

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

May 24, 2021

*Due to COVID-19, this meeting will be conducted as a teleconference pursuant to the provisions of the Governor's Executive Orders N-25-20 and N-29-20, which suspend certain requirements of the Ralph M. Brown Act. Members of the public may not attend this meeting in person.*

Participation by members of the Board of Directors will be from remote locations. Public access and participation will only be available telephonically/electronically.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online via Webex using the link and information below:

Via Web: <https://irwd.webex.com/irwd/j.php?MTID=mc51610a04c5fdff65cfe8a7c74175508>  
Meeting Number (Access Code): 146 495 0905  
Meeting Password: JcHGMg7TN62

After joining the meeting, in order to ensure all persons can participate and observe the meeting, please select the "Call in" option and use a telephone to access the audio for the meeting by using the call-in information and attendee identification number provided.

*As courtesy to the other participants, please mute your phone when you are not speaking.*

**PLEASE NOTE:** Participants joining the meeting will be placed into the Webex lobby when the Board enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Board once the closed session has concluded. Participants who join the meeting while the Board is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the closed session has concluded.

**CALL TO ORDER**      5:00 p.m.

**ROLL CALL**              Directors LaMar, McLaughlin, Swan, and Withers, and President Reinhart

**PUBLIC COMMENT NOTICE**

If you wish to address the Board of Directors on any item, please submit a request to speak via the "chat" feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing [comments@irwd.com](mailto:comments@irwd.com) before 12:00 p.m. on Monday, May 24, 2021.

**ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE.**

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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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**CONSENT CALENDAR, ITEMS 3-6** (Next Resolution No. 2021-8)

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3. BOARD MEETING MINUTES

Recommendation: That the minutes of the March 10, 2021 and May 17, 2021 Regular Board meeting be approved as presented.

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

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Karen McLaughlin, and John Withers, as described.

5. TREASURY REPORT

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Summary of Fixed and Variable Rate Debt, and Disclosure Report of Reimbursements to Board Members and staff, approve the April 2021 Summary Of Payroll ACH payments in the total amount of \$2,136,010, and approve the April 2021 Accounts Payable Disbursement Summary of Warrants 416897 through 417884, Workers' Compensation Distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$22,136,818.

6. POLICY REVISIONS AND ADDITIONS RELATED TO DISTRICT APPROVALS, AUTHORIZATIONS, AND PROCEDURES

Recommendation: That the Board adopt the following resolution by title:

RESOLUTION NO. 2021 –

**RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, SUPERSEDING RESOLUTION NO. 2020-1 AND ADOPTING A REVISED REAL PROPERTY POLICY**

Reso. No. 2021-8

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**ACTION CALENDAR**

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7. HARVARD AVENUE TRUNK SEWER DIVERSION STRUCTURE REHABILITATION AND MWRP PRIMARY CLARIFIERS CHANNEL LINING BUDGET INCREASE AND CONSTRUCTION AWARD

Recommendation: That the Board authorize a budget increase for Project 11122 in the amount of \$2,155,000, from \$707,000 to \$2,862,000, and authorize the General Manager to execute a construction contract with Pacific Hydrotech Corporation in the amount of \$1,827,750 for the Harvard Avenue Trunk Sewer Diversion Structure Rehabilitation and Michelson Water Recycling Plant Primary Clarifiers Channel Lining, Project 11122.

8. IRWD WELL ET-1 PFAS TREATMENT SYSTEM DESIGN CONSULTANT SELECTION AND SETTLEMENT AGREEMENT AMENDMENT

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Tetra Tech in the amount of \$316,300 for engineering design services and authorize the General Manager to execute the Fifth Amendment to the Settlement Agreement for the Marine Corps Air Station El Toro Groundwater Remediation Project for the Well ET-1 PFAS Treatment System, Project 11171.

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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.

9. General Manager's Report
10. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and provide information on relevant community events.
11. Directors' Comments
12. Adjourn.

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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 above-named Board in connection with a matter subject to discussion or consideration at an open meeting of the Board 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 electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to [comments@irwd.com](mailto:comments@irwd.com). Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

May 24, 2021  
Prepared and  
submitted by: L. Bonkowski  
Approved by: Paul A. Cook *PAC.*

CONSENT CALENDAR

BOARD MEETING MINUTES

SUMMARY:

Provided are the minutes of the May 10, 2021 and May 17, 2021 Regular Board meetings for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE MAY 10, 2021 AND MAY 17, 2021 REGULAR BOARD MEETINGS BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – May 10, 2021 Minutes  
Exhibit "B" – May 17, 2021 Minutes

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EXHIBIT “A”

MINUTES OF REGULAR MEETING – May 10, 2021

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 May 10, 2021 via teleconference pursuant to the provisions of the Governor’s Executive Orders N-25-20 and N-29-20 due to COVID-19. Members of the public did not attend this meeting in person.

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

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Technical Services Burton, Executive Director of Operations Chambers, Executive Director of Water Policy Weghorst, Executive Director of Finance and Administration Clary, Director of Treasury and Risk Management Jacobson, Director of Water Quality and Regulatory Compliance Colston, Director of Recycling Operations Zepeda, Director of Information Services Malone, Director of Water Resources Sanchez, Director of Maintenance Mykitta, Director of Human Resources Mitcham, Government Relations Officer/Deputy General Counsel Compton, Secretary Bonkowski, General Counsel Collins, and members of staff and the public.

WRITTEN AND ORAL COMMUNICATIONS: None.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

CONSENT CALENDAR

Director Swan asked that Item No. 7, RESOLUTION FOR SYPHON RESERVOIR IMPROVEMENT PROJECT APPLICATIONS FOR TITLE XVI GRANT FUNDING, be moved to the Action Calendar. There being no objections, this item was moved accordingly. On MOTION by Swan, seconded by LaMar and unanimously carried by a roll call vote (5-0) McLaughlin, Swan, Withers, LaMar and Reinhart voting aye, and 0 noes ITEMS 3 THROUGH 7 WERE APPROVED AS FOLLOWS:

3. BOARD MEETING MINUTES

Recommendation: That the minutes of the March 22, 2021 Regular Board meeting be approved as presented.

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

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Karen McLaughlin, and John Withers, as described.

5. 2021 LEGISLATIVE AND REGULATORY UPDATE

Recommendation: That the Board adopt a “watch” position on AB 602 (Grayson).

CONSENT CALENDAR (CONTINUED)

6. MICHELSON WATER RECYCLING PLANT UNIT SUBSTATION T-1  
REMOVAL FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Michelson Water Recycling Plant Unit Substation T-1 Removal, 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 for Project 10535.

7. EASTWOOD RECYCLED WATER PUMP STATIONS FINAL  
ACCEPTANCE

Recommendation: That the Board accept construction of the Eastwood Recycled Water Pump Stations Zone A to B and Zone A To C, 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 for Projects 04400 and 04457.

ACTION CALENDAR

RESOLUTION FOR SYPHON RESERVOIR IMPROVEMENT PROJECT APPLICATIONS  
FOR TITLE XVI GRANT FUNDING

Director Swan said that he moved this item to Action Calendar as he wished to vote no on this item. Recommendation: On MOTION by Withers, seconded by LaMar and carried by a roll call vote (4-1) McLaughlin, Withers, LaMar and Reinhart voting aye, and Swan voting no, THE BOARD AUTHORIZED STAFF TO SUBMIT GRANT APPLICATIONS FOR THE BUREAU OF RECLAMATION WATERSMART – TITLE XVI WIIN WATER RECLAMATION AND REUSE PROGRAM FOR UP TO 25% OF THE TOTAL PROJECT COSTS, UP TO \$20 MILLION, FOR THE SYPHON RESERVOIR IMPROVEMENT PROJECT, AUTHORIZED THE GENERAL MANAGER TO EXECUTE A RELATED AGREEMENT TO RECEIVE GRANT FUNDING, AND ADOPTED THE FOLLOWING RESOLUTION BY TITLE AUTHORIZING SUBMISSION OF THE GRANT APPLICATIONS.

RESOLUTION NO. 2021 – 7

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
AUTHORIZING SUBMISSION OF GRANT APPLICATIONS  
FOR THE WATERSMART TITLE XVI WIIN  
WATER RECLAMATION AND REUSE PROGRAM TO THE  
DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION,  
POLICY AND ADMINISTRATION

## REHABILITATION OF IRWD WELL 51 CONSTRUCTION AWARD

General Manager Cook reported that IRWD's Well 51 has been idle for nearly 30 years and as a result, the louvers appear partially plugged due to biological and inorganic fouling, and reduced production and specific capacity, and needs rehabilitation. Mr. Cook said that the rehabilitation of Well 51 was identified as the next project in the most recent Groundwater Workplan and in the Well Treatment Alternatives Study presented to the Engineering and Operations Committee on October 20, 2020. Several options were presented with each option requiring Well 51 to be rehabilitated prior to moving on to the next phase of the project.

Executive Director of Technical Services Burton said that an unsuccessful attempt was made to rehabilitate the well in 2009 using traditional mechanical methods; however, rehabilitation methods have improved significantly since then, which include rigorous mechanical, chemical, and pumping development. Mr. Burton said that a recent video of the well casing was reviewed by staff and Richard C. Slade & Associates, hydrogeologist for the project, and the visual observation indicates that the well may be successfully rehabilitated using the updated methods. The original rated production of Well 51 was 2,900 gallons per minute with a specific capacity of 116 gallons per minute per foot of drawdown. The intent of the rehabilitation efforts is to restore this important groundwater resource to its original pumping and specific capacity.

Mr. Burton reported that the project was advertised for construction to a select bidders list of seven contractors. The bid opening was held on April 29, 2021 with three bids received from: 1) Best Drilling and Pump, Inc., 2) Layne, A Granite Company, and 3) Weber Water Resources CA, LLC. He said that all three bids were lower than the engineer's estimate of \$391,000 and ranged from \$304,950.89 to \$336,490 and that Weber Water Resources is the apparent low bidder with a bid amount of \$304,950.89.

Director Swan said that that this well has had problems since startup, and following discussion, staff will provide him with the October PowerPoint presentation and provide him information with information on the ETMCAS plume. On MOTION by Withers, seconded by LaMar and unanimously carried by a roll call vote (5-0) McLaughlin, Swan, Withers, LaMar and Reinhart voting aye, and 0 noes, THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH WEBER WATER RESOURCES CA, LLC IN THE AMOUNT OF \$304,950.89 FOR REHABILITATION OF IRWD WELL 51, PROJECT 11827.

## ANNUAL ORACLE SOFTWARE MAINTENANCE AND SUPPORT AGREEMENT RENEWAL

General Manager Cook reported that IRWD uses Oracle software to run the servers and databases that support the Oracle EBS, Oracle CC&B, Oracle Business Intelligence, and Maximo Enterprise Asset Management applications. In April 2017, the Board approved software maintenance agreements with Oracle for a term of 48 months, from April 2017 through May 2021, for technology software, CC&B application licenses, and EBS application licenses. These agreements cover all versions of Oracle software products, CC&B software products, and EBS financial products purchased by IRWD, and allows for upgrade to new versions as they become available. Included in the most recent agreements was a zero percent increase in software and support maintenance for renewals commencing after 2015 and through 2021.

Director of Information Services Malone reported that staff recommends the Board approve a two-year agreement with Oracle as a two-year agreement will align Oracle support contracts with the District's two-year operating budget cycle, along with an overarching strategy to migrate major computer applications to the cloud, and the two-year cycle presents an opportunity to move EBS and CC&B from their current on-premise operation and be in a position to reduce the technology software licensing at the end of this renewal. The renewals represent an increase of 4% in support costs from the previous contracts.

Director Swan reported that this item was reviewed and approved by the Finance and Personnel Committee on May 4, 2021. On MOTION by LaMar, seconded by Swan and unanimously carried by a roll call vote (5-0) McLaughlin, Swan, Withers, LaMar and Reinhart voting aye, and 0 noes THE BOARD APPROVED RENEWAL OF IRWD'S ANNUAL ORACLE SOFTWARE MAINTENANCE AND SUPPORT AGREEMENTS, AND ADDITIONAL LICENSES AND SUPPORT IN THE AMOUNT OF \$2,020,000 FOR A TWO-YEAR PERIOD FROM JUNE 1, 2021 THROUGH MAY 31, 2023.

### GENERAL MANAGER'S REPORT

General Manager Cook reported that all is going quite well relative to COVID-19 and said that CAL/OSHA posted new regulations last week he said were underwhelming that the District will follow and hopes that something reasonable will come forth soon.

Mr. Cook reported that there were past billing issues with UCI amounting to \$500,000 past due, that staff has spent a substantial amount of time resolving, and thanked Jenny Pan, Tera Rice, Cheryl Clary, Liz Reyes, and Belisario Rios for their efforts. He said that UCI's Fred Bockmiller also sent a thank you note for working diligently with its staff on this issue, which is now resolved, and full payment made.

### DIRECTORS' COMMENTS

Director Swan reported on his attendance at a MWDOC/OCWD Joint Planning Committee meeting, a Southern California Water Dialogue meeting, a Groundwater Banking JPA Finance Committee meeting, a MWDOC Planning and Operations Committee meeting, a MWDOC meeting on Wednesday, a WACO monthly meeting, and a UCI Water Colloquium Series meeting regarding *Tapping into the Future—Potable Reuse in Tomorrow's World*.

Director Withers reported on his attendance at NWRI meetings, OCSD meetings, and a WACO meeting.

Director McLaughlin reported on her attendance at a Southern California Water Coalition meeting, a SOCWMA Executive Committee meeting, and a UCI Water Colloquium Series meeting.

Director LaMar reported on his attendance at an OCBC Washington, DC Advocacy Summit, a WACO meeting, and ACWA meetings. He said he was unable to attend the Southern California Water Coalition meeting.

Director Reinhart reported on his attendance at a MWDOC/OCWD Joint Planning Committee meeting, a Groundwater Banking JPA Board meeting, an OCWD Board meeting, a SOCWA Board meeting, and a WACO meeting.

ADJOURNMENT

President Reinhart adjourned the meeting at 5:43 p.m.

APPROVED and SIGNED this 24th day of May 2021.

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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, General Counsel  
Hanson Bridgett LLP

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## EXHIBIT “B”

### MINUTES OF REGULAR MEETING – May 17, 2021

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 May 17, 2021 via teleconference pursuant to the provisions of the Governor’s Executive Orders N-25-20 and N-29-20 due to COVID-19. Members of the public did not attend this meeting in person.

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

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Technical Services Burton, Executive Director of Operations Chambers, Executive Director of Water Policy Weghorst, Executive Director of Finance and Administration Clary, Director of Human Resources Mitcham, Secretary Bonkowski, General Counsel Collins, Special Legal Counsel Brown, and members of staff and the public.

WRITTEN AND ORAL COMMUNICATIONS: None.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

### CLOSED SESSION

Legal Counsel Collins said that the following Closed Sessions would be held this evening.

CONFERENCE WITH LABOR NEGOTIATORS – Pursuant to Government Code Section 54957.6.

*Agency Designated Representatives:* Paul Cook, General Manager, and Tiffany Mitcham, Director of Human Resources

*Employee Groups:* International Brotherhood of Electrical Workers (AFL-CIO) Local #47 for the General Unit and the Non-Exempt Supervisor Unit

CONFERENCE WITH LABOR NEGOTIATORS – Pursuant to Government Code Section 54957.6:

*Agency Designated Representatives:* Paul Cook, General Manager, and Tiffany Mitcham, Director of Human Resources

*Employee Group:* Managers, Supervisors and Confidential Employees

### OPEN SESSION

At 6:35 p.m. the meeting was reconvened with Directors Swan, LaMar, Withers, McLaughlin, and Reinhart present. General Counsel Collins said that there was no action to report. President Reinhart adjourned the meeting.

APPROVED and SIGNED this 24th day of May 2021.

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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, General Counsel  
Hanson Bridgett LLP

May 24, 2021  
Prepared and  
submitted by: K. Swan  
Approved by: Paul A. Cook



CONSENT CALENDAR

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

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, the following events and meetings require approval by the Board of Directors:

Steven LaMar

May 25	Coro's 46 <sup>th</sup> Annual Crystal Eagle Virtual Awards Gala
June 16	Chapman University's Virtual Economic Forecast Update

Karen McLaughlin

May 13	IRWD Introduction to Irvine Company
May 18	Water UCI Colloquium Virtual Series
May 27	OCWD Water Reuse Webinar

John Withers

May 19	Orange County Water Association's Virtual Monthly Industry Insight Presentation
May 25	Coro's 46 <sup>th</sup> Annual Crystal Eagle Virtual Awards Gala
June 16	Chapman University's Virtual Economic Forecast Update

RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LAMAR, KAREN MCLAUGHLIN, AND JOHN WITHERS AS DESCRIBED HEREIN.

LIST OF EXHIBITS:

None.

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May 24, 2021  
Prepared by: J. Davis  
Submitted by: R. Jacobson / C. Clary  
Approved by: Paul A. Cook *P.A.C.*

## CONSENT CALENDAR

### APRIL 2021 TREASURY REPORT

#### SUMMARY:

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

- A. The April 2021 Investment Summary Report. This Investment Summary Report conforms with the 2021 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 Rate Debt as of April 30, 2021, as outlined in Exhibit "B";
- C. The Monthly Interest Rate Swap Summary as of April 30, 2021, as outlined in Exhibit "C";
- D. The April 30, 2021 Disbursement Summary of warrants 416897 through 417884, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$22,136,818, as outlined in Exhibit "D";
- E. The Summary of Payroll ACH payments in the total amount of \$2,136,010, as outlined in Exhibit "E"; and
- F. The Disclosure Report of Reimbursements to Board members and staff for April 2021, detailing payments or reimbursements for individual charges of \$100 or more per transaction, as outlined in Exhibit "F".

#### FISCAL IMPACTS:

As of April 30, 2021, the book value of the investment portfolio was \$400,972,105, with a 0.65% rate of return and a market value of \$402,056,639. Based on IRWD's March 31, 2021 quarterly real estate investment rate of return of 11.09%, the weighted average return for the fixed income and real estate investments was 2.75%.

As of April 30, 2021, the outstanding principal amount of fixed and variable rate debt was \$641,025,000. The monthly weighted average all-in variable rate was 0.37%. Including IRWD's weighted average fixed rate bond issues of 3.70% and the 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 2.91%.

Payroll ACH payments totaled \$2,136,010, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for April totaled \$22,136,818.

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; the investment and debt reports are submitted to the Finance and Personnel Committee monthly.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF, APPROVE THE APRIL 2021 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,136,010, AND APPROVE THE APRIL 2021 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 416897 THROUGH 417884, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$22,136,818.

LIST OF EXHIBITS:

Exhibit "A" – Investment Summary Report

Exhibit "B" – Summary of Fixed and Variable Debt

Exhibit "C" – Monthly Interest Rate Swap Summary

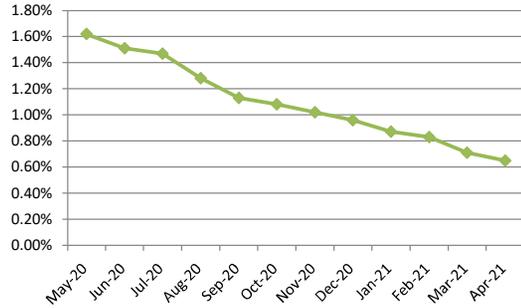
Exhibit "D" – Monthly Summary of District Disbursements

Exhibit "E" – Monthly Payroll ACH Summary

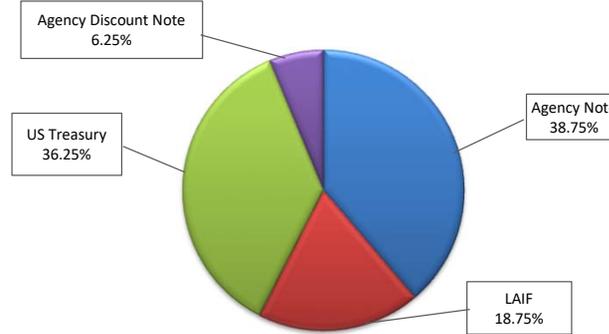
Exhibit "F" – Disclosure of Reimbursements to Board Members and Staff

Exhibit "A"  
**Irvine Ranch Water District  
Investment Portfolio Summary  
April 2021**

**Monthly Fixed Income Yield**



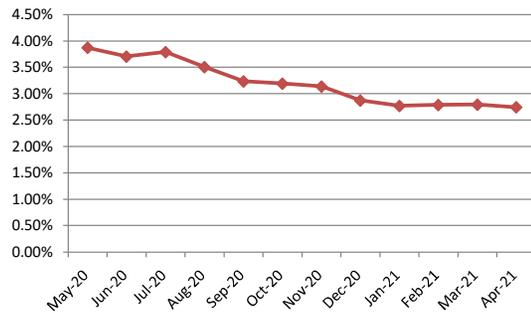
**Portfolio Distribution**



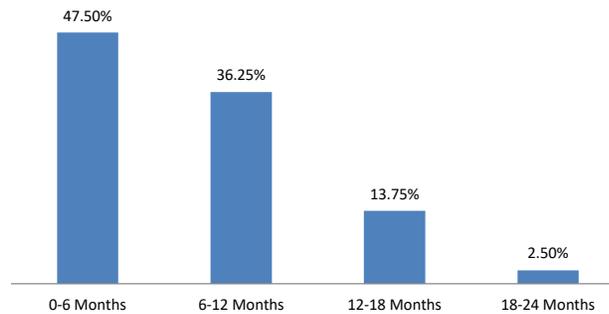
**Investment Summary**

Type	PAR	Book Value	Market Value
US Treasury	155,000,000	155,488,158	155,976,650
Agency Note	145,000,000	145,492,484	145,986,100
LAIF	75,000,000	75,000,000	75,095,239
Agency Discount Note	25,000,000	24,991,463	24,998,650
<b>Grand Total</b>	<b>400,000,000</b>	<b>400,972,105</b>	<b>402,056,639</b>

**Weighted Average Return  
Including Real Estate Portfolio**



**Maturity Distribution**



**Top Issuers**

Issuer	PAR	% Portfolio
US Treasury	155,000,000	38.75%
State of California Tsy.	75,000,000	18.75%
Fed Farm Credit Bank	70,000,000	17.50%
Fed Home Loan Bank	70,000,000	17.50%
Fed Home Loan Mortgage Corp	20,000,000	5.00%
Fed Natl Mortgage Assoc	10,000,000	2.50%
<b>Grand Total</b>	<b>400,000,000</b>	<b>100.00%</b>

IRVINE RANCH WATER DISTRICT  
INVESTMENT SUMMARY REPORT

04/30/21

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> 4/30/2021	UNREALIZED <sup>(2)</sup> GAIN/(LOSS)
07/24/20			05/01/21		LAIF	State of California Tsy.	\$75,000,000		0.340%	\$75,000,000.00	\$75,000,000.00	75,095,238.98	95,238.97
09/13/19	NA	NA	05/15/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.625%	1.757%	5,071,093.75	5,001,631.66	5,004,300.00	2,668.34
11/18/20	NA	NA	05/27/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.080%	0.081%	4,997,888.89	4,999,711.11	5,000,000.00	288.89
03/02/20	NA	NA	05/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	2.125%	1.186%	10,115,711.10	10,030,771.52	10,016,000.00	(14,771.52)
06/11/20	NA	NA	06/09/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.190%	0.193%	4,990,420.85	4,998,970.84	5,000,000.00	1,029.16
09/18/19	NA	NA	06/11/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.250%	1.786%	5,039,300.00	5,002,549.53	5,011,800.00	9,250.47
01/16/20	NA	NA	06/30/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.125%	1.594%	4,966,406.25	4,996,204.10	5,008,600.00	12,395.90
12/31/20	NA	NA	07/01/21	Aaa/NR/AAA	Treasury - Bill	US Treasury	10,000,000	0.090%	0.090%	9,995,450.00	9,998,475.00	9,999,800.00	1,325.00
01/19/21	NA	NA	07/15/21	Aaa/NR/AAA	Treasury - Bill	US Treasury	5,000,000	0.075%	0.076%	4,998,156.25	4,999,218.75	4,999,900.00	681.25
07/26/19	NA	NA	07/19/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.875%	1.927%	4,995,000.00	4,999,454.42	5,018,650.00	19,195.58
08/13/20	NA	NA	08/12/21	NR	FFCB - Discount Note	Fed Farm Credit Bank	10,000,000	0.140%	0.142%	9,985,844.44	9,995,994.44	9,999,400.00	3,405.56
08/13/20	NA	NA	08/13/21	Aaa/NR/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	0.125%	0.133%	9,999,220.00	9,999,777.75	9,999,400.00	(377.75)
08/01/19	NA	NA	08/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.125%	1.816%	4,929,687.50	4,988,727.83	5,017,550.00	28,822.17
03/10/21	NA	NA	09/09/21	NR	Treasury - Bill	US Treasury	10,000,000	0.045%	0.046%	9,997,712.50	9,998,087.50	9,999,300.00	1,212.50
09/17/20	NA	NA	09/17/21	NA	FHLB - Note	Fed Home Loan Bank	5,000,000	0.125%	0.132%	4,999,660.00	4,999,870.52	5,000,850.00	979.48
08/13/20	NA	NA	09/30/21	Aaa/AA+/NR	Treasury - Note	US Treasury	10,000,000	1.125%	0.133%	10,112,109.38	10,041,260.60	10,044,900.00	3,639.40
09/30/20	NA	NA	09/30/21	NA	FHLB - Note	Fed Home Loan Bank	10,000,000	0.125%	0.122%	10,000,336.80	10,000,140.26	10,002,600.00	2,459.74
08/13/20	NA	NA	10/07/21	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.375%	0.143%	10,141,500.00	10,053,567.86	10,057,300.00	3,732.14
10/11/19	NA	NA	10/15/21	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	2.875%	1.540%	5,131,640.63	5,029,910.18	5,064,050.00	34,139.82
10/22/19	NA	NA	10/15/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.400%	1.642%	4,976,500.00	4,994,579.42	5,030,550.00	35,970.58
10/29/20	NA	NA	10/19/21	Aaa/NR/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	0.125%	0.127%	9,999,800.00	9,999,903.66	10,002,800.00	2,896.34
10/27/20	NA	NA	10/26/21	NR	FFCB - Discount Note	Fed Farm Credit Bank	5,000,000	0.130%	0.132%	4,993,427.78	4,996,786.11	4,999,250.00	2,463.89
11/05/19	NA	NA	11/15/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.875%	1.610%	5,125,585.94	5,033,557.38	5,075,800.00	42,242.62
11/08/19	NA	NA	11/30/21	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	1.750%	1.680%	5,007,031.25	5,001,988.92	5,049,200.00	47,211.08
03/17/21	NA	NA	11/30/21	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	1.875%	0.057%	5,064,120.00	5,056,664.19	5,053,150.00	(3,514.19)
09/28/20	NA	NA	12/03/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.150%	0.120%	5,001,765.00	5,000,884.55	5,002,850.00	1,965.45
10/30/20	NA	NA	12/15/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.625%	0.127%	5,140,429.69	5,077,902.60	5,079,500.00	1,597.40
04/23/20	NA	NA	12/20/21	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.625%	0.309%	10,217,480.00	10,097,614.79	10,099,100.00	1,485.21
11/25/19	NA	NA	12/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.000%	1.619%	5,039,062.50	5,012,426.66	5,063,850.00	51,423.34
11/25/19	NA	NA	01/13/22	Aaa/NA/NR	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.375%	1.635%	5,077,250.00	5,025,452.88	5,080,850.00	55,397.12
08/14/20	NA	NA	01/13/22	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.375%	0.147%	5,157,297.23	5,078,192.24	5,080,850.00	2,657.76
03/08/19	NA	NA	01/15/22	Aaa/AA+/NR	Treasury - Note	US Treasury	5,000,000	2.500%	2.460%	5,005,468.75	5,001,356.71	5,085,950.00	84,593.29
12/19/19	NA	NA	01/31/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.875%	1.641%	5,024,218.75	5,008,604.85	5,067,950.00	59,345.15
03/21/19	NA	NA	02/03/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.030%	2.361%	4,954,350.00	4,987,913.62	5,073,100.00	85,186.38
11/13/20	Continuous after	05/04/21	02/04/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.140%	0.150%	4,999,390.00	4,999,620.11	5,000,000.00	379.89
12/19/19	NA	NA	02/15/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.500%	1.652%	5,089,453.13	5,032,878.84	5,096,100.00	63,221.16
11/13/20	NA	NA	02/28/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.875%	0.139%	5,112,304.69	5,072,093.90	5,074,800.00	2,706.10
11/19/20	NA	NA	02/28/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.750%	0.126%	5,103,710.94	5,067,434.37	5,069,900.00	2,465.63
03/08/19	NA	NA	03/11/22	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.500%	2.549%	5,002,750.00	5,000,785.71	5,104,300.00	103,514.29
12/23/20	NA	NA	03/22/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	10,000,000	0.090%	0.090%	10,000,000.00	10,000,000.00	10,001,000.00	1,000.00
12/19/19	NA	NA	03/31/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.875%	1.645%	5,025,585.94	5,010,258.95	5,082,400.00	72,141.05
04/30/21	NA	NA	03/31/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	0.375%	0.056%	5,014,648.44	5,014,604.71	5,014,450.00	(154.71)
02/21/20	NA	NA	04/14/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.400%	1.414%	4,998,500.00	4,999,199.23	5,061,500.00	62,300.77
04/23/20	NA	NA	04/21/22	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.580%	0.320%	10,250,200.00	10,124,756.32	10,142,900.00	18,143.68
05/28/20	One Time	05/26/21	05/26/22	Aaa/NR/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.270%	0.270%	5,000,000.00	5,000,000.00	5,000,100.00	100.00
04/22/21	NA	NA	06/30/22	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.082%	10,005,078.13	10,004,972.82	10,004,700.00	(272.82)
04/30/21	NA	NA	06/30/22	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	0.125%	0.082%	5,002,539.06	5,002,533.10	5,002,350.00	(183.10)
01/15/20	NA	NA	07/15/22	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.600%	1.594%	5,000,750.00	5,000,361.84	5,089,050.00	88,688.16
05/28/20	One Time	05/26/21	08/26/22	Aaa/NR/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.300%	0.300%	5,000,000.00	5,000,000.00	5,000,350.00	350.00
04/28/21	NA	NA	08/31/22	Aaa/NR/NR	Treasury - Note	US Treasury	5,000,000	0.125%	0.102%	5,001,562.50	5,001,552.93	5,001,350.00	(202.93)
04/28/21	NA	NA	09/09/22	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.000%	0.112%	5,128,632.30	5,127,858.96	5,126,200.00	(1,658.96)
04/22/21	NA	NA	10/31/22	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	0.125%	0.110%	10,002,343.75	10,005,040.26	10,000,800.00	(4,240.26)

IRVINE RANCH WATER DISTRICT  
INVESTMENT SUMMARY REPORT

04/30/21

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> 4/30/2021	UNREALIZED <sup>(2)</sup> GAIN/(LOSS)
<b>TOTAL INVESTMENTS</b>							<u>\$400,000,000</u>			<u>\$401,988,374.11</u>	<u>\$400,972,104.51</u>	<u>\$402,056,638.98</u>	<u>\$1,084,534.47</u>
					Petty Cash					3,400.00			
					Ck Balance	Bank of America		ECR	0.19%	10,042,571.00			
										<u>\$412,034,345.11</u>			

<p><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</p>	Outstanding Variable Rate Debt	\$249,300,000															
	Net Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps)	\$189,300,000															
	Investment Balance:	\$412,034,345															
	Investment to Variable Rate Debt Ratio:	218%															
	Portfolio - Average Number of Days To Maturity	187															
	<table border="1"> <thead> <tr> <th></th> <th>Investment Portfolio</th> <th>Real Estate<sup>(3)</sup> Portfolio</th> <th>Weighted Avg. Return</th> </tr> </thead> <tbody> <tr> <td>April</td> <td>0.65%</td> <td>11.09%</td> <td>2.75%</td> </tr> <tr> <td>March</td> <td>0.71%</td> <td>11.09%</td> <td>2.80%</td> </tr> <tr> <td>Change</td> <td>-0.06%</td> <td></td> <td>-0.05%</td> </tr> </tbody> </table>		Investment Portfolio	Real Estate <sup>(3)</sup> Portfolio	Weighted Avg. Return	April	0.65%	11.09%	2.75%	March	0.71%	11.09%	2.80%	Change	-0.06%		-0.05%
	Investment Portfolio	Real Estate <sup>(3)</sup> Portfolio	Weighted Avg. Return														
April	0.65%	11.09%	2.75%														
March	0.71%	11.09%	2.80%														
Change	-0.06%		-0.05%														
<p>This Investment Summary Report is in conformity with the 2021 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures. *S - Step up</p>																	



Irvine Ranch Water District  
Summary of Real Estate - Income Producing Investments  
3/31/2021

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MARKET VALUE 6/30/2020	ANNUALIZED RATE OF RETURN QUARTER ENDED 3/31/2021
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 152,340,625	19.69%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 30,432,947	8.51%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 11,964,600	11.05%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 9,363,600	6.61%
Sand Canyon Professional Center - Medical Office	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 11,444,400	9.25%
Sand Canyon Professional Center - General Office	Sep-20	Office Building	Fee Simple	\$ 25,985,968	\$ 28,770,000	-0.64%
<b>Total - Income Properties</b>				<b>\$ 98,555,794</b>	<b>\$ 244,316,172</b>	<b>11.09%</b>

**IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT**  
**INVESTMENT ACTIVITY**  
**Apr-21**

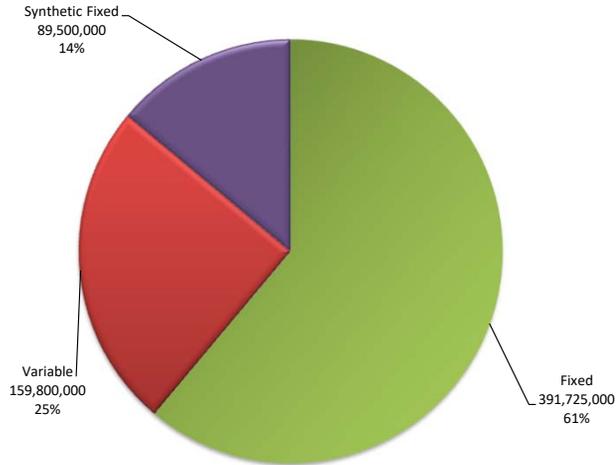
**MATURITIES/SALES/CALLS**

**PURCHASES**

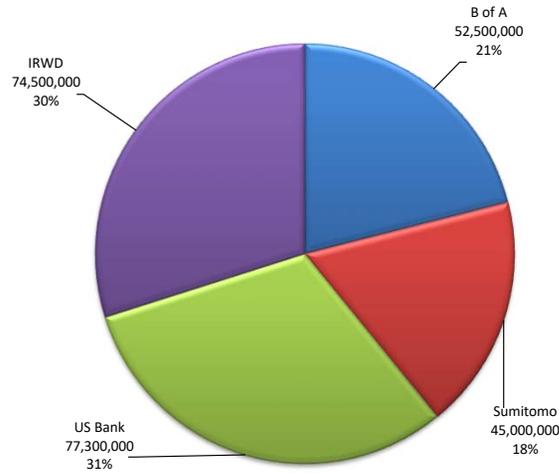
DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
4/13/2021	FNMA - Note	\$3,000,000	1.19%	4/22/2021	6/30/2022	US Treasury - Note	\$10,000,000	0.08%
4/23/2021	FFCB - Note	\$5,000,000	0.15%	4/22/2021	10/31/222	US Treasury - Note	\$10,000,000	0.11%
4/27/2021	FHLB - Discount Note	\$5,000,000	0.08%	4/30/2021	3/31/2022	US Treasury - Note	\$5,000,000	0.06%
4/27/2021	FHLB - Discount Note	\$5,000,000	0.08%	4/30/2021	6/30/2022	US Treasury - Note	\$5,000,000	0.08%

Exhibit "B"  
**Irvine Ranch Water District**  
**Summary of Fixed and Variable Rate Debt**  
**April 2021**

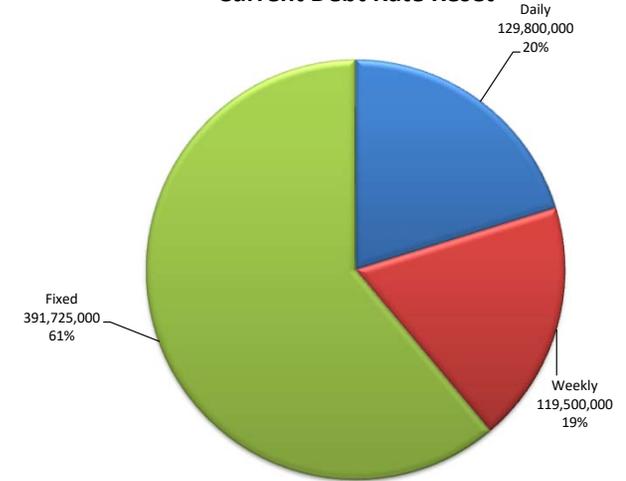
**Current Debt Mix By Type**



**Letters of Credit / Support**



**Current Debt Rate Reset**



**Outstanding Par by Series**

Series	Issue Date	Maturity Date	Remaining Principal	Percent	Letter of Credit/Support	Rmkt Agent	Mode	Reset
Series 1993	05/19/93	04/01/33	\$24,800,000	3.87%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$45,000,000	7.02%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$44,700,000	6.97%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$29,800,000	4.65%	IRWD	Goldman	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$52,500,000	8.19%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$52,500,000	8.19%	B of A	Goldman	Variable	Daily
2016 COPS	09/01/16	03/01/46	\$113,325,000	17.68%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	27.30%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	16.13%	N/A	N/A	Fixed	Fixed
<b>Total</b>			<b>\$641,025,000</b>	<b>100.00%</b>				

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

April-21

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	MOODY'S	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee				
SERIES 1993	05/19/93	04/01/33	Apr 1	5th Bus. Day	\$38,300,000	\$24,800,000	US BANK	05/07/15	12/15/21	Aa3/VMIG1	AA-/A-1+	N/R	\$25,134,290	0.3300%	\$82,943	BAML	DAILY	0.10%	\$24,800	BANK OF NY				
SERIES 2008-A Refunding	04/24/08	07/01/35	Jul 1	5th Bus. Day	\$60,215,000	\$45,000,000	SUMITOMO	04/01/11	06/21/21	A1/P-1	A/A-1	A/F1	\$45,665,753	0.3150%	\$143,847	BAML	WED	0.07%	\$31,500	BANK OF NY				
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$60,545,000	\$44,700,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$55,875	BANK OF NY				
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$40,370,000	\$29,800,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$37,250	BANK OF NY				
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$52,500,000	US BANK	04/01/11	12/15/21	Aa2/VMIG 1	AA-/A-1+	AA/F1+	\$53,086,849	0.3300%	\$175,187	US Bank	DAILY	0.07%	\$36,750	US BANK				
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$52,500,000	B of A	04/01/11	05/16/22	Aa2/VMIG 1	A/A-1	A1/F1+	\$53,086,849	0.3000%	\$159,261	Goldman	DAILY	0.10%	\$52,500	US BANK				
					<b>\$349,430,000</b>	<b>\$249,300,000</b>	<b>SUB-TOTAL VARIABLE RATE DEBT</b>					<b>\$176,973,742</b>	<b>0.3171%</b>	<b>\$561,237</b>										
																	(Wt. Avg)		<b>0.10%</b>		<b>\$238,675</b>		(Wt. Avg)	
FIXED RATE ISSUES																								
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	N/A	N/A	N/A	N/A	N/A	N/A	US BANK				
2016 COPS	09/01/16	03/01/46	Mar 1	Mar/Sept	\$116,745,000	\$113,325,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK				
SERIES 2016	10/12/16	02/01/46	Feb (2022)	Feb/Aug	\$103,400,000	\$103,400,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY				
					<b>\$395,145,000</b>	<b>\$391,725,000</b>	<b>SUB-TOTAL FIXED RATE DEBT</b>																	
					<b>\$744,575,000</b>	<b>\$641,025,000</b>	<b>TOTAL- FIXED &amp; VARIABLE RATE DEBT</b>																	

Remarketing Agents			GO VS COP's		
Goldman	127,000,000	51%	GO:	527,700,000	82%
BAML	69,800,000	28%	COPS:	113,325,000	18%
US Bank	52,500,000	21%	Total	<u>641,025,000</u>	
	<u>249,300,000</u>				

LOC Banks		Breakdown Between Variable & Fixed Rate Mode	
SUMITOMO	45,000,000	Daily Issues	129,800,000 20%
BANK OF AMERICA	52,500,000	Weekly Issues	45,000,000 7%
US BANK	77,300,000	ITN Issues	74,500,000 12%
	<u>174,800,000</u>	Sub-Total	<u>249,300,000</u>
		Fixed Rate Issues	\$391,725,000 61%
		Sub-Total - Fixed	<u>391,725,000</u>
		TOTAL DEBT	
		FIXED & VAR.	<u>641,025,000</u> 100%

IRVINE RANCH WATER DISTRICT  
SUMMARY OF DEBT RATES  
Apr-21

Rmkt Agent Mode	GOLDMAN DAILY	GOLDMAN WEEKLY	GOLDMAN 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	52,500,000	44,700,000	29,800,000	24,800,000	45,000,000	52,500,000
Bank	BOFA	(SIFMA + 3)	(SIFMA + 3)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
4/1/2021	0.02%	0.10%	0.10%	0.03%	0.08%	0.04%
4/2/2021	0.02%	0.10%	0.10%	0.03%	0.08%	0.04%
4/3/2021	0.02%	0.10%	0.10%	0.03%	0.08%	0.04%
4/4/2021	0.02%	0.10%	0.10%	0.03%	0.08%	0.04%
4/5/2021	0.02%	0.10%	0.10%	0.02%	0.08%	0.02%
4/6/2021	0.02%	0.10%	0.10%	0.02%	0.08%	0.02%
4/7/2021	0.01%	0.10%	0.10%	0.02%	0.08%	0.02%
4/8/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/9/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/10/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/11/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/12/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/13/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/14/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/15/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.02%
4/16/2021	0.02%	0.09%	0.09%	0.04%	0.07%	0.03%
4/17/2021	0.02%	0.09%	0.09%	0.04%	0.07%	0.03%
4/18/2021	0.02%	0.09%	0.09%	0.04%	0.07%	0.03%
4/19/2021	0.02%	0.09%	0.09%	0.03%	0.07%	0.03%
4/20/2021	0.02%	0.09%	0.09%	0.03%	0.07%	0.03%
4/21/2021	0.02%	0.09%	0.09%	0.02%	0.07%	0.03%
4/22/2021	0.02%	0.09%	0.09%	0.03%	0.07%	0.03%
4/23/2021	0.02%	0.09%	0.09%	0.03%	0.07%	0.03%
4/24/2021	0.02%	0.09%	0.09%	0.03%	0.07%	0.03%
4/25/2021	0.02%	0.09%	0.09%	0.03%	0.07%	0.03%
4/26/2021	0.02%	0.09%	0.09%	0.02%	0.07%	0.03%
4/27/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.03%
4/28/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.03%
4/29/2021	0.01%	0.09%	0.09%	0.02%	0.07%	0.03%
4/30/2021	0.02%	0.09%	0.09%	0.02%	0.07%	0.03%
Avg Interest Rates	0.02%	0.09%	0.09%	0.03%	0.07%	0.03%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.30%			0.33%	0.32%	0.33%
<b>All-In Rate</b>	<b>0.42%</b>	<b>0.22%</b>	<b>0.22%</b>	<b>0.46%</b>	<b>0.46%</b>	<b>0.43%</b>
Par Amount	97,200,000		29,800,000	69,800,000		52,500,000

Interest Rate Mode	Percent of Total Variable Rate Debt	Par Outstanding	Weighted All-In Average Rate	Base Rate Average
Daily	52.07%	129,800,000	0.43%	0.02%
Weekly	47.93%	119,500,000	0.31%	0.08%
	100.00%	<b>\$ 249,300,000</b>	0.37%	0.05%
<b>Fixed</b>				
COPS 2016	28.93%	113,325,000	2.90%	
BABS 2010	44.67%	175,000,000	4.44%	(1)
SERIES 2016	26.40%	103,400,000	3.32%	
	100.00%	<b>\$ 391,725,000</b>	3.70%	
<b>All-In Debt Rate Including \$60 Million Notional Amount of Swaps</b>				<b>2.91%</b>

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 5.7%

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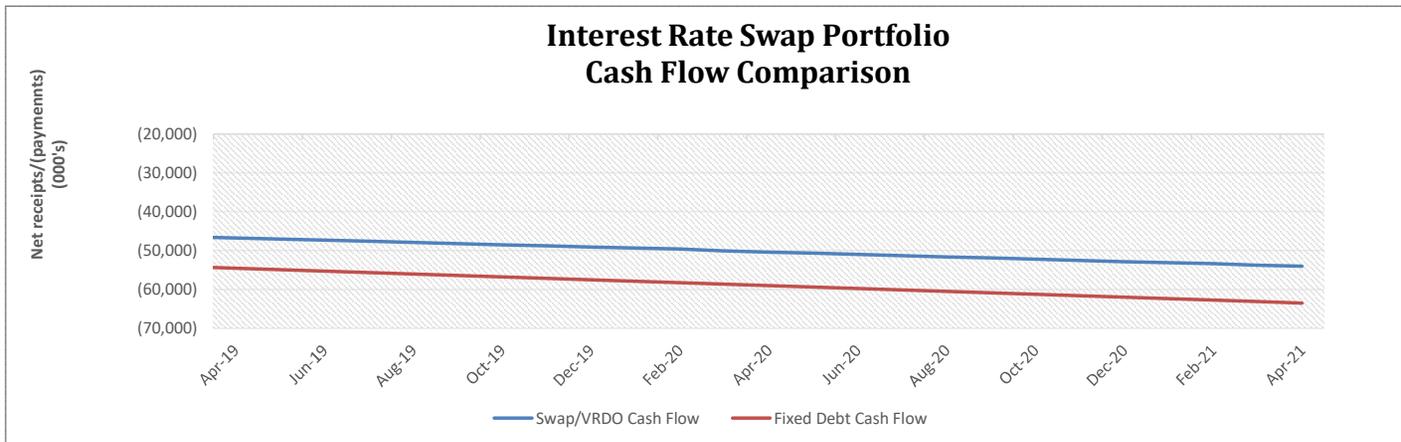
Exhibit "C"  
**Irvine Ranch Water District**  
**Interest Rate Swap Summary**  
**April 2021**

	Prior Mo.	Current Mo.	12-Mo Avg
LIBOR Avg %	0.11%	0.11%	0.15%

Current Fiscal Year Active Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	(Since 3/07)	Current Mark to Market	Notional Difference
											Cumulative Net Accrual		
<b>Fixed Payer Swaps - By Effective Date</b>													
3/10/2007	3/10/2029	7.9	ML	30,000,000	FXP	LIBOR	5.687%	(162,811)	(134,711)	(1,385,665)	(19,479,578)	19,985,650	(10,014,350)
3/10/2007	3/10/2029	7.9	CG	30,000,000	FXP	LIBOR	5.687%	(162,811)	(134,711)	(1,385,665)	(19,479,578)	19,970,319	(10,029,681)
Totals/Weighted Avgs		7.9		\$ 60,000,000			5.687%	\$ (325,622)	\$ (269,422)	\$ (2,771,329)	\$ (38,959,156)	\$ 39,955,969	\$ (20,044,031)
Total Current Year Active Swaps				\$ 60,000,000				\$ (325,622)	\$ (269,422)	\$ (2,771,329)	\$ (38,959,156)	\$ 39,955,969	\$ (20,044,031)

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 Net Accrual	Current Mark to Market	Notional Difference
				\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Current Fiscal Year - Total 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 Net Accrual	Current Mark to Market	Notional Difference
				\$ 60,000,000				\$ (325,622)	\$ (269,422)	\$ (2,771,329)	\$ (38,959,156)	\$ 39,955,969	\$ (20,044,031)



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt	
<u>Cash Flow to Date</u>	
Synthetic Fixed =	\$54,006,720
Fixed Rate =	\$63,464,552
<b>Assumptions:</b>	
- Fixed rate debt issued at 4.93% in Mar-07 (estimated TE rate - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

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# Exhibit "D"

