

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

September 24, 2018

**PLEDGE OF ALLEGIANCE-**

**CALL TO ORDER**                    5:00 p.m., Board Room, District Office  
15600 Sand Canyon Avenue, Irvine, California

**ROLL CALL**                         Directors LaMar, Matheis, 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 three 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.

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**COMMUNICATIONS TO THE BOARD**

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1.     A. Written:

      B. Oral:

2.     ITEMS RECEIVED TOO LATE TO BE AGENDIZED

      Recommendation: Determine the need to discuss and/or take immediate action on item(s).

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**PRESENTATION**

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3.     NATIONAL WATER RESEARCH INSTITUTE

      Executive Director Kevin Hardy will provide an overview of recent activities of the National Water Research Institute.

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**CONSENT CALENDAR**

**Next Resolution No. 2018-27**

**Items 4 -11**

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

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

5.     MINUTES OF REGULAR BOARD MEETING

      Recommendation: That the minutes of the September 10, 2018 Regular Board Meeting be approved as presented.

6.    AUGUST 2018 TREASURY REPORT

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the summary of fixed and variable rate debt, the Monthly Interest Rate SWAP Summary for August 2018, and Disclosure Report of Reimbursements to Board members and staff; approve the August 2018 Summary of Payroll ACH payments in the total amount of \$2,869,899 and approve the August 2018 Accounts Payable Disbursement Summary of Warrants 390193 through 391210, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$19,724,902.

7.    LETTER OF CREDIT EXTENSIONS FOR THE SERIES 1993 AND 2009A BONDS

Recommendation: That the Board authorize staff to extend the U.S. Bank Letters of Credit for the District's 1993 bonds and the 2009A bonds to December 2021 at an annual cost of 0.33%, and adopt a resolution by title authorizing certain actions in connection with extension of Letter of Credit (Consolidated Series 1993 and Consolidated Series Series 2009A)

Reso. 2018-

8.    PLANNING AREA 51 HERITAGE FIELDS CAPITAL FACILITIES

Recommendation: That the Board authorize the General Manager to accept Heritage Fields' construction contract with Fydaq Company, Inc. in the amount of \$167,667.21 for the District 2 Bake Parkway Recycled Water Improvements, Project 10447; authorize a budget increase in the amount of \$110,000, from \$163,000 to \$273,000, for the District 2 Bake Parkway Recycled Water Improvements, Project 10447; authorize a budget increase in the amount of \$240,000, from \$244,200 to \$484,200, for the District 4 Benchmark and Perspective Improvements, Project 06553; and approve Contract Change Order No. 2 to Project 06553 in the amount of \$249,965 for the addition of two additional manholes and jack and bore tasks to the scope of the District 4 Benchmark and Perspective Improvements.

9.    DYER ROAD WELLFIELD WELL NO. 5 REHABILITATION BUDGET ADDITION

Recommendation: That the Board authorize the addition of Project 10914 to the FY 2018-19 Capital Budget in the amount of \$770,000 for the rehabilitation of the Dyer Road Wellfield Well No. 5

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**CONSENT CALENDAR (Continued)**

**Items 4- 11**

10. AMENDED AND RESTATED SEWER SERVICE AGREEMENT FOR EL MORRO ELEMENTARY SCHOOL AND MORO CAMPGROUND

Recommendation: That the Board authorize the General Manager to execute the Amended and Restated Sewer Service Agreement between Orange County Sanitation District and IRWD to provide out-of-area sewer service to El Morro Elementary School and Moro Campground.

11. PLANNING AREA 6 PORTOLA SPRINGS CAPITAL FACILITIES

Recommendation: That the Board authorize the General Manager to accept Irvine Community Development Company's construction contract with Irvine Pipeline Company, Inc. in the amount of \$327,945 for the Portola Springs Neighborhood 5B and 5C Improvements, Projects 10100 and 10426.

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**CLOSED SESSION**

12. Performance Evaluation of Legal Counsel: PUBLIC EMPLOYEE PERFORMANCE EVALUATION – Pursuant to Government Code Section 54957(b). Title: Legal Counsel

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**OPEN SESSION**

13. Open Session

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**ACTION CALENDAR**

14. FISCAL YEAR 2018-19 AND FISCAL YEAR 2019-20 GENERAL COUNSEL CONTRACT VARIANCE

Recommendation: That the Board authorize the General Manager to execute a variance to the Professional Services Agreement with Lewis Brisbois Bisgaard & Smith LLP for general counsel legal services focused on municipal law, transactional and non-complex issues, and rate-setting with a term of October 1, 2018, to June 30, 2020, and a not-to-exceed value of \$1,500,000.

15. ZONE A TO RATTLESNAKE PUMP STATION CONSULTANT SELECTION

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Brown and Caldwell in the amount of \$1,247,625 for engineering design services for the Zone A to Rattlesnake Reservoir Pump Station, Project 05476.

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## **OTHER BUSINESS**

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Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, and 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.

- 16. A. General Manager's Report
- B. Directors' Comments

- 17. Community Updates

Receive an oral update from District liaison(s) regarding communities within IRWD's service area and discuss relevant community happenings.

- 18. 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.

September 24, 2018  
Prepared and  
Submitted by: K. Swan *KS*  
Approved by: Paul A. Cook *PAW*

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

October 11-16 Federal Advocacy Trip, Washington, D.C.

Mary Aileen Matheis

September 27 The Irvine Historical Society’s “An Evening on the Ranch” Program  
October 3 Costa Mesa Sanitation District’s State of the District  
October 9-12 Water Education Foundation’s Northern California Tour, Sacramento

Douglas Reinhart

August 2 Congresswoman Mimi Walters’s CA-45 Elected Officials Breakfast  
September 11 SOCWA Issues Meeting with Staff

Peer Swan

August 1 MWDOC Board Meeting with MWD Directors  
September 27 The Irvine Historical Society’s “An Evening on the Ranch” Program

John Withers

September 27 The Irvine Historical Society’s “An Evening on the Ranch” Program  
October 3-5 CALAFCO Annual Conference, Yosemite

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 HEREIN.

LIST OF EXHIBITS:

None.

September 24, 2018  
Prepared and  
Submitted by: L. Bonkowski  
Approved by: P. Cook *PAW* *B*

CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the September 10, 2018 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE SEPTEMBER 10, 2018 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – Septembers 10, 2018 Minutes of Regular Board Meeting

EXHIBIT "A"

MINUTES OF REGULAR MEETING – SEPTEMBER 10, 2018

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 Reinhart on September 10, 2018 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

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

Directors Absent: None.

Also Present: Acting General Manager Burton, Executive Director of Water Policy Weghorst, Executive Director of Finance and Administration Clary, Executive Director of Operations Chambers, Director of Water Recycling Operations Zepeda, Director of Water Resources Sanchez, Director of Administrative Services Mossbarger, Director of Treasury and Risk Management Jacobson, Director of Public Affairs Beeman, Legal Counsel Collins, Secretary Bonkowski, Assistant Secretary Swan, Principal Engineer Cortez, Principal Engineer Akiyoshi, Principal Engineer Mori, District Consultant Newell, Electrical and Instrumentation Manager O'Neill, User Support Manager Sharp, Customer Service Manager Matuska, Mr. Andrew Pollard, Ms. Melissa Baum-Haley, and members of the public.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: Mr. Colin Lavin of International Brotherhood of Electrical Workers Local 47 introduced himself to the Board and commented on the status of current bargaining efforts. Director Swan left the Board room.

ITEMS TOO LATE TO BE AGENDIZED: None.

CONSENT CALENDAR

On MOTION by Withers, seconded and carried, (Matheis, Reinhart, LaMar, Withers voting aye and Swan absent (4-0)), CONSENT CALENDAR ITEMS 3 THROUGH 9 WERE APPROVED AS FOLLOWS:

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

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

4. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the August 27, 2018 Regular Board Meeting be approved as presented.

CONSENT CALENDAR (Continued)

5. 2018 LEGISLATIVE AND REGULATORY UPDATE

Recommendation: Receive and file.

6. MICHELSON WATER RECYCLING PLANT SECURITY FENCING FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Michelson Water Recycling Plant Security Fencing, Projects 07824, 07825, 07826, 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.

7. UCI COOLING TOWER RECYCLED WATER CONVERSION PIPELINE PHASE II FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the UCI Cooling Tower Recycled Water Conversion Pipeline Phase II, Projects 07101 and 07102, 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.

8. RENEWAL OF GROUP MEDICAL AND DENTAL INSURANCE PLANS FOR PLAN YEAR 2019

Recommendation: That the Board authorize the continuation of the District's health insurance plans with CalPERS with changes in District and employee contribution rates as outlined in Exhibit "A", and authorize continuation of the District's dental insurance plans with ACWA/JPIA Delta Dental DPO Plan A with the child and adult orthodontic plan add-on with no changes to premium rates from the 2018 plan year.

9. REVISED DEFERRED COMPENSATION INVESTMENT POLICY STATEMENT

Recommendation: That the Board approve the Proposed Deferred Compensation Investment Policy Statement.

ACTION CALENDAR

ORANGE COUNTY GREAT PARK REACH A SEWER IMPROVEMENTS BUDGET INCREASE AND CONSTRUCTION AWARD

Director Swan returned to the Board room. Principal Engineer Mori reported that FivePoint constructed the Reach A sewer in 2014 to serve the planned development at the Great Park. Mr. Mori said that after constructing the sewer, FivePoint increased the number of proposed dwelling units at the Great Park which prompted the need to upsize the Reach A sewer. FivePoint has since upsized various portions of the sewer within its development, and IRWD is upsizing the offsite portion of the sewer through Irvine Company property and under the Interstate 5 freeway. He said that this project includes upsizing approximately 1,500 feet of 12-inch diameter sewer pipeline to 18-inch diameter sewer pipeline and miscellaneous manhole improvements.

Approximately 450 feet of the upsized sewer will be constructed under Interstate 5 freeway via bore and jack.

Mr. Mori said that staff advertised the project for bids to a select list of 12 contractors including CCL Contracting, E.J. Meyer Company, GCI Construction, Kennedy Pipeline Company, L&S Construction, Leatherwood Construction, Mladen Buntich Construction, Paulus Engineering, Steve P. Rados, Sukut Construction, T.E. Roberts, and W.A. Rasic Construction. The bid opening was held on August 30 with bids received from T.E. Roberts, L&S Construction, E.J. Meyer Company, Paulus Engineering, and Mladen Buntich Construction. Mr. Mori said that T. E. Roberts, Inc. is the apparent low bidder with a bid amount of \$1,251,110. The remaining bids ranged between \$1,781,400 and \$2,514,450. The engineer's estimate, prepared by MBF Consulting, was \$1,285,000. Following discussion relative to the future capacity requirements in that area and noting that a parallel system will remain in place, on MOTION by Matheis, seconded and unanimously carried, **THE BOARD APPROVED A BUDGET INCREASE IN THE AMOUNT OF \$1,055,100, FROM \$652,000 TO \$1,707,100, FOR PROJECT 10068 AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH T.E. ROBERTS, INC. IN THE AMOUNT OF \$1,251,110 FOR THE ORANGE COUNTY GREAT PARK REACH A SEWER IMPROVEMENTS, PROJECT 10068.**

#### PROPOSED IRWD POLICY PRINCIPLES REGARDING UPDATES TO METROPOLITAN WATER DISTRICT'S LOCAL RESOURCES PROGRAM

Executive Director of Water Policy Weghorst reported that the Metropolitan Water District of Southern California (MWD) is developing updates to its policies governing the implementation of its Local Resources Program (LRP) which provides incentives to water agencies for the development of water recycling, groundwater recovery, and seawater desalination projects.

Mr. Weghorst said that staff has prepared a policy position paper regarding updates to MWD's Local Resources Program. He said currently MWD offers three LRP incentive payment structures for the development of water recycling, groundwater recovery, and seawater desalination projects. He then reviewed the draft IRWD policy principles which provide a basis for IRWD's advocacy for making such improvements and for developing new approaches including: 1) MWD should consider the needs of its member agencies in implementing incentive programs other than the LRP to encourage water supply projects located both in and outside of MWD's service area that improve the water supply reliability of MWD and its member agencies; 2) MWD should establish criteria for prioritizing LRP incentives to local resource projects in areas with reduced water supply reliability as compared to other areas of MWD's service area; 3) LRP funding should not be provided to projects that result in local communities subsidizing other areas of MWD's service area; 4) LRP funding should not result in significant impacts to MWD treatment facilities; 5) LRP funding should also be offered to agencies for projects that will result in reductions in demands for untreated water from MWD with incentives being provided down to the cost of Full Service Tier-1 Untreated Rate offered by MWD such as recycled water storage projects; 6) MWD should index its LRP incentives to inflation to improve the feasibility and lifecycle costs of local resource projects; 7) MWD should expand the LRP or develop other incentives programs to encourage storm water and urban runoff capture and reuse projects that do not result in reductions in supplies to others; 8) A new incentive program should be implemented by MWD that promotes development of extraordinary supplies from projects located outside MWD's service area; 9) Incentives should be provided to fund large "on-site"

reuse projects that defer or avoid MWD's capital and/or operational costs; and 10) MWD should provide LRP incentives to desalination projects through separate funding initiatives that do not impair the ability of non-desalination related local projects to receive funding under existing MWD limits for LRP investments.

Director Matheis reported that this item was reviewed by the Water Resources Policy and Communication Committee on September 6, 2018. Following discussion, on MOTION by Matheis, seconded and unanimously carried, **THE BOARD ADOPTED THE PROPOSED IRWD POLICY POSITION PAPER REGARDING UPDATES TO METROPOLITAN WATER DISTRICT'S LOCAL RESOURCES PROGRAM.**

### GENERAL MANAGER'S REPORT

Acting General Manager Burton reported that the SARWQCB approved an NPDES permit which would allow tertiary water to flow to the San Diego Creek in emergency situations.

Mr. James Sharp was introduced to the Board as the District's new User Support Manager in the Information Systems Department who will focus on managing computer support provided to District users. Mr. Sharp then provided a background of his work history.

### DIRECTORS' COMMENTS

Director Withers thanked Mr. Colin Lavin for introducing himself to the Board. He further said he attended his regular meetings.

Director Matheis reported on her attendance at the Coastkeepers' "Toast of the Coast" event along with Directors LaMar and Withers, and a WACO meeting last Friday.

Director Swan reported on his attendance at an ACWA Energy meeting, a MWDOC Board Workshop with MWD Directors, an OCWD Board Meeting, a WACO meeting, an exposition at the Newport Beach City Hall, and an SWD/IRWD Ad Hoc Committee meeting.

Director LaMar reported on his attendance at a MWDOC Board workshop with MWD Directors, an OC Coastkeepers "Toast the Coast" event, and an ACWA Executive Director Selection Committee meeting where they chose a new Executive Director with background and reference checks in process.

Director Reinhart reported on his attendance at a Sustain OC Water Solution 3: Stretching Water Resources event, a MWDOC Board Workshop with MWD Directors, a SOCWA Board Meeting, and a WACO meeting.

### COMMUNITY UPDATES

Consultant Bruce Newell reported that he will be attending an annual pre-fire season meeting this Thursday.

### ADJOURNMENT

President Reinhart adjourned the meeting at 5:49 p.m.

APPROVED and SIGNED this 24th day of September, 2018.

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President, IRVINE RANCH WATER DISTRICT

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Secretary, IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

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Claire Hervey Collins, Legal Counsel  
– Lewis Brisbois

September 24, 2018  
Prepared by: J. Davis/T. Fournier  
Submitted by: R. Jacobson/C. Clary  
Approved by: Paul A. Cook

CONSENT CALENDAR

AUGUST 2018 TREASURY REPORTS

SUMMARY:

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

- A. The Investment Summary Report for August 2018. This Investment Summary Report is in conformity with the 2018 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Summary of Fixed and Variable Debt as of August 31, 2018, as outlined in Exhibit "B".
- C. The Monthly Interest Rate Swap Summary as of August 31, 2018, as outlined in Exhibit "C".
- D. The August 31, 2018 Disbursement Summary of warrants 390193 through 391210, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$19,724,902 as outlined in Exhibit "D".
- E. The Summary of Payroll ACH payments in the total amount of \$2,869,899 as outlined in Exhibit "E".
- F. The Disclosure Report of Reimbursements to Board Members and Staff for August 2018, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "F".

FISCAL IMPACTS:

As of August 31, 2018, the book value of the investment portfolio was \$358,135,842, with a 1.51% rate of return and a market value of \$355,469,281. Based on the District's June 30, 2018 quarterly real estate investment rate of return of 8.89%, the weighted average return for the fixed income and real estate investments was 3.72%.

As of August 31, 2018, the outstanding principal amount of fixed and variable rate debt was \$680,020,000. The monthly weighted average all-in variable rate was 1.66%. Including the District's weighted average fixed rate bond issues of 3.70% and the previous month's negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 3.65%.

As of August 31, 2018, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in August from all swaps was negative \$412,382.

Payroll ACH payments totaled \$2,869,899, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for August totaled \$19,724,902.

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 SUMMARY OF FIXED AND VARIABLE RATE DEBT, THE MONTHLY INTEREST RATE SWAP SUMMARY FOR AUGUST 2018, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE AUGUST 2018 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,869,899 AND APPROVE THE AUGUST 2018 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 390193 THROUGH 391210, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$19,724,902.

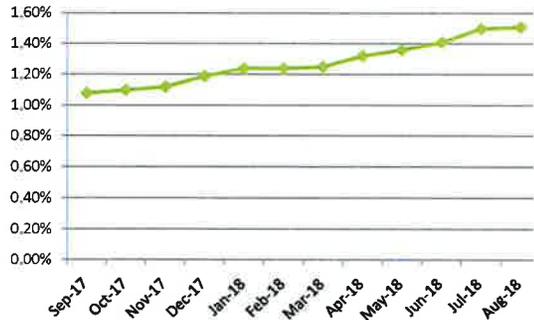
LIST OF EXHIBITS:

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

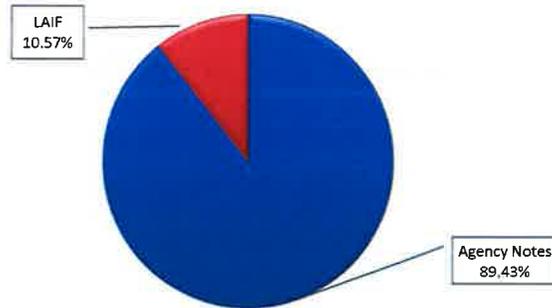
# Exhibit "A"

## Irvine Ranch Water District Investment Portfolio Summary August 2018

Monthly Fixed Income Yield



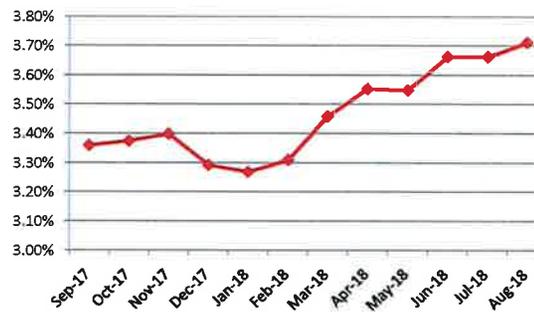
Portfolio Distribution



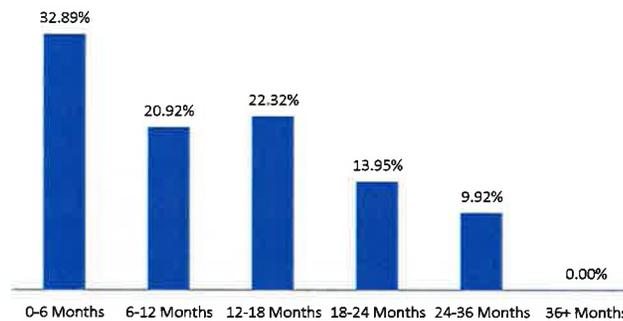
Investment Summary

Type	PAR	Book Value	Market Value
Agency Notes	320,550,000	320,235,842	317,640,273
LAIF	37,900,000	37,900,000	37,829,008
<b>Grand Total</b>	<b>358,450,000</b>	<b>358,135,842</b>	<b>355,469,281</b>

Weighted Average Return  
Including Real Estate Portfolio



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
Fed Home Loan Bank	100,000,000	27.90%
Fed Natl Mortgage Assoc	80,550,000	22.47%
Fed Farm Credit Bank	75,000,000	20.92%
Fed Home Loan Mortgage Corp	65,000,000	18.13%
State of California Treasury - LAIF	37,900,000	10.57%
<b>Grand Total</b>	<b>358,450,000</b>	<b>100%</b>

IRVINE RANCH WATER DISTRICT  
INVESTMENT SUMMARY REPORT

08/31/18

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE <sup>(1)</sup> 8/31/2018	UNREALIZED <sup>(2)</sup> GAIN/(LOSS)
08/23/17			09/01/18		LAIF	State of California Tsy.	\$37,900,000		1.760%	\$37,900,000.00	\$37,900,000.00	37,829,008.34	(70,991.66)
09/01/16	NA	NA	09/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.125%	0.916%	5,021,000.00	5,000,367.43	4,998,600.00	(1,767.43)
12/28/16	NA	NA	09/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.125%	1.225%	4,991,500.00	4,999,823.20	4,998,600.00	(1,223.20)
10/12/16	N/A	N/A	09/27/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	0.900%	0.952%	9,990,000.00	9,999,356.64	9,991,900.00	(7,456.64)
10/12/16	N/A	N/A	09/28/18	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.880%	0.942%	4,994,000.00	4,999,606.15	4,995,600.00	(4,006.15)
09/01/16	NA	NA	10/01/18	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.030%	0.925%	5,010,750.00	5,000,424.34	4,995,700.00	(4,724.34)
10/12/16	N/A	N/A	10/12/18	Aaa/NR/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.000%	1.041%	9,992,000.00	9,999,331.51	9,988,100.00	(11,231.51)
10/12/16	N/A	N/A	11/27/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.625%	0.956%	10,140,360.00	10,019,353.76	9,987,300.00	(32,053.76)
12/21/16	N/A	N/A	12/05/18	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.100%	1.319%	4,978,900.00	5,011,385.13	4,985,100.00	(26,285.13)
09/01/16	NA	NA	12/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	0.941%	5,091,300.00	5,006,024.78	4,993,150.00	(12,874.78)
12/27/16	NA	NA	12/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	1.320%	5,041,536.20	4,997,192.58	4,993,150.00	(4,042.58)
09/01/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.009%	4,993,000.00	4,998,800.23	4,973,900.00	(24,900.23)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.035%	4,990,500.00	4,998,194.31	4,973,900.00	(24,294.31)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.040%	4,990,000.00	4,998,099.27	4,973,900.00	(24,199.27)
10/12/16	Continuous after	02/12/18	02/12/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.050%	1.093%	9,990,000.00	9,997,842.91	9,946,400.00	(51,442.91)
09/01/16	NA	NA	03/08/19	Aaa/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	1.500%	0.964%	5,066,500.00	5,013,618.74	4,979,750.00	(33,868.74)
03/21/18	NA	NA	03/21/19	Aaa/NA/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	2.125%	2.125%	10,000,000.00	10,000,000.00	9,990,100.00	(9,900.00)
10/12/16	N/A	N/A	03/29/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.050%	4,999,950.00	4,999,987.25	4,963,600.00	(36,387.25)
10/12/16	N/A	N/A	04/15/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	1.125%	0.992%	10,032,800.00	10,008,818.36	9,925,400.00	(83,418.36)
10/31/16	N/A	N/A	04/26/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.060%	4,998,750.00	4,999,672.00	4,957,900.00	(41,772.00)
09/01/16	N/A	N/A	05/28/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.030%	1.048%	4,997,550.00	4,999,340.29	4,950,700.00	(48,640.29)
04/19/18	N/A	N/A	05/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.750%	2.252%	4,972,500.00	4,981,644.09	4,975,700.00	(5,944.09)
09/01/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	0.987%	5,087,400.00	5,024,602.76	4,970,450.00	(54,152.76)
10/12/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	1.103%	5,068,515.88	5,021,503.45	4,970,450.00	(51,053.45)
10/12/16	NA	NA	07/19/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.875%	1.098%	4,969,652.90	4,989,754.10	4,933,350.00	(56,404.10)
09/01/16	NA	NA	07/26/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.180%	4,995,700.00	4,998,666.92	4,938,400.00	(60,266.92)
09/01/16	N/A	N/A	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.160%	4,998,500.00	4,999,503.67	4,935,500.00	(64,003.67)
09/01/16	NA	NA	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.132%	4,999,000.00	4,999,669.11	4,934,300.00	(65,369.11)
09/28/16	Quarterly	03/09/17	09/09/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.142%	4,997,500.00	4,999,128.82	4,934,050.00	(65,078.82)
04/10/18	NA	NA	09/13/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.375%	2.288%	5,006,000.00	5,004,341.65	4,993,100.00	(11,241.65)
09/28/16	Continuous after	12/27/16	09/27/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.250%	1.189%	5,001,500.00	5,000,536.11	4,935,250.00	(65,286.11)
10/12/16	Continuous after	10/03/17	10/03/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.125%	1.160%	9,989,780.00	9,996,075.75	9,854,600.00	(141,475.75)
10/12/16	Continuous after	10/11/17	10/11/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.120%	1.205%	9,975,000.00	9,990,287.93	9,845,700.00	(144,587.93)
11/08/16	Quarterly	05/08/17	11/08/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.250%	1.245%	5,000,750.00	5,000,296.58	4,926,250.00	(74,046.58)
11/28/16	NA	NA	11/15/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.375%	1.440%	4,990,550.00	4,996,157.12	4,933,650.00	(62,507.12)
11/28/16	Quarterly	05/25/17	11/25/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.400%	1.503%	4,985,000.00	4,993,818.68	4,924,850.00	(68,968.68)
12/12/16	NA	NA	12/12/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.450%	1.440%	5,001,450.00	5,000,617.64	4,929,550.00	(71,067.64)
12/21/16	NA	NA	12/19/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.500%	1.621%	4,982,350.00	4,992,345.75	4,931,400.00	(60,945.75)

IRVINE RANCH WATER DISTRICT  
INVESTMENT SUMMARY REPORT

08/31/18

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE <sup>(1)</sup> 8/31/2018	UNREALIZED <sup>(2)</sup> GAIN/(LOSS)
12/20/17	NA	NA	01/17/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.500%	1.932%	4,956,250.00	4,965,080.80	4,927,650.00	(37,430.80)
10/16/17	NA	NA	02/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.612%	4,987,025.00	4,991,825.00	4,919,250.00	(72,575.00)
12/20/17	NA	NA	03/13/20	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	4.125%	1.940%	5,237,200.00	5,192,615.72	5,112,850.00	(79,765.72)
10/03/17	NA	NA	04/20/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.375%	1.630%	4,968,350.00	4,979,682.74	4,900,800.00	(78,882.74)
06/29/18	NA	NA	04/23/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.500%	2.544%	4,996,000.00	4,996,397.52	4,989,100.00	(7,297.52)
06/29/18	NA	NA	05/15/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.550%	2.566%	4,998,450.00	4,998,594.61	4,990,000.00	(8,594.61)
11/21/17	Continuous after	02/20/18	05/20/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.830%	1.930%	4,987,500.00	4,977,516.23	4,929,750.00	(47,766.23)
06/11/18	NA	NA	06/11/20	Aaa/NR/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.500%	2.570%	4,997,100.00	4,997,425.31	4,986,900.00	(10,525.31)
11/10/17	NA	NA	06/22/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.750%	4,968,000.00	4,991,547.75	4,902,300.00	(89,247.75)
04/19/18	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.535%	4,886,000.00	4,904,475.39	4,894,900.00	(9,575.39)
06/08/18	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.559%	4,890,100.00	4,902,030.40	4,894,900.00	(7,130.40)
12/20/17	Quarterly	11/10/16	08/10/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.450%	2.052%	4,923,000.00	4,935,220.95	4,887,250.00	(47,970.95)
05/21/18	Continuous after	12/01/17	09/01/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.680%	2.735%	4,884,250.00	4,898,545.26	4,898,600.00	54.74
12/12/17	One Time	09/28/18	09/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	2.000%	2.000%	5,000,000.00	5,000,000.00	4,924,350.00	(75,650.00)
10/31/17	One Time	10/30/18	10/30/20	Aaa/NR/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,550,000	1.850%	1.850%	5,550,000.00	5,550,000.00	5,438,223.00	(111,777.00)
12/13/17	Continuous after	08/23/17	11/23/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.770%	2.060%	4,958,750.00	4,964,615.47	4,896,450.00	(68,165.47)
12/13/17	Quarterly	05/24/18	11/24/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.900%	2.023%	4,982,500.00	4,984,986.07	4,903,700.00	(81,286.07)
11/30/17	NA	NA	11/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.850%	1.964%	4,983,550.00	4,987,700.23	4,904,850.00	(82,850.23)
12/20/17	NA	NA	12/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.875%	2.023%	4,978,400.00	4,981,393.48	4,909,150.00	(72,243.48)

TOTAL INVESTMENTS

\$358,450,000

\$358,363,969.98

\$358,135,841.91

\$355,469,281.34

Petty Cash  
Ck Balance

Bank of America

3,400.00

2,325,200.51

\$360,692,570.49

<sup>(1)</sup> 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.

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

<sup>(3)</sup> Real estate rate of return is based on most recent quarter end return

Outstanding Variable Rate Debt	\$281,100,000
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)	\$151,100,000
Investment Balance:	\$360,692,570
Investment to Variable Rate Debt Ratio:	239%
Portfolio - Average Number of Days To Maturity <sup>(4)</sup>	330

	Investment Portfolio	Real Estate <sup>(3)</sup> Portfolio	Weighted Avg. Return
August	1.51%	8.89%	3.72%
July	1.50%	8.89%	3.66%
Change	0.01%		0.06%

This Investment Summary Report is in conformity with the 2018 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.

\*S - Step up

IRVINE RANCH WATER DISTRICT  
SUMMARY OF MATURITIES

08/31/18

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Collateral Deposit	US Treasury
08/18	\$37,900,000	10.57%	\$37,900,000				
09/18	25,000,000	6.97%		25,000,000			
10/18	15,000,000	4.18%		15,000,000			
11/18	10,000,000	2.79%		10,000,000		-	
12/18	15,000,000	4.18%		15,000,000			
01/19	15,000,000	4.18%		15,000,000			
02/19	10,000,000	2.79%		10,000,000			
03/19	20,000,000	5.58%		20,000,000			
04/19	15,000,000	4.18%		15,000,000			
05/19	10,000,000	2.79%		10,000,000			
06/19	10,000,000	2.79%		10,000,000			
07/19	10,000,000	2.79%		10,000,000			

<b>SUB-TOTAL</b>	<b>\$192,900,000</b>	<b>53.82%</b>	<b>\$37,900,000</b>	<b>\$155,000,000</b>			
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13 Months - 3 YEARS

8/01/2019 - 11/30/19	60,000,000	16.74%		60,000,000			
12/01/19 - 2/28/2020	20,000,000	5.58%		20,000,000			
3/01/2020 - 5/31/2020	30,000,000	8.37%		30,000,000			
6/01/2020 - 8/31/2020	20,000,000	5.58%		20,000,000			
9/01/2020 - 12/31/2020	35,550,000	9.92%		35,550,000			
1/01/2021 - 2/28/2021	-						
	-						
	-						
	-						

<b>TOTALS</b>	<b>\$358,450,000</b>	<b>100.00%</b>	<b>\$37,900,000</b>	<b>\$320,550,000</b>			
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% OF PORTFOLIO

10.57%

89.43%

Irvine Ranch Water District  
 Summary of Real Estate - Income Producing Investments  
 6/30/2018

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MARKET VALUE 6/30/2018	ANNUALIZED RATE OF RETURN QUARTER ENDED 6/30/2018
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 145,000,000	18.74%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 30,670,120	8.55%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 11,500,000	9.42%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 9,000,000	5.33%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 11,000,000	8.85%
<b>Total - Income Properties</b>				<b>\$ 72,569,826</b>	<b>\$ 207,170,120</b>	<b>14.39%</b>
<b>OTHER REAL ESTATE</b>						
<b>DESCRIPTION</b>						
Serrano Summit - Promissory Note	Sep-17	NA	NA	\$ 81,600,000	\$ 81,600,000	4.00%
<b>Total - Income Producing Real Estate Investments</b>				<b>\$ 154,169,826</b>	<b>\$ 288,770,120</b>	<b>8.89%</b>

**IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT**  
**INVESTMENT ACTIVITY**  
**Aug-18**

**MATURITIES/SALES/CALLS**

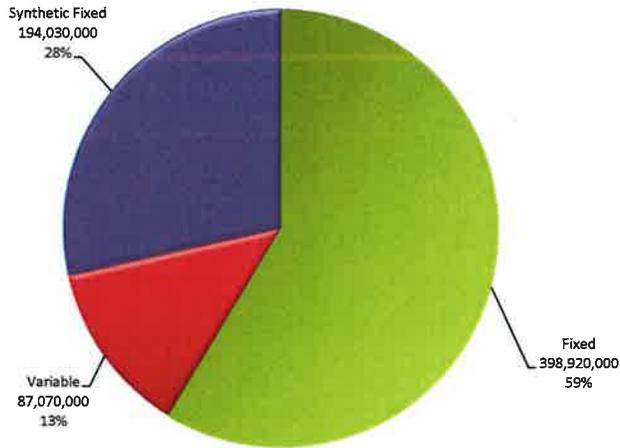
**PURCHASES**

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
8/15/2018	FHLMC - NOTE	\$5,000,000	1.25%					
8/28/2018	FHLB - Note	\$5,000,000	1.00%					

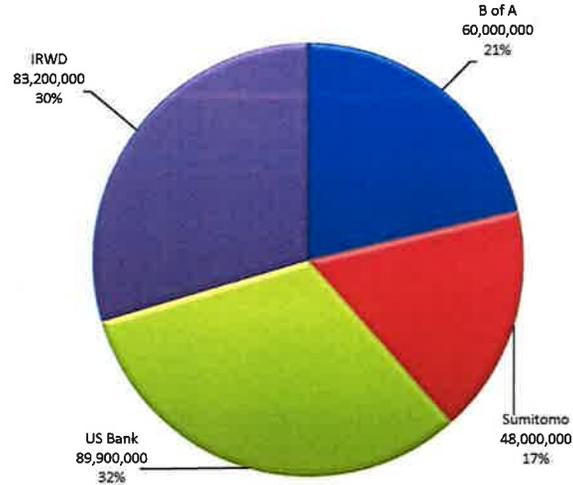
# Exhibit "B"

## Irvine Ranch Water District Summary of Fixed and Variable Rate Debt August 2018

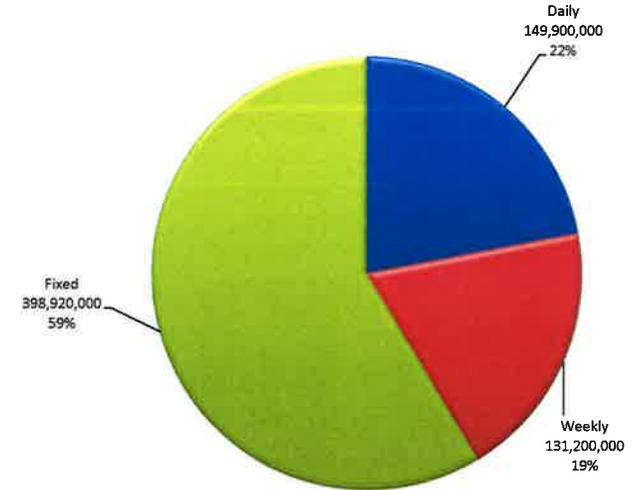
**Current Debt Mix By Type**



**Letters of Credit / Support**



**Current Debt Rate Reset**



**Outstanding Par by Series**

Series	Issue Date	Maturity Date	Remaining Principal	Percent	Letter of Credit	Rmkt Agent	Mode	Reset
Series 1993	05/19/93	04/01/33	\$29,900,000	4.40%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$48,000,000	7.06%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$49,920,000	7.34%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$33,280,000	4.89%	IRWD	Morgan	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$60,000,000	8.82%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$60,000,000	8.82%	B of A	Goldman	Variable	Daily
2010 Refunding COPS	02/23/10	03/01/20	\$3,775,000	0.56%	N/A	N/A	Fixed	Fixed
2016 COPS	09/01/16	03/01/46	\$116,745,000	17.17%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	25.73%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	15.21%	N/A	N/A	Fixed	Fixed
<b>Total</b>			<b>\$680,020,000</b>	<b>100.00%</b>				

**IRVINE RANCH WATER DISTRICT**  
**SUMMARY OF FIXED & VARIABLE RATE DEBT**

August-18

ITN

Daily

Weekly

**GENERAL BOND INFORMATION**

**LETTER OF CREDIT INFORMATION**

**TRUSTEE INFORMATION**

VARIABLE RATE ISSUES	Issue Date	Maturity Date	Principal Payment Date	Payment Date	Original Par Amount	Remaining Principal	Letter of Credit	Reimbursement Agreement Date	L/C Exp. Date	MOODYS	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee
SERIES 2008-A Refunding	04/24/08	07/01/35	JUL 1	5th Bus. Day	\$60,215,000	\$48,000,000	SUMITOMO	04/01/11	07/21/21	A1/P-1	A/A-1	A/F1	\$48,710,137	0.3150%	\$153,437	BAML	WED	0.07%	\$33,600	BANK OF NY
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	OCT 1	1st Bus. Day	\$60,545,000	\$49,920,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$62,400	BANK OF NY
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	OCT 1	1st Bus. Day	\$40,370,000	\$33,280,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Morgan S.	WED	0.13%	\$41,600	BANK OF NY
SERIES 2009 - A	06/04/09	10/01/41	OCT 1	1st Bus. Day	\$75,000,000	\$60,000,000	US BANK	04/01/11	12/22/20	Aa2/VMIG1	AA-/A-1+	AA/F1+	\$60,670,685	0.4100%	\$246,750	US Bank	DAILY	0.07%	\$42,000	US BANK
SERIES 2009 - B	06/04/09	10/01/41	OCT 1	1st Bus. Day	\$75,000,000	\$60,000,000	B of A	04/01/11	07/15/19	A1/VMIG1	A/A-1	A1/F1+	\$60,670,685	0.4000%	\$242,683	Goldman	DAILY	0.10%	\$60,000	US BANK

<b>\$349,430,000</b>	<b>\$281,100,000</b>	<b>SUB-TOTAL VARIABLE RATE DEBT</b>	<b>\$200,354,542</b>	<b>0.3718%</b>	<b>\$744,869</b>	<b>(Wt. Avg)</b>	<b>0.10%</b>	<b>\$269,500</b>	<b>(Wt. Avg)</b>
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**FIXED RATE ISSUES**

2010 REFUNDING COPS	02/23/10	03/01/20	Mar - 1	MAR/SEPT	\$85,145,000	\$3,775,000	N/A	N/A	N/A	Aa1	AAA	AAA	N/A	BANK OF NY						
2010 GO Build America Taxable Bonds	12/16/10	05/01/40	MAY (2025)	MAY/NOV	\$175,000,000	\$175,000,000	N/A	N/A	N/A	Aa1	AAA	NR	N/A	US BANK						
2016 COPS	09/01/16	03/01/46	Mar - 1	MAR/SEPT	\$116,745,000	\$116,745,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	US BANK						
SERIES 2016	10/12/16	02/01/46	Feb - 1	FEB/AUG	\$103,400,000	\$103,400,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	BANK OF NY						

