AGENDA IRVINE RANCH WATER DISTRICT BOARD OF DIRECTORS REGULAR MEETING

September 28, 2020

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.my.webex.com/irwd.my/j.php?MTID=m77682a985db5c5d89844e6210469fb7d Meeting Number (Access Code): 126 994 9946 Meeting Password: 85kEnAp6Js2 (85536276 from phones and video systems

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 Reinhart, LaMar, Swan, and Withers, and President Matheis

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 before 12:00 p.m. on Monday, September 28, 2020.

ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE.

COMMUNICATIONS TO THE BOARD

- 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).

CONSENT CALENDAR

Next Resolution No. 2020-18

Items 3-7

3. <u>BOARD MEETING MINUTES</u>

Recommendation: That the minutes of the September 14, 2020 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 Mary Aileen Matheis, Peer Swan, Steve LaMar, and John Withers, as described.

5. AUGUST 2020 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 August 2020 Summary of Payroll ACH payments in the total amount of \$2,119,464, and approve the August 2020 accounts payable Disbursement Summary of warrants 410388 through 411398, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$16,863,053.

6. SAN JOAQUIN RESERVOIR FILTRATION PROJECT VARIANCE NO. 3

Recommendation: That the Board authorize the General Manager to execute Variance No. 3 in the amount of \$128,503 with Carollo Engineers for the San Joaquin Reservoir Filtration Project, Project 10379.

CONSENT CALENDAR – Continued

Next Resolution No. 2020-18

Items 3-7

7. REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR FISCAL YEAR 2020-21 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT

Recommendation: That the Board authorize the General Manager to execute the Reimbursement Agreement between Irvine Ranch Water District and the City of Irvine for Adjustment of Street Utilities to Grade for the Fiscal Year 2020-21 Annual Street Rehabilitation and Slurry Seal Project, subject to non-substantive changes.

ACTION CALENDAR

8. <u>ASSET MANAGEMENT CAPITAL IMPROVEMENT PROGRAM</u> CONSULTANT SELECTION

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Black & Veatch in the amount of \$423,281 and approve the addition of Projects 11686, 11687, and 11688, each in the amount of \$225,500 for a total of \$676,500, to the Fiscal Year 2020-21 Capital Budget for the Asset Management Capital Improvement Program project.

9. <u>ASSOCIATION OF CALIFORNIA WATER AGENCIES 2021 LEGISLATIVE PLANNING</u>

Recommendation: That the Board authorize staff to submit the legislative proposal to the Association of California Water Agencies Legislative before the October 2, 2020, deadline for consideration as an ACWA-sponsored legislation, and that the Board adopt a "SUPPORT" position on the concept put forth in the legislative proposal form.

OTHER BUSINESS

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

OTHER BUSINESS -- Continued

- 10. General Manager's Report
- 11. Directors' Comments
- 12. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and provide information on relevant community events.
- 13. CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL ANTICIPATED LITIGATION (Gov. Code § 54956.9(d)(2) and (d)(4)) two potential cases
- 14. Open Session
- 15. Adjourn.

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the 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. 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.

September 28, 2020

Prepared and

submitted by: L. Bonkowski

Approved by: Paul A. Cook

CONSENT CALENDAR

BOARD MEETING MINUTES

SUMMARY:

Provided are the minutes of the September 14, 2020 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE SEPTEMBER 14, 2020 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – September 14, 2020 Minutes

No. 3 Minutes

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EXHIBIT "A"

MINUTES OF REGULAR MEETING – September 14, 2020

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 Matheis on September 14, 2020 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: Reinhart, Swan, Withers, LaMar and Matheis.

Directors Absent: None.

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

WRITTEN: None.

ORAL COMMUNICATIONS:

Mr. Kelly Rowe, a member of the Orange County Water District Board, described the Santa Ana Watershed Project Authority's (SAWPA)Watershed Weather Modification for Water Supply Feasibility Study. He also mentioned a cloud seeding program which he believed IRWD may have an interested in exploring. He further discussed potential issues in the Santiago Creek Recharge Basin including soils work needing maintenance by the County.

CONSENT CALENDAR

On <u>MOTION</u> by Matheis, seconded by Swan, and unanimously carried by a roll call vote (5-0) Withers, Matheis, Reinhart, Swan, and LaMar voting aye, and 0 noes, CONSENT CALENDAR ITEMS 3 THROUGH 7 WERE APPROVED AS FOLLOWS:

3. BOARD MEETING MINUTES

Recommendation: That the minutes of the August 24, 2020 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 Mary Aileen Matheis, Peer Swan, Doug Reinhart, Steve LaMar, and John Withers, as described.

CONSENT CALENDAR (Continued)

5. <u>SAND CANYON PROFESSIONAL CENTER – PHASE II PROJECT UPDATE AND</u> LISTING AGREEMENT EXTENSION

Recommendation: That the Board approve a new listing agreement for the lease of the Sand Canyon Professional Office Center Phase II with the brokerage team of Cushman & Wakefield and Colliers International under previously agreed-upon commission terms and expiring February 28, 2021.

6. LAKE FOREST WELL NO. 5 DESTRUCTION FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Lake Forest Well No. 5 Destruction, 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 11168.

7. RENEWAL OF GROUP MEDICAL, DENTAL, VISION AND TERM LIFE INSURANCE FOR CALENDAR YEAR 2021

Recommendation: That the Board authorize the continuation of IRWD's health insurance coverage with CalPERS with changes in District and employee contribution rates as outlined in Exhibit "A", authorize the continuation of the District's dental insurance coverage with ACWA/JPIA with no change in premium rates, authorize the continuation of the District's vision insurance coverage with EyeMed with no change in premium rates, authorize the continuation of the District's Term Life and Accidental Death and Dismemberment coverage with Reliance Standard with no change in premium rates, and authorize the continuation of voluntary Delta Dental and EyeMed buy-up plans for employee purchase.

ACTION CALENDAR

2020 LEGISLATIVE AND REGULATORY UPDATE

Government Relations Officer/Deputy General Counsel Compton provided an update on the 2019-2020 legislative session and IRWD priorities. Ms. Compton said that it is the end of session, and with the impacts of COVID-19, the policy and fiscal committee deadlines were adjusted again. She said that the last day for each house to pass bills without an urgency clause this legislative year was August 31, which was the day the Final Recess began. The Governor has until September 30 to sign or veto legislation passed by the Legislature this session. The 2021-2022 Regular Legislative Session will begin on December 7, 2020.

Ms. Compton updated the Board on state legislation, state regulatory efforts, and federal legislation along with 2021 legislation planning.

Director LaMar said that this item was reviewed by the Water Resources Policy and Communications Committee on September 3, 2020. A motion was made by LaMar and seconded by Matheis. Prior to the vote, Director LaMar reported on SB 4431 (Feinstein and

Daines) Emergency Wildfire and Public Safety Act of 2020 and recommended that the District add a support position to this bill as well. He further said that this bill is a priority of ACWA. Director LaMar said he would like to offer a substitute motion to the pending motion, to add a support position for SB 443. There being no objection to this addition, an amended MOTION was made by LaMar, seconded by Matheis and unanimously carried by a roll call vote (5-0) Withers, Matheis, Reinhart, Swan, and LaMar voting aye, and 0 noes, THE BOARD ADOPTED A "SUPPORT" POSITION ON H.R. 8041 (HARDER), D S. 4530 (FEINSTEIN). AND SB 4431 (FEINSTEIN AND DAINES).

GENERAL MANAGER'S REPORT

General Manager Cook reported that all is well, with no new cases of COVID-19 among staff.

DIRECTORS' COMMENTS

Director Swan reported on his attendance at Kern Fan Groundwater Authority's initial Board meeting, an ACWA Energy Committee meeting, a Southern California Dialogue Steering Committee meeting, an OCBC Government Affairs meeting, MWDOC Board and Planning meetings, a WACO meeting, and an OCWD Finance Committee meeting along with a Water Issues Committee meeting, along with other regular meetings.

Director Withers reported on his attendance at an ISDOC Executive Committee meeting, an NWRI Board meeting, and a WACO meeting.

Director LaMar reported on his attendance at a California Environmental Dialogue Session, a WACO meeting, and ACWA meetings.

Director Reinhart reported on his regular meetings including OCWD, MWDOC, a South County meeting, a Groundwater Banking Authority Board meeting, and a WACO meeting.

Director Matheis reported on her attendance at a WACO meeting. She further encouraged the Board to visit the non-profit Shadetree Partnership nursery where she attended an event last Saturday. She said that it was a wonderful effort in gathering volunteers to do nursery work. She said she is very proud of its General Manager Tom Bonkowski, and its Director Leslie Bonkowski, for their efforts, and was glad that the new Facility Manager, Victor Zamora, was in attendance as well working on the nursery's irrigation system.

COMMUNITY UPDATES:

The District's consultant, Mr. Bruce Newell, said there was no updates, only that the canyon is trying to get through the fire season.

CLOSED SESSION

General Counsel Collins said that the following Closed Session will be held:

CONFERENCE WITH LEGAL COUNSEL — EXISTING LITIGATION – Pursuant to Government Code Section 54956.9(d)(1): *Kessner, et al. v. City of Santa Clara, IRWD, et al.*, Santa Clara County Superior Court Case No. 20CV364054

OPEN SESSION

Following the Closed Session, the meeting was reconvened with Directors Matheis, Swan, Reinhart, LaMar and Withers present. No action was reported.

ADJOURNMENT

President Matheis adjourned the meeting.

APPROVED and SIGNED this 28th day of September 2020.

Ī	President, IRVINE RANCH WATER DISTRICT
APPROVED AS TO FORM:	Secretary IRVINE RANCH WATER DISTRICT
Claire Hervey Collins, General Counsel Hanson Bridgett LLP	

September 28, 2020

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

September 16	State Water Board PFAS Order Compliance Webinar
September 17	CW3E Water Affiliate Group Virtual Kick-off
October 22	OCBC 26 th Annual Economic Forecast Virtual Conference

Mary Aileen Matheis

September 16	Orange County Water Association's Monthly Meeting: Buena Park
	Explores Unidirectional Flushing
September 22	Monthly Meeting with the General Manager
September 29	OCWD Seawater Intrusion Barrier Webinar

Peer Swan

September 3	Southern California Water Dialogue Steering Committee
September 4	Orange County Business Council Government Affairs Committee Meeting

John Withers

September 29	OCWD Seawater Intrusion Barrier Webinar
October 22	OCBC 26 th Annual Economic Forecast Virtual Conference

RECOMMENDATION:

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

LIST OF EXHIBITS:

None.

4 No. 4 Board Attendance.docx

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September 28, 2020

Prepared by: J. Davis / T. Fournier Submitted by: R. Jacobson / C. Clary

Approved by: Paul A. Cook

CONSENT CALENDAR

AUGUST 2020 TREASURY REPORT

SUMMARY:

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

- A. The August 2020 Investment Summary Report. This Investment Summary Report conforms with the 2020 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 August 31, 2020, as outlined in Exhibit "B";
- C. The Monthly Interest Rate Swap Summary as of August 31, 2020, as outlined in Exhibit "C":
- D. The August 31, 2020 Disbursement Summary of warrants 410388 through 411398, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$16,863,053, as outlined in Exhibit "D";
- E. The Summary of Payroll ACH payments in the total amount of \$2,119,464, as outlined in Exhibit "E"; and
- F. The Disclosure Report of Reimbursements to Board members and staff for August 2020, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "F".

FISCAL IMPACTS:

As of August 31, 2020, the book value of the investment portfolio was \$396,376,632, with a 1.28% rate of return and a market value of \$399,749,052. Based on IRWD's June 30, 2020 quarterly real estate investment rate of return of 8.76%, the weighted average return for the fixed income and real estate investments was 3.51%.

As of August 31, 2020, the outstanding principal amount of fixed and variable rate debt was \$654,245,000. The monthly weighted average all-in variable rate was 0.37%. Including IRWD's weighted average fixed rate bond issues of 3.69% and the previous month's negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 2.90%.

Payroll ACH payments totaled \$2,119,464, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for August totaled \$16,863,053.

No. 5 Treasury Report.docx

Consent Calendar: August 2020 Treasury Report

September 28, 2020

Page 2

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

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

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF, APPROVE THE AUGUST 2020 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,119,464, AND APPROVE THE AUGUST 2020 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 410388 THROUGH 411398, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$16,863,053.

LIST OF EXHIBITS:

Exhibit "A" – Investment Summary Report

Exhibit "B" - Summary of Fixed and Variable Debt

Exhibit "C" – Monthly Interest Rate Swap Summary

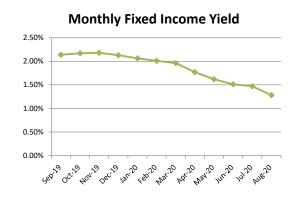
Exhibit "D" – Monthly Summary of District Disbursements

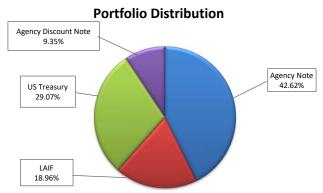
Exhibit "E" – Monthly Payroll ACH Summary

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

Exhibit "A"

Irvine Ranch Water District Investment Portfolio Summary August 2020





Investment Summary

Туре	PAR	Book Value	Market Value
Agency Note	168,550,000	169,265,780	170,642,832
US Treasury	115,000,000	115,162,122	116,761,400
LAIF	75,000,000	75,000,000	75,368,460
Agency Discount Note	37,000,000	36,948,729	36,976,360
Grand Total	395,550,000	396,376,632	399,749,052

Weighted Average Return Including Real Estate Portfolio 5.00% 4.50% 4.00% 3.50% 2.50% 2.00%

1.50% 1.00%

0.50% 0.00%



Top Issuers

Issuer	PAR	% Portfolio
US Treasury	115,000,000	29.07%
State of California Tsy.	75,000,000	18.96%
Fed Home Loan Bank	72,000,000	18.20%
Fed Farm Credit Bank	60,000,000	15.17%
Fed Home Loan Mortgage Corp	40,000,000	10.11%
Fed Natl Mortgage Assoc	33,550,000	8.49%
Grand Total	395,550,000	100.00%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT

08/31/20

						08/31/20								
SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	YTFC	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 8/31/2020	UNREALIZED ⁽²⁾ GAIN/(LOSS)
07/24/20			09/01/20		LAIF	State of California Tsy.	\$75,000,000		0.780%		\$75,000,000.00	\$75,000,000.00	75,368,459.63	368,459.63
09/14/18	NA	NA	09/04/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.690%	2.794%	0.812%	4,990,050.00	4,999,958.60	5,001,050.00	1,091.40
03/13/20	NA	NA	09/16/20	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.480%	0.489%	*****	4,987,533.35	4,993,666.68	4,999,850.00	6,183.32
12/12/17	NA	NA	09/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	2.000%		0.812%	5,000,000.00	5,000,000.00	5,007,100.00	7,100.00
10/31/17	NA	NA	10/30/20	Aaa/NR/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,550,000	1.850%	1.850%		5,550,000.00	5,550,000.00	5,565,762.00	15,762.00
03/31/20	NA	NA	10/30/20	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.150%	0.153%	0.01270	4,995,562.50	4,997,479.17	4,999,250.00	1,770.83
09/28/18	NA	NA	10/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.750%	2.847%	0.812%	4,889,453.13	4,787,587.95	5,013,300.00	225,712.05
03/16/20	NA	NA	11/18/20	NR	FHLB - Discount Note	Fed Home Loan Bank	7,000,000	0.530%	0.540%	0.01270	6,974,545.28	6,984,026.39	6,998,460.00	14,433.61
11/30/17	NA	NA	11/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.850%		0.812%	4,983,550.00	4,998,732.29	5,020,150.00	21,417.71
12/20/17	NA NA	NA NA	12/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.875%		0.812%	4,978,400.00	4,995,695.65	5,028,350.00	32,654.35
11/09/18	NA NA	NA NA	12/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.375%		0.812%	4,939,843.75	4,990,703.82	5,037,100.00	46,396.18
03/31/20	NA NA	NA NA	01/19/21	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	0.200%	0.204%	0.01270	4,991,833.33	4,994,388.89	4,997,650.00	3,261.11
10/12/18	NA NA	NA NA	01/13/21	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	1.375%		0.812%	9,664,843.76	9,939,496.74	10,049,200.00	109,703.26
12/14/18	NA NA	NA NA	02/16/21	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.375%	2.806%	0.812%	4,954,750.00	4,989,413.21	5,051,100.00	61,686.79
08/13/20		NA NA	02/16/21	Aaa/NR/AAA	Treasury - Bill	US Treasury	10,000,000	0.110%	0.112%		9,994,011.11	9,994,591.67	9,993,900.00	(691.67)
12/14/18	NA NA	NA NA	02/23/21	Aaa/NR/AAA Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.000%		0.812%	4,919,515.95	4,980,252.98	5,046,900.00	66,647.02
02/12/19			03/12/21			•		2.500%	2.735%	0.01270	9,996,500.00	9,999,114.62		127,185.38
02/12/19	NA	NA	03/12/21	Aaa/AA+/NR Aaa/AA+/NR	FHLB - Note FHLB - Note	Fed Home Loan Bank Fed Home Loan Bank	10,000,000 5,000,000	2.375%	2.549%		4,982,700.00	4,995,547.45	10,126,300.00	64,702.55
	NA	NA	03/12/21					1.950%	1.938%	0.812%			5,060,250.00	
06/17/19	NA	NA		Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000				5,001,050.00	5,000,323.71	5,048,550.00	48,226.29
02/28/20	NA	NA	04/13/21	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	3,000,000	2.500%	1.185%		3,043,950.00	3,034,088.05	3,043,470.00	9,381.95
06/14/19	NA	NA	04/30/21	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.750%	1.913%		4,985,000.00	4,994,730.32	5,053,350.00	58,619.68
12/05/19	NA	NA	04/30/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.250%	1.650%		5,041,406.25	5,019,490.05	5,069,350.00	49,859.95
09/13/19	NA	NA	05/15/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.625%		0.812%	5,071,093.75	5,029,836.07	5,086,550.00	56,713.93
03/02/20	NA	NA	05/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	2.125%	1.186%	0.812%	10,115,711.10	10,092,314.57	10,146,500.00	54,185.43
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	4,992,584.74	4,994,550.00	1,965.26
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	5,017,597.94	5,082,950.00	65,352.06
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	4,980,893.95	5,040,250.00	59,356.05
07/26/19	NA	NA	07/19/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.875%	1.927%	0.812%	4,995,000.00	4,997,783.15	5,074,900.00	77,116.85
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	9,986,583.33	9,986,600.00	16.67
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	9,999,260.60	9,998,000.00	(1,260.60)
08/01/19	NA	NA	08/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.125%	1.816%	0.812%	4,929,687.50	4,966,368.27	5,047,850.00	81,481.73
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	10,106,951.81	10,103,900.00	(3,051.81)
08/13/20	NA	NA	10/07/21	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.375%		0.812%	10,141,500.00	10,135,098.81	10,133,700.00	(1,398.81)
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	5,073,253.09	5,151,950.00	78,696.91
10/22/19	NA	NA	10/15/21	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.400%	1.642%	0.812%	4,976,500.00	4,986,724.45	5,070,150.00	83,425.55
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	5,074,571.95	5,163,650.00	89,078.05
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	5,004,248.63	5,098,450.00	94,201.37
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	10,184,463.23	10,194,800.00	10,336.77
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	5,024,751.47	5,123,050.00	98,298.53
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%	0.812%	5,077,250.00	5,049,420.19	5,153,000.00	103,579.81
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%	0.812%	5,157,297.23	5,151,820.73	5,153,000.00	1,179.27
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	5,002,624.37	5,160,550.00	157,925.63
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	5,016,177.12	5,121,500.00	105,322.88
03/21/19	NA	NA	02/03/22	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.030%	2.361%	0.812%	4,954,350.00	4,977,392.38	5,132,950.00	155,557.62
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	5,060,315.67	5,170,900.00	110,584.33
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	5,001,391.26	5,178,050.00	176,658.74
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	5,017,692.08	5,136,550.00	118,857.92
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	4,998,735.63	5,099,650.00	100,914.37
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	10,207,927.20	10,230,900.00	22,972.80
04/27/20	Quarterly	10/27/20	04/27/22	Aaa/NA/NA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	0.550%	0.550%		10,000,000.00	10,000,000.00	10,001,200.00	1,200.00
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	5,000,850.00	850.00
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	5,000,560.86	5,132,100.00	131,539.14

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT

08/31/20

SETTLMT 05/28/20 04/24/20	Call Schedule One Time NA	Initial Call 05/26/21 NA	Maturity Date 08/26/22 10/21/22	Rating Aaa/NR/AAA Aaa/NR/NR	INVESTMENT TYPE FHLMC - Note FHLMC - Note	INSTITUTION / ISSUER Fed Home Loan Mortgage Corp Fed Home Loan Mortgage Corp	PAR Amount 5,000,000 5,000,000	COUPON DISCOUNT 0.300% 0.550%	YIELD 0.300% 0.555%	YTFC	ORIGINAL COST 5,000,000.00 5,000,000.00	5,000,000.00 5,000,000.00	MARKET VALUE ⁽¹⁾ 8/31/2020 5,000,800.00 5,000,400.00	UNREALIZED ⁽²⁾ GAIN/(LOSS) 800.00 400.00
TOTAL INV	ESTMENTS						\$395,550,000	-			\$396,293,915.80	\$396,376,631.78	\$399,749,051.63	\$3,372,419.85
					Petty Cash Ck Balance	Bank of America					3,400.00 1,136,349.00 \$397,433,664.80			
			•	d as reported by LAIF.				Outstanding V			ot (Less \$60 million fi	(xed-naver swans)		\$259,100,000 \$199,100,000
and/or broker dea		iiiiied usi	ing Dunk of 140	w ronk (maing me	es), Bloomberg			Investment B	-	e Ruie Bee	A (Less 400 minor n	aca payer swaps)		\$397,433,665
(2) Gain (loss) cald	culated against	carry valu	e using the tra	ding value provided by	Bank of New York/or I	Brokers		Investment to	Variable F	Rate Debt F	Ratio:			200%
(3) Real estate rate	of return is ba	sed on mo	st recent quar	ter end return				Portfolio - Av	verage Nun	nber of Day	ys To Maturity			275
												Investment	Real Estate ⁽³⁾	Weighted Avg.
												Portfolio	Portfolio	Return
											August	1.28%	8.76%	3.51%
			•	the 2020 Investment P	•						July	1.47%	8.76%	3.79%
and provides suff *S - Step up	ficient liquidity	to meet th	ne next six mo	nths estimated expendi	tures.						Change	-0.19%		-0.28%

IRVINE RANCH WATER DISTRICT SUMMARY OF MATURITIES

08/31/20

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Municipal Bonds	US Treasury
08/20	\$75,000,000	18.96%	\$75,000,000				
09/20	15,000,000	3.79%		10,000,000	5,000,000		
10/20	15,550,000	3.93%		5,550,000	5,000,000		5,000,000
11/20	12,000,000	3.03%		5,000,000	7,000,000		
12/20	10,000,000	2.53%		5,000,000			5,000,000
01/21	15,000,000	3.79%			5,000,000		10,000,000
02/21	20,000,000	5.06%		5,000,000			15,000,000
03/21	20,000,000	5.06%		20,000,000			
04/21	13,000,000	3.29%		8,000,000			5,000,000
05/21	15,000,000	3.79%					15,000,000
06/21	15,000,000	3.79%		5,000,000	5,000,000		5,000,000
07/21	5,000,000	1.26%		5,000,000			
SUB-TOTAL	\$230,550,000	58.29%	\$75,000,000	\$68,550,000	\$27,000,000		\$60,000,000
13 Months - 3 YEARS							
08/01/2021 - 09/30/2021	35,000,000	8.85%		10,000,000	10,000,000		15,000,000
10/01/2021 - 12/31/2022	45,000,000	11.38%		25,000,000			20,000,000
01/01/2022 - 03/31/2022	40,000,000	10.11%		20,000,000			20,000,000
04/01/2022 - 06/30/2022	30,000,000	7.58%		30,000,000			
07/01/2022 +	15,000,000	3.79%		15,000,000			
	-						
	-						
	-						
	-						
TOTALS	\$395,550,000	100.00%	\$75,000,000	\$168,550,000	\$37,000,000		\$115,000,000

% OF PORTFOLIO 18.96% 42.62% 9.35% 29.07%

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	MA	RKET VALUE 6/30/2020	ANNUALIZED RATE OF RETURN QUARTER ENDED 6/30/2020
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$	152,340,625	18.54%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$	30,432,947	8.48%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$	11,964,600	9.65%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$	9,363,600	7.04%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$	11,444,400	9.35%
Total - Income Properties				\$ 72,569,826	\$	215,546,172	14.54%
OTHER REAL ESTATE DESCRIPTION							
Serrano Summit - Promissory Note Payment received - 8/12/20	Sep-17	NA	NA	\$ 85,352,804	\$	85,352,804	4.00%
Total - Income Producing Real Estate I	nvestments			\$ 157,922,630	\$	300,898,976	8.76%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT INVESTMENT ACTIVITY

Aug-20

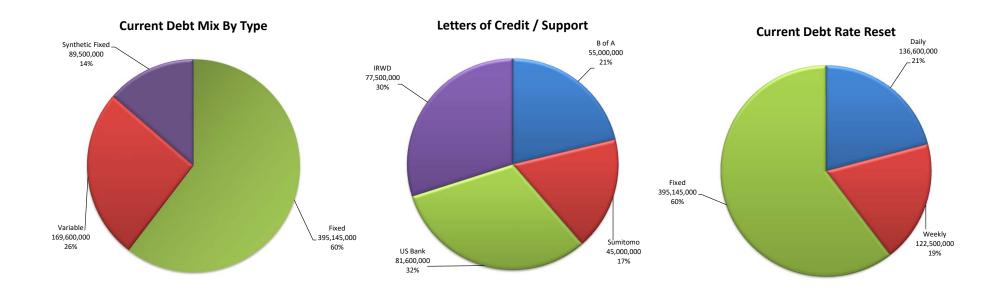
MATURITIES/SALES/CALLS

PURCHASES

				Settlement				YIELD TO
DATE	SECURITY TYPE	PAR	YIELD	Date	Maturity Date	SECURITY TYPE	PAR	MATURITY
8/24/2020	FFCB - Note	\$5,000,000	2.79%	8/13/2020	2/25/2021	Treasury - Bill	\$10,000,000	0.11%
				8/13/2020	8/12/2021	FFCB - Discount Note	\$10,000,000	0.14%
				8/13/2020	8/13/2021	FHLB - Note	\$10,000,000	0.13%
				8/13/2020	9/30/2021	Treasury - Note	\$10,000,000	0.13%
				8/13/2020	10/7/2021	FNMA - Note	\$10,000,000	0.14%
				8/14/2020	1/13/2022	FHLMC - Note	\$5,000,000	0.15%

Exhibit "B"

Irvine Ranch Water District Summary of Fixed and Variable Rate Debt August 2020



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	\$26,600,000	4.07%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$45,000,000	6.88%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$46,500,000	7.11%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$31,000,000	4.74%	IRWD	Goldman	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$55,000,000	8.41%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$55,000,000	8.41%	B of A	Goldman	Variable	Daily
2016 COPS	09/01/16	03/01/46	\$116,745,000	17.84%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	26.75%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	15.80%	N/A	N/A	Fixed	Fixed
Total			\$654,245,000	100.00%				

IRVINE RANCH WATER DISTRICT

SUMMARY OF FIXED & VARIABLE RATE DEBT

August-20

ITNDaily

vveekiy																					
				T.O.							TED OF ODE	DIT INFO							DUOTEE INCOR		
	G	SENERAL BU	OND INFORMA	TION						LEI	TER OF CRE	DII INFOR	RIVIATION					11	RUSTEE INFOR	MATION	
		Maturity	Principal	Payment	Original Par	Remaining	Letter of	Reimbursment	L/C Exp.					LOC Stated		Annual LOC	Rmkt			Annual	
VARIABLE RATE ISSUES	Issue Date	Date	Payment Date	Date	Amount	Principal	Credit	Agreement Date	Date		MOODYS	S&P	FITCH	Amount	LOC Fee	Cost	Agent	Reset	Rmkt Fees	Cost	Trustee
SERIES 1993	05/19/93	04/01/33	Apr 1	5th Bus. Day	\$38,300,000	\$26,600,000	US BANK	05/07/15	12/15/21		Aa3/VMIG1	AA-/A-1+	N/R	\$26,958,553	0.3300%	\$88,963	BAML	DAILY	0.10%	\$26,600	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	07/21/21		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	\$46,500,000	N/A	N/A	N/A		Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$58,125	BANK OF NY
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$40,370,000	\$31,000,000	N/A	N/A	N/A		Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$38,750	BANK OF NY
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$55,000,000	US BANK	04/01/11	12/15/21		Aa2/VMIG 1	AA-/A-1+	AA/F1+	\$55,614,795	0.3300%	\$183,529	US Bank	DAILY	0.07%	\$38,500	US BANK
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$55,000,000	B of A	04/01/11	05/16/22		Aa2/VMIG 1	A/A-1	A1/F1+	\$55,614,795	0.3000%	\$166,844	Goldman	DAILY	0.10%	\$55,000	US BANK

\$349,430,000 \$259,100,000 SUB-TOTAL VARIABLE RATE DEBT \$183,853,896 0.3172% \$583,184 0.10% \$248,475 (Wt. Avg) (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 (2021) Mar/Sept \$116,745,000 \$116,745,000 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** BANK OF NY 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

\$395,145,000 \$395,145,000 SUB-TOTAL FIXED RATE DEBT

\$744,575,000 \$654,245,000 TOTAL- FIXED & VARIABLE RATE DEBT

Remarketing Agents GO VS COP's 537,500,000 116,745,000 132,500,000 82% Goldman 51% GO: 28% COPS: BAML 71,600,000 18% US Bank 55,000,000 21% Total 654,245,000 259,100,000

LOC	Banks	Breakdown Between	een Variable & Fixed R	ate Mode
		Daily Issues	136,600,000	21%
SUMITOMO	45,000,000	Weekly Issues	45,000,000	7%
BANK OF AMERICA	55,000,000	ITN Issues	77,500,000	12%
US BANK	81,600,000	Sub-Total	259,100,000	
	181,600,000			
		Fixed Rate Issues	\$395,145,000	60%
		Sub-Total - Fixed	395,145,000	
		TOTAL DEBT		
		FIXED & VAR.	654,245,000	100%