## IRVINE RANCH WATER DISTRICT AP DISBURSEMENTS AND VOIDS FOR APRIL 2021

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
416897	1-Apr-21	Ledesma, Alejandro (Alex)	165.39	IRWD Check	Reconciled
416898	1-Apr-21	Nguyen, Claire	125.00	IRWD Check	Reconciled
416899	1-Apr-21	Rock, Douglas T (Douglas)	115.72	IRWD Check	Reconciled
416900	1-Apr-21	Shih, Han-Tsuei (Josephine)	80.00	IRWD Check	Reconciled
416901	1-Apr-21	Wise, Maureen (Mo)	132.89	IRWD Check	Reconciled
416902	1-Apr-21	36 SOUTH SUR, LLC	896.91	IRWD Check	Negotiable
416903	1-Apr-21	AAF INTERNATIONAL	1,400.07	IRWD Check	Reconciled
416904	1-Apr-21	ABDO, TALAL	131.16	IRWD Check	Reconciled
416905	1-Apr-21	ABM INDUSTRY GROUPS, LLC	6,124.67	IRWD Check	Reconciled
416906	1-Apr-21	ABSOLUTE STANDARDS, INC.	1,571.50	IRWD Check	Reconciled
416907	1-Apr-21	ACCURATE MEASUREMENT SYSTEMS INC	2,113.52	IRWD Check	Reconciled
416908	1-Apr-21	AERATION INDUSTRIES INTERNATIONAL INC	23,618.80	IRWD Check	Reconciled
416909	1-Apr-21	AFLAC	2,227.70	IRWD Check	Reconciled
416910	1-Apr-21	AGILENT TECHNOLOGIES, INC.	1,247.68	IRWD Check	Reconciled
416911	1-Apr-21	AHMED, RIFAT	87.71	IRWD Check	Negotiable
416912	1-Apr-21	AHN, JEANNIE	33.95	IRWD Check	Reconciled
416913	1-Apr-21	AIRGAS, INC.	1,412.81	IRWD Check	Reconciled
416914	1-Apr-21	AMAZON CAPITAL SERVICES, INC.	1,975.45	IRWD Check	Reconciled
416915	1-Apr-21	AMWINS GROUP BENEFITS INC.	3,924.84	IRWD Check	Reconciled
416916	1-Apr-21	ANDRIC, LISA	83.85	IRWD Check	Reconciled
416917	1-Apr-21	ANTHONY N. LARSEN	450.00	IRWD Check	Reconciled
416918	1-Apr-21	ARNOLD, CARLA R	41.35	IRWD Check	Reconciled
416919	1-Apr-21	ASSOCIATION OF CALIFORNIA CITIES	5,000.00	IRWD Check	Reconciled
416920	1-Apr-21	AT&T	70.38	IRWD Check	Reconciled
416921	1-Apr-21	AT&T	733.31	IRWD Check	Reconciled
416922	1-Apr-21	AT&T	275.89	IRWD Check	Reconciled
416923	1-Apr-21	ATM ASSET MANGAMENT	55.47	IRWD Check	Reconciled
416924	1-Apr-21	AUTOZONE PARTS, INC.	101.80	IRWD Check	Reconciled
416925	1-Apr-21	BATTERIES PLUS AND BATTERIES PLUS BULBS	2,591.10	IRWD Check	Reconciled
416926	1-Apr-21	BAUTISTA, EFREN	143.78	IRWD Check	Reconciled
416927	1-Apr-21	BERBERIAN, ROBERT	42.45	IRWD Check	Negotiable
416928	1-Apr-21	BIGWIG MONSTER, LLC	29,400.00	IRWD Check	Reconciled
416929	1-Apr-21	BILL'S SWEEPING SERVICE INC	1,990.00	IRWD Check	Reconciled
416930	1-Apr-21	BLACK & VEATCH CORPORATION	5,517.50	IRWD Check	Reconciled
416931	1-Apr-21	BOTROS CONSTRUCTION	1,768.22	IRWD Check	Reconciled
416932	1-Apr-21	BROWN AND CALDWELL	12,049.02	IRWD Check	Reconciled
416933	1-Apr-21	BRUNER, DR EDWARD	42.52	IRWD Check	Reconciled
416934	1-Apr-21	BSI SERVICES AND SOLUTIONS (WEST) INC.	11,200.00	IRWD Check	Reconciled
416935	1-Apr-21	C WELLS PIPELINE MATERIALS INC	18,005.03	IRWD Check	Reconciled
416936	1-Apr-21	CALIFORNIA BARRICADE RENTAL, INC.	27,189.91	IRWD Check	Reconciled
416937	1-Apr-21	CAPTIVE AUDIENCE MARKETING INC.	79.00	IRWD Check	Reconciled
416938	1-Apr-21	CART MART INC.	48.00	IRWD Check	Reconciled
416939	1-Apr-21	CASCADE DRILLING	1,447.80	IRWD Check	Reconciled
416940	1-Apr-21	CHAIREL CUSTOM HAY, INC.	7,722.80	IRWD Check	Reconciled
416941	1-Apr-21	CHEM TECH INTERNATIONAL INC	20,482.82	IRWD Check	Reconciled
416942	1-Apr-21	CHEN, JIE	68.36	IRWD Check	Reconciled
416943	1-Apr-21	CHEN, KAI	25.44	IRWD Check	Voided
416944	1-Apr-21	CHEN, MAY	120.26	IRWD Check	Negotiable
416945	1-Apr-21	CHENG, GIGI	50.00	IRWD Check	Reconciled
416946	1-Apr-21	CITY OF IRVINE	1,035.75	IRWD Check	Reconciled
416947	1-Apr-21	CITY OF IRVINE	271.47	IRWD Check	Reconciled
416948	1-Apr-21	CITY OF SANTA ANA	183.88	IRWD Check	Reconciled
416949	1-Apr-21	CITY OF TUSTIN	225.83	IRWD Check	Reconciled
416950	1-Apr-21	CITY OF TUSTIN	2,873.90	IRWD Check	Negotiable
416951	1-Apr-21	CLABAUGH, RHONDA	133.58	IRWD Check	Negotiable
416952	1-Apr-21	CLARIS STRATEGY INC.	2,900.00	IRWD Check	Reconciled
416953	1-Apr-21	COASTLINE EQUIPMENT COMPANY	347.10	IRWD Check	Reconciled
416954	1-Apr-21	COLONIAL LIFE & ACCIDENT INSURANCE CO.	1,103.26	IRWD Check	Reconciled
416955	1-Apr-21	CONSOLIDATED CONTRACTING SERVICES, INC.	2,070.42	IRWD Check	Reconciled
416956	1-Apr-21	CONSTELLATION NEWENERGY, INC.	18,424.87	IRWD Check	Reconciled
416957	1-Apr-21	COOMBS SERVICE GROUP	6,720.00	IRWD Check	Reconciled
416958	1-Apr-21	COUNTY OF ORANGE	129.45	IRWD Check	Reconciled
416959	1-Apr-21	COX COMMUNICATIONS, INC.	113.56	IRWD Check	Reconciled
416960	1-Apr-21	D & H WATER SYSTEMS INC.	744.31	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
416961	1-Apr-21	DDB ENGINEERING, INC.	1,832.00	IRWD Check	Reconciled
416962	1-Apr-21	DEMARIA ELECTRIC MOTOR SERVICES, INC.	28,078.84	IRWD Check	Reconciled
416963	1-Apr-21	DG INVESTMENT INTERMEDIATE HOLDINGS 2, INC.	4,797.00	IRWD Check	Reconciled
416964	1-Apr-21	DIRECTV INC	146.99	IRWD Check	Reconciled
416965	1-Apr-21	DO, TRINH	62.70	IRWD Check	Reconciled
416966	1-Apr-21	DWYER INSTRUMENTS INC	2,176.14	IRWD Check	Reconciled
416967	1-Apr-21	EAGLE PRINT DYNAMICS	462.91	IRWD Check	Reconciled
416968	1-Apr-21	EI&C ENGINEERING INC.	43,493.00	IRWD Check	Reconciled
416969	1-Apr-21	ELEONORA ZURNAJYAN AND SAMVEL HOVHANNISYAN	17.87	IRWD Check	Reconciled
416970	1-Apr-21	EMMERSON CONSTRUCTION INC	4,329.80	IRWD Check	Reconciled
416971	1-Apr-21	ENVIRONMENTAL SCIENCE ASSOCIATES	16,294.24	IRWD Check	Reconciled
416972	1-Apr-21	EQUALTOX, LLC	9,375.00	IRWD Check	Reconciled
416973	1-Apr-21	ERP OPERATING LP	32,269.09	IRWD Check	Reconciled
416974	1-Apr-21	EXECUTIVE LIGHTING & ELECTRIC	7,285.07	IRWD Check	Reconciled
416975	1-Apr-21	FAITHCO INC.	4,950.00	IRWD Check	Reconciled
416976	1-Apr-21	FANG, HAOJIE	35.68	IRWD Check	Negotiable
416977	1-Apr-21	FARWEST CORROSION CONTROL COMPANY	4,286.87	IRWD Check	Reconciled
416978	1-Apr-21	FEDEX	342.32	IRWD Check	Reconciled
416979	1-Apr-21	FERGUSON ENTERPRISES, LLC	9,484.16	IRWD Check	Reconciled
416980	1-Apr-21	FIDELITY SECURITY LIFE INSURANCE COMPANY	6,824.76	IRWD Check	Reconciled
416981	1-Apr-21	FIDELITY SECURITY LIFE INSURANCE COMPANY	154.98	IRWD Check	Reconciled
416982	1-Apr-21	FIDELITY SECURITY LIFE INSURANCE COMPANY	126.91	IRWD Check	Reconciled
416983	1-Apr-21	FIDELITY SECURITY LIFE INSURANCE COMPANY	894.75	IRWD Check	Reconciled
416984	1-Apr-21	FIONA HUTTON & ASSOCIATES, INC.	37,588.89	IRWD Check	Reconciled
416985	1-Apr-21	FIRE EXTINGUISHING SAFETY & SERVICE	814.27	IRWD Check	Reconciled
416986	1-Apr-21	FIRST CHOICE SERVICES	1,079.96	IRWD Check	Reconciled
416987	1-Apr-21	FISHER SCIENTIFIC COMPANY LLC	322.18	IRWD Check	Reconciled
416988	1-Apr-21	FLORASOURCE, LTD	345.02	IRWD Check	Reconciled
416989	1-Apr-21	FRONTIER CALIFORNIA INC.	293.57	IRWD Check	Reconciled
416990	1-Apr-21	GAA VENTURE INVESTMENTS, LLC	43.08	IRWD Check	Reconciled
416991	1-Apr-21	GHOLAMREZAEI, REZA	31.23	IRWD Check	Reconciled
416992	1-Apr-21	GM SAGER CONSTRUCTION CO,INC.	28,100.00	IRWD Check	Reconciled
416993	1-Apr-21	GRAINGER	5,436.02	IRWD Check	Reconciled
416994	1-Apr-21	GRAYBAR ELECTRIC COMPANY	2,083.34	IRWD Check	Reconciled
416995	1-Apr-21	HABITAT RESTORATION SCIENCES, INC.	1,183.00	IRWD Check	Reconciled
416996	1-Apr-21	HACH COMPANY	3,429.05	IRWD Check	Reconciled
416997	1-Apr-21	HARRINGTON INDUSTRIAL PLASTICS LLC	6,214.42	IRWD Check	Reconciled
416998	1-Apr-21	HART BROTHERS CONSTRUCTION INC	1,288.67	IRWD Check	Reconciled
416999	1-Apr-21	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY	72.30	IRWD Check	Reconciled
417000	1-Apr-21	HERITAGE FIELDS EL TORO, LLC	600.40	IRWD Check	Reconciled
417001	1-Apr-21	HI-LINE INC	258.06	IRWD Check	Reconciled
417002	1-Apr-21	HILL BROTHERS CHEMICAL COMPANY	4,994.73	IRWD Check	Reconciled
417003	1-Apr-21	HIRSCH, WILLIAM	136.07	IRWD Check	Reconciled
417004	1-Apr-21	HOME DEPOT USA INC	645.79	IRWD Check	Reconciled
417005	1-Apr-21	HOWELL, JEFFREY	58.54	IRWD Check	Negotiable
417006	1-Apr-21	HSG INC	1,951.00	IRWD Check	Reconciled
417007	1-Apr-21	HUANG, SHIHCHIA	60.94	IRWD Check	Reconciled
417008	1-Apr-21	HUANG, SHUTONG	15.86	IRWD Check	Negotiable
417009	1-Apr-21	HUMANA INSURANCE COMPANY	65.30	IRWD Check	Reconciled
417010	1-Apr-21	INFOSEND, INC.	3,747.83	IRWD Check	Reconciled
417011	1-Apr-21	INFOSYS LIMITED	53,760.00	IRWD Check	Reconciled
417012	1-Apr-21	INTRACORP SOUTHERN CALIFORNIA, LLC	65.86	IRWD Check	Negotiable
417013	1-Apr-21	IRELAND INC.	6,694.50	IRWD Check	Reconciled
417014	1-Apr-21	IRVINE PACIFIC	743.26	IRWD Check	Reconciled
417015	1-Apr-21	IRVINE PIPE & SUPPLY INC	4,053.60	IRWD Check	Reconciled
417016	1-Apr-21	ITRPM INC	25.00	IRWD Check	Negotiable
417017	1-Apr-21	JCI JONES CHEMICALS INC	4,891.32	IRWD Check	Reconciled
417018	1-Apr-21	JIN HANG & XUE YANG	518.76	IRWD Check	Negotiable
417019	1-Apr-21	JINGL LLC	25.00	IRWD Check	Reconciled
417020	1-Apr-21	JOHN MICHAEL COVAS	198.60	IRWD Check	Reconciled
417021	1-Apr-21	KB HOMES	280.95	IRWD Check	Reconciled
417022	1-Apr-21	KEVIN KHUU AND VIVIAN YIP	35.84	IRWD Check	Reconciled
417023	1-Apr-21	KHADER, ABRAHAM	42.08	IRWD Check	Negotiable
417024	1-Apr-21	KIM, YOUNGIL	25.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
417025	1-Apr-21	KIMBALL MIDWEST	2,490.82	IRWD Check	Reconciled
417026	1-Apr-21	KIRKOROWICZ, GREG	1,894.04	IRWD Check	Reconciled
417027	1-Apr-21	KNAGGS, JANICE M	36.42	IRWD Check	Reconciled
417028	1-Apr-21	KURZ INSTRUMENTS INC	598.79	IRWD Check	Reconciled
417029	1-Apr-21	LAGUNA BEACH COUNTY WATER DISTRICT	4,759.51	IRWD Check	Reconciled
417030	1-Apr-21	LEE, HYERAH BAIK	247.69	IRWD Check	Negotiable
417031	1-Apr-21	LEE, WANJU	365.78	IRWD Check	Reconciled
417032	1-Apr-21	LENNAR HOMES OF CALIFORNIA, INC.	1,107.79	IRWD Check	Reconciled
417033	1-Apr-21	LI, RUI	37.85	IRWD Check	Reconciled
417034	1-Apr-21	LIANG, HONG	41.31	IRWD Check	Reconciled
417035	1-Apr-21	MADDOX ELECTRIC INC.	19,529.00	IRWD Check	Reconciled
417036	1-Apr-21	MARK ENTERPRISES TECHNOLOGIES LLC	32,491.77	IRWD Check	Reconciled
417037	1-Apr-21	MARK THOMAS & COMPANY, INC.	943.64	IRWD Check	Reconciled
417038	1-Apr-21	MARTELLI, ANGELA	46.92	IRWD Check	Reconciled
417039	1-Apr-21	MBC AQUATIC SCIENCES, INC.	1,350.00	IRWD Check	Reconciled
417040	1-Apr-21	MC FADDEN-DALE INDUSTRIAL	89.48	IRWD Check	Reconciled
417041	1-Apr-21	MC MASTER CARR SUPPLY CO	792.90	IRWD Check	Reconciled
417042	1-Apr-21	MEGGER	414.71	IRWD Check	Reconciled
417043	1-Apr-21	MERIDETH, TAHNEE	57.37	IRWD Check	Reconciled
417044	1-Apr-21	MICROSOFT CORPORATION	682.09	IRWD Check	Reconciled
417045	1-Apr-21	MORRISROE, EDWARD	406.23	IRWD Check	Negotiable
417046	1-Apr-21	NCL OF WISCONSIN INC	355.19	IRWD Check	Reconciled
417047	1-Apr-21	NETTO, DEIRDRE	445.72	IRWD Check	Reconciled
417048	1-Apr-21	NEW TANGRAM, LLC	89,366.78	IRWD Check	Reconciled
417049	1-Apr-21	NGUYEN, CATHERINE	18.43	IRWD Check	Reconciled
417050	1-Apr-21	NX UTILITIES LLC	1,502.00	IRWD Check	Voided
417051	1-Apr-21	O'REILLY AUTO ENTERPRISES, LLC	1,426.16	IRWD Check	Reconciled
417052	1-Apr-21	OLIN CORPORATION	10,102.35	IRWD Check	Reconciled
417053	1-Apr-21	ONESOURCE DISTRIBUTORS LLC	1,319.31	IRWD Check	Reconciled
417054	1-Apr-21	OPPERMAN, DONALD	97.04	IRWD Check	Negotiable
417055	1-Apr-21	ORANGE COUNTY AUTO PARTS CO	929.73	IRWD Check	Reconciled
417056	1-Apr-21	P ASSETS INC.	53.27	IRWD Check	Reconciled
417057	1-Apr-21	PACIFIC HYDROTECH CORPORATION	177,293.68	IRWD Check	Reconciled
417058	1-Apr-21	PACIFIC HYDROTECH CORPORATION	9,331.25	IRWD Check	Reconciled
417059	1-Apr-21	PACIFIC RESIDENTIAL INC	31.43	IRWD Check	Reconciled
417060	1-Apr-21	PACIFIC STAR CHEMICAL, LLC	4,746.28	IRWD Check	Reconciled
417061	1-Apr-21	PARKHOUSE TIRE INC	1,158.05	IRWD Check	Reconciled
417062	1-Apr-21	PATEL, NIMESH	139.36	IRWD Check	Negotiable
417063	1-Apr-21	PAULUS ENGINEERING INC	40,423.93	IRWD Check	Reconciled
417064	1-Apr-21	PENG, YIFENG	41.10	IRWD Check	Reconciled
417065	1-Apr-21	POLLARDWATER.COM	38.47	IRWD Check	Reconciled
417066	1-Apr-21	PRAXAIR DISTRIBUTION INC	2,042.38	IRWD Check	Reconciled
417067	1-Apr-21	PRE-PAID LEGAL SERVICES, INC.	1,041.73	IRWD Check	Reconciled
417068	1-Apr-21	PRIDE CONSTRUCTION ENGINEERING SERVICES	1,727.75	IRWD Check	Reconciled
417069	1-Apr-21	PRIDEMARK CONTRACTORS, INC.	813.12	IRWD Check	Reconciled
417070	1-Apr-21	RAM AIR ENGINEERING INC	31,260.06	IRWD Check	Reconciled
417071	1-Apr-21	RANCHO ALISAL APTS	159.57	IRWD Check	Reconciled
417072	1-Apr-21	RED WING SHOE STORE	2,193.91	IRWD Check	Reconciled
417073	1-Apr-21	RELIANCE STANDARD LIFE INSURANCE COMPANY	30,628.65	IRWD Check	Reconciled
417074	1-Apr-21	RELO REDAC INC	25.00	IRWD Check	Negotiable
417075	1-Apr-21	RENTOKIL NORTH AMERICA, INC	4,117.00	IRWD Check	Reconciled
417076	1-Apr-21	RESTEK CORPORATION	1,034.20	IRWD Check	Reconciled
417077	1-Apr-21	RIMPAU COMPANY INC.	1,274.12	IRWD Check	Reconciled
417078	1-Apr-21	RINCON TRUCK CENTER INC.	264.13	IRWD Check	Reconciled
417079	1-Apr-21	ROLL RITE	1,204.90	IRWD Check	Reconciled
417080	1-Apr-21	RONG, ZHIQI	78.50	IRWD Check	Negotiable
417081	1-Apr-21	SALTER, ESTELLA	1,125.33	IRWD Check	Reconciled
417082	1-Apr-21	SAN CARLO APARTMENTS	36.71	IRWD Check	Reconciled
417083	1-Apr-21	SAN MARCO APARTMENTS	23.53	IRWD Check	Reconciled
417084	1-Apr-21	SANTA ANA BLUE PRINT	13,380.86	IRWD Check	Reconciled
417085	1-Apr-21	SANTA MARGARITA FORD	115.85	IRWD Check	Reconciled
417086	1-Apr-21	SCHECHINGER, LOIS	20.53	IRWD Check	Reconciled
417087	1-Apr-21	SCHNEIDER, BRENNAN	46.35	IRWD Check	Negotiable
417088	1-Apr-21	SEAL ANALYTICAL INC	79,209.54	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
417089	1-Apr-21	SETOODEH, REZA	26.33	IRWD Check	Negotiable
417090	1-Apr-21	SHAMROCK SUPPLY CO INC	3,966.23	IRWD Check	Reconciled
417091	1-Apr-21	SHOETERIA	695.96	IRWD Check	Reconciled
417092	1-Apr-21	SHOFFEITT PIPELINE	2,600.00	IRWD Check	Reconciled
417093	1-Apr-21	SIADAT, DAVID	26.62	IRWD Check	Reconciled
417094	1-Apr-21	SIAMAK, IRAVANTCHI	1,729.08	IRWD Check	Reconciled
417095	1-Apr-21	SMARTFISH CORP	4,478.62	IRWD Check	Reconciled
417096	1-Apr-21	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	585.03	IRWD Check	Reconciled
417097	1-Apr-21	SOUTHERN CALIFORNIA EDISON COMPANY	174,945.83	IRWD Check	Reconciled
417098	1-Apr-21	SOUTHERN CONTRACTING COMPANY	293,114.90	IRWD Check	Reconciled
417099	1-Apr-21	SOUTHWEST VALVE & EQUIPMENT INC	51,948.90	IRWD Check	Reconciled
417100	1-Apr-21	SPATIAL WAVE, INC.	1,120.00	IRWD Check	Reconciled
417101	1-Apr-21	STANFORD COURT APARTMENTS	318.26	IRWD Check	Reconciled
417102	1-Apr-21	SUSHKOVA, ZARIA	123.35	IRWD Check	Negotiable
417103	1-Apr-21	TANG, MARGARET	23.15	IRWD Check	Reconciled
417104	1-Apr-21	TETRA TECH, INC	25,048.50	IRWD Check	Reconciled
417105	1-Apr-21	THAKORE, ARVIND	17.46	IRWD Check	Negotiable
417106	1-Apr-21	THE IRVINE COMPANY LLC	8,738.93	IRWD Check	Reconciled
417107	1-Apr-21	THOMPSON & PHIPPS INC	4,953.80	IRWD Check	Reconciled
417108	1-Apr-21	THYSSENKRUPP ELEVATOR CORPORATION	422.90	IRWD Check	Reconciled
417109	1-Apr-21	TOLL BROS., INC.	1,065.75	IRWD Check	Reconciled
417110	1-Apr-21	TRAN, LANI	50.27	IRWD Check	Negotiable
417111	1-Apr-21	TRAVATA HOMEOWNERS ASSOCIATION	25.00	IRWD Check	Reconciled
417112	1-Apr-21	TROPICAL PLAZA NURSERY INC	61,942.00	IRWD Check	Reconciled
417113	1-Apr-21	TRUCPARCO	253.89	IRWD Check	Reconciled
417114	1-Apr-21	TSAO, MICHAEL	39.39	IRWD Check	Negotiable
417115	1-Apr-21	UNITED PARCEL SERVICE INC	48.53	IRWD Check	Reconciled
417116	1-Apr-21	USA BLUEBOOK	238.75	IRWD Check	Reconciled
417117	1-Apr-21	VALENTA, SUSAN	182.32	IRWD Check	Reconciled
417118	1-Apr-21	VERIZON WIRELESS SERVICES LLC	13,906.82	IRWD Check	Reconciled
417119	1-Apr-21	VWR INTERNATIONAL, LLC	1,619.32	IRWD Check	Reconciled
417120	1-Apr-21	WARMINGTON HOMES	51.61	IRWD Check	Negotiable
417121	1-Apr-21	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	2,554.33	IRWD Check	Reconciled
417122	1-Apr-21	WAXIE'S ENTERPRISES, INC	165.05	IRWD Check	Reconciled
417123	1-Apr-21	WEST, JAMES MICHAEL	52.75	IRWD Check	Reconciled
417124	1-Apr-21	WILLIAM LYON HOMES, INC.	436.05	IRWD Check	Reconciled
417125	1-Apr-21	WIRELESS WATCHDOGS, LLC	1,764.00	IRWD Check	Reconciled
417126	1-Apr-21	WU, ALEX	152.73	IRWD Check	Negotiable
417127	1-Apr-21	WU, CHUNTEKO	38.88	IRWD Check	Reconciled
417128	1-Apr-21	YE, QING	58.50	IRWD Check	Reconciled
417129	1-Apr-21	YIM, YOUNG	74.12	IRWD Check	Voided
417130	1-Apr-21	YORKE ENGINEERING, LLC	3,887.85	IRWD Check	Reconciled
417131	1-Apr-21	YU, WENNIE	30.38	IRWD Check	Reconciled
417132	1-Apr-21	ZHAO, HUIFANG	48.43	IRWD Check	Voided
417133	1-Apr-21	ZHENG, BOWEN	30.30	IRWD Check	Negotiable
417134	1-Apr-21	ZHU, WEICHEN	106.13	IRWD Check	Reconciled
417135	1-Apr-21	ZHU, YA	85.35	IRWD Check	Negotiable
417136	8-Apr-21	Johnson, Dane	2,482.03	IRWD Check	Negotiable
417137	8-Apr-21	Karpan, Casey L (Casey)	90.00	IRWD Check	Reconciled
417138	8-Apr-21	McCarter, David G (David)	240.00	IRWD Check	Reconciled
417139	8-Apr-21	Pardee, Debra S	196.74	IRWD Check	Reconciled
417140	8-Apr-21	ABM INDUSTRY GROUPS, LLC	12,249.34	IRWD Check	Reconciled
417141	8-Apr-21	ABSOLUTE STANDARDS, INC.	100.00	IRWD Check	Reconciled
417142	8-Apr-21	ACCUSOURCE, INC.	136.62	IRWD Check	Reconciled
417143	8-Apr-21	ADS CORP.	7,983.00	IRWD Check	Reconciled
417144	8-Apr-21	AGILENT TECHNOLOGIES, INC.	1,202.92	IRWD Check	Reconciled
417145	8-Apr-21	AIRGAS, INC.	1,640.43	IRWD Check	Reconciled
417146	8-Apr-21	ALCOR SOLUTIONS, INC	13,920.00	IRWD Check	Reconciled
417147	8-Apr-21	ALEXANDER'S CONTRACT SERVICES, INC.	125,399.00	IRWD Check	Reconciled
417148	8-Apr-21	ALLIED ELECTRONICS INC	935.46	IRWD Check	Reconciled
417149	8-Apr-21	ALSTON & BIRD LLP	82,278.77	IRWD Check	Reconciled
417150	8-Apr-21	AM CONSERVATION GROUP, INC.	508.88	IRWD Check	Reconciled
417151	8-Apr-21	AMAZON CAPITAL SERVICES, INC.	2,531.59	IRWD Check	Reconciled
417152	8-Apr-21	AMERICAN GEOTECHNICAL, INC.	16,362.50	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
417153	8-Apr-21	ANACAPA APARTMENTS	604.76	IRWD Check	Reconciled
417154	8-Apr-21	APPLIED ENGINEERING CONCEPTS	6,155.00	IRWD Check	Reconciled
417155	8-Apr-21	AQUA-METRIC SALES COMPANY	1,388.04	IRWD Check	Reconciled
417156	8-Apr-21	AT&T	4,205.72	IRWD Check	Reconciled
417157	8-Apr-21	ATHENS SERVICES	11,310.41	IRWD Check	Reconciled
417158	8-Apr-21	ATTORNEY GENERAL'S REGISTRY OF CHARITABLE TRUSTS	150.00	IRWD Check	Reconciled
417159	8-Apr-21	AUTOZONE PARTS, INC.	564.87	IRWD Check	Reconciled
417160	8-Apr-21	BATTERIES PLUS AND BATTERIES PLUS BULBS	568.13	IRWD Check	Reconciled
417161	8-Apr-21	BAVCO BACKFLOW APPARATUS & VALVE COMPANY	120.00	IRWD Check	Reconciled
417162	8-Apr-21	BIGWIG MONSTER, LLC	12,000.00	IRWD Check	Negotiable
417163	8-Apr-21	BRAX COMPANY, INC	2,872.18	IRWD Check	Reconciled
417164	8-Apr-21	BRITTANY APTS	628.02	IRWD Check	Reconciled
417165	8-Apr-21	C WELLS PIPELINE MATERIALS INC	25,825.43	IRWD Check	Reconciled
417166	8-Apr-21	CALIFORNIA BARRICADE RENTAL, INC.	16,977.65	IRWD Check	Reconciled
417167	8-Apr-21	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	470.00	IRWD Check	Reconciled
417168	8-Apr-21	CANON SOLUTIONS AMERICA, INC.	19.86	IRWD Check	Reconciled
417169	8-Apr-21	CAROLLO ENGINEERS, INC	8,319.00	IRWD Check	Reconciled
417170	8-Apr-21	CHEM TECH INTERNATIONAL INC	2,806.92	IRWD Check	Reconciled
417171	8-Apr-21	CHO DESIGN ASSOCIATES, INC	1,400.00	IRWD Check	Reconciled
417172	8-Apr-21	CIMARRON ENERGY, INC	1,508.50	IRWD Check	Reconciled
417173	8-Apr-21	CITY OF IRVINE	2,735.02	IRWD Check	Reconciled
417174	8-Apr-21	CITY OF SANTA ANA	174.72	IRWD Check	Reconciled
417175	8-Apr-21	CITY OF TUSTIN	397.75	IRWD Check	Reconciled
417176	8-Apr-21	CLA-VAL COMPANY	5,162.44	IRWD Check	Reconciled
417177	8-Apr-21	CLARKE MOSQUITO CONTROL PRODUCTS, INC.	27,997.33	IRWD Check	Reconciled
417178	8-Apr-21	CLEAN ENERGY	5,666.50	IRWD Check	Reconciled
417179	8-Apr-21	CLIFFORD MORIYAMA	4,000.00	IRWD Check	Reconciled
417180	8-Apr-21	COASTAL OCCUPATIONAL MEDICAL GROUP, INC.	415.00	IRWD Check	Reconciled
417181	8-Apr-21	CONSTELLATION NEWENERGY, INC.	63,230.86	IRWD Check	Reconciled
417182	8-Apr-21	COUNTY OF ORANGE	149.63	IRWD Check	Reconciled
417183	8-Apr-21	COX COMMUNICATIONS, INC.	275.28	IRWD Check	Reconciled
417184	8-Apr-21	CRESCENT CHEMICAL CO.	411.51	IRWD Check	Reconciled
417185	8-Apr-21	D & H WATER SYSTEMS INC.	14,686.95	IRWD Check	Reconciled
417186	8-Apr-21	DAEUN LEE	1,429.18	IRWD Check	Reconciled
417187	8-Apr-21	DIDION, DOROTHY	28.56	IRWD Check	Negotiable
417188	8-Apr-21	DON WILSON BUILDERS	114.53	IRWD Check	Negotiable
417189	8-Apr-21	DUDEK	20,339.06	IRWD Check	Reconciled
417190	8-Apr-21	E&M ELECTRIC AND MACHINERY, INC.	7,845.00	IRWD Check	Reconciled
417191	8-Apr-21	EAST ORANGE COUNTY WATER DISTRICT	2,236.84	IRWD Check	Reconciled
417192	8-Apr-21	EMEDCO	201.08	IRWD Check	Reconciled
417193	8-Apr-21	ENVIRONMENTAL RESOURCE ASSOCIATES	759.84	IRWD Check	Reconciled
417194	8-Apr-21	ENVIRONMENTAL SCIENCE ASSOCIATES	44,723.80	IRWD Check	Reconciled
417195	8-Apr-21	EUROFINS CALSCIENCE, LLC	3,601.50	IRWD Check	Reconciled
417196	8-Apr-21	EXECUTIVE LIGHTING & ELECTRIC	5,325.91	IRWD Check	Reconciled
417197	8-Apr-21	FAHIE, SHURLENE	311.19	IRWD Check	Reconciled
417198	8-Apr-21	FASTBLUE COMMUNICATIONS INC.	1,917.00	IRWD Check	Reconciled
417199	8-Apr-21	FEDEX NATIONAL LTL, INC	772.61	IRWD Check	Reconciled
417200	8-Apr-21	FIRST CHOICE SERVICES	234.81	IRWD Check	Reconciled
417201	8-Apr-21	FISERV SOLUTIONS, LLC	18,434.96	IRWD Check	Reconciled
417202	8-Apr-21	FISHER SCIENTIFIC COMPANY LLC	4,171.20	IRWD Check	Reconciled
417203	8-Apr-21	FLEET SOLUTIONS LLC	5,951.68	IRWD Check	Reconciled
417204	8-Apr-21	FLUID CONSERVATION SYSTEMS INC	700.29	IRWD Check	Reconciled
417205	8-Apr-21	FOUGHT, CYNTHIA J.	2,593.70	IRWD Check	Reconciled
417206	8-Apr-21	FRANCHISE TAX BOARD	958.00	IRWD Check	Negotiable
417207	8-Apr-21	FRANCHISE TAX BOARD	10.00	IRWD Check	Reconciled
417208	8-Apr-21	FRANCHISE TAX BOARD	10.00	IRWD Check	Reconciled
417209	8-Apr-21	GANAHL LUMBER CO.	3,442.91	IRWD Check	Reconciled
417210	8-Apr-21	GEORGE T. HALL CO., INC.	28,700.00	IRWD Check	Reconciled
417211	8-Apr-21	GOFORTH & MARTI	3,394.00	IRWD Check	Reconciled
417212	8-Apr-21	GRAINGER	8,880.61	IRWD Check	Reconciled
417213	8-Apr-21	GRAYBAR ELECTRIC COMPANY	27.33	IRWD Check	Reconciled
417214	8-Apr-21	HAAKER EQUIPMENT COMPANY	2,256.21	IRWD Check	Reconciled
417215	8-Apr-21	HACH COMPANY	897.34	IRWD Check	Reconciled
417216	8-Apr-21	HARRINGTON INDUSTRIAL PLASTICS LLC	7,418.34	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
417217	8-Apr-21	HATHAWAY DINWIDDIE	1,918.89	IRWD Check	Reconciled
417218	8-Apr-21	HELIX ENVIRONMENTAL PLANNING, INC.	9,490.00	IRWD Check	Reconciled
417219	8-Apr-21	HELPMATES STAFFING SERVICES	5,300.80	IRWD Check	Reconciled
417220	8-Apr-21	HENSEL PHELPS CONSTRUCTION CO.	1,119.66	IRWD Check	Reconciled
417221	8-Apr-21	HERITAGE FIELDS EL TORO, LLC	75,756.72	IRWD Check	Reconciled
417222	8-Apr-21	HI-LINE INC	324.06	IRWD Check	Reconciled
417223	8-Apr-21	HILL BROTHERS CHEMICAL COMPANY	11,406.32	IRWD Check	Reconciled
417224	8-Apr-21	HOFFMEYER COMPANY INC.	2,823.45	IRWD Check	Reconciled
417225	8-Apr-21	HOME DEPOT USA INC	774.30	IRWD Check	Reconciled
417226	8-Apr-21	HUNTER, DANA	333.52	IRWD Check	Reconciled
417227	8-Apr-21	IGUCHI, TAKA	211.06	IRWD Check	Reconciled
417228	8-Apr-21	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	2,875.48	IRWD Check	Reconciled
417229	8-Apr-21	IRVINE PIPE & SUPPLY INC	709.65	IRWD Check	Reconciled
417230	8-Apr-21	IRWD-PETTY CASH CUSTODIAN	657.04	IRWD Check	Reconciled
417231	8-Apr-21	JWC ENVIRONMENTAL INC.	2,079.36	IRWD Check	Reconciled
417232	8-Apr-21	KAN VENTURES, INC	6,500.00	IRWD Check	Reconciled
417233	8-Apr-21	KAZARIANS & ASSOCIATES, INC.	3,102.50	IRWD Check	Reconciled
417234	8-Apr-21	KENT DAHLBERG	24,795.66	IRWD Check	Reconciled
417235	8-Apr-21	KNOWBE4 INC.	11,040.00	IRWD Check	Reconciled
417236	8-Apr-21	KUTAK ROCK LLP	22,330.74	IRWD Check	Reconciled
417237	8-Apr-21	LANDCARE HOLDINGS, INC.	42,439.86	IRWD Check	Reconciled
417238	8-Apr-21	LEE & RO, INC.	5,123.50	IRWD Check	Reconciled
417239	8-Apr-21	LGC GEOTECHNICAL, INC.	3,166.25	IRWD Check	Reconciled
417240	8-Apr-21	LIDO PROPERTY MANAGEMENT	15.56	IRWD Check	Negotiable
417241	8-Apr-21	LINDSAY POLIC CONSULTING, INC.	6,500.00	IRWD Check	Reconciled
417242	8-Apr-21	LSA ASSOCIATES INC	5,719.85	IRWD Check	Reconciled
417243	8-Apr-21	LU'S LIGHTHOUSE, INC.	444.29	IRWD Check	Reconciled
417244	8-Apr-21	LUBRICATION ENGINEERS, INC.	2,084.39	IRWD Check	Reconciled
417245	8-Apr-21	MAP COMMUNICATIONS, INC.	3,146.45	IRWD Check	Reconciled
417246	8-Apr-21	MARK KADESH	10,200.00	IRWD Check	Reconciled
417247	8-Apr-21	MC MASTER CARR SUPPLY CO	1,412.61	IRWD Check	Reconciled
417248	8-Apr-21	MDT INC	4,070.00	IRWD Check	Reconciled
417249	8-Apr-21	MEGGER	436.96	IRWD Check	Reconciled
417250	8-Apr-21	MERRIMAC PETROLEUM, INC.	27,032.83	IRWD Check	Reconciled
417251	8-Apr-21	MICHAEL BAKER INTERNATIONAL, INC.	17,578.00	IRWD Check	Reconciled
417252	8-Apr-21	MSC INDUSTRIAL SUPPLY CO	555.98	IRWD Check	Reconciled
417253	8-Apr-21	NATIONAL READY MIXED CONCRETE SALES, LLC	1,127.19	IRWD Check	Reconciled
417254	8-Apr-21	NORTHWOOD PARK APTS	835.00	IRWD Check	Reconciled
417255	8-Apr-21	NORTHWOOD PLACE APTS	196.71	IRWD Check	Reconciled
417256	8-Apr-21	O'REILLY AUTO ENTERPRISES, LLC	553.15	IRWD Check	Reconciled
417257	8-Apr-21	O.C. SUPERIOR CUSTOM CLEANING	920.00	IRWD Check	Reconciled
417258	8-Apr-21	OCEAN BLUE ENVIRONMENTAL SERVICES INC	2,289.58	IRWD Check	Reconciled
417259	8-Apr-21	OLIN CORPORATION	23,381.29	IRWD Check	Reconciled
417260	8-Apr-21	ORANGE COUNTY AUTO PARTS CO	633.93	IRWD Check	Reconciled
417261	8-Apr-21	ORANGE COUNTY HOSE	158.07	IRWD Check	Reconciled
417262	8-Apr-21	ORANGE LINE OIL COMPANY	2,115.36	IRWD Check	Reconciled
417263	8-Apr-21	ORIGIN CONSULTING LLC	17,574.00	IRWD Check	Reconciled
417264	8-Apr-21	OSTS, INC	1,849.20	IRWD Check	Reconciled
417265	8-Apr-21	PACIFIC COAST BOLT CORP	8,694.81	IRWD Check	Reconciled
417266	8-Apr-21	PACIFIC PARTS & CONTROLS INC	487.30	IRWD Check	Reconciled
417267	8-Apr-21	PACIFIC RESOURCE RECOVERY	1,322.10	IRWD Check	Reconciled
417268	8-Apr-21	PARKHOUSE TIRE INC	228.00	IRWD Check	Reconciled
417269	8-Apr-21	PAUL A. RUELAS	718.00	IRWD Check	Reconciled
417270	8-Apr-21	PAYMENTUS GROUP INC.	28,403.30	IRWD Check	Reconciled
417271	8-Apr-21	PERS LONG TERM CARE	447.62	IRWD Check	Reconciled
417272	8-Apr-21	PETRUSSE-NORRIS PAINTING, INC.	1,568.00	IRWD Check	Reconciled
417273	8-Apr-21	POLLARDWATER.COM	219.92	IRWD Check	Reconciled
417274	8-Apr-21	PRAXAIR DISTRIBUTION INC	776.76	IRWD Check	Reconciled
417275	8-Apr-21	PREMIER PAVING	1,548.67	IRWD Check	Reconciled
417276	8-Apr-21	PTI SAND & GRAVEL INC	1,089.90	IRWD Check	Reconciled
417277	8-Apr-21	PURE EFFECT INC	6,063.90	IRWD Check	Reconciled
417278	8-Apr-21	PYRO-COMM SYSTEMS INC	4,976.16	IRWD Check	Reconciled
417279	8-Apr-21	R&B AUTOMATION, INC.	3,458.58	IRWD Check	Reconciled
417280	8-Apr-21	RAM AIR ENGINEERING INC	7,920.60	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
417281	8-Apr-21	RANCHO MADERAS APTS	109.27	IRWD Check	Reconciled
417282	8-Apr-21	RBCI INC PROJECTS	1,637.07	IRWD Check	Reconciled
417283	8-Apr-21	REAL WATER CONSULTANTS INC.	7,584.00	IRWD Check	Negotiable
417284	8-Apr-21	RED WING SHOE STORE	2,600.47	IRWD Check	Reconciled
417285	8-Apr-21	RESA POWER SOLUTIONS - TRANSFORMER SERVICES, LLC	1,164.00	IRWD Check	Reconciled
417286	8-Apr-21	RESTEK CORPORATION	196.84	IRWD Check	Reconciled
417287	8-Apr-21	RICHARD C. SLADE & ASSOCIATES LLC	22,877.42	IRWD Check	Negotiable
417288	8-Apr-21	RINCON TRUCK CENTER INC.	1,649.48	IRWD Check	Reconciled
417289	8-Apr-21	ROBERTS ROOFING INC	3,950.00	IRWD Check	Reconciled
417290	8-Apr-21	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	444,482.53	IRWD Check	Reconciled
417291	8-Apr-21	SANTA ANA BLUE PRINT	5.39	IRWD Check	Reconciled
417292	8-Apr-21	SANTA MARGARITA FORD	527.49	IRWD Check	Reconciled
417293	8-Apr-21	SCAP	10,120.00	IRWD Check	Reconciled
417294	8-Apr-21	SCOTT DAWSON	4,275.00	IRWD Check	Reconciled
417295	8-Apr-21	SHAMROCK SUPPLY CO INC	209.41	IRWD Check	Reconciled
417296	8-Apr-21	SHEA HOMES LIMITED PARTNERSHIP	79.61	IRWD Check	Negotiable
417297	8-Apr-21	SHERWOOD, TANA	241.33	IRWD Check	Reconciled
417298	8-Apr-21	SHIRVANI, HAMID	15.29	IRWD Check	Reconciled
417299	8-Apr-21	SIERRA VISTA APTS	549.36	IRWD Check	Reconciled
417300	8-Apr-21	SOFTWAREONE INC	24,320.00	IRWD Check	Reconciled
417301	8-Apr-21	SOMERSET APARTMENTS	1,002.02	IRWD Check	Reconciled
417302	8-Apr-21	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	3,344.52	IRWD Check	Reconciled
417303	8-Apr-21	SOUTHERN CALIFORNIA EDISON COMPANY	230.84	IRWD Check	Reconciled
417304	8-Apr-21	SOUTHERN CALIFORNIA EDISON COMPANY	433,707.34	IRWD Check	Reconciled
417305	8-Apr-21	SOUTHSIDE TOWING	200.00	IRWD Check	Reconciled
417306	8-Apr-21	SPARKLETTS	173.74	IRWD Check	Reconciled
417307	8-Apr-21	SUBWAY SANDWICHES	63.73	IRWD Check	Reconciled
417308	8-Apr-21	SWAINS ELECTRIC MOTOR SERVICE	8,726.94	IRWD Check	Negotiable
417309	8-Apr-21	TANKVISIONS, INC	30.00	IRWD Check	Reconciled
417310	8-Apr-21	THEODORE ROBINS INC.	30,689.75	IRWD Check	Reconciled
417311	8-Apr-21	THOMAS SCIENTIFIC HOLDINGS, LLC	95.00	IRWD Check	Reconciled
417312	8-Apr-21	THOMPSON & PHIPPS INC	18,539.67	IRWD Check	Reconciled
417313	8-Apr-21	TIC-RETAIL PROPERTIES	547.70	IRWD Check	Reconciled
417314	8-Apr-21	TIC-RETAIL PROPERTIES	65.28	IRWD Check	Voided
417315	8-Apr-21	TOP TEN REAL ESTATE INC	30.34	IRWD Check	Negotiable
417316	8-Apr-21	TOPOL, KAREN	29.20	IRWD Check	Negotiable
417317	8-Apr-21	TREE OF LIFE NURSERY	135.77	IRWD Check	Reconciled
417318	8-Apr-21	TROPICAL PLAZA NURSERY INC	1,293.68	IRWD Check	Reconciled
417319	8-Apr-21	TRUCPARCO	26.55	IRWD Check	Reconciled
417320	8-Apr-21	U.S. GAIN - A DIVISION OF U.S. VENTURE, INC.	616.00	IRWD Check	Reconciled
417321	8-Apr-21	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	6,350.17	IRWD Check	Reconciled
417322	8-Apr-21	UNITED PARCEL SERVICE INC	277.83	IRWD Check	Reconciled
417323	8-Apr-21	UNIVAR SOLUTIONS USA INC.	4,734.32	IRWD Check	Reconciled
417324	8-Apr-21	USDA FOREST SERVICE	285.91	IRWD Check	Reconciled
417325	8-Apr-21	VERIZON WIRELESS SERVICES LLC	7,833.63	IRWD Check	Reconciled
417326	8-Apr-21	VERTECH INDUSTRIAL SYSTEMS, LLC	1,565.00	IRWD Check	Reconciled
417327	8-Apr-21	VULCAN MATERIALS COMPANY	1,507.37	IRWD Check	Reconciled
417328	8-Apr-21	VWR INTERNATIONAL, LLC	2,193.36	IRWD Check	Reconciled
417329	8-Apr-21	WALTERS WHOLESALE ELECTRIC	78.96	IRWD Check	Reconciled
417330	8-Apr-21	WANG, ELLEN	19.62	IRWD Check	Negotiable
417331	8-Apr-21	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	4,404.68	IRWD Check	Reconciled
417332	8-Apr-21	WATERLINE TECHNOLOGIES INC	1,081.60	IRWD Check	Reconciled
417333	8-Apr-21	WATERSMART SOFTWARE INC	13,547.23	IRWD Check	Negotiable
417334	8-Apr-21	WAXIE'S ENTERPRISES, INC	1,093.24	IRWD Check	Reconciled
417335	8-Apr-21	WECK LABORATORIES INC	733.00	IRWD Check	Reconciled
417336	8-Apr-21	WEST COAST SAFETY SUPPLY INC	8,288.39	IRWD Check	Reconciled
417337	8-Apr-21	WEST YOST & ASSOCIATES	32,245.50	IRWD Check	Reconciled
417338	8-Apr-21	WOODBIDGE WILLOWS APARTMENTS	27.51	IRWD Check	Reconciled
417339	8-Apr-21	YU, YANG	33.07	IRWD Check	Negotiable
417340	8-Apr-21	YUAN, DAVID	41.74	IRWD Check	Reconciled
417341	13-Apr-21	UNITED STATES POST OFFICE	1,000.00	IRWD Check	Reconciled
417342	15-Apr-21	Bennett, Ray R (Ray)	232.90	IRWD Check	Reconciled
417343	15-Apr-21	Bornhoff, Mike (Mike)	106.00	IRWD Check	Negotiable
417344	15-Apr-21	Breiter, Michelle	14.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
417345	15-Apr-21	Cervantes, Angel	778.44	IRWD Check	Reconciled
417346	15-Apr-21	Hansen, Casey	110.00	IRWD Check	Reconciled
417347	15-Apr-21	Oldewage, Lars D (Lars)	309.27	IRWD Check	Reconciled
417348	15-Apr-21	Zamora, Victor A	145.47	IRWD Check	Reconciled
417349	15-Apr-21	Zuniga, Emilyn Buenafe	200.00	IRWD Check	Negotiable
417350	15-Apr-21	24 HOUR FITNESS	45.33	IRWD Check	Negotiable
417351	15-Apr-21	ACCIDENT CLAIMS EXPERTS	35.49	IRWD Check	Negotiable
417352	15-Apr-21	AECOM TECHNICAL SERVICES, INC.	550,045.50	IRWD Check	Reconciled
417353	15-Apr-21	AGILENT TECHNOLOGIES, INC.	97.48	IRWD Check	Reconciled
417354	15-Apr-21	AIRGAS, INC.	338.25	IRWD Check	Reconciled
417355	15-Apr-21	ALL STAR GLASS	503.69	IRWD Check	Reconciled
417356	15-Apr-21	ALPHA DESIGN GROUP	678.13	IRWD Check	Negotiable
417357	15-Apr-21	AMAZON CAPITAL SERVICES, INC.	383.72	IRWD Check	Reconciled
417358	15-Apr-21	AMERICAN WATER CHEMICALS, INC.	4,538.43	IRWD Check	Reconciled
417359	15-Apr-21	APEX SYSTEMS, LLC	3,744.00	IRWD Check	Reconciled
417360	15-Apr-21	APPLIED ENGINEERING CONCEPTS	12,290.00	IRWD Check	Reconciled
417361	15-Apr-21	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	40,110.11	IRWD Check	Reconciled
417362	15-Apr-21	AT&T	84.60	IRWD Check	Reconciled
417363	15-Apr-21	AT&T	1,106.82	IRWD Check	Reconciled
417364	15-Apr-21	AT&T	1,856.57	IRWD Check	Reconciled
417365	15-Apr-21	AUTOZONE PARTS, INC.	310.52	IRWD Check	Reconciled
417366	15-Apr-21	BATTERY SYSTEMS INC	1,257.14	IRWD Check	Reconciled
417367	15-Apr-21	BELL TOWER FLORIST & GIFTS	489.14	IRWD Check	Negotiable
417368	15-Apr-21	BEST DRILLING AND PUMP, INC.	167,556.25	IRWD Check	Reconciled
417369	15-Apr-21	BIOMAGIC INC	6,075.39	IRWD Check	Reconciled
417370	15-Apr-21	BOBERG ENGINEERING INC.	1,517.67	IRWD Check	Reconciled
417371	15-Apr-21	BRIGHTVIEW LANDSCAPE DEVELOPMENT, INC	1,135.36	IRWD Check	Negotiable
417372	15-Apr-21	CALIFORNIA BARRICADE RENTAL, INC.	12,703.75	IRWD Check	Reconciled
417373	15-Apr-21	CANON FINANCIAL SERVICES, INC	1,286.54	IRWD Check	Reconciled
417374	15-Apr-21	CHEM TECH INTERNATIONAL INC	20,154.87	IRWD Check	Reconciled
417375	15-Apr-21	CIMARRON ENERGY, INC	12,983.88	IRWD Check	Reconciled
417376	15-Apr-21	CITY OF IRVINE	4,458.43	IRWD Check	Reconciled
417377	15-Apr-21	CLA-VAL COMPANY	1,482.53	IRWD Check	Reconciled
417378	15-Apr-21	COLE, DIXIE	33.38	IRWD Check	Negotiable
417379	15-Apr-21	CONSOLIDATED ELECTRICAL DISTRIBUTORS, INC	1,224.26	IRWD Check	Reconciled
417380	15-Apr-21	CONSTELLATION NEWENERGY, INC.	20,646.93	IRWD Check	Negotiable
417381	15-Apr-21	CR & R INCORPORATED	428.34	IRWD Check	Reconciled
417382	15-Apr-21	CULLIGAN OF SANTA ANA	16,000.00	IRWD Check	Reconciled
417383	15-Apr-21	D & H WATER SYSTEMS INC.	2,776.58	IRWD Check	Reconciled
417384	15-Apr-21	DARDEN, CHRIS	44.67	IRWD Check	Negotiable
417385	15-Apr-21	DATA CLEAN CORPORATION	559.00	IRWD Check	Reconciled
417386	15-Apr-21	DDB ENGINEERING, INC.	4,510.00	IRWD Check	Reconciled
417387	15-Apr-21	DEALERS SERVICE COMPANY, INC	754.47	IRWD Check	Negotiable
417388	15-Apr-21	DEPARTMENT OF WATER RESOURCES	86,528.00	IRWD Check	Reconciled
417389	15-Apr-21	DISCOVERY SCIENCE CENTER OF ORANGE COUNTY	871.92	IRWD Check	Reconciled
417390	15-Apr-21	DOFORMS, INC	1,999.00	IRWD Check	Reconciled
417391	15-Apr-21	DOPUDJA & WELLS CONSULTING INC.	12,245.00	IRWD Check	Reconciled
417392	15-Apr-21	E&M ELECTRIC AND MACHINERY, INC.	3,295.00	IRWD Check	Reconciled
417393	15-Apr-21	ENDEMIC ENVIRONMENTAL SERVICES, INC.	8,762.16	IRWD Check	Reconciled
417394	15-Apr-21	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.	15,107.50	IRWD Check	Reconciled
417395	15-Apr-21	ENVIRONMENTAL EXPRESS INC	755.01	IRWD Check	Reconciled
417396	15-Apr-21	ENVIRONMENTAL RESOURCE ASSOCIATES	474.37	IRWD Check	Reconciled
417397	15-Apr-21	EQUALTOX, LLC	8,900.00	IRWD Check	Reconciled
417398	15-Apr-21	EUROFINS CALSCIENCE, LLC	2,005.50	IRWD Check	Reconciled
417399	15-Apr-21	EVERETT DOREY LLP	12,219.39	IRWD Check	Reconciled
417400	15-Apr-21	EXECUTIVE LIGHTING & ELECTRIC	166.48	IRWD Check	Reconciled
417401	15-Apr-21	FARMER, JAMES W	7.15	IRWD Check	Reconciled
417402	15-Apr-21	FARRELL & ASSOCIATES	103.44	IRWD Check	Reconciled
417403	15-Apr-21	FEDEX	220.20	IRWD Check	Reconciled
417404	15-Apr-21	FERGUSON ENTERPRISES, LLC	568.92	IRWD Check	Reconciled
417405	15-Apr-21	FISHER SCIENTIFIC COMPANY LLC	6,880.87	IRWD Check	Reconciled
417406	15-Apr-21	FLUKE ELECTRONICS CORPORATION	1,632.32	IRWD Check	Reconciled
417407	15-Apr-21	FOUGHT, CYNTHIA J.	217.05	IRWD Check	Reconciled
417408	15-Apr-21	FRONTIER CALIFORNIA INC.	58.66	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
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CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
417409	15-Apr-21	GANAHL LUMBER CO.	73.19	IRWD Check	Reconciled
417410	15-Apr-21	GEOPENTECH, INC.	1,190.00	IRWD Check	Negotiable
417411	15-Apr-21	GI ENDURANT LLC	32,083.00	IRWD Check	Reconciled
417412	15-Apr-21	GM SAGER CONSTRUCTION CO,INC.	29,500.00	IRWD Check	Reconciled
417413	15-Apr-21	GRAINGER	1,452.92	IRWD Check	Reconciled
417414	15-Apr-21	GRAYBAR ELECTRIC COMPANY	14,896.38	IRWD Check	Reconciled
417415	15-Apr-21	GSRP ST SOLAR I LLC	13,840.02	IRWD Check	Reconciled
417416	15-Apr-21	HARRINGTON INDUSTRIAL PLASTICS LLC	4,059.59	IRWD Check	Reconciled
417417	15-Apr-21	HDR ENGINEERING INC	92,416.50	IRWD Check	Reconciled
417418	15-Apr-21	HI-LINE INC	202.03	IRWD Check	Reconciled
417419	15-Apr-21	HILL BROTHERS CHEMICAL COMPANY	15,351.95	IRWD Check	Negotiable
417420	15-Apr-21	HOME DEPOT USA INC	124.43	IRWD Check	Reconciled
417421	15-Apr-21	iLAND INTERNET SOLUTION CORPORATION	11,892.00	IRWD Check	Reconciled
417422	15-Apr-21	INDUSTRIAL HEAT TECHNOLOGIES, INC.	1,430.58	IRWD Check	Reconciled
417423	15-Apr-21	INDUSTRIAL METAL SUPPLY CO	1,263.58	IRWD Check	Reconciled
417424	15-Apr-21	INDUSTRIAL SURPLUS AND SALVAGE	5,164.25	IRWD Check	Reconciled
417425	15-Apr-21	INTEGRITY MUNICIPAL SERVICES LLC	2,500.00	IRWD Check	Reconciled
417426	15-Apr-21	IRON MOUNTAIN INFORMATION MANAGEMENT INC	657.02	IRWD Check	Reconciled
417427	15-Apr-21	IRVINE PIPE & SUPPLY INC	6,310.27	IRWD Check	Reconciled
417428	15-Apr-21	JCI JONES CHEMICALS INC	3,302.68	IRWD Check	Reconciled
417429	15-Apr-21	JIG CONSULTANTS	4,697.50	IRWD Check	Negotiable
417430	15-Apr-21	KIMBALL MIDWEST	627.07	IRWD Check	Reconciled
417431	15-Apr-21	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	84,569.01	IRWD Check	Reconciled
417432	15-Apr-21	KSENAK, DARIUS	20.35	IRWD Check	Negotiable
417433	15-Apr-21	KUNG, CHIH LAN	82.17	IRWD Check	Negotiable
417434	15-Apr-21	LANDCARE HOLDINGS, INC.	1,952.21	IRWD Check	Reconciled
417435	15-Apr-21	LAULHERE, LOUIS	32.27	IRWD Check	Reconciled
417436	15-Apr-21	LEE & RO, INC.	2,690.00	IRWD Check	Reconciled
417437	15-Apr-21	LILLESTRAND LEADERSHIP CONSULTING, INC.	143.53	IRWD Check	Negotiable
417438	15-Apr-21	LSA ASSOCIATES INC	10,235.00	IRWD Check	Reconciled
417439	15-Apr-21	MC FADDEN-DALE INDUSTRIAL	92.41	IRWD Check	Reconciled
417440	15-Apr-21	MICHAEL SHAO & JINGJING XIE	184.99	IRWD Check	Negotiable
417441	15-Apr-21	MILES CHEMICAL COMPANY, INC.	6,015.63	IRWD Check	Reconciled
417442	15-Apr-21	MISSION COMMUNICATIONS, LLC	1,126.80	IRWD Check	Reconciled
417443	15-Apr-21	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	35,917.76	IRWD Check	Reconciled
417444	15-Apr-21	MUTUAL PROPANE	36.00	IRWD Check	Reconciled
417445	15-Apr-21	NALCO US 2 INC	346.14	IRWD Check	Reconciled
417446	15-Apr-21	NATIONAL READY MIXED CONCRETE SALES, LLC	618.16	IRWD Check	Reconciled
417447	15-Apr-21	NEPTUNE TECHNOLOGY GROUP, INC.	80,683.20	IRWD Check	Reconciled
417448	15-Apr-21	NEW PIG CORPORATION	2,558.18	IRWD Check	Reconciled
417449	15-Apr-21	NGO, VAN ANH	386.72	IRWD Check	Negotiable
417450	15-Apr-21	NORTHWOOD PLACE APTS	1,572.56	IRWD Check	Negotiable
417451	15-Apr-21	O'REILLY AUTO ENTERPRISES, LLC	112.53	IRWD Check	Reconciled
417452	15-Apr-21	O.C. SUPERIOR CUSTOM CLEANING	4,392.00	IRWD Check	Reconciled
417453	15-Apr-21	OLIN CORPORATION	36,462.63	IRWD Check	Reconciled
417454	15-Apr-21	ONESOURCE DISTRIBUTORS LLC	33,909.48	IRWD Check	Reconciled
417455	15-Apr-21	ORACLE AMERICA, INC.	814.92	IRWD Check	Reconciled
417456	15-Apr-21	ORANGE COUNTY AUTO PARTS CO	1,087.23	IRWD Check	Reconciled
417457	15-Apr-21	ORANGE COUNTY SANITATION DISTRICT	144,732.61	IRWD Check	Reconciled
417458	15-Apr-21	ORANGE COUNTY TREASURER	250.00	IRWD Check	Reconciled
417459	15-Apr-21	PACIFIC HYDROTECH CORPORATION	158,381.89	IRWD Check	Reconciled
417460	15-Apr-21	PACIFIC HYDROTECH CORPORATION	8,335.89	IRWD Check	Reconciled
417461	15-Apr-21	PAPER DEPOT DOCUMENT DESTRUCTION LLC	306.00	IRWD Check	Reconciled
417462	15-Apr-21	PAYNE & FEARS LLP	5,143.01	IRWD Check	Reconciled
417463	15-Apr-21	PENN ARCHIVE SERVICES	62.86	IRWD Check	Reconciled
417464	15-Apr-21	PERKINELMER HEALTH SCIENCES INC	985.91	IRWD Check	Reconciled
417465	15-Apr-21	PERRINE, GEORGE	35.49	IRWD Check	Reconciled
417466	15-Apr-21	PHAM, TERRY	335.74	IRWD Check	Reconciled
417467	15-Apr-21	PILAR ONATE	15,000.00	IRWD Check	Negotiable
417468	15-Apr-21	PILLSBURY WINTHROP SHAW PITTMAN LLP	4,328.50	IRWD Check	Reconciled
417469	15-Apr-21	PILURAS, GINNY	912.35	IRWD Check	Negotiable
417470	15-Apr-21	PIVOT INTERIORS INC	6,106.64	IRWD Check	Reconciled
417471	15-Apr-21	PURE EFFECT INC	7,725.90	IRWD Check	Reconciled
417472	15-Apr-21	PYRO-COMM SYSTEMS INC	715.00	IRWD Check	Reconciled

