91D3F1F94DF0}	CLMH177S021MH177S020	938.33	935.23	0.666666667	MH177S021	MH177S020			110	CLMH177S021MH177S020	8	0.0282	0.011845	0.06	0.014216	0.07	0.016857	0.08	0.014216	0.07		
CLMH177S022MH177S021			1990		Existing		MH177S022	MH177S021		T13754	IRWD	PVC	{8025D2CD-88EF-4FF8-B113-C975F925165A}	CLMH177S022MH177S021	942.29	938.42	0.666666667	MH177S022	MH177S021			138	CLMH177S022MH177S021	8	0.0280	0.009316	0.06	0.011180	0.06	0.013257	0.07	0.011180	0.06		
CLMH177S024MH177S022			1990		Existing		MH177S024	MH177S022		T13754	IRWD	PVC	{47C95CFD-7372-4938-B8F7-4402C9C17A2}	CLMH177S024MH177S022	945.16	942.50	0.666666667	MH177S024	MH177S022			195	CLMH177S024MH177S022	8	0.0136	0.008567	0.07	0.010283	0.07	0.012193	0.08	0.010283	0.07		
CLMH177S025MH177S024			1990		Existing		MH177S025	MH177S024		T13754	IRWD	PVC	{EB09A319-53CB-4F35-874E-CD147D55F8BC}	CLMH177S025MH177S024	956.66	945.27	0.666666667	MH177S025	MH177S024			289	CLMH177S025MH177S024	8	0.0394	0.003135	0.03	0.003762	0.04	0.004461	0.04	0.003762	0.04		
CLMH177S027MH177S018			1990		Existing		MH177S027	MH177S018		T13754	IRWD	PVC	{5B7CC8C0-18EA-4EA7-ADDA-186DFFB1B59B}	CLMH177S027MH177S018	922.96	913.03	0.666666667	MH177S027	MH177S018			238	CLMH177S027MH177S018	8	0.0417	0.008031	0.05	0.009644	0.05	0.011432	0.06	0.009644	0.05		
CLMH177S028MH177S027			1990		Existing		MH177S028	MH177S027		T13754	IRWD	PVC	{9A364C6F-865A-496A-ACD7-68C683BB8BC2}	CLMH177S028MH177S027	923.55	885.57	0.666666667	MH177S028	MH177S027			266	CLMH177S028MH177S027	8	0.1444	0.004060	0.03	0.004876	0.03	0.005779	0.03	0.004876	0.03		
CLMH177S037MH177S027			1990		Existing		MH177S037	MH177S027		T13755	IRWD	PVC	{490BFAB2-253A-486C-BCD5-2FC5A913AD1D}	CLMH177S037MH177S027	925.16	923.05	0.666666667	MH177S037	MH177S027			238	CLMH177S037MH177S027	8	0.0089	0.004220	0.05	0.005068	0.06	0.006008	0.06	0.005068	0.06		
CLMH191E001MH191E030			1990		Existing		MH191E001	MH191E030		A00655	IRWD	PVC	{D7598935-61C8-41D9-8F6C-1D3ED6D5650}	CLMH191E001MH191E030	1039.51	1019.28	0.666666667	MH191E001	MH191E030			271	CLMH191E001MH191E030	8	0.0775	0.085930	0.13	0.103161	0.14	0.122309	0.15	0.103161	0.14		
CLMH191E002MH191E001			1990		Existing		MH191E002	MH191E001		13765	IRWD	PVC	{3DCD722A-A391-4C82-B757-9F60F4CE155A}	CLMH191E002MH191E001	1043.19	1039.70	0.666666667	MH191E002	MH191E001			237	CLMH191E002MH191E001	8	0.0147	0.085930	0.20	0.103161	0.21	0.122309	0.23	0.103161	0.21		
CLMH191E003MH191E002			1990		Existing		MH191E003	MH191E002		13765	IRWD	PVC	{6D59FAA3-888B-4769-93B9-12CD4AD09E3A}	CLMH191E003MH191E002	1045.44	1043.30	0.666666667	MH191E003	MH191E002			219	CLMH191E003MH191E002	8	0.0098	0.077413	0.21	0.092936	0.23	0

CLMH1915032MH1915031		1990		Existing	MH1915032	MH1915031		13773	IRWD	PVC	{D77A63E6-B3F2-4802-BD6C-FC00CD7E38BD}	CLMH1915032MH1915031	983.19	982.72	0.66666667	MH1915032	MH1915031		120	CLMH1915032MH1915031	8	0.0039	0.006042	0.07	0.007253	0.08	0.008599	0.08	0.007253	0.08
CLMH1915033MH1915034		1990		Existing	MH1915033	MH1915034		13777	IRWD	PVC	{FD306ED8-39FC-4BDE-8123-C6FE55436DEB}	CLMH1915033MH1915034	973.55	968.84	0.66666667	MH1915033	MH1915034		253	CLMH1915033MH1915034	8	0.0186	0.005996	0.05	0.007198	0.06	0.008535	0.06	0.007198	0.06
CLMH1915034MH1915035		1990		Existing	MH1915034	MH1915035		13777	IRWD	PVC	{B6C08A8C-286D-4027-ACBF-B58917ZD86EE}	CLMH1915034MH1915035	968.73	962.47	0.66666667	MH1915034	MH1915035		333	CLMH1915034MH1915035	8	0.0188	0.009880	0.07	0.011860	0.07	0.014063	0.08	0.011860	0.07
CLMH1915035MH1915045		1990		Existing	MH1915035	MH1915045		13777	IRWD	PVC	{5644C3E8-4851-40D1-B6A4-CF871402CC703}	CLMH1915035MH1915045	962.28	958.29	0.66666667	MH1915035	MH1915045		154	CLMH1915035MH1915045	8	0.0259	0.015399	0.07	0.018485	0.08	0.021918	0.09	0.018485	0.08
CLMH1915036MH1915037		1990		Existing	MH1915036	MH1915037		13777	IRWD	PVC	{A19387A3-88FC-4B20-93EF-BFECE3B595B4}	CLMH1915036MH1915037	968.75	965.91	0.66666667	MH1915036	MH1915037		240	CLMH1915036MH1915037	8	0.0118	0.007155	0.06	0.008589	0.07	0.010183	0.07	0.008589	0.07
CLMH1915037MH1915038		1990		Existing	MH1915037	MH1915038		13777	IRWD	PVC	{A2481FB2-23D5-4C11-A6FE-D29B570CDE0C}	CLMH1915037MH1915038	965.82	962.33	0.66666667	MH1915037	MH1915038		188	CLMH1915037MH1915038	8	0.0186	0.007155	0.06	0.008589	0.06	0.010183	0.07	0.008589	0.06
CLMH1915038MH1915041		1990		Existing	MH1915038	MH1915041		13777	IRWD	PVC	{A69CD994-9B15-46E4-93E9-0A0E037C119F}	CLMH1915038MH1915041	962.22	960.84	0.66666667	MH1915038	MH1915041		125	CLMH1915038MH1915041	8	0.0110	0.016264	0.09	0.019523	0.10	0.023147	0.11	0.019523	0.10
CLMH1915039MH1915038		1990		Existing	MH1915039	MH1915038		13777	IRWD	PVC	{62FDA329-A31C-47D8-8B21-B28BC2A3DE52}	CLMH1915039MH1915038	964.32	962.42	0.66666667	MH1915039	MH1915038		250	CLMH1915039MH1915038	8	0.0076	0.004974	0.06	0.005972	0.06	0.007080	0.07	0.005972	0.06
CLMH1915040MH1915039		1990		Existing	MH1915040	MH1915039		13777	IRWD	PVC	{C98EACA2-A22B-45CD-B66A-D0DC42DF995F}	CLMH1915040MH1915039	967.40	964.41	0.66666667	MH1915040	MH1915039		233	CLMH1915040MH1915039	8	0.0128	0.004974	0.05	0.005972	0.06	0.007080	0.06	0.005972	0.06
CLMH1915041MH1915042		1990		Existing	MH1915041	MH1915042		13777	IRWD	PVC	{54D6CA77-8DC1-4AAA-9C44-7D5CD6C9A796}	CLMH1915041MH1915042	960.75	958.96	0.66666667	MH1915041	MH1915042		87	CLMH1915041MH1915042	8	0.0206	0.018557	0.09	0.022277	0.09	0.026412	0.10	0.022277	0.09
CLMH1915042MH1915045		1990		Existing	MH1915042	MH1915045		13777	IRWD	PVC	{3AB533B2-585C-4D16-A011-ACSA5FBBDEAE}	CLMH1915042MH1915045	958.86	958.29	0.66666667	MH1915042	MH1915045		147	CLMH1915042MH1915045	8	0.0039	0.029414	0.15	0.035310	0.17	0.041865	0.18	0.035310	0.17
CLMH1915043MH1915042		1990		Existing	MH1915043	MH1915042		13777	IRWD	PVC	{C2722AFO-52B4-4AAA-A8AD-C43C9535ZE45}	CLMH1915043MH1915042	968.21	959.07	0.66666667	MH1915043	MH1915042		132	CLMH1915043MH1915042	8	0.0132	0.010857	0.07	0.013033	0.08	0.015453	0.09	0.013033	0.08
CLMH1915044MH1915043		1990		Existing	MH1915044	MH1915043		13777	IRWD	PVC	{19982F3D-A645-4254-828B-587E4E7C9E5D}	CLMH1915044MH1915043	963.17	961.39	0.66666667	MH1915044	MH1915043		133	CLMH1915044MH1915043	8	0.0134	0.003906	0.05	0.004690	0.05	0.005561	0.05	0.004690	0.05
CLMH1915045MH1915046		1990		Existing	MH1915045	MH1915046		13777	IRWD	PVC	{60B98982-8D08-45AE-A607-8B2E810DAAE8}	CLMH1915045MH1915046	958.09	940.83	0.66666667	MH1915045	MH1915046		196	CLMH1915045MH1915046	8	0.0585	0.044813	0.12	0.053795	0.14	0.063783	0.16	0.053795	0.14
CLMH1915046MH1915047		1990		Existing	MH1915046	MH1915047		13777	IRWD	PVC	{836142BC-3F76-4DC9-A76A-F54CB12DD3C3}	CLMH1915046MH1915047	940.72	931.00	0.66666667	MH1915046	MH1915047		209	CLMH1915046MH1915047	8	0.0465	0.349845	0.30	0.420001	0.33	0.497944	0.36	0.420001	0.33
CLMH1915047MH1915056		1990		Existing	MH1915047	MH1915056		A00655	IRWD	PVC	{87128EFC-2768-4161-A2D6-EC9F4378253C}	CLMH1915047MH1915056	930.90	910.28	0.66666667	MH1915047	MH1915056		356	CLMH1915047MH1915056	8	0.0581	0.371739	0.29	0.446286	0.32	0.529109	0.35	0.446286	0.32
CLMH1915048MH1915047		1990		Existing	MH1915048	MH1915047		T13778	IRWD	PVC	{54DDD468-20CF-40AA-A0F1-81CFA579C991}	CLMH1915048MH1915047	934.42	931.09	0.66666667	MH1915048	MH1915047		242	CLMH1915048MH1915047	8	0.0138	0.013558	0.08	0.016278	0.09	0.019301	0.10	0.016278	0.09
CLMH1915049MH1915048		1990		Existing	MH1915049	MH1915048		T13778	IRWD	PVC	{0946DC60-84A2-476C-9CA0-711B1DAE4956}	CLMH1915049MH1915048	938.26	934.53	0.66666667	MH1915049	MH1915048		315	CLMH1915049MH1915048	8	0.0118	0.013558	0.08	0.016278	0.09	0.019301	0.10	0.016278	0.09
CLMH1915050MH1915049		1990		Existing	MH1915050	MH1915049		T13778	IRWD	PVC	{1555D1FB-EC56-4B74-AC79-05C73D5982FA}	CLMH1915050MH1915049	940.60	938.40	0.66666667	MH1915050	MH1915049		207	CLMH1915050MH1915049	8	0.0106	0.004269	0.05	0.005125	0.05	0.006078	0.06	0.005125	0.05
CLMH1915051MH1915050		1990		Existing	MH1915051	MH1915050		T13778	IRWD	PVC	{54F16183-FCB0-49C7-B86B-4994CB040B90}	CLMH1915051MH1915050	942.90	940.71	0.66666667	MH1915051	MH1915050		203	CLMH1915051MH1915050	8	0.0108	0.004269	0.05	0.005125	0.05	0.006078	0.06	0.005125	0.05
CLMH1915052MH1915053		1990		Existing	MH1915052	MH1915053		T13788	IRWD	PVC	{05A4FBF2-96E8-4F28-A378-689F4A032D9E}	CLMH1915052MH1915053	919.98	915.82	0.66666667	MH1915052	MH1915053		300	CLMH1915052MH1915053	8	0.0139	0.005451	0.05	0.006544	0.06	0.007758	0.06	0.006544	0.06
CLMH1915053MH1915054		1990		Existing	MH1915053	MH1915054		T13788	IRWD	PVC	{A14153B0-BADF-41A0-9E6E-F18D4589D040}	CLMH1915053MH1915054	915.71	913.01	0.66666667	MH1915053	MH1915054		253	CLMH1915053MH1915054	8	0.0107	0.012764	0.08	0.015325	0.09	0.018167	0.10	0.015325	0.09
CLMH1915054MH1915055		1990		Existing	MH1915054	MH1915055		T13788	IRWD	PVC	{FC7DA282-4C75-48AB-927A-B8F02CEF31D6}	CLMH1915054MH1915055	912.90	911.15	0.66666667	MH1915054	MH1915055		204	CLMH1915054MH1915055	8	0.0086	0.012764	0.09	0.015325	0.10	0.018167	0.10	0.015325	0.10
CLMH1915055MH1915056		1990		Existing	MH1915055	MH1915056		13779	IRWD	PVC	{C62122B0-A3B7-47F3-95BB-2445E0DE9B27}	CLMH1915055MH1915056	911.04	910.28	0.66666667	MH1915055	MH1915056		197	CLMH1915055MH1915056	8	0.0039	0.017671	0.16	0.020998	0.20	0.024890	0.24	0.020998	0.20
CLMH1915056MH1915009		1990		Existing	MH1915056	MH1915009		13779	IRWD	VCP	{79178466-095C-42AC-81D9-0498A4F820F0}	CLMH1915056MH1915009	910.08	908.54	0.66666667	MH1915056	MH1915009		157	CLMH1915056MH1915009	8	0.0098	0.389226	0.60	0.467284	0.56	0.553999	0.63	0.467284	0.56
CLMH1915057MH1915058		1990		Existing	MH1915057	MH1915058		T13766	IRWD	PVC	{AE639223-58CE-4F98-978B-2C248547A1E9}	CLMH1915057MH1915058	1008.84	1002.53	0.66666667	MH1915057	MH1915058		181	CLMH1915057MH1915058	8	0.0349	0.016513	0.07	0.019825	0.08	0.023502	0.09	0.019825	0.08
CLMH1915058MH1915059		1990		Existing	MH1915058	MH1915059		T13766	IRWD	PVC	{5FC3CC28-FF1D-4D95-9B15-81E4B69D88A2}	CLMH1915058MH1915059	1002.42	982.69	0.66666667	MH1915058	MH1915059		311	CLMH1915058MH1915059	8	0.0636	0.102443	0.15	0.122986	0.16	0.145811	0.18	0.122986	0.16
CLMH1915059MH1915060		1990		Existing	MH1915059	MH1915060		T13766	IRWD	PVC	{65CD1CF0-4E8C-452C-895F-709D01C3CC62}	CLMH1915059MH1915060	982.59	977.09	0.66666667	MH1915059	MH1915060		348	CLMH1915059MH1915060	8	0.0158	0.109710	0.22	0.131712	0.24	0.156156	0.26	0.131712	0.24
CLMH1915060MH1915061		1990		Existing	MH1915060	MH1915061		T13766	IRWD	PVC	{9A478ECF-716A-4431-8DC2-B38F638E0540}	CLMH1915060MH1915061	976.98	974.30	0.66666667	MH1915060	MH1915061		374	CLMH1915060MH1915061	8	0.0168	0.13043	0.23	0.156718	0.25	0.185732	0.27	0.156718	0.25
CLMH1915061MH1915007		1990		Existing	MH1915061	MH1915007		T13766	IRWD	DIP	{CB6F3E5C-84F3-4279-99CD-1B24B66221C}	CLMH1915061MH1915007	970.50	962.25	0.66666667	MH1915061	MH1915007		178	CLMH1915061MH1915007	8	0.0463	0.123043	0.18	0.147718	0.20	0.175132	0.22	0.147718	0.20
CLMH1915062MH1915063		1990		Existing	MH1915062	MH1915063		T13766	IRWD	PVC	{2FC14C52-3744-474D-B7D5-2809740587ZD}	CLMH1915062MH1915063	888.80	967.17	0.66666667	MH1915062	MH1915063		33	CLMH1915062MH1915063	8	0.0652	0.003724	0.03	0.004472	0.03	0.005303	0.04	0.004472	0.03
CLMH1915063MH1915064		1990		Existing	MH1915063	MH1915064		T13766	IRWD	PVC	{8A3909F1-3047-4610-90CE-4F6D4A14EE1E}	CLMH1915063MH1915064	967.08	958.70	0.66666667	MH1915063	MH1915064		119	CLMH1915063MH1915064	8	0.0704	0.009152	0.05	0.010988	0.05	0.013028	0.05	0.010988	0.05
CLMH1915064MH1915066		1990		Existing	MH1915064	MH1915066		T13766	IRWD	PVC	{B833F7A0-9AD9-4F1A-A8BE-5CDDCC2FA864}	CLMH1915064MH1915066	958.50	952.48	0.66666667	MH1915064	MH1915066		189	CLMH1915064MH1915066	8	0.0319	0.009152	0.06	0.010988	0.06	0.013028	0.07	0.010988	0.06
CLMH1915065MH1915066		1990		Existing	MH1915065	MH1915066		T13766	IRWD	PVC	{82634971-56D3-48ED-98DD-9CB0E7A50962}	CLMH1915065MH1915066	955.52	952.39	0.66666667	MH1915065	MH1915066		204	CLMH1915065MH1915066	8	0.0157	0.002384	0.04	0.002863	0.04	0.003395	0.04	0.002863	0.04
CLMH1915066MH1915067		1990		Existing	MH1915066	MH1915067		T13766	IRWD	PVC	{A24F38B2-4B20-4D99-A971-DA79F6D98BA2}	CLMH1915066MH1915067	952.28	948.55	0.66666667	MH1915066	MH1915067		201	CLMH1915066MH1915067	8	0.0188	0.014261	0.08	0.017124	0.09	0.020303	0.09	0.017124	0.09
CLMH1915067MH1915068		1990		Existing	MH1915067	MH1915068		T13766	IRWD	PVC	{A9906CCC-458D-40ED-AB83-98D9F1458281}	CLMH1915067MH1915068	948.46	944.38	0.66666667	MH1915067	MH1915068		208	CLMH1915067MH1915068	8	0.0196	0.021506	0.09	0.025822	0.10	0.030616	0.11	0.025822	0.10
CLMH1915068MH1915069		1990		Existing	MH1915068	MH1915069		T13766	IRWD	PVC	{349CE624-AE47-4C6C-BCEA-34C55B6141BF}	CLMH1915068MH1915069	944.28	938.83	0.66666667	MH1915068	MH1915069		167	CLMH1915068MH1915069	8	0.0197	0.021506	0.09	0.025822	0.10	0.030616	0.11	0.025822	0.10
CLMH1915069MH1915070		1990		Existing	MH1915069	MH1915070		T13766	IRWD	PVC	{70DA4011-973D-4BD3-ACFB-330453692C02}	CLMH1915069MH1915070	938.72	935.84	0.66666667	MH1915069	MH1915070		174	CLMH1915069MH1915070	8	0.0166	0.026686	0.11	0.032039	0.12	0.037987	0.13	0.032039	0.12
CLMH1915070MH1915075		1990		Existing	MH1915070	MH1915075		T13766	IRWD	PVC	{00C6090B-91AB-4C8B-B869-952026ECCCF1}	CLMH1915070MH1915075	935.65	933.98	0.66666667	MH1915070	MH1915075		148	CLMH1915070MH1915075	8	0.0113	0.041811	0.15	0.050200	0.16	0.059519	0.17	0.050200	0.16
CLMH1915071MH1915072		1990		Existing	MH1915071	MH1915072		T13766	IRWD	PVC	{4B38E217-AFFC-455A-BAA3-B09C8CC29B80}	CLMH1915071MH1915072	955.63	951.03	0.66666667	MH1915071	MH1915072		275	CLMH1915071MH1915072	8	0.0167	0.003293	0.04	0.003955	0.04	0.004688	0.05	0.003955	0.04
CLMH1915072MH1915073		1990		Existing	MH1915072	MH1915073		T13766	IRWD	PVC	{F25F1E9A-E552-4534-B108-30EBBB2BA473}	CLMH1915072MH1915073	950.92	945.65	0.66666667	MH1915072	MH1915073		282	CLMH1915072MH1915073	8	0.0187	0.013127	0.07	0.015761	0.08	0.018686	0.09	0.015761	0.08
CLMH1915073MH1915074		1990		Existing	MH1915073	MH1915074		T13766	IRWD	PVC	{63BD2602-203B-44F4-A48C-01F869543E0D}	CLMH1915073MH1915074	945.55	940.59	0.66666667	MH1915073	MH1915074		220	CLMH1915073MH1915074	8	0.0225	0.013127	0.07	0.015761	0.08	0.018686	0.08	0.015761	0.08
CLMH1915074MH1915070		1990		Existing	MH1915074	MH1915070		T13766	IRWD	PVC	{58252DA9-8407-498D-90C8-0834A9852FF8}	CLMH1915074MH1915070	940.40	935.84	0.66666667	MH1915074	MH1915070		211	CLMH1915074MH1915070	8	0.0216	0.015126	0.08	0.018160	0.08	0.021532	0.09	0.018160	0.08
CLMH1915075MH1915076		1990		Existing	MH1915075	MH1915076		T13766	IRWD	PVC	{F6041FCB-3058-863E-89AD-BFCE2E3ECB06}	CLMH1915075MH1915076	933.89	931.02	0.66666667	MH1915075	MH1915076		265	CLMH1915075MH1915076	8	0.0108	0.047625	0.16	0.057180	0.17	0.067796	0.19	0.057180	0.17
CLMH1915076MH1915077		1990		Existing	MH1915076	MH1915077		T13766	IRWD	PVC	{CE90FEF4-FB1C-4788-97D4-8D1790D3E7FC}	CLMH1915076MH1915077	930.08	924.73	0.66666667	MH1915076	MH1915077		247	CLMH1915076MH1915077	8	0.0249	0.047625	0.13	0.057180	0.14	0.067796	0.15	0.057180	0.14
CLMH1915077MH1915078		1990		Existing	MH1915077	MH1915078		T13766	IRWD	PVC	{97C106B5-6080-4125-ABA5-C9C130E805B3}	CLMH1915077MH1915078	924.64	904.50	0.66666667	MH1915077	MH1915078		354	CLMH1915077MH1915078	8	0.0571	0.058982	0.12	0.070813	0.13	0.083961	0.14	0.070813	0.13
CLMH1915078MH1915089		1990		Existing	MH1915078	MH1915089		T13766	IRWD	PVC	{43046776-3E2B-40F5-938B-7E132D05C363}	CLMH1915078MH1915089	904.40	894.36	0.66666667	MH1915078	MH1915089		180	CLMH1915078MH1915089	8	0.0558	0.093527	0.15	0.112287	0.16	0.133130	0.17	0.112287	0.16
CLMH1915079MH1915080		1990		Existing	MH1915079	MH1915080		T13766	IRWD	PVC	{2A82C84C-A405-4012-AED3-F451E25584F7}	CLMH1915079MH1915080	939.33	932.78	0.66666667	MH1915079	MH1915080		318	CLMH1915079MH1915080	8	0.0198	0.008313	0.06	0.009980	0.06	0.011832	0.07	0.009980	0.06
CLMH1915080MH1915081		1990		Existing	MH1915080	MH1915081		T13766	IRWD	PVC	{0999EC72B-F80F-43DD-B5A6-CABE0046ABA5}	CLMH1915080MH1915081	932.69	926.67	0.66666667	MH1915080	MH1915081		265	CLMH1915080MH1915081	8	0.0227	0.008313	0.06	0.009980	0.06	0.011832	0.07	0.009980	0.06
CLMH1915081MH1915082		1990		Existing	MH1915081	MH1915082		T13766	IRWD	PVC	{85593A7A-27A6-4984-ACSD-04DAFCBF01A8}	CLMH1915081MH1915082	926.58	919.82	0.66666667	MH1915081	MH1915082		264	CLMH1915081MH1915082	8	0.0256	0.019397	0.08	0.027608	0.10	0.032386	0.11	0.027608	0.09
CLMH1915082MH1915083		1990		Existing	MH1915082	MH1915083		T13766	IRWD	PVC	{8F8616EF-8E93-4896-A110-FBD42198008}	CLMH1915082MH1915083	919.61	913.73	0.66666667	MH1915082	MH1915083		222	CLMH1915082MH1915083	8	0.0265	0.025120	0.09	0.030157	0.10	0.035755	0.11	0.030157	0.10
CLMH1915083MH1915078		1990		Existing	MH1915083	MH1915078		T13766	IRWD	PVC	{C51A33A1-20CB-624D-963F-A2C593A5AE14}	CLMH1915083MH1915078	913.64	904.59	0.66666667	MH1915083	MH1915078		181	CLMH1915083MH1915078	8	0.0500	0.034546	0.09	0.041474	0.10	0.049170	0.11	0.041474	0.10
CLMH1915084MH1915082		1990		Existing	MH1915084	MH1915082		T13766	IRWD	PVC	{785C98A9-8A3B-65C5-8591-604040536BA0}	CLMH1915084MH1915082	921.11	919.82	0.66666667	MH1915084	MH1915082		163	CLMH1915084MH1915082	8	0.0049	0.005723	0.07	0.006871	0.07	0.008147	0.08	0.006871	0.07
CLMH1915086MH1915087		1990		Existing	MH1915086	MH1915087		T13766	IRWD	PVC	{2B809B4B-BECB-4392-BA48-96E3E9677568}	CLMH1915086MH1915087	902.21	897.47	0.66666667	MH1915086	MH1915087		250	CLMH1915086MH1915087	8	0.0166	0.034134	0.04	0.040963	0.05	0.005884	0.05	0.040963	0.05
CLMH1915087MH1915088		1990		Existing	MH1915087	MH1915088		T13766	IRWD	PVC	{D2A6A4AA-8108-4083-9141-53130AE94CB6}	CLMH1915087MH1915088	897.38	895.09	0.66666667	MH1915087	MH1915088		304	CLMH1915087MH1915088	8	0.0075	0.010971	0.09	0.013172	0.09	0.015614	0.10	0.013172	0.09
CLMH1915088MH1915089		1990		Existing	MH1915088	MH1915089		T13766	IRWD	PVC	{6D9E1657-77FA-4696-9E80-8403027C90A1}	CLMH1915088MH1915089	894.90	894.27	0.66666667	MH1915088	MH1915089		161	CLMH1915088MH1915089	8	0.0039	0.010971	0.12	0.013172	0.14	0.015614	0.16	0.013172	0.14
CLMH1915089MH1915149		1990		Existing	MH1915089	MH1915149		T13766	IRWD	PVC	{E1502A25-7202-47A3-AFA8-7DDCA5A41C5}	CLMH1915089MH1915149	894.16	892.78	0.66666667	MH1915089	MH1915149		250	CLMH1915089MH1915149	8	0.0039	0.06428	0.29	0.12778	0.32	0.151492	0.35	0.12778	0.32
CLMH1915090MH1915107		1990		Existing	MH1915090	MH1915107		T13588	IRWD	PVC	{13C79379-02FA-4789-87A8-81AE3334F289}	CLMH1915090MH1915107	928.59	926.73	0.66666667	MH1915090	MH1915107		105	CLMH1915090MH1915107	8	0.0177	0.048109	0.14	0.057745	0.15	0.068465	0.17	0.057745	0.15
CLMH1915091MH1915090		1990		Existing	MH1915091	MH1915090		T13588	IRWD	PVC	{6FCE8410-B532-4E48-A1F9-FB0516110B60}	CLMH1915091MH1915090	929.15	928.79	0.66666667	MH1915091	MH1915090		96	CLMH1915091MH1915090	8	0.0054	0.044432	0.18	0.053329	0.20	0.063224	0.21	0.053329	0.20
CLMH1915092MH1915091		1990		Existing	MH1915092	MH1915091		T13588	IRWD	PVC	{1B30E1F9-6185-4237-97DF-CEF5AA202ABF}	CLMH1915092MH1915091	930.70	929.25	0.66666667	MH1915092	MH1915091		157	CLMH1915092MH1915091	8	0.0092	0.044432	0.16	0.053329	0.17	0.063224	0.19	0.053329	0.17
CLMH1915093MH1915092		1990		Existing	MH1915093	MH1915092		T13588	IRWD	PVC	{C75ED457-B499-40DD-92F2-13F4B9185FF}	CLMH1915093MH1915092	931.90	930.79	0.66666667	MH1915093	MH1915092		127	CLMH1915093MH1915092	8	0.0087	0.004367	0.05	0.005245	0.06	0.006217	0.06	0.005245	0.06
CLMH1915094MH1915093		1990		Existing	MH1915094	MH1915093		T13588	IRWD	PVC	{DB0A0D7E-E069-4BFD-B351-A910E00DDA22}	CLMH1915094MH1915093	934.15	932.10	0.66666667	MH1915094	MH1915093		208	CLMH1915094MH1915093	8	0.0099	0.002119	0.04	0.002544	0.04	0.003016	0.04	0.002544	0.04
CLMH1915095MH1915094		1990		Existing	MH1915095	MH1915094		T13588	IRWD	PVC	{5A6E07C5-22FE-48BD-B0EF-2F0AE8313E15}	CLMH1915095MH1915094	934.97	934.25	0.66666667	MH1915095	MH1915094		77	CLMH1915095MH1915094	8	0.0094	0.000235	0.01	0.000282	0.01	0.000333	0.01	0.000282	0.01
CLMH1915095MH1915096		1990		Existing	MH1915095	MH1915096		T13588	IRWD	PVC	{E58B3262-6C0D-4F63-B634-D9670EF6F1D}	CLMH1915095MH1915096	934.97	933.77	0.66666667	MH1915095	MH1915096		90	CLMH1915095MH1915096	8	0.0133	0.000288	0.01	0.000347	0.01	0.000411	0.01	0.000347	0.01
CLMH1915096MH1915097		1990		Existing	MH1915096	MH1915097		T13588	IRWD	PVC	{5E748E85-670E-423F-82EF-D1BA924ABE1B}	CLMH1915096MH1915097	933.66	932.29	0.66666667	MH1915096	MH1915097		102	CLMH1915096MH1915097	8	0.0134	0.002695	0.04	0.003237	0.04	0.003838	0.05	0.003237	0.04
CLMH1915097MH1915098		1990		Existing	MH1915097	MH1915098		T13588	IRWD	PVC	{5C8D0FEA-0EEE-4E64-AF6D-3CB1982AED6E}	CLMH1915097MH1915098	932.09	930.19	0.66666667	MH1915097	MH1915098		48	CLMH1915097MH1915098	8	0.0396	0.002695	0.03	0.003237	0.03	0.003838	0.04	0.003237	0.03
CLMH1915098MH1915099		1990		Existing	MH1915098	MH1915099		T13588	IRWD	PVC	{38BA43C5-CD22-4AF1-A59E-8FB0375386E9}	CLMH1915098MH1915099	929.98	926.70	0.66666667	MH1915098	MH1915099		187	CLMH1915098MH1915099	8	0.0175	0.002695	0.04	0.003237	0.04	0.003838	0.04	0.003237	0.04
CLMH1915099MH1915108		1990		Existing	MH1915099	MH1915108		T13588	IRWD	PVC	{865B01BE-4F5C-4E6C-85D3-04D16573C88A}	CLMH1915099MH1915108	930.69	928.96	0.66666667	MH1915099	MH1915108		154	CLMH1915099MH1915108	8	0.0112	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH1915099MH1915100		1990		Existing	MH1915099	MH1915100		T13588	IRWD	PVC	{4FE292E0-9E21-4111-98A0-CBE5C5C4BC1F}	CLMH1915099MH1915100	926.59	925.19	0.66666667	MH1915099	MH1915100		87	CLMH1915099MH1915100	8	0.0161	0.011576	0.07	0.013899	0.08	0.016477	0.09	0.013899	0.08
CLMH1915100MH1915101		1990		Existing	MH1915100	MH1915101		T13588	IRWD	PVC	{B260C5A8-DAAF-4958-9E2D-DA9C2CB30DBE}	CLMH1915100MH1915101	924.98	922.32	0.66666667	MH1915100	MH1915101		188	CLMH1915100MH1915101	8	0.0141	0.011576	0.08	0.013899	0.08	0.016477	0.09	0.013899	0.08
CLMH1915101MH1915102		1990		Existing	MH1915101	MH1915102		T13588	IRWD	PVC	{61608BAE-71E1-4537-9BD3-D6BD53AAEA27}	CLMH1915101MH1915102	922.21	921.08	0.66666667	MH1915101	MH1915102		232	CLMH1915101MH1915102	8	0.0049	0.016142	0.11	0.019379	0.12	0.022975	0.13	0.019379	0.12
CLMH1915102MH1915103		1990		Existing	MH1915102	MH1915103		T13588	IRWD	PVC	{911E9F58-0C2B-4EBA-882C-B67A7E7F721C}	CLMH1915102MH1915103	920.88	920.59	0.66666667	MH1915102	MH1915103		60	CLMH1915102MH1915103	8	0.0048	0.016142	0.11	0.019379	0.12	0.022975	0.13	0.019379	0.12
CLMH1915103MH210W027		1990		Existing	MH1915103	MH210W027		T13588	IRWD	PVC	{5996E425-ECA0-4830-A38D-A10415799D83}	CLMH1915103MH210W027	920.40	919.78	0.66666667	MH1915103	MH210W027		87	CLMH1915103MH210W027	8	0.0071	0.094733	0.23	0.113613	0.25	0.134694	0.27	0.113613	0.25
CLMH1915104MH1915105		1990		Existing	MH1915104	MH1915105		T13588	IRWD	PVC	{96DCF9E5-5293-42A8-808E-208DD3E1B2F4}	CLMH1915104MH1915105	921.04	920.59	0.66666667	MH1915104	MH

CLMH192W059MH191W060		1990		Existing			MH191W059	MH191W060	T13751	IRWD	PVC	{8EB7C93C-8216-46A1-8DE8-C9B8362EB524}	CLMH191W059MH191W060	983.13	980.02	0.666666667	MH191W059	MH191W060		315	CLMH191W059MH191W060	8	0.0099	0.003918	0.05	0.004705	0.05	0.005576	0.06	0.004705	0.05						
CLMH191W060MH191W061		1990		Existing			MH191W060	MH191W061	T13751	IRWD	PVC	{348F3900-1789-40BF-B48B-A9119BBE1A4D}	CLMH191W060MH191W061	979.91	977.04	0.666666667	MH191W060	MH191W061		323	CLMH191W060MH191W061	8	0.0089	0.010382	0.08	0.012467	0.09	0.014778	0.09	0.012467	0.09						
CLMH191W061MH191W081		1990		Existing			MH191W061	MH191W081	637	IRWD	PVC	{93594377-D692-4A60-9719-304DF6C279C1}	CLMH191W061MH191W081	976.84	974.78	0.666666667	MH191W061	MH191W081		192	CLMH191W061MH191W081	8	0.0107	0.026232	0.12	0.031506	0.13	0.037354	0.14	0.031506	0.13						
CLMH191W062MH191W061		1990		Existing			MH191W062	MH191W063	T13751	IRWD	PVC	{50469A49-5269-4903-A696-F8C750C2D5B}	CLMH191W062MH191W063	1011.63	1008.40	0.666666667	MH191W062	MH191W063		326	CLMH191W062MH191W063	8	0.0099	0.007106	0.07	0.008531	0.07	0.010114	0.08	0.008531	0.07						
CLMH191W063MH191W064		1990		Existing			MH191W063	MH191W064	T13751	IRWD	PVC	{1A6F9EDC-A172-4A94-943D-EBB669034DFC}	CLMH191W063MH191W064	1008.30	1003.55	0.666666667	MH191W063	MH191W064		400	CLMH191W063MH191W064	8	0.0119	0.007106	0.06	0.008531	0.07	0.010114	0.07	0.008531	0.07						
CLMH191W064MH191W080		1990		Existing			MH191W064	MH191W080	T13751	IRWD	PVC	{587C2DE8-48ED-4C00-B371-C1E83B4E6B0D}	CLMH191W064MH191W080	1003.35	979.78	0.666666667	MH191W064	MH191W080		282	CLMH191W064MH191W080	8	0.0839	0.015850	0.06	0.019040	0.06	0.022576	0.07	0.019040	0.06						
CLMH191W065MH191W064		1990		Existing			MH191W065	MH191W064	T13751	IRWD	PVC	{3A74FF94-7651-440C-9EC4-7A77F4E927D3}	CLMH191W065MH191W064	1005.46	1003.46	0.666666667	MH191W065	MH191W064		95	CLMH191W065MH191W064	8	0.0211	0.001051	0.02	0.001272	0.02	0.001512	0.03	0.001272	0.02						
CLMH191W065MH191W069		1990		Existing			MH191W065	MH191W069	T13751	IRWD	PVC	{26FC4932-ABE7-45C8-A328-A7710E8AC703}	CLMH191W065MH191W069	1005.46	1003.46	0.666666667	MH191W065	MH191W069		154	CLMH191W065MH191W069	8	0.0130	0.000748	0.02	0.000888	0.02	0.001047	0.02	0.000888	0.02						
CLMH191W066MH191W067		1990		Existing			MH191W066	MH191W067	T13751	IRWD	PVC	{F2E27101-7633-4A90-BC57-A0EBDAA65660}	CLMH191W066MH191W067	1026.30	1020.32	0.666666667	MH191W066	MH191W067		157	CLMH191W066MH191W067	8	0.0381	0.000838	0.02	0.001004	0.02	0.001192	0.02	0.001004	0.02						
CLMH191W067MH191W068		1990		Existing			MH191W067	MH191W068	T13751	IRWD	PVC	{214FAA63-CDE4-4922-8B19-70DB862D3C65}	CLMH191W067MH191W068	1020.21	1008.53	0.666666667	MH191W067	MH191W068		127	CLMH191W067MH191W068	8	0.0927	0.000838	0.01	0.001004	0.02	0.001192	0.02	0.001004	0.02						
CLMH191W068MH191W069		1990		Existing			MH191W068	MH191W069	T13751	IRWD	PVC	{FB8BD544-456E-4A36-8E7C-27610720DFC1}	CLMH191W068MH191W069	1008.44	1003.55	0.666666667	MH191W068	MH191W069		161	CLMH191W068MH191W069	8	0.0304	0.005130	0.04	0.006157	0.05	0.007300	0.05	0.006157	0.05						
CLMH191W069MH191W070		1990		Existing			MH191W069	MH191W070	T13751	IRWD	PVC	{A4F5E15D-16A4-421C-99C6-E35FA80645D}	CLMH191W069MH191W070	1003.35	1003.13	0.666666667	MH191W069	MH191W070		63	CLMH191W069MH191W070	8	0.0035	0.005878	0.07	0.007045	0.08	0.008348	0.08	0.007045	0.08						
CLMH191W070MH191W073		1990		Existing			MH191W070	MH191W073	T13752	IRWD	PVC	{9CB7F6F7-A57A-457C-BE49-4DA51C3DCB45}	CLMH191W070MH191W073	1003.03	1002.40	0.666666667	MH191W070	MH191W073		160	CLMH191W070MH191W073	8	0.0039	0.005878	0.07	0.007045	0.08	0.008348	0.08	0.007045	0.08						
CLMH191W071MH191W072		1990		Existing			MH191W071	MH191W072	T13752	IRWD	PVC	{18BA55E6-079A-4AC5-8748-2C5933F552A1}	CLMH191W071MH191W072	1013.65	1008.14	0.666666667	MH191W071	MH191W072		255	CLMH191W071MH191W072	8	0.0216	0.003401	0.04	0.004083	0.04	0.004841	0.05	0.004083	0.04						
CLMH191W072MH191W073		1990		Existing			MH191W072	MH191W073	T13752	IRWD	PVC	{E42B8954-BAE7-41DD-B6A2-C5605C4B794E}	CLMH191W072MH191W073	1008.03	1002.40	0.666666667	MH191W072	MH191W073		260	CLMH191W072MH191W073	8	0.0217	0.003401	0.04	0.004083	0.04	0.004841	0.05	0.004083	0.04						
CLMH191W073MH191W074		1990		Existing			MH191W073	MH191W074	T13752	IRWD	PVC	{20A92423-1EF5-462C-89F6-63FF54AD1AEC}	CLMH191W073MH191W074	1002.21	991.33	0.666666667	MH191W073	MH191W074		155	CLMH191W073MH191W074	8	0.0702	0.014622	0.06	0.017542	0.06	0.020793	0.07	0.017542	0.06						
CLMH191W074MH191W075		1990		Existing			MH191W074	MH191W075	T13752	IRWD	PVC	{57E623A2-7184-4249-80FD-98F6C1A903E2}	CLMH191W074MH191W075	991.22	980.26	0.666666667	MH191W074	MH191W075		156	CLMH191W074MH191W075	8	0.0703	0.018272	0.06	0.021924	0.07	0.025989	0.08	0.021924	0.07						
CLMH191W075MH191W076		1990		Existing			MH191W075	MH191W076	T13752	IRWD	PVC	{CAC68C3B-7B04-4D96-8E86-B2113B3FBD7B}	CLMH191W075MH191W076	980.15	973.60	0.666666667	MH191W075	MH191W076		216	CLMH191W075MH191W076	8	0.0303	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH191W075MH191W077		1990		Existing			MH191W075	MH191W077	T13752	IRWD	PVC	{EE3CD2D7-957E-4E57-99EA-317E1A2D2757}	CLMH191W075MH191W077	980.05	969.51	0.666666667	MH191W075	MH191W077		188	CLMH191W075MH191W077	8	0.0561	0.018272	0.07	0.021924	0.07	0.025989	0.08	0.021924	0.07						
CLMH191W076MH1775001		1990		Existing			MH191W076	MH1775001	T13752	IRWD	PVC	{78AD7958-3450-4DDC-B4EA-8E24CBCA863D}	CLMH191W076MH1775001	973.40	970.07	0.666666667	MH191W076	MH1775001		261	CLMH191W076MH1775001	8	0.0128	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH191W077MH191W078		1990		Existing			MH191W077	MH191W078	T13752	IRWD	PVC	{2E0CC661-C440-4DFE-911B-41B7B1509C13}	CLMH191W077MH191W078	969.40	947.79	0.666666667	MH191W077	MH191W078		211	CLMH191W077MH191W078	8	0.1029	0.021994	0.06	0.026393	0.07	0.031288	0.08	0.026393	0.07						
CLMH191W078MH191W079		1990		Existing			MH191W078	MH191W079	T13752	IRWD	PVC	{618BE137-C035-4884-82C7-0E1286035739}	CLMH191W078MH191W079	947.70	942.00	0.666666667	MH191W078	MH191W079		155	CLMH191W078MH191W079	8	0.0368	0.025716	0.09	0.030863	0.10	0.036581	0.10	0.030863	0.10						
CLMH191W079MH191W106		1990		Existing			MH191W079	MH191W106	T13752	IRWD	PVC	{EA04F8CE-CD1D-483D-9B83-C49DB45E12F}	CLMH191W079MH191W106	941.59	939.51	0.666666667	MH191W079	MH191W106		165	CLMH191W079MH191W106	8	0.0126	0.032573	0.13	0.039095	0.14	0.046346	0.15	0.039095	0.14						
CLMH191W080MH191W061		1990		Existing			MH191W080	MH191W061	T13751	IRWD	PVC	{78553DF9-2022-4535-963E-63AAD27500E5}	CLMH191W080MH191W061	979.69	977.04	0.666666667	MH191W080	MH191W061		82	CLMH191W080MH191W061	8	0.0323	0.015850	0.07	0.019040	0.08	0.022576	0.09	0.019040	0.08						
CLMH191W081MH191W084		1989		Existing			MH191W081	MH191W084	A00657	IRWD	VCP	{9851F63C-D41D-4A2F-80F5-2CC676CF12C2}	CLMH191W081MH191W084	974.58	953.01	0.666666667	MH191W081	MH191W084		220	CLMH191W081MH191W084	8	0.0985	0.029009	0.08	0.034841	0.08	0.041309	0.09	0.034841	0.08						
CLMH191W084MH191W088		1989		Existing			MH191W084	MH191W088	A00657	IRWD	VCP	{227B8ABC-7966-45C1-9293-3905BC5769BE}	CLMH191W084MH191W088	952.90	920.93	0.666666667	MH191W084	MH191W088		342	CLMH191W084MH191W088	8	0.0940	0.032642	0.08	0.039202	0.09	0.046479	0.10	0.039202	0.09						
CLMH191W088MH191W089		1989		Existing			MH191W088	MH191W089	A00657	IRWD	VCP	{B7170E94-E763-4DCB-96C5-4449872D11A1}	CLMH191W088MH191W089	920.83	912.27	0.666666667	MH191W088	MH191W089		154	CLMH191W088MH191W089	8	0.0556	0.042294	0.10	0.050790	0.11	0.060217	0.12	0.050790	0.11						
CLMH191W089MH191W091		1989		Existing			MH191W089	MH191W091	A00657	IRWD	VCP	{9E9B4E84-8F37-4F47-8114-1CE61FE8E2F3}	CLMH191W089MH191W091	912.17	902.03	0.666666667	MH191W089	MH191W091		355	CLMH191W089MH191W091	8	0.0285	0.077395	0.16	0.092933	0.18	0.110179	0.20	0.092933	0.18						
CLMH191W091MH191W092		1989		Existing			MH191W091	MH191W092	A00657	IRWD	VCP	{71177E2B2-D268-41AA-9564-507F0ADBD523}	CLMH191W091MH191W092	901.92	893.52	0.666666667	MH191W091	MH191W092		121	CLMH191W091MH191W092	8	0.0694	0.077395	0.14	0.092933	0.14	0.110179	0.16	0.092933	0.14						
CLMH191W092MH191W094		1989		Existing			MH191W092	MH191W094	A00657	IRWD	VCP	{71058340A-0561-4D5F-BBAC-1F07185308DD}	CLMH191W092MH191W094	893.42	872.85	0.666666667	MH191W092	MH191W094		215	CLMH191W092MH191W094	8	0.0962	0.077395	0.12	0.092933	0.13	0.110179	0.15	0.092933	0.13						
CLMH191W094MH191W096		1989		Existing			MH191W094	MH191W096	A00657	IRWD	VCP	{46E5E243-B906-4BD9-AD44-82A7BA58FF51}	CLMH191W094MH191W096	872.75	856.82	0.666666667	MH191W094	MH191W096		166	CLMH191W094MH191W096	8	0.0962	0.131391	0.16	0.157756	0.17	0.187035	0.19	0.157756	0.17						
CLMH191W096MH191W098		1989		Existing			MH191W096	MH191W098	A00657	IRWD	VCP	{43FA7ED9-3EB9-42AB-89CD-D0B01062143}	CLMH191W096MH191W098	856.71	851.40	0.666666667	MH191W096	MH191W098		83	CLMH191W096MH191W098	8	0.1002	0.147188	0.17	0.176722	0.18	0.209520	0.20	0.176722	0.18						
CLMH191W098MH191W113		1989		Existing			MH191W098	MH191W113	A00657	IRWD	VCP	{FC551AFD-D2CA-4D33-B9E4-B83442CE1207}	CLMH191W098MH191W113	841.53	821.10	0.666666667	MH191W098	MH191W113		263	CLMH191W098MH191W113	8	0.0780	0.160777	0.18	0.193034	0.20	0.228860	0.22	0.193034	0.20						
CLMH191W100MH191W102		1989		Existing			MH191W100	MH191W102	A00657	IRWD	VCP	{0D86642A-E870-4564-94D3-3DB7ABE4D1F9}	CLMH191W100MH191W102	983.28	967.25	0.666666667	MH191W100	MH191W102		312	CLMH191W100MH191W102	8	0.0515	0.011113	0.06	0.013340	0.06	0.015819	0.07	0.013340	0.06						
CLMH191W102MH191W104		1989		Existing			MH191W102	MH191W104	A00657	IRWD	VCP	{9F887A9C-18CE-4224-AE10-171C7E46EE11}	CLMH191W102MH191W104	967.15	952.17	0.666666667	MH191W102	MH191W104		236	CLMH191W102MH191W104	8	0.0636	0.011113	0.05	0.013340	0.06	0.015819	0.06	0.013340	0.06						
CLMH191W104MH191W106		1989		Existing			MH191W104	MH191W106	A00657	IRWD	VCP	{31EFC3B8-43C0-4867-8E29-4FD63F1FDFAB}	CLMH191W104MH191W106	952.07	939.41	0.666666667	MH191W104	MH191W106		218	CLMH191W104MH191W106	8	0.0582	0.017026	0.07	0.020438	0.07	0.024234	0.08	0.020438	0.07						
CLMH191W106MH191W108		1989		Existing			MH191W106	MH191W108	A00657	IRWD	VCP	{97706AC7-BE47-4E4E-B708-EA1584B84031}	CLMH191W106MH191W108	939.30	922.28	0.666666667	MH191W106	MH191W108		312	CLMH191W106MH191W108	8	0.0610	0.050633	0.11	0.060772	0.12	0.072050	0.13	0.060772	0.12						
CLMH191W108MH191W110		1989		Existing			MH191W108	MH191W110	A00657	IRWD	VCP	{A57D5E01-ECC7-40F5-B632-665E8DB83CEA}	CLMH191W108MH191W110	922.17	909.77	0.666666667	MH191W108	MH191W110		226	CLMH191W108MH191W110	8	0.0549	0.087371	0.15	0.104882	0.16	0.124346	0.18	0.104882	0.16						
CLMH191W110MH191W111		1989		Existing			MH191W110	MH191W111	A00657	IRWD	VCP	{C56856FD-58A6-41CC-B460-98B2B25154AA}	CLMH191W110MH191W111	909.66	901.59	0.666666667	MH191W110	MH191W111		303	CLMH191W110MH191W111	8	0.0266	0.087371	0.18	0.104882	0.19	0.124346	0.21	0.104882	0.19						
CLMH191W111MH192N080		1989		Existing			MH191W111	MH192N080	A00657	IRWD	VCP	{3D119D5C-1405-4D30-976E-9D111DE4C1B5}	CLMH191W111MH192N080	901.48	900.09	0.666666667	MH191W111	MH192N080		348	CLMH191W111MH192N080	8	0.0040	0.087371	0.27	0.104882	0.30	0.124346	0.33	0.104882	0.30						
CLMH191W112MH191W094		1990		Existing			MH191W112	MH191W094	T13758	IRWD	PVC	{03C4A456-5E09-47BA-94EA-A5C4CA339CEB}	CLMH191W112MH191W094	873.35	872.95	0.666666667	MH191W112	MH191W094		31	CLMH191W112MH191W094	8	0.0129	0.053997	0.16	0.064823	0.18	0.076856	0.19	0.064823	0.18						
CLMH191W113MH192N036		1989		Existing			MH191W113	MH192N036	A00657	IRWD	VCP	{F73F3460-0D1D-4D4B-982A-10A860A2CC5A}	CLMH191W113MH192N036	821.00	811.16	0.666666667	MH191W113	MH192N036		168	CLMH191W113MH192N036	8	0.0586	0.160776	0.20	0.193034	0.22	0.228859	0.24	0.193034	0.22						
CLMH191W114MH192N021		1989		Existing			MH191W114	MH192N021	T13748	IRWD	PVC	{8F91DE9D-8245-45BB-8A0C-58A8AC6EEF08}	CLMH191W114MH192N021	830.19	818.04	0.666666667	MH191W114	MH192N021		117	CLMH191W114MH192N021	8	0.1047	0.012139	0.05	0.013492	0.05	0.015994	0.05	0.013492	0.05						
CLMH192E001MH192E020		1989		Existing			MH192E001	MH192E020	A00662	IRWD	VCP	{DFA5433E-981C-4BF0-9F98-0D150B35E75}	CLMH192E001MH192E020	806.29	790.25	1.000000000	MH192E001	MH192E020		278	CLMH192E001MH192E020	12	0.0577	0.698000	0.24	0.836329	0.26	0.991524	0.29	0.836329	0.26						
CLMH192E002MH192E001		1990		Existing			MH192E002	MH192E001	674	IRWD	PVC	{F3A4C3EC-899D-4444-8F3B-BAEF38489D85}	CLMH192E002MH192E001	807.84	806.44	1.000000000	MH192E002	MH192E001		201	CLMH192E002MH192E001	12	0.0097	0.015599	0.06	0.016652	0.06	0.019743	0.07	0.016652	0.06						
CLMH192E003MH192E002		1990		Existing			MH192E003	MH192E002	674	IRWD	PVC	{6A953E6A0-E99E-4F00-94AB-B8EDCAF13938}	CLMH192E003MH192E002	815.57	807.97	0.666666667	MH192E003	MH192E002		357	CLMH192E003MH192E002	8	0.0213	0.012591	0.07	0.013442	0.08	0.015936	0.08	0.013442	0.08						
CLMH192E004MH192E003		1990		Existing			MH192E004	MH192E003	674	IRWD	PVC	{721357737-11A2-43B4-9AC5-5127034FA922}	CLMH192E004MH192E003	823.22	815.71	0.666666667	MH192E004	MH192E003		215	CLMH192E004MH192E003	8	0.0349	0.009126	0.05	0.009743	0.06	0.011551	0.06	0.009743	0.06						
CLMH192E005MH192E004		1990		Existing			MH192E005	MH192E004	674	IRWD	PVC	{C29A1E55-88B8-4ADA-BED1-F3CF2F161F74}	CLMH192E005MH192E004	830.09	823.36	0.666666667	MH192E005	MH192E004		40	CLMH192E005MH192E004	8	0.1726	0.008299	0.04	0.008860	0.04	0.010505	0.04	0.008860	0.04						
CLMH192E006MH192E005		1990		Existing			MH192E006	MH192E005	674	IRWD	PVC	{D3C0BD9A-CB1E-42E6-8D12-F017CA017996}	CLMH192E006MH192E005	837.15	830.21	0.666666667	MH192E006	MH192E005		190	CLMH192E006MH192E005	8	0.0365	0.007736	0.05	0.008260	0.05	0.009792	0.06	0.008260	0.05						
CLMH192E007MH192E006		1990		Existing			MH192E007	MH192E006	674	IRWD	PVC	{4E860587-6455-4A96-ADC8-864B7D0BF39}	CLMH192E007MH192E006	839.39	837.28	0.666666667	MH192E007	MH192E006		74	CLMH192E007MH192E006	8	0.0285	0.007560	0.05	0.008073	0.06	0.009569	0.06	0.008073	0.06						
CLMH192E008MH192E007		1990		Existing			MH192E008	MH192E007	674	IRWD	PVC	{945B27E4-D4AF-447D-AD0F-B55612589FB7}	CLMH192E008MH192E007	851.66	839.51	0.666666667	MH192E008	MH192E007		57	CLMH192E008MH192E007	8	0.0331	0.003798	0.04	0.004504	0.04	0.004808	0.04	0.004054	0.04						
CLMH192E009MH192E010		1990		Existing			MH192E009	MH192E010	674	IRWD	PVC	{FE1AB111-CA87-4ED2-B67F-7A626437224ED}	CLMH192E009MH192E010	815.46	813.34	0.666666667	MH192E009	MH192E010		217	CLMH192E009MH192E010	8	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH192E010MH192E011		1990		Existing			MH192E010	MH192E011	674	IRWD	PVC	{8B720DB2-2983-4D6B-A3DC-D885A5C07AD69}	CLMH192E010MH192E011	813.23	811.45	0.666666667	MH192E010	MH192E011		181	CLMH192E010MH192E011	8	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH192E011MH192E012		1990		Existing			MH192E011	MH192E012	674	IRWD	PVC	{3A04F884-0C70-45DC-8B09-873BEA521218}	CLMH192E011MH192E012	811.34	809.88	0.666666667	MH192E011	MH192E012		223	CLMH192E011MH192E012	8	0.0065	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH192E012MH209N001		1990		Existing			MH192E012	MH209N001	674	IRWD	PVC	{A28FCC0A-F797-43C2-B98F-718E749CCCEC}	CLMH192E012-MH209N001	809.78	806.17	0.666666667	MH192E012	MH209N001		304	CLMH192E012MH209N001	8	0.0119	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00						
CLMH192E013MH192E022		1989		Existing			MH192E013	MH192E022	A00662	IRWD	VCP	{28A3966E-6187-42D9-BA20-86A67445C980}	CLMH192E013MH192E022	781.59	778.66	1.250000000	MH192E013	MH192E022		206	CLMH192E013MH192E022	15	0.0142	1.171411	0.33	1.400109	0.36	1.660088	0.40	1.402507	0.36						
CLMH192E014MH192E013		1989		Existing			MH192E014	MH192E013	A00673	IRWD	VCP	{9D13BE9D-897E-49DD-8817-7A0D45049704}	CLMH192E014MH192E013	783.76	782.34	1.250000000	MH192E014	MH192E013		154	CLMH192E014MH192E013	15	0.0036	0.026710	0.07	0.028524	0.07	0.033817	0.08	0.033981	0.08						
CLMH192E015MH192E014		1989		Existing			MH192E015	MH192E014	A00673	IRWD	VCP	{7C3A1214-15CF-4E60-B702-D6CD5AB5317B}	CLMH192E015MH192E014	785.28	783.85	1.250000000	MH192E015	MH192E014		400	CLMH192E015MH192E014	15	0.0036	0.026711	0.07	0.028524	0.07	0.033817	0.08	0.033981	0.08						
CLMH192E016MH192E015		1989		Existing			MH192E016	MH192E015	A00673	IRWD	VCP	{88AA80F9-9C79-43D8-B2A6-3ACB58B5A616}	CLMH192E016MH192E015	786.79	785.38	1.250000000	MH192E016	MH192E015		399	CLMH192E016MH192E015	15	0.0035	0.026711	0.07	0.028524	0.07	0.033817	0.08	0.033982	0.08						
CLMH192E017MH192E018	UFF17	1989		Existing			MH192E017	MH192E018	A00662	IRWD	VCP	{30798374-F459-4607-9889-A40C4328C273}	CLMH192E017MH192E018	866.00	852.29	0.833333333	MH192E017	MH192E018		215	CLMH192E017MH192E018	10	0.0638	0.688344	0.30	0.826064	0.33	0.979363	0.36	0.826064	0.33						
CLMH192E018MH192E019		1989		Existing			MH192E018	MH192E019	A00662	IRWD	VCP	{48034941-0CF0-4F9E-AE83-E38E28EE9778}	CLMH192E018MH192E019	852.00	833.15	1.000000000	MH192E018	MH192E019		228	CLMH192E018MH192E019	12	0.0830	0.688344	0.22	0.826064	0.24	0.979363	0.26	0.826064	0.24						
CLMH192E019MH192E001		1989		Existing			MH192E019	MH192E001	A00662	IRWD	VCP	{8909FCFB-F9DA-4704-8AA7-9F0B510183A6}	CLMH192E019MH192E001	832.79	806.64	1.000000000	MH192E019	MH192E001		201	CLMH192E019MH192E001	12	0.0849	0.690241	0.22	0.828088	0.24	0.981761	0.26	0.828088	0.24						
CLMH192E020MH192E021		1989		Existing			MH192E020	MH192E021	A00662	IRWD	VCP	{CD4B827D-7B69-4CB8-8527-A31F3D86F8C6}	CLMH192E020MH192E021	790.00	784.28	1.250000000	MH192E020	MH192E021		228	CLMH192E020MH192E021	15	0.0251	0.697964	0.22	0.836289	0.24	0.991481	0.26	0.836289	0.24						
CLMH192E021MH192E013		1989		Existing			MH192E021	MH192E013	A00662	IRWD	VCP	{5AE9AA03-FA1D-4CC1-9103-170FF5CE5BAE}	CLMH192E021MH192E013	784.17	781.70	1.250000000	MH192E021	MH192E013		110	CLMH192E021MH192E013	15	0.0225	0.697961	0.23	0.836285	0.26	0.991476	0.29	0.836285	0.26						
CLMH192E022MH192E023		1989		Existing			MH192E022	MH192E023	A00662	IRWD	VCP	{3B97BD09-A130-440B-9405-A76491DBDF5C}	CLMH192E022MH192E023	778.57	774.05	1.250000000	MH192E022	MH192E023		316	CLMH192E022MH192E023	15	0.0143	1.171330	0.33	1.400007	0.36	1.659974	0.40	1.402402	0.36						
CLMH192E023MH192E024		1989		Existing			MH192E023	MH192E024	A00662	IRWD	VCP	{F6991620-EDE1-4DBE-B045-5E85D81AA1D}	CLMH192E023MH192E024	773.89	760.90	1.250000000	MH192E023	MH192E024		305	CLMH192E023MH192E024	15	0.0426	1.171293	0.25	1.399961	0.27	1.659923	0.30	1.402355	0.27						
CLMH192E024MH192E025		1989		Existing			MH192E024	MH192E025	A00662	IRWD	VCP	{92859504-3976-47D2-960F-D988E41BBE8E}	CLMH192E024MH192E025	760.69	747.91	1.250000000	MH192E024	MH192E025		300	CLMH192E024MH192E025	15	0.0426	1.171250	0.25	1.399919	0.27	1.659875	0.30	1.402311	0.27						
CLMH192E025MH192E136		1989		Existing			MH192E025	MH192E136	A00662	IRWD	VCP	{53F50701-0035-4E88-9B68-EB4047987B43}	CLMH192E025MH192E136	747.74	739.86	1.250000000	MH192E025	MH192E136		220	CLMH192E025MH192E136	15	0.0358	1.171252	0.33	1.399910	0.36	1.659865	0.40	1.402302	0.38						
CLMH192E026MH192E019		1989		Existing			MH192E026	MH192E019	654	IRWD	VCP	{60535F25-0CA6-418F-BF07-9EA95DC13425}	CLMH192E026MH192E019	840.79	833.15	0.666666667	MH192E026	MH192E019		80	CLMH192E026MH192E019	8	0.0955	0.004063	0.03	0.004339	0.03	0.005143	0.03	0.004339	0.03						
CLMH192E027MH192E026		1989		Existing			MH192E027	MH192E026	654	IRWD	VCP	{B238DF36-487C-47C9-98FC-66AE01C4E12A}	CLMH192E027MH192E026	874.79	840.90	0.666666667	MH192E027	MH192E026		96	CLMH192E027MH192E026	8	0.3766	0.004063	0.02	0.004339	0.02	0.005143	0.03	0.004339	0.02						
CLMH192E031MH192E032		1990		Existing			MH192E031	MH192E032	T13766	IRWD	PVC	{98804187-B258-4E46-8346-E4EE9060BA28}	CLMH192E031MH192E032	891.40	890.10	0.666666667	MH192E031	MH192E032		234	CLMH192E031MH192E032	8	0.0056	0.106428	0.29	0.127776	0.31	0.151492	0.34	0.127776	0.31						
CLMH192E032MH191S010		1990		Existing			MH192E032	MH191S010	T13766	IRWD	PVC	{BCD7E0A4-951A

CLMH192N005MH192N008		1990		Existing		MH192N005	MH192N008		T13756	IRWD	PVC	{2233664F-81CD-4FB3-A903-CFA7C45FFB23}	CLMH192N005MH192N008	863.79	845.15	0.666666667	MH192N005	MH192N008		272	CLMH192N005MH192N008	8	0.0688	0.034550	0.09	0.041478	0.09	0.049176	0.10	0.041478	0.09			
CLMH192N006MH192N005		1990		Existing		MH192N006	MH192N005		T13756	IRWD	PVC	{5A76C35B-589C-4A21-A46C-15B52F5C569B}	CLMH192N006MH192N005	867.08	864.00	0.500000000	MH192N006	MH192N005		261	CLMH192N006MH192N005	6	0.0118	0.005413	0.08	0.006499	0.09	0.007706	0.09	0.006499	0.09			
CLMH192N008MH192N009		1990		Existing		MH192N008	MH192N009		T13756	IRWD	PVC	{C886FEC7-3CE3-4877-B8F2-9CB8536109BB}	CLMH192N008MH192N009	844.96	841.14	0.666666667	MH192N008	MH192N009		352	CLMH192N008MH192N009	8	0.0109	0.042921	0.15	0.051526	0.16	0.061089	0.18	0.051526	0.16			
CLMH192N009MH192N010		1990		Existing		MH192N009	MH192N010		T13756	IRWD	VCP	{0227F3F4-271C-447E-9F82-FD102B83C42A}	CLMH192N009MH192N010	841.03	837.47	0.666666667	MH192N009	MH192N010		360	CLMH192N009MH192N010	8	0.0099	0.053000	0.18	0.063626	0.19	0.075436	0.21	0.063626	0.19			
CLMH192N010MH192N011		1990		Existing		MH192N010	MH192N011		T13756	IRWD	VCP	{69BE83AB-A899-4BCF-BB67-8004F6302DFA}	CLMH192N010MH192N011	837.38	833.91	0.666666667	MH192N010	MH192N011		360	CLMH192N010MH192N011	8	0.0096	0.060498	0.19	0.072629	0.21	0.086108	0.23	0.072629	0.21			
CLMH192N011MH192N013		1990		Existing		MH192N011	MH192N013		T13756	IRWD	VCP	{B895607A-C588-4EE6-82D4-814F27D37828}	CLMH192N011MH192N013	833.71	832.94	0.666666667	MH192N011	MH192N013		160	CLMH192N011MH192N013	8	0.0048	0.067889	0.23	0.081502	0.25	0.096628	0.28	0.081502	0.25			
CLMH192N012MH192N011		1990		Existing		MH192N012	MH192N011		T13756	IRWD	VCP	{4CB31FD4-D55C-4C07-8291-20730CE703E1}	CLMH192N012MH192N011	836.98	833.91	0.666666667	MH192N012	MH192N011		283	CLMH192N012MH192N011	8	0.0108	0.007391	0.07	0.008873	0.07	0.010520	0.08	0.008873	0.07			
CLMH192N013MH192N014		1990		Existing		MH192N013	MH192N014		T13756	IRWD	PVC	{B234741D-4CA1-4F77-8E06-960E5B92E0B6}	CLMH192N013MH192N014	832.73	827.05	0.666666667	MH192N013	MH192N014		130	CLMH192N013MH192N014	8	0.0437	0.074193	0.14	0.089071	0.15	0.105601	0.17	0.089071	0.15			
CLMH192N014MH192N015		1990		Existing		MH192N014	MH192N015		T13756	IRWD	PVC	{34957AF5-BC40-478E-B415-0A88D44FC827}	CLMH192N014MH192N015	826.96	810.86	0.666666667	MH192N014	MH192N015		166	CLMH192N014MH192N015	8	0.0976	0.074193	0.12	0.089071	0.13	0.105601	0.14	0.089071	0.13			
CLMH192N015MH192N034		1990		Existing		MH192N015	MH192N034		T13756	IRWD	VCP	{52CE3980-1225-45FA-9563-6C3A6E9C3A83}	CLMH192N015MH192N034	810.77	808.53	0.666666667	MH192N015	MH192N034		129	CLMH192N015MH192N034	8	0.0174	0.074193	0.22	0.089071	0.25	0.105601	0.28	0.089071	0.25			
CLMH192N016MH192N013		1990		Existing		MH192N016	MH192N013		T13756	IRWD	PVC	{1A140431E-294E-44BA-B585-B17BC19831CA}	CLMH192N016MH192N013	836.25	832.94	0.666666667	MH192N016	MH192N013		305	CLMH192N016MH192N013	8	0.0109	0.006304	0.06	0.007570	0.07	0.008973	0.07	0.007570	0.07			
CLMH192N018MH192N019		1990		Existing		MH192N018	MH192N019		T13757	IRWD	PVC	{0D54128B-9727-4448-B765-B4BB07209B6D}	CLMH192N018MH192N019	862.17	859.17	0.666666667	MH192N018	MH192N019		96	CLMH192N018MH192N019	8	0.0135	0.005147	0.05	0.006179	0.07	0.007326	0.06	0.006179	0.06			
CLMH192N019MH191W017		1990		Existing		MH192N019	H191W017		T13757	IRWD	PVC	{B7B3E877-5018-484B-B78F-1EC4CCCA6764}	MH192N019-MH191W017	859.01	855.89	0.666666667	MH192N019	H191W017		318	CLMH192N019MH191W017	8	0.0098	0.005147	0.06	0.006179	0.06	0.007326	0.07	0.006179	0.06			
CLMH192N021MH192N022		1990		Existing		MH192N021	MH192N022		T13748	IRWD	VCP	{198B117A-A5BE-42B4-B149-EF71F8A0E687}	CLMH192N021MH192N022	817.95	812.86	0.666666667	MH192N021	MH192N022		125	CLMH192N021MH192N022	8	0.0407	0.012912	0.06	0.015503	0.07	0.018376	0.08	0.015503	0.07			
CLMH192N022MH192N023		1990		Existing		MH192N022	MH192N023		T13748	IRWD	PVC	{45B32AE4-8DBE-4FB7-A622-7D320C7DFD3D}	CLMH192N022MH192N023	812.66	811.77	0.666666667	MH192N022	MH192N023		94	CLMH192N022MH192N023	8	0.0095	0.025272	0.12	0.030341	0.13	0.035968	0.14	0.030341	0.13			
CLMH192N023MH192N033		1990		Existing		MH192N023	MH192N033		T13748	IRWD	PVC	{F317EE8D-BF8F-4555-988C-1DB42BED7E03}	CLMH192N023MH192N033	811.66	810.22	0.666666667	MH192N023	MH192N033		209	CLMH192N023MH192N033	8	0.0069	0.027837	0.14	0.033419	0.15	0.039617	0.16	0.033419	0.15			
CLMH192N024MH192N022		1990		Existing		MH192N024	MH192N022		T13748	IRWD	PVC	{C264A42A-30C6-4AF8-A4F0-6B8B764421EC}	CLMH192N024MH192N022	813.95	812.86	0.666666667	MH192N024	MH192N022		148	CLMH192N024MH192N022	8	0.0074	0.012359	0.09	0.014838	0.10	0.017592	0.11	0.014838	0.10			
CLMH192N025MH192N024		1990		Existing		MH192N025	MH192N024		T13748	IRWD	PVC	{B1B19E02-2334-44C7-ACB2-F36B3C6022A7}	CLMH192N025MH192N024	816.11	814.04	0.666666667	MH192N025	MH192N024		281	CLMH192N025MH192N024	8	0.0074	0.007408	0.07	0.008894	0.08	0.010546	0.08	0.008894	0.08			
CLMH192N026MH192N025		1990		Existing		MH192N026	MH192N025		T13748	IRWD	PVC	{F9AA748F-C7FE-4CB7-9E12-2CAEE43E01A2}	CLMH192N026MH192N025	817.71	816.32	0.666666667	MH192N026	MH192N025		143	CLMH192N026MH192N025	8	0.0097	0.002671	0.04	0.003207	0.04	0.003803	0.05	0.003207	0.04			
CLMH192N027MH192N026		1990		Existing		MH192N027	MH192N026		T13748	IRWD	PVC	{7B89F868-9C4E-486A-B0BF-A3542AB037A1}	CLMH192N027MH192N026	818.98	817.80	0.666666667	MH192N027	MH192N026		122	CLMH192N027MH192N026	8	0.0097	0.002671	0.04	0.003207	0.04	0.003803	0.05	0.003207	0.04			
CLMH192N028MH192N025		1990		Existing		MH192N028	MH192N025		T13748	IRWD	PVC	{697E87E3-65A6-44D4-A793-9058EC1F4B5F}	CLMH192N028MH192N025	817.51	816.21	0.666666667	MH192N028	MH192N025		133	CLMH192N028MH192N025	8	0.0098	0.004737	0.05	0.005687	0.06	0.006743	0.06	0.005687	0.06			
CLMH192N030MH192N031	UFF18	1989		Existing		MH192N030	A00624		MH192N	IRWD	VCP	{3E153BF0-EDB3-425F-AF67-C06A9CBD7986}	CLMH192N030MH192N031	802.77	801.17	1.250000000	MH192N030	MH192N031		309	CLMH192N030MH192N031	15	0.0052	0.441097	0.26	0.529525	0.28	0.627801	0.31	0.529525	0.28			
CLMH192N030MH192N031		1989		Existing		MH192N030	MH192N031		A00624	IRWD	VCP	{F4FDE39F-C132-41FC-9253-DDDA988EB614}	CLMH192N030MH192N031	801.08	799.02	1.250000000	MH192N030	MH192N031		300	CLMH192N030MH192N031	15	0.0052	0.449631	0.26	0.538587	0.29	0.638576	0.31	0.538587	0.29			
CLMH192N031MH192E034		1989		Existing		MH192N031	MH192E034		A00624	IRWD	VCP	{11025six2-FA81-42FE-BCC9-4F0EDCBF034E}	MH192N031-MH192E034	798.91	793.21	1.250000000	MH192N031	MH192E034		400	CLMH192N031MH192E034	15	0.0143	0.449434	0.20	0.538355	0.22	0.638309	0.24	0.538355	0.22			
CLMH192N033MH192N034		1989		Existing		MH192N033	MH192N034		T13756	IRWD	VCP	{4C20FDE4-494F-474B-8CE7-1DD929644664}	CLMH192N033MH192N034	810.03	808.64	0.666666667	MH192N033	MH192N034		153	CLMH192N033MH192N034	8	0.0091	0.189557	0.34	0.227585	0.38	0.269820	0.42	0.227585	0.38			
CLMH192N034MH192N035		1989		Existing		MH192N034	MH192N035		A00657	IRWD	VCP	{379ACF3D-C84A-4AA7-821C-BAC09D91890F}	CLMH192N034MH192N035	808.44	805.55	0.666666667	MH192N034	MH192N035		266	CLMH192N034MH192N035	8	0.0109	0.263749	0.39	0.316656	0.43	0.375421	0.48	0.316656	0.43			
CLMH192N035MH192N029		1989		Existing		MH192N035	MH192N029		668	IRWD	VCP	{AAEFBE4B-E5E8-4576-B481-1ECDD6DF7523}	CLMH192N035MH192N029	805.46	803.25	0.666666667	MH192N035	MH192N029		178	CLMH192N035MH192N029	8	0.0124	0.263749	0.38	0.316656	0.42	0.375421	0.46	0.316656	0.42			
CLMH192N036MH192N033		1989		Existing		MH192N036	MH192N033		A00657	IRWD	VCP	{A8EB4FAB-AA46-4F7D-B8BC-F1B9ABF12857}	CLMH192N036MH192N033	811.07	810.13	0.666666667	MH192N036	MH192N033		98	CLMH192N036MH192N033	8	0.0096	0.161720	0.31	0.194166	0.34	0.230203	0.38	0.194166	0.34			
CLMH192N037MH192N038		1989		Existing		MH192N037	MH192N038		668	IRWD	VCP	{26E10BFE-824D-490D-9B66-1301924477EB}	CLMH192N037MH192N038	816.88	813.47	0.666666667	MH192N037	MH192N038		274	CLMH192N037MH192N038	8	0.0124	0.177374	0.34	0.212881	0.37	0.252387	0.37	0.212881	0.34			
CLMH192N038MH192N039		1989		Existing		MH192N038	MH192N039		668	IRWD	VCP	{76B9D48C-61E1-4947-BAF2-EBAE2DB22447}	CLMH192N038MH192N039	813.38	808.82	0.666666667	MH192N038	MH192N039		333	CLMH192N038MH192N039	8	0.0137	0.177374	0.30	0.212881	0.33	0.252387	0.36	0.212881	0.33			
CLMH192N039MH192N040		1989		Existing		MH192N039	MH192N040		668	IRWD	VCP	{5545BA16-40F1-4182-8931-FA2AD0976668}	CLMH192N039MH192N040	808.71	806.79	0.666666667	MH192N039	MH192N040		286	CLMH192N039MH192N040	8	0.0067	0.177373	0.36	0.212881	0.40	0.252387	0.44	0.212881	0.40			
CLMH192N040MH192N041		1989		Existing		MH192N040	MH192N041		668	IRWD	VCP	{FA7FC3D8-FBB3-4660-9649-43B1EF360C2E}	CLMH192N040MH192N041	806.70	805.34	0.666666667	MH192N040	MH192N041		286	CLMH192N040MH192N041	8	0.0048	0.123771	0.36	0.212880	0.42	0.252386	0.46	0.212880	0.42			
CLMH192N041MH192N029		1989		Existing		MH192N041	MH192N029		668	IRWD	VCP	{3A5FCB2D-6ABC-405C-A717-D29843DE162E}	CLMH192N041MH192N029	805.25	802.96	0.666666667	MH192N041	MH192N029		393	CLMH192N041MH192N029	8	0.0058	0.177367	0.37	0.212878	0.41	0.252385	0.45	0.212878	0.41			
CLMH192N042MH192N043		1989		Existing		MH192N042	MH192N043		A00750	IRWD	VCP	{30D3C736-9AEE-453D-8311-1CCC42B614BC}	CLMH192N042MH192N043	730.73	730.09	0.666666667	MH192N042	MH192N043		140	CLMH192N042MH192N043	8	0.0048	0.153214	0.35	0.183905	0.39	0.218039	0.42	0.183905	0.39			
CLMH192N043MH192N044		1992		Existing		MH192N043	MH192N044		A00750	IRWD	VCP	{D0120CE5-7BC3-4525-8E48-7021CC5C858F}	CLMH192N043MH192N044	729.90	714.27	0.666666667	MH192N043	MH192N044		394	CLMH192N043MH192N044	8	0.0397	0.153214	0.21	0.183905	0.23	0.218039	0.26	0.183905	0.23			
CLMH192N044MH192N122		1992		Existing		MH192N044	MH192N122		A00767	IRWD	VCP	{737B6278-1E07-4684-9057-9139CE7D810B}	CLMH192N044MH192N122	714.16	712.42	0.666666667	MH192N044	MH192N122		160	CLMH192N044MH192N122	8	0.0109	0.203466	0.32	0.244113	0.35	0.289413	0.38	0.244113	0.35			
CLMH192N045MH176E058		1994		Existing		MH192N045	MH176E058		14881	IRWD	VCP	{2D6E2E2A-F1C3-41A3-9817-3AF9F8592052}	CLMH192N045MH176E058	780.05	776.59	0.666666667	MH192N045	MH176E058		149	CLMH192N045MH176E058	8	0.0232	0.059341	0.15	0.071238	0.17	0.084459	0.18	0.071238	0.17			
CLMH192N046MH192N045		1994		Existing		MH192N046	MH192N045		14881	IRWD	VCP	{1B43B7D4-C8C6-41F8-97DE-ADDEADDB0551}	CLMH192N046MH192N045	783.66	780.26	0.666666667	MH192N046	MH192N045		189	CLMH192N046MH192N045	8	0.0180	0.050191	0.15	0.060263	0.16	0.071437	0.18	0.060263	0.16			
CLMH192N047MH192N046		1994		Existing		MH192N047	MH192N046		14881	IRWD	VCP	{64C75A83-318B-4327-85C1-7979B1FB323}	CLMH192N047MH192N046	789.46	783.86	0.666666667	MH192N047	MH192N046		179	CLMH192N047MH192N046	8	0.0313	0.005176	0.04	0.006224	0.05	0.007370	0.05	0.006224	0.05			
CLMH192N048MH192N047		1994		Existing		MH192N048	MH192N047		14881	IRWD	VCP	{12F06103-DF6E-4C50-B454-B270EE0028133}	CLMH192N048MH192N047	787.30	783.77	0.666666667	MH192N048	MH192N047		165	CLMH192N048MH192N047	8	0.0214	0.041460	0.13	0.049772	0.14	0.059008	0.15	0.049772	0.14			
CLMH192N049MH192N048		1994		Existing		MH192N049	MH192N048		14881	IRWD	VCP	{82DC22F5-04D3-4718-A783-791BFD1E16DC}	CLMH192N049MH192N048	794.15	787.51	0.666666667	MH192N049	MH192N048		226	CLMH192N049MH192N048	8	0.0294	0.005234	0.05	0.006329	0.05	0.007502	0.05	0.006329	0.05			
CLMH192N050MH192N049		1994		Existing		MH192N050	MH192N049		14881	IRWD	VCP	{55D3F5C4-3C9F-400C-9638-0DBCA7393392}	CLMH192N050MH192N049	798.25	794.26	0.666666667	MH192N050	MH192N049		77	CLMH192N050MH192N049	8	0.0519	0.005234	0.04	0.006329	0.04	0.007502	0.05	0.006329	0.04			
CLMH192N051MH192N050		1994		Existing		MH192N051	MH192N050		14881	IRWD	VCP	{30B54E0D-BA50-43BB-86A5-9F2898BDC393}	CLMH192N051MH192N050	801.88	798.45	0.666666667	MH192N051	MH192N050		174	CLMH192N051MH192N050	8	0.0197	0.001394	0.03	0.001718	0.03	0.002037	0.03	0.001718	0.03			
CLMH192N051MH192N053		1994		Existing		MH192N051	MH192N053		14881	IRWD	VCP	{96D4675E-3CE6-428C-AF17-BF66AA80BD6A}	CLMH192N051MH192N053	801.88	791.78	0.666666667	MH192N051	MH192N053		250	CLMH192N051MH192N053	8	0.0404	0.002089	0.03	0.002463	0.03	0.002920	0.03	0.002463	0.03			
CLMH192N052MH192N048		1994		Existing		MH192N052	MH192N048		14881	IRWD	VCP	{6522ABB0-DA90-4EC5-8A48-D2F28B0A3DE0}	CLMH192N052MH192N048	790.53	787.40	0.666666667	MH192N052	MH192N048		147	CLMH192N052MH192N048	8	0.0213	0.031170	0.11	0.044310	0.13	0.037373	0.12					
CLMH192N053MH192N052		1994		Existing		MH192N053	MH192N052		14881	IRWD	VCP	{6AE00E2C-43C3-4183-A3A8-E1A105E48FCB}	CLMH192N053MH192N052	791.59	790.64	0.666666667	MH192N053	MH192N052		31	CLMH192N053MH192N052	8	0.0306	0.031170	0.10	0.037373	0.11	0.044310	0.12	0.037373	0.11			
CLMH192N054MH192N053		1994		Existing		MH192N054	MH192N053		14881	IRWD	VCP	{7F442ZE7-1B22-46AE-8BD7-DFFF67FA5B28}	CLMH192N054MH192N053	792.76	791.78	0.666666667	MH192N054	MH192N053		101	CLMH192N054MH192N053	8	0.0097	0.029081	0.13	0.034911	0.14	0.041391	0.16	0.034911	0.14			
CLMH192N056MH192N054		1994		Existing		MH192N056	MH192N054		14881	IRWD	VCP	{D3EF158A-F94F-4CE4-9489-0B70F1D45BD7}	CLMH192N056MH192N054	793.90	792.85	0.666666667	MH192N056	MH192N054		96	CLMH192N056MH192N054	8	0.0096	0.029081	0.13	0.034911	0.15	0.041391	0.16	0.034911	0.15			
CLMH192N057MH192N056		1994		Existing		MH192N057	MH192N056		14881	IRWD	VCP	{CFA17120-AB72-40C7-9F43-ADCE7530F940}	CLMH192N057MH192N056	796.08	794.10	0.666666667	MH192N057	MH192N056		201	CLMH192N057MH192N056	8	0.0099	0.023866	0.12	0.028649	0.13	0.033968	0.14	0.028649	0.13			
CLMH192N058MH192N057		1994		Existing		MH192N058	MH192N057		14881	IRWD	VCP	{3F008CE6-5309-4772-A36A-722854A7A771}	CLMH192N058MH192N057	800.16	796.28	0.666666667	MH192N058	MH192N057		112	CLMH192N058MH192N057	8	0.0140	0.009718	0.06	0.011665	0.06	0.013832	0.07	0.011665	0.06			
CLMH192N059MH192N058		1994		Existing		MH192N059	MH192N058		14881	IRWD	VCP	{016F8795-3DCC-43F0-8CEA-25F1161A0161}	CLMH192N059MH192N058	803.47	800.27	0.666666667	MH192N059	MH192N058		96	CLMH192N059MH192N058	8	0.0333	0.009719	0.06	0.011665	0.06	0.013832	0.07	0.011665	0.06			
CLMH192N060MH192N059		1994		Existing		MH192N060	MH192N059		14881	IRWD	VCP	{54403AF7-0DB3-45D5-B61E-372A0FE6F6A5}	CLMH192N060MH192N059	808.40	803.67	0.666666667	MH192N060	MH192N059		282	CLMH192N060MH192N059	8	0.0168	0.005770	0.05	0.006927	0.06	0.008213	0.06	0.006927	0.06			
CLMH192N061MH192N060		1994		Existing		MH192N061	MH192N060		14881	IRWD	VCP	{D7489C46-0411-4707-B30B-B7345AD08F30}	CLMH192N061MH192N060	812.17	808.50	0.666666667	MH192N061	MH192N060		221	CLMH192N061MH192N060	8	0.0166	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH192N062MH192N061		1994		Existing		MH192N062	MH192N061		14881	IRWD	VCP	{0AAFC20A-C584-4801-A682-689761B67CDA}	CLMH192N062MH192N061	812.17	810.64	0.666666667	MH192N062	MH192N061		300	CLMH192N062MH192N061	8	0.0153	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00			
CLMH192N063MH192N062		1994		Existing		MH192N063	MH192N062		14881	IRWD	VCP	{05EB1CC5-CA4C-4339-8996-11DD0394DD5C}	CLMH192N063MH192N062	810.44	805.65	0.666666667	MH192N063	MH192N062		270	CLMH192N063MH192N062	8	0.0177	0.006413	0.06	0.007698	0.06	0.009127	0.07	0.007698	0.06			
CLMH192N063MH192N064		1994		Existing		MH192N063	MH192N064		14881	IRWD	VCP	{54962DDC-7ABC-4283-A893-7A9A6BC820CC}	CLMH192N063MH192N064	805.46	803.28	0.666666667	MH192N063	MH192N064		119	CLMH192N063MH192N064	8	0.0183	0.006413	0.06	0.007698	0.06	0.009127	0.07	0.007698	0.06			
CLMH192N064MH192N057		1994		Existing		MH192N064	MH192N057		14881	IRWD	VCP	{1F315E46-3FFE-42BB-94E8-760F857234E8}	CLMH192N064MH192N057	803.17	796.28	0.666666667	MH192N064	MH192N057		274	CLMH192N064MH192N057	8	0.0204	0.009719	0.06	0.011665	0.06	0.013832	0.07	0.011665	0.06			
CLMH192N068MH192W069		1993		Existing		MH192N068	MH192W069		A00759C	IRWD	VCP	{6DD77D6D-A9EF-4456-8BE5-8DD10D468C14}	CLMH192N068MH192W069	768.14	765.44	0.666666667	MH192N068	MH192W069		308	CLMH192N068MH192W069	8	0.0088	0.035950	0.15	0.038384	0.16	0.045507	0.17	0.038384	0.16			
CLMH192N069MH192N070		1993		Existing		MH192N069	MH192N070		A00759C	IRWD	VCP	{3A4F47F2-8405-4539-AB28-638E5382BA5C}	CLMH192N069MH192N070	780.50	773.59	0.666666667	MH192N069	MH192N070		300	CLMH192N069MH192N070	8	0.0230	0.028738	0.11	0.036379	0.12	0.030684	0.11	0.036379	0.12			
CLMH192N070MH192N068		1993		Existing		MH192N070	MH192N068		A00759C	IRWD	VCP	{1C648442-B295-46AF-A8DE-547FD0829C33}	CLMH192N070MH192N068	773.40	768.34	0.666666667	MH192N070	MH192N068		245	CLMH192N070MH192N068	8	0.0207	0.035950	0.12	0.038384	0.13	0.045507	0.14	0.038384	0.13			
CLMH192N071MH192N069		1993		Existing		MH192N071	MH192N069		A00759C	IRWD	VCP	{AE5AA258-BEE3-4303-894D-3CAC57669CF6}	CLMH192N071MH192N069	782.40	780.70	0.666666667	MH192N071	MH192N069		300	CLMH192N071MH192N069	8	0.0057	0.018836	0.12	0.022011	0.12	0.026112	0.13	0.022011	0.12			
CLMH192N073MH192N071		1993		Existing		MH192N073	MH192N071		A00759C	IRWD	VCP	{72AE3AEE-CAF0-421F-AC56-4102F2CB455A}	CLMH192N073MH192N071	784.09	782.59	0.666666667	MH192N073	MH192N071		299	CLMH192N073MH192N071	8	0.0050	0.017588	0.12	0.018778	0.12	0.022263	0.13	0.018778	0.12			
CLMH192N074MH192N073		1993		Existing		MH192N074	MH192N073		A00759C	IRWD	VCP	{2434E813-7D98-4852-B1E4-981BAB76FC34}	CLMH192N074MH192N073	785.50	784.29	0.666666667	MH192N074	MH192N073		251	CLMH192N074MH192N073	8	0.0048	0.017096	0.12	0.018252	0.12	0.021640	0.13	0.018252	0.12			
CLMH192N076MH192N115		1993		Existing		MH192N076	MH192N115		A00759D	IRWD	VCP	{8C973249-5022-4795-95FA-A54B365BAD2D}	CLMH192N076MH192N115	786.23	786.13	0.666666667	MH192N076	MH192N115		110	CLMH192N076MH192N115	8	0.0009	0.008512	0.13	0.009089	0.14	0.010776	0.15	0.009089	0.14			
CLMH192N076MH192N077		1995		Existing		MH192N076	MH192N077		A00759D	IRWD	VCP	{C33C9D18-FE91-482A-9148-105A303EDA66}	CLMH192N076MH192N077	787.38	786.38	0.666666667	MH192N076	MH192N077		253	CLMH192N076MH192N077	8	0.0040	0.008512	0.09	0.009089	0.09	0.010776	0.10	0.009089	0.09			
CLMH192N078MH192N077		1995		Existing		MH192N078	MH192N077		A00759D	IRWD	VCP	{B083AA71-07B2-4477-904D-9215CB60128D}	CLMH192N078MH192N077	792.69	787.47	0.666666667	MH192N078	MH192N077		376	CLMH192N078MH192N077	8	0.0139	0.008512	0.07	0.009089	0.07	0.010776	0.08	0.009089	0.07			
CLMH192N079MH192N078		1995		Existing		MH192N079	MH192N078		A00759D	IRWD	VCP	{0B393C45-053C-4ABD-AF45-CB0A211FCDE2}	CLMH192N079MH192N078	793.78	792.78	0.666666667	MH192N079	MH192N078		88	CLMH192N079MH192N078	8	0.0229	0.004468	0.05	0.004769	0.05	0.005656	0.06	0.004769	0.05			
CLMH192N080MH176E027		1989		Existing		MH192N080	MH176E027		A00657	IRWD	VCP	{59400A97-366E-4E53-A99E-1BD1B395818A}	CLMH192N080MH176E027	892.10	883.64	0.666666667	MH192N080	MH176E027		314	CLMH192N080MH176E027	8	0.0269	0.125092	0.21	0.150166	0.23	0.178036	0.25	0.150166	0.23			
CLMH192N083MH176S001		1994		Existing		MH192N083	MH176S001		A00767	IRWD	VCP	{C3EA47DA-DEE5-481E-A01B-6BAA09DB5F1C}	MH192N083-MH176S001	708.66	696.46	0.666666667	MH192N083	MH176S001		310	CLMH192N083MH176S001	8	0.0394	0.204142	0.25	0.244835	0.27	0.290271	0.29	0.244835	0.27			
CLMH192N086MH192N087		1996		Existing		MH192N086	MH192N087		T14969	IRWD	PVC	{1CF02640-F777-4B17-8E32-FE1CB850E60C}	CLMH192N086MH192N087	759.15	757.95	0.666666667	MH192N086	MH192N087		105	CLMH192N086MH192N087	8	0.0114	0.007055	0.06	0.008471	0.07	0.010042	0.07	0.008471	0.07			
CLMH192N087MH192N091		1996		Existing		MH192N087	MH192N091		T14969	IRWD	PVC	{27FD6188-4895-4E8D-B7F7-D05DBE6DE2DE}	CLMH192N087MH192N091	757.84	754.52	0.666666667	MH192N087	MH192N091		366	CLMH192N087MH192N091	8	0.0091	0.007055	0.07	0.008471	0.07	0.010042	0.08	0.008471	0.07			
CLMH192N091MH192N112		1996		Existing		MH192N091	MH192N112		T14969	IRWD	PVC	{6A6A5CAA-0CB0-447D-9A00-04084B01A060}	CLMH192N091MH192N112	754.41	752.69	0.666666667	MH192N091	MH192N112		101	CLMH192N091MH192N112	8	0.0170	0.019746	0.09	0.023577	0.10	0.027951	0.11	0.023577	0.10			
CLMH192N093MH192N099		1996		Existing		MH192N093	MH192N099		T14969	IRWD	PVC	{759FA893-E10D-44DF-ABD5-0AFB6FE278A

| | | |

CLMH193E122MH193E123		2000		Existing	assumed Mannings N	MH193E122	MH193E123		A01441	IRWD	PVC	{652C2BF1-A05B-4BB9-B245-F33AE00C010D}	CLMH193E122MH193E123	719.79	718.96	0.666666667	MH193E122	MH193E123		172	CLMH193E122MH193E123	8	0.0048	0.000969	0.03	0.001207	0.03	0.002109	0.04	0.003736	0.05			
CLMH193E123MH193E113		2000		Existing	assumed Mannings N	MH193E123	MH193E113		A01441	IRWD	PVC	{CB157ECB-F2D1-4A62-9990-E6DE7E864F77}	CLMH193E123MH193E113	718.76	714.29	0.666666667	MH193E123	MH193E113		181	CLMH193E123MH193E113	8	0.0248	0.001431	0.02	0.001783	0.03	0.003113	0.04	0.008327	0.06			
CLMH193E124MH1935001		1999		Existing	assumed Mannings N	MH193E124	1935001		T13344	IRWD	VCP	{7833ACB1-3151-684D-877C-8D1307323444}	CLMH193E124MH1935001	650.14	649.38	1.250000000	MH193E124	MH1935001		271	CLMH193E124MH1935001	15	0.0028	0.091151	0.13	0.109070	0.14	0.191149	0.19	0.199384	0.19			
CLMH193E126MH193E123		2000		Existing	assumed Mannings N	MH193E126	MH193E123		A01441	IRWD	PVC	{D4054709-9501-4217-9A90-1C2AB9C643F1}	CLMH193E126MH193E123	722.59	718.96	0.666666667	MH193E126	MH193E123		183	CLMH193E126MH193E123	8	0.0276	0.000462	0.01	0.000576	0.01	0.001004	0.02	0.004591	0.04			
CLMH193E127MH193E129		1990		Existing	assumed Mannings N	MH193E127	MH193E129		A01130	IRWD	VCP	{685792CC-AB10-41F3-BAD6-2BF3DA197B1E}	CLMH193E127MH193E129	688.00	687.46	1.250000000	MH193E127	MH193E129		188	CLMH193E127MH193E129	15	0.0029	0.088705	0.13	0.106252	0.14	0.185953	0.18	0.196350	0.19			
CLMH193E128MH193E130		1990		Existing	assumed Mannings N	MH193E128	MH193E130		A00711A	IRWD	VCP	{CE7D6AC6-8B1F-4E33-B62D-E05760685252E}	CLMH193E128MH193E130	688.46	687.90	1.750000000	MH193E128	MH193E130		380	CLMH193E128MH193E130	21	0.0015	0.814748	0.41	2.147533	0.45	2.548208	0.50	2.452473	0.49			
CLMH193E129MH193E131		1990		Existing	assumed Mannings N	MH193E129	MH193E131		A01130	IRWD	VCP	{C48B020D-8D86-4823-88F6-E0EC120E7B29}	CLMH193E129MH193E131	687.36	684.92	1.250000000	MH193E129	MH193E131		170	CLMH193E129MH193E131	15	0.0144	0.088702	0.09	0.106250	0.10	0.185950	0.13	0.196347	0.14			
CLMH193E130MH193E132		1990		Existing	assumed Mannings N	MH193E130	MH193E132		A00711A	IRWD	VCP	{848CDACF-CF34-4460-A8BC-59F62AFDA72A}	CLMH193E130MH193E132	687.79	687.23	1.750000000	MH193E130	MH193E132		380	CLMH193E130MH193E132	21	0.0015	1.814098	0.41	2.146876	0.45	2.547555	0.50	2.451746	0.49			
CLMH193E131MH193E133		1990		Existing	assumed Mannings N	MH193E131	MH193E133		A01130	IRWD	VCP	{86465EE8-FFB3-4D16-93B3-799405497413}	CLMH193E131MH193E133	684.83	672.86	1.250000000	MH193E131	MH193E133		293	CLMH193E131MH193E133	15	0.0409	0.088698	0.07	0.106247	0.08	0.185947	0.10	0.196341	0.11			
CLMH193E132MH193E134		1990		Existing	assumed Mannings N	MH193E132	MH193E134		A00711A	IRWD	VCP	{4418AB18-6E3D-4059-897A-917427BF46D4}	CLMH193E132MH193E134	687.14	686.61	1.750000000	MH193E132	MH193E134		387	CLMH193E132MH193E134	21	0.0014	1.813438	0.42	2.146210	0.46	2.546842	0.50	2.451005	0.49			
CLMH193E133MH193E136		1990	assumed Mannings N	Existing	assumed Mannings N	MH193E133	MH193E136		A01130	IRWD	VCP	{9293F685-28A1-4160-AA3E-815122A700CC}	CLMH193E133MH193E136	672.66	659.96	1.250000000	MH193E133	MH193E136		272	CLMH193E133MH193E136	15	0.0467	0.088695	0.07	0.106244	0.08	0.185944	0.10	0.196337	0.10			
CLMH193E134MH193E135		1990		Existing	assumed Mannings N	MH193E134	MH193E135		A00711A	IRWD	VCP	{DB86EDA6-755E-4F91-9BE9-B668B03AD42D}	CLMH193E134MH193E135	686.46	685.88	1.750000000	MH193E134	MH193E135		400	CLMH193E134MH193E135	21	0.0015	1.812741	0.42	2.145504	0.45	2.546134	0.50	2.450203	0.49			
CLMH193E135MH193E137		1990		Existing	assumed Mannings N	MH193E135	MH193E137		A00711A	IRWD	VCP	{27DC4483-60E4-4C39-9501-547CC19F7ACD}	CLMH193E135MH193E137	685.78	685.19	1.750000000	MH193E135	MH193E137		400	CLMH193E135MH193E137	21	0.0015	1.812066	0.42	2.144820	0.45	2.545457	0.50	2.449422	0.49			
CLMH193E136MH193E138		1990		Existing	assumed Mannings N	MH193E136	MH193E138		A01130	IRWD	VCP	{3F452A11-05D0-4152-866E-1A8A73054141}	CLMH193E136MH193E138	659.86	651.20	1.250000000	MH193E136	MH193E138		192	CLMH193E136MH193E138	15	0.0451	0.088693	0.07	0.106243	0.08	0.185942	0.10	0.196335	0.10			
CLMH193E137MH193E139		1990		Existing	assumed Mannings N	MH193E137	MH193E139		A00711A	IRWD	VCP	{36E00489-F871-4528-A1F7-254910543C2D}	CLMH193E137MH193E139	685.09	684.50	1.750000000	MH193E137	MH193E139		400	CLMH193E137MH193E139	21	0.0015	1.811410	0.41	2.144154	0.45	2.544810	0.50	2.448661	0.49			
CLMH193E138MH193E124		1999		Existing	assumed Mannings N	MH193E138	MH193E124		T13344	IRWD	VCP	{47E03ADF-1F64-472C-A778-23074C846AB1}	CLMH193E138MH193E124	651.00	650.23	1.250000000	MH193E138	MH193E124		272	CLMH193E138MH193E124	15	0.0028	0.088674	0.13	0.106229	0.14	0.185929	0.18	0.196308	0.19			
CLMH193E139MH193N001		2013		Existing	assumed Mannings N	MH193E139	MH193N001		A00711A	IRWD	VCP	{F07C2269-ACDB-4BD9-98FA-798D4A783179}	CLMH193E139MH193N001	684.40	683.78	1.750000000	MH193E139	MH193N001		414	CLMH193E139MH193N001	21	0.0015	1.810707	0.41	2.143440	0.45	2.544122	0.50	2.447837	0.49			
CLMH193E140MH193E127		2000		Existing	assumed Mannings N	MH193E140	MH193E127		A01130	IRWD	VCP	{54662BB8-4681-4BD6-BD69-QFE33B47FA5A}	CLMH193E140MH193E127	689.01	688.21	1.250000000	MH193E140	MH193E127		494	CLMH193E140MH193E127	15	0.0016	0.072008	0.13	0.089598	0.15	0.156736	0.19	0.151050	0.19			
CLMH193E141MH193E142		2014		Existing	assumed Mannings N	MH193E141	MH193E142		T17527	IRWD	PVC	{866631F6-4A23-43AE-9FC4-08EB33DA118A}	CLMH193E141MH193E142	723.10	721.50	0.666666667	MH193E141	MH193E142		77	CLMH193E141MH193E142	8	0.0209	0.011872	0.07	0.013223	0.07	0.023123	0.09	0.062173	0.15			
CLMH193E142MH193E143		2014		Existing	assumed Mannings N	MH193E142	MH193E143		T17527	IRWD	PVC	{8019E7BF-3138-4739-AB4C-EF30B823456B}	CLMH193E142MH193E143	721.40	718.40	0.666666667	MH193E142	MH193E143		170	CLMH193E142MH193E143	8	0.0177	0.011871	0.07	0.013223	0.08	0.023123	0.10	0.062173	0.16			
CLMH193E143MH193E144		2014		Existing	assumed Mannings N	MH193E143	MH193E144		T17527	IRWD	PVC	{727B595C-C481-432E-A9B2-B48F7FB960ZE}	CLMH193E143MH193E144	718.30	716.61	0.666666667	MH193E143	MH193E144		36	CLMH193E143MH193E144	8	0.0468	0.013526	0.06	0.015084	0.06	0.026377	0.08	0.063376	0.13			
CLMH193E144MH193E145		2014		Existing	assumed Mannings N	MH193E144	MH193E145		T17527	IRWD	PVC	{80AFA12C-C904-494D-BF28-6EA8044458E4}	CLMH193E144MH193E145	716.51	714.33	0.666666667	MH193E144	MH193E145		124	CLMH193E144MH193E145	8	0.0176	0.016835	0.09	0.018805	0.09	0.032884	0.12	0.066352	0.16			
CLMH193E145MH193E146		0		Existing	assumed Mannings N	MH193E145	MH193E146		T17527	IRWD	PVC	{BA9ECF08-5133-41A7-9A98-1BE86BA18D14}	CLMH193E145MH193E146	714.16	713.74	0.666666667	MH193E145	MH193E146		52	CLMH193E145MH193E146	8	0.0081	0.018489	0.11	0.020665	0.11	0.036138	0.15	0.067606	0.20			
CLMH193E146MH193E147		0		Existing	assumed Mannings N	MH193E146	MH193E147		T17527	IRWD	PVC	{14E809DA-376C-4E8D-A135-958383D960EC}	CLMH193E146MH193E147	713.54	713.40	0.666666667	MH193E146	MH193E147		36	CLMH193E146MH193E147	8	0.0039	0.025108	0.14	0.028109	0.15	0.049153	0.20	0.071799	0.24			
CLMH193E147MH193E148		2014		Existing	assumed Mannings N	MH193E147	MH193E148		T17527	IRWD	PVC	{B7E2D42F-B803-46DA-B7A2-631AE8D00440}	CLMH193E147MH193E148	713.20	712.87	0.666666667	MH193E147	MH193E148		83	CLMH193E147MH193E148	8	0.0040	0.025107	0.14	0.028108	0.15	0.049153	0.20	0.071799	0.24			
CLMH193E148MH193E149		2014		Existing	assumed Mannings N	MH193E148	MH193E149		T17527	IRWD	PVC	{6A801410-EC1E-4E08-8AA4-321576E0F956}	CLMH193E148MH193E149	712.67	710.94	0.666666667	MH193E148	MH193E149		178	CLMH193E148MH193E149	8	0.0097	0.026760	0.12	0.029967	0.13	0.052406	0.17	0.073587	0.20			
CLMH193E149MH193E007		2013		Existing	assumed Mannings N	MH193E149	MH193E007		16466	IRWD	PVC	{8329A74C-6D0A-42C6-8F18-E72DE612C8A9}	CLMH193E149MH193E007	709.36	698.89	0.666666667	MH193E149	MH193E007		63	CLMH193E149MH193E007	8	0.1689	0.026760	0.06	0.029967	0.07	0.052406	0.09	0.073587	0.10			
CLMH193E150MH193E151		2014		Existing	assumed Mannings N	MH193E150	MH193E151		T17527	IRWD	PVC	{4A76168D-E3E7-4D33-B7DC-42003B8BFF1A}	CLMH193E150MH193E151	718.88	718.22	0.666666667	MH193E150	MH193E151		165	CLMH193E150MH193E151	8	0.0040	0.001655	0.04	0.001861	0.04	0.003254	0.05	0.001100	0.03			
CLMH193E151MH193E152		2014		Existing	assumed Mannings N	MH193E151	MH193E152		T17527	IRWD	PVC	{D588E357-9A1E-40A3-822C-E5F3F59D4BF0}	CLMH193E151MH193E152	718.02	717.60	0.666666667	MH193E151	MH193E152		106	CLMH193E151MH193E152	8	0.0039	0.001655	0.04	0.001861	0.04	0.003254	0.05	0.001100	0.03			
CLMH193E152MH193E153		2014		Existing	assumed Mannings N	MH193E152	MH193E153		T17527	IRWD	PVC	{2C0D4C8F-AEF9-42DC-88C3-B156E93F6E68}	CLMH193E152MH193E153	717.50	717.32	0.666666667	MH193E152	MH193E153		43	CLMH193E152MH193E153	8	0.0042	0.003310	0.05	0.003722	0.06	0.006508	0.07	0.002079	0.04			
CLMH193E153MH193E154		0		Existing	assumed Mannings N	MH193E153	MH193E154		T17527	IRWD	PVC	{FC576D0C-C7CB-4A69-8E01-DADAFD4B5835}	CLMH193E153MH193E154	717.22	715.30	0.666666667	MH193E153	MH193E154		160	CLMH193E153MH193E154	8	0.0120	0.004965	0.05	0.005583	0.06	0.009762	0.07	0.003230	0.04			
CLMH193E154MH193E146		2014		Existing	assumed Mannings N	MH193E154	MH193E146		T17527	IRWD	PVC	{C9BF5E60-8CDF-43EF-B68F-4F1D4D2F2D7B}	CLMH193E154MH193E146	715.20	713.74	0.666666667	MH193E154	MH193E146		123	CLMH193E154MH193E146	8	0.0119	0.006620	0.06	0.007444	0.06	0.013016	0.08	0.004194	0.05			
CLMH193E155MH193N030		0		Existing	assumed Mannings N	MH193E155	MH193N030		T17527	IRWD	PVC	{7C05C78A-0B1F-445E-B015-80AC310FFE81}	CLMH193E155MH193N030	733.40	729.90	0.666666667	MH193E155	MH193N030		299	CLMH193E155MH193N030	8	0.0117	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.008194	0.07			
CLMH193E156MH193E157		2014		Existing	assumed Mannings N	MH193E156	MH193E157		T17527	IRWD	PVC	{EE73403A-617A-4C01-863F-41037F187C70}	CLMH193E156MH193E157	721.74	719.40	0.666666667	MH193E156	MH193E157		101	CLMH193E156MH193E157	8	0.0231	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.001293	0.02			
CLMH193E157MH193E158		2014		Existing	assumed Mannings N	MH193E157	MH193E158		T17527	IRWD	PVC	{AE3BA607-B2F3-40B9-987E-66AF6EFDD7BE}	CLMH193E157MH193E158	719.30	717.22	0.666666667	MH193E157	MH193E158		100	CLMH193E157MH193E158	8	0.0207	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.001293	0.02			
CLMH193E158MH193E144		2014		Existing	assumed Mannings N	MH193E158	MH193E144		T17527	IRWD	PVC	{8F07D812-3E4F-433A-B702-0C270F1BDA14}	CLMH193E158MH193E144	717.12	716.71	0.666666667	MH193E158	MH193E144		102	CLMH193E158MH193E144	8	0.0040	0.003310	0.05	0.003722	0.06	0.006508	0.07	0.002976	0.05			
CLMH193E159MH193E143		2014		Existing	assumed Mannings N	MH193E159	MH193E143		T17527	IRWD	PVC	{8413A031-6E05-4EB3-AF6E-D24F13C66CAE}	CLMH193E159MH193E143	721.12	718.50	0.666666667	MH193E159	MH193E143		163	CLMH193E159MH193E143	8	0.0161	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.001203	0.02			
CLMH193E160MH193E158		0		Existing	assumed Mannings N	MH193E160	MH193E158		T17527	IRWD	PVC	{A5A470EA-8FCD-4A6E-BA92-0B25FE82CE6}	CLMH193E160MH193E158	717.83	717.32	0.666666667	MH193E160	MH193E158		118	CLMH193E160MH193E158	8	0.0043	0.001655	0.04	0.001861	0.04	0.003254	0.05	0.001684	0.04			
CLMH193E161MH193E145		2014		Existing	assumed Mannings N	MH193E161	MH193E145		T17527	IRWD	PVC	{AA565314-EFE6-445A-A4F5-B8CA8748892A}	CLMH193E161MH193E145	718.30	714.36	0.666666667	MH193E161	MH193E145		169	CLMH193E161MH193E145	8	0.0233	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.001254	0.02			
CLMH193E162MH193E148		2014		Existing	assumed Mannings N	MH193E162	MH193E148		T17527	IRWD	PVC	{6E404885-F288-45D1-8FA4-B9B69ABFE223}	CLMH193E162MH193E148	715.20	712.87	0.666666667	MH193E162	MH193E148		56	CLMH193E162MH193E148	8	0.0419	0.001655	0.02	0.001861	0.02	0.003254	0.03	0.001788	0.02			
CLMH193E163MH193E154		2014		Existing	assumed Mannings N	MH193E163	MH193E154		T17527	IRWD	PVC	{766A5FE1-9F39-4D6C-AAFO-2630A70697CE}	CLMH193E163MH193E154	717.62	715.40	0.666666667	MH193E163	MH193E154		169	CLMH193E163MH193E154	8	0.0132	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.000964	0.02			
CLMH193E164MH193E153		2014		Existing	assumed Mannings N	MH193E164	MH193E153		T17527	IRWD	PVC	{EAB23D54-5084-4A4B-9CB3-CF2E888A4571}	CLMH193E164MH193E153	719.80	717.42	0.666666667	MH193E164	MH193E153		83	CLMH193E164MH193E153	8	0.0147	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.001152	0.02			
CLMH193E165MH193E152		2014		Existing	assumed Mannings N	MH193E165	MH193E152		T17527	IRWD	PVC	{A2F8FF67-5609-4198-9ABC-8E5F68AA1F7}	CLMH193E165MH193E152	717.70	717.20	0.666666667	MH193E165	MH193E152		130	CLMH193E165MH193E152	8	0.0161	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.000979	0.02			
CLMH193E166MH193E167		2014		Existing	assumed Mannings N	MH193E166	MH193E167		T17528	IRWD	PVC	{57CEE660-6082-4888-9D98-80A35BA7EC93}	CLMH193E166MH193E167	752.58	750.11	0.666666667	MH193E166	MH193E167		83	CLMH193E166MH193E167	8	0.0299	0.001859	0.03	0.002000	0.03	0.003498	0.04	0.002769	0.03			
CLMH193E167MH193E168		2014		Existing	assumed Mannings N	MH193E167	MH193E168		T17528	IRWD	PVC	{00CDB808-983A-4502-BCA4-D785A274D4C7}	CLMH193E167MH193E168	749.91	749.60	0.666666667	MH193E167	MH193E168		29	CLMH193E167MH193E168	8	0.0106	0.001859	0.03	0.002000	0.04	0.003498	0.05	0.002769	0.04			
CLMH193E168MH193N037		2014		Existing	assumed Mannings N	MH193E168	MH193N037		T17528	IRWD	PVC	{E7650421-2A71-429B-8E0B-2B1D285CBEEF}	CLMH193E168MH193N037	749.40	747.09	0.666666667	MH193E168	MH193N037		254	CLMH193E168MH193N037	8	0.0091	0.001859	0.03	0.002000	0.04	0.003498	0.05	0.002769	0.04			
CLMH193E169MH193N040		2014		Existing	assumed Mannings N	MH193E169	MH193N040		T17528	IRWD	PVC	{042620D8D-0F9D-4B5C-8254-274CF7BB628A}	CLMH193E169MH193N040	741.12	738.78	0.666666667	MH193E169	MH193N040		234	CLMH193E169MH193N040	8	0.0100	0.001655	0.03	0.001861	0.03	0.003254	0.04	0.011123	0.08			
CLMH193N001MH193N002		2013		Existing	assumed Mannings N	A00711A	MH193N002		16466	IRWD	PVC	{B18E41F9-639C-43CD-BD07-21BA3C7BBCB6}	CLMH193N001MH193N002	683.69	683.08	1.750000000	MH193N001	MH193N002		414	CLMH193N001MH193N002	21	0.0015	1.810020	0.42	2.142740	0.45	2.543449	0.50	2.447042	0.49			
CLMH193N002MH193W115		1990		Existing	assumed Mannings N	MH193N002	MH193W115		A00711A	IRWD	VCP	{0E3E485A-C2AB-4006-9655-1BA29B2239A3}	CLMH193N002MH193W115	682.97	678.40	1.250000000	MH193N002	MH193W115		357	CLMH193N002MH193W115	15	0.0128	1.809860	0.43	2.142575	0.47	2.543287	0.52	2.446851	0.51			
CLMH193N003MH193N072		2013		Existing	assumed Mannings N	MH193N003	MH193N072		2343	IRWD	PVC	{21CECCE5-74B7-4061-9A2C-DC29F8687580}	CLMH193N003MH193N072	705.15	704.00	0.666666667	MH193N003	MH193N072		88	CLMH193N003MH193N072	8	0.0033	0.003667	0.04	0.004111	0.04	0.006411	0.06	0.022265	0.10			
CLMH193N004MH193N005		2013		Existing	assumed Mannings N	MH193N004	MH193N005		16466	IRWD	PVC	{6ACFD9A4-C259-4D21-88F2-0999E2461D40}	CLMH193N004MH193N005	636.80	632.69	0.666666667	MH193N004	MH193N005		200	CLMH193N004MH193N005	8	0.0205	0.001257	0.02	0.001513	0.03	0.001796	0.03	0.142950	0.23			
CLMH193N005MH193N006		2013		Existing	assumed Mannings N	MH193N005	MH193N006		16466	IRWD	PVC	{BCF3657E-A5B6-466B-BF94-3255CC644137}	CLMH193N005MH193N006	632.59	617.58	0.666666667	MH193N005	MH193N006		312	CLMH193N005MH193N006	8	0.0481	0.001255	0.02	0.001511	0.02	0.001795	0.02	0.142950	0.19			
CLMH193N006MH193N019		2013		Existing	assumed Mannings N	MH193N006	MH193N019		16466	IRWD	PVC	{D13003A9-82C4-47AE-855E-F74A9CB675DB}	CLMH193N006MH193N019	617.48	616.46	0.666666667	MH193N006	MH193N019		314	CLMH193N006MH193N019	8	0.0098	0.001254	0.14	0.001511	0.15	0.001794	0.16	0.198531	0.39			
CLMH193N007MH193N010		2014		Existing	assumed Mannings N	MH193N007	MH193N010		16466	IRWD	PVC	{6A8251F3-4052-49CA-AE3D-B9F6E60C6C58}	CLMH193N007MH193N010	663.35	651.71	0.666666667	MH193N007	MH193N010		111	CLMH193N007MH193N010	8	0.1058	0.001262	0.02	0.001515	0.02	0.001797	0.02	0.173086	0.17			
CLMH193N008MH193N007		2014		Existing	assumed Mannings N	MH193N008	MH193N007		16466	IRWD	PVC	{C74C3423-8935-420E-841C-75141AF95BCF}	CLMH193N008MH193N007	684.41	663.45	0.666666667	MH193N008	MH193N007		239	CLMH193N008MH193N007	8	0.0880	0.001262	0.02	0.001515	0.02	0.001797	0.02	0.173086	0.18			
CLMH193N009MH193N008		2014		Existing	assumed Mannings N	MH193N009	MH193N008		16466	IRWD	PVC	{4116421F-D5C5-4AC3-BC23-65D62C30CB71}	CLMH193N009MH193N008	693.22	684.51	0.666666667	MH193N009	MH193N008		164	CLMH193N009MH193N008	8	0.0533	0.001262	0.02	0.001515	0.02	0.001797	0.02	0.173086	0.20			
CLMH193N010MH193N018		2014		Existing	assumed Mannings N	MH193N010	MH193N018		16466	IRWD	PVC	{58AD26AE-27D2-4902-803A-7C7D9DC013D0}	CLMH193N010MH193N018	651.61	647.86	0.666666667	MH193N010	MH193N018		117	CLMH193N010MH193N018	8	0.0234	0.001262	0.02	0.001515	0.02	0.001797	0.02	0.173086	0.35			
CLMH193N011MH193N012		2013		Existing	assumed Mannings N	MH193N011	MH193N012		16466	IRWD	PVC	{D848E77C-BDAC-475C-B732-E35336FC96F8}	CLMH193N011MH193N012	752.74	751.44	0.666666667	MH193N011	MH193N012		260	CLMH193N011MH193N012	8	0.0050	0.001741	0.04	0.001920	0.04	0.003356	0.05	0.003040	0.05			
CLMH193N012MH193N038	58TROM N-S IS T	2014		Existing	assumed Mannings N	MH193N012	MH193N038		T17528	IRWD	PVC	{F4458D5A-7A1B-4090-B8F3-DD112E8C3225}	CLMH193N012MH193N038	751.24	743.50	0.666666667	MH193N012	MH193N038		298	CLMH193N012MH193N038	8	0.0260	0.001741	0.03	0.001920	0.03	0.003356	0.04	0.037730	0.11			
CLMH193N016MH193W126		2003		Existing	assumed Mannings N	MH193N016	MH193W126		T16224	IRWD	VCP	{201DF718-A2A9-4AC2-A6F8-14722CCAB3A3}	CLMH193N016MH193W126	684.30	682.60	0.666666667	MH193N016	MH193W126		170	CLMH193N016MH193W126	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.02			
CLMH193N018MH193N021		2011		Existing	assumed Mannings N	MH193N018	MH193N021		A02310	IRWD	VCP	{CSE99299-794B-4347-BF1B-B563EAAB719C}	CLMH193N018MH193N021	647.86	644.34	1.250000000	MH193N018	MH193N021		400	CLMH193N018MH193N021	15	0.0088	0.236267	0.15	0.281534	0.16	0.333907	0.18	0.525742	0.22			
CLMH193N019MH175E001		2014		Existing	assumed Mannings N	MH193N019	MH175E001		A02310	IRWD	PVC	{1F0356F2-F26F-4E9D-BC32-DED47F07F5D5}	CLMH193N019MH175E00	616.46	608.81	1.250000000	MH193N019	MH175E001		387	CLMH193N019MH175E001	15	0.0198	0.237044	0.13	0.282507	0.14	0.335094	0.16	0.829961	0.24			
CLMH193N020MH193N023		2011		Existing	assumed Mannings N	MH193N020	MH193N023		A02310	IRWD	PVC	{1DCF221D-7843-4F6D-BA19-234008983307}	CLMH193N020MH193N023	636.58	632.38	1.250000000	MH193N020	MH193N023		204	CLMH193N020MH193N023	15	0.0206	0.236140	0.13	0.281399	0.14	0.333760	0.15	0.528173	0.19			
CLMH193N021MH193N020		2011		Existing	assumed Mannings N	MH193N021	MH193N020		A02310	IRWD	PVC	{0100E511-4016-4D34-A948-B5C3249279E7}	CLMH193N021MH193N020	644.34	636.58	1.250000000	MH193N021	MH193N020		400	CLMH193N021MH193N020	15	0.0194	0.236194	0.13	0.281456	0.14	0.333823	0.16	0.528317	0.19			
CLMH193N022MH193N019		2011		Existing	assumed Mannings N	MH193N022	MH193N019		A02310	IRWD	PVC	{1CBE231C-C0D2-445E-A6BA-3EC151CC90F8}	CLMH193N022MH193N019	624.32	616.46	1.250000000	MH193N022	MH193N019		396	CLMH193N022MH193N019	15	0.0198	0.236002	0.13	0.281256	0.14	0.333602	0.16	0.527891	0.22			
CLMH193N023MH193N022		2011		Existing	assumed Mannings N	MH193N023	MH193N022		A02310	IRWD	PVC	{4B240F55-2A49-4508-88DD-9C75078ZAAD0}	CLMH193N023MH193N022	632.38	624.32	1.250000000	MH193N023	MH193N022		400	CLMH193N023MH193N022	15	0.0202	0.236087	0.13	0.281343	0.14	0.333699	0.16	0.528048	0.19			
CLMH193N025MH193N004		2013		Existing	assumed Mannings N	MH193N025	MH193N004		16466	IRWD	PVC	{4822153A-B308-4225-9465-F3285F2658AF}	CLMH193N025MH193N004	637.08	637.00	0.666666667	MH193N025	MH193N004		210	CLMH193N025MH193N004	8	0.0040	0.001258	0.03	0.001513	0.03	0.001796	0.04	0.004685	0.06			
CLMH193N026MH193E141		2014		Existing	assumed Mannings N	MH193N026	MH193E141		T17527	IRWD	PVC	{FC648AEC-BAE1-4CB0-A7BE-CFD1A8A189F6}	CLMH193N026MH193E141	727.15	723.20	0.666666667	MH193N026	MH193E141		117	CLMH193N026MH193E141	8	0.0337	0.006907	0.05	0.007641	0.05	0.011361	0.07	0.058334	0.13			
CLMH193N030MH193N029		2014		Existing	assumed Mannings N	MH193N030	MH193N029		T17527	IRWD	PVC	{1A59A5A5-DB40-49C7-BFA5-2E7A0F94E064}	CLMH193N030MH193N029	729.70	727.35	0.666666667	MH193N030	MH193N029		44	CLMH193N030MH193N029	8	0.0529	0.001655	0.02	0.001861	0.02	0.003254	0.03	0.008194	0.05			
CLMH193N031MH193N032		2014		Existing	assumed Mannings N	MH193N031	MH193N032		T17527	IRWD	PVC	{6EA458BA-F45A-4366-B0E8-BC9F3CA5D67D}	CLMH193N031MH193N032	728.89	728.40	0.666666667	MH193N031	MH193N032		116	CLMH193N031MH193N032	8	0.0042

SIMH1935011_101MH1935011_102			1987		Existing	assumed Mannings N	GB193S159	GB193S152		A0120R	IRWD	VCP	{5D24FA2F-F7B3-4EA8-87CB-5C2CAD377B4B}	SIGB193S159GB193S152	619.78	612.00	0.666666667	MH1935011_101	MH1935011_102	Siphon	55	SIMH1935011_101MH1935011_102	8	0.1440	0.083226	1.00	0.100615	1.00	0.175057	1.00	0.157962	1.00		
SIMH1935011_102MH1935011_103	INVERTED SIPHON		1987		Existing	assumed Mannings N	GB193S152	GB193S155		A0120R	IRWD	VCP	{68A204D0-600B-4C08-870C-C574D34D556D}	SIGB193S152GB193S155	612.00	612.00	0.666666667	MH1935011_102	MH1935011_103	Siphon	25	SIMH1935011_102MH1935011_103	8	0.0000	0.088119	1.00	0.105394	1.00	0.179013	1.00	0.161332	1.00		
SIMH1935011_103MH1935011_104	INVERTED SIPHON		1987		Existing	assumed Mannings N	GB193S155	GB193S154		A0120R	IRWD	VCP	{653A47A0-78F9-4FCE-B286-CF9333FE1AB1}	SIGB193S155GB193S154	612.00	613.29	0.666666667	MH1935011_103	MH1935011_104	Siphon	20	SIMH1935011_103MH1935011_104	8	0.0645	0.083343	1.00	0.100843	1.00	0.175048	1.00	0.158085	1.00		
SIMH1935011_104MH1935011_201			1987		Existing	assumed Mannings N	GB193S154	GB193S158		A0120R	IRWD	VCP	{A6B6E79C-929E-45EC-951E-D20976FBFBF1}	SIGB193S154MH1935015	613.29	625.70	0.666666667	MH1935011_104	MH1935015	Siphon	126	SIMH1935011_104MH1935015	8	0.0986	0.082167	1.00	0.099533	0.63	0.173965	0.68	0.157154	0.67		
SIMH1935011_201MH1935011_202			1987		Existing	assumed Mannings N	GB193S158	GB193S157		A0120R	IRWD	VCP	{D1E12315-589E-404A-952F-91F51A4AC5A7}	SIGB193S158GB193S157	619.78	612.00	0.666666667	MH1935011_201	MH1935011_202	Siphon	55	SIMH1935011_201MH1935011_202	8	0.1440	0.083226	1.00	0.100615	1.00	0.175057	1.00	0.157962	1.00		
SIMH1935011_202MH1935011_203	INVERTED SIPHON		1987		Existing	assumed Mannings N	GB193S157	GB193S156		A0120R	IRWD	VCP	{78F41DB2-A86D-44AC-8E4E-B510273174F2}	SIGB193S157GB193S156	612.00	612.00	0.666666667	MH1935011_202	MH1935011_203	Siphon	25	SIMH1935011_202MH1935011_203	8	0.0000	0.088119	1.00	0.105394	1.00	0.179013	1.00	0.161332	1.00		
SIMH1935011_203MH1935011_204	INVERTED SIPHON		1987		Existing	assumed Mannings N	GB193S156	GB193S153		A0120R	IRWD	VCP	{2AA829D9-ECB9-4A24-B325-E7C39F6D3372}	SIGB193S156GB193S153	612.00	613.29	0.666666667	MH1935011_203	MH1935011_204	Siphon	20	SIMH1935011_203MH1935011_204	8	0.0645	0.083343	1.00	0.100843	1.00	0.175048	1.00	0.158085	1.00		
SIMH1935011_204MH1935015	INVERTED SIPHON		1987		Existing	assumed Mannings N	GB193S153	MH1935015		A0120R	IRWD	VCP	{0FFF30E4-B4FE-4ED7-A0F9-C6DB0885BCAC}	SIGB193S153MH1935015	613.29	625.70	0.666666667	MH1935011_204	MH1935015	Siphon	126	SIMH1935011_204MH1935015	8	0.0986	0.082167	0.61	0.099553	0.63	0.173965	0.68	0.157154	0.67		
CLMH1935015MH1935016			1989		Existing	assumed Mannings N	MH1935015	MH1935016		A01522	IRWD	VCP	{6DEF78ED-FA2E-484B-ABBD-BDB284A3D6BE}	CLMH1935015MH1935016	625.65	625.65	1.250000000	MH1935015	MH1935016		11	CLMH1935015MH1935016	15	0.0047	0.163144	0.16	0.198270	0.17	0.347396	0.23	0.313243	0.22		
CLMH1935016MH1935033			1987		Existing	assumed Mannings N	MH1935016	MH1935033		A0120R	IRWD	VCP	{4A431A58-097F-4168-9AE4-075DB6664CB4}	CLMH1935016MH1935033	625.37	618.50	1.250000000	MH1935016	MH1935033		277	CLMH1935016MH1935033	15	0.0248	0.321508	0.15	0.395402	0.17	0.692158	0.22	0.529701	0.19		
CLMH1935017MH1935016			1987		Existing	assumed Mannings N	MH1935017	MH1935016		A0120R	IRWD	VCP	{C185AAD6-F2CA-4362-92FF-120B0C272E12}	CLMH1935017MH1935016	626.60	625.37	1.250000000	MH1935017	MH1935016		48	CLMH1935017MH1935016	15	0.0257	0.158419	0.13	0.197249	0.14	0.344898	0.19	0.218142	0.16		
CLMH1935018MH1935017			1987		Existing	assumed Mannings N	MH1935018	MH1935017		A0120R	IRWD	VCP	{37B3366E-98B9-49A8-847A-4CBB733FCB41}	CLMH1935018MH1935017	629.96	626.63	1.250000000	MH1935018	MH1935017		235	CLMH1935018MH1935017	15	0.0142	0.155904	0.12	0.194119	0.13	0.339424	0.18	0.215011	0.14		
CLMH1935019MH1935018			1987		Existing	assumed Mannings N	MH1935019	MH1935018		A0120R	IRWD	VCP	{78A09A61-90C2-4CBC-9678-BFE882FA10D6}	CLMH1935019MH1935018	632.19	630.05	0.666666667	MH1935019	MH1935018		53	CLMH1935019MH1935018	8	0.0407	0.002905	0.06	0.003619	0.08	0.006327	0.12	0.007704	0.09		
CLMH1935020MH1935019			1987		Existing	assumed Mannings N	MH1935020	MH1935019		A0120R	IRWD	VCP	{FA1B0F39-753F-44B2-ABC9-D10D737ADF34}	CLMH1935020MH1935019	638.59	630.05	1.250000000	MH1935020	MH1935019		276	CLMH1935020MH1935019	15	0.0309	0.150368	0.10	0.187238	0.11	0.327376	0.14	0.204042	0.11		
CLMH1935021MH1935020			1987		Existing	assumed Mannings N	MH1935021	MH1935020		A0120R	IRWD	VCP	{105BF1F8-1FD9-4A24-B42C-3F96DD5C210F}	CLMH1935021MH1935020	640.05	638.66	1.250000000	MH1935021	MH1935020		150	CLMH1935021MH1935020	15	0.0093	0.150369	0.13	0.187246	0.15	0.327378	0.19	0.204049	0.15		
CLMH1935025MH1935010			1989		Existing	assumed Mannings N	MH1935025	MH1935010		A01522	IRWD	VCP	{11112F58-14E4-4455-AF1A-C1A9883F399}	CLMH1935025MH1935010	639.42	633.89	0.666666667	MH1935025	MH1935010		268	CLMH1935025MH1935010	8	0.0206	0.026295	0.11	0.032752	0.12	0.057253	0.15	0.057168	0.15		
CLMH1935028MH1935025			1989		Existing	assumed Mannings N	MH1935028	MH1935025		A01522	IRWD	VCP	{83AFC338-D68F-4608-A458-188F9EFBFD4C}	CLMH1935028MH1935025	643.66	639.63	0.666666667	MH1935028	MH1935025		8	0.0276	0.025719	0.10	0.032035	0.11	0.055997	0.14	0.056450	0.14		
CLMH1935029MH1935001			2000		Existing	assumed Mannings N	MH1935029	MH1935001		T14316	IRWD	PVC	{1C351B00-D28F-4165-A040-561FB7AC4D1C}	CLMH1935029MH1935001	662.09	649.38	0.666666667	MH1935029	MH1935001		206	CLMH1935029MH1935001	8	0.0618	0.042880	0.10	0.053413	0.11	0.093365	0.15	0.053413	0.12		
CLMH1935030MH1935029			2000		Existing	assumed Mannings N	MH1935030	MH1935029		T14316	IRWD	PVC	{C618E82E-098C-4F5C-8553-7E4A84B3E333}	CLMH1935030MH1935029	665.92	662.21	0.666666667	MH1935030	MH1935029		169	CLMH1935030MH1935029	8	0.0219	0.042880	0.13	0.053413	0.15	0.093365	0.19	0.053413	0.15		
CLMH1935031MH1935030			2000		Existing	assumed Mannings N	MH1935031	MH1935030		T14316	IRWD	PVC	{23E4E9F7-3DDE-4428-B660-EF401D2A81AE}	CLMH1935031MH1935030	672.71	666.03	0.666666667	MH1935031	MH1935030		315	CLMH1935031MH1935030	8	0.0212	0.009227	0.06	0.011494	0.07	0.020090	0.09	0.011494	0.07		
CLMH1935032MH1935031			2000		Existing	assumed Mannings N	MH1935032	MH1935031		T14316	IRWD	PVC	{97AA2022-C5D5-474E-983F-3FE38593C489}	CLMH1935032MH1935031	682.90	672.97	0.666666667	MH1935032	MH1935031		231	CLMH1935032MH1935031	8	0.0431	0.008396	0.05	0.010459	0.06	0.018282	0.07	0.010459	0.06		
CLMH1935033MH1935032			1987		Existing	assumed Mannings N	MH1935033	MH1935032		A0120R	IRWD	VCP	{8B2B4B95-0990-4512-AA8E-F8B070A43318}	CLMH1935033MH1935032	618.42	614.32	1.250000000	MH1935033	MH1935032		117	CLMH1935033MH1935032	15	0.0352	0.321919	0.14	0.395910	0.15	0.693035	0.20	0.530214	0.18		
CLMH1935034MH1935035	CAL16		1988		Existing	assumed Mannings N	MH1935034	MH1935035		A0120R	IRWD	VCP	{8F067533-D0B0-45EE-92AF-9CF5D2CF38B6}	CLMH1935034MH1935035	614.21	611.03	1.250000000	MH1935034	MH1935035		15	CLMH1935034MH1935035	15	0.0133	0.321907	0.17	0.395870	0.19	0.693001	0.26	0.530188	0.22		
CLMH1935035MH1935036			1987		Existing	assumed Mannings N	MH1935035	MH1935036		A0120R	IRWD	VCP	{49116734-0CCE-49D4-BF77-0602EF1727F0}	CLMH1935035MH1935036	610.96	607.14	1.250000000	MH1935035	MH1935036		287	CLMH1935035MH1935036	15	0.0133	0.321897	0.17	0.395833	0.19	0.692959	0.26	0.530160	0.22		
CLMH1935036MH1935037			1987		Existing	assumed Mannings N	MH1935036	MH1935037		A01252	IRWD	VCP	{059FDED2-355E-4B4B-9AA0-B21FB032E6D2}	CLMH1935036MH1935037	606.85	602.65	1.250000000	MH1935036	MH1935037		200	CLMH1935036MH1935037	15	0.0210	0.322876	0.16	0.396733	0.17	0.694575	0.23	0.531091	0.20		
CLMH1935037MH1935038			1980		Existing	assumed Mannings N	MH1935037	MH1935038		A01252	IRWD	VCP	{DDF2555C4-BFB7-4046-A568-A6DE888F2995}	CLMH1935037MH1935038	602.54	600.26	1.250000000	MH1935037	MH1935038		49	CLMH1935037MH1935038	15	0.0466	0.322876	0.13	0.396733	0.15	0.694573	0.19	0.531090	0.17		
CLMH1935038MH1935039			1981		Existing	assumed Mannings N	MH1935038	MH1935039		A01120	IRWD	VCP	{4F7A28E1-FA98-4948-8C07-C726BF6DFDCD}	CLMH1935038MH1935039	600.26	586.90	1.250000000	MH1935038	MH1935039		338	CLMH1935038MH1935039	15	0.0396	0.322875	0.13	0.396721	0.15	0.694523	0.19	0.531068	0.17		
CLMH1935039MH1935040			1981		Existing	assumed Mannings N	MH1935039	MH1935040		A01120	IRWD	VCP	{E1AD4C43-BD8D-4CCE-8F1E-EB50825DE785}	CLMH1935039MH1935040	586.90	573.90	1.250000000	MH1935039	MH1935040		262	CLMH1935039MH1935040	15	0.0496	0.327800	0.14	0.401592	0.15	0.703119	0.20	0.535996	0.17		
CLMH1935040MH1935041			1981		Existing	assumed Mannings N	MH1935040	MH1935041		A01120	IRWD	VCP	{89DC612F-5912-46C1-A0A1-6D6F7FD4B037}	CLMH1935040MH1935041	573.90	563.65	1.250000000	MH1935040	MH1935041		248	CLMH1935040MH1935041	15	0.0413	0.327469	0.14	0.401871	0.16	0.703559	0.21	0.536290	0.18		
CLMH1935041MH1935042			1981		Existing	assumed Mannings N	MH1935041	MH1935042		A01120	IRWD	VCP	{FDC84ED2-37EB-4164-AE7E-F2C3E4988F6F}	CLMH1935041MH1935042	563.65	557.70	1.250000000	MH1935041	MH1935042		160	CLMH1935041MH1935042	15	0.0372	0.373012	0.15	0.447384	0.16	0.783244	0.21	0.581820	0.18		
CLMH1935042MH1935043			1986		Existing	assumed Mannings N	MH1935042	MH1935043		A01126	IRWD	VCP	{009C60B2-8CD1-4875-9DE1-CD758EDFA536}	CLMH1935042MH1935043	557.50	556.59	1.250000000	MH1935042	MH1935043		44	CLMH1935042MH1935043	15	0.0207	0.376031	0.17	0.450411	0.19	0.788541	0.24	0.584850	0.21		
CLMH1935043MH1935044			1986		Existing	assumed Mannings N	MH1935043	MH1935044		A01126	IRWD	VCP	{93694EFF-8DA3-4B9C-9899-B92B2ED7ADF7}	CLMH1935043MH1935044	556.40	548.97	1.250000000	MH1935043	MH1935044		147	CLMH1935043MH1935044	15	0.0158	0.376029	0.17	0.450372	0.18	0.788499	0.24	0.584817	0.21		
CLMH1935044MH1935045			1987		Existing	assumed Mannings N	MH1935044	MH1935045		A0120R	IRWD	VCP	{16EA6089-5B96-4D5E-8B6F-6916EA6882BB}	CLMH1935044MH1935045	619.19	615.78	0.666666667	MH1935044	MH1935045		220	CLMH1935044MH1935045	8	0.0155	0.000299	0.07	0.000373	0.07	0.000653	0.09	0.000373	0.07		
CLMH1935045MH1935046			1982		Existing	assumed Mannings N	MH1935045	MH1935046		T11397	IRWD	VCP	{01F8DCED-7AD0-4E9F-904E-603F5311E4A4}	CLMH1935045MH1935046	615.78	613.33	0.666666667	MH1935045	MH1935046		61	CLMH1935045MH1935046	8	0.0152	0.031143	0.12	0.031476	0.13	0.060611	0.17	0.034676	0.13		
CLMH1935046MH1935047			1982		Existing	assumed Mannings N	MH1935046	MH1935047		T11397	IRWD	VCP	{5C66CF77-DDAC-460D-B308-E40071D5697D}	CLMH1935046MH1935047	613.33	609.80	0.666666667	MH1935046	MH1935047		170	CLMH1935046MH1935047	8	0.0208	0.031143	0.11	0.034676	0.12	0.060611	0.15	0.034676	0.12		
CLMH1935047MH1935048			1982		Existing	assumed Mannings N	MH1935047	MH1935048		T11397	IRWD	VCP	{687A90A8-FD63-4893-8F4A-4F8C7ED685E17}	CLMH1935047MH1935048	609.80	599.79	0.666666667	MH1935047	MH1935048		151	CLMH1935047MH1935048	8	0.0665	0.050890	0.12	0.056883	0.13	0.099425	0.17	0.056883	0.13		
CLMH1935048MH1935049			1982		Existing	assumed Mannings N	MH1935048	MH1935049		A01252	IRWD	VCP	{A5FA3990-6D6C-4FD1-ACDA-80D7D7E4536C}	CLMH1935048MH1935049	599.79	598.10	0.666666667	MH1935048	MH1935049		51	CLMH1935048MH1935049	8	0.0332	0.052740	0.15	0.058962	0.16	0.103064	0.22	0.058962	0.16		
CLMH1935049MH1935151			1981		Existing	assumed Mannings N	MH1935049	MH1935151		A01120	IRWD	VCP	{35393213-766C-4B7D-AB74-5E128312C33C}	CLMH1935049MH1935151	598.10	594.75	0.666666667	MH1935049	MH1935151		253	CLMH1935049MH1935151	8	0.0133	0.054543	0.15	0.060989	0.16	0.106608	0.20	0.060989	0.16		
CLMH1935050MH1936020			1999		Existing	assumed Mannings N	MH1935050	MH1936020		T13344	IRWD	VCP	{A57E07E4-32C4-4311-A4F4-C4367E692A9F}	CLMH1935050MH1936020	693.50	689.91	0.666666667	MH1935050	MH1936020		153	CLMH1935050MH1936020	8	0.0146	0.000638	0.03	0.000638	0.03	0.001117	0.04	0.000638	0.03		
CLMH1935053MH1939052			1999		Existing	assumed Mannings N	MH1935053	MH1939052		T13344	IRWD	VCP	{85A5EAC7-99DC-457F-953B-B7827E6FC2}	CLMH1935053MH1939052	687.08	685.51	0.666666667	MH1935053	MH1939052		136	CLMH1935053MH1939052	8	0.0115	0.003347	0.05	0.003347	0.05	0.005850	0.06	0.003347	0.05		
CLMH1935054MH1935053			1999		Existing	assumed Mannings N	MH1935054	MH1935053		T13344	IRWD	VCP	{2929F0A0-565B-4993-8B4C-4417A1EE69DB}	CLMH1935054MH1935053	688.65	687.17	0.666666667	MH1935054	MH1935053		74	CLMH1935054MH1935053	8	0.0200	0.003347	0.04	0.003347	0.04	0.005850	0.05	0.003347	0.04		
CLMH1935056MH1935005			2000		Existing	assumed Mannings N	MH1935056	MH1935005		T14316	IRWD	PVC	{D1704D37-90B4-45FA-BEBD-04822614D498}	CLMH1935056MH1935005	648.53	647.66	0.666666667	MH1935056	MH1935005		83	CLMH1935056MH1935005	8	0.0053	0.001177	0.03	0.001591	0.05	0.002561	0.11	0.001466	0.09		
CLMH1935057MH1935056			2000		Existing	assumed Mannings N	MH1935057	MH1935056		T14316	IRWD	PVC	{C23C9FB-4006-4AEF-81F4-F5AF5063BF22}	CLMH1935057MH1935056	649.46	648.65	0.666666667	MH1935057	MH1935056		204	CLMH1935057MH1935056	8	0.0040	0.001177	0.03	0.001466	0.04	0.002561	0.05	0.001466	0.04		
CLMH1935058MH1935057			2000		Existing	assumed Mannings N	MH1935058	MH1935057		T14316	IRWD	PVC	{9C3D7D93-3C82-4FDA-B35B-A5E21FF8F13D}	CLMH1935058MH1935057	653.92	649.57	0.666666667	MH1935058	MH1935057		262	CLMH1935058MH1935057	8	0.0166	0.001177	0.02	0.001466	0.03	0.002561	0.04	0.001466	0.03		
CLMH1935059MH1935058			2000		Existing	assumed Mannings N	MH1935059	MH1935058		T14316	IRWD	PVC	{0760FF01-99A5-40B9-9189-A4AD69CB6151}	CLMH1935059MH1935058	655.98	654.07	0.666666667	MH1935059	MH1935058		93	CLMH1935059MH1935058	8	0.0086	0.000138	0.01	0.000172	0.01	0.000301	0.01	0.000172	0.01		
CLMH1935148MH1935042			1980		Existing	assumed Mannings N	MH1935148	MH1935042		A01252	IRWD	PVC	{D4FB5960-9F05-4E16-B549-62F68BC24A50}	CLMH1935148MH1935042	562.79	557.70	0.666666667	MH1935148	MH1935042		45	CLMH1935148MH1935042	8	0.1132	0.005037	0.03	0.005664	0.04	0.009898	0.10	0.005664	0.06		
CLMH1935151MH208W150			1981		Existing	assumed Mannings N	MH1935151	MH208W150		A01120	IRWD	VCP	{C3EA8BFC5-C43A-4776-9F49-E5237E6B27A0}	CLMH1935151MH208W150	594.75	578.09	0.666666667	MH1935151	MH208W150		249	CLMH1935151MH208W150	8	0.0670	0.058151	0.15	0.065046	0.15	0.113699	0.20	0.065046	0.15		
CLMH193W001MH1755014			2013		Existing	assumed Mannings N	MH193W001	MH1755014		T17532	IRWD	PVC	{048C28B7-942D-4762-B865-BE0C4C7D64BC}	CLMH193W001MH1755014	630.28	628.03	0.666666667	MH193W001	MH1755014		68	CLMH193W001MH1755014	8	0.0131	0.007662	0.06	0.009190	0.07	0.010904	0.07	0.050562	0.16		
CLMH193W002MH193W004			2014		Existing	assumed Mannings N	MH193W002	MH193W004		T17531	IRWD	PVC	{A9624468-88D9-4F5E-830B-BE5583B37B2F}	CLMH193W002MH193W004	634.26	633.06	0.666666667	MH193W002	MH193W004		208	CLMH193W002MH193W004	8	0.0058	0.003784	0.05	0.004544	0.06	0.005390	0.06	0.022107	0.13		
CLMH193W003MH193W001			2014		Existing	assumed Mannings N	MH193W003	MH193W001		T17531	IRWD	PVC	{AF6E5B0B-58DA-4533-8346-D466D4CB8B0}	CLMH193W003MH193W001	632.24	630.38	0.666666667	MH193W003	MH193W001		338	CLMH193W003MH193W001	8	0.0055	0.006402	0.07	0.007677	0.08	0.009108	0.08	0.046280	0.18		
CLMH193W004MH193W003			2014		Existing	assumed Mannings N	MH193W004	MH193W003		T17531	IRWD	PVC	{AAE49921-F414-4F7A-9796-F56BD4CC4E2D}	CLMH193W004MH193W003	632.86	632.34	0.666666667	MH193W004	MH193W003		93	CLMH193W004MH193W003	8	0.0055	0.006405	0.07	0.007678	0.08	0.009108	0.08	0.046280	0.18		
CLMH193W005MH193W002			2014		Existing	assumed Mannings N	MH193W005	MH193W002		T17531	IRWD	PVC	{B38A1255-35F5-49F6-A969-181ED59E2547}	CLMH193W005MH193W002	635.01	634.36	0.666666667	MH193W005	MH193W002		162	CLMH193W005MH193W002	8	0.0040	0.001261	0.03	0.001515	0.03	0.001797	0.04	0.009881	0.09		
CLMH193W006MH193W126			2013		Existing	assumed Mannings N	MH193W006	MH193W126		16466	IRWD	PVC	{F70A0247-A8AF-47EC-A473-04A81E06C02C}	CLMH193W006MH193W126	682.70	682.61	0.666666667	MH193W006	MH193W126		8	0.0032	0.023828	0.14	0.023827	0.14	0.041666	0.18	0.090483	0.27		
CLMH193W007MH193W127			1990		Existing	assumed Mannings N	MH193W007	MH193W127		A007113A	IRWD	VCP	{C8675797F9-F65B-4807-A8D7-52F2509F8F1A}	CLMH193W007MH193W127	570.91	567.84	1.250000000	MH193W007	MH193W127		31	CLMH193W007MH193W127	8	0.0077	0.888685	0.50	0.141284	0.55	0.541971	0.61	2.445330	0.60		
CLMH193W008MH193W009			1990		Existing	assumed Mannings N	MH193W008	MH193W009		A01214	IRWD	VCP	{52143F81-7F7A-4619-9109-B5D10CE8A45B}	CLMH193W008MH193W009	591.23	568.84	0.833333333	MH193W008	MH193W009		424	CLMH193W008MH193W009	10	0.0528	0.060732	0.09	0.060732	0.09	0.106094	0.12	0.113171	0.13		
CLMH193W009MH194N118			1990		Existing	assumed Mannings N	MH193W009	MH194N118		A01214	IRWD	VCP	{3CF03890-80F6-491A-A28E-5C0B7D754307}	CLMH193W009MH194N118	568.75	553.28	0.833333333	MH193W009	MH194N118		223	CLMH193W009MH194N118	10	0.0694	0.062289	0.09	0.062289	0.09	0.108816	0.12	0.114200	0.12		
CLMH193W010MH193W047			2010		Existing	assumed Mannings N	MH193W010	MH193W047		T17531	IRWD	PVC	{86DA66F2-E8D3-4ADE-87C3-DB57682658B}	CLMH193W010MH193W047	654.43	648.96	0.666666667	MH193W010	MH193W047		281	CLMH193W010MH193W047	8	0.0260	0.001363	0.02	0.001619	0.03	0.002171	0.03	0.022377	0.09		
CLMH193W011MH193W098			2000		Existing	assumed Mannings N	MH193W011	MH193W098		T14316	IRWD	PVC	{6354BA86-9EDA-4772-96D1-C17D8FB467AB}	CLMH193W011MH193W098	628.97	628.28	0.833333333	MH193W011	MH193W098		29	CLMH193W011MH193W098	10	0.0238	0.028158	0.08	0.028158	0.08	0.049218	0.10	0.028158	0.08		
CLMH193W012MH193W011			2016		Existing	assumed Mannings N	MH193W012	MH193W011		T14316	IRWD	PVC	{562E8D55-57F8-4597-BC93-F3C959B513F6}	CLMH193W012MH193W011	642.21	629.15	0.833333333	MH193W012	MH193W011		236	CLMH193W012MH193W011	10	0.0555	0.028158	0.07	0.028158	0.07	0.049218	0.08	0.028158	0.07		
CLMH193W013MH193W012			2000		Existing	assumed Mannings N	MH193W013	MH193W012		T14316	IRWD	PVC	{822A7551-3283-4B1F-B08C-2023566C3AFA}	CLMH193W013MH193W012	652.69	642.30	0.833333333	MH193W013	MH193W012		230	CLMH193W013MH193W012	10	0.0453	0.027902	0.07	0.027902	0.07	0.048771	0.09	0.027902	0.07		
CLMH193W014MH193W013			2000		Existing	assumed Mannings N	MH193W014	MH193W013		T14316	IRWD	PVC	{C166853A-A650-4706-81BD-8F07C1CE5117}	CLMH193W014MH193W013	653.63	652.86	0.666666667	MH193W014	MH193W013		184	CLMH193W014MH193W013	8	0.0042	0.022533	0.04	0.022533	0.04	0.041134	0.19	0.022533	0.14		
CLMH193W015MH193W014			2000		Existing	assumed Mannings N	MH193W015	MH193W014		T14316	IRWD	PVC	{92A17133-9CB8-4C34-BEF8-53EFBFDFF83D}	CLMH193W015MH193W014	657.03	653.72	0.666666667	MH193W015	MH193W014		275	CLMH193W015MH193W014	8	0.0120	0.023533	0.11	0.023533	0.11	0.041134	0.15	0.023533	0.11		
CLMH193W016MH193W015			2000		Existing	assumed Mannings N	MH193W016	MH193W015		T14316	IRWD	PVC	{5EF583D1-EDAD-460F-864B-A63EF585BDE0D}	CLMH193W016MH193W015	658.13	657.13	0.666666667	MH193W016	MH193W015		132	CLMH193W016MH193W015	8	0.0076	0.023533	0.13	0.023533	0.13	0.041134	0.17	0.023533	0.13		
CLMH193W017MH193W016			2000		Existing	assumed Mannings N	MH193W017	MH193W016		T14316	IRWD	PVC	{6EA9074D-4674-4229-8198-4FFD1FAB94F0}	CLMH193W017MH193W016	664.73	658.22	0.666666667	MH193W017	MH193W016		281	CLMH193W017MH193W016	8	0.0232	0.023533	0.10	0.023533	0.10	0.041134	0.13	0.023533	0.10		
CLMH193W018MH193W017			2000		Existing	assumed Mannings N	MH193W018	MH193W017		T14316	IRWD	PVC	{3462F248-E748-4BD9-A434-E8B294AC605E}	CLMH193W018MH193W017	669.90	664.84	0.666666667	MH193W018	MH193W017		244	CLMH193W018MH193W017	8	0.0204	0.023533	0.10	0.023533	0.10	0.041134	0.13	0.023533	0.10		
CLMH193W019MH193W018			2000		Existing	assumed Mannings N	MH193W019	MH193W018		T14316	IRWD	PVC	{8551DC40-8E2B-4F4D-B7D9-8E09D9181282}	CLMH193W019MH193W018	675.61	670.00	0.666666667	MH193W019	MH193W018		281	CLMH193W019MH193W018	8	0.0199	0.021335	0.10	0.021335	0.10	0.037294	0.13	0.021335	0.10		
CLMH193W020MH193W019			1999		Existing	assumed Mannings N	MH193W020	MH193W019		T13344	IRWD	VCP	{403CF816-954E-4BA6-940B-A6322A4225B2}	CLMH193W020MH193W019	680.03	675.71	0.666666667	MH193W020	MH193W019		223	CLMH193W020MH193W019	8	0.0194	0.018883	0.09	0.033006	0.12	0.018883	0.09				
CLMH193W021MH193W020			1999		Existing	assumed Mannings N	MH193W021	MH193W020		T13344	IRWD	VCP	{7EE818E-86E8-4E41-8094-57CF52143AD5}	CLMH193W021MH193W020	680.51	680.15	0.666666667	MH193W021	MH193W020		66	CLMH193W021MH193W020	8	0.0055	0.001712	0.04	0.001712	0.04	0.002991	0.05	0.001712	0.04		
CLMH193W022MH193W021			1999		Existing	assumed Mannings N	MH193W022	MH193W021		T13344	IRWD	VCP	{8D90B8AD-A347-4253-905B-5162D57AE5CF}	CLMH193W022MH193W021	681.33	680.60	0.666666667	MH193W022	MH193W021		178	CLMH193W022MH193W021	8	0.0041	0.001712	0.04	0.001712	0.04	0.002991	0.05	0.001712	0.04		
CLMH193W023MH193W022			1999		Existing

CLMH194E040MH194E039		1985		Existing	assumed Mannings N	MH194E040	MH194E039		A01321	IRWD	VCP	{6C9636DC-0F36-4F26-8E87-C7982AC37E3F}	CLMH194E040MH194E039	544.46	541.65	0.666666667	MH194E040	MH194E039			195	CLMH194E040MH194E039	8	0.0269	0.018987	0.08	0.021304	0.09	0.037242	0.12	0.021304	0.09		
CLMH194E041MH194E040		1985		Existing	assumed Mannings N	MH194E041	MH194E040		A01321	IRWD	VCP	{471A38CA-F33B-4209-899F-6DD11446C232}	CLMH194E041MH194E040	546.26	544.55	0.666666667	MH194E041	MH194E040			195	CLMH194E041MH194E040	8	0.0088	0.013258	0.09	0.014909	0.10	0.026063	0.13	0.014909	0.10		
CLMH194E042MH194E041		1985		Existing	assumed Mannings N	MH194E042	MH194E041		A01321	IRWD	VCP	{9569BB11-633D-4CD7-B8F5-495A97E41592}	CLMH194E042MH194E041	547.59	546.35	0.666666667	MH194E042	MH194E041			148	CLMH194E042MH194E041	8	0.0084	0.009017	0.08	0.010140	0.08	0.017729	0.11	0.010140	0.08		
CLMH194E043MH194E042		1985		Existing	assumed Mannings N	MH194E043	MH194E042		A01321	IRWD	VCP	{CF992CFE-AAC7-4869-85ED-B70BC0DB1234}	CLMH194E043MH194E042	549.08	547.79	0.666666667	MH194E043	MH194E042			68	CLMH194E043MH194E042	8	0.0191	0.004146	0.04	0.004662	0.05	0.008151	0.06	0.004662	0.05		
CLMH194E044MH194E043		1985		Existing	assumed Mannings N	MH194E044	MH194E043		A01321	IRWD	VCP	{E9D41809-F212-4FB2-82F5-8FBBCDB6167C}	CLMH194E044MH194E043	550.40	549.17	0.666666667	MH194E044	MH194E043			66	CLMH194E044MH194E043	8	0.0186	0.004146	0.05	0.004662	0.05	0.008151	0.06	0.004662	0.05		
CLMH194E045MH194E044		1985		Existing	assumed Mannings N	MH194E045	MH194E044		A01321	IRWD	VCP	{CA7E810F-5034-4F12-9592-68281353097DD}	CLMH194E045MH194E044	557.59	550.59	0.666666667	MH194E045	MH194E044			218	CLMH194E045MH194E044	8	0.0321	0.004146	0.04	0.004662	0.04	0.008151	0.05	0.004662	0.04		
CLMH194E046MH194E040		1985		Existing	assumed Mannings N	MH194E046	MH194E040		A01321	IRWD	VCP	{6929E741-A15B-4FE7-9FBB-D16FA0E508DC}	CLMH194E046MH194E040	557.53	544.65	0.666666667	MH194E046	MH194E040			247	CLMH194E046MH194E040	8	0.0523	0.005729	0.04	0.006395	0.04	0.011179	0.06	0.006395	0.04		
CLMH194E047MH194E046		1985		Existing	assumed Mannings N	MH194E047	MH194E046		A01321	IRWD	VCP	{0C2F639F-7B7B-457E-8FC4-D4A7BE52401E}	CLMH194E047MH194E046	565.40	557.63	0.666666667	MH194E047	MH194E046			105	CLMH194E047MH194E046	8	0.0739	0.001873	0.02	0.002107	0.02	0.003683	0.03	0.002107	0.02		
CLMH194E048MH194E038		1985		Existing	assumed Mannings N	MH194E048	MH194E038		A01309	IRWD	VCP	{F59C53B8-C7E0-4C66-86DC-B1518SE809B3}	CLMH194E048MH194E038	529.57	520.70	0.666666667	MH194E048	MH194E038			158	CLMH194E048MH194E038	8	0.0561	0.028505	0.09	0.032056	0.09	0.056036	0.12	0.070194	0.13		
CLMH194E049MH194E048		1985		Existing	assumed Mannings N	MH194E049	MH194E048		T12304	IRWD	VCP	{523363E8-CD33-4E10-B402-635B4A479795}	CLMH194E049MH194E048	547.26	529.80	0.666666667	MH194E049	MH194E048			291	CLMH194E049MH194E048	8	0.0600	0.028505	0.09	0.032056	0.09	0.056036	0.12	0.070195	0.13		
CLMH194E050MH194E049		1986		Existing	assumed Mannings N	MH194E050	MH194E049		T12304	IRWD	VCP	{34874639-BAD3-43BC-82BA-2241D07F198F}	CLMH194E050MH194E049	548.86	547.70	0.666666667	MH194E050	MH194E049			177	CLMH194E050MH194E049	8	0.0066	0.028506	0.14	0.032056	0.15	0.056036	0.20	0.032056	0.15		
CLMH194E051MH194E050		1986		Existing	assumed Mannings N	MH194E051	MH194E050		T12304	IRWD	VCP	{CBC1C934-77AB-4557-9F8A-904752CA59A3}	CLMH194E051MH194E050	551.09	548.96	0.666666667	MH194E051	MH194E050			325	CLMH194E051MH194E050	8	0.0066	0.028507	0.14	0.032057	0.15	0.056036	0.20	0.032057	0.15		
CLMH194E052MH194E051		1986		Existing	assumed Mannings N	MH194E052	MH194E051		A01310	IRWD	VCP	{38909FDD-F401-4FD2-A37C-0C6EA9038088}	CLMH194E052MH194E051	552.40	551.29	0.666666667	MH194E052	MH194E051			78	CLMH194E052MH194E051	8	0.0162	0.016446	0.09	0.018494	0.10	0.032325	0.13	0.018494	0.10		
CLMH194E053MH194E052		1986		Existing	assumed Mannings N	MH194E053	MH194E052		A01310	IRWD	VCP	{E908C1D5-DDBD-479E-8668-6982A1AC4083}	CLMH194E053MH194E052	554.08	552.60	0.666666667	MH194E053	MH194E052			209	CLMH194E053MH194E052	8	0.0071	0.004053	0.05	0.004557	0.06	0.007967	0.08	0.004557	0.06		
CLMH194E054MH194E053		1986		Existing	assumed Mannings N	MH194E054	MH194E053		A01310	IRWD	VCP	{5EA719DF-11FD-4179-9F4A-5026B539F10C}	CLMH194E054MH194E053	554.88	554.17	0.666666667	MH194E054	MH194E053			139	CLMH194E054MH194E053	8	0.0051	0.004053	0.06	0.004557	0.06	0.007967	0.08	0.004557	0.06		
CLMH194E055MH194E054		1986		Existing	assumed Mannings N	MH194E055	MH194E054		A01310	IRWD	VCP	{18B83222-30BA-4ABA-891D-B34A0E0A548F}	CLMH194E055MH194E054	555.46	554.97	0.666666667	MH194E055	MH194E054			98	CLMH194E055MH194E054	8	0.0050	0.004053	0.06	0.004557	0.06	0.007967	0.08	0.004557	0.06		
CLMH194E056MH194E055		1986		Existing	assumed Mannings N	MH194E056	MH194E055		A01310	IRWD	VCP	{E012F2A4-4B45-49F3-9FE4-DA2211CC0F7D}	CLMH194E056MH194E055	557.09	555.66	0.666666667	MH194E056	MH194E055			71	CLMH194E056MH194E055	8	0.0201	0.000540	0.01	0.000607	0.02	0.001060	0.02	0.000607	0.02		
CLMH194E057MH194E052		1986		Existing	assumed Mannings N	MH194E057	MH194E052		A01310	IRWD	VCP	{C91FB8E6-F4F2-4887-9959-E94AA8351FC1}	CLMH194E057MH194E052	552.85	552.60	0.666666667	MH194E057	MH194E052			52	CLMH194E057MH194E052	8	0.0048	0.012394	0.10	0.013936	0.11	0.024358	0.14	0.013936	0.11		
CLMH194E058MH194E057		1986		Existing	assumed Mannings N	MH194E058	MH194E057		A01310	IRWD	VCP	{21CB08D3-3636-4252-A6E6-B887F5B3A901}	CLMH194E058MH194E057	553.80	553.05	0.666666667	MH194E058	MH194E057			111	CLMH194E058MH194E057	8	0.0067	0.005576	0.06	0.006271	0.07	0.010960	0.09	0.006271	0.07		
CLMH194E059MH194E058		1986		Existing	assumed Mannings N	MH194E059	MH194E058		A01310	IRWD	PVC	{B31D3EFB-10B0-48AE-87F2-83E2105290CA}	CLMH194E059MH194E058	554.89	554.01	0.666666667	MH194E059	MH194E058			154	CLMH194E059MH194E058	8	0.0057	0.005576	0.06	0.006271	0.07	0.010960	0.09	0.006271	0.07		
CLMH194E060MH194E059		1986		Existing	assumed Mannings N	MH194E060	MH194E059		A01310	IRWD	VCP	{76242EF1-E9C4-4713-8911-A6D2229D67E}	CLMH194E060MH194E059	559.33	555.09	0.666666667	MH194E060	MH194E059			212	CLMH194E060MH194E059	8	0.0200	0.002109	0.03	0.002372	0.03	0.004145	0.04	0.002372	0.03		
CLMH194E062MH194E064		1986		Existing	assumed Mannings N	MH194E062	MH194E064		T12304	IRWD	VCP	{4E429DE4-526B-4276-9FC3-ACE2D7B783E5}	CLMH194E062MH194E064	556.95	556.05	0.666666667	MH194E062	MH194E064			93	CLMH194E062MH194E064	8	0.0051	0.004404	0.06	0.004952	0.06	0.008655	0.08	0.004952	0.06		
CLMH194E063MH194E062		1986		Existing	assumed Mannings N	MH194E063	MH194E062		T12304	IRWD	VCP	{2493DF09-3E1A-469A-9A7A-07C261550068}	CLMH194E063MH194E062	558.71	557.04	0.666666667	MH194E063	MH194E062			82	CLMH194E063MH194E062	8	0.0201	0.000655	0.02	0.000737	0.02	0.001288	0.02	0.000737	0.02		
CLMH194E065MH194E062		1986		Existing	assumed Mannings N	MH194E065	MH194E062		T12304	IRWD	VCP	{825CCF8B-0B7A-4CF0-9CC5-9BB161C1AB5B}	CLMH194E065MH194E062	557.91	557.04	0.666666667	MH194E065	MH194E062			76	CLMH194E065MH194E062	8	0.0114	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH194E065MH194E066		1986		Existing	assumed Mannings N	MH194E065	MH194E066		T12304	IRWD	VCP	{61BDE2FA-6E8B-4650-AE76-78AAC9B23A361}	CLMH194E065MH194E066	557.91	556.48	0.666666667	MH194E065	MH194E066			292	CLMH194E065MH194E066	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH194E068MH194N097		1986		Existing	assumed Mannings N	MH194E068	MH194N097		A01322	IRWD	VCP	{8C4E3E58-1B46-450A-B0D4-9C412CF090C1}	CLMH194E068MH194N097	520.67	517.77	0.666666667	MH194E068	MH194N097			270	CLMH194E068MH194N097	8	0.0107	0.007285	0.07	0.008191	0.07	0.014319	0.10	0.008191	0.07		
CLMH194E069MH194E068		1986		Existing	assumed Mannings N	MH194E069	MH194E068		T10931	IRWD	VCP	{75E83D68-8891-493F-8480-EE6EACAFA527}	CLMH194E069MH194E068	524.29	520.67	0.500000000	MH194E069	MH194E068			47	CLMH194E069MH194E068	6	0.0770	0.002764	0.06	0.003109	0.07	0.005433	0.09	0.003109	0.07		
CLMH194E070MH194E068		1986		Existing	assumed Mannings N	MH194E070	MH194E068		A01322	IRWD	VCP	{79AFCFBF-4614-43D4-BCB7-13866484E59}	CLMH194E070MH194E068	522.71	520.67	0.666666667	MH194E070	MH194E068			184	CLMH194E070MH194E068	8	0.0111	0.004520	0.06	0.005083	0.06	0.008886	0.08	0.005083	0.06		
CLMH194E071MH194E070		1986		Existing	assumed Mannings N	MH194E071	MH194E070		A01322	IRWD	VCP	{02093274-BF8C-4017-B41E-567AF9F4910C}	CLMH194E071MH194E070	523.53	522.71	0.666666667	MH194E071	MH194E070			93	CLMH194E071MH194E070	8	0.0134	0.003279	0.05	0.003688	0.05	0.006446	0.07	0.003688	0.05		
CLMH194E072MH194E070		1986		Existing	assumed Mannings N	MH194E072	MH194E070		A01322	IRWD	VCP	{09F404FE-EE36-42D7-94A9-FC64BAC76EB1}	CLMH194E072MH194E070	524.73	522.71	0.666666667	MH194E072	MH194E070			91	CLMH194E072MH194E070	8	0.0222	0.001241	0.04	0.001395	0.04	0.002440	0.05	0.001395	0.04		
CLMH194E073MH194E072		1986		Existing	assumed Mannings N	MH194E073	MH194E072		T10931	IRWD	VCP	{44E9848E-A177-44BE-A120-34CB78AD60EC}	CLMH194E073MH194E072	526.20	524.92	0.500000000	MH194E073	MH194E072			6	CLMH194E073MH194E072	6	0.0192	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH194E074MH194E073		1985		Existing	assumed Mannings N	MH194E074	MH194E073		T11440	IRWD	ABS	{4817172A-D632-422C-8F68-F3375A06494A}	CLMH194E074MH194E073	506.60	505.60	0.666666667	MH194E074	MH194E073			93	CLMH194E074MH194E073	8	0.0108	0.022888	0.12	0.025685	0.12	0.044895	0.16	0.025685	0.12		
CLMH194E075MH194E074		1983		Existing	assumed Mannings N	MH194E075	MH194E074		T11440	IRWD	ABS	{534F1201-FAAD-4C9F-97B7-F692D52616CC}	CLMH194E075MH194E074	510.10	506.70	0.666666667	MH194E075	MH194E074			63	CLMH194E075MH194E074	8	0.0540	0.004264	0.04	0.004794	0.04	0.008379	0.05	0.004794	0.04		
CLMH194E076MH194S077		1986		Existing	assumed Mannings N	MH194S076	MH194S077		T11440	IRWD	ABS	{4D601833-2935-4238-A5CD-F2D3041893F4}	CLMH194E076MH194S077	505.54	502.26	0.666666667	MH194E076	MH194S077			8	CLMH194E076MH194S077	8	0.0350	0.022888	0.09	0.025685	0.09	0.044895	0.12	0.025685	0.09		
CLMH194E078MH194E074		1983		Existing	assumed Mannings N	MH194E078	MH194E074		T11440	IRWD	ABS	{F3F2E729-E0F2-4A92-B135-473E7E428558}	CLMH194E078MH194E074	510.67	506.79	0.666666667	MH194E078	MH194E074			179	CLMH194E078MH194E074	8	0.0217	0.018624	0.09	0.020891	0.09	0.036516	0.12	0.020891	0.09		
CLMH194E079MH194E078		1983		Existing	assumed Mannings N	MH194E079	MH194E078		T11440	IRWD	ABS	{41912ZA1-D14B-4293-AC89-423D0142SE44}	CLMH194E079MH194E078	515.58	510.76	0.666666667	MH194E079	MH194E078			129	CLMH194E079MH194E078	8	0.0375	0.009816	0.06	0.010986	0.06	0.019203	0.08	0.010986	0.06		
CLMH194E080MH194E079		1983		Existing	assumed Mannings N	MH194E080	MH194E079		T11440	IRWD	ABS	{925BAA18-584D-4D8F-BA28-608DE2733455}	CLMH194E080MH194E079	520.57	515.67	0.666666667	MH194E080	MH194E079			226	CLMH194E080MH194E079	8	0.0226	0.009816	0.06	0.010986	0.07	0.019203	0.09	0.010986	0.07		
CLMH194E081MH194E080		1983		Existing	assumed Mannings N	MH194E081	MH194E080		T11440	IRWD	ABS	{7D4B035F-09A1-42AD-B05F-55B4B026FC44}	CLMH194E081MH194E080	522.28	520.60	0.666666667	MH194E081	MH194E080			233	CLMH194E081MH194E080	8	0.0072	0.000000	0.01	0.000000	0.01	0.000000	0.02	0.000000	0.01		
CLMH194E082MH194E081		1983		Existing	assumed Mannings N	MH194E082	MH194E081		T11440	IRWD	ABS	{CD72B6F9-4579-4531-A30C-B037A5F2B671}	CLMH194E082MH194E081	522.08	515.59	0.666666667	MH194E082	MH194E081			138	CLMH194E082MH194E081	8	0.0470	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH194E083MH194E082		1983		Existing	assumed Mannings N	MH194E083	MH194E082		T11440	IRWD	ABS	{D440A1A7-8E8B-46AF-9459DF4854E51}	CLMH194E083MH194E082	515.48	513.21	0.666666667	MH194E083	MH194E082			100	CLMH194E083MH194E082	8	0.0227	0.007901	0.06	0.008956	0.06	0.015654	0.08	0.008956	0.06		
CLMH194E083MH194E084		1983		Existing	assumed Mannings N	MH194E083	MH194E084		T11440	IRWD	ABS	{EFBCDEED-B95E-48BE-BAD2-31105A74C9B8}	CLMH194E083MH194E084	513.01	505.00	0.666666667	MH194E083	MH194E084			174	CLMH194E083MH194E084	8	0.0460	0.009979	0.06	0.011221	0.06	0.019613	0.08	0.011221	0.06		
CLMH194E084MH194E085		1983		Existing	assumed Mannings N	MH194E084	MH194E085		T11440	IRWD	ABS	{5F96A13D-26CC-4123-B9EE-47FDD76E0565}	CLMH194E084MH194E085	504.82	500.33	0.666666667	MH194E084	MH194E085			84	CLMH194E084MH194E085	8	0.0402	0.016116	0.07	0.018122	0.08	0.031676	0.10	0.018122	0.08		
CLMH194E085MH194E052		1983		Existing	assumed Mannings N	MH194E085	MH194E052		T11440	IRWD	ABS	{E1AA2704-8905-4010-AD17-AE8DB05F0D3DA}	CLMH194E085MH194E052	500.14	491.07	0.666666667	MH194E085	MH194E052			222	CLMH194E085MH194E052	8	0.0408	0.018552	0.08	0.020861	0.08	0.036464	0.10	0.020861	0.08		
CLMH194E086MH194E085		1983		Existing	assumed Mannings N	MH194E086	MH194E085		T11440	IRWD	VCP	{817BE9C9-94D0-48E8-8E2D-540EAEE7B426}	CLMH194E086MH194E085	505.45	500.44	0.666666667	MH194E086	MH194E085			164	CLMH194E086MH194E085	8	0.0305	0.002436	0.03	0.002739	0.03	0.004788	0.04	0.002739	0.03		
CLMH194E087MH194S053		1983		Existing	assumed Mannings N	MH194E087	MH194S053		T11440	IRWD	VCP	{DA41871D-02A7-4077-8043-F3ED3923993}	CLMH194E087MH194S053	504.48	499.39	0.666666667	MH194E087	MH194S053			54	CLMH194E087MH194S053	8	0.0172	0.003794	0.04	0.004267	0.05	0.007459	0.06	0.004267	0.05		
CLMH194E088MH194S058		1983		Existing	assumed Mannings N	MH194E088	MH194S058		A01308	IRWD	VCP	{DC67E652-D0F9-4EBF-8B6E-2DA3462235S1}	CLMH194E088MH194S058	481.48	471.04	0.666666667	MH194E088	MH194S058	Future 8-in and less, d/D>0.50		231	CLMH194E088MH194S058	8	0.0453	0.050413	0.16	0.056576	0.17	0.098887	0.23	0.761091	0.74		
CLMH194E089MH194E088		1983		Existing	assumed Mannings N	MH194E089	MH194E088		A01308	IRWD	VCP	{82452D0F-3EFB-4367-BA5F-4B53CB019CBF}	CLMH194E089MH194E088	491.57	481.48	0.666666667	MH194E089	MH194E088			220	CLMH194E089MH194E088	8	0.0460	0.044744	0.12	0.050206	0.12	0.087745	0.16	0.757483	0.47		
CLMH194E090MH194E089		1987		Existing	assumed Mannings N	MH194E090	MH194E089		A01308	IRWD	VCP	{4D5C4ECC-10FB-4FEA-BBAE-EAA523255FB}	CLMH194E090MH194E089	492.67	491.57	0.666666667	MH194E090	MH194E089	Future 8-in and less, d/D>0.50		52	CLMH194E090MH194E089	8	0.0210	0.044744	0.13	0.050206	0.13	0.087745	0.17	0.757507	0.54		
CLMH194E091MH194E090		1981		Existing	assumed Mannings N	MH194E091	MH194E090		A01308	IRWD	VCP	{2B4ABFDA-6A4C-4864-98D9-89F71AC62B89}	CLMH194E091MH194E090	500.41	492.67	0.666666667	MH194E091	MH194E090			170	CLMH194E091MH194E090	8	0.0457	0.005388	0.09	0.006059	0.10	0.010591	0.13	0.006059	0.32		
CLMH194E092MH194E090		1989		Existing	assumed Mannings N	MH194E092	MH194E090		A01308	IRWD	VCP	{E1953E67-7BB5-4C5F-B331-4EC9A3B17CF}	CLMH194E092MH194E090	495.67	492.67	0.666666667	MH194E092	MH194E090	Future 8-in and less, d/D>0.50		269	CLMH194E092MH194E090	8	0.0113	0.039354	0.15	0.044141	0.15	0.077155	0.20	0.754165	0.70		
CLMH194E093MH194E092		1985		Existing	assumed Mannings N	MH194E093	MH194E092		A01308	IRWD	VCP	{7E979C0C-9BFD-4D70-B095-C1F61AFF263E}	CLMH194E093MH194E092	504.89	495.67	0.666666667	MH194E093	MH194E092			64	CLMH194E093MH194E092	8	0.1579	0.026658	0.11	0.029863	0.11	0.052200	0.15	0.029863	0.42		
CLMH194E094MH194E093		1981		Existing	assumed Mannings N	MH194E094	MH194E093		A01308	IRWD	VCP	{2F9AB2DC-51FC-4357-BDDB-46757A2337E4}	CLMH194E094MH194E093	511.76	504.89	0.666666667	MH194E094	MH194E093			163	CLMH194E094MH194E093	8	0.0421	0.010120	0.06	0.011267	0.06	0.019693	0.08	0.011267	0.06		
CLMH194E095MH194E092		1984		Existing	assumed Mannings N	MH194E095	MH194E092		A01308	IRWD	VCP	{1A4207AF-0DDB-4D20-98BE-878BA760FCCC}	CLMH194E095MH194E092	496.52	495.67	0.666666667	MH194E095	MH194E092	Future 8-in and less, d/D>0.50		164	CLMH194E095MH194E092	8	0.0053	0.012698	0.13	0.014278	0.13	0.024954	0.18	0.736762	0.89		
CLMH194E096MH194E095		1984		Existing	assumed Mannings N	MH194E096	MH194E095		A01308	IRWD	VCP	{7319ZB70-5751-4D95-8D87-4A9DC76E2AE4}	CLMH194E096MH194E095	497.32	496.80	0.666666667	MH194E096	MH194E095	Future 8-in and less, d/D>0.50		156	CLMH194E096MH194E095	8	0.0033	0.008996	0.09	0.010116	0.10	0.017680	0.13	0.734351	1.00		
CLMH194E097MH194E096		1981		Existing	assumed Mannings N	MH194E097	MH194E096		A01308	IRWD	VCP	{2A416F3A-0B8A-4F50-B8ED-9104BD1E195E}	CLMH194E097MH194E096	522.15	497.32	0.666666667	MH194E097	MH194E096	Future 8-in and less, d/D>0.50		357	CLMH194E097MH194E096	8	0.0696	0.006021	0.07	0.006771	0.08	0.011832	0.10	0.732387	0.71		
CLMH194E098MH194E097		1981		Existing	assumed Mannings N	MH194E098	MH194E097		A01308	IRWD	VCP	{36EC1617-DA78-4296-A224-0B2AF52D0EC}	CLMH194E098MH194E097	539.63	522.15	0.666666667	MH194E098	MH194E097			295	CLMH194E098MH194E097	8	0.0593	0.006027	0.04	0.006775	0.04	0.011840	0.06	0.732635	0.42		
CLMH194E099MH194E098		1981		Existing	assumed Mannings N	MH194E099	MH194E098		A01308	IRWD	VCP	{FF479CC9-C6A6-4318-A412-D7E65E08EA24}	CLMH194E099MH194E098	545.39	539.63	0.666666667	MH194E099	MH194E098			249	CLMH194E099MH194E098	8	0.0464	0.002601	0.04	0.002925	0.04	0.005111	0.05	0.730322	0.45		
CLMH194E100MH194E099		1981		Existing	assumed Mannings N	MH194E100	MH194E099		A01308	IRWD	VCP	{4589D20C-6541-4FB6-B811-00AE30CFB2BA}	CLMH194E100MH194E099	551.46	545.39	0.666666667	MH194E100	MH194E099			132	CLMH194E100MH194E099	8	0.0460	0.002622	0.03	0.002949	0.03	0.005153	0.04	0.002925	0.25		
CLMH194E101MH194E093		1981		Existing	assumed Mannings N	MH194E101	MH194E093		A01308	IRWD	VCP	{ABE5840D-8435-4AEF-8363-9DD405DDC5D5}	CLMH194E101MH194E093	519.40	504.89	0.666666667	MH194E101	MH194E093			266	CLMH194E101MH194E093	8	0.0547	0.016591	0.07	0.018653	0.07	0.032616	0.09	0.018655	0.07		
CLMH194E102MH194E101		1981		Existing	assumed Mannings N	MH194E102	MH194E101		A01308	IRWD	VCP	{21A7900A-57C1-47AD-82DA-4D6027373F9A}	CLMH194E102MH194E101	547.46	519.40	0.666666667	MH194E102	MH194E101			350	CLMH194E102MH194E101	8	0.0805	0.009698	0.06	0.010905	0.06	0.019062	0.08	0.010905	0.06		
CLMH194E103MH194E102		1981		Existing	assumed Mannings N	MH194E103	MH194E102		A01308	IRWD	VCP	{42BF6D10-E996-46EA-9982-FEE571BA7E87}	CLMH194E103MH194E102	554.34	547.46	0.666666667	MH194E103	MH194E102			211	CLMH194E103MH194E102	8	0.0326	0.002061	0.04	0.002318	0.04	0.004051	0.05	0.002318	0.04		
CLMH194E104MH194E099		1981		Existing	assumed Mannings N	MH194E104	MH194E099		A01308	IRWD	VCP	{285CB57F-27A7-4AD8-8641-7EEDA55B834C}	CLMH194E104MH194E099	549.07	545.39	0.833333333	MH194E104	MH194E099			205	CLMH194E104MH194E099	10	0.0180	0.000000	0.01	0.000000	0.02	0.728742	0.41			
CLMH194E105MH194E104		1981		Existing	assumed Mannings N	MH194E105	MH194E104		A01033B	IRWD	VCP	{45C47C07-9CC9-4562-8C4C-7C99F4621548}	CLMH194E105MH194E104	560.84	549.07	0.666666667	MH194E105	MH194E104			190	CLMH194E105MH194E104	8	0.0619	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.728719	0.49		
CLMH194E106GB194E148		1983		Existing	assumed Mannings N	MH194E106	GB194E148		A01338	IRWD	VCP	{17CC7207-FD09-40E6-8B1B-DD1DB1357DAA}	CLMH194E106GB194E148	580.15	569.65	0.666666667	MH194E106	GB194E148			200	CLMH194E106GB194E148	8	0.0525	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.043557	0.11		
CLMH194E107MH194E106		1981		Existing	assumed Mannings N	MH194E107	MH194E106		A01338	IRWD	VCP	{9DDA2715-9478-43B1-A997-FF8B72E6F19C}	CLMH194E107MH194E106	584.70	580.15	0.666666667	MH194E107	MH194E106			158	CLMH194E107MH194E106	8	0.0288	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.043557	0.12		
CLMH194E108MH194E107		0		Existing	assumed Mannings N	MH194E108	MH194E107			IRWD	PVC	{886E2750-F3B7-4B79-BAD8-A85545597F9F}	CLMH194E108MH194E107	585.50	584.70	0.833333333	MH194E108	MH194E107			100	CLMH194E108MH194E107	10	0.0080	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.043557	0.11		
CLMH194E109MH194E108		0		Existing	assumed Mannings N	MH194E109	MH194E108			IRWD	PVC	{3D26CD18-A354-4EE9-96EB-5DF2FB9246DD}	CLMH194E109MH194E108	590.70	585.59	0.833333333	MH194E109	MH194E108			212	CLMH194E109MH194E108	10	0.0241	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.043557	0.09		
CLMH194E110MH194E109		0		Existing	assumed Mannings N	MH194E110	MH194E109			IRWD	PVC	{18092727-870B-4404-AF1D-CBEFBC6F6E10}	CLMH194E110MH194E109	611.50	590.79	0.666666667	MH194E110	MH194E109			75	CLMH194E110MH194E109	8	0.2874	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.043557	0.07		
CLMH194E111MH194E110		0		Existing	assumed Mannings N	MH194E111	MH194E110	ERROR 23		IRWD	PVC	{D6E8D749-251F-45D3-9C91-F6224520A28F}	CLMH194E111MH194E110	633.80	611.70	0.666666667	MH194E111	MH194E110			320	CLMH194E111MH194E110	8	0.0693	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.043557	0.10		
CLMH194E112MH194E111		0		Existing	assumed Mannings N	MH194E112	MH194E111	ERROR 23		IRWD	PVC	{593AAEBE-BA8E-4931-AED2-A7379CBB405E}