**\$480,290,000**    **\$398,920,000**    **SUB-TOTAL FIXED RATE DEBT**

**\$829,720,000**    **\$680,020,000**    **TOTAL - FIXED & VARIABLE RATE DEBT**

**Remarketing Agents**

Goldman	109,920,000	39%
Morgan Stanley	33,280,000	12%
BAML	77,900,000	28%
US Bank	60,000,000	21%
	<b>281,100,000</b>	

**GO VS COP's**

GO:	559,500,000	82%
COPS:	120,520,000	18%
Total	<b>680,020,000</b>	

**LOC Banks**

SUMITOMO	48,000,000
BANK OF AMERICA	60,000,000
US BANK	89,900,000
	<b>197,900,000</b>

**Breakdown Between Variable & Fixed Rate Mode**

Daily Issues	149,900,000	22%
Weekly Issues	48,000,000	7%
ITN Issues	83,200,000	12%
Sub-Total	<b>281,100,000</b>	
Fixed Rate Issues	\$398,920,000	59%
Sub-Total - Fixed	<b>398,920,000</b>	
TOTAL DEBT		
FIXED & VAR.	<b>680,020,000</b>	100%

IRVINE RANCH WATER DISTRICT  
SUMMARY OF DEBT RATES  
Aug-18

Rmkt Agent Mode	GOLDMAN DAILY	GOLDMAN WEEKLY	MORGAN STANLEY WEEKLY	MERRILL LYNCH DAILY	MERRILL LYNCH WEEKLY	US BANK DAILY
Bond Issue	2009 - B	2011 A-1	2011 A-2	1993	2008-A	2009-A
Par Amount	60,000,000	49,920,000	33,280,000	29,900,000	48,000,000	60,000,000
Bank	BOFA	(SIFMA -1)	(SIFMA -1)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
8/1/2018	1.16%	0.93%	0.93%	1.07%	0.63%	1.25%
8/2/2018	1.10%	1.28%	1.28%	1.16%	1.06%	1.15%
8/3/2018	1.17%	1.28%	1.28%	1.22%	1.06%	1.15%
8/4/2018	1.17%	1.28%	1.28%	1.22%	1.06%	1.15%
8/5/2018	1.17%	1.28%	1.28%	1.22%	1.06%	1.15%
8/6/2018	1.17%	1.28%	1.28%	1.26%	1.06%	1.25%
8/7/2018	1.23%	1.28%	1.28%	1.24%	1.06%	1.25%
8/8/2018	1.23%	1.28%	1.28%	1.20%	1.06%	1.22%
8/9/2018	1.20%	1.44%	1.44%	1.16%	1.26%	1.22%
8/10/2018	1.22%	1.44%	1.44%	1.19%	1.26%	1.22%
8/11/2018	1.22%	1.44%	1.44%	1.19%	1.26%	1.22%
8/12/2018	1.22%	1.44%	1.44%	1.19%	1.26%	1.22%
8/13/2018	1.22%	1.44%	1.44%	1.24%	1.26%	1.22%
8/14/2018	1.23%	1.44%	1.44%	1.24%	1.26%	1.24%
8/15/2018	1.23%	1.44%	1.44%	1.26%	1.26%	1.27%
8/16/2018	1.23%	1.56%	1.56%	1.27%	1.43%	1.30%
8/17/2018	1.29%	1.56%	1.56%	1.24%	1.43%	1.30%
8/18/2018	1.29%	1.56%	1.56%	1.24%	1.43%	1.30%
8/19/2018	1.29%	1.56%	1.56%	1.24%	1.43%	1.30%
8/20/2018	1.31%	1.56%	1.56%	1.20%	1.43%	1.30%
8/21/2018	1.31%	1.56%	1.56%	1.21%	1.43%	1.27%
8/22/2018	1.28%	1.56%	1.56%	1.21%	1.43%	1.25%
8/23/2018	1.28%	1.57%	1.57%	1.24%	1.39%	1.25%
8/24/2018	1.28%	1.57%	1.57%	1.21%	1.39%	1.25%
8/25/2018	1.28%	1.57%	1.57%	1.21%	1.39%	1.25%
8/26/2018	1.28%	1.57%	1.57%	1.21%	1.39%	1.25%
8/27/2018	1.26%	1.57%	1.57%	1.24%	1.39%	1.25%
8/28/2018	1.26%	1.57%	1.57%	1.23%	1.39%	1.27%
8/29/2018	1.26%	1.57%	1.57%	1.25%	1.39%	1.30%
8/30/2018	1.24%	1.55%	1.55%	1.28%	1.34%	1.30%
8/31/2018	1.24%	1.55%	1.55%	1.27%	1.34%	1.30%
<b>Avg Interest Rates</b>	1.24%	1.45%	1.45%	1.22%	1.27%	1.25%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.40%			0.33%	0.32%	0.41%
<b>All-In Rate</b>	<b>1.74%</b>	<b>1.58%</b>	<b>1.58%</b>	<b>1.65%</b>	<b>1.65%</b>	<b>1.73%</b>
Par Amount		109,920,000	33,280,000		77,900,000	60,000,000

Interest Rate Mode	Percent of Total Variable Rate Debt	Par Outstanding	Weighted All-In Average Rate	Base Rate Average
Daily	53.33%	149,900,000	1.72%	1.24%
Weekly	46.67%	131,200,000	1.60%	1.38%
<b>Fixed</b>	100.00%	<b>\$ 281,100,000</b>	1.66%	1.31%
COPS 2010	0.95%	3,775,000	3.82%	
COPS 2016	29.27%	116,745,000	2.90%	
BABS 2010	43.87%	175,000,000	4.45%	(1)
SERIES 2016	25.92%	103,400,000	3.32%	
	100.00%	<b>\$ 398,920,000</b>	3.70%	
<b>All-In Debt Rate Including \$130 Million Notional Amount of Swaps</b>				<b>3.65%</b>

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 6.2%

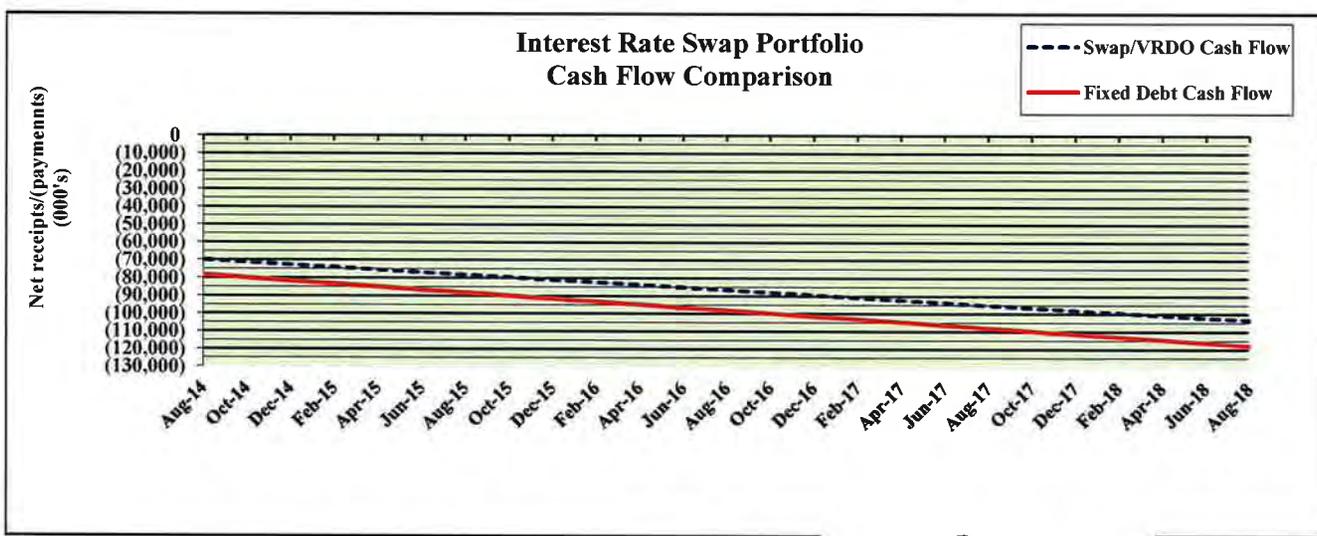
**IRVINE RANCH WATER DISTRICT  
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL  
August 31, 2018**

Exhibit "C"

								LIBOR Avg %			Prior Mo.		Current Mo.		12-Mo Avg	
								2.08%	2.07%	1.73%						
Current Fiscal Year Active Swaps								Cash Flow				(Since 6/06)	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			
<b>Fixed Payer Swaps - By Effective Date</b>																
6/4/2006	6/4/2019	0.8	ML	\$ 20,000,000	FXP	LIBOR	6.200%	(73,166)	(67,464)	\$ (140,630)	\$ (11,997,022)	\$ 19,443,054	\$ (556,946)			
6/4/2006	6/4/2019	0.8	CG	20,000,000	FXP	LIBOR	6.200%	(73,166)	(67,464)	(140,630)	(11,997,022)	19,443,161	(556,839)			
6/17/2006	6/17/2019	0.8	CG	30,000,000	FXP	LIBOR	6.140%	(108,270)	(100,096)	(208,366)	(17,792,074)	29,141,411	(858,589)			
3/10/2007	3/10/2029	10.5	ML	30,000,000	FXP	LIBOR	5.687%	(96,385)	(88,679)	(185,064)	(16,036,972)	22,273,806	(7,726,194)			
3/10/2007	3/10/2029	10.5	CG	30,000,000	FXP	LIBOR	5.687%	(96,385)	(88,679)	(185,064)	(16,036,972)	22,271,541	(7,728,459)			
<b>Totals/Weighted Avgs</b>		<b>5.3</b>		<b>\$ 130,000,000</b>			<b>5.949%</b>	<b>\$ (447,372)</b>	<b>\$ (412,382)</b>	<b>\$ (859,754)</b>	<b>\$ (73,860,060)</b>	<b>\$ 112,572,973</b>	<b>\$ (17,427,027)</b>			
<b>Total Current Year Active Swaps</b>				<b>\$ 130,000,000</b>				<b>\$ (447,372)</b>	<b>\$ (412,382)</b>	<b>\$ (859,754)</b>	<b>\$ (73,860,060)</b>	<b>\$ 112,572,973</b>	<b>\$ (17,427,027)</b>			

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
<b>Total Current Year Terminated Swaps</b>				<b>\$ -</b>				<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

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								
<b>\$ (447,372)</b>	<b>\$ (412,382)</b>	<b>\$ (859,754)</b>	<b>\$ (73,860,060)</b>	<b>\$ 112,572,973</b>	<b>\$ (17,427,027)</b>								



Cash Flow Comparison	
Synthetic Fixed vs. Fixed Rate Debt	
	<u>Cash Flow to Date</u>
Synthetic Fixed =	\$103,364,275
Fixed Rate =	\$125,090,937
<b>Assumptions:</b>	
- 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 "D"

IRWD Ledger Upgrade

Void Payment Register

Report Date: 31-AUG-2018 15:07

Include Zero Amount Payments: Yes  
Display Payee Address: No

Period From: 01-AUG-18

Page: 1  
To: 31-AUG-18  
Date: Void Date

Bank: Bank of America N.A.

Branch: Los Angeles

Account: Checking AP and PR

Bank Account Currency: USD

Payment Currency: USD ( US Dollar )

Payment Number	Date	Payee Name	Site	Address	Payment Amount	Void Date
Payment Document: IRWD CHECK						
384300	01-FEB-18	MONTBURY HOA	INS	CIAIM	980.00	29-AUG-18
385442	08-MAR-18	PACIFIC HYDROTECH CORPORATI	ESR	1001737558	10,642.38	02-AUG-18
386622	04-APR-18	CHA, MIJUNG	PAY		93.76	21-AUG-18
386624	04-APR-18	CHEN, ANNIE	PAY		35.01	21-AUG-18
386649	04-APR-18	FANG, BRIAN	PAY		33.46	21-AUG-18
386679	04-APR-18	HOPKINS, LENE	PAY		40.66	21-AUG-18
386722	04-APR-18	MURPHY, TOD	PAY		181.10	22-AUG-18
386747	04-APR-18	PISHVAIY, REZA	PAY		104.03	22-AUG-18
386985	12-APR-18	ROETHKE, SWARUPA	PAY		67.36	21-AUG-18
386995	12-APR-18	SCHWARZ, ROBERTA	PAY		73.48	21-AUG-18
387022	12-APR-18	TULLERNES, ROBIN	PAY		40.40	21-AUG-18
387046	12-APR-18	ZHU, QIYAO	PAY		25.40	21-AUG-18
387075	19-APR-18	AYNECHI, TIBA	PAY		46.02	21-AUG-18
387134	19-APR-18	FRAME, TJ	PAY		12.40	21-AUG-18
387243	19-APR-18	YIN, YU	PAY		36.26	21-AUG-18
387247	19-APR-18	ZHAO, JINGNAN	PAY		19.13	21-AUG-18
387271	26-APR-18	ALHASHIMI, BASHIR	PAY		81.09	21-AUG-18
387425	26-APR-18	TORRES, MONICA	PAY		40.00	21-AUG-18
387442	26-APR-18	ZHONG, XIAOPING	PAY		37.98	21-AUG-18
387622	10-MAY-18	ABAM, FARDOSA	PAY		421.21	28-AUG-18
389486	05-JUL-18	ALPERT, RICK	PAY		55.31	02-AUG-18
389794	12-JUL-18	YUXING SHEN AND MIN YU	PAY		67.11	27-AUG-18
389929	19-JUL-18	PRADO, LAURIE	PAY		69.70	02-AUG-18
389952	19-JUL-18	SNYDER LANGSTON L.P.	PAY		1,390.07	23-AUG-18
389953	19-JUL-18	SNYDER LANGSTON, L.P.	PAY		2,192.46	23-AUG-18
390648	16-AUG-18	CHANG, TIENSAING	PAY		44.35	17-AUG-18
390861	23-AUG-18	CARLA MARTINEZ AND EDUARDO	PAY		22.28	27-AUG-18
390986	23-AUG-18	SHERMAN AND CANDICE	PAY		41.99	27-AUG-18

Payment Document Subtotal 16,894.40

Bank Account Subtotal 16,894.40

Report Total 16,894.40 Voids

Report Count: 28  
IRWD Ledger Upgrade

Void Payment Register

Period From: 01-AUG-18

Report Date: 31-AUG-2018 15:07

Include Zero Amount Payments: Yes  
Display Payee Address: No

Page: 2  
To: 31-AUG-18  
Date: Void Date

\*\*\* End of Report \*\*\*

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390193		02-AUG-18	Bertsch, Frederick J (Jeff)		124.11	06-AUG-18	124.11	Reconciled
390194		02-AUG-18	Bonkowski, Thomas J (Thomas)		27.30	06-AUG-18	27.30	Reconciled
390195		02-AUG-18	Fournier, Tanja L (Tanja)		79.53	09-AUG-18	79.53	Reconciled
390196		02-AUG-18	Hall, William P (William)		180.00	06-AUG-18	180.00	Reconciled
390197		02-AUG-18	Hufana, Eugenio D		195.11	02-AUG-18	195.11	Reconciled
390198		02-AUG-18	Humeny, Nicholas		140.06	13-AUG-18	140.06	Reconciled
390199		02-AUG-18	Justice, Jack L (Jack)		90.00	16-AUG-18	90.00	Reconciled
390200		02-AUG-18	Lew, Kelly N (Kelly)		115.00	06-AUG-18	115.00	Reconciled
390201		02-AUG-18	Mossbarger, Anthony J (Tony)		126.02	02-AUG-18	126.02	Reconciled
390202		02-AUG-18	Nash, Joel		43.06	08-AUG-18	43.06	Reconciled
390203		02-AUG-18	Navarro, Hector R		228.54	22-AUG-18	228.54	Reconciled
390204		02-AUG-18	Shih, Han-Tsuei (Josephine)		296.48	10-AUG-18	296.48	Reconciled
390205		02-AUG-18	Swan, Peer		1,818.14	02-AUG-18	1,818.14	Reconciled
390206		02-AUG-18	Baquerizo, Joseph	HOME	115.68	07-AUG-18	115.68	Reconciled
390207		02-AUG-18	Lao, Richard S	HOME	63.22	06-AUG-18	63.22	Reconciled
390208		02-AUG-18	AAF INTERNATIONAL		1,710.00	07-AUG-18	1,710.00	Reconciled
390209		02-AUG-18	AGILENT TECHNOLOGIES, INC.		1,925.49	06-AUG-18	1,925.49	Reconciled
390210		02-AUG-18	ALSTON & BIRD LLP		101,431.39	09-AUG-18	101,431.39	Reconciled
390211		02-AUG-18	AMAZON CAPITAL SERVICES, INC.		152.70	06-AUG-18	152.70	Reconciled
390212		02-AUG-18	AMIT KUMAR GUPTA AND SHRADHA SAREEN		20.10	13-AUG-18	20.10	Reconciled
390213		02-AUG-18	APEX LIFE SCIENCES, LLC		5,384.31	06-AUG-18	5,384.31	Reconciled
390214		02-AUG-18	APTEAN, INC.		20,992.37	09-AUG-18	20,992.37	Reconciled
390215		02-AUG-18	AQUA-METRIC SALES COMPANY		38,847.76	08-AUG-18	38,847.76	Reconciled
390216		02-AUG-18	AT&T		11.58	07-AUG-18	11.58	Reconciled
390217		02-AUG-18	AT&T		53.02	07-AUG-18	53.02	Reconciled
390218		02-AUG-18	AT&T		709.37	09-AUG-18	709.37	Reconciled
390219		02-AUG-18	AUTOZONE PARTS, INC.		840.09	08-AUG-18	840.09	Reconciled
390220		02-AUG-18	BANK OF AMERICA		25,930.38	07-AUG-18	25,930.38	Reconciled
390221		02-AUG-18	BANTUGAN, MARVIN		37.41	13-AUG-18	37.41	Reconciled
390222		02-AUG-18	BEAUCHEMIN, FRANCOIS		689.41			Negotiable
390223		02-AUG-18	BECKER, MIKE		152.40	21-AUG-18	152.40	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390224		02-AUG-18	BERK, SUSAN		15,000.00	20-AUG-18	15,000.00	Reconciled
390225		02-AUG-18	BILL'S SWEEPING SERVICE INC		1,510.00	08-AUG-18	1,510.00	Reconciled
390226		02-AUG-18	BITECH CONSTRUCTION COMPANY INC.		1,537.15	14-AUG-18	1,537.15	Reconciled
390227		02-AUG-18	BLACK & VEATCH CORPORATION		345,421.25	10-AUG-18	345,421.25	Reconciled
390228		02-AUG-18	BLAIRS TOWING INC		300.00	10-AUG-18	300.00	Reconciled
390229		02-AUG-18	BOYAJIAN, ROBERT		44.58			Negotiable
390230		02-AUG-18	BRENNTAG PACIFIC INC		3,680.00	06-AUG-18	3,680.00	Reconciled
390231		02-AUG-18	BTF PRECISE MICROBIOLOGY INC.		571.81	07-AUG-18	571.81	Reconciled
390232		02-AUG-18	BURKE, WILLIAMS & SORENSEN, LLP		97.50	07-AUG-18	97.50	Reconciled
390233		02-AUG-18	CALEY, HOLLY		32.53	07-AUG-18	32.53	Reconciled
390234		02-AUG-18	CALIFORNIA WATER EFFICIENCY PARTNERSHIP		7,822.23	07-AUG-18	7,822.23	Reconciled
390235		02-AUG-18	CANON SOLUTIONS AMERICA, INC.		1,752.20	06-AUG-18	1,752.20	Reconciled
390236		02-AUG-18	CDB INVESTMENTS, L.P.		23.13	14-AUG-18	23.13	Reconciled
390237		02-AUG-18	CHAKMAK, JOHN		33.10	15-AUG-18	33.10	Reconciled
390238		02-AUG-18	CHEN, HUI		56.42	09-AUG-18	56.42	Reconciled
390239		02-AUG-18	CHOE, SUN		32.12	08-AUG-18	32.12	Reconciled

390240	02-AUG-18	CITY OF IRVINE	2,641.40	06-AUG-18	2,641.40	Reconciled
390241	02-AUG-18	CITY OF IRVINE	2,169.78	07-AUG-18	2,169.78	Reconciled
390242	02-AUG-18	CITY OF IRVINE	887.51	07-AUG-18	887.51	Reconciled
390243	02-AUG-18	CITY OF NEWPORT BEACH	1,343.08	09-AUG-18	1,343.08	Reconciled
390244	02-AUG-18	COMMERCIAL DOOR OF ORANGE COUNTY, INC.	1,373.75	07-AUG-18	1,373.75	Reconciled
390245	02-AUG-18	CONSTELLATION NEWENERGY, INC.	13,857.01	13-AUG-18	13,857.01	Reconciled
390246	02-AUG-18	CONSUMERS PIPE & SUPPLY CO.	1,357.98	06-AUG-18	1,357.98	Reconciled
390247	02-AUG-18	COUNTY OF ORANGE	1,763.16	17-AUG-18	1,763.16	Reconciled
390248	02-AUG-18	COUNTY OF ORANGE	1,125.00	09-AUG-18	1,125.00	Reconciled
390249	02-AUG-18	COX COMMUNICATIONS, INC.	261.21	06-AUG-18	261.21	Reconciled
390250	02-AUG-18	CRAWFORD ASSOCIATES	9,939.93	09-AUG-18	9,939.93	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 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								
390251		02-AUG-18	CROSS CREEK APTS		345.07	10-AUG-18	345.07	Reconciled
390252		02-AUG-18	CULLIGAN OF SANTA ANA		4,000.00	06-AUG-18	4,000.00	Reconciled
390253		02-AUG-18	DAGGETT, MEGAN		59.40	10-AUG-18	59.40	Reconciled
390254		02-AUG-18	DENALI WATER SOLUTIONS LLC		6,470.18	07-AUG-18	6,470.18	Reconciled
390255		02-AUG-18	DIRECTV INC		125.53	07-AUG-18	125.53	Reconciled
390256		02-AUG-18	DOTY, BARBARA & DOMANN, SHELLY		112.78	21-AUG-18	112.78	Reconciled
390257		02-AUG-18	EI&C ENGINEERING INC		48,484.00	20-AUG-18	48,484.00	Reconciled
390258		02-AUG-18	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.		4,515.00	06-AUG-18	4,515.00	Reconciled
390259		02-AUG-18	ENVIRONMENTAL SCIENCE ASSOCIATES		7,857.30	07-AUG-18	7,857.30	Reconciled
390260		02-AUG-18	EXECUTIVE LIGHTING & ELECTRIC		1,076.88	07-AUG-18	1,076.88	Reconciled
390261		02-AUG-18	FARRELL & ASSOCIATES		574.73	06-AUG-18	574.73	Reconciled
390262		02-AUG-18	FEDEX		243.83	07-AUG-18	243.83	Reconciled
390263		02-AUG-18	FIRE EXTINGUISHING SAFETY & SERVICE		11,479.61	10-AUG-18	11,479.61	Reconciled
390264		02-AUG-18	FISHER SCIENTIFIC COMPANY LLC		1,644.45	06-AUG-18	1,644.45	Reconciled
390265		02-AUG-18	FRONTIER CALIFORNIA INC.		273.30	08-AUG-18	273.30	Reconciled
390266		02-AUG-18	GARZA INDUSTRIES, INC		1,335.68	06-AUG-18	1,335.68	Reconciled
390267		02-AUG-18	GENTERRA CONSULTANTS INC		8,151.00	06-AUG-18	8,151.00	Reconciled
390268		02-AUG-18	GHD INC.		5,435.00	07-AUG-18	5,435.00	Reconciled
390269		02-AUG-18	GJ AUTOMOTIVE EQUIPMENT CO INC		267.74	10-AUG-18	267.74	Reconciled
390270		02-AUG-18	GM SAGER CONSTRUCTION CO, INC.		16,500.00	13-AUG-18	16,500.00	Reconciled
390271		02-AUG-18	GRAINGER		16,789.58	09-AUG-18	16,789.58	Reconciled
390272		02-AUG-18	GREEN, JAMES		29.10			Negotiable
390273		02-AUG-18	GRONDHUIS, FRED		54.67	17-AUG-18	54.67	Reconciled
390274		02-AUG-18	GU, ZHEN		41.33	10-AUG-18	41.33	Reconciled
390275		02-AUG-18	HAAKER EQUIPMENT COMPANY		1,057.87	07-AUG-18	1,057.87	Reconciled
390276		02-AUG-18	HACH COMPANY		3,321.89	06-AUG-18	3,321.89	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 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								
390277		02-AUG-18	HARRINGTON INDUSTRIAL PLASTICS LLC		29,706.72	08-AUG-18	29,706.72	Reconciled
390278		02-AUG-18	HELP/SYSTEMS, LLC		2,791.30	06-AUG-18	2,791.30	Reconciled
390279		02-AUG-18	HELPMATES STAFFING SERVICES		17,505.00	08-AUG-18	17,505.00	Reconciled
390280		02-AUG-18	HILL BROTHERS CHEMICAL COMPANY		7,388.42	09-AUG-18	7,388.42	Reconciled
390281		02-AUG-18	HINSILBLON LTD		9,985.00	15-AUG-18	9,985.00	Reconciled
390282		02-AUG-18	HOME DEPOT USA INC		868.47	07-AUG-18	868.47	Reconciled

390283	02-AUG-18	HOUCHEM, LORI	59.32	08-AUG-18	59.32	Reconciled
390284	02-AUG-18	HSTEH, PING	52.05	07-AUG-18	52.05	Reconciled
390285	02-AUG-18	IBM CORPORATION	31,601.38	09-AUG-18	31,601.38	Reconciled
390286	02-AUG-18	INDUSTRIAL METAL SUPPLY CO	165.35	06-AUG-18	165.35	Reconciled
390287	02-AUG-18	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC	25,521.42	13-AUG-18	25,521.42	Reconciled
390288	02-AUG-18	IRVINE PIPE & SUPPLY INC	3,783.29	06-AUG-18	3,783.29	Reconciled
390289	02-AUG-18	IRWD-PETTY CASH CUSTODIAN	1,322.96	03-AUG-18	1,322.96	Reconciled
390290	02-AUG-18	ISHIHARA, MUNETOSHI	40.64	17-AUG-18	40.64	Reconciled
390291	02-AUG-18	JCI JONES CHEMICALS INC	3,577.00	08-AUG-18	3,577.00	Reconciled
390292	02-AUG-18	JO, HYE SUNG	77.18	06-AUG-18	77.18	Reconciled
390293	02-AUG-18	KEC ENGINEERING	75.70	09-AUG-18	75.70	Reconciled
390294	02-AUG-18	KIMBALL MIDWEST	1,694.78	07-AUG-18	1,694.78	Reconciled
390295	02-AUG-18	KODALI, MADHAVI	215.78	06-AUG-18	215.78	Reconciled
390296	02-AUG-18	KONECRANES INC	900.00	06-AUG-18	900.00	Reconciled
390297	02-AUG-18	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	17,207.30	08-AUG-18	17,207.30	Reconciled
390298	02-AUG-18	LA HABRA FENCE COMPANY INC	2,341.00	10-AUG-18	2,341.00	Reconciled
390299	02-AUG-18	MA, MIN	86.50			Negotiable
390300	02-AUG-18	MACIEL, ROSE	155.60	07-AUG-18	155.60	Reconciled
390301	02-AUG-18	MANZO, TODD	901.82	06-AUG-18	901.82	Reconciled
390302	02-AUG-18	MBC AQUATIC SCIENCES, INC.	1,350.00	15-AUG-18	1,350.00	Reconciled
390303	02-AUG-18	MC MASTER CARR SUPPLY CO	1,908.95	06-AUG-18	1,908.95	Reconciled
390304	02-AUG-18	MCCROMETER, INC.	4,147.69	06-AUG-18	4,147.69	Reconciled
390305	02-AUG-18	MCKENDRY, KELLI	46.97	06-AUG-18	46.97	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 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								
390306		02-AUG-18	MOBILE MODULAR MANAGEMENT CORPORATION		1,212.19	06-AUG-18	1,212.19	Reconciled
390307		02-AUG-18	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		40,631.73	07-AUG-18	40,631.73	Reconciled
390308		02-AUG-18	MYERS & SONS HI-WAY SAFETY, INC.		2,605.40	06-AUG-18	2,605.40	Reconciled
390309		02-AUG-18	MYONGHEE JEONG AND HYO JUN JANG		825.05	08-AUG-18	825.05	Reconciled
390310		02-AUG-18	NATIONAL READY MIXED CONCRETE CO.		1,954.97	06-AUG-18	1,954.97	Reconciled
390311		02-AUG-18	NATURALWELL, LLC		385.00	06-AUG-18	385.00	Reconciled
390312		02-AUG-18	NATURES IMAGE INC		612.87	07-AUG-18	612.87	Reconciled
390313		02-AUG-18	NAVARRO, OSCAR		14.30	06-AUG-18	14.30	Reconciled
390314		02-AUG-18	NEPTUNE TECHNOLOGY GROUP, INC.		116,757.90	09-AUG-18	116,757.90	Reconciled
390315		02-AUG-18	O'HAREN GOVERNMENT RELATIONS		6,500.00	07-AUG-18	6,500.00	Reconciled
390316		02-AUG-18	O.C. SUPERIOR CUSTOM CLEANING SERVICES		3,600.00	10-AUG-18	3,600.00	Reconciled
390317		02-AUG-18	OC WELDING SERVICES		500.00	07-AUG-18	500.00	Reconciled
390318		02-AUG-18	OCEAN BLUE ENVIRONMENTAL SERVICES INC		3,707.42	09-AUG-18	3,707.42	Reconciled
390319		02-AUG-18	OLIN CORPORATION		27,399.68	09-AUG-18	27,399.68	Reconciled
390320		02-AUG-18	OMAR DANDASHI		1,391.73	20-AUG-18	1,391.73	Reconciled
390321		02-AUG-18	ONESOURCE DISTRIBUTORS LLC		1,687.15	06-AUG-18	1,687.15	Reconciled
390322		02-AUG-18	OPERATION TECHNOLOGY, INC		1,578.00	16-AUG-18	1,578.00	Reconciled
390323		02-AUG-18	ORANGE COUNTY AUTO PARTS CO		211.04	06-AUG-18	211.04	Reconciled
390324		02-AUG-18	PACE ADVANCED WATER ENGINEERING, INC.		3,040.00	10-AUG-18	3,040.00	Reconciled
390325		02-AUG-18	PACIFIC COAST BOLT CORP		3,450.71	08-AUG-18	3,450.71	Reconciled
390326		02-AUG-18	PACIFIC PARTS & CONTROLS INC		7,954.78	08-AUG-18	7,954.78	Reconciled
390327		02-AUG-18	PARK, JOANNE		37.07			Negotiable
390328		02-AUG-18	PASCAL & LUDWIG CONSTRUCTORS		345,353.50	08-AUG-18	345,353.50	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 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								
390329		02-AUG-18	PASCAL & LUDWIG CONSTRUCTORS		18,176.50	09-AUG-18	18,176.50	Reconciled
390330		02-AUG-18	PAYNE & FEARS LLP		4,803.80	06-AUG-18	4,803.80	Reconciled
390331		02-AUG-18	PEAK PROCESS CONTROLS INC.		13,239.60	20-AUG-18	13,239.60	Reconciled
390332		02-AUG-18	PETROVA-BUMA, MARIA		57.72			Negotiable
390333		02-AUG-18	POLLARDWATER.COM		138.70	06-AUG-18	138.70	Reconciled
390334		02-AUG-18	PRAXAIR		1,785.84	07-AUG-18	1,785.84	Reconciled
390335		02-AUG-18	DISTRIBUTION INC PREMIER PAVING		1,050.07	06-AUG-18	1,050.07	Reconciled
390336		02-AUG-18	PRETZER, RACHEL		82.02			Negotiable
390337		02-AUG-18	PRIDEMARK CONTRACTORS, INC.		4,605.61	08-AUG-18	4,605.61	Reconciled
390338		02-AUG-18	PRUDENTIAL OVERALL SUPPLY		1,116.01	06-AUG-18	1,116.01	Reconciled
390339		02-AUG-18	R&B AUTOMATION, INC.		2,492.82	06-AUG-18	2,492.82	Reconciled
390340		02-AUG-18	RAM AIR ENGINEERING INC		5,299.51	07-AUG-18	5,299.51	Reconciled
390341		02-AUG-18	RAMIREZ, IRENE		94.24	13-AUG-18	94.24	Reconciled
390342		02-AUG-18	RCE CONSULTANTS, INC.		2,863.38	06-AUG-18	2,863.38	Reconciled
390343		02-AUG-18	RED WING SHOE STORE		218.92	08-AUG-18	218.92	Reconciled
390344		02-AUG-18	REFRIGERATION SUPPLIES DISTRIBUTOR		301.72	06-AUG-18	301.72	Reconciled
390345		02-AUG-18	RELIANCE SAFETY CONSULTANTS, INC.		3,200.00	14-AUG-18	3,200.00	Reconciled
390346		02-AUG-18	SALONGA, MAEGAN		53.97	08-AUG-18	53.97	Reconciled
390347		02-AUG-18	SANCHEZ, DANIELA		25.55			Negotiable
390348		02-AUG-18	SCHINDLER ELEVATOR CORPORATION		214.92	07-AUG-18	214.92	Reconciled
390349		02-AUG-18	SCHULER CONSTRUCTORS, INC.		9,500.00	07-AUG-18	9,500.00	Reconciled
390350		02-AUG-18	SERRANO WATER DISTRICT		43,037.17	13-AUG-18	43,037.17	Reconciled
390351		02-AUG-18	SHAMROCK SUPPLY CO INC		19,676.08	09-AUG-18	19,676.08	Reconciled
390352		02-AUG-18	SINGH, ROBINDER		15.16	08-AUG-18	15.16	Reconciled
390353		02-AUG-18	SITEONE LANDSCAPE SUPPLY, LLC		741.11	07-AUG-18	741.11	Reconciled
390354		02-AUG-18	SLATER BUILDERS INC.		1,474.44	09-AUG-18	1,474.44	Reconciled

IRWD Ledger Upgrade

BANK: Bank of America N.A.