IRVINE RANCH WATER DISTRICT SUMMARY OF DEBT RATES Aug-20

Rmkt Agent	GOLDMAN	GOLDMAN	GOLDMAN	MERRILI	L LYNCH	US BANK
Mode	DAILY	WEEKLY	WEEKLY	DAILY	WEEKLY	DAILY
Bond Issue	2009 - B	2011 A-1	2011 A-2	1993	2008-A	2009-A
Par Amount	55,000,000	46,500,000	31,000,000	26,600,000	45,000,000	55,000,000
Bank	BOFA	(SIFMA -6)	(SIFMA -6)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
			•		•	
8/1/2020	0.11%	0.10%	0.10%	0.14%	0.16%	0.10%
8/2/2020	0.11%	0.10%	0.10%	0.14%	0.16%	0.10%
8/3/2020	0.05%	0.10%	0.10%	0.12%	0.16%	0.05%
8/4/2020	0.02%	0.10%	0.10%	0.06%	0.16%	0.03%
8/5/2020	0.02%	0.10%	0.10%	0.04%	0.16%	0.02%
8/6/2020	0.03%	0.05%	0.05%	0.04%	0.10%	0.02%
8/7/2020	0.05%	0.05%	0.05%	0.07%	0.10%	0.05%
8/8/2020	0.05%	0.05%	0.05%	0.07%	0.10%	0.05%
8/9/2020	0.05%	0.05%	0.05%	0.07%	0.10%	0.05%
8/10/2020	0.05%	0.05%	0.05%	0.06%	0.10%	0.06%
8/11/2020	0.04%	0.05%	0.05%	0.05%	0.10%	0.06%
8/12/2020	0.04%	0.05%	0.05%	0.05%	0.10%	0.05%
8/13/2020	0.04%	0.05%	0.05%	0.05%	0.08%	0.05%
8/14/2020	0.03%	0.05%	0.05%	0.05%	0.08%	0.05%
8/15/2020	0.03%	0.05%	0.05%	0.05%	0.08%	0.05%
8/16/2020	0.03%	0.05%	0.05%	0.05%	0.08%	0.05%
8/17/2020	0.02%	0.05%	0.05%	0.05%	0.08%	0.04%
8/18/2020	0.02%	0.05%	0.05%	0.04%	0.08%	0.03%
8/19/2020	0.01%	0.05%	0.05%	0.04%	0.08%	0.03%
8/20/2020	0.01%	0.04%	0.04%	0.03%	0.08%	0.03%
8/21/2020	0.01%	0.04%	0.04%	0.02%	0.08%	0.03%
8/22/2020	0.01%	0.04%	0.04%	0.02%	0.08%	0.03%
8/23/2020	0.01%	0.04%	0.04%	0.02%	0.08%	0.03%
8/24/2020	0.01%	0.04%	0.04%	0.02%	0.08%	0.03%
8/25/2020	0.01%	0.04%	0.04%	0.02%	0.08%	0.02%
8/26/2020	0.01%	0.04%	0.04%	0.02%	0.08%	0.02%
8/27/2020	0.01%	0.03%	0.03%	0.02%	0.07%	0.02%
8/28/2020	0.01%	0.03%	0.03%	0.02%	0.07%	0.02%
8/29/2020	0.01%	0.03%	0.03%	0.02%	0.07%	0.02%
8/30/2020	0.01%	0.03%	0.03%	0.02%	0.07%	0.02%
8/31/2020	0.01%	0.03%	0.03%	0.02%	0.07%	0.02%
Avg Interest Rates	0.03%	0.05%	0.05%	0.05%	0.10%	0.04%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.30%	0.4=0/	2.470/	0.33%	0.32%	0.33%
All-In Rate	0.43%	0.17%	0.17%	0.48%	0.48%	0.44%
Par Amount	10	1,500,000	31,000,000	71,60	0,000	55,000,000

Tota	al Variable Rat			Weighted All-In		Base Rate
Interest Rate Mode	Debt	te	Outstanding	Average Rate		Average
Daily	52.72%		136,600,000	0.44%		0.04%
Weekly	47.28%		122,500,000	0.29%		0.07%
	100.00%	\$	259,100,000	0.37%		0.05%
Fixed						
COPS 2016	29.54%		116,745,000	2.90%		
BABS 2010	44.29%		175,000,000	4.44%	(1)	
SERIES 2016	26.17%		103,400,000	3.32%		
	100.00%	\$	395,145,000	3.69%		

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Exhibit "C"

Irvine Ranch Water District Interest Rate Swap Summary August 2020

	Prior Mo.	Current Mo.	12-Mo Avg
LIBOR Avg %	0.17%	0.16%	1.09%

		Curre	nt Fiscal Yea	r Active Swaps					Cash I	Flow	(Since 3/07)	Mark to	Market
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Туре	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Net Accrual	Current Mark to Market	Notional Difference
	Fixed Paye	er Swaps - By	Effective Da	ite	Ī								
3/10/2007	3/10/2029	8.5	ML	30,000,000	FXP	LIBOR	5.687%	(142,148)	(137,887)	(280,035)	(18,305,178)	16,831,142	(13,168,858)
3/10/2007	3/10/2029	8.5	CG	30,000,000	FXP	LIBOR	5.687%	(142,148)	(137,887)	(280,035)	(18,305,178)	16,839,083	(13,160,917)
Totals/Weighte	d Avgs	8.5	-	\$ 60,000,000			5.687%	\$ (284,296)	\$ (275,774)	\$ (560,070)	\$ (36,610,355)	\$ 33,670,225	\$ (26,329,775)
Total Current Active Swaps				\$ 60,000,000				\$ (284,296)	\$ (275,774)	\$ (560,070)	\$ (36,610,355)	\$ 33,670,225	\$ (26,329,775)

		Current I	Fiscal Year T	Terminated Swap	s		
	Maturity		Counter			Base	
Effective Date	Date		Party	Notional Amt	Type	Index	Fixed Rate

	Cas	h Flow	
Prior	Current		Cumulative
Month	Month	Fiscal YTD	Net Accrual

Ī	Mark to	Market
	Current Mark to	Notional
ı	Market	Difference

Total Current Year Terminated Swaps

\$

5 - \$ - \$ - \$

¢

Mark to Market

Current Fiscal Year - Total Swaps

	Cas	h Flow	
Prior	Current		Cumulative
Month	Month	Fiscal YTD	Net Accrual

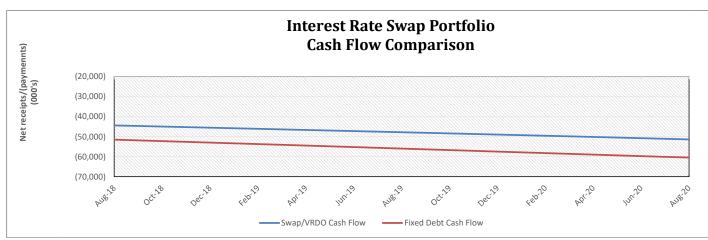
Current Mark to Notional Market Difference

Total Current Year Active & Terminated Swaps

\$ 60,000,000

\$ (284,296) **\$** (275,774) **\$** (560,070) **\$** (36,610,355) **\$**

33,670,225 \$ (26,329,775)



Cash Flow Comparison
Synthetic Fixed vs. Fixed Rate Debt

Cash Flow to Date

Synthetic Fixed = \$51,434,983

Fixed Rate = \$60,484,478

Assumptions:

- 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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CHECK OR		PAYMENT	PAYMENT	PAYMENT	
CTRONIC #	2011	DATE	AMOUNT	METHOD	STATUS
410388	Fabris, John	6-Aug-20	30.48	IRWD Check	Negotiable
410389	Olivolo, Eric J (Eric)	6-Aug-20	80.00	IRWD Check	Reconciled
410390	Shinbashi, Allen	6-Aug-20	84.55	IRWD Check	Reconciled
410391	ABC ICE, INC	6-Aug-20	205.46	IRWD Check	Reconciled
410392	ACCUSOURCE, INC.	6-Aug-20	494.44	IRWD Check	Reconciled
410393	AFLAC	6-Aug-20	223.11	IRWD Check	Reconciled
410394	AFLAC	6-Aug-20	10,180.65	IRWD Check	Reconciled
410395	AGILENT TECHNOLOGIES, INC.	6-Aug-20	2,599.36	IRWD Check	Reconciled
410396	AGILENT TECHNOLOGIES, INC.	6-Aug-20	34,713.60	IRWD Check	Reconciled
410397	AIRGAS, INC.	6-Aug-20	8,159.42	IRWD Check	Reconciled
410398	ALLIANT INSURANCE SERVICES,INC	6-Aug-20	3,873.00	IRWD Check	Reconciled
410399	AMAZON CAPITAL SERVICES, INC.	6-Aug-20	932.86	IRWD Check	Reconciled
410400	ANTHEM BLUE CROSS	6-Aug-20	257.88	IRWD Check	Reconciled
410401	AQUA-METRIC SALES COMPANY	6-Aug-20	434.35	IRWD Check	Reconciled
410402	ARCADIS U.S., INC.	6-Aug-20	26,329.09	IRWD Check	Reconciled
410403	ASIAN INDUSTRY B2B	6-Aug-20	2,000.00	IRWD Check	Reconciled
410404	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	6-Aug-20	38,659.23	IRWD Check	Reconciled
410404	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	-	888.30	IRWD Check	
	·	6-Aug-20			Reconciled
410406	ATHAR, ADEEL	6-Aug-20	587.03	IRWD Check	Reconciled
410407	AUTOZONE PARTS, INC.	6-Aug-20	1,375.25	IRWD Check	Reconciled
410408	BARDWIL, RICHARD P	6-Aug-20	47.65	IRWD Check	Reconciled
410409	BEACHWALK INC	6-Aug-20	52.77	IRWD Check	Reconciled
410410	BENNETT, BRETT	6-Aug-20	34.79	IRWD Check	Reconciled
410412	BLAIRS TOWING INC	6-Aug-20	141.00	IRWD Check	Reconciled
410413	BLOSSER, ALIISA	6-Aug-20	207.95	IRWD Check	Reconciled
410414	BOSCO CONSTRUCTORS, INC.	6-Aug-20	3,364.80	IRWD Check	Reconciled
410415	C WELLS PIPELINE MATERIALS INC	6-Aug-20	24,378.24	IRWD Check	Reconciled
410416	CALIFORNIA BARRICADE RENTAL, INC.	6-Aug-20	2,145.00	IRWD Check	Reconciled
410417	CALIFORNIA MUNICIPAL STATISTICS INC	6-Aug-20	50.00	IRWD Check	Reconciled
410418	CANON FINANCIAL SERVICES, INC	6-Aug-20	203.65	IRWD Check	Reconciled
410419	CAO, WEIRAN	6-Aug-20	43.47	IRWD Check	Reconciled
410420	CAPTIVE AUDIENCE MARKETING INC.	6-Aug-20	79.00	IRWD Check	Reconciled
410421	CARDOZA, CHASE	6-Aug-20	45.97	IRWD Check	Reconciled
410422	CDW GOVERNMENT LLC	6-Aug-20	630.60	IRWD Check	Reconciled
410423	CHAIREL CUSTOM HAY, INC.	6-Aug-20	6,734.88	IRWD Check	Reconciled
410423		-	•		
	CHANG, HO J	6-Aug-20	79.16	IRWD Check	Reconciled
410425	CITY OF NEWPORT BEACH	6-Aug-20	16,943.50	IRWD Check	Reconciled
410426	CITY OF SANTA ANA	6-Aug-20	308,397.24	IRWD Check	Reconciled
410427	CITY OF TUSTIN	6-Aug-20	242.97	IRWD Check	Reconciled
410428	CLEAN ENERGY	6-Aug-20	4,416.15	IRWD Check	Reconciled
410429	COLONIAL LIFE & ACCIDENT INSURANCE CO.	6-Aug-20	1,654.89	IRWD Check	Reconciled
410430	CONSOLIDATED ELECTRICAL DISTRIBUTORS, INC	6-Aug-20	1,895.26	IRWD Check	Reconciled
410431	CONSTELLATION NEWENERGY, INC.	6-Aug-20	3,983.68	IRWD Check	Reconciled
410432	COUNTY OF ORANGE	6-Aug-20	2,960.50	IRWD Check	Reconciled
410433	COUNTY OF ORANGE	6-Aug-20	40,107.17	IRWD Check	Reconciled
410434	CRESCENT CHEMICAL CO.	6-Aug-20	94.00	IRWD Check	Reconciled
410435	D & G SIGNS	6-Aug-20	349.76	IRWD Check	Reconciled
410436	DB INDUSTRIAL SUPPLY CO	6-Aug-20	481.57	IRWD Check	Reconciled
410437	DELL MARKETING LP	6-Aug-20	3,949.04	IRWD Check	Reconciled
410438	DILYTICS INC	6-Aug-20	4,100.00	IRWD Check	Reconciled
410439	DUBEY, RAJEEV	6-Aug-20	24.87	IRWD Check	Reconciled
410439	DURHAM GEO SLOPE INDICATOR	6-Aug-20	1,501.29	IRWD Check	Reconciled
410440	DXP ENTERPRISES, INC.	•	1,301.29	IRWD Check	Reconciled
		6-Aug-20	•		
410442	EAST ORANGE COUNTY WATER DISTRICT	6-Aug-20	2,142.82	IRWD Check	Reconciled
410443	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.	6-Aug-20	11,645.00	IRWD Check	Reconciled
410444	FACCOC FILIPINO AMERICAN CHAMBER OF COMMERCE OF ORANGE COUNTY	6-Aug-20	1,500.00	IRWD Check	Reconciled
410445	FAITHCO INC.	6-Aug-20	19,973.00	IRWD Check	Reconciled
410446	FARWEST CORROSION CONTROL COMPANY	6-Aug-20	4,929.98	IRWD Check	Reconciled
410447	FASTBLUE COMMUNICATIONS INC.	6-Aug-20	1,917.00	IRWD Check	Reconciled
410448	FEDEX	6-Aug-20	125.37	IRWD Check	Reconciled
410449	FENG, FEI	6-Aug-20	199.25	IRWD Check	Reconciled
410450	FISERV SOLUTIONS, LLC	6-Aug-20	22,446.80	IRWD Check	Reconciled
410451	FISHER SCIENTIFIC COMPANY LLC	6-Aug-20	2,991.27	IRWD Check	Reconciled
410452	FLEET SOLUTIONS LLC	6-Aug-20	5,772.56	IRWD Check	Reconciled
410453	FLW, INC.	6-Aug-20	84.25	IRWD Check	Reconciled
410454	FULLER TRUCK ACCESSORIES	6-Aug-20	44.33	IRWD Check	Reconciled
410454	GEOCON WEST, INC.	6-Aug-20	540.00	IRWD Check	Reconciled
	•	_			
410456	GRAINGER HACH COMPANY	6-Aug-20	2,724.01	IRWD Check	Reconciled
		6-Aug-20	1,567.76	IRWD Check	Reconciled
410457 410458	HAN, XU D - 1	6-Aug-20	34.55	IRWD Check	Reconciled

CHECK OR ECTRONIC #	SUPPLIERS		PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
410459	HANSON BRIDGETT LLP		6-Aug-20	81,502.51	IRWD Check	Reconciled
410460	HAZEN AND SAWYER		6-Aug-20	10,504.10	IRWD Check	Reconciled
	HDR ENGINEERING INC		6-Aug-20	23,281.25	IRWD Check	Reconciled
	HELPMATES STAFFING SERVICES		6-Aug-20	12,227.40	IRWD Check	Reconciled
	HI-LINE INC		6-Aug-20	218.73	IRWD Check	Reconciled
	HILL BROTHERS CHEMICAL COMPANY		6-Aug-20	7,265.00	IRWD Check	Reconciled
			_			
	HOME DEPOT USA INC		6-Aug-20	41.24	IRWD Check	Reconciled
	HUMANA INSURANCE COMPANY		6-Aug-20	56.60	IRWD Check	Reconciled
	HUNSAKER & ASSOCIATES IRVINE		6-Aug-20	14,250.00	IRWD Check	Reconciled
410468	INDUSTRIAL METAL SUPPLY CO		6-Aug-20	372.78	IRWD Check	Reconciled
410469	INDUSTRIAL NETWORKING SOLUTIONS		6-Aug-20	5,344.91	IRWD Check	Reconciled
410470	INLAND POTABLE SERVICES, INC.		6-Aug-20	110,202.98	IRWD Check	Reconciled
410471	INTEGRITY MUNICIPAL SERVICES LLC		6-Aug-20	5,000.00	IRWD Check	Reconciled
410472	INTELPATH		6-Aug-20	1,310.00	IRWD Check	Reconciled
	IRONRIDGE PAS		6-Aug-20	1,360.88	IRWD Check	Reconciled
	IRVINE PIPE & SUPPLY INC		=	1,218.59	IRWD Check	Reconciled
			6-Aug-20	•		
	JACOBS, DEBORAH		6-Aug-20	27.87	IRWD Check	Reconciled
	JEN, HUAIYA		6-Aug-20	25.76	IRWD Check	Reconciled
410477	JOHN MICHAEL COVAS		6-Aug-20	210.20	IRWD Check	Reconciled
410478	KAWAGUCHI, MARITA		6-Aug-20	29.90	IRWD Check	Reconciled
410479	KENT DAHLBERG		6-Aug-20	31,083.00	IRWD Check	Reconciled
	KIM, HYERAN		6-Aug-20	32.73	IRWD Check	Reconciled
	KIMBALL MIDWEST		6-Aug-20	505.18	IRWD Check	Reconciled
	KPRS CONSTRUCTION SERVICES, INC.		6-Aug-20	718,949.97	IRWD Check	Reconciled
	·		=			
	KUAN, CHEN HSIANG		6-Aug-20	274.06	IRWD Check	Reconciled
	KUMAR, ANANT		6-Aug-20	38.20	IRWD Check	Negotiable
	LAGUNA BEACH COUNTY WATER DISTRICT		6-Aug-20	6,879.50	IRWD Check	Reconciled
410486	LI, ZAO		6-Aug-20	36.13	IRWD Check	Negotiable
410487	LIM, GEORGE		6-Aug-20	42.59	IRWD Check	Reconciled
410488	LUBRICATION ENGINEERS, INC.		6-Aug-20	4,591.74	IRWD Check	Reconciled
410490	LUONG, BINH		6-Aug-20	367.88	IRWD Check	Reconciled
	MAC DONNELL, KEVIN M		6-Aug-20	409.72	IRWD Check	Reconciled
	MACHADO, ED		6-Aug-20	27.64	IRWD Check	Reconciled
			=			
	MARIN, NANCY		6-Aug-20	70.72	IRWD Check	Negotiable
	MBC AQUATIC SCIENCES, INC.		6-Aug-20	1,350.00	IRWD Check	Reconciled
410495	MC FADDEN-DALE INDUSTRIAL		6-Aug-20	117.20	IRWD Check	Reconciled
410496	MC MASTER CARR SUPPLY CO		6-Aug-20	356.52	IRWD Check	Reconciled
410497	MERIDETH, ANGELA		6-Aug-20	5.77	IRWD Check	Reconciled
410498	MEYER PROPERTIES		6-Aug-20	870.54	IRWD Check	Reconciled
410499	MORAN, TAYLOR		6-Aug-20	33.95	IRWD Check	Reconciled
	MORRISROE, EDWARD		6-Aug-20	266.37	IRWD Check	Reconciled
	MR CRANE INC		=	1,198.80		
			6-Aug-20	•	IRWD Check	Reconciled
	MSGW/PACIFIC COMMERCENTRE		6-Aug-20	562.44	IRWD Check	Reconciled
410503	MUNICIPAL MAINTENANCE EQUIPMENT INC		6-Aug-20	470.28	IRWD Check	Reconciled
410504	MUTUAL PROPANE		6-Aug-20	157.01	IRWD Check	Reconciled
410505	NATIONAL READY MIXED CONCRETE SALES, LLC		6-Aug-20	753.18	IRWD Check	Reconciled
	NATIONAL WATER RESEARCH INSTITUTE		6-Aug-20	50,000.00	IRWD Check	Reconciled
	NI, HONG		6-Aug-20	26.00	IRWD Check	Reconciled
	NMG GEOTECHNICAL INC		6-Aug-20	4,491.80	IRWD Check	Reconciled
	O.C. SUPERIOR CUSTOM CLEANING		6-Aug-20	1,872.00	IRWD Check	Reconciled
			_			
	OLIN CORPORATION		6-Aug-20	13,147.82	IRWD Check	Reconciled
	ORACLE AMERICA, INC.		6-Aug-20	9,087.19	IRWD Check	Reconciled
	ORANGE COUNTY AUTO PARTS CO		6-Aug-20	213.98	IRWD Check	Reconciled
410513	ORANGE COUNTY SANITATION DISTRICT		6-Aug-20	320.00	IRWD Check	Reconciled
410514	PACIFIC COAST BOLT CORP		6-Aug-20	2,885.45	IRWD Check	Reconciled
410515	PACIFIC PARTS & CONTROLS INC		6-Aug-20	984.84	IRWD Check	Reconciled
	PARKHOUSE TIRE INC		6-Aug-20	188.00	IRWD Check	Reconciled
	PARKS, CRYSTAL		6-Aug-20	200.00	IRWD Check	Reconciled
			=	38.12	IRWD Check	
	PEREZ, DANIELA		6-Aug-20			Negotiable
	PETRUSSE-NORRIS PAINTING, INC.		6-Aug-20	852.60	IRWD Check	Reconciled
	PIPELINE PRODUCTS INC		6-Aug-20	822.46	IRWD Check	Reconciled
	PMC CONTRACTORS INC		6-Aug-20	1,076.77	IRWD Check	Reconciled
410522	POLLARDWATER.COM		6-Aug-20	3,485.28	IRWD Check	Reconciled
410523	PRAXAIR DISTRIBUTION INC		6-Aug-20	1,212.60	IRWD Check	Reconciled
	PRE-PAID LEGAL SERVICES, INC.		6-Aug-20	1,646.03	IRWD Check	Reconciled
	PRUDENTIAL OVERALL SUPPLY		6-Aug-20	784.31	IRWD Check	Reconciled
			=			
	PTI SAND & GRAVEL INC		6-Aug-20	1,880.45	IRWD Check	Reconciled
	PU, QIN		6-Aug-20	27.47	IRWD Check	Negotiable
	QUAIL MEADOW APARTMENTS	D - 2	6-Aug-20	70.00	IRWD Check	Reconciled Reconciled

CHECK OR	AURRI :	PAYMENT	PAYMENT	PAYMENT	CTATIC
ECTRONIC #		DATE	AMOUNT	METHOD	STATUS
410530	RAM AIR ENGINEERING INC	6-Aug-20	22,183.77	IRWD Check	Reconciled
410531	RANCHO ALISAL APTS	6-Aug-20	50.25	IRWD Check	Reconciled
410532	REACH EMPLOYEE ASSISTANCE INC	6-Aug-20	1,069.60	IRWD Check	Reconciled
410533	REAL WATER CONSULTANTS INC.	6-Aug-20	1,000.00	IRWD Check	Negotiable
410534	RED WING SHOE STORE	6-Aug-20	150.30	IRWD Check	Reconciled
410535	RELIANCE STANDARD LIFE INSURANCE COMPANY	6-Aug-20	31,652.28	IRWD Check	Reconciled
410536	RESA POWER SOLUTIONS - TRANSFORMER SERVICES, LLC	6-Aug-20	5,990.00	IRWD Check	Reconciled
410537	RODRIGUEZ, RAFAEL L	6-Aug-20	449.31	IRWD Check	Reconciled
410538	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	6-Aug-20	83,362.69	IRWD Check	Reconciled
410539	SAN MARINO APTS	6-Aug-20	35.24	IRWD Check	Reconciled
410540	SAN REMO APTS	6-Aug-20	34.02	IRWD Check	Reconciled
410541	SANTA ANA WATERSHED PROJECT AUTHORITY	6-Aug-20	22,388.00	IRWD Check	Reconciled
410542 410543	SANTA MARGARITA FORD	6-Aug-20	63.12 8,033.84	IRWD Check IRWD Check	Reconciled Reconciled
410545	SCHWEITZER ENGINEERING LABORATORIES, INC. SCOTT FOSTER ENGINEERING, INC.	6-Aug-20 6-Aug-20	10,545.00	IRWD Check	Reconciled
410545	SEAL ANALYTICAL INC	6-Aug-20	12,980.00	IRWD Check	Reconciled
410545	SHAMROCK SUPPLY CO INC	6-Aug-20	2,996.41	IRWD Check	Reconciled
410547	SIGMA-ALDRICH INC	6-Aug-20	3,596.09	IRWD Check	Reconciled
410548	SIMON CHOI AND XINGYAN GUAN	6-Aug-20	23.50	IRWD Check	Reconciled
410548	SOUTHERN CALIFORNIA EDISON COMPANY	6-Aug-20	227,890.41	IRWD Check	Reconciled
410550	SS MECHANICAL CONSTRUCTION CORP	6-Aug-20	17,413.41	IRWD Check	Reconciled
410551	TANKVISIONS, INC	6-Aug-20	30.00	IRWD Check	Reconciled
410553	TETRA TECH, INC	6-Aug-20	16,475.00	IRWD Check	Reconciled
410554	THARALDSON HOSPITALITY DEVELOPMENT	6-Aug-20	2,747.60	IRWD Check	Reconciled
410555	THYSSENKRUPP ELEVATOR CORPORATION	6-Aug-20	614.19	IRWD Check	Reconciled
410556	TONG, LINDA W	6-Aug-20	752.52	IRWD Check	Reconciled
410557	TOXGUARD FLUID TECHNOLOGIES	6-Aug-20	587.08	IRWD Check	Reconciled
410558	TRAN, AN	6-Aug-20	42.71	IRWD Check	Reconciled
410559	TRIAD GROUP, INC.	6-Aug-20	600.00	IRWD Check	Reconciled
410560	TROPICAL PLAZA NURSERY INC	6-Aug-20	45,942.00	IRWD Check	Reconciled
410561	TU, GRACE	6-Aug-20	24.64	IRWD Check	Negotiable
410562	TURTLE ROCK CANYON APTS	6-Aug-20	28.20	IRWD Check	Reconciled
410563	U.S. GAIN - A DIVISION OF U.S. VENTURE, INC.	6-Aug-20	708.65	IRWD Check	Reconciled
410564	UNITED HEALTHCARE INSURANCE COMPANY	6-Aug-20	299.75	IRWD Check	Reconciled
410565	UNITED PARCEL SERVICE INC	6-Aug-20	93.64	IRWD Check	Reconciled
410566	UNITED PARCEL SERVICE INC	6-Aug-20	119.46	IRWD Check	Reconciled
410567	URBAN WATER INSTITUTE INC	6-Aug-20	500.00	IRWD Check	Negotiable
410568	VULCAN INDUSTRIES INC	6-Aug-20	9,940.76	IRWD Check	Reconciled
410569	VULCAN MATERIALS COMPANY	6-Aug-20	1,211.82	IRWD Check	Reconciled
410570	WALTERS WHOLESALE ELECTRIC	6-Aug-20	1,530.36	IRWD Check	Reconciled
410571	WARD, WILLIAM P JR.	6-Aug-20	675.90	IRWD Check	Reconciled
410572	WASTE MANAGEMENT OF CALIFORNIA, INC.	6-Aug-20	1,198.52	IRWD Check	Reconciled
410573	WATER RESEARCH FOUNDATION	6-Aug-20	61,091.00	IRWD Check	Reconciled
410574	WATEREUSE ASSOCIATION	6-Aug-20	7,500.00	IRWD Check	Negotiable
410575	WAXIE'S ENTERPRISES, INC	6-Aug-20	1,388.06	IRWD Check	Reconciled
410576	WECK LABORATORIES INC	6-Aug-20	1,218.00	IRWD Check	Reconciled
410577	WEST COAST SAFETY SUPPLY INC	6-Aug-20	2,396.59	IRWD Check	Reconciled
410578	WIN-911 SOFTWARE	6-Aug-20	1,530.00	IRWD Check	Reconciled
410579	YAN, MIN	6-Aug-20	27.49	IRWD Check	Reconciled
410580	YU, HANG	6-Aug-20	301.66	IRWD Check	Negotiable
410581	ZHANG, YAN	6-Aug-20	39.26	IRWD Check	Reconciled
410582	ZHOU, YUJIE	6-Aug-20	68.83	IRWD Check	Reconciled
410583	MC FADDEN-DALE INDUSTRIAL	6-Aug-20	85.00	IRWD Check	Reconciled
410584	INDUSTRIAL METAL SUPPLY CO	6-Aug-20	42.97	IRWD Check	Reconciled
410585	BOYD, MICHAEL	7-Aug-20	7,403.74	IRWD Check	Reconciled
410586	Aguilar, Alex L (Alex)	13-Aug-20	-	IRWD Check	Negotiable
410587	Armstrong, Ashley	13-Aug-20	-	IRWD Check	Negotiable
410588	Beeman, Beth M (Beth)	13-Aug-20	-	IRWD Check	Negotiable
410589	Beltran, Scott A (Scott)	13-Aug-20	-	IRWD Check	Negotiable
410590	Bendzick-Sin, Julie M (Julie)	13-Aug-20	-	IRWD Check	Negotiable
410591	Bonkowski, Leslie A (Leslie)	13-Aug-20	-	IRWD Check	Negotiable
410592	Bowers, Marie	13-Aug-20	-	IRWD Check	Negotiable
410593	Brennan, Kendra A	13-Aug-20	-	IRWD Check	Negotiable
410594	Brown, Richard E (Richard)	13-Aug-20	-	IRWD Check	Negotiable
410595	Burton, Kevin L (Kevin)	13-Aug-20	-	IRWD Check	Negotiable
410596	Cady, Thanh-Van T (Van)	13-Aug-20	-	IRWD Check	Negotiable
410597	Cervantes, Isela J	13-Aug-20	-	IRWD Check	Negotiable
	Chambers, Wendy	13-Aug-20	-	IRWD Check	Negotiable
410598	•				
410598 410599 410600	Clary, Cheryl L Colston, James D - 1	13-Aug-20 13-Aug-20	-	IRWD Check IRWD Check	Negotiable Negotiable

