

**AGENDA
IRVINE RANCH WATER DISTRICT
BOARD OF DIRECTORS
REGULAR MEETING**

January 27, 2014

PLEDGE OF ALLEGIANCE

CALL TO ORDER

5:00 P.M., Board Room, District Office
15600 Sand Canyon Avenue, Irvine, California

ROLL CALL

Directors Matheis, LaMar, Swan, Withers and President Reinhart

NOTICE

If you wish to address the Board on any item, including Consent Calendar items, please file your name with the Secretary. Forms are provided on the lobby table. Remarks are limited to five minutes per speaker on each subject. Consent Calendar items will be acted upon by one motion, without discussion, unless a request is made for specific items to be removed from the Calendar for separate action.

COMMUNICATIONS TO THE BOARD

1. A. Written:

B. Oral: Mrs. Joan Irvine Smith's assistant relative to the Dyer Road Wellfield.

2. **ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

Recommendation: Determine that the need to discuss and/or take immediate action on item(s) introduced come to the attention of the District subsequent to the agenda being posted.

CONSENT CALENDAR

Next Resolution No. 2014-4

Items 3-11

3. **MINUTES OF REGULAR AND ADJOURNED REGULAR BOARD MEETING**

Recommendation: That the minutes of the January 10, 2014 Adjourned Regular Board Meeting and the January 13, 2014 Regular Board Meeting be approved as presented.

4. **RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS**

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Doug Reinhart, John Withers and Peer Swan.

CONSENT CALENDAR – Continued

Next Resolution No. 2014-4

Items 3-11

5. DECEMBER 2013 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate Swap Summary for December 2013, and Disclosure Report of Reimbursements to board members and staff; approve the December 2013 summary of payroll ach payments in the total amount of \$1,515,640 and approve the December 2013 accounts payable disbursement summary of warrants 344414 through 345065, workers' compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$16,630,891.

6. AMENDMENT TO THE AGREEMENT FOR RELOCATION OF THE MICHELSON PARK PLACE SEWER LIFT STATION

Recommendation: That the Board authorize the General Manager to execute an amendment to the agreement for relocation of the Michelson Park Place Sewer Lift Station, subject to non-substantive changes.

7. QUITCLAIM OF REAL PROPERTY IRVINE COMMUNITY DEVELOPMENT COMPANY LLC WATER AND RECYCLED WATER PIPELINE AND ACCESS EASEMENT TRACT NOS. 16719, 16722, AND 17015 - ORCHARD HILLS

Recommendation: That the Board adopt a resolution approving execution of the Quitclaim Deed to Irvine Community Development Company LLC.

Reso No. 2014-

8. QUITCLAIM OF REAL PROPERTY THE IRVINE COMPANY LLC SEWER AND WATER EASEMENT TRACT NO. 12355 - WESTPARK PLAZA

Recommendation: That the Board adopt a resolution approving execution of the Quitclaim Deed to Irvine Company LLC.

Reso No. 2014-

9. RANDALL STREET AND LOLITA AVENUE DOMESTIC WATER PIPELINE REPLACEMENT FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Randall Street and Lolita Avenue domestic water replacement, project 11408 (1279); authorize the General Manager to file a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

CONSENT CALENDAR – Continued	Next Resolution No. 2014-4	Items 3-11
10. <u>ON-CALL CEQA/NEPA AND PERMITTING SERVICES CONSULTANT SELECTIONS</u>	Recommendation: That the Board authorize the General Manager to execute Professional Service Agreements with ESA, Dudek and Bonterra Psomas to provide on-call CEQA/NEPA services over the next two years for not-to-exceed amounts of \$150,000 each and with Harmsworth Associates and VCS Environmental to provide two years of on-call monitoring and permitting services for not-to-exceed amounts of \$100,000 each.	
11. <u>REIMBURSEMENT TO BOARD MEMBER FOR BUSINESS EXPENSES</u>	Recommendation: That the Board approve the expense report submitted for reimbursement for business mileage expenses incurred by Director Peer Swan.	

ACTION CALENDAR

12. <u>RATTLESNAKE RESERVOIR CHLORINE GAS REMOVAL CONSULTANT SELECTION</u>	Recommendation: That the Board authorize the addition of project 30435 (4959) in the amount of \$1,706,400 to the FY 2013-14 Capital Budget; approve an Expenditure Authorization for project 30435 (4959) in the amount of \$336,100; and authorize the General Manager to execute a Professional Services Agreement with Carollo Engineers in the amount of \$291,045 for engineering services for the Rattlesnake Reservoir Chlorine Gas Removal project.	
13. <u>HIDDEN CANYON ZONE 3 TO 4 DOMESTIC WATER AND ZONE B TO C RECYCLED WATER BOOSTER PUMP STATIONS CONSTRUCTION AWARD</u>	Recommendation: That the Board authorize a budget increase for project 10446 (1648) in the amount of \$393,800, from \$2,679,700 to \$3,073,500; authorize a budget increase for project 30446 (1063) in the amount of \$262,500, from \$1,813,500 to \$2,076,000; approve Expenditure Authorizations in the amounts of \$2,572,600 and \$1,680,100 for projects 10446 (1648) and 30446 (1063), respectively; and authorize the General Manager to execute a construction contract with R.C. Foster Corp. in the amount of \$3,713,700 for the Hidden Canyon Zone 3 to 4 Domestic Water and the Zone B to C Recycled Water Booster Pump Stations, projects 10446 (1648) and 30446 (1063).	

ACTION CALENDAR - Continued

14. WATER SHORTAGE ASSISTANCE TO ANTELOPE VALLEY-EAST
KERN WATER AGENCY

Recommendation: That the Board authorize the General Manager to execute the letter agreement with Antelope Valley-East Kern Water Agency subject to non-substantive changes that allows AVEK to recover additional water from the Strand Ranch Integrated Banking project in 2014 up to its storage balance of 2,229 AF and for it to pay all the costs associated with the recovery and return of this water to the AVEK service area.

15. ON-CALL CONSTRUCTION INSPECTION SERVICES VARIANCE

Recommendation: That the Board authorize the General Manager to execute Variance No. 1 with AndersonPenna in the amount of \$1,200,000 for on-call construction inspection services for three inspectors for a two-year period.

16. MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION
AND FLOOD PROTECTION IMPROVEMENTS CONTRACT CHANGE
ORDER

Recommendation: That the Board approve Contract Change Order No. 104 in the amount of \$242,461.11 for modifications to Riparian View and the Michelson Water Recycling Plant recycled water system with J.R. Filanc Construction Co. for the Michelson Water Recycling Plant Phase 2 Expansion and Flood Protection Improvements, projects 20214 (1599), 20542 (1150), 30214 (1706), and 30542 (1118).

OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

17. A. General Manager's Report

B. Directors' Comments

C. Adjourn

* * * * *

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office.

The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

January 27, 2014

Prepared and

Submitted by: L. Bonkowski

Approved by: P. Cook



CONSENT CALENDAR

MINUTES OF REGULAR AND ADJOURNED REGULAR BOARD MEETING

SUMMARY:

Provided are the minutes of the January 10, 2014 Adjourned Regular Board Meeting and the January 13, 2014 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JANUARY 10, 2014 ADJOURNED REGULAR BOARD MEETING AND THE JANUARY 13, 2014 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – Minutes of January 10, 1014 Adjourned Regular Board Meeting

Exhibit "B" – Minutes of January 13, 1014 Regular Board Meeting

EXHIBIT "A"

MINUTES OF ADJOURNED REGULAR MEETING – JANUARY 10, 2014

The adjourned regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 11:30 a.m. by President LaMar on January 10, 2014 in the District's Multi-purpose Room, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: LaMar, Matheis, Reinhart, Withers and Swan

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Operations Shields, Executive Director of Finance Clary, Executive Director of Engineering Burton, Director of Water Policy Weghorst, Director of Public Affairs Beeman, Director of Administrative Services Mossbarger, Assistant Director of Conservation Sanchez, Director of Recycled Operations Lee, Director of Human Resources Roney, Secretary Bonkowski, and Mr. Loren Lillstrand.

WRITTEN COMMUNICATION: None.

ORAL COMMUNICATION: None.

REVIEW AGENDA AND DESIRED OUTCOMES

General Manager Cook reviewed the agenda and desired outcomes.

IRWD GOALS AND OBJECTIVES FOR 2014

General Manager Cook said that provided for the Board's review and discussion are IRWD's *Mission, Vision and Values*, IRWD's *Strategic Objectives*, and the proposed *IRWD Goals and Objectives for 2014*. He said for the Goals and Objectives, as the changes were substantial, he did not provide a red line-strike out version of this document.

For the District's Mission, Vision, and Values statement, Director LaMar made suggestions to add a Water Reuse value and provided suggested language for this value. Following discussion, staff will submit an item to a Water Resources Policy and Communications Committee meeting and then to the Board for review.

For the District's Strategic Objectives, Director LaMar asked that Resource Recovery be incorporated into the strategic objectives.

Discussion was held with the Board and staff on the draft Goals and Objectives for 2014. Items included the IRWD Groundwater Development program; Potable Water Supply Reliability Program; IRWD Water Banking Program; Baker Water Treatment Plant; Management of Irvine Lake; Water Use Efficiency Programs; Recycled Water Customer Development; Biosolids Dewatering and Energy Recovery Facilities; Sewage Treatment and Recycled Water Supply Optimization; Sewage Collection System Planning; Operational Facilities – Asset Management;

Salt Management Plan; Employee Outreach; Safety Program Improvements; Security Improvements; Employee Training; Performance Management; District Operational and Administrative Process Efficiencies; Succession Planning; Enterprise Resource Planning Software Optimization; Utility Billing Software Implementation; State and Federal Funding; IRWD Rates and Charges; (NEW); Debt and other Financial Instruments; Real Estate Asset Development; Pension and Health Benefits; Natural Treatment Systems (NTS) and Watershed Initiatives; Carbon Footprint Minimization; IRWD Legislative Efforts; Government Relations; and Enhanced Internal and External Communication and Education Programs.

BOARD PROCESS REVIEW

Consultant Loren Lillestrand facilitated an interactive discussion regarding Board processes and operating efficiencies.

ADJOURNMENT

There being no further discussion, President LaMar adjourned the meeting.

APPROVED and SIGNED this 27th day of January, 2014.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM;

Legal Counsel - Bowie, Arneson, Wiles & Giannone

EXHIBIT "B"

MINUTES OF REGULAR MEETING – JANUARY 13, 2014

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President LaMar on January 13, 2014 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Swan, Withers (arrived at 5:12 p.m.), Matheis, LaMar and Reinhart

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Finance Clary, Executive Director of Engineering and Planning Burton, Executive Director of Operations Sheilds, Director of Water Resources Weghorst, Director of Human Resources Roney, Director of Public Affairs Beeman, Assistant Director of Conservation Sanchez, Assistant Director of Water Operations Drake, Legal Counsel Arneson (via conference call), Secretary Bonkowski, Director of Risk Management and Treasury Jacobson, Ms. Christine Compton, Mr. Jim Reed, Mr. Bruce Newell and other members of the public and staff.

WRITTEN COMMUNICATION: None.

ORAL COMMUNICATION

Mrs. Joan Irvine Smith's assistant addressed the Board of Directors with respect to the Dyer Road Wellfield. She said it was her understanding that currently wells 4, C-8, C-9, 10, 14, 15 and 17 will operate in accordance with the District's annual pumping plan. Wells 1, 2, 3, 5, 6, 7, 11, 12, 13, 16 and 18 will be off. This was confirmed by Mr. Cook, General Manager of the District.

On October 31, 2013, the District received its fully executed copy of the Annexation Agreement with the Orange County Water District. This was confirmed by Mr. Cook.

With respect to the Groundwater Emergency Service Plan, IRWD has an agreement in place with various south Orange County water agencies, MWDOC and OCWD, to produce additional groundwater for use within IRWD and transfer imported water from IRWD to south Orange County in case of emergencies. On October 14 2013, the IRWD Board approved the operating agreement with certain south Orange County water agencies to fund the interconnection facilities needed to affect the emergency transfer of water. MWDOC and OCWD have also approved the operating agreement. This was confirmed by Mr. Cook.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

WORKSHOP

2014 STATE LEGISLATIVE UPDATE

Ms. Christine Compton placed before each Director a document relative to 2014 Water Bond funding and amendment requests. Director Withers arrived at 5:12 p.m. Ms. Compton provided an update on the State Budget noting that the November state revenue numbers were released; the District's 2014 legislative priorities including the 2014 water bond funding and amendment requests.

CONSENT CALENDAR

On MOTION by Reinhart, seconded and unanimously carried, CONSENT CALENDAR ITEMS 4 THROUGH 6 WERE APPROVED AS FOLLOWS:

4 MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the December 16, 2013 Regular meeting as presented.

5. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Douglas Reinhart, Peer Swan and John Withers as described.

6. BUREAU OF RECLAMATION WATERSMART GRANT APPLICATIONS

Recommendation: That the Board authorize staff to apply for Bureau of Reclamation WaterSMART grants with maximum award of up to \$1.0 million in total funding to improve water and energy use efficiency, and commit to authorizing matching funds of at least 50% of project costs; agree to meet established deadlines for entering into a cooperative agreement, and adopted the following resolutions by title:

RESOLUTION NO. 2014 - 1

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT AUTHORIZING
SUBMISSION OF A GRANT APPLICATION FOR
THE IRVINE LAKE PIPELINE CONVERSION PROJECT
TO THE DEPARTMENT OF THE INTERIOR, BUREAU
OF RECLAMATION, POLICY AND ADMINISTRATION

RESOLUTION NO. 2014 -2

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT AUTHORIZING
SUBMISSION OF A GRANT APPLICATION FOR THE
STOCKDALE INTEGRATED BANKING PROJECT TO
THE DEPARTMENT OF THE INTERIOR, BUREAU OF
RECLAMATION, POLICY AND ADMINISTRATION

ACTION CALENDAR

REVISED WATER, SEWER AND RECYCLED WATER REGIONAL ALLOCATIONS

General Manager Cook reported that the master consolidation resulting from the Long Term Financial Plan (LTFP) included significant changes for both the remaining and newly-formed Improvement Districts. Mr. Cook said that the Board approved updated regional capital cost allocations at the District's December 16, 2013 Board meeting, and that this evening staff recommends adopting the revised regional allocations.

On MOTION by Reinhart, seconded and unanimously carried, THE BOARD ADOPTED THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2014-3

RESOLUTION OF THE BOARD OF DIRECTORS OF
THE IRVINE RANCH WATER DISTRICT ADOPTING
REVISED WATER, SEWER AND RECYCLED
WATER REGIONAL ALLOCATIONS

GENERAL MANAGER'S COMMENTS

General Manager Cook reported that the first quarter biosolids community update is scheduled for this Wednesday at 6 p.m. at the Learning Center.

DIRECTORS' COMMENTS

Director Withers reported on his attendance at an OCSD Legislative and Public Affairs meeting this morning.

Director Matheis reported on her attendance along with Director Withers at an ISDOC Executive Committee meeting, and last Friday's WACO meeting along with Directors Withers, Swan, and LaMar. She said she attended Shadetree Partnership's monthly event and encouraged the Board to visit its nursery. She further thanked Mr. Tom Bonkowski, Ms. Leslie Bonkowski, Mr. Dave Asman and Mr. Ian Swift for their efforts at these events as well as efforts in making this organization very successful.

Director Reinhart reported on his attendance at a SOCWA Board meeting,

Director Swan reported on his attendance at a tour of the Prado Reservoir's structure with the One Water One Watershed Committee, and following the tour, met with the Santa Ana Flood Control representatives relative to the reservoir. He further said he attended WACO last Friday and will be attending the CASA conference this week at Indian Wells.

Director LaMar reported on his attendance at MWDOC's Public Affairs Committee as well as WACO.

RECESS AND RECONVENE

President LaMar recessed the Board meeting at 5:42 p.m. to hold special corporation meetings for Bardeen Partners, Inc., Improvement Corporation, and Water Service Corporation. At 5:49 p.m., the IRWD Board meeting was reconvened.

OTHER BUSINESS

CLOSED SESSION

President LaMar said that two Closed Sessions would be held as follows:

- 1) Conference with Labor Negotiators – Government Code Section 54957.6
Agency Designated Representatives: Paul Cook and Jenny Roney
Employee Organization: Irvine Ranch Water District Employees Association, and
- 2) Conference with Legal Counsel relative to anticipated litigation –
Government Code Section 54956.9(d)(2) – significant exposure to litigation (one potential case).

OPEN SESSION

The meeting was adjourned with all Directors present. President LaMar said that there was no action to report from the Closed Session items.

ADJOURNMENT

President LaMar adjourned the meeting.

APPROVED and SIGNED this 27th day of January, 2014.

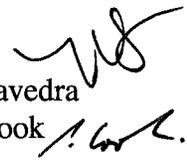
President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson, Wiles & Giannone

January 27, 2014
Prepared and
Submitted by: N. Savedra
Approved by: P. Cook



CONSENT CALENDAR

RATIFY/APPROVE BOARD OF DIRECTORS'
ATTENDANCE AT MEETINGS AND EVENTS

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, approval of attendance of the following events and meetings are required by the Board of Directors.

Events/Meetings

Steven LaMar

1/29/14 South Orange County Agencies Meeting
2/19-21/14 Urban Water Institute Water Conference, Palm Springs, CA
2/24-27/14 ACWA Washington D.C. Conference

Mary Aileen Matheis

2/2-4/14 IEDC 2014 Leadership Summit, Irvine, CA
2/6/14 MWDOC Water Policy Forum
2/19-21/14 Urban Water Institute Water Conference, Palm Springs, CA
2/24-27/14 ACWA Washington D.C. Conference

Douglas Reinhart

1/29/14 South Orange County Agencies Meeting
2/6/14 MWDOC Water Policy Forum

Peer Swan

2/23-25/14 CASA Washington D.C. Conference
2/26-27/14 ACWA Washington D.C. Conference

John Withers

1/20/14 IRWD Overview and District Tour for OC Business Journal Staff
2/2-4/14 IEDC 2014 Leadership Summit, Irvine, CA
2/6/14 MWDOC Water Policy Forum
2/20/14 Orange County Business Council Annual Meeting & Installation of Directors

RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LaMAR, MARY AILEEN MATHEIS, DOUGLAS REINHART, PEER SWAN, AND JOHN WITHERS AS DESCRIBED.

LIST OF EXHIBITS:

None

January 27, 2014

Prepared by: T. Fournier J. Davis

Submitted by: R. Jacobson/Cheryl Clary CC

Approved by: Paul Cook

CONSENT CALENDAR

DECEMBER 2013 TREASURY REPORTS

SUMMARY:

The following is submitted for the Board's information and approval:

- A. The Investment Summary Report for December 2013. This Investment Summary Report is in conformity with the 2013 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Monthly Interest Rate Swap Summary as of December 31, 2013, as outlined in Exhibit "B".
- C. The Summary of Payroll ACH payments in the total amount of \$1,515,640, as outlined in Exhibit "C".
- D. The December 31, 2013 Disbursement Summary of warrants 344414 through 345065, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$16,630,891, as outlined in Exhibit "D".
- E. The Disclosure Report of Reimbursements to Board Members and Staff for December 2013, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "E".

FISCAL IMPACTS:

As of December 31, 2013, the book value of the investment portfolio was \$313,847,269, with a 0.39% rate of return and a market value of \$313,633,699. Based on the District's December 31, 2013 quarterly real estate investment rate of return of 11.43%, the District's weighted average return for the fixed income and real estate investments was 2.50%.

As of December 31, 2013, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in December from all swaps was negative \$668,074.

Payroll ACH payments totaled \$1,515,640 and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for December totaled \$16,630,891.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3 Section 15378.

COMMITTEE STATUS:

This item was not submitted to a Committee; however, the investment and interest rate swap reports are submitted to the Finance and Personnel Committee on a monthly basis.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE MONTHLY INTEREST RATE SWAP SUMMARY FOR DECEMBER 2013, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE DECEMBER 2013 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$1,515,640 AND APPROVE THE DECEMBER 2013 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 344414 THROUGH 345065, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$16,630,891.

LIST OF EXHIBITS:

- Exhibit "A" - Investment Summary Report
- Exhibit "B" - Monthly Interest Rate Swap Summary
- Exhibit "C" - Monthly Payroll ACH Summary
- Exhibit "D" - Monthly Summary of District Disbursements
- Exhibit "E" – Disclosure of Reimbursements to Board Members and Staff

12/31/13

SETTLEMENT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON	YIELD	YFPC	ORIGINAL COST	CARRY VALUE	MARKET VALUE 12/31/2013	UNREALIZED GAIN/(LOSS)(2)
10/15/13			01/31/14		LAIF	State of California Tsy.	\$50,000,000		0.260%		\$50,000,000.00	\$50,000,000.00	50,014,381.00	14,381.00
11/26/13			01/31/14		LAIF-JPA	State of California Tsy.	50,000,000		0.260%		\$50,000,000.00	\$50,000,000.00	50,014,381.00	14,381.00
12/16/13			01/15/14		LAIF BABS	State of California Tsy.	22,902,870		0.260%		\$22,902,869.59	\$22,902,869.59	22,909,456.91	6,587.32
07/11/12	N/A	N/A	02/25/14	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	1.375%	0.301%		5,086,800.00	5,006,688.36	5,009,150.00	2,461.64
05/23/12	N/A	N/A	05/23/14	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.350%	0.394%		4,995,600.00	4,999,144.11	5,004,100.00	4,955.89
04/18/12	N/A	N/A	05/28/14	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.375%	0.354%		5,107,250.00	5,020,475.00	5,025,250.00	4,775.00
01/30/12	One-Time	01/30/14	01/30/15	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.750%	0.500%	0.500%	5,024,850.00	5,008,933.30	5,001,700.00	(7,233.30)
01/30/12	One-Time	01/30/14	01/30/15	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	0.750%	0.453%	0.453%	10,059,000.00	10,021,209.85	10,003,400.00	(17,809.85)
04/29/13	Quarterly	10/29/13	04/29/15	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.320%	0.310%	0.280%	5,001,000.00	5,000,661.64	5,000,550.00	(111.64)
12/18/12	Continuous	03/18/13	06/18/15	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	10,000,000	0.320%	0.360%	0.720%	9,990,000.00	9,994,155.70	9,996,700.00	2,544.30
12/27/12	Continuous	03/26/13	06/26/15	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	10,000,000	0.375%	0.375%	0.375%	10,000,000.00	10,000,000.00	10,000,200.00	200.00
04/30/13	Continuous	07/15/13	07/15/15	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.290%	0.290%	0.290%	5,000,000.00	5,000,000.00	4,994,950.00	(5,050.00)
09/17/12	Continuous	09/17/13	09/17/15	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.480%	0.482%	0.482%	4,999,750.00	4,999,857.53	5,000,100.00	242.47
09/17/12	Continuous	09/17/13	09/17/15	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.480%	0.455%	0.472%	5,001,250.00	5,000,712.33	5,000,100.00	(612.33)
09/28/12	Continuous	12/28/12	09/28/15	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.450%	0.470%	0.470%	4,997,000.00	4,998,260.27	5,000,150.00	1,889.73
10/17/12	One-Time 2yr	10/09/14	10/09/15	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.480%	0.460%	0.466%	5,002,000.00	5,001,188.59	5,003,350.00	2,161.41
12/18/12	Continuous	03/18/13	12/18/15	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	10,000,000	0.400%	0.425%	0.701%	9,992,500.00	9,995,095.89	9,989,600.00	(5,495.89)
12/21/12	Continuous	03/21/13	12/21/15	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.410%	0.418%	0.510%	4,998,750.00	4,999,179.22	4,995,000.00	(4,179.22)
01/15/13	N/A	07/15/13	01/15/16	NA/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	0.375%	0.390%		4,997,750.00	4,998,315.07	4,989,950.00	(8,365.07)
01/17/13	Quarterly	07/15/13	01/15/16	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.500%	0.500%	0.500%	5,000,000.00	5,000,000.00	4,994,850.00	(5,150.00)
03/14/13	Continuous	09/07/13	03/07/16	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	0.470%	0.490%		9,994,000.00	9,995,614.33	9,985,937.00	(9,677.33)
04/12/13	Continuous	07/12/13	04/12/16	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.410%	0.447%	0.851%	4,994,500.00	4,995,824.82	4,987,250.00	(8,574.82)
04/30/13	Quarterly	10/25/13	04/25/16	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.580%	0.536%	0.310%	5,006,550.00	5,005,073.10	4,986,500.00	(18,573.10)
05/24/13	Quarterly	10/25/13	04/25/16	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	4,975,000	0.580%	0.568%	0.500%	4,976,641.75	4,975,278.96	4,961,567.50	(13,711.46)
05/20/13	Quarterly	10/29/13	04/29/16	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.500%	0.500%	0.500%	5,000,000.00	5,000,000.00	4,981,700.00	(18,300.00)
12/19/13	Quarterly	11/20/13	05/20/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.520%	0.520%	0.520%	5,000,000.00	5,000,000.00	4,981,050.00	(18,950.00)
05/31/13	Quarterly	11/27/13	05/27/16	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.520%	0.585%	0.935%	4,990,000.00	4,991,968.86	4,986,800.00	(5,168.86)
12/31/13	Quarterly	06/14/13	09/14/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.650%	0.759%	0.759%	4,985,500.00	4,985,514.68	4,982,900.00	(2,614.68)
03/14/13	Continuous	12/26/12	09/26/16	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.680%	0.683%		4,999,500.00	4,999,613.39	4,982,031.00	(17,582.39)
12/03/13	One-Time	11/25/14	11/25/16	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.750%	0.647%	0.716%	5,005,000.00	5,004,866.85	4,981,450.00	(23,416.85)
12/09/13	Quarterly	12/09/14	12/09/16	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.700%	0.727%	0.780%	4,996,000.00	4,996,083.94	4,969,531.00	(26,552.94)
12/19/13	Quarterly	06/19/14	12/19/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.750%	0.750%	0.750%	5,000,000.00	5,000,000.00	4,983,300.00	(16,700.00)
12/20/13	Quarterly	06/19/14	12/19/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.750%	0.755%	0.755%	4,999,250.00	4,999,258.22	4,983,300.00	(15,958.22)
12/27/13	Continuous after	06/24/14	12/27/16	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.750%	0.760%	0.760%	4,998,500.00	4,998,506.84	4,985,450.00	(13,056.84)
12/27/13	S Quarterly	06/27/14	12/27/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	2,500,000	0.500%	0.550%	0.550%	2,498,750.00	2,498,755.70	2,493,450.00	(5,305.70)
SUB-TOTAL							\$305,377,870				\$305,600,561.34	\$305,393,106.16	\$305,179,535.41	(\$213,570.74)
RESTRICTED CASH (Swap Collateral Deposits)														
12/02/13					Collateral Deposit	Citi-Group	\$8,034,163		0.150%		\$8,034,163.21	\$8,034,163.21	8,034,163.21	
10/28/13					Collateral Deposit	Merrill Lynch	\$420,000		0.150%		\$420,000.00	\$420,000.00	420,000.00	
SUB-TOTAL							\$8,454,163				\$8,454,163.21	\$8,454,163.21	\$8,454,163.21	
TOTAL INVESTMENTS							\$313,832,033				\$314,054,724.55	\$313,847,269.37	\$313,633,698.62	
					Petty Cash						3,200.00			
			December		Bank Bal.	Bank of America					10,119,316.38			
											\$324,177,242.93			

(1) LAIF market value is as of the most recent quarter-end as reported by LAIF.

Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing.

(2) Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers

(3) Real estate rate of return is based on most recent quarter end return

Outstanding Variable Rate Debt

\$350,900,000

Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)

\$220,900,000

Investment Balance:

\$324,177,243

Investment to Variable Rate Debt Ratio:

147%

Portfolio - Average Number of Days To Maturity

430

This Investment Summary Report is in conformity with the 2013 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.

	Investment Portfolio	Real Estate Portfolio (3)	Weighted Avg. Return
December	0.39%	11.43%	2.50%
November	0.37%	11.29%	2.46%
Change	0.02%		

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

12/31/13

DATE	TOTAL	%	LAIF	AGENCIES	COLLATERAL DEPOSIT	CAL REV NOTES
12/13	\$131,357,033	41.86%	\$122,902,870		\$8,454,163	
1/14						
2/14	\$5,000,000	1.59%		5,000,000		
3/14						
4/14						
5/14	\$10,000,000	3.19%		10,000,000		
6/14						
07/14						
08/14						
09/14						
10/14						
11/14						
SUB-TOTAL	\$146,357,033	46.64%	\$122,902,870	\$15,000,000	\$8,454,163	
13 Months - 3 YEARS						
12/1/2014 - 3/31/2015	15,000,000	4.78%		15,000,000		
4/1/2015 - 6/30/2015	25,000,000	7.97%		25,000,000		
07/1/2015 - 9/30/2015	20,000,000	6.37%		20,000,000		
10/1/2015 - 12/30/15	20,000,000	6.37%		20,000,000		
01/01/16 - 03/31/2016	\$20,000,000	6.37%		20,000,000		
04/01/16 - 06/30/2016	\$29,975,000	9.55%		29,975,000		
07/01/16 - 9/30/2016	\$10,000,000	3.19%		10,000,000		
10/01/16 - 12/31/2013	\$27,500,000	8.76%		27,500,000		
TOTALS	\$313,832,033	100.00%	\$122,902,870	\$182,475,000	\$8,454,163	

% OF PORTFOLIO

A-2

39.16%

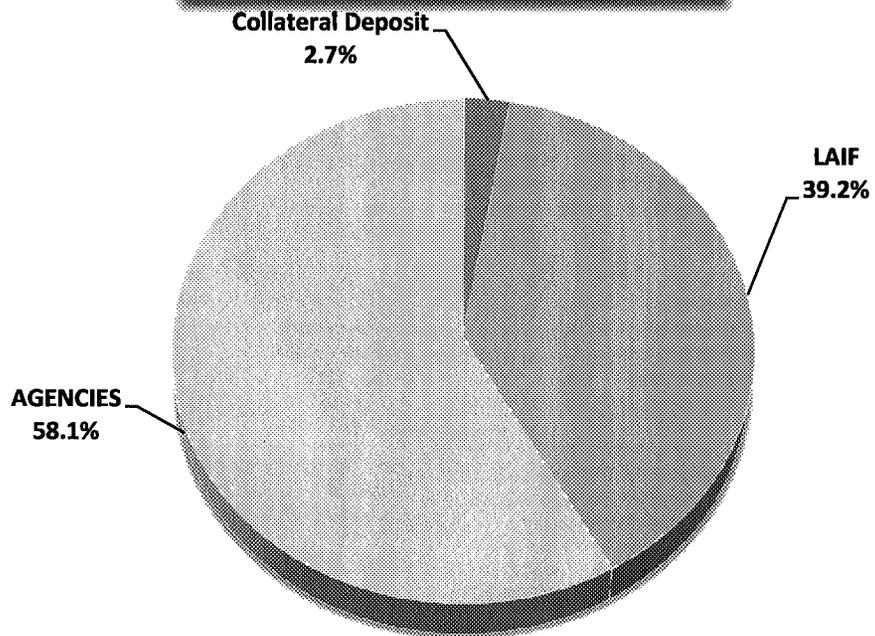
58.14%

2.69%

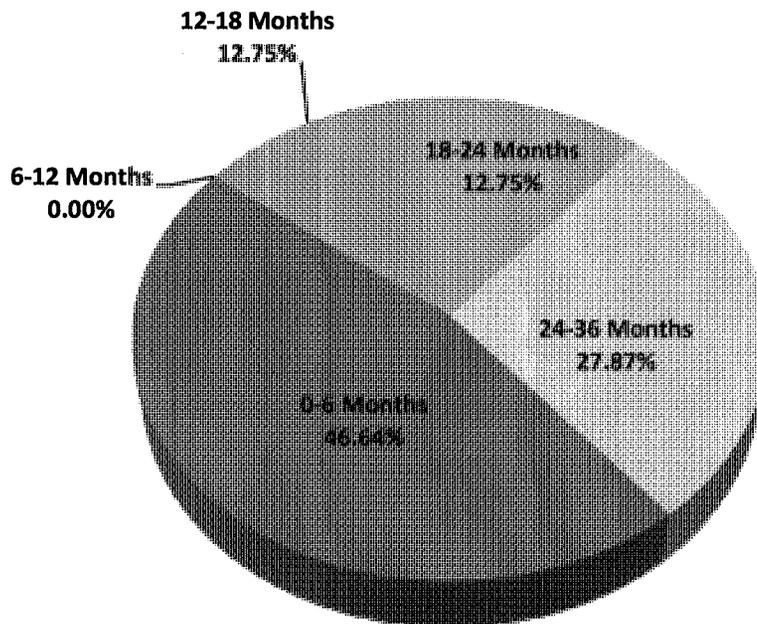
December 2013 INVESTMENT PORTFOLIO

December 31, 2013

Portfolio by Investment Type



Portfolio by Maturities



Irvine Ranch Water District
 Summary of Real Estate
 12/31/2013

	<u>ACQUISITION DATE</u>	<u>PROPERTY TYPE</u>	<u>OWNERSHIP INTEREST</u>	<u>ORIGINAL COST</u>	<u>RATE OF RETURN QUARTER ENDED Dec-13</u>
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	14.42%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	8.57%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	9.29%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	4.37%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	6.81%
				<u>\$ 72,569,826</u>	<u>11.43%</u>

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

Joint Powers Agency - Investment Contracts

12/31/2013

Settlement Date	JPA Issue	Investment Contract	Original Cost	Current Par	Market Value 12/31/13
10/25/1994	JPA - Issue #1	AIG Matched Funding Corp. 7.705% Due 2-15-14	\$ 407,878,616	\$ 238,500,000	\$ 238,500,000
10/25/1994	JPA - Issue #2	Federal National Mortgage Assoc. 8.18% Due 2-15-14	\$ 518,644,189	\$ 349,472,521	\$ 352,684,173
			<u>\$ 926,522,805</u>	<u>\$ 587,972,521</u>	<u>\$ 591,184,173</u>

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
December

MATURITIES/SALES/CALLS

PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
12/4/2013	FNMA	\$5,000,000	0.57%	12/3/2013	11/25/2016	FNMA	\$5,000,000	0.72%
12/19/2013	FFCB	\$10,000,000	0.18%	12/9/2013	12/9/2016	FNMA	\$5,000,000	0.73%
12/23/2013	FHLMC	\$5,000,000	0.30%	12/19/2013	5/20/2016	FHLMC	\$5,000,000	0.52%
12/26/2013	FHLMC	\$5,000,000	0.47%	12/19/2013	12/19/2016	FHLMC	\$5,000,000	0.75%
				12/20/2013	12/19/2016	FHLMC	\$5,000,000	0.76%
				12/27/2013	12/27/2016	FHLMC	\$2,500,000	0.55%
				12/27/2013	12/27/2016	FHLB	\$5,000,000	0.76%
				12/31/2013	9/14/2016	FHLMC	\$5,000,000	0.76%

**IRVINE RANCH WATER DISTRICT
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL
December 31, 2013**

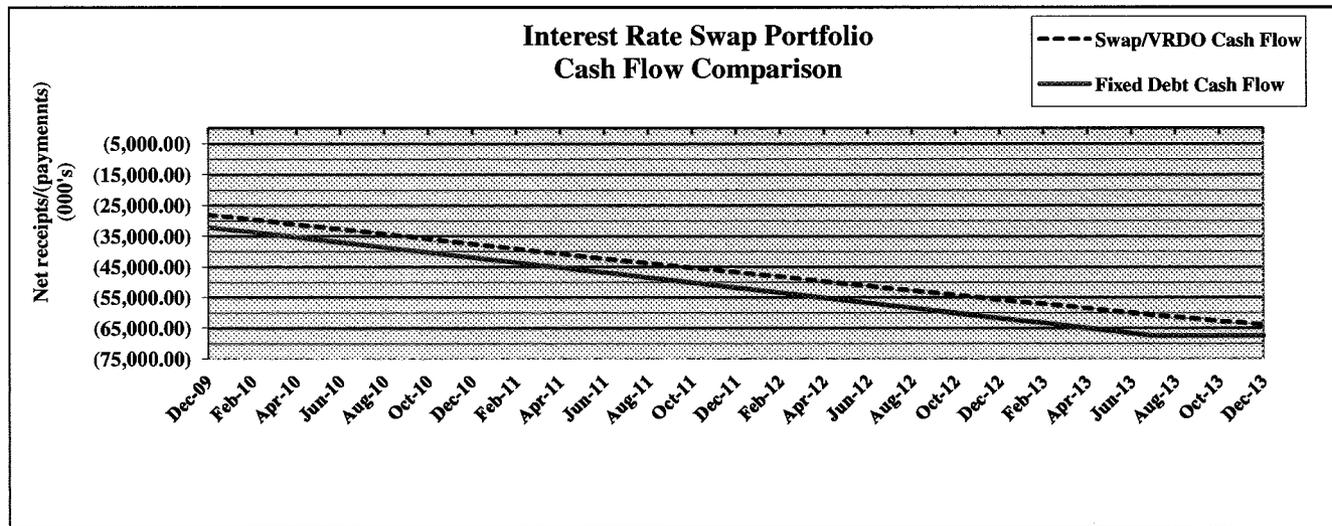
Exhibit "B"

LIBOR Avg %	Prior Mo.	Current Mo.	12-Mo Avg
	0.17%	0.17%	0.19%

Current Fiscal Year Active Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
Fixed Payer Swaps - By Effective Date													
6/4/2006	6/4/2019	5.4	ML	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (93,725)	\$ (107,232)	\$ (611,743)	\$ (6,847,761)	\$ 15,439,003	\$ (4,560,997)
6/4/2006	6/4/2019	5.4	CG	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (93,725)	\$ (107,232)	\$ (611,743)	\$ (6,847,761)	\$ 15,457,285	\$ (4,542,715)
6/17/2006	6/17/2019	5.5	CG	\$ 30,000,000	FXP	LIBOR	6.140%	\$ (139,135)	\$ (159,310)	\$ (908,516)	\$ (10,147,724)	\$ 23,259,645	\$ (6,740,355)
3/10/2007	3/10/2029	15.2	ML	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (128,600)	\$ (147,150)	\$ (839,400)	\$ (9,029,103)	\$ 21,854,629	\$ (8,145,371)
3/10/2007	3/10/2029	15.2	CG	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (128,600)	\$ (147,150)	\$ (839,400)	\$ (9,029,103)	\$ 21,943,804	\$ (8,056,196)
Totals/Weighted Avgs		9.9		\$ 130,000,000			5.949%	\$ (583,785)	\$ (668,074)	\$ (3,810,802)	\$ (41,901,453)	\$ 97,954,366	\$ (32,045,634)
Total Current Year Active Swaps				\$ 130,000,000				\$ (583,785)	\$ (668,074)	\$ (3,810,802)	\$ (41,901,453)	\$ 97,954,366	\$ (32,045,634)

Current Fiscal Year Terminated Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date		Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
Total Current Year Terminated Swaps				\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
								Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
Total Current Year Active & Terminated Swaps				\$ 130,000,000				\$ (583,785)	\$ (668,074)	\$ (3,810,802)	\$ (41,901,453)	\$ 97,954,366	\$ (32,045,634)



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt	
<u>Cash Flow to Date</u>	
Synthetic Fixed =	\$63,933,686
Fixed Rate =	\$67,460,837
Assumptions:	
- Fixed rate debt issued at 5.10% in Jun-06, and 4.93% in Mar-07 (estimated TE rates - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

Exhibit "C"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

December
2013

DATE	AMOUNT	VENDOR	PURPOSE
12/13/2013	745,404.38	BANK OF AMERICA	ACH Payments for Payroll
12/27/2013	770,235.93	BANK OF AMERICA	ACH Payments for Payroll
	<u>\$1,515,640.31</u>		

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344414		02-DEC-13	US BANK NAT'L ASSOCIATION NORTH DAKOTA	ST. LOUIS	68,526.94	13-DEC-13	68,526.94	Reconciled
344415		05-DEC-13	Bertsch, Frederick J (Jeff)		91.00	13-DEC-13	91.00	Reconciled
344416		05-DEC-13	Navarro, Hector R		16.45			Negotiable
344417		05-DEC-13	Moeder, Jacob J (Jacob)		280.00	23-DEC-13	280.00	Reconciled
344418		05-DEC-13	Lewis, Lyndy R		41.81	11-DEC-13	41.81	Reconciled
344419		05-DEC-13	Cortez, Malcolm A (Malcolm)		57.63	11-DEC-13	57.63	Reconciled
344420		05-DEC-13	Reynoso, Pio (Pio)		300.00	09-DEC-13	300.00	Reconciled
344421		05-DEC-13	Torres, Richard P (Richard)		200.00	16-DEC-13	200.00	Reconciled
344422		05-DEC-13	Rudy Ocampo		120.00	06-DEC-13	120.00	Reconciled
344423		09-DEC-13	1000BULBS.COM		150.03	17-DEC-13	150.03	Reconciled
344424		09-DEC-13	A & Y ASPHALT CONTRACTORS INC		8,777.00	17-DEC-13	8,777.00	Reconciled
344425		09-DEC-13	ABEL PUMPS LP		2,932.62	13-DEC-13	2,932.62	Reconciled
344426		09-DEC-13	AFLAC		8,977.46	16-DEC-13	8,977.46	Reconciled
344427		09-DEC-13	AIRGAS-WEST, INC.		1,297.26	12-DEC-13	1,297.26	Reconciled
344428		09-DEC-13	AKM CONSULTING ENGINEERS, INC.		16,638.00	13-DEC-13	16,638.00	Reconciled
344429		09-DEC-13	ALEXANDER CONTRACT SERVICES INC		103,222.90	16-DEC-13	103,222.90	Reconciled
344430		09-DEC-13	ALLIANCE RESOURCE CONSULTING LLC		8,500.00	16-DEC-13	8,500.00	Reconciled
344431		09-DEC-13	ALPHA TRAFFIC SERVICES, INC.		990.00	11-DEC-13	990.00	Reconciled
344432		09-DEC-13	AMERICAN MEMBRANE TECHNOLOGY		125.00			Negotiable
344433		09-DEC-13	AMERICAN MESSAGING SERVICES LLC		292.51	17-DEC-13	292.51	Reconciled
344434		09-DEC-13	ANDERSONPENNA PARTNERS, INC		13,220.00	16-DEC-13	13,220.00	Reconciled
344435		09-DEC-13	AQUA BEN CORPORATION		751.41	11-DEC-13	751.41	Reconciled
344436		09-DEC-13	ARCADIS U.S., INC.		11,098.00	16-DEC-13	11,098.00	Reconciled
344437		09-DEC-13	ARIZONA PIPELINE COMPANY		6,162.59	16-DEC-13	6,162.59	Reconciled
344438		09-DEC-13	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA		36,232.18	17-DEC-13	36,232.18	Reconciled
344439		09-DEC-13	AT&T		82.85	16-DEC-13	82.85	Reconciled
344440		09-DEC-13	AT&T		3,164.31	17-DEC-13	3,164.31	Reconciled

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344441		09-DEC-13	AXA EQUITABLE LIFE INSURANCE COMPANY		9,780.00	23-DEC-13	9,780.00	Reconciled
344442		09-DEC-13	BDC SPECIAL WASTE		204.20	13-DEC-13	204.20	Reconciled
344443		09-DEC-13	BELL PIPE & SUPPLY CO		88.92	11-DEC-13	88.92	Reconciled
344444		09-DEC-13	BK FOUNTAIN WORKS		660.92	11-DEC-13	660.92	Reconciled
344445		09-DEC-13	BOYD & ASSOCIATES		3,708.00	12-DEC-13	3,708.00	Reconciled
344446		09-DEC-13	BRENNTAG PACIFIC INC		16,814.30	16-DEC-13	16,814.30	Reconciled
344447		09-DEC-13	C WELLS PIPELINE MATERIALS INC		15,462.31	23-DEC-13	15,462.31	Reconciled
344448		09-DEC-13	CALIFORNIA BARRICADE INC		3,232.50	17-DEC-13	3,232.50	Reconciled
344449		09-DEC-13	CALIFORNIA MUNICIPAL STATISTICS INC		2,825.00	24-DEC-13	2,825.00	Reconciled
344450		09-DEC-13	CALIFORNIA STATE UNIVERSITY, FULLERTON		5,600.00	19-DEC-13	5,600.00	Reconciled
344451		09-DEC-13	CALIFORNIA URBAN WATER CONSERVATION COUNCIL		7,965.25	23-DEC-13	7,965.25	Reconciled
344452		09-DEC-13	CANON FINANCIAL SERVICES, INC		4,425.03	17-DEC-13	4,425.03	Reconciled
344453		09-DEC-13	CANON SOLUTIONS AMERICA, INC.		2,387.01	12-DEC-13	2,387.01	Reconciled
344454		09-DEC-13	CAPTIVE AUDIENCE MARKETING INC.		85.32	17-DEC-13	85.32	Reconciled

344455	09-DEC-13	CDW GOVERNMENT LLC	650.25				Negotiable
344456	09-DEC-13	CHEM TECH INTERNATIONAL INC	4,923.60	20-DEC-13	4,923.60		Reconciled
344457	09-DEC-13	CITY CIRCUIT BREAKERS	614.00	11-DEC-13	614.00		Reconciled
344458	09-DEC-13	CITY OF TUSTIN	321.78	11-DEC-13	321.78		Reconciled
344459	09-DEC-13	COAST PLUMBING HEATING AND AIR, INC	869.00	11-DEC-13	869.00		Reconciled
344460	09-DEC-13	COASTLINE EQUIPMENT COMPANY	830.46	12-DEC-13	830.46		Reconciled
344461	09-DEC-13	COLONIAL LIFE & ACCIDENT INSURANCE CO.	2,296.86	13-DEC-13	2,296.86		Reconciled
344462	09-DEC-13	COMMERCIAL CLEANING SYSTEMS	240.00	12-DEC-13	240.00		Reconciled

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 3
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344463		09-DEC-13	CONDITION MONITORING SERVICES INC		4,927.50	13-DEC-13	4,927.50	Reconciled
344464		09-DEC-13	ONEYBEARE INC		17,152.75	23-DEC-13	17,152.75	Reconciled
344465		09-DEC-13	CREATIVE ALLIANCE GROUP LLC		500.00	13-DEC-13	500.00	Reconciled
344466		09-DEC-13	CRUMP & CO, INC.		9,854.03	17-DEC-13	9,854.03	Reconciled
344467		09-DEC-13	DELTA SYSTEMS ENGINEERING INC		39,531.68	16-DEC-13	39,531.68	Reconciled
344468		09-DEC-13	DENSON, ALLEN		386.62			Negotiable
344469		09-DEC-13	DWYER INSTRUMENTS INC		4,930.43	13-DEC-13	4,930.43	Reconciled
344470		09-DEC-13	EAST ORANGE COUNTY WATER DISTRICT		6,345.41	16-DEC-13	6,345.41	Reconciled
344471		09-DEC-13	EI&C ENGINEERING INC		6,720.00	16-DEC-13	6,720.00	Reconciled
344472		09-DEC-13	EMA INC		1,620.00	13-DEC-13	1,620.00	Reconciled
344473		09-DEC-13	ENDRESS AND HAUSER INC		1,500.00	17-DEC-13	1,500.00	Reconciled
344474		09-DEC-13	ENVIRONMENTAL EXPRESS INC		1,132.50	16-DEC-13	1,132.50	Reconciled
344475		09-DEC-13	ENVIRONMENTAL RESOURCE ASSOCIATES		223.24	16-DEC-13	223.24	Reconciled
344476		09-DEC-13	ESRI		23,550.00	16-DEC-13	23,550.00	Reconciled
344477		09-DEC-13	EVERGREEN OIL INC		198.00	13-DEC-13	198.00	Reconciled
344478		09-DEC-13	EXECUTIVE LIGHTING & ELECTRIC		2,132.92	11-DEC-13	2,132.92	Reconciled
344479		09-DEC-13	FEDEX		791.27	16-DEC-13	791.27	Reconciled
344480		09-DEC-13	FIDELITY SECURITY LIFE INSURANCE COMPANY		6,243.48			Negotiable
344481		09-DEC-13	FISHER SCIENTIFIC COMPANY LLC		2,229.64	12-DEC-13	2,229.64	Reconciled
344482		09-DEC-13	FIVE POINT PARTNERS LLC		83,942.86	16-DEC-13	83,942.86	Reconciled
344483		09-DEC-13	FOUNTAIN VALLEY PAINTS		426.60	12-DEC-13	426.60	Reconciled
344484		09-DEC-13	FRANK LA PLACA EXTERMINATING INC		175.00	30-DEC-13	175.00	Reconciled
344485		09-DEC-13	GANAHL LUMBER CO.		573.75	13-DEC-13	573.75	Reconciled
344486		09-DEC-13	GCI CONSTRUCTION, INC.		7,581.34	13-DEC-13	7,581.34	Reconciled
344487		09-DEC-13	GENTERRA CONSULTANTS INC		627.89	11-DEC-13	627.89	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 4
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344488		09-DEC-13	GEORGE YARDLEY CO INC		1,935.36	12-DEC-13	1,935.36	Reconciled
344489		09-DEC-13	GLOBALSTAR INC		169.07	11-DEC-13	169.07	Reconciled
344490		09-DEC-13	GRAINGER		5,961.28	16-DEC-13	5,961.28	Reconciled
344491		09-DEC-13	GRAYBAR ELECTRIC COMPANY		436.06	12-DEC-13	436.06	Reconciled
344492		09-DEC-13	H&E EQUIPMENT SERVICES, INC.		31,860.00	17-DEC-13	31,860.00	Reconciled
344493		09-DEC-13	HACH COMPANY		2,981.45	17-DEC-13	2,981.45	Reconciled
344494		09-DEC-13	HADRONEX INC		6,070.00	16-DEC-13	6,070.00	Reconciled
344495		09-DEC-13	HAMILTON, KURT		1,313.77	16-DEC-13	1,313.77	Reconciled
344496		09-DEC-13	HARTFORD LIFE AND		217.07	13-DEC-13	217.07	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
344497	09-DEC-13	ACCIDENT INSURANCE COMPANY			29,985.54	13-DEC-13	29,985.54	Reconciled
344498	09-DEC-13	HILL BROTHERS CHEMICAL COMPANY			1,078.79	16-DEC-13	1,078.79	Reconciled
344499	09-DEC-13	HOME DEPOT USA INC			2,551.12	20-DEC-13	2,551.12	Reconciled
344500	09-DEC-13	HOPKINS TECHNICAL PRODUCTS INC			3,360.00	11-DEC-13	3,360.00	Reconciled
344501	09-DEC-13	HUNSAKER & ASSOCIATES IRVINE			27,631.09	30-DEC-13	27,631.09	Reconciled
344502	09-DEC-13	II FUELS INC			163.28	13-DEC-13	163.28	Reconciled
344503	09-DEC-13	INDUSTRIAL METAL SUPPLY CO			3,139.76	11-DEC-13	3,139.76	Reconciled
344504	09-DEC-13	IRVINE PIPE & SUPPLY INC			1,000.00	17-DEC-13	1,000.00	Reconciled
344505	09-DEC-13	IRVINE VALLEY COLLEGE FOUNDATION			1,065.74	10-DEC-13	1,065.74	Reconciled
344506	09-DEC-13	IRWD-PETTY CASH CUSTODIAN			7,652.33	16-DEC-13	7,652.33	Reconciled
344507	09-DEC-13	JCI JONES CHEMICALS INC			1,212.42	17-DEC-13	1,212.42	Reconciled
344508	09-DEC-13	JOHN CRANE, INC.			134.00	13-DEC-13	134.00	Reconciled
344509	09-DEC-13	JOHN MICHAEL COVAS			4,400.53	16-DEC-13	4,400.53	Reconciled
344510	09-DEC-13	KONECRANES INC			1,381.86	11-DEC-13	1,381.86	Reconciled
344511	09-DEC-13	KS DIRECT LLC			2.23	16-DEC-13	2.23	Reconciled
344512	09-DEC-13	LAS PALMAS APARTMENTS			5,958.63			Negotiable
344513	09-DEC-13	LEWIS BRISBOIS BISGAARD AND SMITH LLP			1,600.00	12-DEC-13	1,600.00	Reconciled
344514	09-DEC-13	LEWIS OPERATING CORP			6,829.70	13-DEC-13	6,829.70	Reconciled
344515	09-DEC-13	LGC GEOTECHNICAL, INC.			950.00	16-DEC-13	950.00	Reconciled
IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 5 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Payment Type: All Display Supplier Address: No								

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344516	09-DEC-13	MBC APPLIED ENVIRONMENTAL SCIENCES			1,250.00	12-DEC-13	1,250.00	Reconciled
344517	09-DEC-13	MC MASTER CARR SUPPLY CO			1,905.23			Negotiable
344518	09-DEC-13	METTLER-TOLEDO INC			2,772.46	13-DEC-13	2,772.46	Reconciled
344519	09-DEC-13	MOODY'S INVESTORS SERVICE INC			1,300.00	13-DEC-13	1,300.00	Reconciled
344520	09-DEC-13	MOTION INDUSTRIES INC			121.16	12-DEC-13	121.16	Reconciled
344521	09-DEC-13	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY			750.00	11-DEC-13	750.00	Reconciled
344522	09-DEC-13	NATIONAL READY MIXED CONCRETE CO			1,908.22	12-DEC-13	1,908.22	Reconciled
344523	09-DEC-13	NATURES IMAGE INC			2,827.76			Negotiable
344524	09-DEC-13	NEPTUNE TECHNOLOGY GROUP, INC.			122,277.60	16-DEC-13	122,277.60	Reconciled
344525	09-DEC-13	NEWPORT WINDOW MAINTENANCE INC			2,314.00			Negotiable
344526	09-DEC-13	NMG GEOTECHNICAL INC			58,848.60	23-DEC-13	58,848.60	Reconciled
344527	09-DEC-13	NORTHWOOD PLACE APTS			27.58	19-DEC-13	27.58	Reconciled
344528	09-DEC-13	O'HAREN GOVERNMENT RELATIONS			6,500.00	17-DEC-13	6,500.00	Reconciled
344529	09-DEC-13	OLIN CORPORATION			16,955.22	16-DEC-13	16,955.22	Reconciled
344530	09-DEC-13	ON ASSIGNMENT LAB SUPPORT			1,202.01	20-DEC-13	1,202.01	Reconciled
344531	09-DEC-13	ONESOURCE DISTRIBUTORS LLC			1,560.19	12-DEC-13	1,560.19	Reconciled
344532	09-DEC-13	ORANGE COUNTY PUBLIC AFFAIRS ASSOCIATION			45.00	13-DEC-13	45.00	Reconciled
344533	09-DEC-13	OUTSOURCE TECHNICAL LLC			36,800.00			Negotiable
344534	09-DEC-13	PAPER DEPOT DOCUMENT DESTRUCTION LLC			708.00	13-DEC-13	708.00	Reconciled
344535	09-DEC-13	PASMA			75.00			Negotiable
344536	09-DEC-13	PAUL E BRADLEY INC			1,440.00	27-DEC-13	1,440.00	Reconciled
344537	09-DEC-13	PCI PRODUCTS COMPANY			2,528.16	12-DEC-13	2,528.16	Reconciled
344538	09-DEC-13	PEARPOINT			485.73	17-DEC-13	485.73	Reconciled
344539	09-DEC-13	PINNACLE LANDSCAPE COMPANY			6,560.00	16-DEC-13	6,560.00	Reconciled
IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 6 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Payment Type: All Display Supplier Address: No								

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344540		09-DEC-13	PIVOT INTERIORS INC		318.61	12-DEC-13	318.61	Reconciled
344541		09-DEC-13	PRAXAIR DISTRIBUTION INC		2,912.17	16-DEC-13	2,912.17	Reconciled
344542		09-DEC-13	PRE-PAID LEGAL SERVICES INC		1,869.15	16-DEC-13	1,869.15	Reconciled
344543		09-DEC-13	PRINCIPAL LIFE INSURANCE		25,790.02	17-DEC-13	25,790.02	Reconciled
344544		09-DEC-13	PRUDENTIAL OVERALL SUPPLY		3,381.08	12-DEC-13	3,381.08	Reconciled
344545		09-DEC-13	PSB INTEGRATED MARKETING		2,915.36	12-DEC-13	2,915.36	Reconciled
344546		09-DEC-13	PTI SAND & GRAVEL INC		512.93	13-DEC-13	512.93	Reconciled
344547		09-DEC-13	RAINBOW DISPOSAL CO INC		506.33	11-DEC-13	506.33	Reconciled
344548		09-DEC-13	RALPHS GROCERY COMPANY		15,960.00	12-DEC-13	15,960.00	Reconciled
344549		09-DEC-13	RAM AIR ENGINEERING INC		8,362.30	19-DEC-13	8,362.30	Reconciled
344550		09-DEC-13	RBF CONSULTING		250.00	17-DEC-13	250.00	Reconciled
344551		09-DEC-13	REACH EMPLOYEE ASSISTANCE INC		890.40	13-DEC-13	890.40	Reconciled
344552		09-DEC-13	REED, JAMES D		1,935.69			Negotiable
344553		09-DEC-13	RICHARD C SLADE & ASSOCIATES		1,756.00	16-DEC-13	1,756.00	Reconciled
344554		09-DEC-13	RINCON TRUCK CENTER INC.		3,482.46	12-DEC-13	3,482.46	Reconciled
344555		09-DEC-13	RITE AID PHARMACY		140.00	16-DEC-13	140.00	Reconciled
344556		09-DEC-13	ROCKY MOUNTAIN CHOCOLATE FACTORY		146.77			Negotiable
344557		09-DEC-13	SANTA ANA BLUE PRINT		360.83	17-DEC-13	360.83	Reconciled
344558		09-DEC-13	SANTA MARGARITA CATHOLIC HIGH SCHOOL		10.00			Negotiable
344559		09-DEC-13	SANTA MARGARITA FORD		394.90	16-DEC-13	394.90	Reconciled
344560		09-DEC-13	SANTA MARGARITA FORD		620.22	13-DEC-13	620.22	Reconciled
344561		09-DEC-13	SANTA MARGARITA WATER DISTRICT		32,420.79	13-DEC-13	32,420.79	Reconciled
344562		09-DEC-13	SCHINDLER ELEVATOR CORPORATION		169.16			Negotiable
344563		09-DEC-13	SECURTEC DISTRICT PATROL INC		10,800.00	16-DEC-13	10,800.00	Reconciled

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
 Payment Type: All

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344564		09-DEC-13	SOLVAY USA INC		9,347.79			Negotiable
344565		09-DEC-13	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		2,558.30	13-DEC-13	2,558.30	Reconciled
344566		09-DEC-13	SOUTH COAST ANSWERING SERVICE		391.33	17-DEC-13	391.33	Reconciled
344567		09-DEC-13	SOUTH COAST BOBCAT		1,779.84	20-DEC-13	1,779.84	Reconciled
344568		09-DEC-13	SOUTHERN CALIFORNIA EDISON COMPANY		500.00	12-DEC-13	500.00	Reconciled
344569		09-DEC-13	SOUTHERN CALIFORNIA EDISON COMPANY		607,075.95	11-DEC-13	607,075.95	Reconciled
344570		09-DEC-13	SOUTHERN CALIFORNIA SECURITY CENTER, INC.		296.48	17-DEC-13	296.48	Reconciled
344571		09-DEC-13	STANTEC CONSULTING SERVICES INC.		177.00	17-DEC-13	177.00	Reconciled
344572		09-DEC-13	SUPERMEDIA LLC		72.75	23-DEC-13	72.75	Reconciled
344573		09-DEC-13	SWAINS ELECTRIC MOTOR SERVICE		908.76	03-JAN-14	908.76	Reconciled
344574		09-DEC-13	T AND S LARSEN MAINTENANCE		400.00	12-DEC-13	400.00	Reconciled
344575		09-DEC-13	TEKDRAULICS		9,725.85	13-DEC-13	9,725.85	Reconciled
344576		09-DEC-13	TESTAMERICA LABORATORIES, INC		769.65	16-DEC-13	769.65	Reconciled
344577		09-DEC-13	TETRA TECH, INC		34,689.15			Negotiable
344578		09-DEC-13	THYSSENKRUPP ELEVATOR		217.19	13-DEC-13	217.19	Reconciled
344579		09-DEC-13	TRABUCO CANYON		74,003.81	16-DEC-13	74,003.81	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
344580		09-DEC-13	WATER DISTRICT TRENCH SHORING COMPANY		960.00	12-DEC-13	960.00	Reconciled
344581		09-DEC-13	TROPICAL PLAZA NURSERY INC		6,591.80	13-DEC-13	6,591.80	Reconciled
344582		09-DEC-13	TRUCPARCO		1,063.95	16-DEC-13	1,063.95	Reconciled
344583		09-DEC-13	TRUGREEN LANDCARE LLC		1,498.11	12-DEC-13	1,498.11	Reconciled
344584		09-DEC-13	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA		609.00	13-DEC-13	609.00	Reconciled
344585		09-DEC-13	UNITED PARCEL SERVICE INC		124.43	13-DEC-13	124.43	Reconciled
344586		09-DEC-13	UNIVAR USA INC		12,625.20	16-DEC-13	12,625.20	Reconciled

IRWD Ledger
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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344587		09-DEC-13	US PEROXIDE LLC		24,397.82	16-DEC-13	24,397.82	Reconciled
344588		09-DEC-13	USA BLUEBOOK		1,456.74	19-DEC-13	1,456.74	Reconciled
344589		09-DEC-13	VA CONSULTING, INC		4,400.00	12-DEC-13	4,400.00	Reconciled
344590		09-DEC-13	VAUGHAN'S INDUSTRIAL REPAIR CO INC		280.00	12-DEC-13	280.00	Reconciled
344591		09-DEC-13	VERIZON CALIFORNIA INC		310.96	17-DEC-13	310.96	Reconciled
344592		09-DEC-13	VERIZON WIRELESS SERVICES LLC		7,955.74	17-DEC-13	7,955.74	Reconciled
344593		09-DEC-13	VPSI INC		20,179.40	16-DEC-13	20,179.40	Reconciled
344594		09-DEC-13	VULCAN MATERIALS COMPANY		2,628.44	12-DEC-13	2,628.44	Reconciled
344595		09-DEC-13	VWR INTERNATIONAL, LLC		7,826.51	17-DEC-13	7,826.51	Reconciled
344596		09-DEC-13	WALTERS WHOLESALE ELECTRIC		1,711.98	13-DEC-13	1,711.98	Reconciled
344597		09-DEC-13	WASTE MANAGEMENT OF ORANGE COUNTY		1,774.73	13-DEC-13	1,774.73	Reconciled
344598		09-DEC-13	WATERSMART SOFTWARE INC		7,500.00	17-DEC-13	7,500.00	Reconciled
344599		09-DEC-13	WAXIE'S ENTERPRISES, INC		1,126.02	12-DEC-13	1,126.02	Reconciled
344600		09-DEC-13	WECK LABORATORIES INC		850.00	12-DEC-13	850.00	Reconciled
344601		09-DEC-13	WELLS SUPPLY COMPANY		1,536.62	11-DEC-13	1,536.62	Reconciled
344602		09-DEC-13	WESTERN EXTERMINATOR COMPANY		1,316.00	16-DEC-13	1,316.00	Reconciled
344603		09-DEC-13	WONDERWARE WEST		79,310.20	17-DEC-13	79,310.20	Reconciled
344604		09-DEC-13	WORKFLOWONE		3,636.88	16-DEC-13	3,636.88	Reconciled
344605		12-DEC-13	Murphy, Alexander J (Alexander)		515.00	16-DEC-13	515.00	Reconciled
344606		12-DEC-13	Collazo, Carlos C (Carlos)		50.00	12-DEC-13	50.00	Reconciled
344607		12-DEC-13	Compton, Christine A		39.04	20-DEC-13	39.04	Reconciled
344608		12-DEC-13	Legault, Dan (Dan)		129.00	16-DEC-13	129.00	Reconciled
344609		12-DEC-13	Chaney, David (Dave)		77.00	16-DEC-13	77.00	Reconciled
344610		12-DEC-13	Pan, Jenny W (Jenny)		1,520.19	16-DEC-13	1,520.19	Reconciled
344611		12-DEC-13	Landon Mortimer		172.79	16-DEC-13	172.79	Reconciled
344612		12-DEC-13	Bonkowski, Leslie A (Leslie)		1,606.98	16-DEC-13	1,606.98	Reconciled

IRWD Ledger
 BANK: Bank of America N.A. Branch: Los Angeles Account: Checking AP and PR Report Date: 07-JAN-2014 08:36
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Page: 9
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344613		12-DEC-13	Sheilds, Patrick		35.00	23-DEC-13	35.00	Reconciled
344614		12-DEC-13	Randy Lee		35.00	17-DEC-13	35.00	Reconciled
344615		12-DEC-13	Sitzler, Roberta K (Roberta)		63.14	13-DEC-13	63.14	Reconciled
344616		12-DEC-13	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	6,930.00	17-DEC-13	6,930.00	Reconciled
344617		12-DEC-13	ADS LLC		1,991.00	23-DEC-13	1,991.00	Reconciled
344618		12-DEC-13	AHN, KRISTIN		27.74	16-DEC-13	27.74	Reconciled
344619		12-DEC-13	AIRGAS-WEST, INC.		235.66	16-DEC-13	235.66	Reconciled
344620		12-DEC-13	ALEXEEVA, ELENA		45.57	27-DEC-13	45.57	Reconciled
344621		12-DEC-13	ALSTON & BIRD LLP		18,967.24	19-DEC-13	18,967.24	Reconciled