**IRVINE RANCH WATER DISTRICT  
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CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
417473	15-Apr-21	QUINTANA, WATTS & HARTMANN, LLC	5,150.00	IRWD Check	Negotiable
417474	15-Apr-21	RAM AIR ENGINEERING INC	6,989.78	IRWD Check	Reconciled
417475	15-Apr-21	RANCHO ALISAL APTS	2,121.40	IRWD Check	Negotiable
417476	15-Apr-21	RANCHO TIERRA APTS	1,522.84	IRWD Check	Negotiable
417477	15-Apr-21	REFRIGERATION SUPPLIES DISTRIBUTOR	186.86	IRWD Check	Reconciled
417478	15-Apr-21	RINCON TRUCK CENTER INC.	342.19	IRWD Check	Reconciled
417479	15-Apr-21	RODNEY HARMSWORTH ASSOCIATES, INC.	10,367.25	IRWD Check	Reconciled
417480	15-Apr-21	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	46,249.07	IRWD Check	Reconciled
417481	15-Apr-21	ROUX ASSOCIATES INC	1,716.50	IRWD Check	Negotiable
417482	15-Apr-21	RSB GROUP, INC.	1,824.22	IRWD Check	Reconciled
417483	15-Apr-21	RTM ENGINEERING CONSULTANTS, LLC	3,740.50	IRWD Check	Reconciled
417484	15-Apr-21	SANTA ANA BLUE PRINT	1,505.27	IRWD Check	Reconciled
417485	15-Apr-21	SANTA MARGARITA FORD	134.59	IRWD Check	Reconciled
417486	15-Apr-21	SARES REGIS GROUP	170.35	IRWD Check	Reconciled
417487	15-Apr-21	SEAL ANALYTICAL INC	1,630.39	IRWD Check	Reconciled
417488	15-Apr-21	SERRANO WATER DISTRICT	8,258.08	IRWD Check	Reconciled
417489	15-Apr-21	SHAMROCK SUPPLY CO INC	172.23	IRWD Check	Reconciled
417490	15-Apr-21	SHEA HOMES LIMITED PARTNERSHIP	75.20	IRWD Check	Negotiable
417491	15-Apr-21	SHOETERIA	1,593.00	IRWD Check	Reconciled
417492	15-Apr-21	SI TESTING	3,700.00	IRWD Check	Negotiable
417493	15-Apr-21	SITES PROJECT JOINT POWERS AUTHORITY	40,000.00	IRWD Check	Reconciled
417494	15-Apr-21	SITMATIC	1,404.72	IRWD Check	Reconciled
417495	15-Apr-21	SMT AUTOMOTIVE LLC	143.21	IRWD Check	Reconciled
417496	15-Apr-21	SOFTWAREONE INC	900.00	IRWD Check	Reconciled
417497	15-Apr-21	SONG, GUAN	71.48	IRWD Check	Negotiable
417498	15-Apr-21	SOUTH COAST WATER CO.	95.00	IRWD Check	Reconciled
417499	15-Apr-21	SOUTH COAST WATER DISTRICT	863.00	IRWD Check	Reconciled
417500	15-Apr-21	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY	42,386.00	IRWD Check	Reconciled
417501	15-Apr-21	SOUTHERN CALIFORNIA GAS COMPANY	11,271.20	IRWD Check	Negotiable
417502	15-Apr-21	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	228.72	IRWD Check	Negotiable
417503	15-Apr-21	STANFORD COURT APARTMENTS	26.23	IRWD Check	Negotiable
417504	15-Apr-21	STERIS CORPORATION	5,379.42	IRWD Check	Reconciled
417505	15-Apr-21	SUKLE ADVERTISING INC.	54,775.00	IRWD Check	Reconciled
417506	15-Apr-21	SUNSHINE SUPPLY COMPANY, INC.	503.85	IRWD Check	Reconciled
417507	15-Apr-21	SUSAN A. SIROTA	4,660.00	IRWD Check	Reconciled
417508	15-Apr-21	THE SHERWIN WILLIAMS COMPANY	1,473.59	IRWD Check	Reconciled
417509	15-Apr-21	THERMO ELECTRON NORTH AMERICA LLC	110,713.78	IRWD Check	Reconciled
417510	15-Apr-21	THOMPSON & PHIPPS INC	482.51	IRWD Check	Reconciled
417511	15-Apr-21	TIC-SPECTRUM OFFICE	7,701.86	IRWD Check	Reconciled
417512	15-Apr-21	TOTAL RESOURCE MANAGEMENT, INC	3,017.50	IRWD Check	Negotiable
417513	15-Apr-21	TROPICAL PLAZA NURSERY INC	1,478.00	IRWD Check	Reconciled
417514	15-Apr-21	TURTLE RIDGE APARTMENTS	2,706.79	IRWD Check	Negotiable
417515	15-Apr-21	UNITED PARCEL SERVICE INC	189.36	IRWD Check	Reconciled
417516	15-Apr-21	UNIVAR SOLUTIONS USA INC.	4,736.00	IRWD Check	Reconciled
417517	15-Apr-21	UNIVERSITY OF CALIFORNIA IRVINE	78.25	IRWD Check	Negotiable
417518	15-Apr-21	USA WASTE OF CALIFORNIA, INC.	542.50	IRWD Check	Reconciled
417519	15-Apr-21	VAUGHAN'S INDUSTRIAL REPAIR CO INC	34,468.47	IRWD Check	Reconciled
417520	15-Apr-21	VIDO ARTUKOVICH & SON, INC./VIDMAR, INC. A JV	17,277.66	IRWD Check	Reconciled
417521	15-Apr-21	VIDO ARTUKOVICH & SON, INC./VIDMAR, INC. A JV	328,275.38	IRWD Check	Reconciled
417522	15-Apr-21	WANG, KETTY	25.00	IRWD Check	Negotiable
417523	15-Apr-21	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	550.26	IRWD Check	Reconciled
417524	15-Apr-21	WATER MANAGEMENT GROUP	1,045.00	IRWD Check	Reconciled
417525	15-Apr-21	WAXIE'S ENTERPRISES, INC	737.57	IRWD Check	Reconciled
417526	15-Apr-21	WECK LABORATORIES INC	1,226.00	IRWD Check	Reconciled
417527	15-Apr-21	WESTAMERICA COMMUNICATIONS, INC.	600.00	IRWD Check	Reconciled
417528	15-Apr-21	WOODARD & CURRAN INC	6,760.96	IRWD Check	Reconciled
417529	15-Apr-21	WOODBRIDGE WILLOWS APARTMENTS	25.60	IRWD Check	Negotiable
417530	15-Apr-21	YOON, APRIL Y	60.84	IRWD Check	Reconciled
417531	15-Apr-21	ZHANG, YAO	43.92	IRWD Check	Negotiable
417532	15-Apr-21	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY	9,270.52	IRWD Check	Reconciled
417533	22-Apr-21	Clinton, Bryan R (Bryan)	155.00	IRWD Check	Negotiable
417534	22-Apr-21	Fehser, Noah (Noah)	100.00	IRWD Check	Negotiable
417535	22-Apr-21	Orozco, Linda	200.00	IRWD Check	Negotiable
417536	22-Apr-21	Ryan, Sabrina N	117.62	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT  
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<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
417537	22-Apr-21	Vargas, Gabriel A (Gabriel)	140.00	IRWD Check	Reconciled
417538	22-Apr-21	A&Y ASPHALT CONTRACTORS, INC.	21,953.00	IRWD Check	Reconciled
417539	22-Apr-21	ADS CORP.	11,026.00	IRWD Check	Reconciled
417540	22-Apr-21	AFLAC	154.21	IRWD Check	Negotiable
417541	22-Apr-21	AIRGAS, INC.	4.14	IRWD Check	Reconciled
417542	22-Apr-21	ALLIANT INSURANCE SERVICES, INC.	83,805.96	IRWD Check	Reconciled
417543	22-Apr-21	AMAZON CAPITAL SERVICES, INC.	2,794.63	IRWD Check	Reconciled
417544	22-Apr-21	AMERICAN GEOTECHNICAL, INC.	6,983.75	IRWD Check	Reconciled
417545	22-Apr-21	ANTHEM BLUE CROSS	283.41	IRWD Check	Negotiable
417546	22-Apr-21	APCO GRAPHICS INC	158.72	IRWD Check	Reconciled
417547	22-Apr-21	APEX SYSTEMS, LLC	2,288.00	IRWD Check	Reconciled
417548	22-Apr-21	APPLIED ENGINEERING CONCEPTS	4,900.00	IRWD Check	Negotiable
417549	22-Apr-21	ARMORCAST PRODUCTS COMPANY	4,859.38	IRWD Check	Reconciled
417550	22-Apr-21	AT&T	11,876.58	IRWD Check	Negotiable
417551	22-Apr-21	ATLAS INTEGRATED SYSTEMS INC.	6,675.49	IRWD Check	Negotiable
417552	22-Apr-21	AUTOZONE PARTS, INC.	380.79	IRWD Check	Negotiable
417553	22-Apr-21	AVIAT U.S., INC	325.54	IRWD Check	Negotiable
417554	22-Apr-21	BAILEY, KENNETH J	829.56	IRWD Check	Negotiable
417555	22-Apr-21	BALENO, CHRIS	23.24	IRWD Check	Negotiable
417556	22-Apr-21	BATTERIES PLUS AND BATTERIES PLUS BULBS	3,255.37	IRWD Check	Negotiable
417557	22-Apr-21	BATTERY SYSTEMS INC	121.33	IRWD Check	Reconciled
417558	22-Apr-21	BIGWIG MONSTER, LLC	1,800.00	IRWD Check	Negotiable
417559	22-Apr-21	BILL'S SWEEPING SERVICE INC	796.00	IRWD Check	Negotiable
417560	22-Apr-21	BIOMAGIC INC	120.68	IRWD Check	Reconciled
417561	22-Apr-21	BOOT WORLD, INC.	225.00	IRWD Check	Reconciled
417562	22-Apr-21	BRUCE HADLEY NEWELL	1,250.00	IRWD Check	Negotiable
417563	22-Apr-21	C WELLS PIPELINE MATERIALS INC	4,307.85	IRWD Check	Negotiable
417564	22-Apr-21	CALIFORNIA BARRICADE RENTAL, INC.	20,547.74	IRWD Check	Reconciled
417565	22-Apr-21	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	1,023.00	IRWD Check	Negotiable
417566	22-Apr-21	CALIFORNIA NEWSPAPERS PARTNERSHIP	11,550.96	IRWD Check	Negotiable
417567	22-Apr-21	CALIFORNIA PACIFIC HOMES	56.26	IRWD Check	Negotiable
417568	22-Apr-21	CANNON CORPORATION	14,550.00	IRWD Check	Negotiable
417569	22-Apr-21	CANON FINANCIAL SERVICES, INC	7,056.98	IRWD Check	Reconciled
417570	22-Apr-21	CAROLLO ENGINEERS, INC	31,871.50	IRWD Check	Negotiable
417571	22-Apr-21	CHAKRABARTI, SHREYA	45.82	IRWD Check	Negotiable
417572	22-Apr-21	CITY OF SANTA ANA	523.85	IRWD Check	Reconciled
417573	22-Apr-21	CLA-VAL COMPANY	2,178.80	IRWD Check	Reconciled
417574	22-Apr-21	CLARKE MOSQUITO CONTROL PRODUCTS, INC.	1,919.09	IRWD Check	Reconciled
417575	22-Apr-21	COASTAL OCCUPATIONAL MEDICAL GROUP, INC.	720.00	IRWD Check	Negotiable
417576	22-Apr-21	COMMERCIAL DOOR OF ORANGE COUNTY, INC.	19,287.00	IRWD Check	Negotiable
417577	22-Apr-21	CONSTELLATION NEWENERGY, INC.	4,430.14	IRWD Check	Negotiable
417578	22-Apr-21	D & G SIGNS	862.00	IRWD Check	Negotiable
417579	22-Apr-21	DATA CLEAN CORPORATION	559.00	IRWD Check	Negotiable
417580	22-Apr-21	DE VAUL PAINT COMPANY	840.77	IRWD Check	Negotiable
417581	22-Apr-21	DELEON, EDGAR	461.96	IRWD Check	Negotiable
417582	22-Apr-21	DG INVESTMENT INTERMEDIATE HOLDINGS 2, INC.	19,371.72	IRWD Check	Reconciled
417583	22-Apr-21	DIRECTV INC	136.95	IRWD Check	Negotiable
417584	22-Apr-21	DUKE'S ROOT CONTROL INC	49,102.71	IRWD Check	Reconciled
417585	22-Apr-21	DWYER INSTRUMENTS INC	425.06	IRWD Check	Negotiable
417586	22-Apr-21	EHS INTERNATIONAL, INC	760.00	IRWD Check	Negotiable
417587	22-Apr-21	EI&C ENGINEERING INC.	46,371.00	IRWD Check	Negotiable
417588	22-Apr-21	ENVIRONMENTAL EQUIPMENT SUPPLY	1,049.18	IRWD Check	Reconciled
417589	22-Apr-21	ENVIRONMENTAL RESOURCE ASSOCIATES	416.39	IRWD Check	Negotiable
417590	22-Apr-21	FARRELL & ASSOCIATES	103.43	IRWD Check	Reconciled
417591	22-Apr-21	FERGUSON ENTERPRISES, LLC	11,105.80	IRWD Check	Reconciled
417592	22-Apr-21	FISHER SCIENTIFIC COMPANY LLC	27,078.63	IRWD Check	Reconciled
417593	22-Apr-21	FLEET SOLUTIONS LLC	79.98	IRWD Check	Negotiable
417594	22-Apr-21	FLUKE ELECTRONICS CORPORATION	659.01	IRWD Check	Reconciled
417595	22-Apr-21	FLW SERVICE CORPORATION	2,050.00	IRWD Check	Negotiable
417596	22-Apr-21	FRANCHISE TAX BOARD	250.00	IRWD Check	Negotiable
417597	22-Apr-21	FRONTIER CALIFORNIA INC.	534.67	IRWD Check	Negotiable
417598	22-Apr-21	FUEL SERV	3,786.75	IRWD Check	Negotiable
417599	22-Apr-21	FUSCOE ENGINEERING, INC.	3,840.00	IRWD Check	Negotiable
417600	22-Apr-21	GCI CONSTRUCTION, INC.	9,063.48	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT  
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<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
417601	22-Apr-21	GEI CONSULTANTS INC	2,601.50	IRWD Check	Reconciled
417602	22-Apr-21	GIA, TONG H	35.01	IRWD Check	Negotiable
417603	22-Apr-21	GRAINGER	2,547.89	IRWD Check	Reconciled
417604	22-Apr-21	GUO, YANQIONG	30.58	IRWD Check	Negotiable
417605	22-Apr-21	HACH COMPANY	2,807.56	IRWD Check	Reconciled
417606	22-Apr-21	HANANIA, NABIL	100.48	IRWD Check	Negotiable
417607	22-Apr-21	HARRINGTON INDUSTRIAL PLASTICS LLC	4,518.85	IRWD Check	Reconciled
417608	22-Apr-21	HDR ENGINEERING INC	29,131.12	IRWD Check	Reconciled
417609	22-Apr-21	HELPMATES STAFFING SERVICES	4,969.50	IRWD Check	Reconciled
417610	22-Apr-21	HERITAGE FIELDS EL TORO, LLC	320.33	IRWD Check	Negotiable
417611	22-Apr-21	HI-LINE INC	182.91	IRWD Check	Reconciled
417612	22-Apr-21	HILL BROTHERS CHEMICAL COMPANY	2,335.00	IRWD Check	Negotiable
417613	22-Apr-21	HOME DEPOT USA INC	794.47	IRWD Check	Negotiable
417614	22-Apr-21	INDUSTRIAL SCIENTIFIC CORPORATION	515.98	IRWD Check	Reconciled
417615	22-Apr-21	INFOSEND, INC.	38,655.56	IRWD Check	Reconciled
417616	22-Apr-21	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	2,875.48	IRWD Check	Negotiable
417617	22-Apr-21	IRVINE PIPE & SUPPLY INC	2,521.68	IRWD Check	Reconciled
417618	22-Apr-21	J M ELECTRICAL SERVICES	3,300.00	IRWD Check	Negotiable
417619	22-Apr-21	JNSN MANAGEMENT	366.88	IRWD Check	Negotiable
417620	22-Apr-21	JUST ENERGY SOLUTIONS INC.	2,146.38	IRWD Check	Reconciled
417621	22-Apr-21	K HOVNIANIAN HOMES	200.62	IRWD Check	Negotiable
417622	22-Apr-21	KIMBALL MIDWEST	434.73	IRWD Check	Reconciled
417623	22-Apr-21	KONECRANES INC	1,646.00	IRWD Check	Reconciled
417624	22-Apr-21	LA HABRA FENCE COMPANY INC	2,439.00	IRWD Check	Negotiable
417625	22-Apr-21	LAKE FOREST CHAMBER OF COMMERCE INC	305.00	IRWD Check	Reconciled
417626	22-Apr-21	LANCER SALES USA, INC.	599.75	IRWD Check	Negotiable
417627	22-Apr-21	LANDCARE HOLDINGS, INC.	41,468.69	IRWD Check	Reconciled
417628	22-Apr-21	LCS TECHNOLOGIES, INC.	6,210.00	IRWD Check	Reconciled
417629	22-Apr-21	LEE, JOANNE	97.16	IRWD Check	Negotiable
417630	22-Apr-21	LGC GEOTECHNICAL, INC.	1,605.00	IRWD Check	Reconciled
417631	22-Apr-21	LILLESTRAND LEADERSHIP CONSULTING, INC.	1,760.00	IRWD Check	Negotiable
417632	22-Apr-21	LOVATI, SANDY	16.68	IRWD Check	Negotiable
417633	22-Apr-21	MATHESON TRI GAS, INC	51.44	IRWD Check	Negotiable
417634	22-Apr-21	MEASUREMENT CONTROL SYSTEMS	5,424.54	IRWD Check	Reconciled
417635	22-Apr-21	MESA INTERNATIONAL TECHNOLOGIES, INC.	167.01	IRWD Check	Negotiable
417636	22-Apr-21	MICROSOFT CORPORATION	533.26	IRWD Check	Negotiable
417637	22-Apr-21	MIKE'S WELDING SERVICE, INC.	500.00	IRWD Check	Negotiable
417638	22-Apr-21	MOTORS & CONTROLS WAREHOUSE, INC	8,404.50	IRWD Check	Reconciled
417639	22-Apr-21	MSA SAFETY INCORPORATED	1,109.45	IRWD Check	Reconciled
417640	22-Apr-21	MUNICIPAL UNDERGROUND SERVICES INC	3,850.00	IRWD Check	Reconciled
417641	22-Apr-21	MUTUAL PROPANE	183.54	IRWD Check	Negotiable
417642	22-Apr-21	NALCO US 2 INC	565.69	IRWD Check	Reconciled
417643	22-Apr-21	NATURALWELL, LLC	1,925.00	IRWD Check	Reconciled
417644	22-Apr-21	NCL OF WISCONSIN INC	407.44	IRWD Check	Negotiable
417645	22-Apr-21	NOVACOAST INC	24,127.66	IRWD Check	Negotiable
417646	22-Apr-21	NV5, INC.	20,440.00	IRWD Check	Reconciled
417647	22-Apr-21	O'REILLY AUTO ENTERPRISES, LLC	38.76	IRWD Check	Negotiable
417648	22-Apr-21	OLIN CORPORATION	16,082.48	IRWD Check	Reconciled
417649	22-Apr-21	OLSON REMCHO LLP	3,097.50	IRWD Check	Reconciled
417650	22-Apr-21	ORANGE COUNTY AUTO PARTS CO	3,150.85	IRWD Check	Reconciled
417651	22-Apr-21	PACIFIC COAST BOLT CORP	5,177.38	IRWD Check	Negotiable
417652	22-Apr-21	PACIFIC HYDROTECH CORPORATION	30,118.36	IRWD Check	Negotiable
417653	22-Apr-21	PACIFIC HYDROTECH CORPORATION	572,248.93	IRWD Check	Negotiable
417654	22-Apr-21	PACIFIC STAR CHEMICAL, LLC	1,309.55	IRWD Check	Reconciled
417655	22-Apr-21	PACIFIC SURVEYS, LLC	1,355.00	IRWD Check	Negotiable
417656	22-Apr-21	PARKHOUSE TIRE INC	3,804.63	IRWD Check	Reconciled
417657	22-Apr-21	PASCAL & LUDWIG CONSTRUCTORS	5,821.00	IRWD Check	Negotiable
417658	22-Apr-21	PAULUS ENGINEERING, INC.	13,589.77	IRWD Check	Reconciled
417659	22-Apr-21	PERS LONG TERM CARE	447.62	IRWD Check	Reconciled
417660	22-Apr-21	PLUMBERS DEPOT INC.	684.75	IRWD Check	Negotiable
417661	22-Apr-21	PRAXAIR DISTRIBUTION INC	418.73	IRWD Check	Reconciled
417662	22-Apr-21	PRES COMPANIES	37.92	IRWD Check	Negotiable
417663	22-Apr-21	PSOMAS	3,883.25	IRWD Check	Reconciled
417664	22-Apr-21	PTI SAND & GRAVEL INC	1,688.11	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT  
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CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
417665	22-Apr-21	R. F. MACDONALD CO.	800.00	IRWD Check	Reconciled
417666	22-Apr-21	RAM AIR ENGINEERING INC	1,875.00	IRWD Check	Negotiable
417667	22-Apr-21	REAL WATER CONSULTANTS INC.	16,353.00	IRWD Check	Negotiable
417668	22-Apr-21	RENTOKIL NORTH AMERICA, INC	8,949.00	IRWD Check	Negotiable
417669	22-Apr-21	RINCON TRUCK CENTER INC.	563.14	IRWD Check	Reconciled
417670	22-Apr-21	RLG ENTERPRISES, INC	435.78	IRWD Check	Reconciled
417671	22-Apr-21	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	166,557.55	IRWD Check	Reconciled
417672	22-Apr-21	RYAN, BILLIE	335.64	IRWD Check	Reconciled
417673	22-Apr-21	SAFETY-KLEEN SYSTEMS, INC	345.00	IRWD Check	Reconciled
417674	22-Apr-21	SANTA MARGARITA FORD	392.88	IRWD Check	Reconciled
417675	22-Apr-21	SCHINDLER ELEVATOR CORPORATION	229.11	IRWD Check	Reconciled
417676	22-Apr-21	SECURITAS SECURITY SERVICES USA, INC.	50,592.20	IRWD Check	Reconciled
417677	22-Apr-21	SHAMROCK SUPPLY CO INC	980.24	IRWD Check	Reconciled
417678	22-Apr-21	SHEN, CHRIS	41.30	IRWD Check	Negotiable
417679	22-Apr-21	SIGMA-ALDRICH INC	171.15	IRWD Check	Reconciled
417680	22-Apr-21	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	557.42	IRWD Check	Negotiable
417681	22-Apr-21	SOUTHERN CALIFORNIA EDISON COMPANY	63,139.99	IRWD Check	Negotiable
417682	22-Apr-21	SOUTHERN CALIFORNIA GAS COMPANY	3,669.89	IRWD Check	Negotiable
417683	22-Apr-21	SOUTHLAND WATER TECHNOLOGIES LLC	553.75	IRWD Check	Negotiable
417684	22-Apr-21	STANTEC CONSULTING SERVICES INC.	46,106.95	IRWD Check	Reconciled
417685	22-Apr-21	STRADLING YOCCA CARLSON & RAUTH	112.00	IRWD Check	Reconciled
417686	22-Apr-21	STRADWICK, MARC	1,430.69	IRWD Check	Negotiable
417687	22-Apr-21	SYNAGRO-WWT, INC.	51,599.89	IRWD Check	Reconciled
417688	22-Apr-21	TETRA TECH, INC	40,951.50	IRWD Check	Negotiable
417689	22-Apr-21	THOMPSON & PHIPPS INC	439.47	IRWD Check	Negotiable
417690	22-Apr-21	TOTAL RESOURCE MANAGEMENT, INC	1,657.50	IRWD Check	Negotiable
417691	22-Apr-21	TRENCH SHORING COMPANY	103.44	IRWD Check	Reconciled
417692	22-Apr-21	TRIPAC MARKETING INC	2,793.97	IRWD Check	Reconciled
417693	22-Apr-21	TRUCPARCO	81.37	IRWD Check	Negotiable
417694	22-Apr-21	TRUKSPECT, INC	903.96	IRWD Check	Negotiable
417695	22-Apr-21	UNITED PARCEL SERVICE INC	51.67	IRWD Check	Reconciled
417696	22-Apr-21	UNITED SITE SERVICES OF CALIFORNIA INC	852.52	IRWD Check	Reconciled
417697	22-Apr-21	VILLASENOR, BLANCA	77.93	IRWD Check	Negotiable
417698	22-Apr-21	VULCAN MATERIALS COMPANY	1,499.96	IRWD Check	Reconciled
417699	22-Apr-21	WASTE MANAGEMENT COLLECTIONS AND RECYCLING, INC.	380.13	IRWD Check	Reconciled
417700	22-Apr-21	WATER RESEARCH FOUNDATION	61,091.00	IRWD Check	Negotiable
417701	22-Apr-21	WATER SYSTEMS OPTIMIZATION, INC.	2,400.00	IRWD Check	Negotiable
417702	22-Apr-21	WAXIE'S ENTERPRISES, INC	343.03	IRWD Check	Reconciled
417703	22-Apr-21	WEST YOST & ASSOCIATES	19,197.00	IRWD Check	Negotiable
417704	22-Apr-21	WYNNE, KIMBERLY	237.34	IRWD Check	Reconciled
417705	22-Apr-21	ZIMA CORPORATION	100,292.63	IRWD Check	Negotiable
417706	29-Apr-21	Soto, Franklin E (Frank)	288.00	IRWD Check	Negotiable
417707	29-Apr-21	1 A LIFESAFER, INC.	34.02	IRWD Check	Negotiable
417708	29-Apr-21	8X8 INC	29,087.68	IRWD Check	Negotiable
417709	29-Apr-21	A&Y ASPHALT CONTRACTORS, INC.	97,193.14	IRWD Check	Negotiable
417710	29-Apr-21	ACCUSTANDARD INC	395.56	IRWD Check	Negotiable
417711	29-Apr-21	ADT SECURITY SERVICES INC	412.47	IRWD Check	Negotiable
417712	29-Apr-21	AERATION INDUSTRIES INTERNATIONAL INC	2,656.04	IRWD Check	Negotiable
417713	29-Apr-21	AGILENT TECHNOLOGIES, INC.	1,438.97	IRWD Check	Negotiable
417714	29-Apr-21	AIRGAS, INC.	1,977.29	IRWD Check	Negotiable
417715	29-Apr-21	ALCH, SHARLENE	50.00	IRWD Check	Negotiable
417716	29-Apr-21	AMAZON CAPITAL SERVICES, INC.	1,239.12	IRWD Check	Negotiable
417717	29-Apr-21	ANTHONY N. LARSEN	450.00	IRWD Check	Negotiable
417718	29-Apr-21	APPLIED ENGINEERING CONCEPTS	28,780.00	IRWD Check	Negotiable
417719	29-Apr-21	AQUA BEN CORPORATION	33,705.00	IRWD Check	Negotiable
417720	29-Apr-21	AQUA-METRIC SALES COMPANY	3,386.99	IRWD Check	Negotiable
417721	29-Apr-21	ASSURED FLOW SALES INC	163.25	IRWD Check	Negotiable
417722	29-Apr-21	AT&T	202.00	IRWD Check	Negotiable
417723	29-Apr-21	AT&T	303.35	IRWD Check	Negotiable
417724	29-Apr-21	AUTOBAHN CONSTRUCTION INC.	1,662.33	IRWD Check	Negotiable
417725	29-Apr-21	AUTOMOX INC.	27,300.00	IRWD Check	Negotiable
417726	29-Apr-21	AUTOZONE PARTS, INC.	999.89	IRWD Check	Negotiable
417727	29-Apr-21	BEACHWALK INC.	25.00	IRWD Check	Negotiable
417728	29-Apr-21	BELLEWICK COMMUNITY ASSOCIATION	220.00	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT  
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<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
417729	29-Apr-21	BLACK & VEATCH CORPORATION	74,442.11	IRWD Check	Negotiable
417730	29-Apr-21	BROWN AND CALDWELL	44,190.51	IRWD Check	Negotiable
417731	29-Apr-21	C WELLS PIPELINE MATERIALS INC	8,578.52	IRWD Check	Negotiable
417732	29-Apr-21	CABCO YELLOW INC.	81.60	IRWD Check	Negotiable
417733	29-Apr-21	CALIFORNIA BARRICADE RENTAL, INC.	3,435.00	IRWD Check	Negotiable
417734	29-Apr-21	CALVERT, ANTHONY	15.18	IRWD Check	Negotiable
417735	29-Apr-21	CDW GOVERNMENT LLC	588.91	IRWD Check	Negotiable
417736	29-Apr-21	CHEM TECH INTERNATIONAL INC	11,169.72	IRWD Check	Negotiable
417737	29-Apr-21	CISCO SYSTEMS, INC.	3,340.65	IRWD Check	Negotiable
417738	29-Apr-21	CITY OF IRVINE	49,065.25	IRWD Check	Negotiable
417739	29-Apr-21	CITY OF NEWPORT BEACH	192.88	IRWD Check	Negotiable
417740	29-Apr-21	CLA-VAL COMPANY	11,336.86	IRWD Check	Negotiable
417741	29-Apr-21	COASTAL OCCUPATIONAL MEDICAL GROUP, INC.	170.00	IRWD Check	Negotiable
417742	29-Apr-21	COTTONS POINT DESIGN, INC.	13,266.60	IRWD Check	Negotiable
417743	29-Apr-21	COX COMMUNICATIONS, INC.	3,375.52	IRWD Check	Negotiable
417744	29-Apr-21	CROWN CASTLE INTERNATIONAL CORP.	810.35	IRWD Check	Negotiable
417745	29-Apr-21	DCS MANAGEMENT LLC	101.32	IRWD Check	Negotiable
417746	29-Apr-21	DENALI WATER SOLUTIONS LLC	5,858.96	IRWD Check	Negotiable
417747	29-Apr-21	DIRECTV INC	146.99	IRWD Check	Negotiable
417748	29-Apr-21	EAGLE PRINT DYNAMICS	405.14	IRWD Check	Negotiable
417749	29-Apr-21	ENTERPRISE INFORMATION SYSTEMS, INC.	13,160.00	IRWD Check	Negotiable
417750	29-Apr-21	ENVIRONMENTAL SCIENCE ASSOCIATES	1,390.16	IRWD Check	Negotiable
417751	29-Apr-21	EUROFINS CALSCIENCE, LLC	4,830.00	IRWD Check	Negotiable
417752	29-Apr-21	FAITHCO INC.	4,067.25	IRWD Check	Negotiable
417753	29-Apr-21	FARWEST CORROSION CONTROL COMPANY	605.03	IRWD Check	Negotiable
417754	29-Apr-21	FEDEX	58.74	IRWD Check	Negotiable
417755	29-Apr-21	FELLING TRAILERS, INC.	64.65	IRWD Check	Negotiable
417756	29-Apr-21	FERGUSON ENTERPRISES, LLC	4,258.28	IRWD Check	Negotiable
417757	29-Apr-21	FIERRO, SERGIO D	3,960.00	IRWD Check	Negotiable
417758	29-Apr-21	FIONA HUTTON & ASSOCIATES, INC.	83,639.69	IRWD Check	Negotiable
417759	29-Apr-21	FIRST CHOICE SERVICES	462.46	IRWD Check	Negotiable
417760	29-Apr-21	FISHER SCIENTIFIC COMPANY LLC	914.91	IRWD Check	Negotiable
417761	29-Apr-21	FRONTIER CALIFORNIA INC.	107.87	IRWD Check	Negotiable
417762	29-Apr-21	FRUEHAUF, JOHN	469.13	IRWD Check	Negotiable
417763	29-Apr-21	FU, HAO	400.56	IRWD Check	Negotiable
417764	29-Apr-21	GAGLIO, JOSEPH	42.59	IRWD Check	Negotiable
417765	29-Apr-21	GANAHL LUMBER CO.	2,790.73	IRWD Check	Negotiable
417766	29-Apr-21	GARCIA, GILBERT	583.72	IRWD Check	Negotiable
417767	29-Apr-21	GCI CONSTRUCTION	1,603.77	IRWD Check	Negotiable
417768	29-Apr-21	GLADWELL GOVERNMENTAL SERVICES, INC.	250.00	IRWD Check	Negotiable
417769	29-Apr-21	GM SAGER CONSTRUCTION CO, INC.	1,250.00	IRWD Check	Negotiable
417770	29-Apr-21	GOSHTASBI, FARIMAH	32.93	IRWD Check	Negotiable
417771	29-Apr-21	GRAINGER	588.35	IRWD Check	Negotiable
417772	29-Apr-21	GRAYBAR ELECTRIC COMPANY	1,473.27	IRWD Check	Negotiable
417773	29-Apr-21	HAAKER EQUIPMENT COMPANY	1,631.86	IRWD Check	Negotiable
417774	29-Apr-21	HACH COMPANY	7,276.18	IRWD Check	Negotiable
417775	29-Apr-21	HANSON BRIDGETT LLP	64,420.83	IRWD Check	Negotiable
417776	29-Apr-21	HARPER & ASSOCIATES ENGINEERING INC	2,232.50	IRWD Check	Negotiable
417777	29-Apr-21	HARRINGTON INDUSTRIAL PLASTICS LLC	1,418.73	IRWD Check	Negotiable
417778	29-Apr-21	HAZEN AND SAWYER	11,788.81	IRWD Check	Negotiable
417779	29-Apr-21	HDR ENGINEERING INC	29,978.61	IRWD Check	Negotiable
417780	29-Apr-21	HELPMATES STAFFING SERVICES	1,441.15	IRWD Check	Negotiable
417781	29-Apr-21	HI-LINE INC	182.72	IRWD Check	Negotiable
417782	29-Apr-21	HILL BROTHERS CHEMICAL COMPANY	10,327.70	IRWD Check	Negotiable
417783	29-Apr-21	HOME DEPOT USA INC	269.65	IRWD Check	Negotiable
417784	29-Apr-21	HOPKINS TECHNICAL PRODUCTS INC	4,679.41	IRWD Check	Negotiable
417785	29-Apr-21	HUNTSMAN HOLDINGS, LLC	144.32	IRWD Check	Negotiable
417786	29-Apr-21	INDUSTRIAL METAL SUPPLY CO	534.31	IRWD Check	Negotiable
417787	29-Apr-21	INDUSTRIAL NETWORKING SOLUTIONS	3,128.46	IRWD Check	Negotiable
417788	29-Apr-21	INDUSTRIAL SURPLUS AND SALVAGE	21,657.12	IRWD Check	Negotiable
417789	29-Apr-21	INFOSEND, INC.	900.00	IRWD Check	Negotiable
417790	29-Apr-21	INTER TEK	22.53	IRWD Check	Negotiable
417791	29-Apr-21	IRVINE PACIFIC	187.76	IRWD Check	Negotiable
417792	29-Apr-21	IRVINE PIPE & SUPPLY INC	1,319.50	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
417793	29-Apr-21	J M ELECTRICAL SERVICES	3,400.00	IRWD Check	Negotiable
417794	29-Apr-21	JACOBS ENGINEERING GROUP INC.	36,407.37	IRWD Check	Negotiable
417795	29-Apr-21	JANIK, LOIS	59.76	IRWD Check	Negotiable
417796	29-Apr-21	JCI JONES CHEMICALS INC	3,311.13	IRWD Check	Negotiable
417797	29-Apr-21	JOHN WAYNE AIRPORT	9,597.64	IRWD Check	Negotiable
417798	29-Apr-21	JOHNSON PLASTICS	1,253.30	IRWD Check	Negotiable
417799	29-Apr-21	KAN VENTURES, INC	6,500.00	IRWD Check	Negotiable
417800	29-Apr-21	KIM, JENNY	53.55	IRWD Check	Negotiable
417801	29-Apr-21	KITTIKHOUN, SUNDONA	30.05	IRWD Check	Negotiable
417802	29-Apr-21	LABELLE-MARVIN INC	390.00	IRWD Check	Negotiable
417803	29-Apr-21	LAGUNA BEACH COUNTY WATER DISTRICT	3,455.13	IRWD Check	Negotiable
417804	29-Apr-21	LANDCARE HOLDINGS, INC.	24,629.10	IRWD Check	Negotiable
417805	29-Apr-21	LI, YING	21.72	IRWD Check	Negotiable
417806	29-Apr-21	LIEBERT CASSIDY WHITMORE	594.50	IRWD Check	Negotiable
417807	29-Apr-21	LSA ASSOCIATES INC	4,914.64	IRWD Check	Negotiable
417808	29-Apr-21	LUBRICATION ENGINEERS, INC.	1,130.46	IRWD Check	Negotiable
417809	29-Apr-21	MARTINEZ, SHERRY	15.58	IRWD Check	Negotiable
417810	29-Apr-21	MC FADDEN-DALE INDUSTRIAL	47.49	IRWD Check	Negotiable
417811	29-Apr-21	MCR TECHNOLOGIES INC	10,127.46	IRWD Check	Negotiable
417812	29-Apr-21	MERRIMAC PETROLEUM, INC.	28,738.01	IRWD Check	Negotiable
417813	29-Apr-21	MSA SAFETY INCORPORATED	338.00	IRWD Check	Negotiable
417814	29-Apr-21	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	321,408.02	IRWD Check	Negotiable
417815	29-Apr-21	NATIONAL READY MIXED CONCRETE SALES, LLC	1,583.76	IRWD Check	Negotiable
417816	29-Apr-21	NEWAGE INDUSTRIES INC	1,102.90	IRWD Check	Negotiable
417817	29-Apr-21	O'REILLY AUTO ENTERPRISES, LLC	302.98	IRWD Check	Negotiable
417818	29-Apr-21	OLIN CORPORATION	26,744.17	IRWD Check	Negotiable
417819	29-Apr-21	ONESOURCE DISTRIBUTORS LLC	23,484.56	IRWD Check	Negotiable
417820	29-Apr-21	ORANGE COUNTY AUTO PARTS CO	334.94	IRWD Check	Negotiable
417821	29-Apr-21	ORANGE COUNTY TREASURER	3,200.00	IRWD Check	Negotiable
417822	29-Apr-21	OSTS, INC	11,940.00	IRWD Check	Negotiable
417823	29-Apr-21	PACIFIC PARTS & CONTROLS INC	1,603.32	IRWD Check	Negotiable
417824	29-Apr-21	PACRIM ENGINEERING INC.	2,632.50	IRWD Check	Negotiable
417825	29-Apr-21	PARKHOUSE TIRE INC	2,605.49	IRWD Check	Negotiable
417826	29-Apr-21	PAWRA, VIMPI	34.21	IRWD Check	Negotiable
417827	29-Apr-21	PAYMENTUS GROUP INC.	38,554.94	IRWD Check	Negotiable
417828	29-Apr-21	PEREZ, MIRIAM	19.70	IRWD Check	Negotiable
417829	29-Apr-21	PLUMBERS DEPOT INC.	27.72	IRWD Check	Negotiable
417830	29-Apr-21	PRAXAIR DISTRIBUTION INC	2,046.40	IRWD Check	Negotiable
417831	29-Apr-21	PRES-TECH MANUFACTURERS' REPRESENTATIVES, INC.	301.64	IRWD Check	Negotiable
417832	29-Apr-21	PRIME CONTROLS COMPANY INC	1,569.45	IRWD Check	Negotiable
417833	29-Apr-21	PYRO-COMM SYSTEMS INC	21,563.04	IRWD Check	Negotiable
417834	29-Apr-21	RAM AIR ENGINEERING INC	6,060.45	IRWD Check	Negotiable
417835	29-Apr-21	RDM GENERAL CONTRACTORS	1,578.33	IRWD Check	Negotiable
417836	29-Apr-21	RINCON TRUCK CENTER INC.	2,528.59	IRWD Check	Negotiable
417837	29-Apr-21	RLG ENTERPRISES, INC	122.40	IRWD Check	Negotiable
417838	29-Apr-21	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	654.89	IRWD Check	Negotiable
417839	29-Apr-21	ROUFOS, KIMBERLY	154.80	IRWD Check	Negotiable
417840	29-Apr-21	S&S SEEDS INC	12,452.13	IRWD Check	Negotiable
417841	29-Apr-21	SANTA ANA BLUE PRINT	304.46	IRWD Check	Negotiable
417842	29-Apr-21	SANTA MARGARITA FORD	478.33	IRWD Check	Negotiable
417843	29-Apr-21	SEQ CORPORATION	7,000.00	IRWD Check	Negotiable
417844	29-Apr-21	SHAMROCK SUPPLY CO INC	534.74	IRWD Check	Negotiable
417845	29-Apr-21	SOUTH ORANGE COUNTY REGIONAL CHAMBERS OF COMMERCE	2,500.00	IRWD Check	Negotiable
417846	29-Apr-21	SOUTHERN CALIFORNIA EDISON COMPANY	72,907.33	IRWD Check	Negotiable
417847	29-Apr-21	SOUTHERN CALIFORNIA EDISON COMPANY	4,200.00	IRWD Check	Negotiable
417848	29-Apr-21	SOUTHERN COUNTIES LUBRICANTS LLC	1,954.24	IRWD Check	Negotiable
417849	29-Apr-21	SOUTHWEST VALVE & EQUIPMENT INC	859.68	IRWD Check	Negotiable
417850	29-Apr-21	SPARKLETTS	236.86	IRWD Check	Negotiable
417851	29-Apr-21	STANTEC CONSULTING SERVICES INC.	3,600.00	IRWD Check	Negotiable
417852	29-Apr-21	STATION ELECTRIC	1,654.43	IRWD Check	Negotiable
417853	29-Apr-21	STETSON ENGINEERS INC.	1,009.75	IRWD Check	Negotiable
417854	29-Apr-21	SUKLE ADVERTISING INC.	5,692.50	IRWD Check	Negotiable
417855	29-Apr-21	SYNAGRO-WWT, INC.	30,509.92	IRWD Check	Negotiable
417856	29-Apr-21	TAIT ENVIRONMENTAL SERVICES, INC.	420.00	IRWD Check	Negotiable