HECK OR			PAYMENT	PAYMENT	PAYMENT	
CTRONIC #	SUP	LIERS	DATE	AMOUNT	METHOD	STATUS
410601	Compton, Christine A		13-Aug-20	-	IRWD Check	Negotiable
410602	Cook, Paul A (Paul)		13-Aug-20	-	IRWD Check	Negotiable
410603	Crowe, David M (David)		13-Aug-20	-	IRWD Check	Negotiable
410604	Dayer, John G (John)		13-Aug-20	-	IRWD Check	Negotiable
410605	Denhaan, Robert E		13-Aug-20	-	IRWD Check	Negotiable
410606	Drake, Kenneth W (Ken)		13-Aug-20	-	IRWD Check	Negotiable
410607	Duarte, Elizabeth (Elizabeth)		13-Aug-20	-	IRWD Check	Negotiable
410608	Escobar, Omar (Omar)		13-Aug-20	_	IRWD Check	Negotiable
410609	Fabris, John		13-Aug-20	_	IRWD Check	Negotiable
410610	Faulds, Jonathan		13-Aug-20	_	IRWD Check	Negotiable
410611	Flotho, Eric (Eric)		13-Aug-20	-	IRWD Check	Negotiable
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410612	Garcia, Dorys Elizabeth		13-Aug-20	-	IRWD Check	Negotiable
410613	Garza, Gaspar		13-Aug-20	-	IRWD Check	Negotiable
410614	Haney, Lisa		13-Aug-20	-	IRWD Check	Negotiable
410615	Hastings, Nola		13-Aug-20	-	IRWD Check	Negotiable
410616	Henton-Hall, Andrea T		13-Aug-20	-	IRWD Check	Negotiable
410617	Ho, Connie		13-Aug-20	-	IRWD Check	Negotiable
410618	Hufana, Mr. Eugenio D II (Gino)		13-Aug-20	140.30	IRWD Check	Reconciled
410619	Jacobson, Robert C (Rob)		13-Aug-20	-	IRWD Check	Negotiable
410620	Jordan, Dawn M (Dawn)		13-Aug-20	-	IRWD Check	Negotiable
410621	Kelly, Cheryl D (Cheryl)		13-Aug-20	-	IRWD Check	Negotiable
410622	Kwon, Andrew		13-Aug-20	-	IRWD Check	Negotiable
410623	Lee, Sun (Sunny)		13-Aug-20	-	IRWD Check	Negotiable
410624	Lewis, Lyndy R		13-Aug-20	-	IRWD Check	Negotiable
410625	Martin, Colton S (Colton)		13-Aug-20	-	IRWD Check	Negotiable
410626	Mays, Shavonne (Shavonne)		13-Aug-20	-	IRWD Check	Negotiable
410627	McElroy, Dorien		13-Aug-20	-	IRWD Check	Negotiable
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410628	McKinstry, Brian H (Brian)		13-Aug-20	-	IRWD Check	Negotiable
410629	McNulty, Amy K (Amy)		13-Aug-20		IRWD Check	Negotiable
410630	Midstokke, Paige		13-Aug-20	-	IRWD Check	Negotiable
410631	Montejano, Graciela (Grace)		13-Aug-20	-	IRWD Check	Negotiable
410632	Mourant, Barbara J (Barbara)		13-Aug-20	-	IRWD Check	Negotiable
410633	Muncy, Jessie A		13-Aug-20	-	IRWD Check	Negotiable
410634	Mykitta, Richard		13-Aug-20	-	IRWD Check	Negotiable
410635	Navarro-Martinez, Veronica P		13-Aug-20	-	IRWD Check	Negotiable
410636	Nguyen, Chau		13-Aug-20	-	IRWD Check	Negotiable
410637	Norman, Tammy		13-Aug-20	-	IRWD Check	Negotiable
410638	O'Neill, Owen H		13-Aug-20	-	IRWD Check	Negotiable
410639	Perez, David M (David)		13-Aug-20	-	IRWD Check	Negotiable
410640	Perry, Ricky A (Rick)		13-Aug-20	-	IRWD Check	Negotiable
410641	Pfister, Ken D (Ken)		13-Aug-20	_	IRWD Check	Negotiable
410642	Pham, Elizabeth		13-Aug-20	_	IRWD Check	Negotiable
410643	Pio, Christine R (Chris)		13-Aug-20	_	IRWD Check	Negotiable
410644	Prewoznik, Frank		_		IRWD Check	-
410644	•		13-Aug-20	-		Negotiable
	Pulles, Margaret M (Margaret)		13-Aug-20	-	IRWD Check	Negotiable
410646	Ramirez, Magdalena (Magdalena)		13-Aug-20	-	IRWD Check	Negotiable
410647	Ramos, Martha A (Marta)		13-Aug-20	-	IRWD Check	Negotiable
410648	Rivenburg, Deniene H		13-Aug-20	-	IRWD Check	Negotiable
410649	Roberts, Thomas (Tom)		13-Aug-20	-	IRWD Check	Negotiable
410650	Roney, Jenny Lauren		13-Aug-20	-	IRWD Check	Negotiable
110651	Ronin, Gretchen C (Gretchen)		13-Aug-20	-	IRWD Check	Negotiable
110652	Sanchez, Fiona M (Fiona)		13-Aug-20	-	IRWD Check	Negotiable
410653	Sciabica, Joseph		13-Aug-20	-	IRWD Check	Negotiable
410654	Sheilds, Patrick		13-Aug-20	-	IRWD Check	Negotiable
410655	Squyres, Diane M (Diane)		13-Aug-20	-	IRWD Check	Negotiable
410656	Srader, Lisa		13-Aug-20	-	IRWD Check	Negotiable
410657	Swan, Kristine		13-Aug-20	-	IRWD Check	Negotiable
410658	Swift, Ian P (Ian)		13-Aug-20	-	IRWD Check	Negotiable
410659	Teran, Mariaelena		13-Aug-20	_	IRWD Check	Negotiable
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110660	Tettemer, John M (Mark)		13-Aug-20	-	IRWD Check	Negotiable
410661	Vanderploeg, Gina V		13-Aug-20	-	IRWD Check	Negotiable
410662	Weghorst, Paul A (Paul)		13-Aug-20	-	IRWD Check	Negotiable
410663	Zepeda, Jose		13-Aug-20	-	IRWD Check	Negotiable
410664	Zuniga, Emilyn Buenafe		13-Aug-20	-	IRWD Check	Negotiable
410665	A&Y ASPHALT CONTRACTORS, INC.		13-Aug-20	22,673.50	IRWD Check	Reconciled
410666	ABC ICE, INC		13-Aug-20	1,147.01	IRWD Check	Reconciled
410667	ABM INDUSTRY GROUPS, LLC		13-Aug-20	65,270.88	IRWD Check	Reconciled
440660	ABSOLUTE STANDARDS, INC.		13-Aug-20	227.50	IRWD Check	Reconciled
410668	· -		0 -			
410668 410669	ADS LLC		13-Aug-20	2,250.00	IRWD Check	Reconciled

CHECK OR ECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
410671	AECOM TECHNICAL SERVICES, INC.	13-Aug-20	95,463.75	IRWD Check	Reconciled
410672	AHMED, DANIA	13-Aug-20	89.70	IRWD Check	Reconciled
410673	AIRGAS, INC.	13-Aug-20	411.17	IRWD Check	Reconciled
410674	•		124,080.00		
	ALEXANDER'S CONTRACT SERVICES, INC.	13-Aug-20	•	IRWD Check	Reconciled
410675	AMAZON CAPITAL SERVICES, INC.	13-Aug-20	704.60	IRWD Check	Reconciled
410676	APEX SYSTEMS, LLC	13-Aug-20	8,359.00	IRWD Check	Reconciled
410677	APPLIED ENGINEERING CONCEPTS	13-Aug-20	5,235.00	IRWD Check	Reconciled
410678	AUSTIN HARDWOODS, INC	13-Aug-20	142.65	IRWD Check	Reconciled
410679	AUTOZONE PARTS, INC.	13-Aug-20	149.73	IRWD Check	Reconciled
410680	B & K ELECTRIC WHOLESALE	13-Aug-20	1,760.48	IRWD Check	Reconciled
		•	•		
410681	BIOLASE TECHNOLOGY INC	13-Aug-20	128.90	IRWD Check	Reconciled
410682	BIOMAGIC INC	13-Aug-20	16,237.50	IRWD Check	Negotiable
410683	BLACK & VEATCH CORPORATION	13-Aug-20	55,927.50	IRWD Check	Reconciled
410684	BLAIRS TOWING INC	13-Aug-20	149.00	IRWD Check	Negotiable
410685	BOYD & ASSOCIATES	13-Aug-20	255.00	IRWD Check	Reconciled
410686	BRENNTAG PACIFIC INC	13-Aug-20	5,675.20	IRWD Check	Reconciled
410687	BRIAN HOMSY	=	2,042.60	IRWD Check	Reconciled
		13-Aug-20	=		
410688	BROOKFIELD HOMES SO. CALIF LLC-BEVERLY	13-Aug-20	323.83	IRWD Check	Reconcile
410689	BSI SERVICES AND SOLUTIONS (WEST) INC.	13-Aug-20	23,640.00	IRWD Check	Reconciled
410690	BUCKNALL POWER TOOL SERVICE, INC.	13-Aug-20	810.28	IRWD Check	Reconciled
410691	BURKE, WILLIAMS & SORENSEN, LLP	13-Aug-20	65.00	IRWD Check	Reconciled
410692	C WELLS PIPELINE MATERIALS INC	13-Aug-20	12,008.05	IRWD Check	Reconciled
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410693	CALIFORNIA BARRICADE RENTAL, INC.	13-Aug-20	1,170.00	IRWD Check	Reconciled
410694	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	13-Aug-20	2,582.00	IRWD Check	Reconciled
410695	CANNON CORPORATION	13-Aug-20	3,602.08	IRWD Check	Reconciled
410696	CANON FINANCIAL SERVICES, INC	13-Aug-20	7,600.08	IRWD Check	Reconciled
410697	CANON SOLUTIONS AMERICA, INC.	13-Aug-20	926.41	IRWD Check	Reconciled
410698	CDW GOVERNMENT LLC	13-Aug-20	1,008.76	IRWD Check	Reconciled
410699	CHEM TECH INTERNATIONAL INC	13-Aug-20	18,882.54	IRWD Check	Reconciled
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410700	CHEN, HENRY	13-Aug-20	39.60	IRWD Check	Reconciled
410701	CHENG, JULIE X	13-Aug-20	52.00	IRWD Check	Reconciled
410702	CHIANG, WENDY	13-Aug-20	32.40	IRWD Check	Reconcile
410703	CHO DESIGN ASSOCIATES, INC	13-Aug-20	1,400.00	IRWD Check	Reconcile
410704	CITY OF IRVINE	13-Aug-20	4,479.70	IRWD Check	Reconcile
410705	CITY OF TUSTIN	13-Aug-20	694.05	IRWD Check	Reconcile
410706	CLA-VAL COMPANY	•	14,657.21	IRWD Check	Reconcile
		13-Aug-20	=		
410707	CLARIS STRATEGY INC.	13-Aug-20	10,007.00	IRWD Check	Reconcile
410708	CLIFFORD MORIYAMA	13-Aug-20	4,000.00	IRWD Check	Reconciled
410709	CNC ENGINEERING	13-Aug-20	4,527.25	IRWD Check	Reconciled
410710	COLE-PARMER INSTRUMENT CO	13-Aug-20	222.69	IRWD Check	Reconciled
410711	CONTROLLED KEY SYSTEMS INC	13-Aug-20	579.65	IRWD Check	Reconciled
410712	CORBIN REEVES CONSTRUCTION	=	661.28	IRWD Check	Reconciled
		13-Aug-20			
410713	CORPORATE HEALTH EDUCATION SOLUTIONS LLC	13-Aug-20	3,000.00	IRWD Check	Reconciled
410714	COXCO LLC	13-Aug-20	26,376.32	IRWD Check	Reconcile
410715	CROOPNICK, ROSELI	13-Aug-20	294.06	IRWD Check	Reconciled
410716	DEMARIA ELECTRIC MOTOR SERVICES, INC.	13-Aug-20	10,891.30	IRWD Check	Reconciled
410717	DEPARTMENT OF TOXIC SUBSTANCES CONTROL	13-Aug-20	2,767.50	IRWD Check	Reconciled
		13-Aug-20	=		
410718	DISTRICT ONE WEST BA 153, LLC	_	50.27	IRWD Check	Negotiable
410719	DIVERSIFIED COMMUNICATIONS SERVICES, INC.	13-Aug-20	10,619.20	IRWD Check	Reconciled
410721	EI&C ENGINEERING INC.	13-Aug-20	59,668.00	IRWD Check	Reconciled
410722	EMERGENCY POWER CONTROLS INC	13-Aug-20	16,656.79	IRWD Check	Negotiable
410723	ENVIRONMENTAL RESOURCE ASSOCIATES	13-Aug-20	2,025.92	IRWD Check	Reconciled
410724	EUROFINS CALSCIENCE, LLC	13-Aug-20	3,029.25	IRWD Check	Reconciled
410725	EUROFINS EATON ANALYTICAL, INC.	_	300.00	IRWD Check	Reconcile
	· · · · · · · · · · · · · · · · · · ·	13-Aug-20			
410726	EVANTEC CORPORATION	13-Aug-20	114.36	IRWD Check	Reconcile
410727	EXECUTIVE LIGHTING & ELECTRIC	13-Aug-20	10,349.19	IRWD Check	Reconcile
410728	FARRELL & ASSOCIATES	13-Aug-20	91.66	IRWD Check	Reconcile
410729	FEDEX	13-Aug-20	161.93	IRWD Check	Reconciled
410730	FERGUSON ENTERPRISES, LLC	13-Aug-20	1,212.19	IRWD Check	Reconciled
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410731	FIRE EXTINGUISHING SAFETY & SERVICE	13-Aug-20	698.81	IRWD Check	Reconciled
410732	FISERV SOLUTIONS, LLC	13-Aug-20	279.45	IRWD Check	Reconciled
410733	FISHER SCIENTIFIC COMPANY LLC	13-Aug-20	1,519.87	IRWD Check	Reconciled
410734	FOTH, SUSAN	13-Aug-20	48.14	IRWD Check	Negotiable
410735	FOUGHT, CYNTHIA J.	13-Aug-20	2,979.28	IRWD Check	Reconciled
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410736	FRANCHISE TAX BOARD	13-Aug-20	25.00	IRWD Check	Reconciled
410737	FRANCHISE TAX BOARD	13-Aug-20	80.00	IRWD Check	Reconciled
410738	FUEL SOLUTIONS, INC.	13-Aug-20	27,600.24	IRWD Check	Reconciled
410739	FULLER TRUCK ACCESSORIES	13-Aug-20	1,247.75	IRWD Check	Reconciled
		=	1,250.00	IRWD Check	Reconciled
410740	GEORGE YARDLEY CO., INC				
110740 110741	GEORGE YARDLEY CO., INC. GIRARD, ROBERT D - 5	13-Aug-20 13-Aug-20	62.22	IRWD Check	Reconcile

CHECK OR		PAYMENT	PAYMENT	PAYMENT	
LECTRONIC #		DATE	AMOUNT	METHOD	STATUS
410742	GLOBE, DENISE	13-Aug-20	53.33	IRWD Check	Reconciled
410743	GRAINGER	13-Aug-20	4,880.28	IRWD Check	Reconciled
410744	HADA, SCOTT	13-Aug-20	42.53	IRWD Check	Reconciled
410745	HAMILTON, KURT	13-Aug-20	1,375.22	IRWD Check	Reconciled
410746	HARRINGTON INDUSTRIAL PLASTICS LLC	13-Aug-20	7,906.08	IRWD Check	Reconciled
410747	HDR ENGINEERING INC	13-Aug-20	14,573.00	IRWD Check	Reconciled
410748	HE, GEOFFREY	13-Aug-20	27.70	IRWD Check	Reconciled
410749	HEADLEY, JENIFER	13-Aug-20	36.41	IRWD Check	Negotiable
410750	HELPMATES STAFFING SERVICES	13-Aug-20	16,015.07	IRWD Check	Reconciled
410751	HILL BROTHERS CHEMICAL COMPANY	13-Aug-20	6,158.77	IRWD Check	Negotiable
410752	HOME DEPOT USA INC	13-Aug-20	926.85	IRWD Check	Reconciled
410753	HOPKINS TECHNICAL PRODUCTS INC	13-Aug-20	2,559.75	IRWD Check	Reconciled
410754	HUANG, ALEX	13-Aug-20 13-Aug-20	28.85	IRWD Check	Reconciled
410755		=			
	ICP DAS USA INC	13-Aug-20	542.00	IRWD Check	Reconciled
410756	IDEA HALL	13-Aug-20	36,533.00	IRWD Check	Reconciled
410757	IDEXX DISTRIBUTION, INC	13-Aug-20	9,804.64	IRWD Check	Reconciled
410758	INDUSTRIAL NETWORKING SOLUTIONS	13-Aug-20	9,438.84	IRWD Check	Reconciled
410759	INFOSEND, INC.	13-Aug-20	54,076.22	IRWD Check	Reconciled
410760	INORGANIC VENTURES INC	13-Aug-20	163.07	IRWD Check	Reconciled
410761	INTEGRITY MUNICIPAL SERVICES LLC	13-Aug-20	2,500.00	IRWD Check	Reconciled
410762	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	13-Aug-20	2,845.07	IRWD Check	Reconciled
410763	IRON MOUNTAIN INFORMATION MANAGEMENT INC	13-Aug-20	2,152.54	IRWD Check	Reconciled
410764	IRVINE PIPE & SUPPLY INC	13-Aug-20	1,562.47	IRWD Check	Negotiable
410765	IRVINE PROPERTY MANAGEMENT	13-Aug-20	59.87	IRWD Check	Negotiable
410766	IRWD-PETTY CASH CUSTODIAN	13-Aug-20	1,230.77	IRWD Check	Reconciled
410767	JIG CONSULTANTS	•	3,189.70	IRWD Check	Reconciled
410767	KAESER COMPRESSORS, INC.	13-Aug-20	3,189.70 4,110.15	IRWD Check	Reconciled
		13-Aug-20	=		
410769	KAVANDI, MOHSEN	13-Aug-20	51.73	IRWD Check	Reconciled
410770	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES	13-Aug-20	325.00	IRWD Check	Reconciled
410771	KIM, JUNSEO	13-Aug-20	465.01	IRWD Check	Reconciled
410772	KIVORK, ALICE	13-Aug-20	47.98	IRWD Check	Reconciled
410773	KLEIF, MARKUS	13-Aug-20	35.30	IRWD Check	Reconciled
410774	KUO, RAYMOND	13-Aug-20	77.43	IRWD Check	Negotiable
410775	LA HABRA FENCE COMPANY INC	13-Aug-20	1,854.00	IRWD Check	Reconciled
410776	LEE & RO, INC.	13-Aug-20	26,304.50	IRWD Check	Reconciled
410777	LEE, SUNYOUNG	13-Aug-20	48.56	IRWD Check	Negotiable
410778	LI, ANQIONG	13-Aug-20	49.81	IRWD Check	Reconciled
410779	LI, HANG	13-Aug-20	36.79	IRWD Check	Reconciled
410779	•	=			
	LINDSAY POLIC CONSULTING, INC.	13-Aug-20	8,600.00	IRWD Check	Negotiable
410781	LLOYD, FLAVIA	13-Aug-20	55.45	IRWD Check	Reconciled
410782	LOU, YIN	13-Aug-20	29.46	IRWD Check	Negotiable
410783	LU'S LIGHTHOUSE, INC.	13-Aug-20	48.43	IRWD Check	Reconciled
410784	LUBRICATION ENGINEERS, INC.	13-Aug-20	1,042.64	IRWD Check	Reconciled
410785	MA, ZESHENG	13-Aug-20	15.86	IRWD Check	Negotiable
410786	MANNINO, MICHAEL	13-Aug-20	35.24	IRWD Check	Negotiable
410787	MAPAR, ABOOZAR	13-Aug-20	32.64	IRWD Check	Reconciled
410788	MARK KADESH	13-Aug-20	10,000.00	IRWD Check	Negotiable
410789	MC MASTER CARR SUPPLY CO	13-Aug-20	1,005.18	IRWD Check	Reconciled
410790	MERITAGE HOMES OF CALIFORNIA, INC.	13-Aug-20	561.22	IRWD Check	Reconciled
410791	MERRIMAC PETROLEUM, INC.	13-Aug-20	19,202.06	IRWD Check	Reconciled
410791	MISSION COMMUNICATIONS, LLC	13-Aug-20 13-Aug-20	1,474.20	IRWD Check	Reconciled
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410793	MIZU SUSHI BAR & GRILL C/O CRYSTAL KIM	13-Aug-20	67.09	IRWD Check	Reconciled
410794	MK HAIRDRESSING STUDIO	13-Aug-20	180.37	IRWD Check	Negotiable
410795	MOHAMED IQBAL, LIJASH	13-Aug-20	47.82	IRWD Check	Negotiable
410796	MOHR, GERHARD	13-Aug-20	61.08	IRWD Check	Reconciled
410797	NAKHJAVANI, ARYA	13-Aug-20	61.62	IRWD Check	Negotiable
410798	NATIONAL READY MIXED CONCRETE SALES, LLC	13-Aug-20	829.69	IRWD Check	Reconciled
410799	NATURES IMAGE INC	13-Aug-20	18,015.00	IRWD Check	Reconciled
410800	NAVARRO, RICHARD	13-Aug-20	39.39	IRWD Check	Reconciled
410801	NELSON, DENNIS	13-Aug-20	38.18	IRWD Check	Reconciled
410801	NEPTUNE TECHNOLOGY GROUP, INC.	13-Aug-20 13-Aug-20	85,208.70	IRWD Check	Reconciled
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410803	NESBIT, GARY	13-Aug-20	41.12	IRWD Check	Negotiable
410804	NMG GEOTECHNICAL INC	13-Aug-20	6,820.00	IRWD Check	Reconciled
410805	O.C. SUPERIOR CUSTOM CLEANING	13-Aug-20	3,600.00	IRWD Check	Reconciled
410806	OCEAN BLUE ENVIRONMENTAL SERVICES INC	13-Aug-20	8,324.04	IRWD Check	Reconciled
410807	OLIN CORPORATION	13-Aug-20	30,421.48	IRWD Check	Reconciled
410808	OLIVA, LUIS	13-Aug-20	51.74	IRWD Check	Reconciled
410809	OLSEN, YONG	13-Aug-20	29.35	IRWD Check	Negotiable
	ONESOURCE DISTRIBUTORS LLC	13-Aug-20	11,722.25	IRWD Check	Reconciled
410×10		13-408-50	11,122.23	ILLAND CHECK	
410810 410811	ORACLE AMERICA, INC. D - 6	13-Aug-20	19,116.72	IRWD Check	Reconciled

CHECK OR		PAYMENT	PAYMENT	PAYMENT	
LECTRONIC #	3311 23213	DATE	AMOUNT	METHOD	STATUS
410812	ORANGE COUNTY AUTO PARTS CO	13-Aug-20	231.75	IRWD Check	Reconciled
410813	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	13-Aug-20	6,715.76	IRWD Check	Reconciled
410814	ORTIZ, JESSE K	13-Aug-20	46.93	IRWD Check	Reconciled
410815	PACIFIC PARTS & CONTROLS INC	13-Aug-20	5,801.26	IRWD Check	Reconciled
410816	PARKHOUSE TIRE INC	13-Aug-20	5,769.96	IRWD Check	Reconciled
410817	PARTCH, DONNA	13-Aug-20	34.02	IRWD Check	Negotiable
410818	PATTEN SYSTEMS, INC.	13-Aug-20	1,442.03	IRWD Check	Reconciled
410819	PAYNE & FEARS LLP	13-Aug-20	1,573.00	IRWD Check	Reconciled
410820	PERKINELMER HEALTH SCIENCES INC	13-Aug-20	239.42	IRWD Check	Reconciled
410821	PERS LONG TERM CARE	13-Aug-20	538.89	IRWD Check	Reconciled
410823	PHG IRVINE PARKPLACE, LLC	13-Aug-20	845.27	IRWD Check	Reconciled
410824	PHILLIPS PLYWOOD CO, INC.	13-Aug-20	1,341.98	IRWD Check	Reconciled
410825	PILLSBURY WINTHROP SHAW PITTMAN LLP	13-Aug-20	12,238.10	IRWD Check	Reconciled
410826	PINEDA, JENNIFER	13-Aug-20	38.78	IRWD Check	Negotiable
410827	PLUMBERS DEPOT INC.	13-Aug-20	886.31	IRWD Check	Reconciled
410828	POURADIB, AMIR	13-Aug-20	265.62	IRWD Check	Reconciled
410829	POWOJSKI, ALLISON	13-Aug-20	94.04	IRWD Check	Reconciled
410830	PRAXAIR DISTRIBUTION INC	13-Aug-20	249.86	IRWD Check	Reconciled
410831	PRIMES, JAMES H	13-Aug-20	365.87	IRWD Check	Reconciled
410832	PROTEUS CONSULTING	13-Aug-20	9,720.00	IRWD Check	Reconciled
410833	PRUDENTIAL OVERALL SUPPLY	13-Aug-20	824.43	IRWD Check	Reconciled
410834	PTI SAND & GRAVEL INC	13-Aug-20	459.05	IRWD Check	Reconciled
410835	PUA, CHARISSE	13-Aug-20	744.13	IRWD Check	Reconciled
410836	PURE EFFECT INC	13-Aug-20	7,725.90	IRWD Check	Reconciled
410837	PYRO-COMM SYSTEMS INC	13-Aug-20	1,125.00	IRWD Check	Reconciled
410838	QI, JINFENG	13-Aug-20	3,785.66	IRWD Check	Reconciled
410839	QUINCY COMPRESSOR LLC	13-Aug-20	1,479.33	IRWD Check	Reconciled
410840	QUINTANA, WATTS & HARTMANN, LLC	13-Aug-20	5,000.00	IRWD Check	Reconciled
410841	R&B AUTOMATION, INC.	13-Aug-20	572.98	IRWD Check	Reconciled
410842	RADZAI-SANCHEZ, TERRY	13-Aug-20	27.95	IRWD Check	Reconciled
410843	RAM AIR ENGINEERING INC	13-Aug-20	7,244.05	IRWD Check	Reconciled
410844	REFRIGERATION SUPPLIES DISTRIBUTOR	13-Aug-20	208.56	IRWD Check	Reconciled
410845	RINCON TRUCK CENTER INC.	13-Aug-20	83.31	IRWD Check	Reconciled
410846	RLG ENTERPRISES, INC	13-Aug-20	714.73	IRWD Check	Reconciled
410847	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	13-Aug-20	321,300.38	IRWD Check	Reconciled
410848	SANTA ANA BLUE PRINT	13-Aug-20	1,842.80	IRWD Check	Reconciled
410849	SCHEID, COURTNEY	13-Aug-20	51.68	IRWD Check	Negotiable
410850	SCHINDLER ELEVATOR CORPORATION	13-Aug-20	1,611.21	IRWD Check	Reconciled
410851	SHAMROCK SUPPLY CO INC	13-Aug-20	1,407.74	IRWD Check	Reconciled
410852	SI TESTING	13-Aug-20	2,198.00	IRWD Check	Reconciled
410853	SOFTWAREONE INC	13-Aug-20	2,493.30	IRWD Check	Reconciled
410854	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	13-Aug-20	7,913.39	IRWD Check	Reconciled
410855	SOUTH COAST WATER CO.	13-Aug-20	95.00	IRWD Check	Reconciled
410856	SOUTH COAST WATER CO. SOUTH COAST WATER CO.	13-Aug-20	863.00	IRWD Check	Reconciled
410857	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	13-Aug-20	631.53	IRWD Check	Reconciled
410857	STREAKWAVE WIRELESS, INC.	13-Aug-20	4,265.05	IRWD Check	Reconciled
410858	SULZER ELECTRO-MECHANICAL SERVICES (US) INC.	13-Aug-20 13-Aug-20	12,216.00	IRWD Check	Reconciled
410859	SUMMIT CHEMICAL SPECIALTY PRODUCTS	13-Aug-20 13-Aug-20	12,216.00	IRWD Check	Reconciled
410860	TAYLOR, DIANNE	=	40.68	IRWD Check	Reconciled
410861	TELEDYNE INSTRUMENTS, INC.	13-Aug-20	6,463.00	IRWD Check	Reconciled
410862	·	13-Aug-20 13-Aug-20	1,059.76	IRWD Check	Reconciled
410863	THOMPSON INDUSTRIAL SUPPLY TRAFFIC CONTROL ENGINEERING, INC	=	6,000.00		
	TRIPAC MARKETING INC	13-Aug-20	=	IRWD Check	Negotiable
410865		13-Aug-20	1,147.76	IRWD Check	Reconciled
410866	TROPICAL PLAZA NURSERY INC	13-Aug-20	5,767.48	IRWD Check	Reconciled
410867	ULINE INC	13-Aug-20	288.08	IRWD Check	Reconciled
410868	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	13-Aug-20	2,579.00	IRWD Check	Reconciled
410869	UNITED PARCEL SERVICES OF CALIFORNIA INC	13-Aug-20	31.00	IRWD Check	Reconciled
410870	UNITED SITE SERVICES OF CALIFORNIA INC	13-Aug-20	835.67	IRWD Check	Reconciled
410871	VALENTA, SUSAN	13-Aug-20	60.21	IRWD Check	Reconciled
410872	VERTECH INDUSTRIAL SYSTEMS, LLC	13-Aug-20	11,124.40	IRWD Check	Reconciled
410873	VULCAN MATERIALS COMPANY	13-Aug-20	1,481.09	IRWD Check	Reconciled
410874	WAGNER, LEONARD	13-Aug-20	37.67	IRWD Check	Reconciled
410875	WALTERS WHOLESALE ELECTRIC	13-Aug-20	1,637.22	IRWD Check	Reconciled
410876	WANG, XIAOYAN	13-Aug-20	28.29	IRWD Check	Reconciled
410877	WANG, YACHUAN	13-Aug-20	29.46	IRWD Check	Negotiable
410878	WASTE MANAGEMENT OF CALIFORNIA, INC.	13-Aug-20	5,528.65	IRWD Check	Reconciled
410879	WATERLINE TECHNOLOGIES INC	13-Aug-20	9,180.00	IRWD Check	Reconciled
	WAXIE'S ENTERPRISES, INC	13-Aug-20	413.55	IRWD Check	Reconciled
410880	5 2 2 1 223, 2				
410880 410881	WECK LABORATORIES INC WEST COAST SAND & GRAVEL INC. D - 7	13-Aug-20	3,631.00	IRWD Check	Reconciled Reconciled