344622	12-DEC-13	AMERICAN MEMBRANE TECHNOLOGY	125.00	23-DEC-13	125.00	Reconciled
344623	12-DEC-13	ANCHUKIEWICZ, DAMIAN	36.42			Negotiable
344624	12-DEC-13	ARCADIS U.S., INC.	24,211.19	20-DEC-13	24,211.19	Reconciled
344625	12-DEC-13	AT&T	2,050.38			Negotiable
344626	12-DEC-13	AT&T	121.50			Negotiable
344627	12-DEC-13	AT&T	1,595.94			Negotiable
344628	12-DEC-13	BABAKANIAN, JOSEPH	29.77			Negotiable
344629	12-DEC-13	BACK, SHANNON	49.79	23-DEC-13	49.79	Reconciled
344630	12-DEC-13	BALLARD, CARL - ACCT 16035788138	26.92			Negotiable
344631	12-DEC-13	BELL PIPE & SUPPLY CO	57.77	17-DEC-13	57.77	Reconciled
344632	12-DEC-13	BEST BUY/CARL SPANGENBERG	1,666.21			Voided
344633	12-DEC-13	BOMEL CONSTRUCTION CO INC.	595.88	24-DEC-13	595.88	Reconciled
344634	12-DEC-13	BORCHARD SURVEYING & MAPPING, INC.	2,477.50	20-DEC-13	2,477.50	Reconciled
344635	12-DEC-13	BROWN, KARLY	29.47			Negotiable
344636	12-DEC-13	BURLINGTON SAFETY LABORATORY OF CALIFORNIA INC	61.00	19-DEC-13	61.00	Reconciled
344637	12-DEC-13	C WELLS PIPELINE MATERIALS INC	26,624.16	23-DEC-13	26,624.16	Reconciled
344638	12-DEC-13	CALHOON, STEVE	49.45	26-DEC-13	49.45	Reconciled
344639	12-DEC-13	CALIFORNIA BARRICADE INC	1,805.00	23-DEC-13	1,805.00	Reconciled
344640	12-DEC-13	CALIFORNIA PACIFIC HOMES	15.00			Negotiable
344641	12-DEC-13	CANON FINANCIAL SERVICES, INC	130.69			Negotiable
344642	12-DEC-13	CAO, HAO	53.70			Negotiable

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344643		12-DEC-13	CASEY, JUSTINE		36.25	26-DEC-13	36.25	Reconciled
344644		12-DEC-13	CEMEX, INC.		860.76			Negotiable
344645		12-DEC-13	CHAGATUR VEERAPPA, SRINIVASA		106.63	26-DEC-13	106.63	Reconciled
344646		12-DEC-13	CHARLES BORKMAN CONSULTANTS		5,600.00	23-DEC-13	5,600.00	Reconciled
344647		12-DEC-13	CHEBEGIA, JEFFREY		12.72			Negotiable
344648		12-DEC-13	CHEN, BETTY		146.52	27-DEC-13	146.52	Reconciled
344649		12-DEC-13	CHEN, HUO		27.41			Negotiable
344650		12-DEC-13	CHEN, J		28.25	03-JAN-14	28.25	Reconciled
344651		12-DEC-13	CHUN, JEDIDIAH		25.84	16-DEC-13	25.84	Reconciled
344652		12-DEC-13	CLEAN ENERGY		870.93			Negotiable
344653		12-DEC-13	CLEARINGHOUSE		528.45			Negotiable
344654		12-DEC-13	COAST PLUMBING HEATING AND AIR, INC		145.00	16-DEC-13	145.00	Reconciled
344655		12-DEC-13	COHEN, MELISSA		54.86			Negotiable
344656		12-DEC-13	COLE, GABE		71.36	31-DEC-13	71.36	Reconciled
344657		12-DEC-13	COMMERCIAL COATING RESOURCE INC		4,380.00	19-DEC-13	4,380.00	Reconciled
344658		12-DEC-13	CONEYBEARE INC		13,807.60	23-DEC-13	13,807.60	Reconciled
344659		12-DEC-13	CORELOGIC INC		12.00	19-DEC-13	12.00	Reconciled
344660		12-DEC-13	CORRPRO COMPANIES INC		1,595.00			Negotiable
344661		12-DEC-13	CR & R INCORPORATED		12.30	19-DEC-13	12.30	Reconciled
344662		12-DEC-13	CRYSTAL COVE ESTATES LLC		117.88			Negotiable
344663		12-DEC-13	DANG, DOAN TRANG		36.04	19-DEC-13	36.04	Reconciled
344664		12-DEC-13	DANG, DOANTIANG		44.36	19-DEC-13	44.36	Reconciled
344665		12-DEC-13	DISCOVERY SCIENCE CENTER		5,532.90			Negotiable
344666		12-DEC-13	DIVERSIFIED LANDSCAPE MANAGEMENT		599.67	16-DEC-13	599.67	Reconciled
344667		12-DEC-13	DRAEGER SAFETY INC		3,887.83	23-DEC-13	3,887.83	Reconciled
344668		12-DEC-13	EAGLE PRINT DYNAMICS		584.62	16-DEC-13	584.62	Reconciled
344669		12-DEC-13	EARTH CONSTRUCTION & MINING		558.86	03-JAN-14	558.86	Reconciled
344670		12-DEC-13	EDWARDS, SALLY		75.06	30-DEC-13	75.06	Reconciled
344671		12-DEC-13	EISEL ENTERPRISES INC		6,057.99	19-DEC-13	6,057.99	Reconciled
344672		12-DEC-13	EMPLOYEE BENEFIT SPECIALIST, INC		655.00			Negotiable

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 11
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344673		12-DEC-13	ENVIRONMENTAL EXPRESS INC		3,526.74	27-DEC-13	3,526.74	Reconciled
344674		12-DEC-13	ENVIRONMENTAL SCIENCE ASSOCIATES		21,780.87	23-DEC-13	21,780.87	Reconciled
344675		12-DEC-13	EVANTEC CORPORATION		836.18	17-DEC-13	836.18	Reconciled
344676		12-DEC-13	EXPRESSAIR		194.80	23-DEC-13	194.80	Reconciled
344677		12-DEC-13	FEDEX		154.38	17-DEC-13	154.38	Reconciled
344678		12-DEC-13	FERGUSON ENTERPRISES, INC.		605.91	16-DEC-13	605.91	Reconciled
344679		12-DEC-13	FERNANDEZ, CAROL		14.19	02-JAN-14	14.19	Reconciled
344680		12-DEC-13	FIRE EXTINGUISHING SAFETY & SERVICE		476.81	16-DEC-13	476.81	Reconciled
344681		12-DEC-13	FISHER SCIENTIFIC COMPANY LLC		10,533.58	20-DEC-13	10,533.58	Reconciled
344682		12-DEC-13	FRANCHISE TAX BOARD		797.88	17-DEC-13	797.88	Reconciled
344683		12-DEC-13	FROISSARD, NICOLAS		29.47	30-DEC-13	29.47	Reconciled
344684		12-DEC-13	GOSNEY, KEVIN		209.92	30-DEC-13	209.92	Reconciled
344685		12-DEC-13	GRAHAM, JO LYNN		32.87	30-DEC-13	32.87	Reconciled
344686		12-DEC-13	GRAINGER		6,866.54	20-DEC-13	6,866.54	Reconciled
344687		12-DEC-13	GULIFORD, Q		56.67			Negotiable
344688		12-DEC-13	GURIN, TAMRA		29.16	27-DEC-13	29.16	Reconciled
344689		12-DEC-13	HACH COMPANY		206.28			Negotiable
344690		12-DEC-13	HALL, DORIS J		240.09	23-DEC-13	240.09	Reconciled
344691		12-DEC-13	HANSON, JEFF		16.04	17-DEC-13	16.04	Reconciled
344692		12-DEC-13	HARRIS, BRIAN		68.12			Negotiable
344693		12-DEC-13	HARTSHORN, SHARON		15.00			Negotiable
344694		12-DEC-13	HDR ENGINEERING INC		103,609.15	19-DEC-13	103,609.15	Reconciled
344695		12-DEC-13	HILL BROTHERS CHEMICAL COMPANY		18,513.19	17-DEC-13	18,513.19	Reconciled
344696		12-DEC-13	HILL, DONNA		50.47	20-DEC-13	50.47	Reconciled
344697		12-DEC-13	HO, MARVIN - ACCT 10013551071		29.36			Negotiable
344698		12-DEC-13	HOANG, NAM		34.36			Negotiable
344699		12-DEC-13	HOME DEPOT USA INC		335.70	23-DEC-13	335.70	Reconciled
344700		12-DEC-13	HOPKINS TECHNICAL PRODUCTS INC		4,870.31	20-DEC-13	4,870.31	Reconciled
344701		12-DEC-13	IBM CORPORATION		1,133.77	16-DEC-13	1,133.77	Reconciled
344702		12-DEC-13	IDEXX DISTRIBUTION, INC		1,230.04	16-DEC-13	1,230.04	Reconciled
344703		12-DEC-13	INDUSTRIAL METAL SUPPLY CO		102.53	16-DEC-13	102.53	Reconciled
344704		12-DEC-13	INTERNAL REVENUE SERVICE		25.00			Negotiable
IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 12 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar) Payment Type: All Display Supplier Address: No								

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344705		12-DEC-13	IRVINE PACIFIC, LP		302.23	23-DEC-13	302.23	Reconciled
344706		12-DEC-13	IRVINE PIPE & SUPPLY INC		1,872.15	17-DEC-13	1,872.15	Reconciled
344707		12-DEC-13	IRWD EMPLOYEE ASSOCIATION		660.00			Negotiable
344708		12-DEC-13	JCI JONES CHEMICALS INC		3,348.27	23-DEC-13	3,348.27	Reconciled
344709		12-DEC-13	JENNETTE, REGINA		32.92	31-DEC-13	32.92	Reconciled
344710		12-DEC-13	JH REALTY & INVESTMENTS		79.18	03-JAN-14	79.18	Reconciled
344711		12-DEC-13	JOHN G. ALEVIZOS D.O. INC.		288.58	17-DEC-13	288.58	Reconciled
344712		12-DEC-13	KAO, ANDREW		29.96			Negotiable
344713		12-DEC-13	KAWAGUCHI, KENJI		21.59			Negotiable
344714		12-DEC-13	KEENER, KATHY		15.00			Negotiable
344715		12-DEC-13	KITZES, MARGARITA		13.19	03-JAN-14	13.19	Reconciled
344716		12-DEC-13	LABELLE-MARVIN INC		4,277.50	02-JAN-14	4,277.50	Reconciled
344717		12-DEC-13	LAI, MILDRED		15.00	23-DEC-13	15.00	Reconciled
344718		12-DEC-13	LEE, CINDY - ACCT 16013512153		21.18			Negotiable
344719		12-DEC-13	LEE, SOYOUNG		41.43			Negotiable
344720		12-DEC-13	LENNAR HOMES		44.23	20-DEC-13	44.23	Reconciled
344721		12-DEC-13	LILLESTRAND LEADERSHIP CONSULTING, INC.		1,875.84	20-DEC-13	1,875.84	Reconciled
344722		12-DEC-13	LIN, TINA		49.97			Negotiable
344723		12-DEC-13	LLAMAS, MARICELA		26.07			Negotiable
344724		12-DEC-13	LU'S LIGHTHOUSE, INC.		464.03	16-DEC-13	464.03	Reconciled
344725		12-DEC-13	LU, JOHNNY		26.50	17-DEC-13	26.50	Reconciled
344726		12-DEC-13	MACIAS, JULIO		72.06	16-DEC-13	72.06	Reconciled
344727		12-DEC-13	MAILFINANCE INC		9,931.08	23-DEC-13	9,931.08	Reconciled

344728	12-DEC-13	MAIN GRAPHICS	271.64	19-DEC-13	271.64	Reconciled
344729	12-DEC-13	MALDONADO, ELVIA	30.34			Negotiable
344730	12-DEC-13	MARTIN, MIKE	29.23			Negotiable
344731	12-DEC-13	MARVIN GARDENS LLC	326.80	13-DEC-13	326.80	Reconciled
344732	12-DEC-13	MASTRANGELO, ANTHONY	10.60	31-DEC-13	10.60	Reconciled
344733	12-DEC-13	MC MASTER CARR SUPPLY CO	263.53	19-DEC-13	263.53	Reconciled
344734	12-DEC-13	MCCALL'S METERS, INC.	21.51	20-DEC-13	21.51	Reconciled
344735	12-DEC-13	MCFARLANE, MICHELLE	62.41	16-DEC-13	62.41	Reconciled
344736	12-DEC-13	MCIVER, JESSICA	16.81	16-DEC-13	16.81	Reconciled
344737	12-DEC-13	MLADINEO, GLORIA	17.67	16-DEC-13	17.67	Reconciled

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch: Los Angeles Account: Checking AP and PR Page: 13
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344738		12-DEC-13	MOBILE MODULAR MANAGEMENT CORPORATION		972.00	17-DEC-13	972.00	Reconciled
344739		12-DEC-13	MOTION INDUSTRIES INC		393.32	16-DEC-13	393.32	Reconciled
344740		12-DEC-13	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		66,628.21	17-DEC-13	66,628.21	Reconciled
344741		12-DEC-13	MYERS & SONS HI-WAY SAFETY, INC.		3,657.96	17-DEC-13	3,657.96	Reconciled
344742		12-DEC-13	NATIONAL READY MIXED CONCRETE CO		423.36			Negotiable
344743		12-DEC-13	NCL OF WISCONSIN INC		56.67	24-DEC-13	56.67	Reconciled
344744		12-DEC-13	NEWAGE INDUSTRIES INC		184.08	17-DEC-13	184.08	Reconciled
344745		12-DEC-13	NGUYEN, PHOUNG		79.37	19-DEC-13	79.37	Reconciled
344746		12-DEC-13	NGUYEN, THU-QUYEN		14.59			Negotiable
344747		12-DEC-13	NOORY, STEVE		31.46	27-DEC-13	31.46	Reconciled
344748		12-DEC-13	OLIN CORPORATION		14,007.44	19-DEC-13	14,007.44	Reconciled
344749		12-DEC-13	ONESOURCE DISTRIBUTORS LLC		460.58	16-DEC-13	460.58	Reconciled
344750		12-DEC-13	ORACLE AMERICA, INC.		21,868.61	30-DEC-13	21,868.61	Reconciled
344751		12-DEC-13	ORANGE COUNTY AUTO PARTS CO		356.30	16-DEC-13	356.30	Reconciled
344752		12-DEC-13	ORANGE COUNTY FIRE AUTHORITY		721.00	17-DEC-13	721.00	Reconciled
344753		12-DEC-13	ORANGE COUNTY SHERIFF'S OFFICE		351.12	30-DEC-13	351.12	Reconciled
344754		12-DEC-13	OUTSOURCE TECHNICAL LLC		28,980.00			Negotiable
344755		12-DEC-13	PACIFIC GAS AND ELECTRIC COMPANY		23.43	19-DEC-13	23.43	Reconciled
344756		12-DEC-13	PARKHOUSE TIRE INC		4,234.99	17-DEC-13	4,234.99	Reconciled
344757		12-DEC-13	PAULUS ENGINEERING INC		25,715.55	17-DEC-13	25,715.55	Reconciled
344758		12-DEC-13	PENSION ADMINISTRATORS		224.27	16-DEC-13	224.27	Reconciled
344759		12-DEC-13	PERS LONG TERM CARE		852.57	17-DEC-13	852.57	Reconciled
344760		12-DEC-13	PHILLIPS PLYWOOD CO, INC.		418.69			Negotiable
344761		12-DEC-13	PONTON INDUSTRIES INC		2,095.59	19-DEC-13	2,095.59	Reconciled

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch: Los Angeles Account: Checking AP and PR Page: 14
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344762		12-DEC-13	PSB INTEGRATED MARKETING		2,710.00	17-DEC-13	2,710.00	Reconciled
344763		12-DEC-13	QUACH, CAN		10.28	24-DEC-13	10.28	Reconciled
344764		12-DEC-13	R&B AUTOMATION INC		600.00	16-DEC-13	600.00	Reconciled
344765		12-DEC-13	RAM AIR ENGINEERING INC		1,467.38	19-DEC-13	1,467.38	Reconciled
344766		12-DEC-13	RED WING SHOES		162.00	17-DEC-13	162.00	Reconciled
344767		12-DEC-13	REED THOMAS CO INC		836.87			Negotiable
344768		12-DEC-13	RGP CORPORATION		10.22	17-DEC-13	10.22	Reconciled
344769		12-DEC-13	RICCI REALTY		26.48			Negotiable
344770		12-DEC-13	RIGI, BETTY		23.66	23-DEC-13	23.66	Reconciled
344771		12-DEC-13	RINCON TRUCK CENTER INC.		478.59	16-DEC-13	478.59	Reconciled
344772		12-DEC-13	RINGCLEAR LLC		42.00			Negotiable

344773	12-DEC-13	ROUTLEY, WALTER	13.28	23-DEC-13	13.28	Reconciled
344774	12-DEC-13	SANDERS PAVING INC	31,975.00	03-JAN-14	31,975.00	Reconciled
344775	12-DEC-13	SANTA MARGARITA FORD	13.10	17-DEC-13	13.10	Reconciled
344776	12-DEC-13	SANTIAGO AQUEDUCT COMMISSION	9,078.75	19-DEC-13	9,078.75	Reconciled
344777	12-DEC-13	SAXTON, WAYNE	28.78	17-DEC-13	28.78	Reconciled
344778	12-DEC-13	SHEEHAN, FLORENCE	20.70			Negotiable
344779	12-DEC-13	SITEA, JOSH	89.25	16-DEC-13	89.25	Reconciled
344780	12-DEC-13	SO CAL SANDBAGS INC	638.93	23-DEC-13	638.93	Reconciled
344781	12-DEC-13	SOUTHERN CALIFORNIA EDISON COMPANY	22,701.08	16-DEC-13	22,701.08	Reconciled
344782	12-DEC-13	SPARKES, MYRTA	34.43	20-DEC-13	34.43	Reconciled
344783	12-DEC-13	SPARLING INSTRUMENTS LLC	183.73	16-DEC-13	183.73	Reconciled
344784	12-DEC-13	SPRIGGS, CHELIA	42.62			Negotiable
344785	12-DEC-13	STICE COMPANY INC	1,476.67	20-DEC-13	1,476.67	Reconciled
344786	12-DEC-13	TAYLOR, MIKE	31.26	30-DEC-13	31.26	Reconciled
344787	12-DEC-13	THE GAS COMPANY	3,769.10	19-DEC-13	3,769.10	Reconciled
344788	12-DEC-13	THOMAS HARDER & CO	1,985.00	20-DEC-13	1,985.00	Reconciled
344789	12-DEC-13	THORP, CAROL	25.84	27-DEC-13	25.84	Reconciled
344790	12-DEC-13	TROPICAL PLAZA NURSERY INC	2,321.22	16-DEC-13	2,321.22	Reconciled
344791	12-DEC-13	TRUCPARCO	621.67	23-DEC-13	621.67	Reconciled
344792	12-DEC-13	TRUGREEN LANDCARE LLC	480.00	16-DEC-13	480.00	Reconciled
344793	12-DEC-13	UNITED PARCEL SERVICE INC	46.18	19-DEC-13	46.18	Reconciled

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 15
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344794		12-DEC-13	UNITED SITE SERVICES OF CALIFORNIA INC		139.26	16-DEC-13	139.26	Reconciled
344795		12-DEC-13	UNIVAR USA INC		2,571.00	16-DEC-13	2,571.00	Reconciled
344796		12-DEC-13	US PEROXIDE LLC		26,780.77	20-DEC-13	26,780.77	Reconciled
344797		12-DEC-13	USA BLUEBOOK		14.71	19-DEC-13	14.71	Reconciled
344798		12-DEC-13	VALENCIA, ROBERTA		32.53	16-DEC-13	32.53	Reconciled
344799		12-DEC-13	VALLEY CREST COMPANIES		568.94			Negotiable
344800		12-DEC-13	WALKER, ESTHER		50.53	16-DEC-13	50.53	Reconciled
344801		12-DEC-13	WALTERS WHOLESALE ELECTRIC		2,241.51			Negotiable
344802		12-DEC-13	WANG, SPRING		33.16	16-DEC-13	33.16	Reconciled
344803		12-DEC-13	WASTE MANAGEMENT OF ORANGE COUNTY		1,709.83			Negotiable
344804		12-DEC-13	WATER QUALITY INC		700.00	17-DEC-13	700.00	Reconciled
344805		12-DEC-13	WATERLINE TECHNOLOGIES INC		4,560.00	16-DEC-13	4,560.00	Reconciled
344806		12-DEC-13	WATSON, GERALDINE		23.65	17-DEC-13	23.65	Reconciled
344807		12-DEC-13	WATTS, NATALIE		44.64			Negotiable
344808		12-DEC-13	WAXIE'S ENTERPRISES, INC		2,083.30			Negotiable
344809		12-DEC-13	WECK LABORATORIES INC		345.00	17-DEC-13	345.00	Reconciled
344810		12-DEC-13	WEIDEMANN, SONJA		24.42	19-DEC-13	24.42	Reconciled
344811		12-DEC-13	WESTERN EXTERMINATOR COMPANY		55.00	23-DEC-13	55.00	Reconciled
344812		12-DEC-13	WESTERN EXTERMINATOR COMPANY		7,283.00	02-JAN-14	7,283.00	Reconciled
344813		12-DEC-13	WILLIAMS, CAROLYN		26.46	16-DEC-13	26.46	Reconciled
344814		12-DEC-13	WIRELESS WATCHDOGS, LLC		928.00			Negotiable
344815		12-DEC-13	WORTHAM, TIFFANY		11.27			Negotiable
344816		12-DEC-13	WU, JUN		71.71	23-DEC-13	71.71	Reconciled
344817		12-DEC-13	YOX, ELAINE		59.76	17-DEC-13	59.76	Reconciled
344818		12-DEC-13	ZAICH, ANNA		50.65	03-JAN-14	50.65	Reconciled
344819		12-DEC-13	STATE BOARD OF EQUALIZATION	SACRAMENTO	56,700.00	20-DEC-13	56,700.00	Reconciled
344820		13-DEC-13	CALPERS	SACRAMENTO	83,928.56			Voided
344821		16-DEC-13	BEST BUY/CARL SPANGENBERG	IRVINE	2,143.57			Voided
344822		17-DEC-13	SOUTHERN CALIFORNIA EDISON COMPANY	IRVINE	509,808.46	23-DEC-13	509,808.46	Reconciled

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 16
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
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Payment Document : IRWD CHECK

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
344823		17-DEC-13	SOUTHERN CALIFORNIA EDISON COMPANY	IRVINE	29,961.97			Negotiable
344824		17-DEC-13	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	70,200.00	23-DEC-13	70,200.00	Reconciled
344825		18-DEC-13	KHARE, ANJALI & SHREEKANT	PURCHASE	12,493.73			Negotiable
344826		19-DEC-13	CALIFORNIA BANK & TRUST	SACRAMANTO	22,487.92	23-DEC-13	22,487.92	Reconciled
344827		19-DEC-13	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY	DANA POINT	65,853.50	30-DEC-13	65,853.50	Reconciled
344828		19-DEC-13	Carter, Cheryl L (Cheryl)		129.38	19-DEC-13	129.38	Reconciled
344829		19-DEC-13	Compton, Christine A		240.43	02-JAN-14	240.43	Reconciled
344830		19-DEC-13	Jackson, Gina C (Gina)		76.33	27-DEC-13	76.33	Reconciled
344831		19-DEC-13	La, Jason (Jason)		50.48	30-DEC-13	50.48	Reconciled
344832		19-DEC-13	Costantino, Joseph A (Joe)		148.00	20-DEC-13	148.00	Reconciled
344833		19-DEC-13	Michael Fites		120.00	20-DEC-13	120.00	Reconciled
344834		19-DEC-13	Owen O'Neill		200.00			Negotiable
344835		19-DEC-13	Swan, Peer		2,176.19	20-DEC-13	2,176.19	Reconciled
344836		19-DEC-13	Wang, Peter (Peter)		140.39	23-DEC-13	140.39	Reconciled
344837		19-DEC-13	Resendez, Ralph R (Ray)		340.00	23-DEC-13	340.00	Reconciled
344838		19-DEC-13	Tammy Norman		139.67	23-DEC-13	139.67	Reconciled
344839		19-DEC-13	Bonkowski, Thomas J (Thomas)		28.36	20-DEC-13	28.36	Reconciled
344840		19-DEC-13	ADAMS, DAVID		1,200.00			Negotiable
344841		19-DEC-13	AERATION INDUSTRIES INTERNATIONAL INC		18,850.00	26-DEC-13	18,850.00	Reconciled
344842		19-DEC-13	AKM CONSULTING ENGINEERS, INC.		58,780.00	02-JAN-14	58,780.00	Reconciled
344843		19-DEC-13	ALSTON & BIRD LLP		47.50	23-DEC-13	47.50	Reconciled
344844		19-DEC-13	AM LEONARD INC		633.74	24-DEC-13	633.74	Reconciled
344845		19-DEC-13	ANDERSONPENNA PARTNERS, INC		13,442.50	26-DEC-13	13,442.50	Reconciled
344846		19-DEC-13	AQUA-METRIC SALES COMPANY		106.93	24-DEC-13	106.93	Reconciled
344847		19-DEC-13	ARCADIS U.S., INC.		1,942.00	23-DEC-13	1,942.00	Reconciled

IRWD Ledger
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Payment Document : IRWD CHECK

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
344848		19-DEC-13	ARMORCAST PRODUCTS COMPANY		9,771.71	26-DEC-13	9,771.71	Reconciled
344849		19-DEC-13	AT&T		3,890.22	24-DEC-13	3,890.22	Reconciled
344850		19-DEC-13	AT&T		47.70	24-DEC-13	47.70	Reconciled
344851		19-DEC-13	ATHENS SERVICES		190.00	20-DEC-13	190.00	Reconciled
344852		19-DEC-13	ATHLETIC FIELD SPECIALISTS		6,500.00			Negotiable
344853		19-DEC-13	AUTOZONE PARTS, INC.		86.26	23-DEC-13	86.26	Reconciled
344854		19-DEC-13	BATTERIES PLUS AND BATTERIES PLUS BULBS		2,429.87	30-DEC-13	2,429.87	Reconciled
344855		19-DEC-13	BATTERIES PLUS AND BATTERIES PLUS BULBS		385.06	30-DEC-13	385.06	Reconciled
344856		19-DEC-13	BETA SYSTEMS SOFTWARE OF NORTH AMERICA INC		1,627.43	27-DEC-13	1,627.43	Reconciled
344857		19-DEC-13	BIGWIG MONSTER, LLC		4,500.00	19-DEC-13	4,500.00	Reconciled
344858		19-DEC-13	BIOMAGIC INC		11,348.27	27-DEC-13	11,348.27	Reconciled
344859		19-DEC-13	BIOMERIEUX INC		762.07	23-DEC-13	762.07	Reconciled
344860		19-DEC-13	BK FOUNTAIN WORKS		668.20	20-DEC-13	668.20	Reconciled
344861		19-DEC-13	BOBCAT COMPANY		29,650.98	31-DEC-13	29,650.98	Reconciled
344862		19-DEC-13	BOND LOGISTIX LLC		2,000.00	26-DEC-13	2,000.00	Reconciled
344863		19-DEC-13	C WELLS PIPELINE MATERIALS INC		81,294.36	02-JAN-14	81,294.36	Reconciled
344864		19-DEC-13	CALIFORNIA BARRICADE INC		3,407.77	02-JAN-14	3,407.77	Reconciled
344865		19-DEC-13	CAMERON-COLE, LLC		2,693.26	02-JAN-14	2,693.26	Reconciled
344866		19-DEC-13	CANON FINANCIAL SERVICES, INC		3,866.40	23-DEC-13	3,866.40	Reconciled
344867		19-DEC-13	CHAMPANPIRA, GUILTY		100.01			Negotiable
344868		19-DEC-13	CHEM TECH INTERNATIONAL INC		9,847.20	02-JAN-14	9,847.20	Reconciled
344869		19-DEC-13	CITY OF LAKE		33,546.94	31-DEC-13	33,546.94	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
			FOREST					
344870		19-DEC-13	CITY OF TUSTIN		612.72	20-DEC-13	612.72	Reconciled
344871		19-DEC-13	CLA-VAL COMPANY		2,562.75	27-DEC-13	2,562.75	Reconciled
344872		19-DEC-13	COMPUCOM SYSTEMS, INC.		11,904.80	26-DEC-13	11,904.80	Reconciled
344873		19-DEC-13	CONEYBEARE INC		4,467.00	02-JAN-14	4,467.00	Reconciled
344874		19-DEC-13	DALEY & HEFT LLP		6,383.37	31-DEC-13	6,383.37	Reconciled
344875		19-DEC-13	DATA CLEAN CORPORATION		513.25	24-DEC-13	513.25	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344876		19-DEC-13	ECOLOGY CONTROL INDUSTRIES		1,484.31	23-DEC-13	1,484.31	Reconciled
344877		19-DEC-13	EISEL ENTERPRISES INC		20,240.01	27-DEC-13	20,240.01	Reconciled
344878		19-DEC-13	EMPIRE PIPE CLEANING & EQUIPMENT INC		1,102.50	23-DEC-13	1,102.50	Reconciled
344879		19-DEC-13	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.		19,967.78	26-DEC-13	19,967.78	Reconciled
344880		19-DEC-13	EVANTEC CORPORATION		3,315.60	02-JAN-14	3,315.60	Reconciled
344881		19-DEC-13	EXECUTIVE LIGHTING & ELECTRIC		855.80	20-DEC-13	855.80	Reconciled
344882		19-DEC-13	FARRELL & ASSOCIATES		86.20	23-DEC-13	86.20	Reconciled
344883		19-DEC-13	FEDEX		137.29	23-DEC-13	137.29	Reconciled
344884		19-DEC-13	FENNEL, NATALIE		195.94	02-JAN-14	195.94	Reconciled
344885		19-DEC-13	FERGUSON ENTERPRISES, INC.		256.56	23-DEC-13	256.56	Reconciled
344886		19-DEC-13	FIRST CHOICE SERVICES		944.58	24-DEC-13	944.58	Reconciled
344887		19-DEC-13	FISERV		12,674.30	24-DEC-13	12,674.30	Reconciled
344888		19-DEC-13	FISHER SCIENTIFIC COMPANY LLC		1,648.64	23-DEC-13	1,648.64	Reconciled
344889		19-DEC-13	FLEET SOLUTIONS LLC		4,316.35	24-DEC-13	4,316.35	Reconciled
344890		19-DEC-13	FLW, INC.		3,453.05	20-DEC-13	3,453.05	Reconciled
344891		19-DEC-13	FRONTLINE MANAGEMENT INC		2,731.88	24-DEC-13	2,731.88	Reconciled
344892		19-DEC-13	FURLAN, SCOTT		115.10	02-JAN-14	115.10	Reconciled
344893		19-DEC-13	GANAHL LUMBER CO.		4,908.21	24-DEC-13	4,908.21	Reconciled
344894		19-DEC-13	GARCIA, KEITH		125.52	03-JAN-14	125.52	Reconciled
344895		19-DEC-13	GARZA INDUSTRIES, INC		1,381.97	20-DEC-13	1,381.97	Reconciled
344896		19-DEC-13	GLASKY, MICHELLE		497.05	24-DEC-13	497.05	Reconciled
344897		19-DEC-13	GORZOLKA, PETER		172.96			Negotiable
344898		19-DEC-13	GRAINGER		3,637.19	23-DEC-13	3,637.19	Reconciled
344899		19-DEC-13	GWAVA TECHNOLOGIES, INC.		2,096.00	31-DEC-13	2,096.00	Reconciled
344900		19-DEC-13	H2O INNOVATION USA INC		7,918.56	27-DEC-13	7,918.56	Reconciled
344901		19-DEC-13	HACH COMPANY		180.15	23-DEC-13	180.15	Reconciled
344902		19-DEC-13	HELP/SYSTEMS-IL, LLC		2,165.00	23-DEC-13	2,165.00	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344903		19-DEC-13	HILL BROTHERS CHEMICAL COMPANY		16,723.30	26-DEC-13	16,723.30	Reconciled
344904		19-DEC-13	HOME DEPOT USA INC		841.13	24-DEC-13	841.13	Reconciled
344905		19-DEC-13	IDEXX DISTRIBUTION, INC		6,005.47	30-DEC-13	6,005.47	Reconciled
344906		19-DEC-13	II FUELS INC		29,968.92	26-DEC-13	29,968.92	Reconciled
344907		19-DEC-13	INDUSTRIAL METAL SUPPLY CO		52.39	24-DEC-13	52.39	Reconciled
344908		19-DEC-13	INFOSYS LIMITED		547,200.00	30-DEC-13	547,200.00	Reconciled
344909		19-DEC-13	IRON MOUNTAIN INFORMATION MANAGEMENT INC		1,694.31	23-DEC-13	1,694.31	Reconciled
344910		19-DEC-13	IRVINE CHAMBER OF COMMERCE		1,000.00	03-JAN-14	1,000.00	Reconciled
344911		19-DEC-13	IRVINE PIPE & SUPPLY INC		4,935.42	20-DEC-13	4,935.42	Reconciled
344912		19-DEC-13	IRWD-PETTY CASH CUSTODIAN		1,387.02	23-DEC-13	1,387.02	Reconciled
344913		19-DEC-13	Irey, Janet K		663.65	19-DEC-13	663.65	Reconciled

344914	19-DEC-13	(Janet) JOE RHODES MAINT SERVICE INC	175.78	30-DEC-13	175.78	Reconciled
344915	19-DEC-13	JOHN CRANE, INC.	2,772.94	23-DEC-13	2,772.94	Reconciled
344916	19-DEC-13	JOHN G. ALEVIZOS D.O. INC.	255.00	24-DEC-13	255.00	Reconciled
344917	19-DEC-13	KAZARIANS & ASSOCIATES, INC.	177.00			Negotiable
344918	19-DEC-13	KEY INFORMATION SYSTEMS, INC.	12,996.25	27-DEC-13	12,996.25	Reconciled
344919	19-DEC-13	LA HABRA FENCE COMPANY INC	5,933.00	26-DEC-13	5,933.00	Reconciled
344920	19-DEC-13	LCS TECHNOLOGIES, INC.	10,750.00			Negotiable
344921	19-DEC-13	LEE & RO, INC.	58,313.15	27-DEC-13	58,313.15	Reconciled
344922	19-DEC-13	LEWIS OPERATING CORP	800.00	23-DEC-13	800.00	Reconciled
344923	19-DEC-13	LGC GEOTECHNICAL, INC.	495.00	23-DEC-13	495.00	Reconciled
344924	19-DEC-13	LILLESTRAND LEADERSHIP CONSULTING, INC.	1,286.80	02-JAN-14	1,286.80	Reconciled
344925	19-DEC-13	LUBRICATION ENGINEERS, INC.	2,203.54	23-DEC-13	2,203.54	Reconciled
344926	19-DEC-13	MARKET-THINK LLC	3,900.00	23-DEC-13	3,900.00	Reconciled
344927	19-DEC-13	MARVIN GARDENS LLC	2,593.70	19-DEC-13	2,593.70	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344928		19-DEC-13	MBF CONSULTING, INC.		9,380.00	26-DEC-13	9,380.00	Reconciled
344929		19-DEC-13	MC MASTER CARR SUPPLY CO		2,126.09	24-DEC-13	2,126.09	Reconciled
344930		19-DEC-13	MUTUAL PROPANE		38.72	24-DEC-13	38.72	Reconciled
344931		19-DEC-13	NATIONAL READY MIXED CONCRETE CO		1,104.84	24-DEC-13	1,104.84	Reconciled
344932		19-DEC-13	NOVELL INC		6,875.00	26-DEC-13	6,875.00	Reconciled
344933		19-DEC-13	OCTA		480.00	23-DEC-13	480.00	Reconciled
344934		19-DEC-13	OLIN CORPORATION		14,250.87	27-DEC-13	14,250.87	Reconciled
344935		19-DEC-13	ON ASSIGNMENT LAB SUPPORT		1,237.02	23-DEC-13	1,237.02	Reconciled
344936		19-DEC-13	ONESOURCE DISTRIBUTORS LLC		5,184.49	26-DEC-13	5,184.49	Reconciled
344937		19-DEC-13	ORANGE COUNTY AUTO PARTS CO		555.62	20-DEC-13	555.62	Reconciled
344938		19-DEC-13	ORANGE COUNTY TREASURER		322.50	23-DEC-13	322.50	Reconciled
344939		19-DEC-13	ORANGE COUNTY VECTOR CONTROL DISTRICT		1,986.51	31-DEC-13	1,986.51	Reconciled
344940		19-DEC-13	PARK, JEONGUK		15.08	30-DEC-13	15.08	Reconciled
344941		19-DEC-13	PARKHOUSE TIRE INC		837.82	24-DEC-13	837.82	Reconciled
344942		19-DEC-13	PARTY CITY CORPORATION		163.20			Negotiable
344943		19-DEC-13	PASCAL & LUDWIG CONSTRUCTORS		40,165.05	26-DEC-13	40,165.05	Reconciled
344944		19-DEC-13	PAULUS ENGINEERING INC		157,700.91	24-DEC-13	157,700.91	Reconciled
344945		19-DEC-13	POLLARDWATER.COM		114.62	24-DEC-13	114.62	Reconciled
344946		19-DEC-13	PRAXAIR DISTRIBUTION INC		1,222.67	24-DEC-13	1,222.67	Reconciled
344947		19-DEC-13	PRISM LTD		2,640.00			Negotiable
344948		19-DEC-13	PROBOLSKY RESEARCH LLC		47,500.00			Negotiable
344949		19-DEC-13	PSOMAS		1,289.34	30-DEC-13	1,289.34	Reconciled
344950		19-DEC-13	PTI SAND & GRAVEL INC		994.56	26-DEC-13	994.56	Reconciled
344951		19-DEC-13	PURE EFFECT INC		11,910.00	27-DEC-13	11,910.00	Reconciled
344952		19-DEC-13	R & S SOIL PRODUCTS INC		842.40	03-JAN-14	842.40	Reconciled
344953		19-DEC-13	R&B AUTOMATION INC		14,523.42	24-DEC-13	14,523.42	Reconciled
344954		19-DEC-13	RAM AIR ENGINEERING INC		18,429.84	26-DEC-13	18,429.84	Reconciled
344955		19-DEC-13	RBF CONSULTING		982.50	27-DEC-13	982.50	Reconciled
344956		19-DEC-13	RBF CONSULTING		29,887.66	30-DEC-13	29,887.66	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344957		19-DEC-13	RESPONSE ENVELOPE,		3,231.36	23-DEC-13	3,231.36	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
344958	19-DEC-13	INC	RINCON TRUCK CENTER INC.		2,472.68	20-DEC-13	2,472.68	Reconciled
344959	19-DEC-13	Sitzler, Roberta K (Roberta)			558.69	19-DEC-13	558.69	Reconciled
344960	19-DEC-13	RRM DESIGN GROUP			1,046.25	23-DEC-13	1,046.25	Reconciled
344961	19-DEC-13	SANTA ANA BLUE PRINT			488.27	20-DEC-13	488.27	Reconciled
344962	19-DEC-13	SANTA MARGARITA FORD			101.38	23-DEC-13	101.38	Reconciled
344963	19-DEC-13	SANTA MARGARITA WATER DISTRICT			3,278.33	23-DEC-13	3,278.33	Reconciled
344964	19-DEC-13	SECURTEC DISTRICT PATROL INC			2,100.00			Negotiable
344965	19-DEC-13	SHAMROCK SUPPLY CO INC			1,862.21	20-DEC-13	1,862.21	Reconciled
344966	19-DEC-13	SOUTH COAST WATER DISTRICT			7.14	27-DEC-13	7.14	Reconciled
344967	19-DEC-13	SOUTHERN CALIFORNIA EDISON COMPANY			283,197.94	23-DEC-13	283,197.94	Reconciled
344968	19-DEC-13	SOUTHERN COUNTIES LUBRICANTS LLC			2,892.86	20-DEC-13	2,892.86	Reconciled
344969	19-DEC-13	STANDARD & POOR'S FINANCIAL SERVICES LLC			3,500.00	23-DEC-13	3,500.00	Reconciled
344970	19-DEC-13	STATE NET			2,280.00	30-DEC-13	2,280.00	Reconciled
344971	19-DEC-13	SUN ENGINEERING SERVICES, INC			5,210.94	31-DEC-13	5,210.94	Reconciled
344972	19-DEC-13	TAYLOR MORRISON			568.36			Negotiable
344973	19-DEC-13	THE FURMAN GROUP			10,065.00	02-JAN-14	10,065.00	Reconciled
344974	19-DEC-13	THE GAS COMPANY			4,408.02	31-DEC-13	4,408.02	Reconciled
344975	19-DEC-13	TIC-IPG-COMMON			462.04			Negotiable
344976	19-DEC-13	Sinclair, Todd C (Todd)			2,142.86	20-DEC-13	2,142.86	Reconciled
344977	19-DEC-13	TRIPAC MARKETING INC			528.32	20-DEC-13	528.32	Reconciled
344978	19-DEC-13	TROPICAL PLAZA NURSERY INC			34,855.98	24-DEC-13	34,855.98	Reconciled
344979	19-DEC-13	TRUCPARCO			900.87	23-DEC-13	900.87	Reconciled
344980	19-DEC-13	TRUGREEN LANDCARE LLC			3,360.00	23-DEC-13	3,360.00	Reconciled
344981	19-DEC-13	TSAO, JANIE			1,318.88	24-DEC-13	1,318.88	Reconciled
344982	19-DEC-13	TYCO INTEGRATED SECURITY, LLC			3,252.44	27-DEC-13	3,252.44	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
344983	19-DEC-13	UNISAN PRODUCTS			703.46	23-DEC-13	703.46	Reconciled
344984	19-DEC-13	UNITED PARCEL SERVICE INC			51.25	23-DEC-13	51.25	Reconciled
344985	19-DEC-13	UNITED SITE SERVICES OF CALIFORNIA INC			458.67	26-DEC-13	458.67	Reconciled
344986	19-DEC-13	VERIZON CALIFORNIA INC			43.38	26-DEC-13	43.38	Reconciled
344987	19-DEC-13	VERIZON WIRELESS SERVICES LLC			723.98	24-DEC-13	723.98	Reconciled
344988	19-DEC-13	VILLA FORD			61,207.43	26-DEC-13	61,207.43	Reconciled
344989	19-DEC-13	VWR INTERNATIONAL, LLC			813.07	23-DEC-13	813.07	Reconciled
344990	19-DEC-13	WALTERS WHOLESALE ELECTRIC			17.47	30-DEC-13	17.47	Reconciled
344991	19-DEC-13	WECK LABORATORIES INC			3,625.00	20-DEC-13	3,625.00	Reconciled
344992	19-DEC-13	WESTERN EXTERMINATOR COMPANY			8,642.00			Negotiable
344993	19-DEC-13	WESTERN NATIONAL CONTRACTORS			604.86	24-DEC-13	604.86	Reconciled
344994	19-DEC-13	YORKE ENGINEERING LLC			4,892.96	23-DEC-13	4,892.96	Reconciled
344995	19-DEC-13	BOWIE, ARNESON, WILES & GIANNONE	PAY		19,047.83			Negotiable
344996	20-DEC-13	NAKHMANSO, ROMAN	IRVINE		5,000.00	20-DEC-13	5,000.00	Reconciled
344997	20-DEC-13	NAKHMANSO, ROMAN	IRVINE		5,000.00	20-DEC-13	5,000.00	Reconciled
344998	20-DEC-13	NAKHMANSO, ROMAN	IRVINE		4,763.94	20-DEC-13	4,763.94	Reconciled
344999	23-DEC-13	ANTHEM BLUE CROSS	LOS ANGELES		415.62			Negotiable
345000	23-DEC-13	ANTHEM BLUE CROSS	LOS ANGELES		2,012.80			Negotiable
345001	23-DEC-13	ANTHEM BLUE CROSS	LOS ANGELES		1,089.40			Negotiable
345002	23-DEC-13	UNITED STATES POST	IRVINE OFFICE		24,580.00	02-JAN-14	24,580.00	Reconciled
345003	23-DEC-13	AKM CONSULTING ENGINEERS, INC.			41,105.00	02-JAN-14	41,105.00	Reconciled

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345004	23-DEC-13	ALPHA TRAFFIC SERVICES, INC.	1,040.00	27-DEC-13	1,040.00	Reconciled
345005	23-DEC-13	ANDERSONPENNA PARTNERS, INC	27,327.50	26-DEC-13	27,327.50	Reconciled
345006	23-DEC-13	AT&T	49.93	30-DEC-13	49.93	Reconciled
345007	23-DEC-13	AT&T	15.78	30-DEC-13	15.78	Reconciled
345008	23-DEC-13	ATHENS SERVICES	8,517.60	24-DEC-13	8,517.60	Reconciled

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
345009		23-DEC-13	BELLEWICK COMMUNITY ASSOCIATION		175.00			Negotiable
345010		23-DEC-13	BIOMAGIC INC		5,593.86	27-DEC-13	5,593.86	Reconciled
345011		23-DEC-13	BIZAKIS, ANTHONY		11.20	26-DEC-13	11.20	Reconciled
345012		23-DEC-13	BRUCE NEWELL		1,316.00	26-DEC-13	1,316.00	Reconciled
345013		23-DEC-13	CALIFORNIA COUNCIL FOR ENVIRONMENTAL AND ECONOMIC BALANCE		10,000.00			Negotiable
345014		23-DEC-13	CDW GOVERNMENT LLC		1,499.00	30-DEC-13	1,499.00	Reconciled
345015		23-DEC-13	CITY OF NEWPORT BEACH		1,129.48			Negotiable
345016		23-DEC-13	COMMERCIAL COATING RESOURCE INC		3,100.00	03-JAN-14	3,100.00	Reconciled
345017		23-DEC-13	CONEYBEARE INC		7,680.13	02-JAN-14	7,680.13	Reconciled
345018		23-DEC-13	CREATIVE ALLIANCE GROUP LLC		4,564.36	30-DEC-13	4,564.36	Reconciled
345019		23-DEC-13	CREDENTIAL CHECK CORPORATION		54.00	30-DEC-13	54.00	Reconciled
345020		23-DEC-13	DCSE INC		5,200.00	24-DEC-13	5,200.00	Reconciled
345021		23-DEC-13	DM CONSTRUCTION SERVICES		775.19			Negotiable
345022		23-DEC-13	GRAINGER		141.10	30-DEC-13	141.10	Reconciled
345023		23-DEC-13	HACH COMPANY		1,486.79	30-DEC-13	1,486.79	Reconciled
345024		23-DEC-13	HARMSWORTH ASSOCIATES		7,085.00	02-JAN-14	7,085.00	Reconciled
345025		23-DEC-13	HDR ENGINEERING INC		5,720.00	26-DEC-13	5,720.00	Reconciled
345026		23-DEC-13	HOME DEPOT USA INC		249.04	30-DEC-13	249.04	Reconciled
345027		23-DEC-13	HSIEH, LAWRENCE		49.42	26-DEC-13	49.42	Reconciled
345028		23-DEC-13	IRVINE PIPE & SUPPLY INC		251.93	26-DEC-13	251.93	Reconciled
345029		23-DEC-13	JOHN G. ALEVIZOS D.O. INC.		180.00	02-JAN-14	180.00	Reconciled
345030		23-DEC-13	KAZARIANS & ASSOCIATES, INC.		713.50			Negotiable
345031		23-DEC-13	NURSERY PRODUCTS LLC		11,996.79	02-JAN-14	11,996.79	Reconciled
345032		23-DEC-13	OLIN CORPORATION		11,381.55	27-DEC-13	11,381.55	Reconciled
345033		23-DEC-13	ORTEGA, WILMA		98.93	26-DEC-13	98.93	Reconciled
345034		23-DEC-13	PAYNE & FEARS LLP		7,253.50	26-DEC-13	7,253.50	Reconciled
345035		23-DEC-13	PREMIER PAVING INC		716.11	24-DEC-13	716.11	Reconciled
345036		23-DEC-13	RICE, LARRY		4.41	31-DEC-13	4.41	Reconciled
345037		23-DEC-13	RRM DESIGN GROUP		1,028.75	30-DEC-13	1,028.75	Reconciled
345038		23-DEC-13	RUCCI, CHRISTY		32.26	02-JAN-14	32.26	Reconciled

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch: Los Angeles Account: Checking AP and PR Page: 24
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
345039		23-DEC-13	SEPARATION PROCESSES INC		6,055.90	02-JAN-14	6,055.90	Reconciled
345040		23-DEC-13	SETTERSTROM, JENNIFER		35.91			Negotiable
345041		23-DEC-13	SIRIUS COMPUTER SOLUTIONS INC		49,860.62	30-DEC-13	49,860.62	Reconciled
345042		23-DEC-13	SLATER BUILDERS INC.		828.40	30-DEC-13	828.40	Reconciled
345043		23-DEC-13	SPARKLETTES		159.41	30-DEC-13	159.41	Reconciled
345044		23-DEC-13	SS MECHANICAL CORPORATION		11,652.20	30-DEC-13	11,652.20	Reconciled
345045		23-DEC-13	SS MECHANICAL CORPORATION		221,391.80	26-DEC-13	221,391.80	Reconciled
345046		23-DEC-13	STOLLINGS, JOSEPH		6.16	03-JAN-14	6.16	Reconciled
345047		23-DEC-13	SUNG, MING-SENG		807.74			Negotiable
345048		23-DEC-13	TERNATE, OLIVER		939.36			Negotiable
345049		23-DEC-13	TRAFFIC CONTROL ENGINEERING, INC		8,000.00			Negotiable
345050		23-DEC-13	TROPICAL PLAZA NURSERY INC		1,763.54	24-DEC-13	1,763.54	Reconciled

345051	23-DEC-13	TRUGREEN LANDCARE LLC		32,100.00	26-DEC-13	32,100.00	Reconciled
345052	23-DEC-13	UNITED STATES POSTAL SERVICE		57.18	31-DEC-13	57.18	Reconciled
345053	23-DEC-13	VERIZON CALIFORNIA INC		232.92	02-JAN-14	232.92	Reconciled
345054	23-DEC-13	VWR INTERNATIONAL, LLC		353.16	30-DEC-13	353.16	Reconciled
345055	23-DEC-13	WECK LABORATORIES INC		1,893.00	26-DEC-13	1,893.00	Reconciled
345056	23-DEC-13	WESTERN EXTERMINATOR COMPANY		7,283.00	02-JAN-14	7,283.00	Reconciled
345057	23-DEC-13	WILDERMUTH ENVIRONMENTAL INC		1,208.75	27-DEC-13	1,208.75	Reconciled
345058	23-DEC-13	YANG, ALICIA		7.58			Negotiable
345059	27-DEC-13	IRWD EMPLOYEE ASSOCIATION	IRVINE	650.00			Negotiable
345060	27-DEC-13	PERS LONG TERM CARE	PASADENA	1,025.04	31-DEC-13	1,025.04	Reconciled
345061	27-DEC-13	CLEARINGHOUSE	PHOENIX	528.45	30-DEC-13	528.45	Reconciled
345062	27-DEC-13	INTERNAL REVENUE SERVICE	FRESNO	25.00			Negotiable
345063	27-DEC-13	FRANCHISE TAX BOARD	SACRAMENTO	797.88			Negotiable

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 25
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
345064		27-DEC-13	ORANGE COUNTY SHERIFF'S OFFICE	SANTA ANA	351.12			Negotiable
345065		27-DEC-13	JCI JONES CHEMICALS INC	CINCINNATI	5,505.50	30-DEC-13	5,505.50	Reconciled
Payment Document Subtotal:					6,128,002.39		5,711,960.33	

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
10206		09-DEC-13	CALPERS	SACRAMENTO	376,777.45			Negotiable
10207		05-DEC-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	11,181.42			Negotiable
10208		05-DEC-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	4,667.75			Negotiable
10209		13-DEC-13	CALPERS	SACRAMENTO	83,928.56			Negotiable
10210		13-DEC-13	INTERNAL REVENUE SERVICE	FRESNO	156,427.11			Negotiable
10211		13-DEC-13	FRANCHISE TAX BOARD	SACRAMENTO	43,347.46			Negotiable
10212		13-DEC-13	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	7,601.57			Negotiable
10213		13-DEC-13	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	500.17			Negotiable
10214		13-DEC-13	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,425.36			Negotiable
10215		13-DEC-13	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	9,932.20			Negotiable
10216		13-DEC-13	GREAT WEST	DENVER	79,145.18			Negotiable
10217		16-DEC-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	5,842.12			Negotiable
10218		16-DEC-13	J.R. FILANC CONSTRUCTION COMPANY INC.	ESCONDIDO	383,590.98			Negotiable
10219		16-DEC-13	FILANC-BALFOUR BEATTY JV	WEST COVINA	3,211,822.57			Negotiable
10220		16-DEC-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	4,964.27			Negotiable

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 26
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
10221		16-DEC-13	BANK OF NEW YORK MELLON TRUST	NEWARK	753.75			Voided

10222	16-DEC-13	COMPANY NA SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	753.75	Negotiable
10223	16-DEC-13	U.S. BANK NATIONALST. ASSOCIATION	LOUIS	2,416.45	Negotiable
10224	17-DEC-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	833.33	Negotiable
10225	17-DEC-13	BANK OF AMERICA MERRILL LYNCH	PAY	2,876.69	Negotiable
10226	17-DEC-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	11,529.63	Negotiable
10227	17-DEC-13	SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	2,056.77	Negotiable
10228	17-DEC-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	1,188.12	Negotiable
10229	26-DEC-13	FILANC-BALFOUR BEATY JV	WEST COVINA	3,076,594.26	Negotiable
10230	26-DEC-13	YORK INSURANCE SERVICES GROUP INC - CA	PAY	9,266.90	Negotiable
10231	26-DEC-13	INTERNAL REVENUE SERVICE	FRESNO	173,375.74	Negotiable
10232	26-DEC-13	FRANCHISE TAX BOARD	SACRAMENTO	48,305.78	Negotiable
10233	26-DEC-13	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	7,218.83	Negotiable
10234	26-DEC-13	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	500.17	Negotiable
10235	26-DEC-13	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,425.36	Negotiable
10236	26-DEC-13	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	9,344.39	Negotiable
10237	26-DEC-13	GREAT WEST	DENVER	74,464.30	Negotiable
10238	26-DEC-13	U.S. BANK NATIONALST. ASSOCIATION	LOUIS	7,992.91	Negotiable

IRWD Ledger Payment Register For 01-DEC-13 To 31-DEC-13 Report Date: 07-JAN-2014 08:36
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 27
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
10239		26-DEC-13	CITIGROUP GLOBAL MARKETS INC.	NEW YORK	893,293.80			Negotiable
10240		26-DEC-13	CITIGROUP GLOBAL MARKETS INC.	NEW YORK	601,326.88			Negotiable
10241		26-DEC-13	BANK OF AMERICA MERRILL LYNCH	PAY	601,327.23			Negotiable
10242		26-DEC-13	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	413,370.69			Negotiable
10243		27-DEC-13	CALPERS	SACRAMENTO	84,134.95			Negotiable
10244		31-DEC-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	104.17			Negotiable
10245		31-DEC-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	2,094.44			Negotiable
10246		31-DEC-13	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	9,659.72			Negotiable
10247		31-DEC-13	CALPERS	SACRAMENTO	83,525.79			Negotiable
Payment Document Subtotal:					10,502,888.97			
Bank Account Subtotal :					16,630,891.36		5,711,960.33	
Report Count : 694	Report Total:				16,630,891.36		5,711,960.33	

*** End of Report ***

Exhibit "E"

IRWD Gov Code 53065.5 Disclosure Report

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.
December 2013

NAME	CHECK	CHECK DATE	TRANSACTION	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Moeder, Jacob	344417	5-Dec-13	\$ 280.00	Membership/Certification	ASCE membership renewal
Reynoso, Pio	344420	5-Dec-13	\$ 300.00	Membership/Certification	SWRCB Grade III Renewal Fee
Torres, Richard P	344421	5-Dec-13	\$ 200.00	Other(Misc)	Safety shoes
Ocampo, Rudy	344422	5-Dec-13	\$ 120.00	Membership/Certification	Water Distribution Grade 3
Bonkowski, Leslie	344612	12-Dec-13	\$ 221.31	Other(Misc)	Meeting supplies
Bonkowski, Leslie	344612	12-Dec-13	\$ 1,385.67	Other(Misc)	Shadetree Partnership nursery event
Murphy, Alexander	344605	12-Dec-13	\$ 515.00	Registration Fee	Irvine City Adult Basketball league
Pan, Jenny	344610	12-Dec-13	\$ 166.88	Lodging	AP Annual Conf & Expo, Las Vegas, NV
Pan, Jenny	344610	12-Dec-13	\$ 166.88	Lodging	AP Annual Conf & Expo, Las Vegas, NV
Pan, Jenny	344610	12-Dec-13	\$ 166.88	Lodging	AP Annual Conf & Expo, Las Vegas, NV
Pan, Jenny	344610	12-Dec-13	\$ 220.00	Membership/Certification	APM Certification Reimbursement
Pan, Jenny	344610	12-Dec-13	\$ 530.00	Other(Misc)	APM Certification Reimbursement
Mortimer, Landon	344611	12-Dec-13	\$ 172.79	Other(Misc)	Safety shoes
Legault, Dan	344608	12-Dec-13	\$ 129.00	Other(Misc)	ASE Certification Reimbursement
Costantino, Joseph	344832	19-Dec-13	\$ 148.00	Membership/Certification	CWEA Membership Renewal Fee
Swan, Peer	344835	19-Dec-13	\$ 461.80	Airfare	ACWA Region 2 & 4 Program, Sacramento, CA
Swan, Peer	344835	19-Dec-13	\$ 413.80	Airfare	ACWA Board meeting, Sacramento, CA
Swan, Peer	344835	19-Dec-13	\$ 230.10	Lodging	ACWA Fall Conference, Los Angeles, CA
Swan, Peer	344835	19-Dec-13	\$ 230.10	Lodging	ACWA Fall Conference, Los Angeles, CA
Swan, Peer	344835	19-Dec-13	\$ 230.10	Lodging	ACWA Fall Conference, Los Angeles, CA
Swan, Peer	344835	19-Dec-13	\$ 230.10	Lodging	ACWA Fall Conference, Los Angeles, CA
Wang, Peter	344836	19-Dec-13	\$ 140.39	Other(Misc)	Safety shoes
Resendez, Ralph	344837	19-Dec-13	\$ 340.00	Membership/Certification	SWRCB Grade 5 Certificate Renewal Fee
Norman, Tammy	344838	19-Dec-13	\$ 139.67	Other(Misc)	Meeting supplies
O'Neill, Owen	344834	19-Dec-13	\$ 200.00	Other(Misc)	Safety shoes
Total			\$ 7,338.47		

DS
January 27, 2014
Prepared by: R. Bennett/J. Moeder
Submitted by: K. Burton *KLB*
Approved by: Paul Cook *[Signature]*

CONSENT CALENDAR

AMENDMENT TO THE AGREEMENT FOR RELOCATION OF THE MICHELSON PARK PLACE SEWER LIFT STATION

SUMMARY:

Staff requests that the Board authorize the General Manager to execute an Amendment to the Agreement for Relocation of the Michelson Park Place Sewer Lift Station, subject to non-substantive changes, confirming the mutual understandings of IRWD and LBA IV-PPI, LLC, a Delaware limited liability company (LBA) to allow the relocated lift station to include an expanded easement in favor of IRWD to accommodate a concrete wall footing and enhanced finishes that will be maintained by LBA.

BACKGROUND:

IRWD acquired the existing Michelson Park Place Sewer Lift Station from the Orange County Sanitation District in 2003. The existing lift station is located in Irvine, north of Michelson Drive between Carlson Avenue and Riparian View and is completely surrounded by LBA's Park Place property. On June 24, 2013, the Board approved an agreement with LBA to relocate the existing sewer lift station to the northeast corner of the Park Place property to facilitate LBA's desire to develop their property. The agreement includes no change in acreage and requires LBA to pay for all costs associated with designing and constructing the new facilities, dismantling the existing facilities, and paying an IRWD administrative fee equal to 10% of the construction cost. The location of the existing and proposed facilities is shown in Exhibit "A".

On January 3, 2014, LBA requested an amendment to the agreement to expand the new facility's easement in favor of IRWD in order to accommodate a concrete wall footing and to provide enhanced finishes at the new facility. The enhanced finishes include a colored plaster coated block wall, a green screen trellis system on the exterior of the block wall and wood slats on the entry gate. Staff and legal counsel reviewed the amendment, which requires the enhanced finishes be maintained by the developer, and if IRWD determines the developer has failed to maintain the enhanced finishes, requires the developer to reimburse IRWD for the cost to correct the condition or to remove or replace the enhanced finishes with IRWD's standard finishes. A copy of the amendment to the agreement is attached as Exhibit "B".

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

To the extent review under the California Environmental Quality Act (CEQA) is triggered, LBA will, at its sole cost and expense, include the construction of the new facilities and abandonment of the existing facilities in the CEQA documentation prepared for LBA's project necessitating

the relocation of the existing facilities. LBA shall be responsible, at its sole cost and expense, for implementing any mitigation measures as may be required under such documentation.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on January 21, 2014.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AMENDMENT TO THE AGREEMENT FOR RELOCATION OF THE MICHELSON PARK PLACE SEWER LIFT STATION, SUBJECT TO NON-SUBSTANTIVE CHANGES.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Amendment to the Agreement for Relocation of the Michelson Park Place Sewer Lift Station

Exhibit A Location Map

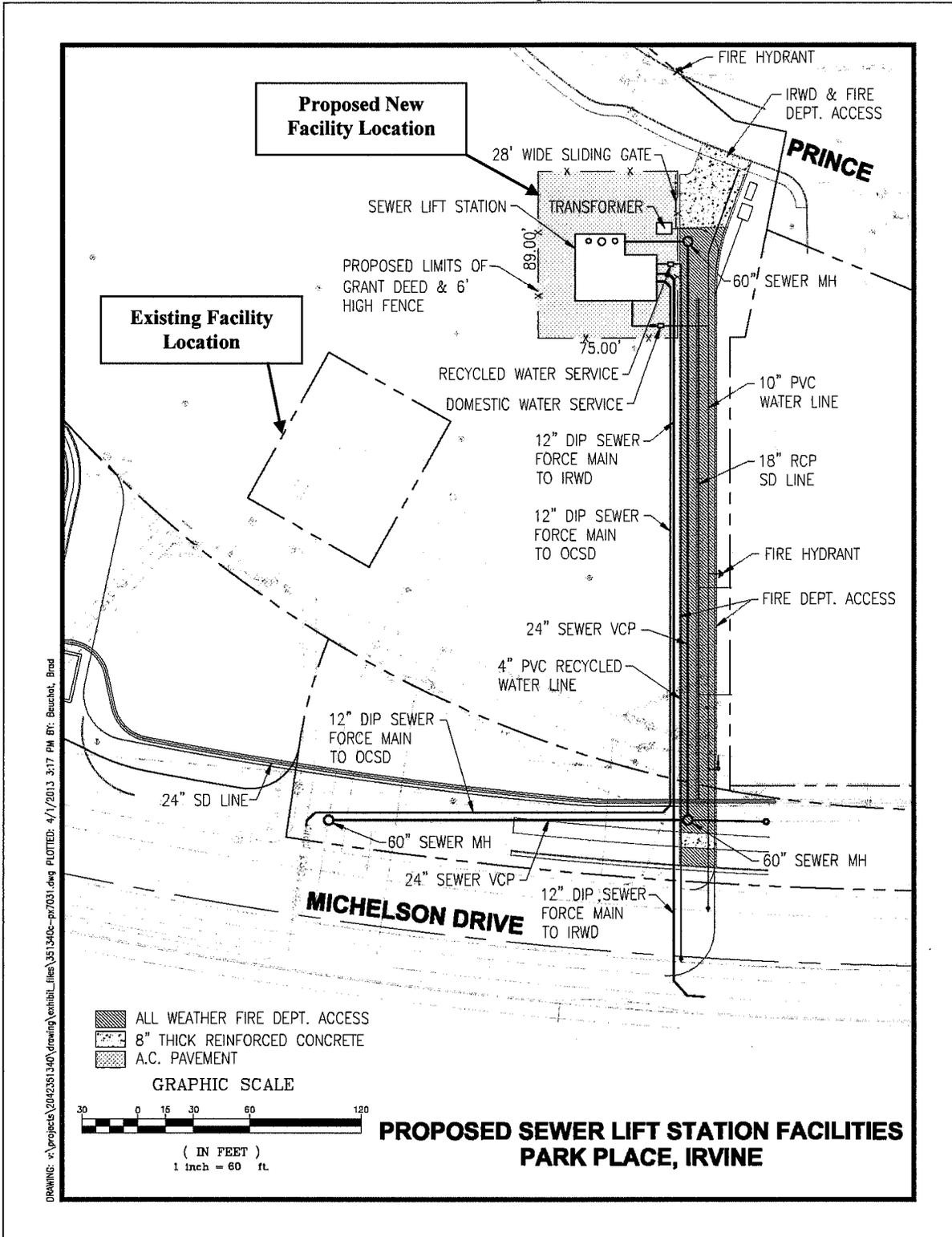


EXHIBIT "B"

**AMENDMENT TO AGREEMENT FOR RELOCATION OF
MICHELSON PARK PLACE SEWER LIFT STATION**

THIS AMENDMENT TO AGREEMENT FOR RELOCATION OF MICHELSON PARK PLACE SEWER LIFT STATION ("**Amendment**") is made and entered into as of this _____, 2014, by and between LBA IV– PPI, LLC, a Delaware limited liability company ("**Developer**") and IRVINE RANCH WATER DISTRICT, a California water district formed under and existing pursuant to Section 34000 et seq. of the California Water Code ("**IRWD**"), with respect to the following:

R E C I T A L S :

A. Developer and IRWD are parties to that certain Agreement for Relocation of Michelson Park Place Sewer Lift Station dated September 3, 2013 ("**Agreement**").

B. Developer and IRWD desire to amend the Agreement to replace an exhibit to the Agreement setting forth the description and depiction of an easement in favor of IRWD and to provide for Developer's maintenance of certain improvements on the New Site as further set forth herein.