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

CHECK OR ELECTRONIC #	PAYMENT DATE	SUPPLIERS	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
417857	29-Apr-21	TAYLOR MORRISON OF CALIFORNIA, LLC	38.14	IRWD Check	Negotiable
417858	29-Apr-21	TEKDRAULICS	3,626.40	IRWD Check	Negotiable
417859	29-Apr-21	TETRA TECH, INC	457.50	IRWD Check	Negotiable
417860	29-Apr-21	TEVORA BUSINESS SOLUTIONS, INC.	22,842.91	IRWD Check	Negotiable
417861	29-Apr-21	THE IRVINE COMPANY	2,566.49	IRWD Check	Negotiable
417862	29-Apr-21	THOMPSON & PHIPPS INC	17,231.68	IRWD Check	Negotiable
417863	29-Apr-21	TRI POINTE HOMES, INC.	442.81	IRWD Check	Negotiable
417864	29-Apr-21	TROPICAL PLAZA NURSERY INC	2,300.00	IRWD Check	Negotiable
417865	29-Apr-21	UNBEHAND, LAURIE M	929.64	IRWD Check	Negotiable
417866	29-Apr-21	UNITED PARCEL SERVICE INC	46.05	IRWD Check	Negotiable
417867	29-Apr-21	US BANK NAT'L ASSOCIATION NORTH DAKOTA	40,219.13	IRWD Check	Negotiable
417868	29-Apr-21	VERIZON WIRELESS SERVICES LLC	13,681.31	IRWD Check	Negotiable
417869	29-Apr-21	VERTECH INDUSTRIAL SYSTEMS, LLC	17,967.16	IRWD Check	Negotiable
417870	29-Apr-21	VERTEX INC	6,335.00	IRWD Check	Negotiable
417871	29-Apr-21	VOSSOUGH, NILOOFAR	217.74	IRWD Check	Negotiable
417872	29-Apr-21	VWR INTERNATIONAL, LLC	839.15	IRWD Check	Negotiable
417873	29-Apr-21	WARMINGTON HOMES	54.76	IRWD Check	Negotiable
417874	29-Apr-21	WATER TREATMENT CHEMICALS INC	12,152.96	IRWD Check	Negotiable
417875	29-Apr-21	WAXIE'S ENTERPRISES, INC	1,238.42	IRWD Check	Negotiable
417876	29-Apr-21	WECK LABORATORIES INC	3,575.00	IRWD Check	Negotiable
417877	29-Apr-21	WEST COAST SAFETY SUPPLY INC	17,648.42	IRWD Check	Negotiable
417878	29-Apr-21	WESTAMERICA COMMUNICATIONS, INC.	787.50	IRWD Check	Negotiable
417879	29-Apr-21	WESTERN NATIONAL CONTRACTORS	1,539.83	IRWD Check	Negotiable
417880	29-Apr-21	WORKFORCE SAFETY LLC	1,500.00	IRWD Check	Negotiable
417881	29-Apr-21	XYLEM WATER SOLUTIONS USA, INC.	1,445.96	IRWD Check	Negotiable
417882	29-Apr-21	YORKE ENGINEERING, LLC	1,543.25	IRWD Check	Negotiable
417883	29-Apr-21	ZEBRON CONTRACTING INC	14,175.00	IRWD Check	Negotiable
417884	29-Apr-21	Bornhoff, Mike (Mike)	200.00	IRWD Check	Negotiable
<b>SUB-TOTAL CHECK DISBURSEMENTS</b>			<b>10,491,209.13</b>		
14283	5-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	1,544.25	IRWD Wire	Negotiable
14284	5-Apr-21	CALPERS	570,357.67	IRWD Wire	Negotiable
14285	5-Apr-21	CALPERS	3,140.28	IRWD Wire	Negotiable
14286	6-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	3,275.54	IRWD Wire	Negotiable
14287	6-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	19,457.28	IRWD Wire	Negotiable
14288	6-Apr-21	BANK OF AMERICA	39,815.14	IRWD Wire	Negotiable
14289	6-Apr-21	YORK INSURANCE SERVICES GROUP INC - CA	6,377.91	IRWD Wire	Negotiable
14290	7-Apr-21	BANK OF NEW YORK MELLON TRUST COMPANY NA	4,367.94	IRWD Wire	Negotiable
14291	7-Apr-21	U.S. BANK NATIONAL ASSOCIATION	934.91	IRWD Wire	Negotiable
14292	7-Apr-21	BANK OF AMERICA	762.27	IRWD Wire	Negotiable
14293	7-Apr-21	U.S. BANK NATIONAL ASSOCIATION	1,800,043.90	IRWD Wire	Negotiable
14294	7-Apr-21	INTERNAL REVENUE SERVICE	221,004.35	IRWD Wire	Negotiable
14295	7-Apr-21	FRANCHISE TAX BOARD	68,682.63	IRWD Wire	Negotiable
14296	7-Apr-21	EMPLOYMENT DEVELOPMENT DEPARTMENT	20,098.55	IRWD Wire	Negotiable
14297	7-Apr-21	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	2,311.47	IRWD Wire	Negotiable
14298	7-Apr-21	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	182,993.53	IRWD Wire	Negotiable
14299	12-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	4,977.90	IRWD Wire	Negotiable
14300	12-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	3,313.53	IRWD Wire	Negotiable
14301	12-Apr-21	CALPERS	253,040.74	IRWD Wire	Negotiable
14302	12-Apr-21	CALPERS	3,738.60	IRWD Wire	Negotiable
14303	12-Apr-21	CALPERS	1,529.52	IRWD Wire	Negotiable
14304	13-Apr-21	YORK INSURANCE SERVICES GROUP INC - CA	868.64	IRWD Wire	Negotiable
14305	13-Apr-21	WELLS FARGO BANK, N.A.	7,374.85	IRWD Wire	Negotiable
14306	19-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	4,019.57	IRWD Wire	Negotiable
14307	19-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	6,811.13	IRWD Wire	Negotiable
14308	20-Apr-21	YORK INSURANCE SERVICES GROUP INC - CA	5,104.96	IRWD Wire	Negotiable
14309	20-Apr-21	BANK OF AMERICA MERRILL LYNCH	92,666.73	IRWD Wire	Negotiable
14310	22-Apr-21	INTERNAL REVENUE SERVICE	222,149.41	IRWD Wire	Negotiable
14311	22-Apr-21	FRANCHISE TAX BOARD	67,280.51	IRWD Wire	Negotiable
14312	22-Apr-21	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	186,826.16	IRWD Wire	Negotiable
14313	22-Apr-21	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	2,311.47	IRWD Wire	Negotiable
14314	22-Apr-21	EMPLOYMENT DEVELOPMENT DEPARTMENT	20,030.35	IRWD Wire	Negotiable
14315	22-Apr-21	HUANG, QIONG	33.62	IRWD Wire	Negotiable
14316	22-Apr-21	JAMAL, SAMIRA	21.33	IRWD Wire	Negotiable

**IRVINE RANCH WATER DISTRICT  
AP DISBURSEMENTS AND VOIDS FOR APRIL 2021**

<b>CHECK OR ELECTRONIC #</b>	<b>PAYMENT DATE</b>	<b>SUPPLIERS</b>	<b>PAYMENT AMOUNT</b>	<b>PAYMENT METHOD</b>	<b>STATUS</b>
14317	22-Apr-21	HAHN, RYAN	32.58	IRWD Wire	Negotiable
14318	22-Apr-21	DAVIS, TODD	65.08	IRWD Wire	Negotiable
14319	22-Apr-21	CALPERS	254,230.66	IRWD Wire	Negotiable
14320	26-Apr-21	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	1,596,238.59	IRWD Wire	Negotiable
14321	26-Apr-21	U.S. BANK NATIONAL ASSOCIATION	604.76	IRWD Wire	Negotiable
14322	26-Apr-21	SUMITOMO MITSUI BANKING CORPORATION	1,282.18	IRWD Wire	Negotiable
14323	26-Apr-21	U.S. BANK NATIONAL ASSOCIATION	45,033.28	IRWD Wire	Negotiable
14324	26-Apr-21	SUMITOMO MITSUI BANKING CORPORATION	36,711.76	IRWD Wire	Negotiable
14325	26-Apr-21	BANK OF NEW YORK MELLON TRUST COMPANY NA	3,867.40	IRWD Wire	Negotiable
14326	26-Apr-21	BANK OF NEW YORK MELLON TRUST COMPANY NA	5,973.76	IRWD Wire	Negotiable
14327	26-Apr-21	U.S. BANK NATIONAL ASSOCIATION	22,990.80	IRWD Wire	Negotiable
14328	26-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	4,198.26	IRWD Wire	Negotiable
14329	26-Apr-21	CHARD SNYDER & ASSOCIATES, INC.	2,073.88	IRWD Wire	Negotiable
14330	27-Apr-21	YORK INSURANCE SERVICES GROUP INC - CA	3,282.52	IRWD Wire	Negotiable
14331	28-Apr-21	U.S. BANK NATIONAL ASSOCIATION	5,794,250.00	IRWD Wire	Negotiable
14332	28-Apr-21	BANK OF NEW YORK MELLON TRUST COMPANY NA	1,002.04	IRWD Wire	Negotiable
14333	28-Apr-21	BANK OF NEW YORK MELLON TRUST COMPANY NA	13,611.11	IRWD Wire	Negotiable
14334	29-Apr-21	BANK OF NEW YORK MELLON TRUST COMPANY NA	1,536.89	IRWD Wire	Negotiable
14335	29-Apr-21	BANK OF NEW YORK MELLON TRUST COMPANY NA	2,071.82	IRWD Wire	Negotiable
14336	29-Apr-21	IRWD	31,000.00	IRWD Wire	Negotiable
<b>SUB-TOTAL ELECTRONIC DISBURSEMENTS</b>			<b>11,647,324.01</b>		
<b>SUB-TOTAL AP CHECK AND ELECTRONIC DISBURSEMENTS</b>			<b>22,138,533.14</b>		
<b>SUB-TOTAL CHECK AND ELECTRONIC ISSUED AND VOIDED IN APR 2020</b>			<b>-</b>		
416943	1-Apr-21	CHEN, KAI	25.44	IRWD CHECK	Voided
417050	1-Apr-21	NX UTILITIES LLC	1,502.00	IRWD CHECK	Voided
417129	1-Apr-21	YIM, YOUNG	74.12	IRWD CHECK	Voided
417132	1-Apr-21	ZHAO, HUIFANG	48.43	IRWD CHECK	Voided
417314	8-Apr-21	TIC-RETAIL PROPERTIES	65.28	IRWD CHECK	Voided
<b>SUB-TOTAL CHECK AND ELECTRONIC ISSUED AND VOIDED IN APR 2021</b>			<b>1,715.27</b>		
<b>TOTAL AP DISBURSEMENTS AND VOIDS FOR APR 2020</b>			<b>22,136,817.87</b>		

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Exhibit "E"

**MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS**

**April  
2021**

	AMOUNT	VENDOR	PURPOSE
4/9/2021	1,068,245.42	BANK OF AMERICA	ACH Payments for Payroll
4/23/2021	1,067,764.76	BANK OF AMERICA	ACH Payments for Payroll
	<u><b>\$2,136,010.18</b></u>		

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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-APR-21 to 30-APR-21

NAME	CHECK NO.	CHECK DATE	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Bennett, Ray	417342	15-Apr-21	112.25	Other(Misc)	Office supplies, working remotely at home
Bennett, Ray	417342	15-Apr-21	120.65	Other(Misc)	Printer ink, working remotely at home
Bornhoff, Mike	417343	15-Apr-21	106.00	Certification Renewal	CWEA Mechanical Technologist Grade IV
Bornhoff, Mike	417884	29-Apr-21	200.00	Other(Misc)	Safety Shoe Allowance
Clinton, Bryan	417533	22-Apr-21	105.00	Certification Renewal	SWRCB Water Distribution Grade V
Fehser, Noah	417534	22-Apr-21	100.00	Certification Renewal	Cross Connection Specialist
Hansen, Casey	417346	15-Apr-21	110.00	Certification Renewal	SWRCB Wastewater Treatment Plant Operator Grade III
Ledesma, Alex	416897	1-Apr-21	165.39	Other(Misc)	Safety Shoe Allowance
McCarter, David	417138	8-Apr-21	240.00	Certification Renewal	SWRCB Distribution Grade IV Operator
Nguyen, Claire	416898	1-Apr-21	125.00	Other(Misc)	Safety Shoe Allowance
Oldewage, Lars	417347	15-Apr-21	294.00	Membership Renewal	AWWA California-Nevada Section
Orozco, Linda	417535	22-Apr-21	200.00	Other(Misc)	Safety Shoe Allowance
Pardee, Debra	417139	8-Apr-21	175.00	Registration Fees	CSDA Rate Setting Under Propositions 218 and 26 Workshop
Rock, Doug	416899	1-Apr-21	115.72	Other(Misc)	Wireless device protection equipment
Soto, Frank	417706	29-Apr-21	192.00	Membership Renewal	CWEA membership
Vargas, Gabriel	417537	22-Apr-21	140.00	Certification Renewal	SWRCB Distribution Grade 4 Operator
Wise, Maureen	416901	1-Apr-21	132.89	Other(Misc)	Safety Shoe Allowance
Zamora, Victor A	417348	15-Apr-21	145.47	Other(Misc)	Shade Tree Nursery supplies
Zuniga, Emilyn	417349	15-Apr-21	200.00	Other(Misc)	Safety Shoe Allowance
<b>Total Amount:</b>			<b>\$2,979.37</b>		

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May 24, 2021  
Prepared and  
submitted by: C. Compton  
Approved by: Paul A. Cook



CONSENT CALENDAR:

POLICY REVISIONS AND ADDITIONS RELATED TO  
DISTRICT APPROVALS, AUTHORIZATIONS AND PROCEDURES

SUMMARY:

In January 2020, the Board approved revisions to IRWD's policies related to delegations of authority for purchasing and procurement, acquisitions of real property interests, dispositions of real and personal property and settlement of administrative claims. Revisions to these policies are necessary from time to time to keep current with state and federal law, to maintain best practices in policy and procedure administration, and to ensure the efficient and effective conduct of District business.

Staff recently reviewed IRWD's Real Property Policy and recommends revisions to address previously unaddressed authorities related to the District's operational properties outside of Orange County. Staff recommends the Board adopt a resolution superseding Resolution No. 2020-1 and adopting a revised Real Property Policy.

BACKGROUND:

In January 2020, the Board adopted Resolutions Nos. 2020-1, 2020-2, 2020-3, and 2020-4 which modified policies related to District delegations of authority for purchasing and procurement, accepting and consenting to deeds and dedications, disposal of District property, the settlement of administrative claims, and the acquisition of land and easements. One of the District's delegation of authority policies is the Real Property Policy, which was adopted through Resolution No. 2020-1.

IRWD's current Real Property Policy deals with the acquisition, disposition, leasing, and management of the District's real property. It includes real property owned by the District for both investment and operational purposes. Among other things, the Policy authorizes the General Manager to approve lease agreements with gross annual revenue of \$250,000 or less, while lease agreements with gross annual revenue of more than \$250,000 require Board approval. Additionally, the Policy provides the General Manager with the authorization to execute certain entry permits, licenses, rights of way, joint use agreements and other forms for permitted uses of District real property.

Recently, staff reviewed the current Real Property Policy and identified the need for the policy to address unique aspects of operational property the District owns outside of Orange County and which are located in landowner districts. When a landowner district holds an election, each landowner, including public agencies who own land within that district, are entitled to vote in the election. A landowner who is not a person must appoint a legal representative who is authorized to act for, and on behalf of, the District with regard to the landowner district and its elections.

Staff recommends that the Real Property Policy be amended to authorize the General Manager, after consulting with and receiving the consent of the Supply Reliability Programs Committee, to appoint and replace a legal representative of the District who is authorized to act for, and on behalf of, the District with regard to a landowner district in which IRWD owns property and the landowner district's elections. A red-line version of the proposed policy change is included in Exhibit "A".

To enact this revision to the Real Property Policy, staff recommends the Board adopt a resolution superseding Resolution No. 2020-1 and adopting the revised Real Property Policy. The proposed resolution is provided as Exhibit "B".

COMMITTEE STATUS:

This item has not been reviewed by a Committee.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2021 -

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT,  
SUPERSEDING RESOLUTION NO. 2020-1 AND  
ADOPTING A REVISED REAL PROPERTY POLICY

LIST OF EXHIBITS:

Exhibit "A" – Redline of the Proposed Revised Real Property Policy  
Exhibit "B" – Proposed Resolution Superseding Resolution No. 2020-1 and Adopting A  
Revised Real Property Policy

## Exhibit "A"

### Irvine Ranch Water District Real Property Policy

#### Section 1. General

1.1. Administration. This Real Property Policy sets out the policy of the Irvine Ranch Water District ("**District**") with respect to the acquisition, use and disposal of real property and with respect to the District's interests in real property, including water, water rights, and works (facilities). This Policy will be administered by the General Manager of the District or his designee ("**Manager**") and is intended to be liberally construed to effectuate the Board's intent behind the delegations of authority included in this policy.