CHECK OR				YMENT	PAYMENT	PAYMEN	
ECTRONIC #	SUPPLIERS			DATE	AMOUNT	METHO	D STAT
410883	WEST YOST & ASSOCIATES		13	-Aug-20	7,972.50	IRWD Ch	eck Recond
410884	WILLIAM LYON HOMES, INC.		13	-Aug-20	50.27	IRWD Ch	eck Negoti
410885	WIRELESS WATCHDOGS, LLC			-Aug-20	1,476.00	IRWD Ch	_
410886	WORKFORCE SAFETY LLC			-Aug-20	3,000.00		
410887	ZENDEJAS, GLORIA			-Aug-20	47.34		
410888	ZERKEL, TRACY			-Aug-20	58.22		•
410889	ZHANG, HAO			-Aug-20	71.86		
	•			-			•
410890	ZION ENTERPRISES LLC			-Aug-20	385.31		
410891	Corey, Jo Ann K (Jo Ann)			-Aug-20	108.82		
410892	Mykitta, Richard			-Aug-20	115.00		
410893	A&A WIPING CLOTH CO		20	-Aug-20	1,336.10	IRWD Ch	eck Recond
410894	ABM INDUSTRY GROUPS, LLC		20	-Aug-20	7,098.00	IRWD Ch	eck Recond
410895	AECOM TECHNICAL SERVICES, INC.		20	-Aug-20	53,910.69	IRWD Ch	eck Recond
410896	AGILENT TECHNOLOGIES, INC.		20	-Aug-20	141.80	IRWD Ch	eck Recond
410897	AGUILAR, FRANCIS		20	-Aug-20	57.42	IRWD Ch	eck Negoti
410898	AHLUWALIA, AMINA			-Aug-20	28.71		•
410899	AHN, PHILLIP			-Aug-20	82.11		•
410990	AIR TECHNOLOGY LABORATORIES			-Aug-20 -Aug-20	503.00		
				•			
410901	AIRGAS, INC.			-Aug-20	15,432.12		
410902	ALBERT GATTONI AND JOHN GATTONI			-Aug-20	38.91		•
410903	AMALRAJ, FRANCIS			-Aug-20	40.61		•
410904	AMAZON CAPITAL SERVICES, INC.		20	-Aug-20	1,137.77	IRWD Ch	eck Recond
410905	ANDERSON, VERNELLE		20	-Aug-20	26.97	IRWD Ch	eck Recond
410906	ANDERSONPENNA PARTNERS, INC.			-Aug-20	40,470.00	IRWD Ch	eck Recond
410907	ANTHEM BLUE CROSS			-Aug-20	257.88		
410908	APEX SYSTEMS, LLC			-Aug-20	4,160.00		
410909	APPLEBEE, BEN			-Aug-20	57.45		
				-			
410910	APPLIED ENGINEERING CONCEPTS			-Aug-20	13,470.00		
410911	ARCADIS U.S., INC.			-Aug-20	1,550.00		
410912	AT&T		20	-Aug-20	133.90		
410913	AT&T		20	-Aug-20	11,282.01	IRWD Ch	eck Recond
410914	AT&T		20	-Aug-20	3,704.23	IRWD Ch	eck Recond
410915	AT&T		20	-Aug-20	58.15	IRWD Cho	eck Recond
410916	AT&T		20	-Aug-20	318.36	IRWD Ch	eck Recond
410917	ATES, ANIL			-Aug-20	32.89		
410918	ATHENS SERVICES			-Aug-20	1,851.36		
				_	•		
410919	ATLURI, SASIDHAR			-Aug-20	11.97		
410920	AUTOZONE PARTS, INC.			-Aug-20	928.18		
410921	AVIDXCHANGE, INC.		20	-Aug-20	476.44		
410922	BALDWIN & SONS HOMES		20	-Aug-20	45.18	IRWD Ch	eck Negoti
410923	BANK OF NEW YORK MELLON TRUST COMPANY NA		20	-Aug-20	3,750.00	IRWD Ch	eck Recond
410924	BATTERIES PLUS AND BATTERIES PLUS BULBS		20	-Aug-20	5,381.49	IRWD Ch	eck Recond
410925	BEACHWALK INC		20	-Aug-20	25.00		
410926	BELLUCCI, DOREEN			-Aug-20	40.86		
410927	BEST DRILLING AND PUMP, INC.			-Aug-20	24,462.50		
				-Aug-20 -Aug-20			
410928	BHUSHAN, RISHABH			•	19.54		
410929	BIGWIG MONSTER, LLC			-Aug-20	47,970.00		
410930	BIOTAGE LLC			-Aug-20	110.23		
410931	BLACK & VEATCH CORPORATION			-Aug-20	19,050.00		
410932	BLAIRS TOWING INC		20	-Aug-20	151.00	IRWD Ch	eck Recond
410933	BORCHARD SURVEYING & MAPPING, INC.		20	-Aug-20	800.00	IRWD Ch	eck Recond
410934	BOWIE, LAKENDRA		20	-Aug-20	29.42	IRWD Ch	eck Recond
410935	BRIZUELA, MONICA			-Aug-20	15.38		
410936	BROWN AND CALDWELL			-Aug-20	1,686.15		
410937	BRUCE HADLEY NEWELL			-Aug-20	2,500.00		
				_			
410938	BUI, DUC			-Aug-20	41.12		_
410939	C WELLS PIPELINE MATERIALS INC			-Aug-20	10,826.64		
410940	CALIFORNIA BARRICADE RENTAL, INC.			-Aug-20	23,400.00		
410941	CALIFORNIA NEWSPAPER PARTNERSHIP		20	-Aug-20	3,924.00	IRWD Ch	eck Negoti
410942	CAMPEAU, LARRY		20	-Aug-20	36.71	IRWD Ch	eck Recond
410943	CANON FINANCIAL SERVICES, INC		20	-Aug-20	8,343.56	IRWD Ch	eck Recond
	CARD, CLIFF			-Aug-20	36.71		
410944	CARLTON, LOUCINDA			-Aug-20	43.65		•
410944 410945				_			
410945	CAROLLO ENGINEERS, INC			-Aug-20	149,495.00		
410945 410946	·		20	-Aug-20	34,081.07		
410945 410946 410947	CHEM TECH INTERNATIONAL INC			A ~	45.39	IRWD Ch	eck Negoti
410945 410946 410947 410948	CHEM TECH INTERNATIONAL INC CHEN, COLIN			-Aug-20			_
410945 410946 410947	CHEM TECH INTERNATIONAL INC			-Aug-20 -Aug-20	55.02		-
410945 410946 410947 410948	CHEM TECH INTERNATIONAL INC CHEN, COLIN		20	-		IRWD Ch	eck Negoti
410945 410946 410947 410948 410949	CHEM TECH INTERNATIONAL INC CHEN, COLIN CHENG, MO		20 20	-Aug-20	55.02	IRWD Cho	eck Negoti eck Recond

CHECK OR ECTRONIC #	CURRUERC		MENT ATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
410953	CITY OF IRVINE		ug-20	19,054.75	IRWD Check	Reconciled
410954	CITY OF SANTA ANA		ug-20	526.14	IRWD Check	Reconciled
410955	CLARE, KATHRYN		ug-20	28.83	IRWD Check	Negotiable
410956	COASTAL INTERNATIONAL		ug-20	35.24	IRWD Check	Reconciled
410957	COMBS, LEXI	20-A	ug-20	48.92	IRWD Check	Reconciled
410958	COMMERCIAL DOOR OF ORANGE COUNTY, INC.	20-A	ug-20	518.21	IRWD Check	Reconciled
410959	CONSTELLATION NEWENERGY, INC.	20-A	ug-20	142,534.88	IRWD Check	Reconciled
410960	COOK-COHEN, SHEILA	20-A	ug-20	105.24	IRWD Check	Reconciled
410961	CORDIA, ADONIS	20-A	ug-20	55.80	IRWD Check	Negotiable
410962	CORE & MAIN LP	20-A	ug-20	4,087.50	IRWD Check	Reconciled
410963	CORELOGIC INC		ug-20	6,490.80	IRWD Check	Reconciled
410964	COUNTY OF ORANGE		ug-20	24,179.25	IRWD Check	Reconciled
410965	COX COMMUNICATIONS, INC.		ug-20	3,624.54	IRWD Check	Negotiable
410966	CR & R INCORPORATED		ug-20	428.34	IRWD Check	Reconciled
410967	CR COMPANIES LLC		ug-20	112.53	IRWD Check	Negotiable
			_			-
410968	CRIGGER, STEPHANIE		ug-20	42.84	IRWD Check	Reconciled
410969	CULLIGAN OF SANTA ANA		ug-20	22,000.00	IRWD Check	Reconciled
410970	D & G SIGNS		ug-20	1,122.76	IRWD Check	Reconciled
410971	DATA CLEAN CORPORATION		ug-20	840.00	IRWD Check	Reconciled
410972	DAVIS FARR LLP		ug-20	4,000.00	IRWD Check	Reconciled
410973	DAYRIT, GERALDINE		ug-20	21.80	IRWD Check	Reconciled
410974	DC FROST ASSOCIATES, INC.		ug-20	1,162.84	IRWD Check	Reconciled
410975	DDB ENGINEERING, INC.	20-A	ug-20	820.00	IRWD Check	Reconciled
410976	DEE JASPAR & ASSOCIATES, INC.	20-A	ug-20	7,376.31	IRWD Check	Reconciled
410977	DERISCHEBOURG, DALE	20-A	ug-20	114.29	IRWD Check	Reconciled
410978	DESANTIS, ERIN		ug-20	29.13	IRWD Check	Reconciled
410979	DESIREE PATNO ENTERPRISES		ug-20	286.54	IRWD Check	Negotiable
410980	DEZKOTA, AALOK		ug-20	72.64	IRWD Check	Reconciled
410981	DIEGUEZ, OSCAR		ug-20	18.56	IRWD Check	Negotiable
410982	DRAEGER, INC.		ug-20	3,067.69	IRWD Check	Reconciled
410983	DU, JUAN		ug-20	26.26	IRWD Check	Negotiable
410984	DUDEK		ug-20	2,740.00	IRWD Check	Reconciled
410985	DWYER INSTRUMENTS INC		•	2,925.67	IRWD Check	Reconciled
			ug-20	•		
410986	EISELMAN, LAURA		ug-20	26.66	IRWD Check	Reconciled
410987	ENVIRONMENTAL RESOURCE ASSOCIATES		ug-20	690.75	IRWD Check	Reconciled
410988	ENVIRONMENTAL SCIENCE ASSOCIATES		ug-20	615.00	IRWD Check	Reconciled
410989	EUROFINS CALSCIENCE, LLC	20-A	ug-20	1,722.00	IRWD Check	Reconciled
410990	EVANS, GARETH	20-A	ug-20	56.50	IRWD Check	Reconciled
410991	EVERETT DOREY LLP	20-A	ug-20	9,844.23	IRWD Check	Reconciled
410992	FEDEX	20-A	ug-20	483.34	IRWD Check	Reconciled
410993	FEDEX	20-A	ug-20	121.30	IRWD Check	Reconciled
410994	FIDELITY SECURITY LIFE INSURANCE COMPANY	20-A	ug-20	33.86	IRWD Check	Reconciled
410995	FIDELITY SECURITY LIFE INSURANCE COMPANY	20-A	ug-20	136.46	IRWD Check	Reconciled
410996	FIDELITY SECURITY LIFE INSURANCE COMPANY		ug-20	791.19	IRWD Check	Reconciled
410997	FIDELITY SECURITY LIFE INSURANCE COMPANY		ug-20	6,895.72	IRWD Check	Reconciled
410998	FIGUEROA, JAVIER		ug-20	17.93	IRWD Check	Negotiable
410999	FIONA HUTTON & ASSOCIATES, INC.		ug-20 ug-20	26,467.23	IRWD Check	Reconciled
411000	FIREHOSEDIRECT.COM		ug-20 ug-20	546.08	IRWD Check	Reconciled
411000	FIRST CHOICE SERVICES		-	588.62	IRWD Check	Reconciled
411001			ug-20			
	FISHER SCIENTIFIC COMPANY LLC		ug-20	6,185.88	IRWD Check	Reconciled
411003	FLINN, KEVIN		ug-20	57.43	IRWD Check	Negotiable
411004	FORBES, DAVID		ug-20	48.47	IRWD Check	Negotiable
411005	FOSTER, LUKE		ug-20	18.41	IRWD Check	Negotiable
411006	FRONTIER CALIFORNIA INC.		ug-20	1,329.69	IRWD Check	Reconciled
411007	FUSCOE ENGINEERING, INC.		ug-20	3,118.50	IRWD Check	Reconciled
411008	GADEA, KRISTY	20-A	ug-20	38.88	IRWD Check	Negotiable
411009	GALEAZZO, TOMMASO	20-A	ug-20	96.08	IRWD Check	Negotiable
411010	GANAHL LUMBER CO.	20-A	ug-20	830.80	IRWD Check	Negotiable
411011	GARIBI, SHIMON		ug-20	103.74	IRWD Check	Reconciled
411012	GARZA INDUSTRIES, INC		ug-20	1,448.16	IRWD Check	Reconciled
411013	GATTONI, JOHN		ug-20	51.62	IRWD Check	Negotiable
411013	GELLEKANAO, SHARLEEN		ug-20 ug-20	6.88	IRWD Check	Reconciled
	•		_			Reconciled
411015	GEORGE HILLS COMPANY, INC.		ug-20	2,367.00	IRWD Check	
411016	GM SAGER CONSTRUCTION CO,INC.		ug-20	28,690.00	IRWD Check	Reconciled
411017	GONG, JIAN		ug-20	9.78	IRWD Check	Reconciled
411018	GOTTUS, MIKE		ug-20	47.36	IRWD Check	Reconciled
411019	GRAINGER		ug-20	4,395.31	IRWD Check	Reconciled
444000	GRAYBAR ELECTRIC COMPANY	20-A	ug-20	560.44	IRWD Check	Reconciled
411020						
411020	HACH COMPANY	20-A	ug-20	50,721.73	IRWD Check	Reconciled Reconciled

CHECK OR CTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
411023	HARRINGTON INDUSTRIAL PLASTICS LLC	20-Aug-20	14,556.07	IRWD Check	Reconciled
411024	HDR ENGINEERING INC	20-Aug-20	31,168.00	IRWD Check	Reconciled
411025	HELPMATES STAFFING SERVICES	20-Aug-20	15,254.53	IRWD Check	Reconciled
411026	HI-LINE INC	20-Aug-20	529.91	IRWD Check	Reconciled
411027	HIBBS, JACQUELINE	20-Aug-20	1,467.92	IRWD Check	Reconciled
411028	HILL BROTHERS CHEMICAL COMPANY	20-Aug-20	4,248.12	IRWD Check	Negotiable
411029	HOANG, DOMINIC	20-Aug-20	46.35	IRWD Check	Negotiable
	•	•			Reconciled
411030	HOYA OPTICAL LABS OF AMERICA, INC.	20-Aug-20	246.00	IRWD Check	
411031	INDUSTRIAL METAL SUPPLY CO	20-Aug-20	77.34	IRWD Check	Reconciled
411032	INFINITY RESIDENTIAL	20-Aug-20	36.45	IRWD Check	Reconciled
411033	INFRASTRUCTURE ENGINEERING CORPORATION	20-Aug-20	335.00	IRWD Check	Negotiable
411034	INGRAM, DANETTE	20-Aug-20	62.10	IRWD Check	Negotiable
411035	IRVANI, ARIA	20-Aug-20	297.53	IRWD Check	Negotiable
411036	IRVINE GATEWAY DEVELOPMENT, LLC	20-Aug-20	1,724.03	IRWD Check	Negotiable
411037	IRVINE PACIFIC	20-Aug-20	40.56	IRWD Check	Reconciled
411038	IRVINE PIPE & SUPPLY INC	20-Aug-20	853.35	IRWD Check	Reconciled
411039	IRWD-PETTY CASH CUSTODIAN	20-Aug-20	513.99	IRWD Check	Reconciled
		_			
411040	JACKSON, QUENTIN	20-Aug-20	47.55	IRWD Check	Reconciled
411041	JANG, JINHWAN	20-Aug-20	56.41	IRWD Check	Reconciled
411042	JIANG, LEI	20-Aug-20	87.67	IRWD Check	Negotiable
411044	KHATIB, RAMZIE	20-Aug-20	32.12	IRWD Check	Negotiable
411045	KIFUNE, ERIK	20-Aug-20	61.88	IRWD Check	Negotiable
411046	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES	20-Aug-20	5,875.00	IRWD Check	Reconciled
411047	KIM, JENNY	20-Aug-20	30.85	IRWD Check	Reconciled
411048	KITE, MICHAEL	20-Aug-20	48.27	IRWD Check	Reconciled
411049	KOZAR, VINCENT	20-Aug-20	22.94	IRWD Check	Reconciled
411050	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	20-Aug-20	38,292.00	IRWD Check	Reconciled
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411051	LABWORKS, LLC	20-Aug-20	35,724.00	IRWD Check	Reconciled
411052	LANDCARE HOLDINGS, INC.	20-Aug-20	25,103.49	IRWD Check	Reconciled
411053	LE, KATE	20-Aug-20	81.17	IRWD Check	Negotiable
411054	LEE, JOSEPH	20-Aug-20	46.39	IRWD Check	Negotiable
411055	LEE, THERESE	20-Aug-20	29.16	IRWD Check	Reconciled
411056	LEE, VIVIAN	20-Aug-20	30.38	IRWD Check	Negotiable
411057	LENNAR HOMES	20-Aug-20	1,440.51	IRWD Check	Reconciled
411058	LI, LIANG	20-Aug-20	25.00	IRWD Check	Reconciled
411059	LI, XIAO JING	20-Aug-20	19.33	IRWD Check	Negotiable
411060	•	=	28.20	IRWD Check	_
	LIVENGOOD, JULIA	20-Aug-20			Negotiable
411061	LLORENTE, FRANCESCA	20-Aug-20	58.52	IRWD Check	Reconciled
411062	LLOYD, BRYSON	20-Aug-20	23.44	IRWD Check	Reconciled
411063	LOS ANGELES TIMES	20-Aug-20	562.30	IRWD Check	Reconciled
411064	LSA ASSOCIATES INC	20-Aug-20	6,710.74	IRWD Check	Reconciled
411065	LUBRICATION ENGINEERS, INC.	20-Aug-20	1,566.81	IRWD Check	Reconciled
411066	LUSK, TYLER	20-Aug-20	66.05	IRWD Check	Reconciled
411067	MACDONALD, CHRISTIAN	20-Aug-20	23.81	IRWD Check	Negotiable
411068	MACHON, MARIO	20-Aug-20	39.68	IRWD Check	Negotiable
411069	MAHBUB, ARIK	20-Aug-20	26.04	IRWD Check	Negotiable
411009	•	20-Aug-20 20-Aug-20	82.29		Reconciled
	MALONE, RYAN	•		IRWD Check	
411071	MARQUEZ, JESSICA	20-Aug-20	62.32	IRWD Check	Negotiable
411072	MC FADDEN-DALE INDUSTRIAL	20-Aug-20	152.88	IRWD Check	Reconciled
411073	MC MASTER CARR SUPPLY CO	20-Aug-20	109.51	IRWD Check	Reconciled
411074	MCGUFF, GERALDINE	20-Aug-20	49.99	IRWD Check	Reconciled
411075	MEDLAND, KIMBERLY	20-Aug-20	27.94	IRWD Check	Reconciled
411076	MEREZHKO, VADYM	20-Aug-20	77.68	IRWD Check	Reconciled
411077	MERRIMAC PETROLEUM, INC.	20-Aug-20	12,376.96	IRWD Check	Reconciled
411078	MICHAEL BAKER INTERNATIONAL, INC.	20-Aug-20	360.00	IRWD Check	Reconciled
411078	MICROSOFT CORPORATION	20-Aug-20 20-Aug-20	816.71		Reconciled
		=		IRWD Check	
411080	MILLER, DALE A	20-Aug-20	98.98	IRWD Check	Negotiable
411081	MR CRANE INC	20-Aug-20	1,819.80	IRWD Check	Reconciled
411082	MSC INDUSTRIAL SUPPLY CO	20-Aug-20	857.87	IRWD Check	Reconciled
411083	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	20-Aug-20	383.18	IRWD Check	Reconciled
411084	MURRAY, TIM A	20-Aug-20	51.25	IRWD Check	Negotiable
411085	NEWPORT REAL ESTATE SERVICES, INC.	20-Aug-20	28,432.81	IRWD Check	Reconciled
411086	NGUYEN, WILLIAM	20-Aug-20	9.39	IRWD Check	Reconciled
		=			
	OLIN CORPORATION	20-Aug-20	20,139.03	IRWD Check	Reconciled
411087	ORANGE COUNTY AUTO PARTS CO	20-Aug-20	70.03	IRWD Check	Reconciled
411088		20-Aug-20	500.00	IRWD Check	Reconciled
411088 411089	ORANGE COUNTY COASTKEEPER				
411088	ORANGE COUNTY COASTREEPER ORANGE COUNTY SANITATION DISTRICT	20-Aug-20	2,770.00	IRWD Check	Reconciled
411088 411089		20-Aug-20 20-Aug-20	2,770.00 131.99	IRWD Check IRWD Check	Reconciled Negotiable
411088 411089 411090	ORANGE COUNTY SANITATION DISTRICT	=			

HECK OR CTRONIC #	SUPPLIERS	 PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
411094	PACIFIC HYDROTECH CORPORATION	20-Aug-20	22,979.20	IRWD Check	Reconciled
411095	PACIFIC RESOURCE RECOVERY	20-Aug-20	1,993.00	IRWD Check	Reconciled
411096	PACIFIC STAR CHEMICAL, LLC	20-Aug-20	1,127.99	IRWD Check	Reconciled
411097	PAEK, JOHN	20-Aug-20	55.02	IRWD Check	Reconciled
411098	PAPER DEPOT DOCUMENT DESTRUCTION LLC	20-Aug-20	333.00	IRWD Check	Reconciled
411099	PARKHOUSE TIRE INC	20-Aug-20	2,759.32	IRWD Check	Reconciled
411100	PATIL, SACHIN	20-Aug-20	47.65	IRWD Check	Negotiable
411100	-	•	30.38		_
	PEACOCK, KRISTY	20-Aug-20		IRWD Check	Negotiable
411102	PENG, GRACE	20-Aug-20	37.92	IRWD Check	Negotiable
411103	PENN ARCHIVE SERVICES	20-Aug-20	440.60	IRWD Check	Reconciled
411104	PHG IRVINE PARKPLACE, LLC	20-Aug-20	2,007.64	IRWD Check	Reconciled
411105	PILLAI, GOKUL	20-Aug-20	34.02	IRWD Check	Negotiable
411106	PINNACLE TOWERS LLC	20-Aug-20	779.18	IRWD Check	Reconciled
411107	PRUDENTIAL OVERALL SUPPLY	20-Aug-20	1,129.61	IRWD Check	Reconciled
411108	PSOMAS	20-Aug-20	2,982.76	IRWD Check	Reconciled
411109	PTI SAND & GRAVEL INC	20-Aug-20	1,252.29	IRWD Check	Reconciled
411110	QUINCY COMPRESSOR LLC	20-Aug-20	10,920.87	IRWD Check	Reconciled
411111	QUINN COMPANY	20-Aug-20	1,900.00	IRWD Check	Reconciled
411112	R.F. MACDONALD CO.	20-Aug-20	2,508.33	IRWD Check	Reconciled
411113	RAFTELIS FINANCIAL CONSULTANTS INC.	20-Aug-20	26,185.00	IRWD Check	Reconciled
411114	RAM AIR ENGINEERING INC	20-Aug-20 20-Aug-20	11,108.54	IRWD Check	Reconciled
411114	REFRIGERATION SUPPLIES DISTRIBUTOR	20-Aug-20 20-Aug-20	314.57	IRWD Check	Reconciled
411115		=			
	REGIONAL GOVERNMENT SERVICES AUTHORITY	20-Aug-20	13,600.00	IRWD Check	Negotiable
411117	REN, YI	20-Aug-20	37.65	IRWD Check	Negotiable
411118	RENTOKIL NORTH AMERICA, INC	20-Aug-20	4,400.00	IRWD Check	Reconciled
411119	RODNEY HARMSWORTH ASSOCIATES, INC.	20-Aug-20	2,500.00	IRWD Check	Reconciled
411120	RODRIGUEZ, TRACY	20-Aug-20	255.67	IRWD Check	Reconciled
411121	ROSE PAVING LLC	20-Aug-20	54,387.32	IRWD Check	Reconciled
411122	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	20-Aug-20	2,605.61	IRWD Check	Reconciled
411123	RYAN HERCO PRODUCTS CORP	20-Aug-20	2,253.63	IRWD Check	Reconciled
411124	SAN CARLO APARTMENTS	20-Aug-20	163.56	IRWD Check	Reconcile
411125	SAN LEON APTS	20-Aug-20	26.41	IRWD Check	Reconcile
411126	SAN MARCO APARTMENTS	20-Aug-20	57.99	IRWD Check	Reconcile
411127	SAN MARINO APTS	20-Aug-20	26.47	IRWD Check	Reconcile
411128	SANTA MARGARITA FORD	20-Aug-20	199.00	IRWD Check	Reconcile
411129	SANTA MARGARITA FORD	20-Aug-20 20-Aug-20	1,906.59	IRWD Check	Reconciled
		=			
411130	SATERI, FARNAZ	20-Aug-20	149.50	IRWD Check	Reconcile
411131	SCHJEI, KATHRYN	20-Aug-20	30.38	IRWD Check	Negotiable
411132	SCHNEIDER, KARIN	20-Aug-20	48.57	IRWD Check	Reconciled
411133	SELECT EQUIPMENT SALES, INC.	20-Aug-20	286.90	IRWD Check	Reconciled
411134	SERVERSUPPLY.COM INC	20-Aug-20	3,632.47	IRWD Check	Reconciled
411135	SHAMROCK SUPPLY CO INC	20-Aug-20	122.23	IRWD Check	Reconciled
411136	SHIN, CINDY	20-Aug-20	39.60	IRWD Check	Negotiable
411137	SHIN, STEPHAN	20-Aug-20	23.08	IRWD Check	Negotiable
411138	SIGNATURE REALTY/ W PROPERTY MANAGEMENT	20-Aug-20	89.66	IRWD Check	Reconciled
411139	SLEPACK, RICH	20-Aug-20	34.79	IRWD Check	Negotiable
411140	SMITH, CLAYTON	20-Aug-20	98.93	IRWD Check	Reconciled
411141	SOLAR ELECTRIC SUPPLY, INC	20-Aug-20	6,224.26	IRWD Check	Reconciled
411142	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	20-Aug-20	8,118.95	IRWD Check	Negotiable
411142	SOUTHERN CALIFORNIA EDISON COMPANY	=	1,344,216.09	IRWD Check	Reconciled
		20-Aug-20			
411144	SOUTHERN CALIFORNIA CAS COMPANY	20-Aug-20	156.46	IRWD Check	Reconciled
411145	SOUTHERN CALIFORNIA GAS COMPANY	20-Aug-20	10,784.21	IRWD Check	Reconciled
411146	SOUTHERN COUNTIES LUBRICANTS LLC	20-Aug-20	564.90	IRWD Check	Reconciled
411147	SPARKLETTS	20-Aug-20	55.50	IRWD Check	Reconcile
411148	SPATIAL WAVE, INC.	20-Aug-20	15,474.00	IRWD Check	Reconciled
111149	STREAKWAVE WIRELESS, INC.	20-Aug-20	4,210.28	IRWD Check	Reconcile
411150	SU HAI INTERNATIONL INC	20-Aug-20	36.96	IRWD Check	Negotiable
411151	SUEZ TREATMENT SOLUTIONS INC.	20-Aug-20	278.36	IRWD Check	Reconciled
411152	SUKLE ADVERTISING INC.	20-Aug-20	53,198.51	IRWD Check	Reconciled
411153	SUSAN A. SIROTA	20-Aug-20	4,660.00	IRWD Check	Reconciled
411154	SWAINS ELECTRIC MOTOR SERVICE	20-Aug-20 20-Aug-20	4,643.30	IRWD Check	Negotiable
		_			_
411155	TERRAMURA, KENNETH	20-Aug-20	36.45	IRWD Check	Negotiable
411156	TERRY ANTONIUS AND ASSICATES	20-Aug-20	24.81	IRWD Check	Reconciled
411157	TETRA TECH, INC	20-Aug-20	11,455.50	IRWD Check	Reconciled
	TEVORA BUSINESS SOLUTIONS, INC.	20-Aug-20	3,500.00	IRWD Check	Reconciled
411158	THOMPSON INDUSTRIAL SUPPLY	20-Aug-20	6,714.90	IRWD Check	Reconciled
	THOWIPSON INDUSTRIAL SUPPLY				
411158	THONG, CANDY	20-Aug-20	64.91	IRWD Check	Reconciled
411158 411159 411160	THONG, CANDY	20-Aug-20	64.91 15.33		
411158 411159		_		IRWD Check IRWD Check IRWD Check	Reconciled Negotiable Reconciled