C. Capitalized terms used but not otherwise defined herein shall have the meaning given to such terms in the Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto hereby agree to amend, modify and supplement the Agreement as follows:

1. Developer Maintenance of Enhanced Finishes. As part of the approval of Plans by IRWD pursuant to Section 2 of the Agreement, IRWD has conceptually approved the following enhanced finishes ("**Enhanced Finishes**") to the New Site on the condition that Developer maintains such Enhanced Finishes:

- Integral Colored Plaster Coating - on the interior of the 12' high block screen wall surrounding the proposed lift station.
- "GreenScreen" – welded wire trellis system and associated landscaping on the exterior of the screen wall surrounding the proposed lift station.
- The Entry Gate – maintain the entire entry gate including both the interior and exterior side wood slats of the gate as well as the framework of the gate.

The Enhanced Finishes shall be subject to IRWD's final approval through the Plan approval process.

2. Developer Maintenance Obligation. Developer hereby agrees to maintain, at its sole cost and expense, the Enhanced Finishes. If IRWD determines that DEVELOPER has failed to maintain the Enhanced Finishes or any portion thereof in a neat and clean condition, free of deterioration, after sixty (60) days' written notice by IRWD, IRWD may proceed to

correct the condition or to remove or replace the Enhanced Finish(es) with IRWD's standard finishes, and DEVELOPER agrees to reimburse IRWD for the cost thereof within thirty (30) days of receipt of invoice(s) therefor. If IRWD replaces the Enhanced Finish(es) with IRWD's standard finishes, IRWD shall thereafter assume the maintenance responsibility with respect thereto at its sole cost and expense. Developer may take steps to have the maintenance obligation for the Enhanced Finishes included as a common area obligation of the managing agent of the Park Place development, provided, however, DEVELOPER shall not be relieved of such obligation to IRWD except with IRWD's express written consent.

3. Exhibit 3. Exhibit 3-A and Exhibit 3-B attached to the Agreement are hereby amended and replaced in their entirety with Exhibit 3-A and Exhibit 3-B attached hereto.

4. Exhibit 4. The form Dedication Grant Deed attached as Exhibit 4 to the Agreement (except for Exhibit 4C, which remains unaffected by this Amendment) is hereby amended and replaced in its entirety with Exhibit 4 attached hereto.

5. Access and Entry. Section 5.3 of the Agreement contemplates that LBA has fully investigated the Existing Site prior to the Acceptance Date and Section 5.4 contemplates that IRWD has fully investigated the New Site prior to the Acceptance Date. LBA hereby grants IRWD the right to enter upon the New Site to perform such investigation and IRWD hereby grants LBA the right to enter onto the Existing Site to perform such investigation. Such right of entry shall extend to the employees, contractors, consultants, agents of each party hereto and to the potential buyer of the apartment site that shall ultimately include the Existing Site. The entering party shall: (1) provide the underlying owner with advanced notice of such entry, which entry shall occur during normal business hours, (2) prior to such entry, provide satisfactory evidence of general liability insurance (in the amount of at least Two Million Dollars (\$2,000,000) per occurrence, Two Million Dollars (\$2,000,000) aggregate) naming the underlying owner as an additional insured, (3) not conduct any drilling, test borings or other disturbance of the property of the underlying owner without the underlying owner's prior written consent, which shall not be unreasonably withheld, and if approved, the entering party shall restore such property to its original condition immediately thereafter, and (4) indemnify, defend and hold harmless the underlying owner from all costs, loss, damages or expenses of any kind or nature arising out of or resulting from any entry and/or activities upon the property of the underlying owner by the entering party and/or its agents, employees, contractors or consultants; provided, however, such indemnification obligation shall not be applicable to the entering party's mere discovery of any pre existing adverse physical condition at such property except to the extent aggravated by such entering party.

6. Miscellaneous.

(a) Effect of Amendment. Except to the extent the Agreement is modified by this Amendment, the remaining terms and conditions of the Agreement shall remain unmodified and in full force and effect. In the event of any conflict between the terms and conditions of the Agreement and the terms and conditions of this Amendment, the terms and conditions of this Amendment shall prevail and control.

(b) Entire Agreement. The Agreement, together with this Amendment, embodies the entire understanding between the parties hereto with respect to its subject matter and can be changed only by an instrument in writing signed by the parties hereto.

(c) Counterparts. This Amendment may be executed in one or more counterparts, including the transmission of counterparts by facsimile or electronic mail, each of which shall be deemed an original but all of which, taken together, shall constitute one in the same Amendment.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the day and year first-above written.

<u>IRWD</u>	<u>DEVELOPER</u>
<p>IRVINE RANCH WATER DISTRICT, a California water district</p> <p>By: _____ Paul Cook General Manager</p>	<p>LBA IV-PPI, LLC, a Delaware limited liability company</p> <p>By: LBA REIT IV, LLC, a Delaware limited liability company its Sole Member and Manager</p> <p>By: LBA Realty Fund IV, L.P., a Delaware limited partnership, its Manager</p> <p>By: LBA Management Company IV, LLC, a Delaware limited liability company its General Partner</p> <p>By: LBA Realty LLC, a Delaware limited liability company its Manager</p> <p>By: LBA Inc., a California corporation its Managing Member</p> <p>By: _____ Name: _____ Title: _____</p>

EXHIBIT 3-A

LEGAL DESCRIPTION OF THE EASEMENTS

THOSE PORTIONS OF PARCELS 2D AND 4D OF LOT LINE ADJUSTMENT 579285-LL, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, RECORDED OCTOBER 22, 2013 AS INSTRUMENT NO. 2013000592491 OF OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF A LINE PARALLEL WITH AND 10.00 FEET WESTERLY OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF "SOUTH 03°37'34" WEST, 256.87 FEET" ALONG THE COMMON LINE BETWEEN SAID PARCELS 2D AND 4D WITH A LINE PARALLEL WITH AND 5.00 FEET SOUTHERLY OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF "SOUTH 86°22'26" EAST, 1.00 FEET" ALONG SAID COMMON LINE BETWEEN PARCELS 2D AND 4D;

THENCE, ALONG SAID PARALLEL LINE, NORTH 86°22'26" WEST, 71.00 FEET;

THENCE, TRAVERSING THE INTERIOR OF SAID PARCEL 2D, THE FOLLOWING COURSES:

NORTH 03°37'34" EAST, 99.00 FEET;

SOUTH 86°22'26" EAST, 95.00 FEET TO A LINE PARALLAL WITH AND 5.00 FEET EASTERLY OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF "SOUTH 03°37'34" WEST, 89.00 FEET" ALONG THE COMMON LINE BETWEEN SAID PARCELS 2D AND 4D;

THENCE, ALONG SAID PARALLEL LINE, SOUTH 03°37'34" WEST, 45.15 FEET;

THENCE, TRAVERSING THE INTERIOR OF SAID PARCEL 4D, THE FOLLOWING COURSES:

SOUTH 86°22'26" EAST, 8.21 FEET;

NORTH 22°29'57" EAST, 39.34 FEET;

SOUTH 67°30'03" EAST, 16.00 FEET;

SOUTH 22°29'57" WEST, 44.52 FEET;

SOUTH 03°37'34" WEST, 9.74 FEET;

SOUTH 86°22'26" EAST, 7.51 FEET;

SOUTH 03°37'34" WEST, 10.00 FEET;

NORTH 86°22'26" WEST, 7.51 FEET TO A LINE PARALLEL WITH AND 20.00 FEET EASTERLY OF SAID CERTAIN COURSE HAVING A BEARING AND DISTANCE OF "SOUTH 03°37'34" WEST, 256.87 FEET" ALONG THE COMMON LINE BETWEEN PARCELS 2D AND 4D;

ALONG SAID PARALLEL LINE, SOUTH 03°37'34" WEST, 142.22 FEET;

SOUTH 86°22'26" EAST, 7.33 FEET TO THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF "NORTH 03°37'34" EAST, 239.33 FEET" ALONG THE COMMON LINE BETWEEN SAID PARCEL 2D AND PARCEL 3 OF LOT LINE ADJUSTMENT 308965-LL, IN SAID CITY OF IRVINE, RECORDED MARCH 20, 2002 AS INSTRUMENT NO. 20020229144 OF OFFICIAL RECORDS, IN SAID OFFICE OF THE COUNTY RECORDER;

THENCE, ALONG SAID COMMON LINE BETWEEN PARCEL 2D AND PARCEL 3,
SOUTH 03°37'34" WEST, 10.00 FEET;

THENCE, TRAVERSING THE INTERIOR OF SAID PARCEL 4D, THE FOLLOWING COURSES;

NORTH 86°22'26" WEST, 7.33 FEET TO SAID LINE PARALLEL WITH AND 20.00
FEET EASTERLY OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF
"SOUTH 03°37'34" WEST, 256.87 FEET" ALONG THE COMMON LINE BETWEEN
PARCELS 2D AND 4D;

ALONG SAID PARALLEL LINE, SOUTH 03°37'34" WEST, 80.76 FEET;

SOUTH 86°22'26" EAST, 7.33 FEET TO SAID COMMON LINE BETWEEN PARCEL 2D
AND PARCEL 3;

THENCE, ALONG SAID COMMON LINE BETWEEN PARCEL 2D AND PARCEL 3,
SOUTH 03°37'34" WEST, 10.00 FEET;

THENCE, TRAVERSING THE INTERIOR OF SAID PARCEL 4D, THE FOLLOWING COURSES;

NORTH 86°22'26" WEST, 7.33 FEET TO SAID LINE PARALLEL WITH AND 20.00
FEET EASTERLY OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF
"SOUTH 03°37'34" WEST, 256.87 FEET" ALONG THE COMMON LINE BETWEEN
PARCELS 2D AND 4D;

ALONG SAID PARALLEL LINE, SOUTH 03°37'34" WEST, 36.14 FEET TO THE
SOUTHERLY LINE OF SAID LOT LINE ADJUSTMENT 579285-LL AND THE BEGINNING
OF A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 2427.00
FEET AND TO WHICH A RADIAL LINE BEARS NORTH 07°01'45" EAST;

THENCE, WESTERLY 115.30 FEET ALONG SAID CURVE AND SAID SOUTHERLY LINE OF LOT
LINE ADJUSTMENT 579285-LL THROUGH A CENTRAL ANGLE OF 02°43'19" TO A
NON-TANGENT LINE TO WHICH A RADIAL LINE BEARS SOUTH 09°45'04" WEST;

THENCE, TRAVERSING THE INTERIOR OF SAID PARCEL 2D, THE FOLLOWING COURSES:

ALONG SAID NON-TANGENT LINE, SOUTH 86°22'26" EAST, 84.89 FEET TO SAID
LINE PARALLEL WITH AND 10.00 FEET WESTERLY OF THAT CERTAIN COURSE
HAVING A BEARING AND DISTANCE OF "SOUTH 03°37'34" WEST, 256.87 FEET"
ALONG THE COMMON LINE BETWEEN PARCELS 2D AND 4D;

ALONG SAID PARALLEL LINE, NORTH 03°37'34" EAST, 243.57 FEET TO THE
POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION OF SAID PARCEL 2D DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHERLY TERMINUS OF THAT CERTAIN COURSE HAVING A BEARING
AND DISTANCE OF "SOUTH 03°37'34" WEST, 89.00 FEET" IN THE EASTERLY LINE OF
SAID PARCEL 2D;

THENCE, ALONG SAID CERTAIN COURSE, SOUTH 03°37'34" WEST, 89.00 FEET TO THE
SOUTHERLY TERMINUS OF SAID CERTAIN COURSE;

THENCE, TRAVERSING THE INTERIOR OF SAID PARCEL 2D, THE FOLLOWING COURSES:

NORTH 86°22'26" WEST, 75.00 FEET;

NORTH 03°37'34" EAST, 89.00 FEET;

SOUTH 86°22'26" EAST, 75.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 11,121 SQUARE FEET, MORE OR LESS.

ALSO AS SHOWN ON EXHIBIT "3" ATTACHED HERETO AND HEREBY MADE A PART HEREOF.

SUBJECT TO COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS, AND RIGHTS-OF-WAY OF RECORD, IF ANY.



PREPARED BY: STANTEC CONSULTING INC.
UNDER THE DIRECTION OF:

James O. Steines
JAMES O. STEINES, P.L.S. 6086

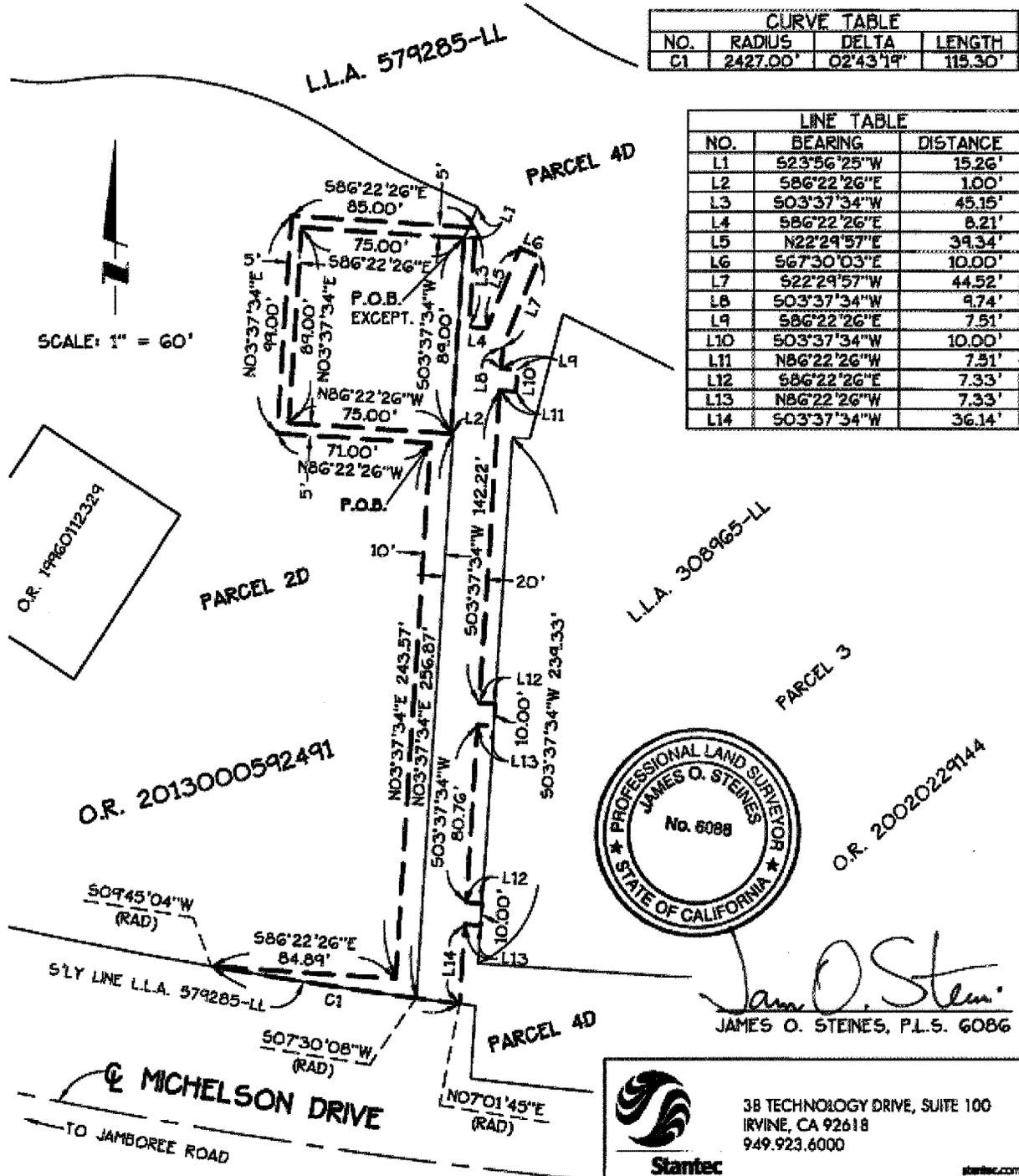
DECEMBER 2, 2013
J.N. 2042 351357

EXHIBIT 3-B

DEPICTION OF THE EASEMENTS

PORTIONS OF PARCEL 2D AND 4D OF
 LOT LINE ADJUSTMENT 579285-LL, O.R. 2013000592491,
 IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

DEPICTION OF THE EASEMENT



CURVE TABLE			
NO.	RADIUS	DELTA	LENGTH
C1	2427.00'	02°43'19"	115.30'

LINE TABLE		
NO.	BEARING	DISTANCE
L1	S23°56'25"W	15.26'
L2	S86°22'26"E	1.00'
L3	S03°37'34"W	45.15'
L4	S86°22'26"E	8.21'
L5	N22°29'57"E	39.34'
L6	S67°30'03"E	10.00'
L7	S22°29'57"W	44.52'
L8	S03°37'34"W	9.74'
L9	S86°22'26"E	7.51'
L10	S03°37'34"W	10.00'
L11	N86°22'26"W	7.31'
L12	S86°22'26"E	7.33'
L13	N86°22'26"W	7.33'
L14	S03°37'34"W	36.14'



James O. Steines
 JAMES O. STEINES, P.L.S. 6088

38 TECHNOLOGY DRIVE, SUITE 100
 IRVINE, CA 92618
 949.923.6000
 stantec.com

V:\projects\2042351340\DRAWING\EXHIBIT...FILES\351340V-7401MX.dwg

J.N. 2042 351357 | DATE: 12/2/13

EXHIBIT 4

Form of Grant Deed with Description and Depiction of the New Site (Sections 1.9; 5.1(i))

[See Attached]

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

Irvine Ranch Water District
15600 Sand Canyon Ave.
P.O. Box 57000
Irvine, CA 92619-7000
Attn: General Manager

APN: Portion of 445-211-43

[SPACE ABOVE FOR RECORDER'S USE ONLY]

DEDICATION GRANT DEED

THE UNDERSIGNED GRANTOR DECLARES AS FOLLOWS:

The undersigned declares that this Dedication Grant Deed is exempt from Recording Fees pursuant to California Government Code Section 27383 and exempt from Documentary Transfer Tax pursuant to California Revenue and Taxation Code Section 11922.

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged LBA IV- PPI, LLC, a Delaware limited liability company ("Grantor") hereby grants to IRVINE RANCH WATER DISTRICT, a California water district formed under and existing pursuant to Section 34000 et seq. of the California Water Code ("Grantee"), certain real property located in the City of Irvine, County of Orange, State of California, more particularly described on Exhibit A attached hereto and depicted on Exhibit B attached hereto and incorporated herein by reference.

EXCEPTING FROM AND RESERVING UNTO GRANTOR, its successors and assigns (including, without limitation, the Managing Agent under that certain that certain Construction, Operation and Reciprocal Easement Agreement dated July 26, 1985 and recorded in the Official Records of Orange County as instrument number 85-279768, as amended), an easement for access onto the property conveyed hereunder to maintain, repair, and replace the following enhanced finishes:

- Integral Colored Plaster Coating - on the interior of the 12' high block screen wall surrounding the lift station.
- "GreenScreen" – welded wire trellis system and associated landscaping on the exterior of the screen wall surrounding the lift station.
- The Entry Gate – maintain the entire entry gate including both the interior and exterior side wood slats of the gate as well as the framework of the gate.

SUBJECT TO:

1. All matters of record.
2. All of the covenants, conditions, and restrictions of Grantee contained in that certain Agreement for Relocation of Michelson Park Place Sewer Lift Station dated September 3, 2013, as amended, which expressly incorporates certain provisions of 1990 Agreement (collectively, "**Agreement**"), which are hereby incorporated by reference in this Dedication Grant Deed. Such covenants, conditions, and restrictions include, but are not limited to, the following:

a. The New Facilities (as defined in the Agreement) to be constructed by Grantor and maintained by Grantee on the Property, shall not exceed a height of thirty-two feet (32') above mean sea level at any time except for the facilities' antenna which is expected to be approximately 25 feet above the ground elevation of the site.

b. Grantee shall keep and maintain the New Facilities and all related improvements constructed on the Property up to their original installation standard, and shall perform promptly and diligently all work and repairs thereon in a good and workmanlike manner, and in accordance with all applicable governmental laws and regulations.

c. The Property shall be used for the construction and operation of the New Facilities only, together with such uses as are incidental thereto. The Property shall not be used for any other purpose, including without limitation, the parking, storage, and/or maintenance of motor vehicles or other equipment outside of the Pump Facility unless the same is necessary for the emergency or scheduled maintenance and repair of the Pump Facility.

d. If (i) the Property (as defined in the Agreement) is not used for sewage pump facility purposes for a period of longer than one (1) year, and/or (ii) if Grantee is in breach of, or otherwise fails to comply with any of the covenants, conditions, and restrictions set forth in the Agreement, including without limitation the covenants, conditions and restrictions contained in this Paragraph 2 of this Dedication Grant Deed, Grantor, in addition to whatever remedies it may have in the Agreement, at law or in equity, shall have the right, but not the obligation, to re-enter and take possession of the Property and all improvements thereon, or any part thereof, and to terminate and re-vest in Grantor the Property as conveyed to Grantee.

e. The easements, covenants, conditions and restrictions reserved and contained in the Agreement and in this Dedication Grant Deed shall run with the land and shall burden the Property, Grantee, and all successors of Grantee to all or any portion of the Property, Grantee, and all successors or Grantee to all or any portion of the Property, for the benefit of the real property legally described on **Exhibit C** attached hereto and incorporated herein by reference (the "**Benefitted Property**"), and Grantor, and all successors of Grantor to all or any part of the Benefitted Property, and all present and future owners of all or any portion of the Benefitted Property.

[Signature Page Follows]

IN WITNESS WHEREOF, Grantor has executed this Dedication Grant Deed as of the date set forth below.

<p>Dated: _____, 2014</p>	<p>LBA IV-PPI, LLC, a Delaware limited liability company</p> <p>By: LBA REIT IV, LLC, a Delaware limited liability company its Sole Member and Manager</p> <p>By: LBA Realty Fund IV, L.P., a Delaware limited partnership, its Manager</p> <p>By: LBA Management Company IV, LLC, a Delaware limited liability company its General Partner</p> <p>By: LBA Realty LLC, a Delaware limited liability company its Manager</p> <p>By: LBA Inc., a California corporation its Managing Member</p> <p>By: _____ Name: _____ Title: _____</p>
---------------------------	---

ACKNOWLEDGMENT

State of California)
County of _____)

On _____, before me, _____,
(insert name of notary)

Notary Public, personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

IRVINE RANCH WATER DISTRICT
CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by deed or grant dated _____
from _____ LBA IV- PPI, LLC, a Delaware limited liability company _____
_____ to IRVINE RANCH WATER DISTRICT, a California Water District, is hereby
accepted by the undersigned officer on behalf of the Board of Directors pursuant to authority
conferred by Resolution 1965-36 of the Board of Directors, adopted on October 6, 1965, and the
grantee consents to recordation thereof by its duly authorized officer.

Date: _____

IRVINE RANCH WATER DISTRICT

By: _____
Leslie Bonkowski
Secretary to Board of Directors

EXHIBIT 4-A

LEGAL DESCRIPTION OF THE PROPERTY

THAT PORTION OF PARCEL 2D OF LOT LINE ADJUSTMENT 579285-LL, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, RECORDED OCTOBER 22, 2013 AS INSTRUMENT NO. 2013000592491, OF OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHERLY TERMINUS OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF "SOUTH 03°37'34" WEST, 89.00 FEET" IN THE EASTERLY LINE OF SAID PARCEL 2D;

THENCE, ALONG SAID CERTAIN COURSE, SOUTH 03°37'34" WEST, 89.00 FEET TO THE SOUTHERLY TERMINUS OF SAID CERTAIN COURSE;

THENCE, TRAVERSING THE INTERIOR OF SAID PARCEL 2D, THE FOLLOWING COURSES:

NORTH 86°22'26" WEST, 75.00 FEET;

NORTH 03°37'34" EAST, 89.00 FEET;

SOUTH 86°22'26" EAST, 75.00 FEET TO THE POINT OF BEGINNING.

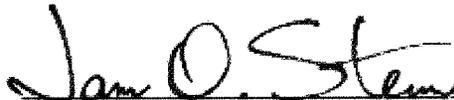
CONTAINING 6675 SQUARE FEET, MORE OR LESS.

ALSO AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND HEREBY MADE A PART HEREOF.

SUBJECT TO COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS, AND RIGHTS-OF-WAY OF RECORD, IF ANY.



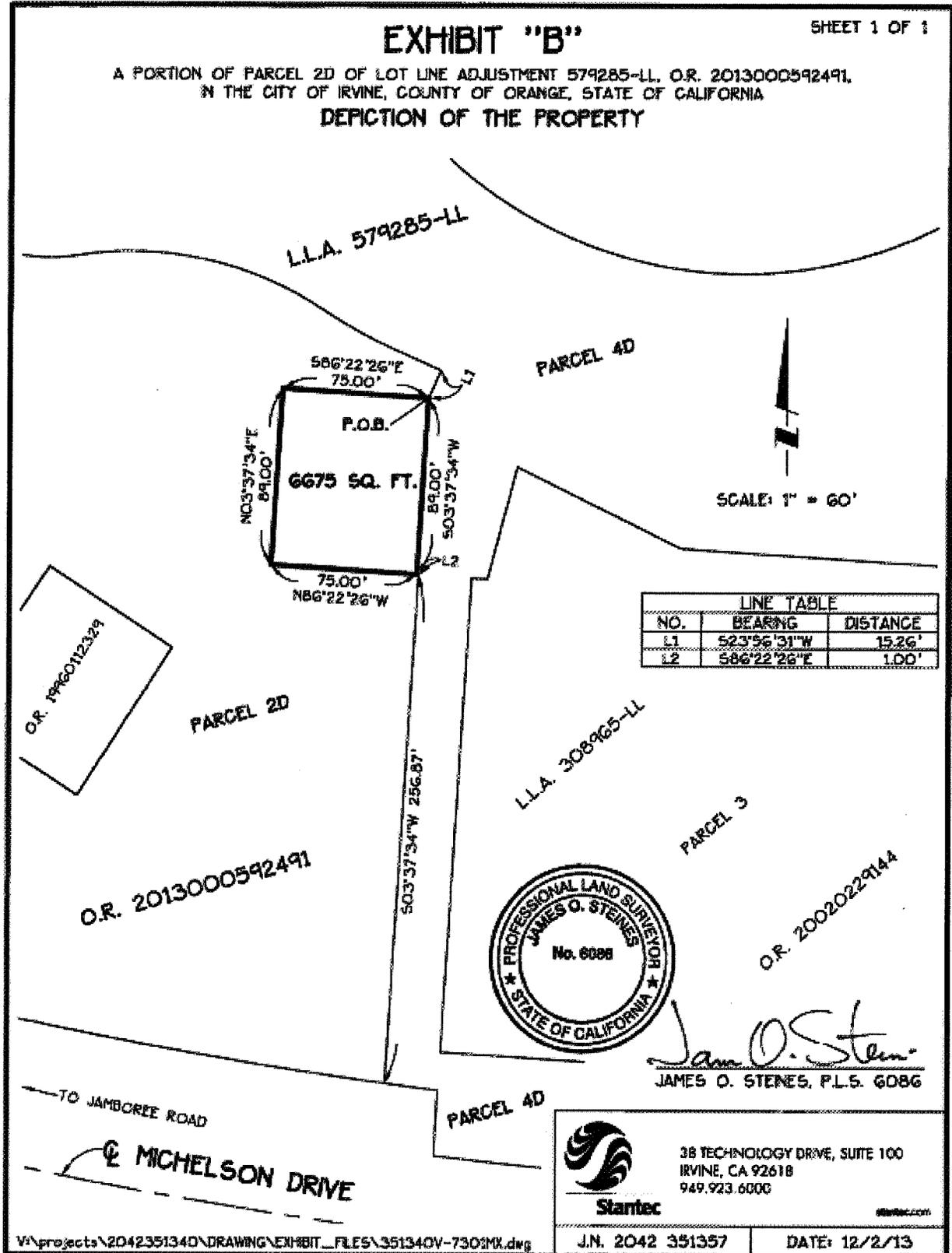
PREPARED BY: STANTEC CONSULTING INC.
UNDER THE DIRECTION OF:


JAMES O. STEINES, P.L.S. 6086

DECEMBER 2, 2013
J.N. 2042 351357

EXHIBIT 4-B

DEPICTION OF THE PROPERTY



DB
January 27, 2014 *ga*
Prepared by: R. Thatcher/M. Hoolihan *MMS*
Submitted by: K. Burton *KB*
Approved by: Paul Cook *PC*

CONSENT CALENDAR

QUITCLAIM OF REAL PROPERTY
IRVINE COMMUNITY DEVELOPMENT COMPANY LLC
WATER AND RECYCLED WATER PIPELINE AND ACCESS EASEMENT PER INST. NO.
19960010567, O.R. LYING WITHIN PROPOSED
TRACT NOS. 16719, 16722, AND 17015
ORCHARD HILLS

SUMMARY:

Staff recommends that the Board adopt a resolution approving the execution of a quitclaim deed to the Irvine Community Development Company LLC (ICDC) quitclaiming a portion of the existing easement for water and recycled water purposes granted per deed recorded January 8, 1996 as Inst. No. 19960010567 of Official Records of Orange County within the Orchard Hills development in Irvine.

BACKGROUND:

ICDC is subdividing a portion of its Orchard Hills development into Tract Nos. 16719, 16722, and 17015. As part of the mapping of these subdivisions and to clear title, ICDC has asked IRWD to quitclaim a portion of the easement for water and recycled water purposes granted to IRWD per deed recorded January 8, 1996 as Instrument No. 19960010567 of Official Records of Orange County. The portion to be quitclaimed is bounded on the north by the southerly right-of-way line of Orchard Hills Drive and on the south by the easterly right of way line of Culver Drive. Staff has reviewed the request and has determined that the pipeline within said easement has already been abandoned and recommends that the Board approve the quitclaim request. The Resolution authorizing the quitclaim is attached as Exhibit "A", the Easement Quitclaim Deed is attached as Exhibit "B", and a map showing the location of the quitclaim area is attached as Exhibit "C".

FISCAL IMPACT:

None.

ENVIRONMENTAL COMPLIANCE:

This project is not subject to the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3), in that CEQA applies only to projects that may result in a direct physical change in the environment or reasonably foreseeable indirect physical change in the environment.

Consent Calendar: Quitclaim Of Real Property Irvine Community Development Company LLC
Water and Recycled Water Pipeline and Access Easement per Inst. No. 19960010567, O.R.
Lying Within Proposed Tract Nos. 16719, 16722, and 17015 Orchard Hills
January 27, 2014
Page 2

COMMITTEE REVIEW:

Quitclaims are not routinely taken to Committee prior to submittal for Board approval.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2014 - _____

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM DEED TO
IRVINE COMMUNITY DEVELOPMENT COMPANY LLC

LIST OF EXHIBITS:

- Exhibit "A" – Resolution
- Exhibit "B" – Easement Quitclaim Deed
- Exhibit "C" – Location Map

EXHIBIT "A"

RESOLUTION NO. 2014 -

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM DEED TO
IRVINE COMMUNITY DEVELOPMENT COMPANY LLC

WHEREAS, Irvine Community Development Company LLC ("ICDC") has requested that the Irvine Ranch Water District ("IRWD") Board approve the quitclaim of a portion of the existing easement for water and recycled water purposes per deed recorded January 8, 1996 as Instrument No. 19960010567 of Official Records, Records of Orange County, California; and

WHEREAS, the purpose of the quitclaim is because ICDC is subdividing a portion of their Orchard Hills Development into Tracts 16719, 16722 and 17015; and

WHEREAS, the existing pipeline within said easement has been abandoned; and

WHEREAS, staff has reviewed and confirmed that the easement herein referred is no longer needed and can be quitclaimed; and

WHEREAS, the proposed quitclaim has been presented to this Board of Directors, copy of which is attached hereto as Exhibit "B".

NOW, THEREFORE, BE IT RESOLVED, the Quitclaim Deed attached hereto as Exhibit "B" to Irvine Community Development Company LLC, a Delaware limited liability company, herein described and hereby is approved and execution by the District's officers is authorized.

ADOPTED, SIGNED and APPROVED this 27th day of January 2014.

President/Vice President
IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

Secretary/Assistant Secretary
IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

APPROVED AS TO FORM:
BOWIE, ARNESON, WILES & GIANNONE
IRWD Legal Counsel

By _____

EXHIBIT "B"

**RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:**

Irvine Community Development Company
550 Newport Center Drive
Newport Beach, CA 92660
Attn: General Counsel's Office

ASSESSOR PARCEL NO(S):

104-043-39, -44 & 53

(Space Above This Line For Recorder's Use)

IRWD Doc. No. E _____
IRWD Res. No. _____

DOCUMENTARY TRANSFER TAX \$ consideration less than \$100
_____ Computed on the consideration or value of property conveyed; OR
_____ Computed on the consideration or value less liens or encumbrances
remaining at time of sale.

Signature or Declarant or Agent determining tax – Firm Name

EASEMENT QUITCLAIM DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, IRVINE RANCH WATER DISTRICT, a California Water District organized under and existing pursuant to Section 34000 *et seq.* of the California Water Code, does hereby REMISE, RELEASE, AND FOREVER QUITCLAIM to IRVINE COMMUNITY DEVELOPMENT COMPANY LLC, a Delaware limited liability company, or the current owner of record,

all RIGHT, TITLE and INTEREST in the real property located in the City of Irvine, County of Orange, State of California, as more particularly described on Exhibit "A", attached hereto and made a part hereof.

The rights hereby quitclaimed are not necessary or useful in the performance of the duties of said Irvine Ranch Water District.

Dated: _____, 2014

IRVINE RANCH WATER DISTRICT,
a California Water District

By: _____
Name: Steven E. LaMar
Title: President

By: _____
Name: Leslie Bonkowski
Title: District Secretary

MAIL TAX STATEMENTS TO THE ABOVE ADDRESS

STATE OF CALIFORNIA)
)
COUNTY OF ORANGE)

On _____, 2014, before me, _____, a Notary Public in and for said State, personally appeared Steven E. LaMar and Leslie Bonkowski, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (SEAL)
Notary Public in and for said State

EXHIBIT "A"

QUITCLAIM OF PIPELINE EASEMENT

LEGAL DESCRIPTION

That certain parcel of land situated in the City of Irvine, County of Orange, State of California being that portion of that certain easement for water and recycled water transmission purposes granted to Irvine Ranch Water District per deed recorded January 8, 1996 as Instrument No. 19960010567 of Official Records lying within Block 82 of Irvine's Subdivision as shown on a map thereof filed in Book 1, Page 88 of Miscellaneous Maps being bounded on the north by the southerly right of way line of Orchard Park Drive and southerly by the easterly right of way line of Culver Drive as said right of way lines are shown on the map of Tract No. 17004, filed in Book 891, Pages 1 through 53 of Miscellaneous Maps, all in the Office of the County Recorder of said County.

SUBJECT TO: Covenants, conditions, reservations, restrictions, rights-of-way, and easements of record, if any.

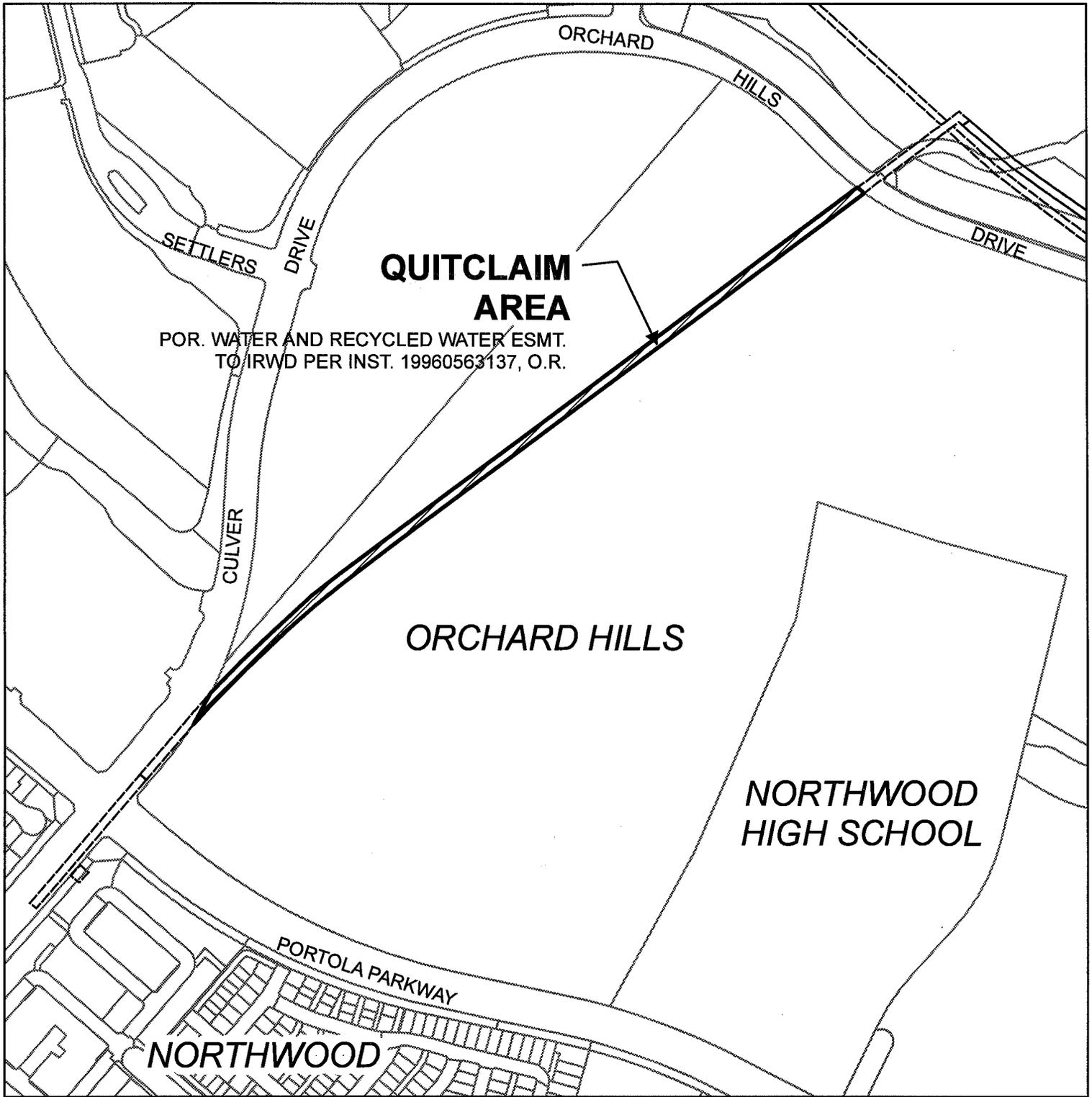
Prepared by me or under my direction:

Dated: January 13, 2014



Steven L. Malloy, R.C.E. 31926
License expires December 31, 2014

EXHIBIT "C"
LOCATION MAP



**QUITCLAIM OF PORTION OF WATER AND RECYCLED WATER EASEMENT
TO IRVINE COMMUNITY DEVELOPMENT COMPANY LLC**



08
January 27, 2014
Prepared by: R. Thatcher/M. Hoolihan
Submitted by: K. Burton
Approved by: Paul Cook

CONSENT CALENDAR

QUITCLAIM OF REAL PROPERTY
THE IRVINE COMPANY LLC
SEWER AND WATER EASEMENT PER INST. NO. 92-030630, O.R.
LYING WITHIN LOT 16, TRACT NO. 12355
WESTPARK PLAZA

SUMMARY:

Staff recommends that the Board adopt a resolution approving the execution of a quitclaim deed to The Irvine Company LLC (TIC) quitclaiming a portion of the existing easement for sewer and water purposes granted per deed recorded January 17, 1992 as Inst. No. 92-030630 of Official Records of Orange County within Westpark Plaza in Irvine.

BACKGROUND:

TIC has remodeled one of the buildings in the Westpark Plaza retail center. The remodel required changes to the existing water and sewer connections. New connections have been made and an easement was granted to IRWD. This quitclaim is for the old connection that is no longer required. Staff has reviewed the request and recommends that the Board approve the quitclaim request. The Resolution authorizing the quitclaim is attached as Exhibit "A", the Easement Quitclaim Deed is attached as Exhibit "B", and a map showing the location of the quitclaim area is attached as Exhibit "C".

FISCAL IMPACT:

None.

ENVIRONMENTAL COMPLIANCE:

This project is not subject to the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3), in that CEQA applies only to projects that may result in a direct physical change in the environment or reasonably foreseeable indirect physical change in the environment.

COMMITTEE REVIEW:

Quitclaims are not routinely taken to Committee prior to submittal for Board approval.

Consent Calendar: Quitclaim Of Real Property The Irvine Company LLC Sewer and Water
Easement per Inst. 92-030630, O.R. Lying Within Lot 16, Tract No. 12355 Westpark Plaza
January 27, 2014
Page 2

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2014 - _____

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM DEED TO
THE IRVINE COMPANY LLC

LIST OF EXHIBITS:

Exhibit "A" – Resolution
Exhibit "B" – Easement Quitclaim Deed
Exhibit "C" – Location Map

EXHIBIT "A"

RESOLUTION NO. 2014 -

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT
APPROVING EXECUTION OF THE QUITCLAIM DEED TO
THE IRVINE COMPANY LLC

WHEREAS, The Irvine Company LLC ("TIC") has requested that the Irvine Ranch Water District ("IRWD") Board approve the quitclaim of a portion of the existing easement for sewer and water purposes per deed recorded January 17, 1992 as Instrument No. 92-030630 of Official Records, Records of Orange County, California; and

WHEREAS, the purpose of the quitclaim is because TIC has remodeled one of its retail buildings; and

WHEREAS, the existing pipeline connection within said easement has been abandoned; and

WHEREAS, staff has reviewed and confirmed that the easement herein referred is no longer needed and can be quitclaimed; and

WHEREAS, the proposed quitclaim has been presented to this Board of Directors, copy of which is attached hereto as Exhibit "B".

NOW, THEREFORE, BE IT RESOLVED, the Quitclaim Deed attached hereto as Exhibit "B" to The Irvine Company LLC, a Delaware limited liability company, herein described and hereby is approved and execution by the District's officers is authorized.

ADOPTED, SIGNED and APPROVED this 27th day of January 2014.

President/Vice President
IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

Secretary/Assistant Secretary
IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

APPROVED AS TO FORM:
BOWIE, ARNESON, WILES & GIANNONE
IRWD Legal Counsel

By _____

EXHIBIT "B"

**RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:**

The Irvine Company
550 Newport Center Drive
Newport Beach, CA 92660
Attn: General Counsel's Office

ASSESSOR PARCEL NO(S):

447-103-04

(Space Above This Line For Recorder's Use)

IRWD Doc. No. E _____
IRWD Res. No. _____

DOCUMENTARY TRANSFER TAX \$ consideration less than \$100
_____ Computed on the consideration or value of property conveyed; OR
_____ Computed on the consideration or value less liens or encumbrances
remaining at time of sale.

Signature or Declarant or Agent determining tax – Firm Name

EASEMENT QUITCLAIM DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, IRVINE RANCH WATER DISTRICT, a California Water District organized under and existing pursuant to Section 34000 *et seq.* of the California Water Code, does hereby REMISE, RELEASE, AND FOREVER QUITCLAIM to THE IRVINE COMPANY LLC, a Delaware limited liability company, or the current owner of record,

all RIGHT, TITLE and INTEREST in the real property located in the City of City of Irvine, County of Orange, State of California, as more particularly described in Exhibit "A" and depicted on Exhibit "B", attached hereto and by this reference, made a part hereof.

The rights hereby quitclaimed are not necessary or useful in the performance of the duties of said Irvine Ranch Water District.

Dated: _____, 2014

IRVINE RANCH WATER DISTRICT,
a California Water District

By: _____
Name: Steven E. LaMar
Title: President

By: _____
Name: Leslie Bonkowski
Title: District Secretary

MAIL TAX STATEMENTS TO THE ABOVE ADDRESS

STATE OF CALIFORNIA)
)
COUNTY OF ORANGE)

On _____, 2014, before me, _____, a Notary Public in and for said State, personally appeared Steven E. Lamar and Leslie Bonkowski, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (SEAL)
Notary Public in and for said State

EXHIBIT "A"
QUITCLAIM OF IRVINE RANCH WATER DISTRICT EASEMENT

THAT PORTION OF LOT 16 OF TRACT NO. 12355, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, PER MAP FILED IN BOOK 556, PAGES 15 THROUGH 36, INCLUSIVE, OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, LYING WITHIN A 15.00 FOOT WIDE EASEMENT FOR SEWER AND WATER PIPELINE PURPOSES TO IRVINE RANCH WATER DISTRICT RECORDED JANUARY 17, 1992 AS INSTRUMENT NO. 92-030630 OF OFFICIAL RECORDS, IN SAID OFFICE OF THE COUNTY RECORDER, THE CENTERLINE OF SAID 15.00 FOOT WIDE EASEMENT BEING DESCRIBED AS FOLLOWS:

BEGINNING AT POINT "H" ON THE CENTERLINE OF SAID 15.00 FOOT WIDE EASEMENT;

THENCE, ALONG SAID CENTERLINE, SOUTH 22°04'26" WEST, 23.00 FEET.

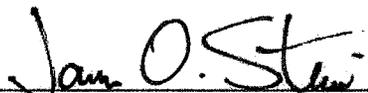
EXCEPTING THEREFROM THAT PORTION INCLUDED WITHIN THE 20.00 FOOT WIDE EASEMENT FOR SEWER AND WATER PIPELINE PURPOSES DESCRIBED IN SAID INSTRUMENT NO. 92-030630 BETWEEN POINT "G" DESCRIBED THEREIN AND SAID POINT "H".

ALSO AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND HEREBY MADE A PART HEREOF.

SUBJECT TO COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS, AND RIGHTS-OF-WAY OF RECORD, IF ANY.



PREPARED BY: STANTEC CONSULTING INC.
UNDER THE DIRECTION OF:


JAMES O. STEINES, P.L.S. 6086

JULY 30, 2013
J.N. 2042 489020

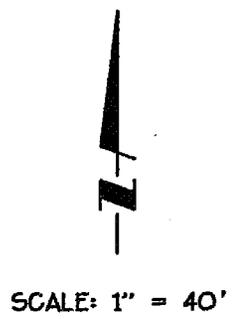
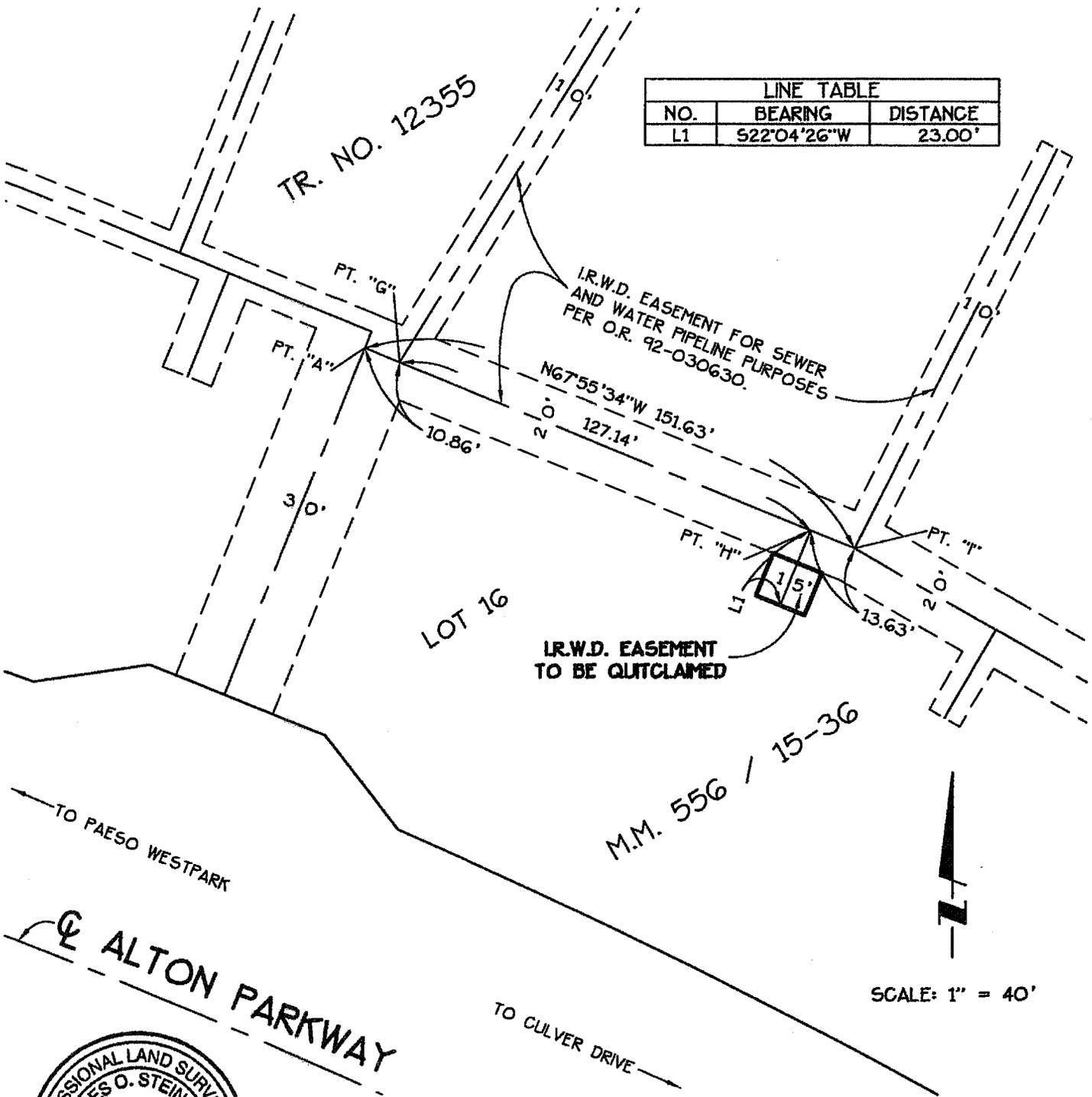
EXHIBIT "B"

SHEET 1 OF 1

A PORTION OF LOT 16, TR. NO. 12355, M.M. 556 / 15-36,
IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

QUITCLAIM OF IRVINE RANCH WATER DISTRICT EASEMENT

LINE TABLE		
NO.	BEARING	DISTANCE
L1	S22°04'26"W	23.00'

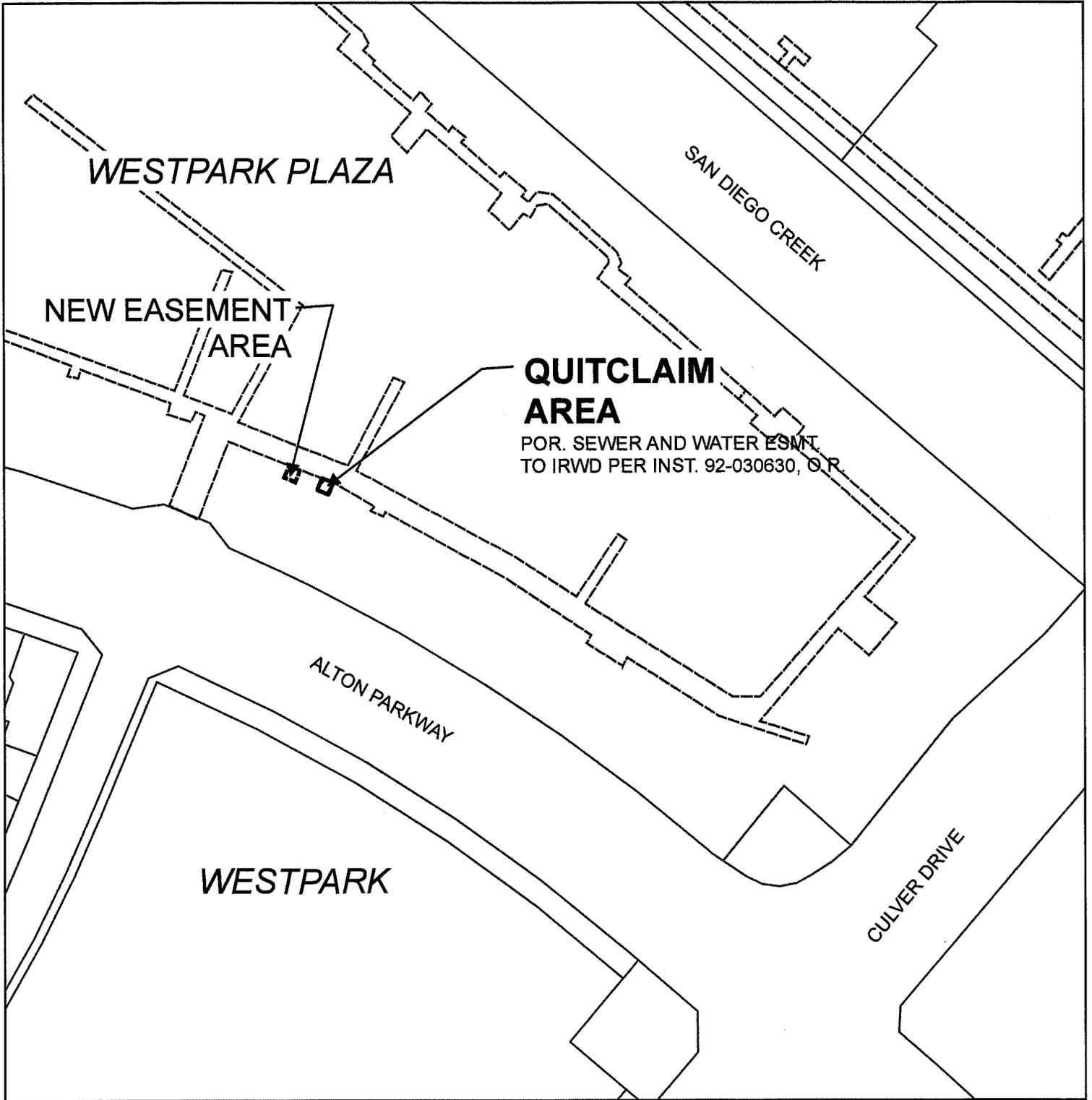


James O. Steines
JAMES O. STEINES, P.L.S. 6086



38 TECHNOLOGY DRIVE, SUITE 100
IRVINE, CA 92618
949.923.6000
stantec.com

EXHIBIT "C"
LOCATION MAP



**QUITCLAIM OF PORTION OF SEWER AND WATER EASEMENT
TO THE IRVINE COMPANY LLC**



OS
January 27, 2014
Prepared by: T. Bonkowski/M. Cortez
Submitted by: K. Burton (K.B.)
Approved by: Paul Cook

CONSENT CALENDAR

RANDALL STREET AND LOLITA AVENUE DOMESTIC WATER
PIPELINE REPLACEMENT FINAL ACCEPTANCE

SUMMARY:

Construction of the Randall Street and Lolita Avenue Domestic Water Pipeline Replacement is complete. The contractor, Paulus Engineering, Inc. (Paulus), has completed the required work and all punch list items. This project has received final inspection and acceptance of construction is recommended.

BACKGROUND:

Over the past several years, IRWD has made numerous pipe leak repairs on the existing steel pipelines in Randall Street and Lolita Avenue, located in IRWD's Orange Park Acres service area. The pipelines are located within the street right-of-way, but outside the edge of the pavement. Homeowner improvements, constructed over the pipelines, hindered IRWD's ability to access, maintain and repair the pipelines. Paulus was awarded a construction contract on May 28, 2013 to install approximately 1,230 feet of 8-inch PVC pipeline, fire hydrants, meters and appurtenant valves. Paulus constructed replacement pipelines within the right-of-way and under the street pavement for accessibility. Appurtenant fire hydrants, meters and valves were also constructed and the existing steel pipelines were abandoned. Construction is complete and the project is ready for final acceptance by the Board.

Project Title:	Randall Street and Lolita Avenue Domestic Water Pipeline Replacement
Project No.:	11408 (1279)
Design Engineer:	Stantec Consulting, Inc.
Construction Management by:	IRWD Staff
Contractor:	Paulus Engineering, Inc.
Original Contract Cost:	\$197,377.00
Final Contract Cost:	\$202,039.90
Original Contract Days:	90
Final Contract Days:	91
Final Change Order Approved On:	August 26, 2013

FISCAL IMPACTS:

Project 11408 (1279) is included in the FY 2013-14 Capital Budget. The existing budget and Expenditure Authorization are sufficient to fund the final payment for the project.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) and in conformance with California Code of regulations, Title 14, Chapter 3, Section 15282 in that the installation of new pipeline or maintenance, repair restoration, removal or demolition of an existing pipeline as set forth in Section 21080.21, as long as the project does not exceed one mile in length. California Public Resources Code, 21080.21, This division does not apply to any project of less than one mile in length within a public street or highway or any other public right-of-way for the installation of a new pipeline or the maintenance, repair, restoration, reconditioning, relocation, replacement, removal or demolition of an existing pipeline. For purposes of this section, "pipeline" includes subsurface facilities but does not include any surface facility related to the operation of the underground facility."

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD ACCEPT CONSTRUCTION OF THE RANDALL STREET AND LOLITA AVENUE DOMESTIC WATER REPLACEMENT, PROJECT 11408 (1279); AUTHORIZE THE GENERAL MANAGER TO FILE A NOTICE OF COMPLETION; AND AUTHORIZE THE PAYMENT OF THE RETENTION 35 DAYS AFTER THE DATE OF RECORDING THE NOTICE OF COMPLETION.

LIST OF EXHIBITS:

None.

January 27, 2014

Prepared by: J. Corey *JK*

Submitted by: P. Weghorst *PW*

Approved by: Paul Cook *PC*

CONSENT CALENDAR

ON-CALL CEQA/NEPA AND PERMITTING SERVICES CONSULTANT SELECTIONS

SUMMARY:

Irvine Ranch Water District (IRWD) uses Professional Service Agreements to secure on-call environmental compliance and permitting services pursuant to the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA) and other regulatory requirements. Staff has solicited proposals from seven firms to perform on-call environmental services for the next two years. Staff requests that the Board authorize the General Manager to:

- Execute Professional Services Agreements for on-call CEQA/NEPA services with ESA, Dudek and Bonterra Psomas for \$150,000 each, and
- Execute Professional Services Agreements for on-call monitoring and permitting services with Harmsworth Associates and VCS Environmental for \$100,000 each.

BACKGROUND:

On-Call CEQA/NEPA Services:

IRWD must comply with the requirements of CEQA for all project activities. Where federal government action or funding is involved, compliance with NEPA is required. The use of on-call Professional Services Agreements for CEQA/NEPA work allows IRWD to quickly address environmental review requirements of projects. The majority of tasks performed under on-call CEQA/NEPA Professional Services Agreements include general consultations and the preparation of Negative Declarations, Mitigated Negative Declarations, Addendums, Environmental Assessments and Findings of No Significant Impact. Over the last two years, approximately \$375,000 of CEQA/NEPA services were obtained on an on-call basis under agreements with environmental consultants at ESA, LSA and Dudek.

On-Call Monitoring and Permitting Services:

The District must also comply with statutes, regulations, policies, and programs that provide for permitting to carry out new projects, conduct operations and maintenance activities and to address emergency conditions. The use of on-call Professional Service Agreements for monitoring and permitting services allows IRWD to task consultants with time-sensitive activities. The majority of the tasks performed under on-call monitoring and permitting Professional Services Agreements include biological surveys, preparation of regulatory agency permit applications and jurisdictional delineations. Over the last two years, approximately \$271,000 of monitoring and permitting services was obtained on an on-call basis under agreements with Harmsworth Associates and ICF International.

Future On-Call Requirements:

Based on past utilization and current expectations, staff has estimated future on-call CEQA/NEPA and permitting services needs for the next two years. Staff is recommending that Professional Service Agreements be awarded to five separate firms. Three firms will perform CEQA/NEPA services under agreements for amounts up to \$150,000 each and two firms will perform monitoring and permitting services under agreements for amounts up to \$100,000 each. Under these agreements, staff will issue project specific task orders based on negotiated scopes of work, cost estimates and schedules for projects that have existing budgets and Expenditure Authorizations.

Consultant Selections:

A Request for Proposal (RFP) for on-call CEQA/NEPA services was distributed to seven environmental consulting firms. Within the RFP, the consultants were asked to: 1) demonstrate a solid understanding of CEQA and NEPA, and associated processes; 2) show broad expertise and experience in performing CEQA/NEPA analysis and review work; and 3) demonstrate a history of successful CEQA/NEPA activities on behalf of other clients and a long-standing working relationship with these agencies and their representatives. Proposals for providing on-call CEQA/NEPA consulting services were received from Dudek, ESA, Bonterra Psomas, VCS Environmental, PCR and Infrastructure Engineering Corp (IEC). The firm Harmsworth Associates declined to submit.

A separate RFP for on-call monitoring and permitting services was distributed to seven environmental consulting firms. The RFP asked the consultants to: 1) demonstrate an understanding of the processes of natural resources, wildlife and regulatory requirements and the agencies with jurisdiction over permits and mitigation requirements; 2) commit to responding to requests for service from IRWD in a timely and cost-effective manner; and 3) document their knowledge and experience with endangered species issues and regulations, mitigation monitoring and reporting, IRWD's Natural Treatment System, and the Natural Community Conservation Plan (NCCP).

Proposals for providing on-call monitoring and permitting services were received from Dudek, Harmsworth Associates, PCR, and VCS Environmental. The firms ESA, IEC, and Bonterra Psomas declined to submit.

Staff reviewed each of the consultant's proposals and recommends that Professional Services Agreements be awarded for two years of CEQA/NEPA services to ESA, Dudek, and Bonterra Psomas for \$150,000 each. Staff also recommends that Professional Services Agreements for two years of monitoring and permitting services be awarded to Harmsworth Associates and VCS Environmental for \$100,000 each.

These firms have demonstrated extensive knowledge and experience with CEQA, NEPA, monitoring and permitting and have also committed to staff availability on an on-call basis. Additionally, staff recommendations are based on the excellent qualifications of each project team. A CEQA/NEPA services assessment matrix based on evaluation of the proposals is provided as Exhibit "A" and an assessment matrix for monitoring and permitting services is provided as Exhibit "B." Proposals from the recommended firms of ESA, Dudek, Bonterra Psomas, Harmsworth Associates and VCS Environmental are included as Exhibits "C", "D", "E", "F", and "G", respectively.

FISCAL IMPACTS:

No new project budgets or Expenditure Authorizations (EAs) are required in executing these Professional Services Agreements. Task orders for specific projects with existing budgets and EAs will be issued to the consultants under the terms of the agreements and negotiated scope of works, costs and schedules.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on January 21, 2014.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE PROFESSIONAL SERVICE AGREEMENTS WITH ESA, DUDEK AND BONTERRA PSOMAS TO PROVIDE ON-CALL CEQA/NEPA SERVICES OVER THE NEXT TWO YEARS FOR NOT-TO-EXCEED AMOUNTS OF \$150,000 EACH AND WITH HARMSWORTH ASSOCIATES AND VCS ENVIRONMENTAL TO PROVIDE TWO YEARS OF ON-CALL MONITORING AND PERMITTING SERVICES FOR NOT-TO-EXCEED AMOUNTS OF \$100,000 EACH.