Bank Account Currency: USD ( US Dollar )

Payment Type: All

Branch : Los Angeles

Payment Register For 01-AUG-18 To 31-AUG-18

Account: Checking AP and PR

Payment Currency: USD ( US Dollar )

Display Supplier Address: No

Report Date: 31-AUG-2018 15:07

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390355		02-AUG-18	SOUTH BAY FOUNDRY, INC		8,242.88	09-AUG-18	8,242.88	Reconciled
390356		02-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY		614,903.05	06-AUG-18	614,903.05	Reconciled
390357		02-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY		4,696.44	09-AUG-18	4,696.44	Reconciled
390358		02-AUG-18	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		341.00	14-AUG-18	341.00	Reconciled
390359		02-AUG-18	SOUTHWEST VALVE & EQUIPMENT		6,999.43	09-AUG-18	6,999.43	Reconciled
390360		02-AUG-18	SPARKLETTS		450.37	13-AUG-18	450.37	Reconciled
390361		02-AUG-18	SS MECHANICAL CONSTRUCTION CORP		14,250.00	10-AUG-18	14,250.00	Reconciled
390362		02-AUG-18	STRADLING YOCCA CARLSON & RAUTH		56.00	06-AUG-18	56.00	Reconciled
390363		02-AUG-18	STREAKWAVE WIRELESS, INC.		2,514.63	06-AUG-18	2,514.63	Reconciled
390364		02-AUG-18	SUEZ TREATMENT SOLUTIONS INC.		13,116.76	10-AUG-18	13,116.76	Reconciled
390365		02-AUG-18	SULLY-MILLER CONTRACTING CO.		69,409.33	08-AUG-18	69,409.33	Reconciled
390366		02-AUG-18	TAKUSHI, M		36.05	09-AUG-18	36.05	Reconciled
390367		02-AUG-18	TEKDRAULICS		12,017.95	08-AUG-18	12,017.95	Reconciled
390368		02-AUG-18	TESTAMERICA LABORATORIES, INC		454.65	08-AUG-18	454.65	Reconciled
390369		02-AUG-18	TETRA TECH, INC		1,638.50	08-AUG-18	1,638.50	Reconciled
390370		02-AUG-18	THERMO ELECTRON NORTH AMERICA LLC		17,570.00	10-AUG-18	17,570.00	Reconciled

390371	02-AUG-18	THOMPSON INDUSTRIAL SUPPLY	1,085.71	15-AUG-18	1,085.71	Reconciled
390372	02-AUG-18	THYSSENKRUPP ELEVATOR CORPORATION	191.94	06-AUG-18	191.94	Reconciled
390373	02-AUG-18	TOLL BROS., INC.	104.19	17-AUG-18	104.19	Reconciled
390374	02-AUG-18	TOVAR, EDGAR	34.66	08-AUG-18	34.66	Reconciled
390375	02-AUG-18	TREE OF LIFE NURSERY	98.06	13-AUG-18	98.06	Reconciled
390376	02-AUG-18	TROPICAL PLAZA NURSERY INC	3,137.00	06-AUG-18	3,137.00	Reconciled
390377	02-AUG-18	TRUCPARCO	705.34	13-AUG-18	705.34	Reconciled
390378	02-AUG-18	UNITED PARCEL SERVICE INC	92.12	08-AUG-18	92.12	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 8  
 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								
390379		02-AUG-18	UNITED SITE SERVICES OF CALIFORNIA INC		160.99	07-AUG-18	160.99	Reconciled
390380		02-AUG-18	VERIZON WIRELESS SERVICES LLC		9,958.28	08-AUG-18	9,958.28	Reconciled
390381		02-AUG-18	VIRTUAL GRAFFITI, INC.		4,521.46	06-AUG-18	4,521.46	Reconciled
390382		02-AUG-18	VULCAN MATERIALS COMPANY		1,435.65	06-AUG-18	1,435.65	Reconciled
390383		02-AUG-18	VWR INTERNATIONAL, LLC		102.39	07-AUG-18	102.39	Reconciled
390384		02-AUG-18	WALTERS WHOLESALE ELECTRIC		608.75	06-AUG-18	608.75	Reconciled
390385		02-AUG-18	WASTE MANAGEMENT OF ORANGE COUNTY		2,172.36	08-AUG-18	2,172.36	Reconciled
390386		02-AUG-18	WATER EDUCATION FOUNDATION		1,000.00	14-AUG-18	1,000.00	Reconciled
390387		02-AUG-18	WATERBORNE, INC		210.00	10-AUG-18	210.00	Reconciled
390388		02-AUG-18	WATERLINE TECHNOLOGIES INC		2,840.00	06-AUG-18	2,840.00	Reconciled
390389		02-AUG-18	WAXIE'S ENTERPRISES, INC		3,266.31	06-AUG-18	3,266.31	Reconciled
390390		02-AUG-18	WECK LABORATORIES INC		2,307.00	10-AUG-18	2,307.00	Reconciled
390391		02-AUG-18	WESTERN AV		1,440.00	06-AUG-18	1,440.00	Reconciled
390392		02-AUG-18	WESTERN NATIONAL CONTRACTORS		1,275.82			Negotiable
390393		02-AUG-18	WILSON, JEFF		25.00	07-AUG-18	25.00	Reconciled
390394		02-AUG-18	YANG, HSIAO YUEU		42.48			Negotiable
390395		02-AUG-18	YING LYU AND LEI YE		52.60			Negotiable
390396		02-AUG-18	YORKE ENGINEERING LLC		1,575.00	08-AUG-18	1,575.00	Reconciled
390397		02-AUG-18	YSI, INC		57,787.11	09-AUG-18	57,787.11	Reconciled
390398		02-AUG-18	ZHANG, XIN		39.74			Negotiable
390399		02-AUG-18	ZUCKERMAN, MATT		67.18	10-AUG-18	67.18	Reconciled
390400		03-AUG-18	PACIFIC HYDROTECH CORPORATION	ESR 1001737558	10,642.38	06-AUG-18	10,642.38	Reconciled
390401		03-AUG-18	FRANCHISE TAX BOARD	SACRAMENTO 1	100.00	08-AUG-18	100.00	Reconciled
390402		03-AUG-18	ORANGE COUNTY SHERIFF'S OFFICE	4601 JAMBOREE	224.50	09-AUG-18	224.50	Reconciled
390403		03-AUG-18	PERS LONG TERM CARE	PASADENA	538.89	07-AUG-18	538.89	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 9  
 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								
390404		03-AUG-18	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	DIAMOND BAR	1,415.00	21-AUG-18	1,415.00	Reconciled
390405		08-AUG-18	FEDERAL INSURANCE COMPANY	LOS ANGELES	131,500.00	20-AUG-18	131,500.00	Reconciled
390406		08-AUG-18	RED WING SHOE STORE	DALLAS	3,905.45	13-AUG-18	3,905.45	Reconciled
390407		08-AUG-18	RED WING SHOE STORE	DALLAS	2,816.62	13-AUG-18	2,816.62	Reconciled
390408		08-AUG-18	RED WING SHOE STORE	DALLAS	2,956.73	13-AUG-18	2,956.73	Reconciled
390409		08-AUG-18	RED WING SHOE STORE	DALLAS	2,593.46	13-AUG-18	2,593.46	Reconciled
390410		08-AUG-18	Bennett, Ray R		181.77	10-AUG-18	181.77	Reconciled

390411	08-AUG-18	(Ray) Cascelli, Craig M (Craig)	180.00				Negotiable
390412	08-AUG-18	Coria, Alejandro (Alex)	90.00	13-AUG-18		90.00	Reconciled
390413	08-AUG-18	Cortez, Malcolm A (Malcolm)	29.43				Negotiable
390414	08-AUG-18	De Leon, Sharon	138.70				Negotiable
390415	08-AUG-18	Ho, Connie	4.47	15-AUG-18		4.47	Reconciled
390416	08-AUG-18	Leal, Eliberto (Eliberto)	188.00	27-AUG-18		188.00	Reconciled
390417	08-AUG-18	Nash, Joel	60.09	14-AUG-18		60.09	Reconciled
390418	08-AUG-18	Perez, Cesar (Cesar)	180.00	20-AUG-18		180.00	Reconciled
390419	08-AUG-18	Roberts, Thomas (Tom)	360.00				Negotiable
390420	08-AUG-18	Solis, Henry (Henry)	188.00	14-AUG-18		188.00	Reconciled
390421	08-AUG-18	Vargas, Gabriel A (Gabriel)	80.00	09-AUG-18		80.00	Reconciled
390422	08-AUG-18	ACCESS TECHNOLOGIES, INC.	6,778.80	14-AUG-18		6,778.80	Reconciled
390423	08-AUG-18	ADS LLC	2,160.00	13-AUG-18		2,160.00	Reconciled
390424	08-AUG-18	AGILENT TECHNOLOGIES, INC.	40,059.85	16-AUG-18		40,059.85	Reconciled
390425	08-AUG-18	ALEXANDER'S CONTRACT SERVICES, INC.	118,250.47	15-AUG-18		118,250.47	Reconciled
390426	08-AUG-18	ALL AMERICAN SEWER TOOLS	1,749.82	13-AUG-18		1,749.82	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 10  
 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								
390427		08-AUG-18	ALLIANCE APPRAISAL, LLC		5,366.80	17-AUG-18	5,366.80	Reconciled
390428		08-AUG-18	ALLIANT INSURANCE SERVICES, INC		10,575.00	15-AUG-18	10,575.00	Reconciled
390429		08-AUG-18	ALPHA TRAFFIC SERVICES, INC.		1,935.00	13-AUG-18	1,935.00	Reconciled
390430		08-AUG-18	ALTARAC, MORDECHAY		13.95	24-AUG-18	13.95	Reconciled
390431		08-AUG-18	AMAZON CAPITAL SERVICES, INC.		3,850.26	13-AUG-18	3,850.26	Reconciled
390432		08-AUG-18	AMERICAN TRAINING RESOURCES, INC		1,076.68	13-AUG-18	1,076.68	Reconciled
390433		08-AUG-18	ANDERSONPENNA PARTNERS, INC.		69,485.25	14-AUG-18	69,485.25	Reconciled
390434		08-AUG-18	ANTHONY N. LARSEN		675.00	13-AUG-18	675.00	Reconciled
390435		08-AUG-18	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA		35,613.34	16-AUG-18	35,613.34	Reconciled
390436		08-AUG-18	AT&T		3,521.34	14-AUG-18	3,521.34	Reconciled
390437		08-AUG-18	AUTOZONE PARTS, INC.		979.42	13-AUG-18	979.42	Reconciled
390438		08-AUG-18	BATTERIES PLUS AND BATTERIES PLUS BULBS		2,146.88	13-AUG-18	2,146.88	Reconciled
390439		08-AUG-18	BECKMAN COULTER INC		2,053.80	15-AUG-18	2,053.80	Reconciled
390440		08-AUG-18	BEE EMERGENCY RESPONSE TEAM		175.00	13-AUG-18	175.00	Reconciled
390441		08-AUG-18	BONILLA, BRITTANY		40.66	17-AUG-18	40.66	Reconciled
390442		08-AUG-18	BROWN, MARY L		21.38			Negotiable
390443		08-AUG-18	BURLINGTON SAFETY LABORATORY OF CALIFORNIA INC		103.75	10-AUG-18	103.75	Reconciled
390444		08-AUG-18	C WELLS PIPELINE MATERIALS INC		8,548.92	16-AUG-18	8,548.92	Reconciled
390445		08-AUG-18	CALIFORNIA HARRICADE RENTAL, INC.		15,972.50	17-AUG-18	15,972.50	Reconciled
390446		08-AUG-18	CALIFORNIA NEWSPAPER PARTNERSHIP		2,388.00	15-AUG-18	2,388.00	Reconciled
390447		08-AUG-18	CALIFORNIA PACIFIC HOMES		158.52	14-AUG-18	158.52	Reconciled
390448		08-AUG-18	CANON FINANCIAL SERVICES, INC		1,312.40	13-AUG-18	1,312.40	Reconciled
390449		08-AUG-18	CANON SOLUTIONS AMERICA, INC.		131.60	13-AUG-18	131.60	Reconciled

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 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
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390499	08-AUG-18	HOME DEPOT USA INC	395.78	14-AUG-18	395.78	Reconciled
390500	08-AUG-18	HOPKINS TECHNICAL PRODUCTS INC	11,370.67	17-AUG-18	11,370.67	Reconciled
390501	08-AUG-18	HOWDEN ROOTS LLC	336.18	13-AUG-18	336.18	Reconciled
390502	08-AUG-18	HUMANA INSURANCE COMPANY	73.80	14-AUG-18	73.80	Reconciled
390503	08-AUG-18	IBM CORPORATION	925.00	14-AUG-18	925.00	Reconciled
390504	08-AUG-18	IRON MOUNTAIN INFORMATION MANAGEMENT INC	1,535.00	10-AUG-18	1,535.00	Reconciled
390505	08-AUG-18	IRVINE PACIFIC	56.94	13-AUG-18	56.94	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 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								
390506		08-AUG-18	IRVINE PIPE & SUPPLY INC		1,441.91	14-AUG-18	1,441.91	Reconciled
390507		08-AUG-18	JCI JONES CHEMICALS INC		5,255.25	14-AUG-18	5,255.25	Reconciled
390508		08-AUG-18	JIG CONSULTANTS		720.00	14-AUG-18	720.00	Reconciled
390509		08-AUG-18	JOHN MICHAEL COVAS		208.70	14-AUG-18	208.70	Reconciled
390510		08-AUG-18	KATRINA RIVERA AND ENRIQUE RIVERA		107.16	30-AUG-18	107.16	Reconciled
390511		08-AUG-18	KERRINA AND KENNETH BRUCE		728.79	16-AUG-18	728.79	Reconciled
390512		08-AUG-18	KONECRANES INC		9,407.63	14-AUG-18	9,407.63	Reconciled
390513		08-AUG-18	LA HABRA FENCE COMPANY INC		3,583.00	15-AUG-18	3,583.00	Reconciled
390514		08-AUG-18	LENNAR HOMES		38.62	13-AUG-18	38.62	Reconciled
390515		08-AUG-18	LEWIS BRISBOIS BISGAARD AND SMITH, LLP		2,280.00	14-AUG-18	2,280.00	Reconciled
390516		08-AUG-18	LIN, PAUL		66.14	17-AUG-18	66.14	Reconciled
390517		08-AUG-18	LOS ANGELES TIMES		221.98	13-AUG-18	221.98	Reconciled
390518		08-AUG-18	MAILFINANCE INC		12,377.26	20-AUG-18	12,377.26	Reconciled
390519		08-AUG-18	MC MASTER CARR SUPPLY CO		2,664.66	13-AUG-18	2,664.66	Reconciled
390520		08-AUG-18	MCNEILL, JOAN		38.93			Negotiable
390521		08-AUG-18	MEDORA CORPORATION		22,534.00	16-AUG-18	22,534.00	Reconciled
390522		08-AUG-18	MESA INTERNATIONAL TECHNOLOGIES, INC.		350.19	14-AUG-18	350.19	Reconciled
390523		08-AUG-18	MESA, CARLOS		46.00	20-AUG-18	46.00	Reconciled
390524		08-AUG-18	MIAO, YAN		92.25			Negotiable
390525		08-AUG-18	MICRO FOCUS SOFTWARE INC.		79,929.34	15-AUG-18	79,929.34	Reconciled
390526		08-AUG-18	MISCOWATER		7,249.13	27-AUG-18	7,249.13	Reconciled
390527		08-AUG-18	MR CRANE INC		1,053.00	13-AUG-18	1,053.00	Reconciled
390528		08-AUG-18	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		7,247.00	13-AUG-18	7,247.00	Reconciled
390529		08-AUG-18	NGUYEN, KELVIN		41.33	23-AUG-18	41.33	Reconciled
390530		08-AUG-18	NINYO & MOORE		990.75	13-AUG-18	990.75	Reconciled
390531		08-AUG-18	O.C. SUPERIOR CUSTOM CLEANING SERVICES		1,040.00	22-AUG-18	1,040.00	Reconciled
390532		08-AUG-18	OLIN CORPORATION		22,387.28	15-AUG-18	22,387.28	Reconciled
390533		08-AUG-18	ONESOURCE DISTRIBUTORS LLC		5,637.86	13-AUG-18	5,637.86	Reconciled
390534		08-AUG-18	ORANGE COUNTY AUTO PARTS CO		664.97	13-AUG-18	664.97	Reconciled
390535		08-AUG-18	ORANGE COUNTY HOSE		166.43	15-AUG-18	166.43	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 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								
390536		08-AUG-18	ORANGE COUNTY WATER DISTRICT		2,975.00	13-AUG-18	2,975.00	Reconciled
390537		08-AUG-18	ORCHARD PARK		1,594.62			Negotiable
390538		08-AUG-18	OSBORNE, BRIAN & JAN		17.69	16-AUG-18	17.69	Reconciled
390539		08-AUG-18	OSTS, INC		1,150.00	15-AUG-18	1,150.00	Reconciled
390540		08-AUG-18	PACIFIC HYDROTECH CORPORATION		6,423.50	13-AUG-18	6,423.50	Reconciled
390541		08-AUG-18	PACIFIC HYDROTECH CORPORATION		122,046.50	17-AUG-18	122,046.50	Reconciled
390542		08-AUG-18	PACIFIC PARTS & CONTROLS INC		751.49	13-AUG-18	751.49	Reconciled
390543		08-AUG-18	PAPER DEPOT DOCUMENT DESTRUCTION LLC		543.00	20-AUG-18	543.00	Reconciled
390544		08-AUG-18	PARKHOUSE TIRE INC		6,190.09	14-AUG-18	6,190.09	Reconciled

390545	08-AUG-18	PASCAL & LUDWIG CONSTRUCTORS		10,390.69	15-AUG-18	10,390.69	Reconciled
390546	08-AUG-18	PASCAL & LUDWIG CONSTRUCTORS		197,423.12	16-AUG-18	197,423.12	Reconciled
390547	08-AUG-18	PILLSBURY WINTHROP SHAW PITTMAN LLP		1,950.00	13-AUG-18	1,950.00	Reconciled
390548	08-AUG-18	PIVOT INTERIORS INC		10,813.98	15-AUG-18	10,813.98	Reconciled
390549	08-AUG-18	POLLARDWATER.COM		53.07	13-AUG-18	53.07	Reconciled
390550	08-AUG-18	PRUDENTIAL OVERALL SUPPLY		6,198.48	13-AUG-18	6,198.48	Reconciled
390551	08-AUG-18	PSOMAS		135.00	14-AUG-18	135.00	Reconciled
390552	08-AUG-18	PTI SAND & GRAVEL INC		1,285.86	14-AUG-18	1,285.86	Reconciled
390553	08-AUG-18	QUINCY COMPRESSOR LLC		2,794.89	16-AUG-18	2,794.89	Reconciled
390554	08-AUG-18	QUINN COMPANY		86.59	13-AUG-18	86.59	Reconciled
390555	08-AUG-18	RAM AIR ENGINEERING INC		13,772.99	14-AUG-18	13,772.99	Reconciled
390556	08-AUG-18	RED WING SHOE STORE		403.80	13-AUG-18	403.80	Reconciled
390557	08-AUG-18	RICHMOND AMERICAN HOMES OF MARYLAND, INC		43.87			Negotiable
390558	08-AUG-18	RINCON TRUCK CENTER INC.		28.08	13-AUG-18	28.08	Reconciled
390559	08-AUG-18	RLG ENTERPRISES, INC		571.88	13-AUG-18	571.88	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 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								
390560		08-AUG-18	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT		5,099.15	16-AUG-18	5,099.15	Reconciled
390561		08-AUG-18	SAN CARLO APARTMENTS		81.98			Negotiable
390562		08-AUG-18	SANDERS PAVING INC		9,976.00	13-AUG-18	9,976.00	Reconciled
390563		08-AUG-18	SANTA ANA BLUE PRINT		1,045.52	14-AUG-18	1,045.52	Reconciled
390564		08-AUG-18	SANTA ANA WATERSHED PROJECT AUTHORITY		3,077.00	13-AUG-18	3,077.00	Reconciled
390565		08-AUG-18	SANTA MARGARITA FORD		934.77	16-AUG-18	934.77	Reconciled
390566		08-AUG-18	SECURITAS SECURITY SERVICES USA, INC.		59,139.69	15-AUG-18	59,139.69	Reconciled
390567		08-AUG-18	SHAMROCK SUPPLY CO INC		472.81	14-AUG-18	472.81	Reconciled
390568		08-AUG-18	SINGER, MATTHEW		51.00	22-AUG-18	51.00	Reconciled
390569		08-AUG-18	SKANDERUP, LAURALI		31.58	15-AUG-18	31.58	Reconciled
390570		08-AUG-18	SMARTCOVER SYSTEMS		26,883.00	15-AUG-18	26,883.00	Reconciled
390571		08-AUG-18	SMITH SYSTEM DRIVER IMPROVEMENT INSTITUTE, INC.		1,448.53	14-AUG-18	1,448.53	Reconciled
390572		08-AUG-18	SOMERSET APARTMENTS		2,412.45			Negotiable
390573		08-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY		18,355.53	13-AUG-18	18,355.53	Reconciled
390574		08-AUG-18	SOUTHERN CALIFORNIA PUBLIC LABOR RELATIONS COUNCIL		150.00			Negotiable
390575		08-AUG-18	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		148.96	22-AUG-18	148.96	Reconciled
390576		08-AUG-18	STANFORD COURT APARTMENTS		44.85			Negotiable
390577		08-AUG-18	STETSON ENGINEERS INC.		6,802.50	13-AUG-18	6,802.50	Reconciled
390578		08-AUG-18	STREAKWAVE WIRELESS, INC.		1,241.10	14-AUG-18	1,241.10	Reconciled
390579		08-AUG-18	SUPPORT PRODUCT SERVICES, INC		1,816.60	20-AUG-18	1,816.60	Reconciled
390580		08-AUG-18	T.E. ROBERTS, INC.		547,979.00	15-AUG-18	547,979.00	Reconciled
390581		08-AUG-18	TALLEY INC		260.66	13-AUG-18	260.66	Reconciled

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 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
Payment Document : IRWD CHECK								

390582	08-AUG-18	THOMPSON	1,127.58	15-AUG-18	1,127.58	Reconciled
390583	08-AUG-18	INDUSTRIAL SUPPLY TIC-OFFICE PROPERTIES	1,204.17			Negotiable
390584	08-AUG-18	TOTALFUNDS	5,002.28	14-AUG-18	5,002.28	Reconciled
390585	08-AUG-18	TROPICAL PLAZA NURSERY INC	2,169.01	13-AUG-18	2,169.01	Reconciled
390586	08-AUG-18	TRUCPARCO	926.95	21-AUG-18	926.95	Reconciled
390587	08-AUG-18	TURTLE ROCK CANYON APTS	190.09			Negotiable
390588	08-AUG-18	ULINE INC	85.69	15-AUG-18	85.69	Reconciled
390589	08-AUG-18	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	1,321.75	16-AUG-18	1,321.75	Reconciled
390590	08-AUG-18	UNITED HEALTHCARE INSURANCE COMPANY	245.85	15-AUG-18	245.85	Reconciled
390591	08-AUG-18	UNITED PARCEL SERVICE INC	186.04	14-AUG-18	186.04	Reconciled
390592	08-AUG-18	VERIZON WIRELESS SERVICES LLC	4,412.70	14-AUG-18	4,412.70	Reconciled
390593	08-AUG-18	VERTECH INDUSTRIAL SYSTEMS, LLC	6,094.41	13-AUG-18	6,094.41	Reconciled
390594	08-AUG-18	VWR INTERNATIONAL, LLC	2,471.35	14-AUG-18	2,471.35	Reconciled
390595	08-AUG-18	WAXIE'S ENTERPRISES, INC	449.64	13-AUG-18	449.64	Reconciled
390596	08-AUG-18	WEST COAST SAFETY SUPPLY INC	7,993.14			Negotiable
390597	08-AUG-18	WIRELESS WATCHDOGS, LLC	984.00	14-AUG-18	984.00	Reconciled
390598	08-AUG-18	WOLTERS KLUWER LEGAL & REGULATORY US, A DIVISION OF CCH INCORPORATED	213.78	14-AUG-18	213.78	Reconciled
390599	08-AUG-18	WOODBURY LANE APARTMENTS	544.99			Negotiable
390600	08-AUG-18	WORKFORCE SAFETY LLC	3,144.00	20-AUG-18	3,144.00	Reconciled
390601	08-AUG-18	YSI, INC	1,375.10	14-AUG-18	1,375.10	Reconciled
390602	09-AUG-18	EAST ORANGE COUNTYORANGE WATER DISTRICT	10,360.68	15-AUG-18	10,360.68	Reconciled
390603	09-AUG-18	DATA SPECIALTIES, BUENA PARK INC.	100.00	16-AUG-18	100.00	Reconciled
390604	09-AUG-18	TOLL BROS., INC. ORANGE	616.00			Negotiable
390605	09-AUG-18	TOLL BROS., INC. ORANGE	9,452.00			Negotiable

IRWD Ledger Upgrade  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 17  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390606		16-AUG-18	Barreto, Gustavo (Gus)		109.49	20-AUG-18	109.49	Reconciled
390607		16-AUG-18	Cascelli, Craig M (Craig)		90.00			Negotiable
390608		16-AUG-18	Compton, Christine A		94.00	20-AUG-18	94.00	Reconciled
390609		16-AUG-18	Figueroa, Jorge (Jorge)		213.79	21-AUG-18	213.79	Reconciled
390610		16-AUG-18	Kessler, Christian L (Christian)		116.00	17-AUG-18	116.00	Reconciled
390611		16-AUG-18	Lassalette, James P (Jim)		55.00	17-AUG-18	55.00	Reconciled
390612		16-AUG-18	Reynoso, Pio (Pio)		97.00			Negotiable
390613		16-AUG-18	Wang, Peter (Peter)		200.00	17-AUG-18	200.00	Reconciled
390614		16-AUG-18	Leal, Eliberto (Eliberto)	HOME	92.00			Negotiable
390615		16-AUG-18	ABM INDUSTRY GROUPS, LLC		18,915.01	22-AUG-18	18,915.01	Reconciled
390616		16-AUG-18	AHMAD, SHIR		54.20			Negotiable
390617		16-AUG-18	AIRGAS, INC.		2,175.42	20-AUG-18	2,175.42	Reconciled
390618		16-AUG-18	ALLIANCE FOR WATER EFFICIENCY NFP		5,000.00	21-AUG-18	5,000.00	Reconciled
390619		16-AUG-18	ALPHA TRAFFIC SERVICES, INC.		615.00	21-AUG-18	615.00	Reconciled
390620		16-AUG-18	ALSTON & BIRD LLP		4,914.00	20-AUG-18	4,914.00	Reconciled
390621		16-AUG-18	ALTA NURSERY, INC.		1,508.16	24-AUG-18	1,508.16	Reconciled
390622		16-AUG-18	AMAZON CAPITAL SERVICES, INC.		2,928.39	20-AUG-18	2,928.39	Reconciled
390623		16-AUG-18	APEX LIFE SCIENCES, LLC		2,461.81	20-AUG-18	2,461.81	Reconciled
390624		16-AUG-18	APPLIED INDUSTRIAL TECHNOLOGIES - CA LLC		931.82	20-AUG-18	931.82	Reconciled
390625		16-AUG-18	AT&T		1,099.80	21-AUG-18	1,099.80	Reconciled
390626		16-AUG-18	AT&T		1,670.57	21-AUG-18	1,670.57	Reconciled
390627		16-AUG-18	ATHENS SERVICES		8,330.63	21-AUG-18	8,330.63	Reconciled

390628	16-AUG-18	AUTOZONE PARTS, INC.	714.82	22-AUG-18	714.82	Reconciled
390629	16-AUG-18	BAO, XINYU	326.60			Negotiable
390630	16-AUG-18	BC WIRE ROPE & RIGGING	278.38	20-AUG-18	278.38	Reconciled
390631	16-AUG-18	BDC SPECIAL WASTE	372.00	20-AUG-18	372.00	Reconciled
390632	16-AUG-18	BEST DRILLING AND PUMP, INC.	77,876.25	22-AUG-18	77,876.25	Reconciled
390633	16-AUG-18	BIOMAGIC INC	15,474.79	22-AUG-18	15,474.79	Reconciled

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

Payment Register For 01-AUG-18 To 31-AUG-18  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390634		16-AUG-18	BOKAEL, ROXANA		42.63	20-AUG-18	42.63	Reconciled
390635		16-AUG-18	BORCHARD SURVEYING & MAPPING, INC.		5,035.00	22-AUG-18	5,035.00	Reconciled
390636		16-AUG-18	BRENNTAG PACIFIC INC		9,355.20	20-AUG-18	9,355.20	Reconciled
390637		16-AUG-18	BRITHINEE ELECTRIC		24,630.27	22-AUG-18	24,630.27	Reconciled
390638		16-AUG-18	BRITTANY APTS		848.53			Negotiable
390639		16-AUG-18	BROWN AND CALDWELL		8,667.62	20-AUG-18	8,667.62	Reconciled
390640		16-AUG-18	BRUCE NEWELL		1,250.00	23-AUG-18	1,250.00	Reconciled
390641		16-AUG-18	C WELLS PIPELINE MATERIALS INC		35,618.92	28-AUG-18	35,618.92	Reconciled
390642		16-AUG-18	CALIFORNIA BARRICADE RENTAL, INC.		3,640.00	17-AUG-18	3,640.00	Reconciled
390643		16-AUG-18	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION		4,977.00	22-AUG-18	4,977.00	Reconciled
390644		16-AUG-18	CANON SOLUTIONS AMERICA, INC.		56.80	20-AUG-18	56.80	Reconciled
390645		16-AUG-18	CCL CONTRACTING INC.		525,326.83	24-AUG-18	525,326.83	Reconciled
390646		16-AUG-18	CENTRAL COAST POWER SERVICES, LLC		4,450.25	20-AUG-18	4,450.25	Reconciled
390647		16-AUG-18	CHANG, TIENHSIANG		37.72	21-AUG-18	37.72	Reconciled
390648		16-AUG-18	CHANG, TIENSAING		44.35			Voided
390649		16-AUG-18	CITY OF IRVINE		3,190.80	20-AUG-18	3,190.80	Reconciled
390650		16-AUG-18	CITY OF TUSTIN		34,150.99	22-AUG-18	34,150.99	Reconciled
390651		16-AUG-18	CIVIL SOURCE, INC.		45,358.00	27-AUG-18	45,358.00	Reconciled
390652		16-AUG-18	CLA-VAL COMPANY		3,765.22	20-AUG-18	3,765.22	Reconciled
390653		16-AUG-18	CLIFFORD MORIYAMA		4,000.00	27-AUG-18	4,000.00	Reconciled
390654		16-AUG-18	CONNOR, FRAN		36.56	30-AUG-18	36.56	Reconciled
390655		16-AUG-18	CONSTELLATION NEWENERGY, INC.		8,456.39	21-AUG-18	8,456.39	Reconciled
390656		16-AUG-18	CONSUMERS PIPE & SUPPLY CO.		935.29	20-AUG-18	935.29	Reconciled
390657		16-AUG-18	CONTROLLED KEY SYSTEMS INC		6,580.60	23-AUG-18	6,580.60	Reconciled
390658		16-AUG-18	COUNTY OF ORANGE		27,356.36	22-AUG-18	27,356.36	Reconciled
390659		16-AUG-18	COUNTY OF ORANGE		8,381.00	23-AUG-18	8,381.00	Reconciled
390660		16-AUG-18	CR & R INCORPORATED		389.96	20-AUG-18	389.96	Reconciled
390661		16-AUG-18	CULLIGAN OF SANTA ANA		7,000.00	21-AUG-18	7,000.00	Reconciled
390662		16-AUG-18	D & G SIGNS		253.21	23-AUG-18	253.21	Reconciled

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

Payment Register For 01-AUG-18 To 31-AUG-18  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390663		16-AUG-18	D & H WATER SYSTEMS INC.		776.32	21-AUG-18	776.32	Reconciled
390664		16-AUG-18	DEASON, TRISHA		44.46	22-AUG-18	44.46	Reconciled
390665		16-AUG-18	DILYRICS INC		44,880.00	22-AUG-18	44,880.00	Reconciled
390666		16-AUG-18	DRIVELINES UNLIMITED		225.04	22-AUG-18	225.04	Reconciled
390667		16-AUG-18	DUKE CULTURAL RESOURCES MANAGEMENT, LLC		6,857.50			Negotiable
390668		16-AUG-18	DWYER INSTRUMENTS INC		1,961.35	20-AUG-18	1,961.35	Reconciled
390669		16-AUG-18	EMD MILLIPORE CORPORATION		45,209.96	20-AUG-18	45,209.96	Reconciled
390670		16-AUG-18	ENTERPRISE SECURITY, INC		4,749.58	21-AUG-18	4,749.58	Reconciled
390671		16-AUG-18	ENVIRONMENTAL EXPRESS INC		1,083.52	20-AUG-18	1,083.52	Reconciled
390672		16-AUG-18	EUROFINS EATON		300.00	20-AUG-18	300.00	Reconciled

390673	16-AUG-18	ANALYTICAL, INC. EVERETT DOREY LLP	14,450.52	24-AUG-18	14,450.52	Reconciled
390674	16-AUG-18	EXECUTIVE LIGHTING & ELECTRIC	279.48	21-AUG-18	279.48	Reconciled
390675	16-AUG-18	FERGUSON ENTERPRISES, INC.	1,400.75	20-AUG-18	1,400.75	Reconciled
390676	16-AUG-18	FEWINGS, DANIELLE	53.55	28-AUG-18	53.55	Reconciled
390677	16-AUG-18	FIREHOSEDIRECT.COM	60.14	20-AUG-18	60.14	Reconciled
390678	16-AUG-18	FIRST CHOICE SERVICES	1,356.28	21-AUG-18	1,356.28	Reconciled
390679	16-AUG-18	FISERV	289.90	20-AUG-18	289.90	Reconciled
390680	16-AUG-18	FISHER SCIENTIFIC COMPANY LLC	665.81	20-AUG-18	665.81	Reconciled
390681	16-AUG-18	FLEET SOLUTIONS LLC	3,985.42	21-AUG-18	3,985.42	Reconciled
390682	16-AUG-18	FRONTIER CALIFORNIA INC.	51.87	20-AUG-18	51.87	Reconciled
390683	16-AUG-18	FU, SUSAN	25.00			Negotiable
390684	16-AUG-18	GENERAL MONITORS INC.	1,643.87	22-AUG-18	1,643.87	Reconciled
390685	16-AUG-18	GEORGE HILLS COMPANY, INC.	144.50	24-AUG-18	144.50	Reconciled
390686	16-AUG-18	GJ AUTOMOTIVE EQUIPMENT CO INC	830.67	17-AUG-18	830.67	Reconciled
390687	16-AUG-18	GRAINGER	3,641.30	20-AUG-18	3,641.30	Reconciled
390688	16-AUG-18	GRAYBAR ELECTRIC COMPANY	22,945.45	22-AUG-18	22,945.45	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 20  
 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								
390689		16-AUG-18	HAAKER EQUIPMENT COMPANY		1,433.34	22-AUG-18	1,433.34	Reconciled
390690		16-AUG-18	HACH COMPANY		6,054.47	20-AUG-18	6,054.47	Reconciled
390691		16-AUG-18	HAN, GWANG JONG		24.42	20-AUG-18	24.42	Reconciled
390692		16-AUG-18	HARRINGTON INDUSTRIAL PLASTICS LLC		1,132.42	20-AUG-18	1,132.42	Reconciled
390693		16-AUG-18	HAZEN AND SAWYER		2,810.00	23-AUG-18	2,810.00	Reconciled
390694		16-AUG-18	HDR ENGINEERING INC		33,442.50	23-AUG-18	33,442.50	Reconciled
390695		16-AUG-18	HELPMATES STAFFING SERVICES		9,934.78	20-AUG-18	9,934.78	Reconciled
390696		16-AUG-18	HERITAGE FIELDS EL TORO, LLC		962,305.70			Negotiable
390697		16-AUG-18	HILL BROTHERS CHEMICAL COMPANY		5,599.25	22-AUG-18	5,599.25	Reconciled
390698		16-AUG-18	HILTS CONSULTING GROUP, INC.		8,473.00	20-AUG-18	8,473.00	Reconciled
390699		16-AUG-18	HO, HELEN		261.65	21-AUG-18	261.65	Reconciled
390700		16-AUG-18	HOME DEPOT USA INC		1,859.94	21-AUG-18	1,859.94	Reconciled
390701		16-AUG-18	HOUSE FOODS AMERICA CORP		930.06	28-AUG-18	930.06	Reconciled
390702		16-AUG-18	IBM CORPORATION		2,178.00	22-AUG-18	2,178.00	Reconciled
390703		16-AUG-18	INTEGRITY IT SOLUTIONS INC.		1,425.00	28-AUG-18	1,425.00	Reconciled
390704		16-AUG-18	IRON MOUNTAIN INFORMATION MANAGEMENT INC		1,533.81	20-AUG-18	1,533.81	Reconciled
390705		16-AUG-18	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC		30,000.00	27-AUG-18	30,000.00	Reconciled
390706		16-AUG-18	IRVINE PIPE & SUPPLY INC		4,236.76	20-AUG-18	4,236.76	Reconciled
390707		16-AUG-18	IRWD-PETTY CASH CUSTODIAN		1,382.45	17-AUG-18	1,382.45	Reconciled
390708		16-AUG-18	JCI JONES CHEMICALS INC		4,638.73	23-AUG-18	4,638.73	Reconciled
390709		16-AUG-18	KEATING, PAULA		47.27	29-AUG-18	47.27	Reconciled
390710		16-AUG-18	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES		3,000.00	20-AUG-18	3,000.00	Reconciled
390711		16-AUG-18	KRONICK MOSKOVITZ TIEDEMANN & GIRARD		19,037.95	22-AUG-18	19,037.95	Reconciled
390712		16-AUG-18	LANDCARE HOLDINGS, INC.		3,083.68	20-AUG-18	3,083.68	Reconciled

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 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390713		16-AUG-18	LCS TECHNOLOGIES,		8,775.00	20-AUG-18	8,775.00	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
390714	16-AUG-18	LENNAR HOMES		18.40	20-AUG-18	18.40	Reconciled	
390715	16-AUG-18	LIHENG ZHANG AND JENNY SONG		47.11	22-AUG-18	47.11	Reconciled	
390716	16-AUG-18	M. CUBED		4,663.75	20-AUG-18	4,663.75	Reconciled	
390717	16-AUG-18	MANGIONE, VIRGINIA		152.36	27-AUG-18	152.36	Reconciled	
390718	16-AUG-18	MC MASTER CARR SUPPLY CO		386.91	20-AUG-18	386.91	Reconciled	
390719	16-AUG-18	MCR TECHNOLOGIES INC		11,753.93	23-AUG-18	11,753.93	Reconciled	
390720	16-AUG-18	MERITAGE HOMES		49.04	30-AUG-18	49.04	Reconciled	
390721	16-AUG-18	MERRIMAC PETROLEUM, INC.		40,368.94	20-AUG-18	40,368.94	Reconciled	
390722	16-AUG-18	MISSION COMMUNICATIONS, LLC		1,474.20	24-AUG-18	1,474.20	Reconciled	
390723	16-AUG-18	MOODY'S INVESTORS SERVICE INC		5,000.00	20-AUG-18	5,000.00	Reconciled	
390724	16-AUG-18	NATIONAL READY MIXED CONCRETE CO.		1,188.52	20-AUG-18	1,188.52	Reconciled	
390725	16-AUG-18	NATURALWELL, LLC		550.00	17-AUG-18	550.00	Reconciled	
390726	16-AUG-18	NEWPORT REAL ESTATE SERVICES		6,338.71	22-AUG-18	6,338.71	Reconciled	
390727	16-AUG-18	NORMAN A. OLSSON CONSTRUCTION, INC.		58,781.92	24-AUG-18	58,781.92	Reconciled	
390728	16-AUG-18	OC PRO MANAGEMENT		37.57	23-AUG-18	37.57	Reconciled	
390729	16-AUG-18	OCHOA, JOSE		25.12			Negotiable	
390730	16-AUG-18	OLIN CORPORATION		27,266.32	23-AUG-18	27,266.32	Reconciled	
390731	16-AUG-18	OMMANNEY, DARIEN		12.01	22-AUG-18	12.01	Reconciled	
390732	16-AUG-18	ONESOURCE DISTRIBUTORS LLC		88.54	20-AUG-18	88.54	Reconciled	
390733	16-AUG-18	ORACLE AMERICA, INC.		19,380.90	22-AUG-18	19,380.90	Reconciled	
390734	16-AUG-18	ORANGE COUNTY AUTO PARTS CO		90.17	17-AUG-18	90.17	Reconciled	
390735	16-AUG-18	PACIFIC COAST BOLT CORP		396.39	22-AUG-18	396.39	Reconciled	
390736	16-AUG-18	PACIFIC PARTS & CONTROLS INC		2,285.36	22-AUG-18	2,285.36	Reconciled	
390737	16-AUG-18	PALMERAS APARTMENTS		946.97			Negotiable	
390738	16-AUG-18	PARKHOUSE TIRE INC		4,453.98	21-AUG-18	4,453.98	Reconciled	
390739	16-AUG-18	PIPELOGIX INC		3,000.00	21-AUG-18	3,000.00	Reconciled	
390740	16-AUG-18	POLLARDWATER.COM		620.64	20-AUG-18	620.64	Reconciled	
390741	16-AUG-18	PREKOPA, CHRIS		37.72			Negotiable	

IRWD Ledger Upgrade  
 BANK: Bank of America N.A. Branch : Los Angeles  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390742	16-AUG-18	PRIME CONTROLS COMPANY INC		4,831.31	20-AUG-18	4,831.31	Reconciled	
390743	16-AUG-18	PRUFTECHNIK INC		762.87	22-AUG-18	762.87	Reconciled	
390744	16-AUG-18	PSOMAS		2,748.75	20-AUG-18	2,748.75	Reconciled	
390745	16-AUG-18	RAINBOW DISPOSAL CO INC		357.36	23-AUG-18	357.36	Reconciled	
390746	16-AUG-18	RCE CONSULTANTS, INC.		793.52	27-AUG-18	793.52	Reconciled	
390747	16-AUG-18	RESPONSE ENVELOPE, INC		2,841.91	21-AUG-18	2,841.91	Reconciled	
390748	16-AUG-18	RICHMOND AMERICAN HOMES OF MARYLAND, INC		41.20	23-AUG-18	41.20	Reconciled	
390749	16-AUG-18	RINCON TRUCK CENTER INC.		2,276.26	17-AUG-18	2,276.26	Reconciled	
390750	16-AUG-18	SANTA ANA BLUE PRINT		173.80	23-AUG-18	173.80	Reconciled	
390751	16-AUG-18	SHAMROCK SUPPLY CO INC		742.54	21-AUG-18	742.54	Reconciled	
390752	16-AUG-18	SIMI VALLEY LANDFILL AND RECYCLING CENTER		665.12	20-AUG-18	665.12	Reconciled	
390753	16-AUG-18	SIMMONS, MATTHEW		28.62	24-AUG-18	28.62	Reconciled	
390754	16-AUG-18	SKORUZ TECHNOLOGIES INC		17,280.00	27-AUG-18	17,280.00	Reconciled	
390755	16-AUG-18	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		6,047.91	29-AUG-18	6,047.91	Reconciled	
390756	16-AUG-18	SOUTH COAST WATER CO.		90.00	24-AUG-18	90.00	Reconciled	
390757	16-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY		282,886.23	20-AUG-18	282,886.23	Reconciled	
390758	16-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY		406.36	21-AUG-18	406.36	Reconciled	
390759	16-AUG-18	SOUTHERN CALIFORNIA GAS COMPANY		2,695.69	22-AUG-18	2,695.69	Reconciled	

390760	16-AUG-18	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	198.93	22-AUG-18	198.93	Reconciled
390761	16-AUG-18	SOUTHERN COUNTIES LUBRICANTS LLC	1,698.62	20-AUG-18	1,698.62	Reconciled
390762	16-AUG-18	SPATIAL WAVE, INC.	2,000.00	17-AUG-18	2,000.00	Reconciled