1.2. Acquisitions. The District will acquire rights in real property for the construction, operation and maintenance of District facilities ("**Operational Property**") in accordance with Section 2 of this policy. Acquisitions of real property for the purpose of investments ("**Investment Property**") is governed by the Real Estate Investment Policy, Resolution No. 2019-8, and as it may be amended from time to time.

1.3. Uses. The District may enter into agreements to lease certain real properties, when appropriate. The District may also enter into entry permits, licenses, rights of way, joint use and similar agreements for District purposes and for approved uses of District real properties. The District's policy with respect to uses of property are described in Section 3.

1.4. Dispositions. The District's Board of Directors ("**Board**") shall authorize all dispositions (sales) of real property, pursuant to Section 4.

1.5. California Environmental Quality Act. The District shall at all times comply with the California Environmental Quality Act ("**CEQA**") in entering into any real property transaction. The District shall require all third party users of the District's real property to pay all costs relating to CEQA compliance, and to indemnify, defend, and hold the District harmless from any and all claims arising out of or relating to CEQA compliance for that third party's use or proposed use unless there is a justifiable business reason, in the opinion of the Manager, for the District to waive such requirements.

#### Section 2. Acquisition of Operational Property

2.1. The District may acquire real property and real property rights for Operational Properties through donations by land developers, negotiated purchase agreements, and eminent domain. The form of acquisition of these rights will generally depend on the type of facilities being acquired or constructed, as follows:

(i) Non-Capital Facilities. Applicant-provided or donated facilities and related property rights are known as "**Non-Capital Facilities**" and will be acquired as set forth in Section 2.2.

(ii) Capital Facilities. "**Capital Facilities**" are facilities that are acquired or to be provided by the District to extend services to an applicant's development or facilities acquired or constructed by the District that serve regional needs. Capital facilities shall also include real property donated to the District for the construction of Capital Facilities. Real property rights for Capital Facilities will be acquired as set forth in Section 2.3.

2.2. Non-Capital Facilities. The District's Rules and Regulations (at Sections 5.2 and 5.4) and its standard application for service/service agreement require applicants for service to provide the District with Non-Capital Facilities, which consists of all facilities and related easements necessary to connect the applicant's property with the District's water or recycled water distribution, sewage collection, or natural treatment system facilities. For all Non-Capital Facilities, a bill of sale and conveyance instrument must be provided to the District at no cost unless there is a justifiable business reason for the District, in the opinion Manger, to waive such requirements.

(i) Conveyance and Bill of Sale. As a condition of connection to the District's system or the District's acceptance of a Non-Capital Facility, the District will require the applicant to provide:

(A) An easement, or conveyance of a higher property right as may be required by the Manager, for construction, installation, maintenance of and access to applicant's non-capital facilities, in a form (separate instrument or final map dedication), condition of title, and location mutually acceptable to District and applicant, together with

(B) A bill of sale for any associated facilities such as pipelines, vaults, or pump stations.

(ii) Review and Approval. Upon the Manager's review and approval of the conveyance and bill of sale, the Secretary shall certify acceptance of those instruments as set forth below.

(iii) Form of Conveyance

(A) Dedication By Final Map. Final map easement dedications must include in the ownership certificate on the title sheet of the map:

(1) The District's standard dedication statement in a form substantially similar to Exhibit "1", signed by a properly licensed engineer or surveyor; and

(2) A certificate of acceptance to be signed by the District Secretary in a form substantially similar to Exhibit "1".

(B) Easement Conveyed by Deed or Agreement

(1) In general, easements conveyed by separate grant or quitclaim instrument or agreement must use the District's standard forms. The applicant must furnish a legal description and any depiction, each signed by a licensed land surveyor, which will be attached as exhibits. The District shall prepare and attach a certificate of acceptance signed by the District Secretary in a form substantially similar to Exhibit "2".

(2) From time to time, the District's standard form easement may not be the suitable conveyance instrument for transferring Non-Capital Facility related easements to the District (e.g. acquisition of an easement or right of way from a railroad or electric utility). The Manager may, as he deems appropriate, accept another form or type of conveyance.

(C) Deed. A fee simple interest in the property conveyed using the District's uniform form of grant deed. The applicant must furnish a legal description and any depiction, which shall be attached as exhibit. Quitclaim deeds may also be accepted at the District's discretion.

2.3. District Acquisition of Capital Facilities and Real Property; Manager's Authority. This section governs acquisition of real property and property rights for all District Capital Facilities and other operational uses. The Manager is hereby authorized to acquire real property or real property rights for a negotiated price or other consideration to be provided by the District valued at \$250,000 or less. Any acquisition of real property or real property right that will result in the District providing consideration in excess of \$250,000, or that is made under threat of eminent domain where the property owner has not requested that the property be acquired under such as threat, will require Board approval.

(i) Property Interest. The District shall acquire the highest property interest normally acquired or appropriate for the type of District use or Capital Facility intended to be placed on the property unless there is a justifiable business reason, in the opinion of the Manager, for the District to acquire a different property interest. The type of property interest acquired should be guided by the following:

(A) Fee Simple Preferred. The District shall acquire a fee simple interest in property if the District requires the full use of the surface of the land or the control of access (generally, reservoirs, pumping or lift stations, treatment facilities, wells).

(B) Exclusive Easement Alternative. The District may acquire an exclusive easement in lieu of a fee simple interest at the District's discretion on a case by case basis, based on the anticipated surface and subsurface uses by the District and the property owner and/or other considerations.

(C) Non-Exclusive Easement. A non-exclusive easement will be acquired only where compatible surface or subsurface uses can be accommodated or tolerated (generally, pipelines, pressure reducing valves, meters, slope maintenance, drainage, access).

(D) Temporary Easement or Right-of-Way. The District may acquire a temporary easement or right-of-way. Temporary easements will usually be acquired for the construction of Capital Facilities where a work area larger than the project site is needed during construction, or for a temporary facility needed while a permanent Capital Facility is being constructed. Temporary easements acquired by the District shall be for a limited term.

(E) License. The District may acquire a license to use property if acquiring the license is not inconsistent with the District's long-term Operational Uses and Capital Facilities. A license involving the site of a Capital Facility may be acquired if the granting party is a public utility or another public agency.

(ii) Time of Acquisition; Procedure

(A) Capital Facilities

(1) All sites and easements for Capital Facilities, except for natural treatment system sites, must be conveyed to the District prior to commencement of construction of the facilities by the District. If District Capital Facilities are to be constructed by

the applicant or other party under a reimbursement agreement with the District, the District shall not pay any reimbursements until conveyance is complete.

(2) Easements or fee interests required by the District for a Capital Facility may be acquired by negotiation between the District and the property owner to establish monetary or other consideration on a case-by-case basis. This may require an appraisal of the value of the site or easement. The negotiation for a site shall take into consideration the requirements of this section.

(B) Natural Treatment Systems. Natural treatment system sites will be acquired at the time determined by the District.

(C) Estimated Boundary Acquisitions. A site or easement that is not fully definable prior to commencement of construction of the facilities because of the stage of surrounding parcel definition will be acquired with an estimated boundary subject to an agreement by the District to quitclaim excess area, or quitclaim the site or easement upon acquisition of a substitute deed with legal description of final site or easement boundary.

(iii) Form of Conveyance

(A) The District shall generally use uniform forms of grant deed and easement grants or agreements, including but not limited to the reference deed used in final map dedications. A formal contract shall be used, except for easements by final map dedication; the service agreement shall serve as the formal contract in the case of a separate instrument for non-capital facilities. Quitclaim deeds may also be accepted at the District's discretion. The District shall prepare the legal description and any depiction, which shall be attached as exhibits. The grant deed shall contain standard reservations of mineral interests and perimeter utility easements. Changes to this Policy shall not affect instruments incorporating reference to a prior version of this Policy.

(B) Easement purposes shall be indicated by general type, e.g., water, sewer, recycled water and/or access, and shall include the right to construct, reconstruct, remove and replace, renew, inspect, maintain, repair, improve, upsize, and otherwise use parallel or any other facilities or appurtenances of the same general type and purpose as or functionally related to the originally installed facilities, and shall include restrictions on the planting of trees.

(C) In unique circumstances, the District's standard forms may not be a suitable conveyance instrument (e.g. when property rights are acquired on lands owned by a public agency or public utility) for the real property conveyance sought by the District. The Manager may, as he deems appropriate, use a modified version of the District's standard forms or use another conveyance instrument provided the instrument adequately convey the property interest being acquired by the District and protects the District's short-term and long-term interests.

2.4. Due Diligence. The District may require that, at a minimum, a satisfactory Phase I Environmental Site Assessment, or comparable evaluation, be completed prior to acquiring a Capital Facility, Non-Capital Facility or other real property interest and will request legal counsel review when deemed appropriate.

Section 3. Use of District's Real Property

### 3.1. Uses of Operational and Investment Property

(i) Primary Uses of Operational Property. Fee-owned Operational Property will be primarily used for, or reserved for future, District operational facilities and appurtenances including the headquarters and other offices, water and wastewater treatment plants, buffer properties, and other works including transmission pipelines, conduits, vaults and valve structures, telemetry, retaining walls, parking areas, drains, culverts, access roads and driveways, control panels and boxes, operator residences, and facilities functionally related to any of the foregoing, except as provided for in this section.

(ii) Primary Uses of Investment Property. District Investment Property, which includes District-owned real property that is designated as an investment by the Board, will be held by the District for the purposes of investment and used by the District to earn an acceptable annual return on the investment to support the District's replacement fund.

(iii) Interim or Ancillary Uses. The Manager is hereby authorized to allow temporary or ancillary third-party uses of the District's real property, including both Operational Property and Investment Property, if he determines that those uses are compatible with and will not unduly interfere with the District's primary use and/or future uses of the property, and may include but are not limited to the following:

(A) Communications towers, poles, or other telecommunications equipment, subject to a lease or license;

(B) Filming or photography, by permit or license;

(C) Storage, by permit;

(D) Construction staging and laydown, by permit;

(E) Testing, surveying, or appraisals, by permit;

(F) Emergency access or emergency preparedness drills.

### 3.2. Leases

(i) Lease Agreement Negotiation and Approval – Operational Property. The Manager is hereby authorized to negotiate proposed lease terms with prospective tenant(s) to lease District Operating Property. The Manager is hereby authorized to execute a lease agreement, approved as to form by District's legal counsel, to lease District Operational Property for agricultural, commercial, residential or other permitted uses, if the gross annual lease revenue is less than, or equal to, \$250,000. Lease agreements with gross annual lease revenue greater than \$250,000 require Board approval.

(ii) Lease Agreement Negotiations and Approval – Investment Property. The Manager is hereby authorized to negotiate proposed lease terms with prospective tenant(s) to lease District Investment Property. The Manager is hereby authorized to execute a lease agreement, approved as to form by District's legal counsel, to lease District Investment Property for commercial, residential or other permitted uses, if the gross annual lease revenue is less than, or equal to, \$250,000. Lease agreements with gross annual lease revenue greater than \$250,000 require Board approval.

3.3. Granting of Easements and Other Non-Temporary Rights-of-Way Rights. The Manager is hereby delegated the authority to execute an easement or other lesser property right to a third party on an Operational Property or Investment Property if the value of the right being given to the third party is not greater than \$250,000 and if the granting of the easement or other non-temporary right is required for another utility provider to provide a service requested by IRWD to that property.

3.4. Other Permits, Licenses, Temporary Rights of Way, Joint Use and Other Agreements. The Manager is hereby delegated the authority to execute any and all necessary agreements pertaining to the use of the District's Operating or Investment Property by third parties and not otherwise described above, including, but not limited to, permits, licenses, entry permits, joint use agreements and other forms for permitted uses of District real property if he determines that those additional uses are compatible with and will not interfere with the District's primary and/or future operational or investment use, and where the total consideration for the term is less than, or equal to, \$250,000. All agreements with a total consideration greater than \$250,000 for the term of the agreement will require Board approval.

#### Section 4. Dispositions (Sales) of Real Property Interests

4.1. Designation of Land Prior to Disposition (Sale). Except as provided in Section 3.3, prior to any action being taken to dispose (sell) of all or a portion of a parcel of land owned by the District, the Board shall designate the land as either "**Surplus Land**" or "**Exempt Surplus Land**" consistent with the Surplus Land Act.

4.2. Disposition of Real Property. After the Board designates a parcel of land owned by the District in fee simple as either Surplus Land or Exempt Surplus Land, the District may use or dispose of the real property for valuable consideration in accordance with the Surplus Land Act and any other applicable law.

4.3. Easements Replaced Or No Longer Needed. If an easement is no longer necessary for the District's purposes or is replaced by a substitute easement, then the District will quitclaim that easement to the owner of record upon request or the District's initiative. The Manager is hereby authorized to execute a quitclaim deed or equivalent instrument to the owner of record for the purposes of this section, including, without limitation, for the purpose of quitclaiming any portion of an easement to reconfigure areas not fully definable at the time of conveyance.

Section 5. IRWD Water Banks and Water Rights. All acquisitions and sales of water associated with the IRWD Water Banks require Board approval. In addition, all acquisitions and dispositions of water rights require Board approval.

Section 6. IRWD Representative in Landowner Districts Outside Orange County. The Manager, after consulting with and receiving the consent of the Supply Reliability Committee, is hereby authorized to appoint and replace legal representative(s) of the District (i.e., landowner's representative) each of whom is authorized to act for, and on behalf of, the District with regards to any specific landowner district in which the District owns property and that landowner district's elections.

Exhibit "1"  
Final Map Easement Dedications  
Form of Dedication Statement and Form of Acceptance

**Subdivision map dedication statement  
to be added to ownership certificate:**

(All maps except those for Heritage Fields)

We also grant by dedication to the Irvine Ranch Water District those pipeline easements for [\_\_\_\_\_] and access purposes shown on this map, which easements shall be subject to the same terms and conditions as are shown in that certain easement recorded May 15, 2013 as inst. No. 2013000293969 of Official Records of Orange County.

(Heritage Fields Maps Only)

We also grant by dedication to the Irvine Ranch Water District those pipeline easements for [\_\_\_\_\_] and access purposes shown on this map, which easements shall be subject to the same terms and conditions as are shown in that certain easement recorded March 25, 2013 as Inst. No. 2013000177032 of Official Records of Orange County.

**Secretary's Certificate of Acceptance,  
in a form substantially similar to the following:**

IRVINE RANCH WATER DISTRICT  
Certificate of Acceptance

This is to certify that the interests in real property conveyed by dedication and shown on this final map to Irvine Ranch Water District, a California Water District, are hereby accepted by the undersigned officer on behalf of the Board of Directors pursuant to authority conferred by Resolution No. 2019-\_\_\_ of the Board of Directors, adopted on December 16, 2019, and the grantee consents to recordation thereof by its duly authorized officer.

Date: \_\_\_\_\_

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

Exhibit "2"

Form of Acceptance for Grants, Deeds, and Agreements

IRVINE RANCH WATER DISTRICT  
Certificate of Acceptance

This is to certify that the interest in real property conveyed by the deed or grant dated \_\_\_\_\_ from \_\_\_\_\_ to Irvine Ranch Water District, a California Water District, is hereby accepted by the undersigned officer on behalf of the Board of Directors pursuant to authority conferred by Resolution No. 2019- \_\_\_\_ of the Board of Directors, adopted on \_\_\_\_\_, 2019, and the grantee consents to recordation thereof by its duly authorized officer.

Date: \_\_\_\_\_

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

EXHIBIT "B"

RESOLUTION NO. 2021 - \_\_\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
SUPERSEDING RESOLUTION NO. 2020-1  
AND ADOPTING A REVISED REAL PROPERTY POLICY

Irvine Ranch Water District ("District") is a California Water District formed pursuant to the California Water District Law, Water Code Section 34000, *et seq.*

Water Code Section 34031 defines "property" as "all real and personal property, including water, water rights, works, easements, and rights of way."

The Water Code, including Sections 35401, 35405, 35600, and 35604, authorize the District to accept, acquire, and dispose of property or rights in property necessary or proper for the District's works, which includes facilities to supply, drain, reclaim, distribute and store water, including dams and reservoirs. Pursuant to that authority, the District acquires various interests in property for the construction, operation, and maintenance of its facilities, including lands and easements required to be dedicated to the District by an applicant for service under the District's Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service.

The District sells, leases, licenses, and grants easements over its real property for operational and investment purposes.

The District engages in water transfers and exchanges, and seeks to maximize its water rights and access to reliable water for the benefit of its customers.

The Board of Directors intends by this Resolution to revise the policy of the District with real property.

The Board previously adopted Resolution No. 2020-1, which provided adopted the District's Real Property Policy. The Board intends by this Resolution to supersede that resolution with respect to real property matters.

The Board of Directors of the Irvine Ranch Water District therefore RESOLVES as follows:

Section 1. Resolution No. 2020-1 is hereby superseded.

Section 2. The District hereby adopts the revised Real Property Policy attached as Exhibit "A."

ADOPTED, SIGNED AND APPROVED on May 24, 2021.

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

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

APPROVED AS TO FORM:  
Hanson Bridgett LLP

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

## **Irvine Ranch Water District Real Property Policy**

### Section 1. General

1.1. Administration. This Real Property Policy sets out the policy of the Irvine Ranch Water District (“**District**”) with respect to the acquisition, use and disposal of real property and with respect to the District’s interests in real property, including water, water rights, and works (facilities). This Policy will be administered by the General Manager of the District or his designee (“**Manager**”) and is intended to be liberally construed to effectuate the Board’s intent behind the delegations of authority included in this policy.

1.2. Acquisitions. The District will acquire rights in real property for the construction, operation and maintenance of District facilities (“**Operational Property**”) in accordance with Section 2 of this policy. Acquisitions of real property for the purpose of investments (“**Investment Property**”) is governed by the Real Estate Investment Policy, Resolution No. 2019-8, and as it may be amended from time to time.

1.3. Uses. The District may enter into agreements to lease certain real properties, when appropriate. The District may also enter into entry permits, licenses, rights of way, joint use and similar agreements for District purposes and for approved uses of District real properties. The District’s policy with respect to uses of property are described in Section 3.

1.4. Dispositions. The District’s Board of Directors (“**Board**”) shall authorize all dispositions (sales) of real property, pursuant to Section 4.

1.5. California Environmental Quality Act. The District shall at all times comply with the California Environmental Quality Act (“**CEQA**”) in entering into any real property transaction. The District shall require all third party users of the District’s real property to pay all costs relating to CEQA compliance, and to indemnify, defend, and hold the District harmless from any and all claims arising out of or relating to CEQA compliance for that third party’s use or proposed use unless there is a justifiable business reason, in the opinion of the Manager, for the District to waive such requirements.

### Section 2. Acquisition of Operational Property

2.1. The District may acquire real property and real property rights for Operational Properties through donations by land developers, negotiated purchase agreements, and eminent domain. The form of acquisition of these rights will generally depend on the type of facilities being acquired or constructed, as follows:

(i) Non-Capital Facilities. Applicant-provided or donated facilities and related property rights are known as “**Non-Capital Facilities**” and will be acquired as set forth in Section 2.2.

(ii) Capital Facilities. “**Capital Facilities**” are facilities that are acquired or to be provided by the District to extend services to an applicant’s development or facilities acquired or constructed by the District that serve regional needs. Capital facilities shall also include real property donated to the District for the construction of Capital Facilities. Real property rights for Capital Facilities will be acquired as set forth in Section 2.3.

2.2. Non-Capital Facilities. The District's Rules and Regulations (at Sections 5.2 and 5.4) and its standard application for service/service agreement require applicants for service to provide the District with Non-Capital Facilities, which consists of all facilities and related easements necessary to connect the applicant's property with the District's water or recycled water distribution, sewage collection, or natural treatment system facilities. For all Non-Capital Facilities, a bill of sale and conveyance instrument must be provided to the District at no cost unless there is a justifiable business reason for the District, in the opinion Manger, to waive such requirements.

(i) Conveyance and Bill of Sale. As a condition of connection to the District's system or the District's acceptance of a Non-Capital Facility, the District will require the applicant to provide:

(A) An easement, or conveyance of a higher property right as may be required by the Manager, for construction, installation, maintenance of and access to applicant's non-capital facilities, in a form (separate instrument or final map dedication), condition of title, and location mutually acceptable to District and applicant, together with

(B) A bill of sale for any associated facilities such as pipelines, vaults, or pump stations.

(ii) Review and Approval. Upon the Manager's review and approval of the conveyance and bill of sale, the Secretary shall certify acceptance of those instruments as set forth below.

(iii) Form of Conveyance

(A) Dedication By Final Map. Final map easement dedications must include in the ownership certificate on the title sheet of the map:

(1) The District's standard dedication statement in a form substantially similar to Exhibit "1", signed by a properly licensed engineer or surveyor; and

(2) A certificate of acceptance to be signed by the District Secretary in a form substantially similar to Exhibit "1".

(B) Easement Conveyed by Deed or Agreement

(1) In general, easements conveyed by separate grant or quitclaim instrument or agreement must use the District's standard forms. The applicant must furnish a legal description and any depiction, each signed by a licensed land surveyor, which will be attached as exhibits. The District shall prepare and attach a certificate of acceptance signed by the District Secretary in a form substantially similar to Exhibit "2".

(2) From time to time, the District's standard form easement may not be the suitable conveyance instrument for transferring Non-Capital Facility related easements to the District (e.g. acquisition of an easement or right of way from a railroad or electric utility). The Manager may, as he deems appropriate, accept another form or type of conveyance.

(C) Deed. A fee simple interest in the property conveyed using the District's uniform form of grant deed. The applicant must furnish a legal description and any depiction, which shall be attached as exhibit. Quitclaim deeds may also be accepted at the District's discretion.

2.3. District Acquisition of Capital Facilities and Real Property; Manager's Authority. This section governs acquisition of real property and property rights for all District Capital Facilities and other operational uses. The Manager is hereby authorized to acquire real property or real property rights for a negotiated price or other consideration to be provided by the District valued at \$250,000 or less. Any acquisition of real property or real property right that will result in the District providing consideration in excess of \$250,000, or that is made under threat of eminent domain where the property owner has not requested that the property be acquired under such as threat, will require Board approval.

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(B) Exclusive Easement Alternative. The District may acquire an exclusive easement in lieu of a fee simple interest at the District's discretion on a case by case basis, based on the anticipated surface and subsurface uses by the District and the property owner and/or other considerations.

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(D) Temporary Easement or Right-of-Way. The District may acquire a temporary easement or right-of-way. Temporary easements will usually be acquired for the construction of Capital Facilities where a work area larger than the project site is needed during construction, or for a temporary facility needed while a permanent Capital Facility is being constructed. Temporary easements acquired by the District shall be for a limited term.

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(ii) Time of Acquisition; Procedure

(A) Capital Facilities

(1) All sites and easements for Capital Facilities, except for natural treatment system sites, must be conveyed to the District prior to commencement of construction of the facilities by the District. If District Capital Facilities are to be constructed by

the applicant or other party under a reimbursement agreement with the District, the District shall not pay any reimbursements until conveyance is complete.

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(B) Natural Treatment Systems. Natural treatment system sites will be acquired at the time determined by the District.

(C) Estimated Boundary Acquisitions. A site or easement that is not fully definable prior to commencement of construction of the facilities because of the stage of surrounding parcel definition will be acquired with an estimated boundary subject to an agreement by the District to quitclaim excess area, or quitclaim the site or easement upon acquisition of a substitute deed with legal description of final site or easement boundary.

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- (B) Filming or photography, by permit or license;
- (C) Storage, by permit;
- (D) Construction staging and laydown, by permit;
- (E) Testing, surveying, or appraisals, by permit;
- (F) Emergency access or emergency preparedness drills.

### 3.2. Leases

(i) Lease Agreement Negotiation and Approval – Operational Property. The Manager is hereby authorized to negotiate proposed lease terms with prospective tenant(s) to lease District Operating Property. The Manager is hereby authorized to execute a lease agreement, approved as to form by District's legal counsel, to lease District Operational Property for agricultural, commercial, residential or other permitted uses, if the gross annual lease revenue is less than, or equal to, \$250,000. Lease agreements with gross annual lease revenue greater than \$250,000 require Board approval.

(ii) Lease Agreement Negotiations and Approval – Investment Property. The Manager is hereby authorized to negotiate proposed lease terms with prospective tenant(s) to lease District Investment Property. The Manager is hereby authorized to execute a lease agreement, approved as to form by District's legal counsel, to lease District Investment Property for commercial, residential or other permitted uses, if the gross annual lease revenue is less than, or equal to, \$250,000. Lease agreements with gross annual lease revenue greater than \$250,000 require Board approval.

3.3. Granting of Easements and Other Non-Temporary Rights-of-Way Rights. The Manager is hereby delegated the authority to execute an easement or other lesser property right to a third party on an Operational Property or Investment Property if the value of the right being given to the third party is not greater than \$250,000 and if the granting of the easement or other non-temporary right is required for another utility provider to provide a service requested by IRWD to that property.

3.4. Other Permits, Licenses, Temporary Rights of Way, Joint Use and Other Agreements. The Manager is hereby delegated the authority to execute any and all necessary agreements pertaining to the use of the District's Operating or Investment Property by third parties and not otherwise described above, including, but not limited to, permits, licenses, entry permits, joint use agreements and other forms for permitted uses of District real property if he determines that those additional uses are compatible with and will not interfere with the District's primary and/or future operational or investment use, and where the total consideration for the term is less than, or equal to, \$250,000. All agreements with a total consideration greater than \$250,000 for the term of the agreement will require Board approval.

#### Section 4. Dispositions (Sales) of Real Property Interests

4.1. Designation of Land Prior to Disposition (Sale). Except as provided in Section 3.3, prior to any action being taken to dispose (sell) of all or a portion of a parcel of land owned by the District, the Board shall designate the land as either "**Surplus Land**" or "**Exempt Surplus Land**" consistent with the Surplus Land Act.

4.2. Disposition of Real Property. After the Board designates a parcel of land owned by the District in fee simple as either Surplus Land or Exempt Surplus Land, the District may use or dispose of the real property for valuable consideration in accordance with the Surplus Land Act and any other applicable law.

4.3. Easements Replaced Or No Longer Needed. If an easement is no longer necessary for the District's purposes or is replaced by a substitute easement, then the District will quitclaim that easement to the owner of record upon request or the District's initiative. The Manager is hereby authorized to execute a quitclaim deed or equivalent instrument to the owner of record for the purposes of this section, including, without limitation, for the purpose of quitclaiming any portion of an easement to reconfigure areas not fully definable at the time of conveyance.

Section 5. IRWD Water Banks and Water Rights. All acquisitions and sales of water associated with the IRWD Water Banks require Board approval. In addition, all acquisitions and dispositions of water rights require Board approval.

Section 6. IRWD Representative in Landowner Districts Outside Orange County. The Manager, after consulting with and receiving the consent of the Supply Reliability Committee, is hereby authorized to appoint and replace legal representative(s) of the District (i.e., landowner's representative) each of whom is authorized to act for, and on behalf of, the District with regards to any specific landowner district in which the District owns property and that landowner district's elections.

May 24, 2021

Prepared by: R. Burk / M. Cortez

Submitted by: K. Burton

Approved by: Paul A. Cook



## ACTION CALENDAR

### HARVARD AVENUE TRUNK SEWER DIVERSION STRUCTURE REHABILITATION AND MWRP PRIMARY CLARIFIERS CHANNEL LINING BUDGET INCREASE AND CONSTRUCTION AWARD

#### SUMMARY:

The Harvard Avenue Trunk Sewer (HATS) Diversion Structure Rehabilitation and Michelson Water Recycling Plant (MWRP) Primary Clarifiers Channel Lining will rehabilitate the HATS Diversion Structure, including replacing the slide gates and relining the structure, and the MWRP Primary Clarifiers channels. Staff recommends the Board:

- Authorize a budget increase in the amount of \$2,155,000, from \$707,000 to \$2,862,000, and
- Authorize the General Manager to execute a construction contract with Pacific Hydrotech Corporation in the amount of \$1,827,750 for the HATS Diversion Structure Rehabilitation and MRWP Primary Clarifiers Channel Lining.

#### BACKGROUND:

The HATS Diversion Structure is an approximately 20-foot-deep manhole located on Main Street west of the intersection with Harvard Avenue. The structure contains two gates allowing sewage to be conveyed either to the HATS Pump Station or to the Orange County Sanitation District (OC SAN). The structure was constructed in 2008 with an internal lining of polyurethane. In September 2018, a visual inspection was completed of the interior of the structure and identified the structure lining to be compromised. The inspection recommended that the existing liner be fully replaced, and the underlying concrete be rehabilitated. In addition, both gates were noted to be in poor condition due to corrosion and require replacement.

During the design of the current project to replace the aluminum covers at the MWRP Primary Clarifiers, the lining of the influent and effluent channels was inspected and observed to be in poor condition and in need of full replacement; the existing lining was installed in 1996. This work to replace the channels' lining was added to the HATS project scope since it was similar in nature, i.e., bypassing flow and relining structures.

IRWD retained Tetra Tech, Inc. to provide engineering design services for the rehabilitation of the HATS Diversion Structure and relining of the MWRP Primary Clarifiers 1-5 influent and effluent channels. Work at the HATS Diversion Structure will include removal of the existing liner, repair of all spalled concrete, relining the structure, and replacing both slide gates. To perform this work, an average of 11 million gallons per day (MGD) of flow will be bypass pumped around the HATS structure to OC SAN for approximately seven weeks. The bypass system will be sized to pump up to 24 MGD to handle any emergency conditions where flow to the MWRP needs to be diverted to OC SAN. In addition to rehabilitating the HATS Diversion

Action Calendar: Harvard Avenue Trunk Sewer Diversion Structure Rehabilitation and MWRP Primary Clarifiers Channel Lining Budget Increase and Construction Award

May 24, 2021

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Structure, the nearby Bypass Manhole and Junction Structure located at the intersection of Main Street and Harvard Avenue will be relined as well. To perform the relining work of the MWRP Primary Clarifiers influent and effluent channels, Primary Clarifiers 1-5 will be taken offline for a period of approximately seven weeks. During this time, Primary Clarifiers 6-9 will be able to treat the full MWRP flow. The project sites are shown in Exhibit “A”.

Construction Bid:

The project was advertised to a select bidders list of 18 mechanical and pipeline contractors on April 6, 2021. The bid opening occurred on May 6, 2021 with two bids received from Pacific Hydrotech Corporation and Vido Artukovich & Son, Inc./Vidmar Inc., a Joint Venture.

The bids are summarized in the table below.

<b>Bidder</b>	<b>Bid Amount</b>
Pacific Hydrotech Corporation	\$1,827,750
Vido Artukovich & Son, Inc./ Vidmar Inc., a Joint Venture	\$2,531,390
<i>Engineer's Estimate</i>	<i>\$1,530,000</i>

Pacific Hydrotech was the apparent low bidder with a bid of \$1,827,750, and the bid results are provided in Exhibit “B”. The bids ranged from 19% higher to 65% higher than the engineer’s estimate of \$1,530,000. The discrepancy between the bids and the engineer’s estimate can be attributed to an underestimate of the amount of effort that will be required for the temporary bypass pumping system as well as the relining of the influent and effluent channels of the Primary Clarifiers. The overall complexity of the project and reduced competition for the bid due to the high volume of current construction work also likely contributed to the discrepancy between the bids and the engineer’s estimate. Construction bids have been observed to be higher in the current market. Pacific Hydrotech has extensive experience with mechanical rehabilitation projects and is well qualified to construct the improvements.

FISCAL IMPACTS:

Project 11122 is included in the FY 2021-22 Capital Budget. The original budget was established to investigate the HATS Diversion Structure and perform the design only. The budget is being adjusted to cover the final scope of work. Staff updated the budget based on the cost to complete construction; a budget increase is required to fund the construction phase for the project as shown in the table below.

Project No.	Current Budget	Budget Addition	Total Budget
11122	\$707,000	\$2,155,000	\$2,862,000

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act 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 was filed with the Orange County Clerk-Recorder on October 2, 2020.

COMMITTEE STATUS:

Construction awards are not routinely taken to a Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE A BUDGET INCREASE FOR PROJECT 11122 IN THE AMOUNT OF \$2,155,000, FROM \$707,000 TO \$2,862,000, AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PACIFIC HYDROTECH CORPORATION IN THE AMOUNT OF \$1,827,750 FOR THE HARVARD AVENUE TRUNK SEWER DIVERSION STRUCTURE REHABILITATION AND MICHELSON WATER RECYCLING PLANT PRIMARY CLARIFIERS CHANNEL LINING, PROJECT 11122.