LIST OF EXHIBITS:

- Exhibit "A" – CEQA/NEPA Services Evaluation Matrix
- Exhibit "B" – Monitoring and Permitting Services Evaluation Matrix
- Exhibit "C" – ESA Proposal for On-Call CEQA/NEPA Services
- Exhibit "D" – Dudek Proposal for On-Call CEQA/NEPA Services
- Exhibit "E" – Bonterra Psomas Proposal for On-Call CEQA/NEPA Services
- Exhibit "F" – Harmsworth Associates Proposal for On-Call Monitoring and Permitting Services
- Exhibit "G" – VCS Environmental Proposal for On-Call Monitoring and Permitting Services

EXHIBIT "A"

2014 - 2016 ON-CALL CEQA / NEPA CONSULTATION SERVICES EVALUATION MATRIX

Item	Description	Weights	Dudek	ESA	VCS Environmental	FCR	Bonterra Psomas	Infrastructure Engineering Corp
A	Demonstration of CEQA/NEPA Skills and Rates							
1	Understanding of IRWD's Needs	20%	2.00	1.00	5.00	4.00	3.67	5.33
2	Demonstration of CEQA Skills and Abilities	20%	2.00	1.00	5.33	3.67	3.33	5.67
3	Demonstration of NEPA Skills and Abilities	20%	2.00	1.00	5.00	3.67	3.67	5.67
4	Provided Staff Rates Consistent with Skills and Abilities Over Range of Staff on Project	20%	4.67	1.00	4.00	2.67	3.67	5.00
5	Demonstrated Ability to Coordinate with Other Consultants / Engineers	10%	2.33	1.00	4.33	4.33	3.33	5.67
6	Demonstrated Experience with MMRP's	10%	2.33	1.00	4.00	5.00	3.33	5.33
	Weighted Score	30%	2.60	1.00	4.70	3.73	3.53	5.43
B	DEMONSTRATION OF PROJECT SCOPING, COST ESTIMATING, AND SCHEDULING							
1	Content of Sample Scope of Work	33.33%	2.00	1.00	5.00	4.33	3.00	5.67
2	Content and Approach to Sample Cost Estimating	33.33%	2.33	1.00	5.67	3.33	3.33	5.33
3	Content and Approach to Sample Scheduling	33.33%	2.00	1.00	4.67	4.33	3.33	5.67
	Weighted Score	30%	2.11	1.00	5.11	4.00	3.22	5.56
C	QUALIFICATION AND EXPERIENCE							
1	Principal / Director		John Porteous BA, MA, CEP., 35 yrs exp	Tom Barnes BA, 20+ yrs exp.	Julie Vandermost BA, 17 yrs exp	Jay Ziff MLA, 20+ yrs exp	Joan Patronite Kelly MS, ACIP, 25+ yrs exp	Anna Buising Ph.D, 30 yrs exp
		20%	2.33	1.00	6.00	5.00	4.00	2.67
2	Project Manager		Rachel Struglia PhD, AICP, 16 yrs	Jennifer Jacobus Ph.D 10+ yrs exp	Peter Carlson BA, 26 yrs exp	David Crook MS, 14 yrs exp	Jennifer Marks BS, 14 yrs exp	Robert S. Weber BS, 22 yrs. Exp
		30%	2.00	1.00	5.00	4.67	3.33	5.00
3	Project Team	30%	2.00	1.00	5.33	4.33	3.00	5.33
4	Firm's Relevance Experience	20%	2.00	1.00	6.00	3.67	3.67	4.67
	Weighted Score	20%	2.07	1.00	5.50	4.43	3.43	4.57
D	REFERENCES							
	Reference Project 1		On-Call CEQA/NEPA	Strand Ranch EIR & Add.	Millcreek Wetlands	OC Water District On-Call	Nohl Canyon Water Storage Tank	San Elijo Hills Pump Station
	Score	50%	2.00	1.00	6.00	3.00	4.00	5.00
	Reference Project 2		Peters Cyn/Syphon Reservoir Integrated Project	Baker WTP EIR & Add.	SANBAG On-Call Env. Svcs	L.A. DWP On-Call	SMWD Infrastructure Projects	Olivenhain Trunk Sewer Improvements Project
	Score	50%	2.00	1.00	6.00	3.33	3.67	5.00
	Weighted Score	20%	2.00	1.00	6.00	3.17	3.83	5.00
	COMBINED WEIGHTED SCORE	100%	2.23	1.00	5.24	3.84	3.48	5.21
E	OTHER							
	Multiplier		Not Listed	3.25	Not Listed	Not Listed	Not Listed	Not listed
	Sub Consultants		None	Paleo Solutions	4	3	None	8
	Exceptions taken to IRWD Std. Contract		None	None	None	None	None	None
	Insurance (General Liability)		Yes	Yes	Yes	Yes	Yes	Yes
	Insurance (Professional)		Yes	Yes	Yes	Yes	Yes	Yes
	Forced Rankings:		2	1	6	4	3	5

EXHIBIT "B"

2014 - 2016 ON-CALL PERMITTING CONSULTATION SERVICES EVALUATION MATRIX

Item	Description	Weights	Dudek	Harmsworth	VCS Environmental	PCR
A	Demonstration of Permitting Skills and Rates					
1	Understanding of IRWD's Needs	10%	2.33	1.33	2.67	3.67
2	Land Use Planning	5%	3.33	1.33	1.67	3.67
3	Regulatory Agency Consultation, Permit Application and Procurement	10%	3.67	1.00	2.00	3.33
4	Wetland Delineation	10%	3.33	1.33	1.67	3.67
5	Biological Survey, Monitoring, Assessment	10%	3.67	1.67	1.67	3.00
6	Threatened & Endangered Species Regulation, Monitoring and Reporting	10%	4.00	1.00	2.33	2.67
7	Mitigation Monitoring and Reporting	5%	3.00	1.67	1.67	3.67
8	Water Quality, Stormwater Monitoring and Reporting	5%	3.00	1.67	1.67	3.67
9	Natural Treatment System (NTS)	10%	3.00	1.00	2.33	3.67
10	Natural Community Conservation Plan/Habitat Conservation Plan (NCCP)	10%	3.00	1.00	2.33	3.67
11	Coordination with other Consultants/Engineers	5%	3.00	1.67	2.00	3.33
12	Staff rates consistent with skills and abilities over range of staff on the project	10%	4.00	1.00	2.33	2.67
	Weighted Score	30%	3.32	1.25	2.08	3.35
B	DEMONSTRATION OF PROJECT SCOPING, COST ESTIMATING, AND SCHEDULING					
1	Content of Sample Scope of Work	33.33%	4.00	1.67	1.33	3.00
2	Content and Approach to Sample Cost Estimating	33.33%	4.00	1.67	1.67	2.67
3	Content and Approach to Sample Scheduling	33.33%	4.00	2.00	1.33	2.67
	Weighted Score	30%	4.00	1.78	1.44	2.78
C	QUALIFICATION AND EXPERIENCE					
1	Principal / Director	20%	Vipul Joshi	Rod Harmsworth	Julie Vandermost	Steve Nelson
			BS, 16 yrs exp	Ph.D, 30+ yrs exp	BA, 17 yrs exp	BS, MS, MBA 39 yrs
			3.33	1.00	3.33	2.33
2	Project Manager	30%	Vipul Joshi	Paul Galvin	Peter Carlson	Beth Martinez
			BS, 16 yrs exp	MS, 25+ yrs exp	BA, 26 yrs exp	BA, MS 15 yrs exp
			3.67	1.33	1.67	3.33
3	Project Team	30%	3.67	1.00	2.00	3.33
4	Firm's Relevance Experience	20%	3.00	1.00	2.33	3.67
	Weighted Score	20%	3.47	1.10	2.23	3.20

Item	Description	Weights	Dudek	Harmsworth	VCS Environmental	PCR
D	REFERENCES					
	Reference Project 1		Upper Chiquita Emergency Storage Reservoir	The Irvine Company	Serrano Summit	SD Creek Restoration, COI
	Score	50%	4.00	1.67	2.00	2.33
	Reference Project 2		Eastern TM Line Replacement Project	Nature Conservancy	Millcreek Wetlands	L.A. City PW On-Call Environmental Services
	Score	50%	3.67	1.67	2.00	2.67
	Weighted Score	20%	3.83	1.67	2.00	2.50
	COMBINED WEIGHTED SCORE	100%	3.65	1.46	1.90	2.98
E	OTHER					
	Multiplier		1.75	Not listed	3.25	Not Listed
	Sub Consultants		None	None	Cadre Environmental	Parkia Eng & Const
	Exceptions taken to IRWD Std. Contract		None	None	None	None
	Insurance (General Liability)		Yes	Yes	Yes, Commits to obtain	Yes
	Insurance (Professional)		Yes	Yes	Yes, Commits to obtain	Yes
	Forced Rankings:		4	1	2	3

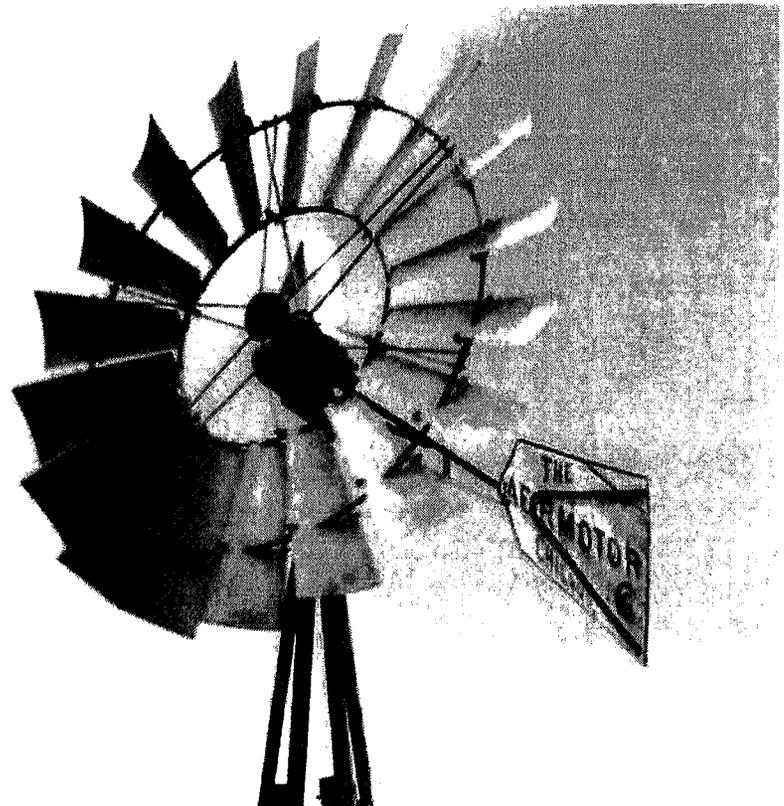
EXHIBIT "C"

Proposal

IRVINE RANCH WATER DISTRICT
On-Call CEQA and NEPA Consultation

Prepared for
Irvine Ranch Water District

December 31, 2013



Relevant Projects	Services Provided	
	<p>IRWD Strand Ranch Integrated Banking Project EIR IRWD and Rosedale-Rio Bravo Water Storage District are partners in development of the Integrated Banking Project which developed groundwater recharge and recovery facilities on Strand Ranch. Project facilities include recharge basins, water supply channels, and recovery wells and pipelines. The recharge and recovery waters are delivered to/from the project site via the Cross Valley Canal, which is part of the State Water Project. ESA prepared the EIR which was successfully completed and certified in 2008.</p>	<ul style="list-style-type: none"> • CEQA
	<p>IRWD Baker Water Treatment Plant Project EIR ESA prepared the EIR for the Baker Water Treatment Plant Project. The goal of the proposed project is to increase water supply reliability in southern Orange County. The project includes construction of new raw water treatment facilities at the existing Baker Filtration Plant located in Lake Forest, CA. Key issues associated with the project include construction-related impacts experienced by neighboring residential areas and impacts to biological and cultural resources. The EIR was successfully completed and certified in 2011.</p>	<ul style="list-style-type: none"> • CEQA • Technical Studies
	<p>Los Angeles County Sanitation Districts Santa Clarita Sanitation District 2025 Facilities Plan ESA prepared the EIR for the Santa Clarita 2025 Facilities Plan that was driven by TMDL compliance for chlorides in the Santa Clara River. The EIR evaluated four distinct project alternatives for salt management facilities to comply with the TMDL. Key issues associated with the project include construction-related impacts, traffic impacts, river water quality and brine disposal. The EIR was successfully completed and certified in 2013.</p>	<ul style="list-style-type: none"> • CEQA • Technical Studies • Reduced Discharge Study
	<p>Los Angeles County Waterworks District 40 Phase 2 Recycled Water Project MND/EA Los Angeles County Waterworks Division 40 is implementing Phase 2 of the Regional Recycled Water Project in the Antelope Valley. Phase 2 includes recycled water pipelines, storage tanks, and pump stations that form a portion of the project's backbone system for the region. The MND/EA tiered off of the Program EIR that ESA prepared in November 2008 for the entire Regional Recycled Water Project. Waterworks Division 40 is receiving federal funding from the USEPA for Phase 2. ESA is assisting with USEPA coordination to ensure the federal environmental compliance requirements are met.</p>	<ul style="list-style-type: none"> • CEQA • NEPA • Cultural Resource Surveys • Biological Resources Surveys

SECTION 3 Scope of Work

As requested in the RFP, the following scope of work outlines the tasks necessary to provide IRWD with on-call professional services for CEQA and NEPA analysis and compliance.

Task 1: CEQA

We understand that IRWD has upcoming small-scale projects that could be implemented over the next two years. IRWD needs a firm that can respond quickly and efficiently to produce cost-effective, high-quality environmental documentation in compliance with CEQA. As already stated, and demonstrated by our qualifications and references described in Section 2, ESA's Southern California Water Group specializes in impact assessments for the construction and operation of water infrastructure projects including pipelines, pump stations, storage tanks, and reservoirs. Providing CEQA compliance in the form of Addenda, Negative Declarations, and MNDs for these types of projects is our primary business. ESA provides full-service environmental support that includes in-house capabilities to perform technical studies, such as air emissions models, greenhouse gas emissions analysis, noise models, biological surveys and monitoring, cultural resources surveys, monitoring, and consultations, historic architectural assessments, and visual simulations. Our sample Scope/Schedule/Budget in Appendix C includes a typical scope of work, demonstrating our process for technical analyses and progression of CEQA documents through internal iterations, including Administrative Draft and Screencheck Draft versions prior to preparation of final Public Drafts.

Task 2: NEPA

In addition to CEQA, we understand that IRWD needs a firm that provides high-quality environmental documentation that also complies with NEPA to satisfy the requirements of potential partner funding entities. ESA regularly produces either joint CEQA/NEPA documents, such as joint MND/EAs, or stand-alone NEPA documents. ESA has recent and relevant experience working with staff at the State Water Resources Control Board, U.S. Bureau of Reclamation (Bureau), U.S. Environmental Protection Agency (USEPA), and U.S. Army National Guard to prepare NEPA documents for projects that either will be located on federal lands or will be receiving federal funding. In particular, Jennifer assisted IRWD with preparation of the MND/IS/EA for the Wells 21 & 22 Project/Tustin Legacy Well 1 Project, which required coordination with the Bureau due to federal funding through the American Recovery and Reinvestment Act of 2009 (ARRA). ESA helped IRWD to meet strict ARRA deadline requirements for its environmental compliance in order to secure the funding for this project. Tom and Jennifer also have experience working with the USEPA to prepare EAs and Environmental Information Documents (EIDs) to satisfy USEPA's NEPA requirements for funding mechanisms. Jennifer also recently assisted the Los Angeles County Waterworks Division with preparation of a MND/EA in accordance with USEPA NEPA requirements for Phase 2 of the Regional Recycled Water Project in the Antelope Valley. We have good working relationships with federal funding sources and understand their specific NEPA compliance requirements. The sample Scope/Schedule/Budget in **Appendix C** also demonstrates our understanding of NEPA and its process requirements.

Task 3: Staff Rates

The hourly rates for all staff and services that might be provided for the projects resulting from this On-Call Services contract are provided in **Section 5**. Charges for time spent on project management, consultation, meetings, field work, data analysis, report preparation and review, travel time, etc, will be made at the Category Rates set forth in Section 5. Rates for non-labor expenses, such as reimbursable expenses and equipment usage are also provided in Section 5. Table 2-1 provides the labor categories for key staff that correspond to those provided in Section 5

Task 4: Project Task Item Estimates

Our typical on-call services contracts require us to prepare scopes of work, cost estimates and schedules for projects as they arise. Level-of-effort estimates are developed by our project management team. Staff are assigned based on project requirements. Each new project established under this IRWD On-Call Services master contract and IRWD's Purchase Order. Upon request, ESA will prepare and submit a scope, schedule, and budget to the District for new projects as they arise within one to two days, depending on the nature of the work. Longer timeframes may be required for larger jobs. The costs associated with preparing scope/schedule/budget packages will be ESA's responsibility. With District approval of the scope and fee, ESA will begin work on new projects immediately.

As requested in the RFP, we are providing a sample Scope/Schedule/Budget package for a current IRWD project for which ESA will be preparing a NEPA-ready CEQA document in the form of an MND/IS/EA and implementing only the CEQA process. This sample Scope/Schedule/Budget can be found in **Appendix C**. Typically, ESA includes only tasks required to legally fulfill environmental review requirements of CEQA and/or NEPA. Additional recommended tasks are included as line-item options, depending on issues or controversies that have potential to arise during the course of a project or contingencies needed for additional environmental review due to potential funding sources. This is also demonstrated in the sample Scope/Schedule/Budget package, which includes implementation of the NEPA process as an optional task, contingent on federal funding needs.

Task 5: Team Experience

ESA has over 40 years of experience in the environmental consulting business. We have excellent knowledge of the business locally, state-wide and nationally. Please refer to **Section 2** for summaries of the experience, education, and skills of the key staff on the ESA Team proposed for this On-Call Services contract. Details about each team member is provided in the resumes attached as **Appendix B**.

Task 6: Project Coordination

ESA has developed and nurtured a vast network of clients and consultants with which we regularly work and coordinate to accomplish tasks at hand. In accordance with our focus on client satisfaction, ESA will team with other consultants or agencies in order to provide the best technical or regulatory expertise required to meet project objectives and provide services that are in the best interest of our clients. ESA regularly teams up with other planning firms, engineering firms, and specialty firms for biological, cultural, geotechnical, and transportation services. For example, our ESA Team has successfully teamed in the past with **Todd Engineers, RMC Water & Environment, and Carollo Engineers** on many projects, including the Antelope Valley Regional Recycled Water Project Program EIR for Los Angeles County Waterworks Division and the Strategic Water Resources Plan Program EIR for Palmdale Water District. Currently, Tom and Jennifer are working jointly with RMC and Todd Engineers in preparation of a Groundwater Basins Master Plan Program EIR for the Water Replenishment District of Southern California. Jennifer is currently working as a sub-consultant to Todd Engineers to prepare Substitute Environmental Documentation for the Central Basin and West Coast Basin Salt and Nutrient Management Plan and will be working with Carollo to prepare an IS/MND for the Palmdale Recycled Water Authority's Recycled Water Master Plan. To facilitate coordination of teams comprised of multiple consultants and agencies, ESA utilizes regularly scheduled conference call meetings to maintain focus of analyses, provide a forum for information exchange, and maintain compliance with project schedules.

As an integral part of our project management services we provide senior project strategy consultation with the client management team as well as with regulatory agencies. We provide senior experience in consulting with the US Fish and Wildlife Service, the US Army Corps of Engineers, the Bureau, the USEPA, the California Department of Fish and Game, the Santa Ana Regional Water Quality Control Board, the South Coast Air Quality Management District, and the local cities and county agencies including Flood Control and the Department of Public Works (e.g., storm water management).

Task 7: Mitigation Monitoring and Reporting

As part of a typical scope of work for environmental compliance, ESA includes development of the Mitigation Monitoring and Reporting Program (MMRP) as required by CEQA. We understand that IRWD may require assistance implementing the MMRPs for current projects such as the Baker Water Treatment Plant Project and MWRP Biosolids Handling and Energy Recovery Facilities Project. If requested by IRWD under this On-Call Services contract, ESA will implement the MMRPs associated with these or other projects, including preparation of a reporting program binder designed to track the implementation and completion of each required mitigation measure, management of periodic monitoring activities and required field surveys, and preparation of periodic reports to document ongoing activities and eventual completion of the MMRP. ESA has staff that specialize in construction monitoring in both our Biological Resources & Land Management Group and Cultural Resources Group. ESA Water also has long term experience with Metropolitan Water District of Southern California implementing the MMRPs for various projects as part of an on-call services contract. Examples of our mitigation monitoring experience are included in **Section 2**.

Task 8: References

As already stated, our references are provided in **Section 1**. As stated in the RFP, in lieu of reference letters, ESA is providing a summary of work completed for IRWD projects and associated IRWD staff members. As listed previously in Table 2-2, our ESA Team, in particular our Key Management Team of Tom and Jennifer, have completed the following projects for IRWD: Strand Ranch Integrated Banking Project EIR and Addendum No. 1, Strand Ranch Integrated Banking Project EIR and Addendum No. 1; Baker Water Treatment Plant Project EIR and Addenda Nos. 1 and 2; Tustin Wells 21/22/TL-1 Project MND/IS/EA and Addendum No. 1; and MWRP Biosolids Handling and Energy Recovery Facilities Project Supplemental EIR. These projects include work completed both under our previous two on-call master contracts with IRWD and otherwise under individual project contracts. The following table identifies the IRWD staff that were primarily involved in each project and can best serve as reference to ESA's performance.

Project	Paul Weghorst	Kellie Welch	Christian Kessler	Jo Ann Corey	Steve Malloy	Richard Mori	Joshi Raghavender	Carl Spangenberg	Beth Beeman	Jacob Moeder
Strand Ranch Integrated Banking Project EIR and Addendum No. 1	X	X								
Baker Water Treatment Plant Project EIR and Addenda Nos. 1 and 2	X		X	X		X	X			
Tustin Wells 21/22 and TL-1 Project MND/IS/EA and Addendum No. 1	X	X								
MWRP Biosolids Handling and Energy Recovery Facilities Project Supplemental EIR	X		X		X			X	X	X

SECTION 4 Schedule

The schedule required for CEQA compliance depends on the complexity of the project, the completeness of the project objectives and description, and the level of controversy associated with project components. With clear stakeholder support and a completely developed project description, a Negative Declaration requires approximately four months to prepare, circulate for public review, and certify. More complex projects requiring intensive technical studies or neighborhood outreach can take several months longer. NEPA documents also can be prepared efficiently depending on the completeness of analysis and complexity of the project. However, federal approval of EAs generally adds at least several months to the CEQA schedule due to the additional agency coordination. We have found that CEQA-Plus compliance (required for SRF funding from SWRCB) can add over six months to projects depending on the level of effort needed to comply with Section 106 of the National Historic Preservation Act.

Sample Schedule

As requested in the RFP, we are providing a sample Scope/Schedule/Budget package for a current IRWD project for which ESA will be preparing an MND/IS/EA document but implementing only the CEQA process. This sample Scope/Schedule/Budget can be found in **Appendix C**. The sample schedule shows the steps required to complete the MND/EA for the sample project scope of work. The sample schedule illustrates approximately a nine-month timeline for completion of a MND/EA for a project involving construction of new



storm drain diversion structures and a new diversion pipeline. The project requires upfront technical studies, including a reduced discharge study and cultural and biological resources surveys and assessments, that occupy the first two to three months of the schedule. The tasks included in the sample schedule coincide with the tasks outlined in the sample project scope of work.

SECTION 5 Fee Schedule

Sample Budget

As requested in the RFP, ESA has provided a sample Scope/Schedule/Budget package for a current IRWD project for which ESA will be preparing an MND/IS/EA document but implementing only the CEQA process.. This sample Scope/Schedule/Budget can be found in **Appendix C**. The sample budget indicates the hours attributed to each task for team members according to personnel Category Rates (see below). The budget for this sample project includes some ESA staff not presented in Section 2, due to the need for highly specialized staff for the technical studies included in the scope of work.

Personnel Category Rates

Charges will be made at the Category Rates set forth below for time spent on project management, consultation, meetings, field work, report preparation and review, travel time, etc. Time spent on projects in litigation, in depositions and providing expert testimony will be charged at the Category Rate times 1.5. We have employed an average multiplier of 3.25 to recent projects. This multiplier times our average raw labor rates for each labor category accounts for overhead and profit and equals our Category Rates. The Category Rates provided would be valid for one year following execution of a contract. Following ESA's rate sheet, we have provided Paleo Solutions 2013 Schedule of Fees.

From time to time, ESA retains outside professional and technical labor on a temporary basis to meet peak workload demands. Such contract labor may be charged at regular Personnel Category Rates. ESA reserves the right to revise the Personnel Category Rates annually to reflect changes in its operating costs.

Environmental Science Associates & Subsidiaries 2013 Schedule of Fees

I. Personnel Category Rates

Charges will be made at the Category hourly rates set forth below for time spent on project management, consultation or meetings related to the project, field work, report preparation and review, travel time, etc. Time spent on projects in litigation, in depositions and providing expert testimony will be charged at the Category rate times 1.5.

Labor Category	Level I	Level II	Level III
Director	190	205	215
Managing Associate	155	170	185
Senior Associate	130	140	150
Associate	95	110	120
Project Technicians	75	90	110

- (a) The range of rates shown for each staff category reflects ESA staff qualifications, expertise and experience levels. These rate ranges allow our project managers to assemble the best project teams to meet the unique project requirements and client expectations for each opportunity.
- (b) From time to time, ESA retains outside professional and technical labor on a temporary basis to meet peak workload demands. Such contract labor may be charged at regular Employee Category rates.
- (c) ESA reserves the right to revise the Personnel Category Rates annually to reflect changes in its operating costs.

II. ESA Expenses

A. Travel Expenses

- 1. Transportation
 - a. Company vehicle – IRS mileage reimbursement rate
 - b. Common carrier or car rental – actual multiplied by 1.15
- 2. Lodging, meals and related travel expenses – direct expenses multiplied by 1.15

B. Communications Fee

In-house costs for phone, e-mail, fax, regular postage, walk-up copier, and records retention – project labor charges multiplied by 3%

C. Printing/Reproduction Rates

Item	Rate/page
8 1/2 x 11 b/w	\$0.05
11 x 17 b/w	\$0.10
8 1/2 x 11 color	\$1.00
11 x 17 color	\$1.50
Covers	\$0.50
Binding	\$1.00
HP Plotter	\$25.00
CD	\$10.00
Digital Photography	\$20.00 (up to 50 images)

III. Subcontracts

Subcontract services will be invoiced at cost multiplied by 1.15.

IV. Other

There shall be added to all charges set forth above amounts equal to any applicable sales or use taxes legally levied in lieu thereof, now or hereinafter imposed under the authority of a federal, state, or local taxing jurisdiction.

**Paleo Solutions Inc.
2013 Schedule of Fees for Paleontology**

This schedule of charges is for professional services provided on a time and material basis. Paleo Solutions reserves the right to revise the Personnel Category Rates annually to reflect changes proportional to inflation rates.

Personnel

Personnel charges are for work directly related to projects. Charges for personnel services are based on an hourly rate for time charged to the project. Current personnel classifications and rates are as follows:

Labor Category	Billing Rates	Overtime Rates
Principal Investigator/PM	\$140.00	N/A
Field Director/Safety Officer	\$125.00	N/A
Research Assistant/APM	\$90.00	N/A
Field Crew Supervisor	\$90.00	N/A
Field Technician	\$70.00	\$105.00

Construction Monitoring

Charges will be made at the Category rates set forth above for time spent on project management, consultation or meetings related to the project, field work, report preparation and review, travel time, etc.

Overtime

Overtime for employees is defined as time and half charged to a project in excess of 8 hours per day/40 hours per week, and any time worked on weekends or holidays. When it is necessary for an employee to be away from the office overnight as a result of a project assignment, per diem will be charged based on each county(s) rate predetermined by the U.S. General Service Administration for California.

Paleo Solutions Expenses

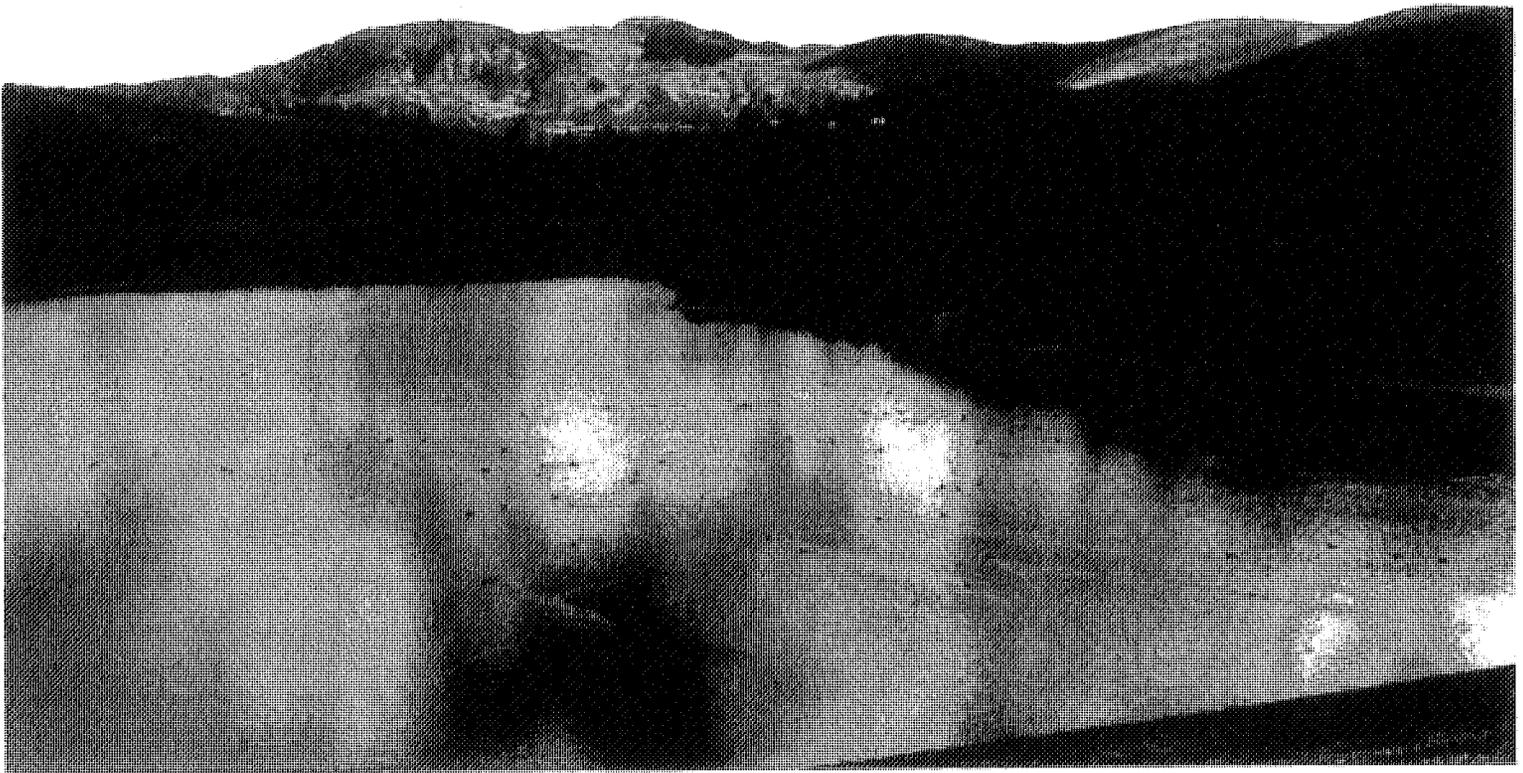
- Outside Services specifically related to project – Direct Cost
- Travel Expenses
 - Transportation
 - Company or Personal vehicle – IRS reimbursement rate (\$0.565)
 - Common carrier or truck/car rental & fuel – Direct Cost

Meals & Lodging – Direct Cost (up to county per diem rate)

DUDEK

ON-CALL CEQA AND NEPA CONSULTATION SERVICES

Proposal



December 31, 2013

PREPARED FOR
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618

PREPARED BY
Dudek
31878 Camino Capistrano #200
San Juan Capistrano, California 92675
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2 CEQA ANALYSIS AND COMPLIANCE

The following scope of work reflects a generic approach to a water or wastewater project for IRWD. This scope assumes that project impacts can be mitigated to less than significant through the incorporation of mitigation measures or design features.

Task 1 Project Start-Up

During this task, the Dudek designated project manager will participate in a kickoff meeting with IRWD staff. The purpose of the meeting will be to discuss project objectives, concept, schedule, responsibilities, available data, and needs for additional data, as well as environmental documentation required to satisfy CEQA and NEPA if necessary.

In addition, Dudek will present an approach to carrying out the project including initial milestone schedule events, methods for project management and communications (including progress reports and meetings), methods for data review and exchange (electronic and other), approaches to maintaining the administrative record for the project, and anticipated deliverables. During this task, Dudek will prepare a detailed scope, budget and cost for review and approval by IRWD. A sample project scope, schedule, and budget is presented in Appendix B.

Task 2 Collect and Review Existing Information and Draft Project Description

During this task, Dudek will collect and review existing available information and prepare a draft project description for IRWD review and comment. It is Dudek's experience that early definition of the project greatly facilitates the environmental review process.

Task 3 Initial Study (IS)

Dudek will provide IRWD with a draft IS on the proposed project, including development of the appropriate data and completion of the necessary analysis. The Environmental Checklist Form included in the CEQA Guidelines will be used for the IS. Each checklist response will include a discussion of the construction and operational impacts. Mitigation measures will be identified and included (if needed) for avoiding or reducing potentially significant effects to less-than-significant levels. Parties responsible for carrying out measures will be identified. The degree of reduction of impact due to mitigation will be qualitatively and, where possible, quantitatively identified.

Task 4 Public Scoping (Optional)

If requested by IRWD, we will support IRWD for any scoping or public information meetings.

Task 5 Technical Studies

The need for additional technical studies will be based on the project description, IS, and any public scoping efforts completed. It is anticipated that the following types of studies may be required:

BIOLOGICAL RESOURCES ANALYSIS

Dudek will conduct a general biological reconnaissance survey of the project study area to create a biological resources map with vegetation communities and observations of sensitive species locations. The project study area boundary will be determined in advance during Tasks 1 and 2. For purposes of this task, it is assumed that the proposed project facilities would be located within disturbed areas.

CEQA ANALYSIS AND COMPLIANCE

During the field survey, a general inventory of plant and animal species detected by sight, calls, tracks, scat, or other signs will be compiled, as well as a determination of potential sensitive species that could occur on the project site. Observable sensitive resources, including perennial plants and conspicuous wildlife (i.e., birds and some reptiles) commonly accepted as regionally sensitive by the California Native Plant Society, CDFW, and USFWS will be recorded. Our scope of work does not include focused sensitive plant or wildlife surveys, or a formal jurisdictional wetland determination, but these items can be provided at an additional cost, if needed.

The results of the biological resources investigations will be documented in a stand-alone biological resources letter report suitable for inclusion as an appendix to the project CEQA document. The report will include a discussion of the survey methodology and accuracy of methods. Vegetation communities and sensitive biological resources will be described in terms of regional significance and presence on site. An assessment of existing conditions and impact analysis, and an assessment of the significance of the impacts in accordance with the significance thresholds established for the project CEQA document will be provided, including direct, indirect, and cumulative effects. Mitigation measures will be proposed for identified significant impacts in terms of CEQA requirements, regional planning, and state and federal laws and guidelines.

NOISE ANALYSIS

To determine potential noise impacts, Dudek will identify noise levels for project-related noise sources during construction and operation. Typically, field measurements are taken at on-site and off-site locations to quantify existing ambient noise levels and to provide a baseline for evaluation of project effects. The noise measurements are made using a sound level meter meeting American National Standards Institute (ANSI) Type 1 or Type 2 standards. Existing sensitive receptors are identified including any nearby residential uses. To assess project impacts, Dudek's acoustical specialists utilize such models as the Federal Highway Administration's Roadway Construction Noise Model, the Traffic Noise Model (TNM, version 2.5) or CadnaA (a graphically oriented software package for calculation, presentation, assessment, and prediction of a wide range of environmental noise sources) to assess impacts and, more importantly, formulate mitigation measures (such as specification of quieter equipment, construction of enclosures or sound walls, setback distances, building orientation, etc.) needed to reduce noise impacts. Additionally, vibration impacts from project-related construction activities are also evaluated.

AIR QUALITY ANALYSIS/CLIMATE CHANGE

Dudek will evaluate the air quality and greenhouse gas (GHG) impacts associated with IRWD projects. Construction emissions of criteria air pollutants will be estimated using the California Emissions Estimator Model and other appropriate tools to estimate emissions from off-road equipment and on-road vehicles. The construction emissions will be compared to the South Coast Air Quality Management District (SCAQMD) significance thresholds. It is anticipated that the SCAQMD's localized significance thresholds, which evaluate ambient air quality impacts of construction emissions, will be assessed using a simple look-up table due to the relatively small size of the projects. If a project would result in an increase in operational emissions, Dudek will use CalEEMod and other appropriate tools to estimate these emissions for a comparison with SCAQMD thresholds. Depending on the nature of the project and the CEQA/NEPA document, Dudek will prepare the environmental and regulatory setting sections, include discussions of the South Coast Air Basin and the topographical and meteorological conditions that affect air quality; summaries of existing air quality and attainment status; and a discussion of applicable federal, state, and SCAQMD rules and regulations. Each of air quality thresholds in Appendix G of the CEQA Guidelines, including the potential for a project to generate significant odors, will be evaluated in the CEQA document.

CEQA ANALYSIS AND COMPLIANCE

For the GHG section of the CEQA/NEPA documents, we may also include a description of the greenhouse effect, national and state emission inventories, and applicable federal and state regulatory measures. The GHG emissions associated with construction, and operation if applicable, will be estimated using the same approaches as those for criteria air pollutants. Dudek will assess the significance of a project with respect to the Appendix G thresholds; specifically, whether the implementation of a project would generate GHG emissions that may have a significant impact on the environment or would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. SCAQMD has not established GHG significance thresholds that would apply to the proposed projects; thus, we will work with the IRWD, as lead agency, to evaluate a representative GHG threshold for the proposed project. Our budget assumes that a simple emission-based threshold can be used.

PUBLIC HEALTH AND SAFETY

Dudek will consult with IRWD to identify any chemicals and quantities that will be stored and handled at the facility. Dudek will evaluate the potential for an adverse impact to public health and safety from the potential for an accidental release of water treatment chemicals (both worst-case release and accidental release during transport of chemicals to the site).

CULTURAL AND PALEONTOLOGICAL RESOURCES

Dudek will conduct a cultural resources survey of the proposed project to assess the presence or absence of potentially significant prehistoric and historic archaeological sites in accordance with Orange County CEQA guidelines. This cultural resource study will consist of an archaeological records search conducted by the South Central Coastal Information Center (SCCIC) at California State University – Fullerton, including all previously completed investigation reports and site records within the project study area. Dudek archaeologists will subsequently complete a cultural resource survey of areas within the project study area that have not been previously investigated, and they will revisit previously recorded archaeological sites, as indicated by the SCCIC records search results.

Dudek will also request a search of the Sacred Lands Inventory maintained by the California State Native American Heritage Commission to determine if any lands with heritage value to contemporary Native Americans are present within the project property and to identify all individuals who should be consulted regarding the proposed project. Dudek will provide a written request to all of these individuals identified. All correspondence with Native American representatives and resulting concerns will be addressed during the CEQA review.

Dudek paleontologists will review existing documents, including the County of Orange General Plan Conservation Element and geological technical reports such as U.S. Geological Surveys, to determine the likelihood that the project study area includes soil formations with a potential to contain significant vertebrate fossils. Potential project effects on paleontological resources will be assessed and any appropriate mitigation measures incorporated.

HYDROLOGY/WATER QUALITY

Dudek will research and describe existing surface water features, drainage patterns, groundwater basins, water quality issues and flood risks currently present on site and in the vicinity of IRWD projects using the best available data from resource agencies as well as hydrology/drainage reports from IRWD and/or its engineering consultant, if available. Dudek will also describe the regulatory framework and permitting context, including impaired waters (Clean Water Act Section 303[d]), water quality objectives, and waste discharge requirements, where applicable.

CEQA ANALYSIS AND COMPLIANCE

Dudek will evaluate the adequacy of best management practices (BMPs) proposed by IRWD and/or its consultant, and will identify additional mitigation measures and BMPs necessary to mitigate for potential water quality impacts. As part of the analysis, Dudek will assess the adequacy of the proposed drainage system (to be provided by IRWD's engineer) and the project's conformance with the requirements of the Orange County Storm Water Management Program, the Orange County Hydrology Manual, and the municipal stormwater National Pollutant Discharge Elimination System permit (i.e., Order No. R8-2009-0030).

Dudek will also identify potential impacts related to construction- and/or operations-related water usage, and its effects on groundwater resources and/or surface water supplies. Dudek hydrologists will coordinate closely with the authors of related issue areas—such as biological resources (for wetlands and groundwater-dependent habitat) and hazardous materials (e.g., proximity cleanup sites or contaminant plumes)—to avoid redundant analyses and to ensure all potential impacts are adequately evaluated.

VISUAL

The appearance of the site and the immediate vicinity will be described. Visibility of the site from adjacent roadways and public viewpoints will also be described. Visual characteristics will be illustrated through the use of photographs of the site with a key showing the location of the viewpoints.

A discussion of the change in appearance as it related to the site will be presented. Probable visual effects and view blockage will be assessed. Dudek has the capability in-house to provide digital/visual simulations. Such simulations are not included in our scope but can be provided for an additional fee.

Mitigation measures will be suggested where potentially significant impacts are identified. The suggested mitigation measures will be specific to location and types of changes that would affect views to the project. Types of mitigation measures that may be suggested include enhanced landscaping or minor changes to structure location and cover slope sculpting or landform contour grading.

TRANSPORTATION

Dudek will evaluate the construction as well as the operational traffic impacts associated with the project. Infrastructure projects mostly have construction period impacts which are considered temporary and less than significant.

Other Environmental Effects

Explanations will be provided to support findings related to other environmental issues such as agricultural resources, geology/soils, land use and planning, mineral resources, public services, and recreation.

Task 6 Prepare Screencheck/Administrative Draft

Dudek assumes that preparation of a negative declaration (ND) or MND would satisfy CEQA requirements for this project.

Dudek will prepare a screencheck/administrative draft MND in accordance with the requirements of CEQA. The MND will include text, graphics, appendices, and all required CEQA sections. The environmental analysis will be based on the project description and IS. For each environmental category, a discussion of the environmental setting, impacts, level of significance, and mitigation measures, if required, will be provided. The degree of impact reduction due to mitigation will be qualitatively and, where possible, quantitatively documented. A clear description of the means by which mitigation measures will be implemented, the timing and technical requirements, and responsibility for mitigation will be identified and discussed. This discussion will form the basis for the Mitigation Monitoring and Reporting Program (MMRP) developed during Task 10.

Task 7 Complete and Distribute Draft MND

After completion of Task 6, Dudek will incorporate final revisions and assemble the draft MND for public review distribution. Dudek will prepare a camera-ready copy of the draft MND and will meet with IRWD staff, as appropriate, to conduct a final “over the shoulder” review prior to volume reproduction. Dudek will be responsible for noticing and distributing the draft MND, including filing the notice of completion with the State Clearinghouse and appropriate publication of notices in newspapers. For budgeting purposes, we have assumed distribution of 50 copies of the draft MND. For broader public review distribution, we have assumed that the MND would be posted on IRWD’s website, where it can be viewed by the public.

Task 8 Compile and Evaluate Public Review Comments

Dudek will compile, categorize, and summarize public review comments for review by the consultant project team and IRWD. Dudek will discuss with IRWD our proposed approaches to preparing responses to comments, including use of themed responses, along with responses to each individual comment and/or preparation of a revised document. For budgeting purposes, we have assumed up to 30 individual comments on the MND; a single comment letter may contain multiple individual comments.

Task 9 Prepare Final MND

Dudek will prepare responses to comments to be incorporated in the final MND. Two rounds of revisions to the responses to comments are incorporated in the scope of work.

Task 10 Mitigation Monitoring and Reporting Plan

Dudek will prepare the MMRP for inclusion in the final MND. The MMRP will include a brief project description, a list of agencies with jurisdiction over the project, monitoring roles and responsibilities, and general monitoring procedures. For each mitigation measure identified in the final MND, the party responsible for the monitoring, schedule, reporting requirements, and effectiveness criteria will be identified.

Task 11 Decision-Making Support

In coordination with IRWD staff, Dudek will assist as necessary through the adoption of the MND by the IRWD Board of Directors. Dudek will be available to attend a hearing regarding adoption of the MND. We will file the notice of determination and CDFW fee. Our budget includes payment of the CDFW filing fee on behalf of IRWD.

3 NEPA ANALYSIS AND COMPLIANCE

NEPA Analysis

The NEPA and State Revolving Fund (SRF) environmental review requirements are not significantly different from the normally applicable CEQA requirements and would include the scope of services described in Tasks 1 through 10 as outlined in Section 2, CEQA Analysis and Compliance.

To facilitate compliance with NEPA requirements, the CEQA document prepared for the project would also be prepared to meet general NEPA compliance and/or SRF requirements as needed. The main additional requirements generally include consideration of the Endangered Species Act, Clean Air Act, National Historic Preservation Act, environmental justice, and project alternatives. These additional requirements will be addressed under this task and included in the CEQA document prepared for the project.

NEPA Experience

Dudek has experience preparing NEPA documents that comply with a wide range of federal agency requirements which are enforced or administered by the ACOE, USFWS, Bureau of Land Management (BLM), California Department of Transportation (Caltrans), and Bureau of Reclamation. Table 2 below summarizes our most recent NEPA documents and demonstrates this wide range of experience our staff have in preparing NEPA documents for a variety of federal agencies.

TABLE 2. DUDEK NEPA EXPERIENCE

Document/Title	Federal Lead Agency	Project Description	Year of Completion
Salton Sea Species Conservation Habitat EIS/EIR	Army Corps of Engineers	The California Department of Fish and Wildlife (CDFW; formerly California Department of Fish and Game), through the California Department of Water Resources, contracted Cardo ENTRIX to assist with the planning, design, and permitting of this wildlife habitat restoration project. Dudek is a subconsultant to Cardo ENTRIX. The project consists of creating approximately 2,400 acres of new saline pond habitat near the confluence of the New and Alamo Rivers and the Salton Sea. The project would result in the establishment of new shallow water habitat for fish and fish-eating bird species that use the Salton Sea for breeding, migratory stopover, and residential habitat. Dudek is assisting Cardo ENTRIX with wetland, endangered species, and California State Lands Commission lease/environmental permitting. Dudek is also under contract to prepare the aesthetics, transportation, geology/soils, land use/planning, public services, utilities, and population and housing sections of the EIR/EIS. Dudek will provide all analysis, text, and associated graphics for terrestrial resource issues for the biological resources chapter. Dudek also participated in the alternatives screening process, in which several	Ongoing

4 STAFF RATES

DUDEK 2013 STANDARD SCHEDULE OF CHARGES

ENVIRONMENTAL SERVICES	
Principal	\$225.00/hr
Senior Project Manager/Specialist I	\$200.00/hr
Environmental Specialist/Planner VI	\$180.00/hr
Environmental Specialist/Planner V	\$160.00/hr
Environmental Specialist/Planner III	\$140.00/hr
Environmental Specialist/Planner I	\$120.00/hr
Analyst	\$100.00/hr
ARCHAEOLOGICAL SERVICES	
Senior Project Manager/Archaeologist II	\$210.00/hr
Environmental Specialist/Archaeologist IV	\$150.00/hr
Environmental Specialist/Archaeologist II	\$130.00/hr
Archaeologist Technician II	\$70.00/hr
HYDROGEOLOGICAL SERVICES	
Sr Environmental Engineer	\$195.00/hr
Sr. Hydrogeologist/Sr Proj Mgr	\$175.00/hr
Project Manager	\$160.00/hr
Associate Hydrogeologist/Engineer	\$145.00/hr
Hydrogeologist IV/Engineer IV	\$125.00/hr
Hydrogeologist III/Engineer III	\$115.00/hr
Hydrogeologist I/Engineer I	\$95.00/hr
OFFICE SERVICES	
<i>Technical/Drafting/CADD Services</i>	
3D Graphic Artist	\$150.00/hr
Senior Designer	\$135.00/hr
Designer	\$125.00/hr
GIS Specialist III	\$140.00/hr
GIS Specialist I	\$120.00/hr
SUPPORT SERVICES	
Technical Editor III	\$140.00/hr
Technical Editor II	\$125.00/hr
Publications Assistant	\$100.00/hr
Clerical Administration	\$80.00/hr

Forensic Engineering – Court appearances, depositions, and interrogatories as expert witness will be billed at 2.00 times normal rates.
 Emergency and Holidays – Minimum charge of two hours will be billed at 1.75 times the normal rate
 Material and Outside Services – Subcontractors, rental of special equipment, special reproductions and blueprinting, outside data processing and computer services, etc., are charged at 1.15 times the direct cost
 Travel Expenses – Mileage at current IRS allowable rates. Per diem where overnight stay is involved is charged at cost
 Invoices/Late Charges. - All fees will be billed to Client monthly and shall be due and payable upon receipt. Invoices are delinquent if not paid within thirty (30) days from the date of the invoice. Client agrees to pay a monthly late charge equal to one percent (1%) per month of the outstanding balance until paid in full

DUDEK

Effective January 1, 2013

EXHIBIT "E"



**PROPOSAL TO PROVIDE ON-CALL CEQA
AND NEPA CONSULTATION SERVICES
FOR THE IRVINE RANCH WATER DISTRICT**

Prepared for | Irvine Ranch Water District
District Headquarters
15600 Sand Canyon Avenue
Irvine, California 92618
Attn: Paul A. Weghorst, Director of Water Resources
Jo Ann Corey, MPA, Engineering Technician III

Prepared by | BonTerra Consulting
2 Executive Circle, Suite 175
Irvine, California 92614
T: (714) 444-9199 F: (714) 444-9599

December 31, 2013

RESPONSE TO RFP ITEM II. SCOPE OF WORK

In our experience with on-call contracts for public agencies, the environmental documentation requirements for a “typical project” can vary extensively. BonTerra Consulting provides environmental impact assessment services that can range from documentation processing pursuant to CEQA and NEPA to identification of potential environmental constraints as part of feasibility studies. Our NEPA expertise is especially helpful if a project has the potential to receive federal funds or if it requires federal permits. Knowledge of technical issues, applicable regulations, and entitlement and regulatory processes allows BonTerra Consulting to provide responsive and solution-oriented advice to its clients.

Responsiveness, knowledge of regulatory agency requirements, and the ability to complete work products quickly were critical requirements for this project. BonTerra Consulting's experience with the environmental process and its commitment to providing outstanding work products have resulted in the successful execution of several IS/MNDs.

Daniel R. Ferons
General Manager
Santa Margarita Water District

It should also be noted that the BonTerra Consulting project team is capable of not only providing comprehensive CEQA and NEPA documentation services (as noted below in Tasks 1 and 2), but can provide stand-alone technical reports to support project analysis or regulatory permitting requirements. BonTerra Consulting can provide stand-alone constraints analyses and/or technical reports, including biological assessments (e.g., Sensitive Species Surveys); Biological Agency Permitting, including Section 7 consultations with the U.S. Fish and Wildlife Service (USFWS) Resource Agency Permit Procurement including the Clean Water Act (CWA) Section 404 Permit, Water Quality Certifications pursuant to Section 401 of the CWA, California Department of Fish and Wildlife (CDFW) Section 1602 Streambed Alteration

Agreements, Coastal Development Permits, and Section 10(a) permits to “take” Endangered or Threatened species; Aquatic Resources Surveys; Construction Monitoring for sensitive habitat areas and/or sensitive species located within or adjacent to project areas; Tree Surveys; Habitat Conservation Planning, Wildlife Movement Corridor Studies, and Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) compliance; Noise Assessments; Air Quality Assessments; Greenhouse Gas Emissions Analyses; Cultural Resource Assessments including surveys and construction monitoring; water quality management plans; and storm drain, sewer, and water capacity studies.

The CEQA and NEPA discussions below are representative of the tasks that would be included in the preparation of environmental documentation as noted in the RFP for CEQA (Negative Declaration [ND], Mitigated Negative Declaration [MND], and Addenda) and NEPA (Environmental Assessment [EA] and Findings of No Significant Impacts [FONSI]). A typical ***Sample Scope of Work*** for the preparation of an MND pursuant to CEQA is included as Attachment A.

TASK 1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

BonTerra Consulting understands the inherent complexities of processing projects through the CEQA process. If not analyzed in a comprehensive manner and if impacts to sensitive land uses and adjacent jurisdictions are not considered, future projects have the potential to present opportunities for legal challenges against the CEQA documentation and supporting technical analyses. BonTerra Consulting has an excellent track record of preparing thorough CEQA documents that are capable of withstanding legal challenges. All environmental documentation will be prepared in conformance with the criteria, standards, and procedures of CEQA (*California Public Resources Code* Section 21000 et seq.), the State CEQA Guidelines (Title 14, *California Code of Regulations*, Chapter 3, Section 15000 et seq.) and IRWD procedures. However, compliance with CEQA is only one component to ensure the preparation of a legally adequate document.

Navigating through the CEQA process continues to become more and more complex due to new and changing regulations, court rulings, and legislation. This is not to say that every project is complicated or will be litigated. However, BonTerra Consulting works very hard to ensure that every CEQA document and technical report that we prepare reflects all applicable rules and regulations and appropriate legal interpretations. Senior staff

members at BonTerra Consulting regularly review pertinent regulations, pending legislation, and court rulings during each phase of the environmental review process to ensure compliance with the mandates of CEQA and the State CEQA Guidelines. We understand that some court cases have provided clearer interpretations of, and guidance to, the provisions of CEQA, while other court rulings have contradicted earlier case law; therefore, we work closely with our clients to ensure that there is a common understanding. Because we regularly follow regulations, CEQA rulings, and legislative changes closely, if we see a potential issue, we revisit our documents to make sure they are consistent with recent refinements to the law. This process will ensure that the environmental document complies with all pertinent provisions of CEQA and is legally defensible, if challenged.

When preparing an environmental document pursuant to CEQA, typical activities performed would include, but are not limited to the tasks listed below.

Project Initiation/Project Study Sessions. The project initiation effort will involve coordination between BonTerra Consulting staff and IRWD staff to define the scope of services required for assigned work requests. BonTerra Consulting strives to work closely with clients to ensure that project designs are conceived in a manner that minimizes environmental impacts before starting the CEQA process. Projects that are designed to avoid or minimize impacts to sensitive uses and resources can engender a sense of confidence from the community and special interest groups. BonTerra Consulting will strategize with staff to ensure that all CEQA and regulatory permitting environmental issues are considered early in the process. Upon reviewing a proposed project description, BonTerra Consulting will coordinate with the IRWD Project Manager to develop an appropriate Task Order Scope of Work, to address the proposed project; existing environmental documentation and commitments; the appropriate type of environmental documentation and level of analysis required; and project permitting requirements. BonTerra Consulting's involvement on projects may continue through participation in regularly scheduled project development team meetings so team members can stay up to date with project development.

The Public Utilities Department was impressed by the consistent, thorough, and efficient efforts and work products put forth by BonTerra Consulting . . . BonTerra Consulting made a substantial contribution towards implementation of the Nohl Canyon Water Storage Project and completed the EIR within the original budget.

Richard Wilson
Environmental Services Manager
City of Anaheim Public Utilities
Department

Although not required for an ND, MND, or Addendum, BonTerra Consulting will also be available to participate in public meeting efforts. The total timeframe required to complete the environmental documentation process can be significantly affected by the concerns and/or input expressed from local residents, businesses, State and federal agencies, environmental interest groups, and the interested community-at-large. For some projects, workshops, meetings, and/or targeted outreach efforts may be appropriate to provide a forum for meaningful community input and to instill the public with a sense of "partnering" and "ownership" in the process. The assigned BonTerra Consulting project management team members are professionals that are able to effectively facilitate public meetings and conduct presentations on the environmental process and/or required technical analyses. At the request of IRWD, BonTerra Consulting will attend and participate in scoping meetings to facilitate the environmental review process. We also find it useful to prepare a meeting summary that discusses who will be responsible for addressing each issue to ensure that the points raised at the meeting will be addressed in the environmental document.

Documents/Project Research. BonTerra Consulting maintains access to a variety of information sources covering the IRWD service area, including local and regional planning documents, GIS databases, previous environmental documents, and reference documents. BonTerra Consulting staff members are also able to efficiently research information via internet search engines. In addition to these resources, the BonTerra Consulting project team members have experience and established relationships from working on projects within Orange County and, specifically, the jurisdictions within the IRWD service area. If an answer is not immediately available, the project team members are available to consult with peers and other contacts to obtain additional information at the direction of IRWD.

Administrative Draft Environmental Document. BonTerra Consulting has the expertise to support IRWD on the full range of technical evaluations required to support environmental document preparation. BonTerra Consulting, using the CEQA Guidelines environmental checklist, will prepare a draft Initial Study (IS). The analysis will be based on all available technical information, including any background planning documents, previous environmental documentation in the area, and project-specific technical studies. Existing conditions will be described in narrative, numerical and graphic form, as appropriate to a particular issue. Potential impacts will be identified on an individual and cumulative basis, as appropriate. Mitigation Programs—including Project Design Features (PDFs), Standard Conditions (SCs), and Mitigation Measures (MMs)—will be proposed to reduce impacts to levels considered less than significant to the extent feasible. PDFs can be called out in environmental documents to highlight the efforts that IRWD has made to proactively design an environmentally sensitive project. Therefore, these efforts are recognized in the environmental document as self-mitigating project design features. When mitigation is required, BonTerra Consulting will propose pragmatic and effective recommendations to reduce or eliminate environmental impacts from the construction and operation of the project. Focused and strategic interaction with staff and other project team members will ensure that the environmental documentation and technical reports comprehensively address the potential impacts that might result from project implementation. The IS can be used as a preliminary tool to determine the appropriate level of documentation based on the presence or absence of impacts that cannot be mitigated to less than significant levels. Should it be determined that no potentially significant and unavoidable impacts would occur, BonTerra Consulting will recommend the preparation of an ND or an MND. After the Administrative Draft IS is completed, it will be submitted for IRWD review. Following receipt of IRWD comments on the IS, BonTerra Consulting will revise the document and complete the necessary documentation for an ND or MND.

Should the findings in the IS suggest the potential for a significant and unavoidable impact, preparation of an Environmental Impact Report (EIR) will be required. BonTerra Consulting will present this recommendation along with all supporting documentation to IRWD for consideration. It is understood that a separate call for proposals would be issued at this point.

Section 15164 of the State CEQA Guidelines provides for the preparation of an Addendum to a Final EIR if none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred. Should it be determined that an addendum to a previously approved or certified CEQA document is the appropriate document, the analysis would follow a similar format as previously identified for an IS. The analysis would be based on the environmental checklist from Appendix G of the State CEQA Guidelines. In the case of an addendum to a previous environmental document, a summary of the previous analysis will be provided for each environmental topic and the mitigation program will reiterate applicable PDFs, SCs, and MMs from the original environmental document. Additionally, following the project-specific analysis, an overall statement identifying the proposed project's consistency with the previous analysis will be made. The advantage of an Addendum is that there is no need for public review.

Screencheck Draft and Public Draft Environmental Document. Once the comments on the Administrative Draft document from both IRWD and their peer reviewer have been addressed, BonTerra Consulting will submit a Screencheck Draft document for IRWD review. At this time, BonTerra Consulting and IRWD staff may decide to meet to review the document. At the meeting, the document can be reviewed and any required changes made during the meeting, streamlining the review of the final "proof check" document during the meeting.

For an ND or MND, BonTerra Consulting will be responsible for coordinating document reproduction, distribution, and noticing pursuant to CEQA. As a budget-saving measure, document reproduction on CD is recommended to minimize the number of print copies. We will also provide the environmental documents in a web-ready format for use by IRWD.

For an Addendum to a previous environmental document, public review is not required; therefore, BonTerra Consulting will prepare a Addendum for use by IRWD. As noted above, document reproduction on CD is

recommended to minimize the number of print copies. We will also provide the environmental document (i.e., ND, MND, or Addendum, as appropriate) in a web-ready format for IRWD use.

Response to Comments and Final Environmental Document. If any public comments are submitted on an ND or MND, BonTerra Consulting will work with IRWD and the project team to develop appropriate and defensible responses. Topical responses may be used if multiple comments are received on the same issue. The responses to comments document will be revised and finalized upon receipt of IRWD comments. BonTerra Consulting will prepare a Final MND, which may include the responses to comments document, the Mitigation Monitoring Program (discussed below and under Task 7, Mitigation Monitoring and Reporting), and, if applicable, any revisions or clarifications to the text of the ND or MND.

For an Addendum, public review is not required, and a response to comments document would not be produced. Should any revisions be recommended through the approval process, BonTerra Consulting will revise the Addendum and submit the Addendum for IRWD use.

Mitigation Monitoring Program. BonTerra Consulting will develop a Mitigation Monitoring Program based in IRWD's preferred format, and will clearly identify all components of the Mitigation Program, responsible parties, and a timeframe for implementation. Implementation of the MMP is further discussed under Task 7, Mitigation Monitoring and Reporting.

Attendance at Public Hearings. As discussed previously under Initial Scoping/Project Study Sessions, the BonTerra Consulting project team is able to coordinate public meetings. BonTerra Consulting is skilled at conducting project-related presentations for decision-makers at public workshops and hearings; providing helpful technical responses and clarifications; and providing general support for IRWD staff. We will be available to attend and participate in any public meetings for consideration of the environmental document.

TASK 2 NATIONAL ENVIRONMENTAL POLICY ACT

Similar to the process identified above for CEQA, BonTerra Consulting is also experienced in preparing thorough NEPA documents that are capable of withstanding legal challenges for a variety of federal agencies. All environmental documentation will be prepared in conformance with the criteria, standards, and procedures of NEPA (Title 42 *United States Code* Sections 4331 et seq.) and specific NEPA Guidance as set forth by individual agencies. CEQA and NEPA are similar in the intent to analyze environmental impacts and in the review process which involves analysis, public involvement, and document preparation. NEPA applies to "proposals for legislation and other major Federal Actions" (42 *United States Code* Section 4332[2][c]). NEPA also applies when an agency exercises authority over a non-federal project with a federal nexus (i.e., federal decisions on approvals, permits, or funding)

Similar to the process identified previously for preparation of an IS and ND or MND pursuant to CEQA, BonTerra Consulting will prepare an EA leading to a FONSI or Mitigated FONSI pursuant to NEPA. Document preparation will follow the same basic process as the CEQA documentation with (1) preparation of an Administrative Draft EA that will be subject to review by IRWD and its peer reviewer; (2) preparation of a Screencheck Draft document; (3) preparation of a Draft EA for Public Review; and (4) preparation of the final EA/FONSI. However, because the NEPA process will involve a separate lead agency (i.e., the federal agency with oversight on the project), additional review cycles may be required prior to preparation of the Draft EA for Public Review and preparation of the final EA/FONSI. As noted previously, specific document preparation and review requirements vary depending on the federal lead agency. BonTerra Consulting has experience working with a variety of federal lead agencies and will contact the federal lead agency early in the process to determine the anticipated schedule and to develop a scope of work addressing each key milestone.

TASK 3 STAFF RATES

Hourly rates for key staff members are listed below. Order of staff members in the table is the same as the order on the Organizational Chart shown on page 10. Additional field staff for Regulatory, Biological, Habitat

Restoration, and Cultural Resources services are available for task orders as-needed but would not be assigned without prior written approval from IRWD.

Key Staff Member	Role/Title for Project Task Assignments	Hourly Billing Rates
Joan Patronite Kelly, AICP	Principal-in-Charge/Quality Assurance and Quality Control Manager	\$230.00
Jennifer Y. Marks	Project Manager	\$150.00
Megan Larum	Environmental Analyst	\$100.00
James P. Kurtz	Air Quality, Greenhouse Gas, and Noise Manager	\$210.00
Victor M. Ortiz	Air Quality, Greenhouse Gas, and Noise Specialist	\$125.00
Lindsay A. Messett, CWB [®]	Wildlife Biologist	\$120.00
Allison D. Rudalevige	Biologist/Botanical Support	\$110.00
Carl L. Demetropoulos, PhD	Aquatic Biologist	\$130.00
Brad R. Blood, PhD (Psomas)	Senior Environmental Scientist, Regulatory Permitting Specialist/Biologist	\$185.00
David T. Hughes	Restoration Ecologist/Arborist/Regulatory Specialist	\$130.00
Patrick O. Maxon, M.A., RPA	Cultural Resources Manager	\$150.00
Mark A. Roeder	Paleontologist	\$120.00
Michael D. Swan, PE (Psomas)	Senior Project Manager, Water Resources	\$210.00
Christopher J. Starbird	GIS Specialist	\$100.00
Field Staff	As-Needed Regulatory Specialists/Biologists/Archaeologists/Paleontologists	\$75.00– 130.00

REIMBURSABLE COSTS

BonTerra Consulting

Mileage	Federal Standard Mileage Rate
Reprographics (Outside)	at cost plus 10%
Reprographics (Inside)	Request Printing fee sheet
Other Out-of-pocket Expenses	at cost plus 10%
Subconsultants	at cost plus 10%
Plotting:	
Field Maps	\$2.50 per sq ft
Display/Oversized/High Quality Graphics	\$10 per sq ft
Aerial Maps: Less than 500 acres	\$200
Aerial Maps: 500–1,500 acres	\$350
Aerial Maps: Greater than 1,500 acres	\$500

PSOMAS

Auto Mileage	Current IRS allowable
Auto/Truck Rental	Actual cost + 10%
Other Travel and Living Expenses	Actual cost + 10%
Equipment Rental	Actual cost + 10%
Postage/Freight	Actual cost + 10%
Laboratory Costs	Actual cost + 10%
Reprographics Services	Actual cost + 10%
Materials and Other Expenses	Actual cost + 10%
Subconsultants and Other Outside Services	Actual cost + 10%

Effective Through December 31, 2015

EXHIBIT "F"

December 13th, 2013

Irvine Ranch Water District
Attn: Mr. Paul Weghorst, Director Water Resources
15600 Sand Canyon Ave., Box 57,000
Irvine, CA 92619

Dear Mr. Weghorst:

Re: Proposal for On-Call Monitoring and Permitting Services

Harmsworth Associates (HWA) has provided general environmental services to private and public organizations since 1984. The firm developed expertise in Orange County in ecologically sensitive areas through its work with the Irvine Company, The Nature Conservancy, the Nature Reserve of Orange County, and IRWD within the IRWD Service Area. The firm has expertise in ecologically sensitive areas and played a major role in the development of the Central and Coastal sub-region NCCP/HCP. Harmsworth Associates has prepared documents for and conducted CEQA/NEPA compliance, mitigation development and monitoring as well as associated wetland permitting with the USACE, CDFG and RWQCB. The firm has a close working relationship with The Irvine Company, in a number of Planning Areas, undertaking predevelopment biological surveys, mitigation planning and monitoring in IRWD's Service Area.

Recently the firm assisted IRWD with the several important projects including, the sewer lines ESA's, Lake Forest Sports Park waterline, PA6 Water tank restoration, construction monitoring and restoration for the OPA project and surveys/monitoring at Strand West Ranch. In each case HWA responded promptly to conduct the required monitoring/surveys in a timely and cost-effective manner.

Neither Harmsworth Associates nor its personnel have a conflict of interest prohibited by law. The firm has the required insurance and has named IRWD as an additional insured on its certificates of insurance. The IRWD contract is acceptable to Harmsworth Associates.

Thank you for the opportunity to submit the enclosed Scope of Work.
Yours truly

Harmsworth Associates

Rodney V. Harmsworth, Ph.D.
President

**ENVIRONMENTAL ASSISTANCE
FOR
ON-CALL MONITORING AND PERMITTING SERVICES**

SCOPE OF WORK

At the request of the Irvine Ranch Water District (IRWD), Harmsworth Associates will provide the following on-call services:

Task 1: Land Use Planning

IRWD plans through its Master Plan, and sub-area Master Plans for its three primary statutory activities, to provide domestic water, reclaimed water and wastewater treatment. These activities are planned to accommodate the County and City development plans. Moreover, the IRWD is required to comply with the many laws, regulations and codes in its capital improvement program.