IRWD Ledger Upgrade  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 31-AUG-2018 15:07  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar ) Page: 23  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390763		16-AUG-18	SPIEKER, THOMAS		48.50	28-AUG-18	48.50	Reconciled
390764		16-AUG-18	SS MECHANICAL CONSTRUCTION CORP		46,700.00	23-AUG-18	46,700.00	Reconciled
390765		16-AUG-18	STANDARD PACIFIC HOMES		11.12	20-AUG-18	11.12	Reconciled
390766		16-AUG-18	STANTEC CONSULTING SERVICES INC.		13,380.00	23-AUG-18	13,380.00	Reconciled
390767		16-AUG-18	STREAKWAVE WIRELESS, INC.		1,130.50	20-AUG-18	1,130.50	Reconciled
390768		16-AUG-18	SUEZ TREATMENT SOLUTIONS INC.		16,349.77	23-AUG-18	16,349.77	Reconciled
390769		16-AUG-18	SUKLE ADVERTISING INC.		53,622.44	29-AUG-18	53,622.44	Reconciled
390770		16-AUG-18	SUNSHINE SUPPLY COMPANY, INC.		2,734.70	21-AUG-18	2,734.70	Reconciled
390771		16-AUG-18	SUTCLIFF, ANNE		121.60	28-AUG-18	121.60	Reconciled
390772		16-AUG-18	TAYLOR MORRISON		39.47	30-AUG-18	39.47	Reconciled
390773		16-AUG-18	TAYLOR, JOHN		91.81			Negotiable
390774		16-AUG-18	TEREX SERVICES		293,092.96	22-AUG-18	293,092.96	Reconciled
390775		16-AUG-18	THE FURMAN GROUP, INC.		12,540.00	24-AUG-18	12,540.00	Reconciled
390776		16-AUG-18	THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC		68.07	29-AUG-18	68.07	Reconciled
390777		16-AUG-18	TOTAL RESOURCE MANAGEMENT, INC.		14,400.00	29-AUG-18	14,400.00	Reconciled
390778		16-AUG-18	TRAFFIC CONTROL ENGINEERING, INC		5,000.00			Negotiable
390779		16-AUG-18	TRUCPARCO		619.51	21-AUG-18	619.51	Reconciled
390780		16-AUG-18	UNITED SAMPLES		116.05	22-AUG-18	116.05	Reconciled
390781		16-AUG-18	UNITED SITE SERVICES OF CALIFORNIA INC		665.15	20-AUG-18	665.15	Reconciled
390782		16-AUG-18	USA BLUEBOOK		468.52	21-AUG-18	468.52	Reconciled
390783		16-AUG-18	VIRTUAL GRAFFITI, INC.		8,803.98	17-AUG-18	8,803.98	Reconciled
390784		16-AUG-18	VULCAN MATERIALS COMPANY		1,498.38	20-AUG-18	1,498.38	Reconciled
390785		16-AUG-18	WANG, JUI-WAN		41.46	27-AUG-18	41.46	Reconciled
390786		16-AUG-18	WASTE MANAGEMENT OF ORANGE COUNTY		3,469.36	20-AUG-18	3,469.36	Reconciled
390787		16-AUG-18	WATERLINE TECHNOLOGIES INC		2,840.00	17-AUG-18	2,840.00	Reconciled
390788		16-AUG-18	WATERSMART SOFTWARE, INC		13,597.50	23-AUG-18	13,597.50	Reconciled

IRWD Ledger Upgrade  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Report Date: 31-AUG-2018 15:07  
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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								
390789		16-AUG-18	WAXIE'S ENTERPRISES, INC		2,476.13	20-AUG-18	2,476.13	Reconciled
390790		16-AUG-18	WECK LABORATORIES INC		41,337.00	27-AUG-18	41,337.00	Reconciled
390791		16-AUG-18	WILLIAM LYON HOMES, INC.		15.97	29-AUG-18	15.97	Reconciled
390792		16-AUG-18	WOODBURY LANE APARTMENTS		982.60			Negotiable
390793		16-AUG-18	XCAPER INDUSTRIES LLC		37.76	21-AUG-18	37.76	Reconciled
390794		16-AUG-18	YP LLC		103.52	21-AUG-18	103.52	Reconciled
390795		17-AUG-18	ANTHEM BLUE CROSS	LOS ANGELES	214.68	22-AUG-18	214.68	Reconciled
390796		17-AUG-18	ANTHEM BLUE CROSS	LOS ANGELES	546.33	22-AUG-18	546.33	Reconciled
390797		17-AUG-18	ANTHEM BLUE CROSS	LOS ANGELES	546.33	22-AUG-18	546.33	Reconciled
390798		17-AUG-18	REACH EMPLOYEE ASSISTANCE INC	PLACENTIA	1,013.60	22-AUG-18	1,013.60	Reconciled
390799		17-AUG-18	ANTHEM BLUE CROSS	LOS ANGELES	290.43	22-AUG-18	290.43	Reconciled

390800	17-AUG-18	PERS LONG TERM CARE	PASADENA	538.89	20-AUG-18	538.89	Reconciled
390801	17-AUG-18	FRANCHISE TAX BOARD	SACRAMENTO 1	100.00	29-AUG-18	100.00	Reconciled
390802	17-AUG-18	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	DIAMOND BAR	1,415.00			Negotiable
390803	17-AUG-18	ORANGE COUNTY SHERIFF'S OFFICE	4601 JAMBOREE	224.50	23-AUG-18	224.50	Reconciled
390804	17-AUG-18	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY	ATLANTA	72.30	20-AUG-18	72.30	Reconciled
390805	17-AUG-18	PRE-PAID LEGAL SERVICES INC	PO BOX 2629	1,223.95	22-AUG-18	1,223.95	Reconciled
390806	17-AUG-18	COLONIAL LIFE & ACCIDENT INSURANCE CO.	COLUMBIA	1,258.02	21-AUG-18	1,258.02	Reconciled
390807	17-AUG-18	AFLAC	PO BOX 84069	148.74	21-AUG-18	148.74	Reconciled
390808	17-AUG-18	AFLAC	1932 WYNNTON RD	6,818.24	20-AUG-18	6,818.24	Reconciled
390809	23-AUG-18	Figuroa, Jorge (Jorge)		160.34	28-AUG-18	160.34	Reconciled
390810	23-AUG-18	Johnson, Dane		758.26			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								
390811		23-AUG-18	Malloy, Steven L (Steven)		30.00	24-AUG-18	30.00	Reconciled
390812		23-AUG-18	Monroy, Jonnathan		57.27	27-AUG-18	57.27	Reconciled
390813		23-AUG-18	Perez, Cesar (Cesar)		95.00	29-AUG-18	95.00	Reconciled
390814		23-AUG-18	Saini, Mohit		283.48	23-AUG-18	283.48	Reconciled
390815		23-AUG-18	Shinbashi, Allen		35.23	27-AUG-18	35.23	Reconciled
390816		23-AUG-18	RED WING SHOE STORE	DALLAS	1,080.61	27-AUG-18	1,080.61	Reconciled
390817		23-AUG-18	ABM INDUSTRY GROUPS, LLC		17,565.22	29-AUG-18	17,565.22	Reconciled
390818		23-AUG-18	ACCUSTANDARD INC		117.24	28-AUG-18	117.24	Reconciled
390819		23-AUG-18	ACWA		2,000.00	27-AUG-18	2,000.00	Reconciled
390820		23-AUG-18	AGILENT TECHNOLOGIES, INC.		2,242.20	27-AUG-18	2,242.20	Reconciled
390821		23-AUG-18	AHLUWALIA, MOHINDER		35.26	28-AUG-18	35.26	Reconciled
390822		23-AUG-18	AIRGAS, INC.		1,897.22	27-AUG-18	1,897.22	Reconciled
390823		23-AUG-18	ALL AMERICAN ASPHALT		1,657.00	27-AUG-18	1,657.00	Reconciled
390824		23-AUG-18	ALLIANT INSURANCE SERVICES, INC		1,000.00	27-AUG-18	1,000.00	Reconciled
390825		23-AUG-18	ALSTON & BIRD LLP		130,764.39	30-AUG-18	130,764.39	Reconciled
390826		23-AUG-18	AMAND, PAUL		173.98	30-AUG-18	173.98	Reconciled
390827		23-AUG-18	AMAZON CAPITAL SERVICES, INC.		1,495.64	27-AUG-18	1,495.64	Reconciled
390828		23-AUG-18	AMERICAN GEOTECHNICAL, INC.		2,170.00	27-AUG-18	2,170.00	Reconciled
390829		23-AUG-18	AMERICAN TECHNOLOGIES, INC		405.00	29-AUG-18	405.00	Reconciled
390830		23-AUG-18	ANSARI, SARA		51.09	27-AUG-18	51.09	Reconciled
390831		23-AUG-18	APEX LIFE SCIENCES, LLC		1,190.00	29-AUG-18	1,190.00	Reconciled
390832		23-AUG-18	ARC		696.40	27-AUG-18	696.40	Reconciled
390833		23-AUG-18	ARCADIS U.S., INC.		97,253.05	29-AUG-18	97,253.05	Reconciled
390834		23-AUG-18	AT&T		174.02	27-AUG-18	174.02	Reconciled
390835		23-AUG-18	AT&T		48.96	27-AUG-18	48.96	Reconciled
390836		23-AUG-18	AT&T		14,281.44	28-AUG-18	14,281.44	Reconciled
390837		23-AUG-18	ATKINSON, ANDELSON, LOYA, RUOD AND ROMO		4,442.00	28-AUG-18	4,442.00	Reconciled
390838		23-AUG-18	AUTOZONE PARTS, INC.		1,394.11	29-AUG-18	1,394.11	Reconciled
390839		23-AUG-18	BAE, SANGJUN		47.13			Negotiable
390840		23-AUG-18	BALDWIN & SONS		75.54	27-AUG-18	75.54	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								
390841		23-AUG-18	BANK OF NEW YORK MELLON TRUST COMPANY NA		1,359.00	27-AUG-18	1,359.00	Reconciled

390842	23-AUG-18	BATTERIES PLUS AND BATTERIES PLUS BULBS	1,190.67	27-AUG-18	1,190.67	Reconciled
390843	23-AUG-18	BDC SPECIAL WASTE	207.20	27-AUG-18	207.20	Reconciled
390844	23-AUG-18	BEE EMERGENCY RESPONSE TEAM	175.00	27-AUG-18	175.00	Reconciled
390845	23-AUG-18	BELL TOWER FLORIST & GIFTS	99.12			Negotiable
390846	23-AUG-18	BILL'S SWEEPING SERVICE INC	460.00	28-AUG-18	460.00	Reconciled
390847	23-AUG-18	BLACK & VEATCH CORPORATION	279,448.06	30-AUG-18	279,448.06	Reconciled
390848	23-AUG-18	BORCHARD SURVEYING & MAPPING, INC.	2,457.50	27-AUG-18	2,457.50	Reconciled
390849	23-AUG-18	BRITHINEE ELECTRIC	7,552.87	27-AUG-18	7,552.87	Reconciled
390850	23-AUG-18	BRUCE CLARK	6,000.00	27-AUG-18	6,000.00	Reconciled
390851	23-AUG-18	BURLINGTON SAFETY LABORATORY OF CALIFORNIA INC	82.54	28-AUG-18	82.54	Reconciled
390852	23-AUG-18	BUSH & ASSOCIATES INC	1,256.00			Negotiable
390853	23-AUG-18	BUTLER BOX & STAKE INC	915.88	27-AUG-18	915.88	Reconciled
390854	23-AUG-18	C WELLS PIPELINE MATERIALS INC	823.22	30-AUG-18	823.22	Reconciled
390855	23-AUG-18	CALIFORNIA BARRICADE RENTAL, INC.	10,120.00	28-AUG-18	10,120.00	Reconciled
390856	23-AUG-18	CALIFORNIA PACIFIC HOMES	701.66			Negotiable
390857	23-AUG-18	CALSENSE	350.00	29-AUG-18	350.00	Reconciled
390858	23-AUG-18	CANON FINANCIAL SERVICES, INC	9,200.24	27-AUG-18	9,200.24	Reconciled
390859	23-AUG-18	CANON SOLUTIONS AMERICA, INC.	53.13	27-AUG-18	53.13	Reconciled
390860	23-AUG-18	CARL ZEISS INDUSTRIAL METROLOG	54.63			Negotiable
390861	23-AUG-18	CARLA MARTINEZ AND EDUARDO MARTINEZ	22.28			Voided
390862	23-AUG-18	CAROLLO ENGINEERS, INC	6,770.93	29-AUG-18	6,770.93	Reconciled
390863	23-AUG-18	CARUSO, MONICA	25.24			Negotiable

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 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
390864	23-AUG-18	23-AUG-18	CHARLES P CROWLEY COMPANY INC		250.74	28-AUG-18	250.74	Reconciled
390865	23-AUG-18	23-AUG-18	CHEM TECH INTERNATIONAL INC		13,868.80			Negotiable
390866	23-AUG-18	23-AUG-18	CHEN, ZHONG		20.92			Negotiable
390867	23-AUG-18	23-AUG-18	CHOI, KWANGYEON		67.54			Negotiable
390868	23-AUG-18	23-AUG-18	CITY CIRCUIT BREAKERS		4,729.38	24-AUG-18	4,729.38	Reconciled
390869	23-AUG-18	23-AUG-18	CITY OF IRVINE		32.00	28-AUG-18	32.00	Reconciled
390870	23-AUG-18	23-AUG-18	CITY OF NEWPORT BEACH		1,400.84	29-AUG-18	1,400.84	Reconciled
390871	23-AUG-18	23-AUG-18	CLEAN ENERGY		4,750.27	29-AUG-18	4,750.27	Reconciled
390872	23-AUG-18	23-AUG-18	CONSTELLATION NEWENERGY, INC.		44,914.85	27-AUG-18	44,914.85	Reconciled
390873	23-AUG-18	23-AUG-18	CONSUMERS PIPE & SUPPLY CO.		300.45	27-AUG-18	300.45	Reconciled
390874	23-AUG-18	23-AUG-18	COX COMMUNICATIONS, INC.		3,264.00	27-AUG-18	3,264.00	Reconciled
390875	23-AUG-18	23-AUG-18	CPC SYSTEMS, INC.		2,575.00			Negotiable
390876	23-AUG-18	23-AUG-18	D & G SIGNS		662.66	28-AUG-18	662.66	Reconciled
390877	23-AUG-18	23-AUG-18	D & H WATER SYSTEMS INC.		21,602.50	30-AUG-18	21,602.50	Reconciled
390878	23-AUG-18	23-AUG-18	DAMRON, ROBERT		58.66			Negotiable
390879	23-AUG-18	23-AUG-18	DELL MARKETING LP		1,551.49	27-AUG-18	1,551.49	Reconciled
390880	23-AUG-18	23-AUG-18	DIRECTV INC		129.98	28-AUG-18	129.98	Reconciled
390881	23-AUG-18	23-AUG-18	DU, KEZHENG		93.32			Negotiable
390882	23-AUG-18	23-AUG-18	ELIASSON, MARIE C		42.22			Negotiable
390883	23-AUG-18	23-AUG-18	ENTERPRISE SECURITY, INC		300.00	27-AUG-18	300.00	Reconciled
390884	23-AUG-18	23-AUG-18	ENVIRONMENTAL EXPRESS INC		3,362.15	27-AUG-18	3,362.15	Reconciled
390885	23-AUG-18	23-AUG-18	EXECUTIVE LIGHTING & ELECTRIC		7,917.65	28-AUG-18	7,917.65	Reconciled
390886	23-AUG-18	23-AUG-18	FARRELL & ASSOCIATES		216.15	24-AUG-18	216.15	Reconciled
390887	23-AUG-18	23-AUG-18	FEDEX		807.79	27-AUG-18	807.79	Reconciled
390888	23-AUG-18	23-AUG-18	FERGUSON ENTERPRISES, INC.		1,226.20	27-AUG-18	1,226.20	Reconciled
390889	23-AUG-18	23-AUG-18	FIONA HUTTON & ASSOCIATES, INC.		25,193.75	30-AUG-18	25,193.75	Reconciled

390890	23-AUG-18	FISHER SCIENTIFIC COMPANY LLC	11,865.74	29-AUG-18	11,865.74	Reconciled
390891	23-AUG-18	FRONTIER CALIFORNIA INC.	580.34	29-AUG-18	580.34	Reconciled

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

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Payment Document : IRWD CHECK								
390892		23-AUG-18	FUSCOE ENGINEERING, INC.		1,329.57	24-AUG-18	1,329.57	Reconciled
390893		23-AUG-18	GANAHL LUMBER CO.		458.60	29-AUG-18	458.60	Reconciled
390894		23-AUG-18	GEIGER BROS		796.67	27-AUG-18	796.67	Reconciled
390895		23-AUG-18	GENERATION INVESTMENTS LP		1,089.58			Negotiable
390896		23-AUG-18	GRAINGER		1,402.17	27-AUG-18	1,402.17	Reconciled
390897		23-AUG-18	GRAYBAR ELECTRIC COMPANY		320.25	27-AUG-18	320.25	Reconciled
390898		23-AUG-18	HABITAT RESTORATION SCIENCES, INC.		1,183.00			Negotiable
390899		23-AUG-18	HARRINGTON INDUSTRIAL PLASTICS LLC		2,270.46	27-AUG-18	2,270.46	Reconciled
390900		23-AUG-18	HDR ENGINEERING INC		47,462.73	30-AUG-18	47,462.73	Reconciled
390901		23-AUG-18	HELPMATES STAFFING SERVICES		10,388.82	29-AUG-18	10,388.82	Reconciled
390902		23-AUG-18	HILL BROTHERS CHEMICAL COMPANY		10,563.74			Negotiable
390903		23-AUG-18	HOME DEPOT USA INC		221.59	27-AUG-18	221.59	Reconciled
390904		23-AUG-18	HORIZON TECHNOLOGY INC		333.65	27-AUG-18	333.65	Reconciled
390905		23-AUG-18	HUANG, NAI- FONG		49.51			Negotiable
390906		23-AUG-18	IBM CORPORATION		925.00	27-AUG-18	925.00	Reconciled
390907		23-AUG-18	IDEA HALL		30,800.00			Negotiable
390908		23-AUG-18	IRVINE PIPE & SUPPLY INC		1,329.57	24-AUG-18	1,329.57	Reconciled
390909		23-AUG-18	IRVINE RANCH CONSERVANCY		27.47	28-AUG-18	27.47	Reconciled
390910		23-AUG-18	ISRAEL, RICHARD		42.94			Negotiable
390911		23-AUG-18	JACK RUBIN & SONS, INC		1,271.45	27-AUG-18	1,271.45	Reconciled
390912		23-AUG-18	JACKSON TIDUS, A LAW CORPORATION		882.00	28-AUG-18	882.00	Reconciled
390913		23-AUG-18	JIANG, HAIYING		15.03	30-AUG-18	15.03	Reconciled
390914		23-AUG-18	JUST ENERGY SOLUTIONS INC.		68.11	27-AUG-18	68.11	Reconciled
390915		23-AUG-18	KANG, KAI		32.84			Negotiable
390916		23-AUG-18	KIM, SOON TAE		1,400.00	29-AUG-18	1,400.00	Reconciled
390917		23-AUG-18	KIMBALL MIDWEST		96.23	27-AUG-18	96.23	Reconciled
390918		23-AUG-18	KING, TAYLOR		188.22			Negotiable
390919		23-AUG-18	KIRAKOSIAN, GARY		41.35			Negotiable
390920		23-AUG-18	KLEINFELDER, INC.		5,545.63	27-AUG-18	5,545.63	Reconciled
390921		23-AUG-18	KO, ASHLEY		87.13			Negotiable

IRWD Ledger Upgrade  
 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								
390922		23-AUG-18	KONECRANES INC		5,615.00	27-AUG-18	5,615.00	Reconciled
390923		23-AUG-18	LA HABRA FENCE COMPANY INC		16,125.64			Negotiable
390924		23-AUG-18	LAGUNA BEACH COUNTY WATER DISTRICT		6,779.76	30-AUG-18	6,779.76	Reconciled
390925		23-AUG-18	LANI, MANIJEH		40.27	27-AUG-18	40.27	Reconciled
390926		23-AUG-18	LEE, KENNETH		234.17			Negotiable
390927		23-AUG-18	LENNAR HOMES		5,423.10	24-AUG-18	5,423.10	Reconciled
390928		23-AUG-18	LEUNG, AMY		49.92			Negotiable
390929		23-AUG-18	LEWIS BRISBOIS BISGAARD AND SMITH, LLP		48,219.84	29-AUG-18	48,219.84	Reconciled
390930		23-AUG-18	LIN, JOHANS		67.98	28-AUG-18	67.98	Reconciled
390931		23-AUG-18	LIST, BRANDI		78.62			Negotiable
390932		23-AUG-18	LIU, TONG		36.62			Negotiable
390933		23-AUG-18	LIU, CATHY		21.94			Negotiable
390934		23-AUG-18	MACDUFF, CHRIS		32.00			Negotiable
390935		23-AUG-18	MAP COMMUNICATIONS, INC.		1,044.88	29-AUG-18	1,044.88	Reconciled
390936		23-AUG-18	MC MASTER CARR SUPPLY CO		342.70	27-AUG-18	342.70	Reconciled

390937	23-AUG-18	METROPOLIS GARDENS LLC	854.25	29-AUG-18	854.25	Reconciled
390938	23-AUG-18	MICHAEL BAKER INTERNATIONAL, INC.	5,043.76	27-AUG-18	5,043.76	Reconciled
390939	23-AUG-18	MISCOWATER	1,751.50	27-AUG-18	1,751.50	Reconciled
390940	23-AUG-18	MPULSE MOBILE, INC	106.92	27-AUG-18	106.92	Reconciled
390941	23-AUG-18	MR CRANE INC	2,613.60	27-AUG-18	2,613.60	Reconciled
390942	23-AUG-18	MSC INDUSTRIAL SUPPLY CO	83.26	27-AUG-18	83.26	Reconciled
390943	23-AUG-18	MUNICIPAL MAINTENANCE EQUIPMENT INC	573.81	27-AUG-18	573.81	Reconciled
390944	23-AUG-18	MYERS & SONS HI-WAY SAFETY, INC.	2,605.40	27-AUG-18	2,605.40	Reconciled
390945	23-AUG-18	NAM, DANIEL	19.10	27-AUG-18	19.10	Reconciled
390946	23-AUG-18	NATIONAL READY MIXED CONCRETE CO.	1,629.71	27-AUG-18	1,629.71	Reconciled
390947	23-AUG-18	NEWPORT WINDOW MAINTENANCE INC	2,314.00	30-AUG-18	2,314.00	Reconciled
390948	23-AUG-18	NGUYEN, KATIE	46.11	28-AUG-18	46.11	Reconciled
390949	23-AUG-18	NORTHWESTERN MUTUAL	72.05			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								
390950		23-AUG-18	O.C. SUPERIOR CUSTOM CLEANING SERVICES		832.00			Negotiable
390951		23-AUG-18	OCEAN BLUE ENVIRONMENTAL SERVICES INC		2,709.86			Negotiable
390952		23-AUG-18	OLIN CORPORATION		24,363.28	30-AUG-18	24,363.28	Reconciled
390953		23-AUG-18	OLSON, HAGEL & FISHBURN, LLP		780.00	27-AUG-18	780.00	Reconciled
390954		23-AUG-18	ONESOURCE DISTRIBUTORS LLC		11,310.75	29-AUG-18	11,310.75	Reconciled
390955		23-AUG-18	ORANGE COUNTY AUTO PARTS CO		887.32	24-AUG-18	887.32	Reconciled
390956		23-AUG-18	ORANGE COUNTY TREASURER		438.12	24-AUG-18	438.12	Reconciled
390957		23-AUG-18	PACIFIC HYDROTECH CORPORATION		26,263.05	29-AUG-18	26,263.05	Reconciled
390958		23-AUG-18	PAK, KYONG		38.42			Negotiable
390959		23-AUG-18	PARK, CATHERINE		219.60	28-AUG-18	219.60	Reconciled
390960		23-AUG-18	PARK, SUNHYUNG		66.50			Negotiable
390961		23-AUG-18	PARKHANI, JAANVI		59.81			Negotiable
390962		23-AUG-18	PARKHOUSE TIRE INC		2,835.93	28-AUG-18	2,835.93	Reconciled
390963		23-AUG-18	PEI, LEI		38.39			Negotiable
390964		23-AUG-18	POLLARDWATER.COM		208.23	27-AUG-18	208.23	Reconciled
390965		23-AUG-18	PRAXAIR DISTRIBUTION INC		1,475.92	27-AUG-18	1,475.92	Reconciled
390966		23-AUG-18	PTI SAND & GRAVEL INC		1,717.03	28-AUG-18	1,717.03	Reconciled
390967		23-AUG-18	QUALITY ENVIRONMENTAL CONTAINERS		689.70	28-AUG-18	689.70	Reconciled
390968		23-AUG-18	QUICKEL PAVING INC		30,202.00	28-AUG-18	30,202.00	Reconciled
390969		23-AUG-18	QUINN COMPANY		11.76	27-AUG-18	11.76	Reconciled
390970		23-AUG-18	RAM AIR ENGINEERING INC		2,630.00	28-AUG-18	2,630.00	Reconciled
390971		23-AUG-18	RED WING SHOE STORE		2,740.03	27-AUG-18	2,740.03	Reconciled
390972		23-AUG-18	REDDIVARI, KUMAR		10.06			Negotiable
390973		23-AUG-18	RELIANCE STANDARD LIFE INSURANCE COMPANY		30,439.39			Negotiable
390974		23-AUG-18	RESILIENT COMMUNICATIONS INC.		35,737.25			Negotiable
390975		23-AUG-18	RESTEK CORPORATION		1,869.93	27-AUG-18	1,869.93	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								
390976		23-AUG-18	RICHMOND AMERICAN HOMES OF MARYLAND, INC		126.22			Negotiable
390977		23-AUG-18	RINCON TRUCK CENTER INC.		1,632.76	24-AUG-18	1,632.76	Reconciled

390978	23-AUG-18	RIVERA, ALEXIS	233.39	27-AUG-18	233.39	Reconciled
390979	23-AUG-18	ROSEMOUNT INC.	5,526.69	27-AUG-18	5,526.69	Reconciled
390980	23-AUG-18	SAFETY CENTER INCORPORATED	4,200.00	27-AUG-18	4,200.00	Reconciled
390981	23-AUG-18	SANDERS PAVING INC	16,918.75	30-AUG-18	16,918.75	Reconciled
390982	23-AUG-18	SANFORD, DONNA	201.02	27-AUG-18	201.02	Reconciled
390983	23-AUG-18	SANTA ANA BLUE PRINT	356.22	30-AUG-18	356.22	Reconciled
390984	23-AUG-18	SANTA MARGARITA FORD	1,178.74	28-AUG-18	1,178.74	Reconciled
390985	23-AUG-18	SANTA MARGARITA FORD	199.00	28-AUG-18	199.00	Reconciled
390986	23-AUG-18	SHERMAN AND CANDICE	41.99			Voided
390987	23-AUG-18	SHERWIN WILLIAMS COMPANY	1,804.47	27-AUG-18	1,804.47	Reconciled
390988	23-AUG-18	SHIH MAR, HSAU HWA	582.60			Negotiable
390989	23-AUG-18	SHORAKA, TAGHI	46.21			Negotiable
390990	23-AUG-18	SIERRA, ROXANNE	24.76			Negotiable
390991	23-AUG-18	SIMONEAU, LESLIE	53.70			Negotiable
390992	23-AUG-18	SITMATIC	1,907.49	27-AUG-18	1,907.49	Reconciled
390993	23-AUG-18	SKALING, CHRIS	49.78	28-AUG-18	49.78	Reconciled
390994	23-AUG-18	SKORUZ TECHNOLOGIES INC	18,252.00	29-AUG-18	18,252.00	Reconciled
390995	23-AUG-18	SLADEK, HENRY	45.28			Negotiable
390996	23-AUG-18	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	1,615.74	30-AUG-18	1,615.74	Reconciled
390997	23-AUG-18	SOUTH COAST WATER DISTRICT	2,577.00	30-AUG-18	2,577.00	Reconciled
390998	23-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY	481,677.88	27-AUG-18	481,677.88	Reconciled
390999	23-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY	50.83	28-AUG-18	50.83	Reconciled
391000	23-AUG-18	SOUTHERN CALIFORNIA GAS COMPANY	3,138.35	30-AUG-18	3,138.35	Reconciled

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 32  
 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								
391001		23-AUG-18	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		135.00			Negotiable
391002		23-AUG-18	SOUTHERN CALIFORNIA WATER COMMITTEE INC		25,000.00			Negotiable
391003		23-AUG-18	SPARKLETT'S		379.16	30-AUG-18	379.16	Reconciled
391004		23-AUG-18	SPATIAL WAVE, INC.		1,860.00	29-AUG-18	1,860.00	Reconciled
391005		23-AUG-18	STETSON ENGINEERS INC.		5,616.25	28-AUG-18	5,616.25	Reconciled
391006		23-AUG-18	STREAKWAVE WIRELESS, INC.		1,208.94	28-AUG-18	1,208.94	Reconciled
391007		23-AUG-18	SUMMIT CHEMICAL SPECIALTY PRODUCTS		11,721.60			Negotiable
391008		23-AUG-18	SUN, MANTIAN		40.23			Negotiable
391009		23-AUG-18	SUPERIOR WATER TECHNOLOGIES		8,783.13			Negotiable
391010		23-AUG-18	SUPPORT PRODUCT SERVICES, INC		8,837.14	27-AUG-18	8,837.14	Reconciled
391011		23-AUG-18	TADOKORO, YASHUHITO		42.34			Negotiable
391012		23-AUG-18	TALLEY INC		1,566.86	28-AUG-18	1,566.86	Reconciled
391013		23-AUG-18	TESTAMERICA LABORATORIES, INC		1,992.90	28-AUG-18	1,992.90	Reconciled
391014		23-AUG-18	TETRA TECH, INC		14,508.00	30-AUG-18	14,508.00	Reconciled
391015		23-AUG-18	THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC		171.08			Negotiable
391016		23-AUG-18	TIC-RETAIL PROPERTIES		720.15			Negotiable
391017		23-AUG-18	TOTAL RESOURCE MANAGEMENT, INC.		170.00	30-AUG-18	170.00	Reconciled
391018		23-AUG-18	TRAFFIC CONTROL ENGINEERING, INC		5,000.00			Negotiable
391019		23-AUG-18	TRENCH SHORING COMPANY		4,500.00	28-AUG-18	4,500.00	Reconciled
391020		23-AUG-18	TRIPAC MARKETING INC		1,580.10	27-AUG-18	1,580.10	Reconciled
391021		23-AUG-18	TROPICAL PLAZA NURSERY INC		16,090.00	29-AUG-18	16,090.00	Reconciled
391022		23-AUG-18	TRUCPARCO		1,054.77			Negotiable
391023		23-AUG-18	TRUONG, HANH		29.65	29-AUG-18	29.65	Reconciled
391024		23-AUG-18	UNITED PARCEL SERVICE INC		105.69	27-AUG-18	105.69	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
391025		23-AUG-18	US BANK NAT'L ASSOCIATION NORTH DAKOTA		56,334.86			Negotiable
391026		23-AUG-18	V&A CONSULTING ENGINEERS		951.50	27-AUG-18	951.50	Reconciled
391027		23-AUG-18	VINCENT, VIRGIE		73.41			Negotiable
391028		23-AUG-18	VONG, SHERRY		22.25	28-AUG-18	22.25	Reconciled
391029		23-AUG-18	VWR INTERNATIONAL, LLC		97.62	28-AUG-18	97.62	Reconciled
391030		23-AUG-18	WANG, RAN		360.46	29-AUG-18	360.46	Reconciled
391031		23-AUG-18	WANG, XIAOPING		19.11			Negotiable
391032		23-AUG-18	WAXIE'S ENTERPRISES, INC		326.67	27-AUG-18	326.67	Reconciled
391033		23-AUG-18	WECK LABORATORIES INC		3,259.00	30-AUG-18	3,259.00	Reconciled
391034		23-AUG-18	WEST YOST ASSOCIATES, INC		7,497.00	28-AUG-18	7,497.00	Reconciled
391035		23-AUG-18	WESTAMERICA COMMUNICATIONS, INC.		3,339.50	29-AUG-18	3,339.50	Reconciled
391036		23-AUG-18	WESTERN AV		2,215.46	27-AUG-18	2,215.46	Reconciled
391037		23-AUG-18	WORTHY, CHRISTINA		58.38			Negotiable
391038		23-AUG-18	XU, QIAN		49.03			Negotiable
391039		23-AUG-18	YANG, JOANNIE		107.18			Negotiable
391040		23-AUG-18	YORKE ENGINEERING LLC		949.50	29-AUG-18	949.50	Reconciled
391041		23-AUG-18	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	1,890.00	28-AUG-18	1,890.00	Reconciled
391042		23-AUG-18	Chaney, David (Dave)	HOME	125.00	27-AUG-18	125.00	Reconciled
391043		23-AUG-18	COUNTY OF ORANGE	PO BOX 1438	106.38	29-AUG-18	106.38	Reconciled
391044		29-AUG-18	Fabris, John		22.13			Negotiable
391045		29-AUG-18	Fites, Michael E (Michael)		51.50	30-AUG-18	51.50	Reconciled
391046		29-AUG-18	Hastings, Nola		107.46	30-AUG-18	107.46	Reconciled
391047		29-AUG-18	Hayes, John H (John)		200.00			Negotiable
391048		29-AUG-18	Ho, Connie		6.32			Negotiable
391049		29-AUG-18	Jackson, Bradley E (Brad)		475.00			Negotiable
391050		29-AUG-18	Oldewage, Lars D (Lars)		44.69			Negotiable
391051		29-AUG-18	Orozco, Linda		285.83			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
391052		29-AUG-18	Torres, Richard P (Richard)		97.00			Negotiable
391053		29-AUG-18	2 FARADAY LLC		14.39			Negotiable
391054		29-AUG-18	A&Y ASPHALT CONTRACTORS, INC.		28,077.00			Negotiable
391055		29-AUG-18	ACCURATE MEASUREMENT SYSTEMS INC		6,416.36			Negotiable
391056		29-AUG-18	AIRGAS, INC.		1,655.04			Negotiable
391057		29-AUG-18	ALPHA TRAFFIC SERVICES, INC.		1,010.00			Negotiable
391058		29-AUG-18	AMBROSE APTS		256.49			Negotiable
391059		29-AUG-18	AMERICAN SEAL & PACKING		336.99			Negotiable
391060		29-AUG-18	APEX LIFE SCIENCES, LLC		714.00			Negotiable
391061		29-AUG-18	ARKHIPOVA, JULIA		38.02			Negotiable
391062		29-AUG-18	AT&T		53.53			Negotiable
391063		29-AUG-18	AT&T		249.08			Negotiable
391064		29-AUG-18	AUTOZONE PARTS, INC.		890.35			Negotiable
391065		29-AUG-18	BATTERIES PLUS AND BATTERIES PLUS BULBS		611.49			Negotiable
391066		29-AUG-18	BROOKFIELD RESIDENTIAL		117.66			Negotiable
391067		29-AUG-18	C WELLS PIPELINE MATERIALS INC		2,153.95			Negotiable

391068	29-AUG-18	CALATLANTIC HOMES	43.92	Negotiable
391069	29-AUG-18	CALIFORNIA BARRICADE RENTAL, INC.	3,005.00	Negotiable
391070	29-AUG-18	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	1,279.23	Negotiable
391071	29-AUG-18	CANON SOLUTIONS AMERICA, INC.	468.06	Negotiable
391072	29-AUG-18	CDW GOVERNMENT LLC	13,469.50	Negotiable
391073	29-AUG-18	CHEHABI, HAITHAM	26.59	Negotiable
391074	29-AUG-18	CITY OF IRVINE	185.13	Negotiable
391075	29-AUG-18	CITY OF ORANGE	171.14	Negotiable
391076	29-AUG-18	CITY OF SANTA ANA	191.22	Negotiable
391077	29-AUG-18	CITY OF TUSTIN	8,303.27	Negotiable
391078	29-AUG-18	CONSTELLATION NEWENERGY, INC.	16,189.52	Negotiable

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 35  
 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								
391079		29-AUG-18	COX COMMUNICATIONS, INC.		129.94			Negotiable
391080		29-AUG-18	CRESCENT CHEMICAL CO.		1,515.92			Negotiable
391081		29-AUG-18	CULLIGAN OF SANTA ANA		10,000.00			Negotiable
391082		29-AUG-18	DANESHVAR, RAHI REZA		370.29			Negotiable
391083		29-AUG-18	DATA CLEAN CORPORATION		830.00			Negotiable
391084		29-AUG-18	DATASITE INC		54,257.00			Negotiable
391085		29-AUG-18	DAWSON, MEGHAN		579.30			Negotiable
391086		29-AUG-18	DEE JASPAR & ASSOCIATES, INC.		368.25			Negotiable
391087		29-AUG-18	DELL MARKETING LP		9,794.34			Negotiable
391088		29-AUG-18	DENALI WATER SOLUTIONS LLC		5,373.15			Negotiable
391089		29-AUG-18	DEO, ANDY		182.66			Negotiable
391090		29-AUG-18	DIRECTV INC		125.53			Negotiable
391091		29-AUG-18	EAGLE PRINT DYNAMICS		6,994.27			Negotiable
391092		29-AUG-18	EHS INTERNATIONAL, INC		1,200.00			Negotiable
391093		29-AUG-18	ELEMENT MATERIALS TECHNOLOGY HUNTINGTON BEACH INC		650.00			Negotiable
391094		29-AUG-18	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.		9,527.50			Negotiable
391095		29-AUG-18	EQUIPMENT DIRECT INC		337.85			Negotiable
391096		29-AUG-18	EXECUTIVE LIGHTING & ELECTRIC		11,244.64			Negotiable
391097		29-AUG-18	FARRELL & ASSOCIATES		1,116.05			Negotiable
391098		29-AUG-18	FEDEX		190.21			Negotiable
391099		29-AUG-18	FIRE EXTINGUISHING SAFETY & SERVICE		662.42			Negotiable
391100		29-AUG-18	FISERV		19,829.92			Negotiable
391101		29-AUG-18	FISHER SCIENTIFIC COMPANY LLC		5,101.95			Negotiable
391102		29-AUG-18	FISHER, GUSTAVO		10.34			Negotiable
391103		29-AUG-18	FORESTRY SUPPLIERS INC		269.23			Negotiable

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 36  
 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								
391104		29-AUG-18	GEERA, DESAI		928.69			Negotiable
391105		29-AUG-18	GENERAL MONITORS INC.		1,540.83			Negotiable
391106		29-AUG-18	GHD INC.		7,978.94			Negotiable
391107		29-AUG-18	GILBERT, DAVID A		19.02			Negotiable
391108		29-AUG-18	GJ AUTOMOTIVE EQUIPMENT CO INC		397.00			Negotiable
391109		29-AUG-18	GRAINGER		15,791.86			Negotiable
391110		29-AUG-18	GRAYBAR ELECTRIC		3,039.05			Negotiable



