

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

April 23, 2018

PLEDGE OF ALLEGIANCE

CALL TO ORDER

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

ROLL CALL

Directors LaMar, Matheis, Swan, Withers and President Reinhart

NOTICE

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

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).

WORKSHOPS

3. PROPOSED OPERATING BUDGET AND RATES AND CHARGES FOR FISCAL YEAR 2018-19

Res. No. 2018-

Recommendation: That the Board adopt a resolution by title approving the Operating Budget for Fiscal Year 2018-19 (with rates and charges for Fiscal Year 2018-19 to be adopted on June 25, 2018) and approve the Proposition 218 notices, subject to non-substantive modifications.

4. FISCAL YEAR 2018-19 CAPITAL BUDGET

Res. No. 2018-

Recommendation: That the Board adopt a resolution by title approving the Capital Budget for Fiscal Year 2018-19.

CONSENT CALENDAR

Resolution No. 2018-10

Items 5-10

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

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

6. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the April 9, 2018 Board meeting be approved as presented.

7. MARCH 2018 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate Swap Summary for March 2018, and Disclosure Report of Reimbursements to Board members and staff; approve the March 2018 Summary of Payroll ACH payments in the total amount of \$2,779,102 and approve the March 2018 Accounts Payable Disbursement Summary of Warrants 385062 through 386582, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$40,337,512.

8. REVIEW OF SAN DIEGO CREEK WATER RIGHTS

Recommendation: Receive and file.

9. OPERATIONS CENTER AIR HANDLER DUCT REPLACEMENT CONSTRUCTION AWARD

Recommendation: That the Board authorize the General Manager to execute a construction contract with Los Angeles Air Conditioning, Inc. in the amount of \$255,756 for the Operations Center Air Handler Duct Replacement.

10. OPERATIONS CENTER COMPUTER ROOM HEATING, VENTILATION, AND AIR CONDITIONING REPLACEMENT CONSTRUCTION AWARD

Recommendation: That the Board authorize the General Manager to execute a construction contract with Los Angeles Air Conditioning, Inc. in the amount of \$215,694.00 for the Operations Center Computer Room Heating, Ventilation and Air Conditioning Replacement Projects.

ACTION CALENDAR

11. CONSTRUCTION INSPECTION SERVICES AGREEMENT

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with AndersonPenna in the amount of \$1,873,053 for construction inspection services for three inspectors for a two-year period.

12. MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES CONTRACT CHANGE ORDER NO. 78

Recommendation: That the Board approve Contract Change Order No. 78 in the amount of \$344,006.55 with Filanc/Balfour Beatty for several software, structural, piping, and hardscaping items for the Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities, project 04286.

13. AB 2241 (RUBIO): THE OPEN AND TRANSPARENT WATER DATA ACT

Recommendation: That the Board adopt a "Support" Position on AB 2241 (Rubio, D-West Covina).

14. AMENDMENTS TO ENERGY MANAGEMENT SERVICES AGREEMENTS

Recommendation: That the Board authorize the General Manager to execute an Amended and Restated Energy Management Services (DRES Portfolio B) Agreement with Hybrid-Electric Building Technologies West Los Angeles 1, LLC, and Hybrid-Electric Building Technologies West Los Angeles 2, LLC, and an Amended and Restated Energy Management Services Amendment with Redwood Energy Storage, LLC subject to substantive revisions approved by the Engineering and Operations Committee.

15. SOUTHERN CALIFORNIA EDISON DIRECT ACCESS ELECTRIC SERVICE PROGRAM


Recommendation: That the Board concur with staff to accept the offer by Southern California Edison to transfer up to 25 electric service accounts to Direct Access Service, and to negotiate and execute an agreement with an Electric Service Provider to provide electricity for the selected accounts.

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.

16. A. General Manager's Report
- B. Directors' Comments
- C. Closed Session
 - a. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION – Significant exposure to litigation pursuant to Government Code Section 54956.9(d)(2) (One potential case.).
- D. Open Session
 - a. Report of any action in Closed Session.
- E. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office. The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

April 23, 2018
Prepared by: J. Davis / C. Smithson
Submitted by: C. Clary
Approved by: Paul A. Cook 

WORKSHOP

PROPOSED OPERATING BUDGET AND RATES AND CHARGES FOR FISCAL YEAR 2018-19

SUMMARY:

The proposed Fiscal Year (FY) 2018-19 Operating Budget for Irvine Ranch Water District is \$157.1 million. This budget reflects an increase of \$8.5 million or 5.7%, as compared to the FY 2017-18 Operating Budget.

One substantial change to the previous draft of the proposed Operating Budget (presented on April 9, 2018) is that the Orange County Water District (OCWD) increased the replenishment assessment (RA) to \$462 per acre-foot (AF), not to \$472 per AF as originally expected. This change reduces IRWD's cost of water by \$0.5 million. As discussed with the Finance and Personnel Committee, this version of the Operating Budget applies this \$0.5 million to the payback to the Replacement Fund that resulted from borrowing associated with funding of the IRWD Pension Benefits Trust.

Rate increases are necessary to provide for cost of service equity. The commodity rate-setting methodology continues to utilize the four tiers beginning with a low volume tier, a base rate and two over-allocation tiers. The proposed adjustment to rates include a low volume rate increase of \$0.04 per hundred cubic feet (ccf), a base commodity rate increase of \$0.19 per ccf, and a \$0.05 increase per month to the service charge for water. For sewer service, staff recommends no change to IRWD's monthly sewer service charge.

Based on the recommendation, a typical residential customer within the District will experience an increase of \$1.58 or 3.0%, from \$52.20 to \$53.78 per month.

The proposed Operating Budget, along the changes discussed above (with redline or highlighted mark-up), is attached as Exhibit "A". The Proposition 218 notices are attached as Exhibit "B". The proposed Resolution approving the Operating Budget for FY 2018-19 is attached as Exhibit "C".

Staff recommends that the Board approve the Resolution and the Proposition 218 notices, subject to non-substantive changes, in order to affect the new rates that will become effective July 1, 2018. The draft powerpoint presentation which staff will provide at the workshop is included as Exhibit "D".

BACKGROUND:

The proposed Operating Budget has been organized into eight major functional areas, plus separate sections for proposed general plant and labor changes. The proposed budget for FY 2018-19 represents an increase of \$8.5 million over the FY 2017-18 Operating Budget. In addition, staff has budgeted non-operating sources and uses of which the primary drivers are

property tax revenues, net income from real estate investments, connection fees paid by developers and interest expense on the District's debt. Total net sources and uses from non-operating sources are estimated to generate an additional net \$81.9 million. Quarterly reporting in FY 2018-19 will include a review of actual versus budget results for operating and non-operating revenue and expenses.

Page four of the proposed Operating Budget (summaries tab) included in Exhibit "A" identifies the effects of the proposed rate increases for a typical IRWD residential customer. The details of the tiered rate structure cost allocations based on cost of service were reviewed at the April 9, 2018 Board Workshop.

Attached as Exhibit "B" are the proposed Proposition 218 notices for the District. The rate impact is an increase of 3.0% for the average residential customer, as shown on page four of the Operating Budget. Staff is recommending that the Board approve the proposed Proposition 218 notices, subject to non-substantive changes, which will be mailed to the District's customers and property owners.

Staff recommends approval of the proposed resolution approving the Operating Budget for FY 2018-19 attached as Exhibit "C".

Proposed Schedule for the Operating Budget and Rates Adoption:

- April 23, 2018 Second Board Workshop to adopt the Proposed Operating Budget and to approve the Proposition 218 Notices for ratepayers
- May 4, 2018 Mail Proposition 218 notices to ratepayers / customers
- June 22, 2018 Tabulate responses
- June 25, 2018 Board Meeting – Public Hearing to review Proposition 218 responses and adopt IRWD's Rates and Charges for FY 2018-19

FISCAL IMPACTS:

Planned operating expenses in the FY 2018-19 Proposed Operating Budget reflect an increase of \$8.5 million from the adopted Operating Budget for FY 2017-18.

It is expected that the proposed rate increases will result in a contribution to the enhancement and replacement funds of approximately \$4.0 million and \$25.1 million for water and sewer, respectively. The conservation fund is expected to generate and use approximately \$11.0 million in FY 2018-19.

COMMITTEE STATUS:

The Committee previously reviewed the Budget and assumptions at its Finance and Personnel Committee meetings on March 8, 2018 and April 3, 2018 and at a Special Finance and Personnel Committee meeting on March 19, 2018.

ENVIRONMENTAL COMPLIANCE:

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

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE APPROVING THE OPERATING BUDGET FOR FISCAL YEAR 2018-19 (WITH RATES AND CHARGES FOR FISCAL YEAR 2018-19 TO BE ADOPTED ON JUNE 25, 2018) AND APPROVE THE PROPOSITION 218 NOTICES SUBJECT TO NON-SUBSTANTIVE MODIFICATIONS.

RESOLUTION NO. 2018 –

RESOLUTION OF THE BOARD OF DIRECTORS
OF IRVINE RANCH WATER DISTRICT,
ORANGE COUNTY, CALIFORNIA
APPROVING THE DISTRICT'S OPERATING BUDGET FOR
FISCAL YEAR 2018-19 AND DETERMINING COMPLIANCE WITH
ARTICLE XIIB OF THE CALIFORNIA CONSTITUTION

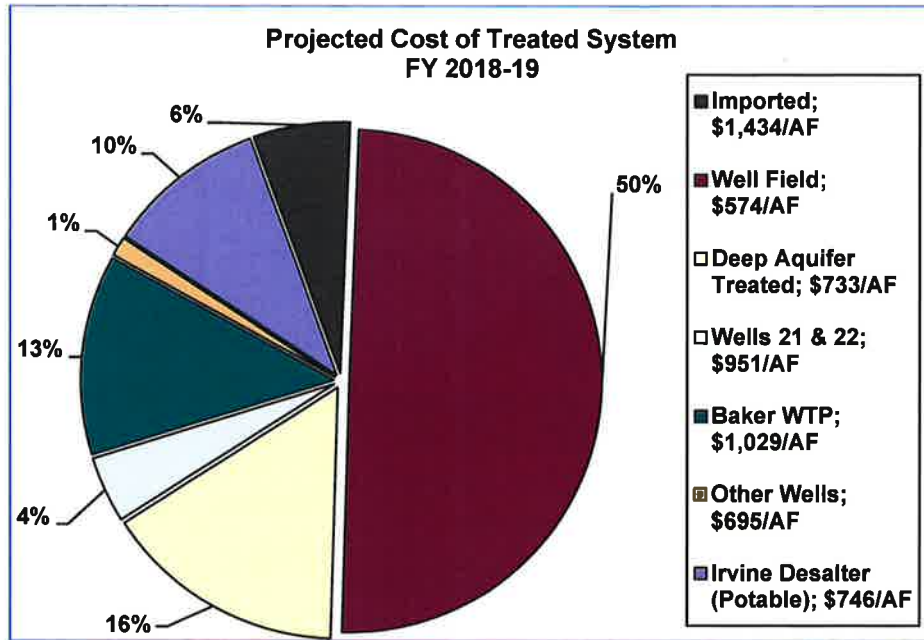
LIST OF EXHIBITS:

- Exhibit "A" – Proposed Operating Budget Draft for Fiscal Year 2018-19
- Exhibit "B" – Proposed Proposition 218 Notices
- Exhibit "C" – Resolution
- Exhibit "D" – Draft PowerPoint Presentation



OPERATING BUDGET

*Assumptions as of April 23, 2018
Fiscal Year 2018-19*



Groundwater Production

The major assumptions associated with the respective sources of water include the following:

- The Replenishment Assessment (RA) in FY 2017-18 was \$445 per AF and the rate used in FY 2018-19 is ~~\$472~~ \$462 per AF, an increase of ~~6.13~~ 8%. The District's basin production percentage (BPP) is set at a maximum of 70%, per the OCWD / IRWD Annexation Agreement executed in 2013.
- The Dyer Road Well Field (DRWF) pumping costs:
 - Actual energy usage is relatively flat.
 - Chemical expense is relatively flat.
- Primary changes in costs include a ~~\$127~~ per AF estimated rate increase for RA for the Irvine Desalter Project (IDP), the Potable Treatment Plant (PTP), and the Deep Aquifer Treatment System (DATS).

Treated Water – Metropolitan Water District (MWD) and Municipal Water District of Orange County (MWDOC)

- MWD is expected to increase its treated and untreated rates again on January 1, 2019 by 3.4% and 5.2% respectively.
- Staff assumes no substantial change to the costs associated with the IRWD Reservoir Management Systems.

Untreated Water

The sources for untreated water for FY 2018-19 will include purchased water.

- MWDOC purchases, Native Water and SAC water are expected to be used to meet all untreated demands. MWDOC purchases will increase to



OPERATING BUDGET

Assumptions as of April 23, 2018 Fiscal Year 2018-19

The following table identifies the current and proposed contribution of the District toward employee benefits.

Additional Contributions Provided by the District		
	FY 17-18	FY 18-19
PERS Employer Contribution	19.3%	19.3%
PERS in Excess of ARC	5.7%	5.77.1%
Combined Total	25.0%	25.026.4%
District Direct 401A Match	0.3%	0.3%
401A Matching Contribution of 3%	2.3%	2.8%

The PERS in Excess of ARC (approximately \$1.8 million) will be used to payback the Replacement Fund borrowing primarily associated with funding of the Pension Benefits Trust.

III. USE OF OTHER FUNDS

A. Over-Allocation Revenue

Over-allocation revenue is used to offset the following expenses:

- o The cost associated with additional imported water purchases;
- o Customers who receive the \$2 low volume capacity rebate on the fixed service charge;
- o Budgeted conservation expenses;
- o Urban runoff (NTS) and San Joaquin Marsh maintenance expenses; and
- o Water banking expenses that exceed associated revenue.

Total conservation expense is expected to meet over allocation revenue in FY 2018-19. The conservation fund is projected to be approximately \$8.0 million at the end of FY 2018-19.

B. Enhancement Fund User Rate Component

The current enhancement fund contribution for both the water and sewer system for FY 2017-18 was a combined \$1.45 per month (\$0.70 for water and \$0.82 for sewer) for the average residential customer. There was no increase built into these rates for FY 2018-19. It is estimated that the fund balance will be approximately \$50.0 million at the end of FY 2018-19.

C. Replacement Fund User Rate Component

The current replacement water service charge is \$2.10. The sewer service charge is \$9.31 per month for the average residential customer in FY 2018-19, no increase from the prior year. It is estimated that the fund balance will be approximately \$290 million as of the end of FY 2018-19. It is expected that the 4 years of increased funding totaling \$3.00 per month per customer will adequately cover the cost of debt associated with the MWRP Biosolids and Energy Recovery project.



**IRVINE RANCH WATER DISTRICT
CONSOLIDATED OPERATING BUDGET FOR FY 2018-19**
(in thousands)

	Actual		Budget		Budget to Budget Variance	
	FY 16-17	FY 2017-18 YTD 12/31/2017	FY 17-18 Approved	2018-19 Proposed	\$	%
Salaries & Benefits						
Regular Labor	\$ 31,297	\$ 15,574	\$ 32,855	\$ 34,981	\$ 2,127	6.5%
Overtime Labor	2,082	999	2,037	2,104	66	3.3%
Contract Labor	1,608	807	1,470	1,846	377	25.6%
Employee Benefits <small>Shift \$490K from Water Purchases</small>	19,109	8,024	17,366	19,124	1,758	10.1%
Salaries & Benefits Total	\$ 54,095	\$ 25,404	\$ 53,727	\$ 58,055	\$ 4,328	8.1%
Purchased Water & Utilities						
Water Purchases <small>Shift \$490K to Employee Benefits</small>	\$ 35,599	\$ 21,313	\$ 35,287	\$ 37,454	\$ 2,168	6.1%
Electricity	11,480	6,947	14,631	14,537	(94)	-0.6%
Fuel	578	268	627	559	(69)	-10.9%
Telecommunication	540	310	566	627	61	10.8%
Other Utilities	161	96	171	182	11	6.7%
Purchased Water & Utilities Total	\$ 48,359	\$ 28,934	\$ 51,282	\$ 53,360	\$ 2,078	4.1%
Material & Supplies						
Chemicals	\$ 2,081	\$ 1,503	\$ 3,074	\$ 3,146	\$ 72	2.3%
Office Supplies	97	42	109	96	(14)	-12.6%
Operating Supplies	1,355	535	1,475	1,498	23	1.6%
Printing	211	70	276	401	125	45.2%
Postage	578	267	594	520	(75)	-12.6%
Permits, Licenses and Fees	1,157	1,494	1,797	1,749	(48)	-2.7%
Duplicating Equipment	175	88	192	174	(18)	-9.4%
Equipment Rental	63	58	114	73	(42)	-36.6%
Material & Supplies Total	\$ 5,717	\$ 4,058	\$ 7,632	\$ 7,656	\$ 23	0.3%
Professional Services						
Rep & Maint OCSD & Other	\$ 15,149	\$ 7,036	\$ 13,852	\$ 13,704	\$ (148)	-1.1%
Rep & Maint IRWD	8,132	3,983	9,683	10,254	571	5.9%
Insurance	1,017	839	1,021	1,085	65	6.3%
Legal Fees	933	857	1,565	1,865	300	19.2%
Engineering Fees	598	463	980	967	(13)	-1.3%
Accounting Fees	116	59	95	102	7	7.4%
Data Processing	3,064	1,511	2,898	2,857	(41)	-1.4%
Personnel Training	947	466	1,247	1,267	20	1.6%
Personnel Physicals	24	11	51	41	(10)	-19.6%
Other Professional Fees	2,886	2,100	4,207	5,087	880	20.9%
Directors Fees	151	75	168	168	-	0.0%
Professional Services Total	\$ 33,017	\$ 17,399	\$ 35,766	\$ 37,396	\$ 1,630	4.6%
Other						
Mileage Reimbursement	\$ 161	\$ 68	\$ 140	\$ 148	\$ 8	5.7%
Election Expense	145	110	145	145	-	0.0%
Safety	123	79	108	122	14	13.0%
Alarm and Patrol Services	135	235	520	751	231	44.3%
Biosolids Disposals	20	-	131	20	(111)	-84.7%
Commuter Program	124	87	156	156	-	0.0%
Contract Meter Reading	1,354	692	1,390	1,390	-	0.0%
Other	340	63	152	142	(10)	-6.7%
Conservation	1,420	349	2,012	2,050	38	1.9%
Other Total	\$ 3,822	\$ 1,683	\$ 4,753	\$ 4,923	\$ 170	3.6%
Grand Total	\$ 145,010	\$ 77,478	\$ 153,161	\$ 161,390	\$ 8,229	5.4%
Less: Reimbursement from Baker Partners	\$ (1,612)	\$ (2,019)	\$ (4,498)	\$ (4,269)	\$ 229	
Grand Total	\$ 143,398	\$ 75,459	\$ 148,663	\$ 157,121	\$ 8,458	5.7%



REVENUES AND EXPENSES BY SYSTEM

(in thousands)

	Water	Sewer	Recycled	Conserve & NTS	Consolidated
Revenue:					
Commodity	\$ 42,159	\$ -	\$ 15,972	\$ 1,932	\$ 60,063
Service	34,322	51,893	6,813	-	93,028
Over Allocation	-	-	-	9,080	9,080
Rate Stabilization	-	-	-	-	-
Total Revenues	\$ 76,481	\$ 51,893	\$ 22,785	\$ 11,012	\$ 162,171
Contribution to Enhancement and Replacement Funds	(8,520)	(19,500)	(1,120)	-	(29,140)
Net Revenues	\$ 67,961	\$ 32,393	\$ 21,665	\$ 11,012	\$ 133,031
Expenses:					
Cost of Water	\$ 42,585	\$ -	\$ 9,764	\$ -	\$ 52,349
Operations	11,807	9,831	4,878	7,792	34,308
Water Banking	-	-	-	169	169
OCSD - O&M	-	12,554	-	-	12,554
Total Direct	\$ 54,392	\$ 22,385	\$ 14,642	\$ 7,961	\$ 99,380
Customer Records and Collections	2,473	1,349	678	-	4,500
General & Admin Expense	10,584	7,927	5,808	2,898	27,217
Total Indirect	\$ 13,057	\$ 9,276	\$ 6,486	\$ 2,898	\$ 31,717
General Plant	512	732	537	153	1,934
Total Expenses	\$ 67,961	\$ 32,393	\$ 21,665	\$ 11,012	\$ 133,031
Net Operating Position	\$ -	\$ -	\$ -	\$ -	\$ -

Decrease by \$446K.

Decrease by \$44K.

Increase by \$446K.

Increase by \$44K.



COST OF WATER

BUDGETED COST OF WATER

	FY 2017-18			FY 2018-19			Change	
	Acre Feet	Total	Cost / AF	Acre Feet	Total	Cost / AF	Acre Feet	Total
<i>(in thousands)</i>								
Irvine Ranch Rate Area								
<u>TREATED</u>								
Purchased from MWDOC	2,960	\$ 4,207	\$1,421	3,463	\$ 4,965	\$1,434	503	\$ 758
Dyer Road Well Field	28,000	16,176	\$578	28,000	16,082	\$574	-	(94)
Other Wells	700	454	\$648	700	487	\$696	-	34
Deep Aquifer Treatment System	8,000	5,576	\$697	8,700	6,374	\$733	700	798
Lost to Production	(160)			(174)			(14)	
Wells 21 & 22 Desalter	2,400	2,181	\$909	2,400	2,281	\$950	-	100
Lost to Production	(360)			(432)			(72)	
Baker WTP	7,611	8,497	\$1,116	7,232	\$ 7,440	\$1,029	(379)	(1,057)
Well Water	432	39	\$90	0	0		(432)	(39)
Irvine Desalter Project	6,540	4,702	\$719	5,700	4,252	\$746	(840)	(450)
Lost to Production	(981)			(1,026)			(45)	
Total Shrinkage	(2,626)			(2,444)			182	
Total Irvine Ranch Potable	52,516	\$ 41,832		52,118	\$ 41,881		(398)	\$ 50
<u>UNTREATED</u>								
Purchased from MWDOC	1,000	\$ 841	\$841	2,835	\$ 2,472	\$872	1,835	\$ 1,631
Native Water	3,827	811	\$212	1,000	245	\$245	(2,827)	(566)
Santiago Aqueduct Commission	175	148	\$846	175	153	\$874	-	5
Transfer to RW System	(3,091)	(2,009)	\$650	(1,961)	(1,404)	\$716	1,130	605
Total Shrinkage	(87)			(93)			(6)	
Total Untreated	1,824	\$ (209)		1,956	\$ 1,467		132	\$ 1,676
Total Potable and Untreated Water	54,340	41,623		54,074	43,348		(266)	1,725
<u>RECYCLED</u>								
Groundwater	0	\$ -	\$ -	435	\$ 201	\$ -	435	\$ 201
Irvine Desalter Project	4,165	2,904	\$697	4,165	3,032	\$738	-	128
Lost to Production	(625)			(625)			-	
MWRP / LAW RP Production	22,300	4,919	\$221	22,890	5,251	\$229	590	332
Transfer from Untreated System	3,091	2,009	\$650	1,961	1,404	\$716	(1,130)	(605)
Total Shrinkage	(567)			(565)			2	
Total Recycled	28,364	\$ 9,832		28,261	\$ 9,888		(103)	\$ 56
Total Cost of Water for Billed Usage	82,704	\$ 51,455		82,335	\$ 53,235		(369)	\$ 1,781

**Irvine Ranch Water District
Consolidated Operating Expense Budget for FY 2018-19**

Administration		2016-17 Actual	2017-18 Actual thru 12/31/17	2017-18 Orig Budget	2018-19 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
<u>Human Resources</u>						
140	Regular Labor	643,110	247,700	667,174	631,862	(35,312)
140	Overtime Labor	7,532	7,525	5,000	2,000	(3,000)
140	Employee Benefits	19,108,562	8,024,273	17,365,620	19,123,550	1,757,930
140	Contract Labor			2,500	18,633,900	1,268,280
140	Postage		11	100	3,000	500
140	Office Supplies	2,524	981	2,500	0	(100)
140	Rep & Maint IRWD	227		1,000	2,500	0
140	Legal Fees	218,066	81,425	145,000	1,000	0
140	Personnel Training	295,872	82,069	388,800	145,000	0
140	Personnel Physicals	13,044	8,324	15,000	399,600	10,800
140	Other Professional Fees	140,763	43,750	179,500	20,000	5,000
140	Safety	178		0	174,200	(5,300)
140	Commuter Program				0	0
					156,000	156,000
Total Human Resources		20,429,878	8,496,058	18,772,194	20,658,712	1,886,518
					20,169,062	1,396,868
Total Administration		24,617,685	11,257,445	23,717,736	26,452,186	2,734,450
					25,962,536	2,244,800

Irvine Ranch Water District
Consolidated Operating Expense Budget for FY 2018-19

Water Operations		2016-17 Actual	2017-18 Actual thru 12/31/17	2017-18 Orig Budget	2018-19 Prop Budget	Incr/(Decr)
Dept No	Expense Name					
<u>Water Operations</u>						
420	Water Purchases	35,599,308	21,312,805	35,286,508	37,454,466	2,167,958
420	Regular Labor	1,761,426	780,737	2,013,302	37,944,116 2,070,218	2,657,608 56,916
420	Overtime Labor	476,938	219,522	453,300	442,290	(11,010)
420	Electricity	8,320,293	4,573,931	9,863,218	9,905,210	41,992
420	Fuel	34,736	27,772	45,800	57,000	11,200
420	Telecommunication	63,785	44,433	53,900	77,900	24,000
420	Other Utilities	41,986	32,586	34,800	47,000	12,200
420	Chemicals	1,288,069	828,472	1,465,004	1,605,544	140,540
420	Operating Supplies	78,057	15,138	64,960	79,200	14,240
420	Permits, Licenses and Fees	121,058	125,855	204,000	251,500	47,500
420	Office Supplies		77	0	200	200
420	Equipment Rental	13,492	16,837	9,000	17,000	8,000
420	Rep & Maint OCSD & Other	422,600	460,002	824,300	857,100	32,800
420	Rep & Maint IRWD	684,896	282,406	1,274,130	1,489,588	215,458
420	Engineering Fees	144,742	84,871	117,360	124,756	7,396
420	Data Processing			12,500	12,500	0
420	Personnel Training	409	139	340	1,340	1,000
420	Other Professional Fees	10,822	2,611	78,000	78,000	0
420	Safety			3,000	3,000	0
Total Water Operations		49,062,617	28,808,194	51,803,422	54,573,812 55,063,462	2,770,390 3,260,040

**Irvine Ranch Water District
Consolidated Operating Expense Budget for FY 2018-19**

Water Operations		2016-17 Actual	2017-18 Actual thru 12/31/17	2017-18 Orig Budget	2018-19 Prop Budget	Incr/(Decr)
<u>Dept No</u>	<u>Expense Name</u>					
<u>Construction Services</u>						
430	Regular Labor	1,577,737	737,218	1,646,816	1,726,964	80,148
430	Overtime Labor	245,428	39,541	223,000	241,000	18,000
430	Contract Labor	99,883	54,598	125,800	208,960	83,160
430	Telecommunication	193		0	0	0
430	Chemicals	228	634	400	800	400
430	Operating Supplies	152,146	43,503	164,520	144,800	(19,720)
430	Permits, Licenses and Fees	61,979	31,215	88,000	93,000	5,000
430	Equipment Rental		5,781	10,000	12,000	2,000
430	Rep & Maint IRWD	631,645	198,558	473,000	628,000	155,000
430	Personnel Training		1,301	6,390	6,400	10
430	Other Professional Fees	374				
Total Construction Services		2,769,613	1,112,349	2,737,926	3,061,924	323,998
<hr/>						
Total Water Operations		53,825,855	31,079,672	56,730,194	60,318,666 60,808,316	3,588,472 4,078,122



SALARIES AND WAGES

SUMMARY OF SALARIES AND WAGES

(in thousands)

	Total	Administration	Finance & Administrative Services	Engineering	Water Quality	Water Policy	Water Operations	Recycling Operations	Maintenance
Current Authorized: Gross Pay	\$32,855	\$1,681	\$6,722	\$4,562	\$1,725	\$3,619	\$6,174	\$4,328	\$4,044
Annual Increase	1,111	119	184	299	99	9	232	163	5
Sub-Total Regular Salaries & Wages	33,966	1,801	6,907	4,861	1,824	3,629	6,406	4,491	4,048
New Positions: Gross Pay	1,015	\$0	\$326	\$0	\$0	\$197	\$222	\$79	\$191
Total Regular Salaries & Wages	34,981	1,801	7,233	4,861	1,824	3,826	6,628	4,570	4,239
Increase by \$490K.									
Insurance and Benefits	8,311	428	1,718	1,155	433	909	1,575	1,086	1,007
Employment Tax & PERS Contributions	10,813	557	2,236	1,502	564	1,183	2,049	1,413	1,310
Total Regular Salaries & Wages, health Insurance and employment taxes	\$54,105	\$2,786	\$11,187	\$7,518	\$2,821	\$5,918	\$10,252	\$7,069	\$6,556
Employee Count:	394	16	85	44	20	40	82	56	52



BENEFITS AND EMPLOYMENT TAX

HEALTH INSURANCE AND EMPLOYER CONTRIBUTIONS

(in thousands)	<u>FY 2017-18</u>	<u>FY 2018-19</u>	<u>Change</u>
Insurance and Benefits			
Health Ins Actives	\$5,220	\$5,423	\$203
Dental Premiums	421	442	21
Wrkrs Comp Premiums	660	692	32
Wrkrs Comp Paid Claims	612	813	201
Life Ins Actives	150	153	3
LT Disability Premiums	103	136	33
Medical Premiums - Retirees	115	151	36
Vision Benefit Premiums	85	82	(3)
RHCAP Payments - OPEB	325	344	19
Life Ins Retirees	14	11	(3)
Other	63	64	1
	<u>\$7,768</u>	<u>\$8,311</u>	<u>\$543</u>
Employment Tax and PERS		Increase by \$490K.	
PERS Employer Portion	\$6,340	\$7,468	\$1,128
PERS In Excess Of ARC	1,872	1,787	(85)
401A Employer Match Portion	734	850	116
401A Employer Direct Portion	126	160	34
Medicare Tax	476	498	22
St Unemployment Tax	50	50	0
	<u>\$9,598</u>	<u>\$10,813</u>	<u>\$1,215</u>
Total Insurance, Benefits, and Taxes	<u>\$17,366</u>	<u>\$19,124</u>	<u>\$1,758</u>



Irvine Ranch Water District Notice of Proposed Water and Sewer Rate Change

Background

The Irvine Ranch Water District is a public agency that provides water and sewer service. Our rates are based on the actual cost to provide these services and are set each year during the annual budget process. The budget is adopted by the Board of Directors and goes into effect on July 1. A critical IRWD business objective is to keep costs, and therefore rates, as low as possible for our customers. When compared with other agencies providing similar services in Orange County, IRWD's rates are consistently among the lowest.

Basic Components of Residential Rates

- **Commodity Charge** is based on the amount of water used both inside and outside the home each month. It is based on the cost of local and imported water.
- **Fixed Service Charges** do not vary each month and include costs for operations, maintenance and infrastructure. There are separate service charges for water and sewer service.

Commodity Charge:

Commodity charges are billed monthly based on the actual volume of water used. Customers are billed in tiers based on the actual water used as a percentage of the monthly water budget. A description of how monthly water budgets are determined is described in more detail at <https://www.irwd.com/services/understanding-your-bill>. Effective July 1, 2018, IRWD is proposing a commodity charge increase shown in the chart below. The Low Volume rate tier rewards customers who use the least amount of water, which reduces the need for IRWD to purchase more expensive water supplies. The Base rate tier is for customers that stay within their monthly water budget allocation. The Inefficient and Wasteful tiers are for customers that exceed their monthly water budget. The standard Billing Unit is called a ccf (hundred cubic feet) and is equal to 748 gallons of water.

Proposed Residential Commodity Rates				
Tier	% of Monthly Water Budget Residential with Outdoor	% of Monthly Water Budget Multi-Family with No Outdoor	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Low Volume	0-40 %	0-50%	\$ 1.36	\$1.40
Base Rate	41-100%	51-100%	\$ 1.70	\$1.89
Inefficient	101-140%	101-120%	\$ 4.09	\$4.73
Wasteful	141+	121+	\$12.06	\$13.35

Why Did the Cost of Water Increase?

The main reasons for the change include uncontrollable costs attributed to:

- Pass through charges from the Orange County Water District (OCWD) for pumping local groundwater (3.8% increase) which is the lowest cost of water.
- Pass through charges from the Metropolitan Water District (MWD) for imported water purchased through the regional wholesaler, the Municipal Water District of Orange County (MWDOC) (between 3.4% and 5.2% increase).

Understanding the IRWD Budget Based Rate Structure

Since 1991, IRWD customer bills have been calculated using a budget based rate structure. Usage up to 100 percent of the water budget is billed at the low volume and base rate. The rate structure uses property-specific allocations and tiered pricing to provide an economic incentive to encourage efficient water use.

- Each customer receives a monthly water budget that provides for a reasonable amount of water for indoor and outdoor use. It can be adjusted by a variance for more people living in the home, medical needs, additional irrigated landscape area or other special circumstances.
- The monthly water commodity charge is calculated based upon how much water is used.
- If a customer goes over their monthly water budget, the water is billed at increasingly higher tiers based on IRWD's cost to provide the water.
- Costs associated with the purchase of additional imported water (the most expensive source of water for IRWD), urban runoff programs, water banking and water conservation programs are allocated to the higher tiers.

Monthly Water Budgets, Rate Calculator & Sample Bills Available on Website

To find out more information on the rate tiers, the types of usage that determine the monthly water budget, how the monthly water budget is calculated and to use the IRWD budget based rate calculator, please visit the IRWD website at <https://www.irwd.com/services/understanding-your-bill>. The calculator shows how staying within your monthly water budget or exceeding it will affect your monthly bill. Provide your account number from a recent bill and you can see how your bill will be recalculated using the proposed rates, allocations and tiers, and any variances you have on your account. Sample bills are also provided as well as technical water budget formulas. Free internet access is available Monday – Friday from 8am to 5pm in the IRWD lobby at 15600 Sand Canyon Avenue, Irvine, CA.

Water & Sewer Fixed Service Charges:

Monthly service charges are fixed monthly charges which cover IRWD's cost of operations, maintenance and infrastructure and do not change based on the amount of a customers' monthly water or sewer use. Monthly service charges are based on a 30 day calendar month so billing cycles which are longer or shorter than 30 days are billed based on the proportional number of days. The fixed charge includes an amount set aside for the future inevitable repair and

replacement of infrastructure such as pipes, pumping stations and treatment facilities. This way, the District can avoid significant one time rate spikes when the repairs and replacements are made. These charges are not used to pay for facilities that extend service to new development.

Water Fixed Service Charges: The fixed monthly water service charges for the average residential customer are used to pay for operations and maintenance costs, including inevitable infrastructure enhancements and replacements. The charge is based on the size of your meter.

Proposed Water Service Fixed Monthly Charges for System Operation and Maintenance		
Residential meter size – homes, condos, apartments	Current Rates	Effective July 1, 2018
5/8 x 3/4"	\$10.30/meter	\$10.35/meter
3/4" disc meter	\$15.45/meter	\$15.55/meter
1" disc meter	\$25.75/meter	\$25.90/meter
1 1/2" disc meter	\$51.50/meter	\$51.75/meter
2" disc meter	\$82.40/meter	\$82.80/meter
2" turbo meter	\$108.15/meter	\$108.70/meter
3" turbo meter	\$247.20/meter	\$248.40/meter
4" turbo meter	\$515.00/meter	\$517.50/meter
6" turbo meter	\$1,030.00/meter	\$1,035.05/meter
6" Omni F2 meter	\$1,440.45/meter	\$1,447.50/meter
8" Omni F2 meter	\$2,561.60/meter	\$2,574.15/meter
Residential master meter (shared) apartments and condominiums 5/8 x 3/4" meter	\$10.30/meter	\$10.35/meter

The current amount for your meter size appears on your bill. Customers that remain in the low volume tier for most of the year will have a larger percentage of their bill made up of the fixed charge. Customers that remain in the low volume tier for 9 out of 12 months of the prior calendar year will receive a \$2.00 credit per month which will be itemized on each bill. New customers do not receive this credit unless they have been with the District for a full calendar year.

Sewer Fixed Service Charges: The proposed fixed monthly sewer service charges for the average residential customer are used to pay for operations and maintenance costs including inevitable infrastructure enhancements and replacements. The tiered sewer service fixed charge is based on the 3 months with the lowest potable water usage from the prior calendar year. New customers are billed at the highest tier until they have established a full calendar year of usage history.

Proposed Changes for Sewer Service Fixed Monthly Charges for System Operation and Maintenance (No Change)		
Usage	Current Rates	Effective July 1, 2018
Average water usage exceeds 10 ccfs per month	\$25.75/month	No change
Average water usage falls between 5 and 10 ccfs	\$23.20/month	No change
Average water usage falls below 5 ccfs	\$19.30/month	No change
Collection Service Charge	\$8.40/month	No change
Treatment Service Charge	\$14.80/month	No change

Pumping Surcharges: A pumping surcharge will be added to the commodity rate for those customers who reside at higher elevations and cause the District to incur additional pumping costs to supply their water. The surcharge is based on the actual prevailing energy costs and varies depending upon the elevation of the area served. If you live in an area affected by a pumping surcharge, the charge is itemized on your monthly bill. Please visit the IRWD website at <https://www.irwd.com/services/residential-water-rates> to see charges by zone.

Proposed Changes to Pumping Surcharges, Set-up and Reconnection Fees		
Component	Current Rates	Effective July 1, 2018
Pumping Surcharges by Zone	\$0.21 to \$0.64/ccf	\$0.21 to \$0.65/ccf
One-time Setup Fee for New Accounts	\$25.00	No change
Shutoff Reconnection Fees	\$70.00 - \$95.00	No change

Automatic Pass-Through Adjustments

IRWD has used its best available information to calculate proposed increases in the cost of imported water IRWD purchases from MWD through MWDOC, the replenishment charges paid by IRWD to OCWD for pumping groundwater, and the cost for regional treatment of sewage paid by IRWD to the Orange County Sanitation District (OCSD). IRWD has no control over the amounts set by MWD, MWDOC, OCWD and OCSD (the "Regional Agencies"), and must pass those costs through to IRWD customers. Should any of the Regional Agencies adopt an additional increase (or decrease) in its charges ("Pass-Through Amount"), IRWD will automatically recalculate its rates to include the Pass-Through Amount. If this occurs, the automatic IRWD rate adjustment will not require a public hearing or any additional action by the IRWD Board of Directors. At least 30 days before the effective date of the adjustment, IRWD will provide its customers with the expected adjustment(s), which will generally be calculated as the total projected cost increase divided by the projected annual water consumption or annual total sewage flow as appropriate. This calculation will vary as necessary to reflect IRWD's different service areas and service classes.

Public Hearing

Any customers or property owners within the IRWD service area may file a written protest for the proposed rate increases with IRWD by sending a letter to IRWD, P.O. Box

5149, Irvine, CA 92616. A valid protest letter must include your name, the address at which you receive service from IRWD, a statement of protest and your original signature. Protest letters received by June 25 will be tabulated and presented to the Board of Directors at a public hearing regarding the rate increase to be held on June 25, 2018 at 5 p.m. in the IRWD Board Room, 15600 Sand Canyon Ave., Irvine, CA. Any customers or property owners may appear at the hearing to make comments regarding the proposed rates. Letters may be delivered in person at the hearing, and must be received prior to the conclusion of the June 25 public hearing.

Additional Information

For more information on IRWD's water efficiency programs, rebates and tips on how you can conserve, visit www.irwd.com. If you have any additional questions, please contact IRWD Customer Service at 949-453-5300.



Irvine Ranch Water District Notice of Proposed Water Rate Change

Background

The Irvine Ranch Water District is a public agency that provides water and sewer service. Our rates are based on the actual cost to provide these services and are set each year during the annual budget process. The budget is adopted by the Board of Directors and goes into effect on July 1. A critical IRWD business objective is to keep costs, and therefore rates, as low as possible for our customers. When compared with other agencies providing similar service in Orange County, IRWD's rates are consistently among the lowest.

Basic Components of Residential Rates

- **Commodity Charge** is based on the amount of water used each month. It is based on the cost of local and imported water.
- **Fixed Service Charge** does not vary each month and include costs for operations, maintenance and infrastructure.

Commodity Charge:

Commodity charges are billed monthly based on the actual volume of water used. Customers are billed in tiers based on the actual water used as a percentage of the monthly water budget. A description of how monthly water budgets are determined is described in more detail at <https://www.irwd.com/services/understanding-your-bill>. Effective July 1, 2018, IRWD is proposing a commodity charge increase shown in the chart below. The Low Volume rate tier rewards customers who use the least amount of water, which reduces the need for IRWD to purchase more expensive water supplies. The Base rate tier is for customers that stay within their monthly water budget allocation. The Inefficient and Wasteful tiers are for customers that exceed their monthly water budget. The standard Billing Unit is called a ccf (one hundred cubic feet) and is equal to 748 gallons of water.

Proposed Non Agricultural/Landscape Commodity Rates:

Proposed Potable Non Agricultural/Landscape Commodity Rates			
Tier	% of Monthly Water Budget	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Low Volume	0 - 40 %	\$1.36	\$1.40
Base Rate	41 -100%	\$1.70	\$1.89
Inefficient	101-160%	\$4.09	\$4.73
Wasteful	161+	\$ 12.06	\$13.35

Proposed Non-Potable & Recycled Non Agricultural / Landscape Commodity Rates			
Tier	% of Monthly Water Budget	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Low Volume	0 -40 %	\$1.01	\$1.13
Base Rate	41 -100%	\$1.36	\$1.47
Inefficient	101-140%	\$2.33	\$3.11
Wasteful	141+	\$5.08	\$6.44

Proposed Agricultural Commodity Rates:

Proposed Agricultural Potable Commodity Rates		
Tier	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Base Rate	\$2.36	\$2.62

Proposed Agricultural Non-Potable / SAC Commodity Rates		
Type	FY 2017-18 Rates per ccf.	Effective July 1, 2018 per ccf
Non-Potable	\$1.40	\$1.58
SAC Water	\$1.66	\$1.75

Proposed Recycled Agricultural Commodity Rates		
Tier	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Base Rate	\$1.40	\$1.52

Why Did the Cost of Water Increase?

The main reasons for the change include uncontrollable costs attributed to:

- Pass through charges from the Orange County Water District (OCWD) for pumping local groundwater (3.8% increase) which is the lowest cost of water.

- Pass through charges from the Metropolitan Water District (MWD) for imported water purchased through the regional wholesaler, the Municipal Water District of Orange County (MWDOC) (between 3.4% and 5.2% increase).

Understanding the IRWD Budget Based Rate Structure

Since 1991, IRWD customer bills have been calculated using a budget based rate structure. Usage up to 100 percent of the water budget is billed at the low volume and base rate. This rate structure uses property-specific allocations and tiered pricing to provide customers an economic incentive to encourage efficient water use.

- Each customer receives a monthly water budget (allocation) that provides for a reasonable amount of water based on the irrigated landscape area.
- The monthly water commodity charge is based upon how much water is used.
- If a customer goes over their monthly water budget, the water is billed at increasingly higher tiers based on IRWD's cost of service to provide the water.
- Costs associated with the purchase of additional imported water (the most expensive source of water for IRWD), urban runoff programs, water banking and water conservation programs are allocated to the highest tiers.

Landscape Monthly Potable & Recycled Water Allocations

Type	Proposed Monthly Allocation Basis
Irrigated with Potable Water	60% warm-season turf + 40% drought tolerant landscape
Irrigated with Recycled Water	100% warm-season turf

Please visit www.irwd.com for specific details about the calculation.

Monthly Water Budgets, Rate Calculator & Sample Bills Available on Website

To find out more information on the rate tiers, the types of usage that determine the monthly water budget, how the monthly water budget is calculated and to use the IRWD budget based rate calculator, please visit the IRWD website at <https://www.irwd.com/services/understanding-your-bill>. The calculator shows how staying within your monthly water budget or exceeding it will affect your monthly bill. Provide your account number from a recent bill and you can see how your bill will be recalculated using the proposed rates, allocations and tiers. Free internet access is available Monday – Friday from 8am to 5pm in the IRWD lobby at 15600 Sand Canyon Avenue, Irvine, CA.

Water Fixed Service Charges:

Monthly service charges are fixed monthly charges which cover IRWD's cost of operations, maintenance and infrastructure and do not change based on the amount of a customers' water use. Monthly service charges are based on a 30 day calendar month so billing cycles which are longer or shorter than 30 days are billed based on the proportional number of days. The fixed charge includes an amount set aside for the future inevitable repair and replacement of infrastructure such as pipes, pumping stations and treatment facilities. This way, the District can avoid significant one time rate spikes when the repairs and replacements are made. These charges are not used to pay for facilities that extend service to new development.

The charge is based on the size of your meter. The current amount for your meter size appears on your bill. Customers that remain in the low volume tier for most of the year will have a larger percentage of their bill made up of the fixed charge. The baseline fixed charge is calculated on the meter's maximum flow capacity and the demand on the system. Potable customers that remain in the low volume tier for 9 out of 12 months will receive a \$2.00 credit per month which will be itemized on each bill. New customers do not receive this credit unless they have been with the District for a full calendar year.

Proposed Water Service Charges		
Meter Type	FY 2017-18 Rates	Effective July 1, 2018
5/8" x 3/4" disc	\$10.30/meter	\$10.35/meter
3/4" disc	\$15.45/meter	\$15.55/meter
1" disc	\$25.75/meter	\$25.90/meter
1 1/2" disc	\$51.50/meter	\$51.75/meter
2" disc	\$82.40/meter	\$82.80/meter
3" compound	\$164.80/meter	\$165.60/meter
4" compound	\$309.00/meter	\$310.50/meter
6" compound	\$515.00/meter	\$517.50/meter
8" compound	\$991.40/meter	\$996.25/meter
10" compound	\$1,133.00/meter	\$1,138.55/meter
14" compound	\$1,802.50/meter	\$1,811.35/meter
2" turbo	\$108.15/meter	\$108.70/meter
3" turbo	\$247.20/meter	\$248.40/meter
4" turbo	\$515.00/meter	\$517.50/meter
6" turbo	\$1,030.00/meter	\$1,035.05/meter
8" turbo	\$1,802.50/meter	\$1,811.35/meter
10" turbo	\$2,163.00/meter	\$2,173.60/meter
2" magnetic	\$160.15/meter	\$160.95/meter
4" magnetic	\$640.15/meter	\$643.30/meter
6" magnetic	\$1,440.45/meter	\$1,447.50/meter

8" magnetic	\$2,561.60/meter	\$2,574.15/meter
6" propeller	\$695.25/meter	\$698.65/meter
8" propeller	\$927.00/meter	\$931.55/meter
10" propeller	\$1,236.00/meter	\$1,242.05/meter
12" or 14" propeller	\$1,738.15/meter	\$1,746.65/meter
16", 18" or 20" propeller	\$2,935.50/meter	\$2,949.90/meter
4" Omni F2	\$640.15/meter	\$643.30/meter
6" Omni F2	\$1,440.45/meter	\$1,447.50/meter
8" Omni F2	\$2,561.60/meter	\$2,574.15/meter
10" Omni F2	\$2,935.50/meter	\$2,949.90/meter

Pumping Surcharges: A pumping surcharge will be added to the commodity rate for those customers who are located at higher elevations and cause the District to incur additional pumping costs to supply their water. The surcharge is based on the actual prevailing energy costs and varies depending upon the elevation of the area served. If your property is in an area affected by a pumping surcharge, the charge is itemized on your monthly bill. Please visit the IRWD website at www.irwd.com to see charges by zone.

Proposed Changes to Pumping Surcharges, Set-up and Reconnection Fees		
Component	FY 2017-18 Rates	Effective July 1, 2018
Pumping Surcharges by Zone	\$0.21 to \$0.64/ccf	\$0.21 to \$0.65/ccf
One-time Setup Fee for New Accounts	\$25.00	No change
Shutoff Reconnection Fees	\$70.00 - \$95.00	No change

Automatic Pass-Through Adjustments

IRWD has used its best available information to calculate proposed increases in the cost of imported water IRWD purchases from MWD through MWDOC, and the replenishment charges paid by IRWD to OCWD for pumping groundwater. IRWD has no control over the amounts set by MWD, MWDOC and OCWD (the "Regional Agencies"), and must pass those costs through to IRWD customers. Should any of the Regional Agencies adopt an additional increase (or decrease) in its charges ("Pass-Through Amount"), IRWD will automatically recalculate its rates to include the Pass-Through Amount. If this occurs, the automatic IRWD rate adjustment will not require a public hearing or any additional action by the IRWD Board of Directors. At least 30 days before the effective date of the adjustment, IRWD will provide its customers with the expected adjustment(s), which will generally be calculated as the total projected cost increase divided by the projected annual water consumption. This calculation will vary as necessary to reflect IRWD's different service areas and service classes.

Public Hearing

Any customers or property owners within the IRWD service area may file a written protest for the proposed rate increases with IRWD by sending a letter to IRWD, P.O. Box 5149, Irvine, CA 92616. A valid protest letter must include your name, the address at which you receive service from IRWD, a statement of protest and your original signature. Protest letters received by June 25 will be tabulated and presented to the Board of Directors at a public hearing regarding the rate increase to be held on June 25, 2018 at 5 p.m. in the IRWD Board Room, 15600 Sand Canyon Ave., Irvine, CA. Any customers or property owners may appear at the hearing to make comments regarding the proposed rates. Letters may be delivered in person at the hearing, and must be received prior to the conclusion of the June 25 public hearing.

Additional Information

For more information on IRWD's water efficiency programs, rebates and tips on how you can conserve, visit www.irwd.com. If you have any additional questions, please contact IRWD Customer Service at 949-453-5300.



Irvine Ranch Water District Notice of Proposed Water and Sewer Rate Change

Background

The Irvine Ranch Water District is a public agency that provides water and sewer service. Our rates are based on the actual cost to provide these services and are set each year during the annual budget process. The budget is adopted by the Board of Directors and goes into effect on July 1. A critical IRWD business objective is to keep costs, and therefore rates, as low as possible for our customers. When compared with other agencies providing similar services in Orange County, IRWD's rates are consistently among the lowest.

Basic Components of Residential Rates

- **Commodity Charge** is based on the amount of water used each month. It is based on the cost of local and imported water.
- **Fixed Service Charges** do not vary each month and include costs for operations, maintenance and infrastructure. There are separate service charges for water and sewer service.

Commodity Charge: Proposed Changes to the Cost of Water

Commodity charges are billed monthly based on the actual volume of water used. Customers are billed in one or two tiers based on the actual water used as a percentage of the monthly water budget. A description of how monthly water budgets are determined is described below in the section *Monthly Water Budgets Information Available on Website*. Effective July 1, 2018, IRWD is proposing a commodity charge increase shown in the chart below. The Base Rate tier rewards customers that stay within their monthly water budget allocation. The Wasteful tier is for customers that exceed their monthly water budget. The standard Billing Unit is called a ccf (hundred cubic feet) and is equal to 748 gallons of water.

Proposed Commercial Commodity Rates:

Proposed Potable Commercial Commodity Rates			
Tier	% of Monthly Water Budget	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Base Rate	0 -100 %	\$1.70	\$1.89
Wasteful	101+	\$12.06	\$13.35

Proposed Recycled Water Commercial Commodity Rates			
Tier	% of Monthly Water Budget	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Base Rate	0 -100 %	\$0.95	\$1.07
Wasteful	101+	\$5.08	\$6.44

Why Did the Cost of Water Increase?

The main reasons for the change include uncontrollable costs attributed to:

- Pass through charges from the Orange County Water District (OCWD) for pumping local groundwater (3.8% increase) which is the lowest cost of water.
- Pass through charges from the Metropolitan Water District (MWD) for imported water purchased through the regional wholesaler, the Municipal Water District of Orange County (MWDOC) (between 3.4% and 5.2% increase).

Understanding the IRWD Budget Based Rate Structure

Since 1991, IRWD customer bills have been calculated using a budget based rate structure. Usage up to 100 percent of the water budget is billed at the base rate. The rate structure uses business-specific allocations and tiered pricing to provide an economic incentive to encourage efficient water use.

- Each customer receives a monthly water budget that provides for a reasonable amount for your business needs.
- The monthly water commodity charge is calculated based upon how much water is used.
- If a customer goes over their monthly water budget, the water is billed at the highest tier based on IRWD's cost to provide the water.
- Costs associated with the purchase of additional imported water (the most expensive source of water for IRWD), urban runoff programs, water banking and water conservation programs are allocated to the highest tier.

Monthly Water Budget Information Available on Website

To find out more information on the rate tiers, please visit the IRWD website at www.irwd.com. If you would like additional information regarding the monthly water budget for your property, please contact customer service at 949 453-5300.

Water & Sewer Fixed Service Charges:

Monthly service charges are fixed monthly charges which cover IRWD's cost of operations, maintenance and infrastructure and do not change based on the amount of a customers' water or sewer use. Monthly service charges are based on a 30 day calendar month so billing cycles which are longer or shorter than 30 days are billed based on the proportional number of days. The fixed charge includes an amount set aside for the future inevitable repair and replacement of infrastructure such as pipes, pumping stations and treatment facilities. This way, the District can avoid significant one time rate spikes when the repairs and replacements are made. These charges are not used to pay for facilities that extend service to new development.

Water Fixed Service Charges: The fixed monthly water service charges are used to pay for operations and maintenance costs, including inevitable infrastructure enhancements and replacements. The charge is based on the size of your meter. The proposed fixed monthly charges are presented below. The current amount for your meter size appears on your bill. The baseline fixed charge is calculated on the meter's maximum flow capacity and the demand on the system.