Harmsworth Associates is familiar with the Planning Areas within IRWD's Service Area and has recently conducted pre-construction biological surveys, construction monitoring or permitting in the following PAs 1, 6, 9 18 and 39, for The Irvine Company's residential developments that will be served by IRWD through its capital improvement program. The firm has access to local planning documents, CEQA, NEPA documents and permits. Moreover, the firm was a part of the NCCP/HCP planning process representing the Metropolitan Water District of Southern California and later assisting both The Irvine Company and IRWD in extensive biological surveys and the preparation of amendments to the NCCP/HCP.

Harmsworth Associates will assist IRWD with planning its capital projects and maintenance activities by providing advice on the nexus of environmental issues with planning activities to minimize the environmental consequences and cost of its planned actions.

Task 2: Regulatory Agency Consultation, Permit Application and Procurement

Harmsworth Associates is familiar with the preparation and processing of federal, state, and local permits on projects, operations, maintenance and planning activities. Assistance by Harmsworth Associates may involve the preparation and processing of permit applicants and supporting materials with one or more of the regulatory agencies. The firm has provided consultation on both riparian and upland systems.

Harmsworth Associates secured emergency permits for IRWDs ILP washout and the San Joaquin Reservoir Access Road washout. Currently HWA are in the process of obtaining permits for a major road expansion and interchange in the City of Beaumont, Riverside County.

Harmsworth Associates will assist IRWD with the preparation of permit applications to the resource/wildlife regulatory agencies including:

- *United States Army Corps of Engineers*
- *Bureau of Land Management*
- *United States Forest Service*
- *California Department of Water Resources*
- *California Regional Water Quality Control Board*
- *California Department of Fish and Wildlife*
- *California Coastal Commission*
- *South Coast Air Quality Management District*

Harmsworth Associates will provide services to monitor or implement compliance and reporting. Compliance may require monitoring contractor removal of exotic plants, restoration and revegetation monitoring then complete the annual or periodic reporting requirements in permits. Consultant shall provide certification of compliance with permit conditions for IRWD and agency approval. Harmsworth Associates shall develop a schedule of all permit requirements for existing and new permits and their status. Consultant shall bring any violations of permit conditions to the attention of the District.

Task 3: Wetland Delineation

Harmsworth Associates staff has taken the USACE delineation course and are fully competent to determine the jurisdictional boundaries of the United States Army Corps of Engineers (pursuant to Section 404 of the federal Clean Water Act). They have expertise with the California Fish and Wildlife Code (pursuant to Section 1602) and the California Coastal Commission (pursuant to the California Coastal Act).

Harmsworth Associates has completed many wetland delineations in southern California and Orange County for submission to the USACE, RWQCB and CDFW to obtain permits certifications and agreements. One recent complex project is in the city of Beaumont, where Potrero Boulevard and 4th Street are being extended and connecting in a new interchange with Highway 60. Impacts will occur to a number of drainages including a perennial creek that supports wetlands, riparian habitat and least Bell's vireo. Complicating the project is the fact that the city conducted some associated grading prior to permit approval. HWA conducted the delineation, all biological surveys, impact analysis and worked with the Corps to avoid fines relating to the pre-permit grading. HWA also prepared the mitigation plan.

Harmsworth Associates recently completed Wetland Delineations, Vegetation Mapping and obtained permits on projects in Moreno Valley, Hidden Canyon in Riverside County and at UCI Campus.

Harmsworth Associates will provide wetland delineation services to IRWD in compliance with the regulatory definitions in force.

Task 4: Biological Survey, Monitoring, Assessment

Harmsworth Associates has the necessary permits to survey for the listed species in the Service Area including nest monitoring ability for the least Bell's vireo, the southwestern willow flycatcher and the collection of endangered fairy shrimp etc. The staff is very familiar with the flora and fauna of Orange County having completed some of the most extensive surveys undertaken in the County. The firm was selected to survey the **Orange County Coastal Central NCCP/HCP** project including:

1. Rare Wetland Plants in the Orange County Central/Coastal NCCP Subregion
2. Rare Grassland Plants in the Orange County Central/Coastal NCCP Subregion
3. Quino Checkerspot Butterfly Habitat in Orange County Central/Coastal NCCP Subregion
4. *Arundo donax* in Orange County Central/Coastal NCCP Subregion
5. Native Fish in Orange County Central/Coastal NCCP Subregion
6. Arroyo Southwestern Toad in Orange County Central/Coastal NCCP Subregion
7. Southwestern Pond Turtle in Orange County Central/Coastal NCCP Subregion
8. Grassland Birds in Orange County Central/Coastal NCCP Subregion
9. Tricolored Blackbird in Orange County Central/Coastal NCCP Subregion
10. Raptors in Orange County Central/Coastal NCCP Subregion
11. Least Bell's Vireo and Willow Flycatcher in Orange County Central/Coastal NCCP Sub-region

In addition the firm has undertaken extensive wildlife and plant surveys of the North Ranch Policy Plan Area for The Irvine Company. Currently the firm is undertaking numerous surveys for TIC, IRC, NROC and the TNC of the flora and fauna in IRWD's Service Area.

Harmsworth Associates will undertake biological surveys, assessments and monitor preconstruction and construction areas as required for the District's projects. Harmsworth Associates will provide field services, written reports, compliance with state and federal protocols and advisement on IRWD's projects. The firm will undertake preliminary and initial assessments, bird nesting surveys, biological monitoring and identification of threatened and endangered species.

Task 5: Threatened and Endangered Species Regulation, Monitoring and Reporting

Harmsworth Associates can survey and prepare documents for endangered and threatened species and recommend strategies to minimize and mitigate potential impacts within the NCCP/HCP agreements. Harmsworth Associates has permits (No. PRT-810768) and MOUs to survey and study endangered species such as the least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, fairy shrimp, pond turtle and other species. The firm's staff attends meetings with the USFWS staff on key issues involving survey protocols for listed species and provides input of a practical nature.

As a consultant representative of Lennar Homes with the Coalition for Habitat Conservation the firm follows the latest developments and legal actions under the ESA. Complex issues such as the “No Surprises Policy”, “adverse modification” definition and the ability to mitigate “off-site” impacts to critical habitat are currently under litigation and may impact IRWD’s Section 10(a) (1) (B) Endangered Species Permit obtained as a result of the NCCP/HCP plan in 1996. These and other issues of importance are well known to Harmsworth Associates.

Over the past several seasons HWA staff has assisted TIC comply with the endangered species act relating to least Bell’s vireo at PA39, adjacent San Diego Creek. A complex set of mitigation measures required TIC to conduct surveys and nest monitoring for least Bell’s vireo in addition to weekly noise monitoring of construction activity during the nesting season for the vireo. Weekly reports were required to be submitted to USFWS, CDFW and the Corps. HWA conducted the surveys, nest monitoring, noise monitoring and submitted the weekly reports.

Harmsworth Associates will assist IRWD in the review of regulatory issues associated with listed species under the Endangered Species Acts (FESA and CESA) and ascertain the significance of such regulation on IRWD’s projects, operations, and planning activities. The firm will provide assistance with specific policy formulation on endangered species covered under the:

- *Federal Endangered Species Act*
- *California Endangered Species Act*
- *Natural Community Conservation Plan Act*
- *The NROC’s policies and IRWD’s rights on “take” in the reserve*
- *Migratory Bird Treaty Act*

The firm will provide assistance with both existing 10(a) permits and new applications as required.

Task 6: Mitigation Monitoring and Reporting

Harmsworth Associates has a long history of mitigation monitoring in Orange County. The firm is currently working on a number of projects for the Irvine Company undertaking preconstruction surveys, construction monitoring surveys for conditions compliance, noise monitoring and other requirements for several developments in the service area. The firm is currently assisting IRWD in restoring cactus scrub habitat at the OPA site and is assisting the Nature Reserve of Orange County (NROC) managing contractors controlling exotic weeds in the NCCP/HCP reserve.

Other projects include:

- Mitigation monitoring at various sites for IRWD including Santiago Oaks Regional Park, Quail Hill, Santiago Creek ILP and PA6 water-tank.
- Mitigation monitoring of native grassland restoration at PA18 for The Irvine Company.

- Surveys and monitoring for least Bell's vireo, southwestern willow flycatcher, and other riparian birds at various riparian habitats in Irvine for The Irvine Company.
- Southwestern pond turtle habitat restoration and pond turtle monitoring at Shady Canyon for The Irvine Company.
- Vegetation and wildlife surveys for The Nature Conservancy, at open space areas of the Irvine Ranch.
- Monitoring vegetation removal under the NCCP guidelines

Harmsworth Associates will assist IRWD in mitigation monitoring planning, 404, 1602, and 401 permit conditions compliance. Harmsworth Associates shall provide services to monitor or implement compliance and reporting. Compliance may require monitoring contractor removal of exotic plants, restoration and revegetation monitoring then complete the annual or periodic reporting requirements in permits. Consultant shall provide certification of compliance with permit conditions for IRWD and agency approval. Harmsworth Associates shall develop a schedule of all permit requirements for existing and new permits and their status. Consultant shall bring any violations of permit conditions to the attention of the District.

Task 7: Water Quality Stormwater Monitoring and Reporting

Harmsworth Associates personnel have a strong background in water resources. Dr. Harmsworth was an analytical chemist prior to specializing in the field of fresh water biology as a limnologist. At Camp Dresser and McKee he was president of the Environmental Sciences Division and responsible for over 200 personnel including 100 water quality chemists. He managed water quality monitoring projects from wastewater treatment plant efficacy analysis (City of Detroit WWTP), sewer and wastewater discharges to lake, river and stream systems. He was responsible for the long-term monitoring of Salt Creek sediment load as a part of the RWQCB conditions. We are familiar with water quality collection procedures and the quality assurance procedures required for water quality collection and analysis.

Harmsworth Associates collected the biological data used by the Corps in preparation of the San Diego Creek SAMP and we are familiar with the workings of this SAMP.

Harmsworth Associates will provide water quality and sediment quality monitoring for compliance with USACE, RWQCB, and CDFW permit conditions. Also, Harmsworth Associates will provide compliance monitoring with the General Orange County Stormwater Permit.

Task 8: Natural Treatment System

Harmsworth Associates conducted invertebrate sampling in the Woodbridge Channel for the NTS project. The aim of the sampling was to document the existing invertebrate fauna of the Woodbridge Channel, particularly the riffle areas. Four locations were selected along the channel for sampling. Standard qualitative and semi-qualitative

methods including, sweep netting of vegetation and the water column, sediment grabs, kick-sampling and hand searches, will be used to assess the status of the existing fauna. To the extent possible, sampling techniques were compatible with the methods used by Alex Horne along Peters Canyon Channel. The existing physical condition and vegetation communities at each location were described.

Harmsworth Associates obtained permits for IRWD's inline basins under a sub contract to Tettemer and Associates. The firm has expertise in the areas of water quality, freshwater biology, wetland permits and restoration of wetland systems. The NTS as designed will remove sediment, some nitrogen from nitrification processes in the treatment basins and potentially heavy metals adsorbed onto sediments and selenium to the atmosphere.

Harmsworth Associates have been involved in the design, planting palette and installation of the NTS basins at PA1 and PA39 for The Irvine Company. Harmsworth Associates is familiar with the vegetation management and monitoring required for NTS basins.

Harmsworth Associates will provide assistance in monitoring water quality, fauna and the growth and types of vegetation in the basins. In addition the firm will provide advice on the management of the basins to optimize the removal of sediments and pollutants.

Task 9: Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)

Harmsworth Associates was a consultant member of the working group of agencies and landowners that prepared the Orange County NCCP/HCP program for coastal sage scrub including the preparation of the EIR/EIS, Management Plan and the Implementing Agreements. The program plays an important role in the mitigation plans for participating landowner's projects and the operation and maintenance plans of existing and future facilities.

Harmsworth Associates prepared survey documents for the wetland, upland and grassland surveys and biological analysis for the NCCP/HCP Amendment including:

- Rare Wetland Plants in the Orange County Central/Coastal NCCP Subregion
- Rare Grassland Plants in the Orange County Central/Coastal NCCP Subregion
- Quino Checkerspot Butterfly Habitat in O.C. Central/Coastal NCCP Subregion
- *Arundo donax* in Orange County Central/Coastal NCCP Subregion
- Native Fish in Orange County Central/Coastal NCCP Subregion
- Arroyo Southwestern Toad in Orange County Central/Coastal NCCP Subregion
- Southwestern Pond Turtle in Orange County Central/Coastal NCCP Subregion
- Grassland Birds in Orange County Central/Coastal NCCP Subregion
- Tricolored Blackbird in Orange County Central/Coastal NCCP Subregion
- Raptors in Orange County Central/Coastal NCCP Subregion
- Least Bell's Vireo and Willow Flycatcher in Orange County Central/Coastal NCCP Sub-region

Harmsworth Associates has extensive experience working with the Orange County (NCCP/HCP). Projects relating to NCCP/HCP issues have been conducted for the Nature Reserve of Orange County, The Irvine Company, The Nature Conservancy, Transportation Corridor Agencies and others. Many of these projects have included conducting biological assessments, focused surveys, assessment of impacts to NCCP resources, construction monitoring and co-ordination with NROC and wildlife agencies.

Harmsworth Associates recently provided NCCP/HCP compliance for IRWD on the Lake Forest Zone C pipeline, Sewer Lines ESAs and the Newport Coast Cathodic project.

Harmsworth Associates will provide assistance to IRWD in the planning of its projects that are related to the NCCP/HCP plan. Three main elements, the ESA 10a permit, the Implementing Agreement and the Mitigation Monitoring Program are of importance to IRWD. We will provide assistance for Section 10 relating to the construction minimization methods that must be followed.

Task 10: Project Coordination

Harmsworth Associates has a history of successful coordination with other consultants and agencies; and we can work equally well as a project leader or as a team member. Harmsworth Associates was a consultant member of the working group of agencies and landowners that prepared the Orange County NCCP/HCP, which required significant coordination with other consultants and agencies. Harmsworth Associates successfully obtained permits for IRWD's inline basins under a sub contract to Tettemer and Associates; and regularly work and coordinate with a variety of IRWD managers and staff on IRWD projects.

Harmsworth Associates regularly provide biological data and reports to other consultants preparing the CEQA documents; Harmsworth Associates will work with IRWDs CEQA consultant as requested.

Harmsworth Associates will coordinate with other consultants and agencies as necessary and will provide project management or act as a subordinate as directed by IRWD.

Task 11: Staff Rates

The rates of the personnel shown in the table would be used on the contract

**CONSULTING FEE SCHEDULE
JULY 1, 2013 TO JUNE 30, 2014**

Labor Category	Hourly Rates
Principal	\$ 140.00
Vice-principal	\$ 130.00
Sr. Biologist	\$ 100.00
Project Biologist	\$ 80.00
Assistant Biologist	\$ 60.00

EXPENSES

Mileage \$ 0.50 /mile

Other direct costs at cost plus 12%

Task 12: Project Task Item Estimates

Once requested Harmsworth Associates always provides project scope/cost in a timely manner. Harmsworth Associates is used to working for IRWD, Irvine Company and other clients on call contracts, and is experienced in providing project scopes/costs at short notice. For all projects Harmsworth Associates provides a scope of work, cost estimate, schedule and staff availability; the level of detail depends on the client requirements for individual projects.

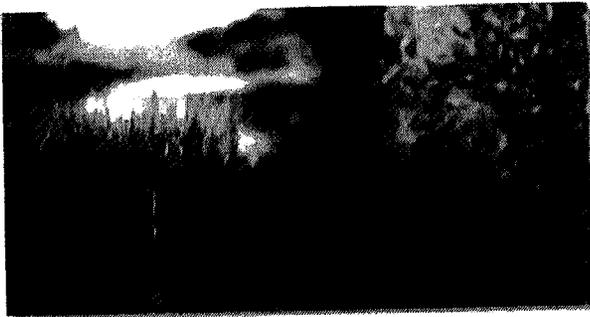
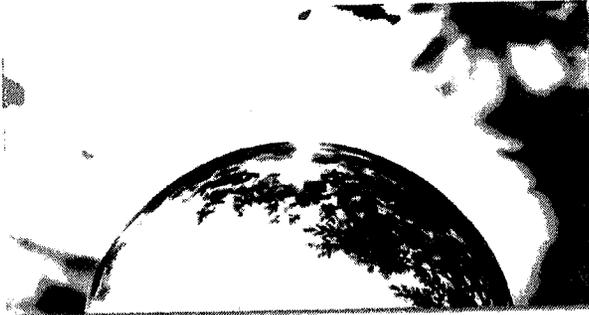
On small projects with very quick turn-around times Harmsworth Associates can provide a same-day proposal with staff availability, schedule, cost estimate and scope via email. For example on the IRWDs Syphon Reservoir storm drain culvert, the cost for the survey was provided via phone and the survey, letter report and meetings were completed in one week for a total cost of less than \$500.

On more typical small jobs Harmsworth Associates can provide a proposal, cost estimate, staff availability and schedule within a few days. For example, the Sewer Line ESAs was conducted under budget (see Appendix A).

For more complex projects Harmsworth Associates provides a more detailed proposal including methodology, detailed schedule, cost estimate, scope of work and staff assignments. For example the biological surveys currently being conducted for The City of Beaumont (through Urban Logic) (see Appendix A).

REQUEST FOR PROPOSAL IRVINE RANCH WATER DISTRICT

On-Call Monitoring and Permitting Services



PREPARED FOR

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

**Attn: Paul A. Weghorst, Director of
Water Resources**

PREPARED BY

VCS ENVIRONMENTAL
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, California 92675
W 949.489.2700
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DECEMBER 31, 2013



VCS Environmental

30900 Rancho Viejo Road, Suite 100, San Juan Capistrano, CA 92675

Introduction

The following scope of work is presented by task order consistent with the organization of the Request for Proposals: On-Call Monitoring and Permitting Services (RFP). The remaining contents of the proposal are provided by task where applicable and/or are included in the Appendices, as follows: Scope (Appendix A), Team (Appendix B), References (Appendix C), Fee Schedule (Appendix D), Insurance (Appendix E). VCS has not arranged a Joint Venture as part of this proposal. Instead, VCS will rely on its partner technical subconsultant referenced in this proposal on an as-needed basis. VCS has no personal or organizational conflicts of interest prohibited by law. VCS maintains professional liability insurance coverage and is in the process of increasing our existing coverage to meet IRWD requirements (Appendix E). VCS has no proposed modifications to the standard terms and conditions of the IRWD sample professional service agreement.

Scope of Work

OVERVIEW

The VCS team has extensive experience providing regulatory guidance and acquiring permits from local, state, and federal agencies including the United States Army Corps of Engineers (USACE), Regional Water Quality Control Boards (RWQCB), California Department of Fish and Wildlife (CDFW), and the United States Fish and Wildlife Service (USFWS). This requires our staff to maintain a working knowledge of the regulatory framework related to the Clean Water Act (CWA), Porter-Cologne Water Quality Control Act (PCWQCA), Federal Endangered Species Act (FESA), and California Endangered Species Act (CESA). It also requires our staff to understand the interests and jurisdictional authority held by the United States Environmental Protection Agency (EPA), and USACE regional rules such as the San Diego Creek Special Area Management Plan (SAMP), as well as regulatory requirements of the United States Fish & Wildlife (USFWS), CDFW, State Water Resources Control Board (SWRCB), RWQCB, Nature Reserve of Orange County (NROC), Natural Community Conservation Plan (NCCP), South Coast Air Quality Management District (SCAQMD), local cities, and the County of Orange.

VCS has prepared and processed many USACE Section 404 and 408 permits, RWQCB Section 401 Water Quality Certifications and Dewatering Permits, CDFW Section 1602 Streambed Alteration Agreements, USFWS Section 7 Biological Opinions within Orange County and throughout southern California.

Our team works closely with the project proponent at the earliest stages of development to understand the project details. Our first step is to analyze the project design and the resources to determine if regulatory permits can be avoided. Often a small change can avoid jurisdiction and save substantial money and time. If jurisdiction is unavoidable, we then determine the types of permits required, regulatory climate, and potential environmental opportunities and constraints. Next, we provide strategy on the project design and project description (if applicable) in order to identify proper mitigation associated with those necessary permits. Throughout the process we continue to provide strategic advice on how to minimize exposure to regulatory permits in order to save time and money.

We transact with the regulatory agencies on a daily basis and understand their needs, which allows us to effectively negotiate permit conditions and mitigation. VCS also assists clients with creation of formal agency approved mitigation banks. We are currently processing over 4,600 acres of mitigation bank land with the resource agencies in the Santa Ana, San Gabriel and Santa Clara River Watersheds.

We believe it is our job to identify potential future roadblocks to initiating projects. We are uniquely qualified in this regard due to our extensive experience actually entitling land for private landowners, builders, and school districts, from inception to construction. VCS takes project schedules very seriously. As an example, Garry Cohoe of SANBAG entrusted VCS with ensuring environmental schedules were met for two of its highest priority projects: the I-15/I-215 "Devore" Interchange and the Colton Crossing. VCS successfully guided the environmental teams to meet the schedules and both projects secured their essential funding and are now under construction. We bring a commitment to meeting schedules to all of our projects.

San Bernardino Associated Governments (SANBAG)

"Vandermost team members have been assigned as environmental managers on our highest profile projects... These projects have extremely aggressive schedules and contain many potential environmental impacts... many times this entails working through evenings, weekends, and holidays for Vandermost team members. Their "on-call" services truly are instrumental in SANBAG's delivery... Vandermost Consulting Services Inc. has allowed SANBAG to become proactive in the environmental phase of its projects rather than only reactive resulting in project schedule and monetary savings."

VCS also takes project budgets very seriously. We understand that every organization, whether public or private, is trying to stretch its funding as far as possible. Therefore, we try to be as efficient and cost effective for our clients as possible. For example, we have an approximate \$3 million three-year contract with SANBAG. At the end of year three, we had over \$1 million of authority remaining. SANBAG was able to stretch the contract another year as a result. We see ourselves as advocates for our clients and that includes finding the most cost efficient way to complete work.

TASK 1: LAND USE PLANNING

The IRWD service area is governed by city and county regulations, including general plan, zoning code, specific plan, area plan, and specific subdivision requirements. For these areas, prior environmental documents or specific environmental regulations may add an additional layer of governance. Depending on the type and location of the project, some or all of these local land use and environmental regulations may apply.

VCS has extensive experience working with local jurisdictions (counties and cities) and their respective regulations. First, our proposed Project Manager, Peter Carlson, spent 12 years of his career working for the cities of Newport Beach and Laguna Niguel. During this time, Mr. Carlson drafted and implemented land use and environmental regulations similar to those that might affect IRWD projects. Mr. Carlson also has extensive experience entitling development projects for landowners and developers. Entitling these projects requires navigating the maze of land use and environmental regulations to obtain project

approval. Furthermore, almost all of the entitlement projects contained extensive domestic water facilities, such as storage tanks, booster pumps, and transmission/distribution pipes. One of our current entitlement projects requires an interagency agreement between Trabuco Canyon Water District and Santa Margarita Water District that we are involved in negotiating / facilitating.

TASK 2: REGULATORY AGENCY CONSULTATION, PERMIT APPLICATION AND PROCUREMENT

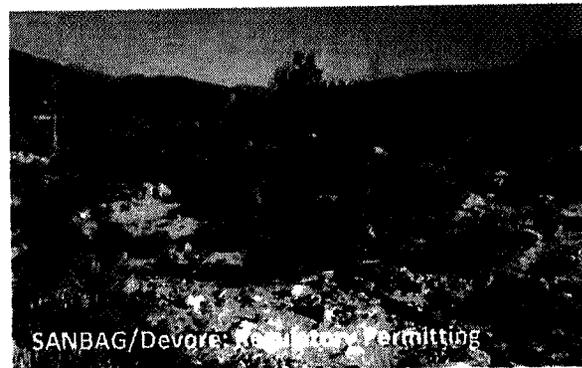
VCS will provide IRWD with a full range of regulatory and permitting services including:

- Consultation on state and federal environmental laws and regulations;
- Guidance on legal authority of USFWS, CDFW, RWQCB, SWRCB, USEPA, USACE, NROC and SCAQMD;
- Strategic advice and counseling on environmental permitting procedures;
- Permit application preparation, permit procurement and permit processing;
- Agency negotiation of permitting requirements and project obligations;
- Field reconnaissance, surveys, technical reports and memorandums.

VCS currently provides these services to numerous public agencies such as, SANBAG, County of San Bernardino, City of Los Angeles, City of Long Beach, City of Tustin, City of Irvine, City of Murrieta, IRWD/City of Lake Forest, City of Ontario, and City of Lake Elsinore. We also provide these services to private sector clients such as, Shea Homes, Tripointe Communities, Meritage Homes, New Model Colony, Lewis Operating Corporation and Standard Pacific Homes.

VCS is well known in the industry for our guidance on regulatory issues including those related to the:

- Clean Water Act
- California Fish and Game Code
- Porter-Cologne Water Quality Control Act
- California Endangered Species Act
- Federal Endangered Species Act
- California Public Resources Code
- California Coastal Act
- California Environmental Quality Act
- National Environmental Policy Act



We have provided guidance to public and private sector clients on all of the above codes and regulations. We often turn to the code to assist our clients in minimizing their exposure to these regulations. An example is the CWA Section 404 preamble found in the Code of Federal Regulations. There is extensive information in the preamble that helps us to limit the USACE's authority over projects. Sometimes this information is forgotten and seldom used by the USACE staff and/or other consultants. We have also had extensive experience tracking MS4 documents and have been involved in National Pollution Elimination Discharge System (NPDES) advocacy since this program's inception in the

early 1990's. Recently, we relied on the California Public Resources Code to prepare a position paper related to a CDFW staff person's position regarding the transfer of conservation easements.

While biological regulatory permitting is what we do on a daily basis, VCS also has the capability to assist IRWD with other permitting issues or consultations with other agencies. For example, IRWD may have projects that require consultation and/or coordination with Caltrans. As SANBAG's environmental consultant, VCS works with Caltrans on a daily basis and is therefore well versed in Caltrans' policies and procedures. Another example might be the need to obtain permits from AQMD for emergency generators or other facilities, which is very similar to work that VCS just completed. The Laurel Street Grade Crossing project in the City of Colton creates a potential sump condition during storm events that requires an emergency generator to operate pumps to prevent flooding. The project site is located in an area with businesses and single-family residences. VCS represented SANBAG and the City of Colton and obtained the necessary permits from AQMD for the generator. VCS also recently performed all of the environmental review for the Murrieta Unified School District's conversion of its bus fleet to CNG, which also included the installation of back-up generators and compressors. Through our entitlement work, we have also worked with and obtained permits from agencies such as the Public Utilities Commission on railroad at-grade and grade separation projects; Department of Dam Safety for dam removal and avoiding creating jurisdictional dams; and County Health, Regional Board, and Department of Toxic Substances Control on hazardous waste contamination issues.

Another agency not mentioned in the RFP that could affect some of IRWD's service area is the California Coastal Commission. VCS also has extensive experience working with the Coastal Commission on a variety of projects, such as drafting Local Coastal Programs (LCPs), preparing and processing Coastal Development Permits, and advising clients on Coastal Act consistency. VCS recently kicked-off a large project with the City of Long Beach in the Alamitos Bay wetland estuaries in which VCS is conducting the delineation, vegetation mapping, wildlife surveys, regulatory permitting, and a LCP amendment.

In response to the RFP's Task 3 and Proposal Contents section 3, Appendix C includes summary sheets for project examples including, Serrano Summit, Mill Creek Wetlands, On-call services for SANBAG, On-call services for MVUSD, Summerly, French Valley, Monrovia Nursery and Tustin Marine Base. In addition, the table below provides a sample list of current projects documenting the breadth of VCS' history with regulatory permit procurement and related services.

Project/ Client	Permitting
SANBAG On-Call Environmental/ SANBAG	Regulatory Strategy, USACE 404 Permits, RWQCB 401 Certifications, CDFW 1602 Agreements, USFWS Section 7, SCAQMD Permit, Biological Reports Production and Oversight, Special Status Species, Jurisdictional Delineations (JDs), CRAM
MVUSD On-Call Environmental/ Murrieta Unified School District	Regulatory Strategy, USACE 404 Permits, RWQCB 401 Certifications, CDFW 1602 Agreements, USFWS Section 7, Biological Report Production and Oversight, MSHCP, Special Status Species, JD, CRAM

Irvine Ranch Water District

Serrano Summit/ City of Lake Forest & IRWD	Regulatory Strategy related to the San Diego Creek SAMP, USACE LOP, RWQCB 401 Certification, CDFW 1602 Agreements, Alternatives Analysis, Mitigation design/HMMP
Tustin Marine Base Redevelopment/ City of Tustin	Master Plan, Regulatory Strategy, USACE 404 Permit, RWQCB 401 Certification, CDFW 1602 Agreement, Biological Report, HMMP
SEAPLAN/ City of Long Beach	Habitat assessment, Coastal Act Compliance / LCP Amendment, Regulatory Strategy, USACE 404 Permit, RWQCB 401 Certification, CDFW 1602 Agreement, USFWS Section 7
French Valley Creek Slope Protection/ Global Investments	Regulatory Strategy, USACE 404 Permit, RWQCB 401 Certification, CDFW 1602 Agreement, Flood Control, MSHCP, HANS, DBESP, JD, Tree Count, Vegetation Mapping, Habitat Assessment, HMMP, Burrowing Owl Survey, Least Bell's Vireo, Narrow Endemic Plant Species
Gate King Industrial Park/ Gate King	Regulatory Strategy, USACE 404 Permit, RWQCB 401 Certification, CDFW 1602 Agreement, USFWS Section 7, HMMP, Coastal Sage Scrub
Baker Ranch/ Shea Homes	Regulatory Strategy, USACE 404 Permit, RWQCB 401 Certification, CDFW 1602 Agreement, USFWS Section 7
Vila Borba Development/ Standard Pacific	Regulatory Strategy, USACE 404 Permit, RWQCB 401 Certification, CDFW 1602 Agreement, FESA Biological Assessment, CESA Consistency Determination
Petersen Mitigation Bank/ Land Veritas	Project Management, Regulatory Approvals from USACE, RWQCB, CDFW, Special Status Species
Soquel Canyon Mitigation Bank/ Land Veritas	Project Management, Regulatory Approvals from USACE, RWQCB, CDFW, Special Status Species
Argus Residential Developments/ Pacific Land Investors	Habitat Assessments, Tree Surveys, Raptor Foraging Habitat, Non-native Grassland, North County MSCP
Summerly/ McMillian Companies, LLC	Regulatory Strategy, USACE 404 Negotiations, HMMP
Mill Creek Wetlands/ City of Ontario	Regulatory Strategy, USACE 404 Permit, RWQCB 401 Certification, CDFW 1602 Agreement, CDFW Section 2080.1, USFWS Section 7, Biological Report Production and Oversight, Special Status Species, JD, CRAM
Skyridge/ Standard Pacific	Regulatory Strategy, USACE 404 Permits, RWQCB 401 Certifications, CDFW 1602 Agreements, USFWS Section 7, Biological Assessment, Focused plant surveys, Focused Coastal California Gnatcatcher Surveys, and JD

TASK 3: WETLAND DELINEATION

VCS staff includes trained wetland delineators by The Wetland Institute, certified U.C. Davis California Rapid Assessment Methodology (CRAM) practitioners, and agency-approved biologists and regulatory specialists. Our staff has extensive experience performing field reconnaissance and site evaluations, and preparing detailed maps of vegetation and waters consistent with agency standards and requirements. During delineations and vegetation mapping we use a GPS unit with +/- 1-foot accuracy to pinpoint the edges of jurisdiction. These data are input into our GIS system, allowing us to create very accurate delineation maps and/or provide the data to the project engineer for inclusion on the design plans.

Once jurisdiction is defined through a detailed delineation, VCS assists its clients to identify minimal impacts to “waters of the U.S. and State”, including wetlands, riparian areas and other sensitive habitat to minimize exposure to the regulations. On many projects, we have successfully advised clients on eliminating all impacts under potential USACE, RWQCB and CDFW jurisdiction, and therefore eliminating the need for all permits, to effectively meet project schedules and objectives. This includes providing strategy to enable a project to qualify for a USACE Section 404 non-notifying permit and/or nationwide permit rather than Individual Permit.

The USACE has special rules that apply to many areas throughout Southern California. For example, in Murrieta/Temecula, the USACE has a regional rule that limits the Nationwide Permit threshold to 0.10 acre within the Murrieta, Temecula, and Warm Spring Creek watersheds. The USACE also has Special Area Management Plans (SAMPs) for certain watersheds, one of which is the San Diego Creek Watershed, which affects the IRWD service area. The SAMP also establishes special rules that apply to thresholds for permitting, processing requirements, and mitigation options. VCS is well versed in the San Diego Creek SAMP, as well as other USACE rules, and is currently processing regulatory permits under the San Diego Creek SAMP for the City of Lake Forest and IRWD on the Serrano Summit project.

A representative sampling of some of VCS’s current projects that include regulatory permitting is included in the Task 2 section above.

TASK 4: BIOLOGICAL SURVEY, MONITORING, ASSESSMENT

VCS has a team of qualified biologists ready to assist IRWD on any of its projects. Our biologists have been vetted and approved by the Resource Agencies to perform biological surveys and conduct biological monitoring. Specific capabilities include:

- Habitat assessments and vegetation mapping
- Delineation of Waters of the US and State
- Pre-construction nesting bird surveys
- Burrowing Owl surveys
- CRAM
- HGM / Vegetation monitoring
- Construction monitoring
- Habitat Mitigation and Monitoring Reports (HMMP)
- Biological technical studies and reports
- Focus Surveys for Threatened, Endangered, and Species of Special Concern (may include minor subconsultants for species specific studies); and Biological Assessment reports.



Should an IRWD project require focused surveys for a particular species, VCS will utilize Cadre Environmental (Cadre). Cadre has conducted habitat assessments, focused surveys and research for federally listed threatened and endangered species throughout Orange County for nearly two decades. Specifically, Cadre possesses experience and permits for conducting habitat assessments and focused surveys for the coastal California gnatcatcher, least Bell’s vireo, willow flycatcher, cactus wren, arroyo toad, and pacific pocket mouse. In addition to conducting focused surveys, Cadre was selected as one of the few consultants to work with the resource agencies on the development of the CRAM procedures.

Irvine Ranch Water District

One of Cadre's present research efforts include serving as the principal investigator for a 5-year arroyo toad habitat utilization study currently being conducted for Rancho Mission Viejo. Cadre is also currently serving as a lead biological monitor for Caltrans with responsibilities including, focused surveys, development of alternative mitigation measures, USFWS liaison, and reporting.

VCS is well versed with the flora and fauna located within the IRWD service area. Primarily the habitat types that could be encountered include wetland, riparian, coastal sage scrub, oak and walnut woodland, and cactus scrub. It is unlikely, but possible that vernal pools and/or seeps could be encountered. We routinely encounter all of these habitats in our work throughout Southern California. One unique example of this familiarity with local species is our work with the Irvine Ranch Conservancy to restore land with native species local to the area for the purpose of creating a "seed farm" for future restoration activities on the Irvine Ranch.

VCS has extensive experience fulfilling both preconstruction monitoring and post-construction implementation requirements associated with those described under Tasks 4 through 9 of the RFP. The table below provides a sample list of current relevant projects.

Project/ Client	Monitoring
SANBAG On-Call Environmental/ SANBAG	Preconstruction Nesting Bird Surveys, Bat Surveys, Construction Monitoring
MVUSD On-Call Environmental/ Murrieta Unified School District	Mitigation Monitoring, Preconstruction Nesting Bird Surveys
French Valley Creek Slope Protection/ Global Investments	HMMP, Burrowing Owl Survey, Least Bell's Vireo Survey, Narrow Endemic Plant Species, Vegetation Mapping
Gate King Industrial Park/ Gate King	HMMP, Coastal Sage Scrub Monitoring
Baker Ranch/ Shea Homes	Mitigation Monitoring, California Gnatcatcher Monitoring, Nesting Bird Surveys, Construction Monitoring
Via Borba Development/ Standard Pacific	Least Bell's Vireo Surveys
Mill Creek Wetlands/ City of Ontario	Burrowing Owl Preconstruction Surveys, Nesting Bird Surveys, Construction Monitoring
Skyridge/ Standard Pacific	Focused plant surveys, Focused Coastal California Gnatcatcher Surveys
Norco/ Wyle Laboratories	Rat Trapping, Burrowing Owl Preconstruction Surveys, Remediation Monitoring

In addition to monitoring, VCS also has extensive experience managing the full implementation of restoration and mitigation projects from start to successful completion focusing on compliance with

HMMPs and regulatory agency permit requirements. Projects have included a variety of native California habitat types such as coastal sage scrub, riparian woodlands, alkali marsh, wetlands, oak woodlands, and grasslands, with a focus on varying special status wildlife species such as California gnatcatcher, checkerspot butterfly, and least Bell's vireo. Past examples of success include French Valley Airport Center, Rancon Village Walk, Santiago Canyon for Irvine Company, Monroe Avenue and Vista Murrieta High School for the Murrieta Valley Unified School District, and Yerba Buena Elementary School in the Las Virgenes Unified School District.

TASK 5: THREATENED AND ENDANGERED SPECIES REGULATION, MONITORING AND REPORTING

VCS provides documentation and project processing pursuant to CESA and FESA on a regular basis. While not all of our projects have impacts to protected state or federal species, or require permits, we assess each and every project for the potential to impact protected species and designated critical habitat. Even if species are not present, impacts to designated critical habitat can trigger Section 7 consultation with the USFWS if a federal nexus occurs, such as the need for a 404 permit or federal funding. Therefore, VCS senior staff and biologists have a comprehensive knowledge and working understanding of the CESA, FESA and the regulatory framework and process associated with issuance of biological opinions pursuant to Section 7 and Section 10 of the ESA and Section 2080 and 2080.1 of the CESA.

Murrieta Valley Unified School District

"We trust VCS to solve all of the environmental issues we face during the planning and construction of our school sites and appreciate how VCS works to meet project schedules and budgets. This includes obtaining permits (Department of Fish and Game, U.S. Army Corps of Engineers, and Regional Water Quality Control Board), preparing CEQA documents, handling MSHCP compliance, performing due diligence on our land purchases, monitoring mitigation sites, and briefing the Board of Education and concerned residents."

Many of our projects require consultation with the agencies under ESA and CESA. For example, we are currently processing a Section 7 consultation for a project for Standard Pacific Homes in the Trabuco Canyon area. The project requires take authorization for impacts to the coastal California gnatcatcher and designated critical habitat. We also recently completed consultation on our Mill Creek Wetlands project for impacts to least Bell's vireo. When a species is both federal and state listed, such as the Least Bell's Vireo, it is very important to consult with both agencies (CDFW and USFWS) concurrently. Generally, the USFWS takes the lead, but it is critical to keep CDFW involved in order to obtain a consistency determination under Section 2080.1 of the CESA. Otherwise two separate consultations can be more time consuming.

Take authorization without a federal nexus falls under Section 10 of the ESA. VCS advises its clients to avoid Section 10 consultations because of the extraordinary expense and time required. However, this isn't always possible. VCS represents the Murrieta Valley Unified School District and one of its high schools had impacts to occupied Quino Checkerspot Butterfly habitat. Without impacts to waters of the U.S. there was no federal nexus. Therefore, MVUSD was forced into the Section 10 process. VCS worked

a solution to join a Habitat Conservation Plan that was being processed in the area called AD 161, which was the precursor to the Southwest Riverside Multiple Species Habitat Conservation Plan (MSHCP). This solution saved MVUSD a substantial amount of time and money. As part of the AD 161 process, VCS developed a unique and creative mitigation plan, which entailed developing a separate laboratory at the high school for the purpose of rearing and releasing Quino Checkerspot Butterflies. This mitigation solution helped secure the approval of AD 161.

With the presence of the NCCP, it is unlikely IRWD would be subject to a separate Section 10 consultation and in most cases any impacts to listed species would be covered by the NCCP. However, VCS has the knowledge and capability to assist IRWD through this process.

In addition, our staff is experienced in species monitoring removal, project impact delineation and general contractor supervision. VCS is currently providing construction monitoring and reporting for our clients for work in and around "waters", wetlands and sensitive habitat. Our staff has been approved for monitoring by USFWS and CDFW. We also provide CEQA/NEPA mitigation monitoring, including assisting the construction contractors in appropriately interpreting conditions and measures.

VCS has a long list of examples of its construction monitoring. One example of construction monitoring is our work with Shea Homes on its Baker Ranch project in the City of Lake Forest. VCS provided construction monitoring and was on-site during the removal of all coastal sage scrub habitat. Another example is our work monitoring construction activities at Mill Creek Wetlands for potential impacts to least Bell's vireo.

Construction monitoring can be a challenging task because many contractors see the project biologist as a potential impediment to completing their job. Therefore, our approach to monitoring begins before construction starts with a pre-construction conference so we can establish a rapport with the contractor and explain to them that the biologist is not an impediment, but rather a team member who is there to trouble-shoot potential issues that could stop the job.

TASK 6: MITIGATION MONITORING AND REPORTING

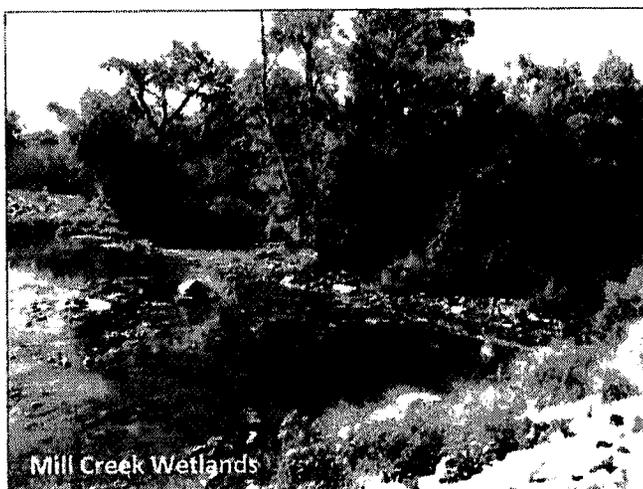
VCS specializes in fulfilling permit conditions placed on projects by regulatory agencies such as the USACE, RWQCB, USFWS and CDFW. These commitments often require detailed, on-going monitoring and documentation through implementation of a Habitat Mitigation Monitoring and Reporting Program (HMMP) and Long Term Management Plan (LTMP). These regulatory permit conditions, in conjunction with mitigation measures, often intersect and overlap in ways that make tracking and compliance a challenge. VCS is particularly adept at meeting this challenge by using what we call a *permit fillet*, which entails a thorough extraction of all mitigation, conditions, and other obligations taken from project CEQA/NEPA documents and regulatory permits organized by timing triggers. We have successfully utilized the *permit fillet* on the Vila Borba residential project for Standard Pacific Homes and on numerous other complex projects to avoid roadblocks associated with measures and conditions that restrict work to specific windows of time and to ensure hard deadlines are met.

VCS is also well versed in the process of creating and implementing both Mitigation Monitoring and Reporting Plans (MMRPs) for CEQA compliance and Environmental Commitment Records (ECRs) for NEPA compliance. We understand that mitigation measures must have both a nexus and a rough proportionality in order to be deemed an appropriate and legally defensible measure. This knowledge is especially important when negotiating with vested agencies and for understanding the legal obligations and responsibilities of a project. We also understand how to design well-defined mitigation measures that are both measurable and verifiable. Loosely defined mitigation measures can lead to difficulty and/or infeasibility of implementation and are much more challenging to document compliance and fulfillment.

In addition to our experience with MMRP CEQA compliance, we recently provided the documentation to verify project ECR NEPA compliance for the I-10 Cherry Avenue Interchange Project and the I-10 Citrus Avenue Interchange Project as part of our on-call contract with SANBAG. We are currently in the process of completing a third ECR for the SANBAG Colton Crossing Project, a major rail to rail grade separation project in the City of Colton, California.

TASK 7: WATER QUALITY, STORMWATER MONITORING, AND REPORTING AND TASK 8: NATURAL TREATMENT SYSTEMS (NTS)

We have combined Task 7 and Task 8 into one discussion of our role in the creation of the Mill Creek Wetlands, which provides water quality benefits through a Natural Treatment System (NTS). The City of Ontario and the New Model Colony builders teamed to create a regional NTS for compliance with MS4 requirements and VCS was instrumental in every step of the project. The site is located along Cucamonga Creek in the City of Chino, just upstream of Prado Dam. The majority of the 52-acre property is located on land owned by the USACE and a small portion is



privately owned land. Storm and dry season flows are diverted from Cucamonga Creek and flow through a forebay and six water quality treatment ponds before being outlet into Mill Creek. Each water quality treatment pond has areas of open water for ultraviolet treatment as well as emergent vegetation. Recreation trails encircle the ponds providing over 3.5 miles of hiking opportunity. Surrounding each pond is riparian habitat designed to support the endangered least Bell's vireo, which has populations in Mill Creek adjacent to the wetlands.

VCS's role began in the early stages of project development, working with the USACE's real estate and planning divisions up to the Colonel's office to obtain support for an outgrant (lease) to use the USACE's

property, and continues today with VCS taking the lead on project implementation. The following is a list of some of the tasks VCS has performed for the Mill Creek Wetlands:

- VCS held numerous meetings with the Colonel and top civilians with the USACE to negotiate authorization to use USACE land for the wetlands.
- VCS played a supporting role with the grant applications, resulting in the award of \$6.5 million for the project.
- VCS prepared the CEQA documentation for the City of Ontario as the lead agency.
- VCS prepared the NEPA documentation for the USACE as the NEPA lead agency.
- VCS prepared a Habitat Mitigation Monitoring Plan for the design of the basins.
- VCS prepared a Mill Creek Bioassessment methodology to analyze potential effects on the portion of Mill Creek between the diversion and the outlet resulting from the diversion of water, especially during the dry season, as required by the RWQCB.
- VCS prepared a Least Bell's Vireo monitoring program and Brown Headed Cowbird Trapping Plan.
- VCS prepared an Operations and Maintenance Manual that describes and defines how the basins are to be operated and maintained.
- VCS prepared a Water Quality Monitoring Plan, designed to test the effectiveness of the wetlands and also test for impacts to the portion of Mill Creek between the diversion and the outlet for changes that could affect flora and fauna in the Creek.
- VCS conducted all biological field surveys, mapping, and monitoring before and during construction.
- VCS negotiated and obtained all regulatory permits, including a 404 Individual Permit, 401, 1602, and Section 7.
- VCS identified, negotiated, and prepared the conservation easement for off-site mitigation.
- VCS has managed the installation of all plant material and managed the operation of the ponds during the initial stages of diversion.

The comprehensive nature of Mill Creek Wetlands makes it a good example of VCS' capabilities to handle all facets of creating a natural treatment system designed to improve water quality, provide recreation amenities, and create habitat for endangered species.

TASK 9: NATURAL COMMUNITY CONSERVATION PLAN/HABITAT CONSERVATION PLAN (NCCP)

VCS Environmental has been working with the Nature Reserve of Orange County (NROC) this year to transact Natural Community Conservation Plan (NCCP/HCP) approvals to remove coastal sage scrub from the Shea Borrego project. This required coordination with NROC board members including USFWS and the CDFW, and preparation of requests with graphics and vegetation mapping.

VCS also assisted Shea Homes with strategy related to a request to NROC to amend their boundary to incorporate an area of preserved coastal sage scrub on the Shea Borrego project that is located immediately adjacent to the NCCP/HCP preserve.

In addition, Cadre is currently preparing a General Plan update of the Conservation/Open Space Element for the City of Aliso Viejo. The Element focuses on the conservation of natural resources and preservation of open space. Various regional conservation plans including the Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) for the Central and Coastal Subregion of the County of Orange existing habitat reserves have been reviewed for existing biological resources and/or conservation



goals within and adjacent to the Study Area. The review included a detailed habitat assessment of the Study Area for federal/state listed and special status floral and faunal species.

TASK 10: PROJECT COORDINATION

As an experienced company that maintains current on-call environmental consultant contracts with multiple public entities and manages monitoring and permitting projects for both public and private sector clients, VCS is very comfortable acting in either a project management or subordinate role. We understand that collaboration is the nature of the business and there is no room for ego within a successful project team. It is an integral part of the VCS culture to remain flexible yet focused in order to move projects forward through the environmental review and regulatory process. This holds true whether we are managing our own technical consultants or functioning as a subconsultant under management of a public agency or prime.

An example of a management role we play is our on-call consultant contract with SANBAG. As the prime consultant, VCS is required to peer review and manage the preparation of environmental documents prepared by other consultants, including companies such as LSA Associates, ICF, AECOM, and others. We view our role as a facilitator to help the team to succeed. We also believe that positive working relationships are extremely important and we treat those we peer review and collaborate with the same way we would wish to be treated if the roles were reversed.

VCS also works in a subordinate role on many of its projects. For example, the Planning Center included VCS on its team for the SEAPLAN project in Long Beach. On this particular team, VCS is providing biological surveys, regulatory permitting, and coastal act compliance services. The Planning Center is taking the lead on preparing the Specific Plan and CEQA documents. We believe that our job is to ensure that our prime is successful so we will troubleshoot and communicate with The Planning Center to be sure they are able to provide excellent service to the City.

TASK 11: STAFF RATES

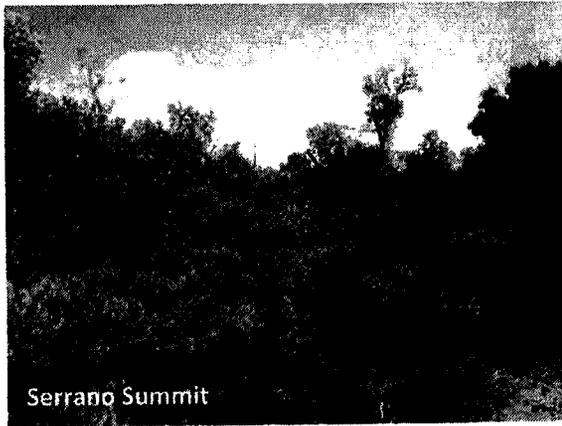
VCS offers an exceptionally high level of service at competitive rates. In addition, we will utilize Cadre to provide focused surveys for special status species on an as-needed basis. Cadre is a trusted subconsultant of VCS with a long established work history. Per the RFP Task 11 and Section 5 of the Proposal Contents, we have included a breakdown of VCS staff and Cadre's hourly rates and other costs in Appendix D of this proposal.

TASK 12: PROJECT TASK ITEM ESTIMATES

VCS will provide a Cost and Scope in a timely manner when presented with a project by IRWD. The Cost and Scope will include a project scope of work, cost estimate, team description and schedule.

VCS currently provides environmental on-call services to SANBAG, the Murrieta Valley Unified School District, the County of San Bernardino, the Los Angeles County Department of Parks and Recreation, and to several other public and private-sector clients. As such, we are very experienced in providing Costs and Scopes given short notice and with limited time for turnaround. In addition, all of our scopes and estimates are tailored to fit the actual needs of each project. Because our staff are not compartmentalized but rather trained in both regulatory and CEQA/NEPA, we have the advantage of being able to view the big picture and the details simultaneously, which allows us to identify an appropriate course of action and a streamlined list of tasks.

Per the RFP's Task 12 and Proposal Contents section 1, we have included a sample Cost and Scope for the Serrano Summit Project. The Cost and Scope was submitted to Omar Dandashi as part of a joint regulatory permitting effort between Lewis Operating Corporation and IRWD. The contents of Cost and Scope are similar to the type of information that would be submitted to IRWD under contract and upon request, including but not limited to a description of VCS' understanding of the project description and the methodology behind our approach to regulatory project compliance and permit procurement, a scope of work broken down by task, a schedule for completion of tasks, a list of project team members and hours required to complete each task, and a cost estimate per task. In cases where the project is uniquely complex or where the project description has yet to be finalized, VCS may also provide recommended and/or optional tasks for IRWD's consideration. For the Serrano Summit Project sample



Cost and Scope, VCS work included updating a jurisdictional delineation, updating focus surveys for California gnatcatcher and least Bell's vireo, preparation of a San Diego Creek SAMP Letter of Permission and Streambed Alteration Agreement, preparation of a RWQCB 401 certification package, PDT meetings, agency coordination, and HMMP/mitigation compliance. The sample Cost and Estimate is included in Appendix A of this proposal.

A final point on quality and costs – we strive to provide adequate time for senior staff review

FEE SCHEDULE**VCS FEE SCHEDULE 2013**

All work provided under this proposal would be charged according to the following fee schedule below with the exception of specialized work. Information about fees for specialized work can be found on the following pages.

Staff Level	Hourly Rate
President	\$200
Vice President	\$195
Senior Project Manager	\$185
Project Manager	\$175
Senior Biologist	\$185
Biologist	\$175
Assistant Project Manager	\$165
Project Coordinator	\$145
Office Assistant/ Word Processing	\$65

NOTE:

REIMBURSABLE EXPENSES. Expenses incurred directly for the Client's project will be billed at the actual cost and are not included in the original contract amount. Expenses include, but are not limited to, reprographics, Federal Express, necessary transportation costs including mileage by automobile at the IRS reimbursement rate, toll road fees, meals and lodging, computer services, photocopying, and \$100.00 per day for GIS and mapping equipment used in the field.

CHANGE ORDERS. Change Orders may be subject to future fee schedule increases.

SUB-CONSULTANT FEE SCHEDULES 2013

Cadre Environmental

**Special Species**

Staff Level	Hourly Rate
Research Biologist	\$90
Travel	
Mileage	\$0.565/mile
Lodging	Cost (no markup)
Per Diem	No Charge
Reproduction	
Cost included in professional hourly rate	
Postage	
FedEx/Postal	Cost (no markup)
Equipment	
Cost included in professional hourly rate	

January 27, 2014

Prepared and

Submitted by: Cheryl Clary *CC*

Approved by: Paul Cook *P. Cook*

CONSENT CALENDAR

REIMBURSEMENT TO BOARD MEMBER FOR BUSINESS EXPENSES

SUMMARY:

The District's Expense Policy provides, in part, that expense reports submitted for reimbursement by members of the Board are subject to approval by two Board members if submitted to the report reviewer within 60 days after the expenses were paid or incurred. Expense reports submitted outside of this period require approval by the full Board of Directors in order to receive reimbursement. Staff recently received expense reports primarily for mileage from Director Peer Swan covering the periods May-October 2013, which requires the approval by the full Board in order to receive reimbursement.

BACKGROUND:

Director Swan has submitted the following expense report for approval and reimbursement (Exhibit "A"):

Time Period & Purpose	Total Expense Requested	Amount Advanced by District	Balance Due to Director Swan
May 2013 mileage and tolls- various meetings	\$ 80.54	\$ 0.00	\$ 80.54
June 2013 meal, mileage and tolls- various meetings	130.17		130.17
July 2013 meal, mileage and tolls- various meetings	202.00		202.00
August 2013 mileage and tolls- various meetings	172.38		172.38
September 2013 mileage and tolls- various meetings	94.58		94.58
October 2013 mileage and tolls- various meetings	157.69		157.69
Total	\$ 837.36	\$ 0.00	\$ 837.36

FISCAL IMPACTS:

Approval of expenses is requested for a total of \$837.36, of which the District advanced \$0.00. Subject to Board approval, the amount of \$837.36 will be reimbursed to Director Swan primarily for mileage relating to District expenses for May-October 2013.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3, Section 15378.

RECOMMENDATION:

THAT THE BOARD APPROVE THE EXPENSE REPORT SUBMITTED FOR REIMBURSEMENT FOR BUSINESS MILEAGE EXPENSES INCURRED BY DIRECTOR PEER SWAN.

LIST OF EXHIBITS:

Exhibit “A” – Expense Report for May-October 2013 (limited distribution)



IRVINE RANCH WATER DISTRICT

CONFERENCE / SEMINAR EXPENSE REPORT
 MONTHLY EXPENSE REPORT

DATE(S) _____
 MONTH JULY 2013
 MILEAGE _____

DB 6241 *inf*

Name: PEER SWAN Employee #: 1289 Sub-department #: 11

D = District CC P = Personal CC

Date	Business Purpose / Location / Attendee(s) / Business Relationship	CC (D/P)	Registration Fees	Airfare	Lodging	Meals	Shuttle/ Tax Auto Rental	Parking Fees	Other	Mileage @ .565		Total	Project.Task.Award or ID.Dept.Process.Account
										Miles	Amount		
07/08/13	Roundtrip mileage to meet with IRWD consultant, Loren Lillestrand at Strawberry Farms, Irvine.	P								14	7.91	7.91	1010-110-5840-591003
07/11/13	Roundtrip mileage to attend Newport Chamber Gov't Affairs Meeting in Newport Beach, CA.	P								12	6.78	6.78	1010-110-5840-591003
07/11/13	Roundtrip mileage to attend Assoc. of Ca. Cities-OC City Leaders Event at Disneyland Hotel in Anaheim (includes toll road fees)								5.00	42	23.73	28.73	1010-110-5840-591003
07/12/13	Roundtrip mileage to attend WACO Committee Meeting in Fountain Valley, CA (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
07/16/13	Roundtrip mileage to attend WACO Planning Committee Meeting in Fountain Valley (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
07/17/13	Roundtrip mileage to attend OCWD Water Issues Committee Meeting in Fountain Valley (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
07/17/13	Roundtrip mileage to attend OCWA July Meeting in Irvine, CA.	P								22	12.43	12.43	1010-110-5840-591003
07/18/13	Roundtrip mileage to meet with IRWD consultant, Loren Lillestrand at Strawberry Farms, Irvine.	P								14	7.91	7.91	1010-110-5840-591003
07/22/13	Roundtrip mileage to meet with Tustin Councilman Allen Berstein at Rutabegorz in Tustin, CA (includes toll road fees).	P							5.00	26	14.69	19.69	1010-110-5840-591003
07/24/13	Roundtrip mileage to attend MWD-Southern California Water Dialogue Meeting in Los Angeles (includes toll road fees).	P							5.00	92	51.98	56.98	1010-110-5840-591003
07/24/13	Lunch meal at MWD Cafeteria, Los Angeles.	P				5.89					0.00	5.89	1010-110-5840-588028
TOTAL			\$0.00	\$0.00	\$0.00	\$5.89	\$0.00	\$0.00	\$30.00	294	\$166.11		

The District Representative certifies that, to the best of his or her knowledge and belief, the information on this form is true and correct.

Total Expenses: \$202.00
Paid by District: \$0.00
Advanced to you: \$0.00
DUE YOU or (IRWD): \$202.00

SIGNATURE / APPROVALS / REVIEW :	DATE:
District Representative: _____	
Department Director: _____	
Board Member: _____	
Director of Finance (or Designee): _____	
General Manager (or Asst. GM): _____	

Approved Expenditure _____
(If Conference/Seminar)



IRVINE RANCH WATER DISTRICT

CONFERENCE / SEMINAR EXPENSE REPORT
 MONTHLY EXPENSE REPORT

DB 6243 ml

DATE(S) _____
 MONTH SEPT 2013
 MILEAGE _____

Name: PEER SWAN Employee #: 1289 Sub-department #: 11

D = District CC P = Personal CC

Date	Business Purpose / Location / Attendee(s) / Business Relationship	CC (D/P)	Registration Fees	Airfare	Lodging	Meals	Shuttle/ Taxi / Auto Rental	Parking Fees	Other	Mileage @ .565		Total	Project.Task.Award or ID.Dept.Process.Account
										Miles	Amount		
09/04/13	Roundtrip mileage to attend MWDOC/MWD Caucus Meeting in Fountain Valley, CA (includes toll road fees).	P							\$5.00	24	13.56	\$18.56	1010-110-5840-591003
09/05/13	Roundtrip mileage to attend Newport Chamber Gov't Affairs Meeting in Newport Beach, CA.	P								12	6.78	6.78	1010-110-5840-591003
09/06/13	Roundtrip mileage to attend WACO Committee Meeting in Fountain Valley, CA (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
09/10/13	Roundtip mileage to attend OCBC Infrastructure Meeting in Irvine, CA.	P								16	9.04	9.04	1010-110-5840-591003
09/11/13	Roundtrip mileage to attend OCWD Water Issues Committee Meeting in Fountain Valley (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
09/17/13	Roundtrip mileage to attend WACO Planning Committee Meeting in Fountain Valley (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
09/23/13	Roundtrip mileage to The Irvine Company in Newport Beach, regarding District activities.	P								8	4.52	4.52	1010-110-5840-591003
											0.00	-	
											0.00	-	
											0.00	-	
											0.00	-	
											0.00	-	
											0.00	-	
											0.00	-	
TOTAL			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20.00	132	\$74.58		

The District Representative certifies that, to the best of his or her knowledge and belief, the information on this form is true and correct.

Total Expenses: \$94.58
Paid by District: \$0.00
Advanced to you: \$0.00
DUE YOU or (IRWD): \$94.58

SIGNATURE / APPROVALS / REVIEW :	DATE:
District Representative: _____	_____
Department Director: _____	_____
Board Member: _____	_____
Director of Finance (or Designee): <i>ms</i> _____	_____
General Manager (or Asst. GM): _____	_____

Approved Expenditure (If Conference/Seminar) _____



IRVINE RANCH WATER DISTRICT

CONFERENCE / SEMINAR EXPENSE REPORT

MONTHLY EXPENSE REPORT

DB 6/24/13

DATE(S)

MONTH

OCT 2013
MILEAGE

Name: PEER SWAN

Employee #: 1289 Sub-department #: 11

D = District CC P = Personal CC

Date	Business Purpose / Location / Attendee(s) / Business Relationship	CC (D/P)	Registration Fees	Airfare	Lodging	Meals	Shuttle/ Tax Auto Renta	Parking Fees	Other	Mileage @ .565		Total	Project.Task.Award or ID.Dept.Process.Account
										Miles	Amount		
10/02/13	Roundtrip mileage to attend MWDOC/MWD Caucus Meeting in Fountain Valley, CA (includes toll road fees).	P							\$5.00	24	13.56	\$18.56	1010-110-5840-591003
10/02/13	Roundtrip mileage to attend OCWD Board meeting in Fountain Valley (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
10/03/13	Roundtrip mileage to attend Newport Chamber Gov't Affairs Meeting in Newport Beach, CA.	P								12	6.78	6.78	1010-110-5840-591003
10/03/13	Roundtrip mileage to meet with IRWD consultant, Loren Lillestrand at Oak Creek, Irvine.	P								18	10.17	10.17	1010-110-5840-591003
10/04/13	Roundtrip mileage to attend WACO Committee Meeting in Fountain Valley, CA (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
10/04/13	Roundtrip mileage to attend City of Irvine's XPO Opening Reception at OC Great Park in Irvine	P								22	12.43	12.43	1010-110-5840-591003
10/09/13	Roundtrip mileage to attend OCWD Water Issues Committee Meeting in Fountain Valley (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
10/15/13	Roundtrip mileage to attend WACO Planning Committee Meeting in Fountain Valley (includes toll road fees).	P							5.00	24	13.56	18.56	1010-110-5840-591003
10/23/13	Roundtrip mileage to attend MWDOC/OCWD Joint Committee Meeting in Fountain Valley, CA (includes toll road fees).	P							\$5.00	24	13.56	\$18.56	1010-110-5840-591003
10/26/13	Roundtrip mileage to attend Sea & Sage Audubon annual pancake breakfast at San Joaquin Marsh, Irvine.	P								12	6.78	\$6.78	1010-110-5840-591003
10/30/13	Roundtrip mileage to meet with IRWD consultant, Loren Lillestrand at Oak Creek, Irvine.	P								18	10.17	10.17	1010-110-5840-591003
											0.00	-	
TOTAL			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.00	226	\$127.69		

The District Representative certifies that, to the best of his or her knowledge and belief, the information on this form is true and correct.