Bank Account Currency: USD ( US Dollar )  
 Payment Type: All

Payment Currency: USD ( US Dollar )  
 Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
391158		29-AUG-18	R & S SOIL PRODUCTS INC		700.38			Negotiable
391159		29-AUG-18	RED WING SHOE STORE		890.75			Negotiable
391160		29-AUG-18	REDDING, PAM		45.29			Negotiable
391161		29-AUG-18	REGENTS OF THE UNIVERSITY OF CALIFORNIA		70.00			Negotiable
391162		29-AUG-18	REGENTS OF THE UNIVERSITY OF CALIFORNIA		6,775.42			Negotiable
391163		29-AUG-18	REGENTS OF THE UNIVERSITY OF CALIFORNIA		800.00			Negotiable
391164		29-AUG-18	RICHARD C. SLADE & ASSOCIATES LLC		10,506.89			Negotiable
391165		29-AUG-18	RMC WATER AND ENVIRONMENT		2,551.92			Negotiable
391166		29-AUG-18	RS HUGHES COMPANY, INC.		1,255.29			Negotiable
391167		29-AUG-18	SAFETY-KLEEN SYSTEMS, INC		1,080.19			Negotiable
391168		29-AUG-18	SALVADOR, FRANZ		358.62			Negotiable
391169		29-AUG-18	SAN CARLO APARTMENTS		17.46			Negotiable
391170		29-AUG-18	SANTA MARGARITA FORD		68.86			Negotiable
391171		29-AUG-18	SHAW PUMP & SUPPLY, INC.		8,616.15			Negotiable
391172		29-AUG-18	SHEIKH, SHAMS		49.63			Negotiable
391173		29-AUG-18	SITEONE LANDSCAPE SUPPLY, LLC		3,121.29			Negotiable
391174		29-AUG-18	SITMATIC		635.83			Negotiable
391175		29-AUG-18	SMARTCOVER SYSTEMS		595.00			Negotiable
391176		29-AUG-18	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		32,673.51			Negotiable
391177		29-AUG-18	SOUTHERN CALIFORNIA EDISON COMPANY		312,043.12			Negotiable
391178		29-AUG-18	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		475.75			Negotiable
391179		29-AUG-18	SPARKLETTS		116.66			Negotiable
IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 39 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								
391180		29-AUG-18	STETSON ENGINEERS INC.		551.47			Negotiable
391181		29-AUG-18	SUKLE ADVERTISING INC.		20,478.48			Negotiable
391182		29-AUG-18	THAI, CHARLES		30.33			Negotiable
391183		29-AUG-18	TICHANDCO, MARIA LOUDES		41.99			Negotiable
391184		29-AUG-18	TOM BARON		203.03			Negotiable
391185		29-AUG-18	TOP TEN REAL ESTATE INC		159.75			Negotiable
391186		29-AUG-18	TREE FERN INVESTORS, LLC		1,251.03			Negotiable
391187		29-AUG-18	TROPICAL PLAZA NURSERY INC		37,745.93			Negotiable
391188		29-AUG-18	TRUCPARCO		655.46			Negotiable
391189		29-AUG-18	UNITED PARCEL SERVICE INC		143.07			Negotiable
391190		29-AUG-18	VERIZON WIRELESS SERVICES LLC		9,701.51			Negotiable
391191		29-AUG-18	VWR INTERNATIONAL, LLC		2,181.20			Negotiable
391192		29-AUG-18	WANG, GUIPING		61.91			Negotiable
391193		29-AUG-18	WARE MALCOMB		2,000.00			Negotiable
391194		29-AUG-18	WARMINGTON RESIDENTIAL		112.20			Negotiable
391195		29-AUG-18	WASTE MANAGEMENT OF ORANGE COUNTY		2,166.16			Negotiable
391196		29-AUG-18	WATERLINE TECHNOLOGIES INC		5,964.00			Negotiable
391197		29-AUG-18	WAXIE'S		2,965.38			Negotiable

391198	29-AUG-18	ENTERPRISES, INC		51.50		Negotiable
391199	29-AUG-18	WEN, YANG		371.74		Negotiable
391200	29-AUG-18	WEST COAST SAFETY				
391201	29-AUG-18	SUPPLY INC		62.60		Negotiable
391202	29-AUG-18	WOLF, NICHOLAS		78.17		Negotiable
391203	29-AUG-18	WU, XIAOKANG		18.84		Negotiable
391204	29-AUG-18	YANG, QIAN		79.97		Negotiable
391205	29-AUG-18	YANG, SU JUNG		40,266.66		Negotiable
391206	29-AUG-18	ZEBRON CONTRACTING				
		INC		5,195.08		Negotiable
		ZHOU, MEITONG		1,415.40		Negotiable
		INTERNATIONAL	DIAMOND			
		BROTHERHOOD OF	BAR			
		ELECTRICAL WORKERS				
		LOCAL 47				

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 40  
 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								
391207		30-AUG-18	FRANCHISE TAX BOARD	SACRAMENTO 1	100.00			Negotiable
391208		30-AUG-18	PERS LONG TERM CARE	PASADENA	538.89			Negotiable
391209		30-AUG-18	JCI JONES CHEMICALS INC	NEWARK	4,106.79			Negotiable
391210		30-AUG-18	CENTRAL COAST POWER SERVICES, LLC	TEMPLETON	16,167.50			Negotiable
Payment Document Subtotal:					11,459,172.58		8,592,202.01	

Payment Document : IRWD Wire

12721		03-AUG-18	BANK OF AMERICA MERRILL LYNCH	CHICAGO	5,616.54			Negotiable
12722		06-AUG-18	EMPLOYEE BENEFIT SPECIALISTS, INC.	PO BOX 11657	13,196.24			Negotiable
12723		07-AUG-18	YORK INSURANCE SERVICES GROUP INC - CA	PAY	4,923.22			Negotiable
12724		13-AUG-18	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	448.87			Negotiable
12725		13-AUG-18	INTERNAL REVENUE SERVICE	FRESNO	184,910.69			Negotiable
12726		13-AUG-18	FRANCHISE TAX BOARD	SACRAMENTO	58,758.12			Negotiable
12727		13-AUG-18	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	13,310.85			Negotiable
12728		13-AUG-18	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	1,993.83			Negotiable
12729		13-AUG-18	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	122,759.66			Negotiable
12730		13-AUG-18	EMPLOYEE BENEFIT SPECIALISTS, INC.	PO BOX 11657	29,185.34			Negotiable
12731		13-AUG-18	CALPERS	SACRAMENTO 1	483,802.83			Negotiable
12732		13-AUG-18	CALPERS	SACRAMENTO 1	2,802.27			Negotiable

IRWD Ledger Upgrade Payment Register For 01-AUG-18 To 31-AUG-18 Report Date: 31-AUG-2018 15:07  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 41  
 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								
12733		14-AUG-18	YORK INSURANCE SERVICES GROUP INC - CA	PAY	6,245.35			Negotiable
12734		15-AUG-18	U.S. BANK NATIONALST. ASSOCIATION	ST. LOUIS	8,187.69			Negotiable
12735		20-AUG-18	EMPLOYEE BENEFIT SPECIALISTS, INC.	PO BOX 11657	13,419.59			Negotiable
12736		20-AUG-18	FILANC-BALFOUR BEATPY JV	WEST COVINA	688,779.48			Negotiable
12737		20-AUG-18	FILANC-BALFOUR BEATPY JV	ESR 211084000	4,599.49			Negotiable
12738		20-AUG-18	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY	FOUNTAIN	2,350,859.03			Negotiable



Exhibit "E"

**MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS**

**August  
2018**

	AMOUNT	VENDOR	PURPOSE
8/3/2018	952,170.33	BANK OF AMERICA	ACH Payments for Payroll
8/17/2018	957,321.62	BANK OF AMERICA	ACH Payments for Payroll
8/31/2018	960,406.77	BANK OF AMERICA	ACH Payments for Payroll
	<u><u>\$2,869,898.72</u></u>		

Exhibit "F"

**IRWD Gov Code 53065.5 Disclosure Report**

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

01-AUG-18 to 31-AUG-18

NAME	CHECK NO.	CHECK	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Baquerizo, Joseph	390206	2-Aug-18	115.68	Other(Misc)	Meeting supplies
Bennett, Ray	390410	8-Aug-18	166.77	Mileage	Monthly Rio Bravo DRP Project Tour/Inspection
Caselli, Craig	390411	8-Aug-18	180.00	Membership Renewal	CWEA membership fee
Figueroa, Jorge	390609	16-Aug-18	213.79	Certification Renewal	Wastewater Grade I certification
Hall, William	390196	2-Aug-18	180.00	Certification Renewal	CWEA Backflow Tester certification
Hayes, John	391047	29-Aug-18	200.00	Certification Renewal	Distribution Operator Grade 4
Humeny, Nicholas	390198	2-Aug-18	140.06	Other(Misc)	Safety shoe allowance
Jackson, Brad	391049	29-Aug-18	475.00	Certification Renewal	ACI Concrete Field Testing Technician Grade I
Johnson, Dane	390810	23-Aug-18	302.01	Lodging	ESRI User Annual Conference, San Diego, CA - July 11, 2018
Johnson, Dane	390810	23-Aug-18	302.00	Lodging	ESRI User Annual Conference, San Diego, CA - July 12, 2018
Kessler, Chris	390610	16-Aug-18	116.00	Membership Renewal	Principal Engineer liscense renewal
Leal, Eliberto	390416	8-Aug-18	188.00	Membership Renewal	CWEA membership fee
Lew, Kelly	390200	2-Aug-18	115.00	Membership Renewal	Principal Engineer liscense renewal
Orozco, Linda	391051	29-Aug-18	172.30	Certification Renewal	SWRCB Water Treatment Operator Grade II
Orozco, Linda	391051	29-Aug-18	113.53	Membership Renewal	SWRCB Water Treatment Operator Grade II - Text Book
Perez, Cesar	390418	8-Aug-18	180.00	Membership Renewal	CWEA membership fee
Roberts, Tom	390419	8-Aug-18	155.00	Certification Renewal	SWRCB Water Treatment Operator Grade V
Roberts, Tom	390419	8-Aug-18	205.00	Certification Renewal	SWRCB Water Distribution Operator Grade V
Saini, Mohit	390814	23-Aug-18	181.69	Other(Misc)	Meeting supplies
Solis, Henry	390420	8-Aug-18	188.00	Membership Renewal	CWEA membership fee
Swan, Peer	390205	2-Aug-18	555.96	Airfare	ACWA Region 1 Event, Sacramento, CA - June 14-15, 2018
Swan, Peer	390205	2-Aug-18	181.26	Lodging	ACWA Region 1 Event, Sacramento, CA - June 14, 2018
Swan, Peer	390205	2-Aug-18	523.96	Airfare	ACWA Region 3 Event, Sacramento, CA - June 21-22, 2018
Swan, Peer	390205	2-Aug-18	174.90	Lodging	ACWA Region 3 Event, Sacramento, CA - June 21, 2018
Wang, Peter	390613	16-Aug-18	200.00	Other(Misc)	Safety shoe allowance
<b>Total Amount:</b>			<b>\$5,525.91</b>		

September 24, 2018   
Prepared by: J. Davis/T. Fournier   
Submitted by: R. Jacobson/C. Clary   
Approved by: Paul A. Cook 

## CONSENT CALENDAR

### LETTER OF CREDIT EXTENSIONS FOR THE SERIES 1993 AND 2009A BONDS

#### SUMMARY:

The District currently has \$29.9 million of Consolidated Series 1993 Bonds (1993 Bonds) and \$60.0 million of Consolidated Series 2009A Bonds (2009A Bonds) supported by U.S. Bank N.A. (U.S. Bank) letters of credit (LOC) scheduled to expire November 7, 2018 and December 22, 2020, respectively. Staff requested U.S. Bank provide a fee proposal to extend the LOC for the 1993 Bonds and reduce the LOC fees for the 2009A Bonds. U.S. Bank provided a proposal to extend both LOC's to December 2021. The proposed LOC fee for the 1993 Bonds and the 2009A Bonds will result in a total savings to the District of \$93,000. Staff is requesting the Board approve a resolution for the extension of both LOC's to December 2021 at an annual cost of 0.33%.

#### BACKGROUND:

The District currently has \$29.9 million of 1993 Bonds supported by a U.S. Bank LOC, scheduled to expire November 7, 2018. U.S. Bank provided a proposal to extend the 1993 Bonds LOC for three years at the same annual rate of 0.33%. Additionally, the District has 2009A Bonds supported by a U.S. Bank LOC scheduled to expire December 22, 2020. Staff requested that U.S. Bank reduce the 2009A Bonds LOC fee and extend the LOC for one additional year past the current expiration. U.S. Bank agreed to reduce the fee from 0.41% to 0.33% and extend both LOC's to December 2021. The reduction in the 2009A LOC fee will provide total savings to the District of approximately \$93,000. Legal expenses related to the LOC extensions are estimated at \$15,000.

Staff reviewed current LOC market rates with the District's Municipal Advisor, PFM, to ensure the fee proposal was competitive with current LOC pricing from other banks of similar credit quality. PFM confirmed the pricing was consistent with current LOC market pricing.

Based on the pricing received, staff recommends the Board approve a resolution extending the LOC's to December 2021 at an annual cost of 0.33%. The Letter of Credit Pricing Analysis is attached as Exhibit "A". Legal counsel has prepared a resolution approving the extensions of the letters of credit for the 1993 and 2009A Bonds, attached as Exhibits "B".

#### FISCAL IMPACTS:

The total letter of credit fee for the 1993 Bonds will be \$275,084 for the three-year period. Due to the LOC fee reduction from 0.41% to 0.33% on the 2009A Bonds, the LOC cost for the remaining term (to December 2020) will be \$383,742, resulting in a savings of approximately \$93,000. The cost for the one-year extension will be \$179,358, for a three-year total of \$563,100. Legal expenses related to the extensions are estimated at \$15,000

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on September 4, 2018.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE STAFF TO EXTEND THE U.S. BANK LETTERS OF CREDIT FOR THE DISTRICT'S 1993 BONDS AND 2009A BONDS TO DECEMBER 2021 AT ANNUAL COST OF 0.33%, AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE IRVINE RANCH WATER DISTRICT  
AUTHORIZING CERTAIN ACTIONS IN CONNECTION  
WITH EXTENSION OF LETTERS OF CREDIT  
(CONSOLIDATED SERIES 1993 and CONSOLIDATED SERIES 2009A)

LIST OF EXHIBITS:

Exhibit "A" - Letter of Credit Extension Pricing Analysis

Exhibit "B" – Resolution Authorizing Certain Actions in Connection with LOC Extensions

**EXHIBIT "A"**

IRVINE RANCH WATER DISTRICT  
US BANK LETTER OF CREDIT PRICING  
August 28, 2018

<b>Series 1993 Bonds</b>
--------------------------

Fiscal Year	Stated <sup>(1)</sup>	Proposed LOC Fee	Annual Cost
FY 18-19 <sup>(2)</sup>	\$30,303,036	0.33%	\$50,000
FY 19-20	28,681,468	0.33%	94,649
FY 20-21	26,958,553	0.33%	88,963
FY 21-22 <sup>(2)</sup>	25,134,290	0.33%	41,472
<b>Total</b>			<b>\$275,084</b>

(1) Stated amount represents the average par amount of bonds outstanding for the 1993 Bonds, plus 41 days of interest at the maximum rate of 12%.

(2) Represents a 6-month period

<b>Series 2009A Bonds</b>
---------------------------

Fiscal Year	Stated <sup>(3)</sup>	Current LOC Fee	Current Annual Cost	Proposed LOC Fee	Proposed Cost	Savings
FY 18-19	\$60,670,685	0.41%	\$124,375	0.33%	\$100,107	\$24,268
FY 19-20	58,142,740	0.41%	238,385	0.33%	191,871	46,514
FY 20-21 <sup>(4)</sup>	55,614,795	0.41%	114,010	0.33%	91,764	22,246
<b>Subtotal Current Term</b>			<b>\$476,770</b>		<b>\$383,742</b>	<b>\$93,028</b>
<b>1-Year Extension</b>						
FY 20-21 <sup>(4)</sup>	55,614,795			0.33%	91,764	
FY 21-22 <sup>(4)</sup>	53,086,849			0.33%	87,593	
<b>Total</b>					<b>\$563,100</b>	

(3) Stated amount represents the average par amount of bonds outstanding for the 2009A Bonds, plus 34 days of interest at the maximum rate of 12%.

(4) Represents a 6-month period

Estimated Legal Expense                      \$15,000

Exhibit "B"

RESOLUTION NO. 2018-

RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE IRVINE RANCH WATER DISTRICT  
AUTHORIZING CERTAIN ACTIONS IN CONNECTION  
WITH EXTENSION OF LETTERS OF CREDIT  
(CONSOLIDATED SERIES 1993 AND CONSOLIDATED SERIES 2009A)

The Irvine Ranch Water District ("**IRWD**") has issued the Bonds of IRWD, Consolidated Series 1993 (the "**Series 1993 Bonds**") and Consolidated Series 2009A (the "**Series 2009A Bonds**").

The irrevocable letters of credit of U.S. Bank National Association ("**US Bank**") have been issued with respect to the Series 1993 Bonds (the "**1993 Bonds Letter of Credit**") and 2009A Bonds (the "**2009A Bonds Letter of Credit**," and collectively with the 1993 Bonds Letter of Credit, the "**Letters of Credit**").

The 1993 Bonds Letter of Credit is scheduled to expire on November 7, 2018, and the 2009A Bonds Letter of Credit is scheduled to expire on December 22, 2020.

Consistent with IRWD's Debt Management Policy, the Board of Directors (the "**Board**") must approve all debt issuance or refunding proposals made by IRWD involving a pledge or other extension of IRWD's credit through the sale of securities, execution of loans or leases, or making guarantees, or otherwise involving directly or indirectly the lending or pledging of IRWD's credit.

After evaluating proposed terms and conditions for extending the Letters of Credit, the Board believes it is in the interest of IRWD to authorize the extension of the Letters of Credit as provided herein.

The 1993 Bonds Letter of Credit was issued pursuant to the Reimbursement Agreement dated as of May 7, 2015 (the "**1993 Bonds Reimbursement Agreement**"), and the 2009A Bonds Letter of Credit was issued and has previously been extended pursuant to the Amended and Restated Reimbursement Agreement, dated as of April 1, 2011, as amended by the First Amendment to Amended and Restated Reimbursement Agreement, dated as of July 15, 2013, and subsequently amended by the Second Amendment to Amended and Restated Reimbursement Agreement, dated as of June 22, 2016, each by and between the District and US Bank (collectively, the "**2009A Bonds Reimbursement Agreement**").

The Board of Directors of IRWD therefore resolves as follows:

Section 1. The Treasurer is hereby authorized and directed to cause the extension of the Letters of Credit, so as to expire on or about December 2021. The form of a first amendment to the 1993 Bonds Reimbursement Agreement (inclusive of the form of an amended and restated fee letter), and the third amendment to the 2009A Bonds Reimbursement Agreement (inclusive of the form of an amended and restated fee letter) are hereby approved in substantially the forms presented to the Board with this resolution, and the President and Secretary are authorized and

directed to execute such amendment and the President is authorized to execute such fee letter, each in the form so presented with such changes therein as are approved by, and on the date for delivery established by, the Treasurer with the concurrence of the President, which approval will be conclusively evidenced by execution and delivery thereof.

Section 2. The foregoing authorization to cause the extension of the Letters of Credit shall include the approval of the terms of any amendments to agreement and instrument to be delivered by and to the respective remarketing agent. The President and Secretary of IRWD are authorized and directed to execute any amendment so approved.

Section 3. The foregoing authorization to cause the extension of the Letters of Credit shall further include any and all of the following: preparation and/or approval, execution and delivery of any notices, instruments, disclosure or other documents to be delivered or distributed in conjunction with the authorized actions, and any other actions to implement such extension of the Letters of Credit.

Section 4. The President, Secretary and each other officer of IRWD is hereby authorized and directed to execute and deliver any and all documents and instruments and to do and cause to be done any and all acts and things necessary or proper for carrying out the transactions contemplated by this resolution.

ADOPTED, SIGNED AND APPROVED this 24<sup>th</sup> day of September 2018.

\_\_\_\_\_  
President  
IRVINE RANCH WATER DISTRICT and  
of the Board of Directors thereof

\_\_\_\_\_  
Secretary  
IRVINE RANCH WATER DISTRICT and  
of the Board of Directors thereof

APPROVED AS TO FORM:  
Lewis Brisbois Bisgaard & Smith, LLP

By: \_\_\_\_\_  
District Counsel

## FIRST AMENDMENT TO REIMBURSEMENT AGREEMENT

This **FIRST AMENDMENT TO REIMBURSEMENT AGREEMENT** (this "*Amendment*") is dated [October \_\_, 2018] (the "*Amendment Date*"), between **IRVINE RANCH WATER DISTRICT**, a California water district ("*IRWD*"), and **U.S. BANK NATIONAL ASSOCIATION** (the "*Bank*"). All capitalized terms herein and not defined herein shall have the meanings set forth in the hereinafter defined Agreement.

### WITNESSETH

**WHEREAS**, IRWD and the Bank have previously entered into that certain Reimbursement Agreement dated as of May 7, 2015 (as amended, restated, supplemented or otherwise modified from time to time, the "*Agreement*"), relating to the \$38,300,000 Bonds of Irvine Ranch Water District, Consolidated Series 1993;

**WHEREAS**, pursuant to Section 8.1 of the Agreement, the Agreement may be amended by a written amendment thereto executed by IRWD and the Bank; and

**WHEREAS**, IRWD has requested that certain amendments be made to the Agreement, and the Bank has agreed to make such amendments to the Agreement subject to the terms and conditions set forth herein.

**NOW, THEREFORE**, in consideration of the premises, the parties hereto hereby agree as follows:

### SECTION 1. AMENDMENTS.

Upon the satisfaction of the conditions precedent set forth in Section 2 hereof, the Agreement is hereby amended as follows:

1.01. The following definitions in Section 1.1 of the Agreement are hereby amended and restated in their entireties to read as follows:

"Base Rate" means, for each day of determination, a rate of interest per annum equal to the highest of (i) the Prime Rate plus two percent (2%); (ii) the Federal Funds Rate plus three percent (3%); and (iii) seven and one half percent (7.5%).

"Fee Letter" shall mean the letter dated [October \_\_, 2018], from the Bank to IRWD regarding fees and expenses in respect of the Financing Documents, as amended, restated, supplemented or otherwise modified from time to time.

1.02. Section 2.2(f) of the Agreement is hereby amended and restated in its entirety to read as follows:

(f) Increased Costs and Reduced Return.

(i) If the Bank or any Participant determines that any Change of Law affecting the Bank, the Bank's holding company, such Participant or such Participant's holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on the Bank's or such Participant's capital or liquidity or on the capital or liquidity of the Bank's or such Participant's holding company, if any, as a consequence of this Agreement, the Fee Letter or the Letter of Credit issued by the Bank, to a level below that which the Bank, the Bank's holding company, such Participant or such Participant's holding company could have achieved but for such Change of Law (taking into consideration the Bank's policies, the policies of the Bank's holding company, such Participant's policies or the policies of such Participant's holding company with respect to capital adequacy), then from time to time, within 30 days after demand by the Bank or such Participant made through the Bank, IRWD will pay to the Bank or such Participant such additional amount or amounts as will compensate the Bank, the Bank's holding company, such Participant or such Participant's holding company for any such reduction suffered.

(ii) If any Change of Law shall:

(A) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, the Bank or such Participant; or

(B) subject the Bank or such Participant to any taxes on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

and the result of any of the foregoing shall be to increase the cost to the Bank or such Participant of participating in, issuing or maintaining the Letter of Credit, or to reduce the amount of any sum received or receivable by the Bank or such Participant hereunder (whether of principal, interest or any other amount) or under the Fee Letter then, within 30 days following the demand of the Bank, IRWD will pay to the Bank or such Participant such additional amount or amounts as will compensate the Bank for such additional costs incurred or reduction suffered; provided, however, that any amounts payable to any Participant pursuant to this Section shall not exceed the amount IRWD would have been required to pay pursuant to this Section without the participation of such Participant.

(iii) A certificate of the Bank or any Participant setting forth the amount or amounts necessary to compensate the Bank, its holding company, such Participant or its holding company, as the case may be, as specified in section (i) or (ii) of this Subsection (f) and delivered to IRWD (accompanied by a statement specifying the reasons therefor) shall be conclusive absent

manifest error. In determining such amount, the Bank or such Participant may use any reasonably averaging and attribution methods.

1.03. The phrase “the date that is fifteen days following” is hereby deleted from clause (vi) of Section 2.3(a) of the Agreement.

1.04. The phrase “the date that is fifteen days following” is hereby deleted from clause (ii) of the second sentence of Section 2.3(b) of the Agreement.

1.05. Section 2.8 of the Agreement is hereby amended by deleting the reference to “365/366 day year, as the case may be,” and substituting “360 day year” therefor.

1.06. Section 2.9 of the Agreement is hereby amended by the addition of the following sentences at the end thereto to read as follows:

The terms of the Fee Letter are hereby incorporated herein by reference as if fully set forth herein. All references to amounts or obligations due hereunder shall be deemed to include all amounts and obligations under the Fee Letter and any reference to this Agreement shall be deemed to include the Fee Letter.

1.07. Section 7.1(n) of the Agreement is hereby amended by deleting the reference to “A3, A- or A-” and substituting “A2, A or A” therefor.

## **SECTION 2. CONDITIONS PRECEDENT.**

This Amendment shall be effective as of the Amendment Date subject to the satisfaction of or waiver by IRWD of all of the following conditions precedent:

2.01. Delivery by IRWD to the Bank of an executed counterpart of this Amendment and the Amended and Restated Fee Letter dated [October \_\_, 2018] between the Bank and IRWD.

2.02. Receipt by the Bank of the Resolution of IRWD authorizing the extension of the Letter of Credit, the execution of this Amendment and the other matters contemplated hereby and thereby.

2.03. Receipt by the Bank of an incumbency certificate of IRWD certifying the names and signatures of the people authorized to execute and deliver, on behalf of IRWD, this Amendment and the other matters contemplated hereby, in form and substance satisfactory to the Bank.

2.04. Payment to the Bank on or before the Amendment Date of the reasonable legal fees and expenses of counsel to the Bank.

2.05. All other legal matters pertaining to the execution and delivery of this Amendment shall be reasonably satisfactory to the Bank and its counsel.

**SECTION 3. AMENDMENT OF THE LETTER OF CREDIT.**

At the Amendment Date, the Bank shall execute and deliver to the Trustee an amendment to the Letter of Credit extending the Stated Expiration Date to **[December \_\_, 2021]**.

**SECTION 4. REPRESENTATIONS AND WARRANTIES OF IRWD.**

4.01. IRWD hereby represents and warrants that the following statements are true and correct as of the Amendment Date:

- (a) the representations and warranties of IRWD contained in Article IV of the Agreement and in each of the other Financing Documents are true and correct on and as of the Amendment Date as though made on and as of such date;
- (b) no Default or Event of Default has occurred and is continuing or would result from the execution of this Amendment; and
- (c) no petition by or against IRWD has at any time been filed under the United States Bankruptcy Code or under any similar law.

4.02. In addition to the representations given in Article IV of the Agreement, IRWD hereby represents and warrants as follows:

- (a) the execution, delivery and performance by IRWD of this Amendment and the Agreement, as amended hereby, are within its powers, have been duly authorized by all necessary action and do not contravene any law, rule or regulation, any judgment, order or decree or any contractual restriction binding on or affecting IRWD;
- (b) no authorization, approval or other action by, and no notice to or filing with, any governmental authority or regulatory body is required for the due execution, delivery and performance by IRWD of this Amendment or the Agreement, as amended hereby; and
- (c) this Amendment and the Agreement, as amended hereby, constitute legal, valid and binding obligations of IRWD enforceable against IRWD in accordance with their respective terms, except that (i) the enforcement thereof may be limited by bankruptcy, reorganization, insolvency, liquidation, moratorium and other laws relating to or affecting the enforcement of creditors' rights and remedies generally, as the same may be applied in the event of the bankruptcy, reorganization, insolvency, liquidation or similar situation of IRWD, and (ii) no representation or warranty is expressed as to the availability of equitable remedies.

**SECTION 5. MISCELLANEOUS.**

5.01. Except as specifically amended herein, the Agreement shall continue in full force and effect in accordance with its terms. Reference to this Agreement need not be made in any note, document, agreement, letter, certificate, the Agreement or any communication issued or made subsequent to or with respect to the Agreement, it being hereby agreed that any reference to the Agreement shall be sufficient to refer to, and shall mean and be a reference to, the Agreement,

as hereby amended. In case any one or more of the provisions contained herein should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired hereby. The rights and obligations of the parties hereunder shall be deemed to be a contract made under the laws of the State of New York and for all purposes shall be construed in accordance with the laws of said State, without regard to principles of conflicts of law.

5.02. This Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

[Remainder of page intentionally left blank.]

**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be duly executed and delivered as of the Amendment Date.

**IRVINE RANCH WATER DISTRICT**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**U.S. BANK NATIONAL ASSOCIATION**

By: \_\_\_\_\_  
Name: Ashley L. Martin  
Title: Vice President

[TO BE PRINTED ON U.S. BANK LETTERHEAD]

[October \_\_, 2018]

Irvine Ranch Water District  
Consolidated Series 1993  
Amended and Restated Fee Letter

Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92718  
Attention: Treasurer

Ladies and Gentlemen:

Reference is made to (i) the Reimbursement Agreement dated as of May 7, 2015 (the “Agreement”) between Irvine Ranch Water District (“you” or the “District”) and U.S. Bank National Association (“US Bank” or the “Bank”) relating to the Bonds of Irvine Ranch Water District, Consolidated Series 1993 and (ii) the letter agreement dated as of May 7, 2015 (the “Existing Fee Letter”) between US Bank and the District regarding certain fees and expenses. This letter agreement amends and restates the Existing Fee Letter in its entirety as of the date hereof. Any capitalized term below that is defined in the Agreement shall have the same meaning when used herein. This letter is the Fee Letter described in the Agreement.

In order to induce US Bank to extend the Stated Expiration Date of the Letter of Credit to [December \_\_, 2021], the District agrees to make the following payments at the following times:

(1) The District hereby agrees to pay to the Bank on October 1, 2018, for the period commencing on July 1, 2018 to and including September 30, 2018, and in arrears on the first Business Day of each January, April, July and October until the Termination Date and on the Termination Date, a non-refundable letter of credit fee (the “Letter of Credit Fee”) on the daily average undrawn Stated Amount of the Letter of Credit in effect from time to time from the date of this Fee Letter to and including the Termination Date, at the applicable Letter of Credit Fee Rate. As used herein, “Letter of Credit Fee Rate” means the fee rate per annum set forth in the grid below opposite Level 1; provided, however, if any Rating Agency downgrades the District’s Rating to a level less than Level 1, the applicable “Letter of Credit Fee Rate” shall be the rate per annum set forth in the applicable grid below opposite the level that corresponds to the lowest level (it being understood that level 1 is the highest level):

LEVEL	MOODY’S RATING	S&P RATING	FITCH RATING	LETTER OF CREDIT FEE RATE
Level 1	Aa1 or above	AA+ or above	AA+ or above	0.33%
Level 2	Aa2	AA	AA	0.48%

LEVEL	MOODY'S RATING	S&P RATING	FITCH RATING	LETTER OF CREDIT FEE RATE
Level 3	Aa3	AA-	AA-	0.63%
Level 4	A1	A+	A+	0.83%
Level 5	A2	A	A	1.03%

Notwithstanding the foregoing, the Letter of Credit Fee Rate shall be increased by 1.00% per annum from the Letter of Credit Fee Rate in effect immediately prior thereto, (a) in the event that (i) any Rating is withdrawn, suspended or otherwise unavailable from any Rating Agency (other than as a result of the District's determination for reasons other than credit-related reasons or an imminent withdrawal, suspension or downgrade to reduce the number of Rating Agencies assigning Ratings from three to two) or (ii) only one Rating Agency is providing a Rating, and/or (b) upon the occurrence and during the continuance of an Event of Default other than an Event of Default of the type described in clauses (i) and (ii) of Section 7.1(n) of the Agreement.

Any change in the Letter of Credit Fee Rate resulting from a change in the Rating shall be and become effective as of and on the date of the announcement of the change in such Rating. References to the Ratings above are references to the rating categories of the Rating Agencies as presently determined by the respective Rating Agencies and in the event of adoption of any new or changed rating system by any Rating Agency, the Ratings from the applicable Rating Agency shall be deemed to refer to the rating category under the new rating system which most closely approximates the applicable rating category as currently in effect.

The Letter of Credit Fee for any period prior to the date of this Fee Letter shall be calculated in accordance with the terms of the Existing Fee Letter.

(2) In the event the Letter of Credit is terminated prior to the first anniversary of the date of this Fee Letter, a termination fee (the "*Termination Fee*") payable on the date of termination equal to the Letter of Credit Fee that would have been payable to the Bank pursuant to preceding paragraph (1) but for the termination of the Letter of Credit for the period from and including the date on which the Letter of Credit is terminated to and including the first anniversary of the date of this Fee Letter assuming (A) a Letter of Credit Fee Rate equal to the Letter of Credit Fee Rate in effect immediately prior to the termination of the Letter of Credit; and (B) a Stated Amount equal to the Stated Amount in effect on the date of this Fee Letter; *provided, however*, that the Termination Fee shall not be payable if (1) the Bank's unsecured short-term credit rating at the time of termination is below "P-1" by Moody's, below "A-1" by S&P or below "F1" by Fitch or (2) the Bank submits a request for payment pursuant to Section 2.2(f) of the Agreement.

(3) A draw fee of \$250 for each drawing under the Letter of Credit, payable on each Business Day on which the Bank honors the amount of any such drawing or, if the District so elects, payable quarterly in arrears along with the Letter of Credit Fee.

(4) The Bank's customary courier fees and wire transfer fees payable promptly following the District's receipt of an invoice therefor.

(5) Upon each transfer of the Letter of Credit in accordance with its terms, a transfer commission equal to \$2,500.

(6) (A) At the time any non-material amendment, waiver, supplement or restatement of the Agreement is requested or (B) in connection with any Bank consent required for any non-material amendment, waiver, supplement or restatement of any Financing Document (other than the Agreement) at the time such consent is sought, a fee of \$2,500 plus reasonable attorneys' fees and expenses, which fee shall be earned and payable whether or not any such amendment, waiver, supplement or restatement is executed or consent granted. Fees for material amendments, waivers, supplements, restatements, supplements and consents shall be negotiated at the time sought.

All amounts paid pursuant to this Fee Letter shall be non-refundable. Computations of the Letter of Credit Fee and the Termination Fee shall be made on the basis of a 360 day year and actual days elapsed. All amounts paid pursuant to this Fee Letter shall be paid in the manner and to the account set forth in the Agreement.

This Fee Letter may not be amended or waived except by an instrument in writing signed by the Bank and you.

The provisions of Sections 8.9 and 8.10 of the Agreement shall be incorporated by this reference into this Fee Letter as if such provisions were set forth in their entirety except that references to other agreements or "this Agreement" shall mean this Fee Letter and references to "hereunder" or "hereof" shall mean under this Fee Letter or of this Fee Letter.

This Fee Letter amends and restates in its entirety the Existing Fee Letter. Reference to this specific Fee Letter need not be made in any agreement, document, instrument, letter, certificate, the Existing Fee Letter itself, or any communication issued or made pursuant to or with respect to the Existing Fee Letter, any reference to the Existing Fee Letter being sufficient to refer to the Existing Fee Letter as amended and restated hereby, and more specifically, any and all references to the Fee Letter as amended and restated hereby, and more specifically, any and all references to the Fee Letter in the Agreement shall mean this Fee Letter.

This Fee Letter may be executed in any number of counterparts, each of which shall be an original, and all of which, when taken together, shall constitute one agreement. Delivery of an executed signature page of this Fee Letter by electronic transmission shall be effective as delivery of a manually executed counterpart hereof.

This Fee Letter is delivered to you on the understanding that neither the Fee Letter nor any of its terms shall be disclosed, directly or indirectly, to any other person except (a) to your officers, directors, employees, accountants, attorneys, agents and advisors who are directly involved in the consideration of this matter on a confidential and need-to-know basis and for whom you shall be responsible for any breach by any of them of this confidentiality undertaking or (b) under compulsion of law (whether by interrogatory, subpoena, civil investigative demand or otherwise) or by order of any court or governmental or regulatory body, *provided* that, to the extent permitted, you shall give us reasonable prior notice of such disclosure.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Please confirm that the foregoing is our mutual understanding by signing and returning to the Bank an executed counterpart of this Fee Letter. This Fee Letter shall become effective as of the date first above referenced upon our receipt of an executed counterpart of this Fee Letter from you.

Very truly yours,

U.S. BANK NATIONAL ASSOCIATION

By: \_\_\_\_\_

Name: Ashley L. Martin

Title: Vice President

Accepted and agreed to  
as of the date first  
written above by:

IRVINE RANCH WATER DISTRICT

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**THIRD AMENDMENT TO  
AMENDED AND RESTATED REIMBURSEMENT AGREEMENT**

This **THIRD AMENDMENT TO AMENDED AND RESTATED REIMBURSEMENT AGREEMENT** (this "*Amendment*") is dated [October \_\_, 2018] (the "*Amendment Date*"), between **IRVINE RANCH WATER DISTRICT**, a California water district ("*IRWD*"), and **U.S. BANK NATIONAL ASSOCIATION** (the "*Bank*"). All capitalized terms herein and not defined herein shall have the meanings set forth in the hereinafter defined Agreement.

**WITNESSETH**

**WHEREAS**, IRWD and the Bank have previously entered into that certain Amended and Restated Reimbursement Agreement dated as of April 1, 2011 (the "*Original Agreement*") between IRWD and the Bank, as amended by the First Amendment to Amended and Restated Reimbursement Agreement dated as of July 15, 2013 (the "*First Amendment*"), and as further amended by the Second Amendment to Amended and Restated Reimbursement Agreement dated as of June 22, 2016 (the "*Second Amendment*" and the Original Agreement as amended by the First Amendment and the Second Amendment, herein the "*Agreement*"), relating to the \$75,000,000 Bonds of Irvine Ranch Water District, Consolidated Series 2009A;

**WHEREAS**, pursuant to Section 8.1 of the Agreement, the Agreement may be amended by a written amendment thereto executed by IRWD and the Bank; and

**WHEREAS**, IRWD has requested that certain amendments be made to the Agreement, and the Bank has agreed to make such amendments to the Agreement subject to the terms and conditions set forth herein.

**NOW, THEREFORE**, in consideration of the premises, the parties hereto hereby agree as follows:

**SECTION 1. AMENDMENTS.**

Upon the satisfaction of the conditions precedent set forth in Section 2 hereof, the Agreement is hereby amended as follows:

1.01. The following definition in Section 1.1 of the Agreement is hereby amended and restated in its entirety to read as follows:

**"Fee Letter"** shall mean the letter dated [October \_\_, 2018], from the Bank to IRWD regarding fees and expenses in respect of the Financing Documents, as amended, restated, supplemented or otherwise modified from time to time.

1.02. Section 2.2(b) of the Agreement is hereby amended by the addition of the following sentences at the end thereto to read as follows:

The terms of the Fee Letter are hereby incorporated herein by reference as if fully set forth herein. All references to amounts or obligations due hereunder shall be

deemed to include all amounts and obligations under the Fee Letter and any reference to this Agreement shall be deemed to include the Fee Letter.

1.03. The phrase “the date that is fifteen days following” is hereby deleted from clause (vi) of Section 2.3(a) of the Agreement.

1.04. The phrase “the date that is fifteen days following” is hereby deleted from clause (ii) of the second sentence of Section 2.3(b) of the Agreement.

## **SECTION 2. CONDITIONS PRECEDENT.**

This Amendment shall be effective as of the Amendment Date subject to the satisfaction of or waiver by IRWD of all of the following conditions precedent:

2.01. Delivery by IRWD to the Bank of an executed counterpart of this Amendment and the Amended and Restated Fee Letter dated [October \_\_, 2018] between the Bank and IRWD.

2.02. Receipt by the Bank of the Resolution of IRWD authorizing the extension of the Letter of Credit, the execution of this Amendment and the other matters contemplated hereby and thereby.

2.03. Receipt by the Bank of an incumbency certificate of IRWD certifying the names and signatures of the people authorized to execute and deliver, on behalf of IRWD, this Amendment and the other matters contemplated hereby, in form and substance satisfactory to the Bank.

2.04. Payment to the Bank on or before the Amendment Date of the reasonable legal fees and expenses of counsel to the Bank.

2.05. All other legal matters pertaining to the execution and delivery of this Amendment shall be reasonably satisfactory to the Bank and its counsel.

## **SECTION 3. AMENDMENT OF THE LETTER OF CREDIT.**

At the Amendment Date, the Bank shall execute and deliver to the Trustee an amendment to the Letter of Credit extending the Stated Expiration Date to [December \_\_, 2021].