CLMH194N045MH194N040			1976		Existing	assumed Mannings N	MH194N045	MH194N040		T09110	IRWD	VCP	{37E0BC91-E1B8-4205-A206-0905E6D8BCAA}	CLMH194N045MH194N040	458.98	454.22	0.666666667	MH194N046	MH194N040																		
CLMH194N046MH194N045			1976		Existing	assumed Mannings N	MH194N046	MH194N045		T09110	IRWD	VCP	{9CFA31D2-AB42-46E8-901D-7F43A70EC4C7}	CLMH194N046MH194N045	464.20	458.98	0.666666667	MH194N046	MH194N045																		
CLMH194N047MH194N046			1976		Existing	assumed Mannings N	MH194N047	MH194N046		T09110	IRWD	VCP	{0578A38D-7298-4A11-9AED-FC8E28CC5786}	CLMH194N047MH194N046	471.67	464.20	0.666666667	MH194N047	MH194N046																		
CLMH194N051MH194N061			1985		Existing	assumed Mannings N	MH194N051	MH194N061		A01309	IRWD	VCP	{BEFC2DF0-E67A-4F2C-88B5-5E7851BF468A}	CLMH194N051MH194N061	589.26	568.50	0.666666667	MH194N051	MH194N061																		
CLMH194N052MH194N062			1986		Existing	assumed Mannings N	MH194N052	MH194N062		A01309	IRWD	VCP	{CF4BD1AB-2CCB-4F52-BB13-1725F33917C4}	CLMH194N052MH194N062	537.05	516.80	0.666666667	MH194N052	MH194N062																		
CLMH194N053MH194N052			1985		Existing	assumed Mannings N	MH194N053	MH194N052		A01309	IRWD	VCP	{66262940-D49A-4FA3-ADAB-EE102E44CCDB}	CLMH194N053MH194N052	546.80	537.05	0.666666667	MH194N053	MH194N052																		
CLMH194N054MH194N128			1985		Existing	assumed Mannings N	MH194N054	MH194N128		A01309	IRWD	VCP	{F1B68BE2-4CA5-4A46-8A8C-36B7B91C7A65}	CLMH194N054MH194N053	548.53	547.62	0.666666667	MH194N054	MH194N128																		
CLMH194N055MH194N054			1986		Existing	assumed Mannings N	MH194N055	MH194N054		T12304	IRWD	VCP	{0C44E81B-6233-4DAD-93A6-5C99A7AFBA39}	CLMH194N055MH194N054	554.29	548.72	0.666666667	MH194N055	MH194N054																		
CLMH194N056MH194N055			1986		Existing	assumed Mannings N	MH194N056	MH194N055		T12304	IRWD	VCP	{51EDDDDD-012A-4622-BF0E-B7DEDEA2CB1E}	CLMH194N056MH194N055	555.07	554.40	0.666666667	MH194N056	MH194N055																		
CLMH194N057MH194N055			1986		Existing	assumed Mannings N	MH194N057	MH194N055		T12304	IRWD	VCP	{AF83B1FD-1566-458e-8690-017BD2849CB4}	CLMH194N057MH194N055	554.80	554.40	0.666666667	MH194N057	MH194N055																		
CLMH194N058MH194N052			1986		Existing	assumed Mannings N	MH194N058	MH194N052		T10931	IRWD	VCP	{545600ED-1499-4DCB-8B60-D626436746151}	CLMH194N058MH194N052	537.64	537.05	0.666666667	MH194N058	MH194N052																		
CLMH194N059MH194N058			1986		Existing	assumed Mannings N	MH194N059	MH194N058		T10931	IRWD	VCP	{1141BCAA-9CE9-644D-B92A-117228686A191}	CLMH194N059MH194N058	539.27	537.64	0.666666667	MH194N059	MH194N058																		
CLMH194N060MH194N059			1986		Existing	assumed Mannings N	MH194N060	MH194N059		T10931	IRWD	VCP	{86AE5197-983F-480B-AB24-DF815861CBEC}	CLMH194N060MH194N059	541.13	539.46	0.666666667	MH194N060	MH194N059																		
CLMH194N061MH194E049			1985		Existing	assumed Mannings N	MH194N061	MH194E049		T12304	IRWD	VCP	{0501A7A0-E13A-4087-9B82-050D5DA0597E}	CLMH194N061MH194E049	568.26	547.50	0.666666667	MH194N061	MH194E049																		
CLMH194N062MH194N104			1986		Existing	assumed Mannings N	MH194N062	MH194N104		A01309	IRWD	VCP	{4720245B-561E-4A95-B656-36C7475113A3}	CLMH194N062MH194N104	516.80	505.55	0.666666667	MH194N062	MH194N104																		
CLMH194N063MH194N100			1985		Existing	assumed Mannings N	MH194N063	MH194N100		A01324	IRWD	VCP	{E9B1B68A-7582-42D6-933A-2BAF82EC9D36}	CLMH194N063MH194N100	515.59	512.95	0.500000000	MH194N063	MH194N100																		
CLMH194N064MH194N056			1986		Existing	assumed Mannings N	MH194N064	MH194N056		T12304	IRWD	VCP	{2E032960-AFCB-4E16-9F11-F31DBAC02CB2}	CLMH194N064MH194N056	555.96	555.27	0.666666667	MH194N064	MH194N056																		
CLMH194N065MH194N068			1986		Existing	assumed Mannings N	MH194N065	MH194N068		T10931	IRWD	PVC	{2F4CB419-1CEA-4565-91B9-61B4E1634F8E}	CLMH194N065MH194N068	511.25	510.08	0.666666667	MH194N065	MH194N068																		
CLMH194N066MH194N057			1986		Existing	assumed Mannings N	MH194N066	MH194N057		T12304	IRWD	VCP	{0B07EEAB-2141-482B-804D-95A320D368SF}	CLMH194N066MH194N057	556.26	554.90	0.666666667	MH194N066	MH194N057																		
CLMH194N067MH194N099			1985		Existing	assumed Mannings N	MH194N067	MH194N099		A01324	IRWD	VCP	{D488D8AC-23FD-4DB4-BF00-64E23DE95EB2}	CLMH194N067MH194N099	521.16	515.28	0.500000000	MH194N067	MH194N099																		
CLMH194N068MH194N069			1985		Existing	assumed Mannings N	MH194N068	MH194N069		A01324	IRWD	VCP	{3966C906-084C-47CA-A041-851BDC59AFF9}	CLMH194N068MH194N069	509.92	509.22	0.666666667	MH194N068	MH194N069																		
CLMH194N069MH194N098			1986		Existing	assumed Mannings N	MH194N069	MH194N098		T10931	IRWD	VCP	{198BF686-8FB8-422D-B095-0B5F577900D8}	CLMH194N069MH194N098	509.11	507.52	0.666666667	MH194N069	MH194N098																		
CLMH194N070MH194N068			1985		Existing	assumed Mannings N	MH194N070	MH194N068		A01324	IRWD	VCP	{231C2575-F321-4D25-AAA5-8F10821E44D1}	CLMH194N070MH194N068	512.83	510.08	0.500000000	MH194N070	MH194N068																		
CLMH194N071MH194N098			1986		Existing	assumed Mannings N	MH194N071	MH194N098		T10931	IRWD	PVC	{3DC33800-62A8-48C0-ACDC-DE403E89E00A}	CLMH194N071MH194N098	511.14	507.52	0.666666667	MH194N071	MH194N098																		
CLMH194N072MH194N069			1985		Existing	assumed Mannings N	MH194N072	MH194N069		T10931	IRWD	PVC	{1DB912BE-F71E-45DB-AFBC-6BCAC68437A3}	CLMH194N072MH194N069	512.46	509.39	0.666666667	MH194N072	MH194N069																		
CLMH194N073MH194N112		NO ASBUILT FOUI	1999		Existing	assumed Mannings N	MH194N073	MH194N112			IRWD	UNK	{0713F9F7-49A6-4258-9D94-4E9C25BEC869}	CLMH194N073MH194N112	557.28	556.23	0.500000000	MH194N073	MH194N112																		
CLMH194N097MH194N062			1986		Existing	assumed Mannings N	MH194N097	MH194N062		T10931	IRWD	VCP	{00997089-CFED-4152-9946-7D22BCFEEA55}	CLMH194N097MH194N062	517.77	516.80	0.666666667	MH194N097	MH194N062																		
CLMH194N098MH194N104			1985		Existing	assumed Mannings N	MH194N098	MH194N104		T10931	IRWD	PVC	{0C150AE4-2BCB-4295-A856-7C1076ED0626}	CLMH194N098MH194N104	507.32	505.56	0.666666667	MH194N098	MH194N104																		
CLMH194N099MH194N065			1986		Existing	assumed Mannings N	MH194N099	MH194N065		T10931	IRWD	VCP	{1E31D951-912A-4E2F-9864-2B0EFFED4B8C}	CLMH194N099MH194N065	515.09	511.35	0.666666667	MH194N099	MH194N065																		
CLMH194N100MH194N065			1986		Existing	assumed Mannings N	MH194N100	MH194N065		T10931	IRWD	VCP	{FD268F92-727E-4ABE-9A66-A9A66E580068}	CLMH194N100MH194N065	512.75	511.35	0.666666667	MH194N100	MH194N065																		
CLMH194N101MH194N060			1986		Existing	assumed Mannings N	MH194N101	MH194N060		T10931	IRWD	VCP	{9AE21F78-4CEA-49F0-9CB0-45E2A0C1990A}	CLMH194N101MH194N060	542.00	541.20	0.500000000	MH194N101	MH194N060																		
CLMH194N102MH194N059			1988		Existing	assumed Mannings N	MH194N102	MH194N059		T10931	IRWD	VCP	{77933B2D-A03E-4AE9-B71D-45A0A5EBFA6}	CLMH194N102MH194N059	541.90	539.46	0.500000000	MH194N102	MH194N059																		
CLMH194N104MH194E005			1983		Existing	assumed Mannings N	MH194N104	MH194E005		A01309	IRWD	VCP	{FE4CA7FB-67DE-4DDE-A4A2-79BAD26D517B}	CLMH194N104MH194E005	505.55	501.05	0.666666667	MH194N104	MH194E005																		
CLMH194N112MH194N118	NO INFORMATIOI		1990		Existing	assumed Mannings N	MH194N118			A01214	IRWD	VCP	{7787182C-D26F-4B78-A4CA-ACFCCF6384FA}	CLMH194N112MH194N118	556.23	553.58	0.500000000	MH194N112	MH194N118																		
CLMH194N117MH194N003			1991		Existing	assumed Mannings N	MH194N117	MH194N003		A00711A	IRWD	VCP	{88003F8F-216B-4A48-835B-02006851150E}	CLMH194N117MH194N003	545.58	523.83	1.250000000	MH194N117	MH194N003																		
CLMH194N118MH194N032			1991		Existing	assumed Mannings N	MH194N118	MH194N032		A01214	IRWD	VCP	{4C957375-F421-4886-820E-F670D0D858DC}	CLMH194N118MH194N003	553.17	541.45	0.833333333	MH194N118	MH194N003																		
CLMH194N119MH194N121			1990		Existing	assumed Mannings N	MH194N119	MH194N121		A00711A	IRWD	VCP	{7364915E-87DF-403A-9DC1-001E106DF401}	CLMH194N119MH194N121	504.20	485.14	1.250000000	MH194N119	MH194N121																		
CLMH194N120MH194N001			1997		Existing	assumed Mannings N	MH194N120	MH194N001		T13343	IRWD	VCP	{2883FEC1-2041-4A7B-A705-02D2E6C65F1B}	CLMH194N120MH194N001	541.58	541.45	1.000000000	MH194N120	MH194N001																		
CLMH194N123MH194N123			1990		Existing	assumed Mannings N	MH194N123			A00711A	IRWD	VCP	{CFA3566C-FFAF-4A56-91A1-AEEA0D02E6E8}	CLMH194N123MH194N123	484.88	474.29	1.250000000	MH194N123																			
CLMH194N123MH194N120			1997		Existing	assumed Mannings N	MH194N120	T13343		MH194N001	IRWD	VCP	{8A920565-EED2-413F-8072-298F6857448F}	CLMH194N123MH194N120	550.33	541.67	1.000000000	MH194N122	MH194N120																		
CLMH194N123MH194N126			1990		Existing	assumed Mannings N	MH194N123	MH194N126		A00711A	IRWD	VCP	{14C66A6E-15B0-4273-8A74-F35283B30EB7}	CLMH194N123MH194N126	474.08	461.95	1.250000000	MH194N123	MH194N126																		
CLMH194N124MH194N122			1997		Existing	assumed Mannings N	MH194N124	MH194N122		T13343	IRWD	VCP	{BAA95C4D7-8541-4D62-9263-530CB0DB2129}	CLMH194N124MH194N122	561.17	550.61	1.000000000	MH194N124	MH194N122																		
CLMH194N125MH194N124			1989		Existing	assumed Mannings N	MH194N125	MH194N124		A01128	IRWD	VCP	{48BF263D-BF53-4A15-ABF4-8BAD57C340D4}	CLMH194N125MH194N124	577.97	561.50	1.000000000	MH194N125	MH194N124																		
CLMH194N126MH174E103			1990		Existing	assumed Mannings N	MH194N126	MH174E103		A00711A	IRWD	PVC	{6C1D6AC2-D060-4A63-9033-8709740BF589}	CLMH194N126MH174E103	461.75	446.10	1.250000000	MH194N126	MH174E103																		
CLMH194N127MH194N066			0		Existing	assumed Mannings N	MH194N127	MH194N066		R2971	IRWD	PVC	{85E3E3EE-C551-49AE-81C2-285C9B36A43F}	CLMH194N127MH194N066	559.57	556.46	0.666666667	MH194N127	MH194N066																		
CLMH194N128MH194N053			1985		Existing	assumed Mannings N	MH194N128	MH194N053		A01309	IRWD	VCP	{C670E3EB-3F3C-4DEA-874A-289C805A75D4}	CLMH194N054MH194N053	547.62	547.00	0.666666667	MH194N128	MH194N053																		
CLMH194S001MH194S002			1971		Existing	assumed Mannings N	MH194S001	MH194S002		A01115	IRWD	VCP	{82116E04-248C-4FB9-A4D5-7B3B4F45073E}	CLMH194S001MH194S002	428.00	426.88	1.750000000	MH194S001	MH194S002																		
CLMH194S002MH194S003			1971		Existing	assumed Mannings N	MH194S002	MH194S003		A01115	IRWD	VCP	{C1DC5C46-63B7-4C1E-B5C4-21B65C83E8A7}	CLMH194S002MH194S003	426.88	424.29	1.750000000	MH194S002	MH194S003																		
CLMH194S003MH194S004			1971		Existing	assumed Mannings N	MH194S003	MH194S004		A01115	IRWD	VCP	{BA47DDB9-EBCC-494B-B328-B26830A5399F}	CLMH194S003MH194S004	424.29	423.42	1.750000000	MH194S003	MH194S004																		
CLMH194S004MH195E005			1975		Existing	assumed Mannings N	MH194S004	MH195E005		A01115	IRWD	VCP	{64F94473-7D2D-4FC6-8520-8F4226EA729D}	CLMH194S004MH195E005	423.42	421.42	1.750000000	MH194S004	MH195E005																		
CLMH195006MH195E005			1975		Existing	assumed Mannings N	MH195006	MH195E005		A01588	IRWD	VCP	{91DE3C38-CB84-4447-95FC-804F07C1562A}	CLMH195006MH195E005	437.29	433.50	0.666666667	MH195006	MH195E005																		
CLMH195007MH194S006			1975		Existing	assumed Mannings N	MH194S007	MH194S006		A01588	IRWD	VCP	{BED3645E-7FA1-42BD-B40E-0BCF61AC4C18}	CLMH195007MH194S006	455.16	437.29	0.666666667	MH194S007	MH194S006																		
CLMH194S008MH194S007			1975		Existing	assumed Mannings N	MH194S008	MH194S007		A01588	IRWD	VCP	{55C1BA0E-C838-4748-8639-ED592666E88F}	CLMH194S008MH194S007	458.95	455.16	0.666666667	MH194S008	MH194S007																		
CLMH195009MH194S008			1981		Existing	assumed Mannings N	MH194S009	MH194S008		A01360	IRWD	VCP	{09FFAA00-2C82-4D2B-A6E7-ED7BF74C5C6D}	CLMH195009MH194S008	468.82	458.95	0.666666667	MH194S009	MH194S008																		
CLMH194S010MH194S009			1980		Existing	assumed Mannings N	MH194S010	MH194S009		A01360	IRWD	VCP	{FCD66765-0A47-4FAF-8674-A70C35FA8446}	CLMH194S010MH194S009	471.67	468.82	0.666666667	MH194S010	MH194S009																		
CLMH194S011MH194S010			1980		Existing	assumed Mannings N	MH194S011	MH194S010		A01360	IRWD	VCP	{E48ED0BC-7A79-48BC-9A9F-0B739992248EC}	CLMH194S011MH194S010	473.70	471.67	0.666666667	MH194S011	MH194S010																		
CLMH194S014MH194S011			1977		Existing	assumed Mannings N	MH194S014	MH194S011		A01254	IRWD	VCP	{A1AD4AAD-FE3E-4D11-8FAC-9211DDE2B038}	CLMH194S014MH194S011	442.33	428.00	1.250000000	MH194S014	MH194S011																		
CLMH194S015MH194S014			1977		Existing	assumed Mannings N	MH194S015	MH194S014	ERROR 23	A01254	IRWD	VCP	{D51D95CD-8023-4D96-AEF3-4EC34F273675}	CLMH194S015MH194S014	460.52	443.11	0.666666667	MH194S015	MH194S014																		
CLMH194S016MH194S014			1977		Existing	assumed Mannings N	MH194S016	MH194S014		A01254	IRWD	VCP	{3A23047F-F509-430D-A09D-654832085528}	CLMH194S016MH194S014	445.45	442.33	1.250000000	MH194S016	MH194S014																		
CLMH194S017MH194S016			1977		Existing	assumed Mannings N	MH194S017	MH194S016		A01254	IRWD	VCP	{349SAED5-86C3-41F0-A054-414F8155D947}	CLMH194S017MH194S016	449.42	445.45	0.666666667	MH194S017	MH194S016																		
CLMH194S018MH194S016			1977		Existing	assumed Mannings N	MH194S018	MH194S016		T09619	IRWD	VCP	{37AC15C1-B890-49B5-8AFA-2EBD4F9DF16}	CLMH194S018MH194S016	447.70	445.45	1.250000000	MH194S018	MH194S016																		
CLMH194S019MH194S018			1977		Existing	assumed Mannings N	MH194S019	MH194S018		T09619	IRWD	VCP	{68923466F-A74C-4EAF-AB43-B5F8C1C0BEA4}	CLMH194S019MH194S018	451.32	447.70	1.250000000	MH194S019	MH194S018																		
CLMH194S020MH194S019			1977		Existing	assumed Mannings N	MH194S020	MH194S019		A01254	IRWD	VCP	{DD9E811C-B829-4D47-A54C-6A48D349E308}	CLMH194S020MH194S019	456.94	451.32	1.250000000	MH194S020	MH194S019																		
CLMH194S021MH194S020			1977		Existing	assumed Mannings N	MH194S021	MH194S020		T09619	IRWD	VCP	{2AAB1E52-B185-4BC2-AF42-CE4DA04DDD7E}	CLMH194S021MH194S020	459.00	456.94	0.666666667	MH194S021	MH194S020																		
CLMH194S022MH194S021			1977		Existing	assumed Mannings N	MH194S022	MH194S021		T09619	IRWD	VCP	{61D97469-4B57-45BB-A573-CD93D05E592F}	CLMH194S022MH194S021	461.89	459.00	0.666666667	MH194S022	MH194S021																		
CLMH194S023MH194S022			1977		Existing	assumed Mannings N	MH194S023	MH194S022		A01254	IRWD	VCP	{A82A0AB5-2859-404C-B846-6802AE267DB9}	CLMH194S023MH194S022	465.29	461.89	0.666666667	MH194S023	MH194S022																		
CLMH194S024MH194S020			1977		Existing	assumed Mannings N	MH194S024	MH194S020		T09619	IRWD	VCP	{41240140-FB5E-4F80-808D-F5892988FB1E}	CLMH194S024MH194S020	463.19	456.94	1.250000000	MH194S024	MH194S020																		
CLMH194S025MH194S001			1981		Existing	assumed Mannings N	MH194S025	MH194S001		A01308	IRWD	VCP	{0C136E61-8864-4A22-9642-E393F5A931BC}	CLMH194S025MH194S001	429.64	428.00	1.250000000	MH194S025	MH194S001																		
CLMH194S026MH194S025			1981		Existing	assumed Mannings N	MH194S026	MH194S025		A01308	IRWD	VCP	{4079F678-D988-46A1-82DC-4E385E76EA46}	CLMH194S026MH194S025	449.02	429.64	1.250000000	MH194S026	MH194S025																		
CLMH194S027MH194S026			1981		Existing	assumed Mannings N	MH194S027	MH194S026		A01308	IRWD	VCP	{BE162433-0257-4926-A465-D33868E338DC}	CLMH194S027MH194S026	453.25	449.02	1.000000000	MH194S027	MH194S026																		
CLMH194S028MH194S027			1981		Existing	assumed Mannings N	MH194S028	MH194S027		A01308	IRWD	VCP	{65C924CB-675D-408C-9080-10097D7348A7}	CLMH194S028MH194S027	454.39	453.25	0.666666667	MH194S028	MH194S027																		
CLMH194S029MH194S028			1981		Existing	assumed Mannings N	MH194S029	MH194S028		A01308	IRWD	VCP	{E868184C-A1E5-4C3A-AED8-555BE7448645}	CLMH194S029MH194S028	455.81	454.39	0.666666667	MH194S029	MH194S028																		
CLMH194S030MH194S029			1983		Existing	assumed Mannings N	MH194S030	MH194S029		A01133	IRWD	VCP	{12935D72-E6AD-475E-BCC1-849E59320E1D}	CLMH194S030MH194S029	456.70	456.21	0.666666667	MH194S030	MH194S029																		
CLMH194S031MH194S030			1983		Existing	assumed Mannings N	MH194S031	MH194S030		A01133	IRWD	ABS	{ACAD8912-109F-4F3D-8F54-02D0C1C206C}	CLMH194S031MH194S030	457.35	456.89	0.666666667	MH194S031	MH194S030																		
CLMH194S032MH194S031			1983		Existing	assumed Mannings N	MH194S032	MH194S031		A01133	IRWD	ABS	{0DDA50EF-B712-4A85-ABDB-C1356E3E2B46}	CLMH194S032MH194S031	461.47	457.55	0.666666667	MH194S032	MH194S031																		
CLMH194S033MH194S031			1983		Existing	assumed Mannings N	MH194S033	MH194S031		A01133	IRWD	ABS	{381DA495-2FAE-4684-B3D0-050180AF04E2}	CLMH194S033MH194S031	458.29	457.45	0.666666667	MH194S033	MH194S031																		
CLMH194S034MH194S033			1983		Existing	assumed Mannings N	MH194S034	MH194S033		A01133	IRWD	ABS	{3E9B4758-9522-41ED-B6C7-0B628SC29FF5}	CLMH194S034MH194S033	459.73	458.50	0.666666667	MH194S034	MH194S033																		
CLMH194S035MH194S033			1983		Existing	assumed Mannings N	MH194S035	MH194S033		A01133	IRWD	ABS	{52B5DE08-BCF4-433B-BA1D-42543E78F7B04}	CLMH194S035MH194S033	459.86	458.50	0.666666667	MH194S035	MH194S033																		
CLMH194S036MH194S035			1983		Existing	assumed Mannings N	MH194S036	MH194S035		A01133	IRWD	VCP	{40B419A7-12DE-4633-9820-6BA6068082BA}	CLMH194S036MH194S035	460.80	459.97	0.666666667	MH194S036	MH194S035																		
CLMH194S037MH194S035			1983		Existing	assumed Mannings N	MH194S037	MH194S035		A01133	IRWD	ABS	{C7CE9287-ABE1-4113-9D1D-C30E6DC02CB7}	CLMH194S037MH194S035	461.20	460.07	0.666666667	MH194S037	MH194S035																		
CLMH194S037MH194S038			1983		Existing	assumed Mannings N	MH194S037	MH194S038		A01133	IRWD	ABS	{DC148DBC-5D9C-408B-903F-82D16FC54091}	CLMH194S037MH194S038	461.20	459.79	0.666666667	MH194S037	MH194S038																		
CLMH194S038MH194S040			1983		Existing	assumed Mannings N	MH194S038	MH194S040		A01133	IRWD	ABS	{01F72033-07AA-48B2-8F6C-E6E7410BB266}	CLMH194S038MH194S040	459.69	459.01	0.666666667	MH194S038	MH194S040																		
CLMH194S039MH194S038			1983		Existing	assumed Mannings N	MH194S039	MH194S038		A01133	IRWD	ABS	{9AA932E9-B870-495B-B695-74B35C272550}	CLMH194S039MH194S038	461.23	459.79	0.666666667	MH194S039	MH194S038																		
CLMH194S040MH194S041			1983		Existing	assumed Mannings N	MH194S040	MH194S041		A01133	IRWD	ABS	{16F98746-22F6-4215-B8CF-FDE23AB4D123}	CLMH194S040MH194S041	458.91	458.01	0.666666667	MH194S040	MH194S041																		
CLMH194S030MH194S030			1983		Existing	assumed Mannings N	MH194S030	MH194S030		A01133	IRWD	ABS	{0C4DF3DC-E254-4F51-93CF-437C7F5D95F}	CLMH194S041MH194S030	457.80	456.89	0.666666667	MH194S041	MH194S030																		
CLMH194S042MH194S041			1983		Existing	assumed Mannings N	MH194S042	MH194S041		A01133	IRWD	ABS	{E810BF54-13F2-4FE5-A34D-669C054687E8}	CLMH194S042MH194S041	459.11	458.01	0.666666667	MH194S042	MH194S041																		
CLMH194S043MH194S027			1983		Existing	assumed Mannings N	MH194S043	MH194S027		A01308	IRWD	VCP	{67520CA2-A3F6-4F84-AE46-A8A4731A910D}	CLMH194S043MH194S027	476.17	453.25	0.833333333	MH194S043	MH194S027																		
CLMH194S044MH194S043			1983		Existing	assumed Mannings N	MH194S044	MH194S043		A01308	IRWD	VCP	{1C470629-732D-41A4-9786-58B4B2629SA2}	CLMH194S044MH194S043	478.60	476.17	1.000000000	MH194S044	MH194S043																		
CLMH194S045MH194S044			1983		Existing	assumed Mannings N	MH194S045	MH194S044		A01308	IRWD	VCP	{4F2EFEC03-38CB-4E17-9BB7-1D7A5D35F5DDF1}	CLMH194S045MH194S044	481.18	478.60	1.000000000	MH194S045	MH194S044																		
CLMH194S046MH194S045			1986		Existing	assumed Mannings N	MH194S046	MH194S045	adverse slope	A01308	IRWD	VCP	{EE6C48AA-01E2-4884-91C4-58E911D51549}	CLMH194S046MH194S045	483.67	481.18	1.000000000	MH194S046	MH194S045																		
CLMH194S047MH194S046			1983		Existing	assumed Mannings N	MH194S047	MH194S046		T11440	IRWD	ABS	{14383240-A803-41A7-9289-A9B5160A6AB85}	CLMH194S047MH194S046	484.04	483.67	1.000000000	MH194S047	MH194S046																		
CLMH194S048MH194S047			1983		Existing	assumed Mannings N	MH194S048	MH194S047		A01308	IRWD	VCP	{EE76A17E-EF7A-41FA-91A0-83663777F1E1}	CLMH194S048MH194S047	485.89	484.04	1.000000000	MH194S048	MH194S047																		
CLMH194S049MH194S048			1981		Existing	assumed Mannings N	MH194S049	MH194S048		A01308	IRWD	VCP	{166F0885-9893-42C6-A161-80C5E7B51C52}	CLMH194S049MH194S048	490.73	485.89	1.000000000	MH194S049	MH194S048																		
CLMH194S050MH194S046			1983		Existing	assumed Mannings N	MH194S050	MH194S046		T11440	IRWD	ABS	{0DC1C979-0C37-4F27-AB7E-ABA3EFEB4025}	CLMH194S050MH194S046	489.26	483.80	0.666666667	MH194S050	MH194S046																		
CLMH194S051MH194S050			1983		Existing	assumed Mannings N	MH194S051	MH194S050		T11440	IRWD	ABS	{E6D8D199-FA7B-4BE8-803F-CDDD7123AC46}	CLMH194S051MH194S050	489.82	489.36	0.666666667	MH194S051	MH194S050																		
CLMH194S052MH194S051			1983		Existing	assumed Mannings N	MH194S052	MH194S051		T11440	IRWD	ABS	{382E1AA1-A2F9-45E1-90AB-A1F1F8AFF15}	CLMH194S052MH194S051	497.61	489.92	0.666666667	MH194S052	MH194S051																		
CLMH194S053MH194S052			1983		Existing	assumed Mannings N	MH194S053	MH194S052		T11440	IRWD	ABS	{791CDE51-CB57-4668-893D-913605420A68}	CLMH194S053MH194S052	499.10	497.72	0.666666667	MH194S053	MH194S052																		
CLMH194S054MH194S051			1983		Existing	assumed Mannings N	MH194S054	MH194S051		T11440	IRWD	ABS	{010CCFB9-9E6F-4FA8-966A-026DC51ED2ED}	CLMH194S054MH194S051	490.30	489.92	0.666666667	MH194S054	MH194S051																		
CLMH194S055MH194S054			1983		Existing	assumed Mannings N	MH194S055	MH194S054		T11440

| | | |

CLMH195E025MH195E026		1976		Existing	assumed Mannings N	MH195E025	MH195E026		T08814	IRWD	VCP	{F38A9EEC-08D0-4AD2-8491-86B538SD2694}	CLMH195E025MH195E026	421.63	420.89	0.666666667	MH195E025	MH195E026		143	CLMH195E025MH195E026	8	0.0052	0.006448	0.07	0.007251	0.07	0.012675	0.10	0.007251	0.07	
CLMH195E026MH195E007		1976		Existing	assumed Mannings N	MH195E026	MH195E007		T08814	IRWD	VCP	{3BA25F99-C706-4F22-99CB-45CD689D4DBFB}	CLMH195E026MH195E007	420.89	414.05	0.666666667	MH195E026	MH195E007		300	CLMH195E026MH195E007	8	0.0228	0.008251	0.10	0.009278	0.10	0.016219	0.13	0.009278	0.10	
CLMH195E027MH195E026		1976		Existing	assumed Mannings N	MH195E027	MH195E026		T08814	IRWD	VCP	{8C7D4B5C-E1CA-404A-86F0-B436271AF57D}	CLMH195E027MH195E026	424.41	420.89	0.666666667	MH195E027	MH195E026		213	CLMH195E027MH195E026	8	0.0165	0.001803	0.05	0.002028	0.05	0.003544	0.06	0.002028	0.05	
CLMH195E028MH195E023		1976		Existing	assumed Mannings N	MH195E028	MH195E023		T08816	IRWD	VCP	{F9FC9AE3-8AB1-411A-B865-15441B42E5C5}	CLMH195E028MH195E023	423.81	422.57	0.666666667	MH195E028	MH195E023		118	CLMH195E028MH195E023	8	0.0106	0.003232	0.05	0.003634	0.06	0.006354	0.07	0.003634	0.06	
CLMH195E029MH195S091		1998		Existing	assumed Mannings N	MH195E029	MH195S091		T07197	IRWD	VCP	{B1813D73-9CB7-495C-B8C9-6F13494CFB4}	CLMH195E029MH195S157	365.20	363.60	0.666666667	MH195E029	MH195S091		130	CLMH195E029MH195S091	8	0.0123	0.033101	0.15	0.037152	0.16	0.065010	0.21	0.037152	0.16	
CLMH195E030MH195E029		1998		Existing	assumed Mannings N	MH195E030	MH195E029		T07197	IRWD	VCP	{439F2A34-B6EE-4701-83E4-78B98554F555}	CLMH195E030MH195E029	366.47	365.20	0.666666667	MH195E030	MH195E029		287	CLMH195E030MH195E029	8	0.0044	0.016831	0.13	0.018936	0.14	0.033167	0.18	0.018936	0.14	
CLMH195E031GB195E121		1975		Existing	assumed Mannings N	MH195E031	GB195E121		T08816	IRWD	VCP	{76F8B521-8531-46AC-8789-E5A268F50002}	CLMH195E031GB195E121	382.00	380.70	0.666666667	MH195E031	GB195E121		65	CLMH195E031GB195E121	8	0.0201	0.002605	0.04	0.002929	0.04	0.005121	0.05	0.002929	0.04	
CLMH195E032MH195E031		1975		Existing	assumed Mannings N	MH195E032	MH195E031		T08816	IRWD	VCP	{9A24A0A0-9AC8-4D54-AF1A-7059B1CCEB04}	CLMH195E032MH195E031	403.60	382.00	0.666666667	MH195E032	MH195E031		223	CLMH195E032MH195E031	8	0.0972	0.002605	0.03	0.002929	0.03	0.005121	0.04	0.002929	0.03	
CLMH195E033GB195E124		1975		Existing	assumed Mannings N	MH195E033	GB195E124		T08816	IRWD	VCP	{2B69279C-B0CF-4354-AEE1-86686EAB98BE}	CLMH195E033GB195E124	411.05	409.51	0.666666667	MH195E033	GB195E124		115	CLMH195E033GB195E124	8	0.0111	0.002605	0.04	0.002929	0.04	0.005122	0.05	0.002929	0.04	
CLMH195E034MH195E030		1998		Existing	assumed Mannings N	MH195E034	MH195E030		T07197	IRWD	VCP	{48F94D8A-630A-44D1-9E54-C3B04D3CB3EB}	CLMH195E034MH195E030	367.57	366.47	0.666666667	MH195E034	MH195E030		339	CLMH195E034MH195E030	8	0.0032	0.014251	0.12	0.016031	0.13	0.028058	0.17	0.016031	0.13	
CLMH195E035GB195E143		1998		Existing	assumed Mannings N	MH195E035	GB195E143		T07174	IRWD	VCP	{4BB441D4-9014-4F3C-8601-753728F0797D}	CLMH195E035GB195E143	400.11	380.43	0.666666667	MH195E035	GB195E143		139	CLMH195E035GB195E143	8	0.1430	0.015635	0.06	0.017590	0.06	0.030745	0.08	0.017590	0.06	
CLMH195E036MH195E035		1998		Existing	assumed Mannings N	MH195E036	MH195E035		T07174	IRWD	VCP	{ADA84D88-6976-48BA-9469-B2B5506B2D75}	CLMH195E036MH195E035	409.14	400.11	0.666666667	MH195E036	MH195E035		140	CLMH195E036MH195E035	8	0.0475	0.015636	0.06	0.017591	0.07	0.030745	0.08	0.017591	0.07	
CLMH195E037MH195E036		1970		Existing	assumed Mannings N	MH195E037	MH195E036		T07174	IRWD	VCP	{A3B0796D-0A69-405C-83D8-B60C697F4382}	CLMH195E037MH195E036	411.47	409.25	0.666666667	MH195E037	MH195E036		277	CLMH195E037MH195E036	8	0.0080	0.007737	0.07	0.008707	0.08	0.015234	0.10	0.008707	0.08	
CLMH195E038MH195E037		1970		Existing	assumed Mannings N	MH195E038	MH195E037		T07174	IRWD	VCP	{DD3CC188-8E3B-494F-8D38-69CD063F4E25}	CLMH195E038MH195E037	413.04	411.58	0.666666667	MH195E038	MH195E037		73	CLMH195E038MH195E037	8	0.0201	0.002898	0.04	0.003258	0.04	0.005696	0.05	0.003258	0.04	
CLMH195E039MH195E037		1970		Existing	assumed Mannings N	MH195E039	MH195E037		T07174	IRWD	VCP	{2ECA74CC-EBC7-4BE8-A7F1-E4ED466AF5DC}	CLMH195E039MH195E037	412.73	411.58	0.666666667	MH195E039	MH195E037		285	CLMH195E039MH195E037	8	0.0040	0.004844	0.07	0.005452	0.07	0.009539	0.09	0.005452	0.07	
CLMH195E040MH195E039		1970		Existing	assumed Mannings N	MH195E040	MH195E039		T07174	IRWD	VCP	{103499DF-3A5F-4795-8567-C3F57BD06E7}	CLMH195E040MH195E039	413.23	412.73	0.666666667	MH195E040	MH195E039		102	CLMH195E040MH195E039	8	0.0049	0.000352	0.05	0.000397	0.05	0.000691	0.06	0.000397	0.05	
CLMH195E041MH195E040		1970		Existing	assumed Mannings N	MH195E041	MH195E040		T07174	IRWD	VCP	{76817A2A-F71A-4E2A-BD2D-32F11E7CDFDD}	CLMH195E041MH195E040	414.38	413.23	0.666666667	MH195E041	MH195E040		260	CLMH195E041MH195E040	8	0.0044	0.000358	0.02	0.000404	0.02	0.000700	0.03	0.000404	0.02	
CLMH195E042MH195E039		1970		Existing	assumed Mannings N	MH195E042	MH195E039		T07174	IRWD	VCP	{07C7DAF3-B0B7-41E9-8841-6B21F7EC7588}	CLMH195E042MH195E039	413.51	412.73	0.666666667	MH195E042	MH195E039		144	CLMH195E042MH195E039	8	0.0054	0.001681	0.06	0.001893	0.06	0.003321	0.08	0.001893	0.06	
CLMH195E043MH195E042		1970		Existing	assumed Mannings N	MH195E043	MH195E042		T07174	IRWD	VCP	{8AD8AA91-3EA7-42E0-A15A-9E2255C4F3DD}	CLMH195E043MH195E042	414.29	413.51	0.666666667	MH195E043	MH195E042		198	CLMH195E043MH195E042	8	0.0039	0.001682	0.04	0.001893	0.04	0.003322	0.06	0.001893	0.04	
CLMH195E044MH195E043		1970		Existing	assumed Mannings N	MH195E043	MH195E044		T07174	IRWD	VCP	{FA4DE7BC-9853-4EFA-B88D-C7F3E8ZD4E1}	CLMH195E043MH195E044	414.29	413.22	0.666666667	MH195E043	MH195E044		240	CLMH195E043MH195E044	8	0.0045	0.002031	0.05	0.002278	0.05	0.003990	0.07	0.002278	0.05	
CLMH195E045MH195E044		1970		Existing	assumed Mannings N	MH195E045	MH195E044		T07174	IRWD	VCP	{18D42D6F-7A2F-4FBB-90AE-77F63AD205F}	CLMH195E044MH195E045	413.22	412.14	0.666666667	MH195E044	MH195E045		270	CLMH195E044MH195E045	8	0.0040	0.001968	0.04	0.002211	0.05	0.003852	0.06	0.002211	0.05	
CLMH195E045MH195E046		1970		Existing	assumed Mannings N	MH195E045	MH195E046	ERROR 23	T07174	IRWD	VCP	{B5961784-102F-4014-8219-CCC21D97AD17}	CLMH195E045MH195E046	412.04	411.56	0.666666667	MH195E045	MH195E046		121	CLMH195E045MH195E046	8	0.0040	0.005618	0.07	0.006316	0.07	0.011026	0.10	0.006316	0.07	
CLMH195E046MH195E047		1970		Existing	assumed Mannings N	MH195E046	MH195E047	ERROR 23	T07174	IRWD	VCP	{D3658B3E-6775-4C33-9403-07F4814A52D0}	CLMH195E046MH195E047	411.46	410.44	0.666666667	MH195E046	MH195E047		254	CLMH195E046MH195E047	8	0.0040	0.005617	0.07	0.006315	0.07	0.011024	0.10	0.006315	0.07	
CLMH195E047MH195E036		1970		Existing	assumed Mannings N	MH195E047	MH195E036		T07174	IRWD	VCP	{FF0AAA1A1-6722-45F6-8BCA-04F78DDE370A}	CLMH195E047MH195E036	410.34	409.25	0.666666667	MH195E047	MH195E036		272	CLMH195E047MH195E036	8	0.0040	0.007900	0.08	0.008884	0.09	0.015511	0.12	0.008884	0.09	
CLMH195E052MH195S159		1970		Existing	assumed Mannings N	MH195E052	MH195S159		T08789	IRWD	VCP	{11EE1DE3-F298-487C-8E5F-A0D1B12B9A21}	CLMH195E052MH195S159	415.35	406.39	0.666666667	MH195E052	MH195S159		167	CLMH195E052MH195S159	8	0.0538	0.010915	0.07	0.021383	0.08	0.037380	0.10	0.021383	0.08	
CLMH195E053MH195E052		1975		Existing	assumed Mannings N	MH195E053	MH195E052		T08789	IRWD	VCP	{16E0C100-008C-428E-9329-0CC46CC72F65}	CLMH195E053MH195E052	418.54	415.45	0.666666667	MH195E053	MH195E052		129	CLMH195E053MH195E052	8	0.0240	0.002662	0.03	0.002993	0.04	0.005230	0.05	0.002993	0.04	
CLMH195E054MH195E052		1975		Existing	assumed Mannings N	MH195E054	MH195E052		T08789	IRWD	VCP	{88962C51-F055-42A5-B036-4AD2976C079C}	CLMH195E054MH195E052	424.77	415.45	0.666666667	MH195E054	MH195E052		238	CLMH195E054MH195E052	8	0.0392	0.004416	0.04	0.004965	0.04	0.008681	0.05	0.004965	0.04	
CLMH195E055MH195E054		1975		Existing	assumed Mannings N	MH195E055	MH195E054		T08789	IRWD	VCP	{E3475769-E55A-4364-94E5-71D292B6E796}	CLMH195E055MH195E054	429.85	424.92	0.666666667	MH195E055	MH195E054		210	CLMH195E055MH195E054	8	0.0235	0.001978	0.03	0.002224	0.03	0.003888	0.04	0.002224	0.03	
CLMH195E056MH195E052		1975		Existing	assumed Mannings N	MH195E056	MH195E052		T08789	IRWD	VCP	{CC528BC6-54EC-4C25-AC39-7CB8C8B9770B2}	CLMH195E056MH195E052	424.77	415.35	0.666666667	MH195E056	MH195E052		268	CLMH195E056MH195E052	8	0.0352	0.008803	0.06	0.009895	0.07	0.017308	0.09	0.009895	0.07	
CLMH195E057MH195E056		1975		Existing	assumed Mannings N	MH195E057	MH195E056		T08789	IRWD	VCP	{208A348D-FA84-43A4-8083-C4B3D5A6B194}	CLMH195E057MH195E056	427.23	425.07	0.666666667	MH195E057	MH195E056		85	CLMH195E057MH195E056	8	0.0253	0.004068	0.04	0.004574	0.04	0.007997	0.06	0.004574	0.04	
CLMH195E058MH195E056		1975		Existing	assumed Mannings N	MH195E058	MH195E056		T08789	IRWD	VCP	{91F8CABB-6367-4157-BEDA-5D56914D2270}	CLMH195E058MH195E056	431.32	424.98	0.666666667	MH195E058	MH195E056		262	CLMH195E058MH195E056	8	0.0225	0.004735	0.05	0.005325	0.05	0.009311	0.06	0.005325	0.05	
CLMH195E059MH195E058		1975		Existing	assumed Mannings N	MH195E059	MH195E058		T08789	IRWD	VCP	{4A84EAE6-E13E-4F4A-9435-D5879147D980}	CLMH195E059MH195E058	432.85	431.51	0.666666667	MH195E059	MH195E058		332	CLMH195E059MH195E058	8	0.0040	0.002855	0.05	0.003211	0.05	0.005615	0.07	0.003211	0.05	
CLMH195E060MH195N121		1975		Existing	assumed Mannings N	MH195E060	MH195N121		T08892	IRWD	VCP	{D1D4B0C0-6302-4ADF-B66B-2951811E4EDC}	CLMH195E060MH195N121	400.26	396.79	0.666666667	MH195E060	MH195N121		306	CLMH195E060MH195N121	8	0.0113	0.073145	0.22	0.081966	0.23	0.143273	0.30	0.081966	0.23	
CLMH195E061MH195E060		1975		Existing	assumed Mannings N	MH195E061	MH195E060		T08892	IRWD	VCP	{7A9576FD-0F91-40F8-8FFE-1C790739655E}	CLMH195E061MH195E060	402.64	400.26	0.666666667	MH195E061	MH195E060		128	CLMH195E061MH195E060	8	0.0186	0.007241	0.13	0.008144	0.14	0.014235	0.18	0.008144	0.14	
MH195E062MH195S046		1976		Existing	assumed Mannings N	MH195E062	MH195S046		T06195	IRWD	VCP	{780SC7DE-DF3D-479C-85B2-7D23F8365C26}	CLMH195E062MH195S046	389.04	379.60	0.833333333	MH195E062	MH195S046		374	MH195E062MH195S046	10	0.0252	0.181668	0.28	0.204230	0.29	0.357085	0.40	0.206955	0.30	
CLMH195E062MH195S046		1976		Existing	assumed Mannings N	MH195E062	A01114		T08892	IRWD	VCP	{82E73154-9803-46A8-9863-329E0A29E62A}	CLMH195E062MH195S046	389.04	379.60	0.833333333	MH195E062	MH195S046		362	CLMH195E062MH195S046	10	0.0252	0.181668	0.28	0.204230	0.29	0.357085	0.40	0.206955	0.30	
CLMH195E063MH195E062		1971		Existing	assumed Mannings N	MH195E062	A01114		T08892	IRWD	VCP	{89F3E44D-D5AA-40A2-A8FC-ECD9708B3518}	CLMH195E063MH195E062	392.20	389.04	0.833333333	MH195E063	MH195E062		257	CLMH195E063MH195E062	10	0.0123	0.363362	0.27	0.408479	0.29	0.714173	0.39	0.413929	0.29	
CLMH195E064MH195E135		1976		Existing	assumed Mannings N	MH195E064	MH195E135		T07708	IRWD	VCP	{E0D65CBD-B4ED-43CB-A76A-A1D0EB624B5E}	CLMH195E064MH195E135	418.23	416.08	0.666666667	MH195E064	MH195E135		134	CLMH195E064MH195E135	8	0.0161	0.002592	0.04	0.002914	0.04	0.005093	0.05	0.002914	0.04	
CLMH195E065MH195E063		1975		Existing	assumed Mannings N	MH195E065	MH195E063		T08789	IRWD	VCP	{4278CE1A-14D3-4935-A066-EB4475D57B5}	CLMH195E065MH195E063	393.85	392.20	0.833333333	MH195E065	MH195E063		97	CLMH195E065MH195E063	10	0.0170	0.344863	0.32	0.387564	0.34	0.677754	0.47	0.393112	0.35	
CLMH195E065MH195E065		1975		Existing	assumed Mannings N	MH195E065	ERROR 23		T08790	IRWD	VCP	{5970F137-2D8C-4781-A31A-1A1364A18EA2}	CLMH195E065MH195E065	433.67	393.85	0.666666667	MH195E065	MH195E065		273	CLMH195E065MH195E065	8	0.1475	0.024683	0.22	0.027745	0.23	0.048440	0.31	0.027745	0.23	
CLMH195E067GB195E118		1975		Existing	assumed Mannings N	MH195E067	GB195E118		T08790	IRWD	VCP	{00003ED2-9AF9-48BE-9FC1-48E10D61A7F7}	CLMH195E067GB195E118	440.66	436.07	0.666666667	MH195E067	GB195E118		174	CLMH195E067GB195E118	8	0.0264	0.005805	0.05	0.006522	0.05	0.011370	0.07	0.006522	0.05	
CLMH195E068MH195E067		1975		Existing	assumed Mannings N	MH195E068	MH195E067	ERROR 23, assumed US	T08790	IRWD	VCP	{E6DFF4E4-265D-481D-9E26-BEC8B35DA109}	CLMH195E068MH195E067	448.85	440.76	0.666666667	MH195E068	MH195E067		168	CLMH195E068MH195E067	8	0.0432	0.005805	0.04	0.006522	0.05	0.011370	0.06	0.006522	0.05	
CLMH195E069MH195E070		1975		Existing	assumed Mannings N	MH195E069	MH195E070		T08790	IRWD	VCP	{13124729-8495-4A22-9A26-0DA4DAB1A33}	CLMH195E069MH195E070	454.80	444.77	0.666666667	MH195E069	MH195E070		268	CLMH195E069MH195E070	8	0.0374	0.005379	0.05	0.006045	0.05	0.010499	0.07	0.006045	0.05	
CLMH195E069MH195E129		1975		Existing	assumed Mannings N	MH195E069	MH195E129		T08790	IRWD	VCP	{738C5FB1-4B74-430C-94E9-42C7CEFFC0F}	CLMH195E069MH195E129	454.80	453.63	0.666666667	MH195E069	MH195E129		248	CLMH195E069MH195E129	8	0.0047	0.001688	0.04	0.001903	0.04	0.003346	0.05	0.001903	0.04	
CLMH195E070MH195E071		1975		Existing	assumed Mannings N	MH195E070	MH195E071		T08790	IRWD	VCP	{9ACDE070-EE06-4630-B1DB-BA9CD972B5DB}	CLMH195E070MH195E071	444.77	442.48	0.666666667	MH195E070	MH195E071		254	CLMH195E070MH195E071	8	0.0086	0.005314	0.07	0.005972	0.08	0.010401	0.10	0.005972	0.08	
CLMH195E071MH195E073		1975		Existing	assumed Mannings N	MH195E071	MH195E073		T08790	IRWD	VCP	{17B760F9-B2A6-4619-9003-159E5C082A63}	CLMH195E071MH195E073	442.48	440.00	0.666666667	MH195E071	MH195E073		252	CLMH195E071MH195E073	8	0.0098	0.011526	0.09	0.012956	0.09	0.022617	0.12	0.012956	0.09	
CLMH195E072MH195E071		1975		Existing	assumed Mannings N	MH195E072	MH195E071		T08790	IRWD	VCP	{803A7485-23A7-4B17-B9A0-2D5A7AB96C1}	CLMH195E072MH195E071	445.60	442.48	0.666666667	MH195E072	MH195E071		150	CLMH195E072MH195E071	8	0.0208	0.003190	0.06	0.003587	0.07	0.006271	0.09	0.003587	0.07	
CLMH195E073MH195E117		1975		Existing	assumed Mannings N	MH195E073	MH195E117		T08790	IRWD	VCP	{B4684CBE-7DC4-4AA0-A50A-59BE8A06A567}	CLMH195E073MH195E117	439.20	438.73	0.666666667	MH195E073	MH195E117		117	CLMH195E073MH195E117	8	0.0040	0.016137	0.11	0.018141	0.12	0.031680	0.15	0.018141	0.12	
CLMH195E074MH195E117	Changed alignmer	1975		Existing	assumed Mannings N	MH195E074	MH195E117		T08790	IRWD	VCP	{AFACF1F11-57C9-408D-B08A-BA4882F05B95}	CLMH195E074MH195E117	439.70	438.73	0.666666667	MH195E074	MH195E117		142	CLMH195E074MH195E117	8	0.0068	0.002746	0.07	0.003087	0.07	0.005395	0.09	0.003087	0.07	
CLMH195E075MH195E073		1975		Existing	assumed Mannings N	MH195E075	MH195E073		T09309	IRWD	VCP	{4C6FE08B-5844-4315-B304-E6A6A0E74A5}	CLMH195E075MH195E073	421.01	416.25	0.666666667	MH195E075	MH195E073		188	CLMH195E075MH195E073	8	0.0253	0.132112	0.22	0.148562	0.23	0.259686	0.31	0.148562	0.23	
CLMH195E076MH195E075		1975		Existing	assumed Mannings N	MH195E076	MH195E075		T09309	IRWD	VCP	{839A81A8-EC51-4FA3-AF02-7C118F71BA14}	CLMH195E076MH195E075	422.69	421.01	0.666666667	MH195E076	MH195E075		395	CLMH195E076MH195E075	8	0.0043	0.120788	0.29	0.135827	0.30	0.237423	0.41	0.135827	0.30	
CLMH195E077MH195E076		1976		Existing	assumed Mannings N	MH195E077	MH195E076		T09309	IRWD	VCP	{0DC07C9C-1354-4E35-B40D-37CBB202C2B5}	CLMH195E077MH195E076	424.01	422.69	0.666666667	MH195E077	MH195E076		308	CLMH195E077MH195E076	8	0.0043	0.110110	0.33	0.123818	0.36	0.216427	0.48	0.123817	0.36	
CLMH195E078MH195E077		1976		Existing	assumed Mannings N	MH195E078	MH195E077		T09309	IRWD	VCP	{FD168581-F0C9-4FB5-9FE2-1836408D9F33}	CLMH195E078MH195E077	430.23	424.01	0.666666667	MH195E078	MH195E077		177	CLMH195E078MH195E077	8	0.0534	0.018553	0.19	0.020863	0.21	0.036466	0.28	0.020863	0.21	
CLMH195E079MH195E078		1976		Existing	assumed Mannings N	MH195E079	MH195E078		T09309	IRWD	VCP	{C74B5AC3A-5593-421F-B2C9-9D7ADC401BA}	CLMH195E079MH195E078	433.60	430.23	0.666666667	MH195E079	MH195E078		205	CLMH195E079MH195E078	8	0.0165	0.011666	0.07	0.013118	0.08	0.022929	0.10	0.013118	0.08	
CLMH195E080MH195E079		1976		Existing	assumed Mannings N	MH195E080	MH195E079		T09309	IRWD	VCP	{71FD554B-02CE-4FDF-AA95-EFACE296F5E1}	CLMH195E080MH195E079	434.51	433.60	0.666666667	MH195E080	MH195E079		186	CLMH195E080MH195E079	8	0.0049	0.005481	0.07	0.006164	0.08	0.010774	0.10	0.006164	0.08	
CLMH195E081MH195E080		1976		Existing	assumed Mannings N	MH195E081	MH195E080		T09309	IRWD	VCP	{FE0DBEFD-4417-4DB9-93D8-42C7557C2FEF}	CLMH195E081MH195E080	437.69	434.51	0.666666667	MH195E081	MH195E080		158	CLMH195E081MH195E080	8	0.0201	0.005481	0.06	0.006164	0.06	0.010774	0.08	0.006164	0.06	
CLMH195E082MH195E081		1976		Existing	assumed Mannings N	MH195E082	MH195E081		T09309	IRWD	VCP	{ADB1EEB5-FBCE-4596-8241-2B01AA932AC}	CLMH195E082MH195E081	425.11	424.01	0.666666667	MH195E082	MH195E081		199	CLMH195E082MH195E081	8	0.0040	0.001558	0.10	0.002957	0.32	0.009961	0.44	0.010955	0.32	
CLMH195E083MH195E082		1976		Existing	assumed Mannings N	MH195E083	MH195E082		T09310	IRWD	VCP	{1EE6EDAF-343B-479D-B670-A93E17450566}	CLMH195E083MH195E082	429.80	425.11	0.666666667	MH195E083	MH195E082		288	CLMH195E083MH195E082	8	0.0163	0.018564	0.19	0.020875	0.21	0.036488	0.27	0.020875	0.21	
CLMH195E084MH195E083		1976		Existing	assumed Mannings N	MH195E084	MH195E083		T09310	IRWD	VCP	{1D740B58-491E-4325-B50F-0813251904 1E}	CLMH195E084MH195E083	431.22	429.80	0.666666667	MH195E084	MH195E083		278	CLMH195E084MH195E083	8	0.0051	0.010412	0.09	0.011708	0.10	0.020464	0.13	0.011708	0.10	
CLMH195E085MH195E084		1976		Existing	assumed Mannings N	MH195E085	MH195E084		T09310	IRWD	VCP	{7CFEC499-0B05-4135-A1FF-009D425SD4950}	CLMH195E085MH195E084	431.79	431.22	0.666666667	MH195E085	MH195E084		131	CLMH195E085MH195E084	8	0.0044	0.005422	0.08	0.006097	0.09	0.010658	0.12	0.006097	0.09	
CLMH195E086MH195E085		1976		Existing	assumed Mannings N	MH195E086	MH195E085		T09309	IRWD	VCP	{EF7144BE-C1D7-43E8-B6AF-1993B4E13724}	CLMH195E086MH195E085	439.69	431.79	0.666666667	MH195E086	MH195E085		396	CLMH195E086MH195E085	8	0.0200	0.005422	0.06	0.006097	0.06	0.010658	0.08	0.006097	0.06	
CLMH195E086MH195E087		1976		Existing	assumed Mannings N	MH195E086	MH195E087		T09309	IRWD	VCP	{E519938C-868A-4229-A9B4-27F60B446110}	CLMH195E086MH195E087	439.69	432.51	0.666666667	MH195E086	MH195E087		357	CLMH195E086MH195E087	8	0.0201	0.005448	0.06	0.006126	0.07	0.010708	0.09	0.006126	0.07	
CLMH195E087MH195E088		1976		Existing	assumed Mannings N	MH195E087	MH195E088		T09309	IRWD	VCP	{D95D0E7B-B060-4895-8730-2E902AA55480}	CLMH195E087MH195E088	432.51	429.67	0.666666667	MH195E087	MH195E088		171	CLMH195E087MH195E088	8	0.0166	0.011328	0.07	0.012738	0.07	0.022264	0.09	0.012738	0.07	
CLMH195E088MH195E075		1976		Existing	assumed Mannings N	MH195E088	MH195E075		T09309	IRWD	VCP	{54ED4314-04AD-462B-B3E7-FCB0C4B00AC1}	CLMH195E088MH195E075	429.67	421.01	0.666666667	MH195E088	MH195E075		145	CLMH195E088MH195E075	8	0.0600	0.011328	0.14	0.012738	0.15	0.022264	0.19	0.012738	0.15	
CLMH195E089MH195E082		1976		Existing	assumed Mannings N	MH195E089	MH195E082		T09310	IRWD	VCP	{947AA9D7-E4F4-4D76-95D8-56567DFA0990}	CLMH195E089MH195E082	425.70	425.11	0.666666667	MH195E089	MH195E082		96	CLMH195E089MH195E082	8	0.0062	0.072994	0.26	0.082080	0.28	0.143473	0.37	0.082080	0.28	
CLMH195E090MH195E089		1976		Existing	assumed Mannings N	MH195E090	MH195E089		T09310	IRWD	VCP	{31FBE035-9897-4039-9CD2-FEB481CE31B7}	CLMH195E090MH195E089	428.85	425.70	0.666666667	MH195E090	MH195E089		262	CLMH195E090MH195E089	8	0.0120	0.063507	0.21	0.071413	0.22	0.124826	0.29	0.071413	0.22	
CLMH195E091MH195E090		1976		Existing	assumed Mannings N	MH195E091	MH195E090		T09310	IRWD	VCP	{857A3457-0895-42C0-A787-E49483BE4314}	CLMH195E091MH195E090	435.14	429.04	0.666666667	MH195E091	MH195E090		346	CLMH195E091MH195E090	8	0.0176	0.045803	0.14	0.051501	0.15	0.090024	0.20	0.051501	0.15	
CLMH195E092MH195E091		1976		Existing	assumed Mannings N	MH195E092	MH195E091		T09310	IRWD	VCP	{3A63CE63-EA3E-45B6-BCC1-7E358D7163B}	CLMH195E092MH195E091	437.17	435.14	0.666666667	MH195E092	MH195E091		350	CLMH195E092MH195E091	8	0.0058	0.034066	0.15	0.038304	0.16	0.066956	0.22	0.038304	0.16	
CLMH195E093GB195E120		1976		Existing	assumed Mannings N	MH195E093	GB195E120		T09310	IRWD	VCP	{4EE21A47-EA32-4D25-91F9-95BAA2D410F8}	CLMH195E093GB195E120	439.02	438.50	0.666666667	MH195E093	GB195E120		101	CLMH195E093GB195E120	8	0.0052	0.024861	0.15	0.027952	0.16	0.048860	0.22	0.027952	0.16	
CLMH195E094MH195E093		1976		Existing	assumed Mannings N	MH195E094	MH195E093		T09310	IRWD	VCP	{D18E4C53-B5FF-463B-B527-CDEED6D62D35}	CLMH195E094MH195E093	442.22	439.02	0.666666667	MH195E094	MH195E093		250	CLMH195E094MH195E093	8	0.0128	0.023877	0.13	0.026845	0.14	0.046927	0.18	0.026845	0.14	
CLMH195E095MH195E094		1976		Existing	assumed Mannings N	MH195E095	MH195E094

CLMH1955N071MH1955N070			1975			Existing	assumed Mannings N	MH1955N071	MH1955N070		T08892	IRWD	VCP	{97E7DF0F-2DB8-4FF4-8E3E-C938BC677599}	CLMH1955N071MH1955N070	385.95	375.19	0.66666667	MH1955N071	MH1955N070						8	0.0376	0.055560	0.17	0.062476	0.18	0.109204	0.24	0.062476	0.18
CLMH1955N073MH1955N070			1975			Existing	assumed Mannings N	MH1955N073	MH1955N070		T08892	IRWD	VCP	{9AAEFC97-9907-42B1-A66E-97588D79FE69}	CLMH1955N073MH1955N070	376.64	375.19	0.66666667	MH1955N073	MH1955N070		245	CLMH1955N073MH1955N070	8	0.0059	0.016708	0.16	0.018788	0.17	0.032845	0.23	0.018788	0.17
CLMH1955N074MH1955N073			1975			Existing	assumed Mannings N	MH1955N074	MH1955N073		T08892	IRWD	VCP	{2623F12D-934D-42B7-9210-79D9D0BDDE8D}	CLMH1955N074MH1955N073	378.70	376.64	0.66666667	MH1955N074	MH1955N073		330	CLMH1955N074MH1955N073	8	0.0062	0.016709	0.11	0.018788	0.12	0.032845	0.16	0.018788	0.12
CLMH1955N075MH1955N074			1975			Existing	assumed Mannings N	MH1955N075	MH1955N074		T08892	IRWD	VCP	{0A8E9060-6298-4C26-9001-95902AAB28BA}	CLMH1955N075MH1955N074	380.88	378.70	0.66666667	MH1955N075	MH1955N074		350	CLMH1955N075MH1955N074	8	0.0062	0.006768	0.09	0.007610	0.10	0.013304	0.13	0.007610	0.10
CLMH1955N076MH1955N075			1975			Existing	assumed Mannings N	MH1955N076	MH1955N075		T08892	IRWD	VCP	{590A0DC1-5143-45FD-BCBA-50C32746F5B6}	CLMH1955N076MH1955N075	383.48	380.88	0.66666667	MH1955N076	MH1955N075		288	CLMH1955N076MH1955N075	8	0.0090	0.006778	0.07	0.007617	0.07	0.013328	0.10	0.007617	0.07
CLMH1955N077MH1955N071			1975			Existing	assumed Mannings N	MH1955N077	MH1955N071		T08892	IRWD	VCP	{89359E7A-E872-4694-97CC-EA9CE72B2B50}	CLMH1955N077MH1955N071	388.17	385.95	0.66666667	MH1955N077	MH1955N071		257	CLMH1955N077MH1955N071	8	0.0086	0.050483	0.16	0.056767	0.17	0.099226	0.22	0.056767	0.17
CLMH1955N078MH1955N077			1975			Existing	assumed Mannings N	MH1955N078	MH1955N077		T08892	IRWD	VCP	{EA918E11-5255-4B1B-95D4-3ED98CB008A}	CLMH1955N078MH1955N077	389.42	388.17	0.66666667	MH1955N078	MH1955N077		148	CLMH1955N078MH1955N077	8	0.0085	0.043221	0.18	0.048601	0.19	0.086952	0.25	0.048601	0.19
CLMH1955N079MH1955N078			1975			Existing	assumed Mannings N	MH1955N079	MH1955N078		T08892	IRWD	VCP	{0A520732-B3B0-4688-83A8-62D635342E0}	CLMH1955N079MH1955N078	391.25	389.42	0.66666667	MH1955N079	MH1955N078		220	CLMH1955N079MH1955N078	8	0.0083	0.029026	0.15	0.032640	0.16	0.057051	0.21	0.032640	0.16
CLMH1955N080MH1955N079			1975			Existing	assumed Mannings N	MH1955N080	MH1955N079		T08892	IRWD	VCP	{A727A740-4F69-4DB0-BE44-DF6C8167662F}	CLMH1955N080MH1955N079	393.33	391.25	0.66666667	MH1955N080	MH1955N079		231	CLMH1955N080MH1955N079	8	0.0090	0.020355	0.13	0.022888	0.13	0.040004	0.17	0.022888	0.13
CLMH1955N081MH1955N078			1975			Existing	assumed Mannings N	MH1955N081	MH1955N078		T08892	IRWD	VCP	{0CCBCC10-448B-47D3-9EB4-D47A9603955F1}	CLMH1955N081MH1955N078	399.35	389.42	0.66666667	MH1955N081	MH1955N078		263	CLMH1955N081MH1955N078	8	0.0378	0.014195	0.12	0.015962	0.12	0.027901	0.16	0.015962	0.12
CLMH1955N082MH1955N081			1975			Existing	assumed Mannings N	MH1955N082	MH1955N081		T08892	IRWD	VCP	{BA9CD611-CF99-411E-8F70-B38CD8FBD816}	CLMH1955N082MH1955N081	401.63	399.35	0.66666667	MH1955N082	MH1955N081		211	CLMH1955N082MH1955N081	8	0.0108	0.007179	0.07	0.008071	0.07	0.014110	0.09	0.008071	0.07
CLMH1955N083MH1955N080			1975			Existing	assumed Mannings N	MH1955N083	MH1955N080		T08892	IRWD	VCP	{0995B52B-4480-4C4D-B88A-B551E9B2A912}	CLMH1955N083MH1955N080	397.94	393.33	0.66666667	MH1955N083	MH1955N080		273	CLMH1955N083MH1955N080	8	0.0169	0.011470	0.09	0.012898	0.10	0.022542	0.13	0.012898	0.10
CLMH1955N084MH1955N083			1975			Existing	assumed Mannings N	MH1955N084	MH1955N083		T08892	IRWD	VCP	{14837ZE2-7F45-4514-8986-F7432EA89CB1}	CLMH1955N084MH1955N083	400.51	397.94	0.66666667	MH1955N084	MH1955N083		302	CLMH1955N084MH1955N083	8	0.0085	0.006088	0.07	0.006845	0.07	0.011964	0.10	0.006845	0.07
CLMH1955N085MH1955N084			1975			Existing	assumed Mannings N	MH1955N085	MH1955N084		T08892	IRWD	VCP	{C5285G08-EFB9-493F-8E3B-863EADF9F08D}	CLMH1955N085MH1955N084	402.75	400.51	0.66666667	MH1955N085	MH1955N084		270	CLMH1955N085MH1955N084	8	0.0083	0.000000	0.03	0.000000	0.03	0.000000	0.04	0.000000	0.03
CLMH1955N085MH1955N086			1975			Existing	assumed Mannings N	MH1955N086	MH1955N085		T08892	IRWD	VCP	{3BE323FB-1CD5-4E1C-A238-ADB0E11600E9}	CLMH1955N085MH1955N086	402.75	398.16	0.66666667	MH1955N085	MH1955N086		147	CLMH1955N085MH1955N086	8	0.0313	0.000000	0.03	0.000000	0.03	0.000000	0.04	0.000000	0.03
CLMH1955N086MH1955N087			1975			Existing	assumed Mannings N	MH1955N086	MH1955N087		T08892	IRWD	VCP	{DF8F4C5E-CE81-4335-9AAB-C5AD19C7F92F}	CLMH1955N086MH1955N087	398.16	395.04	0.66666667	MH1955N086	MH1955N087		213	CLMH1955N086MH1955N087	8	0.0147	0.005124	0.07	0.005762	0.07	0.010072	0.09	0.005762	0.07
CLMH1955N087MH1955N100			1975			Existing	assumed Mannings N	MH1955N087	MH1955N100		T08892	IRWD	VCP	{CD59EFA4-509D-60AA-90FE-0FE7E7BB890B}	CLMH1955N087MH1955N100	395.04	392.01	0.66666667	MH1955N087	MH1955N100		208	CLMH1955N087MH1955N100	8	0.0145	0.011634	0.09	0.013082	0.10	0.022867	0.12	0.013082	0.10
CLMH1955N088MH1955N120			1975			Existing	assumed Mannings N	MH1955N088	MH1955N120		T08892	IRWD	VCP	{9F842C7C-061C-4033-AEA7-768BDB3C7901}	CLMH1955N088MH1955N120	375.42	368.64	0.66666667	MH1955N088	MH1955N120		367	CLMH1955N088MH1955N120	8	0.0185	0.007896	0.21	0.008879	0.23	0.015522	0.30	0.008879	0.23
CLMH1955N089MH1955N120			1975			Existing	assumed Mannings N	MH1955N089	MH1955N120		T08892	IRWD	VCP	{63CCE300-570A-4A2A-ACEC-CFD419FAE417}	CLMH1955N089MH1955N120	371.17	368.64	1.00000000	MH1955N089	MH1955N120		247	CLMH1955N089MH1955N120	12	0.0102	0.190322	0.22	0.213731	0.23	0.373602	0.31	0.213731	0.23
CLMH1955N090MH1955N089			1975			Existing	assumed Mannings N	MH1955N090	MH1955N089		T08892	IRWD	VCP	{09CA19AC-6F64-4D4C-B683-117A8978CB20}	CLMH1955N090MH1955N089	374.63	371.17	0.66666667	MH1955N090	MH1955N089		329	CLMH1955N090MH1955N089	8	0.0154	0.015582	0.19	0.017522	0.20	0.030627	0.26	0.017522	0.20
CLMH1955N091MH1955N090			1975			Existing	assumed Mannings N	MH1955N091	MH1955N090		T08892	IRWD	VCP	{B7DD429E-6759-4F75-B6E8-2164A7E13232}	CLMH1955N091MH1955N090	378.00	374.63	0.66666667	MH1955N091	MH1955N090		225	CLMH1955N091MH1955N090	8	0.0150	0.008062	0.08	0.009065	0.08	0.015844	0.11	0.009065	0.08
CLMH1955N092MH1955N089			1975			Existing	assumed Mannings N	MH1955N092	MH1955N089	ERROR 23	T08892	IRWD	VCP	{8B56E0FF-0FCD-498C-BFBD-A0D05CC0AA2B}	CLMH1955N092MH1955N089	373.95	371.17	1.00000000	MH1955N092	MH1955N089		271	CLMH1955N092MH1955N089	12	0.0103	0.174742	0.19	0.196209	0.20	0.342975	0.26	0.196209	0.20
CLMH1955N093MH1955N092			1975			Existing	assumed Mannings N	MH1955N093	MH1955N092	ERROR 23	T08892	IRWD	VCP	{706EEC698-7560-4B7B-B8AE-E20F21D87F15}	CLMH1955N093MH1955N092	376.19	374.39	0.66666667	MH1955N093	MH1955N092		200	CLMH1955N093MH1955N092	8	0.0090	0.006276	0.06	0.007057	0.07	0.012334	0.09	0.007057	0.07
CLMH1955N094MH1955N093			1975			Existing	assumed Mannings N	MH1955N094	MH1955N093		T08892	IRWD	VCP	{6C3976BA-9AFC-42C3-B81D-64D9F583F9A6}	CLMH1955N094MH1955N093	378.19	376.29	0.66666667	MH1955N094	MH1955N093		210	CLMH1955N094MH1955N093	8	0.0090	0.006276	0.06	0.007057	0.07	0.012334	0.09	0.007057	0.07
CLMH1955N095MH1955N109			1975			Existing	assumed Mannings N	MH1955N095	MH1955N109		T08892	IRWD	VCP	{C9CEE561-3615-429B-9ECD-1791F176CFA2}	CLMH1955N095MH1955N109	377.76	375.25	1.00000000	MH1955N095	MH1955N109		246	CLMH1955N095MH1955N109	12	0.0102	0.159912	0.18	0.179534	0.19	0.313825	0.25	0.179534	0.19
CLMH1955N096MH1955N095			1975			Existing	assumed Mannings N	MH1955N096	MH1955N095		T08892	IRWD	VCP	{4E7E0B9D-F247-49CD-BF6A-1BD9C4F440B4}	CLMH1955N096MH1955N095	380.05	377.76	0.66666667	MH1955N096	MH1955N095		197	CLMH1955N096MH1955N095	8	0.0116	0.037439	0.21	0.042100	0.22	0.073590	0.29	0.042100	0.22
CLMH1955N097MH1955N096			1975			Existing	assumed Mannings N	MH1955N097	MH1955N096		T08892	IRWD	VCP	{1104CC2C-A7FD-4484-93F2-FD9B8268265C}	CLMH1955N097MH1955N096	381.80	380.05	0.66666667	MH1955N097	MH1955N096		349	CLMH1955N097MH1955N096	8	0.0050	0.037439	0.16	0.042100	0.17	0.073590	0.23	0.042100	0.17
CLMH1955N098MH1955N097			1975			Existing	assumed Mannings N	MH1955N098	MH1955N097		T08892	IRWD	VCP	{6B295073-BE2E-4A88-A4C6-B06CCF98BD78}	CLMH1955N098MH1955N097	386.95	381.80	0.66666667	MH1955N098	MH1955N097		284	CLMH1955N098MH1955N097	8	0.0181	0.029237	0.15	0.032877	0.16	0.057468	0.21	0.032877	0.16
CLMH1955N099MH1955N098			1975			Existing	assumed Mannings N	MH1955N099	MH1955N098		T08892	IRWD	VCP	{58682530-0717-4EC4-B8CA-3A1A7716C9A}	CLMH1955N099MH1955N098	388.54	386.95	0.66666667	MH1955N099	MH1955N098		351	CLMH1955N099MH1955N098	8	0.0045	0.029237	0.14	0.032877	0.15	0.057468	0.20	0.032877	0.15
CLMH1955N100MH1955N099			1975			Existing	assumed Mannings N	MH1955N100	MH1955N099		T08892	IRWD	VCP	{519A1296-CC29-4162-8239-CB248ED6EF78}	CLMH1955N100MH1955N099	392.01	388.54	0.66666667	MH1955N100	MH1955N099		328	CLMH1955N100MH1955N099	8	0.0106	0.017744	0.14	0.019953	0.14	0.034879	0.19	0.019953	0.14
CLMH1955N101MH1955N095			1975			Existing	assumed Mannings N	MH1955N101	MH1955N095		T08892	IRWD	VCP	{48902561-579A-4FE1-80AB-550924DB8483}	CLMH1955N101MH1955N095	380.20	377.76	0.66666667	MH1955N101	MH1955N095		254	CLMH1955N101MH1955N095	8	0.0096	0.116433	0.26	0.128363	0.27	0.230600	0.37	0.130643	0.28
CLMH1955N102MH1955N101			1975			Existing	assumed Mannings N	MH1955N102	MH1955N101		T08892	IRWD	VCP	{E7000C31-556D-4520-A6B8-E69B1E2615597}	CLMH1955N102MH1955N101	382.14	380.20	0.66666667	MH1955N102	MH1955N101		132	CLMH1955N102MH1955N101	8	0.0147	0.006675	0.16	0.007506	0.17	0.013120	0.23	0.007506	0.17
CLMH1955N103MH1955N102			1975			Existing	assumed Mannings N	MH1955N103	MH1955N102		T08892	IRWD	VCP	{47D9DA1D-6AC2-42F7-9E03-541E71FDD7CF}	CLMH1955N103MH1955N102	387.04	382.14	0.66666667	MH1955N103	MH1955N102		320	CLMH1955N103MH1955N102	8	0.0153	0.006712	0.06	0.007558	0.06	0.013209	0.08	0.007558	0.06
CLMH1955N104MH1955N101	SLOPE NOT ON AS		1975			Existing	assumed Mannings N	MH1955N104	MH1955N101		T08892	IRWD	VCP	{1F997A81-BCAA-49D4-9F58-AE1ECAE57425}	CLMH1955N104MH1955N101	383.39	380.20	0.66666667	MH1955N104	MH1955N101		197	CLMH1955N104MH1955N101	8	0.0162	0.103061	0.24	0.115606	0.25	0.202077	0.34	0.115606	0.25
CLMH1955N105MH1955N104			1975			Existing	assumed Mannings N	MH1955N105	MH1955N104		T08892	IRWD	VCP	{E4368C1A-4EAB-4443-9341-029CCAF8CBBE}	CLMH1955N105MH1955N104	386.39	383.39	0.66666667	MH1955N105	MH1955N104		183	CLMH1955N105MH1955N104	8	0.0164	0.103061	0.22	0.115606	0.23	0.202077	0.31	0.115606	0.23
CLMH1955N106MH1955N105			1975			Existing	assumed Mannings N	MH1955N106	MH1955N105		T08892	IRWD	VCP	{04BCFACC-375A-4BC4-9106-A06D0E33CDB}	CLMH1955N106MH1955N105	388.57	386.39	0.66666667	MH1955N106	MH1955N105		264	CLMH1955N106MH1955N105	8	0.0082	0.092933	0.23	0.104217	0.25	0.182167	0.33	0.104217	0.25
CLMH1955N107MH1955N106			1975			Existing	assumed Mannings N	MH1955N107	MH1955N106		T08892	IRWD	VCP	{3D03AF27-1E56-4473-B769-C5DD72B17072}	CLMH1955N107MH1955N106	394.01	388.57	0.66666667	MH1955N107	MH1955N106		300	CLMH1955N107MH1955N106	8	0.0181	0.092933	0.23	0.104217	0.24	0.182168	0.32	0.104217	0.24
CLMH1955N108MH1955N022	CAL13		1998			Existing	assumed Mannings N	MH1955N108	MH1955N022		T07197	IRWD	VCP	{A32E80D6-0C75-4E12-BAD6-B7849BB0092E}	CLMH1955N108MH1955N022	362.61	362.26	1.75000000	MH1955N108	MH1955N022		71	CLMH1955N108MH1955N022	21	0.0049	1.161469	0.29	1.253921	0.31	2.212900	0.42	2.033930	0.40
CLMH1955N109MH1955N092			1975			Existing	assumed Mannings N	MH1955N109	MH1955N092	ERROR 23	T08892	IRWD	VCP	{0B423980-D4A4-4606-B8A8-3BA7D1390D02}	CLMH1955N109MH1955N092	375.25	374.05	1.00000000	MH1955N109	MH1955N092		124	CLMH1955N109MH1955N092	12	0.0097	0.162850	0.18	0.182837	0.19	0.319600	0.25	0.182837	0.19
CLMH1955N111MH1955N121			1975			Existing	assumed Mannings N	MH1955N111	MH1955N121		T08892	IRWD	VCP	{FB72E6E7-209A-46F1-AE1F-A5DA4B61E8A4}	CLMH1955N111MH1955N121	398.94	396.79	0.66666667	MH1955N111	MH1955N121		112	CLMH1955N111MH1955N121	8	0.0192	0.007124	0.14	0.008012	0.15	0.014001	0.20	0.008012	0.15
CLMH1955N111MH1955N018			1976			Existing	assumed Mannings N	MH1955N111	MH1955N018		T08814	IRWD	VCP	{24DD2402-6C3C-44C8-9E1F-A27B9E24C651}	CLMH1955N111MH1955N018	406.13	402.17	1.50000000	MH1955N111	MH1955N018		395	CLMH1955N111MH1955N018	18	0.0100	1.067687	0.24	1.146294	0.25	2.020095	0.33	1.969114	0.33
CLMH1955N112MH1955N111			1976			Existing	assumed Mannings N	MH1955N112	MH1955N111		T08814	IRWD	VCP	{9CDBAF27-A544-4912-A9DD-185DEA4A8CEF}	CLMH1955N112MH1955N111	408.29	406.13	1.50000000	MH1955N112	MH1955N111		287	CLMH1955N112MH1955N111	18	0.0100	1.067367	0.27	1.146081	0.28	2.019683	0.38	1.968842	0.38
CLMH1955N113MH1955N112			1976			Existing	assumed Mannings N	MH1955N113	MH1955N112		T08814	IRWD	VCP	{F4168D69-3285-4EA4-B331-1B1E09ADF375}	CLMH1955N113MH1955N112	418.07	416.41	0.66666667	MH1955N113	MH1955N112		302	CLMH1955N113MH1955N112	8	0.0055	0.008762	0.09	0.009838	0.10	0.017081	0.13	0.009838	0.10
CLMH1955N114MH1955N013			1971			Existing	assumed Mannings N	MH1955N114	MH1955N013		T07395	IRWD	VCP	{23C5E008-F52F-4E1D-8E4A-CF26CFD68BF9}	CLMH1955N114MH1955N013	400.67	398.79	0.66666667	MH1955N114	MH1955N013		152	CLMH1955N114MH1955N013	8	0.0124	0.001733	0.04	0.001949	0.05	0.003408	0.06	0.001949	0.05
CLMH1955N115MH1955N081			1975			Existing	assumed Mannings N	MH1955N115	MH1955N081		T08892	IRWD	VCP	{A6E6831C-4A91-48CB-A751-035A0CA4F4F5}	CLMH1955N115MH1955N081	405.35	399.35	0.66666667	MH1955N115	MH1955N081		264	CLMH1955N115MH1955N081	8	0.0164	0.007074	0.06	0.007954	0.07	0.013904	0.09	0.007954	0.07
CLMH1955N116MH1955N080			1975			Existing	assumed Mannings N	MH1955N116	MH1955N080		T08892	IRWD	VCP	{19EA5184-019E-44EA-B1C1-0749414EE83C}	CLMH1955N116MH1955N080	395.55	393.33	0.66666667	MH1955N116	MH1955N080		244	CLMH1955N116MH1955N080	8	0.0091	0.008884	0.10	0.009990	0.10	0.017462	0.13	0.009990	0.10
CLMH1955N117MH1955N118			1975			Existing	assumed Mannings N	MH1955N117	MH1955N118		T08892	IRWD	VCP	{8F119F90-91CC-4AE3-B33A-E1F9D04E14E0}	CLMH1955N117MH1955N118	375.32	369.17	0.66666667	MH1955N117	MH1955N118		333	CLMH1955N117MH1955N118	8	0.0185	0.007991	0.06	0.008986	0.07	0.015706	0.09	0.008986	0.07
CLMH1955N118MH1955N119			1975			Existing	assumed Mannings N	MH1955N118	MH1955N119		T08892	IRWD	VCP	{82730F55-EA25-459F-B4E1-0B661DDF3846}	CLMH1955N118MH1955N119	369.17	367.66	0.66666667	MH1955N118	MH1955N119		213	CLMH1955N118MH1955N119	8	0.0147	0.007991	0.23	0.008986	0.24	0.015706	0.33	0.008986	0.24
CLMH1955N119MH1955N061			1975			Existing	assumed Mannings N	MH1955N119	MH1955N061		T08892	IRWD	VCP	{81F28340-9CDD-4055-A6A1-583F9BABFC84}	CLMH1955N119MH1955N061	367.66	366.54	1.00000000	MH1955N119	MH1955N061		283	CLMH1955N119MH1955N061	12	0.0040	0.213102	0.25	0.239368	0.27	0.418455	0.35	0.239368	0.27
CLMH1955N120MH1955N119			1975			Existing	assumed Mannings N	MH1955N120	MH1955N119		T08892	IRWD	VCP	{5BA8D321-93F2-4E9B-AFA9-A9CAAFC97B99}	CLMH1955N120MH1955N119	368.64	367.66	1.00000000	MH1955N120	MH1955N119		227	CLMH1955N120MH1955N119	12	0.0043	0.198211	0.25	0.222606	0.27	0.389123	0.36	0.222606	0.27
CLMH1955N121MH1955N107			1975			Existing	assumed Mannings N	MH1955N121	MH1955N107		T08892	IRWD	VCP	{97A211B4-7143-44D1-A958-3C6D36C107D1}	CLMH1955N121MH1955N107	396.79	394.01	0.66666667	MH1955N121	MH1955N107		243	CLMH1955N121MH1955N107	8	0.0114	0.052933	0.22	0.104218	0.23	0.182168	0.30	0.104218	0.23
CLMH1955N123MH1955E009			1976			Existing	assumed Mannings N	MH1955N123	MH1955E009	ERROR 23	T08814	IRWD	VCP	{0DE7F1FA-144C-4A58-84F0-7C82D8707BAE}	CLMH1955N123MH1955E009	416.41	415.83	0.66666667	MH1955N123	MH1955E009		126	CLMH1955N123MH1955E009	8	0.0046	0.011034	0.10	0.012393	0.10	0.021546	0.13	0.012393	0.10
CLMH1955001MH1955007			1976			Existing	assumed Mannings N	MH1955001	MH1955007		T09452	IRWD	VCP	{6AD11210-A1AE-4A19-88AD-C9154859CB13}	CLMH1955001MH1955007	358.57	356.97	0.66666667	MH1955001	MH1955007		358	CLMH1955001MH1955007	8	0.0040	0.043929	0.16	0.049398	0.17	0.086928	0.23	0.049397	0.17
CLMH1955002MH1955001			1998			Existing	assumed Mannings N	MH1955002	MH1955001		T07197	IRWD	VCP	{A0DDA605-5D4E-4017-B105-9A0AE1A8D0E1}	CLMH1955002MH1955001	366.00	358.57	0.66666667	MH1955002	MH1955001		349	CLMH1955002MH1955001	8	0.0271	0.013349	0.14	0.012768	0.15	0.022342	0.20	0.012767	0.15
CLMH1955005MH1955W108			1998			Existing	assumed Mannings N	MH1955005	MH1955W108		T07197	IRWD	VCP	{D01B4ED9-DB1C-4667-894C-CD6021F8DD00}	CLMH1955005MH1955W108	370.45	370.07	0.66666667	MH1955005	MH1955W108		97	CLMH1955005MH1955W108	8	0.0039	0.000000	0.03	0.000000	0.04	0.000000	0.04	0.000000	0.03
CLMH1955007MH1955008			1976			Existing	assumed Mannings N	MH1955007	MH1955008		T07390	IRWD	VCP	{4CAC7B3C-2746-4A83-94E1-9500A7422CC2}	CLMH1955007MH1955008	356.97	335.57	0.66666667	MH1955007	MH1955008		351	CLMH1955007MH1955008	8	0.0610	0.043907	0.10	0.049373	0.11	0.086902	0.14	0.049373	0.11
CLMH1955008MH1955W105			1976			Existing	assumed Mannings N	MH1955008	MH1955W105		T07390	IRWD	VCP	{C4F3B883-58EA-4CAB-A109-2B4BE80223A0}	CLMH1955008MH1955W105	335.00	329.85	1.00000000	MH1955008	MH1955W105		195	CLMH1955008MH1955W105	12	0.0265	0.098483	0.15	0.786858	0.35	1.389751	0.48	0.752522	0.36
CLMH1955010MH1955W009			1976			Existing	assumed Mannings N	MH1955010	MH1955W009		T09452	IRWD	VCP	{7ACE6830-B1B8-4465-BFF3-F83A84B1F95C}	CLMH1955010MH1955W009	346.07	340.66	0.66666667	MH1955010	MH1955W009		120	CLMH1955010MH1955W009	8	0.0451	0.000000	0.06	0.000000	0.06	0.000000	0.08	0.000000	0.06
CLMH1955013MH1955W098			1976			Existing	assumed Mannings N	MH1955013	MH1955W098		T09452	IRWD	VCP	{F9F12361-D2CA-4A39-9EA7-B8B9A34E4F8D}	CLMH1955013MH1955W098	365.89	360.13	0.66666667	MH1955013	MH1955W098		283	CLMH1955013MH1955W098	8	0.0203	0.003521	0.05	0.003959	0.05	0.006921	0.06	0.003959	0.05
CLMH1955016MH1955W105			1976			Existing	assumed Mannings N	MH1955016	MH1955W105		T07390	IRWD	VCP	{3A6F8028-3720-4140-9941-9AF867FD0337}	CLMH1955016MH1955W105	356.67	329.85	0.66666667	MH1955016	MH1955W105		353	CLMH1955016MH1955W105	8	0.0762	0.005489	0.30	0.006172	0.32	0.010789	0.43	0.006172	0.32
CLMH1955017MH1955016			1976			Existing	assumed Mannings N	MH1955017	MH1955016		T07390	IRWD	VCP	{9E1EAE370-3138-4AFF-864A-2DD82EE2E683}	CLMH1955017MH1955016	365.92	356.76	0.66666667	MH1955017	MH1955016		260	CLMH1955017MH1955016	8	0.0353	0.005489	0.04	0.006172	0.05	0.010789	0.06	0.006172	0.05
CLMH1955018MH1955017			1976			Existing	assumed Mannings N	MH1955018	MH1955017		T07390	IRWD	VCP	{D70B2878-B462-4483-AF24-5B160B941E68}	CLMH1955018MH1955017	367.17	366.11	0.66666667	MH1955018	MH1955017		267	CLMH1955018MH1955017	8	0.0040	0.005489	0.07	0.006172	0.07	0.010789	0.10	0.006172	0.07
CLMH1955019MH1955018			1976			Existing	assumed Mannings N	MH1955019	MH1955018		T07390	IRWD	VCP	{5CC4CDCB-6093-4034-8E8A-150023668F6E}	CLMH1955019MH1955018	370.79	367.26	0.66666667	MH1955019	MH1955018		161	CLMH1955019MH1955018	8	0.0219	0.000961	0.02	0.001081	0.02	0.001889	0.03	0.001081	0.02
CLMH1955020MH1955008			1976			Existing	assumed Mannings N	MH1955020	MH1955008		T07390	IRWD	VCP	{FB167639-0B3E-40DC-940C-396C44211159}	CLMH1955020MH1955008	336.45	335.50	1.00000000	MH1955020	MH1955008		168	CLMH1955020MH1955008	12	0.0056	0.606941	0.41	0.681521	0.43	1.199822	0.60	0.687071	0.44
CLMH1955021MH1955020			1976			Existing	assumed Mannings N	MH1955021	MH1955020		T07390	IRWD	VCP	{5F87CA58-8E8C-461B-974C-FFFCBEEDA1D9}	CLMH1955021MH1955020	369.48	336.45	0.66666667	MH1955021	MH1955020		191	CLMH1955021MH1955020	8	0.2143	0.009627	0.32	0.010826	0.35	0.018921	0.49	0.010826	0.35
CLMH1955022MH1955114			1976			Existing	assumed Mannings N	MH1955022	MH1955114		T07390	IRWD	VCP	{0B70E8C2-C056-428B-8D3B-882DF73587AC}	CLMH1955022MH1955114	377.55	372.52	0.66666667	MH1955022	MH1955114		251	CLMH1955022MH1955114	8	0.0200	0.002327	0.03	0.002617	0.04	0.004572	0.05	0.002617	0.04
CLMH1955023MH1955020			1970			Existing	assumed Mannings N	MH1955023	MH1955020		A01174	IRWD	VCP	{AB194D04-183F-4128-9A96-2B546E6CE688}	CLMH1955023MH1955020	337.92	336.45	1.00000000	MH1955023	MH1955020		327	CLMH1955023MH1955020	12	0.0036	0.559596	0.44	0.673696	0.47	1.182386	0.67	0.679223	0.47
CLMH1955024MH1955023			1970			Existing	assumed Mannings N	MH1955024	MH1955023		T07390	IRWD	VCP	{89467853-97AC-469B-972E-134BC1C2E718}	CLMH1955024M

| | | |

| | | |

CLMH196125MH196N143		1971			Existing	assumed Mannings N	MH196N125	MH196N143		A01115	IRWD	VCP	{917E4ECA-4A7B-4B24-B41B-4DE9AD767A55}	CLMH196125MH196N143	299.52	298.54	2.000000000	MH196N125	MH196N143																			
CLMH196N127MH196N137		1978			Existing	assumed Mannings N	MH196N127	MH196N137	Old CIP	A01537	IRWD	VCP	{2650BA48-A2CB-4F16-A1D8-9F81912D952}	CLMH196N127MH196N137	312.98	311.76	1.500000000	MH196N127	MH196N137		55	CLMH196N127MH196N137	18	0.0222	4.561693	0.48	5.134676	0.52	8.124506	0.71	5.252377	0.53				
CLMH196N128MH196N148	CAL10	1971			Existing	assumed Mannings N	MH196N128	MH196N148		A01115	IRWD	VCP	{0469127A-9661-48BB-BB04-14B487A8AE4E}	CLMH196N128MH196N148	323.83	319.38	1.750000000	MH196N128	MH196N148		446	CLMH196N128MH196N148	21	0.0100	2.076034	0.29	2.223417	0.30	3.944479	0.40	2.998217	0.35				
CLMH196N129MH196N128		1971			Existing	assumed Mannings N	MH196N129	MH196N128		A01115	IRWD	VCP	{CC1F78A9-B3FA-4E4B-A9FB-4F391218A239}	CLMH196N129MH196N128	326.64	323.94	1.750000000	MH196N129	MH196N128		270	CLMH196N129MH196N128	21	0.0100	2.076013	0.31	2.223418	0.32	3.944431	0.43	2.998184	0.37				
CLMH196N130MH196N013		1968			Existing	assumed Mannings N	MH196N130	MH196N013	Old CIP	A01248	IRWD	VCP	{06A07ACD-E77E-4847-A5AB-A738DC24E1EA}	CLMH196N130MH196N013	320.42	319.25	1.750000000	MH196N130	MH196N013		365	CLMH196N130MH196N013	21	0.0032	4.549330	0.61	5.121114	0.66	8.103912	0.88	5.238523	0.67				
CLMH196N131MH196N132		2006			Existing	assumed Mannings N	MH196N131	MH196N132		A01784	IRWD	VCP	{1EA102DF-CDDF-4F79-AA2C-8737F4058656}	CLMH196N131MH196N132	299.96	299.52	3.000000000	MH196N131	MH196N132		177	CLMH196N131MH196N132	36	0.0025	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH196N132DE196N018	CONNECT TO OTH	2006			Existing	assumed Mannings N	MH196N132	DE196N018		A01784	IRWD	VCP	{CF401DFB-3B20-4CE6-97AB-5F957AD85EA2}	CLMH196N132DE196N018	299.50	299.26	3.000000000	MH196N132	DE196N018		97	CLMH196N132DE196N018	36	0.0025	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH196N133MH172E107		2006			Existing	assumed Mannings N	MH196N133	MH172E107		A00275A	IRWD	PVC	{F9E3F6CC-CE07-44EE-81EF-7A74B590BCA3}	CLMH196N133MH172E107	322.29	320.10	0.666666667	MH196N133	MH172E107		219	CLMH196N133MH172E107	8	0.0100	0.001620	0.03	0.001731	0.03	0.002052	0.04	0.001731	0.03				
CLMH196N134MH196N002		1978			Existing	assumed Mannings N	MH196N134	MH196N002		A00274	IRWD	VCP	{7553A587-4320-441F-A265-E7EBF73E29FA}	CLMH196N134MH196N002	304.01	293.25	0.666666667	MH196N134	MH196N002		280	CLMH196N134MH196N002	8	0.0384	0.009203	0.06	0.009827	0.06	0.011652	0.06	0.009827	0.06				
CLMH196N135MH196N127		1978			Existing	assumed Mannings N	MH196N135	MH196N127	Old CIP	A01537	IRWD	VCP	{9307F9DA-B42B-4696-B572-025F518D9A7}	CLMH196N135MH196N127	315.64	312.98	1.500000000	MH196N135	MH196N127		120	CLMH196N135MH196N127	18	0.0222	4.550573	0.47	5.121793	0.50	8.103130	0.68	5.239284	0.51				
CLMH196N136MH196N002		1978			Existing	assumed Mannings N	MH196N136	MH196N002		A00274	IRWD	VCP	{784B0F71-B9FF-473F-A83D-9B3172A1C6A6}	CLMH196N136MH196N002	294.08	293.25	0.666666667	MH196N136	MH196N002		237	CLMH196N136MH196N002	8	0.0035	0.004400	0.06	0.004698	0.07	0.005570	0.07	0.004698	0.07				
CLMH196N137MH196N139		1971			Existing	assumed Mannings N	MH196N137	MH196N139	Old CIP	A01100	IRWD	VCP	{CAE4506D-C556-4ADF-98D3-7F14AFF6C2DF}	CLMH196N137MH196N139	311.76	302.00	1.500000000	MH196N137	MH196N139		18	CLMH196N137MH196N139	18	0.0185	4.547231	0.50	5.122168	0.53	8.120369	0.73	5.238110	0.54				
CLMH196N138MH196N140		1978			Existing	assumed Mannings N	MH196N138	MH196N140		A00274	IRWD	VCP	{0C1E6655-EFE1-498D-8141-E48FB05217D0}	CLMH196N138MH196N140	288.75	286.97	0.666666667	MH196N138	MH196N140		265	CLMH196N138MH196N140	8	0.0067	0.014123	0.10	0.015081	0.10	0.017881	0.11	0.015081	0.10				
CLMH196N139MH196N131		2006			Existing	assumed Mannings N	MH196N139	MH196N131	Old CIP	A01784	IRWD	VCP	{9C1192AC-72C4-4C79-BFE9-9AB744B87EF}	CLMH196N139MH196N131	303.04	300.69	2.500000000	MH196N139	MH196N131		323	CLMH196N139MH196N131	27	0.0073	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH196N139MH196N141		-99			Existing	assumed Mannings N	MH196N139	MH196N141			IRWD	VCP	{CEBAFD4B-A4B2-4C14-945A-00BA5F86D33F}	CLMH196N139MH196N141	301.89	300.98	1.500000000	MH196N139	MH196N141		38	CLMH196N139MH196N141	18	0.0239	4.547630	0.53	5.121644	0.57	8.120378	0.80	5.238624	0.58				
CLMH196N140MH196N142		1978			Existing	assumed Mannings N	MH196N140	MH196N142		A00274	IRWD	VCP	{CE5A217C-8792-4FB8-AE76-7D7834BA9F32}	CLMH196N140MH196N142	286.76	284.95	0.666666667	MH196N140	MH196N142		270	CLMH196N140MH196N142	8	0.0067	0.014123	0.10	0.015081	0.10	0.017881	0.11	0.015081	0.10				
CLMH196N141MH196N143		-99			Existing	assumed Mannings N	MH196N141	MH196N143			IRWD	VCP	{7C26AD7A-180F-491F-B633-BAA35CD3D323}	CLMH196N141MH196N143	300.98	298.54	1.750000000	MH196N141	MH196N143		326	CLMH196N141MH196N143	21	0.0075	4.540644	0.51	5.114959	0.55	8.118252	0.75	5.230981	0.55				
CLMH196N142MH196N007		-99			Existing	assumed Mannings N	MH196N142	MH196N007		A00274	IRWD	VCP	{DC68DC40-6A27-4867-9D42-9EF838DF6DED}	CLMH196N142MH196N007	284.95	283.73	0.666666667	MH196N142	MH196N007		119	CLMH196N142MH196N007	8	0.0103	0.014123	0.10	0.015081	0.10	0.017881	0.11	0.015081	0.10				
CLMH196N143MH196N126	NOT SURE SHOUL	-99			Existing	assumed Mannings N	MH196N143	MH196N126			IRWD	VCP	{AB7C7B9D-7AE7-40B5-914F-0D28B42F3E26}	CLMH196N143MH196N126	297.95	297.73	2.250000000	MH196N143	MH196N126		88	CLMH196N143MH196N126	27	0.0025	6.613000	0.51	7.327678	0.54	12.026007	0.71	8.197383	0.58				
CLMH196N144MH196N136		1979			Existing	assumed Mannings N	MH196N144	MH196N136		A00314	IRWD	VCP	{EFE9DD2B-ADA5-4889-8B66-7E0159E9B4B}	CLMH196N144MH196N136	295.44	294.39	0.666666667	MH196N144	MH196N136		44	CLMH196N144MH196N136	8	0.0239	0.004400	0.04	0.004698	0.05	0.005570	0.05	0.004698	0.05				
CLMH196N145MH196N125		1971			Existing	assumed Mannings N	MH196N145	MH196N125		A01115	IRWD	VCP	{A37D665C8-6AA0-48EO-A851-901F190DBCF4}	CLMH196N145MH196N125	307.88	299.76	1.750000000	MH196N145	MH196N125		422	CLMH196N145MH196N125	21	0.0192	2.075626	0.26	2.222843	0.27	3.944069	0.36	2.997741	0.31				
CLMH196N144MH196N144		1979			Existing	assumed Mannings N	MH196N144	MH196N144		A00314	IRWD	VCP	{42AC6499-7A30-4C08-AACB-C9AD224823441}	CLMH196N144MH196N144	298.75	295.64	0.666666667	MH196N144	MH196N146		207	CLMH196N144MH196N144	8	0.0150	0.004400	0.05	0.004698	0.05	0.005570	0.05	0.004698	0.05				
CLMH196N147MH196N145		1971			Existing	assumed Mannings N	MH196N147	MH196N145		A01115	IRWD	VCP	{EB88A1EB-0E7E-4842-B157-31F581F0BD44}	CLMH196N147MH196N145	309.73	307.98	1.750000000	MH196N147	MH196N145		309	CLMH196N147MH196N145	21	0.0100	2.075744	0.31	2.223013	0.32	3.944176	0.43	2.997873	0.37				
CLMH196N148MH196N147		1971			Existing	assumed Mannings N	MH196N148	MH196N147		A01115	IRWD	VCP	{95E0A347-7DF3-408E-BD17-68F1FE13AC01}	CLMH196N148MH196N147	319.38	310.08	1.500000000	MH196N148	MH196N147		401	CLMH196N148MH196N147	18	0.0232	2.075754	0.30	2.223029	0.31	3.944175	0.43	2.997879	0.37				
CLMH196N149MH196N146		1978			Existing	assumed Mannings N	MH196N149	MH196N146		A00314	IRWD	VCP	{2B1FD44B-902A-495E-95AE-F8B7402A4945}	CLMH196N149MH196N146	301.01	298.95	0.666666667	MH196N149	MH196N146		206	CLMH196N149MH196N146	8	0.0100	0.003126	0.05	0.003338	0.05	0.003957	0.05	0.003338	0.05				
CLMH196S001MH196S003		1973			Existing	assumed Mannings N	MH196S001	MH196S003		T06946	IRWD	VCP	{1AE3D6A0-642E-480F-A769-915A9B385739}	CLMH196S001MH196S003	301.00	296.70	0.666666667	MH196S001	MH196S003		168	CLMH196S001MH196S003	8	0.0256	0.130534	0.24	0.146785	0.25	0.256582	0.33	0.146785	0.25				
CLMH196S002MH196S001		1973			Existing	assumed Mannings N	MH196S002	MH196S001		T06946	IRWD	VCP	{FFDAF8CA-D030-4EC0-BECA-556222228286}	CLMH196S002MH196S001	304.02	301.00	0.666666667	MH196S002	MH196S001		215	CLMH196S002MH196S001	8	0.0141	0.001526	0.12	0.001716	0.13	0.003000	0.17	0.001716	0.13				
CLMH196S003MH196S005		1973			Existing	assumed Mannings N	MH196S003	MH196S005		T06946	IRWD	VCP	{148DCCA0-4D6A-4268-866D-AC23A7153E45}	CLMH196S003MH196S005	296.70	295.48	0.666666667	MH196S003	MH196S005		84	CLMH196S003MH196S005	8	0.0145	0.133835	0.28	0.150498	0.30	0.263075	0.45	0.150498	0.30				
CLMH196S004MH196S003		1973			Existing	assumed Mannings N	MH196S004	MH196S003		T06946	IRWD	VCP	{F7E8DC93-3199-488E-8424-E6D3777479E9}	CLMH196S004MH196S003	297.23	296.70	0.666666667	MH196S004	MH196S003		133	CLMH196S004MH196S003	8	0.0040	0.003302	0.16	0.003713	0.17	0.006493	0.22	0.003713	0.17				
CLMH196S005MH196S006		1973			Existing	assumed Mannings N	MH196S005	MH196S006		T06946	IRWD	VCP	{F60A809A-5EF4-4C44-A5CA-18827A0D8DA0}	CLMH196S005MH196S006	295.39	294.73	0.666666667	MH196S005	MH196S006		162	CLMH196S005MH196S006	8	0.0041	0.191421	0.41	0.215352	0.44	0.376790	0.60	0.215352	0.44				
CLMH196S006MH196S008		1973			Existing	assumed Mannings N	MH196S006	MH196S008		T06946	IRWD	VCP	{5E68FECA-1FEB-4AD0-95FB-9817B2397A70}	CLMH196S006MH196S008	294.64	293.65	0.666666667	MH196S006	MH196S008		252	CLMH196S006MH196S008	8	0.0039	0.194106	0.42	0.218393	0.44	0.382213	0.62	0.218392	0.44				
CLMH196S007MH196S006		1973			Existing	assumed Mannings N	MH196S007	MH196S006		T06946	IRWD	VCP	{FA09158B-1357-4F13-AE13-B4825D7BE231}	CLMH196S007MH196S006	295.25	294.73	0.666666667	MH196S007	MH196S006		133	CLMH196S007MH196S006	8	0.0039	0.002784	0.19	0.003130	0.20	0.005472	0.32	0.003130	0.20				
CLMH196S008MH196S010		1973			Existing	assumed Mannings N	MH196S008	MH196S010		T06946	IRWD	VCP	{4F982201-4DA9-40B4-8143-97CFEDF8CD54}	CLMH196S008MH196S010	293.55	291.77	0.666666667	MH196S008	MH196S010		180	CLMH196S008MH196S010	8	0.0099	0.198780	0.34	0.223669	0.37	0.391519	0.50	0.223668	0.37				
CLMH196S009MH196S008		1973			Existing	assumed Mannings N	MH196S009	MH196S008		T06946	IRWD	VCP	{6334F407-5079-4940-B54A-0C6585AEA98D}	CLMH196S009MH196S008	294.16	293.65	0.666666667	MH196S009	MH196S008		143	CLMH196S009MH196S008	8	0.0038	0.004750	0.13	0.005341	0.15	0.009337	0.22	0.005341	0.15				
CLMH196S010MH196W059		1973			Existing	assumed Mannings N	MH196S010	MH196W059		T06946	IRWD	VCP	{C3F31050-369F-40CD-9718-BC0F88FE550F}	CLMH196S010MH196W059	291.64	290.00	0.666666667	MH196S010	MH196W059		178	CLMH196S010MH196W059	8	0.0092	0.263394	0.41	0.296472	0.44	0.519406	0.61	0.296470	0.44				
CLMH196S011MH196S010		1973			Existing	assumed Mannings N	MH196S011	MH196S010		T06946	IRWD	VCP	{9E7D0AE8-967E-47BA-BECC-713C7FC26D09}	CLMH196S011MH196S010	292.11	291.77	0.666666667	MH196S011	MH196S010		51	CLMH196S011MH196S010	8	0.0067	0.064144	0.21	0.072269	0.23	0.126816	0.36	0.072269	0.23				
CLMH196S012MH196S011		1973			Existing	assumed Mannings N	MH196S012	MH196S011		T06946	IRWD	VCP	{F5FD406D-1166-4EF5-AA84-CB242DC77ACE}	CLMH196S012MH196S011	292.88	292.11	0.666666667	MH196S012	MH196S011		191	CLMH196S012MH196S011	8	0.0040	0.064196	0.23	0.072308	0.25	0.126832	0.33	0.072307	0.25				
CLMH196S013MH196S010		1973			Existing	assumed Mannings N	MH196S013	MH196S010		T06946	IRWD	VCP	{FC56A542-5F3A-4E4C-8174-B16E12D588F4}	CLMH196S013MH196S010	307.51	291.77	0.666666667	MH196S013	MH196S010		287	CLMH196S013MH196S010	8	0.0550	0.000581	0.11	0.000654	0.13	0.001143	0.22	0.000654	0.13				
CLMH196S014MH196S012		1973			Existing	assumed Mannings N	MH196S014	MH196S012		T06946	IRWD	VCP	{F246EF85-F622-4171-B6FD-63CD8CADFC53}	CLMH196S014MH196S012	294.39	292.98	0.666666667	MH196S014	MH196S012		254	CLMH196S014MH196S012	8	0.0056	0.060877	0.21	0.068562	0.23	0.120232	0.30	0.068561	0.23				
CLMH196S015MH196S014		1973			Existing	assumed Mannings N	MH196S015	MH196S014		T06946	IRWD	VCP	{27AD29F5-09BF-44A3-8144-B4825D7FBB23}	CLMH196S015MH196S014	297.70	294.55	0.666666667	MH196S015	MH196S014		181	CLMH196S015MH196S014	8	0.0174	0.059136	0.16	0.066572	0.17	0.116645	0.23	0.066571	0.17				
CLMH196S016MH196S015		1969			Existing	assumed Mannings N	MH196S016	MH196S015		T06942	IRWD	VCP	{3BAC7F02-D05F-4153-B452-144D9D45E7B5}	CLMH196S016MH196S015	312.91	297.70	0.666666667	MH196S016	MH196S015		282	CLMH196S016MH196S015	8	0.0540	0.001195	0.09	0.001344	0.10	0.002350	0.13	0.001344	0.10				
CLMH196S017MH196S015		1973			Existing	assumed Mannings N	MH196S017	MH196S015		T06942	IRWD	VCP	{FEE69007-43EE-4ED3-9E06-7228F9C15F80}	CLMH196S017MH196S015	298.51	297.70	0.666666667	MH196S017	MH196S015		139	CLMH196S017MH196S015	8	0.0039	0.058000	0.20	0.065280	0.22	0.114316	0.29	0.065280	0.22				
CLMH196S018MH196S017		1969			Existing	assumed Mannings N	MH196S018	MH196S017		T06942	IRWD	VCP	{2E1361A8-0B33-4B3C-9E03-DC86687707D0}	CLMH196S018MH196S017	309.20	298.51	0.666666667	MH196S018	MH196S017		247	CLMH196S018MH196S017	8	0.0433	0.054294	0.18	0.061097	0.20	0.106944	0.26	0.061097	0.20				
CLMH196S019MH196S018		1969			Existing	assumed Mannings N	MH196S019	MH196S018		T06942	IRWD	VCP	{8F6DBAE7-AA23-41B0-A766-27A42C727D05}	CLMH196S019MH196S018	320.45	309.20	0.666666667	MH196S019	MH196S018		341	CLMH196S019MH196S018	8	0.0330	0.004387	0.08	0.004933	0.09	0.008625	0.11	0.004933	0.09				
CLMH196S020MH196S018		1973			Existing	assumed Mannings N	MH196S020	MH196S018		T06942	IRWD	VCP	{094FBD1F-31C3-4AA1-923B-5AD7077FD890}	CLMH196S020MH196S018	315.13	309.20	0.666666667	MH196S020	MH196S018		215	CLMH196S020MH196S018	8	0.0276	0.049933	0.13	0.056186	0.14	0.098328	0.18	0.056186	0.14				
CLMH196S021MH196S020		1969			Existing	assumed Mannings N	MH196S021	MH196S020		T06942	IRWD	VCP	{7ED8CA80-1B84-4208-BC23-B5B5C0007BD4}	CLMH196S021MH196S020	326.04	315.13	0.666666667	MH196S021	MH196S020		318	CLMH196S021MH196S020	8	0.0344	0.003302	0.09	0.003713	0.09	0.006493	0.12	0.003713	0.09				
CLMH196S022MH196S020		1969			Existing	assumed Mannings N	MH196S022	MH196S020		T06942	IRWD	VCP	{07262084-D9B8-4032-B232-5A1AEC68E1E5}	CLMH196S022MH196S020	321.60	315.13	0.666666667	MH196S022	MH196S020		314	CLMH196S022MH196S020	8	0.0279	0.066654	0.13	0.052491	0.14	0.091842	0.18	0.052491	0.14				
CLMH196S023MH196S022		1969			Existing	assumed Mannings N	MH196S023	MH196S022		T06942	IRWD	VCP	{FE11DDE1-787F-476B-8B34-A09FD1369ADC}	CLMH196S023MH196S022	328.42	321.60	0.666666667	MH196S023	MH196S022		252	CLMH196S023MH196S022	8	0.0252	0.002422	0.08	0.002724	0.09	0.004760	0.11	0.002724	0.09				
CLMH196S024MH196S022		1969			Existing	assumed Mannings N	MH196S024	MH196S022		T06942	IRWD	VCP	{621DB900-3E00-457A-B592-D0B8968533A}	CLMH196S024MH196S022	323.05	321.60	0.666666667	MH196S024	MH196S022		214	CLMH196S024MH196S022	8	0.0068	0.039107	0.15	0.043998	0.16	0.076979	0.21	0.043998	0.16				
CLMH196S025MH196S024		1969			Existing	assumed Mannings N	MH196S025	MH196S024		T06942	IRWD	VCP	{F1281429-F219-4565-8EF9-3B4B9DA5A6F1}	CLMH196S025MH196S024	327.14	323.16	0.666666667	MH196S025	MH196S024		97	CLMH196S025MH196S024	8	0.0412	0.025213	0.09	0.028361	0.09	0.049605	0.12	0.028361	0.09				
CLMH196S026MH196S025		1969			Existing	assumed Mannings N	MH196S026	MH196S025		T06942	IRWD	VCP	{527914A57-86A2-4531-8767-8DE0738A3A46}	CLMH196S026MH196S025	329.19	327.14	0.666666667	MH196S026	MH196S025		274	CLMH196S026MH196S025	8	0.0075	0.025218	0.11	0.028365	0.12	0.049607	0.16	0.028365	0.12				
CLMH196S027MH196S026		1969			Existing	assumed Mannings N	MH196S027	MH196S026		T06942	IRWD	VCP	{5BF2F390-6919-44D7-81E4-9C6AD5F085A1}	CLMH196S027MH196S026	332.17	329.19	0.666666667	MH196S027	MH196S026		236	CLMH196S027MH196S026	8	0.0126	0.022332	0.13	0.025117	0.13	0.043922	0.17	0.025117	0.13				
CLMH196S028MH196S027		1969			Existing	assumed Mannings N	MH196S028	MH196S027		T06942	IRWD	VCP	{1717F4CA4-D092-4145-85F1-9EA5E3DED3A6}	CLMH196S028MH196S027	333.35	332.17	0.666666667	MH196S028	MH196S027		249	CLMH196S028MH196S027	8	0.0047	0.020449	0.12	0.022999	0.13	0.040215	0.17	0.022999	0.13				
CLMH196S029MH196S028		1969			Existing	assumed Mannings N	MH196S029	MH196S028		T06942	IRWD	VCP	{B1A401C7-B798-4211-A4A1-9BA4ECAA2A43}	CLMH196S029MH196S028	334.52	333.35	0.666666667	MH196S029	MH196S028		300	CLMH196S029MH196S028	8	0.0033	0.016051	0.13	0.018051	0.14	0.031562	0.18	0.018051	0.14				
CLMH196S030MH196S029		1971			Existing	assumed Mannings N	MH196S030	MH196S029		T06943	IRWD	VCP	{7518D69F-BEE3-487E-8828-290775BA0BE}	CLMH196S030MH196S029	337.66	334.52	0.666666667	MH196S030	MH196S029		248	CLMH196S030MH196S029	8	0.0127	0.011982	0.10	0.013475	0.11	0.023556	0.14	0.013475	0.11				
CLMH196S031MH196S030		1973			Existing	assumed Mannings N	MH196S031	MH196S030		T06943	IRWD	VCP	{05667FEC-2FC4-49C6-BCA6-6C582AA207EA}	CLMH196S031MH196S030	339.29	337.85	0.666666667	MH196S031	MH196S030		350	CLMH196S031MH196S030	8	0.0041	0.005880	0.07	0.006613	0.08	0.011562	0.10	0.006613	0.08				
CLMH196S032MH196S031		1973			Existing	assumed Mannings N	MH196S032	MH196S031		T06943	IRWD	VCP	{43F95CF9-CD81-48BD-B8A9-B0D0ACFAC14}	CLMH196S032MH196S031	340.39	339.29	0.666666667	MH196S032	MH196S031		243	CLMH196S032MH196S031	8	0.0042	0.006018	0.08	0.006768	0.08	0.011796	0.11	0.006768	0.08				
CLMH196S033MH196S030		1973			Existing	assumed Mannings N	MH196S033	MH196S030		T06943	IRWD	VCP	{83560AD2-AFE9-4E24-8908-5CABB3158E9E1}	CLMH196S033MH196S030	339.29	337.85	0.666666667	MH196S033	MH196S030		242	CLMH196S033MH196S030	8	0.0060	0.006103	0.07	0.006862	0.07	0.011094	0.09	0.006862	0.07				
CLMH196S034MH196S029		1973			Existing	assumed Mannings N	MH196S034	MH196S029		T06943	IRWD	VCP	{0E7228CF-F1A2-47F9-A21F-8309F5812A26}	CLMH196S034MH196S029	335.83	334.52	0.666666667	MH196S034	MH196S029		236	CLMH196S034MH196S029	8	0.0055	0.004074	0.09	0.004581	0.10	0.008008	0.13	0.004581	0.10				
CLMH196S035MH196S024		1969			Existing	assumed Mannings N	MH196S035	MH196S024		T06942	IRWD	VCP	{0ACC03FC-2D4E-4F4F-9CA3-08513DFBE328}	CLMH196S035MH196S024	324.19	323.16	0.666666667	MH196S035	MH196S024		236	CLMH196S035MH196S024	8	0.0044	0.013903	0.11	0.015644	0.11	0.027377	0.15	0.015644	0.11				
CLMH196S036MH196S035		1973			Existing	assumed Mannings N	MH196S036	MH196S035		T06943	IRWD	VCP	{2C3C3E62-A743-4EB3-ACAC-1DB7B5349C15}	CLMH196S036MH196S035	325.17	324.19	0.666666667	MH196S036	MH196S035		252	CLMH196S036MH196S035	8	0.0039	0.011484	0.11	0.012917	0.12	0.022589	0.15	0.012917	0.12				
CLMH196S036MH196S053		1973			Existing	assumed Mannings N	MH196S036	MH196S053		T06943	IRWD	VCP	{49AC4D4C-BE77-4243-B6AA-EB95A05A8B86}	CLMH196S036MH196S053	325.17	315.60	0.666666667	MH196S036	MH196S053		259	CLMH196S036MH196S053	8	0.0370	0.035378	0.14	0.039793	0.15	0.069591	0.20	0.039793	0.15				
CLMH196S037MH196S036		1971			Existing	assumed Mannings N	MH196S037	MH196S036		T06943	IRWD	VCP	{153E70FD-7705-4B24-9395-9A4259BC5A17}	CLMH196S037MH196S036	326.04	325.27	0.666666667	MH196S037	MH196S036		193	CLMH196S037MH196S036	8	0.0040	0.044602	0.19	0.050167	0.21	0.087729	0.27	0.050167	0.21				
CLMH196S038MH196S037		1973			Existing	assumed Mannings N	MH196S038	MH196S037		T06943	IRWD	VCP	{C83F68D1-97A0-40B9-9C93-6ECE7B00FF87}	CLMH196S038MH196S037	332.39	326.04	0.666666667	MH196S038	MH196S037		297	CLMH196S038MH196S037	8	0.0214	0.032276	0.16	0.036298	0.17	0.063466	0.23	0.036298	0.17				
CLMH196S039MH196S038		1973			Existing	assumed Mannings N	MH196S039	MH196S038		T06943	IRWD	VCP	{0FC67861-3E05-40FD-908A-B057DA8E5C58}	CLMH196S039MH196S038	339.19	332.39	0.666666667	MH196S039	MH196S038		243	CLMH196S039MH196S038	8	0.0280	0.007737	0.09	0.008700	0.09	0.015210	0.12	0.008700	0.09				
CLMH196S040MH196S039		1971			Existing	assumed Mannings N	MH196S040	MH196S039		T06943	IRWD	VCP	{FB9EC2FD-BCBB-4CAB-98F9-DF1816A6123C}	CLMH196S040MH196S039	341.00	339.19	0.666666667	MH196S040	MH196S039		275	CLMH196S040MH196S039	8	0.0066	0.005489	0.06	0.006172	0.07	0.010787	0.08	0.006172	0.07				
CLMH196S041MH196S040		1971			Existing	assumed Mannings N	MH196S041	MH196S040		T06943	IRWD	VCP	{C8111DF7-A370-4B6C-A6A8-E86CB9CF82E1}	CLMH196S041MH196S040	345.60	341.00	0.666666667	MH196S041	MH196S040		350	CLMH196S041MH196S040	8	0.0181	0.002060	0.05	0.002316	0.05	0.004049	0.07	0.002316	0.05				
CLMH196S042MH196S038		1973			Existing	assumed Mannings N	MH196S042	MH196S038		T06943	IRWD	VCP	{0022B205-83A5-4C92-BE98-96826D50FBD7}	CLMH196S042MH196S038	344.44	332.39	0.666666667	MH196S042	MH196S038		385	CLMH196S042MH196S038	8	0.0313	0.021289	0.10	0.023941	0.11	0.041858	0.14	0.023941	0.11				
CLMH196S043MH196S042		1973			Existing	assumed Mannings N	MH196S043	MH196S042		T06943	IRWD	VCP	{97456177-02DC-496D-B9AF-3118586BDDB4}	CLMH196S043MH196S042	347.00	344.44	0.666666667	MH196S043	MH196S042		352	CLMH196S043MH196S042	8	0.0073	0.016793	0.10	0.018885	0.11	0.033017	0.14	0.018885	0.11				
CLMH196S044MH196S043		1972			Existing	assumed Mannings N

CLMH196W064MH196W063		0		Existing	assumed Mannings N	MH196W064	MH196W063			IRWD	VCP	{5BA46C2B-3AA5-4B4B-A2D6-C16EE8B26B78}	CLMH196W064MH196W063	284.85	280.04	0.666666667	MH196W064	MH196W063					300	CLMH196W064MH196W063	8	0.0160	0.079177	0.19	0.079331	0.19	0.138688	0.25	0.079330	0.19
CLMH196W065MH196W064		1979		Existing	assumed Mannings N	MH196W065	MH196W064		A01536	IRWD	VCP	{B3E8C669-CAE4-448C-B7E6-3063DF99B291}	CLMH196W065MH196W064	291.63	284.85	0.666666667	MH196W065	MH196W064					89	CLMH196W065MH196W064	8	0.0762	0.079212	0.16	0.079366	0.16	0.138750	0.21	0.079365	0.16
CLMH196W076MH196W158		1974		Existing	assumed Mannings N	MH196W076	MH196W158		T08453	IRWD	VCP	{F04845CE-2C72-404F-B884-C43F36FA1EF3}	CLMH196W076MH196W158	308.75	306.05	0.666666667	MH196W076	MH196W158					273	CLMH196W076MH196W158	8	0.0099	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH196W087MH196S086		1976		Existing	assumed Mannings N	MH196W087	MH196S086		A01540	IRWD	VCP	{9159A365-4CE4-44E7-92DE-0A70B6E0E2DE}	CLMH196W087MH196S086	326.70	325.73	0.833333333	MH196W087	MH196S086					352	CLMH196W087MH196S086	10	0.0028	0.053830	0.26	0.053832	0.26	0.090351	0.56	0.053940	0.26
CLMH196W088MH196W087		1975		Existing	assumed Mannings N	MH196W088	MH196W087		A01540	IRWD	VCP	{D1D88A13-A61A-4F97-AC99-FA65C7661D4C}	CLMH196W088MH196W087	327.60	326.70	0.833333333	MH196W088	MH196W087					318	CLMH196W088MH196W087	10	0.0028	0.020707	0.15	0.020707	0.15	0.036194	0.19	0.020707	0.15
CLMH196W139MH175Z014		1976		Existing		MH196W139	H175Z014		A00326	IRWD	VCP	{77A80D21-82CC-44DC-ACC6-78D8819DDDCF}	CLMH196W139MH175Z014	277.76	271.98	0.666666667	MH196W139	H175Z014					265	CLMH196W139MH175Z014	8	0.0218	0.020753	0.09	0.022158	0.10	0.026271	0.10	0.022158	0.10
CLMH196W141MH196W139		1976		Existing	assumed Mannings N	MH196W141	MH196W139		A00326	IRWD	VCP	{20A109FD-7CCE-402E-A9A3-018EFE31B9DB}	CLMH196W141MH196W139	286.51	277.85	0.666666667	MH196W141	MH196W139					394	CLMH196W141MH196W139	8	0.0220	0.020753	0.09	0.022158	0.10	0.026271	0.10	0.022158	0.10
CLMH196W142MH196W063		1972		Existing	assumed Mannings N	MH196W142	MH196W063		A01107	IRWD	VCP	{C01AA954-30A6-4667-A4C3-C7C4B81086B}	CLMH196W142MH196W063	281.55	279.88	0.666666667	MH196W142	MH196W063					328	CLMH196W142MH196W063	8	0.0051	0.053213	0.20	0.053213	0.20	0.093013	0.27	0.053213	0.20
CLMH196W143MH196W141		1974		Existing		MH196W143	MH196W141		A00326	IRWD	VCP	{BE0D18A6-AB1F-4389-93DE-F7A42BB09C5B}	CLMH196W143MH196W141	291.26	286.60	0.666666667	MH196W143	MH196W141					294	CLMH196W143MH196W141	8	0.0159	0.020753	0.10	0.022158	0.10	0.026271	0.11	0.022158	0.10
CLMH196W144MH196W142		1974		Existing	assumed Mannings N	MH196W144	MH196W142		T08453	IRWD	VCP	{24F28EFC-5937-4587-A200-ECC6571C22BD}	CLMH196W144MH196W142	294.00	281.55	0.666666667	MH196W144	MH196W142					167	CLMH196W144MH196W142	8	0.0747	0.032259	0.15	0.032259	0.15	0.056388	0.20	0.032259	0.15
CLMH196W145MH196W143		1974		Existing		MH196W145	MH196W143		A00326	IRWD	VCP	{2A329B47-D761-4119-8C86-D9B3A2ABDBB0}	CLMH196W145MH196W143	292.66	291.35	0.666666667	MH196W145	MH196W143					329	CLMH196W145MH196W143	8	0.0040	0.007178	0.08	0.007665	0.08	0.009087	0.09	0.007665	0.08
CLMH196W146MH196W144		1999		Existing	assumed Mannings N	MH196W146	MH196W144		A01546	IRWD	VCP	{1B13D0E2-7D80-41E2-B319-E1C14AC79EB6}	CLMH196W146MH196W144	300.23	294.20	0.666666667	MH196W146	MH196W144					251	CLMH196W146MH196W144	8	0.0240	0.012327	0.07	0.012327	0.07	0.021549	0.09	0.012327	0.07
CLMH196W147MH196W149		1976		Existing		MH196W147	MH196W149		A00326	IRWD	VCP	{B1647561-9B44-44AE-B685-020BEEE72E1E}	CLMH196W147MH196W149	299.72	292.95	0.666666667	MH196W147	MH196W149					326	CLMH196W147MH196W149	8	0.0208	0.006948	0.06	0.007418	0.06	0.008793	0.06	0.007418	0.06
CLMH196W148MH196W146		1974		Existing	assumed Mannings N	MH196W148	MH196W146		T01546	IRWD	VCP	{B176CB3F-5AAD-4D93-8A00-F05655DACB67}	CLMH196W148MH196W146	308.20	300.52	0.666666667	MH196W148	MH196W146					369	CLMH196W148MH196W146	8	0.0208	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH196W149MH196W151		1976		Existing	assumed Mannings N	MH196W149	MH196W151		A00326	IRWD	VCP	{1E0B9E1A-1C35-46CD-A14D-C91CCE4584CF}	CLMH196W149MH196W151	292.85	280.44	0.666666667	MH196W149	MH196W151					316	CLMH196W149MH196W151	8	0.0369	0.006976	0.05	0.007450	0.05	0.008830	0.05	0.007450	0.05
CLMH196W150MH196W144		1974		Existing	assumed Mannings N	MH196W150	MH196W144		T08453	IRWD	VCP	{290CCDC6-F83A-4E32-B8FF-643B87FED250}	CLMH196W150MH196W144	297.50	294.20	0.666666667	MH196W150	MH196W144					250	CLMH196W150MH196W144	8	0.0132	0.019932	0.10	0.019932	0.10	0.034839	0.13	0.019932	0.10
CLMH196W151MH196W153		1976		Existing		MH196W151	MH196W153		A00326	IRWD	VCP	{582F8504-94EE-458B-8F02-8CCA936774A5}	CLMH196W151MH196W153	280.33	279.14	0.666666667	MH196W151	MH196W153					303	CLMH196W151MH196W153	8	0.0039	0.006976	0.08	0.007450	0.08	0.008830	0.09	0.007450	0.08
CLMH196W152MH196W150		1974		Existing	assumed Mannings N	MH196W152	MH196W150		T08453	IRWD	VCP	{66C0CD18-3B2F-4BD0-AFAA-5AEAD7AFA1AC}	CLMH196W152MH196W150	300.82	297.50	0.666666667	MH196W152	MH196W150					350	CLMH196W152MH196W150	8	0.0133	0.012421	0.09	0.012421	0.09	0.021709	0.12	0.012421	0.09
CLMH196W153MH175Z010		1978		Existing		MH196W153	H175Z010		A00326	IRWD	VCP	{FD7EEAAA-3607-46A5-9EE1-0C917F1F9191}	CLMH196W153MH175Z010	279.04	274.57	0.666666667	MH196W153	H175Z010					384	CLMH196W153MH175Z010	8	0.0116	0.016383	0.10	0.017494	0.10	0.020738	0.11	0.017494	0.10
CLMH196W154MH196W152		1974		Existing	assumed Mannings N	MH196W154	MH196W152		T08453	IRWD	VCP	{60ACE89F-5954-4D45-B336-646A8600177A}	CLMH196W154MH196W152	303.32	300.82	0.666666667	MH196W154	MH196W152					250	CLMH196W154MH196W152	8	0.0100	0.007620	0.08	0.007620	0.08	0.013319	0.10	0.007620	0.08
CLMH196W155H175Z024		1978		Existing		MH196W155	H175Z024		A00274	IRWD	VCP	{C1683E87-D66C-4FF9-98F1-608F9E6B9912}	CLMH196W155MH175Z024	266.75	264.22	0.666666667	MH196W155	H175Z024					400	CLMH196W155MH175Z024	8	0.0063	0.038238	0.17	0.040824	0.17	0.048399	0.19	0.040675	0.18
CLMH196W157MH196W155		1978		Existing		MH196W157	MH196W155		A00274	IRWD	VCP	{67676477-B2A5-44C6-9E99-BDDC27650271}	CLMH196W157MH196W155	275.01	266.95	0.666666667	MH196W157	MH196W155					350	CLMH196W157MH196W155	8	0.0230	0.017831	0.09	0.019038	0.09	0.022570	0.10	0.016982	0.08
CLMH196W158MH196W154		1974		Existing	assumed Mannings N	MH196W158	MH196W154		T08453	IRWD	VCP	{28B02352-6974-470B-B24F-C179040EA42C}	CLMH196W158MH196W154	305.85	303.32	0.666666667	MH196W158	MH196W154					256	CLMH196W158MH196W154	8	0.0099	0.007526	0.07	0.007526	0.07	0.013156	0.09	0.007526	0.07
CLMH196W159MH196W157		1978		Existing		MH196W159	MH196W157		A00274	IRWD	VCP	{A5FC397D-D77F-4EE5-A392-FCE0CAFC774B}	CLMH196W159MH196W157	281.95	275.26	0.666666667	MH196W159	MH196W157					374	CLMH196W159MH196W157	8	0.0179	0.014763	0.08	0.015762	0.09	0.018686	0.09	0.013706	0.08
CLMH196W160MH196W158		1974		Existing	assumed Mannings N	MH196W160	MH196W158		T01546	IRWD	VCP	{F496CAA2-EAC2-4F96-BAC2-3A62535BC05F}	CLMH196W160MH196W158	312.50	306.05	0.666666667	MH196W160	MH196W158					253	CLMH196W160MH196W158	8	0.0255	0.007526	0.06	0.007526	0.06	0.013156	0.08	0.007526	0.06
CLMH196W161MH196W159		1978		Existing		MH196W161	MH196W159		A00274	IRWD	VCP	{0B2D1423-93C6-4953-AC7B-2517CD7DC6E6}	CLMH196W161MH196W159	293.91	282.25	0.666666667	MH196W161	MH196W159					295	CLMH196W161MH196W159	8	0.0295	0.000492	0.01	0.000526	0.01	0.000623	0.01	0.013706	0.07
CLMH196W163MH196W155		1978		Existing		MH196W163	MH196W155		A00274	IRWD	VCP	{A4CB48ED-98A7-4DE8-AF41-2AEF2A0A0184}	CLMH196W163MH196W155	267.17	267.04	0.666666667	MH196W163	MH196W155					60	CLMH196W163MH196W155	8	0.0022	0.020407	0.15	0.021786	0.15	0.025829	0.16	0.029094	0.17
CLMH196W164MH196W160		1974		Existing	assumed Mannings N	MH196W164	MH196W160		T01546	IRWD	VCP	{95ABF914-5760-4066-9F63-D4EE8784221F}	CLMH196W164MH196W160	317.50	312.50	0.666666667	MH196W164	MH196W160					200	CLMH196W164MH196W160	8	0.0250	0.007538	0.06	0.007538	0.06	0.013177	0.07	0.007538	0.06
CLMH196W165MH196W163		1979		Existing	assumed Mannings N	MH196W165	MH196W163		A00274	IRWD	VCP	{A5837B95-C3B2-4646-8499-EE619FCA4DEA}	CLMH196W165MH196W163	278.02	267.36	0.666666667	MH196W165	MH196W163					336	CLMH196W165MH196W163	8	0.0317	0.019771	0.08	0.021107	0.09	0.025023	0.09	0.028415	0.10
CLMH197E001MH197E074		1990		Existing		MH197E001	MH197E074		T13687	IRWD	VCP	{91C4AD95-5F69-468D-B406-D77DA9C09713}	CLMH197E001MH197E074	323.48	321.95	0.666666667	MH197E001	MH197E074					333	CLMH197E001MH197E074	8	0.0046	0.038859	0.16	0.043259	0.17	0.075616	0.23	0.043259	0.17
CLMH197E002MH197E001		1979		Existing	assumed Mannings N	MH197E002	MH197E001		A01536	IRWD	VCP	{64E70044-5FDD-4881-B287-14041FD035F2}	CLMH197E002MH197E001	326.17	323.48	0.666666667	MH197E002	MH197E001					152	CLMH197E002MH197E001	8	0.0177	0.038855	0.16	0.043256	0.17	0.075612	0.23	0.043256	0.17
CLMH197E003MH197E002		1979		Existing	assumed Mannings N	MH197E003	MH197E002		T07143	IRWD	VCP	{1AE92CD3-2444-4C50-90E3-E44F9ED0E880}	CLMH197E003MH197E002	335.01	326.17	0.666666667	MH197E003	MH197E002					76	CLMH197E003MH197E002	8	0.0076	0.038855	0.16	0.043257	0.17	0.075612	0.23	0.043257	0.12
CLMH197E004MH197E003		1970		Existing	assumed Mannings N	MH197E004	MH197E003		T07143	IRWD	VCP	{62E18925-5765-496C-B377-51F6AAC27214}	CLMH197E004MH197E003	336.51	335.01	0.666666667	MH197E004	MH197E003					329	CLMH197E004MH197E003	8	0.0046	0.037676	0.15	0.041930	0.15	0.073294	0.20	0.041930	0.15
CLMH197E005MH197E004		1970		Existing	assumed Mannings N	MH197E005	MH197E004		T07143	IRWD	VCP	{CD10F721-52F8-45CD-A218-13FC26FC0AB8}	CLMH197E005MH197E004	337.29	336.51	0.666666667	MH197E005	MH197E004					145	CLMH197E005MH197E004	8	0.0054	0.036213	0.19	0.040248	0.20	0.070418	0.26	0.040285	0.20
CLMH197E006MH197E005		1970		Existing	assumed Mannings N	MH197E006	MH197E005		T07143	IRWD	VCP	{2B7C7174-9F92-4920-AC86-10C197DA30F3}	CLMH197E006MH197E005	337.79	337.29	0.666666667	MH197E006	MH197E005					75	CLMH197E006MH197E005	8	0.0067	0.023363	0.15	0.025836	0.16	0.045162	0.21	0.025836	0.16
CLMH197E007MH197E006		1974		Existing	assumed Mannings N	MH197E007	MH197E006		T07143	IRWD	VCP	{0B10BD92-6767-424C-984C-D1B0A4A0DC0}	CLMH197E007MH197E006	338.51	337.79	0.666666667	MH197E007	MH197E006					130	CLMH197E007MH197E006	8	0.0054	0.023363	0.13	0.025836	0.14	0.045162	0.19	0.025836	0.14
CLMH197E008MH197E007		1970		Existing		MH197E008	MH197E007		T07143	IRWD	VCP	{FF81867D-E591-4076-97D6-8C8466631A6F}	CLMH197E008MH197E007	339.88	338.51	0.666666667	MH197E008	MH197E007					266	CLMH197E008MH197E007	8	0.0052	0.006401	0.11	0.007198	0.11	0.012582	0.15	0.007198	0.11
CLMH197E072MH1965068		1970		Existing	assumed Mannings N	MH197E072	MH1965068		A01536	IRWD	VCP	{E1733703-53D0-4499-AF08-47412A649112}	CLMH197E072MH1965068	306.82	303.47	0.666666667	MH197E072	MH1965068					186	CLMH197E072MH1965068	8	0.0180	0.058744	0.16	0.061140	0.16	0.106890	0.21	0.061140	0.16
CLMH197E073MH197E072		1970		Existing	assumed Mannings N	MH197E073	MH197E072		A01536	IRWD	VCP	{AAC46773-DDB9-4119-AA86-43B9477FFE10}	CLMH197E073MH197E072	315.07	306.82	0.666666667	MH197E073	MH197E072					346	CLMH197E073MH197E072	8	0.0238	0.059694	0.15	0.055015	0.16	0.096168	0.20	0.055014	0.16
CLMH197E074MH197E073		1979		Existing	assumed Mannings N	MH197E074	MH197E073		A01536	IRWD	VCP	{824F02F7-802E-4C1E-A47F-417FCFCC0F01}	CLMH197E074MH197E073	321.95	315.07	0.666666667	MH197E074	MH197E073					345	CLMH197E074MH197E073	8	0.0199	0.043236	0.14	0.045578	0.14	0.079688	0.19	0.045578	0.14
CLMH197E103MH197E007		1970		Existing		MH197E103	MH197E007		T07143	IRWD	VCP	{1FC95307-105B-489F-991E-BF19CC996B05}	CLMH197E103MH197E007	339.83	338.51	0.666666667	MH197E103	MH197E007					279	CLMH197E103MH197E007	8	0.0047	0.016963	0.13	0.018638	0.14	0.032580	0.18	0.018638	0.14
CLMH197E104MH197E103		1970		Existing	assumed Mannings N	MH197E104	MH197E103		T07143	IRWD	VCP	{1D98B387-265D-489A-9F98-DCA1F95F110A}	CLMH197E104MH197E103	341.20	339.83	0.666666667	MH197E104	MH197E103					263	CLMH197E104MH197E103	8	0.0052	0.004579	0.09	0.004588	0.09	0.008021	0.12	0.004588	0.09
CLMH197N004MH197N005		1998		Existing	assumed Mannings N	MH197N004	MH197N005		A00848	IRWD	VCP	{990ACC68-A72A-46F2-9F91-0505955DA45C}	CLMH197N004MH197N005	268.50	266.16	0.666666667	MH197N004	MH197N005					238	CLMH197N004MH197N005	8	0.0098	0.003878	0.05	0.004142	0.05	0.004569	0.06	0.010619	0.08
CLMH197N005MH171E013		1998		Existing		MH197N005	MH171E013		A00848	IRWD	VCP	{B1508123-4A80-4450-A7D6-CED8F0ED3CAE}	CLMH197N005MH171E013	265.95	257.25	0.666666667	MH197N005	MH171E013					314	CLMH197N005MH171E013	8	0.0277	0.004978	0.04	0.005317	0.05	0.006301	0.05	0.010619	0.06
CLMH197N006MH171E013		1974		Existing	assumed Mannings N	MH197N006	MH171E013		A00848	IRWD	VCP	{8814BFDF-DC44-4D7D-B77E-01CB9DDB2086}	CLMH197N006MH171E013	260.50	257.25	0.666666667	MH197N006	MH171E013					183	CLMH197N006MH171E013	8	0.0085	0.010161	0.08	0.010847	0.09	0.012860	0.09	0.021137	0.12
CLMH205E001MH205E002		1968		Existing	assumed Mannings N	MH205E001	MH205E002		T06584	IRWD	VCP	{B9874D12-0059-468b-B517-885C9646434D}	CLMH205E001MH205E002	428.67	428.41	0.666666667	MH205E001	MH205E002					76	CLMH205E001MH205E002	8	0.0034	0.021699	0.14	0.023821	0.15	0.041663	0.19	0.023821	0.15
CLMH205E002MH205E041		1968		Existing	assumed Mannings N	MH205E002	MH205E041		T06584	IRWD	VCP	{5DA90404-F3F6-4026-B11A-4C45C7DE30B}	CLMH205E002MH205E041	428.31	427.67	0.666666667	MH205E002	MH205E041					266	CLMH205E002MH205E041	8	0.0024	0.042606	0.21	0.047388	0.22	0.083833	0.29	0.047388	0.22
CLMH205E003MH205E001		1968		Existing	assumed Mannings N	MH205E003	MH205E001		T06584	IRWD	VCP	{DA2385AA-3390-491E-B172-7B3C563AF99C}	CLMH205E003MH205E001	430.04	428.88	0.666666667	MH205E003	MH205E001					296	CLMH205E003MH205E001	8	0.0039	0.009008	0.09	0.009008	0.09	0.015747	0.12	0.009008	0.09
CLMH205E007MH2055008		1968		Existing	assumed Mannings N	MH205E007	MH2055008		T05585	IRWD	VCP	{CC4A08C8-62BA-453E-987A-68E6D8408730}	CLMH205E007MH2055008	396.20	395.16	0.666666667	MH205E007	MH2055008					209	CLMH205E007MH2055008	8	0.0050	0.001089	0.05	0.001224	0.06	0.002141	0.07	0.001224	0.06
CLMH205E008MH205N095		1968		Existing	assumed Mannings N	MH205E008	A01346	IRWD	VCP	{FFCA0442-B490-49E7-A226-0F90AD1386DE}	CLMH205E008MH205N095	436.01	424.12	0.666666667	MH205E008	MH205N095					232	CLMH205E008MH205N095	8	0.0512	0.001928	0.03	0.002169	0.03	0.003792	0.03	0.002169	0.03
CLMH205E009MH205E125		1964		Existing	assumed Mannings N	MH205E009	MH205E125		T05585	IRWD	UNK	{F5707586-B35C-4E94-819B-E1A4E8726AAB}	CLMH205E009MH205E125	398.47	394.83	1.250000000	MH205E009	MH205E125					390	CLMH205E009MH205E125	15	0.0093	0.000000	0.28	0.000000	0.31	0.822954	1.00	0.000000	0.31
CLMH205E010MH205E125		1964		Existing	assumed Mannings N	MH205E010	MH205E125	Old CIP	A01224	IRWD	VCP	{9B13705D-C3EF-4F1A-B681-23C321066F5}	CLMH205E010MH205E125	396.30	394.83	1.250000000	MH205E010	MH205E125					98	CLMH205E010MH205E125	15	0.0150	2.542416	0.53	2.938395	0.58	5.208650	1.00	3.043881	0.59
CLMH205E013DS205E012		1964		Existing	assumed Mannings N	MH205E013	DS205E012	assumed DS invert	A01172	IRWD	VCP	{27AF7EC9-2AED-4F18-9A98-836215542B6B}	CLMH205E013DS205E012	399.48	397.06	1.750000000	MH205E013	DS205E012					216	CLMH205E013DS205E012	21	0.0036	0.040009	0.48	3.435967	0.51	6.168374	1.00	3.541473	0.52
CLMH205E014MH205E013		1964		Existing	assumed Mannings N	MH205E014	MH205E013		A01172	IRWD	VCP	{F0449C1F-35D1-47F3-9104-BF5F9A82A28C}	CLMH205E014MH205E013	403.94	399.79	1.750000000	MH205E014	MH205E013					426	CLMH205E014MH205E013	21	0.0097	0.040042	0.32	1.848420	0.40	6.168338	1.00	3.554565	0.41
CLMH205E015MH205E014		1964		Existing	assumed Mannings N	MH205E015	MH205E014		A01172	IRWD	VCP	{AAE61963-68D8-48B4-8D28-D764DE3910EA}	CLMH205E015MH205E014	406.79	403.94	1.750000000	MH205E015	MH205E014					419	CLMH205E015MH205E014	21	0.0068	3.054684	0.40	3.453427	0.43	6.165793	0.83	3.559956	0.43
CLMH205E016MH205E014		1993		Existing	assumed Mannings N	MH205E016	MH205E014		A01521	IRWD	VCP	{B658F66E-6F35-47E5-82A2-C7AB355736B5}	CLMH205E016MH205E014	415.20	405.25	0.666666667	MH205E016	MH205E014					344	CLMH205E016MH205E014	8	0.0289	0.001558	0.03	0.001752	0.03	0.003062	0.52	0.001752	0.03
CLMH205E017MH205E015		1971		Existing	assumed Mannings N	MH205E017	MH205E015		A01172	IRWD	VCP	{6E337AAC-9551-41AF-8279-4954688A8A96}	CLMH205E017MH205E015	407.39	406.89	2.000000000	MH205E017	MH205E015					145	CLMH205E017MH205E015	24	0.0020	0.014675	0.43	3.453470	0.45	6.185482	0.63	3.560014	0.46
CLMH205E018MH205E017		1971		Existing	assumed Mannings N	MH205E018	MH205E017	changed length to exc	A01172	IRWD	VCP	{715D1BB2-01CB-4B7D-8C7E-C31D90FD98CA}	CLMH205E018MH205E017	416.86	408.89	0.666666667	MH205E018	MH205E017					19	CLMH205E018MH205E017	8	0.4688	0.004555	0.02	0.004556	0.02	0.007961	0.03	0.004556	0.02
CLMH205E019MH205E018		1980		Existing	assumed Mannings N	MH205E019	MH205E018		T10929	IRWD	VCP	{5F6212F4-5B76-498A-BA9F-5FAE0083D07E}	CLMH205E019MH205E018	419.79	416.86	0.666666667	MH205E019	MH205E018					368	CLMH205E019MH205E018	8	0.0819	0.004340	0.03	0.004340	0.03	0.007586	0.04	0.004340	0.03
CLMH205E021MH205E018		1982		Existing	assumed Mannings N	MH205E021	MH205E018		A01109	IRWD	VCP	{C3CF1486-E5E7-40F7-A541-74C197D228DB}	CLMH205E021MH205E018	418.00	416.86	0.666666667	MH205E021	MH205E018					282	CLMH205E021MH205E018	8	0.0040	0.000343	0.02	0.000377	0.02	0.000651	0.03	0.000377	0.02
CLMH205E024MH205E018		1965		Existing	assumed Mannings N	MH205E024	MH205E018		A01172	IRWD	VCP	{6D10B412-E1F2-4179-8CF7-F79B0B771254}	CLMH205E024MH205E018	408.89	408.89	2.500000000	MH205E024	MH205E018					360	CLMH205E024MH205E018	24	0.0020	3.066068	0.48	3.465750	0.52	6.193617	0.75	3.572811	0.53
CLMH205E025MH205E024		1971		Existing	assumed Mannings N	MH205E025	MH205E024		A01172	IRWD	VCP	{C5CCA78E-BCDE-4A19-836E-F30DA862DAAA}	CLMH205E025MH205E024	409.14	408.89	2.000000000	MH205E025	MH205E024					124	CLMH205E025MH205E024	24	0.0020	3.068331	0.48	3.468490	0.52	6.197264	0.76	3.575648	0.53
CLMH205E026MH205E025		1971		Existing	assumed Mannings N	MH205E026	MH205E025		A01172	IRWD	VCP	{40207556-4F69-42F5-BC64-32D487909E87}	CLMH205E026MH205E025	409.85	409.14	2.000000000	MH205E026	MH205E025					360	CLMH205E026MH205E025	24	0.0020	3.072607	0.48	3.473300	0.52	6.203917	0.77	3.580739	0.53
CLMH205E027MH205E026		1971		Existing	assumed Mannings N	MH205E027	MH205E026		A01172	IRWD	VCP	{A0934867-68B0-4B60-AE48-C22099706AB3}	CLMH205E027MH205E026	411.91	409.85	1.750000000	MH205E027	MH205E026					450	CLMH205E027MH205E026	21	0.0046	3.079735	0.51	3.480728	0.55	6.212632	0.81	3.588663	0.56
CLMH205E028MH205N006		1964		Existing	assumed Mannings N	MH205E028	MH205N006		T05585	IRWD	VCP	{5503F3FE-ED4E-433F-B8D8-ECC2A84E14CD}	CLMH205E028MH205N006	395.76	394.54	0.666666667	MH205E028	MH205N006					326	CLMH205E028MH205N006	8	0.0040	0.054605	0.21	0.061353	0.22	0.107239	0.29	0.061353	0.22
CLMH205E030MH205E029		1964		Existing	assumed Mannings N	MH205E030	MH205E029		T05679	IRWD	VCP	{856CB11F-1189-4476-BC4B-37AC6E128D2E}	CLMH205E030MH205E029	396.32	395.76	0.666666667	MH205E030	MH205E029					190	CLMH205E030MH205E029	8	0.0029	0.051727	0.24	0.058116	0.25	0.101581	0.33	0.058116	0.25
CLMH205E031MH205E030		1964		Existing	assumed Mannings N	MH205E031	MH205E030		T05679	IRWD	VCP	{8F708EAE-2848-438B-9473-9DD8BA12EE43}	CLMH205E031MH205E030	396.91	396.32	0.666666667	MH205E031	MH205E030					233	CLMH205E031MH205E030	8	0.0031	0.049128	0.23	0.055194	0.25	0.096473	0.33	0.055194	0.25
CLMH205E032MH205E031		1964		Existing	assumed Mannings N	MH205E032	MH205E031		T05679	IRWD	VCP	{2A6C1FD8-177B-4BCF-9F77-9033D678D651}	CLMH205E032MH205E031	398.17	396.91	0.666666667	MH205E032	MH205E031					177	CLMH205E032MH205E031	8	0.0071	0.003093	0.14	0.003478	0.15	0.006078	0.19	0.003478	0.15
CLMH205E033MH205E031		1972		Existing	assumed Mannings N	MH205E033	MH205E031		A01108	IRWD	VCP	{9073B29E-79CB-4273-972B-97E260B5B0C4}	CLMH205E033MH205E031	398.17	396.91	0.666666667	MH205E033	MH205E031					302	CLMH205E033MH205E031	8	0.0042	0.044482	0.21	0.049968	0.23	0.087341	0.30	0.049968	0.23
CLMH205E034MH205E033		1974		Existing	assumed Mannings N	MH205E034	MH205E033		T06098	IRWD	VCP	{D871F700-F199-44FC-B04E-8373C9AEEF66}	CLMH205E034MH205E033	400.82	398.17	0.666666667	MH205E034	MH205E033					265	CLMH205E034MH205E033	8	0.0100	0.044080	0.18	0.049567	0.19	0.086640	0.25	0.049567	0.19
CLMH205E035MH205E034		1974		Existing	assumed Mannings N	MH205E035	MH205E034		T06098	IRWD	VCP	{04275388

CLMH205N104MH205N031	NO ASBUILT FOUI	1969			Existing	assumed Mannings N	MH205N104	MH205N031		T06353	IRWD	VCP	{C34A4EA3-25BB-49F8-9D67-D5C262653C22}	CLMH205N104MH205N031	389.17	389.17	0.666666667	MH205N104	MH205N031				107	CLMH205N104MH205N031	8	0.0067	0.012525	0.10	0.014084	0.11	0.024617	0.14	0.014084	0.11	
CLMH205N105MH196E144	NO ASBUILT FOUI	0			Existing	assumed Mannings N	MH205N105	MH196E144			IRWD	VCP	{6AFF813C-A461-4478-9C1B-A37E722393D}	CLMH205N105MH196E144	383.80	368.26	0.666666667	MH205N105	MH196E144				361	CLMH205N105MH196E144	8	0.0431	0.024926	0.09	0.028029	0.10	0.048990	0.13	0.028029	0.10	
CLMH205N106MH205N043		1964			Existing	assumed Mannings N	MH205N106	MH205N043	Old CIP	A01224	IRWD	VCP	{DDF5D4F4-062F-4E18-B720-C7CA100E865F}	CLMH205N106MH205N043	389.64	386.67	1.250000000	MH205N106	MH205N043	Equal to 15-in, d/D >0.67			285	CLMH205N106MH205N043	15	0.0104	2.543221	0.61	2.938154	0.67	4.623783	1.00	3.043397	0.69	
CLMH205N107MH205N036		1968			Existing	assumed Mannings N	MH205N107	MH205N036	Old CIP	A01248	IRWD	VCP	{A7C80261-CB4F-4F54-9617-B50974376E49}	CLMH205N107MH205N036	365.35	357.38	1.250000000	MH205N107	MH205N036				399	CLMH205N107MH205N036	15	0.0200	2.690348	0.54	3.097759	0.59	4.824677	0.87	3.202373	0.60	
CLMH205N108MH205N007		1964			Existing	assumed Mannings N	MH205N108	MH205N007		T05585	IRWD	VCP	{BE4AFB93-0AD6-4DDE-A410-223A0B9D014B}	CLMH205N108MH205N007	393.23	390.70	0.666666667	MH205N108	MH205N007				250	CLMH205N108MH205N007	8	0.0101	0.038305	0.17	0.043075	0.18	0.075303	0.23	0.043075	0.18	
CLMH205N109MH205N001		1964			Existing	assumed Mannings N	MH205N109	MH205N001		T05585	IRWD	VCP	{37AD16F7-228D-4947-ACF7-62E71271B106}	CLMH205N109MH205N001	397.55	396.35	0.666666667	MH205N109	MH205N001				303	CLMH205N109MH205N001	8	0.0040	0.024136	0.16	0.027140	0.17	0.047442	0.22	0.027140	0.17	
CLMH205N110MH205N111		1964			Existing	assumed Mannings N	MH205N110	MH205N111		T05585	IRWD	VCP	{606AEECD-3B13-4B44-A676-A21A01A733A1}	CLMH205N110MH205N111	404.42	398.79	0.666666667	MH205N110	MH205N111				228	CLMH205N110MH205N111	8	0.0247	0.010958	0.08	0.012322	0.09	0.021539	0.12	0.012322	0.09	
CLMH205N111MH205N109		1964			Existing	assumed Mannings N	MH205N111	MH205N109		T05585	IRWD	VCP	{C88280EC-CB84-4F6F-AE33-23B88FF66E42}	CLMH205N111MH205N109	398.79	397.55	0.666666667	MH205N111	MH205N109				309	CLMH205N111MH205N109	8	0.0040	0.010958	0.13	0.012322	0.13	0.021539	0.18	0.012322	0.13	
CLMH205N112MH205W046		1964			Existing	assumed Mannings N	MH205N112	MH205W046		T05585	IRWD	VCP	{536AFD09-0A2B-4473-825B-F6C248C179C0}	CLMH205N112MH205W046	394.08	392.25	0.666666667	MH205N112	MH205W046				230	CLMH205N112MH205W046	8	0.0080	0.001509	0.05	0.001696	0.05	0.002965	0.07	0.001696	0.05	
CLMH205S001MH205S002		1964			Existing	assumed Mannings N	MH205S001	MH205S002		T05585	IRWD	VCP	{B862E4DD-FE46-4AA5-81E3-C5E52CDED6DA}	CLMH205S001MH205S002	394.55	393.57	0.666666667	MH205S001	MH205S002				250	CLMH205S001MH205S002	8	0.0039	0.034515	0.19	0.038277	0.19	0.066860	0.25	0.038277	0.19	
CLMH205S002MH205S004		1964			Existing	assumed Mannings N	MH205S002	MH205S004		T05585	IRWD	VCP	{AFBCA4E8-1A66-4FCF-9E2D-F2F49C6B4FE8}	CLMH205S002MH205S004	393.57	393.52	0.666666667	MH205S002	MH205S004				15	CLMH205S002MH205S004	8	0.0033	0.040642	0.17	0.045172	0.18	0.078952	0.24	0.045172	0.18	
CLMH205S003MH205S004		1964			Existing	assumed Mannings N	MH205S003	MH205S004		T05585	IRWD	VCP	{0F176C5C-CFFC-46C0-AF0B-600DD7C05A1C}	CLMH205S003MH205S004	396.75	393.52	0.666666667	MH205S003	MH205S004				250	CLMH205S003MH205S004	8	0.0269	0.001883	0.09	0.002117	0.10	0.003700	0.13	0.002117	0.10	
CLMH205S004MH205W005		1964			Existing	assumed Mannings N	MH205S004	MH205W005		T05585	IRWD	VCP	{DF97D7EE-266E-429B-A1DF-565839F9E047}	CLMH205S004MH205W005	393.52	390.07	0.666666667	MH205S004	MH205W005				300	CLMH205S004MH205W005	8	0.0115	0.042520	0.18	0.047285	0.19	0.082648	0.26	0.047285	0.19	
CLMH205S006MH205S001		1988			Existing	assumed Mannings N	MH205S006	MH205S001		A01137	IRWD	VCP	{31530CA3-DB08-4280-85D4-0F4AAA91DF80}	CLMH205S006MH205S001	395.45	394.55	0.666666667	MH205S006	MH205S001				250	CLMH205S006MH205S001	8	0.0032	0.034764	0.19	0.038543	0.20	0.067283	0.26	0.038542	0.20	
CLMH205S007MH205S006		1988			Existing	assumed Mannings N	MH205S007	MH205S006		A01137	IRWD	VCP	{1EBCF26D-B89B-4940-B3E4-4CBB416C7145}	CLMH205S007MH205S006	396.04	395.45	0.666666667	MH205S007	MH205S006				183	CLMH205S007MH205S006	8	0.0032	0.020772	0.17	0.022904	0.18	0.040037	0.24	0.022904	0.18	
CLMH205S008MH205S002		1964			Existing	assumed Mannings N	MH205S008	MH205S002		T05585	IRWD	VCP	{E3119FFE-66F6-4348-87D2-5DCE1F5B5A78}	CLMH205S008MH205S002	395.16	393.57	0.666666667	MH205S008	MH205S002				307	CLMH205S008MH205S002	8	0.0052	0.006270	0.13	0.007050	0.14	0.012326	0.18	0.007050	0.14	
CLMH205W001MH205W044		1964			Existing	assumed Mannings N	MH205W001	MH205W044		T05585	IRWD	VCP	{1BA6A242-846E-435B-8039-B43F2ACEE0BD}	CLMH205W001MH205W044	387.07	385.70	0.666666667	MH205W001	MH205W044				315	CLMH205W001MH205W044	8	0.0043	0.056794	0.23	0.063341	0.24	0.137227	1.00	0.063341	0.24	
CLMH205W002MH205W001		1964			Existing	assumed Mannings N	MH205W002	MH205W001		T05585	IRWD	VCP	{08CD68AC-0D91-4706-B305-8FED2ACD60BD}	CLMH205W002MH205W001	389.04	387.07	0.666666667	MH205W002	MH205W001				276	CLMH205W002MH205W001	8	0.0071	0.052966	0.21	0.059036	0.22	0.116984	0.64	0.059036	0.22	
CLMH205W005MH205W002		1964			Existing	assumed Mannings N	MH205W005	MH205W002		T05585	IRWD	VCP	{20B4CDFB-B071-4E2C-8690-A2C559655000}	CLMH205W005MH205W002	390.07	389.04	0.666666667	MH205W005	MH205W002				260	CLMH205W005MH205W002	8	0.0040	0.047038	0.20	0.052370	0.21	0.093841	0.29	0.052370	0.21	
CLMH205W006MH205W045		1964			Existing	assumed Mannings N	MH205W006	MH205W045		T05585	IRWD	VCP	{D8897337-5C73-49CA-981E-8E055988B9BF9}	CLMH205W006MH205W045	392.17	390.97	0.666666667	MH205W006	MH205W045				240	CLMH205W006MH205W045	8	0.0050	0.001214	0.04	0.002386	0.06	0.001365	0.04		
CLMH205W044MH205N042		1964			Existing	assumed Mannings N	MH205W044	MH205N042		T05585	IRWD	VCP	{A62D80C8-83B2-4808-9A75-14DE0728D90E}	CLMH205W044MH205N042	385.70	384.89	0.666666667	MH205W044	MH205N042	Existing B-in and less, d/D>0.50			202	CLMH205W044MH205N042	8	0.0041	0.061662	0.61	0.068815	0.63	0.189600	1.00	0.068815	0.63	
CLMH205W045MH205W044		1964			Existing	assumed Mannings N	MH205W045	MH205W044		T05585	IRWD	VCP	{F7693CD9-B61B-43AA-A498-9FFBDC4B3B86}	CLMH205W045MH205W044	390.97	385.70	0.666666667	MH205W045	MH205W044				272	CLMH205W045MH205W044	8	0.0194	0.043878	0.14	0.045476	0.15	0.093574	0.53	0.045476	0.15	
CLMH205W046MH205W005		1964			Existing	assumed Mannings N	MH205W046	MH205W005		T05585	IRWD	VCP	{CDF09B5B-31FC-45F7-AEE9-A20B589848BD}	CLMH205W046MH205W005	392.25	390.07	0.666666667	MH205W046	MH205W005				345	CLMH205W046MH205W005	8	0.0063	0.004528	0.14	0.005091	0.15	0.008899	0.19	0.005091	0.15	
CLMH206E001MH206E017		1972			Existing	assumed Mannings N	MH206E001	MH206E017		T07428	IRWD	VCP	{09DB8367-46DC-4486-BDBF-C2AEB5333D6}	CLMH206E001MH206E017	491.58	490.69	0.666666667	MH206E001	MH206E017				230	CLMH206E001MH206E017	8	0.0039	0.023501	0.14	0.026427	0.15	0.046199	0.20	0.026427	0.15	
CLMH206E002MH206E002		1973			Existing	assumed Mannings N	MH206E002	MH206E001		T08352	IRWD	VCP	{7FC7A2AC-6502-4A06-8C2D-A9EB640D416A}	CLMH206E002MH206E001	494.02	491.58	0.666666667	MH206E002	MH206E001				142	CLMH206E002MH206E001	8	0.0172	0.023502	0.14	0.026427	0.14	0.046199	0.18	0.026427	0.14	
CLMH206E003MH206E002		1973			Existing	assumed Mannings N	MH206E003	MH206E002		T08352	IRWD	VCP	{C8888AB9-11DF-494A-BCF1-2DF160753E65}	CLMH206E003MH206E002	501.22	494.02	0.666666667	MH206E003	MH206E002				261	CLMH206E003MH206E002	8	0.0276	0.012496	0.09	0.014052	0.09	0.024564	0.12	0.014052	0.09	
CLMH206E004MH206E003		1973			Existing	assumed Mannings N	MH206E004	MH206E003		T08352	IRWD	VCP	{F7A63878-08A2-40C5-8E2D-B62D12B76739}	CLMH206E004MH206E003	507.89	501.22	0.666666667	MH206E004	MH206E003				250	CLMH206E004MH206E003	8	0.0267	0.012497	0.07	0.014053	0.07	0.024567	0.10	0.014053	0.07	
CLMH206E005MH206E004		1973			Existing	assumed Mannings N	MH206E005	MH206E004		T08352	IRWD	VCP	{B8E3DA90-FE1F-476F-B7F9-620C405E43B4}	CLMH206E005MH206E004	515.96	507.89	0.666666667	MH206E005	MH206E004				250	CLMH206E005MH206E004	8	0.0323	0.007007	0.06	0.007879	0.06	0.013774	0.08	0.007879	0.06	
CLMH206E006MH206E005		1973			Existing	assumed Mannings N	MH206E006	MH206E005		T08352	IRWD	VCP	{AFED99FA-545F-4ACD-9E49-B0DB2B839637}	CLMH206E006MH206E005	524.04	515.96	0.666666667	MH206E006	MH206E005				358	CLMH206E006MH206E005	8	0.0356	0.007007	0.05	0.007879	0.05	0.013774	0.07	0.007879	0.05	
CLMH206E007MH206E108		1983			Existing	assumed Mannings N	MH206E007	MH206E108		T11834	IRWD	PVC	{8286BB17-25AB-4BF7-B180-8318F74E075}	CLMH206E007MH206E108	549.30	548.73	0.666666667	MH206E007	MH206E108				28	CLMH206E007MH206E108	8	0.0201	0.009823	0.06	0.011046	0.07	0.019306	0.09	0.011046	0.07	
CLMH206E008MH206E009		1973			Existing	assumed Mannings N	MH206E008	MH206E009		T08352	IRWD	VCP	{F9C19625-B028-431C-ACBA-65CF75884B8B}	CLMH206E008MH206E009	522.55	514.66	0.666666667	MH206E008	MH206E009				283	CLMH206E008MH206E009	8	0.0315	0.003942	0.04	0.004433	0.04	0.007749	0.06	0.004433	0.04	
CLMH206E009MH206E010		1973			Existing	assumed Mannings N	MH206E009	MH206E010		T08352	IRWD	VCP	{F21F2019-FBCD-4E31-AD70-0F71F46B8884}	CLMH206E009MH206E010	514.66	513.57	0.666666667	MH206E009	MH206E010				229	CLMH206E009MH206E010	8	0.0048	0.020175	0.05	0.022445	0.05	0.039255	0.07	0.022445	0.05	
CLMH206E009MH206N013		1974			Existing	assumed Mannings N	MH206E009	MH206N013		T08416	IRWD	VCP	{16EC815D-788D-427D-BD97-C87679A7ED33}	CLMH206E009MH206N013	514.66	504.01	0.666666667	MH206E009	MH206N013				264	CLMH206E009MH206N013	8	0.0404	0.006337	0.05	0.007126	0.06	0.012456	0.07	0.007126	0.06	
CLMH206E010MH206E011		1973			Existing	assumed Mannings N	MH206E010	MH206E011		T08352	IRWD	VCP	{5110E7CD-AD12-4A89-9660-884AE1CDDC2A}	CLMH206E010MH206E011	513.57	512.52	0.666666667	MH206E010	MH206E011				218	CLMH206E010MH206E011	8	0.0048	0.002175	0.04	0.002445	0.04	0.004275	0.06	0.002445	0.04	
CLMH206E011MH206E012		1973			Existing	assumed Mannings N	MH206E011	MH206E012		T08352	IRWD	VCP	{99E41350-5CAB-48DA-9E3E-2CB8E7B519A2}	CLMH206E011MH206E012	512.52	505.57	0.666666667	MH206E011	MH206E012				274	CLMH206E011MH206E012	8	0.0254	0.002175	0.04	0.002445	0.04	0.004275	0.06	0.002445	0.04	
CLMH206E012MH206E002		1973			Existing	assumed Mannings N	MH206E012	MH206E002		T08352	IRWD	VCP	{F17DC737-B89D-4A02-A475-F21E18BB51A1}	CLMH206E012MH206E002	505.57	494.02	0.666666667	MH206E012	MH206E002				290	CLMH206E012MH206E002	8	0.0399	0.007760	0.08	0.008727	0.08	0.015256	0.11	0.008727	0.08	
CLMH206E013MH206E109		1984			Existing	assumed Mannings N	MH206E013	MH206E109		T11761	IRWD	PVC	{6F36FC1E-AEE5-4BCA-8776-C41FFCCFACFB}	CLMH206E013MH206E109	548.53	530.67	0.666666667	MH206E013	MH206E109				199	CLMH206E013MH206E109	8	0.0199	0.008191	0.06	0.009211	0.06	0.016101	0.08	0.009211	0.06	
CLMH206E014MH206N013		1974			Existing	assumed Mannings N	MH206E014	MH206N013		T08416	IRWD	VCP	{E14BEB11-6561-4F37-94E7-C9BDDF33A622}	CLMH206E014MH206N013	511.39	504.01	0.666666667	MH206E014	MH206N013				219	CLMH206E014MH206N013	8	0.0337	0.004583	0.05	0.005153	0.05	0.009010	0.07	0.005153	0.05	
CLMH206E016MH206N097		1976			Existing	assumed Mannings N	MH206E016	MH206N097		T08416	IRWD	VCP	{11831314-858D-4E0A-957F-141SA7CE4DE2}	CLMH206E016MH206N097	492.23	489.39	0.666666667	MH206E016	MH206N097				284	CLMH206E016MH206N097	8	0.0100	0.003553	0.08	0.003995	0.09	0.006982	0.11	0.003995	0.09	
CLMH206E017MH206E023		1972			Existing	assumed Mannings N	MH206E017	MH206E023		T07428	IRWD	VCP	{9B9D114C-65D3-4552-9FFF-1C2496945547}	CLMH206E017MH206E023	490.58	489.17	0.666666667	MH206E017	MH206E023				181	CLMH206E017MH206E023	8	0.0078	0.013470	0.15	0.034932	0.15	0.061067	0.20	0.034932	0.15	
CLMH206E018MH206E017		1972			Existing	assumed Mannings N	MH206E018	MH206E017		T07428	IRWD	VCP	{666BE271-8E31-479D-A39A-ACD172B09CC8}	CLMH206E018MH206E017	491.51	490.69	0.666666667	MH206E018	MH206E017				152	CLMH206E018MH206E017	8	0.0054	0.018288	0.12	0.018288	0.12	0.031965	0.16	0.018288	0.12	
CLMH206E019MH206E018		1976			Existing	assumed Mannings N	MH206E019	MH206E018		T08083	IRWD	VCP	{90A4FD970-6482-4EE0-904A-0CEF9341E7A2}	CLMH206E019MH206E018	497.51	491.51	0.666666667	MH206E019	MH206E018				116	CLMH206E019MH206E018	8	0.0519	0.018288	0.10	0.018288	0.10	0.031965	0.13	0.018288	0.10	
CLMH206E020MH206E019		-99			Existing	assumed Mannings N	MH206E020	MH206E019			IRWD	VCP	{90B190F2-FD58-4D7A-B76E-B720DF954F E0}	CLMH206E020MH206E019	500.58	497.51	0.666666667	MH206E020	MH206E019				168	CLMH206E020MH206E019	8	0.0183	0.018288	0.08	0.018288	0.08	0.031965	0.11	0.018288	0.08	
CLMH206E021MH206E115		2010			Existing	assumed Mannings N	MH206E021	MH206E115	ERROR 23	A002291	IRWD	PVC	{74DAD039-C1AD-48EB-BAB5-5392CC687B77}	CLMH206E021MH206E115	510.98	510.74	1.000000000	MH206E021	MH206E115				51	CLMH206E021MH206E115	12	0.0047	0.012567	0.06	0.012567	0.06	0.021966	0.08	0.012567	0.06	
CLMH206E022MH206E021		-99			Existing	assumed Mannings N	MH206E022	MH206E021	ERROR 23		IRWD	VCP	{5450S867-F5ED-426E-8776-2AD4B2CDA605}	CLMH206E022MH206E021	517.09	511.08	0.666666667	MH206E022	MH206E021				312	CLMH206E022MH206E021	8	0.0193	0.012567	0.08	0.012567	0.08	0.021966	0.10	0.012567	0.08	
CLMH206E023MH206E024		1972			Existing	assumed Mannings N	MH206E023	MH206E024		T07428	IRWD	VCP	{8F4E110E-8569-41AE-A940-349D3261ED5B}	CLMH206E023MH206E024	489.07	488.01	0.666666667	MH206E023	MH206E024				164	CLMH206E023MH206E024	8	0.0064	0.042774	0.18	0.047042	0.18	0.082233	0.24	0.047042	0.18	
CLMH206E024MH206E025		1972			Existing	assumed Mannings N	MH206E024	MH206E025		T07428	IRWD	VCP	{5D991663-95A1-4294-B3E1-E907A0FCD0D3521}	CLMH206E024MH206E025	487.92	483.50	0.666666667	MH206E024	MH206E025				158	CLMH206E024MH206E025	8	0.0144	0.046632	0.15	0.051381	0.16	0.089818	0.21	0.051381	0.16	
CLMH206E025MH206E026		1972			Existing	assumed Mannings N	MH206E025	MH206E026		T07428	IRWD	VCP	{C51EDA32-B1CD-47A7-B612-604A17A156F0}	CLMH206E025MH206E026	483.50	478.38	0.666666667	MH206E025	MH206E026				206	CLMH206E025MH206E026	8	0.0160	0.046630	0.15	0.051379	0.16	0.089817	0.21	0.051379	0.16	
CLMH206E026MH206E027		1972			Existing	assumed Mannings N	MH206E026	MH206E027		T07428	IRWD	VCP	{9894E64F-9309-4EAD-B783-1C15D4EC891A}	CLMH206E026MH206E027	478.38	473.60	0.666666667	MH206E026	MH206E027				305	CLMH206E026MH206E027	8	0.0157	0.050413	0.15	0.055635	0.16	0.097264	0.21	0.055635	0.16	
CLMH206E027MH206S121		1972			Existing	assumed Mannings N	MH206E027	MH206S121		T07428	IRWD	VCP	{F9581450-CD40-4AFC-A61C-E01258981087}	CLMH206E027MH206S121	473.50	471.10	0.666666667	MH206E027	MH206S121				170	CLMH206E027MH206S121	8	0.0143	0.065750	0.18	0.072882	0.19	0.127414	0.25	0.072882	0.19	
CLMH206E031MH206S127		1972			Existing	assumed Mannings N	MH206E031	MH206S127		T07428	IRWD	VCP	{586AFD1C-A158-4AD8-9175-64DEC66E7317}	CLMH206E031MH206S127	485.54	477.47	0.666666667	MH206E031	MH206S127				285	CLMH206E031MH206S127	8	0.0284	0.004165	0.06	0.004683	0.06	0.008187	0.08	0.004683	0.06	
CLMH206E033MH206S122		1972			Existing	assumed Mannings N	MH206E033	MH206S122		T07428	IRWD	VCP	{6B7783F8-F9F4-4625-BE9B-0E8FF05B9004}	CLMH206E033MH206S122	492.01	482.76	0.666666667	MH206E033	MH206S122				385	CLMH206E033MH206S122	8	0.0240	0.002229	0.03	0.002506	0.03	0.004382	0.04	0.002506	0.03	
CLMH206E034MH206E023		1972			Existing	assumed Mannings N	MH206E034	MH206E023		T07428	IRWD	VCP	{C82A31FE-E8E2-4444-A500-892776955B0C}	CLMH206E034MH206E023	489.17	489.17	0.666666667	MH206E034	MH206E023				104	CLMH206E034MH206E023	8	0.0054	0.010225	0.09	0.011500	0.09	0.020099	0.12	0.011500	0.09	
CLMH206E035MH206E034		1972			Existing	assumed Mannings N	MH206E035	MH206E034		T07428	IRWD	VCP	{68DB5F59-EF7F-4E67-999D-29CD5CCFF27D}	CLMH206E035MH206E034	490.98	489.83	0.666666667	MH206E035	MH206E034				285	CLMH206E035MH206E034	8	0.0040	0.003636	0.06	0.004089	0.06	0.007147	0.08	0.004089	0.06	
CLMH206E036MH206E034		1972			Existing	assumed Mannings N	MH206E036	MH206E034		T07428	IRWD	VCP	{ED561094-F320-4B7F-B76D-1F59E6E7AFDC}	CLMH206E036MH206E034	492.85	489.83	0.666666667	MH206E036	MH206E034				260	CLMH206E036MH206E034	8	0.0116	0.004667	0.05	0.005249	0.06	0.009173	0.07	0.005249	0.06	
CLMH206E037MH206E036		1972			Existing	assumed Mannings N	MH206E037	MH206E036		T07428	IRWD	VCP	{47DE9583-C838-4813-8F47-A9AB57713152}	CLMH206E037MH206E036	494.80	492.95	0.666666667	MH206E037	MH206E036				308	CLMH206E037MH206E036	8	0.0048	0.001755	0.04	0.001974	0.04	0.003450	0.05	0.001974	0.04	
CLMH206E038MH206N116		1983			Existing	assumed Mannings N	MH206E038	MH206N116		A01307	IRWD	VCP	{B07481AA-08F9-4B29-8AEF-3136BE582CC}	CLMH206E038MH206N116	514.70	507.75	1.000000000	MH206E038	MH206N116				129	CLMH206E038MH206N116	12	0.0314	0.132830	0.12	0.149350	0.12	0.261064	0.16	0.149350	0.12	
CLMH206E039MH206E013		1984			Existing	assumed Mannings N	MH206E039	MH206E013		T11761	IRWD	PVC	{13C5215A-4CBA-4FF5-BFA2-32BA8057B972}	CLMH206E039MH206E013	541.50	532.84	0.666666667	MH206E039	MH206E013				246	CLMH206E039MH206E013	8	0.0352	0.004875	0.04	0.005482	0.04	0.009584	0.06	0.005482	0.04	
CLMH206E040MH206E041		1984			Existing	assumed Mannings N	MH206E040	MH206E041		A01356	IRWD	VCP	{85F66384-D8DB-40FF-A936-08F34295A5AB}	CLMH206E040MH206E041	537.22	534.36	0.666666667	MH206E040	MH206E041				286	CLMH206E040MH206E041	8	0.0100	0.003921	0.05	0.003921	0.05	0.006855	0.07	0.003921	0.05	
CLMH206E041MH206E105		1984			Existing	assumed Mannings N	MH206E041	MH206E105		A01356	IRWD	VCP	{70398703-EF04-4172-B76F-38317EA58BC5}	CLMH206E041MH206E105	534.16	532.32	0.666666667	MH206E041	MH206E105				185	CLMH206E041MH206E105	8	0.0099	0.011964	0.09	0.011964	0.09	0.020914	0.11	0.011964	0.09	
CLMH206E042MH206E041		1984			Existing	assumed Mannings N	MH206E042	MH206E041		A01356	IRWD	VCP	{68A5CBEE-AEAE-4138-B37A-F615583CC169}	CLMH206E042MH206E041	528.47	520.71	0.666666667	MH206E042	MH206E041				196	CLMH206E042MH206E041	8	0.0396	0.018383	0.08	0.018383	0.08	0.032136	0.10	0.018383	0.08	
CLMH206E043MH206E044		1978			Existing	assumed Mannings N	MH206E043	MH206E044		T10471	IRWD	VCP	{63B69A0C-31BC-4ADC-9260-8F3557AEDC79}	CLMH206E043MH206E044	520.40	510.79	1.250000000	MH206E043	MH206E044				320	CLMH206E043MH206E044	15	0.0300	0.018383	0.03	0.018383	0.03	0.032136	0.04	0.018383	0.03	
CLMH206E044MH206E102		1978			Existing	assumed Mannings N	MH206E044	MH206E102		T10471	IRWD	VCP	{F625B20D-41E9-48E5-B162-60640359EBB8}	CLMH206E044MH206E102	510.79	507.17	1.250000000	MH206E044	MH206E102				53	CLMH206E044MH206E102	15	0.0685	0.019061	0.04	0.019065	0.04	0.033128	0.05	0.019065	0.04	
CLMH206E045MH206E044		1978			Existing	assumed Mannings N	MH206E045	MH206E044		T10471	IRWD	VCP	{CB32CC15-CD01-4036-A7CA-AB99B47771B4}	CLMH206E045MH206E044	517.71	510.79	0.666666667	MH206E045	MH206E044				224	CLMH206E045MH206E044	8	0.0309	0.001058	0.04	0.001190	0.04	0.002079	0.05	0.001190	0.04	
CLMH206E046MH206E045		1978			Existing	assumed Mannings N	MH206E046	MH206E045		T10471	IRWD	VCP	{1377 3AAF-9DAB-456B-ACD4-968000 3AEE02}	CLMH206E046MH206E045	500.98	495.91	1.250000000	MH206E046	MH206E045				116	CLMH206E046MH206E045	15	0.0255	0.028353	0.06	0.028411	0.06	0.049664	0.08	0.028411	0.06	
CLMH206E047MH206E046		1978			Existing	assumed Mannings N	MH206E047	MH206E046		T10471	IRWD	VCP	{0A88335EB-A07D-43E7-8E00-8D486C67377F}	CLMH206E047MH206E046	502.63	500.98	0.666666667	MH206E047	MH206E046				182	CLMH206E047MH206E046	8	0.0091	0.013634	0.09	0.015273	0.09	0.026703	0.12	0.015273	0.09	
CLMH206E048MH206E047		1978			Existing	assumed Mannings N	MH206E048	MH206E047		T10471	IRWD	VCP	{39CAD023-563F-4327-B9D9-F1EC95CFBE8D}	CLMH206E048MH206E047	505.64	502.63	0.666666667	MH206E048	MH206E047				207	CLMH206E048MH206E047	8	0.0226	0.013557	0.09	0.015200	0.09	0.026570	0.12	0.015200	0.09	
CLMH206E049MH206E048		1978			Existing	assumed Mannings N	MH206E049	MH206E048		T10471	IRWD	VCP	{12161746-5183-45BD-98CB-161BDC54E363}	CLMH206E049MH206E048	495.91	494.75	1.250000000	MH206E049	MH206E048				265	CLMH206E049MH206E048	15	0.0044	0.028755	0.08	0.028816	0.08	0.050371	0.10	0.028816	0.08	
CLMH206E050MH206E052		1978			Existing	assumed Mannings N	MH206E050	MH206E052		T10471	IRWD	VCP	{F12E943F-1882-46EB-A30C-201BF9920FBF}	CLMH206E050MH206E052	494.75	494.04	1.250000000	MH206E050	MH206E052				76	CLMH206E050MH206E052	15	0.0094	0.063402	0.22	0.070185	0.23	0.122685	0.32	0.070185	0.24	
CLMH206E051MH206E050		1978			Existing	assumed Mannings N	MH206E051	MH206E050	Aliso Creek Aci Rev