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
411164	UNIVAR SOLUTIONS USA INC.	20-Aug-20	4,596.62	IRWD Check	Reconciled
411165	US BANK NAT'L ASSOC N.DAKOTA	20-Aug-20	4,000.00	IRWD Check	Reconciled
411166	USA WASTE OF CALIFORNIA, INC.	20-Aug-20	465.00	IRWD Check	Reconciled
411167	VAN, JOHN	20-Aug-20	28.83	IRWD Check	Reconciled
411168	VERIZON WIRELESS SERVICES LLC	20-Aug-20	22,641.48	IRWD Check	Reconciled
411169	WANG, AIPING	20-Aug-20	70.58	IRWD Check	Reconciled
411170	WANG, CARRIE	20-Aug-20	82.94	IRWD Check	Reconciled
411171	WANG, GUANGMING	20-Aug-20	26.40	IRWD Check	Reconciled
411172	WANG, YUE	20-Aug-20	53.21	IRWD Check	Negotiable
411173	WASTE MANAGEMENT OF CALIFORNIA, INC.	20-Aug-20	498.76	IRWD Check	Reconciled
411174	WATERLINE TECHNOLOGIES INC	20-Aug-20	4,800.00	IRWD Check	Reconciled
411175	WATERSMART SOFTWARE INC	20-Aug-20	13,547.22	IRWD Check	Negotiable
411176	WAXIE'S ENTERPRISES, INC	20-Aug-20	2,022.68	IRWD Check	Reconciled
411177	WEI, YILIN	20-Aug-20	48.78	IRWD Check	Negotiable
411178	WESCON DESIGNED SOLUTIONS INC	20-Aug-20	128.16	IRWD Check	Reconciled
411179	WEST YOST & ASSOCIATES	20-Aug-20	6,202.25	IRWD Check	Reconciled
411180	WESTAMERICA COMMUNICATIONS, INC.	20-Aug-20	187.50	IRWD Check	Reconciled
411181	WIN-911 SOFTWARE	20-Aug-20	1,030.00	IRWD Check	Reconciled
411182 411183	WOODARD & CURRAN INC	20-Aug-20	13,525.50	IRWD Check	Reconciled
	WOODBRIDGE WILLOWS APARTMENTS	20-Aug-20	22.13	IRWD Check	Reconciled
411184	WU, JING	20-Aug-20	25.00	IRWD Check	Negotiable
411185	WU, RONG	20-Aug-20	65.35	IRWD Check	Reconciled
411186	YANG, LIN	20-Aug-20	43.73	IRWD Check	Negotiable
411187	YIRENKYI, JERRY	20-Aug-20	224.92	IRWD Check	Negotiable
411188 411189	YORKE ENGINEERING, LLC	20-Aug-20	5,239.25	IRWD Check	Reconciled
411189	YOSHINAGA, EMILY	20-Aug-20	41.82 46.76	IRWD Check IRWD Check	Reconciled Reconciled
411190	ZHANG, XU	20-Aug-20	192.00	IRWD Check	
411191	Avalos, Joaquin Graff, Jeff N	27-Aug-20 27-Aug-20	58.70	IRWD Check	Negotiable Negotiable
411192		27-Aug-20 27-Aug-20	94.00	IRWD Check	-
411194	Justice, Jack L (Jack) Martinez, Diego	27-Aug-20 27-Aug-20	129.95	IRWD Check	Negotiable Negotiable
411194	Sanchez, Fiona M (Fiona)	27-Aug-20 27-Aug-20	74.33	IRWD Check	Negotiable
411196	Wang, Peter (Peter)	27-Aug-20 27-Aug-20	60.00	IRWD Check	Negotiable
411197	A&Y ASPHALT CONTRACTORS, INC.	27-Aug-20	4,829.50	IRWD Check	Reconciled
411198	ABGHARI, HAMID	27-Aug-20	15.35	IRWD Check	Negotiable
411199	ACCUSTANDARD INC	27-Aug-20	129.36	IRWD Check	Negotiable
411200	AIRGAS, INC.	27-Aug-20	411.42	IRWD Check	Reconciled
411201	AMAZON CAPITAL SERVICES, INC.	27-Aug-20	1,615.24	IRWD Check	Negotiable
411202	ASSEO, THOMAS	27-Aug-20	21.97	IRWD Check	Negotiable
411203	ASSURED FLOW SALES INC	27-Aug-20	162.12	IRWD Check	Negotiable
411204	AT&T	27-Aug-20	6,921.15	IRWD Check	Reconciled
411205	ATHENS SERVICES	27-Aug-20	9,761.62	IRWD Check	Reconciled
411206	ATLAS INTEGRATED SYSTEMS INC.	27-Aug-20	568.36	IRWD Check	Negotiable
411207	AUTOZONE PARTS, INC.	27-Aug-20	385.76	IRWD Check	Negotiable
411208	BADDI, AMID	27-Aug-20	58.93	IRWD Check	Negotiable
411209	BAKER, BARBARA	27-Aug-20	81.93	IRWD Check	Negotiable
411210	BANK OF AMERICA	27-Aug-20	27,461.13	IRWD Check	Reconciled
411211	BAVCO BACKFLOW APPARATUS & VALVE COMPANY	27-Aug-20	368.38	IRWD Check	Reconciled
411212	BONAKDAR, ALEXANDER	27-Aug-20	269.66	IRWD Check	Reconciled
411213	BORCHARD SURVEYING & MAPPING, INC.	27-Aug-20	18,360.50	IRWD Check	Negotiable
411214	BOROSSAY, STEVEN G	27-Aug-20	36.62	IRWD Check	Negotiable
411215	BRENNER, EMILY	27-Aug-20	36.97	IRWD Check	Negotiable
411216	BRENNTAG PACIFIC INC	27-Aug-20	25,304.80	IRWD Check	Reconciled
411217	BRIAN HOMSY	27-Aug-20	595.60	IRWD Check	Negotiable
411218	BRIGHTVIEW LANDSCAPE DEVELOPMENT, INC	27-Aug-20	1,213.22	IRWD Check	Negotiable
411219	BROWN AND CALDWELL	27-Aug-20	223.22	IRWD Check	Reconciled
411220	BYINGTON, ELENA	27-Aug-20	48.28	IRWD Check	Negotiable
411221	C WELLS PIPELINE MATERIALS INC	27-Aug-20	28,568.94	IRWD Check	Reconciled
411222	CALIFORNIA BARRICADE RENTAL, INC.	27-Aug-20	17,433.90	IRWD Check	Negotiable
411223	CANON SOLUTIONS AMERICA, INC.	27-Aug-20	26.37	IRWD Check	Reconciled
411224	CART MART INC.	27-Aug-20	375.41	IRWD Check	Reconciled
411225	CASCADE DRILLING L.P.	27-Aug-20	1,640.77	IRWD Check	Negotiable
411226	CEDAR CREEK APARTMENTS	27-Aug-20	25.52	IRWD Check	Reconciled
411227	CHAIREL CUSTOM HAY, INC.	27-Aug-20	5,373.62	IRWD Check	Reconciled
411228	CHAVOS, ANTHONY	27-Aug-20	43.29	IRWD Check	Negotiable
411229	CHEM TECH INTERNATIONAL INC	27-Aug-20	13,842.78	IRWD Check	Negotiable
411230	CHO, HYUNMI	27-Aug-20	23.53	IRWD Check	Negotiable
411231	CHO, SAMUEL	27-Aug-20	35.40	IRWD Check	Negotiable
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411232	CHOU, LICHUN	27-Aug-20	23.23	IRWD Check	Negotiable Reconciled

576.00 IRWD Check Reconciled age 12 of 16 27-Aug-20

CHECK OR ECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
411234	CLA-VAL COMPANY	27-Aug-20	7,980.43	IRWD Check	Reconciled
411235	COASTLINE EQUIPMENT COMPANY	27-Aug-20	1,550.28	IRWD Check	Reconciled
411236	COLE, DAVID S	27-Aug-20	69.51	IRWD Check	Negotiable
411237	CONSTELLATION NEWENERGY, INC.	27-Aug-20	19,012.01	IRWD Check	Negotiable
411238	CORNELL COURT APTS	27-Aug-20	45.39	IRWD Check	Reconciled
411240	COX COMMUNICATIONS, INC.	27-Aug-20	3,240.23	IRWD Check	Reconciled
411241	CREASEY, COREY	27-Aug-20	45.98	IRWD Check	Negotiable
411241	D & H WATER SYSTEMS INC.	•	205.75		_
		27-Aug-20		IRWD Check	Negotiable
411243	DCS MANAGEMENT LLC	27-Aug-20	266.29	IRWD Check	Reconciled
411244	DEALERS SERVICE COMPANY, INC	27-Aug-20	780.00	IRWD Check	Reconciled
411245	DESHPANDE, SAMRUDDHI	27-Aug-20	18.15	IRWD Check	Negotiable
411246	DEX MEDIA, INC.	27-Aug-20	41.00	IRWD Check	Negotiable
411247	DILYTICS INC	27-Aug-20	3,110.00	IRWD Check	Negotiable
411248	DINC, MURAT	27-Aug-20	28.81	IRWD Check	Negotiable
411249	DIRECTV INC	27-Aug-20	150.24	IRWD Check	Reconciled
411250	DONG, NING	27-Aug-20	23.27	IRWD Check	Negotiable
411251	DOUGLAS ENVIRONMENTAL GROUP INC	27-Aug-20	1,425.00	IRWD Check	Negotiable
411252	DRONE NERDS INC	27-Aug-20	2,650.00	IRWD Check	Reconciled
411253	EHS INTERNATIONAL, INC	27-Aug-20	1,500.00	IRWD Check	Reconciled
411254	ELECTRICAL RELIABILITY SERVICES, INC.	27-Aug-20 27-Aug-20	6,459.00	IRWD Check	Reconciled
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411255	ENVIRONMENTAL SCIENCE ASSOCIATES	27-Aug-20	220.57	IRWD Check	Negotiable
411256	ENVIRONMENTAL SCIENCE ASSOCIATES	27-Aug-20	3,675.04	IRWD Check	Negotiable
411257	FERGUSON ENTERPRISES, LLC	27-Aug-20	16,912.44	IRWD Check	Reconciled
411258	FIRE EXTINGUISHING SAFETY & SERVICE	27-Aug-20	824.11	IRWD Check	Reconciled
411259	FISHER SCIENTIFIC COMPANY LLC	27-Aug-20	4,531.91	IRWD Check	Reconciled
411260	FRANCHISE TAX BOARD	27-Aug-20	914.06	IRWD Check	Negotiable
411261	FRONTIER CALIFORNIA INC.	27-Aug-20	629.72	IRWD Check	Reconciled
411262	FRYE, JEFFREY	27-Aug-20	29.52	IRWD Check	Negotiable
411263	GALLERY PROPERTY MANAGEMENT	27-Aug-20	40.61	IRWD Check	Negotiable
411264	GANAHL LUMBER CO.	=	2,260.17	IRWD Check	-
		27-Aug-20	•		Negotiable
411265	GENEAU, KAREN	27-Aug-20	32.90	IRWD Check	Reconciled
411266	GOU, YIDO	27-Aug-20	61.67	IRWD Check	Negotiable
411267	GRAINGER	27-Aug-20	8,121.17	IRWD Check	Reconcile
411268	GRANICUS, LLC	27-Aug-20	1,732.10	IRWD Check	Negotiable
411269	GROVES AT ORCHARD HILLS COMMUNITY ASSOCIATION	27-Aug-20	100.27	IRWD Check	Negotiable
411270	HAAKER EQUIPMENT COMPANY	27-Aug-20	494.25	IRWD Check	Reconciled
411271	HABITAT RESTORATION SCIENCES, INC.	27-Aug-20	800.00	IRWD Check	Negotiable
411272	HACH COMPANY	27-Aug-20	7,091.77	IRWD Check	Reconciled
411273	HARP, ROBERT	27-Aug-20	3.16	IRWD Check	Reconciled
411274	HARPER & ASSOCIATES ENGINEERING INC	27-Aug-20	760.00	IRWD Check	Negotiable
411275	HARRINGTON INDUSTRIAL PLASTICS LLC	27-Aug-20	11,027.51	IRWD Check	Reconciled
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411276	HD SUPPLY CONSTRUCTION SUPPLY, LTD	27-Aug-20	1,605.48	IRWD Check	Reconciled
411277	HE, JIANHONG	27-Aug-20	26.91	IRWD Check	Reconciled
411278	HELPMATES STAFFING SERVICES	27-Aug-20	17,183.28	IRWD Check	Reconciled
411279	HGCPM, INC	27-Aug-20	206.25	IRWD Check	Negotiable
411280	HI-LINE INC	27-Aug-20	115.38	IRWD Check	Reconciled
411281	HICKS, MARK	27-Aug-20	19.39	IRWD Check	Reconciled
411282	HILL BROTHERS CHEMICAL COMPANY	27-Aug-20	13,369.21	IRWD Check	Negotiable
411283	HOME DEPOT USA INC	27-Aug-20	1,791.19	IRWD Check	Negotiable
411284	HU, XIANGWANG	27-Aug-20	27.43	IRWD Check	Reconciled
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411285	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	27-Aug-20	2,817.06	IRWD Check	Reconciled
411286	IRVINE PIPE & SUPPLY INC	27-Aug-20	694.82	IRWD Check	Reconciled
411287	JAMILY, ZOHRA	27-Aug-20	145.71	IRWD Check	Negotiable
411288	JCI JONES CHEMICALS INC	27-Aug-20	3,494.40	IRWD Check	Reconciled
411289	JI, YAQIN	27-Aug-20	72.46	IRWD Check	Negotiable
411290	JLK INVESTMENTS, INC.	27-Aug-20	1,758.77	IRWD Check	Negotiable
411291	JOOWON, SUH	27-Aug-20	41.49	IRWD Check	Negotiable
411292	JUST ENERGY SOLUTIONS INC.	27-Aug-20	494.13	IRWD Check	Reconciled
411293	KANG, MICHAEL	27-Aug-20	22.50	IRWD Check	Reconciled
411294	KAYLA AND GRAHAM KELLER, LLC	_	49.20	IRWD Check	Reconciled
	·	27-Aug-20			
411295	KENNETH BAXTER AND LAUREN BAXTER	27-Aug-20	41.67	IRWD Check	Negotiable
411296	KEY INFORMATION SYSTEMS, INC.	27-Aug-20	2,050.00	IRWD Check	Reconciled
411297	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES	27-Aug-20	2,575.00	IRWD Check	Reconciled
411298	KIM, STACY	27-Aug-20	58.72	IRWD Check	Negotiable
411299	KPRS CONSTRUCTION SERVICES, INC.	27-Aug-20	301,523.91	IRWD Check	Reconciled
411300	L & S CONSTRUCTION INC.	27-Aug-20	1,665.75	IRWD Check	Negotiable
411301	LCS TECHNOLOGIES, INC.	27-Aug-20	1,755.00	IRWD Check	Negotiable
411302	LEE, JESSICA	27-Aug-20	46.54	IRWD Check	Negotiable
11100		=	35.42	IRWD Check	Reconciled
411202			45 A J	IKVVIJINECK	KECUNCIIEC
411303 411304	LI, TROFIM LIN, BEI D - 13	27-Aug-20 27-Aug-20	53.84	IRWD Check	Negotiable

CHECK OR		PAYMENT	PAYMENT	PAYMENT	
ECTRONIC #	SUPPLIERS	DATE	AMOUNT	METHOD	STATUS
411305	LSA ASSOCIATES INC	27-Aug-20	1,012.93	IRWD Check	Reconciled
411306	MADDOX ELECTRIC INC.	27-Aug-20	10,394.00	IRWD Check	Reconciled
411307	MAP COMMUNICATIONS, INC.	27-Aug-20	3,673.12	IRWD Check	Negotiable
411308	MC FADDEN-DALE INDUSTRIAL	27-Aug-20	163.32	IRWD Check	Reconciled
411309	MC MASTER CARR SUPPLY CO	27-Aug-20	103.30	IRWD Check	Reconciled
411310	MCBAIN SYSTEMS LP	27-Aug-20	565.00	IRWD Check	Reconciled
411311	MCRAE, TREVOR	27-Aug-20	39.65	IRWD Check	Negotiable
411312	MILLER, NATHAN	27-Aug-20	36.45	IRWD Check	Negotiable
411313	MORGAN COMPANY	27-Aug-20	18,429.62	IRWD Check	Reconciled
411314	NATIONAL READY MIXED CONCRETE SALES, LLC	27-Aug-20	4,019.12	IRWD Check	Reconciled
411315	NATURES IMAGE INC	27-Aug-20	1,700.00	IRWD Check	Reconciled
411316	NMG GEOTECHNICAL INC	27-Aug-20	2,896.40	IRWD Check	Negotiable
411317	NV5, INC.	27-Aug-20	22,400.00	IRWD Check	Negotiable
411318	OFFICE DEPOT INC	27-Aug-20	765.96	IRWD Check	Reconciled
411319	OLIN CORPORATION	27-Aug-20	23,603.90	IRWD Check	Reconciled
411320	ONESOURCE DISTRIBUTORS LLC	27-Aug-20	1,194.82	IRWD Check	Reconciled
411321	ORANGE COUNTY AUTO PARTS CO	27-Aug-20	2,397.85	IRWD Check	Reconciled
411322	ORANGE COUNTY TREASURER	27-Aug-20	3,200.00	IRWD Check	Reconciled
411323	PACIFIC COAST BOLT CORP	27-Aug-20	4,159.53	IRWD Check	Negotiable
411324	PACIFIC PARTS & CONTROLS INC	27-Aug-20	10,882.97	IRWD Check	Reconciled
411325	PARK, HYEWON	27-Aug-20	66.66	IRWD Check	Negotiable
411326	PARK, JUNG WOOK	27-Aug-20	74.55	IRWD Check	Negotiable
411327	PATEL, MILAN	27-Aug-20	94.83	IRWD Check	Negotiable
411328	PENG, YINGZI	27-Aug-20	49.27	IRWD Check	Reconciled
411329	PEREZ, AILEEN	27-Aug-20	20.86	IRWD Check	Negotiable
411330	PERKINELMER HEALTH SCIENCES INC	27-Aug-20	591.77	IRWD Check	Reconciled
411331	PERS LONG TERM CARE	27-Aug-20	538.89	IRWD Check	Reconciled
411332	PHAM, KRISTIE	27-Aug-20	36.57	IRWD Check	Reconciled
411333	PREMIER PAVING INC.	27-Aug-20	3,290.19	IRWD Check	Reconciled
411334	PROCARE WORK INJURY CENTER	27-Aug-20	4,491.27	IRWD Check	Reconciled
411335	PUGLIA ASSUNCAO, GUILHERME	27-Aug-20	32.90	IRWD Check	Negotiable
411336	RAM AIR ENGINEERING INC	27-Aug-20	4,188.15	IRWD Check	Reconciled
411337	REAL WATER CONSULTANTS INC.	27-Aug-20	6,162.00	IRWD Check	Negotiable
411338	RELIABLE WATER SOLUTIONS, LLC	27-Aug-20	2,628.78	IRWD Check	Reconciled
411339	RESTEK CORPORATION	27-Aug-20	83.38	IRWD Check	Reconciled
411340	RINCON TRUCK CENTER INC.	27-Aug-20	218.52	IRWD Check	Reconciled
411341	ROLIN, SHAWN	27-Aug-20 27-Aug-20	16.48	IRWD Check	Negotiable
411341	SABIN, BRENDA	27-Aug-20 27-Aug-20	39.24	IRWD Check	Reconciled
411342		=	63.93	IRWD Check	Reconciled
411344	SADRI, SHAHRIAR	27-Aug-20 27-Aug-20		IRWD Check	Reconciled
	SAFETY-KLEEN SYSTEMS, INC	•	1,158.75		
411345	SAGONG, YOUNG	27-Aug-20	63.23	IRWD Check	Negotiable
411346	SAN CARLO APARTMENTS	27-Aug-20	68.04	IRWD Check	Reconciled
411347	SAN LEON APTS	27-Aug-20	62.23	IRWD Check	Reconciled
411348	SAN MARCO APARTMENTS	27-Aug-20	63.91	IRWD Check	Reconciled
411349	SANTA ANA BLUE PRINT	27-Aug-20	11.25	IRWD Check	Negotiable
411350	SANTA MARGARITA FORD	27-Aug-20	267.48	IRWD Check	Negotiable
411351	SCHINDLER ELEVATOR CORPORATION	27-Aug-20	229.11	IRWD Check	Reconciled
411352	SHAMROCK SUPPLY CO INC	27-Aug-20	1,174.18	IRWD Check	Reconciled
411353	SHOETERIA	27-Aug-20	164.83	IRWD Check	Negotiable
411354	SIGNATURE FLOORING, INC	27-Aug-20	1,161.16	IRWD Check	Reconciled
411355	SNAP-ON INCORPORATED	27-Aug-20	338.03	IRWD Check	Reconciled
411356	SOFTWAREONE INC	27-Aug-20	17,802.00	IRWD Check	Reconciled
411357	SOLORIO, JUAN	27-Aug-20	31.59	IRWD Check	Negotiable
411358	SOLTANIPOUR, MAHSA	27-Aug-20	330.58	IRWD Check	Negotiable
411359	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	27-Aug-20	1,672.26	IRWD Check	Negotiable
411360	SOUTHERN CALIFORNIA EDISON COMPANY	27-Aug-20	56.95	IRWD Check	Negotiable
411361	SOUTHERN CALIFORNIA EDISON COMPANY	27-Aug-20	261,873.57	IRWD Check	Negotiable
411362	SOUTHSIDE TOWING	27-Aug-20	350.00	IRWD Check	Negotiable
411363	SOUTHWEST VALVE & EQUIPMENT INC	27-Aug-20	9,137.28	IRWD Check	Negotiable
411364	SPARKLETTS	27-Aug-20	261.39	IRWD Check	Negotiable
411365	STANTEC CONSULTING SERVICES INC.	27-Aug-20	1,725.00	IRWD Check	Reconciled
411366	STICE COMPANY INC	27-Aug-20	5,657.46	IRWD Check	Negotiable
411367	STREAKWAVE WIRELESS, INC.	27-Aug-20	672.36	IRWD Check	Reconciled
411368	SUKLE ADVERTISING INC.	27-Aug-20	1,742.50	IRWD Check	Negotiable
411369	TABER COMPANY, INC.	27-Aug-20	13,488.00	IRWD Check	Reconciled
	TAKIMOTO, TAKASHI	27-Aug-20	15.90	IRWD Check	Negotiable
		=			_
411370	TANTRADI, DEEPALI	27-Aug-20	32.73	IRVVD Check	MEROHADIE
411370 411371	TANTRADI, DEEPALI TEAMWORK FIRE PROTECTION INC	27-Aug-20 27-Aug-20	32.73 1.723.43	IRWD Check IRWD Check	_
411370	TANTRADI, DEEPALI TEAMWORK FIRE PROTECTION INC THOMPSON INDUSTRIAL SUPPLY	27-Aug-20 27-Aug-20 27-Aug-20	1,723.43 1,207.82	IRWD Check IRWD Check	Negotiable Negotiable Negotiable

CHECK OR LECTRONIC #	SUPPLIERS		PAYMENT DATE	PAYMENT AMOUNT	PAYMENT METHOD	STATUS
411375	TOTAL RESOURCE MANAGEMENT, INC		27-Aug-20	1,955.00	IRWD Check	Negotiable
411377	TROPICAL PLAZA NURSERY INC		27-Aug-20	244.00	IRWD Check	Reconciled
411378	UCT, LLC		27-Aug-20	688.47	IRWD Check	Reconciled
411379	US BANK NAT'L ASSOCIATION NORTH DAKOTA		27-Aug-20	50,245.06	IRWD Check	Negotiable
411379	VAUGHAN'S INDUSTRIAL REPAIR CO INC		27-Aug-20 27-Aug-20	9,770.50	IRWD Check	Reconciled
411381			_	•		
	VO-TA, HUAN		27-Aug-20	1,432.78	IRWD Check	Reconciled
411382	VOLVO CAR USA LLC		27-Aug-20	75.00	IRWD Check	Negotiable
411383	WALTERS WHOLESALE ELECTRIC		27-Aug-20	1,814.75	IRWD Check	Reconciled
411384	WATERLINE TECHNOLOGIES INC		27-Aug-20	2,992.00	IRWD Check	Reconciled
411385	WE, MITCHELL		27-Aug-20	54.59	IRWD Check	Reconciled
411386	WEST COAST SAND & GRAVEL INC.		27-Aug-20	530.13	IRWD Check	Reconciled
411387	WEST YOST & ASSOCIATES		27-Aug-20	19,671.00	IRWD Check	Reconciled
411388	WILLIAMS, MICHAEL		27-Aug-20	109.45	IRWD Check	Reconciled
411389	WIRELESS WATCHDOGS, LLC		27-Aug-20	1,516.00	IRWD Check	Negotiable
	·			•		_
411390	WORKPLACE SOLUTIONS LLC		27-Aug-20	1,024.70	IRWD Check	Reconciled
411391	YAN, TING TAO		27-Aug-20	23.41	IRWD Check	Negotiable
411392	YAO, YUHAN D		27-Aug-20	29.16	IRWD Check	Reconciled
411393	YU, DIAMENG		27-Aug-20	26.26	IRWD Check	Negotiable
411394	YU, HUI		27-Aug-20	129.51	IRWD Check	Negotiable
411395	ZAZA, SHARON		27-Aug-20	38.88	IRWD Check	Negotiable
411396			27-Aug-20 27-Aug-20	24.23	IRWD Check	Negotiable
	ZHANG, YA		_			_
411397	ZHANG, YANYING		27-Aug-20	80.92	IRWD Check	Negotiable
411398	SUKLE ADVERTISING INC.		28-Aug-20	41,400.00	IRWD Check	Negotiable
3-TOTAL CHE	ECK DISBURSEMENTS			9,681,983.39		
13910	CHARD SNYDER & ASSOCIATES, INC.		3-Aug-20	20,250.77	IRWD Wire	Negotiable
13911	CHARD SNYDER & ASSOCIATES, INC.		3-Aug-20	1,272.10	IRWD Wire	Negotiable
13912	YORK INSURANCE SERVICES GROUP INC - CA		4-Aug-20	4,167.84	IRWD Wire	Negotiable
13913	CHARD SNYDER & ASSOCIATES, INC.		4-Aug-20	1,501.90	IRWD Wire	Negotiable
13914	CALPERS		5-Aug-20	536,776.53	IRWD Wire	Negotiable
13915	CALPERS		_	•		•
			5-Aug-20	2,952.19	IRWD Wire	Negotiable
13916	CHARD SNYDER & ASSOCIATES, INC.		10-Aug-20	3,188.53	IRWD Wire	Negotiable
13917	CHARD SNYDER & ASSOCIATES, INC.		10-Aug-20	5,078.08	IRWD Wire	Negotiable
13918	BANK OF NEW YORK MELLON TRUST COMPANY NA		10-Aug-20	6,183.06	IRWD Wire	Negotiable
13919	U.S. BANK NATIONAL ASSOCIATION		10-Aug-20	4,463.11	IRWD Wire	Negotiable
13920	BANK OF AMERICA		10-Aug-20	5,318.08	IRWD Wire	Negotiable
13921	YORK INSURANCE SERVICES GROUP INC - CA		11-Aug-20	5,110.17	IRWD Wire	Negotiable
			_			_
13922	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY		11-Aug-20	12,672.26	IRWD Wire	Negotiable
13923	WELLS FARGO BANK, N.A.		12-Aug-20	6,434.20	IRWD Wire	Negotiable
13924	FILANC-BALFOUR BEATTY JV		12-Aug-20	84,652.33	IRWD Wire	Negotiable
13925	INTERNAL REVENUE SERVICE		12-Aug-20	227,482.14	IRWD Wire	Negotiable
13926	EMPLOYMENT DEVELOPMENT DEPARTMENT		12-Aug-20	15,542.96	IRWD Wire	Negotiable
13927	FRANCHISE TAX BOARD		12-Aug-20	69,043.52	IRWD Wire	Negotiable
13928	EMPLOYMENT DEVELOPMENT DEPARTMENT		12-Aug-20	15,486.59	IRWD Wire	Negotiable
			•	•		_
13929	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY		12-Aug-20	167,575.54	IRWD Wire	Negotiable
13930	CHARD SNYDER & ASSOCIATES, INC.		17-Aug-20	6,519.66	IRWD Wire	Negotiable
13931	CHARD SNYDER & ASSOCIATES, INC.		17-Aug-20	3,089.39	IRWD Wire	Negotiable
13932	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		17-Aug-20	1,685,884.74	IRWD Wire	Negotiable
13933	BANK OF NEW YORK MELLON TRUST COMPANY NA		17-Aug-20	41,495.90	IRWD Wire	Negotiable
13934	BANK OF NEW YORK MELLON TRUST COMPANY NA		17-Aug-20	48,125.00	IRWD Wire	Negotiable
13935	CALPERS		17-Aug-20 17-Aug-20	1,522.24	IRWD Wire	Negotiable
			_			_
13936	CALPERS		17-Aug-20	248,711.06	IRWD Wire	Negotiable
13937	YORK INSURANCE SERVICES GROUP INC - CA		18-Aug-20	18,955.55	IRWD Wire	Negotiable
13938	FAULKNER, BRYN		18-Aug-20	10.53	IRWD Wire	Negotiable
13939	ILAGAN, JONATHAN		18-Aug-20	16.54	IRWD Wire	Negotiable
13940	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES		18-Aug-20	2,450.40	IRWD Wire	Negotiable
13941	BANK OF NEW YORK MELLON TRUST COMPANY NA		18-Aug-20	10,225.69	IRWD Wire	Negotiable
			•			•
13942	CHARD SNYDER & ASSOCIATES, INC.		24-Aug-20	389.40	IRWD Wire	Negotiable
13943	CHARD SNYDER & ASSOCIATES, INC.		24-Aug-20	3,213.96	IRWD Wire	Negotiable
13944	YORK INSURANCE SERVICES GROUP INC - CA		25-Aug-20	5,753.21	IRWD Wire	Negotiable
13945	INTERNAL REVENUE SERVICE		27-Aug-20	225,502.46	IRWD Wire	Negotiable
13946	FRANCHISE TAX BOARD		27-Aug-20	68,380.58	IRWD Wire	Negotiable
	EMPLOYMENT DEVELOPMENT DEPARTMENT		27-Aug-20	14,978.24	IRWD Wire	Negotiable
130//7			=			_
13947	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES		27-Aug-20	2,830.01	IRWD Wire	Negotiable
13948	ODEAT MECTIFE O AND DESCRIPTION OF THE TEXT OF THE COLUMN		27-Aug-20	165,282.01	IRWD Wire	Negotiable
13948 13949	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY		24 4 20	3,055.04	IRWD Wire	Negotiable
13948	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY CHARD SNYDER & ASSOCIATES, INC.		31-Aug-20	-,		
13948 13949			31-Aug-20 31-Aug-20	1,565.05	IRWD Wire	Negotiable
13948 13949 13950 13951	CHARD SNYDER & ASSOCIATES, INC. CHARD SNYDER & ASSOCIATES, INC.		31-Aug-20	1,565.05		_
13948 13949 13950 13951 13952	CHARD SNYDER & ASSOCIATES, INC. CHARD SNYDER & ASSOCIATES, INC. U.S. BANK NATIONAL ASSOCIATION		31-Aug-20 31-Aug-20	1,565.05 2,918,625.00	IRWD Wire	Negotiable
13948 13949 13950 13951	CHARD SNYDER & ASSOCIATES, INC. CHARD SNYDER & ASSOCIATES, INC.	D - 15	31-Aug-20	1,565.05		_

CHECK OR		PAYMENT	PAYMENT	PAYMENT	
ELECTRONIC #	SUPPLIERS	DATE	AMOUNT	METHOD	STATUS
13956	CALPERS	31-Aug-20	250,179.44	IRWD Wire	Negotiable
SUB-TOTAL ELE	ECTRONIC DISBURSEMENTS		6,929,523.92		
SUB-TOTAL AP	CHECK AND ELECTRONIC DISBURSEMENTS		16,611,507.31		
13955	CALPERS	31-Aug-20	250,192.22	IRWD Wire	Voided
410411	BILLINGTON, NILES	6-Aug-20	291.33	IRWD Check	Voided
410489	LUO, YING	6-Aug-20	42.39	IRWD Check	Voided
410549	SONG, LI JIE	6-Aug-20	31.20	IRWD Check	Voided
410720	EBINA, KATSUYA	13-Aug-20	42.78	IRWD Check	Voided
410822	PHAN, BETTY	13-Aug-20	47.74	IRWD Check	Voided
411043	KB HOMES	20-Aug-20	541.29	IRWD Check	Voided
411239	COUNTY OF ORANGE	27-Aug-20	297.15	IRWD Check	Voided
411376	TRI POINTE HOMES, INC.	27-Aug-20	59.33	IRWD Check	Voided
	ECK AND ELECTRONIC ISSUED AND VOIDED IN AUG 2020		251,545.43		

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Exhibit "E"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

August 2020

	AMOUNT	VENDOR	PURPOSE
8/14/2020 8/28/2020	1,069,446.16 1,050,017.59 \$2,119,463.75	BANK OF AMERICA BANK OF AMERICA	ACH Payments for Payroll ACH Payments for Payroll

Exhibit "F"

IRWD Gov Code 53065.5 Disclosure Report

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received. 01-AUG-20 to 31-AUG-20

NAME	CHECK NO.	CHECK DATE	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Avalos, Joaquin	411191	27-Aug-20	192.00	Membership renewal	CWEA membership
Corey, Jo Ann	410891	20-Aug-20	108.82	Other(Misc)	Printer Ink - working remotely at home
Martinez, Diego	411194	27-Aug-20	129.95	Registration Fees	CEU Distribution System review course
Mykitta, Richard	410892	20-Aug-20	115.00	Other(Misc)	Chemical Engineer cerficiate renewal
Total Amount:		\$545.77			

September 28, 2020

Prepared by: H. Cho / M. Cortez

Submitted by: K. Burton

Approved by: Paul A. Cook

CONSENT CALENDAR

SAN JOAQUIN RESERVOIR FILTRATION PROJECT VARIANCE NO. 3

SUMMARY:

The San Joaquin Reservoir Filtration Project will install a filtration system and disinfection improvements at the reservoir to mitigate algae and debris entering the recycled water system. During final design, additional design tasks were identified that will be required to complete project design. Staff recommends that the Board authorize the General Manager to execute Variance No. 3 in the amount of \$128,503 with Carollo Engineers for the San Joaquin Reservoir Filtration Project.