Proposed Water Service Charges		
Meter Type	FY 2017-18 Rates	Effective July 1, 2018
5/8" x 3/4" disc	\$10.30/meter	\$10.35/meter
3/4" disc	\$15.45/meter	\$15.55/meter
1" disc	\$25.75/meter	\$25.90/meter
1 1/2" disc	\$51.50/meter	\$51.75/meter
2" disc	\$82.40/meter	\$82.80/meter
3" compound	\$164.80/meter	\$165.60/meter
4" compound	\$309.00/meter	\$310.50/meter
6" compound	\$515.00/meter	\$517.50/meter
8" compound	\$991.40/meter	\$996.25/meter
10" compound	\$1,133.00/meter	\$1,138.55/meter
14" compound	\$1,802.50/meter	\$1,811.35/meter
2" turbo	\$108.15/meter	\$108.70/meter
3" turbo	\$247.20/meter	\$248.40/meter
4" turbo	\$515.00/meter	\$517.50/meter
6" turbo	\$1,030.00/meter	\$1,035.05/meter
8" turbo	\$1,802.50/meter	\$1,811.35/meter
10" turbo	\$2,163.00/meter	\$2,173.60/meter
2" magnetic	\$160.15/meter	\$160.95/meter
4" magnetic	\$640.15/meter	\$643.30/meter
6" magnetic	\$1,440.45/meter	\$1,447.50/meter
8" magnetic	\$2,561.60/meter	\$2,574.15/meter
6" propeller	\$695.25/meter	\$698.65/meter
8" propeller	\$927.00/meter	\$931.55/meter
10" propeller	\$1,236.00/meter	\$1,242.05/meter
12" or 14" propeller	\$1,738.15/meter	\$1,746.65/meter
16", 18" or 20" propeller	\$2,935.50/meter	\$2,949.90/meter
4" Omni F2	\$640.15/meter	\$643.30/meter
6" Omni F2	\$1,440.45/meter	\$1,447.50/meter
8" Omni F2	\$2,561.60/meter	\$2,574.15/meter
10" Omni F2	\$2,935.50/meter	\$2,949.90/meter

Sewer Fixed Service Charges: There is no proposed increase for the fixed monthly sewer service charge of \$25.75. Additional fixed monthly charges for the operation and maintenance of the system are based on the volume of water used and treated in excess of 10ccf per month and are shown in the table below.

Proposed Changes for Sewer Quantity and Industrial Waste Charges		
Component	FY 2017-18 Rates	Effective July 1, 2018
Sewer Quantity Charge > 10 ccf's	\$2.74 per ccf	No change
Industrial Waste Charge	\$0.134 per ccf	No change
Collection Service Charge	\$8.40/month	No change
Treatment Quantity Charge	\$14.80/month	No change
OCSD Special Permit Discharge Rate	Up to \$1,377.56 per million gallons	Up to \$1,433.49 per million gallons

Proposed Fats, Oil, and Grease (FOG) Charges		
Component	FY 2017-18 Rates	Effective July 1, 2018
Grease Interceptor Charge	\$250 Bi-annually	\$7.33/month
Conditional Waiver Charge	\$250 Bi-annually	\$2.96/month

Pumping Surcharges, Set-up and Reconnection Fees: A pumping surcharge is added to the commodity rate of customers at higher elevations which requires the District to incur additional pumping costs to supply their water. The surcharge is based on the actual prevailing energy costs and varies depending upon the elevation of the area served. If your business is in an area affected by a pumping surcharge, it is itemized on your monthly bill. Please

visit the IRWD website at www.irwd.com to see charges by zone.

Proposed Changes to Pumping Surcharges, Set-up and Reconnection Fees		
Component	FY 2017-18 Rates	Effective July 1, 2018
Pumping Surcharges by Zone	\$0.21 to \$0.64/ccf	\$0.21 to \$0.65/ccf
One-time Setup Fee for New Accounts	\$25.00	No change
Shutoff Reconnection Fees	\$70.00 - \$95.00	No change
Private Fire Line Service Fee	\$13.60 per diameter inch	No change
Fire Hydrant Charge	\$23.70/month per hydrant	No change

Automatic Pass-Through Adjustments

IRWD has used its best available information to calculate proposed increases in the cost of imported water IRWD purchases from MWD through MWDOC, the replenishment charges paid by IRWD to OCWD for pumping groundwater, and the cost for regional treatment of sewage paid by IRWD to the Orange County Sanitation District (OCSD). IRWD has no control over the amounts set by MWD, MWDOC, OCWD and OCSD (the "Regional Agencies"), and must pass those costs through to IRWD customers. Should any of the Regional Agencies adopt an additional increase (or decrease) in its charges ("Pass-Through Amount"), IRWD will automatically recalculate its rates to include the Pass-Through Amount. If this occurs, the automatic IRWD rate adjustment will not require a public hearing or any additional action by the IRWD Board of Directors. At least 30 days before the effective date of the adjustment, IRWD will provide its customers with the expected adjustment(s), which will generally be calculated as the total projected cost increase divided by the projected annual water consumption or annual total sewage flow as appropriate. This calculation will vary as necessary to reflect IRWD's different service areas and service classes.

Public Hearing

Any customers or property owners within the IRWD service area may file a written protest for the proposed rate increases with IRWD by sending a letter to IRWD, P.O. Box 5149, Irvine, CA 92616. A valid protest letter must include your name, the address at which you receive service from IRWD, a statement of protest and your original signature. Protest letters received by June 25 will be tabulated and presented to the Board of Directors at a public hearing regarding the rate increase to be held on June 25, 2018 at 5 p.m. in the IRWD Board Room, 15600 Sand Canyon Ave., Irvine, CA. Any customers or property owners may appear at the hearing to make comments regarding the proposed rates. Letters may be delivered in person at the hearing, and must be received prior to the conclusion of the June 25 public hearing.

Additional Information

For more information on IRWD's water efficiency programs, rebates and tips on how you can conserve, visit www.irwd.com. If you have any additional questions, please contact IRWD Customer Service at 949-453-5300.

EXHIBIT "C"

RESOLUTION NO. 2018 -

RESOLUTION OF THE BOARD OF DIRECTORS
OF IRVINE RANCH WATER DISTRICT,
ORANGE COUNTY, CALIFORNIA
APPROVING THE DISTRICT'S OPERATING BUDGET FOR
FISCAL YEAR 2018-19 AND DETERMINING COMPLIANCE WITH
ARTICLE XIII B OF THE CALIFORNIA CONSTITUTION

WHEREAS, the Board of Directors of the Irvine Ranch Water District (IRWD) has considered the financial needs of IRWD for purposes of operational costs during Fiscal Year 2018-19; and

WHEREAS, an Operating Budget, as set forth in the attached Exhibit "A", has been prepared and reviewed by this Board of Directors; and

WHEREAS, Article XIII B of the Constitution of the State of California provides that the appropriations of local agencies will be limited each year to those of the previous year, adjusted for changes in population, cost of living, and transfers in sources of funding; and

WHEREAS, Section 8 of Article XIII B specifically excludes user charges or fees or regulatory fees as long as such fees and charges do not produce revenues exceeding the costs reasonably borne in providing the regulation, product or service and Section 9 of Article XIII B excludes from the appropriations subject to limitation an appropriation for debt service or for a qualified capital outlay project, defined by statute as an appropriation for a fixed asset (including land and construction) with a useful life of 10 or more years, and a value which equals or exceeds one hundred thousand dollars (\$100,000); and

WHEREAS, IRWD's Operating Budget for Fiscal Year 2018-19 is totally funded from user charges which are excluded from the appropriations formula established by Article XIII B, Section 8, and other monies that are not proceeds of taxes, such as proceeds of bonds or other indebtedness, and/or are expenditures for debt service or qualified capital outlay projects pursuant to Article XIII B, Section 9.

NOW, THEREFORE, the Board of Directors of IRWD DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. That relative to appropriations subject to limitation under Article XIII B of the Constitution of the State of California, IRWD's Operating Budget for Fiscal Year 2018-19 is hereby determined to be funded totally by revenues other than the proceeds of taxes as defined in Article XIII B, Section 8(c), and/or that the expenditures identified in the Operating Budget are funded by other monies that are not proceeds of taxes, such as proceeds of bonds or other indebtedness, and/or are expenditures for debt service or qualified capital outlay projects pursuant to Article XIII B, Section 9, and that the documentation used in making such determination has been on file in the offices of IRWD for not less than fifteen days prior to the date hereof, pursuant to Section 7910 of the Government Code of the State of California.

Section 2. That IRWD's Operating Budget for Fiscal Year 2018-19 is in compliance with the provisions of Article XIII B of the Constitution of the State of California.

Section 3. That pursuant to Section 21080(b) (8) of the Public Resources Code providing that the establishment, modification, structuring, restructuring or approval of rates, tolls, fares, or other charges by public agencies are exempt from the requirements of the California Environmental Quality Act (CEQA), it is hereby found that the Operating Budget for Fiscal Year 2018-19 including proposed rates and charges is within the purposes set forth in Section 21080(b) of the Public Resources Code including but not by way of limitation, the purposes of (1) meeting operating expenses, (2) purchasing or leasing supplies, equipment or materials, (3) meeting financial reserve needs and requirements, and (4) obtaining funds for capital projects necessary to maintain service within existing areas.

Section 4. That the proposed Operating Budget for Fiscal Year 2018-19 is consistent with the recommendations of the cost of service study approved on June 8, 2015.

Section 5. That the Operating Budget for IRWD for Fiscal Year 2018-19 as set forth in the Summary of the Operating Budget dated April 23, 2018 which is by this reference incorporated herein, be and the same is hereby approved.

ADOPTED, SIGNED AND APPROVED this 23rd day of April, 2018.

President, IRVINE RANCH WATER DISTRICT
and the Board of Directors thereof

Secretary, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

APPROVED AS TO FORM:
LEWIS BRISBOIS
Legal Counsel – IRWD

By: _____

Exhibit "D"

Board Workshop
Operating Budget and Rate Proposal
FY 2018-19

Board Meeting
April 23, 2018



Schedule for Budget & Rate Adoption

FY 2018-19 Operating Budget and Rates

March 8	F&P Committee: Preliminary Budget Review
March 19	Special F&P Committee: Detailed Budget Review
April 3	F&P Committee: Budget Update, Impact on Rates
April 9	First Board Workshop
April 23	Second Board Workshop: Staff recommends adoption of Budget and approval of Proposition 218 Notices
May 4	Proposition 218 Notices mailed
June 25	Adopt FY 2018-19 Rates & Charges

Irvine Ranch Water District



Agenda

First Workshop (held April 9th):

- Detailed Budget Review- FY 2018-19
 - Revenues
 - Significant factors affecting rate setting
 - Operating expenses by system
- Funding Operating Increases Through Rates
- Comparison of Proposed Rates
- Schedule for Budget & Rate Adoption

Tonight's Workshop:

- Budget Update - OCWD action
- Recap Budget Highlights FY 2018-19
- Impact/Comparison of Rates
- Non-Operating Sources and Uses
- Detailed Review of the Proposition 218 Notices
- Recommendations and Next Steps

Irvine Ranch Water District

FY 2018-19 Operating Budget

Changes from April 9, Public Hearing

- OCWD RA decrease - from \$472 / AF to \$462 / AF
reduces cost of water by \$0.5 million
- Average residential rate decreases from 3.0% to 2.7%
- Impact to rates:
 - \$0.02 / ccf for Low Volume
 - \$0.01/ ccf for Base
- Committee recommendation
 - No change in rates
 - Increase payback to the Replacement Fund by \$0.5 million

Irvine Ranch Water District



FY 2018-19 Operating Budget

Comparison of key drivers with prior year budget (in millions):

Consolidated Budget	Adopted FY 17-18	Proposed FY 18-19	Increase / (Decrease)	%
Salaries and Benefits	\$53.7	\$58.1	\$4.4	8.1%
Purchased Water	\$35.3	\$37.4	\$2.1	5.9%
Repairs and Maintenance	\$23.5	\$24.0	\$0.5	2.1%
Electricity	\$14.6	\$14.5	(\$0.1)	-0.7%
Other Expenses	\$21.5	\$23.1	\$1.6	7.7%
Total	\$148.6	\$157.1	\$8.5	5.7%

Irvine Ranch Water District

FY 2018-19 Operating Budget

(in thousands)	SOURCES AND USES				
	Water	Sewer	Recycled	Conserve & NTS	Total
Revenue:					
Commodity	\$ 42,159	\$ -	\$ 15,972	\$ 1,932	\$ 60,064
Service	34,322	51,893	6,812	-	93,027
Over-Allocation	-	-	-	9,079	9,079
Total Revenues	\$ 76,481	\$ 51,893	\$ 22,785	\$ 11,012	\$ 162,171
Contribution to Enhancement and Replacement Funds	(8,520)	(19,500)	(1,120)	-	(29,140)
Net Revenues	\$ 67,961	\$ 32,393	\$ 21,665	\$ 11,012	\$ 133,031
Expenses:					
Total Direct	\$ 54,392	\$ 22,385	\$ 14,642	\$ 7,961	\$ 99,380
Total Indirect	13,058	9,276	6,466	2,898	31,718
General Plant	512	732	537	153	1,934
Total Expenses	\$ 67,961	\$ 32,393	\$ 21,665	\$ 11,012	\$ 133,031
Net Operating Position	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

Irvine Ranch Water District



PROPOSED RATES



FY 2018-19 Operating Budget

Tiers	Low	Base	Inefficient	Wasteful
	Volume	Rate		
Lowest Cost Source of Water	\$1.35			
District Wide Conservation	\$0.05	\$0.05	\$0.05	\$0.05
Melded Cost of Water		\$1.84		
Blended Cost of Baker and Potable Import			\$3.21	
Loaded Cost of Imported Water				\$3.35
Water Banking				\$0.25
Conservation			\$0.90	\$2.87
Natural Treatment Systems (NTS)			\$0.57	\$6.83
Total Cost per Tier per ccf	\$1.40	\$1.89	\$4.73	\$13.35
FY 2017-18 Rates by Tier	\$1.36	\$1.70	\$4.09	\$12.06
Change	\$0.04	\$0.19	\$0.64	\$1.29
Percentage Change	2.9%	11.2%	15.6%	10.7%
Use of Sinking Fund for Rate Parity (M)	\$0.7	\$1.1		

Irvine Ranch Water District



Proposed Rates for IRWD

Typical Residential Customer

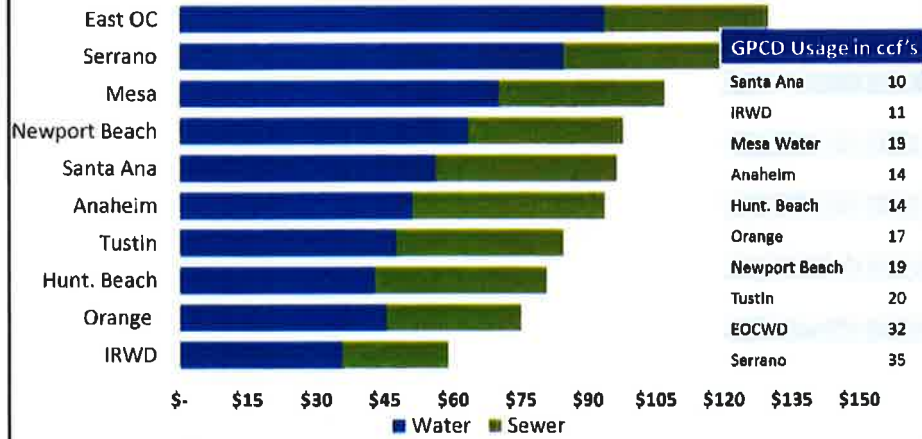
	Current Rate FY 2017-18	Proposed Rate FY 18-19	Rate Change	% Change
Water				
Service Charge *	\$ 10.30	\$ 10.35	\$ 0.05	
Commodity Charge **	<u>18.70</u>	<u>20.23</u>	<u>1.53</u>	
Total Water Charge	\$ 29.00	\$ 30.70	\$ 1.58	
Sewer				
Service Charge *	\$ 23.20	\$ 23.20	\$ 0.00	
Total Typical Residential Monthly Bill	\$ 52.20	\$ 53.78	\$ 1.58	3.0%

* Treated water service charge assumes a 5/8" x 3/4" meter. Both the water and sewer service charges include components for enhancement and replacement capital. No additions have been included for either fund.

** Commodity charges for a typical residential customer are based on 12 ccf (District average).
 Current Rates: Low Volume \$1.36 Base \$1.70
 Proposed Rates: Low Volume \$1.40 3% Base \$1.89 11%

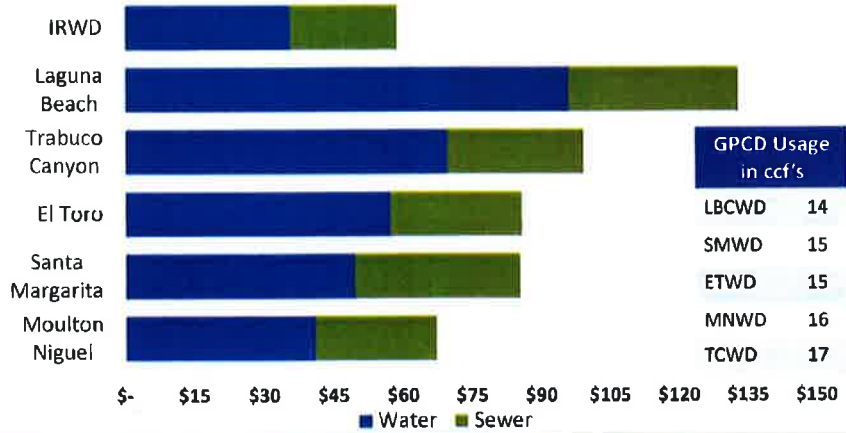
Comparison of Proposed Rates

Monthly Water & Sewer Bill Based on 15 ccf of Usage and Groundwater Availability



Comparison of Proposed Rates

Monthly Water & Sewer Bill Based on 15 ccf Usage and Imported Water

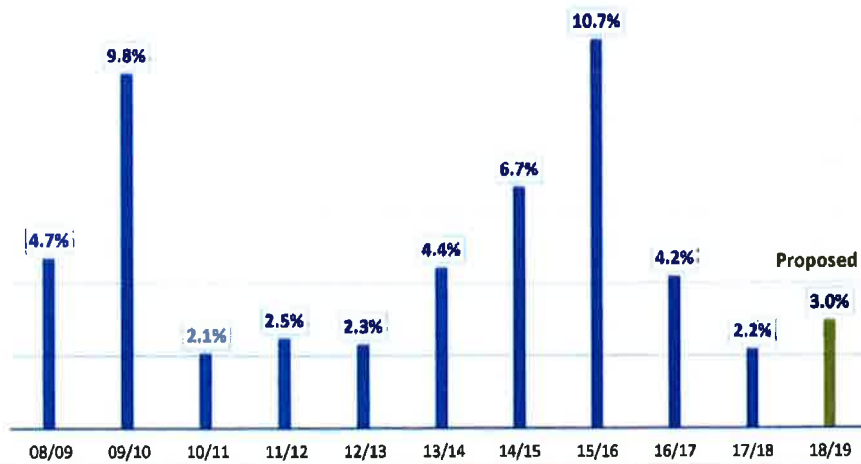


Irvine Ranch Water District

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History of Rate Increases

Average Monthly Rate Increase-Irvine Ranch Rate Area



Irvine Ranch Water District

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NON-OPERATING SOURCES AND USES



FY 2018-19 Non-Operating Budget

NON-OPERATING SOURCES & USES OF FUNDS

(In thousands)

	<u>FY 2017-18</u>	<u>FY 2018-19</u>	<u>Change</u>
Revenues:			
Property Taxes	\$ 52,500	\$ 59,300	\$ 6,800
Investment Income	4,200	4,768	568
Connection Fees	26,000	20,000	(6,000)
Real Estate Income	13,400	17,000	3,600
Real Estate Fair Value Change	-	6,300	6,300
Other Income	8,000	8,000	-
Total Revenue	\$ 104,100	\$ 115,368	\$ 11,268
Expenses:			
Interest Expense	\$ 28,300	\$ 26,294	\$ (2,006)
Real Estate Expense	7,300	5,170	(2,130)
Other Expenses	2,000	2,000	-
Total Expense	\$ 37,600	\$ 33,464	\$ (4,136)
Net Sources and Uses	\$ 66,500	\$ 81,904	\$ 15,404

Irvine Ranch Water District



PROPOSITION 218 NOTICES



PROPOSITION 218 NOTICES

Customer friendly 2-3 page format

- Basic components
- Proposed commodity rates
- Proposed monthly water and sewer service charges
- Other required noticing

PROP 218 STRUCTURE

Proposed Commodity Rates

Proposed Residential Commodity Rates

Tier	% of Monthly Water Budget	FY 2017-18 Rates per ccf	Effective July 1, 2018 per ccf
Low Volume	0 -40 %	\$ 1.36	\$1.40
Base Rate	41 -100%	\$ 1.70	\$1.89
Inefficient	101-140%	\$ 4.09	\$4.73
Wasteful	141+	\$12.06	\$13.35

Irvine Ranch Water District

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PROP 218 STRUCTURE

Proposed Water Service Fixed Monthly Charges for System Operation and Maintenance

Residential meter size – homes, condos, apartments	Current Rates	Effective July 1, 2018
5/8 x 3/4"	\$10.30/meter	\$10.35/meter
3/4" disc meter	\$15.45/meter	\$15.55/meter
1" disc meter	\$25.75/meter	\$25.90/meter
1 1/2" disc meter	\$51.50/meter	\$51.75/meter
2" disc meter	\$82.40/meter	\$82.80/meter
2" turbo meter	\$108.15/meter	\$108.70/meter
3" turbo meter	\$247.20/meter	\$248.40/meter
4" turbo meter	\$515.00/meter	\$517.50/meter
6" turbo meter	\$1,030.00/meter	\$1,035.05/meter
6" Omni F2 meter	\$1,440.45/meter	\$1,447.50/meter
8" Omni F2 meter	\$2,561.60/meter	\$2,574.15/meter
Residential master meter (shared) apartments and condominiums (5/8 x 3/4" meter)	\$10.30/meter	\$10.35/meter

Irvine Ranch Water District

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PROP 218 STRUCTURE

Proposed Changes for Sewer Service Fixed Monthly Charges for System Operation and Maintenance

Usage	Current Rates	Effective July 1, 2018
Average water usage exceeds 10 ccfs per month	\$25.75/month	No Change
Average water usage falls between 5 and 10 ccfs	\$23.20/month	No Change
Average water usage falls below 5 ccfs	\$19.30/month	No Change
Collection Service Charge	\$8.40/month	No Change
Treatment Service Charge	\$14.80/month	No Change

PROP 218 STRUCTURE

Proposed Changes to Pumping Surcharges, Set-up and Reconnection Fees

Component	Current Rates	Proposed Rates
Pumping Surcharges by Zone	\$0.21 to \$0.64/ccf	\$0.21 to \$0.65/ccf
One-time Setup Fee for New Accounts	\$25.00	No change
Shutoff Reconnection Fees	\$70.00 - \$95.00	No change

PROP 218 STRUCTURE

Proposed Recycled Water Commodity Rates

Tier	% of Monthly Water Budget	per ccf	
		FY 2017-18 Rates	Effective July 1, 2018
Low Volume	0 -40 %	\$1.01	\$1.13
Base Rate	41 -100%	\$1.36	\$1.47
Inefficient	101-140%	\$2.33	\$3.11
Wasteful	141+	\$5.08	\$6.44

Proposed Recycled Water Agricultural Rates

Tier	per ccf	
	FY 2017-18 Rates	Effective July 1, 2018
Base Rate	\$1.40	\$1.52

Irvine Ranch Water District

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PROP 218 STRUCTURE

Proposed Potable Commercial Commodity Rates

Tier	% of Monthly Water Budget	per ccf	
		FY 2017-18 Rates	Effective July 1, 2018
Base Rate	0 -100 %	\$1.70	\$1.89
Wasteful	101+	\$12.06	\$13.35

Proposed Recycled Water Commercial Commodity Rates

Tier	% of Monthly Water Budget	per ccf	
		FY 2017-18 Rates	Effective July 1, 2018
Base Rate	0 -100 %	\$0.95	\$1.07
Wasteful	101+	\$5.08	\$6.44

Irvine Ranch Water District

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PROP 218 STRUCTURE

Other Required Disclosures

- Automatic pass-through adjustments
- Notice the Public Hearing date and location

Recommendations & Next Steps

Recommended Board Actions:

1. Adopt the Resolution to Approve the FY 2018-19 Operating Budget
2. Approve the Proposition 218 Notices

Next Steps:

1. Mail Proposition 218 Notices (~May 4)
2. Auditors to receive and Tabulate Responses over 45 day period
3. June 25, 2018: Adopt proposed Rates & Charges effective July 1, 2018
4. 1st Bills with application of new rates will occur in August.

QUESTIONS/DISCUSSION



April 23, 2018

Prepared by: E. Akiyoshi/M. Robinson

Submitted by: K. Burton *(KLB)*

Approved by: Paul A. Cook *(Signature)*

BOARD WORKSHOP

FISCAL YEAR 2018-19 CAPITAL BUDGET

SUMMARY:

Staff will provide a presentation on the forecasted Fiscal Year (FY) 2018-19 Capital Budget. The projected expenditures for the FY 2018-19 Capital Budget are \$94.8 million. This item is presented for information and discussion purposes prior to Board adoption of the FY 2018-19 Capital Budget.

BACKGROUND:

The forecasted capital expenditures for the upcoming fiscal year are presented annually to the Engineering and Operations Committee and Board for review. The presentation, attached as Exhibit "A", includes an update on FY 2017-18 budget-to-actual capital expenditures, and forecasted FY 2018-19 capital expenditures.

In the current fiscal year, FY 2017-18, budgeted expenditures were originally estimated at \$97.2 million. Actual expenditures on projects identified in last year's projected expenditures are forecasted at approximately \$92.1 million (approximately 95% of projected expenditures).

Estimated capital expenditures for FY 2018-19 are \$94.8 million. Three project groups will consist of approximately 50% of projected expenditures: 1) Replacement and Rehabilitation projects, 2) Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities, and 3) Regional Development.

FISCAL IMPACTS:

The following table shows the major capital projects for FY 2018-19. The FY 2018-19 Capital Budget, attached as Exhibit "B", provides details on all capital projects with anticipated expenditures in FY 2018-19.

Project	FY 2018-19 (\$ Million)
Replacement & Rehabilitation	\$18.4
MWRP Biosolids & Energy Recovery Facilities	\$18.4
Regional Development (Eastwood Pump Station)	\$11.0
OCSD Capital Expenditures	\$9.7
Zone 1 Reservoir No. 2	\$6.2
Development - Great Park Area	\$3.9
Irvine Lake Pipeline Zone C+ Conversion	\$3.7
Well Rehabilitation	\$3.2
General Plant Capital	\$2.7
Nonpotable Storage	\$2.1
Subtotal	\$79.3
Total All Projects	\$94.8

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on April 17, 2018.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

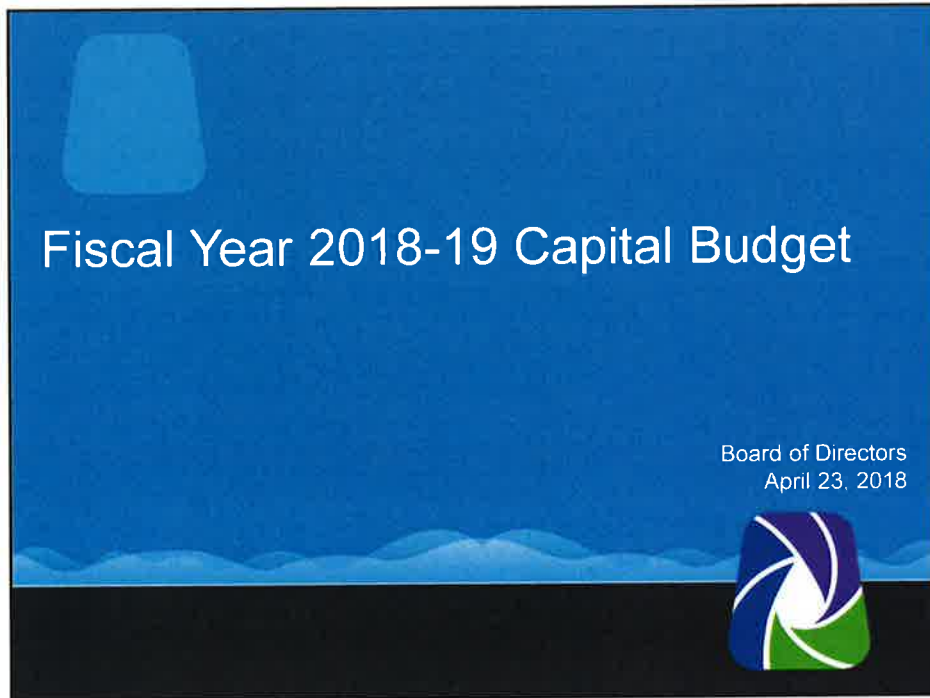
RESOLUTION NO. 2018 –

RESOLUTION OF THE BOARD OF DIRECTORS OF
 IRVINE RANCH WATER DISTRICT, ORANGE COUNTY
 CALIFORNIA, APPROVING THE DISTRICT’S CAPITAL
 BUDGET FOR FISCAL YEAR 2018-19

LIST OF EXHIBITS:

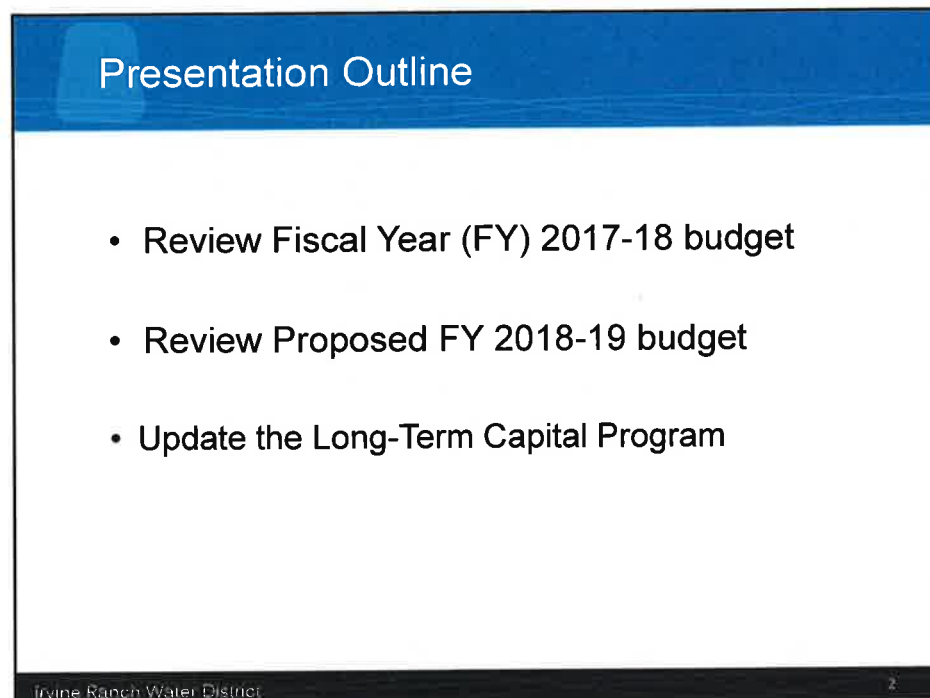

- Exhibit “A” – Capital Budget Presentation
- Exhibit “B” – FY 2018-19 Capital Budget
- Exhibit “C” – Resolution

EXHIBIT "A"



Fiscal Year 2018-19 Capital Budget

Board of Directors
April 23, 2018



Presentation Outline

- Review Fiscal Year (FY) 2017-18 budget
- Review Proposed FY 2018-19 budget
- Update the Long-Term Capital Program

Irvine Ranch Water District

Annual Capital Budget

Accomplishes the following objectives

- Identifies all capital projects for next year
- Obtains Board approval for the capital budgets
- Forecasts annual capital expenditures
- Identifies “Flagged” projects for further Board discussion

FY 2017-18 Capital Budget



FY 2017-18 Overview

Description	Budgeted Expenditures (\$ Millions)*	Actual Expenditures (\$ Millions)*
Top 10 project groups	82.9	76.3
Other projects	14.3	15.8
Subtotal	\$97.2	\$92.1

* Projected through June 2018. Capital offsets (e.g. grants and reimbursements) not subtracted.

Irvine Ranch Water District

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Compare Budgeted to Actual Expenditures

No.	Description	Budgeted (\$ Millions)	Actual (\$ Millions)*
1	Irvine Lake Pipeline Conversion Projects	16.2	8.2
2	MWRP Biosolids & Energy Recovery Facilities	15.4	19.0
3	OCSD Capital Expenditures	9.8	33.5
4	System Repair and Rehabilitation	9.8	5.5
5	Operational Enhancement Projects	9.6	2.7
6	Annual Operational System Repair and Rehabilitation	7.6	3.3
7	Asset Optimization	4.3	0.1
8	Development - Regional Projects	4.2	1.3
9	Water Resources (UCI RW Conversions)	3.2	1.1
10	Well Rehabilitation	2.8	1.6
	Other Projects	14.3	15.8
	Subtotal	\$97.2	\$92.1

* Capital offsets = \$9.10 Million
Projected through June 2018

Irvine Ranch Water District

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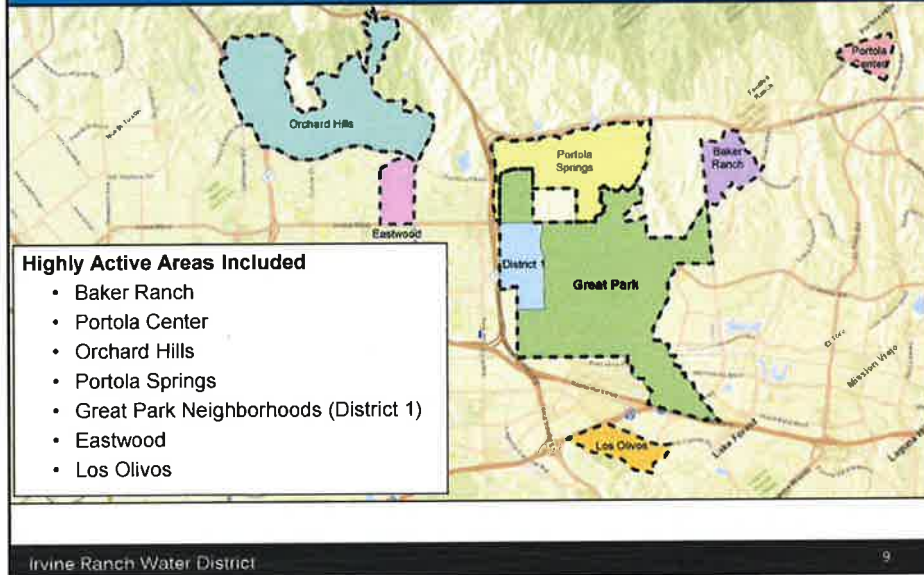
Review “Under-Expended” Projects

Description	Under Expended (\$ Millions)
Irvine Lake Pipeline North Conversion	-8.0
Asset Optimization	-4.1
Zone 1 Reservoir	-2.6
Wells 11 and 15 Surge Tank Replacement	-1.5
DRWF Rehabilitation	-1.3
OPA Zone C+ Pipelines	-1.1
Service Line-Valve-Main Replacement	-1.1
Newport Coast Lift Station Improvements	-1.0

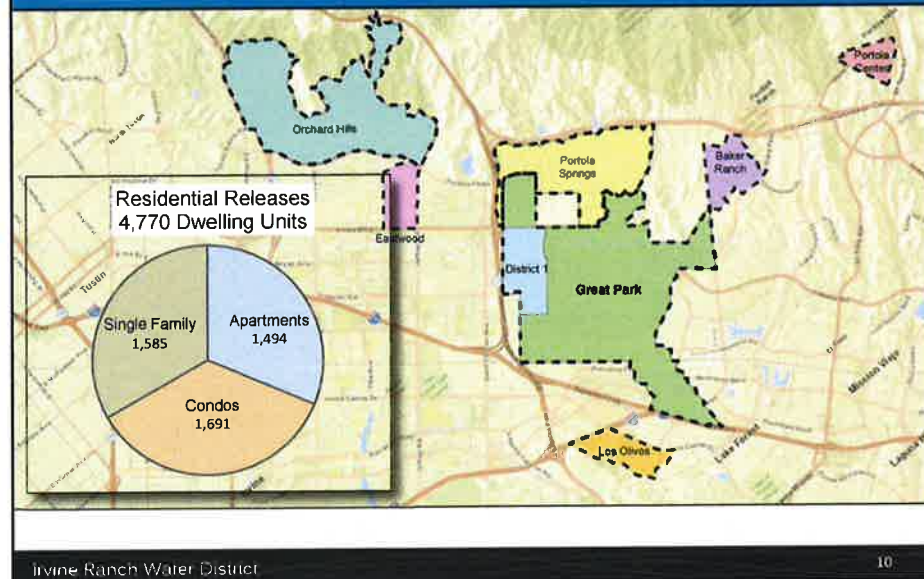
Update on Development



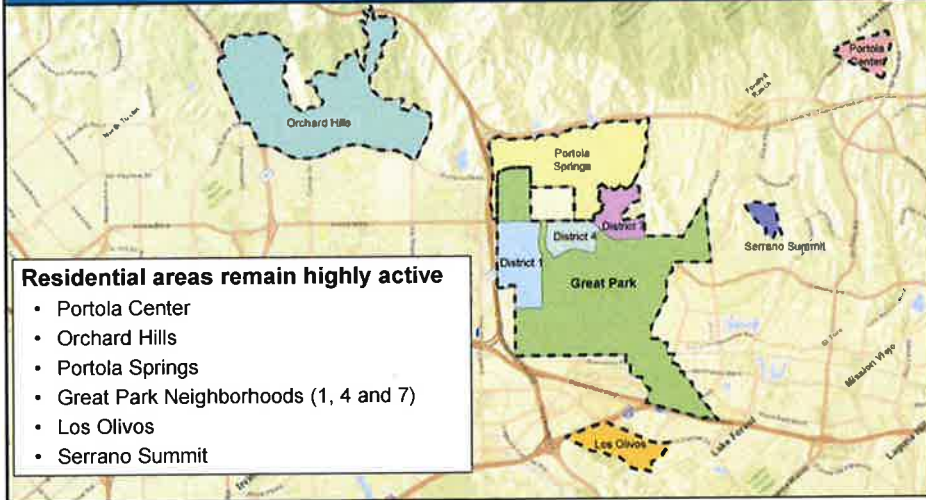
Review Development in FY 2017-18



Review Development in FY 2017-18



Projected Development in FY 2018-19



Irvine Ranch Water District

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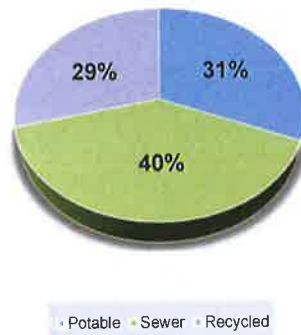
FY 2018-19 Capital Budget



Overview

FY 2018-19 Expenditures = \$94.8 million

Expenditures by System



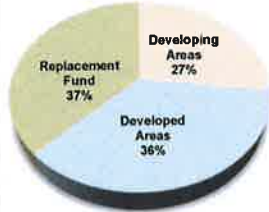
FY 2018-19 Top 10 Project Groups

No.	Description	Forecasted Expenditures (\$ Millions)*
1	Replacement & Rehabilitation	18.4
2	MWRP Biosolids & Energy Recovery Facilities	18.4
3	Regional Development (Eastwood Pump Station)	11.0
4	OCSD Capital Expenditures	9.7
5	Zone 1 Reservoir No. 2	6.2
6	Development - Great Park Area	3.9
7	Irvine Lake Pipeline Zone C+ Conversion	3.7
8	Well Rehabilitation	3.2
9	General Plant Capital	2.7
10	Non-Potable Storage	2.1
	Subtotal	\$79.3
	Other Projects	15.5
	Total	\$94.8

* Capital offsets = \$1-2 Million.

Capital Budget Funding Sources

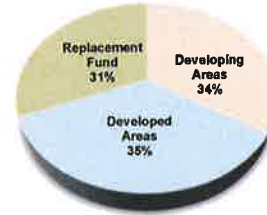
FY 2018-19
\$94.8 M



FY 2017-18
\$97.2 M



FY 2016-17
\$159.5 M



Irvine Ranch Water District

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FY 2018-19 Flagged Projects

Flagged projects require additional Board review prior to capital expenditures.
FY 2018-19 flagged projects include:

- 01402 – Wells 51/52/53 Treatment Alternatives Study
- 03808 – Syphon Reservoir Improvements
- 07140 – Tustin Legacy Red Hill Well Drilling And Equipping

All projects with start dates beyond the FY 2018-19 must be presented to the Board prior to any expenditures.

Irvine Ranch Water District

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Long-Term Capital Program



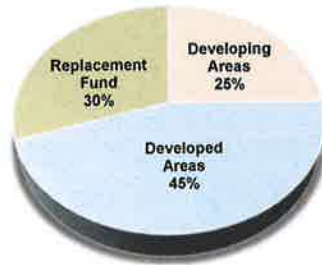
Long Term Capital Program Description

- Identifies all planned capital projects through 2050
- Includes three years of replacement projects
- Excludes Replacement Planning Model 100-year funding requirements
- Provides data to the Financial Enterprise Model for setting Connection Fees, Property Taxes, and User Rates
- Estimates capital cash flow

Overview

Proposed Long Term Capital Program \$623.6 M

Funding Sources



Long Term Capital Program Summary

Component ¹	Budget and Expenditures (\$ Millions)
FY 2017-18 Unexpended LTCP	621.0
Forecasted FY 2017-18 Expenditures	(92.1)
Proposed FY 2018-19 Increases	94.7
Total FY 2018-19 Unexpended LTCP	\$623.6

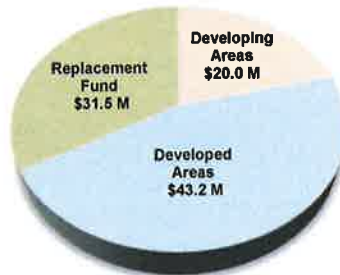
¹ All costs and expenditures account for applicable offsets (~\$55 million)

Long Term Capital Program Increases

Project Groups	Increases Including Offsets (\$ Millions)
OCSD - CORF - Solids Lease	59.4
Syphon Reservoir Improvements	11.2
Extending OCWD Annexation	10.1
Development (PA-51, IIC East Zone "B" PS)	6.3
Operational	3.9
Other	3.8
Total	\$94.7

Long Term Capital Program Increases

Total By Funding Sources \$94.7 M*



* Excludes Replacement Planning Model expenditures and capital offsets subtracted

Recommendation

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2018 –

RESOLUTION OF THE BOARD OF DIRECTORS OF
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY
CALIFORNIA, APPROVING THE DISTRICT'S CAPITAL
BUDGET FOR FISCAL YEAR 2018-19

EXHIBIT "B"

CAPITAL BUDGET

FISCAL YEAR 2018-19

**Adopted
April 23, 2018**



**Irvine Ranch
WATER DISTRICT**

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

**FISCAL YEAR 2018-19
CAPITAL BUDGET**

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<u>TAB</u>	<u>DESCRIPTION</u>
1.	Project Expenditures by Project Number with Improvement District Allocations
2.	Flagged Projects
3.	Project Expenditure Groups
4.	Water Improvement District Map
5.	Sewer Improvement District Map

Improvement Districts

System	Project	Project Title	Start	End	FY18-19 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	1880	2100	2220	2120	2130	2250	2400	2530	256	2850	2880
Potable Capital	07091	DRWF WELL 16 REHAB	2/1/18	3/31/19	\$697,083	\$770,000	100.0																		
Potable Capital	07090	DRWF WELL 17 REHAB	7/1/17	7/31/18	\$17,488	\$770,000	100.0																		
Potable Capital	10097	DRWF WELL 2 REHAB	8/1/17	7/31/18	\$18,750	\$770,000	100.0																		
Potable Capital	07092	DRWF WELL 4 REHAB	6/1/19	6/30/22	\$667	\$770,000	100.0																		
Potable Capital	05761	EAST IRVINE ZONE 1 RESERVOIR INTERIOR RECOATIN	6/1/18	6/30/22	\$1,946	\$2,748,500	100.0																		
Potable Capital	05406	EL MODENA INLET MODIFICATION	6/1/18	6/30/22	\$2,270	\$156,200		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Recycled Capital	10093	EMERGENCY MWRP RW DIVERSION TO SAN DIEGO C	7/1/17	12/31/19	\$652,412	\$1,905,000											33.1	3.4	3.4	48.6		9.6	0.3	1.3	0.3
Potable Capital	07444	ENERGY STORAGE SYSTEMS	7/1/16	1/31/19	\$55,308	\$272,200		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Potable Capital	03566	ENTERPRISE ASSET MGMT SOFTWARE IMPLEMENT-	10/1/11	12/31/19	\$488,595	\$2,682,100		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Sewer Capital	03567	ENTERPRISE ASSET MGMT SOFTWARE IMPLEMENT-S	10/1/11	12/31/19	\$488,595	\$2,682,100											33.1	3.4	3.4	48.5		9.7	0.3	1.3	0.3
Potable Capital	07146	GEN SYS MODS 18/19-DW	7/1/18	6/30/19	\$190,300	\$190,300		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Recycled Capital	07147	GEN SYS MODS 18/19-RW	7/1/18	6/30/19	\$100,500	\$100,500											14.6	10.7	4.1	51.0	7.7	10.4		1.5	
Sewer Capital	07157	GEN SYS MODS 18/19-SS	7/1/18	6/30/19	\$330,000	\$330,000																			
Potable Capital	10605	GP_DEP 250_FY 18_19	7/1/18	6/30/20	\$903,000	\$903,000	25.1	2.8	0.3	0.3	4.2	1.0		0.1		45.5	4.9	1.5	0.8	10.3	0.8	2.1		0.3	
Potable Capital	10606	GP_DEP 515_FY 18_19	7/1/18	6/30/20	\$52,000	\$52,000	25.1	2.8	0.3	0.3	4.2	1.0		0.1		45.5	4.9	1.5	0.8	10.3	0.8	2.1		0.3	
Potable Capital	10607	GP_DEP 600_FY 18_19	7/1/18	6/30/20	\$287,050	\$287,050	25.1	2.8	0.3	0.3	4.2	1.0		0.1		45.5	4.9	1.5	0.8	10.3	0.8	2.1		0.3	
Potable Capital	10608	GP_DEP 740_FY 18_19	7/1/18	6/30/20	\$24,000	\$24,000	25.1	2.8	0.3	0.3	4.2	1.0		0.1		45.5	4.9	1.5	0.8	10.3	0.8	2.1		0.3	
Potable Capital	10609	GP_DEP 870_FY 18_19	7/1/18	6/30/20	\$1,428,200	\$1,428,200	25.1	2.8	0.3	0.3	4.2	1.0		0.1		45.5	4.9	1.5	0.8	10.3	0.8	2.1		0.3	
Recycled Capital	06198	IIC EAST ZONE B BPS UPGRADES	1/1/16	12/31/19	\$1,418,137	\$2,128,600																			
Recycled Capital	05823	IIP NORTH CONVERSION-PIPELINES	3/1/14	12/31/18	\$1,168,571	\$10,991,100											2.1	2.5	1.0	46.3	1.8	46.0		0.3	
Recycled Capital	05407	IIP NORTH CONVERSION-RESERVOIR	3/1/14	6/30/19	\$2,500,135	\$14,382,500											0.3	40.1	0.1	16.8	0.3	42.3		0.1	
Potable Capital	10522	INDUSTRIAL COATINGS REPLACEMENT 18/19-DW	7/1/18	6/30/19	\$210,000	\$210,000	100.0																		
Recycled Capital	10523	INDUSTRIAL COATINGS REPLACEMENT 18/19-RW	7/1/18	6/30/19	\$220,000	\$220,000																			
Sewer Capital	10524	INDUSTRIAL COATINGS REPLACEMENT 18/19-SS	7/1/18	6/30/19	\$110,000	\$110,000																			
Potable Capital	07887	IRVINE LAKE SERVICE IMPROVEMENT	6/1/18	6/30/22	\$4,541	\$228,800		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Potable Capital	10541	LAGUNA CYN RD DW PIPE CORR REP	5/1/18	6/30/19	\$468,210	\$491,700	100.0																		
Recycled Capital	05156	LAGUNA CYN RD RW PIPE CORR REP	1/1/18	6/30/19	\$495,468	\$588,500																			
Potable Capital	10096	LAKE FOREST NAKASE DW IMPROVEMENTS	6/1/19	7/31/22	\$4,567	\$437,000						100.0													
Potable Capital	05404	LAKE FOREST Z2-2RA PRV AT COMMERCENTRE	7/1/18	12/31/20	\$113,175	\$412,700									100.0										
Sewer Capital	07155	LAWRP SYSTEM REPLACEMENTS 18/19	7/1/18	6/30/19	\$138,600	\$138,600																			
Potable Capital	10099	LF PORTOLA FROM RANCHO PKWY TO GLEN RANCH	6/1/19	6/30/22	\$1,200	\$972,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Sewer Capital	10095	LF SEWER AUTUMNWOOD/ELDERWOOD	8/1/17	12/31/19	\$100,869	\$719,000																			
Recycled Capital	10551	LF ZNB EAST RES FLOATING COVER	2/1/18	12/31/18	\$355,000	\$390,000																			
Sewer Capital	05520	MAINTENANCE ACCESS FOR FOUR SEWER REACHES	6/1/18	6/30/22	\$3,632	\$368,000																			
Potable Capital	07896	MARSH O&M PLAN UPDATE	1/1/18	6/30/20	\$118,800	\$297,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Potable Capital	10537	MASON PARK DW PIPE REPLACEMENT	6/1/19	12/31/20	\$4,286	\$531,000	100.0																		

Improvement Districts

System	Project	Project Title	Start	End	FY18-19 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	1880	2100	2220	2120	2130	2250	2400	2530	256	2850	2880
Potable Capital	07113	MECH-ELEC SYS REPLACEMENT 18/19-DW	7/1/18	6/30/19	\$950,000	\$950,000	100.0																		
Recycled Capital	07114	MECH-ELEC SYS REPLACEMENT 18/19-RW	7/1/18	6/30/19	\$660,000	\$660,000										100.0									
Sewer Capital	07115	MECH-ELEC SYS REPLACEMENT 18/19-SS	7/1/18	6/30/19	\$550,000	\$550,000										100.0									
Potable Capital	10629	METER REPLACEMENT 18/19-DW	7/1/18	6/30/19	\$2,646,290	\$2,646,290	100.0																		
Recycled Capital	10633	METER REPLACEMENT 18/19-RW	7/1/18	6/30/19	\$111,700	\$111,700										100.0									
Potable Capital	07824	MICHELSON CAMPUS SECURITY-DW	1/3/17	6/30/19	\$33,878	\$99,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Recycled Capital	07826	MICHELSON CAMPUS SECURITY-RW	1/3/17	6/30/19	\$33,878	\$99,000										14.6	10.7	4.1	51.0	7.7	10.4		1.5		
Sewer Capital	07825	MICHELSON CAMPUS SECURITY-SS	1/3/17	6/30/19	\$33,878	\$99,000										33.1	3.4	3.4	48.5		9.7	0.3	1.3	0.3	
Sewer Capital	07097	MICHELSON SEWER FORCE MAIN RELINING	12/1/16	12/31/18	\$544,735	\$1,367,300										100.0									
Potable Capital	10543	MIGRATE EMAIL TO MS CLOUD DW	5/1/19	12/31/20	\$9,350	\$93,500	100.0																		
Sewer Capital	10544	MIGRATE EMAIL TO MS CLOUD SS	5/1/19	12/31/20	\$9,350	\$93,500										100.0									
Recycled Capital	04388	MULTI-ZONE BPS-ZONE A TO SYPHON	7/1/17	6/30/22	\$400	\$2,989,500										14.6	10.7	4.1	51.0	7.7	10.4		1.5		
Recycled Capital	04457	MULTI-ZONE BPS-ZONE A-B	3/1/16	3/31/20	\$4,155,776	\$5,950,000										13.7	48.2				38.1				
Recycled Capital	04400	MULTI-ZONE BPS-ZONE A-C	3/1/16	3/31/20	\$5,375,884	\$7,520,000											56.0				44.0				
Sewer Capital	04286	MWRP BIOSOLIDS AND ENERGY RECOVERY FACILITIE	4/1/13	12/31/21	\$18,364,808	\$227,573,100										45.5	18.9	1.5	1.5	27.7		4.1	0.1	0.6	0.1
Sewer Capital	07900	MWRP DUMP STATION IMPROVEMENTS	6/1/18	12/31/20	\$128,115	\$291,500										33.1	3.4	3.4	48.5		9.7	0.3	1.3	0.3	
Sewer Capital	07892	MWRP FILTER VALVES AND GATE REPLACEMENT	12/1/18	6/30/20	\$4,071	\$461,000										100.0									
Sewer Capital	07890	MWRP HEADWORKS PLATFORMS	6/1/18	7/31/20	\$61,892	\$175,000										33.1	3.4	3.4	48.5		9.7	0.3	1.3	0.3	
Sewer Capital	07891	MWRP HEADWORKS SCREENING AREA DIVERTER CH	6/1/18	6/30/20	\$94,023	\$180,500										33.1	3.4	3.4	48.5		9.7	0.3	1.3	0.3	
Sewer Capital	04467	MWRP REPAIRS - ACT SLUDGE-2DARY TANKS-RAS/W	10/1/16	12/31/19	\$750,000	\$1,200,000										100.0									
Sewer Capital	07116	MWRP SYS REPLACEMENTS 18/19	7/1/18	6/30/19	\$450,000	\$450,000										100.0									
Sewer Capital	10535	MWRP TRANSFORMER T1 REPLACEMENT	1/1/19	12/31/20	\$65,000	\$543,000										100.0									
Sewer Capital	05470	NEWPORT COAST SLS AND FM RECOATING	6/1/15	12/31/18	\$133,962	\$2,135,500										100.0									
Sewer Capital	06400	NEWPORT COAST SLS IMPROVEMENTS	6/1/15	12/31/18	\$139,320	\$2,654,600															100.0				
Recycled Capital	07807	NON-POTABLE WATER STUDIES 18/19	7/1/18	6/30/19	\$60,000	\$60,000										14.6	10.7	4.1	51.0	7.7	10.4		1.5		
Recycled Capital	06216	NORTHWOOD ZONE B BPS DEMOLITION	6/1/17	1/31/21	\$76,700	\$539,000											54.2		23.1		22.7				
Potable Capital	10548	NTS GENERAL SYSTEM MODIFICATIONS 18/19 NTS	7/1/18	6/30/19	\$121,000	\$121,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Potable Capital	06212	NTS INFILTRATION STUDY	6/1/18	6/30/19	\$61,054	\$64,900		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Potable Capital	07895	NTS MASTER PLAN UPDATE	1/1/18	6/30/19	\$66,667	\$100,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Sewer Capital	10502	OCSD CORF LONG TERM CAPITAL PROGRAM 2018 T	7/1/17	6/30/2050	\$5,421,125	\$154,476,000										72.7	9.0	0.9	0.9	13.3		2.6	0.1	0.4	0.1
Sewer Capital	10500	OCSD EQUITY LONG TERM CAPITAL PROGRAM 2018	7/1/17	6/30/2050	(\$364,375)	\$13,591,000										33.1	3.4	3.4	48.6		9.6	0.3	1.3	0.3	
Sewer Capital	10594	OCSD SOLIDS LEASE LONG TERM CAPITAL PROGRAM	7/1/17	6/30/20	\$4,691,000	\$9,582,000										33.1	3.4	3.4	48.6		9.6	0.3	1.3	0.3	
Potable Capital	10503	OCWD ANNEXATION LONG TERM CAPITAL PROGRA	7/1/17	1/30/2050	\$598,100	\$22,861,400		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Potable Capital	01336	OFFICE SPACE IMPROVEMENTS-DW	6/1/18	12/31/19	\$284,628	\$477,300	100.0																		
Recycled Capital	01257	OFFICE SPACE IMPROVEMENTS-RW	6/1/18	12/31/19	\$111,613	\$181,400										100.0									
Sewer Capital	01549	OFFICE SPACE IMPROVEMENTS-SS	6/1/18	12/31/19	\$265,597	\$445,900										100.0									