Total Expenses:	\$157.69
Paid by District:	\$0.00
Advanced to you:	\$0.00
DUE YOU or (IRWD):	\$157.69

SIGNATURE / APPROVALS / REVIEW :	DATE:
District Representative:	_____
Department Director:	_____
Board Member:	_____
Director of Finance (or Designee):	_____
General Manager (or Asst. GM):	_____

Approved Expenditure _____
(If Conference/Seminar)



Notes

Trip to:

18700 Ward St

Fountain Valley, CA 92708-6930

12.24 miles / 17 minutes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	1.4 Mi 1.9 Mi Total
	5. Merge onto CA-73 N (Portions toll). Map	6.6 Mi 8.6 Mi Total
	6. Merge onto I-405 N via the exit on the left toward Long Beach . Map	2.2 Mi 10.7 Mi Total
	7. Take the Euclid St / Newhope St exit, EXIT 12 . Map	0.4 Mi 11.1 Mi Total
	8. Turn right onto Euclid St . Map <i>Jonathan's Coastal Living Inc is on the corner If you are on Newhope St and reach Talbert Ave you've gone about 0.2 miles too far</i>	0.5 Mi 11.6 Mi Total
	9. Stay straight to go onto Ellis Ave . Map	0.5 Mi 12.1 Mi Total
	10. Turn left onto Ward St . Map <i>Ward St is just past Amistad St Pacific Coast Custom Design is on the right If you reach San Antonio St you've gone about 0.1 miles too far</i>	0.2 Mi 12.2 Mi Total
	11. 18700 WARD ST is on the left . Map <i>Your destination is just past Thrush Ave If you reach Falcon Ave you've gone a little too far</i>	
	18700 Ward St, Fountain Valley, CA 92708-6930	

Total Travel Estimate: **12.24 miles - about 17 minutes**

Enter your mobile number



Trip to:
20351 Irvine Ave Ste C-5
 Newport Beach, CA 92660-0236
 6.31 miles / 10 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	1.4 Mi 1.9 Mi Total
	5. Merge onto CA-73 N (Portions toll). Map	3.9 Mi 5.8 Mi Total
	6. Take EXIT 15 toward Birch St . Map	0.2 Mi 6.0 Mi Total
	7. Turn slight left onto Bristol St N . Map	0.2 Mi 6.2 Mi Total
	8. Take the 2nd left onto Campus Dr . Map <i>Campus Dr is 0.1 miles past Birch St If you are on Bristol St and reach Red Hill Ave you've gone about 0.5 miles too far</i>	0.08 Mi 6.3 Mi Total
	9. Campus Dr becomes Irvine Ave . Map	0.01 Mi 6.3 Mi Total
	10. 20351 IRVINE AVE STE C-5 is on the right . Map <i>If you reach Orchard Dr you've gone about 0.2 miles too far</i>	
	20351 Irvine Ave Ste C-5, Newport Beach, CA 92660-0236	

Total Travel Estimate: **6.31 miles - about 10 minutes**

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Trip to:
311 Marine Ave
 Newport Beach, CA 92662-1205
 6.13 miles / 11 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
●	1. Start out going northeast on Terraza Dr toward Altezza Dr. Map	0.02 Mi 0.02 Mi Total
↶	2. Turn left onto Altezza Dr. Map	0.2 Mi 0.2 Mi Total
↷	3. Turn right onto Vista Ridge Rd. Map	0.3 Mi 0.5 Mi Total
↷	4. Take the 2nd right onto Newport Coast Dr. Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	0.4 Mi 0.9 Mi Total
↶	5. Turn left onto San Joaquin Hills Rd. Map <i>San Joaquin Hills Rd is 0.2 miles past Ridge Park Rd Culinary Kids is on the corner If you reach Sage HI you've gone about 0.5 miles too far</i>	3.7 Mi 4.6 Mi Total
↶	6. Turn left onto Jamboree Rd. Map <i>Jamboree Rd is 0.3 miles past Big Canyon Dr SHELL is on the corner If you reach Park Newport you've gone about 0.1 miles too far</i>	1.3 Mi 5.9 Mi Total
↷	7. Turn slight right onto Marine Ave. Map <i>Blue Cross & Blue Shield is on the corner</i>	0.2 Mi 6.1 Mi Total
■	8. 311 MARINE AVE is on the right. Map <i>Your destination is just past N Bayfront If you reach Balboa Ave you've gone a little too far</i>	
B	311 Marine Ave, Newport Beach, CA 92662-1205	

Total Travel Estimate: 6.13 miles - about 11 minutes

FREE NAVIGATION APP
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Enter your mobile number

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Trip to:
15600 Sand Canyon Ave
 Irvine, CA 92618-3100
 9.77 miles / 15 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr . Map	2.5 Mi 5.8 Mi Total
	7. Merge onto I-405 S toward San Diego . Map	2.5 Mi 8.4 Mi Total
	8. Take the Shady Cyn Dr / Sand Cyn Ave exit, EXIT 3 . Map	0.3 Mi 8.7 Mi Total
	9. Turn left onto Sand Canyon Ave . Map	1.1 Mi 9.8 Mi Total
	10. 15600 SAND CANYON AVE is on the right . Map <i>Your destination is just past Waterworks Way If you reach Irvine Center Dr you've gone about 0.1 miles too far</i>	
	15600 Sand Canyon Ave, Irvine, CA 92618-3100	

Total Travel Estimate: **9.77 miles - about 15 minutes**

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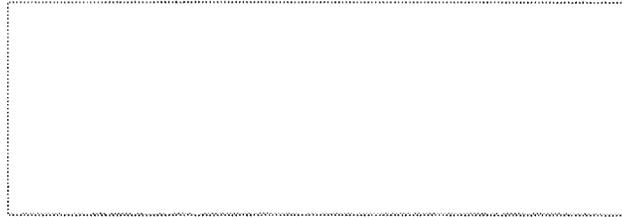
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Trip to:
700 N Alameda St
 Los Angeles, CA 90012-3352
 45.76 miles / 55 minutes

Notes



	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	1.4 Mi 1.9 Mi Total
	5. Merge onto CA-73 N (Portions toll). Map	6.6 Mi 8.5 Mi Total
	6. Merge onto I-405 N via the exit on the left toward Long Beach . Map	13.4 Mi 21.9 Mi Total
	7. Merge onto I-605 N via EXIT 24 . Map	10.8 Mi 32.8 Mi Total
	8. Merge onto I-5 N toward Los Angeles . Map	9.8 Mi 42.5 Mi Total
	9. Keep left to take US-101 N toward Los Angeles / Civic Center . Map	2.9 Mi 45.5 Mi Total
	10. Take the Alameda St exit, EXIT 2B , toward Union Station . Map	0.1 Mi 45.6 Mi Total
	11. Merge onto US-101 Hov Ln N . Map	0.10 Mi 45.7 Mi Total
	12. Take the 1st right onto N Alameda St . Map <i>If you are on Arcadia St and reach N Los Angeles St you've gone a little too far</i>	0.03 Mi 45.8 Mi Total
	13. 700 N ALAMEDA ST is on the right . Map <i>Your destination is just past US-101 Hov Ln S If you reach N Los Angeles St you've gone a little too far</i>	



700 N Alameda St, Los Angeles, CA 90012-3352

Total Travel Estimate: **45.76 miles - about 55 minutes**

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Trip to:
545 Newport Center Dr
 Newport Beach, CA 92660-6937
 4.08 miles / 8 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	0.4 Mi 0.9 Mi Total
	5. Turn left onto San Joaquin Hills Rd . Map <i>San Joaquin Hills Rd is 0.2 miles past Ridge Park Rd Culinary Kids is on the corner If you reach Sage Hl you've gone about 0.5 miles too far</i>	3.0 Mi 3.9 Mi Total
	6. Turn left onto Santa Rosa Dr . Map <i>Santa Rosa Dr is just past Big Canyon Dr If you reach San Simeon you've gone about 0.2 miles too far</i>	0.1 Mi 4.1 Mi Total
	7. Turn left onto Newport Center Dr . Map <i>Newport Center Dr is just past Center Dr Cafe' R & D is on the corner</i>	0.01 Mi 4.1 Mi Total
	8. 545 NEWPORT CENTER DR is on the right . Map <i>If you reach San Nicolas Dr you've gone a little too far</i>	
	545 Newport Center Dr, Newport Beach, CA 92660-6937	

Total Travel Estimate: **4.08 miles - about 8 minutes**

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Trip to:
Irvine, CA 92612-2300
 6.95 miles / 12 minutes

Notes

		Download Free App
	7 Terraza Dr, Newport Coast, CA 92657-1510	
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr . Map	1.7 Mi 5.1 Mi Total
	7. Turn right onto University Dr . Map <i>University Dr is 0.2 miles past Harvard Ave If you reach Sandburg Way you've gone about 0.3 miles too far</i>	1.6 Mi 6.6 Mi Total
	8. Turn right onto Strawberry Farms Rd . Map <i>Strawberry Fams Rd is 0.3 miles past Ridgeline Dr</i>	0.3 Mi 7.0 Mi Total
	9. Welcome to IRVINE, CA 92612 . Map	
	Irvine, CA 92612-2300	

Total Travel Estimate: 6.95 miles - about 12 minutes

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Trip to:
1150 W Magic Way
 Anaheim, CA 92802-2247
 21.11 miles / 29 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	1.4 Mi 1.9 Mi Total
	5. Merge onto CA-73 N (Portions toll). Map	4.7 Mi 6.7 Mi Total
	6. Merge onto CA-55 N via EXIT 17A . Map	5.8 Mi 12.5 Mi Total
	7. Merge onto I-5 N via EXIT 10B toward Santa Ana . Map	7.3 Mi 19.7 Mi Total
	8. Take the Harbor Blvd exit, EXIT 110 , toward Ball Rd . Map	0.3 Mi 20.0 Mi Total
	9. Turn right onto S Harbor Blvd . Map <i>If you are on S Harbor Blvd and reach S Manchester Ave you've gone about 0.2 miles too far</i>	0.1 Mi 20.2 Mi Total
	10. Turn left onto W Ball Rd . Map <i>SHELL is on the corner If you reach Anaheim Harbor RV Park you've gone about 0.1 miles too far</i>	0.4 Mi 20.6 Mi Total
	11. Turn left onto S Disneyland Dr . Map <i>ARCO - Anaheim - West is on the corner If you reach S Flore St you've gone about 0.1 miles too far</i>	0.4 Mi 21.0 Mi Total
	12. Turn right onto W Magic Way . Map <i>If you are on S Disneyland Dr and reach Downtown Dr you've gone a little too far</i>	0.1 Mi 21.1 Mi Total



13. **1150 W MAGIC WAY** is on the left. [Map](#)

Your destination is just past Downtown Dr

If you reach S Walnut St you've gone about 0.1 miles too far



1150 W Magic Way, Anaheim, CA 92802-2247

Total Travel Estimate: **21.11 miles - about 29 minutes**

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Notes

Trip to:

71 Fortune Dr Ste 960

Irvine, CA 92618-2929

11.11 miles / 16 minutes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr. Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr. Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd. Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr. Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr. Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr. Map	2.5 Mi 5.8 Mi Total
	7. Merge onto I-405 S toward San Diego. Map	4.5 Mi 10.4 Mi Total
	8. Take the Irvine Center Dr exit, EXIT 1C. Map	0.3 Mi 10.7 Mi Total
	9. Keep left at the fork to go on Irvine Center Dr. Map	0.3 Mi 11.0 Mi Total
	10. Turn right onto Pacifica. Map <i>Pacifica is 0.1 miles past Enterprise Charmaine Lim - Farmers Insurance is on the corner If you reach Spectrum you've gone about 0.1 miles too far</i>	0.1 Mi 11.1 Mi Total
	11. Take the 1st right onto Fortune Rd. Map	0.01 Mi 11.1 Mi Total
	12. 71 FORTUNE DR STE 960. Map <i>If you reach Enterprise you've gone about 0.2 miles too far</i>	
	71 Fortune Dr Ste 960, Irvine, CA 92618-2929	



Trip to:
158 W Main St
 Tustin, CA 92780-4347
 13.40 miles / 20 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	1.4 Mi 1.9 Mi Total
	5. Merge onto CA-73 N (Portions toll). Map	4.7 Mi 6.7 Mi Total
	6. Merge onto CA-55 N via EXIT 17A . Map	5.3 Mi 12.0 Mi Total
	7. Take EXIT 10A toward McFadden Ave . Map	0.2 Mi 12.2 Mi Total
	8. Stay straight to go onto Sycamore Ave . Map	0.08 Mi 12.3 Mi Total
	9. Turn left onto Newport Ave . Map <i>If you reach Del Amo Ave you've gone about 0.1 miles too far</i>	0.7 Mi 13.0 Mi Total
	10. Turn left onto El Camino Real . Map <i>El Camino Real is 0.1 miles past Nisson Rd Arby's is on the corner If you reach Bonita St you've gone a little too far</i>	0.3 Mi 13.4 Mi Total
	11. Turn left onto W Main St . Map <i>W Main St is 0.1 miles past W 6th St Elegant Hive is on the right If you reach W 3rd St you've gone a little too far</i>	0.04 Mi 13.4 Mi Total
	12. 158 W MAIN ST is on the left . Map <i>If you reach S C St you've gone a little too far</i>	
	158 W Main St, Tustin, CA 92780-4347	



Trip to:
17231 17th St
 Tustin, CA 92780-1926
 14.51 miles / 20 minutes

Notes

		Download Free App
	7 Terraza Dr, Newport Coast, CA 92657-1510	
	1. Start out going northeast on Terraza Dr toward Altezza Dr. Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr. Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd. Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr. Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	1.4 Mi 1.9 Mi Total
	5. Merge onto CA-73 N (Portions toll). Map	4.7 Mi 6.7 Mi Total
	6. Merge onto CA-55 N via EXIT 17A. Map	7.2 Mi 13.9 Mi Total
	7. Take the Seventeenth St exit, EXIT 12. Map	0.3 Mi 14.2 Mi Total
	8. Turn right onto E 17th St. Map <i>Mimi's Cafe is on the corner If you are on E 17th St and reach Deodar St you've gone about 0.1 miles too far</i>	0.2 Mi 14.3 Mi Total
	9. Make a U-turn onto E 17th St. Map <i>If you reach Treehaven you've gone about 0.1 miles too far</i>	0.2 Mi 14.5 Mi Total
	10. 17231 17TH ST is on the right. Map <i>Your destination is just past Carroll Way If you reach Deodar St you've gone about 0.1 miles too far</i>	
	17231 17th St, Tustin, CA 92780-1926	

Total Travel Estimate: **14.51 miles - about 20 minutes**

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Trip to:
2 Park Plz
 Irvine, CA 92614-2500
 8.06 miles / 13 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr . Map	2.7 Mi 6.0 Mi Total
	7. Merge onto I-405 N toward Long Beach . Map	1.2 Mi 7.2 Mi Total
	8. Take the Jamboree Rd exit, EXIT 7 . Map	0.3 Mi 7.5 Mi Total
	9. Turn right onto Jamboree Rd . Map	0.2 Mi 7.7 Mi Total
	10. Take the 2nd right onto Main St . Map <i>Main St is 0.1 miles past Park Plz</i>	0.2 Mi 7.9 Mi Total
	11. Take the 1st right onto Park Plz . Map <i>If you reach Veneto you've gone about 0.2 miles too far</i>	0.1 Mi 8.0 Mi Total
	12. Take the 1st right to stay on Park Plz . Map <i>MetLife is on the corner If you reach the end of Park Plz you've gone a little too far</i>	0.05 Mi 8.1 Mi Total
	13. 2 PARK PLZ is on the right . Map <i>Your destination is just past Park Plz If you reach Coronado you've gone about 0.1 miles too far</i>	



Trip to:
550 Newport Center Dr
 Newport Beach, CA 92660-7011
 4.10 miles / 8 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
●	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
↶	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
➤	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
➤	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	0.4 Mi 0.9 Mi Total
↶	5. Turn left onto San Joaquin Hills Rd . Map <i>San Joaquin Hills Rd is 0.2 miles past Ridge Park Rd Culinary Kids is on the corner If you reach Sage Hl you've gone about 0.5 miles too far</i>	2.5 Mi 3.4 Mi Total
↶	6. Turn left onto San Miguel Dr . Map <i>San Miguel Dr is 0.1 miles past Crown Dr N HARBOR VIEW CAR CARE is on the right</i>	0.5 Mi 3.9 Mi Total
➤	7. Turn right onto Newport Center Dr . Map <i>Newport Center Dr is 0.1 miles past Avocado Ave Restoration Hardware is on the corner</i>	0.2 Mi 4.1 Mi Total
■	8. 550 NEWPORT CENTER DR is on the right . Map <i>Your destination is just past San Nicolas Dr If you reach Santa Rosa Dr you've gone a little too far</i>	
●	550 Newport Center Dr, Newport Beach, CA 92660-7011	

Total Travel Estimate: **4.10 miles - about 8 minutes**

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Trip to:
1 Golf Club Dr
 Irvine, CA 92618-5210
 9.13 miles / 15 minutes

Notes

		Download Free App
	7 Terraza Dr, Newport Coast, CA 92657-1510	
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr . Map	1.7 Mi 5.1 Mi Total
	7. Turn right onto University Dr . Map <i>University Dr is 0.2 miles past Harvard Ave If you reach Sandburg Way you've gone about 0.3 miles too far</i>	2.0 Mi 7.0 Mi Total
	8. University Dr becomes Jeffrey Rd . Map	1.6 Mi 8.6 Mi Total
	9. Turn right onto Irvine Center Dr . Map <i>Irvine Center Dr is 0.5 miles past Barranca Pky</i>	0.5 Mi 9.1 Mi Total
	10. Turn left onto Golf Club Dr . Map <i>Golf Club Dr is 0.2 miles past College If you reach Valley Oak Dr you've gone about 0.2 miles too far</i>	0.05 Mi 9.1 Mi Total
	11. 1 GOLF CLUB DR is on the left . Map	
	1 Golf Club Dr, Irvine, CA 92618-5210	

Total Travel Estimate: **9.13 miles - about 15 minutes**

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Trip to:
5 Riparian Vw
 Irvine, CA 92612-5691
 6.40 miles / 11 minutes

Notes

		Download Free App
	7 Terraza Dr, Newport Coast, CA 92657-1510	
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr . Map	2.3 Mi 5.7 Mi Total
	7. Turn left onto Michelson Dr . Map <i>Michelson Dr is 0.2 miles past Sandburg Way If you reach Seton Rd you've gone about 0.1 miles too far</i>	0.7 Mi 6.4 Mi Total
	8. Turn right onto Riparian Vw . Map <i>Riparian Vw is 0.2 miles past Harvard Ave If you reach Loop Rd E you've gone about 0.1 miles too far</i>	0.01 Mi 6.4 Mi Total
	5 RIPARIAN VW is on the right . Map <i>If you reach the end of Riparian Vw you've gone a little too far</i>	
	5 Riparian Vw, Irvine, CA 92612-5691	

Total Travel Estimate: **6.40 miles - about 11 minutes**

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Trip to:
1530 Concordia
 Irvine, CA 92612-3203
 6.70 miles / 12 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonite Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr . Map	1.7 Mi 5.1 Mi Total
	7. Turn right onto University Dr . Map <i>University Dr is 0.2 miles past Harvard Ave If you reach Sandburg Way you've gone about 0.3 miles too far</i>	1.2 Mi 6.3 Mi Total
	8. Turn right onto Ridgeline Dr . Map <i>Ridgeline Dr is 0.3 miles past Yale Ave If you reach Strawberry Farms Rd you've gone about 0.3 miles too far</i>	0.1 Mi 6.4 Mi Total
	9. Turn right onto Concordia E (Gate access required) . Map <i>If you reach San Simeon you've gone about 0.6 miles too far</i>	0.3 Mi 6.7 Mi Total
	10. 1530 CONCORDIA is on the left . Map <i>Your destination is 0.2 miles past Ascension If you reach Joy you've gone about 0.1 miles too far</i>	
	1530 Concordia, Irvine, CA 92612-3203	

Total Travel Estimate: **6.70 miles - about 12 minutes**

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Trip to:
2607 Main St
 Irvine, CA 92614-6228
 7.91 miles / 13 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi 2.8 Mi Total
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi 3.3 Mi Total
	6. Stay straight to go onto Culver Dr . Map	2.7 Mi 6.0 Mi Total
	7. Merge onto I-405 N toward Long Beach . Map	1.2 Mi 7.2 Mi Total
	8. Take the Jamboree Rd exit, EXIT 7 . Map	0.3 Mi 7.5 Mi Total
	9. Turn right onto Jamboree Rd . Map	0.3 Mi 7.8 Mi Total
	10. Turn left onto Main St . Map <i>Main St is 0.1 miles past Park Plz If you reach Kelvin Ave you've gone about 0.2 miles too far</i>	0.1 Mi 7.9 Mi Total
	11. 2607 MAIN ST is on the right . Map <i>If you reach Siglo you've gone a little too far</i>	
	2607 Main St, Irvine, CA 92614-6228	

Total Travel Estimate: **7.91 miles - about 13 minutes**

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Trip to:
690 Newport Center Dr
 Newport Beach, CA 92660-6431
 4.26 miles / 8 minutes

Notes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	0.4 Mi 0.9 Mi Total
	5. Turn left onto San Joaquin Hills Rd . Map <i>San Joaquin Hills Rd is 0.2 miles past Ridge Park Rd Culinary Kids is on the corner If you reach Sage HI you've gone about 0.5 miles too far</i>	3.0 Mi 3.9 Mi Total
	6. Turn left onto Santa Rosa Dr . Map <i>Santa Rosa Dr is just past Big Canyon Dr If you reach San Simeon you've gone about 0.2 miles too far</i>	0.1 Mi 4.1 Mi Total
	7. Turn right onto Newport Center Dr . Map <i>Newport Center Dr is just past Center Dr Cafe' R & D is on the corner</i>	0.2 Mi 4.3 Mi Total
	8. 690 NEWPORT CENTER DR is on the right . Map <i>Your destination is just past Center Dr If you reach Santa Cruz Dr you've gone a little too far</i>	
	690 Newport Center Dr, Newport Beach, CA 92660-6431	

Total Travel Estimate: **4.26 miles - about 8 minutes**

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Notes

Trip to:
3535 Harbor Blvd
 Costa Mesa, CA 92626-1492
 10.34 miles / 16 minutes

	7 Terraza Dr, Newport Coast, CA 92657-1510	Download Free App
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi 0.02 Mi Total
	2. Turn left onto Altezza Dr . Map	0.2 Mi 0.2 Mi Total
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi 0.5 Mi Total
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	1.4 Mi 1.9 Mi Total
	5. Merge onto CA-73 N (Portions toll). Map	6.6 Mi 8.6 Mi Total
	6. Keep right at the fork in the ramp. Map	0.6 Mi 9.2 Mi Total
	7. Keep left to take the Harbor Blvd ramp. Map	0.5 Mi 9.7 Mi Total
	8. Turn right onto Harbor Blvd . Map <i>If you are on Harbor Blvd and reach Gistler Ave you've gone about 0.2 miles too far</i>	0.6 Mi 10.3 Mi Total
	9. Make a U-turn at Scenic Ave onto Harbor Blvd / S Harbor Blvd . Map <i>If you reach W MacArthur Blvd you've gone about 0.1 miles too far</i>	0.06 Mi 10.3 Mi Total
	10. 3535 HARBOR BLVD . Map <i>If you reach Sunflower Ave you've gone about 0.1 miles too far</i>	
	3535 Harbor Blvd, Costa Mesa, CA 92626-1492	

Total Travel Estimate: **10.34 miles - about 16 minutes**

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Trip to:
[6500-6899] Marine Way
 Irvine, CA 92618
 10.90 miles / 18 minutes

Notes

		Download Free App
	7 Terraza Dr, Newport Coast, CA 92657-1510	
	1. Start out going northeast on Terraza Dr toward Altezza Dr . Map	0.02 Mi <i>0.02 Mi Total</i>
	2. Turn left onto Altezza Dr . Map	0.2 Mi <i>0.2 Mi Total</i>
	3. Turn right onto Vista Ridge Rd . Map	0.3 Mi <i>0.5 Mi Total</i>
	4. Take the 2nd right onto Newport Coast Dr . Map <i>Newport Coast Dr is just past Trovare Dr If you are on Pacific Pines Dr and reach Torrey Pine Dr you've gone about 0.1 miles too far</i>	2.3 Mi <i>2.8 Mi Total</i>
	5. Turn right onto Bonita Canyon Dr . Map <i>Bonita Canyon Dr is 0.1 miles past Turtle Crest Dr Liberty Baptist School is on the right</i>	0.5 Mi <i>3.3 Mi Total</i>
	6. Stay straight to go onto Culver Dr . Map	2.5 Mi <i>5.8 Mi Total</i>
	7. Merge onto I-405 S toward San Diego . Map	2.5 Mi <i>8.4 Mi Total</i>
	8. Take the Shady Cyn Dr / Sand Cyn Ave exit, EXIT 3 . Map	0.3 Mi <i>8.7 Mi Total</i>
	9. Turn left onto Sand Canyon Ave . Map	1.9 Mi <i>10.6 Mi Total</i>
	10. Turn right onto Marine Way . Map <i>Marine Way is 0.1 miles past Burt Rd If you reach Nightmist you've gone about 0.3 miles too far</i>	0.3 Mi <i>10.9 Mi Total</i>
	11. [6500-6899] MARINE WAY . Map <i>If you reach Perimeter Rd you've gone about 0.2 miles too far</i>	
	[6500-6899] Marine Way, Irvine, CA 92618	

Total Travel Estimate: 10.90 miles - about 18 minutes

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DS
January 27, 2014
Prepared by: J. Moeder/R. Mori
Submitted by: K. Burton *KLB*
Approved by: Paul Cook *PC*

ACTION CALENDAR

RATTLESNAKE RESERVOIR CHLORINE GAS REMOVAL CONSULTANT SELECTION

SUMMARY:

IRWD disinfects non-potable water at the Rattlesnake Chlorination Facility to control biological growth in the recycled water distribution system and to minimize odors downstream of the Zone A North tank. The Rattlesnake Chlorination Facility currently uses chlorine gas for disinfection, which is labor intensive and requires extensive safety measures. The Rattlesnake Reservoir Chlorine Gas Removal Project includes the removal of the existing chlorine gas system and related appurtenances and the installation of new sodium hypochlorite storage and feed facilities in the existing chlorination building. Proposals were solicited from four engineering firms for the design of the sodium hypochlorite facilities, and staff recommends that the Board:

- Authorize the addition of the Rattlesnake Reservoir Chlorine Gas Removal Project in the amount of \$1,706,400 to the FY 2013-14 Capital Budget;
- Approve an Expenditure Authorization in the amount of \$336,100 for the project; and
- Authorize the General Manager to execute a Professional Services Agreement with Carollo Engineers, in the amount of \$291,045, for engineering services for the Rattlesnake Reservoir Chlorine Gas Removal Project 30435.

BACKGROUND:

IRWD constructed the Rattlesnake Chlorination facility in 1991 and upgraded the facility in 2000 to include a new building to enclose the chlorine gas storage and feed facilities. This facility, located at the base of Rattlesnake Reservoir, is categorized as a Cal-ARP Program Level 2 Facility and is regulated under both the California Accidental Release Prevention (Cal-ARP) Risk Management Program (RMP) and the California Division of Occupational Safety and Health (Cal/OSHA) Process Safety Management (PSM) programs. As a result, this facility requires routine audits, inspections, certifications, and seismic analysis to ensure compliance with regulatory requirements.

The chlorination facility, which is located near existing residential communities and planned future residential developments, houses chlorine gas storage containers, a gaseous chlorine feed system, an emergency gas scrubber system, a standby engine generator, and remote monitoring controls and alarm systems. Operation and maintenance of this chlorine gas system is labor intensive and requires more complex and extensive safety measures when compared to those required for the use of liquid sodium hypochlorite.

Due to the maintenance involved with the various pieces of equipment at the facility, safety concerns for staff and to the community, and due to the ongoing Cal-ARP RMP and Cal/OSHA regulatory requirements, staff from the Engineering and Operations Departments collaborated to develop concepts for improving the facility. As a result of these efforts, staff prepared a Request

for Proposal to reuse the existing chlorination building and to replace the chlorine gas system with liquid sodium hypochlorite storage and feed facilities.

While converting the facility from chlorine gas to liquid sodium hypochlorite will increase the facility chemical costs, the reduced maintenance requirements, lower safety concerns and reduced regulatory requirements will provide significant benefits. Typically, an annual budget of \$20,000 is established for the purchase of chlorine gas at the Rattlesnake Chlorination Facility. By switching to liquid sodium hypochlorite, staff anticipates the annual chemical costs to increase to approximately \$40,000. The industry trend shows that chlorine gas costs are increasing faster than liquid sodium hypochlorite costs, which means that the difference in chemical costs between the two is anticipated to decrease in the coming years. The District historically spends approximately \$60,000 per year in maintenance and regulatory compliance which staff anticipates will significantly decrease once the conversion is complete.

In accordance with the recently adopted IRWD Goals and Objectives for 2014, the conversion of the Rattlesnake Chlorination Facility from chlorine gas to liquid sodium hypochlorite aligns with the District's goal of assessing the ongoing use of chlorine gas and investigating potential conversions to liquid sodium hypochlorite. After conversion of this facility, the District will have two remaining chlorine gas facilities.

Consultant Selection:

Staff received proposals for design of the sodium hypochlorite facility from Carollo Engineers, Dudek, and URS. Brown & Caldwell, CDM, and CH2M Hill declined to submit proposals.

Carollo's proposal presented new ideas for the sodium hypochlorite storage and feed facilities including constructing horizontal tanks for liquid sodium hypochlorite storage and providing catwalks around the tanks to allow staff to walk outside the containment area. Carollo's ideas optimize the use of available space, increase accessibility, and maximize the use of existing facilities. A copy of the proposal ranking matrix is attached as Exhibit "A". Carollo's proposed design fee is \$240,683; including construction phase services the total proposed contract amount is \$291,045. Carollo has successfully completed projects for IRWD in the past, including design of the existing Rattlesnake Chlorination Facilities, preliminary design for the Wells 21 and 22 Desalter and the process design for the Baker Water Treatment Plant. Carollo's scope of work and fee proposal is attached as Exhibit "B". Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement with Carollo Engineers.

Schedule:

Design and construction of the Rattlesnake Reservoir Chlorine Gas Removal Project is anticipated to proceed in accordance with the following milestone schedule:

Final Basis of Design Memorandum and 60% Design Submittal	May 2014
100% Design Submittal	July 2014
Final Plans Approved	August 2014

Bid Opening	September 2014
Notice of Award	September 2014
Sodium Hypochlorite Facility Operational	May 2015

FISCAL IMPACTS:

Project 30435 (4959) is not included in the FY 2013-14 Capital Budget. Staff requests the addition of Project 30435 (4959) to the FY 2013-14 Capital Budget and approval of an Expenditure Authorization for preliminary design, final design, and bid phase services as shown in the table below and in Exhibit "C".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
30435 (4959)	\$0	\$1,706,400	\$1,706,400	\$0	\$336,100	\$336,100

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 which provides exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. A Notice of Exemption for the project will be prepared and filed with the County of Orange.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on January 21, 2014.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE ADDITION OF PROJECT 30435 (4959) IN THE AMOUNT OF \$1,706,400 TO THE FY 2013-14 CAPITAL BUDGET; APPROVE AN EXPENDITURE AUTHORIZATION FOR PROJECT 30435 (4959) IN THE AMOUNT OF \$336,100; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH CAROLLO ENGINEERS IN THE AMOUNT OF \$291,045 FOR ENGINEERING SERVICES FOR THE RATTLESNAKE RESERVOIR CHLORINE GAS REMOVAL PROJECT.

LIST OF EXHIBITS:

- Exhibit "A" – Consultant Selection Matrix
- Exhibit "B" – Carollo Engineer's Scope of Work and Fee Proposal
- Exhibit "C" – Expenditure Authorization

EXHIBIT "A"

CONSULTANT SELECTION MATRIX

Rattlesnake Reservoir Chlorine Gas Removal								
Item	Description	Weights	Carollo		Dudek		URS	
A	<u>TECHNICAL APPROACH</u>	40%						
1	Overall Project Understanding / Approach	40%	1		3		2	
2	Scope of Proposal	60%	1		2		3	
	<u>Weighted Score (Technical Approach)</u>		1.0		2.4		2.6	
B	<u>QUALIFICATION AND EXPERIENCE</u>	60%						
1	Firm/Team	20%	1		3		2	
2	Project Manager	40%	2		3		1	
			Jim Meyerhofer, P.E.		Jane Costello, P.E.		Joseph Long, P.E.	
3	Project Engineer - Mechanical/Pumps	20%	2		3		1	
			Jeff Weishaar, P.E.		Tom Falk, P.E.		Bryan Paine, P.E.	
4	Project Engineer - Electrical	20%	1		3		2	
			Troy Hedlund, P.E.		Tracy Adams, P.E.		Joe Moraes, P.E.	
	<u>Weighted Score (Experience)</u>		1.6		3.0		1.4	
	<u>COMBINED WEIGHTED SCORE</u>		1.4		2.8		1.9	
	Ranking of Consultants		1		3		2	
C	<u>SCOPE OF WORK</u>							
TASK			Task Hours	FEE	Task Hours	FEE	Task Hours	FEE
1	Project Management		173	\$34,621	123	\$20,369	193	\$32,505
2	Preliminary Design		228	\$48,536	336	\$52,081	569	\$88,425
3	Final Design		910	\$157,526	1,495	\$200,287	1,535	\$251,870
4	Construction Phase Services		304	\$50,362	460	\$77,429	404	\$80,445
	TOTAL ENGINEERING SERVICES FEE		1,615	\$291,045	2,414	\$350,166	2,701	\$453,245
D	<u>OTHER</u>							
	Number of Drawings		64		38		48	
	Engineering Services Fee per Drawings		\$3,761		\$7,177		\$7,767	
	Joint Venture		None		None		None	
	Sub Consultants	Elec	In-House		Moraes & Pham		Moraes & Pham	
		Struct	In-House		R2H Engineering		IDS Group	
		Geotech	not indicated		Leighton		not indicated	
		Survey	not indicated		Right-of-Way Engineering		not indicated	
		Potholing	Underground Solutions		Underground Solutions		SAF-r-Dig	
		Permitting	not indicated		DHK Engineers		not indicated	
	Exceptions taken to IRWD Std. Contract		None		None		None	
	Insurance (Professional & General Liability)		Yes		Yes		Yes	

EXHIBIT "B"

Section Number 1

PROJECT UNDERSTANDING & APPROACH

This section describes our understanding, approach and detailed scope of work for Irvine Ranch Water District's (IRWD's or District's) Chlorine Gas System Replacement at Rattlesnake Reservoir Project.

PROJECT UNDERSTANDING

The Rattlesnake Reservoir gaseous chlorine facility is used to disinfect a combination of recycled water discharged from Rattlesnake Reservoir and Irvine Lake raw water from the Zone B system prior to entering the Zone A Reservoir. IRWD now desires to convert the gaseous chlorine system at Rattlesnake Reservoir to a bulk sodium hypochlorite storage and feed system.

A bulk system offers multiple advantages compared to gas chlorine. The use and handling of sodium hypochlorite is safer compared to that of chlorine gas. Safety and monitoring system requirements are reduced which also reduces mechanical equipment needs. Removal of the gas system will ease regulatory permits and reduce inspections and auditing. Overall, the facility operational and maintenance needs will be lessened, which should result in an economic benefit to the District.

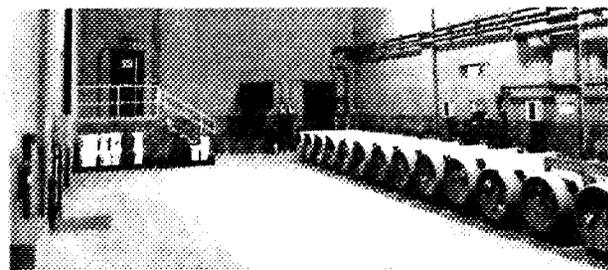
System conversion, does however, come with certain issues that must be addressed through the preliminary and final design stages. Carollo Engineers is excited to work with the District to deliver a quality project with the right solutions. In developing this proposal, we have identified the main issues that are critical to the District in developing a successful project.

- **Quality assurance through accurate scheduling, project management and technical reviews will ensure the project is on task, on schedule, and on budget.** Our team includes management and technical experts to deliver a product that meets District expectations.
- **Identification of proper design criteria.** There is a wide range of flows and dosing concentrations that must be met. Storage and chemical metering must be designed for efficient pumping and reasonable storage, while minimizing capital costs. We have developed alternatives, presented in this proposal, which highlight preferred solutions to address these issues. This includes facility layouts to maximize

efficient use of space and repurposing newly available space.

- **Utilize installed assets.** Removal of the chlorine system will allow other loads to be added to the standby generator. We will work with the District to determine previously unsupported equipment that can be connected.
- **Permitting.** The existing facility requires various inspections, audits, and safety plans required by regulatory agency due to the storage and use of chlorine gas. While sodium hypochlorite is considered a corrosive chemical, it is not considered as hazardous as chlorine gas. We will work closely with the regulatory agencies and the District to revise operating permits and reporting requirements due to the chemical conversion.
- **IRWD standards.** The District has established design standards to assist in consistency of engineering plans, specifications, and project implementation and start-up. Our recent experience at the Baker Water Treatment Plant familiarized us with the IRWD project manual, construction manual, and electrical and instrumentation standards that will be used for this project.
- **Continued disinfection through construction is a must.** We feel a temporary system offers the most advantage to safe, uninterrupted facility operations while allowing the contractor adequate space to work efficiently.

The following sections expand on and detail our approach to addressing these issues and working with the District to provide a complete and successful project.



Storage and use of gaseous chlorine creates added maintenance, monitoring, and operational costs for IRWD. Installation of bulk chemical storage provides the opportunity to eliminate these costs and simplify the facility operations.

PROJECT APPROACH AND SCOPE OF WORK

This section describes our approach and scope of work to accomplishing the tasks outlined in the RFP.

Task 1 Project Management

Task 1.01 – Project Status Reports

Weekly and monthly written status reports will be provided to the District. Monthly reports will accompany and supplement monthly invoices along with updated project schedules. These reports will provide a narrative summary of progress on the project, including budget and schedule status. The report will discuss work completed on the project for the reporting period and anticipated work for the next period. Critical decisions and outstanding action items will be documented and included with each report. Any out-of-scope work, if needed, will be identified in the progress report.

Tasks 1.02 – Meetings and Workshops

Meetings will be provided according to the RFP. A Kick-Off meeting will be used to review the scope of work, establish lines of communication, and discuss project goals and approach. Project issues and concerns can be expressed by City staff. Data and other information needs will be discussed. A total of sixteen (16) meetings have been planned for the Preliminary and Final Design tasks. Construction phase meetings are discussed under Task 4.

Draft agenda and supporting materials will be distributed for review approximately five days prior to each meeting and workshop. Draft and final conference notes will be distributed to all attendees and other interested staff within one week of the meeting.

Task 1.03 – Quality Assurance and Quality Control

Carollo has well defined, rigorous procedures for successful quality management. These techniques have been developed and refined over our 80-year history and have contributed to our success and reputation. Our quality assurance program provides for quality work through proven procedures for planning, coordination, checking, reviewing, and scheduling the work.

Our quality management program includes key senior staff and expert involvement at all project stages and provides a review of all aspects of the project at various milestones throughout the project execution. Vincent

Roquebert will lead our project review team, consisting of selected senior engineers and process experts, performs reviews on the project deliverables.

Three distinct quality review subtasks will be included in the technical evaluations:

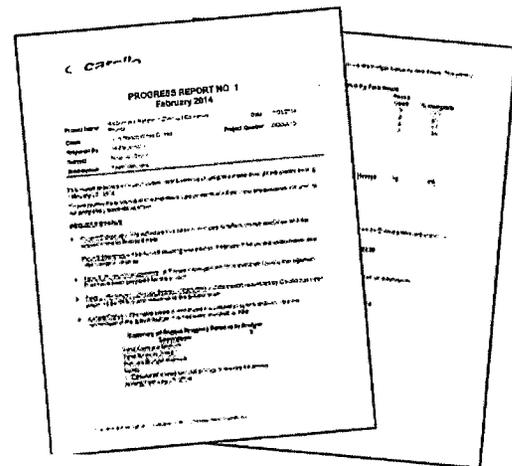
1. Preliminary review of quality requirements, purpose, and scope by the project team.
2. Intermediate technical review of the draft Preliminary Design Report (PDR) by the review team.
3. Final review of PDR, including technical content and adherence to guidelines by the review team.

Discipline checks will be made on all design calculations, drawings, specifications, construction cost estimates, and reports required for the project. An integrated design review will be performed for multidisciplinary documents to provide coordination and avoid conflicts in the documents. Qualified individuals who are not directly involved in the design or supervision of the work will perform the checking.

Jeff Thornbury will be responsible for the quality management of the project. He will ensure the project plan and schedule are being followed. This includes checking that project milestones are being planned for and that delays do not creep into the project and threaten the scheduled completion date. His role also includes regular discussions with the District to ensure the project team is meeting and exceeding the District's needs.

Task 1 Deliverables

- Weekly Progress Reports
- Monthly Progress Reports
- Draft and Final Meeting Agenda
- Draft and Final Meeting Minutes



Progress reports will document work completed and upcoming work to ensure the project stays on schedule.

B-2

Task 2 Preliminary Design Report

Our approach is to focus on the issues important to the District that will result in a successful project. These issues may include:

- Storage volume and layout
- Chemical pumping, including the required number of pumps, and the desired number of standby pumps
- Proper chemical injection
- Chemical truck access and delivery to the site
- HVAC requirements for chemical storage without need for chlorine gas scrubbing or monitoring
- Maintaining of existing assets such as the standby generator and overhead crane
- Permitting needs and revisions for Orange County Fire Authority (OCFA) and the California Accidental Release Prevention (CalARP) Risk Management Program (RMP)
- Construction sequencing to maintain facility operation while minimizing the time and cost of construction

These issues will be addressed in a series of tasks outlined below.

Task 2.01 – Background Information

The RFP provided preliminary historical data for flows and chlorine doses at Rattlesnake Reservoir. Under this task, additional information will be requested in order to review and confirm the historical process data. Expected data request is summarized in Table 1.

Beyond the project specific data requests, Carollo will compile the District's Project Manual, Construction Manual, and Electrical, Instrumentation and Controls Design Standards for use throughout the project. Carollo will review these manuals prior to the Project Kickoff Meeting so that any questions or concerns may be discussed immediately and resolved.

Task 2.02 – Sodium Hypochlorite Storage and Feed Layout and Configuration

Under this task, Carollo will develop and evaluate alternative layouts for the new sodium hypochlorite storage and feed system. This will include at least three initial layouts for tank and pumping configurations that will be presented to the District for review. Two hybrid alternatives will be created based on District comments and preferences. In fact, we have already begun developing initial layouts based on the information available. The layouts are presented

Table 1. Informational Needs

Parameter	Use
Flow	Determine minimum, maximum, and average flows to evaluate storage and chemical metering pump needs.
Dosing	Determine minimum, maximum, and average dosing to evaluate storage and chemical metering pump needs.
Record Structural Drawings and Geotechnical Report	Evaluation of existing facility and subsurface conditions to accept weight of bulk storage tanks
Record Site Drawings	Evaluation of site for chemical delivery truck access. Identification of subsurface utilities.
Record HVAC System Design Criteria	Evaluation of HVAC system and determination of current air exchanges in the gas cylinder storage room.
Existing Permits	Determination of permit modification needs for OCFA, CalOSHA, CalARP, and local Air Quality Management District.

here for discussion, and will be refined with District input once the project begins. Additional layouts will be created, as needed, to meet the project scope and determine the best possible solution for the District.

Chemical Storage and Feed Design Criteria

The RFP provided the range of water flows and chemical dosages typically applied at the Rattlesnake Reservoir. Based on the preliminary information, a range of sodium hypochlorite dosing rates has been calculated as shown in Table 2 on the next page. The feed rates represent a 10 percent sodium hypochlorite solution, allowing for some degradation from the standard 12.5 percent delivered solution. The rates are also used to determine bulk storage needs.

Chemical Storage

The various pump and dosing scenarios presented in the Design Criteria table (Table 2) represent a wide range of potential storage conditions. We understand the District's desire to maintain an average, on-site storage capacity of about 1 month. The maximum flow, average concentration scenario provides the most practical approach for bulk storage, requiring approximately 33,000 gallons of total storage. Additional storage for maximum dosing and average

Table 2. Design Criteria Table

Design Criteria	Units	Scenario					
		Min Q	Ave Q	Max Q	Min Q	Ave Q	Max Q
		Ave C	Ave C	Ave C	Max C	Max C	Max C
Process Flow Rate	cfs	1.0	15.0	40.0	1.0	15.0	40.0
Process Flow Rate	mgd	0.6	9.7	25.9	0.6	9.7	25.9
Chemical Dosage for Disinfection (mg/L of Chlorine)	mg/L	5.0	5.0	5.0	30.0	30.0	30.0
Chemical Feed Rate	gph	1.2	17.3	46.2	6.9	103.9	277.2
Monthly Usage (30-Day Month)	gallons	832	12,473	33,262	4,989	74,839	199,572

Based on the range of flows and dosages, chemical metering will require careful planning in the number of pumps and capacity of each.

to maximum flows will require added expenditures for tank volumes. There is also the risk of chemical degradation during operating scenarios when the chemical demand is limited.

For the purpose of this proposal, we have developed three potential alternatives for tank storage shown in Figures 1, 2, and 3 (on the following pages). Alternative 1 uses four 8,500 gallon vertical storage tanks while Alternative 2 uses two 18,000 gallon horizontal storage tanks. Alternative 3 also uses horizontal storage tanks, with the tanks positioned along the length of the building. The use of vertical or horizontal tanks both offer advantages and disadvantages as described in Table 3 on page 8.

In reviewing the alternatives, there are similar design features that should be considered for the final design:

- The existing lower concrete walls can be used for the containment area. Only one new wall is required. The wall can be cast with a shelf for mounting the chemical metering pumps.
- The containment area concrete should be coated with vinyl ester for protection and added service life.
- Double containment pipe should be evaluated for pipe runs not within the bulk containment area.
- The existing overhead crane is suspended a foot or more below the supporting steel beams. The crane should be raised to allow for tank installation and to maximize space above the tanks
- The tank vents are routed through the wall to avoid conflict with the crane
- The existing sump can be used as a low point to collect and pump out any spills. All drain pipes will be blocked to prevent chemical from leaving the room.

- Demolition of the existing chlorine evaporators and pumps will provide additional space for a control room, office, storage, or other needs as desired by the District.
- An elevated walkway is provided to allow operators to walk above the containment area.
- Isolation of the cylinder storage room, or new bulk tank storage room, is no longer needed. Doors can be added for better access through the building.

We recommend FRP Storage Tanks. We have recently added enhancement to our FRP Tank Specifications including:

- Manufacture per RTP-1 standards to ensure fabrication quality and oversight
- Increased corrosion liner thickness to prolong service life
- 5-year warranty to protect against defects
- Sloping of the tank bottom to prevent sediment buildup

We look forward to discussing these design features with the District, refining them, and adding any additional features that will best fit the District's vision for the sodium hypochlorite storage system.

Alternative 3 is the most promising of the three alternatives we developed for the following reasons:

- Most efficient use of space
- Walkways provide effective access throughout the area
- Installation and future replacement of tanks is straightforward

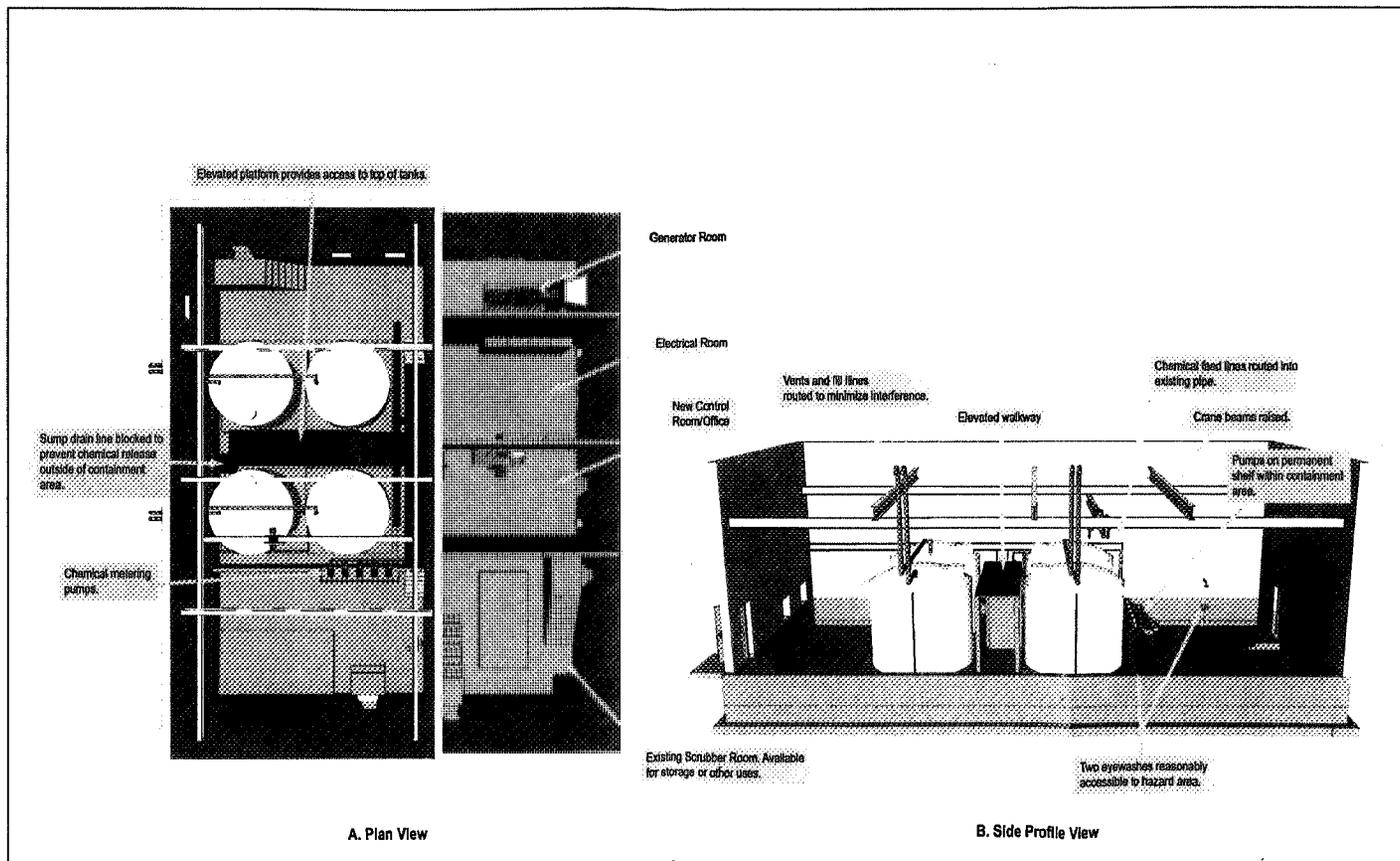


Figure 1. Alternative 1: Four 12-foot diameter, 12-foot tall vertical tanks

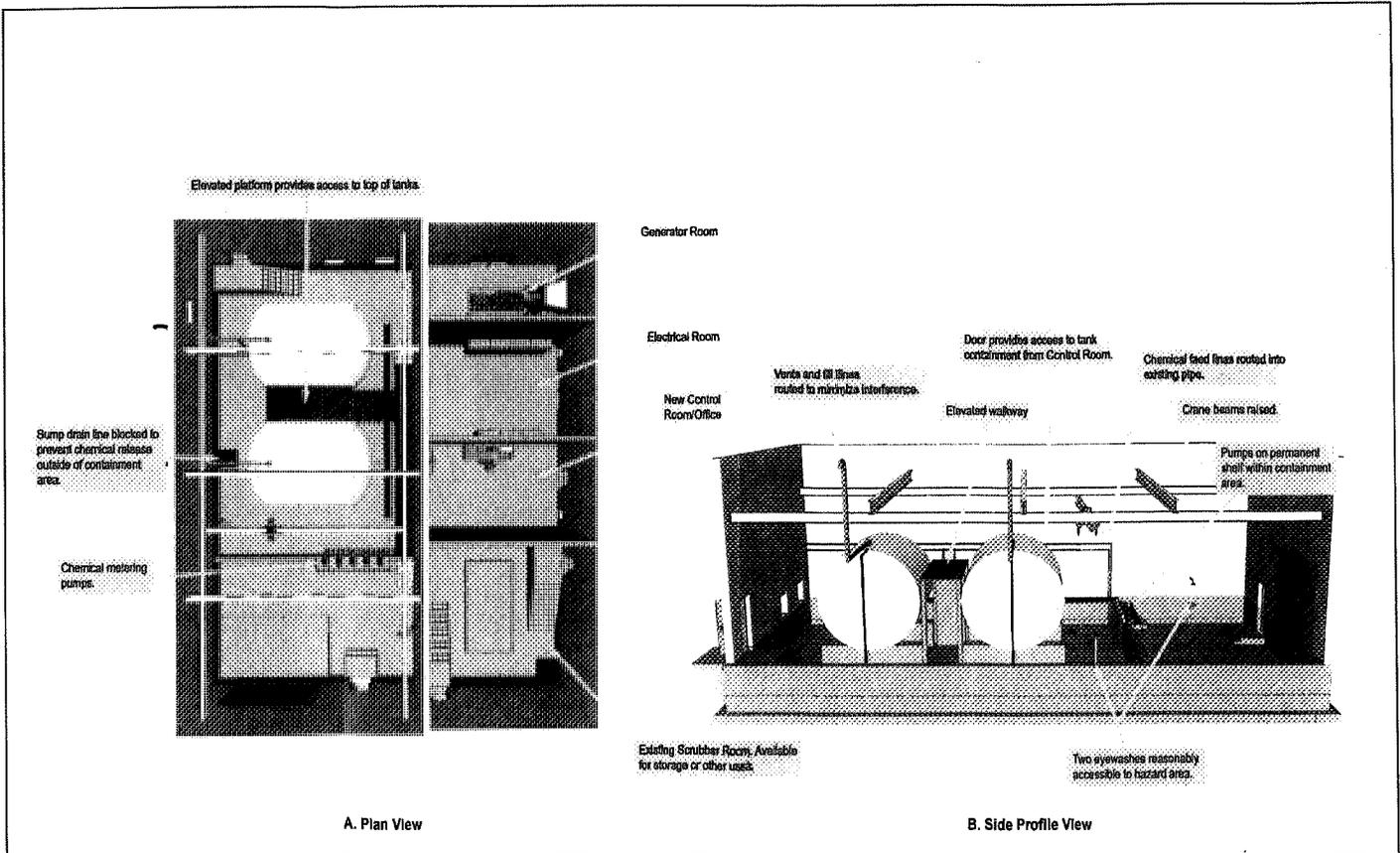


Figure 2. Alternative 2: Two 13-foot diameter, 19-foot long horizontal tanks

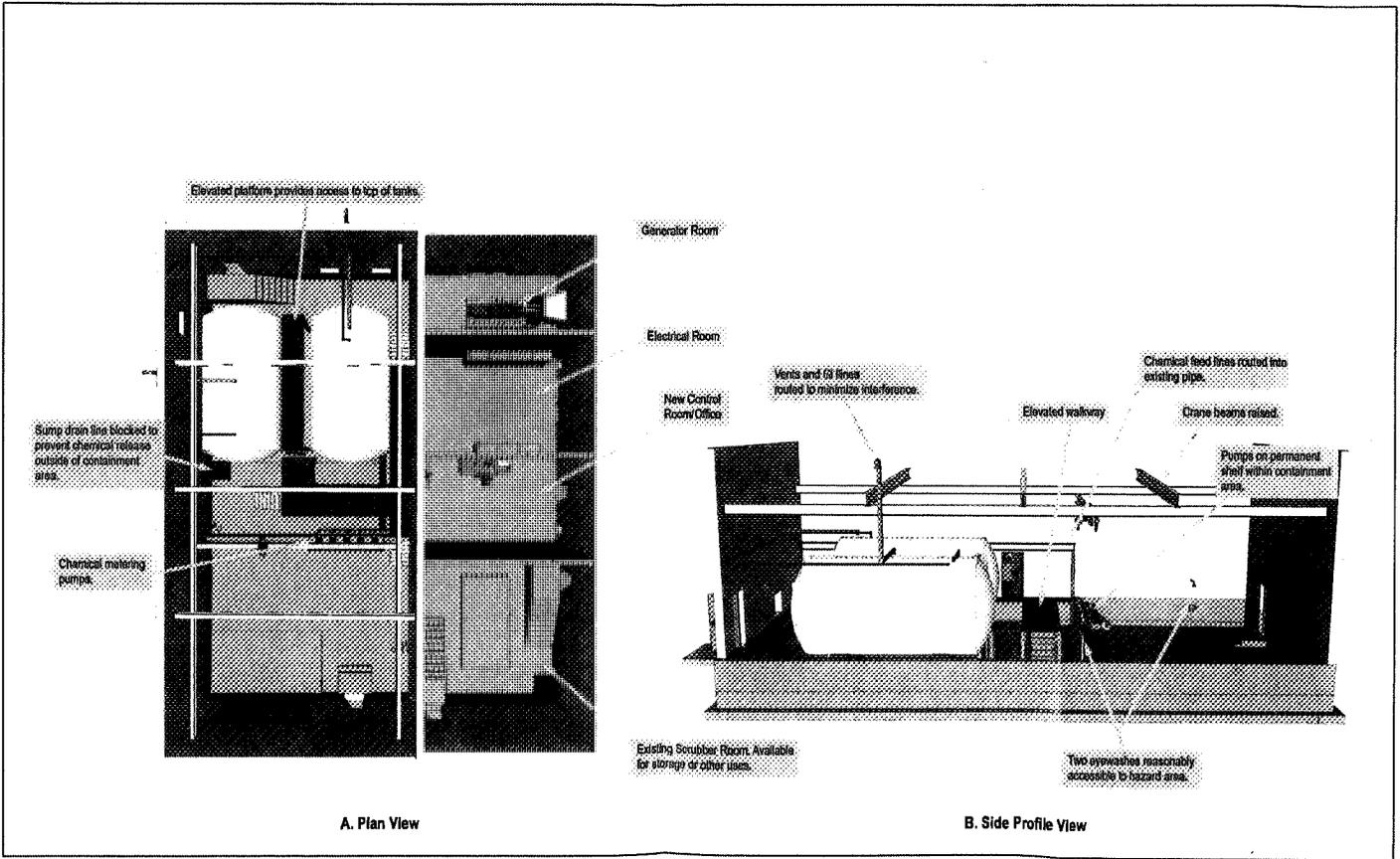


Figure 3. Alternative 3: Two 12-foot diameter, 24-foot long horizontal tanks

Table 3. Chemical Storage Tank Alternatives Comparison

Alternatives	Advantages	Disadvantages
1. Vertical Tanks Four, 12-ft diameter 12-ft tall vertical tanks Capacity per tank: 9,000 gal	<ul style="list-style-type: none"> The number of tanks filled and in service can be adjusted according to seasonal demands to limit degradation. Added redundancy should a tank fail. 	<ul style="list-style-type: none"> More piping required which can complicate fill and pumping operations. Tank height is limited by the overhead crane. Access hatch will likely have to be side-mounted.
2. Horizontal Tanks Two, 13-ft diameter 19-ft long horizontal tanks Capacity per tank: 18,000 gal	<ul style="list-style-type: none"> Fewer tanks have less complicated pipe routing. Mounting tanks on saddles will reduce modifications to existing slab. Fewer number of tanks to maintain. 	<ul style="list-style-type: none"> Installation is complicated with increased tank diameter and need to rotate the tanks inside the building.
3. Horizontal Tanks Two, 12-ft diameter 24-ft long horizontal tanks Capacity per tank: 18,000 gal	<ul style="list-style-type: none"> Simplified installation without having to turn tanks. Fewer tanks have less complicated pipe routing. Mounting tanks on saddles will reduce modifications to existing slab. Fewer number of tanks to maintain More headroom above tank. 	<ul style="list-style-type: none"> Less redundancy compared to four tank option.

Chemical Pumping

The chemical storage alternatives presented each showed a common pump layout. Per the scope of the project, alternative pumping configurations will be developed and presented to the District for further revision and analysis. Based on the chemical pumping criteria previously discussed, we have developed three preliminary alternatives to deliver a chemical feed rate of roughly 1 gallon per hour (gph) to 280 gph at peak demand:

- Alternative 1** – Five equally sized diaphragm pumps, each with a capacity of 1 to 71 gph. Under this alternative there will be one standby pump for the maximum flow, maximum dose scenario. All other scenarios will have one standby pump for each duty pump.
- Alternative 2** – Three duplex diaphragm pump systems would be installed, each capable of 1 to 144 gph. Each duplex system would consist of a single motor and controller with a pair of pump heads mechanically fitted at 180 degrees phase so that one pump head would be discharging while the other is priming. In this fashion there is a constant output of chemical. Three installed systems allows for two duty and one standby system at the maximum flow and dosing scenario

- Alternative 3** – Under this scenario, two duty and one standby diaphragm pumps would each have a capacity of 1 to 55 gph to provide pumping for all scenarios except the high flow, high dose scenario. One duty and one standby gear pump would be sized for a flow rate 330 gph to meet the maximum demand.

The listed alternatives offer certain advantages that may be desirable to the District, as shown in Table 4 on the following page.

Beyond the alternatives provided, we are prepared to discuss and analyze other alternatives with the District. This may include alternate pumping technologies, such as peristaltic pumps. Peristaltic pumps have less issues with off-gassing of sodium hypochlorite as compared to diaphragm pumps, however, the tubes are more susceptible to failure compared to diaphragms. Other issues to consider include pump turndown, the amount of redundancy desired by the District, and whether shelf spares of pumps, motors, and parts can be considered in lieu of installed standby pumps.

Chemical Piping

Liquid sodium hypochlorite offers a significant decrease in on-site and off-site risk when compared to gaseous chlorine, but there are challenges associated with its use. The most significant is the degradation

Table 4. Proposed Pump Options and Configurations Matrix

Option	Description	No. of Pumps	Advantages	Disadvantages
		(Duty + Standby)		
1	Diaphragm Pumps	4 + 1	<ul style="list-style-type: none"> • Most straightforward and simple pumping configuration • Identical pumps 	<ul style="list-style-type: none"> • Multiple pumps required
2	Duplex Diaphragm Pump System	3 + 1	<ul style="list-style-type: none"> • Duplex system is more cost effective than individual pumps • Pairing the pump heads provides steady chemical injection 	<ul style="list-style-type: none"> • Motor failure results in loss of two pumps • More complex than individual pumps
3	Diaphragm and Gear Pumps	Diaphragm: 3 + 1 Gear: 1+1	<ul style="list-style-type: none"> • Gear pump offers less expensive option to meet maximum dosing demand 	<ul style="list-style-type: none"> • Most complex pumping system for control and operation • Gear pumps have short life expectancy

of the stored solution—especially in warmer climates. One of the by-products of decomposition is oxygen gas, which can cause binding in the metering and conveyance systems downstream of the storage tanks. Piping systems must be carefully designed to prevent and relieve gas buildup.

Despite efforts to prevent degradation and gas build up, some will occur. The oxygen gas that results from degradation can cause significant problems in the conveyance system. Gas collection in the high points of the piping can effectively stop liquid flow. To mitigate this concern, degassing valves, illustrated in the photo here below, should be installed at every high point of the system and on the discharge of the metering pump. The valves are vented back to the storage tank to prevent the gas from releasing directly into the room. We have used this approach on previous projects with great success. The valves will be used with traditional vented ball valves and diaphragm valves to minimize gas build-up.

Degassing valves will be installed at high points of the piping system to release any gas buildups



Sodium hypochlorite is also classified as a corrosive substance. Protection against spills and operator contact with the material should be provided. Double containment piping can be used for all new piping in the building, as well as for fill piping and discharge piping to the injection locations. A preliminary review of the existing piping suggests that the two 4-inch Zone A pipes can be used as containment pipes for the carrier tubing. There are two 90-degree bends along the buried pipe route outside of the building. It may be necessary to expose the fittings to pull tubing through. This would be less disruptive than trenching in new lines. Zone B disinfectant is fed through a 1.5-inch pipe. There are slightly more bends in this pipe that may need to be exposed. Leak detection should also be discussed with the District. Methods of detection include visual inspection ports at low points in the pipe, sensors at the low points, or running a detection wire along the length of the carrier pipe.

Chemical Delivery and Site Access

The District may have an interest in using the Rattlesnake Reservoir sodium hypochlorite storage system to supply chemical to smaller facilities in the area. Whether delivering or loading chemical, truck access must be considered in the final design and layout of the system. The common delivery truck is a 4,500 gallon tanker truck. Providing an easy access route in and out of the site will be important, not only for efficient chemical transfer, but also in protecting the onsite facilities from potential vehicular damage.

The existing site offers challenges in determining an efficient and safe truck access route. The main access into and out of the site appears to be through the westerly gate near the fire station. The close proximity of the existing buildings and pump stations to each other prevent a simple circuitous path through the site. We have developed multiple potential routes, each with its own benefits and drawbacks, as shown in Figure 4 on the next page.



The existing site has limited turning lanes between buildings for vehicles. This may complicate chemical delivery. Proper documentation of site features will be critical in determining a safe delivery route.

Alternatives 1 and 3 require a new access gate and truck routing through the parking lot located west of the site. District input is required to determine if this route would upset the existing use of the parking lot and associated area. These alternatives provide the advantage of allowing a tanker truck to back up close to the chlorine building. The fill station can be located next to the building. This will place the station as close as possible to the tanks, limit the amount of exposed pipe, protect the fill station from vehicular traffic and other site activities, and limit staff exposure to potential pipe leaks.

Alternatives 2 and 4 provide truck access within the existing fence line. These alternatives are preferred if access through the parking area west of the site is not possible. Both alternatives will require a new access gate between the two existing gates. Alternative 4 will require a difficult turn between the chlorine building and the pump station. Both alternatives would place the fill station farther away from the chemical building. The station can be installed with vehicle bollards for safety and fill pipe should be elevated and routed along existing walls to prevent potential staff from tripping or bumping into the pipes.

We will evaluate all alternatives with the District throughout the preliminary design phase. Input from

the District's truck driver may provide crucial insight into the preferred alternative.

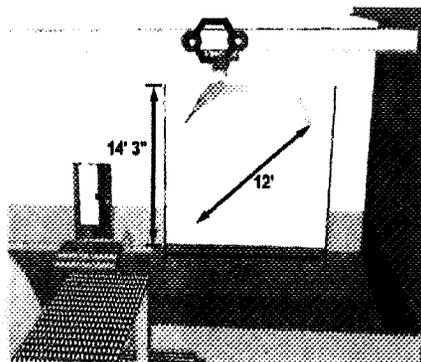
Installation and Construction Sequencing

When discussing the various storage, feed, and delivery options, constructability and sequencing alternatives should be discussed in detail. Construction sequencing can play a large part in determining overall construction schedule as well as affecting hidden costs associated with risk, safety, excessive coordination and scheduling due to complicated staging of various construction phases.

There are multiple strategies available to maintain disinfection facilities during construction. These are shown in Table 5 on page 12.

We have developed a potential construction sequence, shown in Figure 5 on page 13. *Our sequencing plan will limit risk, ensure a safe working site, and allow construction to occur as straight-forward as possible. This will enable construction to occur in a timely and efficient manner, limiting costs associated with temporary facilities.*

The ability to minimize temporary chemical system size and duration will reduce project risk and liabilities to the District, resulting in lower overall construction costs. We look forward to discussing and evaluating these options with the District throughout the project duration.



The horizontal tanks can be fit through the existing door for installation and future replacement.