BACKGROUND:

In February 2019, staff retained Carollo Engineers to design filtration and disinfection improvements at San Joaquin Reservoir to mitigate against algae and debris entering the Zone B system. Currently, there is no filtration system for water drafting out of the reservoir into the system, and recycled water users in the area have reported clogged irrigation equipment and filters on the customer side of the service meter and increased maintenance costs. A site plan is attached as Exhibit "A".

Design Variance No. 3:

Design Variance No. 3 includes the following additional work items that were identified during the design, and were not included in the original scope of work:

- Coordination with Amiad, the disc filter supplier, to provide control panels that will use IRWD standard parts and that will provide information and control through the IRWD SCADA system. Due to the COVID-19 health emergency, this process has been slow as Amiad and its suppliers have not been available to respond in a timely manner.
- Updating the geotechnical report for the site. The project was originally scoped to use the 2003 Lowry & Associates geotechnical report for the site since the project area is the same. During final design, additional geotechnical information is required for meeting current seismic and building codes.
- Changing the pump design criteria for the new pumps that will be installed to pump water out of San Joaquin Reservoir through the new disc filters into Zone B. The project was originally scoped to pump water out of the reservoir to the same Hydraulic Grade Line (HGL) of 450 feet as the existing San Joaquin Reservoir pump station. Operations asked that the new pump station meet the Zone B HGL of 460 feet to allow water to be pumped to Zone B on the other side of the current Zone B split. Additionally, a pump control valve was added to provide backpressure during pump operations when the reservoir level is between 435 feet and 470 feet.

Consent Calendar: San Joaquin Reservoir Filtration Project Variance No. 3

September 28, 2020

Page 2

• Design of a new canopy and sunscreen structure around the improved sodium hypochlorite tanks at the existing control building; and

• Additional electrical and instrumentation work updating the filter backwash pump controller, modifying the standard for variable frequency drives, modifying the size of the electrical room in the existing control building, and updating filter conduit routing. Additionally, staff requested additional work on the vertical turbine pump controls.

The total cost of Variance No. 3 is \$128,503 and is shown in Exhibit "B". Staff negotiated the final variance amount with Carollo Engineers and believes the variance to be fair for the additional requested work. The Variance Log is shown in Exhibit "C" and the cumulative variance total requires Board approval. Final design will be completed in January 2021, and construction completion is scheduled for May 2022.

FISCAL IMPACTS:

The San Joaquin Reservoir Filtration Project, Project 10379, is included in the FY 2020-21 Capital Budget. The existing budget is sufficient to fund the additional engineering services.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA) and in conformance with California Code of Regulations Title 14, Chapter 3, Article 6, IRWD is preparing the Mitigated Negative Declaration for the project.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on September 15, 2020.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 3 IN THE AMOUNT OF \$128,503 WITH CAROLLO ENGINEERS FOR THE SAN JOAQUIN RESERVOIR FILTRATION PROJECT, PROJECT 10379.

LIST OF EXHIBITS:

Exhibit "A" – Site Plan

Exhibit "B" - Carollo Engineers' Variance No. 3

Exhibit "C" - Variance Log

EXHIBIT "A"



EXHIBIT "B"



3150 Bristol Street, Suite 500, Costa Mesa, California 92626 P. 714.593.5100 F. 714.593.5101

September 2, 2020

Mr. Harry Cho, P.E. Senior Engineer Irvine Ranch Water District 3512 Michelson Drive Irvine Ranch, CA 92612

Subject: San Joaquin Reservoir Filtration Project

Variance 3 Request

Dear Mr. Cho:

Discussions and decisions following the 60% submittal of the San Joaquin Reservoir (SJR) Filtration Project have led to changes from the original basis of design. These changes include modifications to the Reservoir Booster Pump Station design criteria, to the sodium hypochlorite facility (new tank pads, canopy, sunscreen, and revised pump type), to the Control Building electrical room, to the control panels and schematics, coordination with Amiad (filter supplier), and an updated geotechnical report. This has resulted in efforts outside the original scope of work and planned budget, described in the attached table (Exhibit A).

Our estimated effort to complete the additional scope is also included in the table attached to this letter as Exhibit A. We have also included IRWD's Professional Services Variance as Exhibit C. We appreciate your consideration in approving the requested variance issued.

Sincerely,

CAROLLO ENGINEERS, INC.

Jilli Meyerilorei, PE

Enclosures: Project Changes and Impacts (Exhibit A)

Professional Services Variance (Exhibit C)



EXHIBIT A

Project Changes and Impacts SJR Filtration Project

Item	Date	Description	Forum	Impact	Estimated Impact (\$)
1	1/23/2020	Coordinate with Amiad to get a proposal and negotiate	Email	This is being tracked separetly on monthly invoices.	\$ 7,525
2	5/5/2020	Replace sodium hypochlorite chemical metering pumps, exposed piping, bulk storage canopy and tank pads. Add sunscreen.	Email	Additional design effort for structural, architectural, mechanical, EI&C.	\$ 45,000
3	5/27/2020	Resubmit 60% drawing set with sodium hypochlorite facility improvements.	Email	Additional effort to recompile deliverable	\$ 1,520
4	6/30/2020	Sole source Milton Roy diaphragm metering pumps. Provide chemical metering pump VFDs within the MCC.	60% Deliverable Meeting	Specifications and drawings done for Blue-White peristaltic pump per previous direction provided 5/12/20. Revise specifications and drawings for diaphragm metering pumps.	\$ 2,000
5	6/30/2020	Reduce Control Building Electrical Room Size and new MCC-100 feeder routing	Various Mtgs	Revise 60% structural/demo, electrical, and HVAC drawings based on reduced room size.	\$ 3,458
6	7/8/2020	Relocate the 6"PVC Exhaust south of the SCE Service Entrance pad and the 6" PVC Intake and 4" Air Rel/Vacuum Valve north of the SCE Service Entrance pad.	60% EIC Deliverable Meeting	Based on revised SCE Service Entrance location, demo and rerouting is requried for existing facilities that were originally not impacted by design.	\$ 965
7	7/8/2020	Remove control panels for the Reservoir Booster Pumps, Filter Backwash Supply Pumps, and the Filter Backwash Waste Pumps and only provide E-Stops	60% EIC Deliverable Meeting	CAD rework and lost time for P&IDs and elevations.	\$ 2,080
8	7/8/2020	Delete schematics for all pumps and utilize IRWD standard arrangement schematics for pumps provided by One-Source.	60% EIC Deliverable Meeting	Decipher Rockwell schematics and determine if the functionality is met.	\$ 11,175
9	7/8/2020	Operate Filter Backwash Waste Pumps (large sump pumps) using SEL controller and locating starter in the field Currently controlled by PLC	60% EIC Deliverable Meeting	Design panel and schematic and update P&IDs.	\$ 5,092

Page 1 of 2

EXHIBIT A

Project Changes and Impacts SJR Filtration Project

Item	Date	Description	Forum	Impact	Estimated Impact (\$)
10	7/8/2020	VFD ductwork and possible exhaust fan to the outside of	60% EIC	HVAC and EPIC® coordination on	
		the building.	Deliverable	ductwork. Coordination with Rockwell.	\$ 510
			Meeting		
11	7/8/2020	Update Filter conduit routing	60% EIC	Rework conduit routing throughout the	
			Deliverable	filter building	\$ 2,040
			Meeting		
12		Change Reservoir Booster Pump Design Criteria	Various Emails	Will need new pump selections and	
				control valve within vault in yard. New	
				valve will require modifications to	\$ 28,000
				electrical sheets, new P&ID, new	
				civil/mech	
					\$ 109,365

SUBCO	SUBCONSULTANT SPECIFIC ITEMS							
S.1	4/28/20	Add air conditioning to expanded Control Building	Phone Call					
		Electrical Room. Remove wall louvers			\$3,800			
S.2		Add Geotechnical Report			\$15,338			
					\$19,138			

TOTAL	\$ 128,503

IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Originator: [] IRWD [X] ENGINEER/CONSULTANT [Description of Variance (attach any back-up material): Discussions and decisions following the 60% submittal of the San Joaquin Reservoir (SJ original basis of design. These changes include modifications to the Reservoir Booster Phypochlorite facility (new tank pads, canopy, sunscreen, and revised pump type), to the Grant Constant of the Constant of	R) Filtration Proje ump Station design Control Building el	ain)ct have led to ch				
Discussions and decisions following the 60% submittal of the San Joaquin Reservoir (SJ original basis of design. These changes include modifications to the Reservoir Booster P hypochlorite facility (new tank pads, canopy, sunscreen, and revised pump type), to the G	ump Station design Control Building e	n criteria, to the				
panels and schematics, coordination with Amiad (filter supplier), and an updated geotecl original scope of work and planned budget, described in the attached table.			sodium o the control			
Engineering & Management Cost Impact:						
Classification Manhours Rate \$		Subcon.	Total \$			
Final Design 560 Varies \$109.	.365 -	\$19,138	\$128,503			
			\$128,503			
Schedule Impact:		Total \$ =	\$120,303			
No. Description Schedule V	chedule ariance	New Schedule				
4 Final Design March 2020 + 10 (Variance 2)) months	Jan 2021				
Required Approval Determination:						
Total Original Contract \$\frac{634,888}{575,000}\$ [] Director: Cur	[] Director: Cumulative total of Variances less than or equal to \$75,000.					
	[] Executive Director: Cumulative total of Variances less than or equal to \$125,000.					
Total Sum of Variances \$560,076 New Contract Amount \$1,194,964 [X] General Mana	[X]General Manager: Cumulative total of Variances less than or equal to \$200,000.					
Percentage of Total Variances	[] Board: Cumulative total of Variances greater than \$200,000.					
ENGINEER/CONSULTANT: Carollo Engineers, Inc. IRVIN Company Name	NE RANCH WA	ATER DISTR	ICT			
Project Engineer/Manager Date Department D	HC Kevin L Burton 9/3/2020 Department Director Date					
Engineer's/Consultant's Management Date General Mana	ager/Board	Date				

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title:	roject Title: San Joaquin Reservoir Filtration Project						
Project No.:	: 10379 Project Manager: Jim Meyerhofer						
Variance			Dates		Variance		
No.		Description	Initiated	Approved	Amount		
1		Pilot study	10/2/19		\$84,444		
2		Additional prelim. and final design	10/4/19		\$347,129		
						_	

EXHIBIT "C"

San Joaquin Reservoir Filtration Project 10379 Design Variance Summary

Design Engineer: Tetra Tech

				Original Contra	ct Amount:	\$634,888.00
Variance	Description	Variance Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount
1	Approved by Exe. Director of Engineering and Water Quality Approved on October 10, 2019 Disc filter pilot study	\$84,444.00	\$0.00	\$84,444.00	13.30%	\$719,332.00
2	Approved by Board of Directors Approved on November 25, 2019 Added filter building rather than canopy and 70 micron disc filter instead of 10 micron filters to preliminary design and final design scope of work	\$347,129.00	\$84,444.00	\$431,573.00	67.98%	\$1,066,461.00
3	Current Additional final design items: Amiad coordination, pump design, sodium hypochlorite system items, update geotech report, electrical and instrumentation items	\$128,503.00	\$431,573.00	\$560,076.00	88.22%	\$1,194,964.00

September 28, 2020

Prepared by: B. Rios / K. Lew

Submitted by: K. Burton

Approved by: Paul A. Cook / Ca.

CONSENT CALENDAR

REIMBURSEMENT AGREEMENT BETWEEN IRWD AND THE CITY OF IRVINE FOR FISCAL YEAR 2020-21 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT

SUMMARY:

The City of Irvine is proceeding with its pavement rehabilitation and slurry seal project for the area of the Irvine Business Complex West. This project requires an individual Reimbursement Agreement (RA) since the estimated construction cost is over \$100,000. Staff recommends the Board authorize the General Manager to execute an RA with the City for the Fiscal Year 2020-21 Annual Street Rehabilitation and Slurry Seal Project, subject to non-substantive changes.

BACKGROUND:

IRWD has had an RA in place with the City since 1995 for managing various street rehabilitation projects. Typically included in the City's capital improvement projects are alternate bid items for raising existing IRWD sewer manhole covers, sewer cleanouts, and water valve frames and lids to the new pavement grade. Any project up to \$100,000 in reimbursable costs can be authorized by the General Manager as an addendum to this "umbrella" RA.

IRWD and the City have also agreed that any City street improvement project that involves the construction, modification, or relocation of IRWD facilities with an estimated construction cost over \$100,000 will be administered through a separate RA. The City's Fiscal Year 2020-21 Annual Street Rehabilitation and Slurry Seal Project has an estimated construction cost of \$499,400. Therefore, this project requires a project-specific RA.

This project includes replacement and adjustment to grade of approximately 379 domestic water valve cans and lids, 77 recycled water valve cans and lids, eight sanitary sewer cleanout cans and lids and adjustment to grade of approximately 81 sanitary sewer manholes. The estimated construction cost is \$499,400 plus a City administrative fee equal to 4% of the actual construction cost per the terms of the RA. An engineer's estimate is provided as Exhibit "A", a Location Map is provided as Exhibit "B", and the RA is provided as Exhibit "C". The RA has been reviewed by IRWD's legal counsel.

FISCAL IMPACTS:

Projects 10473, 11109, and 10474 are included in the FY 2020-21 Capital Budget and have adequate budgets to fund the project.

7 No. 7 RA 2020-21 Irvine.docx

Consent Calendar: Reimbursement Agreement between IRWD and the City of Irvine for the Fiscal Year 2020-21 Annual Street Rehabilitation and Slurry Seal Project September 28, 2020 Page 2

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3). The activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on September 15, 2020.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE REIMBURSEMENT AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT AND THE CITY OF IRVINE FOR ADJUSTMENT OF STREET UTILITIES TO GRADE FOR THE FISCAL YEAR 2020-21 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT, SUBJECT TO NON-SUBSTANTIVE CHANGES.

LIST OF EXHIBITS:

Exhibit "A" – FY 2020-21 Annual Street Rehabilitation and Slurry Seal Engineer's Estimate

Exhibit "B" – FY 2020-21 Annual Street Rehabilitation and Slurry Seal Vicinity Map

Exhibit "C" – FY 2020-21 Annual Street Rehabilitation and Slurry Seal Reimbursement

Agreement

EXHIBIT "A"

REIMBURSEMENT AGREEMENT BETWEEN IRVINE RANCH WATER DISTRICT (IRWD) AND THE CITY OF IRVINE

FOR

FY 20-21 ANNUAL STREET REHABILITATION AND SLURRY SEAL PROJECT, BID NO. 21-1824

ENGINEER'S ESTIMATE

ITEM					UNIT	E	EXTENDED
NO.	DESCRIPTION	QUANTITY	UNITS		COST	AMOUNT	
A-1	INSTALL NEW IRWD WATER VALVE FRAME AND COVER TO GRADE	379	EA	\$	900.00	\$	341,100.00
A-2	INSTALL NEW IRWD RECLAIM WATER VALVE FRAME AND COVER TO GRADE	77	EA	\$	900.00	\$	69,300.00
A-3	INSTALL NEW IRWD SEWER CLEANOUT FRAME AND COVER TO GRADE	8	EA	\$	1,000.00	\$	8,000.00
	ADJUST EXISTING IRWD SEWER MANHOLE FRAME AND COVER TO GRADE	81	EA	\$	1,000.00	\$	81,000.00
	TOTAL CONSTRUCTION ESTIMATE						499,400.00
4% ADMINSTRATION FEE PER SECTION 5 OF AGREEMENT					\$	19,976.00	
TOTAL COSTS					\$	519,376.00	

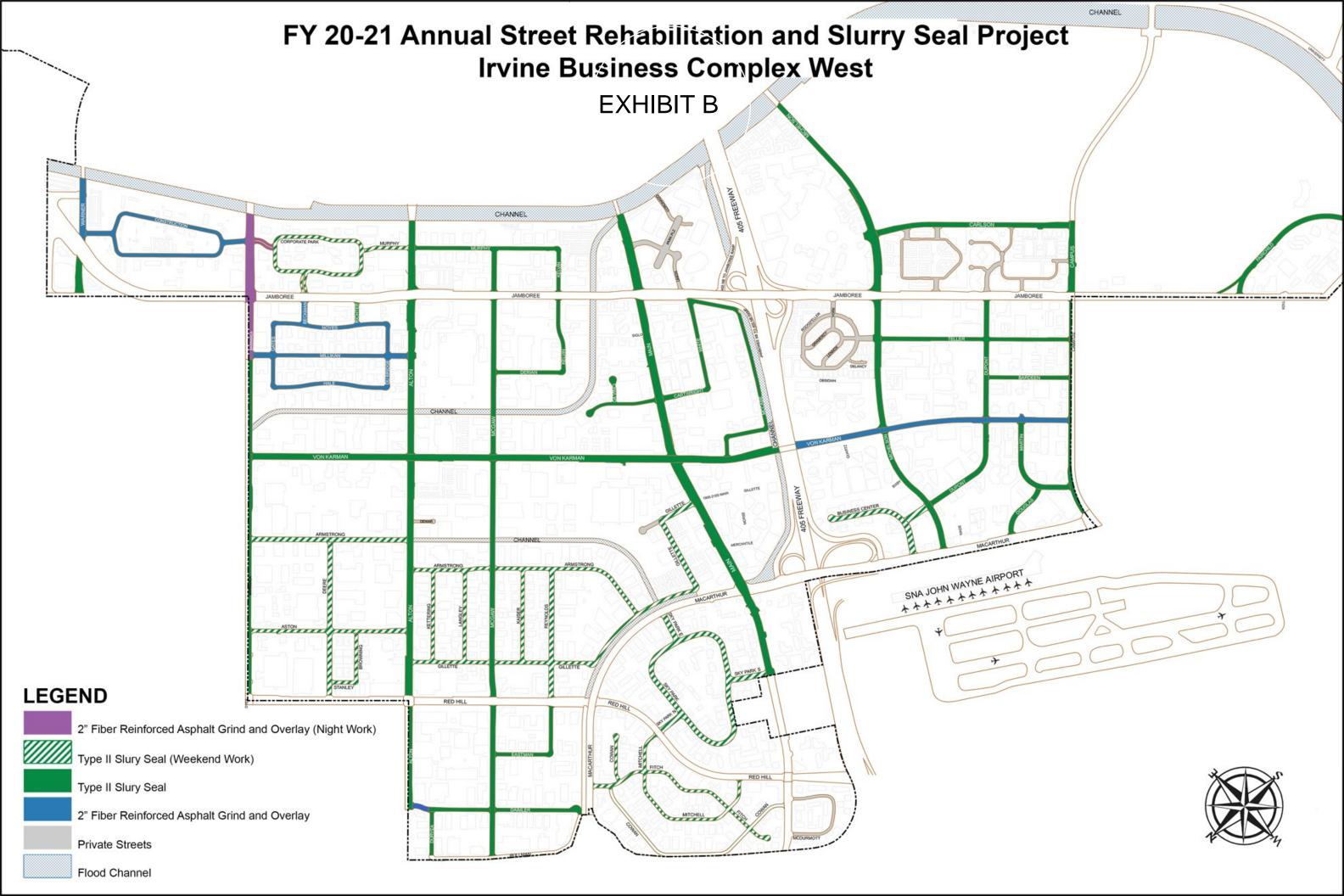


EXHIBIT C

File No. 10473

REIMBURSEMENT AGREEMENT BETWEEN

IRVINE RANCH WATER DISTRICT AND THE CITY OF IRVINE

FOR

INSTALLATION AND ADJUSTMENT OF STREET UTILITIES TO GRADE FOR FY 2020-21 ANNUAL STREET REHABILITATION AND SLURRY SEAL BID NO. 21-1824

This Agreement is made and entered into as of this , 2020, by and between IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law, hereinafter referred to as "DISTRICT," and the CITY OF IRVINE, a municipal corporation, hereinafter referred to as "CITY."

$\underline{W} \underline{I} \underline{T} \underline{N} \underline{E} \underline{S} \underline{S} \underline{E} \underline{T} \underline{H}$:

WHEREAS, CITY proposes to construct street and utility improvements within the area of the Irvine Business Complex West, Bid No. 21-1824 (the "Project"), within the jurisdictional boundaries of DISTRICT and the City of Irvine; and

WHEREAS, such construction will necessitate the following construction work on DISTRICT facilities: replacement and adjustment to grade of approximately 379 Domestic Water Valve cans and lids, replacement and adjustment to grade of approximately 77 Recycled Water Valve cans and lids, replacement and adjustment to grade of approximately 8 Sanitary Sewer Cleanout cans and lids and adjustment to grade of approximately 81 Sanitary Sewer Manholes, all as described on Exhibit "A" attached hereto incorporated by reference herein (the infrastructure above collectively referred to as the "IRWD FACILITIES" and the construction work related to them is the "Work"); and

WHEREAS, the parties have determined that it would be more expedient for CITY to perform the IRWD FACILITIES Work rather than for DISTRICT to do so; and

WHEREAS, DISTRICT is amenable to the CITY performing the IRWD FACILITIES Work with the CITY agreeing to advance the costs; and

WHEREAS, DISTRICT intends to fully reimburse the CITY through payments billed by the CITY and approved by DISTRICT for the entire cost of the IRWD FACILITIES Work; and

WHEREAS, except as otherwise provided herein, upon the completion of the IRWD FACILITIES Work, the parties intend that any newly-installed IRWD FACILITIES shall become the property of DISTRICT in accordance with the terms and conditions hereinafter set forth.

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

SECTION 1. IRWD FACILITIES. In conjunction with the Project, CITY agrees to initiate and pursue to completion the design and construction of the IRWD FACILITIES Work pursuant to this Agreement.

SECTION 2. PLANS. CITY agrees that the IRWD FACILITIES Work shall be completed pursuant to project plans and specifications (the "Plans and Specifications") approved by DISTRICT. Prior to commencement of preparation of the Plans and Specifications, CITY shall submit its design engineer's proposed improvement plans for the IRWD FACILITIES to DISTRICT. DISTRICT will have a period of five (5) calendar days from its receipt of such design proposal to review and either indicate its approval or request changes. CITY shall cause its design engineer to review and respond to any requested changes. The Plans and Specifications must incorporate (directly or by reference) the applicable portions of DISTRICT's latest edition of *Construction Manual for the Construction of Water, Sewer, and Recycled Water Facilities* (the "Construction Manual"). CITY shall let the contract for the performance of the IRWD FACILITIES Work (together with non-reimbursable work to be completed by CITY within the Project) pursuant to the approved plans prepared by CITY's design engineer.

SECTION 3. BIDDING AND AWARD.

The parties agree that the performance of the IRWD FACILITIES Work 3.1 shall be included in CITY's contract(s) awarded for the Project and that the IRWD FACILITIES Work shall be bid as a separate item or items that can be deleted. During the bidding process, CITY shall deliver to IRWD one (1) complete set of the bid documents that include the IRWD FACILITIES Work, including all related addenda concurrently with the distribution thereof to prospective bidders. Upon opening of bids by CITY, CITY will submit the bids or a spread sheet summary of the bids to DISTRICT. DISTRICT will have a period of ten (10) calendar days from its receipt of the bid results for review and approval of the IRWD FACILITIES Work bid item(s) submitted by the bidder identified to DISTRICT by CITY as CITY's proposed successful bidder. CITY agrees that bids received for the construction of the IRWD FACILITIES bid item(s) shall be subject to the approval of DISTRICT prior to award of the Project construction contract(s) that include the IRWD FACILITIES. If DISTRICT does not approve such bids, then either party may terminate this Agreement upon 24 hours' prior written notice, in which event CITY shall have no further obligation to perform the IRWD FACILITIES Work, and DISTRICT may elect to perform the IRWD FACILITIES Work with its own contractor. If DISTRICT approves of the IRWD FACILITIES bid item(s) of CITY's successful bidder, then CITY shall cause the IRWD FACILITIES Work to be performed as part of the contract awarded to such bidder.

- 3.2 <u>Estimated Costs</u>. The total estimated construction cost for the IRWD FACILITIES Work is \$499,400, but the amount to be reimbursed by DISTRICT will be based on the actual costs of construction plus an administration fee as set forth in further detail in Section 5.
- 3.3 <u>Contract Documents</u>. Upon award of the construction contract, CITY shall provide DISTRICT with one original copy of the fully-executed contract documents and one copy of the bid package relating to the IRWD FACILITIES received from the successful bidder.

SECTION 4. DESIGN REVISIONS AND CHANGE ORDERS.

- 4.1 DISTRICT agrees to reimburse CITY for any change order(s) for revision(s) requested by DISTRICT or otherwise required to perform the IRWD FACILITIES Work. CITY shall promptly furnish DISTRICT with copies of any proposed change order(s) to such contract within five (5) working days of the initiation of the changed conditions to such contract, which change orders will be subject to DISTRICT approval if and to the extent the IRWD FACILITIES are affected.
- 4.2 DISTRICT shall promptly review proposed change order(s) and provide CITY with a response within five (5) working days or sooner of receiving proposed change order(s) information from CITY. DISTRICT agrees not to unreasonably cause delay(s) to the construction schedule of the Project in reviewing proposed change order(s) for the IRWD FACILITIES Work. Notwithstanding any other provision herein, any approval required to be given by the DISTRICT under this Section 4 will be deemed given if no response to the CITY's request for such approval is received by the CITY within eight (8) working days following the written request for such approval, unless the parties agree otherwise in a writing executed by both parties.

SECTION 5. REIMBURSEMENT.

- 5.1 <u>Costs</u>. CITY shall keep a separate accounting of all costs incurred by CITY in relation to the IRWD FACILITIES Work. DISTRICT shall reimburse CITY for the following costs (collectively, the "Costs"):
 - (1) <u>Actual Costs</u>: the actual costs of design, construction, permits, bonds, and legal fees (excluding the costs of preparation of this Agreement) incurred by CITY in connection with the design and construction of the IRWD FACILITIES;

<u>plus</u>

(2) <u>Administration Fee</u>: an administration fee which shall be equal to four percent (4%) of the actual cost of construction (costs paid directly to CITY's contractor for construction only, excluding any cost for design, surveying, geotechnical or other work) of the IRWD FACILITIES Work. This amount is deemed to cover all costs of project administration, including, but not limited to, accounting, inspection, surveying, compaction testing, geotechnical services and engineering.

5.2 <u>Invoicing & Payment</u>. Within sixty (60) days of DISTRICT's acceptance of the installed, relocated, or adjusted IRWD FACILITIES as provided in Section 8, a final accounting of the Costs shall be made by CITY and submitted to DISTRICT along with an invoice for the Costs and any supporting documentation necessary to show the amounts which represent Costs of performing the IRWD FACILITIES Work. Amounts paid pursuant to progress payment invoices shall be subject to adjustment in the final accounting. Within 30 days after the DISTRICT's receipt of the final accounting, DISTRICT agrees to pay to CITY the total amount of the Costs.

SECTION 6. LAWS, ORDINANCES, RULES AND REGULATIONS. CITY shall require in its contract for the construction of the IRWD FACILITIES that its contractor be fully informed of and comply with all laws, ordinances, rules and regulations, including, but not limited to, all applicable requirements of the California Labor Code, prevailing wage laws, the Construction Manual, and the Rules and Regulations of DISTRICT, in connection with performing the IRWD FACILITIES Work.