CLMH206N027MH206N026		1976		Existing	assumed Mannings N	MH206N027	MH206N026		T07708	IRWD	VCP	{08F0D8B0-0194-4B89-BF76-148BF4F75E59}	CLMH206N027MH206N026	448.47	446.73	0.666666667	MH206N027	MH206N026			173	CLMH206N027MH206N026	8	0.0101	0.002996	0.04	0.003369	0.05	0.0058888	0.06	0.003369	0.05		
CLMH206N030MH195E126		1971		Existing	assumed Mannings N	MH206N030	MH195E126		A01114	IRWD	VCP	{21418BC3-0E1F-4236-ABA0-F85BF8947143}	CLMH206N030MH195E126	408.95	404.85	0.833333333	MH206N030	MH195E126			304	CLMH206N030MH195E126	10	0.0135	0.318767	0.28	0.358311	0.29	0.626446	0.39	0.363756	0.29		
CLMH206N031MH206N030		1971		Existing	assumed Mannings N	MH206N031	MH206N030		A01114	IRWD	PVC	{72E228F6-68F6-6079-A82C-4845955542FF6}	CLMH206N031MH206N030	409.35	409.14	0.666666667	MH206N031	MH206N030			20	CLMH206N031MH206N030	8	0.0104	0.318778	0.42	0.358318	0.45	0.626446	0.63	0.363762	0.45		
CLMH206N032MH206N030		0		Existing	assumed Mannings N	MH206N032	MH206N030			IRWD	UNK	{D1297F3C0-34C1-472A-92F4-B866270202A8}	CLMH206N032MH206N030	409.32	409.14	0.666666667	MH206N032	MH206N030			46	CLMH206N032MH206N030	8	0.0039	0.000000	0.05	0.000000	0.06	0.000646	0.14	0.000000	0.07		
CLMH206N033MH206N105		1974		Existing	assumed Mannings N	MH206N033	MH206N105		T07706	IRWD	VCP	{E2CD6CAC-37CB-4207-9537-8CB85E684F6C}	CLMH206N033MH206N105	499.00	496.47	1.000000000	MH206N033	MH206N105			213	CLMH206N033MH206N105	12	0.0119	0.142329	0.19	0.160033	0.20	0.279739	0.27	0.167029	0.20		
CLMH206N034MH206N033		1976		Existing	assumed Mannings N	MH206N034	MH206N033		T09118	IRWD	VCP	{45106850-8340-414E-9E8B-0348452A3AB4}	CLMH206N034MH206N033	500.30	499.00	1.000000000	MH206N034	MH206N033			277	CLMH206N034MH206N033	12	0.0047	0.132830	0.18	0.149350	0.19	0.261064	0.25	0.149411	0.19		
CLMH206N035MH206N085		1974		Existing	assumed Mannings N	MH206N035	MH206N085		T07706	IRWD	VCP	{FC3E8F3D-E58D-4910-9F63-6B0F495937A2}	CLMH206N035MH206N085	500.00	489.95	0.666666667	MH206N035	MH206N085			209	CLMH206N035MH206N085	8	0.0481	0.007554	0.06	0.008494	0.06	0.014848	0.08	0.008494	0.06		
CLMH206N036MH206N031		1971		Existing	assumed Mannings N	MH206N036	MH206N031		A01114	IRWD	VCP	{DE54C081-47FD-4F04-89E1-1FD096C50739}	CLMH206N036MH206N031	411.60	409.35	0.833333333	MH206N036	MH206N031			100	CLMH206N036MH206N031	10	0.0225	0.318780	0.30	0.358320	0.32	0.626446	0.44	0.363765	0.32		
CLMH206N037MH206N036		1976		Existing	assumed Mannings N	MH206N037	MH206N036		T07708	IRWD	VCP	{F2345828-B4EC-46E9-86D6-E7F9472DE85E}	CLMH206N037MH206N036	445.08	411.60	0.666666667	MH206N037	MH206N036			241	CLMH206N037MH206N036	8	0.1400	0.003080	0.18	0.003463	0.19	0.006053	0.25	0.003463	0.19		
CLMH206N038MH206N036		1976		Existing	assumed Mannings N	MH206N038	MH206N036		T07708	IRWD	VCP	{8C6D6982-86F1-4EAE-A711-F5C6D3DDA4DC}	CLMH206N038MH206N036	415.95	411.60	0.833333333	MH206N038	MH206N036			180	CLMH206N038MH206N036	10	0.0242	0.315709	0.26	0.354863	0.27	0.620395	0.37	0.360307	0.28		
CLMH206N039MH206N038		1976		Existing	assumed Mannings N	MH206N039	MH206N038		T08791	IRWD	VCP	{3472FAF5-B8DC-403B-90DE-498E5A8AC739}	CLMH206N039MH206N038	417.16	415.95	0.833333333	MH206N039	MH206N038			90	CLMH206N039MH206N038	10	0.0135	0.315712	0.28	0.354865	0.30	0.620395	0.40	0.360309	0.30		
CLMH206N040MH206N039		1976		Existing	assumed Mannings N	MH206N040	MH206N039		T08791	IRWD	VCP	{B631292D-2ABE-4AB7-94F2-38FA7D01F85D}	CLMH206N040MH206N039	434.95	417.16	0.666666667	MH206N040	MH206N039			193	CLMH206N040MH206N039	8	0.1240	0.036635	0.23	0.041206	0.24	0.072076	0.33	0.041206	0.25		
CLMH206N041MH206N040		1976		Existing	assumed Mannings N	MH206N041	MH206N040		T08791	IRWD	VCP	{1C5532C5-E71F-40C1-A878-B680ACF82989}	CLMH206N041MH206N040	437.98	435.04	0.666666667	MH206N041	MH206N040			174	CLMH206N041MH206N040	8	0.0169	0.035924	0.13	0.040407	0.14	0.070679	0.18	0.040407	0.14		
CLMH206N043MH206N041		1976		Existing	assumed Mannings N	MH206N043	MH206N041		T08791	IRWD	VCP	{61368D56-C0D0-4519-A6F6-4C9CB0F5F580}	CLMH206N043MH206N041	443.54	438.17	0.666666667	MH206N043	MH206N041			261	CLMH206N043MH206N041	8	0.0206	0.031159	0.11	0.035049	0.12	0.061315	0.16	0.035049	0.12		
CLMH206N044MH206N043		1974		Existing	assumed Mannings N	MH206N044	MH206N043		T08791	IRWD	VCP	{EDF46F72-CB7E-464B-BB3B-BD5579828754}	CLMH206N044MH206N043	444.19	443.75	0.666666667	MH206N044	MH206N043			114	CLMH206N044MH206N043	8	0.0039	0.003093	0.05	0.003478	0.06	0.006078	0.07	0.003478	0.06		
CLMH206N045MH206N043		1976		Existing	assumed Mannings N	MH206N045	MH206N043		T08791	IRWD	VCP	{EB5EABDF-AD76-48E6-A047-0EA553D43AFE}	CLMH206N045MH206N043	450.26	443.75	0.666666667	MH206N045	MH206N043			233	CLMH206N045MH206N043	8	0.0280	0.028066	0.10	0.031571	0.11	0.055236	0.14	0.031571	0.11		
CLMH206N046MH195E129		1975		Existing	assumed Mannings N	MH206N046	MH195E129		T08790	IRWD	VCP	{D7E16867-9C1E-4D72-A06F-AC3D645371EC}	CLMH206N046MH195E129	454.10	453.63	0.666666667	MH206N046	MH195E129			119	CLMH206N046MH195E129	8	0.0039	0.000510	0.03	0.000561	0.04	0.000562	0.03	0.000931	0.04	0.000562	0.03
CLMH206N046MH206N045		1974		Existing	assumed Mannings N	MH206N046	MH206N045		T08791	IRWD	VCP	{5B3E77C9-2E51-4DD5-B702-DA3F8F0881E8}	CLMH206N046MH206N045	454.10	450.47	0.666666667	MH206N046	MH206N045			179	CLMH206N046MH206N045	8	0.0203	0.001037	0.02	0.001177	0.02	0.002110	0.03	0.001177	0.02		
CLMH206N047MH206N072		1974		Existing	assumed Mannings N	MH206N047	MH206N072		T08351	IRWD	VCP	{AF3EDB37-BEFC-4ED6-AFB3-D20B68D1DAF6}	CLMH206N047MH206N072	486.83	480.30	0.666666667	MH206N047	MH206N072			241	CLMH206N047MH206N072	8	0.0271	0.018371	0.09	0.020658	0.09	0.036103	0.12	0.020658	0.09		
CLMH206N048MH206N045		1974		Existing	assumed Mannings N	MH206N048	MH206N045		T08791	IRWD	VCP	{4E4D819F-C41C-4270-8959-90EF4DD1D537}	CLMH206N048MH206N045	453.00	450.47	0.666666667	MH206N048	MH206N045			96	CLMH206N048MH206N045	8	0.0264	0.027029	0.10	0.030394	0.11	0.053127	0.14	0.030394	0.11		
CLMH206N049MH206N048		1974		Existing	assumed Mannings N	MH206N049	MH206N048		T08791	IRWD	VCP	{52728ZBC-FE72-4DC3-B0BC-A02D7C135276}	CLMH206N049MH206N048	457.20	453.00	0.666666667	MH206N049	MH206N048			150	CLMH206N049MH206N048	8	0.0280	0.025357	0.10	0.028514	0.10	0.049841	0.14	0.028514	0.10		
CLMH206N050MH206N049		1974		Existing	assumed Mannings N	MH206N050	MH206N049		T07707	IRWD	VCP	{4ABT704D-F459-4C59-9D77-7EBB185A596D}	CLMH206N050MH206N049	460.94	457.20	0.666666667	MH206N050	MH206N049			83	CLMH206N050MH206N049	8	0.0144	0.019325	0.10	0.021730	0.10	0.037983	0.14	0.021730	0.10		
CLMH206N051MH206N050		1974		Existing	assumed Mannings N	MH206N051	MH206N050		T07707	IRWD	VCP	{0207EFD5-5275-46E1-822B-6E8AEB4371F6}	CLMH206N051MH206N050	466.91	460.94	0.666666667	MH206N051	MH206N050			288	CLMH206N051MH206N050	8	0.0208	0.002453	0.07	0.002758	0.07	0.004820	0.09	0.002758	0.07		
CLMH206N052MH206N051		1974		Existing	assumed Mannings N	MH206N052	MH206N051		T07707	IRWD	VCP	{611B3C83-C0C1-4CFD-B98E-2C848E54EE03}	CLMH206N052MH206N051	472.88	466.91	0.666666667	MH206N052	MH206N051			288	CLMH206N052MH206N051	8	0.0208	0.002471	0.03	0.002779	0.04	0.004858	0.05	0.002779	0.04		
CLMH206N053MH206N052		1974		Existing	assumed Mannings N	MH206N053	MH206N052		T07707	IRWD	VCP	{CCAB98ZD-4927-45G2-865F-522641F38FA}	CLMH206N053MH206N052	478.04	472.88	0.666666667	MH206N053	MH206N052			337	CLMH206N053MH206N052	8	0.0122	0.006032	0.07	0.006783	0.08	0.011858	0.10	0.006783	0.08		
CLMH206N055MH195E130		1974		Existing	assumed Mannings N	MH206N055	MH195E130		T07707	IRWD	VCP	{0ABA1120-4A42-48F7-87C4-69790D8C74CF}	CLMH206N055MH195E130	466.95	465.22	0.666666667	MH206N055	MH195E130			345	CLMH206N055MH195E130	8	0.0050	0.003762	0.09	0.004230	0.10	0.007394	0.13	0.004230	0.10		
CLMH206N056MH206N128		2010		Existing	assumed Mannings N	MH206N056	MH206N128		A02289	IRWD	PVC	{8CC97097-F6AE-4736-B75A-321BF0B6732A}	CLMH206N056MH206N128	421.79	419.69	0.833333333	MH206N056	MH206N128			102	CLMH206N056MH206N128	10	0.0205	0.279021	0.24	0.313527	0.26	0.548070	0.34	0.318970	0.26		
CLMH206N057MH206N056		1974		Existing	assumed Mannings N	MH206N057	MH206N056		T08351	IRWD	VCP	{2A6057DA-2B82-49D7-B399-B544CB289AAB}	CLMH206N057MH206N056	425.40	421.79	0.833333333	MH206N057	MH206N056			165	CLMH206N057MH206N056	10	0.0219	0.279036	0.24	0.313533	0.26	0.548080	0.35	0.318976	0.26		
CLMH206N058MH206N057		1974		Existing	assumed Mannings N	MH206N058	MH206N057		T08351	IRWD	VCP	{3E999BC0-4099-497F-8F1A-F0A5A4FE6DF}	CLMH206N058MH206N057	429.69	425.40	0.833333333	MH206N058	MH206N057			193	CLMH206N058MH206N057	10	0.0224	0.279044	0.24	0.313538	0.26	0.548088	0.35	0.318981	0.26		
CLMH206N059MH206N058		1974		Existing	assumed Mannings N	MH206N059	MH206N058		T08351	IRWD	VCP	{D12ACC79-D1BC-4983-A10F-1ECADE3FE9AA}	CLMH206N059MH206N058	457.52	429.69	0.833333333	MH206N059	MH206N058			288	CLMH206N059MH206N058	10	0.0970	0.279136	0.21	0.313583	0.22	0.548162	0.29	0.319025	0.22		
CLMH206N067MH206N059		1974		Existing	assumed Mannings N	MH206N067	MH206N059		T08351	IRWD	VCP	{7CB4A341-CCBA-4090-AC79-53E4C0567FCB}	CLMH206N067MH206N059	467.04	457.52	0.833333333	MH206N067	MH206N059			137	CLMH206N067MH206N059	10	0.0699	0.276379	0.18	0.310771	0.19	0.543245	0.25	0.316214	0.19		
CLMH206N068MH206N067		1974		Existing	assumed Mannings N	MH206N068	MH206N067		T08351	IRWD	VCP	{86A78041-881F-4638-BBEB-7C29914106E9}	CLMH206N068MH206N067	468.39	467.04	0.666666667	MH206N068	MH206N067			240	CLMH206N068MH206N067	8	0.0056	0.003474	0.04	0.003764	0.04	0.005790	0.08	0.003764	0.04		
CLMH206N069MH206N068		1974		Existing	assumed Mannings N	MH206N069	MH206N068		T08351	IRWD	VCP	{82E08AD9-65FB-405C-9A31-61878DA80BEE}	CLMH206N069MH206N068	471.64	468.39	0.666666667	MH206N069	MH206N068			242	CLMH206N069MH206N068	8	0.0134	0.029476	0.14	0.033146	0.15	0.057930	0.20	0.033146	0.15		
CLMH206N070MH206N069		1974		Existing	assumed Mannings N	MH206N070	MH206N069		T08351	IRWD	VCP	{0A05F195-567A-4846-85F0-9977E7358C1C}	CLMH206N070MH206N069	480.92	471.64	0.666666667	MH206N070	MH206N069			252	CLMH206N070MH206N069	8	0.0368	0.006103	0.08	0.006862	0.09	0.011994	0.12	0.006862	0.09		
CLMH206N071MH206N070		1974		Existing	assumed Mannings N	MH206N071	MH206N070		T08351	IRWD	VCP	{156C597D-0772-4895-8D8C-B8B44C155662}	CLMH206N071MH206N070	486.55	481.14	0.666666667	MH206N071	MH206N070			107	CLMH206N071MH206N070	8	0.0506	0.003260	0.03	0.003666	0.03	0.006407	0.04	0.003666	0.03		
CLMH206N072MH206N071		1974		Existing	assumed Mannings N	MH206N072	MH206N071		T08353	IRWD	VCP	{8A09F4FA-0BBB-4756-8EC5-D784B47CBFB3}	CLMH206N072MH206N071	480.30	471.64	0.666666667	MH206N072	MH206N071			255	CLMH206N072MH206N071	8	0.0339	0.023374	0.11	0.026281	0.11	0.045936	0.15	0.026283	0.11		
CLMH206N073MH206N072		1974		Existing	assumed Mannings N	MH206N073	MH206N072		T08353	IRWD	VCP	{835682D2-B24D-468E-BA60-6E929F29B4BB}	CLMH206N073MH206N072	487.32	480.30	0.666666667	MH206N073	MH206N072			258	CLMH206N073MH206N072	8	0.0272	0.002244	0.06	0.002523	0.06	0.004410	0.08	0.002523	0.06		
CLMH206N074MH206N073		1974		Existing	assumed Mannings N	MH206N074	MH206N073		T08353	IRWD	VCP	{18AA987D-539F-4E1D-B63A-1BD541044511}	CLMH206N074MH206N073	502.85	487.32	0.666666667	MH206N074	MH206N073			205	CLMH206N074MH206N073	8	0.0760	0.002244	0.03	0.002523	0.03	0.004410	0.04	0.002523	0.03		
CLMH206N075MH206N067		1974		Existing	assumed Mannings N	MH206N075	MH206N067		T08353	IRWD	VCP	{03BD4451-F326-4950-9844-7F9641437176}	CLMH206N075MH206N067	468.83	467.04	1.000000000	MH206N075	MH206N067			254	CLMH206N075MH206N067	12	0.0071	0.186674	0.19	0.209901	0.20	0.366921	0.26	0.215343	0.20		
CLMH206N076MH206N075		1974		Existing	assumed Mannings N	MH206N076	MH206N075		T08353	IRWD	VCP	{492CBA02-4FA3-45D5-BE70-F7115616CF8}	CLMH206N076MH206N075	472.88	468.83	0.666666667	MH206N076	MH206N075			147	CLMH206N076MH206N075	8	0.0276	0.002035	0.18	0.002288	0.19	0.003997	0.25	0.002288	0.19		
CLMH206N077MH206N076		1974		Existing	assumed Mannings N	MH206N077	MH206N076		T08353	IRWD	VCP	{30D88837-C7AB-4591-9494-5114E2A08462}	CLMH206N077MH206N076	506.32	472.88	0.666666667	MH206N077	MH206N076			379	CLMH206N077MH206N076	8	0.0886	0.002035	0.03	0.002288	0.03	0.003997	0.04	0.002288	0.03		
CLMH206N078MH206N075		1974		Existing	assumed Mannings N	MH206N078	MH206N075		T07706	IRWD	VCP	{787F19F6-16BE-4576-A41C-295EA3086EE2}	CLMH206N078MH206N075	473.20	468.83	0.666666667	MH206N078	MH206N075			273	CLMH206N078MH206N075	8	0.0256	0.002717	0.18	0.003055	0.19	0.005341	0.25	0.003055	0.20		
CLMH206N079MH206N078		1974		Existing	assumed Mannings N	MH206N079	MH206N078		T07706	IRWD	VCP	{A16B1168-72A7-42A7-AE5F-0B6CBF9D9B33}	CLMH206N079MH206N078	487.60	473.20	0.666666667	MH206N079	MH206N078			209	CLMH206N079MH206N078	8	0.0692	0.001003	0.03	0.001128	0.03	0.001972	0.04	0.001128	0.03		
CLMH206N080MH206N075		1974		Existing	assumed Mannings N	MH206N080	MH206N075		T07706	IRWD	VCP	{ECD57A35-9A3B-4568-BDB8-AADBD3DB96DC}	CLMH206N080MH206N075	471.61	468.83	0.666666667	MH206N080	MH206N075			337	CLMH206N080MH206N075	8	0.0083	0.181926	0.34	0.204561	0.36	0.357583	0.49	0.210003	0.37		
CLMH206N081MH206N080		1974		Existing	assumed Mannings N	MH206N081	MH206N080		T07706	IRWD	VCP	{3ED9D055-137C-409C-AE03-B21E12D778DC}	CLMH206N081MH206N080	474.58	471.61	0.666666667	MH206N081	MH206N080			82	CLMH206N081MH206N080	8	0.0364	0.002898	0.19	0.003258	0.20	0.005696	0.28	0.003258	0.21		
CLMH206N082MH206N081		1974		Existing	assumed Mannings N	MH206N082	MH206N081		T07706	IRWD	VCP	{9AE9B12D-EF36-43A0-B0F8-EEE39927B3E1}	CLMH206N082MH206N081	497.94	474.58	0.666666667	MH206N082	MH206N081			252	CLMH206N082MH206N081	8	0.0930	0.002898	0.03	0.003258	0.03	0.005696	0.04	0.003258	0.03		
CLMH206N083MH206N074		1974		Existing	assumed Mannings N	MH206N083	MH206N074		T08351	IRWD	VCP	{9D979372-679A-491B-9618-0D2221BFEF5C}	CLMH206N083MH206N074	509.33	502.85	0.666666667	MH206N083	MH206N074			211	CLMH206N083MH206N074	8	0.0317	0.000000	0.01	0.000000	0.01	0.000000	0.02	0.000000	0.01		
CLMH206N083MH206N082		1974		Existing	assumed Mannings N	MH206N083	MH206N082		T07706	IRWD	VCP	{A65E5F5F-D36E-4E78-AF58-B0CBCE17CC06}	CLMH206N083MH206N082	509.33	497.94	0.666666667	MH206N083	MH206N082			135	CLMH206N083MH206N082	8	0.0375	0.000000	0.01	0.000000	0.02	0.000000	0.01	0.000000	0.02		
CLMH206N084MH206N080		1974		Existing	assumed Mannings N	MH206N084	MH206N080		T07706	IRWD	VCP	{B15EB2FC-C291-4E11-A821-6045B04B1A3B}	CLMH206N084MH206N080	485.45	471.61	0.666666667	MH206N084	MH206N080			255	CLMH206N084MH206N080	8	0.0544	0.173221	0.28	0.194772	0.30	0.340467	0.40	0.200214	0.30		
CLMH206N085MH206N084		1974		Existing	assumed Mannings N	MH206N085	MH206N084		T07706	IRWD	VCP	{88EC151D-509C-4A88-A707-D0C5507BF75D}	CLMH206N085MH206N084	489.95	485.45	0.666666667	MH206N085	MH206N084			170	CLMH206N085MH206N084	8	0.0265	0.011635	0.14	0.013083	0.15	0.022871	0.19	0.013083	0.15		
CLMH206N086MH206N084		1974		Existing	assumed Mannings N	MH206N086	MH206N084		T07706	IRWD	VCP	{2A1C54FC-50A2-4ABF-87C5-A026CEEA498E}	CLMH206N086MH206N084	494.54	485.45	0.666666667	MH206N086	MH206N084			153	CLMH206N086MH206N084	8	0.0594	0.161587	0.20	0.181689	0.21	0.317597	0.28	0.187131	0.22		
CLMH206N087MH206N086		1974		Existing	assumed Mannings N	MH206N087	MH206N086		T07706	IRWD	VCP	{BF90BD70-616B-40E9-928D-B323C9F94622}	CLMH206N087MH206N086	495.47	494.54	1.000000000	MH206N087	MH206N086			180	CLMH206N087MH206N086	12	0.0052	0.159673	0.18	0.179537	0.19	0.313833	0.25	0.184979	0.19		
CLMH206N088MH206N086		1974		Existing	assumed Mannings N	MH206N088	MH206N086		T07706	IRWD	VCP	{B3AB1EAE-9A40-4894-ACBD-DC54E3A418BC}	CLMH206N088MH206N086	501.26	494.54	0.666666667	MH206N088	MH206N086			82	CLMH206N088MH206N086	8	0.0250	0.001915	0.11	0.002153	0.12	0.003764	0.16	0.002153	0.12		
CLMH206N089MH206N088		1974		Existing	assumed Mannings N	MH206N089	MH206N088		T07706	IRWD	VCP	{5E518CB-2E84-415E-9805-3E69B58E1C50}	CLMH206N089MH206N088	501.26	494.94	0.666666667	MH206N089	MH206N088			217	CLMH206N089MH206N088	8	0.0292	0.002070	0.03	0.002327	0.04	0.004068	0.05	0.002327	0.04		
CLMH206N089MH206N090		1974		Existing	assumed Mannings N	MH206N089	MH206N090		T07706	IRWD	VCP	{EEB2267D-4345-4C49-B9AC-0918939B0601}	CLMH206N089MH206N090	494.94	483.13	0.666666667	MH206N089	MH206N090			174	CLMH206N089MH206N090	8	0.0679	0.006096	0.13	0.006854	0.14	0.011982	0.18	0.006854	0.14		
CLMH206N090MH206N091		1974		Existing	assumed Mannings N	MH206N090	MH206N091		T07706	IRWD	VCP	{13FD639B-C559-45F0-B88F-63422F810306}	CLMH206N090MH206N091	483.13	482.79	0.666666667	MH206N090	MH206N091			78	CLMH206N090MH206N091	8	0.0043	0.051189	0.18	0.057562	0.19	0.100620	0.26	0.057562	0.19		
CLMH206N091MH206N092		1974		Existing	assumed Mannings N	MH206N091	MH206N092		T07706	IRWD	VCP	{8A2972D0-E3DA-45D0-BE23-EC1A059FBAFE}	CLMH206N091MH206N092	482.79	477.04	0.666666667	MH206N091	MH206N092			287	CLMH206N091MH206N092	8	0.0200	0.091184	0.23	0.102620	0.24	0.157562	0.33	0.102620	0.25		
CLMH206N092MH206N067		1974		Existing	assumed Mannings N	MH206N092	MH206N067		T08351	IRWD	VCP	{F5495051-8DB0-4BCF-B027-5C2F26B0CC2F}	CLMH206N092MH206N067	477.04	467.04	0.666666667	MH206N092	MH206N067			361	CLMH206N092MH206N067	8	0.0277	0.056229	0.19	0.063231	0.20	0.110533	0.26	0.063231	0.20		
CLMH206N093MH206N090		1974		Existing	assumed Mannings N	MH206N093	MH206N090		T07706	IRWD	VCP	{0AEE5620-E0AF-4D19-A16D-A393F1EAA6F9}	CLMH206N093MH206N090	484.94	483.13	0.666666667	MH206N093	MH206N090			330	CLMH206N093MH206N090	8	0.0055	0.045094	0.20	0.050708	0.22	0.088638	0.28	0.050708	0.22		
CLMH206N093MH206N093		1974		Existing	assumed Mannings N	MH206N094	MH206N093		T07706	IRWD	VCP	{060CAA2B-AB6E-4F34-985C-3011661C53BA}	CLMH206N094MH206N093	485.14	484.94	0.666666667	MH206N094	MH206N093			54	CLMH206N094MH206N093	8	0.0037	0.035148	0.19	0.039524	0.20	0.069087	0.26	0.039524	0.20		
CLMH206N095MH206N094		1974		Existing	assumed Mannings N	MH206N095	MH206N094		T08416	IRWD	VCP	{1E27B053-20AB-4FBF-B78C-B32F4024971}	CLMH206N095MH206N094	486.45	485.14	0.666666667	MH206N095	MH206N094			277	CLMH206N095MH206N094	8	0.0047	0.035149	0.18	0.039524	0.19	0.069087	0.25	0.039524	0.19		
CLMH206N096MH206N095		1974		Existing	assumed Mannings N	MH206N096	MH206N095		T08416	IRWD	VCP	{3B6A4E2E-4476-4649-BDD4-787C12D73780}	CLMH206N096MH206N095	487.52	486.45	0.666666667	MH206N096	MH206N095			243	CLMH206N096MH206N095	8	0.0044	0.025550	0.16	0.028730	0.17	0.050219	0.23	0.028730	0.17		
CLMH206N097MH206N096		1974		Existing	assumed Mannings N	MH206N097	MH206N096		T08416	IRWD	VCP	{F9E2CBE1-2B62-419A-A0F1-51DD2347AE4D}	CLMH206N097MH206N096	489.39	487.52	0.666666667	MH206N097	MH206N096			261	CLMH206N097MH206N096	8	0.0072	0.018834	0.13	0.021178	0.14	0.037020	0.19	0.021178	0.14		
CLMH206N098MH206N095		1974		Existing	assumed Mannings N	MH206N098	MH206N095		T08416	IRWD	VCP	{46940B4B-B7F7-4F38-BAA8-D47B309EEFB0}	CLMH206N098MH206N095	494.39	486.45	0.666666667	MH206N098	MH206N095			186	CLMH206N098MH206N095	8	0.0427	0.004124	0.11	0.004637	0.11	0.008108	0.15	0.004637	0.11		
CLMH206N098MH206N098		1974		Existing	assumed Mannings N	MH206N098	MH206N098		T09118	IRWD	VCP	{72E00FF2-C0D4-4EC6-AE24-5DB092C988F0}	CLMH206N098MH206N098	508.95	494.39	0.666666667	MH206N098	MH206N098			346	CLMH206N098MH206N098	8	0.0421	0.004150	0.04	0.004666	0.04	0.008157	0.05	0.004666	0.04		
CLMH206N100MH206N093		1974		Existing	assumed Mannings N	MH206N100	MH206N093		T07706	IRWD	VCP	{77D2329A-D9B4-4F80-AC55-5ED7DA11ABEA}	CLMH206N100MH206N093	491.23	484.94	0.666666667	MH206N100	MH206N093			107	CLMH206N100MH206N093	8	0.0588	0.009946	0.12	0.011185	0.13	0.019551	0.17	0.011185	0.13		
CLMH206N101MH206N100		1974		Existing	assumed Mannings N	MH206N101	MH206N100		T07706	IRWD	VCP	{FC582C33-44D7-41C5-9EB2-23ABADBDC01C}	CLMH206N101MH206N100	504.57	491.23	0.666666667	MH206N101	MH206N100			346	CLMH206N101MH206N100	8	0.0386	0.004416	0.05	0.004965	0.05	0.008681	0.06	0.004965	0.05		
CLMH206N102MH206N096		1974		Existing	assumed Mannings N	MH206N102	MH206N096		T08416	IRWD	VCP	{EEBAF81A-AA78-4A18-611D-B83A-82DFC9CE7167}	CLMH206N102MH206N096	493.98	487.52	0.666666667	MH206N102	MH206N096			161	CLMH206N102MH206N096	8	0.0401	0.004055	0.09	0.004560	0.10	0.007971	0.13	0.004560	0.10		
CLMH206N103MH206N102		1974		Existing	assumed Mannings N	MH206N103	MH206N102		T08416	IRWD	VCP	{F933E568-F21E-47AF-B292-E3D3CEDB1A4F}	CLMH206N103MH206N102	503.75	493.98	0.666666667	MH206N103	MH206N102			248	CLMH206N103MH206N102	8	0.0394	0.004081	0.04	0.004589	0.04	0.008021	0.05	0.004589	0.04		
CLMH206N104MH206N035		1974		Existing	assumed Mannings N	MH206N104	MH206N035		T07706	IRWD	VCP	{406B286A-A1BB-4542-BA29-DE06A1DA183}	CLMH206N104MH206N035	501.19	500.00	0.666666667	MH206N104	MH206N035			185	CLM

CLMH2065071MH2065072	NO INFORMATION	1976		Existing	assumed Mannings N	MH2065071	MH2065072		T09315	IRWD	VCP	{78E380A1-13FB-44B1-B498-42840C290C1A}	CLMH2065071MH2065072	426.41	422.26	0.666666667	MH2065071	MH2065072					190	CLMH2065071MH2065072	8	0.0218	0.027454	0.11	0.030800	0.11	0.053843	0.15	0.030800	0.11		
CLMH2065072MH2065073		1976		Existing	assumed Mannings N	MH2065072	MH2065073		T09315	IRWD	VCP	{12A9857C-4346-4458-A2B4-88953260B7E8}	CLMH2065072MH2065073	422.16	418.01	0.666666667	MH2065072	MH2065073					350	CLMH2065072MH2065073	8	0.0119	0.027453	0.12	0.030800	0.13	0.053843	0.40	0.030800	0.13		
CLMH2065073MH2065134		1971		Existing	assumed Mannings N	MH2065073	MH2056074	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{20DF25AA-3554-4A76-960B-4D77035OBCEE}	CLMH2065073MH2056074	417.17	416.83	1.500000000	MH2065073	MH2065134					55	CLMH2065073MH2065134	18	0.0062	3.066857	0.51	3.465346	0.55	6.177557	0.80	3.574478	0.56		
CLMH2065075MH2065135		1971		Existing	assumed Mannings N	MH2065075	MH2065073	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{9FF7015B-A841-4FCA-B80F-0FFEF930DB7F}	CLMH2065075MH2065073	419.62	418.56	1.500000000	MH2065075	MH2065135					125	CLMH2065075MH2065135	18	0.0085	3.035276	0.49	3.429852	0.52	6.110521	0.79	3.539104	0.53		
CLMH2065076MH2065130		1971		Existing	assumed Mannings N	MH2065076	MH2065130		A01172	IRWD	VCP	{8D34DD98-0DF6-4461-8D2B-0DDAB99552F3}	CLMH2065076MH2065075	429.98	428.44	1.250000000	MH2065076	MH2065130					60	CLMH2065076MH2065130	15	0.0257	1.914820	0.37	2.169544	0.40	3.901729	0.61	2.279434	0.41		
CLMH2065077MH2065137		1971		Existing	assumed Mannings N	MH2065077	MH2065076	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{00282E59-42FD-4D30-B083-43E9FCF0A90F}	CLMH2065077MH2065076	436.24	433.20	1.500000000	MH2065077	MH2065137					245	CLMH2065077MH2065137	18	0.0124	1.682086	0.33	1.894955	0.35	3.388253	0.49	2.010603	0.36		
CLMH2065078MH2065138		1971		Existing	assumed Mannings N	MH2065078	MH2065077	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{B1766A3F-D104-45F1-9C7A-7FE0768BB255}	CLMH2065078MH2065077	440.60	439.27	1.500000000	MH2065078	MH2065138					250	CLMH2065078MH2065138	18	0.0053	1.647321	0.40	1.859281	0.42	3.311512	0.59	1.974999	0.44		
CLMH2065079MH2065078		1971		Existing	assumed Mannings N	MH2065079	MH2065078		A01172	IRWD	VCP	{ABF46ABB-7341-4D59-98AF-F365E79B69C6}	CLMH2065079MH2065078	444.60	440.60	1.500000000	MH2065079	MH2065078					500	CLMH2065079MH2065078	18	0.0080	1.649851	0.38	1.861717	0.40	3.314076	0.56	1.977771	0.42		
CLMH2065080MH2065076		1980		Existing	assumed Mannings N	MH2065080	MH2065076			IRWD	VCP	{CB2D6AD9-EB4B-438E-937A-FD6AA17276E8}	CLMH2065080MH2065076	431.97	431.34	1.000000000	MH2065080	MH2065076					255	CLMH2065080MH2065076	12	0.0025	0.112152	0.20	0.126013	0.21	0.220719	0.28	0.126013	0.21		
CLMH2065081MH2065080		1980		Existing	assumed Mannings N	MH2065081	MH2065080			IRWD	VCP	{1ED1BED4-198C-4FF8-9616-BD9887D12EBE}	CLMH2065081MH2065080	433.14	432.07	1.000000000	MH2065081	MH2065080					274	CLMH2065081MH2065080	12	0.0039	0.069128	0.14	0.077579	0.15	0.135878	0.21	0.077579	0.15		
CLMH2065082MH2065081		1980		Existing	assumed Mannings N	MH2065082	MH2065081			IRWD	VCP	{77BD8CE3-09AD-4E20-ABE6-631A2B0B148F}	CLMH2065082MH2065081	437.41	433.82	1.000000000	MH2065082	MH2065081					15	CLMH2065082MH2065081	12	0.2393	0.069173	0.06	0.077622	0.06	0.135887	0.08	0.077621	0.06		
CLMH2065083MH2065082		1980		Existing	assumed Mannings N	MH2065083	MH2065082		T10929	IRWD	VCP	{57D4C273-998E-4D2C-A6D4-64EFE72B2DC2}	CLMH2065083MH2065082	438.85	438.02	1.000000000	MH2065083	MH2065082					209	CLMH2065083MH2065082	12	0.0040	0.069175	0.14	0.077623	0.15	0.135888	0.20	0.077623	0.15		
CLMH2065084MH2065083		1980		Existing	assumed Mannings N	MH2065084	MH2065083		T10929	IRWD	VCP	{F27D5814-BAD2-40C9-A458-493529ABBAF3}	CLMH2065084MH2065083	443.22	438.85	0.666666667	MH2065084	MH2065083					142	CLMH2065084MH2065083	8	0.0309	0.003631	0.13	0.003631	0.13	0.006348	0.18	0.003631	0.13		
CLMH2065085MH2065084		1980		Existing	assumed Mannings N	MH2065085	MH2065084		T10929	IRWD	VCP	{6F7E45E6-E12E-411E-8F81-84CE40AACB2B}	CLMH2065085MH2065084	444.67	443.22	0.666666667	MH2065085	MH2065084					341	CLMH2065085MH2065084	8	0.0043	0.003631	0.05	0.003631	0.05	0.006348	0.07	0.003631	0.05		
CLMH2065086MH2065085		1980		Existing	assumed Mannings N	MH2065086	MH2065085		T10929	IRWD	VCP	{1727B98F-F68E-4078-A9E3-646ZF594A242}	CLMH2065086MH2065085	454.60	444.67	0.666666667	MH2065086	MH2065085					229	CLMH2065086MH2065085	8	0.0434	0.002084	0.05	0.002084	0.05	0.003643	0.06	0.002084	0.05		
CLMH2065087MH2065070		1976		Existing	assumed Mannings N	MH2065087	MH2065070		T09315	IRWD	VCP	{962BFB28-8157-42DB-A383-CDEAC6EC349E}	CLMH2065087MH2065070	432.50	429.85	0.666666667	MH2065087	MH2065070					280	CLMH2065087MH2065070	8	0.0095	0.026887	0.13	0.030234	0.14	0.052847	0.18	0.030234	0.14		
CLMH2065088MH2065087		1976		Existing	assumed Mannings N	MH2065088	MH2065087		T09315	IRWD	VCP	{AE811424-1E3A-478F-A662-5C1128A51AEC}	CLMH2065088MH2065087	434.80	432.60	0.666666667	MH2065088	MH2065087					280	CLMH2065088MH2065087	8	0.0079	0.008620	0.08	0.009693	0.08	0.016943	0.11	0.009693	0.08		
CLMH2065089MH2065088		1980		Existing	assumed Mannings N	MH2065089	MH2065088		T10929	IRWD	VCP	{653000E8-5C45-4E55-9F8F-417739483B03}	CLMH2065089MH2065088	440.44	438.85	0.833333333	MH2065089	MH2065088					137	CLMH2065089MH2065088	10	0.0116	0.067538	0.16	0.075982	0.17	0.132960	0.23	0.075982	0.17		
CLMH2065090MH2065089		1973		Existing	assumed Mannings N	MH2065090	MH2065089		T08076	IRWD	VCP	{3EA97CFB-2DC5-420B-B027-1CDED6B2613D}	CLMH2065090MH2065089	444.82	440.44	0.666666667	MH2065090	MH2065089					203	CLMH2065090MH2065089	8	0.0216	0.010986	0.12	0.012353	0.13	0.021589	0.17	0.012353	0.13		
CLMH2065091MH2065090		1973		Existing	assumed Mannings N	MH2065091	MH2065090		T08076	IRWD	VCP	{2E9CE288-3205-4F5E-8BE1-C9C1092A8A94}	CLMH2065091MH2065090	445.23	444.92	0.666666667	MH2065091	MH2065090					31	CLMH2065091MH2065090	8	0.0100	0.010986	0.08	0.012353	0.09	0.021589	0.11	0.012353	0.09		
CLMH2065092MH2065091		1973		Existing	assumed Mannings N	MH2065092	MH2065091		T08076	IRWD	VCP	{D559774D-17B2-44DF-A974-50D07BF1A330}	CLMH2065092MH2065091	446.97	445.32	0.666666667	MH2065092	MH2065091					229	CLMH2065092MH2065091	8	0.0072	0.010986	0.09	0.012353	0.09	0.021589	0.12	0.012353	0.09		
CLMH2065093MH2065092		1973		Existing	assumed Mannings N	MH2065093	MH2065092		T08076	IRWD	VCP	{B9B7E189-979B-488E-8BAD-F02B48B94419}	CLMH2065093MH2065092	451.11	447.07	0.666666667	MH2065093	MH2065092					230	CLMH2065093MH2065092	8	0.0176	0.007406	0.06	0.008328	0.06	0.014556	0.08	0.008328	0.06		
CLMH2065094MH2065093		1973		Existing	assumed Mannings N	MH2065094	MH2065093		T08076	IRWD	VCP	{EF062856-6ADC-4B81-86E4-735B8D4FC63A}	CLMH2065094MH2065093	455.01	451.22	0.666666667	MH2065094	MH2065093					257	CLMH2065094MH2065093	8	0.0148	0.005166	0.05	0.005809	0.06	0.010153	0.07	0.005809	0.06		
CLMH2065095MH2065094		1973		Existing	assumed Mannings N	MH2065095	MH2065094		T08076	IRWD	VCP	{D584DCD0-3962-4C1E-9685-0F652D83113F}	CLMH2065095MH2065094	457.52	455.11	0.666666667	MH2065095	MH2065094					158	CLMH2065095MH2065094	8	0.0152	0.005166	0.05	0.005809	0.06	0.010153	0.07	0.005809	0.06		
CLMH2065096MH2065095		1973		Existing	assumed Mannings N	MH2065096	MH2065095		T08076	IRWD	VCP	{FDDCF90F-3A54-407F-821E-75E7C675F6F1}	CLMH2065096MH2065095	460.88	457.63	0.666666667	MH2065096	MH2065095					169	CLMH2065096MH2065095	8	0.0192	0.002288	0.03	0.002572	0.04	0.004495	0.05	0.002572	0.04		
CLMH2065097MH2065089		1980		Existing	assumed Mannings N	MH2065097	MH2065089		T10929	IRWD	VCP	{2EADCEF5-9E62-4250-9A96-CE2C849D4B40}	CLMH2065097MH2065089	441.07	440.44	0.666666667	MH2065097	MH2065089					148	CLMH2065097MH2065089	8	0.0048	0.000747	0.10	0.000840	0.11	0.001468	0.14	0.000840	0.11		
CLMH2065098MH2065089		1973		Existing	assumed Mannings N	MH2065098	MH2065089		T08076	IRWD	VCP	{D8CDC096-A26E-4E31-A6EF-8B3C1D52E41F}	CLMH2065098MH2065089	441.64	440.44	0.833333333	MH2065098	MH2065089					102	CLMH2065098MH2065089	10	0.0117	0.055828	0.14	0.062810	0.14	0.109913	0.19	0.062810	0.14		
CLMH2065099MH2065098		1973		Existing	assumed Mannings N	MH2065099	MH2065098		T08076	IRWD	VCP	{21BACB8D-DC22-41A0-9E5A-92F7DD78C49D}	CLMH2065099MH2065098	442.42	441.73	0.833333333	MH2065099	MH2065098					64	CLMH2065099MH2065098	10	0.0108	0.054654	0.13	0.061488	0.14	0.107592	0.18	0.061488	0.14		
CLMH2065100MH2065099		1973		Existing	assumed Mannings N	MH2065100	MH2065099		T08076	IRWD	VCP	{AB71F91B-105C-4039-AAB8-A0A2E2FB226C}	CLMH2065100MH2065099	445.23	442.52	0.833333333	MH2065099	MH2065100					109	CLMH2065100MH2065099	10	0.0109	0.051626	0.13	0.058082	0.14	0.101632	0.18	0.058082	0.14		
CLMH2065101MH2065100		1973		Existing	assumed Mannings N	MH2065101	MH2065100		T08076	IRWD	VCP	{B12FC22E-B0C4-4CE0-B7BE-CD4F5D090E02}	CLMH2065101MH2065100	446.45	445.32	0.833333333	MH2065101	MH2065100					108	CLMH2065101MH2065100	10	0.0105	0.050698	0.13	0.057033	0.14	0.099776	0.18	0.057033	0.14		
CLMH2065102MH2065101		1973		Existing	assumed Mannings N	MH2065102	MH2065101		T08076	IRWD	VCP	{97DF38F9-B78C-4030-9975-B336376C3E39}	CLMH2065102MH2065101	447.45	446.54	0.666666667	MH2065102	MH2065101					64	CLMH2065102MH2065101	8	0.0142	0.048730	0.16	0.054820	0.16	0.095896	0.22	0.054820	0.16		
CLMH2065103MH2065102		1973		Existing	assumed Mannings N	MH2065103	MH2065102		T08076	IRWD	VCP	{968CE722-08CC-4245-AC7C-3A5F173ACCC9}	CLMH2065103MH2065102	447.82	447.54	0.666666667	MH2065103	MH2065102					67	CLMH2065103MH2065102	8	0.0042	0.020229	0.03	0.001382	0.03	0.002833	0.07	0.001382	0.03		
CLMH2065104MH2065101		1973		Existing	assumed Mannings N	MH2065104	MH2065101		T08076	IRWD	VCP	{47330B11-9DB8-437E-8B57-6F176A5902B}	CLMH2065104MH2065101	450.00	446.54	0.666666667	MH2065104	MH2065101					180	CLMH2065104MH2065101	8	0.0193	0.001976	0.03	0.002222	0.03	0.003884	0.07	0.002222	0.03		
CLMH2065105MH2065104		1973		Existing	assumed Mannings N	MH2065105	MH2065104		T08076	IRWD	VCP	{517CDD58-574A-4227-930D-A104613D1A144}	CLMH2065105MH2065104	452.48	450.10	0.666666667	MH2065105	MH2065104					64	CLMH2065105MH2065104	8	0.0192	0.000513	0.01	0.000577	0.01	0.001008	0.02	0.000577	0.01		
CLMH2065106MH2065102		1973		Existing	assumed Mannings N	MH2065106	MH2065102		T08076	IRWD	VCP	{DC1FC009-6807-4EF0-8174-E42C98C72F02}	CLMH2065106MH2065102	449.82	447.54	0.666666667	MH2065106	MH2065102					196	CLMH2065106MH2065102	8	0.0117	0.047506	0.16	0.053442	0.17	0.093482	0.22	0.053442	0.17		
CLMH2065107MH2065106	SHEET MISSING FI	1973		Existing	assumed Mannings N	MH2065107	MH2065106		T08076	IRWD	VCP	{E72E76B5-BC53-47CF-BC01-7A49C3A385D2}	CLMH2065107MH2065106	451.62	449.92	0.666666667	MH2065107	MH2065106					100	CLMH2065107MH2065106	8	0.0169	0.047515	0.15	0.053450	0.16	0.093486	0.20	0.053450	0.16		
CLMH2065108MH2065107	SHEET MISSING FI	1973		Existing	assumed Mannings N	MH2065108	MH2065107		T08076	IRWD	VCP	{03EFEE87-4933-43D1-985F-48717806E3E6}	CLMH2065108MH2065107	452.54	451.72	0.666666667	MH2065108	MH2065107					163	CLMH2065108MH2065107	8	0.0080	0.047520	0.18	0.053454	0.19	0.093488	0.25	0.053454	0.19		
CLMH2065109MH2065108		1973		Existing	assumed Mannings N	MH2065109	MH2065108		T08076	IRWD	VCP	{DC26F815-927F-455C-9493-CABE990A0BE}	CLMH2065109MH2065108	453.42	452.64	0.833333333	MH2065109	MH2065108					98	CLMH2065109MH2065108	10	0.0080	0.046251	0.13	0.052024	0.14	0.090982	0.18	0.052024	0.14		
CLMH2065110MH2065109		1973		Existing	assumed Mannings N	MH2065110	MH2065109		T08076	IRWD	VCP	{66A20683-50DA-4615-9150-7A8E7D06F87F}	CLMH2065110MH2065109	454.04	453.52	0.666666667	MH2065110	MH2065109					64	CLMH2065110MH2065109	8	0.0081	0.003751	0.05	0.004217	0.05	0.007445	0.07	0.004217	0.05		
CLMH2065111MH2065110		1973		Existing	assumed Mannings N	MH2065111	MH2065110		T08076	IRWD	VCP	{459631AF-918B-4115-B1C2-55117B8F1ABFC}	CLMH2065111MH2065110	455.04	454.14	0.666666667	MH2065111	MH2065110					141	CLMH2065111MH2065110	8	0.0064	0.003751	0.05	0.004217	0.06	0.007371	0.07	0.004217	0.06		
CLMH2065112MH2065109		1973		Existing	assumed Mannings N	MH2065112	MH2065109		T08076	IRWD	VCP	{C2FCBB84-E401-44A4-AF26-05A9D56D4671}	CLMH2065112MH2065109	457.32	453.52	0.666666667	MH2065112	MH2065109					272	CLMH2065112MH2065109	8	0.0140	0.042504	0.15	0.047810	0.15	0.083613	0.20	0.047810	0.15		
CLMH2065113MH2065112		1973		Existing	assumed Mannings N	MH2065113	MH2065112		T08076	IRWD	VCP	{725E7927-7C8C-4B8C-B273-D8773CE17C6}	CLMH2065113MH2065112	461.26	457.42	0.666666667	MH2065113	MH2065112					240	CLMH2065113MH2065112	8	0.0160	0.000296	0.01	0.000341	0.01	0.000581	0.04	0.000333	0.01		
CLMH2065114MH2065113		1973		Existing	assumed Mannings N	MH2065114	MH2065113		T08076	IRWD	VCP	{99884A04-AAE7-48B2-869F-F87C66DCA533}	CLMH2065114MH2065113	458.64	457.42	0.666666667	MH2065114	MH2065113					82	CLMH2065114MH2065113	8	0.0150	0.042217	0.14	0.047484	0.15	0.083036	0.20	0.047484	0.15		
CLMH2065115MH2065114		1976		Existing	assumed Mannings N	MH2065115	MH2065114		T09141	IRWD	VCP	{B50A628E-02E2-4457-B756-487806144DD}	CLMH2065115MH2065114	459.35	458.64	0.666666667	MH2065115	MH2065114					169	CLMH2065115MH2065114	8	0.0042	0.041677	0.17	0.046875	0.18	0.081967	0.24	0.046874	0.18		
CLMH2065116MH2065115		1976		Existing	assumed Mannings N	MH2065116	MH2065115		T09141	IRWD	VCP	{F282337E3-2FA6-4FC4-A130-1CB5038A1F3}	CLMH2065116MH2065115	459.88	459.35	0.666666667	MH2065116	MH2065115					109	CLMH2065116MH2065115	8	0.0049	0.034502	0.19	0.038802	0.20	0.067843	0.26	0.038802	0.20		
CLMH2065117MH2065115		1976		Existing	assumed Mannings N	MH2065117	MH2065115		T09141	IRWD	VCP	{BAFBC480-8531-4325-9004-EE9A0928FC8C}	CLMH2065117MH2065115	480.54	459.35	0.666666667	MH2065117	MH2065115					395	CLMH2065117MH2065115	8	0.0537	0.007188	0.12	0.008082	0.13	0.014129	0.17	0.008082	0.13		
CLMH2065118MH2065113		1976		Existing	assumed Mannings N	MH2065118	MH2065113		T09141	IRWD	VCP	{B391B248-169E-4BA3-A8BC-3BC568958BF0}	CLMH2065118MH2065113	463.92	461.36	0.666666667	MH2065118	MH2065113					159	CLMH2065118MH2065113	8	0.0161	0.000296	0.01	0.000333	0.01	0.000581	0.02	0.000333	0.01		
CLMH2065119MH2065098		1973		Existing	assumed Mannings N	MH2065119	MH2065098		T08076	IRWD	VCP	{43BAA179-3ED9-4264-95F2-FEDA611B9FB5}	CLMH2065119MH2065098	445.66	441.73	0.666666667	MH2065119	MH2065098					64	CLMH2065119MH2065098	8	0.0273	0.001242	0.03	0.001360	0.03	0.002325	0.06	0.001360	0.03		
CLMH2065120MH2065119		1973		Existing	assumed Mannings N	MH2065120	MH2065119		T08076	IRWD	VCP	{1EB433CC-4976-430B-BA1F-636662F8FBEF}	CLMH2065120MH2065119	446.54	445.66	0.666666667	MH2065120	MH2065119					62	CLMH2065120MH2065119	8	0.0143	0.000249	0.02	0.000280	0.02	0.000489	0.02	0.000280	0.02		
CLMH2065121MH2065029		1973		Existing	assumed Mannings N	MH2065121	MH2065029		T05966	IRWD	VCP	{98220B9EA-4C6D-434A-855F-EB151E99041A}	CLMH2065121MH2065029	471.10	467.57	0.666666667	MH2065121	MH2065029					278	CLMH2065121MH2065029	8	0.0127	0.065747	0.19	0.072879	0.20	0.127413	0.27	0.072879	0.20		
CLMH2065122MH2065127		1972		Existing	assumed Mannings N	MH2065122	MH2065127		T07428	IRWD	VCP	{5C8AE1A0-946F-40A9-BAE3-B47F0637512}	CLMH2065122MH2065127	482.67	477.57	0.666666667	MH2065122	MH2065127					82	CLMH2065122MH2065127	8	0.0196	0.007119	0.06	0.008006	0.06	0.013994	0.08	0.008006	0.06		
CLMH2065123MH2065027		1972		Existing	assumed Mannings N	MH2065123	MH2065027		T07168	IRWD	VCP	{EFF5D093-0E31-4192-BA26-B73491CCD874}	CLMH2065123MH2065027	453.58	453.20	0.666666667	MH2065123	MH2065027					70	CLMH2065123MH2065027	8	0.0054	0.000747	0.03	0.000840	0.03	0.001468	0.05	0.000840	0.03		
CLMH2065125MH2065116		1976		Existing	assumed Mannings N	MH2065125	MH2065116		T09141	IRWD	VCP	{FD9A7438-D946-4450-8F1C-CC1E3D527F10}	CLMH2065125MH2065116	461.01	459.88	0.666666667	MH2065125	MH2065116					64	CLMH2065125MH2065116	8	0.0043	0.034505	0.17	0.038805	0.18	0.067844	0.24	0.038805	0.18		
CLMH2065126MH2065123		1972		Existing	assumed Mannings N	MH2065126	MH2065123		T07168	IRWD	VCP	{933E2C8D-AF98-49C9-A2AF-EABF5902B310}	CLMH2065126MH2065123	453.92	453.58	0.666666667	MH2065126	MH2065123					82	CLMH2065126MH2065123	8	0.0065	0.000747	0.03	0.000840	0.03	0.001468	0.04	0.000840	0.03		
CLMH2065127MH2065027		1972		Existing	assumed Mannings N	MH2065127	MH2065027		T07428	IRWD	VCP	{930E9EE6-3B3E-4674-93FF-0EA4EF9FF076}	CLMH2065127MH2065027	477.47	473.60	0.666666667	MH2065127	MH2065027					268	CLMH2065127MH2065027	8	0.0144	0.011284	0.08	0.012689	0.08	0.022181	0.11	0.012689	0.08		
CLMH2065128MH2065130		2004		Existing	assumed Mannings N	MH2065128	MH2065130		2210	SMWD	PVC	{C2441630-D5DC-4457-9EBE-992F7B06AF2A}	CLMH2065128MH2065130	430.93	430.74	1.250000000	MH2065128	MH2065130					15	CLMH2065128MH2065130	15	0.0023	1.141943	0.45	1.287309	0.48	2.273406	0.66	1.287065	0.48		
CLMH2065130MH2065131		1971		Existing	assumed Mannings N	MH2065130	MH2065075	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{59CF8B7C-2E8E-4D32-98BF-30F157B1DC00}	CLMH2065130MH2065075	428.30	424.05	1.250000000	MH2065130	MH2065131					263	CLMH2065130MH2065131	15	0.0236	3.013363	0.51	3.407234	0.55	6.066203	0.75	3.517002	0.52		
CLMH2065134MH2056074	Splitted conduit	1971		Existing	assumed Mannings N	MH2065073	MH2056074	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{20DF25AA-3554-4A76-960B-4D77035OBCEE}	CLMH2065073MH2056074	416.83	414.95	1.500000000	MH2065073	MH2056074					192	CLMH2065134MH2056074	18	0.0098	3.090044	0.48	3.492314	0.51	6.224697	0.76	3.600857	0.52		
CLMH2065135MH2065073	Splitted conduit	1971		Existing	Changed DS invert to match slo	MH2065075	MH2065073	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{9FF7015B-A841-4FCA-B80F-0FFEF930DB7F}	CLMH2065075MH2065073	418.56	417.37	1.500000000	MH2065135	MH2065073					132	CLMH2065135MH2065073	18	0.0090	3.039479	0.48	3.434643	0.52	6.120584	0.78	3.543774	0.53		
CLMH2065136MH2065075	Splitted conduit	1971		Existing	assumed Mannings N	MH2065130	MH2065075	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{C9CF8B7C-2E8E-4D32-98BC-30F157B1DC00}	CLMH2065076MH2065075	424.05	419.87	1.250000000	MH2065136	MH2065075					150	CLMH2065136MH2065075	15	0.0279	1.018857	0.46	3.411394	0.49	6.076305	0.74	3.520880	0.50		
CLMH2065137MH2065076	Splitted conduit	1971		Existing	assumed Mannings N	MH2065137	MH2065076	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{00282E59-42FD-4D30-B083-43E9FCF0A90F}	CLMH2065077MH2065076	433.20	430.61	1.500000000	MH2065137	MH2065076					261	CLMH2065137MH2065076	18	0.0099	1.684906	0.34	1.897893	0.36	3.393601	0.50	2.013409	0.37		
CLMH2065138MH2065077	Splitted conduit	1971		Existing	assumed Mannings N	MH2065078	MH2065077	Aliso Creek ACI Revisio	A01172	IRWD	VCP	{B1766A3F-D104-45F1-9C7A-7FE0768BB255}	CLMH2065078MH2065077	438.69	436.24	1.500000000	MH2065138	MH2065077					250	CLMH2065138MH2065077	18	0.0098	1.678401	0.33	1.891147	0.35	3.380441	0.49	2.006874	0.36		
CLMH2065W001MH2065W004		1968		Existing	assumed Mannings N	MH2065W001	MH2065W004		A01270	IRWD	VCP	{FF14B77A-F67A-473E-B3DF-B3E63A258E57}	CLMH2065W001MH2065W004	392.44	391.04	0.666666667	MH2065W001	MH2065W004					350	CLMH2065W001MH2065W004	8	0.0040	0.075124	0.22	0.084377	0.23	0.147501	0.30	0.084377	0.23		
CLMH2065W002MH2065W001		1968		Existing	assumed Mannings N	MH2065W002	MH2065W001		A01270	IRWD	VCP	{8FC5CD01-F923-47AF-82D6-3A51C288F95F}	CLMH2065W002MH2065W001	394.39	392.54	0.666666667	MH2065W002	MH2065W001					40	CLMH2065W002MH2065W001	8	0.0463	0.052803	0.13	0.059379	0.14	0.103800	0.21	0.059379	0.14		
CLMH2065W003MH2065W002		1968		Existing	assumed Mannings N	MH2065W003	MH2065W002		T05966	IRWD	VCP	{37A3B785-4897-4139-8B82-8DADFC902D1D}	CLMH2065W003MH2065W002	455.64	445.14	0.666666667	MH2065W003	MH2065W002					400	CLMH2065W003MH2065W002	8	0.0263	0.065715	0.15	0.072852	0.16	0.127405	0.21	0.072852	0.16		
CLMH2065W004MH2025N014		1968		Existing	assumed Mannings N	MH2065W004	MH2025N014		A01270	IRWD	VCP	{040606F3-270F-4E7B-A6BC-7350286F278C}	CLMH2065W004MH2025N014	391.04	377.04	0.666666667	MH2065W004	MH2025N014					302	CLMH2065W004MH2025N014	8	0.0464	0.075121	0.15	0.084375	0.17	0.147501	0.25	0.084375	0.17		
CLMH2065W005MH2065W001		1968		Existing	assumed Mannings N	MH2065W005	MH2065W001		A01270	IRWD	VCP	{5E32C1F7-20B2-4DFA-940E-E3C738F81C27}	CLMH2065W005MH2065W001	396.66	392.54	0.666666667	MH2065W005	MH2065W001					285	CLMH2065W005MH2065W001	8	0.0145	0.022327	0.12	0.025003	0.13	0.043702	0.20	0.025003	0.13		
CLMH2065W006MH2065W005		1968		Existing	assumed Mannings N	MH2065W006	MH2065W005		A01270	IRWD	VCP	{B9958D51-648B-478D-A69B-5153DBA8DBF7}	CLMH2065W006MH2065W005	397.60	396.76	0.666666667	MH2065W006	MH2065W005					212	CLMH2065W006MH2065W005	8	0.0040	0.009428	0.09	0.010602	0.10	0.018532	0.13	0.010602	0.10		
CLMH2065W007MH2065W006		1

CLMH206W108MH1955109		1969		Existing	assumed Mannings N	MH206W108	MH1955109		T06353	IRWD	VCP	{E3334D8D-4CFA-47C1-8563-0543316207F}	CLMH206W108MH1955109	396.51	389.95	0.666666667	MH206W108	MH1955109						212	CLMH206W108MH1955109	8	0.0309	0.000809	0.02	0.000910	0.02	0.001590	0.03	0.000910	0.02
CLMH206W111MH1955150		1969		Existing	assumed Mannings N	MH206W111	MH1955150		T06353	IRWD	VCP	{CD3874BF-43B2-4DDC-95FD-BF3F362C958B}	CLMH206W111MH1955150	408.92	393.50	0.666666667	MH206W111	MH1955150						346	CLMH206W111MH1955150	8	0.0446	0.003329	0.05	0.003743	0.05	0.006544	0.07	0.003743	0.05
CLMH206W112MH206W097		1969		Existing	assumed Mannings N	MH206W112	MH206W097		T06353	IRWD	VCP	{CA691993-7EB7-4E73-A251-9D246C42EB6B}	CLMH206W112MH206W097	400.39	399.66	0.666666667	MH206W112	MH206W097						159	CLMH206W112MH206W097	8	0.0046	0.022691	0.14	0.044618	0.19	0.025518	0.14	0.044618	0.19
CLMH206W113MH206W112		1969		Existing	assumed Mannings N	MH206W113	MH206W112		T06353	IRWD	VCP	{291DA040-E36D-4E95-A300-239990582CF1}	CLMH206W113MH206W112	407.01	400.39	0.666666667	MH206W113	MH206W112						285	CLMH206W113MH206W112	8	0.0232	0.012627	0.11	0.014201	0.12	0.024830	0.15	0.014201	0.12
CLMH206W114MH206W113		1969		Existing	assumed Mannings N	MH206W114	MH206W113		T06353	IRWD	VCP	{B724D791-A571-43D1-AA76-48ECB70A6857}	CLMH206W114MH206W113	413.88	407.01	0.666666667	MH206W114	MH206W113						238	CLMH206W114MH206W113	8	0.0288	0.008350	0.06	0.009390	0.07	0.016421	0.09	0.009390	0.07
CLMH206W114MH206W115		1969		Existing	assumed Mannings N	MH206W114	MH206W115		T06353	IRWD	VCP	{5C4BA926-A7A5-48D8-B5F8-1C133EF666EE}	CLMH206W114MH206W115	414.04	410.83	0.666666667	MH206W114	MH206W115						250	CLMH206W114MH206W115	8	0.0128	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH206W115MH1955145		1969		Existing	assumed Mannings N	MH206W115	MH1955145		T06353	IRWD	VCP	{78627205A-2957-42CF-8CBB-5616A32626BE}	CLMH206W115MH1955145	410.78	396.57	0.666666667	MH206W115	MH1955145						386	CLMH206W115MH1955145	8	0.0368	0.005445	0.05	0.006123	0.05	0.010704	0.06	0.006123	0.05
CLMH206W117MH206W114		1969		Existing	assumed Mannings N	MH206W117	MH206W114		T06353	IRWD	VCP	{A9896CD3-A7C4-45AB-BB71-83DE664679BF}	CLMH206W117MH206W114	416.83	414.04	0.666666667	MH206W117	MH206W114						167	CLMH206W117MH206W114	8	0.0167	0.008350	0.06	0.009390	0.07	0.016421	0.09	0.009390	0.07
CLMH206W118MH206W117		1969		Existing	assumed Mannings N	MH206W118	MH206W117		T06353	IRWD	VCP	{35045728-2CAA-4072-80FD-37BD5EB9EBBD}	CLMH206W118MH206W117	422.10	416.94	0.666666667	MH206W118	MH206W117						269	CLMH206W118MH206W117	8	0.0192	0.002225	0.03	0.002502	0.04	0.004383	0.05	0.002502	0.04
CLMH206W119MH206W118		1969		Existing	assumed Mannings N	MH206W119	MH206W118		T06353	IRWD	VCP	{C1876B9F-CE71-4236-8F23-6D670ED05FA}	CLMH206W119MH206W118	422.10	414.01	0.666666667	MH206W119	MH206W118						358	CLMH206W119MH206W118	8	0.0226	0.002369	0.03	0.002664	0.03	0.004650	0.04	0.002664	0.03
CLMH206W119MH1955116		1969		Existing	assumed Mannings N	MH206W119	MH1955116		T06353	IRWD	VCP	{2E779B18-3983-42AA-873D-6B76F15FB0E7}	CLMH206W119MH1955116	414.01	403.92	0.666666667	MH206W119	MH1955116						400	CLMH206W119MH1955116	8	0.0252	0.002369	0.03	0.002664	0.03	0.004649	0.07	0.002664	0.05
CLMH206W120MH206W117		1969		Existing	assumed Mannings N	MH206W120	MH206W117		T06353	IRWD	VCP	{E127757C-FD58-4363-9A23-0565E40F2C5C}	CLMH206W120MH206W117	417.94	416.94	0.666666667	MH206W120	MH206W117						307	CLMH206W120MH206W117	8	0.0037	0.004013	0.06	0.004513	0.06	0.007890	0.09	0.004513	0.06
CLMH206W121MH206W120		1969		Existing	assumed Mannings N	MH206W121	MH206W120		T06353	IRWD	VCP	{5937ACEF-127A-414C-B265-41DA14AA5169}	CLMH206W121MH206W120	423.29	417.94	0.666666667	MH206W121	MH206W120						208	CLMH206W121MH206W120	8	0.0257	0.004015	0.06	0.004514	0.06	0.007890	0.08	0.004514	0.06
CLMH206W122MH206W121		1969		Existing	assumed Mannings N	MH206W122	MH206W121		T06353	IRWD	VCP	{060ACF70-7011-4687-9992-7468DF265FE5}	CLMH206W122MH206W121	427.00	423.29	0.666666667	MH206W122	MH206W121						237	CLMH206W122MH206W121	8	0.0157	0.002443	0.04	0.002748	0.04	0.004801	0.05	0.002748	0.04
CLMH206W123MH206W112		1969		Existing	assumed Mannings N	MH206W123	MH206W112		T06353	IRWD	VCP	{D221765A-918E-4726-B02D-AFC705C6824E}	CLMH206W123MH206W112	401.01	400.39	0.666666667	MH206W123	MH206W112						306	CLMH206W123MH206W112	8	0.0062	0.006925	0.11	0.007787	0.12	0.013610	0.15	0.007787	0.12
CLMH206W124MH206W123		1978		Existing	assumed Mannings N	MH206W124	MH206W123		T09910	IRWD	VCP	{75C43358-2AC3-4030-8B32-E84432A5645A}	CLMH206W124MH206W123	405.45	401.01	0.666666667	MH206W124	MH206W123						36	CLMH206W124MH206W123	8	0.1254	0.006925	0.06	0.007787	0.06	0.013610	0.08	0.007787	0.06
CLMH206W125MH206W124		1978		Existing	assumed Mannings N	MH206W125	MH206W124		T09910	IRWD	VCP	{8E766C63-9455-416A-B38B-BA962F2390EA}	CLMH206W125MH206W124	406.10	405.45	0.666666667	MH206W125	MH206W124						113	CLMH206W125MH206W124	8	0.0057	0.006925	0.06	0.007787	0.06	0.013610	0.08	0.007787	0.06
CLMH206W126MH206W125		1978		Existing	assumed Mannings N	MH206W126	MH206W125		T09910	IRWD	VCP	{96D15E65-0B31-4057-B6DC-5E13352F69F}	CLMH206W126MH206W125	410.88	406.10	0.666666667	MH206W126	MH206W125						146	CLMH206W126MH206W125	8	0.0327	0.006380	0.07	0.007174	0.07	0.012539	0.09	0.007174	0.07
CLMH206W127MH206W126		1978		Existing	assumed Mannings N	MH206W127	MH206W126		T09910	IRWD	VCP	{795A0084-4C15-4D2C-BD56-1757FC343BD8}	CLMH206W127MH206W126	413.17	410.88	0.666666667	MH206W127	MH206W126						238	CLMH206W127MH206W126	8	0.0096	0.003859	0.05	0.004339	0.05	0.007585	0.07	0.004339	0.05
CLMH206W128MH206W127		1978		Existing	assumed Mannings N	MH206W128	MH206W127		T09910	IRWD	VCP	{21123539-ED16-423E-9192-23D912DA08EB}	CLMH206W128MH206W127	414.45	413.17	0.666666667	MH206W128	MH206W127						321	CLMH206W128MH206W127	8	0.0040	0.001089	0.04	0.001224	0.05	0.002141	0.06	0.001224	0.05
CLMH206W129MH206W172		1978		Existing	assumed Mannings N	MH206W129	MH206W172		T09910	IRWD	VCP	{7483B19B-24CD-4B5F-8418-D6063E395EB}	CLMH206W129MH206W172	415.08	403.82	0.666666667	MH206W129	MH206W172						346	CLMH206W129MH206W172	8	0.0325	0.004513	0.05	0.005074	0.05	0.008869	0.06	0.005074	0.05
CLMH206W133MH1955132		1976		Existing	assumed Mannings N	MH206W133	MH1955132		T09125	IRWD	VCP	{43A553DC-8E3A-4BC0-9774-CD33BE3E963C}	CLMH206W133MH1955132	389.81	389.27	0.666666667	MH206W133	MH1955132						140	CLMH206W133MH1955132	8	0.0039	0.022124	0.14	0.024878	0.15	0.043487	0.19	0.024878	0.15
CLMH206W136MH1955135		1976		Existing	assumed Mannings N	MH206W136	MH1955135		T09179	IRWD	VCP	{DC9E9AAA-3F98-4BEE-9920-E4CA04E85060}	CLMH206W136MH1955135	418.00	410.11	0.666666667	MH206W136	MH1955135						398	CLMH206W136MH1955135	8	0.0198	0.001659	0.03	0.001865	0.03	0.003258	0.04	0.001865	0.03
CLMH206W137MH1955135		1976		Existing	assumed Mannings N	MH206W137	MH1955135		T09125	IRWD	VCP	{1DB759B6-D3CF-43F1-80D0-4FB7509ZEC66}	CLMH206W137MH1955135	420.98	410.11	0.666666667	MH206W137	MH1955135						286	CLMH206W137MH1955135	8	0.0381	0.006226	0.05	0.007001	0.05	0.011240	0.06	0.007001	0.05
CLMH206W138MH206W131		1976		Existing	assumed Mannings N	MH206W138	MH206W131		T09125	IRWD	VCP	{A85A6B04-DCC1-46CC-8E32-7517A19E6D40}	CLMH206W138MH206W131	390.46	389.91	0.666666667	MH206W138	MH206W131						141	CLMH206W138MH206W131	8	0.0039	0.022124	0.14	0.024878	0.15	0.043487	0.19	0.024878	0.15
CLMH206W139MH206W138		1976		Existing	assumed Mannings N	MH206W139	MH206W138		T09179	IRWD	VCP	{5FE9BA44-19BE-41D7-8EB5-5C5C1965800B}	CLMH206W139MH206W138	410.50	390.48	0.666666667	MH206W139	MH206W138						375	CLMH206W139MH206W138	8	0.0534	0.003984	0.08	0.004480	0.08	0.007832	0.11	0.004480	0.08
CLMH206W140MH206W138		1976		Existing	assumed Mannings N	MH206W140	MH206W138		T09179	IRWD	VCP	{17D6B013-1E52-41F5-85D6-FA10F16A48E0}	CLMH206W140MH206W138	391.44	390.48	0.666666667	MH206W140	MH206W138						244	CLMH206W140MH206W138	8	0.0039	0.015367	0.12	0.017280	0.12	0.032588	0.18	0.017280	0.12
CLMH206W141MH206W140		1976		Existing	assumed Mannings N	MH206W141	MH206W140		T09179	IRWD	VCP	{90B142C9-B2AF-4479-9E85-4438C3207048}	CLMH206W141MH206W140	427.99	391.54	0.666666667	MH206W141	MH206W140						219	CLMH206W141MH206W140	8	0.1688	0.001923	0.02	0.002162	0.02	0.003779	0.03	0.002162	0.02
CLMH206W142MH206W141		1976		Existing	assumed Mannings N	MH206W142	MH206W141		T09179	IRWD	VCP	{C4EFCA27-0E28-44BF-A006-9DDF6769CAB1}	CLMH206W142MH206W141	433.45	428.09	0.666666667	MH206W142	MH206W141						270	CLMH206W142MH206W141	8	0.0199	0.001923	0.03	0.002162	0.02	0.003779	0.04	0.002162	0.03
CLMH206W143MH206W140		1976		Existing	assumed Mannings N	MH206W143	MH206W140		T09179	IRWD	VCP	{A5780C88-3519-412A-A0BD-4BA44041189A}	CLMH206W143MH206W140	400.89	391.54	0.666666667	MH206W143	MH206W140						311	CLMH206W143MH206W140	8	0.0301	0.013249	0.07	0.014898	0.07	0.026042	0.10	0.014898	0.07
CLMH206W144GB206W178		1978		Existing	assumed Mannings N	MH206W144	GB206W178		T09178	IRWD	VCP	{E9D06B8A-35A4-498A-BCBD-9FA3851D4CFF}	CLMH206W144GB206W178	436.20	432.50	0.666666667	MH206W144	GB206W178						188	CLMH206W144GB206W178	8	0.0197	0.010435	0.06	0.011734	0.06	0.020511	0.08	0.011734	0.07
CLMH206W145MH206W144		1976		Existing	assumed Mannings N	MH206W145	MH206W144		T09178	IRWD	VCP	{57B01D74-C5A5-4D61-B168-7DA783129737}	CLMH206W145MH206W144	440.50	436.30	0.666666667	MH206W145	MH206W144						304	CLMH206W145MH206W144	8	0.0197	0.010435	0.06	0.011734	0.06	0.020511	0.08	0.011734	0.07
CLMH206W146MH1955130		1976		Existing	assumed Mannings N	MH206W146	MH1955130		T09125	IRWD	VCP	{1A6B2349-39A1-4CA0-B203-3072A74A66D6}	CLMH206W146MH1955130	419.01	400.20	0.666666667	MH206W146	MH1955130						278	CLMH206W146MH1955130	8	0.0677	0.014143	0.06	0.015904	0.06	0.027794	0.08	0.015904	0.06
CLMH206W147MH206W146		1976		Existing	assumed Mannings N	MH206W147	MH206W146		T09179	IRWD	VCP	{4C03FCF8-C2AE-43E0-80F1-3B42CC9D1DAE}	CLMH206W147MH206W146	420.45	419.10	0.666666667	MH206W147	MH206W146						340	CLMH206W147MH206W146	8	0.0040	0.011649	0.10	0.013099	0.11	0.022893	0.14	0.013099	0.11
CLMH206W148MH206W147		1976		Existing	assumed Mannings N	MH206W148	MH206W147		T09179	IRWD	VCP	{A8F6DD2F-A492-48F4-9A62-188343FF68B4}	CLMH206W148MH206W147	431.17	420.54	0.666666667	MH206W148	MH206W147						328	CLMH206W148MH206W147	8	0.0324	0.009071	0.06	0.010200	0.06	0.017827	0.08	0.010200	0.06
CLMH206W149MH206W148		1976		Existing	assumed Mannings N	MH206W149	MH206W148		T09179	IRWD	VCP	{E8949159-2E84-4447-A0E7-D424385BCF8A}	CLMH206W149MH206W148	433.39	431.27	0.666666667	MH206W149	MH206W148						110	CLMH206W149MH206W148	8	0.0193	0.003733	0.04	0.004198	0.05	0.007339	0.06	0.004198	0.05
CLMH206W150MH206W148		1976		Existing	assumed Mannings N	MH206W150	MH206W148		T09179	IRWD	VCP	{76E122E2-DEA0-4AC0-B638-53040822E599}	CLMH206W150MH206W148	437.77	431.27	0.666666667	MH206W150	MH206W148						375	CLMH206W150MH206W148	8	0.0203	0.005337	0.05	0.006001	0.05	0.010488	0.07	0.006001	0.05
CLMH206W151MH206W150		1976		Existing	assumed Mannings N	MH206W151	MH206W150		T09178	IRWD	VCP	{3DACCF54-D035-4FCB-B590-29EA713571C8}	CLMH206W151MH206W150	444.39	437.88	0.666666667	MH206W151	MH206W150						330	CLMH206W151MH206W150	8	0.0197	0.003469	0.04	0.003901	0.04	0.006818	0.06	0.003901	0.04
CLMH206W160MH206W186		1971		Existing	assumed Mannings N	MH206W160	MH206W186		T05966	IRWD	VCP	{F1187B61-6EE2-4EA2-ADA0-699B3336SCDB7}	CLMH206W160MH206W186	465.58	463.69	0.666666667	MH206W160	MH206W186						162	CLMH206W160MH206W186	8	0.0116	0.007642	0.07	0.007642	0.07	0.013360	0.09	0.007642	0.07
CLMH206W161MH206W163		1971		Existing	assumed Mannings N	MH206W161	MH206W163		T05966	IRWD	VCP	{B677B31C-5F3A-4E07-98B7-E8ABE01D2660}	CLMH206W161MH206W163	450.80	447.26	0.666666667	MH206W161	MH206W163						130	CLMH206W161MH206W163	8	0.0402	0.004351	0.05	0.004703	0.05	0.008130	0.06	0.004703	0.05
CLMH206W163MH206W063		1971		Existing	assumed Mannings N	MH206W163	MH206W063		T05966	IRWD	VCP	{D19CBB3C-8DC3-48D4-AFFE-12DF19CD0738}	CLMH206W163MH206W063	457.02	455.20	0.666666667	MH206W163	MH206W063						105	CLMH206W163MH206W063	8	0.0173	0.012133	0.08	0.013644	0.08	0.023850	0.11	0.013644	0.08
CLMH206W164MH206W163		1971		Existing	assumed Mannings N	MH206W164	MH206W163		T05966	IRWD	VCP	{9BA5C3C8-62D1-40B7-9E32-762052DC785B}	CLMH206W164MH206W163	460.64	457.02	0.666666667	MH206W164	MH206W163						210	CLMH206W164MH206W163	8	0.0302	0.010608	0.07	0.011928	0.07	0.020853	0.10	0.011928	0.07
CLMH206W172MH206W002		1971		Existing	assumed Mannings N	MH206W172	MH206W002		T09910	IRWD	VCP	{56A2DAA2-6497-44FE-9363-8CD0877BCB2F}	CLMH206W172MH206W002	403.82	394.39	0.666666667	MH206W172	MH206W002						210	CLMH206W172MH206W002	8	0.0450	0.008168	0.09	0.009185	0.09	0.016056	0.12	0.009185	0.09
CLMH206W183MH206W067		1971		Existing	assumed Mannings N	MH206W183	MH206W067	ERROR 23	T05966	IRWD	VCP	{24070EFA-5595-468A-81E2-31214975B34D}	CLMH206W183MH206W067	447.26	446.28	0.666666667	MH206W183	MH206W067						38	CLMH206W183MH206W067	8	0.0258	0.020520	0.21	0.023074	0.22	0.040336	0.31	0.023074	0.22
CLMH206W186MH206W164		1971		Existing	assumed Mannings N	MH206W186	MH206W164		T05966	IRWD	VCP	{11AD2842-3D39-4BDC-AE4F-C9963D4F0A44}	CLMH206W186MH206W164	463.69	460.64	0.666666667	MH206W186	MH206W164						271	CLMH206W186MH206W164	8	0.0117	0.008445	0.07	0.009497	0.07	0.016601	0.09	0.009497	0.07
CLMH206W187MH205N095		1965		Existing	assumed Mannings N	MH206W187	MH205N095		A01346	IRWD	VCP	{F7103407-6EB5-484C-8816-72BD77EDE4FF}	CLMH206W187MH205N095	429.91	423.92	0.666666667	MH206W187	MH205N095						254	CLMH206W187MH205N095	8	0.0236	0.006131	0.05	0.006895	0.06	0.012050	0.08	0.006895	0.06
CLMH206W188MH206W190		1978		Existing	assumed Mannings N	MH206W188	MH206W190		T09178	IRWD	VCP	{F9C22F99-83E3-449B-82E4-4A50258450B9}	CLMH206W188MH206W190	432.51	421.21	0.666666667	MH206W188	MH206W190						306	CLMH206W188MH206W190	8	0.0442	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
CLMH206W189MH206W003		1971		Existing	assumed Mannings N	MH206W189	MH206W003		T05966	IRWD	VCP	{9DA5101E-6890-4791-BCCD-835ED21EE80C}	CLMH206W189MH206W003	463.57	455.64	0.666666667	MH206W189	MH206W003						130	CLMH206W189MH206W003	8	0.0198	0.065731	0.16	0.072866	0.17	0.127409	0.22	0.072866	0.17
CLMH206W190MH206W143		1976		Existing	assumed Mannings N	MH206W190	MH206W143		T09178	IRWD	VCP	{3B0E6041-EE9C-497B-B2DB-C88F5CC7E87B}	CLMH206W190MH206W143	421.10	401.00	0.666666667	MH206W190	MH206W143						196	CLMH206W190MH206W143	8	0.1033	0.010435	0.05	0.011734	0.05	0.020511	0.06	0.011734	0.05
CLMH206W197MH206W137		1976		Existing	assumed Mannings N	MH206W197	MH206W137		T09125	IRWD	VCP	{F8780776-C794-43A7-A04F-D3C7012490D0E}	CLMH206W197MH206W137	436.69	421.08	0.666666667	MH206W197	MH206W137						171	CLMH206W197MH206W137	8	0.0915	0.002814	0.03	0.003168	0.03	0.005531	0.04	0.003168	0.03
CLMH207E001MH2075085		1981		Existing	assumed Mannings N	MH207E001	MH2075085		A01317	IRWD	PVC	{F7039B8C-3259-479B-AA27-5ECBEE11E99F}	CLMH207E001MH2075085	630.90	628.59	1.000000000	MH207E001	MH2075085						278	CLMH207E001MH2075085	12	0.0083	0.211984	0.21	0.238385	0.23	0.417187	0.30	0.242445	0.23
CLMH207E001MH207W112		1981		Existing	assumed Mannings N	MH207E001	MH207W112		A01307	IRWD	PVC	{8758C34D-0B3B-60D4-847F-ACF23F577E34}	CLMH207E001MH207W112	635.53	634.19	0.666666667	MH207E001	MH207W112						290	CLMH207E001MH207W112	8	0.0046	0.000000	0.03	0.000000	0.03	0.000000	0.04	0.000000	0.03
CLMH207E002MH207E001		1981		Existing	assumed Mannings N	MH207E002	MH207E001		A01317	IRWD	VCP	{9A332078-5087-4A92-8B2C-FF556F742756}	CLMH207E002MH207E001	635.00	631.09	1.000000000	MH207E002	MH207E001						420	CLMH207E002MH207E001	12	0.0083	0.207662	0.21	0.233383	0.22	0.408141	0.30	0.237559	0.23
CLMH207E003MH2075003		1983		Existing	assumed Mannings N	MH207E003	MH2075003		A01306	IRWD	VCP	{6E09F3D-E413-935F-B6EC-BFF5AF6AC6F}	CLMH207E003MH2075003	612.15	608.29	0.666666667	MH207E003	MH2075003						193	CLMH207E003MH2075003	8	0.0200	0.002746	0.04	0.003087	0.04	0.005397	0.05	0.003087	0.04
CLMH207E005MH2075003		1983		Existing	assumed Mannings N	MH207E005	MH2075003		A01306	IRWD	VCP	{B1ABE16D-D79D-42EC-B7BD-BDB5E57B867C}	CLMH207E005MH2075003	627.00	608.29	0.666666667	MH207E005	MH2075003						269	CLMH207E005MH2075003	8	0.0696	0.035044	0.09	0.039406	0.10	0.068879	0.13	0.039406	0.10
CLMH207E006MH207E005		1983		Existing	assumed Mannings N	MH207E006	MH207E005		A01306	IRWD	VCP	{7340D77D-216D-448E-B209-F9B3848C4A7A}	CLMH207E006MH207E005	645.15	627.20	0.666666667	MH207E006	MH207E005						315	CLMH207E006MH207E005	8	0.0572	0.028560	0.09	0.032122	0.09	0.056150	0.12	0.032122	0.09
CLMH207E007MH207E006		1983		Existing	assumed Mannings N	MH207E007	MH207E006		A01306	IRWD	VCP	{6G8FC2DA-ODA5-4E71-93F8-D49AFF7CD8A}	CLMH207E007MH207E006	649.47	645.35	0.666666667	MH207E007	MH207E006						169	CLMH207E007MH207E006	8	0.0244	0.003644	0.04	0.004098	0.04	0.007164	0.05	0.004098	0.04
CLMH207E008MH207E070		1983		Existing	assumed Mannings N	MH207E008	MH207E070		A01306	IRWD	VCP	{5A0CE187-AF15-4148-97C9-08A844542072}	CLMH207E008MH207E070	664.85	652.52	0.666666667	MH207E008	MH207E070						261	CLMH207E008MH207E070	8	0.0472	0.020915	0.08	0.023519	0.08	0.041111	0.11	0.023519	0.08
CLMH207E009MH207E008		1983		Existing	assumed Mannings N	MH207E009	MH207E008		A01306	IRWD	VCP	{D6595F64-118F-438D-A490-286B048ED6E7}	CLMH207E009MH207E008	667.86	665.05	0.666666667	MH207E009	MH207E008						141	CLMH207E009MH207E008	8	0.0200	0.007737	0.06	0.008700	0.06	0.015208	0.08	0.008700	0.06
CLMH207E010MH207E008		1983		Existing	assumed Mannings N	MH207E010	MH207E008		A01306	IRWD	VCP	{00972B4E-82AA-4D24-886A-218F56651FBA}	CLMH207E010MH207E008	675.15	665.05	0.666666667	MH207E010	MH207E008						202	CLMH207E010MH207E008	8	0.0501	0.013178	0.06	0.014819	0.07	0.025903	0.08	0.014819	0.07
CLMH207E011MH207E010		1983		Existing	assumed Mannings N	MH207E011	MH207E010		A01306	IRWD	VCP	{AF191982-07F2-4514-88C6-E4502584038F}	CLMH207E011MH207E010	691.08	675.34	0.666666667	MH207E011	MH207E010						315	CLMH207E011MH207E010	8	0.0500	0.013178	0.06	0.014819	0.07	0.025903	0.08	0.014819	0.07
CLMH207E012MH207E011		1983		Existing	assumed Mannings N	MH207E012	MH207E011		A01306	IRWD	VCP	{BDA9B3BA-0174-4047-B78F-9857926D9941}	CLMH207E012MH207E011	708.58	691.28	0.666666667	MH207E012	MH207E011						346	CLMH207E012MH207E011	8	0.0500	0.005337	0.04	0.006001	0.04	0.010490	0.06	0.006001	0.04
CLMH207E013MH207E012		1983		Existing	assumed Mannings N	MH207E013	MH207E012		A01306	IRWD	VCP	{80EEA662-0247-48DF-B9BD-055326605463}	CLMH207E013MH207E012	722.00	708.78	0.666666667	MH207E013	MH207E012						301	CLMH207E013MH207E012	8	0.0439	0.005337	0.04	0.006001	0.04	0.010490	0.06	0.006001	0.04
CLMH207E014MH207E015		1983		Existing	assumed Mannings N	MH207E014	MH207E015		A01306	IRWD	VCP	{02759B89-1C0C-47C1-8E8D-A61260F9402}	CLMH207E014MH207E015	720.72	718.47	0.666666667	MH207E014	MH207E015						225	CLMH207E014MH207E015	8	0.0100	0.002626	0.04	0.002953	0.04	0.005160	0.06	0.002953	0.04
CLMH207E015MH207E016		1983		Existing	assumed Mannings N	MH207E015	MH207E016		A01306	IRWD	VCP	{51641063-8E81-4E78-808D-E641BD057D6B}	CLMH207E015MH207E016	718.28	714.80	0.666666667	MH207E015	MH207E016						346	CLMH207E015MH207E016	8	0.0101	0.008653	0.07	0.009730	0.08	0.017007	0.10	0.009730	0.08
CLMH207E016MH207N081		1983		Existing	assumed Mannings N	MH207E016	MH207N081		A01306	IRWD	VCP	{BC332B29-DD41-4DEF-91AD-A6049FD4661F}	CLMH207E016MH207N081	714.60	700.19	0.666666667	MH207E016	MH207N081						361	CLMH207E016MH207N081	8	0.0399	0.019534	0.08	0.021965	0.08	0.038393	0.11	0.021965	0.08
CLMH207E017MH207E031		1983		Existing	assumed Mannings N	MH207E017	MH207E031		A01306	IRWD	VCP	{085DC9C7-4D12-4388-9F95-5D4630CED6E8}	CLMH207E017MH207E031	651.26	650.55	1.250000000	MH207E017	MH207E031						348	CLMH207E017MH207E031	15	0.0020	0.357482	0.27	0.401707	0.29	0.702300	0.39	0.414872	0.29
CLMH207E018MH207E017		1983		Existing	assumed Mannings N	MH207E018	MH207E017		A01306	IRWD	VCP	{56D09468-AE2D-4E9D-A531-D40AEFF120BC}	CLMH207E018MH207E017	652.29	651.46	1.250000000	MH207E018	MH207E017						190	CLMH207E018MH207E017	15	0.0044	0.345504	0.23	0.388213	0.25	0.678648	0.33	0.401381	0.25
CLMH207E019MH207E018		1983		Existing	assumed Mannings N	MH207E019	MH207E018		A01306	IRWD	PVC	{7C89C566-56F5-43DD-B2F3-B290B3C0CFDE}	CLMH207E019MH207E018	663.22	652.50	0.666666667	MH207E019	MH207E018						186	CLMH207E019MH207E018	8	0.0578	0.015802	0.10	0.017769	0.11	0.031063	0.20	0.017769	0.12
CLMH207E020MH207E019		1983		Existing	assumed Mannings N	MH207E020	MH207E019		A01306	IRWD	PVC	{4175FDFD-EB95-4A33-89B3-62ADC99AD4F7}	CLMH207E020MH207E019	666.71	663.42	0.666666667	MH207E020

CLMH207N022M2H207N021			1985		Existing	assumed Mannings N	MH207N022	MH207N021		A01404	IRWD	VCP	{41DD205F-7F24-4015-ACDD-BA7ECEFEB078}	CLMH207N022M2H207N021	679.70	677.03	0.666666667	MH207N022	MH207N021			343	CLMH207N022M2H207N021	8	0.0078	0.005337	0.10	0.006001	0.10	0.010490	0.13	0.006001	0.10				
CLMH207N023M2H207N021			1985		Existing	assumed Mannings N	MH207N023	MH207N021		A01404	IRWD	VCP	{F39B0D4C-5616-4AE8-A022-8ABEAE8BED46}	CLMH207N023M2H207N021	680.40	677.03	0.666666667	MH207N023	MH207N021			217	CLMH207N023M2H207N021	8	0.0156	0.013074	0.11	0.014701	0.11	0.025698	0.15	0.014701	0.11				
CLMH207N024M2H207N023			1985		Existing	assumed Mannings N	MH207N024	MH207N023		A01404	IRWD	VCP	{E304A727-D721-427D-A20E-7EEAF48565BE}	CLMH207N024M2H207N023	682.73	680.40	0.666666667	MH207N024	MH207N023			310	CLMH207N024M2H207N023	8	0.0075	0.004024	0.07	0.004525	0.07	0.007909	0.09	0.004525	0.07				
CLMH207N025M2H207N023			1985		Existing	assumed Mannings N	MH207N025	MH207N023		A01404	IRWD	VCP	{4978332-9E81-4835-A4B2-46F80EE2207E}	CLMH207N025M2H207N023	684.07	680.40	0.666666667	MH207N025	MH207N023			207	CLMH207N025M2H207N023	8	0.0177	0.009050	0.07	0.010176	0.08	0.017789	0.10	0.010176	0.08				
CLMH207N026M2H207N025			1985		Existing	assumed Mannings N	MH207N026	MH207N025		A01404	IRWD	VCP	{C0E5C686-356F-4441-8371-C86DBA658E03}	CLMH207N026M2H207N025	686.36	684.07	0.666666667	MH207N026	MH207N025			251	CLMH207N026M2H207N025	8	0.0091	0.004767	0.06	0.005361	0.07	0.009369	0.08	0.005361	0.07				
CLMH207N027M2H207N025			1985		Existing	assumed Mannings N	MH207N027	MH207N025		A01404	IRWD	VCP	{156B4D04-F5B1-4215-94C1-DF97347BDB81}	CLMH207N027M2H207N025	687.89	684.07	0.666666667	MH207N027	MH207N025			181	CLMH207N027M2H207N025	8	0.0211	0.004283	0.06	0.004816	0.06	0.008421	0.08	0.004816	0.06				
CLMH207N028M2H207N027			1985		Existing	assumed Mannings N	MH207N028	MH207N027		A01139	IRWD	VCP	{AACE98C0-1E88-4625-ADC1-1FFDBB98BC33}	CLMH207N028M2H207N027	691.34	687.89	0.666666667	MH207N028	MH207N027			172	CLMH207N028M2H207N027	8	0.0201	0.004315	0.04	0.004850	0.05	0.008486	0.06	0.004850	0.05				
CLMH207N029M2H207N020			1985		Existing	assumed Mannings N	MH207N029	MH207N020		A01404	IRWD	VCP	{19B56244-BBEE-4B9A-9E7A-267A9ECD24F5}	CLMH207N029M2H207N020	683.02	675.86	0.666666667	MH207N029	MH207N020			194	CLMH207N029M2H207N020	8	0.0369	0.033749	0.10	0.037951	0.11	0.066341	0.14	0.037951	0.11				
CLMH207N030M2H207N029			1985		Existing	assumed Mannings N	MH207N030	MH207N029		A01404	IRWD	VCP	{893BABD1-597D-4E6D-962B-51BEBA215192}	CLMH207N030M2H207N029	690.40	683.02	0.666666667	MH207N030	MH207N029			261	CLMH207N030M2H207N029	8	0.0283	0.007602	0.08	0.008548	0.08	0.014941	0.11	0.008548	0.08				
CLMH207N031M2H207N030			1985		Existing	assumed Mannings N	MH207N031	MH207N030		A01404	IRWD	VCP	{F23ECZ40-541F-4C0E-8B13-80FC25CB47DC}	CLMH207N031M2H207N030	694.30	690.40	0.666666667	MH207N031	MH207N030			256	CLMH207N031M2H207N030	8	0.0152	0.002886	0.05	0.003245	0.05	0.005673	0.06	0.003245	0.05				
CLMH207N032M2H207N031			1985		Existing	assumed Mannings N	MH207N032	MH207N031		A01404	IRWD	VCP	{76718561-5A66-41AE-8C92-2A2C2E1B9742}	CLMH207N032M2H207N031	698.11	694.30	0.666666667	MH207N032	MH207N031			250	CLMH207N032M2H207N031	8	0.0153	0.002886	0.04	0.003245	0.04	0.005673	0.05	0.003245	0.04				
CLMH207N033M2H207N033			1985		Existing	assumed Mannings N	MH207N033	MH207N033		A01404	IRWD	VCP	{53F2FC6A-41CE-413A-AB26-60B36ECEC2426}	CLMH207N033M2H207N033	698.11	695.29	0.666666667	MH207N033	MH207N033			148	CLMH207N033M2H207N033	8	0.0156	0.002960	0.05	0.003334	0.05	0.005810	0.07	0.003334	0.05				
CLMH207N033M2H207N036			1985		Existing	assumed Mannings N	MH207N033	MH207N036		A01404	IRWD	VCP	{C55DECB9-826F-4E5E-AA76-5DA11DC53D3E}	CLMH207N033M2H207N036	695.29	689.15	0.666666667	MH207N033	MH207N036			227	CLMH207N033M2H207N036	8	0.0270	0.007583	0.05	0.008526	0.05	0.014907	0.07	0.008526	0.05				
CLMH207N034M2H207N033			1985		Existing	assumed Mannings N	MH207N034	MH207N033		A01404	IRWD	VCP	{A9B381FD-59F1-455D-9BDA-C69CE1995F5F}	CLMH207N034M2H207N033	696.76	695.29	0.666666667	MH207N034	MH207N033			154	CLMH207N034M2H207N033	8	0.0095	0.004664	0.06	0.005245	0.06	0.009166	0.08	0.005245	0.06				
CLMH207N035M2H207N034			1985		Existing	assumed Mannings N	MH207N035	MH207N034		A01404	IRWD	VCP	{CD0A9954-D606-42F3-B4B9-21F315F8A02D}	CLMH207N035M2H207N034	699.08	696.76	0.666666667	MH207N035	MH207N034			159	CLMH207N035M2H207N034	8	0.0146	0.001659	0.04	0.001865	0.05	0.003258	0.06	0.001865	0.05				
CLMH207N036M2H207N037			1985		Existing	assumed Mannings N	MH207N036	MH207N037		A01404	IRWD	VCP	{F3C0B823-7FD9-49B5-8892-6D2A49B7F5DD}	CLMH207N036M2H207N037	689.15	667.98	0.666666667	MH207N036	MH207N037			274	CLMH207N036M2H207N037	8	0.0774	0.007582	0.13	0.008526	0.14	0.014903	0.18	0.008526	0.14				
CLMH207N037M2H207N043			1983		Existing	assumed Mannings N	MH207N037	MH207N043		A01306	IRWD	VCP	{3FOAD2D8-83FB-4CAC-B9CE-8E0B1E4C6DBF}	CLMH207N037M2H207N043	667.98	666.22	0.833333333	MH207N037	MH207N043			245	CLMH207N037M2H207N043	10	0.0072	0.073634	0.15	0.082591	0.16	0.144376	0.22	0.086870	0.17				
CLMH207N038M2H207N038			1983		Existing	assumed Mannings N	MH207N038	MH207N038		A01306	IRWD	VCP	{58054899-5B22-4AD9-948F-16CF8B2CB388}	CLMH207N038M2H207N001	650.84	647.77	1.000000000	MH207N038	MH207N001			288	CLMH207N038M2H207N001	12	0.0107	0.104970	0.14	0.117833	0.15	0.205990	0.20	0.122089	0.15				
CLMH207N039M2H207N038			1983		Existing	assumed Mannings N	MH207N039	MH207N038		A01306	IRWD	PVC	{B383ADA0-1F18-4A74-AA80-8745388ZCA2A}	CLMH207N039M2H207N038	659.15	650.84	0.666666667	MH207N039	MH207N038			276	CLMH207N039M2H207N038	8	0.0302	0.006597	0.13	0.007418	0.14	0.012969	0.18	0.007418	0.14				
CLMH207N040M2H207N038			1983		Existing	assumed Mannings N	MH207N040	MH207N038		A01306	IRWD	VCP	{47F14FCC-7DD3-459E-B030-3631C3B1D740}	CLMH207N040M2H207N038	659.08	650.84	1.000000000	MH207N040	MH207N038			252	CLMH207N040M2H207N038	12	0.0327	0.098381	0.12	0.110420	0.13	0.193022	0.17	0.114690	0.13				
CLMH207N041M2H207N040			1983		Existing	assumed Mannings N	MH207N041	MH207N040		A01306	IRWD	PVC	{89847CDF-A8CE-42D6-A700-F9F8CC905772}	CLMH207N041M2H207N040	669.59	659.08	0.666666667	MH207N041	MH207N040			276	CLMH207N041M2H207N040	8	0.0181	0.011744	0.11	0.013206	0.12	0.023083	0.15	0.013206	0.12				
CLMH207N042M2H207N041			1983		Existing	assumed Mannings N	MH207N042	MH207N041		A01306	IRWD	PVC	{72047AAA-B3DC-4523-B82C-0E969FBFAB67}	CLMH207N042M2H207N041	669.70	669.59	0.666666667	MH207N042	MH207N041			48	CLMH207N042M2H207N041	8	0.0198	0.002746	0.04	0.003087	0.04	0.005397	0.05	0.003087	0.04				
CLMH207N043M2H207N040			1983		Existing	assumed Mannings N	MH207N043	MH207N040		A01306	IRWD	VCP	{62F102B6-D7AF-468E-A319-9AB3D9094A29}	CLMH207N043M2H207N040	666.22	659.08	0.833333333	MH207N043	MH207N040			283	CLMH207N043M2H207N040	10	0.0252	0.086638	0.13	0.097215	0.14	0.169939	0.18	0.101490	0.14				
CLMH207N044M2H207N043			1983		Existing	assumed Mannings N	MH207N044	MH207N043		A01306	IRWD	PVC	{CD9E0B28-859G-4083-B849-C7E834799310}	CLMH207N044M2H207N043	672.90	666.22	0.666666667	MH207N044	MH207N043			110	CLMH207N044M2H207N043	8	0.0611	0.013005	0.11	0.014624	0.12	0.025563	0.16	0.014624	0.12				
CLMH207N045M2H207N044			1983		Existing	assumed Mannings N	MH207N045	MH207N044		A01306	IRWD	PVC	{38BF016D-2765-42CB-A189-C34F22EF200}	CLMH207N045M2H207N044	675.64	673.00	0.666666667	MH207N045	MH207N044			194	CLMH207N045M2H207N044	8	0.0136	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH207N046M2H207N044			1983		Existing	assumed Mannings N	MH207N046	MH207N044		A01306	IRWD	PVC	{D70DAF95-934F-4874-9252-78A0FE68EFF9}	CLMH207N046M2H207N044	678.00	673.00	0.666666667	MH207N046	MH207N044			88	CLMH207N046M2H207N044	8	0.0569	0.013005	0.06	0.014624	0.06	0.025563	0.08	0.014624	0.06				
CLMH207N047M2H207N029			1985		Existing	assumed Mannings N	MH207N047	MH207N029		A01404	IRWD	VCP	{A430AB6C-03E5-41A8-BA47-483D31A67513}	CLMH207N047M2H207N029	686.05	683.02	0.666666667	MH207N047	MH207N029			177	CLMH207N047M2H207N029	8	0.0171	0.023471	0.10	0.026392	0.11	0.046138	0.14	0.026392	0.11				
CLMH207N048M2H207N047			1985		Existing	assumed Mannings N	MH207N048	MH207N047		A01404	IRWD	VCP	{35253BF92-CCD5-44FE-B78C-446DB90B52B5}	CLMH207N048M2H207N047	688.59	686.15	0.666666667	MH207N048	MH207N047			215	CLMH207N048M2H207N047	8	0.0113	0.016182	0.10	0.018197	0.10	0.031811	0.13	0.018197	0.10				
CLMH207N049M2H207N048			1985		Existing	assumed Mannings N	MH207N049	MH207N048		A01404	IRWD	VCP	{56690D8E-B626-48DD-BC1F-5F0705487C32}	CLMH207N049M2H207N048	692.79	688.82	0.666666667	MH207N049	MH207N048			199	CLMH207N049M2H207N048	8	0.0200	0.005060	0.05	0.005695	0.05	0.009948	0.07	0.005695	0.05				
CLMH207N050MH207N048			1985		Existing	assumed Mannings N	MH207N050	MH207N048		A01404	IRWD	PVC	{A487E990-CE02-4C47-B849-7F1854ECE842}	CLMH207N050MH207N048	692.09	688.82	0.666666667	MH207N050	MH207N048			189	CLMH207N050MH207N048	8	0.0173	0.011123	0.07	0.012507	0.08	0.021863	0.10	0.012507	0.08				
CLMH207N051MH207N050			1985		Existing	assumed Mannings N	MH207N051	MH207N050		A01404	IRWD	VCP	{2A68BC58-C6F7-4596-AF89-0D4827B4FDA5}	CLMH207N051MH207N050	697.79	692.20	0.666666667	MH207N051	MH207N050			206	CLMH207N051MH207N050	8	0.0272	0.006580	0.05	0.007399	0.05	0.012934	0.07	0.007399	0.05				
CLMH207N052MH207N051			1985		Existing	assumed Mannings N	MH207N052	MH207N051		A01404	IRWD	VCP	{DAF28489-35D4-4E68-AAA2-F0A29B78C122}	CLMH207N052MH207N051	694.00	692.20	0.666666667	MH207N052	MH207N051			176	CLMH207N052MH207N051	8	0.0102	0.004543	0.05	0.005108	0.06	0.008928	0.07	0.005108	0.06				
CLMH207N053MH207N052			1983		Existing	assumed Mannings N	MH207N053	MH207N052		A01404	IRWD	VCP	{CC1E8510-A9DF-4E5A-A37C-2A478F4F513B}	CLMH207N053MH207N052	701.40	694.00	0.666666667	MH207N053	MH207N052			370	CLMH207N053MH207N052	8	0.0200	0.000000	0.03	0.000000	0.03	0.000000	0.04	0.000000	0.03				
CLMH207N054MH207N053			1983		Existing	assumed Mannings N	MH207N054	MH207N053		A01404	IRWD	VCP	{58C03ACE-3AB5-4086-B86E-A42F109B1105}	CLMH207N054MH207N053	704.40	701.40	0.666666667	MH207N054	MH207N053			284	CLMH207N054MH207N053	8	0.0215	0.000000	0.03	0.000000	0.04	0.000000	0.04	0.000000	0.03				
CLMH207N055MH207N054			1983		Existing	assumed Mannings N	MH207N055	MH207N054		A01404	IRWD	VCP	{8F76216A-E615-4D77-A943-4FB2017382D7}	CLMH207N055MH207N054	694.28	691.27	0.666666667	MH207N055	MH207N054			293	CLMH207N055MH207N054	8	0.0103	0.004421	0.06	0.004972	0.06	0.008691	0.08	0.004972	0.06				
CLMH207N056MH207N055			1985		Existing	assumed Mannings N	MH207N056	MH207N055		A01404	IRWD	VCP	{2830C67E-CB23-41BE-8E06-65C19B4E2BD7}	CLMH207N056MH207N055	691.27	686.05	0.666666667	MH207N056	MH207N055			374	CLMH207N056MH207N055	8	0.0139	0.007288	0.08	0.008195	0.09	0.014327	0.12	0.008195	0.09				
CLMH207N057MH207N056			1985		Existing	assumed Mannings N	MH207N057	MH207N056		A01404	IRWD	PVC	{D26E81D0-1D18-4907-A78F-2276874F0438}	CLMH207N057MH207N056	690.42	678.67	0.666666667	MH207N057	MH207N056			309	CLMH207N057MH207N056	8	0.0381	0.016206	0.07	0.018217	0.07	0.031855	0.10	0.018217	0.07				
CLMH207N057MH207N058			1985		Existing	assumed Mannings N	MH207N057	MH207N058		A01404	IRWD	PVC	{4B30B653-2C63-4393-848D-39BD6CF3CE06}	CLMH207N057MH207N058	678.67	669.07	0.666666667	MH207N057	MH207N058			246	CLMH207N057MH207N058	8	0.0390	0.016090	0.08	0.018093	0.08	0.031627	0.10	0.018093	0.08				
CLMH207N058MH207N059			1980		Existing	assumed Mannings N	MH207N058	MH207N059		A01404	IRWD	PVC	{58C155A5-098F-4399-9E1E-79B2792D3490}	CLMH207N058MH207N059	669.07	663.09	0.666666667	MH207N058	MH207N059			294	CLMH207N058MH207N059	8	0.0203	0.016087	0.08	0.018090	0.09	0.031623	0.11	0.018090	0.09				
CLMH207N059MH207N065			1985		Existing	assumed Mannings N	MH207N059	MH207N065		A01404	IRWD	PVC	{699D61FD-7824-45EC-8D22-653527CF1741}	CLMH207N059MH207N065	663.00	651.26	0.666666667	MH207N059	MH207N065			198	CLMH207N059MH207N065	8	0.0533	0.016087	0.07	0.018090	0.07	0.031623	0.09	0.018090	0.07				
CLMH207N060MH207N059			1985		Existing	assumed Mannings N	MH207N060	MH207N059		A01139	IRWD	PVC	{12342509-C9BA-4FF9-B9B2-378A7D522522}	CLMH207N060MH207N059	668.85	663.09	0.666666667	MH207N060	MH207N059			116	CLMH207N060MH207N059	8	0.0497	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH207N061MH207N062			1985		Existing	assumed Mannings N	MH207N061	MH207N062		A01404	IRWD	VCP	{8E698E18-F49A-42D5-A7D4-9391EF18F1BD}	CLMH207N061MH207N062	651.05	643.65	0.666666667	MH207N061	MH207N062			291	CLMH207N061MH207N062	8	0.0255	0.016087	0.08	0.018090	0.08	0.031623	0.11	0.018090	0.08				
CLMH207N062MH207N064			1985		Existing	assumed Mannings N	MH207N062	MH207N064		A01404	IRWD	PVC	{62B3F296-2805-46A2-A2D1A-7D9DF44134433}	CLMH207N062MH207N064	643.45	638.54	0.666666667	MH207N062	MH207N064			128	CLMH207N062MH207N064	8	0.0384	0.011428	0.08	0.012985	0.08	0.042121	0.11	0.024096	0.08				
CLMH207N063MH207N062			1985		Existing	assumed Mannings N	MH207N063	MH207N062		A01404	IRWD	PVC	{E12EA468-6E98-4C19-99C1-447070748DAB}	CLMH207N063MH207N062	646.46	643.65	0.666666667	MH207N063	MH207N062			91	CLMH207N063MH207N062	8	0.0309	0.005341	0.04	0.006006	0.05	0.010499	0.06	0.006006	0.05				
CLMH207N064MH207W108		SHEETS MISSING	1985		Existing	assumed Mannings N	MH207W108	MH207N064		A01404	IRWD	PVC	{48833B91-A041-4B41-88CD-DE68480FB848}	CLMH207N064MH207W108	638.34	599.45	0.666666667	MH207N064	MH207W108			210	CLMH207N064MH207W108	8	0.1884	0.031854	0.07	0.035819	0.07	0.062611	0.09	0.035819	0.07				
CLMH207N065MH207N064			1985		Existing	assumed Mannings N	MH207N065	MH207N064		A01404	IRWD	VCP	{A542E81B-91D2-49F0-A72A-64935F77E6DF}	CLMH207N065MH207N064	639.16	638.54	0.666666667	MH207N065	MH207N064			62	CLMH207N065MH207N064	8	0.0100	0.010425	0.08	0.011723	0.09	0.020489	0.11	0.011723	0.09				
CLMH207N066MH207N065			1985		Existing	assumed Mannings N	MH207N066	MH207N065		A01404	IRWD	VCP	{4930F72E-F7A1-4355-8C07-B7555CD0F268}	CLMH207N066MH207N065	649.50	639.36	0.666666667	MH207N066	MH207N065			278	CLMH207N066MH207N065	8	0.0366	0.010425	0.06	0.011723	0.06	0.020489	0.08	0.011723	0.06				
CLMH207N067MH207N066			1985		Existing	assumed Mannings N	MH207N067	MH207N066		A01404	IRWD	PVC	{920FDF32-0660-4134-B63A-B7DE1395FDD7}	CLMH207N067MH207N066	664.90	649.59	0.666666667	MH207N067	MH207N066			264	CLMH207N067MH207N066	8	0.0543	0.002764	0.03	0.003109	0.03	0.005433	0.04	0.003109	0.03				
CLMH207N070MH207W082			1985		Existing	assumed Mannings N	MH207W082	MH207N070		A01307	IRWD	PVC	{F7084C90-04DD-4CA9-AF44-FD9E133B7146}	CLMH207N070MH207W082	637.53	614.03	0.666666667	MH207N070	MH207W082			245	CLMH207N070MH207W082	8	0.0965	0.008083	0.05	0.009089	0.05	0.015885	0.07	0.009089	0.05				
CLMH207N071GB207N119			1985		Existing	assumed Mannings N	MH207N071	GB207N119		A01307	IRWD	VCP	{66AF0FFC-3D3E-4250-A2A2-5377D0CFA314}	CLMH207N071GB207N119	665.57	653.31	0.666666667	MH207N071	GB207N119			202	CLMH207N071GB207N119	8	0.0607	0.008083	0.04	0.009089	0.05	0.015885	0.06	0.009089	0.05				
CLMH207N072MH207N071			1981		Existing	assumed Mannings N	MH207N072	MH207N071		A01307	IRWD	PVC	{A3510418-DF8E-43F4-8144-95B37B85A5E6}	CLMH207N072MH207N071	670.38	665.57	0.666666667	MH207N072	MH207N071			201	CLMH207N072MH207N071	8	0.0239	0.001780	0.04	0.002002	0.04	0.003500	0.05	0.002002	0.04				
CLMH207N073MH207N076			1981		Existing	assumed Mannings N	MH207N073	MH207N076		A01307	IRWD	PVC	{6892628F-6C68-4618-898A-88CB2C64926A}	CLMH207N073MH207N076	658.90	657.39	0.666666667	MH207N073	MH207N076			327	CLMH207N073MH207N076	8	0.0046	0.007051	0.07	0.007929	0.07	0.013860	0.09	0.007929	0.07				
CLMH207N074MH207N073			1981		Existing	assumed Mannings N	MH207N074	MH207N073		A01307	IRWD	PVC	{B2766B1C-783C-4B06-9891-9865A50E3F91}	CLMH207N074MH207N073	659.90	658.90	0.666666667	MH207N074	MH207N073			204	CLMH207N074MH207N073	8	0.0049	0.004801	0.07	0.005399	0.08	0.009439	0.10	0.005399	0.08				
CLMH207N075MH207N074			1981		Existing	assumed Mannings N	MH207N075	MH207N074		A01307	IRWD	PVC	{2A93AC77-C682-4E0D-9DD1-84F7C1F11B57}	CLMH207N075MH207N074	661.00	659.90	0.666666667	MH207N075	MH207N074			230	CLMH207N075MH207N074	8	0.0048	0.002787	0.06	0.003134	0.06	0.005480	0.08	0.003134	0.06				
CLMH207N076MH207W112			1981		Existing	assumed Mannings N	MH207W112	MH207N076		A01307	IRWD	PVC	{0304A633-F443-414D-947B-D7E23F151F2}	CLMH207N076MH207W112	657.39	634.19	0.666666667	MH207N076	MH207W112			288	CLMH207N076MH207W112	8	0.0807	0.014172	0.05	0.015936	0.06	0.027856	0.08	0.015936	0.06				
CLMH207N078MH207E002			1981		Existing	assumed Mannings N	MH207N078	MH207E002		A01317	IRWD	VCP	{0B3CCA86-7029-45DC-A1B3-D60FF85BF0E5}	CLMH207N078MH207E002	636.28	635.20	1.250000000	MH207N078	MH207E002			400	CLMH207N078MH207E002	15	0.0027	0.207711	0.20	0.233418	0.21	0.408147	0.28	0.237615	0.21				
CLMH207N079MH207N078			1983		Existing	assumed Mannings N	MH207N079	MH207N078		A01317	IRWD	VCP	{AF925727-958A-43CA-91BC-D0B8A2938D05}	CLMH207N079MH207N078	636.76	636.28	1.250000000	MH207N079	MH207N078			219	CLMH207N079MH207N078	15	0.0022	0.207711	0.12	0.233418	0.13	0.408155	0.31	0.237701	0.24				
CLMH207N080MH207W076			1981		Existing	assumed Mannings N	MH207W076	MH207N080		A01307	IRWD	PVC	{05D64717-7216-4503-BE37-64DD303DF528}	CLMH207N080GB207W106	613.75	582.12	0.666666667	MH207N080	MH207W076			384	CLMH207N080MH207W076	8	0.0826	0.003794	0.03	0.004267	0.03	0.007459	0.04	0.004267	0.03				
CLMH207N081MH208W076			1983		Existing	assumed Mannings N	MH207N081	MH208W076		A01306	IRWD	VCP	{1C129076-3CF9-4242-80B1-D55B515FDE90}	CLMH207N081MH208W076	699.98	688.09	0.666666667	MH207N081	MH208W076			304	CLMH207N081MH208W076	8	0.0391	0.019534	0.08	0.021965	0.08	0.038393	0.11	0.021965	0.08				
CLMH207N082MH207N083			1977		Existing	assumed Mannings N	MH207N082	MH207N083		T09619	IRWD	VCP	{20F894AD-CA37-41B4-B644-089103BE274A}	CLMH207N082MH207N083	498.77	484.50	0.666666667	MH207N082	MH207N083			279	CLMH207N082MH207N083	8	0.0513	0.008409	0.07	0.009456	0.07	0.016530	0.09	0.009456	0.07				
CLMH207N083MH194E145			1977		Existing	assumed Mannings N	MH194E145	MH207N083		T09619	IRWD	VCP	{F12FAA1C-B0D8-4C27-B548-D9F869C71231}	CLMH207N083MH194E145	484.50	476.67	0.666666667	MH207N083	MH194E145			145	CLMH207N083MH194E145	8	0.0542	0.025509	0.21	0.028685	0.23	0.050142	0.30	0.028685	0.25				
CLMH207N084MH194E145			1977		Existing	assumed Mannings N	MH194E145	MH207N084		T09619	IRWD	VCP	{92D276AB-4DFC-4B13-B7FC-8177DFE10B46}	CLMH207N084MH194E145	481.73	476.67	1.250000000	MH207N084	MH194E145			300	CLMH207N084MH194E145	15	0.0169	0.399550	0.19	0.479467	0.20	0.831658	0.27	0.609513	0.23				
CLMH207N085MH207N084			1977		Existing	assumed Mannings N	MH207N085	MH207N084		A01254	IRWD	VCP	{A684F415-B8A9-4754-AD5D-168C26DB1D6}	CLMH207N085MH207N084	485.89	481.73	1.250000000	MH207N085	MH207N084			246	CLMH207N085MH207N084	15	0.0169	0.399552	0.18	0.479484	0.20	0.831690	0.26	0.609529	0.23				
CLMH207N086GB207N122			1980		Existing	assumed Mannings N	MH207N086	GB207N122		A01252	IRWD	VCP	{FE4D7E96-BAA9-4695-948E-039DE4933326}	CLMH207N086GB207N122	499.29	489.51	1.250000000	MH207N086	GB207N122			245	CLMH207N086GB207N122	15	0.0400	0.399553	0.16	0.475004	0.17	0.831723	0.22	0.609547	0.19				
CLMH207N087MH207N086			1986		Existing	assumed Mannings N	MH207N087	MH207N086		A01126	IRWD	VCP	{BAA506CB-B96D-4A53-ADE3-C4BF193930B5}	CLMH207N087MH207N086	507.26	499.29	1.250000000	MH207N087	MH207N086			136	CLMH207N087MH207N086	15	0.0586	0.399553	0.14	0.475017	0.15	0.831744	0.20	0.609557	0.17				
CLMH207N088MH207N087			1986		Existing	assumed Mannings N	MH207N088	MH207N087		A01126	IRWD	VCP	{81099C10-0433-49FB-A49C-2105234A30BA}	CLMH207N088MH207N087	509.35	507.26	1.250000000	MH207N088	MH207N087			68	CLMH207N088MH207N087	15	0.0309	0.399553	0.15	0.475023	0.16	0.831753	0.21	0.609562	0.18				
CLMH207N089MH207N088			1986		Existing	assumed Mannings N	MH207N089	MH207N088		A01126	IRWD	VCP	{79BBA2C1-9C25-4328-A760-FFB9B641E9F4}	CLMH207N089MH207N088	510.69	509.35	1.250000000	MH207N089	MH207N088			215	CLMH207N089MH207N088	15	0.0235	0.389856	0.17	0.465200	0.18	0.814522	0.24	0.599697	0.20				
CLMH207N090MH207N089			1986		Existing	assumed Mannings N	MH207N090	MH207N089		A01126	IRWD	VCP	{C2A6265C-4D5F-4C67-AD4F-82790F6671D}	CLMH207N090MH207N089	513.28	510.69	1.250000000	MH207N090	MH207N089			142	CLMH207N090MH207N089	15	0.0182	0.389856	0.17	0.465205	0.19	0.814531	0.25	0.599702	0.22				
CLMH207N091MH207N090			1986		Existing	assumed Mannings N	MH207N091	MH207N090		A01126	IRWD	VCP	{DEDDFC8E-5690-4E8C-90A1-7A4A98B55DF7}	CLMH207N091MH207N090	515.91	513.28	1.

| | | |

CLMH207W120MH207W080		1981		Existing	assumed Mannings N	MH207W120	MH207W080	A01307	IRWD	PVC	{F2833AA9-F0D1-4F6F-995F-32CC53F13207}	CLMH207W120MH207W080	612.36	590.00	0.666666667	MH207W120	MH207W080			247	CLMH207W120MH207W080	8	0.0909	0.014172	0.06	0.015936	0.06	0.027856	0.08	0.015936	0.06				
CLMH207W121MH2075042		1980		Existing	assumed Mannings N	MH207W121	MH2075042	A01375	IRWD	PVC	{237739DE-B718-494A-A279-84C689852B35}	CLMH207W121MH2075042	589.46	579.36	0.666666667	MH207W121	MH2075042			66	CLMH207W121MH2075042	8	0.1549	0.029786	0.09	0.033494	0.09	0.058547	0.12	0.033494	0.09				
CLMH207W122MH207W002		1986		Existing	assumed Mannings N	MH207W122	MH207W002	T12224	IRWD	VCP	{A0E31EC8-39F8-4139-9491-E7C9A87D66D0}	CLMH207W122MH207W002	508.74	494.16	0.666666667	MH207W122	MH207W002			157	CLMH207W122MH207W002	8	0.0935	0.017476	0.06	0.019477	0.06	0.034042	0.08	0.019477	0.06				
CLMH208E001MH208E002		1988		Existing	assumed Mannings N	MH208E001	MH208E002	A01157	IRWD	PVC	{13B0D46D-DA06-4551-A9E2-D572F5A2B863}	CLMH208E001MH208E002	752.15	751.83	0.666666667	MH208E001	MH208E002			78	CLMH208E001MH208E002	8	0.0041	0.017732	0.12	0.019928	0.13	0.034834	0.17	0.019928	0.13				
CLMH208E002MH208E003		1988		Existing	assumed Mannings N	MH208E002	MH208E003	A01157	IRWD	PVC	{20F8DD21-BC72-411D-964F-485193872D5D}	CLMH208E002MH208E003	751.63	746.52	0.666666667	MH208E002	MH208E003			78	CLMH208E002MH208E003	8	0.0653	0.017732	0.06	0.019928	0.07	0.034834	0.09	0.019928	0.07				
CLMH208E003MH208E004		1988		Existing	assumed Mannings N	MH208E003	MH208E004	A01157	IRWD	PVC	{890DD87D-B489-4526-B66C-D89555250CSF}	CLMH208E003MH208E004	746.32	741.19	0.666666667	MH208E003	MH208E004			71	CLMH208E003MH208E004	8	0.0724	0.027663	0.08	0.031095	0.08	0.054355	0.11	0.031095	0.08				
CLMH208E004MH208E005		1988		Existing	assumed Mannings N	MH208E004	MH208E005	A01157	IRWD	PVC	{97304E77-094B-41CC-B41B-7839F8645787}	CLMH208E004MH208E005	740.98	733.04	0.666666667	MH208E004	MH208E005			126	CLMH208E004MH208E005	8	0.0630	0.027663	0.08	0.031095	0.08	0.054355	0.11	0.031095	0.08				
CLMH208E005MH208E006		1988		Existing	assumed Mannings N	MH208E005	MH208E006	A01157	IRWD	PVC	{5DED0EA7-761F-44A7-BAB8-3EA249EC4FA4}	CLMH208E005MH208E006	732.84	730.71	0.666666667	MH208E005	MH208E006			90	CLMH208E005MH208E006	8	0.0238	0.027663	0.10	0.031095	0.11	0.054355	0.14	0.031095	0.11				
CLMH208E006MH208E007		1988		Existing	assumed Mannings N	MH208E006	MH208E007	A01157	IRWD	PVC	{A9ACC1A9-E04C-470A-99F8-128BB13C5D48}	CLMH208E006MH208E007	730.51	729.38	0.666666667	MH208E006	MH208E007			155	CLMH208E006MH208E007	8	0.0073	0.030150	0.14	0.033892	0.15	0.059244	0.19	0.033892	0.15				
CLMH208E007MH208E008		1988		Existing	assumed Mannings N	MH208E007	MH208E008	A01157	IRWD	PVC	{9712F1D6-5AB7-4552-A658-9ABD2D1EB278}	CLMH208E007MH208E008	729.17	724.04	0.666666667	MH208E007	MH208E008			276	CLMH208E007MH208E008	8	0.0186	0.033622	0.12	0.037795	0.12	0.066068	0.16	0.037795	0.12				
CLMH208E008MH208E046		1988		Existing	assumed Mannings N	MH208E008	MH208E046	A01151	IRWD	PVC	{80085ECF-4DC9-45BB-8B76-B88B3560F1B0}	CLMH208E008MH208E046	723.84	723.20	0.666666667	MH208E008	MH208E046			128	CLMH208E008MH208E046	8	0.0050	0.043175	0.18	0.048538	0.19	0.084841	0.25	0.048538	0.19				
CLMH208E009MH208E008		1988		Existing	assumed Mannings N	MH208E009	MH208E008	A01151	IRWD	PVC	{AE997B1C-E264-4492-9464-045DE485FA67}	CLMH208E009MH208E008	728.47	724.04	0.666666667	MH208E009	MH208E008			115	CLMH208E009MH208E008	8	0.0385	0.009553	0.05	0.010742	0.06	0.018774	0.07	0.010742	0.06				
CLMH208E010MH208E009		1988		Existing	assumed Mannings N	MH208E010	MH208E009	A01151	IRWD	PVC	{85622C28-365A-4E7F-9EC7-CAA99FE7CE10}	CLMH208E010MH208E009	730.94	728.67	0.666666667	MH208E010	MH208E009			168	CLMH208E010MH208E009	8	0.0135	0.008274	0.07	0.009305	0.07	0.016261	0.09	0.009305	0.07				
CLMH208E011MH208E010		1983		Existing	assumed Mannings N	MH208E010	MH208E011	A01151	IRWD	PVC	{C524F218-2EE5-4928-9A3C-5D1672FCC4CE}	CLMH208E011MH208E010	732.96	731.14	0.666666667	MH208E010	MH208E011			94	CLMH208E011MH208E010	8	0.0194	0.002972	0.04	0.003142	0.04	0.005839	0.05	0.003142	0.04				
CLMH208E012MH208E010		1981		Existing	assumed Mannings N	MH208E012	MH208E010	A01151	IRWD	PVC	{11D895A0-65B1-4DEC-BFB0-01DF444F8101}	CLMH208E012MH208E010	735.03	731.14	0.666666667	MH208E012	MH208E010			137	CLMH208E012MH208E010	8	0.0285	0.005303	0.04	0.005963	0.05	0.010422	0.06	0.005963	0.05				
CLMH208E013MH208E012		1988		Existing	assumed Mannings N	MH208E013	MH208E012	A01151	IRWD	PVC	{BCC8672D-BC7E-473C-9C58-970125648ABA}	CLMH208E013MH208E012	743.11	735.22	0.666666667	MH208E013	MH208E012			84	CLMH208E013MH208E012	8	0.0948	0.003420	0.03	0.003846	0.03	0.006721	0.04	0.003846	0.03				
CLMH208E014MH208E013		1988		Existing	assumed Mannings N	MH208E014	MH208E013	A01151	IRWD	PVC	{86D7831F-261C-4738-8327-32134CC47BCE}	CLMH208E014MH208E013	752.41	743.32	0.666666667	MH208E014	MH208E013			96	CLMH208E014MH208E013	8	0.0950	0.002521	0.02	0.002835	0.03	0.004957	0.03	0.002835	0.03				
CLMH208E015MH208E014		1988		Existing	assumed Mannings N	MH208E015	MH208E014	A01151	IRWD	PVC	{92748270-622D-4449-9368-28CB2531DEE}	CLMH208E015MH208E014	763.79	752.61	0.666666667	MH208E015	MH208E014			115	CLMH208E015MH208E014	8	0.0979	0.001554	0.02	0.001748	0.02	0.003055	0.03	0.001748	0.02				
CLMH208E016MH208E015		1988		Existing	assumed Mannings N	MH208E016	MH208E015	A01151	IRWD	PVC	{94EBFA41-E59E-4B8E-A82D-AC6C53828BCF}	CLMH208E016MH208E015	771.48	764.00	0.666666667	MH208E016	MH208E015			98	CLMH208E016MH208E015	8	0.0765	0.001554	0.02	0.001748	0.02	0.003055	0.03	0.001748	0.02				
CLMH208E017MH208E003		1988		Existing	assumed Mannings N	MH208E017	MH208E003	A01157	IRWD	PVC	{A084A019-3785-4236-95EB-ACFAA95665C4}	CLMH208E017MH208E003	748.94	746.52	0.666666667	MH208E017	MH208E003			240	CLMH208E017MH208E003	8	0.0101	0.009931	0.08	0.011168	0.08	0.019521	0.10	0.011168	0.08				
CLMH208E018MH208E017		1987		Existing	assumed Mannings N	MH208E018	MH208E017	A01153	IRWD	VCP	{46F53986-5087-42AE-834B-B6B7C4D13D55}	CLMH208E018MH208E017	751.66	749.14	0.666666667	MH208E018	MH208E017			195	CLMH208E018MH208E017	8	0.0129	0.007220	0.06	0.008119	0.07	0.014191	0.08	0.008119	0.07				
CLMH208E019MH208E018		1987		Existing	assumed Mannings N	MH208E019	MH208E018	A01153	IRWD	VCP	{D4CCC63B-52FB-4A6A-A1D1-B576378C6907}	CLMH208E019MH208E018	754.71	751.86	0.666666667	MH208E019	MH208E018			181	CLMH208E019MH208E018	8	0.0157	0.007220	0.06	0.008119	0.06	0.014191	0.08	0.008119	0.06				
CLMH208E020MH208E019		1987		Existing	assumed Mannings N	MH208E020	MH208E019	A01153	IRWD	PVC	{D57424AC-15CB-4B59-B552-61D92FFEF6EC}	CLMH208E020MH208E019	757.03	754.90	0.666666667	MH208E020	MH208E019			166	CLMH208E020MH208E019	8	0.0146	0.003264	0.04	0.003671	0.04	0.006416	0.06	0.003671	0.04				
CLMH208E021MH208E020		1987		Existing	assumed Mannings N	MH208E021	MH208E020	A01153	IRWD	PVC	{D3026315-526E-452A-8634-CF6DFCD97015}	CLMH208E021MH208E020	761.79	757.23	0.666666667	MH208E021	MH208E020			136	CLMH208E021MH208E020	8	0.0335	0.001503	0.02	0.001690	0.03	0.002953	0.03	0.001690	0.03				
CLMH208E022GB208E089		1987		Existing	assumed Mannings N	GB208E089		A01153	IRWD	PVC	{A3280A65-5F90-4BBD-A764-68E591D7F6B}	CLMH208E022GB208E089	762.79	758.88	0.666666667	GB208E022	GB208E089			131	CLMH208E022GB208E089	8	0.0299	0.014019	0.07	0.015753	0.07	0.027536	0.10	0.015753	0.07				
CLMH208E023MH208E022		1987		Existing	assumed Mannings N	MH208E023	MH208E022	A01155	IRWD	PVC	{D189BAA9-AA02-4839-A013-2D2F26953313}	CLMH208E023MH208E022	776.39	763.00	0.666666667	MH208E023	MH208E022			192	CLMH208E023MH208E022	8	0.0698	0.014019	0.06	0.015753	0.06	0.027536	0.08	0.015753	0.06				
CLMH208E024MH208E023		1987		Existing	assumed Mannings N	MH208E024	MH208E023	A01155	IRWD	PVC	{3C3E900F-3800-49B3-B031-E8FF92A5A2BD}	CLMH208E024MH208E023	780.91	776.59	0.666666667	MH208E024	MH208E023			101	CLMH208E024MH208E023	8	0.0428	0.007888	0.05	0.008858	0.05	0.015484	0.07	0.008858	0.05				
CLMH208E025MH208E024		1987		Existing	assumed Mannings N	MH208E025	MH208E024	A01155	IRWD	PVC	{5C508065-E3B5-484F-A525-223763420359}	CLMH208E025MH208E024	784.21	781.11	0.666666667	MH208E025	MH208E024			154	CLMH208E025MH208E024	8	0.0201	0.001808	0.03	0.002021	0.03	0.003534	0.04	0.002021	0.03				
CLMH208E026MH208E025		1987		Existing	assumed Mannings N	MH208E026	MH208E025	A01155	IRWD	PVC	{82C05D6C-627B-4464-9607-0E3AE6D0D29}	CLMH208E026MH208E025	787.15	784.40	0.666666667	MH208E026	MH208E025			138	CLMH208E026MH208E025	8	0.0200	0.001808	0.03	0.002021	0.03	0.003534	0.04	0.002021	0.03				
CLMH208E027MH208E026		1987		Existing	assumed Mannings N	MH208E027	MH208E026	A01155	IRWD	PVC	{B3F4EF3F-754E-4C35-B1E6-5134CB15A3DD}	CLMH208E027MH208E026	789.40	787.35	0.666666667	MH208E027	MH208E026			72	CLMH208E027MH208E026	8	0.0284	0.001808	0.03	0.002021	0.03	0.003534	0.04	0.002021	0.03				
CLMH208E028MH208E027		1987		Existing	assumed Mannings N	MH208E028	MH208E027	A01329	IRWD	PVC	{A0B2DAF7-05C4-4D61-AABC-44BB0A37E301}	CLMH208E028MH208E027	789.40	782.83	0.666666667	MH208E028	MH208E027			333	CLMH208E028MH208E027	8	0.0198	0.001490	0.03	0.001688	0.03	0.002950	0.04	0.001688	0.03				
CLMH208E029MH208E028		1987		Existing	assumed Mannings N	MH208E029	MH208E028	A01335	IRWD	PVC	{96D4D284-0D57-4C20-8CD1-C7EF2D3E0AAA}	CLMH208E029MH208E028	792.63	789.40	0.666666667	MH208E029	MH208E028			296	CLMH208E029MH208E028	8	0.0883	0.013044	0.06	0.014680	0.07	0.025661	0.09	0.014680	0.07				
CLMH208E029MH208E023		1987		Existing	assumed Mannings N	MH208E029	MH208E023	A01155	IRWD	PVC	{E9BF4491-9A05-4F40-BAD7-CC3907994A7F}	CLMH208E029MH208E023	796.84	776.59	0.666666667	MH208E029	MH208E023			271	CLMH208E029MH208E023	8	0.0750	0.006131	0.04	0.006895	0.04	0.012052	0.05	0.006895	0.04				
CLMH208E030MH208E029		1987		Existing	assumed Mannings N	MH208E030	MH208E029	A01155	IRWD	PVC	{7874D8A9-B411-49D5-8FD9-6DE28BFE78CB}	CLMH208E030MH208E029	798.09	797.03	0.666666667	MH208E030	MH208E029			160	CLMH208E030MH208E029	8	0.0066	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH208E031MH208E030		1988		Existing	assumed Mannings N	MH208E031	MH208E030	A01328	IRWD	PVC	{D23FCEB1-F242-45F2-83A6-980D6480148F}	CLMH208E031MH208E030	800.14	798.28	0.666666667	MH208E031	MH208E030			99	CLMH208E031MH208E030	8	0.0187	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH208E032MH208E031		1988		Existing	assumed Mannings N	MH208E032	MH208E031	A01328	IRWD	PVC	{FF7B9057-0694-497F-A20F-0AC1952284B7}	CLMH208E032MH208E031	801.97	800.34	0.666666667	MH208E032	MH208E031			139	CLMH208E032MH208E031	8	0.0117	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH208E032MH208E033		1988		Existing	assumed Mannings N	MH208E032	MH208E033	A01155	IRWD	PVC	{A07E9A8C-3216-4982-A21F-B16134977FE3}	CLMH208E032MH208E033	801.97	799.15	0.666666667	MH208E032	MH208E033			283	CLMH208E032MH208E033	8	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH208E033MH208E034		1988		Existing	assumed Mannings N	MH208E033	MH208E034	A01328	IRWD	PVC	{C51BA98E-1132-4490-8848-818F1F35AEF1}	CLMH208E033MH208E034	798.95	795.63	0.666666667	MH208E033	MH208E034			111	CLMH208E033MH208E034	8	0.0300	0.007081	0.05	0.007963	0.05	0.013919	0.07	0.007963	0.05				
CLMH208E034MH208E035		1992		Existing	assumed Mannings N	MH208E034	MH208E035	A01328	IRWD	PVC	{7B7F6A5C-FC55-4359-95C2-B3CE12FBDD1D}	CLMH208E034MH208E035	795.42	792.05	0.666666667	MH208E034	MH208E035			111	CLMH208E034MH208E035	8	0.0304	0.011554	0.06	0.012992	0.07	0.022711	0.09	0.012992	0.07				
CLMH208E035MH208E036		1988		Existing	assumed Mannings N	MH208E035	MH208E036	A01316	IRWD	PVC	{DD17C543-168A-4CB4-9612-E3B73F743D4}	CLMH208E035MH208E036	756.59	737.63	0.666666667	MH208E035	MH208E036			245	CLMH208E035MH208E036	8	0.0775	0.027414	0.08	0.030838	0.08	0.053904	0.10	0.030838	0.08				
CLMH208E036MH208E037		1986		Existing	assumed Mannings N	MH208E036	MH208E037	A01316	IRWD	PVC	{A98D5858-7CAE-41D6-AA94-F78982F3C92E}	CLMH208E036MH208E037	737.53	710.54	0.666666667	MH208E036	MH208E037			275	CLMH208E036MH208E037	8	0.0986	0.027414	0.07	0.030838	0.08	0.053904	0.10	0.030838	0.08				
CLMH208E037MH208E038		1986		Existing	assumed Mannings N	MH208E037	MH208E038	A01316	IRWD	PVC	{7DFBE002-B1F8-4121-B08E-A0F0DED04D0D}	CLMH208E037MH208E038	710.45	699.15	0.666666667	MH208E037	MH208E038			231	CLMH208E037MH208E038	8	0.0489	0.048865	0.11	0.054959	0.12	0.096068	0.15	0.054959	0.12				
CLMH208E038MH208E039		1987		Existing	assumed Mannings N	MH208E038	MH208E039	A01316	IRWD	VCP	{0B4F04F5-877B-4096-98BA-6F4CE1D444BD}	CLMH208E038MH208E039	699.04	696.96	0.666666667	MH208E038	MH208E039			49	CLMH208E038MH208E039	8	0.0425	0.048865	0.12	0.054959	0.13	0.096068	0.17	0.054959	0.13				
CLMH208E039MH208E082		1986		Existing	assumed Mannings N	MH208E039	MH208E082	A01316	IRWD	PVC	{D9891B1E-344C-4D29-9C39-9854C139143B}	CLMH208E039MH208E082	696.78	681.75	0.666666667	MH208E039	MH208E082			278	CLMH208E039MH208E082	8	0.0541	0.127151	0.17	0.142979	0.18	0.249929	0.24	0.142979	0.18				
CLMH208E040MH208E039		1987		Existing	assumed Mannings N	MH208E040	MH208E039	A01156	IRWD	VCP	{668AB289-80E8-4F7C-B31D-75E5B89C72AC}	CLMH208E040MH208E039	697.09	696.96	0.666666667	MH208E040	MH208E039			97	CLMH208E040MH208E039	8	0.0036	0.078287	0.26	0.088020	0.27	0.153861	0.36	0.088020	0.27				
CLMH208E041MH208E040		1988		Existing	assumed Mannings N	MH208E041	MH208E040	A01151	IRWD	PVC	{1C16E05F-5869-419C-B0A1-129F986B0227}	CLMH208E041MH208E040	698.01	697.28	0.666666667	MH208E041	MH208E040			170	CLMH208E041MH208E040	8	0.0043	0.078287	0.25	0.088020	0.26	0.153861	0.35	0.088020	0.26				
CLMH208E042MH208E041		1988		Existing	assumed Mannings N	MH208E042	MH208E041	A01156	IRWD	VCP	{4566FC12-E681-4E46-8CC7-B0ED8D763B37}	CLMH208E042MH208E041	698.59	698.21	0.666666667	MH208E042	MH208E041			97	CLMH208E042MH208E041	8	0.0047	0.078287	0.24	0.088020	0.26	0.153861	0.34	0.088020	0.26				
CLMH208E043MH208E042		1988		Existing	assumed Mannings N	MH208E043	MH208E042	A01151	IRWD	PVC	{344EBD44-0A32-4644-9D43-06EE2E1B80CC}	CLMH208E043MH208E042	699.50	699.50	0.666666667	MH208E043	MH208E042			63	CLMH208E043MH208E042	8	0.0213	0.078287	0.20	0.088020	0.21	0.153861	0.28	0.088020	0.21				
CLMH208E044MH208E043		1988		Existing	assumed Mannings N	MH208E044	MH208E043	A01151	IRWD	PVC	{C23515C2-945C-465A-9640-BF92D3DDE1C6}	CLMH208E044MH208E043	700.90	699.70	0.666666667	MH208E044	MH208E043			32	CLMH208E044MH208E043	8	0.0379	0.078287	0.15	0.088020	0.16	0.153861	0.21	0.088020	0.16				
CLMH208E045MH208E044		1988		Existing	assumed Mannings N	MH208E045	MH208E044	A01151	IRWD	PVC	{0E5C864F-4947-41B2-A53D-185771C7F250}	CLMH208E045MH208E044	706.20	701.09	0.666666667	MH208E045	MH208E044			137	CLMH208E045MH208E044	8	0.0373	0.078287	0.15	0.088020	0.16	0.153861	0.21	0.088020	0.16				
CLMH208E046GB208E090		1984		Existing	assumed Mannings N	GB208E090		A01151	IRWD	PVC	{9CEC892F-EAAC-4199-981D-059DC9F0169C}	CLMH208E046GB208E090	723.00	722.60	0.666666667	MH208E046	GB208E090			80	CLMH208E046GB208E090	8	0.0050	0.045404	0.14	0.051044	0.15	0.089221	0.20	0.051044	0.15				
CLMH208E047MH208E045		1988		Existing	assumed Mannings N	MH208E047	MH208E045	A01151	IRWD	PVC	{B5B2C241-15F6-4609-9EC6-BE0725244E4C}	CLMH208E047MH208E045	706.71	706.40	0.666666667	MH208E047	MH208E045			64	CLMH208E047MH208E045	8	0.0048	0.032883	0.16	0.036977	0.17	0.064640	0.22	0.036977	0.17				
CLMH208E048MH208E047		1988		Existing	assumed Mannings N	MH208E048	MH208E047	A01157	IRWD	PVC	{E8111278-583A-482B-A854-D51B3DA0CDFE}	CLMH208E048MH208E047	708.34	706.91	0.666666667	MH208E048	MH208E047			286	CLMH208E048MH208E047	8	0.0050	0.032883	0.16	0.036977	0.17	0.064640	0.22	0.036977	0.17				
CLMH208E049MH208E048		1988		Existing	assumed Mannings N	MH208E049	MH208E048	A01157	IRWD	PVC	{9E8DB39C-04BD-4EE1-8475-E77E09FAA6D5}	CLMH208E049MH208E048	709.10	708.54	0.666666667	MH208E049	MH208E048			111	CLMH208E049MH208E048	8	0.0050	0.032883	0.16	0.036977	0.17	0.064640	0.22	0.036977	0.17				
CLMH208E050MH208E049		1988		Existing	assumed Mannings N	MH208E050	MH208E049	A01157	IRWD	PVC	{57CA4D1E-AFCC-4779-8CDB-A7389645Z010}	CLMH208E050MH208E049	710.29	709.30	0.666666667	MH208E050	MH208E049			188	CLMH208E050MH208E049	8	0.0053	0.032883	0.16	0.036977	0.16	0.064640	0.22	0.036977	0.16				
CLMH208E051MH208E050		1988		Existing	assumed Mannings N	MH208E051	MH208E050	A01157	IRWD	PVC	{F6779212-18F1-4E2F-B175-56A3F4893218}	CLMH208E051MH208E050	711.23	710.50	0.666666667	MH208E051	MH208E050			141	CLMH208E051MH208E050	8	0.0052	0.032883	0.16	0.036977	0.17	0.064640	0.22	0.036977	0.17				
CLMH208E052MH208E051		1987		Existing	assumed Mannings N	MH208E052	MH208E051	A01156	IRWD	PVC	{A5311C84-AB75-4F46-829E-14B67A8BA45}	CLMH208E052MH208E051	736.58	711.44	0.666666667	MH208E052	MH208E051			252	CLMH208E052MH208E051	8	0.1088	0.032883	0.08	0.036977	0.08	0.064640	0.10	0.036977	0.08				
CLMH208E053MH208E052		1988		Existing	assumed Mannings N	MH208E053	MH208E052	A01156	IRWD	PVC	{C97D5007-CD85-4B98-937C-4E22F14F80D7}	CLMH208E053MH208E052	742.50	736.78	0.666666667	MH208E053	MH208E052			163	CLMH208E053MH208E052	8	0.0350	0.027064	0.09	0.030433	0.10	0.053199	0.13	0.030433	0.10				
CLMH208E054MH208E053		1988		Existing	assumed Mannings N	MH208E054	MH208E053	A01156	IRWD	PVC	{D755D888-76C7-43B6-BF96-A3A472372120}	CLMH208E054MH208E053	745.92	742.70	0.666666667	MH208E054	MH208E053			50	CLMH208E054MH208E053	8	0.0643	0.027064	0.08	0.030433	0.08	0.053199	0.11	0.030433	0.08				
CLMH208E055MH208E054		1987		Existing	assumed Mannings N	MH208E055	MH208E054	A01156	IRWD	PVC	{168C4F7D-4235-4421-962B-6F6BE44CD600}	CLMH208E055MH208E054	752.44	746.13	0.666666667	MH208E055	MH208E054			118	CLMH208E055MH208E054	8	0.0536	0.027064	0.08	0.030433	0.09	0.053199	0.11	0.030433	0.09				
CLMH208E057MH208E055		1988		Existing	assumed Mannings N	MH208E057	MH208E055	A01446	IRWD	PVC	{C183CF1D-37A0-4CC5-8E1A-273CFE495F8}	CLMH208E057MH208E055	758.40	752.84	0.666666667	MH208E057	MH208E055			261	CLMH208E057MH208E055	8	0.0213	0.020138	0.09	0.022645	0.09	0.039585	0.12	0.022645	0.09				
CLMH208E058MH208E057		2000		Existing	assumed Mannings N	MH208E058	MH208E057	A01446	IRWD	PVC	{C560B6B8-4FA7-4805-9057-BFE942226659}	CLMH208E058MH208E057	773.26	758.50	0.666666667	MH208E058	MH208E057			57	CLMH208E058MH208E057	8	0.2699	0.020138	0.05	0.022645	0.05	0.039585	0.07	0.022645	0.05				
CLMH208E059MH208E058		2000		Existing	assumed Mannings N	MH208E059	MH208E058	A01446	IRWD	PVC	{EC0933CC-6A22-4327-98A7-D85E8C28D62A}	CLMH208E059MH208E058	774.64	773.35	0.666666667	MH208E059	MH208E058			133	CLMH208E059MH208E058	8	0.0097	0.020138	0.11	0.022645	0.11	0.039585	0.15	0.022645	0.11				
CLMH208E060MH208E059		2000		Existing	assumed Mannings N	MH208E060	MH208E059	A01446	IRWD	PVC	{E8F3F628-A902-4F28-A5D5-208E6AD50738}	CLMH208E060MH208E059	776.59	774.84	0.666666667	MH208E060	MH208E059			180	CLMH208E060MH208E059	8	0.0097	0.008377	0.07	0.009420	0.07	0.016466	0.10	0.009420	0.07				
CLMH208E062MH208E061		2000		Existing	assumed Mannings N	MH208E062	MH208E061	A01446	IRWD	PVC	{EBDDED60-7A54-4352-B940-15C60158F5B1}	CLMH208E062MH208E061	801.09	798.29	0.666666667	MH208E062	MH208E061			91	CLMH208E062MH208E061	8	0.0308	0.008377	0.05	0.009420	0.06	0.016466	0.07	0.009420	0.06				
CLMH208E063MH208E062		2000		Existing	assumed Mannings N	MH208E063	MH208E062	A01446	IRWD	PVC	{B20F614B-DBA2-48BC-80A6-40D64F74EA0F}	CLMH208E063MH208E062	803.04	801.20	0.666666667	MH208E063	MH208E062			130	CLMH208E063MH208E062	8	0.0142	0.008377	0.06	0.009420	0.07	0.016466	0.09	0.009420	0.07				
CLMH208E064MH208E063		2000		Existing	assumed Mannings N	MH208E064	MH208E063	A01446	IRWD	PVC	{13A9FFCD-F34B-4064-8DAE-83BB92785702}	CLMH208E064MH208E063	804.29	803.15	0.666666667	MH208E064	MH208E063			119	CLMH208E064MH208E063	8	0.0096	0.006494	0.06	0.007303	0.07	0.012766	0.09	0.007303	0.07				
CLMH208E065MH208E064		2000		Existing	assumed Mannings N	MH208E065	MH208E064	A01446	IRWD	PVC	{15D4995D-E9EF-42EA-810A-BDB09DB7A3DF}	CLMH208E065MH208E064	806.04	804.40	0.666666667	MH208E065	MH208E064			169	CLMH208E065MH208E064	8	0.0097	0.004560	0.05	0.005128	0.06	0.008963	0.07	0.005128	0.06				
CLMH208E066MH208E059		2000		Existing	assumed Mannings N	MH208E066	MH208E059	A01446	IRWD	PVC	{09163F5E-4207-4CD9-96E6-219756873D4C}	CLMH208E066MH208E059	778.46	774.84	0.666666667	MH208E066	MH208E059			111	CLMH208E066MH208E059	8	0.0328	0.011761	0.06	0.013225	0.07	0.023119	0.09	0.013225	0.07				
CLMH208E067MH208E066		2000		Existing	assumed Mannings N	MH208E067	MH208E066	A01446	IRWD	PVC	{80272630-28E9-4562-945E-9C9B96A22F2}	CLMH208E067MH208E066	779.82	778.55	0.666666667	MH208E067	MH208E066			130	CLMH208E067MH208E066

| | | |

CLMH208W019MH207N037		1983		Existing	assumed Mannings N	MH208W019	MH207N037		A01306	IRWD	PVC	{FB2E1A9E-A905-4432-ADBD-FEA613456F9}	CLMH208W019MH207N037	677.60	668.09	0.833333333	MH208W019	MH207W037			396	CLMH208W019MH207N037	10	0.0240	0.066054	0.12	0.074067	0.13	0.129476	0.16	0.078349	0.13		
CLMH208W020MH208W019		1986		Existing	assumed Mannings N	MH208W020	MH208W019		A01149	IRWD	PVC	{E7E738C1-3DDB-4566-8DE7-833595C1240E}	CLMH208W020MH208W019	679.96	677.65	0.833333333	MH208W020	MH208W019			233	CLMH208W020MH208W019	10	0.0099	0.054812	0.13	0.061420	0.14	0.107313	0.18	0.065706	0.14		
CLMH208W021MH208W020		1986		Existing	assumed Mannings N	MH208W021	MH208W020		A01149	IRWD	PVC	{9E04A11D-245E-4AF1-93CA-9ECDA1540AAE}	CLMH208W021MH208W020	682.34	680.16	0.833333333	MH208W021	MH208W020			218	CLMH208W021MH208W020	10	0.0100	0.050459	0.12	0.056526	0.13	0.098759	0.17	0.060813	0.14		
CLMH208W022MH208W021		1983		Existing	assumed Mannings N	MH208W022	MH208W021		A01149	IRWD	PVC	{4FDD070C-26AB-498B-953D-BA498E208FBF}	CLMH208W022MH208W021	692.58	683.86	0.666666667	MH208W022	MH208W021			122	CLMH208W022MH208W021	8	0.0717	0.004853	0.03	0.005457	0.04	0.009540	0.05	0.005457	0.04		
CLMH208W023MH208W022		1986		Existing	assumed Mannings N	MH208W023	MH208W022		A01149	IRWD	PVC	{FB3E2E5F-A0CB-4B20-B430-F7DC14AF113E}	CLMH208W023MH208W022	697.59	692.68	0.666666667	MH208W023	MH208W022			246	CLMH208W023MH208W022	8	0.0200	0.004853	0.05	0.005457	0.05	0.009540	0.06	0.005457	0.05		
CLMH208W024MH208W020		1984		Existing	assumed Mannings N	MH208W024	MH208W020	ERROR 23, assumed UpE	A01149	IRWD	PVC	{A9625118-4C5C-4106-8E24-FBADD06A55F}	CLMH208W024MH208W020	689.17	680.27	0.666666667	MH208W024	MH208W020			151	CLMH208W024MH208W020	8	0.0589	0.004354	0.03	0.004896	0.04	0.008556	0.05	0.004896	0.04		
CLMH208W025MH208W024		1986		Existing	assumed Mannings N	MH208W025	MH208W024	ERROR 23	A01149	IRWD	PVC	{181F188D-993B-4149-BACF-928A83DE759C}	CLMH208W025MH208W024	693.09	689.17	0.666666667	MH208W025	MH208W024			196	CLMH208W025MH208W024	8	0.0200	0.004372	0.04	0.004921	0.04	0.008586	0.05	0.004921	0.04		
CLMH208W026MH208W021		1986		Existing	assumed Mannings N	MH208W026	MH208W021		A01149	IRWD	PVC	{48DE597D-C4C2-409D-9A80-578A8493A1F5}	CLMH208W026MH208W021	684.13	682.39	0.833333333	MH208W026	MH208W021			175	CLMH208W026MH208W021	10	0.0100	0.045607	0.12	0.051069	0.12	0.089219	0.16	0.055358	0.13		
CLMH208W027MH208W026		1984		Existing	assumed Mannings N	MH208W027	MH208W026		A01303	IRWD	PVC	{139F0BC5-329D-456E-9A08-B4820C0EE3EB}	CLMH208W027MH208W026	684.86	684.33	0.833333333	MH208W027	MH208W026			37	CLMH208W027MH208W026	10	0.0143	0.045607	0.11	0.051069	0.11	0.089219	0.15	0.055359	0.12		
CLMH208W028MH208W027		1992		Existing	assumed Mannings N	MH208W028	MH208W027		A01449	IRWD	PVC	{6D937340-1D5F-4669-A8F2-DA2037DC5870}	CLMH208W028MH208W027	696.41	685.01	0.666666667	MH208W028	MH208W027			198	CLMH208W028MH208W027	8	0.0576	0.002728	0.03	0.003068	0.03	0.005365	0.04	0.003068	0.03		
CLMH208W029MH208W028		1986		Existing	assumed Mannings N	MH208W029	MH208W028		A01149	IRWD	PVC	{9324A554-0D30-41BF-A070-0408351977724}	CLMH208W029MH208W028	700.35	696.51	0.666666667	MH208W029	MH208W028			193	CLMH208W029MH208W028	8	0.0199	0.002728	0.04	0.003068	0.04	0.005365	0.05	0.003068	0.04		
CLMH208W030MH208W001		1986		Existing	assumed Mannings N	MH208W030	MH208W001		A01149	IRWD	PVC	{3138987D-C01F-4593-825B-4D0FDDE877D7}	CLMH208W030MH208W001	688.83	686.67	0.833333333	MH208W030	MH208W001			109	CLMH208W030MH208W001	10	0.0094	0.030635	0.10	0.034239	0.11	0.059850	0.14	0.038530	0.11		
CLMH208W031MH208W030		1986		Existing	assumed Mannings N	MH208W031	MH208W030		A01154	IRWD	VCP	{942A8305-4B44-4881-8F2A-7C8473B1EF74}	CLMH208W031MH208W030	689.23	688.92	0.666666667	MH208W031	MH208W030			42	CLMH208W031MH208W030	8	0.0074	0.016513	0.11	0.018422	0.11	0.032208	0.15	0.018422	0.11		
CLMH208W032MH208W031		1986		Existing	assumed Mannings N	MH208W032	MH208W031		A01154	IRWD	VCP	{0473CE1F-4D8F-4C99-AE26-DAF7E06E1110}	CLMH208W032MH208W031	719.15	689.44	0.666666667	MH208W032	MH208W031			83	CLMH208W032MH208W031	8	0.3809	0.016513	0.04	0.018422	0.04	0.032208	0.06	0.018422	0.04		
CLMH208W033MH208W032		1986		Existing	assumed Mannings N	MH208W033	MH208W032		A01154	IRWD	VCP	{9A3B61E0-79F8-408E-81C7-68B7D4EDCDCD}	CLMH208W033MH208W032	720.34	719.35	0.666666667	MH208W033	MH208W032			98	CLMH208W033MH208W032	8	0.0101	0.016513	0.10	0.018422	0.10	0.032208	0.13	0.018422	0.10		
CLMH208W034MH208W033		1986		Existing	assumed Mannings N	MH208W034	MH208W033		A01154	IRWD	PVC	{3BA30F98-53B8-4919-ADE4-6D9A235E1420}	CLMH208W034MH208W033	721.50	720.44	0.666666667	MH208W034	MH208W033			48	CLMH208W034MH208W033	8	0.0221	0.001761	0.03	0.001981	0.03	0.003463	0.04	0.001981	0.03		
CLMH208W035MH208W033		1983		Existing	assumed Mannings N	MH208W035	MH208W033		A01154	IRWD	PVC	{B180F289-3410-4CDA-A3EF-C174049FA286}	CLMH208W035MH208W033	723.53	720.44	0.666666667	MH208W035	MH208W033			23	CLMH208W035MH208W033	8	0.1369	0.014751	0.05	0.016442	0.05	0.028745	0.07	0.016442	0.05		
CLMH208W036MH208W035		1986		Existing	assumed Mannings N	MH208W036	MH208W035		A01154	IRWD	PVC	{B7FC0355-CDF2-4F0D-A471-515F610483EC}	CLMH208W036MH208W035	727.09	723.72	0.666666667	MH208W036	MH208W035			86	CLMH208W036MH208W035	8	0.0394	0.001467	0.02	0.001649	0.02	0.002886	0.03	0.001649	0.02		
CLMH208W037MH208W036		1986		Existing	assumed Mannings N	MH208W037	MH208W036		A01154	IRWD	PVC	{95D9ECCD-320B-4D64-998B-F85E7A3FA855}	CLMH208W037MH208W036	728.90	727.29	0.666666667	MH208W037	MH208W036			80	CLMH208W037MH208W036	8	0.0201	0.000621	0.02	0.000699	0.02	0.001222	0.02	0.000699	0.02		
CLMH208W038MH208W035		1986		Existing	assumed Mannings N	MH208W038	MH208W035		A01154	IRWD	PVC	{4D6B6BF6-10ED-4C7C-825A-EFD2398DAC28}	CLMH208W038MH208W035	726.13	723.72	0.666666667	MH208W038	MH208W035			140	CLMH208W038MH208W035	8	0.0172	0.013285	0.08	0.014792	0.08	0.025859	0.11	0.014792	0.08		
CLMH208W039MH208W038		1983		Existing	assumed Mannings N	MH208W039	MH208W038		A01154	IRWD	PVC	{65C6B08D-0FFF-4C30-B175-75C66A730D56}	CLMH208W039MH208W038	728.54	726.33	0.666666667	MH208W039	MH208W038			111	CLMH208W039MH208W038	8	0.0199	0.001537	0.03	0.001728	0.03	0.003021	0.04	0.001728	0.03		
CLMH208W040MH208W039		1986		Existing	assumed Mannings N	MH208W040	MH208W039		A01154	IRWD	PVC	{4BDCF017-1C4A-4019-B24D-2B1E517AF75E}	CLMH208W040MH208W039	731.28	726.33	0.666666667	MH208W040	MH208W039			33	CLMH208W040MH208W039	8	0.1500	0.007241	0.03	0.007996	0.04	0.013978	0.05	0.007996	0.04		
CLMH208W041MH208W040		1986		Existing	assumed Mannings N	MH208W041	MH208W040		A01154	IRWD	PVC	{D13E65CE-EADD-49A0-855F-B71392DAD656}	CLMH208W041MH208W040	735.51	731.38	0.666666667	MH208W041	MH208W040			128	CLMH208W041MH208W040	8	0.0322	0.007241	0.05	0.007996	0.05	0.013978	0.07	0.007996	0.05		
CLMH208W042MH208W041		1986		Existing	assumed Mannings N	MH208W042	MH208W041		A01154	IRWD	PVC	{E2878691-2BF0-4D69-9787-83CB81590A37}	CLMH208W042MH208W041	739.03	735.71	0.666666667	MH208W042	MH208W041			86	CLMH208W042MH208W041	8	0.0387	0.005924	0.04	0.006662	0.05	0.011644	0.06	0.006662	0.05		
CLMH208W043MH208W042		1986		Existing	assumed Mannings N	MH208W043	MH208W042		A01154	IRWD	PVC	{61438701-0C4D-46D6-83DA-D90986221851}	CLMH208W043MH208W042	741.04	739.22	0.666666667	MH208W043	MH208W042			68	CLMH208W043MH208W042	8	0.0268	0.001520	0.03	0.001709	0.03	0.002987	0.03	0.001709	0.03		
CLMH208W044MH208W042		1986		Existing	assumed Mannings N	MH208W044	MH208W042		A01154	IRWD	PVC	{3BFDA054-AB2D-4858-8413-54358DDD47D5}	CLMH208W044MH208W042	742.39	739.22	0.666666667	MH208W044	MH208W042			172	CLMH208W044MH208W042	8	0.0185	0.004214	0.04	0.004739	0.05	0.008283	0.06	0.004739	0.05		
CLMH208W045MH208W044		1983		Existing	assumed Mannings N	MH208W045	MH208W044		A01154	IRWD	PVC	{AD3903F1-1623-4A66-A9F6-E82EA66CBF5F}	CLMH208W045MH208W044	744.70	742.48	0.666666667	MH208W045	MH208W044			71	CLMH208W045MH208W044	8	0.0313	0.002763	0.03	0.003106	0.03	0.005431	0.04	0.003106	0.03		
CLMH208W046MH208W044		1983		Existing	assumed Mannings N	MH208W046	MH208W044		A01154	IRWD	PVC	{58F23831-6289-4EAA-819B-4DF5807BDE8B}	CLMH208W046MH208W044	743.88	742.48	0.666666667	MH208W046	MH208W044			156	CLMH208W046MH208W044	8	0.0090	0.001452	0.03	0.001632	0.03	0.002852	0.04	0.001632	0.03		
CLMH208W047MH208W046		1986		Existing	assumed Mannings N	MH208W047	MH208W046		A01154	IRWD	PVC	{7F33E731-4E9F-4E4A-B72F-C3E3222EA14}	CLMH208W047MH208W046	746.39	744.08	0.666666667	MH208W047	MH208W046			85	CLMH208W047MH208W046	8	0.0370	0.001452	0.02	0.001632	0.02	0.002852	0.03	0.001632	0.02		
CLMH208W048MH208W038		1986		Existing	assumed Mannings N	MH208W048	MH208W038		A01154	IRWD	PVC	{07C4EE9B-D485-42B5-91D8-5FADB11C2C3E}	CLMH208W048MH208W038	733.55	726.33	0.666666667	MH208W048	MH208W038			108	CLMH208W048MH208W038	8	0.0670	0.004507	0.03	0.005068	0.04	0.008860	0.05	0.005068	0.04		
CLMH208W049MH208W048		1986		Existing	assumed Mannings N	MH208W049	MH208W048		A01154	IRWD	PVC	{1831CC1A-FC87-49ED-A986-C38D5816F59}	CLMH208W049MH208W048	734.15	733.76	0.666666667	MH208W049	MH208W048			79	CLMH208W049MH208W048	8	0.0049	0.002556	0.05	0.002874	0.05	0.005025	0.06	0.002874	0.05		
CLMH208W050MH208W049		1986		Existing	assumed Mannings N	MH208W050	MH208W049		A01154	IRWD	PVC	{033E5331-2207-430E-8F3F-1FF14CD29F39}	CLMH208W050MH208W049	736.21	734.35	0.666666667	MH208W050	MH208W049			153	CLMH208W050MH208W049	8	0.0121	0.002556	0.04	0.002874	0.04	0.005025	0.05	0.002874	0.04		
CLMH208W051MH208W050		1986		Existing	assumed Mannings N	MH208W051	MH208W050		A01154	IRWD	PVC	{F7E64E9D-CCD9-4D03-9A9C-4497FFD72870}	CLMH208W051MH208W050	738.96	736.30	0.666666667	MH208W051	MH208W050			133	CLMH208W051MH208W050	8	0.0201	0.002556	0.03	0.002874	0.04	0.005025	0.05	0.002874	0.04		
CLMH208W052MH208W030		1986		Existing	assumed Mannings N	MH208W052	MH208W030		A01154	IRWD	VCP	{8400AE44-D8D2-47EB-B7DC-45289A73F494}	CLMH208W052MH208W030	690.64	688.92	0.666666667	MH208W052	MH208W030			182	CLMH208W052MH208W030	8	0.0095	0.014123	0.09	0.015816	0.10	0.027641	0.13	0.020108	0.11		
CLMH208W053MH208W052		1986		Existing	assumed Mannings N	MH208W053	MH208W052		A01327	IRWD	VCP	{D72C1B84-863C-4324-A249-0699ABABA1DC}	CLMH208W053MH208W052	692.39	690.96	0.666666667	MH208W053	MH208W052			155	CLMH208W053MH208W052	8	0.0092	0.014109	0.09	0.015807	0.10	0.027626	0.13	0.015807	0.10		
CLMH208W054MH208W053		1986		Existing	assumed Mannings N	MH208W054	MH208W053		A01327	IRWD	VCP	{651B9CA3-8421-43B4-B5D8-25CD2D6D4315}	CLMH208W054MH208W053	692.94	692.48	0.666666667	MH208W054	MH208W053			49	CLMH208W054MH208W053	8	0.0093	0.014136	0.09	0.015853	0.10	0.027707	0.12	0.014136	0.09		
CLMH208W055MH208W054		1986		Existing	assumed Mannings N	MH208W055	MH208W054		A01327	IRWD	VCP	{E94A41F7-B8AC-443A-998B-EE7E7E5058B}	CLMH208W055MH208W054	693.54	693.14	0.666666667	MH208W055	MH208W054			103	CLMH208W055MH208W054	8	0.0039	0.003559	0.06	0.004002	0.06	0.006995	0.08	0.004002	0.06		
CLMH208W056MH208W055		1986		Existing	assumed Mannings N	MH208W056	MH208W055		A01327	IRWD	VCP	{302FD966-B4F7-4E42-A334-20A53E1ACB22}	CLMH208W056MH208W055	694.05	693.75	0.666666667	MH208W056	MH208W055			76	CLMH208W056MH208W055	8	0.0039	0.002713	0.05	0.003051	0.05	0.005331	0.07	0.003051	0.05		
CLMH208W057MH208W056		1983		Existing	assumed Mannings N	MH208W057	MH208W056		A01327	IRWD	VCP	{6F06E3F7-F3AC-4263-B7DC-71F9F85CBB1A}	CLMH208W057MH208W056	699.36	694.26	0.666666667	MH208W057	MH208W056			105	CLMH208W057MH208W056	8	0.0486	0.000899	0.02	0.001015	0.02	0.001765	0.02	0.001011	0.02		
CLMH208W058MH208W056		1986		Existing	assumed Mannings N	MH208W058	MH208W056		A01327	IRWD	VCP	{515FFF49-C1F1-4687-BC06-9D6BBFF87D17}	CLMH208W058MH208W056	696.46	694.26	0.666666667	MH208W058	MH208W056			50	CLMH208W058MH208W056	8	0.0040	0.001814	0.04	0.002040	0.04	0.003566	0.06	0.002040	0.04		
CLMH208W059MH208W058		1983		Existing	assumed Mannings N	MH208W059	MH208W058		A01327	IRWD	VCP	{6A5CBC54-EAC2-47B0-9196-3DCC532482EF}	CLMH208W059MH208W058	699.30	694.55	0.666666667	MH208W059	MH208W058			56	CLMH208W059MH208W058	8	0.0847	0.000675	0.01	0.000758	0.01	0.001325	0.02	0.000758	0.01		
CLMH208W060MH208W058		1986		Existing	assumed Mannings N	MH208W060	MH208W058		A01327	IRWD	VCP	{EEC5B43C-7E85-40D2-BA13-D5C4FA3EC818}	CLMH208W060MH208W058	698.29	694.55	0.666666667	MH208W060	MH208W058			182	CLMH208W060MH208W058	8	0.0205	0.001140	0.02	0.001282	0.02	0.002241	0.03	0.001282	0.02		
CLMH208W061MH208W054		1986		Existing	assumed Mannings N	MH208W061	MH208W054		A01327	IRWD	VCP	{9C863D3F-6867-4E3B-8D59-7918F8356601}	CLMH208W061MH208W054	694.83	693.14	0.666666667	MH208W061	MH208W054			57	CLMH208W061MH208W054	8	0.0298	0.003955	0.06	0.004534	0.06	0.007933	0.08	0.004534	0.06		
CLMH208W062MH208W061		1986		Existing	assumed Mannings N	MH208W062	MH208W061		A01327	IRWD	VCP	{6F685E04-AC19-4CC2-B015-6F65E23360C6}	CLMH208W062MH208W061	696.22	694.92	0.666666667	MH208W062	MH208W061			122	CLMH208W062MH208W061	8	0.0106	0.001313	0.03	0.001476	0.03	0.002581	0.04	0.001476	0.03		
CLMH208W063MH208W061		1986		Existing	assumed Mannings N	MH208W063	MH208W061		A01327	IRWD	VCP	{14681E70-CEDE-405E-A86D-BD35EB719660}	CLMH208W063MH208W061	696.17	694.92	0.666666667	MH208W063	MH208W061			106	CLMH208W063MH208W061	8	0.0118	0.007752	0.07	0.008658	0.07	0.015132	0.09	0.008658	0.07		
CLMH208W064MH208W063		1986		Existing	assumed Mannings N	MH208W064	MH208W063		A01327	IRWD	VCP	{7548C285-DC6E-4457-8DD1-E8F8E51359F9}	CLMH208W064MH208W063	698.80	696.22	0.666666667	MH208W064	MH208W063			93	CLMH208W064MH208W063	8	0.0277	0.001226	0.02	0.001378	0.02	0.002410	0.03	0.001378	0.02		
CLMH208W065MH208W063		1986		Existing	assumed Mannings N	MH208W065	MH208W063		A01327	IRWD	VCP	{0B7D034C-64F0-4F7A-9F70-2AB221A31FE}	CLMH208W065MH208W063	696.83	696.22	0.666666667	MH208W065	MH208W063			51	CLMH208W065MH208W063	8	0.0120	0.000526	0.06	0.007280	0.07	0.012722	0.09	0.007280	0.07		
CLMH208W066MH208W065		1986		Existing	assumed Mannings N	MH208W066	MH208W065		A01327	IRWD	VCP	{CF7F0466-47F0-4C7F-B188-3FC1BE2FBEF7}	CLMH208W066MH208W065	699.27	696.92	0.666666667	MH208W066	MH208W065			74	CLMH208W066MH208W065	8	0.0320	0.001279	0.02	0.001438	0.02	0.002513	0.03	0.001438	0.02		
CLMH208W067MH208W065		1986		Existing	assumed Mannings N	MH208W067	MH208W065		A01327	IRWD	VCP	{9C7E2A02-D99A-4BF9-91B4-8CB1B1752F7}	CLMH208W067MH208W065	698.32	696.92	0.666666667	MH208W067	MH208W065			147	CLMH208W067MH208W065	8	0.0095	0.005248	0.06	0.005842	0.06	0.010209	0.08	0.005842	0.06		
CLMH208W068MH208W067		1986		Existing	assumed Mannings N	MH208W068	MH208W067		A01327	IRWD	VCP	{928FA852-6B78-4384-9F57-999A7720CAA}	CLMH208W068MH208W067	701.44	698.41	0.666666667	MH208W068	MH208W067			147	CLMH208W068MH208W067	8	0.0207	0.001881	0.03	0.002117	0.03	0.003700	0.04	0.002117	0.03		
CLMH208W069MH208W067		1986		Existing	assumed Mannings N	MH208W069	MH208W067		A01327	IRWD	VCP	{73AC81F1-1F85-4694-8F56-60AFFDA701D}	CLMH208W069MH208W067	699.60	698.41	0.666666667	MH208W069	MH208W067			165	CLMH208W069MH208W067	8	0.0072	0.003365	0.05	0.003725	0.05	0.006509	0.07	0.003725	0.05		
CLMH208W070MH208W069		1982		Existing	assumed Mannings N	MH208W070	MH208W069		A01327	IRWD	VCP	{0C1D3644-C9D1-4342-8672-41E23E2E100A}	CLMH208W070MH208W069	702.79	699.71	0.666666667	MH208W070	MH208W069			149	CLMH208W070MH208W069	8	0.0206	0.001262	0.02	0.001419	0.03	0.002478	0.03	0.001419	0.03		
CLMH208W071MH208W069		1982		Existing	assumed Mannings N	MH208W071	MH208W069		A01327	IRWD	VCP	{4558BEB8-38F8-4E67-84D6-EEF4030FFD39}	CLMH208W071MH208W069	703.60	699.71	0.666666667	MH208W071	MH208W069			132	CLMH208W071MH208W069	8	0.0295	0.002103	0.03	0.002306	0.03	0.004030	0.04	0.002306	0.03		
CLMH208W072MH208W052		1986		Existing	assumed Mannings N	MH208W072	MH208W052		A01154	IRWD	VCP	{9D1106F4-A5-4161-88E9-E7A04E8B1AB3}	CLMH208W072MH208W052	694.18	690.64	0.666666667	MH208W072	MH208W052			337	CLMH208W072MH208W052	8	0.0105	0.000033	0.05	0.000041	0.05	0.000073	0.07	0.000925	0.09		
CLMH208W073MH208W072		1986		Existing	assumed Mannings N	MH208W073	MH208W072		A01154	IRWD	VCP	{0DED6987-E6AA-4105-8F2F-A1F6BF68FAE6}	CLMH208W073MH208W072	697.75	694.38	0.666666667	MH208W073	MH208W072			341	CLMH208W073MH208W072	8	0.0099	0.000062	0.00	0.000065	0.00	0.000074	0.00	0.000925	0.08		
CLMH208W074MH208W073		1984		Existing	assumed Mannings N	MH208W074	MH208W073		A01327	IRWD	VCP	{007DB1A5-AC0A-438B-B460-EE1C68FC6B8}	CLMH208W074MH208W073	700.14	697.95	0.666666667	MH208W074	MH208W073			227	CLMH208W074MH208W073	8	0.0097	0.000061	0.00	0.000063	0.00	0.000074	0.00	0.000925	0.08		
CLMH208W075MH208W074		1986		Existing	assumed Mannings N	MH208W075	MH208W074		A01306	IRWD	PVC	{6E1D13FB-E1AC-4625-A285-DA5C4DA363C2}	CLMH208W075MH208W074	687.89	670.34	0.666666667	MH208W075	MH208W074			227	CLMH208W075MH208W074	12	0.0412	0.000226	0.01	0.000248	0.01	0.000404	0.01	0.181193	0.22	0.103660	0.17
CLMH208W076MH208W075		1986		Existing	assumed Mannings N	MH208W076	MH208W075		A01132	IRWD	PVC	{16F3FDE2-A33E-4BDA-87AF-40D5D8686E1E}	CLMH208W076MH208W075	693.00	688.09	0.666666667	MH208W076	MH208W075			108	CLMH208W076MH208W075	8	0.0454	0.072727	0.14	0.081694	0.14	0.142800	0.19	0.081694	0.14		
CLMH208W077MH208W076		1986		Existing	assumed Mannings N	MH208W077	MH208W076		A01132	IRWD	PVC	{19DC2974-C72B-437A-9F40-805933303A465}	CLMH208W077MH208W076	704.29	693.20	0.666666667	MH208W077	MH208W076			349	CLMH208W077MH208W076	8	0.0318	0.043129	0.12	0.048465	0.12	0.084716	0.16	0.048465	0.12		
CLMH208W078MH208W077		1985		Existing	assumed Mannings N	MH208W078	MH208W077		A01132	IRWD	PVC	{10A7E18E-7C1A-4005-AA70-D25E7758A505}	CLMH208W078MH208W077	707.00	704.50	0.666666667	MH208W078	MH208W077			284	CLMH208W078MH208W077	8	0.0088	0.026825	0.13	0.030132	0.13	0.052668	0.17	0.030132	0.13		
CLMH208W079MH208W078		1985		Existing	assumed Mannings N	MH208W079	MH208W078		A01132	IRWD	PVC	{B3CCDA19-06CD-4CEC-A001-8EBF863B61C}	CLMH208W079MH208W078	708.29	707.20	0.666666667	MH208W079	MH208W078			95	CLMH208W079MH208W078	8	0.0114	0.026825	0.12	0.030132	0.12	0.052668	0.16	0.030132	0.12		
CLMH208W080MH208W079		1983		Existing	assumed Mannings N	MH208W080	MH208W079		A01132	IRWD	PVC	{2F983B12-0A61-4DDD-82D4-22D883BD56AF}	CLMH208W080MH208W079	708.29	707.20	0.666666667	MH208W080	MH208W079			140	CLMH208W080MH208W079	8	0.0114	0.026825	0.12	0.030132	0.12	0.052668	0.16	0.030132	0.12		
CLMH208W081MH208W215		1985		Existing	assumed Mannings N	MH208W081	MH208W215		A01132	IRWD	PVC	{2F983B12-0A61-4DDD-82D4-22D883BD56AF}	CLMH208W081MH208W215	714.15	709.75	0.666666667	MH208W081	MH208W215			176	CLMH208W081MH208W215	8	0.0250	0.012090	0.07	0.013595	0.07	0.023764	0.09	0.013595	0.07		
CLMH208W082MH208W081		1985		Existing	assumed Mannings N	MH208W082	MH208W081		A01132	IRWD	PVC	{AC00FB86-3D4D-4C86-8D78-F8AC36AF5994}	CLMH208W082MH208W081	716.13	714.34	0.666666667	MH208W082	MH208W081			178	CLMH208W082MH208W081	8	0.0100	0.012090	0.08	0.013595	0.09	0.023764	0.11	0.013595	0.09		
CLMH208W083MH208W077		1985		Existing	assumed Mannings N	MH208W083	MH208W077		A01132	IRWD	PVC	{8F4D8B59-AF6F-417E-B874-E0EAF041E8BC}	CLMH208W083MH208W077	703.78	693.20	0.666666667	MH208W083	MH208W077			125	CLMH208W083MH208W077	8	0.0849	0.029598	0.08	0.033229	0.08	0.058084	0.11	0.033229	0.08		
CLMH208W084MH208W083		1983		Existing	assumed Mannings N	MH208W084	MH208W083		A01132	IRWD	PVC	{5DA791A9-93A3-40C1-89E3-F06B0554717}	CLMH208W084MH208W083	717.17	703.89	0.666666667	MH208W084	MH208W083			184	CLMH208W084MH208W083	8	0.0722	0.029598	0.08	0.033229	0.08	0.058084	0.11	0.033229	0.08		
CLMH208W085MH208W084		1985		Existing	assumed Mannings N	MH208W085	MH208W084		A01132	IRWD	PVC	{D4BCEE4E-F653-430A-9728-38CBC3D22F78}	CLMH208W085MH208W084	723.53	717.38	0.666666667	MH208W085	MH208W084			173	CLMH208W085MH208W084	8	0.0356	0.029598	0.09	0.033229	0.10	0.058084	0.13	0.033229	0.10		
CLMH208W086MH208W085		1985		Existing	assumed Mannings N	MH208W086	MH208W085		A01132	IRWD	PVC	{A962EC1F-A2D7-4DF4-BA59-CC462E53CD12}	CLMH208W086MH208W085	725.34	723.64	0.666666667	MH208W086	MH208W085			172	CLMH208W086MH208W085	8	0.0099	0.029598	0.13	0.033229	0.14	0.058084	0.18	0.033229	0.14		
CLMH208W087MH208W086		1985		Existing	assumed Mannings N	MH208W087	MH208W086		A01132	IRWD	PVC	{2246F930-1BB1-4C5C-B002-3E25F5EEF5F}	CLMH208W087MH208W086	727.48	725.45	0.666666667	MH208W087	MH208W086			204	CLMH208W087MH208W086	8	0.0099	0.029598	0.13	0.033229	0.14	0.058084	0.18	0.033229	0.14		
CLMH208W088MH208W087		1985		Existing	assumed Mannings N	MH208W088	MH208W087		A01132	IRWD	PVC	{EA7F1002-9B13-4605-830A-D1BF817853AC}	CLMH208W088MH208W087	731.01	727.59	0.666666667	MH208W088