## **SECTION 4. REPRESENTATIONS AND WARRANTIES OF IRWD.**

4.01. IRWD hereby represents and warrants that the following statements are true and correct as of the Amendment Date:

(a) the representations and warranties of IRWD contained in Article IV of the Agreement and in each of the other Financing Documents are true and correct on and as of the Amendment Date as though made on and as of such date;

(b) no Default or Event of Default has occurred and is continuing or would result from the execution of this Amendment; and

(c) no petition by or against IRWD has at any time been filed under the United States Bankruptcy Code or under any similar law.

4.02. In addition to the representations given in Article IV of the Agreement, IRWD hereby represents and warrants as follows:

(a) the execution, delivery and performance by IRWD of this Amendment and the Agreement, as amended hereby, are within its powers, have been duly authorized by all necessary action and do not contravene any law, rule or regulation, any judgment, order or decree or any contractual restriction binding on or affecting IRWD;

(b) no authorization, approval or other action by, and no notice to or filing with, any governmental authority or regulatory body is required for the due execution, delivery and performance by IRWD of this Amendment or the Agreement, as amended hereby; and

(c) this Amendment and the Agreement, as amended hereby, constitute legal, valid and binding obligations of IRWD enforceable against IRWD in accordance with their respective terms, except that (i) the enforcement thereof may be limited by bankruptcy, reorganization, insolvency, liquidation, moratorium and other laws relating to or affecting the enforcement of creditors' rights and remedies generally, as the same may be applied in the event of the bankruptcy, reorganization, insolvency, liquidation or similar situation of IRWD, and (ii) no representation or warranty is expressed as to the availability of equitable remedies.

## **SECTION 5. MISCELLANEOUS.**

5.01. Except as specifically amended herein, the Agreement shall continue in full force and effect in accordance with its terms. Reference to this Agreement need not be made in any note, document, agreement, letter, certificate, the Agreement or any communication issued or made subsequent to or with respect to the Agreement, it being hereby agreed that any reference to the Agreement shall be sufficient to refer to, and shall mean and be a reference to, the Agreement, as hereby amended. In case any one or more of the provisions contained herein should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired hereby. The rights and obligations of the parties hereunder shall be deemed to be a contract made under the laws of the State of New York and for all purposes shall be construed in accordance with the laws of said State, without regard to principles of conflicts of law.

5.02. This Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

[Remainder of page intentionally left blank.]

**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be duly executed and delivered as of the Amendment Date.

**IRVINE RANCH WATER DISTRICT**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**U.S. BANK NATIONAL ASSOCIATION**

By: \_\_\_\_\_  
Name: Ashley L. Martin  
Title: Vice President

[TO BE PRINTED ON U.S. BANK LETTERHEAD]

[October \_\_, 2018]

Irvine Ranch Water District  
2009A GO Bonds  
Amended and Restated Fee Letter

Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92718  
Attention: Treasurer

Ladies and Gentlemen:

Reference is made to (i) the Amended and Restated Reimbursement Agreement dated as of April 1, 2011 (the "*Original Agreement*") between Irvine Ranch Water District ("*you*" or the "*District*") and U.S. Bank National Association ("*US Bank*" or the "*Bank*"), as amended by the First Amendment to Amended and Restated Reimbursement Agreement dated as of July 15, 2013 (the "*First Amendment*"), and as further amended by the Second Amendment to Amended and Restated Reimbursement Agreement dated as of June 22, 2016 (the "*Second Amendment*" and the Original Agreement as amended by the First Amendment and the Second Amendment, herein the "*Agreement*"), relating to the Bonds of Irvine Ranch Water District, Consolidated Series 2009A and (ii) the letter agreement dated as of June 22, 2016 (the "*Existing Fee Letter*") between US Bank and the District regarding certain fees and expenses. This letter agreement amends and restates the Existing Fee Letter in its entirety as of the date hereof. Any capitalized term below that is defined in the Agreement shall have the same meaning when used herein. This letter is the Fee Letter described in the Agreement.

In order to induce US Bank to extend the Stated Expiration Date of the Letter of Credit to [December \_\_, 2021], the District agrees to make the following payments at the following times:

(1) The District hereby agrees to pay to the Bank on October 1, 2018, for the period commencing on July 1, 2018 to and including September 30, 2018, and in arrears on the first Business Day of each January, April, July and October until the Termination Date and on the Termination Date, a non-refundable letter of credit fee (the "*Letter of Credit Fee*") on the daily average undrawn Stated Amount of the Letter of Credit in effect from time to time from the date of this Fee Letter to and including the Termination Date, at the applicable Letter of Credit Fee Rate. As used herein, "*Letter of Credit Fee Rate*" means the fee rate per annum set forth in the grid below opposite Level 1; *provided, however*, if any Rating Agency downgrades the District's Rating to a level less than Level 1, the applicable "*Letter of Credit Fee Rate*" shall be the rate per annum set forth in the applicable grid below opposite the level that corresponds to the lowest level (it being understood that level 1 is the highest level) during each related period:

(i) for the period commencing on July 1, 2018, to but not including [October \_\_, 2018]<sup>1</sup>, the Letter of Credit Fee Rate for such period shall be determined in accordance with the pricing matrix set forth below:

LEVEL	MOODY'S RATING	S&P RATING	FITCH RATING	LETTER OF CREDIT FEE RATE
Level 1	Aa1 or above	AA+ or above	AA+ or above	0.41%
Level 2	Aa2	AA	AA	0.56%
Level 3	Aa3	AA-	AA-	0.71%
Level 4	A1	A+	A+	0.91%
Level 5	A2	A	A	1.11%

(ii) for the period commencing on [October \_\_, 2018]<sup>2</sup>, and at all times thereafter, the Letter of Credit Fee Rate shall be determined in accordance with the pricing matrix set forth below:

LEVEL	MOODY'S RATING	S&P RATING	FITCH RATING	LETTER OF CREDIT FEE RATE
Level 1	Aa1 or above	AA+ or above	AA+ or above	0.33%
Level 2	Aa2	AA	AA	0.48%
Level 3	Aa3	AA-	AA-	0.63%
Level 4	A1	A+	A+	0.83%
Level 5	A2	A	A	1.03%

Notwithstanding the foregoing, the Letter of Credit Fee Rate shall be increased by 1.00% per annum from the Letter of Credit Fee Rate in effect immediately prior thereto, (a) in the event that (i) any Rating is withdrawn, suspended or otherwise unavailable from any Rating Agency (other than as a result of the District's determination for reasons other than credit-related reasons or an imminent withdrawal, suspension or downgrade to reduce the number of Rating Agencies assigning Ratings from three to two) or (ii) only one Rating Agency is providing a Rating, and/or (b) upon the occurrence and during the continuance of an Event of Default other than an Event of Default of the type described in clauses (i) and (ii) of Section 7.1(n) of the Agreement.

Any change in the Letter of Credit Fee Rate resulting from a change in the Rating shall be and become effective as of and on the date of the announcement of the change in such Rating.

<sup>1</sup> Such date to be the date hereof.

<sup>2</sup> Such date to be the date hereof.

References to the Ratings above are references to the rating categories of the Rating Agencies as presently determined by the respective Rating Agencies and in the event of adoption of any new or changed rating system by any Rating Agency, the Ratings from the applicable Rating Agency shall be deemed to refer to the rating category under the new rating system which most closely approximates the applicable rating category as currently in effect.

The Letter of Credit Fee for any period prior to the date of this Fee Letter shall be calculated in accordance with the terms of the Existing Fee Letter.

(2) In the event the Letter of Credit is terminated prior to the first anniversary of the date of this Fee Letter, a termination fee (the "*Termination Fee*") payable on the date of termination equal to the Letter of Credit Fee that would have been payable to the Bank pursuant to preceding paragraph (1) but for the termination of the Letter of Credit for the period from and including the date on which the Letter of Credit is terminated to and including the first anniversary of the date of this Fee Letter assuming (A) a Letter of Credit Fee Rate equal to the Letter of Credit Fee Rate in effect immediately prior to the termination of the Letter of Credit; and (B) a Stated Amount equal to the Stated Amount in effect on the date of this Fee Letter; *provided, however*, that the Termination Fee shall not be payable if (1) the Bank's unsecured short-term credit rating at the time of termination is below "P-1" by Moody's, below "A-1" by S&P or below "F1" by Fitch or (2) the Bank submits a request for payment pursuant to Section 2.2(f) of the Agreement.

(3) A draw fee of \$250 for each drawing under the Letter of Credit, payable on each Business Day on which the Bank honors the amount of any such drawing or, if the District so elects, payable quarterly in arrears along with the Letter of Credit Fee.

(4) The Bank's customary courier fees and wire transfer fees payable promptly following the District's receipt of an invoice therefor.

(5) Upon each transfer of the Letter of Credit in accordance with its terms, a transfer commission equal to \$2,500.

(6) (A) At the time any non-material amendment, waiver, supplement or restatement of the Agreement is requested or (B) in connection with any Bank consent required for any non-material amendment, waiver, supplement or restatement of any Financing Document (other than the Agreement) at the time such consent is sought, a fee of \$2,500 plus reasonable attorneys' fees and expenses, which fee shall be earned and payable whether or not any such amendment, waiver, supplement or restatement is executed or consent granted. Fees for material amendments, waivers, supplements, restatements, supplements and consents shall be negotiated at the time sought.

All amounts paid pursuant to this Fee Letter shall be non-refundable. Computations of the Letter of Credit Fee and the Termination Fee shall be made on the basis of a 360 day year and actual days elapsed. All amounts paid pursuant to this Fee Letter shall be paid in the manner and to the account set forth in the Agreement.

This Fee Letter may not be amended or waived except by an instrument in writing signed by the Bank and you.

The provisions of Sections 8.9 and 8.10 of the Agreement shall be incorporated by this reference into this Fee Letter as if such provisions were set forth in their entirety except that references to other agreements or “this Agreement” shall mean this Fee Letter and references to “hereunder” or “hereof” shall mean under this Fee Letter or of this Fee Letter.

This Fee Letter amends and restates in its entirety the Existing Fee Letter. Reference to this specific Fee Letter need not be made in any agreement, document, instrument, letter, certificate, the Existing Fee Letter itself, or any communication issued or made pursuant to or with respect to the Existing Fee Letter, any reference to the Existing Fee Letter being sufficient to refer to the Existing Fee Letter as amended and restated hereby, and more specifically, any and all references to the Fee Letter as amended and restated hereby, and more specifically, any and all references to the Fee Letter in the Agreement shall mean this Fee Letter.

This Fee Letter may be executed in any number of counterparts, each of which shall be an original, and all of which, when taken together, shall constitute one agreement. Delivery of an executed signature page of this Fee Letter by electronic transmission shall be effective as delivery of a manually executed counterpart hereof.

This Fee Letter is delivered to you on the understanding that neither the Fee Letter nor any of its terms shall be disclosed, directly or indirectly, to any other person except (a) to your officers, directors, employees, accountants, attorneys, agents and advisors who are directly involved in the consideration of this matter on a confidential and need-to-know basis and for whom you shall be responsible for any breach by any of them of this confidentiality undertaking or (b) under compulsion of law (whether by interrogatory, subpoena, civil investigative demand or otherwise) or by order of any court or governmental or regulatory body, *provided* that, to the extent permitted, you shall give us reasonable prior notice of such disclosure.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Please confirm that the foregoing is our mutual understanding by signing and returning to the Bank an executed counterpart of this Fee Letter. This Fee Letter shall become effective as of the date first above referenced upon our receipt of an executed counterpart of this Fee Letter from you.

Very truly yours,

U.S. BANK NATIONAL ASSOCIATION

By: \_\_\_\_\_

Name: Ashley L. Martin

Title: Vice President

Accepted and agreed to  
as of the date first  
written above by:

IRVINE RANCH WATER DISTRICT

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

September 24, 2018

Prepared by: C. Kessler/K. Lew

Submitted by: K. Burton *KLB*

Approved by: Paul A. Cook *PAW*

## CONSENT CALENDAR

### PLANNING AREA 51 HERITAGE FIELDS CAPITAL FACILITIES

#### SUMMARY:

Heritage Fields El Toro, LLC (Heritage Fields) is proceeding with development of Planning Area (PA) 51 (Great Park), which includes the construction of streets, storm drains, domestic water, sewer, and recycled water improvements. Staff recommends that the Board:

- Authorize the General Manager to accept Heritage Fields' construction contract with Fydaq Company, Inc. in the amount of \$167,667.21 for the District 2 Bake Parkway Recycled Water Improvements, Project 10447;
- Authorize a budget increase in the amount of \$110,000, from \$163,000 to \$273,000, for the District 2 Bake Parkway Recycled Water Improvements;
- Authorize a budget increase in the amount of \$240,000, from \$244,200 to \$484,200, for the District 4 Benchmark and Perspective Improvements; and
- Approve Contract Change Order (CCO) No. 2 to Project 06553 in the amount of \$249,965 for the addition of two additional manholes and jack and bore tasks to the scope of the District 4 Benchmark and Perspective Improvements.

#### BACKGROUND:

Heritage Fields is moving forward with development of Districts 2 and 4 within PA 51. District 2 is bound by Marine Way, Alton Parkway and Interstate 5. District 4 is south of Irvine Boulevard between Districts 1 and 5. The project location map is shown as Exhibit "A". As part of this development, Heritage Fields will design and construct IRWD's domestic water, sewer, and recycled water capital improvements. The required IRWD capital facilities are documented in the June 2017 PA 51 Sub-Area Master Plan Technical Memorandum prepared by Stantec.

The design and construction of the IRWD facilities will be performed under the terms of the Master Reimbursement Agreement and Supplemental Reimbursement Agreement between Heritage Fields and IRWD approved by the Board in August 2012 and November 2015, respectively.

#### District 2 Bake Parkway Recycled Water Improvements:

The District 2 Bake Parkway Recycled Water Improvements consist of installing approximately 20 feet of 16-inch recycled water pipeline within the intersection of Bake Parkway and Marine Way. This portion of the pipeline was designed and bid separately from the rest of the project given the difficulty of working within the intersection. Heritage Fields retained Hunsaker to prepare the plans and received bids from three contractors; Heritage Fields recommends awarding the construction contract to the lowest bidder, Fydaq Company, Inc., for a bid amount of \$167,667.21 as shown in Exhibit "B". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services,

design and field archeological and paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of District 2 Bake Parkway Improvements costs is shown below.

Design (Hunsaker)	\$ 45,380.00
Construction (Fydaq)	\$167,667.21
Geotechnical Services (Engeo)	\$ 2,400.00
Construction Engineering/Surveying (Hunsaker)	\$ 8,300.00
Archeo/Paleo Monitoring (LSA)	\$ 812.00
Heritage Fields Administration Fee (1%)	<u>\$ 1,676.67</u>
	\$226,235.88

District 4 Benchmark and Perspective Improvements CCO No. 2:

CCO No. 2 to the District 4 Benchmark and Perspective Improvements represents revisions to bid quantities that were originally contracted. Items were added to the original bid set as a part of a delta plan revision. CCO No. 2 includes the addition of two manholes and jack and bore construction methods to the scope of the project at the direction of IRWD. The modified scope and relocation resolved issues associated with open trench construction methods, construction of a diversion structure within an existing multiple-inlet manhole, and maintenance access. Staff has reviewed the costs and quantities associated with this change order and finds them to be acceptable. CCO No. 2, attached as Exhibit "C" in the amount of \$249,965, is for the equipment, material, and labor to install the facilities.

FISCAL IMPACTS:

Projects 10447 and 06553 are included in the FY 2018-19 Capital Budget and will be funded by Great Park Neighborhoods development. Both projects will require a budget increase.

Project No.	Current Budget	Addition <Reduction>	Total Budget
10447	\$163,000	\$110,000	\$273,000
06553	\$244,200	\$240,000	\$484,200
Total	\$407,200	\$350,000	\$757,200

ENVIRONMENTAL COMPLIANCE:

Construction of capital domestic water, sewer, and recycled water facilities for the Great Park Development is subject to CEQA. In conformance with the California Code of Regulations Title 14, Chapter 3, Article 7 an Environmental Impact Report was certified by the City of Irvine, the lead agency on April 4, 2012 (SCH# 2002101020).

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on September 18, 2018.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO ACCEPT HERITAGE FIELDS' CONSTRUCTION CONTRACT WITH FYDAQ COMPANY, INC. IN THE AMOUNT OF \$167,667.21 FOR THE DISTRICT 2 BAKE PARKWAY RECYCLED WATER IMPROVEMENTS, PROJECT 10447; AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$110,000, FROM \$163,000 TO \$273,000, FOR THE DISTRICT 2 BAKE PARKWAY RECYCLED WATER IMPROVEMENTS, PROJECT 10447; AUTHORIZE A BUDGET INCREASE IN THE AMOUNT OF \$240,000, FROM \$244,200 TO \$484,200, FOR THE DISTRICT 4 BENCHMARK AND PERSPECTIVE IMPROVEMENTS, PROJECT 06553; AND APPROVE CONTRACT CHANGE ORDER NO. 2 TO PROJECT 06553 IN THE AMOUNT OF \$249,965 FOR THE ADDITION OF TWO ADDITIONAL MANHOLES AND JACK AND BORE TASKS TO THE SCOPE OF THE DISTRICT 4 BENCHMARK AND PERSPECTIVE IMPROVEMENTS.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Bid Summary, District 2 Bake Parkway Recycled Water Improvements

Exhibit "C" – CCO No. 2, District 4 Benchmark and Perspective Improvements

# EXHIBIT "A"

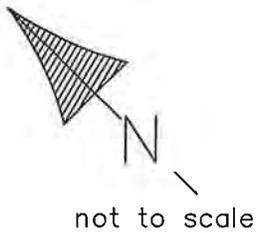


EXHIBIT "A"  
LOCATION MAP

# EXHIBIT "B"

Owner: Heritage Fields El Toro, LLC Project: District 2 - Bake Parkway - Recycled Water Improvements Bid Date: April 26, 2018  
 CODE 7142

ITEM NO.	I. IRWD CODE 7142 CAPITAL RECYCLED WATER	UNIT	QTY	ENGINEER ESTIMATE		FYDAQ-LOW Attn: Greg Huntley Tel: 714.447.9760		L&S Attn: Eilon Wehnam Tel: 714.528.3232		KEC Attn: James Eitring Tel: 951.734.3010		Kennedy - No Bid Attn: David Chorak Tel: 949.380.8363		Leatherwood - No Bid Attn: Bobby Kawai Tel: 714.593.6575	
				PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
1.	Mobilization (Maximum of 2% of Bid Amount Section A), Complete	LS	1	\$ 3,300.00	\$ 3,300.00	\$ 750.00	\$ 750.00	\$ 8,000.00	\$ 8,000.00	\$ 2,500.00	\$ 2,500.00	\$ -	\$ -	\$ -	\$ -
2.	Performance, Labor & Payment Bond, Complete	LS	1	\$ 2,475.00	\$ 2,475.00	\$ 2,380.13	\$ 2,380.13	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ -	\$ -	\$ -	\$ -
3.	Interim Erosion Control - SWPPP & BMP's, Complete	LS	1	\$ 2,475.00	\$ 2,475.00	\$ 750.00	\$ 750.00	\$ 2,500.00	\$ 2,500.00	\$ 6,500.00	\$ 6,500.00	\$ -	\$ -	\$ -	\$ -
4.	Development and Application of Construction Water, Complete	LS	1	\$ 1,650.00	\$ 1,650.00	\$ 750.00	\$ 750.00	\$ 1,500.00	\$ 1,500.00	\$ 6,300.00	\$ 6,300.00	\$ -	\$ -	\$ -	\$ -
5.	Traffic Control per Owner's Supplied Plan, Complete	LS	1	\$ 15,000.00	\$ 15,000.00	\$ 16,240.00	\$ 16,240.00	\$ 14,500.00	\$ 14,500.00	\$ 14,700.00	\$ 14,700.00	\$ -	\$ -	\$ -	\$ -
6.	Pressure Test Pipeline, Complete	LS	1	\$ 3,500.00	\$ 3,500.00	\$ 3,385.00	\$ 3,385.00	\$ 3,000.00	\$ 3,000.00	\$ 2,500.00	\$ 2,500.00	\$ -	\$ -	\$ -	\$ -
7.	Coordinate and Perform shutdown of 24" Recycled Water Line with IRWD Prior to Commencement of Work per IRWD Requirements, Including Disposal of Reclaimed Water to Adjacent Farmer (or as directed by IRWD), Complete	LS	1	\$ 12,000.00	\$ 12,000.00	\$ 3,675.00	\$ 3,675.00	\$ 18,500.00	\$ 18,500.00	\$ 13,200.00	\$ 13,200.00	\$ -	\$ -	\$ -	\$ -
8.	Sawcut, Remove and Replace Existing Pavement Per City Std. 223, Alt "A" Pavement Shall Match Existing ("ARHM Over" "HMA Over" "CMB), Complete	LF	37	\$ 300.00	\$ 11,100.00	\$ 207.00	\$ 7,659.00	\$ 275.00	\$ 10,175.00	\$ 760.00	\$ 28,120.00	\$ -	\$ -	\$ -	\$ -
9.	Furnish and Install Replacement Disturbed Recycled Water, Slope Ground Cover Ice Plant (Carpusbrots edulis, 1 Gal at 18" O.C. spacing), Straw Wattle, 3" Thick City Approved Mulch, 90-Day Plant Maintenance, Complete	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 1,050.00	\$ 1,050.00	\$ 7,500.00	\$ 7,500.00	\$ 61,800.00	\$ 61,800.00	\$ -	\$ -	\$ -	\$ -
10.	Remove and Replace Existing Curb and Gutter, Place Removals into Owner's CFD Concrete Stockpile (Within 3 Miles of Project Site), Complete	LF	20	\$ 250.00	\$ 5,000.00	\$ 285.00	\$ 5,700.00	\$ 175.00	\$ 3,500.00	\$ 315.00	\$ 6,300.00	\$ -	\$ -	\$ -	\$ -
11.	Sawcut, Remove and Replace Existing Sidewalk to Nearest Joint, Place Removals into Owner's CFD Concrete Stockpile (Within 3 Miles of Project Site), Complete	SF	110	\$ 50.00	\$ 5,500.00	\$ 52.00	\$ 5,720.00	\$ 45.00	\$ 4,950.00	\$ 58.00	\$ 6,380.00	\$ -	\$ -	\$ -	\$ -
12.	Construct Slurry Seal (Type II) from lane line to lane line in any Areas Disturbed by the Contractor's Work and Per the Satisfaction of the City Inspector, Complete	SF	1,100	\$ 10.00	\$ 11,000.00	\$ 10.00	\$ 11,000.00	\$ 8.00	\$ 8,800.00	\$ 11.50	\$ 12,650.00	\$ -	\$ -	\$ -	\$ -
13.	Remove and Replace Striping as Required in any Areas Distrubed by the Contractor's Work, Complete	LS	1	\$ 3,500.00	\$ 3,500.00	\$ 1,680.00	\$ 1,680.00	\$ 3,000.00	\$ 3,000.00	\$ 6,300.00	\$ 6,300.00	\$ -	\$ -	\$ -	\$ -
14.	Furnish and Install 16" PVC Purple Pipe, C-900, DR 14, including Trenching, Bedding, Backfill, Compaction, All Fittings, Appurtenances and Thrust Blocks per IRWD Std. DWG. W-17 and as shown on the plans, Complete	LF	15	\$ 1,000.00	\$ 15,000.00	\$ 1,125.00	\$ 16,875.00	\$ 525.00	\$ 7,875.00	\$ 1,600.00	\$ 24,000.00	\$ -	\$ -	\$ -	\$ -
15.	Furnish and Install 24"x24"x16"x16" CML & CSP (0.25" Thick Min.) Cut-In Cross, Fig'd, per Detail 1 on Sheet 3, Remove Interfering Portions of 24" CML & CSP, Complete	EA	1	\$ 35,000.00	\$ 35,000.00	\$ 48,975.00	\$ 48,975.00	\$ 45,000.00	\$ 45,000.00	\$ 8,200.00	\$ 8,200.00	\$ -	\$ -	\$ -	\$ -
16.	Furnish and Install 24" Slip-On Flanged Welded to Ex. 24" CML & CSP, Bond All Joints per IRWD Std. Dwg. CP-9, Complete	EA	2	\$ 2,500.00	\$ 5,000.00	\$ 3,480.00	\$ 6,960.00	\$ 2,500.00	\$ 5,000.00	\$ 3,000.00	\$ 6,000.00	\$ -	\$ -	\$ -	\$ -
17.	Furnish and Install 16"x8" D.I. Concentric Reducer, FExFE, Including 6" Blind Flange, Complete	EA	1	\$ 3,000.00	\$ 3,000.00	\$ 3,755.00	\$ 3,755.00	\$ 850.00	\$ 850.00	\$ 4,800.00	\$ 4,800.00	\$ -	\$ -	\$ -	\$ -
18.	Furnish 24" Butterfly Valve, CL 150B, Fig'd, per IRWD Std. W-22, including Valve Box, Complete (Item Pre-Ordered by FYDAQ)	EA	1	\$ 5,877.94	\$ 5,877.94	\$ 5,877.94	\$ 5,877.94	\$ 5,877.94	\$ 5,877.94	\$ 5,877.94	\$ 5,877.94	\$ -	\$ -	\$ -	\$ -
19.	Install 24" Butterfly Valve, CL 150B, Fig'd, per IRWD Std. W-22, including Valve Box, 1 Raise, Complete	EA	1	\$ 6,500.00	\$ 6,500.00	\$ 4,525.00	\$ 4,525.00	\$ 8,000.00	\$ 8,000.00	\$ 5,000.00	\$ 5,000.00	\$ -	\$ -	\$ -	\$ -
20.	Furnish 16" Butterfly Valve, CL 150B, Fig'd, per IRWD Std. W-22, including Valve Box, Complete (Item Pre-Ordered by FYDAQ)	EA	2	\$ 2,665.07	\$ 5,330.14	\$ 2,665.07	\$ 5,330.14	\$ 2,665.07	\$ 5,330.14	\$ 2,665.07	\$ 5,330.14	\$ -	\$ -	\$ -	\$ -
21.	Install 16" Butterfly Valve, CL 150B, Fig'd, per IRWD Std. W-22, including Valve Box, 1 Raise, Complete	EA	2	\$ 4,500.00	\$ 9,000.00	\$ 3,820.00	\$ 7,640.00	\$ 5,500.00	\$ 11,000.00	\$ 2,800.00	\$ 5,600.00	\$ -	\$ -	\$ -	\$ -
22.	Furnish and Install Temporary Flush-Out Assembly per IRWD Std. W-12, including 16"x8" D.I. Concentric Reducer and 1 Raise, Complete	EA	1	\$ 5,000.00	\$ 5,000.00	\$ 5,640.00	\$ 5,640.00	\$ 1,900.00	\$ 1,900.00	\$ 12,000.00	\$ 12,000.00	\$ -	\$ -	\$ -	\$ -
23.	Raise Valve can to Final Grade After Improvements are Complete or Requested by Developer including Extra Move-In, Complete	EA	3	\$ 800.00	\$ 2,400.00	\$ 450.00	\$ 1,350.00	\$ 750.00	\$ 2,250.00	\$ 1,250.00	\$ 3,750.00	\$ -	\$ -	\$ -	\$ -
<b>TOTAL IRWD CAPITAL IMPROVEMENTS.....</b>				<b>\$173,608.08</b>	<b>\$173,608.08</b>	<b>\$167,667.21</b>	<b>\$167,667.21</b>	<b>\$182,008.08</b>	<b>\$182,008.08</b>	<b>\$250,808.08</b>	<b>\$250,808.08</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

EXHIBIT "C"

CHANGE NO.: 2  
DATE: 8/04/2016

POTENTIAL CHANGE OF WORK ACKNOWLEDGEMENT & VALUE  
(FOR IRWD CAPITAL IMPROVEMENTS)

The purpose of this form is to acknowledge a change in work for the intent of reimbursement of costs. Upon acceptance a change order will be issued.

Contract No.: 20051601 Owner: Heritage Fields El Toro, LLC

Sewer  Contractor: FYDAQ Companies  
Domestic Water   
Reclaim Water   
Other  Design Engineer: Hunsaker & Associates  
IRWD Mgr. Kelly Lew

Project Description: District 4 Area 2 Tract 17884 IRWD Code No. 6523 Capital Facilities

PART A - POTENTIAL CHANGE OF WORK:

Plan Revision Required:  YES  NO Estimated Cost: 249,965.00

Change Initiated By:

Work Description:

Plan revisions to IRWD Code 6523 Delta A added sewer manholes and jack and bore 16" PVC.

- 1. Submitted by: [Signature] Owner Representative / Date
- 2a. In IRWD's opinion the aforementioned work qualify as a potential change in work. does  does not
- 2b. IRWD comments (required if representative does not concur with the potential change):
- 2c. Reviewed by: [Signature] IRWD Representative / Date 8/30/18
- 3. Received and Recorded by: \_\_\_\_\_ Owner Representative / Date

PART B - CHANGE OF WORK VALUE:

\$ 249,965.00

Detailed Backup Attached

- 1. Submitted by: [Signature] Owner Representative / Date
- 2. Recommended by: \_\_\_\_\_ IRWD Representative / Date

September 24, 2018

Prepared by: C. Spangenberg/M. Cortez

Submitted by: K. Burton *KLB*

Approved by: Paul A. Cook *PAW*

## CONSENT CALENDAR

### DYER ROAD WELLFIELD WELL NO. 5 REHABILITATION BUDGET ADDITION

#### SUMMARY:

Dyer Road Wellfield (DRWF) Well No. 5 was constructed in 1998 and is located in the City of Santa Ana. In 2015, Well No. 5 was rehabilitated due to extensive microbial-induced corrosion. Since the well's rehabilitation, Well No. 5 began to shut down within a few minutes after startup due to extremely quick water level drawdown below the pump intake. This project will rehabilitate the well and restore production capacity and reduce the drawdown in the well. Staff recommends that the Board authorize the addition of the DRWF Well No. 5 Rehabilitation project to the FY 2018-19 Capital Budget in the amount of \$770,000 to complete the necessary rehabilitation of the well and to mitigate continuing degradation by microbial fouling and chemical encrustation.

#### BACKGROUND:

DRWF Well No. 5 was constructed in 1998 and is located in the City of Santa Ana near the intersection of Goetz Avenue and South Orange Avenue as shown in Exhibit "A". Well No. 5 was rehabilitated in 2015 due to extensive microbial-induced corrosion. A video survey conducted in 2012 revealed that over 75 percent of the casing perforations were partially plugged with yellowish fibrous biological nodules and chemical iron oxide scale. The well was rehabilitated to address the microbial fouling and chemical encrustation within the screened intervals to improve the specific capacity of the well. Rehabilitation included brushing, bailing, air bursting, chemical treatment, mechanical development, and patching of two damaged screens. As a result of the rehabilitation efforts, the specific capacity was increased from 10 gallons per minute (gpm) per foot of drawdown to 16 gpm per foot of drawdown.

Since the well's rehabilitation in 2015, staff noted that Well No. 5 was shutting down within a few minutes after startup due to extremely quick water level drawdown below the pump intake. Staff performed a pump and surge regimen continuously for 24 hours in an attempt to loosen any debris located within the gravel pack, but it was unsuccessful due to the extensive biofouling within the well. Video inspection of the well indicates that the louvers are completely plugged by what appears to be crystalline calcite as a result of microbial-induced corrosion. The physical appearance of the corrosion has a different character indicating that redox and water quality conditions within the well have changed since the last rehabilitation in 2015. In addition, Well No. 5 sat dormant for at least six months as a result of the in-lieu pumping period during the second half of 2017, as was the case for most of the DRWF wells, to allow the Orange County Water District to recharge the Orange County Groundwater Basin. The well's specific capacity, as shown in Exhibit "B", experienced a reduction during this time frame while operating at pumping rates ranging between 1,900 gpm to 2,200 gpm. This project will rehabilitate the well and restore production capacity and reduce the drawdown in the well. Future measures to

mitigate microbial-induced corrosion in DRWF wells will include a monthly pumping, surging, and disinfection regimen.

Well No. 5 will be rehabilitated in parallel with DRWF Well No. 16, followed by the rehabilitation of DRWF Well No. 14. Bids will be solicited for all three wells together to secure more competitive costs and to expedite the rehabilitation of these wells. Richard C. Slade & Associates is currently completing the design and will provide construction phase services for the three wells.

**FISCAL IMPACTS:**

Staff requests the addition of Project 10914 to the FY 2018-19 Capital Budget in the amount of \$770,000 as shown in the table below. Funding will be provided by the replacement fund.

Project No.	Current Budget	Addition <Reduction>	Total Budget
10914	-\$0-	\$770,000	\$770,000

**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 in October 2018.

**COMMITTEE STATUS:**

This item was reviewed and approved by the Engineering and Operations Committee in September 18, 2018.

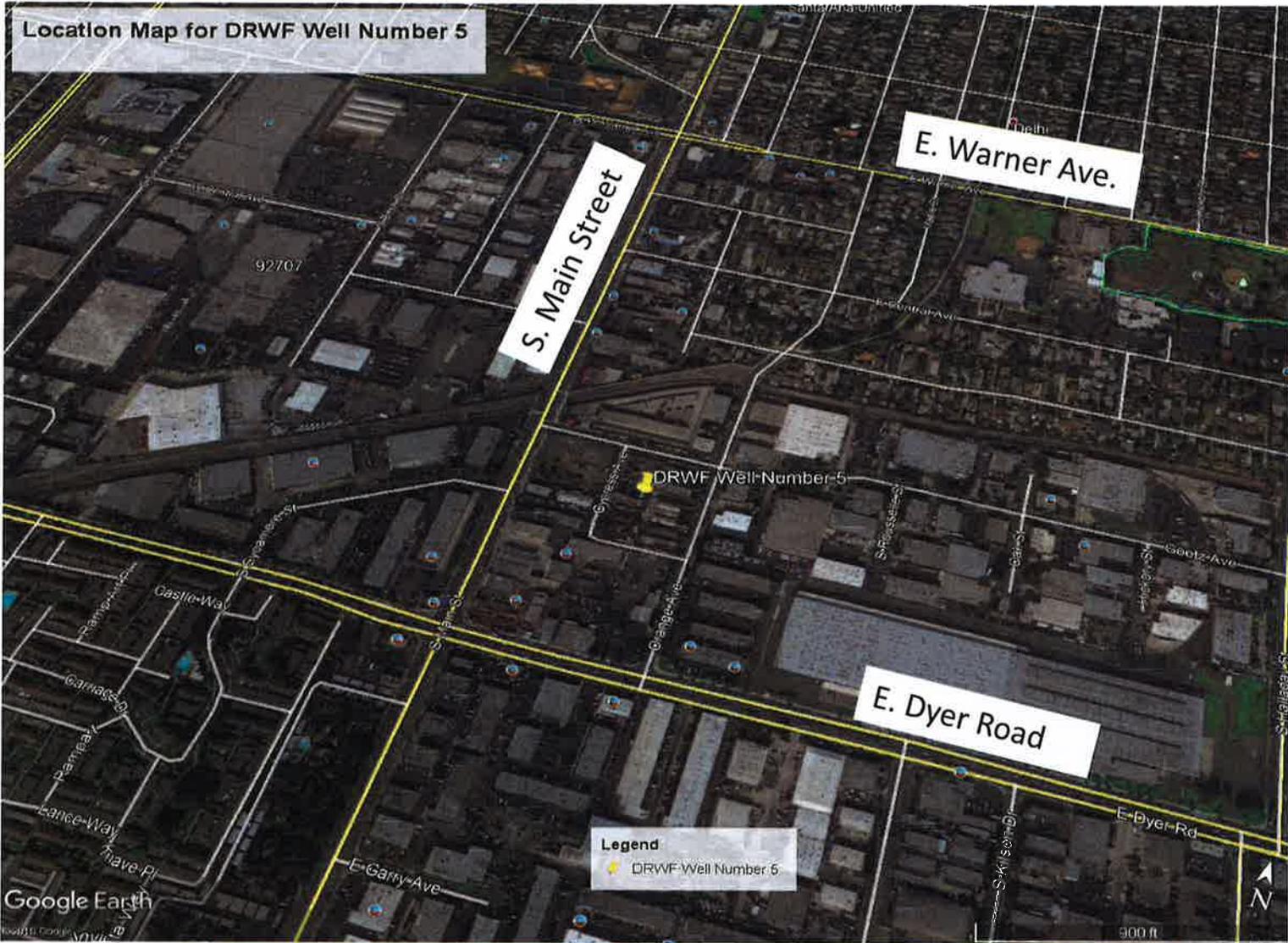
**RECOMMENDATION:**

THAT THE BOARD AUTHORIZE THE ADDITION OF PROJECT 10914 TO THE FY 2018-19 CAPITAL BUDGET IN THE AMOUNT OF \$770,000 FOR THE REHABILITATION OF THE DYER ROAD WELLFIELD WELL NO. 5.