Improvement Districts

System	Project	Project Title	Start	End	FY18-19 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	1880	2100	2220	2120	2130	2250	2400	2530	256	2850	2880	
Recycled Capital	07096	OSO RES STRAINER AND METER	4/1/18	12/31/19	\$218,524	\$375,100											14.6	10.7	4.1	51.0	7.7	10.4		1.5		
Recycled Capital	05919	PA1 NHB1 ORCHARD HILLS 16 ZC 6 ZC+	10/1/14	7/31/18	\$21,522	\$561,400																			100.0	
Potable Capital	07012	PA1 NHB3 ORCHARD HILLS 16 DW Z5	2/1/16	7/31/18	\$60,474	\$889,700						100.0														
Recycled Capital	07013	PA1 NHB3 ORCHARD HILLS 6 8 10 12 RW ZC	2/1/16	7/31/18	\$27,569	\$475,200																				100.0
Recycled Capital	07017	PA1 NHB3 ORCHARD HILLS 6 8 RW ZC+	2/1/16	7/31/18	\$14,229	\$250,800																				100.0
Recycled Capital	07555	PA1 NHB3 ORCHARD HILLS F ST (RIDGE GATE TO E ST	8/1/16	7/31/18	\$13,437	\$167,800																				100.0
Recycled Capital	01722	PA1 NHB4 ORCHARD HILLS RW	6/1/19	6/30/22	\$4,219	\$566,500																				100.0
Sewer Capital	07173	PA1 PORTOLA PKWY SEWER REPLACEMENT	6/1/19	6/30/22	\$8,038	\$744,700																				100.0
Potable Capital	04680	PA185 HIDDEN CANYON 12 DW	7/1/13	7/31/18	\$7,115	\$315,700						100.0														
Recycled Capital	05168	PA185 HIDDEN CANYON 36 RW PIPELINE	3/1/13	7/31/18	\$60,474	\$2,208,200												14.6	10.7	4.1	51.0	7.7	10.4		1.5	
Recycled Capital	04681	PA185 HIDDEN CANYON 6 - 8 RW	7/1/13	7/31/18	\$7,115	\$315,700																				100.0
Recycled Capital	03735	PA39 PH2 FACILITIES-RW	6/1/16	10/31/18	\$184,508	\$470,000																				100.0
Recycled Capital	03734	PA40 TRAVELAND FACILITIES-RW	6/1/19	7/31/22	\$4,269	\$447,700																				79.0
Sewer Capital	05788	PA51 ALTON PKWY SS RELOCATION 12 AND 18	8/1/14	7/31/18	\$40,981	\$1,232,300																				100.0
Potable Capital	05816	PA51 ALTON-TECHNOLOGY TO MUIRLANDS 12 DW	9/1/14	7/31/18	\$5,817	\$177,100				20.9			79.1													
Recycled Capital	05818	PA51 ALTON-TECHNOLOGY TO MUIRLANDS 16 RW	9/1/14	7/31/18	\$12,162	\$344,300																				87.4
Sewer Capital	05817	PA51 ALTON-TECHNOLOGY TO MUIRLANDS SS RELO	9/1/14	7/31/18	\$53,672	\$1,326,300																				100.0
Potable Capital	05756	PA51 B ST FROM SOCIABLE TO IRVINE BLV 12 ZN 4	8/1/14	7/31/18	\$7,932	\$243,100				98.2			1.8													
Recycled Capital	05757	PA51 B ST FROM SOCIABLE TO IRVINE BLV 16 ZN C	8/1/14	7/31/18	\$7,879	\$240,900																				99.6
Potable Capital	06304	PA51 BENCHMARK-BOSQUE TO 550-E/O BOSQUE 12	3/1/15	7/31/18	\$1,957	\$49,500				98.2			1.8													
Recycled Capital	06306	PA51 BENCHMARK-BOSQUE TO 550-E/O BOSQUE 6 Z	3/1/15	7/31/18	\$1,957	\$49,500																				99.6
Potable Capital	04645	PA51 C ST FROM LQ ST TO O ST DW	7/1/13	7/31/18	\$5,191	\$211,700				67.3			32.7													
Recycled Capital	04646	PA51 C ST FROM LQ ST TO O ST RW	7/1/13	7/31/18	\$5,989	\$266,200																				99.6
Sewer Capital	04653	PA51 C ST FROM TRABUCO RD TO LQ ST SS	7/1/13	7/31/18	\$8,440	\$403,700																				100.0
Recycled Capital	05758	PA51 CADENCE-PUSAN TO CHINON 12_16RW	8/1/14	7/31/18	\$8,196	\$271,700																				87.4
Potable Capital	10343	PA51 D5 A ST 12 DW	4/1/18	12/31/19	\$418,062	\$989,000				100.0																
Recycled Capital	10344	PA51 D5 A ST 12_10 RW	4/1/18	12/31/19	\$445,516	\$1,059,000																				100.0
Recycled Capital	10255	PA51 D5 CADENCE S 10RW	4/1/18	12/31/19	\$57,656	\$138,000																				100.0
Potable Capital	10254	PA51 D5 CADENCE S 12DW	4/1/18	12/31/19	\$58,566	\$138,000				100.0																
Sewer Capital	10117	PA51 D5 CADENCE S FROM O TO CHINON 12SS	4/1/18	12/31/19	\$205,988	\$487,000																				100.0
Recycled Capital	10024	PA51 D5 CHINON 16 RW, 12 RW and 10 RW ZONE C	4/1/18	6/30/20	\$100,623	\$457,000																				99.6
Sewer Capital	10023	PA51 D5 CHINON FROM SOUTH CADENCE TO CADEN	4/1/18	6/30/20	\$109,657	\$502,000																				100.0
Potable Capital	10022	PA51 D5 CHINON FROM SOUTH CADENCE TO CADEN	4/1/18	6/30/20	\$80,792	\$392,000				98.2			1.8													
Potable Capital	06683	PA51 GP BENCHMARK AND MODJESKA (DISTRICT 4)	8/1/15	7/31/18	\$6,409	\$150,700				98.2			1.8													
Recycled Capital	06684	PA51 GP BENCHMARK AND MODJESKA (DISTRICT 4)	8/1/15	7/31/18	\$40,480	\$971,300																				99.6
Potable Capital	06552	PA51 GP BENCHMARK AND PERSPECTIVE 12 DW 24R	7/1/15	7/31/18	\$5,870	\$147,400				98.2			1.8													

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System	Project	Project Title	Start	End	FY18-19 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	1880	2100	2220	2120	2130	2250	2400	2530	256	2850	2880
Sewer Capital	06553	PA51 GP BENCHMARK AND PERSPECTIVE 16 SS	7/1/15	7/31/18	\$9,783	\$244,200												100.0							
Recycled Capital	06554	PA51 GP BENCHMARK AND PERSPECTIVE 6 RW ZC	7/1/15	7/31/18	\$5,217	\$129,800												99.6				0.4			
Sewer Capital	06331	PA51 GP CULTIVATE (BOSQUE TO 500 E/O BOSQUE)	3/1/15	7/31/18	\$5,726	\$220,000												100.0							
Recycled Capital	07169	PA51 GP DIST 7 Z ST AND A ST RW ZC	3/1/16	7/31/18	\$20,240	\$492,800												100.0							
Recycled Capital	06823	PA51 GP EPISODE (FROM FRAME TO PUSAN) 16 RW	11/1/15	7/31/18	\$13,975	\$323,400												99.6				0.4			
Recycled Capital	06514	PA51 GP GP-1 ST (MARINE TO GP-2 ST) 10 RW	6/1/15	7/31/18	\$21,927	\$536,800												87.4				12.6			
Recycled Capital	06732	PA51 GP MAGNET (FROM RIDGE V. TO BOSQUE) 6 R	9/1/15	7/31/18	\$8,205	\$206,800												87.4				12.6			
Potable Capital	06534	PA51 GP PUSAN (EPISODE TO IRVINE BLVD) 12 DW Z	6/1/15	7/31/18	\$1,630	\$44,000			98.2			1.8													
Recycled Capital	06535	PA51 GP PUSAN (EPISODE TO IRVINE BLVD) 12 RW Z	6/1/15	7/31/18	\$4,239	\$106,700												99.6				0.4			
Sewer Capital	10058	PA51 GP REACH A SS PHASE 2	9/1/17	3/31/19	\$515,011	\$652,000												67.0				33.0			
Recycled Capital	06595	PA51 GP TERRAPIN (TRABUCO TO CADENCE) 6 RW Z	7/1/15	7/31/18	\$6,942	\$180,400												87.4				12.6			
Potable Capital	06512	PA51 GP-1 ST (MARINE TO GP-2 ST) 12 DW	6/1/15	7/31/18	\$14,843	\$355,300			20.9			79.1													
Sewer Capital	06513	PA51 GP-1 ST (MARINE TO GP-2 ST) 12 SS	6/1/15	7/31/18	\$32,384	\$753,300												100.0							
Recycled Capital	06538	PA51 GP-2 ST (BOSQUE TO GP1 ST) 10 RW	6/1/15	7/31/18	\$47,226	\$1,169,400												87.4				12.6			
Potable Capital	06536	PA51 GP-2 ST (BOSQUE TO GP1 ST) 12 DW	6/1/15	7/31/18	\$18,891	\$531,300			20.9			79.1													
Sewer Capital	06537	PA51 GP-2 ST (BOSQUE TO GP1 ST) 12 SS	6/1/15	7/31/18	\$11,469	\$333,300												100.0							
Recycled Capital	07022	PA51 GP-2 ST (FROM GP-3 TO BOSQUE) 12 RWZC	2/1/16	7/31/18	\$8,967	\$180,400												99.6				0.4			
Potable Capital	06016	PA51 IRVINE BLVD-LAMBERT TO Z ST 12 DW	12/1/14	7/31/18	\$13,493	\$256,200			98.2			1.8													
Sewer Capital	06017	PA51 IRVINE BLVD-LAMBERT TO Z ST 16 SS	12/1/14	7/31/18	\$4,723	\$115,500												100.0							
Recycled Capital	06018	PA51 IRVINE BLVD-LAMBERT TO Z ST 20 RW	12/1/14	7/31/18	\$66,792	\$1,412,400												99.6				0.4			
Recycled Capital	05536	PA51 LQ ST FROM BOSQUE TO Z ST 12 RW	5/1/14	7/31/18	\$12,691	\$416,900												99.6				0.4			
Sewer Capital	05535	PA51 LQ ST FROM BOSQUE TO Z ST 12 SS	5/1/14	7/31/18	\$41,024	\$1,075,300												100.0							
Recycled Capital	04649	PA51 LQ ST FROM O ST TO LY ST RW	7/1/13	7/31/18	\$1,597	\$78,100												93.5				6.5			
Sewer Capital	04648	PA51 LQ ST FROM O ST TO LY ST SS	7/1/13	7/31/18	\$5,191	\$255,200												61.5				38.5			
Potable Capital	04650	PA51 LY ST FROM LQ ST TO IRVINE BLVD DW	7/1/13	7/31/18	\$624	\$51,700			98.2			1.8													
Recycled Capital	04652	PA51 LY ST FROM LQ ST TO IRVINE BLVD RW	7/1/13	7/31/18	\$18,733	\$688,300												99.6				0.4			
Sewer Capital	04651	PA51 LY ST FROM LQ ST TO IRVINE BLVD SS	7/1/13	7/31/18	\$33,302	\$1,262,200												100.0							
Recycled Capital	10447	PA51 MARINE WAY AND BAKE 16RW	4/1/18	7/31/19	\$118,931	\$163,000												100.0							
Sewer Capital	10574	PA51 MARINE WAY AT OCTA 18 SS	4/1/18	6/30/20	\$217,652	\$970,000												100.0							
Potable Capital	06086	PA51 MARINE WAY FROM ALTON TO BARRANCA 12	1/1/15	12/31/18	\$89,162	\$438,700			20.9			79.1													
Potable Capital	04153	PA51 MARINE WAY ZN3 DW	11/1/12	7/31/18	\$12,578	\$420,200			20.9			79.1													
Recycled Capital	04147	PA51 MARINE WAY ZN8-RW	11/1/12	7/31/18	\$45,186	\$1,201,200												87.4				12.6			
Sewer Capital	06476	PA51 MARINE WAY, RIDGE VALLEY TO 3000 FT EAST	6/1/15	7/31/18	\$16,410	\$426,800																	100.0		
Potable Capital	06208	PA51 MARINE WAY, SR133 TO RIDGE VALLEY 12 ZON	3/1/15	7/31/18	\$3,913	\$82,500			20.9			79.1													
Recycled Capital	06209	PA51 MARINE WAY, SR133 TO RIDGE VALLEY 6 ZONE	3/1/15	7/31/18	\$2,348	\$53,900												87.4				12.6			
Recycled Capital	06087	PA51 MARINE WAY-ALTON TO BARRANCA 16 RW ZN	1/1/15	12/31/18	\$95,916	\$481,600												87.4				12.6			

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System	Project	Project Title	Start	End	FY18-19 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	1880	2100	2220	2120	2130	2250	2400	2530	256	2850	2880	
Sewer Capital	06048	PA51 MARINE WAY-ALTON TO BARRANCA 18 SS	1/1/15	7/31/18	\$26,246	\$874,500												100.0								
Sewer Capital	04614	PA51 REACH A SEWER IMPROVEMENTS	6/1/13	7/31/18	\$110,747	\$3,956,500												67.0				33.0				
Sewer Capital	10576	PA51 REACH B EAST 18 SS	4/1/18	6/30/20	\$417,101	\$2,125,000												100.0								
Potable Capital	04268	PA51 RIDGE VALLEY-MARINE WAY TO TRABUCO DW	1/1/13	7/31/18	\$12,072	\$486,200			20.9			79.1														
Recycled Capital	04278	PA51 RIDGE VALLEY-MARINE WAY TO TRABUCO RW	1/1/13	7/31/18	\$12,488	\$464,200												87.4					12.6			
Sewer Capital	04267	PA51 RIDGE VALLEY-MARINE WAY TO TRABUCO SS	1/1/13	7/31/18	\$38,363	\$1,493,800												22.9					77.1			
Potable Capital	07809	PA51 SAMP UPDATE-FUTURE AREAS-DW	7/1/17	12/31/18	\$20,000	\$60,000			100.0																	
Sewer Capital	07810	PA51 SAMP UPDATE-FUTURE AREAS-SS	7/1/17	12/31/18	\$20,000	\$60,000												100.0								
Recycled Capital	10426	PA6 NB5BC B ST 6 RW PHASE 2	11/1/17	11/30/20	\$23,438	\$81,000																	100.0			
Recycled Capital	05243	PA6 NHB4B 6 RW ZONE D	2/1/14	7/31/18	\$16,702	\$526,900																	100.0			
Recycled Capital	06915	PA6 NHB5A 6 AND 8 RECYCLED WATER MAIN ZONE	12/1/15	7/31/18	\$16,867	\$402,600																	100.0			
Recycled Capital	05763	PA6 NHB5A RW ZONE D	8/1/14	7/31/18	\$3,818	\$132,000																	100.0			
Recycled Capital	10100	PA6 NHB5B5C 12 8 6 RW	12/1/17	6/30/20	\$55,263	\$640,000																	100.0			
Recycled Capital	04557	PA6 PHASE 1 NEIGHBORHOOD 3 ZONE C RW	6/1/13	7/31/18	\$9,100	\$315,700																	100.0			
Recycled Capital	01762	PA9B PHASE 5 GATEWAY PARK RW PIPES	6/1/19	6/30/22	\$7,990	\$506,100																	100.0			
Potable Capital	06214	PDF SODIUM HYPOCHLORITE STORAGE AND FEED SY	4/1/17	8/31/20	\$371,591	\$2,976,900		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Potable Capital	07682	PILOT SOUTH BASIN GROUNDWATER CLEANUP	6/1/18	12/31/19	\$84,298	\$1,127,500		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Potable Capital	07898	PLC REPLACEMENT-DW	7/1/17	12/31/21	\$132,121	\$440,000	100.0																			
Recycled Capital	07899	PLC REPLACEMENT-RW	7/1/17	12/31/21	\$132,121	\$440,000												100.0								
Potable Capital	07082	POTABLE REUSE ALTERNATIVES ANALYSIS DW	7/1/16	12/31/20	\$55,556	\$250,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Sewer Capital	07083	POTABLE REUSE ALTERNATIVES ANALYSIS SS	7/1/16	12/31/20	\$55,556	\$250,000												33.1	3.4	3.4	48.5		9.7	0.3	1.3	0.3
Sewer Capital	07130	RAISE MANHOLES TO GRADE 18/19 UNDER RA	7/1/18	6/30/19	\$346,500	\$346,500												100.0								
Potable Capital	07128	RAISE SYSTEM VALVES 18/19 UNDER RA-DW	7/1/18	6/30/19	\$577,500	\$577,500	100.0																			
Recycled Capital	07132	RAISE SYSTEM VALVES 18/19 UNDER RA-RW	7/1/18	6/30/19	\$138,600	\$138,600												100.0								
Recycled Capital	05476	RATTLESNAKE ZONE A BPS REBUILD	6/1/17	1/31/21	\$133,185	\$3,937,700												100.0								
Sewer Capital	07098	REBUILD SMH ON MAIN ST E/O MACARTHUR	1/1/17	12/31/19	\$110,014	\$178,200												100.0								
Potable Capital	07084	REPLACEMENT PLANNING DW	5/1/17	12/31/20	\$120,000	\$440,000	100.0																			
Recycled Capital	07085	REPLACEMENT PLANNING RW	5/1/17	12/31/20	\$120,000	\$440,000												100.0								
Potable Capital	07750	ROCKFIELD FLOW CONTROL FACILITY	7/1/17	6/30/19	\$86,815	\$187,100	100.0																			
Potable Capital	06023	ROSEDALE DROUGHT RELIEF PROJECT FACILITIES	1/13/15	6/30/19	\$744,026	\$9,872,500		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Recycled Capital	07159	RW CONVERSION IMPROVEMENTS FOR OFF-SITE 18/	7/1/18	6/30/19	\$753,500	\$753,500												100.0								
Recycled Capital	10436	RW RESERVOIRS FILTRATION STUDY	2/16/17	7/31/18	\$16,502	\$288,200												14.6	10.7	4.1	51.1	7.7	10.3		1.5	
Recycled Capital	10063	SALT MANAGEMENT MODELING ON RECYCLED WAT	7/1/17	6/30/19	\$37,500	\$108,100												14.6	10.7	4.1	51.1	7.7	10.3		1.5	
Recycled Capital	03780	SAN JOAQUIN RESERVOIR LINER REPLACEMENT	5/1/19	12/31/21	\$38,463	\$2,807,900												100.0								
Potable Capital	01414	SAND CYN 16" DW ANODE REP	6/1/18	6/30/22	\$4,865	\$243,100	100.0																			
Potable Capital	10101	SANTIAGO CANYON FLEMING STORAGE AND PUMP	1/1/18	12/31/22	\$663,876	\$9,001,000		100.0																		

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System	Project	Project Title	Start	End	FY18-19 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	1880	2100	2220	2120	2130	2250	2400	2530	256	2850	2880
Potable Capital	10102	SANTIAGO CANYON PIPELINE REPLACEMENTS	6/1/19	6/30/21	\$16,308	\$1,286,000	100.0																		
Potable Capital	01398	SANTIAGO CYN PUMP STATION IMPROVEMENTS	6/1/18	6/30/21	\$287,980	\$6,613,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Recycled Capital	01813	SANTIAGO DAM SLOPED OUTLET	7/1/13	6/30/22	\$438,512	\$15,417,000											14.6	10.7	4.1	51.0	7.7	10.4		1.5	
Potable Capital	10061	SCE-IRWD WATER-ENERGY PILOT PHASE 2	6/1/18	12/31/19	\$239,684	\$379,500		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Recycled Capital	07099	SEAWATCH RW MAIN REPLACEMENT	12/1/16	12/31/18	\$441,828	\$1,360,500											100.0								
Recycled Capital	10071	SERRANO SUMMIT PHASE 2 RW	4/1/17	12/31/19	\$197,479	\$507,000																			100.0
Potable Capital	07149	SERVICE LINE-VALVE-MAIN REPLACEMENT 18/19-D	7/1/18	6/30/19	\$1,793,900	\$1,793,900	100.0																		
Recycled Capital	07150	SERVICE LINE-VALVE-MAIN REPLACEMENT 18/19-R	7/1/18	6/30/19	\$642,100	\$642,100											100.0								
Sewer Capital	07151	SEWER LATERAL-MAIN REPLACEMENT 18/19	7/1/18	6/30/19	\$308,200	\$308,200											100.0								
Sewer Capital	07886	SEWER SIPHON REHABILITATION	6/1/18	6/30/22	\$4,541	\$440,000											100.0								
Sewer Capital	07885	SEWER SYSTEM CALCIUM REMOVAL	6/1/18	6/30/22	\$4,541	\$440,000											100.0								
Sewer Capital	07748	SGU DIVERSION TO SEWER	7/1/17	12/31/19	\$15,000	\$398,200											33.1	3.4	3.4	48.5		9.7	0.3	1.3	0.3
Sewer Capital	07452	SHII CANYON VIEW (AT JAMBOREE RD) 15 SS	7/1/16	7/31/22	\$5,688	\$259,600																			100.0
Potable Capital	07376	SHII PH1 D ST (FROM SANTIAGO TO B ST) 12 DW	6/1/16	7/31/22	\$3,881	\$176,000						100.0													
Recycled Capital	07377	SHII PH1 D ST (FROM SANTIAGO TO B ST) 6 RW	6/1/16	7/31/22	\$3,609	\$162,800																			100.0
Sewer Capital	07379	SHII PH2 A ST (FROM SANTIAGO TO B ST) 12 SS	4/1/18	7/31/22	\$7,250	\$205,000																			100.0
Recycled Capital	07380	SHII PH2 A/B/F ST (TR 17995) 6 AND 8 RW	4/1/18	7/31/22	\$17,500	\$487,000																			100.0
Potable Capital	07378	SHII PH2 B/F ST (FROM C ST TO 25 RES) 12 DW	4/1/18	7/31/22	\$35,000	\$974,000						100.0													
Potable Capital	07451	SHII SANTIAGO CYN (FROM D ST TO A ST) 12 DW	7/1/16	7/31/22	\$16,154	\$1,126,900						100.0													
Recycled Capital	07453	SHII SANTIAGO CYN AND JAMBOREE 6 8 12 16 RW	7/1/16	7/31/22	\$31,491	\$2,228,300																			100.0
Recycled Capital	07486	SHII SOUTH TR 16199 12 8 AND 6 RW	7/1/16	7/31/22	\$17,422	\$808,000																			100.0
Sewer Capital	07484	SHII SOUTH TR 16199 15 AND 12 SS	7/1/16	7/31/22	\$14,201	\$668,000																			100.0
Recycled Capital	05154	SJR SEISMIC EVALUATION (DSOD)	6/1/18	6/30/21	\$11,351	\$150,700											14.6	10.7	4.1	51.0	7.7	10.4			1.5
Sewer Capital	10581	SOCWA ALISO CREEK OCEAN OUTFALL SEAL REPLACE	5/1/18	12/31/19	\$24,351	\$35,000											100.0								
Sewer Capital	03750	SOCWA ETM PROTECTION-TRAIL BRIDGE CROSSING (8/1/16	12/31/20	\$106,667	\$951,500											100.0								
Potable Capital	07897	SOUTH SAN DIEGO CREEK RUNOFF DIVERSION STUD	1/1/18	6/30/20	\$40,000	\$100,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Potable Capital	05499	STOCKDALE STORAGE FOR RECOVERY CAPACITY	1/1/19	6/30/20	\$439,358	\$1,590,800		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5										
Recycled Capital	10580	SUNNYHILL RW PIPE REHAB	5/1/19	11/30/20	\$26,429	\$392,700											100.0								
Recycled Capital	03808	SYPHON RESERVOIR IMPROVEMENTS	6/1/15	8/31/22	\$2,056,267	\$75,000,000											14.6	10.7	4.1	51.0	7.7	10.4		1.5	
Potable Capital	07888	TURTLE RIDGE PIPE REHAB-DW	7/1/17	6/30/19	\$206,391	\$309,000	100.0																		
Recycled Capital	07889	TURTLE RIDGE PIPE REHAB-RW	7/1/17	6/30/19	\$206,391	\$309,000											100.0								
Recycled Capital	04984	TUSTIN LEGACY ARMSTRONG ZONE A-WARNER ZON	11/1/13	7/31/18	\$19,565	\$773,300																			100.0
Recycled Capital	07163	TUSTIN LEGACY BELL AVE (REDHILL TO ARMSTRONG)	3/1/16	7/31/18	\$18,553	\$362,800																			100.0
Recycled Capital	07535	TUSTIN LEGACY FLIGHT DR 6 RW	8/1/16	7/31/18	\$12,228	\$270,000																			100.0
Potable Capital	06765	TUSTIN LEGACY MOFFETT DR (AT PETERS CYN) 12 D	10/1/15	7/31/18	\$25,323	\$287,000					100.0														
Recycled Capital	06766	TUSTIN LEGACY MOFFETT DR (AT PETERS CYN) 16 R	10/1/15	7/31/18	\$33,715	\$375,000																			100.0

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System	Project	Project Title	Start	End	FY18-19 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	1880	2100	2220	2120	2130	2250	2400	2530	256	2850	2880	
Sewer Capital	01062	TUSTIN LEGACY MOFFETT FROM DOWNS RD TO JAM	7/1/18	6/30/19	\$217,000	\$217,000													100.0							
Recycled Capital	10261	TUSTIN LEGACY MOFFETT LEGACY 12RW	6/1/17	6/30/20	\$170,867	\$643,000													100.0							
Potable Capital	10260	TUSTIN LEGACY MOFFETT LEGACY 16_12DW	6/1/17	6/30/20	\$170,867	\$643,000				100.0																
Sewer Capital	06010	TUSTIN LEGACY PARK AVE FROM JAMBOREE TO VICT	12/1/14	7/31/18	\$2,115	\$64,900													100.0							
Potable Capital	07140	TUSTIN LEGACY RED HILL WELL DRILLING AND EQUIP	6/1/19	12/31/21	\$36,754	\$4,559,800		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Potable Capital	04988	TUSTIN LEGACY WARNER FROM ARMSTRONG TO LE	11/1/13	7/31/18	\$4,991	\$150,500				100.0																
Recycled Capital	04989	TUSTIN LEGACY WARNER FROM ARMSTRONG TO LE	11/1/13	7/31/18	\$8,784	\$332,700													100.0							
Potable Capital	07170	UNIVERSITY DR WIDENING APPURTENANCE RELOC-D	4/1/16	12/31/20	\$102,587	\$248,000	75.0	25.0																		
Recycled Capital	07172	UNIVERSITY DR WIDENING APPURTENANCE RELOC-R	4/1/16	12/31/20	\$102,587	\$248,000										25.0	75.0									
Sewer Capital	07171	UNIVERSITY DR WIDENING APPURTENANCE RELOC-S	4/1/16	12/31/20	\$102,587	\$248,000										50.0	50.0									
Sewer Capital	07112	VACTOR ACCESS TO SMH ON SO IRVINE INTERCEPTO	9/1/16	12/31/18	\$123,295	\$383,000													100.0							
Potable Capital	10542	VAULT LID REPLACEMENT-18/19 DW	6/1/18	6/30/19	\$399,200	\$402,200	100.0																			
Recycled Capital	10549	VAULT LID REPLACEMENT-18/19 RW	6/1/18	6/30/19	\$352,143	\$355,000													100.0							
Sewer Capital	10550	VAULT LID REPLACEMENT-18/19 SS	6/1/18	6/30/19	\$177,571	\$179,000													100.0							
Potable Capital	06121	VAULT LID REPLACEMENT-DW	1/1/18	12/31/18	\$317,821	\$397,700	100.0																			
Recycled Capital	06123	VAULT LID REPLACEMENT-RW	1/1/18	12/31/18	\$143,088	\$195,300													100.0							
Sewer Capital	06122	VAULT LID REPLACEMENT-SS	1/1/18	12/31/19	\$62,876	\$96,300													100.0							
Potable Capital	07154	WATER AND ENERGY PLANNING STUDIES DW 18/19	7/1/18	6/30/19	\$231,500	\$231,500	32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5												
Recycled Capital	07141	WATER RECYCLING TRT PLANT MSTR PLAN UPDATE-	4/1/17	9/30/19	\$191,149	\$454,300												14.6	10.7	4.1	51.0	7.7	10.4	1.5		
Sewer Capital	05427	WATER RECYCLING TRT PLANT MSTR PLAN UPDATE-	4/1/17	9/30/19	\$387,663	\$921,300												33.1	3.4	3.4	48.5	9.7	0.3	1.3	0.3	
Potable Capital	07161	WATER RELIABILITY PLANNING 18/19	7/1/18	6/30/19	\$137,500	\$137,500		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Potable Capital	07160	WATER SUPPLY RELIABILITY AGREEMENTS 18/20	7/1/18	6/30/20	\$220,000	\$440,000		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Potable Capital	07120	WELL MAINTENANCE AND REHABILITATION 18/19	7/1/18	6/30/19	\$450,000	\$450,000	100.0																			
Potable Capital	05473	WELLS 11 AND 15 SURGE TANK REPLACEMENT	11/1/14	12/31/18	\$193,113	\$3,626,200	100.0																			
Potable Capital	01402	WELLS 51/52/53 TREATMENT ALTERNATIVES STUDY	6/15/18	12/31/19	\$86,180	\$133,100		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
Potable Capital	06169	ZN 8-9 PIPELINE ANODE BED LEAD WIRE REPLACEME	6/1/18	6/30/22	\$8,108	\$315,200	100.0																			
Potable Capital	06401	ZONE 1 RESERVOIR NO. 2	4/1/16	12/31/19	\$6,210,209	\$12,626,300		32.6	3.3	3.0	47.5	11.1	0.4	1.6	0.5											
					Totals	94,822,459	779,202,740																			

4/18/2018

Irvine Ranch Water District
Fiscal Year 2018-19 Capital Budget
Section 2 - Flagged Projects

Project Number	Project Title	Flagged Project	Project Status
01402	WELLS 51/52/53 TREATMENT ALTERNATIVES STUDY	Yes	Board Approved
03808	SYPHON RESERVOIR IMPROVEMENTS	Yes	Active
07140	TUSTIN LEGACY RED HILL WELL DRILLING AND EQUIPPING	Yes	Board Approved

Irvine Ranch Water District
Fiscal Year 2018-19 Capital Budget

Section 3 - Projected FY 2018-19 Expenditures by Fiscal Year Expenditure Groups

FY Exp Category	FY18-19 Direct	Total Direct	FY Replacement	FY Developed	FY Developing
Replacement & Rehabilitation	\$18,398,253	\$45,774,190	\$17,652,782	\$627,745	\$117,727
Solids Handling	\$18,364,808	\$227,573,100	\$8,355,988	\$8,558,001	\$1,450,820
Regional Development	\$11,026,497	\$16,137,600	\$569,341	\$345,307	\$10,111,848
OCSD - CORF - Solids Lease	\$9,747,750	\$177,649,000	\$3,941,158	\$4,743,764	\$1,062,829
Zone 1 Reservoir No. 2	\$6,210,209	\$12,626,300	\$0	\$4,974,378	\$1,235,832
Operational	\$5,432,011	\$45,384,500	\$555,094	\$4,034,105	\$842,812
Development - PA51	\$3,877,186	\$36,038,500	\$0	\$0	\$3,877,186
ILP Zone C+ Conversion	\$3,668,707	\$25,373,600	\$32,040	\$989,606	\$2,647,060
Well Rehabilitation	\$3,201,939	\$6,610,000	\$3,201,939	\$0	\$0
General Plant	\$2,694,250	\$2,694,250	\$1,902,141	\$619,678	\$172,432
Nonpotable Storage	\$2,073,169	\$78,277,700	\$0	\$1,519,649	\$553,520
Planning	\$1,914,077	\$3,365,100	\$240,000	\$1,281,937	\$392,140
Water Resources	\$1,789,417	\$7,542,400	\$753,500	\$829,769	\$206,147
Water Banking	\$1,540,883	\$12,040,800	\$0	\$1,234,248	\$306,636
Replacement-Business Software	\$1,397,041	\$8,710,200	\$419,850	\$790,059	\$187,132
Development - Tustin Legacy	\$684,010	\$4,119,200	\$0	\$0	\$684,010
OCWD Annexation	\$598,100	\$22,861,400	\$0	\$479,078	\$119,022
Sewage Treatment	\$578,811	\$1,375,600	\$0	\$456,445	\$122,367
Property Management	\$533,147	\$24,969,300	\$533,147	\$0	\$0
Development - Lake Forest	\$417,290	\$3,047,700	\$0	\$106,397	\$310,892
Development - PA39	\$184,508	\$470,000	\$0	\$0	\$184,508
Development - SHII	\$152,195	\$7,095,600	\$0	\$0	\$152,195
Development - PA1	\$135,260	\$3,405,300	\$0	\$0	\$135,260
Development - PA6	\$115,979	\$2,268,000	\$0	\$0	\$115,979
Development - PA18	\$74,704	\$2,839,600	\$0	\$44,328	\$30,376
Development - PA9B	\$7,990	\$506,100	\$0	\$0	\$7,990
Development - PA40	\$4,269	\$447,700	\$0	\$0	\$4,269
	\$94,822,459	\$779,202,740	\$38,156,979	\$31,634,492	\$25,030,988

EXHIBIT "C"

RESOLUTION NO. 2018 -

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA, APPROVING DISTRICT'S CAPITAL BUDGET FOR FISCAL YEAR 2018-19

WHEREAS, the Board of Directors of the Irvine Ranch Water District (IRWD) has considered the capital project needs of IRWD for Fiscal Year 2018-19; and

WHEREAS, a Capital Budget, which includes both the capital expenditures projected for Fiscal Year 2018-19 and entire project budgets for the listed projects, as set forth in the attached Exhibit "A" has been prepared and reviewed by this Board of Directors; and

WHEREAS, during the review of the Capital Budget by the Board of Directors, the Board "flagged" certain capital expenditures for projects for further review by the Board; and

WHEREAS, Article XIII B of the Constitution of the State of California provides that the appropriations of local agencies will be limited each year to those of the previous year, adjusted for changes in population, cost of living and transfers in sources of funding; and

WHEREAS, Section 8 of Article XIII B excludes from its limitations user charges and fees and regulatory fees, to the extent such fees and charges do not produce revenue exceeding the costs reasonably borne in providing the regulation, product or service, and Section 9 of Article XIII B excludes from the appropriations subject to limitation an appropriation for a qualified capital outlay project, defined by statute as an appropriation for a fixed asset (including land and construction) with a useful life of 10 or more years and a value which equals or exceeds one hundred thousand dollars (\$100,000); and

WHEREAS, the expenditures identified in the Capital Budget are to be funded entirely from user fees and charges excluded by Article XIII B, Section 8, and other monies that are not proceeds of taxes, such as proceeds of bonds or other indebtedness, and/or are expenditures for debt service or qualified capital outlay projects pursuant to Article XIII B, Section 9.

NOW, THEREFORE, the Board of Directors of IRWD DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

Section 1. The revenues which have been collected from connection fees and have been deposited in the capital funds of the Improvement Districts, to the extent not previously or hereafter committed or appropriated to pay reimbursement, bonding and other financing or fund-management related costs for capital facilities, are hereby appropriated to pay costs of the projects shown in the Capital Budget.

Section 2. That relative to appropriations subject to limitation under Article XIII B of the Constitution of the State of California, it is hereby determined that IRWD's Capital

Budget for Fiscal Year 2018-19 is to be funded totally by revenues other than the proceeds of taxes, and/or that the expenditures identified in such Capital Budget are for debt service or qualified capital outlay projects, and that the documentation used in making such determination has been on file in the offices of IRWD for not less than 15 days prior to the date hereof, pursuant to Section 7910 of the Government Code of the State of California.

Section 3. Subject in all respects to prior pledges for debt service requirements, including those contained in Resolution No. 2002-10, the Treasurer is hereby authorized and directed to allocate to the Replacement Fund, 29% of the general 1% ad valorem property tax revenues for the 2018-19 fiscal year, to be expended for qualified capital outlay projects.

Section 4. That IRWD's Capital Budget for Fiscal Year 2018-19 is in compliance with the provisions of Article XIII B of the Constitution of the State of California.

Section 5. That IRWD's Capital Budget for Fiscal Year 2018-19, shown in the attached Exhibit "A" and by this reference incorporated herein, be and the same is hereby approved.

Section 6. That the capital expenditures for projects set forth in the attached Exhibit "A" identified with "Yes" in the Flagged report section are "flagged" for further review by the Board of Directors prior to implementation, pursuant to the Policy Regarding Authorization of Expenditures.

ADOPTED, SIGNED and APPROVED this 23th day of April, 2018.

President, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

Secretary, IRVINE RANCH WATER DISTRICT
and of the Board of Directors thereof

APPROVED AS TO FORM:
Lewis Brisbois Bisgaard & Smith, LLP
Legal Counsel - IRWD

By _____

April 23, 2018
Prepared and
Submitted by: K. Swan *KS*
Approved by: Paul A. Cook *P. Cook*

CONSENT CALENDAR

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

SUMMARY:

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

Events/Meetings

Steven LaMar

May 6 ACWA Spring 2018 Conference, Sacramento

Mary Aileen Matheis

April 20 Southern California Water Coalition Quarterly Meeting, Irwindale

Douglas Reinhart

May 31 Monthly Discussion of District Activities with the General Manager
June 26 Monthly Discussion of District Activities with the General Manager
July 26 Monthly Discussion of District Activities with the General Manager

Peer Swan

April 18 Orange County Water Association Monthly Meeting and Luncheon, Irvine

John Withers

April 18 ACC-OC Board of Directors Installation Reception, Fullerton

RECOMMENDATION:

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

LIST OF EXHIBITS:

None.

April 23, 2018

Prepared and

Submitted by: L. Bonkowski

Approved by: P. Cook



CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the April 9, 2018 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE APRIL 9, 2018 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – April 9, 2018 Minutes of Regular Board Meeting

EXHIBIT "A"

MINUTES OF REGULAR MEETING – APRIL 9, 2018

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Reinhart on April 9, 2018 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

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

Directors Absent: LaMar.

Also Present: General Manager Cook, Executive Director of Water Policy Weghorst, Executive Director of Finance and Administration Clary, Executive Director of Engineering and Water Quality Burton, Director of Public Affairs Beeman, Director of Treasury and Risk Management Jacobson, Director of Water Operations Zepeda, Director of Maintenance Drake, Director of Administrative Services Mossbarger, Government Relations Officer Compton, Legal Counsel Collins, Secretary Bonkowski, Principal Engineer Akiyoshi, Principal Engineer Moeder, Manager of Risk and Contracts Shinbashi, Public Affairs Manager Fabris, Ms. Connie Ho, Ms. Eileen Lin, Mr. Craig Irely, Ms. Jennifer Davis, Mr. Doug Davert, Mr. Jim Fisler, Mr. Bob Ooten, Mr. Carl Cassidy, Mr. Chris Palmer, Consultant Bruce Newell and members of the public.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: Mr. Doug Davert, a candidate for the Orange County Local Agency Formation Commission's Regular Special District Member seat, asked for the Board's support at the upcoming election. Mr. Bob Ooten and Mr. Jim Fisler, both candidates for the Alternate Special District Member seat, also asked for the Board's support.

Mr. Carl Cassidy, a Corona del Mar resident, asked to speak relative to Item No. 4 (see page 2).

ITEMS TOO LATE TO BE AGENDIZED: None

PRESENTATION

DISTRICT TRANSPARENCY CERTIFICATE OF EXCELLENCE ACHIEVEMENT

Public Affairs Field Coordinator Chris Palmer with the California Special Districts Association presented the District with the Special District Leadership Foundation's District Transparency Certificate of Excellence which reflects the District's dedication to being fully transparent, and open and accessible to the public and other stakeholders.

BOARD WORKSHOP

FISCAL YEAR 2018-19 OPERATING BUDGET AND PROPOSED RATES AND CHARGES

Executive Director of Finance Clary reported that the proposed Fiscal Year (FY) 2018-19 Operating Budget for Irvine Ranch Water District is \$157.1 million, representing an increase of \$8.5 million, or 5.7%, when compared to the Operating Budget for FY 2017-18.

Using a PowerPoint presentation, Ms. Jennifer Davis reviewed the following key assumptions: 1) potable water sales are in line with the Fiscal Year 2017-18 budget; 2) customer growth equals three percent; 3) no change in customer water allocations; 4) no basin equity assessment payment budgeted; capital offsets will be used; 5) Biosolids facility will start up in Fiscal Year 2019-20; 6) Orange County Water District replenishment assessment is at \$472 per acre-foot; 7) Municipal Water District of Orange County (MWDOC) increase of 3.4% for potable and 5.2% for untreated water; 8) MWDOC meter charge is \$0.35 per meter increase (plus units); and 9) Public Employee Retirement System funding is at 25% and no OPEB funding.

Ms. Davis reviewed the potable sources of supply, water sales comparisons, and potable water source costs. She reviewed the four key drivers including salaries and benefits (\$57.5 million); purchased water (\$37.9 million); repairs and maintenance (\$24.0 million); and electricity (\$14.5 million) for a total of \$133.9 million. She reviewed a comparison of the key drivers with the prior year's budget; reviewed tables describing sources of revenue and expenses; proposed rates for a typical residential customer; proposed pumping surcharges; a comparison of proposed rates with neighboring agencies; and a history of rate increases. Based on the recommendation, a typical residential customer will experience an increase of \$1.58 or 3.0%, from \$52.20 to \$53.78, per month.

Mr. Christopher Smithson reviewed the non-operating budget and key assumptions including: 1) property taxes at a 4.0% growth of assessed values; investment income at 1.58% average rate of return; 2) real estate income: Serrano Summit promissory note maturity in September 2019; real estate fair market value; 3) interest expense at 1.53% average variable rate debt; and 4) real estate expense. Using a table, he reviewed the revenue and expenses. He further reviewed the budget process and noted that a second public workshop will be held on April 23, 2018 with Proposition 218 notices being mailed on May 5, 2018 and a public hearing will be held on June 25, 2018.

Director Swan said that this item was reviewed by the Finance and Personnel Committee on March 8, 2018, March 19, 2018, and April 3, 2018.

In response to Mr. Carl Cassidy's inquiry, Executive Director of Finance and Administration Clary said that she would be able to meet with him to review any questions he has relative to budget comparisons from the previous fiscal year and the process itself.

CONSENT CALENDAR

General Manager Cook asked that Item No. 7, 2018 LEGISLATIVE AND REGULATORY UPDATE, be moved to the Action Calendar as staff revised the item to include an update and position on the Metropolitan Water District's Board agenda item relative to unsubscribed capacity in the 9,000 cfs, two tunnel form of the California WaterFix. There being no objection, this item was

moved to the Action Calendar. There being no further comments, CONSENT CALENDAR ITEMS 5, 6, AND 8 WERE APPROVED AS FOLLOWS:

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

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

6. MINUTES OF REGULAR BOARD MEETINGS

Recommendation: That the minutes of the March 26, 2018 and April 2, 2018 Regular Board Meetings be approved as presented.

8. INITIAL DISINFECTION FACILITY SODIUM HYPOCHLORITE STORAGE AND FEED SYSTEM FINAL ACCEPTANCE

Recommendation: That the Board authorize the General Manager to accept construction of the Initial Disinfection Facility Sodium Hypochlorite Storage and Feed System, project 06213, authorize the General Manager to file a Notice of Completion, and authorize the release of retention 35 days after filing of the Notice of Completion.

ACTION CALENDAR

2018 LEGISLATIVE AND REGULATORY UPDATE – REVISED

General Manager Cook reported he was informed that the Metropolitan Water District Board of Directors will be considering financing the unsubscribed capacity in the 9,000 cfs, two tunnel form of the California WaterFix at its Board meeting on April 10, 2018. Staff has included a revised staff recommendation to include a support position for Option 2 implementation of the California WaterFix. Mr. Cook said that by financing the unsubscribed capacity, Metropolitan could realize substantial benefits including increasing its own water supplies, gaining the ability to sell or lease capacity, generating wheeling revenue, and facilitating transfers of water from north of the Delta. He said that these benefits would improve future water supply reliability to IRWD along with the entire Metropolitan service area. He further said that if the Board supports staff's position, a letter will be hand-delivered to MWD's Chairman tomorrow at its meeting showing the District's support of Option 2.

On MOTION by Matheis, seconded by Withers and unanimously carried, THE BOARD ADOPTED A "SUPPORT" POSITION ON AB 2050 (CABALLERO, D-SALINA); AN "OPPOSE" POSITION ON AB 1876 (FRAZIER, D-FAIRFIELD); A "SUPPORT" POSITION ON AB 2283 (HOLDEN, D-PASADENA); A "SEEK AMENDMENTS" POSITION ON AB 2890 (TING, D-SAN FRANCISCO); A "WATCH" POSITION ON AB 2711 (CHEN, R-BREA); A "SUPPORT" POSITION ON AB 3170 (FRIEDMAN, D-GLENDALE); A "SEEK AMENDMENTS" POSITION ON SB 831(WIECKOWSKI, D-FREMONT); A "SEEK AMENDMENTS" POSITION ON SB 1469 (SKINNER, D-OAKLAND); AND AN "OPPOSE UNLESS AMENDED" POSITION ON SB 998 (DODD, D-NAPA); AND A "SUPPORT" METROPOLITAN WATER DISTRICT OF

SOUTHERN CALIFORNIA FINANCING THE UNSUBSCRIBED CAPACITY IN THE 9,000 CFS, TWO TUNNEL FORM OF THE CALIFORNIA WATERFIX AS REVISED.

ENTERPRISE SERVER AND STORAGE REPLACEMENT

General Manager Cook reported that the current enterprise server and storage equipment, purchased and installed in 2011 provides server processing and storage for the District's enterprise applications and files and is nearing end of service. The applications include Oracle Financials (EBS), Oracle Business Intelligence (BI), Oracle Customer Care and Billing (CC&B), Maximo, and Micro Focus file storage services. Proposals were received from Carahsoft Technology Corp, Sirius Computer Solutions, and Nutanix Inc. Staff recommends Sirius Computer Solutions as it has the best overall pricing for the enterprise server and storage replacement equipment, providing the District significant discounts from list pricing and has extensive experience providing equipment installation and implementation services to the District.

Director Swan said that this item was reviewed and approved by the Finance and Personnel Committee on April 3, 2018. On MOTION by Swan, seconded by Withers, and unanimously carried, THE BOARD APPROVED A GENERAL PLANT EXPENDITURE OF \$334,943 WITH SIRIUS COMPUTER SOLUTIONS TO PURCHASE AND IMPLEMENT THE ENTERPRISE SERVER AND STORAGE REPLACEMENT EQUIPMENT.

ANNUAL ORACLE SOFTWARE MAINTENANCE AND SUPPORT AGREEMENT RENEWAL

The Oracle Software Maintenance and Support Agreements, which expire in May 2018, provide for upgrades and maintenance of the District's Oracle Customer Care and Billing (CC&B) software, Oracle eBusiness Suite (EBS) Financial software, and Oracle Technology software. These agreements provide pricing for software maintenance and licenses contained in the CC&B and Technology Software License Agreement executed with Oracle in May 2014 as well as the EBS Financial Software Agreement executed with Oracle in May 2010. On MOTION by Swan, seconded by Withers and unanimously carried, THE BOARD APPROVED RENEWAL OF THE ANNUAL ORACLE SOFTWARE MAINTENANCE AND SUPPORT AGREEMENTS AND ADDITIONAL LICENSES AND SUPPORT IN THE AMOUNT OF \$903,000.

AUDITOR SELECTION FOR FIVE-YEAR CONTRACT COMMENCING IN FISCAL YEAR 2018

Executive Director of Finance and Administration Clary reported that in 2012, the Board approved a five-year professional services contract with Mayer Hoffman McCann P.C. (MHM) for financial statement audit services, and that in 2015, key principals at MHM left the firm and formed a new firm, Davis Farr LLP (Davis Farr). Ms. Clary said that the Board approved a two-year audit services contract with Davis Farr, commencing with the fiscal year ended June 30, 2015. In April 2017, the Board authorized a one-year contract extension with Davis Farr to perform audit services for the fiscal year ended June 30, 2017.

Ms. Clary said that staff solicited proposals from 12 qualified audit firms and received proposals from seven firms for a five-year contract. The first audit to be performed under this new contract will be for fiscal year 2017-18. She said that after evaluating the proposals received and conducting interviews of the top three scoring firms, staff recommends the retention of Davis Farr at an annual cost commencing at \$63,540. Although Davis Farr is not the least expensive firm for the standard audit and financial reporting work, staff contends the additional average annual cost of less than \$7,000 per year from the lowest bid is outweighed by the internal costs noted above as well as the audit quality that comes with continuity and institutional knowledge of the District.

Director Swan said that this item was reviewed by the Finance and Personnel Committee on April 3, 2018. On MOTION by Swan, seconded and unanimously carried, **THE BOARD APPROVED A FIVE-YEAR CONTRACT WITH DAVIS FARR LLP AT A COST OF \$330,620.**

GENERAL MANAGER'S REPORT

General Manager Cook reported that he was invited by the Coastkeepers to participate in a mini-documentary relative to the Poseidon project. He further said that on Wednesday April 11, 2018 he will be in Sacramento with Government Relations Officer Compton attending WateReuse California and CASA's Public Policy Forum.

DIRECTORS' COMMENTS

Director Matheis reported on her attendance at the ISDOC quarterly meeting, an ISDOC Executive Committee meeting, an Orange County forum, a MWDOC Board and Member Agency elected officials' forum, and a WACO monthly meeting.

Director Withers thanked Executive Director of Engineering and Water Quality Burton for attending a meeting with the Crystal Cove Conservancy to determine the viability of restoring the remainder of the residences in Crystal Cove. He further said he attended his regular meetings.

Director Swan reported that he attended a Newport Bay Watershed meeting, SAWPA meetings, a WateReuse conference in Monterey along with a retirement celebration, an OCWD meeting, a MWDOC Planning Committee meeting, and an Orange County Forum honoring Congressman Ed Royce.

Director Reinhart reported that he attended an El Toro Water District dedication of a demonstration garden. He said he was unable to attend the MWDOC and SOCWA Board meetings as he was out of town.

CLOSED SESSION

President Reinhart said that the following Closed Session would be held:

CLOSED SESSION with Legal Counsel relative to: Anticipated litigation - Government Code Section 54956.9(d)(2) - significant exposure to litigation (one potential case: BKK Working Group notification to IRWD of potential liability, claim and/or litigation on file with the District.

OPEN SESSION

Following the Closed Session, the meeting was reconvened with Directors Withers, Swan, Matheis, and Reinhart present. President Reinhart said there was no action to report.

ADJOURNMENT

President Reinhart adjourned the meeting at 6:47 p.m.

APPROVED and SIGNED this 23rd day of April, 2018.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Claire Hervey Collins, Legal Counsel – Lewis Brisbois

April 23, 2018

Prepared by: J. Davis/T. Fournier

Submitted by: R. Jacobson/C. Clary

Approved by: Paul A. Cook

CONSENT CALENDAR

MARCH 2018 TREASURY REPORTS

SUMMARY:

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

- A. The Investment Summary Report for March 2018. This Investment Summary Report is in conformity with the 2018 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Summary of Fixed and Variable Debt as of March 31, 2018, as outlined in Exhibit "B".
- C. The Monthly Interest Rate Swap Summary as of March 31, 2018, as outlined in Exhibit "C".
- D. The March 31, 2018 Disbursement Summary of warrants 385062 through 386582, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$40,337,512 as outlined in Exhibit "D".
- E. The Summary of Payroll ACH payments in the total amount of \$2,779,201, as outlined in Exhibit "E".
- F. The Disclosure Report of Reimbursements to Board Members and Staff for March 2018, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "F".

FISCAL IMPACTS:

As of March 31, 2018, the book value of the investment portfolio was \$359,110,299, with a 1.25% rate of return and a market value of \$355,994,278. Based on the District's March 31, 2018 quarterly real estate investment rate of return of 8.91%, the weighted average return for the fixed income and real estate investments was 3.46%.

As of March 31, 2018, the outstanding principal amount of fixed and variable rate debt was \$683,120,000. The monthly weighted average all-in variable rate was 1.44%. Including the District's weighted average fixed rate bond issues of 3.70% and the previous month's negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 3.50%.

As of March 31, 2018, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in March from all swaps was negative \$421,066.