SECTION 7. INSPECTION. DISTRICT shall have sole and absolute discretion as to all aspects of design and construction of the IRWD FACILITIES, and DISTRICT shall be entitled to inspect the construction of IRWD FACILITIES Work as it deems necessary to assure compliance with the Plans and Specifications, including shop drawing review and material inspection thereof. DISTRICT shall have access to all phases of the Project work to be performed by CITY for the purpose of such inspection; provided, however, all questions regarding the work being performed will be directed to CITY's resident engineer. DISTRICT will promptly notify CITY of any portion of the Work on the IRWD FACILITIES which appears not to conform to the Plans and Specifications. The determination of DISTRICT as to conformity of the IRWD FACILITIES Work with the Plans and Specifications shall be made in DISTRICT's sole and absolute discretion. DISTRICT shall not unreasonably withhold its approval as to such conformity of the IRWD FACILITIES Work with the Plans and Specifications. CITY shall require its contractor to construct the IRWD FACILITIES so that the IRWD FACILITIES conform to the Plans and Specifications. CITY shall assume full responsibility for certifying or obtaining certification of the compaction of backfill material over the IRWD FACILITIES.

SECTION 8. ACCEPTANCE.

- 8.1 <u>Acceptance.</u> DISTRICT shall accept the IRWD FACILITIES, as installed, relocated, or adjusted when the IRWD FACILITIES Work has been completed by CITY in accordance with all requirements of the Plans and Specifications, including any change orders approved by DISTRICT as provided in Section 4.
- 8.2 <u>As-Builts</u>. At the time of completion and acceptance of the IRWD FACILITIES, CITY shall furnish DISTRICT with one copy of the contractor's redlined set of blueline "record" drawings (showing all revisions, manufacturer and type of valves, pipe and fittings as required by DISTRICT) and one copy of the compaction reports and certificate, survey notes, and cut sheets.

SECTION 9. OWNERSHIP. Notwithstanding the fact that CITY shall accomplish the construction of the IRWD FACILITIES subject to reimbursement, the IRWD FACILITIES to be completed hereunder, together with the necessary franchises, licenses, easements, rights-of-way, and other privileges, shall at all times be subject to the applicable rates, rules and regulations of DISTRICT, as modified or amended from time to time. CITY hereby disclaims any interest in the IRWD FACILITIES and hereby transfers and assigns to DISTRICT any and all right, title, and interest it may have in the IRWD FACILITIES upon their completion and acceptance. DISTRICT shall own, operate and maintain the IRWD FACILITIES following acceptance thereof.

SECTION 10. GUARANTEES. CITY will, pursuant to the requirement(s) of the Plans and Specifications, cause its contractor(s) for the IRWD FACILITIES to guarantee the IRWD FACILITIES against defects in workmanship and materials for a period of one (1) year from the date of acceptance by CITY, which acceptance shall be given only after acceptance by DISTRICT as provided in Section 8. It is further agreed that CITY shall cause the IRWD FACILITIES to be brought or restored to full compliance with the requirements of the Plans and Specifications, including any test requirements, for any portions of the IRWD FACILITIES which during said one (1) year period are found not to be in conformance with the provisions of the Plans and Specifications. This guarantee is in addition to any and all other warranties, express or implied, from CITY's contractors or material manufacturers, with respect to the IRWD FACILITIES. The guarantee and obligations under this section shall in no way be relieved by DISTRICT's inspection and/or acceptance of the IRWD FACILITIES. This section sets forth the entire guarantee and warranty of CITY with respect to the IRWD FACILITIES Work. The express or implied warranties of other persons with respect to IRWD FACILITIES shall in no way be limited by the guarantee and warranty of CITY contained in this section. If requested by DISTRICT, CITY agrees to assign to DISTRICT the contractor's guarantee and/or any other guarantees or warranties relating to the IRWD FACILITIES Work.

SECTION 11. INDEMNIFICATION.

- 11.1 CITY shall indemnify, defend and hold DISTRICT, its officers, agents, employees, and engineers harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen during construction of the IRWD FACILITIES as a result of any work or action performed by CITY or on behalf of CITY, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of DISTRICT, its officers, agents, employees or engineers or by any act or omission for which DISTRICT, its officers, agents, employees or engineers are liable without fault.
- 11.2 DISTRICT shall indemnify, defend and hold CITY, its officers, agents, and employees, harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen either (i) as a result of any acts performed by DISTRICT, its officers, agents, or employees, with respect to the IRWD FACILITIES construction; or (ii) following DISTRICT acceptance of the IRWD FACILITIES, with respect to maintenance and operation of the IRWD FACILITIES, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by

any negligence of CITY, its officers, agents, employees or engineers, or by any act or omission for which CITY, its officers, agents, employees or engineers are liable without fault.

SECTION 12. INSURANCE AND BONDING. CITY shall cause its contractor(s) to provide performance and payment bonds for the construction of the Project including the IRWD FACILITIES and to obtain insurance coverage sufficiently broad to insure the matters set forth in this Agreement and to include DISTRICT, its officers, agents, employees and engineers, as additional insureds on all insurance policies that CITY requires its contractor(s) to provide. As evidence of such insurance coverage, CITY shall, prior to commencement of performance of the IRWD FACILITIES Work, provide DISTRICT with certificates of insurance and insurance endorsements from CITY's contractor(s) in a form acceptable to DISTRICT.

SECTION 13. TERMINATION.

- 13.1 DISTRICT shall have the right to terminate this Agreement at any time, subject to the provisions of this section, by providing five (5) business days' prior written notice to CITY, except as provided in Section 3 with respect to unapproved bids. If at the request or direction of a party other than CITY, the performance of the IRWD FACILITIES Work is not accomplished or completed, DISTRICT shall remain obligated for the actual amount of the Costs incurred by CITY to the date of termination.
- 13.2 If CITY's Project is canceled or modified so as to eliminate the necessity of the construction of the IRWD Facilities, CITY shall have the right to terminate this Agreement and thereby terminate its obligation to perform the IRWD FACILITIES Work, by providing five (5) business days' prior written notice to DISTRICT. In such case, DISTRICT will not be obligated for any design or any other Costs incurred by CITY. If IRWD elects to perform the IRWD FACILITIES Work, DISTRICT may, but shall not be obligated to, acquire the design or other work from CITY by separate agreement.

<u>SECTION 14.</u> <u>NOTICE</u>. Any notice or other written instrument required or permitted by this Agreement to be given to either party shall be deemed received when personally served or twenty-four (24) hours after being deposited in the U.S. Mail, postage prepaid, registered or certified and addressed as follows:

DISTRICT: Irvine Ranch Water District

15600 Sand Canyon Avenue

P.O. Box 57000

Irvine, CA 92619-7000 Attn: General Manager

CITY: City of Irvine

6427 Oak Canyon, Bldg. 1

Irvine, CA 92618

Attn: Allison Tran, Associate Engineer

SECTION 15. SUCCESSORS AND ASSIGNS; INTEGRATION; AMENDMENT. This Agreement shall be binding upon and inure to the benefit of the successor and assigns of CITY and DISTRICT. This Agreement constitutes the entire Agreement between CITY and DISTRICT and supersedes all prior understandings and agreements between the parties with respect to the subjects hereof. This Agreement may be modified only in writing signed by both parties hereto.

<u>SECTION 16. LEGAL FEES</u>. In the event of any declaratory or other legal or equitable action instituted between CITY and DISTRICT in connection with this Agreement, the prevailing party shall be entitled to recover from the losing party all of its costs and expenses, including court costs and reasonable attorneys' fees.

<u>SECTION 17. DEEMED APPROVAL</u>. Any approval required to be given by either party pursuant to this Agreement shall be deemed given if no response to the party's request for such approval is received by the requesting party within fifteen (15) days following the written request for such approval.

SECTION 18. SEVERABILITY. If any term, provision, covenant or condition of this Agreement is held to be invalid, void or other unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby, and each term provision, covenant or condition of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

<u>SECTION 19.</u> <u>APPLICABLE LAW</u>. This Agreement shall be construed and enforced in accordance with the laws of the State of California.

<u>SECTION 20.</u> <u>WAIVER</u>. The waiver of any provision of this Agreement by either party shall not be deemed to be a waiver of any other provision or of any preceding or subsequent breach hereunder.

IN WITNESS WHEREOF, the parties to the Agreement have executed this Agreement on the date herein above written.

IRVINE RANCH WATER DISTRICT

By	Dated
ByPaul Cook, General Manager	
ATTEST:	
By Secretary/Assistant Secretary	Dated
APPROVED AS TO FORM:	
By	Dated
CITY OF IRVINE A Municipal Corporation	
By Marianna Marysheva Interim City Manager of the City of Irvine	Dated
By Mark A. Steuer Director of Public Works and Transportation	Dated
ATTEST:	
By Molly M. Perry City Clerk of the City of Irvine	Dated
APPROVED AS TO FORM:	
ByRobert Owen, RUTAN & TUCKER, LLP City Attorney of the City of Irvine	Dated

September 28, 2020

Prepared by: M. Robinson / E. Akiyoshi

Submitted by: K. Burton

Approved by: Paul A. Cook

ACTION CALENDAR

ASSET MANAGEMENT CAPITAL IMPROVEMENT PROGRAM CONSULTANT SELECTION

SUMMARY:

The Asset Management Capital Improvement Program (CIP) is a new and major initiative to expand and optimize IRWD's approach to planning capital replacement and rehabilitation projects. Phase 1 of the program will develop a risk-based five-year prioritized CIP project list for wells, pump stations, tanks, and sewage lift stations. Staff recently received proposals from five well-qualified teams. Staff evaluated the proposals, conducted interviews with three firms, and recommends the Board:

- Authorize the General Manager to execute a Professional Services Agreement with Black and Veatch in the amount of \$423,281, and
- Approve the addition of Projects 11686, 11687, and 11688 to the Fiscal Year 2020-21 Capital Budget, each in the amount of \$225,500, for a total of \$676,500.

BACKGROUND:

The Asset Management CIP will provide a comprehensive approach for planning capital replacement and rehabilitation (R&R) projects. IRWD currently plans for R&R projects through individual studies (e.g., the Santiago Canyon Fire Flow Improvement Study), regular operational capital project meetings between Engineering and Operations teams, and updates to the Water Resources, Sewer Treatment, and Sewage Collection Master Plans. Staff anticipates implementing the Asset Management CIP in multiple phases to consolidate capital-related R&R project planning. This will optimize efficiencies, coordination, timing, and financing of capital related R&R improvements for vertical and linear facilities.

Phase 1 of the program focuses on developing a five-year risk-based prioritized CIP for pump stations, lift stations, tanks, and wells. Future phases will include water and sewer pipelines and treatment plants. The scope of work includes a desktop condition assessment, ranking facilities based on likelihood of failure, developing consequences of failure and levels of service expectations, calculating facilities' remaining useful lives, estimating replacement costs, and producing a five-year prioritized CIP project list.

Consultant Selection:

Staff invited seven consultants to propose on the project and received proposals from five consultants: Black and Veatch, Kennedy Jenks, HDR, GHD, and Brown and Caldwell. Two consultants, Woodard & Curran and Dudek, declined to submit proposals early in the proposal process. Based on team experience, displaying innovative ideas for proposed tools, and articulating a clear approach to risk assessment, three consultants: Black and Veatch, Kennedy

Action Calendar: Asset Management Capital Improvement Program Consultant Selection September 28, 2020

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Jenks, and HDR were selected for interviews. All the firms presented qualified teams and well-thought-out approaches to the project and scope of work.

While all the teams were well qualified, Black and Veatch presented a well-balanced team, clear project approach, and excellent understanding that meets IRWD's goals and objectives for this project.

- Project Team: Black & Veatch's team couples solid project management with technical expertise. Additionally, during the proposal period, the team demonstrated a strong commitment to the project by developing a business intelligence reporting tool for the project using IRWD's well evaluation data. Also, Black and Veatch is a proven leader in the Southern California area and recently completed successful CIP and Asset Management projects for Metropolitan Water District, Western Municipal Water District, City of San Diego, and Coachella Valley Water District.
- Project Understanding: In both the proposal and interview, Black & Veatch demonstrated a clear project understanding that matched with IRWD's vision for Asset Management and CIP. This will help ensure that the resulting five-year CIP meets IRWD's needs, is accurate, and is defensible. Black and Veatch also demonstrated the ability to transfer knowledge in a clear and effective way, resulting in a project that is scalable and repeatable. This approach will enable the Asset Management and CIP to be successful in future phases and repeated by staff on a regular basis.
- Technical Approach: While all the teams had solid technical approaches and industry expertise, Black & Veatch's clearly articulated approach to integrating Level of Service, calculating facilities remaining useful life, and using technology for developing useful reporting tools best aligned with IRWD's goals for the project. Black and Veatch will utilize Microsoft's Power Business Intelligence (Power BI) package to incorporate the final data and results into a dynamic reporting and analysis tool. Power BI is a leading industry tool for business intelligence that allows for understandable data visualization, effective analysis, and useful business reporting. It also helps standardize and automate linking of various enterprise data systems (e.g., Maximo and Replacement Planning Model). Also, as part of IRWD's Microsoft enterprise licensing, Power BI is included with no additional licensing fees.

Staff anticipates that the Asset Management CIP Phase 1 work for wells, pump stations, tanks, and sewage lift stations will be completed in May 2021. Concurrent with Phase 1, staff will evaluate the process and overall project goals to optimize the scope of work for Phase 2. Staff anticipates starting Phase 2 in summer of 2021.

The consultant selection matrix is provided as Exhibit "A", and Black and Veatch's scope of work and fee proposal are provided as Exhibit "B".

FISCAL IMPACTS:

The Asset Management CIP-DW, Asset Management CIP-RW, and Asset Management CIP-SS, Projects 11686, 11687, and 11688, will be funded through replacement funds and are not included in the FY 2020-21 Capital Budget. Staff requests the addition of each project in the

Action Calendar: Asset Management Capital Improvement Program Consultant Selection

September 28, 2020

Page 3

amount of \$225,000 for a total budget of \$676,500 to fund the project as shown in the following table.

Project	Current	Addition	Total
No.	Budget	<reduction></reduction>	Budget
11686	\$0	\$225,500	\$225,500
11687	\$0	\$225,500	\$225,500
11689	\$0	\$225,500	\$225,500
Total	\$0	\$676,500	\$676,500

ENVIRONMENTAL COMPLIANCE:

This study is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262 which provides exemption for planning studies.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on September 15, 2020.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH BLACK & VEATCH IN THE AMOUNT OF \$423,281 AND APPROVE THE ADDITION OF PROJECTS 11686, 11687, AND 11688, EACH IN THE AMOUNT OF \$225,500 FOR A TOTAL OF \$676,500, TO THE FISCAL YEAR 2020-21 CAPITAL BUDGET FOR THE ASSET MANAGEMENT CAPITAL IMPROVEMENT PROGRAM PROJECT.

LIST OF EXHIBITS:

Exhibit "A" – Consultant Evaluation Matrix

Exhibit "B" – Black & Veatch Scope of Services and Cost Estimate

Note: This page is intentionally left blank.

EXHIBIT "A"

CONSULTANT EVALUATION MATRIX

Capital Imprvoement Plan and Asset Management for Pump Stations, Lift Stations, Tanks and Wells

	Tot i amp stations, the		,					
Item	Description	Weights	KENN	NEDY/JENKS		HDR	BLAC	K & VEATCH
Α	TECHNICAL APPROACH	60%						
1	Overall Project Understanding	20%		3		1		2
2	Scalability and Repeatability	15%		2		3	1	
3	Condition Assessment (LoF, CoF, Risk Score)	25%		3	1			2
4	Remaining Useful Life	10%		2		3		1
5	Level of Service	10%		3		2		1
6	Five-Year Prioritized Capital Plan	20%		2	3 1		1	
	Weighted Score (Technical Approach)	100%		2.55		2.00		1.45
В	QUALIFICATIONS AND EXPERIENCE	40%						
				1		2		3
1	Project Manager	40%		Ramamurthy,	Mid	rhael Flores	Derek Kurtti, PE	
	Tacketallands	250/	PE, P	MP, PMI-ACP				
3	Technical Leads Team Makeup (Team Size, Cohesiveness, Experience)	35% 25%		3		2	1	
	Weighted Score (Qualifications and Experience)	100%			2			
				2.20 2.00		1.80		
	COMBINED WEIGHTED SCORE			2.41		2.00		1.59
	Ranking of Consultants							
С	SCOPE OF WORK							
TASK			Task Hours	FEE	Task Hours	FEE	Task Hours	FEE
1	TASK 1 - Project Management		124	\$31,601	189	\$53,700	174	\$34,058
2	TASK 2 - Data Analysis and Asset Inventory		546	\$100,615	130	\$27,500	566	\$109,066
3	TASK 3 - Risk Analysis		644	\$133,725	640	\$149,000	384	\$78,072
4	TASK 4 - Remaining Useful Life and Replacement Costs		188	\$35,895	220	\$49,200	136	\$29,348
5	TASK 5 - Prioritized Capital Improvement Plan Project List and Report		148	\$27,469	515	\$114,200	219	\$41,157
6	TASK 6 - Dynamic Asset Management Platform Pilot (Black & Veatch only)						736	\$131,580
	SUB-TOTAL ENGINEERING SERVICES, FEE		1,650	\$329,305	1,694	\$393,600	2,215	\$423,281
9.1	Optional Tasks							
	Optional rasks					\$393,600		6422 204
	TOTAL ENGINEERING SERVICES, FEE		1,650	\$329,305	1,694	Ç393,000	2,215	\$423,281
			1,650	\$329,305 \$200	1,694	\$232	2,215	\$423,281
D	TOTAL ENGINEERING SERVICES, FEE		1,650		1,694		2,215	
D	TOTAL ENGINEERING SERVICES, FEE Avg \$/hr		1,650		1,694		2,215	
D	TOTAL ENGINEERING SERVICES, FEE Avg \$/hr OTHER		1,650		1,694		2,215	
D	TOTAL ENGINEERING SERVICES, FEE Avg \$/hr OTHER Miscellaneous Items		1,650		1,694	\$232	2,215	
D	TOTAL ENGINEERING SERVICES, FEE Avg \$/hr OTHER Miscellaneous Items Multiplier Conflict of Interest Joint Venture		1,650	\$200 - No No	1,694	\$232 - No No	2,215	\$191 - No No
D	TOTAL ENGINEERING SERVICES, FEE Avg \$/hr OTHER Miscellaneous Items Multiplier Conflict of Interest Joint Venture Addendum Acknowledgement		1,650	\$200 - No No N/A	1,694	\$232 - No No N/A	2,215	\$191 - No No N/A
D	TOTAL ENGINEERING SERVICES, FEE Avg \$/hr OTHER Miscellaneous Items Multiplier Conflict of Interest Joint Venture Addendum Acknowledgement Scope of Work Exclusions		1,650	- No No N/A No	1,694	\$232 - No No N/A No	2,215	\$191 - No No N/A No
D	TOTAL ENGINEERING SERVICES, FEE Avg \$/hr OTHER Miscellaneous Items Multiplier Conflict of Interest Joint Venture Addendum Acknowledgement		1,650	\$200 - No No N/A		\$232 - No No N/A		\$191 - No No N/A

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EXHIBIT "B"



PROPOSAL -

CAPITAL IMPROVEMENT PLAN AND ASSET MANAGEMENT FOR PUMP STATIONS, LIFT STATIONS, TANKS, AND WELLS

IRVINE RANCH WATER DISTRICT

— August 6, 2020 —

TEAM

As global leaders in asset management, the Black & Veatch Team is excited to support you with this important next step in your asset management strategy. The team is comprised of many local professionals with ideal asset management experience, and supported by nationally recognized experts. All the leadership team is close by, located just a few miles from your headquarters, making it easy to stay coordinated and keep our team aligned with yours. This section provides a brief overview of our Team. Detailed resumes are provided in an appendix. Our Team organization, shown here, is streamlined for efficiency.



BLACK & VEATCH LEADERSHIP drives alignment, gains stakeholder support, and positions IRWD for success in all phases of your asset management program.



DR. JEFF NEEMANN, PE PROJECT DIRECTOR

HIGHLIGHTS

- Industry leader with proven technical skills
- Provides high level guidance
- Authority to assign resources

EDUCATION

- Doctor of Engineering, Kansas University
- MS, Mo. University of Science and Technology
- BS, University of Mo



DEREK KURTTI, PE PROJECT MANAGER

HIGHLIGHTS

- Water and wastewater designer and contractor experience
- Team oriented
- Organized and collaborative
- Guides team and gains alignment

EDUCATION

 BS, Civil Engineering, California Polytechnic State University, San Luis Obispo



KATTY FLEMING, CPM, ENV SP ENGINEERING MANAGER

HIGHLIGHTS

- Asset management expert
- Clear focus on project objectives
- Excellent listening skills
- Excellent teacher

EDUCATION

 MS, Civil and Infrastructure Engineering, George Mason University

BLACK & VEATCH

 BS, Civil Engineering George Mason University

Detailed Scope of Work

[The following scope of work generally follows the provided scope within the RFP. We have provided specific details to enhance this project's scope or provide clarification shown in italics. The intention is to allow IRWD to easily distinguish these enhancements from the originally listed scope.]

TASK 1. PROJECT MANAGEMENT

The Consultant shall conduct project management activities to ensure adherence to scope, schedule, and budget; promote efficient communication between the Consultant, IRWD, and others as required; and implement an effective quality assurance/quality control (QA/QC) program. To encourage this, a kick-off meeting will be held to review the Consultant's proposed work plan/project schedule and establish communication protocols. Other components of the Project Management Task are listed within this section.

IRWD's Project Manager will be copied on all correspondence related to this Project, including e-mails, between the Consultant's team and the District or other public entities.

Task 1.1. Project Managemnet

The Consultant shall conduct project management activities to deliver the scope, schedule, and budget, to promote efficient communication between the Consultant, IRWD, and others as required, and to implement an effective quality assurance/quality control (QA/QC) program. IRWD anticipates the involvement of engineering staff, operations staff, and senior management. The Consultant will facilitate input and gain buy-in from the diverse IRWD team. The Consultant shall schedule and lead meetings with the IRWD team to assure that planning, design, operational, and maintenance issues are addressed.

Task 1.2. Quality Control

Consultant shall perform appropriate quality assurance/quality control (QA/QC) of deliverables prior to sending to IRWD for review.

A quality control review will be scheduled at key Project milestones and will be conducted by senior staff members who will be selected for their experience and expertise in the specific issues contained in this Project. All deliverables will be reviewed by the Consultant's Project Manager and a member of the Consultant's QC Review Team prior to submission to IRWD. Documentation of the Consultant's internal QC review will be included with each submittal to IRWD.

Consultant shall provide IRWD with a brief email summary every week on the project progress of the prior week.

A weekly progress summary will be provided by the Consultant's Project Manager and submitted via email to IRWD's Project Manager. During the kickoff meeting IRWD will identify other personnel who may be included on this email summary.

The Consultant shall maintain/update a Gantt-style milestone-based project schedule using MS Project 2010 (or earlier).

The schedule shall include all tasks and subtasks related to the completion of project deliverables. The

schedule shall identify key milestone dates and include periods for IRWD review of submittals as well as meetings and/or workshops requiring IRWD and Consultant schedule coordination. The schedule shall be monitored and updated monthly or more frequently. A complete schedule update shall be included with monthly invoice submittals and a written summary of project progress/milestones shall be provided with key deliverables.

Within two weeks of award of contract, the Consultant shall submit an updated project schedule to IRWD for review. The schedule should show the tasks and activities required to complete the work and identify dependencies (logic ties) and key milestones.

Progress reports shall be submitted with the monthly invoice in a written as part of the invoice cover letter. The narrative shall include a summary of the project progress including activities completed within the current progress period, activities planned for the upcoming period, and outstanding items or issues that may impact the project. Progress reporting will also include an update of the schedule.

Task 1.3. Project meetings

Organizing and/or attending project meetings (for proposal purposes, assume one meeting per month as a minimum). This includes preparing agendas for meetings and compiling meeting minutes.

- *Kick-Off Meeting.* The Consultant, with input from the IRWD's Project Manager, will prepare for and conduct an initial Kick-off meeting with IRWD staff.
- Meetings/Workshops. The Consultant will prepare for and conduct up to 18 meetings/workshops with IRWD staff. These sessions are included in Task 2 through Task 6. The following meetings shall occur throughout the course of these tasks:

TABLE 1. PROJECT MEETINGS

NO.	MEETING	PURPOSE
1	Kickoff Meeting	Discuss Project overview, goals and objectives, communications and management, schedule, scope clarifications, etc.
2	Condition Assessment Criteria Workshop	Develop assessment criteria, discussing integration into existing CMMS system.
3	Eight (8) Criticality Assessment Workshops	Develop a defined approach and guideline to categorize critical assets utilizing a simple scoring system to create a Consequence of Failure (CoF) score for each asset.
4	Risk Assessment Workshop	Review results of risk assessment, identify adjustments to risk calculations, and review top risks in system.
5	Levels of Service Workshop	Discuss approach to levels of service and identify selection of performance indicators for tracking.

NO.	MEETING	PURPOSE			
6 Two (2) Module Development Workshops		Dynamic AMP Modules will be developed to support the work completed during Tasks 2 to 5.			
7 Two (2) Dynamic Asset Management Platform Meetings (Module Training & Updates)		A four-hour training session for all potential IRWD Dynamic AMP users, and a four-hour training session for the technical IRWD staff who will be the owners of the Dynamic AMP.			
8	Future Dynamic AMP Expansion Meeting	A workshop to gather IRWD input on the future platform expansion opportunities.			
9	Final Report Meeting	 Present and review proposed draft dashboard Modules with IRWD: Pump Stations Module Lift Stations Module Tanks Module Wells Module 			

DELIVERABLES:

- Consultant shall prepare draft agendas for IRWD review no later than 3 days prior to any meeting. Consultant shall receive and incorporate IRWD comments to the agenda for use in the meeting.
- A draft set of meeting minutes shall be prepared by the Consultant and submitted to IRWD within one (1) week of the meeting. All review comments shall be incorporated into the final minutes and submitted to IRWD.

TASK 2. DATA ANALYSIS AND ASSET INVENTORY

Table 2 on the following page presents asset management efforts implemented for operational, capital, and financial needs. These items were implemented to assist with 1 to 30-day maintenance, 1 to 5 year capital improvements, and up to 100-year replacement funding. All major assets are included in an Access database that is currently used for asset inventory. The Consultant shall develop a cohesive asset inventory for pump stations, lift stations, tanks, and wells.

The asset management project will consolidate data from these sources and create a five year prioritized CIP. In addition to the items listed below, information from O&M manuals, record drawings, and other sources are available by request. Information from each of these items are described in more detail on the following page.

Table 2 – IRWD Asset Management Efforts and Information Sources

Item	Implementation Year	Usage Description
IRWD Facility Database	2000	Access database to house all assets Districtwide
Well Evaluation Matrix	2010	Developed in-house and updated annually to prioritize well rehabilitation. This tool identifies capital needs for wells for the 1 to 2-year time frame.
Replacement Planning Model	2019	Identifies all capital facilities and forecasts 100-year expenditures. Main purpose is for long term financial projections.
Sewage Collections System Master Plan	2016	InfoMaster was used as a proof-of-concept for risk-based analysis.
Maximo	2017	Preventative and Corrective Maintenance for 1 to 30-day time frame

Task 2.1 – Data Analysis

The Consultant shall evaluate available sources of data in preparation for developing likelihood and consequence of failure metrics. As noted above, five sources have been identified by IRWD as particularly relevant to this study. Other data sources, such as the geographic information system, operational manuals, prior master plans and studies, etc., may have relevant data for inclusion as well. The Consultant shall work with IRWD to identify potential sources and include relevant data where applicable for the asset management plan.

- IRWD Facilities Database: The IRWD Facility database is Microsoft Access based, implemented in 2000, and contains capital assets districtwide. The database is used primarily for generating vertical asset Facility Identification numbers. Using this database as a reference, the Consultant shall develop a cohesive asset inventory for pump stations, lift stations, tanks, and wells.
 - The IRWD Facilities Database will be used as the basis for identifying existing assets to be included in the evaluation and the the asset inventory. Attribute data is expected to be compiled from other sources.
- Well Evaluation Matrix: The Well Evaluation Matrix is an internally developed and maintained spreadsheet tool that assists in prioritizing well rehabilitation projects. It contains all the active potable and non-potable wells and was successfully implemented in 2010. This tool contains key parameters for condition assessment, including specific capacity, sanding and cascading conditions, last rehab, and other observations through video inspection. In order to update the Well Evaluation Matrix, Engineering staff meets with the Operations department to discuss field and operational conditions of the wells. Performance and operational information are combined to calculate a weighted score and a forced ranking for the wells. Typically, 2-3 wells are refurbished or rehabilitated on an annual basis. The Consultant shall review, modernize, and recommend updates to the Well Evaluation Matrix as part of this project.

 In this task, review and recommendations will be made. Updates will be made as part of tasks 3, 4, and 5 in parallel with the other asset systems. The Consultant will work with IRWD to determine the appropriate future format of the well matrix as part of Task 2.2.

- Replacement Planning Model (RPM): The RPM was completed by Kayuga Solutions in 2020, and contains a comprehensive list of all District capital facilities that provides 50 and 100-year replacement funding requirements. The RPM contains established criteria that was developed to determine each facility's overall and major component (e.g. mechanical, electrical, site, structural) replacement costs, including construction and all-in costs. Information from the RPM project should be used for Task 4, Remaining Useful Life and Replacement Costs.
- Sewage Collection System Master Plan: The Sewage Collections System Master Plan (SCSMP) was completed in 2016, and primarily focused on sewer pipes (gravity and force mains), lift stations, siphons, and diversion structures. Hydraulic Modeling analysis was completed with InfoSWMM, and criticality analysis was completed with InfoMaster. Recently, the siphon risk analysis was used to kickoff rehabilitation projects on the top four priority siphon structures. IRWD does not currently have an InfoMaster license, and the criticality analysis has not been updated since project completion.

DELIVERABLES:

Consultant shall prepare a summary of data sources, which will be used as the basis for developing an Asset Inventory (spreadsheet or database) encompassing all pump stations, lift station, tanks, and wells in Task 2.2. The summary will be presented in a "chapter" format such that it can later be incorporated into the Draft prioritized Capital Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.

ASSUMPTIONS

- IRWD will provide all background information within 10 calendar days of Notice To Proceed.
- Data sources will be limited to available digital data that is structured consistently with the asset hierarchy it does not include data cleanup or data collection from hard-copy records. Field visits to facilities are not included.
- All data will be provided in digital format in native data files (e.g. InfoMaster files as opposed to PDF report of InfoMaster output).
- A consistent definition of assets and consistent asset IDs are used throughout, or relationships are readily identifiable. Manual effort will not be needed to align data sets in database format.