| | | |

CLMH2095017MH2095018			2000		Existing	assumed Mannings N	MH2095017	MH2095018		A01412	IRWD	PVC	{47D8A57A-232S-4026-85F8-89F1F4EA5C90}	CLMH2095017MH2095018	735.88	733.90	0.666666667	MH2095017	MH2095018					164	CLMH2095017MH2095018	8	0.0121	0.002125	0.04	0.002125	0.04	0.003716	0.05	0.002125	0.04				
CLMH2095018MH2095019			2000		Existing	assumed Mannings N	MH2095018	MH2095019		A01412	IRWD	PVC	{42DED4A1-41FE-468C-979C-994A4D7D741E}	CLMH2095018MH2095019	733.70	733.48	0.666666667	MH2095018	MH2095019					46	CLMH2095018MH2095019	8	0.0048	0.002125	0.04	0.002125	0.04	0.003716	0.05	0.002125	0.04				
CLMH2095019MH2095020			2000		Existing	assumed Mannings N	MH2095019	MH2095020		A01412	IRWD	PVC	{50B21F96-F888-4382-B83C-4159BC892515}	CLMH2095019MH2095020	733.28	732.50	0.666666667	MH2095019	MH2095020					153	CLMH2095019MH2095020	8	0.0051	0.002125	0.04	0.002125	0.04	0.003716	0.05	0.002125	0.04				
CLMH2095020MH2095021			2000		Existing	assumed Mannings N	MH2095020	MH2095021		A01412	IRWD	PVC	{EC3B1269-842B-489F-9FF1-C455AFF9F90F}	CLMH2095020MH2095021	732.40	731.54	0.666666667	MH2095020	MH2095021					172	CLMH2095020MH2095021	8	0.0050	0.002125	0.04	0.002125	0.04	0.003716	0.05	0.002125	0.04				
CLMH2095021MH2095022			2000		Existing	assumed Mannings N	MH2095021	MH2095022		A01412	IRWD	PVC	{65EAD92A-AB2B-44D9-8093-DF5386C58993}	CLMH2095021MH2095022	731.45	729.04	0.666666667	MH2095021	MH2095022					65	CLMH2095021MH2095022	8	0.0372	0.010578	0.06	0.010578	0.06	0.018490	0.07	0.036848	0.10				
CLMH2095022MH2095023			2000		Existing	assumed Mannings N	MH2095022	MH2095023		A01412	IRWD	PVC	{B7322C2F-5F88-4313-8F0A-55174FBFB374}	CLMH2095022MH2095023	728.95	726.21	0.666666667	MH2095022	MH2095023					67	CLMH2095022MH2095023	8	0.0409	0.010578	0.06	0.010578	0.06	0.018490	0.07	0.036848	0.10				
CLMH2095023MH2095003			2000		Existing	assumed Mannings N	MH2095023	MH2095003		A01412	IRWD	PVC	{EBB62477-BA6E-45BA-88EC-3CDC345512638}	CLMH2095023MH2095003	725.64	725.20	1.250000000	MH2095023	MH2095003					187	CLMH2095023MH2095003	15	0.0024	0.038094	0.09	0.038094	0.09	0.066586	0.12	0.187000	0.19				
CLMH2095031MH2095005			1992		Existing	assumed Mannings N	MH2095031	MH2095005		A01555	IRWD	VCP	{CB866B76-163B-4242-93F6-3B72E14D6077}	CLMH2095031MH2095005	740.00	733.95	0.833333333	MH2095031	MH2095005					75	CLMH2095031MH2095005	10	0.0812	0.025713	0.06	0.025713	0.06	0.044945	0.07	0.037593	0.07				
CLMH2095036MH2095037			2010		Existing	assumed Mannings N	MH2095036	MH2095037		A01845	IRWD	PVC	{6553E19E-95B4-45B1-99F8-44A04AC5FAD2}	CLMH2095036MH2095037	794.67	775.15	0.666666667	MH2095036	MH2095037					245	CLMH2095036MH2095037	8	0.0800	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013919	0.05				
CLMH2095037MH2095038			2010		Existing	assumed Mannings N	MH2095037	MH2095038		A01845	IRWD	PVC	{6A6B94B7-816E-444A-8C12-B8DE00A33FBC}	CLMH2095037MH2095038	775.05	764.53	0.666666667	MH2095037	MH2095038					196	CLMH2095037MH2095038	8	0.0537	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013919	0.06				
CLMH2095038MH2095040			2010		Existing	assumed Mannings N	MH2095038	MH2095040		A01845	IRWD	PVC	{ADEDFAA1-ED9F-41CC-B4C5-E45F625A2515}	CLMH2095038MH2095040	764.33	762.90	0.666666667	MH2095038	MH2095040					178	CLMH2095038MH2095040	8	0.0080	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013919	0.09				
CLMH2095039MH2095015			2006		Existing	assumed Mannings N	MH2095039	MH2095015		A01845	IRWD	PVC	{6D7BFE68-B82E-4EE3-A57A-2F27B7A7D227}	CLMH2095039MH2095015	751.75	743.21	0.666666667	MH2095039	MH2095015					173	CLMH2095039MH2095015	8	0.0494	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.022357	0.08				
CLMH2095040MH2095041			2010		Existing	assumed Mannings N	MH2095040	MH2095041		A01845	IRWD	PVC	{DE3F C6C1-D699-46DD-B8F1-05E3DB5A363C}	CLMH2095040MH2095041	762.70	757.96	0.666666667	MH2095040	MH2095041					119	CLMH2095040MH2095041	8	0.0400	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013919	0.06				
CLMH2095041MH2095039			2006		Existing	assumed Mannings N	MH2095041	MH2095039		A01845	IRWD	PVC	{5E56F14C-46EE-4418-88A9-B9B675C9170A}	CLMH2095041MH2095039	757.80	751.95	0.666666667	MH2095041	MH2095039					146	CLMH2095041MH2095039	8	0.0400	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.022357	0.08				
CLMH2095043MH2095004			2004		Existing	assumed Mannings N	MH2095043	MH2095004		A01777	IRWD	VCP	{56C4AC53-20DE-49FC-94C3-83815120956B}	CLMH2095043MH2095004	715.73	713.20	1.250000000	MH2095043	MH2095004					265	CLMH2095043MH2095004	15	0.0095	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH2095044MH2095046			2006		Existing	assumed Mannings N	MH2095044	MH2095046		A01777	IRWD	VCP	{AD76E5A6-88E9-41F3-BCCD-92EF9FEA6F25}	CLMH2095044MH2095046	720.75	716.44	1.250000000	MH2095044	MH2095046					366	CLMH2095044MH2095046	15	0.0118	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH2095045MH2095044			2006		Existing	assumed Mannings N	MH2095045	MH2095044		A01777	IRWD	VCP	{E14C058E-660F-461C-8733-566792E3E7AF}	CLMH2095045MH2095044	723.03	720.81	1.250000000	MH2095045	MH2095044					188	CLMH2095045MH2095044	15	0.0118	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH2095046MH2095043			2006		Existing	assumed Mannings N	MH2095046	MH2095043		A01777	IRWD	VCP	{B7D5CD97-BA5E-4A2E-9FC4-6232976754B}	CLMH2095046MH2095043	716.34	715.93	1.250000000	MH2095046	MH2095043					107	CLMH2095046MH2095043	15	0.0038	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH2095047MH2095048			2002		Existing	assumed Mannings N	MH2095047	MH2095048		A01761	IRWD	PVC	{486E8DF1-6FD7-42B1-B8E6-C6A4965EAEA7}	CLMH2095047MH2095048	737.92	737.35	0.666666667	MH2095047	MH2095048					144	CLMH2095047MH2095048	8	0.0040	0.001768	0.04	0.001768	0.04	0.003091	0.05	0.001768	0.04				
CLMH2095048MH2095049			2002		Existing	assumed Mannings N	MH2095048	MH2095049		A01761	IRWD	PVC	{409C9DDA-ECF6-4F7A-BD9E-30E1CE802D1D}	CLMH2095048MH2095049	737.15	736.66	0.666666667	MH2095048	MH2095049					125	CLMH2095048MH2095049	8	0.0039	0.001768	0.04	0.001768	0.04	0.003091	0.05	0.001768	0.04				
CLMH2095049MH2095017			2004		Existing	assumed Mannings N	MH2095049	MH2095017		A01412	IRWD	PVC	{4883B85E-2670-4744-AE53-B4E5A90EFC58}	CLMH2095049MH2095017	736.21	735.97	0.666666667	MH2095049	MH2095017					37	CLMH2095049MH2095017	8	0.0065	0.002125	0.04	0.002125	0.04	0.003716	0.05	0.002125	0.04				
CLMH2095050MH2095051			2007		Existing	assumed Mannings N	MH2095050	MH2095051		A0018845A	IRWD	PVC	{D8568EF5-176-4B49-BFDE-CB344BB71903}	CLMH2095050MH2095051	776.26	766.03	0.666666667	MH2095050	MH2095051					234	CLMH2095050MH2095051	8	0.0438	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.038438	0.05				
CLMH2095051MH2095041			2007		Existing	assumed Mannings N	MH2095051	MH2095041		A0018845A	IRWD	PVC	{0533C5D0-E065-41E9-97C2-9E6C7E090903}	CLMH2095051MH2095041	765.83	757.96	0.666666667	MH2095051	MH2095041					173	CLMH2095051MH2095041	8	0.0239	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.038438	0.06				
CLMH2095052MH2095014			1995		Existing	assumed Mannings N	MH2095052	MH2095014		A01165	IRWD	PVC	{85BBA07C-225D-4A9D-B0A2-ABE8D3A7205B}	CLMH2095052MH2095014	746.78	744.68	0.833333333	MH2095052	MH2095014					120	CLMH2095052MH2095014	10	0.0175	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.113369	0.16				
CLMH2095053MH2095052			1995		Existing	assumed Mannings N	MH2095053	MH2095052		A01165	IRWD	PVC	{8800A016-3454-4500-8D3C-AF1D0A3C0188}	CLMH2095053MH2095052	750.48	746.98	0.833333333	MH2095053	MH2095052					87	CLMH2095053MH2095052	10	0.0402	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.101484	0.12				
CLMH209W001MH209W006			2000		Existing	assumed Mannings N	MH209W001	MH209W006		T13932	IRWD	PVC	{89E9CC1D-7B02-437F-A640-B1AB68941893}	CLMH209W001MH209W006	735.46	732.53	1.000000000	MH209W001	MH209W006					318	CLMH209W001MH209W006	12	0.0092	0.000324	0.01	0.000402	0.01	0.000703	0.01	0.000402	0.01				
CLMH209W002MH209W001			1990		Existing	assumed Mannings N	MH209W002	MH209W001		A01147	IRWD	PVC	{FF05E6AE-EDF4-4489-B7F9-AB3BFE70565E}	CLMH209W002MH209W001	740.76	735.65	1.000000000	MH209W002	MH209W001					292	CLMH209W002MH209W001	12	0.0175	0.000324	0.01	0.000403	0.01	0.000704	0.01	0.000403	0.01				
CLMH209W003MH209W002			1990		Existing	assumed Mannings N	MH209W003	MH209W002		A01147	IRWD	PVC	{561C162E-C95E-4C1F-B4AE-539BBF99C1DE}	CLMH209W003MH209W002	742.53	740.96	1.000000000	MH209W003	MH209W002					330	CLMH209W003MH209W002	12	0.0048	0.000324	0.01	0.000403	0.01	0.000704	0.01	0.000403	0.01				
CLMH209W004MH209W003			1990		Existing	assumed Mannings N	MH209W004	MH209W003		A01147	IRWD	PVC	{47D64149-E4A4-4E2F-AA83-EF4120TE6B0B}	CLMH209W004MH209W003	744.03	742.72	1.000000000	MH209W004	MH209W003					223	CLMH209W004MH209W003	12	0.0059	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH209W005MH209W004			1990		Existing	assumed Mannings N	MH209W005	MH209W004		A01147	IRWD	PVC	{FE60CCB8-8AF7-471C-A264-FC3DBA2FA5F0}	CLMH209W005MH209W004	745.34	744.23	1.000000000	MH209W005	MH209W004					188	CLMH209W005MH209W004	12	0.0059	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH209W006MH209W007			2000		Existing	assumed Mannings N	MH209W006	MH209W007		T13932	IRWD	PVC	{4E179994-6410-42C6-AD06-BDF3AE79ED1A}	CLMH209W006MH209W007	732.34	727.13	1.000000000	MH209W006	MH209W007					310	CLMH209W006MH209W007	12	0.0168	0.013932	0.05	0.013932	0.05	0.003034	0.07	0.017354	0.05				
CLMH209W027MH209W026			2000		Existing	assumed Mannings N	MH209W027	MH209W026		T13932	IRWD	PVC	{50E72349-7EB5-4AD8-B061-66C501AFA30F5}	CLMH209W027MH209W026	726.51	724.20	1.250000000	MH209W027	MH209W026					243	CLMH209W027MH209W026	15	0.0090	0.005314	0.08	0.068900	0.09	0.120434	0.12	0.068900	0.09				
CLMH209W008MH209W026			2000		Existing	assumed Mannings N	MH209W008	MH209W026		T13932	IRWD	PVC	{75DCBACA-85CD-45DD-8614-D1D7235C2640}	CLMH209W008MH209W026	747.21	745.46	0.833333333	MH209W008	MH209W026					289	CLMH209W008MH209W026	10	0.0061	0.041381	0.13	0.051546	0.15	0.090100	0.19	0.051546	0.15				
CLMH209W009MH209W008			2000		Existing	assumed Mannings N	MH209W009	MH209W008		T13932	IRWD	PVC	{B198C865-E741-462C-BFCB-D2DCC14AD205}	CLMH209W009MH209W008	751.40	747.85	0.833333333	MH209W009	MH209W008					240	CLMH209W009MH209W008	10	0.0146	0.040642	0.11	0.050626	0.12	0.088492	0.15	0.050626	0.12				
CLMH209W010MH209W009			2000		Existing	assumed Mannings N	MH209W010	MH209W009		T13932	IRWD	VCP	{90866B81-4A88-4844-A43B-B0216DC75C6A}	CLMH209W010MH209W009	753.57	751.59	0.833333333	MH209W010	MH209W009					329	CLMH209W010MH209W009	10	0.0060	0.039166	0.13	0.048787	0.14	0.085279	0.19	0.048787	0.14				
CLMH209W011MH209W010			2000		Existing	assumed Mannings N	MH209W011	MH209W010		T13932	IRWD	VCP	{FE77650A-A283-47F5-BA55-F395BA828C22}	CLMH209W011MH209W010	766.78	760.84	0.666666667	MH209W011	MH209W010					186	CLMH209W011MH209W010	8	0.0319	0.000393	0.01	0.000480	0.01	0.000853	0.02	0.000489	0.01				
CLMH209W013MH209W010			2000		Existing	assumed Mannings N	MH209W013	MH209W010		T13932	IRWD	VCP	{38767BAD-259C-4EB3-9B3E-0D489FC23398}	CLMH209W013MH209W010	754.21	753.76	0.833333333	MH209W013	MH209W010					116	CLMH209W013MH209W010	10	0.0039	0.032085	0.12	0.039966	0.14	0.069861	0.18	0.039966	0.14				
CLMH209W014MH209W013			2000		Existing	assumed Mannings N	MH209W014	MH209W013		T13932	IRWD	VCP	{B2EB561D-3457-4984-895C-A0B806E14F5}	CLMH209W014MH209W013	755.45	754.32	0.833333333	MH209W014	MH209W013					212	CLMH209W014MH209W013	10	0.0053	0.032085	0.12	0.039966	0.13	0.069861	0.17	0.039966	0.13				
CLMH209W015MH209W014			2000		Existing	assumed Mannings N	MH209W015	MH209W014		T13932	IRWD	VCP	{C9A3BB4F-BF73-4685-A2F0-9B3743F26ACC}	CLMH209W015MH209W014	765.59	755.54	0.666666667	MH209W015	MH209W014					286	CLMH209W015MH209W014	8	0.0352	0.008903	0.06	0.011090	0.06	0.019387	0.08	0.011090	0.06				
CLMH209W016MH209W015			2000		Existing	assumed Mannings N	MH209W016	MH209W015		T13932	IRWD	VCP	{319FE7AB-1AAE-4BAB-A8CC-2EF3FFEFAAF1}	CLMH209W016MH209W015	767.16	765.69	0.666666667	MH209W016	MH209W015					286	CLMH209W016MH209W015	8	0.0051	0.008903	0.06	0.011090	0.09	0.019387	0.12	0.011090	0.09				
CLMH209W017MH209W016			2000		Existing	assumed Mannings N	MH209W017	MH209W016		T13932	IRWD	VCP	{36113664-6661-40E2-9142-23ED3E7ACBF6}	CLMH209W017MH209W016	768.30	767.27	0.666666667	MH209W017	MH209W016					261	CLMH209W017MH209W016	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH209W018MH209W016			2000		Existing	assumed Mannings N	MH209W018	MH209W016		T13932	IRWD	VCP	{13960612-55CA-425B-A05D-2E6C214331B3}	CLMH209W018MH209W016	776.58	767.27	0.666666667	MH209W018	MH209W016					194	CLMH209W018MH209W016	8	0.0480	0.008903	0.05	0.011090	0.06	0.019387	0.07	0.011090	0.06				
CLMH209W018MH209W019			2000		Existing	assumed Mannings N	MH209W018	MH209W019		T13932	IRWD	VCP	{857D2FD5-DFF8-4AB5-A0D4-ABECD8B10F99}	CLMH209W018MH209W019	783.09	776.67	0.666666667	MH209W018	MH209W019					226	CLMH209W018MH209W019	8	0.0284	0.008350	0.06	0.010401	0.06	0.018182	0.08	0.010401	0.06				
CLMH209W020MH209W019			2000		Existing	assumed Mannings N	MH209W020	MH209W019		T13932	IRWD	VCP	{FF739C60-019A-4C7D-90A7-EBAF81AD9424}	CLMH209W020MH209W019	787.84	783.20	0.500000000	MH209W020	MH209W019					102	CLMH209W020MH209W019	6	0.0455	0.001246	0.03	0.001552	0.03	0.002713	0.04	0.001552	0.03				
CLMH209W021MH209W019			2000		Existing	assumed Mannings N	MH209W021	MH209W019		T13932	IRWD	VCP	{7ED05F67-24E5-4FD9-A95F-2AF1E7527C7E}	CLMH209W021MH209W019	785.78	783.20	0.666666667	MH209W021	MH209W019					96	CLMH209W021MH209W019	8	0.0269	0.007104	0.05	0.008849	0.06	0.015469	0.08	0.008849	0.06				
CLMH209W022MH209W021			2000		Existing	assumed Mannings N	MH209W022	MH209W021		T13932	IRWD	VCP	{57C9CED81-E4F5-4E0E-AD84-CB722CB001EF}	CLMH209W022MH209W021	790.04	785.78	0.500000000	MH209W022	MH209W021					197	CLMH209W022MH209W021	6	0.0216	0.000000	0.04	0.000000	0.04	0.000000	0.05	0.000000	0.04				
CLMH209W023MH209W022			2000		Existing	assumed Mannings N	MH209W023	MH209W022		T13932	IRWD	VCP	{5C037D0E-3682-452B-A757-6C0A6042122B}	CLMH209W023MH209W022	756.23	755.54	0.666666667	MH209W023	MH209W022					170	CLMH209W023MH209W022	8	0.0041	0.032182	0.14	0.028876	0.16	0.050474	0.21	0.028876	0.16				
CLMH209W024MH209W023			2000		Existing	assumed Mannings N	MH209W024	MH209W023		T13932	IRWD	VCP	{D6224401A-E7B6-4206-AEEA-B1F38FA8F29A}	CLMH209W024MH209W023	767.22	756.34	0.666666667	MH209W024	MH209W023					284	CLMH209W024MH209W023	8	0.0584	0.003852	0.03	0.004798	0.04	0.008387	0.05	0.004798	0.04				
CLMH209W025MH209W024			2000		Existing	assumed Mannings N	MH209W025	MH209W024		T01425	IRWD	PVC	{0D23660A-9D4D-4ECC-BD56-A2F5FB0DCBCB}	CLMH209W025MH209W024	770.30	767.39	0.666666667	MH209W025	MH209W024					62	CLMH209W025MH209W024	8	0.0472	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH209W026MH209W007			2000		Existing	assumed Mannings N	MH209W026	MH209W007		T13932	IRWD	VCP	{E1063BFEC-0913-4756-8723-3E4D370C5DF7}	CLMH209W026MH209W007	745.00	727.13	0.833333333	MH209W026	MH209W007					310	CLMH209W026MH209W007	10	0.1548	0.041381	0.13	0.051546	0.07	0.090100	0.09	0.051546	0.07				
CLMH209W027MH209W028			1989		Existing	assumed Mannings N	MH209W027	MH209W028		A01368	IRWD	VCP	{28E85858-3EF7-41BE-93EC-5F10071631OA}	CLMH209W027MH209W028	724.00	715.20	1.250000000	MH209W027	MH209W028					245	CLMH209W027MH209W028	15	0.0255	0.055314	0.06	0.068899	0.07	0.120434	0.09	0.068899	0.07				
CLMH209W028MH208N068			1989		Existing	assumed Mannings N	MH209W028	MH208N068		A01368	IRWD	VCP	{463F9266-40DC-482E-92FC-959D22CEC118}	CLMH209W028MH208N068	715.00	705.20	1.250000000	MH209W028	MH208N068					470	CLMH209W028MH208N068	15	0.0209	0.064172	0.07	0.079934	0.08	0.139720	0.10	0.079934	0.08				
CLMH209W029MH209W028			1989		Existing	assumed Mannings N	MH209W029	MH209W028		A01357	IRWD	VCP	{A53D1ED0-43FF-4983-8428-0D5F7AD799CE}	CLMH209W029MH209W028	717.79	715.20	0.666666667	MH209W029	MH209W028					246	CLMH209W029MH209W028	8	0.0664	0.001061	0.02	0.001321	0.02	0.002309	0.03	0.001321	0.02				
CLMH209W030MH209W029			1989		Existing	assumed Mannings N	MH209W030	MH209W029		A01357	IRWD	VCP	{CD12B93F-BA6C-4EBE-B170-6F32F0A8FBAA}	CLMH209W030MH209W029	718.21	718.00	0.666666667	MH209W030	MH209W029					29	CLMH209W030MH209W029	8	0.0035	0.001061	0.03	0.001321	0.03	0.002309	0.05	0.001321	0.03				
CLMH209W031MH209W030			1990		Existing	assumed Mannings N	MH209W031	MH209W030		A01357	IRWD	VCP	{96A54D96-0C5F-474A-AD81-5E67995B4F61}	CLMH209W031MH209W030	720.28	718.41	0.666666667	MH209W031	MH209W030					153	CLMH209W031MH209W030	8	0.0122	0.000900	0.02	0.001121	0.02	0.001958	0.03	0.001121	0.02				
CLMH209W032MH209W031			1989		Existing	assumed Mannings N	MH209W032	MH209W031		A01357	IRWD	VCP	{8DB40E3E-A405-46EB-BA7D-89FCB8496AE5}	CLMH209W032MH209W031	722.29	720.28	0.666666667	MH209W032	MH209W031					103	CLMH209W032MH209W031	8	0.0195	0.000900	0.02	0.001121	0.03	0.001958	0.03	0.001121	0.03				
CLMH209W033MH209W032			1989		Existing	assumed Mannings N	MH209W033	MH209W032		A01357	IRWD	VCP	{DAD3628B-6AF9-4E45-A004-A51065E8391E}	CLMH209W033MH209W032	719.15	718.41	0.666666667	MH209W033	MH209W032					103	CLMH209W033MH209W032	8	0.0040	0.000900	0.01	0.000352	0.02	0.000704	0.02	0.000352	0.02				
CLMH209W034MH209W033			1990		Existing	assumed Mannings N	MH209W034	MH209W033		A01357	IRWD	VCP	{CA244C12-59CC-4874-9019-55F445150410}	CLMH209W034MH209W033	720.10	719.34	0.666666667	MH209W034	MH209W033					193	CLMH209W034MH209W033	8	0.0039	0.000196	0.01	0.000206	0.01	0.000352	0.02	0.000206	0.01				
CLMH209W035MH209W034			1990		Existing	assumed Mannings N	MH209W035	MH209W034		A01357	IRWD	VCP	{0584CFB7-FCB9-416F-B26F-4114C1433C7C}	CLMH209W035MH209W034	721.75	720.30	0.666666667	MH209W035	MH209W034					76	CLMH209W035MH209W034	8	0.0191	0.000161	0.01	0.000200	0.01	0.000352	0.01	0.000200	0.01				
CLMH209W036MH209W037			1990		Existing	assumed Mannings N	MH209W036	MH209W037		A01357	IRWD	VCP	{885CF728-0A01-4C3E-8570-D62F972EC39A}	CLMH209W036MH209W037	718.00	714.88	0.666666667	MH209W036	MH209W037					152	CLMH209W036MH209W037	8	0.0205	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH209W037MH208N069			1990		Existing	assumed Mannings N	MH209W037	MH208N069		A01357	IRWD	VCP	{072DC6AE-6A59-4B6D-A6C4-E14A341F7D}	CLMH209W037MH208N069	714.88	711.32	0.666666667	MH209W037	MH208N069					201	CLMH209W037MH208N069	8	0.0177	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH209W038MH208N070			1990		Existing	assumed Mannings N	MH209W038	MH208N070		A01357	IRWD	VCP	{160909DC-796A-634D-81A1-6D6B4DB24A22}	CLMH209W038MH208N070	715.20	713.46	0.666666667	MH209W038	MH208N070					178	CLMH209W038MH208N070	8	0.0098	0.002238	0.04	0.002787	0.04	0.004871	0.06	0.002787	0.04				
CLMH209W039MH209W038			1990		Existing	assumed Mannings N	MH209W039	MH209W038		A01357	IRWD	VCP	{7D96D72E-3A32-4FF8-A568-9C5783DC51C0}	CLMH209W039MH209W038	717.79	715.40	0.666666667	MH209W039	MH209W038					114	CLMH209W039MH209W038	8	0.0209	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00				
CLMH209W040GB209W091			1989		Existing	assumed Mannings N	MH209W040	GB209W091		A01287	IRWD	VCP	{F9169F64-5699-4AAC-AB67-A655E9168CAE}	CLMH209W040GB209W091	722.61	718.79	0.666666667	MH209W040	GB209W091					58	CLMH209W040GB209W091	8	0.0657	0.007798	0.05	0.009713	0.05	0.016977	0.07	0.009713	0.05				
CLMH209W041MH209W040		CANNOT READ SL	1989		Existing	assumed Mannings N	MH209W041	MH209W040		A01368	IRWD	VCP	{5222F0A7-966B-46B3-A0D7-E99AB6A0B13}	CLMH209W041MH209W040	730.60	722.80	0.666666667	MH209W041	MH209W040					89	CLMH209W041MH209W040	8	0.0879	0.000808	0.01	0.001007	0.02	0.001757	0.02	0.001007	0.02				
CLMH209W042MH209W041			1989		Existing	assumed Mannings N	MH209W042	MH209W041		A01368	IRWD	VCP	{2F6943CD-F278-8094-BD7A-B353AA6BB334}	CLMH209W042MH209W041	731.00	730.80	0.666666667	MH209W042	MH209W041					43	CLMH209W042MH209W041	8	0.0047	0.000601	0.02	0.000748	0.02	0.001305	0.03	0.000748	0.02				
CLMH209W043MH209W042			1989		Existing	assumed Mannings N	MH209W043	MH209W042		A01368	IRWD	VCP	{74828402-BC54-4511-B581-7CEA7A493CAE}	CLMH209W043MH209W042	731.80	731.00	0.666666667	MH209W043	MH209W042					123	CLMH209W043MH209W042	8	0.0049	0.000601	0.02	0.000748	0.02	0.001305	0.03	0.000748	0.02				
CLMH209W044MH209W043			1989		Existing	assumed Mannings N	MH209W044	MH209W043		A01368	IRWD	VCP	{15B778DD-9E4B-4C6F-AF43-AAA0B2015C2F}	CLMH209W044MH209W043	732.20	732.00	0.666666667	MH209W044	MH209W043					65	CLMH209W044MH209W043	8	0.0031	0.000601	0.02	0.000748	0.03	0.001305	0.04	0.000748	0.03				
CLMH209W045MH209W044			1989

CLMH210E102MH210E107			1990			Existing			MH210E102	MH210E107		T13921	IRWD	PVC	{8FE3DD39-7FA4-4D6D-A416-C1A061945671}	CLMH210E102MH210E107	1207.73	1190.09	0.666666667	MH210E102	MH210E107			226	CLMH210E102MH210E107	8	0.0784	0.053135	0.10	0.063768	0.11	0.075596	0.12	0.063768	0.11		
CLMH210E103MH210E102			1990			Existing			MH210E103	MH210E102		T13921	IRWD	PVC	{FB8C3DFD-CCCF-40FA-8B39-5FDBC02FC21F}	CLMH210E103MH210E102	1211.20	1208.04	0.666666667	MH210E103	MH210E102			288	CLMH210E103MH210E102	8	0.0110	0.003013	0.04	0.003617	0.05	0.004288	0.05	0.003617	0.05		
CLMH210E105MH210E106			1990			Existing			MH210E105	MH210E106		T13921	IRWD	PVC	{0CA779CD-70E3-4318-A121-875CB7505231}	CLMH210E105MH210E106	1195.06	1193.07	0.666666667	MH210E105	MH210E106			164	CLMH210E105MH210E106	8	0.0121	0.001923	0.03	0.002310	0.04	0.002737	0.04	0.002310	0.04		
CLMH210E106MH210E107			1990			Existing			MH210E106	MH210E107		T13921	IRWD	PVC	{FEC4452B-BAEA-4768-9043-0F1F161E3464}	CLMH210E106MH210E107	1192.88	1190.06	0.666666667	MH210E106	MH210E107			275	CLMH210E106MH210E107	8	0.0114	0.005426	0.06	0.006516	0.06	0.007723	0.07	0.006516	0.06		
CLMH210E107MH210E110			1990			Existing			MH210E107	MH210E110		T13921	IRWD	PVC	{229E1281-F237-4B41-B2C6-EC25895A402D}	CLMH210E107MH210E110	1189.80	1184.40	0.666666667	MH210E107	MH210E110			275	CLMH210E107MH210E110	8	0.0196	0.065784	0.16	0.078955	0.17	0.093598	0.19	0.078955	0.17		
CLMH210E109MH210E110			1990			Existing			MH210E109	MH210E110		T13921	IRWD	PVC	{C44DA2B6-BD24-4D66-9582-2760CAF678CB}	CLMH210E109MH210E110	1188.34	1184.50	0.666666667	MH210E109	MH210E110			107	CLMH210E109MH210E110	8	0.0359	0.003589	0.03	0.004309	0.04	0.005108	0.04	0.004309	0.04		
CLMH210E110MH210E111			1990			Existing			MH210E110	MH210E111		T13921	IRWD	PVC	{D98C02EA-2A8F-4405-AC26-96D709B206FF}	CLMH210E110MH210E111	1184.19	1183.09	0.666666667	MH210E110	MH210E111			92	CLMH210E110MH210E111	8	0.0120	0.069373	0.19	0.083264	0.20	0.098707	0.22	0.083264	0.20		
CLMH210E111MH210E112			1990			Existing			MH210E111	MH210E112		T13921	IRWD	PVC	{4E4490E6-4226-42C4-BD30-83F52EFEB9B6}	CLMH210E111MH210E112	1183.00	1142.40	0.666666667	MH210E111	MH210E112			115	CLMH210E111MH210E112	8	0.3759	0.069373	0.08	0.083264	0.09	0.098707	0.10	0.083264	0.09		
CLMH210E112MH210E006			1990			Existing			MH210E112	MH210E006		T13921	IRWD	PVC	{DAE58BE2-B71D-4025-B408-7EEF0FC29AB8}	CLMH210E112MH210E006	1142.19	1137.40	0.666666667	MH210E112	MH210E006			42	CLMH210E112MH210E006	8	0.1140	0.069500	0.11	0.083418	0.12	0.098888	0.13	0.083418	0.12		
CLMH210E113MH217N045			1993			Existing			MH210E113	MH217N045		T14521	IRWD	VCP	{67A16654-3E92-4849-A75E-3D5DB8E60FA}	CLMH210E113MH217N045	1163.55	1161.79	0.666666667	MH210E113	MH217N045			180	CLMH210E113MH217N045	8	0.0098	0.002991	0.04	0.003591	0.05	0.004258	0.05	0.003591	0.05		
CLMH210N001MH210N002			1990			Existing			MH210N001	MH210N002		T13793	IRWD	PVC	{9E9EF622-3792-4264-890B-3E9136DFBDBD}	CLMH210N001MH210N002	1017.72	1015.79	0.666666667	MH210N001	MH210N002			179	CLMH210N001MH210N002	8	0.0108	0.011039	0.08	0.013253	0.09	0.015712	0.09	0.013253	0.09		
CLMH210N002MH191E028			1990			Existing			MH210N002	MH191E028		T13793	IRWD	PVC	{302FA0F6-EC1A-4A3F-931F-2B2BB83AB45C}	CLMH210N002MH191E028	1015.59	1012.76	0.666666667	MH210N002	MH191E028			382	CLMH210N002MH191E028	8	0.0108	0.028935	0.12	0.034740	0.14	0.041186	0.15	0.034740	0.14		
CLMH210N004MH210W003			1990			Existing			MH210N004	MH210W003		T13793	IRWD	PVC	{C6175E87-A923-4B02-B0DF-B7CA84B946AE}	CLMH210N004MH210W003	988.19	982.46	0.666666667	MH210N004	MH210W003			305	CLMH210N004MH210W003	8	0.0188	0.028278	0.11	0.033949	0.12	0.040250	0.13	0.033949	0.12		
CLMH210N005MH210N001			1990			Existing			MH210N005	MH210N001		T13793	IRWD	PVC	{2DAD6481-399C-41CA-80F6-57815C1AE1EA}	CLMH210N005MH210N001	1020.71	1017.92	0.666666667	MH210N005	MH210N001			285	CLMH210N005MH210N001	8	0.0098	0.003906	0.05	0.004690	0.05	0.005561	0.06	0.004690	0.05		
CLMH215001MH209E038			2013			Existing	assumed Mannings N		MH215001	MH209E038		A00644B	IRWD	PVC	{CD98F993-B635-4B34-AB30-BBCF12CF9B0F}	CLMH215001MH209E038	874.69	846.77	1.000000000	MH215001	MH209E038			397	CLMH215001MH209E038	12	0.0705	0.610989	0.21	0.713128	0.22	0.845466	0.24	0.990519	0.26		
CLMH215002MH215001			2013			Existing	assumed Mannings N		MH215002	MH215001		A00644B	IRWD	PVC	{F3A789EF-0F05-493E-AB74-333AFCB7455F}	CLMH215002MH215001	902.74	874.69	1.000000000	MH215002	MH215001			399	CLMH215002MH215001	12	0.0705	0.459236	0.19	0.551131	0.21	0.653406	0.23	0.828481	0.25		
CLMH215003MH215002			2013			Existing	assumed Mannings N		MH215003	MH215002		A00644B	IRWD	PVC	{40AF9A68-CA85-4BE8-BA9F-3719102918FC}	CLMH215003MH215002	926.06	902.74	1.000000000	MH215003	MH215002			406	CLMH215003MH215002	12	0.0576	0.459239	0.18	0.551133	0.20	0.653407	0.22	0.828491	0.25		
CLMH215004MH215003			2013			Existing	assumed Mannings N		MH215004	MH215003		A00644B	IRWD	PVC	{C9CB98CE-4C18-49EB-A548-FDAD36EBA341}	CLMH215004MH215003	944.68	926.06	1.000000000	MH215004	MH215003			376	CLMH215004MH215003	12	0.0495	0.459241	0.19	0.551134	0.21	0.653408	0.23	0.828493	0.26		
CLMH215005MH215004			2013			Existing	assumed Mannings N		MH215005	MH215004		A00644B	IRWD	PVC	{AF3A1F8C-EFDC-460C-BA92-F1D7BA613DCB}	CLMH215005MH215004	955.77	944.68	1.000000000	MH215005	MH215004			396	CLMH215005MH215004	12	0.0280	0.459243	0.21	0.551136	0.23	0.653409	0.25	0.828508	0.29		
CLMH215006MH215005			2013			Existing	assumed Mannings N		MH215006	MH215005		A00644B	IRWD	PVC	{6F567951-3478-4618-9A96-7EB5FE2F80CC}	CLMH215006MH215005	959.93	955.77	1.000000000	MH215006	MH215005			396	CLMH215006MH215005	12	0.0105	0.459246	0.26	0.551138	0.29	0.653410	0.32	0.828524	0.36		
CLMH215007NH215006			2013			Existing	assumed Mannings N		MH215007	MH215006		A00644B	IRWD	PVC	{48EA4430-8509-486B-82CF-885C933CB84F}	CLMH215007MH215006	971.02	959.93	1.000000000	MH215007	MH215006			396	CLMH215007MH215006	12	0.0280	0.459252	0.26	0.551141	0.29	0.653412	0.31	0.828553	0.35		
CLMH215008MH215007			2013			Existing	assumed Mannings N		MH215008	MH215007		A00644B	IRWD	PVC	{9B2B274D-030F-4E90-B7D7-C9C319F95703}	CLMH215008MH215007	990.70	971.02	1.000000000	MH215008	MH215007			375	CLMH215008MH215007	12	0.0526	0.459255	0.21	0.551143	0.23	0.653414	0.25	0.660764	0.26		
CLMH210W002MH210N004			1990			Existing			MH210W002	MH210N004		13794	IRWD	VCP	{8CF925E1-9DA2-45F0-85BD-4DC23615D82A}	CLMH210W002MH210N004	996.70	988.39	0.666666667	MH210W002	MH210N004			382	CLMH210W002MH210N004	8	0.0218	0.016762	0.08	0.020124	0.09	0.023858	0.10	0.020124	0.09		
CLMH210W003MH210W004			1990			Existing			MH210W003	MH210W004		13794	IRWD	PVC	{9C5A700C-58EA-4D3F-8E3B-EE1128208F50}	CLMH210W003MH210W004	982.36	976.44	0.666666667	MH210W003	MH210W004			248	CLMH210W003MH210W004	8	0.0239	0.032798	0.11	0.039376	0.12	0.046683	0.13	0.039376	0.12		
CLMH210W004MH210W038			1990			Existing			MH210W004	MH210W038		13795	IRWD	PVC	{B87858DC-05A6-4EB4-90F5-C869F78E1227}	CLMH210W004MH210W038	976.34	968.70	0.666666667	MH210W004	MH210W038			138	CLMH210W004MH210W038	8	0.0554	0.038726	0.10	0.046493	0.11	0.055120	0.11	0.046493	0.11		
CLMH210W005MH210W002			1990			Existing			MH210W005	MH210W002		13794	IRWD	VCP	{FBC38EB7-04B4-419C-B03F-47748AD0F343}	CLMH210W005MH210W002	999.10	996.90	0.666666667	MH210W005	MH210W002			256	CLMH210W005MH210W002	8	0.0086	0.011242	0.09	0.013498	0.09	0.016002	0.10	0.013498	0.09		
CLMH210W014MH210W073			1990			Existing			MH210W014	MH210W073		A00655	IRWD	VCP	{DF86C892-D5DC-483F-81E3-4D7C75597DE5}	CLMH210W014MH210W073	937.91	927.10	0.666666667	MH210W014	MH210W073			355	CLMH210W014MH210W073	8	0.0305	0.093009	0.18	0.111663	0.19	0.132387	0.21	0.111663	0.19		
CLMH210W020MH210W021			1990			Existing			MH210W020	MH210W021		A00655	IRWD	VCP	{762D5B32-550A-4870-BCBD-E43F289B808F}	CLMH210W020MH210W021	920.84	916.40	0.666666667	MH210W020	MH210W021			226	CLMH210W020MH210W021	8	0.0196	0.094266	0.20	0.112987	0.22	0.133963	0.24	0.112987	0.22		
CLMH210W021MH191S004			1990			Existing			MH210W021	MH191S004		A00655	IRWD	VCP	{9205CF57-F7FE-43F7-8F1A-04E3E1880BFD}	CLMH210W021MH191S004	916.29	911.53	0.666666667	MH210W021	MH191S004			282	CLMH210W021MH191S004	8	0.0169	0.192692	0.30	0.231005	0.32	0.273873	0.35	0.231005	0.32		
CLMH210W022MH191S090			1990			Existing			MH210W022	MH191S090		T13588	IRWD	PVC	{472FEBEC-A64F-4068-BA1F-1F78900E962C}	CLMH210W022MH191S090	931.48	928.59	0.666666667	MH210W022	MH191S090			372	CLMH210W022MH191S090	8	0.0078	0.003676	0.10	0.004416	0.10	0.005241	0.11	0.004416	0.10		
CLMH210W022MH210W023			1990			Existing			MH210W022	MH210W023		T13588	IRWD	PVC	{D258224C-5F36-487C-A549-880FD7876FC9}	CLMH210W022MH210W023	931.48	930.05	0.666666667	MH210W022	MH210W023			100	CLMH210W022MH210W023	8	0.0143	0.004999	0.05	0.005999	0.06	0.007108	0.06	0.005999	0.06		
CLMH210W023MH210W024			1990			Existing			MH210W023	MH210W024		T13588	IRWD	PVC	{C3B114B1-3F05-4004-B663-BCC4AAF79E3E}	CLMH210W023MH210W024	929.96	923.70	0.666666667	MH210W023	MH210W024			305	CLMH210W023MH210W024	8	0.0205	0.004999	0.05	0.005999	0.06	0.007108	0.06	0.005999	0.06		
CLMH210W024MH210W025			1990			Existing			MH210W024	MH210W025		T13588	IRWD	PVC	{CAF9A709-9D92-4C34-A755-E9DD9DDAE05D}	CLMH210W024MH210W025	923.50	922.46	0.666666667	MH210W024	MH210W025			68	CLMH210W024MH210W025	8	0.0153	0.004999	0.05	0.005999	0.05	0.007108	0.06	0.005999	0.05		
CLMH210W025MH210W026			1990			Existing			MH210W025	MH210W026		T13588	IRWD	PVC	{92D7CAD2-36AD-4641-8F2D-7C563DF6686A}	CLMH210W025MH210W026	922.26	921.96	0.666666667	MH210W025	MH210W026			204	CLMH210W025MH210W026	8	0.0047	0.011110	0.09	0.013334	0.10	0.015804	0.11	0.013334	0.10		
CLMH210W026MH191S104			1990			Existing			MH210W026	MH191S104		T13588	IRWD	PVC	{9E463558-C9D3-48F5-B17D-F3D6DE7F4CD9}	CLMH210W026MH191S104	921.76	921.25	0.666666667	MH210W026	MH191S104			105	CLMH210W026MH191S104	8	0.0049	0.015361	0.11	0.018343	0.12	0.021741	0.13	0.018343	0.12		
CLMH210W027MH210W021			1990			Existing			MH210W027	MH210W021		T13588	IRWD	PVC	{6CBF44E4-B17C-4AB4-86A9-2C8F388369AC}	CLMH210W027MH210W021	919.78	916.50	0.666666667	MH210W027	MH210W021			179	CLMH210W027MH210W021	8	0.0213	0.098539	0.21	0.118123	0.23	0.140038	0.25	0.118123	0.23		
CLMH210W029MH210W030			1990			Existing			MH210W029	MH210W030		A00677	IRWD	VCP	{48D31CAE-55C3-4496-B80C-E133A19F276C}	CLMH210W029MH210W030	886.75	885.59	0.666666667	MH210W029	MH210W030			28	CLMH210W029MH210W030	8	0.0421	0.000528	0.01	0.000668	0.01	0.000563	0.01	0.000668	0.01		
CLMH210W030MH210W031			1990			Existing			MH210W030	MH210W031		A00677	IRWD	VCP	{433BCC1B-D2F7-41F0-AB26-35B408672E49}	CLMH210W030MH210W031	885.50	882.03	0.666666667	MH210W030	MH210W031			333	CLMH210W030MH210W031	8	0.0104	0.000528	0.02	0.000563	0.02	0.000668	0.02	0.000563	0.02		
CLMH210W031MH210W032			1990			Existing			MH210W031	MH210W032		A00677	IRWD	VCP	{A64A3ED3-D26D-460C-A8AB-879A9FA20BC0}	CLMH210W031MH210W032	881.92	877.78	0.666666667	MH210W031	MH210W032			387	CLMH210W031MH210W032	8	0.0107	0.000528	0.02	0.000563	0.02	0.000668	0.02	0.000563	0.02		
CLMH210W032MH210W033			1990			Existing			MH210W032	MH210W033		A00677	IRWD	VCP	{1861597E-A70F-4ACC-8121-3D941B2D3844}	CLMH210W032MH210W033	877.69	874.22	0.666666667	MH210W032	MH210W033			380	CLMH210W032MH210W033	8	0.0093	0.001759	0.03	0.001878	0.04	0.002226	0.04	0.001878	0.04		
CLMH210W033MH210W034			1990			Existing			MH210W033	MH210W034		A00677	IRWD	VCP	{C6C71863-D26D-45AD-908C-1B07D5EC76A9}	CLMH210W033MH210W034	874.13	871.10	0.666666667	MH210W033	MH210W034			319	CLMH210W033MH210W034	8	0.0095	0.001759	0.03	0.001878	0.04	0.002226	0.04	0.001878	0.04		
CLMH210W034MH210W072			1990			Existing			MH210W034	MH210W072		A00677	IRWD	VCP	{50FBD3A0-4ABD-4457-89FE-35BBC34DA717}	CLMH210W034MH210W072	871.01	868.03	0.666666667	MH210W034	MH210W072			289	CLMH210W034MH210W072	8	0.0103	0.007914	0.07	0.008451	0.07	0.010018	0.08	0.008451	0.07		
CLMH210W035MH210W036			1990			Existing			MH210W035	MH210W036		T13587	IRWD	VCP	{12C09102-A3E8-4326-A094-181EBD7F5013}	CLMH210W035MH210W036	957.55	952.26	0.666666667	MH210W035	MH210W036			143	CLMH210W035MH210W036	8	0.0170	0.005223	0.04	0.006271	0.05	0.007435	0.05	0.006271	0.05		
CLMH210W036MH191S117			1990			Existing			MH210W036	MH191S117		T13587	IRWD	VCP	{86092115-09F4-4970-97A7-F736F582605C}	CLMH210W036MH191S117	952.11	951.19	0.666666667	MH210W036	MH191S117			197	CLMH210W036MH191S117	8	0.0047	0.007539	0.08	0.009052	0.09	0.010732	0.09	0.009052	0.09		
CLMH210W037MH210W036			1990			Existing			MH210W037	MH210W036		T13587	IRWD	VCP	{992C1903-0EBB-45C7-ACF1-48A88F4248F9}	CLMH210W037MH210W036	953.11	952.35	0.666666667	MH210W037	MH210W036			106	CLMH210W037MH210W036	8	0.0043	0.002316	0.05	0.002782	0.05	0.003297	0.05	0.002782	0.05		
CLMH210W038MH210W039			1990			Existing			MH210W038	MH210W039		T14469	IRWD	VCP	{B7A8CE1A-374B-45A1-958D-98F1A59FB4BB}	CLMH210W038MH210W039	968.59	963.05	0.666666667	MH210W038	MH210W039			93	CLMH210W038MH210W039	8	0.0596	0.038726	0.10	0.046493	0.11	0.055120	0.12	0.046493	0.11		
CLMH210W039MH210W040			1990			Existing			MH210W039	MH210W040		T14469	IRWD	VCP	{471CB567-46CF-48C5-BAAD-F93B78BD4617}	CLMH210W039MH210W040	962.96	957.73	0.666666667	MH210W039	MH210W040			253	CLMH210W039MH210W040	8	0.0207	0.085608	0.14	0.054755	0.15	0.064916	0.16	0.054755	0.15		
CLMH210W040MH210W049			1990			Existing			MH210W040	MH210W049		T14469	IRWD	VCP	{8E15D62F-D1BA-446E-87EF-9EB662F7ABE}	CLMH210W040MH210W049	957.64	955.72	0.666666667	MH210W040	MH210W049			118	CLMH210W040MH210W049	8	0.0108	0.056373	0.18	0.067678	0.20	0.080241	0.22	0.067678	0.20		
CLMH210W042MH210W044			1990			Existing			MH210W042	MH210W044		T14469	IRWD	VCP	{473C13AA-504D-4AB9-9692-C9BED9312CF}	CLMH210W042MH210W044	962.96	959.88	0.666666667	MH210W042	MH210W044			242	CLMH210W042MH210W044	8	0.0127	0.005814	0.06	0.006980	0.06	0.008277	0.07	0.006980	0.06		
CLMH210W040MH210W042			1990			Existing			MH210W040	MH210W042		T14469	IRWD	VCP	{90CC31EC-7F04-411A-8095-76B01D2B806}	CLMH210W040MH210W042	959.67	957.84	0.666666667	MH210W040	MH210W042			171	CLMH210W040MH210W042	8	0.0107	0.010765	0.08	0.012924	0.09	0.015325	0.10	0.012924	0.09		
CLMH210W046MH210W047			1990			Existing			MH210W046	MH210W047		T14469	IRWD	VCP	{B52AB8E0-48FF-46F6-AA01-484BEF4F4A22}	CLMH210W046MH210W047	962.53	959.10	0.666666667	MH210W046	MH210W047			233	CLMH210W046MH210W047	8	0.0147	0.003338	0.04	0.004008	0.05	0.004752	0.05	0.004008	0.05		
CLMH210W047MH210W048			1990			Existing			MH210W047	MH210W048		T14469	IRWD	VCP	{B031CFB6-4F4B-4D83-B3FF-62C55ED13E87}	CLMH210W047MH210W048	959.01	957.71	0.666666667	MH210W047	MH210W048			122	CLMH210W047MH210W048	8	0.0107	0.012242	0.09	0.014697	0.09	0.017423	0.10	0.014697	0.09		
CLMH210W048MH210W049			1990			Existing			MH210W048	MH210W049		T14469	IRWD	VCP	{7059F8EC-F1A6-494E-A702-759105CC6065}	CLMH210W048MH210W049	957.52	955.63	0.666666667	MH210W048	MH210W049			193	CLMH210W048MH210W049	8	0.0098	0.012242	0.09	0.014697	0.10	0.017423	0.10	0.014697	0.10		
CLMH210W049MH210W050			1990			Existing			MH210W049	MH210W050		T14469	IRWD	VCP	{83DB108D-F19C-46EE-B290-02A92D350392}	CLMH210W049MH210W050	955.53	946.90	0.666666667	MH210W049	MH210W050			192	CLMH210W049MH210W050	8	0.0449	0.068615	0.14	0.082375	0.15	0.097664	0.16	0.082375	0.15		
CLMH210W050MH210W056			1990			Existing			MH210W050	MH210W056		T14469	IRWD	VCP	{85466412-139C-414A-A9B1-022C5A0B7FEA}	CLMH210W050MH210W056	946.79	939.48	0.666666667	MH210W050	MH210W056			213	CLMH210W050MH210W056	8	0.0343	0.077041	0.16	0.092492	0.17	0.109659	0.19	0.092492	0.17		
CLMH210W051MH210W052			1990			Existing			MH210W051	MH210W052		T14469	IRWD	VCP	{0E438D39-4CB7-4801-991B-80AF1B8422D3}	CLMH210W051MH210W052	955.67	950.84	0.666666667	MH210W051	MH210W052			377	CLMH210W051MH210W052	8	0.0128	0.008086	0.07	0.009708	0.07	0.011509	0.08	0.009708	0.07		
CLMH210W052MH210W053			1990			Existing			MH210W052	MH210W053		T14469	IRWD	VCP	{8EBF0A38-3933-436A-BAF4-6A2F3CFEFE5}	CLMH210W052MH210W053	950.73	944.91	0.666666667	MH210W052	MH210W053			346	CLMH210W052MH210W053	8	0.0168	0.008086	0.06	0.009708	0.07	0.011509	0.08	0.009708	0.07		
CLMH210W053MH210W054			1990			Existing			MH210W053	MH210W054		T14469	IRWD	VCP	{81DF8F11-0558-4876-B113-B7293820A13B}	CLMH210W053MH210W054	944.82	942.47	0.666666667	MH210W053	MH210W054			151	CLMH210W053MH210W054	8	0.0156	0.013061	0.08	0.015680	0.09	0.018590	0.10	0.015680	0.09		
CLMH210W054MH210W056			1990			Existing			MH210W054	MH210W056		T14469	IRWD	VCP	{E04B5204-B633-498B-BC7B-7FE530523354}	CLMH210W054MH210W056	942.28	939.59	0.666666667	MH210W054	MH210W056			183	CLMH210W054MH210W056	8	0.0147	0.015968	0.09	0.019171	0.10	0.022728	0.11	0.019171	0.10		
CLMH210W056MH210W014			1990			Existing			MH210W056	MH210W014		T14469	IRWD	VCP	{9CCBE730-E78F-41F0-A914-859A39116052}	CLMH210W056MH210W014	939.39	938.10	0.666666667	MH210W056	MH210W014			132	CLMH210W056MH210W014	8	0.0098	0.093009	0.23	0.111663	0.26	0.132387	0.28	0.111663	0.26		
CLMH210W072MH209N020			1990			Existing			MH210W072	MH209N020		A00677	IRWD	VCP	{9AED7AAE8-90E8-4616-9E6F-695E530A88B}	CLMH210W072MH209N020	867.94	858.76	0.666666667	MH210W072	MH209N020			298	CLMH210W072MH209N020	8	0.0308	0.007914	0.05	0.008451	0.06	0.010018	0.06	0.008451	0.06		
CLMH210W073MH210W020			1990			Existing			MH210W073	MH210W020		A00655	IRWD	VCP	{232329C6-74C8-41AA-AECD-6345DADE73CC}	CLMH210W073MH210W020	927.00	920.94	0.666666667	MH210W073	MH210W020			151	CLMH210W073MH210W020	8	0.0401	0.093009	0.17	0.111663	0.18	0.132387	0.20	0.111663	0.18		
CLMH211E001MH211E002			1988			Existing			MH211E001	MH211E002		T12400	IRWD	PVC	{FBDD586D-AF53-43A1-8700-9C2CA7B4BEED}	CLMH211E001MH211E002	1342.58	1341.93	0.666666667	MH211E001	MH211E002			113	CLMH211E001MH211E002	8	0.0058	0.001710	0.03	0.002053	0.04	0.002433	0.04	0.002053	0.04		
CLMH211E002MH211E009	JOINT OWNERSHI		1988			Existing			MH211E002	MH211E009		T12400	IRWD	PVC	{7A109C3A-2C51-4E44-B27B-2255B488F01D}	CLMH211E002MH211E009	1341.73	1340.50	0.666666667	MH211E002	MH211E009			253	CLMH211E002MH211E009	8	0.0049	0.003215	0.05	0.003912	0.06	0.004684	0.06	0.003912	0.06		
CLMH211E003MH211E002			1988			Existing			MH211E003	MH211E002		T12400	IRWD	PVC	{EC883AAD-8834-428B-B41F-E21F585192F0}	CLMH211E003MH211E002	1342.51	1341.93	0.666666667	MH211E003	MH211E002			61	CLMH211E003MH211E002	8	0.0095	0.001505	0.03	0.001858	0.03	0.002251	0.04	0.001858	0.03		
CLMH211E004MH211E004			1988			Existing			MH211E004	MH211E004		T12400	IRWD	PVC	{FC7CA63B-3AD9-42D6-B38F-D7CABD50D2DE}	CLMH211E004MH211E004	1342.51	1339.13	0.666666667	MH211E004	MH211E004			110	CLMH211E004MH211E004	8	0.0307	0.002919	0.03	0.003451	0.04	0.004045	0.04	0.003451	0.04		
CLMH211E004MH211E031			1988			Existing			MH211E004	MH211E031		T12400	IRWD	PVC	{3FDCF7C6-0EA3-4BE5-9374-E9BA4633A18F}	CLMH211E004MH211E031	1338.93	1337.34	0.666666667	MH211E004	MH211E031			319	CLMH211E004MH211E031	8	0.0050	0.050253	0.19	0.060261	0.21	0.071401	0.23	0.060261	0.21		
CLMH211E005MH211E031			1988			Existing			MH211E005	MH211E031		T12400	TCWD	PVC	{1B052F16-B266-4EC1-8869-82AE22D4FBBB}	CLMH211E005MH211E031	1340.93	1337.44	0.666666667	MH211E005	MH211E031			178	CLMH211E005MH211E031	8	0.0196	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00		
CLMH211E006MH211E007			1988			Existing			MH211E006	MH211E007		T12400	TCWD	PVC	{1ABA7FEB-9894-45A5-BCD4-96AA1E1191EE}	CLMH211E006MH211E007	1339.63	1339.18	0.666666667	MH211E006	MH211E007			93	CLMH211E006MH211E007	8	0.0048	0.010667	0.09	0.012806	0.10	0.015184	0.11	0.012806	0.10		
CLMH211E007MH216N009	JOINT OWNERSHI		1988			Existing			MH211E007	MH216N009		T12400	IRWD	PVC	{FA3C7EF3-6C4F-4121-95F5-1D4B0BF960E6}	CLMH211E007MH216N009	1338.97	1338.76	0.666666667	MH211E007	MH216N009			48	CLMH211E007MH216N009	8	0.0044	0.013881	0.10	0.016718	0.11	0.019869	0.12	0.016718	0.11		
CLMH211E008MH211E007	JOINT OWNERSHI		1988			Existing			MH211E008	MH211E007		T12400	IRWD	PVC	{F3C7EF3-6C4F-4121-95F5-1D4B0BF960E6}	CLMH211E008MH211E007	1339.42	1339.18	0.666666667	MH211E008	MH211E007			71	CLMH211E008MH211E007	8	0.0034	0.003214	0.05	0.003912	0.06	0.004684	0.06	0.003912	0.06

| | | |

| | | |

| | | |

PA1_100	P-5832	0	assumed mannings N	Future			474.592463982		PVC		PA1_100	280.00	272.10	0.666666667	PA1_0025	MH106N014		508	PA1_100	8	0.0156	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.118224	0.24
PA1_010	P-5828	0	assumed mannings N	Future			1368.78526262		PVC		PA1_010	292.00	269.70	0.666666667	PA1_0030	MH106N013		1406	PA1_010	8	0.0159	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.071625	0.18
PA1_105	P-5811	0	assumed mannings N	Future			662.205732739		PVC		PA1_105	264.00	255.70	0.666666667	PA1_0035	MH106W034		598	PA1_105	8	0.0139	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006347	0.06
PA1_030	P-5815	0	assumed mannings N	Future			621.469940983		PVC		PA1_030	248.50	240.00	0.666666667	PA1_0040	PA1_0060		621	PA1_030	8	0.0137	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.028390	0.12
PA1_035	P-5823	0	assumed mannings N	Future			1985.54216636		PVC		PA1_035	245.00	217.00	0.666666667	PA1_0045	MH0835051		2021	PA1_035	8	0.0139	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.030388	0.12
PA1_045	P-5819	0	assumed mannings N	Future			360.97457476		PVC		PA1_045	270.00	265.60	0.666666667	PA1_0050	MH106N023		268	PA1_045	8	0.0164	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.008683	0.07
PA1_075	P-5806	0	assumed mannings N	Future			1527.17856979		PVC		PA1_075	269.00	240.90	0.666666667	PA1_0055	PA1_0080		1527	PA1_075	8	0.0184	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.025156	0.11
PA1_080	P-5814	0	assumed mannings N	Future			496.902912053		PVC		PA1_080	239.80	233.10	0.666666667	PA1_0060	MH106W022		529	PA1_080	8	0.0127	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.028390	0.12
PA1_085	P-5822	0	assumed mannings N	Future			223.898878612		PVC		PA1_085	276.00	273.50	0.666666667	PA1_0065	PA1_0085		224	PA1_085	8	0.0112	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.025100	0.12
PA1_000	P-5826	0	assumed mannings N	Future			875.883023815		PVC		PA1_000	270.00	260.00	0.666666667	PA1_0070	PA1_0095		876	PA1_000	8	0.0114	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA1_005	P-5834	0	assumed mannings N	Future			374.948693483		PVC		PA1_005	277.00	270.20	0.666666667	PA1_0075	PA1_0070		375	PA1_005	8	0.0181	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA1_015	P-5805	0	assumed mannings N	Future			755.716999333		PVC		PA1_015	240.70	234.60	0.666666667	PA1_0080	MH106W007		710	PA1_015	8	0.0086	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.066154	0.20
PA1_020	P-5813	0	assumed mannings N	Future			257.839725876		PVC		PA1_020	273.30	270.70	0.666666667	PA1_0085	PA1_0005		258	PA1_020	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.025100	0.12
PA1_025	P-5821	0	assumed mannings N	Future			216.400953697		PVC		PA1_025	273.00	270.60	0.666666667	PA1_0090	PA1_0095		216	PA1_025	8	0.0111	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.018348	0.10
PA1_040	P-5825	0	assumed mannings N	Future			604.601507486		PVC		PA1_040	259.80	255.00	0.666666667	PA1_0095	PA1_0020		605	PA1_040	8	0.0079	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019706	0.12
PA1_050	P-5833	0	assumed mannings N	Future			770.175532135		PVC		PA1_050	288.00	280.20	0.666666667	PA1_0100	PA1_0025		770	PA1_050	8	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.118224	0.26
PA1_445	P-99	0	assumed mannings N	Future			285.000036816		PVC		PA1_445	341.00	337.00	0.666666667	PA1_0105	PA1_0480		285	PA1_445	8	0.0140	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016266	0.10
PA1_125	P-112	0	assumed mannings N	Future			539.983060883		PVC		PA1_125	490.50	486.00	0.666666667	PA1_0110	PA1_0170		540	PA1_125	8	0.0083	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020409	0.10
PA1_135	P-82	0	assumed mannings N	Future			234.000020227		PVC		PA1_135	360.00	358.00	0.666666667	PA1_0115	PA1_0460		234	PA1_135	8	0.0085	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.063635	0.22
PA1_190	P-405	0	assumed mannings N	Future			523.661595212		PVC		PA1_190	467.00	434.00	0.666666667	PA1_0120	PA1_0180		524	PA1_190	8	0.0631	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.045468	0.12
PA1_575	New Pipe	0	assumed mannings N	Future			46.2849573211		PVC		PA1_575	447.00	424.15	0.666666667	PA1_0125	PA1_0590		46	PA1_575	8	0.5677	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA1_110	P-418	0	assumed mannings N	Future			185.216337126		PVC		PA1_110	429.00	424.00	0.666666667	PA1_0130	PA1_0185		185	PA1_110	8	0.0270	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.010106	0.07
PA1_260	P-410	0	assumed mannings N	Future			228.59498938		PVC		PA1_260	568.00	567.00	0.666666667	PA1_0135	PA1_0190		229	PA1_260	8	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006890	0.07
PA1_160	P-423	0	assumed mannings N	Future			434.059859151		PVC		PA1_160	453.00	421.00	0.666666667	PA1_0140	PA1_0200		434	PA1_160	8	0.0739	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.022049	0.13
PA1_280	P-311	0	assumed mannings N	Future			268.740355687		PVC		PA1_280	445.25	439.95	0.666666667	PA1_0145	PA1_0715		265	PA1_280	8	0.0200	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.048830	0.16
PA1_380	P-109	0	assumed mannings N	Future			453.953574543		PVC		PA1_380	449.00	445.00	0.666666667	PA1_0150	MH067W016		439	PA1_380	8	0.0510	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.065302	0.18
PA1_320	P-89	0	assumed mannings N	Future			307.648415309		PVC		PA1_320	400.00	394.50	0.666666667	PA1_0155	PA1_0175		308	PA1_320	8	0.0179	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013078	0.07
PA1_180	P-79	0	assumed mannings N	Future			256.10546919		PVC		PA1_180	366.50	362.00	0.666666667	PA1_0160	PA1_0205		256	PA1_180	8	0.0176	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.025010	0.13
PA1_550	P-105	0	assumed mannings N	Future			290.064408985		PVC		PA1_550	350.00	346.00	0.666666667	PA1_0165	PA1_0240		290	PA1_550	8	0.0138	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012181	0.08
PA1_465	P-111	0	assumed mannings N	Future			921.634650451		PVC		PA1_465	486.00	452.00	0.666666667	PA1_0170	PA1_0250		922	PA1_465	8	0.0369	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020385	0.11
PA1_340	P-88	0	assumed mannings N	Future			254.545145161		PVC		PA1_340	394.50	383.50	0.666666667	PA1_0175	PA1_0375		255	PA1_340	8	0.0433	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013035	0.06
PA1_525	P-404	0	assumed mannings N	Future			286.835314054		PVC		PA1_525	434.00	422.00	0.666666667	PA1_0180	PA1_0260		287	PA1_525	8	0.0419	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.061488	0.13
PA1_330	P-416	0	assumed mannings N	Future			176.450907589		PVC		PA1_330	424.00	422.00	0.666666667	PA1_0185	PA1_0260		176	PA1_330	8	0.0113	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.010106	0.10
PA1_305	P-409	0	assumed mannings N	Future			514.999907623		PVC		PA1_305	567.00	542.00	0.666666667	PA1_0190	PA1_0405		515	PA1_305	8	0.0486	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006890	0.05
PA1_255	P-429	0	assumed mannings N	Future			612.05188939		PVC		PA1_255	546.00	524.00	0.666666667	PA1_0195	PA1_0490		612	PA1_255	8	0.0360	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003258	0.05
PA1_505	P-422	0	assumed mannings N	Future			396.388006164		PVC		PA1_505	421.00	407.00	0.666666667	PA1_0200	PA1_0280		396	PA1_505	8	0.0153	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.099700	0.16
PA1_195	P-78	0	assumed mannings N	Future			300.999988034		PVC		PA1_195	362.00	357.00	0.666666667	PA1_0205	PA1_0560		301	PA1_195	8	0.0166	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.057622	0.20
PA1_385	P-86	0	assumed mannings N	Future			324.055515377		PVC		PA1_385	369.00	365.50	0.666666667	PA1_0210	PA1_0555		324	PA1_385	8	0.0108	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013028	0.12
PA1_535	P-305	0	assumed mannings N	Future			195.426789608		PVC		PA1_535	376.44	361.22	0.666666667	PA1_0215	PA1_0675		190	PA1_535	8	0.0802	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.057802	0.11
PA1_405	P-107	0	assumed mannings N	Future			279.014133969		PVC		PA1_405	378.00	374.00	0.666666667	PA1_0220	PA1_0305		279	PA1_405	8	0.0143	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.035949	0.15
PA1_430	P-346	0	assumed mannings N	Future			274.327325135		PVC		PA1_430	553.00	541.05	0.666666667	PA1_0230	PA1_0615		271	PA1_430	8	0.0441	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.014336	0.07
PA1_270	P-93	0	assumed mannings N	Future			1153.71947668		PVC		PA1_270	528.00	489.00	0.666666667	PA1_0235	PA1_0580		1154	PA1_270	8	0.0338	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.010435	0.07
PA1_435	P-104	0	assumed mannings N	Future			279.00007038		PVC		PA1_435	346.00	342.00	0.666666667	PA1_0240	PA1_0335		279	PA1_435	8	0.0143	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012105	0.08
PA1_515	P-108	0	assumed mannings N	Future			352.98711493		PVC		PA1_515	383.00	378.00	0.666666667	PA1_0245	PA1_0220		353	PA1_515	8	0.0142	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007657	0.10
PA1_335	P-110	0	assumed mannings N	Future			339.601707606		PVC		PA1_335	452.00	449.00	0.666666667	PA1_0250	PA1_0150		340	PA1_335	8	0.0088	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.031192	0.14
PA1_115	P-83	0	assumed mannings N	Future			300.999891176		PVC		PA1_115	361.50	360.00	0.666666667	PA1_0255	PA1_0115		301	PA1_115	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.029857	0.18
PA1_415	P-403	0	assumed mannings N	Future			657.691394429		PVC		PA1_415	422.00	375.00	0.666666667	PA1_0260	PA1_0345		658	PA1_415	8	0.0716	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.071590	0.12
PA1_165	P-415	0	assumed mannings N	Future			1133.36837872		PVC		PA1_165	484.00	467.00	0.666666667	PA1_0265	PA1_0120		1133	PA1_165	8	0.0150	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003193	0.07
PA1_230	P-348	0	assumed mannings N	Future			55.8272424642		PVC		PA1_230	495.00	481.88	0.666666667	PA1_0270	PA1_0515		56	PA1_230	8	0.2418	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012268	0.04
PA1_555	P-428	0	assumed mannings N	Future			643.282191476		PVC		PA1_555	512.50	493.00	0.666666667	PA1_0275	PA1_0565		643	PA1_555	8	0.0303	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003675	0.05
PA1_390	P-421	0	assumed mannings N	Future			1039.25604735		PVC		PA1_390	407.00	297.00	0.666666667	PA1_0280	PA1_0365		1039	PA1_390	8	0.1064	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.099700	0.14
PA1_495	P-432	0	assumed mannings N	Future			144.498122586		PVC		PA1_495	468.00	467.00	0.666666667	PA1_0285	PA1_0120		144	PA1_495	8	0.0069	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007830	0.09
PA1_420	P-304	0	assumed mannings N	Future			45.8321700278		PVC		PA1_420	389.68	389.28	0.666666667	PA1_0295	PA1_0670		100	PA1_420	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.024570	0.14
PA1_185	P-316	0	assumed mannings N	Future			55.8965175986		PVC		PA1_185	445.70	445.30	0.666666667	PA1_0300	PA1_0145		100	PA1_185	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.029398	0.16
PA1_250	P-106	0	assumed mannings N	Future			253.431961835		PVC		PA1_250	374.00	372.00	0.666666667	PA1_0305	DE067W002		302	PA1_250	8	0.0066	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.035949	0.16
PA1_245	P-321	0	assumed mannings N	Future			75.7395621414		PVC		PA1_245	509.49	509.09	0.666666667	PA1_0310	PA1_0440		100	PA1_245	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011627	0.10
PA1_155	P-119	0	assumed mannings N	Future			456.977970014		PVC		PA1_155	495.00	493.00	0.666666667	PA1_0315	PA1_0385		457	PA1_155	8	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.015395	0.12
PA1_485	P-90	0	assumed mannings N	Future			297.463792243		PVC		PA1_485	367.00	365.50	0.666666667	PA1_0320	PA1_0555		297	PA1_485	8	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016829	0.13
PA1_570	New Pipe	0	assumed mannings N	Future			86.3896602414		PVC		PA1_570	528.00	513.90	0.666666667	PA1_0325	PA1_0450		86	PA1_570	8	0.1654	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013219	0.05
PA1_170	P-80	0	assumed mannings N	Future			221.999960356		PVC		PA1_170	363.50	362.00	0.666666667	PA1_0330	PA1_0205		222	PA1_170	8	0.0068	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.032777	0.16
PA1_310	P-103	0	assumed mannings N	Future			300.999944611		PVC		PA1_310	342.00	338.00	0.666666667	PA1_0335	PA1_0395		301	PA1_310	8	0.0133	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012117	0.08
PA1_175	P-97	0	assumed mannings N	Future			177.380453547		PVC		PA1_175	334.00	330.00	0.666666667	PA1_0340	DE066N027		222	PA1_175	8	0.0180	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016270	0.09
PA1_265	P-402	0	assumed mannings N	Future			694.476027713		PVC		PA1_265	375.00	312.75	0.666666667	PA1_0345	MH107W004		684	PA1_265	8	0.0914	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.071579	0.12
PA1_510	P-414	0	assumed mannings N	Future			884.883853855		PVC		PA1_510	519.00	510.00	0.666666667	PA1_0350	PA1_0470		885	PA1_510	8	0.0102	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.003871	0.07
PA1_615	New Pipe	0	assumed mannings N	Future			207.0907323		PVC		PA1_615	553.51	543.34	0.666666667	PA1_0355	PA1_0680		204	PA1_615	8	0.0500	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007805	0.05
PA1_440	P-427	0	assumed mannings N	Future			766.357364619		PVC		PA1_440	477.00	453.00	0.666666667	PA1_0360	PA1_0140		766	PA1_440	8	0.0313	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004134	0.06
PA1_225	P-420	0	assumed mannings N	Future			295.45435783		PVC		PA1_225	292.44	291.13	0.666666667	PA1_0365	MH107W002		135	PA1_225	8	0.0097	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.099700	0.28
PA1_370	P-431	0	assumed mannings N	Future			190.33352042		PVC		PA1_370	526.00	526.00	0.666666667	PA1_0370	PA1_0495		190	PA1_370	8	0.0000	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.010983	0.17
PA1_365	P-87	0	assumed mannings N	Future			404.233129186		PVC		PA1_365	383.50	369.00	0.666666667	PA1_0375	PA1_0210		404	PA1_365	8	0.0359	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013028	0.08
PA1_585	New Pipe	0	assumed mannings N	Future			216.026631845		PVC		PA1_585	532.54	523.00	0.666666667	PA1_0380	PA1_0685		212	PA1_585	8	0.0450	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007805	0.05
PA1_500	P-118	0	assumed mannings N	Future			574.329291571		PVC		PA1_500	493.00	490.50	0.666666667	PA1_0385	PA1_0110		574	PA1_500	8	0.0044	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.015303	0.12
PA1_235	P-94	0	assumed mannings N	Future			386.609746893		PVC		PA1_235	504.00	489.00	0.666666667	PA1_0390	PA1_0580		387	PA1_235	8	0.0388	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012743	0.07
PA1_140	P-102	0	assumed mannings N	Future			275.007299256		PVC		PA1_140	338.00	334.00	0.666666667	PA1_0395	PA1_0455		275	PA1_140	8	0.0145	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012119	0.08
PA1_540	P-115	0	assumed mannings N	Future			768.829345187		PVC		PA1_540	473.00	457.00	0.666666667	PA1_0400	PA1_0545		769	PA1_540	8	0.0208	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012836	0.10
PA1_130	P-408	0	assumed mannings N	Future			395.003352469		PVC		PA1_130	542.00	510.00	0.666666667	PA1_0405	PA1_0470		395	PA1_130	8	0.0813	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012206	0.07
PA1_565	P-401	0	assumed mannings N	Future			317.963970199		PVC		PA1_565	331.00	329.00	0.666666667	PA1_0410	PA1_0475		318	PA1_565	8	0.0063	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.04
PA1_560	P-84	0	assumed mannings N	Future			268.007511727		PVC		PA1_560	363.00	361.50	0.666666667	PA1_0415	PA1_0255		268	PA1_560	8	0.0056	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.029858	0.16
PA1_240	P-76	0	assumed mannings N	Future			291.000059295		PVC		PA1_240	353.00	351.00	0.666666667	PA1_0420	PA1_0575		291	PA1_240	8	0.0069	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.121253	0.28
PA1_395	P-413	0	assumed mannings N	Future			533.823596646		PVC		PA1_395	554.00	542.00	0.666666667	PA1_0425	PA1_0405		534	PA1_395	8	0.0225	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005368	0.05
PA1_315	P-426	0	assumed mannings N	Future			680.16645083		PVC		PA1_315	442.00	421.00	0.666666667	PA1_0430	PA1_0200		680	PA1_315	8	0.0309	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004134	0.11
PA1_450	P-74	0	assumed mannings N	Future			118.052165514		PVC		PA1_450	346.50	335.50	0.666666667	PA1_0435	MH066N032		211	PA1_450	8	0.0523	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.121250	0.18
PA1_200	P-314	0	assumed mannings N	Future			282.116552912		PVC		PA1_200	509.04	489.60	0.666666667	PA1_0440	PA1_0505		278	PA1_200	8	0.0702	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019432	0.07
PA1_375	P-117	0	assumed mannings N	Future			606.269000811		PVC		PA1_375	459.00	452.00	0.666666667	PA1_0445	PA1_0250		606	PA1_375	8	0.0115	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.011061	0.11
PA1_475	P-343	0	assumed mannings N	Future			215.769157691		PVC		PA1_475	513.85	497.21	0.666666667	PA1_0450	PA1_0625		283	PA1_475	8	0.0589	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.027555	0.08
PA1_490	P-101	0	assumed mannings N	Future			157.987196648		PVC		PA1_490	334.00	329.00	0.666666667	PA1_0455	DE066N028		220	PA1_490	8	0.0227	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012100	0.07
PA1_150	P-81	0	assumed mannings N	Future			235.999997274		PVC		PA1_150	358.00	357.00	0.666666667	PA1_0460	PA1_0560		236	PA1_150	8	0.0042	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.063634	0.24
PA1_425	P-114	0	assumed mannings N	Future			344.687889429		PVC		PA1_425	457.00	449.00	0.666666667	PA1_0465	PA1_0150		345	PA1_425	8	0.0232	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.034188	0.12
PA1_470	P-407	0	assumed mannings N	Future			246.427060868		PVC		PA1_470	510.00	499.00	0.666666667	PA1_0470	PA1_0540		246	PA1_470	8	0.0447	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.029397	0.09
PA1_290	P-400	0	assumed mannings N, changed ds invert to match ds mh	Future			202.510030259		PVC		PA1_290	329.00	319.41	0.666666667	PA1_0475	DE107W003		240	PA1_290	8	0.0401	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016537	0.09
PA1_455	P-98	0	assumed mannings N	Future			276.999943656		PVC		PA1_455	337.00	334.00	0.666666667	PA1_0480	PA1_0340		277	PA1_455	8	0.0108	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016293	0.09
PA1_520	P-412	0	assumed mannings N	Future			194.55737589		PVC		PA1_520	585.00	583.00	0.666666667	PA1_0485	PA1_0550		195	PA1_520	8	0.0103	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006914	0.06
PA1_145	P-425	0	assumed mannings N	Future			504.119073309		PVC		PA1_145	524.00	493.00	0.666666667	PA1_0490	PA1_0565		504	PA1_145	8	0.0616	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.014242	0.08
PA1_205	P-430	0	assumed mannings N	Future			245.42439645		PVC		PA1_205	526.00	524.00	0.666666667	PA1_0495	PA1_0490		245	PA1_205	8	0.0081	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.010985	0.08
PA1_480	P-308	0	assumed mannings N	Future			181.571910569		PVC		PA1_480	429.38	418.20	0.666666667	PA1_0500	PA1_0730		180	PA1_480	8	0.0621	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.118453	0.17
PA1_530	P-313	0	assumed mannings N	Future			254.324852259		PVC		PA1_530	489.50	462.10	0.666666667	PA1_0505	PA1_0695		249	PA1_530	8	0.1106	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019432	0.06
PA1_220	P-116	0	assumed mannings N	Future			291.093321088		PVC		PA1_220	461.00	457.00	0.666666667	PA1_0510	PA1_0465		291	PA1_220	8	0.0137	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.021540	0.11
PA1_350	P-342	0	assumed mannings N	Future			254.568816532		PVC		PA1_350	481.83	451.75	0.666666667	PA1_0515	PA1_0630		283	PA1_350	8	0.1069	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.039822	0.09
PA1_120	P-354	0	assumed mannings N	Future			84.4957404607		P

| | | |

PA51_545	GP-GPN	0	assumed mannings N	Future				1073.84298593				PA51_545	526.90	508.00	0.666666667	PA51_0565	PA51_0560		1074	PA51_545	8	0.0176	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.004645	0.05
PA51_565	GP-GPN	0	assumed mannings N	Future				1071.10598479				PA51_565	506.90	491.00	0.666666667	PA51_0570	PA51_0540		1071	PA51_565	8	0.0148	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012764	0.08
PA51_560	GP-GPN	0	assumed mannings N	Future				693.07361483				PA51_560	516.90	498.00	0.666666667	PA51_0575	PA51_0555		693	PA51_560	8	0.0273	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.026275	0.10
PA51_570	GP-GPN	0	assumed mannings N	Future				1304.1367739				PA51_570	341.90	265.00	1.000000000	PA51_0580	PA51_0830		1304	PA51_570	12	0.0591	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.434669	0.27
PA51_575	GP-GPN	0	assumed mannings N	Future				1382.61140353				PA51_575	358.00	342.00	1.000000000	PA51_0585	PA51_0580		1383	PA51_575	12	0.0116	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.05
PA51_580	GP-GPN	0	assumed mannings N	Future				2461.70782121				PA51_580	367.00	342.10	0.833333333	PA51_0590	PA51_0580		2464	PA51_580	10	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.434729	0.38
PA51_585	GP-GPN	0	assumed mannings N	Future				212.154068285				PA51_585	506.90	503.00	0.666666667	PA51_0595	PA51_0490		212	PA51_585	8	0.0184	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.028451	0.11
PA51_590	GP-GPN	0	assumed mannings N	Future				234.792451074				PA51_590	412.68	411.74	0.666666667	PA51_0600	PA51_0425		235	PA51_590	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.111380	0.31
PA51_595	GP-GPN	0	assumed mannings N	Future				780.143089236				PA51_595	415.90	412.78	0.666666667	PA51_0605	PA51_0600		780	PA51_595	8	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020177	0.16
PA51_605	New Pipe	0	assumed mannings N	Future				3104.53639735				PA51_605	432.90	383.20	0.666666667	PA51_0610	MH141N001		3084	PA51_605	8	0.0161	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.141941	0.26
PA51_610	GP-GPN	1985	assumed mannings N	Future				1757.3212079			VCP	PA51_610	217.50	213.50	1.000000000	PA51_0615	MH140W012		1803	PA51_610	12	0.0022	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.108923	0.20
PA51_690	MH139E017MH1	1985	assumed mannings N	Future				1526.12229297			VCP	PA51_690	433.00	424.33	1.250000000	PA51_0675	MH174W010		1235	PA51_690	15	0.0070	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.134488	0.13
PA51_705	MH139E017MH1	0	assumed mannings N	Future				248.6145484				PA51_705	257.31	253.45	1.500000000	PA51_0680	PA51_0790		188	PA51_705	18	0.0206	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.134756	0.08
PA51_710	MH139E017MH1	0	assumed mannings N	Future				213.313136803				PA51_710	269.86	267.06	1.500000000	PA51_0685	PA51_0070		350	PA51_710	18	0.0080	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006724	0.03
PA51_715	MH139E017MH1	0	assumed mannings N	Future				348.226377921				PA51_715	265.08	262.85	1.500000000	PA51_0690	PA51_0695		281	PA51_715	18	0.0080	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.127580	0.10
PA51_720	MH139E017MH1	0	assumed mannings N	Future				288.08117602				PA51_720	262.75	260.73	1.500000000	PA51_0695	PA51_0075		254	PA51_720	18	0.0079	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.127578	0.10
PA51_745	MH139E017MH1	1985	assumed mannings N	Future				65.1406661134			VCP	PA51_745	235.41	235.31	2.000000000	PA51_0700	MH156S035		20	PA51_745	24	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	1.054115	0.22
PA51_725	MH139E017MH1	0	assumed mannings N	Future				140.238608621				PA51_725	236.02	235.61	2.000000000	PA51_0705	PA51_0700		81	PA51_725	24	0.0051	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	1.054071	0.22
PA51_730	MH139E017MH1	0	assumed mannings N	Future				275.253293586				PA51_730	237.89	236.22	2.000000000	PA51_0710	PA51_0705		330	PA51_730	24	0.0051	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	1.054073	0.21
PA51_735	MH139E017MH1	0	assumed mannings N	Future				345.343115054				PA51_735	239.73	237.99	2.000000000	PA51_0715	PA51_0710		343	PA51_735	24	0.0051	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	1.021797	0.21
PA51_740	MH139E017MH1	0	assumed mannings N	Future				193.409498894				PA51_740	241.45	239.93	2.000000000	PA51_0720	PA51_0715		299	PA51_740	24	0.0051	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	1.022291	0.21
PA51_760	MH139E017MH1	1985	assumed mannings N	Future				823.075110012			VCP	PA51_760	255.86	254.05	1.000000000	PA51_0725	PA51_0045		823	PA51_760	12	0.0022	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.128694	0.22
PA51_770	MH139E017MH1	1985	assumed mannings N	Future				774.530283217			VCP	PA51_770	252.94	252.01	1.500000000	PA51_0730	PA51_0110		775	PA51_770	18	0.0012	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.128828	0.15
PA51_780	MH139E017MH1	1985	assumed mannings N	Future				1025.67404085			VCP	PA51_780	295.17	284.92	1.250000000	PA51_0735	PA51_0740		1026	PA51_780	15	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA51_785	MH139E017MH1	1985	assumed mannings N	Future				1155.718598			VCP	PA51_785	284.82	273.26	1.250000000	PA51_0740	PA51_0750		1156	PA51_785	15	0.0100	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA51_790	MH139E017MH1	1985	assumed mannings N	Future				617.872043873			VCP	PA51_790	275.09	273.36	0.833333333	PA51_0745	PA51_0750		618	PA51_790	10	0.0028	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA51_795	MH139E017MH1	1985	assumed mannings N	Future				1808.4913244			VCP	PA51_795	273.16	264.26	1.250000000	PA51_0750	MH140E002		1780	PA51_795	15	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.10
PA51_810	MH139E017MH1	1985	assumed mannings N	Future				1659.80991134			VCP	PA51_810	254.20	245.90	1.500000000	PA51_0755	PA51_0820		1660	PA51_810	18	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.416188	0.20
PA51_805	MH139E017MH1	1985	assumed mannings N	Future				322.944838182			VCP	PA51_805	287.00	281.90	1.250000000	PA51_0760	PA51_0755		323	PA51_805	15	0.0158	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA51_815	MH139E017MH1	1985	assumed mannings N	Future				407.343037619			VCP	PA51_815	246.54	245.63	1.500000000	PA51_0765	PA51_0780		304	PA51_815	18	0.0030	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.884893	0.31
PA51_820	MH139E017MH1	1985	assumed mannings N	Future				81.0329588159			VCP	PA51_820	243.84	243.36	1.500000000	PA51_0770	PA51_0775		160	PA51_820	18	0.0030	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.884034	0.31
PA51_825	MH139E017MH1	1985	assumed mannings N	Future				152.632509949			VCP	PA51_825	243.26	242.45	1.500000000	PA51_0775	PA51_0135		270	PA51_825	18	0.0030	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.883668	0.31
PA51_830	MH139E017MH1	1985	assumed mannings N	Future				72.6803051712			VCP	PA51_830	245.43	245.38	1.500000000	PA51_0780	PA51_0785		17	PA51_830	18	0.0029	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.884924	0.30
PA51_835	MH139E017MH1	1985	assumed mannings N	Future				360.539028123			VCP	PA51_835	245.18	244.04	1.500000000	PA51_0785	PA51_0770		380	PA51_835	18	0.0030	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.884159	0.32
PA51_840	MH139E017MH1	0	assumed mannings N	Future				118.106936761				PA51_840	253.25	242.45	1.500000000	PA51_0790	PA51_0135		127	PA51_840	18	0.0853	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.134749	0.06
PA51_845	MH139E017MH1	0	assumed mannings N	Future				248.61806139				PA51_845	247.80	246.74	1.500000000	PA51_0795	PA51_0765		350	PA51_845	18	0.0030	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.885483	0.32
PA51_850	MH139E017MH1	0	assumed mannings N	Future				523.387145156				PA51_850	249.93	249.05	1.500000000	PA51_0800	PA51_0165		294	PA51_850	18	0.0030	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.705374	0.28
PA51_855	MH139E017MH1	0	assumed mannings N, changed us invert to flow	Future				222.683055741				PA51_855	383.00	377.00	0.666666667	PA51_0805	PA51_0300		223	PA51_855	8	0.0270	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.066008	0.27
PA51_860	MH139E017MH1	0	assumed mannings N	Future				381.627887483				PA51_860	394.90	387.00	0.666666667	PA51_0810	PA51_0315		182	PA51_860	8	0.0207	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.150943	0.27
PA51_865	MH139E017MH1	0	assumed mannings N	Future				492.188988497				PA51_865	285.80	281.00	0.666666667	PA51_0815	PA51_0250		492	PA51_865	8	0.0098	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.026756	0.13
PA51_875	MH139E017MH1	1985	assumed mannings N	Future				519.335385676			VCP	PA51_875	245.80	242.16	1.500000000	PA51_0820	PA51_0825		519	PA51_875	18	0.0070	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.415687	0.18
PA51_880	MH139E017MH1	1985	assumed mannings N	Future				708.40878843			VCP	PA51_880	242.06	239.29	1.750000000	PA51_0825	MH1405006		694	PA51_880	21	0.0040	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.415236	0.26
PA51_885	MH139E017MH1	0	assumed mannings N	Future				485.11189142				PA51_885	317.00	312.10	1.000000000	PA51_0830	PA51_0025		485	PA51_885	12	0.0101	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00
PA51_890	MH139E017MH1	1985	assumed mannings N	Future				2306.24842254			VCP	PA51_890	267.37	259.99	1.500000000	PA51_0830	PA51_891		2306	PA51_890	18	0.0032	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.424498	0.22
PA51_895	MH139E017MH1	0	assumed mannings N	Future				51.4541629553				PA51_895	470.82	470.57	0.833333333	PA51_0835	PA51_0840		31	PA51_895	10	0.0080	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.460505	0.38
PA51_900	MH139E017MH1	0	assumed mannings N	Future				70.2882518418				PA51_900	470.57	470.00	1.500000000	PA51_0840	PA51_0845		70	PA51_900	18	0.0081	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.460616	0.19
PA51_905	MH139E017MH1	0	assumed mannings N	Future				376.764351794				PA51_905	469.80	462.50	1.500000000	PA51_0845	PA51_0850		377	PA51_905	18	0.0194	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.460505	0.15
PA51_910	MH139E017MH1	0	assumed mannings N	Future				164.538216688				PA51_910	450.80	450.10	0.833333333	PA51_0850	PA51_0855	1_Check_future_reach	195	PA51_910	10	0.0036	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.460505	0.56
PA51_915	MH139E017MH1	0	assumed mannings N	Future				79.620981152				PA51_915	450.00	449.30	0.833333333	PA51_0855	PA51_0860	1_Check_future_reach	195	PA51_915	10	0.0036	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.717202	0.64
PA51_920	MH139E017MH1	0	assumed mannings N	Future				428.403730704				PA51_920	449.20	448.40	0.833333333	PA51_0860	PA51_0865	1_Check_future_reach	251	PA51_920	10	0.0032	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.717202	0.66
PA51_925	MH139E017MH1	0	assumed mannings N	Future				181.563771772				PA51_925	448.30	446.50	0.833333333	PA51_0865	PA51_0870	1_Check_future_reach	252	PA51_925	10	0.0071	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.717202	0.59
PA51_930	MH139E017MH1	0	assumed mannings N	Future				173.239218828				PA51_930	446.40	445.75	0.833333333	PA51_0870	PA51_0875	1_Check_future_reach	197	PA51_930	10	0.0033	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.717202	0.65
PA51_935	MH139E017MH1	0	assumed mannings N	Future				444.224409031				PA51_935	440.35	439.36	1.000000000	PA51_0875	MH174W030		355	PA51_935	12	0.0291	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.717202	0.29
PA51_950	MH139E017MH1	0	assumed mannings N	Future				105.035151699				PA51_950	462.55	450.20	0.833333333	PA51_0880	PA51_0855		116	PA51_950	10	0.1071	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.256696	0.32
PA51_945	MH139E017MH1	0	assumed mannings N	Future				177.67994629				PA51_945	464.00	462.75	0.833333333	PA51_0885	PA51_0880		255	PA51_945	10	0.0049	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.256696	0.34
PA51_940	MH139E017MH1	0	assumed mannings N	Future				87.2421530333				PA51_940	466.00	464.20	0.833333333	PA51_0890	PA51_0885		74	PA51_940	10	0.0243	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.256696	0.23
PA51_960	MH139E017MH1	1985	assumed mannings N	Future				2282.92139805			VCP	PA51_960	447.00	409.16	0.833333333	PA51_0895	PA51_0900		2283	PA51_960	10	0.0166	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.071372	0.15
PA51_955	MH139E017MH1	0	assumed mannings N	Future				1735.4464283				PA51_955	409.06	395.00	0.833333333	PA51_0900	PA51_0420		1735	PA51_955	10	0.0081	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.240327	0.29
PA51_800	MH139E017MH1	1985	assumed mannings N	Future				1117.41252026			VCP	PA51_800	259.89	254.30	1.500000000	PA51_891	PA51_0755		1117	PA51_800	18	0.0050	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.421802	0.20
PA6_000	P-618	0	assumed mannings N	Future				1910.82876569			PVC	PA6_000	454.00	412.50	1.000000000	PA6_0000	MH142W003		1923	PA6_000	12	0.0216	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.028420	0.06
PA6_380	MH139N023MH1	1985	assumed mannings N	Future				621.28113817			VCP	PA6_380	576.70	573.00	0.666666667	PA6_0005	DE152W001		702	PA6_380	8	0.0053	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.062156	0.21
PA6_005	P171	0	assumed mannings N	Future				211.972607431				PA6_005	578.00	576.80	0.666666667	PA6_0010	PA6_0005		212	PA6_005	8	0.0057	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.029854	0.15
PA6_010	P199	0	assumed mannings N	Future				220.533731195				PA6_010	604.00	598.00	0.666666667	PA6_0015	PA6_0020		221	PA6_010	8	0.0272	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.029860	0.11
PA6_015	P201	0	assumed mannings N	Future				990.036837036				PA6_015	598.00	578.00	0.666666667	PA6_0020	PA6_0010		990	PA6_015	8	0.0202	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.029858	0.13
PA6_025	P241	0	assumed mannings N	Future				379.06169078				PA6_025	464.00	452.00	0.666666667	PA6_0025	PA6_0040		379	PA6_025	8	0.0317	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.016558	0.10
PA6_020	P239	0	assumed mannings N	Future				735.558506803				PA6_020	459.00	452.00	0.666666667	PA6_0030	PA6_0040		736	PA6_020	8	0.0095	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006127	0.08
PA6_370	P447	0	assumed mannings N, changed ds invert to flow	Future				661.41228924				PA6_370	456.00	448.70	0.666666667	PA6_0035	CO153W017		787	PA6_370	8	0.0091	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.020989	0.15
PA6_030	P247	0	assumed mannings N, changed ds invert to flow	Future				461.187749774				PA6_030	452.00	448.70	0.666666667	PA6_0040	CO153W017		460	PA6_030	8	0.0072	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.019403	0.15
PA6_035	P269	0	assumed mannings N	Future				319.515618839				PA6_035	434.00	428.00	0.666666667	PA6_0045	PA6_0375		320	PA6_035	8	0.0188	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.073789	0.21
PA6_040	P279	0	assumed mannings N	Future				461.418416752				PA6_040	448.90	437.00	0.666666667	PA6_0050	MH153W005		440	PA6_040	8	0.0270	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.012253	0.07
PA6_045	P281	0	assumed mannings N	Future				1019.60075551				PA6_045	663.00	660.00	0.666666667	PA6_0055	PA6_0270		1020	PA6_045	8	0.0029	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.049232	0.19
PA6_050	P283	0	assumed mannings N, assumed ds invert to flow	Future				428.899835861				PA6_050	586.00	535.86	0.666666667	PA6_0060	CO153N024		1213	PA6_050	8	0.0414	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.101328	0.20
PA6_055	P285	0	assumed mannings N	Future				135.922455736				PA6_055	660.00	659.00	0.666666667	PA6_0065	PA6_0160		136	PA6_055	8	0.2263	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005053	0.04
PA6_060	P287	0	assumed mannings N	Future				753.381050885				PA6_060	624.00	616.00	0.666666667	PA6_0075	PA6_0235		753	PA6_060	8	0.0106	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005048	0.06
PA6_075	P293	0	assumed mannings N, changed inverts to make flow	Future				864.44514624				PA6_075	707.00	692.00	0.666666667	PA6_0080	PA6_0135		864	PA6_075	8	0.0081	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.007619	0.09
PA6_070	P291	0	assumed mannings N	Future				367.39343887				PA6_070	704.00	694.00	0.666666667	PA6_0085	PA6_0115		367	PA6_070	8	0.0272	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005587	0.08
PA6_085	P297	0	assumed mannings N, changed inverts to make flow	Future				350.22390677				PA6_085	704.00	692.00	0.666666667	PA6_0090	PA6_0135		350	PA6_085	8	0.0314	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006854	0.08
PA6_120	P311	0	assumed mannings N, changed inverts to make flow	Future				164.054043613				PA6_120	702.00	693.00	0.666666667	PA6_0095	PA6_0110		164	PA6_120	8	0.0549	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.014802	0.12
PA6_080	P295	0	assumed mannings N, changed inverts to make flow	Future				266.130161031				PA6_080	717.00	703.00	0.666666667	PA6_0100	PA6_0130		266	PA6_080	8	0.0527	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005066	0.07
PA6_100	P303	0	assumed mannings N	Future				740.077594182				PA6_100	700.00	693.00	0.666666667	PA6_0105	PA6_0110		740	PA6_100	8	0.0095	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.006999	0.12
PA6_095	P301	0	assumed mannings N	Future				218.216890555				PA6_095	693.00	692.00	0.666666667	PA6_0110	PA6_0145		218	PA6_095	8	0.0046	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.035114	0.17
PA6_105	P305	0	assumed mannings N	Future				221.775009637				PA6_105	694.00	693.00	0.666666667	PA6_0115	PA6_0100		222	PA6_105	8	0.0045	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.013373	0.14
PA6_110	P307	0	assumed mannings N	Future				493.970230316				PA6_110	700.00	694.00	0.666666667	PA6_0120	PA6_0115		494	PA6_110	8	0.0121	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005809	0.08
PA6_115	P309	0	assumed mannings N, changed ds invert to match ds mh	Future				619.266178262				PA6_115	700.00	694.00	0.666666667	PA6_0125	PA6_0115		619	PA6_115	8	0.0097	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.002004	0.07
PA6_125	P313	0	assumed mannings N, changed inverts to make flow	Future				210.690515538				PA6_125	703.00	702.00	0.666666667	PA6_0130	PA6_0095		211	PA6_125	8	0.0047	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.009612	0.08
PA6_135	P317	0	assumed mannings N	Future				152.388407904				PA6_135	693.00	692.00	0.666666667	PA6_0135	PA6_0145		152	PA6_135	8	0.0066	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.014466	0.10
PA6_130	P315	0	assumed mannings N, changed inverts to make flow	Future				413.400745547				PA6_130	707.00	702.00	0.666666667	PA6_0140	PA6_0095		413	PA6_130	8	0.0121	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.005190	0.06
PA6_090	P299	0	assumed mannings N	Future				555.458478501				PA6_090	673.00	663.00	0.666666667	PA6_0145	PA6_0055		555	PA6_090	8	0.0180	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.000000	0.00	0.049563	0.20
PA6_140	P319	0	assumed mannings N, changed inverts to make flow	Future				241.800087058		

Bayview Lift Station

Evaluation

1-1 Introduction

Bayview Lift Station is located on the northwest corner of Bayview Way and Bayview Place in the City of Newport Beach. The lift station is bordered by The Terrace apartment complex to the west, a Marriot Hotel to the east, and San Diego Creek to the south. It is near the intersection of Jamboree Road and the Corona Del Mar Freeway (Freeway No. 73). It serves a total tributary area of 59 acres, which is bound by Bristol Street, Jamboree Road (including Fletcher Jones Motorcars), and the San Diego Creek. It is a submersible lift station with two 15 HP, 425 gpm capacity pumps having 55 feet total dynamic head (TDH) at a rated speed of 1800 rpm. The ground elevation at the lift station is 31 feet above mean sea level (amsl). It is an open site and is accessible from Bayview Place with a small area to park, as seen on Photograph 1-1. Also seen on Photograph 1-1 are the Southern California Edison transformer, valve vault and wet well hatches, electrical enclosure, and the standby generator. When crane access to the site is needed, traffic control is required.



Photograph 1-1
Bayview Lift Station

The Bayview Lift Station was constructed in 1986 and upgraded in 2008. The force main is a 6-inch diameter Class 150 AWWA C-900 PVC pipe that extends east along Bayview Way to the intersection of Bayview Way and Jamboree Road, then south along Jamboree Road, terminating at a manhole (MH057N031) at the intersection of University Drive and Jamboree Road, with a total length of 2,850 feet.

1-2 Tributary Area

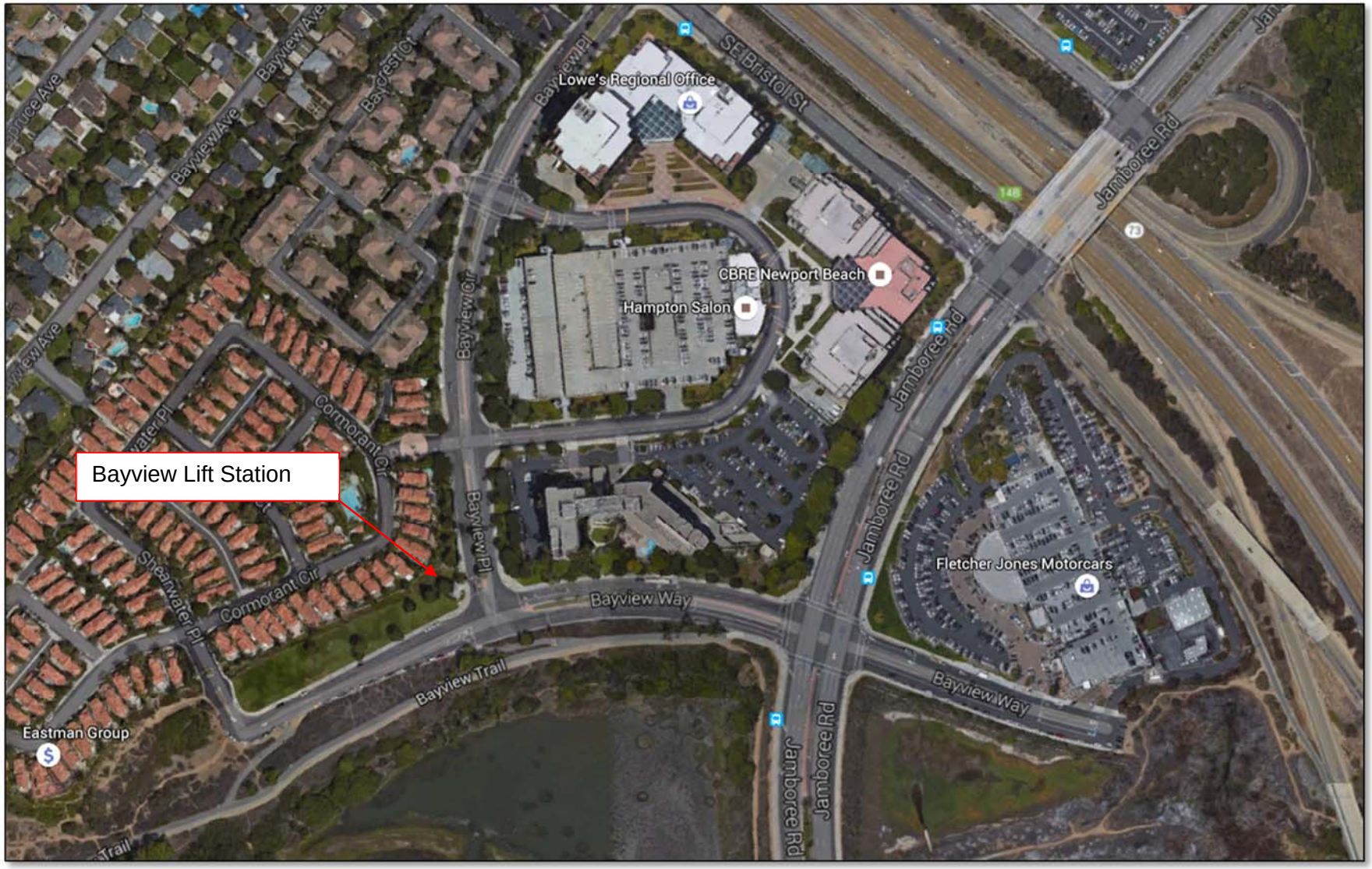
The Bayview Lift Station serves a net tributary area of 59 acres. The tributary area, shown on Figures 1-1 and 1-2, includes general office buildings, a car dealership (Fletcher Jones Motorcars), and medium and high density residential land uses. The breakdown of the lift station tributary area by land use categories is detailed in Table 1-1.

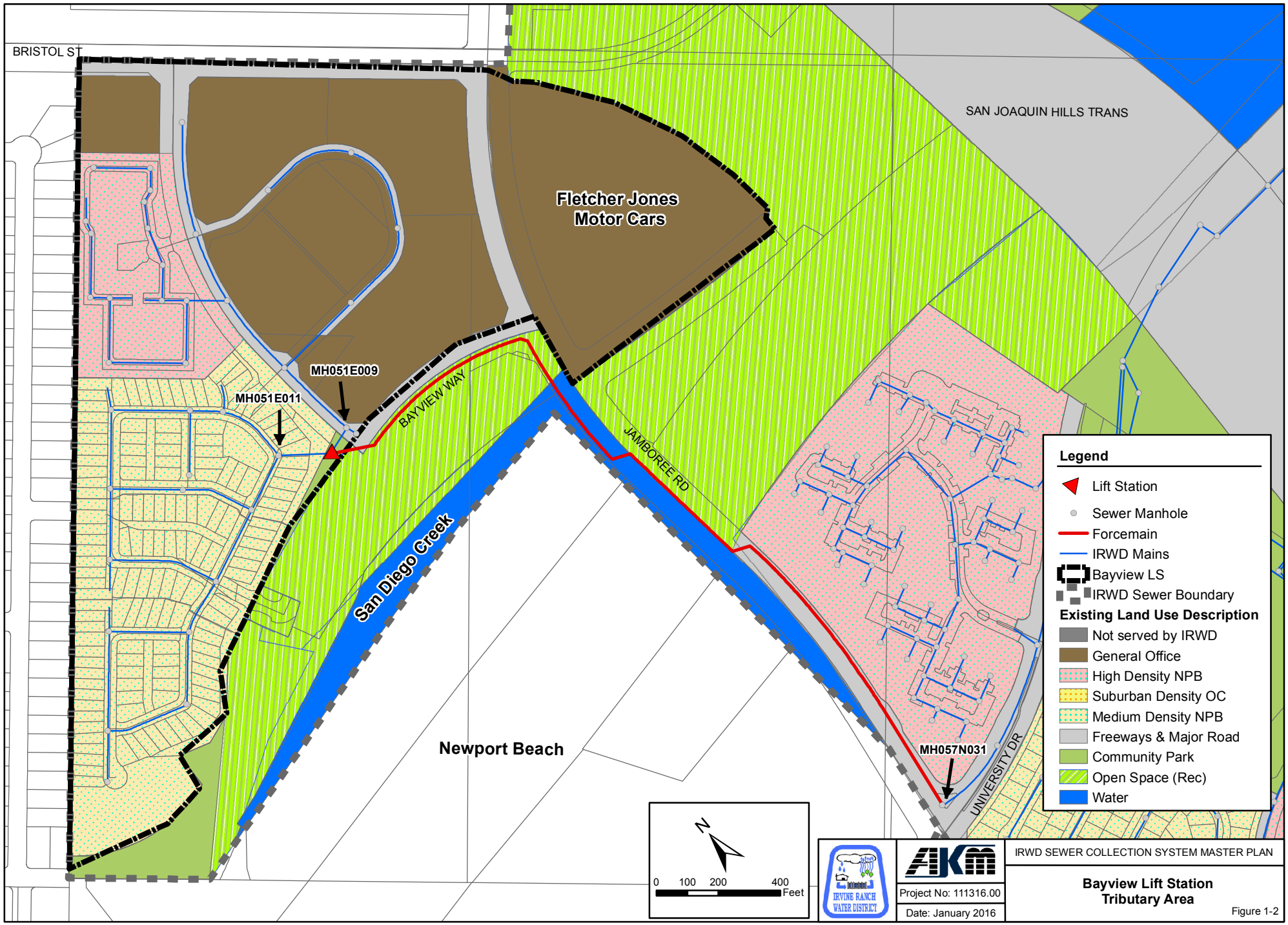
Table 1-1

Bayview Lift Station Tributary Area Land Uses

	LU Code	Land Use Description		Area (Acres)	No. of Dus	Water Use (GPM)
Residential	1163	Medium Density NPB		20.2	136	22.22
	1183	High Density NPB		6.7	88	
Non Residential	1210	General Office	Fletcher Jones	12.6		17.3
			Marriott Hotel	6.0		8.7
			Other	13.8		15.7
	Grand Total			**59**	**224**	**63.92**

Figure 1-1
Bayview Lift Station Aerial Image




BRISTOL ST
SAN JOAQUIN HILLS TRANS
Fletcher Jones Motor Cars
MH051E009
MH051E011
BAYVIEW WAY
JAMBOREE RD
San Diego Creek
Newport Beach
MH057N031
UNIVERSITY DR
Legend
Lift Station
Sewer Manhole
Forcemain
IRWD Mains
Bayview LS
IRWD Sewer Boundary
Existing Land Use Description
Not served by IRWD
General Office
High Density NPB
Suburban Density OC
Medium Density NPB
Freeways & Major Road
Community Park
Open Space (Rec)
Water
N
0 100 200 400
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2016
Bayview Lift Station
Tributary Area
Figure 1-2

1-3 Tributary Flows

Flow calculations based on SCADA records of pump start and stop times and wet well area resulted in an average dry weather flow of 63 gpm, and peak dry weather flow of 104 gpm. The estimated peak wet weather flow is 146 gpm. The average water use within the tributary area is 64 gpm. The tributary flows are significantly higher during weekdays and Saturdays, due to a car wash facility at Fletcher Jones Motorcars.

1-4 Influent Sewers

Two (2) gravity sewers convey wastewater to the wet well. The inlet piping is detailed on Figure 1-3. A 10-inch PVC sewer, which collects the wastewater from the Bay Crest apartment complex and the commercial area west of Jamboree Road, including the Marriott Hotel, enters the wet well from the west at an invert elevation of 16.86 feet amsl. Another 10-inch PVC sewer collects the wastewater from the medium density residential area (The Terrace) and the flows pumped from Fletcher Jones Motorcars, and enters the wet well from the east at an invert elevation of 16.99 feet amsl. The District staff indicated that Fletcher Jones does a good job of removing large debris from their sewage before it reaches the lift station. However, since there is no oil separator at the facility, the sewage still contains grease and oil.

1-5 Wet Well

The wet well is a 6-foot square precast reinforced concrete structure. The original structure was lined with Zebron. It was re-lined with polyurethane in 2008. The visible portion of the wet well lining was observed to be in good condition during the field visit on April 28, 2015. The wet well base is cast-in- place reinforced concrete with 16-inch high ¾:1 fillets to direct debris towards the pump suction. The wet well is shown on Photograph 1-2.

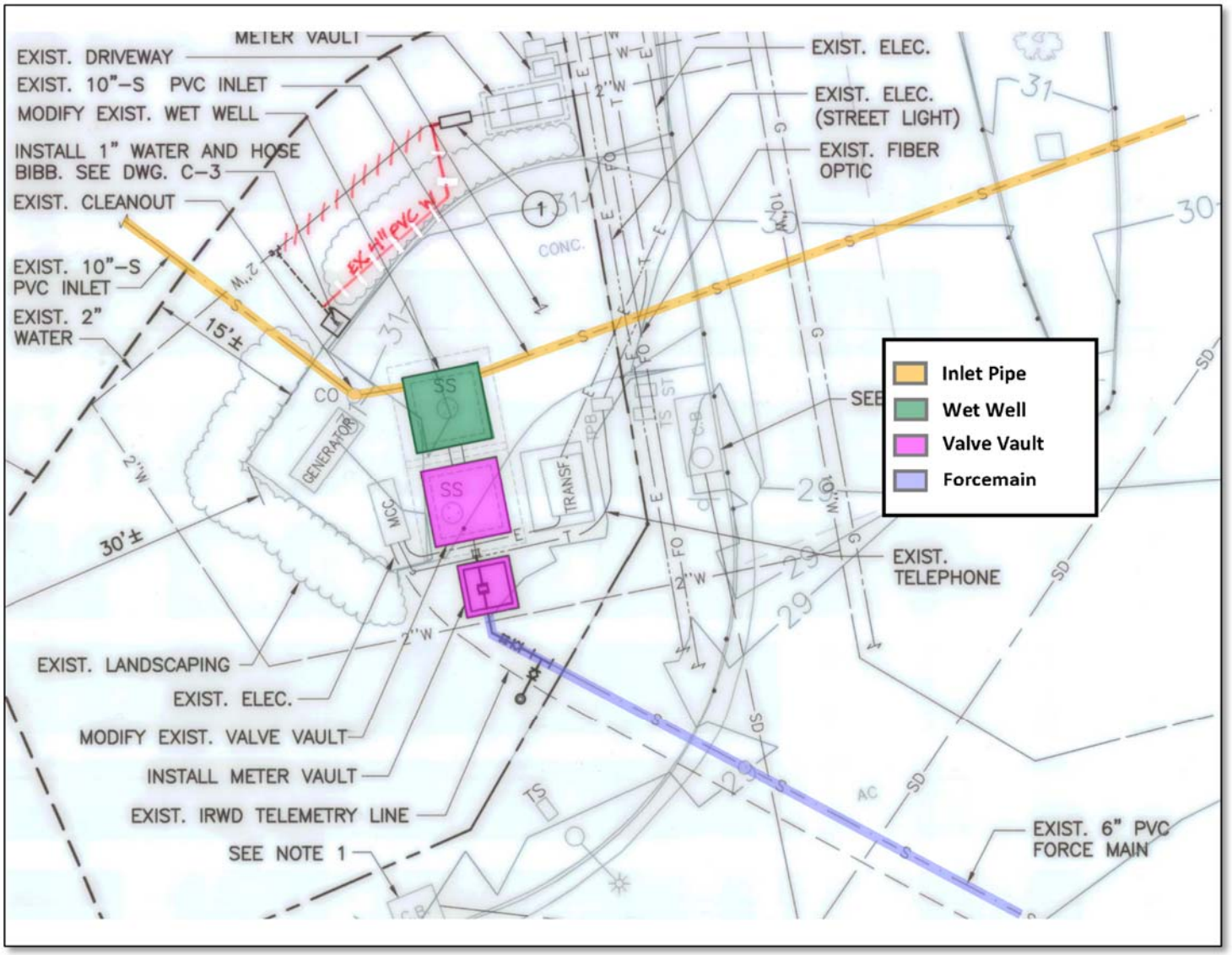


Photograph 1-2
Wet Well

The wastewater level in the wet well is measured with a bubbler. The lead pump starts when the wastewater level reaches 71 inches (15.9 feet amsl) above the invert elevation of the wet well (10.0 feet amsl), and stop when the wastewater level drops to 33 inches above the invert (12.8 feet amsl) according to bubbler recorded levels. The SCADA screenshots provided by the District and set points shown in SCADA data suggest that the pump start and stop levels are 72 inches (16.0 feet amsl) and 25 inches (12.1 feet amsl), respectively, which differs from recorded level data.

Within the 47-inch band indicated by the SCADA, there are 1,054 gallons of operational storage. With the existing average pump capacities of 425 gpm, the pumps would cycle a maximum of 3 times per hour if they are alternated, and the tributary flow were 212.5 gpm (half the capacity of one pump). Since even the estimated peak wet weather flow of 146 gpm is less than 217.5 gpm, the pumps will cycle less than 3 times per hour if alternated. This is less than the maximum of 4 starts per hour recommended for 15 HP motors.

Figure 1-3
Bayview Lift Station Site and Piping Plan



The 10-inch influent sewers enter the wet well at invert elevations of 16.86 feet amsl (west) and 16.99 feet amsl (east). The invert elevation (20.5 feet amsl) of the lowest upstream manhole is on Bayview Place east of the lift station. Assuming an emergency storage band from the high wet well level alarm of 16.5 feet amsl to 20.5 feet amsl, there are 1,077 gallons of emergency storage in the wet well, which corresponds to 18 minutes of response time with the average dry weather flows, and 9 minutes of response time with the peak wet weather flows. The Bayview Sewer Lift Station is very close to San Diego Creek and the Back Bay. There are two catch basins near the lift station (one on the northwest corner of Bayview Way and Bayview Place, and one on the south side of Bayview Way across from the first one).

1-6 Valve Vault

The below ground valve vault, shown on Photograph 1-3, is a 6-foot square precast reinforced concrete structure with a height of approximately 8 feet. The bottom elevation is 22.60 feet amsl and the top elevation is 30.75 feet amsl. Access is through a hatch and a ladder.



Photograph 1-3
Valve Vault

There is no lighting in the valve vault. The vault has a 4-inch drain that has a P-trap but no means to prime it. It is connected to the wet well at a swing check valve, which is corroded.

The valve vault is considered a Class 1 Division 2 hazardous location. All junction boxes for the power and control wires are located in the valve vault. While these boxes are explosion proof, any work conducted on them will expose the wiring to this atmosphere. The District can use portable ventilation equipment for such work. Because the valve vault is very crowded with the eye wash and the BioMagic containers, it would be difficult to add a permanent ventilation system.

Subsequent to the improvements implemented in 2008, the District installed a BioMagic system in the valve vault to add the chemical into the wet well to mitigate odors within the wet well and the downstream system. Both the BioMagic tanks and the eye-wash are located in the valve vault, which leaves minimal space for any maintenance, repair, and replacement work.

1-7 Discharge Piping



Photograph 1-4
Flow Meter Vault and Magnetic Flow Meter

The 4-inch ductile iron (DI) discharge piping for each pump starts at the pump discharge nozzle and extends up through a flanged 90° DI bend to a sleeve type coupling, and then a second flanged 90° DI bend within the wet well at an invert elevation of 23.30 feet amsl (Photograph 1-2). This segment of piping was replaced in 2008. The 90° DI bend joins with the older (1986) cast iron piping at the flanged 90° DI bend. The 4-inch cast iron discharge piping then penetrates the wet well wall, and continues horizontally into the valve vault, with a flexible coupling between the two structures. Within the valve vault (Photograph 1-3), there is a 4-inch Victaulic coupling, SurgeBuster check valve, plug valve, and a 45° bend for each pump discharge, which confluence at a 4-inch x 4-inch x 6-inch cast iron flanged true wye. Following the wye is a 6-inch flanged tee that extends to the force main, as well as to a vertical 6-inch bypass pumping connection with a plug valve and Camlock fitting. The 6-inch cast iron force main exists the valve vault on its south side. With the design capacity of the pump (425 gpm), the velocity in the 4-inch diameter discharge pipes is nearly 11 feet per second.

In 2008, the District modified the downstream piping, as shown on Figure 1-4, by adding a magnetic flow meter in a new vault, shown on Photograph 1-4, and another bypass pumping connection. The vault does not have any drainage, so ponding can occur in the meter vault as shown on Photograph 1-4.

The 4-inch discharge piping experiences high velocities.

1-8 Forcemain

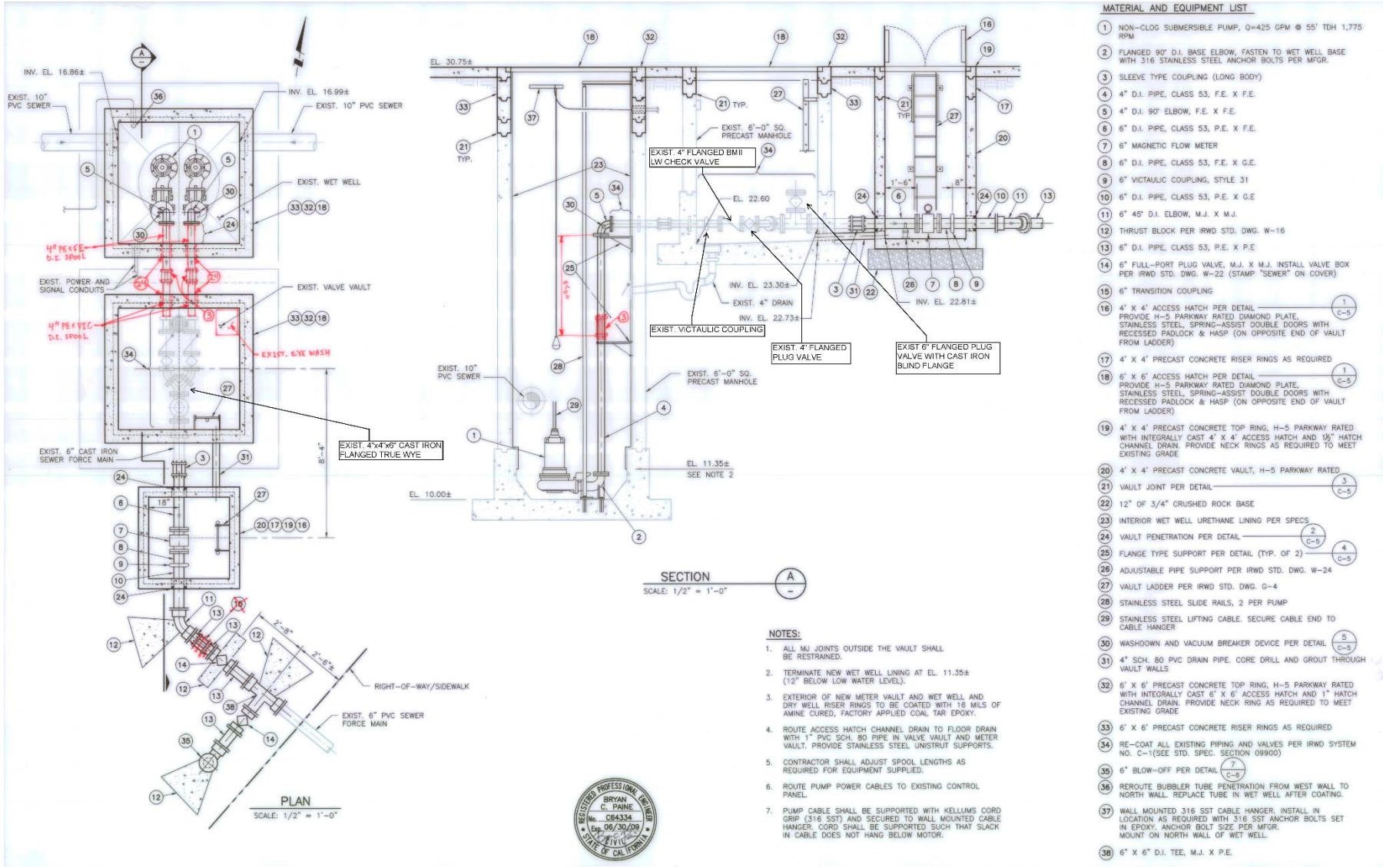
The forcemain is a 6-inch diameter Class 150 AWWA C-900 PVC pipe that extends east along Bayview Way to the intersection of Bayview Way and Jamboree Road, where it continues south along Jamboree Road and terminates at MH057N031 at the intersection of University Drive and Jamboree Road, totaling 2,850 feet, as seen on Figure 1-2. The invert elevation at the discharge manhole is approximately 30 feet amsl. From the discharge manhole, gravity sewers convey the wastewater northeast to a siphon, and then to the University Lift Station at the intersection of Campus Drive and University Drive.

Approximately 360 feet of the forcemain is an epoxy lined and coated steel pipe supported from the east pile caps of the southbound Jamboree Road Bridge over San Diego Creek. This pipe is nearly 30 years old. With the existing pump capacity of 425 gpm, the velocity in the forcemain is approximately 4.8 feet per second (fps), which is within the recommended forcemain velocity range of 3 – 5 fps.

1-9 Main Pumps

Bayview Lift Station has two (2) Cornell model 4NNDH-SUB submersible pumps with 8.75-inch diameter impellers. The existing pumps were installed during the 2008 improvements. According to the certified pump test performance curve dated October 20, 2008, the pumps are rated at 425 gpm

Figure 1-4
Wet Well and Valve Vault Plan and Profile View per 2008 Improvements



NOTES:

1. ALL MJ JOINTS OUTSIDE THE VAULT SHALL BE RESTRAINED.
2. TERMINATE NEW WET WELL LINING AT EL. 11.35± (12" BELOW LOW WATER LEVEL).
3. EXTERIOR OF NEW METER VAULT AND WET WELL AND DRY WELL RISER RINGS TO BE COATED WITH 16 MILS OF AMINE CURED, FACTORY APPLIED COAL TAR EPOXY.
4. ROUTE ACCESS HATCH CHANNEL DRAIN TO FLOOR DRAIN WITH 1" PVC SCH. 80 PIPE IN VALVE VAULT AND METER VAULT. PROVIDE STAINLESS STEEL UNISTRUT SUPPORTS.
5. CONTRACTOR SHALL ADJUST SPOOL LENGTHS AS REQUIRED FOR EQUIPMENT SUPPLIED.
6. ROUTE PUMP POWER CABLES TO EXISTING CONTROL PANEL.
7. PUMP CABLE SHALL BE SUPPORTED WITH KELLUMS CORD GRIP (316 SST) AND SECURED TO WALL MOUNTED CABLE HANGER. CORD SHALL BE SUPPORTED SUCH THAT SLACK IN CABLE DOES NOT HANG BELOW MOTOR.

MATERIAL AND EQUIPMENT LIST

1. NON-CLOG SUBMERSIBLE PUMP, Q=425 GPM @ 55' TDH 1,775 RPM
2. FLANGED 90° D.I. BASE ELBOW, FASTEN TO WET WELL BASE WITH 316 STAINLESS STEEL ANCHOR BOLTS PER MFGR.
3. SLEEVE TYPE COUPLING (LONG BODY)
4. 4" D.I. PIPE, CLASS 53, F.E. X F.E.
5. 4" D.I. 90° ELBOW, F.E. X F.E.
6. 6" D.I. PIPE, CLASS 53, P.E. X F.E.
7. 6" MAGNETIC FLOW METER
8. 6" D.I. PIPE, CLASS 53, F.E. X G.E.
9. 6" VICTAULIC COUPLING, STYLE 31
10. 6" D.I. PIPE, CLASS 53, P.E. X G.E
11. 6" 45° D.I. ELBOW, M.J. X M.J.
12. THRUST BLOCK PER IRWD STD. DWG. W-16
13. 6" D.I. PIPE, CLASS 53, P.E. X P.E
14. 6" FULL-PORT PLUG VALVE, M.J. X M.J. INSTALL VALVE BOX PER IRWD STD. DWG. W-22 (STAMP "SEWER" ON COVER)
15. 6" TRANSITION COUPLING
16. 4' X 4' ACCESS HATCH PER DETAIL 1/C-5 PROVIDE H-5 PARKWAY RATED DIAMOND PLATE, STAINLESS STEEL, SPRING-ASSIST DOUBLE DOORS WITH RECESSED PADLOCK & HASP (ON OPPOSITE END OF VAULT FROM LADDER)
17. 4' X 4' PRECAST CONCRETE RISER RINGS AS REQUIRED
18. 6' X 6' ACCESS HATCH PER DETAIL 1/C-5 PROVIDE H-5 PARKWAY RATED DIAMOND PLATE, STAINLESS STEEL, SPRING-ASSIST DOUBLE DOORS WITH RECESSED PADLOCK & HASP (ON OPPOSITE END OF VAULT FROM LADDER)
19. 4' X 4' PRECAST CONCRETE TOP RING, H-5 PARKWAY RATED WITH INTEGRALLY CAST 4' X 4' ACCESS HATCH AND 1½" HATCH CHANNEL DRAIN. PROVIDE NECK RINGS AS REQUIRED TO MEET EXISTING GRADE
20. 4' X 4' PRECAST CONCRETE VAULT, H-5 PARKWAY RATED
21. VAULT JOINT PER DETAIL 3/C-5
22. 12" OF 3/4" CRUSHED ROCK BASE
23. INTERIOR WET WELL URETHANE LINING PER SPECS.
24. VAULT PENETRATION PER DETAIL 2/C-5
25. FLANGE TYPE SUPPORT PER DETAIL (TYP. OF 2) 4/C-5
26. ADJUSTABLE PIPE SUPPORT PER IRWD STD. DWG. W-24
27. VAULT LADDER PER IRWD STD. DWG. G-4
28. STAINLESS STEEL SLIDE RAILS, 2 PER PUMP
29. STAINLESS STEEL LIFTING CABLE. SECURE CABLE END TO CABLE HANGER
30. WASHDOWN AND VACUUM BREAKER DEVICE PER DETAIL 5/C-5
31. 4" SCH. 80 PVC DRAIN PIPE. CORE DRILL AND GROUT THROUGH VAULT WALLS
32. 6' X 6' PRECAST CONCRETE TOP RING, H-5 PARKWAY RATED WITH INTEGRALLY CAST 6' X 6' ACCESS HATCH AND 1" HATCH CHANNEL DRAIN. PROVIDE NECK RING AS REQUIRED TO MEET EXISTING GRADE
33. 6' X 6' PRECAST CONCRETE RISER RINGS AS REQUIRED
34. RE-COAT ALL EXISTING PIPING AND VALVES PER IRWD SYSTEM NO. C-1(SEE STD. SPEC. SECTION 09900)
35. 6" BLOW-OFF PER DETAIL 7/C-6
36. REROUTE BUBBLER TUBE PENETRATION FROM WEST WALL TO NORTH WALL. REPLACE TUBE IN WET WELL AFTER COATING.
37. WALL MOUNTED 316 SST CABLE HANGER. INSTALL IN LOCATION AS REQUIRED WITH 316 SST ANCHOR BOLTS SET IN EPOXY. ANCHOR BOLT SIZE PER MFGR. MOUNT ON NORTH WALL OF WET WELL.
38. 6" X 6" D.I. TEE, M.J. X P.E.

and total dynamic heads of 61.8 feet and 59.4 feet, at 1770 RPM. The pumps are driven by 15 HP motors. According to the SCADA data collected between February 1, 2015 and March 29, 2015, the lift station runs approximately 26.9 hours per week. The SCADA data also indicates that the pumps are pumping a range of around 275 to 425 gpm with an average of 350 gpm.

1-10 Gas Detection System

The existing valve vault does not have a permanent gas detection system, so District staff has to use portable gas detectors for entry into the wet well.

1-11 Electrical and Controls

The Bayview Lift Station has a 100 Amp, 277/480 volt, 3-phase, 4-wire service. The pumps are driven by 15 HP constant speed motors. The pump control panel is located to the west of the wet well and drywell, as illustrated on Photographs 1-1 and 1-5. The lift station site is paved, but the control panels are not protected from the elements.



Photograph 1-5
Pump Control Panel

A permanent diesel standby generator (35 KW GENSET ONAN 35 DGBB) with sound attenuating enclosure and sub-base fuel tank is located to the west of the wet well and dry well, adjacent the pump control panel, as seen on Photograph 1-1. The motor control center is equipped with an automatic transfer switch, which is utilized to power the station in the event of a commercial power outage at the lift station.

Pumps are controlled based on sewage level in the wet well as determined by the bubbler system. The pumps start when the sewage level reaches 5.9 feet above the wet well floor, and stop when it drops to 2.8 feet. The operating volume of 853 gallons is sufficient to keep the pump cycling less than 4 times per hour.

The programmable logic controller and SCADA system should provide all pertinent operational data and alarm information. Most of the electrical equipment is 30 years old.

The PLC and SCADA do not currently provide all pertinent operational data and alarm information to the District.

1-12 Recommendations

The recommendations for Bayview Lift Station are summarized in Table 1-2

Table 1-2
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Traffic control required for crane access	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	There is no permanent lighting in valve or meter vault	
	Electrical enclosure is exposed to sun and rain	
	Valve vault has a check valve on the drainline, but no P-trap priming system	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	BioMagic tanks and eye wash are in the valve vault, which leaves minimal space for maintenance work	
Redundancy	Level measurement is provided by single bubbler	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
	Lift station has single forcemain	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory requirements. Develop recommendations based on validation and verification efforts.
	Pump discharge piping experiences high velocities	Validate that existing conditions are consistent with IRWD operational requirements. Develop recommendations based on verification efforts.
Condition/ Age	Lift station is approximately 30 years old	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Meter vault has no sump pump and drain	

University Lift Station

Evaluation

1-1 Introduction

University Lift Station is located on the southeast corner of University Drive and MacArthur Boulevard in the City of Irvine, as shown on Figure 1-1. The lift station is bordered by University Drive and San Diego Creek to the north, MacArthur Boulevard and the Corona Del Mar Freeway (Freeway 73) to the west, and the University of California, Irvine (UCI) campus to the east. It serves a total tributary area of 1,868 acres.



Photograph 1-1
University Lift Station and Site Access

The lift station structure has a wet well, and a dry well with three 20 HP, 1000 gpm capacity pumps having 44 feet total dynamic head (TDH) at a rated speed of 1196 rpm. A separate enclosure that houses the switchgear and the motor control center is located to the south of the lift station structure. The ground elevation at the site is approximately 18 feet above mean sea level (amsl). The pump room, wet well, and the site access from University Drive are shown on Photograph 1-1. Also located onsite is a pressure regulating station for the potable water system.

The University Lift Station was originally constructed in 1964 with an 8-inch ACP forcemain and a 12-inch ACP forcemain that transition to a 16-inch forcemain on University Drive. The lift station was reconstructed in a different location on the same property in 1997. The new lift station utilizes a segment of the original 12-inch forcemain, and the 16-inch forcemain along University Drive. Phase II of the forcemain project and a sewer rehabilitation project was implemented in 2009, which involved construction of a redundant 16-inch AWWA C-905 PVC line parallel to the existing forcemain. Each forcemain extends north and then east along University Drive, terminating at two separate manholes at the intersection of University Drive and Campus Drive, totaling approximately 4,840 feet. The original 16-inch forcemain terminates at manhole MH058E127 and the newer 16-inch forcemain terminates at manhole MH058E128. Flow from the two manholes continues east by gravity along San Diego Creek.

1-2 Tributary Area

The University Lift Station serves a net tributary area of 1,868 acres, shown on Figure 1-2. The Coyote Canyon and Bayview Lift Station tributary areas make up a majority of the overall tributary area. It includes a portion of the UCI campus. The breakdown of the lift station tributary area by land use categories is provided in Table 1-1.

Figure 1-1

University Lift Station Location



MH058E127
MH058E128
CAMPUS DRIVE
UNIVERSITY DR
University of California Irvine
MH057N011
University
Lift Station
Bayview
Lift Station
BONITA CANYON RD
TURTLE ROCK
Coyote Canyon
Lift Station
SAN JOAQUIN HILLS TRANS
Closed Coyote
Canyon Land Fill
BISON AVENUE
MACARTHUR BLVD

Legend

- Lift Station
- Sewer Manhole
- Forcemains
- University LS Tributary Area
- IRWD Sewer Boundary
- IRWD Mains

Existing Land Use Description

- Not served by IRWD
- Regional Commercial
- Community Commercial
- General Office
- High Density Irvine
- High Density NPB
- Industrial - Heavy
- Low Density Irvine
- Low Density NPB
- Estate Density Irvine
- Suburban Density OC
- Medium Density Irvine
- Medium Density NPB
- Medium-High Density Irvine
- Freeways & Major Road
- Community Park
- Regional Park
- Wildlife Preserve
- Open Space (Rec)
- Fuel Modification Zone
- School
- UCI
- Institutional
- Water
- Vacant

N

0 375 750 1,500 Feet

IRVINE RANCH WATER DISTRICT

AKM

IRWD SEWER COLLECTION SYSTEM MASTER PLAN

Project No: 111316.00

Date: January 2016

University LS Tributary Area

Figure 1-2

Table 1-1

University Lift Station Tributary Area Land Uses

	LU Code	Land Use Description	Area (Acres)	No. of Dus	Water Use (gpm)
Residential	1132	Low Density Irvine	126.2	415	474.4
	1163	Medium Density NPB	237.1	1,947	
	1172	Medium-High Density Irvine	94.5	1,529	
	1183	High Density NPB	82.3	1,336	
		Medium Density NPB	27	159	NA
		High Density NPB	77.0	1,004	
		UCI Residential	94.0	301	
Non-Residential	1210	General Office	132.3		156.1
	1221	Community Commercial	9.6		
	1240	Institutional	98.3		
	1260	School	46.2		
	1261	UCI[1]	164.7		
	1413	Freeways & Major Road	202.3		
	1820	Community Park	99.0		
	1830	Regional Park	48.9		
	1840	Fuel Modification Zone	40.6		
	1850	Wildlife Preserve	167.1		
	1880	Open Space (Rec)	85.0		
	1900	Vacant	31.4		
	4100	Water	4.1		
	Grand Total		**1,868**	**6,691**	**630.5**

[1]Multiple UCI landuses combined in this value for Acres and Dus

1-3 Tributary Flows

Because the pump motors are operated by variable frequency drives, pump speeds are not available through the SCADA and wet well storage backs into approximately 860 feet of upstream sewer pipes and manholes prior to a pump start, SCADA records of pumps start and stop times were not used to estimate average dry weather and peak dry weather flows. Further, inaccuracies were observed in the flow monitoring data collected for the master plan study. Discharge values from the magnetic flow meter were not used to estimate influent flow due to discrepancies observed between meter readings and pump on/off times.

1-4 Influent Sewers

Two (2) gravity sewers, a 27-inch pipe from the west and a 15-inch pipe from the east, convey wastewater to Manhole MH057N011, which is just north of the wet well. A 30-inch ductile iron pipe (DIP) extends southerly, and enters the wet well with an invert elevation of 2.45 feet amsl as seen on Figure 1-3 and Figure 1-4.

Figure 1-3

University Lift Station Site and Piping Plan

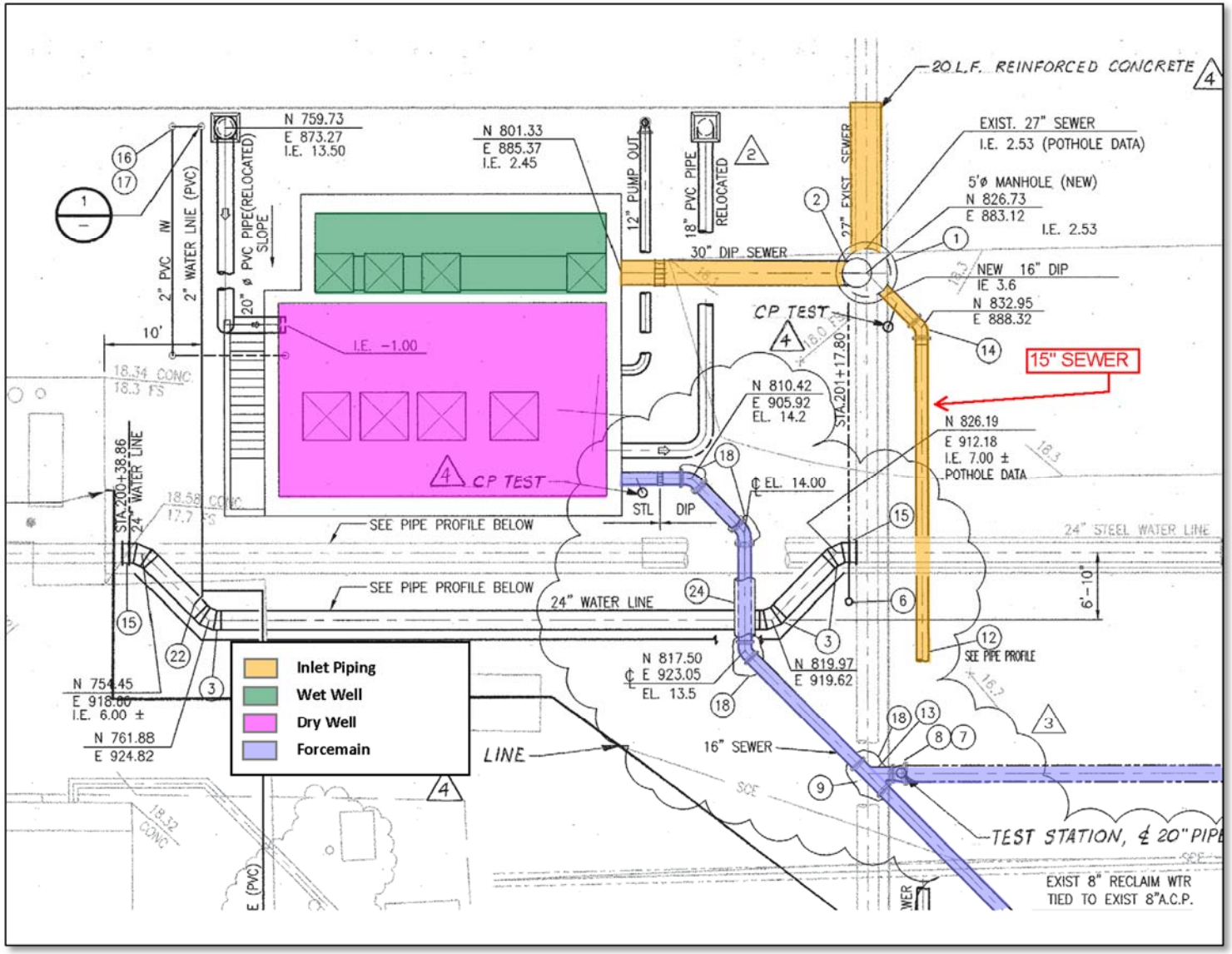
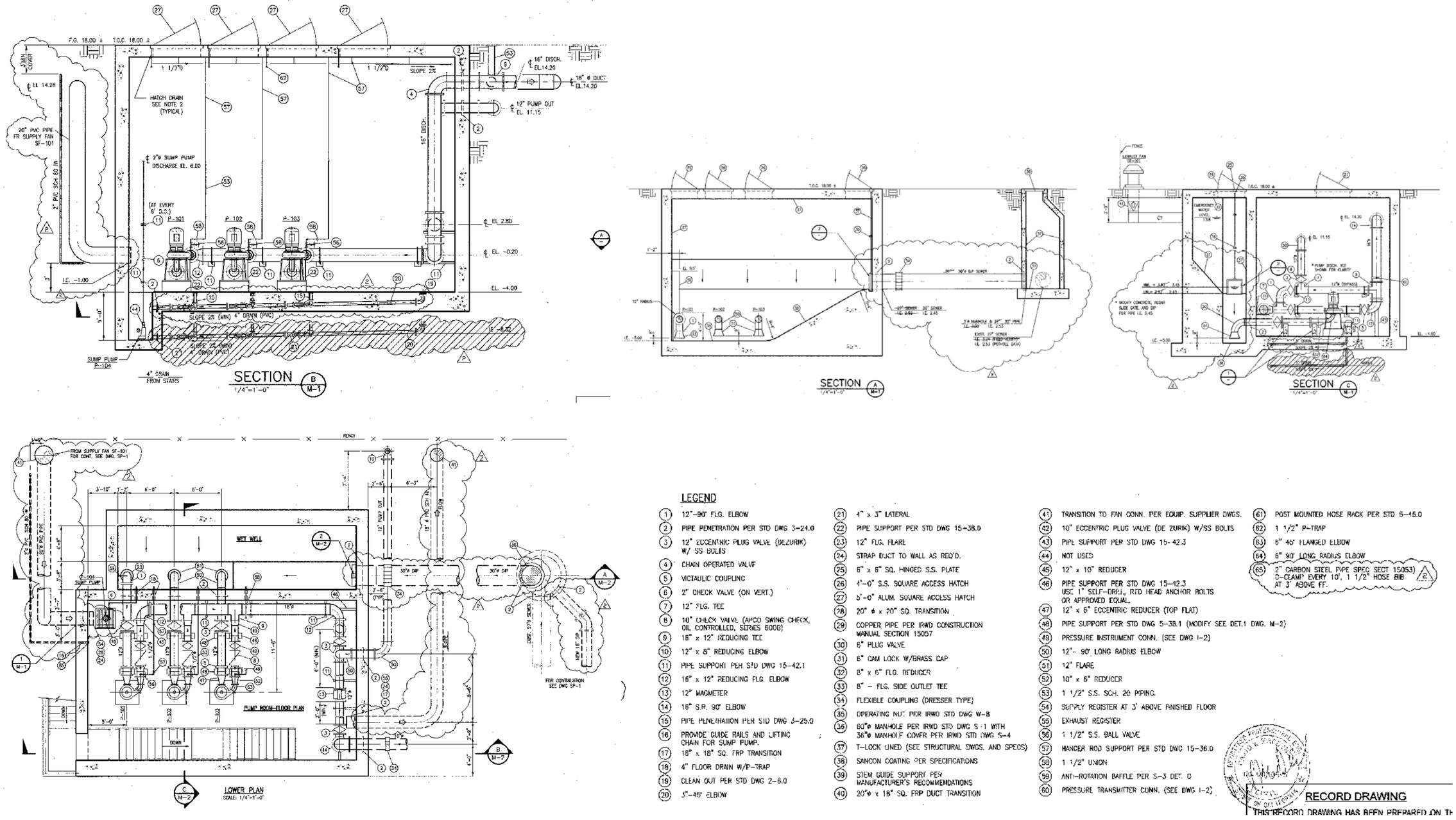


Figure 1-4

University Lift Station Wet Well and Dry Well Plan and Profile View



LEGEND

1. 12"-90° FLG. ELBOW
2. PIPE PENETRATION PER STD DWG S-24.0
3. 12" ECCENTRIC PLUG VALVE (DEZURIK) W/ SS BOLTS
4. CHAIN OPERATED VALVE
5. VICTAULIC COUPLING
6. 2" CHECK VALVE (ON VERT.)
7. 12" FLG. TEE
8. 10" CHECK VALVE (APCO SWING CHECK, OIL CONTROLLED, SERIES 600B)
9. 16" x 12" REDUCING TEE
10. 12" x 8" REDUCING ELBOW
11. PIPE SUPPORT PER STD DWG 15-42.1
12. 16" x 12" REDUCING FLG. ELBOW
13. 12" MAGMETER
14. 16" S.R. 90° ELBOW
15. PIPE PENETRATION PER STD DWG S-25.0
16. PROVIDE GUIDE RAILS AND LIFTING CHAIN FOR SUMP PUMP.
17. 18" x 18" SQ. FRP TRANSITION
18. 4" FLOOR DRAIN W/P-TRAP
19. CLEAN OUT PER STD DWG 2-6.0
20. 3"-45° ELBOW
21. 4" x 3" LATERAL
22. PIPE SUPPORT PER STD DWG 15-38.0
23. 12" FLG. FLARE
24. STRAP DUCT TO WALL AS REQ'D.
25. 6" x 6" SQ. HINGED S.S. PLATE
26. 4'-0" S.S. SQUARE ACCESS HATCH
27. 5'-0" ALUM. SQUARE ACCESS HATCH
28. 20" ø x 20" SQ. TRANSITION
29. COPPER PIPE PER IRWD CONSTRUCTION MANUAL SECTION 15057
30. 6" PLUG VALVE
31. 6" CAM LOCK W/BRASS CAP
32. 8" x 6" FLG. REDUCER
33. 8" – FLG. SIDE OUTLET TEE
34. FLEXIBLE COUPLING (DRESSER TYPE)
35. OPERATING NUT PER IRWD STD DWG W-8
36. 60"ø MANHOLE PER IRWD STD DWG S-1 WITH 36"ø MANHOLE COVER PER IRWD STD DWG S-4
37. T-LOCK LINED (SEE STRUCTURAL DWGS. AND SPECS)
38. SANCON COATING PER SPECIFICATIONS
39. STEM GUIDE SUPPORT PER MANUFACTURER'S RECOMMENDATIONS
40. 20"ø x 18" SQ. FRP DUCT TRANSITION
41. TRANSITION TO FAN CONN. PER EQUIP. SUPPLIER DWGS.
42. 10" ECCENTRIC PLUG VALVE (DE ZURIK) W/SS BOLTS
43. PIPE SUPPORT PER STD DWG 15-42.3
44. NOT USED
45. 12" x 10" REDUCER
46. PIPE SUPPORT PER STD DWG 15-42.3 USE 1" SELF-DRILL, RED HEAD ANCHOR BOLTS OR APPROVED EQUAL.
47. 12" x 6" ECCENTRIC REDUCER (TOP FLAT)
48. PIPE SUPPORT PER STD DWG 5-38.1 (MODIFY SEE DET.1 DWG. M-2)
49. PRESSURE INSTRUMENT CONN. (SEE DWG I-2)
50. 12"- 90° LONG RADIUS ELBOW
51. 12" FLARE
52. 10" x 6" REDUCER
53. 1 1/2" S.S. SCH. 20 PIPING.
54. SUPPLY REGISTER AT 3' ABOVE FINISHED FLOOR
55. EXHAUST REGISTER
56. 1 1/2" S.S. BALL VALVE
57. HANGER ROD SUPPORT PER STD DWG 15-36.0
58. 1 1/2" UNION
59. ANTI-ROTATION BAFFLE PER S-3 DET. D
60. PRESSURE TRANSMITTER CONN. (SEE DWG I-2)
61. POST MOUNTED HOSE RACK PER STD S-45.0
62. 1 1/2" P-TRAP
63. 6" 45° FLANGED ELBOW
64. 6" 90° LONG RADIUS ELBOW
65. 2" CARBON STEEL PIPE SPEC SECT 15053) C-CLAMP EVERY 10', 1 1/2" HOSE BIB AT 3' ABOVE FF.

RECORD DRAWING

THIS RECORD DRAWING HAS BEEN PREPARED ON TH



Photograph 1-2
Wet Well



Photograph 1-3
Wet Well Lining

1-5 Wet Well

The wet well is a rectangular reinforced concrete structure. The influent sewer enters the wet well at its northwest corner. The floor slopes 7.45 feet down in a distance of 15.5 feet from the entry to the bottom, forming a 3.5 foot wide rectangular channel. The westerly wall slopes (1:1) to the top of this channel. The overall length of the wet well is 30.16 feet, and it is 8 feet wide at the top. Its bottom elevation is -5.0 feet above mean sea level (amsl), and the ceiling is at elevation 16.67 feet amsl. The wet well walls are T-lock (PVC) lined and the inlet channel bottom is Sancon spray coated. Because of the steep slope of the inlet channel, debris and grit in the sewage causes deterioration of the lining as seen on Photograph 1-3. The wet well is shown on Photograph 1-2 and on Figure 1-4. The wastewater level in the wet well is measured with an ultrasonic level sensor.

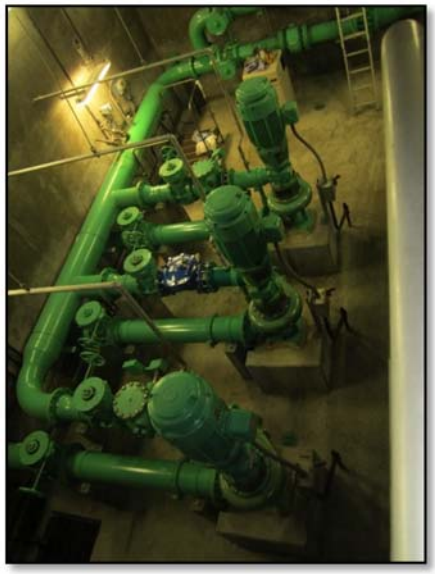
The lead pump starts when the wastewater level is 9 feet (4.0 feet amsl) above the invert elevation of the wet well (-5.0 feet amsl), and stops when the wastewater level is 3.8 feet (-1.2 feet amsl) above the invert according to ultrasonic sensor recorded levels and setpoints shown in SCADA data.

Considering the inlet pipe enters the wet well at an invert elevation of 2.53 feet amsl and the pump start level is 4.0 feet amsl, wet well storage backs up into approximately 860 feet of influent sewers and manholes.

1-6 Dry Well

The pumps and motors are located below ground within the dry well, located east of the wet well as shown on Photograph 1-4. The dry well is accessible through stairs on the south and east side of the structure. The lighting within the dry well is dim.

The dry well dimensions are 34.0 feet by 20.0 feet. The bottom elevation is -4.0 feet amsl and the roof bottom elevation is 16.67 feet amsl. The dry well volume is estimated to be 14,056 cubic feet.



Photograph 1-4
Dry Well

The dry well would be considered a Class 1 Division 2 hazardous location. NFPA 820 requires a minimum of 6 air changes per hour based on classifications. The necessary air changes should also consider the actual heat generated in the dry well, including the pumps, motors, and electrical gear. Exhaust and supply fans of 1,500 cfm capacity would provide six air changes per hour. The dry well is equipped with a 20-inch PVC pipe leading to an exhaust fan. Machinery in the dry well is very loud.



Photograph 1-5
Eyewash station and BioMagic storage

Proximity of suction and discharge piping causes difficultly in maintaining the suction pipes.

The District injects BioMagic into the discharge piping to mitigate corrosion and odor problems in the downstream system. The chemical storage tank and an eyewash station are located in the south east corner of the dry well as seen on Photograph 1-5.

The existing dry well structure is in good condition. Some corrosion at the outlet terminal in the dry well was observed during the field visit.

1-7 Suction Piping

The suction piping starts with a 12-inch flare (9 inches above the wet well floor) and long radius 90º bend, and a spool extending into the dry well, continues with an isolation plug valve, two flange x groove end spools with a Victaulic coupling, a 12" x 6" eccentric reducer, and a 6-inch 90º bend into the pump suction. The centerline of the suction piping is 2.25 feet above the dry well floor elevation of -4.00 feet. The suction piping is illustrated on Photograph 1-6 and Photograph 1-7.



Photograph 1-6
Wall penetration and Plug Valve



Photograph 1-7
Suction Pipe Reducer into Pump

1-8 Discharge Piping

The steel pump discharge piping starts with a 6-inch 45º elbow at the discharge nozzle, continues with a concentric 6" x 10" reducer, welded to a 10-inch spool, a pressure gage connection, a lever and weight oil controlled check valve, a handwheel operated eccentric plug valve, a spool and a welded 10" x 12" reducer, connecting to the 16-inch diameter discharge header at a tee for Pumps 2 and 3. The discharge piping for Pump 1 has a horizontal 90º elbow, and a 12" x 16" concentric reducer welded to the discharge header at its south end. The 16-inch discharge header extends north along the west wall of the dry well, then turns east through a 16" x 12" reducer in the northwest corner.

As seen on Photograph 1-9, the 12-inch discharge pipe extends along the north wall and has the magnetic flow meter between two eccentric plug valves, then turns up through a 12" x 16" reducing elbow, and exists the dry well through the north wall with a centerline elevation of 14.2 feet amsl. A parallel 12-inch piping system is intended for bypassing of the flow meter when it needs to be serviced, however, there is no flexible coupling between the isolation valves to allow removal of the flow meter without cutting the pipe. It is reported that the magnetic flow meter is old.

The bypass around the flow meter includes a 12-inch extension up and out the north wall to the 8-inch bypass pumping connection.



Photograph 1-8
Discharge Piping



Photograph 1-9
Discharge Piping and Bypass

1-9 Forcemain

The steel forcemain exits the lift station building, transitions to ductile iron pipe, and continues northeast, splitting into two (2) forcemains at a 45° wye, as seen on Figure 1-3. During reconstruction of the lift station in 1997, a blind flange was installed on the wye for future forcemain construction and it continued straight to connect to the existing 12-inch ACP pipe forcemain. The 12-inch ACP forcemain connects to a 16-inch forcemain on University Drive. In 2009 the blind flange was removed and a redundant 16-inch AWWA C-905 PVC forcemain was constructed. Each forcemain extends north and then east 4,840 feet along University Drive, terminating at two separate manholes at the intersection of University Drive and Campus Drive. The original 16-inch forcemain terminates at manhole MH058E127 and the newer 16-inch forcemain terminates at manhole MH058E128. Flow from both manholes continues east by gravity along the San Diego Creek.

1-10 Main Pumps

The University Lift Station has three (3) Cornell model 6NHG pumps with 11.38-inch diameter impellers. According to the certified pump test performance curve dated April 28, 1998, the pumps are rated at 1,000 gpm and total dynamic heads of 44 feet, at 1,196 RPM. The pumps are driven by 20 HP variable speed drives. According to SCADA data collected between February 1, 2015 and March 29, 2015, the lift station runs approximately 100.3 hours per week. During this period, each pump turns on around 670 times. The runtimes for Pump 1, Pump 2, and Pump 3 are 68 hours, 158 hours, and 576 hours, respectively. The variable frequency drive for Pump 2 and Pump 3 appears to always be in operation while the pumps are running, but is never on for Pump 1 according to the Pump 1 run status shown in pump on/off time data. However, the Pump 1 PLC command to VFD (Hz) shown in data provided every 5 minutes suggests that the VFD does turn on for Pump 1.

1-11 Gas Detection System

A Drager Polytron TX gas detection system and oxygen level monitor are installed in the wet well. Both are old.

1-12 Electrical and Controls

The University Lift Station has a 480Y/277 volt 3 phase, 4 wire service with a maximum supply rating of 250 amps.

The pumps are driven by 20 HP variable frequency drive operated motors. The electrical equipment is housed in a building south of the lift station and adjacent the potable water system pressure regulating valve vault as shown on Photograph 1-11.

A permanent standby generator, SCE transformer, and SCE vault are located east of the lift station and are shown on Photograph 1-10.

Pumps are controlled based on sewage level in the wet well as determined by the ultrasonic level sensing system. The pumps start when the sewage level reaches 9.0 feet above the wet well floor, and stop when it drops to 3.8 feet. Currently, there is only one level sensor/controller.

The electrical and control equipment, including the VFDs, and the programmable logic controller are 20 years old.



Photograph 1-10
Pump Control Panel



Photograph 1-11
Electrical Building

1-13 Recommendations

The recommendations for University Lift Station are summarized in Table 1-2

Table 1-2

Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Dry well area noise appears loud to staff	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Influent manhole does not currently have a Smart Manhole Cover installed	
	Dry well appears dimly lit	
Redundancy	Level measurement is provided by an ultrasonic level sensor	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
Condition/ Age	Electrical control equipment and PLCs are 20 years old and are near the end of their useful life	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Gas detection and oxygen level monitor are deteriorated	
	Magnetic flow meter is old and does not appear to be accurate	
	Wet well lining is deteriorating	

Newport Coast Lift Station

Evaluation

1-1 Introduction

Newport Coast Lift Station is located on the east side of Newport Coast Drive just south of Ridge Park Road in the City of Newport Beach. The lift station is bordered by Newport Coast Drive to the west, and the Coastal Canyon Park to the north, east, and south. A high density residential area is located to the south. It serves a total tributary area of 1,092 acres, and includes the Buck Gully Lift Station and Coastal Ridge Lift Station tributary areas.



Photograph 1-1
Newport Coast Lift Station

The lift station is a wet well and dry well facility with three Cornell Model 8NHTA, 1,600 gpm capacity pumps having 93 feet of total dynamic head (TDH) at a rated speed of 1180 rpm. The ground elevation at the lift station is approximately 602.5 feet above mean sea level (amsl). The electrical building and the wet well access structures are shown on Photograph 1-1. Site access from Newport Coast Drive is shown on Photograph 1-2. Site paving is in poor condition and there is no outdoor lighting.



Photograph 1-2
Site Access

The Newport Coast Lift Station was originally constructed in 1990 to serve a significant area of the Newport Coast development. The 12-inch diameter polyethylene lined ductile iron (DI) forcemain constructed with the original lift station extends northwest from the lift station and turns southwest down Newport Coast Drive, extending approximately 2,998 feet to manhole MH129S253, terminating with an invert elevation of 643.06 feet amsl. Due to problems with the polyethylene lining, a redundant 12-inch PVC forcemain was constructed in 2005 that extends parallel to the ductile iron forcemain to its west, and terminates at a vortex manhole, MH129S131, with an invert elevation of 652.86 feet amsl. The vortex manhole is about 56 feet northwest of manhole MH129S253. A 15-inch VCP gravity sewer extends from manhole MH129S131 to manhole MH129S253. Sewage from either forcemain will flow by gravity from MH129S253 down Newport Coast Drive to an Orange County Sanitation District (OCSD) outfall sewer along Pacific Coast Highway.

1-2 Tributary Area

The Newport Coast Lift Station serves a tributary area of 1,092 acres, shown on Figure 1-2. It largely includes low and medium density residential areas, the Newport Coast Elementary School, a

community commercial area, institutional areas, high density housing, and open space areas. The breakdown of the lift station tributary area by land use categories is detailed in Table 1-1.

Table 1-1

Newport Coast Lift Station Tributary Area Land Uses

	LU Code	Land Use Description	Area (Acres)	No. of Dus	Average Water Use (GPM)
Residential	1133	Low Density NPB	153	665	456
	1163	Medium Density NPB	503	1182	
	1183	High Density NPB	99	964	
Commercial	1221	Community Commercial	15		36
	1240	Institutional	5		
	1260	School	13		
	1413	Freeways & Major Road	37		
	1820	Community Park	30		
	1830	Regional Park	75		
	1850	Wildlife Preserve	127		
	1880	Open Space (Rec)	27		
	1900	Vacant	7		
		Grand Total	**1092**	**2811**	**491**

1-3 Tributary Flows

Flow monitoring data was used to estimate an average dry weather inflow of 408 gpm. Influent flow could not be calculated using pump start and stop times from SCADA because the operating band volume is unknown. The average water use within the tributary area is 491 gpm.

1-4 Influent Sewers

Three (3) gravity sewers, an 18-inch pipe from the north, a 10-inch pipe from the south, and an 8-inch pipe from the west convey wastewater to a common collector manhole upstream of the wet well (MH129E006), which is the second manhole upstream of the wet well. Wastewater is then conveyed from this manhole (invert elevation 585.55 feet amsl) through an 18-inch VCP pipe to the first manhole upstream of the wet well (MH129E552, invert elevation 581.09 feet amsl) at a slope of 0.0808 ft/ft, and continues in the 18-inch VCP pipe, entering the wet well at an invert elevation of 580.80 feet amsl. The inlet piping is detailed on Figure 1-3.

Figure 1-1
Newport Coast Lift Station Aerial Image



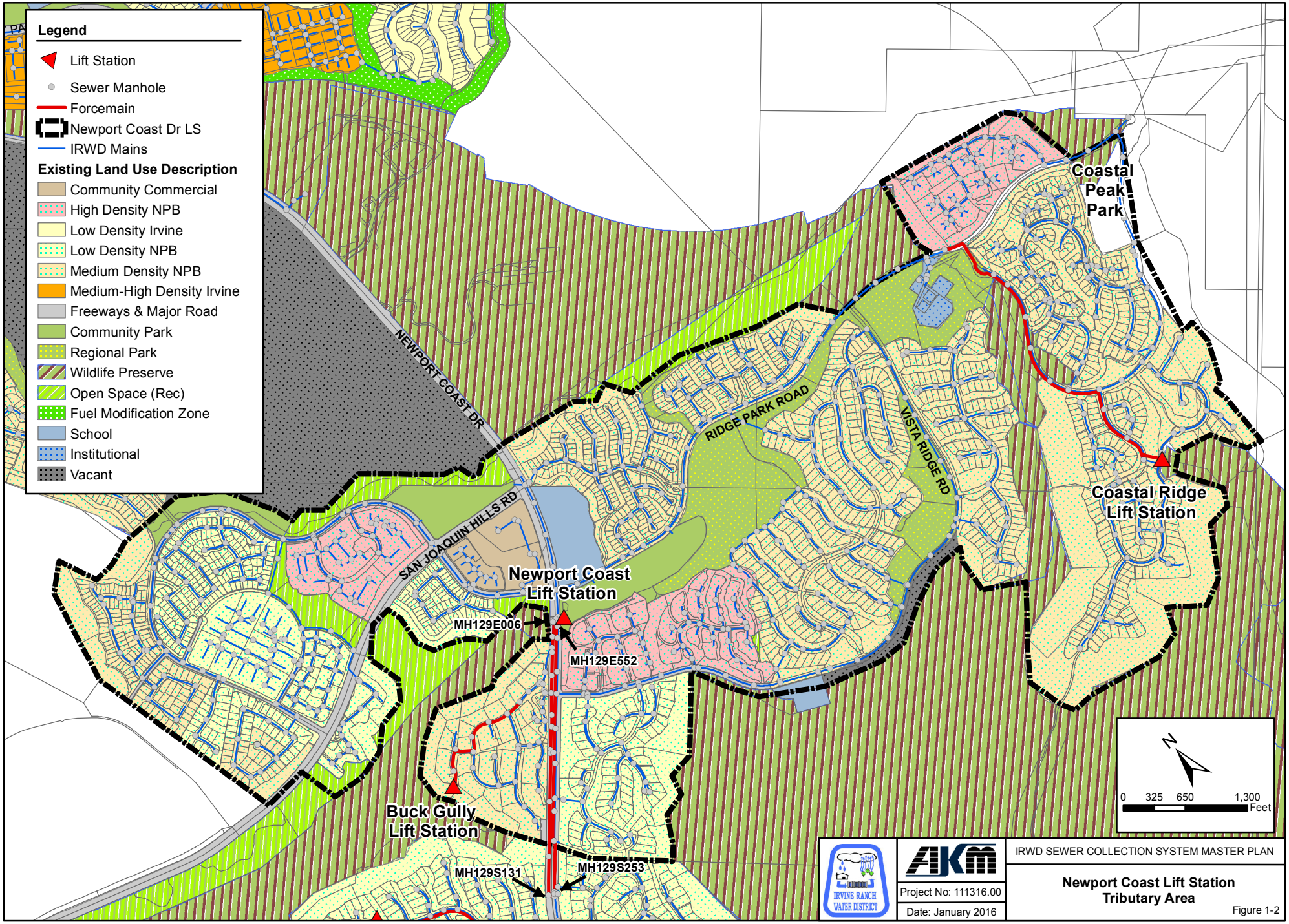
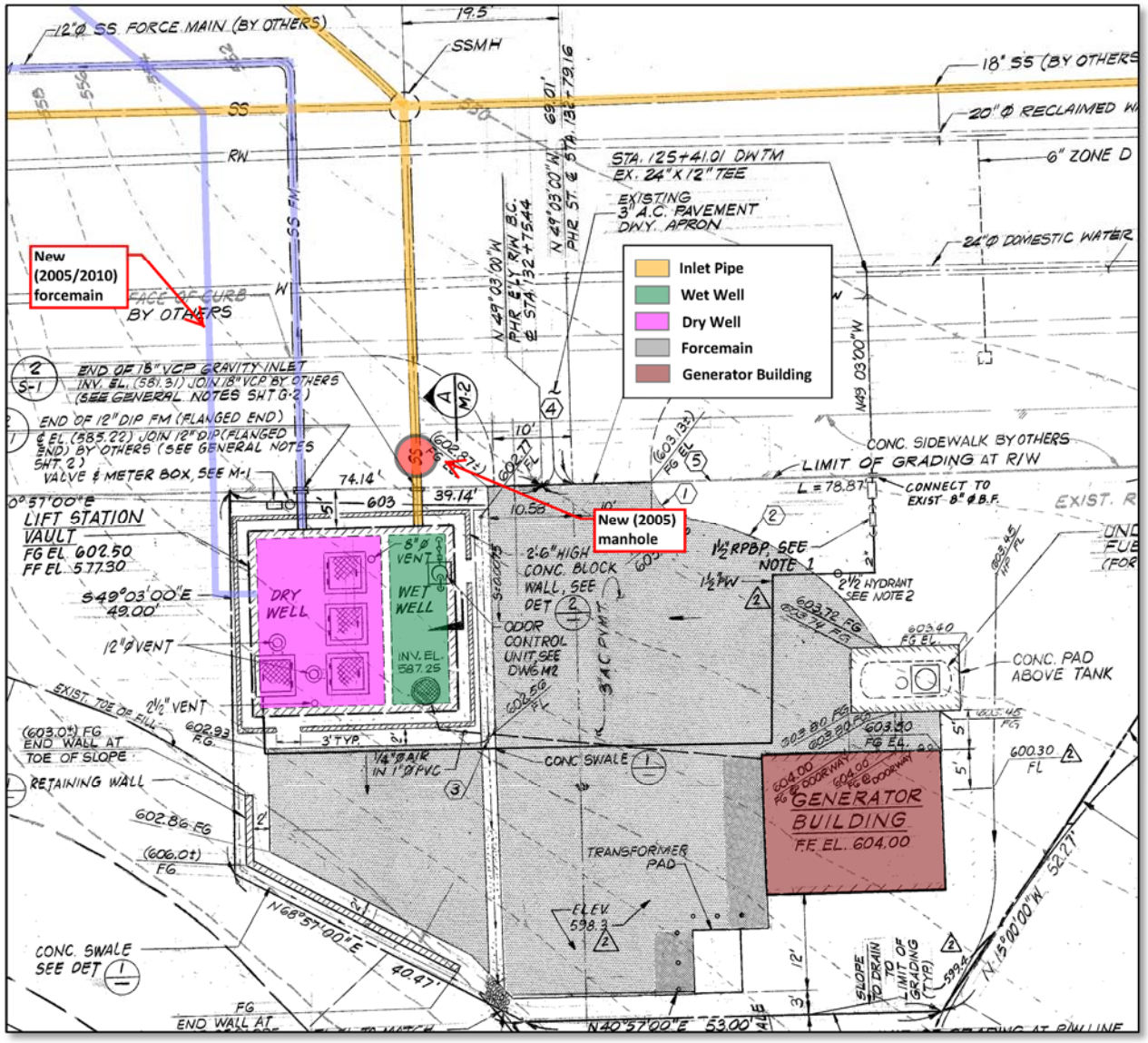

Legend
Lift Station
Sewer Manhole
Forcemain
Newport Coast Dr LS
IRWD Mains
Existing Land Use Description
Community Commercial
High Density NPB
Low Density Irvine
Low Density NPB
Medium Density NPB
Medium-High Density Irvine
Freeways & Major Road
Community Park
Regional Park
Wildlife Preserve
Open Space (Rec)
Fuel Modification Zone
School
Institutional
Vacant
NEWPORT COAST DR
SAN JOAQUIN HILLS RD
RIDGE PARK ROAD
VISTA RIDGE RD
Coastal Peak Park
Coastal Ridge Lift Station
Newport Coast Lift Station
MH129E006
MH129E552
Buck Gully Lift Station
MH129S131
MH129S253
N
0 325 650 1,300
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2016
Newport Coast Lift Station Tributary Area
Figure 1-2

Figure 1-3
Newport Coast Lift Station Site and Piping Plan



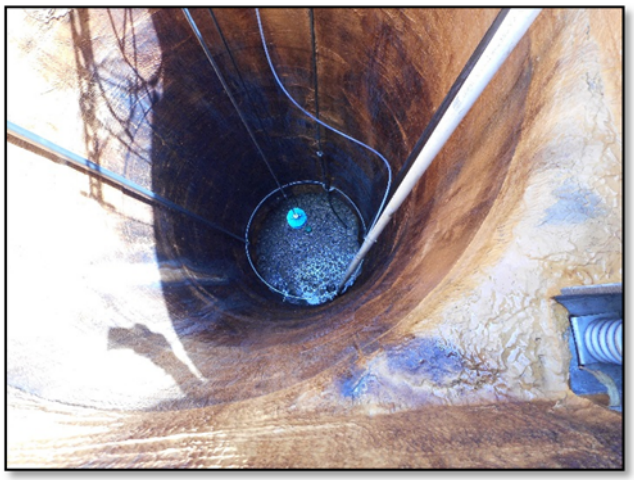
1-5 Wet Well

The wet well is a rectangular reinforced concrete structure with three 48-inch diameter openings that extend to the ground surface, as shown on Figure 1-4. A square double leaf access hatch is located over each opening. The hatch lids are warped and do not close securely, allowing odor to escape. The rectangular lower portion of the wet well has a length of 21.5 feet, width of 7.0 feet, and a height of 10.5 feet. The distance from the invert elevation of the wet well (577.3 feet amsl) to the rim elevation of the access opening (602.5 feet amsl) is 25.2 feet. According to the plans, it has 1:1 sloped 2-foot high concrete fillets along the north, east, and west walls to direct debris and grit toward the pump suction bells. The as-built drawings show the entire area of the wet well to have been coated with Tnemec Series 66 Epoxyline. The coating has deteriorated, exposing the wet well concrete surfaces to corrosion. The as-built plans show only one access opening and hatch above the wet well located on the southern end, shown on Photograph 1-3. It was noted during the site visit that two additional openings, one in the center and one on the north end near the inlet (Photograph 1-4 and Photograph 1-5) have been added.

The Irvine Ranch Water District had the interior surfaces of the wet well access openings re-coated by Sancon Engineering. The new coating shows minor delamination.

Currently, a fire hose is used to wash down the wet well.

In the southernmost access opening, there is a HydroRanger ultrasonic level sensor, a bubbler tube, and a float switch. The wastewater level in the wet well is primarily measured with the bubbler. The ultrasonic device is used for redundancy, but it does not sense the sewage level in the wet well accurately.



Photograph 1-3
Wet Well Access Opening (south)

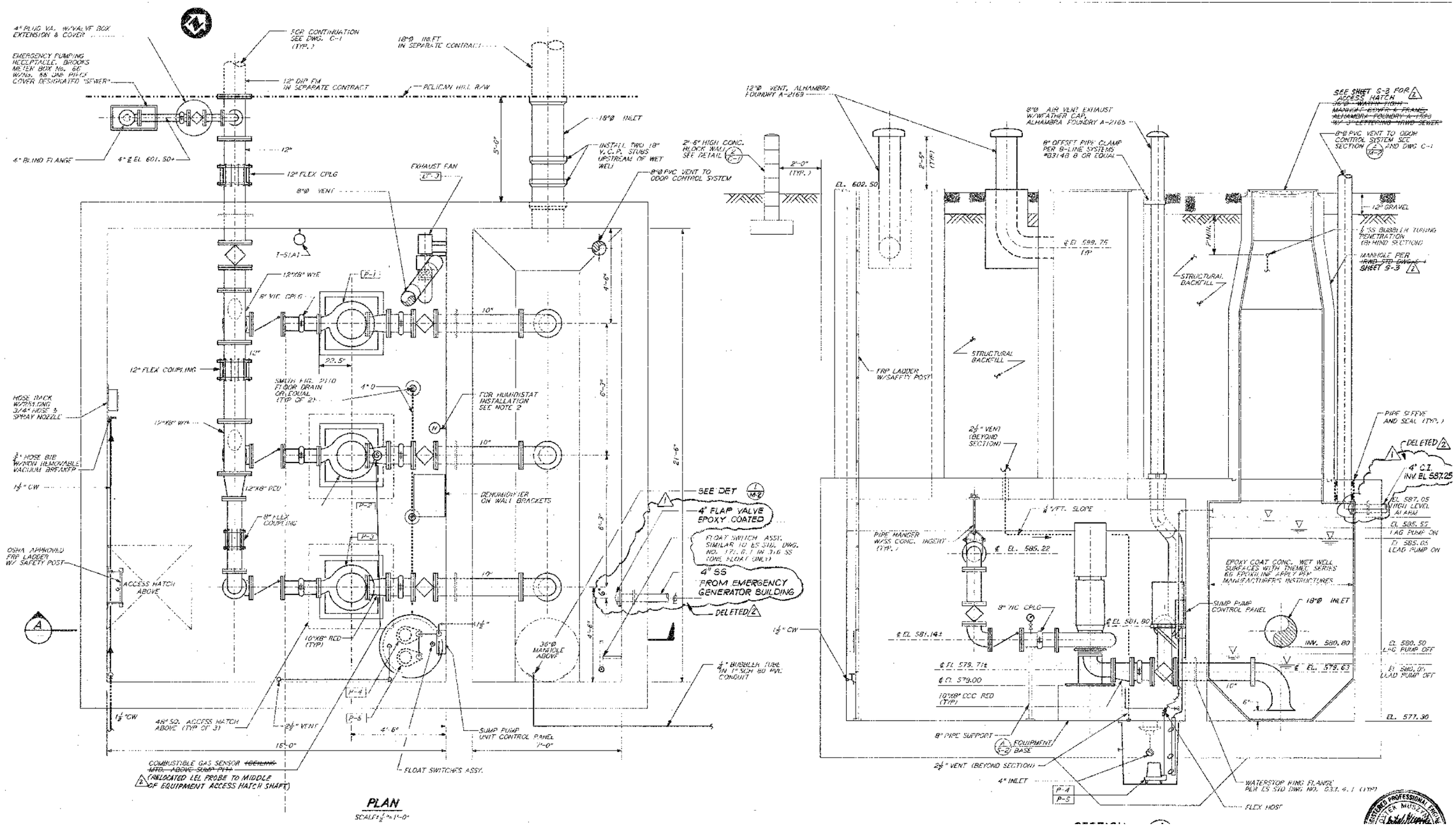


Photograph 1-4
Wet Well Access Opening (center)

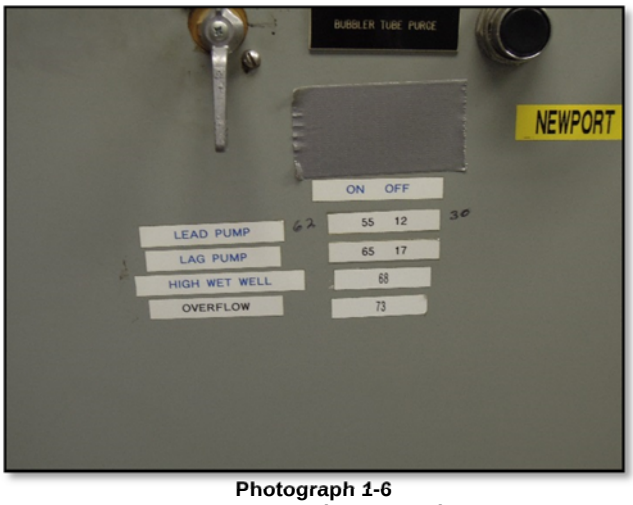


Photograph 1-5
Wet Well Access Opening (north)

Figure 1-4
Newport Coast Lift Station Wet Well and Dry Well Plan and Profile View



According to recorded wet well levels and pump start and stop setpoints shown in SCADA, the lead pump starts when the wastewater level is 55.7 inches (581.9 feet amsl) above the invert elevation of the wet well (577.3 feet amsl), and stops when the wastewater level is 34.2 inches (580.2 feet amsl) above the invert. However, as seen on Photograph 1-3, the wastewater level appears to be above the elevation where the circular access opening begins, which is around 10.5 feet above the invert elevation of the wet well (587.8 feet amsl) according to as-built drawings. This is much higher than the levels suggested by SCADA data. In addition, levels marked on a panel indicate a start level of 62 inches and stop level of 30 inches, as seen on Photograph 1-6.



Photograph 1-6
Pump Start and Stop Levels

Given the invert elevation of the influent sewer in the wet well is 580.80 feet amsl and assuming the pumps start at levels shown by the bubbler and SCADA setpoints (581.9 feet amsl), the sewage will back up into the influent sewer pipe but will not submerge the pipe before the first upstream manhole (crown elevation 582.59 feet amsl). If the pumps start near wastewater levels observed in Photograph 1-3 (around 587.8 feet amsl), then sewage will likely submerge the inlet pipe at the second upstream manhole (crown elevation 587.05 feet amsl).

If the operating band is consistent with pump start and stop levels shown by the bubbler and SCADA setpoints, there are 2,013 gallons of operational storage. With the existing pump capacities of 2,000 gpm, the pumps would cycle a maximum of 8 times per hour if they are alternated, and the tributary flows were 1,000 gpm (half the capacity of one pump). Since even the estimated peak wet weather flow of 595 gpm is less than 1,000 gpm, the pumps would cycle around 3.2 times per hour if alternated. This is less than the recommended maximum of 4 starts per hour for 50 HP motors.

There are noxious gases in the wet well from Fortistar power regeneration facility that discharges into the sewer. In the past, medical help was needed.

BioMagic is pumped into the wet well, but is not effective on odor from petroleum products.

1-6 Dry Well

The pumps and motors are located below ground within the dry well, a 21.5-foot wide, 16-foot long, and 10.5-foot high reinforced concrete structure. It has two side beams (2.5 feet wide and 1.5 feet high) and two interior beams (2.25 feet wide and 1.5 feet high), which frame the three 4-foot x 4-foot pump access openings. It has an interior volume of 4,090 cubic feet. The dry well is located south of the wet well.It was not entered in the field visit.

The only access to the dry well is through a 4-foot x 4-foot opening near the south corner of the structure. The access hatch has fall protection, as well a ladder-up device. However, the dry well floor is 25.2 feet below the access hatch. It is difficult to access, and is a confined space.

The dry well would be considered a Class 1 Division 2 hazardous location. NFPA 820 requires a minimum of 6 air changes per hour based on classifications. The necessary air changes should also consider the actual heat generated in the dry well, including the pumps, motors, and electrical gear. One 12-inch ventilation pipe enters the Pump 3 access opening near its top, and another 12-inch ventilation pipe is connected to the dry well personnel access opening near its top. A 1/3 HP exhaust fan is located near the north corner of the dry well, with its intake near the dry well floor. The existing ventilation system provides greater air flow through Pump 1 and 2 motors, and some flow through the

Pump 3 motor, but leaves the southwesterly corner stagnant. The exhaust pipe is only 8-inch in diameter. It is reported that the dry well gets very warm. The lighting within the dry well is dim. The dry well is also very loud.

1-7 Suction Piping

The suction piping for each pump consists of a 10-inch ductile iron flared bell with inlet 6 inches above the wet well floor, a 10-inch ductile iron spool which extends through the dividing wall, a 10-inch plug isolation valve, two short flange x groove spools, a 10" x 8" eccentric reducer, and an 8-inch 90º bend. The suction piping enter the dry well at a centerline elevation of 579.71 feet amsl, which is 2.41 feet above the finished floor elevation (577.30 feet amsl). The pump centerline is at elevation 581.14 feet amsl, 1.09 foot above the lead pump off level shown on the as-built drawings.