Payroll ACH payments totaled \$2,779,201, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for March totaled \$40,337,512.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

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

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE SUMMARY OF FIXED AND VARIABLE RATE DEBT, THE MONTHLY INTEREST RATE SWAP SUMMARY FOR MARCH 2018, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE MARCH 2018 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,779,201 AND APPROVE THE MARCH 2018 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 385062 THROUGH 386582 WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$40,337,512.

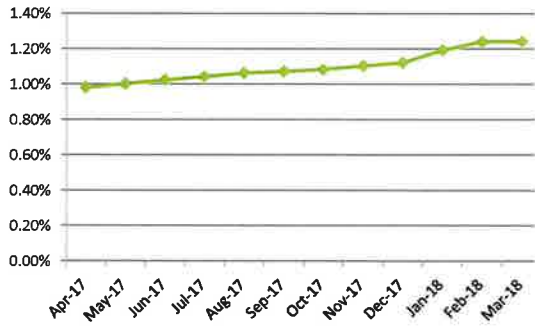
LIST OF EXHIBITS:

- 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

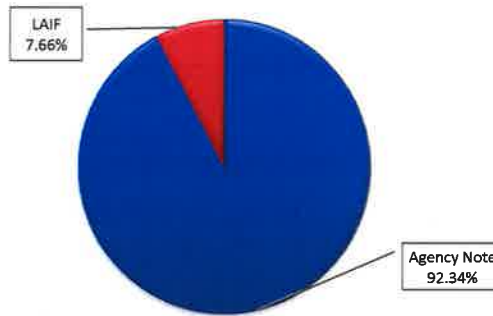
Exhibit "A"

Irvine Ranch Water District Investment Portfolio Summary March 2018

Monthly Fixed Income Yield



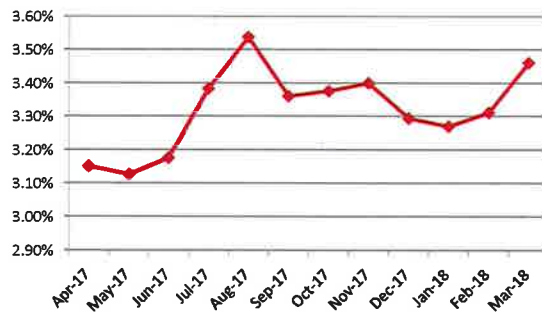
Portfolio Distribution



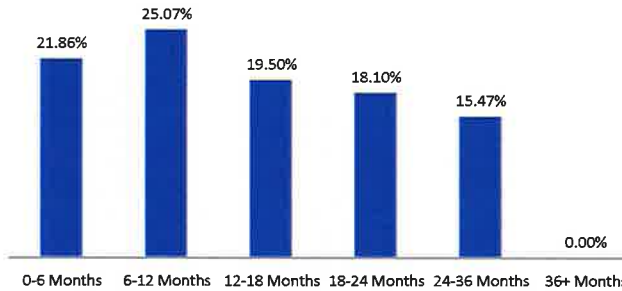
Investment Summary

Type	PAR	Book Value	Market Value
Agency Note	331,550,000	331,610,299	328,561,983
LAIF	27,500,000	27,500,000	27,432,295
Grand Total	359,050,000	359,110,299	355,994,278

Weighted Average Return Including Real Estate Portfolio



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
Fed Home Loan Bank	111,000,000	30.91%
Fed Natl Mortgage Assoc	80,550,000	22.44%
Fed Home Loan Mortgage Corp	75,000,000	20.89%
Fed Farm Credit Bank	65,000,000	18.10%
State of California Treasury - LAIF	27,500,000	7.66%
Grand Total	359,050,000	100%

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

03/31/18

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 3/31/2018	UNREALIZED ⁽²⁾ GAIN/(LOSS)
08/23/17			04/01/18		LAIF	State of California Tsy.	\$27,500,000		1.430%	\$27,500,000.00	\$27,500,000.00	27,432,295.03	(67,704.97)
04/07/16	N/A	N/A	04/09/18	NA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.750%	0.790%	4,996,000.00	4,999,956.28	4,999,050.00	(906.28)
05/16/16	N/A	N/A	05/16/18	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.750%	0.801%	4,995,000.00	4,999,691.78	4,994,500.00	(5,191.78)
05/13/16	N/A	N/A	05/21/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.875%	0.768%	5,010,700.00	5,000,724.93	4,994,200.00	(6,524.93)
05/24/16	N/A	N/A	06/08/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	11,000,000	1.250%	0.995%	11,056,540.00	11,005,160.70	10,989,110.00	(16,050.70)
06/29/16	N/A	N/A	06/29/18	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	1.000%	0.679%	10,016,000.00	10,001,950.68	9,979,200.00	(22,750.68)
09/01/16	N/A	N/A	07/27/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.750%	0.928%	4,983,250.00	4,997,176.15	4,981,800.00	(15,376.15)
12/21/16	N/A	N/A	08/15/18	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.000%	1.245%	4,980,000.00	4,995,481.73	4,983,950.00	(11,531.73)
09/01/16	N/A	N/A	08/28/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.000%	1.000%	5,000,000.00	5,000,000.00	4,980,000.00	(20,000.00)
09/01/16	NA	NA	09/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.125%	0.916%	5,021,000.00	5,004,691.79	4,980,350.00	(24,341.79)
12/28/16	NA	NA	09/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.125%	1.225%	4,991,500.00	4,997,742.40	4,989,350.00	(17,392.40)
10/12/16	N/A	N/A	09/27/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	0.900%	0.952%	9,990,000.00	9,997,216.78	9,946,400.00	(50,816.78)
10/12/16	N/A	N/A	09/28/18	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.880%	0.942%	4,994,000.00	4,998,324.02	4,976,050.00	(22,274.02)
09/01/16	NA	NA	10/01/18	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.030%	0.925%	5,010,750.00	5,002,588.49	4,980,000.00	(22,588.49)
10/12/16	N/A	N/A	10/12/18	Aaa/NR/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.000%	1.041%	9,992,000.00	9,997,654.79	9,947,900.00	(49,754.79)
10/12/16	N/A	N/A	11/27/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.625%	0.956%	10,140,360.00	10,047,027.84	9,974,100.00	(72,927.84)
12/21/16	N/A	N/A	12/05/18	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.100%	1.319%	4,978,900.00	5,028,134.41	4,967,800.00	(60,334.41)
09/01/16	NA	NA	12/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	0.941%	5,091,300.00	5,014,888.15	4,989,350.00	(25,538.15)
12/27/16	NA	NA	12/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	1.320%	5,041,536.20	4,992,671.15	4,989,350.00	(3,321.15)
09/01/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.009%	4,993,000.00	4,997,584.56	4,949,800.00	(47,784.56)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.035%	4,990,500.00	4,996,434.62	4,949,800.00	(46,634.62)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.040%	4,990,000.00	4,996,246.97	4,949,800.00	(46,446.97)
10/12/16	Continuous after	02/12/18	02/12/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.050%	1.093%	9,990,000.00	9,996,049.24	9,907,000.00	(89,049.24)
09/01/16	NA	NA	03/08/19	Aaa/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	1.500%	0.964%	5,066,500.00	5,024,702.07	4,970,200.00	(54,502.07)
03/21/18	NA	NA	03/21/19	Aaa/NA/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	2.125%	2.125%	10,000,000.00	10,000,000.00	9,997,200.00	(2,800.00)
10/12/16	N/A	N/A	03/29/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.050%	4,999,950.00	4,999,978.73	4,944,000.00	(55,978.73)
10/12/16	N/A	N/A	04/15/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	1.125%	0.992%	10,032,800.00	10,014,302.95	9,893,500.00	(120,802.95)
10/31/16	N/A	N/A	04/26/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.060%	4,998,750.00	4,999,461.14	4,939,500.00	(59,961.14)
09/01/16	N/A	N/A	05/28/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.030%	1.048%	4,997,550.00	4,998,965.07	4,932,000.00	(66,965.07)
09/01/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	0.987%	5,087,400.00	5,037,764.37	4,967,100.00	(70,664.37)
10/12/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	1.103%	5,068,515.88	5,032,255.17	4,967,100.00	(65,155.17)
10/12/16	NA	NA	07/19/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.875%	1.098%	4,969,652.90	4,985,156.96	4,914,150.00	(71,006.96)
09/01/16	NA	NA	07/26/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.180%	4,995,700.00	4,998,045.09	4,930,300.00	(67,745.09)
09/01/16	N/A	N/A	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.160%	4,998,500.00	4,999,293.31	4,924,850.00	(74,443.31)
09/01/16	NA	NA	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.132%	4,999,000.00	4,999,528.87	4,923,150.00	(76,378.87)
09/28/16	Quarterly	03/09/17	09/09/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.142%	4,997,500.00	4,998,774.33	4,907,200.00	(91,574.33)
09/28/16	Continuous after	12/27/16	09/27/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.250%	1.189%	5,001,500.00	5,000,745.89	4,927,500.00	(73,245.89)
10/12/16	Continuous after	10/03/17	10/03/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.125%	1.160%	9,989,780.00	9,994,635.91	9,834,000.00	(160,635.91)
10/12/16	Continuous after	10/11/17	10/11/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.120%	1.205%	9,975,000.00	9,986,791.59	9,823,900.00	(162,891.59)

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

03/31/18

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 3/31/2018	UNREALIZED ⁽²⁾ GAIN/(LOSS)
11/08/16	Quarterly	05/08/17	11/08/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.250%	1.245%	5,000,750.00	5,000,401.37	4,919,800.00	(80,601.37)
11/28/16	NA	NA	11/15/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.375%	1.440%	4,990,550.00	4,994,820.84	4,928,900.00	(65,920.84)
11/28/16	Quarterly	05/25/17	11/25/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.400%	1.503%	4,985,000.00	4,991,717.03	4,929,550.00	(62,167.03)
12/12/16	NA	NA	12/12/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.450%	1.440%	5,001,450.00	5,000,820.43	4,931,250.00	(69,570.43)
12/21/16	NA	NA	12/19/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.500%	1.621%	4,982,350.00	4,989,875.07	4,932,500.00	(57,375.07)
12/20/17	NA	NA	01/17/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.500%	1.932%	4,956,250.00	4,958,039.25	4,928,700.00	(29,339.25)
10/16/17	NA	NA	02/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.612%	4,987,025.00	4,989,530.00	4,924,550.00	(64,980.00)
12/20/17	NA	NA	03/13/20	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	4.125%	1.940%	5,237,200.00	5,228,166.58	5,166,200.00	(61,966.58)
10/03/17	NA	NA	04/20/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.375%	1.630%	4,968,350.00	4,974,475.81	4,904,650.00	(69,825.81)
11/21/17	Continuous after	02/20/18	05/20/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.830%	1.930%	4,987,500.00	4,972,389.53	4,928,550.00	(43,839.53)
11/10/17	NA	NA	06/22/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.750%	4,968,000.00	4,989,448.41	4,903,250.00	(86,198.41)
12/20/17	Quarterly	11/10/16	08/10/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.450%	2.052%	4,923,000.00	4,925,476.14	4,886,450.00	(39,026.14)
12/12/17	One Time	09/28/18	09/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	2.000%	2.000%	5,000,000.00	5,000,000.00	4,947,750.00	(52,250.00)
10/31/17	One Time	10/30/18	10/30/20	Aaa/NR/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,550,000	1.850%	1.850%	5,550,000.00	5,550,000.00	5,460,922.50	(89,077.50)
12/13/17	Continuous after	08/23/17	11/23/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.770%	2.060%	4,958,750.00	4,959,938.43	4,905,050.00	(54,888.43)
12/13/17	Quarterly	05/24/18	11/24/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.900%	2.023%	4,982,500.00	4,983,003.71	4,926,550.00	(56,453.71)
11/30/17	NA	NA	11/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.850%	1.964%	4,983,550.00	4,985,391.19	4,923,800.00	(61,591.19)
12/20/17	NA	NA	12/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.875%	2.023%	4,978,400.00	4,979,006.52	4,928,050.00	(50,956.52)

TOTAL INVESTMENTS

\$359,050.00

\$359,371,059.98

\$359,110,299.24

\$355,994,277.53

Petty Cash
Ck Balance

Bank of America

3,400.00

1,417,303.51

\$360,791,763.49

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

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

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

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

Outstanding Variable Rate Debt	\$284,200,000
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)	\$154,200,000
Investment Balance:	\$360,791,763
Investment to Variable Rate Debt Ratio:	234%
Portfolio - Average Number of Days To Maturity ⁽⁴⁾	396

	Investment Portfolio	Real Estate ⁽³⁾ Portfolio	Weighted Avg. Return
March	1.25%	8.91%	3.46%
February	1.24%	8.49%	3.31%
Change	0.01%		0.15%

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

*S - Step up

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

03/31/18

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Collateral Deposit	US Treasury
03/18	\$27,500,000	7.66%	\$27,500,000				
04/18	5,000,000	1.39%		5,000,000			
05/18	10,000,000	2.79%		10,000,000			
06/18	21,000,000	5.85%		21,000,000		-	
07/18	5,000,000	1.39%		5,000,000			
08/18	10,000,000	2.79%		10,000,000			
09/18	25,000,000	6.96%		25,000,000			
10/18	15,000,000	4.18%		15,000,000			
11/18	10,000,000	2.79%		10,000,000			
12/18	15,000,000	4.18%		15,000,000			
01/19	15,000,000	4.18%		15,000,000			
02/19	10,000,000	2.79%		10,000,000			
SUB-TOTAL	\$168,500,000	46.93%	\$27,500,000	\$141,000,000			
13 Months - 3 YEARS							
3/01/19 - 5/31/2019	40,000,000	11.14%		40,000,000			
6/01/19 - 8/31/2019	30,000,000	8.36%		30,000,000			
9/01/2019 - 11/30/19	45,000,000	12.53%		45,000,000			
12/01/19 - 2/28/2020	20,000,000	5.57%		20,000,000			
3/01/2020 - 5/31/2020	15,000,000	4.18%		15,000,000			
6/01/2020 - 8/31/2020	10,000,000	2.79%		10,000,000			
9/01/2020 -12/31/2020	30,550,000	8.51%		30,550,000			
1/01/2021 -2/28/2021	-						
	-						
TOTALS	\$359,050,000	100.00%	\$27,500,000	\$331,550,000			

% OF PORTFOLIO

7.66%

92.34%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Mar-18

MATURITIES/SALES/CALLS

PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
3/23/2018	FHLMC - Note	\$5,000,000	0.91%	3/21/2018	3/21/2019	FHLB - Note	\$10,000,000	2.13%

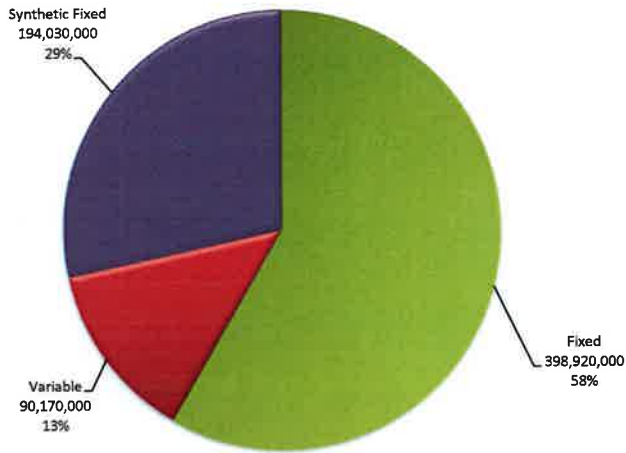
Irvine Ranch Water District
 Summary of Real Estate - Income Producing Investments
 3/31/2018

	<u>ACQUISITION DATE</u>	<u>PROPERTY TYPE</u>	<u>OWNERSHIP INTEREST</u>	<u>ORIGINAL COST</u>	<u>ESTIMATED MARKET VALUE 3/31/2018</u>	<u>ANNUALIZED RATE OF RETURN QUARTER ENDED 3/31/2018</u>
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 147,507,750	18.94%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 28,934,076	8.56%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 9,571,680	11.08%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 7,803,000	3.39%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 10,820,160	9.02%
Total - Income Properties				\$ 72,569,826	\$ 204,636,666	14.43%
<u>OTHER REAL ESTATE DESCRIPTION</u>						
Serrano Summit - Promissory Note	Sep-17	NA	NA	\$ 81,600,000	\$ 81,600,000	4.00%
Total - Income Producing Real Estate Investments				\$ 154,169,826	\$ 286,236,666	8.91%

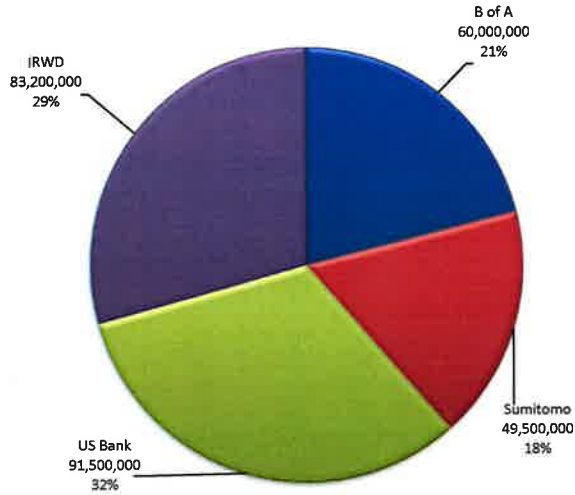
Exhibit "B"

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

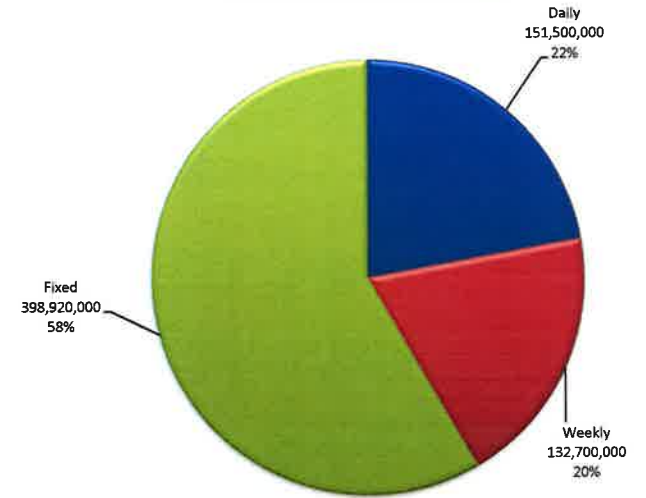
Current Debt Mix By Type



Letters of Credit / Support



Current Debt Rate Reset



Outstanding Par by Series

Series	Issue Date	Maturity Date	Remaining		Letter of Credit	Rmkt Agent	Mode	Reset
			Principal	Percent				
Series 1993	05/19/93	04/01/33	\$31,500,000	4.61%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$49,500,000	7.25%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$49,920,000	7.31%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$33,280,000	4.87%	IRWD	Morgan	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$60,000,000	8.78%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$60,000,000	8.78%	B of A	Goldman	Variable	Daily
2010 Refunding Cops	02/23/10	03/01/20	\$3,775,000	0.55%	N/A	N/A	Fixed	Fixed
2016 COPS	09/01/16	03/01/46	\$116,745,000	17.09%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	25.62%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	15.14%	N/A	N/A	Fixed	Fixed
Total			\$683,120,000	100.00%				

IRVINE RANCH WATER DISTRICT
SUMMARY OF FIXED & VARIABLE RATE DEBT

March-18

ITN
Daily
Weekly

GENERAL BOND INFORMATION							LETTER OF CREDIT INFORMATION									TRUSTEE INFORMATION										
VARIABLE RATE ISSUES	Issue Date	Maturity Date	Principal Payment Date	Payment Date	Original Par Amount	Remaining Principal	Letter of Credit	Reimbursement Agreement Date	L/C Exp Date	MOODY'S	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee						
SERIES 1993	05/19/93	04/01/33	APR 1 (2014)	5th Bus. Day	\$38,300,000	\$31,500,000	US BANK	05/07/15	11/07/18	Aa3/VMIG1	AA-/A-1+	N/R	\$31,924,603	0.3300%	\$105,351	BAML	DAILY	0.10%	\$31,500	BANK OF NY						
SERIES 2008-A Refunding	04/24/08	07/01/35	JUL 1	5th Bus. Day	\$60,215,000	\$49,500,000	SUMITOMO	04/01/11	07/21/21	A1/P-1	A/A-1	A/F1	\$50,232,329	0.3150%	\$158,232	BAML	WED	0.07%	\$34,650	BANK OF NY						
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$60,545,000	\$49,920,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$62,400	BANK OF NY						
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$40,370,000	\$33,280,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Morgan S.	WED	0.13%	\$41,600	BANK OF NY						
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$60,000,000	US BANK	04/01/11	12/22/20	Aa2/VMIG1	AA-/A-1+	AA/F1+	\$60,670,685	0.4100%	\$248,750	US Bank	DAILY	0.07%	\$42,000	US BANK						
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$60,000,000	B of A	04/01/11	07/15/19	A1/VMIG1	A/A-1	A1/F1+	\$60,670,685	0.4000%	\$242,683	Goldman	DAILY	0.10%	\$60,000	US BANK						
\$349,430,000							\$284,200,000							SUB-TOTAL VARIABLE RATE DEBT			\$203,498,301		0.3711%		\$755,016		0.10%		\$272,150	
															(Wt. Avg)					(Wt. Avg)						
FIXED RATE ISSUES																										
2010 REFUNDING COPS	02/23/10	03/01/20	Mar -1	MAR/SEPT	\$85,145,000	\$3,775,000	N/A	N/A	N/A	Aa1	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY					
2010 GO Build America Taxable Bonds	12/16/10	05/01/40	MAY (2025)	MAY/NOV	\$175,000,000	\$175,000,000	N/A	N/A	N/A	Aa1	AAA	NR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	US BANK					
2016 COPS	09/01/16	03/01/46	Mar -1	MAR/SEPT	\$116,745,000	\$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	N/A	US BANK					
SERIES 2016	10/12/16	02/01/46	Feb -1	FEB/AUG	\$103,400,000	\$103,400,000	N/A	N/A	N/A	NR	AAA	AAA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BANK OF NY					
\$480,290,000							\$398,920,000							SUB-TOTAL FIXED RATE DEBT												
\$829,720,000							\$683,120,000							TOTAL - FIXED & VARIABLE RATE DEBT												

Remarketing Agents			GO VS COP's		
Goldman	109,920,000	39%	GO:	562,600,000	82%
Morgan Stanley	33,280,000	12%	COPS:	120,520,000	18%
BAML	81,000,000	29%	Total	<u>683,120,000</u>	
US Bank	60,000,000	21%			
	<u>284,200,000</u>				

LOC Banks		Breakdown Between Variable & Fixed Rate Mode	
SUMITOMO	49,500,000	Daily Issues	151,500,000 22%
BANK OF AMERICA	60,000,000	Weekly Issues	49,500,000 7%
US BANK	91,500,000	ITN Issues	83,200,000 12%
	<u>201,000,000</u>	Sub-Total	<u>284,200,000</u>
		Fixed Rate Issues	\$398,920,000 58%
		Sub-Total - Fixed	<u>398,920,000</u>
		TOTAL DEBT	
		FIXED & VAR.	<u>683,120,000</u> 100%

IRVINE RANCH WATER DISTRICT
SUMMARY OF DEBT RATES
Mar-18

Rmkt Agent	GOLDMAN	GOLDMAN	MORGAN STANLEY	MERRILL 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	60,000,000	49,920,000	33,280,000	31,500,000	49,500,000	60,000,000
Bank	BOFA	(SIFMA -1)	(SIFMA -1)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
3/1/2018	0.81%	1.08%	1.08%	0.76%	0.93%	0.81%
3/2/2018	0.74%	1.08%	1.08%	0.76%	0.93%	0.80%
3/3/2018	0.74%	1.08%	1.08%	0.76%	0.93%	0.80%
3/4/2018	0.74%	1.08%	1.08%	0.76%	0.93%	0.80%
3/5/2018	0.74%	1.08%	1.08%	0.78%	0.93%	0.75%
3/6/2018	0.74%	1.08%	1.08%	0.78%	0.93%	0.75%
3/7/2018	0.77%	1.08%	1.08%	0.78%	0.93%	0.77%
3/8/2018	0.79%	1.12%	1.12%	0.79%	0.97%	0.80%
3/9/2018	0.80%	1.12%	1.12%	0.82%	0.97%	0.83%
3/10/2018	0.80%	1.12%	1.12%	0.82%	0.97%	0.83%
3/11/2018	0.80%	1.12%	1.12%	0.82%	0.97%	0.83%
3/12/2018	0.82%	1.12%	1.12%	0.92%	0.97%	0.83%
3/13/2018	0.90%	1.12%	1.12%	0.85%	0.97%	0.87%
3/14/2018	0.92%	1.12%	1.12%	0.89%	0.97%	0.93%
3/15/2018	0.94%	1.21%	1.21%	0.94%	1.05%	0.98%
3/16/2018	0.95%	1.21%	1.21%	0.97%	1.05%	0.98%
3/17/2018	0.95%	1.21%	1.21%	0.97%	1.05%	0.98%
3/18/2018	0.95%	1.21%	1.21%	0.97%	1.05%	0.98%
3/19/2018	0.96%	1.21%	1.21%	0.98%	1.05%	1.00%
3/20/2018	0.98%	1.21%	1.21%	1.02%	1.05%	1.00%
3/21/2018	1.03%	1.21%	1.21%	1.08%	1.05%	1.01%
3/22/2018	1.07%	1.35%	1.35%	1.15%	1.25%	1.08%
3/23/2018	1.17%	1.35%	1.35%	1.16%	1.25%	1.10%
3/24/2018	1.17%	1.35%	1.35%	1.16%	1.25%	1.10%
3/25/2018	1.17%	1.35%	1.35%	1.16%	1.25%	1.10%
3/26/2018	1.18%	1.35%	1.35%	1.28%	1.25%	1.18%
3/27/2018	1.30%	1.35%	1.35%	1.29%	1.25%	1.22%
3/28/2018	1.35%	1.35%	1.35%	1.33%	1.25%	1.33%
3/29/2018	1.47%	1.57%	1.57%	1.44%	1.47%	1.45%
3/30/2018	1.47%	1.57%	1.57%	1.44%	1.47%	1.45%
3/31/2018	1.47%	1.57%	1.57%	1.44%	1.47%	1.45%
Avg Interest Rates	0.99%	1.24%	1.24%	1.00%	1.09%	0.99%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.40%			0.33%	0.32%	0.41%
All-In Rate	1.49%	1.36%	1.36%	1.43%	1.48%	1.48%
Par Amount		109,920,000	33,280,000	81,000,000		60,000,000

Interest Rate Mode	Percent of Total Variable Rate Debt	Par Outstanding	Weighted All-In Average Rate	Base Rate Average
Daily	53.31%	151,500,000	1.47%	0.99%
Weekly	46.69%	132,700,000	1.40%	1.18%
Fixed			1.44%	1.08%
COPS 2010	0.95%	3,775,000	3.82%	
COPS 2016	29.27%	116,745,000	2.90%	
BABS 2010	43.87%	175,000,000	4.46%	(1)
SERIES 2016	25.92%	103,400,000	3.32%	
	100.00%	\$ 398,920,000	3.70%	
All-In Debt Rate Including \$130 Million Notional Amount of Swaps				3.50%

(1) Rate adjusted up from 4.35% as a result of sequestration reducing BAB's subsidy by 6.8%

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

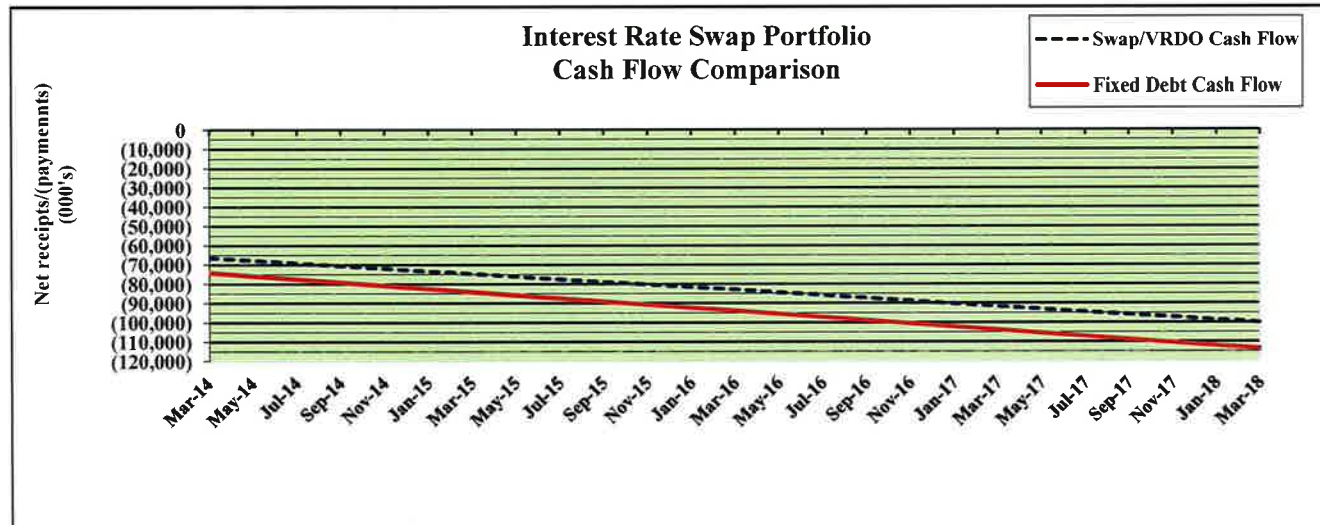
Exhibit "C"

LIBOR Avg %	Prior Mo.	Current Mo.	12-Mo Avg
	1.56%	1.60%	1.32%

Current Fiscal Year Active Swaps								Cash Flow				(Since 6/06)	Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference	
Fixed Payer Swaps - By Effective Date														
6/4/2006	6/4/2019	1.2	ML	\$ 20,000,000	FXP	LIBOR	6.200%	(82,223)	(68,470)	\$ (720,910)	\$ (11,644,203)	\$ 19,077,677	\$ (922,323)	
6/4/2006	6/4/2019	1.2	CG	20,000,000	FXP	LIBOR	6.200%	(82,223)	(68,470)	(720,910)	(11,644,203)	19,078,075	(921,925)	
6/17/2006	6/17/2019	1.2	CG	30,000,000	FXP	LIBOR	6.140%	(121,975)	(101,530)	(1,067,504)	(17,270,161)	28,599,635	(1,400,365)	
3/10/2007	3/10/2029	11.0	ML	30,000,000	FXP	LIBOR	5.687%	(110,144)	(91,298)	(966,620)	(15,572,427)	21,550,315	(8,449,685)	
3/10/2007	3/10/2029	11.0	CG	30,000,000	FXP	LIBOR	5.687%	(110,144)	(91,298)	(966,620)	(15,572,427)	21,550,593	(8,449,407)	
Totals/Weighted Avgs				5.7	\$ 130,000,000		5.949%	\$ (506,709)	\$ (421,066)	\$ (4,442,563)	\$ (71,703,419)	\$ 109,856,295	\$ (20,143,705)	
Total Current Year Active Swaps				\$ 130,000,000				\$ (506,709)	\$ (421,066)	\$ (4,442,563)	\$ (71,703,419)	\$ 109,856,295	\$ (20,143,705)	

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

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference								
\$ (506,709)	\$ (421,066)	\$ (4,442,563)	\$ (71,703,419)	\$ 109,856,295	\$ (20,143,705)								



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt	
Cash Flow to Date	
Synthetic Fixed =	\$99,938,247
Fixed Rate =	\$113,564,917
Assumptions:	
- Fixed rate debt issued at 5.10% in Jun-06, and 4.93% in Mar-07 (estimated TE rates - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

Exhibit "D"

IRWD Ledger Upgrade

Void Payment Register

Report Date: 29-MAR-2018 14:55

Include Zero Amount Payments: Yes
Display Payee Address: No

Period From: 01-MAR-18

Page: 1
To: 29-MAR-18
Date: Void Date

Bank: Bank of America N.A.

Branch: Los Angeles

Account: Checking AP and PR

Bank Account Currency: USD

Payment Currency: USD (US Dollar)

Payment Number	Date	Payee Name	Site	Address	Payment Amount	Void Date
Payment Document: IRWD CHECK						
381586	02-NOV-17	ALMUHAITHIF, ZIYAD	PAY		13.79	13-MAR-18
381717	02-NOV-17	PRC BUILDERS, INC.	PAY		972.98	14-MAR-18
381778	02-NOV-17	YANG, STEPHANIE	PAY		48.86	13-MAR-18
381781	02-NOV-17	ZHAO, WEI	PAY		13.13	13-MAR-18
381911	09-NOV-17	SANTA ANA COUNTRY CLUB	PAY		963.30	14-MAR-18
382018	16-NOV-17	COFFELT, MARILYN	PAY		64.77	13-MAR-18
382056	16-NOV-17	HECK, MARCEA	PAY		39.99	13-MAR-18
382102	16-NOV-17	NGUYEN, MICHELLE	PAY		80.57	13-MAR-18
382124	16-NOV-17	QIAO, JINGJING	PAY		56.30	13-MAR-18
382141	16-NOV-17	SEO, JIEUN	PAY		152.33	14-MAR-18
382183	16-NOV-17	WILLIAMS, FRITZIE	PAY		58.90	13-MAR-18
382185	16-NOV-17	XIE, YI	PAY		33.17	13-MAR-18
382295	29-NOV-17	GUO, HAOXIANG	PAY		32.21	13-MAR-18
382307	29-NOV-17	HSU, KEYEE	PAY		71.93	13-MAR-18
382320	29-NOV-17	LI, RONG	NEWPORT BEACH		29.00	13-MAR-18
382321	29-NOV-17	LINNELL, HARRY T	PAY		188.74	14-MAR-18
382429	29-NOV-17	WET SEAL, LLC	IRVINE		24.43	13-MAR-18
384343	01-FEB-18	SOUTH BAY FOUNDRY, INC	SAN BERNARDINO		3,431.84	27-MAR-18
384738	15-FEB-18	FUN, BAOLONG	PAY		354.09	01-MAR-18
384769	15-FEB-18	KLEINFELDER, INC.	PAY		1,747.50	19-MAR-18
385015	22-FEB-18	SANCHEZ, CAROLINE	PAY		183.81	19-MAR-18
385398	08-MAR-18	JIN, DAN	PAY		222.15	21-MAR-18

Payment Document Subtotal 8,783.79

Bank Account Subtotal 8,783.79 Voids

Report Total 8,783.79

Report Count: 22
IRWD Ledger Upgrade

Void Payment Register

Report Date: 29-MAR-2018 14:55

Include Zero Amount Payments: Yes
Display Payee Address: No

Period From: 01-MAR-18

Page: 2
To: 29-MAR-18
Date: Void Date

*** End of Report ***

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385062		01-MAR-18	Bystrom, Brian V (Brian)		90.00	12-MAR-18	90.00	Reconciled
385063		01-MAR-18	Garcia, Juan		207.17	05-MAR-18	207.17	Reconciled
385064		01-MAR-18	Guzman, Juan (Juan)		145.46	06-MAR-18	145.46	Reconciled
385065		01-MAR-18	Lewis, Lyndy R		43.60			Negotiable
385066		01-MAR-18	Moore, Rory M (Rory)		90.00	19-MAR-18	90.00	Reconciled
385067		01-MAR-18	Nash, Joel		126.75	06-MAR-18	126.75	Reconciled
385068		01-MAR-18	Norman, Tammy		1,200.00	05-MAR-18	1,200.00	Reconciled
385069		01-MAR-18	Ruiz, Ricky (Ricky)		110.00	06-MAR-18	110.00	Reconciled
385070		01-MAR-18	Sciabica, Joseph		8.72	07-MAR-18	8.72	Reconciled
385071		01-MAR-18	Soto, Franklin E (Frank)		119.94			Negotiable
385072		01-MAR-18	Stontz, Adam J		153.81	12-MAR-18	153.81	Reconciled
385073		01-MAR-18	Tran, Jason M (Jason)		180.00	12-MAR-18	180.00	Reconciled
385074		01-MAR-18	Trigg, Tyler		60.00	05-MAR-18	60.00	Reconciled
385075		01-MAR-18	Vazquez, Rafael		190.00	06-MAR-18	190.00	Reconciled
385076		01-MAR-18	Vazquez, Rafael	HOME	520.00	06-MAR-18	520.00	Reconciled
385077		01-MAR-18	Chaney, David (Dave)	HOME	85.00	07-MAR-18	85.00	Reconciled
385078		01-MAR-18	A STITCH ON TIME.COM		94.82	05-MAR-18	94.82	Reconciled
385079		01-MAR-18	ABM INDUSTRY GROUPS, LLC		20,264.80	08-MAR-18	20,264.80	Reconciled
385080		01-MAR-18	AFLAC		7,248.01	06-MAR-18	7,248.01	Reconciled
385081		01-MAR-18	AFLAC		203.12	08-MAR-18	203.12	Reconciled
385082		01-MAR-18	AIR TECHNOLOGY LABORATORIES		503.00	21-MAR-18	503.00	Reconciled
385083		01-MAR-18	ALEXANDER'S CONTRACT SERVICES, INC.		125.00	06-MAR-18	125.00	Reconciled
385084		01-MAR-18	ALPHA TRAFFIC SERVICES, INC.		620.00	05-MAR-18	620.00	Reconciled
385085		01-MAR-18	ALSTON & BIRD LLP		18,822.81	08-MAR-18	18,822.81	Reconciled
385086		01-MAR-18	AM CONSERVATION GROUP, INC.		1,028.66	06-MAR-18	1,028.66	Reconciled
385087		01-MAR-18	AMAZON CAPITAL SERVICES, INC.		80.30	05-MAR-18	80.30	Reconciled
385088		01-MAR-18	APEX LIFE SCIENCES, LLC		1,190.00	06-MAR-18	1,190.00	Reconciled
385089		01-MAR-18	AQUA-METRIC SALES COMPANY		10,642.44	12-MAR-18	10,642.44	Reconciled
385090		01-MAR-18	ARCADIS U.S., INC.		93,617.78	08-MAR-18	93,617.78	Reconciled

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385091		01-MAR-18	ASHLEY, ALICIA		143.06	06-MAR-18	143.06	Reconciled
385092		01-MAR-18	AT&T		5,200.50	06-MAR-18	5,200.50	Reconciled
385093		01-MAR-18	ATTORNEY GENERAL'S REGISTRY OF CHARITABLE TRUSTS		150.00	12-MAR-18	150.00	Reconciled
385094		01-MAR-18	AUTOZONE PARTS, INC.		392.52	07-MAR-18	392.52	Reconciled
385095		01-MAR-18	BARQAWI, BADER		37.25			Negotiable
385096		01-MAR-18	BATTERIES PLUS AND BATTERIES PLUS BULBS		704.36	07-MAR-18	704.36	Reconciled
385097		01-MAR-18	BDC SPECIAL WASTE		372.00	07-MAR-18	372.00	Reconciled
385098		01-MAR-18	BERK, SUSAN		10,000.00	12-MAR-18	10,000.00	Reconciled
385099		01-MAR-18	BICKMORE RISK SERVICES		2,350.00	05-MAR-18	2,350.00	Reconciled
385100		01-MAR-18	BIOMAGIC INC		2,584.39	06-MAR-18	2,584.39	Reconciled
385101		01-MAR-18	BRENNTAG PACIFIC INC		5,196.50	05-MAR-18	5,196.50	Reconciled
385102		01-MAR-18	BRITHINEE ELECTRIC		6,862.74	05-MAR-18	6,862.74	Reconciled
385103		01-MAR-18	BRUCE NEWELL		1,250.00	06-MAR-18	1,250.00	Reconciled
385104		01-MAR-18	BUTLER BOX & STAKE INC		1,359.16	07-MAR-18	1,359.16	Reconciled
385105		01-MAR-18	C WELLS PIPELINE MATERIALS INC		3,126.92	08-MAR-18	3,126.92	Reconciled
385106		01-MAR-18	CALATLANTIC HOMES		25.74			Negotiable
385107		01-MAR-18	CALIFORNIA BARRICADE RENTAL,		11,056.63	07-MAR-18	11,056.63	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
385150		01-MAR-18	HACH COMPANY		3,749.40	06-MAR-18	3,749.40	Reconciled
385151		01-MAR-18	HARBOR ALL GLASS & MIRROR INC.		1,911.79	07-MAR-18	1,911.79	Reconciled
385152		01-MAR-18	HARRINGTON INDUSTRIAL PLASTICS LLC		925.15	05-MAR-18	925.15	Reconciled
385153		01-MAR-18	HARRY H. KOBZEFF		1,390.00	06-MAR-18	1,390.00	Reconciled
385154		01-MAR-18	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY		72.30	06-MAR-18	72.30	Reconciled
385155		01-MAR-18	HARVARD COURT APARTMENTS		30.96	09-MAR-18	30.96	Reconciled
385156		01-MAR-18	HDR ENGINEERING INC		30,826.25	08-MAR-18	30,826.25	Reconciled
385157		01-MAR-18	HELPMATES STAFFING SERVICES		4,053.85	05-MAR-18	4,053.85	Reconciled
385158		01-MAR-18	HERC RENTALS INC.		1,481.58	06-MAR-18	1,481.58	Reconciled
385159		01-MAR-18	HILL BROTHERS CHEMICAL COMPANY		20,166.14	09-MAR-18	20,166.14	Reconciled
385160		01-MAR-18	HOANG, HUYNH		91.05	07-MAR-18	91.05	Reconciled
385161		01-MAR-18	HOME DEPOT USA INC		156.21	07-MAR-18	156.21	Reconciled
385162		01-MAR-18	IBM CORPORATION		3,201.00	06-MAR-18	3,201.00	Reconciled
385163		01-MAR-18	INDEPENDENT SPECIAL DISTRICT OF ORANGE COUNTY		50.00			Negotiable
385164		01-MAR-18	INORGANIC VENTURES INC		192.19	05-MAR-18	192.19	Reconciled
385165		01-MAR-18	IRVINE PIPE & SUPPLY INC		3,063.48	05-MAR-18	3,063.48	Reconciled
385166		01-MAR-18	IRWD EMPLOYEES ASSOCIATION		1,400.00	09-MAR-18	1,400.00	Reconciled
385167		01-MAR-18	IRWD-PETTY CASH CUSTODIAN		1,188.97	02-MAR-18	1,188.97	Reconciled
385168		01-MAR-18	JACKSON TIDUS, A LAW CORPORATION		588.00	05-MAR-18	588.00	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 5
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385169		01-MAR-18	JUST ENERGY SOLUTIONS INC.		42.57	05-MAR-18	42.57	Reconciled
385170		01-MAR-18	KEC ENGINEERING		1,513.48	08-MAR-18	1,513.48	Reconciled
385171		01-MAR-18	KENT & AMY DAHLBERG		14,333.60	07-MAR-18	14,333.60	Reconciled
385172		01-MAR-18	KHONG, ASHLEY		33.98	12-MAR-18	33.98	Reconciled
385173		01-MAR-18	KIM, YOUNG SUN		43.52			Negotiable
385174		01-MAR-18	KNODLE, JOHN		55.57	07-MAR-18	55.57	Reconciled
385175		01-MAR-18	KOELLER NEBEKER CARLSON & HALUCK, LLP		3,156.44	05-MAR-18	3,156.44	Reconciled
385176		01-MAR-18	KUO, JENNY		45.39	19-MAR-18	45.39	Reconciled
385177		01-MAR-18	LANDCARE HOLDINGS, INC.		26,222.43	08-MAR-18	26,222.43	Reconciled
385178		01-MAR-18	LANE, HEATHER		120.12	12-MAR-18	120.12	Reconciled
385179		01-MAR-18	LOU, LIDIA		36.32	05-MAR-18	36.32	Reconciled
385180		01-MAR-18	LSA ASSOCIATES INC		4,586.73	05-MAR-18	4,586.73	Reconciled
385181		01-MAR-18	LUBRICATION ENGINEERS, INC.		3,218.71	06-MAR-18	3,218.71	Reconciled
385182		01-MAR-18	MALLINA, SURESH		30.20	06-MAR-18	30.20	Reconciled
385183		01-MAR-18	MARK ANTHONY DERSHEM		5,000.00	07-MAR-18	5,000.00	Reconciled
385184		01-MAR-18	MASCI, DAWN		201.62	08-MAR-18	201.62	Reconciled
385185		01-MAR-18	MASHAYEKH, SOROOSH		10.73	12-MAR-18	10.73	Reconciled
385186		01-MAR-18	MBC APPLIED ENVIRONMENTAL SCIENCES		2,600.00	09-MAR-18	2,600.00	Reconciled
385187		01-MAR-18	MC FADDEN-DALE INDUSTRIAL		300.29	06-MAR-18	300.29	Reconciled
385188		01-MAR-18	MC MASTER CARR SUPPLY CO		213.09	05-MAR-18	213.09	Reconciled
385189		01-MAR-18	MEINEKE, SCOTT M		39.79	07-MAR-18	39.79	Reconciled
385190		01-MAR-18	MICHAEL BAKER INTERNATIONAL, INC.		35,266.49	08-MAR-18	35,266.49	Reconciled
385191		01-MAR-18	MINOW, ADAM		46.90	12-MAR-18	46.90	Reconciled
385192		01-MAR-18	MOBILE MODULAR MANAGEMENT CORPORATION		1,018.24	05-MAR-18	1,018.24	Reconciled
385193		01-MAR-18	MODJESKA FIREFIGHTERS ASSOCIATION		60.00	15-MAR-18	60.00	Reconciled
385194		01-MAR-18	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		1,800.00	05-MAR-18	1,800.00	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 6
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385195		01-MAR-18	NEPTUNE TECHNOLOGY GROUP, INC.		158,263.20	08-MAR-18	158,263.20	Reconciled
385196		01-MAR-18	NEWPORT BLUFFS APTS		27.96	09-MAR-18	27.96	Reconciled
385197		01-MAR-18	NEWPORT WINDOW MAINTENANCE INC		2,274.00	05-MAR-18	2,274.00	Reconciled
385198		01-MAR-18	NINYO & MOORE		3,258.00	06-MAR-18	3,258.00	Reconciled
385199		01-MAR-18	NMG GEOTECHNICAL INC		25,021.20	08-MAR-18	25,021.20	Reconciled
385200		01-MAR-18	NOSSAMAN LLP		28,100.61	08-MAR-18	28,100.61	Reconciled
385201		01-MAR-18	O'HAREN GOVERNMENT RELATIONS		6,500.00	06-MAR-18	6,500.00	Reconciled
385202		01-MAR-18	OCTA		3,848.00	06-MAR-18	3,848.00	Reconciled
385203		01-MAR-18	OLIN CORPORATION		16,264.57	08-MAR-18	16,264.57	Reconciled
385204		01-MAR-18	OMAR DANDASHI		4,042.40	12-MAR-18	4,042.40	Reconciled
385205		01-MAR-18	ORANGE COUNTY AUTO PARTS CO		4.30	05-MAR-18	4.30	Reconciled
385206		01-MAR-18	ORANGE COUNTY SHERIFF'S OFFICE		62.50	08-MAR-18	62.50	Reconciled
385207		01-MAR-18	ORANGE COUNTY SHERIFF'S OFFICE		249.22	08-MAR-18	249.22	Reconciled
385208		01-MAR-18	PALLIVATHUCAL, BOSE		115.97	12-MAR-18	115.97	Reconciled
385209		01-MAR-18	PARKWAY LAWNMOWER SHOP		246.01	06-MAR-18	246.01	Reconciled
385210		01-MAR-18	PAULUS ENGINEERING, INC.		5,174.28	05-MAR-18	5,174.28	Reconciled
385211		01-MAR-18	PAYNE & FEARS LLP		9,523.00	06-MAR-18	9,523.00	Reconciled
385212		01-MAR-18	PERS LONG TERM CARE		675.35	07-MAR-18	675.35	Reconciled
385213		01-MAR-18	PEYTON, MEL		42.58	06-MAR-18	42.58	Reconciled
385214		01-MAR-18	PIVOT INTERIORS INC		41,444.15	08-MAR-18	41,444.15	Reconciled
385215		01-MAR-18	PMC ENGINEERING LLC.		1,233.38	09-MAR-18	1,233.38	Reconciled
385216		01-MAR-18	POLLARDWATER.COM		8,988.73	05-MAR-18	8,988.73	Reconciled
385217		01-MAR-18	PRAXAIR DISTRIBUTION INC		257.85	06-MAR-18	257.85	Reconciled
385218		01-MAR-18	PRE-PAID LEGAL SERVICES INC		1,284.64	06-MAR-18	1,284.64	Reconciled
385219		01-MAR-18	PROCARE WORK INJURY CENTER		474.94	06-MAR-18	474.94	Reconciled
385220		01-MAR-18	PRUDENTIAL OVERALL SUPPLY		613.43	05-MAR-18	613.43	Reconciled
385221		01-MAR-18	PRUFTECHNIK INC		1,090.43	06-MAR-18	1,090.43	Reconciled
385222		01-MAR-18	PSOMAS		8,916.25	09-MAR-18	8,916.25	Reconciled
IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17								
BANK: Bank of America N.A.			Branch : Los Angeles		Account: Checking AP and PR		Page: 7	
Bank Account Currency: USD (US Dollar)					Payment Currency: USD (US Dollar)			
Payment Type: All					Display Supplier Address: No			

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385223		01-MAR-18	QUALITY ENVIRONMENTAL CONTAINERS		423.28	07-MAR-18	423.28	Reconciled
385224		01-MAR-18	RAM AIR ENGINEERING INC		17,948.88	06-MAR-18	17,948.88	Reconciled
385225		01-MAR-18	RAN, GUO		63.46	27-MAR-18	63.46	Reconciled
385226		01-MAR-18	RANCHO MADERAS APTS		34.85	09-MAR-18	34.85	Reconciled
385227		01-MAR-18	RELIANCE STANDARD LIFE INSURANCE COMPANY		29,484.06	09-MAR-18	29,484.06	Reconciled
385228		01-MAR-18	RESPONSE ENVELOPE, INC		2,618.33	13-MAR-18	2,618.33	Reconciled
385229		01-MAR-18	ROKNI ELECTRIC COMPANY INC.		10,485.00	07-MAR-18	10,485.00	Reconciled
385230		01-MAR-18	ROYAL WHOLESALE ELECTRIC		7,154.60	05-MAR-18	7,154.60	Reconciled
385231		01-MAR-18	S & J SUPPLY CO INC		40,466.82	07-MAR-18	40,466.82	Reconciled
385232		01-MAR-18	SAFETY-KLEEN SYSTEMS, INC		310.75	06-MAR-18	310.75	Reconciled
385233		01-MAR-18	SAN CARLO APARTMENTS		42.17	09-MAR-18	42.17	Reconciled
385234		01-MAR-18	SAN LEON APTS		38.77	09-MAR-18	38.77	Reconciled
385235		01-MAR-18	SAN MARCO APARTMENTS		163.33	09-MAR-18	163.33	Reconciled
385236		01-MAR-18	SAN MARINO APTS		40.97	09-MAR-18	40.97	Reconciled
385237		01-MAR-18	SAN REMO APTS		398.57	09-MAR-18	398.57	Reconciled
385238		01-MAR-18	SANTA MARGARITA FORD		1,386.78	06-MAR-18	1,386.78	Reconciled
385239		01-MAR-18	SCHINDLER ELEVATOR		202.95	09-MAR-18	202.95	Reconciled

385274	01-MAR-18	YUAN, MING		73.98	05-MAR-18	73.98	Reconciled
385275	01-MAR-18	YUN, KYUNGMI		43.54	14-MAR-18	43.54	Reconciled
385276	01-MAR-18	ZEBRON CONTRACTING INC		6,750.00	12-MAR-18	6,750.00	Reconciled
385277	01-MAR-18	ZHANG, JIE		194.10	26-MAR-18	194.10	Reconciled
385278	01-MAR-18	ZHANG, ZHIPENG		26.32	06-MAR-18	26.32	Reconciled
385279	06-MAR-18	ORANGE COUNTY WATER DISTRICT F.V.		722,635.50	08-MAR-18	722,635.50	Reconciled
385280	08-MAR-18	Amezcuca, Joshua E		110.00	13-MAR-18	110.00	Reconciled
385281	08-MAR-18	Chaney, David (Dave)		322.00	14-MAR-18	322.00	Reconciled
385282	08-MAR-18	Corral, Edward Jr (Ed)		125.00	13-MAR-18	125.00	Reconciled
385283	08-MAR-18	LaMar, Steven E		291.95	12-MAR-18	291.95	Reconciled
385284	08-MAR-18	Matheis, Mary Aileen		435.02	09-MAR-18	435.02	Reconciled
385285	08-MAR-18	Moore, Jonathon C (Jon)		105.00	13-MAR-18	105.00	Reconciled
385286	08-MAR-18	Morabito, Chadd		74.79	08-MAR-18	74.79	Reconciled
385287	08-MAR-18	Reinhart, Douglas J		196.34	13-MAR-18	196.34	Reconciled
385288	08-MAR-18	Saldana Rodriguez, Cristina		113.09	09-MAR-18	113.09	Reconciled
385289	08-MAR-18	Strader, Lisa		256.11	08-MAR-18	256.11	Reconciled
385290	08-MAR-18	Swan, Peer		1,167.24	13-MAR-18	1,167.24	Reconciled
385291	08-MAR-18	Arce, Jesus (Jesse)	HOME	85.51	12-MAR-18	85.51	Reconciled
385292	08-MAR-18	Carlos, Alex	HOME	100.00	16-MAR-18	100.00	Reconciled
385293	08-MAR-18	ABM INDUSTRY GROUPS, LLC		17,565.22	15-MAR-18	17,565.22	Reconciled
385294	08-MAR-18	ACCUSOURCE, INC.		487.55	16-MAR-18	487.55	Reconciled
385295	08-MAR-18	ACWA		450.00	12-MAR-18	450.00	Reconciled
385296	08-MAR-18	ADAMS, KEITH		1,952.04	16-MAR-18	1,952.04	Reconciled