Task 2.2 – Asset Inventory Development

The Consultant shall develop a cohesive asset inventory for pump stations, lift stations, tanks, and wells. This task includes an in-depth coordination of available data, data structures, and updates, including recommendations in preparation for development of business intelligence dashboards.

Task 2.2.1 - Data Catalog

Consultant shall work with IRWD to identify data sources required to support the development of modules identified under Tasks 2 to 5 for pump stations, lift stations, tanks and wells. It is assumed that this data will include the following enterprise systems and sources:

- IRWD Facility Database (MS Access)
- Well Evaluation Matrix (MS Excel)
- Replacement Planning Model (MS Excel)
- Innovyze InfoMaster
- Maximo

Consultant will conduct a workshop to discuss available data and potential improvements. A Data Catalog will be developed and serve as a detailed inventory for each data source. The Data Catalog will include the following information for each required data source:

- Format of the data source (e.g. Access, SQL, geodatabase)
- Location of the data (e.g. cloud, IRWD server, local hard drive)
- Ownership of the data (are there access considerations which must be taken into account?)
- Security considerations (is the data sensitive, located behind a firewall, on premises?)
- Refresh interval (how often is data updated? Once per day, once per month, once per year?)
- Identification of key data (e.g. tables) within each data source which will be required to support the development of the Dynamic Asset Management Platform modules
- Current state and future state
- Assessment of data completeness and accurary (if data clean-up is required, identify proposed data clean-up activities and procedures)

Task 2.2.2 – Data Engineering

Consultant shall conduct a Data Architecture Workshop with IRWD's IT staff to share the objectives of the project and develop the framework for the architecture of the solution.

Consultant shall determine the anticipated (future state) system architecture that will host the Dynamic AMP modules for all four (4) classes, including if it will be hosted on-premise within the District's enterprise IT environment or if an on-premise data gateway will be required to keep data in sync between each enterprise system and a hosted Power BI environment.

Consultant will develop an understanding of the current and desired future state of each data source. During this stage, Consultant will identify these challenges and develop a plan for preserving linkage to historical information from to-be-phased-out systems as well as potential new systems.

Consultant will develop conceptual Extract, Transform and Load (ETL) processes for each required data source. The ETL process will define how key data is extracted from each required data source and fed into the Dynamic AMP. ETL processes may include SQL queries, REST APIs or other scheduled refresh functions. As part of this process, issues with access to data and security concerns will be addressed. The purpose of this stage will be to understand the shape of each data source (e.g., column names and format) for the purpose of generating a static data export which can be used during development of the Dynamic AMP.

Based on the conceptual ETL process for each required data source / data table, the Consultant will work with the IRWD's IT department to develop a static, representative data export to be used during development of the Dynamic AMP. This step will ensure that all queries and logic used for each module will be based on the exact data structure (column names, data shape, etc.) which will be produced by the individual ETL processes for each data source. This will reduce effort during the full implementation of the Dynamic AMP in the future.

DELIVERABLES:

Consultant shall prepare a summary of the asset inventory for all pump stations, lift station, tanks, and wells. The data inventory will be presented in a "chapter" format such that it can later be incorporated into the Draft prioritized Capital Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.

ASSUMPTIONS

The Dynamic AMP Modules will be developed using static exports from each data source. The static exports will be stored on Consultant's cloud (SharePoint) during development. Static exports will be transitioned to IRWD's SharePoint (or similar) during implementation. IT work required to establish automatic data refreshes (e.g. directly from Maximo) is not included in the base level of effort.

Task 2.3 – Maximo Data Analysis and Integration Recommendations

Maximo: IRWD implemented Maximo in 2017 as its computerized maintenance management system (CMMS) for work order management, inventory, and preventative maintenance. This software is useful for maintenance for determining work orders for the 1 to 30-day time frame. Vertical facility assets were implemented in 2017, and linear facility implementation for sewer, potable, and recycled systems is in progress. As part of this project, the Consultant shall evaluate data gaps for Pump Stations, Lift Stations, Tanks, and Wells in Maximo to be used in future phases of the project. Since vertical facility integration was implemented recently, data may be limited for this phase of the project.

Black & Veatch will perform a Maximo review that includes meeting with core users, administrators, and other key stakeholders to review high level configuration, integration, and usability. Additionally, a review of the Maximo database(s) will be performed to help assess data completeness and identify gaps in data management efforts. Black & Veatch will meet with stakeholders remotely (e.g. via Microsoft Teams) for up to six interviews to review and document the deficiencies with use and integrating current hardware. Interviews are expected to include the following:

- Group 1 system administrators, key power users, and active end users (2 hours)
- Group 2 Management stakeholders who require data out of the systems (2 hours)
- Follow-up interviews individual meetings to follow-up on details identified in first two interviews (4 meetings, each 1 hour)

Based on the findings from the data review and interviews, Black & Veatch will develop a set of recommendations to implement in future phases to help improve data management and information flow for processes associated with the Maximo environment. This may include activities like integration of GIS with Maximo; deployment of new Maximo workflows, integration of condition scoring with work order management or GIS. Recommendations will be associated by weakness along with a high level overview of the level of effort or additional planning required to implement each recommendation.

DELIVERABLES:

Consultant shall provide a summary analysis and recommendations for integrating Maximo into the asset management and CIP development system, identifying missing improvement information for pump stations, lift stations, tanks, and wells. The analysis will be submitted in "chapter" format such that it can later be incorporated into the Draft prioritized Captial Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.

ASSUMPTIONS

- Maximo data to be provided by IRWD in agreed format within 10 days of Notice to Proceed.
- Arrangements to be made for Consultant access to Maximo and/or staff to be available to demonstrate Maximo as needed to identify aspects of configuration and usage.

TASK 3. RISK ANALYSIS

Complete a risk analysis by rating each asset as a measure of criticality (Consequence of Failure / CoF) and condition (Likelihood of Failure / LoF).

Task 3.1 - Condition Assessment

Consultant shall complete a high-level desktop condition assessment, based on available data compiled in Task 2. The condition assessment shall be completed for Wells, Pump Stations, Lift Stations, and Tanks to develop appropriate scoring factors that will contribute to calculating the LoF and the expected remaining useful life for each asset. The intent is to develop a unique condition scoring approach for each asset type, based on attribute data appropriate to that asset type, while having the overall condition scores be consistent, to facilitate a consistent calculation of LoF and remaining useful life.

For wells, this process will use the District's existing Well Evaluation Matrix for performance condition assessment as a foundation, and calculations will be modernized to align with the calculations for the other asset types.

As part of this task, proposed calculations will be developed for each asset type, for review by IRWD. In addition to presentation in Microsoft Word, Powerpoint, or similar, the calculations will concurrently be developed as part of draft AMP modules in PowerBI (discussed in Task 6). This will enable review of the results and refinement of proposed calculation methods prior to acceptance by IRWD.

The Consultant shall also develop simple criteria and descriptions for the condition assessment and will prepare a summary guide for future use by IRWD. The Condition Assessment Guide will include criteria for physical condition and asset performance and reliability. All criteria will be scored on a 1-5 scale and will be developed to provide the likelihood of failure score for the asset risk assessment in the next phase. The Consultant shall conduct workshops to train staff on the process for condition assessment data capture.

Additionally, the Consultant shall develop recommendations to incorporate Maximo maintenance data to improve condition assessment analysis for Pump Stations, Lift Stations, Tanks, and Wells.

DELIVERABLES:

- Consultant shall conduct a condition assessment workshop to present the following: desktop
 condition assessment results for each asset type (Wells, Pump Stations, Lift Stations, and Tanks);
 scoring approaches and preliminary results for each asset type; a guideline for IRWD staff to
 accurately self-perform condition assessments; and recommendations for incorporating Maximo
 maintenance data into the guidelines.
- This assessment shall be provided in "chapter" format such that it can later be incorporated into the Draft prioritized Capital Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.
- Dynamic AMP dashboard modules will be developed to support visualization of the condition assessment results. Effort module development is included in Task 6.

ASSUMPTIONS

- Assessments will be based on available asset data and databases. No facility visits will be performed.
- The guidance document is assumed to be based on operator visual assessment to facilitate frequent updates and identify if more rigorous assessment may be required. It will not include specialized condition assessment methodologies.

Task 3.2 - Criticality Assessment

Develop a defined approach and guideline to categorize critical assets utilizing a simple scoring system to create a Consequence of Failure (CoF) score for each asset.

The Consultant will determine the Consequence of Failure (CoF) for each of IRWD's assets (wells, pump stations, lift stations, and tanks). The Consultant will utilize triple bottom line factors for environmental, social, and financial effects of the asset's failure to deliver the expected level of service. Based on available information, the Consultant shall propose a method to determine the CoF for each asset, for review by the District.

For each asset type, Consultant will lead up to two 2-hour meetings (eight meetings total) with appropriate District staff familiar with the assets and system, to develop appropriate scoring. To the extent that scoring cannot be completed in these calls, District staff will be responsible for populating remaining scores.

The results of this task shall be summarized in a report chapter outlining the CoF score for each asset type, the basis for the scoring system, and a list identifying assets and sub-assets of concern. The results will be summarized using the AMP dashboard (PowerBI).

DELIVERABLES:

- Consultant shall perform a criticality assessment that includes a defined approach and guidelines for categorizing critical asset's Consequence of Failure (CoF). Consultant will lead up to two 2-hour meetings for each asset type (eight meetings total).
- The assessment shall be provided in "chapter" format such that it can later be incorporated into the Draft prioritized Captial Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.
- Dynamic AMP dashboard modules will be developed to support visualization of the condition assessment results. Effort module development is included in Task 6.

ASSUMPTIONS

• Existing CoF factors and scores are not available. District staff will be responsible for populating agreed scoring factors for each asset, with guidance and some assistance from Consultant.

Task 3.3 - Risk Score

Combine analysis for LoF and CoF to develop a risk score for each asset.

The Consultant shall develop a risk-based methodology for prioritizing how the District manages its wells, pump stations, lift stations, and tanks. This will serve as a means for refining maintenance and replacement priorities among these assets and will help the District identify assets that pose a higher-than-acceptable risk, thereby allowing the District to prioritize projects/approaches to mitigate these risks.

The Consultant shall determine the risk for each of the Districts well, pump station, lift station, and tank assets. The BRE calculations shall consider both the PoF and the CoF, previously developed as part of this Project.

The result of this task shall be summarized in AMP dashboard modules providing a risk matrix, BRE scores, and prioritized lists filterable according to the asset hierarchy and other relevant parameters. A risk scoring chapter outlining the basis for the scoring system, the scoring assigned to each asset, and a list identifying assets of concern. The Consultant shall lead a 2-hour workshop to review the results of the risk assessment, discuss top risks in the system, and identify any needed modifications to the risk scores.

DELIVERABLES:

- Consultant shall prepare and submit the resultant Risk Score based on previous LoF and CoF scores for individual assets. The competed risk scores shall be provided in "chapter" format such that it can later be incorporated into the Draft prioritized Captial Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.
- Dynamic AMP dashboard modules will be developed to support visualization of the condition assessment results. Effort module development is included in Task 6.

Task 3.4 - Level of Service

Consultant will develop and incorporate Level of Service Concepts as appropriate in the Risk Analysis.

Consultant will develop materials to discuss the approach to Levels of Service, as well as potential performance indicators for tracking in the future. Consultant will lead a 2-hour workshop to review proposed performance indicators and review levels of service.

DELIVERABLES:

- Consultant shall summarize conclusions related to Level of Service Concepts as applicable to IRWD assets. These concepts and applications shall be prepared and provided in "chapter" format such that it can later be incorporated into the Draft prioritized Captial Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.
- Dynamic AMP dashboard modules will be developed to support visualization of the condition assessment results. Effort module development is included in Task 6.

TASK 4. REMAINING USEFUL LIFE AND REPLACEMENT COSTS

Task 4.1 - Remaining Useful Life

Using information developed from the Condition Assessment, determine the remaining useful life for capital assets. The Consultant shall develop clear guidelines for determining basis of remaining useful for each facility, and also identify data gaps in condition assessment to better determine remaining useful life and creating failure curves in the future.

DELIVERABLES:

• Consultant shall establish guidelines and provide recommendations for analyzing existing facilities and estimating the remaining useful life; prepare a summary of data gaps; and provide recommendations for resolving data gaps. A summary of these tasks shall be provided in

"chapter" format such that it can later be incorporated into the Draft prioritized Captial Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.

• Dynamic AMP dashboard modules will be developed to support visualization of the condition assessment results. Effort module development is included in Task 6.

Task 4.2 - Replacement Costs

The District's Replacement Planning Model (RPM) contains established criteria that was developed to determine each facility's overall and major component (e.g. mechanical, electrical, site, structural) replacement costs, including construction and all-in costs. Use the RPM to determine costs and incorporate into Task 5, Prioritized Capital Improvement Plan and Report.

DELIVERABLES:

Consultant shall establish replacement cost estimates including base costs, construction costs, and all-in costs. The costs analysis shall be provided in "chapter" format such that it can later be incorporated into the Draft prioritized Captial Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.

Dynamic AMP dashboard modules will be developed to support visualization of the condition assessment results. Effort module development is included in Task 6.

TASK 5. PRIORITIZED CAPITAL IMPROVEMENT PLAN AND REPORT

Develop a Prioritized Capital Improvement Plan (CIP) utilizing information from the previous tasks. This task includes the following:

- Prepare a five year prioritized Capital Improvement Plan project list, incorporating information from the previous tasks.
- Include risk management guidelines, procedures, and methodology for condition and criticality assessment. These guides should be clearly defined for staff to use for future use.
- Summarixe data gap and next steps to refine risk analysis in the future.

DELIVERABLES:

- Consultant shall provide a detailed roadmap for identifying an resolving identified data gaps, and conduct a Final Report meeting. Roadmap shall include the identified data gaps and provide recommendations to populate missing data and formulate a complete risk analysis. The roadmap shall be provided in "chapter" format such that it can later be incorporated into the Draft prioritized Captial Improvement Plan and Report as part of Task 5. An electronic copy shall be submitted via email to IRWD's Project Manager.
- Consultant shall provide a draft form of the proposed 5-year CIP. A searchable PDF copy in addition to five (5) paper copies shall be submitted.
- Consultant shall submit the final 5-year CIP including all IRWD comments and associated changelog.
 The CIP shall include an appendix with all associate meeting minutes. A searchable PDF copy, five
 (5) paper copies, and all native digital files (word.doc, excel files, etc.) shall be provided as part of this submittal.

• Dynamic AMP dashboard modules will be developed to support visualization of the condition assessment results. Effort module development is included in Task 6.

TASK 6. DYNAMIC ASSET MANAGEMENT PLATFORM

Task 6 is an integral component of Tasks 2-5. However, the work is summarized here to avoid repetition in each task.

Develop a Dynamic Asset Management Platform (AMP) using Microsoft Power BI which contains dashboard modules designed to support Task 2 to 5.

Task 6.1 – Module Development

Dynamic AMP Modules will be developed to support the work completed during Tasks 2 to 5. A Module Identification Workshop will be conducted with IRWD at the beginning of the project to discuss the goals and benefits of each proposed module, including the decisions each module will support. The workshop will include discussion of the data required to support each module as well as feasibility of implementation. Output of this workshop will be a module list to be included in the Dynamic AMP.

For each module on the final list identified during the workshop, Consultant will develop a draft concept module, including submodules (if applicable). The goal of the draft concept is to establish connectivity with the static data sources and develop the logic, functionality and basic visualizations for each module.

A Draft Module Workshop will be conducted to present each draft module to IRWD for feedback, review, and comment.

Modules will be updated, refined and finalized based on input from IRWD. Final modules will be shared with IRWD on the web through Power BI Pro.

Task 6.2 – Platform Development

<u>Platform Framework and Hierarchy.</u> Consultant will develop the structure of Dynamic AMP, including the Main Landing Page, individual Module Landing Pages, modules, and sub-modules. This task will include development of a schematic hierarchy diagram of the Dynamic AMP which illustrates the relationship between all landing pages and modules.

<u>User Experience and Functionality.</u> Consultant will develop the usability of the Dynamic UMP to maximize ease of use for the IRWD. This will include development of an "App Workpace" in Power BI to consolidate modules from multiple PBIX files (developed during Tasks 2 to 5) into a single accessible and easily navigable location.

<u>Module Integration</u>. Modules from Tasks 2 to 5 will be integrated into the Dynamic AMP. It is expected that each Task will produce one or more individual PBIX files which will be linked together in the "App Workspace" to allow for easy and intuitive navigation. As appropriate, module landing pages will be developed to display the "high level" data from each sub-module and include easy access to drill down to additional detail. Engineer will deliver Dynamic AMP based on Static Data Export shared on web (through Power BI Pro) and accompanying .PBIX files.

<u>Platform Specifications.</u> During platform development, Consultant will develop a Platform Specification TM which includes:

- Platform Framework and Hierarchy, including location of all modules
- Data sources for and key data fields for all modules
- Relationships between data sources within modules

Task 6.3 - Implementation

Consultant will work with the IRWD's IT staff (via remote access/screen share) to connect the Dynamic AMP Module PBIX files to IRWD's system. This process will involve updating the data source queries in Power Query from the static data exports on Consultant's Sharepoint to static exports stored on IRWD's sharepoint (or similar).

Following connection of all data sources, Consultant will configure the PBIX files and Power BI App Workspace to mirror the configuration on Consultant's system, to ensure all navigation and usability is maintained throughout the platform. Following connection and configuration of the Dynamic Utility Management Platform on the Consultant's system, Consultant will perform a QA/QC to ensure that all visualizations, outputs and KPIs are producing accurate results.

ASSUMPTIONS

The Dynamic AMP will be linked to static data exports on IRWD's Sharepoint (or similar). No effort has been included to complete the IT tasks required to develop near-real-time connection between the Dynamic AMP and IRWD's enterprise systems (e.g. Maximo). Direct connection of the Dynamic AMP to IRWD's eneterpise systems is assumed to be included in a future task or as a supplemental service.

Task 6.4 – Asset Management Platform Training

Use of Dynamic Asset Management Platform Training: A four-hour training session for all potential IRWD Dynamic AMP users which will include an overview of the platform as well as the purpose, functionality, and capabilities of each module. The training will include real-world examples to illustrate to IRWD staff how the platform can be integrated into their normal workflow to save time, enhance their knowledge and provide decision-support.

Modifying and Updating the Dynamic Asset Management Platform Training: A four-hour training session for the technical IRWD staff who will be the owners of the Dynamic AMP. The training will include an overview of the Dynamic AMP Manual (completed as part of this task) as well as training on key topics such as: identifying, diagnosing and debugging refresh errors, updating queries if there are updates / modifications to enterprise systems, creating new modules and adding new KPIs.

Task 6.5 – Future Dynamic Asset Management Platform Expansion

During the project, Consultant and IRWD will identify additional modules which are not part of the base scope but would represent a logical and beneficial expansion of the platform in the future. Consultant will conduct a workshop to gather IRWD input on the future platform expansion opportunities. The goal of the workshop will be a list of desired future modules as well as an initial assessment of the feasibility of each given the currently available data. For modules without sufficient available data, a roadmap will be created to enable IRWD to begin collecting the data which will enable creation of the desired modules in the future. A TM documenting the future platform expansion opportunities including a plan for inclusion of additional

asset systems (Potable and Recycled Pipelines and PRVs, Treatment Plants and Seasonal Storage Reservoirs, Gravity Sewer Pipes, Force Mains, Siphons and Diversion Structures) will be developed for reference by IRWD in the future.

OPTIONAL Task 6.6 - On-Call Assistance

If desired by IRWD, Consultant can be available on an on-call / as-needed basis to support IRWD as they continue to get up to speed on the operation, maintenance, and use of the Dynamic AMP. Consultant will be available to provide ongoing technical assistance to troubleshoot and help address any issues faced by IRWD to ensure continued smooth operation of the platform. Effort has not been included for this task in the budget, but can be added if desired.

DELIVERABLES:

- Dynamic AMP Specification Summary Update
- Dynamic AMP Module PBIX Files
- Dynamic AMP Manual (PowerPoint)
- Future Dynamic AMP Expansion Report

September 28, 2020 Prepared and

submitted by: C. Compton

Approved by: Paul A. Cook

ACTION CALENDAR

ASSOCIATION OF CALIFORNIA WATER AGENCIES 2021 LEGISLATIVE PLANNING

SUMMARY:

Annually, the Association of California Water Agencies (ACWA) puts out a call for legislative proposals from its members. The submitted proposals are considered by the ACWA State Legislative Committee for support or sponsorship at its Annual Planning Meeting that is held each October. Staff has developed a legislative proposal that seeks to provide retail water suppliers the options of filing a validation action after they adopt property-related water, wastewater and sewer fees and charges. Staff recommends the Board authorize staff to submit the legislative proposal to ACWA before the October 2, 2020, deadline and that the Board adopt a "SUPPORT" position on the legislative concept.

BACKGROUND:

Each year ACWA's State Legislative Committee solicits legislative proposals from ACWA members, which it considers at its Annual Planning Meeting held in the fall. In order to have a proposal considered for the 2021 legislative session, ACWA requires the proposal to be submitted by October 2, 2020.

The ACWA State Legislative Committee will meet on October 30, 2020, to prepare for the first year of the 2021-2022 State Legislative Session. The State Legislative Committee will consider the legislative proposals that are submitted by ACWA member agencies for proposed introduction in January of next year. The Committee will evaluate the proposals, provide feedback to the proposing agency, and determine whether to sponsor or support legislation based on ACWA's Strategic and Business Plan, policy principles and priorities. In order to submit a legislative proposal for consideration by this committee, ACWA member agencies must:

- Complete the ACWA Legislative Proposal Submittal form;
- Obtain a resolution passed by its governing body in support of the proposal, or at a minimum have noticed such an action by October 2, 2020; and
- Submit the proposal no later than October 2, 2020

Potential Legislation:

The number of lawsuits challenging water rates has increased in recent years. Water agencies currently have no means of proactively seeking a court judgment that their rates and charges are legal and comply with the requirements of Proposition 218 and other laws. For certain local agency actions, existing law provides that a local agency may file a validation action – a lawsuit filed in Superior Court seeking a finding that a certain action is legal. For example, a local

Action Calendar: Association of California Water Agencies 2021 Legislative Planning

September 28, 2020

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agency can file a validation action with the court seeking a determination that its connection and capacity fees are legal (see Gov't Code Section 66022).

The potential legislative concept, which was prepared by staff and is provided as Exhibit "A", seeks to provide that same validation action option to retail water suppliers for property-related water, wastewater, and sewer fees and charges. If retail water suppliers had the option of filing a validation action, a water supplier could have avoided future challenges to its rates years after they had been set and collected because a court would have already reviewed them and ruled of their legality.

Simply, the potential legislative concept proposes to add a new Section 53757 to the Government Code, which would read:

"An action to determine the legality of a property related fee or charge for water, wastewater or sewer service may be brought by a local agency pursuant to Chapter 9 (commencing with Section 860) of Title 10 of Part 2 of the Code of Civil Procedure."

Staff recommends the Board authorize staff to submit the legislative proposal to ACWA by the October 2, 2020, deadline, and that the Board adopt a "SUPPORT" position on the concept put forth in the ACWA Legislative Proposal Form, which is provided as Exhibit "A".

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Due to timing, this item was not reviewed by the Water Resources, Policy and Communications Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE STAFF TO SUBMIT THE LEGISLATIVE PROPOSAL TO THE ASSOCIATION OF CALIFORNIA WATER AGENCIES LEGISLATIVE BEFORE THE OCTOBER 2, 2020, DEADLINE FOR CONSIDERATION AS AN ACWA-SPONSORED LEGISLATION AND THAT THE BOARD ADOPT A "SUPPORT" POSITION ON THE CONCEPT PUT FORTH IN THE LEGISLATIVE PROPOSAL FORM.

LIST OF EXHIBITS:

Exhibit "A" – Association of California Water Agencies Legislative Proposal Submittal

EXHIBIT "A"



LEGISLATIVE PROPOSAL

Deadline: September 27, 2019

FOR DISCUSSION PURPOSES ONLY

Each year ACWA's State Legislative Committee (SLC) solicits legislative proposals from ACWA members. The SLC reviews and considers at its Annual Planning Meeting in the fall sponsoring or supporting each proposal that has been submitted by the deadline. The Committee evaluates the proposals and determines whether to sponsor or support legislation based on ACWA's Strategic and Business Plan, policy principles and priorities. In order to have your agency's proposal considered this year, please complete this form and submit a copy of a resolution passed by your governing body in support of the proposal (or at a minimum confirm that your agency has noticed consideration of the resolution by the deadline). **The deadline is September 27, 2019.**

Questions and submissions should be sent to **Richard Filgas**, State Relations Analyst, at **richardf@acwa.com** or **(916) 441-4545**.

CONTACT	NFORMATION
Contact Person Name*	Title
Christine Compton	Government Relations Officer/Deputy General Counsel
Agency	
Irvine Ranch Water District	
Telephone	Fax
(949) 453-5338	
Email	
compton@irwd.com	
PROPOSAL	INFORMATION
Submittal Date	Region #
	10
Submitting ACWA Member Agency	
Irvine Ranch Water District	
Title of Proposal (subject area)	
Retail Water Rates Validation Actions	

^{*} ACWA will be contacting this person to ask clarifying questions about this proposal within the next few weeks. The contact person is also expected to attend the October 25, 2019, Annual Planning Meeting in person to provide information and answer questions from the State Legislative Committee in order for the proposal to move forward within ACWA's process.

FOR DISCUSSION PURPOSES ONLY

BACKGROUND

A. What is the problem or deficiency in existing law that your proposal seeks to fix?

The number of lawsuits challenging retail water rates has increased in recent years. Retail water agencies currently have no means of proactively seeking a court judgment that their rates and charges are legal and comply with the requirements of Prop. 218 and other laws. For certain local agency actions, existing law provides that a local agency may file a validation action- a lawsuit filed in Superior Court seeking the court's finding that a certain action is legal. For example, a local agency can file a validation action with the court seeking a determination that is connection and capacity fees are legal. (See Gov't Code Section 66022). This proposal seeks to provide that same validation action option to retail water agencies for property-related water, wastewater and sewer fees and charges.

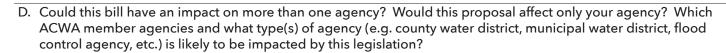
B. What are you trying to accomplish or prevent through this proposal?

If this proposal were to become law, a local agency would be permitted, but not required, to file a validation action in Superior Court within 60 days of adopting property-related water, wastewater or sewer rates. The initial filing of a validation action would have minimal costs for an agency, and if the validation was not challenged, the local agency would have a court judgment within 3-4 months that their rate was legal. If it was challenges, the local agency would being able to defend its rates and have the court rule on the legality of them. A court ruling on the legality of the rates would be good until the next rate setting.

This proposal seeks to provide a proactive option for retail water agencies to prevent costly and time-consuming water rates litigation challenging their rates and charges years after they have been adopted and collected while still ensuring that the adopted rates and charges comply with Proposition 218 and the law.

C. Has a similar bill ever been previously introduced? If so, please identify the bill, the legislative session, year, and outcome, if known.

Unknown



All water agencies setting property-related water, wastewater or sewer fees or charges.

FOR DISCUSSION PURPOSES ONLY

ACTIONS

A.	process? Note: A "su advocates will write p indicates that ACWA	would you like ACWA to take regarding this proposal if it moves through the legislative oport" position means ACWA will support legislation once it is introduced. ACWA's legislative osition letters on the bill and offer testimony in committee hearings. A "sponsor" position will attempt to secure a legislator to introduce the proposed legislation and will actively half throughout the year-long process.
	■ Sponsor	
В.	Please list statewide (include specific reas	or local organizations that are likely to support or oppose your legislative proposal and why ons).
Sa	nitation Agencies, Cali	garner support from the California Municipal Utilities Association, California Association of ornia Special Districts Association, WateReuse California, and many water agencies. It may e attorneys or attorneys groups.
C.	when, and what was	ate Legislators? Have you ever contacted them regarding this proposal? If so, who, the outcome of the discussion? Have they indicated a willingness to author or support this ely, could they oppose it?
rep	resented by Assembly	senator Tom Umberg, Senator John Moorlach, and Senator Patrica Bates. The District is also member Tom Daly, Assemblymember Steven Choi, Assemblyembmer Cottie Petrie-Norris and ugh. These members have not been contacted about the proposal yet.
D.	Have you informed o	ther water agencies in your region regarding this proposal?
	Yes	No
	If yes, please state w	nich districts. If not, which districts border your water agency?
Em Mu Ma	nerald Bay Service Dis Inicipal Water District (of the ACWA Prop. 218 Work Group about the proposal. Additionally, El Toro Water District, rict, Laguna County Water District, Mesa Water District, Moulton Niguel Water District, f Orange County, Orange County Water District, San Diego County Water Authority, Santa South Coast Water District, Trabuco Canyon Water District, were give notice about the proposal submitted.
E.	ACWA Legislative Ad	buld be available to testify before legislative committees in Sacramento, accompanied by a vocate, on behalf of this proposal. Include the organization each witness represents with his number, email address, and other contact information.
		would provide water agencies, potential witnesses could include members of the ACWA Legal from water agencies who have had their rates and charges challenged under Prop. 218.

FOR DISCUSSION PURPOSES ONLY

PROPOSAL

A. California Code Sections to be amended or added.

The language could be as simple as:

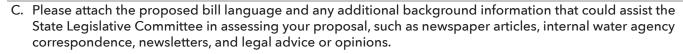
Add Section 53757 to the Government Code.

"An action to determine the legality of a property-related fee or charge for water, wastewater or sewer service may be brought by a local agency pursuant to Chapter 9 (commencing with Section 860) of Title 10 of Part 2 of the Code of Civil Procedure."

B. Describe specific examples illustrating the problem you are trying to fix. Attach additional sheets if necessary.

This past year, lawsuits were filed against 81 water suppliers throughout California, calling into question their ability to lawfully and appropriately charge residents and businesses for the costs of water supplies used during fire protection services and for the costs associated with the fire hydrants the water supplier owns and maintains within the community. These water suppliers, in large part, included these costs in their rates and charges for 2018 and 2019.

Because the law did not allow them to seek validation of those rates and charges, they had no way of proactively avoiding these lawsuits. If they had had the option of filing a validation action, a water supplier could have avoided the challenge to its rates years after they had been set and collect because a court would have already reviewed them and ruled of their legality.



D. Attach a copy of a resolution passed by your agency's governing body in support of this proposal.