1-8 Discharge Piping

The 8-inch ductile iron discharge piping exits each pump with two short flange x groove spools, a flanged check valve, 90º bend, a plug valve, a flanged spool before entering the 12-inch diameter common discharge header at a centerline elevation of 585.22 feet amsl. The discharge piping for Pump 3, the most southerly pump, consists of two flange x plain end spools with a flexible coupling and a 12" x 8" reducer before it joins the discharge header. The District implemented an emergency project in 2010 resulting from failure of the newer PVC forcemain. The project installed a 12-inch tee between Pump 2 and Pump 1, as well as a 12-inch plug valve on the branch leg, and extended it through the southwesterly wall. The discharge pipe then turns northwesterly, providing an 8-inch Camlock bypass pumping connection, and connects to the 12-inch PVC forcemain through a plug valve and flanged coupling adapter. With this layout, the discharge of Pump 1 turns back through a wye connection to the tee installed with the emergency project, and will be in the opposite direction of the flow from Pumps 2 and 3, if it has to operate simultaneously with either of the other two pumps.

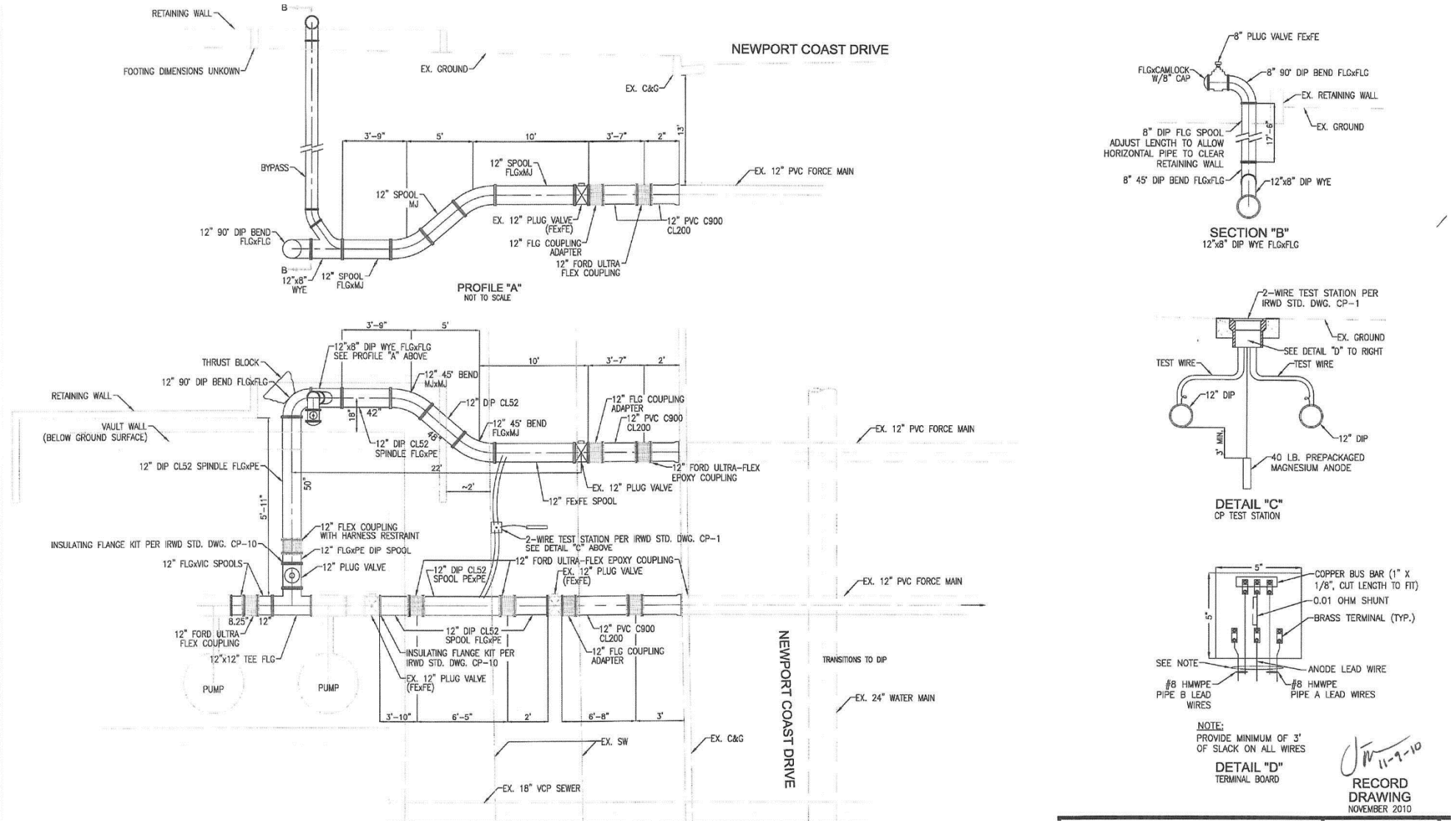
1-9 Forcemain

The original 12-inch polyethylene lined ductile iron forcemain was constructed with the lift station in 1990. In 2005, a new 12-inch PVC forcemain was constructed because of failure of the polyethylene lining of the original forcemain. The new forcemain connected to the original forcemain just outside of the dry well. As mentioned, failure of this new forcemain resulted in the implementation of an emergency project in 2010 that revised the discharge piping to provide dual forcemains from the discharge header, as shown on Figure 1-5. IRWD staff indicated that every time the pump shuts off, a series of 3 "pings" can be heard due to the water hammer. The forcemain failed again on December 4, 2014.

The original 12-inch ductile iron (DI) forcemain extends northwest from the lift station and turns southwest down Newport Coast Drive, extending approximately 2,998 feet to manhole MH129S253 (invert elevation 643.06 feet amsl). The newer, PVC 12-inch forcemain extends parallel the ductile iron forcemain and terminates at a vortex manhole, MH129S131 (invert elevation 652.86 feet amsl), which is around 60 feet northwest of manhole MH129S253. A 15-inch VCP sewer pipe allows flow by gravity from manhole MH129S131 to manhole MH129S253. Sewage from either forcemain will flow by gravity from MH129S253 down Newport Coast Drive to an Orange County Sanitation District (OCSD) outfall sewer along Pacific Coast Highway.

With the existing pump capacities of 1,600 gpm, the velocity in the 12-inch forcemain is approximately 4.5 feet per second (fps), which is within the recommended forcemain velocity range of 3-5 fps. .

Figure 1-5
Emergency Project (2010) Plan and Profile View



1-10 Main Pumps

Newport Coast Lift Station has three (3) Cornell model NNDH VC18DB pumps with 12.75-inch impellers sized at 1,600 gpm capacity, 93 feet of total dynamic head operating at 1780 rpm (8NHTA pumps with 16.125-inch diameter impellers rated at 2,000 gpm and total dynamic head of 85 feet, at 1,180 RPM). The pumps are driven by 60 HP motors. According to SCADA data collected between February 1, 2015 and March 26, 2015, the lift station runs approximately 45.4 hours per week.
The District staff has indicated that the pumps cavitate. Based on the available information, the pumps appear to operate near the design point. The cavitation may be due to too low a suction level in the wet well, and possible blockage in the suction piping.

The District staff has indicated that the pump bases are cracked. This may be due to insufficient support for the motors, and vibration that may be caused by the cavitation.

Pumps are controlled based on sewage level in the wet well as determined by the bubbler level sensing system.



Photograph 1-7
Generator Building

1-11 Gas Detection System

A combustible gas sensor is installed in the dry well. It is old and does not comply with the District's gas detection system. The District staff has indicated that petroleum products have been dumped into the tributary sewers, which resulted in very dangerous conditions at the lift station.

1-12 Electrical and Controls

Electrical and control panels are located in the 23'-4" x 18'-0" generator building (Photograph 1-7), along with chemical storage, an eye wash station, and a 150 KW ONAN model DGFA standby generator It is reported that the generator works well, because of its advanced age (26 years), future availability of spare parts is uncertain.

The electrical and controls equipment are 26 years old, and at the end of their useful lives. Further VFD's should be incorporated if they are determined to be beneficial in eliminating the surge problems and pump cycling.

Panels and equipment are corroded from exposure to ocean air, as shown on Photograph 1-8.



Photograph 1-8
Corrosion on Panels

The District staff indicates that it is very difficult to communicate with personnel in the dry well due to excessive noise from the ventilation and pumping equipment.

Electrical service is provided by the Southern California Edison's on-site pad mounted transformer located southerly of the existing generator building. The service is rated 225 amps, 277/480 volt, 3 phase, 4 wire. The motor control center is rated 600 amps, 480 volt, 3 phase, 3 wire; and has a 225 amp main breaker.

1-14 Recommendations

The recommendations for Newport Coast Lift Station are summarized in Table 1-2

Table 1-2
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Dry well lacks adequate ventilation	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Generator building lacks adequate ventilation	
	Dry well does not have adequate lighting	
	Forcemain does not have flow meter and associated pressure sensor or transmitter	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Dry well is not linked to communication system	
	Pump start and stop levels cause lift station to run 45 hours/week	
	Dry well lacks district standard gas detection system	
	Pumps have cavitation issues	
	Discharge piping does not have a flowmeter	
	Dry well area noise appears loud to staff	
	Dry well has no sump and drain	
	Wet well hatches do not close properly	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory agencies. Develop recommendations based on validation and verification efforts.
Redundancy	The flow meter has no spare in the warehouse	Evaluate as part of reliability and redundancy analysis of critical facilities.
Condition/ Age	Wet well lacks washer	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Pump base and restraints need replacing	
	Motor Control Center, Programmable Logic Control and associated panels are over 26 years old and are beyod their useful lives	
	Bubbler tube shows signs of wear	
	Standby generator has exceeded its useful life and shows signs of wear	
	Asphalt paving on site is in poor condition	
	Wet well lining is deteriorating	

Buck Gully Lift Station

Evaluation

1-1 Introduction

Buck Gully Lift Station is located at 21594 White Pine Drive at the western end of White Pine Drive in the City of Newport Beach as seen on Figure 1-1. It serves a total tributary area of 36.8 acres that is bounded by the Buck Gully Reserve and Newport Coast Drive. It is a submersible lift station with two (2) 20 HP, 180 gpm capacity pumps having 110 feet in total dynamic head (TDH) at a rated speed of 1750 rpm. The ground elevation at the lift station is 541 feet above mean sea level (amsl). The wet well, valve vault, and electrical panel are seen on Photograph 1-1.

Access to the lift station is through a driveway at the west end of White Pine Drive. A 20 foot wide manual swing gate provides access to the lift station as seen on Photograph 1-2.

The Buck Gully Lift Station was constructed in 1993. The flows from the lift station are conveyed in a 1,735 foot long, 6-inch force main extending northeast to Sugar Pine Road, and then continue northwest on Monterey Pine Drive where it discharges into MH129E045 east of Silver Pine Drive. The gravity sewer extends further north and east, and discharges to the influent gravity sewer system of Newport Coast Lift Station.

The District is considering construction of a dry weather urban runoff pump station, which can also pump any spilled flow from the Buck Gully, Montecito, and Newport Coast Lift Stations.



Photograph 1-1
Buck Gully Lift Station



Photograph 1-2
Buck Gully Lift Station Entrance

1-2 Tributary Area

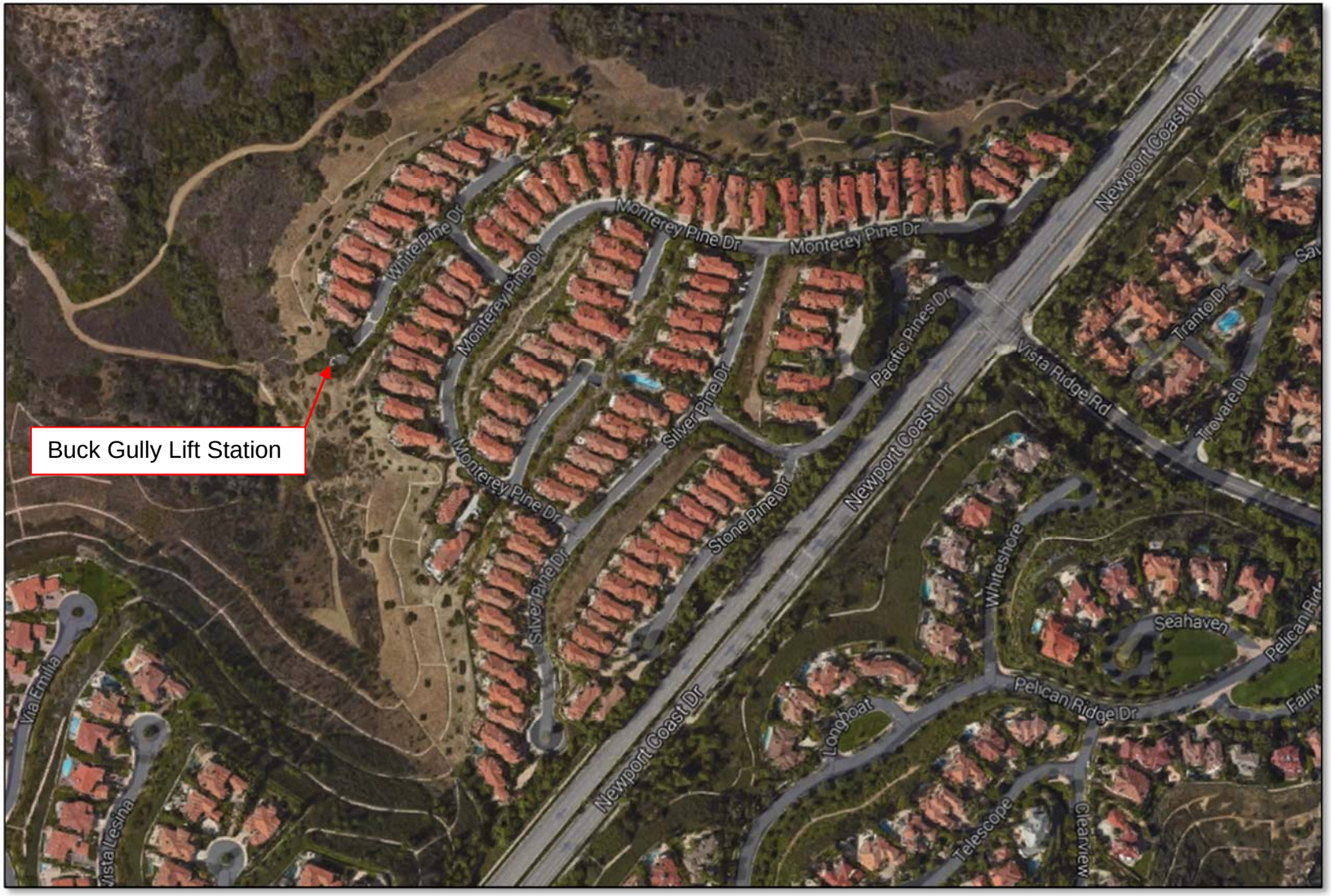
The Buck Gully Lift Station serves a net tributary area of 36.8 acres. The tributary area, shown on Figure 1-2, consists entirely of medium density residential land use with 95 dwelling units, as listed in Table 1-1.

Table 1-1
Buck Gully Lift Station Tributary Area Land Uses

LU Code	Land Use Description	Area (Acres)	No. of Dus	Water Use (GPM)
1163	Medium Density NPB	36.8	95	14.7
Grand Total		**36.8**	**95**	**14.7**

Figure 1-1

Site Location



1-3 Tributary Flows

Flow calculations based on SCADA records of pump start and stop times and wet well area resulted in an average dry weather flow of 12 gpm, and peak dry weather flow of around 25 gpm. The estimated peak wet weather flow is 35 gpm. The average water use is 14.7 gpm.

The Buck Gully Lift Station tributary area is completely developed with medium density housing. No future re-development, nor increase in wastewater flows are expected in this area. The existing pump capacities are much larger than the expected peak wet weather flows.

1-4 Influent Sewers

An 8-inch gravity sewer extending southwest along White Pine Drive conveys wastewater to the wet well. The 8-inch pipe enters the wet well at invert elevation of 526.87 feet amsl, which is 2.4 feet above the bottom. The inlet piping is shown on Figure 1-3.

1-5 Wet Well



Photograph 1-3
Wet Well

The wet well, seen on Photograph 1-3 and Figure 1-4, is an 8-foot square precast reinforced concrete structure with a height of approximately 16 feet. It has a bottom elevation of 524.50 feet amsl and a top elevation of 540.80 feet amsl.

The wet well walls and ceiling are PVC lined. The lining has experienced deterioration along weld strips and appears to be separating from the wall, as shown on Photograph 1-3. The wet well access hatch is not traffic rated.

The wastewater level in the wet well is primarily measured by an Essco Duplex Bubbler with ISR bubbler system. According to bubbler recorded levels, the lead pump starts when the wastewater level is approximately 11 inches above the invert elevation of the wet well and stops at a wastewater level of approximately 7 inches, resulting in an operating band of 4 inches. These levels are very low, and may result in formation of vortices and introduction of air into the pumps. The set points shown in SCADA data and discussions with IRWD staff suggest the pump start and stop levels are 15 inches and 6 inches, respectively, which conflicts with recorded level data and results in an operating band of 9 inches. Both stop levels of 6 and 7 inches are low. The wastewater level seen on Photograph 1-3 in relation to the inlet pipe invert, indicates that the wastewater level was approximately 26 inches from the bottom of the wet well, which is much higher than both pump start set points from SCADA and bubbler levels indicate, and is close to the start level shown on the as-built plans (28.8 inches). The plans indicate a stop level of 18 inches, which results in a band width of almost 11 inches. IRWD staff indicated that the pump set points were lowered and the operating band was decreased to reduce odor, system backup, and prevent grease issues. Calculations using pump on/off times and an operating band of 4 inches indicate average pumping rates of 200 gpm. The calculated pump capacity would be much higher if the operating band is 9 inches, or 11 inches.

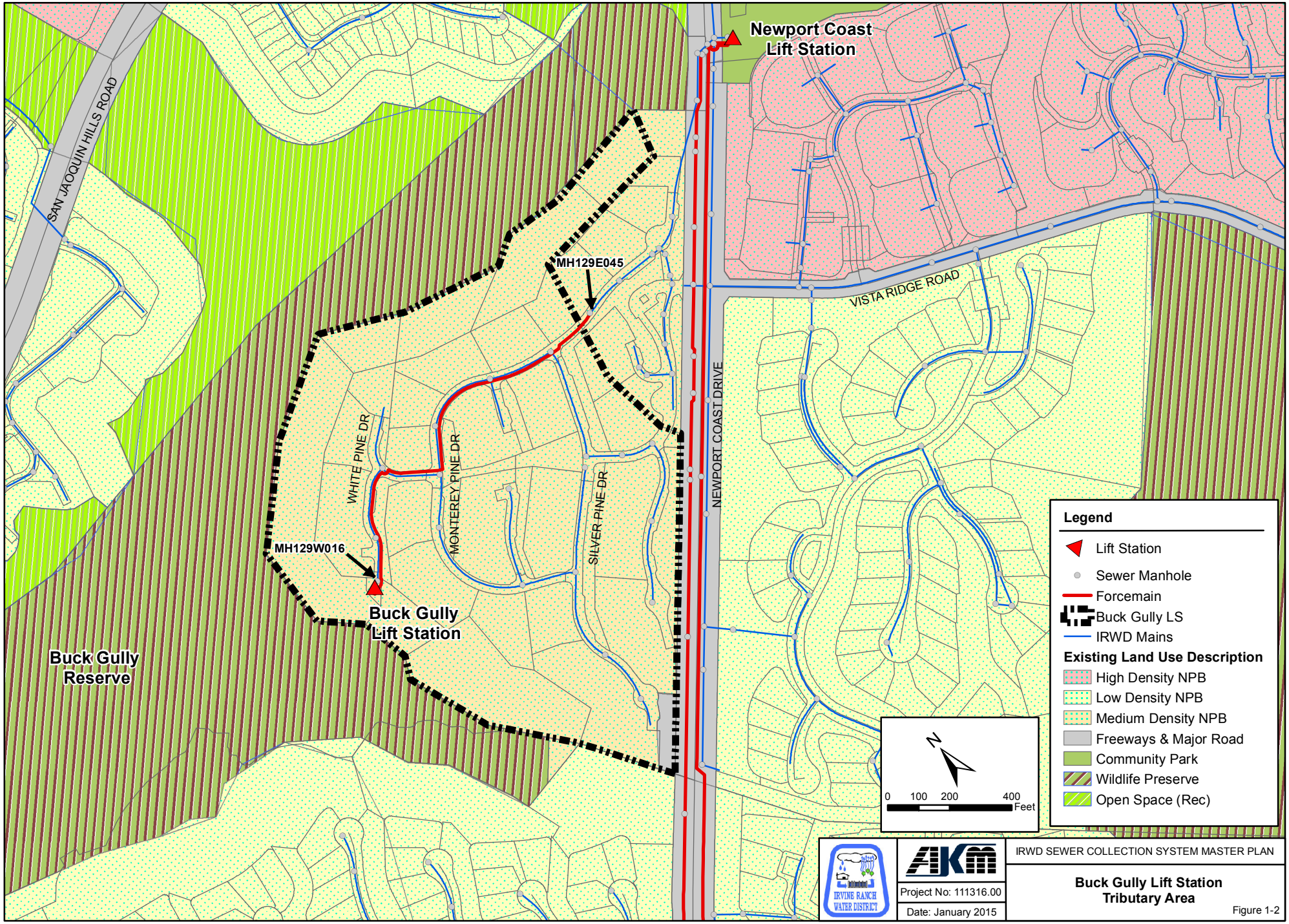

Newport Coast
Lift Station
SAN JAOQUIN HILLS ROAD
MH129E045
VISTA RIDGE ROAD
NEWPORT COAST DRIVE
WHITE PINE DR
MONTEREY PINE DR
SILVER PINE DR
MH129W016
Buck Gully
Lift Station
Buck Gully
Reserve
Legend
Lift Station
Sewer Manhole
Forcemain
Buck Gully LS
IRWD Mains
Existing Land Use Description
High Density NPB
Low Density NPB
Medium Density NPB
Freeways & Major Road
Community Park
Wildlife Preserve
Open Space (Rec)
N
0 100 200 400
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2015
Buck Gully Lift Station
Tributary Area
Figure 1-2

Figure 1-3
Buck Gully Lift Station Site and Piping Plan

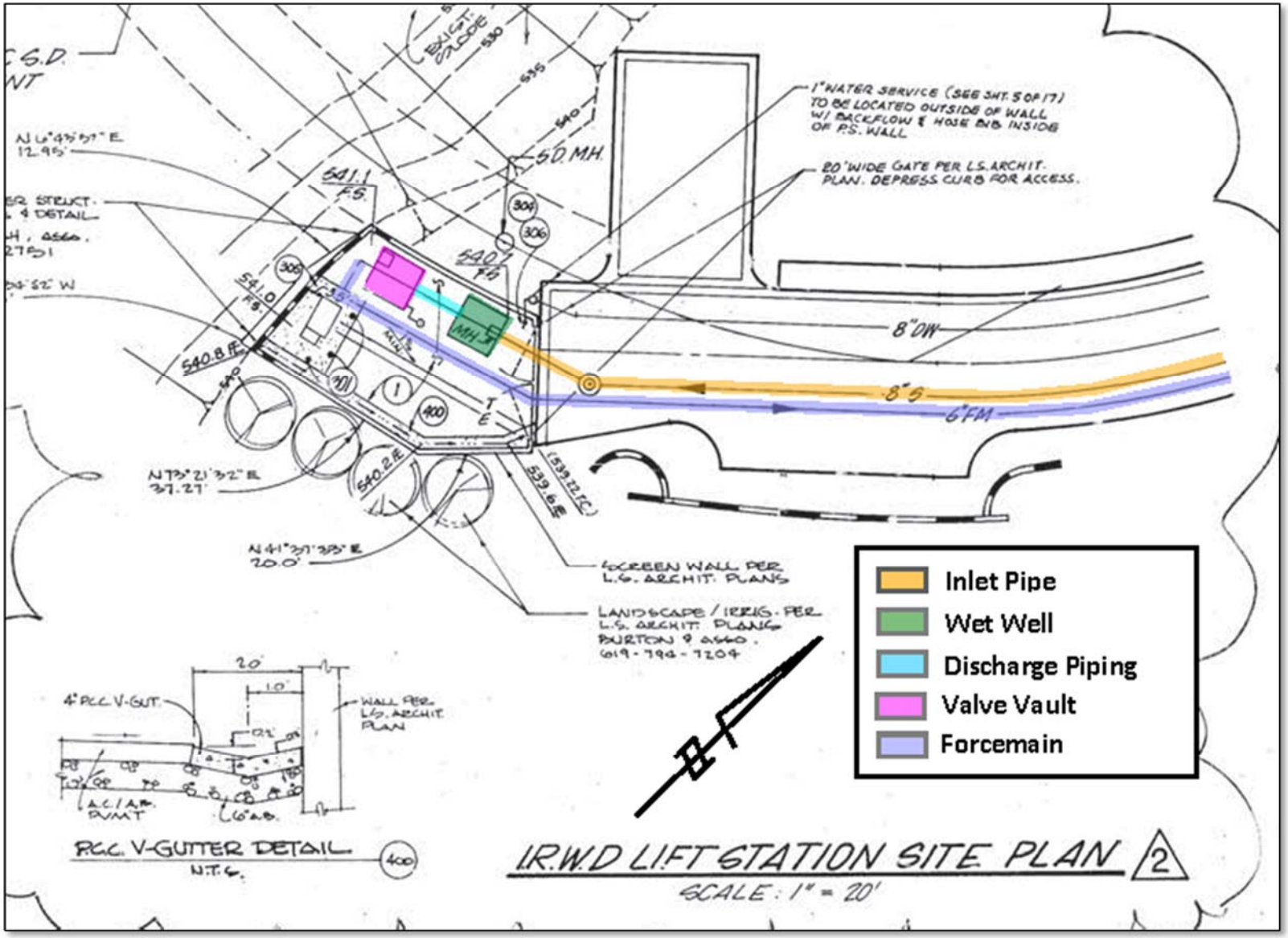
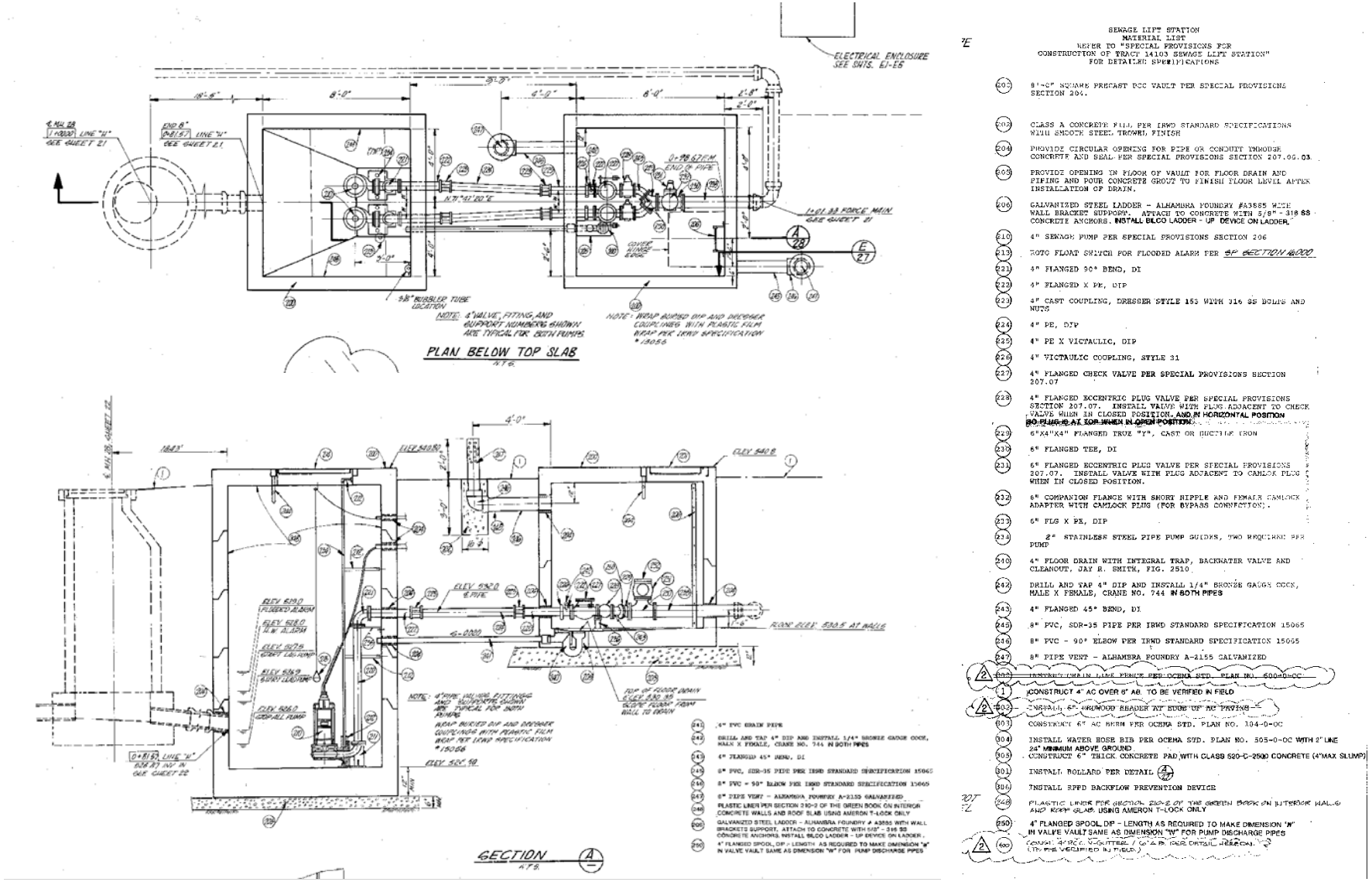


Figure 1-4
Wet Well and Valve Vault Plan and Profile View



Within a 4-inch operating band, the lift station has 159 gallons of operational storage. If the existing pump capacities are 180 gpm, the pumps would cycle a maximum of 9 times per hour if they are alternated, and the tributary flow were 90 gpm (half the capacity of one pump). However, the estimated peak wet weather flow is only 35 gpm. With these flows and 180 gpm pump capacity, the pumps will cycle a maximum of 4.6 times per hour if alternated which is more than the recommended 4 starts per hour. However, this would be a rare event, and would be acceptable.

There are two float switches in the wet well, seen on Photograph 1-3. One float switch sends a high wet well level alarm at sewage level of 528 feet amsl; and one sends a "flooded alarm" at 529 feet amsl and, per the as built plans, initiates a timed pump-down of the wet well with both pumps. One of the float switches appears to be disconnected.

The influent pipe enters the wet well at an invert elevation of 526.87 feet amsl, which is the same elevation as the lead pump start elevation. There is no emergency storage before the wet well begins to back into the influent pipes. The influent manhole does not currently have a Smart Manhole Cover installed.

In the past, the IRWD injected BioMagic into the wet well due to odor complaints. The odor problem has been remediated by lengthening the forcemain so the discharge is farther away from the residences, and reducing the wet well operating band to 9-inch from the original design operating band of 1.15-feet. The reduction in the operating band resulted in reducing the residence time in the wet well, as well as grease accumulation. Since these changes have been implemented, there have been no odor complaints, and the District has stopped injecting BioMagic into the wet well.

A pipe for evacuating sewage from the wet well by a Vactor truck has been in the wet well for 3 years.



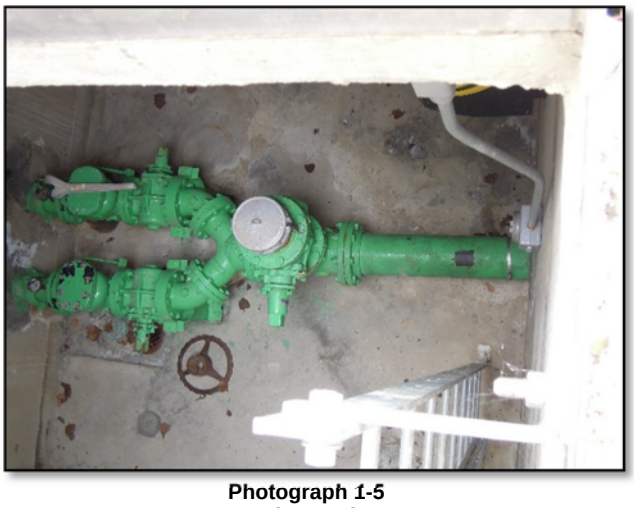
Photograph 1-4
Valve Vault Access

1-6 Valve Vault

The below ground valve vault, shown on Photograph 1-4, Photograph 1-5, and Figure 1-4, is an 8-foot square precast reinforced concrete structure with a height of approximately 10 feet. It is located west of the wet well. It has a bottom elevation of 530.5 feet amsl and a top elevation of 540.8 feet amsl. Access is through a 3-foot square access hatch and a ladder. The access hatch is not traffic rated. The light bulb in the valve vault was out at the time of the field investigation.

The vault has a 4-inch drain with integral trap, backwater valve, and cleanout. Sealing of the connection to the wet well is dependent upon the backwater valve. Presumably because of this, there is no trap priming system. This cannot be depended on to provide a positive seal continuously, unless regularly cleaned and tested.

The valve vault does not have a mechanical ventilation system. It only has a gravity ventilation system with 8-inch pipes on opposite corners of



Photograph 1-5
Valve Vault

the vault. It is considered a Class 1 Division 2 hazardous location. The District can use portable ventilation equipment for work in the valve vault, providing a minimum of six (6) air changes per hour. However, it is recommended that a permanent ventilation system be constructed, especially if a p-trap priming system is not installed.

1-7 Discharge Piping

The discharge piping begins at the west side of the wet well at the two 4-inch pump discharge flanges. Within the wet well, each pump has two 4-inch 90º flanged bends and a vertical 4-inch spool; and a 4-inch flange x plain end horizontal spool that exits the wet well with a centerline elevation of 532.0 feet amsl. Some of the coating on the discharge piping has been lost. The damaged coating and corrosion of the discharge piping can be seen on Photograph 1-5.

Discharge piping includes two (2) flexible couplings between the wet well and the valve vault. The pipes are deflected at the flexible couplings to line them up with the wye within the valve vault, instead of keeping them straight and providing spools within the valve vault which would have eliminated the deflections. This is not a desirable installation. Within the valve vault, each discharge pipe extends with a groove end spool, a Victaulic coupling, a groove end x flanged spool with a pressure gauge connection (no transmitter), a lever and weight check valve, an eccentric plug valve, and a 45º flanged bend, connecting to a 4" x 4" x 6" wye. The discharge piping continues with a 6-inch flanged tee and a flange x plain end spool that exits the valve vault. A bypass pumping connection extends up from the 6-inch flanged tee with an eccentric plug valve and a Camlock fitting.

The District staff has indicated that the existing lever and spring check valves slam when the pumps stop, and do not always seal, allowing reverse flow. They cannot be easily adjusted to mitigate the slamming and the resulting hydraulic transients.

The lift station does not have a discharge pressure meter on the discharge pipe to monitor blockages.The lift station does not have a flow meter. Settlement issues have been reported in the forcemain in the past.

1-8 Forcemain

The forcemain is a 6-inch PVC pipe that extends 1,735 feet from the Buck Gully Lift Station valve vault northeast along White Pine Drive, southeast on Sugar Pine Drive, northeast and east along Monterey Pine Drive, discharging the flow into manhole MH129E032 approximately 350 feet east of Silver Pine Drive. The invert elevation at the discharge manhole is 594.94 feet amsl. From the discharge manhole, gravity sewers convey the wastewater east on Monterey Pine Drive, and northeast crossing Newport Coast Drive where it discharges into MH129E552 upstream of the Newport Coast Lift Station. The invert elevation at the entrance to the Newport Coast Lift Station wet well is 580.80 feet amsl.

From the Newport Coast Lift Station, a 16-inch diameter PVC forcemain extends 2,935 feet southwest on Newport Coast Drive to MH129S005. The downstream gravity sewer system consists of 9,500 feet of 15-inch VCP along Newport Coast Drive, terminating at MH131E004 (OCSD Manhole BAY0355-0000) on Pacific Coast Highway.

With the existing pump capacity of 180 gpm, the velocity in the 6-inch forcemain is approximately 2 fps, which is lower than the recommended forcemain velocity range of 3 – 5 fps. A 4-inch force main would likely provide better self-cleansing velocities and reduce the residence time in the forcemain, resulting in further reduction in odor problems.

Ground settlement has occurred in the past between the wet well and the valve vault, resulting in forcemain failures.

1-9 Main Pumps

Buck Gully Lift Station has two (2) Essco model 4 x 12TF torque fluid submersible vortex pumps with 100% recessed vortex 7 vane impellers, 11-inches in diameter. According to the pump performance curve submitted February 17, 1998, the pumps are rated at 180 gpm and total dynamic head of 110 feet at 1750 RPM. The operating efficiency of the pumps is undetermined. The pumps are driven by 20 HP motors. According to the SCADA data collected February 1, 2015 through March 29, 2015 the lift station runs approximately 7.6 hours a week, corresponding to an average flow of 8 gpm if the pump capacities are 180 gpm.

1-10 Gas Detection System

The existing valve vault does not have a permanent gas detection system. The District staff has to use portable gas detectors for entry into the wet well.

1-11 Electrical and Controls

Buck Gully Lift Station is served through a 480 volt 3-phase 3 wire meter. The SCE meter and the 200 amp main breaker are housed in an enclosure connected to the motor control center (Photograph 1-6), which houses the manual transfer switch, pump control panel, 480/120 volt transformer and the lighting panel, bubbler control panel, and the telemetry enclosure. The enclosure is not elevated above the concrete pad that it is constructed on, which has resulted in corrosion of the base steel angles.

The pumps are driven by 20 HP constant speed motors. The starters are across the linewhich produces hydraulic transients resulting from sudden starting of the pumps.

A pump control panel is located to the south of the valve vault, and is illustrated on Photograph 1-7. The switchgear and motor control center enclosures are not protected from the elements. The compressor is located on the opposite side of the enclosure from the pump control panel (Photograph 1-8). The air compressor light is malfunctioning.

Most of the electrical equipment is over 22 years old. The electrical enclosure is exposed to the elements. The Buck Gully Lift Station is the only IRWD lift station without a permanent standby generator.

Pumps are controlled based on sewage level in the wet well as determined by the bubbler system. The compressor has a manual bleed valve. There is not a redundant level control system that can operate the lift station if the bubbler system fails. The existing float switches are connected to the control system to initiate a timed pump-down with both pumps if the bubbler system fails. However, the plans show no alarm



Photograph 1-6
SCE Meter and Main Breaker Enclosure and Generator Quick Connect Coupler



Photograph 1-7
Pump Control Panel



Photograph 1-8
Air Compressor

indicating control power failure, when the lift station cannot operate.

The PLC and SCADA do not currently provide all pertinent operational data and alarm information to the District.

1-12 Recommendations

The recommendations for Buck Gully Lift Station are summarized in Table 1-2.

Table 1-2

Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Valve vault and wet well hatches should be traffic-rated	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Valve vault lighting is out	
	Electrical enclosure is exposed to sun and rain	
	Valve vault lacks permanent ventalation system	
	Valve vault lacks permanent gas detector	
	Air compressor lighting is malfunctioning	
	Compressor bleed valve is manually operated	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Wet well float switch is disconnected	
	Discharge piping in the wet well is corroded	
	Wet well evacuation pipe is deteriorating	
	Existing motor starters are not solid state soft starters, causing hydraulic transients due to rapid pump start and stop	
	Pump start and stop levels are not optimal	
	The lift station does not have a flow meter	
	There is no pressure transmitter on the discharge pipe	
	Valve vault drainage system has a check valve, but no P-trap priming system	
	Bypass pumping connection uses ductile iron tee instead of a 3-way plug	
Redundancy	Lift station has single forcemain	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
	Level measurement is provided by a single bubbler system	
	There is no control power fail alarm for notification if wet well level control system fails	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory agencies. Develop recommendations based on validation and verification efforts.
	There is no on-site generator	Validate that existing conditions are consistent with IRWD operational requirements. Develop recommendations based on verification efforts.
Condition/ Age	Wet well and valve vault have some ground settlement	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Existing lever and weight check valve experience slamming, contributing to hydraulic transients when pumps start and stop	
	Motor control center (MCC) enclosure pad is flush with adjacent pavement & has corrosion from moisture exposure	
	Influent manhole does not currently have a Smart Manhole Cover installed	
	Electircal and control system equipment is over 23 years old and are near the end of their useful lives	
	Wet well lining is deteriorating	

Montecito Lift Station

Evaluation

1-1 Introduction

Montecito Lift Station is located at 21 Via Burrone within the Pelican Heights gated community, which is off of Pelican Hill Road in the City of Newport Beach. The site of the lift station is shown on Figure 1-1. It serves a total tributary area of 36.4 acres that is bounded by the Buck Gully Reserve and Newport Coast community. It is a submersible lift station with two (2) 20 HP, 120 gpm capacity pumps having 119 feet in total dynamic head (TDH) at a rated speed of 1750 rpm. The ground elevation at the lift station is 542 feet above mean sea level (amsl). The wet well, valve vault, chemical cabinet, and electrical panel are seen on Photograph 1-1.

Access to the lift station is through a short driveway that extends southwesterly to Via Burrone as shown on Photograph 1-2. A manual swing gate with a padlock provides access to the lift station. The narrow entrance would make it difficult for a Vactor truck to enter. IRWD uses a hose to clean the wet well.

The Montecito Lift Station was constructed in 1999. The flow from the lift station is conveyed 1,270 feet easterly to the intersection of Vista Lesina and Via Burrone through a 4-inch PVC forcemain. Pumped flow is further conveyed in the gravity system first to Newport Coast Drive, and then to Pacific Coast Highway where it enters an Orange County Sanitation District trunk sewer.



Photograph 1-1 Montecito Lift Station



Photograph 1-2 Montecito Lift Station Entrance

1-2 Tributary Area

The Montecito Lift Station serves a net tributary area of 36.4 acres. The tributary area, shown on Figure 1-2, consists entirely of low density residential land use with 98 dwelling units and a guard shack, as shown in Table 1-1.

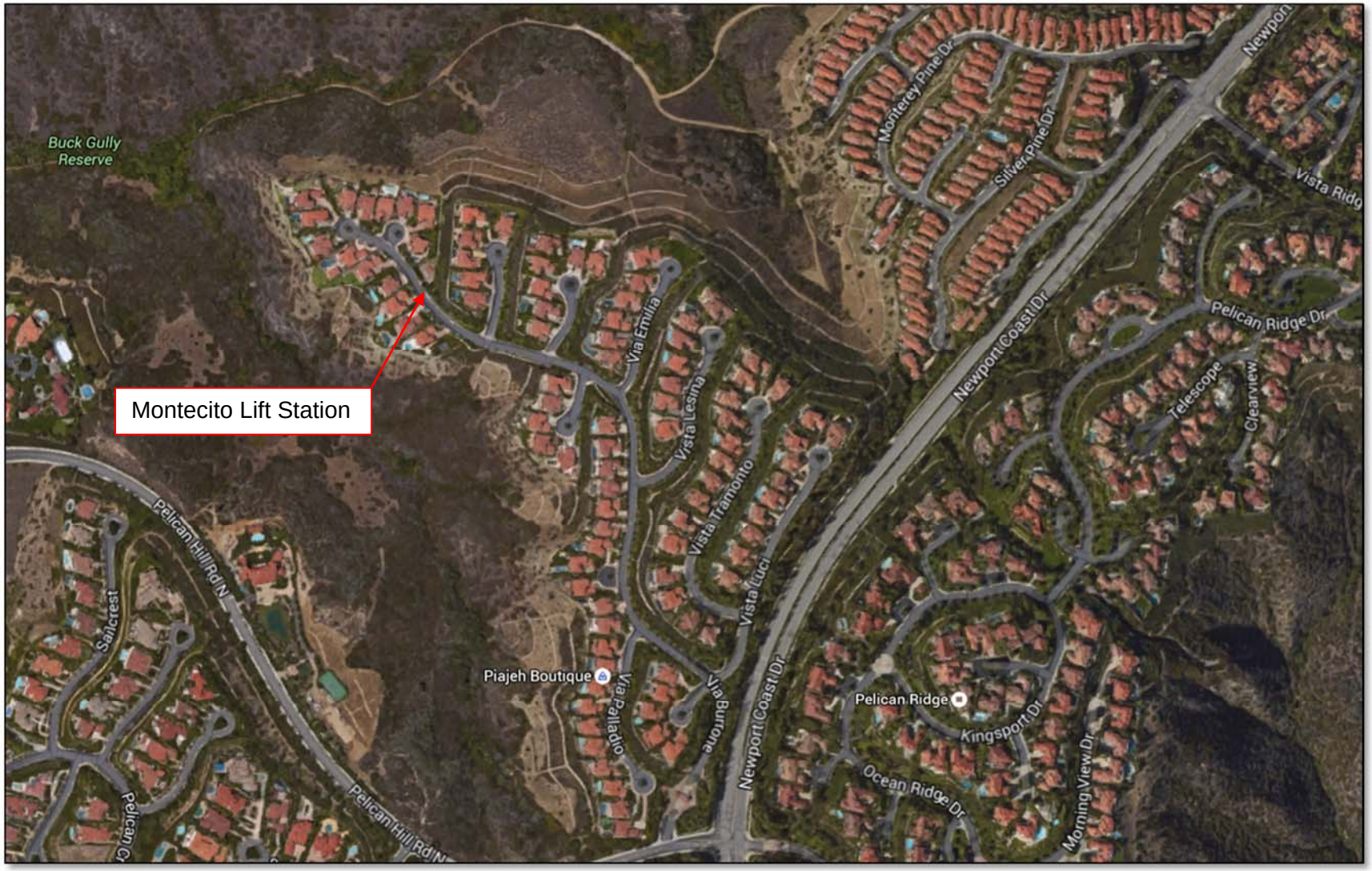
Table 1-1

Montecito Lift Station Tributary Area Land Uses

LU Code	Land Use Description	Area (Acres)	No. of Dus	Water Use (GPM)
1133	Low Density NPB	36.4	98	14.8
Grand Total		**36.4**	**98**	14.8

Figure 1-1

Site Location



1-3 Tributary Flows

Flow calculations based on SCADA records of pump start and stop times and wet well area resulted in an average dry weather flow of 7 gpm, and peak dry weather flow of 16 gpm. The estimated peak wet weather flow is 22 gpm. The average water use is 14.8 gpm.

The Montecito Lift Station tributary area is completely developed with low density housing. No future re-development, nor increase in wastewater flows are expected in this area. The existing pump capacities are sufficient for all conditions.

1-4 Influent Sewers

An 8-inch gravity sewer extending northwest along Via Burrone conveys wastewater to the wet well. The 8-inch pipe enters the wet well at an invert elevation of 523.17 feet amsl, which is 5.5 feet above the wet well bottom. The inlet piping is shown on Figure 1-3.

1-5 Wet Well

The wet well, seen on Photograph 1-3 and Figure 1-4, is a 6-foot square structure with precast reinforced concrete walls and a height of approximately 18 feet. It has a bottom elevation of 517.67 feet amsl and a top elevation of 535.92 feet amsl. Two foot high grout fillets slope (2:1) from all four walls to the bottom, directing debris to the suction of the pumps.

The wet well is polyurethane coated. The plans indicate coating to be applied to the “air space only”, presumably on the walls above the fillet. Some coating near the fillet appears to be damaged.

The wastewater level in the wet well is primarily measured with a bubbler system. The lift station has a redundant ultrasonic level transducer. The bubbler tubing extends down in a 4-inch diameter stilling pipe. The ultrasonic level transducer is also located inside the same stilling pipe. The lead pump starts when the wastewater level is 26 inches above the invert elevation of the wet well



Photograph 1-3 Wet Well

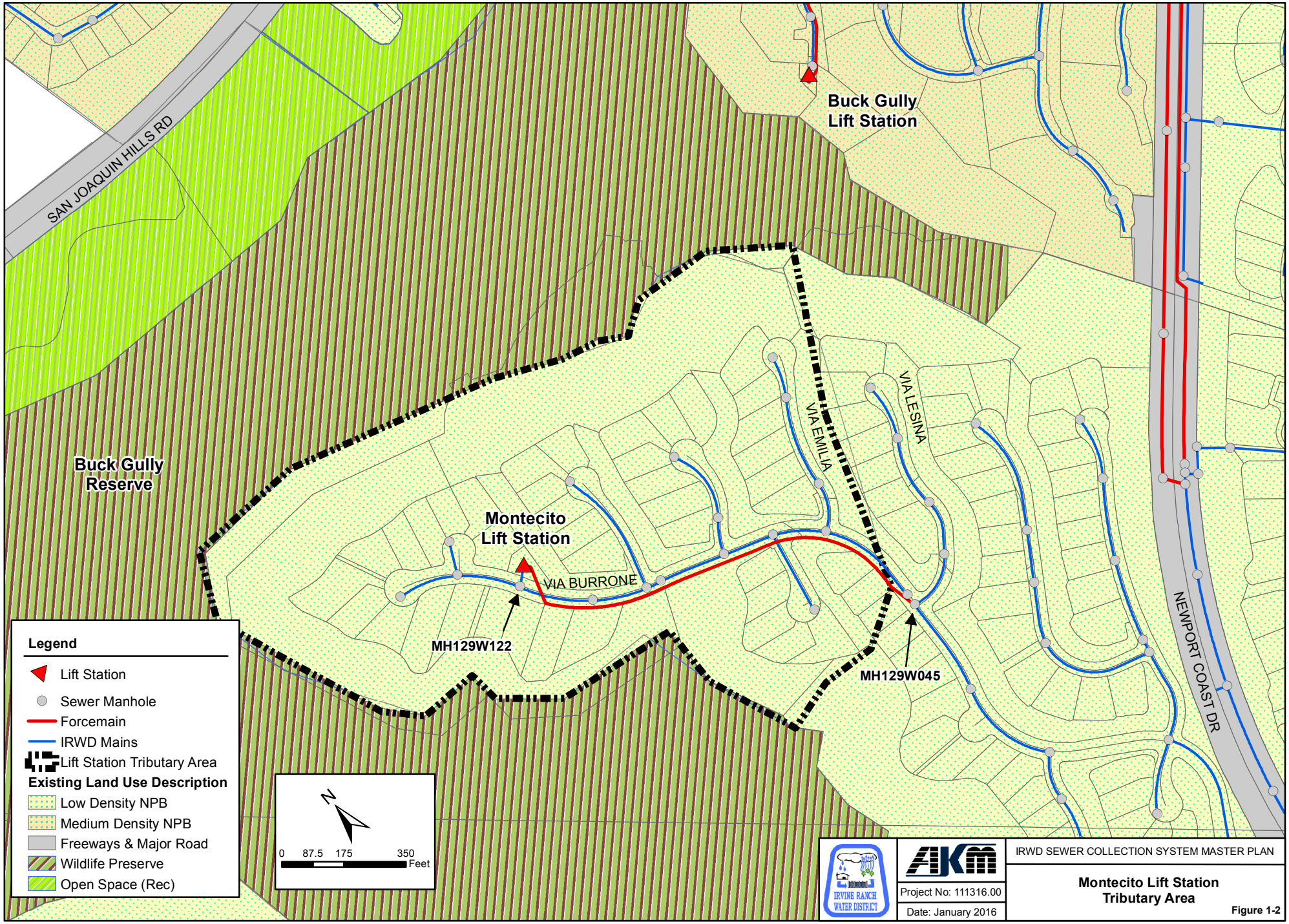

Buck Gully
Lift Station
SAN JOAQUIN HILLS RD
Buck Gully
Reserve
Montecito
Lift Station
VIA BURRONE
VIA EMILIA
VIA LESINA
NEWPORT COAST DR
MH129W122
MH129W045
Legend
Lift Station
Sewer Manhole
Forcemain
IRWD Mains
Lift Station Tributary Area
Existing Land Use Description
Low Density NPB
Medium Density NPB
Freeways & Major Road
Wildlife Preserve
Open Space (Rec)
N
0 87.5 175 350
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2016
Montecito Lift Station
Tributary Area
Figure 1-2

Figure 1-3
Montecito Lift Station Site and Piping Plan

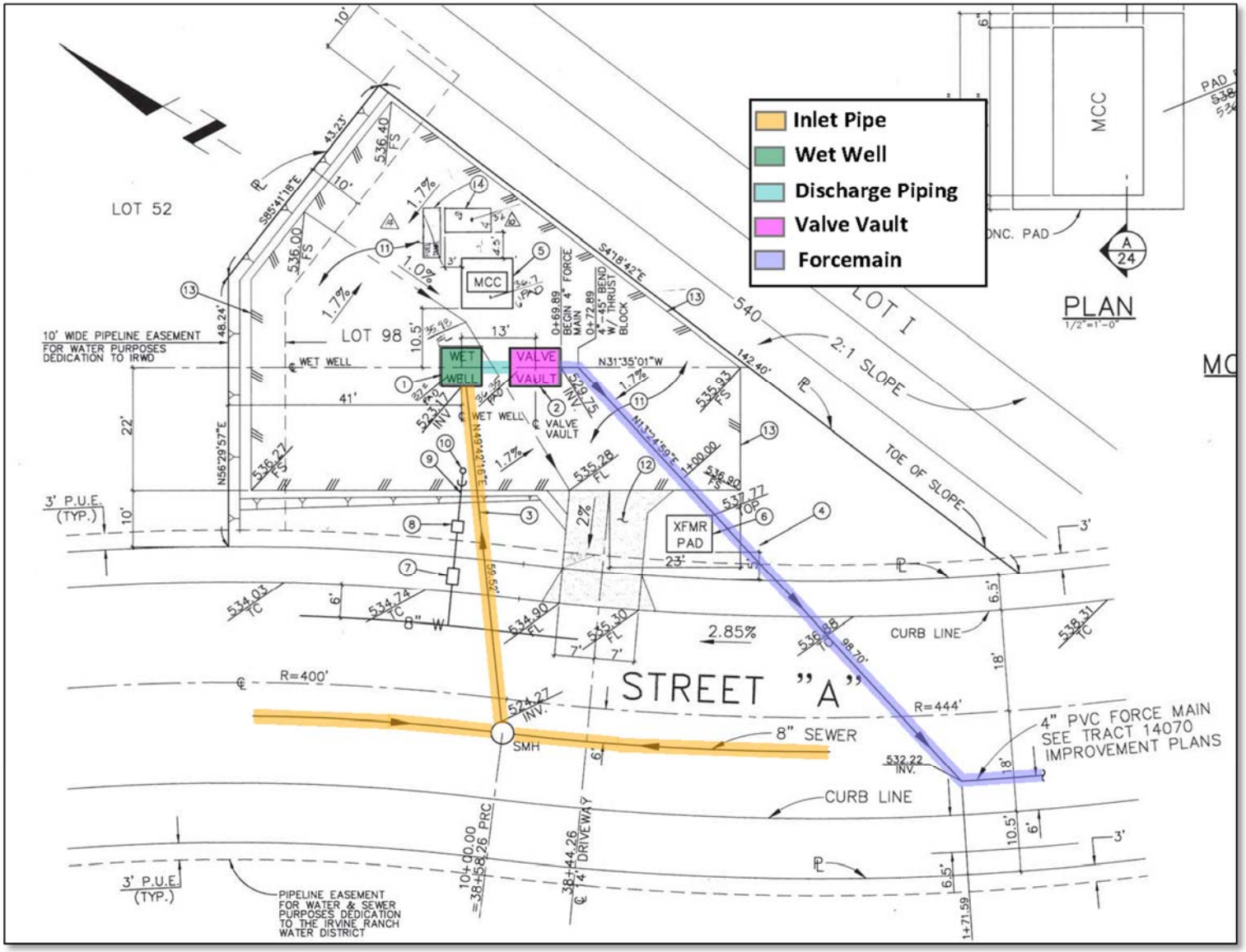
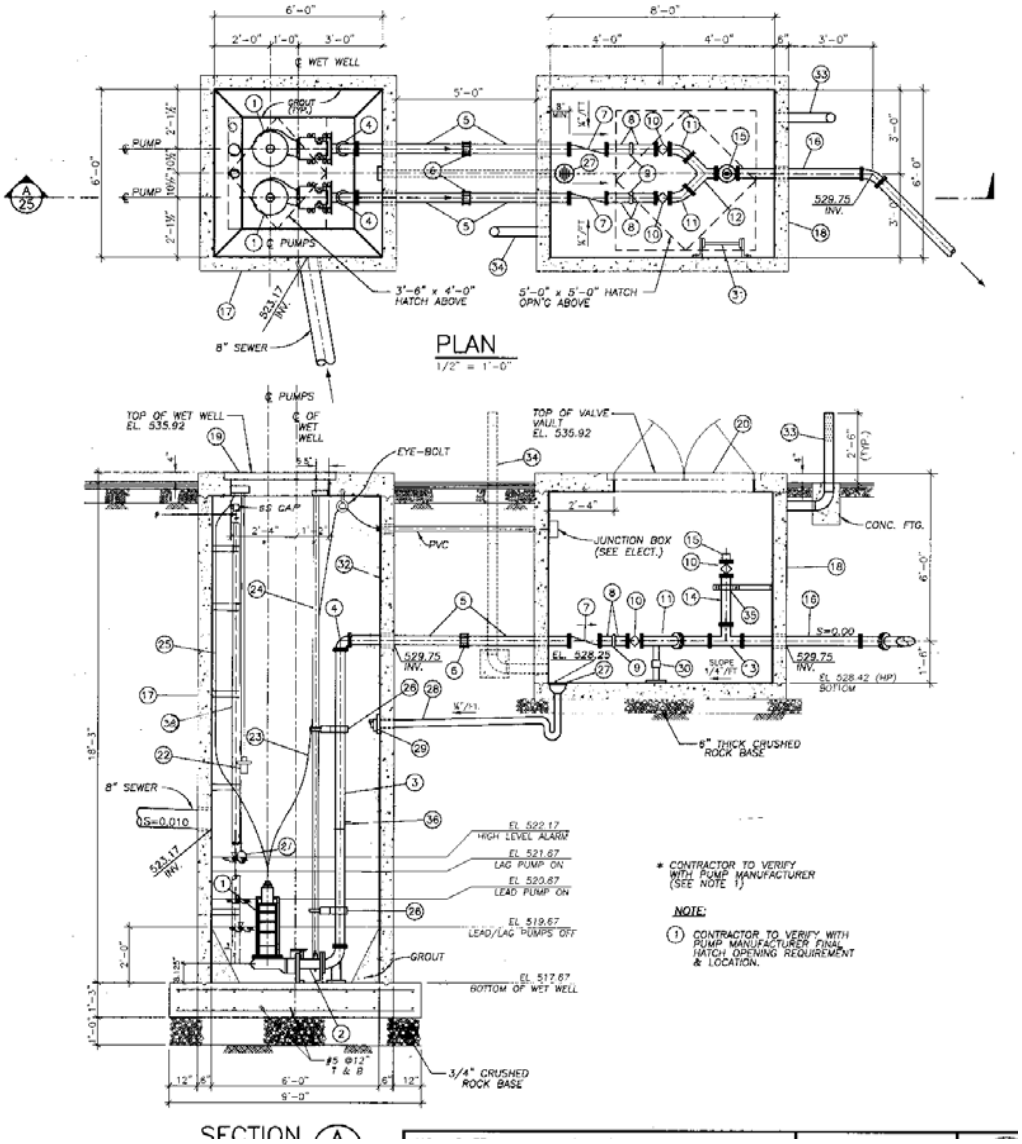


Figure 1-4
Wet Well and Valve Vault Plan and Profile View



LIST OF MATERIALS		
ITEM	DESCRIPTION	QUANTITY
1	SUBMERSIBLE VORTEX PUMP, 120 GPM @ 119' TDH W/ 20 HP, 1750 RPM, 480 VOLTS, 3 PHASE 60 Hz SUBMERSIBLE EXPLOSION-PROOF MOTOR, ESSCO MODEL NO. 4 x 12TF	2
2	4" SPARK PROOF SLIDE RAIL ASSEMBLY	2
3	4" D.I. PIPE, F.E. X F.E. (LENGTH AS REQ'D)	2
4	4"-90° ELBOW, FLG'D	2
5	4" D.I. PIPE, F.E. X P.E. (L=3'-9")	4
6	4" FLEXIBLE COUPLING	2
7	4" SWING CHECK VALVE, SPRING & LEVER TYPE, MUELLER A-2600-6-02	2
8	4" D.I. SPOOL, F.E. X V.E.	4
9	4" VICTAULIC COUPLING	2
10	4" ECCENTRIC PLUG VALVE, DEZURIK SERIES 118	3
11	4" - 45° D.I. LONG RADIUS ELBOW	2
12	4" x 4" D.I. TRUE "Y"	1
13	4" x 4" x 4" D.I. TEE	1
14	4" D.I. SPOOL x 1'-10" LG. F.E. x F.E.	1
15	4" FLANGE W/ SHORT NIPPLE & 4" FEMALE CAMLOCK ADAPTER W/ CAMLOCK PLUG	1
16	4" D.I. PIPE, F.E. x F.E. (L=4'-6")	1
17	5'-0" x 6'-0" PRECAST CONC. MANHOLE, DESIGNED FOR H-20 TRAFFIC BRIDGE LOADING, QUIKSET SERIES 6060	1
18	8'-0" x 8'-0" PRECAST CONC. VAULT, DESIGNED FOR H-20 TRAFFIC BRIDGE LOADING, QUIKSET SERIES 450	1
19	3'-6" x 4'-0" HEAVY DUTY S/G SS DOUBLE DOOR, H-20 LOADING, U.S. FOUNDRY & MANUF. TYPE THD	1
20	5'-0" x 5'-0" HEAVY DUTY ALUMINUM DOUBLE DOOR, H-20 LOADING, U.S. FOUNDRY & MANUF. TYPE THD W/ SS SPRINGS & TORSION BAR	1
21	FLOAT SWITCH, ANCHOR SCIENTIFIC TYPE S	1
22	SONIC LEVEL SENSOR (SEE SPECS)	1
23	POWER CABLE MOTOR LOAD (LENGTH AS REQ'D.)	2
24	2" SCHED. 40 S.S. RAIL GUIDE PIPE (LENGTH AS REQ'D.)	4
25	0.375" S.S. NYLON JACKETED LIFTING CABLE	2
26	2" ST. STL. INTERMEDIATE GUIDE BRACKET W/ S.S. SPACER AND CLAMP SERIES 450	4
27	4" FLOOR DRAIN, CLOW MODEL F-3945	1
28	4" PVC PIPE DRAIN, SCHED 80	1
29	4" FLAP VALVE, CLOW MODEL F-3016	1
30	6" ADJUSTABLE PIPE SUPPORT GRINNELL FIG. 264	2
31	GALV. STEEL LADDER, ALHAMBRA FDY. NO. A-3400	1
32	POLYURETHANE COATING, ON AIR SPACE ONLY	1
33	4" GALV. STEEL PIPE VENT ALHAMBRA FDY. NO. A-2151 (AIR EXHAUST)	1
34	4" GALV. STEEL PIPE VENT ALHAMBRA FDY. NO. A-2151 (AIR INTAKE)	1
35	4" PIPE CLAMP, GRINNELL FIG. 212 W/ 1½" x ¼" BENT PL ANCHOR TO WALL W/ ½"ø x 4" LG. EXPANSION BOLT	1
36	L4 x 3 x 3/8 S.S. PIPE SUPPORT W/ 5/8"ø S.S. U-BOLT PER DETAIL ON THIS SHT.	1
37	3/8" TYPE 316 SS TUBING TO BUBBLER CABINET	1
38	4" SCHED 80 PVC PIPE STILLING WELL FASTEN TO WALL W/ SS PIPE CLAMPS	1

and stops at a wastewater level of approximately 18 inches according to bubbler recorded levels. The ultrasonic device records start and stop levels of approximately 25 and 16 inches, respectively, and appears to generally record values about 2 inches lower than the bubbler. As an alternative to the ultrasonic level transducer, a pressure transducer can be used. The SCADA screenshots provided by the District, as-built plans, and the set points shown in SCADA data suggest that the pump start and stop levels are 36 and 24 inches, respectively, which conflicts with recorded level data.



Photograph 1-4 BioMagic Feed Tube

Within the 8-inch operating band, the lift station has 180 gallons of operational storage. With the existing pump capacities of 120 gpm, the pumps would cycle a maximum of 5 times per hour if they are alternated, and the tributary flow were 60 gpm (half the capacity of one pump). However, since even the estimated peak wet weather flow of 22 gpm is much less than 60 gpm(half of one pump capacity), the pumps will cycle less, approximately 2.9 times per hour if alternated. This is less than the maximum of 4 starts per hour recommended for 20 HP motors.



Photograph 1-5 Corroding Stilling Well Supports

The influent pipe enters the wet well at an elevation of 523.17 feet amsl, which is 1.33 foot higher than the high water alarm level of 522.17 feet amsl. There is only 358 gallons of emergency storage in the wet well, which provides about 23 minutes of response time during peak dry weather flows, and 14 minutes during peak wet weather flows before sewage backs up into the tributary gravity system. The influent manhole does not currently have a Smart Manhole Cover installed.

To mitigate odors at the lift station and within the downstream gravity sewers, IRWD installed a portable system to inject BioMagic into the wet well, subsequent to the construction the lift station. As shown on Photograph 1- 4, the protective PVC pipe and the tubing inside it that feeds BioMagic into the wet well is located above ground between the enclosure and the wet well.

The supports for the stilling well (Photograph 1-5), as well as the Kellum grips (Photograph 1-6) are corroding



Photograph 1-6 Corroding Kellum Grips

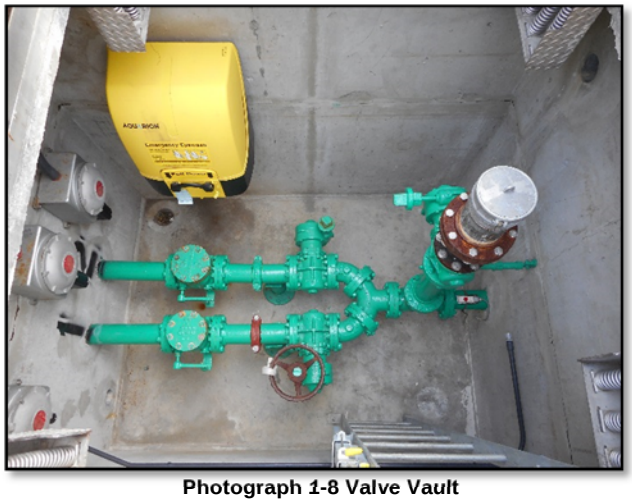
1-6 Valve Vault

The below ground valve vault, shown on Photograph 1-7 and Figure 1-4, is a 6-foot x 8-foot precast reinforced concrete structure with a height of approximately 6 feet. It has a bottom elevation of 528.42 feet amsl and a top elevation of 535.92 feet amsl. Access is through a 5-foot square hatch and a ladder. There is no lighting in the valve vault.



Photograph 1-7 Valve Vault

The vault has a 4-inch drain that has a p-trap but no means to prime it. It is connected to the wet well at a cast iron flap gate, which is corroded. The flap gate does not provide an adequate seal.
The valve vault does not have a mechanical ventilation system. It only has a gravity ventilation system with 4-inch pipes on opposite corners of the vault. It is considered a Class 1 Division 2 hazardous location. All junction boxes for the power and control wires are located in the valve vault. While these boxes are explosion proof, any work conducted on them will expose the wiring to this atmosphere. The District can use portable ventilation equipment providing a minimum of six air changes per hour for such work. The eye wash station is currently located in the valve vault.



Photograph 1-8 Valve Vault

1-7 Discharge Piping

The 4-inch discharge piping for each pump starts at the pump discharge nozzle at a centerline elevation of 525.8 feet amsl. They extend up to 529.9 feet amsl through two (2) 90º bends within the wet well, penetrate the wet well wall, and continue horizontally into the valve vault. Within the valve vault (Photograph 1-8), there is a 4-inch lever and spring type swing check valve, a Victaulic coupling, an eccentric plug valve, and a 45º bend for each pump discharge, which confluence at a 4-inch flanged true wye. Following the wye is a 4-inch ductile iron flanged tee that extends to the forcemain, as well as to the bypass pumping connection through a short 4-inch spool, eccentric plug valve, and female Camlock adapter. The District staff prefers a 3-way plug valve instead of the tee connection for the flexibility it provides.



Photograph 1-9 Discharge Pipe and Fittings

The discharge pipes and fittings within the wet well have lost some of the coating, and exhibit rusting, as shown on Photograph 1-9. The flanged spool downstream of the plug valve on the bypass pumping connection is not coated, and is rusting.

The District staff has indicated that the existing lever and spring check valves slam when the pump stop, and do not always seal, allowing reverse flow. They cannot be easily adjusted to mitigate the slamming and the resulting hydraulic transients.

There is no pressure transmitter on the discharge pipe.The lift station does not have a flow meter.

1-8 Forcemain

The forcemain is a 4-inch PVC pipe that extends 1,270 feet easterly to the intersection of Vista Lesina and Via Burrone, and terminates at manhole MH129W045, as seen on Figure 1-2. The invert elevation at the discharge manhole is approximately 623 feet amsl. From the discharge manhole, gravity sewers convey the wastewater south to Pelican Hill Road and then south down Newport Coast Drive, where it eventually enters an Orange County Sanitation District trunk line that runs along Pacific Coast Highway.

With the existing pump capacity of 120 gpm, the velocity in the forcemain is approximately 3.1 feet per second (fps), which is within the recommended forcemain velocity range of 3 – 5 fps.

1-9 Main Pumps

Montecito Lift Station has two (2) ESSCO model 4x12TF torque fluid submersible vortex pumps with a 100% recessed vortex 7 vane and 11-inch diameter impellers. The existing pumps were installed in 2008. According to the pump performance curve dated January 7, 2008, the pumps are rated at 120 gpm and a total dynamic head of 119 feet, at 1750 RPM. The pumps are driven by 20 HP motors. According to the SCADA data collected between February 1, 2015 and March 29, 2015, the lift station runs approximately 14.7 hours per week. The SCADA data also indicates that the pumps are pumping at a range of around 65 to 95 gpm with an average of 81 gpm.

The existing pump capacities are much higher than the estimated peak wet weather flow of 22 gpm. However, the IRWD staff indicated that when residents drain their pools, the wet well level rises quickly even with both pumps running, resulting in high wet well level alarm signals. The District staff has had to contact the residents and ask them to reduce the rate of drainage from the pools.



Photograph 1-10 Electric Service, ATS, and Bubbler System



Photograph 1-11 Control and Telemetry Panels



Photograph 1-12 Canopy Over Electrical And Chemical Enclosures, Generator



Photograph 1-13 Standby Generator

1-10 Gas Detection System

The existing valve vault does not have a permanent gas detection system. The District staff has to use portable gas detectors, which is adequate for the infrequent entry into the wet well. When the lift station is upgraded with the addition of a mechanical ventilation system and motor control center replacement, it is recommended that a permanent gas detector be added in the valve vault.

1-11 Electrical and Controls

The Montecito Lift Station is served through a 480 volt 3-phase 4 wire meter. The pumps are driven by 20 HP constant speed motors. The SCE meter and 100 amp main breaker; a 5 KVA 480/120 volt transformer, the automatic transfer switch, the lighting panel, and the bubbler system, shown on Photograph 1-10 are located on one side of a 304 stainless steel NEMA 3R enclosure. The pump control panel, bubbler control panel, and the telemetry panel, shown on Photograph 1-11 are located on the other side. The electrical enclosure, the standby generator, as well as the odor control system enclosure are located under a tile roofed canopy, protecting them from the elements (Photograph 1-12). The existing motor starters are across the line starters.

A permanent standby generator (Cummins 50 KW DGCA-4494342), shown on Photograph 1-13, is provided to operate the lift station on commercial power outage. The electrical equipment is over 16 years old.

Pumps are controlled based on sewage level in the wet well as determined by the bubbler system, and backed up by the ultrasonic level transducer.

The PLC and SCADA do not currently provide all pertinent operational data and alarm information to the District.

The electrical and control equipment is over 16 years old.

1-12 Recommendations

The recommendations for Montecito Lift Station are summarized in Table 1-2.

Table 1-2

Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Chemical feed tube is above ground and exposed to sun and rain, which is a tripping hazard	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Eye wash station is currently located in the valve vault	
	Valve vault lighting is insufficient for night work	
	Valve vault lacks permanent ventalation system	
	Valve vault lacks permanent gas detector	
	Valve vault drainage system has a check valve, but no P-trap priming system	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Lift station does not have a flow meter	
	Existing motor starters are not solid state soft starters	
	Pumps experience surge pressures due to sudden closure of the check valves	
	Level measurements and SCADA settings do not match	
	There is no pressure transmitter on the discharge pipe	
Redundancy	Lift station has single forcemain	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory requirements. Develop recommendations based on validation and verification efforts.
Condition/ Age	Site piping is corroding and may need repair or replacement	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Existing lever and weight check valves experience slamming	
	Electrical and control equipment is over 16 years old	
	Influent manhole does not currently have a Smart Manhole Cover installed	
	Repair pipe coating in valve vault	
	Wet well lining is deteriorating	

Coyote Canyon Lift Station

Evaluation

1-1 Introduction

Coyote Canyon Lift Station is located at 5130 Bonita Canyon Drive between Chambord Road and the San Joaquin Hills Transportation Corridor (SR-73) in the City of Newport Beach. The lift station is located near the borders of the of the Turtle Ridge, Newport Ridge North, and UCI communities. The ground elevation at the lift station is 169 feet above mean sea level (amsl).

Access to the lift station is through a driveway that extends north to Bonita Canyon Drive. A manual sliding gate provides vehicular access to the lift station. The Coyote Canyon Lift Station site is illustrated on Photograph 1-1.



Photograph 1-1 Coyote Canyon Lift Station

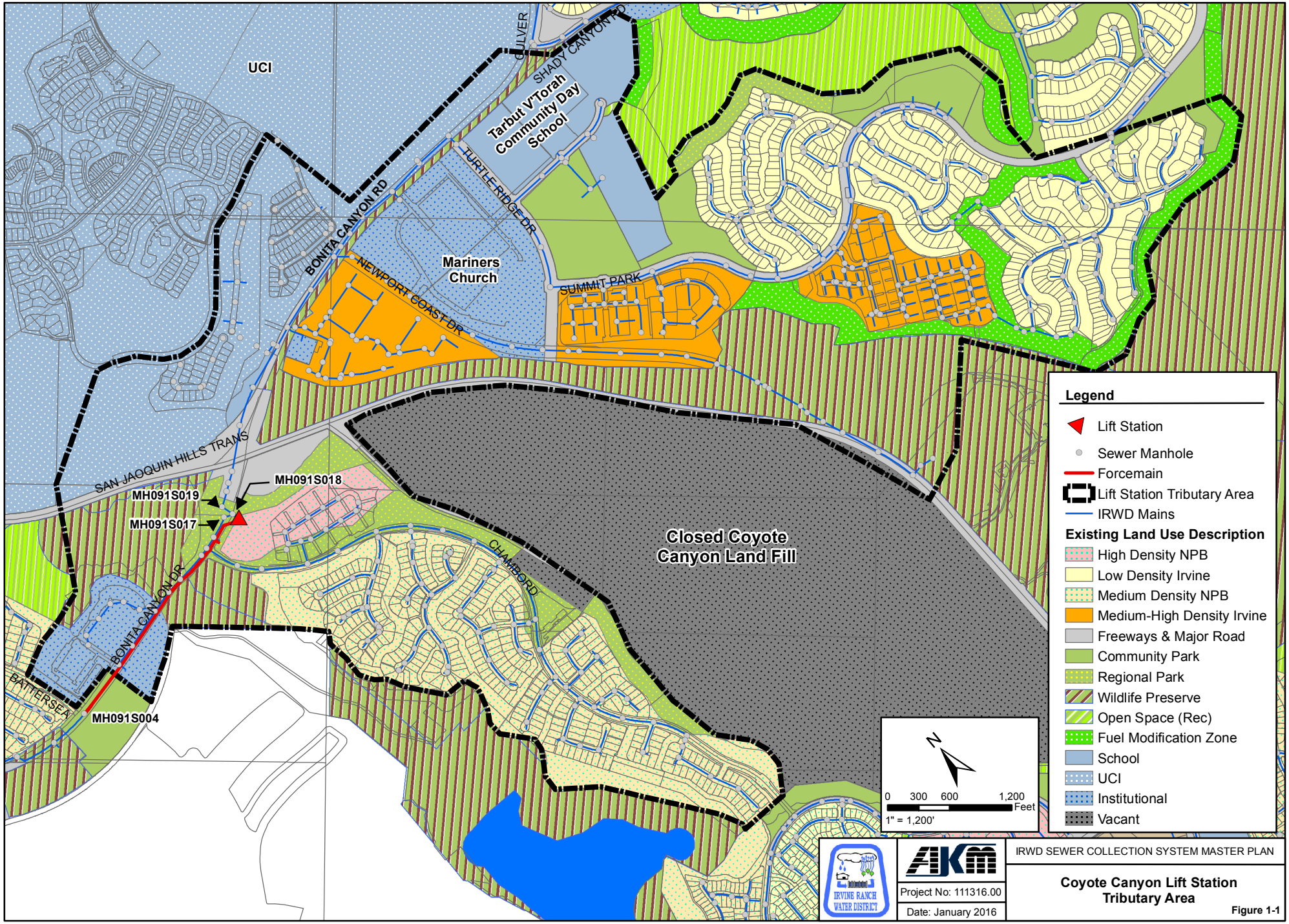
The Coyote Canyon Lift Station was constructed in 2001 with four pumps that are housed in a below grade dry well. The pumped flows are conveyed 2,135 feet westerly to Bonita Canyon Road and Battersea through a 12-inch PVC forcemain, and eventually reach University Lift Station.

1-2 Tributary Area

The Coyote Canyon Lift Station serves a net tributary area of 922.1 acres. The tributary area, shown on Figure 1-1, generally consists of the parcels adjacent to Bonita Canyon Drive between Prairie Road and Shady Canyon Drive. The breakdown of the lift station tributary area by land use categories is detailed in Table 1-1.

Table 1-1
Coyote Canyon Lift Station
Tributary Area Land Uses

LU Code	Land Use Description	Area (Ac)	No. of Du
1132	Low Density Irvine	132.3	343
1163	Medium Density NPB	128.7	309
1172	Medium-High Density Irvine	94.5	1,529
1183	High Density NPB	16.1	194
1240	Institutional	74.3	
1260	School	46.2	
1261	UCI	94.0	
1820	Community Park	46.6	
1413	Freeways & Major Road	58.4	
1840	Fuel Modification Zone	40.6	
1880	Open Space (Rec)	1.1	
1830	Regional Park	48.9	
1900	Vacant	6.7	
1850	Wildlife Preserve	133.6	
	Grand Total	**922.1**	**2,375**


UCI
ULVER
SHADY CANYON RD
Tarbut V'Torah Community Day School
TURTLE RIDGE DR
BONITA CANYON RD
Mariners Church
NEWPORT COAST DR
SUMMIT PARK
SAN JAOQUIN HILLS TRANS
MH091S018
MH091S019
MH091S017
Closed Coyote Canyon Land Fill
CHAMBERS RD
BONITA CANYON DR
BATTERSEA
MH091S004
Legend
Lift Station
Sewer Manhole
Forcemain
Lift Station Tributary Area
IRWD Mains
Existing Land Use Description
High Density NPB
Low Density Irvine
Medium Density NPB
Medium-High Density Irvine
Freeways & Major Road
Community Park
Regional Park
Wildlife Preserve
Open Space (Rec)
Fuel Modification Zone
School
UCI
Institutional
Vacant
N
0 300 600 1,200
Feet
1" = 1,200'
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2016
Coyote Canyon Lift Station Tributary Area
Figure 1-1

1-3 Tributary Flows

The existing lift station tributary flows were developed from the flow monitoring data gathered during the development of the Sewer Collection System Master Plan (SCSMP). The average dry weather flow (ADWF) was measured to be 192 gpm, and the peak dry weather flow (PDWF) was measured to be 380 gpm. Flow calculations based on SCADA records of pump start and stop times and wet well area resulted in an average dry weather flow of 210 gpm, and peak dry weather flow of 410 gpm.

The Coyote Canyon Lift Station tributary area is mostly developed. To account for possible densification in the future, the tributary flows were estimated utilizing the land use summary and the sewer generation factors (SGF) developed during this study. The SGF were calculated after evaluating the flow monitoring data and historical water billing records, as described in detail in Appendix B. The future flows were developed based on the 2035 build out projections in the tributary area.

Table 1-2
Coyote Canyon Lift Station Tributary Land Use and Future Sewage Flows

LU Code	Land Use Description	Future Flows (2035)							
		KSF[1]	No. of DU	SGF[2]	Units	ADWF MGD/gpm		PDWF[3] MGD/gpm	
1132	Low Density Irvine		343	215	gpd/du	0.07	51.2	0.14	99.8
1163	Medium Density NPB		309	200	gpd/du	0.06	42.9	0.12	83.8
1172	Medium-High Density Irvine		1,529	130	gpd/du	0.20	138.0	0.39	269.2
1183	High Density NPB		194	110	gpd/du	0.02	14.8	0.04	28.9
1261	UCI[4] -Low Medium Density		121	200	gpd/du	0.02	16.8	0.05	32.8
1261	UCI[4] - Medium Density		180	215	gpd/du	0.04	26.9	0.08	52.4
1240	Institutional	286.8		30	gpd/kSF	0.01	6.0	0.02	11.7
1260	School	332.8		20	gpd/kSF	0.01	4.6	0.01	9.0
	Grand Total					**0.43**	**301.3**	**0.85**	**587.5**

[1] KSF based on City of Irvine GIS shapefile

[2] Sewer Generation Factor Appendix B, TB-6

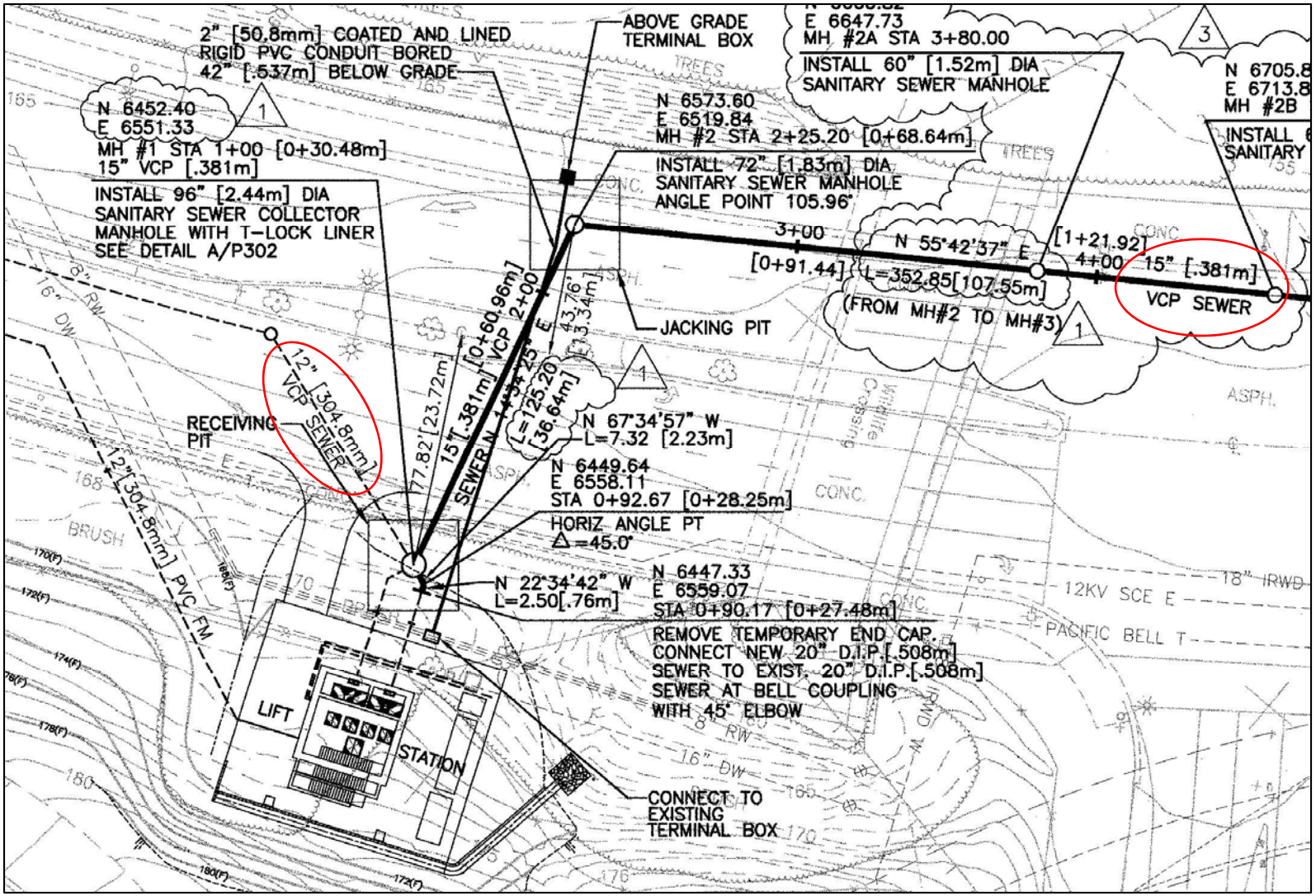
[3] PDWF is based on 1.95 factor

[4] UCI estimate is based on tributary landuse estimate (Low Density Irvine)

1-4 Influent Sewers

Two (2) gravity sewers convey wastewater to a common collector manhole, MH091S018, located to the northwest of the Coyote Canyon Lift Station. The inlet piping is detailed on Figure 1-2. A 12-inch sewer extends east on Bonita Canyon Road to MH091S017 that directs the sewage south to the collector manhole. A 15-inch sewer extends west on Bonita Canyon Drive to MH091S019 that directs the sewer south to the collector manhole. Two (2) 20-inch ductile iron pipes convey flows from the collector manhole (MH091S18) to the two compartments of the wet well. The pipes enter the wet well at invert elevations of 143.0 feet amsl. As shown on Photograph 1-2, there are 24-inch x 24-

Figure 1-2
Inlet Piping Schematic



inch sluice gates at the entrance of the 20-inch pipes to the wet well, which may be used to isolate each wet well compartment for maintenance. The sluice gates are deteriorated.



Photograph 1-2 Sluice Gate Operating Nut

1-5 Wet Well

The wet well storage consists of a west and east compartment connected by a 12-inch pipe that can be isolated with two 16-inch x 16-inch sluice gates. The sluice gates are normally maintained open to allow flow between the two structures. These gates are deteriorated. Each wet well compartment is 7 feet long and 11 feet wide below the elevation of 142 feet. The wet well is located to the northwest of the dry well. The walls are sloped toward the suction bells to promote movement of debris towards the suction bells. The wet well walls are Sancon-lined reinforced concrete structures. The lining has experienced deterioration. The west and east wet well compartments are shown on Photographs 1-3 and 1-4, respectively.



Photograph 1-3 Wet Well (West)

The wastewater level in each of the wet well compartments are measured with a bubbler system, and with Milltronics Multi Ranger Echomax ultrasonic level transducers, which are used for back-up level control. The lead pump is set to start when the wastewater level is 7 feet above the invert elevation of the wet well (143 feet amsl) and stop at a wastewater level of 4.5 feet (140.5 feet amsl). Within this band, it has 1,440 gallons of operational storage. With the existing average pump capacities of 630 gpm and 4 pumps available, the pumps are expected to cycle less than 2 times per hour. This is less than the recommended 4 starts per hour.



Photograph 1-4 Wet Well (East)

The influent pipes enter the wet well at elevations of 143.0 feet amsl, which is the same elevation as the lead pump start elevation. There is no emergency storage before the wet well begins to back up into the influent pipes. If it is assumed that wastewater may back up into the influent sewers during a lift station failure, there is

approximately 24,100 gallons of emergency storage within the wet well, excluding the storage in the tributary system. This estimate is based on wet well storage available between the pump start elevation (143 feet amsl) and elevation 164, which is about 1 foot below the rim elevation of the lowest manhole. If the lift station failed during a peak dry weather flow event (410 gpm), IRWD staff would have 59 minutes to respond to the lift station site before there is an overflow at the lowest manhole. The influent manhole does not currently have a Smart Manhole Cover installed.

To mitigate odors at the lift station and within the downstream system, Biomagic is injected into the wet well. The power supply for the injection pump runs above ground between the motor control center and the dry well hatch.

1-6 Dry Well

The pumps and motors are located below ground within the dry well, located to the south of the wet well. The dry well is accessible through stairs on the south side of the structure. The lighting within the dry well is dim and takes time to reach full brightness.

The dry well dimensions are 15.3-feet by 27.2-feet. The dry well bottom elevation is 136 feet amsl and the roof bottom elevation is 168 feet amsl. The dry well volume is estimated to be 13,320 cubic feet.

The dry well would be considered a Class 1 Division 2 hazardous location. NFPA 820 requires a minimum of 6 air changes per hour based on classifications. The necessary air changes should also consider the actual heat generated in the dry well, including the pumps, motors, and electrical gear. The dry well is equipped with supply and exhaust fans with 4800 cfm capacity. With a dry well volume of 13,320 cubic feet, the existing fan can provide over 20 air changes per hour, which is sufficient. The fans are located to the south of the dry well roof, as shown on Photograph 1-5.



Photograph 1-5 Exhaust Fan

The existing dry well structure is in good condition.

1-7 Suction Piping

The suction piping starts at the south side of the wet well with 8-inch 90º flared elbows, which start approximately 9 inches above the bottom of the wet well. Four (4) 8-inch horizontal spools extend south through the wet well wall to the dry well at centerline elevation of 138.22 feet amsl (Photograph 1-6). They connect to 8-inch eccentric plug valves, 8-inch pipe spools, and 8-inch 90º suction elbows, before terminating at the pumps (Photographs 1-6 and 1-7).



Photograph 1-6 Suction Piping in Dry Well



Photograph 1-7 Suction Piping at Pump

1-8 Discharge Piping

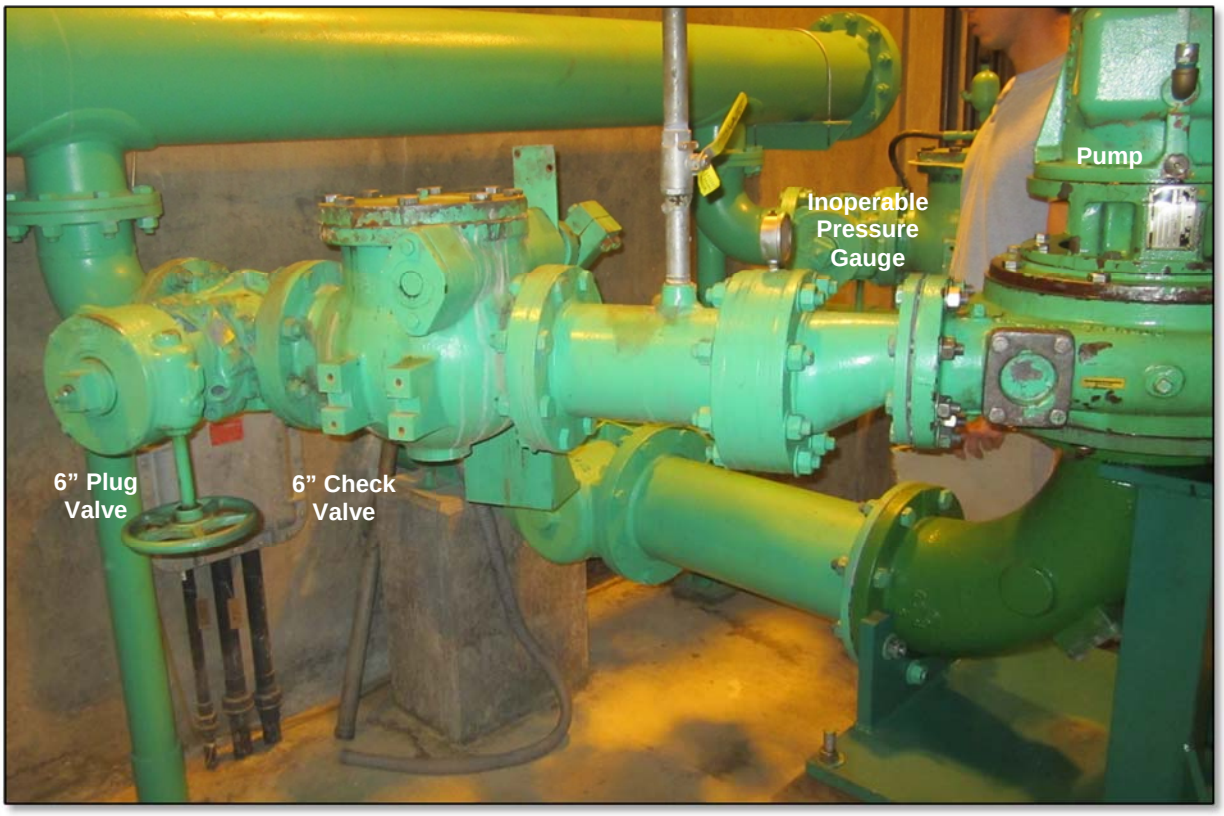
The discharge piping starts at the discharge nozzles at centerline elevations of 139.79 feet amsl. They attach to 4-inch x 6-inch eccentric flanged reducers, pressure gauges, and 6-inch spools with 1-inch air relief valves that extend back to the wet well. The pressure gauges are currently inoperable. The spools connect to 6-inch lever and weight swing check valves with speed control dashpots, and 6-inch eccentric plug isolation valves which are oriented horizontally. Flanged 6-inch 90º elbows are located between the plug valves and the 10-inch x 6-inch tees at the discharge header.



Photograph 1-8 Missing Check Valve Dashpot

As shown on Photograph 1-8, the dashpots are missing on the check valves for Pumps 1 and 3.

The pump discharge piping connects to the horizontally oriented 10-inch discharge header with spacing of 6-feet. The centerline elevation of the discharge header is 141.29 feet amsl. The discharge piping and header are illustrated on Photograph 1-9.



Photograph 1-9 Discharge Piping and Header along North Wall of Dry Well

The 10-inch diameter discharge header is adjacent to the north wall of the wet well and is connected to a 10-inch long radius 90º elbow that turns the discharge piping toward the west wall of the dry well. A 10-inch x 8-inch reducer connects to the elbow, and the discharge pipe extends south to an 8-inch cross, which is oriented in the vertical direction. The plan and profile of the lift station piping are illustrated on Figure 1-3 and Figure 1-4.

The flow meter, its by-pass piping, and pump-out pipes within the dry well are illustrated on Photograph 1-10.

The 8-inch magnetic flowmeter and sleeve type pressure transmitter are located above the 8-inch bypass and can be isolated with the 8-inch eccentric plug valves located on both sides of the flowmeter. The flowmeter piping system is supported by brackets and support straps.

The by-pass line and the flowmeter piping system connect at an 8-inch x 8- inch tee and extends up to an 8-inch by 12-inch reducer. The 12-inch pipe extends up, turns west through a long radius 90º bend, and exits the dry well through its west wall.

Figure 1-3
Dry Well Plan View

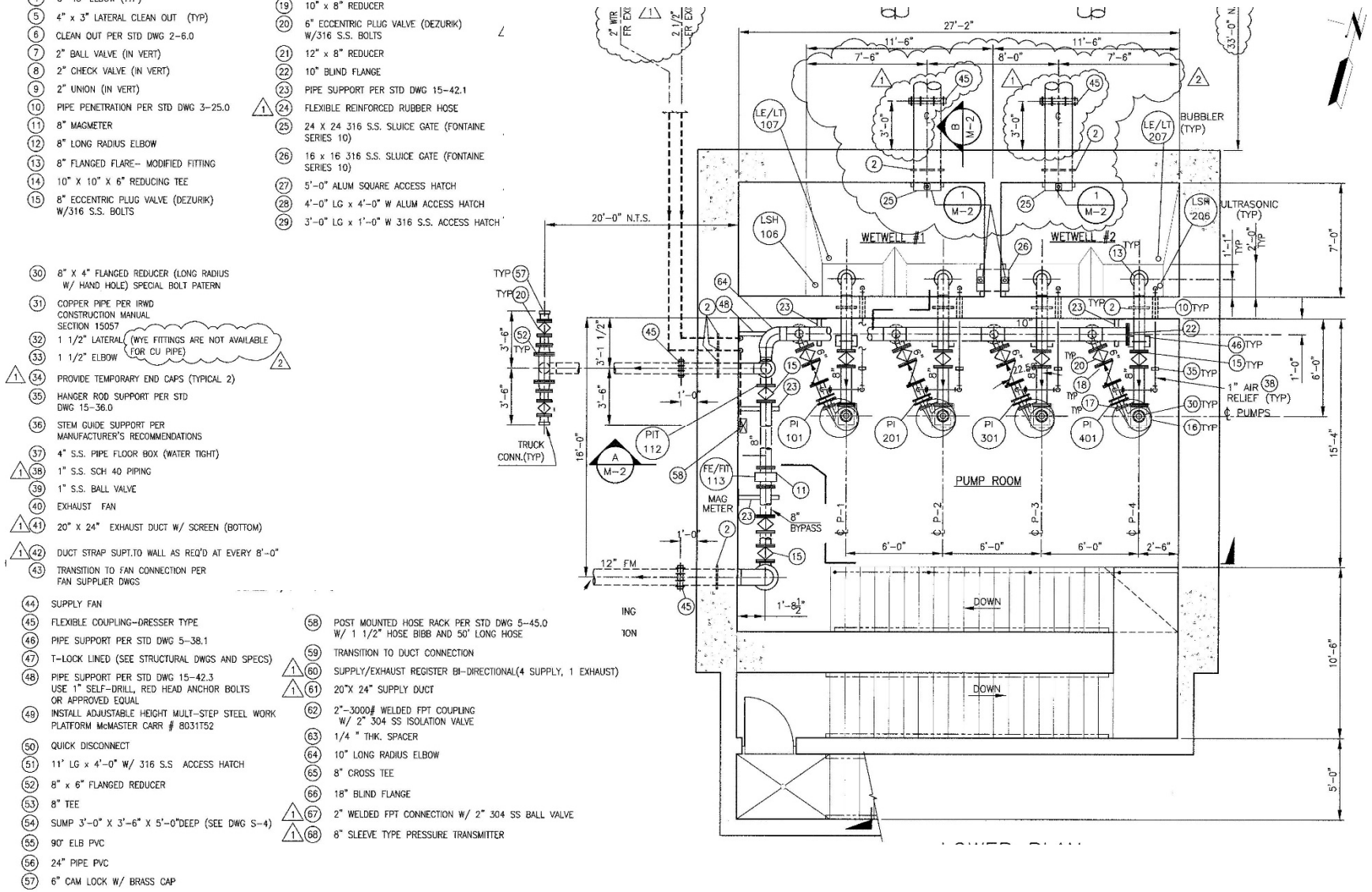
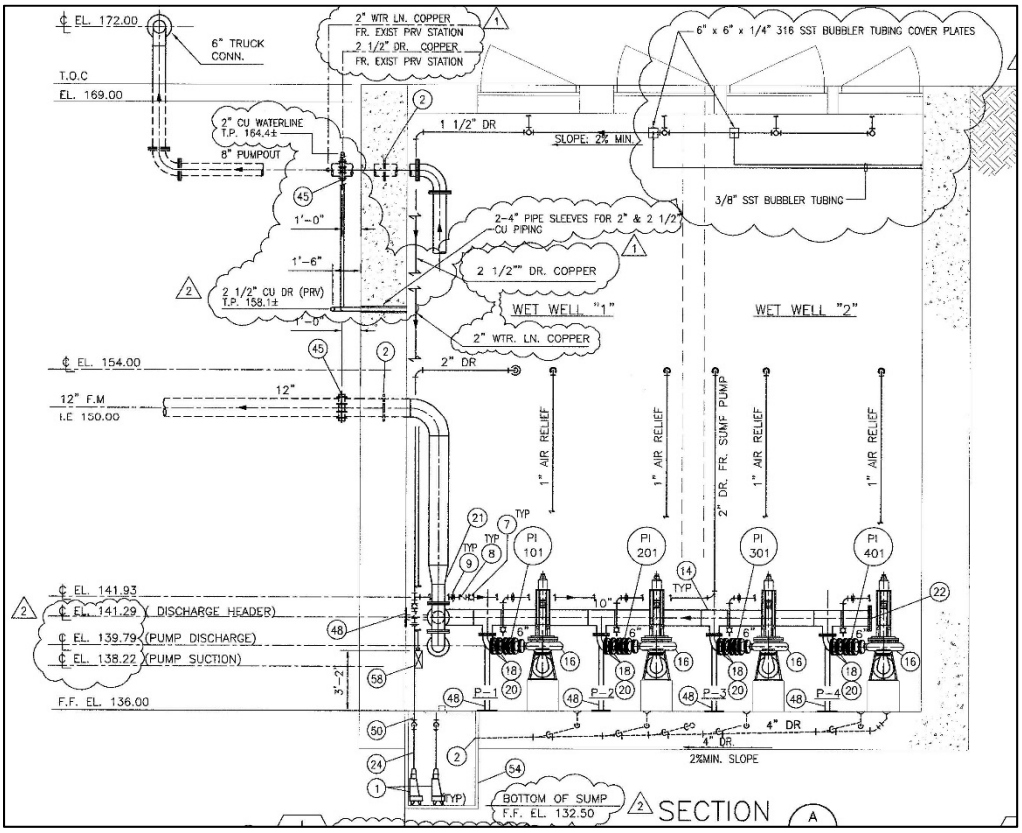
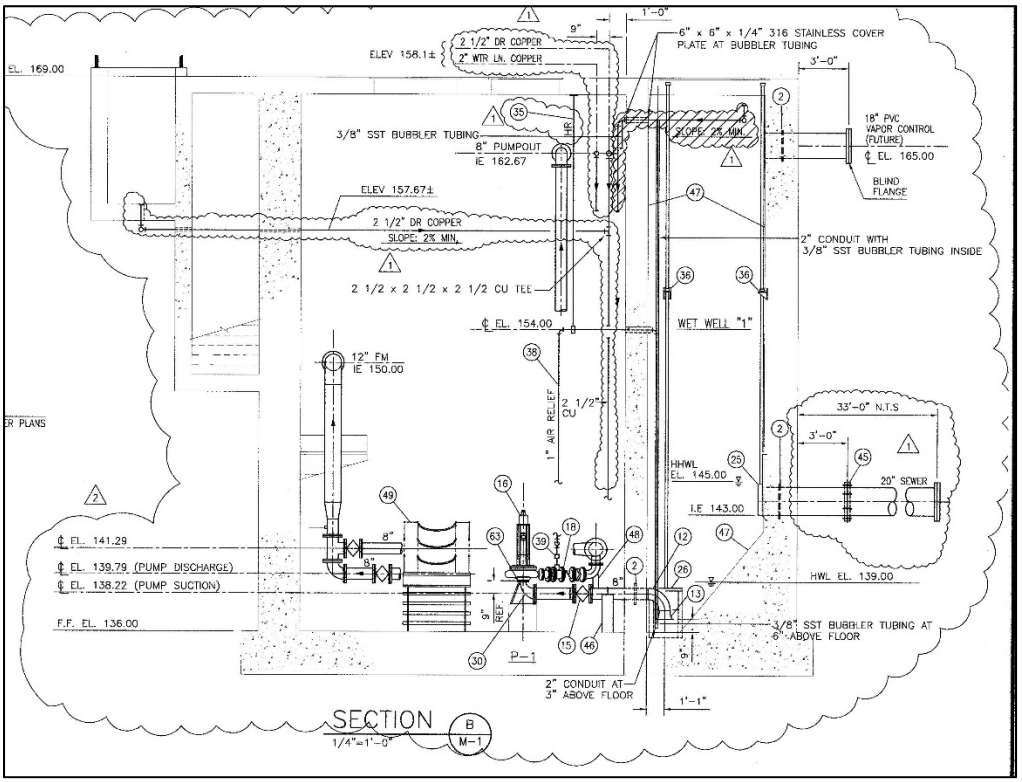


Figure 1-4
Dry Well Profile







Photograph 1-10 Dry Well West Wall (Flow Meter, Flow Meter By-pass, and Pump Out)

The 8-inch "pump-out" pipe may be used in the event of an emergency or for bypass pumping. The 8-inch "pump-out" pipe extends up the west wall of the dry well, west through the dry well wall, and up to the ground surface along the westerly edge of the lift station property. A 6-inch Cam-lock connection is provided for the bypass pump (Photograph 1-11).

The existing flowmeter is over 16 years old. The pressure transmitter was observed to be inoperable during the field visit.

1-9 Forcemain

The forcemain is a 12-inch PVC pipe that extends 2,135 feet from the lift station dry well westerly along Bonita Canyon Drive to Battersea, at manhole MH091S004, as shown on Figure 1-1. The invert elevation at the discharge manhole is 201.20 feet amsl. From the discharge manhole, gravity sewers convey the wastewater southwest on Bonita Canyon Drive, and northwest on Mesa View Drive to the University/Milano Siphon, which is located at University Drive and the Milano Drive extension. From the siphon, the gravity



Photograph 1-11 By-pass Pump Connection

sewer extends easterly on University Drive to the University Lift Station. From there, the wastewater is pumped north east along University Drive to Campus Drive, where the gravity sewer conveys it to the Michelson Water Recycling Plant (MWRP).

With the existing peak flow of 770 gpm, the velocity in the forcemain is approximately 2.2 feet per second (fps), which is lower than the recommended forcemain velocity range of 3 – 5 fps.

The forcemain size should be evaluated with the pump capacity. If the original design capacity of 500 gpm is maintained, a parallel 8-inch diameter forcemain may be considered as an option to meet velocity criteria. The existing 12-inch forcemain can then be relined to provide a redundant facility with proper diameter.

1-10 Main Pumps

Coyote Canyon Lift Station has four (4) Cornell 4414T-VC1BDB pumps with 13.3 inch Delta impellers. Pumps 1 and 2 are illustrated on Photograph 1-12. According to the pump performance curve dated October 29, 2004, the pumps are rated at 500 gpm and total dynamic head of 82 feet, at 1,200 RPM. The operating efficiency of the pumps is approximately 69%. The pumps are driven by 15 HP motors. According to the SCADA data collected between February 1, 2015 and March 31, 2015, the lift station runs approximately 12.6 hours per week. The SCADA also indicates that the pumps are pumping a high of 770 gpm with an average of 690 gpm. Signs of cavitation were identified during the site visit conducted on April 28, 2015, which may be due to the pumps operating at capacities much greater than the design capacity of 500 gpm. Analysis of the system indicates that the pumps may have operated at flows of up to 900 gpm when installed in 2004, and the motors may have operated above their service factors.



Photograph 1-12 Pump and Motor



Photograph 1-13 Pump Leak

During the field visit, the seals on Pumps 2 and 4 showed signs of leaking (Photograph 1-13). IRWD indicated that the lift station experiences surge problems during pump shutdown.

1-11 Sump Pumps

Two (2) sump pumps are located in the northwest corner of the dry well. Sewage collected within the sump is pumped back into the wet well through a common 2-inch discharge pipe.

1-12 Gas Detection System

The existing gas detection system is over 16 years old.

1-13 Electrical and Controls

The Coyote Canyon Lift Station is served through a 480 volt 3-phase meter. The pumps are driven by 15 HP constant speed motors. The pump control panel is located to the east of the wet well and drywell, as illustrated on Photographs 1-14 and 1-15. Aside from the reinforced concrete roof structure of the wet well and dry well, the lift station site is unpaved and covered with gravel. The control panels are not protected from the elements.



Photograph 1-14 MCC, ATS, Pump Control Panels



Photograph 1-15 Bubbler and Alarm Panels

A permanent standby generator (Cummins 25 KW DGEA-4482036) is located on the south east corner of the lift station site, as illustrated on Photograph 1-16. The motor control center is equipped with an automatic transfer switch, which is utilized to power the station in the event of a commercial power outage.

Pumps are controlled based on sewage level in the wet well as determined by the bubbler system. The ultrasonic level transducer is the backup level sensing system for operating the lift station if the bubbler system fails. The pumps start when the sewage level reaches 7.0 feet above the wet well floor, and stop when it drops to 4.5 feet. The operating volume of 1,440 gallons is sufficient to keep the pump cycling to less than 2 times per hour.



Photograph 1-16 Standby Generator

The PLC and SCADA do not currently provide all pertinent operational data and alarm information to the District.

The electrical equipment is over 16 years old.

1-14 Recommendations

The recommendations for Coyote Canyon Lift Station are summarized in Table 1-3

Table 1-3
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Electrical conduit for the BioMagic injection pumpis above ground	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Electrical enclosure is exposed to sun and rain	
	Existing motor starters are not solid state soft starters	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Influent manhole does not currently have a Smart Manhole Cover installed	
	Pumps may be operating ouside of their proper range	
	Check valves missing speed control dashpots	
	Dry well appears dimly lit	
Redundancy	Lift station has single forcemain	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory agencies. Develop recommendations based on validation and verification efforts.
	Forcemain experiences low velocities	Validate that existing conditions are consistent with IRWD operational requirements. Develop recommendations based on verification efforts.
Condition/ Age	Electrical and control equipment and PLC are over 16 years old	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Pump base and restraints need replacing	
	Gas detection and oxygen level monitor are deteriorated	
	Magnetic flow meter appears to not be working properly	
	Flowmeter piping system is supported by straps	
	Fire extinguisher cover(s) need replacing	
	Pressure gauges are inoperable	
	Pumps experiences hydraulic transients when pumps start and stop	
	Pump seals are leaking	
	Pressure transmitter and associated parts are inoperable or need repair	
	Power monitor is inoperable	
	Wet well lining is deteriorating	

Canada Lift Station

Evaluation

1. Introduction



Photograph 1-1
Canada Lift Station

Canada Lift Station is located at 22950 Lake Forest Drive on the south east corner of the Lake Forest Drive and Rockfield Boulevard intersection in the City of Lake Forest. The site location is portrayed on Figure 1-1. A single family residential development is located to the south and east of the lift station. It serves a total tributary area of 249 acres, which is bounded by the City of Lake Forest corporate boundary between the I-5 Freeway and midpoint between Aspen Drive and Lambert Street, as well as Lake Forest Drive south west of Muirlands Boulevard on the north, Muirlands Boulevard and west of Ursula Circle on the east, and Ridge Route Drive and the I-5 Freeway on the south. It is a submersible lift station with two 30 HP, 650 gpm capacity and 68 feet total dynamic head (TDH) pumps at a rated speed of 1150 rpm. The ground elevation at the lift station is 301 feet above mean sea level (amsl). The site entrance, wet well hatches and the standby generator are seen on Photograph 1-1.

Access to the lift station is through a driveway on the south side of Lake Forest Drive that is approximately 150 feet east of Rockfield Boulevard. Because of its closeness to the intersection with Rockfield Boulevard, limited space within the site to maneuver equipment, heavy traffic during most of the day, and limited space between the gate and Lake Forest Drive, this access is difficult to use. A motor operated swing gate provides access to the lift station. It is reported that the District's attempts to construct an access road from Rockfield Boulevard has not been received well by the City of Lake Forest. Such an access would allow staff to drive through the site without having to back onto the site or back out of the site. It will require construction of retaining walls, and relocation of several existing facilities, including an SCE vault vent, and an electric meter.

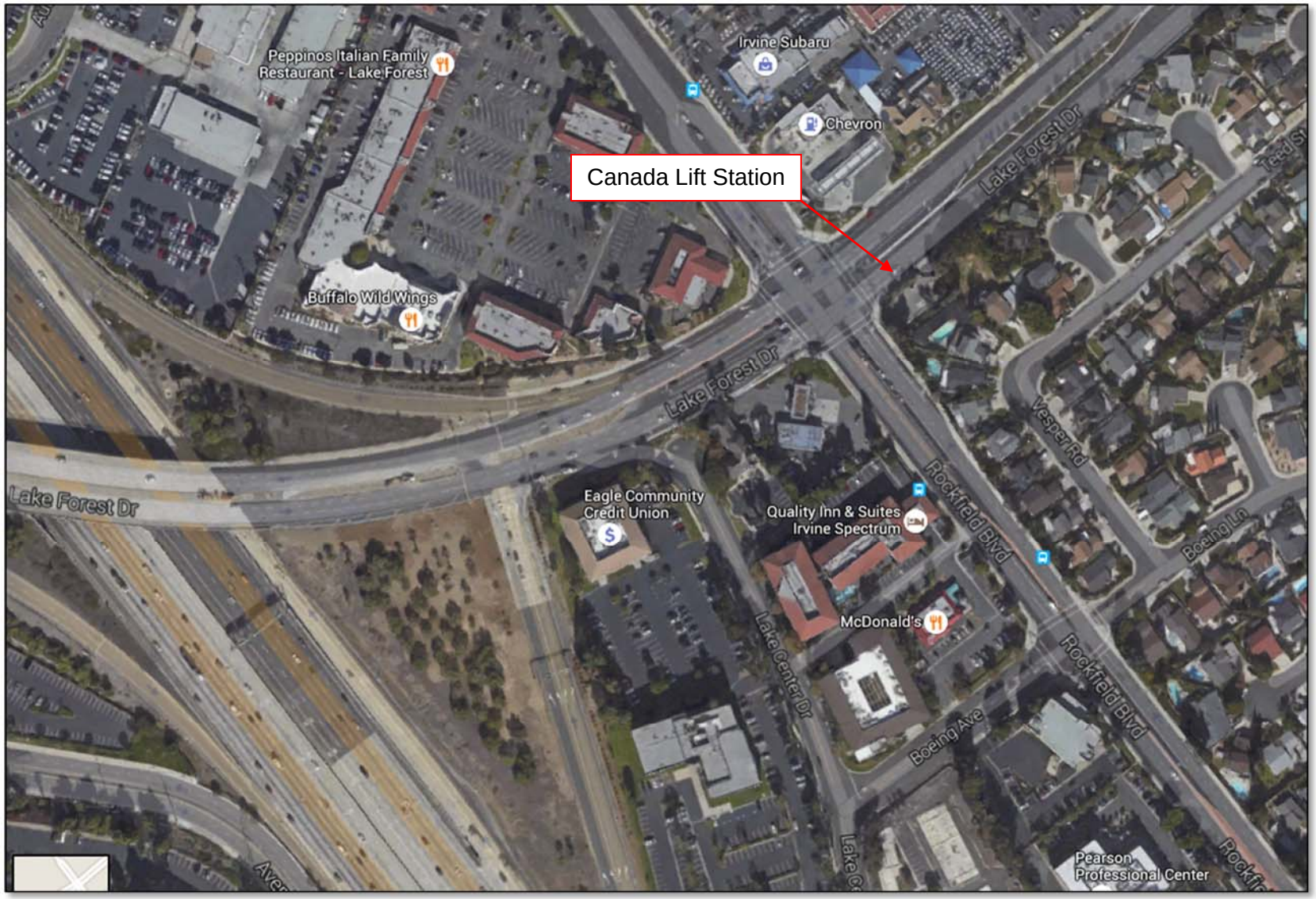
The Canada Lift Station was originally constructed as a wet well-dry well pump station in 1980. It was upgraded in 2004 as a submersible pump station. The force main is an 8-inch diameter mostly Class 200 AWWA C-900 PVC pipe that extends 1,530 feet northeast along Lake Forest Drive and terminates at a manhole approximately 500 feet northeast of Aspen Drive.

2. Tributary Area

The Canada Lift Station serves a tributary area of 249 acres, shown on Figure 1-1. It includes a low density single family residential area between Lake Forest Drive and Ridge Route Drive with Rockfield Boulevard to the west and Muirlands Boulevard to the east; a 5 acre community park (Mountain View Park) within this development; commercial areas between the I-5 Freeway and Rockfield Boulevard, as well as northwest of Lake Forest Drive; and medium-high density multi-family residential areas southerly of the Lake Forest Drive and Muirlands Boulevard intersection (Eaves Lake Forest), and westerly of the intersection of Rockfield Boulevard and Ridge Route Drive (The Timbers Apartments).

Figure 1-1

Site Location



The breakdown of the lift station tributary area by land use categories and water use for residential and non-residential areas are detailed in Table 1-1.

Table 1-1
Canada Lift Station Tributary Area Land Uses

	LU Code	Land Use Description	Area (Ac)	No. of Du	Water Use (GPM)
Residential	1136	Low Density LF	117.8	639	168.3
	1176	Medium-High Density LF	19.6	386	
Non-Residential	1210	General Office	26.9	NA	62.8
	1221	Community Commercial	52.0	NA	
	1240	Institutional	2.2	NA	
	1413	Freeways & Major Road	24.4	NA	
	1820	Community Park	5.0	NA	
	0	*(not served by IRWD)	1.2	NA	
	Grand Total		**249.0**	**1,024.5**	**231.1**

1-3 Tributary Flows

Flow calculations based on SCADA records of pump start and stop times and wet well area resulted in an average dry weather flow of 151 gpm, and peak dry weather flow of 256 gpm. The estimated peak wet weather flow is 360 gpm. The average water use in the tributary area is 231 gpm. The tributary area is mostly developed, and significant increase in sewer flows is not expected. The existing firm pumping capacity is significantly greater than the existing and future maximum flows.

1-4 Influent Sewers

Two (2) gravity sewers convey wastewater to the 10-foot diameter wet well, as detailed on Figure 1-3. A 12-inch PVC sewer, which collects the wastewater from the portions of the tributary area southwest of Rockfield Boulevard and northwest of Lake Forest Drive, enters the wet well from the west. An 8-inch PVC sewer collects the wastewater generated by the single family residential area, Eaves Lake Forest, and Mountain View Park, and enters the wet well from the east. Both influent sewers enter the wet well with invert elevations of 278.20 feet amsl.

1-5 Wet Well

The wet well is a 10-foot diameter reinforced concrete structure lined with PVC (T-Lock) above the fillet that is located at the bottom. The bottom 3 feet of the wet well has a polyurethane coated concrete fillet that directs debris towards the pump suction. The visible portion of the PVC wet well lining was observed to be in good condition during the field visit on May 14, 2015. The wet well is shown on Photograph 1-2. The wastewater level in the wet well is measured with an ultrasonic level transducer.



Photograph 1-2
Canada Lift Station Wet Well

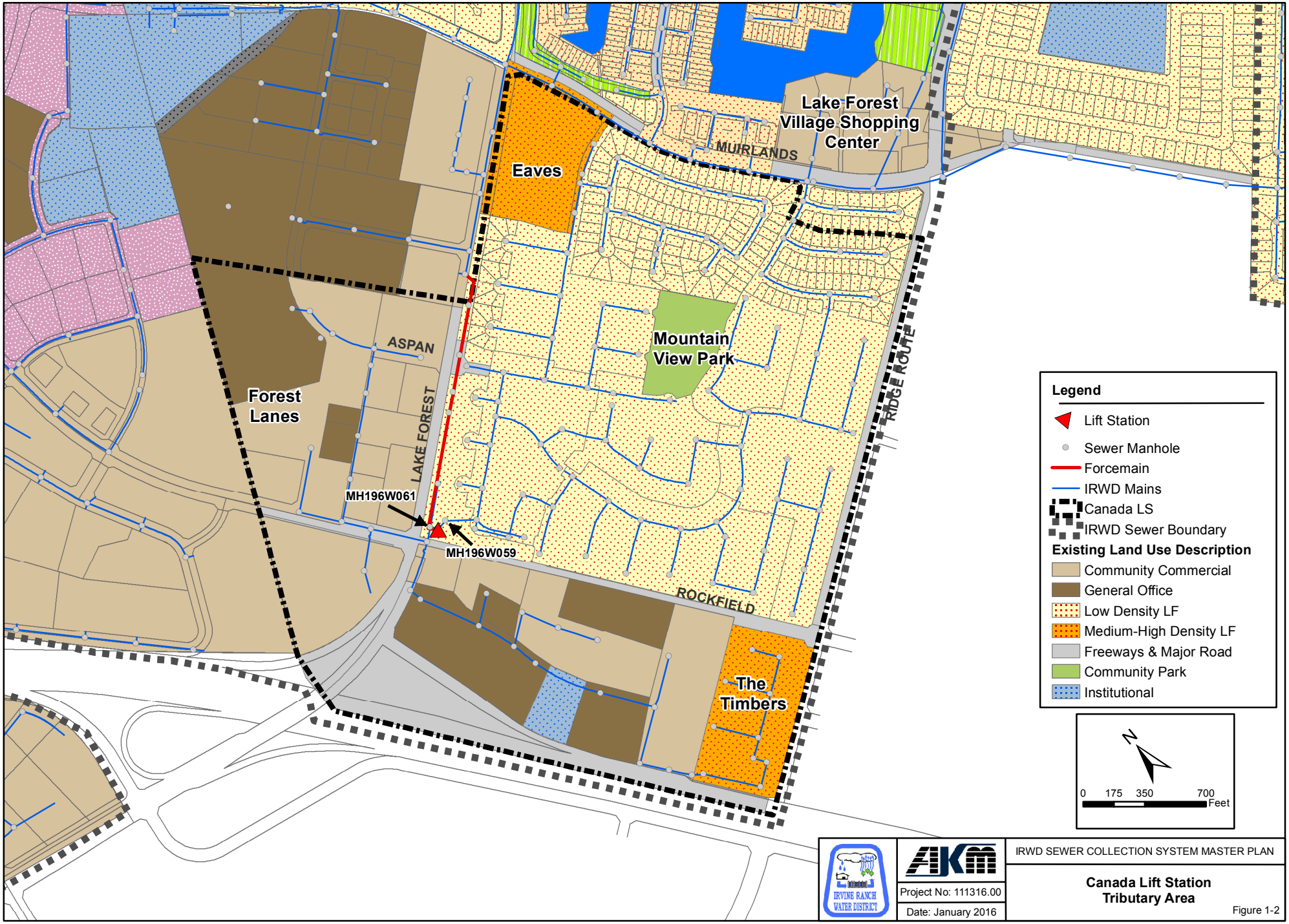
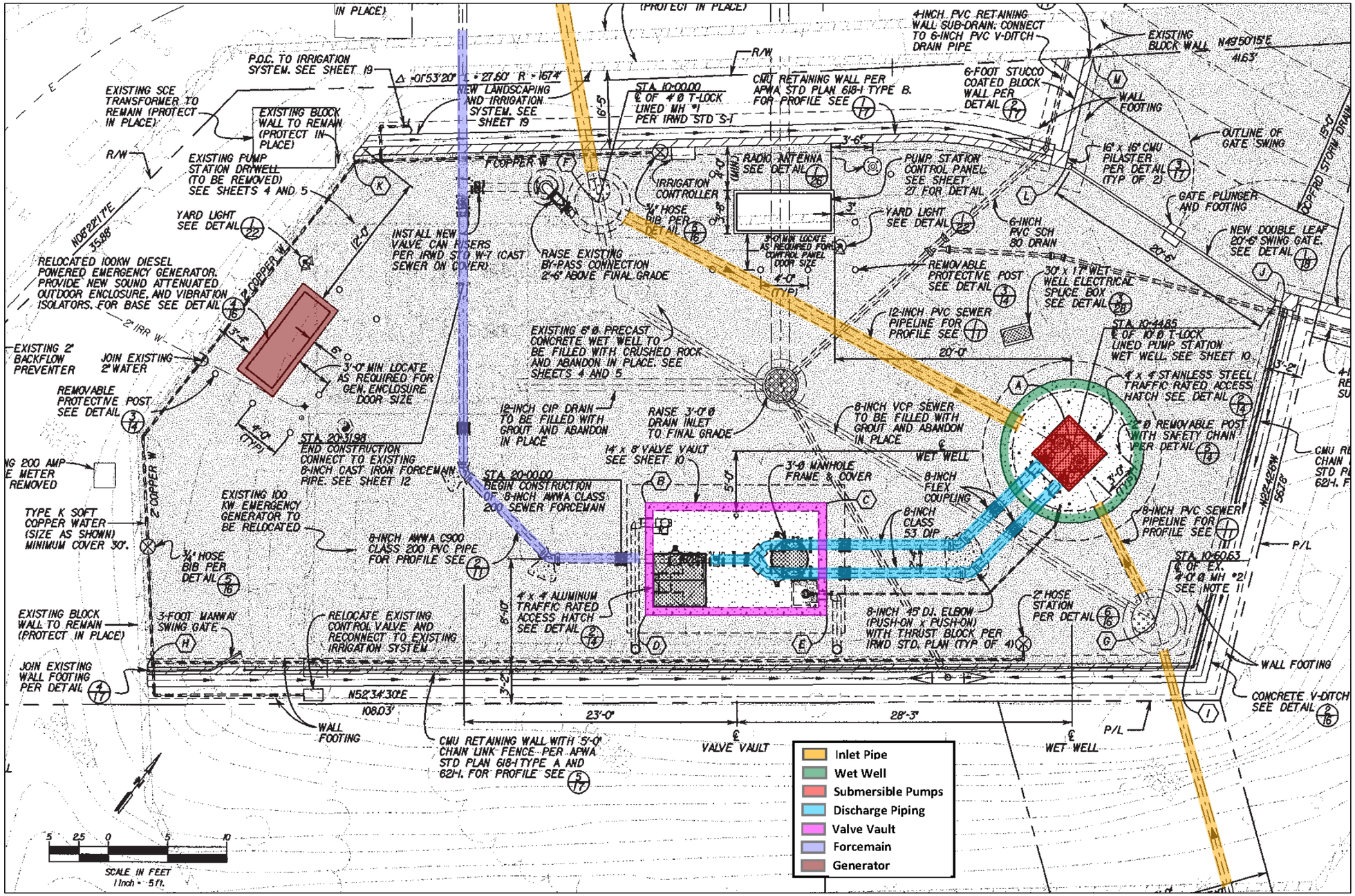

Lake Forest Village Shopping Center
MUIRLANDS
Eaves
Mountain View Park
RIDGE ROUTE
ASPAN
LAKE FOREST
Forest Lanes
MH196W061
MH196W059
ROCKFIELD
The Timbers
Legend
Lift Station
Sewer Manhole
Forcemain
IRWD Mains
Canada LS
IRWD Sewer Boundary
Existing Land Use Description
Community Commercial
General Office
Low Density LF
Medium-High Density LF
Freeways & Major Road
Community Park
Institutional
N
0 175 350 700
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2016
Canada Lift Station
Tributary Area
Figure 1-2

Figure 1-3
Site Plan Overview



The lift station has a float switch that can start the pumps in case of failure of the ultrasonic level sensor.

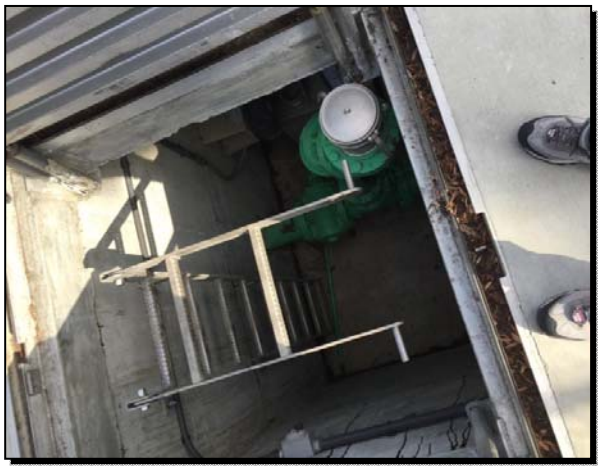
The lead pump is set to start when the wastewater level is 7.5 feet (278.20 feet amsl) above the invert elevation of the wet well (270.7 feet amsl), and stop when the wastewater level is 4.4 feet (275.10 feet amsl) above the invert. Within this band, the wet well has 1,821 gallons of operational storage. With the existing average pump capacities of 650 gpm, the pumps would cycle a maximum of 3 times per hour if they are alternated, and the tributary flow were 325 gpm (half the capacity of one pump). With an estimated peak wet weather flow of 360 gpm, the pump will cycle approximately 2.7 times per hour. This is less than the maximum of 4 starts per hour recommended for 30 HP motors.

The influent pipes enter the wet well at invert elevations of 278.2 feet amsl, which is the same elevation as the lead pump start elevation. There is no emergency storage before the wet well begins to back into the influent pipes. The influent manhole does not currently have a Smart Manhole Cover installed.

The District has not received odor complaints from the service area customers. To mitigate odors that might be generated by the sewage in the wet well and the terminal gravity sewers, the District has installed a BioMagic system which is injected into the wet well.

1-6 Valve Vault

The two submersible pumps convey the sewage south through two 8-inch Class 53 DIP pipes to the below ground valve vault. The valve vault is a 14' long, 8' wide, and 8'-9" deep reinforced concrete structure, with its floor at elevation 291 feet amsl. It has a 4-foot square access hatch at its southerly corner and a 3-foot diameter access at its east end. A stainless steel ladder is located below the hatch. A 6-inch diameter bypass pumping connection extends to near the surface inside the access hatch, as illustrated on Photograph 1-3. The above ground features of the valve vault are shown on Photograph 1-4. The District staff indicated that the lighting near and within the valve vault is not working.



Photograph 1-3
Valve Vault Entrance

The valve vault volume is estimated to be 980 cubic feet. The valve vault would be considered a Class 1 Division 2 hazardous location. NFPA 820 requires a minimum of 6 air changes per hour based on this classification. The valve vault is equipped with an exhaust fan of 610 cfm capacity, which can provide over 37 air changes per hour. The fan is located in the northwest corner of the valve vault. The valve vault has a float switch which sends an alarm signal through the SCADA in case of flooding of the structure. The existing valve vault structure is in good condition.



Photograph 1-4
Valve Vault

1-7 Discharge Piping

The discharge piping for each pump includes a 6-inch 90º flanged elbow; 6"x8" reducer, 8-inch flanged Class 53 D.I. pipe; flanged 90º elbow (centerline elevation 293 feet amsl); a flange x plain end spool; a restrained type flexible coupling; a plain end x groove end spool entering the valve vault; a Victaulic coupling and a groove end by flange spool; a lever and spring check valve; an eccentric plug valve; a flanged 45º elbow; and a flange filler. The two pipes confluence at an 8-inch flanged true wye, followed by pressure sensor with a gauge and transmitter (Photograph 5), flange x groove end spools with a Victaulic coupling, a magnetic flow meter, a flanged spool, an 8" x 6" flanged tee, an eccentric plug valve (Photographs 1-6 and1-7), and a flange x plain end spool exiting the valve vault. It then connects to the 8-inch diameter Class 200 PVC force main with a restrained type flexible coupling. The force main continues southwest, west, and northwest and connects to the 8-inch diameter PVC force main installed in 1980 inside the original pump station's dry well. The discharge pipes inside the wet well have minor corrosion, as shown on Photograph 1-5.



Photograph 1-5
8-inch Discharge Pipes

The bypass pumping connection extends up from the flanged 8" x 6" tee with a 6-inch eccentric plug valve, a flanged spool, two 45º bends with a short flanged spool, terminating near the east corner of the access hatch with a Camlock fitting. The bypass pumping connection is displayed on Photograph 1-7.



Photograph 1-6
Discharge Pipes in the Valve Vault

The valve vault plan and profile views are shown on Figure 1-4 and Figure 1-5. There is not sufficient space in the valve vault to install a bypass system for the magnetic flow meter. However, because of the isolation valving and groove end couplings provided, these meters can be removed from line, and replaced with a spare meter, when needed, within a short period of time.



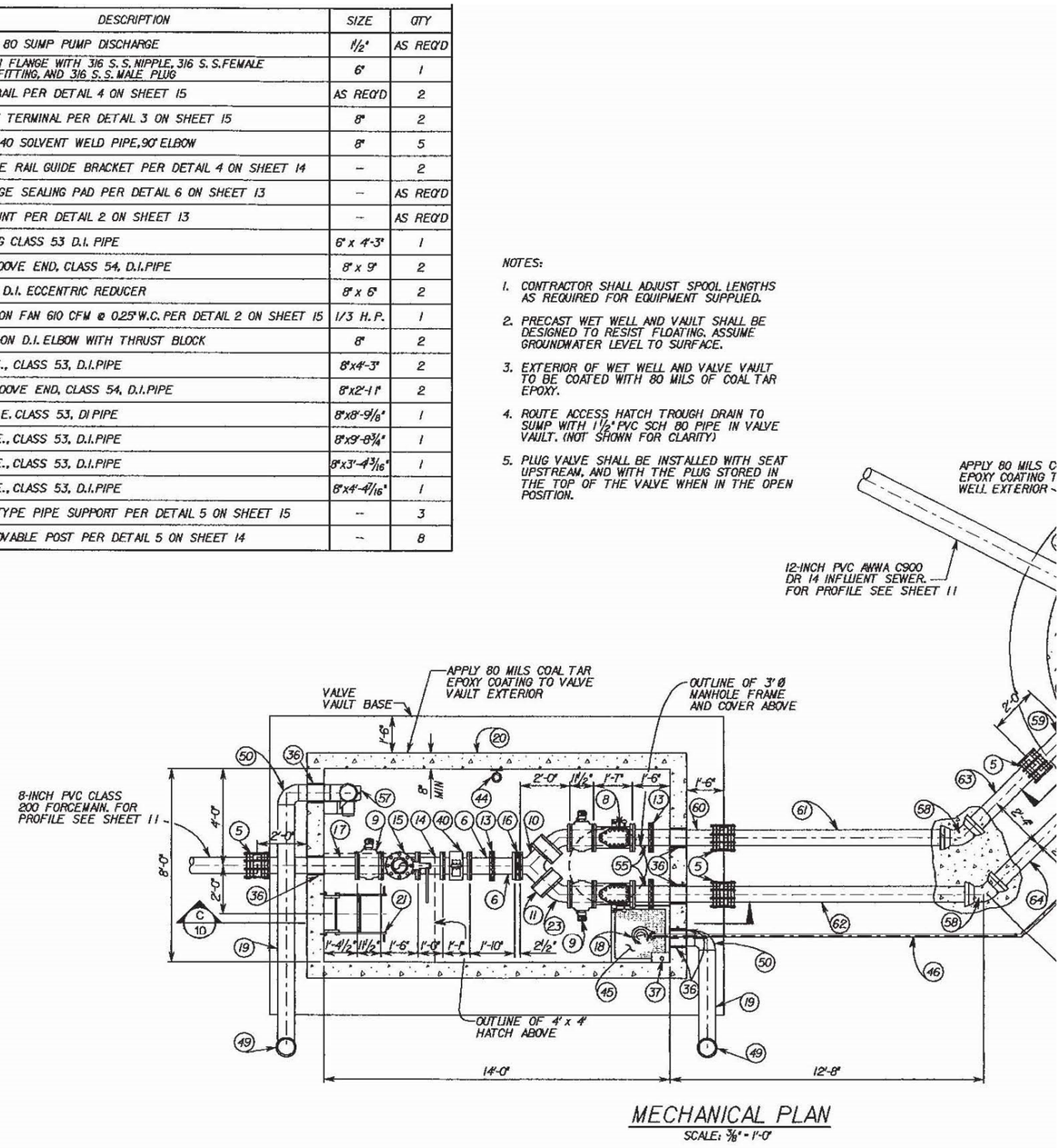
Photograph 1-7
6-inch Bypass Pumping Connection

Figure 1-4
Valve Vault Plan View

ITEM	DESCRIPTION	SIZE	QTY
1	NON-CLOG SUBMERSIBLE PUMP, Q = 650 GPM @ 68' TDH 1150 RPM	30.0 HP	2
2	AUTOMATIC PUMP DISCHARGE CONNECTION (BY PUMP SUPPLIER)	6"	2
3	90° FLANGED D.I. ELBOW	8"	2
4	CRUSHED AGGREGATE BASE	3/4"	310 ft³
5	SLEEVE TYPE COUPLING (RESTRAINED TYPE)	8"	5
6	FLG.x GROOVE END, CLASS 54, D.I.PIPE	8"x1'-1"	2
7	WASHDOWN AND VACUUM BREAKER DEVICE	3/4"	2
8	SWING CHECK VALVE WITH LEVER AND SPRING	8"	2
9	ECCENTRIC PLUG VALVE W/LEVER ACTUATOR (CUT LEVER TO 18")	8"	3
10	FLANGED DUCTILE IRON TRUE WYE	8"	1
11	FLANGE FILLER	8"x5 5/16"	2
12	MANHOLE FRAME AND COVER PER IRWD STD S-4	36" Ø	--
13	STYLE 31 VICTAULIC COUPLING	8"	3
14	FLG x FLG CLASS 53 D.I. PIPE	8"x1'-0"	1
15	FLANGED DUCTILE IRON TEE	8"x8"x6"	1
16	PRESSURE SENSOR WITH GAUGE AND TRANSMITTER	8"	1
17	FLG.x P.E., CLASS 53, D.I.PIPE	8"x4'-0 1/2"	1
18	SUMP PUMP PER DETAIL 1ON SHEET 15	1/3 HP	1
19	P.V.C. SCH. 40, SOLVENT WELD, VENT PIPE	8"	AS REQ'D
20	PRECAST CONCRETE H-20 TRAFFIC RATED VAULT WITH 80 MIL COAL TAR EPOXY EXTERIOR COATING	14' x 8'	1
21	316 SS STEEL LADDER PER DETAIL 1ON SHEET 14	AS REQ'D	1
22	PRECAST CONCRETE H-20 TRAFFIC RATED T-LOCK LINED WET WELL WITH 80 MIL COAL TAR EPOXY	10' Ø	1
23	45° FLANGED D.I. ELBOW	8"	2
24	90° FLANGED D.I.BASE ELBOW, FASTEN TO WET WELL BASE WITH STAINLESS STEEL ANCHOR BOLTS	6"	2
25	ULTRASONIC LEVEL TRANSDUCER SEE DETAIL 5 ON SHEET 28	--	1
26	FLG.x FLG., CLASS 53, D.I. PIPE	8"x9'-7 11/16"	4
27	316 STAINLESS STEEL, NYLON JACKETED, LIFTING CABLE	AS REQ'D	2
28	SCH. 40, 316 STAINLESS STEEL SLIDE RAILS, 2 PER PUMP	2"	AS REQ'D
29	316 STAINLESS STEEL GUIDE BRACKET. DESIGN PER PUMP MANUFACTURER RECOMMENDATIONS	AS REQ'D	3 MIN
30	STAINLESS EYE BOLT	1/2" Ø	4
31	WET WELL BASE JOINT PER DETAIL 4 ON SHEET 13	--	AS REQ'D
32	316 STAINLESS STEEL DOUBLE DOOR, SPRING ASSISTED ACCESS HATCH, H-20 TRAFFIC RATED PER DETAIL 2 ON SHEET 14	4' x 4'	1
33	CONCRETE FILL WITH 125 MIL POLYURETHANE/EPOXY COATING SYSTEM	--	4 cy
34	ADJUSTABLE TYPE PIPE SUPPORT PER IRWD STD DWG. IN APPENDIX OF SPECIFICATIONS	--	4
35	CRUSHED AGGREGATE BASE	3/4"	390 ft³
36	VAULT PENETRATION PER DETAIL 1ON SHEET 13	AS REQ'D	6
37	VALVE VAULT FLOODED FLOAT	--	1
38	WET WELL WALL PENETRATION PER DETAIL 5 ON SHEET 13	AS REQ'D	5
39	WET WELL JOINT PER DETAIL 3 ON SHEET 13	--	AS REQ'D
40	MAGNETIC FLOW METER	8"	1
41	ALUMINUM DOUBLE DOOR, SPRING ASSISTED ACCESS HATCH H-20, TRAFFIC RATED, PER DETAIL 2 ON SHEET 14	4' X 4'	1
42	ECCENTRIC PLUG VALVE W/LEVER ACTUATOR (CUT LEVER TO 18")	6"	1
43	FLOAT SWITCH ASSEMBLY PER DETAIL 6 ON SHEET 28	--	1
44	VAULT LIGHT (EXPLOSION PROOF) PER DETAIL 4 ON SHEET 28	150 W	1
45	PRECAST CONCRETE SUMP WITH FIBERGLASS GRATE	24" x 24"	1
46	PVC SCH 80 SUMP PUMP DISCHARGE	1 1/2"	AS REQ'D
47	COMPANION FLANGE WITH 316 S.S. NIPPLE, 316 S.S. FEMALE CAMLOCK FITTING, AND 316 S.S. MALE PLUG	6"	1
48	LIFTING BAIL PER DETAIL 4 ON SHEET 15	AS REQ'D	2
49	AIR VENT TERMINAL PER DETAIL 3 ON SHEET 15	8"	2
50	PVC SCH.40 SOLVENT WELD PIPE, 90° ELBOW	8"	5
51	TOP SLIDE RAIL GUIDE BRACKET PER DETAIL 4 ON SHEET 14	--	2
52	ROOF EDGE SEALING PAD PER DETAIL 6 ON SHEET 13	--	AS REQ'D
53	VAULT JOINT PER DETAIL 2 ON SHEET 13	--	AS REQ'D
54	FLG x FLG CLASS 53 D.I. PIPE	6" x 4'-3"	1
55	FLG.x GROOVE END, CLASS 54, D.I.PIPE	8" x 9"	2
56	FLANGED D.I. ECCENTRIC REDUCER	8" x 6"	2
57	VENTILATION FAN 610 CFM @ 0.25"W.C. PER DETAIL 2 ON SHEET 15	1/3 H.P.	1
58	45° PUSH-ON D.I. ELBOW WITH THRUST BLOCK	8"	2
59	FLG.x P.E., CLASS 53, D.I.PIPE	8"x4'-3"	2
60	P. E.x GROOVE END, CLASS 54, D.I.PIPE	8"x2'-11"	2
61	P. E. x P. E. CLASS 53, DI PIPE	8"x8'-9 1/8"	1
62	P. E.x P.E., CLASS 53, D.I.PIPE	8"x9'-8 3/4"	1
63	P. E.x P.E., CLASS 53, D.I.PIPE	8"x3'-4 3/16"	1
64	P. E.x P.E., CLASS 53, D.I.PIPE	8"x4'-4 7/16"	1
65	FLANGE TYPE PIPE SUPPORT PER DETAIL 5 ON SHEET 15	--	3
66	2' Ø REMOVABLE POST PER DETAIL 5 ON SHEET 14	--	8

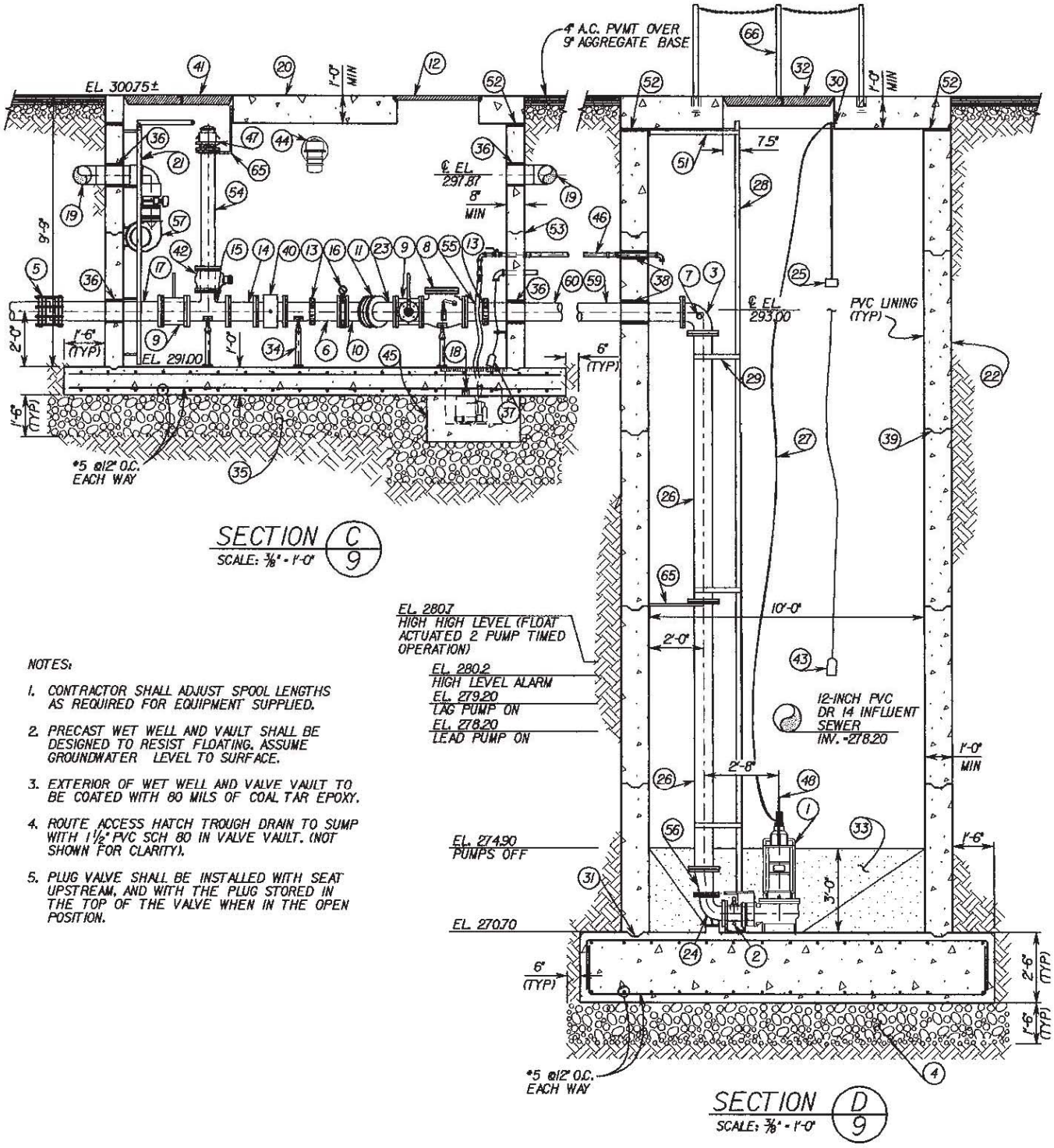
NOTES:

1. CONTRACTOR SHALL ADJUST SPOOL LENGTHS AS REQUIRED FOR EQUIPMENT SUPPLIED.
2. PRECAST WET WELL AND VAULT SHALL BE DESIGNED TO RESIST FLOATING. ASSUME GROUNDWATER LEVEL TO SURFACE.
3. EXTERIOR OF WET WELL AND VALVE VAULT TO BE COATED WITH 80 MILS OF COAL TAR EPOXY.
4. ROUTE ACCESS HATCH TROUGH DRAIN TO SUMP WITH 1 1/2" PVC SCH 80 PIPE IN VALVE VAULT. (NOT SHOWN FOR CLARITY)
5. PLUG VALVE SHALL BE INSTALLED WITH SEAT UPSTREAM, AND WITH THE PLUG STORED IN THE TOP OF THE VALVE WHEN IN THE OPEN POSITION.



MECHANICAL PLAN
SCALE: 3/8" = 1'-0"

Figure 1-5
Valve Vault and Lift Station Profile



NOTES:

1. CONTRACTOR SHALL ADJUST SPOOL LENGTHS AS REQUIRED FOR EQUIPMENT SUPPLIED.
2. PRECAST WET WELL AND VAULT SHALL BE DESIGNED TO RESIST FLOATING. ASSUME GROUNDWATER LEVEL TO SURFACE.
3. EXTERIOR OF WET WELL AND VALVE VAULT TO BE COATED WITH 80 MILS OF COAL TAR EPOXY.
4. ROUTE ACCESS HATCH TROUGH DRAIN TO SUMP WITH 1½" PVC SCH 80 IN VALVE VAULT. (NOT SHOWN FOR CLARITY).
5. PLUG VALVE SHALL BE INSTALLED WITH SEAT UPSTREAM, AND WITH THE PLUG STORED IN THE TOP OF THE VALVE WHEN IN THE OPEN POSITION.

1-9 Forcemain

The forcemain is an 8-inch Class 200 PVC pipe that extends 1,530 feet from the lift station valve vault northeast along Lake Forest Drive, terminating at manhole MH196S085 about 500 feet east of Aspen Street, as shown on Figure 1-1. The invert elevation at the discharge manhole is 326.05 feet amsl. From the discharge manhole, gravity sewers convey the wastewater northeast on Lake Forest Drive, and northwest on Muirlands Boulevard to the Los Alisos Water Recycling Plant, which is located southwesterly of the Ferngreen Lane and Muirlands Boulevard intersection.

With the existing pump capacity of 650 gpm, the velocity in the forcemain is approximately 4.15 feet per second (fps), which is within the recommended forcemain velocity range of 3 – 5 fps.

During the site visit, the flow meter was indicating around 715 gpm, which would generate a velocity of 4.6 fps, which is still in the recommended range.

The existing force main is 35 years old. When a new force main is constructed, the existing force main should be lined and maintained as a redundant facility.



Photograph 1-8
Electrical Enclosure

1-10 Main Pumps

When the lift station was upgraded in 2004, it was equipped with ESSCO 6x6x14x3 non clog pumps, rated at 650 gpm capacity and 68 feet total dynamic head, at 1,150 RPM. The pumps were replaced in 2008 with Cornell 6NHM non-clog submersible pumps with 13.38 inch diameter impellers, rated at 800 gpm capacity and 72 feet total dynamic head at 1,200 rpm. They are driven by the original (2004) 30 HP motors. According to the SCADA data collected between February 1, 2015 and March 31, 2015, the pumps deliver an average of 616 gpm and a high of 774 gpm.

1-11 Sump Pumps

One (1) 1/3 HP sump pump with an integral float switch is located in the southeast corner of the valve vault. Any stormwater and leakage from the discharge piping collected within the sump is pumped back into the wet well through a 1.5-inch discharge pipe.



Photograph 1-9 Control Panel

1-12 Gas Detection System

The existing valve vault does not have a permanent gas detection system. The District staff has to use portable gas detectors, which is adequate for the infrequent entry into the valve vault.

1-13 Electrical and Controls

The Canada Pump Station is provided power through a 3-phase, 3 - wire, 480 volt, 200 amp service. The pumps are driven by 30 HP constant speed motors. The switchgear, motor control center, and the pump control panel are located in a 304 stainless steel NEMA 4X enclosure to the west of the wet well and valve vault, as illustrated on Photographs 1-8



Photograph 1-10 Standby Generator

and 1-9. The electrical enclosure is not protected from the elements.

A permanent standby generator (100 KW 480/277V.3) is located on the south east corner of the lift station site, as illustrated on Photograph 1-10. The motor control center is equipped with an automatic transfer switch, which is utilized to power the station in the event of a commercial power outage. The generator was not replaced when the pump station was upgraded in 2004; it is currently over 35 years old.

Pumps are controlled based on sewage level in the wet well as determined by a Milltronics ultrasonic level sensor. The pumps start when the sewage level reaches 7.5 feet above the wet well floor, and stop when it drops to 4.4 feet. The operating volume of 1,821 gallons is sufficient to keep the pump cycling to less than 3 times per hour. The PLC and SCADA do not currently provide all pertinent operational data and alarm information to the District.

1-13 Recommendations

The recommendations for Canada Lift Station are summarized in Table 1-2.

Table 1-2
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Site is difficult to access	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Site lighting is broken and/or insufficient	
	Electrical enclosure is exposed to sun and rain	
Redundancy	Level measurement is provided by an ultrasonic level sensor	Evaluate as part of reliability and redundancy analysis of critical facilities.
	Lift station has a single forcemain	
	The flow meter has no spare in the warehouse	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions ar in compliance with IRWD SSMP and regulatory agencies. Develop recommendations based on validation and verification efforts.
Condition/ Age	Influent manhole does not currently have a Smart Manhole Cover installed	Conduct a more thorough condition assessment of areas of interest and make recommendations accordingly.
	Piping in the wet well is corroding and may need repair or replacement	
	Standby generator has exceeded its useful life and shows signs of wear	
	Forecmain has exceeded its useful life and needs replacement	

Irvine Park Lift Station

Evaluation

1-1 Introduction

Irvine Park Lift Station is located at the east end of Irvine Park Road in unincorporated Orange County territory. It serves a total tributary area of 280 acres, covering the entire Irvine Regional Park facilities connected to the gravity sewer system, as well as the Boy Scouts Camp located to the north of the park.

It is a submersible lift station which has two 20 HP pumps rated at 270 gpm capacity, 72 feet total dynamic head (TDH) at a speed of 1750 rpm. The ground elevation at the lift station is 565 feet above mean sea level (amsl). It is accessible from Irvine Park Road through a driveway, as seen on Photograph 1-1. The site is currently secured with a chain link fence. IRWD staff has encountered rattlesnakes at the site. It was observed during the site visit on May 7, 2015, that the access gate had been damaged.



Photograph 1-1
Irvine Park Lift Station

The Irvine Park Lift Station was constructed in 2004, along with the tributary gravity sewer system, which replaced the septic system that served the park. When the lift station was originally planned, it did not include capacity from the subsequently constructed Boy Scouts Camp. The force main is a 6-inch diameter Class 200 AWWA C-900 PVC pipe that extends 2,286 feet, terminating at a manhole (MH018W001) approximately 700 feet north of the intersection of East Chapman Avenue/Santiago Canyon Road and Jamboree Road.

1-2 Tributary Area

The Irvine Park Lift Station serves the Irvine Regional Park facilities and the Orange County Zoo (240 acres), and the Boy Scouts Camp (40 acres) located to the north of the park as shown on Figure 1-1. The breakdown of the lift station tributary area by land use is detailed in Table 1-1.

Table 1-1
Irvine Park Lift Station Tributary Area Land Uses

Land Use Description	Area (Acres)
Boy Scouts Camp	40
Irvine Park	240
Grand Total	**280**

Figure 1-1
Irvine Park Lift Station Aerial Image



1-3 Tributary Flows

Flow calculations based on SCADA records of pump start and stop times and wet well area resulted in an average dry weather flow of 20 gpm. This is consistent with the original design estimate, which was based on 1,988 park visitors per day as provided by Orange County Harbors, Beaches, and Parks, and 15 gallons of sewage generation per visitor per day. The peak dry weather flow was calculated from SCADA records is 58 gpm, which is lower than the flow estimated (98 gpm) during the design of the lift station based upon peak daily visitor population of 9,000, and 1,050 gallons per day from Orange County Zoo. However, the peak dry weather flow calculated from SCADA records may not represent the peak park usage time, and the flows from the Boy Scouts Camp. The tributary flows are significantly higher during the weekends and holidays, due to the much higher usage of the park.

1-4 Influent Sewers

One (1) 8-inch diameter PVC gravity sewer enters the wet well from the east at an invert elevation of 542.8 feet amsl. The inlet piping is detailed on Figure 1-3.

1-5 Wet Well

The wet well is a 10-foot diameter T-Lock lined precast reinforced concrete structure with a 2'-6" thick cast-in-place reinforced concrete base. It has a 1-foot high and 1-foot wide fillet that directs debris and solids towards the pump suction. The visible portion of the wet well lining, shown on Photograph 1-2, was observed to be in good condition during the field visit.



Photograph 1-2
Wet Well

The wastewater level in the wet well is measured using an ultrasonic level transducer. The IRWD staff indicated that suds and a matting of oils form on top of the sewage in the wet well because of the low flows. This results in erroneous sewage level readings by the ultrasonic level sensor.

There is no wet well washer facility.

The SCADA screenshots provided by the District suggest that the pump start and stop levels are 4.9 feet (542.8 feet amsl) and 3.2 feet (541.1 feet amsl), respectively. These match the levels marked at the lift station site.

Within the 1.7 foot operating band indicated by the SCADA, there is 998 gallons of storage. With the existing average pump capacities of 270 gpm, the pumps would cycle a maximum of 4 times per hour, if only one is cycled and the influent flow were 135 gpm, and 2 times per hour if they are alternated. This is not excessive for 20 HP motors.

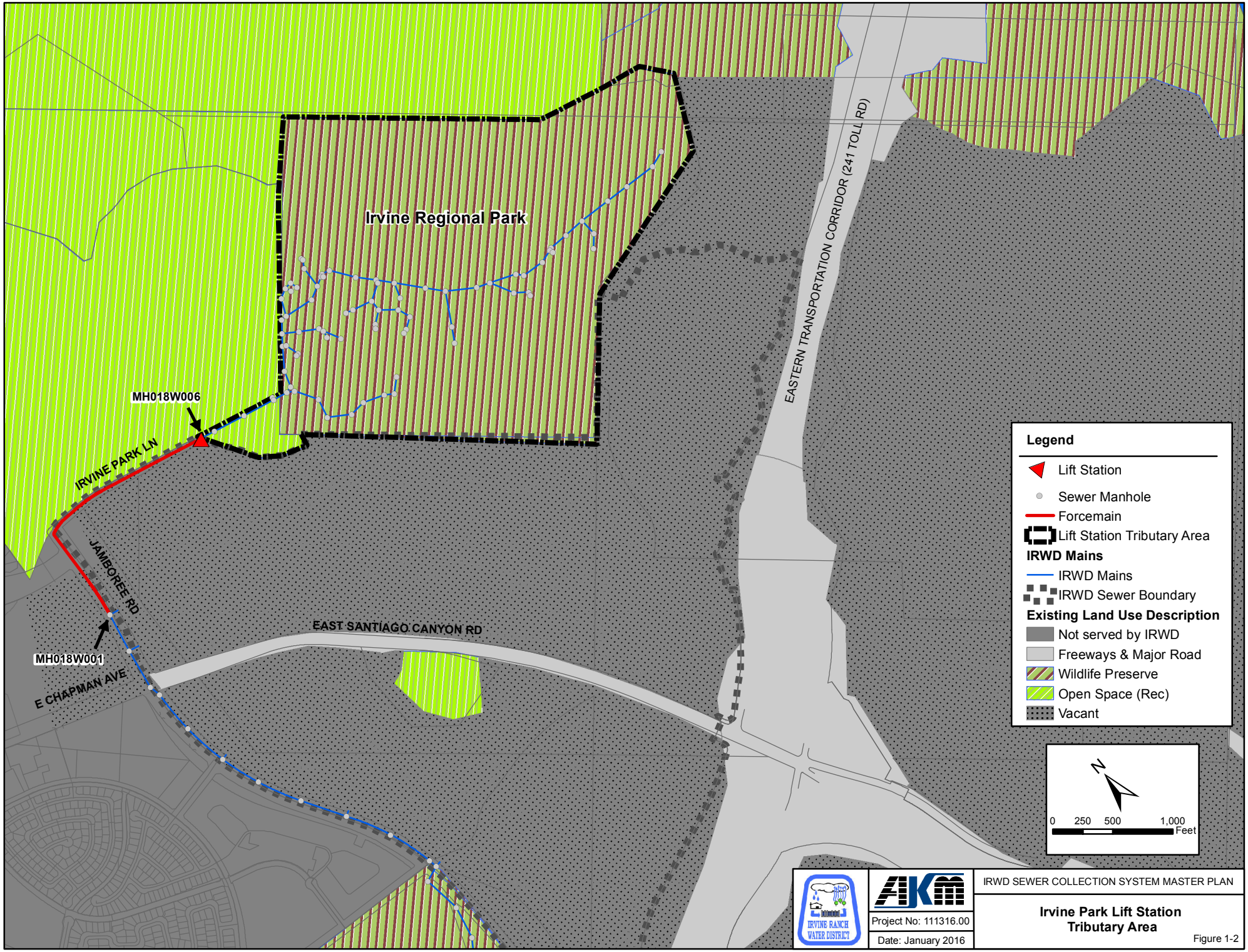
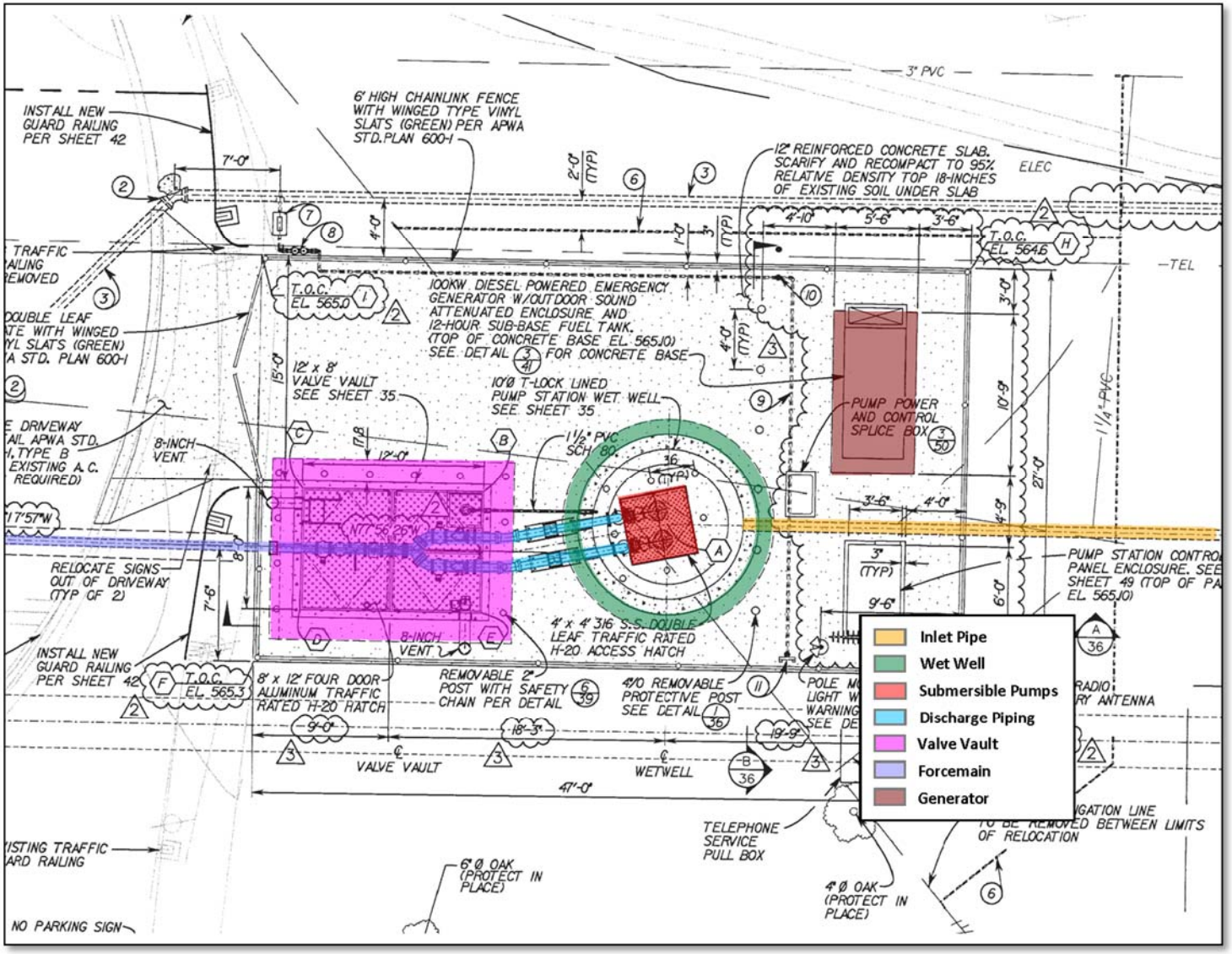

Irvine Regional Park
EASTERN TRANSPORTATION CORRIDOR (241 TOLL RD)
MH018W006
IRVINE PARK LN
JAMBOREE RD
EAST SANTIAGO CANYON RD
MH018W001
E CHAPMAN AVE
Legend
Lift Station
Sewer Manhole
Forcemain
Lift Station Tributary Area
IRWD Mains
IRWD Mains
IRWD Sewer Boundary
Existing Land Use Description
Not served by IRWD
Freeways & Major Road
Wildlife Preserve
Open Space (Rec)
Vacant
N
0 250 500 1,000
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Irvine Park Lift Station
Tributary Area
Project No: 111316.00
Date: January 2016
Figure 1-2

Figure 1-3
Irvine Park Lift Station Site and Piping Plan



The 8-inch influent sewer enters the wet well at an invert elevation of 542.8 feet amsl. The invert elevation (545.2 feet amsl) of the lowest upstream manhole is on Irvine Park Road east of the lift station. This value is lower than the high water level alarm in the wet well (545.5 feet amsl), leaving no emergency storage in the wet well. It is recommended that the District develop a site specific overflow prevention and response plan to provide timely response to a potential overflow.

1-6 Valve Vault

The below ground valve vault, shown on Photograph 1-3, is a 12-foot by 8-foot rectangular structure with a cast-in-place reinforced concrete base and pre-cast reinforced concrete walls. Its invert is at elevation is 559.9 feet amsl and the top is at 565.0 feet amsl. Access is through an aluminum hatch and a steel ladder. The District staff noted that stormwater enters the vault through one of the four hatch panels.

There is minimal lighting in the valve vault. The valve vault has a 1/3 HP automatic sump pump (Zoeller M57) in the northeast corner. The sump is 2-foot x 2-foot square and 2 feet deep. The sump pump conveys the collected liquids to the wet well through a 1-1/2" PVC forcemain.



Photograph 1-3
Valve Vault

The valve vault has two (2) air vents and one (1) 610 CFM ventilation blower, which can provide about 76 air changes per hour, which is sufficient.

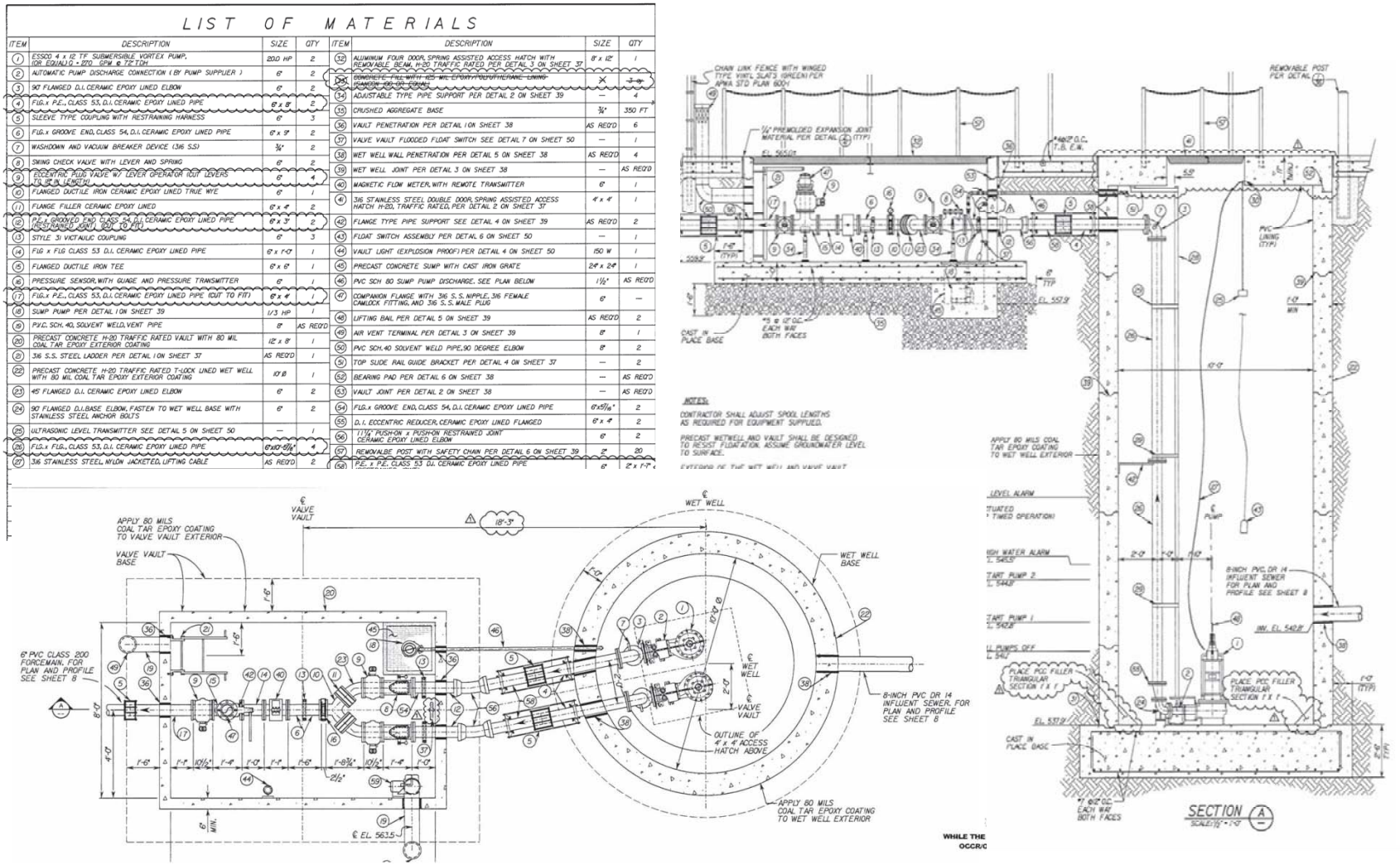
The wet well and valve vault plan and section are shown on Figure 1-4.

The District installed a BioMagic system in the valve vault to add the chemical into the wet well, to mitigate odors within the wet well and the downstream system. Both the BioMagic tanks and the eye-wash are located in the valve vault, which reduced the space available for maintenance, repair, and replacement work.

1-7 Discharge Piping

The 6-inch ductile iron (DI) discharge piping for each pump starts at the pump discharge nozzle and extends up through a flanged 90° DI bend to a DI eccentric 4"x6" reducer, and then a second flanged 90° DI bend within the wet well at a centerline elevation of 561.65 feet amsl (Photograph 1-2). The 6-inch discharge piping then penetrates the wet well wall, and continues horizontally into the valve vault. Each discharge pipe has a sleeve type coupling with a restraining harness between the two structures. Within the valve vault (Photograph 1-3), there is a 6-inch Victaulic coupling, a lever and spring swing check valve, plug valve, and a 45° bend for each pump discharge, which confluence at a 6-inch x 6-inch x 6-inch ductile iron flanged true wye. Following the wye is a pressure sensor with a gauge and a pressure transmitter, as well as a magnetic flowmeter, followed by a flanged tee and a plug valve. The vertical branch of the tee has a 6-inch plug valve and a Camlock fitting for bypass pumping. The 6-inch ductile iron force main exits the valve vault on its west side.

Figure 1 - 4
Wet Well and Valve Vault Plan and Section View



LIST OF MATERIALS

ITEM	DESCRIPTION	SIZE	QTY
1	ESSCO 4 x 12 TF SUBMERSIBLE VORTEX PUMP, (OR EQUAL) @ ~270 GPM @ 72' TDH	20.0 HP	2
2	AUTOMATIC PUMP DISCHARGE CONNECTION (BY PUMP SUPPLIER)	6"	2
3	90° FLANGED D.I. CERAMIC EPOXY LINED ELBOW	6"	2
4	F.G. x P.E., CLASS 53, D.I. CERAMIC EPOXY LINED PIPE	8" x 8"	2
5	SLEEVE TYPE COUPLING WITH RESTRAINING HARNESS	6"	3
6	F.G. x GROOVE END, CLASS 54, D.I. CERAMIC EPOXY LINED PIPE	6" x 9"	2
7	WASHDOWN AND VACUUM BREAKER DEVICE (316 S.S.)	¾"	2
8	SWING CHECK VALVE WITH LEVER AND SPRING	6"	2
9	ECCENTRIC PLUG VALVE W/ LEVER OPERATOR (CUT LEVERS TO 8" W. MAX.)	6"	4
10	FLANGED DUCTILE IRON CERAMIC EPOXY LINED TRUE WYE	6"	1
11	FLANGE FILLER CERAMIC EPOXY LINED	6" x 8"	2
12	P.E. x GROOVED END, CLASS 54, D.I. CERAMIC EPOXY LINED PIPE (RESTRAINED JOINT, SEE NOTE 10 ON)	6" x 3'	2
13	STYLE 31 VICTAULIC COUPLING	6"	3
14	F.G. x F.G. CLASS 53 D.I. CERAMIC EPOXY LINED PIPE	6" x 1'-0"	1
15	FLANGED DUCTILE IRON TEE	6" x 6"	1
16	PRESSURE SENSOR, WITH GUAGE AND PRESSURE TRANSMITTER	6"	1
17	F.G. x P.E., CLASS 53, D.I. CERAMIC EPOXY LINED PIPE (CUT TO FIT)	8" x 6"	1
18	SUMP PUMP PER DETAIL 1 ON SHEET 39	1/3 HP	1
19	PVC. SCH. 40, SOLVENT WELD, VENT PIPE	8"	AS REQ'D
20	PRECAST CONCRETE H-20 TRAFFIC RATED VAULT WITH 80 MIL COAL TAR EPOXY EXTERIOR COATING	12' x 8'	1
21	316 S.S. STEEL LADDER PER DETAIL 1 ON SHEET 37	AS REQ'D	1
22	PRECAST CONCRETE H-20 TRAFFIC RATED T-LOCK LINED WET WELL WITH 80 MIL COAL TAR EPOXY EXTERIOR COATING	10'Ø	1
23	45° FLANGED D.I. CERAMIC EPOXY LINED ELBOW	6"	2
24	90° FLANGED D.I. BASE ELBOW, FASTEN TO WET WELL BASE WITH STAINLESS STEEL ANCHOR BOLTS	6"	2
25	ULTRASONIC LEVEL TRANSMITTER SEE DETAIL 5 ON SHEET 50	—	1
26	F.G. x F.G., CLASS 53, D.I. CERAMIC EPOXY LINED PIPE	6"x10"-8½"	4
27	316 STAINLESS STEEL, NYLON JACKETED, LIFTING CABLE	AS REQ'D	2

ITEM	DESCRIPTION	SIZE	QTY
32	ALUMINUM FOUR DOOR, SPRING ASSISTED ACCESS HATCH WITH REMOVABLE BEAM, H-20 TRAFFIC RATED PER DETAIL 3 ON SHEET 37	8' x 12'	1
33	CONCRETE FILL WITH 10% WL EPOXY POLYMERIC LIVING FOAM® PER DETAIL 2 ON SHEET 39	X	3 cy
34	ADJUSTABLE TYPE PIPE SUPPORT PER DETAIL 2 ON SHEET 39	—	4
35	CRUSHED AGGREGATE BASE	¾"	350 FT
36	VAULT PENETRATION PER DETAIL 1 ON SHEET 38	AS REQ'D	6
37	VALVE VAULT FLOODED FLOAT SWITCH SEE DETAIL 7 ON SHEET 50	—	1
38	WET WELL WALL PENETRATION PER DETAIL 5 ON SHEET 38	AS REQ'D.	4
39	WET WELL JOINT PER DETAIL 3 ON SHEET 38	—	AS REQ'D
40	MAGNETIC FLOW METER, WITH REMOTE TRANSMITTER	6"	1
41	316 STAINLESS STEEL DOUBLE DOOR, SPRING ASSISTED ACCESS HATCH H-20, TRAFFIC RATED, PER DETAIL 2 ON SHEET 37	4' x 4'	1
42	FLANGE TYPE PIPE SUPPORT SEE DETAIL 4 ON SHEET 39	AS REQ'D	2
43	FLOAT SWITCH ASSEMBLY PER DETAIL 6 ON SHEET 50	—	1
44	VAULT LIGHT (EXPLOSION PROOF) PER DETAIL 4 ON SHEET 50	150 W	1
45	PRECAST CONCRETE SUMP WITH CAST IRON GRATE	24" x 24"	1
46	PVC SCH. 80 SUMP PUMP DISCHARGE, SEE PLAN BELOW	1½"	AS REQ'D
47	COMPANION FLANGE WITH 316 S.S. NIPPLE, 316 FEMALE CAMLOCK FITTING, AND 316 S.S. MALE PLUG	6"	—
48	LIFTING BAIL PER DETAIL 5 ON SHEET 39	AS REQ'D.	2
49	AIR VENT TERMINAL PER DETAIL 3 ON SHEET 39	8"	1
50	PVC SCH. 40 SOLVENT WELD PIPE, 90 DEGREE ELBOW	8"	2
51	TOP SLIDE RAIL GUIDE BRACKET PER DETAIL 4 ON SHEET 37	—	2
52	BEARING PAD PER DETAIL 6 ON SHEET 38	—	AS REQ'D
53	VAULT JOINT PER DETAIL 2 ON SHEET 38	—	AS REQ'D
54	F.G. x GROOVE END, CLASS 54, D.I. CERAMIC EPOXY LINED PIPE	6"x5⅞"	2
55	D.I. ECCENTRIC REDUCER, CERAMIC EPOXY LINED FLANGED	6" x 4"	2
56	11¼° PUSH-ON x PUSH-ON RESTRAINED JOINT CERAMIC EPOXY LINED ELBOW	6"	2
57	REMOVALBE POST WITH SAFETY CHAIN PER DETAIL 6 ON SHEET 39	2"	20
58	P.E. x P.E. CLASS 53 D.I. CERAMIC EPOXY LINED PIPE	6"	2' x 1'-7"

NOTES:
CONTRACTOR SHALL ADJUST SPOOL LENGTHS AS REQUIRED FOR EQUIPMENT SUPPLIED.
PRECAST WETWELL AND VAULT SHALL BE DESIGNED TO RESIST FLOATATION. ASSUME GROUNDWATER LEVEL TO SURFACE.

With the design capacity of the pump (270 gpm), the velocity in the 6-inch diameter discharge pipes is approximately 3 feet per second (fps), which is within the acceptable range of 3 to 5 fps.

1-8 Forcemain

The forcemain is a 6-inch diameter Class 200 AWWA C-900 PVC pipe that extends west along Irvine Park Road and south along Jamboree Road to approximately 700 feet north of the intersection of Jamboree Road and East Chapman Avenue, terminating at MH018W001. Its total length is 2,286 feet. The invert elevation at the discharge manhole is approximately 599 feet amsl. From the discharge manhole, gravity sewers convey the wastewater southeast to HATS Lift Station, and Michelson Water Recycling Plant.

With the existing pump capacity of 270 gpm, the velocity in the forcemain is approximately 3 feet per second (fps), which is within the recommended forcemain velocity range of 3 to 5 fps.



Photograph 1-4
Flow Meter Vault and Magnetic Flow Meter

1-9 Main Pumps

Irvine Park Lift Station has two (2) ESSCO 4 x 12 TF submersible pumps with 9.25-inch diameter impellers. According to the pump curve test data dated April 16, 2004, the pumps have a rated capacity of 270 gpm and total dynamic heads of 72 feet, at 1750 RPM. The pumps are driven by 20 HP motors. According to the SCADA data collected between February 1, 2015 and March 29, 2015, the lift station runs approximately 20 hours per week. The flow rate entering the lift station varies drastically, from 80 gallons per day to 50,000 gallons per day, because it is downstream of the Boy Scouts Camp Lift Station. Irvine Ranch Water District staff indicated that high wet well levels are experienced when the Boy Scouts Camp Lift Station operates.



Photograph 1-5
Pump Control Panel

1-10 Gas Detection System

The existing valve vault does not have a permanent gas detection system. The District staff has to use portable gas detectors, which is adequate for the infrequent entry into the valve vault.

1-13 Electrical and Controls

The Irvine Park Lift Station has a 300 Amp, 480 volt, 3-phase service. The pumps are driven by 20 HP constant speed motors. The pump control panel is located to the east of the wet well and

drywell, as illustrated on Photographs 1-1 and 1-5. The lift station site is paved, but the control panels are not protected from the elements.

The lift station has a permanent diesel standby generator (100 KW) with sound attenuating enclosure and a 12-hour sub-base fuel tank. It is located to the northeast of the wet well, adjacent the pump control panel, as seen on Photograph 1-6. The motor control center is equipped with an automatic transfer switch, which is utilized to power the station in the event of a commercial power outage at the lift station.



Photograph 1-6
Standby Generator

Pumps are controlled based on sewage level in the wet well as determined by the ultrasonic transducer system. The pumps start when the sewage level reaches 5.5 feet above the wet well floor, and stop when it drops to 3.8 feet. The operating volume of 998 gallons is sufficient to keep the pump cycling less than 4 times per hour.

The PLC and SCADA do not currently provide all pertinent operational data and alarm information to the District.

1-14 Recommendations

The recommendations for Irvine Park Lift Station are summarized in Table 1-2

Table 1-2
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Site currently lacks secure perimeter wall and entry gate	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Valve vault hatch is heavy and difficult to open	
	Valve vault lighting is insufficient for night work	
	Electrical enclosure is exposed to sun and rain	
	Boy Scout Camp Lift Station lacks flow controls to prevent exceeding firm capacity of Irvine Park Lift Station	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Valve vault hatch panel is not watertight	
	BioMagic tanks and eye wash are located in the valve vault	
Redundancy	Lift station has single forcemain	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
	Level measurement is provided by single ultrasonic level sensor	
Condition/ Age	Access gate is damaged	Conduct a more thorough condition assessment of areas of interest and make recommendations accordingly.
	Wet well lacks washer	
	Due to low flows, suds and oil mats form in the wet well, resulting in erroneous level readings	
	Motor Control Center, Programmable Logic Control and associated panels are 12 years old and may not be of the current IRWD standard	

Coastal Ridge Lift Station

Evaluation

1-1 Introduction

The Coastal Ridge Lift Station is located at 22322 Pacific Mist between the cul-de-sacs at the end of Canyon Peak and Pacific Mist in the City of Newport Beach, as seen on Figure 1-1. The lift station is located in a single family housing area near the 73 Freeway, Newport Coast Drive and Laguna Coast Wilderness Park. The ground elevation at the lift station is 852.5 feet above mean sea level (amsl). The dry well, wet well, meter vault, surge tank, and chemical cabinet can be seen on Photograph 1-1.



Photograph 1-1
Coastal Ridge Lift Station

Access to the lift station is through a driveway that extends north from Pacific Mist and west from Canyon Peak. A manual sliding gate provides vehicular access to the lift station as shown on Photograph 1-2.

The Coastal Ridge Lift Station was constructed in 2002 with two (2) sets of duplex horizontal pumps that are housed in a below grade dry well. The flows from the lift station are conveyed 3,623 feet in a 4-inch PVC forcemain north along an easement, Pacific Mist, West Coastal Peak, and Ridge Park Road, where it turns west, and terminates at manhole MH134W528, as seen on Figure 1-2. Flow continues by gravity west along Ridge Park Road and then south on Newport Coast Drive where it enters Newport Coast Lift Station.