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 10
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385297		08-MAR-18	ADS LLC		2,160.00	12-MAR-18	2,160.00	Reconciled
385298		08-MAR-18	ADVANCED CALIBRATION DESIGNS INC		1,102.00	16-MAR-18	1,102.00	Reconciled
385299		08-MAR-18	ALEXANDER BOWIE A LAW CORP		225.00	21-MAR-18	225.00	Reconciled
385300		08-MAR-18	ALEXANDER'S CONTRACT SERVICES, INC.		116,279.43	14-MAR-18	116,279.43	Reconciled
385301		08-MAR-18	AM CONSERVATION GROUP, INC.		2,905.11	12-MAR-18	2,905.11	Reconciled
385302		08-MAR-18	AMAZON CAPITAL SERVICES, INC.		89.34	12-MAR-18	89.34	Reconciled
385303		08-MAR-18	AMIRHOUSHMAND, MORTEZA		54.96			Negotiable
385304		08-MAR-18	APEX LIFE SCIENCES, LLC		2,768.94	15-MAR-18	2,768.94	Reconciled
385305		08-MAR-18	AQUA-METRIC SALES COMPANY		31,238.17	19-MAR-18	31,238.17	Reconciled
385306		08-MAR-18	ASKRI, EMMA		1,407.13	13-MAR-18	1,407.13	Reconciled
385307		08-MAR-18	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA		35,120.77	19-MAR-18	35,120.77	Reconciled
385308		08-MAR-18	AT&T		53.74	13-MAR-18	53.74	Reconciled
385309		08-MAR-18	AT&T		3,825.12	13-MAR-18	3,825.12	Reconciled
385310		08-MAR-18	AT&T		10.22	13-MAR-18	10.22	Reconciled
385311		08-MAR-18	AUTOZONE PARTS, INC.		173.51	12-MAR-18	173.51	Reconciled
385312		08-MAR-18	AVELINO, CHARLIE		720.99	13-MAR-18	720.99	Reconciled
385313		08-MAR-18	BAI, YU		80.20			Negotiable
385314		08-MAR-18	BANK OF NEW YORK MELLON TRUST COMPANY NA		1,435.00	12-MAR-18	1,435.00	Reconciled
385315		08-MAR-18	BATTERIES PLUS AND BATTERIES PLUS BULBS		796.79	13-MAR-18	796.79	Reconciled
385316		08-MAR-18	BELL TOWER FLORIST & GIFTS		501.07	26-MAR-18	501.07	Reconciled
385317		08-MAR-18	BHAN, RAJESH		5.42			Negotiable
385318		08-MAR-18	BILL'S SWEEPING SERVICE INC		900.00	13-MAR-18	900.00	Reconciled
385319		08-MAR-18	BIOMAGIC INC		11,844.05	14-MAR-18	11,844.05	Reconciled
385320		08-MAR-18	BLOOMBERG FINANCE LP		12,735.00	19-MAR-18	12,735.00	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 11
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Cleared

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385321		08-MAR-18	BRIGHTVIEW LANDSCAPE DEVELOPMENT		1,595.74			Negotiable
385322		08-MAR-18	BROWN AND CALDWELL		1,004.52	12-MAR-18	1,004.52	Reconciled
385323		08-MAR-18	BRUCE CLARK		10,500.00	14-MAR-18	10,500.00	Reconciled
385324		08-MAR-18	BUCKNALL POWER TOOL SERVICE, INC.		275.65	12-MAR-18	275.65	Reconciled
385325		08-MAR-18	BURKE, WILLIAMS & SORENSEN, LLP		1,885.00	12-MAR-18	1,885.00	Reconciled
385326		08-MAR-18	BURLINGTON SAFETY LABORATORY OF CALIFORNIA INC		187.00	09-MAR-18	187.00	Reconciled
385327		08-MAR-18	C WELLS PIPELINE MATERIALS INC		8,697.61	14-MAR-18	8,697.61	Reconciled
385328		08-MAR-18	CALIFORNIA BARRICADE RENTAL, INC.		6,646.25	13-MAR-18	6,646.25	Reconciled
385329		08-MAR-18	CANON FINANCIAL SERVICES, INC		1,312.40	12-MAR-18	1,312.40	Reconciled
385330		08-MAR-18	CAROLLO ENGINEERS, INC		16,623.23	19-MAR-18	16,623.23	Reconciled
385331		08-MAR-18	CEDAR CREEK APARTMENTS		154.10	19-MAR-18	154.10	Reconciled
385332		08-MAR-18	CHAIREL CUSTOM HAY, INC.		1,294.21	13-MAR-18	1,294.21	Reconciled
385333		08-MAR-18	CHARLES P CROWLEY COMPANY INC		6,249.75	15-MAR-18	6,249.75	Reconciled
385334		08-MAR-18	CHEM TECH INTERNATIONAL INC		12,135.20	19-MAR-18	12,135.20	Reconciled
385335		08-MAR-18	CHEN, SU M		52.70	13-MAR-18	52.70	Reconciled
385336		08-MAR-18	CHOW, DAVID		46.80	15-MAR-18	46.80	Reconciled
385337		08-MAR-18	CITY OF ORANGE		181.25	12-MAR-18	181.25	Reconciled
385338		08-MAR-18	CIVIL SOURCE, INC.		10,802.71	15-MAR-18	10,802.71	Reconciled
385339		08-MAR-18	COMMERCIAL DOOR OF ORANGE COUNTY, INC.		298.71	12-MAR-18	298.71	Reconciled
385340		08-MAR-18	CONTROLLED KEY SYSTEMS INC		155.63	20-MAR-18	155.63	Reconciled
385341		08-MAR-18	COX COMMUNICATIONS, INC.		255.43	12-MAR-18	255.43	Reconciled
385342		08-MAR-18	COXCO LLC		27,206.05	16-MAR-18	27,206.05	Reconciled
385343		08-MAR-19	CPC SYSTEMS, INC.		816.25			Negotiable
385344		08-MAR-18	CROSS CREEK APTS		202.24	19-MAR-18	202.24	Reconciled
385345		08-MAR-18	CULLIGAN OF SANTA ANA		9,000.00	13-MAR-18	9,000.00	Reconciled

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 12
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385346		08-MAR-18	D & H WATER SYSTEMS INC.		596.46	12-MAR-18	596.46	Reconciled
385347		08-MAR-18	DANIELS, KRISTI		41.99			Negotiable
385348		08-MAR-18	DDB ENGINEERING, INC.		1,147.63	09-MAR-18	1,147.63	Reconciled
385349		08-MAR-18	DEACON, JANET		2,398.92	12-MAR-18	2,398.92	Reconciled
385350		08-MAR-18	DEE JASPAR & ASSOCIATES, INC.		2,931.02	15-MAR-18	2,931.02	Reconciled
385351		08-MAR-18	DELL MARKETING LP		6,156.46	12-MAR-18	6,156.46	Reconciled
385352		08-MAR-18	DENALI WATER SOLUTIONS LLC		6,425.76	15-MAR-18	6,425.76	Reconciled
385353		08-MAR-18	DISCOUNT COURIER SERVICE		67.47	12-MAR-18	67.47	Reconciled
385354		08-MAR-18	DOUG MARTIN CONTRACTING CO., INC.		2,843.34	21-MAR-18	2,843.34	Reconciled
385355		08-MAR-18	DUKE'S ROOT CONTROL INC		9,776.87	14-MAR-18	9,776.87	Reconciled
385356		08-MAR-18	DURSO, JOHN		213.01	15-MAR-18	213.01	Reconciled
385357		08-MAR-18	EAST ORANGE COUNTY WATER DISTRICT		69,125.23	20-MAR-18	69,125.23	Reconciled
385358		08-MAR-18	ET&C ENGINEERING INC		67,331.00	15-MAR-18	67,331.00	Reconciled
385359		08-MAR-18	ENVIRONMENTAL EXPRESS INC		2,026.00	12-MAR-18	2,026.00	Reconciled
385360		08-MAR-18	ENVIRONMENTAL SCIENCE ASSOCIATES		18,312.75	16-MAR-18	18,312.75	Reconciled
385361		08-MAR-18	EVANS-HYDRO INC		30,720.60	20-MAR-18	30,720.60	Reconciled
385362		08-MAR-18	EVANTEC CORPORATION		7,378.49	09-MAR-18	7,378.49	Reconciled
385363		08-MAR-18	EXECUTIVE LIGHTING & ELECTRIC		5,216.10	13-MAR-18	5,216.10	Reconciled
385364		08-MAR-18	FEDEX		204.04	12-MAR-18	204.04	Reconciled
385365		08-MAR-18	FERGUSON		4,952.19	12-MAR-18	4,952.19	Reconciled

385366	08-MAR-18	ENTERPRISES, INC. FIDELITY SECURITY LIFE INSURANCE COMPANY	6,862.44	12-MAR-18	6,862.44	Reconciled
385367	08-MAR-18	FISHER SCIENTIFIC COMPANY LLC	2,229.05	12-MAR-18	2,229.05	Reconciled
385368	08-MAR-18	GANAHL LUMBER CO.	413.99	15-MAR-18	413.99	Reconciled
385369	08-MAR-18	GARCIA, LEONEL B	44.51	19-MAR-18	44.51	Reconciled
385370	08-MAR-18	GARZA INDUSTRIES, INC	1,292.58	12-MAR-18	1,292.58	Reconciled
385371	08-MAR-18	GAW, PATRICK	26.94			Negotiable
385372	08-MAR-18	GHD INC.	7,807.18	12-MAR-18	7,807.18	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385373		08-MAR-18	GOLSON, GARY		19.82			Negotiable
385374		08-MAR-18	GRACHEV, OLEG		165.24			Negotiable
385375		08-MAR-18	GRAINGER		5,084.11	12-MAR-18	5,084.11	Reconciled
385376		08-MAR-18	HACH COMPANY		702.95	12-MAR-18	702.95	Reconciled
385377		08-MAR-18	HAJARIAN, ALI		40.92	19-MAR-18	40.92	Reconciled
385378		08-MAR-18	HARDY & HARPER, INC.		9,600.00	12-MAR-18	9,600.00	Reconciled
385379		08-MAR-18	HDR ENGINEERING INC		5,332.57	12-MAR-18	5,332.57	Reconciled
385380		08-MAR-18	HELP/SYSTEMS, LLC		1,500.00	12-MAR-18	1,500.00	Reconciled
385381		08-MAR-18	HELPMATES STAFFING SERVICES		34,483.79	14-MAR-18	34,483.79	Reconciled
385382		08-MAR-18	HHS COMMUNICATIONS, INC.		1,120.80	13-MAR-18	1,120.80	Reconciled
385383		08-MAR-18	HILL BROTHERS CHEMICAL COMPANY		2,196.66	13-MAR-18	2,196.66	Reconciled
385384		08-MAR-18	HOME DEPOT USA INC		645.30	13-MAR-18	645.30	Reconciled
385385		08-MAR-18	HUMANA INSURANCE COMPANY		73.80	12-MAR-18	73.80	Reconciled
385386		08-MAR-18	INDUSTRIAL METAL SUPPLY CO		6.73	12-MAR-18	6.73	Reconciled
385387		08-MAR-18	INFOSYS LIMITED		91,520.00	15-MAR-18	91,520.00	Reconciled
385388		08-MAR-18	IPC (USA), INC.		25,000.97	13-MAR-18	25,000.97	Reconciled
385389		08-MAR-18	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC		108,023.23	19-MAR-18	108,023.23	Reconciled
385390		08-MAR-18	IRVINE COMPANY		80.00	14-MAR-18	80.00	Reconciled
385391		08-MAR-18	IRVINE COMPANY		1,360.84			Negotiable
385392		08-MAR-18	IRVINE PACIFIC		53.61	12-MAR-18	53.61	Reconciled
385393		08-MAR-18	IRVINE PIPE & SUPPLY INC		2,529.43	09-MAR-18	2,529.43	Reconciled
385394		08-MAR-18	IRVINE UNIFIED SCHOOL DISTRICT		41.17	15-MAR-18	41.17	Reconciled
385395		08-MAR-18	IZQUIERDO, NICOLE		71.47			Negotiable
385396		08-MAR-18	JCI JONES CHEMICALS INC		5,255.25	14-MAR-18	5,255.25	Reconciled
385397		08-MAR-18	JIANG, YAN		135.58			Negotiable
385398		08-MAR-18	JIN, DAN		222.15			Voided
385399		08-MAR-18	JOE RHODES MAINT SERVICE INC		220.35	14-MAR-18	220.35	Reconciled
385400		08-MAR-18	JOHN MICHAEL COVAS		208.70	19-MAR-18	208.70	Reconciled
385401		08-MAR-18	KAM, LILY		36.05	19-MAR-18	36.05	Reconciled
385402		08-MAR-18	KB HOMES		182.19	23-MAR-18	182.19	Reconciled
385403		08-MAR-18	KENNY THE PRINTER		511.76	12-MAR-18	511.76	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385404		08-MAR-18	KERN COUNTY WATER AGENCY		61,200.00	14-MAR-18	61,200.00	Reconciled
385405		08-MAR-18	KEYTRAK		9,963.40	14-MAR-18	9,963.40	Reconciled
385406		08-MAR-18	KIMBALL MIDWEST		1,111.25	12-MAR-18	1,111.25	Reconciled
385407		08-MAR-18	KLEINFELDER, INC.		8,029.35	12-MAR-18	8,029.35	Reconciled
385408		08-MAR-18	KONECRANES INC		612.00	12-MAR-18	612.00	Reconciled
385409		08-MAR-18	KROHNE, INC		1,987.28	12-MAR-18	1,987.28	Reconciled
385410		08-MAR-18	KRONICK MOSKOVITZ TIEDEMANN & GIRARD		806.20	12-MAR-18	806.20	Reconciled
385411		08-MAR-18	LAGUNA BEACH COUNTY WATER DISTRICT		5,294.63	14-MAR-18	5,294.63	Reconciled
385412		08-MAR-18	LANDCARE HOLDINGS, INC.		45,602.57	15-MAR-18	45,602.57	Reconciled
385413		08-MAR-18	LILLIE, CARMAN		35.03			Negotiable
385414		08-MAR-18	LIN, TSE S		193.65	13-MAR-18	193.65	Reconciled

385415	08-MAR-18	LU'S LIGHTHOUSE, INC.	1,345.69	13-MAR-18	1,345.69	Reconciled
385416	08-MAR-18	LUBRICATION ENGINEERS, INC.	6,414.88	12-MAR-18	6,414.88	Reconciled
385417	08-MAR-18	LUEVANO, SYLVIA	270.00	13-MAR-18	270.00	Reconciled
385418	08-MAR-18	M.CUBED	14,357.50	19-MAR-18	14,357.50	Reconciled
385419	08-MAR-18	MATSUNAGA, YASUTERU	131.18			Negotiable
385420	08-MAR-18	MCCROMETER, INC.	3,435.36	15-MAR-18	3,435.36	Reconciled
385421	08-MAR-18	MCGREGOR, TODD	2.98	13-MAR-18	2.98	Reconciled
385422	08-MAR-18	MCMURRAY STERN, INC.	1,193.02	13-MAR-18	1,193.02	Reconciled
385423	08-MAR-18	MERCER (US) INC.	17,000.00	13-MAR-18	17,000.00	Reconciled
385424	08-MAR-18	MICHAEL BAKER INTERNATIONAL, INC.	8,354.00	12-MAR-18	8,354.00	Reconciled
385425	08-MAR-18	MIDIRAHMADI, HOHOOMAN	23.44			Negotiable
385426	08-MAR-18	MISSION COMMUNICATIONS, LLC	6,197.40	14-MAR-18	6,197.40	Reconciled
385427	08-MAR-18	MUNICIPAL UNDERGROUND SERVICES INC	2,850.00	09-MAR-18	2,850.00	Reconciled
385428	08-MAR-18	MUTUAL PROPANE	198.89	13-MAR-18	198.89	Reconciled
385429	08-MAR-18	MYERS & SONS HI-WAY SAFETY, INC.	2,605.40	12-MAR-18	2,605.40	Reconciled
385430	08-MAR-18	NATIONAL WATER RESOURCES ASSOCIATION INC	500.00			Negotiable

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385431		08-MAR-18	NATURES IMAGE INC		385.00	09-MAR-18	385.00	Reconciled
385432		08-MAR-18	NCL OF WISCONSIN INC		166.80	14-MAR-18	166.80	Reconciled
385433		08-MAR-18	NMG GEOTECHNICAL INC		12,237.40	19-MAR-18	12,237.40	Reconciled
385434		08-MAR-18	NORMAN A. OLSSON CONSTRUCTION, INC.		375,466.60	19-MAR-18	375,466.60	Reconciled
385435		08-MAR-18	O.C. SUPERIOR CUSTOM CLEANING SERVICES		4,312.00	13-MAR-18	4,312.00	Reconciled
385436		08-MAR-18	OLIN CORPORATION		12,997.24	16-MAR-18	12,997.24	Reconciled
385437		08-MAR-18	OMEGA INDUSTRIAL SUPPLY, INC.		207.73	12-MAR-18	207.73	Reconciled
385438		08-MAR-18	ORACLE AMERICA, INC.		28,173.06	14-MAR-18	28,173.06	Reconciled
385439		08-MAR-18	ORANGE COUNTY AUTO PARTS CO		116.03	09-MAR-18	116.03	Reconciled
385440		08-MAR-18	ORANGE COUNTY WATER DISTRICT		486,707.76	14-MAR-18	486,707.76	Reconciled
385441		08-MAR-18	PACE ADVANCED WATER ENGINEERING, INC.		8,820.00	09-MAR-18	8,820.00	Reconciled
385442		08-MAR-18	PACIFIC HYDROTECH CORPORATION		10,642.38			Negotiable
385443		08-MAR-18	PACIFIC HYDROTECH CORPORATION		202,205.12	14-MAR-18	202,205.12	Reconciled
385444		08-MAR-18	PAPER DEPOT DOCUMENT DESTRUCTION LLC		757.80	16-MAR-18	757.80	Reconciled
385445		08-MAR-18	PARKHOUSE TIRE INC		2,428.10	13-MAR-18	2,428.10	Reconciled
385446		08-MAR-18	PATTEN SYSTEMS, INC.		13,303.35	19-MAR-18	13,303.35	Reconciled
385447		08-MAR-18	PLUMBERS DEPOT INC.		517.20	12-MAR-18	517.20	Reconciled
385448		08-MAR-18	POLLARDWATER.COM		197.75	12-MAR-18	197.75	Reconciled
385449		08-MAR-18	PTI SAND & GRAVEL INC		553.71	12-MAR-18	553.71	Reconciled
385450		08-MAR-18	R&M SERVICE SOLUTIONS, INC.		2,080.00	12-MAR-18	2,080.00	Reconciled
385451		08-MAR-18	RAM AIR ENGINEERING INC		1,412.62	09-MAR-18	1,412.62	Reconciled
385452		08-MAR-18	RANCHO TIERRA APTS		34.85	19-MAR-18	34.85	Reconciled
385453		08-MAR-18	REACH EMPLOYEE ASSISTANCE INC		1,002.40	14-MAR-18	1,002.40	Reconciled

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

385454	08-MAR-18	REFRIGERATION SUPPLIES DISTRIBUTOR	375.14	09-MAR-18	375.14	Reconciled
385455	08-MAR-18	RELIABLE WATER SOLUTIONS, LLC	9,822.56	12-MAR-18	9,822.56	Reconciled
385456	08-MAR-18	RESOLUTE CONTRACTORS, INC	129.87	13-MAR-18	129.87	Reconciled
385457	08-MAR-18	RINGCLEAR LLC	114.00	13-MAR-18	114.00	Reconciled
385458	08-MAR-18	ROBINSON, MARY	36.09	12-MAR-18	36.09	Reconciled
385459	08-MAR-18	ROGERS, LINDA	36.36	20-MAR-18	36.36	Reconciled
385460	08-MAR-18	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	162,286.21	15-MAR-18	162,286.21	Reconciled
385461	08-MAR-18	SAFAI, ALI	739.16	19-MAR-18	739.16	Reconciled
385462	08-MAR-18	SAFETY CENTER INCORPORATED	1,800.00	15-MAR-18	1,800.00	Reconciled
385463	08-MAR-18	SAN CARLO APARTMENTS	150.71	19-MAR-18	150.71	Reconciled
385464	08-MAR-18	SAN LEON APTS	362.37	19-MAR-18	362.37	Reconciled
385465	08-MAR-18	SAN MARCO APARTMENTS	267.44	19-MAR-18	267.44	Reconciled
385466	08-MAR-18	SAN MARINO APTS	278.47	19-MAR-18	278.47	Reconciled
385467	08-MAR-18	SAN REMO APTS	190.12	19-MAR-18	190.12	Reconciled
385468	08-MAR-18	SANDERS PAVING INC	52,406.25	15-MAR-18	52,406.25	Reconciled
385469	08-MAR-18	SANTA ANA BLUE PRINT	783.48	13-MAR-18	783.48	Reconciled
385470	08-MAR-18	SANTA MARGARITA FORD	178.55	12-MAR-18	178.55	Reconciled
385471	08-MAR-18	SAWAYA, TINA	35.02	19-MAR-18	35.02	Reconciled
385472	08-MAR-18	SEALS WEST PACKING CO.	2,262.75	14-MAR-18	2,262.75	Reconciled
385473	08-MAR-18	SEPARATION PROCESSES INC	201.00	12-MAR-18	201.00	Reconciled
385474	08-MAR-18	SERRANO WATER DISTRICT	32,292.96	19-MAR-18	32,292.96	Reconciled
385475	08-MAR-18	SHAW PUMP & SUPPLY, INC.	3,702.40	14-MAR-18	3,702.40	Reconciled
385476	08-MAR-18	SHERWIN WILLIAMS COMPANY	187.75	12-MAR-18	187.75	Reconciled
385477	08-MAR-18	SHOETERIA	13,710.42	19-MAR-18	13,710.42	Reconciled
385478	08-MAR-18	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	57.39	21-MAR-18	57.39	Reconciled
385479	08-MAR-18	SOUTH COAST ANSWERING SERVICE	549.64	12-MAR-18	549.64	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385480		08-MAR-18	SOUTH COAST WATER CO.		40.00	12-MAR-18	40.00	Reconciled
385481		08-MAR-18	SOUTHERN CALIFORNIA EDISON COMPANY		5,007.37	12-MAR-18	5,007.37	Reconciled
385482		08-MAR-18	SOUTHERN CALIFORNIA EDISON COMPANY		391,405.25	12-MAR-18	391,405.25	Reconciled
385483		08-MAR-18	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		57.92	20-MAR-18	57.92	Reconciled
385484		08-MAR-18	SPATIAL WAVE, INC.		11,880.00	13-MAR-18	11,880.00	Reconciled
385485		08-MAR-18	SPESS, CHRISTY		50.00	15-MAR-18	50.00	Reconciled
385486		08-MAR-18	ST ANTON		910.58	14-MAR-18	910.58	Reconciled
385487		08-MAR-18	STANDARD REGISTER, INC.		2,555.02	12-MAR-18	2,555.02	Reconciled
385488		08-MAR-18	STANFORD COURT APARTMENTS		114.96	19-MAR-18	114.96	Reconciled
385489		08-MAR-18	SYNERGY COMPANIES		180,107.37	15-MAR-18	180,107.37	Reconciled
385490		08-MAR-18	TAORMINA, COSMO		90.43	16-MAR-18	90.43	Reconciled
385491		08-MAR-18	THE FURMAN GROUP, INC.		12,540.00	19-MAR-18	12,540.00	Reconciled
385492		08-MAR-18	THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC		48.15			Negotiable
385493		08-MAR-18	THERMO ELECTRON NORTH AMERICA LLC		2,410.23	12-MAR-18	2,410.23	Reconciled
385494		08-MAR-18	THOMPSON INDUSTRIAL SUPPLY		119.35	12-MAR-18	119.35	Reconciled
385495		08-MAR-18	THYSSENKRUPP ELEVATOR CORPORATION		191.94	12-MAR-18	191.94	Reconciled
385496		08-MAR-18	TIC-RETAIL PROPERTIES		1,969.49	14-MAR-18	1,969.49	Reconciled
385497		08-MAR-18	TIGER SUPPLIES INC		621.82	12-MAR-18	621.82	Reconciled
385498		08-MAR-18	TOLL BROTHERS		10.58			Negotiable
385499		08-MAR-18	TOTO, BARBARA A		35.36	12-MAR-18	35.36	Reconciled

385500	08-MAR-18	TROPICAL PLAZA NURSERY INC		37,085.12	14-MAR-18	37,085.12	Reconciled
385501	08-MAR-18	TRUCPARCO		447.76	16-MAR-18	447.76	Reconciled
385502	08-MAR-18	TURTLE ROCK CANYON APTS		264.05	19-MAR-18	264.05	Reconciled
385503	08-MAR-18	UCT, LLC		270.87	13-MAR-18	270.87	Reconciled
385504	08-MAR-18	ULTRA SCIENTIFIC		208.63	14-MAR-18	208.63	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385505		08-MAR-18	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA		1,247.50	13-MAR-18	1,247.50	Reconciled
385506		08-MAR-18	UNITED HEALTHCARE INSURANCE COMPANY		245.85	14-MAR-18	245.85	Reconciled
385507		08-MAR-18	UNITED PARCEL SERVICE INC		278.06	12-MAR-18	278.06	Reconciled
385508		08-MAR-18	UNITED STATES POST OFFICE		25,000.00	19-MAR-18	25,000.00	Reconciled
385509		08-MAR-18	US BANK NAT'L ASSOCIATION NORTH DAKOTA		101,646.70	19-MAR-18	101,646.70	Reconciled
385510		08-MAR-18	VANMALL, MINA		82.13			Negotiable
385511		08-MAR-18	VERIZON WIRELESS SERVICES LLC		3,592.37	12-MAR-18	3,592.37	Reconciled
385512		08-MAR-18	WARDE, CAROLE		18.70	19-MAR-18	18.70	Reconciled
385513		08-MAR-18	WASTE MANAGEMENT OF ORANGE COUNTY		1,812.88	12-MAR-18	1,812.88	Reconciled
385514		08-MAR-18	WAXIE'S ENTERPRISES, INC		1,053.89	12-MAR-18	1,053.89	Reconciled
385515		08-MAR-18	WECK LABORATORIES INC		730.00	14-MAR-18	730.00	Reconciled
385516		08-MAR-18	WINDWOOD GLEN		78.72	19-MAR-18	78.72	Reconciled
385517		08-MAR-18	WOODBRIIDGE WILLOWS APARTMENTS		148.24	19-MAR-18	148.24	Reconciled
385518		08-MAR-18	WORLD OF DECOR INC		74.03	13-MAR-18	74.03	Reconciled
385519		08-MAR-18	XIE, NIANFEI		29.40			Negotiable
385520		08-MAR-18	YORK INSURANCE SERVICES GROUP INC - CA		7,786.25	12-MAR-18	7,786.25	Reconciled
385521		08-MAR-18	ZHENG, JIN		24.60			Negotiable
385522		15-MAR-18	Garcia, Alejandro (Alex)		180.00	19-MAR-18	180.00	Reconciled
385523		15-MAR-18	Marshall, Matt I (Matt)		60.00	23-MAR-18	60.00	Reconciled
385524		15-MAR-18	Martin, Didene J (De)		208.95			Negotiable
385525		15-MAR-18	Perez, Rodolfo (Rudy)		145.00			Negotiable
385526		15-MAR-18	Severin, Victoria		167.02	15-MAR-18	167.02	Reconciled
385527		15-MAR-18	2581 FAIRWAY DR, LLC		145.90	22-MAR-18	145.90	Reconciled
385528		15-MAR-18	4200 VON KARMAN, LLC		59.84	26-MAR-18	59.84	Reconciled
385529		15-MAR-18	AAF INTERNATIONAL		771.78	20-MAR-18	771.78	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385530		15-MAR-18	ABM INDUSTRY GROUPS, LLC		18,915.01	21-MAR-18	18,915.01	Reconciled
385531		15-MAR-18	ADAM'S FALCONRY SERVICE, LLC		2,640.00	19-MAR-18	2,640.00	Reconciled
385532		15-MAR-18	ARECOM TECHNICAL SERVICES, INC.		55,021.59	22-MAR-18	55,021.59	Reconciled
385533		15-MAR-18	AGHI, RAKESH		255.84			Negotiable
385534		15-MAR-18	AGUSTSSON, TAKAKO		74.00	20-MAR-18	74.00	Reconciled
385535		15-MAR-18	AIRGAS, INC.		574.41	19-MAR-18	574.41	Reconciled
385536		15-MAR-18	AMAZON CAPITAL SERVICES, INC.		915.07	19-MAR-18	915.07	Reconciled
385537		15-MAR-18	ANDERSONPENNA PARTNERS, INC.		55,576.00	20-MAR-18	55,576.00	Reconciled
385538		15-MAR-18	ANIXTER INC		23,317.10	23-MAR-18	23,317.10	Reconciled
385539		15-MAR-18	ANTHEM BLUE CROSS		214.68	22-MAR-18	214.68	Reconciled
385540		15-MAR-18	ANTHEM BLUE CROSS		546.33	22-MAR-18	546.33	Reconciled
385541		15-MAR-18	ANTHEM BLUE CROSS		546.33	22-MAR-18	546.33	Reconciled
385542		15-MAR-18	ANTHEM BLUE CROSS		290.43	22-MAR-18	290.43	Reconciled
385543		15-MAR-18	ANTHONY N. LARSEN		400.00	19-MAR-18	400.00	Reconciled
385544		15-MAR-18	APCO GRAPHICS INC		327.96	19-MAR-18	327.96	Reconciled

385545	15-MAR-18	APEX LIFE SCIENCES, LLC	3,398.06	19-MAR-18	3,398.06	Reconciled
385546	15-MAR-18	ASHFORD, WALT	256.63	19-MAR-18	256.63	Reconciled
385547	15-MAR-18	ASSOCIATION OF CALIFORNIA CITIES	5,150.00			Negotiable
385548	15-MAR-18	AT&T	1,670.57	20-MAR-18	1,670.57	Reconciled
385549	15-MAR-18	AT&T	1,094.20	20-MAR-18	1,094.20	Reconciled
385550	15-MAR-18	AT&T	49.32	20-MAR-18	49.32	Reconciled
385551	15-MAR-18	ATHENS SERVICES	977.25	19-MAR-18	977.25	Reconciled
385552	15-MAR-18	ATHENS SERVICES	10,762.23	26-MAR-18	10,762.23	Reconciled
385553	15-MAR-18	ATKINSON, ANDELSON, LOYA, RUUD AND ROMO	2,756.40	19-MAR-18	2,756.40	Reconciled
385554	15-MAR-18	AUTOZONE PARTS, INC.	203.06	20-MAR-18	203.06	Reconciled
385555	15-MAR-18	BAOLONG SUN AND KAI CHENG	354.09	20-MAR-18	354.09	Reconciled
385556	15-MAR-18	BDC SPECIAL WASTE	207.20	19-MAR-18	207.20	Reconciled
385557	15-MAR-18	BEST DRILLING AND PUMP, INC.	10,500.00	26-MAR-18	10,500.00	Reconciled
385558	15-MAR-18	BEST MANAGEMENT CONSTRUCTION, INC.	10,688.42	20-MAR-18	10,688.42	Reconciled
385559	15-MAR-18	BOYD & ASSOCIATES	3,753.00	20-MAR-18	3,753.00	Reconciled
385560	15-MAR-18	BRENNTAG PACIFIC INC	58,960.10	19-MAR-18	58,960.10	Reconciled

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385561		15-MAR-18	BROOKFIELD HOMES SO. CALIF LLC		2,328.60	23-MAR-18	2,328.60	Reconciled
385562		15-MAR-18	C WELLS PIPELINE MATERIALS INC		2,189.49	23-MAR-18	2,189.49	Reconciled
385563		15-MAR-18	CALIFORNIA BARRICADE RENTAL, INC.		1,495.00	19-MAR-18	1,495.00	Reconciled
385564		15-MAR-18	CALIFORNIA PACIFIC HOMES		329.89			Negotiable
385565		15-MAR-18	CAROLLO ENGINEERS, INC		17,906.50	27-MAR-18	17,906.50	Reconciled
385566		15-MAR-18	CDW GOVERNMENT LLC		1,536.08	20-MAR-18	1,536.08	Reconciled
385567		15-MAR-18	CENTRAL COAST POWER SERVICES, LLC		3,715.00	19-MAR-18	3,715.00	Reconciled
385568		15-MAR-18	CHO DESIGN ASSOCIATES, INC		1,025.00	26-MAR-18	1,025.00	Reconciled
385569		15-MAR-18	CITY CIRCUIT BREAKERS		808.13	22-MAR-18	808.13	Reconciled
385570		15-MAR-18	CITY OF TUSTIN		612.03	19-MAR-18	612.03	Reconciled
385571		15-MAR-18	CLARIS STRATEGY INC.		10,500.00	23-MAR-18	10,500.00	Reconciled
385572		15-MAR-18	COAST PLUMBING HEATING AND AIR, INC		1,300.00	19-MAR-18	1,300.00	Reconciled
385573		15-MAR-18	CONSOLIDATED CONTRACTING SERVICES, INC.		927.75	23-MAR-18	927.75	Reconciled
385574		15-MAR-18	CR & R INCORPORATED		384.48	20-MAR-18	384.48	Reconciled
385575		15-MAR-18	DEB ENGINEERING, INC.		1,800.00	19-MAR-18	1,800.00	Reconciled
385576		15-MAR-18	DEE JASPAR & ASSOCIATES, INC.		3,864.93	28-MAR-18	3,864.93	Reconciled
385577		15-MAR-18	DELL MARKETING LP		3,364.78	19-MAR-18	3,364.78	Reconciled
385578		15-MAR-18	DEMARIA ELECTRIC MOTOR SERVICES, INC.		6,253.75	20-MAR-18	6,253.75	Reconciled
385579		15-MAR-18	DIRECT DRIVES & CONTROLS INC		261.76	19-MAR-18	261.76	Reconciled
385580		15-MAR-18	DISCOVERY SCIENCE CENTER OF ORANGE COUNTY		2,049.84	20-MAR-18	2,049.84	Reconciled
385581		15-MAR-18	DOWNSTREAM SERVICES, INC.		12,388.00	23-MAR-18	12,388.00	Reconciled
385582		15-MAR-18	DUDEK		2,497.50	22-MAR-18	2,497.50	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385583		15-MAR-18	EAGLE PRINT DYNAMICS		272.15	20-MAR-18	272.15	Reconciled

385584	15-MAR-18	ENTERPRISE RIDESHARE	15,642.66	22-MAR-18	15,642.66	Reconciled
385585	15-MAR-18	EVANS-HYDRO INC	6,343.94	20-MAR-18	6,343.94	Reconciled
385586	15-MAR-18	EXECUTIVE LIGHTING & ELECTRIC	22,612.05	21-MAR-18	22,612.05	Reconciled
385587	15-MAR-18	FEDEX	270.41	19-MAR-18	270.41	Reconciled
385588	15-MAR-18	FERGUSON ENTERPRISES, INC.	25,536.75	21-MAR-18	25,536.75	Reconciled
385589	15-MAR-18	FISHER SCIENTIFIC COMPANY LLC	372.31	19-MAR-18	372.31	Reconciled
385590	15-MAR-18	FLEET SOLUTIONS LLC	4,871.00	20-MAR-18	4,871.00	Reconciled
385591	15-MAR-18	FRONTIER CALIFORNIA INC.	51.90	21-MAR-18	51.90	Reconciled
385592	15-MAR-18	FU, YONGQUN	718.10	22-MAR-18	718.10	Reconciled
385593	15-MAR-18	GANAHL LUMBER CO.	48.74	21-MAR-18	48.74	Reconciled
385594	15-MAR-18	GEORGE HILLS COMPANY, INC.	136.00	21-MAR-18	136.00	Reconciled
385595	15-MAR-18	GJ AUTOMOTIVE EQUIPMENT CO INC	429.92	23-MAR-18	429.92	Reconciled
385596	15-MAR-18	GRAINGER	3,662.76	19-MAR-18	3,662.76	Reconciled
385597	15-MAR-18	GRAYBAR ELECTRIC COMPANY	19,313.66	21-MAR-18	19,313.66	Reconciled
385598	15-MAR-18	HAAKER EQUIPMENT COMPANY	519.49	20-MAR-18	519.49	Reconciled
385599	15-MAR-18	HACH COMPANY	7,181.59	19-MAR-18	7,181.59	Reconciled
385600	15-MAR-18	HALLMARK PROPERTY MANAGEMENT	44.78	23-MAR-18	44.78	Reconciled
385601	15-MAR-18	HAMILTON, KURT	626.70	23-MAR-18	626.70	Reconciled
385602	15-MAR-18	HARRINGTON INDUSTRIAL PLASTICS LLC	23,182.62	21-MAR-18	23,182.62	Reconciled
385603	15-MAR-18	HARRY H. KOBZEFF	9,205.00	19-MAR-18	9,205.00	Reconciled
385604	15-MAR-18	HELPMATES STAFFING SERVICES	11,268.81	20-MAR-18	11,268.81	Reconciled
385605	15-MAR-18	HERITAGE FIELDS EL TORO, LLC	462.71	28-MAR-18	462.71	Reconciled
385606	15-MAR-18	HERMITAGE PROPERTY MANAGEMENT	33.64	21-MAR-18	33.64	Reconciled
385607	15-MAR-18	HERMITAGE PROPERTY MGMT	230.29	21-MAR-18	230.29	Reconciled
385608	15-MAR-18	HIA, HUI	31.26			Negotiable
385609	15-MAR-18	HILL BROTHERS CHEMICAL COMPANY	10,566.09	22-MAR-18	10,566.09	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385610		15-MAR-18	HOME DEPOT USA INC		525.28	20-MAR-18	525.28	Reconciled
385611		15-MAR-18	HORIZON TECHNOLOGY INC		1,515.62	19-MAR-18	1,515.62	Reconciled
385612		15-MAR-18	HOYA OPTICAL LABS OF AMERICA, INC.		212.18	21-MAR-18	212.18	Reconciled
385613		15-MAR-18	IBEW LOCAL 47		1,400.00			Negotiable
385614		15-MAR-18	IBM CORPORATION		925.00	20-MAR-18	925.00	Reconciled
385615		15-MAR-18	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC		172,273.92	23-MAR-18	172,273.92	Reconciled
385616		15-MAR-18	IRVINE PIPE & SUPPLY INC		67.92	19-MAR-18	67.92	Reconciled
385617		15-MAR-18	IRVINE POLICE ASSOCIATION		750.00	21-MAR-18	750.00	Reconciled
385618		15-MAR-18	IRWD-PETTY CASH CUSTODIAN		1,392.21	16-MAR-18	1,392.21	Reconciled
385619		15-MAR-18	KAYUGA SOLUTION INC		14,280.00	20-MAR-18	14,280.00	Reconciled
385620		15-MAR-18	KONECRANES INC		5,615.00	19-MAR-18	5,615.00	Reconciled
385621		15-MAR-18	LENNAR HOMES		897.39			Negotiable
385622		15-MAR-18	LEWIS BRISBOIS BISGAARD AND SMITH, LLP		280.00	20-MAR-18	280.00	Reconciled
385623		15-MAR-18	LU'S LIGHTHOUSE, INC.		117.24	20-MAR-18	117.24	Reconciled
385624		15-MAR-18	MAKINO, YOKO		99.84	28-MAR-18	99.84	Reconciled
385625		15-MAR-18	MANSOUR, SALAHEDDIN		2,901.69	19-MAR-18	2,901.69	Reconciled
385626		15-MAR-18	MBK ENGINEERS		6,681.00	20-MAR-18	6,681.00	Reconciled
385627		15-MAR-18	MC MASTER CARR SUPPLY CO		131.18	19-MAR-18	131.18	Reconciled
385628		15-MAR-18	MCR TECHNOLOGIES INC		6,328.39	19-MAR-18	6,328.39	Reconciled
385629		15-MAR-18	MEGGER		380.71	21-MAR-18	380.71	Reconciled
385630		15-MAR-18	MERRIMAC PETROLEUM, INC.		20,564.84	21-MAR-18	20,564.84	Reconciled
385631		15-MAR-18	MICHAEL BAKER INTERNATIONAL, INC.		4,051.00	19-MAR-18	4,051.00	Reconciled
385632		15-MAR-18	MO, QIRONG		215.86			Negotiable

385633	15-MAR-18	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	11,511.02	20-MAR-18	11,511.02	Reconciled
385634	15-MAR-18	NATIONAL READY MIXED CONCRETE CO.	1,849.23	19-MAR-18	1,849.23	Reconciled
385635	15-MAR-18	NATURALWELL, LLC	1,017.50	19-MAR-18	1,017.50	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385636		15-MAR-18	NOSSAMAN LLP		31,951.00	22-MAR-18	31,951.00	Reconciled
385637		15-MAR-18	O.C. SUPERIOR CUSTOM CLEANING SERVICES		712.00	20-MAR-18	712.00	Reconciled
385638		15-MAR-18	OLIN CORPORATION		22,177.23	22-MAR-18	22,177.23	Reconciled
385639		15-MAR-18	ORACLE AMERICA, INC.		192,681.50	22-MAR-18	192,681.50	Reconciled
385640		15-MAR-18	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT		2,554.69	23-MAR-18	2,554.69	Reconciled
385641		15-MAR-18	ORANGE COUNTY SANITATION DISTRICT		890,730.41	20-MAR-18	890,730.41	Reconciled
385642		15-MAR-18	ORANGE COUNTY SHERIFF'S OFFICE		62.50	26-MAR-18	62.50	Reconciled
385643		15-MAR-18	ORCHARD HILLS APARTMENTS		621.60			Negotiable
385644		15-MAR-18	OUTSOURCE TECHNICAL LLC		20,931.25	20-MAR-18	20,931.25	Reconciled
385645		15-MAR-18	PACIFIC PARTS & CONTROLS INC		620.34	20-MAR-18	620.34	Reconciled
385646		15-MAR-18	PARKHOUSE TIRE INC		8,635.41	20-MAR-18	8,635.41	Reconciled
385647		15-MAR-18	PASCAL & LUDWIG CONSTRUCTORS		126,039.64	21-MAR-18	126,039.64	Reconciled
385648		15-MAR-18	PASCAL & LUDWIG CONSTRUCTORS		6,741.57	19-MAR-18	6,741.57	Reconciled
385649		15-MAR-18	PELLETIER & ASSOCIATES, INC.		1,830.00	20-MAR-18	1,830.00	Reconciled
385650		15-MAR-18	PERS LONG TERM CARE		675.35	20-MAR-18	675.35	Reconciled
385651		15-MAR-18	PILLSBURY WINTHROP SHAW PITTMAN LLP		8,868.75	19-MAR-18	8,868.75	Reconciled
385652		15-MAR-18	PROCARE WORK INJURY CENTER		1,345.00	20-MAR-18	1,345.00	Reconciled
385653		15-MAR-18	PRONTO GYM SERVICES, INC.		555.49	19-MAR-18	555.49	Reconciled
385654		15-MAR-18	PSOMAS		3,971.50	19-MAR-18	3,971.50	Reconciled
385655		15-MAR-18	PTI SAND & GRAVEL INC		403.68	20-MAR-18	403.68	Reconciled
385656		15-MAR-18	PULTE HOMES		150.85			Negotiable
385657		15-MAR-18	PULTE HOMES-2009		1,312.44			Negotiable
385658		15-MAR-18	PUREWORKS, INC.		57,350.00	22-MAR-18	57,350.00	Reconciled
385659		15-MAR-18	PURL, KARAN		50.00	21-MAR-18	50.00	Reconciled
385660		15-MAR-18	RAINBOW DISPOSAL CO INC		357.36	23-MAR-18	357.36	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385661		15-MAR-18	RAM AIR ENGINEERING INC		3,865.00	20-MAR-18	3,865.00	Reconciled
385662		15-MAR-18	RANCHO ALISAL APTS		1,635.59			Negotiable
385663		15-MAR-18	RANCHO MADERAS APTS		260.22			Negotiable
385664		15-MAR-18	RANCHO MARIPOSA APTS		110.59			Negotiable
385665		15-MAR-18	RANCHO SANTA FE APTS		1,254.35			Negotiable
385666		15-MAR-18	RANCHO TIERRA APTS		219.57			Negotiable
385667		15-MAR-18	REFRIGERATION SUPPLIES DISTRIBUTOR		816.12	19-MAR-18	816.12	Reconciled
385668		15-MAR-18	RHODES JR, REILLY		11.54			Negotiable
385669		15-MAR-18	RINCON TRUCK CENTER INC.		2,682.24	20-MAR-18	2,682.24	Reconciled
385670		15-MAR-18	RJ NOBLE COMPANY		3,351.71	19-MAR-18	3,351.71	Reconciled
385671		15-MAR-18	ROKNI ELECTRIC COMPANY INC.		9,875.00	22-MAR-18	9,875.00	Reconciled
385672		15-MAR-18	RU, ZEHAO		923.28	26-MAR-18	923.28	Reconciled
385673		15-MAR-18	RYLAND HOMES OF		666.94			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
385674	15-MAR-18		CALIFORNIA INC S & J SUPPLY CO INC		64,750.59	21-MAR-18	64,750.59	Reconciled
385675	15-MAR-18		SACRAMENTO RIVER WATERSHED PROGRAM		1,500.00			Negotiable
385676	15-MAR-18		SAFETY CENTER INCORPORATED		3,480.00	21-MAR-18	3,480.00	Reconciled
385677	15-MAR-18		SAN CARLO APARTMENTS		52.18			Negotiable
385678	15-MAR-18		SANDERS PAVING INC		28,834.00	21-MAR-18	28,834.00	Reconciled
385679	15-MAR-18		SANTA ANA BLUE PRINT		187.88	20-MAR-18	187.88	Reconciled
385680	15-MAR-18		SHAMROCK SUPPLY CO INC		1,741.40	20-MAR-18	1,741.40	Reconciled
385681	15-MAR-18		SHEA/BAKER RANCH ASSOCIATES, LLC		16,132.39			Negotiable
385682	15-MAR-18		SIGMA-ALDRICH INC		89.86	20-MAR-18	89.86	Reconciled
385683	15-MAR-18		SILVERWOOD LANDSCAPE		2,821.85	19-MAR-18	2,821.85	Reconciled
385684	15-MAR-18		SIMI VALLEY LANDFILL AND RECYCLING CENTER		669.98	19-MAR-18	669.98	Reconciled
385685	15-MAR-18		SITEONE LANDSCAPE SUPPLY, LLC		188.78	20-MAR-18	188.78	Reconciled
385686	15-MAR-18		SITMATIC		2,016.16	19-MAR-18	2,016.16	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385687	15-MAR-18		SOUTHERN CALIFORNIA EDISON COMPANY		24,190.46	20-MAR-18	24,190.46	Reconciled
385688	15-MAR-18		SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		1,378.44	20-MAR-18	1,378.44	Reconciled
385689	15-MAR-18		SOUTHERN COUNTIES LUBRICANTS LLC		905.10	20-MAR-18	905.10	Reconciled
385690	15-MAR-18		SPARKLETT'S		275.82	21-MAR-18	275.82	Reconciled
385691	15-MAR-18		STANTEC CONSULTING SERVICES INC.		8,485.00	19-MAR-18	8,485.00	Reconciled
385692	15-MAR-18		STRADLING YOCCA CARLSON & RAUTH		84.00	19-MAR-18	84.00	Reconciled
385693	15-MAR-18		SUKLE ADVERTISING INC.		4,006.00	23-MAR-18	4,006.00	Reconciled
385694	15-MAR-18		TANG, HUI		63.04	19-MAR-18	63.04	Reconciled
385695	15-MAR-18		TAYLOR MORRISON		773.22	28-MAR-18	773.22	Reconciled
385696	15-MAR-18		TAYLOR MORRISON OF CALIFORNIA		349.04	28-MAR-18	349.04	Reconciled
385697	15-MAR-18		TESTAMERICA LABORATORIES, INC		215.25	20-MAR-18	215.25	Reconciled
385698	15-MAR-18		TETRA TECH, INC		51,195.25	22-MAR-18	51,195.25	Reconciled
385699	15-MAR-18		THE GAS COMPANY		5,413.38	22-MAR-18	5,413.38	Reconciled
385700	15-MAR-18		THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC		2,857.86			Negotiable
385701	15-MAR-18		THOMAS HARDER & CO		13,488.75	23-MAR-18	13,488.75	Reconciled
385702	15-MAR-18		TIGER SUPPLIES INC		834.00	19-MAR-18	834.00	Reconciled
385703	15-MAR-18		TOLL BROS., INC.		8,188.17			Negotiable
385704	15-MAR-18		TROPICAL PLAZA NURSERY INC		1,918.06	19-MAR-18	1,918.06	Reconciled
385705	15-MAR-18		TRUCPARCO		222.11	23-MAR-18	222.11	Reconciled
385706	15-MAR-18		UNITED PARCEL SERVICE INC		39.83	19-MAR-18	39.83	Reconciled
385707	15-MAR-18		UNITED STATES PLASTIC CORP.		224.56	20-MAR-18	224.56	Reconciled
385708	15-MAR-18		VALLEYCREST LANDSCAPE DEVELOPMENT, INC.		5,663.33			Negotiable
385709	15-MAR-18		VAUGHAN'S INDUSTRIAL REPAIR CO INC		600.00	20-MAR-18	600.00	Reconciled
385710	15-MAR-18		VERTECH INDUSTRIAL SYSTEMS, LLC		4,225.00	21-MAR-18	4,225.00	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385711	15-MAR-18		VISION TECHNOLOGY SOLUTIONS, LLC		6,284.25	20-MAR-18	6,284.25	Reconciled
385712	15-MAR-18		WALSH, GERALD		46.87			Negotiable

385713	15-MAR-18	WARD, WILLIAM P JR.		1,188.00	21-MAR-18	1,188.00	Reconciled
385714	15-MAR-18	WASTE MANAGEMENT OF ORANGE COUNTY		2,156.47	19-MAR-18	2,156.47	Reconciled
385715	15-MAR-18	WATERLINE TECHNOLOGIES INC		2,634.10	19-MAR-18	2,634.10	Reconciled
385716	15-MAR-18	WATERSMART SOFTWARE, INC		13,597.50	21-MAR-18	13,597.50	Reconciled
385717	15-MAR-18	WAXIE'S ENTERPRISES, INC		1,038.15	19-MAR-18	1,038.15	Reconciled
385718	15-MAR-18	WESTAMERICA COMMUNICATIONS, INC.		3,274.50	19-MAR-18	3,274.50	Reconciled
385719	15-MAR-18	WILLIAM LYON HOMES, INC.		3,719.26			Negotiable
385720	15-MAR-18	WILMINGTON INSTRUMENT COMPANY INC		3,867.58	20-MAR-18	3,867.58	Reconciled
385721	15-MAR-18	WINDWOOD GLEN		136.89			Negotiable
385722	15-MAR-18	WIRELESS WATCHDOGS, LLC		848.00	22-MAR-18	848.00	Reconciled
385723	15-MAR-18	WOLFGANG CHRISTOPH AND NOBUKO CHRISTOPH		68.81			Negotiable
385724	15-MAR-18	WOODBRIIDGE WILLOWS APARTMENTS		25.54			Negotiable
385725	15-MAR-18	YP LLC		91.00	20-MAR-18	91.00	Reconciled
385726	15-MAR-18	ZABOLOTSKIKH, ALEXEY		17.12	20-MAR-18	17.12	Reconciled
385727	15-MAR-18	ZEE MEDICAL SERVICE CO		568.53	19-MAR-18	568.53	Reconciled
385728	15-MAR-18	ZHU, CHENG		45.06			Negotiable
385729	16-MAR-18	IRVINE UNIFIED SCHOOL DISTRICT	SOUTHLAKE	100.00			Negotiable
385730	16-MAR-18	IRVINE UNIFIED SCHOOL DISTRICT	IRVINE	100.00			Negotiable
385731	16-MAR-18	IRVINE UNIFIED SCHOOL DISTRICT	UNIVERSITY HS	200.00			Negotiable
385732	16-MAR-18	IRVINE UNIFIED SCHOOL DISTRICT	BEACON PARK	100.00			Negotiable
385733	19-MAR-18	JCI JONES CHEMICALS INC	NEWARK	3,172.61	26-MAR-18	3,172.61	Reconciled

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

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385734		22-MAR-18	Bennett, Ray R		75.00			Negotiable
385735		22-MAR-18	(Ray) Compton, Christine A		173.42			Negotiable
385736		22-MAR-18	Garcia, Alejandro (Alex)		90.00			Negotiable
385737		22-MAR-18	Justice, Jack L (Jack)		180.00			Negotiable
385738		22-MAR-18	Karpan, Casey L (Casey)		90.00	26-MAR-18	90.00	Reconciled
385739		22-MAR-18	Lin, Eileen (Eileen)		71.42	23-MAR-18	71.42	Reconciled
385740		22-MAR-18	Lynch, Toni Marie		116.00	22-MAR-18	116.00	Reconciled
385741		22-MAR-18	Robinson, Mitchell S		116.00			Negotiable
385742		22-MAR-18	Steinbeck, Brandon C		107.38	27-MAR-18	107.38	Reconciled
385743		22-MAR-18	ABM INDUSTRY GROUPS, LLC		740.00	26-MAR-18	740.00	Reconciled
385744		22-MAR-18	ACCURATE AIR ENGINEERING INC		968.16	27-MAR-18	968.16	Reconciled
385745		22-MAR-18	ACWA		25,000.00			Negotiable
385746		22-MAR-18	ADAM'S FALCONRY SERVICE, LLC		440.00	26-MAR-18	440.00	Reconciled
385747		22-MAR-18	AECOM TECHNICAL SERVICES, INC.		30,532.50			Negotiable
385748		22-MAR-18	AERATION INDUSTRIES INTERNATIONAL INC		8,295.00	26-MAR-18	8,295.00	Reconciled
385749		22-MAR-18	AHNN, WILLIAM		44.62			Negotiable
385750		22-MAR-18	AMAZON CAPITAL SERVICES, INC.		22.13	26-MAR-18	22.13	Reconciled
385751		22-MAR-18	APEX LIFE SCIENCES, LLC		3,899.00	26-MAR-18	3,899.00	Reconciled
385752		22-MAR-18	APPLIED MEMBRANES INC		1,321.17	28-MAR-18	1,321.17	Reconciled
385753		22-MAR-18	AQUA-METRIC SALES COMPANY		104,296.29			Negotiable
385754		22-MAR-18	ARCHITERRA INC.		450.66	27-MAR-18	450.66	Reconciled
385755		22-MAR-18	AT&T		174.02	28-MAR-18	174.02	Reconciled
385756		22-MAR-18	AT&T		10,690.12			Negotiable
385757		22-MAR-18	ATKINSON,		430.20	27-MAR-18	430.20	Reconciled