Task 2.03 – HVAC & Plumbing Systems

Removal of the gaseous chlorine system will allow a re-evaluation of the HVAC and fire sprinkler systems. The scrubber can be removed and the scrubber room designated for other uses. The HVAC system will also be reviewed for the new bulk storage room (gas cylinder room). Sodium hypochlorite degrades over time and loses potency. A contributor to this is temperature fluctuations, so there is some incentive to maintain an HVAC system within the

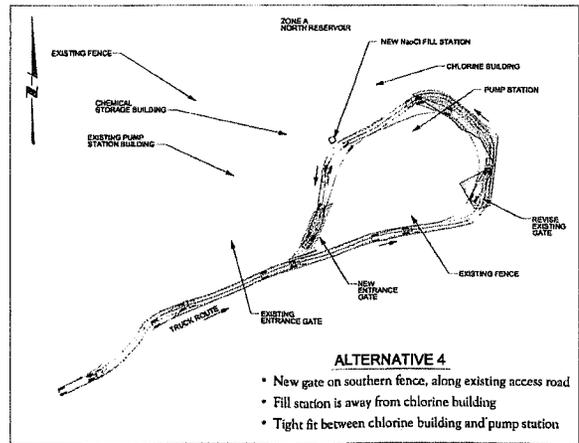
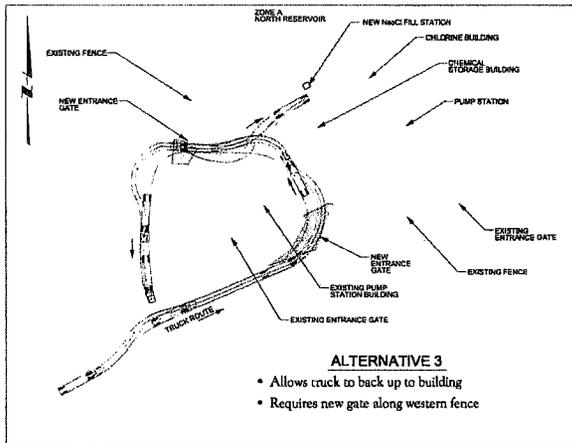
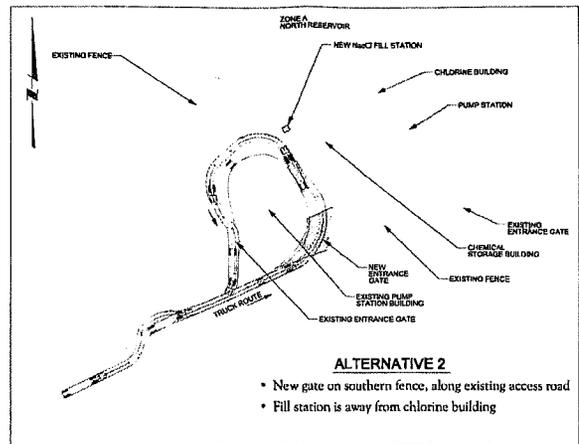
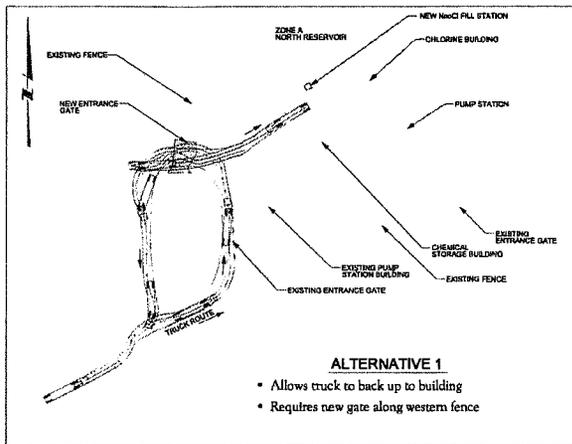


Figure 4. Alternatives 1 and 3 provide the most efficient path for chemical deliveries and unloading.

Table 5. Proposed Temporary Chlorine Feed Matrix

Option	Description	Advantages	Disadvantages
1	Installing a complete and fully functional temporary bulk storage hypochlorite system including storage tank, containment, pumping, and pump controls.	<ul style="list-style-type: none"> • Reduces costs associated with equipment rental • Avoids working around live chlorine cylinders • Separates construction work from facility operations 	<ul style="list-style-type: none"> • Risk of damaging equipment during temporary installation and use • Cost associated with erecting the tank twice • Warranty period begins during temporary operations
2	Operate part of the gaseous chlorine system while installing the bulk system. This would require removing a portion of the gaseous cylinders to allow for installation of a permanent tank in the chlorine building along with the necessary duty pumps.	<ul style="list-style-type: none"> • No costs associated with temporary systems. 	<ul style="list-style-type: none"> • Construction and facility operations would occur in the same, limited area • Risk associated with construction around live gas cylinders • Chlorine gas monitoring system would have to remain operational longer • Complicated logistics and construction sequencing
3	Provide large capacity temporary storage and pumping near the injection manhole. Large storage could be provided by renting a tank or leasing a tanker truck to use for site storage.	<ul style="list-style-type: none"> • If construction must occur during high demand periods, large capacity storage reduces delivery schedules. 	<ul style="list-style-type: none"> • Higher cost for larger rental equipment
4	Provide less storage capacity near the injection manhole using rented totes.	<ul style="list-style-type: none"> • Requires less footprint • Limits size and cost of rented equipment • Preferred, if scheduled during low demand period • Can sufficiently supply chemical for the expected 6 to 8 weeks needed to have new system functional 	<ul style="list-style-type: none"> • May require a busier delivery schedule

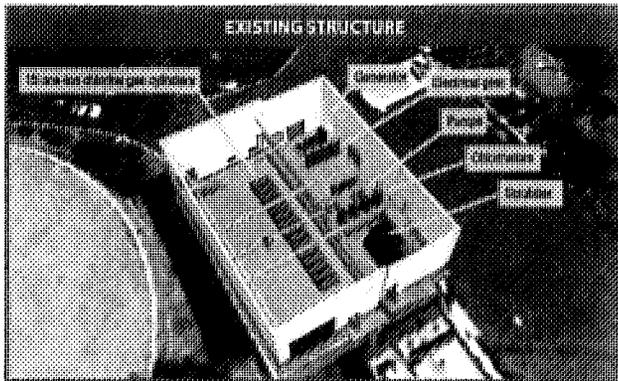
room. Additionally, fire code requirements state that continuous ventilation must be provided at a minimum rate of 1 cubic foot per minute (cfm) per square foot of building size. This results in a minimum air flow rate of approximately 2,160 cfm. We will review the existing HVAC system to determine what modifications should be made to meet these requirements.

The existing room is also equipped with a fire sprinkler system. The system is a requirement for the storage and use of gaseous chlorine cylinders but is not required for sodium hypochlorite storage. A sprinkler system is still required by the fire code with a minimum

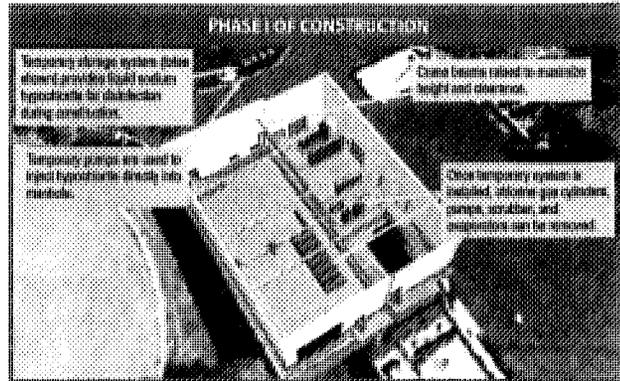
design area of 3,000 square feet and the room rating not less than Ordinary Hazard Group 2. We will contact the local Orange County Fire Authority to review and revise the room occupancy rating. We will then review the existing fire sprinkler system and recommend modifications, if any. The existing system is likely oversized for a sodium hypochlorite system. We will review with the District the pros and cons of modifying the sprinkler system to reduce the fire flow.

Task 2.04 – Electrical and Controls

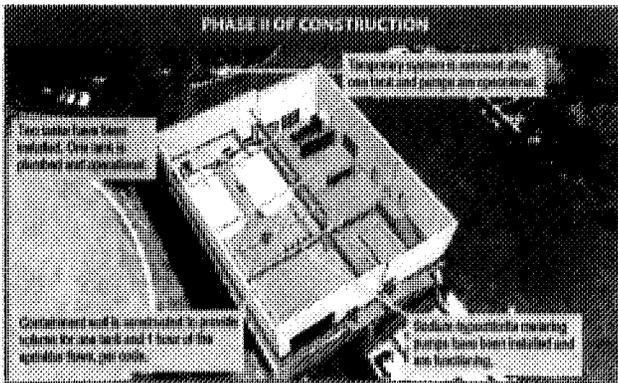
Integration of the new sodium hypochlorite storage and feed system into the reservoir operations will



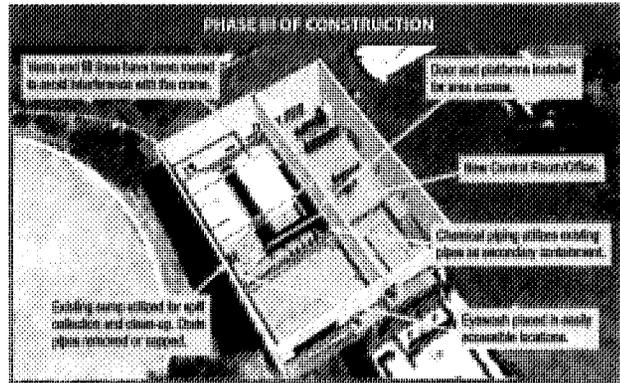
Chlorine gas system includes 15 one-ton gas cylinders, evaporators, chemical feed pumps and gas monitoring and scrubbing systems.



Initial construction sequence allows for chlorine to be dosed while construction is in progress. Construction will be undertaken in winter months. The lower demand will reduce the volume of chemical needed.



One liquid sodium hypochlorite tank is installed with chemical feed pumps. Once operational, the temporary system is removed. FRP walkways and platforms are constructed. All equipment related to old chlorine gas system is removed.



Sodium hypochlorite system is fully installed and operational. Staff can access tanks and pumps without entering the containment area. Evaporator Room and Scrubber Room are available for new uses.

Note: Not all interior walls are shown for clarity.
Figure 5. Potential Construction Sequence

include proper instrumentation and controls. Sodium hypochlorite dosing should be flow paced in relation to the incoming water flow. Adjustable dosing should also be available to maintain a set point chlorine residual. Additional instrumentation should include storage tank level monitoring, spill alarm within the containment area, and pump fail alarms.

We have also reviewed the existing standby generator. Once the scrubber is removed, it will be possible to add new loads to the generator as desired by the District. With the scrubber gone, there is approximately 60 horsepower available for connection to the generator. However, care must be taken that the newly connected loads do not create a current inrush that can shut down the generator. For this reason, we would recommend that any new loads not exceed 40 horsepower. We will work with the District to identify critical onsite pumps or other equipment that should be connected to the generator. Carollo will also review the existing power and control systems and make recommendations that will improve the facility operations.

Task 2.05 – Structural Evaluation

We have reviewed the as-built records and geotechnical report for the site. Based on our review, the existing facility can incorporate the new bulk storage tanks. The tanks offer a fairly large load for the existing 10-inch thick slab and mounting the tanks directly to the slab is not feasible without modifications. Options for slab modification include the following:

- Pour a new slab on top of the existing slab. This has the added benefit of raising the tanks above the finished floor to provide flooding of the pump suction. There is less control over the final mounting height as it is controlled by the structural calculations
- Cut out existing slab, to dimensions required, and pour a new slab. The slab height could be either flush with the existing slab or raised above it to some optimum level.

Slab thickening will be required for mounting the vertical or horizontal tanks. The slab modifications would be less with the horizontal tank that is mounted on pedestals. The pedestals will be 24 to 36-inches thick and the new slab would be approximately two feet larger than the pedestal dimensions. New slabs for the vertical tanks will require approximately 24 to 30 inches of width beyond the diameter of the tank.

We have also reviewed the interior concrete block wall separating the gas cylinder room from the other rooms. It is possible to cut a door or other openings into the wall as long as the roof pilaster blocks are not cut. There is an existing small viewing window in the wall that is located between two pilasters. This would be a good location to cut in a new door.

Finally, we have previously mentioned a desire to raise the overhead crane that is currently suspended from the roof framing beams by rods. Shorter rods can be installed to raise the height of the beam. We have also noticed that the track beams supporting the crane appear to have seismic bracing only at the ends of the beams. Intermediate lateral sway bracing is recommended. We will review the crane and track beam with respect to the seismic code to determine the optimal number of sway braces to install. Mounting the bracing to the roof pilasters will provide the most strength and protection under a seismic event.

Task 2.06 – Project Schedule

The project schedule will be developed to identify all preliminary design tasks, final design tasks, and critical construction activities. The project will be prepared using Microsoft Project.

The construction schedule will be developed utilizing a detailed sequence of construction for the contractor to follow. This will include specific limitations as to installation of a temporary disinfection system, when (seasonally), and with limits on duration of the temporary system before the final system is placed on line.

Considering the above, a potential construction schedule is shown on the next page.

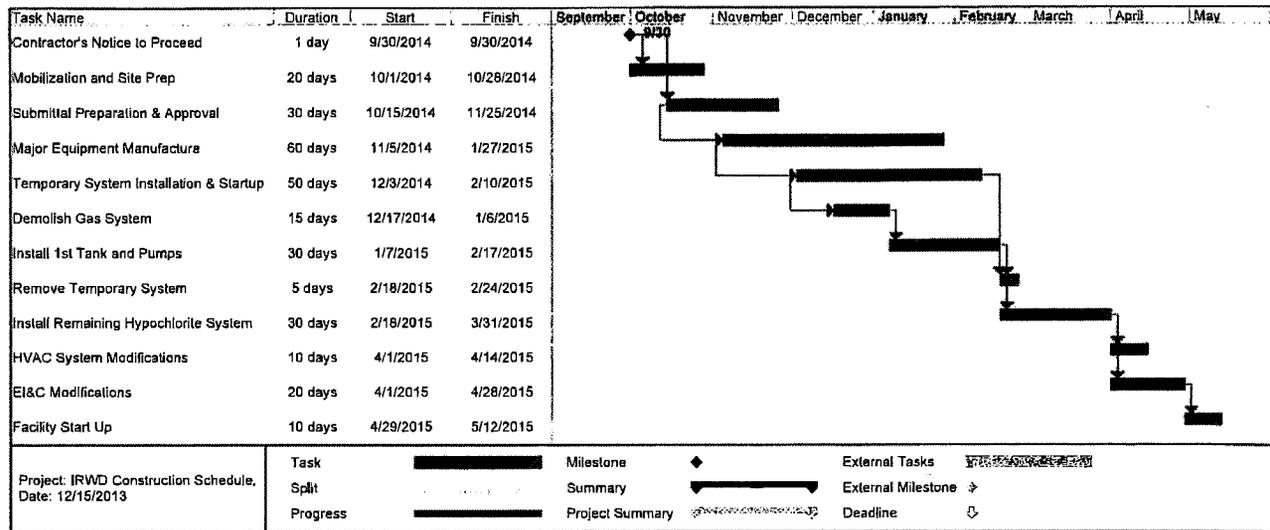
Task 2.07 – Opinion of Probable Construction Cost

Cost estimates will be developed based on conceptual quantity take-offs, expected unit costs, and vendor quotes for major equipment. Carollo's Cost Template will be used. The database reflects both inflation and other cost trends for material and labor. These estimates will be up-dated and refined throughout PDR analysis.

Task 2.08 – Permits

The Rattlesnake Reservoir facility is categorized as a CalARP Program Level 2 Facility due to the presence and storage of chlorine gas. Based on our preliminary

Potential Construction Schedule



investigations, sodium hypochlorite at 12.5 percent solution strength is not regulated and has no listed threshold planning quantities under CalARP. It may be possible to delist the facility from CalARP once the project is complete. We will work with the District to interact with the local CalARP authority in order to determine any necessary requirements for this project.

Carollo will also assist the District in interactions and permit amendments with the Orange County Fire Authority. The scrubber room and gas cylinder room are currently classified as high hazard occupancy groups due to the presence of caustic soda and chlorine. Removal of these systems will allow for reclassifying the occupancy groups.

Another issue may be the existing Air Pollution Control District Permit-to-Operate for the chlorine gas scrubber. The permit can be modified to remove the chlorine gas scrubber.

Task 2.09 – BOD Report

The Basis of Design Report (BOD) will document the results of the above tasks. The BOD will focus on finalizing the design criteria, equipment selection, spatial configurations, and development of alternatives for replacement of the gaseous chlorine system with bulk sodium hypochlorite storage and pumping. A list of final design drawings will be included in the report. A preliminary drawing list, based on the previous tasks, is included on the following page. Both a draft and final report will be prepared.

Task 2 Deliverables

- Ten (10) copies of the Draft BOD Report will be provided to the District for review and comment.

- Ten (10) copies and one (1) electronic copy of the Final BOD Report will be provided to the District with or before the 60-Percent Final Design Submittal.

Task 3 Final Design

Task 3.01 – Project Manual

The Project Manual will be prepared using IRWD's standard format and IRWD's front end documents. Supplemental and special provisions will be included as required to supplement the standard and front end documents. Work sequence and restraints will include allowable shutdown durations and sequencing to minimize facility down time. IRWD technical specifications will be included. Carollo will provide project specific technical specifications to complete the Project Manual for the project. Submittals of the Project Manual will be per the Task 3 Deliverables.

Task 3.02 – Construction Plans

Carollo will prepare detailed construction drawings according to the requirements of the RFP:

Task 3.03 – Utility Research

Carollo has reviewed the as-built information provided with the RFP. The location of existing underground utilities and other physical features will be accurately shown on the construction plans. This will include material, size, horizontal and vertical locations as needed. A budget of up to four utility potholes is included in the project budget.

Task 3.04 – Electrical and Instrumentation

Carollo will prepare Programming and Instrumentation Diagrams (P&IDs), single line diagrams, control

Preliminary Drawing List

Drawing Number and Description	
General	
G-1	Cover Sheet
G-2	Sheet Index
G-3	Abbreviations
G-4	General Site Plan
G-5	Survey Control & Construction Staging
G-6	Process Flow Schematics Chemical Storage & Feed
G-7	Chemical Storage and Feed Design Criteria
Demolition	
D-1	Overall Demolition Plan
D-2	Demolition Photos
D-3	Demolition Photos
D-4	Demolition Photos and Details
Civil	
C-1	Legend, Symbols and Notes
C-2	Site Paving and Grading
C-3	Partial Site Piping Plan
C-4	Site Piping Sections & Details
Structural Drawings	
S-1	General Notes I
S-2	General Notes II
S-3	NaOCI Storage Tank Room Plan
S-4	NaOCI Storage Tank Room Sections & Details
S-5	NaOCI Truck Loading Plan & Sections
Mechanical Drawings	
M-1	Legend, Symbols and Notes
M-2	NaOCI Storage Tank Room Plan
M-3	NaOCI Storage Tank Room Sections & Details
M-4	NaOCI Pumping Isometric
M-5	NaOCI Truck Fill Station Plan & Details
M-6	HVAC Plan
M-7	HVAC Sections & Details
M-8	NaOCI Zone A and Zone B Connection Details
Electrical	
E-1	Legend
E-2	Abbreviations
E-3	Schedules I
E-4	Electrical Site Plan
E-5	Conduit Routing Plans
E-6	Overall One Line Diagram Demolition
E-7	Overall One Line Diagram Modifications
E-8	MCC Modification One Line Diagram
E-9	MCC Modification Elevation
E-10	NaOCI Building Power & Control Plan
E-11	NaOCI Conduit Development Plan
Instrumentation	
I-1	Legend, Symbols and Notes I
I-2	Legend, Symbols and Notes II
I-3	Legend, Symbols and Notes III
I-4	Legend, Symbols and Notes IV
I-5	Legend, Symbols and Notes V
I-6	Schematic Symbols
I-7	Analog Terminal Wiring Schematic
I-8	PCM Power Schematic
I-9	Sample Loop Drawing
I-10	Control Schematics
I-11	SCADA Network Block Diagram
I-12	PLC Layout
I-13	NaOCI Storage Tank No 1 P&ID
I-14	NaOCI Storage Tank No 2 P&ID
I-15	Chemical Metering Pump No. 1 P&ID
I-16	Chemical Metering Pump No. 2 P&ID
I-17	Chemical Metering Pump No. 3 P&ID
I-18	Chemical Metering Pump No. 4 P&ID
I-19	Chemical Metering Pump No. 5 P&ID
I-20	Chlorine Analyzer P&ID
Typical Details	
T-1	Typical Details - Civil
T-2	Typical Details - Structural
T-3	Typical Details - Mechanical
T-4	Typical Details - Electrical
T-5	Typical Details - I&C

equipment lists, and integration of the new facility into the District's existing SCADA system. We will meet with IRWD electrical and telemetry staff in order to properly and efficiently incorporate IRWD's standard operations, programming, and tagging requirements. Operation schemes and control descriptions will be provided to the District for review and comment.

Task 3.05 – Project Schedule

The project construction schedule and construction sequencing will be updated at each submittal point as the design is refined and new features are added.

Task 3.06 – Liquidated Damages

Carollo will prepare IRWD's standard liquidated damages calculation form in order to assist the District in determining the proper damages to assess for exceeding of the contracted construction time.

Task 3.07 – Opinion of Probable Construction Cost

The cost estimates will be updated at each submittal point as the design is refined and new features are added.

Task 3.08 – Final Design Deliverables

60-Percent Deliverable

- Ten (10) copies and one (1) compact disc of PDF's, including Project Manual, Construction Plans, Opinion of Probable Construction Plans, Project Schedule and Liquidated Damages Spreadsheet.

90-Percent Deliverable

- Ten (10) copies and one (1) compact disc of PDF's, including Project Manual, Construction Plans, Opinion of Probable Construction Plans, Project Schedule and Liquidated Damages Spreadsheet.

100-Percent Deliverable

- Ten (10) copies and one (1) compact disc of PDF's and one (1) compact disc of AutoCAD files of the 100-percent plan set, including Project Manual, Construction Plans, Opinion of Probable Construction Plans, Project Schedule and Liquidated Damages Spreadsheet.

Final Deliverable

- One (1) final set of stamped and signed reproducible plans on mylar and original Project Manual for District signature.
- Carollo will attend a Final Plan Signature Meeting to discuss the final project with the District and answer any remaining questions prior to the bid period.

Task 3.09 – Addenda Preparation and Pre-Bid Meeting

Carollo will assist in conducting one pre-bid meeting, including a site visit with potential bidders. Up to two (2) bid addenda will be prepared to provide information and clarification of the bid documents.

Task 3 Deliverables

- 60-Percent Plan Set
- 90-Percent Plan Set
- 100-Percent Plan Set
- Final Biddable and Reproducible Plan Set
- Pre-Bid Meeting Minutes
- Two (2) Addenda

Task 4 Construction Phase Services

Carollo will provide support and consultation to the District throughout the construction period, as outlined in the following tasks

Task 4.01 – Project Meetings

Attend and conduct ten (10) construction meetings throughout the duration of construction period. Draft agenda and supporting materials will be distributed for review approximately 5 days prior each meeting and workshop. Draft and final conference notes will be distributed to all attendees and other interested staff within one week of the meeting.

Task 4.02 – Request for Information

Respond to thirty (30) Requests for Information (RFIs) from the construction contractor. Clarifications, details, additional calculations for clarification or modification to original design drawings will be provided as requested by the District to provide clear and concise responses.

Task 4.03 – Minor Plan Revisions

A budget of up to forty (40) hours has been established to provide minor revisions to the contract construction drawings as required for Task 4.02 above or other needs.

Task 4.04 – Site Visits

Carollo will attend and conduct four (4) site visits throughout the construction period to review construction progress, resolve technical issues, and/or review overall project schedule, coordination, and progress with the District and the Contractor.

Task 4.05 – Shop Drawing Reviews

Review and approve for acceptance of at least forty (40) shop drawing submittals. This task will include a second review of up to twenty (20) shop drawing submittal, if required.

Task 4.06 – Record Drawings

Prepare record drawings on full-size mylar at construction completion using Contractor's and IRWD's inspector's markups. Deliver final record drawings, reissued signed construction drawings in mylar hardcopy, a combined PDF electronic file, and AutoCAD electronic files.

Task 4 Deliverables

- Draft and Final Construction Meeting Agenda
- Draft and Final Construction Meeting Minutes
- Submittal Review Comments
- RFI Responses
- Plan Revisions, as required
- Record Drawings as mylar, PDF electronic file, and AutoCAD electronic files

**CAROLLO ENGINEERS, INC.
FEE SCHEDULE**

**As of January 1, 2013
California**

	<u>Hourly Rate</u>
Engineers/Scientists	
Assistant Professional	\$150.00
Professional	182.00
Project Professional	209.00
Lead Project Professional	224.00
Senior Professional	249.00
Technicians	
Technicians	142.00
Support Staff	
Document Processing / Clerical	106.00
 Other Direct Expenses	
Travel and Subsistence	at cost
Mileage at IRS Reimbursement Rate Effective January 1, 2013	\$.565 per mile
Subconsultant	cost + 10%
Other Direct Cost	cost + 10%
Expert Witness	Rate x 2.0
Senior Process Specialist	Rate x 2.0

This fee schedule is subject to annual revisions due to labor adjustments.

Fee Proposal

Task Number/Description	Thornbury	Meyershofer	Roquebert	Washburn	Assistant Engineer	Green	Doering	Hedlund	Designer	Document Processing	Task Hours	Task Subtotal	Subconsultant/Permit Fees	Reproduction	Task Total
1. Project Management															
1.01 Project Status Reports	1	8	0	24	0	0	0	0	0	0	33	\$6,457	\$-	\$-	\$6,457
1.02 Meetings and Workshops	2	32	8	32	12	0	4	8	0	6	104	\$19,870	\$-	\$800	\$20,670
1.03 Quality Assurance/Quality Control	4	4	18	4	0	2	2	2	0	0	36	\$7,494	\$-	\$-	\$7,494
Task Subtotal	7	44	26	60	12	2	6	10	0	6	173	\$33,821	\$-	\$800	\$34,621
2. Preliminary Design															
2.01 Background Information	0	0	1	4	4	2	4	6	0	0	21	\$3,753	\$-	\$-	\$3,753
2.02 Demolition Plan	0	1	0	2	8	2	2	4	0	0	19	\$3,264	\$-	\$-	\$3,264
2.03 Sodium Hypochlorite Storage & Feed Layouts	0	2	2	8	24	0	0	0	0	0	38	\$5,938	\$-	\$-	\$5,938
2.04 HVAC System	0	0	0	2	2	6	0	6	0	0	16	\$2,876	\$-	\$-	\$2,876
2.05 Electrical and Controls	0	0	0	2	0	0	0	22	12	0	36	\$6,120	\$-	\$-	\$6,120
2.06 Structural Evaluation	0	0	0	2	0	0	8	0	0	0	10	\$1,840	\$-	\$-	\$1,840
2.07 Project Schedule	0	1	1	2	6	0	0	2	0	0	12	\$2,069	\$-	\$-	\$2,069
2.08 Opinion of Probable Cost	0	1	2	4	8	0	0	2	0	0	17	\$2,946	\$-	\$-	\$2,946
2.09 Permits (See Note 1)	0	1	0	4	12	0	2	4	0	0	23	\$3,864	\$10,000	\$-	\$13,864
2.10 BOD Memorandum	2	2	0	2	12	0	0	0	12	8	38	\$5,666	\$-	\$200	\$5,866
Task Subtotal	2	8	6	32	76	10	16	48	24	8	228	\$38,336	\$10,000	\$200	\$48,536
3. Final Design															
3.01 Project Manual	0	2	4	18	24	8	4	24	0	12	96	\$16,092	\$-	\$-	\$16,092
3.02 Construction Plans	0	4	12	24	72	12	40	72	140	6	382	\$61,952	\$-	\$-	\$61,952
3.03 Utility Research	0	0	0	4	8	0	0	4	0	0	16	\$2,672	\$8,600	\$-	\$9,272
3.04 Electrical/Instrumentation	0	1	0	8	0	0	0	116	120	0	245	\$40,080	\$-	\$-	\$40,080
3.05 Project Schedule	0	1	0	4	8	0	0	0	0	0	13	\$2,160	\$-	\$-	\$2,160
3.06 Liquidated Damages Spreadsheet	0	1	0	2	0	0	0	0	0	0	3	\$592	\$-	\$-	\$592
3.07 Opinion of Probable Construction Cost	0	1	0	4	12	0	0	0	0	0	17	\$2,760	\$-	\$-	\$2,760
3.08 Final Design Deliverables															
3.08A 60-Percent Deliverable	1	1	1	4	8	0	0	0	4	4	23	\$3,810	\$-	\$500	\$4,310
3.08B 90-Percent Deliverable	1	1	1	4	8	0	0	0	4	4	23	\$3,610	\$-	\$500	\$4,110
3.08C 100-Percent Deliverable	1	1	1	4	8	0	0	0	4	4	23	\$3,610	\$-	\$500	\$4,110
3.08D Final Deliverable	1	1	1	4	8	0	0	0	4	4	23	\$3,810	\$-	\$750	\$4,560
3.09 Addenda Preparation & Pre-Bid Meeting	0	2	0	8	24	2	2	8	0	0	46	\$7,728	\$-	\$200	\$7,928
Task Subtotal	4	16	20	88	180	22	46	224	276	34	910	\$148,476	\$6,600	\$2,450	\$157,526
4. Construction Phase Services															
4.01 Project Meetings (10 Total)	0	2	2	8	4	0	0	2	0	0	18	\$3,306	\$-	\$500	\$3,806
4.02 Requests for Information (30 Total)	0	2	2	8	28	4	8	8	0	0	60	\$10,218	\$-	\$-	\$10,218
4.03 Plan Revisions (40 Hours Total)	0	0	0	4	10	2	2	2	20	0	40	\$6,180	\$-	\$100	\$6,280
4.04 Site Visits (4 Total)	0	0	0	8	0	0	0	0	0	0	8	\$1,472	\$-	\$200	\$1,672
4.05 Shop Drawing Review (40 Total)	0	2	2	12	24	4	8	16	0	8	76	\$12,674	\$-	\$-	\$12,674
4.06 Record Drawings	0	2	0	4	24	0	8	4	60	0	102	\$15,512	\$-	\$200	\$15,712
Task Subtotal	0	8	6	44	90	10	26	32	80	8	304	\$49,362	\$-	\$1,000	\$50,362
Hours Total	19	76	38	224	363	14	34	312	380	36	1,615				
Rate	\$219	\$224	\$303	\$184	\$150	\$184	\$184	\$184	\$142	\$106					
Project Subtotal	\$3,237	\$17,024	\$12,122	\$41,216	\$53,700	\$8,098	\$17,296	\$57,408	\$59,860	\$5,996		\$269,995	\$16,600	\$4,450	\$291,045

Notes:
 1. Permit fees estimated based on available OCFR and South Coast AQMD fee schedules. Reimbursement

DS
January 27, 2014
Prepared by: J. McGehee/R. Mori
Submitted by: K. Burton *KRB*
Approved by: Paul Cook *PC*

ACTION CALENDAR

HIDDEN CANYON ZONE 3 TO 4 DOMESTIC WATER AND ZONE B TO C RECYCLED WATER BOOSTER PUMP STATIONS CONSTRUCTION AWARD

SUMMARY:

The Hidden Canyon Zone 3 to 4 Domestic Water and Zone B to C Recycled Water Booster Pump Stations (BPS) Project will provide service to the Hidden Canyon (Planning Area 18 South) development currently being constructed by Toll Brothers. Staff recommends the Board:

- Authorize a budget increase for Project 10446 in the amount of \$393,800, from \$2,679,700 to \$3,073,500;
- Authorize a budget increase for Project 30446 in the amount of \$262,500, from \$1,813,500 to \$2,076,000;
- Approve Expenditure Authorizations in the amounts of \$2,572,600 and \$1,680,100 for Projects 10446 and 30446, respectively; and
- Authorize the General Manager to execute a construction contract with RC Foster Corp. in the amount of \$3,713,700 for the Hidden Canyon Zone 3 to 4 Domestic Water and Zone B to C Recycled Water Booster Pump Stations Projects 10446 and 30446.

BACKGROUND:

The Planning Area 18 South development is currently under construction. The developer for the work, Toll Brothers, will construct approximately 250 low-density residential homes for sale in early 2015. The development will be served by a domestic water and recycled water BPS in a combined building located on the recently extended Lake Forest Drive, east of Romano Street. In March 2013, the Board approved a Professional Services Agreement with Lee & Ro, Inc. to perform engineering design services for the BPS Project.

Construction Award:

The design was completed and the project was advertised for construction on December 19, 2013 to a select list of ten contractors including Archer Western Contractors, Pascal & Ludwig Constructors, Schuler Engineering Corp., SS Mechanical Corp., Stanek Constructors, Clarke Contracting Corp., Doty Bros. Construction Co., J.F. Shea Construction, Inc., Olsson Construction, and RC Foster Corp. The bid opening was held on January 21, 2014 with bids received from Archer Western Contractors, Pascal & Ludwig Constructors, Schuler Engineering Corp., SS Mechanical Corp., Stanek Constructors, and RC Foster Corp. RC Foster Corp. is the apparent low bidder with a bid amount of \$3,713,700.

Staff reviewed RC Foster Corp.'s bid and has determined that it is responsive. The engineer's estimate, prepared by Lee & Ro, was \$3,600,000. RC Foster Corp. was recently added to the list of prequalified contractors and this will be their first project with IRWD. The next lowest bidder submitted a bid amount of \$3,736,200, a difference of only \$22,500. The remaining four bids

ranged from \$3,950,000 to \$4,070,000. Staff recommends awarding the construction contract to RC Foster Corp. in the amount of \$3,713,700. The Bid Summary is attached as Exhibit "A".

Schedule:

Toll Brothers is currently planning for model homes to be complete by February 2015. In accordance with Toll Brothers' expedited development schedule, the construction will be completed as follows:

Bid Opening	January 21, 2014
Notice of Award (Construction)	January 28, 2014
Notice of Completion (Construction)	February 2015

FISCAL IMPACTS:

Projects 10446 (1648) and 30446 (1063) are included in the FY 2013-14 Capital Budget. Staff requests budget increases and Expenditure Authorizations to fund the construction as shown in the table below and in Exhibit "B".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
10446 (1648)	\$ 2,679,700	\$ 393,800	\$ 3,073,500	\$ 500,900	\$ 2,572,600	\$ 3,073,500
30446 (1063)	\$ 1,813,500	\$ 262,500	\$ 2,076,000	\$ 395,900	\$ 1,680,100	\$ 2,076,000
Total	\$ 4,493,200	\$ 656,300	\$ 5,150,000	\$ 896,800	\$ 4,252,700	\$ 5,150,000

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, as the lead agency, the City of Irvine certified an Environmental Impact Report (SCH #2005051099) on June 15, 2006.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE A BUDGET INCREASE FOR PROJECT 10446 (1648) IN THE AMOUNT OF \$393,800, FROM \$2,679,700 TO \$3,073,500; AUTHORIZE A BUDGET INCREASE FOR PROJECT 30446 (1063) IN THE AMOUNT OF \$262,500, FROM \$1,813,500 TO \$2,076,000; APPROVE EXPENDITURE AUTHORIZATIONS IN THE AMOUNTS OF \$2,572,600 AND \$1,680,100 FOR PROJECTS 10446 (1648) AND 30446 (1063), RESPECTIVELY; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH R.C. FOSTER CORP. IN THE AMOUNT OF \$3,713,700 FOR THE HIDDEN CANYON ZONE 3 TO 4 DOMESTIC WATER AND THE ZONE B TO C RECYCLED WATER BOOSTER PUMP STATIONS, PROJECTS 10446 (1648) AND 30446 (1063).

Action Calendar: Hidden Canyon Zone 3 to 4 Domestic Water and Zone B to C Recycled Water
Booster Pump Stations Construction Award
January 27, 2014
Page 3

LIST OF EXHIBITS:

Exhibit "A" – Bid Summary

Exhibit "B" – Expenditure Authorizations

EXHIBIT "A"

Bid Opening: Tuesday, 1-21-2014 @2:00 p.m.

Irvine Ranch Water District Bid Summary For
Hidden Canyon Zone 3-4 DW
Zone B-C RW BPS
PR 10446/30446 (1648/1063)

Entered By: J.K. Irey

Item No.	Description	Qty	Unit	Engineer's Estimate		1 R.C. Foster Corporation Corona, CA		2 Pascal & Ludwig Constructors Ontario, CA		3 S.S. Mechanical Corp. Huntington Beach, CA		4 Archer Western Contractors San Diego, CA		5 Schuler Engineering Corona, CA		6 Stanek Constructors, Inc. Escondido, CA			
				Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
1	Domestic Water and Recycled Water Booster Pump Station: Furnish all labor, materials, services, and appurtenant work, except for the items 2 - x listed below, for the construction of the Hidden Canyon DW and RW Booster Pumping Station, piping, and site improvements	1	LS	\$3,420,000.00	\$3,420,000.00	\$3,522,700.00	\$3,522,700.00	\$3,537,000.00	\$3,537,000.00	\$3,840,000.00	\$3,840,000.00	\$3,802,802.00	\$3,802,802.00	\$3,298,000.00	\$3,298,000.00	\$3,920,000.00	\$3,920,000.00		
2	Mobilization/Demobilization (maximum 4% of Total for Bid Items 1, 3, 4, 5, and 6)	1	LS	\$80,000.00	\$80,000.00	\$94,000.00	\$94,000.00	\$140,000.00	\$140,000.00	\$120,000.00	\$120,000.00	\$150,000.00	\$150,000.00	\$139,000.00	\$139,000.00	\$100,000.00	\$100,000.00		
3	Trench and Project Safety Measures, Sheet piling, Shoring and Bracing	1	LS	\$15,000.00	\$15,000.00	\$35,000.00	\$35,000.00	\$1,000.00	\$1,000.00	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00	\$3,000.00	\$3,000.00	\$5,000.00	\$5,000.00		
4	Startup and Testing	1	LS	\$30,000.00	\$30,000.00	\$16,000.00	\$16,000.00	\$13,000.00	\$13,000.00	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00	\$3,000.00	\$3,000.00	\$5,000.00	\$5,000.00		
5	Operation & Maintenance Manuals	1	LS	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00		
6	Final Record Drawings	1	LS	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00		
	Subtotal				\$3,575,000.00		\$3,697,700.00		\$3,721,000.00		\$4,000,000.00		\$4,002,802.00		\$3,473,000.00		\$4,060,000.00		
A-1	Alternative Item: Builder's "All-Risk"				\$25,000.00		\$16,000.00		\$15,200.00		\$6,000.00		\$16,000.00		\$15,500.00		\$10,000.00		
	Sub-Total, Bid Items 1 thru 6 + A-1				\$3,600,000.00		\$3,713,700.00		\$3,736,200.00		\$4,006,000.00		\$4,018,802.00		\$3,488,500.00		\$4,070,000.00		
	Adjustment (+ or -)				\$0.00		\$0.00		\$0.00		-\$56,000.00		\$0.00		\$578,000.00		\$0.00		
	Total Amount of Bid				\$3,600,000.00		\$3,713,700.00		\$3,736,200.00		\$3,950,000.00		\$4,018,802.00		\$4,066,500.00		\$4,070,000.00		
							Item Delivery Dates:		Item Delivery Dates:		Item Delivery Dates:		Item Delivery Dates:		Item Delivery Dates:		Item Delivery Dates:		
							15 HP Vertical Turbine Pumps w/Motors: 133 days		15 HP Vertical Turbine Pumps w/Motors: 189 days		15 HP Vertical Turbine Pumps w/Motors: 189 days		15 HP Vertical Turbine Pumps w/Motors: 19 weeks		15 HP Vertical Turbine Pumps w/Motors: 160 days		15 HP Vertical Turbine Pumps w/Motors: 180 days		
							100 HP Vertical Turbine Pumps w/Motors: 133 days		100 HP Vertical Turbine Pumps w/Motors: 182 days		100 HP Vertical Turbine Pumps w/Motors: 189 days		100 HP Vertical Turbine Pumps w/Motors: 19 weeks		100 HP Vertical Turbine Pumps w/Motors: 160 days		100 HP Vertical Turbine Pumps w/Motors: 180 days		
							Generator: 105 days		Generator: 147 days		Generator: 147 days		Generator: 15 weeks		Generator: 135 days		Generator: 180 days		
							CML&C Steel Pipe: 42 days		CML&C Steel Pipe: 112 days		CML&C Steel Pipe: 90 days		CML&C Steel Pipe: 105 days		CML&C Steel Pipe: 90 days		CML&C Steel Pipe: 90 days		
							CML&P Steel Pipe: 42 days		CML&P Steel Pipe: 112 days		CML&P Steel Pipe: 90 days		CML&P Steel Pipe: 105 days		CML&P Steel Pipe: 90 days		CML&P Steel Pipe: 90 days		
							Butterfly Valves: 98 days		Butterfly Valves: 112 days		Butterfly Valves: 100 days		Butterfly Valves: 42-84 days		Butterfly Valves: 120 days		Butterfly Valves: 90 days		
							Check Valves: 98 days		Check Valves: 84 days		Check Valves: 100 days		Check Valves: 35-56 days		Check Valves: 120 days		Check Valves: 90 days		
							Ball Valves: 45 days		Ball Valves: 70 days		Ball Valves: 60 days		Ball Valves: 28-42 days		Ball Valves: 60 days		Ball Valves: 90 days		
							Air Release Valves: 90 days		Air Release Valves: 70 days		Air Release Valves: 90 days		Air Release Valves: 28-42 days		Air Release Valves: 60 days		Air Release Valves: 90 days		
							Pressure Relief Valves: 90 days		Pressure Relief Valves: 100 days		Pressure Relief Valves: 126 days		Pressure Relief Valves: 56-70 days		Pressure Relief Valves: 100 days		Pressure Relief Valves: 90 days		
							Magnetic Flow Meters: 70 days		Magnetic Flow Meters: 100 days		Magnetic Flow Meters: 126 days		Magnetic Flow Meters: 10 weeks		Magnetic Flow Meters: 98 days		Magnetic Flow Meters: 70 days		
							Switchboard: 140 days		Switchboard: 8-12 weeks		Switchboard: 168 days		Switchboard: 20 weeks		Switchboard: 112 days		Switchboard: 140 days		
							Motor Control Center: 140 days		Motor Control Center: 12-16 weeks		Motor Control Center: 168 days		Motor Control Center: 20 weeks		Motor Control Center: 140 days		Motor Control Center: 140 days		
							Variable Frequency Drives: 140 days		Variable Frequency Drives: 12-16 wks		Variable Frequency Drives: 168 days		Variable Frequency Drives: 20 weeks		Variable Frequency Drives: 140 days		Variable Frequency Drives: 140 days		
							Control Panels w/PLC's: 56 days		Control Panels w/PLC's: 8-10 weeks		Control Panels w/PLC's: 168 days		Control Panels w/PLC's: 10 weeks		Control Panels w/PLC's: 112 days		Control Panels w/PLC's: 70 days		
							Manufacturers:		Manufacturers:		Manufacturers:		Manufacturers:		Manufacturers:		Manufacturers:		
							Vertical Turbine Pumps: Flowserve		Vertical Turbine Pumps: Flowserve		Vertical Turbine Pumps: Flowserve		Vertical Turbine Pumps: Flowserve		Vertical Turbine Pumps: Flowserve		Vertical Turbine Pumps: Flowserve		
							Motors: GE		Motors: GE		Motors: Flowserve		Motors: GE		Motors: Flowserve		Motors: GE		
							Magnetic Flow Meters: ABB Watermaster		Magnetic Flow Meters: ABB		Magnetic Flow Meters: ABB		Magnetic Flow Meters: ABB		Magnetic Flow Meters: ABB		Magnetic Flow Meters: ABB		
							Ball Valves: Sharpe		Ball Valves: Apollo		Ball Valves: Sharpe		Ball Valves: Jamesbury		Ball Valves: Sharpe		Ball Valves: Apollo		
							Butterfly Valves: Pratt		Butterfly Valves: DeZurik		Butterfly Valves: Pratt		Butterfly Valves: DeZurik		Butterfly Valves: Pratt		Butterfly Valves: DeZurik		
							Check Valves: Pratt		Check Valves: Pratt		Check Valves: Pratt		Check Valves: Pratt		Check Valves: Pratt		Check Valves: Apco		
							Pressure Relief Valves: Cla-Val		Pressure Relief Valves: Cla-Val		Pressure Relief Valves: Cla-Val		Pressure Relief Valves: Cla-Val		Pressure Relief Valves: Clayton		Pressure Relief Valves: Cla-Val		
							Air Release Valves: ARI		Air Release Valves: Val-Matic		Air Release Valves: Val-Matic		Air Release Valves: Val-Matic		Air Release Valves: Crispin		Air Release Valves: Val-Matic		
							Steel Pipe: Lecco Fabrication		Steel Pipe: Lecco		Steel Pipe: Consumers		Steel Pipe: Utility Coating & Fab.		Steel Pipe: Lecco		Steel Pipe: Southland		
							Variable Frequency Drives: Allen Bradley		Variable Frequency Drives: Allen Bradley		Variable Frequency Drives: Allen Bradley		Variable Frequency Drives: Allen Bradley		Variable Frequency Drives: Allen Bradley		Variable Frequency Drives: Allen Bradley		
							Motor Control Center: Allen Bradley		Motor Control Center: Allen Bradley		Motor Control Center: Allen Bradley		Motor Control Center: Allen Bradley		Motor Control Center: Allen Bradley		Motor Control Center: Allen Bradley		
							Control Panels w/PLC's: Control Technologies and Modicon		Control Panels w/PLC's: Control Technologies and Modicon		Control Panels w/PLC's: Allen Bradley		Control Panels w/PLC's: Control Technologies and Modicon		Control Panels w/PLC's: Control Technologies and Modicon		Control Panels w/PLC's: Control Technologies and Modicon		
							Generator: Kohler		Generator: Kohler		Generator: Kohler		Generator: Kohler		Generator: Kohler/Bay Cities		Generator: Kohler		

Item No.	Description	Engineer's Estimate		1 R.C. Foster Corporation Corona, CA		2 Pascal & Ludwig Constructors Ontario, CA		3 S.S. Mechanical Corp. Huntington Beach, CA		4 Archer Western Contractors San Diego, CA		5 Schuler Engineering Corona, CA		6 Stanek Constructors, Inc. Escondido, CA	
		Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
		Qty	Unit												
				Subcontractors:		Subcontractors:		Subcontractors:		Subcontractors:		Subcontractors:		Subcontractors:	
				Electrical: Halcyon Electric	Masonry: Kretschmar & Smith	Paving (1%): Sanders Paving	HVAC: Anderson Air Conditioning	Rebar: DD Reinforcing	Siding/Gate: Gonzales Fence						
				Paving: Regan Paving	Structural Steel: Remco	Masonry (3%): Kretschmar & Smith	Asphalt/Paving: Terra Pave	Fencing: Valley Cities Fence	Rebar: Harris Rebar						
				Fencing: Valley Cities	Roofing: Sylvester	Rebar (1%): Harris Rebar	Electrical: Vanciu Electric	HVAC: Menifee Valley Air	Roofing: Sylvester Roofing						
				Masonry: NuWay Inc.	Painting: Haight Painting	Coating (1.5%): Western Jalco	Slide Gates/Automation: Valley Cities/Gonzales Fence Co.	Masonry: Kretschmar & Smith	Masonry: Kretschmar & Smith						
				Doors/Windows: Accurate Door	HVAC: Anderson	Roofing (1.5%): Sylvester Roofing	Masonry: Nuway Inc.	Roofing: Sylvester Roofing	Asphalt: Hardy & Harper						
				HVAC: Anderson Air	Paving: Hardy & Harper	HVAC (2%): Anderson Air Conditioning	Structural Steel: Remco Machining & Fabrication	Painting/Coating: Haight Painting	HVAC: AMS						
				Roofing: Sylvester Roofing	Rebar: RR Leonard	Electrical (25%): Halcyon Electric	Painting: US Coating	Electrical: Halcyon Electric	Painting: KNK Painting						
				Structural Steel/Roof Decking: Allied Steel	Fence/Gates: Valley City Fence		Rebar: Harris Rebar	Paving: Regan Paving	Electrical: Halcyon Electric						
				Painting/Coating: KNK	Electrical: Halcyon		Roofing: Watson Roofing								
				Painting/Coating											

IRVINE RANCH WATER DISTRICT

EXHIBIT "B"

Expenditure Authorization

Project Name: PA18 ZN 3-4 BPS
EPMS Project No: 10446 **EA No:** 3
Oracle Project No: 1648
Project Manager: MORI, RICHARD
Project Engineer: MCGEHEE, JOSEPH
Request Date: January 21, 2014

ID Split: Miscellaneous

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
130	100.0	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$500,900
This Request:	\$2,572,600
Total EA Requests:	\$3,073,500
Previously Approved Budget:	\$2,679,700
Budget Adjustment Requested this EA:	\$393,800
Updated Budget:	\$3,073,500
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	20,000	20,000	0	20,000	20,000	2/07	12/13
ENGINEERING DESIGN - OUTSIDE	0	450,000	450,000	0	450,000	450,000	2/07	12/13
DESIGN STAFF FIELD SUPPORT	0	5,000	5,000	0	5,000	5,000	2/07	12/13
ENGINEERING - CA&I IRWD	20,000	0	20,000	0	20,000	20,000	1/14	5/15
ENGINEERING - CA&I OUTSIDE	100,000	0	100,000	0	100,000	100,000	1/14	5/15
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	1/14	5/15
CONSTRUCTION	2,325,000	0	2,325,000	375,000	1,950,000	2,325,000	1/14	5/15
LEGAL	0	2,000	2,000	0	2,000	2,000	2/07	5/15
Contingency - 5.00% Subtotal	\$122,600	\$23,900	\$146,500	\$18,800	\$127,700	\$146,500		
Subtotal (Direct Costs)	\$2,572,600	\$500,900	\$3,073,500	\$393,800	\$2,679,700	\$3,073,500		
Estimated G/A - 170.00% of direct labor*	\$40,000	\$45,000	\$85,000	\$0	\$85,000	\$85,000		
Total	\$2,612,600	\$545,900	\$3,158,500	\$393,800	\$2,764,700	\$3,158,500		
Direct Labor	\$25,000	\$25,000	\$50,000	\$0	\$50,000	\$50,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: JJM 1/21/14
Department Director: Kari L. Burt 1/21/14
Finance: _____
Board/General Manager: _____

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$3,222,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated into the official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

IRVINE RANCH WATER DISTRICT

Expenditure Authorization

Project Name: PA18 ZN B-C BPS
 EPMS Project No: 30446 EA No: 3
 Oracle Project No: 1063
 Project Manager: MORI, RICHARD
 Project Engineer: MCGEHEE, JOSEPH
 Request Date: January 21, 2014

ID Split: Miscellaneous

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
230	100.0	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$395,900
This Request:	\$1,680,100
Total EA Requests:	\$2,076,000
Previously Approved Budget:	\$1,813,500
Budget Adjustment Requested this EA:	\$262,500
Updated Budget:	\$2,076,000
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	20,000	20,000	0	20,000	20,000	2/07	12/13
ENGINEERING DESIGN - OUTSIDE	0	350,000	350,000	0	350,000	350,000	2/07	12/13
DESIGN STAFF FIELD SUPPORT	0	5,000	5,000	0	5,000	5,000	2/07	12/13
ENGINEERING - CA&I IRWD	20,000	0	20,000	0	20,000	20,000	1/14	5/15
ENGINEERING - CA&I OUTSIDE	100,000	0	100,000	0	100,000	100,000	1/14	5/15
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	1/14	5/15
CONSTRUCTION	1,475,000	0	1,475,000	250,000	1,225,000	1,475,000	1/14	5/15
LEGAL	0	2,000	2,000	0	2,000	2,000	2/07	5/15
Contingency - 5.00% Subtotal	\$80,100	\$18,900	\$99,000	\$12,500	\$86,500	\$99,000		
Subtotal (Direct Costs)	\$1,680,100	\$395,900	\$2,076,000	\$262,500	\$1,813,500	\$2,076,000		
Estimated G/A - 170.00% of direct labor*	\$40,000	\$45,000	\$85,000	\$0	\$85,000	\$85,000		
Total	\$1,720,100	\$440,900	\$2,161,000	\$262,500	\$1,898,500	\$2,161,000		
Direct Labor	\$25,000	\$25,000	\$50,000	\$0	\$50,000	\$50,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: _____

JGM

1/21/14

Department Director: _____

Kevin L. Burt

1/21/14

Finance: _____

Board/General Manager: _____

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$2,205,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The intent of this authorization is to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

January 27, 2014

Prepared By: K. Welch *KW*

Submitted By: P. Weghorst *PW*

Approved By: Paul Cook *PC*

ACTION CALENDAR

WATER SHORTAGE ASSISTANCE TO ANTELOPE VALLEY-EAST KERN WATER AGENCY

SUMMARY:

Antelope Valley-East Kern Water Agency (AVEK) has requested the recovery of water from storage at the Strand Ranch Integrated Banking Project (Strand Ranch). In its request, AVEK identified that it may need additional water above its allowable recovery amount under the terms of the Short-Term Water Storage Partnership – Pilot Exchange Program Agreement between IRWD and AVEK. Staff recommends that the Board authorize the General Manager to execute a letter agreement that would allow AVEK to recover additional water from its account in the Strand Ranch and for AVEK to pay all the costs associated with the recovery and conveyance of the water to AVEK's service area.

BACKGROUND:

In June 2011, IRWD and AVEK executed an agreement for the Short-Term Water Storage Partnership-Pilot Exchange Program (Pilot Exchange Agreement) that allowed AVEK to deliver 5,000 acre-feet (AF) of its State Water Project Table A into storage at the Strand Ranch on a 2-for-1 unbalanced exchange basis. This water was delivered into storage in 2012 through a combination of in-lieu and direct recharge events.

The Pilot Exchange Agreement allows AVEK to recover up to one-third of its starting account balance in any year. Currently, AVEK's share of the water delivered into storage in 2012 equals 2,229 AF. The allowable annual recovery rate for AVEK is 743 AFY. AVEK is currently evaluating its need for additional water above the 743 AF in 2014. Staff recommends that the District be prepared to provide AVEK with water shortage assistance in 2014 by offering additional recovery capacity up to AVEK's total amount in storage of 2,229 AF. The recovery of additional water on behalf of AVEK would not have negative impacts on IRWD or its other exchange program partners.

Letter Agreement:

IRWD legal counsel has prepared a letter agreement, which is attached as Exhibit "A", that will allow AVEK to recover additional water during 2014 up to its balance in storage at the Strand Ranch. The letter agreement calls for AVEK to pay the full cost of the recovery and delivery of the additional water to its service area. Recovery of additional water for AVEK will not be allowed to exceed the 17,500 AF per year recovery limit for the Strand Ranch.

The letter agreement specifies that the recovery of the additional water by AVEK will occur in second priority to IRWD's recovery of water for itself and in fulfilling the obligations of

IRWD's other exchange programs. Staff recommends that the Board authorize the General Manager to execute the letter agreement.

FISCAL IMPACTS:

The terms of the letter agreement require AVEK to pay all costs related to the recovery and delivery of the additional water recovered in 2014 for AVEK in excess of the 743 AF that is allowed in the Pilot Exchange Agreement.

ENVIRONMENTAL COMPLIANCE:

A Final Environmental Impact Report for the Strand Ranch Integrated Water Banking Project (Strand Ranch FEIR) has been prepared, certified and the project approved in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended), codified at California Public Resources Code Sections 21000 et. seq., and the State CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3.

COMMITTEE STATUS:

This item was reviewed by the Water Banking Committee on January 23, 2014.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE LETTER AGREEMENT WITH ANTELOPE VALLEY-EAST KERN WATER AGENCY SUBJECT TO NON-SUBSTANTIVE CHANGES THAT ALLOWS AVEK TO RECOVER ADDITIONAL WATER FROM THE STRAND RANCH INTEGRATED BANKING PROJECT IN 2014 UP TO ITS STORAGE BALANCE OF 2,229 AF AND FOR IT TO PAY ALL THE COSTS ASSOCIATED WITH THE RECOVERY AND RETURN OF THIS WATER TO THE AVEK SERVICE AREA.

LIST OF EXHIBITS:

Exhibit "A" – Letter Agreement with AVEK for Recovery of Additional Water in 2014

EXHIBIT "A"



IRVINE RANCH WATER DISTRICT

15600 Sand Canyon Ave., P.O. Box 57000, Irvine, CA 92619-7000 (949) 453-5300

January __, 2014

Honorable Board of Directors
Antelope Valley-East Kern Water Agency
6500 West Avenue N
Palmdale, CA 93551

Re: Amendment of Agreement

Dear Board Members:

With reference to the Letter Agreement for Short-Term Water Storage Partnership – Pilot Exchange Program, dated as of June 6, 2011, executed by and between Irvine Ranch Water District (“IRWD”) and Antelope Valley-East Kern Water Agency (“AVEK”) (the “Agreement”), IRWD and AVEK have agreed that during the calendar year 2014, the quantity of Return Water that may be returned to AVEK pursuant to the Terms for Pilot Exchange Program may exceed 743 acre feet, up to the amount in storage in AVEK’s account. For the amount of Return Water in excess of 743 acre feet, AVEK shall assume all costs incurred by IRWD and Rosedale to recover and deliver such excess amount of the Return Water to the AVEK POD. The recovery of the excess amount of the Return Water by AVEK will occur in second priority to IRWD’s recovery of water for itself and in fulfilling the obligations of IRWD’s other exchange programs. As modified herein, the Agreement shall remain in full force and effect.

Sincerely,

IRVINE RANCH WATER DISTRICT

By: _____
General Manager

By: _____
Secretary

READ, APPROVED AND ACCEPTED:

ANTELOPE VALLEY-EAST KERN WATER AGENCY

By: _____
Title:

By: _____
Secretary

OS
January 27, 2014
Prepared by: M. Jack
Submitted by: K. Burton (KLB)
Approved by: Paul Cook (signature)

ACTION CALENDAR

ON-CALL CONSTRUCTION INSPECTION SERVICES VARIANCE

SUMMARY:

The current construction inspection workload for capital, development and operational improvement projects continues to exceed a level that can be supported by the District's inspection staff. Staff recommends that the Board authorize the General Manager to execute Variance No. 1 with AndersonPenna in the amount of \$1,200,000 for three inspectors over a period of two year for on-call construction inspection services.

BACKGROUND:

The District's current and upcoming inspection workload for capital, development and operational improvement projects continues to exceed the level that can be supported by the District's staff. The District's construction inspection group consists of five staff inspectors and three on-call consultant inspectors that are currently responsible for the inspection, field coordination, documentation and record drawing preparation of over 230 projects spread across the District. Based on currently active and upcoming construction projects planned by The Irvine Company, FivePoint Communities, Toll Brothers and the City of Tustin, staff anticipates the need for continued consultant field inspection support for a period of up to two years. Upon completion of the current high volume of construction projects, staff anticipates that these inspection services will no longer be required as the workload should return to a level that can be supported by District inspection staff.

Consultant Variance:

In mid-2012 staff requested proposals from Butier Engineering, Tetra Tech, CivilSource and Anderson Penna for on-call field inspection services. Based on interviews of several inspectors, Anderson Penna was selected to provide the inspection services. In September 2012, the Board awarded a Professional Services Agreement to AndersonPenna in the amount of \$400,000 for on-call field inspection services. AndersonPenna is currently providing three experienced inspectors under their on-call contract that have worked well within the District's inspection group and have demonstrated the ability to inspect and coordinate multiple projects simultaneously.

Funds for the current agreement with AndersonPenna will be expended by February 2014. Due to the experience, attention to detail and quality work of the current consultant inspectors, staff requests a variance for continued inspection services. AndersonPenna has agreed to maintain the previously negotiated favorable fully-burdened rate of \$95 per hour for its inspectors, which includes a truck and fuel, cell phone and laptop computer. Staff recommends executing Variance No. 1 with AndersonPenna in the amount of \$1,200,000 for three inspectors for two additional years of on-call field inspection services. Variance No. 1 in the amount of \$1,200,000 is shown in Exhibit "A".

FISCAL IMPACTS:

Funding for the construction inspection services will be provided from the various developer and capital projects being constructed as part of each project's budget.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on January 21, 2014.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 1 WITH ANDERSONPENNA IN THE AMOUNT OF \$1,200,000 FOR ON-CALL CONSTRUCTION INSPECTION SERVICES FOR THREE INSPECTORS FOR A TWO-YEAR PERIOD.

LIST OF EXHIBITS:

Exhibit "A" – AndersonPenna Inspection On-Call Variance

EXHIBIT "A"

IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Project Title: On-call Construction Inspection Services

Project No.: _____ Date: January 10, 2014
 Purchase Order No.: 510529 Variance No.: 1

Originator: IRWD ENGINEER/CONSULTANT Other (Explain) _____

Description of Variance (*attach any back-up material*):

IRWD has requested additional inspection staff to meet the ongoing need of capital improvement and developer installed improvements. The following manhours reflect 3 full time inspectors for two years.

Engineering & Management Cost Impact:

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Public Works Inspector	12,632	95.00	1,200,000	0	0	1,200,000
Total \$ =						1,200,000

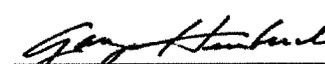
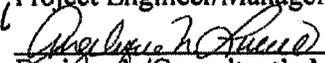
Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
1	On-call Inspection	10/01/12-9/30/14	26.5 month extension	10/1/12-4/15/16

Required Approval Determination:

Total Original Contract	\$ <u>400,000</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.
Previous Variances \$	0	
This Variance	\$ <u>1,200,000</u>	<input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.
Total Sum of Variances	\$ <u>1,200,000</u>	<input checked="" type="checkbox"/> Board: Single Variance greater than \$60,000.
New Contract Amount	\$ <u>1,600,000</u>	
Percentage of Total Variances to Original Contract	300 %	<input type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.

ENGINEER/CONSULTANT: AndersonPenna Partners, Inc. IRVINE RANCH WATER DISTRICT

	1/10/14		1/13/14
Project Engineer/Manager	Date	Department Director	Date
	1/10/14	_____	_____
Engineer's/Consultant's Management	Date	General Manager/Comm./Board	Date



January 10, 2014

Mr. Mike Jack
Construction Inspection Manager
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618-3102

Subject: Variance 1 to Purchase Order 510529 – On-call Construction Inspection Services

Dear Mr. Jack,

Attached is a requested variance to our existing contract effective October 1, 2012. The variance takes into consideration the following rate and extended fee information.

AndersonPenna Partners, Inc.
On-call Construction Inspection Services Contract

Original Contract

Staff	Regular Time Hourly Rate	Overtime Hourly Rates		
		Mon- Fri	Saturday	Sun/Hol
Principal Construction Manager	165	165	165	165
Sr. Construction Manager	150	150	150	150
Public Works Inspector (Prevailing Wage)	95	95	95	95
TOTAL CONTRACT	400,000			

Variance #1 Request

12/27/13 Budget Remaining	\$ 53,125	559		
Current Expiration:	9/30/2014			
One Inspector / Month	\$ 15,073	159		
Hours = (2080/person - 8 days Holiday - 10 days vacation)/12 months				
3 Inspectors/Month - Avg	\$ 45,220	476	1	
Contract Extension Options:	Fee	Hours	Months	%Variance
From 2/1/14 - 9/30/14	\$ 361,760	3,808	8	90%
From 2/1/14 - 9/30/15	\$ 904,400	9,520	20	226%
From 2/1/14 - 4/15/16	\$ 1,200,000	12,632	26.5	300%

We have enjoyed the opportunity to work with you. If you have any questions please contact me at (714) 504-2753 or alucero@andpen.com.

Sincerely,
AndersonPenna Partners, Inc.


Angelique M. Lucero, Principal

20280 ACACIA STREET, SUITE 100 • NEWPORT BEACH, CA 92660
PHN 949 428 1500 • FAX 949 258 5053

WWW.ANDPEN.COM
CERTIFIED UDBE

OS
January 27, 2014
Prepared by: S. Malloy
Submitted by: K. Burton ^{KB}
Approved by: Paul Cook *[Signature]*

ACTION CALENDAR

MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS CONTRACT CHANGE ORDER

SUMMARY:

The Michelson Water Recycling Plant (MWRP) Phase 2 Expansion and Flood Protection Improvements are currently being constructed by J. R. Filanc Construction Company (Filanc). Staff recommends that the Board approve Contract Change Order (CCO) No. 104 in an amount of \$242,461.11 for modifications to Riparian View and the MWRP recycled water system for the MWRP Phase 2 Expansion.

BACKGROUND:

Construction of the MWRP Phase 2 Expansion and Flood Protection Improvements project was awarded to Filanc in July 2009 in the amount of \$87,479,450. This project will expand the recycled water production capacity of MWRP to 28 million gallons per day and protect MWRP from flooding of San Diego Creek.

Contract Change Order No. 104:

During construction of the flood protection improvements, staff identified several necessary design modifications for Riparian View. Staff also identified opportunities to improve the MWRP in-plant recycled water system.

- *Riparian View Modifications:* Review of the flood protection improvements plans revealed several conflicts primarily due to inaccuracies in the aerial photo base map provided by IRWD to the design consultant. Once the wall was constructed, staff noticed that the floodwall foundation would have been exposed had the road been constructed per the original design. Additionally, the Riparian View drainage needed to be improved in consideration of constraints such as flood gate locations and drainage requirements which must direct flow towards MWRP and not San Diego Creek.

Therefore, the Riparian View plan and profile was redesigned to accommodate the above changes. Riparian View will now have gradual slopes allowing proper drainage and the foundation of the floodwall will not be exposed. The net result of implementing these changes is that more road base and asphalt will be required than shown on the original bid documents. The Riparian View road improvements and security fencing is scheduled to be completed by the end of February 2014. The cost for this portion of the work is \$189,182.30.