Photograph 1-2
Coastal Ridge Lift Station Entrance

1-2 Tributary Area

The Coastal Ridge Lift Station serves a net tributary area of 217.5 acres. The tributary area, shown on Figure 1-2, generally consists of the parcels at the end of Ridge Park Road, starting at West Coastal Peak and ending at the San Joaquin Mountains. The breakdown of the lift station tributary area by land use categories is detailed in Table 1-1.

Table 1-1

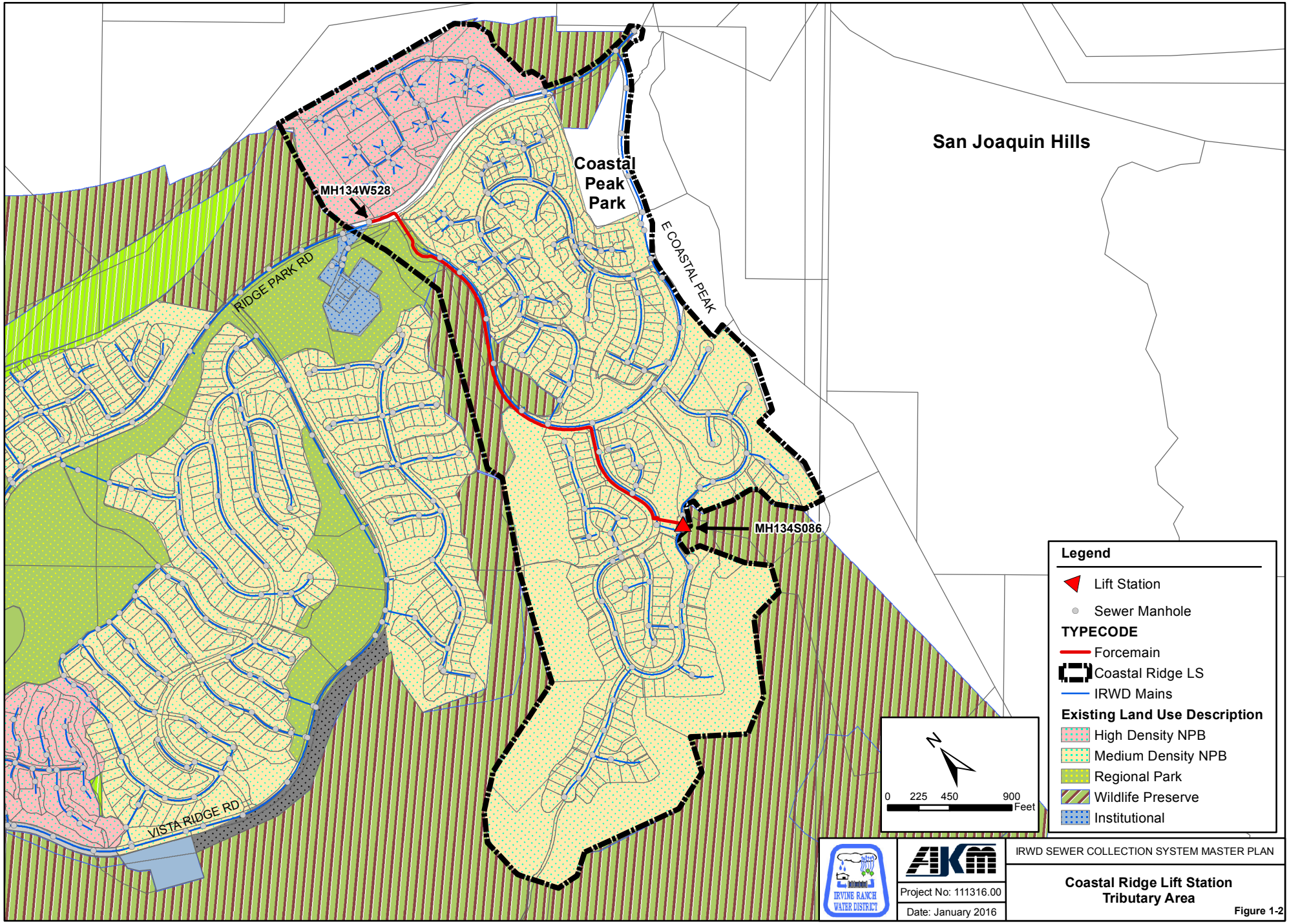
Coastal Ridge Lift Station Tributary Area Land Uses

	LU Code	Land Use Description	Area (Acres)	No. of Dus	Average Water Use (GPM)
Residential	1163	Medium Density NPB	187.0	343	90.5
	1183	High Density NPB	30.6	171	
	Grand Total		**217.5**	**514**	**90.5**

Figure 1-1

Site Location




San Joaquin Hills
Coastal Peak Park
MH134W528
MH134S086
RIDGE PARK RD
E COASTAL PEAK
VISTA RIDGE RD
Legend
Lift Station
Sewer Manhole
TYPECODE
Forcemain
Coastal Ridge LS
IRWD Mains
Existing Land Use Description
High Density NPB
Medium Density NPB
Regional Park
Wildlife Preserve
Institutional
N
0 225 450 900
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2016
Coastal Ridge Lift Station
Tributary Area
Figure 1-2

1-3 Tributary Flows

Flow calculations based on SCADA records of pump start and stop times and wet well area resulted in an average dry weather flow of 61 gpm, and peak dry weather flow of around 105 gpm. The estimated peak wet weather flow is 147 gpm. The average water use in the tributary area is 90.5 gpm.

The Coastal Ridge Lift Station tributary area is mostly developed. Future development includes the addition of 39 single family homes, which are estimated to add 5 gpm to the overall average dry weather sewage load. This value is based on a 69% return from water use meter data that was calculated for current conditions of single family homes in this tributary area. The future tributary average and peak dry weather flows are estimated at 66 gpm and 128 gpm, respectively. The future peak wet weather flow is estimated at 180 gallons per minute.

1-4 Influent Sewers

Two (2) gravity sewers convey wastewater to a common collector manhole, MH134S088, located to the southeast of the Coastal Ridge Lift Station. This flow is then combined with flows from the north side of the lift station, at another collector manhole MH134S086, before entering the wet well. An 8-inch PVC pipe extends 10 feet northwest from the manhole (MH134S086) to the wet well. The pipe enters the wet well at an invert elevation of 841.5 feet amsl. The inlet piping is detailed on Figure 1-3.

1-5 Wet Well

The wet well, seen on Photograph 1-3, Figure 1-3, and Figure 1-4, is a 6-foot by 12-foot cast-in-place concrete structure with a depth of approximately 19 feet, located to the south of the dry well. It has a bottom elevation of 833.2 feet amsl and an inside roof elevation of 851.5 feet amsl. Plans show very steep 7-foot high fillets on the east, west, and south walls extending from about 16 inches below the influent sewer invert to the wet well bottom. However, these fillets were not visible with sewage levels well below the influent pipe invert, as can be seen on Photograph 1-3. Wet well volume calculations for this study assume that there are no fillets within the operating band.



Photograph 1-3
Wet Well

The wet well walls are PVC-lined reinforced concrete structures. The lining has experienced deterioration as seen in Photograph 1-3.

The wastewater level in the wet well is measured with a submersible transducer and an ultrasonic level sensor (Milltronics). However, the levels measured do not match.

Figure 1-3

Inlet Piping Schematic

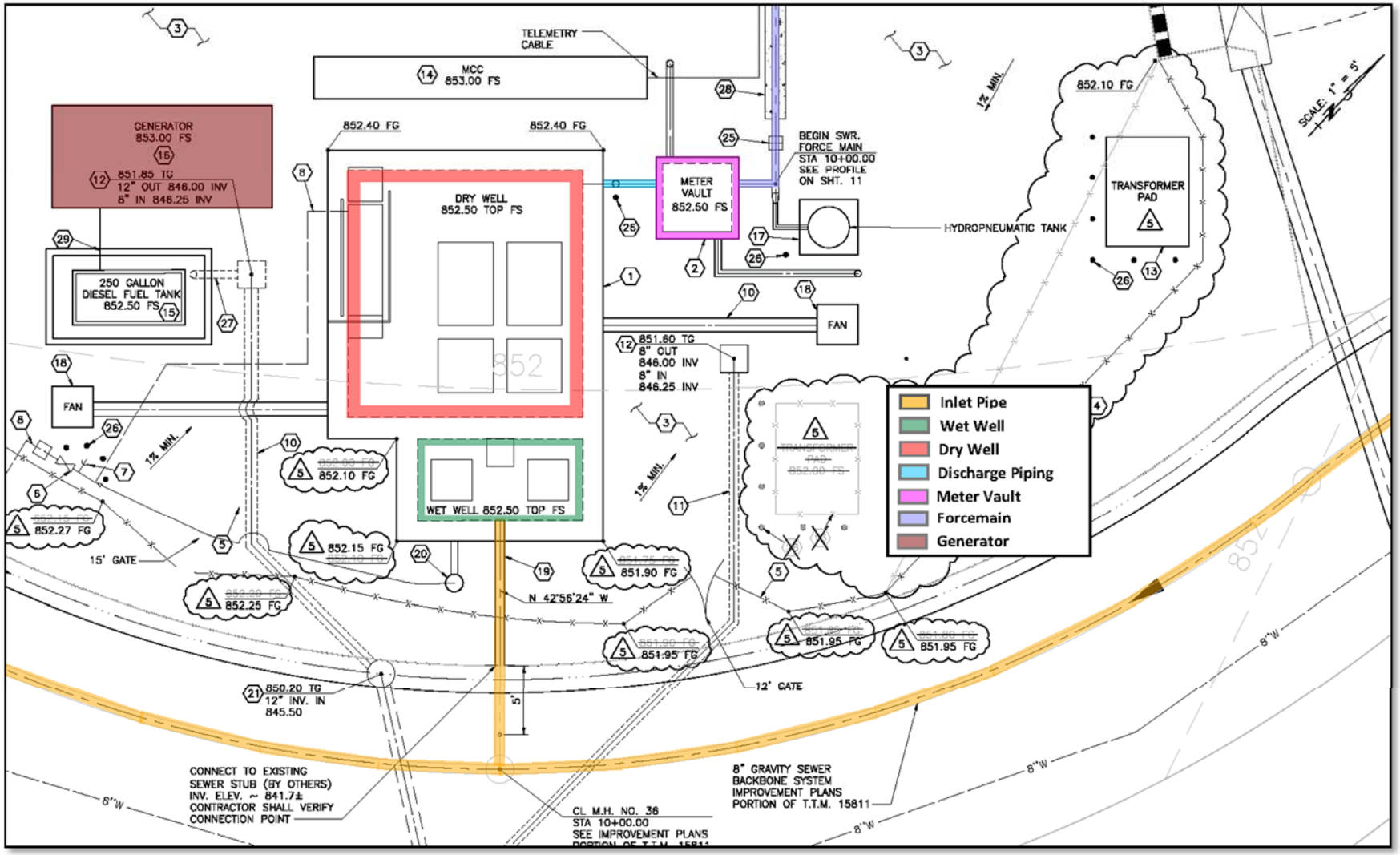
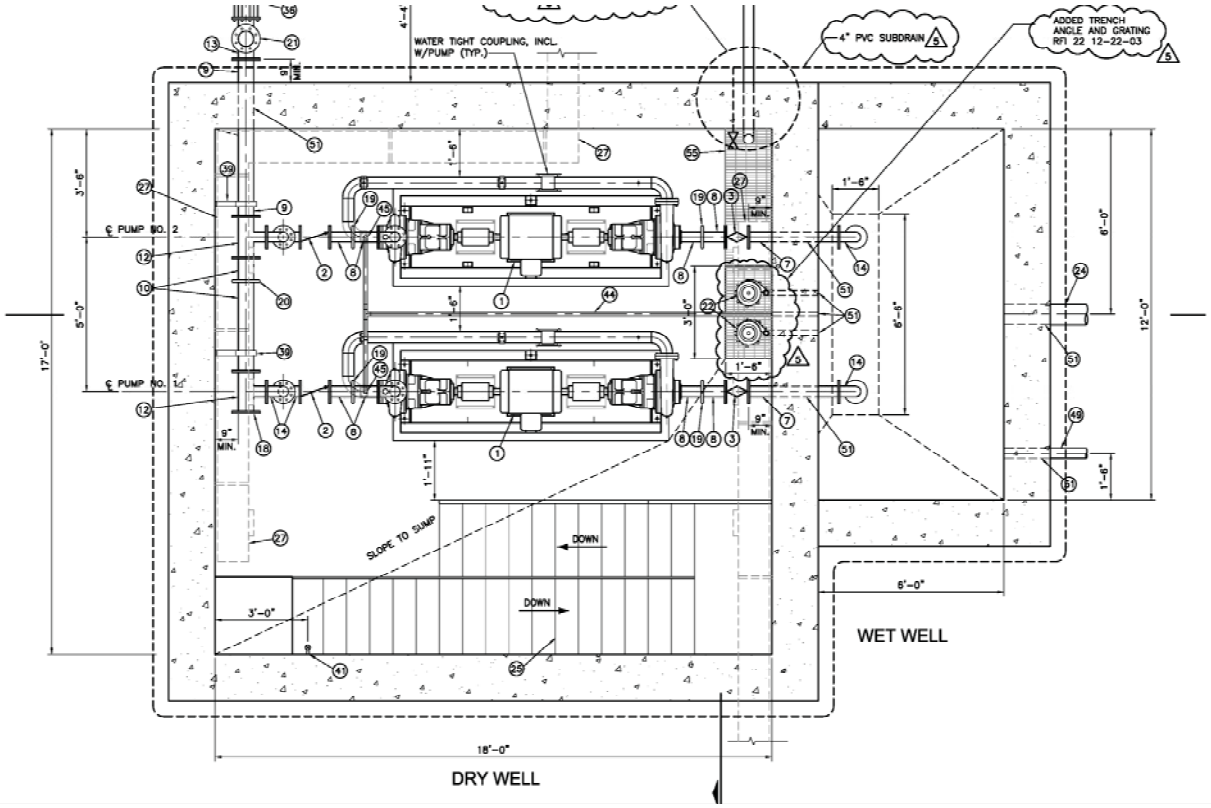


Figure 1-4

Dry Well Plan View

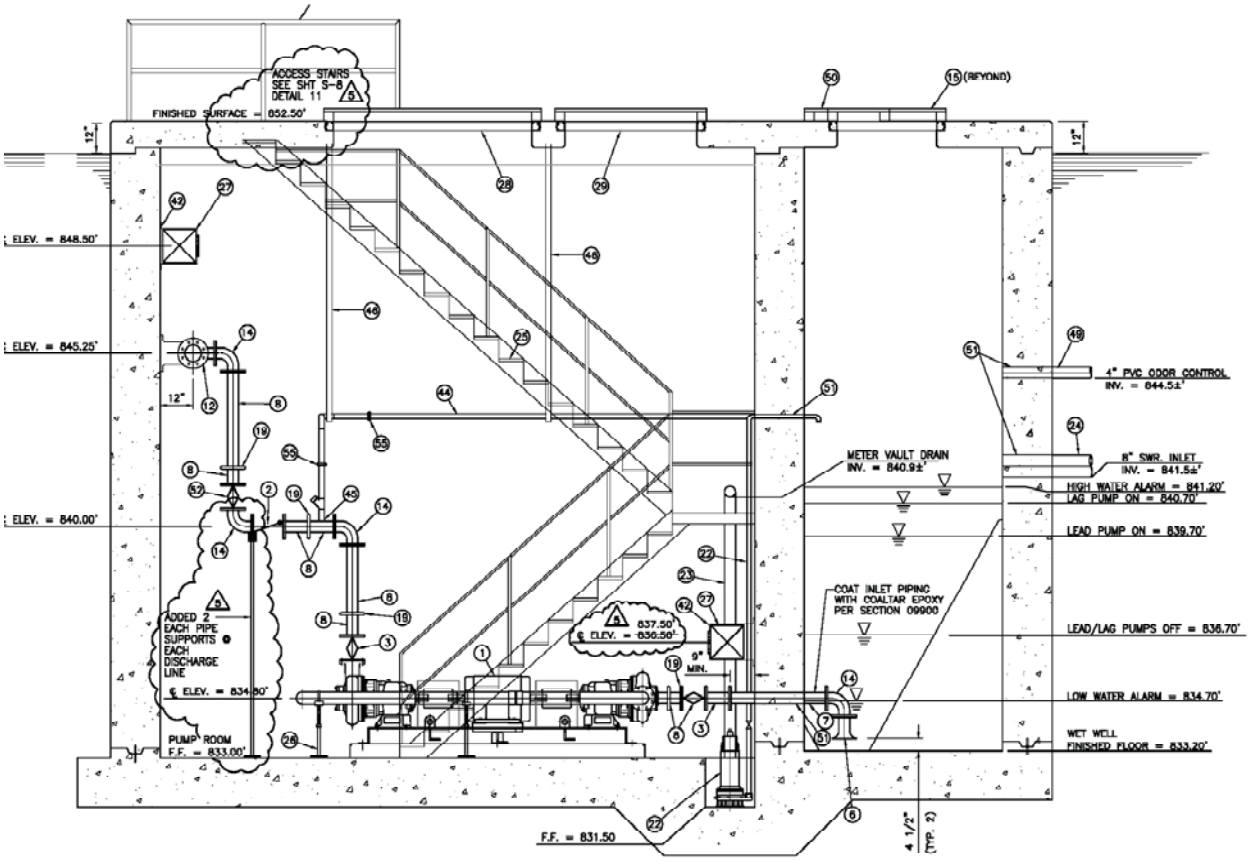


CONSTRUCTION NOTES:

1. CONSTRUCT NON-CLOG WASTEWATER PUMP, CORNELL MODEL 4NHTA-F18 DUPLEX FRAME PUMP 1760 RPM. OPERATING POINT: 260 GPM @ 288' TDH, 51% EFFICIENCY, 60 HP.
2. 4" CHECK VALVE (FLG X FLG)
3. 4" PLUG VALVE W/ HANDWHEEL OPERATOR (FLG X FLG)
4. 6" PLUG VALVE W/ HANDWHEEL OPERATOR (FLG X FLG)
5. 6" MAGNETIC FLOWMETER
6. 4" D.I.P. FLARED BELL (FLG. x P.E.)
7. 4" D.I.P. SPOOL (FLG. X FLG.)
8. 4" D.I.P. SPOOL (FLG. X G.E.)
9. 6" D.I.P. SPOOL (FLG. X FLG.)
10. 6" D.I.P. SPOOL (FLG. X G.E.)
11. 6" D.I.P. SPOOL (FLG. X P.E.)
12. 4"x6" D.I.P. TEE (FLG. X FLG.)
13. 6"x6" D.I.P. TEE (FLG. X FLG.)
14. 4" D.I.P. 90°-BEND (FLG. X FLG.)
17. 6" D.I.P. TEE (FLG. X FLG.) W/ THRUST BLOCK PER IRWD STD. W-12.
18. 6" BLIND FLANGE
19. 4" VICTAULIC COUPLING
20. 6" VICTAULIC COUPLING
21. 6" FEMALE CAMLOCK CPLG. AND MALE PLUG FOR BYPASS
22. SUMP PUMP W/ 1-1/2" SCH. 80 PVC DRAIN LINE W/ 1-1/2" TRUE UNION BALL CHECK VALVE
23. 4" SCH. 80 PVC PIPE
24. 8" PVC SEWER INLET: CONNECT PER DETAIL 3 ON SHT. 9
25. GALV. STAIRWAY PER STRUCTURAL PLANS
27. 12" AIR DUCT W/ 10"x8" REGISTERS (LOCATED 4'-3" O.C.)
31. 5' X 5' PRECAST VAULT (UTILITY VAULT 55-90 OR APPROVED EQUAL) AND 5' X 5' TRAFFIC RATED ALUMINUM HATCH W/316 STAINLESS STEEL HARDWARE, SAFETY CHAIN AND HINGED HASP LOCK (BILCO MODEL JD-4AL H-20 OR APPROVED EQUAL)
33. FLOOR DRAIN PER DETAIL 7 ON SHT. 9
34. AIR VENT PER DETAIL 4 ON SHT. 9 LOCATION PER HORIZONTAL CONTROL PLAN (SHT. 3)
35. 6" FLEXIBLE COUPLING W/ TYPE 316 SS HARDWARE
36. 6" FLANGE COUPLING ADAPTER W/ TYPE 316 SS HARDWARE
37. GALV. STEEL LADDER PER DETAIL 5 ON SHT. 9
38. 6" D.I.P. SPOOL (FLG. X P.E.)
39. PIPE SUPPORT STRAP, GRINNEL FIG. 103, TOLCO FIG. 7 OR EQUAL
40. DIFFERENTIAL PRESSURE TRANSMITTER, ROSEMOUNT MODEL 1151DP MOUNTED ON UNISTRUT SUPPORT PER MANUFACTURER'S SPECIFICATIONS AND DETAIL 1 ON SHT. 9
41. HOSE BIB ASSEMBLY PER DETAIL 2 ON SHT. 9
44. 1-1/2" SCH. 80 PVC AIR RELEASE LINE
45. 2" SADDLE CONNECTION AND AIR RELIEF PER DETAIL 6 ON SHT. 1
49. 4" SCH. 80 PVC ODOR CONTROL PIPE. SEE DETAIL 4 ON SHT. 10
51. PIPE PENETRATION PER DETAIL 3 ON SHT. 9
53. 6"X4" ECCENTRIC REDUCER (FLG. X FLG.)
54. 4" R.W. GATE VALVE W/ HANDWHEEL OPERATOR (FLG. X FLG.)
55. FURNISH AND INSTALL TRENCH GRATING FROM WALL TO SUMP PUMPS.

Figure 1-5

Dry Well Profile View



CONSTRUCTION NOTES:

1. CONSTRUCT NON-CLOG WASTEWATER PUMP, CORNELL MODEL 4NHTA-F18 DUPLEX FRAME PUMP 1760 RPM, OPERATING POINT: 260 GPM @ 288' TDH, 51% EFFICIENCY, 60 HP. W/EXPLOSION PROOF MOTORS
2. 4" CHECK VALVE (FLG. x FLG.)
3. 4" PLUG VALVE W/ HANDWHEEL OPERATOR (FLG. x FLG.)
6. 4" D.I.P. FLARED BELL (FLG. x P.E.)
7. 4" D.I.P. SPOOL (FLG. X FLG.)
8. 4" D.I.P. SPOOL (FLG. X G.E.)
12. 4"x6" D.I.P. TEE (FLG. X FLG.)
14. 4" D.I.P. 90°-BEND (FLG. X FLG.)
15. 3' x 3' ALUMINUM HATCH W/ 316 STAINLESS STEEL HARDWARE, SAFETY CHAIN, AND HINGED HASP LOCK (BILCO MODEL J-4AL OR APPROVED EQUAL)
19. 4" VICTAULIC COUPLING
22. SUMP PUMP W/ 1-1/2" SCH. 80 PVC DRAIN LINE W/ 1-1/2" TRUE UNION BALL CHECK VALVE
23. 4" SCH. 80 PVC PIPE
24. 8" PVC SEWER INLET
25. GALV. STAIRWAY PER STRUCTURAL PLANS
26. ADJUSTABLE PIPE SUPPORT PER IRWD STD. W-24
27. 12" AIR DUCT W/ 10"x8" REGISTERS (LOCATE 4'-3" O.C.)
28. 4' X 6' ALUMINUM HATCH W/ TYPE 316 STAINLESS STEEL HARDWARE, SAFETY CHAIN AND HINGED HASP LOCK (BILCO MODEL JD-3AL OR APPROVED EQUAL)
29. 4' X 4' ALUMINUM HATCH W/ TYPE 316 STAINLESS STEEL HARDWARE AND HINGED HASP LOCK (BILCO MODEL JD-2AL OR APPROVED EQUAL)
42. 1" GALVANIZED STRAPS @ 5'-0" O.C. BOLT TO WALL W/ S.S. EPOXY ANCHORS
43. STAINLESS STEEL HANDRAIL PER DETAIL 6 ON SHT. 20
44. 1-1/2" SCH. 80 PVC AIR RELEASE LINE
45. 2" SADDLE CONNECTION PER DETAIL 6 ON SHT. 9.
46. PIPE SUPPORT: CONNECT TO CEILING @ 8' O.C., ~~GRINNEL FIG. 188, TOLCO FIG. 28, OR APPROVED EQUAL~~ UNISTRUT P3250 (4" LONG), P4012S CHANNEL NUT 1 1/2" ADJUSTABLE PIPE HANGER W/ALL THREAD
49. 4" SCH. 80 PVC ODOR CONTROL PIPE. SEE DETAIL 4 ON SHEET 10.
50. 2' x 2' ALUMINUM HATCH W/ 316 STAINLESS STEEL HARDWARE, BOLTED DOWN COVER (BILCO MODEL J-1AL OR APPROVED EQUAL)
51. PIPE PENETRATION PER DETAIL 3 ON SHT. 9
52. 4" PLUG VALVE W/ CHAINWHEEL OPERATOR (FLG. x FLG.)
55. 1 1/2" UNION PVC.

The lead pump is set to start when the wastewater level is 6.5 feet above the invert elevation of the wet well (839.7 feet amsl) and stop at a wastewater level of 3.5 feet (836.7 feet amsl).

Within the 3-foot operating band, the lift station has 1615 gallons of operational storage. If the existing pump capacities are 260 gpm, the pumps would cycle a maximum of 1.2 times per hour if they are alternated, and the tributary flow were 130 gpm (half the capacity of one pump). This is less than the recommended maximum 4 starts per hour.



Photograph 1-4
Detention Basin

The influent pipe enters the wet well at an invert elevation of 841.5 feet amsl. The lowest manhole invert in the Coastal Ridge Lift Station tributary area is at manhole MH134S086 (843.21 feet amsl), which is the final collector manhole before flow enters the wet well. Between the current high water alarm level (841.2 feet amsl) and the influent sewer invert of 841.5 feet, there is only 0.3 feet of emergency storage in the wet well. There is also about 665 feet of 8-inch tributary sewer where the invert elevations of the manholes are 2.93 and 3.19 feet higher than the influent sewer invert elevation at the wet well. Utilizing the lower manhole invert, there would be 640 feet of 8-inch sewer, with a volume of about 1,670 gallons, available for emergency storage. Further, allowing the wet well level to rise similarly, approximately 2 feet, there would be 1,238 gallons of emergency storage available in the wet well. The total volume of 2,608 gallons provides 39 minutes of response time with average dry weather flows, 23 minutes with peak dry weather flows, and 16 minutes with peak wet weather flows before further upstream sewers flow full.

Because the rated capacity of one pump is much higher than the estimated future peak wet weather flow, the lag pump should not start under any normal condition. Therefore, additional emergency storage volume of 700 gallons can be provided if the high water alarm level is set 0.2 feet above the lag pump start level.

A detention basin located south of the lift station (Photograph 1-4) can be used in the event of an emergency where IRWD personnel cannot respond before a spill occurs. The overflow can flow by gravity to Los Trancos Lift Station through a drain at the bottom of the basin. There are sufficient redundant facilities to prevent overflow into any drainage facilities or public streets.

A blowoff on the recycled water line is used to add recycled water to the wet well to help clean it when IRWD visits because a thick layer of scum forms. A 4-inch PVC pipe is installed to mitigate odors at the lift station.

Wet well hatches are not traffic rated.

1-6 Dry Well

The pumps and motors are located below grade within the dry well, shown on Photograph 1-5, which is to the south of the wet well. The dry well is accessible through aluminum hatches and stairs on the west side of the structure. The bottom of the dry well access stairs are open.



Photograph 1-5
Dry Well

Double leaf hatches, flush with the top slab, are located above the pumps. Stormwater enters through the hatches onto the pumps, causing corrosion on fans and casings at the intake. Dry well hatches are not traffic rated.

The lighting within the dry well is dim and takes time to reach full brightness.

The dry well dimensions are 17 feet by 18 feet. The dry well bottom elevation is 833.0 feet amsl and the inside roof elevation is 851.5 feet amsl. The dry well volume is approximately 5,661 cubic feet.

The dry well would be considered a Class 1 Division 2 hazardous location. NFPA 820 requires a minimum of 6 air changes per hour based on classifications. The necessary air changes should also consider the actual heat generated in the dry well, including the pumps and motors. The dry well is equipped with supply and exhaust fans with 1000 cfm capacity. With a dry well volume of 5,661 cubic feet, the existing fans can provide over 10 air changes per hour, which is sufficient.

1-7 Suction Piping

The suction piping for the first stage pumps begins at the north end of the wet well with 4-inch ductile iron (DI) flared bells with inlets that are 4.5 inches above the bottom of the wet well. Following a 90 degree bend, two (2) 4-inch spools extend north through the wet well wall to the dry well at a centerline elevation of 834.8 feet amsl (Photograph 1-6). They each connect to a 4-inch plug valve, 4-inch flange x groove end spools with Victaulic couplings, before terminating at the pumps (Photograph 1-7). There are no pipe supports between the wall and the pumps. The suction piping is not properly lined up with the pump



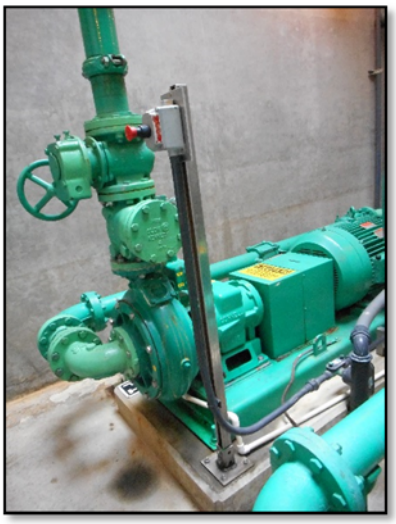
Photograph 1-6
Suction Pipe Wet Well Wall



Photograph 1-7
Suction Pipe Wet Well Wall



Photograph 1-8
Suction Piping



Photograph 1-9
Suction Piping

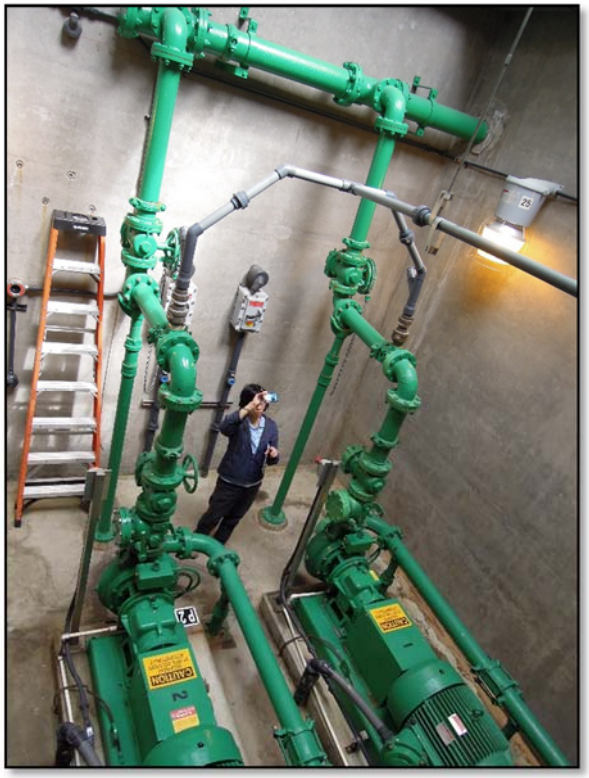
suction and therefore experiences vibration, causing cracks in the concrete wall as seen in Photograph 1-6.

The discharge piping of the first stage pumps form the suction piping for the second stage pumps, as shown on Photograph 1-8.

1-8 Discharge Piping

The horizontal discharge piping begins at each pump at a centerline elevation of 834.8 feet amsl and eventually joins a 6-inch diameter common discharge header along the north wall of the dry well at a centerline elevation of 845.5 feet amsl, as shown on Photograph 1-10.

The actual installation is not accurately reflected on the as-built drawings. A 4-inch lever and spring check valve is connected to the discharge nozzle of the pump, which is followed by a handwheel operated plug valve, flange x groove end spools with a Victaulic coupling, a 90° bend, two horizontal flange x groove end spools and a Victaulic coupling (centerline elevation of 840.0 feet amsl) with the first spool including a 2-inch tap for air release back to the wet well. The discharge piping continues with a 4-inch 90° bend up connected directly to a chainwheel operated plug isolation valve, two flange x groove end spools with a Victaulic coupling, a 90° bend connecting to a 6” x 4” tee on the discharge header at a centerline elevation of



Photograph 1-10
Discharge Piping

845.25 feet amsl. The common discharge header penetrates the dry well wall in the northeast corner of the dry well, as shown on Photograph 1-10.

The 1.5-inch (gray) PVC air recirculation pipe seen on Photograph 1-10 is not operable.

1-9 Flow Meter Vault

The 6-inch DI discharge pipe enters the flow meter vault at a center line elevation of 845.25 feet amsl where there is a differential pressure transmitter, 6-inch magnetic flow meter, Victaulic coupling, and an isolation plug valve with a hand wheel operator, before exiting the vault (Photograph 1-11). The wooden backboard on the pressure transmitter is damaged.

Following the meter vault is a 6-inch DI tee. The connection to the tee heading south is reduced to 4-inch DI pipe that extends vertically 1.5 feet above ground elevation where there is a 4-inch resilient wedge gate valve with a handwheel operator. It then continues to the surge tank. The tee connection heading north extends to the 6-inch forcemain.

There is not sufficient space in the meter vault to install a bypass system.



Photograph 1-11
Meter Vault

1-10 Surge Tank

A surge tank, shown on Photograph 1-12, was included to mitigate the transient pressures that may result from the normal starting and stopping of the pumps, and commercial power failure. The tank is a PULSCO CST-36 model with a volume of 26.9 gallons and a design pressure of 175 psi. The discharge pressure is typically 125-130 psi.

It is reported that the surge tank pressure sensors have been problematic due to the presence of slime.



Photograph 1-12
Surge Tank

1-11 Forcemain

The forcemain, shown on Figure 1-2, is a 6-inch PVC pipe that extends 3,623 feet from the lift station dry well north along an easement, West Coastal Peak, Pacific Mist, and Ridge Park Road, and terminates at manhole MH134W528 with an invert elevation of 1086.64 feet amsl. Flow continues by gravity west along Ridge Park Road, then south on Newport Coast Drive, and east where it enters Newport Coast Lift Station, located on the east side of Newport Coast Drive just south of Ridge Park Road. Flow from Newport Coast Lift Station eventually reaches an Orange County Sanitation District trunk sewer on Pacific Coast Highway. Because a redundant forcemain was not constructed, and the force main is very long, Vactor trucks have to be used in case of a forcemain failure.

With the existing pump capacities of 260 gpm, the velocity in the 6-inch forcemain is approximately 3.0 feet per second (fps), which is within the recommended forcemain velocity range of 3 – 5 fps.

1-12 Main Pumps

Coastal Ridge Lift Station has two parallel pumping systems each with two pumps in series. The first pump in each system is a Cornell 4NHTA-F18DB pump with an 11.63-inch diameter impeller and the second one is a Cornell 4NHTA-F18DBLH pump withan 11.25-inch diameter impeller as seen on Photograph 1-13. According to the pump performance curve dated October 2002, the pumps are rated at 260 gpm and total dynamic head of 144 feet (each stage) at 1770 RPM with impeller diameters of 11.44 inches, which is the average of 11.25 and 11.63 inches. The adjusted head is 288 feet considering the pumps are in series. The pumps are driven by 60 HP motors. According to the SCADA data collected from February 1, 2015 through March 31, 2015, the lift station runs approximately 32.2 hours per week. The SCADA also indicates that the pumps are pumping at a range of 110 to 300 gpm with an average of 188 gpm.



Photograph 1-13
Main Pumps

In the past, ragging removal was performed at Pump 2 approximately 2 times per month, but is now only performed around 3 times per year. Pump 1 does not experience ragging.

1-13 Sump Pumps

Two (2) sump pumps are located along the south wall of the dry well. Sewage, groundwater, the meter vault, and site drainage is collected within the sump and pumped back into the wet well through two 1.5-inch diameter discharge pipes. A sub-drain with 4-inch collector pipes collect the groundwater around the foundation. However, the structure experienced groundwater seepage at higher levels. French drains were added to collect the groundwater seeping into the dry well, and convey it into the sump. The sump pumps are shown on Photograph 1-14.



Photograph 1-14
Sump Pumps

1-14 Gas Detection System

The existing gas detection system is over 14 years old.

1-15 Electrical and Controls

The Coastal Ridge Lift Station is served through a 277/480 volt 3-phase meter and a 400 amp main breaker. The pumps are driven by 60 HP constant speed motors operated by solid state soft starters and bypass contactors. The pump control panels are located to the north of the wet well and drywell, as shown on Photograph 1-15. Although the enclosures are rated NEMA 3R, they are not adequately protected from the elements. The cabinet shown on Photograph 1-17 overheats during summer and leaks during rain events. It is reported that in the summer the operators leave the cabinet doors open to prevent overheating of the electrical equipment.

The PLC monitor shown on Photograph 1-16 is too high and difficult to read due to reflection and glare. A shield was installed to increase legibility but has not been effective. The power monitor was observed to be inoperable during the field visit.



Photograph 1-15
Pump Control Panels



Photograph 1-16
PLC Monitor

The electrical and control equipment is aging and does not have sufficient ventilation and air conditioning.

There is a portable and a permanent standby generator onsite, both located southwest of the wet well and dry well (Photograph 1-18). The permanent standby generator has a sound attenuating enclosure and is currently connected to the lift station with an automatic transfer switch. During the field visit IRWD staff indicated that for the past two years the generator has not always started when it was called to start. The District is in the process of replacing the generator fuel tank, which will likely fix the issue due to the presence of condensation causing rust in the fuel tank, clogging the outlet pipe.

Pumps are controlled based on sewage level in the wet well as determined by a transducer system, and backed up by a redundant ultrasonic level sensor. The pumps start when the sewage level reaches 6.5 feet above the wet well floor, and



Photograph 1-17
Pump Control Panel

stop when it drops to 3.5 feet. There is a discrepancy between wet well levels recorded by the backup and primary transducers.

The PLC and SCADA do not currently provide all pertinent operational data and alarm information to the District.

1-16 Recommendations

The recommendations for Coastal Ridge Lift Station are summarized in Table 1-2



Photograph 1-18
Portable and Permanent Standby Generators

Table 1-2
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Dry well appears dimly lit	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Dry well area noise is loud to staff	
	Electrical enclosure is exposed to sun and rain	
	Bottom of the dry well access stairs are open	
	Suction piping does not have pipe supports	
	Pump air recirculation pipe is not operable	
	Dry well and wet well hatches are not traffic-rated	
	Power monitor is inoperable	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Permanent generator has failed to start	
	Pump 2 experiences ragging and has to be maintained three times per year	
	Some of the displays in the electrical enclosure are too high	
	Suction pipeing experiences vibration	
Redundancy	Lift station has single forcemain	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory agencies. Develop recommendations based on validation and verification efforts.
	Lift station is located near a receiving water body	Validate that existing conditions are consistent with IRWD operational requirements. Develop recommendations based on verification efforts.
Condition/ Age	Electrical control equipment and PLCs are deteoriating	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Gas detection and oxygen level monitor are deteriorated	
	Wet well lining is deteriorating	
	Surge tank experiences slime buildup	
	Pressure transmitter mounting panel is damaged	

Michelson Lift Station

Evaluation

1-1 Introduction

Michelson Lift Station is located at 3033 Michelson Drive, on the north side of Michelson Drive just east of Carlson Avenue in the City of Irvine. The lift station construction was completed in 2015 within a commercial area (Park Place) just north of Michelson Drive, about 700 feet east of Carlson Avenue. It serves a total tributary area of 157 acres, including the Park Place commercial area, high density residential areas, as well as high-rise residential and office complexes within Park Place.

The lift station is a wet well and dry well facility with three (3) pumps. Two (2) pumps are rated at 600 gpm capacity and 32.5 feet of total dynamic head (TDH) at a speed of 1200 rpm; and one (1) pump is rated at 1500 gpm capacity, 54 feet of TDH at a speed of 1760 rpm. The ground elevation at the lift station is 24.75 feet above mean sea level (amsl). Site access from Michelson Drive is shown on Photograph 1-1. The wet well access structures and carbon filter units are shown on Photograph 1-2.



Photograph 1-1
Michelson Lift Station Access North of Michelson



Photograph 1-2
Wet Well Access Hatch and Carbon Filters and Exhaust

The forcemain consists of 1,950 feet of 12-inch diameter polyethylene lined ductile iron pipe with bonded joints constructed in 1992. It extends south to Michelson Drive, and east on Michelson to Riparian View, where it terminates at manhole MH059N010.

1-2 Tributary Area

The Michelson Lift Station serves a net tributary area of 157 acres, shown on Figure 1-2. It includes high density residential and commercial areas, including Villa Siena Apartments, Park Place Apartments, portions of Toscana Apartments and Water Marke, as well as high-rise residential and office complexes within Park Place.

The breakdown of the lift station tributary area by land use categories is detailed in Table 1-1.

Table 1-1

Michelson Lift Station Tributary Area Land Uses

	LU Code	Land Use Description	Area (Acres)	No. of Dus	Water Use (GPM)
Residential	1182	High Density Irvine	36.7	1679	139.0
	1192	High Rise Density - Irvine Irvine	44.5	2511	
Commercial	1210	General Office	35.5	0	188.0
	1221	Community Commercial	20.8	0	
	1240	Institutional	0.8	0	
	1413	Freeways & Major Road	14.3	0	
	1820	Community Park	3.2	0	
	1880	Open Space (Rec)	0.5	0	
	4100	Water	0.4	0	
	Grand Total		**157**	**4,213**	**327.0**

1-3 Tributary Flows

The average water use for this tributary area was 327 gpm in February and March of 2015. The estimated average dry weather flow and peak dry weather flow into the lift station at this time is 219 gpm and 360 gpm, respectively. Due to the ongoing construction in this area during the data collection period and the construction of the new Michelson Lift Station, it is recommended that the diurnal flow variation into the lift station, as well as the average and peak dry weather flows be evaluated after construction is complete. This information should be used in verifying the adequacy of the pump capacities, operational settings, and for use in developing a site specific emergency overflow response plan.

1-4 Influent Sewers

A 24-inch pipe from the south conveys wastewater to a manhole just upstream of the wet well (MH059N052, invert elevation 4.52 feet amsl). It continues west in a 24-inch epoxy lined DI pipe, and enters the wet well at an invert elevation of 4.50 feet amsl. The inlet piping is shown on Figure 1-3.

Figure 1-1
Michelson Lift Station Aerial Image



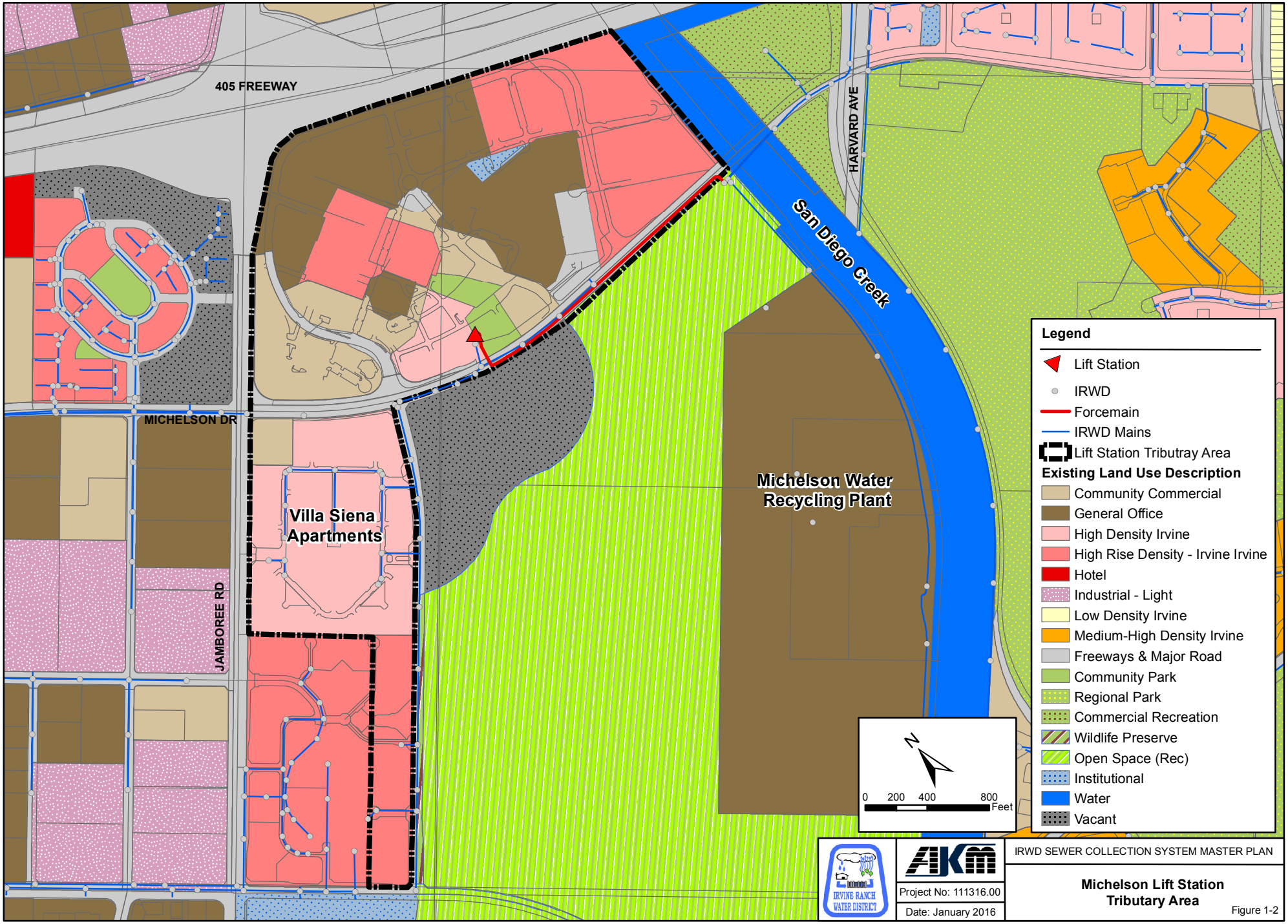
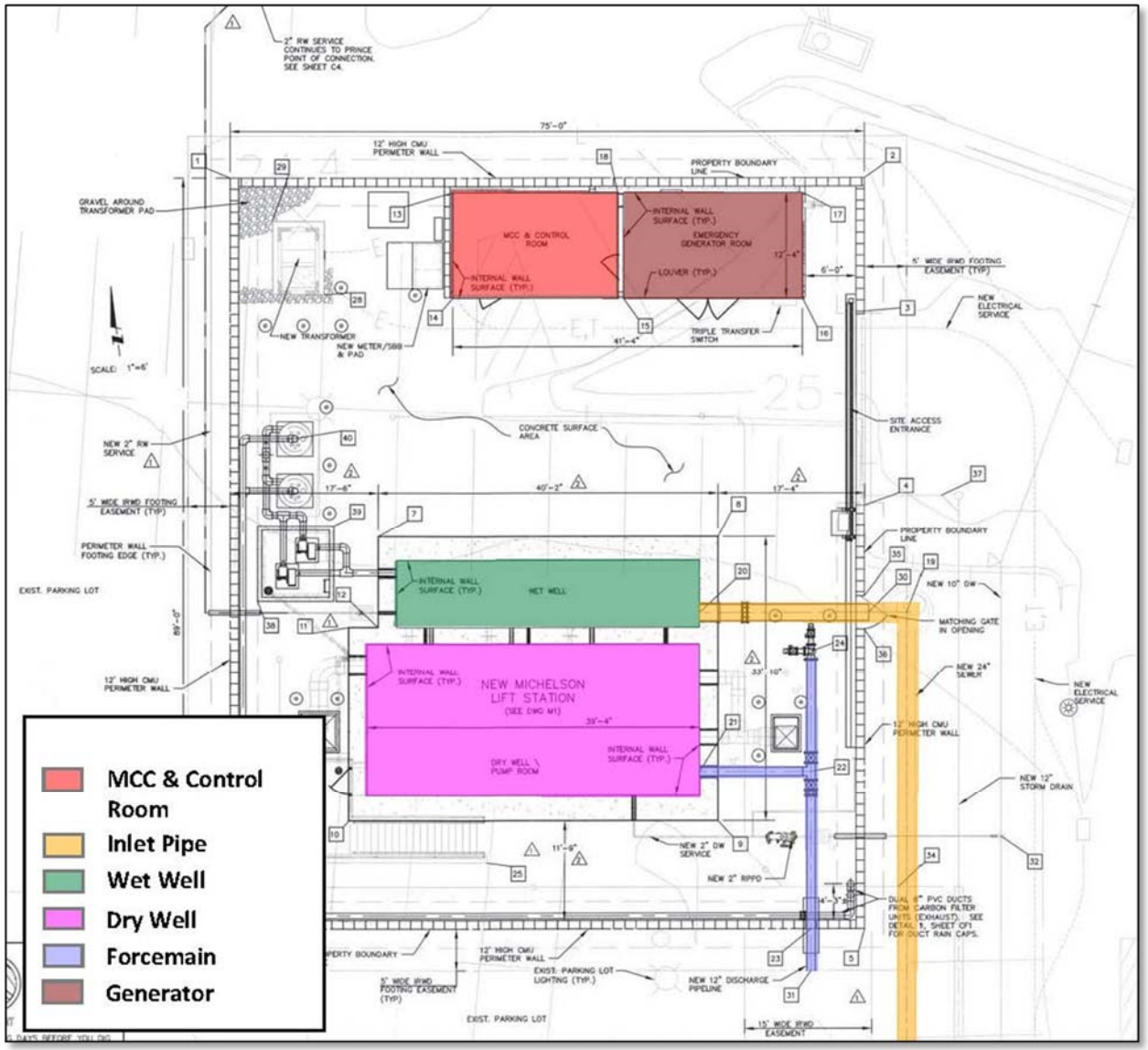

405 FREEWAY
HARVARD AVE
San Diego Creek
MICHELSON DR
JAMBOREE RD
Villa Siena Apartments
Michelson Water Recycling Plant
Legend
Lift Station
IRWD
Forcemain
IRWD Mains
Lift Station Tributray Area
Existing Land Use Description
Community Commercial
General Office
High Density Irvine
High Rise Density - Irvine Irvine
Hotel
Industrial - Light
Low Density Irvine
Medium-High Density Irvine
Freeways & Major Road
Community Park
Regional Park
Commercial Recreation
Wildlife Preserve
Open Space (Rec)
Institutional
Water
Vacant
N
0 200 400 800
Feet
IRVINE RANCH WATER DISTRICT
AKM
IRWD SEWER COLLECTION SYSTEM MASTER PLAN
Project No: 111316.00
Date: January 2016
Michelson Lift Station Tributary Area
Figure 1-2

Figure 1-3
Michelson Lift Station Site and Piping Plan



1-5 Wet Well

The wet well is a rectangular reinforced concrete structure, 35'-10" long and 8 feet wide. The wet well is 26'-2" high (the lowest invert elevation is -1.42 feet amsl, and the rim elevation of the access openings is 24.75 feet amsl). A 3'-6" wide pumping trough is located along the south wall of the wet well (Photographs 1-3, 1-4, and 1-5). The wet well bottom descends to the trough from the invert elevation of the influent gravity sewer (4.50 ft amsl) to elevation -1.19 feet amsl over a distance of around 10 feet, and then at a slope of 1% to the west end of the structure. A concrete fillet used to direct debris and grit toward the pump suction bells is placed along the north wall which slopes from elevation 9.31 feet amsl to 1.50 feet over a distance of 4'-6". .

Square hatches (3' x 3') are located over each suction pipe and a 4' x 4' square hatch is present over the inlet pipe entry/slide gate. Record drawings show the wet well has been coated with Sancon epoxy coating.

A well washer is located on the west side of the wet well (Photograph 1-5).

An ultrasound level transducer is located in the wet well (Photograph 1-3) for level control management, in addition to a pressure transducer. There is also a high wet well level float switch which can operate the facility if both level sensors fail.

The new lift station has two systems for odor control. One is the BioMagic system, with storage tanks and pumping equipment located under the access stairs in the dry well. BioMagic is introduced into the wet well between duty Pumps 1 and 2. The other is an activated carbon filter system with two (2) exhaust fans (Photograph 1-6) and ECS filter units (Photograph 1-2) located to the northwest of the site. Filtered air is discharged at the southeast corner of the site through two 8-inch diameter PVC pipes.



Photograph 1-3
Wet Well Access Opening (center)



Photograph 1-4
Wet Well Access Opening (west)



Photograph 1-5
Wet Well Access Opening (west)

Figure 1-4
Wet Well and Dry Well Plan View

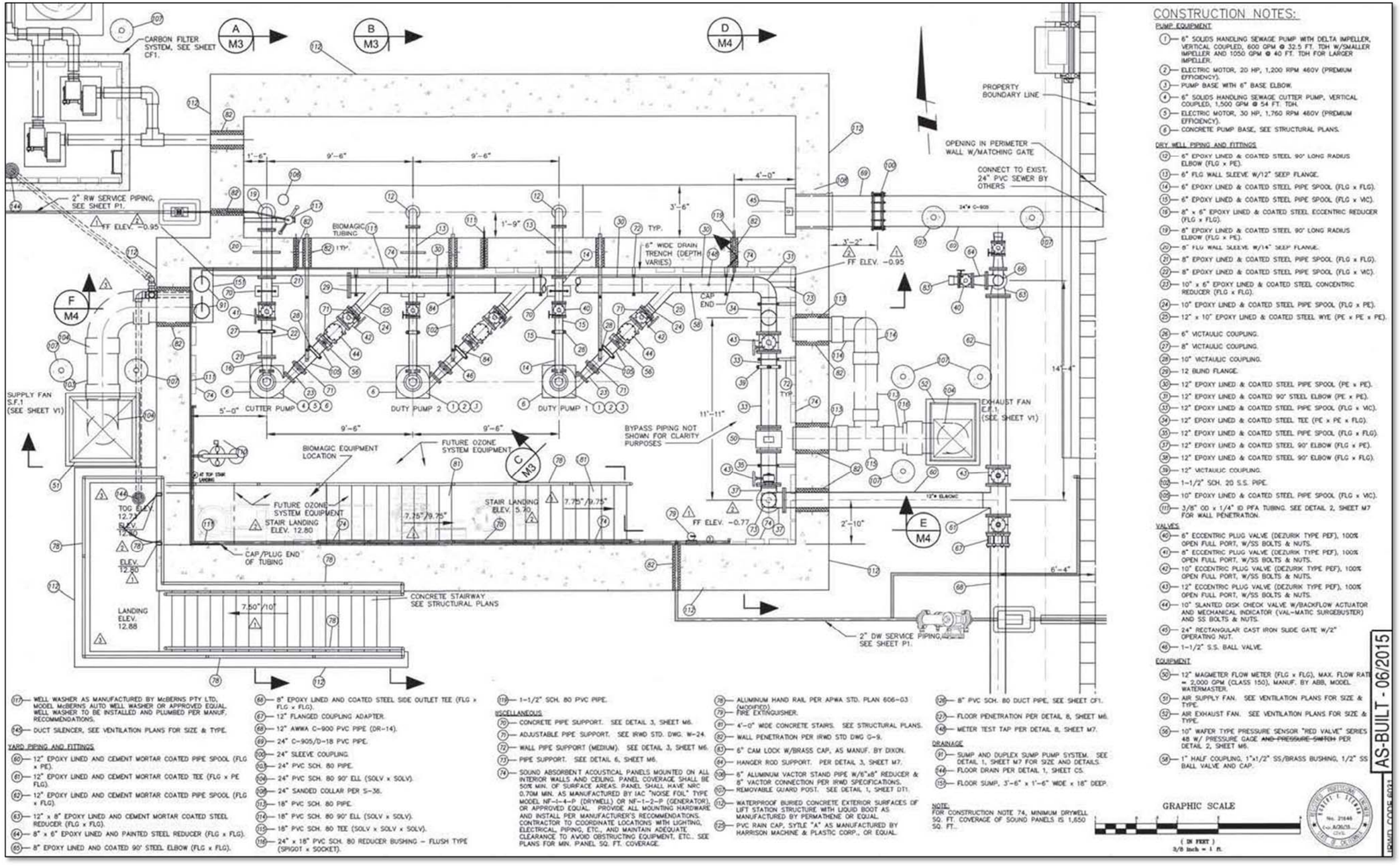
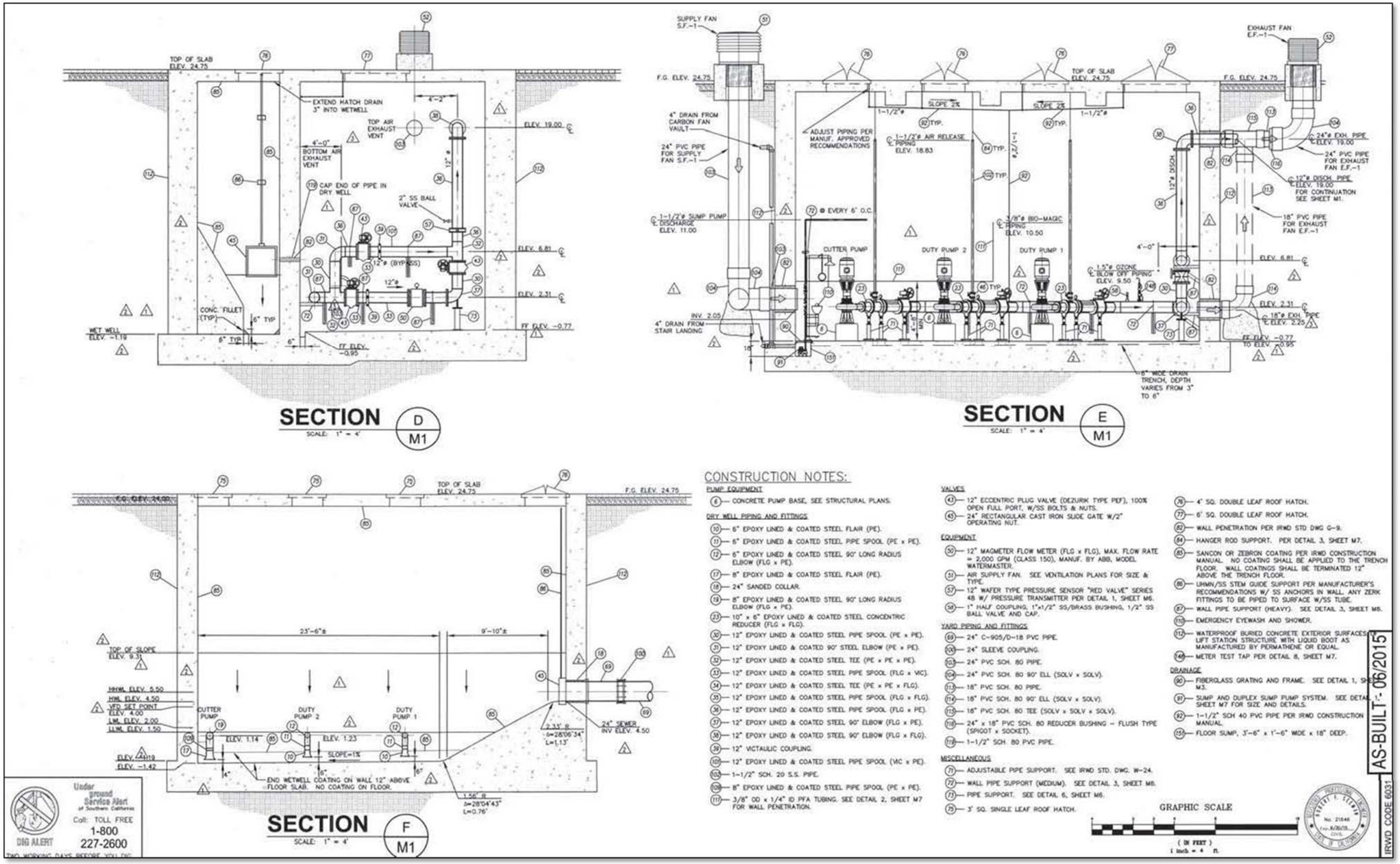


Figure 1-5
Wet Well and Dry Well Profile View



1-6 Dry Well



Photograph 1-6
Wet Well Exhaust Fans

The pumps and motors are located below ground within the dry well, in an 18-foot wide, 39'-4" long, and 25'-6" high reinforced concrete structure. It has three interior beams (2 feet wide and 1.5 feet high), which frame the three (3) 4-foot x 4-foot pump access and one 6-foot by 6-foot dry well access openings. It has an interior volume of 18,054 cubic feet. The dry well is located south of the wet well.

Access to the dry well is through a concrete stairway along the south side, which descends from ground level to a landing on the southwest corner of the structure (elevation 12.88 feet amsl), and a door into the dry well. The landing extends east into the dry well, and descends further east with concrete stairs and another landing reaching the dry well floor near the south east corner.

The dry well is considered a Class 1 Division 2 hazardous location. NFPA 820 requires a minimum of 6 air changes per hour based on classifications. The necessary air changes should also consider the actual heat generated in the dry well, including the pumps, motors, and electrical gear. A supply fan located at ground level to the west of the dry well and a 24-inch Schedule 80 PVC pipe provides air into the dry well near the northwest corner of the structure. Two 18-inch diameter Schedule 80 PVC exhaust ducts (one low on the north east side and one high on the southeast side) confluence at an 18-inch tee, increase to 24-inch diameter and connect to the exhaust fan located near the southeast corner of the site. The exhaust fan is rated at 4,261 cubic feet per minute (CFM), which provides 14 air changes per hour.

The lighting within the dry well is sufficient.

1-7 Suction Piping

The suction piping is epoxy lined and coated steel pipe (8-inch in diameter for the cutter pump, and 6-inch for the duty pumps). They start with a flared bell, 4 inches above the floor for the cutter pump and 6-inches above the floor for the duty pumps, and continue with long radius 90º bends, wall spools, flanged spools, eccentric plug isolation valves, flange x grooved spools, Victaulic couplings, wafer pressure sensors and a 90-degree bend into the pump suction (Photograph 1-7). The suction piping enters the dry well at a centerline elevation of 1.23 feet amsl, which is 2.18 feet above the finished floor elevation (-0.93 feet amsl). The pump centerline is at elevation 1.23 feet amsl.



Photograph 1-7
Suction Piping

1-8 Discharge Piping



Photograph 1-8
Discharge Piping Between Pumps and Discharge Header

Discharge piping for each pump consists of a 10" x 6" concentric reducer, flanged spool, wafer pressure sensor, Val-Matic Surgebuster check valve with a backflow actuator, eccentric plug isolation valve, connecting to the branch side of a tee on the 12-inch discharge header at a centerline elevation of 4.31 feet amsl (Photograph 1-8). The 12-inch steel pipe extends northeast to the corner of the dry well, and turns south through a 90-degree elbow. Along the east wall is a 12-inch steel tee to bypass the flowmeter, a plug valve, flange x groove spools with a Victaulic coupling, a magnetic flow meter, a 12-inch flanged spool plug valve, a 90º elbow up, a plug valve, 12-inch tee (where the bypass connects to the discharge pipe), 12-inch spools with a wafer pressure sensor/transmitter, and another 90º elbow exiting the dry well through the east wall at a centerline elevation of 19.00 amsl (Photograph 1-9).



Photograph 1-9
Discharge Piping Along the East Wall

A bypass pumping/pump-out facility with two (2) 6-inch Camlock fittings (Photograph 1-10) connects to the discharge pipe at a tee east of the dry well.

1-9 Forcemain

The 12-inch polyethylene lined ductile iron forcemain was constructed with the previous Michelson Lift Station in 1992. It extends south to Michelson Drive and east to Riparian View where it terminates at a 60-inch diameter drop manhole (MH059N010) with an invert elevation 29.00 feet amsl. An 18-inch diameter VCP gravity sewer (22.24 LF) with upstream and downstream elevations of 16.41 feet amsl and 16.12 feet amsl, respectively, conveys the flow to 51-inch diameter RCP sewer at manhole MH059N009 for further conveyance to Michelson Water Recycling Plant.

With the new pump capacities of 600 gpm, the velocity in the 12-inch forcemain is approximately 1.7 feet per second (fps), with one pump operating, which is below the minimum recommended forcemain velocity of 3 fps. With the cutter pump capacity of 1500 gpm, the velocity in the forcemain is about 4.3 fps, which is within the recommended range (3 to 5 fps).

1-10 Main Pumps

Michelson Lift Station has two duty pumps and one cutter pump. Record plans indicate that the duty pumps are rated at 600 gpm capacity, 32.5 feet of total dynamic head operating at 1200 rpm. They are driven by 20 HP motors and variable frequency drives. The cutter pump is sized at 1,500 gpm capacity, 54 feet of total dynamic head operating at 1760 rpm. This pump is driven by a 30 HP motor and VFD.

The estimated future peak dry weather and wet weather flows are 1,896 gpm and 2,655 gpm, respectively. Lift Station firm capacity is 1200 gpm, which is less than the calculated future peak flows.



Photograph 1-10
Bypass Pumping/Pumpout Connection

1-11 Sump Pumps

A 6-inch wide drainage trench extends along the north wall of the dry well, terminating at a 3'-6" long, 1'-6" wide and 18-inch deep sump at the northwest corner of the dry well. Two (2) sump pumps (Photograph 1-11) convey the liquids collected within the sump back into the wet well through a common 1-1/2" discharge pipe.

1-12 Gas Detection System

A ventilation/gas monitoring alarm control system is installed in the dry well. The panel is located on the southwest end, near the stairs.

1-13 Electrical and Controls

Electrical service to the lift station is provided by the Southern California Edison Company through a transformer located at the northwest corner of the site. The switchboard is located in an outside cabinet adjacent to the west wall of the motor control center (MCC) and control room. The 16'-6" x 12'-4" control room includes the automatic transfer switch, VFD and bypass starter cabinets, and control panels. The 125 KW Kohler model 125REOZJG standby diesel generator (Photograph 1-12) is located in the 24'-2" x 12'-4" generator room, east of the MCC and Control Room.



Photograph 1-11
Sump Pumps



Photograph 1-12
Standby Generator

Table 1-2
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Traffic control required for crane access	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Valve vault lighting is insufficient for night work	
	Electrical enclosure is exposed to sun and rain	
	Pump start and stop levels aren't optimal	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Lift station has a check valve, but no P-trap priming system	
	Lift station has single forcemain	
	BioMagic tanks and eye wash are exposed to sun and rain	
Redundancy	Level measurement is provided by single bubbler	Evaluate as part of reliability and redundancy analysis of critical facilities.
	The flow meter has no spare in the warehouse	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory agencies. Develop recommendations based on validation and verification efforts.
	There is not a site-specific Standard Operating Procedure in case of sewer overflow	
	Forcemain experiences high velocity	Validate that existing conditions are consistent with IRWD operational requirements. Develop recommendations based on verification efforts.
	Meter vault has no sump pump and drain	

Harvard Avenue Trunk Sewer (HATS) Lift Station

Evaluation

1-1 Introduction

The Harvard Avenue Trunk Sewer (HATS) diversion to Michelson Water Reclamation Plant is a flow diversion and a sewer lift station facility that has an electrical meter address of 17675.25 Harvard Avenue, Irvine, CA. The facility stretches along Harvard Avenue from its intersection with Main Street to just north of the 405 Freeway, as shown on Figure1-1.

The HATS Lift Station is located in a green belt area east of Harvard Avenue, approximately 360 feet south of Coronado. It is accessible from a short driveway off of Harvard Avenue just north of the lift station facilities, as shown on Photograph 1-1. It serves a total tributary area of 7,992 acres.



Photograph 1-1
HATS Lift Station Looking North

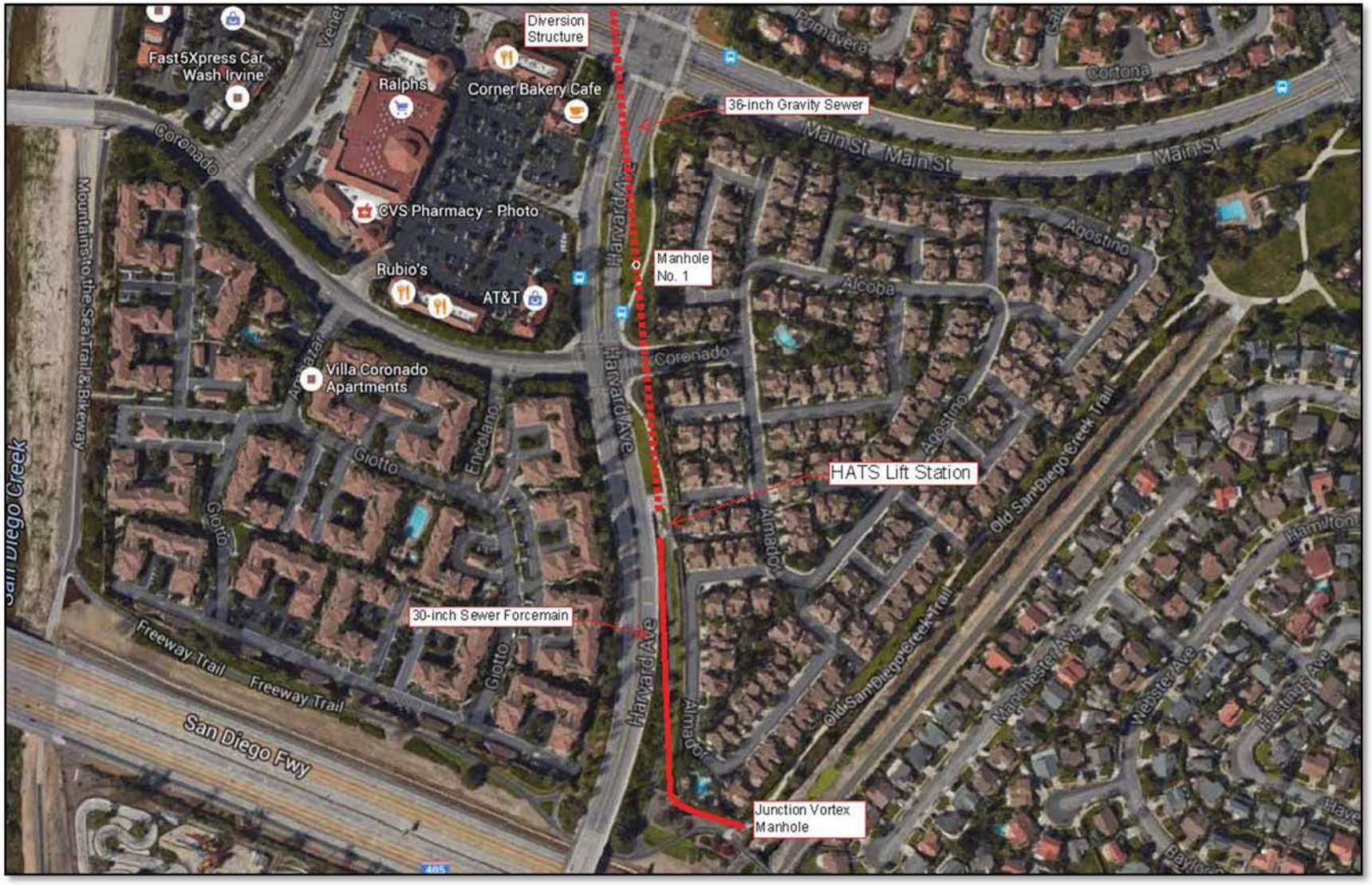
The Irvine Ranch Water District's Harvard Area Trunk Sewer was originally designed to drain to Orange County Sanitation District's (OCSD) Plant No. 1 in Fountain Valley due to lack of adequate capacity at Michelson Water Recycling Plant (MWRP) at that time. The District subsequently implemented significant capacity expansion projects, which provided capacity for the wastewater from the HATS tributary area. This allowed the District the ability to divert the HATS flows to MWRP, avoid treatment costs at OCSD facilities, and increase recycled water supply capacity within its service area significantly. The District constructed the HATS Diversion Facility in 2008. It includes a diversion structure just northwest of the intersection of Harvard Avenue and Main Street; 1100 feet of 36-inch diameter sewer between the diversion structure and HATS Lift Station; odor control and chemical injection facilities, and a 30-inch PVC forcemain which extends 745 feet to a vortex manhole just north of the 405 Freeway, discharging into the San Diego Creek Interceptor.

The HATS Lift Station is a duplex submersible facility. The ground elevation at the lift station is 43.60 feet above mean sea level (amsl). The lift station was constructed with a separate below grade valve vault, a metering vault, an odor control vault, and a chemical injection vault. The pumps are rated at 5,730 GPM, and 32 feet of total dynamic head (TDH) at a speed of 700 RPM. Each pump has 73.76 HP motor.

The wet well is a rectangular, below grade reinforced concrete structure with an interior polyurethane lining and access hatches over each pump. The forcemain isolation valves and flow meter are each located in their respective below grade structures. The valve vault is located less than 10 feet south of the wet well and houses each pump's 18-inch discharge piping, 18-inch swing check valves, and

Figure 1-1

Site Location



18-inch plug valves. The vault is equipped with a double leaf hatch cover that provides full access to the equipment. The flow meter vault is located approximately 23.5 feet south of the valve vault and houses the 20-inch forcemain magnetic flow meter. The meter vault is equipped with a double leaf hatch cover that provides full access to the flow meter. The odor control system vault, located east of and adjacent to the station's valve and meter vaults, is designed to pull odorous emissions from the facility's gravity inflow piping and wet well and run it through a granular activated carbon (GAC) scrubber system. The odor control vault is equipped with two (2) access hatches, one for worker access and the other larger hatch for equipment maintenance. The chemical injection system vault is located approximately 40 feet north of the wet well and houses a 1,400 gallon fiberglass reinforced plastic (FRP) chemical storage tank, two (2) peristaltic chemical feed pumps, and a ventilation system.

The diversion structure at the HATS facility (manhole DS060W142) diverts flows to the HATS Lift Station. It is located north of the lift station, in the far right westbound lane of Main Street, just west of Harvard Avenue. It is a below grade reinforced concrete structure that is divided by an overflow weir gate and upstream and downstream chambers. It is designed to stop sewage from flowing to Orange County Sanitation (OCSD) and divert flows to HATS Lift Station through the 36-inch Poly-Crete pipe (PCP) gravity inflow line.

The 30-inch diameter AWWA C-905 PVC forcemain extends approximately 745 feet south and east to a vortex manhole (MH060W143) at an invert elevation of 40.25 feet amsl, located in a park area off the Old San Diego Creek Trail, behind the property at 210 Almador, Irvine CA. The vortex manhole is designed to minimize cascading of the sewer flow, thereby reducing odors. The junction structure (MH060S201) is the lift station's terminus manhole where the lifted flow is discharged to the San Diego Creek Interceptor (SDCI).

HATS site facilities are shown on Figure 1-3.

1-2 Tributary Area

The HATS Lift Station serves a tributary area of 7,992 acres, shown on Figure 1-2. The breakdown of the lift station tributary area by land use category is detailed in Table 1-1. Altering flow diversions throughout the collection system can increase the tributary area of HATS lift station.

Table 1-1

HATS Lift Station Tributary Area Land Uses

	LU Code	Land Use Description	Area (Acres)	No. of Dus	Water Use (gpm)
Residential	1132	Low Density Irvine	39	141	3,417
	1134	Low Density PC Tustin	165	98	
	1162	Medium Density Irvine	1,401	8,448	
	1164	Medium Density PC Tustin	1,046	8,103	
	1172	Medium-High Density Irvine	529	6,906	
	1182	High Density Irvine	188	2,480	
	1184	High Density PC Tustin	33	446	
Non-Residential	1210	General Office	506		544
	1221	Community Commercial	353		
	1222	Regional Commercial	100		
	1240	Institutional	101		
	1260	School	168		
	1273	Military Air Field	0		
	1310	Industrial - Light	12		
	1413	Freeways & Major Road	724		
	1820	Community Park	267		
	1830	Regional Park	220		
	1850	Wildlife Preserve	190		
	1880	Open Space (Rec)	450		
	1900	Vacant	284		
	2110	Low-Irrigated AG Untreated	100		
	2210	High-Irrigated AG Untreated	596		
	4100	Water	160		
NA	CAL5 Tributary Area		985	NA	NA
NA	Unincorporated Orange County		360	NA	NA
	Grand Total		8,976.9	26,621.1	3,961.1

* This tributary water meter data does not include the selenium contaminated groundwater that is pumped into the sewer system

Unincorporated Orange County
261 FREEWAY
PORTOLA PKWY
Tustin Ranch Golf Club
IRVINE BLVD
The Market Place
I-5 FREEWAY
JAMBOREE ROAD
CULVER DR
JEFFREY ROAD
CAL5 Entrance
The District
Woodbridge
HARVARD AVE
DS060W142
MH060W141
MH060W143
MH060S201
405 FREEWAY

Legend

- Lift Station
- Sewer Manhole
- FM
- Lift Station Tributary Area
- CAL5
- IRWD Mains

Existing Land Use Description

- High Density NPB
- Low Density Irvine
- Medium Density NPB
- Medium-High Density Irvine
- Freeways & Major Road
- Community Park
- Regional Park
- Wildlife Preserve
- Open Space (Rec)
- Fuel Modification Zone
- School
- UCI
- Institutional
- Vacant

N

0 650 1,300 2,600 Feet

IRVINE RANCH WATER DISTRICT

AKM

IRWD SEWER COLLECTION SYSTEM MASTER PLAN

Project No: 111316.00

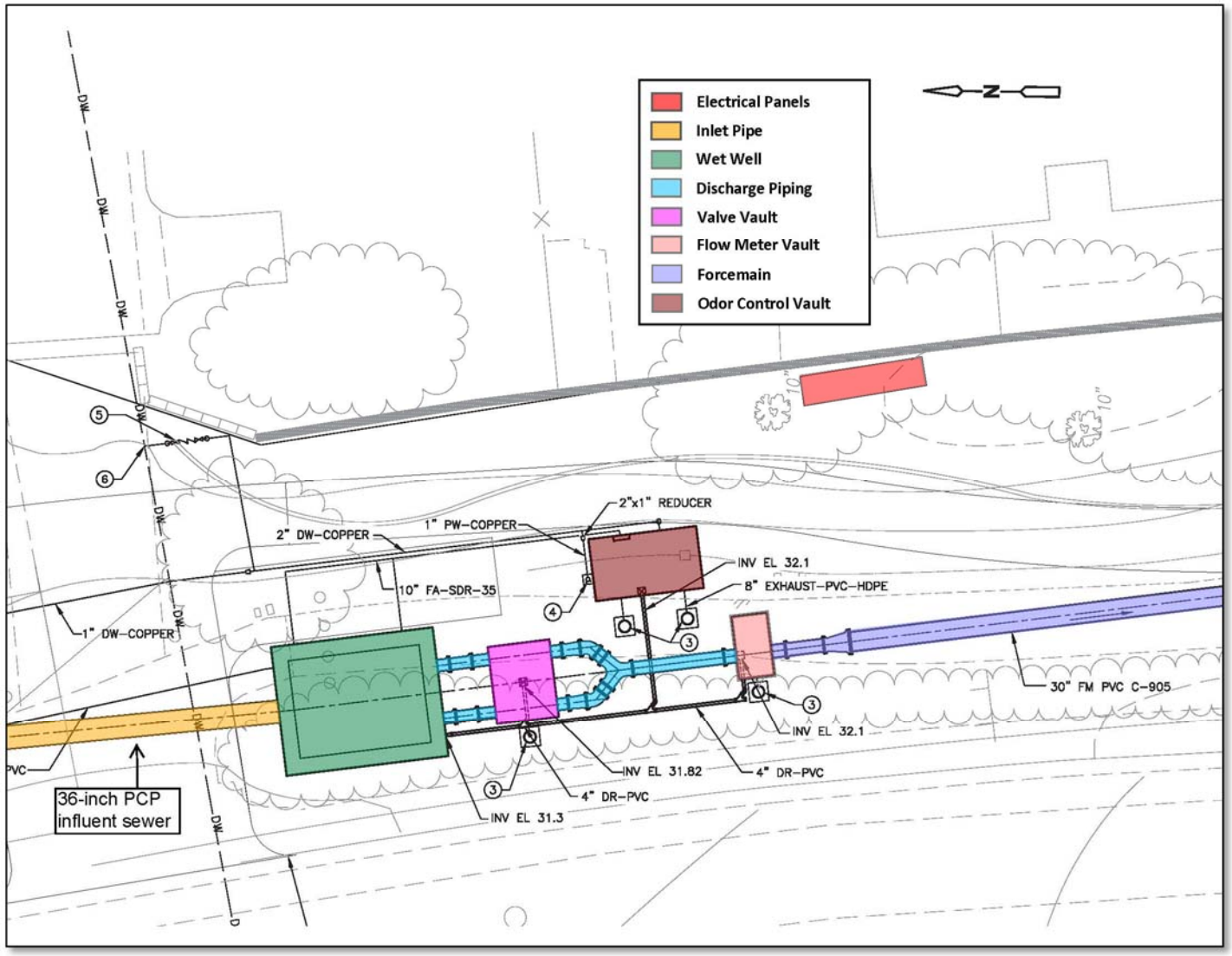
Date: January 2016

Harvard Lift Station Tributary Area

Figure 1-2

Figure 1-3

HATS Lift Station Site and Piping Plan



1-3 Tributary Flows

A reliable pump operating band volume could not be calculated because the wet well storage backs into approximately 603 feet of upstream sewer pipes and manholes prior to a pump start. For this reason, and due to a large number of "null" values in SCADA data, SCADA records of pump start and stop times were not used to determine an estimated influent and effluent flow.

Flow monitoring was used to estimate an average inflow of 6.12 mgd into the lift station.

1-4 Influent Sewer

The wastewater flow tributary to HATS is diverted at the Diversion Structure (DS060W142) to a 36-inch PCP gravity sewer, which extends 1100 feet south to HATS Lift Station, entering the wet well at an invert elevation of 17.44 feet amsl, as shown on Figure 1-5. One (1) 72-inch diameter manhole (MH060W141) is located about 565 feet south of the diversion structure on the easterly greenbelt along Harvard Avenue north of Coronado. PCP is a composite material consisting of polyester resin, quartz sand, silicate aggregate, and quartz filler. It is known as a very smooth and corrosion resistant pipe with 100 year service life. Its internal diameter is 36.7 inches.

1-5 Wet Well

The wet is a 17 feet long, 12'-9" wide, and 37'-9" deep reinforced concrete structure as shown on Figure 1-4 and Figure 1-5. Access is provided by a 30-inch square single leaf aluminum hatch at the northeast corner, and two (2) 6-foot by 4.5-foot double leaf aluminum hatches on the south side, above the pumps. A lean concrete fillet starts at the 36-inch PCP inflow pipe invert (17.44 ft amsl) along the north wall, extends 8.5 feet south sloping down to elevation 10.80 feet amsl, and terminates with a vertical face to the invert of the structure (elevation 5.84 feet amsl). Lean concrete fillets (1'- 2-1/2" wide) are located along the east and west walls below elevation 11.76. A 3'-4" wide center fillet below elevation 10.8 feet amsl is also present in the wet well, which, along with 3'-6" wide reinforced concrete pump base elbow foundations, create 3'-6" square pumping pits for the two pumps.

The wet well interior concrete walls above the minimum pumping level of 15.8 feet amsl are noted as having a polyurethane lining (Photograph 1-2). It is reported that the lining is failing in some areas.

The wet well hatch cover is at grade level, and when open, requires special equipment (not stored onsite) to provide proper fall protection as described in OSHA Standards 1926.502 Fall Protection.



Photograph 1-2
Wet Well and Discharge Piping

Figure 1-4

HATS Lift Station Site and Piping Plan

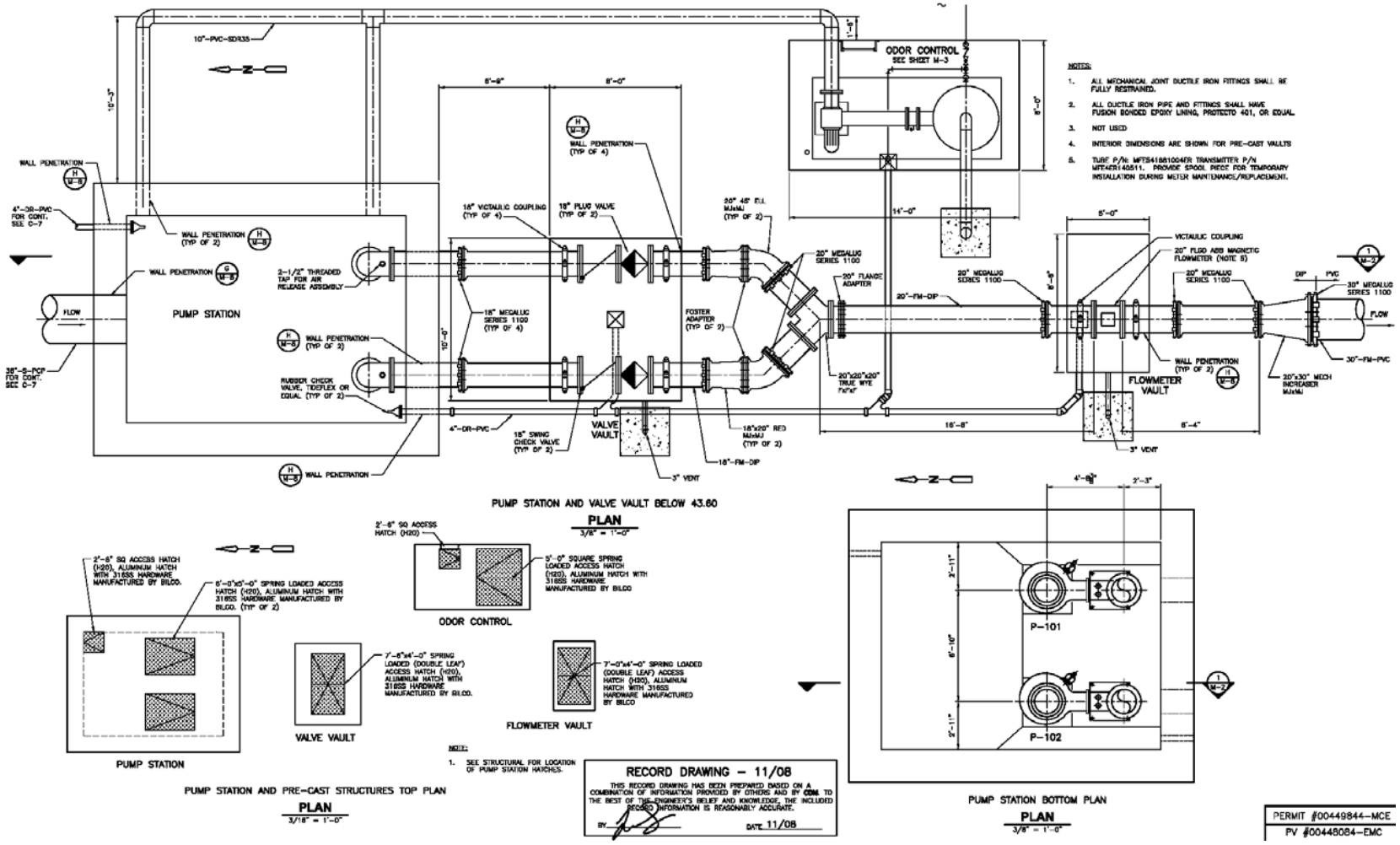
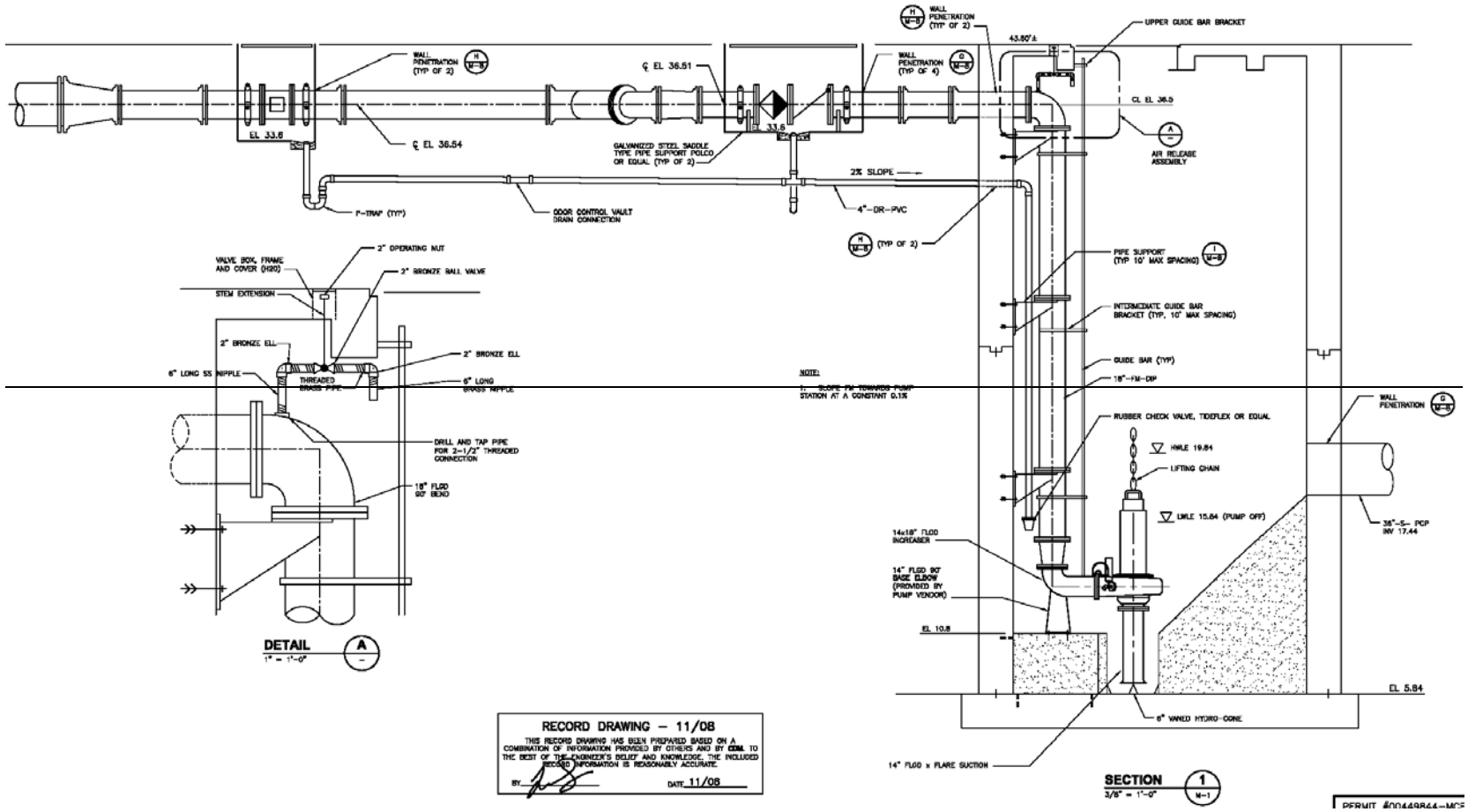


Figure 1-5

HATS Lift Station Site and Piping Profile



The wastewater level in the wet well is measured with an ultrasonic level sensor. There are two float switches in the wet well. One float switch starts both pumps at the high high level, and one stops the pumps at the low low level.

The lead pump starts when the wastewater level is 13 feet (18.84 feet amsl) above the invert elevation of the wet well (5.84 feet amsl), and stops when the wastewater level is 5 feet (10.84 feet amsl) above the invert according to ultrasonic sensor recorded levels and setpoints shown in SCADA data.

Considering the inlet pipe enters the wet well at invert elevation of 17.44 feet amsl and the pump start level is 18.84 feet amsl, wet well storage backs up into approximately 603 feet of influent sewers and manholes.

The District staff reported that debris hangs up on the motor cables and pull them down to the pumping pits. The cables have been sucked into the pump volute, which not only disables the pumps, but is a dangerous condition.

1-6 Suction Piping

Each pump has a 14-inch diameter tail pipe that is bolted to the 14-inch diameter pump intake. The suction piping arrangement and the wet well pumping pit design increases the likelihood of large debris being sucked into the pump.

1-7 Discharge Piping

The 14-inch DI discharge pipe exits each pump to the south and extends upward through a 90° bend, 14-inch by 18-inch flanged reducer, and continues about 23 feet upward in the wet well to a 90° bend with a 2.5-inch threaded tap for air release. The 18-inch diameter DI pipes exit the wet well at a centerline elevation of 36.5 feet amsl. The 18-inch DI discharge piping continues south, and penetrates the valve vault wall. Between the valve vault and the meter vault, the discharge lines are increased to 20-inch DIP at two (2) 18" x 20" reducers, and confluence into one 20-inch DIP true wye. The 20-inch discharge pipe continues approximately 15 feet south and enters the flow meter vault. Beyond the flow meter vault a 20-inch by 30-inch mechanical joint-restrained reducer transitions the discharge pipe from 20-inch DIP to the 30-inch AWWA C-905 PVC forcemain. All buried joints are restrained mechanical joints.



Photograph 1-3
Valve Vault

1-8 Valve Vault

The valve vault, shown on Photograph 1-3, Figure 1-4, and Figure 1-5, is a rectangular, below ground 8-foot long by 10-foot wide by 10-foot deep reinforced concrete structure. From north to south, the structure houses each pump's 18-inch discharge piping, a Victaulic coupling, 18-inch lever and weight swing check valve, 18-inch eccentric plug valve, and another Victaulic coupling. The vault also contains a

drain and a 3-inch vent. The vault lid is a double leaf aluminum hatch that allows for complete access to equipment in the valve vault. There is no ladder for safe access to the bottom.

Plug valve manufacturers recommend installing them in a horizontal position when being used to convey materials with suspended solids such as raw sewage. When installed in the horizontal position, the plug rotates upward as it opens. One of the valves in the valve vault appear to be installed contradictory to this. Either the plug is on the bottom when in the open position, increasing the possibilities of a blockage, or the plug is backwards in the closed position, which could prevent the valve from being drip tight. Due to the valve vault dimensions, correctly installing both plug valves is not possible.

Landscape irrigation sprinkler water is reported to enter the access hatches of the valve vault, as well as all the other access hatches at the site.



Photograph 1-4
Flow Meter Vault

1-9 Flow Meter Vault

The flow meter vault, shown on Photograph 1-4, is a rectangular, below ground 5-foot long by 8.5-foot wide by 10-foot deep reinforced concrete structure with a double leaf aluminum access hatch for full access to the equipment, as shown on Figure 1-4 and Figure 1-5. The structure houses a 20-inch electromagnetic flow meter, which has a 304 SS tube and a rubber liner. A discharge pressure transmitter is also located in the meter vault. There is no ladder in the vault.

1-10 Odor Control Vault

The odor control vault is a rectangular, below ground 14-foot long by 8-foot wide by 10-foot deep reinforced concrete structure with two (2) separate access hatches, as shown on Photograph 1-5 and Figure 1-4. One is a staff access hatch with a ladder, and the other is for equipment access. The vault houses the odor control equipment, which consist of foul air ducts, a blower, a foul air GAC scrubber, vault gas detector and vault drain. The 600 CFM FRP blower and 10-inch SDR 35 ducting collect foul from the wet well, the influent gravity line, and the 72-inch upstream manhole (MH060W141). The blower forces the collected air through the scrubber that is filled with GAC to remove hydrogen sulfide (H_2S). Scrubbed air is discharged to the atmosphere outside the vault through a secured exhaust cover that



Photograph 1-5
Odor Control Vault

also houses a 0-50 ppm H_2S monitor. OSHA Safety and Health Topics describe H_2S levels of 0.01-1.5 ppm as the H_2S odor threshold, and levels of 3 – 5 ppm to be offensive..

1-11 Chemical Injection Vault

The chemical injection vault is a rectangular, below ground 14-foot long by 8-foot wide by 11.5-foot deep reinforced concrete structure. The top of the structure is 2 feet below grade, with a 36-inch square access hatch and ladder provided for routine access as shown on Photograph 1-6. The structure is also designed with subsurface removable concrete roof beams for large equipment replacement. The vault houses chemical injection equipment, consisting of a 1,400 gallon FRP chemical storage tank that is compatible with both BioMagic and Sodium Hypochlorite. Two (2) peristaltic chemical feed pumps that are capable of feeding 25 gallons of chemical per 1.5 MGD of wastewater flow, a vault exhaust fan, vault sump, and an emergency eye wash station are located in the vault. Redundant chemical feed lines are constructed in a 6-inch double-contained pipe and are routed from the chemical injection vault to the upstream 72-inch manhole (MH060W141) that is located approximately 550 feet north of the lift station.



Photograph 1-6
Chemical Injection Vault

A portion of the chemical injection vault is not visible from the top. Staff has indicated that the vault floor is slippery.

1-12 Forcemain

Downstream of the meter vault, the 30-inch diameter AWWA C-905 PVC forcemain pipe continues for approximately 765 LF to a vortex structure (MH060W143), which is adjacent to the terminus manhole on San Diego Creek Interceptor (SDCI). The as-built drawings show the wet well low liquid level elevation at 15.8 feet amsl, and the centerline of the 30-inch forcemain piping at the vortex structure (MH060W143) is at elevation 41.5 feet amsl.

With the reported pump capacity of 5,730 gpm, velocities in the 18-inch and 30-inch discharge piping range from 7.2 feet per second (fps) to 2.6 fps, respectively.

1-13 Main Pumps

The facility is a duplex slide rail mounted submersible sewage pump station. Each pump has a dual vane non-clog type impeller made from Class 40 B cast iron. The impeller is set in a Class 40 B cast iron volute, and is capable of passing a 5.9-inch sphere with a flow capacity of 5,730 gpm at 32 feet of TDH. The pump suction and discharge sizes are 14-inch. The pump to motor shaft is a one piece 420 Stainless Steel (SS) shaft with a minimum diameter of 3.126 inches at the lowest bearing. The pump motors are three phase, 73.6 Horsepower (HP) 460 Volt AC, with a maximum speed of 890 RPM. The motor starter is shown as a 100 HP Softstart. According to SCADA data collected between February 1, 2015 and March 29, 2015, the lift station runs approximately 129.3 hours per week (6.35 MGD).

The pump and motor assemblies can be removed from the wet well via the slide rail system and the wet well hatch openings. The slide rail system includes the 14-inch cast iron discharge base elbow, cast iron pump coupling, dual 2-inch diameter 304 stainless steel slide rails, stainless steel intermittent brackets, ductile iron upper slide rail bracket and a stainless steel lifting cable. The base elbows are mounted to their reinforced concrete stands and the pump coupling is mounted to the pump discharge flange. When the pump assembly is lowered into place, the coupling and base elbow are designed to provide a bolt free, leak proof connection while allowing for "slide" removal and installation of the pump and motor assembly. The pump discharge piping from above the base elbow through the valve vault is 18-inch DIP.

IRWD staff indicated that the pumps have been damaged often due to clogging and debris entering the pump volute.

Pumps are controlled based on sewage level in the wet well as determined by the ultrasonic level sensing system.

1-14 Electrical and Controls

The HATS Lift Station electrical and control panels/enclosures are located southeast of the lift station vaults, adjacent to the Westpark Los Palmas community perimeter wall. The 60-inch high stainless steel NEMA 3R enclosures are constructed on a 6-inch thick by 16-foot long by 3.75-foot wide concrete pad. The enclosures include locked SCE metering section, distribution section, pump and odor control section, and instrumentation section. The overall length of the enclosure sections is 15 feet. The Station's communication antenna is located in the back, southeast corner of the electrical enclosures and stands approximately 12 feet above finish grade.

The main electrical breaker is 400 Amp 3 phase, and is located in the distribution section along with the station's main breakers for Pump No 1 and 2, the odor control fan, the 7,500 Amp stepdown transformer and the 100 Amp 120/240 load center. This section also has a secured dead front for the connection of emergency/alternate electrical power. Although the HATS station is designed with an overflow weir in the Diversion Structure that would allow HATS wastewater flows to be diverted to Orange County Sanitation District, in an electrical power outage event, the District may be required to provide the sewage lift station with alternative electrical power. The main breaker and alternative power connection does not meet the NEC requirements.



Photograph 1-7
Breaker Panel

The station's main breaker is not an approved backup/alternate power transfer type breaker and is subject to an inadvertent interconnection of the normal and alternative power sources. Per the NEC, "Transfer equipment shall be designed and installed to prevent inadvertent interconnections of normal and alternate sources of supply." Additionally, the current system requires generator wires to be bolted to a terminal block for proper connection. The typical wire sizes needed for a

facility of this size are awkward at best and the current design would require the panel to remain open while running on alternate power.

The station's instrumentation is designed to provide manual, remote and automated supervisory control and data acquisition. Remote supervisory control is provided through redundant systems, Cellular, 900 MHz Radio, and an ADN Telco line via an Ethernet switch. Automation and manual control is provided by "HAND," "OFF," and "AUTO" switch controls.

In auto mode, the pumps operate in a lead/lag mode. The lead/lag designation is automatically switched every cycle. The lead pump is called to start when the wet well level is above the lead pump ON level set point. The lead pump continues to run until the level drops below the lead pump OFF level set point. If the level continues to rise and reaches the lag pump ON level set point, the lag pump is called to run. The lag pump continues to run until the level drops below the lag pump OFF level set point. If the lead pump is not available for automatic control, the lag pump will be called instead. A pump is considered not available if it has failed or is not in auto mode.

The primary level control is based on the level measurement obtained by the ultrasonic level sensor in the wet well. A High-High Level float switch set just above the lag pump ON level and Low-Low Level float switch set just below the lead pump off level are provided as back up to the ultrasonic level sensor. Both the lead and lag pump will automatically start upon activation of the High High float switch and both pumps will automatically stop upon activation of the Low Low Level float switch.

Normally, both pumps are allowed to run. However, the station has a Pump Disable Control that allows the operator to set the maximum number of pump(s) allowed to run during a certain time period. The Pump Disable setup screen allows the operator to specify ten time periods. Each time period includes an Enable, a Time Setting, and a Number of Pumps Allowed setting (0, 1, or 2). When the time of day is equal to the time in the configured schedule and it is enabled, the maximum number of pumps allowed will become active. When the time of day is equal to the time in the configured schedule and it is not enabled, then both pumps are allowed to run.

The HATS facility also has a Daily Total Flow Limit Control which allows the District to set a set point for daily total flow allowed to be pumped from the HATS Lift Station to MWRP. The daily total will be from 6 am to 6 am as measured by the flow meter. The pumps will be disabled when the daily flow limit is exceeded, causing flow to back up to the Diversion structure's weir overflow elevation and divert flows to OCSD.

The station's PLC monitors and controls the following HATS facility improvements:

- Gravity Sewer Manhole (MH No 1)
  - Ultrasonc Level Indicator and its Failure
  - High High Float switch
- Main (SCE) Electrical Power Loss
- Control Power Loss
- Intrusion and Override *(NOTE: Wet Well and Valve Vault have no Intrusion Alarms)*
  - Electrical Panels Doors
  - Chemical Injection Vault Hatch
  - Blower Vault
  - Meter Vault
- Chemical Injection Vault

  - Emergency Eye Wash Flow
  - Chemical Storage Tank Level and its Failure
  - Vault Flood and Sump Run
  - Vault Atmosphere Gas Detection (LEL and H_2S)
  - Peristaltic Chemical Feed Pumps
    - On
    - Failed
    - Call
    - Remote
    - Speed Control and Feedback
    - High Pressure
- Meter Vault
  - Vault Flood
  - Forcemain Pressure (psi)
  - Forcdemain Flow
- Odor Control Vault
  - Vault Flood
  - Vault Atmosphere Gas Detection (LEL)
  - Scrubber Exhaust Gas Detection (H_2S)
  - Blower Run and Fail
- Pumps 1 and 2
  - Call
  - Fail
  - Run
  - Hand
  - Remote
- Wet Well
  - Low Low Float
  - High High Float and High High Alarm
  - Backup Control Power Fail
  - Ultrasonic Level and Failure

1-15 Recommendations

The recommendations for HATS Lift Station are summarized in Table 1-2.

Table 1-2
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Wet well lacks temporary fall protection facilities	Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Vaults lack non-skid flooring	
	Valve vault and meter vault do not have access ladders	
	Pumps experience ragging. Motor cables get sucked into pumping pits and into pumps due to rags in the wet well	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Pumps do not have VFDs	
	Backup power connection facilities do not comply with NEC	
	Portable generator connection is not protected from rain in the existing cabinet	
	Chemical injection vault does not have a camera	
	Hydrogen Sulfide sensor lacks required sensitivity	
Redundancy	Level measurement is provided by single ultrasonic sensor	Evaluate as part of reliability and redundancy analysis of critical facilities.
	Lift station has single forcemain	
	The flow meter has no spare in the warehouse	
Operational & Emergency Response	SCADA system should provide all pertinent operational data and alarm information to IRWD	Validate that existing conditions are consistent with IRWD operational requirements. Also verify that existing conditions are in compliance with IRWD SSMP and regulatory agencies. Develop recommendations based on validation and verification efforts.
Condition/ Age	Wet well lining is deteriorating	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Landscape irrigation water enters access hatches	

San Diego Creek / Harvard Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The San Diego Creek / Harvard Siphon (S2) is located between Riparian View and Harvard Avenue, north of University Drive in the City of Irvine. It is located in the University Trunk sewershed. It was constructed in 1966 in order to convey sewage under San Diego Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location



Figure 2
Siphon Plan and Profile

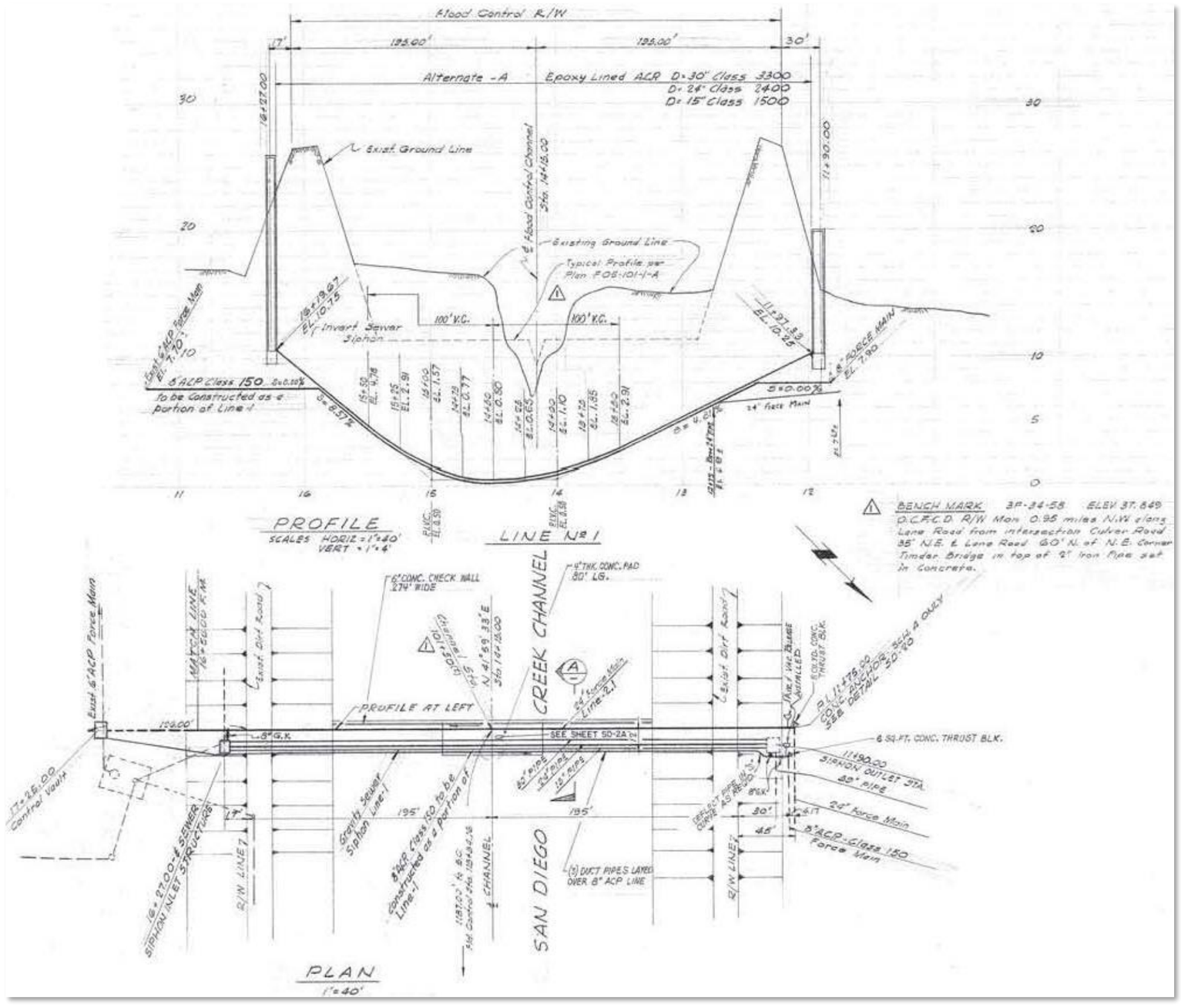
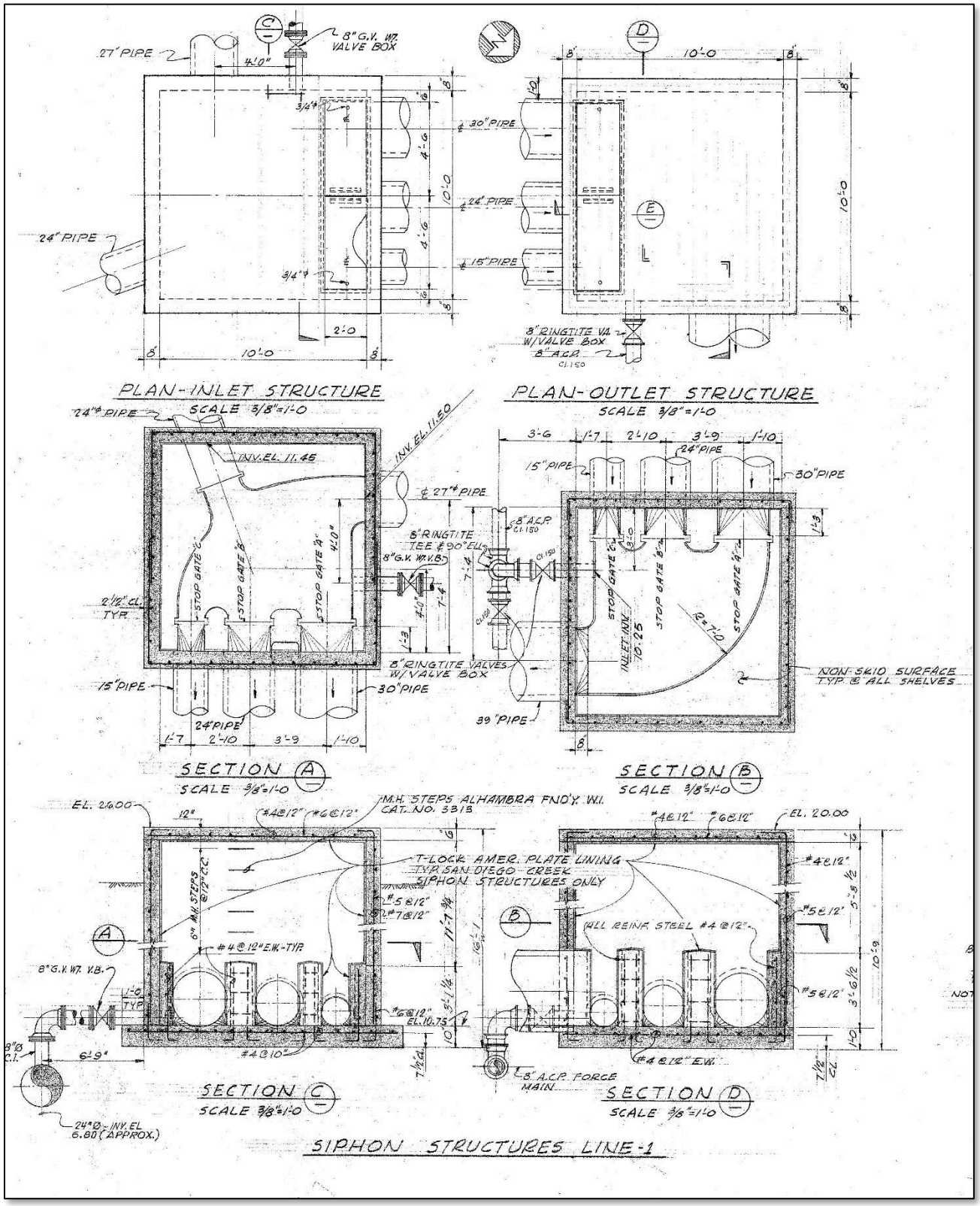


Figure 3
Upstream and Downstream Structure Details



**Note that the slide gates have been removed.*

Section 2: Siphon Barrels

The siphon is 422 feet long, consisting of three epoxy lined ACP barrels that are 15-inch, 24-inch, and 30-inch in diameter as shown on Figure 2. The 15-inch and 24-inch barrels are open and per IRWD staff; the 30-inch barrel has been blocked off for the past 15 to 20 years.

Section 3: Air Jumper

There is no air jumper associated with the San Diego Creek Channel / Harvard Siphon.

Section 4: Upstream Structure

Access

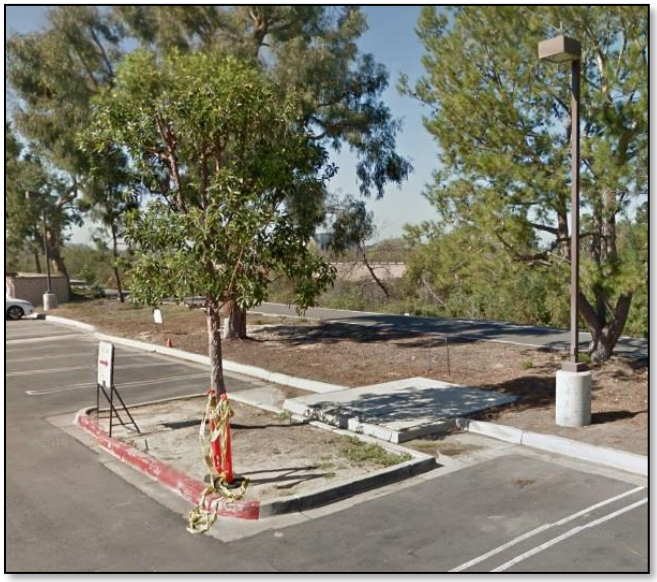
The upstream structure is accessible via the parking lot of 18700 Harvard Avenue (Korean Worship Center). As seen in Photograph 1, there is a tree located directly in front of the access hatch. Ideally, there would not be a tree here and there would be a ramp up to the structure but otherwise access is not an issue.

Access Hatch

The upstream structure access hatch is shown in Photograph 2. The access hatch is in good condition but the locks are experiencing corrosion. The access hatch is not locked.

Condition

As seen in Photograph 3 and 4, the upstream structure coating has spotting and black markings.



Photograph 1 Upstream Structure Location



Photograph 2 Upstream Structure Access Hatch



Photograph 3 Upstream Structure Channels



Photograph 4 Upstream Structure Walls

Gates

This structure does not have any sluice gates present, howeverslide gate guides are present and wood blocks can be slid into the guides to block flow as needed. IRWD plans to construct fiberglass blocks for this location. The structure must be entered to block or unblock any of the barrels,requiring confined space entry.

Odor

There is an odor issue on the upstream side of this siphon. This is typical on the upstream side of siphons, particularly if there is no air jumper present. At this location, it may also be enhanced by the turbulence caused by the two influent pipes to the upstream structure. Due to past complaints by the nearby Korean Worship Center, it is necessary for IRWD staff to seal the entire structure access hatch and holes with silicon each time it is opened for maintenance purposes.

Section 5: Downstream Structure

Access

The downstream structure is located at the Duck Club facility adjacent MWRF. It is accessible via Riparian View and the parking lot of the Duck Club, on the west side of San Diego Creek as shown in Photographs 5 and 6. Access to this structure has been an issue. There are two access options:

1. If the structure is accessed from the parking lot of the Duck Club,this requires the clearance of two parking spaces. The hose has to be taken around the right side of the hatch and into the structure because the access hatch opens up towards the parking lot. If the hose is taken over the top of the access hatch, there is the potential of damage to the hose due to sharp edges of the access hatch.

2. If the structure is accessed from Riparian View, there is vegetation and a slope down from the road. The hose has to be brought from the truck down the slope and then has to be threaded through a barbed wire fence. The hose has to be protected from the barbed wire fencing.

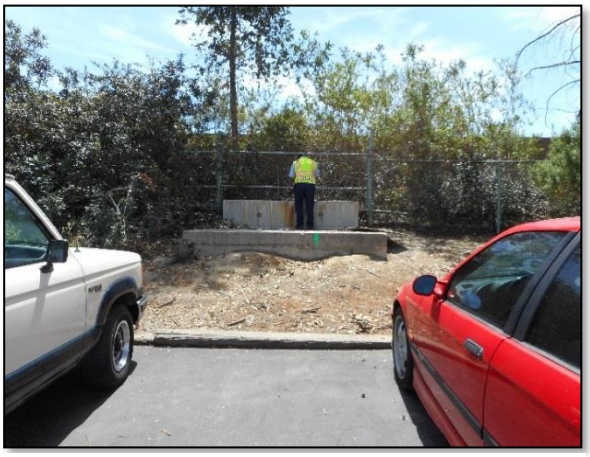
I

Access Hatch



Photograph 5 Downstream Structure Access Road

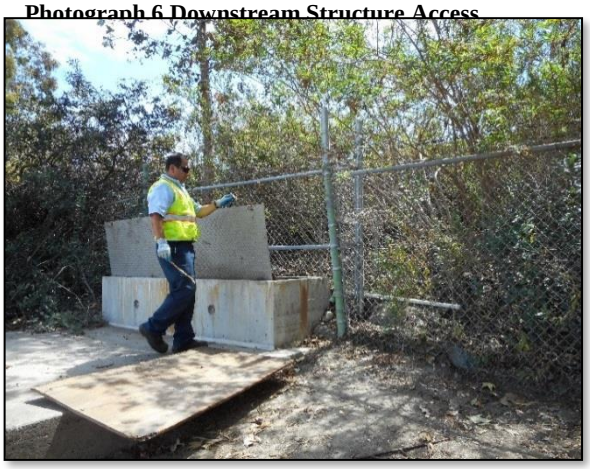
The downstream structure access hatch, shown in Photograph 7 and 8. As mentioned above, it opens in the same direction as the parking lot, so the hose from the truck has to be brought around it to access the structure. The access hatch is in good condition besides some minor rusting.



Photograph 6 Downstream Structure Access

Condition

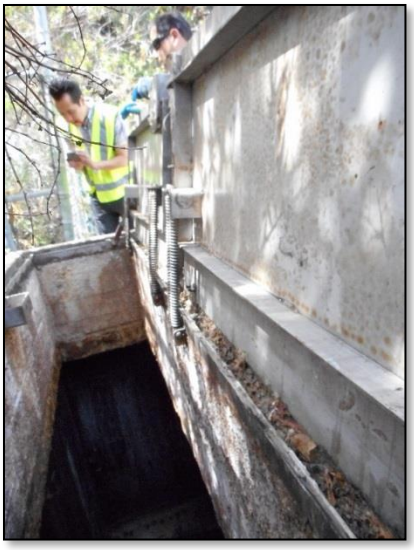
The downstream structure is partially above ground. The surrounding soil does not reach the top of the structure as shown in Photograph 6. The inside of the structure is in good condition as shown in Photograph 9.



Photograph 7 Downstream Structure

Odor

There is no odor issue at the downstream structure.



Photograph 8 Downstream Structure Access Hatch



Photograph 9 Downstream Structure Channels

Section 6: Recommendations

The recommendations for the San Diego Creek Channel / Harvard Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Upstream structure lacks guard rail and/or fall protection	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Upstream structure lacks slide gates and/or above ground operators	
	Downstream structure site lacks ground cover and/or landscaping	
	Upstream structure has odor issues	
Condition/ Age	Upstream structure hatch shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Downstream structure hatch shows signs of wear and tear	
	Downstream structure lining is deteriorating	

Michelson / Riparian Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Michelson / Riparian Siphon (S3) is located along the south side of Michelson Drive, between Riparian View and Harvard Avenue in the City of Irvine. It is located in the Lower San Diego Creek sewershed. It was constructed in 1976 in order to convey sewage under San Diego Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2 and 3. The upstream and downstream structure details are shown on Figures 4 and 5.

Figure 1
Siphon Location

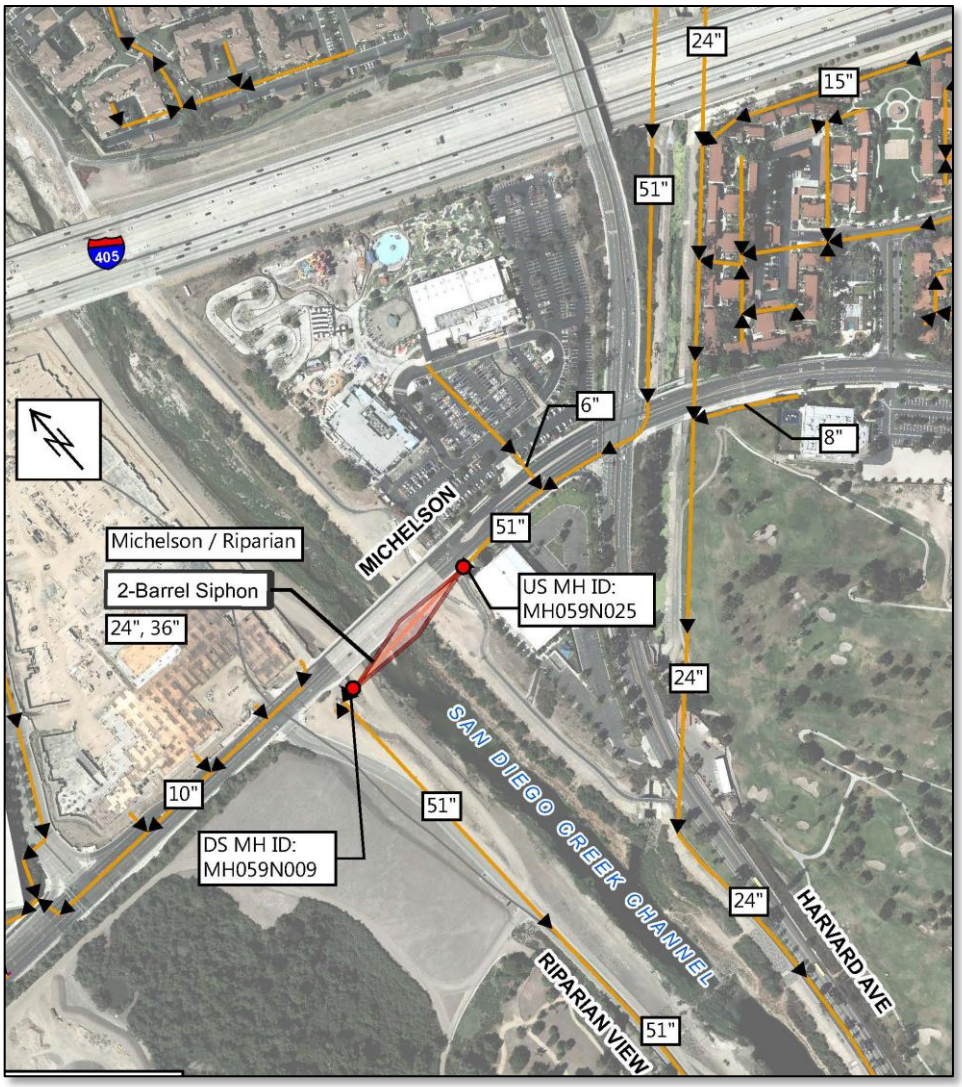


Figure 2
Siphon Plan and Profile

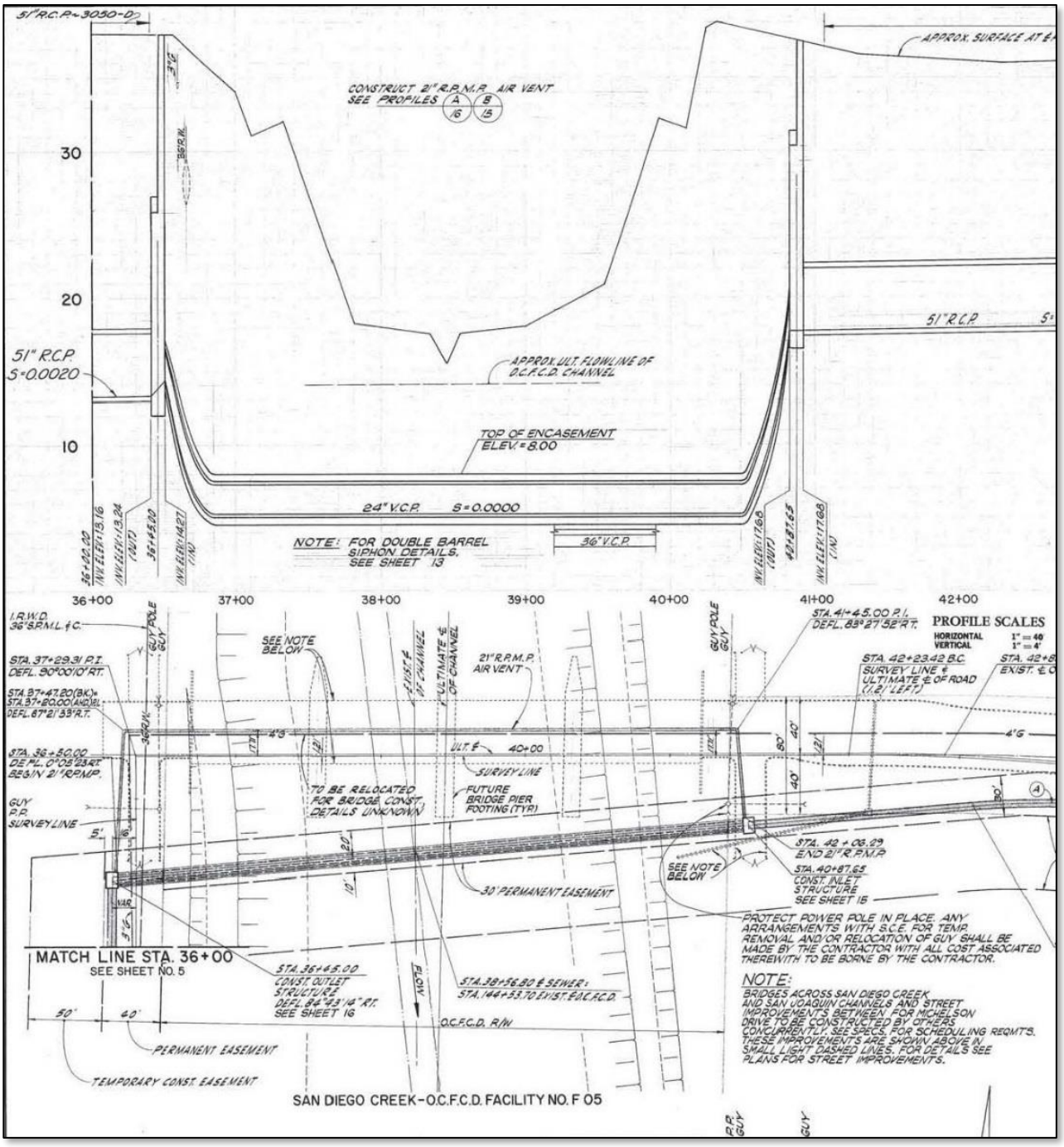


Figure 3
Siphon Profiles

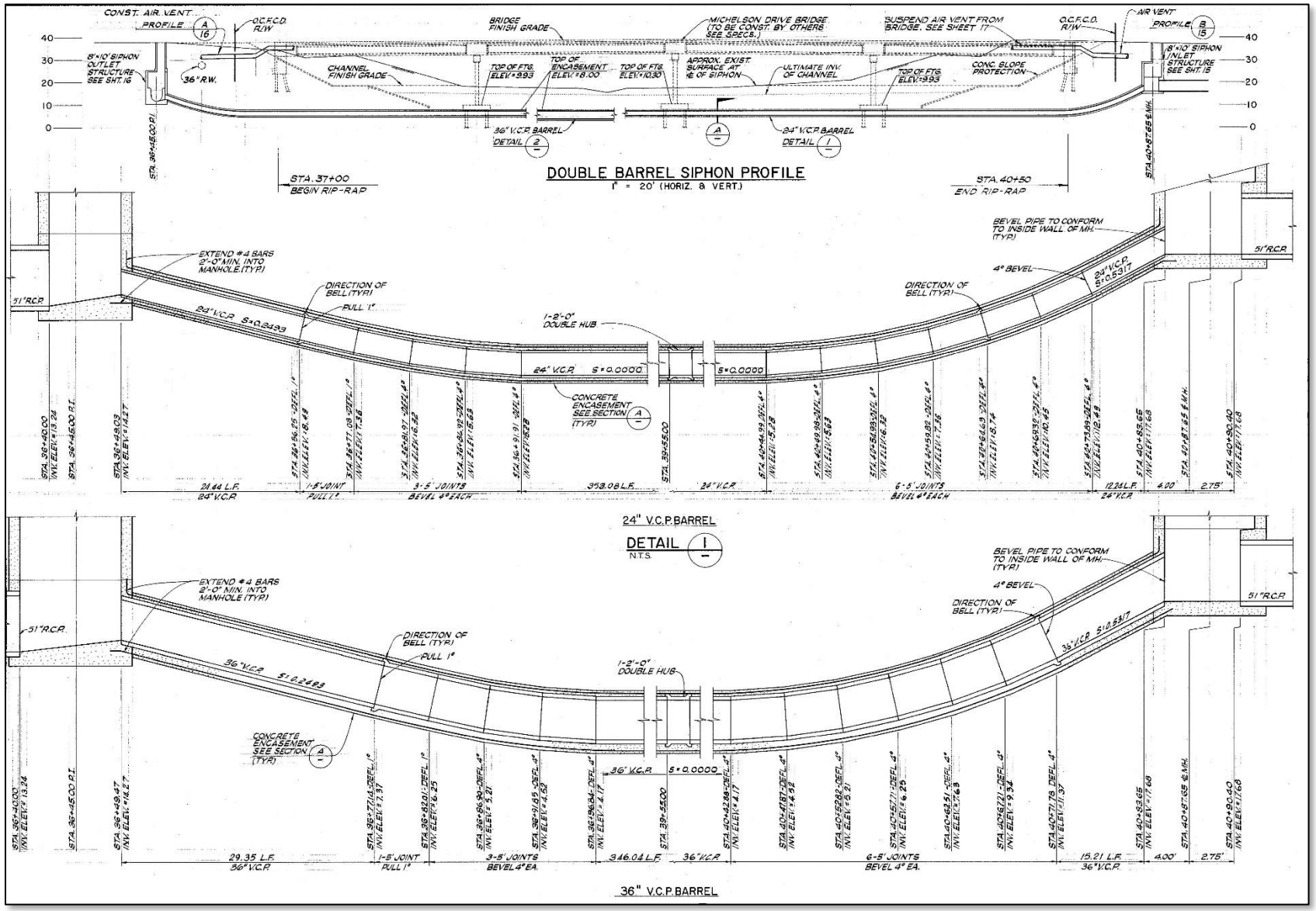


Figure 4
Upstream Structure Details

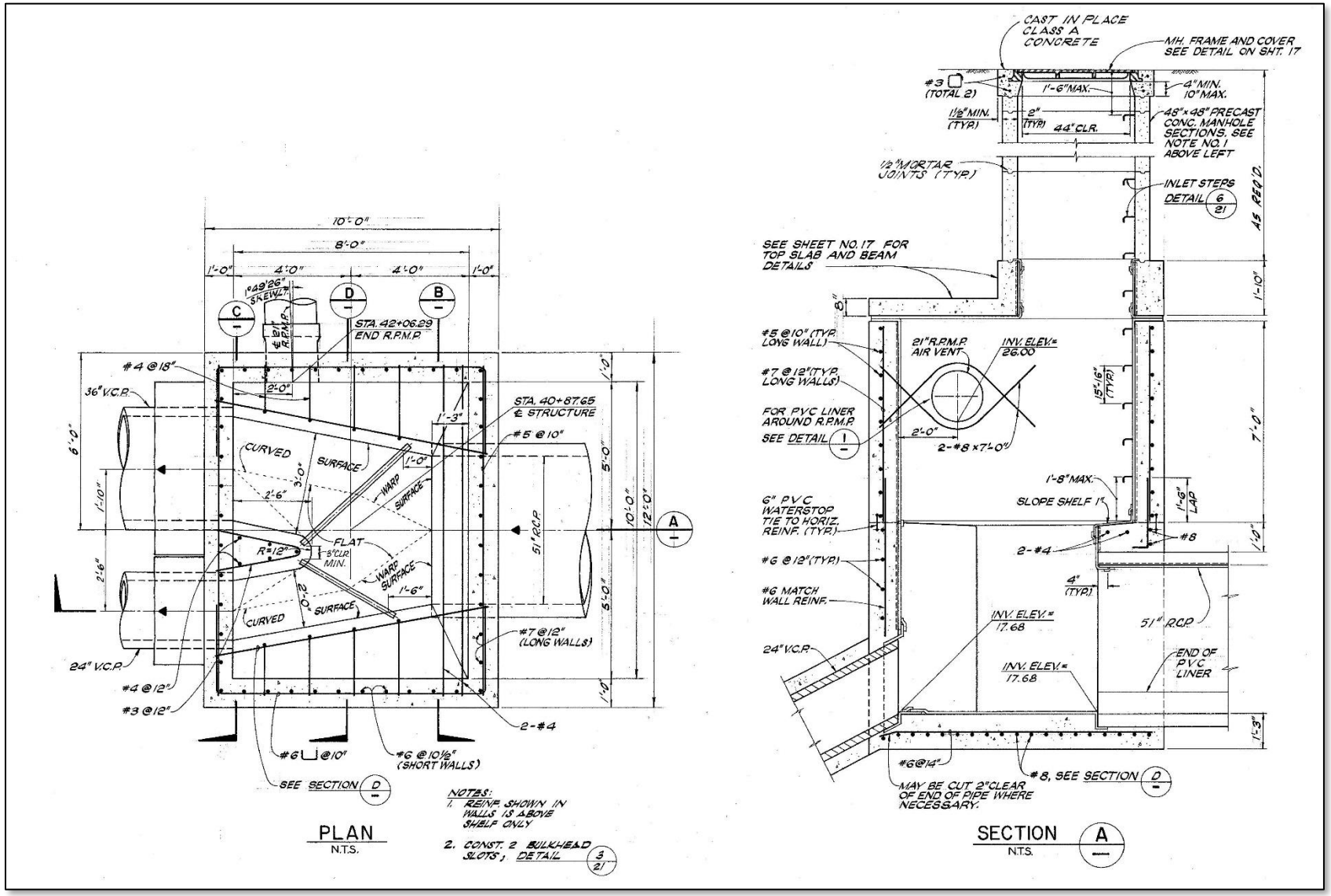
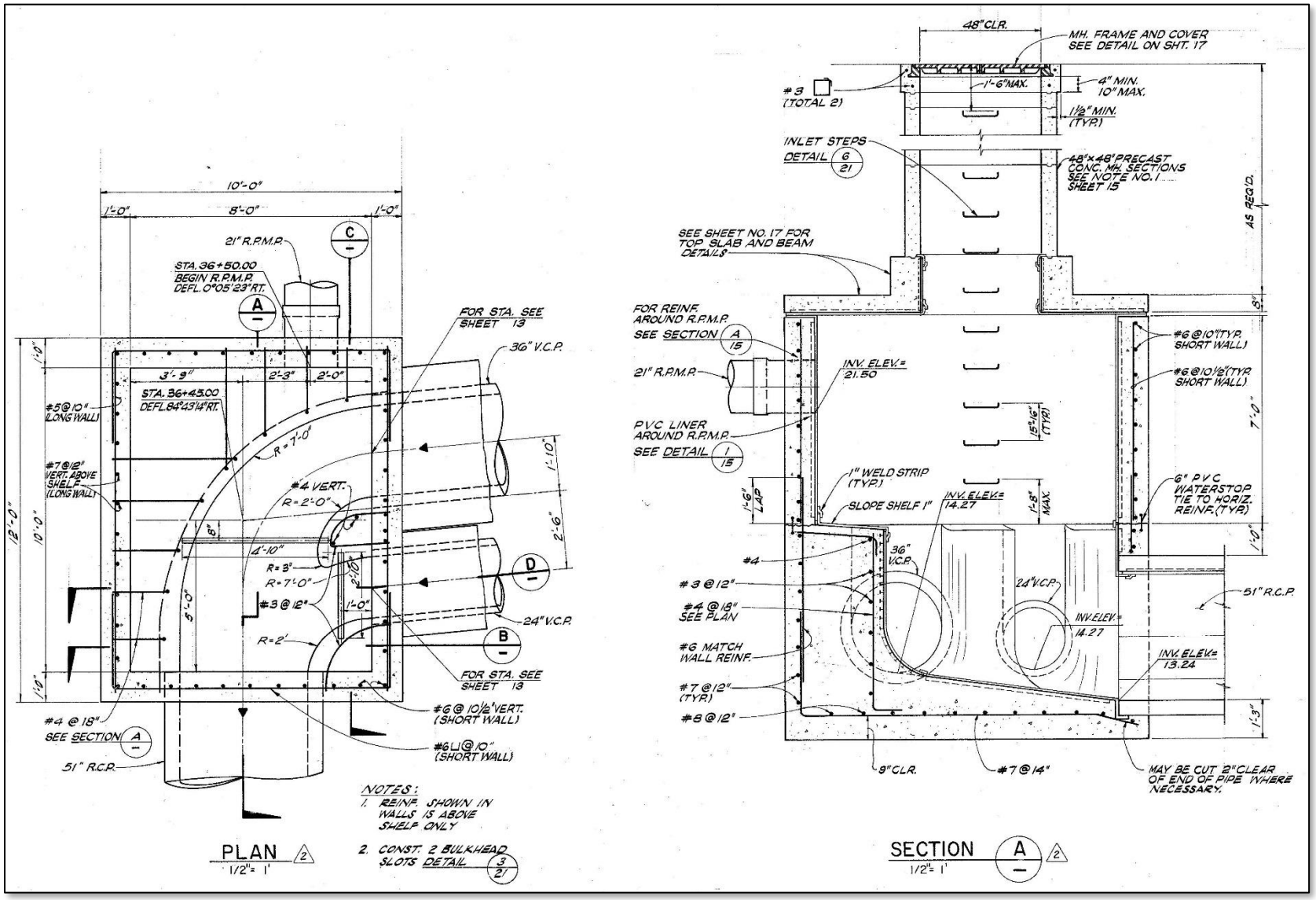


Figure 5
Downstream Structure Details



Section 2: Siphon Barrels

The siphon is 434 feet long, consisting of two VCP barrels that are 24-inch and 36-inch in diameter as shown on Figure 2 and 3. Both barrels are kept open.

Section 3: Air Jumper

There is a 21-inch air jumper that hangs on the underside of the bridge crossing San Diego Creek as shown in Photograph 1. The air jumper has not been cleaned or inspected since its construction because there are no access points to facilitate this work.



Photograph 1 Air Jumper

Section 4: Upstream Structure

Access

The upstream structure is accessible via Michelson Drive. The access hatch of the structure is located in the south sidewalk of Michelson Drive at the end of the bike path that follows the east side of San Diego Creek. The structure location is shown in Photograph 2. Traffic control is required at this location so the maintenance trucks can be parked adjacent to the structure.



Photograph 2 Upstream Structure Location (east side of San Diego Creek facing south)

Access Hatch

The upstream structure access hatch is shown in Photograph 3. The latches are broken and the lock is rusted. A different locking mechanism should be considered so that corrosion will not be an issue. IRWD staff would like to see the square doors rehabilitated. A guard rail or fall prevention device is needed as well.



Photograph 3 Upstream Structure Access Hatch



Photograph 4 Upstream Structure Walls



Photograph 5 Upstream Structure Channels

Condition

The upstream structure is in good condition. It has T-lock lining and a spray coating on the top portion of the manhole. The structure walls can be seen in Photograph 4.

Gates

There are redwood baffles half way stuck in the guides. The baffles were previously attempted to be removed but could not be. Currently, the flow goes under the baffles.

Odor

There is an odor issue at the upstream structure. The access hatch is sealed with silicon following maintenance at the site.

Section 5: Downstream Structure

Access

The downstream structure is accessible via Riparian View or Michelson Drive, along the west side of San Diego Creek as shown in Photograph 6.



Photograph 6 Downstream Structure Access (west side of San Diego Creek facing north toward Michelson Drive)

Access Hatch

The downstream structure access hatch at Michelson Drive is shown in Photograph 7 and 8. A guard rail or fall prevention device is needed for access.

Condition

The downstream structure is partially above ground. The top of the structure is shown in Photograph 7.

The coating is in fair condition.



Photograph 7 Downstream Structure



Photograph 8 Downstream Structure Access Hatch

Odor

Odors are not an issue at the downstream structure due to the fast moving flow through the structure.

Section 6: Recommendations

The recommendations for the Michelson / Riparian Siphon are summarized in Table 1.



Photograph 9 Downstream Structure Channels

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Upstream structure lacks guard rail and/or fall protection	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop Recommendations accordingly.
	Upstream structure lacks slide gates and/or above ground operators	
	Downstream structure site lacks ground cover and/or landscaping	
	Upstream structure has odor issues	
Condition/ Age	Upstream structure hatch shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Downstream structure hatch shows signs of wear and tear	
	Downstream structure lining is deteriorating	

Main / Veneto Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Main / Veneto Siphon (S4) is located along the north side of Main Street, between Jamboree Road and Veneto in the City of Irvine. It is located in the Irvine Business Complex (IBC) sewershed. It was constructed in 1986 in order to convey sewage under San Diego Creek to OCSD's sewer system when needed. The siphon location is shown on Figure 1. The siphon plan and profile are shown on Figures 2 and 3. The upstream and downstream structure details are shown on Figures 4 and 5.

Figure 1
Siphon Location

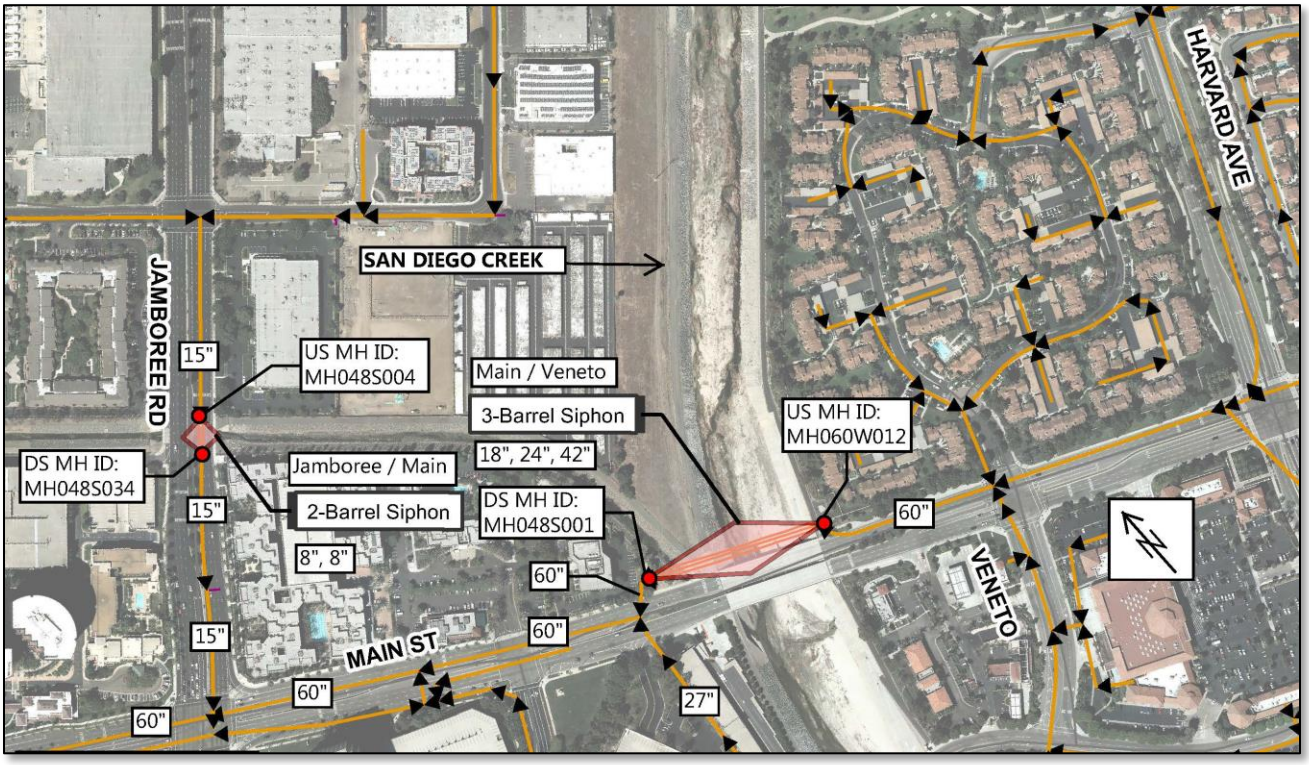


Figure 2
Siphon Plan and Profile

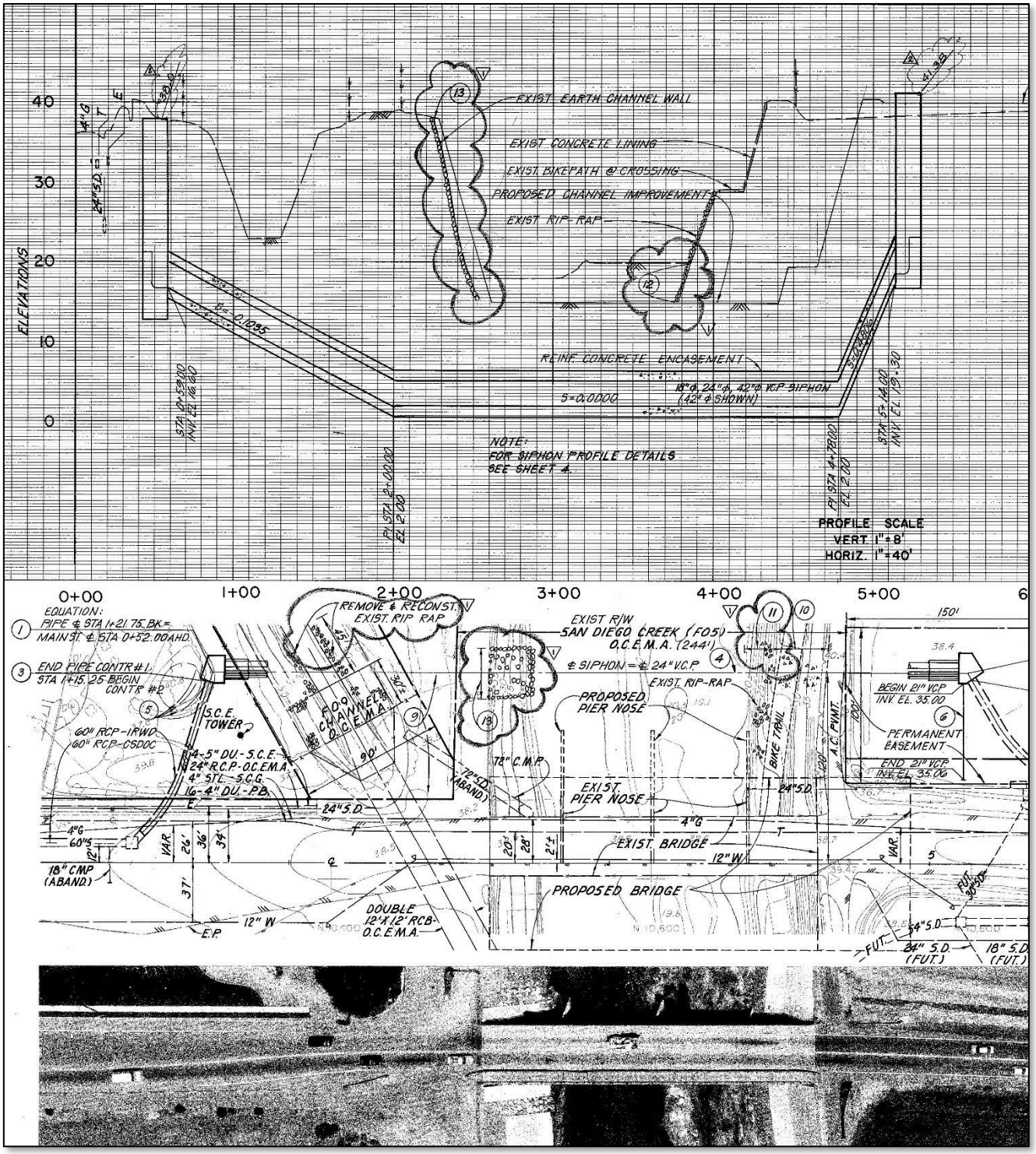


Figure 3
Siphon Profile

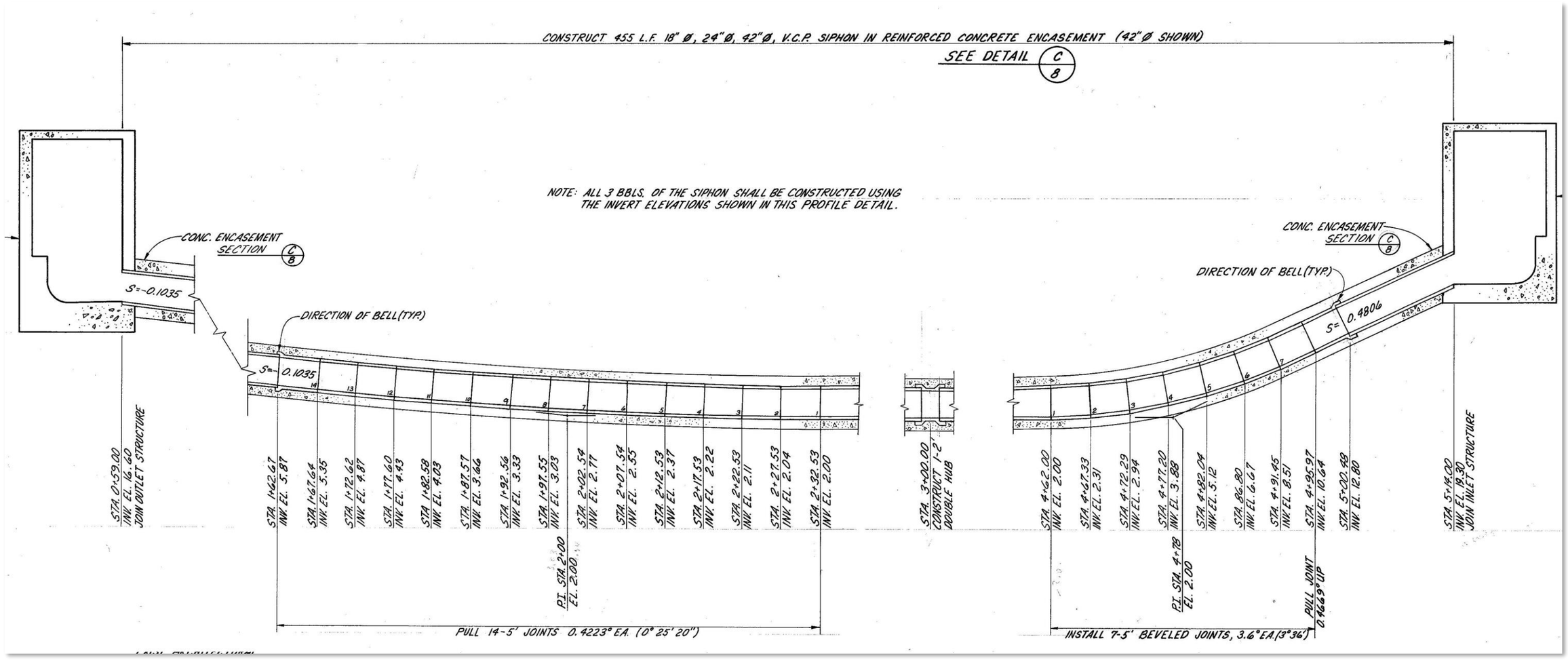
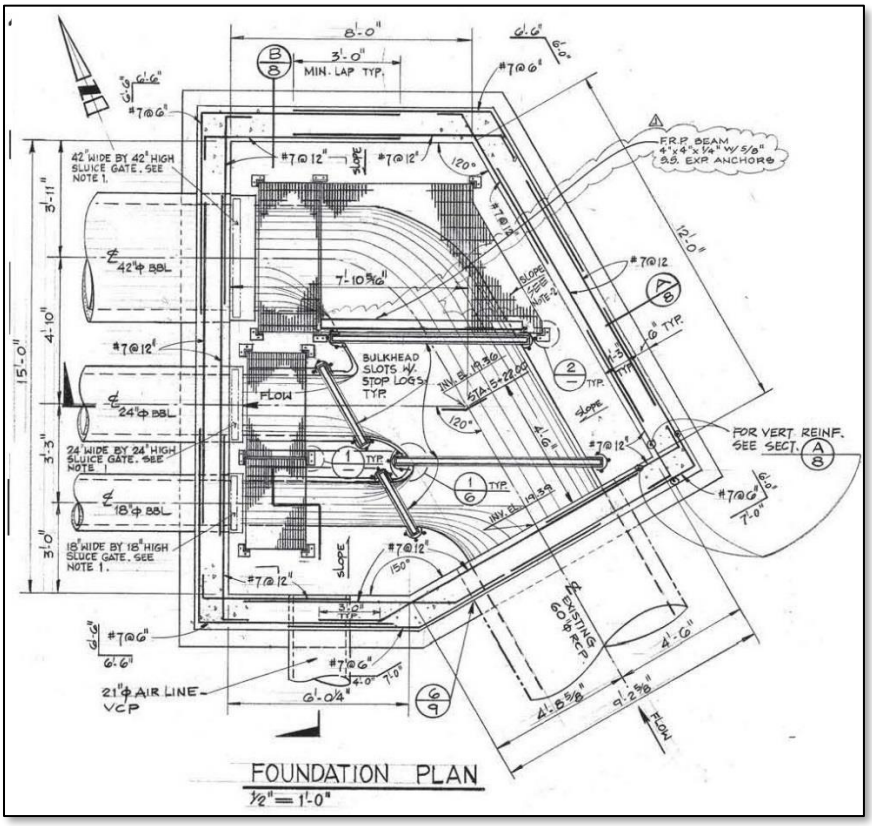


Figure 4
Upstream Structure Details



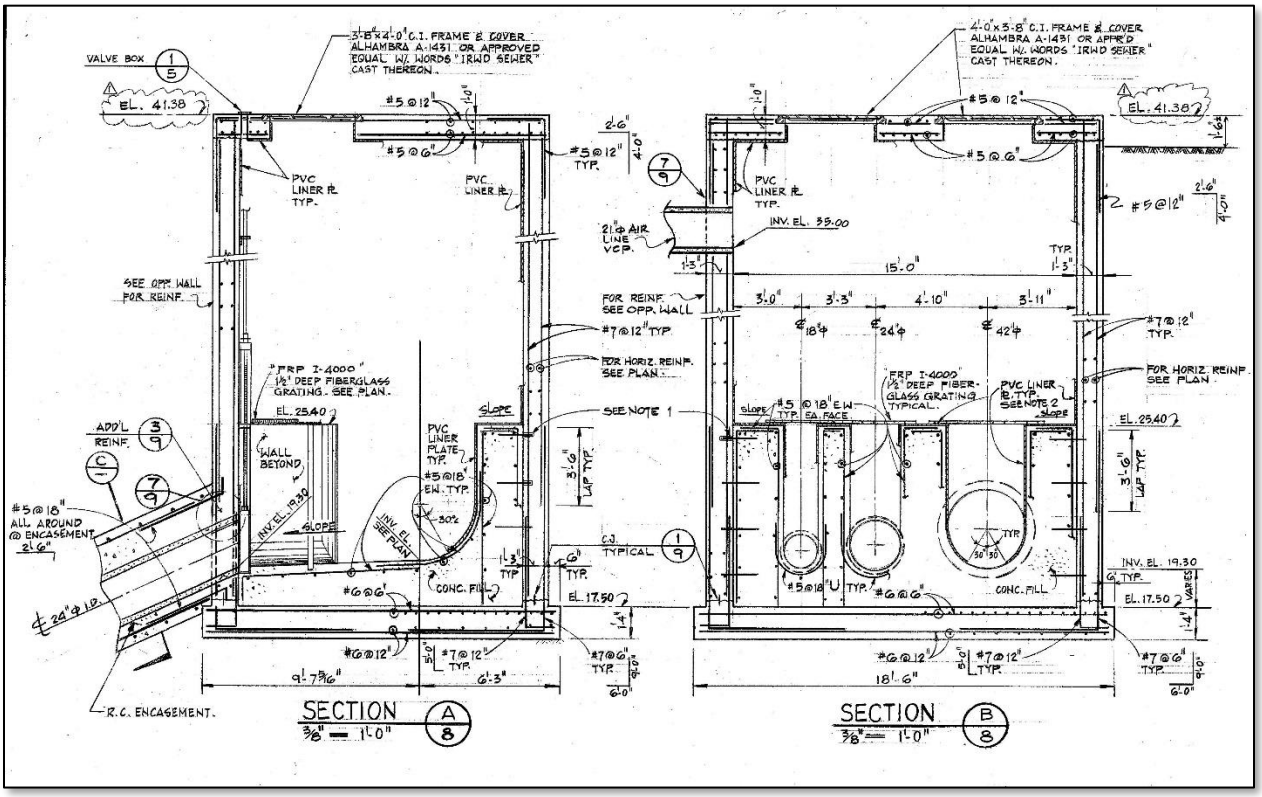
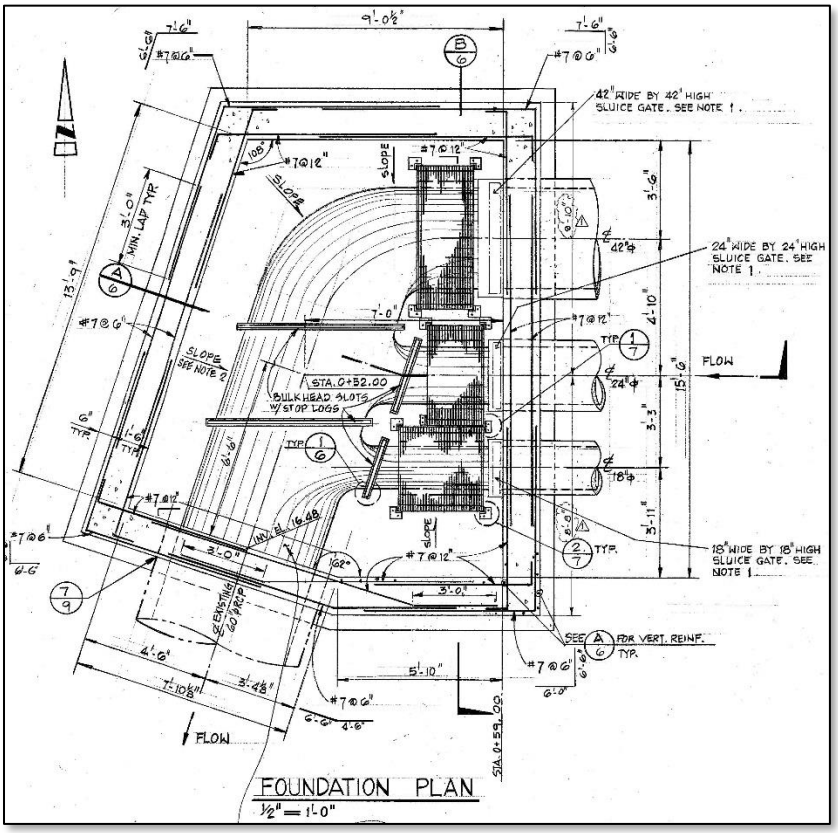
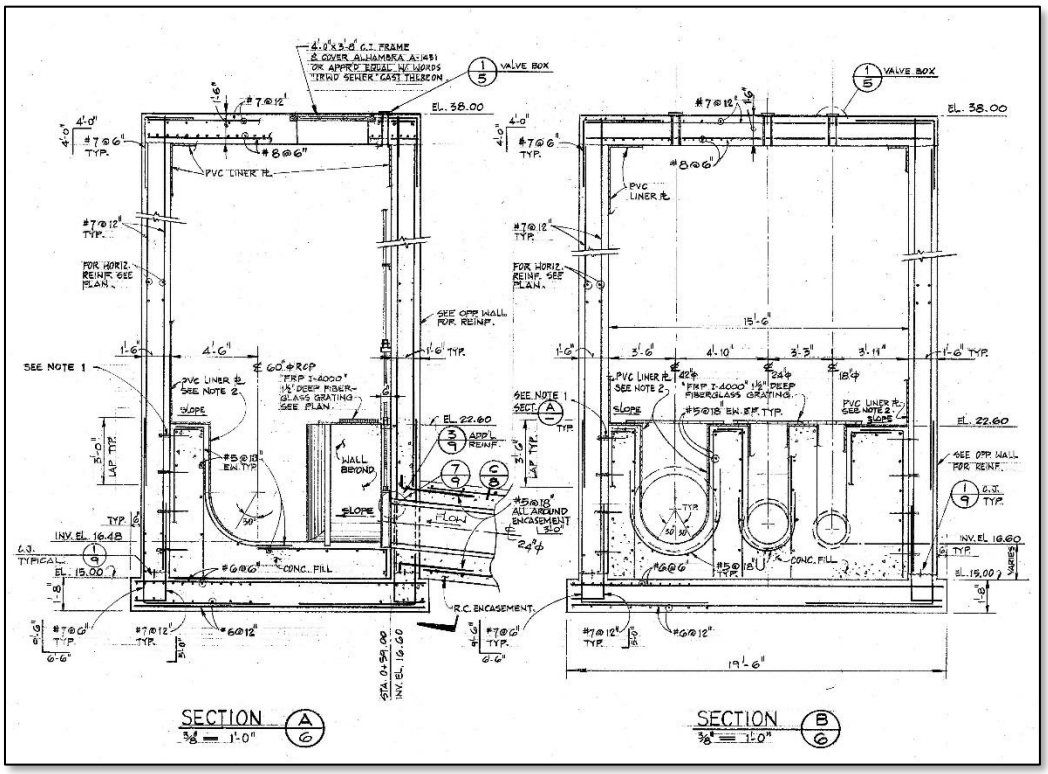


Figure 5
Downstream Structure Details





Section 2: Siphon Barrels

The siphon is 455 feet long, consisting of three VCP barrels that are 18-inch, 24-inch, and 42-inch in diameter as shown on Figure 2 and 3. The 18-inch and 24-inch barrels are closed off with a slide gate and the 42-inch is currently open to divert flows to OCSD's sewer system when needed. The 42-inch siphon is sized large enough to handle all the flows tributary to the HATS lift station and therefore could convey all the flow to OCSD if needed. Normal operation of IRWD's system diverts all sewage to the HATS lift station and there is typically no flow conveyed through the Main/Veneto Siphon. In the event of an emergency or scheduled maintenance, IRWD can divert flow to the Main/Veneto Siphon by diverting flow at the Culver and San Leandro Diversion Structure and diverting flow at the Harvard and Main Diversion Structure. Also, if the HATS lift station is turned off, the sewage flow will back up to the Harvard and Main Diversion Structure and cascade over the gates into the sewers that convey flow to the Main/Veneto Siphon.

Section 3: Air Jumper

There is a 21-inch VCP air jumper shown on the construction plans from the upstream structure to the street right-of-way. The plans indicate that the line was stubbed off. It is unknown if the line was ever completed during another construction project. Documentation could not be found and the air jumper was not seen from the downstream structure.

Section 4: Upstream Structure

Access

The upstream structure is accessible via a bike path along the east side of San Diego Creek as shown in Photograph 1. Currently, maintenance trucks have to be driven up the bike path from the back side of the structure.



Photograph 1 Upstream Structure Access

Access Hatch

The upstream structure access hatches are in good condition as shown in Photograph 2 and 3.

Condition

The upstream structure and coating is in good condition.

Gates

The upstream structure barrels have sluice gates with an above ground gate operating system. The 18-inch and 24-inch sluice gates are stuck shut and therefore inoperable. The 24-inch sluice gate also has a bent frame. There are bulkhead stop logs currently placed in front of the 18-inch and 24-inch channels as shown in Photograph 4.

Odor

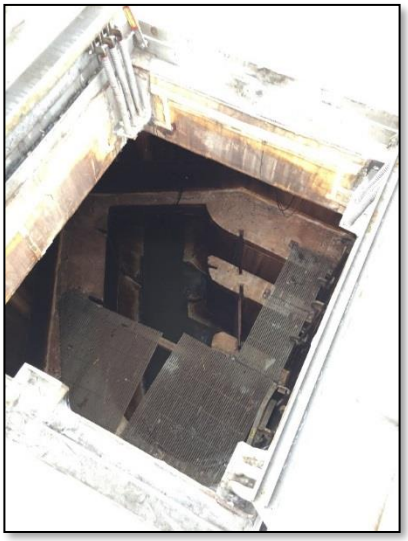
There is no odor issue at this location.



Photograph 2 Upstream Structure



Photograph 3 Upstream Structure Access Hatches



Photograph 4 Upstream Structure Channels

Section 5: Downstream Structure

Access

The downstream structure is accessible via Main Street, west of San Diego Creek. There is a private drive approach from Main Street to the downstream structure past the second channel near the overhead power line power pole as shown in Photograph 5. There is open space adjacent the structure where maintenance vehicles can park and access the structure easily.



Photograph 5 Downstream Structure Access

Access Hatch

The downstream structure access hatches, shown in Photograph 6 and 7, are in good condition. The locks are corroded.

Condition

The downstream structure and coating is in good condition.

Odor

There is no odor issue at this location



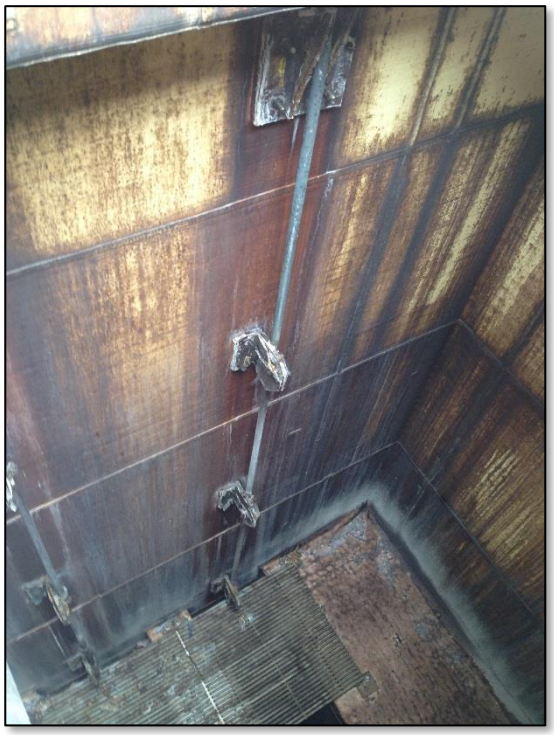
Photograph 6 Downstream Structure



Photograph 7 Downstream Structure Access Hatch



Photograph 8 Downstream Structure



Photograph 9 Downstream Structure Wall

Section 6: Recommendations

The recommendations for the Main / Veneto Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Upstream structure grates shows signs of wear and tear	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Site access is difficult	
Condition/ Age	Upstream structure sluice gates shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.

Jamboree / Main Siphon
Evaluation
(No Field Inspection)

Section 1: General

The Jamboree / Main Siphon (S5) is located in Jamboree Road, between Main Street and Kevin Avenue, in the City of Irvine. It is located in the Irvine Business Complex (IBC) sewershed. It was constructed in 1972 in order to convey sewage under Barranca Channel. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location

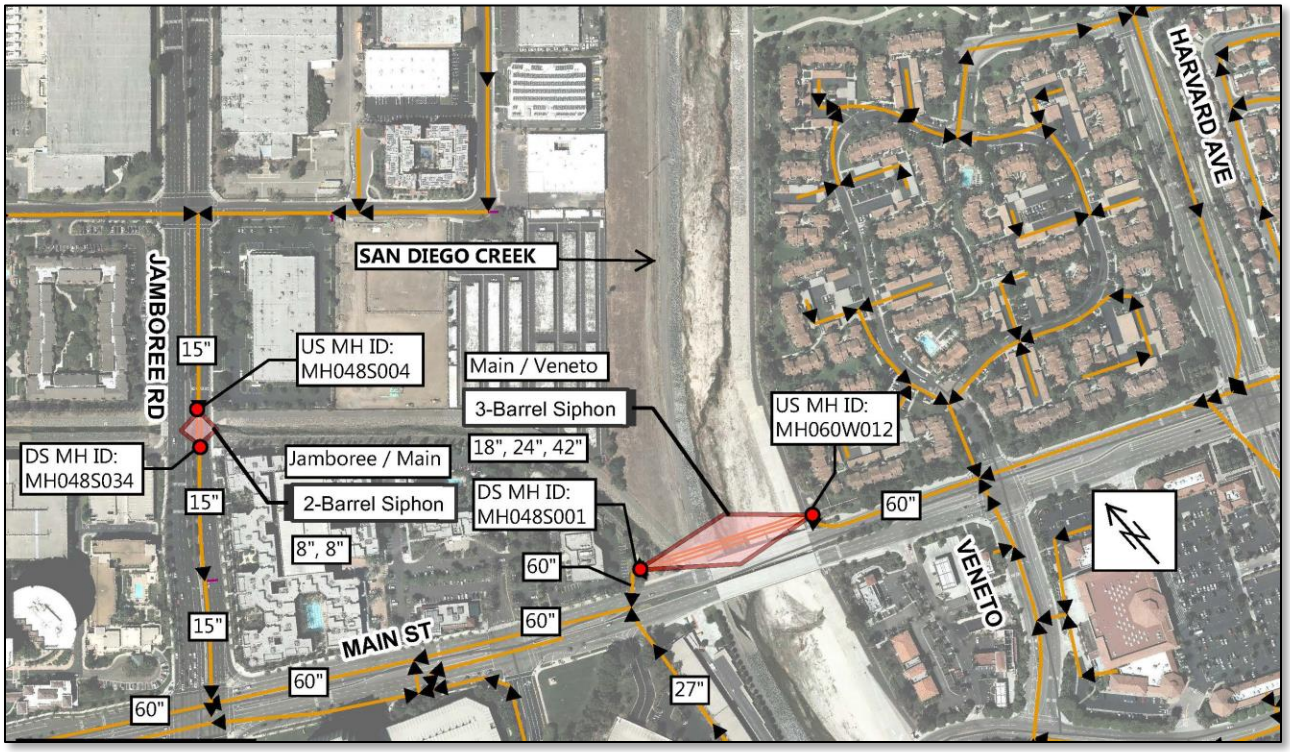


Figure 2
Siphon Plan and Profile

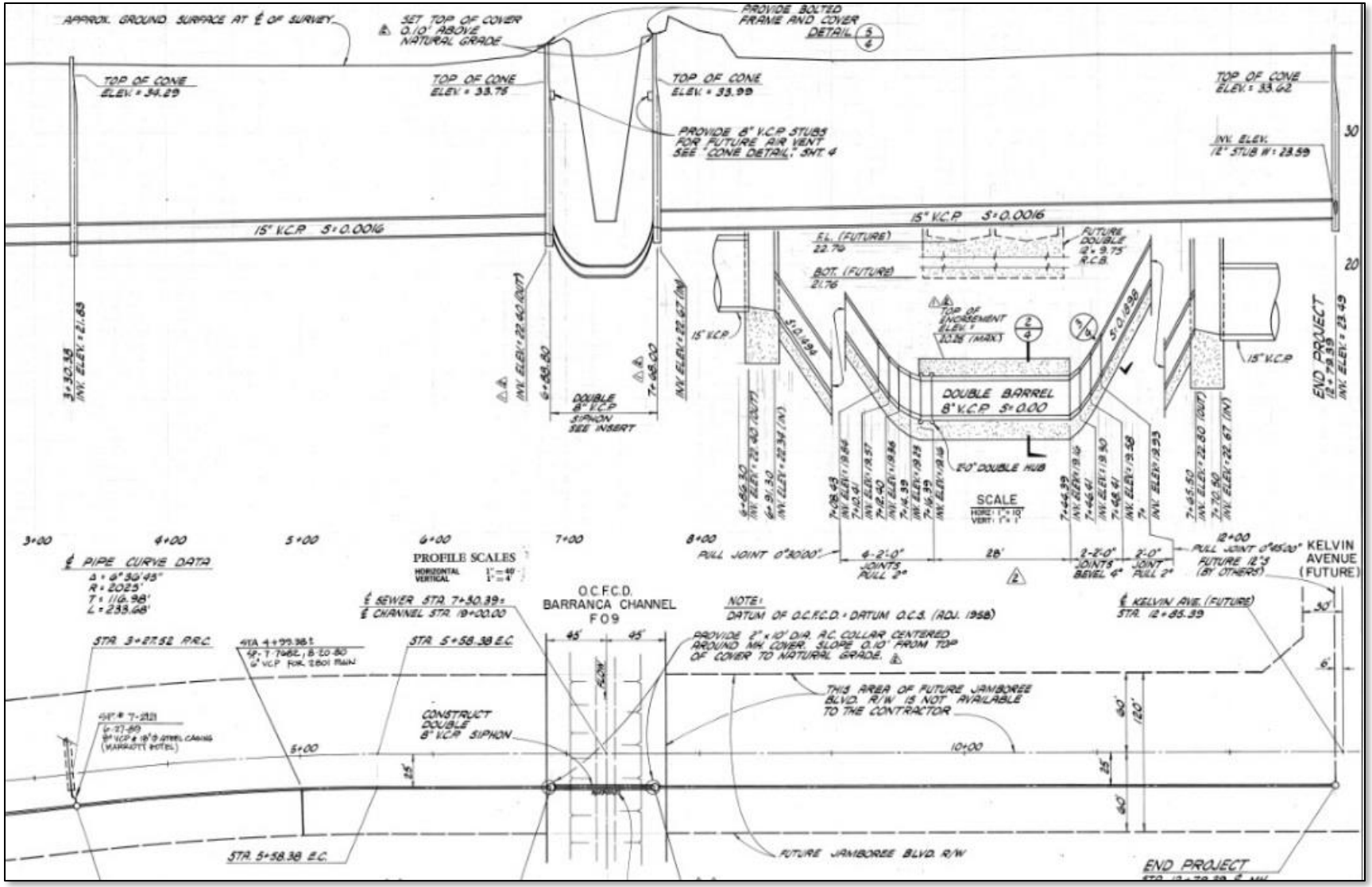
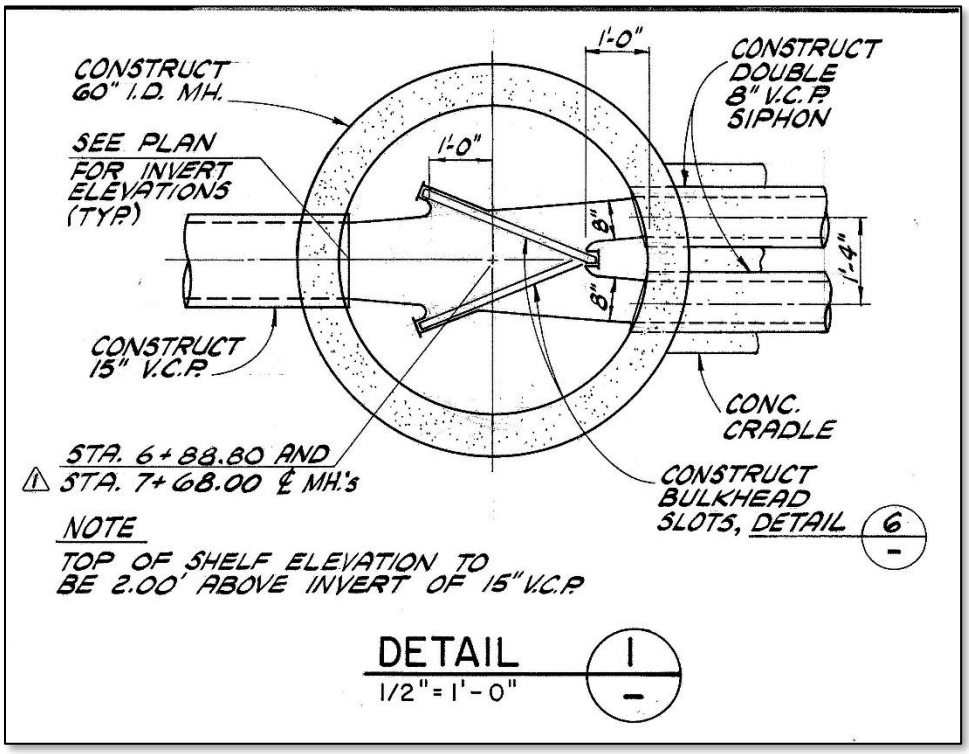


Figure 3
Upstream and Downstream Structure Detail



Section 2: Siphon Barrels

The siphon is 74 feet long consisting of two 8-inch VCP barrels as shown on Figure 2. Both barrels are open per IRWD staff.

Section 3: Air Jumper

The construction plans show an 8-inch VCP stubs for future air vents. It is unknown if the air vent was ever constructed.

Section 4: Upstream Structure

Access

The Jamboree / Main Siphon is located in a high traffic area that requires traffic control and makes access difficult. This site was not field inspected because traffic control was needed but not available.

Section 5: Downstream Structure

Access

The Jamboree / Main Siphon is located in a high traffic area that requires traffic control and makes access difficult. This site was not field inspected because traffic control was needed but not available.