385758 22-MAR-18 ANDELSON, LOYA, RUUD AND ROMO AUTOZONE PARTS, INC. 204.27 26-MAR-18 204.27 Reconciled

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

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385759		22-MAR-18	AVISTA TECHNOLOGIES, INC		16,957.40			Negotiable
385760		22-MAR-18	BAMBOO DESSERTS & DRINKS		64.04			Negotiable
385761		22-MAR-18	BATTERIES PLUS AND BATTERIES PLUS BULBS		2,256.77	26-MAR-18	2,256.77	Reconciled
385762		22-MAR-18	BENJAMIN, LISA		1,330.00	27-MAR-18	1,330.00	Reconciled
385763		22-MAR-18	BILL'S SWEEPING SERVICE INC		460.00	27-MAR-18	460.00	Reconciled
385764		22-MAR-18	BIOMAGIC INC		12,234.85	27-MAR-18	12,234.85	Reconciled
385765		22-MAR-18	BLACK & VEATCH CORPORATION		268,892.90			Negotiable
385766		22-MAR-18	BORCHARD SURVEYING & MAPPING, INC.		4,927.50			Negotiable
385767		22-MAR-18	BOTTOM LINE REALTY		84.96			Negotiable
385768		22-MAR-18	BRITHINEE ELECTRIC		13,762.63	28-MAR-18	13,762.63	Reconciled
385769		22-MAR-18	CABELA'S MARKETING AND BRAND MANAGEMENT INC		211.44	27-MAR-18	211.44	Reconciled
385770		22-MAR-18	CALIFORNIA BANK & TRUST		22,487.92	28-MAR-18	22,487.92	Reconciled
385771		22-MAR-18	CALIFORNIA BARRICADE RENTAL, INC.		14,328.75	27-MAR-18	14,328.75	Reconciled
385772		22-MAR-18	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION		3,524.00			Negotiable
385773		22-MAR-18	CANON FINANCIAL SERVICES, INC		8,996.59	26-MAR-18	8,996.59	Reconciled
385774		22-MAR-18	CAPTIVE AUDIENCE MARKETING INC.		79.00	27-MAR-18	79.00	Reconciled
385775		22-MAR-18	CAROLLO ENGINEERS, INC		17,115.98			Negotiable
385776		22-MAR-18	CCL CONTRACTING INC.		1,734,166.05			Negotiable
385777		22-MAR-18	CDW GOVERNMENT LLC		320.99	27-MAR-18	320.99	Reconciled
385778		22-MAR-18	CHEM TECH INTERNATIONAL INC		34,883.00			Negotiable
385779		22-MAR-18	CHEN, YU SU		48.70	27-MAR-18	48.70	Reconciled
385780		22-MAR-18	CHOE, YOON		45.36	26-MAR-18	45.36	Reconciled
385781		22-MAR-18	CHUNG, ALEX		18.58			Negotiable
385782		22-MAR-18	CHUNG, EDWIN		56.25			Negotiable

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385783		22-MAR-18	COAST PLUMBING HEATING AND AIR, INC		210.00	23-MAR-18	210.00	Reconciled
385784		22-MAR-18	CONSUMERS PIPE & SUPPLY CO.		2,205.11	26-MAR-18	2,205.11	Reconciled
385785		22-MAR-18	CONTROLLED KEY SYSTEMS INC		1,448.63	28-MAR-18	1,448.63	Reconciled
385786		22-MAR-18	CONTROLLED MOTION SOLUTIONS, INC		620.14	23-MAR-18	620.14	Reconciled
385787		22-MAR-18	D & G SIGNS		2,532.75	26-MAR-18	2,532.75	Reconciled
385788		22-MAR-18	DATA CLEAN CORPORATION		534.00	27-MAR-18	534.00	Reconciled
385789		22-MAR-18	DIRECTV INC		129.98	27-MAR-18	129.98	Reconciled
385790		22-MAR-18	EL TORO WATER DISTRICT		28,987.40	28-MAR-18	28,987.40	Reconciled
385791		22-MAR-18	EMEDCO		2,198.89	26-MAR-18	2,198.89	Reconciled
385792		22-MAR-18	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.		15,415.00	28-MAR-18	15,415.00	Reconciled
385793		22-MAR-18	EUROFINS EATON ANALYTICAL, INC.		300.00	26-MAR-18	300.00	Reconciled
385794		22-MAR-18	EXECUTIVE LIGHTING & ELECTRIC		603.42	27-MAR-18	603.42	Reconciled
385795		22-MAR-18	FARWEST CORROSION CONTROL COMPANY		13,135.36	28-MAR-18	13,135.36	Reconciled

385796	22-MAR-18	FEDEX		201.16	26-MAR-18	201.16	Reconciled
385797	22-MAR-18	FIREWALLS.COM, INC.		2,576.56			Negotiable
385798	22-MAR-18	FISHER SCIENTIFIC COMPANY LLC		900.78	26-MAR-18	900.78	Reconciled
385799	22-MAR-18	FITCH RATINGS, INC.		5,000.00	27-MAR-18	5,000.00	Reconciled
385800	22-MAR-18	FLEET SOLUTIONS LLC		397.32	26-MAR-18	397.32	Reconciled
385801	22-MAR-18	FLUEGGE CONSTRUCTION, INC.		710.83			Negotiable
385802	22-MAR-18	FOOTHILL/EASTERN TRANSPORTATION		4,650.00			Negotiable
385803	22-MAR-18	FRONTIER CALIFORNIA INC.		479.79			Negotiable
385804	22-MAR-18	GEIGER BROS		154.84	26-MAR-18	154.84	Reconciled
385805	22-MAR-18	GRAINGER		2,350.77	26-MAR-18	2,350.77	Reconciled
385806	22-MAR-18	GRAYBAR ELECTRIC COMPANY		1,317.72	26-MAR-18	1,317.72	Reconciled
385807	22-MAR-18	GREEN, ROCKY		60.20			Negotiable
385808	22-MAR-18	GU, QI		46.56			Negotiable

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

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385809		22-MAR-18	HACH COMPANY		12,147.41			Negotiable
385810		22-MAR-18	HAN, XI		111.26			Negotiable
385811		22-MAR-18	HARDY & HARPER, INC.		9,700.00	23-MAR-18	9,700.00	Reconciled
385812		22-MAR-18	HARMSWORTH ASSOCIATES		2,427.00			Negotiable
385813		22-MAR-18	HARPER & ASSOCIATES		2,460.00			Negotiable
385814		22-MAR-18	ENGINEERING INC HARRINGTON		1,921.57	26-MAR-18	1,921.57	Reconciled
385815		22-MAR-18	INDUSTRIAL PLASTICS LLC					
385815		22-MAR-18	HELPMATES STAFFING SERVICES		22,040.58	27-MAR-18	22,040.58	Reconciled
385816		22-MAR-18	HERITAGE FIELDS EL TORO, LLC		4,044.97			Negotiable
385817		22-MAR-18	HILL BROTHERS CHEMICAL COMPANY		11,552.31			Negotiable
385818		22-MAR-18	HOME DEPOT USA INC		515.75	27-MAR-18	515.75	Reconciled
385819		22-MAR-18	IDENTICARD SYSTEMS WORLDWIDE		1,189.92	27-MAR-18	1,189.92	Reconciled
385820		22-MAR-18	INSITUFORM TECHNOLOGIES INC		8,193.75	27-MAR-18	8,193.75	Reconciled
385821		22-MAR-18	IRON MOUNTAIN INFORMATION MANAGEMENT INC		1,422.78	26-MAR-18	1,422.78	Reconciled
385822		22-MAR-18	IRVINE PIPE & SUPPLY INC		495.81	26-MAR-18	495.81	Reconciled
385823		22-MAR-18	IRVINE UNIFIED SCHOOL DISTRICT		1,902.47			Negotiable
385824		22-MAR-18	JACOB & HEFNER ASSOCIATES, INC		1,420.92			Negotiable
385825		22-MAR-18	JCI JONES CHEMICALS INC		10,751.41			Negotiable
385826		22-MAR-18	JUST ENERGY SOLUTIONS INC.		66.04	26-MAR-18	66.04	Reconciled
385827		22-MAR-18	K HOVNIANIAN		563.03			Negotiable
385828		22-MAR-18	K. HOVNIANIAN		125.59			Negotiable
385829		22-MAR-18	KAESER COMPRESSORS, INC.		534.00	26-MAR-18	534.00	Reconciled
385830		22-MAR-18	KAJFOSZ, CHRIS		65.11	28-MAR-18	65.11	Reconciled
385831		22-MAR-18	KEC ENGINEERING		2,587.47			Negotiable
385832		22-MAR-18	KIM, SOON TAE		1,650.00	26-MAR-18	1,650.00	Reconciled
385833		22-MAR-18	KIMBALL MIDWEST		7,021.36	26-MAR-18	7,021.36	Reconciled
385834		22-MAR-18	KLEINFELDER, INC.		15,355.15			Negotiable

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

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385835		22-MAR-18	KOELLER NEBEKER CARLSON & HALUCK, LLP		920.00	23-MAR-18	920.00	Reconciled
385836		22-MAR-18	KZ MILLER CONSTRUCTION INC.		1,135.45			Negotiable
385837		22-MAR-18	LANDCARE HOLDINGS, INC.		10,049.91			Negotiable

385838	22-MAR-18	LCS TECHNOLOGIES, INC.	2,700.00	27-MAR-18	2,700.00	Reconciled
385839	22-MAR-18	LEIGHTON GROUP	143.17	27-MAR-18	143.17	Reconciled
385840	22-MAR-18	LENNAR HOMES	281.80	26-MAR-18	281.80	Reconciled
385841	22-MAR-18	LILLESTRAND LEADERSHIP CONSULTING, INC.	866.08			Negotiable
385842	22-MAR-18	MARVIN GARDENS LLC	2,593.70	22-MAR-18	2,593.70	Reconciled
385843	22-MAR-18	MC FADDEN-DALE INDUSTRIAL	1.83			Negotiable
385844	22-MAR-18	MC MASTER CARR SUPPLY CO	2,655.86	26-MAR-18	2,655.86	Reconciled
385845	22-MAR-18	MERACLE, MARGARET	48.70	28-MAR-18	48.70	Reconciled
385846	22-MAR-18	MICHAEL BAKER INTERNATIONAL, INC.	14,923.29			Negotiable
385847	22-MAR-18	MISCOWATER	1,867.38	26-MAR-18	1,867.38	Reconciled
385848	22-MAR-18	MORGAN, STEWART	50.00			Negotiable
385849	22-MAR-18	MORTGAGE BANKERS OF AMERICA	22.96			Negotiable
385850	22-MAR-18	MUNDO, LUZ	20.38			Negotiable
385851	22-MAR-18	NAN JIANG & XUEJING DU	34.76	27-MAR-18	34.76	Reconciled
385852	22-MAR-18	NATIONAL READY MIXED CONCRETE CO.	2,195.42	26-MAR-18	2,195.42	Reconciled
385853	22-MAR-18	NINYO & MOORE	7,821.00	26-MAR-18	7,821.00	Reconciled
385854	22-MAR-18	NORICK, KIM A	80.24			Negotiable
385855	22-MAR-18	OLIN CORPORATION	9,656.80	26-MAR-18	9,656.80	Reconciled
385856	22-MAR-18	OLSEN, KEEGAN	54.11	26-MAR-18	54.11	Reconciled
385857	22-MAR-18	OMAR DANDASHI	1,121.73			Negotiable
385858	22-MAR-18	ORANGE COUNTY AUTO PARTS CO	924.17	23-MAR-18	924.17	Reconciled
385859	22-MAR-18	ORRICK, HERRINGTON & SUTCLIFFE LLP	30,000.00	28-MAR-18	30,000.00	Reconciled
385860	22-MAR-18	PACIFIC COAST BOLT CORP	1,958.10	28-MAR-18	1,958.10	Reconciled
385861	22-MAR-18	PALMER, ASHLEY	34.27			Negotiable
385862	22-MAR-18	PARKHOUSE TIRE INC	544.67	27-MAR-18	544.67	Reconciled

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

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385863		22-MAR-18	PARKWAY LAWNMOWER SHOP		193.24	26-MAR-18	193.24	Reconciled
385864		22-MAR-18	PASCAL & LUDWIG CONSTRUCTORS		65,070.25	28-MAR-18	65,070.25	Reconciled
385865		22-MAR-18	PASCAL & LUDWIG CONSTRUCTORS		3,424.75	26-MAR-18	3,424.75	Reconciled
385866		22-MAR-18	PAULUS ENGINEERING, INC.		85,109.97			Negotiable
385867		22-MAR-18	PHILADELPHIA MIXING SOLUTIONS, LTD.		3,547.97	27-MAR-18	3,547.97	Reconciled
385868		22-MAR-18	PINNACLE TOWERS LLC		720.39	26-MAR-18	720.39	Reconciled
385869		22-MAR-18	PONTILLAS TRUST, JULIANA		43.26			Negotiable
385870		22-MAR-18	PRAXAIR DISTRIBUTION INC		78.57	26-MAR-18	78.57	Reconciled
385871		22-MAR-18	PRESTIGE AUTO BODY EXPRESS		7,956.44	27-MAR-18	7,956.44	Reconciled
385872		22-MAR-18	PROCARE WORK INJURY CENTER		1,250.00	27-MAR-18	1,250.00	Reconciled
385873		22-MAR-18	PRUDENTIAL OVERALL SUPPLY		5,577.18	23-MAR-18	5,577.18	Reconciled
385874		22-MAR-18	PTI SAND & GRAVEL INC		1,097.93	28-MAR-18	1,097.93	Reconciled
385875		22-MAR-18	RAFTELIS FINANCIAL CONSULTANTS INC.		3,892.50	26-MAR-18	3,892.50	Reconciled
385876		22-MAR-18	RAM AIR ENGINEERING INC		14,665.42	27-MAR-18	14,665.42	Reconciled
385877		22-MAR-18	RANCHO MARIPOSA APTS		12.01	28-MAR-18	12.01	Reconciled
385878		22-MAR-18	RANJBAR, FARAH		46.80			Negotiable
385879		22-MAR-18	RAY ROBERTS REALTY		12.02	26-MAR-18	12.02	Reconciled
385880		22-MAR-18	REFRIGERATION SUPPLIES DISTRIBUTOR		494.23	23-MAR-18	494.23	Reconciled
385881		22-MAR-18	RELIANCE SAFETY CONSULTANTS, INC.		4,350.00	28-MAR-18	4,350.00	Reconciled
385882		22-MAR-18	RELIANCE STANDARD LIFE INSURANCE COMPANY		29,614.39			Negotiable
385883		22-MAR-18	RESPONSE ENVELOPE, INC		2,618.33			Negotiable
385884		22-MAR-18	RICHARD C. SLADE & ASSOCIATES LLC		1,584.73			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385885		22-MAR-18	RICHMOND AMERICAN HOMES OF MARYLAND, INC		3,204.12			Negotiable
385886		22-MAR-18	RINCON TRUCK CENTER INC.		9,818.72	23-MAR-18	9,818.72	Reconciled
385887		22-MAR-18	RMC WATER AND ENVIRONMENT		10,713.50			Negotiable
385888		22-MAR-18	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT		153,946.91			Negotiable
385889		22-MAR-18	RS HUGHES COMPANY, INC.		265.39	26-MAR-18	265.39	Reconciled
385890		22-MAR-18	S & J SUPPLY CO INC		2,893.09	26-MAR-18	2,893.09	Reconciled
385891		22-MAR-18	SALMAN, JAMAL		89.12			Negotiable
385892		22-MAR-18	SANTA ANA BLUE PRINT		63.85	26-MAR-18	63.85	Reconciled
385893		22-MAR-18	SECURITAS SECURITY SERVICES USA, INC.		47,568.48			Negotiable
385894		22-MAR-18	SERFILCO LTD		6,996.03	27-MAR-18	6,996.03	Reconciled
385895		22-MAR-18	SHAMROCK SUPPLY CO INC		49.45	27-MAR-18	49.45	Reconciled
385896		22-MAR-18	SITEONE LANDSCAPE SUPPLY, LLC		114.61	26-MAR-18	114.61	Reconciled
385897		22-MAR-18	SKORUZ TECHNOLOGIES INC		16,308.00			Negotiable
385898		22-MAR-18	SOUTH COAST WATER CO.		151.66			Negotiable
385899		22-MAR-18	SOUTHERN CALIFORNIA EDISON COMPANY		16.65	27-MAR-18	16.65	Reconciled
385900		22-MAR-18	SOUTHERN CALIFORNIA EDISON COMPANY		419,898.58	23-MAR-18	419,898.58	Reconciled
385901		22-MAR-18	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		2,089.48			Negotiable
385902		22-MAR-18	SOUTHERN COUNTIES LUBRICANTS LLC		273.63	26-MAR-18	273.63	Reconciled
385903		22-MAR-18	SOUTHWESTERN INDUSTRIES, INC.		56,912.97			Negotiable
385904		22-MAR-18	SPATIAL WAVE, INC.		1,056.00	27-MAR-18	1,056.00	Reconciled
385905		22-MAR-18	STANTEC CONSULTING SERVICES INC.		8,192.00	26-MAR-18	8,192.00	Reconciled
385906		22-MAR-18	STARKS, LANITA		40.74	27-MAR-18	40.74	Reconciled
IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17								
BANK: Bank of America N.A. Branch : Los Angeles			Account: Checking AP and PR			Page: 34		
Bank Account Currency: USD (US Dollar)			Payment Currency: USD (US Dollar)					
Payment Type: All			Display Supplier Address: No					

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385907		22-MAR-18	STATE OF CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT		78.00			Negotiable
385908		22-MAR-18	STETSON ENGINEERS INC.		52,444.02	28-MAR-18	52,444.02	Reconciled
385909		22-MAR-18	STEVEN ENTERPRISES INC		1,034.40	23-MAR-18	1,034.40	Reconciled
385910		22-MAR-18	SULLY-MILLER CONTRACTING CO.		245,419.44	28-MAR-18	245,419.44	Reconciled
385911		22-MAR-18	SUSAN A. SIROTA		4,295.00			Negotiable
385912		22-MAR-18	TAI, OWEN		74.04			Negotiable
385913		22-MAR-18	TALLEY INC		866.18	26-MAR-18	866.18	Reconciled
385914		22-MAR-18	TATE, SUSAN		39.88			Negotiable
385915		22-MAR-18	TESLA ASSOCIATES LLC		87.55			Negotiable
385916		22-MAR-18	TESTAMERICA LABORATORIES, INC		192.15	28-MAR-18	192.15	Reconciled
385917		22-MAR-18	THE GAS COMPANY		5,119.88			Negotiable
385918		22-MAR-18	THE IRVINE COMPANY LLC		1,618.08			Negotiable
385919		22-MAR-18	THOMPSON INDUSTRIAL SUPPLY		4,126.28	26-MAR-18	4,126.28	Reconciled
385920		22-MAR-18	TRAMMELL CROW		25.06			Negotiable
385921		22-MAR-18	TRI COUNTY PUMP COMPANY		50,586.38	28-MAR-18	50,586.38	Reconciled

385922	22-MAR-18	TROPICAL PLAZA NURSERY INC		802.58	26-MAR-18	802.58	Reconciled
385923	22-MAR-18	TRUCPARCO		9,407.41			Negotiable
385924	22-MAR-18	UNITED PARCEL SERVICE INC		36.03	26-MAR-18	36.03	Reconciled
385925	22-MAR-18	UNITED SITE SERVICES OF CALIFORNIA INC		478.06	28-MAR-18	478.06	Reconciled
385926	22-MAR-18	V&A CONSULTING ENGINEERS		1,968.00	26-MAR-18	1,968.00	Reconciled
385927	22-MAR-18	VAUGHAN'S INDUSTRIAL REPAIR CO INC		12,560.18			Negotiable
385928	22-MAR-18	VIRTUAL GRAFFITI, INC.		4,525.50	23-MAR-18	4,525.50	Reconciled
385929	22-MAR-18	WASTE MANAGEMENT OF ORANGE COUNTY		66.76	26-MAR-18	66.76	Reconciled

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles
 Bank Account Currency: USD (US Dollar)
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385930		22-MAR-18	WAXIE'S ENTERPRISES, INC		3,213.06	26-MAR-18	3,213.06	Reconciled
385931		22-MAR-18	WECK LABORATORIES INC		931.00	28-MAR-18	931.00	Reconciled
385932		22-MAR-18	WEST YOST ASSOCIATES, INC		13,511.00			Negotiable
385933		22-MAR-18	XIE, WANGHUA		20.82			Negotiable
385934		22-MAR-18	YALE/CHASE EQUIPMENT AND SERVICES, INC.		29,433.18	28-MAR-18	29,433.18	Reconciled
385935		22-MAR-18	YIN'S INC		447.60			Negotiable
385936		22-MAR-18	YORKE ENGINEERING LLC		2,649.46	23-MAR-18	2,649.46	Reconciled
385937		22-MAR-18	YOSHIOKA, ANDREW		17.93	26-MAR-18	17.93	Reconciled
385938		22-MAR-18	ZHANG, HAO		94.47			Negotiable
385939		27-MAR-18	SOUTHERN CALIFORNIA EDISON COMPANY	P.O. BOX 800	2,500.00			Negotiable
385940		28-MAR-18	Davis, Jennifer R (Jennifer)		213.09			Negotiable
385941		28-MAR-18	Hoffman, Michael S (Mike)		180.00			Negotiable
385942		28-MAR-18	Lao, Richard S		98.00			Negotiable
385943		28-MAR-18	Reed, James B		17.00			Negotiable
385944		28-MAR-18	A&Y ASPHALT CONTRACTORS, INC.		56,777.00			Negotiable
385945		28-MAR-18	A&Y COMPANY INC		11,077.00			Negotiable
385946		28-MAR-18	ACWA		500.00			Negotiable
385947		28-MAR-18	AEGIS ENGINEERING MANAGEMENT, INC.		14,457.00			Negotiable
385948		28-MAR-18	AFA USA LLC		59.80			Negotiable
385949		28-MAR-18	AHMADISATARI, POURANDOKHT		55.42			Negotiable
385950		28-MAR-18	ATR TECHNOLOGY LABORATORIES		289.00			Negotiable
385951		28-MAR-18	ALFREY, MICHAEL		48.14			Negotiable
385952		28-MAR-18	ALI, SHAHEEN		81.30			Negotiable
385953		28-MAR-18	ALLEN, JUSTIN		34.11			Negotiable
385954		28-MAR-18	ALLISON, PAULINE		62.06			Negotiable
385955		28-MAR-18	ALPHA TRAFFIC SERVICES, INC.		620.00			Negotiable
385956		28-MAR-18	ALSTON & BIRD LLP		126,361.18			Negotiable
385957		28-MAR-18	AMEERALLY, NAGLA		111.80			Negotiable
385958		28-MAR-18	AMEY, CINDY		46.92			Negotiable
385959		28-MAR-18	AMIRI, OZRA		23.68			Negotiable
385960		28-MAR-18	ANANT, FARAH		51.70			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385961		28-MAR-18	ANDERSON, SARAH		41.05			Negotiable
385962		28-MAR-18	ANDRY, AMY		44.95			Negotiable
385963		28-MAR-18	ANSELMO, CHAD		33.01			Negotiable
385964		28-MAR-18	ANTRIM, PATRICK		19.62			Negotiable
385965		28-MAR-18	APCO GRAPHICS INC		155.83			Negotiable
385966		28-MAR-18	APEX LIFE SCIENCES, LLC		1,190.00			Negotiable
385967		28-MAR-18	ARCADIS U.S., INC.		69,651.28			Negotiable
385968		28-MAR-18	ARMORCAST PRODUCTS COMPANY		6,984.36			Negotiable

385969	28-MAR-18	ARRIOLA, NICOLAS	25.93	Negotiable
385970	28-MAR-18	ASABUSHI, JULIAN	32.33	Negotiable
385971	28-MAR-18	AT&T	248.47	Negotiable
385972	28-MAR-18	AT&T	53.74	Negotiable
385973	28-MAR-18	ATES, BEHLUL	40.70	Negotiable
385974	28-MAR-18	AULT, JOHN	170.00	Negotiable
385975	28-MAR-18	AUTOZONE PARTS, INC.	1,011.07	Negotiable
385976	28-MAR-18	AVSAROGLU, AHMET	26.93	Negotiable
385977	28-MAR-18	AXELSEN, SANDRA	26.81	Negotiable
385978	28-MAR-18	AYERS, WANDA	64.55	Negotiable
385979	28-MAR-18	BADDORF, DONALD	222.09	Negotiable
385980	28-MAR-18	BAL, LYDIA	134.12	Negotiable
385981	28-MAR-18	BALAZS, LINDA	55.12	Negotiable
385982	28-MAR-18	BANITABA, LILI	39.68	Negotiable
385983	28-MAR-18	BARCELON, GLENN	20.11	Negotiable
385984	28-MAR-18	BARRAGAN, MARIA	33.68	Negotiable
385985	28-MAR-18	BASEGGIO, SONDRRA	49.78	Negotiable
385986	28-MAR-18	BASIT, ABDUL	36.86	Negotiable
385987	28-MAR-18	BASU, TANUKA	32.64	Negotiable
385988	28-MAR-18	BASULTO, ERNIE	72.50	Negotiable
385989	28-MAR-18	BATTERIES PLUS AND BATTERIES PLUS BULBS	1,106.22	Negotiable
385990	28-MAR-18	BAUMAN, LAURENCE	30.54	Negotiable
385991	28-MAR-18	BAVCO BACKFLOW APPARATUS & VALVE COMPANY	546.20	Negotiable
385992	28-MAR-18	BDC SPECIAL WASTE	336.00	Negotiable
385993	28-MAR-18	BEAUVIL, RICHARD	11.27	Negotiable
385994	28-MAR-18	BEHESHTI, SAYEH	66.82	Negotiable
385995	28-MAR-18	BEN'S ASPHALT & MAINTENANCE CO	67.32	Negotiable
385996	28-MAR-18	BETHARD, JEFF	49.04	Negotiable
385997	28-MAR-18	BIBAYAN, FARABORZ	44.80	Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
385998		28-MAR-18	BILL'S SWEEPING SERVICE INC		900.00			Negotiable
385999		28-MAR-18	BIO PRO TECH		146.22			Negotiable
386000		28-MAR-18	BIOMAGIC INC		3,782.03			Negotiable
386001		28-MAR-18	BIOMERIEUX INC		217.36			Negotiable
386002		28-MAR-18	BISHOP, RICHARD		13.58			Negotiable
386003		28-MAR-18	BLAIR, HEATHER		40.84			Negotiable
386004		28-MAR-18	BOHAN, BRIAN		19.19			Negotiable
386005		28-MAR-18	BOMEL CONSTRUCTION COMPANY INC.		324.12			Negotiable
386006		28-MAR-18	BOMEL CONSTRUCTION COMPANY, INC.		357.56			Negotiable
386007		28-MAR-18	BOSTON, JAY		37.16			Negotiable
386008		28-MAR-18	BOTSHEKAN, HOLLY		33.21			Negotiable
386009		28-MAR-18	BRADSTREET, JENNIFER		10.90			Negotiable
386010		28-MAR-18	BRENNTAG PACIFIC INC		18,865.41			Negotiable
386011		28-MAR-18	BROOKFIELD RESIDENTIAL		67.20			Negotiable
386012		28-MAR-18	BROWN, CHARLINE		238.48			Negotiable
386013		28-MAR-18	BRYANT, VENZIWE		66.06			Negotiable
386014		28-MAR-18	BUCKNER, CAROL		49.99			Negotiable
386015		28-MAR-18	BUFTON, LARRY		30.93			Negotiable
386016		28-MAR-18	BUNDSCHUH, RANDY		32.91			Negotiable
386017		28-MAR-18	BURBAGE, JOEL		359.42			Negotiable
386018		28-MAR-18	BURRILL, CHRIS		38.34			Negotiable
386019		28-MAR-18	CADERO, MICHAEL		34.34			Negotiable
386020		28-MAR-18	CALIFORNIA BARRICADE RENTAL, INC.		4,339.76			Negotiable
386021		28-MAR-18	CALIFORNIA MUNICIPAL STATISTICS INC		3,525.00			Negotiable
386022		28-MAR-18	CAMAUR, NANCY		26.34			Negotiable
386023		28-MAR-18	CANON SOLUTIONS AMERICA, INC.		468.06			Negotiable
386024		28-MAR-18	CARESS, JACK		29.66			Negotiable
386025		28-MAR-18	CAREY, DEANNE		62.68			Negotiable
386026		28-MAR-18	CAROLLO ENGINEERS, INC		15,690.53			Negotiable
386027		28-MAR-18	CASEY, REGINA		40.92			Negotiable
386028		28-MAR-18	CATALANO, LYNN M		158.91			Negotiable
386029		28-MAR-18	CDW GOVERNMENT LLC		22.13			Negotiable
386030		28-MAR-18	CETIN, BELI		37.80			Negotiable
386031		28-MAR-18	CHAMBERS, JOYCE		85.99			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386032		28-MAR-18	CHAMPION PAVING INC		347.10			Negotiable
386033		28-MAR-18	CHANG, CHIN SHENG		34.57			Negotiable
386034		28-MAR-18	CHANG, FRANCES		26.12			Negotiable
386035		28-MAR-18	CHANG, WILLIAM		26.78			Negotiable
386036		28-MAR-18	CHANG, YUNCHIEH		37.68			Negotiable
386037		28-MAR-18	CHARLES P CROWLEY COMPANY INC		17,962.92			Negotiable
386038		28-MAR-18	CHEHAB, MOHAMAD		13.47			Negotiable
386039		28-MAR-18	CHEM TECH INTERNATIONAL INC		9,303.92			Negotiable
386040		28-MAR-18	CHEN, DONG		54.32			Negotiable
386041		28-MAR-18	CHEN, HSIAOCHUNG		41.89			Negotiable
386042		28-MAR-18	CHEN, NATALIA		38.46			Negotiable
386043		28-MAR-18	CHEN, YIHONG		149.25			Negotiable
386044		28-MAR-18	CHEN, YUN		31.11			Negotiable
386045		28-MAR-18	CHI, MINJUNG		27.26			Negotiable
386046		28-MAR-18	CHILDS, JOHN		36.09			Negotiable
386047		28-MAR-18	CHIN, CHRISTINA		24.50			Negotiable
386048		28-MAR-18	CHIN, CHRISTINE		43.55			Negotiable
386049		28-MAR-18	CHO, HEESANG		22.30			Negotiable
386050		28-MAR-18	CHOI, JI YOUNG		59.10			Negotiable
386051		28-MAR-18	CHOI, RICHARD		41.62			Negotiable
386052		28-MAR-18	CHRISTOPHERSON, JOANNE		14.75			Negotiable
386053		28-MAR-18	CHRISTUS, MATTHEW		21.35			Negotiable
386054		28-MAR-18	CHUANG, KEN		130.17			Negotiable
386055		28-MAR-18	CITY OF NEWPORT BEACH		1,107.10			Negotiable
386056		28-MAR-18	CITY OF ORANGE		114.00			Negotiable
386057		28-MAR-18	CITY OF SANTA ANA		110.46			Negotiable
386058		28-MAR-18	CLA-VAL COMPANY		10,064.08			Negotiable
386059		28-MAR-18	CLARK, JASON		54.46			Negotiable
386060		28-MAR-18	COADY, EDWARD J		30.36			Negotiable
386061		28-MAR-18	COLE-PARMER INSTRUMENT CO		939.73			Negotiable
386062		28-MAR-18	COLLIER, PAUL		11.96			Negotiable
386063		28-MAR-18	COLUMBIA COURT APTS		82.64			Negotiable
386064		28-MAR-18	CONGER, DAVID		50.07			Negotiable
386065		28-MAR-18	CONMY, PHIL		69.97			Negotiable
386066		28-MAR-18	CONSOLIDATED CONTRACTING SERVICES, INC.		2,575.86			Negotiable

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Payment Document : IRWD CHECK								
386067		28-MAR-18	COX COMMUNICATIONS, INC.		3,383.92			Negotiable
386068		28-MAR-18	CRAMER FISH SCIENCES		20,188.25			Negotiable
386069		28-MAR-18	CROOK, KIMBERLY		12.26			Negotiable
386070		28-MAR-18	CUESTA, ERIC		20.64			Negotiable
386071		28-MAR-18	CULLIGAN OF SANTA ANA		8,000.00			Negotiable
386072		28-MAR-18	CULLINEN, JERRY		138.48			Negotiable
386073		28-MAR-18	CUSHMAN & WAKEFIELD OF CA		1,212.80			Negotiable
386074		28-MAR-18	D & H WATER SYSTEMS INC.		6,284.12			Negotiable
386075		28-MAR-18	DANG, ANDREW		51.35			Negotiable
386076		28-MAR-18	DAVIDSON, SHELBY		43.73			Negotiable
386077		28-MAR-18	DAVIS, DEBORAH		26.12			Negotiable
386078		28-MAR-18	DAVIS, JARRED		40.88			Negotiable
386079		28-MAR-18	DEACON, JANET		798.54			Negotiable
386080		28-MAR-18	DEBOSKEY, ANGELA		86.66			Negotiable
386081		28-MAR-18	DEDRICK, JESSICA		228.34			Negotiable
386082		28-MAR-18	DELL MARKETING LP		5,355.54			Negotiable
386083		28-MAR-18	DENALI WATER SOLUTIONS LLC		5,040.68			Negotiable
386084		28-MAR-18	DESOLA, MATT		71.29			Negotiable
386085		28-MAR-18	DEVRIES, TIM		58.48			Negotiable
386086		28-MAR-18	DEWAR, JOAN E		29.10			Negotiable
386087		28-MAR-18	DIRECTV INC		125.53			Negotiable
386088		28-MAR-18	DISANTO, JOHN		86.74			Negotiable
386089		28-MAR-18	DISCOUNT COURIER SERVICE		257.37			Negotiable
386090		28-MAR-18	DOMINGO, JOHN		156.45			Negotiable

386091	28-MAR-18	DORMAN, BOBBY		32.74	Negotiable
386092	28-MAR-18	DOWNSTREAM SERVICES, INC.		1,723.95	Negotiable
386093	28-MAR-18	DOYLE, MEGHAN		37.44	Negotiable
386094	28-MAR-18	DU, HONGLIN		33.17	Negotiable
386095	28-MAR-18	DUMAS, SRARAH		50.16	Negotiable
386096	28-MAR-18	DYNAMICS AUTOSPORT, INC		70.71	Negotiable
386097	28-MAR-18	EID, MIRIAM		37.64	Negotiable
386098	28-MAR-18	ELABRA INC		936.91	Negotiable
386099	28-MAR-18	ELECNR BELCO ELECTRIC, INC.		1,706.13	Negotiable
386100	28-MAR-18	ELHAREZI, DANIAH		162.00	Negotiable
386101	28-MAR-18	ENEIX, BRENT		33.89	Negotiable

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Payment Document : IRWD CHECK								
386102		28-MAR-18	ENTERPRISE RIDESHARE		16,473.99			Negotiable
386103		28-MAR-18	ENTERPRISE SECURITY, INC		5,893.76			Negotiable
386104		28-MAR-18	ENVIRONMENTAL RESOURCE ASSOCIATES		404.02			Negotiable
386105		28-MAR-18	ESSAYLI, BILAL		42.92			Negotiable
386106		28-MAR-18	EXECUTIVE LIGHTING & ELECTRIC		8,012.84			Negotiable
386107		28-MAR-18	EYNON, JEFF		29.45			Negotiable
386108		28-MAR-18	FAMILY MEDICAL CENTER		83.55			Negotiable
386109		28-MAR-18	FEDEX		318.67			Negotiable
386110		28-MAR-18	FERRANTE, BARBARA		42.99			Negotiable
386111		28-MAR-18	FTONA HUTTON & ASSOCIATES, INC.		19,844.54			Negotiable
386112		28-MAR-18	FIRE EXTINGUISHING SAFETY & SERVICE		684.00			Negotiable
386113		28-MAR-18	FIRST CHOICE SERVICES		1,597.04			Negotiable
386114		28-MAR-18	FISCHBEIN, BRIAN		73.60			Negotiable
386115		28-MAR-18	FISERV		285.40			Negotiable
386116		28-MAR-18	FISHER SCIENTIFIC COMPANY LLC		361.74			Negotiable
386117		28-MAR-18	FITCH RATINGS, INC.		2,000.00			Negotiable
386118		28-MAR-18	FLOOD, REBECCA		38.25			Negotiable
386119		28-MAR-18	FOSTER, JOHN		73.60			Negotiable
386120		28-MAR-18	FOSTER, ROBERT		34.31			Negotiable
386121		28-MAR-18	FRAZIER, AMANDA		10.66			Negotiable
386122		28-MAR-18	FREEDMAN, JAY		45.66			Negotiable
386123		28-MAR-18	FRONTIER CALIFORNIA INC.		100.14			Negotiable
386124		28-MAR-18	FUJII, ANDREW		37.26			Negotiable
386125		28-MAR-18	GAHNG, BETTY		14.44			Negotiable
386126		28-MAR-18	GANAHL LUMBER CO.		309.11			Negotiable
386127		28-MAR-18	GARCIA, ALAN		35.07			Negotiable
386128		28-MAR-18	GARZA INDUSTRIES, INC		1,604.99			Negotiable
386129		28-MAR-18	GCI CONSTRUCTION, INC.		3,237.72			Negotiable
386130		28-MAR-18	GEIGER BROS		487.30			Negotiable
386131		28-MAR-18	GENTERRA CONSULTANTS INC		1,885.50			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 41
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386132		28-MAR-18	GHAMARIFARD, FARIBORC		65.62			Negotiable
386133		28-MAR-18	GIBBS, GREGG		40.13			Negotiable
386134		28-MAR-18	GILBERT, LUCAS		37.02			Negotiable
386135		28-MAR-18	GIM, HONGRAE		42.14			Negotiable
386136		28-MAR-18	GJ AUTOMOTIVE EQUIPMENT CO INC		1,813.43			Negotiable
386137		28-MAR-18	GLASER, BRAD		164.19			Negotiable
386138		28-MAR-18	GNIWEK, RAYMOND		48.24			Negotiable
386139		28-MAR-18	GOLDMAN, ALFREDO		37.68			Negotiable
386140		28-MAR-18	GONZALES, JOAN		44.11			Negotiable
386141		28-MAR-18	GOSLA, SAEED		28.29			Negotiable
386142		28-MAR-18	GRAHAM, STEVEN		57.20			Negotiable
386143		28-MAR-18	GRAINGER		2,462.85			Negotiable

386144	28-MAR-18	GRANDY, LEONARD A	33.84	Negotiable
386145	28-MAR-18	GRECO, MARK	21.21	Negotiable
386146	28-MAR-18	GRIFFITH, CATHERINE	38.30	Negotiable
386147	28-MAR-18	GRONWALD, HARVEY	21.49	Negotiable
386148	28-MAR-18	GU, BINGZHU	46.87	Negotiable
386149	28-MAR-18	GUIDA SURVEYING INC.	5,871.40	Negotiable
386150	28-MAR-18	GUILLEN, PATRICK	29.92	Negotiable
386151	28-MAR-18	GUO, WENYING	102.71	Negotiable
386152	28-MAR-18	GUPTA, SAMIK	27.89	Negotiable
386153	28-MAR-18	HACH COMPANY	1,423.05	Negotiable
386154	28-MAR-18	HACKEN, MICHAEL	88.84	Negotiable
386155	28-MAR-18	HAGEMETER, NATHAN	20.85	Negotiable
386156	28-MAR-18	HALLSTEN CORPORATION	48,829.50	Negotiable
386157	28-MAR-18	HALUNKA, MARY	38.19	Negotiable
386158	28-MAR-18	HAMILTON, LORI	86.84	Negotiable
386159	28-MAR-18	HAN, SEUNG HO	34.52	Negotiable
386160	28-MAR-18	HARINDRAN, VIKRAM	35.96	Negotiable
386161	28-MAR-18	HARRINGTON INDUSTRIAL PLASTICS LLC	8,595.33	Negotiable
386162	28-MAR-18	HARRIS, JOCELYN	33.01	Negotiable
386163	28-MAR-18	HARVARD COURT APARTMENTS	68.07	Negotiable
386164	28-MAR-18	HARVEY, GREG	90.09	Negotiable
386165	28-MAR-18	HASLAUER, JEFFREY	63.19	Negotiable
386166	28-MAR-18	HASPERT, ELIZABETH	27.12	Negotiable
386167	28-MAR-18	HASSAN, ISTERLIN	81.52	Negotiable
386168	28-MAR-18	HATAGO, PAUL Y	35.37	Negotiable
386169	28-MAR-18	HAYES, DAVID	18.36	Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 42
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386170		28-MAR-18	HDR ENGINEERING INC		54,524.85			Negotiable
386171		28-MAR-18	HEDGER, PHILIP		94.15			Negotiable
386172		28-MAR-18	HEILESON, JASMINE		26.33			Negotiable
386173		28-MAR-18	HELPMATES STAFFING SERVICES		29,733.96			Negotiable
386174		28-MAR-18	HENNINGSON, CARL		52.99			Negotiable
386175		28-MAR-18	HERITAGE FIELDS EL TORO, LLC		238,156.16			Negotiable
386176		28-MAR-18	HERNANDEZ, TANYA		161.98			Negotiable
386177		28-MAR-18	HERNANEZ, EDWARD		29.73			Negotiable
386178		28-MAR-18	HERRMANN, JULIA		11.41			Negotiable
386179		28-MAR-18	HICKEY, MATTHEW		39.08			Negotiable
386180		28-MAR-18	HIEGER, NATHAN		35.29			Negotiable
386181		28-MAR-18	HILL BROTHERS CHEMICAL COMPANY		15,446.11			Negotiable
386182		28-MAR-18	HO, HAO		44.85			Negotiable
386183		28-MAR-18	HOFMAN, MARIA		46.05			Negotiable
386184		28-MAR-18	HOLDEN, JAMES M		29.10			Negotiable
386185		28-MAR-18	HOLLAND, CASSANDRA		14.18			Negotiable
386186		28-MAR-18	HOLSTE, MARION L		34.33			Negotiable
386187		28-MAR-18	HOME DEPOT USA INC		388.27			Negotiable
386188		28-MAR-18	HONG, JUN		20.63			Negotiable
386189		28-MAR-18	HOVSEPIAN, JOANN		25.92			Negotiable
386190		28-MAR-18	HSU, JAMES		32.80			Negotiable
386191		28-MAR-18	HSU, SHERRY		52.45			Negotiable
386192		28-MAR-18	HU, SHUYANG		26.32			Negotiable
386193		28-MAR-18	HUMPHREYS, MICHELLE		75.38			Negotiable
386194		28-MAR-18	HUMPHREYS, TYLER		37.65			Negotiable
386195		28-MAR-18	HUNT, RAY		68.32			Negotiable
386196		28-MAR-18	HUNTER, CASSANDRA		31.23			Negotiable
386197		28-MAR-18	HYDRANAUTICS		67,572.24			Negotiable
386198		28-MAR-18	IBM CORPORATION		3,201.00			Negotiable
386199		28-MAR-18	ICHIKAWA, NATHUD		55.42			Negotiable
386200		28-MAR-18	INDUSTRIAL METAL SUPPLY CO		98.38			Negotiable
386201		28-MAR-18	INFOSYS LIMITED		22,880.00			Negotiable
386202		28-MAR-18	INTEGRITY IT SOLUTIONS INC.		2,100.00			Negotiable
386203		28-MAR-18	IRVINE PIPE & SUPPLY INC		50.60			Negotiable
386204		28-MAR-18	IRWD-PETTY CASH CUSTODIAN		1,097.43			Negotiable
386205		28-MAR-18	ISEN, BRUCE A		72.08			Negotiable
386206		28-MAR-18	JACKSON, STEFANI		37.49			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 43
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386207		28-MAR-18	JANG, YOUNGHEE		75.26			Negotiable
386208		28-MAR-18	JARMAN'S CUSTOM WALL COVERING		19.06			Negotiable
386209		28-MAR-18	JCI JONES CHEMICALS INC		5,468.90			Negotiable
386210		28-MAR-18	JESPERSEN, MORTEN		72.03			Negotiable
386211		28-MAR-18	JIN, HIOJIN		189.01			Negotiable
386212		28-MAR-18	JOHNSON, KEVIN J		124.68			Negotiable
386213		28-MAR-18	JOHNSON, VINCENT		28.49			Negotiable
386214		28-MAR-18	JOHNSTON, MICHELE		51.58			Negotiable
386215		28-MAR-18	JOHNSTONE SUPPLY		2,441.36			Negotiable
386216		28-MAR-18	JOKHAN, ANJINI		64.22			Negotiable
386217		28-MAR-18	JUNG, LAURA		50.71			Negotiable
386218		28-MAR-18	KADAN, BOB		20.34			Negotiable
386219		28-MAR-18	KASHYAP, MANEESHA		29.07			Negotiable
386220		28-MAR-18	KASS, SALLY		79.16			Negotiable
386221		28-MAR-18	KATO, LINDA		17.45			Negotiable
386222		28-MAR-18	KEENAN, KAREY		57.06			Negotiable
386223		28-MAR-18	KELLEY, BREANN		54.44			Negotiable
386224		28-MAR-18	KELLEY, TAMBRA		37.21			Negotiable
386225		28-MAR-18	KELLY, TYLER		48.69			Negotiable
386226		28-MAR-18	KENNEDY, MIKE		18.04			Negotiable
386227		28-MAR-18	KIEMM, JANA		106.79			Negotiable
386228		28-MAR-18	KIETHANOM, TAWIN		31.88			Negotiable
386229		28-MAR-18	KIL, RICHARD		23.29			Negotiable
386230		28-MAR-18	KILLIAN, MICHELLE		28.07			Negotiable
386231		28-MAR-18	KIM, HANG		37.05			Negotiable
386232		28-MAR-18	KIM, JI HOON		53.60			Negotiable
386233		28-MAR-18	KIM, JINSOOK		75.33			Negotiable
386234		28-MAR-18	KIM, JOHN		33.23			Negotiable
386235		28-MAR-18	KIM, JUHEE		71.57			Negotiable
386236		28-MAR-18	KIM, NELSON		23.12			Negotiable
386237		28-MAR-18	KIM, SAMAN		77.17			Negotiable
386238		28-MAR-18	KIM, SOOMYUNG		32.15			Negotiable
386239		28-MAR-18	KIM, U		40.13			Negotiable
386240		28-MAR-18	KINSLEY, BRIAN		76.25			Negotiable
386241		28-MAR-18	KIRKBRIDE, SHEENA		23.86			Negotiable
386242		28-MAR-18	KIRSCHENMANN, DANIEL		100.02			Negotiable
386243		28-MAR-18	KO, RICHARD Y		43.37			Negotiable
386244		28-MAR-18	KOLEX INTERNATIONAL INC		76.32			Negotiable
386245		28-MAR-18	KRIESEL, WES		74.05			Negotiable
386246		28-MAR-18	KUANG, DI		89.02			Negotiable
386247		28-MAR-18	KUK, RICHARD		35.86			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 44
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386248		28-MAR-18	LA HABRA FENCE COMPANY INC		844.00			Negotiable
386249		28-MAR-18	LAMBRAKIS, MICHAEL		33.98			Negotiable
386250		28-MAR-18	LAMEYER, DONALD J		36.05			Negotiable
386251		28-MAR-18	LANDCARE HOLDINGS, INC.		2,591.00			Negotiable
386252		28-MAR-18	LEAHY, RICHARD		40.60			Negotiable
386253		28-MAR-18	LECLAIR, SUSAN		40.18			Negotiable
386254		28-MAR-18	LEDBETTER, CARLA		44.96			Negotiable
386255		28-MAR-18	LEE, EDWARD		40.37			Negotiable
386256		28-MAR-18	LEE, GANG HOON		70.48			Negotiable
386257		28-MAR-18	LEE, GRACE		72.70			Negotiable
386258		28-MAR-18	LEE, JOO		43.46			Negotiable
386259		28-MAR-18	LEE, KANG		39.76			Negotiable
386260		28-MAR-18	LEE, SERAP		28.93			Negotiable
386261		28-MAR-18	LEIGHTON, STEPHEN		40.27			Negotiable
386262		28-MAR-18	LEONARD, CASSANDRA M		74.09			Negotiable
386263		28-MAR-18	LEPLASTRIER, EMILY		51.55			Negotiable
386264		28-MAR-18	LEWIS, JANE		277.00			Negotiable
386265		28-MAR-18	LEYS, WILLIAM D		158.96			Negotiable
386266		28-MAR-18	LICH, DAVID		81.02			Negotiable
386267		28-MAR-18	LICUANAN, BRIAN		70.33			Negotiable
386268		28-MAR-18	LIN, JENNIFER		72.89			Negotiable
386269		28-MAR-18	LISANDRILLO, JANET		26.33			Negotiable
386270		28-MAR-18	LITVAK, URI		66.05			Negotiable
386271		28-MAR-18	LIU, CHENG CHENG		134.23			Negotiable
386272		28-MAR-18	LIU, JIANMING		17.49			Negotiable
386273		28-MAR-18	LONG, LARRY		42.02			Negotiable
386274		28-MAR-18	LUTZ-JESCO AMERICA CORPORATION		21,674.00			Negotiable
386275		28-MAR-18	MACGILLIVRAY, COLIN		11.52			Negotiable
386276		28-MAR-18	MACLIN, ALISA		37.05			Negotiable

386277	28-MAR-18	MADDUX, HAYLEY	34.72	Negotiable
386278	28-MAR-18	MALLETTE, LEO	36.63	Negotiable
386279	28-MAR-18	MALLIK, RANGAN	17.77	Negotiable
386280	28-MAR-18	MALONEY, KIMBERLY	38.83	Negotiable
386281	28-MAR-18	MANSOORI, FARZANEH	35.32	Negotiable
386282	28-MAR-18	MANSOUR ESFANDIARI AND SHOREH KHARZE	30.02	Negotiable
386283	28-MAR-18	MARCUS, GISELE	50.00	Negotiable
386284	28-MAR-18	MARIMUTHU, SHANTHINI	12,52	Negotiable
386285	28-MAR-18	MARK WU AND SUK FUN CHIU	81.70	Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 45
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386286		28-MAR-18	MARS, MARISSA		30.72			Negotiable
386287		28-MAR-18	MARSHALL, ANTHONY		16.83			Negotiable
386288		28-MAR-18	MARSHALL, GREG		36.10			Negotiable
386289		28-MAR-18	MARTIN, JULIA		66.40			Negotiable
386290		28-MAR-18	MASHOUR, PEARL		39.94			Negotiable
386291		28-MAR-18	MASOOD, BURHAN		39.66			Negotiable
386292		28-MAR-18	MATHEWS, JOHN		90.96			Negotiable
386293		28-MAR-18	MATHURIA, ATUL		15.32			Negotiable
386294		28-MAR-18	MAYERS, CRAIG		33.00			Negotiable
386295		28-MAR-18	MAYO, TODD		48.01			Negotiable
386296		28-MAR-18	MC FADDEN-DALE INDUSTRIAL		221.37			Negotiable
386297		28-MAR-18	MC MASTER CARR SUPPLY CO		1,088.39			Negotiable
386298		28-MAR-18	MCCLOUD, JIM		63.18			Negotiable
386299		28-MAR-18	MCCROMETER, INC.		5,435.60			Negotiable
386300		28-MAR-18	MCKEAGUE, W. DOUGLAS		51.97			Negotiable
386301		28-MAR-18	MEISLIK, ILANA		145.80			Negotiable
386302		28-MAR-18	MELO, ARTURO		67.60			Negotiable
386303		28-MAR-18	MENDENHALL, THOMAS		51.08			Negotiable
386304		28-MAR-18	MEROW, ALAN		35.24			Negotiable
386305		28-MAR-18	MERRIFIELD, MARK		45.35			Negotiable
386306		28-MAR-18	MERRILL, DEBORAH		362.50			Negotiable
386307		28-MAR-18	METTLER-TOLEDO		2,907.59			Negotiable
386308		28-MAR-18	MEZA-DURAN, ROBERTA		41.38			Negotiable
386309		28-MAR-18	MICHAEL LEE		49.22			Negotiable
386310		28-MAR-18	MOHAMMADI, FARNAZ		34.00			Negotiable
386311		28-MAR-18	MOHOS, KRISTINA		218.08			Negotiable
386312		28-MAR-18	MONETTE, LISA		64.19			Negotiable
386313		28-MAR-18	MOORE, MICHAEL		39.98			Negotiable
386314		28-MAR-18	MORGAN, JOLIE		206.99			Negotiable
386315		28-MAR-18	MORIARTY, CYNTHIA		84.52			Negotiable
386316		28-MAR-18	MORRELL, ANNA		34.85			Negotiable
386317		28-MAR-18	MORRIS, ELISA		33.88			Negotiable
386318		28-MAR-18	MOTTESI, NOEMI		47.88			Negotiable
386319		28-MAR-18	MULLER, JOHN		40.83			Negotiable
386320		28-MAR-18	MUNICIPAL UNDERGROUND SERVICES INC		17,750.00			Negotiable
386321		28-MAR-18	MUNROE, KAY		25.00			Negotiable
386322		28-MAR-18	MURPHY, DANNY		18.39			Negotiable
386323		28-MAR-18	MURPHY, GABY		42.67			Negotiable
386324		28-MAR-18	MURROW, ADAM		53.18			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 46
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386325		28-MAR-18	MUSETTI, LOUIS		54.76			Negotiable
386326		28-MAR-18	MUTUAL PROPANE		449.49			Negotiable
386327		28-MAR-18	NAGEL, KRISTINA		49.90			Negotiable
386328		28-MAR-18	NAKAMURA, DANIEL		60.90			Negotiable
386329		28-MAR-18	NAQVI, SYED		16.09			Negotiable
386330		28-MAR-18	NARAYANASWAMY, KAVITA		58.00			Negotiable
386331		28-MAR-18	NATIONAL READY MIXED CONCRETE CO.		840.46			Negotiable
386332		28-MAR-18	NAVAIIRA, ANDREA		30.31			Negotiable
386333		28-MAR-18	NAYAGAM, EASTER		13.66			Negotiable
386334		28-MAR-18	NEW RESOURCES GROUP INC		432.00			Negotiable
386335		28-MAR-18	NGUYEN, HELEN		40.49			Negotiable
386336		28-MAR-18	NGUYEN, LISA		29.42			Negotiable