LIST OF EXHIBITS:

Exhibit "A" – Project Site Map

Exhibit "B" – Bid Results: Pacific Hydrotech Corporation

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EXHIBIT "A"  
PROJECT SITE PLAN - SITE NO. 1  
HARVARD AVENUE TRUNK SEWER (HATS) DIVERSION STRUCTURE REHABILITATION



PROJECT SITE PLAN - SITE NO. 2  
PRIMARY CLARIFIERS 1-5 INFLUENT AND EFFLUENT CHANNEL LINING AT MICHELSON  
WATER RECYCLING PLANT (MWRP)



## EXHIBIT "B"

## Bid Results

## Bidder Details

Vendor Name Pacific Hydrotech Corp  
 Address 314 E 3rd Street  
 Perris, California 92507  
 United States  
 Respondee Jimmy Garibaldo  
 Respondee Title Estimator  
 Phone 951-943-8803  
 Email jimmy@pachydro.com  
 Vendor Type CADIR  
 License # 518355  
 CADIR 1000002987

## Bid Detail

Bid Format Electronic  
 Submitted 05/06/2021 1:54 PM (PDT)  
 Delivery Method  
 Bid Responsive  
 Bid Status Submitted  
 Confirmation # 253105  
 Ranking 0

## Attachments

File Title	File Name	File Type
5-6-2021 HATS Diversion Structure Rehabilitation.pdf	5-6-2021 HATS Diversion Structure Rehabilitation.pdf	Bid Form

## Subcontractors

Showing 4 Subcontractors

Name & Address	Desc	License Num	CADIR	Amount	Type
Charles King Company 2841 Gardena Ave Signal Hill, California 90755	Bypass	738236	1000001537	\$423,785.35	
Econo Fence Inc 5261 Pedley Rd Riverside, California 92509	Fence for sound wall	337734	1000001395	\$47,100.00	CADIR
Regan Paving 216 N. Smith Ave Corona, California 92880	Road Slurry	538134	1000002950	\$49,500.00	CADIR
Zebtron Contracting, Inc. P.O. Box 2874 Newport Beach, California 92659	Re-Lining	855170	1000004993	\$279,500.00	

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## Line Items

Discount Terms No Discount

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
BASE BID ITEMS							\$1,827,750.00		
1			Mobilization, Demobilization, Cleanup, and Stormwater and Erosion Control BMPs – MWRP Site	LS	1	\$53,600.00	\$53,600.00	Yes	
2			Mobilization, Demobilization, Cleanup, and Stormwater and Erosion Control BMPs – HATS Diversion Structure Site	LS	1	\$94,500.00	\$94,500.00	Yes	
3			Traffic Control	LS	1	\$99,900.00	\$99,900.00	Yes	
4			Trench Safety Measures	LS	1	\$600.00	\$600.00	Yes	
5			Furnish and Install Temporary Bypass System	LS	1	\$748,900.00	\$748,900.00	Yes	
6			Perform Re-lining of HATS Diversion Structure	LS	1	\$31,000.00	\$31,000.00	Yes	
7			Rehabilitation of HATS Diversion Structure (Including Slide Gates)	LS	1	\$152,800.00	\$152,800.00	Yes	
8			Perform Re-lining of Upstream Bypass Structure	LS	1	\$19,700.00	\$19,700.00	Yes	
9			Perform Re-lining of Downstream Bypass Manhole	LS	1	\$25,200.00	\$25,200.00	Yes	
10			Repair of Upstream Bypass Structure	LS	1	\$60,500.00	\$60,500.00	Yes	
11			Repair of Downstream Bypass Manhole	LS	1	\$50,400.00	\$50,400.00	Yes	
12			Perform Re-lining of the Influent and Effluent Channels of Clarifiers 1-5 at MWRP	LS	1	\$376,900.00	\$376,900.00	Yes	
13			Perform Dewatering of the Influent and Effluent Channels of Clarifiers 1-5 at MWRP	LS	1	\$22,000.00	\$22,000.00	Yes	
14			Slurry Seal	SF	17200	\$4.00	\$68,800.00	Yes	
15			Install Project Signs	LS	1	\$6,300.00	\$6,300.00	Yes	
16			Prepare Spill Prevention, Control and Countermeasure Plan	LS	1	\$10,200.00	\$10,200.00	Yes	
17			Furnish and Install Temporary Power System	LS	1	\$4,450.00	\$4,450.00	Yes	
18			Prepare and Maintain Record Drawings	LS	1	\$2,000.00	\$2,000.00	Yes	
ADDITIVE AND DEDUCTIVE BID ITEMS							\$0.00		
19			ADDITION (+) OR DEDUCTION (-)	LS	1	\$0.00	\$0.00	Yes	

## Line Item Subtotals

Section Title	Line Total
BASE BID ITEMS	\$1,827,750.00
ADDITIVE AND DEDUCTIVE BID ITEMS	\$0.00
<b>Grand Total</b>	<b>\$1,827,750.00</b>

May 24, 2021

Prepared by: J. McGehee / R. Mori

Submitted by: K. Burton

Approved by: Paul A. Cook



## ACTION CALENDAR

### IRWD WELL ET-1 PFAS TREATMENT SYSTEM DESIGN CONSULTANT SELECTION AND SETTLEMENT AGREEMENT AMENDMENT

#### SUMMARY:

Per-and polyfluoroalkyl substance (PFAS) compounds have emerged as “contaminants of concern” primarily due to human health impacts. Several of these compounds have been detected in significant concentrations in IRWD’s Well ET-1. Well ET-1 is currently equipped with a treatment system to remove volatile organic compounds (VOCs), but that treatment system does not remove PFAS compounds. Staff completed an evaluation that identified a replacement treatment system capable of effectively removing both PFAS and VOC compounds from the water produced by this well. Operation of Well ET-1 is addressed in the 2001 Settlement Agreement and Shallow Groundwater Unit Contract with the U.S. Departments of Justice and Navy (2001 Settlement Agreement). The 2001 Settlement Agreement allows Well ET-1 to be removed from service no more than two months per year. Since construction of the treatment system will take longer than two months, an amendment to the Settlement Agreement is required to allow the well to be removed from service for an extended period during construction. To facilitate design and construction of the treatment system, staff recommends the Board:

- Authorize the General Manager to execute a Professional Services Agreement in the amount of \$316,300 with Tetra Tech for engineering design services, and
- Authorize the General Manager to execute the Fifth Amendment to the Settlement Agreement for the MCAS El Toro Groundwater Remediation Project for the Well ET-1 PFAS Treatment System, Project 11171.

#### BACKGROUND:

IRWD operates and maintains Well ET-1 and its associated VOC treatment facilities in accordance with the 2001 Settlement Agreement. Water from Well ET-1 is treated through air stripping, and the off-gas from the air strippers is delivered to a vapor phase granular-activated carbon (GAC) treatment system where the VOCs are removed. The treated water is then delivered into the recycled water distribution system.

In summer 2018, elevated levels of PFAS compounds were detected in the well. While the existing treatment system is capable of effectively removing VOCs from the water, it is unable to remove PFAS compounds. In early 2019, staff began delivering the treated water to the Peters Canyon Channel rather than continuing to deliver it to the recycled water distribution system.

Per the 2001 Settlement Agreement, IRWD maintains a \$20,000,000 pollution insurance policy to reasonably cover risks associated with the facilities included in the 2001 Settlement Agreement. In December 2018, staff submitted a claim to the insurance carrier to cover the cost associated

with implementing modifications to the well for PFAS treatment. The insurance carrier recently accepted the claim, so all costs above the \$250,000 deductible associated with the design, construction, and implementation of PFAS treatment facilities at Well ET-1 will be reimbursed by the insurance carrier. It should be noted that staff also submitted a separate insurance claim associated with elevated levels of PFAS detected at the Shallow Groundwater Unit treatment facilities, and staff anticipates that the insurance carrier will also accept that claim.

In late 2020, staff contracted with Tetra Tech to identify and evaluate various treatment systems that would be capable of effectively removing both PFAS and VOC compounds from the well. The evaluation included analysis of existing water quality parameters, finished water quality goals, pretreatment requirements, evaluation of media selection options including GAC and ion exchange, and the impact to the overall site and other existing facilities based on the recommended treatment system. The evaluation concluded with a recommendation to replace the existing air stripper and vapor phase GAC treatment systems with a liquid phase GAC treatment system, which would effectively remove both VOCs and PFAS compounds.

In parallel with the Tetra Tech evaluation identified above, staff authorized Jacobs Engineering Group to conduct bench-scale treatability testing of various adsorbent products capable of effectively removing PFAS compounds. The bench testing program consists of a series of rapid small-scale column tests for each of the adsorbent products, which can simulate months to years of full-scale operations in a relatively short period of time. This reduces the time for testing, the amount of water required, and the waste produced. At the completion of the testing program, anticipated for late May 2021, Jacobs will recommend a preferred adsorbent that will be incorporated into the final design of the proposed treatment facilities for Well ET-1.

For the past several years, staff has coordinated closely with Orange County Water District (OCWD), the Department of the Navy (DON), and the Department of Justice (DOJ) to develop ways of addressing the PFAS compounds in the well. All parties have been actively involved in developing solutions and are supportive of the implementation of the proposed treatment system that will address both PFAS compounds and VOCs.

#### Consultant Selection:

Staff requested a proposal from Tetra Tech for engineering design services for the proposed treatment system at Well ET-1. In addition to being the design engineer for the existing treatment system at Well ET-1, Tetra Tech has extensive knowledge of the existing site, has performed several recent similar PFAS treatment improvement projects for OCWD and other local agencies, and is best suited to quickly and efficiently progress the design effort. Tetra Tech's proposal is provided as Exhibit "A" and includes scope for removal of the existing treatment system and design of the proposed treatment system and other ancillary improvements to existing infrastructure that are needed to support the proposed treatment system.

Staff reviewed Tetra Tech's scope of work and fee and recommends the Board authorize the General Manager to execute a Professional Services Agreement with Tetra Tech in the amount of \$316,300 for engineering design services for the Well ET-1 PFAS Treatment System.

Fifth Amendment to the Settlement Agreement:

In accordance with the Settlement Agreement, Well ET-1 can be removed from service no more than two months per year. Since construction of the proposed treatment system will take longer than two months, a fifth amendment to the Settlement Agreement is required. The fifth amendment, which is provided as Exhibit “B”, will allow for the temporary shutdown of Well ET-1 and the existing treatment system for up to 18 months while construction is underway. Staff anticipates the construction duration to be approximately 10 months, which is well within the time allowed for by the amendment.

The DON and DOJ have reviewed the amendment and are in the process of executing it. OCWD has also reviewed the amendment and is bringing a recommendation for approval to its Board later this month. IRWD’s legal counsel has reviewed the amendment, and staff recommends the Board authorize the General Manager to execute the Fifth Amendment to the Settlement Agreement for the MCAS El Toro Groundwater Remediation Project for the Well ET-1 PFAS Treatment System.

This fifth amendment does not alter or modify any other provisions of the 2001 Settlement Agreement. While the proposed treatment system will remove both PFAS compounds and VOCs, IRWD will continue to only be required to comply with the VOC removal requirements identified in the 2001 Settlement Agreement since the agreement does not require removal of PFAS compounds. Since the operations and maintenance (O&M) costs of the proposed treatment system are anticipated to be similar to the O&M costs of the existing treatment system, the DON/DOJ will continue to cover all O&M costs associated with the proposed treatment system.

Anticipated Schedule:

Staff expects the project to be completed in accordance with the following schedule milestones:

Notice of Award (Design)	May 25, 2021
Kick-off Meeting	June 2021
Basis of Design Complete	July 2021
90% Design Submittal	September 2021
100% Design Submittal	November 2021
Plans Approved	December 2021
Bid Opening	January 2022
Notice of Award (Construction)	February 2022
Notice of Completion (Construction)	December 2022

FISCAL IMPACTS:

The Well ET-1 PFAS Treatment System, Project 11171, is included in the FY 2020-21 Capital Budget and will be funded through insurance reimbursement. The existing budget is sufficient to fund the recommendation presented.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). OCWD is the lead agency for CEQA compliance, with IRWD as the responsible agency. In addition to the project Environmental Impact Report, which was approved by the OCWD Board of Directors on September 15, 2004, OCWD Board of Directors and IRWD approved the Settlement Agreement on September 7, 2001. Approval of the Settlement Agreement was followed by approval of the first amendment to the Settlement Agreement on January 28, 2003, approval of the second amendment on June 24, 2005, approval of the third amendment on May 22, 2012, and approval of the fourth amendment on November 28, 2017. OCWD will prepare and file a Notice of Exemption for the fifth amendment to the Settlement Agreement.

For the treatment system design, 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 May 18, 2021.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH TETRA TECH IN THE AMOUNT OF \$316,300 FOR ENGINEERING DESIGN SERVICES AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE FIFTH AMENDMENT TO THE SETTLEMENT AGREEMENT FOR THE MARINE CORPS AIR STATION EL TORO GROUNDWATER REMEDIATION PROJECT FOR THE WELL ET-1 PFAS TREATMENT SYSTEM, PROJECT 11171.

LIST OF EXHIBITS:

Exhibit “A” – Tetra Tech Scope of Work and Fee Proposal

Exhibit “B” – Fifth Amendment to the 2001 Settlement Agreement



## EXHIBIT "A"

April 14, 2021

Mr. Richard K. Mori, PE  
Engineering Manager – Capital Projects  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Reference: Proposal to Provide Design Services for Well ET-1 PFAS Water Treatment Plant**

Dear Mr. Mori:

Thank you for providing Tetra Tech with the opportunity to submit our proposal for your design of the Well ET-1 PFAS Water Treatment Plant project. We have assembled an experienced, local team of water quality experts and design engineers familiar with the design of PFAS treatment plants. This team has successfully completed both Granular Activated Carbon (GAC) and Ion Exchange (IX) treatment plants in Southern California. Our team is very familiar with the requirements of these types of projects. The team has recently completed the design on three similar PFAS projects for Orange County Water District. All three projects are currently under construction.

Our team will work closely with the Irvine Ranch Water District (IRWD) throughout the design to ensure that we provide detailed design drawings and contract documents. As you know our team is very familiar with the ET-1 site from our past design projects and recently completed study.

This proposal includes information on the following:

- Scope of Work
- Qualifications
- Project Team
- Drawing Sheet Count
- Schedule
- Price Proposal

Our team is available to begin work on the project immediately upon receipt of your authorization to proceed. As outlined in our schedule we will have the project designed and ready to bid within 6 months of receiving your notice to proceed.

A detailed breakdown of tasks, labor hours and expenses are also included. Tetra Tech will provide the services listed in our Scope of Work for a not to exceed fee of \$316,300.

If you have any questions regarding our proposal, please feel free to contact us.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Steve Tedesco'.

Steve Tedesco, PE  
Senior Vice President

SDT/de

M:\Marketing\Proposals\FY 2021\IRWD\_ET-1 Design

## SCOPE OF WORK

Tetra Tech proposes to provide the following Scope of Work for the ET-1 PFAS Water Treatment Plant Design based on the preliminary study work performed by Tetra Tech. The selected layout of the plant is shown at the end of this section.

All work performed on the project will conform to the IRWD standards and requirements including but not limited to the following: IRWD Project Manual; IRWD Construction Manual; and IRWD Electrical, Instrumentation, and Control (I&C) Design Standards.

### 1.0 Design

#### 1.1 Project Management

Tetra Tech will conduct project management activities to ensure adherence to scope, schedule, and budget; promote efficient communication between Tetra Tech, IRWD, and others as required; and implement an effective quality assurance/quality control (QA/QC) program.

- 1.1.1 Site Survey – Tetra Tech will perform a topographic survey of the site. The topographic survey will collect all site features as well as surface utilities within the project area extending to the centerline of the street. Survey will identify or set onsite horizontal and vertical control points to assist during the construction phase of the project.
- 1.1.2 Geotechnical Report – Our geotechnical engineer will review the existing previously completed geotechnical report for the site. They will then drill, sample and log one hollow-stem auger boring at the site to a depth of 20 to 25 feet below existing grade or auger refusal, whichever is shallower. Boring log and laboratory testing will be reviewed, and recommendations provided for the following:
  - 1.1.2.1 Site conditions
  - 1.1.2.2 Geologic hazards
  - 1.1.2.3 Seismicity per 2016 California Building Code
  - 1.1.2.4 Corrosivity of soil
  - 1.1.2.5 Foundation design parameters
  - 1.1.2.6 Lateral earth pressures
  - 1.1.2.7 Pipe installation
  - 1.1.2.8 Construction considerations
- 1.1.3 Quality Control/Quality Assurance (QA/QC) Plan – Tetra Tech will prepare a job specific QA/QC Plan for the project. It will include the staff responsible for QA/QC along with the method of performing and documentation.
- 1.1.4 Water Quality Analysis – Our water quality expert will review the water quality data provided and determine the design parameters required for pretreatment, media selection and backwashing requirements. We will also incorporate the results of the RSSCT testing being provided by Jacobs into our design criteria. A memorandum explaining our analysis of the Jacobs results and our recommendations for incorporating them into our design will be provided for IRWD review.

- 1.1.5 Meetings – We have included a total of ten meetings during the design phase of the project including: Kickoff Meeting, Review Meeting at 60%, 90% and 100% plus six monthly status review meeting.
- 1.1.6 Preparation of Project Status Reports – Tetra Tech will prepare weekly and monthly status reports. Each weekly status report shall be submitted on Monday and shall consist of a brief (one to two paragraphs) e-mail summarizing the activities completed the previous week, the activities planned for the upcoming week, and critical decisions that need to be made. Each monthly status report shall be submitted along with the billing invoice for that month and shall provide more detail, summarizing the work completed and reviewing work status relative to budget and schedule. The project schedule shall also be updated monthly for inclusion in the monthly status report.
- 1.2 Design Drawings – Tetra Tech will prepare detailed construction drawings for each set of Contract Documents in the latest version of AutoCAD and using NCS V4.0 layering standards, on 22-inch x 34-inch sheets utilizing IRWD's standard border template. Separate sheets with sheet index/location map/legend, general notes, index map, construction notes, phasing, and detail connections will be included. Construction notes will be used (callouts on the plans are not allowed) on all construction drawings. Existing IRWD utilities will be identified on the plan view by as-built plan set number with the pipeline material and IRWD pressure zone labeled. The index map will include sheet legend, final alignment, valve locations, surrounding streets, and significant project site locations. Construction plans will be prepared using the NAVD 88 and NAD 83 survey standards.
  - 1.2.1 Design 60% Plans – Preliminary design level drawings will be prepared at approximately 60% complete level including:
    - 1.2.1.1 General (3 sheets)
    - 1.2.1.2 Civil and Demolition (5 sheets)
    - 1.2.1.3 Mechanical Process (6 sheets)
    - 1.2.1.4 Structural (4 sheets)
    - 1.2.1.5 Electrical (6 sheets)
    - 1.2.1.6 Instrumentation (6 sheets)
  - 1.2.2 Draft Specifications – We will provide a Draft set of project specifications for review by IRWD. Draft Specifications at 60% will include Technical Specifications only.
- 1.3 90% Design – Tetra Tech will prepare and submit a 90% level design and specifications for the project including:
  - 1.3.1 Address all District comments on 60% Design.
  - 1.3.2 Design 90% Plans – Provide the following plans at a 90% level:
    - 1.3.2.1 General (5 sheets)
    - 1.3.2.2 Civil and Demolition (11 sheets)
    - 1.3.2.3 Mechanical/Process (11 sheets)
    - 1.3.2.4 Structural (7 sheets)
    - 1.3.2.5 Electrical (8 sheets)
    - 1.3.2.6 Instrumentation (6 sheets)

- 1.3.3 Specifications 90% – We will provide a 90% complete level of specifications for the project including Technical Specification, Special Provisions, Bid Descriptions and Bid Forms.
- 1.3.4 Cost Estimate 90% – We will provide a cost estimate based on the 90% plans and specifications. We will also provide an analysis of costs to justify the amount of contract liquidated damages.
- 1.4 Final Design – Tetra Tech will prepare and submit a Final Design and specifications for the project including:
  - 1.4.1 Address all comments on 90% Design.
  - 1.4.2 Final Design Plans – Provide the following plans at a 100% level:
    - 1.4.2.1 General (5 sheets)
    - 1.4.2.2 Civil and Demolition (11 sheets)
    - 1.4.2.3 Mechanical/Process (11 sheets)
    - 1.4.2.4 Structural (7 sheets)
    - 1.4.2.5 Electrical (8 sheets)
    - 1.4.2.6 Instrumentation (6 sheets)
  - 1.4.3 Specifications – We will provide a 100% complete Technical Specifications, Special Provisions, Bid Descriptions and Bid Forms for the project.
  - 1.4.4 Final Cost Estimate – We will provide a cost estimate based on the Final Design plans and specifications.

## 2.0 Additional Services

- 2.1 Demolition of Existing Facilities – Tetra Tech will provide a summary of onsite facilities that are recommended for demolition that may interfere with the proposed locations of any new facilities.
- 2.2 Project Schedule – Tetra Tech will prepare a project schedule which includes detailed schedules for both design and construction activities. The schedule will include all critical factors impacting the project schedule including implementation, permitting, and coordination activities to ensure that the project is completed in accordance with the proposed schedule. The schedule shall be prepared in Microsoft Project and submitted with the 90% and 100% design deliverables.
- 2.3 Additional Facility Evaluations – IRWD anticipates that through a review of background information and the execution of the work, additional onsite facilities will need to be reviewed and evaluated. We have budgeted \$15,000 for evaluation of additional facilities located at the site as requested by IRWD. Work under this task will proceed only as authorized by IRWD.
- 2.4 Permitting and Easement Support – IRWD anticipates that through a review of background information and the execution of the work, additional permits and/or easement may be required. We have budgeted \$10,000 for evaluation of additional permits and/or easements as requested by IRWD. Work under this task will proceed only as authorized by IRWD.

- 2.5 CEQA Documentation – IRWD will hire a CEQA consultant separately from this contract to prepare the CEQA documentation for this Project. IRWD anticipates the preparation of a Mitigated Negative Declaration or Notice of Exemption. Tetra Tech may need to review portions of the environmental document, prepare exhibits, attend meetings, and/or provide project specific information. We have budgeted \$5,000 for supporting IRWD and the CEQA consultant through the CEQA documentation process.

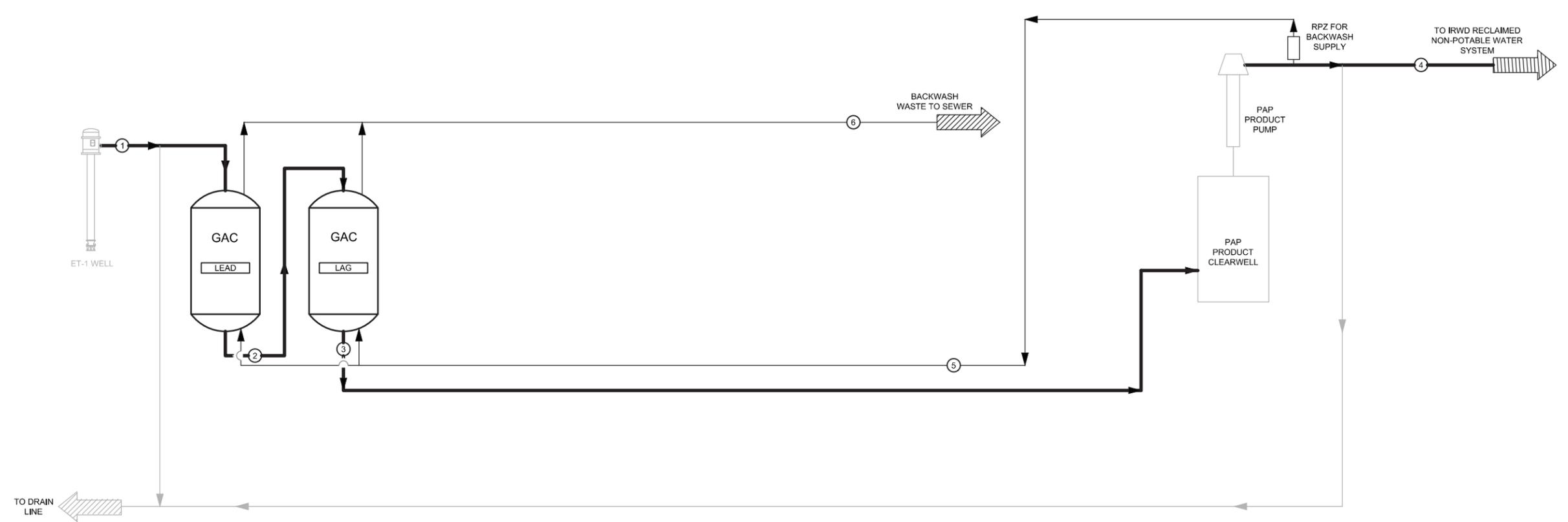
### **3.0 Bid Phase Services**

During the bidding period, Tetra Tech will assist with providing information and clarification of bid documents to prospective bidders. This shall include the preparation of up to three addenda including revisions to the design plans and specifications and assistance with addressing bidder questions. We have budgeted the following hours for these tasks:

- 3.1 Plan Revisions – Ten hours of appropriate staff time for plan revisions to the construction drawings.
- 3.2 Specification Revisions – Ten hours of appropriate staff time for revisions or additions to the project specifications.
- 3.3 Bidder Questions – Ten hours of appropriate staff time to address and respond to bidder questions.

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LEGEND	
	PROPOSED PRIMARY
	PROPOSED SECONDARY
	EXISTING



FLOW STREAM	①	②	③	④	⑤	⑥
DESIGN FLOW (GPM)	1,000	1,000	1,000	1,000	340 - 962	340 - 962

**TETRA TECH**  
 www.tetrattech.com  
 17885 Von Karman Ave, Suite 500  
 Irvine, CA 92614  
 (914) 809-5000

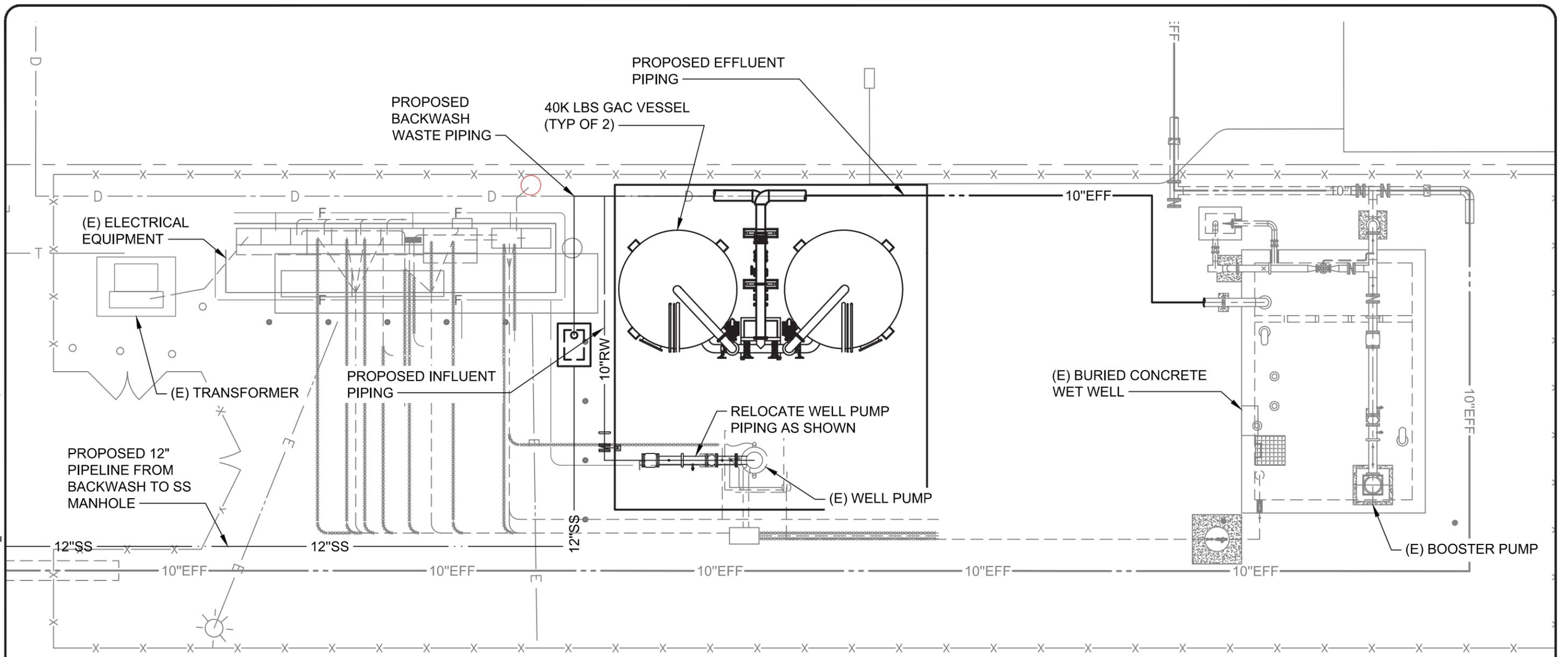
IRVINE RANCH WATER DISTRICT  
 PFAS TREATMENT WELL ET-1  
**PROCESS FLOW DIAGRAM  
 OPTION 1  
 ET1 TREATMENT WITH 40K GAC**

PROJ:	200-09368-21001
DATE:	FEB 2021
DESN:	KAB
Exhibit	
<b>Figure 1</b>	

Bar Measures 1 inch

Copyright: Tetra Tech

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- EXISTING EQUIPMENT TO BE DISCONNECT AND REMOVED:**
1. AIR STRIPPER
  2. CARBON ABSORBERS
  3. AIR STRIPPER BLOWERS
  4. ELECTRICAL HEATER
  5. ELECTRICAL AND CONTROL CONDUITS ASSOCIATED WITH ABOVE LISTED EQUIPMENT



 <b>TETRA TECH</b> <small>www.tetrattech.com</small> <small>17885 Von Karman Ave, Suite 500  Irvine, CA 92614  (914) 809-5000</small>	IRVINE RANCH WATER DISTRICT PFAS TREATMENT WELL ET-1
	<b>SITE LAYOUT                  OPTION 1                  ET1 TREATMENT WITH 40K GAC</b>

PROJ: 200-09368-21001 DATE: FEB 2021 DESN: KAB
Exhibit <b>Figure 2</b>

Bar Measures 1 inch
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## QUALIFICATIONS

Tetra Tech offers a full range of professional services related to groundwater contaminant characterization and remediation. We have more than 50 years of experience in the groundwater field. Our extensive groundwater knowledge covers all phases of concern, including site investigation and characterization, testing, remedial engineering, regulatory support, treatment facility design, construction management, operation, and maintenance. This section summarizes our experience on relevant projects in which proposed team members have participated on. The following project descriptions demonstrate that our team members have the experience to successfully implement the proposed project:

### PFAS EXPERIENCE MATRIX

PROJECT/LOCATION	CLIENT TYPE
Drinking Water and Groundwater PFOA/PFOS at Former Pease Air Force Base, NH	Government
Nationwide PFOS and PFOA ARNG owned/operated drinking water systems, Nationwide	Government
PFAS Groundwater Testing, City of Cape Canaveral, FL	Municipal
Muskogee Mill Water PFAS Sampling, OK	Industrial
Facility Wide PFAS PA/SI, Bethpage, NY	Government
Site Investigation for PFAS Contamination, Brunswick, ME	Government
Swanson PFAS Engineering Investigation, Georgetown, Washington, D.C.	Industrial
On-Site Perfluoroalkyl Substances Investigation, Former Naval Air Station, Cecil Field, FL	Government
Land use control management, real estate support and PFAS, CNC Charleston, SC	Government
Owosso Wastewater PFAS Assessment, MI	Industrial
NAS Corpus Christi PFAS PA/SI, Corpus Christi, TX	Government
PFAS Treatment System Design, Wallops Flight Facility, VA	Government
PFAS Excavation Dewatering Fluids Treatment, Kennedy Space Center, FL	Government
PFAS Site Investigation, Kalamazoo, MI	Industrial
Martha's Vineyard/PFAS MCP Services, Marlborough, MA	Municipal
Tank Farms Groundwater PFAS Investigations (39 Wells), Newport, RI	Government

### LOCAL TREATMENT PLANT EXPERIENCE MATRIX (STUDY, DESIGN & COST ESTIMATING)

PROJECT/LOCATION	CAPACITY (MGD)	CONTAMINANT REMOVAL	TREATMENT
Serrano Water PFAS WTP, Villa Park, CA	4.0	PFOA, PFOS	IX
Kimberley 1A PFAS WTP, Fullerton, CA	4.3	PFOA, PFOS	IX
Fullerton Main Plant, Fullerton, CA	12.0	PFOA, PFOS, TCE	GAC
YLWD Headquarters Plant, Placentia, CA	25.0	PFOA, PFOS	IX
PFAS Study for 5 Wells, Downey, CA	3.0 to 4.5	PFOA, PFOS	IX
Well ET-1 PFAS Study, Irvine, CA	1.4 to 4.5	PFOA, PFAS, TCE	GAC
Well #11, Huntington Park, CA	2.0	TCE	GAC
Well #9 WTP, Signal Hill, CA	2.6	Color, TOC, Benzene	NF, GAC
MTBE WTP, San Juan Capistrano, CA	5.3	MTBE	GAC
Well #11, Huntington Park, CA	2.0	TCE	GAC
Well #9 WTP, Signal Hill, CA	2.6	Color, TOC, Benzene	NF, GAC
Richardson WTP, Loma Linda, CA	6.9	TCE, Perchlorate	GAC, IX
Tippecanoe Final Expansion, Redlands, CA	3.5	TCE, Perchlorate	GAC, IX
Burbank Operable Unit, Burbank, CA	13.0	TCE, PCE, 1,2,3-TCP, 1, 4-Dioxane	GAC, UVAOP

Legend: GAC – Granular Activated Carbon IX – Ion Exchange UVAOP – Ultraviolet Light Advanced Oxidation Process

# OCWD PFAS On-Call Design Contract

ORANGE COUNTY, CALIFORNIA



**owner:**  
Orange County Water District  
Chris Olsen, PE  
714.378.3232

**schedule:**  
2020 - 2021 (Design)

**value:**  
\$30M (construction)

**key staff:**  
Steve Tedesco, PE, BCEE  
Project Manager  
Tom Epperson, PE  
QA/QC  
James Christopher, PE, BCEE  
QA/QC  
Kara Buttacavoli, PE  
Project Team Lead  
Amanda Taylor, PE  
Process Engineer  
Crisna Raymond, PE  
Project Engineer  
Victor Ramirez, PE, SE  
Structural Engineer  
Mazen Kassar, PE  
Electrical Engineer  
Astrid Fleischer, PE I&C  
Engineer

The OCWD selected Tetra Tech as one of the Engineering Firms to design PFAS Systems for their groundwater producers. Tetra Tech is currently working on the following four projects:

- ▶ **Serrano Water District Well #5 and #9** (Completed Design) – This project consists of a 3,000 GPM IX System with a bag filter pre-treatment, 3,000 GPM Booster Pump Station and new chemical feed system for disinfection. Estimated Const. Cost - \$6.2M.
- ▶ **Kimberley Well 1A** (Completed Design) – Located on a very small site with a single well this facility is designed to produce 3,000 GPM using an IX System with a bag filter pre-treatment and new chemical feed system for disinfection. Estimated Const. Cost - \$3.7M.
- ▶ **Fullerton Main Plant** – The Fullerton Main Plant will treat six (6) onsite wells with a total capacity of 10,100 GPM. PFOS, PFOA and VOCs will be removed using 6 to 12 ft diameter, 40,000 lb. GAC vessels that will discharge into an existing forebay then pumped into the distribution system. The remaining wells will be treated with an IX system consisting of 8 vessels and bag filters for pre-treatment. Estimated Const. Cost - \$26.5M.
- ▶ **Yorba Linda Water District Headquarters Plant** (Completed Design) – This system will treat water from 10 wells with a total capacity of 17,400 GPM. An IX System consisting of 11 pairs of Lead/ Lag Vessels (22 vessels total), bag filter pre-treatment, Booster Pump Station, and new Onsite Generation System for chlorine disinfection. In order to get the system on the existing site an extensive analysis of the site improvements was completed. Estimated Const. Cost - \$32.5M.