Section 6: Recommendations

The recommendations for the Jamboree / Main Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Upstream structure grates shows signs of wear and tear	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Downstream structure grates shows signs of wear and tear	
Condition/ Age	Upstream structure lining is deteriorating	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Downstream structure lining is deteriorating	

Harvard / Barranca Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Harvard / Barranca Siphon (S6) is located on the east side of Harvard Avenue, south of Barranca Parkway in the City of Irvine. It is located in the HATS sewershed. It was constructed in 1986 in order to convey sewage under San Diego Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location

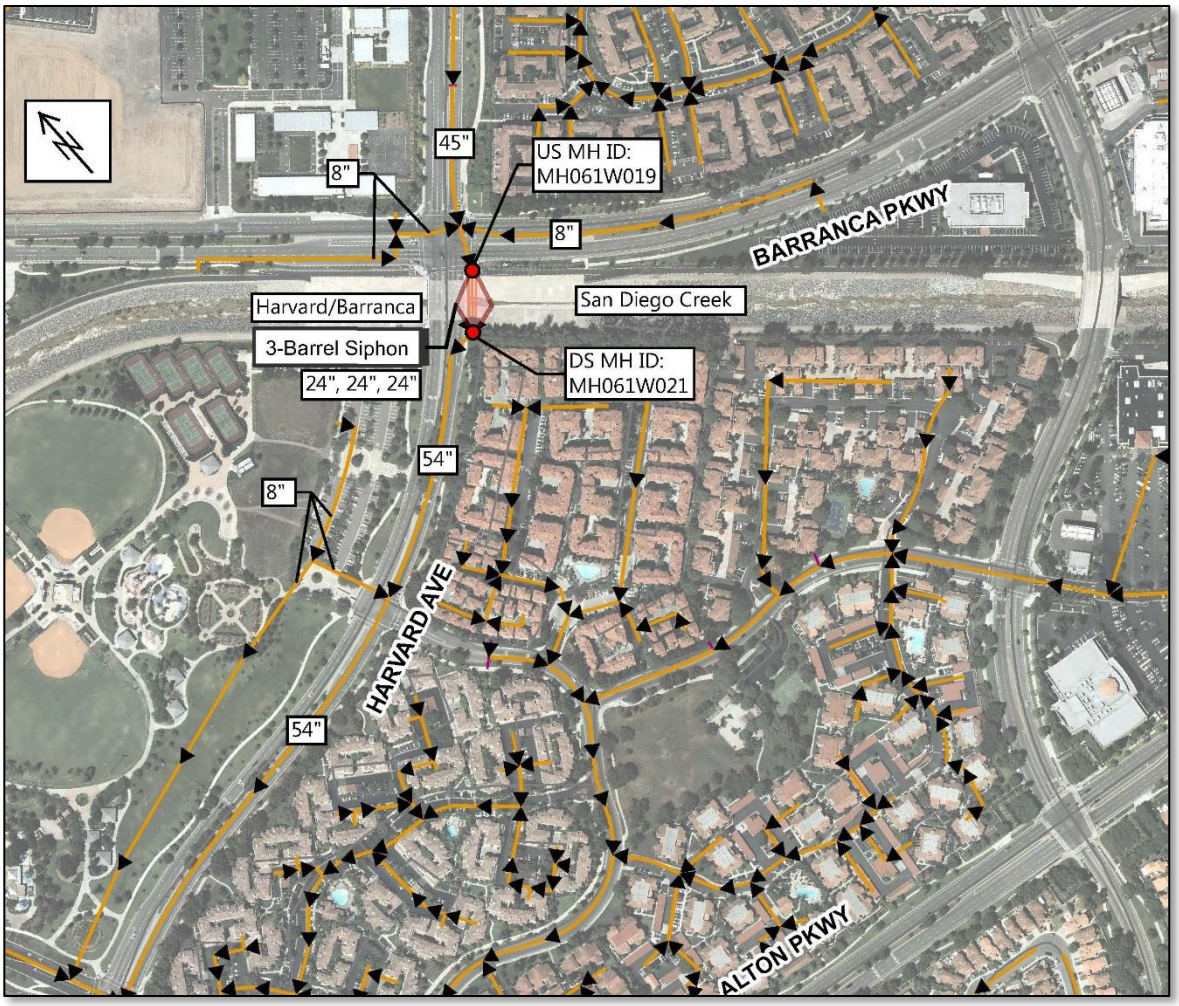


Figure 2
Siphon Plan and Profile

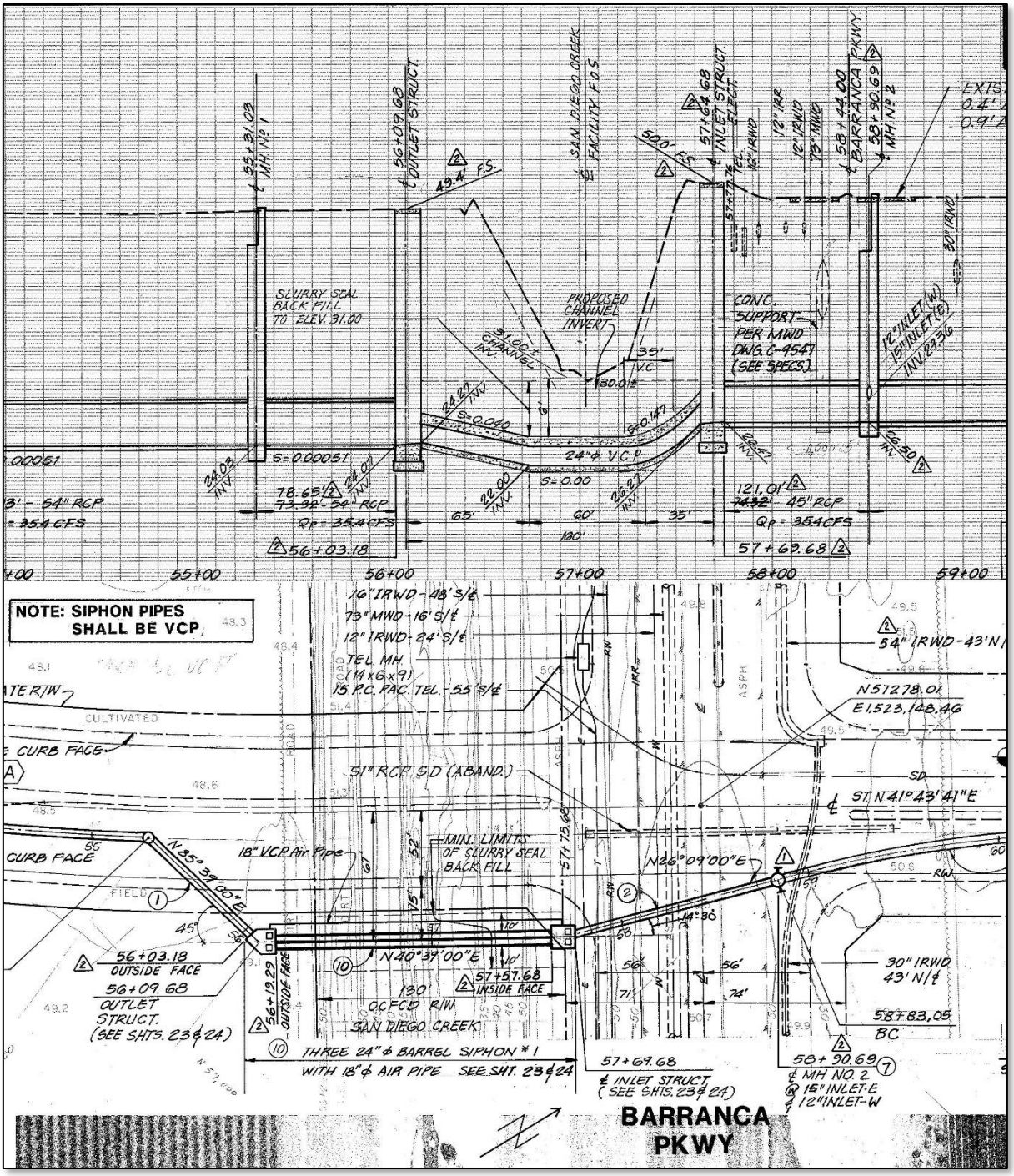
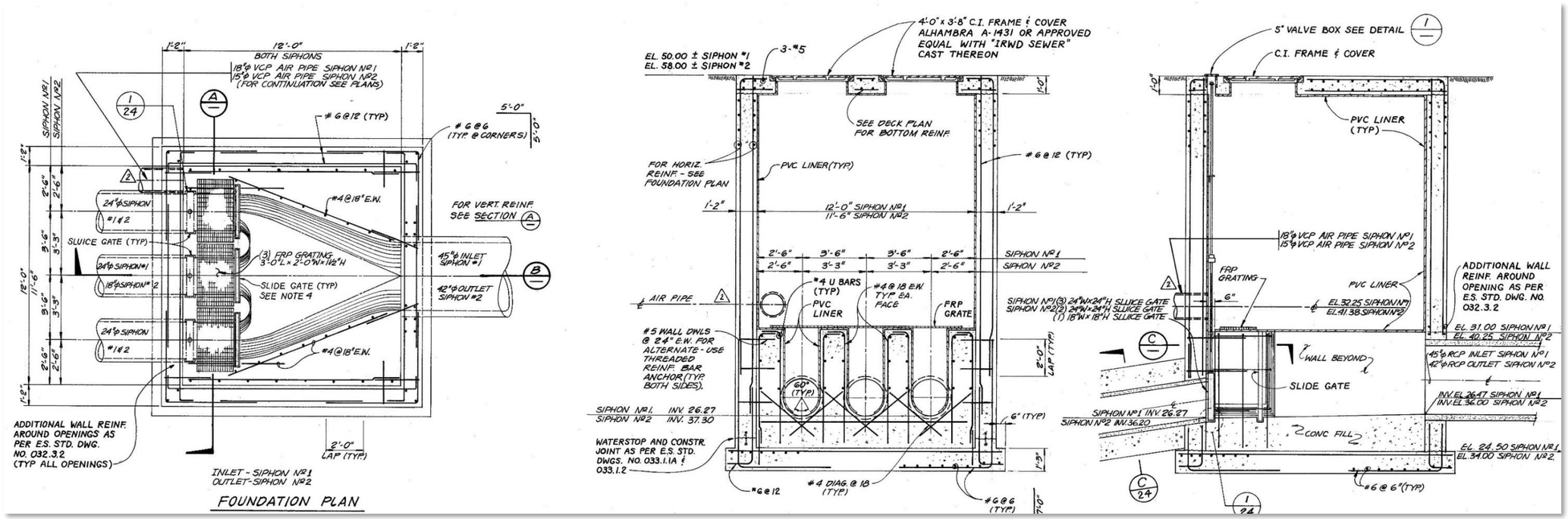
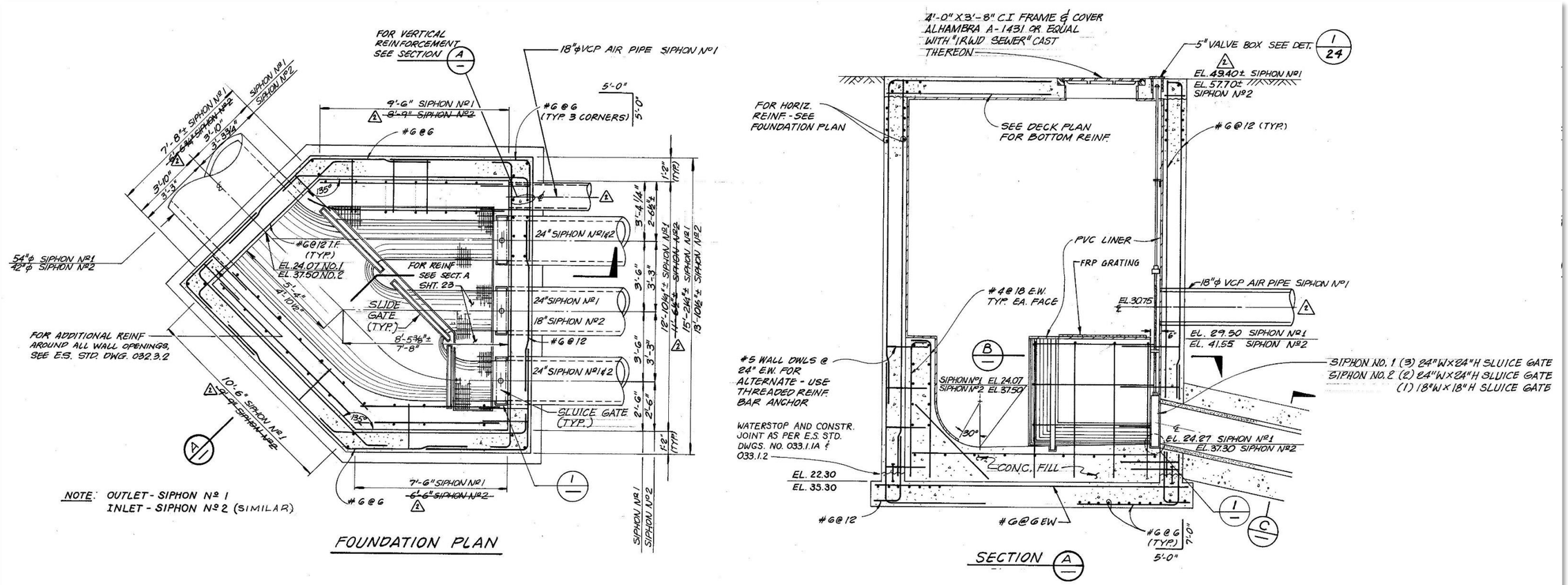


Figure 3
Upstream Structure Details



**Note that the slide gates have been removed.*

Figure 4
Downstream Structure Details



**Note that the slide gates have been removed.*

Section 2: Siphon Barrels

The siphon is 148 feet long, consisting of three 24-inch VCP barrels as shown on Figure 2. IRWD staff indicated that all barrels are open. During the field inspection, it appeared that the middle barrel was conveying the entire flow from the upstream to the downstream side of the siphon.

Section 3: Air Jumper

There is an 18-inch VCP air jumper associated with the Harvard / Barranca Siphon as shown on Figure 2.

Section 4: Upstream Structure

Access

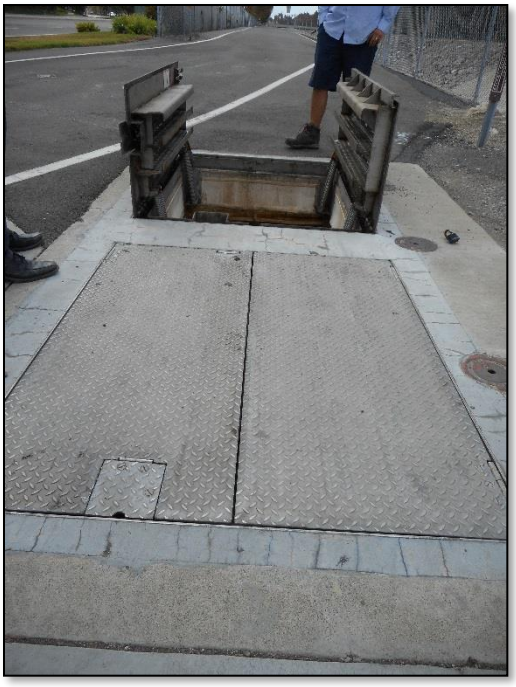
The upstream structure is located on the south corner of Harvard Avenue and Barranca Parkway, adjacent to the bike path on the north side of San Diego Creek, as shown in Photograph 1. The access at this location is good.



Photograph 1 Upstream Structure Access (facing east)

Access Hatch

The upstream structure access hatches are in good condition as shown in Photograph 2. The locks have some corrosion.



Photograph 2 Upstream Structure Access Hatches



Photograph 3 Upstream Structure Channels

Condition

The upstream structure is lined with PVC. The lining has spotting and black markings. The lining of the walls are seen in Photograph 3 and 4.



Photograph 4 Upstream Structure Walls

Gates

This structure has sluice gates for each barrel and slide gate guides, but no slide gates in place. Per IRWD staff, the sluice gate for the middle barrel is damaged. The barrel is currently open.

Odor

There is an odor issue at the upstream structure.

Section 5: Downstream Structure

Access

The downstream structure is accessible via Harvard Avenue, on the south side of San Diego Creek. There is a driveway approach to the access of the upstream structure off Harvard Avenue, shown in Photograph 5.



Photograph 5 Downstream Structure Access

Access Hatch

The downstream structure access hatches are in good condition, shown in Photograph 6 and 7.

Condition

The downstream structure is lined with PVC. The lining has spotting and black markings. The lining of the walls are seen in Photograph 8.

Gates

This structure has sluice gates for each barrel and slide gate guides, but no slide gates in place.

Odor

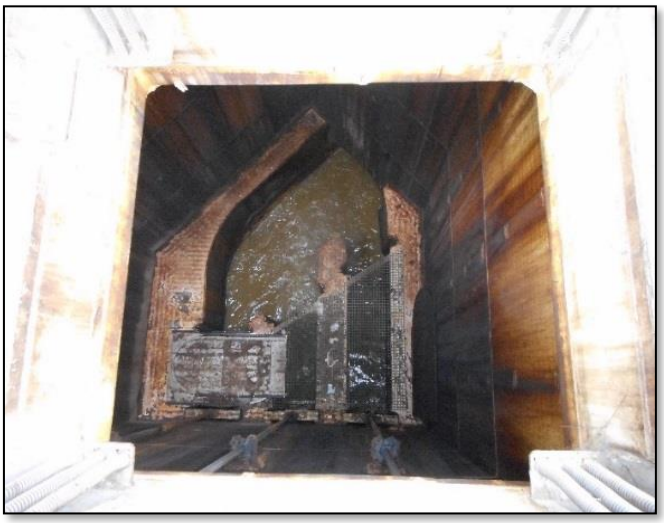
There is no odor issue at the downstream structure.



Photograph 6 Downstream Structure



Photograph 7 Downstream Structure Access Hatches



Photograph 8 Downstream Structure Channels

Section 6: Recommendations

The recommendations for the Harvard / Barranca Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Upstream structure grates shows signs of wear and tear	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Downstream structure grates shows signs of wear and tear	
	One or more barrels may be obstructed	
	Upstream structure has odor issues	
Condition/ Age	Upstream structure sluice gates shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Upstream structure lining is deteriorating	
	Downstream structure lining is deteriorating	

Shady Canyon / Sage Creek Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Shady Canyon / Sage Creek Siphon (S7) is located west of Shady Canyon Drive, at the south end of Bommer Canyon in the City of Irvine. It is located in the University Trunk sewershed. It was constructed in 1998 in order to convey sewage under four East Canyon culverts (CS Pipe Arch 9'-9" x 6'-7"). The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location

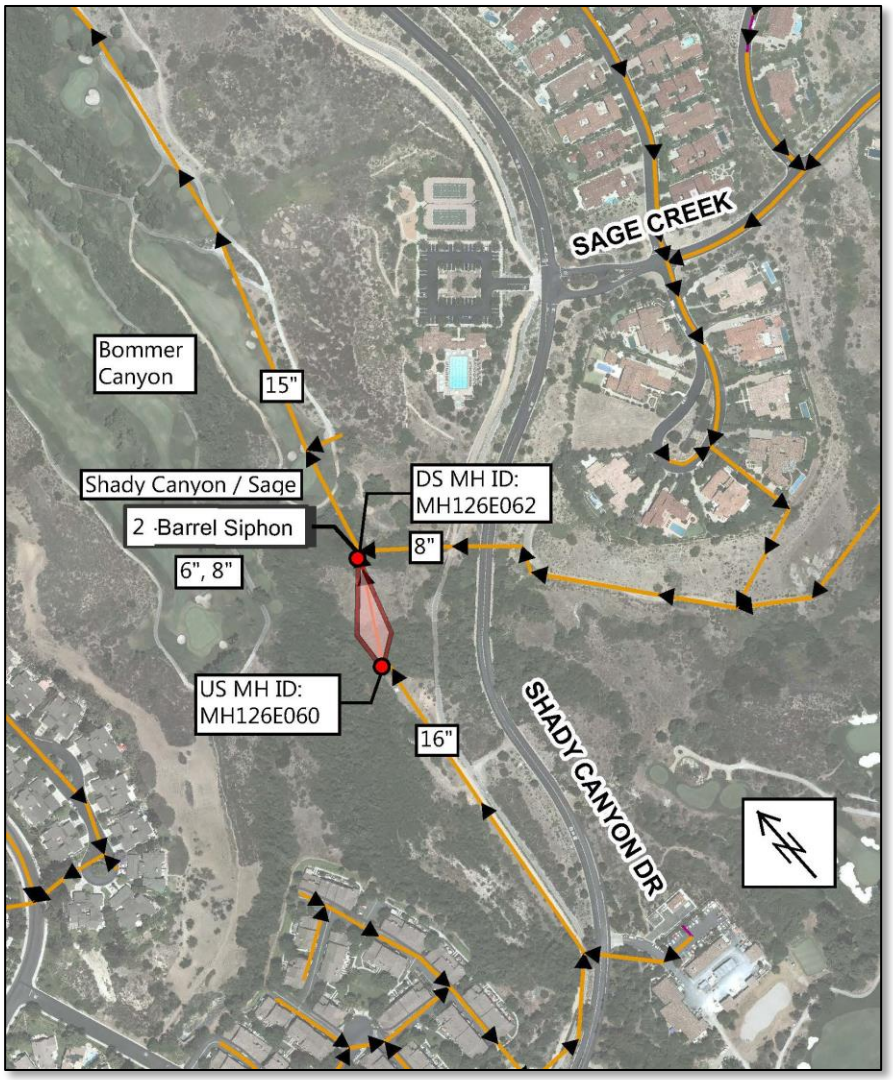


Figure 2
Siphon Plan and Profile

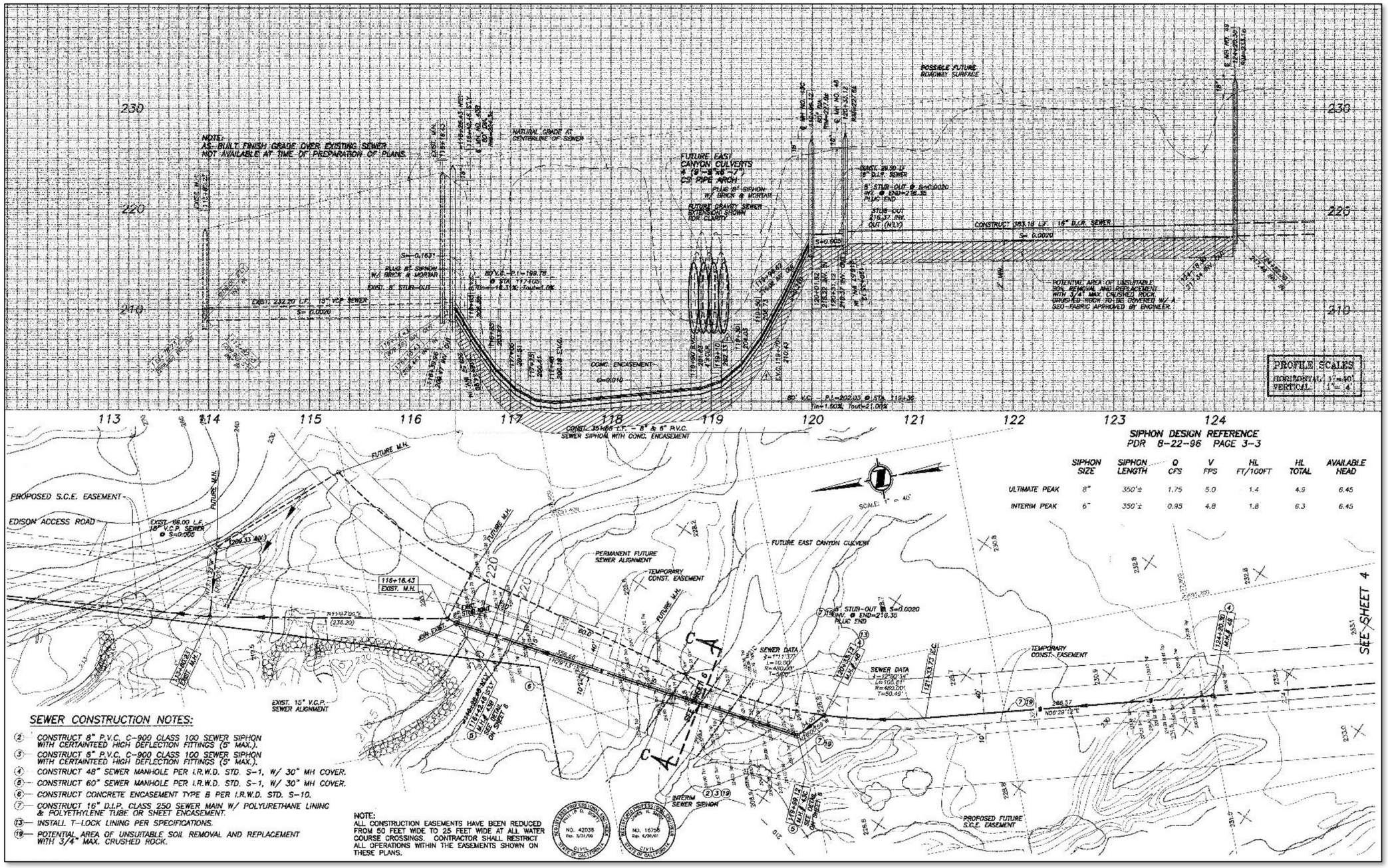
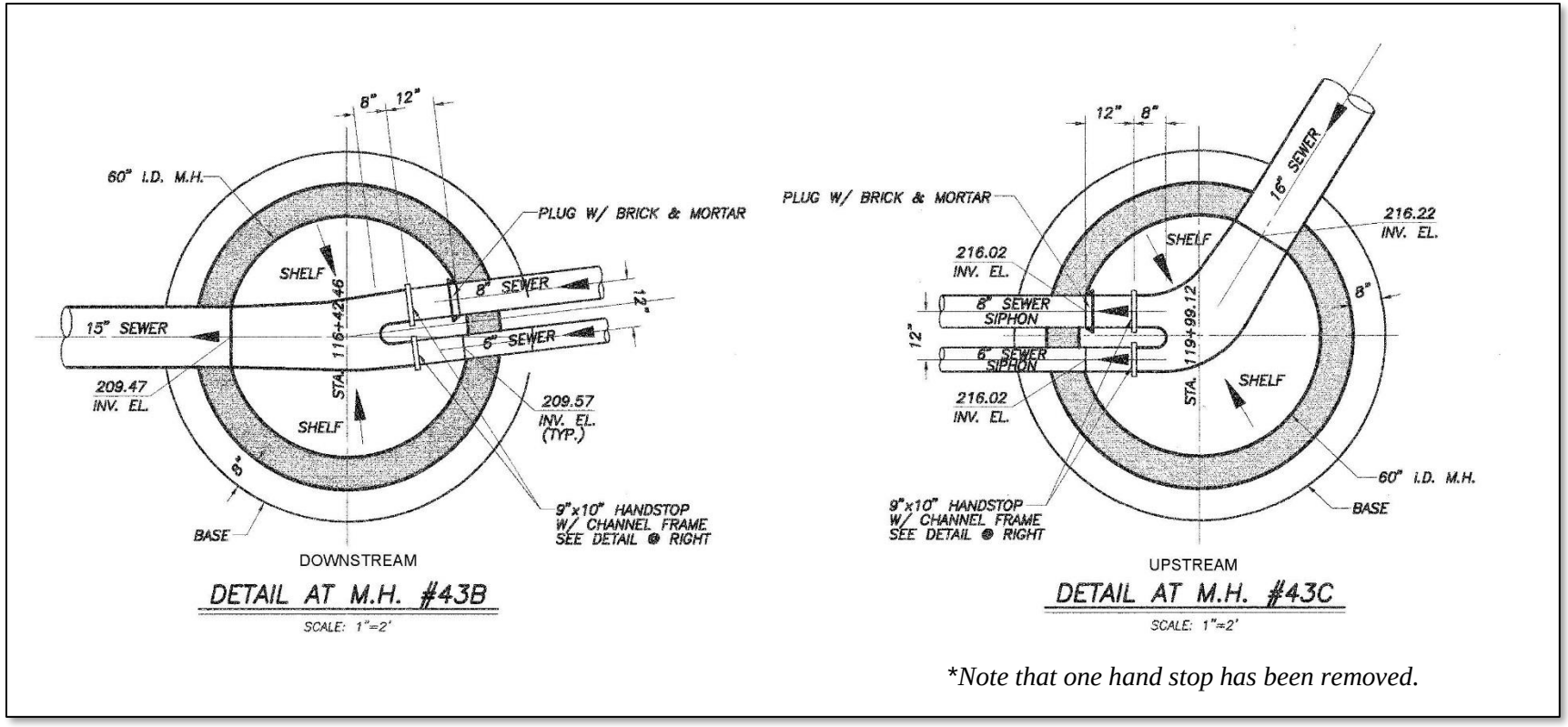


Figure 3
Upstream and Downstream Structure Details



**Note that one hand stop has been removed.*

Section 2: Siphon Barrels

The siphon is 352 feet long, consisting of two PVC barrels that are 6-inch and 8-inch in diameter as shown on Figure 2. The 6-inch barrel is currently conveying all flows. The 8-inch barrel is closed off with a hand-stop or slide gate.

Section 3: Air Jumper

There is no air jumper associated with the Shady Canyon / Sage Creek Siphon.

Section 4: Upstream Structure

Access

The upstream structure is accessible along the Shady Canyon Trail Bikeway, which parallels Shady Canyon Drive to the north as shown on Figure 4. Currently, the upstream structure has to be accessed from the north. Trucks drive down the Shady Canyon Trail Bikeway, across two bridges with 8,000 lb weight limits (see Photograph 1) to the structure. A pickup truck and trailer can cross the bridges.



Figure 4 Overview of Siphon Access

Approximately 200-feet to the south of the structure location, there is a dirt road that seems like an ideal way to access the structure. There are two bollards and a chain preventing the use of the path from Shady Canyon Drive. It is unknown why this dirt path could not be used for access..



Photograph 1 Bridge Crossing on Shady Canyon Trail Bikeway



Photograph 2 Upstream Structure Access

Brush was cleared in the area about 4 months prior to the site visit in May 2015. As can be seen in Photograph 2, the brush grows back. IRWD staff are constantly concerned about snakes and ticks in the area.

The siphon can only be cleaned before and after nesting season and maintenance activities must be scheduled with the landscape contractor of the Shady Canyon Home Owners Association (HOA).

Access Hatch

The upstream structure access hatch is in good condition as shown in Photograph 3 and 4.

Condition

The upstream structure is in good condition as seen in Photograph 5.

Gates

The upstream structure has channel frames for hand-stops as shown in Photograph 5. The east, 8-inch barrel has a hand-stop in place. The 6-inch barrel does not have a hand-stop in place and currently conveys all the flow.

Odor

There is no odor issue at this location.

Section 5: Downstream Structure

Access

The downstream structure was not inspected due to the difficulty to access this location, which is shown from afar in Photograph 6. There is no access for maintenance vehicles to get to this location. A



Photograph 3 Upstream Structure



Photograph 4 Upstream Structure Access Hatch



Photograph 5 Upstream Structure Channels

concrete gutter must be crossed to get to the structure. Erosion has been an issue for access as well.

IRWD staff says that the location could be accessed from the Strawberry Farms Golf Course but then the crews have to worry about being hit by golf balls.

Condition

The condition of the downstream structure was not verified.



Photograph 6 Downstream Structure Access (corner of paper in picture points to location of DS structure)

Section 6: Recommendations

The recommendations for the Shady Canyon / Sage Creek Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Downstream structure is difficult to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Site access is difficult	

Jeffrey / Alton Siphon
Evaluation
(No Field Inspection for this Site)

Section 1: General

The Jeffrey / Alton Siphon (S8) is located east of Jeffery Road south of Barranca Parkway in the City of Irvine. It is located in the Jeffrey sewershed. It was constructed in 1988 in order to convey sewage under San Diego Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figures 2 and 3. The upstream and downstream structure details are shown on Figure 4.

Figure 1
Siphon Location

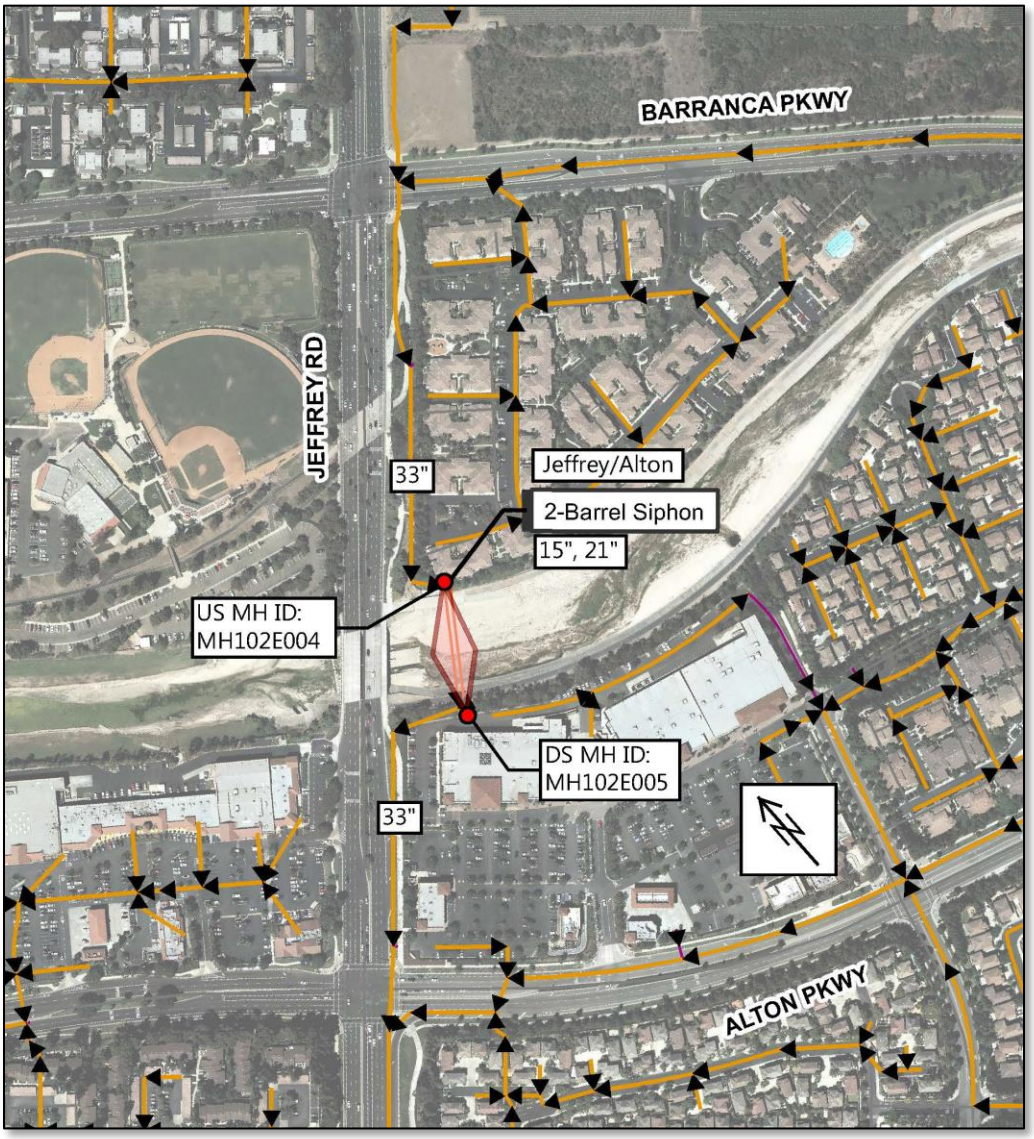


Figure 2
Siphon Plan and Profile

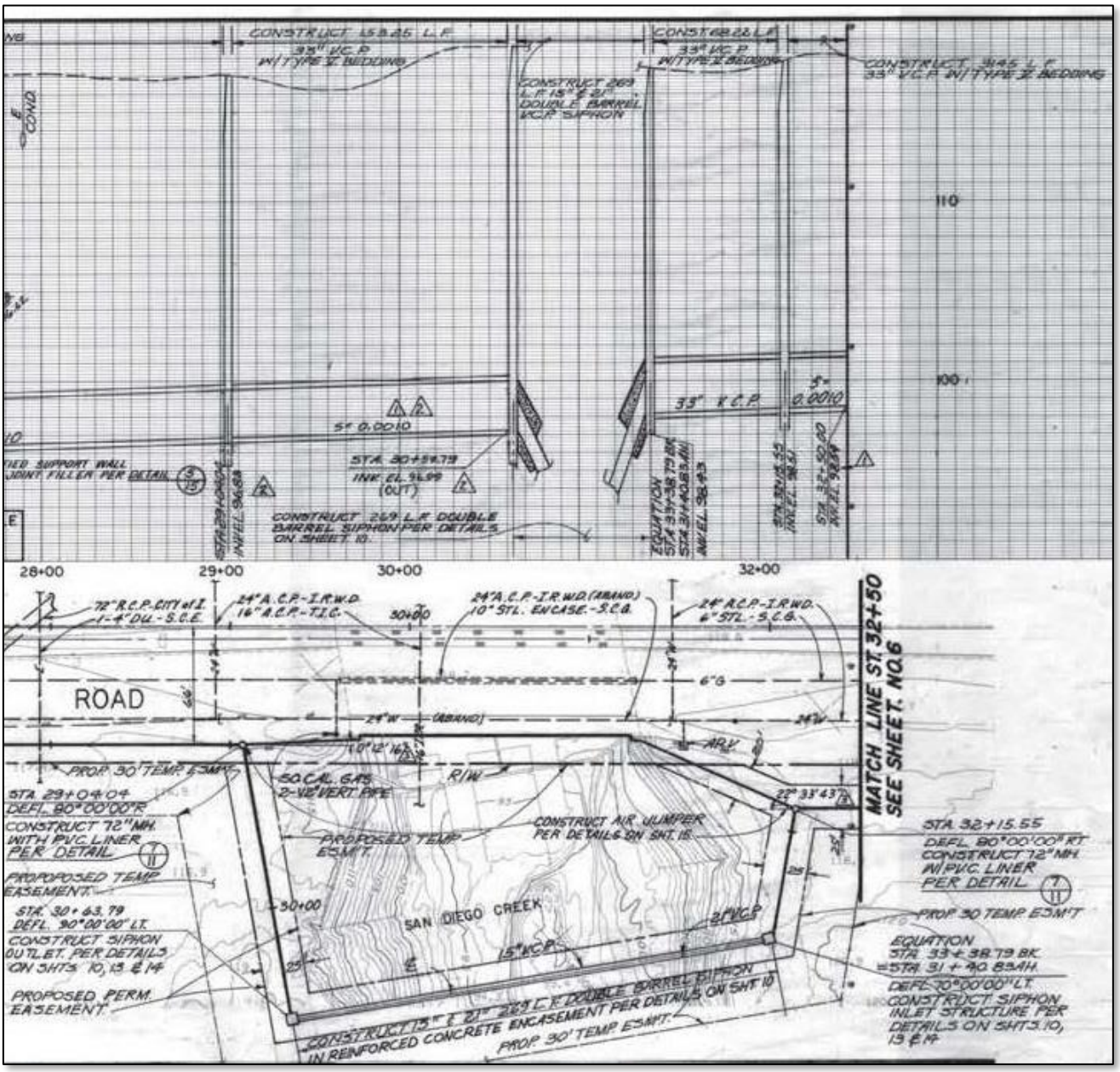


Figure 3
Siphon Profile

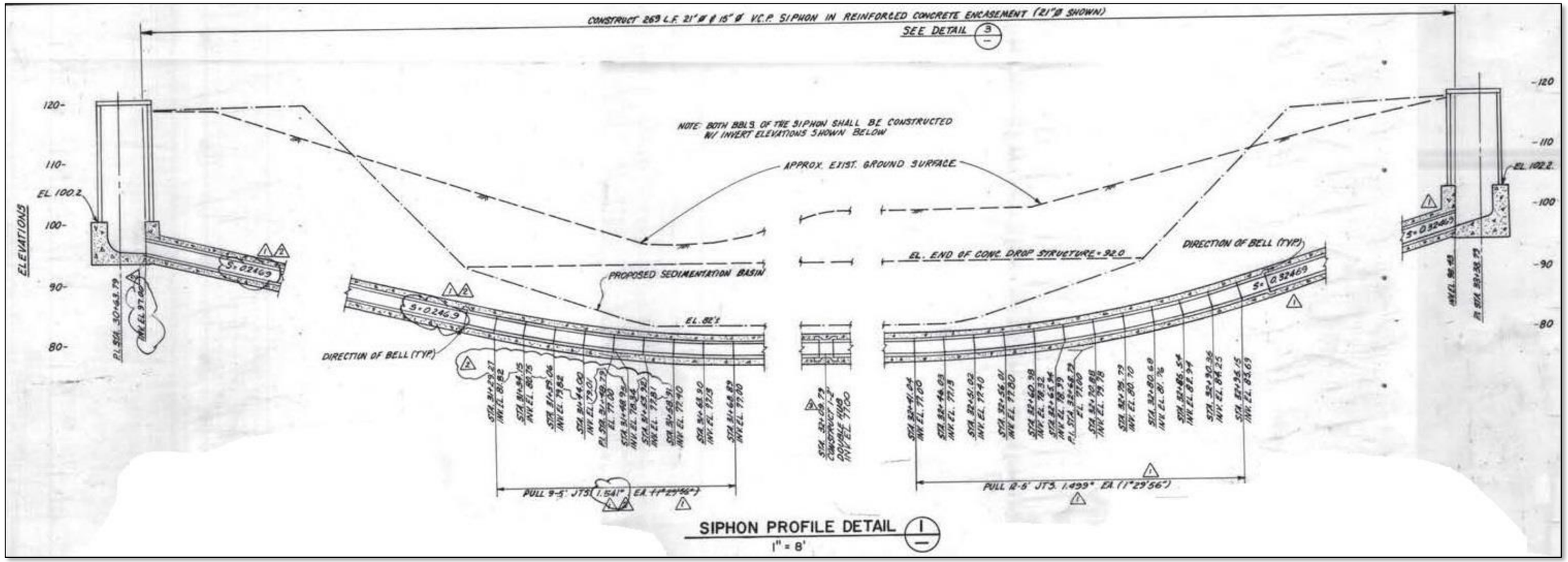
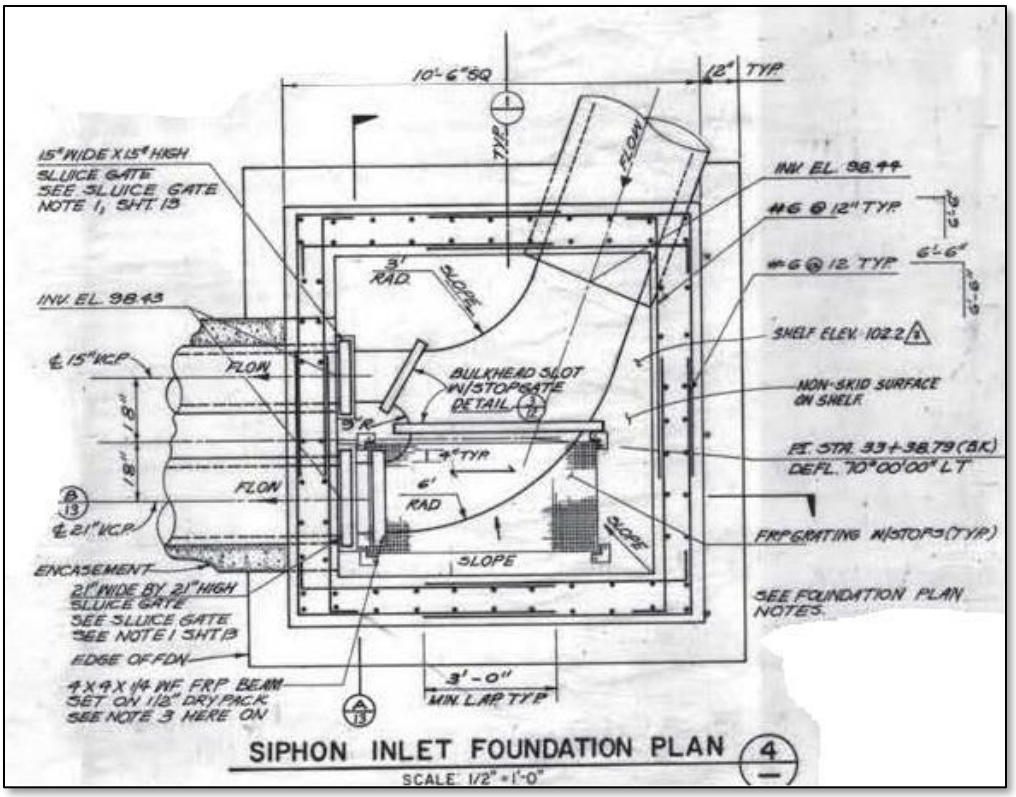
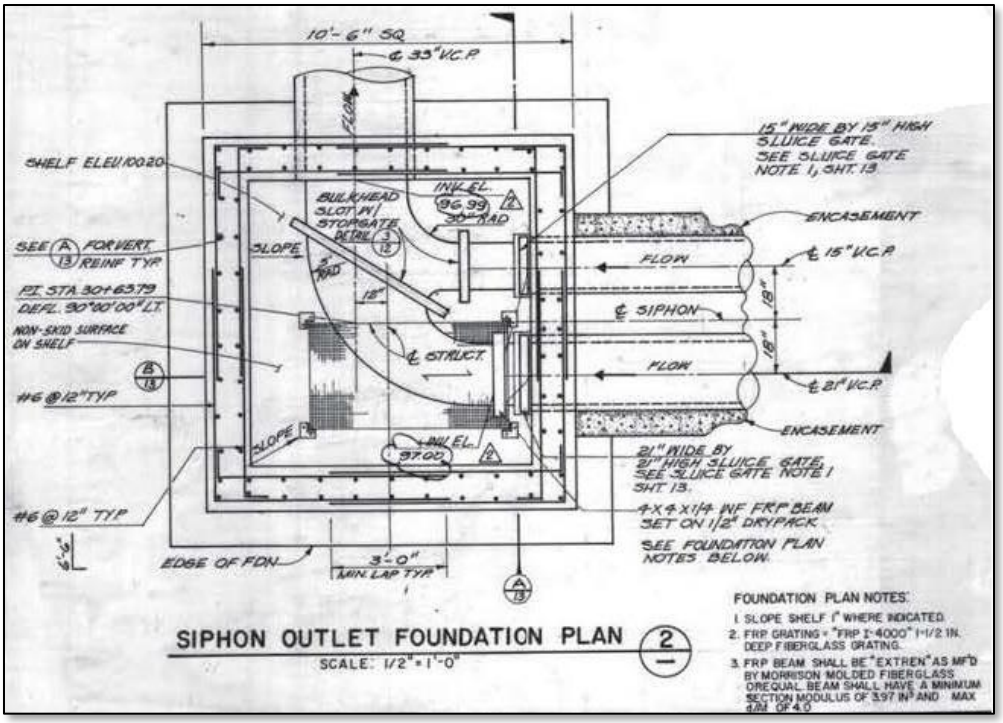


Figure 4
Upstream and Downstream Structure Details



**Note that the stop gates have been removed.*



**Note that the stop gates have been removed.*

Section 2: Siphon Barrels

The siphon is 269 feet long consisting of two VCP barrels that are 15-inch and a 21-inch in diameter as shown on Figure 2. Both barrels are open per IRWD staff.

Section 3: Air Jumper

There is a 15-inch PVC air jumper that hangs off of the east side of the bridge crossing San Diego Creek.

Section 4: Upstream Structure

Access

The upstream structure is accessed from the bike path that parallels San Diego Creek on the north as shown in Photograph 1. There is turf-lock installed from the bike path to the structure for the maintenance vehicles to drive over. Access is not an issue at this location.



Photograph 1 Upstream Structure Access (facing west toward Jeffrey Rd)

Access Hatch

The upstream structure access hatch shows signs of corrosion as seen in Photograph 2.



Photograph 2 Upstream Structure Access Hatch



Photograph 3 Upstream Structure Channels (Photo provided by IRWD)

Condition

The access hatch was not opened in May 2015 during the field visit because of the silicone seal around the edges of the access hatch to prevent odors from escaping the structure. Therefore, the condition of the structure was not verified. IRWD staff provided pictures that were on file. The inside of the upstream structure is shown in Photograph 3.

Gates

Per IRWD staff, the slide gate hardware is corroding.

Odor

Historically, there has been an odor issue at this location. Complaints have been made in the past by nearby residents regarding the odor. The access hatch has since been sealed with silicone and there have not been any recent complaints.

Section 5: Downstream Structure

Access

The downstream structure, shown in Photograph 4, is accessible from the northwest corner of the Gelson's Markets parking lot. There are two parking spaces adjacent the structure location. IRWD staff place traffic cones in advance of any work that needs to be done but often, people move the cones and use the parking spaces anyway.

Access Hatch

The downstream structure access hatch shows signs of corrosion as seen in Photograph 5. The locks were seen to be corroded during the site visit.



Photograph 5 Downstream Structure Access Hatch

Condition

The access hatch was not opened in May 2015 during the field visit because of the silicone seal around the edges of the access hatch to prevent odors from escaping the structure. Therefore, the condition of the structure was not verified. IRWD staff provided pictures that were on file. The inside of the upstream structure is shown in Photograph 6.



Photograph 6 Downstream Structure Channels (photo provided by IRWD)

Gates

Per IRWD staff, the slide gate hardware is corroding as seen in Photograph 7.



Photograph 7 Downstream Structure Corrosion (Photo provided by IRWD)

Odor

Historically, there has been an odor issue at this location. Complaints have been made in the past by nearby residents regarding the odor. The lid has since been sealed with silicone and there have not been any recent complaints.

Section 6: Recommendations

The recommendations for the Jeffrey / Alton Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Upstream structure grates shows signs of wear and tear	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Downstream structure grates shows signs of wear and tear	
	Upstream structure has odor issues	
	Upstream structure has odor issues	
Condition/ Age	Upstream structure sluice gates shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Downstream structure sluice gates shows signs of wear and tear	

Sand Canyon / Barranca Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Sand Canyon / Barranca Siphon (S9) is located on the east side of Sand Canyon Avenue, south of Barranca Parkway in the City of Irvine. It is located in the San Diego Creek Trunk sewershed. It was constructed in 1987 in order to convey sewage under San Diego Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location

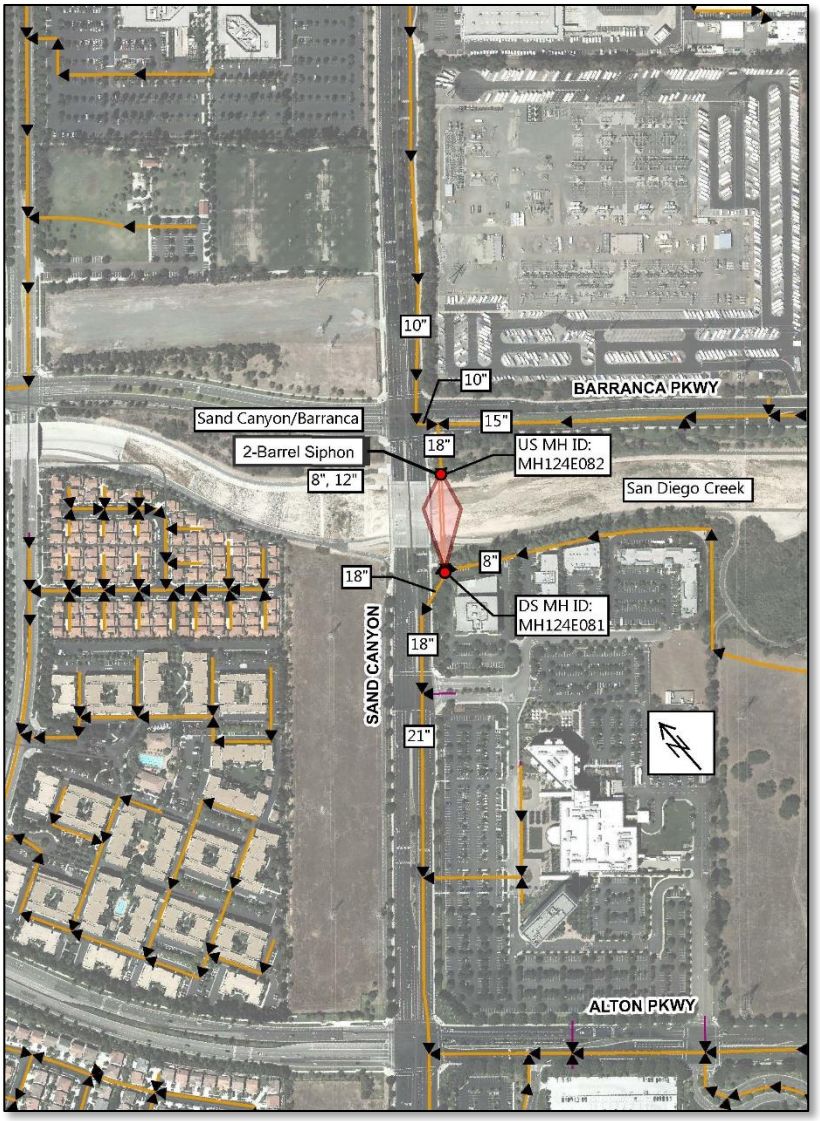


Figure 2
Siphon Plan and Profile

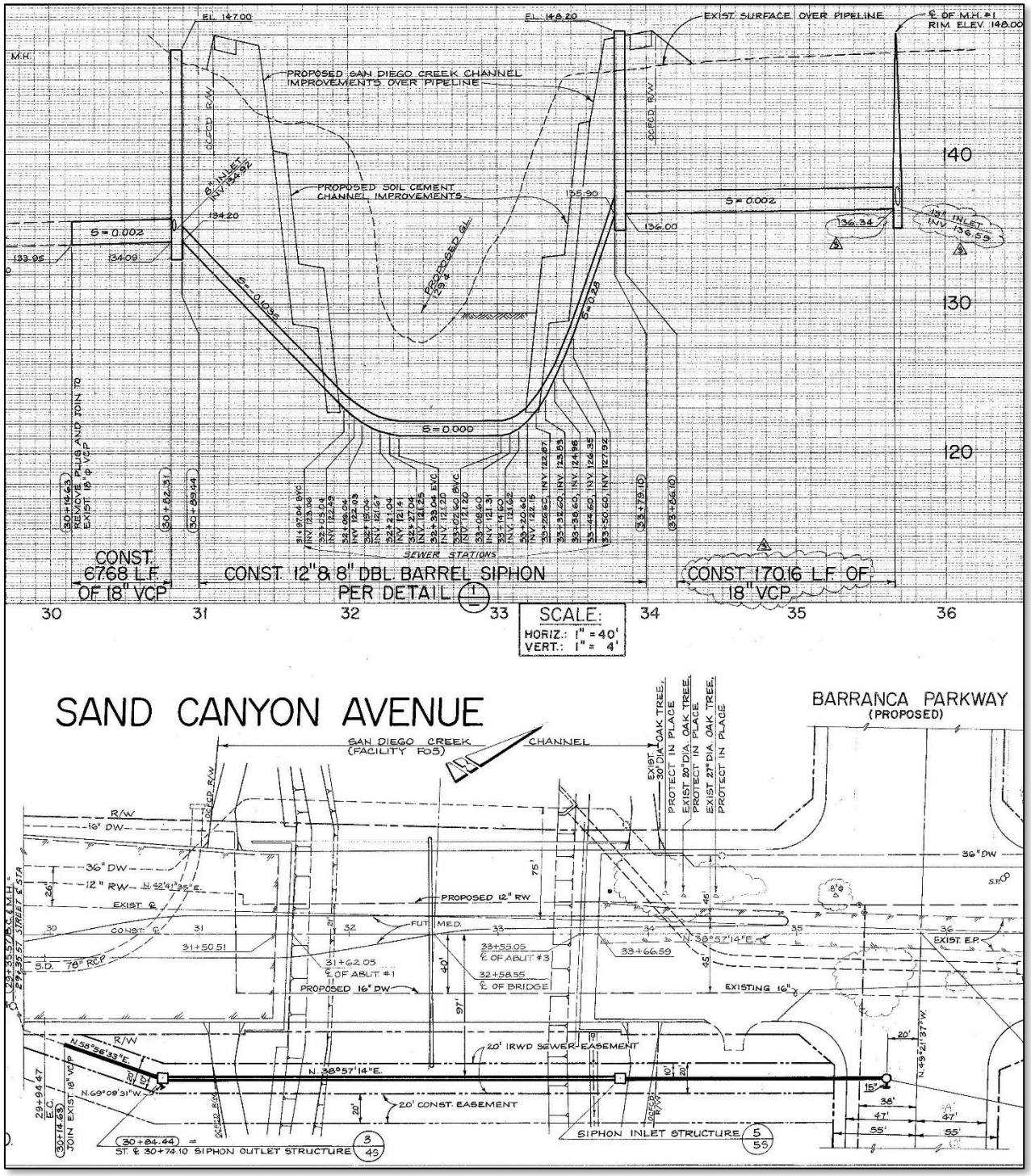
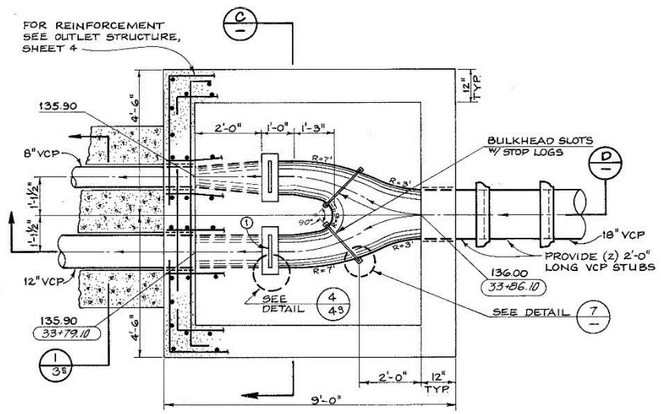
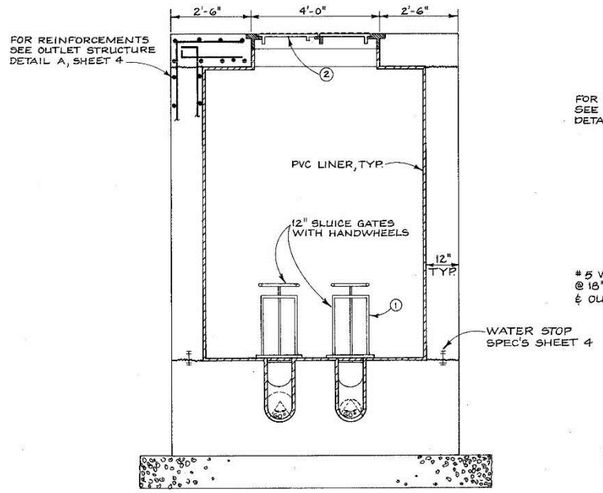
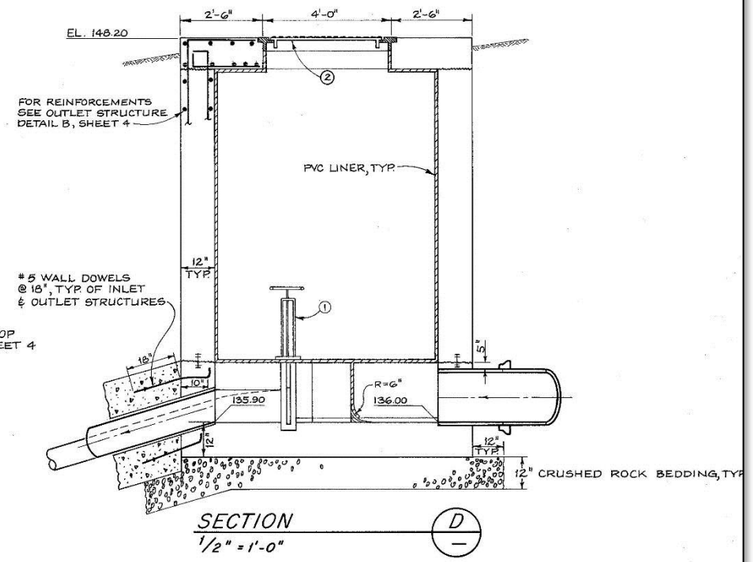


Figure 3
Upstream and Downstream Structure Details

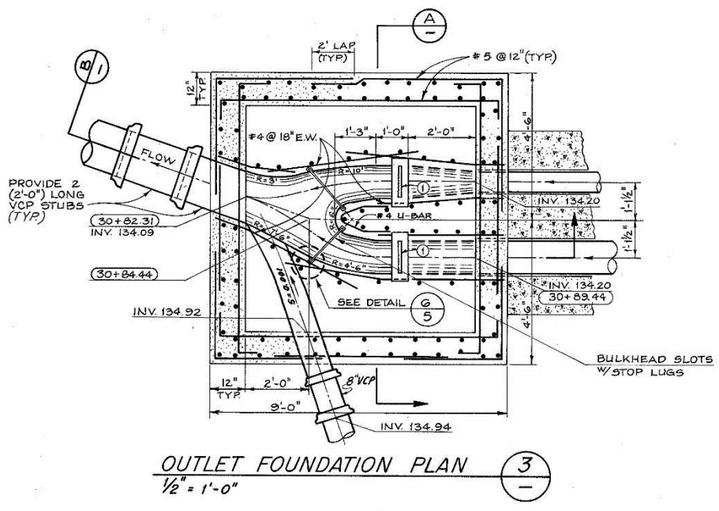
**Note that the stop logs have been removed.*

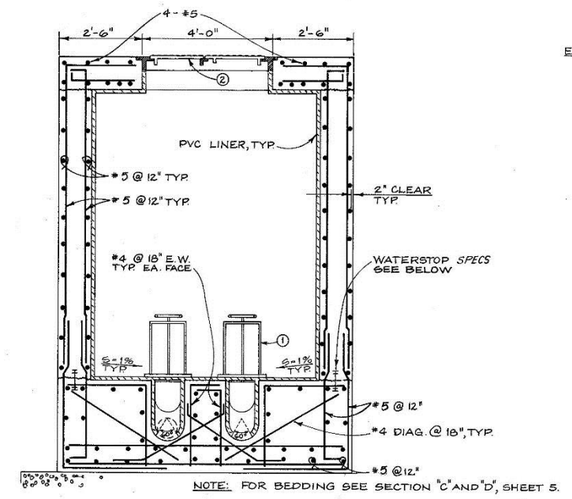


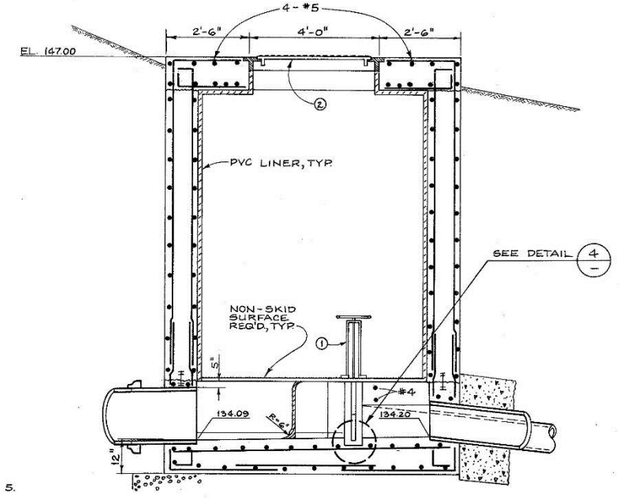




**Note that the slide gates have been removed.*







Section 2: Siphon Barrels

The siphon is 290 feet long, consisting of two VCP barrels that are 8-inch and 12-inch in diameter as shown in Figure 2. IRWD staff indicated that both barrels are open and in operation. During the field inspection, it appeared that the 12-inch (east) barrel was conveying the entire flow from the upstream to the downstream side of the siphon.

Section 3: Air Jumper

There is no air jumper associated with the Sand Canyon / Barranca Siphon.

Section 4: Upstream Structure

Access

The upstream structure is accessible from Sand Canyon Avenue via the adjacent bike path shown in Photograph 1. Access is not an issue at this location.



Photograph 1 Upstream Structure Access (facing southwest on San Canyon Avenue)

Access Hatch

The upstream structure access hatch is a double leaf aluminum door, shown in Photograph 2. One door opens all the way and the other door only opens half way due to corrosion.



Photograph 2 Upstream Structure Access Hatch

Condition

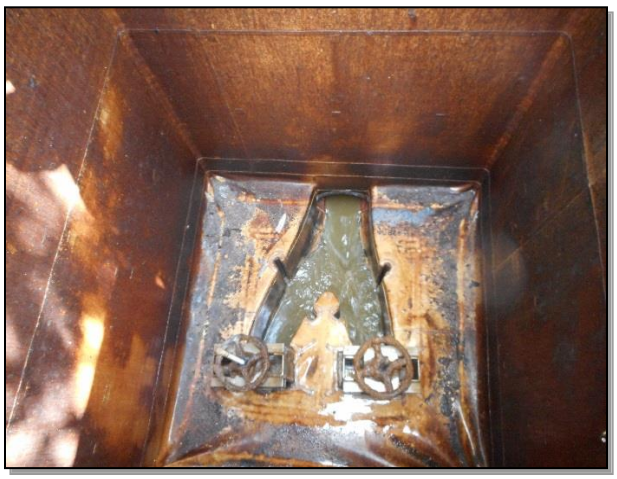
The upstream structure, shown in Photograph 3 and 4, has significant corrosion issues.

Gates

This structure has sluice gates with hand wheels located inside the structure. Bulkhead slots are also present, but the stop logs are not in place. The hand wheels are significantly corroded as seen in Photograph 5.

Odor





Photograph 4 Upstream Structure Channels and



Photograph 6 Downstream Structure
Photograph 5 Upstream Structure Handwheel

There is no odor issue at the upstream structure.

Section 5: Downstream Structure

Access

The downstream structure, shown in Photograph 6, is accessible from the northwest corner of the Sand Canyon Medical Center parking lot.

Access Hatch

The downstream structure access hatch and hatch are in good condition as shown in Photograph 6 and 7. The lock was corroded due to moisture under the plastic tarp, used for odor control.

Condition

The lining of the downstream structure is in good condition as shown in Photograph 9.

Gates

This structure has sluice gates with hand wheels located inside the structure. Bulkhead slots are also present, but the stop logs are not in place. The hand wheels are significantly corroded as seen in Photograph 10.

Odor

There is an odor control issue at the downstream structure location. A plastic tarp is situated over the top of the access hatch to keep odors under control.



Photograph 7 Downstream Structure Access Hatch



Photograph 8 Downstream Structure Channels



Photograph 10 Downstream Structure Handwheel



Photograph 9 Downstream Structure Walls

Section 6: Recommendations

The recommendations for the Sand Canyon / Barranca Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Structure requires confined space entry to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Upstream structure sluice gates shows signs of wear and tear	
	Downstream structure has odor issues	
Condition/ Age	Upstream structure hatch shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Upstream structure lining is deteriorating	

OCTA / Jamboree Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The OCTA / Jamboree Siphon (S10) is located south of the OCTA Metrolink railroad, east of Jamboree Road in the City of Tustin. It is located in the HATS sewershed. It was constructed in 1986 in order to convey sewage under Peters Canyon Channel. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figures 2 and 3. The upstream and downstream structure details are shown on Figures 4 and 5.

Figure 1
Siphon Location

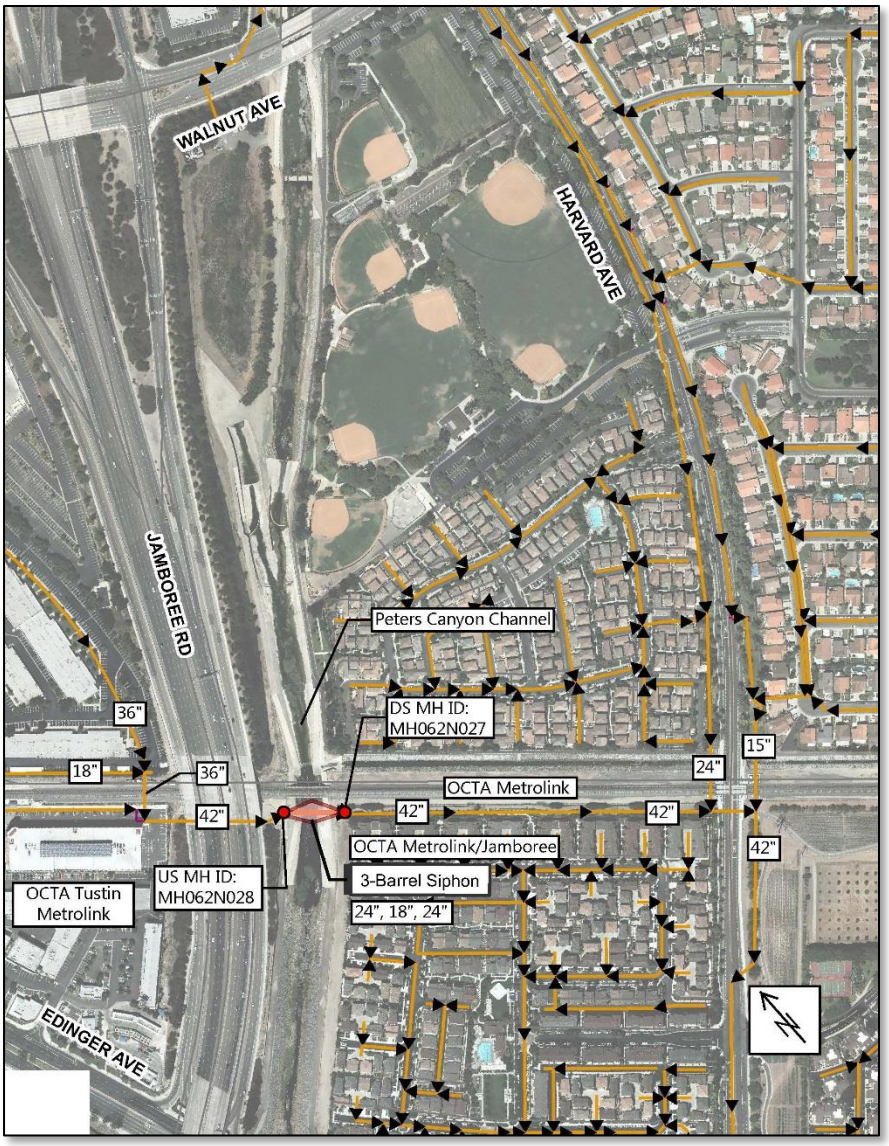


Figure 2
Siphon Plan and Profile

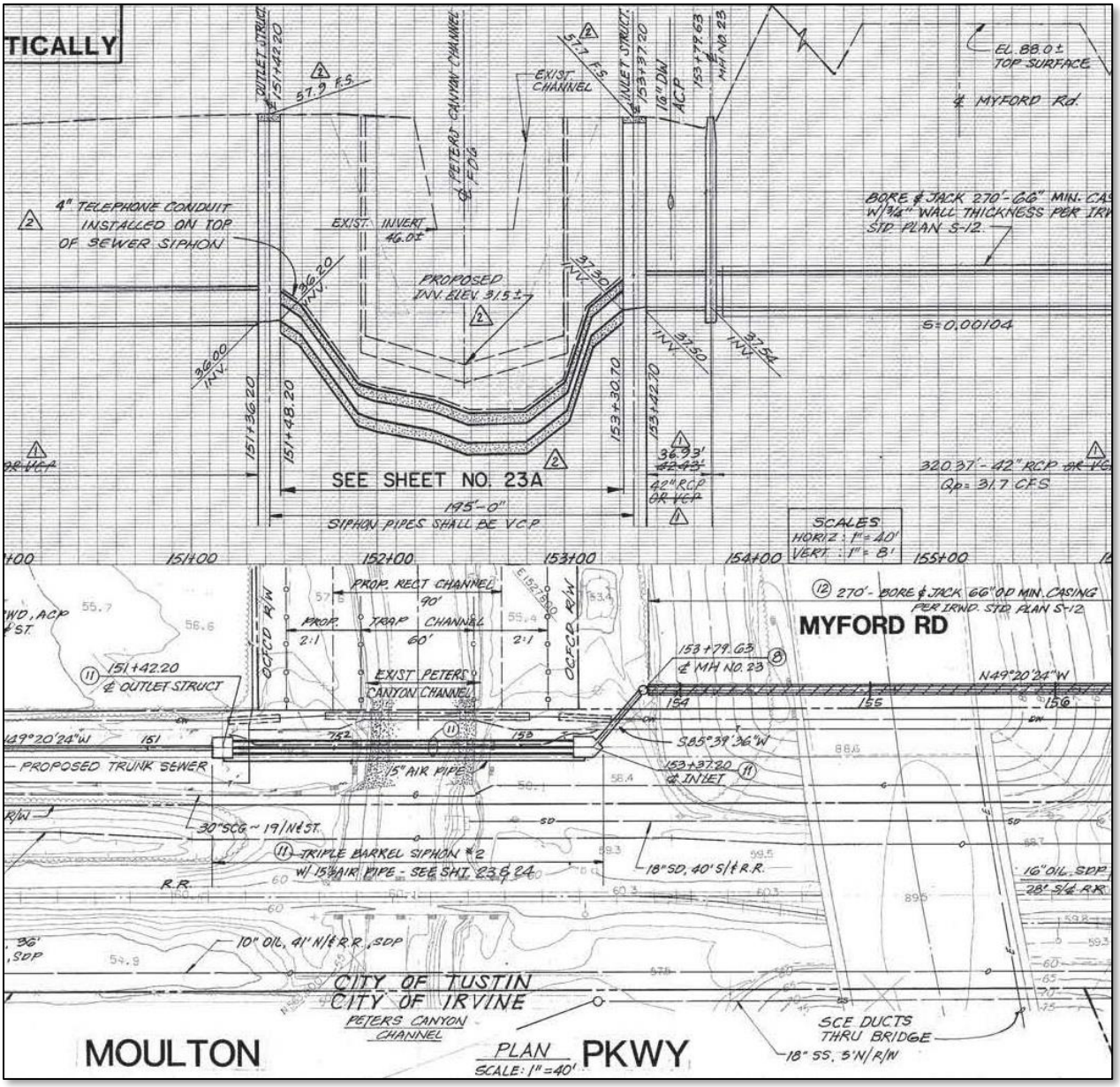


Figure 3
Siphon Profile

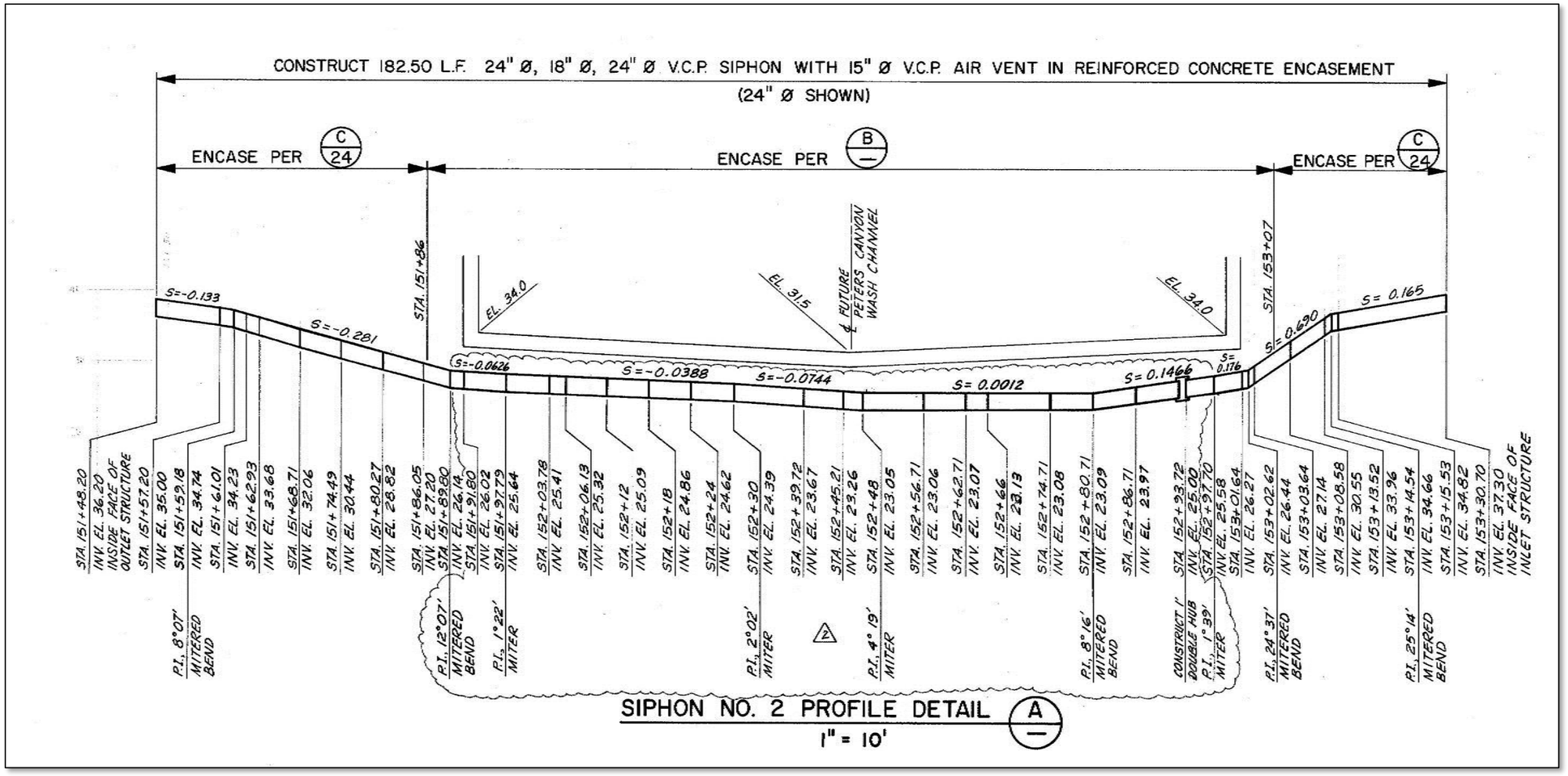
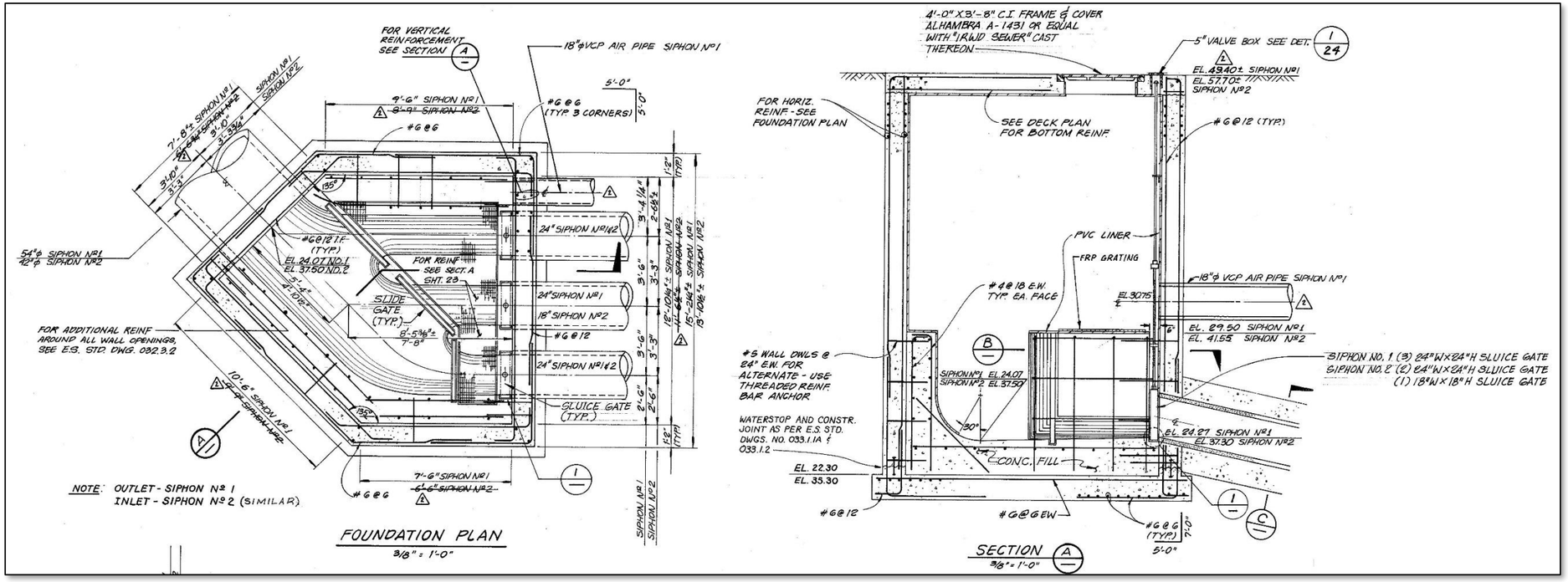
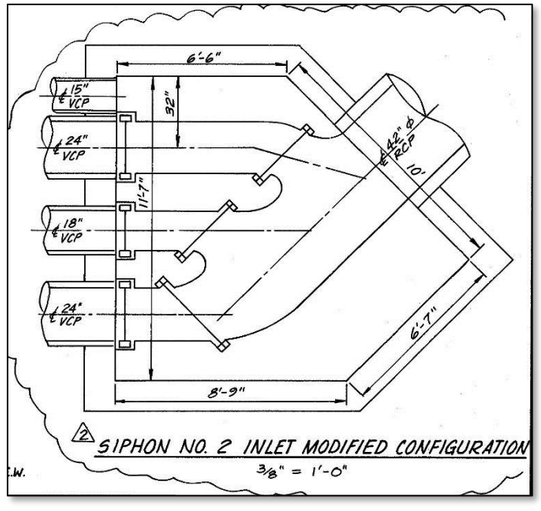


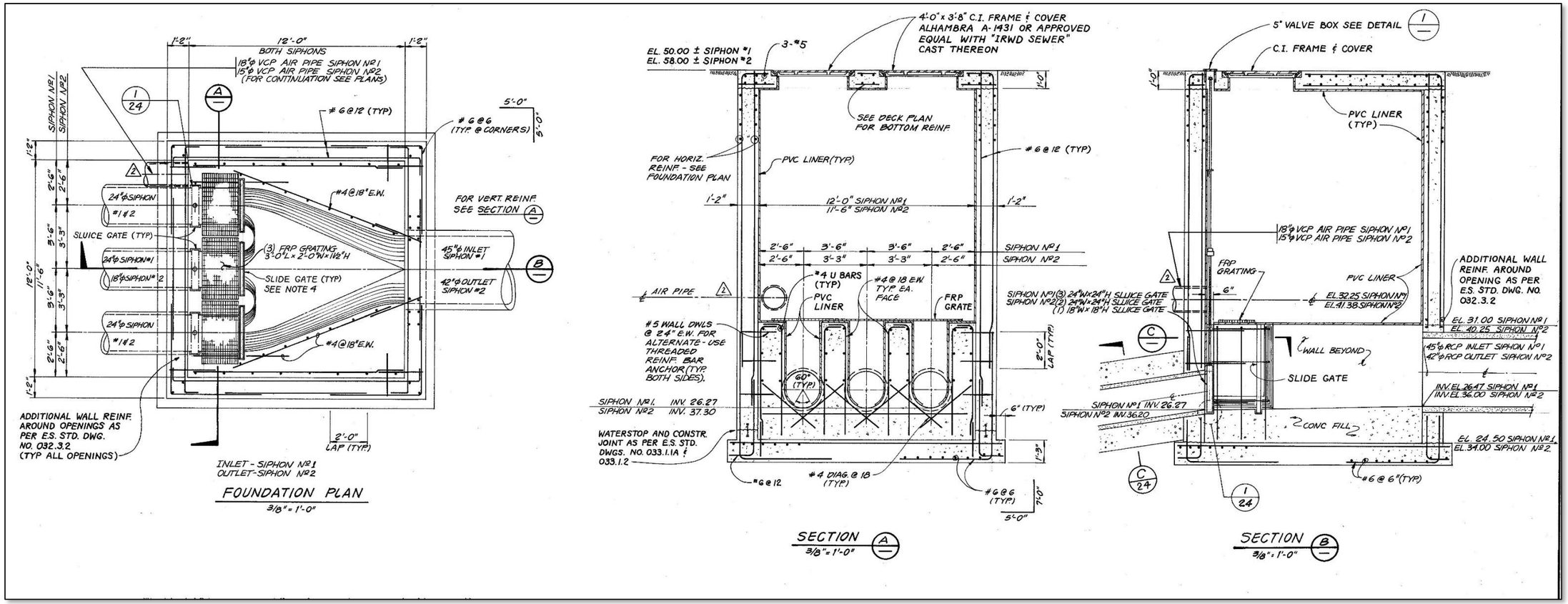
Figure 4
Upstream Structure Details





**Note that one slide gate has been removed.*

Figure 5
Downstream Structure Details



**Note that the slide gates have been removed.*

Section 2: Siphon Barrels

The siphon is 183 feet long, consisting of three VCP barrels that are 24-inch, 18-inch and 24-inch in diameter as shown on Figure 2 and 3 (Siphon #2). IRWD staff indicated that all barrels are open and in operation. During the field inspection, it appeared that the 24-inch (northeasterly) barrel was conveying the entire flow from the upstream to the downstream side of the siphon. It recommended to investigate the condition of the 18-inch and 24-inch (southwesterly) barrel and determine if the sluice gate is closed or if any obstructions exist.

Section 3: Air Jumper

There is a 15-inch VCP air jumper in reinforced concrete encasement associated with the OCTA / Jamboree Siphon.

Section 4: Upstream Structure

Access

The upstream structure, shown in Photograph 1 (provided by IRWD), was not inspected during the May 2015 field visits because the condition of the access road is not maintained very well. Typically, the structure would be accessed from Edinger Avenue via the Peters Canyon Hiking Trail on the northwest side of the channel. In the vicinity of the structure, there are Caltrans drainage facilities that create rivets and cause the maintenance trucks to bottom out.

Access Hatch

The access hatch of the upstream structure looks to be in good condition per Photograph 1 and 2 (provided by IRWD).



Photograph 1 Upstream Structure Access (facing downstream or southeast) (Photo provided by IRWD)



Photograph 2 Upstream Structure Access Hatch (Photo provided by IRWD)

Condition

The inside of the upstream structure, which is lined with PVC is shown in Photograph 3 (provided by IRWD).

Gates

This structure has sluice gates for each barrel and slide gate guides. Per Photograph 3, it appears that the slide gate for the middle barrel and the southwesterly barrel are in place and therefore only the 24-inch northeasterly barrel is typically open and conveys flow. There are signs of corrosion, particularly on the pillow blocks of the sluice gate valve stems as shown in Photograph 4 (provided by IRWD).

Odor



Photograph 3 Upstream Structure Channels (Photo provided by IRWD)



Photograph 4 Upstream Structure Pillow Block (Photo provided by IRWD)

There is no odor issue at the upstream structure.

Section 5: Downstream Structure

Access

The downstream structure is accessible via Walnut Trail, shown in Photograph 5. There is a driveway approach to the Walnut Trail from Harvard Avenue just southwest of the Metrolink Railroad Tracks. The access road is owned by the local home owners association and there are trees very close to the



Photograph 5 Downstream Structure Access (Walnut Trail facing southeast)





trail. Access to the downstream structure is very limited and difficult for maintenance vehicles. There is no room to turn a vehicle around in the vicinity of the structure.

Access Hatch

The downstream structure and structure access hatches are shown in Photograph 6 and 7.

Condition

The inside of the downstream structure is shown in Photograph 8 and 9. The coating is starting to separate from the walls in the upper portion of the structure.

Gates

This structure has sluice gates for each barrel and slide gate guides. There are signs of corrosion, particularly on the pillow blocks of the sluice gate valve stems as shown in Photograph 9.

Odor



Photograph 8 Downstream Structure Channels



Photograph 9 Downstream Structure Walls

There is no odor issue at the downstream structure.

Section 6: Recommendations

The recommendations for the OCTA / Jamboree Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Site access is difficult	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
Condition/ Age	Downstream structure hatch shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Upstream structure sluice gates shows signs of wear and tear	
	Upstream structure grates shows signs of wear and tear	
	Downstream structure grates shows signs of wear and tear	
	Downstream structure sluice gates shows signs of wear and tear	
	Upstream structure lining is deteriorating	
	Downstream structure lining is deteriorating	

El Toro / Raintree Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The El Toro / Raintree Siphon (S11) is located west of the intersection of El Toro Road and Raintree Lane in the City of Lake Forest. It is located in the Muirlands Cherry sewershed. It was constructed in 1986 in order to convey sewage under Aliso Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2.

Figure 1
Siphon Location

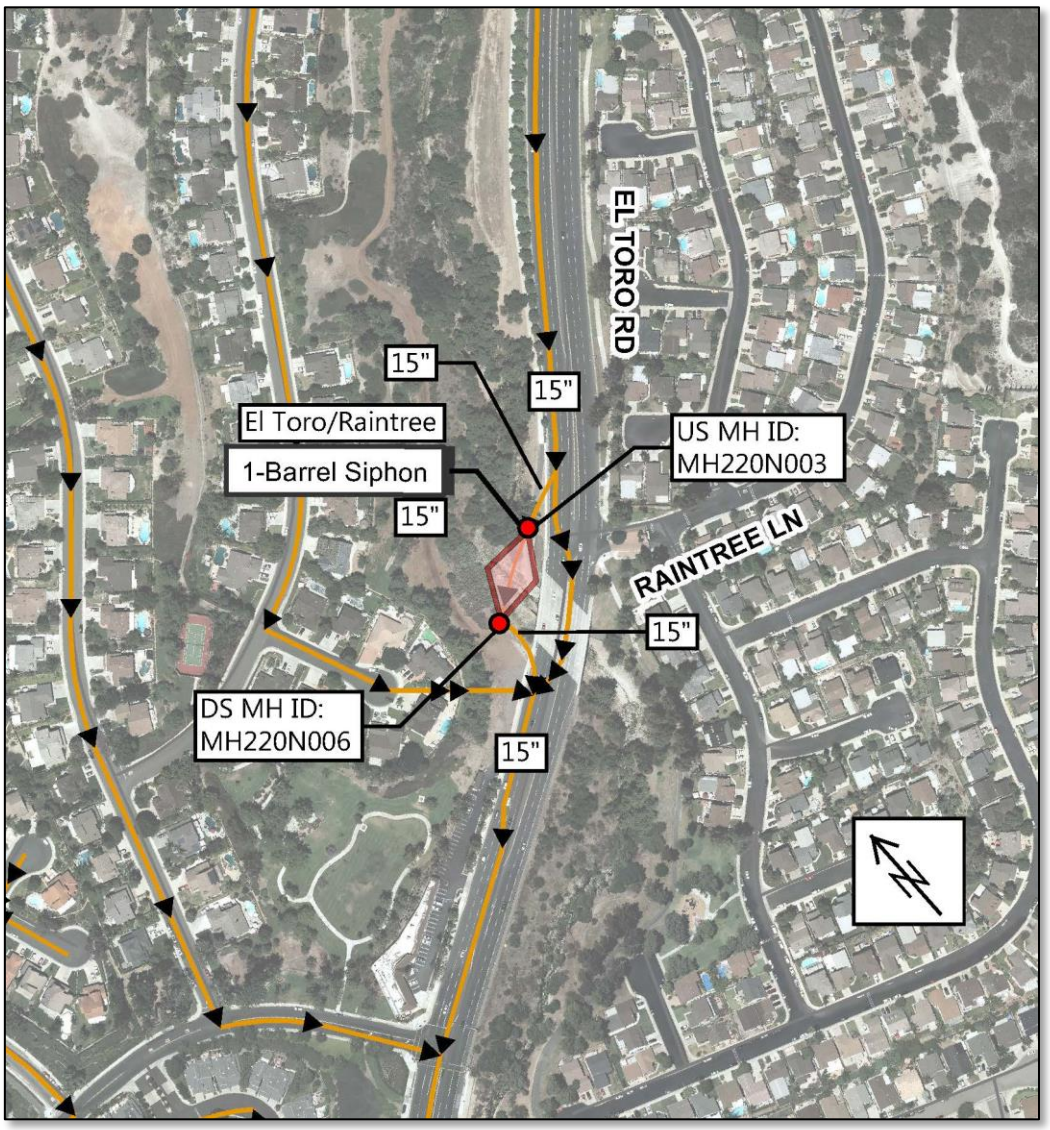
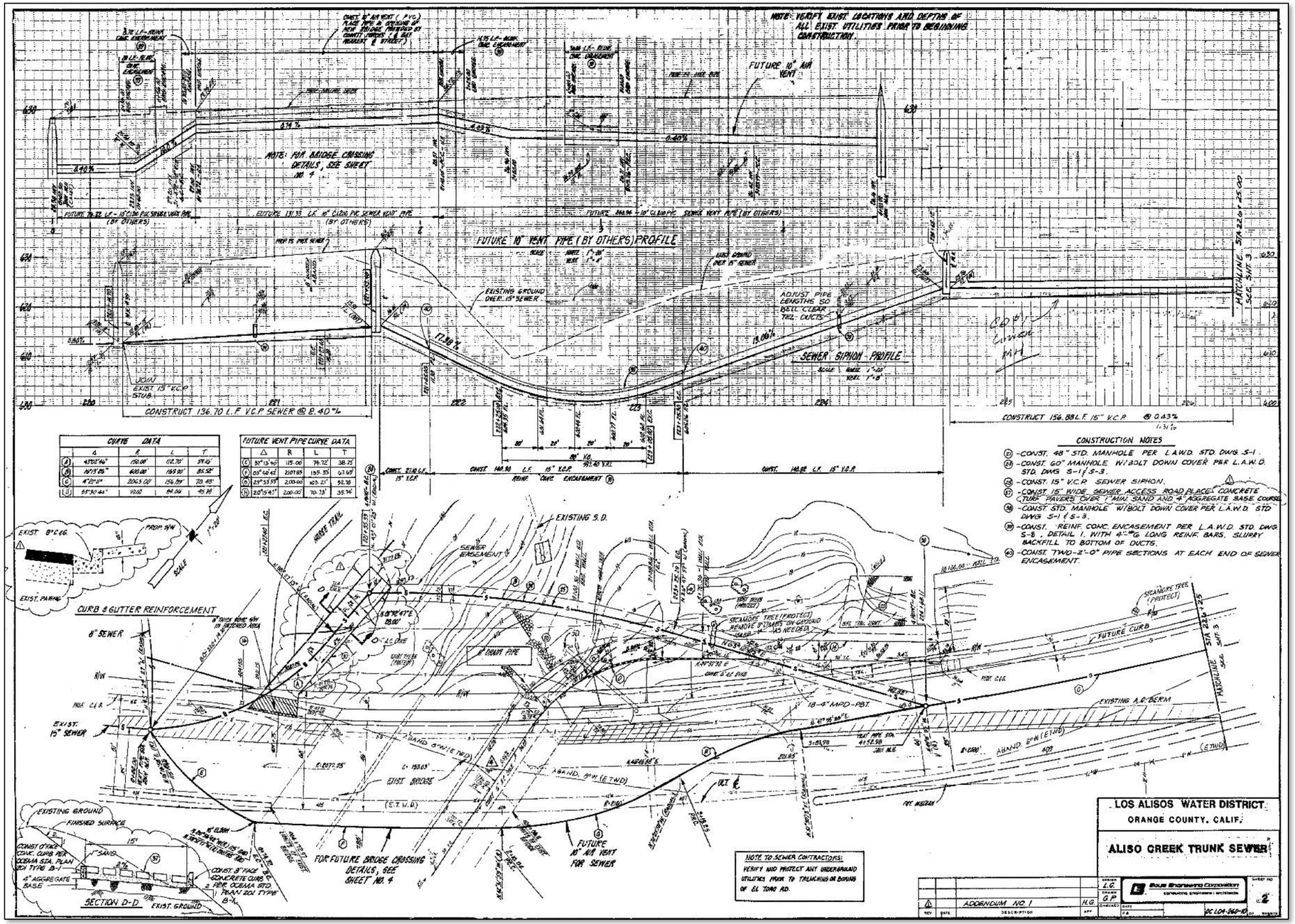


Figure 2
Siphon Plan and Profile



Section 2: Siphon Barrel

The siphon is 316 feet long, consisting of a single VCP barrel that is 15-inch in diameter as shown on Figure 2.

Section 3: Air Jumper

There is a 10-inch PVC air jumper associated with the El Toro / Raintree Siphon.

Section 4: Upstream Structure

Access

The upstream structure was not inspected in May 2015 during the field visits due to the need for traffic control. The manhole is located in El Toro Road between the first and second southbound lanes as seen in Photograph 1.



Photograph 1 Upstream Structure Access (facing south)

Section 5: Downstream Structure

Access

The downstream structure is accessible via a driveway approach off El Toro Road, located west of Raintree Road and seen in Photograph 2. The access road has turf lock which enables trucks to drive on it. Entering the access road is not an issue. On the way out, the trucks must back out onto El Toro Road, initially facing against traffic and then turn around to travel south on El Toro Road. This is a dangerous maneuver when the traffic is heavy.



Photograph 2 Downstream Structure Access

Manhole Cover

The downstream structure manhole cover, shown in Photograph 3 and 4 is very heavy and IRWD staff would prefer a regular manhole cover or access hatch.



Photograph 3 Downstream Structure



Photograph 4 Downstream Structure Manhole Cover

Condition

The inside of the downstream structure is in good condition as shown in Photograph 5.



Photograph 5 Downstream Structure

Gates

This structure does not have any gates due to the fact that there is only one barrel that must be kept open. There is no mechanism for blocking the siphon barrel.

Odor

There is no odor issue at the downstream structure.

Section 6: Recommendations

The recommendations for the El Toro / Raintree Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Site access is difficult	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
Condition/ Age	Downstream structure manhole shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.

Prism / Linear Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Prism / Linear Siphon (S12) is located south of Dimension Drive, between Prism Place and Linear Lane in the City of Lake Forest. It is located in the Bake LAWRP Trunk sewershed. It was constructed in 1988 in order to convey sewage under Serrano Creek. Figure 1 shows the siphon location. Figure 2 shows the siphon plan and profile, as well as the upstream and downstream structure details.

Figure 1
Siphon Location

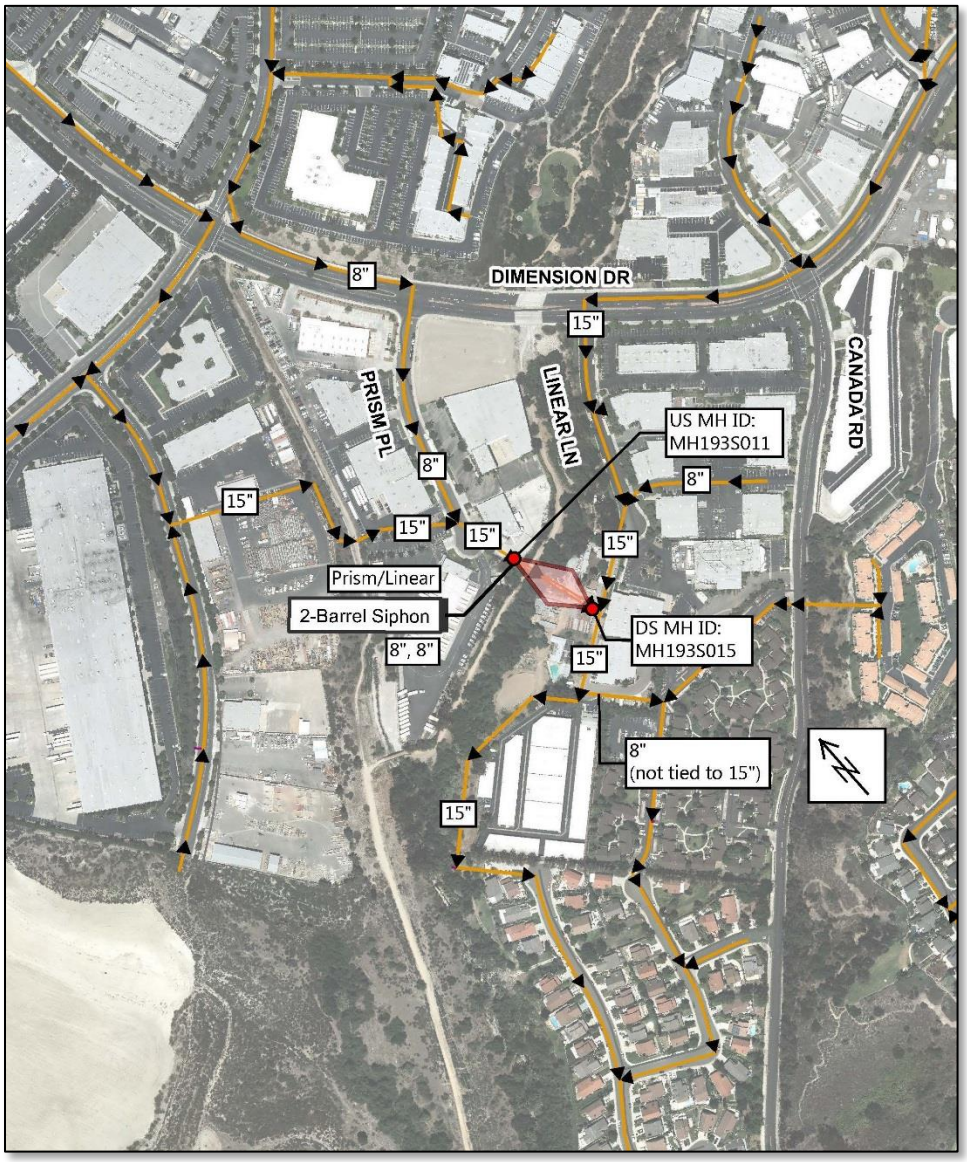
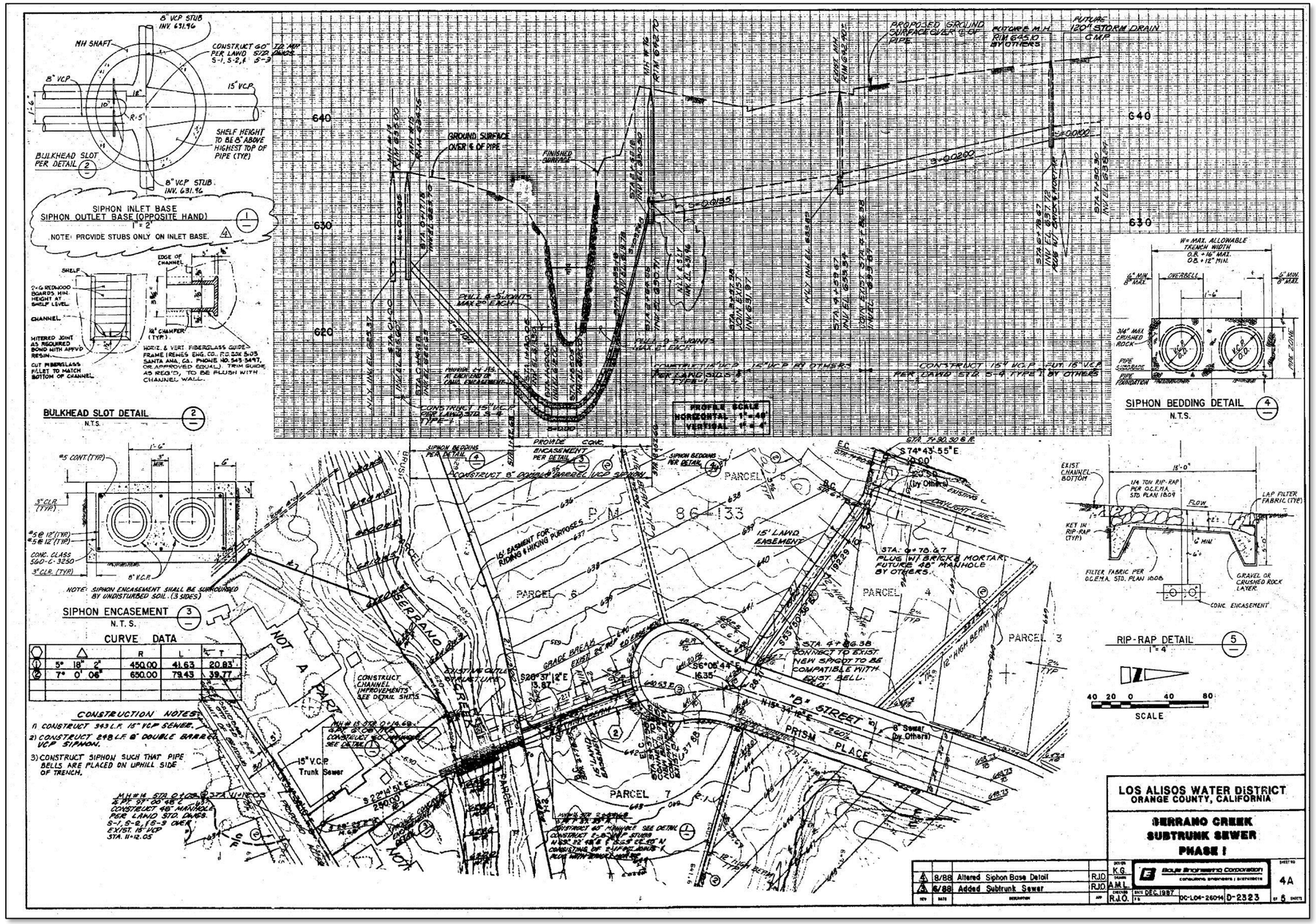


Figure 2
Siphon Plan and Profile
Upstream and Downstream Structure Details



Section 2: Siphon Barrels

The siphon is 246 feet long, consisting of two VCP barrels that are 8-inch in diameter as shown on Figure 2. Both siphon barrels are open.

Section 3: Air Jumper

There is no air jumper associated with the Prism / Linear Siphon.

Section 4: Upstream Structure

Access

The upstream structure is accessible from the south corner of the parking lot of 20692 Prism Place in Lake Forest. The driveway access is shown in Photograph 1.



Photograph 1 Upstream Structure Access

Manhole Cover

The upstream structure and manhole cover is shown in Photograph 2 and 3. The manhole cover is in good condition.

Condition

The inside of the upstream structure is in good condition as shown in Photograph 4.



Photograph 2 Upstream Structure



Photograph 3 Upstream Structure Manhole Cover



Photograph 4 Upstream Structure Channels

Gates

This structure has bulkhead slots but there are no stop logs present. The structure must be entered each time to block or unblock any of the barrels.

Odor

There is no odor issue at the upstream structure.

Section 5: Downstream Structure

Access

The downstream structure is accessible through a back entrance of 20865 Canada Road as shown on Figure 3. Trucks drive from Dimension Drive down Canada Road to an access road just before Serrano Court and follow this road to 20865 Cananda Road.

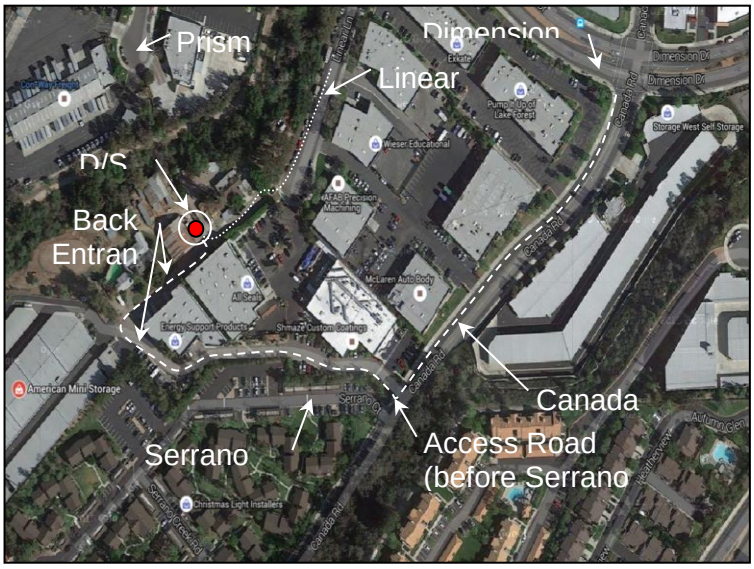


Figure 3 Downstream Structure Access

Manhole Cover

The downstream structure and manhole cover are in good condition, shown in Photograph 5 and 6.

Condition

The downstream structure is in good conditions and shown in Photograph 7.

Gates

This structure has bulkhead slots but there are no stop logs present.



Photograph 5 Downstream Structure



Photograph 6 Downstream Structure Manhole Cover



Photograph 7 Downstream Structure Channels

Odor

There is no odor issue at the downstream structure.

Section 6: Recommendations

The recommendations for the Prism / Linear Siphon are summarized in Table 1.

Table 1
Recommendation Summary

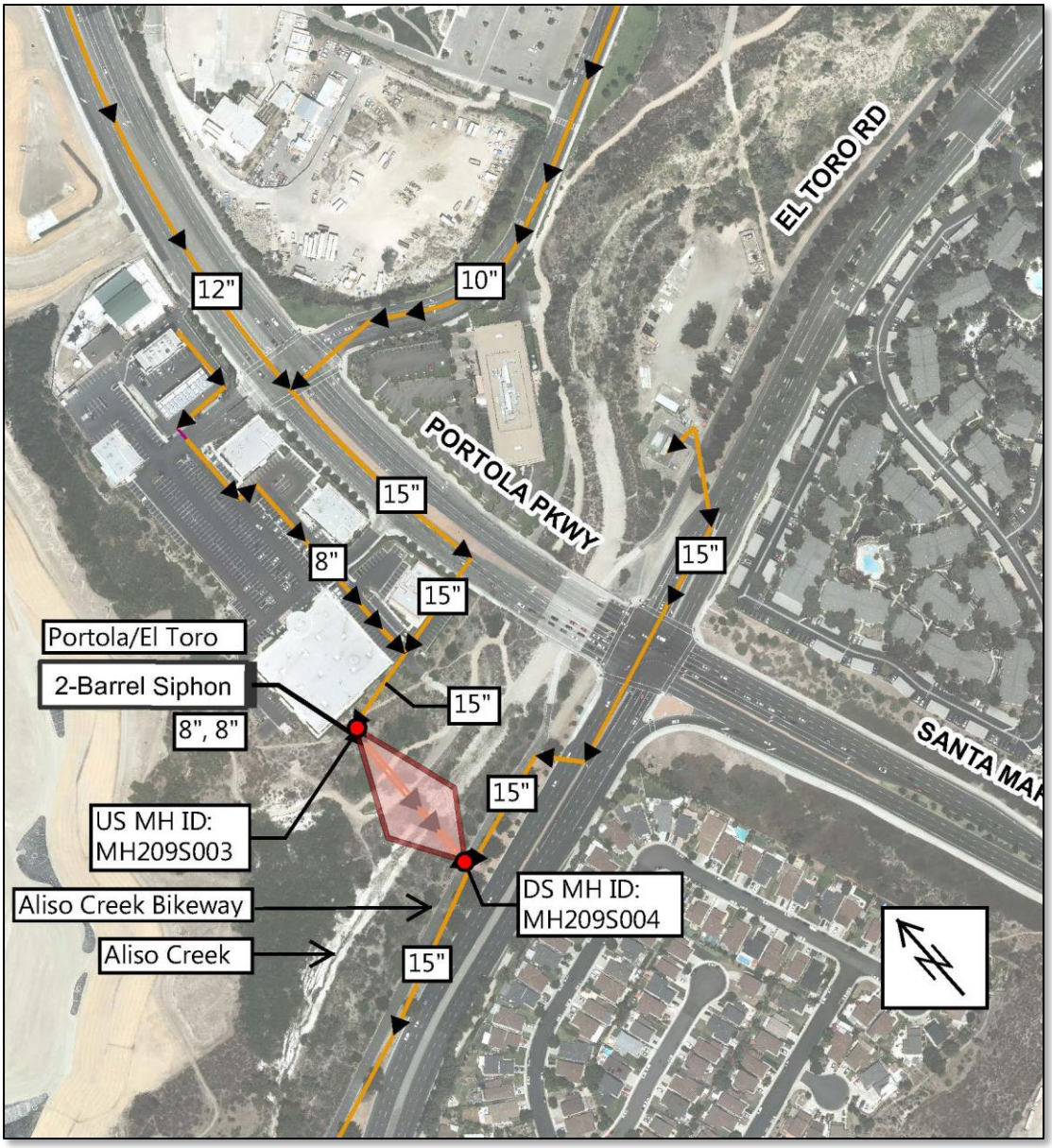
Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Structure requires confined space entry to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.

Portola / El Toro Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

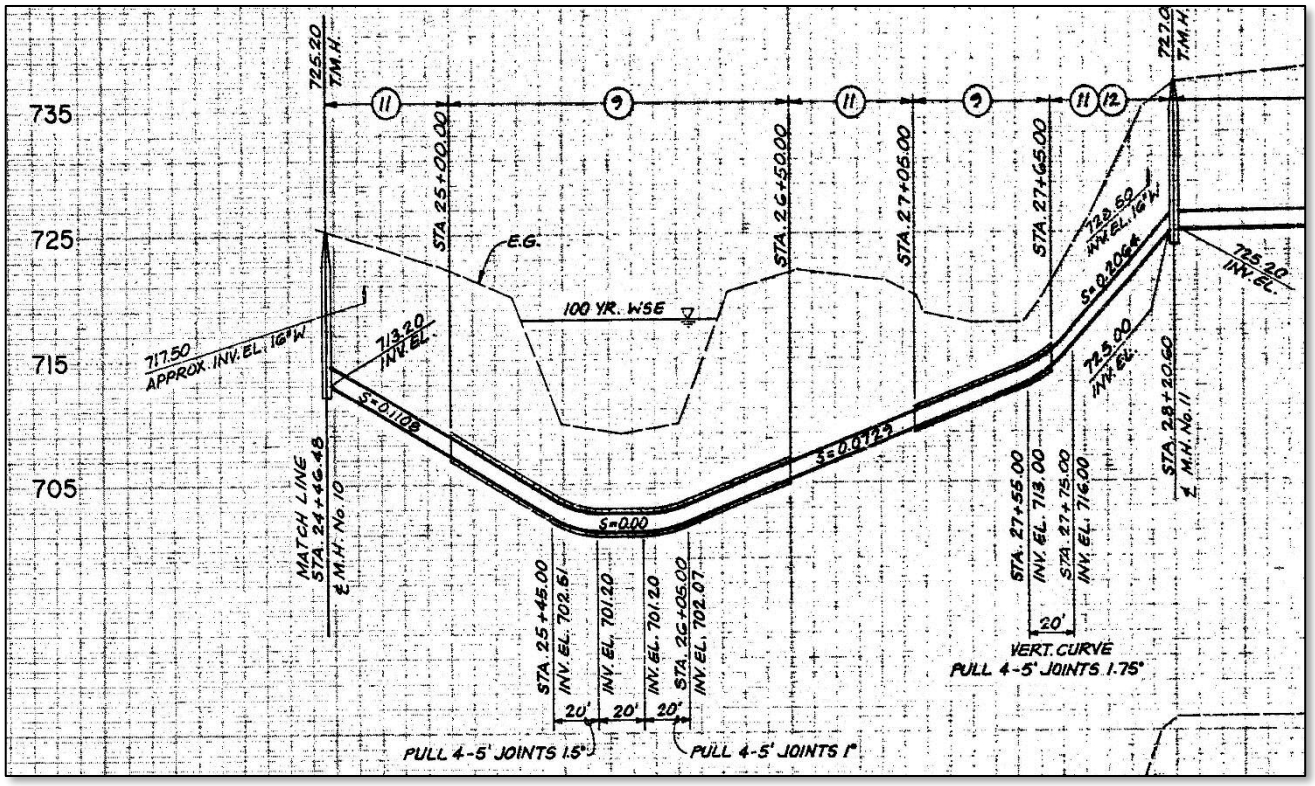
The Portola / El Toro Siphon (S13) is located west of Portola Parkway and north of El Toro Road, in the City of Lake Forest. It is located in the Muirlands Cherry sewershed. It was constructed in 1992 in order to convey sewage under Aliso Creek. The siphon location is shown on Figure 1. The siphon plan and profile are shown on Figure 2. The upstream and downstream structure detail is shown on Figure 3.

Figure 1



Siphon Location

Figure 2
Siphon Plan and Profile



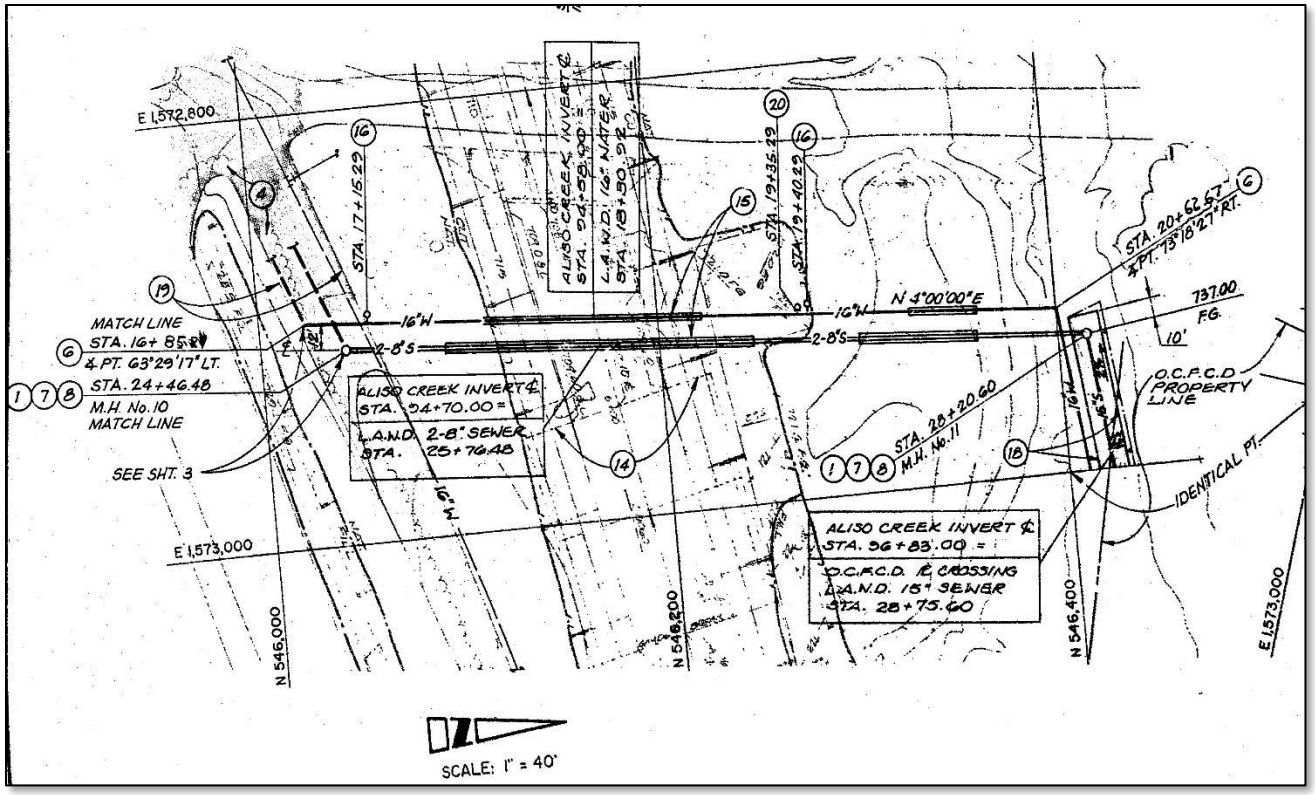
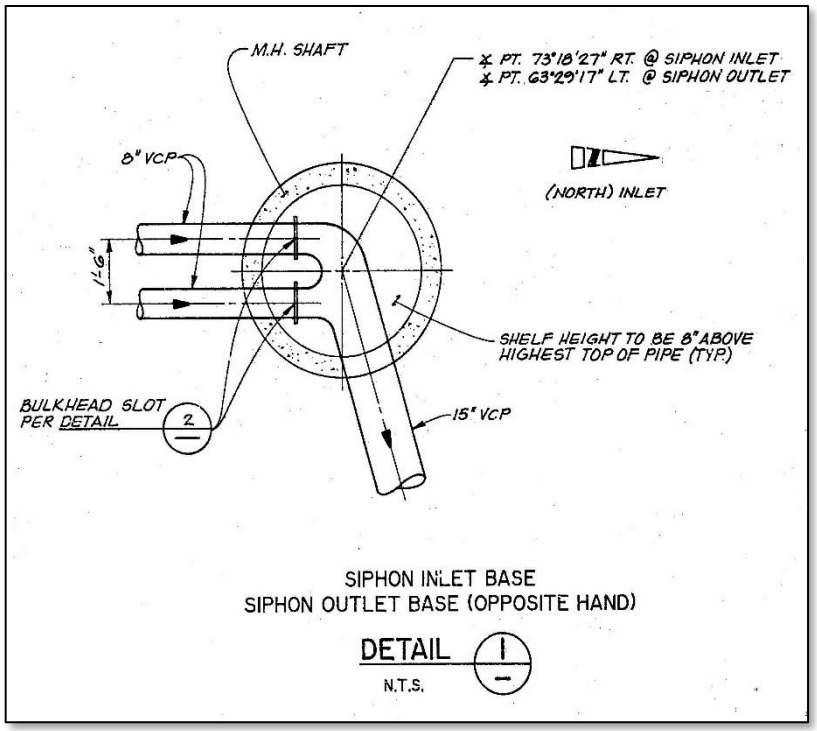
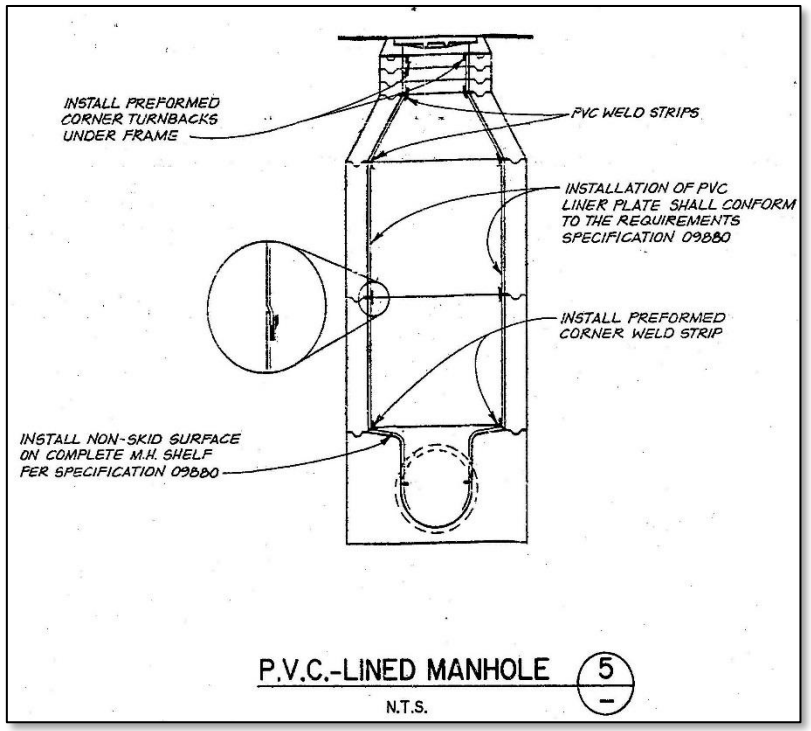


Figure 3
Upstream and Downstream Structure Details





**Note that the stop gates have been removed.*

Section 2: Siphon Barrels

The siphon is 374 feet long, consisting of two VCP barrels that are both 8-inch in diameter as shown on Figure 2. Both barrels are open.

Section 3: Air Jumper

There is no air jumper associated with the Portola / El Toro Siphon.

Section 4: Upstream Structure

Access

The upstream structure is accessible by foot along a trail, shown in Photograph 1, behind 29400 Portola Parkway, Lake Forest (LA Fitness). The vactor truck is not able to access the structure.



Photograph 2 Upstream Structure Manhole Cover

Manhole Cover

The upstream structure manhole cover is in good condition as shown in Photograph 2. There is a lot of vegetation close to the manhole cover that should be cleared away for better access.

Condition

The inside of the upstream structure is shown in Photograph 4. The structure has a PVC liner that seems to be separating from the walls.

There is a water pipe seen in Photograph 4 that is believed to have been used in the past to flush the siphon.

At the time of the inspection, significant ragging was evident and flow was prevented from entering the east barrel.

Gates

The upstream structure has bulkhead slots but does not have any stop gates in place.

Odor

There is no odor issue at the upstream structure.



Photograph 3 Upstream Structure Rim



Photograph 4 Upstream Structure Channels

Section 5: Downstream Structure

Access

The downstream structure is accessible from the Aliso Creek Bikeway, which parallels El Toro Road to the north as shown on Figure 1. It is located in the center of the bikeway as shown in Photograph 5. Maintenance vehicles enter the bikeway via a curb ramp on the west corner of the intersection of Portola Parkway and El Toro Road, shown in Photograph 6. Access concerns include the sharp turn that has to be made to use the curb ramp, and uneven grade and steepness of the access road.

Manhole Cover



Photograph 5 Downstream Structure



Photograph 6 Downstream Structure Access

The downstream structure manhole is shown in fair condition as shown in Photograph 7. The frame and grade rings show signs of corrosion.



Photograph 7 Downstream Structure Manhole Cover



Photograph 8 Downstream Structure Channels

Condition

The inside of the downstream structure is shown in Photograph 8. The PVC liner is in good condition. At the time of the inspection, significant ragging was evident in the channel of the east barrel.

Gates

The downstream structure has bulkhead slots but does not have any stop gates in place.

Odor

There is no odor issue at the downstream structure.

Section 6: Recommendations

The recommendations for the Portola / El Toro Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Siphon experiences ragging	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Site access is difficult	
Condition/ Age	Upstream structure lining is deteriorating	Conduct further condition assessment of areas of interest and make recommendations accordingly.

241 / Lake Forest Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The 241 / Lake Forest Siphon (S14) is located north of the 241 Freeway (SR-241) and east of Lake Forest Drive(SR-241) the City of Lake Forest. It is located in the upper portion of the Alton-Bake Trunk sewershed. It was constructed in 1996 in order to convey sewage under Serrano Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location

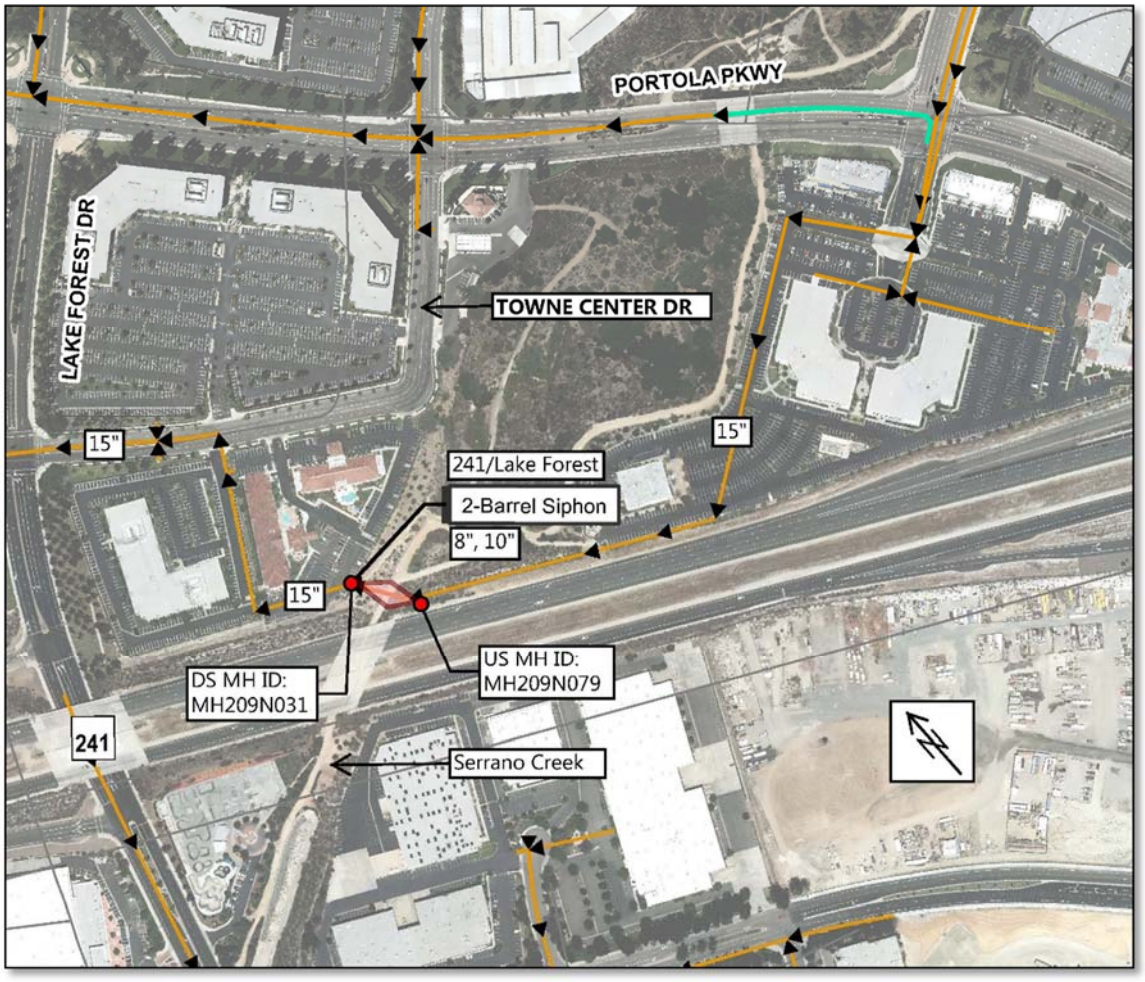


Figure 2
Siphon Plan and Profile

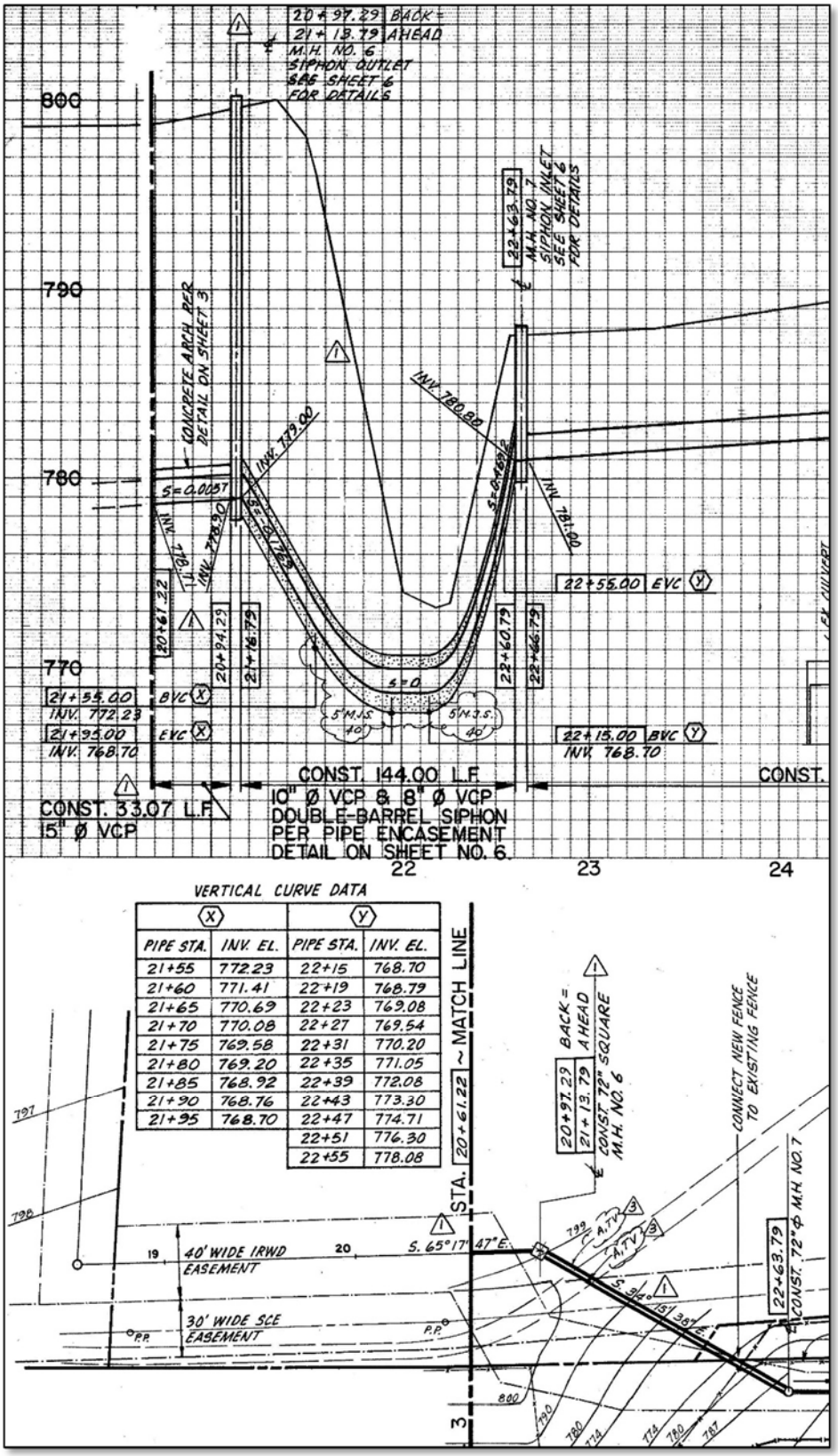
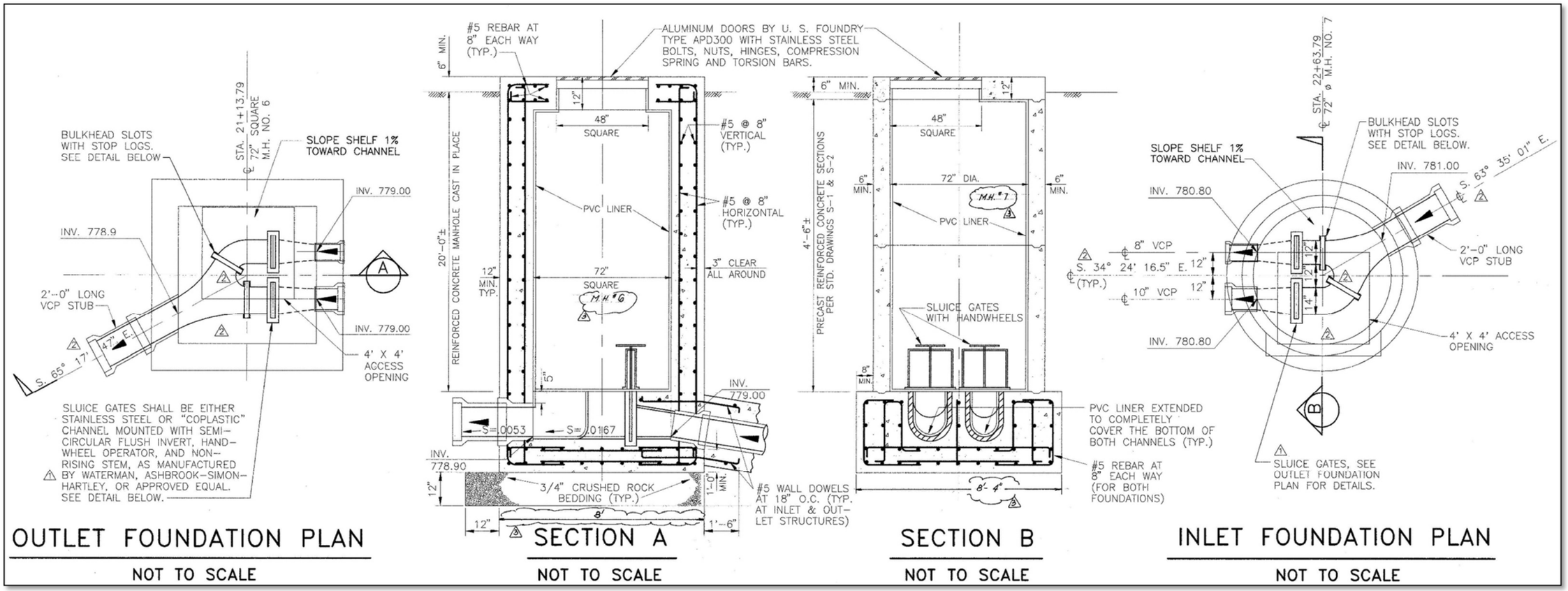


Figure 3
Upstream and Downstream Structure Details



**Note that the stop logs have been removed.*

Section 2: Siphon Barrels

The siphon is 144 feet long, consisting of two VCP barrels that are 8-inch and 10-inch in diameter as shown on Figure 2. Both barrels are open.

Section 3: Air Jumper

There is no air jumper associated with the 241 / Lake Forest Siphon.

Section 4: Upstream Structure

Access

The upstream structure is accessible on foot from the parking lot of 27082 Towne Centre Drive, Lake Forest (Hilton Garden Inn Irvine East / Lake Forest) via the Serrano Creek Trail system. There is no path cleared from the trail to the structure so a vactor truck cannot get to it. It is also difficult to locate this structure due to heavy vegetation surrounding it. This vegetation should be cleared from the immediate area.

IRWD staff stated that this manhole is not used for cleaning. Instead the crews clean from upstream and downstream manhole locations.



Photograph 1 Upstream Structure Access



Photograph 2 Upstream Structure Access Hatch

Access Hatch

The upstream structure access hatch is in good condition as shown in Photograph 2. There are some signs of corrosion on the hatch and locks.

Condition

The inside of the upstream structure is shown in Photograph 3. The PVC liner has spotting and black markings. The sluice gates have rust just below the hand wheels.

Gates

This structure has sluice gates with hand wheels at the bottom. There are also bulkhead slots but there are no stop logs in place. Both barrels are open.

Odor

There are no odor issues at this location.

Section 5: Downstream Structure

Access

The downstream structure is accessible from the parking lot of 27082 Towne Centre Drive, Lake Forest (Hilton Garden Inn Irvine East / Lake Forest). It is located in a curbed island as shown in Photograph 4.



Photograph 4 Downstream Structure Access

Access Hatch

The downstream structure access hatch is in good condition as shown in Photograph 5.

Condition

The inside of the downstream structure is shown in Photograph 6. The PVC liner is discolored and the shelf has spotting and black markings. The sluice gates have rust just below the hand wheels.



Photograph 5 Downstream Structure Access Hatch

Gates

This structure has sluice gates with hand wheels at the bottom. There are also bulkhead slots but there are no stop logs in place. Both barrels are open.

Odor

There are no odor issues at this location.



Photograph 6 Downstream Structure Channels and Walls

Section 6: Recommendations

The recommendations for the 241 / Lake Forest Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Structure requires confined space entry to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Site access is difficult	
Condition/ Age	Upstream structure lining is deteriorating	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Downstream structure lining is deteriorating	

Glenn Ranch / El Toro Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Glenn Ranch / El Toro Siphon (S15) is located south of Glenn Ranch Road and west of El Toro Road in the City of Lake Forest. It is located in the SMWD sewershed. It was constructed in 1989 in order to convey sewage under Aliso Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location



Figure 2
Siphon Plan and Profile

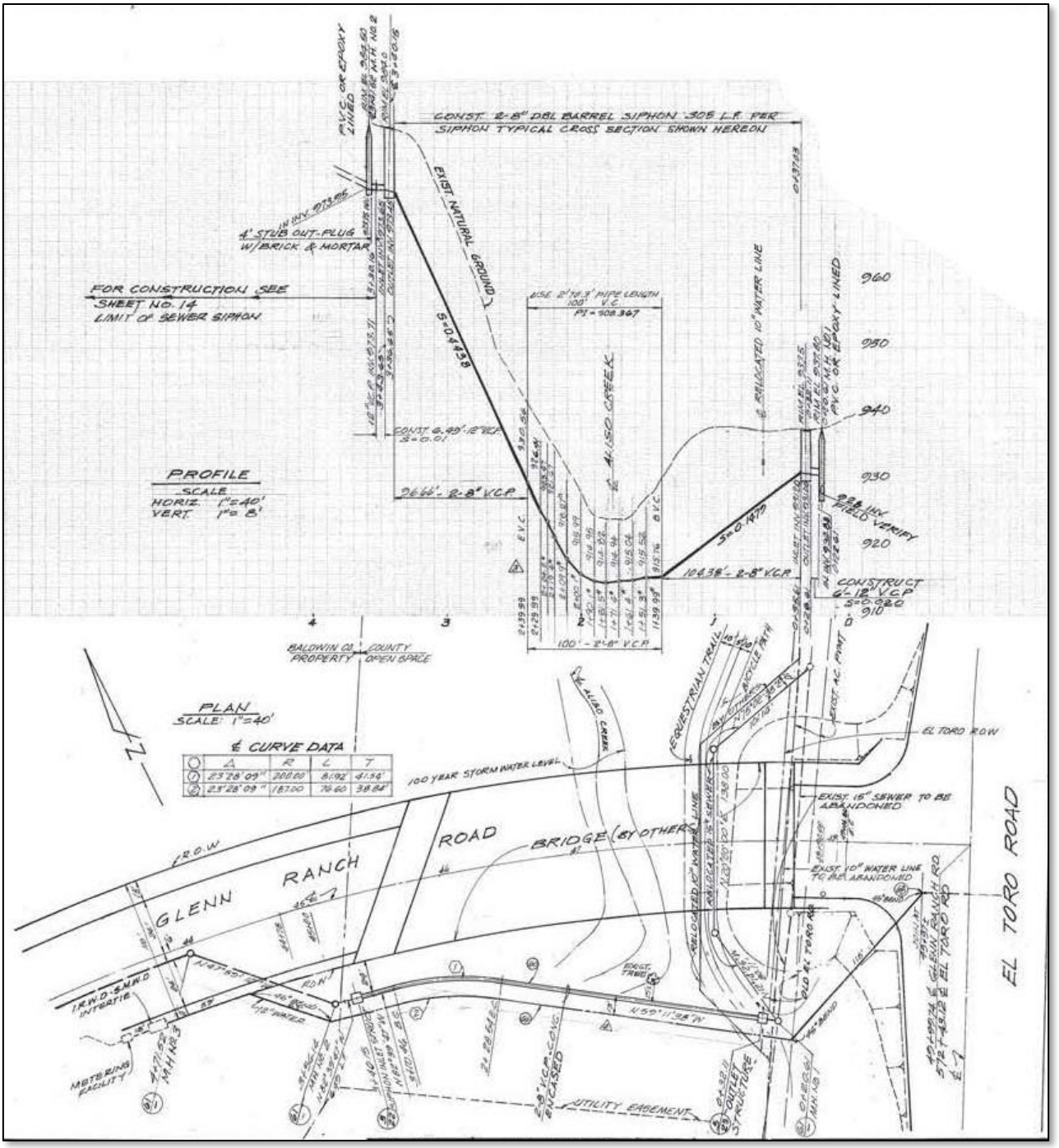
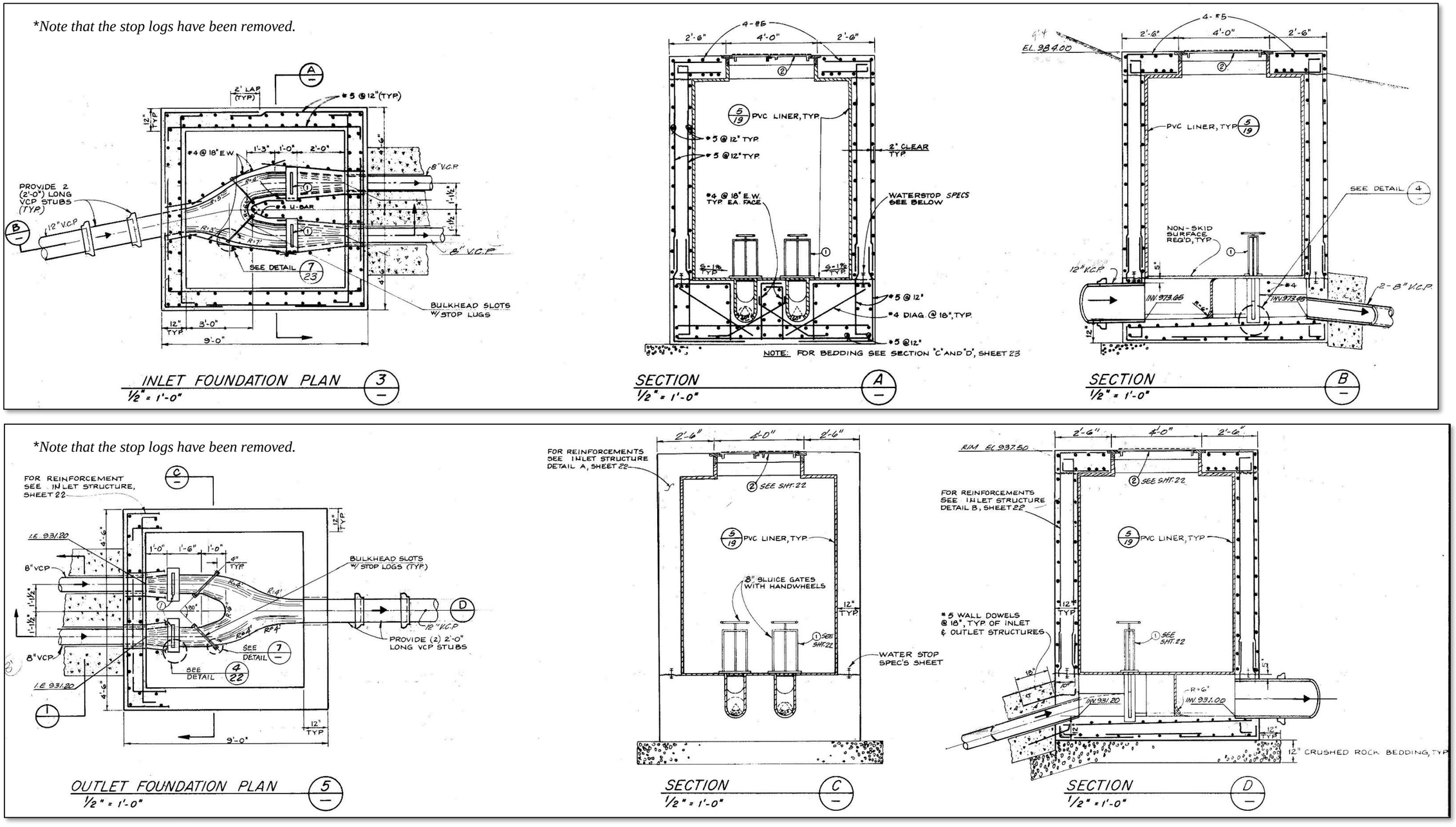


Figure 3
Upstream and Downstream Structure Details

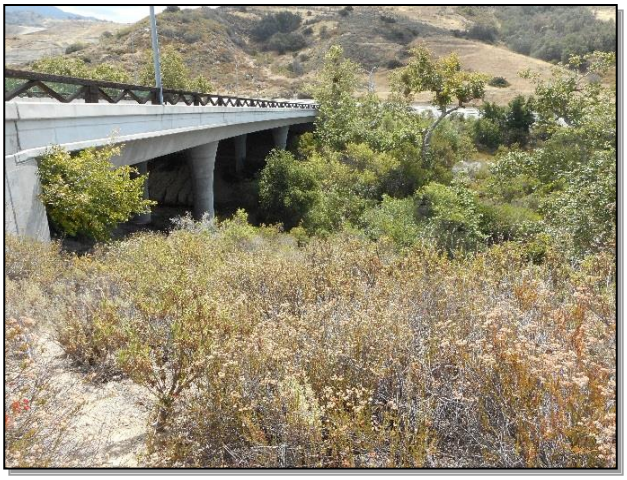


Section 2: Siphon Barrel

The siphon is 305 feet long, consisting of a two VCP barrels that are 8-inch in diameter as shown on Figure 2. The sewage flow that used to be conveyed through the Glenn Ranch / El Toro siphon have been diverted to the Alton-Bake sewershed. The upstream structure influent sewers have been capped off. The siphon is therefore dry.

Section 3: Air Jumper

There is no air jumper associated with the Glenn Ranch / El Toro Siphon.



Photograph 1 Upstream Structure Access (facing east)

Section 4: Upstream Structure

Access

The upstream structure is located on the south side of the Glenn Ranch Road bridge (shown in Photograph 1) across Aliso Creek and west of El Toro Road. It is accessible by foot from Glenn Ranch Road. It is a short downhill hike to the structure. This location is inaccessible for the vactor truck.

It is possible that future development areas will become tributary to this siphon.



Photograph 2 Upstream Structure

Access Hatch

The upstream structure access hatch is shown in Photograph 2 and 3. The doors show evidence of sulfides and the hinges and frame are rusted. During the field visit, the hatch had to be pried open because the key did not engage and the hatch was stuck.



Photograph 3 Upstream Structure Access Hatch

Condition

The inside of the upstream structure is shown in Photograph 4 and 5. The base of the structure is deteriorated as well as the gate hardware.

Gates

This structure has sluice gates with hand wheels at the bottom. There are also bulkhead slots but there are no stop logs in place. The gate hardware is severely corroded.



Photograph 4 Upstream Channels

Section 5: Downstream Structure

Access

The downstream structure is accessible by foot via the Aliso Creek Bikeway which parallels El Toro Road to the west and is seen in Photograph 6. The downstream structure is not accessible with a maintenance vehicle.

Access Hatch

From the outside, the access hatch looked to be in good condition.



Photograph 5 Upstream Structure Walls

Condition

The downstream structure was not be opened in May 2015 during the field visit due to overgrown vegetation blocking the access hatch as shown in Photograph 7. Therefore, the condition of the structure was not verified. IRWD staff provided pictures that were on file. The inside of the upstream structure is shown in Photograph 8.

Gates

This structure has sluice gates with hand wheels at the bottom. There are also bulkhead slots but there are no stop logs in place. The gate hardware is severely corroded.



Photograph 6 Downstream Structure Access



Photograph 7 Downstream Structure Access



Photograph 8 Downstream Structure Channels (Photo provided by IRWD)

Section 6: Recommendations

The recommendations for the Glenn Ranch / El Toro Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Structure requires confined space entry to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Site access is difficult	
Condition/ Age	Upstream structure hatch shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Downstream structure hatch shows signs of wear and tear	
	Upstream structure lining is deteriorating	

University / Milano Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The University / Milano Siphon (S16) is located south of University Drive and west of the SR-73 toll road in the City of Newport Beach. It is located at the Irvine South sewershed. It was constructed in 1998 in order to convey flows under Bonita Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figure 3.

Figure 1
Siphon Location

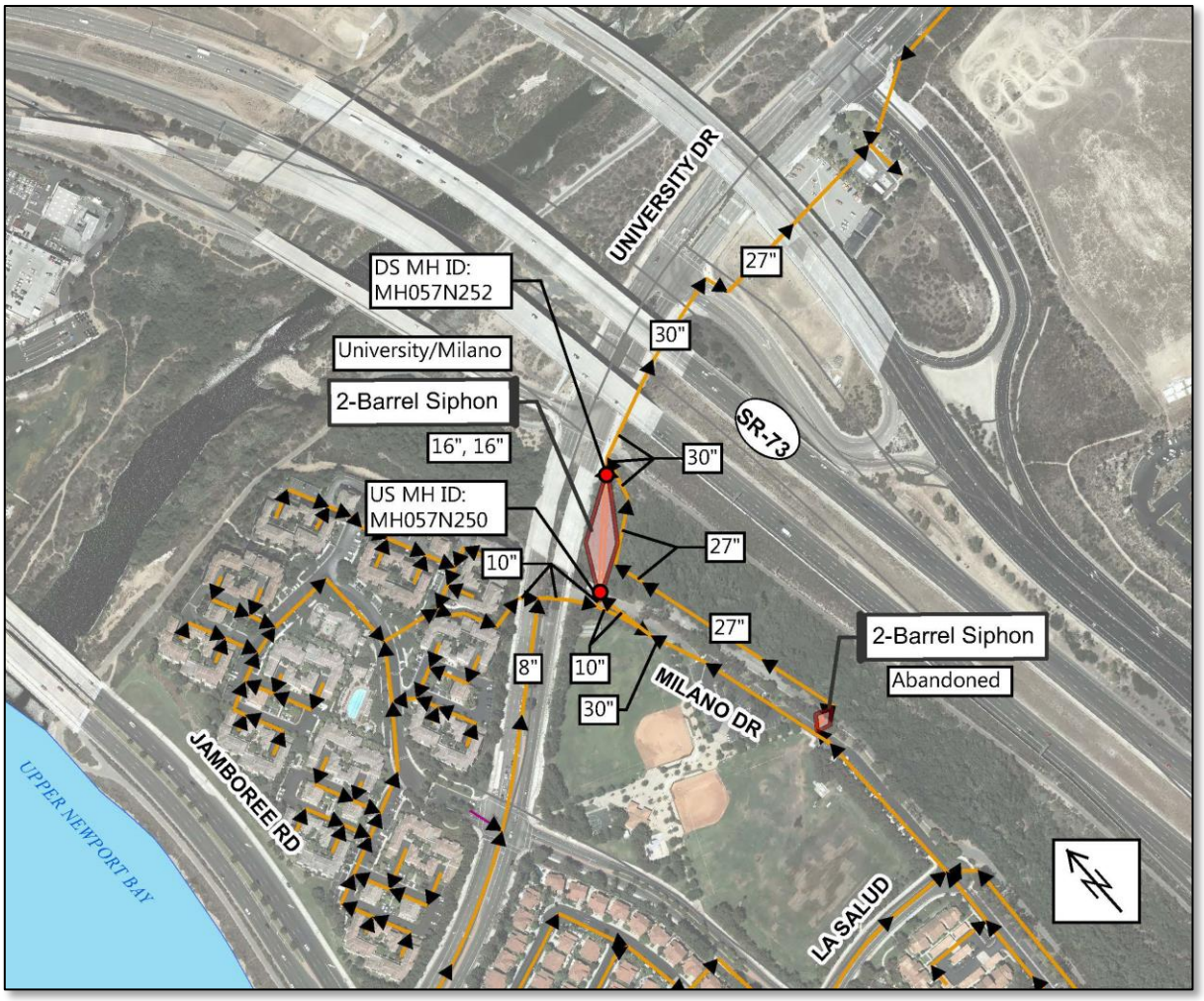


Figure 2
Siphon Plan and Profile

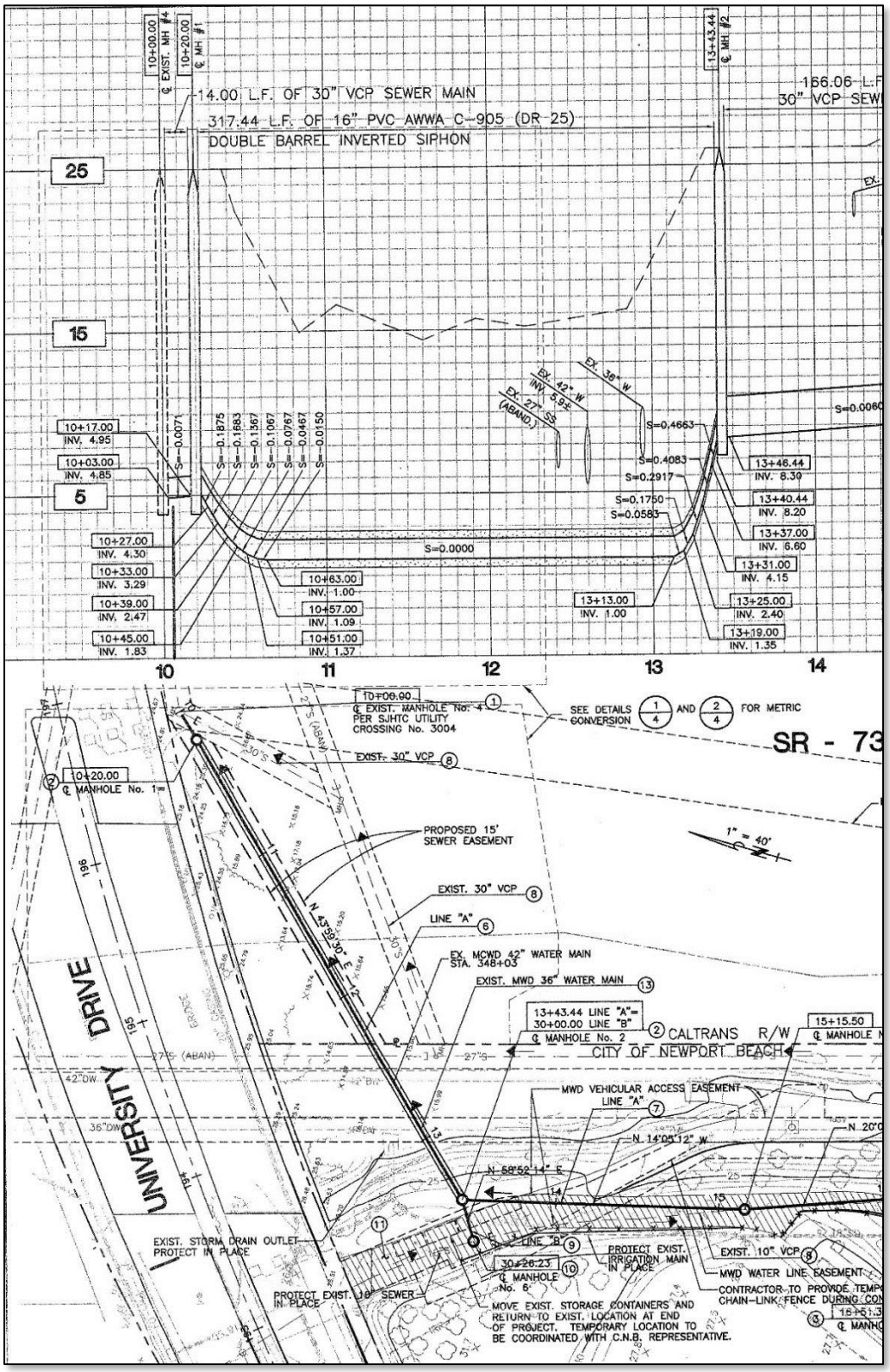
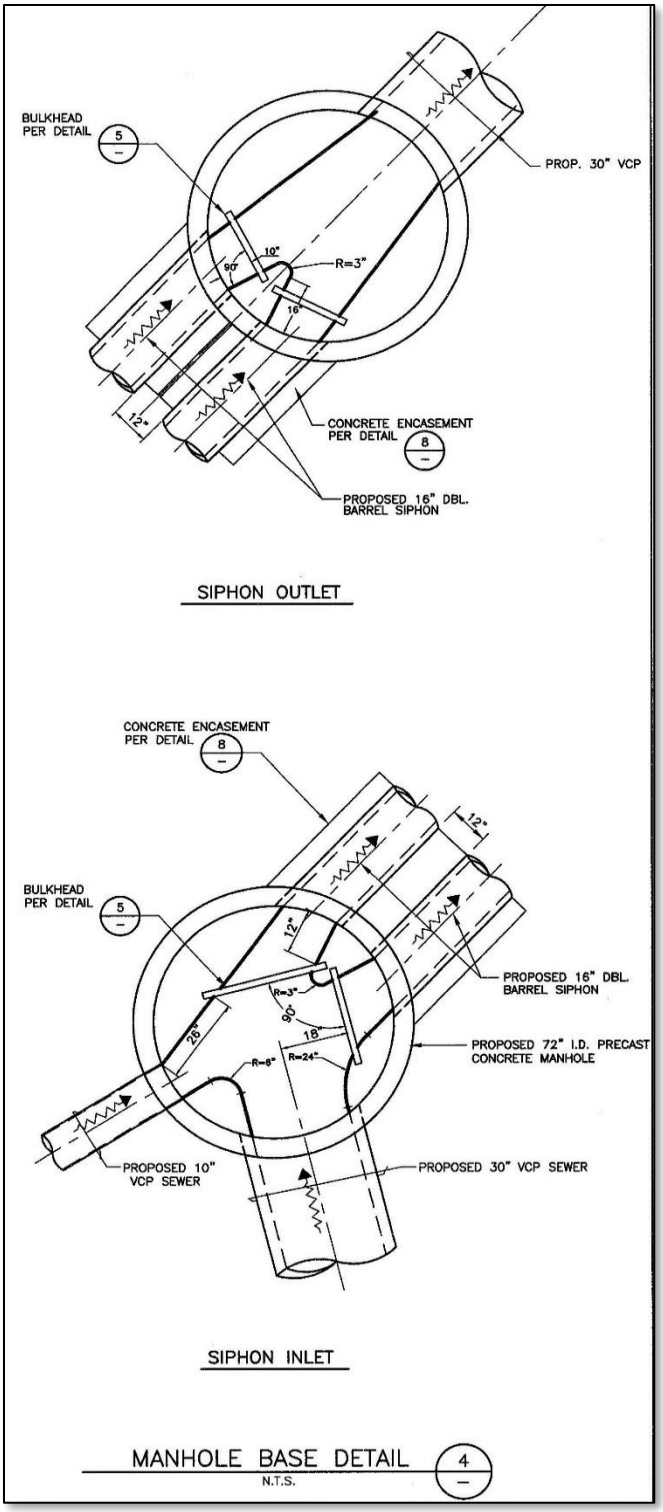


Figure 3
Upstream and Downstream Structure Details



** Note that some of the stop logs have been removed.*

Section 2: Siphon Barrels

The siphon is approximately 317 feet long, consisting of two PVC barrels that are both 16-inch in diameter as shown on Figure 2 and 3. Both barrels are not kept open; the south barrel is closed with a stop log at the bulkhead.

Section 3: Air Jumper

There is no air jumper associated with the University / Milano Siphon.

Section 4: Upstream Structure

Access

The upstream structure is accessed via the Bonita Park parking lot and a paved road adjacent on the east side of the park as shown in Photograph 1. The manhole is located right next to the City of Newport Beach storage bins as shown in Photograph 2, making it difficult to open the manhole cover.

Manhole Cover

The upstream structure manhole cover is shown in Photograph 3 and 4. The underside of the manhole cover, the lock and the spring mechanism are all severely corroded.



Photograph 1 Upstream Manhole Access



Photograph 2 Upstream Manhole



Photograph 3 Upstream Structure Manhole Cover



Photograph 4 Upstream Structure Manhole Cover Lock

Condition

The inside of the upstream structure is shown in Photograph 5 and 6.

Gates

There are bulkhead slots for each barrel but only one stop log is in place as shown in Photograph 5. The easterly siphon barrel is open. The structure must be entered to block or unblock any of the barrels.

Odor

There is no odor issue at the upstream structure.



Photograph 5 Upstream Structure Channels

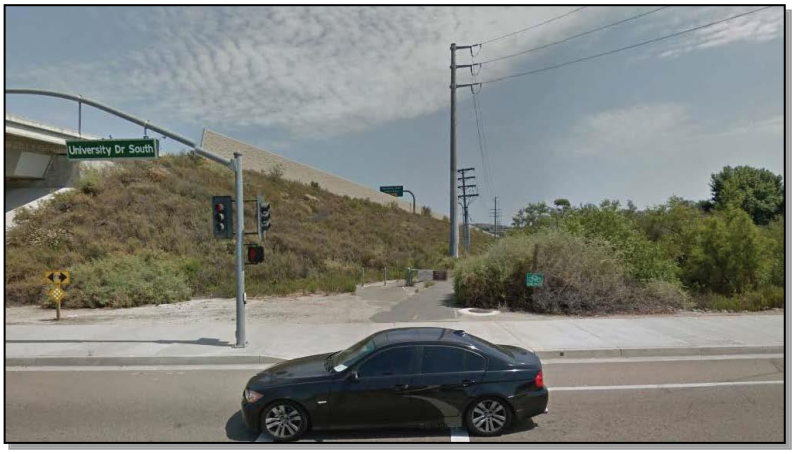


Photograph 6 Upstream Structure Walls

Section 5: Downstream Structure

Access

The downstream structure is accessible via a bike path on the south side of University Drive west of the SR-73. There is a driveway approach with heavy brush in the area as shown in Photograph 7 and 8.



Photograph 7 Downstream Structure Access



Photograph 8 Downstream Structure Location



Photograph 9 Downstream Structure Manhole Cover

Manhole Cover

The downstream manhole cover is shown in Photograph 9. The security locking mechanism is broken and the cover is rusted. There is evidence of corrosion on the manhole ring.

Condition

The inside of the downstream structure is shown in Photograph 10 and 11.

Gates

There are bulkhead slots for each barrel but only one stop log is in place as shown in Photograph 10.

Odor

There is no odor issue at the upstream structure.



Photograph 10 Downstream Structure Channels



Photograph 11 Downstream Structure Walls

Section 6: Recommendations

The recommendations for the University / Milano Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Structure requires confined space entry to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Site access is difficult	
Condition/ Age	Upstream structure manhole shows signs of wear and tear	Conduct further condition assessment of areas of interest and make recommendations accordingly.
	Downstream structure manhole shows signs of wear and tear	
	Upstream structure lining is deteriorating	
	Downstream structure lining is deteriorating	

Bake / Toledo Siphon
Evaluation
(No Field Inspection for this Site)

Section 1: General

The Bake / Toledo Siphon (S17) is located in Bake Parkway, north of Toledo Way in the City of Lake Forest. It is located in the Bake LAWRP sewershed. It was constructed in 1975 in order to convey sewage under the Serrano Creek triple box culvert that crosses beneath Bake Parkway. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figures 2 and 3. The upstream and downstream structure details are shown on Figure 4.

Figure 1
Siphon Location



Figure 2
Siphon Plan and Profile

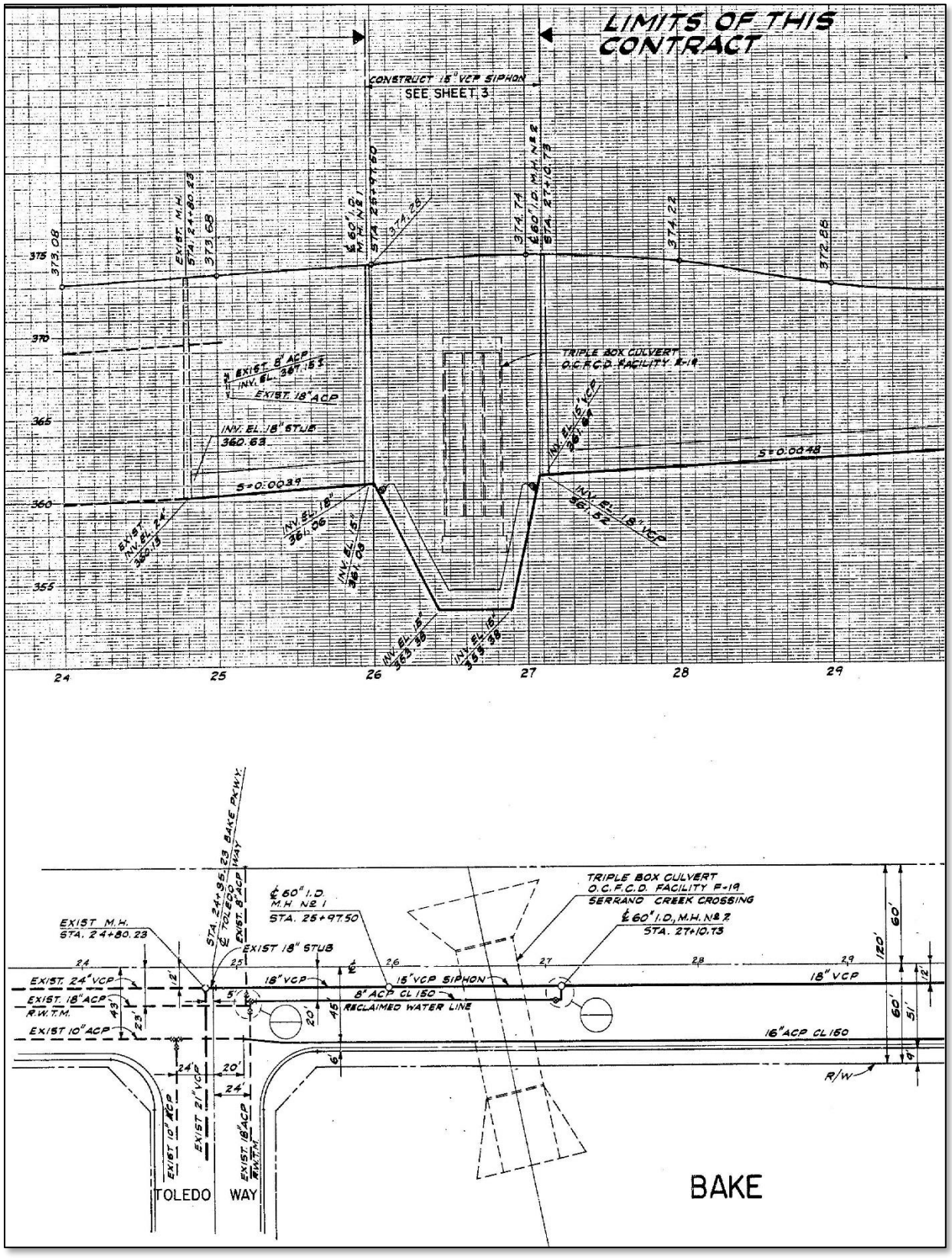


Figure 3
Siphon Profile

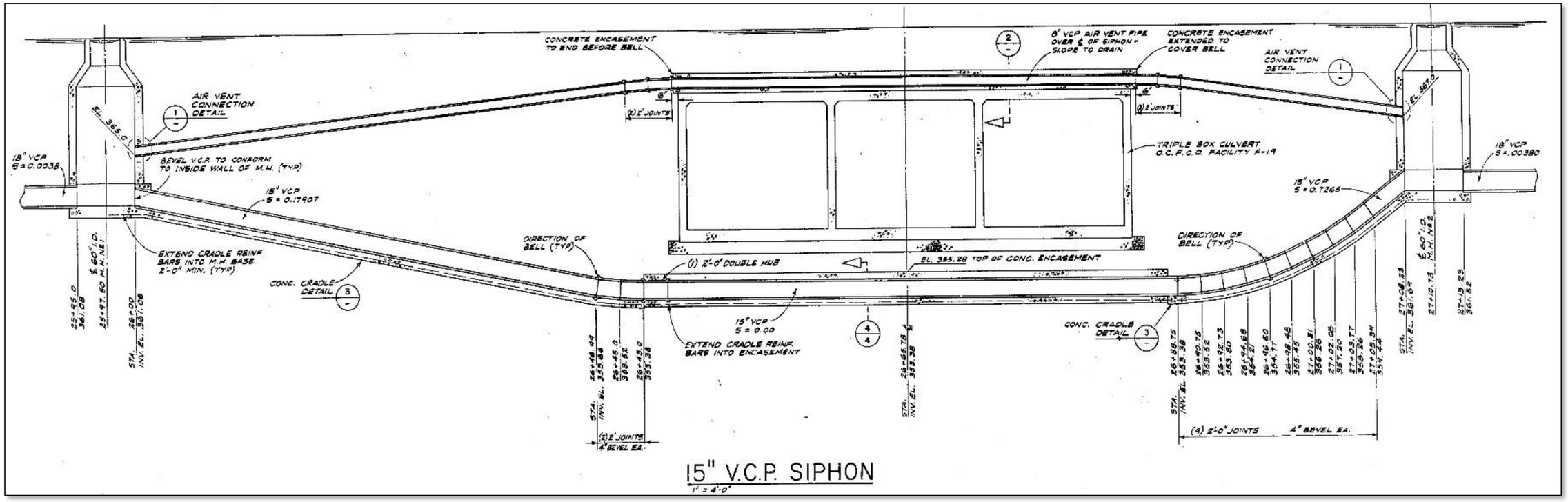
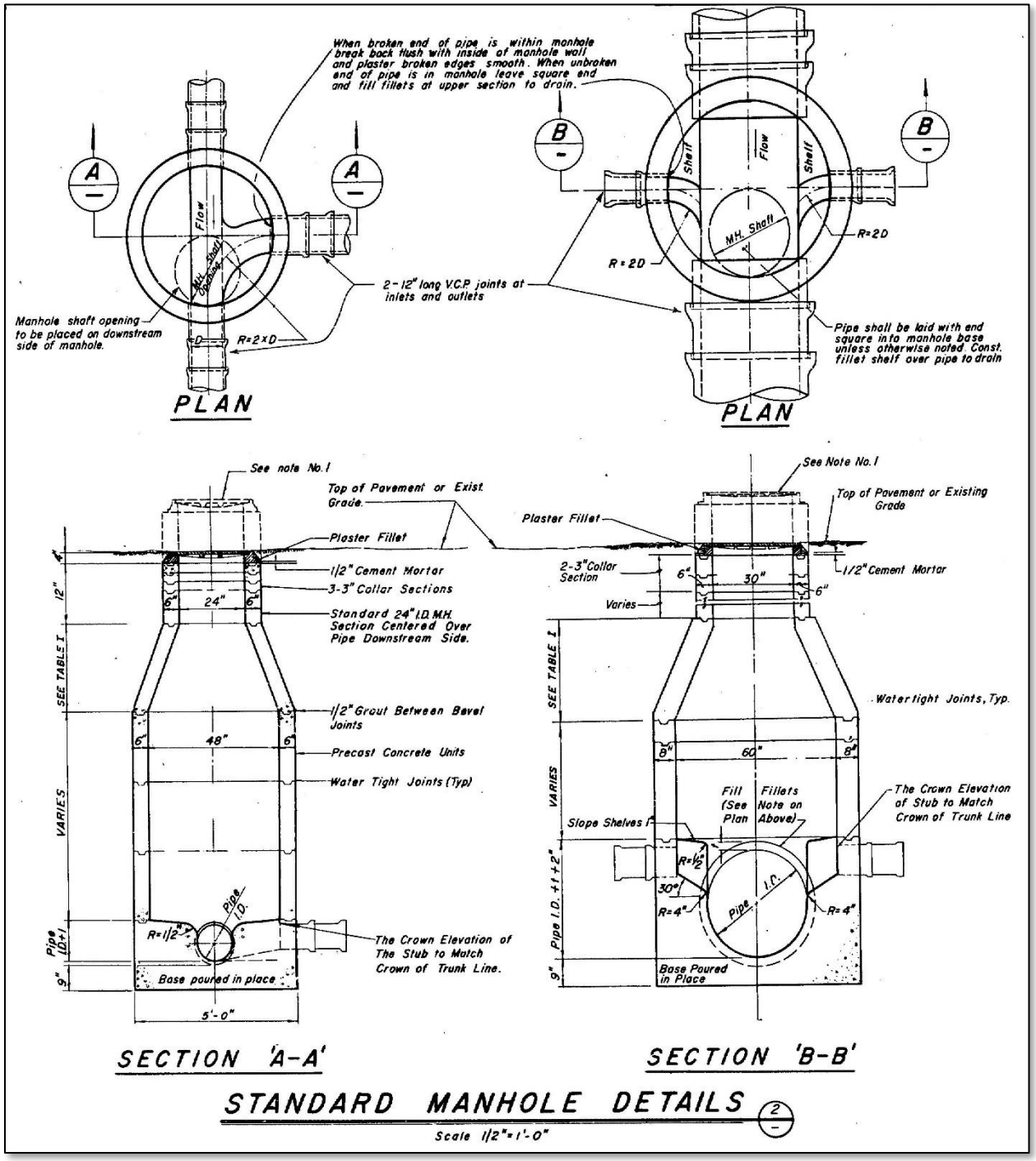


Figure 4
Upstream and Downstream Structure Details



Section 2: Siphon Barrels

The siphon is 108 feet long, consisting of one 15-inch VCP barrel as shown on Figure 2.

Section 3: Air Jumper

The construction plans show an 8-inch VCP air jumper crossing above the triple box culvert from the upstream to the downstream manhole.

Section 4: Upstream Structure

Access

The Bake / Toledo siphon is located in a high traffic area that requires traffic control.

Section 5: Downstream Structure

Access

The Bake / Toledo siphon is located in a high traffic area that requires traffic control.

Section 6: Recommendations

This siphon was not inspected in the field in May 2015 because it was not identified as a siphon until after the inspections were completed.

Harvard / University Siphon
Evaluation
(Field Inspection May 2015)

Section 1: General

The Harvard / University Siphon (S18) is located in Harvard Avenue, south of University Drive in the City of Irvine. It is located in the University Trunk sewershed. It was constructed in 1978 in order to convey sewage under Sand Canyon Creek. The siphon location is shown on Figure 1. The siphon plan and profile is shown on Figure 2. The upstream and downstream structure details are shown on Figures 3 and 4.

Figure 1
Siphon Location

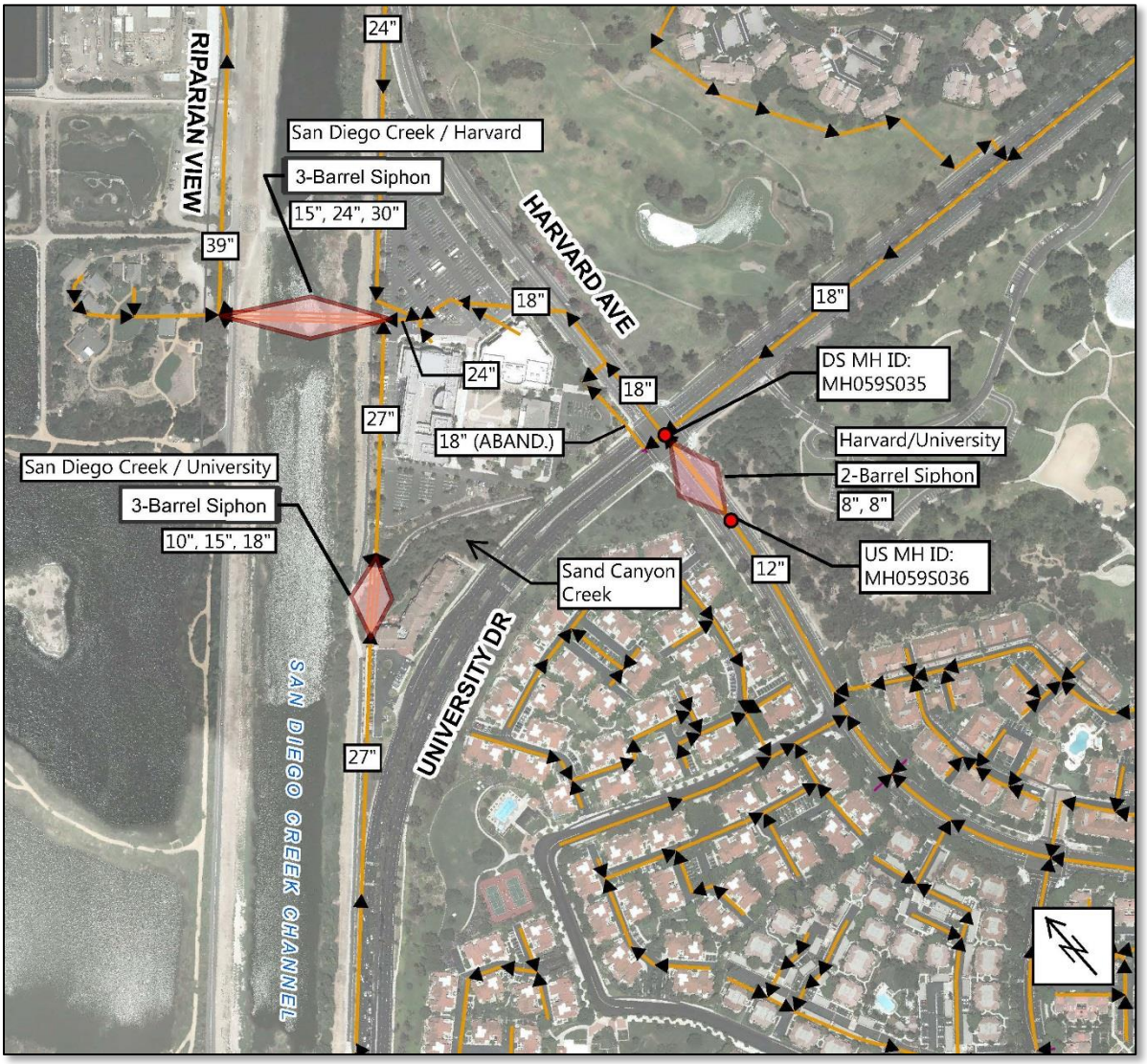


Figure 2
Siphon Plan and Profile

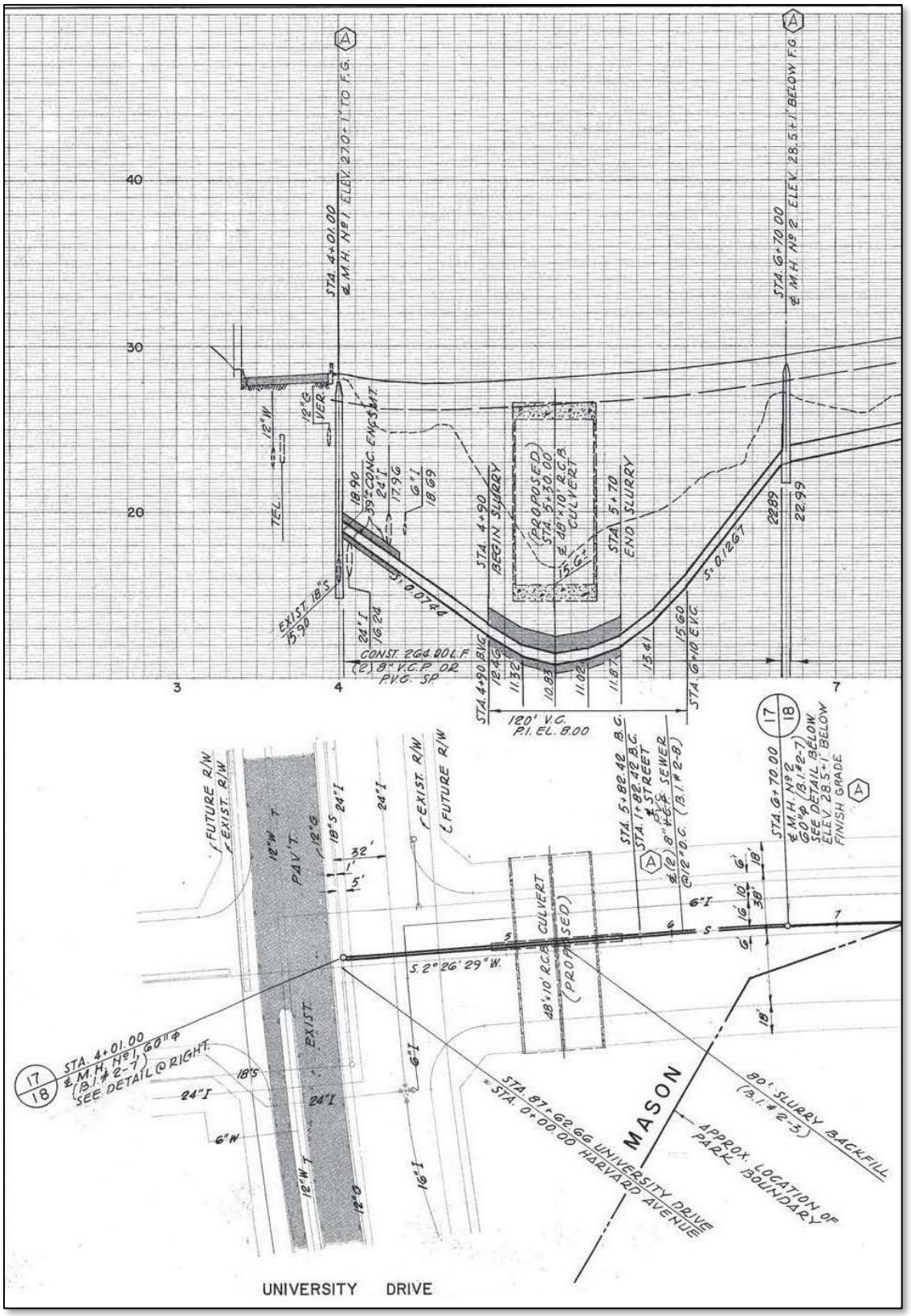
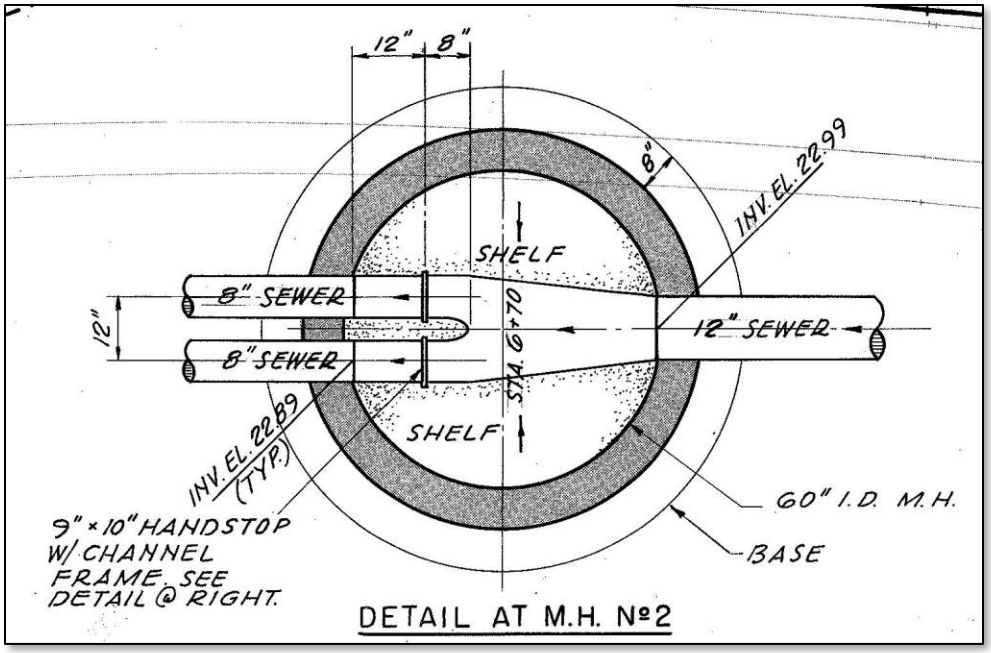
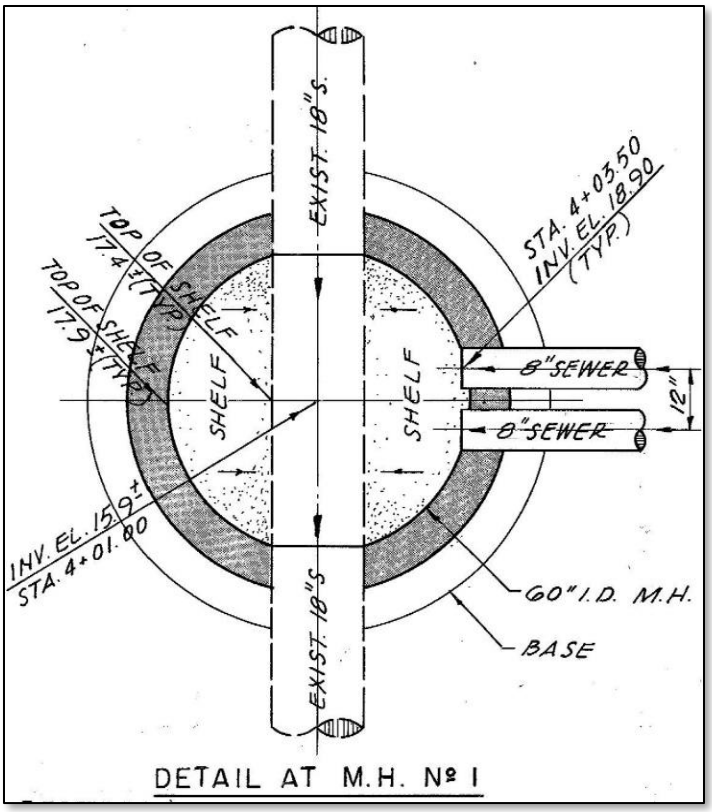


Figure 3
Upstream Structure Detail



**Note that the hand stops have been removed.*

Figure 4
Downstream Structure Detail



Section 2: Siphon Barrels

The siphon is 269 feet long, consisting of two PVC barrels that are both 8-inch in diameter as shown on Figure 2. Both barrels are open.