386337	28-MAR-18	NGUYEN, TRI	10.92	Negotiable
386338	28-MAR-18	NICHOLSON, NANCY	62.76	Negotiable
386339	28-MAR-18	NIRVANA ALONSO	200.00	Negotiable
386340	28-MAR-18	NMG GEOTECHNICAL INC	32,980.90	Negotiable
386341	28-MAR-18	NORDINE, MOLLY	190.91	Negotiable
386342	28-MAR-18	NOSSAMAN LLP	26,404.62	Negotiable
386343	28-MAR-18	O'HAREN GOVERNMENT RELATIONS	6,500.00	Negotiable
386344	28-MAR-18	OCEAN BLUE ENVIRONMENTAL SERVICES INC	8,362.16	Negotiable
386345	28-MAR-18	OFER, MAXIMA	42.62	Negotiable
386346	28-MAR-18	OKINAGA, HIROKI	56.28	Negotiable
386347	28-MAR-18	OLIN CORPORATION	19,406.40	Negotiable
386348	28-MAR-18	ONESOURCE DISTRIBUTORS LLC	4,169.22	Negotiable
386349	28-MAR-18	ORANGE COUNTY AUTO PARTS CO	511.37	Negotiable
386350	28-MAR-18	ORANGE COUNTY TREASURER	332.19	Negotiable
386351	28-MAR-18	ORLINSKI, SCOTT	19.38	Negotiable
386352	28-MAR-18	ORTEGA, EDGAR	11.80	Negotiable
386353	28-MAR-18	PACIFIC PARTS & CONTROLS INC	4,520.86	Negotiable
386354	28-MAR-18	PADUA, DAVID	59.08	Negotiable
386355	28-MAR-18	PAGE, KAUSTUBH	11.39	Negotiable
386356	28-MAR-18	PAN, RENJUN	46.56	Negotiable
386357	28-MAR-18	PAPPACHAN, PRIMAL	48.50	Negotiable
386358	28-MAR-18	PARK, HANJIN	147.30	Negotiable
386359	28-MAR-18	PARK, WON KYO	44.07	Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 47
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386360	28-MAR-18	PARROTT, DEBORAH			42.60			Negotiable
386361	28-MAR-18	PAULUS ENGINEERING, INC.			74,545.04			Negotiable
386362	28-MAR-18	PAWLEY, CRAIG			46.71			Negotiable
386363	28-MAR-18	PEEBLER, DANIELLE			30.32			Negotiable
386364	28-MAR-18	PEREZ, DONNA			10.28			Negotiable
386365	28-MAR-18	PERRY, MORGANN			66.40			Negotiable
386366	28-MAR-18	PETROFF, SUNITA			58.13			Negotiable
386367	28-MAR-18	PHAM, VAN-KHANH			38.63			Negotiable
386368	28-MAR-18	PINTA, MEREDITH			106.68			Negotiable
386369	28-MAR-18	PMC ENGINEERING LLC.			1,633.37			Negotiable
386370	28-MAR-18	POGORELAC, CHAD			20.47			Negotiable
386371	28-MAR-18	PORTRAIT CONSTRUCTION, INC.			737.06			Negotiable
386372	28-MAR-18	POST, KEN/SANDY			36.32			Negotiable
386373	28-MAR-18	PRAXAIR DISTRIBUTION INC			819.47			Negotiable
386374	28-MAR-18	PRESTIGE AUTO BODY EXPRESS			2,803.62			Negotiable
386375	28-MAR-18	PRICE, JESSICA			35.20			Negotiable
386376	28-MAR-18	PRINCE, LEE			21.49			Negotiable
386377	28-MAR-18	PSOMAS			3,257.60			Negotiable
386378	28-MAR-18	PTI SAND & GRAVEL INC			824.62			Negotiable
386379	28-MAR-18	QI, XIN			51.54			Negotiable
386380	28-MAR-18	QUALITY ENVIRONMENTAL CONTAINERS			6,129.98			Negotiable
386381	28-MAR-18	QUARTO, JANE			139.15			Negotiable
386382	28-MAR-18	QWEST ENGINEERING, INC			1,050.00			Negotiable
386383	28-MAR-18	RABLE, BRAD			27.18			Negotiable
386384	28-MAR-18	RADOFF, JONATHAN			60.89			Negotiable
386385	28-MAR-18	RAFAIL, SAM			35.17			Negotiable
386386	28-MAR-18	RAMACHANDRAN, BALA			33.54			Negotiable
386387	28-MAR-18	RANESES, TAMI			43.27			Negotiable
386388	28-MAR-18	RAYMOND, LIZA			162.00			Negotiable
386389	28-MAR-18	RAZMI, KARIM			46.16			Negotiable
386390	28-MAR-18	READ, MISTY			79.66			Negotiable
386391	28-MAR-18	READY, KEVIN			33.98			Negotiable
386392	28-MAR-18	REAL WATER CONSULTANTS INC.			19,434.00			Negotiable
386393	28-MAR-18	REESE, AARON			69.38			Negotiable
386394	28-MAR-18	REESE, JOHN D			47.88			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 48
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
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Payment Document : IRWD CHECK					
386395	28-MAR-18	RELIANCE SAFETY CONSULTANTS, INC.	28,645.96		Negotiable
386396	28-MAR-18	REYNOLDS, JASON	46.92		Negotiable
386397	28-MAR-18	REZAEI, ROYA	100.00		Negotiable
386398	28-MAR-18	RHINO SAFETY SOLUTIONS, INC	3,828.43		Negotiable
386399	28-MAR-18	RHO, HYONSUK	82.60		Negotiable
386400	28-MAR-18	RHOADES, ROGER	57.31		Negotiable
386401	28-MAR-18	RICE, VIVIAN	38.61		Negotiable
386402	28-MAR-18	RICHARDSON, JOSEPH	38.86		Negotiable
386403	28-MAR-18	RICHARDSON, RACHEL	41.83		Negotiable
386404	28-MAR-18	RIDGEWAY, SUEKO	30.43		Negotiable
386405	28-MAR-18	RINCON TRUCK CENTER INC.	101.80		Negotiable
386406	28-MAR-18	RINEHART, JOSEPH	91.07		Negotiable
386407	28-MAR-18	ROBERTS, ANDREW	40.85		Negotiable
386408	28-MAR-18	ROBERTS, STEPHEN	41.83		Negotiable
386409	28-MAR-18	ROBINSON, DYTICIA	47.85		Negotiable
386410	28-MAR-18	RODGERS, MELANIE	20.82		Negotiable
386411	28-MAR-18	ROMERO, CATHY	10.27		Negotiable
386412	28-MAR-18	ROSS, STEVEN	38.40		Negotiable
386413	28-MAR-18	ROWSHAN, KASRA	178.28		Negotiable
386414	28-MAR-18	RUBIO, MICHAEL	11.38		Negotiable
386415	28-MAR-18	RUIZ, ARMANDO	32.38		Negotiable
386416	28-MAR-18	RUNNERSTROM, MIRYHA	28.52		Negotiable
386417	28-MAR-18	RUTH NOLAN AND BRENDAN NOLAN	72.31		Negotiable
386418	28-MAR-18	SACKSTEIN, EVAN	80.99		Negotiable
386419	28-MAR-18	SAFFTY-KLEEN SYSTEMS, INC	754.80		Negotiable
386420	28-MAR-18	SAFFELL, STEVE	48.05		Negotiable
386421	28-MAR-18	SALCIDO, ANTHONY	37.01		Negotiable
386422	28-MAR-18	SALVETTI, ERIN	80.00		Negotiable
386423	28-MAR-18	SAMARRAI, RAY	18.43		Negotiable
386424	28-MAR-18	SAMUEL & NORBERT MALER	39.39		Negotiable
386425	28-MAR-18	SANDS, JASON	144.18		Negotiable
386426	28-MAR-18	SANTA ANA BLUE PRINT	155.16		Negotiable
386427	28-MAR-18	SANTA BARBARA NPB APTS LLC	455.83		Negotiable
386428	28-MAR-18	SARAVIA, VARTAN	56.51		Negotiable
386429	28-MAR-18	SARHANGNEJAD, FUAD	91.11		Negotiable
386430	28-MAR-18	SCHAPEL, ZACH	77.26		Negotiable
IRWD Ledger Upgrade		Payment Register For		01-MAR-18 To 30-MAR-18	Report Date: 29-MAR-2018 15:17
BANK: Bank of America N.A.		Branch : Los Angeles		Account: Checking AP and PR	Page: 49
Bank Account Currency: USD (US Dollar)		Payment Currency: USD (US Dollar)		Display Supplier Address: No	
Payment Type: All					

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386431		28-MAR-18	SCHINDLER ELEVATOR CORPORATION		202.95			Negotiable
386432		28-MAR-18	SCHISLER, DONALD		18.72			Negotiable
386433		28-MAR-18	SCOTT, ROCKWELL		142.98			Negotiable
386434		28-MAR-18	SEGOVIA, RAUL		35.85			Negotiable
386435		28-MAR-18	SEYLER, ALLISON		28.44			Negotiable
386436		28-MAR-18	SHAMROCK SUPPLY CO INC		1,091.71			Negotiable
386437		28-MAR-18	SHARIFI NEJAD, HAMID		33.79			Negotiable
386438		28-MAR-18	SHENODA, MARYANN		59.57			Negotiable
386439		28-MAR-18	SHERWIN, RALPH		91.81			Negotiable
386440		28-MAR-18	SHI, YONG GANG		41.59			Negotiable
386441		28-MAR-18	SHIVELY, CINDI		40.48			Negotiable
386442		28-MAR-18	SHUSTER, IGAL		56.06			Negotiable
386443		28-MAR-18	SIGMA-ALDRICH INC		1,198.66			Negotiable
386444		28-MAR-18	SILVESTRO, DORIS L		29.44			Negotiable
386445		28-MAR-18	SIMANCEK, CLYSTA		31.58			Negotiable
386446		28-MAR-18	SINGARELLA, HEATHER		177.66			Negotiable
386447		28-MAR-18	SITEONE LANDSCAPE SUPPLY, LLC		239.64			Negotiable
386448		28-MAR-18	SMALL, RANDI		57.70			Negotiable
386449		28-MAR-18	SMITH, HAROLD		31.18			Negotiable
386450		28-MAR-18	SMITH, IDRENE		45.75			Negotiable
386451		28-MAR-18	SMITH, KAITLYNN		32.84			Negotiable
386452		28-MAR-18	SMITH, TERESA L		37.56			Negotiable
386453		28-MAR-18	SOLIS, ULYSSES		40.52			Negotiable
386454		28-MAR-18	SONG, JUNGSUB		39.82			Negotiable
386455		28-MAR-18	SOUTH BAY FOUNDRY, INC		3,431.84			Negotiable
386456		28-MAR-18	SOUTHERN CALIFORNIA EDISON COMPANY		84,956.28			Negotiable
386457		28-MAR-18	SOUTHERN CALIFORNIA EDISON		61.60			Negotiable

386514	28-MAR-18	US BANK NAT'L ASSOCIATION NORTH DAKOTA	78,564.51	Negotiable
386515	28-MAR-18	VARNADO, SHERRY	34.98	Negotiable
386516	28-MAR-18	VASHIST, DEEPAK	78.15	Negotiable
386517	28-MAR-18	VAUGHN, GINA	40.58	Negotiable
386518	28-MAR-18	VERIZON WIRELESS SERVICES LLC	10,691.67	Negotiable
386519	28-MAR-18	VERMA, KUMAR	27.06	Negotiable
386520	28-MAR-18	VILLACORTA, BRIAN	55.42	Negotiable
386521	28-MAR-18	VISCO, NANCY	27.89	Negotiable
386522	28-MAR-18	VLAD, CATHY	121.93	Negotiable
386523	28-MAR-18	VULCAN MATERIALS COMPANY	2,828.49	Negotiable
386524	28-MAR-18	WACO FILTERS CORPORATION	8,549.53	Negotiable
386525	28-MAR-18	WADHWANI, RISHI	44.18	Negotiable
386526	28-MAR-18	WALDHAUSER, ALYSSA	33.33	Negotiable
386527	28-MAR-18	WALTER WILHELM & NATALIE WILHELM	65.23	Negotiable
386528	28-MAR-18	WALTERS WHOLESALE ELECTRIC	566.62	Negotiable
386529	28-MAR-18	WANG, CONNIE	25.93	Negotiable
386530	28-MAR-18	WANG, PEI	34.88	Negotiable
386531	28-MAR-18	WANG, PEFQIANG	38.86	Negotiable
386532	28-MAR-18	WANG, YUANBIN	73.37	Negotiable
386533	28-MAR-18	WATKINS, TERESA	22.00	Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 52
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
386534		28-MAR-18	WAXIE'S ENTERPRISES, INC		1,212.62			Negotiable
386535		28-MAR-18	WEBB, CAMERON		114.37			Negotiable
386536		28-MAR-18	WECK LABORATORIES INC		1,660.00			Negotiable
386537		28-MAR-18	WENTWORTH, CHRISTINA		28.25			Negotiable
386538		28-MAR-18	WEST COAST SAFETY SUPPLY INC		9,945.54			Negotiable
386539		28-MAR-18	WESTAMERICA COMMUNICATIONS, INC.		3,918.11			Negotiable
386540		28-MAR-18	WESTERN AV		9,163.64			Negotiable
386541		28-MAR-18	WESTERN EXTERMINATOR COMPANY		9,777.50			Negotiable
386542		28-MAR-18	WIDJAJA, MARIO		45.02			Negotiable
386543		28-MAR-18	WILDER, JADE		52.46			Negotiable
386544		28-MAR-18	WILLIAMS, JUSTIN		31.58			Negotiable
386545		28-MAR-18	WILLIAMS, RICHARD A		19.03			Negotiable
386546		28-MAR-18	WILLIAMS, TROY		39.67			Negotiable
386547		28-MAR-18	WILLIAMS, VICKEY		53.28			Negotiable
386548		28-MAR-18	WILSON, KEVIN		65.67			Negotiable
386549		28-MAR-18	WISNIEWSKI, MICHAEL		46.38			Negotiable
386550		28-MAR-18	WORKFORCE SAFETY LLC		2,984.00			Negotiable
386551		28-MAR-18	WU, CINDY		102.98			Negotiable
386552		28-MAR-18	WU, ELIZABETH		103.29			Negotiable
386553		28-MAR-18	WU, GRACE		174.97			Negotiable
386554		28-MAR-18	WU, MARK		36.33			Negotiable
386555		28-MAR-18	WYMAN, NIKKOLE		46.61			Negotiable
386556		28-MAR-18	YAMANI, SHEHILA		40.70			Negotiable
386557		28-MAR-18	YAO, HOWARD		38.82			Negotiable
386558		28-MAR-18	YEUNG, FAN		44.11			Negotiable
386559		28-MAR-18	YOON, MICHAEL		48.54			Negotiable
386560		28-MAR-18	YORK, WILLIAM		23.87			Negotiable
386561		28-MAR-18	YOUNG, DOROTHYAN		40.08			Negotiable
386562		28-MAR-18	YOUNG, JENNIFER		372.22			Negotiable
386563		28-MAR-18	YOUNG, KHEM		74.47			Negotiable
386564		28-MAR-18	YOUNG, WALTER		29.71			Negotiable
386565		28-MAR-18	YU, ANGELA		25.05			Negotiable
386566		28-MAR-18	ZAIDI, ZAHIDA		50.13			Negotiable
386567		28-MAR-18	ZAPATA, JAIME		45.04			Negotiable
386568		28-MAR-18	ZARCHIAN, NASTARAN		31.96			Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 53
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

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

386569	28-MAR-18	ZEBRON CONTRACTING INC	40,520.00	Negotiable
386570	28-MAR-18	ZEE MEDICAL SERVICE CO	1,276.47	Negotiable
386571	28-MAR-18	ZEHNER, MICHELLE C	70.11	Negotiable
386572	28-MAR-18	ZELAZO, MATT	38.43	Negotiable
386573	28-MAR-18	ZHANG, FUTAO	86.04	Negotiable
386574	28-MAR-18	ZHANG, HAIYING	66.58	Negotiable
386575	28-MAR-18	ZHANG, HONG	25.90	Negotiable
386576	28-MAR-18	ZHAO, NATHAN	48.03	Negotiable
386577	28-MAR-18	ZHU, YONGDONG	13.63	Negotiable
386578	28-MAR-18	ZIAIE, NIMA	55.47	Negotiable
386579	28-MAR-18	ZIFF, MARCI	46.24	Negotiable
386580	28-MAR-18	ZILL, MICHAEL	69.15	Negotiable
386581	28-MAR-18	ZURN, CHRIS	35.56	Negotiable
386582	29-MAR-18	KING, COURTNEY ANDFULLERTON B&H PHOTO - VIDEO, INC.	2,059.00	Negotiable

Payment Document Subtotal: 13,713,684.23 9,157,325.91

Payment Document : IRWD Wire

12493	01-MAR-18	EMPLOYEE BENEFIT SPECIALISTS, INC. 11657	PO BOX	1,270.00	Negotiable
12494	02-MAR-18	EMPLOYEE BENEFIT SPECIALISTS, INC. 11657	PO BOX	150.00	Negotiable
12495	06-MAR-18	CALPERS	SACRAMENTO	183,491.71	Negotiable
12496	07-MAR-18	KLADDE, JOHN	LIMERICK IRELAN	10,000.00	Negotiable
12497	13-MAR-18	CALPERS	SACRAMENTO 1	486,949.78	Negotiable
12498	13-MAR-18	CALPERS	SACRAMENTO 1	2,805.07	Negotiable
12499	13-MAR-18	EMPLOYEE BENEFIT SPECIALISTS, INC. 11657	PO BOX	30,835.72	Negotiable
12500	13-MAR-18	EMPLOYEE BENEFIT SPECIALISTS, INC. 11657	PO BOX	1,175.00	Negotiable
12501	15-MAR-18	U.S. BANK NATIONALST. LOUIS ASSOCIATION		7,509.60	Negotiable
12502	15-MAR-18	INTERNAL REVENUE SERVICE	FRESNO	191,970.61	Negotiable
12503	15-MAR-18	FRANCHISE TAX BOARD	SACRAMENTO	59,586.80	Negotiable

IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 54
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
12504		16-MAR-18	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	14,139.33			Negotiable
12505		16-MAR-18	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	230.77			Negotiable
12506		16-MAR-18	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	1,993.83			Negotiable
12507		16-MAR-18	EMPLOYEE BENEFIT SPECIALISTS, INC. 11657	PO BOX	13,387.45			Negotiable
12508		16-MAR-18	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	126,744.84			Negotiable
12509		16-MAR-18	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	635,307.61			Negotiable
12510		19-MAR-18	FILANC-BALFOUR BEATTY JV	ACT 4427724347	401,771.05			Negotiable
12511		19-MAR-18	FILANC-BALFOUR BEATTY JV	ESR 211084000	3,794.03			Negotiable
12512		19-MAR-18	MERRILL LYNCH CAPITAL SERVICES, INC	CHARLOTTE	645,106.64			Negotiable
12513		19-MAR-18	CITIGROUP GLOBAL MARKETS INC.	NEW YORK	645,106.64			Negotiable
12514		27-MAR-18	INTERNAL REVENUE SERVICE	FRESNO	174,386.90			Negotiable
12515		27-MAR-18	FRANCHISE TAX BOARD	SACRAMENTO	54,472.41			Negotiable
12516		27-MAR-18	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	13,838.87			Negotiable
12517		27-MAR-18	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	230.77			Negotiable
12518		27-MAR-18	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	1,993.83			Negotiable

12519	27-MAR-18	EMPLOYEE BENEFIT SPECIALISTS, INC. 11657	PO BOX	14,090.70		Negotiable
12520	27-MAR-18	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	127,228.26		Negotiable
12521	27-MAR-18	CALPERS	SACRAMENTO	181,163.80		Negotiable

IRWD Ledger Upgrade
 BANK: Bank of America N.A. Branch : Los Angeles Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 Bank Account Currency: USD (US Dollar) Account: Checking AP and PR Page: 55
 Payment Type: All Payment Currency: USD (US Dollar) Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
12522		27-MAR-18	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	48,506.74			Negotiable
12523		27-MAR-18	U.S. BANK NATIONAL ASSOCIATION	ST. LOUIS	32,761.63			Negotiable
12524		27-MAR-18	BANK OF AMERICA	SAN FRANCISCO	31,857.51			Negotiable
12525		27-MAR-18	U.S. BANK NATIONAL ASSOCIATION	ST. LOUIS	16,216.03			Negotiable
12526		27-MAR-18	SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	34,839.86			Negotiable
12527		27-MAR-18	YORK INSURANCE SERVICES GROUP INC - CA	PAY	9,654.06			Negotiable
12528		27-MAR-18	YORK INSURANCE SERVICES GROUP INC - CA	PAY	23,837.79			Negotiable
12529		27-MAR-18	YORK INSURANCE SERVICES GROUP INC - CA	PAY	14,075.05			Negotiable
12530		29-MAR-18	EMPLOYEE BENEFIT SPECIALISTS, INC. 11657	PO BOX	13,316.96			Negotiable
12531		30-MAR-18	ORANGE COUNTY SANITATION DISTRICT	FOUNTAIN VALLEY	22,004,844.40			Negotiable
12532		29-MAR-18	INTERNAL REVENUE SERVICE	FRESNO	175,893.83			Negotiable
12533		29-MAR-18	FRANCHISE TAX BOARD	SACRAMENTO	54,700.85			Negotiable
12534		29-MAR-18	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	13,838.95			Negotiable
12535		29-MAR-18	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	1,993.83			Negotiable
12536		29-MAR-18	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	125,541.66			Negotiable

Payment Document Subtotal: 26,632,611.17
 IRWD Ledger Upgrade Payment Register For 01-MAR-18 To 30-MAR-18 Report Date: 29-MAR-2018 15:17
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 56
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Bank Account Subtotal :					40,346,295.40		9,157,325.91	
Report Count : 1565			Report Total:	40,346,295.40	9,157,325.91			

Disbursements

*** End of Report ***

\$ 40,346,295.40 Disbursements
<8,783.79> Voids
 \$ 40,337,511.61 Total Voids and Disbursements

Exhibit "E"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

**March
2018**

	AMOUNT	VENDOR	PURPOSE
3/2/2018	937,332.68	BANK OF AMERICA	ACH Payments for Payroll
3/16/2018	923,632.36	BANK OF AMERICA	ACH Payments for Payroll
3/30/2018	918,235.55	BANK OF AMERICA	ACH Payments for Payroll
	<u>\$2,779,200.59</u>		

Exhibit "F"

IRWD Gov Code 53065.5 Disclosure Report

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

01-MAR-18 to 31-MAR-18

NAME	CHECK NO.	CHECK	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Amezcuca, Joshua E	385280	8-Mar-18	110.00	Certification Renewal	Wastewater Treatment Plant Operator Grade III
Carlos, Alex	385292	8-Mar-18	100.00	Certification Renewal	CA Division of Labor Standards - Electrician Certificate
Chaney, David	385281	8-Mar-18	154.00	Certification Renewal	Water Treatment Operator Grade II
Chaney, David	385281	8-Mar-18	168.00	Certification Renewal	Water Distribution Operator Grade II
Corral, Edward Jr	385282	8-Mar-18	125.00	Other(Misc)	Safety shoe allowance
Davis, Jennifer	385940	28-Mar-18	195.00	Membership Renewal	Certified Fixed Income Practitioner renewal
Garcia, Alejandro	385522	15-Mar-18	180.00	Membership Renewal	CWEA membership fee
Guzman, Juan	385064	1-Mar-18	145.46	Other(Misc)	Safety shoe allowance
Hoffman, Michael	385941	28-Mar-18	180.00	Membership Renewal	CWEA membership fee
Justice, Jack	385737	22-Mar-18	180.00	Membership Renewal	CWEA membership fee
LaMar, Steven	385283	8-Mar-18	229.45	Lodging	Calif. Environmental Dialogue, Sacramento, CA - Dec. 15, 2017
Lynch, Toni Marie	385740	22-Mar-18	116.00	Membership Renewal	Professional Engineers license renewal
Martin, Didene	385524	15-Mar-18	208.95	Other(Misc)	Safety shoe allowance
Matheis, Mary Aileen	385284	8-Mar-18	174.61	Lodging	2017 Colorado River Water Users Assoc. Conf., Las Vegas, NV - Dec. 12, 2017
Matheis, Mary Aileen	385284	8-Mar-18	174.61	Lodging	2017 Colorado River Water Users Assoc. Conf., Las Vegas, NV - Dec. 13, 2017
Moore, Jonathon	385285	8-Mar-18	105.00	Certification Renewal	Water Distribution Operator Grade IV
Norman, Tammy	385068	1-Mar-18	1,200.00	Other(Misc)	Meeting supplies
Robinson, Mitchell	385741	22-Mar-18	116.00	Membership Renewal	Professional Engineers license renewal
Ruiz, Ricky	385069	1-Mar-18	110.00	Certification Renewal	Water Distribution Operator Grade II
Saldana Rodriguez,	385288	8-Mar-18	113.09	Other(Misc)	Safety shoe allowance
Severin, Victoria	385526	15-Mar-18	167.02	Other(Misc)	Safety shoe allowance
Steinbeck, Brandon	385742	22-Mar-18	107.38	Other(Misc)	Safety shoe allowance
Swan, Peer	385290	8-Mar-18	587.96	Airfare	2017 Colorado River Water Users Assoc. Conf., Las Vegas, NV - Dec. 13-15,
Swan, Peer	385290	8-Mar-18	174.61	Lodging	2017 Colorado River Water Users Assoc. Conf., Las Vegas, NV - Dec. 13, 2017
Tran, Jason	385073	1-Mar-18	180.00	Membership Renewal	CWEA membership fee
Vazquez, Rafael	385075	1-Mar-18	190.00	Certification Renewal	Water Distribution Operator Grade III
Vazquez, Rafael	385076	1-Mar-18	170.00	Certification Renewal	Wastewater Treatment Plant Operator Grade III
Vazquez, Rafael	385076	1-Mar-18	350.00	Certification Renewal	Wastewater Treatment Plant Operator Grade III exam fee
Total Amount:			\$ 6,012.14		

April 23, 2018

Prepared by: F. Sanchez

Submitted by: P. Weghorst

Approved by: Paul A. Cook

CONSENT CALENDAR

REVIEW OF SAN DIEGO CREEK WATER RIGHTS

SUMMARY:

Irvine Ranch Water District has the right to divert surface water from San Diego Creek to the San Joaquin Marsh for the support of wetland habitat and wildlife enhancements. A permit for an appropriative right was issued in 1998 by the State Water Resources Control Board that provides IRWD the ability to divert and put water to beneficial use in accordance with certain terms and a time schedule. The perfection of this appropriate right is subject to IRWD applying for and receiving a license from the State Board. When applying for the permit, IRWD also claimed a riparian right to San Diego Creek water. A recent review conducted by IRWD's legal counsel has concluded that it is advantageous for IRWD to divert water to the Marsh by exercising its riparian right rather than seeking to license its appropriative right. Following is an overview of information supporting this conclusion.

BACKGROUND:

There are three steps to securing an appropriative water right from the State Board's Division of Water Rights: 1) submitting a water right application, 2) obtaining a permit, and 3) obtaining a license. In April 1997, IRWD filed an application to appropriate water by permit with the State Board. IRWD's permit application also included a riparian claim to water from San Diego Creek stating that IRWD had previously exercised a riparian right by diverting water from the creek in quantified amounts. In November 1998, the State Board provided IRWD Permit 20979 (Permit), which is provided as Exhibit "A". This permit allows IRWD to divert and use water from San Diego Creek to support habitat and wildlife enhancements within the constructed wetlands of the San Joaquin Marsh.

Overview of Permit 20979:

The Permit that was issued to IRWD by the State Board includes conditions that the appropriated water be limited to the quantity that can be beneficially used within a 140-acre designated area. The Permit also authorizes a maximum diversion rate of five cubic feet per second, and an annual maximum diversion of 3,600 acre-feet (AF). The Permit specifies a development schedule for IRWD to complete construction of the San Joaquin Marsh and to establish beneficial use of the water by December 31, 2007. The construction of the Marsh was completed in 1998 and the Permit has since then been maximized by putting 3,600 AF per year to beneficial use. To prepare for licensing of the appropriative right, IRWD consultant Stetson Engineering, Inc. conducted an assessment of IRWD's permitted diversions.

Permit Assessment:

Stetson's assessment concluded that, in compliance with the Permit requirements, IRWD submitted Annual Water Use Reports to the State Board that provided information on monthly

diversions and water use, maximum rates of diversion and the status of the project with regard to the full beneficial use of the San Diego Creek. Stetson also determined that the rate of diversion for the current operations of the Marsh does not conform to the operational related terms of the Permit, and that the completion date to license the right was not met.

Discussion with State Board:

IRWD and Stetson participated in several conference calls with the State Board to discuss modifying IRWD's permit to increase the diversion rate and to request a time extension for licensing the right. State Board staff stated that the diversion rate could not be amended in the permit and that IRWD would need to apply for a new permit and provide supporting stream flow analysis. Alternatively, State Board staff suggested that IRWD consider relying upon its existing riparian right to divert water from San Diego Creek, which would not limit the rate of diversion. To determine the best approach to ensure IRWD's right to water, staff engaged legal counsel at Alston & Bird to evaluate both IRWD's San Diego Creek appropriative and riparian rights for purposes of operating the San Joaquin Marsh.

Legal Counsel Review:

In March 2018, IRWD's legal counsel at Alston & Bird completed a review of IRWD's water rights in San Diego Creek. Alston & Bird concluded that since IRWD's Marsh parcels are contiguous to San Diego Creek, that IRWD possesses a riparian right to divert water from San Diego Creek for use on its property. No permit is needed before a riparian right can be exercised and a riparian right is typically not quantified. Alston & Bird concludes that the State Board could not limit IRWD's riparian right absent an adjudication.

Review of Appropriative Right:

IRWD's appropriative right to draw on water from San Diego Creek through Permit 20979 is subject to conditions concerning the diversion and use of the water. The State Board may limit IRWD's appropriative right based on the conditions in the Permit and it is likely that the combined diversions from the riparian and appropriative right would be limited to the face value of the Permit. In other words, the riparian right is not additive to the appropriative right. IRWD could try to request that the State Board consider an interpretation that it is additive, but this would likely entail significant effort. Alternatively, Alston & Bird recommends that IRWD rely upon its existing riparian right to divert at the current quantity and rate of diversion.

Making use of Riparian Right:

IRWD's historic and existing diversions from San Diego Creek are consistent with IRWD's riparian right to water. Such diversions are already considered a baseline condition, therefore IRWD would not need to conduct any environmental review pursuant to the California Environmental Quality Act (CEQA) in making future use of its riparian right. While IRWD's riparian right could be limited in the future by new riparian claims from upstream landowners, an assessment of upstream permit holders and landowners does not seem to indicate that any new claims would be established.

Based on the findings of Alston & Bird's legal review, staff intends to utilize IRWD's riparian right in order to continue to divert water from San Diego Creek for the optimal operation of the San Joaquin Marsh. Staff will notify the State Board of the change to the use of the riparian right in IRWD's Annual Water Use Report. Staff will also advise the State Board that IRWD does not intend to move forward in licensing its permitted appropriative right.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

IRWD's historic and existing diversions from San Diego Creek are consistent with IRWD's riparian right to water. Such diversions are already considered a baseline condition and cannot have a significant effect on the environment, and therefore environmental review pursuant to the CEQA is not necessary.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on April 5, 2018.

RECOMMENDATION:

RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit "A" – Permit 20979 and Permit Application



Peter M. Rooney
Secretary for
Environmental
Protection

EXHIBIT A
State Water Resources Control Board

John P. Caffrey, Chairman



Pete Wilson
Governor

Division of Water Rights

901 P Street • Sacramento, California 95814 • (916) 657-0765 FAX (916) 657-1485
Mailing Address: P.O. Box 2000 • Sacramento, California • 95812-2000
Internet Address: <http://www.swrcb.ca.gov>

NOVEMBER 6 1998

In Reply Refer
to: 331:CM:30618

Irvine Ranch Water District
15600 Sand Canyon Ave.
P.O. Box 57000
Irvine, CA 92619

Ladies and Gentlemen:

APPLICATION 30618 PERMIT **20979**

Your water right permit is enclosed. The State Water Resources Control Board requires that you submit annual reports showing the progress you have made in the construction of your project or, if constructed, the use made under your permit which would qualify for licensing purposes. We will mail the forms to you when the reports are due.

Please note that, with respect to other rights attaching to this source, the priority of this right commences with the date of the application. Therefore, in time of water shortage, those with rights senior to yours can take their water first. Additional limitations on the diversion of water are specified by the terms of this permit. You should read the terms and conditions carefully so that you are familiar with your responsibilities as an appropriator of water under this entitlement.

After the project has been completed, an inspection will be made to determine the amount of water which has been placed to beneficial use within the terms of the permit. A license will then be issued confirming a right to that amount of water.

Please inform us of any changes in address or ownership.

Sincerely,

Ed Dito
Program Manager
Application and Petition Section

WR 14a (11/94)

SURNAME
LLW 540 REV 2/98

(Signature)
7-22-98

AMLS 7/23/98

FINALED BY:

STATE OF CALIFORNIA
 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
 STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20979

Application 30618 of Irvine Ranch Water District

15600 Sand Canyon Avenue, P.O. Box 57000, Irvine, CA 92619

filed on May 16, 1997, has been approved by the State Water Resources Control Board
 SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source:

Tributary to:

San Diego Creek

Upper Newport Bay

2. Location of point of diversion By California Coordinate in Zone 6	40-acre subdivision of public land survey or projection thereof	Section Projected	Township	Range	Base and Meridian
Point of Diversion #1 North 546,900 feet and East 1,515,800 feet	SW $\frac{1}{4}$	8	6S	9W	SB
Point of Diversion #2 North 547,552 feet and East 1,512,995 feet	SW $\frac{1}{4}$	8	6S	9W	SB

County of Orange

3. Purpose of use:	4. Place of use:	Section	Township	Range	Base and Meridian	Acres
Wildlife Enhancement	140 Acres	8 17	6S 6S	9W 9W	SB SB	

The place of use is shown on map dated 6-17-97 on file with the State Water Resources Control Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 5 cubic feet per second to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 3600 acre-feet per year (0000005)
6. The amount authorized for appropriation may be reduced in the license if investigation warrants (0000006)
7. Construction work shall begin within two years of the date of this permit and thereafter shall be prosecuted with reasonable diligence. (0000007)
8. Construction work shall be completed by December 31, 2003. (0000008)
9. Complete application of the water to the authorized use shall be made by December 31, 2007. (0000009)
10. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)
11. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)
12. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust. (0000012)

13. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1)adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2)the water quality objectives cannot be achieved solely through the control of waste discharges (0000013)

14. During the season specified in this permit, the total quantity and rate of water diverted and used under this permit and under permittee's claimed existing right for the place of use specified in the permit shall not exceed the quantity and rate of diversion and use, respectively, specified in this permit. If the permittee's claimed existing right is quantified at some later date as a result of an adjudication or other legally binding proceeding, the quantity and rate of diversion and use allowed under this permit shall be the net of the face value of the permit less the amounts of water available under the existing right.

Permittee shall forfeit all rights under this permit if permittee transfers all or any part of the claimed existing right for the place of use covered by this permit to another place of use without the prior approval of the State Water Resources Control Board.

Permittee shall take and use water under the existing right claimed by permittee only in accordance with law (0000021)

15. To the extent that water available for use under this permit is return flow, imported water, or wastewater, this permit shall not be construed as giving any assurance that such supply will continue. (0000025)

16. This permit does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "taking" will result from any act authorized under this water right, the permittee shall obtain an incidental take permit prior to construction or operation. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this permit. (0000014)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated **NOVEMBER 6 1998**

STATE WATER RESOURCES CONTROL BOARD


Chief, Division of Water Rights

Working Copy

MINIMUM FILING FEE: \$100.00
FILE ORIGINAL & ONE COPY
TYPE OR PRINT IN BLACK INK
(For explanation of areas required, see
booklet "How to File an Application to
Appropriate Water in California")

STATE OF CALIFORNIA
State Water Resources Control Board
DIVISION OF WATER RIGHTS
901 P Street, Sacramento
P. O. Box 2000, Sacramento, CA 95812-2000

97 MAY 16 AM 10 35

APPLICATION TO APPROPRIATE WATER BY PERMIT

(Check one box only)

OR
 REGISTRATION OF SMALL DOMESTIC USE APPROPRIATION*

(If this form is used to register a small domestic use appropriation, the terms "application" and "applicant" herein, and in related forms, shall mean "registration" and "registrant".)

Application No. 30618
(Leave blank)

1. APPLICANT

Irvine Ranch Water District (Name of applicant) (714) 453-5300
(Telephone number where you may be reached between 8 a. m. and 5 p. m. - include area code)
15600 Sand Canyon Avenue
P.O. Box 57000 (Mailing address) Irvine (City or town) CA (State) 92619 (Zip code)

2. SOURCE

a. The name of the source at the point of diversion is San Diego Creek
(If unnamed, state that it is an unnamed stream, spring, etc.)
tributary to Upper Newport Bay
b. In a normal year does the stream dry up at any point downstream from your project? YES NO If yes, during what months is it usually dry? From N/A to
What alternate sources are available to your project should a portion of your requested direct diversion season be excluded because of a dry stream or nonavailability of water? Reclaimed Water

3. POINTS OF DIVERSION and REDIVERSION

a. The point(s) of diversion will be in the County of Orange (Irvine Subdivision)

POD
POD

b.	List all points giving coordinate distances from section corner or other as allowed by Board regulations in California Coordinate System - <u>ZONE 6</u>	Point is within (40-acre subdivision)	PROTECTED			Base and Meridian
			Section	Township	Range	
	Inlet - N 546,700 E 1,515,800 2,188,319; 6,078,367	1/4 of	14	8	6S 9W	SB
	Inlet - N 547,552 E 1,512,995 2,188,971; 6,075,562	1/4 of	14	8	6S 9W	SB
		1/4 of	14			

c. Does applicant own the land at the point of diversion? YES NO
d. If applicant does not own the land at point of diversion, state name and address of owner and what steps have been taken to obtain right of access: _____

4. PURPOSE OF USE, AMOUNT and SEASON

a. In the table below, state the purpose(s) for which water is to be appropriated, the quantities of water for each purpose, and the dates between which diversions will be made. Use gallons per day if rate is less than 0.025 cubic foot per second (approximately 16,000 gallons per day). Purpose must only be "Domestic" for registration of small domestic use.*

PER SUPPLEMENT
12-3-97

PURPOSE OF USE (Irrigation, Domestic, etc.)	DIRECT DIVERSION				STORAGE		
	QUANTITY		SEASON OF DIVERSION		AMOUNT	COLLECTION SEASON	
	RATE (Cubic feet per second or gallons per day)	AMOUNT (Acre-feet per year)	Beginning Date (Mo. & Day)	Ending Date (Mo. & Day)	Acre-feet per annum	Beginning Date (Mo. & Day)	Ending Date (Mo. & Day)
<u>WILDLIFE ENHANCEMENT</u> <u>*see supplement</u>	<u>5 CFS</u>		<u>JAN 1</u>	<u>DEC 31</u>			
		<u>3,600</u>	TOTAL AMOUNT			TOTAL AMOUNT	

b. Total combined amount taken by direct diversion and storage during any one year will be 3,600 acre-feet.
* Not to exceed 4,500 gallons per day by direct diversion or 10 acre-feet per annum by storage.
WR 1 (6-91) FOR0053-R1

5. JUSTIFICATION OF AMOUNT (For small domestic use registration, complete item b. only) *see supplement

a. IRRIGATION: Maximum area to be irrigated in any one year is 140 acres.

CROP	ACRES	METHOD OF IRRIGATION (Sprinklers, flooding, etc.)	ACRE-FEET PER YEAR	NORMAL SEASON	
				Beginning Date	Ending Date

b. DOMESTIC: Number of residences to be served is . Separately owned? YES NO
 Total number of people to be served is . Estimated daily use per person is
 Total area of domestic lawns and gardens is square feet. (Gallons per day)
 Incidental domestic uses are
 (Dust control area, number and kind of domestic animals, etc.)

c. STOCKWATERING: Kind of stock Maximum number
 Describe type of operation:
 (Feed lot, dairy, range, etc.)

d. RECREATIONAL: Type of recreation: Fishing Swimming Boating Other

e. MUNICIPAL: (Estimated projected use)

POPULATION		MAXIMUM MONTH		ANNUAL USE		
5-Year periods until use is completed		Average daily use	Rate of diversion	Average daily use	Acre-foot	Total acre-foot
PERIOD	POP.	(gal. per capita)	(cfs)	(gal. per capita)	(per capita)	
Present						

Month of maximum use during year is . Month of minimum use during year is

f. HEAT CONTROL: The total area to be heat protected is net acres.
 Type of crop protected is
 Rate at which water is applied to use is gpm per acre.
 The heat protection season will begin about and end about
 (Date) (Date)

g. FROST PROTECTION: The total area to be frost protected is net acres.
 Type of crop protected is
 Rate at which water is applied to use is gpm per acre.
 The frost protection season will begin about and end about
 (Date) (Date)

h. INDUSTRIAL: Type of industry is
 Basis for determination of amount of water needed is

i. MINING: The name of the claim is . Patented Unpatented
 The nature of the mine is . Mineral to be mined is
 Type of milling or processing is
 After use, the water will be discharged into
 (Name of stream)
 in 1/4 of 1/4 of Section , T , R , B. & M.
 (40-acre subdivision)

j. POWER: The total fall to be utilized is feet. The maximum amount of water to be used through the penstock is cubic feet per second. The maximum theoretical horsepower capable of being generated by the works is . Electrical capacity is kilowatts at % efficiency.
 (Cubic feet per second x fall = 6.8) (Hp x 0.746 x efficiency)
 After use, the water will be discharged into
 (Name of stream)
 in 1/4 of 1/4 of Section , T , R , B. & M. FERC No.
 (40-acre subdivision)

k. FISH AND WILDLIFE PRESERVATION AND/OR ENHANCEMENT: YES NO If yes, list specific species and habitat type that will be preserved or enhanced in item 17 of Environmental Information form WR 1-2. *see supplement

l. OTHER: Describe use: . Basis for determination of amount of water needed is

6. PLACE OF USE

- a. Does applicant own the land where the water will be used? YES NO Is land in joint ownership? YES NO
 (All joint owners should include their names as applicants and sign the application.)
 If applicant does not own land where the water will be used, give name and address of owner and state what arrangements have been made with the owner.

N/A

b.

USE IS WITHIN (40-acre subdivision)	SECTION	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Number of acres	Presently cultivated (Y/N)
1/4 of 1/4	see attached parcel map					
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						

(If area is unsurveyed, state the location as if lines of the public land survey were projected, or contact the Division of Water Rights. If space does not permit listing all 40-acre tracts, include on another sheet or state sections, townships and ranges, and show detail on map.)

7. DIVERSION WORKS

- a. Diversion will be by gravity by means of N/A
(Dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)
- b. Diversion will be by pumping from instream wetwell Pump discharge rate 5 cfs Horsepower 50
(Sump, offset well, channel, reservoir, etc.) (cfs or gpc)
- c. Conduit from diversion point to first lateral or to offstream storage reservoir:

CONDUIT (Pipe or channel)	MATERIAL (Type of pipe or channel lining; indicate if pipe is buried or not)	CROSS SECTIONAL DIMENSION (Pipe diameter or ditch depth and top and bottom width)	LENGTH (Feet)	TOTAL LIFT OR FALL		CAPACITY (Estimate)
				Feet	+ or -	
Pipe	CML Steel	12 inch	100	12	+	5 cfs
Pipe	DIP	24 inch	1220	12	+	5 cfs
Pipe	AIP	18 inch	2000	4	-	5 cfs

- d. Storage reservoirs: (For underground storage, complete Supplement 1 to WR1, available upon request.)

Name or number of reservoir, if any	DAM			RESERVOIR			
	Vertical height from downstream toe of slope to spillway level (ft.)	Construction material	Dam length (ft.)	Freeboard Dam height above spillway crest (ft.)	Approximate surface area when full (acres)	Approximate capacity (acre-feet)	Maximum water depth (ft.)
N/A							

- e. Outlet pipe: (For storage reservoirs having a capacity of 10 acre-feet or more.)

Diameter of outlet pipe (inches)	Length of outlet pipe (feet)	FALL (Vertical distance between entrance and exit of outlet pipe in feet)	HEAD (Vertical distance from spillway to outlet pipe in reservoir in feet)	Estimated storage below outlet pipe entrance (dead storage)
N/A				

- f. If water will be stored and the reservoir is not at the point of diversion, the maximum rate of diversion to offstream storage will be _____ cfs. Diversion to offstream storage will be made by: Pumping Gravity N/A

8. COMPLETION SCHEDULE

- a. Year work will start 1996 b. Year work will be completed 1997
 c. Year water will be used to the full extent intended 1997 d. If completed, year of first use N/A

9. GENERAL

- a. Name of the post office most used by those living near the proposed point of diversion is 17192 Murphy Avenue, Irvine,
 b. Does any part of the place of use comprise a subdivision on file with the State Department of Real Estate? YES NO CA 92623
 If yes, state name of the subdivision _____
 If no, is subdivision of these lands contemplated? YES NO
 Is it planned to individually meter each service connection? YES NO If yes, When? N/A
 c. List the names and addresses of diverters of water from the source of supply downstream from the proposed point of diversion: No known downstream diversions occurring.

 d. Is the source used for navigation, including use by pleasure boats, for a significant part of each year at the point of diversion, or does the source substantially contribute to a waterway which is used for navigation, including use by pleasure boats? YES NO If yes, explain: N/A

10. EXISTING WATER RIGHT

Do you claim an existing right for the use of all or part of the water sought by this application? YES NO
 If yes, complete table below.

Nature of Right (riparian, appropriative, groundwater)	Year of First Use	Purpose of use made in recent years including amount, if known	Season of Use	Source	Location of Point of Diversion
Riparian	1996	Nitrogen Removal Testing 5 cfs	Nov-Dec	San Diego Creek	See #3 above

11. AUTHORIZED AGENT (Optional)

With respect to all matters concerning this water right application those matters designated as follows:

Irvine Ranch Water District

Kenneth A. Thompson

(Name of agent)

(714) 453-5850

(Telephone number of agent between 8 a. m. and 5 p. m.)

P.O. Box 57000

(Mailing address)

Irvine

(City or town)

CA 92619-7000

(State)

(Zip code)

is authorized to act on my behalf as my agent.

12. SIGNATURE OF APPLICANT

I (we) declare under penalty of perjury that the above is true and correct to the best of my (our) knowledge and belief.

Dated 4-18 1997, at Irvine, California

Ms. (MP)

Miss. Mrs. _____

(Signature of applicant)

(If there is more than one owner of the project, please indicate their relationship.)

Ms. Mr.

Miss. Mrs. _____

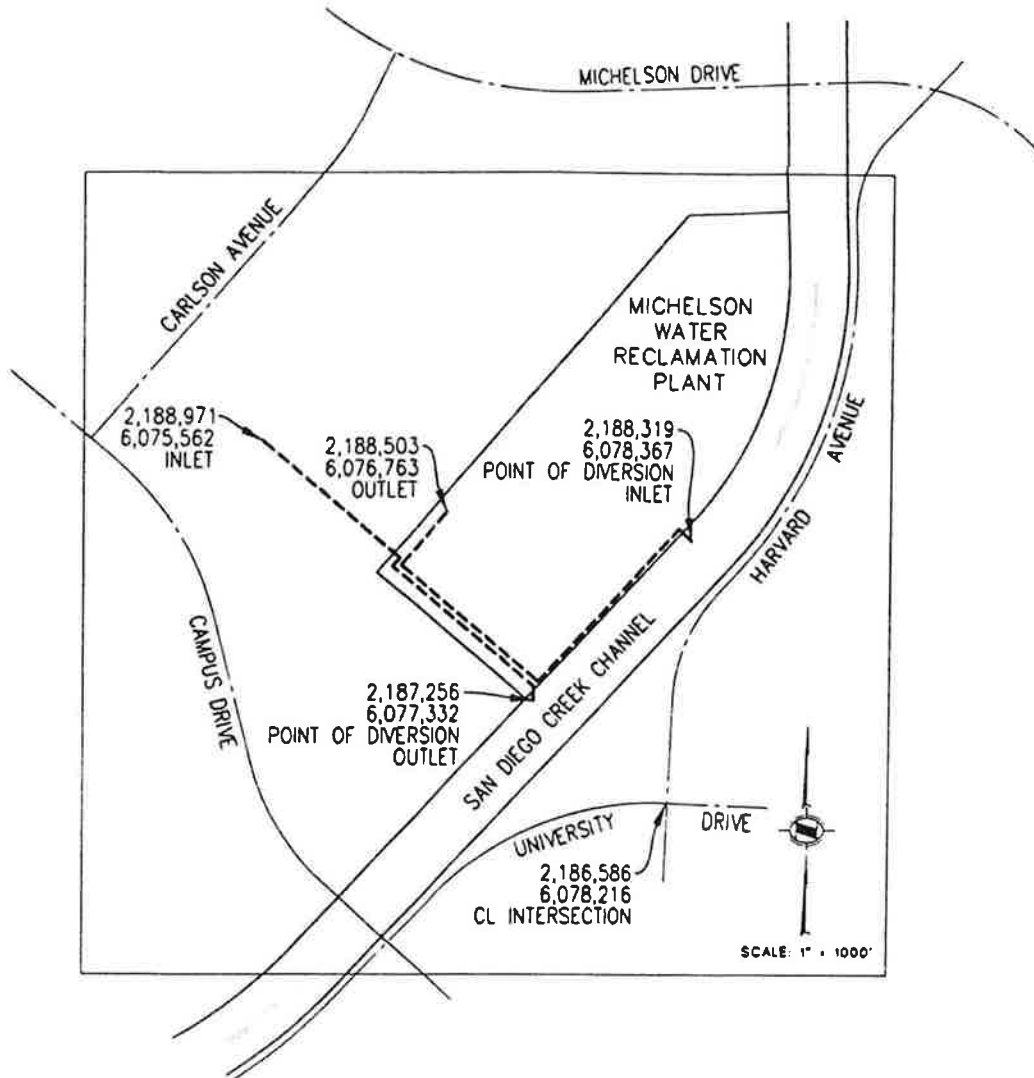
(Signature of applicant)

Additional information needed for preparation of this application may be found in the Instruction Booklet entitled "HOW TO FILE AN APPLICATION TO APPROPRIATE WATER IN CALIFORNIA". If there is insufficient space for answers in this form, attach extra sheets. Please cross-reference all remarks to the numbered item of the application to which they may refer. Send original application and one copy to the STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER RIGHTS, P. O. Box 2000, Sacramento, CA 95810, with \$100 minimum filing fee.

NOTE:

If this application is approved for a permit, a minimum permit fee of \$100 will be required before the permit is issued. There is no additional fee for registration of small domestic use.

13. MAP



- (1) Show location of the stream or spring, and give name.
- (2) Locate and describe the point of diversion (i. e. the point at which water is to be taken from the stream or spring) in the following way: Begin at the most convenient known corner of the public land survey, such as a section or quarter section corner (if on unsurveyed land more than two miles from a section corner, begin at a mark or some natural object or permanent monument that can be readily found and recognized) and measure directly north or south until opposite the point which it is desired to locate; then measure directly east or west to the desired point. Show these distances in figures on the map as shown in the instructions.
- (3) Show location of the main ditch or pipeline from the point of diversion.
- (4) Indicate clearly the proposed place of use of the water. *See attached exhibit

14. SUPPLEMENTAL INFORMATION

- a. If you are applying for a permit, Environmental Information form WR1-2 should be completed and attached to this form.
- b. If you are registering a small domestic use, Fish and Game Information form WR1-3 should be completed and attached to this form.
- c. If you are applying for underground storage, Supplement 1 to WR 1 (available upon request) should be completed and attached to this form.

SUPPLEMENT TO APPLICATION TO APPROPRIATE WATER BY PERMIT

4. PURPOSE of Use, AMOUNT and SEASON

The maximum diversion rate will be 5 cfs, occurring between April 1 and September 30, and if water quality and weather conditions permit, between October 1 and March 31. A maximum 3,600 acre feet of water per year will be diverted. All the water will be diverted into two deep ponds used to insure adequate water quality, then into a maximum 67 acres of shallow open water "duck ponds". Some of the water will be used to irrigate approximately 26.5 acres of riparian habitat associated with the duck ponds.

Up to 5 cfs will pass through the ponds and back into San Diego Creek. This flow-through operation will minimize algae growth, eliminate nuisance stagnant water and vector conditions, and remove approximately half of the nitrogen in the creek water.

Based on irrigation demand (which will be a function of weather, season, type of vegetation, and stage of growth), water in the duck ponds will be delivered into the adjacent portions of the San Joaquin Marsh to maintain riparian and wetland areas covering approximately 46.5 acres. The primary purpose of this water is to maintain vegetation associated with natural wetland and riparian habitats. Any irrigation tail water will be returned into the duck ponds, and subsequently discharged back into San Diego Creek. A maximum 5 cfs will be consumed in the San Joaquin Marsh. (See #5 below)

5. a & k JUSTIFICATION of AMOUNT

The uses of the diverted water are irrigation of habitat (a) and wildlife preservation/enhancement (k). The diversion will be used to supply water to a single system that is composed of 67 acres of duck ponds and a 73 acre riparian area mitigation site. All of the diverted water initially flows through the ponds to provide habitat for a multitude of migratory and non-migratory bird species. Up to 5 cfs is required to minimize algae growth and minimize stagnant and vector conditions in the duck ponds. The flow of up to 5 cfs exiting the duck ponds is either delivered into the irrigation system for the riparian area mitigation site or returned into San Diego Creek. The methods of irrigation are flood, spray, and drip. The amount of flow consumed in irrigation versus the amount returned into San Diego Creek is dependent on weather conditions, season, types of vegetation and stage of growth. The diversion season will be between April 1 and September 30, and if and to the extent weather and water quality conditions permit, October 1 through March 31. A maximum of 3,600 acre-feet per year will be diverted.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
901 P Street, Sacramento
P.O. Box 2000, Sacramento, CA 95812-2000

**APPLICATION TO APPROPRIATE WATER BY PERMIT
ENVIRONMENTAL INFORMATION**

(THIS IS NOT A CEQA DOCUMENT)

APPLICATION NO. 30618
(leave blank)

The following information will aid in the environmental review of your application as required by the California Environmental Quality Act (CEQA). IN ORDER FOR YOUR APPLICATION TO BE ACCEPTED AS COMPLETE, ANSWERS TO THE QUESTIONS LISTED BELOW MUST BE COMPLETED TO THE BEST OF YOUR ABILITY. Failure to answer all questions may result in your application being returned to you, causing delays in processing. If you need more space, attach additional sheets. Additional information may be required from you to amplify further or clarify the information requested in this form.