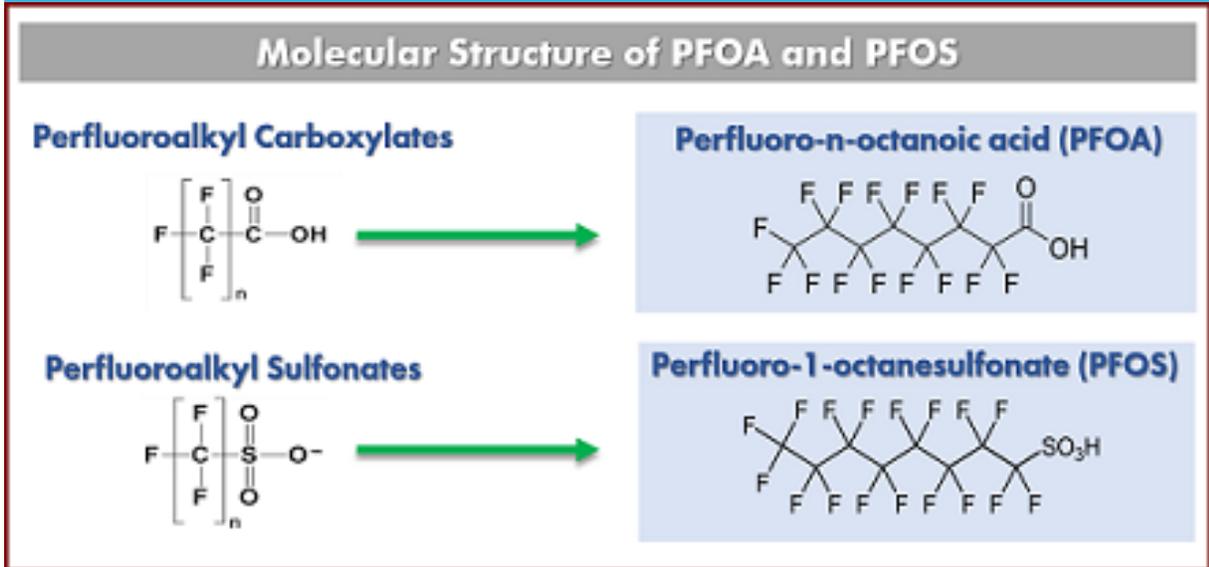
The Tetra Tech team prepared the Engineer's Report and Operating Plan for the State of California Division of Drinking Water (DDW) for each of the projects.

## Innovation

- *Performed detailed operational analysis of IX and GAC usage from both RSCCT and Pilot Data.*
- *Used early submittal process to obtain DDW approvals in less than 5 months from start of the design.*
- *Performed details wells analysis to determine how to maximize well production after adding IX and GAC systems.*

# PFAS Study for Five Wells

DOWNNEY, CALIFORNIA



**owner:**  
 City of Downey  
 Dan Mueller, PE  
 562.904.7110

**schedule:**  
 2020 - 2021

**value:**  
 \$4M (construction)

**key staff:**  
 Steve Tedesco, PE, BCEE  
 Principal in Charge  
 Kara Buttacavoli, PE  
 Project Engineer  
 Amanda Taylor, PE  
 Process Engineer  
 Crisna Raymond, PE  
 Project Engineer  
 Victor Ramirez, PE, SE  
 Structural Engineer  
 Eric Yuen, PE, SE  
 Structural Engineer  
 Mazen Kassar, PE  
 Electrical Engineer  
 Nicole Han, PE  
 Electrical Engineer

The City of Downey found that they had five existing groundwater wells in their system that had PFOA and PFAS higher than the new California Response Levels (RL) set in February 2020. Tetra Tech was hired to review perform a study to determine the best means for the City to continue to operate the wells.

Alternatives were analyzed including isolating certain zones in the wells that contained PFAS, blending PFAS contaminated water with other City well water, using IX or GAC wellhead treatment and/or piping PFAS contaminated water to a central location for treatment.

The scope of work of the project includes:

- ▶ Analyze Project Water Quality
- ▶ Review Well Screen Data to determine if well modifications can solve the PFAS issue
- ▶ Develop options for treating the PFAS at the Wellhead
- ▶ Develop option for treating PFAS at a Central Location
- ▶ Determine if IX or GAC treatment should be used
- ▶ Develop capital and operations cost estimates

**Innovation**

- Well sites are within a highly developed urban area.
- All existing well sites are on very small sites.
- Detailed analysis of Capital and Operating Costs.
- Study used to supplement funding application.

# Well ET-1 PFAS Study

IRVINE, CALIFORNIA



**owner:**

Irvine Ranch Water District  
Rich Mori, PE  
949.453.5571

**schedule:**

2020 - 2021

**value:**

\$4M (construction)

**key staff:**

Steve Tedesco, PE, BCEE  
Principal in Charge

Kara Buttacavoli, PE  
Project Engineer

Amanda Taylor, PE  
Process Engineer

Victor Ramirez, PE, SE  
Structural Engineer

Mazen Kassar, PE  
Electrical Engineer

ET-1 was developed to increase utilization of the Irvine Subbasin through recovery and treatment of VOC- impaired, poor-quality groundwater. The project cleans up the contaminated VOCs, with the treated water used for non- potable purposes. Water extracted from inside the VOC plume is treated using granular activated carbon and air stripping technologies. The scope of work of the project includes:

- ▶ Analyze Project Water Quality
- ▶ Develop three options for treating the PFAS discovered at ET-1
- ▶ Develop three option to include wells ET-1 and 78 into the project if PFAS is found at those wells
- ▶ Determine if IX or GAC treatment should be used
- ▶ Develop capital and operations cost

## Innovation

- *Site with VOCs and very High PFAS and PFOA levels.*
- *Existing Operating Site with small footprint.*
- *Treated water will be used in the non-potable distribution system for irrigation and industrial uses.*

# Well No. 15 Water Treatment System

HUNTINGTON PARK, CALIFORNIA



#### owner/operator:

Water Replenishment District  
of Southern California  
Charlene King  
562.275.4252

#### schedule:

2018 - 2019

#### value:

\$1.1M (construction)

#### role:

Lead Designer and  
Engineer of Record

#### key staff:

Steve Tedesco, PE, BCEE  
Project Manager

Corey Hess, PE  
Civil Engineer

Mazen Kassar, PE  
Electrical Engineer

Victor Ramirez, PE, SE  
Structural Engineer

Nicole Han, PE  
Electrical Engineer

Astrid Fleischer, PE  
I&C Engineer

The City of Huntington Park's Well 15 was drilled in 1954 at a depth of 1,582 feet and design capacity of 1,400 gpm. The current capacity is 1,050 gpm. Since 1986, this well has been affected with elevated concentrations of trichloroethylene (TCE). In 1994, a treatment system was installed using six low profile air strippers, which were no longer effective.

Tetra Tech was hired by the Water Replenishment District of Southern California to provide a preliminary design report, final design, and construction engineering services to upgrade the Wellhead Treatment system at Huntington Park Well 15. Design included removing the existing air stripping units at Well 15 and replacing with the liquid phase granular activated carbon (LPGAC) treatment system to remove contamination, particularly VOCs from the well. Tetra Tech worked closely with GAC suppliers to incorporate the new LPGAC system into the existing well, pumping and storage facilities onsite. In addition, coordination for deliveries of LPGAC was also incorporated into the design.

## Innovation

- *Tetra Tech worked closely with the City and WRD to coordinate work on a very small site.*
- *Special design consideration was required for GAC delivery, backwash and will purge water discharge.*
- *Tetra Tech prepared all reports and permit applications for the DDW approvals.*

# Well No. 9 NF & GAC Plant

SIGNAL HILL, CALIFORNIA



**owner:**

City of Signal Hill  
Cecil Looney  
562.989.7253

**schedule:**

2010 - 2011

**value:**

\$6.8M (construction)

**role:**

Lead Design Report Author

**key staff:**

Steve Tedesco, PE, BCEE  
Project Manager

Kara Buttacavoli, PE  
Project Engineer

Beverly Encina, PE  
Design Engineer

Crisna Raymond, PE  
Resident Engineer

Mazen Kassar, PE  
Electrical Engineer

Tetra Tech was contracted by City of Signal Hill to prepare a preliminary design report to treat water with high color from Well No. 9. A membrane treatment system was proposed to be used to remove color and organics from the groundwater.

The membrane system was designed to treat well water containing low salinity (less than 400 ppm TDS) and high level of color (over 50 color units). The objective of the treatment was to produce potable water with color below 5 color units without significant reduction of concentration of dissolved ions.

The NF membrane system was designed for operation at a recovery rate of 98%. Based on operation of similar units at other locations and consultations with the membrane manufacturer, operation at this level of high recovery rate was possible using a three stage configuration. The feasibility study also analyzed several different treatment capacities from 1,200 gpm to the full well capacity of 2,000 gpm. The City constructed the NF plant through a design-build project delivery method. Tetra Tech prepared the 30% design, procurement documents, and provide construction management services.

## Innovation

- *During startup benzene was detected in the feed water. Tetra Tech and contractor Pascal + Ludwig then designed and built a GAC treatment system to remove the benzene, saving the city close to \$300,000. The GAC system was operational within 4 months of the Notice-to-Proceed with design.*
- *City of Signal Hill being a relatively small community needed a feasibility study that could provide an accurate cost for both capital and operational costs. Tetra Tech was able to use its past experience on RO and NF projects to develop accurate cost estimates. The costs of the new NF plant were then compared to the costs for other available water sources. These detailed cost estimates were also used to help obtain funding for the project from the State of California.*

# MTBE Treatment Plant

SAN JUAN CAPISTRANO, CALIFORNIA



#### owner/operator:

City of San Juan Capistrano  
Eric Bauman  
949.487.4312

#### schedule:

2011 - 2012

#### value:

\$2.8M (design-build)

#### key staff:

Steve Tedesco, PE, BCEE  
Project Manager

Steve Ellis, PE, BCEE  
QA/QC Manager

Victor Ramirez, PE, SE  
Structural Engineer

Beverly Encina, PE  
Design Engineer

The Tetra Tech designed and built this \$2.8 million modification to the Ground Water Treatment Plant to remove MTBE found in the feed water. The 5.3 MGD system includes eight 10-foot diameter granular activated carbon (GAC) vessels with feed, backwash, and effluent piping.

Located on a very constructed site, the team was challenged to find a way to design and build the facility while keeping the existing plant in service. As shown in the above picture, a concrete slab was completed first followed by installation of vessels. Due to space constraints each vessel had to be “walked” into place with a movable crane in order to complete installation. Other work on the project included:

- ▶ Relocation of Cartridge Filter
- ▶ Piping Modifications
- ▶ Replacement of Greensand Media in Fe/Mn Filters
- ▶ Obtaining Division of Drinking Water Permit
- ▶ Programming and SCADA Upgrades
- ▶ Obtaining Division of Drinking Water approvals

### Innovation

- *GAC System added to an operational plant to remove MTBE.*
- *Phased construction approach to build on a constricted job site.*
- *Upgrades to existing Brackish water pre-treatment system.*

# Tippecanoe Final Expansion

REDLANDS, CALIFORNIA



**owner/operator:**

Lockheed Martin Corporation /  
City of Redlands, CA  
Tom Patterson  
949.553.8417

**schedule:**

2011 - 2012

**value:**

\$2.8M (design-build)

**key staff:**

Steve Tedesco, PE, BCEE  
Project Manager

Steve Ellis, PE, BCEE  
QA/QC Manager

Victor Ramirez, PE, SE  
Structural Engineer

Beverly Encina, PE  
Design Engineer

Tetra Tech prepared final design documents and acted as the general contractor to construct the Tippecanoe Regional Groundwater Treatment Facility using a Design-Build delivery process. Pascal & Ludwig constructed the facility under a subcontractor agreement. The completed facility utilizes granular activated carbon (GAC) to remove trichloroethylene (TCE) and Ion Exchange (IX) to remove perchlorate. Groundwater is pumped from three wells to the site where it is metered prior to treatment. The GAC units consist of a battery of 12 units, with each battery consisting of two (2) 20,000-pound carbon vessels. The vessel piping and valving are arranged so that each battery of carbon vessels can be operated either in series or in parallel. Treated water is discharged directly into the potable water system. The California Department of Public Health reviewed and approved the engineering design and monitoring provisions.

Tetra Tech constructed the expansion of the existing pump station that boosts water through the facility. The total pump station capacity is 10,000 gallons per minute.

## Innovation

- *The backwash system utilizes treated water that has been stored in a 30,000-gallon steel holding tank. Backwash water is pumped from the tank and to the carbon vessels. After going through the vessels in an up flow direction, the waste backwash passes through a series of 25 micron, then 10 micron bag filters to remove carbon fines and returned to the holding tank for re-treatment through the carbon vessels.*

# Richardson Water Treatment Plant

LOMA LINDA, CALIFORNIA



#### owner/operator:

Lockheed Martin Corporation /  
City of Loma Linda, CA  
Tom Patterson  
949.553.8417

#### schedule:

2008 - 2010

#### value:

\$8M (construction)

#### key staff:

Steve Tedesco, PE, BCEE  
Project Manager

Kara Buttacavoli, PE  
Process Engineer

Victor Ramirez, PE, SE  
Structural Engineer

Crisna Raymond, PE  
Design Engineer

Mazen Kassar, PE  
Electrical Engineer

The Richardson Water Treatment Plant utilizes both ion exchange (IX) and granular activated carbon (GAC) processes. The process removes VOCs, TCE, PCE, and perchlorate, from the supplied well water. Two wells supply 4,800 gpm to the process. The plant includes pre- and post-treatment filtration, an on-site product storage tank, an on-site backwash waste tank and a product water booster station. Backwash waste is allowed to settle in the tank before it is pumped to the head of the plant to be treated. Purge water from well starts are treated by a smaller 200 gpm similar system prior to discharge to the local storm drain. In addition, the project contains one on-site well and one off-site groundwater well. Project included obtaining permits from the City of San Bernardino, California Department of Drinking Water, and the Regional Water Quality Control Board. Design included mistake-proofing the design workshop required on Lockheed Martin projects.

Tetra Tech provided all design on the project and was responsible for procurement of the IX and GAC vessels. Pascal & Ludwig and Halcyon Electric were responsible for all construction efforts on the two groundwater wells.

### Innovation

- *Siemens (now Evoqua) was the supplier of the IX and GAC treatment vessels. Vessel equipment and piping were pre-purchased by Tetra Tech to expedite the construction schedule. The equipment layout was designed for ease of access and operation on a relatively small site.*
- *A temporary treatment scenario was implemented to develop each of the two wells supplying the process. The project included a percolation pond to capture startup and testing water from each of the wells.*

## PROJECT TEAM

Tetra Tech has assembled a local team of dedicated and experienced professionals uniquely qualified to complete your project. In order to provide the most comprehensive services possible, our team has been thoughtfully assembled to capitalize on the strengths of each team member and provide you with a team of unparalleled technical excellence. Through our past experience we fully understand how to successfully complete this type of project.

The strength of our team is that our team members have all worked on several local PFAS projects. Our experience in similar studies and in full designs will be an asset in completing this project. We have provided a biographical sketch that introduces the background and unique skill set of each of the talented key personnel of our core management team that we are committing to the project.

**Project Manager, Kara Buttacavoli, PE**, will serve as the Project Manager. She has recently completed the design of three other PFAS plants ranging in size from 4.0 mgd to 25.0 mgd. Kara fully understands all the tasks needed for completing this type of project. She will provide overall design direction, coordination, and technical oversight. In addition, she will make certain that the proper resources are allocated to the project to meet the desired completion schedule.

**QA/QC, Steve Tedesco, PE**, will provide QA/QC Management. Steve understands the ET-1 site and is well versed in design of groundwater treatment plants. He also worked with Kara on three recently completed PFAS plants in Orange County. He also understands local permitting and construction costs.

**Civil & Mechanical Lead, Beverly Encina, PE**, brings to the team over 18 years of experience in analysis, design, and construction management for various types of public works projects including, but not limited to, water treatment plants, wells, water booster pump stations, reservoirs, hydraulic analysis, storm drainage systems, and site improvement design. Beverly has worked on four PFAS water treatment plants and one PFAS well study.

**Process Lead, Amanda Taylor, PE**, brings to the team extensive experience in process engineering for water treatment facilities. In her 11 years of experience she has provided analysis, studies, design, and construction management for various types of public works projects including five PFAS projects, two advanced water treatment plants and numerous wellhead treatment plants for nitrates, iron, manganese, and TDS.

**Structural Lead, Victor Ramirez, PE, SE**, has over 39 years of structural engineering design experience with special emphasis in the design of water storage/water containment and water conveyance related structures. This includes reservoirs, water/wastewater treatment plants, booster pump stations, flow control facilities, pressure reducing stations and pipelines. Victor will be responsible for the design of all the structures, management and oversight of the structural design team, and interdisciplinary coordination.



**Electrical Lead & Controls, Mazen Kassar, PE**, is experienced in the electrical design of water and wastewater facilities, system studies, power distribution, emergency power supply, motor and instrumentation control. During his 29 years of experience his projects have included designing water and wastewater facilities, desalination plants, lift stations, pump stations, drinking water wells, pipelines, and odor control systems. Mazen will use this experience and his knowledge of the operation of water facilities and cost analysis to assist the team.

*Our team knows firsthand that the key to our success is the people we have assigned to this project!*

**Team Availability**

Tetra Tech is dedicating our project team shown to complete this project. Each of the team members will be assigned so they are available to meet the schedule for the design of this project. The following table shows our Project Teams’ availability, areas of responsibility of the key team members, and percentage of time key personnel will contribute to the project:

Name	Role	Areas of Responsibility	Availability	Project Need
Kara Buttacavoli, PE	Project Manager	Project Oversight, Technical Input, Quality Control, Constructability Review	40%	30%
Steve Tedesco, PE	QA/QC Manager	Coordinate, Manage and Ensure QA/QC is Completed	10%	5%
Beverly Encina, PE	Civil & Mechanical Lead	Lead Civil & Mechanical Design, Coordinate Inter-discipline Review	50%	40%
Amanda Taylor, PE	Process Lead	Lead Process Design, Prepare P&IDs, Coordinate with Electrical & Controls	50%	40%
Victor Ramirez, PE, SE	Structural Lead	Lead Structural Design	50%	40%
Mazen Kassar, PE	Electrical & Controls Lead	Lead Electrical Design	35%	25%
H.C. Liang, PhD	Water Quality Expert	Review Water Data, Determine Treatability	15%	5%

Resumes of Key Team Members can be found on the following pages.

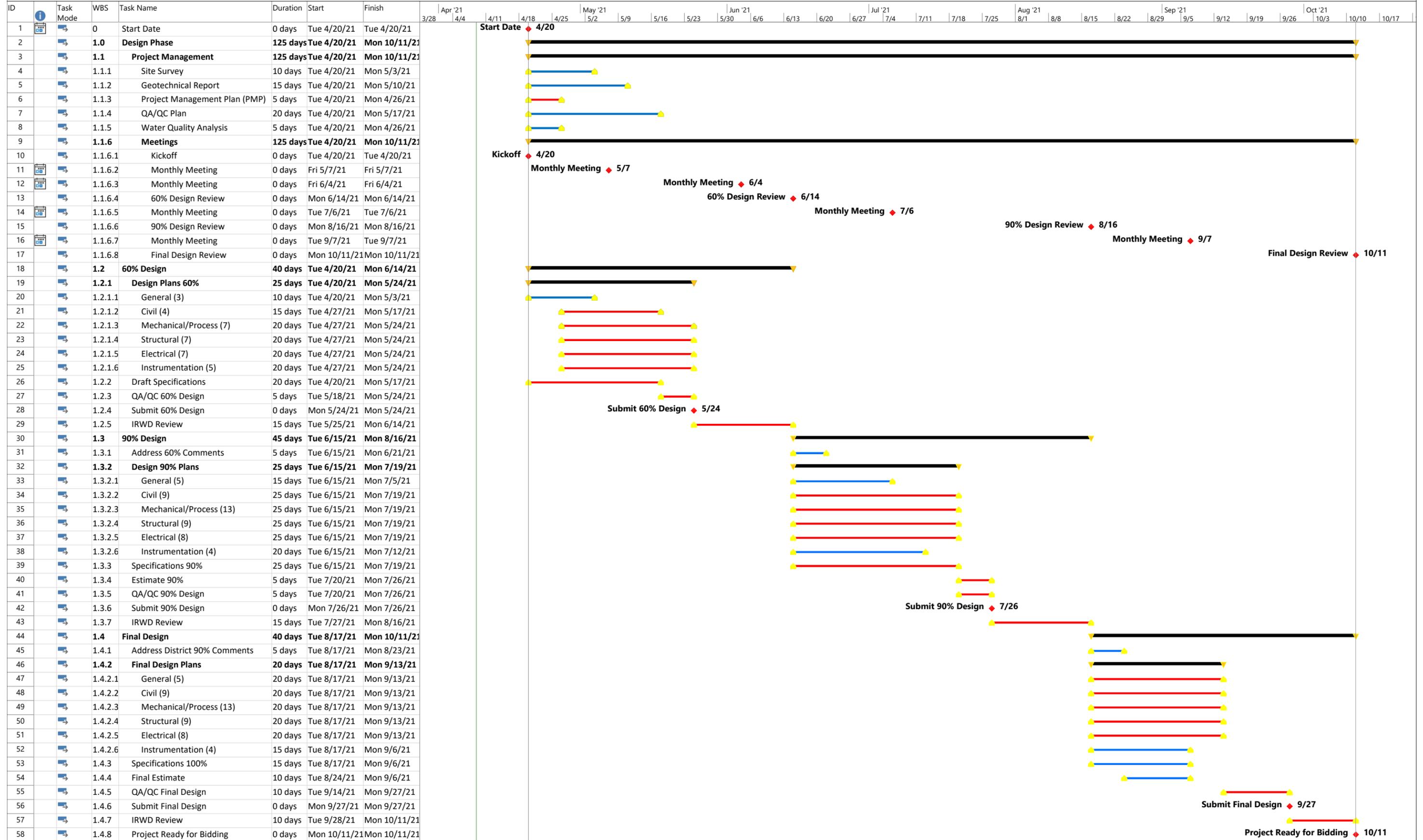
***The strength of our team is demonstrated by our qualifications, experience, and prior completion of similar PFAS projects!***



**IRWD - ET-1 PFAS Water Treatment Plant  
Drawing Sheet Count**

Sequential Number	Subset Count	Sheet Number	Description	60% Design	90% Design	100% Design
				Planned	Planned	Planned
<b>General</b>						
1	1	G-001	Title Sheet	60%	90%	100%
2	2	G-002	General Notes		90%	100%
3	3	G-003	Sheet Index, Agency Index & Abbreviations		90%	100%
4	4	G-004	Process Flow Diagram	60%	90%	100%
5	5	G-005	Horizontal Control Plan	60%	90%	100%
<b>Civil</b>						
6	1	C-101	Site Demolition Plan	60%	90%	100%
7	2	C-102	Demolition Plan & Details	60%	90%	100%
8	3	C-103	Site Plan & Grading Plan	60%	90%	100%
9	4	C-104	Yard Piping Plan	60%	90%	100%
10	5	C-201	Yard Piping Profiles		90%	100%
11	6	C-202	Drain and Sewer Profiles		90%	100%
12	7	C-301	Civil Sections	60%	90%	100%
13	8	C-501	Civil Details 1		90%	100%
14	9	C-502	Civil Details 2		90%	100%
15	10	C-503	Piping Details		90%	100%
16	11	SW-101	Erosion Control Plan		90%	100%
<b>Structural</b>						
17	1	S-001	General Structural Notes	60%	90%	100%
18	2	S-002	Special Inspection & Structural Observations	60%	90%	100%
19	3	S-101	GAC Vessel Foundation Plan	60%	90%	100%
20	4	S-301	Vessel Foundation Section	60%	90%	100%
21	5	S-501	Structural Details 1		90%	100%
22	6	S-502	Structural Details 2		90%	100%
23	7	S-503	Structural Details 3		90%	100%
<b>Mechanical/Process</b>						
24	1	D-100	Overall Process Plan	60%	90%	100%
25	2	D-101	ET-1 Well Modifications Plan & Section	60%	90%	100%
26	3	D-103	GAC Vessel Process Plan	60%	90%	100%
27	4	D-104	Single Vessel Process Plan	60%	90%	100%
28	5	D-301	Pretreatment Filters Process Sections	60%	90%	100%
29	6	D-302	GAC Vessel Process Section	60%	90%	100%
30	7	D-303	Piping Sections		90%	100%
31	8	D-501	Process Details 1		90%	100%
32	9	D-502	Process Details 2		90%	100%
33	10	D-503	Process Details 3		90%	100%
34	11	D-901	3D Treatment Plant Perspective		90%	100%
<b>Electrical</b>						
35	1	E-001	Electrical Symbols, Notes & Abbreviations	60%	90%	100%
36	2	E-101	Electrical Overall Site Plan	60%	90%	100%
37	3	E-103	Vessels Electrical Plan	60%	90%	100%
38	4	E-104	Existing MCC Modifications	60%	90%	100%
39	5	E-201	Single Line Diagram, Conduit & Panel Schedule	60%	90%	100%
40	6	E-301	Existing Control Panel & Modification Plan	60%	90%	100%
41	7	E-302	Electrical Details 1		90%	100%
42	8	E-501	Electrical Details 2		90%	100%
<b>Instrumentation</b>						
43	1	I-001	Instrument Symbols, Notes & Legend	60%	90%	100%
44	2	I-101	P&ID Pre-Treatment Filters	60%	90%	100%
45	3	I-102	P&ID GAC - Train 1	60%	90%	100%
46	4	I-103	P&ID Well Pump Revisions	60%	90%	100%
47	5	I-104	P&ID Pump Station & Tank Revisions	60%	90%	100%
48	6	I-201	SCADA Block Diagram	60%	90%	100%
<b>Total Drawing Count</b>				30	48	48

### Irvine Ranch Water District PFAS Treatment Systems Design for ET-1





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## EXHIBIT "B"

### **Fifth Amendment to the Settlement Agreement Among the Settling Federal Agencies (SFA), Orange County Water District (OCWD), and Irvine Ranch Water District (IRWD) in Regard to the Former Marine Corps Air Station (MCAS) El Toro Groundwater Remediation**

This Fifth Amendment to the Settlement Agreement Among the Settling Federal Agencies (SFA), Orange County Water District (OCWD), and Irvine Ranch Water District (IRWD) in Regard to the Former Marine Corps Air Station (MCAS) El Toro Groundwater Remediation (“**Fifth Amendment**”) among the Settling Federal Agencies<sup>1</sup> (“**SFA**”), Orange County Water District (“**OCWD**”), and Irvine Ranch Water District (“**IRWD**”) (collectively the “**Parties**”), is effective upon execution by all Parties.

WHEREAS the Parties entered into the Settlement Agreement Among the SFA, OCWD, and IRWD in Regard to the Former MCAS El Toro Groundwater Remediation on September 7, 2001 (“Settlement Agreement”);

WHEREAS, the Settlement Agreement was amended as follows: the First Amendment dated January 28, 2003; the Second Amendment dated June 24, 2005; the Third Amendment dated May 22, 2012; and the Fourth Amendment dated November 28, 2017;

WHEREAS, capitalized terms used herein and not otherwise defined shall have the meanings given such terms in the Settlement Agreement;

WHEREAS, the Settlement Agreement, as amended, requires OCWD and IRWD to design, construct, operate, and maintain certain OCWD/IRWD groundwater treatment assets.

WHEREAS, OCWD and IRWD are required to operate and maintain the OCWD/IRWD Comprehensive Environmental Response, Compensation, and Liability Act (“**CERCLA**”) Component of the Modified Irvine Desalter Project (“**IDP**”) (hereinafter, the “**CCMI**”). Settlement Agreement § III.A. “OCWD and IRWD are jointly and severally responsible for and will design, construct, operate and maintain the OCWD/IRWD Assets of the CCMI in accordance with this Agreement, the ROD<sup>2</sup> and the requirements set forth in the Former MCAS El Toro Federal Facilities Agreement (“**FFA**”)<sup>3</sup> and FFA deliverables set forth in Section 8.2 of

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<sup>1</sup> “‘Settling Federal Agencies’ or ‘SFA’ means the United States, including its agencies, departments, and instrumentalities and hence including [Department of the Navy], but excluding [U.S. Environmental Protection Agency] in its regulatory capacity.” Settlement Agreement § II.

<sup>2</sup> The “Record of Decision” or “ROD” is defined in Section II of the Settlement Agreement. *Id.*

<sup>3</sup> The “Federal Facilities Agreement” or “FFA” is defined in Section II of the Settlement Agreement and attached as Appendix 1 to the Settlement Agreement. “FFA Deliverables” means the documents that the Department of the Navy is obligated to prepare pursuant to the FFA, as identified in Sections 7.3 and 7.4 of the FFA. Settlement Agreement § II.

the FFA that receive concurrence from USEPA and CALEPA<sup>4</sup> or otherwise become finalized pursuant to the FFA including, but not limited to, the schedules set forth therein.” *Id.* ¶ III.A.1;

WHEREAS, the Settlement Agreement provides that “[e]xcept as otherwise provided in this Agreement or in connection with short term routine maintenance, the parties agree that payments made to OCWD/IRWD by the United States under this Agreement are made with the express assumption and understanding that OCWD/IRWD will provide uninterrupted operation of the OCWD/IRWD Assets of the CCMI. OCWD/IRWD will not temporarily shut down or permanently terminate operations of the OCWD/IRWD Assets of the CCMI except in accordance with the procedures set forth below,” *id.* ¶ III.A.4.a;

WHEREAS, “**Temporary Shutdown**” means the temporary cessation of operation of the OCWD/IRWD Assets of the CCMI by OCWD and/or IRWD, *id.* § II;

WHEREAS, Paragraph III.A.4.a sets forth a procedure for Temporary Shutdown of the CCMI upon notice by any Party only under certain circumstances and provides that “[a]ny temporary shutdown or permanent termination that does not satisfy the terms of Paragraph III.A.4 will constitute a breach of this Agreement,” *id.* ¶ III.A.4.d;

WHEREAS, the Parties intend by this Fifth Amendment to provide for a Temporary Shutdown to make modifications to OCWD/IRWD Assets of the CCMI to optimize treatment of volatile organic compounds in accordance with regulatory approvals, if required, by the USEPA and/or CALEPA;

WHEREAS, the modifications are also intended to treat various per- and polyfluoroalkyl substances in the groundwater, which are contaminants of emerging concern.

WHEREAS, a Temporary Shutdown for the purpose of making such modifications to the OCWD/IRWD Assets of the CCMI is not otherwise provided for under the Settlement Agreement;

WHEREAS, this Fifth Amendment does not modify the Shallow Groundwater Unit (“SGU”) Contract.<sup>5</sup>

WHEREAS, this Fifth Amendment does not modify the obligation of the SFA to reimburse OCWD/IRWD for future response costs relating to the design, construction, operation,

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<sup>4</sup> “USEPA” is the United States Environmental Protection Agency and “CALEPA” is the California Environmental Protection Agency and its departments, agencies, boards, bureaus, and other components. Settlement Agreement § II.

<sup>5</sup> Appendix 8 to Settlement Agreement is an offer by OCWD to enter into a contact with the Navy for SGU treatment. *See* Settlement Agreement ¶ III.B.1. Subsequently, pursuant to Paragraph III.B.2.a of the Settlement Agreement, when funds became available, the Navy issued Naval Facilities Engineering Command Contract No. N62473-06-C-2010 to OCWD on September 27, 2006 (the “SGU Contract”).

and maintenance of the OCWD/IRWD Assets of the CCMI as set forth in Section IV of the Settlement Agreement.

WHEREAS, Paragraph VII.N of the Settlement Agreement provides that the “Agreement may be modified only upon the mutual agreement of the Parties reflected in a written document signed by duly authorized representatives of the Parties, which document expressly makes reference to this Agreement and the intent to modify the terms of this Agreement.”

THEREFORE, the SFA, OCWD, and IRWD hereby modify the Settlement Agreement as follows:

1. Add Paragraph III.A.4.f as follows:

f. Temporary Shutdown of the CCMI for Treatment System Modifications.

i. After giving notice to and receiving approval from the SFA, OCWD and/or IRWD may temporarily shut down the OCWD/IRWD Assets of the CCMI for a period not to exceed 18 months (“**Shutdown Period**”) to modify the OCWD/IRWD Assets to optimize treatment of volatile organic compounds.

ii. If OCWD and IRWD believe that the Shutdown Period must be extended due to circumstances beyond the control of OCWD and IRWD (including but not limited to an epidemic, riot, insurrection, war, or act of God), then OCWD and IRWD will provide written notice to the SFA explaining the need to extend the Shutdown Period.

iii. Any extension of the Shutdown Period must be approved in writing by the SFA.

iv. Modification must be done in accordance with any regulatory approvals required by the USEPA and CALEPA.

2. This Fifth Amendment does not alter or modify any other provision of the Agreement, including Paragraph IV or change any other contractual obligations as may exist between the Parties to this Agreement, except as expressly stated herein.

FOR THE UNITED STATES

Date: \_\_\_\_\_

JEAN A. WILLIAMS  
Acting Assistant Attorney General

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FOR THE ORANGE COUNTY WATER DISTRICT

Date: \_\_\_\_\_

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Michael R. Markus, P.E.  
General Manager

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Stephen R. Sheldon  
President, Board of Directors

Approved as to Form:

By: \_\_\_\_\_  
Jeremy N. Jungreis,  
General Counsel

FOR THE IRVINE RANCH WATER DISTRICT

Date: \_\_\_\_\_

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

Approved as to Form:

By: \_\_\_\_\_  
Claire Hervey Collins,  
General Counsel