Section 3: Air Jumper

There is no air jumper associated with the Harvard / University Siphon.

Section 4: Upstream Structure

Access

The upstream structure is accessed from the middle of Harvard Avenue and requires traffic control to close off two lanes as shown in Photograph 1.



Photograph 1 Upstream Structure Access

Manhole Cover

The upstream structure manhole cover is in good condition.

Condition

The inside of the upstream structure is shown in Photograph 2 and 3. The coating was recently redone but the bottom of the manhole is showing signs of deterioration.



Photograph 2 Upstream Structure Channels

Heavy ragging is occurs at the upstream manhole as seen in Photograph 2. The University of California Irvine is tributary to this site and is believed to contribute to the ragging problem. IRWD staff cleans this manhole out every 2-3 weeks.

Gates

The upstream structure was constructed with handstop channel frames but there are no handstops in place. Both barrels are open. The structure must be entered each time to block or unblock any of the barrels.



Photograph 3 Upstream Structure Walls

Odor

There is no odor issue at this location.

Section 5: Downstream Structure

Access

The downstream structure is located in the intersection of Harvard Avenue and University Drive as shown in Photograph 4. It was not been inspected in May 2015 during the field visits due to the need for heavy traffic control.



Photograph 4 Downstream Structure Channels

Section 6: Recommendations

The recommendations for the Harvard / University Siphon are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Structure requires confined space entry to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
Condition/ Age	Upstream structure lining is deteriorating	Conduct further condition assessment of areas of interest and make recommendations accordingly.

San Mateo Park Diversion Structure
Evaluation
(Field Inspection May 2015)

Section 1: General

The San Mateo Park Diversion Structure is located in San Mateo Park at 3256 Main Street in the City of Irvine. It is situated on the west side of San Joaquin Channel (Orange County Flood Control District Facility F14) just south of Main Street, as shown on Figure 1. The diversion structure was constructed in 1985. Normally, the flow from the east is diverted south to the Michelson Water Recycling Plant (MWRP). The purpose of the structure is to divert flow west to the HATS Lift Station or to Orange County Sanitation District's trunk system and away from the MWRP in the event of an emergency or for maintenance purposes.

As shown on Figure 2, the upstream pipe is 45-inches in diameter. The downstream pipe to the south is 51-inches in diameter. The pipe to the west is 48-inches in diameter.

Figure 1
Diversion Structure Location



Figure 2
Plan and Profile of Pipe to the West

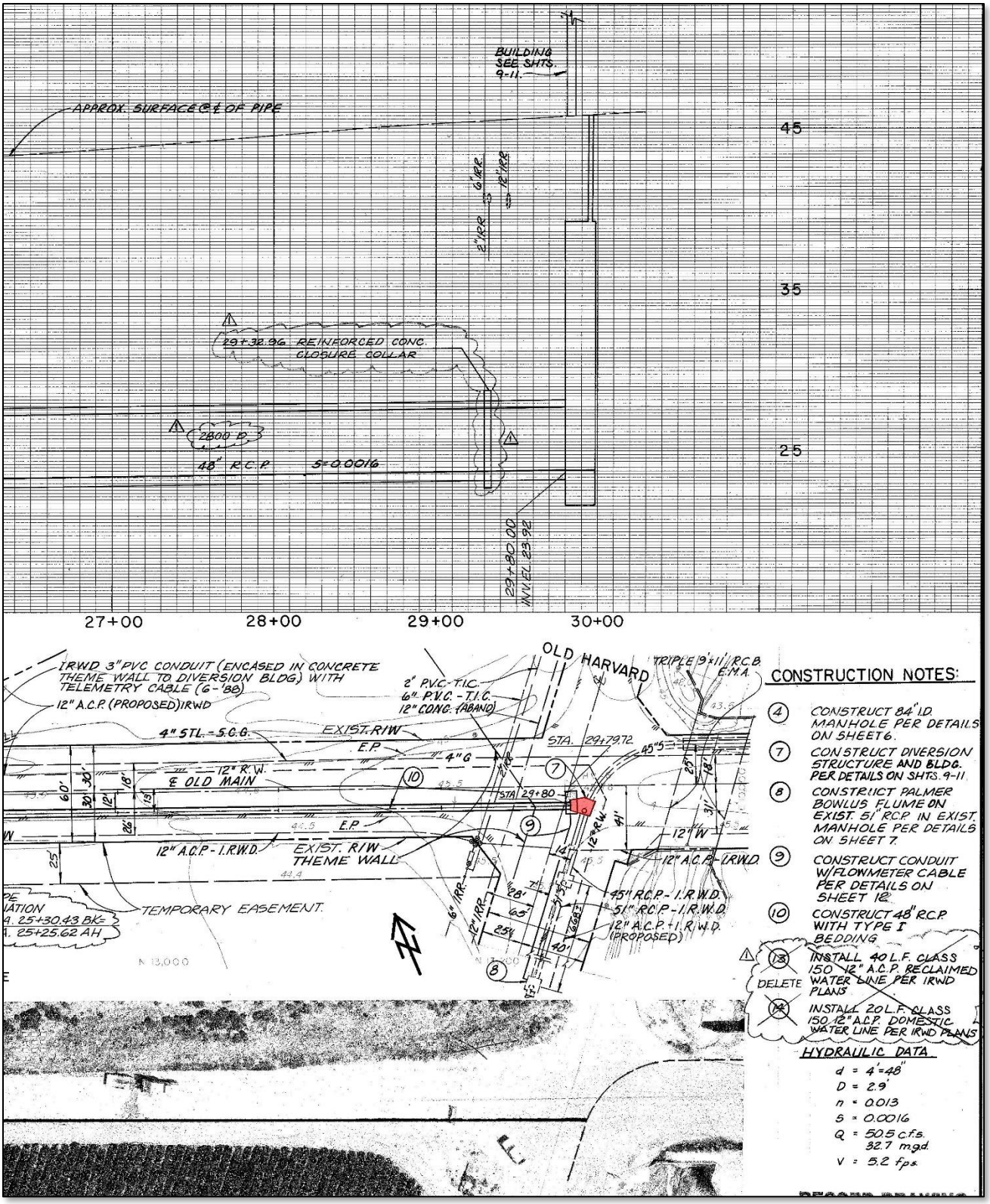


Figure 3
Diversion Structure Foundation Plan (DS06E097)

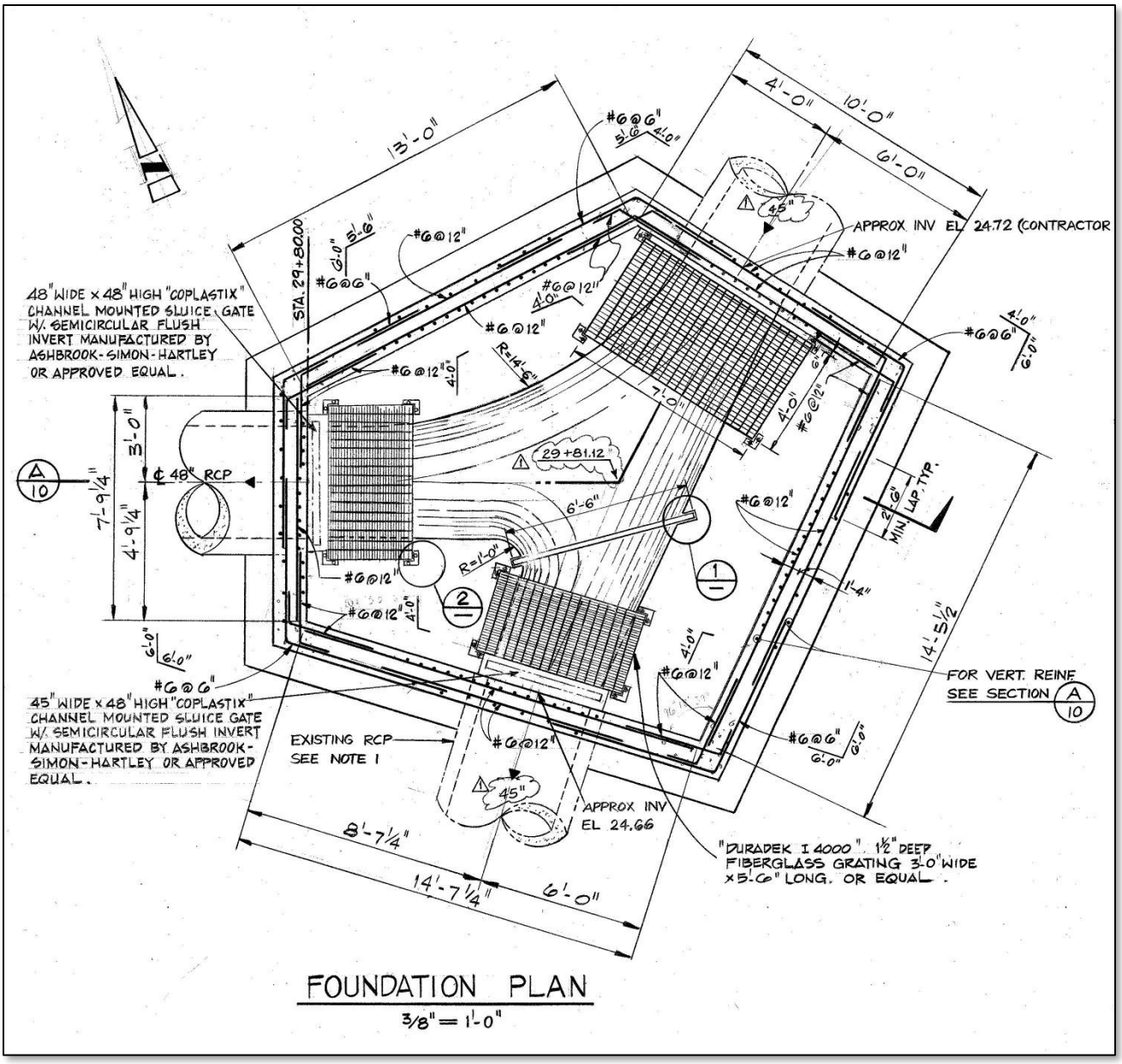
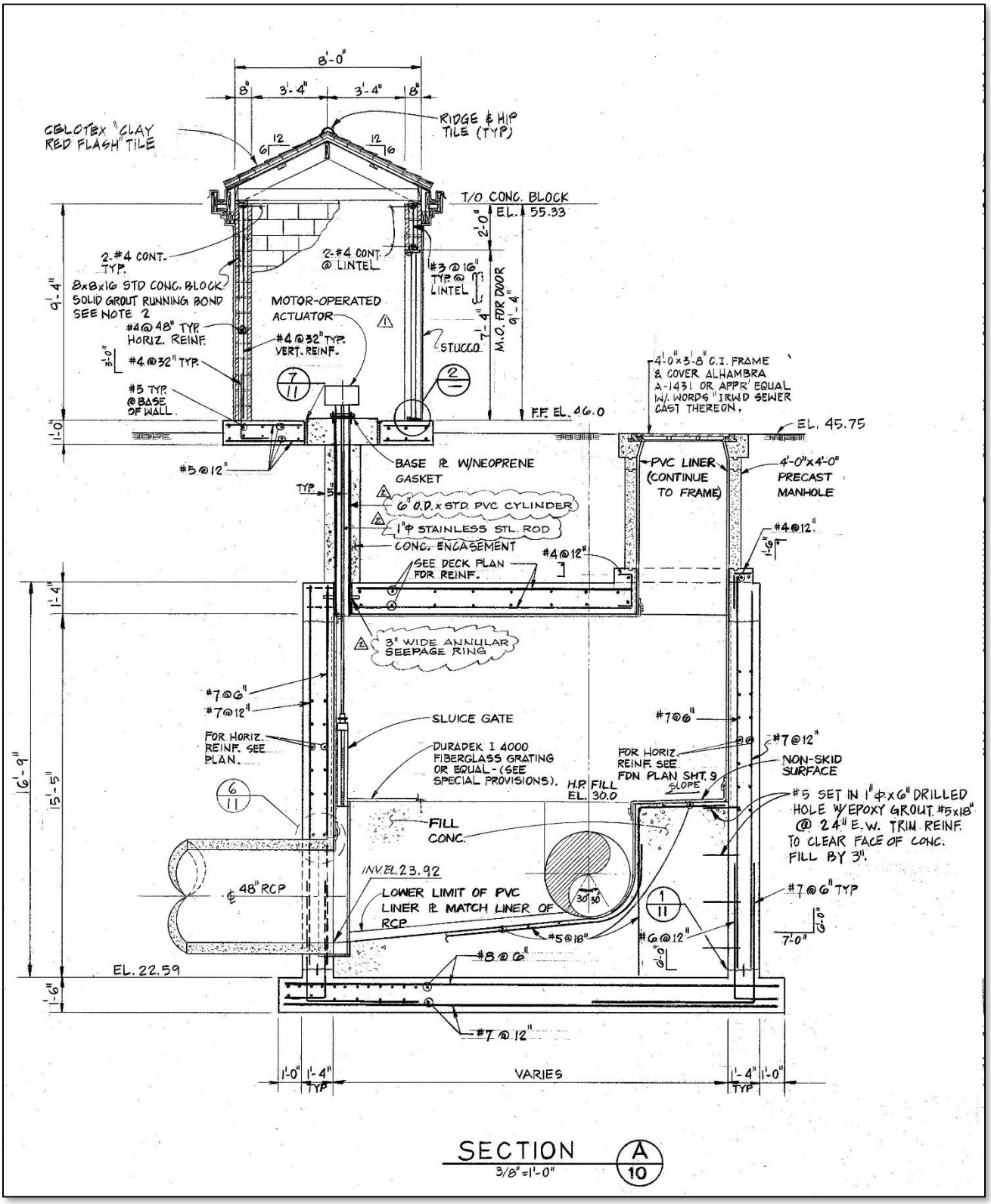


Figure 4
Diversion Structure Section



Section 2: Access

The diversion structure is accessible via the San Mateo Park walking/biking paths called the Old San Diego Creek Trail and the Old Main Street Trail, as shown in Photograph 1. There are park trees that have foliage hanging low enough that the van hits it. Maintenance of the trees should be coordinated with the City of Irvine so that maintenance vehicles have unobstructed access to the diversion structure.

Section 3: Structure Condition

The vault, shown in Photograph 2, is in good condition. No major defects were observed. The structure is lined with T-Lock, which was observed to be in good condition. The building that houses the motor operated actuator has settled and is leaning, as can be seen in Photograph 3 and 4. There was a water pipe break about 12 years ago that likely caused the settlement of the structure. IRWD already has a capital project planned to reconstruct the building and bent sluice gate stems.



Photograph 1 Access Path



Photograph 2 Structure Access (DS06E097)



Photograph 3 Gate Actuator Building



Photograph 4 Gate Actuator Building



Photograph 5 Motor Operated Gate Actuator

Section 4: Sluice Gates

The sluice gate used to be able to be operated remotely through the SCADA system from MWRP, but currently it has to be operated manually. This may be due to bent valve stems and the settlement of the structure.



Photograph 6 Vault Lid

Section 5: Access / Hardware

The access hatch is in good condition as seen in Photograph 6. No major defects were observed.

Section 6: Odors

There is an odor issue at this facility. Chemical injection was previously considered but it was ultimately determined that there was not enough space to fit a chemical injection facility in the structure.

Section 7: Recommendations

The recommendations for the San Mateo Park Diversion Structure are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Evaluate building condition and chemical injection facility	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
	Access hatch is not airtight	

El Toro and Portola Diversion Structure
Evaluation
(Field Inspection May 2015)

Section 1: General

The El Toro and Portola Diversion Structure is located on the north side of El Toro Road, east of Portola Parkway in the City of Lake Forest, as shown on Figure 1. The diversion structure was constructed in 2005. Historically, there was flow through this diversion structure but since the Portola Hills Lift Station was abandoned about 2-1/2 years ago and flows were rerouted, there is now normally no flow through this structure. The only time flows are diverted is when the Trabuco Canyon Water District's (TCWD) El Toro Road Lift Station is shut down. TCWD flows are then diverted to IRWD's line in El Toro Road and are ultimately conveyed to the Los Alisos Water Recycling Plant (LAWRP).

As shown on Figures 2 and 3, the upstream pipe is 15-inches in diameter. The downstream pipes are both 15-inches in diameter.

Figure 1
Diversion Structure Location

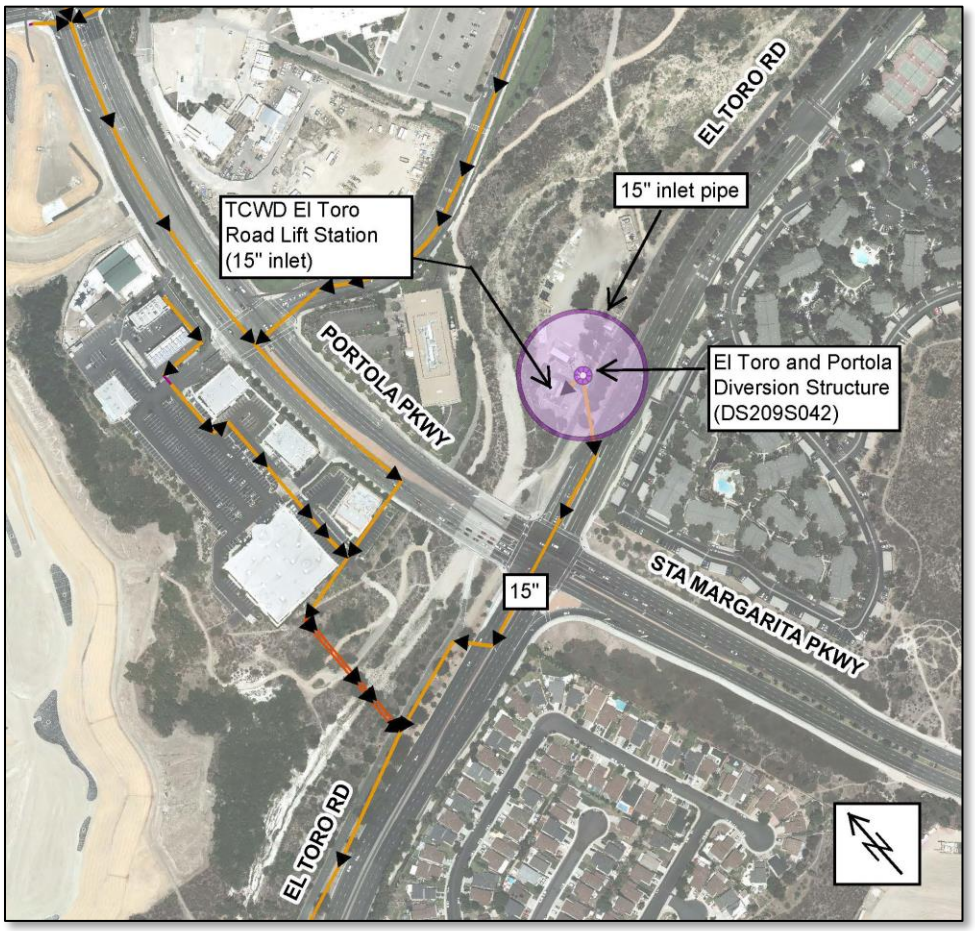


Figure 2
Plan and Profile

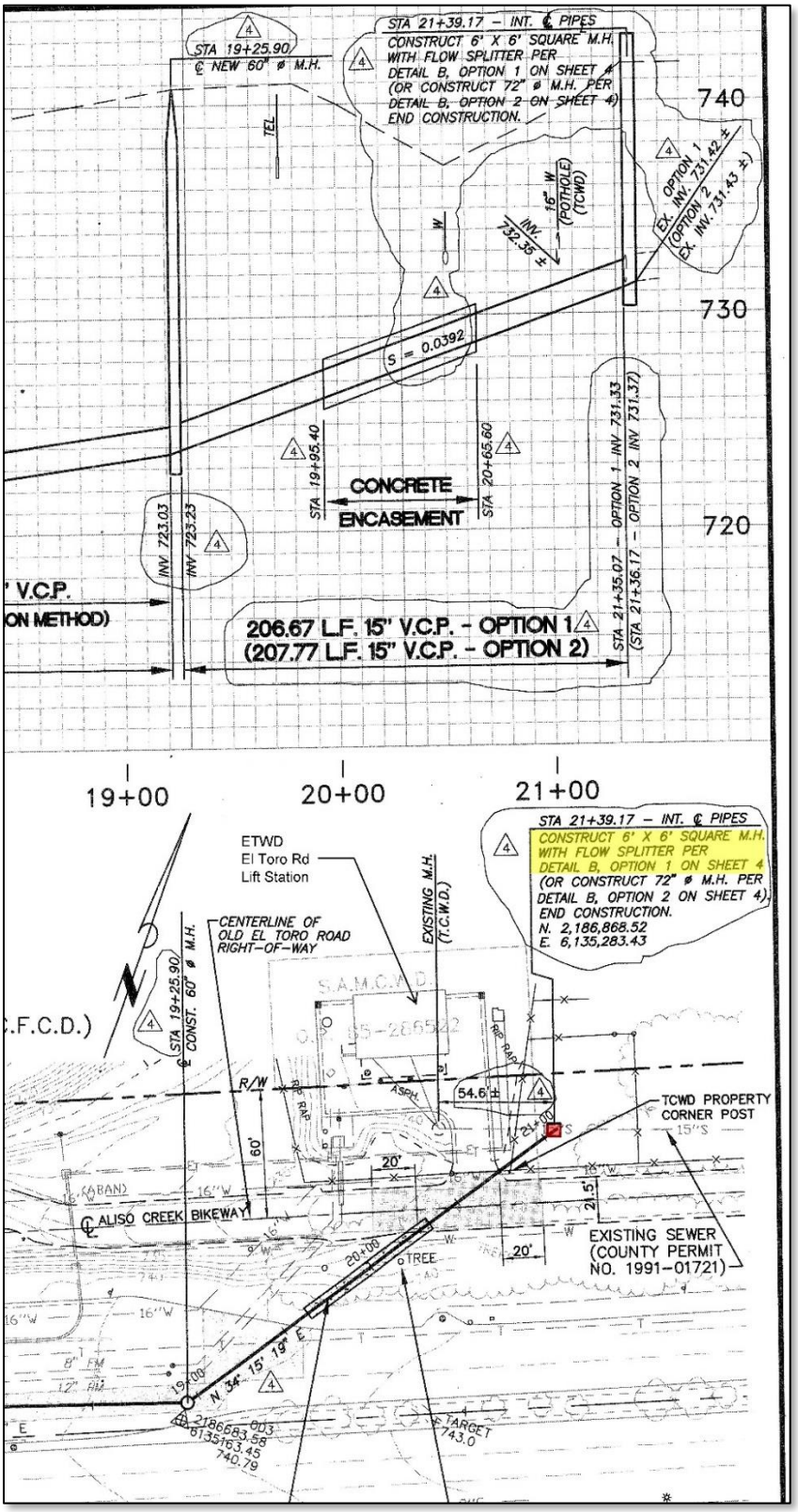


Figure 3
Diversion Structure Plan View Detail (DS209S042)

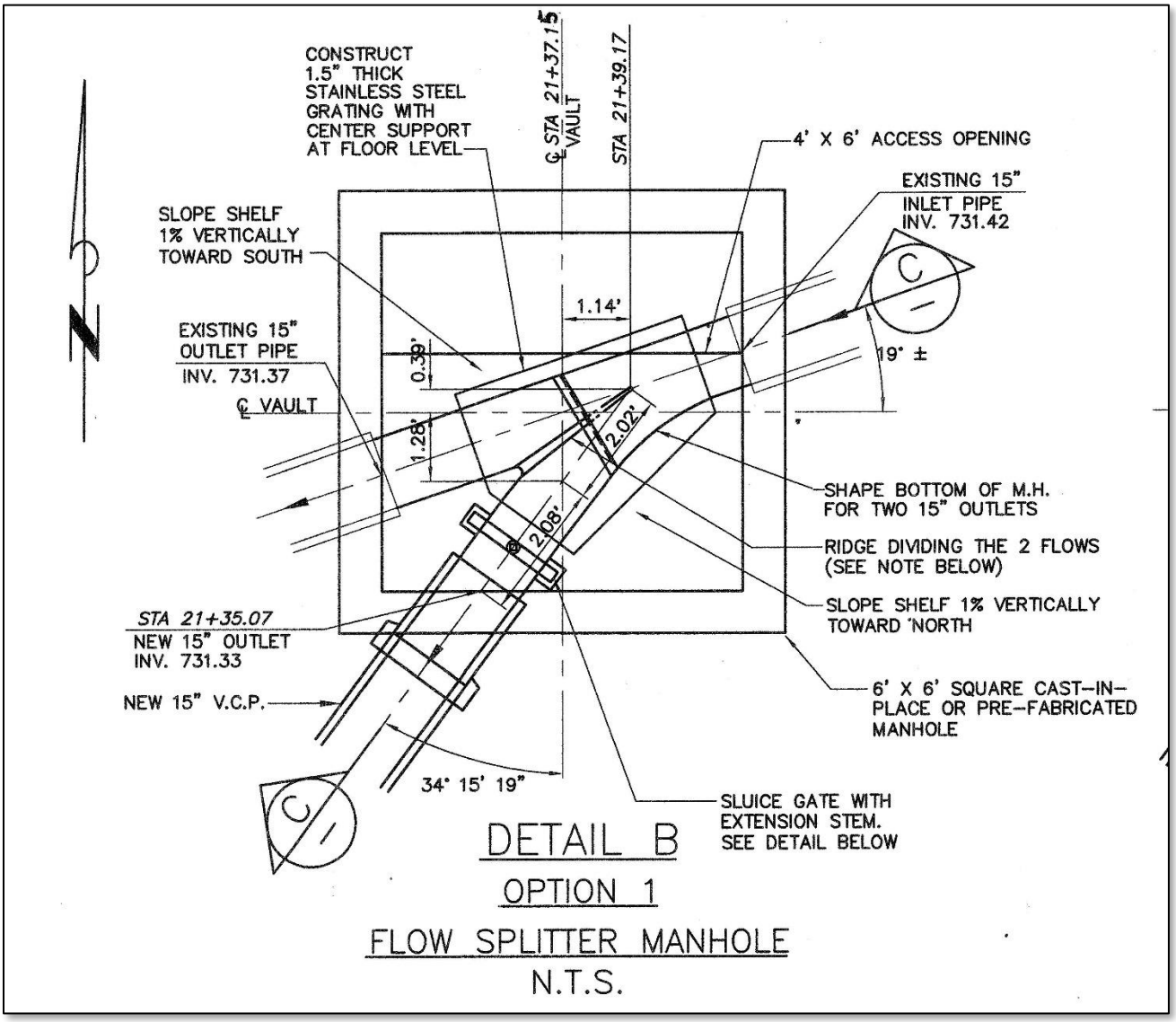
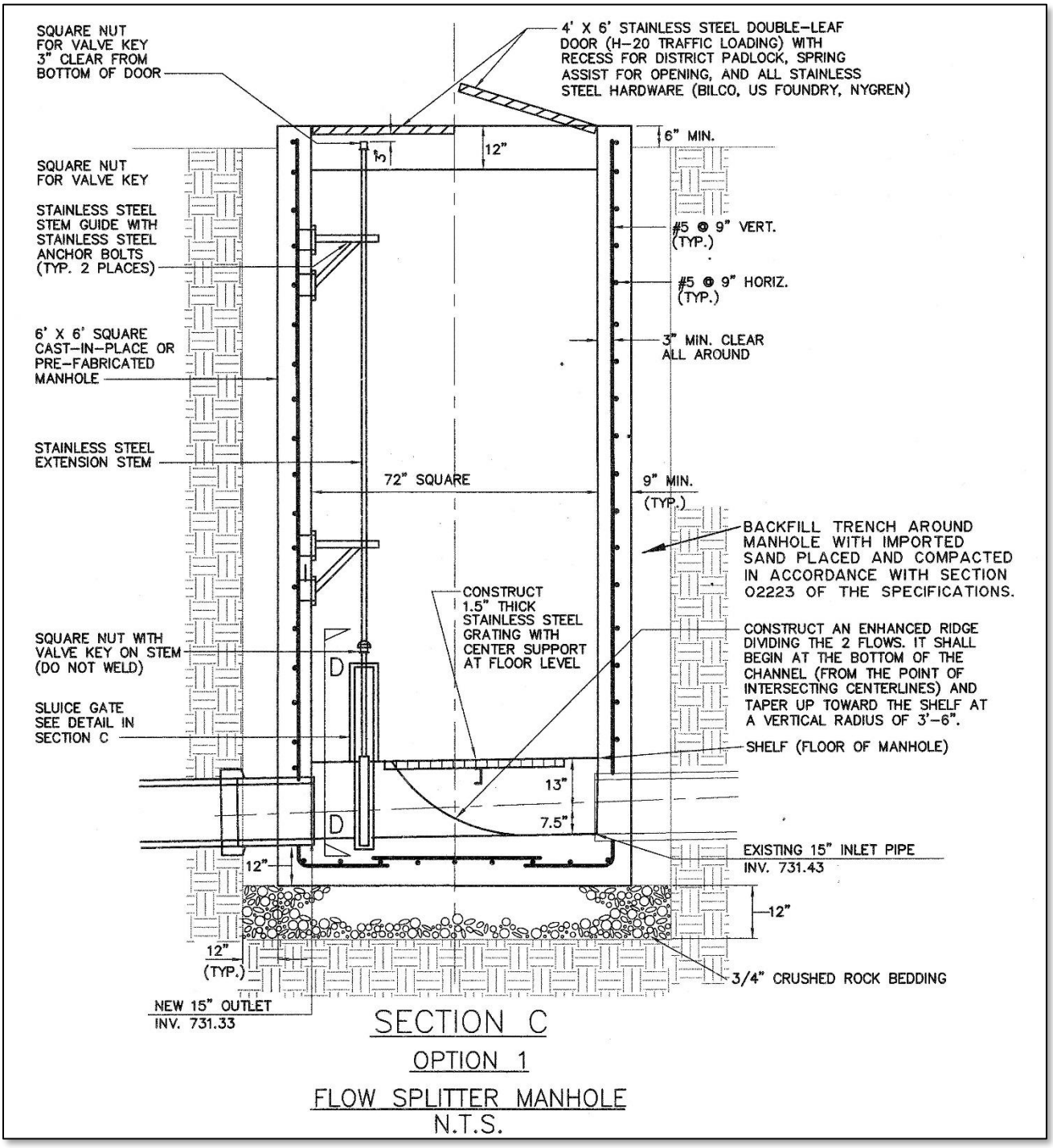


Figure 4
Diversion Structure Section



Section 2: Access

The diversion structure is accessible via a storage yard adjacent to the TCWD El Toro Road Lift Station. The lift station is shown in Photograph 1 and the diversion structure site is shown in Photograph 2. The storage yard is cluttered and staff has to walk over storage materials to access the diversion structure vault. If needed, a vactor truck would have to park on the adjacent paved bike path and use a boom to reach over to the vault.

Section 3: Structure Condition

The vault, shown in Photograph 3, is in good condition. The vault is coated and no major defects were observed.



Photograph 1 TCWD El Toro Road Lift Station



Photograph 2 Diversion Structure Site



Photograph 3 Vault (DS209S042)



Photograph 4 Sluice Gate Extension Stems

Section 4: Sluice Gates

The sluice gates, seen in Photograph 3, are controlled remotely through the SCADA system. They are exercised once a month and physically inspected quarterly. The rising extension stems are shown in Photograph 4. One of the gate controls is shown in Photograph 6.

Section 5: Access Hatch

The access hatch is in fair condition with minor rusting, as seen in Photograph 5. No major defects were observed.



Photograph 5 Access Hatch

Section 6: Odors

There is a slight odor at this facility, but it is not a major issue due to its remote location away from residences.

Section 7: Flow Meter

There is a flow meter in a TCWD manhole located upstream of this diversion structure. Staff has experienced problems with the flow meter data. The automation group periodically has to service the meter when the reads get too high. It is a Flo-dar meter which uses Dopplar radar velocity sensing technology and ultrasonic level sensing. The meter equipment is not in the flow line



Photograph 6 Sluice Gate Operator

Section 8: Recommendations

The recommendations for the El Toro and Portola Diversion Structure are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Site is difficult to access	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.

El Toro and Muirlands Diversion Structure
Evaluation
(Field Inspection May 2015)

Section 1: General

The El Toro and Muirlands Diversion Structure is located on the south side of El Toro Road, east of Muirlands Boulevard in the City of Lake Forest, as shown on Figure 1. The diversion structure was constructed in 1979. Part of the flow (approximately 25%) is diverted to the southeast in Muirlands Boulevard to El Toro Water District's sewer system, and part of the flow (approximately 75%) is diverted to the northwest in Muirlands Boulevard to IRWD's sewer system.

As shown on Figures 2 and 3, the upstream pipe is 21-inches in diameter. The downstream pipes are 21-inches (to IRWD's system and the LAWRP facility for treatment) and 15-inches (to ETWD's system and treatment plant) in diameter.

Figure 1
Diversion Structure Location

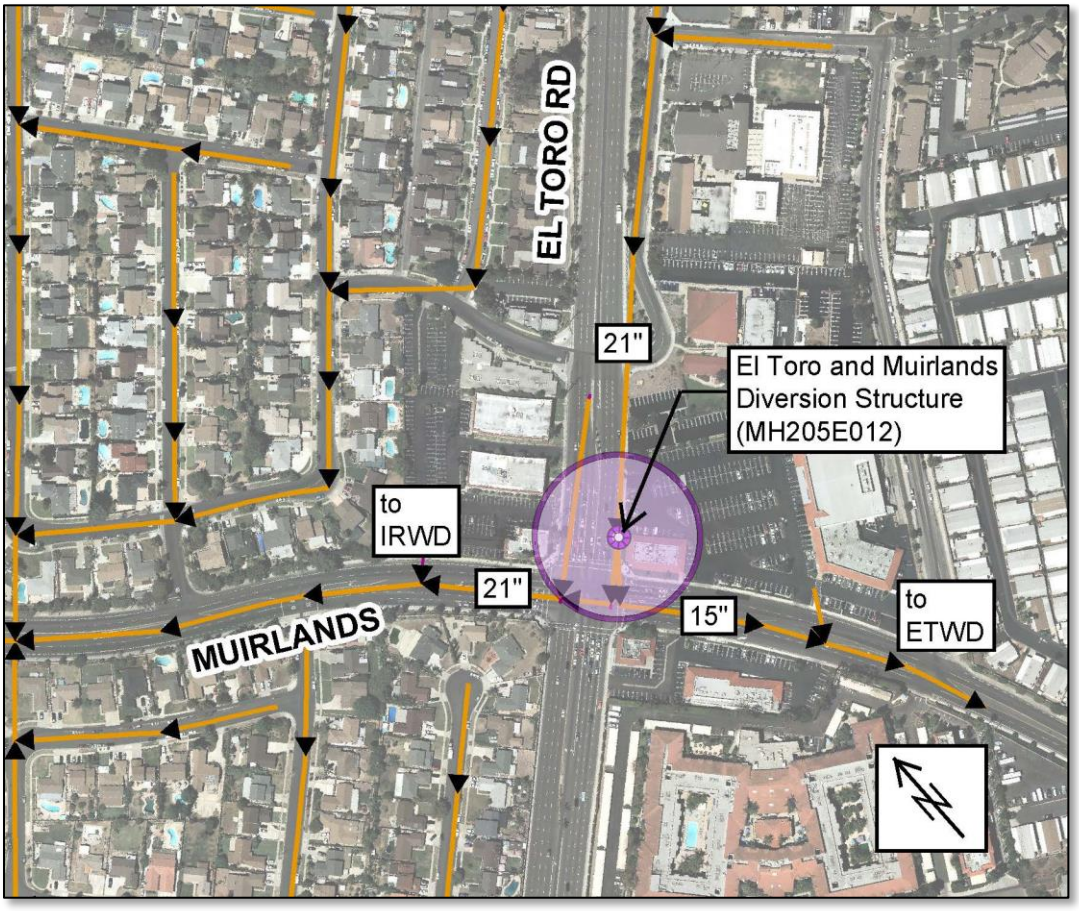


Figure 2
Diversion Structure Plan View Detail

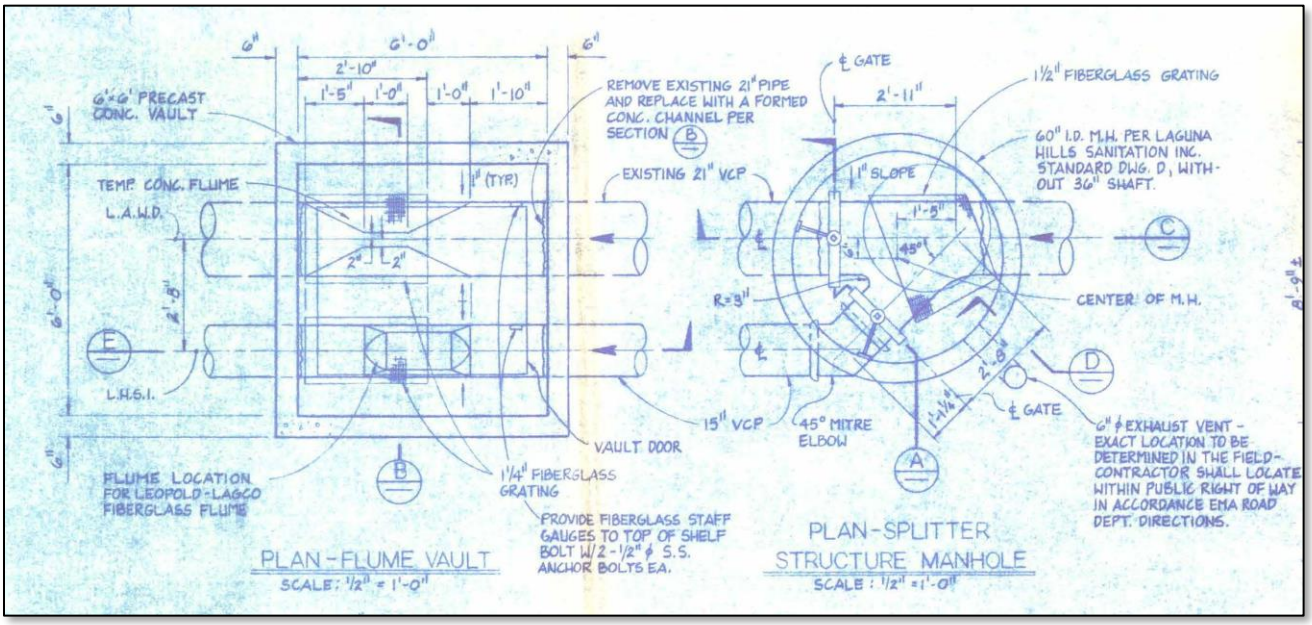


Figure 3
Diversion Structure Section Details

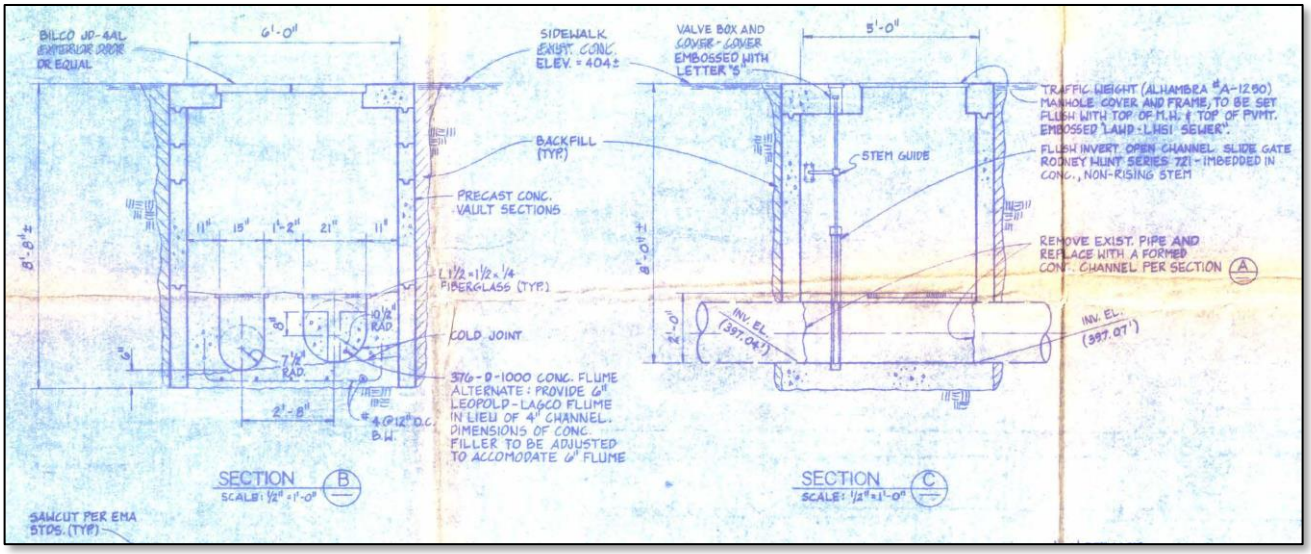
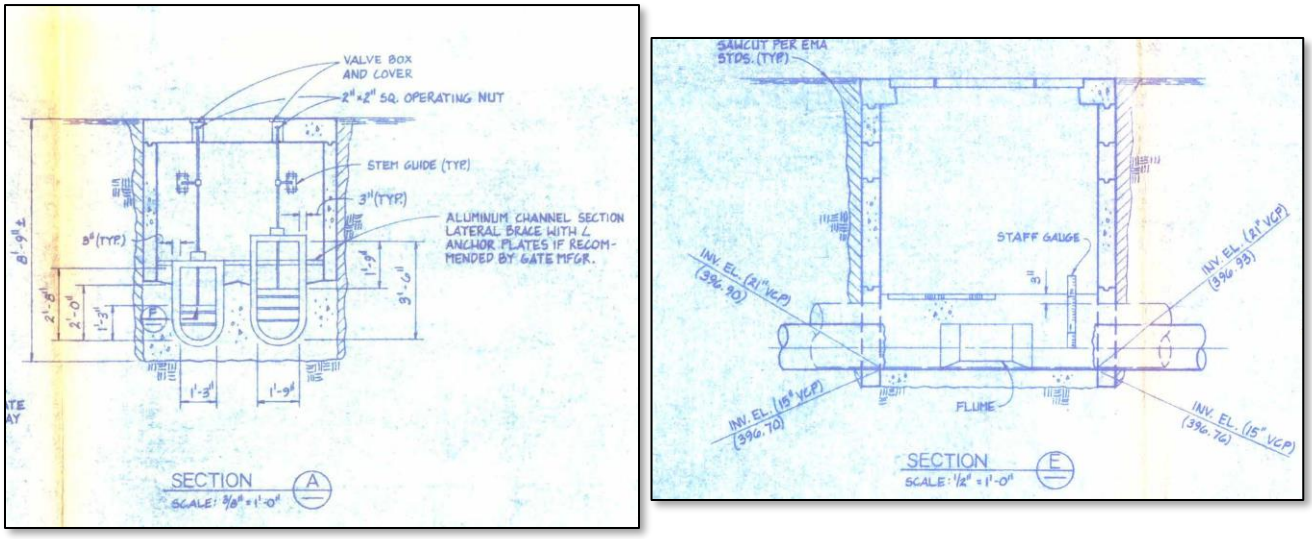


Figure 3 (continued)
Diversion Structure Section Details



Section 2: Access

The El Toro and Muirlands Diversion Structure is located in a high traffic area that requires traffic control.

Section 3: Recommendations

This diversion structure was not inspected in the field in May 2015 due to traffic control issues.

Harvard and Main Diversion Structure
Evaluation
(Field Inspection May 2015)

Section 1: General

The Harvard and Main Diversion Structure is located on the north side of Main Street, west of Harvard Avenue in the City of Irvine, as shown on Figure 1. The diversion structure was constructed in 2008. Normally, the flow from the north and east is diverted south in Harvard Avenue towards the HATS Lift Station. The purpose of the structure is to divert flow west to OCSD's trunk system in the event of an emergency, or for maintenance purposes at either HATS Lift Station or Michelson Water Recycling Plant (MWRP).

As shown on Figures 1 and 2, the upstream pipe is 60-inches in diameter. The downstream pipe to the south is 36-inches in diameter, and the downstream pipe to the west is 60-inches in diameter.

Figure 1
Diversion Structure Location

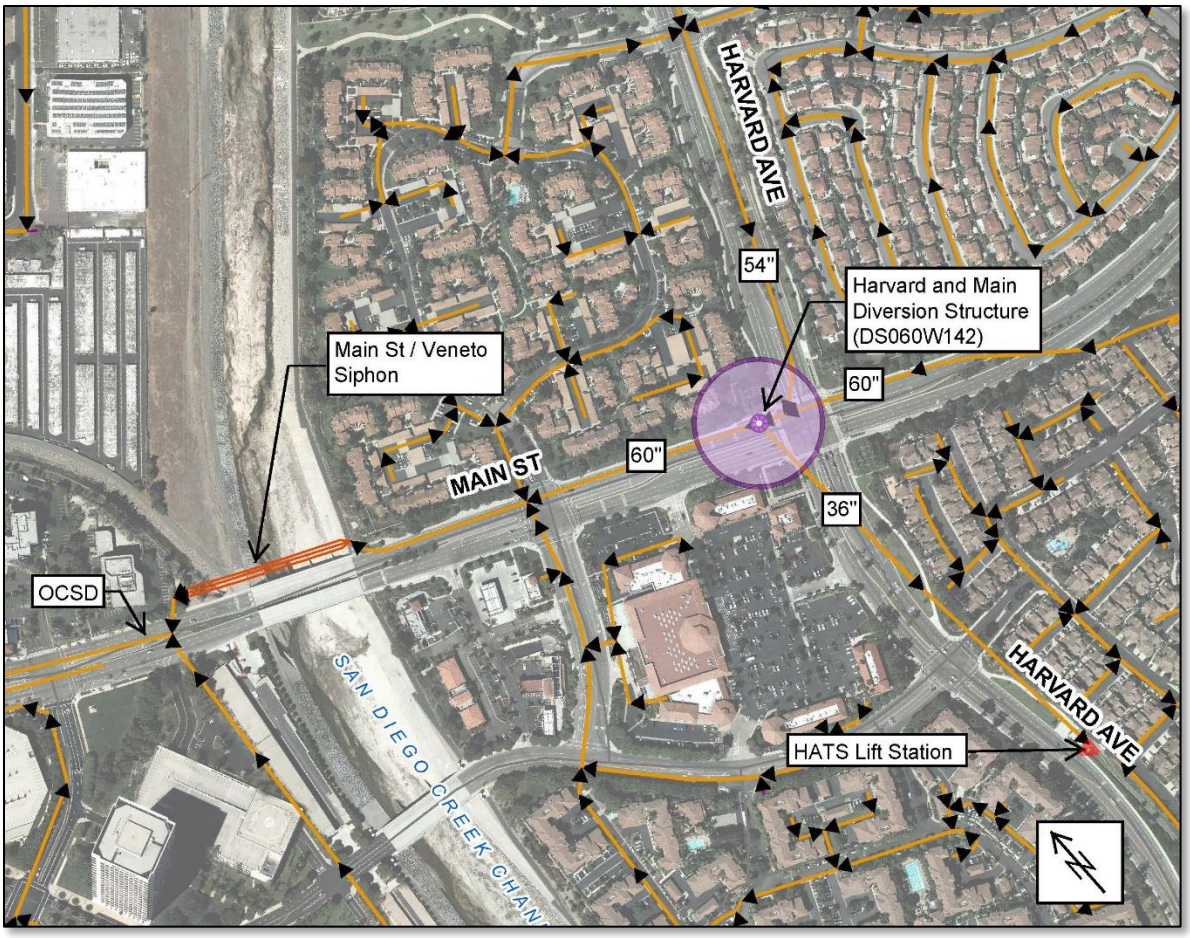
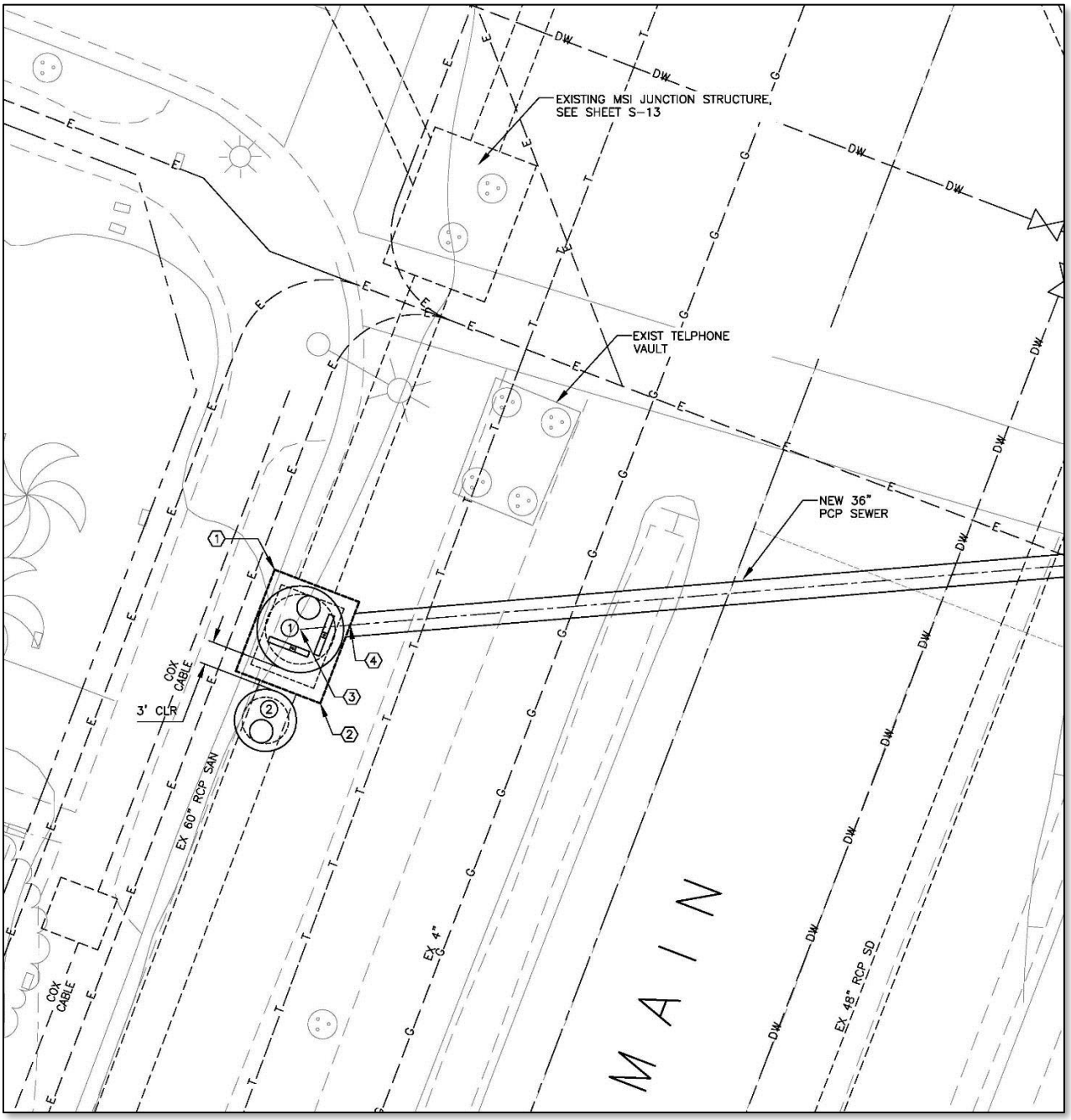


Figure 2
Plan View



NOTES:

(1) DIVERSION STRUCTURE. SEE SHEETS S-10 AND M-5. INTERNAL LINING SHALL BE SANCON.

(2) 8'ø MH PER IRWD STD DWG S-1. INTERNAL LINING SHALL BE T-LOCK.

Figure 3
Diversion Structure Plan View Detail (DS060W142)

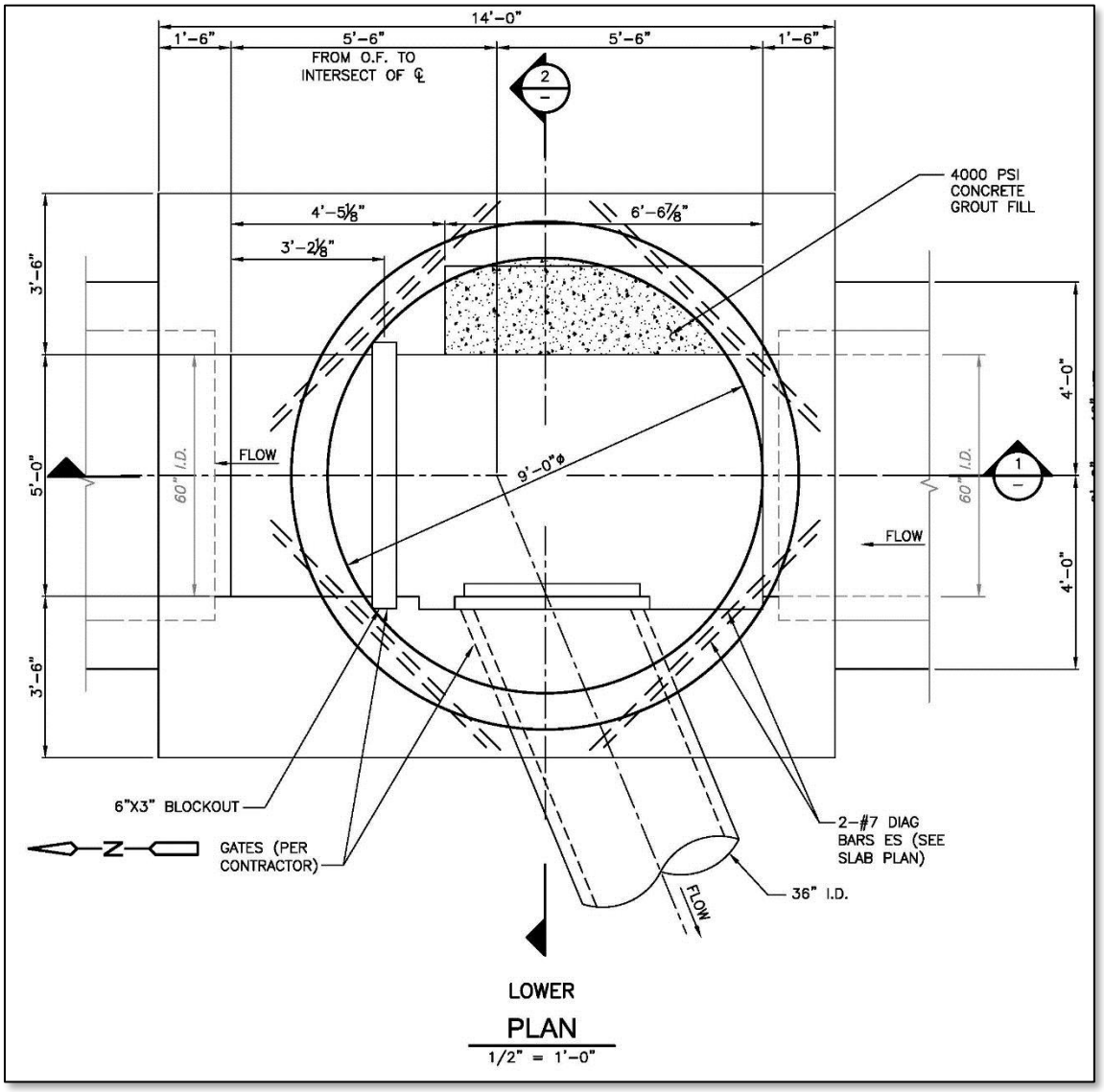
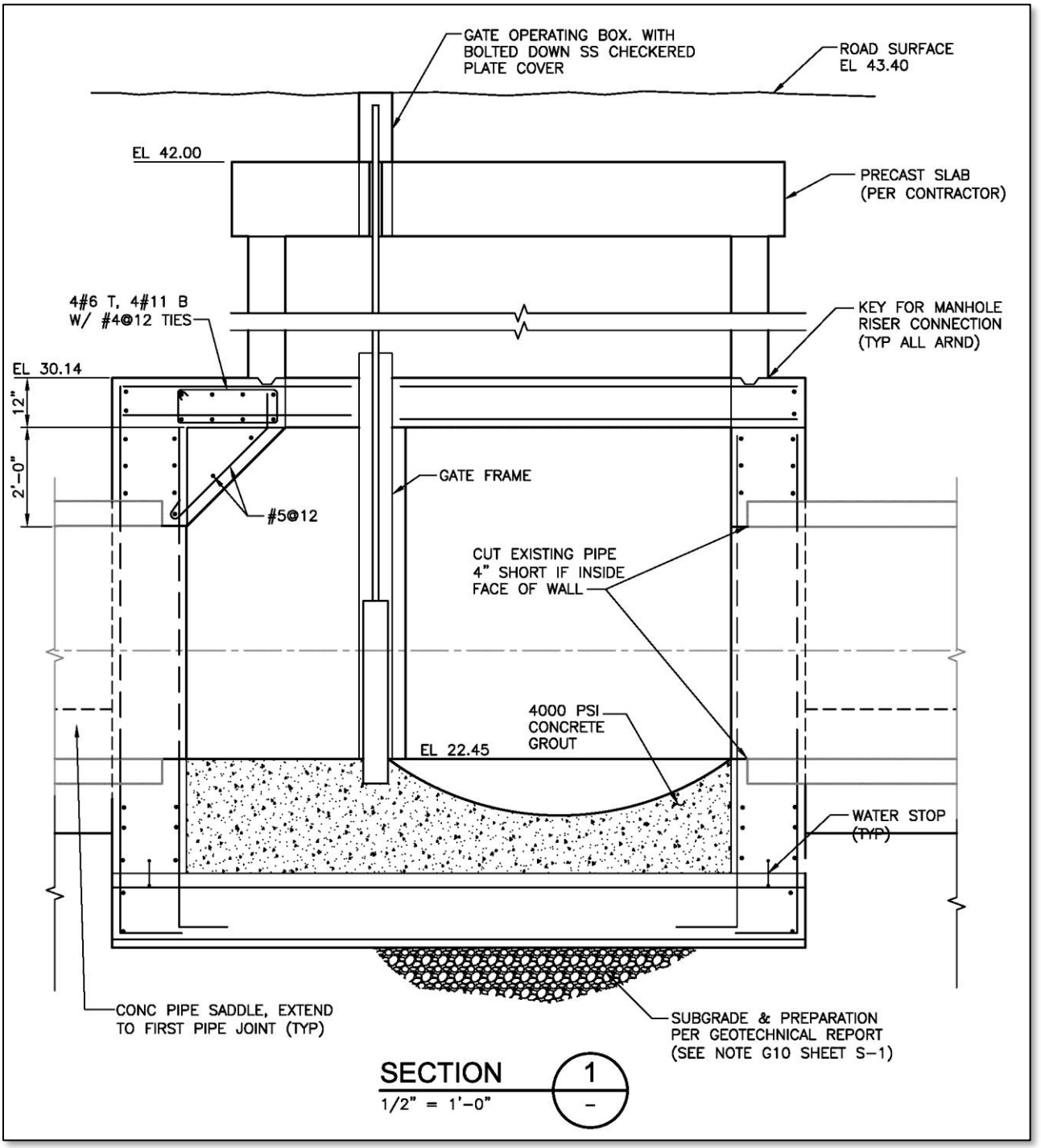


Figure 4
Diversion Structure Section (DS060W142)



Section 2: Access

The diversion structure is located in the westbound bike lane of Main Street, as shown on Photograph 1. It is close to the intersection of Harvard Avenue and Main Street, therefore traffic control is needed when accessed. The bike lane and the slow lane of traffic has to be closed off.



Photograph 1 Access and Location

Section 3: Structure Condition

The structure, shown on Photograph 2, is in good condition. The manhole is lined and no major defects were observed.



Photograph 2 Manhole and Slide Gates (DS060W142)



Photograph 3 Slide Gate Operating Box

Section 4: Slide Gates

The slide gates, seen on Photograph 2, each have valve stems that extend up to the street level. The valves are not exercised regularly. It takes 100 or more turns to fully exercise the valves. The smaller turning unit used by Collections crews broke when attempting to exercise the gates due to an extreme amount of torque applied. Now, the Computer Assisted Maintenance Program (CAMP) crew is called in to operate gates because this crew has heavier duty equipment.

Section 5: Manhole Cover / Operator Covers

The manhole and operator covers are in good condition as seen on Photograph 1. No major defects were observed.

Section 6: Odors

The manhole lid is bolted down with rubber gaskets therefore there is no odor issue at this diversion structure.

Section 8: Recommendations

The recommendations for the Harvard and Main Diversion Structure are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Confirm IRWD staff has appropriate equipment to operate the slide gates	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.

Culver and San Leandro Diversion Structure
Evaluation
(Field Inspection May 2015)

Section 1: General

The Culver and San Leandro Diversion Structure is located on San Leandro, northwest of Culver Drive in the City of Irvine, as shown on Figure 1. The diversion structure was constructed in 1976. The flow from the north is divided by gravity to the northerly and southerly sewers in San Leandro. The purpose of the structure is to divide the flow that is conveyed west in San Leandro and then south to Michelson Water Recycling Plant (MWRP).

As shown on Figures 1 and 2, the upstream pipe is 36-inches in diameter. The downstream pipes are 24-inches and 45-inches in diameter.

Figure 1
Diversion Structure Location



Figure 2
Plan View

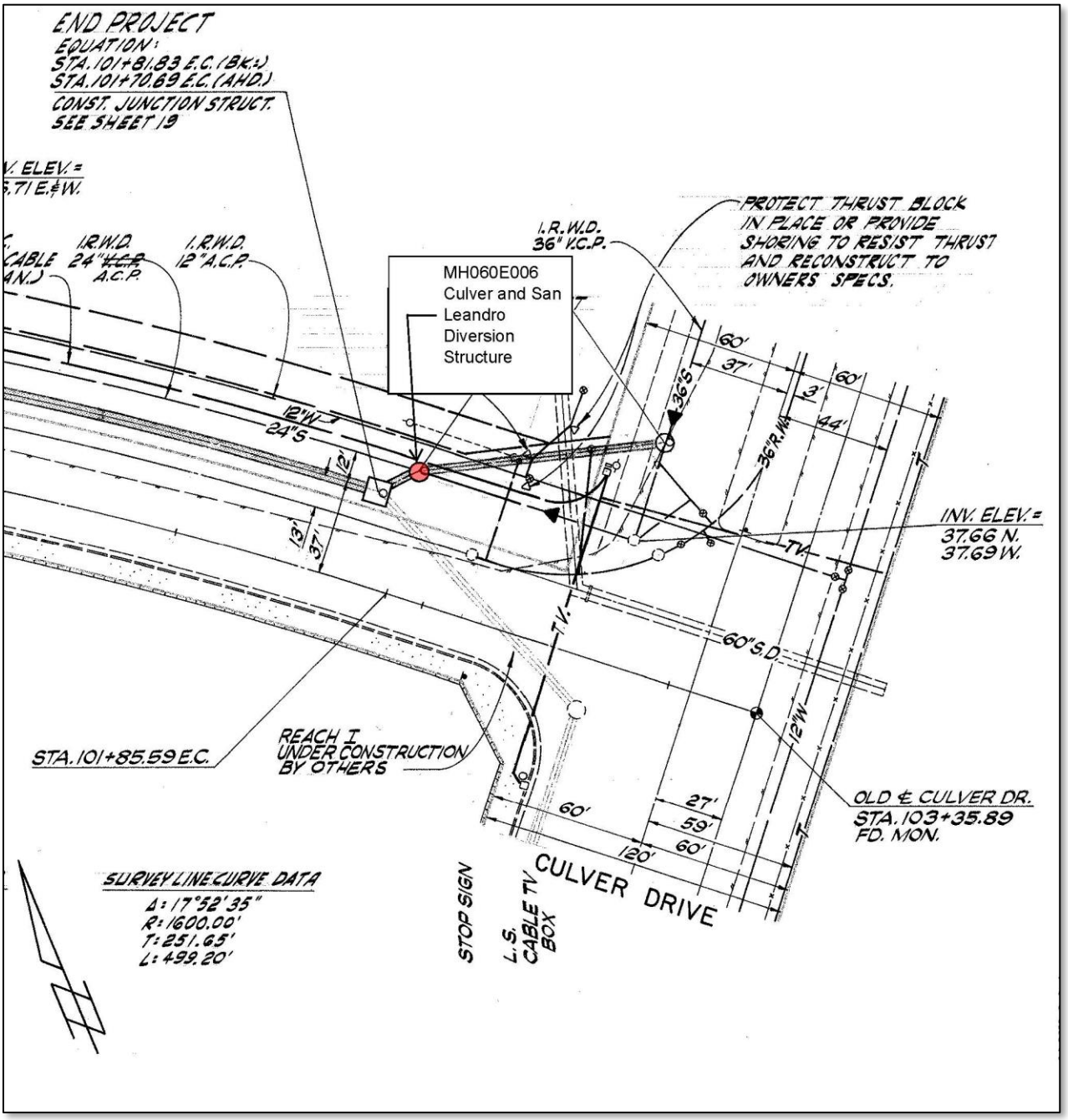
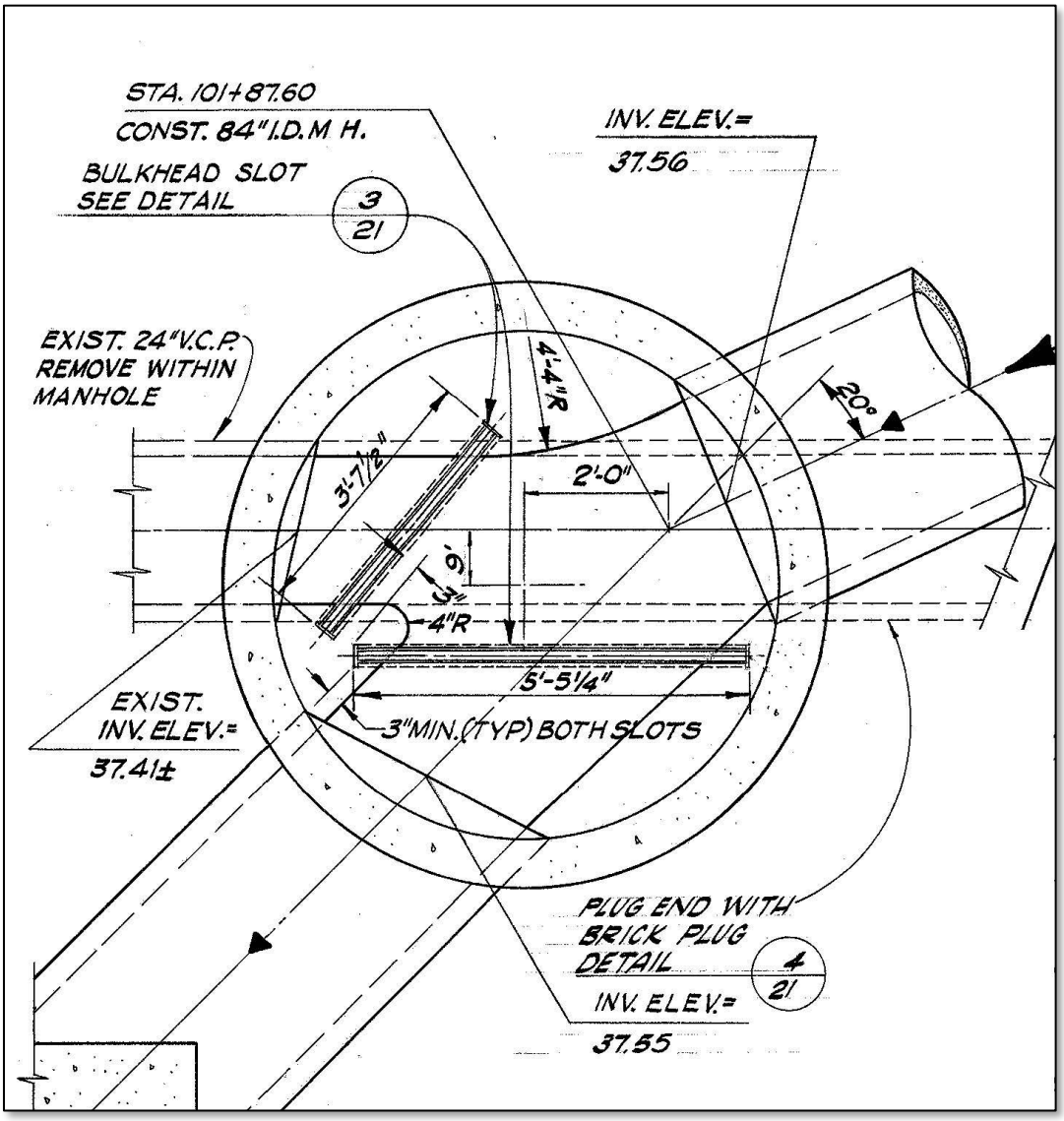


Figure 3
Diversion Structure Plan View Detail (MH060E006)



Section 2: Access

The diversion structure is located in the westbound lane of San Leandro, as shown in Photograph 1. It is close to the intersection of Culver Drive, therefore traffic control is needed when accessed. The center portion of the street has to be closed off.

Section 3: Structure Condition

The manhole, shown in Photograph 2, is in good condition. The manhole is lined and no major defects were observed. Staff reports that this manhole structure was rehabilitated within the last 2 years. The floor and walls were rebuilt along with new guide rails for slide gates.



Photograph 1 Location and Access (facing west)



Photograph 2 Manhole (MH060E006)

Section 4: Slide Gates

There are slide gate guides as seen in Photograph 2, but currently there are no slide gates in the diversion structure manhole.

Section 5: Manhole Lid / Hardware

The manhole lids are in good condition as seen in Photograph 3. No major defects were observed. The coating on top was redone about 1 year ago.



Photograph 3 Manhole Lid with Silicone Seal

Section 6: Odors

The manhole lid is sealed with silicon for odor control purposes. There is a lot of turbulence in this area of the system due to the splitting and merging of large amounts of flows. Chemicals (BioMagic) are added to the system upstream of this location at the former potable water

Northwood Booster Pump Station. The chemicals are added via a drain line that is directly connected to the trunk sewer in Culver Drive.

Section 8: Recommendations

The recommendations for the Culver and San Leandro Diversion Structure are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Condition/Age	Perform holiday testing	Conduct further condition assessment of areas of interest and make recommendations accordingly.

Von Karman and Main Diversion Structure
Evaluation
(Field Inspection May 2015)

Section 1: General

The Von Karman and Main Diversion Structure is located on Main Street, west of Von Karman Avenue in the City of Irvine, as shown on Figure 1. The diversion structure was constructed in 1972. There is a parallel Orange County Sanitation District (OCSD) trunk line to the north. Flow can be diverted to the OCSD line but currently the flow from the east continues west and stays within the IRWD sewer system.

As shown on Figures 1 and 2, the upstream pipe is 18 inches in diameter. The downstream pipes are both 21-inches in diameter.

Figure 1
Diversion Structure Location

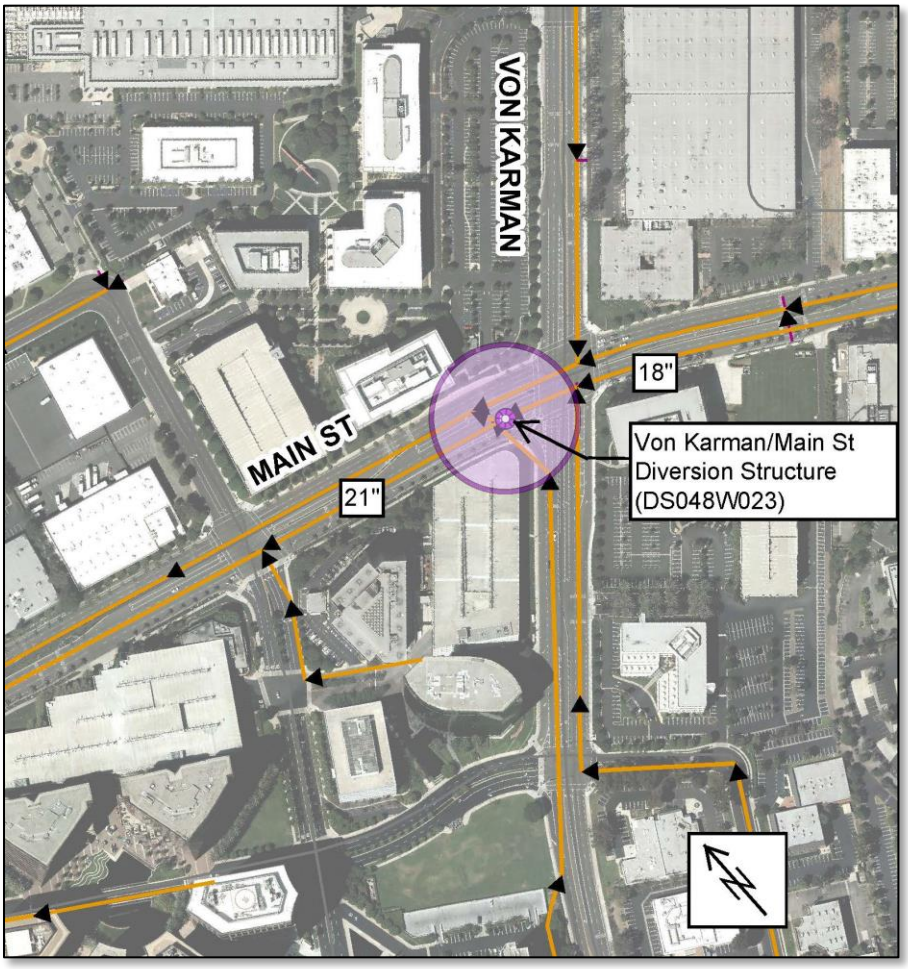
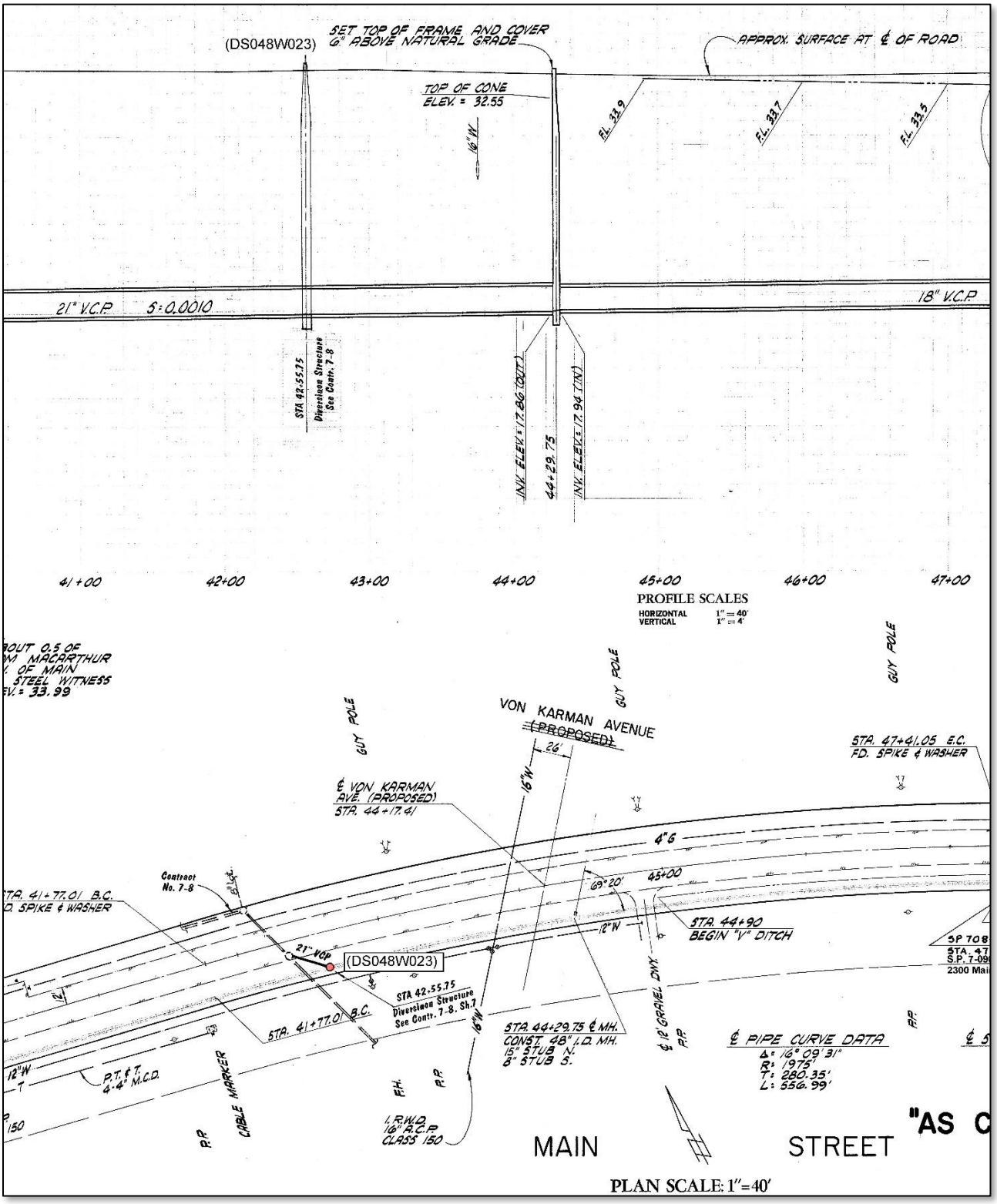


Figure 2
Plan and Profile View



Section 2: Access

The diversion structure is located in the eastbound lane of Main Street, as shown in Photograph 1. Traffic control is needed when accessing this facility. Although the intersection at Von Karman is not affected, the center portion of eastbound Main Street has to be closed off.

Section 3: Structure Condition

The manhole, shown in Photograph 2, is in good condition. The manhole is lined and no major defects were observed. Some of the T-lock welding strips are coming off as seen in Photograph 3.

Section 4: Slide Gates

There is a slide gate in place that prevents flows from being conveyed north to the OCSD trunk sewer in Main Street. All wastewater currently flows west, continuing in IRWD's sewer system. There is no way to operate the gate from above ground.

Section 5: Manhole Cover

The manhole covers are in good condition as seen in Photograph 4. No major defects were observed. The manhole cover is stamped as belonging to OCSD, but IRWD actually maintains this structure.



Photograph 1 Location and Access (facing East)



Photograph 2 Manhole (D6048W023)



Photograph 3 Manhole Lining



Photograph 4 Manhole Lid (D6048W023)

Section 6: Odors

Flows can be diverted to OCSD's trunk sewer in Main Street, but this would only be done on a short term basis due to the odor and grease issues this causes in IRWD's system to the west. When flows are diverted to OCSD, the sewers to the west receive reduced flows and therefore the cleansing velocities cannot be maintained. Sewage becomes stagnant, odors develop, and grease accumulates in the system. There are several restaurants located in the area that contribute Fats, Oils and Grease (FOG) to the system.

Section 8: Recommendations

The recommendations for the Von Karman and Main Diversion Structure are summarized in Table 1.

Table 1
Recommendation Summary

Category	Evaluation/Observation Description	Recommendations
Mechanical and Operational	Site requires confined space entry	Validate existing conditions are consistent with IRWD operational requirements. Verify compliance with IRWD and local governing safety regulations. Develop recommendations accordingly.
Condition/Age	T-Lock welding strips are deterioating	Conduct further condition assessment of areas of interest and make recommendations accordingly.

Von Karman and Michelson Diversion Structure
Evaluation
(Field Inspection May 2015)

Section 1: General

The Von Karman and Michelson Diversion Structure is located at the intersection of Von Karman Avenue and Michelson Drive, in the City of Irvine. It is situated in the eastbound lane of Michelson Drive and the southbound lane of Von Karman Avenue, as shown on Figure 1. The diversion structure was constructed in 1991. Normally, the flow from the east is diverted to the Orange County Sanitation District (OCSD) trunk sewer in Von Karman Avenue.

As shown on Figures 1 and 2, the upstream pipe is 15-inches in diameter. The flow is deflected off of an inserted board as shown in Photograph 2 and diverted to the 36-inch diameter OCSD trunk sewer in Von Karman Avenue.

Figure 1
Diversion Structure Location

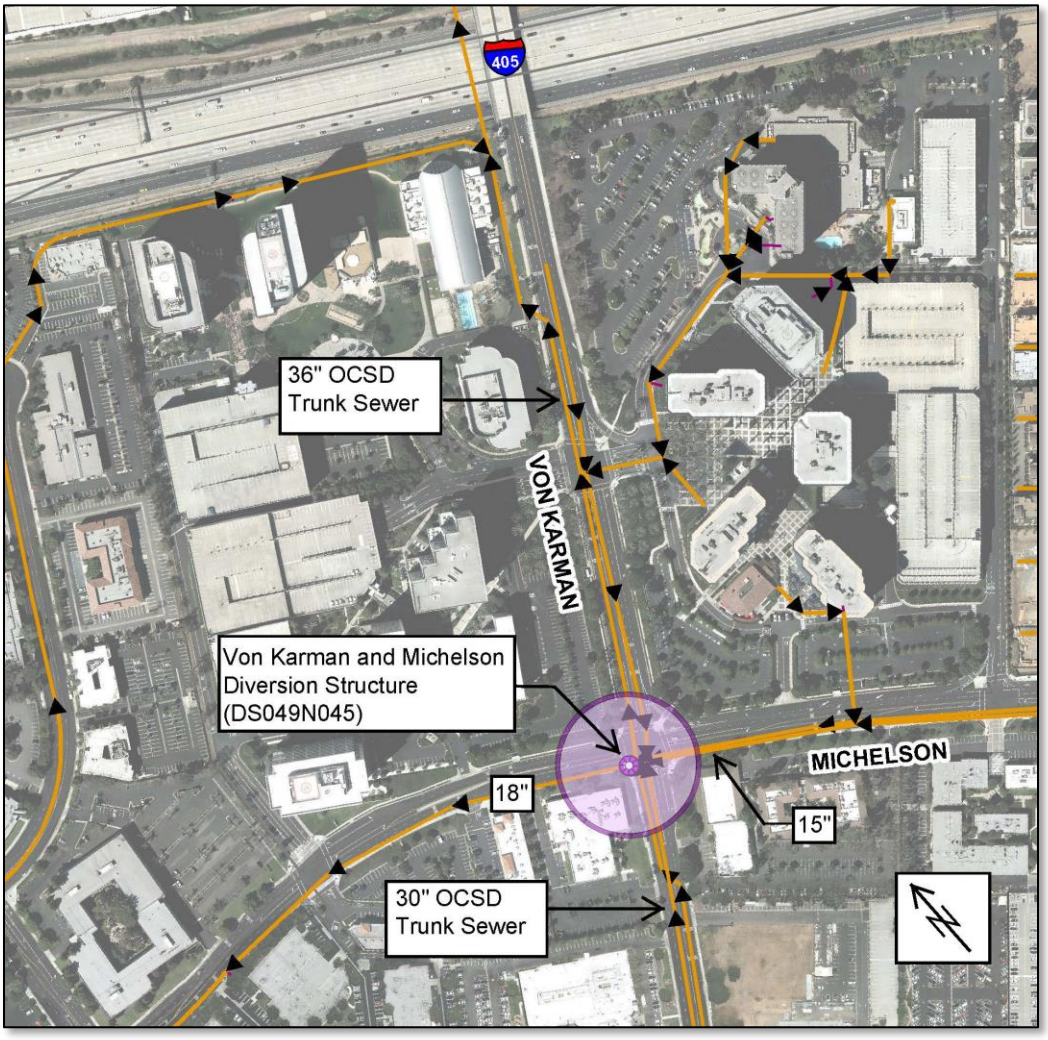


Figure 2
Plan View

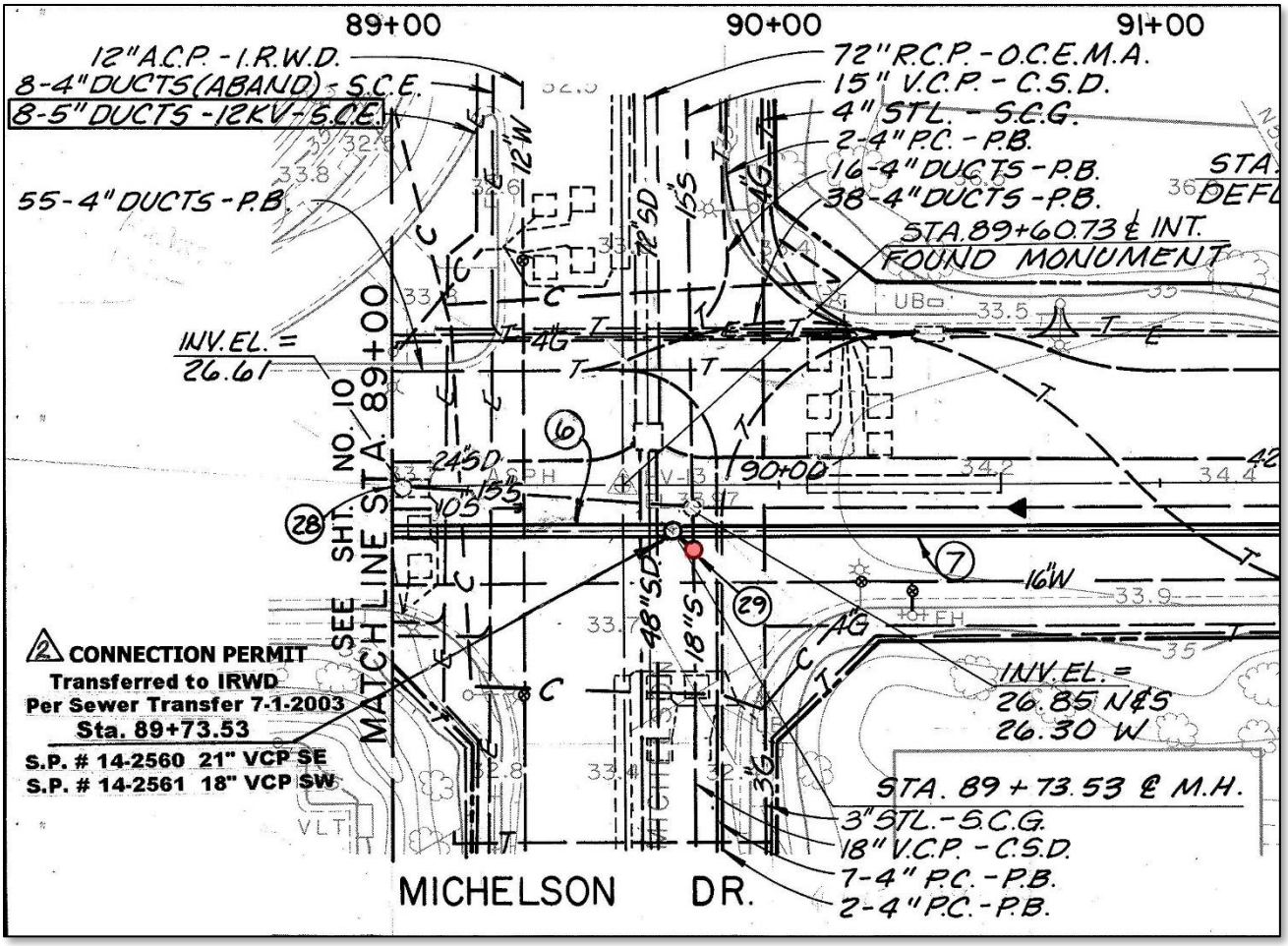
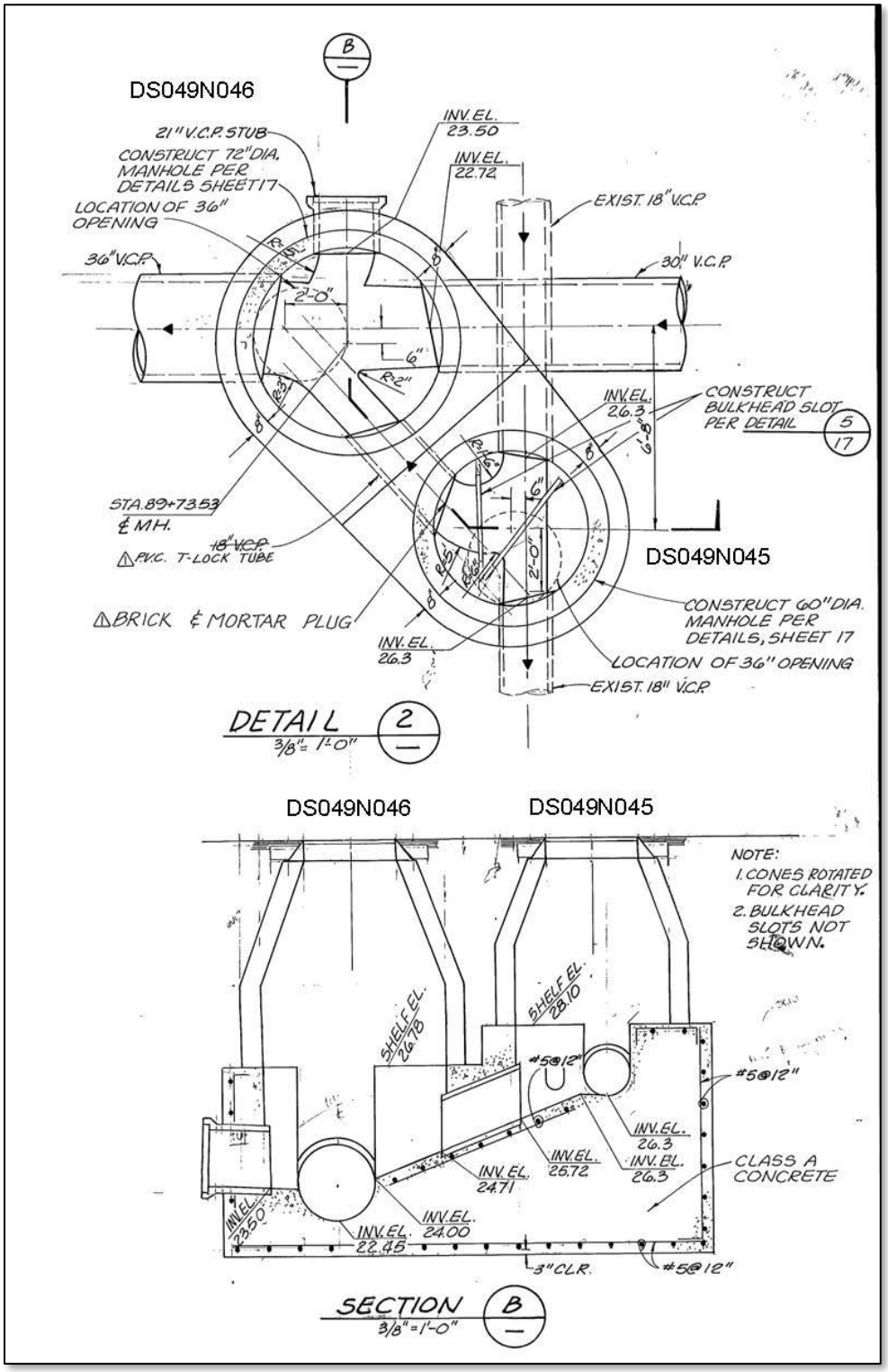


Figure 3
Diversion Structure Detail and Section (DS049N045)



Section 2: Access

The diversion structure is located in the intersection of Michelson Drive and Von Karman Avenue. It is in the eastbound lane of Michelson Drive and the southbound lane of Von Karman Avenue, as shown in Photograph 1. ~~Heavy t~~Traffic control is needed when accessing this facility.

Section 3: Structure Condition

The diversion manhole is shown in Photograph 2. Except for the approximately top 12 inches, it is lined with T-Lock, which appears to be in good condition. A portion of the top 12 inches seems to be lined with a polyurethane product, with exposed concrete below the manhole frame as shown in Photograph 3.



Photograph 1 Access (facing west)



Photograph 2 Manhole (DS09N045)



Photograph 3 Manhole Lid



Photograph 4 Manhole Lid

Section 4: Slide Gates

The inserted gate (wood board) is in good condition. There is a small wedge inserted in one of the gate slots, presumably to hold the board in place.

Section 5: Manhole Cover

The manhole cover and frame are in good condition as seen in Photograph 4. No major defects were observed.

Section 6: Odors

There is a no odor issue at this facility.

Section 7: Recommendations

There are no recommendations for the Von Karman and Michelson Diversion Structure.

APPENDIX I

Risk Analysis

Section 1.0 General

As a part of the Sewer Collection System Master Plan, a risk analysis of the gravity system pipes, force mains, and lift stations was conducted. The analysis utilized the existing closed circuit television (CCTV) inspection data, the developed hydraulic model data, as well as other elements deemed of importance to the analysis. This document describes the approach to the risk analysis.

InfoMaster, an ArcGIS based asset integrity management and capital planning software package, was utilized to conduct the analysis. InfoMaster is certified by the National Association of Sewer Service Companies (NASSCO). It is a powerful tool that assists in characterizing the likelihood and consequence of failure for individual pipes in the network. IRWD's CCTV inspection data follows the Pipeline Assessment and Certification Program (PACP) standards and can be easily imported into the InfoMaster software, which already recognizes the same coding system that is required by PACP. InfoMaster has the capability to incorporate any asset data that is in IRWD's geodatabase as well as the CCTV inspection data and hydraulic analysis data.

The NASSCO Pipeline Assessment and Certification Program (PACP) describes risk as follows:

"Risk relates to the probability of something bad happening, or the likelihood of a negative impact occurring, and how this can be avoided. Sometimes risk is used to describe the severity of the consequence(s) related to a potential failure. Asset management relates the combination of both **Likelihood of Failure** and **Consequence of Failure** to risk. Risk takes into account the asset's physical condition, as well as the impact that its failure would have on system performance and stakeholders. Mathematically, the risk from an occurrence may be expressed as the product of likelihood and consequence of failure as quantified in the following equation:

Risk = Likelihood of Failure (LoF) x Consequence of Failure (CoF)"

Likelihood of Failure (LoF) refers to a calculated numerical representation that denotes the probability of failure based on an asset's physical and hydraulic condition.

Consequence of failure (CoF) is the combination of direct and indirect impacts on the vicinity and community due to a potential asset failure.

Section 2.0 Gravity Pipe Risk Analysis

The resulting gravity system risk profile and recommended action items are graphically displayed on Plate I-1 and Plate I-2, respectively.

Each of the LoF and CoF elements are assigned different weighting factors depending on the goals and priorities of IRWD. In the Gravity Pipe Risk Analysis, the overall LoF and CoF scores are calculated as a weighted average of all individual LoF and CoF scores. The weighting factors are shown in Table I-1.

Table I-1
Gravity Main Risk Analysis Weighted Scores

Liklihood of Failure Element	Weighting Factor	Highest LoF Score	Weighted LoF Score	Total Percentage of Element
PACP Structural Condition Grade	5	10	50	26%
PACP O&M Condition Grade	5	10	50	26%
PDWF d/D	5	10	50	26%
Root Type	2	8	16	8%
Deposit Type	2	8	16	8%
Age/Construction Period	1	6	6	3%
Pipe Material	1	6	6	3%
Total	**21**	**58**	**194**	**100%**

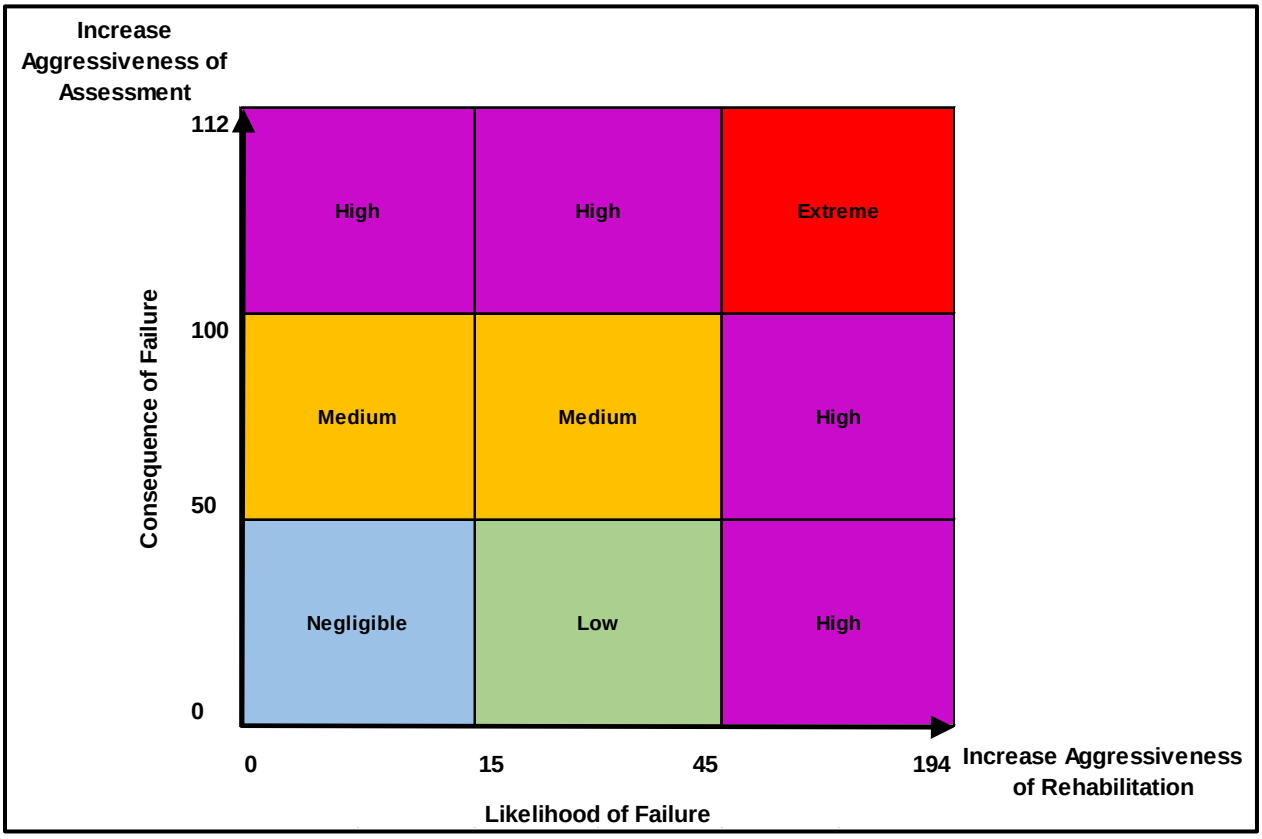
Consequence of Failure Element	Weighting Factor	Highest CoF Score	Weighted CoF Score	Total Percentage of Element
Proximity to Major Waterway	5	10	50	45%
Maximum Rate of Flow	5	10	50	45%
Size of Pipe	1	6	6	5%
Depth of Pipe	1	6	6	5%
Total	**12**	**32**	**112**	**100%**

For LoF elements, the structural and O&M condition grades, established via CCTV assessment data, are heavily weighted because they represent actual observed conditions of the pipe. The peak dry weather flow (PDWF) depth to diameter ratio is weighted heavily because it can be directly correlated with the potential that an overflow could occur. Roots and deposits are weighted higher than age and material based on historical spill records. The causes of spills are more often due to roots and deposits and not due to structural defects, which relate to age and material.

For CoF elements, the proximity to major waterways and the maximum rate of flow through a pipe segment are heavily weighted because of the impact a sewer spill could have on the environment and the community. The size of pipe and depth of pipe are weighted lower. These elements are included because they play a role in the cost of replacing a pipe.

The overall risk associated with a failure event is a function of the LoF and CoF. A risk matrix was developed to display the results of the gravity main risk analysis as shown on Figure I-1. Increased likelihood of failure should result in more aggressive maintenance and repair. Increased consequence of failure should result in increased assessment.

Figure I-1
Gravity Main Risk Matrix



Using the bi-directional distribution method, the evaluated sewer pipes were classified into categories of CoF and LoF.

On the CoF Scale:

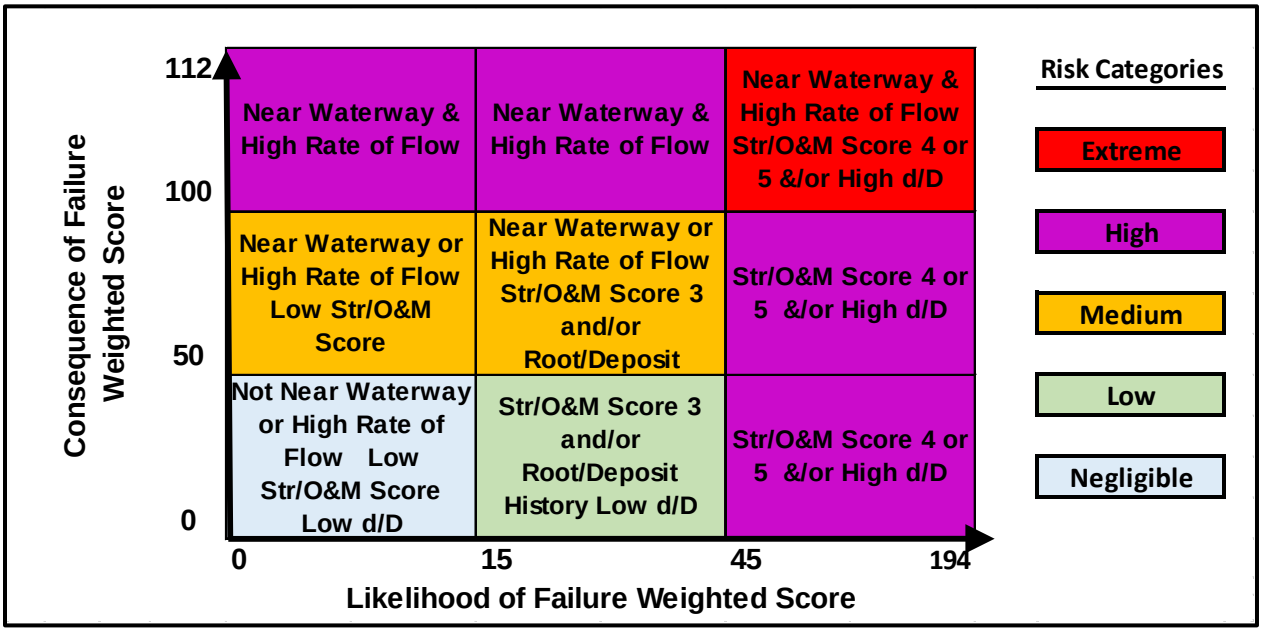
- Any weighted scores greater than 100 were classified as an “Extreme” or “High” Risk Pipe
- Any weighted scores between 50 and 100 were classified as a “Medium” or “High” Risk Pipe, depending on its corresponding LoF Score
- Any weighted scores below 50 were classified as a “High”, “Low”, or “Negligible” Risk Pipe, depending on its corresponding LoF Score

On the LoF Scale:

- Any weighted scores greater than 45 were classified as an “Extreme” or “High” Risk Pipe
- Any weighted scores between 15 and 45 were classified as a “High”, “Medium”, or “Low” Risk Pipe, depending on its corresponding CoF score
- Any weighted scores less than 15 were classified as a “High”, “Medium” or “Negligible” Risk Pipe, depending on its corresponding CoF score

The Risk Matrix and the weighted score breaks were developed to ensure that the pipes with a high rate of flow and near a major waterway OR pipes with a structural or O&M grade greater than 4 and/or a high depth to diameter ratio were identified as “High Risk”. If the pipe has a high rate of flow and is near a major waterway AND has a structural or O&M grade greater than 4 and/or a high depth to diameter ratio, it was identified as “Extreme Risk”. Figure I-2 shows the Risk Matrix from a different perspective. Each matrix box contains a description of the criteria met by each pipe that falls into each respective box. The individual CoF scores and LoF Scores determine the specific risk category that each pipe segment is classified. The overall Risk Score (LoF x CoF) is then considered within each risk category when developing the prioritization of recommended actions.

Figure I-2
Description of Risk Matrix Categories for Gravity Mains



Section 3.0 Gravity Pipe Likelihood of Failure

Likelihood of Failure (LoF) refers to a calculated numerical representation that denotes the probability of failure based on an asset's physical and hydraulic condition.

For this study, the elements considered in the calculation of the gravity main LoF are as follows:

1. Structural condition of pipe based on CCTV inspection and PACP structural condition grades.

   The more severe a structural defect, the more likely the pipe is to fail (collapse and cause and overflow). The LoF Scores are assigned to Structural Condition as shown in Table I-2.

   The LoF Score reflects a substantially higher Likelihood of Failure for pipes with a peak PACP structural condition grade of a 4 or 5. The weighted score ensures that these pipes with a high structural condition LoF score, are categorized as "Extreme Risk" or "High Risk", which corresponds to immediate attention and/or action. PACP structural condition grade definitions are as follows:

   5 – Most significant defect grade

   4 – Significant defect grade

   3 – Moderate defect grade

   2 – Minor to moderate defect grade

   1 – Minor defect grade

Table I-2
Structural Condition of Gravity Main

PACP Structural Condition Grade	LoF Score
No Condition Grade	0
Peak Condition Grade of 1	1
Peak Condition Grade of 2	2
Peak Condition Grade of 3	3
Peak Condition Grade of 4	9
Peak Condition Grade of 5	10

2. Operation and maintenance (O&M) condition of pipe based on CCTV inspection and PACP O&M grades.

   The more severe the O&M defect, the more likely the pipe is to fail (become obstructed and cause an overflow). The LoF Scores are assigned to Structural Condition as shown in Table I-3. The LoF Score reflects a substantially higher Likelihood of Failure for pipes with a peak PACP O&M grade of 4 or 5. The weighted score ensures that these pipes with a high O&M LoF score are categorized as "Extreme Risk" or "High Risk", which corresponds to immediate attention and/or action. PACP O&M grade definitions are as follows:

   5 – Most significant defect grade

   4 – Significant defect grade

   3 – Moderate defect grade

   2 – Minor to moderate defect grade

   1 – Minor defect grade

Table I-3
O&M Condition of Gravity Main

PACP O&M Condition	LoF Score
No Condition Grade	0
Peak Condition Grade of 1	1
Peak Condition Grade of 2	2
Peak Condition Grade of 3	3
Peak Condition Grade of 4	9
Peak Condition Grade of 5	10

3. Peak dry weather flow (PDWF) depth to diameter ratio (d/D)

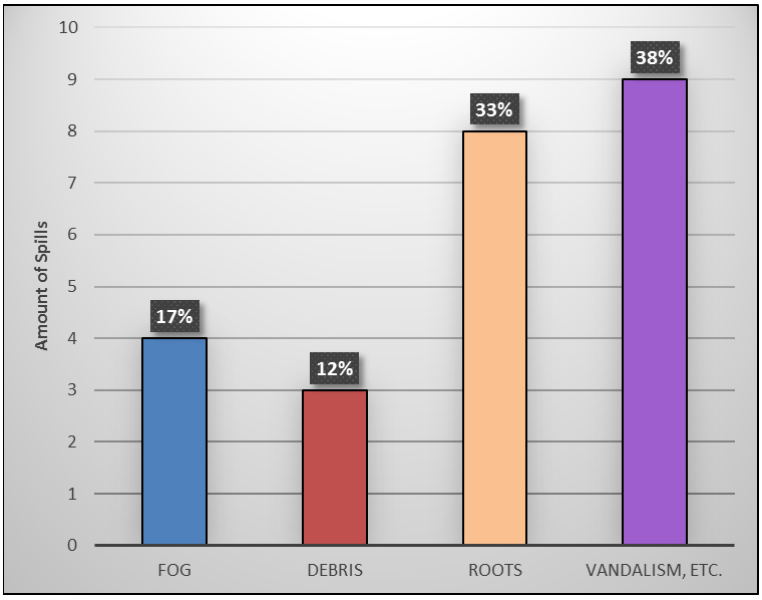
The higher the peak dry weather d/D ratio, the more likely the pipe is to be capacity deficient and cause an overflow. IRWD's criteria considers any pipe flowing with a PDWF d/D ratio greater than 0.75 deficient in capacity. For this reason, pipes with a d/D ratio greater than 0.75 are assigned a significantly higher LoF score. The LoF Scores are assigned to PDWF d/D as shown in Table I-4.

Table I-4
PDWF d/D

PDWF d/D	LoF Score
< 0.5	0
0.50 - 0.62	1
0.62 - 0.67	4
0.67 - 0.75	6
> 0.75	10

The cause of the IRWD historical sewer overflows from 2008-2016 are summarized in Figure I-3. About 17 percent of the overflows are attributed to fats, oils, and grease; 12 percent are due to debris; and 33 percent are due to root intrusion. Based on the historical overflow information, roots and deposits are also considered as elements of Likelihood of Failure.

Figure I-3
Sewage Spill History



4. Roots

The bigger and denser the roots are in a pipe, the more likely the pipe is to fail (become obstructed and cause an overflow). Only pipe segments with an historic and/or current record of grade 5 root defects will be assigned a LoF roots score. T his will separate the severe defects from the more minor root defects in the Risk Analysis. The LoF Scores are assigned to roots as shown in Table I-5.

Table I-5
Roots

Root Type	LoF Score
Root Ball	8

5. Deposits

The more deposits that are in the pipe, the more likely the pipe is to fail (become obstructed and cause an overflow). Only pipe segments with a grade 5 deposit defect will be given an LoF deposits score. This will separate the severe defects from the more minor deposit defects in the Risk Analysis. The LoF Scores are assigned to deposits as shown in Table I-6.

Table I-6
Deposits

Deposit Type	LoF Score
Grease, Encrustation	8

6. Age/Construction period

If the pipe is extremely old or constructed during a boom period, the more likely it is to have structural problems and fail. The earliest portion of IRWD's system was constructed in the 1960's. The LoF Scores are assigned to age/construction period as shown in Table I-7.

Table I-7
Gravity Main Age/Construction Period

Year of Construction	LoF Score
Unknown	0
2010 and later	1
2000-2009	2
1990-1999	3
1980-1989	4
1970-1979	5
Pre-1969	6

7. Material

Some materials are more likely to deteriorate and fail in the sewage environment. The LoF Scores, based on AKM Consulting Engineer's experience in reviewing thousands of feet of CCTV videos, are assign ed to materials as shown in Table I-8.

Table I-8
Gravity Main Material

Pipe Material	LoF Score
Unknown	0
HDPE, PVC, VCP	1
CML&C	2
RPMP	3
DIP, RCP, ACP	4
ABS, CCFRPM	5

Section 4.0 Gravity Pipe Consequence of Failure

Consequence of failure (CoF) is the combination of direct and indirect impacts on the vicinity and community due to a potential asset failure. The CoF can be broken up into three categories:

Economical Costs: impacts of direct (repairs and fines) and indirect (cleanup and loss of business revenue) economic losses to organization and third parties due to asset failure

Social Costs: impact to society, appearance and public health safety, due to asset failure (hospitals, schools, parks, businesses, critical services)

Environmental Costs: impact to ecological conditions occurring as a result of asset failure (contamination of soil, groundwater, and surface water)

Some elements can be categorized into more than one type of cost. For this study, the components considered in the calculation of the gravity main CoF are as follows:

1. Proximity to Major Waterway

The proximity of a sewer to a major waterway, can have an economical, social, and environmental cost associated with it when an overflow occurs. The economical costs can be fines imposed by government agencies, cleanup costs, and loss of business revenue if cleanup and repair take substantial amounts of time. The social costs are the impact to society, appearance, and public health safety. The environmental costs are the impact to ecological conditions.

Table I-9
Proximity to Major Waterway

Distance to Major Waterway	CoF Score
> 2,972 LF	0
2,331-2,972 LF	1
1,872-2,331 LF	2
1,491-1,872 LF	3
1,179-1,491 LF	4
875-1,179 LF	5
585-875 LF	6
270-585 LF	8
< 270 LF	10

Note: The breaks were established by evenly distributing the sewer pipes into 8 categories after the critical breakpoint was established

The CoF scores assigned for proximity to major waterways are shown in Table I-9. The sewer trunks that are adjacent to or cross under a major waterway are of the highest concern because if a sewer spill were to occur, there would be almost no response time for IRWD's crews.

In order to capture all the sewers in close proximity and aligned parallel to the waterways, a distance of 270 feet is implemented as the first break point. Therefore, any pipe within 270 feet of a major waterway is given the highest weighted value of 10.

The distance of 270 feet also limited the number of sewers that were in close proximity, but if a spill were to occur, the sewage does not have a direct route to the nearby waterway. Sewage would have to follow the street gutters or enter the local storm drain system before it would reach the waterway. The remaining breaks were established by evenly distributing the remaining sewer pipes in each category.

2. Rate of Flow

The rate of flow through a pipe can have an economic, social, and environmental cost associated with it. The more flow in a pipe, the more it may cost to replace if bypass pumping is required. More flow in a pipe is also equated to more customers affected in the area if sewer service has to be shut down for any period of time and more damage to the environment if an overflow occurs.

The CoF Scores assigned to rate of flow are shown in Table I-10. The breaks in the flow range were developed based upon spill volumes of 1,000 gallons and 50,000 gallons in conjunction with response times. The 1,000 gallons and 50,000 gallons are reporting "trigger" volumes in the California State Waste Discharge Requirements (WDR) Monitoring and Reporting Program (MRP). California Office of Emergency Services must be notified of spills greater than 1,000 gallons discharged to surface water. Water quality

monitoring results and a SSO Technical report must be submitted to the water board for any spill greater than 50,000 gallons discharged to surface water.

Table I-10
Rate of Flow in Gravity Main

Spill Volume and Response Time	Maximum Flow (mgd)	Maximum Flow (gpm)	CoF Score
1,000 gallons with 120 minute or more response time	<= 0.012	<= 8	1
1,000 gallons with 60-120 minute response time	0.012-0.024	8 - 17	2
1,000 gallons with 30-60 minute response time	0.024-0.048	17 - 33	3
1,000 gallons with 30 minute response time	0.048-0.6	33 - 417	4
50,000 gallons with 60-120 minute response time	0.6-1.2	417 - 833	5
50,000 gallons with 60 minute or less response time	1.2 >=	833 >=	10

3. Pipe Size

Pipe size can have an economical, social, and environmental cost associated with it.

The larger the pipe size, the more it costs to replace or rehabilitate. The larger pipes require larger trench widths and the cost of the pipe is greater as well.

The larger pipe size typically carries more flow and therefore can affect more customers in the area if sewer service has to be shut down for any period of time.

And the larger pipe size typically is associated with larger amounts of flow that can cause more damage to the environment if an overflow occurs.

The CoF Scores are assigned to pipe size as shown in Table I-11. The range of pipe sizes were extracted from IRWD's GIS/hydraulic model data.

Table I-11
Gravity Main Pipe Size

Pipe Size	CoF Score
Less than 8"	1
8"-10"	2
12"-16"	3
18"-24"	4
27"-33"	5
36" and greater	6

4. Depth of Pipe

The depth of pipe has an economical cost associated with it. The deeper the pipe, typically the more it will cost to replace it. The CoF Scores assigned to depth of pipe are shown in Table I-12. The depth of pipe data is based on the rim elevations and invert elevations in IRWD's hydraulic model.

Table I-12
Depth of Gravity Main

Depth	CoF Score
Less than 6'	1
6' to < 10'	2
10' to < 15'	3
15' to < 20'	4
20' to < 25'	5
25' and greater	6

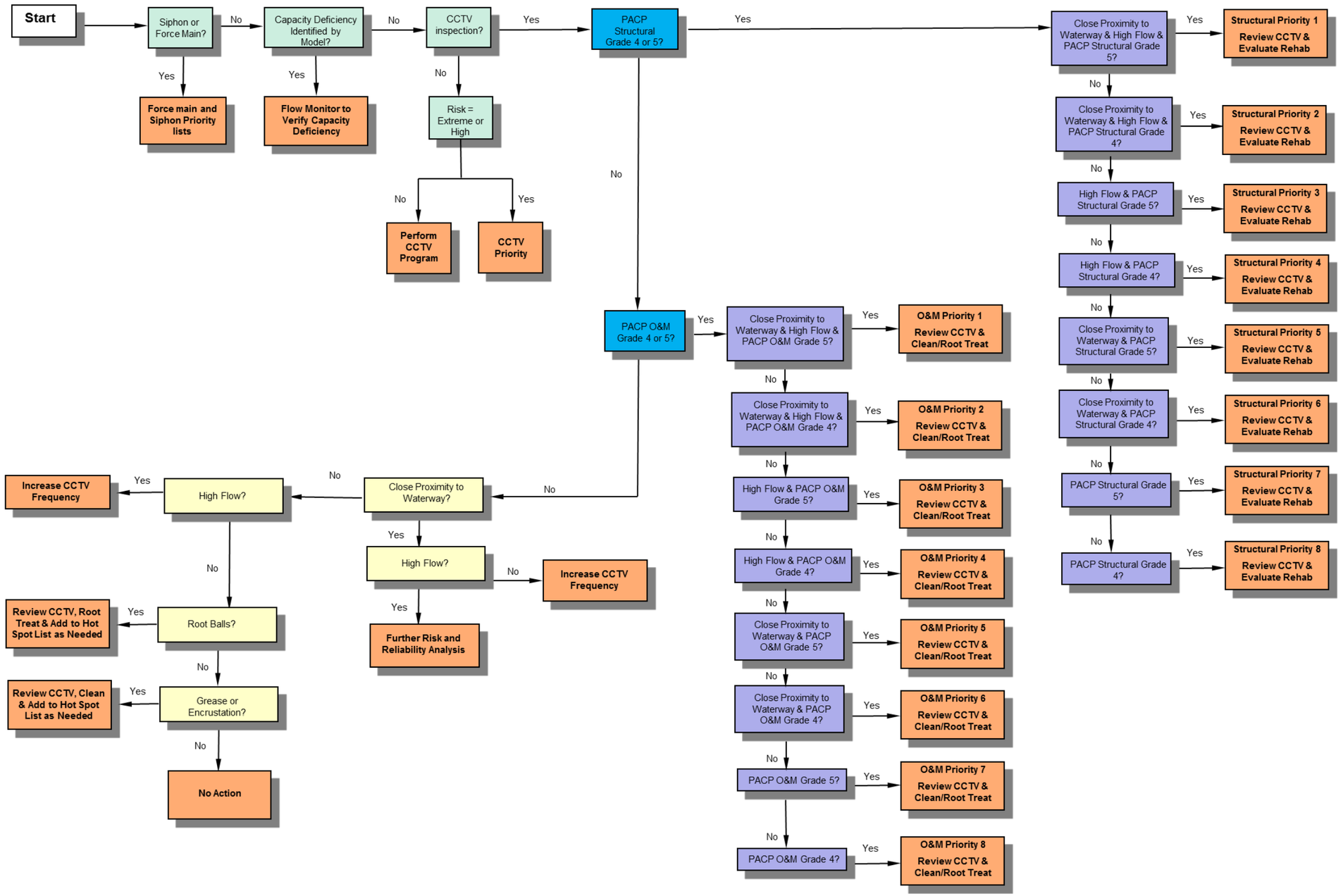
Section 5.0 Gravity Pipe Decision Tree

The final step in the risk analysis is to run the results through a decision tree to determine action items related to each pipe. Any LoF or CoF element, described in Section 3 and Section 4, can be incorporated into the decision tree. The developed decision tree is shown in Figure I-4. A few items to note about the decision tree:

1. Action items are highlighted in orange boxes.
2. If the pipe has already been identified by the hydraulic model as capacity deficient, the recommendation will be to flow monitor to verify the capacity deficiency.
3. If the pipe has not been CCTV inspected, the recommendation will be to perform a CCTV inspection, starting with the “High Risk” pipes.
4. If the pipe has been identified to have a structural defect with a PACP grade of 4 or 5, the pipe will be categorized by priority so that IRWD will know which group of pipes should be considered first for rehabilitation.
5. If the pipe has been identified to have an operational or maintenance defect with a PACP grade of 4 or 5, the pipe will be categorized by priority so that IRWD will know which group of pipes should be considered first for cleaning and/or treatment.
6. If the pipe does not have severe structural issues but is close to a waterway with high flows, further risk analysis may be considered.
7. If the pipe does not have severe structural issues, but has root balls or heavy grease/encrustation, currently or historically, the recommendation will be to review the CCTV, root treat or clean, and add to the hot spot list.
8. If the pipe has any other defects or attributes that place it into the extreme or high risk category, the recommendation will be to increase the CCTV frequency at these locations, as they could become a concern and need rehabilitation in the near future.

The resulting recommended action items are graphically displayed on Plate I-2.

Figure G-4
Risk Analysis Decision Tree for Gravity Sewer Pipes



Section 6.0 Siphon Risk Analysis

The siphon risk analysis was conducted along with the gravity main pipes. Because of the fact that siphons for the most part flow under pressure, and have a d/D greater than 0.75, all siphons are classified in the "Extreme Risk" or "High Risk" category. The siphons are then scored based on the other LoF and CoF scores and its overall total risk score. The resulting risk profile is as shown in Table I-13.

Table I-13
Siphon Risk Profile

No.	Siphon	Risk
1	SD Creek/ University	Extreme
2	Michelson/Riparian	Extreme
3	Harvard/SD Creek	Extreme
4	Harvard/Barranca	Extreme
5	Metro/Jamb	Extreme
6	Jeffrey/Alton	Extreme
7	Bake/Toledo	High
8	University/Milano	High
9	Sand Canyon/Barranca	High
10	Main/Veneto	High
11	241/Lake Forest	High
12	El Toro/Rain Tree	High
13	Jamboree/Kelvin	High
14	Universty and Harvard	High
15	Jamboree/Barranca	High
16	Prism/Linear	High
17	Portola/El toro	High
18	Sand Canyon/Sage Creek	High
19	Glan Ranch/El Toro	High

Section 7.0 Force Main Risk Analysis

Each of the LoF and CoF elements are assigned different weighting factors depending on the goals and priorities of IRWD. In the Force Main Risk Analysis, the overall LoF and CoF scores are calculated as a weighted average of all individual LoF and CoF scores.

The weighted scores for all Consequence of Failure and Likelihood of Failure Elements are shown in Table I-14. The failure grade element is weighted heavily because it is based on actual observations and calculations of each force main. The proximity to waterways element is weighted heavily because in the event of a spill/break it will have the highest impact on the environment and the community.

Table I-14
Force Main Risk Analysis Weighted Scores

Liklihood of Failure Element	Weighting Factor	Highest LoF Score	Weighted LoF Score	Element Percentage
Failure Grade	5	10	50	69%
Age/Construction Period	3	6	18	25%
Pipe Material	2	2	4	6%
Total	**10**	**18**	**72**	**100%**

Consequence of Failure Element	Weighting Factor	Highest CoF Score	Weighted CoF Score	Element Percentage
Proximity to Major Waterway	5	10	50	63%
Maximum Rate of Flow	3	10	30	38%
Total	**8**	**20**	**80**	**100%**

The overall risk associated with a failure event is a function of the LoF and CoF. A risk matrix was developed to display the results of the force main risk analysis as shown on Figure I-5. Increased likelihood of failure should result in more aggressive maintenance and repair. Increased consequence of failure should result in increased assessment.

The Risk Matrix and the weighted score breaks were developed to ensure that the force mains near a major waterway OR has a high failure grade were, at minimum, identified as "High Risk". If the force main is near a major waterway AND has a high failure grade, it was identified as "Extreme Risk". Figure I-6 shows the Risk Matrix from a different perspective. Each matrix box contains a description of the criteria met by each pipe that falls into each respective box.

Figure I-5
Force Main Risk Matrix

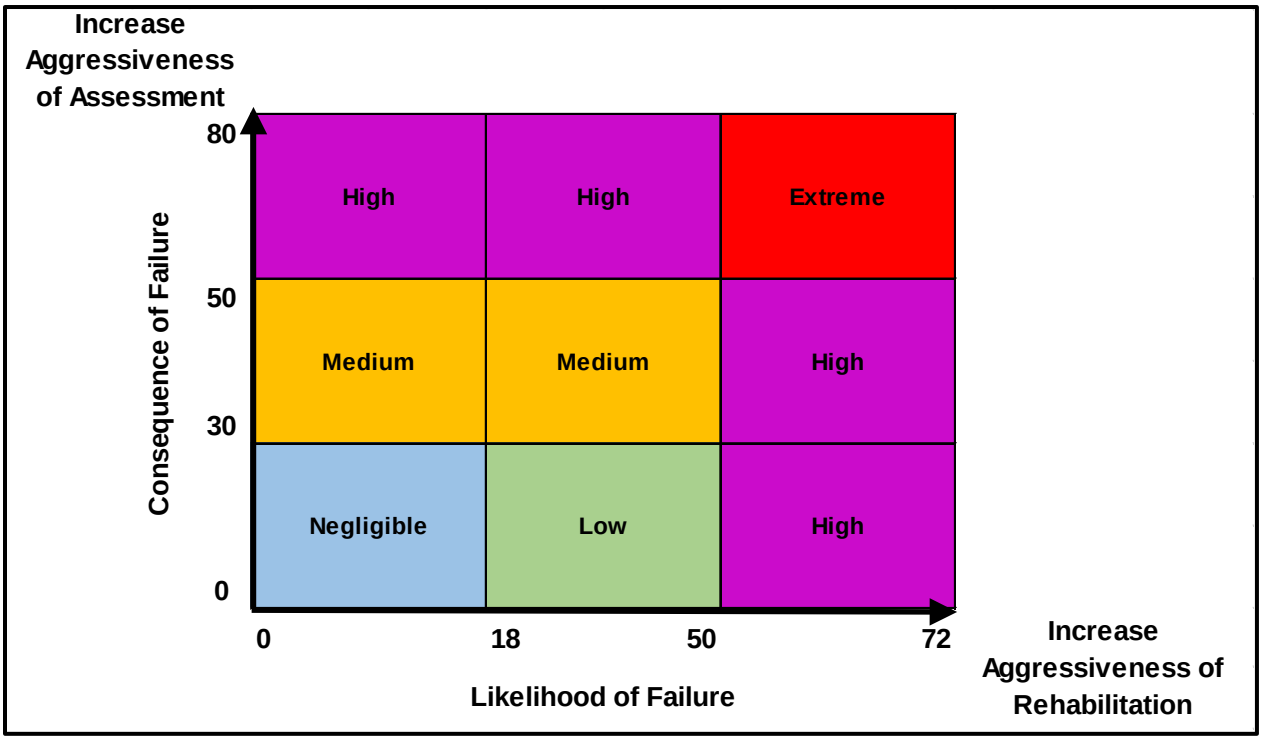
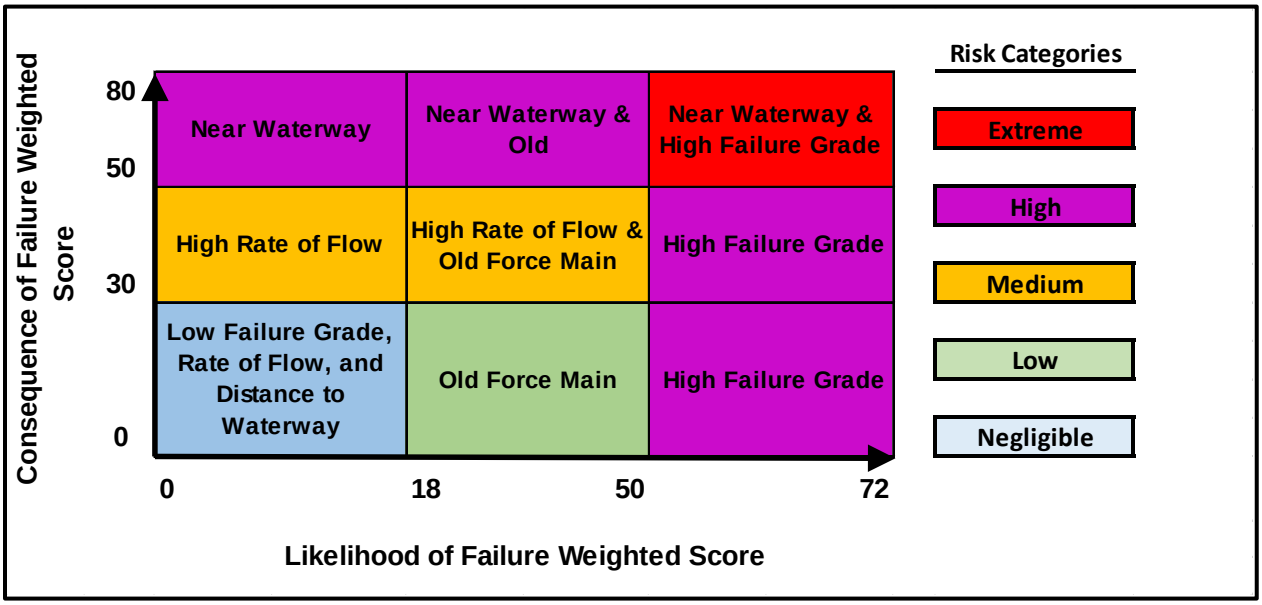


Figure I-6
Description of Risk Matrix Categories for Force Mains



For this study, the elements considered in the calculation of force main LoF are as follows:

1. Failure Grade

   The CoF scores assigned to failure grade are shown in Table I-15. These rankings were developed based on the field visits to the lift stations, IRWD's Collections staff interviews, the force main history, and capacity calculations. The ranking signifies which force mains are considered in need of rehabilitation or investigation.

Table I-15
Failure Grade

Associated Force Main	LoF Score	Comments
Coyote Canyon	10	Inaccurately sized; redundant line recommended
Buck Gully	10	Forcemain failures; recommended to replace 6" with 4"
Bayview	10	Redundant line needed
Canada	8	Recommended to replace/rehab within the next 15 years
Harvard	3	Has back up capabilities
Newport Coast	2	Has redundant forcemain
Coastal Ridge	2	Has back up capabilities
Montecito	2	No forcemain recommendations
Irvine Park	1	No forcemain recommendations
University	0	Has redundant forcemain
Michelson	0	Has redundant forcemain

2. Age / Construction Period

   If the pipe is extremely old or constructed during a boom period, the more likely it is to have structural problems and fail. The earliest portion of IRWD's system was constructed in the 1960's. The LoF Scores are assigned to age/construction period as shown in Table I-16.

Table I-16
Force Main Age/Construction Period

Year of Construction	LoF Score
Unknown	0
2011 and later	1
2001-2010	2
1991-2000	3
1981-1990	4
1971-1980	5
Pre-1970	6

3. Material

   Some materials are more likely to deteriorate and fail in the sewage environment. IRWD's force mains are made of a few different materials that are comparable in terms of deterioration rate. The LoF Scores are as shown in Table I-17.

Table I-17
Force Main Material

Pipe Material	LoF Score
Unknown	0
PVC	1
DIP, CIP	2

For this study, the elements considered in the calculation of force main CoF are as follows:

1. Proximity to Major Waterway

   The proximity of a sewer to a major waterway, can have an economic, social, and environmental cost associated with it when an overflow occurs. The economical costs can be fines imposed by government agencies, cleanup costs, and loss of business revenue if cleanup and repair take substantial amounts of time. The social costs are the impact to society, appearance, and public health safety. The environmental costs are the impact to ecological conditions.

   The CoF scores assigned for proximity to major waterways are shown in Table I-18. The force mains that are adjacent to or cross under a major waterway are of the highest concern because if a sewer spill were to occur, there would be almost no response time for IRWD's crews.

   The distance values and scores remain consistent with those developed for the gravity main analysis.

Table I-18
Proximity to Major Waterway

Distance to Major Waterway	CoF Score
> 2,972 LF	0
2,331-2,972 LF	1
1,872-2,331 LF	2
1,491-1,872 LF	3
1,179-1,491 LF	4
875-1,179 LF	5
585-875 LF	6
270-585 LF	8
< 270 LF	10

2. Rate of Flow

The rate of flow through a pipe can have an economic, social, and environmental cost associated with it. The more flow in a pipe, the more it may cost to replace if bypass pumping is required. More flow in a pipe is also equated to more customers affected in the area if sewer service has to be shut down for any period of time and more damage to the environment if an overflow occurs.

The CoF Scores assigned to rate of flow are shown in Table I-19. The rate of flow values and scores remain consistent with those developed for the gravity main analysis.

Table I-19
Rate of Flow

Maximum Influent Flow (MGD)	CoF Score
<= 0.012	1
0.012-0.024	2
0.024-0.048	3
0.048-0.6	4
0.6-1.2	5
1.2>=	10

Based on the CoF and LoF scores and weightings, the resulting Force Main Risk Profile is shown in Table I-20.

Table I-20
Force Main Risk Profile

No.	Force Main	Risk
1	Bayview LS Force Main	Extreme
2	Canada LS Force Main	High
3	Coyote LS Force Main	High
4	Harvard LS Force Main	High
5	Buck Gully LS Force Main	High
6	University LS Force Main	High
7	Montecito LS Force Main	Medium
8	Michelson LS Force Main	Medium
9	Newport Coast LS Force Main	Medium
10	Coastal Ridge LS Force Main	Low
11	Irvine Park LS Force Main	Negligible

Section 6.0 Lift Station Risk Analysis

Each of the LoF and CoF elements are assigned different weighting factors depending on the goals and priorities of IRWD. In the Lift Station Risk Analysis, the overall LoF and CoF scores are calculated as a weighted average of all individual LoF and CoF scores.

The weighted Scores for all Consequence of Failure and Likelihood of Failure Elements are shown in Table I-21. The Condition Grade is weighted heavily because it is based on actual observations made during the field visits of each lift station. Proximity to Major Waterways and Rate of Flow are weighted heavily because in the event of a spill, these lift stations would have the most impact on the community and the environment.

The overall risk associated with a failure event is a function of the LoF and CoF. A risk matrix was developed to display the results of the force main risk analysis as shown on Figure I-7. Increased likelihood of failure should result in more aggressive maintenance and repair. Increased consequence of failure should result in increased assessment.

The Risk Matrix and the weighted score breaks were developed to ensure that the lift stations near a major waterway OR have a high condition grade were, at minimum, identified as "High Risk". Lift stations near a major waterway AND have a high condition grade were identified as "Extreme Risk". Figure I-8 shows the Risk Matrix from a different perspective. Each matrix box contains a description of the criteria met by each lift station that falls into each respective box.

Table I-21
Lift Station Risk Analysis Weighted Scores

Likelihood of Failure Element	Weighting Factor	Highest LoF Score	Weighted LoF Score	Element Percentage
Condition Grade	5	10	50	89%
Age/Construction Period	1	6	6	11%
Total	**6**	**16**	**56**	**100%**

Consequence of Failure Element	Weighting Factor	Highest CoF Score	Weighted CoF Score	Element Percentage
Proximity to Major Waterway	5	10	50	63%
Max Rate of Flow	3	10	30	38%
Total	**8**	**20**	**80**	**100%**

Figure I-7
Lift Station Overall Risk Matrix

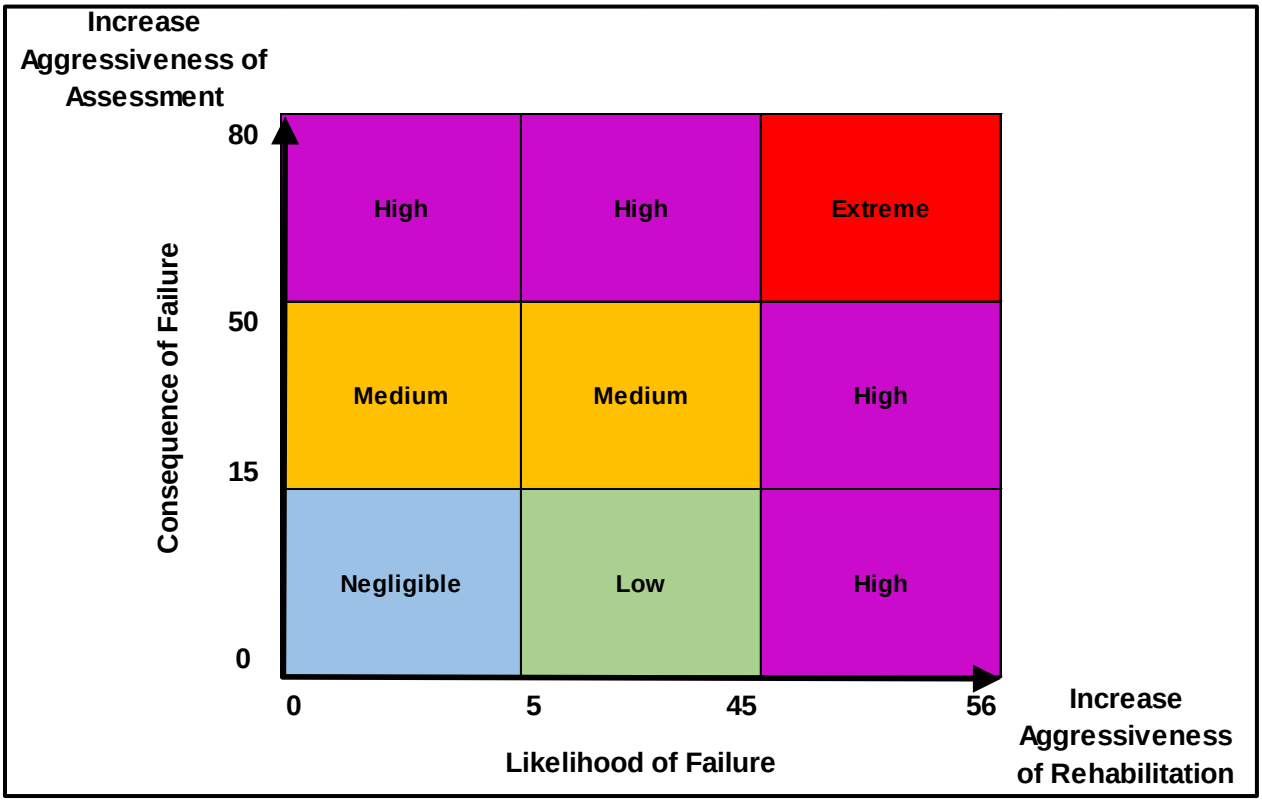
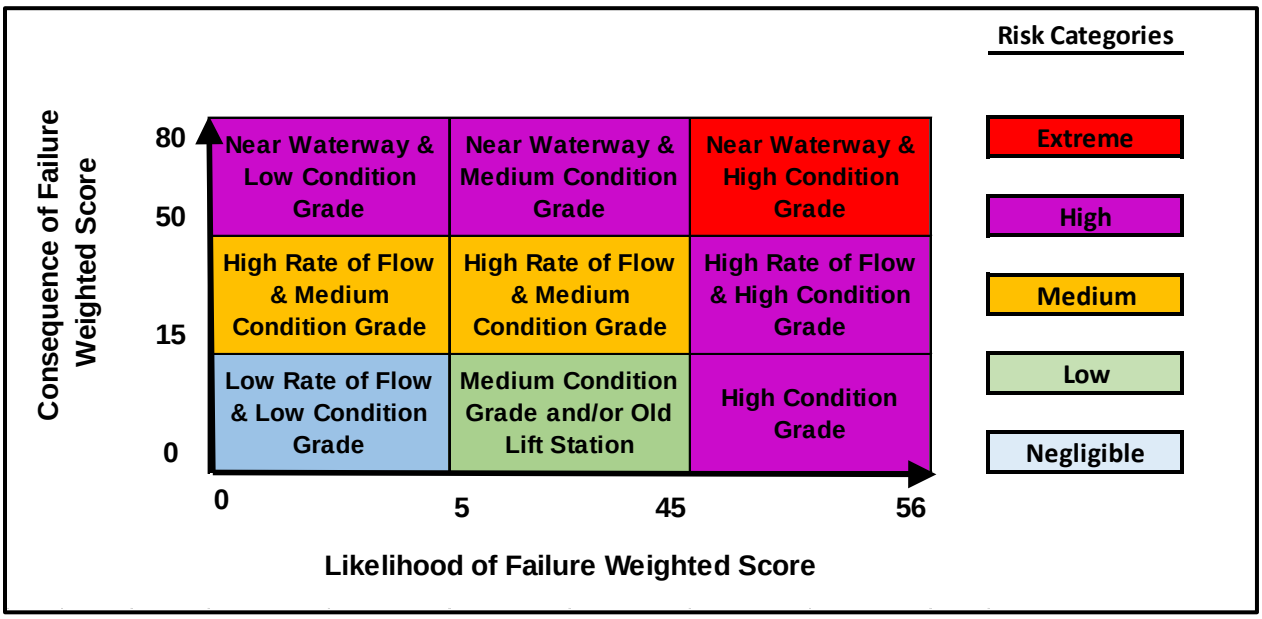


Figure I-8
Description of Risk Matrix Categories for Lift Stations



For this study, the elements considered in the calculation of lift station LoF are as follows:

1. Condition Assessment

   The condition assessment scores were assigned based upon the field inspections of the lift station structure and equipment, conducted during the Sewer Master Plan project. The order is based on AKM's opinion of which lift station should be rehabilitated or studied first. The LoF Scores assigned for condition assessment are shown in Table I-22.

2. Age / Construction Period

   The older the lift station, the less amount of useful life left in the equipment and facility in general. Therefore, a higher likelihood of failure is associated with the facility. The LoF Scores assigned for age/construction period are shown in Table I-23.

Table I-22
Condition Grade

Condition Grade	LoF Score
Harvard	10
Newport Coast	9
Coyote Canyon	8
University	7
Buck Gully	6
Coastal Ridge	5
Montecito	4
Canada	3
Bayview	2
Irvine Park	1
Michelson	0

Table I-23
Age/Construction Period

Year of Construction	LoF Score
Unknown	0
2011 and later	1
2001-2010	2
1991-2000	3
1981-1990	4
1971-1980	5
Pre-1970	6

For this study, the elements considered in the calculation of lift station CoF are as follows:

1. Proximity to Major Waterway

   The CoF Scores assigned to proximity to major waterways are shown in Table I-24. The values remain consistent with the scores and ranges described for gravity mains

2. Rate of Flow

   The more flow conveyed through a lift station, the more it will generally cost to upgrade or replace. Higher flows are also equated to more customers affected in the area if sewer service has to be shut down for any period of time and more damage to the environment if an overflow occurs. The CoF Scores assigned to rate of flow are shown in Table I-25 and generally remain consistent with those developed for the gravity main analysis.

Table I-24
Proximity to Major Waterway

Distance to Major Waterway	CoF Score
> 2,972 LF	0
2,331-2,972 LF	1
1,872-2,331 LF	2
1,491-1,872 LF	3
1,179-1,491 LF	4
875-1,179 LF	5
585-875 LF	6
270-585 LF	8
< 270 LF	10

Table I-25
Rate of Flow

Maximum Influent Flow (MGD)	CoF Score
<= 0.012	1
0.012-0.024	2
0.024-0.048	3
0.048-0.6	4
0.6-1.2	5
1.2>=	10

Based on the CoF and LoF scores and weightings, the resulting Lift Station Risk Profile is shown in Table I-26.

Table I-26
Lift Station Risk Profile

No.	Lift Station	Risk
1	Harvard Lift Station	Extreme
4	University Lift Station	High
3	Newport Coast Lift Station	High
2	Bayview Lift Station	High
5	Canada Lift Station	Medium
6	Michelson Lift Station	Medium
7	Coyote Canyon Lift Station	Low
8	Coastal Ridge Lift Station	Low
9	Buck Gully Lift Station	Low
10	Montecito Lift Station	Low
11	Irvine Park Lift Station	Low

Irvine Park LS
City of Orange
SANTIAGO CANYON
Santiago Canyon
Foothill Ranch
GLENN RANCH
EL TORO
SR-241
Limestone Regional Park
Tustin Foothills
SR-261
PORTOLA
IRVINE
JAMBOREE
CULVER
YALE
JEFFREY
City of Mission Viejo
BAKE
City of Tustin
BRYAN
TUSTIN RANCH
El Modena Irvine Channel
Central Irvine Channel
I-5 FWY
WALNUT
TRABUCO
SAND CANYON
SR-133
Borrego Canyon Channel
Serrano Creek Channel
LAKE FOREST
RIDGE ROUTE
TOLEDO
JERONIMO
EDINGER
Como Storm Channel
Marshburn Channel
BARRANCA
ALTON
Los Alisos Water Recycling Plant
Aliso Creek Channel
IRVINE CENTER
Peters Canyon Channel
City of Santa Ana
WARNER
SR-55
SR-133
Canada LS
City of Lake Forest
I-405 FWY
San Diego Creek Channel
San JoaquinChannel
City of Laguna Hills
City of Laguna Woods
MAIN
Harvard LS
Michelson LS
MICHELSON
CAMPUS
Michelson Water Recycling Plant
Sand Canyon Channel
City of Aliso Viejo
UNIVERSITY
BONITA CANYON
University LS
Bayview LS
SR-73
NEWPORT COAST
Coyote Canyon LS
San Joaquin Hills
Coastal Ridge LS
Newport Coast Dr LS
Buck Gully LS
Montecito LS
Newport Coast
City of Costa Mesa
Upper Newport Bay
City of Newport Beach
Pacific Ocean

Legend

- Modeled Lift Stations
- Force Main
- OCSD Sewer

Risk Categorization

- Extreme
- High
- Medium
- Low
- Negligible

Consequence of Failure Weighted Score \ Likelihood of Failure Weighted Score			
Near Waterway & High Rate of Flow	Near Waterway & High Rate of Flow	Near Waterway & High Rate of Flow Str/O&M Score 4 or 5 &/or High d/D	Extreme
Near Waterway or High Rate of Flow Low Str/O&M Score	Near Waterway or High Rate of Flow Str/O&M Score 3 and/or Root/Deposit History	Str/O&M Score 4 or 5 &/or High d/D	High
Not Near Waterway or High Rate of Flow Low Str/O&M Score Low d/D	Str/O&M Score 3 and/or Root/Deposit History Low d/D	Str/O&M Score 4 or 5 &/or High d/D	Medium
			Low
			Negligible

0 3,000 6,000 12,000 Feet

1" = 3,000'

IRVINE RANCH WATER DISTRICT

AKM

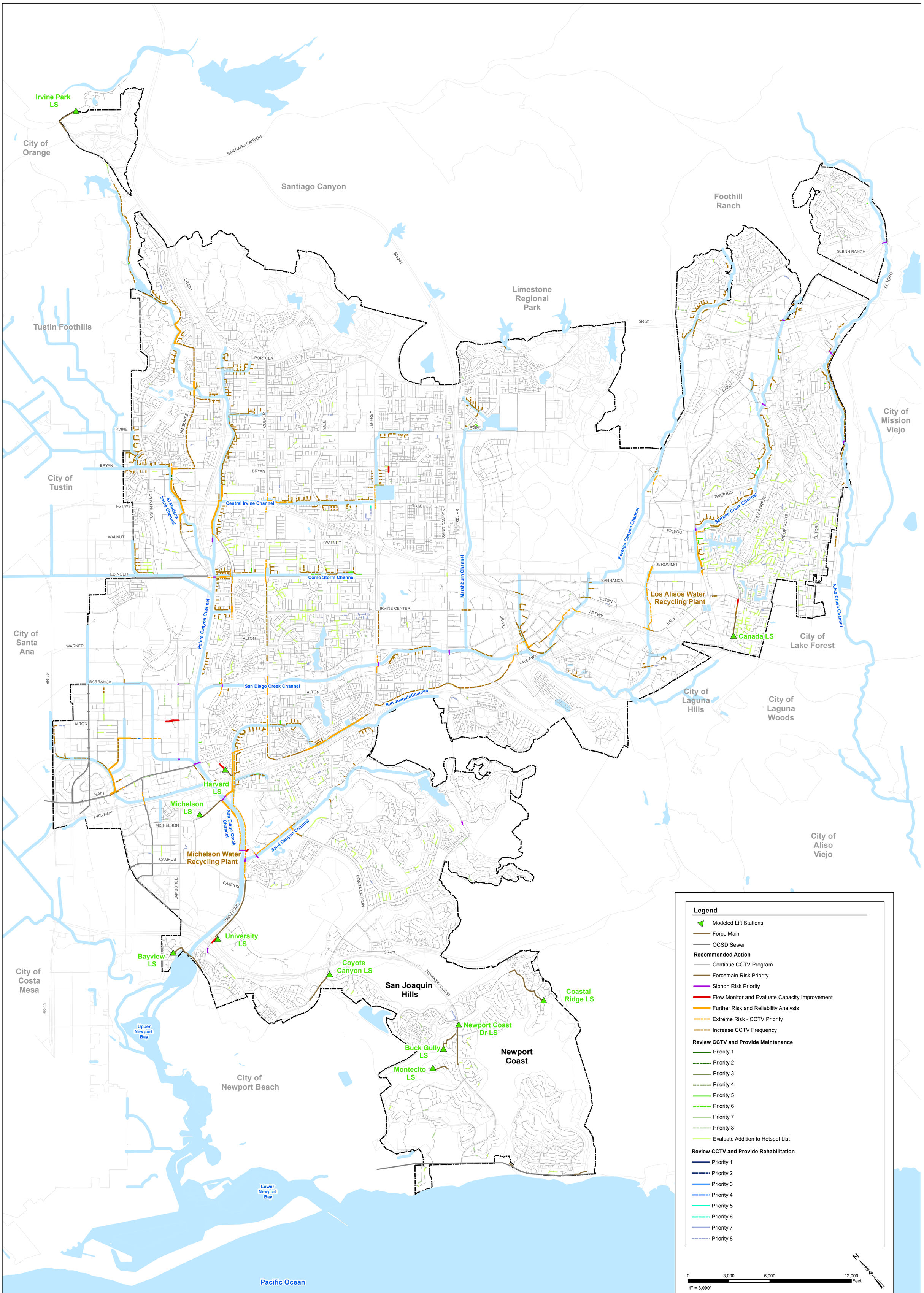
PROJECT NO: 11316.00

DATE: May 2016

Sewer Collection System Master Plan

Gravity Sewer Risk Profile

Plate I-1



IRVINE RANCH WATER DISTRICT

PROJECT NO: 11316.00

DATE: May 2016

Sewer Collection System Master Plan

Recommended Action Items

Plate I-2

CCTV Videos reviewed on SD Creek Interceptor

129673.MPG: I-405 Trunk Line MH138N017 to MH138N016 (42 in.) 170.5 ft. surveyed

Location:	Near 133 and 405 intersection
Pipe:	42-inch Clay
Date:	May 21, 2012
Time:	12:06
Flow Depth:	20%-25%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition.

129683.MPG: I-405 Trunk Line MH138N015 to MH138N014 (42 in.) 709.1 ft. surveyed

Location:	Near 133 and 405 intersection
Pipe:	42-inch Clay
Date:	May 21, 2012
Time:	12:20
Flow Depth:	15% - 35%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition.

177287.MPG: I-405 Trunk Line MH088N001A (MH088N475 in model) to MH088W087 (36 in.) 282.4 ft. surveyed

Location: South of Wildwheat and Racing Wind intersection	
Pipe:	36-inch Clay
Date:	April 22, 2015
Time:	13:43
Flow Depth:	20%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition.
Condition:	Thin calcification in the upper 270°**,** more at the joints.

177364.MPG: I-405 Trunk Line MH101N078 to MH088E008 (42 in.) 500.7 ft. surveyed

Location:	South of Yale and Springbrook intersection
Pipe:	42-inch T-lock lined RCP
Date:	April 29, 2015
Time:	11:06
Flow Depth:	15% - 20%
High water mark:	50% - 65%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition.
Condition:	Downstream manhole lining delaminating near the bottom.

177369.MPG: I-405 Trunk Line MH102W003 to MH102W002 (42 in.) 476.4 ft. surveyed (20 ft short)

Location:	West of Jeffrey and 405 intersection
Pipe:	42-inch T-lock lined RCP
Date:	April 30, 2015
Time:	10:13
Flow Depth:	15% - 25%
High water mark:	50% - 65%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK).
	Visible portion of the pipe is in very good condition.
	Recording stopped 20 feet short of downstream manhole. Reason not stated nor is visible. Either bypass flow or reverse set up should be done to identify the reason.

177375.MPG: I-405 Trunk Line MH102W002 to MH101N080 (42 in.) 486.2 ft. surveyed

Location:	West of Jeffrey and 405 intersection
Pipe:	42-inch T-lock lined RCP
Date:	April 30, 2015
Time:	10:23
Flow Depth:	15% - 25%
High water mark:	50% - 60%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition

177922.MPG: I-405 Trunk Line MH102S006 to MH102S005 (36 in.) 615.6 ft. surveyed

Location: East of Jeffrey and 405 intersection

Pipe:	36-inch Clay
Date:	May 12, 2015
Time:	11:07
Flow Depth:	15% - 20%
High water mark:	40% - 50%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition.
	Manhole lining delaminating in the channel.
	Calcification (light) from 300 feet to 560 feet.

177946.MPG: I-405 Trunk Line MH124W006 to MH124W005 (36 in.) 587.1 ft. surveyed

Location:	East of Jeffrey and 405 intersection
Pipe:	36-inch Clay
Date:	May 12, 2015
Time:	09:14
Flow Depth:	15% - 20%
High water mark:	40% - 60%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition
Condition:	Manhole lining delaminating in the channel.
	Calcification (light) from 210 feet to 520 feet; 562 to end 585 feet.
Note:	Smart cover at downstream manhole

177964.MPG: I-405 Trunk Line MH102S001 to MH102W005 (33 in.) 234.3 ft. surveyed

Location:	East of Jeffrey and 405 intersection
Pipe:	33-inch Clay
Date:	May 13, 2015
Time:	11:48
Flow Depth:	10% - 15%
High water mark:	55%
Structural Defects:	None recorded by video operator, none visible to video reviewer (ZK)
	Visible portion of the pipe is in very good condition.
Condition:	Calcification from start to 30 feet; from 100 feet to 110 feet, then from 130 feet to end, the last portion primarily at the top 40%.

IRVINE RANCH WATER DISTRICT

MEMORANDUM

TO:	**File**	DATE:	11/07/2016
FROM:	**Eric Akiyoshi**	FILE NO.:	
SUBJECT:	**SCSMP Capital Improvement Program Description**		

Introduction:

This SCSMP does not have a traditional list of Capital Improvement Projects (CIP) because IRWD has a robust program of planning for new and replacement projects. IRWD's Long-Term Capital Program (LTCP) includes all known new capital projects identified through the end of the current planning horizon (i.e. FY 2035/36). The LTCP also includes a select number of specific replacement and repair projects and generic replacement projects through the next three fiscal years. The LTCP is reviewed and updated during the annual Capital Budget approval process. Some of the ways the LTCP is updated include:

- **Master Planning and Criticality Analysis –** Although traditional SCSMPs (and Water Resources Master Plans) include specific recommendations for projects, IRWD anticipates updating the Criticality Analysis (as presented in this SCSMP) and reviewing the results with the proposed "Sewer Management Team." The Sewer Management Team anticipates incorporating the recommended capital projects into the annual capital budgeting process.
- **Sub-Area Master Plans (SAMP) -** All known future development driven capital projects (e.g. pipelines, tanks/wet wells, system valves, and lift stations/pump stations) are analyzed as part of the IRWD Sub-Area Master Plan (SAMP) process. Proposed projects are included in the LTCP which is updated annually and approved by the Board of Directors during the annual Capital Budgeting process.
- **Individual Planning Studies –** Some projects are added to the LTCP and Capital Budget through individual planning studies like the Wastewater Treatment Master Plan or the Biosolids study that resulted in adding the MWRP Phases II and III expansions and the MWRP Biosolids projects.
- **Replacement Planning Model (RPM) -** IRWD also maintains a Replacement Planning Model (RPM) that identifies future financial requirements for replacement projects. The RPM identifies the financial requirements for projects beyond those identified in the LTCP.

IRWD's approved capital budget is located at on IRWD's website at:

http://www.irwd.com/images/1617CapBudget.pdf

APPENDIX H

Biennial Sewer System Management Plan Audit Report

May 2, 2016

The purpose of the Sewer System Management Plan (SSMP) Audit is to evaluate the effectiveness of Irvine Ranch Water District's (IRWD) SSMP and to identify whether updates are needed. This document was designed to meet the requirements of State Water Resources Control Board Order No. 2006-0003-DWQ as revised by Order No. WQ 2013-0058-EXEC. Documentation of SSMP audits are kept on file at the IRWD, and indication is made in the California Integrated Water Quality System (CIWQS) database that the audit was completed.

Directions: *Please update the following items in the SSMP (items to be updated every 2 year, if necessary):*

- Figure 4-1: Organization and Roles of IRWD Staff Responsible for Development & Implementation of SSMP
- Table 4-1: Positions Responsible for SSMP Development and Implementation
- Table 4-2: Narrative Explanation of SSMP Roles of Various Positions
- Appendix D: Contact Names & Numbers for Positions Responsible for SSMP Development and Implementation

---

Directions: *Please indicate **YES** or **NO** for each question. To answer the following questions, refer to the text of the SSMP Element, any referenced material in the text, all corresponding attachments, and any data collected to assist in assessing SSMP effectiveness. For any **NO** responses describe the updates or changes needed and the timeline to completion in "Description of Scheduled Updates/Changes to the SSMP" on the last page of this form.*

ELEMENT 1. GOALS

1. Are the goals stated in the SSMP still appropriate and accurate? **(YES) / NO**

ELEMENT 2. ORGANIZATION

2. Is the SSMP up-to-date with organization and staffing contact information? **YES / (NO)**

ELEMENT 3. LEGAL AUTHORITY

3. Does the SSMP reference up-to-date information about legal authority? **(YES) / NO**

4. Does IRWD have sufficient legal authority to control sewer use and maintenance? **(YES) / NO**

ELEMENT 4. OPERATIONS AND MAINTENANCE PROGRAM

4.a Map of the Sanitary Sewer System

5. Does the SSMP reference up-to-date information about maps? **YES / (NO)**

6. Are collection system maps complete, up-to-date, and sufficiently detailed? **(YES) / NO**

4.b Preventative Maintenance Program

7. Does the SSMP contain up-to-date information about preventive operations and maintenance activities? **(YES) / NO**

8. Are IRWD's preventive maintenance activities sufficient and effective in reducing and preventing SSOs and blockages? **(YES) / NO**

4.c Rehabilitation and Replacement Plan

9. Does the SSMP contain up-to-date information about the rehabilitation and replacement program? **(YES) / NO**

10. Does the SSMP contain up-to-date information about Closed Circuit Television (CCTV) inspections? **(YES) / NO**

11. Are scheduled inspections and the condition assessment system effective in identifying, prioritizing, and addressing deficiencies? **(YES) / NO**

12. Does the Capital Improvement Plan (CIP) address prioritized projects for collection system assets? **(YES) / NO**

4.d Training

13. Does the SSMP contain up-to-date information about existing training programs? **(YES) / NO**

14. Do supervisors believe their staff are sufficiently trained? **(YES) / NO**

15. Are staff satisfied with the training opportunities and support offered to them? **(YES) / NO**

4.e Equipment and Replacement Part Inventories

16. Does the SSMP reference up-to-date information about equipment and replacement part inventories? **YES / (NO)**

ELEMENT 5. DESIGN AND PERFORMANCE PROVISIONS

17. Does the SSMP contain up-to-date information about design and construction standards? **(YES) / NO**

ELEMENT 6. SSO & BACKUP RESPONSE PLAN

18. Does the SSMP contain an up-to-date version of SSO Response Plan? **YES / (NO)**

19. Is the Response Plan effective in handling SSOs? (if **YES**, indicate specific information under the "Evaluation of the Effectiveness of the SSMP" section below) **(YES) / NO**

ELEMENT 7. FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

20. Does the SSMP reference or contain up-to-date information about the IRWD's FOG Control Program? **(YES) / NO**

21. Is the current FOG program effective in documenting and controlling FOG source? **(YES) / NO**

22. Are all public outreach materials for the FOG program current? **(YES) / NO**

ELEMENT 8. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

23. Does the SSMP reference or contain up-to-date information about the IRWD's capacity assessment activities and documentation? **(YES) / NO**

24. Is the IRWD sufficiently addressing hydraulic deficiencies? **(YES) / NO**

ELEMENT 9. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

25. Does the SSMP reference up-to-date information about the IRWD's data collection and organization (e.g. use of CMMS, performance indicators, etc.)? **(YES) / NO**

26. Is the IRWD's data collection and organization sufficient to evaluate the effectiveness of the SSMP? **(YES) / NO**

ELEMENT 10. SSMP PROGRAM AUDITS

27. Will this SSMP Audit be completed by every two years starting in 2014? **(YES) / NO**

ELEMENT 11. COMMUNICATION PROGRAM

28. Is the IRWD's website up-to-date, including information related to providing an opportunity for public input on the SSMP? **(YES) / NO**

Evaluation of the Effectiveness of the SSMP

The measures that Irvine Ranch Water District has implemented and that are documented in its Sewer System Management Program have been effective in reducing the frequency of sanitary sewer overflows, as shown in Figure 1.

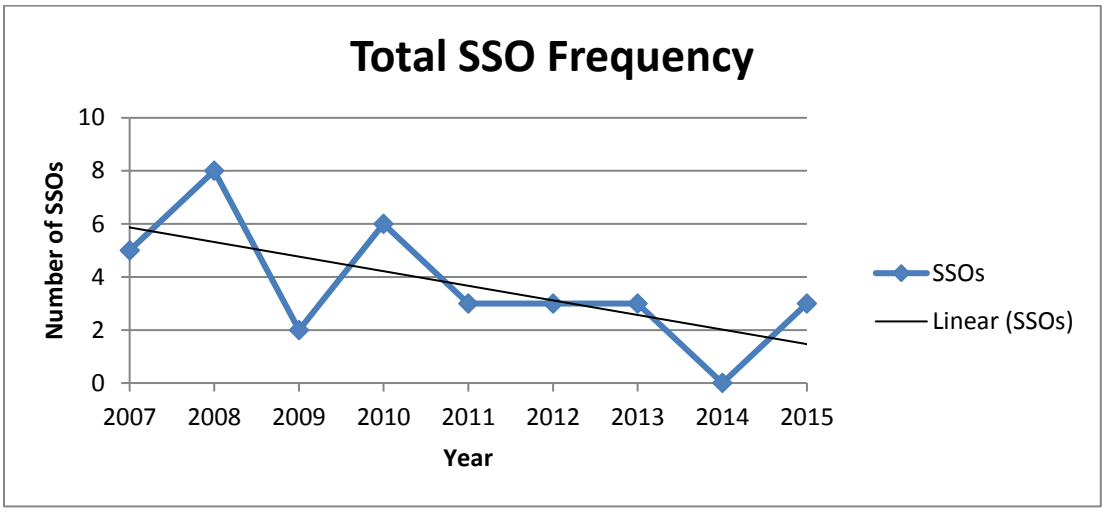


Figure 1. Total Sanitary Sewer Overflow Frequency from 2007 to 2015

The maintenance program that consists of planned cleaning and closed circuit television inspection of IRWD's sewer pipelines is on track and consistent with the goals specified in the SSMP. Furthermore, when an SSO has occurred, IRWD's staff training and response plans have been implemented effectively which is evident by the reduction in total spill volume and the total volume "not" recovered (Figure 2) over the years. In other words, IRWD staff have increasingly been able to recover most, if not all, of the spill volume during each event, reducing the impact to public health and the environment.

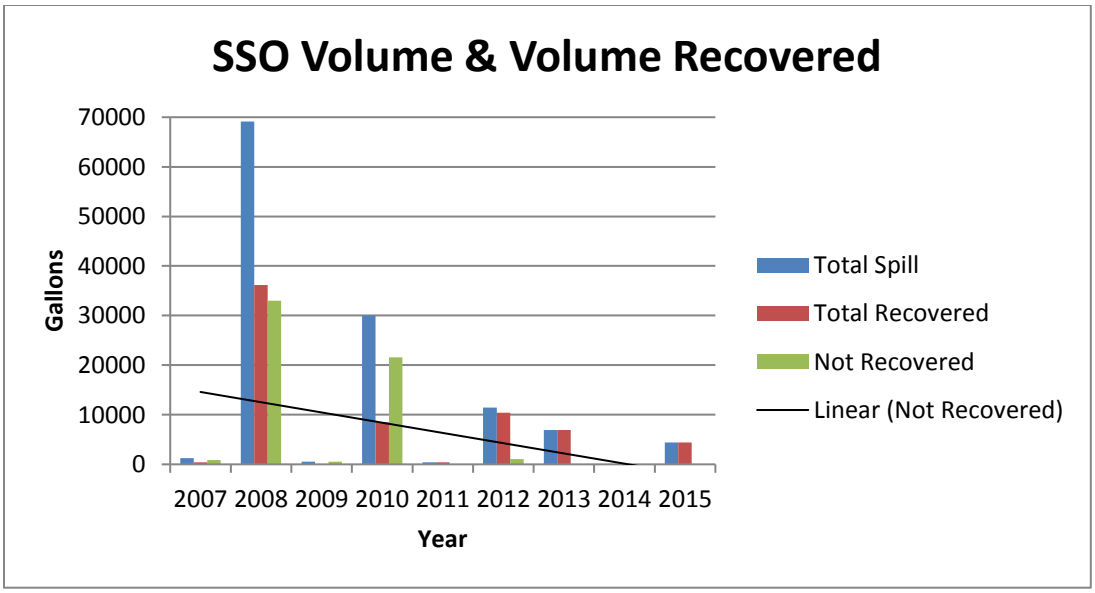


Figure 2. Sanitary Sewer Overflow Volume, Volume Recovered and Volume Not Recovered from 2007 to 2015.

Furthermore, over the last five years, IRWD's staff has successfully been able to prevent minimal, if any, volume of sewage from an SSO from reaching surface waters as shown in Figure 3. Once again, reducing the impact to the environment and the beneficial uses of surface waters during an SSO event.

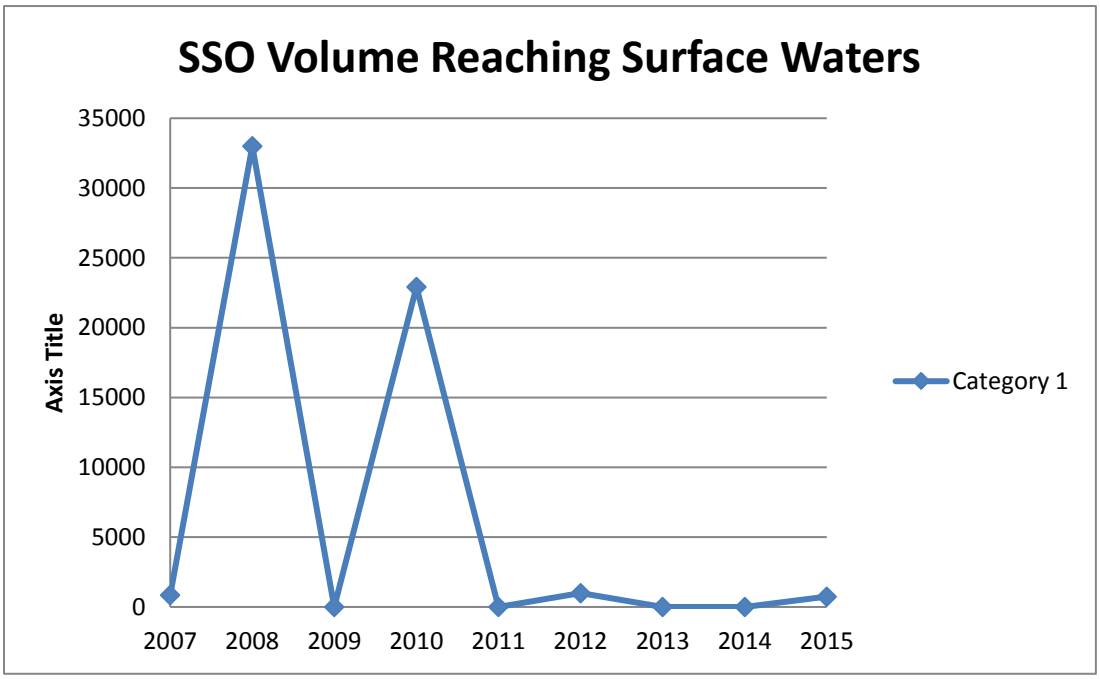


Figure 3. Sanitary Sewer Overflow Volume that Reached a Surface Water from 2007 to 2015.

The effectiveness of IRWD's preventative maintenance and operations program, as well as Fats, Oils and Grease (FOG) program is also evidenced by examining the various causes attributed to each spill event as shown in Figure 4.

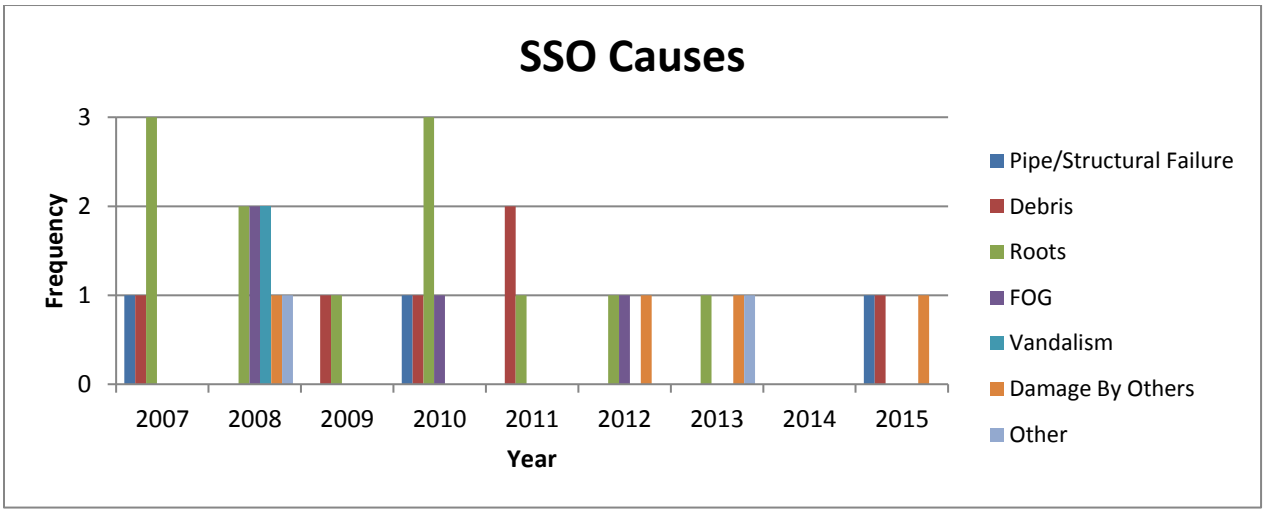


Figure 4. Sanitary Sewer Overflow Causes for Each Spill Event from 2007 to 2015.

IRWD has had a decreasing number of SSO's that can be attributed to roots or FOG, and only a few that have been attributed to any type of pipe or structural failure. IRWD has had a number of SSO's that have been attributed to uncontrollable factors such as vandalism and damage by others, namely contractors.

How does IRWD compare with the State and Regional averages? Two of the primary collection system operational performance metrics created by the State Water Board are the *Spill Rate Indice*, which is the number of spills per 100 miles of pipeline per year, and the *Net Volume Spills Indice*, which is the spill volume minus spill volume recovered per 1,000 capita per year. As shown in in Figure 5, for all categories of SSO's, IRWD is not only well below the State average, but also well below both Regional averages for the spill rate and net volume spills indices.

Spill Rate Indice (# spills/100 miles/year)			
	Category 1	**Category 2**	**Category 3**
IRWD	**0.18**	**0.03**	**0.16**
State Average	1.59	0.59	4.03
Region 8 Average	0.4	0.21	0.8
Region 9 Average	0.55	0.22	1.21

Net Volume Spills Indice (Net Vol in gallons/1000 Capita/year)			
	Category 1	**Category 2**	**Category 3**
IRWD	**19.0**	**0.0**	**0.2**
State Average	671.9	317.39	23.65
Region 8 Average	49.82	51.26	1.33
Region 9 Average	306.74	54.35	3.08

Figure 5. Collection System Operational Performance metrics. Information obtained from CIWQS public reports for 2007 to 2015.

Description of Scheduled Updates/Changes to the SSMP

May 2016 Audit Finds/Recommendations

SSMP Section	Finding/Recommendation	Status
Organization	There has been a variety of organizational, staff and contact changes since the 2013/2014 revision of the SSMP that needs to be updated in Figure 4-1, Table 4-1, Table 4-2 and Appendix D.	Updated, attached to May 2016 Audit report.
O&M Program – Map of the Sanitary Sewer System	The SSMP does not reference the most up-to-date information about maps that is utilized by IRWD staff. IRWD now has an up-to-date electronic mapping program called Field Mapplet that was in full use beginning January 2016. This living electronic system replaces paper forms and documents that track sewer line cleaning records and footage, inspections, field notes, among a host of other characteristics.	Future, will update and include in 5-year SSMP review & modification scheduled for May 2018.
O&M Program – Equipment & Replacement Part Inventories	The SSMP does not reference up-to-date information about equipment and replacement part inventories. Since the 2013/2014 revision of the SSMP, a new and better process has been developed to track equipment and replacement part inventories. However, ongoing improvement and evaluation is needed for a method to secure and track spare parts utilized by different Departments.	Future, will update and include in 5-year SSMP review & modification scheduled for May 2018.
SSO & Backup Response Plan	The SSMP does not contain an up-to-date version of the SSO Response Plan. The notification procedure is in the process of being updated in 2016. Some of these changes include clear delineation of staff/Department notification responsibilities.	Future, will be attached to May 2016 Audit report upon completion.
System Evaluation and Capacity Assurance Plan	While the System Evaluation and Capacity Assurance Plan is up-to-date and accurate, Table 10-2: Recommended Capital Improvement Projects to Address Capacity Issues and Table 10-3: Recommended Reliability and Redundancy Projects "Status" has changed since the 2013/2014 revision of the SSMP. Some projects continue to be on-hold pending further analysis, others are or have been implemented, and others were only potential alternatives that have since been removed from consideration.	See attached Memo from Engineering Department. Will update and include in 5-year SSMP review & modification scheduled for May 2018.

Carry-over Recommendations from 2013/2014 Audit Findings

SSMP Section	Recommendation	Status
System Evaluation & Capacity Assurance Plan	FINDING: The District's current planning criteria for flow generation factors are based pm water demand and flow monitoring studies performed in 2003-2005. Given the declining flows experienced by wastewater agencies since that time, the factors may have changed significantly. RECOMMENDATIONS: Update the flow generation factors used for capacity planning through a combination of water demand analysis and targeted flow monitoring. Use the new flow generation factors in the Master Plan update which is planned to be initiated within the next two years.	The sewer flow generation factors were calibrated in 2015-16. The results were presented at the March 2016 E&O Committee meeting.
System Evaluation & Capacity Assurance Plan	FINDING: The District uses the InfoSewer hydraulic modeling software, which is not a fully-dynamic program. InfoSewer is adequate for analyzing and sizing simple sewer systems with gradual flow variations that operate primarily in a non-surcharge mode. RECOMMENDATIONS: Evaluate whether converting to a fully-dynamic model would provide sufficient benefits to planning and operational analyses to offset the additional cost and re-training of staff. This evaluation could be done in conjunction with the update of the Master Plan. A fully-dynamic model (e.g., InfoSWMM) can more accurately represent the hydraulics within a sewer system that includes diversion structures that can split slow in two directions at normal or high levels, and that may experience backups due to planned or unplanned constrictions, pump operations, or temporary diversions.	The Sewer System Collection System Master Plan is being updated. The conversion to the fully dynamic, "InfoSWMM" hydraulic model is being completed as part of the SCSMP.
Operations and Maintenance Program	FINDINGS: The District does not have access to mapping for storm water conveyance facilities throughout the entire service area. The District does have access to support from the County of Orange, in the form of staff and equipment, during an SSO event and County staff do have access to all available storm water	Future

	conveyance mapping data as well as have historical knowledge of the location of storm water conveyance assets. RECOMMENDATIONS: Continue to work with the County of Orange to gain access to storm water conveyance mapping information as it becomes available. Make this information available to Collection System Operations field crews.	
O& M Program - Preventative Maintenance	FINDINGS: The District's current system-wide cleaning strategy to clean the system once every 18 months is potentially more than is needed. Although an aggressive sewer cleaning strategy is one of the factors contributing to the low SSO rates the District is achieving, it may be possible to achieve the same results with a condition-based sewer cleaning frequency based on the cleaning needs of individual pipelines. RECOMMENDATIONS: Some pipelines in the sewer system could be cleaned on a significantly reduced scheduled with little to no risk of having a sewer overflow. The District may want to consider using feedback from sewer cleaning crews to identify pipelines and areas which may not require such an aggressive system-wide cleaning schedule and begin to increase periods between cleanings in these locations. If the District employs a condition-based sewer cleaning approach an additional opportunity will be to re-invest sewer cleaning resources to performing additional CCTV inspection. This could be accomplished over a multi-year period with a phased transition of a crew from cleaning to CCTV. The additional CCTV inspection capability could be focused on inspection in lieu of cleaning, validation of preventative maintenance schedules and additional system-wide inspection for condition assessment.	Future, while the District may not have an official condition-based system to evaluate its cleaning strategy, the District has been able to allocate additional resources towards its CCTV inspection program with the approval in the budget for the purchase of a new CCTV vehicle, and an additional CCTV technician.
O&M Program – Rehabilitation & Replacement Program	FINDINGS: The District currently uses a combination of Tabware software and paper work orders to track and communication collection system repair, rehabilitation, and replacement needs. Currently, the District does not have a streamlined process for mapping deficiencies recommended for repair, rehabilitation, or replacement. Mapping of these deficiencies would enable Engineering to group projects addressing deficiencies geographically. RECOMMENDATIONS: Include a means for tracking collection system asset repair, rehabilitation, and replacement needs and activities in the implementation of the asset management system currently being planned. Include a means to track system deficiencies and locations recommended for repair, rehabilitation, or replacement to support Engineering in defining project to address system deficiencies.	Future
O&M Program – Rehabilitation & Replacement Program	FINDINGS: The District does not have an approach to assess the condition of all force mains within the collection system. RECOMMENDATIONS: The District should consider performing a risk assessment of force main assets and developing an approach to managing risk associated with force main assets including an analysis of probable failure modes, contingency plans in the event of failure, and approaches to assess condition issues linked to probable failure modes.	Future
FOG Control Program	FINDINGS: Several opportunities were identified during the audit for additional public outreach regarding FOG control. Current public outreach activities include brochures sent to residential customers with bills during the holiday season as well as information provided on IRWD's website. Multi-family residences have specifically been identified as a potentially significant source of FOG. RECOMMENDATIONS: Arrange for regular communication between the FOG Program Manager and the Public Outreach Coordinator regarding: -Development and implementation of a multifamily outreach campaign. -Ongoing public outreach efforts.	Future