**LIST OF EXHIBITS:**

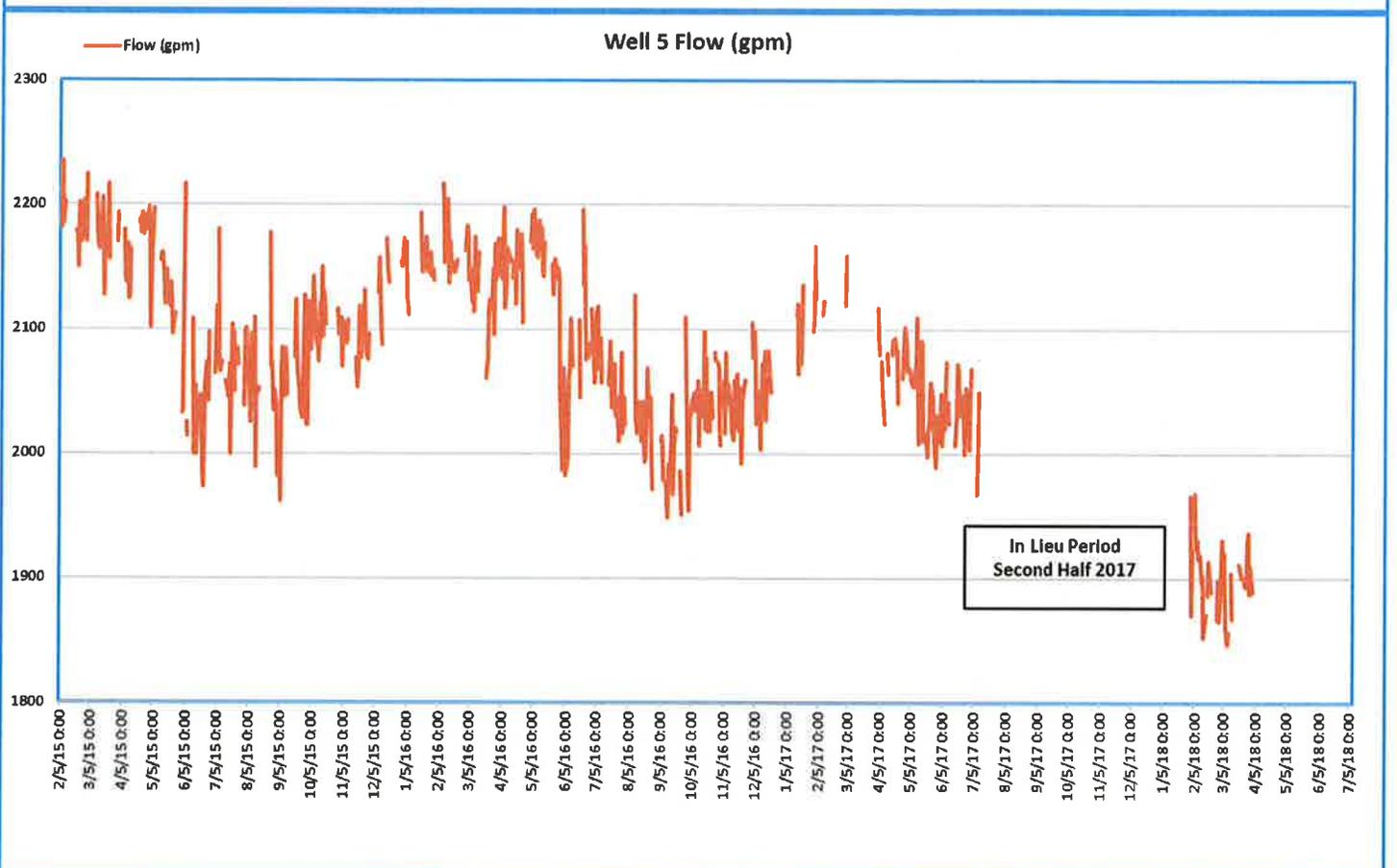
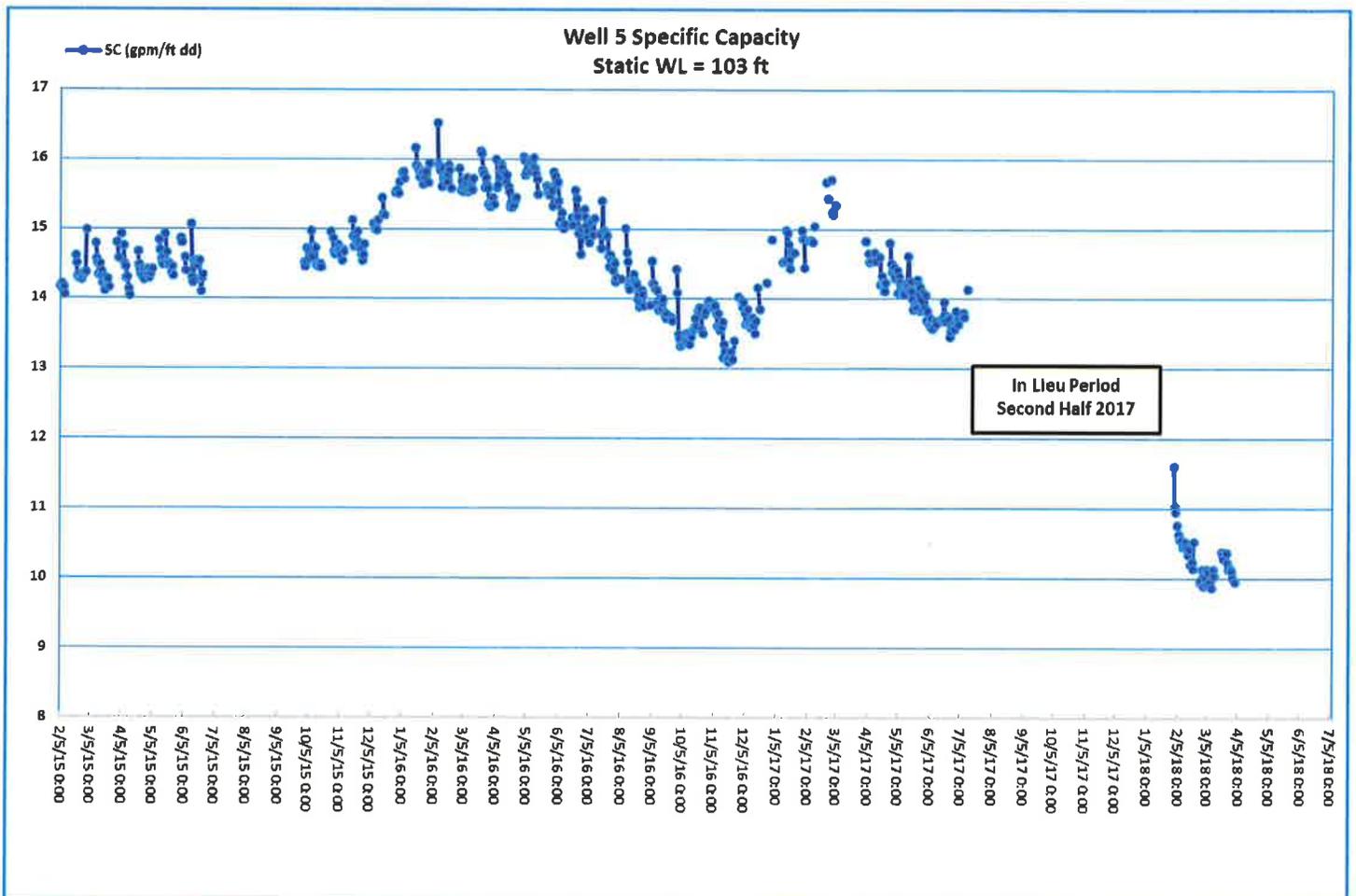
- Exhibit "A" – Well Location Map
- Exhibit "B" – Plot of Specific Capacity and Pumping Rate vs Time

EXHIBIT "A"



2619 S. Cypress Ave., City of Santa Ana

# EXHIBIT "B"



September 24, 2018  
Prepared by: N. Mwe/E. Akiyoshi  
Submitted by: K. Burton *K.B.*  
Approved by: Paul A. Cook *PAW*

## CONSENT CALENDAR

### AMENDED AND RESTATED SEWER SERVICE AGREEMENT FOR EL MORRO ELEMENTARY SCHOOL AND MORO CAMPGROUND

#### SUMMARY:

In 2002, the Orange County Sanitation District (OCSD) and IRWD entered into an out-of-area sewer service agreement to provide sewer services for El Morro Elementary School. The Amended and Restated Sewer Service Agreement will add the Moro Campground to the out-of-area service agreement, update OCSD User Fees calculations, and simplify the flow monitoring reporting requirements. Staff recommends that the Board authorize the General Manager to execute the Amended and Restated Sewer Service Agreement between OCSD and IRWD.

#### BACKGROUND:

In July 2002, IRWD and OCSD entered into an out-of-area sewer service agreement where IRWD became the local sewer service agency to the Laguna Beach Unified School District's (LBUSD) El Morro Elementary School. Per the 2002 agreement, attached as Exhibit "A," regional OCSD treatment fees and IRWD's operational costs are passed through to LBUSD and the OCSD treatment fees are calculated based on the school operation only. Concurrently, this sewer service arrangement was approved by the Orange County Local Area Formation Commission.

In 2005, the California State Department of Parks and Recreations opened Moro Campground and entered into an agreement with LBUSD that allowed the campground to use El Morro Elementary School's sewer collection system. The Amended and Restated Sewer Service Agreement, attached as Exhibit "B", includes the provisions to provide out-of-area sewer services to both the elementary school and Moro Campground. The Agreement, which has been reviewed by both OCSD and IRWD legal staff, will be presented to the OCSD Board in October for approval.

IRWD will continue to pass through any treatment fees from OCSD as well as IRWD's operational costs to LBUSD, who will then prorate the expenses with the Campground.

#### FISCAL IMPACTS:

IRWD will pass through to LBUSD the treatment fees assessed by OCSD. Additionally, IRWD will bill LBUSD all costs incurred during the year for operation, maintenance, repair, refurbishment, and replacement of the lift station and the force main.

ENVIRONMENTAL COMPLIANCE:

LBUSD was the lead agency for CEQA compliance and responsible for filing the appropriate documentation with the Orange County Clerk-Recorder and the California State Clearinghouse.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on September 18, 2018.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE AMENDED AND RESTATED SEWER SERVICE AGREEMENT BETWEEN ORANGE COUNTY SANITATION DISTRICT AND IRWD TO PROVIDE OUT-OF-AREA SEWER SERVICE TO EL MORRO ELEMENTARY SCHOOL AND MORO CAMPGROUND.

LIST OF EXHIBITS:

Exhibit "A" – 2002 Sewer Service Agreement Between OCSD and IRWD

Exhibit "B" – Amended and Restated Sewer Service Agreement Between OCSD and IRWD

## EXHIBIT "A"

### SEWER SERVICE AGREEMENT

THIS SEWER SERVICE AGREEMENT ("Agreement") is made this 22 day of

July, 2002 by and between:

ORANGE COUNTY SANITATION DISTRICT, a  
County Sanitation District, hereinafter referred to  
as "OCSD",

AND

IRVINE RANCH WATER DISTRICT, a California  
Water District, hereinafter referred to as "IRWD".

### RECITALS

WHEREAS, OCSD is a duly organized County Sanitation District, existing pursuant to County Sanitation District Act, California Health and Safety Code section 4700, et seq., providing for the ownership, operation, and maintenance of wastewater collection, treatment, and disposal facilities within Orange County, California.

WHEREAS, IRWD is organized and existing pursuant to the California Water Act, California Water Code section 34000 et seq.

WHEREAS, El Morro Elementary School ("School"), an elementary school in Laguna Beach Unified School District, is currently on a septic tank system and needs to connect to a sanitary sewer system. The School is located at 8681 N. Coast Highway, Laguna Beach, California, as shown on Exhibit A hereto.

WHEREAS, the School is located outside of, but in close proximity to, the jurisdictional boundaries of both IRWD and OCSD. IRWD and OCSD recognize that the property on which the School is located may, in the future, be annexed into both IRWD and OCSD's jurisdictional boundaries.

WHEREAS, IRWD has proposed to act as the School's local sewerage agency and construct, at its sole expense, all the necessary sewage collection and conveyance facilities to connect the School to the OCSD South Coast Trunk Sewer located in Pacific Coast Highway at the Southern edge of OCSD's jurisdictional boundaries (hereinafter "Trunk Sewer").

WHEREAS, OCSD is willing to allow IRWD to connect those collection and conveyance facilities to the Trunk Sewer.

NOW THEREFORE, in consideration of the mutual promises set forth herein, the parties hereto agree as follows:

Section 1. The recitals set forth above are true and correct and are incorporated into this Agreement.

Section 2. IRWD shall serve as the local sewer servicing agency for the School and shall be responsible for the operation and maintenance of the local sewers required to connect the School to OCSD's Trunk Sewer. IRWD shall be responsible for the installation, maintenance, and operation of all necessary equipment, including but not limited to a pump station, force main, and collector sewer lines, as needed, from the point of discharge, the School, to the connection with the Trunk Sewer. IRWD shall install, operate and maintain a flow meter to measure the daily discharge from the School to the sewerage system. IRWD shall provide monthly reports to OCSD containing the results of the flow meter measurements of the daily discharge from the School. IRWD shall work with OCSD to develop a method for OCSD to obtain the School flow measurements on a daily basis through either the installation by IRWD of a Supervisory Control and Data

Acquisition System which allows OCSD to download the flow data directly from such system or by another mechanism reasonably acceptable to OCSD.

Section 3. OCSD agrees to allow the connection of IRWD's collector sewer line serving the School to the Trunk Sewer for the transport of wastewater generated from the School to OCSD's treatment facilities for treatment and disposal. No other discharge to the Trunk Sewer is authorized by this Agreement.

Section 4. IRWD shall pay to OCSD sanitary sewer service charges ("user fees") for the School discharge to the Trunk Sewer at OCSD's Class I permittee rate, as such rate may be periodically adjusted by OCSD. OCSD's 2001-2002 Class I rate includes the following: \$224.94 per million gallons of flow, \$185.07 per 1000 pounds of Biochemical Oxygen Demand ("BOD"), and \$177.07 per 1000 pounds of Suspended Solids ("SS"). Initial estimates are that the School will discharge approximately 10,000 gallons per day, with each student generating .011 pounds per day of BOD and .008 pounds per day of SS. Assuming a 9 month school year and a school population of 525 students and faculty, the annual sanitary sewer service charge will be approximately \$991.50. The Sanitary Sewer Service charges may also be adjusted to the extent that actual flow, BOD levels, SS levels and/or the school population varies from the estimates provided herein. OCSD may in its discretion require periodic sampling of BOD and SS levels, the cost of which shall be borne by IRWD. IRWD shall also provide to OCSD annual reports identifying the average daily attendance (students and faculty) at the School during each school year. OCSD shall invoice IRWD annually, following the completion of each school year, for the sanitary sewer service charges applicable to the School.

Section 5. IRWD shall obtain a connection permit from OCSD for the connection of the local sewer to the Trunk Sewer and shall pay to OCSD capital facilities capacity charges (connection fees) prior to the commencement of discharge to the Trunk Sewer. OCSD's capital facilities capacity charges are based on the School's total square footage (42,203 square feet of building space) multiplied by the unit rate of \$675.00 per thousand square feet for a total charge of \$28,487.03. If the School is expanded, additional capital facility charges shall be due to OCSD at OCSD's then-existing rate.

Section 6. This Agreement shall continue in full force and effect until terminated for either of the following reasons: (a) by mutual written agreement of OCSD and IRWD or (b) for any material breach of this Agreement by either of the Parties. For purposes of this Agreement, a material breach may include, but is not limited to, (a) the failure to timely pay, upon demand, the user fees or capital facilities capacity charges described in Sections 4 and 5 above; (b) the failure to provide, upon demand, the operation and maintenance services described in Section 2, above; or (c) the failure to perform sampling or provide reports or information required by this Agreement. To the extent of any termination for a material breach of this Agreement, the parties shall retain all rights and remedies that they may have hereunder at law or in equity.

Section 7. All notices or other communications required or permitted hereunder shall be in writing, and shall be personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested, delivered or sent by electronic transmission, and shall be deemed received upon the earlier of (i) the date of delivery to the address of the person to receive such notice if delivered personally or by messenger or overnight courier; (ii) three (3) business days after the date of posting by the United States Post

Office if by mail; or (iii) when sent if given by electronic transmission. Any notice, request, demand, direction, or other communication sent by electronic transmission must be confirmed within forty-eight (48) hours by letter mailed or delivered. Notices or other communications shall be addressed as follows:

To OCSD:           Orange County Sanitation District  
Post Office Box 8127  
Fountain Valley, Ca 92728-8127  
Attention: General Manager  
Telephone: (714) 962-2411  
Facsimile: (714) 962-0356

To IRWD:           Irvine Ranch Water District  
Post Office Box 57000  
Irvine, CA 92618-7000  
Attention: General Manager  
Telephone: (949) 453-5300  
Facsimile: (949) 453-1228

Either party may, by written notice to the other, designate a different address, which shall be substituted for that specified above.

Section 8. In the event any one or more of the provisions contained in this Agreement, for any reason, shall be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, but this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been set forth herein, and the same shall be enforceable to the fullest extent permitted by law.

Section 9. Except as otherwise provided herein, all the terms of this Agreement shall be binding upon and shall inure to the benefit of and be enforceable by the respective successors and assigns of the Parties thereto.

Section 10. This Agreement may be executed simultaneously in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

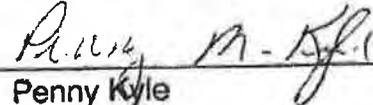
Section 11. This Agreement shall be governed by, interpreted under, and constructed and enforced in accordance with, the laws of the State of California.

Section 12. This Agreement contains the entire agreement between the Parties related to the rights herein granted and the obligations herein assumed. Any prior agreements or representations not expressly set forth herein are of no legal force or effect.

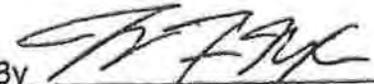
IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the day and year first above written.

ORANGE COUNTY SANITATION DISTRICT

By   
~~Norman Z. Eckenrode~~ Shirley McCracken  
Chair of the Board of Directors

By   
Penny Kyle  
Secretary of the Board of Directors

APPROVED AS TO FORM:  
THOMAS L. WOODRUFF  
DISTRICT COUNSEL

By   
Thomas L. Woodruff  
Thomas F. Nixon

[Signatures Continued on Following Page]

IRVINE RANCH WATER DISTRICT

By   
President

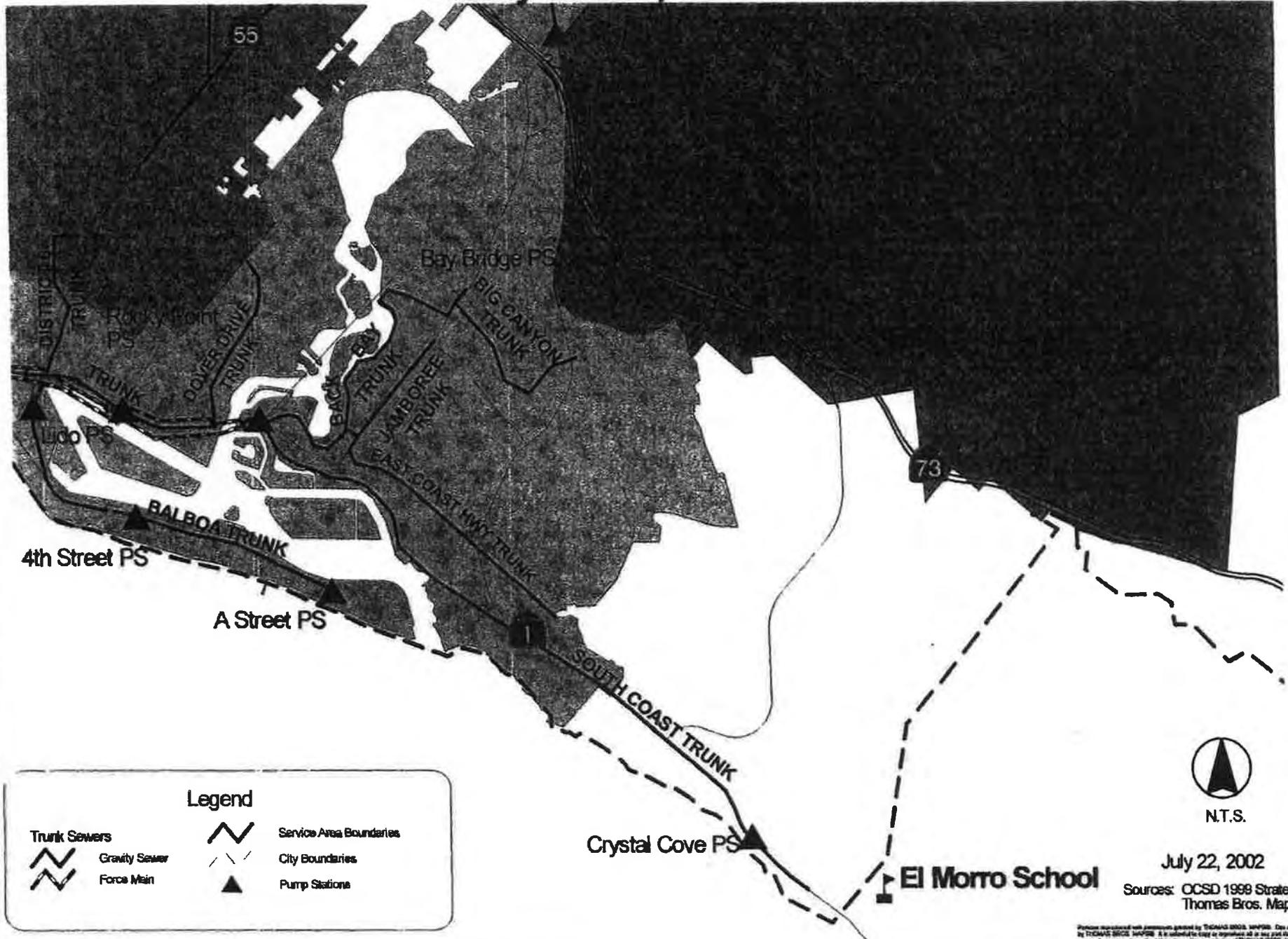
By   
Clerk of the Board of Directors

APPROVED AS TO FORM:  
JOAN C. ARNESON  
GENERAL COUNSEL

By   
Joan C. Arneson

# Exhibit A

## El Morro Elementary School, OCSD Pump Stations, Gravity Sewers, and Force Mains



**Legend**

	Trunk Sewers		Service Area Boundaries
	Gravity Sewer		City Boundaries
	Force Main		Pump Stations



N.T.S.

July 22, 2002

Sources: OCSD 1999 Strategic Plan, Thomas Bros. Maps

Portion reproduced with permission granted by THOMAS BROS. MAPS. This map is copyrighted by THOMAS BROS. MAPS. It is unlawful to copy or reproduce all or any part thereof, whether for general use or resale, without the prior, written permission of THOMAS BROS. MAPS.

## EXHIBIT “B”

### AMENDED AND RESTATED SEWER SERVICE AGREEMENT (El Morro Elementary School and Moro Campground)

This Amended and Restated Sewer Service Agreement (“**Agreement**”) is effective as of \_\_\_\_\_, 2018 (“**Effective Date**”) and is between ORANGE COUNTY SANITATION DISTRICT (“**Sanitation District**”) and IRVINE RANCH WATER DISTRICT (“**IRWD**”). IRWD and Sanitation District are each a “**Party**” and together are the “**Parties.**”

A. Sanitation District is a duly organized County Sanitation District, existing pursuant to County Sanitation District Act, California Health and Safety Code section 4700, *et seq.*, providing for the ownership, operation, and maintenance of wastewater collection, treatment, and disposal facilities within Orange County, California.

B. IRWD is organized and existing pursuant to the California Water District Law, California Water Code Section 34000, *et seq.*, under which it owns, operates, and maintains wastewater collection, treatment, recycling and disposal facilities.

C. On July 22, 2002, Sanitation District and IRWD entered into a *Sewer Service Agreement* (the “**Sewer Service Agreement**”), which provided the terms under which IRWD would collect the wastewater from El Morro Elementary School (“**School**”) and convey it to Sanitation District for treatment. The School is located outside of Sanitation District’s and IRWD’s boundaries, as shown on Exhibit A.

D. Adjacent to the School is the Moro Campground (“**Campground**”), which was redeveloped by the State of California, Department of Parks and Recreation. The Campground is also located outside of Sanitation District’s and IRWD’s boundaries, as shown on Exhibit A.

E. In 2002, the Orange County Local Agency Formation Commission approved sewer service by Sanitation District and IRWD to the School and Campground. IRWD serves as the local sewer service agency for the School and Campground.

F. Under a *Joint Development Agreement between the State of California, Department of Parks and Recreation and Laguna Beach Unified School District For Design and Construction of Two Lift Stations, Storm Drainage Improvements And Entrance Road Improvements And Maintenance of Entrance Road* effective September 9, 2002, wastewater collection and conveyance facilities were constructed to connect the School and the Campground to the Sanitation District South Coast Trunk Sewer located in Pacific Coast Highway at the Southern edge of Sanitation District’s jurisdictional boundaries (“**Trunk Sewer**”).

G. IRWD owns and operates the local wastewater collection and conveyance facilities, consisting of the El Morro Elementary School lift station, force main, and a manhole upstream of the El Morro Elementary School lift station (the “**IRWD Facilities**”). The Campground’s sewer flows are combined with the School’s sewer flows in the IRWD Facilities, which are then conveyed and discharged to the Trunk Sewer.

H. IRWD must allocate operational costs, including Sanitation District's sanitary sewer service charges, between the School and the Campground. The Parties intend by this Agreement to allocate those operational costs, and to amend and restate the Sewer Service Agreement.

The Parties therefore agree as follows:

1. IRWD Collection and Metering.

1.1 Sewer Service. IRWD shall serve as the local sewer service agency for the School and the Campground.

1.2 Metering. IRWD shall operate and maintain a flow meter to measure the combined discharge to the Trunk Sewer from the School and the Campground and provide to OCSD annual meter calibration reports. IRWD shall provide annual flow reports to OCSD by July 10, or upon request, containing the monthly meter read data of combined discharge and the respective read date.

2. Sanitation District's Acceptance and Treatment of Wastewater. Sanitation District shall accept into the Trunk Sewer and shall treat and dispose all wastewater from the School and the Campground that is conveyed through the IRWD Facilities. Discharges to Sanitation District's system must be in compliance with Sanitation District's Wastewater Discharge Regulations Ordinance limits, terms, and conditions. No other discharge to the Trunk Sewer is authorized by this Agreement.

3. User Fees. IRWD shall pay to Sanitation District sanitary sewer service fees ("User Fees") for the School and the Campground discharge to the Trunk Sewer. Sanitation District shall calculate the combined User Fees applicable to the School and the Campground, and Sanitation District shall accordingly invoice IRWD annually.

3.1 User Fees will be based on metered flows at standard quality/strength concentrations for Biochemical Oxygen Demand ("**BOD**") and Suspended Solids ("**SS**"), 250 mg/L each, at OCSD's Class I permittee rate.

3.2 Sanitation District may periodically adjust the rate. Sanitation District's 2018-2019 Class I rate includes the following: \$1,433.49 per million gallons of flow, \$658.09 per 1000 pounds of BOD, and \$716.60 per 1000 pounds of SS.

4. Connection Permit/Capacity Charges. Per the Sewer Service Agreement, Sanitation District invoiced IRWD and IRWD paid capital facility capacity charges for the El Morro Elementary School. Also, the State of California, Department of Parks and Recreation obtained a Trunk Connection Permit from Sanitation District and paid the processing and annexation fees and capital facility capacity charges in 2004 in anticipation of the connection of the local sewer to the Trunk Sewer. If any of the connected facilities are expanded, then additional capital facility capacity charges will be due to Sanitation District at Sanitation District's then-existing applicable rates, fees, and charges.

5. Breach, Cure, and Remedies.

5.1 For purposes of this Agreement, a material breach may include, but is not limited to:

A. IRWD's failure to timely pay, upon demand, the User Fees or capital facilities capacity charges described in Section 3 or Section 4;

B. IRWD's failure to provide, upon demand, the operation and maintenance services described in Section 2;

C. IRWD's failure to provide reports or information required by this Agreement;

D. Sanitation District's failure to provide sewer services.

5.2 Upon the occurrence of any material breach, the non-breaching Party shall provide notice to the allegedly breaching Party and give 30 days to cure the breach.

6. Termination. This Agreement will continue in full force and effect until terminated for either of the following reasons: (a) by mutual written agreement of Sanitation District and IRWD or (b) for any material breach of this Agreement by either of the Parties that remains uncured 30 days after notice. To the extent of any termination for a material breach of this Agreement, the parties shall retain all rights and remedies that they may have hereunder at law or in equity.

7. Notice.

7.1 All notices must be in writing, and delivered as follows:

A. by hand, nationally-recognized overnight carrier, or U.S. mail, with

B. a courtesy copy sent by email.

7.2 Notices will be deemed received upon the date of delivery if by hand or overnight carrier, or three business days after the date of posting if by U.S. mail.

7.3 Notices must be addressed as follows:

To Sanitation District:

Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, Ca 92708  
Attention: General Manager

To IRWD:

Irvine Ranch Water District  
*If by hand delivery or overnight carrier:*

15600 Sand Canyon Avenue  
Irvine, CA 92618

*If by U.S. Mail*

Post Office Box 57000  
Irvine, CA 92618-7000  
Attention: General Manager

With a Courtesy Copy by email to: [Burton@irwd.com](mailto:Burton@irwd.com)

7.4 Either Party may, by written notice to the other, designate a different address or addressee, which will be substituted immediately for that specified above.

8. Severability. If any provision of this Agreement, for any reason, is held to be invalid, illegal, or unenforceable in any respect, that invalidity, illegality, or unenforceability will not affect any other provision of this Agreement, but this Agreement will be construed as if the invalid, illegal, or unenforceable provision had never been set forth herein, and the remainder will be enforceable to the fullest extent permitted by law.

9. Successors & Assigns. The terms of this Agreement are binding upon and will inure to the benefit of and be enforceable by the respective successors and assigns of the Parties.

10. Mutual Indemnity. Each party shall indemnify and hold harmless the other party, and its elected officials, officers, agents, and employees from and against any and all losses, liability, damages, claims, suits, actions, and administrative proceedings or demands (including reasonable attorney's fees) relating to acts or omissions of the indemnitor, its officers, agents, or employees arising out of or incidental to the performance of any of the provisions of this Agreement. This Section 10 survives termination of the Agreement.

11. Counterparts. This Agreement may be executed in counterparts, each of which is an original, but all of which together will constitute one and the same instrument.

12. Choice of Law. This Agreement shall be governed by, interpreted under, and construed and enforced in accordance with, the laws of the State of California.

13. Integration. This Agreement contains the entire agreement between the Parties with respect to sewer service to the School and the Campground. Any prior agreements or representations not expressly set forth herein are of no legal force or effect.

14. Supersession. This Agreement amends, supersedes, and replaces the Sewer Services Agreement.

The Parties are entering into this Agreement to be effective as of the Effective Date.

ORANGE COUNTY SANITATION DISTRICT

By: \_\_\_\_\_  
Greg Sebourn  
Chair of the Board of Directors

By: \_\_\_\_\_  
Kelly Lore  
Secretary of the Board of Directors

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Bradley R. Hogin  
General Counsel

IRVINE RANCH WATER DISTRICT

By: \_\_\_\_\_  
Paul A. Cook  
General Manager

By: \_\_\_\_\_  
Secretary

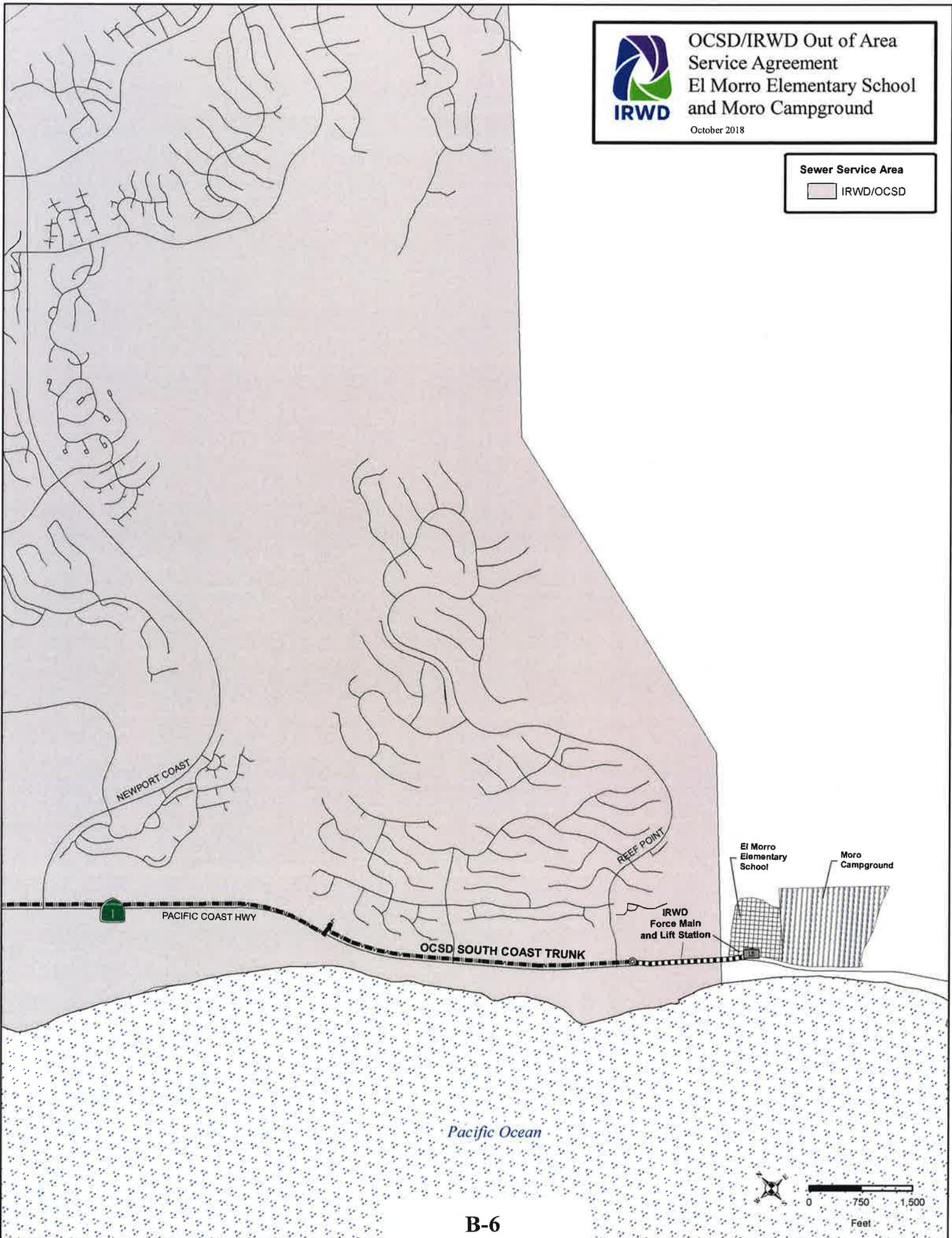
APPROVED AS TO FORM:

By: \_\_\_\_\_  
General Counsel



OCSD/IRWD Out of Area  
Service Agreement  
El Morro Elementary School  
and Moro Campground  
October 2018

Sewer Service Area  
IRWD/OCSD



El Morro  
Elementary  
School

Moro  
Campground

IRWD  
Force Main  
and Lift Station

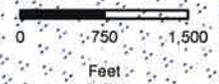
OCSD SOUTH COAST TRUNK

PACIFIC COAST HWY

NEWPORT COAST

REEF POINT

Pacific Ocean



September 24, 2018  
Prepared by: K. Lew  
Submitted by: K. Burton *(KLB)*  
Approved by: Paul A. Cook *(PAC)*

CONSENT CALENDAR

PLANNING AREA 6 (PORTOLA SPRINGS) CAPITAL FACILITIES

SUMMARY:

Irvine Community Development Company (ICDC) is proceeding with the development of Planning Area 6 (Portola Springs), which includes the construction of streets, storm drains, domestic water, sewer, and recycled water improvements. Staff recommends that the Board authorize the General Manager to accept ICDC's construction contract with Irvine Pipeline Company, Inc. (Irvine Pipeline) in the amount of \$327,945 for the Portola Springs Neighborhood 5B and 5C Recycled Water Improvements.

BACKGROUND:

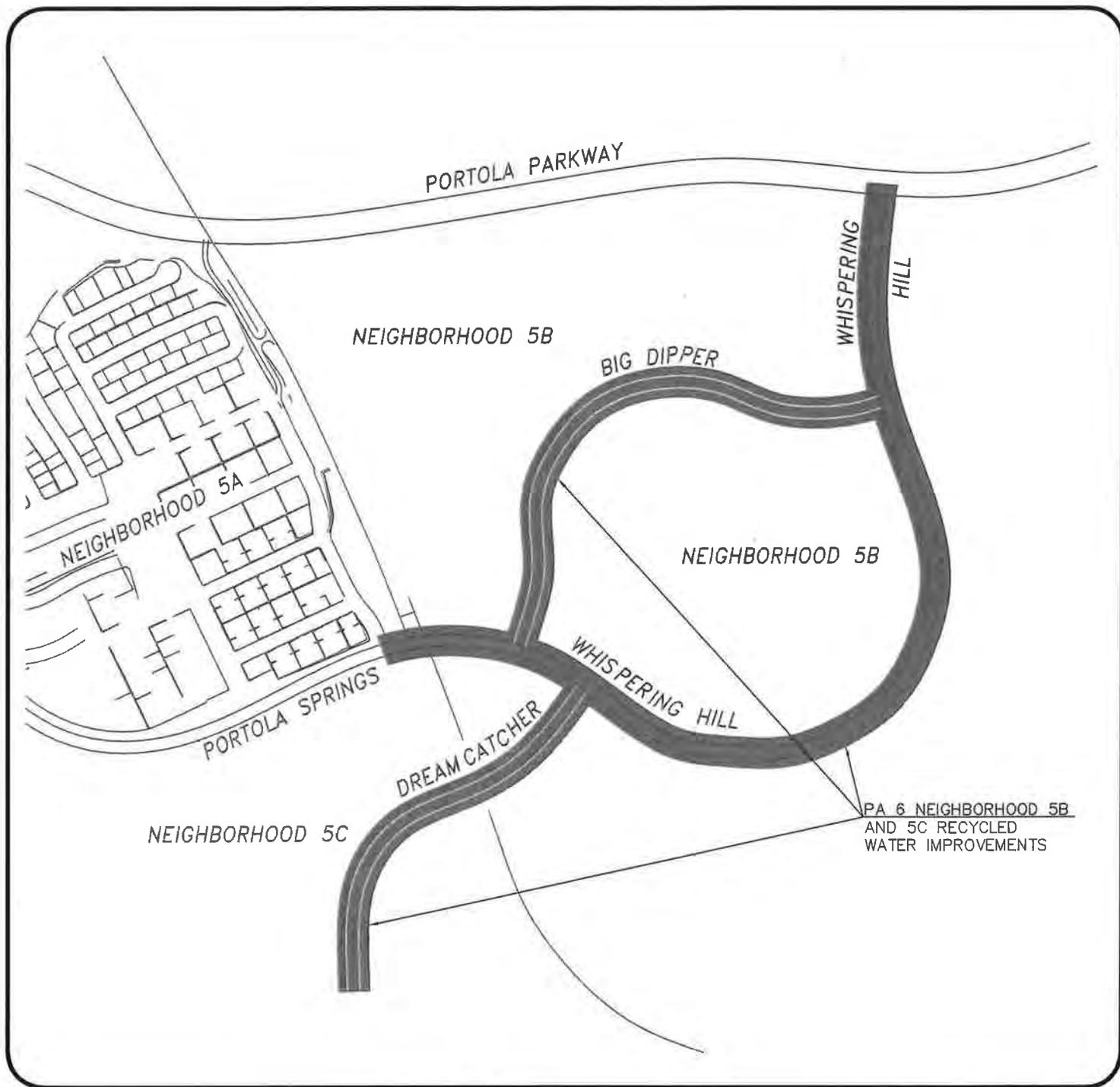
IRWD and ICDC have had a Reimbursement Agreement (RA) for design and construction of IRWD capital facilities in place since May 1997. Under this RA, a Supplemental Reimbursement Agreement (SRA) serves to define the improvements to be designed and constructed within a specific planning area as well as the estimated reimbursable costs.

An SRA was previously approved in April 2004 for all IRWD capital facilities within Planning Area 6. All required IRWD capital improvements are documented in the Planning Area 6 Sub-Area Master Plan Addendum, dated September 2017. The improvements are shown in Exhibit "A".

Neighborhood 5B and 5C Improvements include construction of approximately 4,900 feet of 6-inch, 2,300 feet of 8-inch, and 1,000 feet of 12-inch recycled water pipeline. ICDC selected Wilson Mikami to complete the Neighborhood 5B and 5C Improvements design plans and it received bids from seven contractors. ICDC recommends awarding the construction contract to the lowest bidder, Irvine Pipeline, for a bid amount of \$327,945 as shown in Exhibit "B". In addition, ICDC received proposals from Wilson Mikami Corporation, NMG Geotechnical, Inc., and Stantec Consulting Services Inc. for construction support services. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Neighborhood 5B and 5C costs is shown below:

Design Engineering (Wilson Mikami)	\$ 30,000.00
Construction (Irvine Pipeline)	\$327,945.00
Construction Engineering (Wilson Mikami)	\$ 13,400.00
Construction Geotechnical (NMG)	\$ 8,482.00
Construction Staking (Stantec)	\$ 7,011.00
ICDC Administration Fee (1%)	<u>\$ 3,279.45</u>
	\$390,117.45

# EXHIBIT "A"



N

not to scale

EXHIBIT "A"  
LOCATION MAP



NO. 12

CLOSED SESSION

Performance Evaluation of Legal Counsel:  
PUBLIC EMPLOYEE PERFORMANCE  
EVALUATION – Pursuant to Government  
Code Section 54957(b). Title: Legal Counsel

**NO. 13**

**OPEN SESSION**

**(FROM CLOSED SESSION)**

September 24, 2018

Prepared and

submitted by: C. Compton

Approved by: Paul A. Cook



## ACTION CALENDAR

### FISCAL YEAR 2018-2019 AND FISCAL YEAR 2019-2020 GENERAL COUNSEL CONTRACT VARIANCE

#### SUMMARY:

The District has elected to adopt a team approach to the procurement of legal services. The approach divides legal service responsibility for regular issues and matters across multiple law firms. Under this approach, the District's outside general counsel is expected to provide legal services related to municipal law, transactional and non-complex issues, rate-setting, and other routine general counsel matters.