Action Calendar: Michelson Water Recycling Plant Phase 2 Expansion and Flood Protection Improvements Contract Change Order

January 27, 2014

Page 2

- *MWRP Recycled Water Modifications:* Because of the uncertain location of existing in-plant recycled water pipelines, the Phase 2 Expansion design included a new, stand-alone recycled water loop for the new treatment processes. As construction proceeded and the existing recycled water pipelines were encountered, the active existing pipelines were connected to the new recycled water loop. This increased the reliability of the in-plant recycled water system. Filanc demolished and removed some unneeded recycled water lines, located mostly in the southern portion of MWRP. Filanc also abandoned in place and capped other unneeded recycled water pipelines in various located within MWRP. The cost for this portion of the work is \$53,278.81.

CCO No. 104 in the amount of \$242,461.11 is for the labor, equipment, and material to perform the aforementioned modifications to Riparian View and the MWRP recycled water system. CCO No. 104 is attached as Exhibit "A".

The Contract Change Order Summary is attached as Exhibit "B". The amount of all change orders in this construction project is \$4,932,713.41 (5.6% of the original bid). The amount of change orders directly related to MWRP Phase 2 Expansion and Flood Protection Improvements is \$3,477,638.93 (4.0% of the original bid). Change orders for other projects, such as the biosolids project, account for the difference.

FISCAL IMPACTS:

The MWRP Phase 2 Expansion and Flood Protection Improvement, Project 20214 (1599), 20542 (1150), 30214 (1706), and 30542 (1118) are included in the FY 2013-14 Capital Budget. The existing budgets and Expenditure Authorizations are sufficient to fund Contract Change Order No. 104.

ENVIRONMENTAL COMPLIANCE:

The Michelson Water Recycling Plant Phase 2 Expansion and Flood Protection Improvements, Projects 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118) are subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, an Environmental Impact Report, SCH # 2005051174, was certified by the lead agency on February 27, 2006.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on January 21, 2014.

RECOMMENDATION:

THAT THE BOARD APPROVE CONTRACT CHANGE ORDER NO. 104 IN THE AMOUNT OF \$242,461.11 FOR MODIFICATIONS TO RIPARIAN VIEW AND THE MICHELSON WATER RECYCLING PLANT RECYCLED WATER SYSTEM WITH J. R. FILANC CONSTRUCTION CO. FOR THE MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS, PROJECTS 20214 (1599), 20542 (1150), 30214 (1706), AND 30542 (1118).

LIST OF EXHIBITS:

Exhibit "A" – Contract Change Order No. 104
Exhibit "B" – Contract Change Order Summary

CONTRACT CHANGE ORDER EXHIBIT "A"

IRVINE RANCH WATER DISTRICT
 15600 Sand Canyon Avenue
 Irvine, California 92618
 (949) 453-5300



C.O. No. 104
 Final

Project No. 20214, 30214,
20542, 30542
(1599,1706,1150,1118)

MWRP Phase 2 Expansion and Flood Protection Improvements

Project Title

Date: January 9, 2014

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
1. Riparian View Modifications (CR-083A) PR 20542 (1150) Task 3505 and PR 30542 (1118) Task 3505	\$189,182.30	\$0.00	0
2. MWRP Recycled Water System Modifications PR 30214 (1706) Task 3520	\$53,278.81	\$0.00	0
Note 1: The project completion date of June 13, 2014 is unchanged with this Change Order.			
TOTAL	\$242,461.11	\$0.00	0

DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	\$242,461.11	0
2. ORIGINAL CONTRACT AMOUNT	=	\$87,479,450.00	1,094
3. TOTAL PREVIOUS CHANGE ORDER(S)	=	\$4,690,252.30	681
4. TOTAL BEFORE THIS CHANGE ORDER (2+ 3)	=	\$92,169,702.30	1,775
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$92,412,163.41	1,775

We hereby agree to make the above change subject to the terms of this change order for the sum of: _____

-----Two Hundred Forty-Two Thousand Four Hundred Sixty-One and 11/100----- Dollars

1/13/14 Date J R Filanc Construction Co. Contractor Sean MacGregor By: Sean MacGregor, Project Manager

SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
	<u>1/13/14</u>	Department Director Approval Required <input type="checkbox"/>
IRWD Engineer or Consulting Engineer	Date	General Manager Approval Required <input type="checkbox"/>
<u>Steve Malloy</u>	<u>1-13-14</u>	Committee Approval Required <input type="checkbox"/>
Principal Engineer - MWRP Construction	Date	Board Approval Required <input checked="" type="checkbox"/>
<u>Karen J. Banta</u>	<u>1-13-14</u>	
Executive Director of Engineering and Water Quality	Date	By _____ Date _____
General Manager	Date	Purchase Order No. _____

NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies will be made as required. The parties mutually agree the pricing set forth in this Change Order are complete and fair compensation for the entirety of the work authorized under this Change Order and that no additional compensation is warranted nor shall it be allowed.

CHANGES: All workmanship and materials called for by this Order shall be fully in accord with the original Contract Documents insofar as the same may be applied without conflict to the conditions set forth by this Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

EXHIBIT "B"

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date: 8/1/2012	
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Original Days: 1,094			
											Cum. Total C.O. days	Revised Total Contract Days		Revised Completion Date
Original Contract Amount: \$ 87,479,450.00														
1	Approved by Director of Engineering and Construction Approved on November 19, 2009			\$195.40	\$0.00	\$195.40	0.0%	\$87,479,645.40	0	0	0	1,094	8/1/2012	
1.1	Partnering Workshop – IRWD and the Contractor agreed to split equally the cost of partnering. The initial partnering workshop was held on September 3, 2009. This change request represents the Contractor's portion of the cost of that initial workshop. It is a credit to IRWD.	A	(\$6,561.60)						0					
1.2	Installation of Bollards – The Contractor installed bollards around the IRWD MWRP Phase 2 Field Office Trailer and K-trails around the interim sodium hypochlorite System to protect from traffic	A	\$ 3,655.72						0					
1.3	Relocation of 4-inch Natural Gas Pipeline	B	\$ 3,101.28						0					
2	Approved by Director of Engineering and Construction Approved on December 3, 2009			\$16,018.04	\$195.40	\$16,213.44	0.0%	\$87,495,663.44	0	0	0	1,094	8/1/2012	
2.1	Previously Approved Change Request #4 – Tree Removal and Grinding at Flood Improvements and Duck Club	A	\$ 6,696.00						0					
2.2	Previously Approved NOPE #1 – Demolish Abandoned Building	D	\$ 7,641.87						0					
2.3	Repair of 10-inch PVC Groundwater Line at the New Headworks Area	B	\$ 1,680.17						0					
3	Approved by Director of Engineering and Construction Approved on December 18, 2009			\$0.00	\$16,213.44	\$16,213.44	0.0%	\$87,495,663.44	0	0	0	1,094	8/1/2012	
3.1	Construct Temporary Access Road to Staging Area 3	A	\$ -						0					
4	Approved by Board of Directors Approved on January 25, 2010			\$143,950.10	\$16,213.44	\$160,163.54	0.2%	\$87,639,613.54	0	0	0	1,094	8/1/2012	
4.1	Upsize Area 600 Aeration Blower from 350 to 500 hp	C	\$ 66,355.57						0					
4.2	Upsizing Soft Starters for Area 700 Blowers from 350 to 450 hp	C	\$ 41,529.75						0					
4.3	Infrared Windows to Measure Stray Currents	A	\$ 36,064.78						0					
5	Approved by Director of Engineering and Construction Approved on December 29, 2009			\$5,081.52	\$160,163.54	\$165,245.06	0.2%	\$87,644,695.06	0	0	0	1,094	8/1/2012	
5.1	Relocation of K-rail to Allow Construction Equipment access for pond maintenance (PR 10942)	D	\$ 5,081.52						0					
6	Approved by Engineering & Operations Comm Approved on January 19, 2010			\$77,478.00	\$165,245.06	\$242,723.06	0.3%	\$87,722,173.06	0	0	0	1,094	8/1/2012	
6.1	WAS and Skimming Pumps Replacement (PR 20779)	D	\$ 77,478.00						0					

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Original Days:			1,094	
									Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	8/1/2012
13	Approved by AGM Approved on April 28, 2010 13.1 Modifications in Checkered Aluminum Plates at the Headworks Area (CR 037)	C	\$34,095.00	\$34,095.00	-\$873,828.95	-\$839,733.95	-1.0%	\$86,639,716.05	0	0	0	1,094	8/1/2012
14	Approved by Director of Engineering and Construction Approved on May 4, 2010 14.1 Electrical Substation Work (Two additional 5-inch Conduits and Connection btwn IRWD and SCE) (CR 028)	A	\$16,655.10	\$16,655.10	-\$839,733.95	-\$823,078.85	-0.9%	\$86,656,371.15	0	0	0	1,094	8/1/2012
15	Approved by AGM Approved on May 21, 2010 15.1 Credit for Not Relocating the 18-inch diameter drain line at HRC (CR #019) 15.2 Credit for Slab Penetration Modifications, Detail P17 (RFI 0102) (CR #032)	A A	(\$42,262.00) (\$6,745.95)	-\$49,007.95	-\$823,078.85	-\$872,086.80	-1.0%	\$86,607,363.20	0	0	0	1,094	8/1/2012
16	Approved by Director of Engineering and Construction Approved on May 25, 2010 16.1 Abandonment of 6" Pipes at MBR Screen Area (CR 042) 16.2 Addition of Three Transformers at UV Disinfection Facility (RFI 0149) 16.3 Remove encasement on existing utilities to allow construction of future Primary Sedimentation Tanks (CR 051)	B C B	\$2,536.36 \$18,633.63 \$1,188.43	\$22,358.42	-\$872,086.80	-\$849,728.38	-1.0%	\$86,629,721.62	0	0	0	1,094	8/1/2012
17	Approved by Engineering & Operations Committee Approved on June 15, 2010 17.1 Demolition of Old Clarifier Bottoms (CR 013)	B	(\$55,420.00)	-\$55,420.00	-\$849,728.38	-\$905,148.38	-1.0%	\$86,574,301.62	0	0	0	1,094	8/1/2012
18	Approved by Director of Engineering and Construction Approved on July 28, 2010 18.1 Water Control Gate Revisions (CR #034) 18.2 Repair of Existing Vault west of High Rate Clarifier (CR #063) 18.3 Additional Demolition at Abandoned Aerobic Digester Area (CR #063)	C B B	\$17,923.23 \$1,451.75 \$5,507.26	\$24,882.24	-\$905,148.38	-\$880,266.14	-1.0%	\$86,599,183.86	0	0	0	1,094	8/1/2012
19	Approved by Director of Engineering and Construction Approved on July 30, 2010 19.1 Platform modifications at Sodium Hypochlorite Feed System (CR 025) 19.2 Pothole of existing 36-inch filter influent pipe (CR 043) 19.3 Delete 6" knife gate valve and add 6" plug valve at Primary Sedimentation (CR 046) 19.4 Repair of reclaimed water leak near old control room (CR 064) 19.5 MBR fine screen cover plates modifications (CR 064)	A A A B B	\$2,478.67 \$4,503.99 \$662.31 \$1,173.07 \$7,240.64	\$16,058.68	-\$880,266.14	-\$864,207.46	-1.0%	\$86,615,242.54	0	0	0	1,094	8/1/2012
20	Approved by Assistant GM Approved on August 26, 2010 20.1 Area 600 Blower Discharge Modifications (CR 050)	A	\$34,622.27	\$34,622.27	-\$864,207.46	-\$829,585.19	-0.9%	\$86,649,864.81	0	0	0	1,094	8/1/2012

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Original Days: 1,094			Revised Completion Date	
									Change Order Days	Previous Change Orders	Cum. Total C.O. days		
21	Approved from Board of Directors Approved on August 23, 2010 21.1 Valve Vaults Modifications (CR 020)	A	\$277,384.97	\$277,384.97	-\$829,585.19	-\$552,200.22	-0.6%	\$86,927,249.78	0	0	0	1,094	8/1/2012
22	Approved by Director of Engineering and Construction Approved on August 26, 2010 22.1 Site Cleanup Due to Existing Filter Overflow (CR 065) 22.2 Hollow shaft motor modifications to Vertical Turbine & Vertical Propeller Pumps (CR 069)	B A	\$4,271.51 \$18,845.55	\$23,117.06	-\$552,200.22	-\$529,083.16	-0.6%	\$86,950,366.84	0	0	0	1,094	8/1/2012
23	Approved by Director of Engineering and Construction Approved on September 9, 2010 23.1 MBR Anoxic Wall Modifications (CR 061) 23.2 Repair Existing 6-inch GW near SCE Station (CR 067) 23.3 Unforeseen Conditions at SCE Conduit Installation (CR 075)	C B B	\$6,399.86 \$3,449.83 \$13,719.91	\$23,569.60	-\$529,083.16	-\$505,513.56	-0.6%	\$86,973,936.44	0	0	0	1,094	8/1/2012
24	Approved by Engineering and Operations Committee Approved on September 21, 2010 24.1 UVE Piping Modifications at Chlorine Contact Tanks (CR	A	(\$52,172.00)	-\$52,172.00	-\$505,513.56	-\$557,685.56	-0.6%	\$86,921,764.44	0	0	0	1,094	8/1/2012
25	Approved by Board of Directors Approved on September 27, 2010 25.1 Modifications to Campus Drive Entrance (CR 022)	A	\$186,651.45	\$186,651.45	-\$557,685.56	-\$371,034.11	-0.4%	\$87,108,415.89	0	0	0	1,094	8/1/2012
26	Approved by Director of Engineering and Construction Approved on October 20, 2010 26.1 Change of Strut Material from FRP to Stainless Steel 316/Install CAT5 Cable from PLC 1600 to PLC 9 (CR 074) [PR 20214, 30214] 26.2 Existing Primary Sludge Pump Room Demolition and Modifications (CR 076) [PR 20214, 30214] 26.3 Fence Repair at SCE Substation (CR 078) [PR 20214, 30214] 26.4 SHC Electrical and Controls and Milestone Revisions (CR 079) [PR 20214, 30214] 26.5 Change to more Energy Efficient Air Conditioning Units (Five Total) (Submittal 15604-001) (CR 081) [PR 20214, 30214] 26.6 Grouting of the Sodium Hypochlorite Tanks at their Permanent Site (CR 084) [PR 20214, 30214]	A C B B A A	\$1,539.18 \$3,909.94 \$1,957.62 \$324.07 \$9,101.41 \$2,560.52	\$19,392.74	-\$371,034.11	-\$351,641.37	-0.4%	\$87,127,808.63	0	0	0	1,094	8/1/2012
27	Approved by Engineering & Operations Committee Approved on November 4, 2010 27.1 Primary Sedimentation Tanks Flo-Clip Baffles Value Engineering (CR 080)	A	(\$58,157.82)	-\$58,157.82	-\$351,641.37	-\$409,799.19	-0.5%	\$87,069,650.81	0	0	0	1,094	8/1/2012
28	Approved by GM Approved on November 24, 2010 28.1 Ducts for Future Phase 3 MBR (RFI 44) (RFI 016) 28.2 Sodium Hypochlorite LCP Modifications (CR 071)	A A	\$32,021.80 \$7,503.44	\$39,525.24	-\$409,799.19	-\$370,273.95	-0.4%	\$87,109,176.05	0	0	0	1,094	8/1/2012

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	8/1/2012
29	Approved by Director of Engineering & Construction Approved on December 22, 2010			\$23,964.61	-\$370,273.95	-\$346,309.34	-0.4%	\$87,133,140.66	0	0	0	1,094	8/1/2012
29.1	MBR Aeration Piping Access Platforms (CR-066)	A	\$14,074.73						0				
29.2	Electrical Conduit Installation near MWRP Phase 2 Trailers (Unforeseen Conditions) (CR 077)	B	\$9,889.88						0				
30	Approved by Assistant GM Approved on December 22, 2010			\$48,684.10	-\$346,309.34	-\$297,625.24	-0.3%	\$87,181,824.76	0	0	0	1,094	8/1/2012
30.1	Pipe Support (20-PE and 18-ML) Modifications per Submittal 15090-003 (CR 073)	C	\$20,880.97						0				
30.2	Material Change to SS 316 for Dry Type Transformer Submittal 16460-001 and Panelboard Submittal 16441-002	A	\$27,803.13						0				
31	Approved by Engineering & Operations Committee Approved on January 18, 2011			\$61,136.74	-\$297,625.24	-\$236,488.50	-0.3%	\$87,242,961.50	0	0	0	1,094	8/1/2012
31.1	Modifications at Campus Drive Access (CR 085)	A	\$61,136.74						0				
32	Approved by Director of Engineering & Construction Approved on January 31, 2011			\$24,303.15	-\$236,488.50	-\$212,185.35	-0.2%	\$87,267,264.65	0	0	0	1,094	8/1/2012
32.1	Delete Grout Fillet and Add Embeds at Headworks Grit Chambers (CR 090)	A	\$8,156.20						0				
32.2	LCPs for Vertical Recirculating Chopper Pumps and Sump Pumps (CR 097)	C	\$15,000.00						0				
32.3	Install Additional "Pipe Below Ground" Warning Tape (CR-099)	A	\$1,146.95						0				
33	Approved by Board of Directors Approved on February 28, 2011			\$282,840.15	-\$212,185.35	\$70,654.80	0.1%	\$87,550,104.80	0	0	0	1,094	8/1/2012
33.1	Revised chlorine feed to filters (CR-038)	C	-\$3,510.68						0				
33.2	PEPS meter vaults and bypass piping revisions (CR-039)	C	-\$165,696.50						0				
33.3	MPS-2 Pump Discharge Pipe Modifications (NOPE #003/CR-040)	D	\$34,005.58						0				
33.4	Modifications to MPS-2 Building Due to Unknown Duct Banks (RFI 160) (CR-049)	B	\$16,500.00						0				
33.5	WAS/Foam Pump Revisions (CR-053)	C	-\$5,696.40						0				
33.6	Floodwall Revisions per County of Orange and FEMA comments (CR-083)	A	\$350,685.85						0				
33.7	Modifications to Grating Supports at PST Splitter Box (CR-084)	C	\$5,266.73						0				
33.8	Change to NEMA 3R SS 316 Cabinets and Additional Taps for UV Disinfection Transformers Added by CR 047/CO 16 (CR-104)	A	\$12,003.29						0				
33.9	Miscellaneous Time & Material								0				
	Demo Oversized Footing/Rebar on Existing Retaining Wall behind Paint Shop (CR-100)	B	\$5,391.41						0				
	Removal of Unknown Concrete at the North Interceptor (CR-107)	B	\$2,917.38						0				
	Thrust block on storage line at HRC vault (CR-108)	B	\$3,638.22						0				
	Removal of encased pipe for pile driving at MBR (CR-109)	B	\$2,756.79						0				
	Repair pile damaged when performing CR-109 (CR-110)	B	\$1,320.34						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

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Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:	
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Original Days:			Revised Total Contract Days	8/1/2012	
									Change Order Days	Previous Change Orders	Cum. Total C.O. days			
								Original Contract Amount: \$ 87,479,450.00						
34	Install hydrophilic waterstop at PST launders (CR-113) Approved by Director of Engineering & Construction Approved on March 23, 2011	B	\$3,258.14	\$21,844.56	\$70,654.80	\$92,499.36	0.1%	\$87,571,949.36	0	0	0	1,094	8/1/2012	
34.1	Groundwater Well Modifications (CR-041) [PR 20214, 30214]	A	\$2,338.20						0					
34.2	Bypass for Shutdown at HRC Vault (CR-106) [PR 20214, 30214]	A	\$11,200.90						0					
34.3	Removal and Disposal of Abandoned 8-inch Reclaimed Water Line in the area of North Influent Interceptor Junction Structure (CR-111) [PR 20214, 30214]	B	\$3,039.17						0					
34.4	Additional Pipe Supports for 20" PE at MBR (CR-135) [PR 20214, 30214]	B	\$2,811.22						0					
34.5	Repair existing 6-in Reclaimed Water Line near Headworks (CR-138) [PR 20214, 30214]	C	\$2,455.07						0					
35	Approved by Asst. GM Approved on April 18, 2011			\$43,741.00	\$92,499.36	\$136,240.36	0.2%	\$87,615,690.36	0	0	0	1,094	8/1/2012	
35.1	Area 600 Blower Discharge Modifications (CR-055) [PR 20214, 30214]	A	\$28,785.00						0					
35.2	Area 600 Blower Structural Support Modifications (CR-077) [PR 20214, 30214]	B	\$14,956.00						0					
36	Approved by Director of Engineering and Construction Approved on May 16, 2011			\$23,514.97	\$136,240.36	\$159,755.33	0.2%	\$87,639,205.33	0	0	0	1,094	8/1/2012	
36.1	Area 300 Primary Sedimentation and Area 700 Membrane Bioreactors FRP Launder Modifications (CR-087) [PR 20214, 30214]	A	\$4,757.27						0					
36.2	Area 700 Membrane Bioreactors GE Piping Modifications (CR-136) [PR 20214, 30214]	B	\$16,933.64						0					
36.3	Addition of speed feedback on Various variable speed pumps (Chemical Systems) (CR-116) [PR 20214, 30214]	A	\$1,824.06						0					
37	Approved by Assistant GM Approved on May 30, 2011			\$46,369.50	\$159,755.33	\$206,124.83	0.2%	\$87,685,574.83	0	0	0	1,094	8/1/2012	
37.1	Replacement of Existing Area 600 Discharge Pipe Coupling (CR-117) [PR 20214, 30214]	A	\$14,011.85						0					
37.2	Modifications to Primary Sedimentation Tank Embeds and Cover Plates (CR-125) [PR 20214, 30214]	A	\$6,751.65						0					
37.3	Increase of Bid Item A.8 - Additional Pre-drilling of Piles (CR-098) - 3,658 LF@ \$7/LF [PR 20214, 30214]	B	\$25,606.00						0					

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	8/1/2012
													Original Contract Amount: \$ 87,479,450.00
38	Approved by Director of Engineering and Construction Approved on May 30, 2011			\$24,692.00	\$206,124.83	\$230,816.83	0.3%	\$87,710,266.83	0	0	0	1,094	8/1/2012
38.1	Two-Sided (Split Faced) Masonry for Flood Protection Improvements (CR-088) [PR 20542, 30542]	C	\$19,704.00						0				
38.2	Architectural Modifications of MBR Building per Revised Drawing A-702 (CR-149) [PR 20214, 30214]	C	\$4,988.00						0				
39	Approved by Engineering & Operations Committee Approved on June 21, 2011			\$60,515.80	\$230,816.83	\$291,332.63	0.3%	\$87,770,782.63	0	0	0	1,094	8/1/2012
39.1	Additional Architectural Modifications at High Rate Clarifier (CR-082) [PR 20214, 30214]	A	\$60,515.80						0				
40	Approved by Director of Engineering and Construction Approved on June 23, 2011			\$23,214.05	\$291,332.63	\$314,546.68	0.4%	\$87,793,996.68	0	0	0	1,094	8/1/2012
40.1	Double Containment Piping Modification for Sodium Hypochlorite System (CR-095) [PR 20214, 30214/Oracle]	A	\$16,157.16						0				
40.2	Change of Enclosure from NEMA 4 to NEMA 4X SS for Chopper Pumps in CR-097 (CR-133) [PR 20214,	A	\$1,347.00						0				
40.3	Sodium Hypochlorite Tank Pad at PST Odor Control (CR-146) [PR 20214, 30214/Oracle 1599, 1706]	B	\$5,709.89						0				
41	Approved Assistant GM Approved on June 24, 2011			\$48,005.26	\$314,546.68	\$362,551.94	0.4%	\$87,842,001.94	0	0	0	1,094	8/1/2012
41.1	MFS-2 replacement of existing valves (NOPE #4) (CR-126) [PR 20214, 30214/Oracle 1599, 1706]	A	\$35,068.26						0				
41.2	Graybar Modifications per RFI 372 (CR-144) [PR 20214, 30214/Oracle 1599, 1706]	A	\$3,429.00						0				
41.3	Steel Joists Modifications Due to Additional Load Requirements per Submittal 05221-001 (CR-153) [PR 20214,	B	\$9,508.00						0				
42	Approved by Engineering & Operations Committee Approved on July 13, 2011			\$59,150.74	\$362,551.94	\$421,702.68	0.5%	\$87,901,152.68	0	0	0	1,094	8/1/2012
42.1	MBR Aeration and Permeate Piping Modifications (CR-048) [PR 20214, 30214/Oracle 1599, 1706]	B	\$59,150.74						0				
43	Approved by Board of Directors Approved on July 25, 2011			\$1,132,283.71	\$421,702.68	\$1,553,986.39	1.8%	\$89,033,436.39	120	0	120	1,214	11/29/2012
43.1	Pipelines and Utilities for Future Biosolids (CR-017) (PR 20847/Oracle 1617)	D	\$503,272.17						60				
43.2	Biosolids Sewer Force Main (CR-045) (PR 20847/Oracle	D	\$626,976.14						60				
43.3	Geotechnical Investigation at Staging Area 2 for Biosolids Project (CR 137) (PR 20847/Oracle 1617)	D	\$2,035.40						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Film Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Original Days:			1,094	
									Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	8/1/2012
44	Approved on Director of Engineering & Construction Approved on August 18, 2011 44.1 Chemical Systems Pump Pad Modifications (CR-105) (PR 20214,30214/Oracle 1599,1706) 44.2 Installation of 6" Gate Valve and Change of Pipe Size on PW near SII Junction (CR-140) (PR 20214,30214/Oracle 1599,1706) 44.3 PLC-300 additional I/O to accommodate VFD change of Primary Sludge Pumps (PR 20214,30214/Oracle 1599,1706) 44.4 Non-compensable time extension of Milestone 5 – Floodwall Installation delay due to FEMA review and regulatory compliance	A A A B	\$1,833.71 \$9,141.00 \$13,999.77 \$0.00	\$24,974.48	\$1,553,986.39	\$1,578,960.87	1.8%	\$89,058,410.87	0	120	120	1,214	11/29/2012
45	Approved by Director of Engineering & Construction Approved on August 29, 2011 45.1 Deletion of Monorail and Door Modifications at Headworks (CR-103) (PR 20214,30214/Oracle 1599,1706) 45.2 Hollow Metal Door Modifications (CR-156) (PR 20214,30214/Oracle 1599,1706) 45.3 Miscellaneous T&M (CR-166) (PR 20214,30214/Oracle 1599,1706)	A A B	\$3,570.03 \$7,396.38 \$13,969.46	\$24,935.87	\$1,578,960.87	\$1,603,896.74	1.8%	\$89,083,346.74	0	0	0	1,214	11/29/2012
46	Approved by Board of Directors Approved on September 26, 2011 46.1 Replacement of Sand Canyon Zone A and Associated Piping, Valves, and Appurtenances (CR-130) (PR 30038/Oracle 1643) 46.2 As Needed Potholing Related to Strainer Replacement and Pipe Installation (CR-130) (PR 30038/Oracle 1643)	D D	\$455,216.07 \$21,573.30	\$476,789.37	\$1,603,896.74	\$2,080,686.11	2.4%	\$89,560,136.11	0	120	120	1,214	11/29/2012
47	Approved by Director of Engineering & Construction Approved on October 13, 2011 47.1 Installation of Davits at PST, MBR, SBW Walkway, and HRC (CR-134) (PR 20214 (1599)/30214 (Oracle 1706)) 47.2 Miscellaneous T&M Work (CR-183) (PR 20214 (1599)/30214 (Oracle 1706))	A B	\$6,153.02 \$18,062.88	\$24,215.90	\$2,080,686.11	\$2,104,902.01	2.4%	\$89,584,352.01	0	120	120	1,214	11/29/2012

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
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Contractor: J R Filanc Construction
Design Engineer HDR

			Contract Amount						Contract Days				Original Completion Date:	
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Original Days:		Revised Total Contract Days	Revised Completion Date
											Cum. Total C.O. days	1,094		
								Original Contract Amount: \$ 87,479,450.00						8/1/2012
48	Approved by Director of Engineering & Construction Approved on October 18, 2011			\$24,860.93	\$2,104,902.01	\$2,129,762.94	2.4%	\$89,609,212.94	0	120	120	1,214	11/29/2012	
48.1	Primary splitter box low pressure air pipe material and restraints (CR-162)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$6,583.45						0					
48.2	FRP Launder Modifications at MBR RAS Box (CR-168)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$4,318.00						0					
48.3	Concrete with PVC behind Auto Shop (CR-112)/(PR 20214 (1599)/30214 (Oracle 1706))	B	\$1,262.67						0					
48.4	Door Hardware Modifications per RFI-0339 (CR-139)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$7,428.82						0					
48.5	SBW Pumps Low Level Circuit modifications (CR-178)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$2,261.42						0					
48.6	Site Lighting Modifications (CR-068)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$3,006.57						0					
49	Approved from Board of Directors Approved on October 24, 2011			\$318,886.24	\$2,129,762.94	\$2,448,649.18	2.8%	\$89,928,099.18	0	120	120	1,214	11/29/2012	
49.1	Biosolids Indicator Piles (CR-175)/PR 20847 (1617)	D	\$318,886.24						0					
50	Approved by Director of Engineering & Construction Approved on November 21, 2011			\$24,937.84	\$2,448,649.18	\$2,473,607.02	2.8%	\$89,953,057.02	0	120	120	1,214	11/29/2012	
50.1	Odor scrubber cleaning at Primary Sedimentation Tanks (CR-158) (PR 20214,30214/Oracle 1599,1706)	A	\$2,564.33						0					
50.2	Existing Ductbank Modifications (CR-185) (PR 20214,30214/Oracle 1599,1706)	A	\$13,764.46						0					
50.3	Additional Concrete Filleis at High Rate Clarifier (CR-188) (PR 20214,30214/Oracle 1599,1706)	A	\$8,629.05						0					
51	Approved by Director of Engineering & Construction Approved on November 22, 2011			\$24,342.17	\$2,473,607.02	\$2,497,949.19	2.9%	\$89,977,399.19	0	120	120	1,214	11/29/2012	
51.1	Filter Pump Station-2(FPS-2) Potable Water Line Addition (CR-172) (PR 20214 (1599)/30214 (Oracle 1706))	A	\$6,296.80						0					
51.2	Pothole 8 Inch Drain Line from High Rate Clarifier to Manhole #3 (CR-197) (PR 20214 (1599)/30214 (Oracle 1706))	B	\$18,045.37						0					
52	Approved by Board of Directors Approved on December 12, 2011			\$284,442.00	\$2,497,949.19	\$2,782,391.19	3.2%	\$90,261,841.19	0	120	120	1,214	11/29/2012	
52.1	36" Stormwater Pipeline for Biosolids (CR-174) (PR 20847)	D	\$284,442.00						0					
53	Approved by Director of Engineering & Construction Approved on December 8, 2011			\$24,885.30	\$2,782,391.19	\$2,807,276.49	3.2%	\$90,286,726.49	0	120	120	1,214	11/29/2012	
53.1	Modifications to MBR Pump Room Drains and Valve Vaults (CR-096) (PR 20214/30214 (1599/1706))	C	\$8,460.88						0					
53.2	Central Electrical Building Masonry Veneer Modifications (CR-159) (PR 20214/30214 (1599/1706))	C	\$5,243.55						0					
53.3	Sodium Hydroxide Tank Pad Modifications (CR-161)	A	\$2,578.57						0					
53.4	Addition of Gutter and Downspout at Membrane Bioreactors Structure (CR-164) (PR 20214/30214 (1599/1706))	C	\$8,602.30						0					

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Original Days: 1,094				8/1/2012
									Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
54	Approved by Director of Engineering & Construction Approved on December 9, 2011			\$24,569.34	\$2,807,276.49	\$2,831,845.83	3.2%	\$90,311,295.83	0	120	120	1,214	11/29/2012
54.1	Grit Pump and Mixer Power Food Modifications (CR-115) (PR 20214,30214/Oracle 1599,1706)	A	\$3,764.78						0				
54.2	8-inch Plant Drain Residuals to Headworks Piping Modifications at High Rate Clarifier (CR-171) (PR 20214,30214/Oracle 1599,1706)	A	\$11,720.63						0				
54.3	Vault Drain Line to PEPS (CR-176) (PR 20214,30214/Oracle 1599,1706)	B	\$9,083.93						0				
55	Approved by Director of Engineering & Construction Approved on January 11, 2012			\$24,469.23	\$2,831,845.83	\$2,856,315.06	3.3%	\$90,335,765.06	0	120	120	1,214	11/29/2012
55.1	Sodium Hypochlorite and Ferric Chloride Chemical Piping Additions (CR-128) (PR 20214,30214/Oracle 1599,1706)	A	\$9,994.81						0				
55.2	Modifications to the Existing Filter Effluent Channels (CR-204) (PR 20214,30214/Oracle 1599,1706)	C	\$14,474.42						0				
56	Approved by Director of Engineering & Construction Approved on January 20, 2012			\$24,315.75	\$2,856,315.06	\$2,880,630.81	3.3%	\$90,360,080.81	47	120	167	1,261	1/15/2013
56.1	Existing Sludge Pump Room Modifications (CR-147) (PR 20214,30214/Oracle 1599,1706)	B	\$19,483.75						0				
56.2	Structural Modifications for 20" LPA Penetration at MBR Building (CR-213) (PR 20214,30214/Oracle 1599,1706)	C	\$4,832.00						47				
57	Approved by Board of Directors Approved on February 27, 2012			\$116,206.53	\$2,880,630.81	\$2,996,837.34	3.4%	\$90,476,287.34	0	167	167	1,261	1/15/2013
57.1	Change from 2-Ton Bridge Crane to 5-Ton Bridge Crane (CR-195) (PR 20214,30214/Oracle 1599,1706)	C	\$116,206.53						0				
58	Approved by Board of Directors Approved on February 27, 2012			(\$669,030.20)	\$2,996,837.34	\$2,327,807.14	2.7%	\$89,807,257.14	0	167	167	1,261	1/15/2013
58.1	Final Quantity Adjustment due to Differing Site Conditions of Bid Item A.06 - Precast Prestressed Concrete Driven Piles - Structure Piles (PR 20214,30214/Oracle 1599,1706)	B	(\$669,030.20)						0				
59	Approved by Director of Engineering & Construction Approved on February 23, 2012			\$24,975.26	\$2,327,807.14	\$2,352,782.40	2.7%	\$89,832,232.40	0	167	167	1,261	1/15/2013
59.1	South Influent Interceptor Modifications (CR-169) (PR 20214,30214/Oracle 1599,1706)	B	\$24,975.26						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
60	Approved by Director of Engineering & Construction Approved on February 24, 2012			\$24,875.42	\$2,352,782.40	\$2,377,657.82	2.7%	\$89,857,107.82	0	167	167	1,261	1/15/2013
60.1	Installation of 1" and 2" Conduits at High Rate Clarifier (CR-058) (PR 20214,30214/Oracle 1599,1706)	B	\$1,225.50						0				
60.2	Floodwall Revisions Due to 5 kv and Transmitter Conflict (CR-148) (PR 20542 (1150)/30542 (1118))	B	\$1,485.98						0				
60.3	Pump call relays for Area 800 polymer and sand feed LCPs (CR-189) (PR 20214,30214/Oracle 1599,1706)	A	\$1,013.84						0				
60.4	Modifications to Flood Wall Entrance on Riparian (CR-222) (PR 20542 (1150)/30542 (1118))	B	\$17,922.87						0				
60.5	Existing 30-Inch Wall Spools at SBW Tank (CR-223)(PR 20214,30214/Oracle 1599,1706)	A	\$3,227.23						0				
61	Approved by Engineering & Operations Committee Approved on March 20, 2012			\$56,853.28	\$2,377,657.82	\$2,434,511.10	2.8%	\$89,913,961.10	0	167	167	1,261	1/15/2013
61.1	Additional sampling stations, samplers, analyzers, and associated electrical, instrumentation, and programming at Primary Effluent Pump Station, Membrane Bioreactor, and Chlorine Contact Tanks (CR-131) (PR 20214,30214/Oracle 1599,1706)	A	\$56,853.28						0				
62	Approved by Director of Engineering & Construction Approved on March 19, 2012			\$24,734.25	\$2,434,511.10	\$2,459,245.35	2.8%	\$89,938,695.35	0	167	167	1,261	1/15/2013
62.1	Additional Electrical Work to Site Glass for Scum Line at Primary Sludge Room (CR-044)(PR 20214,30214/Oracle 1599,1706)	C	\$3,247.25						0				
62.2	T12/T13 Substation Pad Modifications (CR-120)(PR 20214,30214/Oracle 1599,1706)	C	\$13,144.00						0				
62.3	Removal of ACP Pipe in Primary Sludge Room (CR-124) (PR 20214,30214/Oracle 1599,1706)	B	\$3,562.83						0				
62.4	Pressure Testing of 14-Inch Butterfly Valves at MPS-2 (CR-187) (PR 20214,30214/Oracle 1599,1706)	A	\$2,454.83						0				
62.5	Pipe Rental for Secondary Clarifier Bypass (CR-202) (PR 20214,30214/Oracle 1599,1706)	A	\$2,325.34						0				
62.6	Non-compensatory Time Extension of 117 Days for Milestone #5 - Floodwall Installation	B	\$0.00						0				
63	Approved by Director of Engineering & Construction Approved on March 26, 2012			\$24,724.63	\$2,459,245.35	\$2,483,969.98	2.8%	\$89,963,419.98	0	167	167	1,261	1/15/2013
63.1	Remove and Replace Existing Slide Gate at Backwash Supply Tank (CR-165)(PR 20214,30214/Oracle 1599,1706)	A	\$18,991.09						0				
63.2	HRC Polymer Storage & Feed System Modifications (CR-170)(PR 20214,30214/Oracle 1599,1706)	C	\$3,435.19						0				
63.3	Potholing for Utilities Not Shown on Drawings near MgOH Tanks (CR-211)(PR 20214,30214/Oracle 1599,1706)	C	\$2,298.35						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J.R. Filanc Construction
Design Engineer HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
64	Approved by E&O Committee Approved on April 17, 2012 64.1 Grading Modifications at High Rate Clarifier (CR-179) (PR 20214,30214/Oracle 1599,1706)	A	\$76,429.27	\$76,429.27	\$2,483,969.98	\$2,560,399.25	2.9%	\$90,039,849.25	0	167	167	1,261	1/15/2013
65	Approved by Director of Engineering & Construction Approved on April 19, 2012 65.1 Filler pieces between steel roof joists at CEB (CR-154)(PR 20214,30214/Oracle 1599,1706) 65.2 Highline & Relocate 6-in GW due to revised location of electrical manholes (CR-201)(PR 20214,30214/Oracle 1599,1706) 65.3 Additional Building Signage at UV Facility (CR-205) (PR 20214,30214/Oracle 1599,1706) 65.4 Area 400 PEPS Electrical Room HVAC Modifications (CR-215) (PR 20214,30214/Oracle 1599,1706) 65.5 Revisions to the Seimens Pre-Negotiated Component Scope for the Odor Scrubber (CR-226) (PR 20214,30214/Oracle 1599,1706)	C B A C A	\$1,072.20 \$10,739.37 \$3,432.94 \$2,186.05 \$6,796.29	\$24,226.85	\$2,560,399.25	\$2,584,626.10	3.0%	\$90,064,076.10	0	167	167	1,261	1/15/2013
66	Approved by General Manager Approved on May 1, 2012 66.1 High Rate Clarifier and Chlorine Contact Tank Coating Modifications (CR-155) 30542 (1118)	A	\$28,953.41	\$28,953.41	\$2,584,626.10	\$2,613,579.51	3.0%	\$90,093,029.51	0	167	167	1,261	1/15/2013
67	Approved by General Manager Approved on May 7, 2012 67.1 Membrane Bioreactors Air Scour Blower Control I/O Conduit Modifications (CR-101) PR 20124 (1599) 67.2 Primary Sludge Pump Modifications (CR-114) PR 20214 (1599)	A A	\$21,906.75 \$26,328.27	\$48,235.02	\$2,613,579.51	\$2,661,814.53	3.0%	\$90,141,264.53	0	167	167	1,261	1/15/2013
68	Approved by Exe. Dir. Of Engineering & Planning Approved on May 18, 2012 68.1 Backwash Surge Line Reroute to Backwash Supply Wetwell (CR-198) PR 30124 (1706) 68.2 Additional Eyewash at the UV Disinfection Facility (CR-200) PR 30214 (1706)	A A	\$20,308.25 \$4,634.95	\$24,943.20	\$2,661,814.53	\$2,686,757.73	3.1%	\$90,166,207.73	0	167	167	1,261	1/15/2013
69	Approved by Exe. Dir. Of Engineering & Planning Approved on May 23, 2012 69.1 Modifications to Existing Slab-On-Grade at Filters (CR-142) PR 30124 (1706) 69.2 Flood Wall Modifications (CR-167) PR 20542 (1150)/PR 30542 (1118) 69.3 Filters Air Flow Meter Repair and Bollards Addition (CR-173) PR 30124 (1706) 69.4 Bridge Crane Photo Sensors at Membrane Bioreactors and Ultraviolet Disinfection Facility (CR-177) PR 20214 (1599)/PR 30214 (1706)	A A A A	\$2,816.82 \$3,488.62 \$2,185.92 \$16,451.50	\$24,942.86	\$2,686,757.73	\$2,711,700.59	3.1%	\$90,191,150.59	0	167	167	1,261	1/15/2013

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
70	Approved by General Manager Approved on June 26, 2012 70.1 Credit for Landscape Restoration of a Portion of the Screen Berm North of MWRP (CR-255) PR 20542 (1150)/PR 30542	A	(\$48,672.95)	(\$48,672.95)	\$2,711,700.59	\$2,663,027.64	3.0%	\$90,142,477.64	0	167	167	1,261	1/15/2013
71	Approved by Acting Exec. Director of Engineering & Construction Approved on June 28, 2012 71.1 Surge Tank Tower Cable and Conduit Repair and Relocation (CR-210)/Photocell for 3 nightlights at UV (CR-236) PR 71.2 8" line stop for removal of existing 8" sewer line (CR 217) PR 20214 (1599) 71.3 Demolition of existing 24" SBW Pipe conflicting with new 8" SBW (CR 229) PR 20214 (1599) 71.4 Demolition of existing concrete ductbank encasement near Headworks (CR 233) PR 20214 (1599) 71.5 Installation of 4-inch gate valve and associated repairs near FPS-2 Due to Failure of Existing 4-inch Reclaimed Water Loop (CR 234) PR 30214 (20214)	B B B B A	\$7,226.25 \$6,200.00 \$4,277.45 \$4,596.34 \$1,626.47	\$23,926.51	\$2,663,027.64	\$2,686,954.15	3.1%	\$90,166,404.15	0	167	167	1,261	1/15/2013
72	Approved by Acting Exec. Director of Engineering & Construction Approved on June 28, 2012 72.1 Irrigation Line Road Crossings Additions (CR-186) PR 20214 (1599), 30214 (7106) 72.2 Transformer 12, 13 conduit relocation (CR 239) PR 20214 (1599), 30214 (7106) 72.3 Biosolids conduit realignment near SWP Station (CR 245) PR 20847 (1617) 72.4 Repair of unknown 2" and 4" RW pipe during excavation of biosolids piping (CR 260) PR 20847 (1617)	C B B B	\$14,596.59 \$865.37 \$3,605.70 \$3,980.11	\$23,047.77	\$2,686,954.15	\$2,710,001.92	3.1%	\$90,189,451.92	0	167	167	1,261	1/15/2013
73	Approved by Acting Exec. Director of Engineering & Construction Approved on July 3, 2012 73.1 MBR Roof and Bridge Crane Modifications (CR-264) PR 20214 (1599)	C	\$16,525.80	\$16,525.80	\$2,710,001.92	\$2,726,527.72	3.1%	\$90,205,977.72	0	167	167	1,261	1/15/2013
74	Approved by E&O Committee Approved on July 24, 2012 74.1 Relocation of Existing 16-Inch Reclaimed Water Pipeline near Flow Equalization Basin (CR-240) PR 20542 (1150) and 30542 (1118)	B	\$52,342.09	\$52,342.09	\$2,726,527.72	\$2,778,869.81	3.2%	\$90,258,319.81	0	167	167	1,261	1/15/2013
75	Approved by Board of Directors Approved on August 13, 2012 75.1 MPS-1 Building Demolition and Electrical Relocation (CR-209) PR 20214 (1599) and 30214 (1706)	A	\$473,570.14	\$473,570.14	\$2,778,869.81	\$3,252,439.95	3.7%	\$90,731,889.95	0	167	167	1,261	1/15/2013

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J.R. Filanc Construction
Design Engineer HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
76	Approved by General Manager Approved on July 30, 2012			\$29,412.41	\$3,252,439.95	\$3,281,852.36	3.8%	\$90,761,302.36	0	167	167	1,261	1/15/2013
76.1	MPS-2 Pump Pad Modifications (CR-232) PR 30214 (1706)	A	\$29,412.41						0				
77	Approved by Board of Directors Approved on August 27, 2012			\$151,336.95	\$3,281,852.36	\$3,433,189.31	3.9%	\$90,912,639.31	0	167	167	1,261	1/15/2013
77.1	Chlorine Contact Tank Repairs (CR-152) PR 30214 (1706)	B	\$151,336.95						0				
78	Approved by Exec. Dir. Of Engineering and Planning Approved on August 15, 2012			\$24,341.31	\$3,433,189.31	\$3,457,530.62	4.0%	\$90,936,980.62	0	167	167	1,261	1/15/2013
78.1	Unforeseen Conditions Associated with 36-inch HDPE Biosolids Storm Drain Installation PR 20847 (1617)	B	\$11,473.24						0				
78.2	Remove and Replace Two 8-Inch Reclaimed Water Gate Valves on South Side of Chlorine Contact Tanks (CR-257) PR	A	\$1,832.69						0				
78.3	Removal of Unknown Concrete at Existing Structure northwest of PEPS to install 54" PE line PR 20124 (1599)	B	\$6,833.18						0				
78.4	Headworks Scum Piping Modifications (CR-269) PR 20124 (1599)	B	\$4,202.20						0				
79	Pending Approval from General Manager Sent for Approval on September 20, 2012			\$49,030.10	\$3,457,530.62	\$3,506,560.72	4.0%	\$90,986,010.72	0	167	167	1,261	1/15/2013
79.1	Chlorine Contact Tank Repairs (CR-152) PR 30214 (1706)	A	\$49,030.10						0				
80	Approved by Exe. Director of Engineering and Planning Approved on September 24, 2012			\$24,593.00	\$3,506,560.72	\$3,531,153.72	4.0%	\$91,010,603.72	0	167	167	1,261	1/15/2013
80.1	Arc Flash/Coordination Study (CR-252) PR 20214 (1599)	A	\$24,593.00						0				
81	Approved by E&O Committee Approved on November 16, 2012			\$66,811.32	\$3,531,153.72	\$3,597,965.04	4.1%	\$91,077,415.04	0	167	167	1,261	1/15/2013
81.1	Storage Building (CR-295) PR 20847 (1617)	D	\$66,811.32						0				

MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary

Contractor: J R Filanc Construction
 Design Engineer HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
82	Approved by Exe. Director of Engineering and Planning Approved on November 1, 2012			\$24,888.24	\$3,597,965.04	\$3,622,853.28	4.1%	\$91,102,303.28	0	167	167	1,261	1/15/2013
82.1	SCADA Programming Modifications at UV Disinfection Facility (CR-235) PR 30214 (1706)	A	\$2,598.23										
82.2	Re-Fabricate Cofferdam Due to Existing Conditions at Primary Effluent Channel (CR-259) PR 20124 (1599)	B	\$3,904.14										
82.3	Repair of Existing 6" Waste Activated Sludge (WAS) Pipeline south of Existing Rectangular Secondary Clarifiers (CR-268) PR 20214 (1599)	B	\$2,979.43										
82.4	Membrane Bioreactor Low Pressure Air Flange Modifications (CR-271) PR 20214 (1599)	B	\$1,394.68										
82.5	Cut and Plug Abandoned 6-inch sewer line north of existing Headworks (CR-272) PR 20214 (1599)	B	\$429.63										
82.6	Electrical Manhole No. MHG6C Sump Pump Work (CR-277) PR 20124 (1599)	C	\$2,104.38										
82.7	Crack Repair of Existing Primary Sedimentation Tank Influent Channel (CR-292) PR 20214 (1599)	B	\$3,476.68										
82.8	Modifications to Ledger Angle, Grating, and FRP launder troughs in Primary Sedimentation Tank splitter box (CR-293) PR 20214 (1599)	B	\$2,767.83										
82.9	Pressure Regulators at Headworks (CR-294) PR 20214 (1599)	B	\$5,233.24						0				
83	Approved by Board of Directors Approved on November 26, 2012			-\$228,007.95	\$3,622,853.28	\$3,394,845.33	3.9%	\$90,874,295.33	0	167	167	1,261	1/15/2013
83.1	Final quantity adjustments for Bid Item No. A.07 - Predrilled Precast Pre-stressed Concrete Drive Piles - Influent Sewer	B	-\$210,094.00						0				
83.2	Final quantity adjustments for Bid Item No. B.01 - Precast Pre-stressed Concrete Driven Pile	B	\$89,362.00						0				
83.3	Final quantity adjustments for Bid Item No. B.02 - Predrilled Precast Pre-stressed Concrete Driven Piles.	B	-\$107,275.95						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
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Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Original Days:			1,094	
									Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	8/1/2012
	Approved by Acting GM Approved on December 28, 2012			\$37,859.85	\$3,394,845.33	\$3,432,705.18	3.9%	\$90,912,155.18	0	167	167	1,261	1/15/2013
84	84.1 Removal and Disposal of Existing Motors, Pumps, and Equipment in MPS- Building (CR-221) PR 20214, 30214	A	\$37,859.85						0				
	Approved by Exe. Director of Engineering and Planning Approved on December 28, 2012			\$24,049.97	\$3,432,705.18	\$3,456,755.15	4.0%	\$90,936,205.15	0	167	167	1,261	1/15/2013
85	85.1 Installation of 10-Inch Tee on Biosolids Piping (CR-253) PR 20847 (1617)	D	\$1,783.30						0				
	85.2 Two Additional Concrete Supports for the 36-Inch RAS Line at MBR (CR-242) PR 20214 (1599)	C	\$6,211.81						0				
	85.3 Addition of Two 8-inch Plug Valves to Plant Drain Line for Sampling at Headworks (CR-303) PR 20214 (1599)	A	\$16,054.86						0				
	Approved by Exe. Director of Engineering and Planning Approved on December 28, 2012			\$20,228.81	\$3,456,755.15	\$3,476,983.96	4.0%	\$90,956,433.96	0	167	167	1,261	1/15/2013
86	86.1 Removal of Buried Concrete to Allow Construction of Groundwater Well No. 0140 (CR-273) PR 20214 (1599)	B	\$2,893.01						0				
	86.2 Additional Concrete Fillets on the East Wall Corners of New PSTs (CR-304) PR 20214 (1599)	A	\$10,727.59						0				
	86.3 HVAC Modifications at PEPS Electrical Room (CR-305) PR 20214 (1599)	B	\$3,433.39						0				
	86.4 Coating of Vector Station (CR-306) PR 20214 (1599)	A	\$3,174.82						0				
	Approved by E&O Committee Approved on January 15, 2013			\$79,315.00	\$3,476,983.96	\$3,556,298.96	4.1%	\$91,035,748.96	0	167	167	1,261	1/15/2013
87	87.1 Research Pads (CR-219) PR 20214 (1599)	D	\$79,315.00						0				
	Approved by Exe. Director of Engineering and Planning Approved on January 29, 2013			\$24,499.14	\$3,556,298.96	\$3,580,798.10	4.1%	\$91,060,248.10	0	167	167	1,261	1/15/2013
88	88.1 Headworks Building Load-Out Container Wheel Guides and Stops (CR-249) PR 20214 (1599)	A	\$8,337.79						0				
	88.2 Modifications to Existing Junction Box at PEPS (CR-291) PR 20214 (1599)	B	\$5,249.47						0				
	88.3 Investigation to Expose High Pressure Corroded 8-Inch Reclaimed Water Line (CR-298) PR 20214 (1599)	B	\$1,471.66						0				
	88.4 Alum Sidewalk Revisions (CR-311) PR 20214 (1599)	A	\$3,556.22						0				
	88.5 Equipment Rental for ES-3 Shutdown (CR-312) PR 20214	B	\$2,423.20						0				
	88.6 Removal of Unknown Ductbank near South Influent Interceptor (CR-313) PR 20214 (1599)	B	\$3,460.80						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J.R. Filanc Construction
Design Engineer HDR

Change Order	Description	Category	Contract Amount						Contract Days				Original Completion Date:
			Change Order Line Item	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Original Days:		Revised Completion Date
											Cum. Total C.O. days	Revised Total Contract Days	
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094		8/1/2012		
89	Approved by Exe. Director of Engineering and Planning Approved on February 6, 2013			\$23,272.79	\$3,580,798.10	\$3,604,070.89	4.1%	\$91,083,520.89	0	167	167	1,261	1/15/2013
89.1	Installation of Ultraviolet (UV) Light Shields at UV Facility (CR-208) PR 30214 (1706)	A	\$8,607.30						0				
89.2	Odor Control Drains to Primary Sedimentation Tanks Effluent Channels (CR-216) PR 20214 (1599)	C	\$1,085.54						0				
89.3	Addition of Standby Sodium Hypochlorite Injection Point (CR-228) PR 20214 (1599)	A	\$2,652.29						0				
89.4	Relocate conduit for Groundwater Well No. 140, North of Primary Sedimentation Tanks (CR-315) PR 20214 (1599)	B	\$1,678.49						0				
89.5	Miscellaneous Modifications at High Rate Clarifier (CR-299) PR 20124 (1599)	B	\$5,014.13						0				
89.6	Miscellaneous Modifications (CR-300) PR 20124 (1599)	B	\$4,235.04						0				
90	Approved by Board of Directors Approved on March 25, 2013			\$410,000.00	\$3,604,070.89	\$4,014,070.89	4.6%	\$91,493,520.89	197	167	364	1,458	7/31/2013
90.1	Project Related Field Office Overhead PR 20214 (1599), 30214 (1706), 20542 (1150), 30542 (1118)	B	\$410,000.00						197				
91	Approved by Exe. Director of Engineering and Planning Approved on March 28, 2013			\$24,948.94	\$4,014,070.89	\$4,039,019.83	4.6%	\$91,518,469.83	0	364	364	1,458	7/31/2013
91.1	Installation of Medium Voltage Switchgear Kirk Keys (CR-182) (PR 20214 (1599), 30214 (1706))	C	\$4,341.69						0				
91.2	Additional Lights, Emergency Lights, and Exit Lights at Various Locations (CR-194) PR 20214 (1599)	A	\$20,607.25						0				
92	Approved by Exe. Director of Engineering and Planning Approved on March 28, 2013			\$49,044.94	\$4,039,019.83	\$4,088,064.77	4.7%	\$91,567,514.77	0	364	364	1,458	7/31/2013
92.1	Modifications to High Rate Clarifier (HRC) and ES-3 Valve Controls (CR-91) PR 30214 (1706)	A	\$18,782.41						0				
92.2	Field Modifications at MSP-2 Circuit Breaker 10 (CR-157) PR	A	\$12,395.07						0				
92.3	Additional Lights at HRC and Existing Primary Sludge Room (CR-256) PR 20214 (1599) and PR 30214 (1706)	A	\$17,867.46						0				
93	Approved by Exe. Director of Engineering and Planning Approved on April 23, 2013			\$23,546.00	\$4,088,064.77	\$4,111,610.77	4.7%	\$91,591,060.77	0	364	364	1,458	7/31/2013
93.1	Electrical Modifications at Headworks Building, MBR Pump Room, and Blower Room (CR-309) PR 20214 (1599)	A	\$23,546.00						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

Contractor: J R Filanc Construction
Design Engineer HDR

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			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
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94	Pending Approval by Exe. Director of Engineering and Planning Sent on April 24, 2013			\$22,281.00	\$4,111,610.77	\$4,133,891.77	4.7%	\$91,613,341.77	0	364	364	1,458	7/31/2013
94.1	Headworks Tipping Trough Electrical Modifications (CR-092) PR 20214 (1599)	A	\$3,044.00						0				
94.2	Power to roll-up doors at Membrane Bioreactors and High Rate Clarifier (CR-141) PR 20124 (1599), 30214 (1706)	C	\$2,453.00						0				
94.3	Addition of Safety Ramps at Ultraviolet Disinfection Facility (CR-258) PR 30214 (1706)	A	\$716.00						0				
94.4	Cabinet Pad at Ultraviolet Disinfection Facility (CR-262) PR 30214 (1706)	A	\$1,224.00						0				
94.5	High Rate Clarifier Reclaimed Water Line Extension (CR-284) PR 30214 (1706)	A	\$11,243.00						0				
94.6	Addition of Air Vacuum Valve at Membrane Bioreactor Back Pulse Pump(CR-307) PR 20214 (1599)	B	\$669.00						0				
94.7	Repair of 6-Inch Groundwater Line, east of Chlorine Contact Tank and 3" Potable Water Line at Filters (CR-319) PR 20214 (1599), 30214 (1706)	C	\$1,032.00						0				
94.8	Electrical Rewiring of Membrane Bioreactors Fine Screens (CR-323) PR 20214 (1599)	C	\$1,900.00						0				
95	Approved by Board of Directors Approved on May 27, 2013			\$370,963.00	\$4,133,891.77	\$4,504,854.77	5.1%	\$91,984,304.77	92	364	456	1,550	10/31/2013
95.1	8-inch Reclaimed Water Line Lateral for Biosolids (CR-221) PR 20847 (1617)	D	\$81,600.00						0				
95.2	MWRP Security Fence Improvements (CR-288) PR 20124 (1599), 30214 (1706)	A	\$289,363.00						0				
95.3	Deletion of one water quality sampler (CR-062) PR 20124 (1599), Deletion of demolition of existing and abandoned 30-inch sewer (CR-224) PR 20124 (1599), and Use of Schedule 10 stainless steel in lieu of Schedule 40 for low pressure air at membrane bioreactors (CR-225) PR 20124 (1599)	A	(\$34,390.00)						0				
95.4	Premium offset for Builder's Risk insurance through October 31, 2013	A	\$34,390.00						0				
95.5	Time Extension related to sequencing of CCO No. 74 - MPS-1 Building Demolition and Existing Primary Sedimentation Motor Control Center Electrical Relocation	A	\$0.00						92				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

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			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
96	Approved by Exe. Director of Engineering and Water Quality Approved on August 19, 2013			\$23,975.88	\$4,504,854.77	\$4,528,830.65	5.2%	\$92,008,280.65	0	456	456	1,550	10/31/2013
96.1	Install 2" flush out assembly per W-13 at end of 4" DW s/o MBR (CR-241) PR 20214 (1599)	A	\$1,528.33						0				
96.2	6-Inch GW Potholing and Concrete Cap (CR-318) PR 20214 (1599)	B	\$7,675.03						0				
96.3	Relocation of UVT and Conductivity Analyzer at UV Structure (CR-328) PR 30214 (1706)	A	\$4,036.26						0				
96.4	Removal of Baffles at Existing PSTs (CR-329) PR 20214 (1599)	A	\$5,405.51						0				
96.5	Blower Room Piping Modifications (CR-335) PR 20214	A	\$5,330.75						0				
97	Approved by Exe. Director of Engineering and Water Quality Approved on October 24, 2013			\$24,999.85	\$4,528,830.65	\$4,553,830.50	5.2%	\$92,033,280.50	0	456	456	1,550	10/31/2013
97.1	New Potable Water Service Line to Existing MWRP Generator Radiators at Headworks (CR-265) PR 20214	D	\$2,562.54						0				
97.2	Removal of Baffles at Existing PSTs (CR-329) PR 20214 (1599)	C	\$5,405.51						0				
97.3	Addition of Master Solenoid Valve for MBR Fine Screens Water Supply (CR-331) PR 20214 (1599)	A	\$5,943.97						0				
97.4	Provide Spent Backwash Turbidity Meter (CR-336) PR 30214 (1706)	C	\$7,099.69						0				
97.5	New Rotameter at Membrane Bioreactor (MBR) Fine Screens (CR-337) PR 20214 (1599)	C	\$1,801.35						0				
97.6	Removal of steel plates at the existing filters (CR-342) PR 30214 (1706)	C	\$2,186.79						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
Construction Summary**

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Design Engineer HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
98	Approved by Exe. Director of Engineering and Water Quality Approved on November 1, 2013			\$13,773.34	\$4,553,830.50	\$4,567,603.84	5.2%	\$92,047,053.84	0	456	456	1,550	10/31/2013
98.1	Seal Exterior Insulation Finishing System (EIFS) of High Rate Clarifier (CR-326) PR 20214 (1599)	A	\$873.28						0				
98.2	Install 2-in Air/Vacuum Valve on High Rate Clarifier Residual Pump Discharge pipe (CR-343) PR 20214 (1599)	C	\$3,231.39						0				
98.3	Install Drain Lines at Primary Sedimentation Tank Pump Room Deck (CR-345) PR 20214 (1599)	A	\$4,938.08						0				
98.4	Install Additional Manhole at South Influent Sewer (CR-346) PR 20214 (1599)	A	\$1,353.23						0				
98.5	Modifications to the Flow Switches at the Primary Sedimentation Tank Sludge Room (CR-214) PR 20214(1599)	A	\$3,798.53						0				
98.6	Removal of Baffles at Existing PSTs (CR-329) PR 20214 (1599) - Credit	C	(\$5,405.51)						0				
98.7	Re-route 1-Inch Conduit from MPS-2 Pump Station to Chlorine Contact Tank (CR-261) PR 20214 (1599)	C	\$3,188.92						0				
98.8	Ultrasonic Flowmeter at Existing Aeration Basins (CR-352) PR 20214 (1599)	C	\$1,795.42						0				
98.9	Non-compensatory item - Repair Leaks in the Existing Primary Sludge Room in Lieu of Filling 100-feet of Abandoned South Influent Sewer as part of CCO-095 with	A	\$0.00						0				
99	Approved by Exe. Director of Engineering and Water Quality Approved on December 3, 2013			\$23,877.70	\$4,567,603.84	\$4,591,481.54	5.2%	\$92,070,931.54	0	456	456	1,550	10/31/2013
99.1	Area 200 Headworks Modifications (CR-290) PR 20214	A	\$13,360.87						0				
99.2	Remove and replace 12"x12" Slide Gate in Spent Backwash (CR-341) PR 20214 (1599)	A	\$10,516.83						0				
100	Pending approval by Exe. Director of Engineering and Water Quality Pending approval on December 5, 2013			\$24,516.80	\$4,591,481.54	\$4,615,998.34	5.3%	\$92,095,448.34	0	456	456	1,550	10/31/2013
100.1	Provide Modulating Butterfly Valves with AUMA Actuators on FEB discharge to Activated Sludge PR 20214 (1599) (CR-347)	C	\$24,516.80						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements
PR 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118)
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			Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Original Days:			Revised Completion Date	
									Change Order Days	Previous Change Orders	Cum. Total C.O days		Revised Total Contract Days
								Original Contract Amount: \$ 87,479,450.00				1,094	8/1/2012
101	Approved by Acting GM Approved on January 2, 2014 101.1 Install Oil Sample Tubes at the Membrane Bioreactors (CR-308) PR 20214 (1599) 101.2 Drill and tap discharge risers and install 1" x 1/2" PVC bushings for anti-siphon at MBR Fine Screens (CR-340) PR 101.3 Remove existing 6-inch primary sludge pipe in the primary sludge pump room (CR-344) PR 20214 (1599) 101.4 Demolish existing equipment pads in former chlorine room (CR-350) PR 20214 (1599) 101.5 Groundwater Pump No. 9 Conduit Re-routing (CR-351) PR 20214 (1599) 101.6 Relocate existing 4-inch potable water (CR-356) PR 20214 (1599) 101.7 Modify Handrail at spent back wash tank (CR-358) PR 20214 (1599) 101.8 Install additional hose bibs in headworks load-out room (CR-361) PR 20214 (1599) 101.9 Install additional solenoid valves at mixed liquor pump station and storm water pump station (CR-333) PR 20214 (1599)	A A C C A B B A A A		\$49,268.74	\$4,615,998.34	\$4,665,267.08	5.3%	\$92,144,717.08	0	456	456	1,550	10/31/2013
102	Pending Approval by Exe. Director of Engineering and Planning Approved on January 7, 2014 102.1 Additional pressure switches at Permeate and Backpulse Pumps (CR-335) PR 20214 (1599) 102.2 Access Ramp to South Junction Structure for Vector Trucks (CR-333) PR 20214 (1599) 102.3 Miscellaneous Work Time and Materials (CR-364) PR 20214 (1599)	A B A		\$24,985.22	\$4,665,267.08	\$4,690,252.30	5.4%	\$92,169,702.30	0	456	456	1,550	10/31/2013
103	Pending Approval by Exe. Director of Engineering and Planning Approved on January 17, 2014 103.1 Non-compensatory Time Extension of 125Days per Jan 2, 2014 agreement	A		\$0.00	\$4,690,252.30	\$4,690,252.30	5.4%	\$92,169,702.30	225	456	681	1,775	6/13/2014

**MWRP Phase 2 Expansion and Flood Protection Improvements
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			Original Contract Amount: \$ 87,479,450.00					Original Days: 1,094				8/1/2012	
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104	Pending Approval by Board of Directors Pending Approval on January 24, 2014			\$242,461.11	\$4,690,252.30	\$4,932,713.41	5.6%	\$92,412,163.41	0	681	681	1,775	6/13/2014
	104.1 Riparian View Modifications (CR-83A) PR 20542 (1150), 30542 (1118)	A	\$189,182.30						0				
	104.2 Recycled Water Modifications (CR-227) PR 30214 (1706)	A	\$53,278.81						0				

A - District Convenience/Initiation - Project Related	\$ 1,751,063.55	2.0%
B - Differing Site Conditions	\$ 205,134.85	0.2%
C - Design Oversight	\$ 385,619.78	0.4%
D - District Convenience/Initiation - Non-Project Related	\$ 2,590,895.23	3.0%
TOTAL (A + B + C + D)	\$ 4,932,713.41	5.6%
TOTAL (A+B+C - (CCO No. 8 - SCADA))	\$ 3,477,638.93	4.0%