In March 2018, the Board selected Lewis Brisbois & Smith LLP (Lewis Brisbois) to provide general counsel services to the District, and authorized the General Manager to enter into a six-month Professional Services Agreement with the firm for those services. The agreement expires September 30, 2018. The Board determined that it would evaluate the general counsel's performance and would consider extending the term of the contract in September 2018.

Staff recommends, after the general counsel's performance is evaluated, that the Board authorize the General Manager to execute a variance to the Professional Services Agreement with Lewis Brisbois for general counsel legal services with a term of October 1, 2018, to June 30, 2020, and a not-to-exceed amount of \$1,500,000.

#### BACKGROUND:

The District has adopted a team approach that divides legal service responsibility for regular issues and matters among several law firms. The approach utilizes an outside general counsel who provides general counsel legal services related to municipal law, transactional and non-complex issues, rate-setting, and other routine general counsel matters. The general counsel also provides coordination among the District's various legal counsel. Additionally, the approach utilizes at least two different law firms to provide legal services related to complex issues, complex litigation, and legal matters related to water resources and policy issues. Staff provides legal services management and legal service continuity along with having other duties.

In order to implement the District's adopted approach to general legal services, the District entered into a six-month agreement with Lewis Brisbois for general counsel legal services. The current contract with Lewis Brisbois runs from March 23, 2018, until September 30, 2018.

#### Services Provided by Lewis Brisbois Bisgaard & Smith LLP:

Lewis Brisbois was appointed by the Board as IRWD's general counsel on March 23, 2018. Claire Hervey Collins has served as the primary point of contact for the District and serves in the role of general counsel for IRWD. While Ms. Collins provides the vast majority of the services required by IRWD, Paul Beck has responsibility for assisting Ms. Collins and serves as an

assistant general counsel for the District in order to ensure continuity of service should Ms. Collins become unavailable.

As general counsel, Ms. Collins, and on occasion other members of the Lewis Brisbois firm, provides general counsel legal services for the District focused on municipal law, transactional and non-complex issues, and rate-setting.

Proposed Variance to IRWD's Contract with Lewis Brisbois Bisgaard & Smith LLP:

When the Board approved the current contract with Lewis Brisbois, the Board determined that it would evaluate the general counsel's performance in September 2018 and would consider extending the term of the contract.

Staff recommends, after evaluating the general counsel's performance, that the Board authorize the General Manager to enter into a variance to the Professional Services Agreement with Lewis Brisbois, establishing a new not-to-exceed value for a 21-month period effective October 1, 2018. The proposed variance term would run from October 1, 2018, until June 30, 2020, at which time the Board will evaluate legal counsel's performance and may consider extending the term of the contract.

The proposed not-to-exceed value is based on the hourly rates listed in Exhibit "A", which includes a summary of the scope of work. The number of billable hours estimated for this 21-month period includes the estimated amount of time required to represent, advise, and counsel IRWD with regard to matters related to municipal law, transactional and non-complex issues and rate-setting, and the estimated amount of time required to coordinate with the District's other legal counsel.

FISCAL IMPACTS:

The total not-to-exceed amount for the variance is \$1,500,000. If approved by the Board, the variance will be charged against the Fiscal Year 2018-2019 and Fiscal Year 2019-2020 Operating Budgets, as appropriate. Legal services related to capital projects will be billed to the capital budgets, as appropriate.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Due to timing, this item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A VARIANCE TO THE PROFESSIONAL SERVICES AGREEMENT WITH LEWIS BRISBOIS BISGAARD & SMITH LLP FOR GENERAL COUNSEL LEGAL SERVICES FOCUSED ON MUNICIPAL LAW, TRANSACTIONAL AND NON-COMPLEX ISSUES, AND RATE-SETTING WITH A TERM OF OCTOBER 1, 2018, TO JUNE 30, 2020, AND A NOT-TO-EXCEED VALUE OF \$1,500,000.

LIST OF EXHIBITS:

Exhibit "A" – Summary of the Scope of Work and Hourly Rates for the Proposed Professional Services Agreement with Lewis Brisbois Bisgaard & Smith LLP

## EXHIBIT "A"

### SUMMARY OF THE SCOPE OF WORK AND CURRENT HOURLY RATES OF LEWIS BRISBOIS BISGAARD & SMITH LLP

#### Summary of Scope of Work:

Lewis Brisbois Bisgaard & Smith LLP (Lewis Brisbois) will provide general counsel legal services and representation to IRWD and its subsidiaries, and other affiliates. The firm will perform the work, duties, and responsibilities consistent with the position of general counsel for IRWD and its subsidiaries and other affiliates understanding that the firm's roles as general counsel will be to:

1. Provide expert legal advice to IRWD and its subsidiaries and other affiliates;
2. Independently represent IRWD and its subsidiaries and other affiliates in a variety of matters and forums; and
3. Develop and implement proactive legal strategies to position IRWD and its subsidiaries and other affiliates to best meet its legal, regulatory, and policy objectives.

The scope of the general counsel services provided by Lewis Brisbois to IRWD will consist of a broad range of legal services including regulatory and public policy tracking, interpretation, advice, counsel, legal representation and other services with respect to a variety of legal areas such as:

#### A. TYPICAL AREAS OF MUNICIPAL LAW, INCLUDING:

1. Agenda and Agenda Item Review;
2. Basic CEQA and Other Environmental Document Review;
3. Brown Act and Open Meeting Compliance;
4. Claims Processing;
5. Collections;
6. Cortese-Knox-Hertzberg Local Government Reorganization Act;
7. Election Procedures and Challenges;
8. Fair Political Practices Commission Regulations and Political Reform Act;
9. Joint Powers Authorities;
10. Non-complex Litigation;
11. Ordinance, Rule and Regulation Creation and Adoption;
12. Public Contracting and Prevailing Wage;
13. Public Records Act;
14. Public Works Bidding;
15. Real Property;
16. Records Retention and Destruction;

17. Review of Contracts and Other Legal Documents; and
18. Tort Claims.

B. LAWS AND REGULATIONS GOVERNING CALIFORNIA WATER DISTRICTS, INCLUDING:

1. California Government Code;
2. California Health and Safety Code;
3. California Water Code;
4. California Water District Code;
5. Clean Water Act;
6. Porter-Cologne Water Quality Control Act;
7. Sustainable Groundwater Management Act;
8. Safe Drinking Water Act;
9. Urban Water Management Planning Act; and
10. Other Water and Wastewater Laws and Regulations.

C. LAWS AND REGULATIONS RELATED TO WATER AND SEWER SERVICE RATE SETTING, INCLUDING:

1. Case law related to water and sewer service rates;
2. Proposition 26;
3. Proposition 218; and
4. Other statutes affecting water and sewer rates and charges.

D. COORDINATION AND MANAGEMENT OF SPECIAL COUNSEL

Hourly Rates through December 31, 2018:

Claire Hervey Collins:	\$335.00 per hour
Other Partners:	\$300.00 per hour
Associates:	\$265.00 per hour
Paralegals & Law Clerks:	\$145.00 per hour
Word Processing	\$35.00 per hour

Hourly Rates through December 31, 2019:

Claire Hervey Collins:	\$350.00 per hour
Other Partners:	\$315.00 per hour
Associates:	\$280.00 per hour

Paralegals & Law Clerks: \$151.00 per hour

Word Processing \$35.00 per hour

Hourly Rates through December 31, 2020:

Claire Hervey Collins: \$365.00 per hour

Other Partners: \$330.00 per hour

Associates: \$295.00 per hour

Paralegals & Law Clerks: \$155.00 per hour

Word Processing \$35.00 per hour

September 24, 2018  
Prepared by: J. McGehee/R. Mori  
Submitted by: K. Burton (K.B.)  
Approved by: Paul A. Cook p.m.

## ACTION CALENDAR

### ZONE A TO RATTLESNAKE RESERVOIR PUMP STATION CONSULTANT SELECTION

#### SUMMARY:

Staff is proceeding with the replacement of the existing Zone A to Rattlesnake Reservoir Pump Station as identified in the 2016 Recycled Water Distribution System Analysis. The project also includes improvements to other existing facilities within the Rattlesnake Reservoir Complex. Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement in the amount of \$1,247,625 with Brown and Caldwell for engineering design services for the Zone A to Rattlesnake Reservoir Pump Station.

#### BACKGROUND:

Staff is proceeding with the replacement of the existing Zone A to Rattlesnake Reservoir Pump Station Project as identified in the 2016 Recycled Water Distribution System Analysis prepared by Stantec Consulting. The project is located within the Rattlesnake Reservoir Complex as shown on the location map attached as Exhibit "A". The complex consists of several critical facilities including the Rattlesnake Reservoir, Zone A North Reservoir, Northwood Zone A to B pump station, Zone A to Rattlesnake Reservoir pump station, Zone A to C+ pump station, Zone 3 to 5 pump station, dechlorination facility, chlorination facility, Rattlesnake Reservoir strainers, IRWD caretaker residence, and several aboveground and belowground piping and valving systems.

The existing pump station, which delivers recycled water from the Zone A system to the Rattlesnake Reservoir, was constructed in 1976 and is nearing the end of its useful life. The existing pump station requires frequent maintenance attention and locating and procuring replacement parts is becoming increasingly challenging. The pump station consists of three gas engine-driven pumps and one electric motor-driven pump. The project will replace the pump station in its entirety with a new pump station equipped with all electric motor-driven pumps. The ultimate pump station capacity will be confirmed as part of the project, but staff anticipates the capacity to range between 28 million gallons per day and 33 million gallons per day.

In addition to the pump station replacement, the project also includes modifications to the existing dechlorination facility, installation of a new permanent backup power generator, extended sewer facilities to eliminate onsite septic systems currently located at the caretaker house and the park restrooms, new site electrical service, various communications and control system improvements, and demolition of the Northwood Zone A to B pump station, which will be replaced by the Eastwood Zone A to B pump station currently under construction.

Consultant Selection:

Staff received proposals for engineering design services from AECOM, Brown and Caldwell, Lee & Ro, and Stantec. Each firm presented unique project approaches and creative engineering solutions for achieving the project objectives, but Brown and Caldwell's approach to completing the project exceeded those presented by the other firms. Brown and Caldwell outlined a focused, collaborative approach to completing the preliminary design, which staff believes is the most critical phase to successfully executing the project. In addition to its collaborative approach, Brown and Caldwell presented original design concepts that maximized the use of the limited available site space at the complex and identified several facility siting alternatives that will be evaluated further. After reviewing the proposals, staff met with Brown and Caldwell to discuss and negotiate the final scope of work, project schedule, hourly billing rates, and overall fee. The consultant selection matrix is attached as Exhibit "B", and Brown and Caldwell's scope of work and fee proposal are attached as Exhibit "C".

Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement in the amount of \$1,247,625 with Brown and Caldwell since its design approach, schedule, and staff hours are consistent with the project goals and objectives.

Design Schedule:

The design phase will be completed in accordance with the following schedule milestones:

Notice of Award (anticipated)	September 25, 2018
Kick-off Meeting	October 2018
Preliminary Design Report Submittal	May 2019
Final Plans Approved	March 2020
Bid Opening and Notice of Award (Construction)	April 2020

FISCAL IMPACTS:

The Zone A to Rattlesnake Reservoir Pump Station, Project 05476, is included in the FY 2018-19 Capital Budget and will be funded through replacement funds. The existing budget is sufficient to fund the engineering services recommended.

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, the appropriate environmental document will be prepared when "meaningful information" becomes available.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on September 18, 2018.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH BROWN AND CALDWELL IN THE AMOUNT OF \$1,247,625 FOR ENGINEERING DESIGN SERVICES FOR THE ZONE A TO RATTLESNAKE RESERVOIR PUMP STATION, PROJECT 05476.

LIST OF EXHIBITS:

- Exhibit "A" – Location Map
- Exhibit "B" – Consultant Selection Matrix
- Exhibit "C" – Brown and Caldwell Scope of Work and Fee Proposal

# EXHIBIT "A"

Zone A to Rattlesnake Reservoir Pump Station  
Exhibit "A"  
Location Map



**EXHIBIT "B"**

**CONSULTANT SELECTION MATRIX**

Zone A to Rattlesnake Reservoir Pump Station										
Item	Description	Weights	Brown and Caldwell		AECOM		Lee & Ro		Stantec	
A	<u>TECHNICAL APPROACH</u>									
1	Project Understanding	30%	1		2		3		4	
2	Project Approach	40%	1		2		3		4	
3	Project Team	30%	1		3		2		4	
	<u>Weighted Score</u>		1.0		2.3		2.7		4.0	
	<b>Ranking of Consultants</b>		<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>	
B	<u>SCOPE OF WORK</u>									
TASK			Task Hours	Fee	Task Hours	Fee	Task Hours	Fee	Task Hours	Fee
1	Project Management		246	\$57,181	425	\$69,340	500	\$102,562	528	\$119,722
2	Preliminary Design		2,016	\$431,588	2,132	\$391,599	2,038	\$477,456	1,724	\$438,524
3	Final Design		4,824	\$758,857	5,826	\$691,545	4,231	\$669,981	3,129	\$530,329
	<b>Total Engineering Services Fee</b>		<b>7,086</b>	<b>\$1,247,625</b>	<b>8,383</b>	<b>\$1,152,484</b>	<b>6,769</b>	<b>\$1,249,999</b>	<b>5,381</b>	<b>\$1,088,575</b>
C	<u>OTHER</u>									
	Number of Drawings		114		126		153		107	
	Engineering Design Services Fee per Drawing		\$6,657		\$5,488		\$4,379		\$4,956	
	<u>Sub Consultants</u>									
	Electrical		In-house		In-house		In-house		In-house	
	Civil		In-house		In-house		In-house		In-house	
	Structural		In-house		In-house		In-house		Beyaz & Patel	
	Architectural		In-house		In-house		Nuvis (Landscaping)		In-house	
	Geotech		Converse Consultants		In-house		Ninyo & Moore		Leighton Consulting	
	Mechanical		In-house		In-house		In-house		In-house	
	Survey		Bush & Associates		Psomas		The Prizm Group		In-house	
	Surge		In-house		Northwest Hydraulics		Flowscience		Northwest Hydraulics	
	Potholing		Cardno		C-Below		Bess, Testlab		Cardno	
	Exceptions taken to IRWD Std. Contract		None		None		None		None	
	DIR Numbers Provided		Yes		Yes		Yes		Yes	
	Insurance (Professional & General Liability)		Yes		Yes		Yes		Yes	

# EXHIBIT "C"

**Brown AND  
Caldwell**

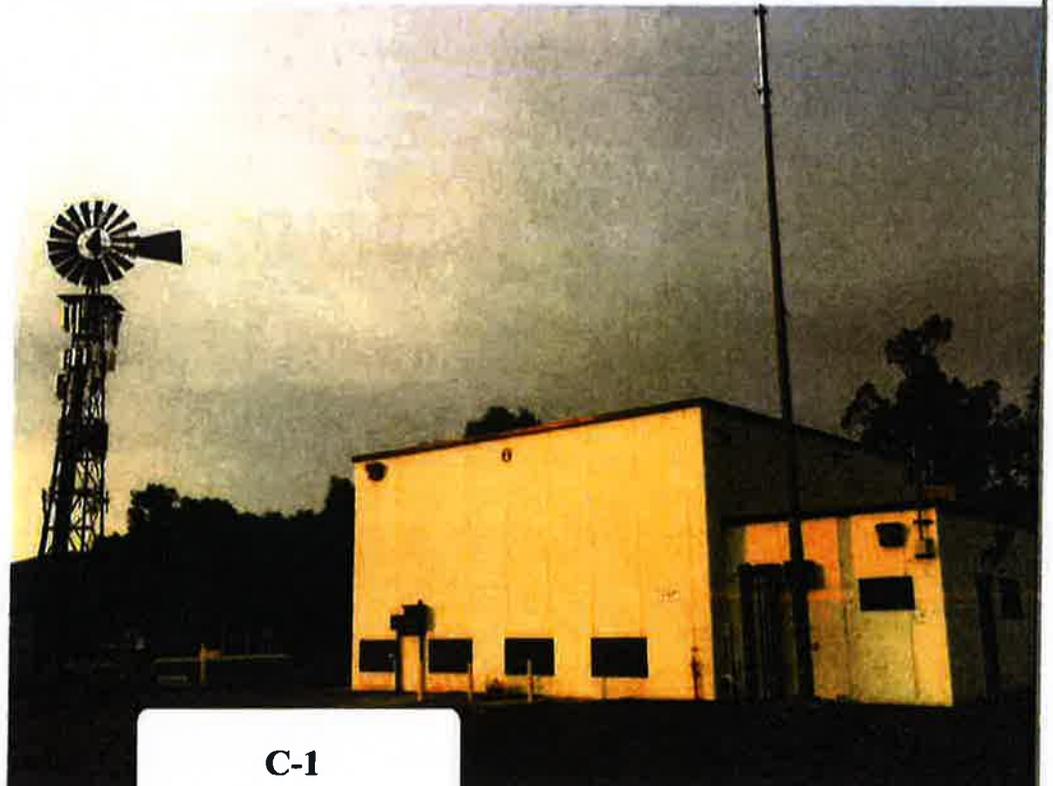
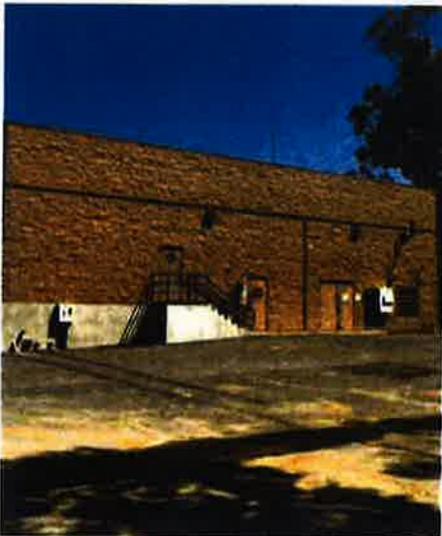
PROPOSAL | Prepared for  
Irvine Ranch Water District



Irvine Ranch  
WATER DISTRICT

## Engineering Design Services for the Zone A to Rattlesnake Reservoir Pump Station Project

August 23, 2018



C-1

## Scope of Work

IRWD developed a detailed scope of work and BC agrees to perform the scope as defined in the RFP and as discussed earlier in this section. Furthermore, our level of effort (provided in sealed envelope), was developed with the following design basis:

- Utilize 2018 AutoDesk suite for design/BIM implementation using:
  - AutoCAD Civil 3D
  - Revit
- New Zone A to Rattlesnake Reservoir Pump Station located at the to-be-demolished Northwood Zone A to B Pump Station
- Modifications, as proposed, to the existing valve vault roof to accommodate H-2O traffic loading
- Renovation (not replacement) of existing dechlorination building – replace all existing chemical storage and feed, ventilation (in-kind), lighting and communications. No new architectural provisions added to existing building, other than paint and/or related product to match color scheme of neighboring chlorination building
- Locate two (2) new sodium hypochlorite metering pumps in the vacant chlorinator room of the existing Chlorination Building
- New standby generator located near new Zone A to Rattlesnake Reservoir Pump Station
- New sewer alignment around perimeter of Rattlesnake Complex with laterals to receiving points, as shown on Figure 1-3
- Use of IRWD-specific standard details and specifications and supplemented with BC details and specifications, as required.
- Loop drawings or instrument data sheets are not required

**Table 1-3** provides a summary of the scope of work as broken down by task, key elements, and deliverables. The Drawings List is included at the end of this section in **Table 1-4**.

**TABLE 1-3 // Scope of Work Summary**

Task	Key Elements	Deliverables
<b>1. Project Management</b>		
<b>A. Preparation of Project Status Reports</b>	<ul style="list-style-type: none"> <li>• Provide weekly and monthly status reports to IRWD.</li> <li>• Maintain tracking log of project decisions, action items, budget and schedule.</li> </ul>	<p>Weekly email reports summarizing activities completed previous week, activities planned for the upcoming week, and critical actions requiring decisions.</p> <p>Monthly reports with billing invoice summarizing work completed and status of work completed relative to budget and schedule.</p>
<b>B. Meetings and Workshops</b>	<p>Organize, attend, and conduct a total of 26 project meetings/workshop, as summarized below.</p> <ul style="list-style-type: none"> <li>• General project management and DDMs – fourteen (14) two-hour meetings.</li> <li>• Coordination meetings with jurisdictional agencies – two (2) two-hour meetings.</li> <li>• Rattlesnake Reservoir Complex site visits – six (6) two-hour meetings</li> <li>• Present Draft Preliminary Design Report (PDR) – one (1) three-hour workshop.</li> <li>• Present 60% design – one (1) two-hour meeting.</li> <li>• Present 90% design – one (1) two-hour meeting.</li> <li>• Present 100% design – one (1) two-hour meeting.</li> </ul>	<p>Prepare and provide meeting agendas and draft and final meeting minutes.</p>
<b>C. Quality Assurance/Quality Control</b>	<p>Perform internal, independent QA/QC for all project deliverables and maintain documentation for compliance.</p>	<p>QC verification form, if requested by IRWD.</p>

TABLE 1-3 // Scope of Work Summary (continued)

Task	Key Elements	Deliverables
<b>2. Preliminary Design</b>		
<b>A. Background Information</b>	Review the Recycled Water Distribution System Analysis report, other existing reports, historical flow data, record drawings, system processes, and other information related to the project. Conduct one site visit to establish an initial site reconnaissance and understanding of existing facilities (included in Task 1.B).	Include findings in Draft PDR.
<b>B. Utility Research</b>	Research and identify the location of existing underground and aboveground utilities and/or other physical features within the complex and adjacent to the Zone A to C+ pump station along Portola Parkway. Information on utilities including type, pressure zone, material, size, and horizontal and vertical locations will be identified. Update the Rattlesnake Reservoir Complex Existing Facilities Map, based on the results of the research. Conduct a meeting with IRWD with a focus on site constraints and the results of the utility research (included in Task 1.B.). Pothole twenty (20) existing utilities within IRWD property to a maximum depth of 20 feet and survey five (5) of the pothole locations for northing, easting and depth.	Include updated facilities map and pothole results in Draft PDR.
<b>C. Zone A to Rattlesnake Reservoir Pump Station Capacity Validation</b>	Review and coordinate with IRWD for the recommended pump station capacity and pumping parameters provided by IRWD.	Include findings in Draft PDR.
<b>D. Zone A to Rattlesnake Reservoir Pump Selection</b>	Identify and evaluate options for the number and size of pumps required to meet the proposed pump station capacity including provisions for inclusion of a standby pump. Identify, develop, and evaluate five alternative pump capacity configurations utilizing constant speed drives, variable frequency drives, or combinations of the two. The alternatives will include any needed considerations for future expansion to meet future pumping requirements. Upon selection of the preferred pumping arrangement, identify three specific pump models, one each from Flowserve, Goulds, and Sulzer, that meet the hydraulic requirements at four separate design points for inclusion in the final technical specifications.	Include pump station configuration alternatives and recommended plan, pump selections, and other details in Draft PDR. Review with IRWD during scheduled DDM.
<b>E. Zone A to Rattlesnake Reservoir Pump Configuration</b>	Develop and evaluate three alternative building configurations for the new pump station based on the results of the pump selection. The pump station will consist of split-face masonry block walls with a parapet roof and will be similar in aesthetic appearance to the existing chlorination building. Each alternative building layout will include a separate pump room, electrical room, and restroom and locations for HVAC will be identified (with adequate consideration for the neighbors). The pump room will include the number of pumps as determined under Task 2.D, a high-pressure bypass pressure reducing valve (PRV), magnetic flowmeter, and a motor-operated PRV between the Zone B and Rattlesnake Reservoir pipelines. The electrical room will have an air conditioning system and others will have mechanical ventilation.	Details of evaluations and final recommendations in Draft PDR. Review with IRWD during scheduled DDM.
<b>F. Surge Study</b>	Complete a hydraulic transient analysis and provide recommendations for surge mitigation.	Submit three (3) hard copies and one (1) electronic copy in PDF of a Technical Memorandum (TM) describing the surge analysis details and recommendations. Finalized TM will be included with the PDR.

TABLE 1-3 // Scope of Work Summary (continued)

Task	Key Elements	Deliverables
G. Demolition of Existing Facilities	Include a summary of onsite facilities that are recommended for demolition. At a minimum, the existing Northwood Zone A to B pump station, Zone A to Rattlesnake Reservoir pump station, interior of the dechlorination facility (if dechlorination building renovation is recommended under Task H below), IRWD caretaker residence septic tank and leach field, IRWD park restroom septic tank and leach field, SCE power poles, existing electrical service and any additional facilities identified as the design progresses. Coordinate construction sequencing per Task 2.N.	Details of evaluations and final recommendations in Draft PDR.
H. Dechlorination Facility	Evaluate the condition of the existing dechlorination facility and determine whether it should be renovated or replaced in its entirety. The evaluation will include consideration of available site space for a new building, phasing requirements associated with construction, and cost considerations between the two options. Conduct building condition assessment site visit (included in Task 1.B).	Details of evaluations and final recommendations in Draft PDR. Review with IRWD during scheduled DDM.
I. Sewer Alignment Analysis	Evaluate existing 8-inch PVC sewer lateral that terminates on site and develop three alignment alternatives to extend the sewer throughout the Complex. Each alignment alternatives shall include provisions for laterals to the dechlorination building, chlorination building, new pump station (floor drains and restroom), IRWD caretaker residence and the IRWD park restroom.	Details of evaluations and final recommendations in Draft PDR. Review with IRWD during scheduled DDM.
J. Permanent Backup Power Generator	Develop and evaluate two backup power generation alternatives and provide a recommendation for which alternative to implement. One alternative will include backup power for only the new Pump Station and the other for the entire site.	Details of evaluations and final recommendations in Draft PDR.
K. Site Automation and Communications Improvements	Evaluate the existing communications infrastructure on site within each operating facility, determine which equipment should be upgraded or replaced, and provide recommendations for developing a combined communications system for the entire complex. At a minimum, a new fiber optic communications network on Rattlesnake Site, a new radio antenna for communication, replacement of existing monitoring panel (analyzer signals), connection of strainer PLC to chlorination system PLC and demolition of existing radio communication.	Details of evaluations and final recommendations in Draft PDR.
L. Site Electrical Service	Evaluate the existing and proposed site electrical loads to identify the size of the needed electrical service to the site and coordinate with SCE to begin preparation of the SCE preliminary service plan and support SCE as needed to develop the final, SCE-approved service plan during the final design phase. A new service switchboard will be provided. An automatic transfer switch and triple switch will be provided for either the new pump station only or for the entire complex, as determined under Task J. Evaluate existing overhead electrical lines and power poles and identify suitable alignment to underground.	Details of evaluations and final recommendations in Draft PDR.
M. Electrical and Controls	Develop electrical and controls design requirements associated with the proposed improvements including all facilities associated with the current and future phases.	Details of evaluations and final recommendations in Draft PDR.
N. Construction Phasing	Evaluate demolition and construction phasing requirements for the proposed pump station, emergency backup power generator, PLC and communications systems, dechlorination facility, and chlorination facility to establish seamless transfer of operations to the new facilities and demolishing the existing ones. Prepare phasing plan and sequence of construction for site layouts. Include discussion on sequencing to maintain existing services throughout construction prior to demolition.	Details of evaluations and final recommendations in Draft PDR. Review with IRWD during scheduled DDM.

TABLE 1-3 // Scope of Work Summary (continued)

Task	Key Elements	Deliverables
O. Site Master Plan	Develop five (5) site layout alternatives to include all requirements of RFP and provide recommendations. Site layouts will include pump station building, pipelines, valves, storm drains and catch basins, sewer, surge tank (if required), electrical transformers and panels, backup generator, and other appurtenances. Define site access and chemical delivery provisions and Orange County Fire Authority (OCFA) requirements. Include discussion of construction phasing, per Task 2.N.	Details of evaluations and final recommendations in Draft PDR. Review with IRWD during scheduled DDM.
P. Entry Road Improvements	Evaluate the existing entry road into the complex from the access point near the OCFA concrete driveway to the end of the paved area near the gate adjacent to the IRWD caretaker residence and provide recommendations for improvements to pavement, grades, curbs, drainage facilities, and the structural street section.	Details of evaluations and final recommendations in Draft PDR.
Q. Preliminary Grading Plan	Develop a preliminary grading plan for the selected Site Layout and incorporate improvements from Task 2.P.	Details of evaluations and final recommendations in Draft PDR.
R. Water Quality Management Plan Requirements	Define project features and best management practices that will mitigate the impact of the project on water quality and the environment according to the North Orange County permit from the National Pollutant Discharge Elimination System (NPDES) held by IRWD, which is under the jurisdiction of the Santa Ana Regional Water Quality Control Board. Perform a site assessment, compile site conditions, determine hydrologic conditions of concern and pollutants of concern, determine performance criteria, and provide recommendations for low impact development best management practices for treatment and capture of onsite stormwater. Review the proposed improvements with IRWD, determine which are suitable, and then incorporate these improvements into the project. Preparation of a complete Water Quality Management Plan is not included.	Details of evaluations and final recommendations in Draft PDR.
S. Geotechnical Investigations	Complete geotechnical investigations per detailed scope of work provided by specialty subconsultant (provided upon request). Work includes: <ul style="list-style-type: none"> <li>• Existing document review</li> <li>• Project setup</li> <li>• Subsurface exploration (six (6) boring locations assumed)</li> <li>• Laboratory testing</li> <li>• Final report preparation</li> <li>• Drill rig services</li> <li>• Permit fee from Orange County Department of Environmental Health Services (if required for disposal of soils from demolition of septic facilities)</li> </ul>	Three (3) copies of the draft Geotechnical Investigation Report (GIR) for review. Upon resolution and incorporation of review comments, three (3) copies of the final GIR and one (1) electronic copy in PDF on CD will be submitted.
T. Surveying Services	Complete surveying services per detailed scope of work provided by specialty subconsultant (provided upon request). Work includes: <ul style="list-style-type: none"> <li>• Research at County offices for local survey control and property line information</li> <li>• Establish survey control using NAD83 coordinates and NAVD88 County benchmark elevations</li> <li>• Aerial mapping of the approximate 11-acre site</li> <li>• Field locate and add obscured surface features not visible in the aerial photography</li> <li>• Establish property line from found property corners and street centerline monuments</li> <li>• Includes one-day field survey crew time to measure coordinates and elevations of utility potholes</li> </ul>	Will establish horizontal and vertical control and develop topographic maps to be used in the design drawings for the proposed facilities.
U. CEQA Documentation	Provide support to the IRWD selected CEQA consultant.	As required.

TABLE 1-3 // Scope of Work Summary (continued)

Task	Key Elements	Deliverables
V. NPDES Permit	Perform a Risk Level assessment in accordance with the Construction General Permit and provide the Risk Level for Inclusion in the Contract Documents. The SWPPP document will be prepared by the contractor, if required.	Include recommendation in Draft PDR.
W. Project Schedule	Develop a project schedule for the design and construction phases.	Include preliminary project schedule with Draft PDR.
X. Opinion of Probable Construction Cost	Develop an Opinion of Probable Construction Cost for proposed improvements.	Include with Draft PDR.
Y. Preliminary Design Report (PDR)	Compile all the Task 2 work into a Draft PDR. Incorporate comments from IRWD on Draft PDR and finalize the Final PDR.	Six (6) hard copies and one (1) electronic copy each of the Draft PDR and Final PDR.
Z. Additional Facility Evaluations	Complete additional evaluations per IRWD direction.	As directed.
<b>3. Final Design</b>		
Final Design	<p>Develop contract documents (in stages - 60%, 90%, 100%, Bid Set, Addenda) consisting of the following:</p> <ul style="list-style-type: none"> <li>• Project Manual per IRWD format consisting of IRWD's Front End Documents, special provisions as needed, technical specifications and other documents required for bid.</li> <li>• Construction Plans</li> <li>• Electrical, Instrumentation and Controls Drawings</li> <li>• SCE Final Service Plan</li> <li>• Project Schedule</li> <li>• Opinion of Probable Construction Cost</li> <li>• Preparation of Addenda and attendance at Pre-Bid Meeting</li> </ul>	<p>Eight (8) copies 11"x17" plans, and a red-lined Project Manual and a PDF on CD at 90% submittal.</p> <p>Eight (8) copies 11"x17" plans, and a table of contents for Project Manual and a PDF of entire documents and AutoCAD files of all drawings on CD at 100% submittal.</p> <p>One (1) full-size final stamped and signed reproducible plan set on mylar and one (1) original signed Project Manual for IRWD signatures.</p>

Phase	Phase Description	Piccolo, Michael V PIC	Lazovsky, Andrew G Project Manager	Jay/Walsh, Madison K Project Engineer	Briggs, Mark D QA/QC	Chandrasekhar, Venkatesh Structural Engineering Lead	Zakaria, Evans Structural Engineering QA/QC	Bourdeau, Pol Structural Engineering	Jordan, Daniel A Structural Engineering	Gilshkko, Maxim Structural Engineering	Dunquels, Michael M Process Mechanical PS Lead	Robison, Douglas B Process Mechanical PS Lead	Vee, Kenneth A Process Mechanical QA/QC	Byrne, Kinan L Process Mechanical Pump Stations	Halverson, Eric Process Mechanical Pump Stations	Bryan, Kyle R Process Mechanical CAD	Beneshing, Russell A Process Mechanical CAD	Lin, Michael Civil/Site Lead	Waltz, Alex Civil/Site	Howell, Greg Civil/Site	Shadon, Farahid F Electrical Engineering Lead	Kindle, Christopher J Electrical Engineering QA/QC	Vo, Sang Van Electrical Engineering
001	Project Management	0	77	53	4	6	0	0	0	0	4	4	0	8	0	0	0	4	0	0	6	0	0
---	Default Task	0	77	53	4	6	0	0	0	0	4	4	0	8	0	0	0	4	0	0	6	0	0
002	Preliminary Design	0	68	125	21	16	4	12	12	20	40	40	14	124	161	64	170	124	176	200	10	6	48
---	Default Task	0	68	125	21	16	4	12	12	20	40	40	14	124	161	64	170	124	176	200	10	6	48
003	Final Design	4	140	260	48	44	40	148	184	246	31	31	26	129	65	208	202	106	152	250	55	34	272
001	Project Schedule	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0
002	Opinion of Probable Const Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
003	Prepare 60% Submittal	0	59	113	20	16	16	60	72	120	14	14	14	56	35	92	98	48	72	120	19	12	96
004	Prepare 90% Submittal	0	42	81	15	20	16	64	84	96	10	10	10	40	25	80	70	40	60	100	26	16	120
005	Prepare 100% Submittal	0	17	32	5	8	8	24	28	30	2	2	2	8	5	24	14	8	12	20	10	6	48
006	Prepare Final Submittal	4	8	8	8	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0
007	Bid-Phase Services	0	12	22	0	0	0	0	0	0	5	5	0	25	0	0	20	10	0	10	0	0	0
<b>GRAND TOTAL</b>		<b>4</b>	<b>285</b>	<b>438</b>	<b>73</b>	<b>66</b>	<b>44</b>	<b>160</b>	<b>196</b>	<b>266</b>	<b>75</b>	<b>75</b>	<b>40</b>	<b>261</b>	<b>226</b>	<b>272</b>	<b>372</b>	<b>234</b>	<b>328</b>	<b>450</b>	<b>71</b>	<b>40</b>	<b>320</b>

Hours and Dollars are rounded to nearest whole number. Rates are fixed for the duration of design.

David Tate	Electrical Engineering	Neel Paul	Electrical Engineering	Zion Bryan J	I&C Lead	Thomas William H	I&C	Christopher Michael B	I&C	Gregory David	Architecture Lead	William Barry N	Architecture CA/QC	Gonzal Brendon R	Architecture	Noyah Jobil A	Building/ Mechanical Lead	Quinn Terry L	Building/ Mechanical CA/QC	Vitor Gustav	Building/ Mechanical	Millones Luis A	Building/ Mechanical CAD	Shudiehl Lina C	WOMP Support	Gooburn Daniel L	Estimating/ Scheduling	Hoop Mirella L	Project Assistant	Bosse Payla P	Project Assistant	Emma Blanca C	Word Processing	Total Labor Hours	Total Labor Effort	Gross Expenses	Geotech - Converse	Survey - Bush	Geotech - Corning	Total Expense Cost	Total Expense Effort	Total Effort
0	0	0	8	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	32	0	0	0	0	246	\$53,181	\$4,000	\$0	\$0	\$0	\$4,000	\$4,000	\$57,181
0	0	0	8	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	32	0	0	0	0	246	\$53,181	\$4,000	\$0	\$0	\$0	\$4,000	\$4,000	\$57,181
20	64	14	55	112	56	22	4	48	36	10	0	24	32	32	0	0	32	32	0	24	32	32	0	0	0	0	0	0	0	0	0	0	2,016	\$317,358	\$31,000	\$17,610	\$33,700	\$31,920	\$114,230	\$114,230	\$431,308	
20	64	14	55	112	56	22	4	48	36	10	0	24	32	32	0	0	32	32	0	24	32	32	0	0	0	0	0	0	0	0	0	0	2,016	\$317,358	\$31,000	\$17,610	\$33,700	\$31,920	\$114,230	\$114,230	\$431,308	
113	362	26	102	208	104	127	24	272	172	22	248	141	0	128	0	0	100	4,824	\$752,857	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	4,824	\$752,857	\$6,000	\$0	\$0	\$0	\$6,000	\$6,000	\$758,857
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	\$2,416	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	0	14	\$2,416	\$0	\$0	\$0	\$0	\$0	\$0	\$2,416
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	\$26,104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	0	128	\$26,104	\$0	\$0	\$0	\$0	\$0	\$0	\$26,104
40	126	12	47	96	48	52	10	112	68	8	108	64	0	0	0	0	0	1,399	\$305,624	\$1,500	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	0	0	1,399	\$305,624	\$1,500	\$0	\$0	\$0	\$1,500	\$1,500	\$307,124
53	170	12	47	96	48	60	11	128	64	8	90	60	0	0	0	0	32	1,912	\$292,293	\$1,500	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	0	0	32	\$292,293	\$1,500	\$0	\$0	\$0	\$1,500	\$1,500	\$293,793
20	64	2	8	16	8	15	3	32	40	6	50	17	0	0	0	0	0	622	\$96,798	\$1,500	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	0	0	622	\$96,798	\$1,500	\$0	\$0	\$0	\$1,500	\$1,500	\$98,298
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	\$8,921	\$1,500	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	0	0	48	\$8,921	\$1,500	\$0	\$0	\$0	\$1,500	\$1,500	\$10,421
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	188	\$20,701	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0	0	0	0	0	0	0	188	\$20,701	\$0	\$0	\$0	\$0	\$0	\$0	\$20,701
133	426	40	165	320	160	157	28	320	208	32	248	165	32	160	32	32	132	7,086	\$1,123,395	\$41,000	\$17,610	\$33,700	\$31,920	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	7,086	\$1,123,395	\$41,000	\$17,610	\$33,700	\$31,920	\$124,230	\$124,230	\$1,247,625