PROJECT DESCRIPTION

1. Provide a description of your project, including but not limited to type of construction activity, structures existing or to be built, area to be graded or excavated and project operation, including how the water will be used.

San Diego Creek water will be diverted into various portions of the San Joaquin Marsh. Approximately 5 cfs will be used to maintain waterfowl ponds and remove nitrogen from the creek water.

Diverted water will be used to irrigate wetland and riparian areas in the San Joaquin Marsh. The total demand for water should not exceed 5 cfs, and any water in excess of the irrigation needs will be returned into San Diego Creek. The excess water will be returned several hundred yards downstream of the diversion.

For a more detailed explanation of water use, refer to the San Joaquin Marsh Enhancement Plan EIR and Wetland Water Supply Project EIR.

If not, explain below whether you expect that a public agency other than the State Water Resources Control Board will be preparing an environmental document for your project or whether the applicant, if it is a California public agency, will be preparing the environmental document for your project:

N/A

Note: When completed, please submit a copy of the final environmental document (including notice of determination) or notice of exemption to the State Water Resources Control Board. Processing of your water right application cannot proceed until such documents are submitted.

5. Will your project, during construction or operation, generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or cause erosion, turbidity or sedimentation? No

If so, explain: N/A

If you answered yes or you are unsure of your answer, contact your local Regional Water Quality Control Board for the following information (See attachment for address and telephone number):

Will a waste discharge permit be required for your project? No

Person contacted N/A Date of contact N/A

What method of treatment and disposal will be used? N/A

6. Have any archeological reports been prepared on this project, or will you be preparing an archeological report to satisfy another public agency? Yes

Do you know of any archeological or historic sites located within the general project area? Yes

If so, explain: *Cultural resources within the study area primarily consist of midden loci and lithic scatters associated with villages and temporary camps. There is evidence of Native American burials in the project area. The San Joaquin Marsh Enhancement Plan Section 4.3 discusses cultural resources and provides a cultural resources mitigation plan.*

ENVIRONMENTAL SETTING

7. Attach **THREE COMPLETE SETS** of color photographs, clearly dated and labeled, showing the vegetation currently existing at the following locations:

(a) Along the stream channel immediately downstream from the proposed point(s) of diversion

- (b) Along the stream channel immediately upstream from the proposed point(s) of diversion
- (c) At the place(s) where the water is to be used.

Note: It is very important that you submit no less than three complete sets of photographs as required above. If less than three sets are submitted, processing of your application will be delayed until you furnish the remaining sets!

8. From the list given below, mark or circle the general plant community types which best describe those which occur within your project area. (Note: See footnote denoted by * under Question 11 below):

Tree Dominated Communities

Subalpine Conifer
 Red Fir
 Lodgepole Pine
 Mixed Conifer
 Sierran Mixed Conifer
 White Fir
 Klamath Mixed Conifer
 Douglas-Fir
 Jeffrey Pine
 Ponderosa Pine
 Eastside Pine
 Redwood
 Pinyon-Juniper
 Juniper
 Aspen
 Closed-Cone Pine-Cypress
 Montane Hardwood-Conifer
 Montane Hardwood
 Valley Foothill Hardwood
 Blue Oak Woodland
 Valley Oak Woodland
 Coastal Oak Woodland
 Valley Foothill Hardwood-Conifer
 Blue Oak Digger Pine
 Eucalyptus
 Montane Riparian
 Valley Foothill Riparian
 Desert Riparian
 Palm Oasis
 Joshua Tree

Shrub Dominated Communities

Alpine Dwarf-Shrub
 Low Sage
 Bitterbrush
 Sagebrush
 Montane Chaparral
 Mixed Chaparral
 Chamise-Redshank Chaparral
 Coastal Scrub
 Desert Succulent Shrub
 Desert Wash
 Desert Scrub
 Alkali Desert Scrub

Herbaceous Dominated Communities

* Annual Grassland
 Perennial Grassland
 * Wet Meadow
 * Fresh Emergent Wetland
 Saline Emergent Wetland
 Pasture

Aquatic Communities

Riverine
 * Lacustrine
 Estuarine
 Marine

Developed Communities

Cropland
 Orchard-Vineyard
 Urban

Literature source: Mayer, K.E., and W.F. Laudenslayer, Jr., (eds). 1988. A Guide to Wildlife Habitats of California. California Department of Forestry and Fire Protection, Sacramento. 166 pp. (Note: You may view a copy of this document at our public counter at the address given at the top of this form or you may purchase a copy by calling the California Department of Fish and Game, Wildlife Habitat Relationships (WHR) Program, at 916/653-7203)

9. Provide below an estimate of the type, number, and size (trunk/stem diameter at chest height) of trees and large shrubs that are planned to be removed or destroyed due to construction and operation of your project. Consider all aspects of your project, including diversion structures, water distribution and use facilities, and changes in the places of use due to additional water development.

Within San Diego Creek, no trees or large shrubs will be removed. Within the San Joaquin Marsh, some trees and large shrubs were removed and mitigated to accommodate the restoration. Since the San Joaquin Marsh is considered a wetland, all vegetation removal is under USACOE 404 Permit and was reviewed by other responsible agencies.

FISH AND WILDLIFE CONCERNS

10. Identify the typical species of fish which occur in the source(s) from which you propose to divert water and discuss whether or not any of these fish species or their habitat has been or would be affected by your project (Note: See footnote denoted by * under Question 11 below):

Fish common to Southern California fresh water streams including carp, chubs, and shiners were identified in San Diego Creek in the vicinity of the wetwell intake. The intake is located adjacent to the pilot channel and is connected by a temporary channel to the pilot channel minimizing to insignificance the impact on the fishery. Discussion of fish, infauna, and plant communities are contained in the Addendum to the Irvine Ranch Water District's Wetlands Water Supply Project EIR.

11. Identify the typical species of riparian and terrestrial wildlife in the project area and discuss whether or not any of these species and/or their habitat has been or would be affected by your project through construction of water diversion and distribution works and changes in the places of water use (Note: See footnote denoted by * below):

Primary plant communities are Tule Marsh, Willow-Woodland/Mulefat Scrub and Alkali Meadow/Seasonal Wetland, Seasonal Pond and Ruderal Lowland/Upland. Primary animal species other than birds include: five species of amphibian, sixteen species of reptile, and twenty-one species of mammals. Numerous bird species including migratory water fowl, raptors, passerines and swallows are present. Five listed or proposed bird species and one reptile have been observed in the marsh. Detailed lists are contained in the San Joaquin Marsh Enhancement Plan EIR Section 4.4. Impacts and mitigations are stipulated in the 404 Permit and 1601 Agreement.

***Note:** The purpose of Questions 10 and 11 are to provide a preliminary assessment of the presence of typical plant and animal species in the project area and whether these species might be affected by your project. Detailed site surveys to quantify populations of specific species or determine the presence of rare or endangered species may be required at a later date. It is very important that you answer these questions accurately. If you are unable to obtain appropriate answers from your local California Department of Fish and Game biologists (See attachment for address and telephone number) or you do not have adequate information for expertise to complete your answers, you should hire a fishery consultant and/or wildlife consultant to review your project and prepare suitable answers for you. For information on available qualified fishery or wildlife consultants near you, consult your local telephone directory yellow pages under **Environmental and Ecological Services**, or call the California Environmental Protection Agency, Registered Environmental Assessor (REA) Program, at 916/324-6881 or the University of California, Cooperative Extension Service (See your local telephone directory white pages).

12. Does your proposed project involve any construction or grading-related activity which has significantly altered or would significantly alter the bed or bank of any stream or lake? Yes

If so, explain: *Grading to construct the intake structure, surrounding stilling basin, and connection to the pilot channel required movement of several hundred yards of creek bed. An ACOE 404 Permit and CDFG 1601 Agreement have been secured for the work (attached).*

f:\sands\ceqa\hyde

MAP

NOTE: CCS INDICATES CALIFORNIA COORDINATE SYSTEM, NUMERICAL DIGITS INDICATE YEAR.

COORDINATES SHOWN HEREON ARE BASED ON CCS83, ZONE 6. EXCEPT WHERE CCS27 IS NOTED.

SEC. 8 T. 6 S. R. 9 W.

MIL LSON DRIVE

CARLSON AVENUE

SAN JOAQUIN CHANNEL

MICHELSON WATER RECLAMATION PLANT

PLACE OF USE 140 ACRES

2,188,971
6,075,562
INLET

(CCS83) 2,188,319
6,078,367
POINT OF DIVERSION
INLET

2,188,503
6,076,763
OUTLET

TO NE CORNER T. 5 S.
R. 8 W. S.B.M.
N54°18'E

69,100'
SEE SHEET 2

CAMPUS DRIVE

SAN DIEGO CREEK CHANNEL

HARVARD

CCS27 COORDINATES PER
U.S.G.S. TUSTIN QUAD
N 546,900
E 1,515,800

2,187,256
6,077,332
POINT OF DIVERSION
OUTLET

UNIVERSITY

DRIVE

2,186,586
6,078,216
CL INTERSECTION

SEC. 17 T. 6 S. R. 9 W.



SCALE: 1" = 600'

W.O. 971-16

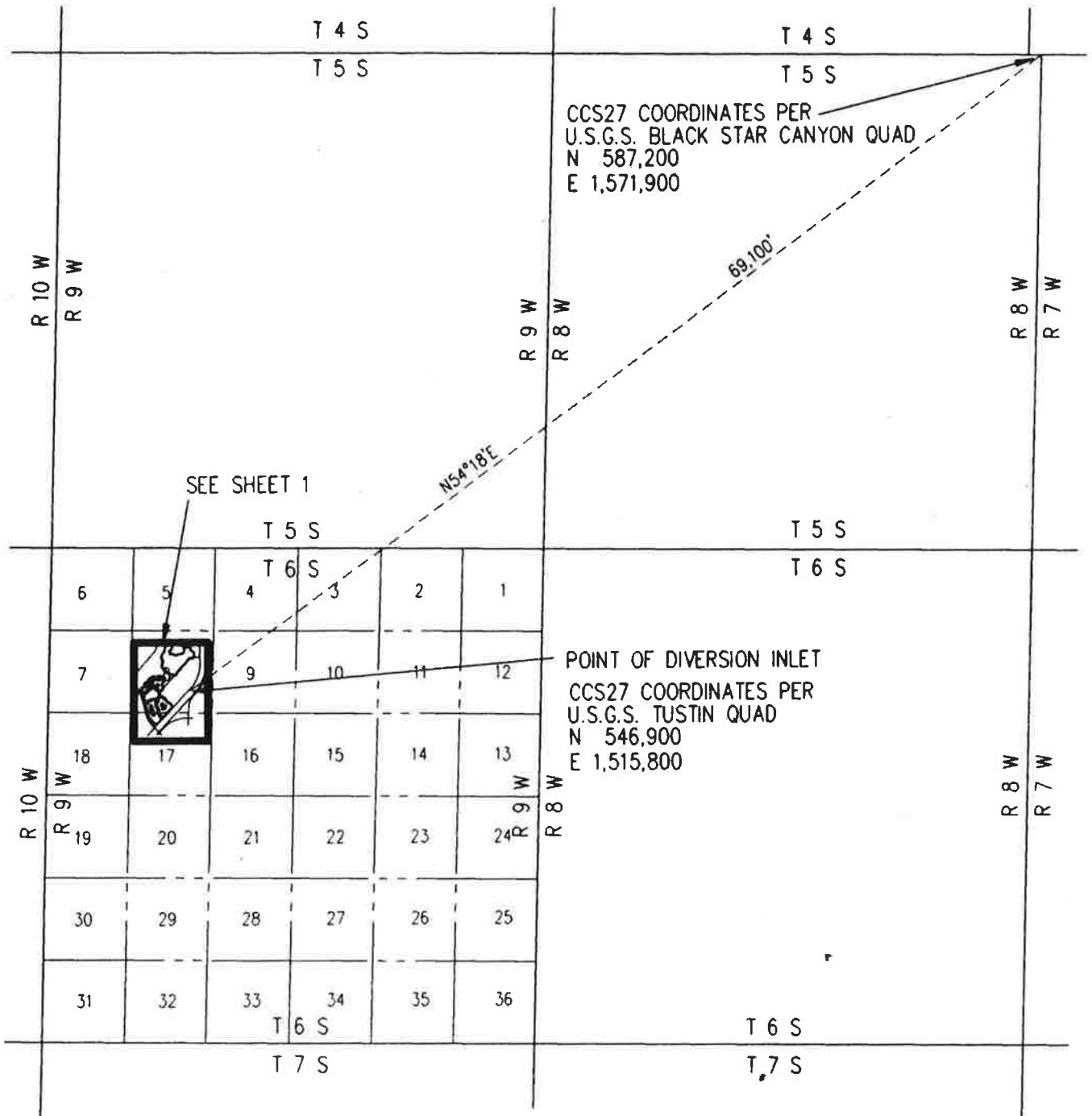
M:\DUCKCLUB\TOPO\APPLICAT

I, Rory S. Williams, do hereby certify that this map was prepared by me from notes taken during an actual survey made under my supervision on December 31, 1996, and that it correctly represents the project described in the accompanying application and shows the locations of streams and ditches in the immediate vicinity.

Rory S. Williams 6-17-97
Rory S. Williams, L.S. 6654 Date

SHEET 1 OF 2

VICINITY MAP



SCALE: 1" = 10000'

W.O. 971-16
 M: \DUCKCLUB\TOPO\APPLICA2

SHEET 2 OF 2

April 23, 2018
Prepared by: J. Dayer
Submitted by: K. Drake
Approved by: Paul A. Cook *P. Cook*

CONSENT CALENDAR

OPERATIONS CENTER AIR HANDLER DUCT REPLACEMENT
CONSTRUCTION AWARD

SUMMARY:

The IRWD Operations Center air handling units distribute conditioned air to the building through a network of insulated roof-mounted ductwork. The existing ductwork is original to this building and now shows the normal wear expected of galvanized metal ducting exposed to the elements over 30 years. The ductwork has been repaired periodically to extend its service life but now requires replacement.

Staff recommends that the Board authorize the General Manager to execute a construction contract with Los Angeles Air Conditioning, Inc., in the amount of \$255,756 for the Operations Center Air Handler Duct Replacement Project.

BACKGROUND:

The Operations Center was built in 1994 and provides office and shop workspace for Water Operations, Recycling Operations, Maintenance Operations, the Water Quality Laboratory, and other departments. The indoor air quality of these spaces is maintained by four air handling units that filter, regulate, and circulate air as part of the heating, ventilating, and air conditioning (HVAC) system. While the air handling units remain in good operating condition, the air handler ductwork requires replacement due to environmental exposure over time.

Bid Process:

Staff issued a Request for Proposal to a select list of four qualified contractors in March 2018. All four contractors attended a job walk held on March 29, 2018. The bid opening was held on April 9, 2018 with two contractors submitting bids. Los Angeles Air Conditioning, Inc. submitted a proposal in the amount of \$255,756.00. Ram Air Engineering submitted a bid that was not opened and deemed non-responsive as they did not submit the required bid bond by the submission deadline. EMCOR and Christian Bros declined to bid citing their current workload and project timing. The bid summary is as follows:

Supplier	Bid Amount
Los Angeles Air Conditioning, Inc.	\$255,756
Ram Air Engineering, Inc.	Non-responsive
EMCOR	No bid
Christian Brothers Air Conditioning, Inc.	No bid

Los Angeles Air Conditioning installed the HVAC systems at the Baker Water Treatment Plant; staff found this contractor's workmanship and post-installation support to be excellent.

FISCAL IMPACTS:

Funding to complete the Operations Center Air Handler Duct Replacement Project is included in the 2017-18 capital budget, Projects 07117, 07118 and 07119.

ENVIRONMENTAL COMPLIANCE:

This activity does not constitute a project as defined by the California Environmental Quality Act pursuant to section 15378 of the California Code of Regulations, Title 14, Division 6, Chapter 3.

COMMITTEE STATUS:


Construction awards are not routinely taken to Committee prior to submittal to the Board.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH LOS ANGELES AIR CONDITIONING, INC. IN THE AMOUNT OF \$255,756 FOR THE OPERATIONS CENTER AIR HANDLER DUCT REPLACEMENT PROJECTS.

LIST OF EXHIBITS:

None.

April 23, 2018
Prepared by: J. Dayer
Submitted by: K. Drake
Approved by: Paul A. Cook 

CONSENT CALENDAR

OPERATIONS CENTER COMPUTER ROOM HEATING, VENTILATION, AND AIR
CONDITIONING REPLACEMENT CONSTRUCTION AWARD

SUMMARY:

The existing heating, ventilation and air conditioning (HVAC) for the Operations Center Computer Room is original to the building and requires frequent repair. It also does not have sufficient capacity to manage heat loads that will be imposed by planned equipment upgrades and additions.

Staff recommends that the Board authorize the General Manager to execute a construction contract with Los Angeles Air Conditioning, Inc. in the amount of \$215,694 for the Operations Center Computer Room HVAC Replacement.

BACKGROUND:

The Operations Center was built in 1994 and provides office and shop workspace for Water Operations, Recycling Operations, Maintenance Operations, and the Water Quality Laboratory. The Operations Center computing infrastructure is primarily housed in the computer room located in the south wing of the second floor. The computer room is cooled by a Liebert 10-ton capacity air conditioning system that is original to the building. Current heat loads in the space require the Liebert system to run at near 100% load 24 hours a day. This proposed replacement will upgrade the the system to a 20-ton capacity unit with a redundant dual compressor configuration. The increased capacity will be sufficient to meet anticipated cooling demand for the foreseeable future.

Staff issued a Request for Proposal to a select list of four qualified contractors in March 2018. All four contractors attended a job walk held on March 29, 2018. The bid opening was held on April 9, 2018 with two contractors submitting bids. Los Angeles Air Conditioning, Inc. submitted a proposal in the amount of \$215,694. Ram Air Engineering submitted a bid that was not opened and deemed non-responsive as they did not submit the required bid bond by the submission deadline. Emcor and Christian Bros declined to bid citing its current workload and project timing. The bid summary is as follows:

Supplier	Bid Amout
Los Angeles Air Conditioning, Inc.	\$215,694
Ram Air Engineering, Inc.	Non-responsive
Emcor	No bid
Christian Brothers Air Conditioning, Inc.	No bid

Los Angeles Air Conditioning installed the HVAC systems at the Baker Water Treatment Plant; staff found this contractor's workmanship and post-installation support to be excellent.

Consent Calendar: Operations Center Computer Room HVAC Replacement Construction
Award
April 23, 2018
Page 2

FISCAL IMPACTS:

Funds were included in the 2017-18 operating budget sufficient complete the Operations Center Computer Room HVAC replacement.

ENVIRONMENTAL COMPLIANCE:

This activity does not constitute a project as defined by the California Environmental Quality Act pursuant to section 15378 of the California Code of Regulations, Title 14, Division 6, Chapter 3.

COMMITTEE STATUS:

Construction awards are not routinely taken to Committee prior to submittal to the Board.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH LOS ANGELES AIR CONDITIONING, INC. IN THE AMOUNT OF \$215,694.00 FOR THE OPERATIONS CENTER COMPUTER ROOM HEATING, VENTILATION AND AIR CONDITIONING REPLACEMENT.


LIST OF EXHIBITS:

None.

April 23, 2018

Prepared by: K. Lew

Submitted by: K. Burton 

Approved by: Paul A. Cook 

ACTION CALENDAR

CONSTRUCTION INSPECTION SERVICES AGREEMENT

SUMMARY:

The current construction inspection workload for capital, development and operational improvement projects continues to exceed a level that can be supported by the District's inspection staff. Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement with AndersonPenna in the amount of \$1,873,053 for three inspectors over a period of two years for construction inspection services.

BACKGROUND:

The District's current and upcoming inspection workload for capital, development and operational improvement projects continues to exceed the level that can be supported by the District's staff. The District's construction inspection group consists of eight staff inspectors and five consultant inspectors who are currently responsible for the inspection, field coordination, documentation and record drawing preparation of over 520 projects spread across the District. Based on currently active and upcoming construction projects planned by the major developers including Irvine Company, FivePoint Communities, Lennar and the City of Tustin, staff anticipates the need for continued consultant field inspection support for a period of up to two years. Upon completion of the current high volume of construction projects, staff anticipates that these inspection services will no longer be required as the workload should return to a level that can be supported by District inspection staff.

In September 2012, the Board awarded a Professional Services Agreement to AndersonPenna, a construction management and inspection services company for on-call field inspection services. In January 2014 and August 2016, the Board authorized variances to extend the services. AndersonPenna is currently providing three experienced inspectors under its on-call contract that have worked well within the District's inspection group and have demonstrated the ability to inspect and coordinate multiple projects simultaneously.

Funds for the current agreement with AndersonPenna will be expended by May 2018. Due to the experience, attention to detail and quality work of the current consultant inspectors, staff requests a new Professional Services Agreement for continued inspection services. AndersonPenna's fully-burdened rate for its senior inspectors is \$136 per hour through June 30, 2018 and \$140 per hour starting July 1, 2018, which includes office space and office equipment, truck and fuel, cell phone and laptop computer. This billing rate has increased from the current \$118 per hour rate to account for increases in overhead costs associated with rent, health benefits, insurance, technology and vehicles costs as well as prevailing wage increases. Staff recommends executing a new Professional Services Agreement with AndersonPenna in the amount of \$1,873,053 for three inspectors for two additional years of construction inspection services. AndersonPenna's proposal is included as Exhibit "A".

FISCAL IMPACTS:

Funding for the construction inspection services will be provided from the various developer and capital projects being constructed as part of each project's budget.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on April 17, 2018.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH ANDERSONPENNA IN THE AMOUNT OF \$1,873,053 FOR CONSTRUCTION INSPECTION SERVICES FOR THREE INSPECTORS FOR A TWO-YEAR PERIOD.

LIST OF EXHIBITS:

Exhibit "A" – AndersonPenna's Proposal

EXHIBIT "A"



March 13, 2018

Kelly Lew, PE
Principal Engineer of Development and Inspection Services
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

Subject: Revised Proposal for Renewal of Agreement Between the Irvine Ranch Water District (IRWD and AndersonPenna Partners, Inc. for Professional As-Needed Public Works Inspection Services

Dear Ms. Lew,

AndersonPenna Partners, Inc. (APP) greatly appreciates the opportunity to submit this revised proposal to the Irvine Ranch Water District (IRWD) to renew our agreement for professional on-call public works inspection services.

Our successful, service-focused partnership with IRWD allows us to consistently provide IRWD with the following:

- **Proven public works inspectors with significant, directly relevant experience with very similar water infrastructure projects.**
- **A team of inspectors with extensive experience overseeing IRWD projects and permits and established relationships with IRWD staff.**
- **The coordination and problem-solving support of Inspection Services Manager Gary Heinbuch.**

APP proposes Senior Public Works Inspectors Mark Sanchez, Gary Lozonne and Jason Pilgrim to continue their current assignments with IRWD. Their resumes are enclosed for your convenience. Additional inspectors, as approved by IRWD, can of course be added at the District's request. APP's estimated fee for the renewal contract is also enclosed.

APP's contractual contact is:

Mr. Gary Heinbuch, Inspection Services Manager
AndersonPenna Partners, Inc.
3737 Birch Street, Suite 250, Newport Beach, CA 92660
Cell: (951) 533-4041, Email: gheinbuch@andpen.com

Please feel free to contact Gary using the contact information listed above, or me at (714) 458-0703 or ddemilia@andpen.com, should you require additional information. We enthusiastically look forward to being of continued service to IRWD under this contract renewal.

Sincerely,
AndersonPenna Partners, Inc.

Dino P. D'Emilia, PE, F.ASCE, QSD
Vice President, Construction Services

3737 BIRCH STREET, SUITE 250 • NEWPORT BEACH, CA 92660 • 949 428 1500
1225 W. 190TH STREET, SUITE 255 • GARDENA, CA 90248 • 310 359 1203
16801 VAN BUREN BOULEVARD • RIVERSIDE, CA 92504 • 951 200 3021

WWW.ANDPEN.COM

CERTIFIED DBE

Resumes

Mark Sanchez Senior Public Works Inspector

Education

Chaffey Junior College,
Rancho Cucamonga, CA

Certifications

Metrolink Safety-Trained

ACI Concrete Field Testing
Technician, #00163572

10-Hour Construction OSHA Safety
Heavy Equipment-Teamsters Union
Training

Years of Experience

Entered the profession in 2000

Drawing upon more than 18 years of experience, Mark Sanchez skillfully conducts inspections on projects to construct many types of water and roadway infrastructure. Mark's inspection background includes water transmission mains and pipes, pump stations, wastewater treatment plants, reservoirs, recycled water and sanitary sewer systems. He is also knowledgeable about basin channeling for storm water runoff and well-drilling and equipping. Mark excels at interpreting plans and specifications, providing final punch lists and performing warranty walk-throughs. Mark maintains strong working relationships with clients, due to his meticulous documentation and effective communication skills.

RELEVANT EXPERIENCE

Water Infrastructure Construction, Irvine Ranch Water District (IRWD), Orange County, CA. Construction observer assigned under APP's on-call inspection contract with IRWD. Observed installation of new water mains up to 12 inches in diameter, water main lowering, service connections, house line connections, fire services, water quality testing, street resurfacing, pulling permits and punch list.

Vista Del Verde Village IV Improvements, Yorba Linda Water District, Orange County, CA. Construction observer for installation of 4,000 linear feet of 12-inch C900 PVC water main, 36-inch cement mortar-lined and coated steel water main pipe and 4,500 linear feet of 36-inch Zone 4 cement mortar-lined and coated steel pipe to serve a new development. Participated in all shutdowns and tie-ins to existing water mains.

Lakeview Avenue Water Pipeline, Toll Brothers / 36-inch Zone 4 Domestic Water Transmission Main, Yorba Linda Water District, Orange County, CA. Construction observer monitoring installation of 1,300 linear feet of 36-inch Zone 4 cement mortar-lined and coated steel pipe. Participated in all shutdowns and tie-ins to existing water mains.

Construction of Recycled Water Well 78, IRWD, Orange County, CA. Inspector monitoring underground cast-in-place vault construction, with piping to existing IRWD recycled water connections to convey water for recycled water use. Coordinated water shut-downs with IRWD. This project, which received funding from the U.S. Navy, was high-profile due to location. IRWD received few complaints from the public during construction.

Well 115 Construction, IRWD, Orange County, CA. Inspector for well construction using rotary drilling. Inspected all underground and above-ground installation, electrical conduit installation and site construction. Supported coordination of startup with IRWD electrical instrumentation specialists. Well 115 is an above-ground facility for potable water use in Irvine. Construction utilized well-drilling operations identical to those of Well 78. Worked closely with personnel from Richard Sladen & Associates and groundwater geologists on all drilling procedures. Other duties included coordinating water shut downs with IRWD, reviewing progress payment invoicing and participating in biweekly meetings.

Well 110 Rehabilitation, IRWD, Orange County, CA. Inspector for project involving a chemical rehabilitation on an existing casing to clean-screen sections of an existing well to maintain production capacity. Project supported maximum production at the Desalter Project Potable Treatment Plant. Worked with Thomas Harder, Co. (geologist) on the project and documented all work performed daily. Reviewed progress payment invoicing and participated in weekly and biweekly meetings.

Well 107 Construction, IRWD, Orange County, CA. Inspector for project to construct Well 107, an above-ground well providing potable water in Irvine. Worked closely with Richard Sladen & Associates; groundwater geologists documenting all drilling procedures. Coordinated water shut-downs with IRWD. Reviewed progress payment invoicing and attended weekly and biweekly meetings.

Cooks Reservoir Replacement Project, City of San Juan Capistrano, CA. Construction observer for demolition of 0.3-million-gallon (mg) reservoir and pump station. Project constructed new 1.17-mg cast-in-place concrete reservoir and installed an altitude valve vault, ancillary piping and valves. Construction included excavation; shoring, rough grading and stockpiling of graded material; final grading; landscaping and electrical site work.

12-mg Ogden Reservoir Site Improvements, San Bernardino Municipal Water Department, San Bernardino, CA. Construction observer for site improvements to accommodate construction of 12-mg partially buried reservoir and booster pump station at Ogden site. Project included rough and fine grading, water piping, storm drainage system, on-site percolation basin and fencing.

Street and Water Improvements for New-Home Developments, Lambert Ranch Phases 1 and 2, City of Irvine, CA. Conducted inspections addressing sanitary sewer, recycled water and domestic water installation, with tie-ins to existing utilities on Portola Parkway. Inspected house connections for domestic water and sanitary sewer for 165 lots. Evaluated sanitary sewer system, which involved air testing, manhole lining and CCTV inspection. Tested domestic and recycled water lines and pulled bacteriological samples to assess water quality in domestic water lines. Project involved two pressure-reducing valve (PRV) stations for Lambert Ranch, Phases 1 and 2 at Portola Springs. Those activities involved 16-inch cement mortar-lined and coated steel pipeline, butterfly valve (BFV) relocations and construction of pre-cast PRV vaults with piping and Cla-Val installation.

Roadway Improvements, City of Burbank, CA. Construction observer for federally -funded project. Construction included: street widenings, installation of new catch basins, signage, striping and a new pre-signal; permanent closure of one road; and traffic signal modification.

Flow Meter Relocation/Pipe Replacement, Stonegate Zones 1 to 3, IRWD, Orange County, CA. Oversaw inspection of 30-inch flow meter replacement with 36-, 30- and 20-inch cement-mortar lined and coated steel pipe replacements.

Endave 3 - Planning Area 6, Irvine Company, Orange County, CA. Inspected multiple infrastructure construction projects, accelerated for inspections for model home builders. Work involved domestic water, recycled water and sanitary sewer systems.

Portola Springs Village - Planning Area 6, Irvine Company, Orange County, CA. Oversaw inspection of domestic water, recycled water and sanitary sewer systems.

Heritage Fields - El Toro LLC Capital Project GP2/GP3, City of Irvine, CA. Performed inspection of infrastructure construction for pressure-reducing vault.

Construction of Great Park Neighborhoods, Heritage Fields - Planning Area 51, El Toro LLC, City of Irvine, CA. Senior public works inspector for development of 1,300-acre Orange County Great Park master-planned community. Work involved development of 688 acres of park land, including 175-acre sports park. Public-private partner, FivePoint Communities, was developing adjacent private land for new homes and non-residential use, including businesses.

Gary Lozonne
Senior Public Works
Inspector

Years of Experience

Entered the profession in 1987

Inspector Gary Lozonne has more than 30 years of experience in the installation of water, sewer and storm drain pipelines. He specializes in all types of water distribution as well as fire protection systems, including pressure-reducing stations, valve vaults and pipeline cathodic protection. Gary's experience includes both gravity/force main systems and pump stations. He is currently overseeing the installation of new domestic and recycled water mains and sewer mains, from pre-construction meeting up to final acceptance.

RELEVANT EXPERIENCE

Orchard Hills Master Planned Community, Irvine Ranch Water District (IRWD), Irvine, CA. Inspector for installation of new domestic and recycled water mains and sewer mains. Worked on project from pre-construction meeting to final acceptance. Inspected installation of new water transmission mains for domestic and recycled water systems containing new pipelines up to 36 inches in diameter. Inspected water main lowering, service connections, fire services and water quality testing for multiple master-planned communities with 1,500 housing units. Ensured accuracy of survey and staking for line and grade and contractor compliance with IRWD specifications. Worked with geotechnical and soils engineers to ensure proper compaction in trenches. Obtained water quality samples for testing prior to final tie-ins of new lines to existing water systems. Worked with contractor to ensure that all final project work is performed to IRWD satisfaction.

Santa Ana Heights/Costa Mesa Water Improvement Project, IRWD, Irvine, CA. Inspector for one-year project to replace aging water system. Inspected installation of new 12-inch PVC main line, hydrants and services throughout large area. Project required constant contact and coordination with residents and business owners.

Laguna Altura Community, IRWD, Irvine, CA. Inspector for installation of reclaimed-water main 36 inches in diameter with two large valve vaults, several blow offs, air vacs and cathodic protection for entire system.

Wharf Expansion, Port of Los Angeles, CA. Inspector for installation of ductile-iron water main 12 inches in diameter, incorporating fire hydrants and domestic meter vaults that provide water to container ships. Project installed extensive drainage system with 12-inch-diameter ductile-iron pipe and 8-inch and 4-inch SDR-35 PVC. Drainage system and several water lines were installed under wharf, hung above water with galvanized fastening systems and hangers.

Installation of 16-inch Cross-Country Transmission Main, IRWD, Irvine, CA. Inspector for installation of approximately 3 miles of 16-inch CML and C-steel pipeline. The one-year project installed valves, blow-offs, air vacs and pipeline cathodic protection. This was a very challenging project due to the topography, as the pipeline ran through hilly avocado orchards inhabited by protected wildlife and vegetation.

Water Line Installations, Ladera Ranch Master-Planned Community, Santa Margarita Water District, South Orange County, CA. Inspector for four-year project installing 24-inch and 16-inch CML and C-steel transmission mains, as well as 12-inch and 6-inch PVC mains. The infrastructure included all services and hydrants to provide water to master-planned community. The project also installed a large sewer system with gravity and force mains.

Storm Drain Construction-Ladera Ranch, County of Orange, South Orange County, CA. Inspector for installation of extensive storm drain system using 120-inch through 18-inch reinforced concrete pipe. Installation involved junction structures, catch basins, culverts and area drains.

241/261 Toll Road Water Main Relocation, IRWD and Santa Margarita Water District, Orange County, CA. Inspector for project rerouting and installing new water mains countywide in support of Toll Roads. The project installed new 24-inch sewer main for Santa Margarita Water District. Project completed on schedule, per plan.

Jason Pilgrim

Senior Public Works Inspector

Certifications

Trenching and excavation competent person

Confined space entry

SWPPP

OSHA 10-hour safety

First aid and CPR

Years of Experience

Entered the profession in 1997

Inspector Jason Pilgrim has more 20 years of experience as a construction foreman for projects involving underground wet utilities. Jason's project types include sewer treatment plants, pump stations, pressure-reducing stations, police stations, libraries, schools, housing tracts, commercial developments and street improvements. Much of this work has been done in the Irvine area, per Irvine Ranch Water District (IRWD) requirements and specifications. Prior to official inspections, Jason performs inspections to ensure work quality and adherence to plans and standard specifications.

RELEVANT EXPERIENCE

Public Works Inspection, Irvine Ranch Water District (IRWD), Orange County, CA. Public works inspection for new water and sewer main pipeline installations for multiple master-planned communities in service area. Currently inspecting 50 water infrastructure projects, in part for development of Irvine's 1,300-acre Great Park master-planned community.

Construction of Advanced Water Purification Facility, City of Oxnard, CA. Foreman for construction of sewer treatment plant, considered at the time to be one of four in the world providing that particularly high degree of purification. Project cost \$80 million, including a pipeline contract and change order value of \$7.8 million. The installation included 2,500 feet of 16-inch through 30-inch HDPE plant drains, 3,000 feet of 36-inch HDPE-finished water lines, 2,200 feet of 20-inch reverse osmosis concentrate lines, 6-inch through 8-inch chemical treatment lines, 4-inch and 6-inch sewer lines, 10-inch through 2-inch water lines, and 10-inch through 8-inch fire lines. All buried metal fittings and flanges had full cathodic protection. Numerous reinforced pipe encasements were installed, as well as a 66-inch steel casing for a 48-inch effluent line, work requiring a bore under existing railroad tracks. A strategically timed tie-in to a 36-inch ocean outfall line was done, along with a 30-inch plant drain tie-in to a 66-inch sewer inlet to the plant. There were only two opportunities for installation of the 36-inch ocean outfall tie-in within one year, due to the timed low operation hours of the plant as well as low tide of the ocean. Depths exceeded 20 feet, with groundwater and wells needed to lower groundwater through the project.

Singleton Road Storm Drain Improvements, Calimesa, CA. Foreman on-call around the clock for \$1-million pipeline construction project. Project installed 987 feet of 96-inch storm drain at depths of 29 feet, in between a 24-inch water line and a 12-inch sewer line routed under Singleton Road. Two manholes were built, with a landing platform midway down, due to the depth. An inlet structure was installed with trash racks at existing basin. A warped-wing wall structure was installed at the outlet. The project continued through the winter, with two 10-inch bypass pumps and a 1,200-foot double bypass always on site for emergency overflow of an existing basin in the event of a rain storm, protecting a nearby neighborhood at the bottom of the road. The strict schedule permitted only 29 working days to complete the project, ultimately delivered in 27 days.

Pipeline Construction at Apartment Community, Irvine, CA. Foreman for \$1.8-million pipeline construction. Project installed 8-inch sewer, 8-inch water and 4-inch reclaimed water lines, as well as storm drain improvements with multiple street crossings and tie-ins. Project required tee cut-ins on existing 16-inch and 10-inch water lines with butterfly valves and gate valves. Project constructed nine 48-inch sewer manholes and one 60-inch sewer manhole. Oversaw required traffic control throughout project. Challenges included poor soil conditions, the presence of existing utilities and the need to work around large concrete pours. A few redesigns were completed, due to conflicting locations of existing utilities – work requiring review by IRWD before proceeding. Inspections were conducted by IRWD and City of Irvine.

Estimated Fee

Estimated Fee Irvine Ranch Water District Public Works Inspection Services April 1, 2018-March 31, 2020					
April 1, 2018-June 30, 2018 ¹			13 Working Weeks		
TITLE	No. of Personnel	Hours/ Person	Total Hours	Hourly Rate	Extended Fee
Public Works Inspector (Prevailing Wage) (13 weeks)	3	520	1,560	\$136.00	\$212,160.00
Inspections Manager (2.5 hours/week for 13 weeks)	1	33	33	\$165.00	\$5,362.50
Subtotal					\$217,522.50
Public Works Inspector Special Shift/Overtime Allowance -5%					\$10,876.00
Subtotal April 1, 2018-June 30, 2018					\$228,398.50
July 1, 2018-March 31, 2020 ²			91 Working Weeks		
TITLE		Est. Hours Per Inspector	Total Hours	Hourly Rate	Extended Fee
Public Works Inspector (Prevailing Wage)	3	3,640	10,920	\$140.00	\$1,528,800.00
Inspections Manager (2.5 hours/week for 91 weeks)	1	228	228	\$165.00	\$37,537.50
Subtotal					\$1,566,337.50
Public Works Inspector Special Shift/Overtime Allowance (5%)					\$78,317.00
Subtotal July 1, 2018-March 31, 2020					\$1,644,654.50
Total Estimated Fee					\$1,873,053.00

Notes:

The above hourly rates include wages, fringe and general and administrative overhead and fee, as well as typical supplies, tools and equipment required to perform services.

This is a Prevailing Wage project. Prevailing Wage Rates are subject to increases pursuant to the State of California's Department of Industrial Relations Wage Rate Determinations, assumed at \$2.30 per hour, plus associated overhead and profit, per annum. APP's Billing Rates will increase in proportion to the subsequent DIR increase, plus overhead and profit.

¹Prevailing Wage Rates pursuant to the State of California's Department of Industrial Relations Wage Rate Determinations effective 2/2/2018 through 6/30/2018.

²Prevailing Wage Rates pursuant to the State of California's Department of Industrial Relations Wage Rate Determinations effective 7/1/2018 through the subsequent posted determination.

The following minimum callout applies to Inspection staff, in accordance with Industrial Welfare Commission Order No. 16-2001.

- Cancellation of 8 hours scheduled inspection after inspector's arrival on site: 4-hour minimum
- Cancellation of 4 hours scheduled inspection after inspector's arrival on site: 2-hour minimum

Inspection Overtime: Should any weekday or Saturday overtime inspection be required, it is charged at 1.4 times the hourly Public Works Inspector hourly rate shown. For Sundays and holidays inspection billing, rates are 1.70 times the above rate, upon the City's prior written approval therefore.

The estimate above is based upon IRWD's use of three APP inspectors. Should IRWD wish to increase or decrease the number of inspectors, a contract amendment would be required.

Hourly rates, not subject to Prevailing Wage, are subject to a three percent (3%) per year escalation.

Fees for subconsultant services: Billed at actual cost, plus 15 percent (15%) to cover overhead and administration.

Reimbursable Expenses: Ordinary identifiable non-salary costs that are directly attributable to the project, such as reproduction, regular vehicular travel costs, overnight postage / couriers, etc., are included in the fee estimated above. Extraordinary expenses, such as oversized and/or color reproduction costs, site facility hard phone line and/or internet service charges, non-commuter project miles and/or other travel expenses to remote (over 50 miles one-way) fabrication yards / batch plants, overnight postage / couriers, etc., are billed at actual cost plus 10 percent to cover overhead and administration. Travel charges to a casting / fabrication yard or batch plant will include the hourly billing rate plus travel expenses as listed in the Caltrans Travel Guide (State rates). Extraordinary charges will not be billed to the Client unless specifically requested and approved by the Client in writing prior to incurring the expense.

Fees for expert witness services: Charged at \$300.00 per hour with a 4-hour minimum per day.

Payment Terms: A late payment finance charge at a rate of 12 percent per annum will be applied to any unpaid balance commencing 30 days after the date of original invoice. This rate schedule is effective through June, 2018. Should the Contract duration be extended beyond June 30, 2018, rates may be subject to annual and/or periodic revisions as necessary to accommodate inflationary trends, salary adjustments and the general costs of business, as mutually agreeable to the parties and approved via Contract amendment prior to implementing higher rates.

EXCLUSIONS TO SCOPE AND FEE:

The following items are specifically excluded:

- Legal advice
- Design engineering
- Temporary field office facilities, equipment, furniture, utilities and/or services
- Hazardous materials monitoring and/or testing
- Scope of Services not specifically enumerated in the Agreement
- Specialized Software (other than MS Office Suite) and MS Project

Rates Comparison:

The hourly inspector rates proposed are increased from the prior approved rates. APP's current agreement with IRWD for the contracted services was last amended in August of 2016. Since August of 2016, APP has grown both in terms of the number of staff employed and the geography it serves. Inflation and other economic factors have increased the overhead costs associated with operating our engineering and management company in a way that allows APP to attract and keep the high-quality professional staff employed with our firm that our clients have come to expect.

For instance, we have seen substantial increases in rent, health benefits, general and professional liability and automobile insurance, technology and vehicle costs, to name a few. Additionally, prevailing wage rates have increased several times.

Please refer to the following attachments:

- APP's proposed Hourly Rate Schedule
- Prevailing Wage Inspector Labor Rate Breakdown
- General Prevailing Wage Determination Made by the Director of Industrial Relations (Announcement of New Wage Rate)

Proposed Hourly Rate Schedule

Construction Services				
Staff	Regular Time	Overtime		
	Rate ⁴	Mon – Fri ²	Sat. ³	Sun./Holiday
Principal/Project Executive	\$230	n.a.	n.a.	n.a.
Project/Construction Manager, Resident Engineer	\$185	n.a.	n.a.	n.a.
Project Manager	\$180	n.a.	n.a.	n.a.
Structures Representative	\$175	n.a.	n.a.	n.a.
Project Controls Engineer	\$140	n.a.	n.a.	n.a.
Documents Control/Assistant Construction Manager	\$130	n.a.	n.a.	n.a.
Labor Compliance/Documents Control	\$120	n.a.	n.a.	n.a.
Inspection Services Manager	\$165	n.a.	n.a.	n.a.
Public Works Inspector (Prevailing Wage) ^{1,5}	\$136	\$190	\$190	\$245
Public Works Inspector, Special Shift (Prevailing Wage) ^{1,5}	\$137	\$192	\$192	\$247
Public Works Inspector (Prevailing Wage) ^{1,6}	\$140	\$196	\$196	\$252
Public Works Inspector, Special Shift (Prevailing Wage) ^{1,6}	\$141	\$197	\$197	\$254
Public Works Inspector (Non Prevailing Wage)	\$125	\$175	\$175	\$225

¹The above hourly rates include wages, fringe and general and administrative overhead and fee, as well as typical supplies, tools and equipment required to perform services.

² Rate applies to the first four hours of overtime per day; all overtime in excess of four hours is paid at the Sunday/Holiday rate.

³ Rate applies to the first 12 hours worked. All other time is paid at the Sunday rate.

⁴ Regular Time Rates, not subject to Prevailing Wage, are subject to a three percent (3%) per year escalation.

⁵ Prevailing Wage Rates pursuant to the State of California's Department of Industrial Relations Wage Rate Determinations effective 2/2/2018 through 6/30/2018.

⁶ Prevailing Wage Rates pursuant to the State of California's Department of Industrial Relations Wage Rate Determinations effective 7/1/2018 through the subsequent posted determination.

APP's Billing Rates will increase in proportion to the subsequent DIR increase, plus overhead and profit.

Prevailing Wage Inspector Labor Rate Breakdown Irvine Ranch Water District (IRWD) AndersonPenna Partners, Inc.				
August 2016 Billing Rate Breakdown		Group 2		Special Shift
Prevailing Wage Determination Date	02/22/16		02/22/16	
Prevailing Wage Rate	\$66.70		\$67.20	
Overhead:	\$40.57	61%	\$40.98	61%
Wages + Overhead	\$107.27		\$108.18	
Fee	\$10.73	10%	\$10.82	10%
2016 Billing Rate Approved by IRWD	\$118.00		\$119.00	
March 2018 Billing Rate Breakdown				
March-June 2018 Prevailing Wages		Group 2		Special Shift
Prevailing Wage Determination Date	02/02/18		02/02/18	
Current Prevailing Wage	\$72.60		\$73.10	
Overhead	\$51.04	70%	\$51.45	70%
Wages+Overhead	\$123.64		\$124.55	
Fee	\$12.36	10%	\$137.00	10%
Billing Rate Requested 2018-21 Contract	\$136.00		\$137.00	
Billing Rate Effective July 1, 2018				
Billing Rate Effective July 1, 2018		Group 2		Special Shift
Prevailing Wage Determined Increase - 7/1/18	Pre-determined Increase for 2018-1 Determination			
Current Prevailing Wage	\$74.90		\$75.40	
Overhead	\$52.37	70%	\$52.78	70%
Wages+Overhead	\$127.27		\$128.18	
Fee	\$12.73	10%	\$12.82	10%
Billing Rate Requested 2018-21 Contract	\$140.00		\$141.00	

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

CRAFT: #BUILDING/CONSTRUCTION INSPECTOR AND FIELD SOILS AND MATERIAL TESTER

DETERMINATION: SC-23-63-2-2017-ID

ISSUE DATE: August 22, 2017

EXPIRATION DATE OF DETERMINATION: June 30, 2018** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

LOCALITY: All localities within Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, and Ventura counties.

CLASSIFICATION (Journey person)	Basic Hourly Rate	Employer Payments					Straight - Time		Overtime Hourly Rate		
		Health and Welfare	Pension	Vacation/ Holiday (a)	Training	Other Payments	Hours	Total Hourly Rate	Daily (b)	Saturday (c)	Sunday/ Holiday
									1 1/2X	1 1/2X	2X
Classification Groups											
Group 1	\$44.78	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$70.82	\$93.210	\$93.210	\$115.60
Group 2	\$46.56	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$72.60	\$95.880	\$95.880	\$119.16
Group 3	\$48.56	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$74.60	\$98.880	\$98.880	\$123.16

Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

^a Includes an amount withheld for supplemental dues.

^b Rate applies to the first 4 overtime hours. All other daily overtime is paid at the Sunday rate.

^c Rate applies to the first 12 hours worked. All other time is paid at the Sunday rate.

RECOGNIZED HOLIDAYS: Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director - Research Unit at (415) 703-4774.

TRAVEL AND/OR SUBSISTENCE PAYMENT: In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director - Research Unit at (415) 703-4774.

CLASSIFICATIONS:

GROUP I

Field Soils and Materials Tester
Field Asphaltic Concrete (Soils and Materials Tester)
Field Earthwork (Grading Excavation and Filling)
Roof Inspector
Water Proofer

GROUP II

AWS-CWI Welding Inspector
Building / Construction Inspector
Licensed Grading Inspector
Reinforcing Steel
Reinforced Concrete
Pre-Tension Concrete
Post-Tension Concrete
Structural Steel and Welding Inspector
Glue-Lam and truss Joints
Truss-Type Joint Construction
Shear Wall and Floor System used as diaphragms
Concrete batch Plant
Spray-Applied Fireproofing
Structural masonry

Group III

Nondestructive Testing (NDT)

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

CRAFT: #BUILDING/CONSTRUCTION INSPECTOR AND FIELD SOILS AND MATERIAL TESTER (SPECIAL SHIFT)

DETERMINATION: SC-23-63-2-2017-1D1

ISSUE DATE: August 22, 2017

EXPIRATION DATE OF DETERMINATION: June 30, 2018** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

LOCALITY: All localities within Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, and Ventura counties.

CLASSIFICATION (Journeyperson)	Basic Hourly Rate	Health and Welfare	Employer Payments				Straight - Time		Overtime Hourly Rate		
			Pension	Vacation/ Holiday (a)	Training	Other Payments	Hours	Total Hourly Rate	Daily (b) 1 1/2X	Saturday (c) 1 1/2X	Sunday/ Holiday 2X
Classification Groups											
Group 1	\$45.28	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$71.32	\$93,960	\$93,960	\$116.60
Group 2	\$47.06	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$73.10	\$96,630	\$96,630	\$120.16
Group 3	\$49.06	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$75.10	\$99,630	\$99,630	\$124.16

Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

^a Includes an amount withheld for supplemental dues:

^b Rate applies to the first 4 overtime hours. All other daily overtime is paid at the Sunday rate.

^c Rate applies to the first 12 hours worked. All other time is paid at the Sunday rate.

RECOGNIZED HOLIDAYS: Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director - Research Unit at (415) 703-4774.

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Building / Construction Inspector
Licensed Grading Inspector
Reinforcing Steel
Reinforced Concrete
Pre-Tension Concrete
Post-Tension Concrete
Structural Steel and Welding Inspector
Glue-Lam and truss Joints
Truss-Type Joint Construction
Shear Wall and Floor System used as diaphragms
Concrete batch Plant
Spray-Applied Fireproofing
Structural masonry

Group III

Nondestructive Testing (NDT)

**GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1**

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

CRAFT: #BUILDING/CONSTRUCTION INSPECTOR AND FIELD SOILS AND MATERIAL TESTER (MULTI-SHIFT)

DETERMINATION: SC-23-63-2-2017-1D2

Issue Date: August 22, 2017

EXPIRATION DATE OF DETERMINATION: June 30, 2018** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director - Research Unit for specific rates at (415) 703-4774.

LOCALITY: All localities within Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, and Ventura counties.

CLASSIFICATION (Journey person)	Basic Hourly Rate	Employer Payments					Straight - Time		Overtime Hourly Rate		
		Health and Welfare	Pension	Vacation/ Holiday (a)	Training	Other Payments	Hours (d)	Total Hourly Rate	Daily (b) 1 1/2X	Saturday (c) 1 1/2X	Sunday/ Holiday 2X
Classification Groups											
Group 1	\$45.78	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$71.82	\$94.710	\$94.710	\$117.60
Group 2	\$47.56	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$73.60	\$97.380	\$97.380	\$121.16
Group 3	\$49.56	\$11.45	\$9.65	\$3.55	\$1.00	\$0.39	8	\$75.60	\$100.380	\$100.380	\$125.16

Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

^a Includes an amount withheld for supplemental dues.

^b Rate applies to the first 4 overtime hours. All other daily overtime is paid at the Sunday rate.

^c Rate applies to the first 12 hours worked. All other time is paid at the Sunday rate.

^d The Third Shift shall work 6.5 hours, exclusive of meal period, for which 8 hours straight-time shall be paid at the non-shift rate, Monday through Friday.

RECOGNIZED HOLIDAYS: Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director - Research Unit at (415) 703-4774.

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Field Asphaltic Concrete (Soils and Materials Tester)
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Water Proofer

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Licensed Grading Inspector
Reinforcing Steel
Reinforced Concrete
Pre-Tension Concrete
Post-Tension Concrete
Structural Steel and Welding Inspector
Glue-Lam and truss Joints
Truss-Type Joint Construction
Shear Wall and Floor System used as diaphragms
Concrete batch Plant
Spray-Applied Fireproofing
Structural masonry

Group III

Nondestructive Testing (NDT)

DEPARTMENT OF INDUSTRIAL RELATIONS
Office of the Director - Research Unit
455 Golden Gate Avenue, 9th Floor
San Francisco, CA 94102

MAILING ADDRESS:
P. O. Box 420603
San Francisco, CA 94142-0603



PREDETERMINED INCREASES FOR

**OPERATING ENGINEER (SC-23-63-2-2017-1)
OPERATING ENGINEER (MULTI-SHIFT) (SC-23-63-2-2017-1)
OPERATING ENGINEER (SPECIAL SHIFT) (SC-23-63-2-2017-1)**

**CRANES, PILE DRIVER AND HOISTING EQUIPMENT
(OPERATING ENGINEER) (SC-23-63-2-2017-1B)**

**CRANES, PILE DRIVER AND HOISTING EQUIPMENT
(OPERATING ENGINEER, MULTI-SHIFT) (SC-23-63-2-2017-1B1)**

**CRANES, PILE DRIVER AND HOISTING EQUIPMENT
(OPERATING ENGINEER, SPECIAL SHIFT) (SC-23-63-2-2017-1B2)**

TUNNEL (OPERATING ENGINEER) (SC-23-63-2-2017-1C)

TUNNEL (OPERATING ENGINEER) (SC-23-63-2-2017-1C1) (MULTI-SHIFT)

**BUILDING/CONSTRUCTION INSPECTOR, FIELD SOILS AND MATERIAL
TESTER, AND NON-DESTRUCTIVE TESTING (SC-23-63-2-2017-1D)**

**BUILDING/CONSTRUCTION INSPECTOR, FIELD SOILS AND MATERIAL
TESTER, AND NON-DESTRUCTIVE TESTING (SPECIAL SHIFT)
(SC-23-63-2-2017-1D1)**

**BUILDING/CONSTRUCTION INSPECTOR, FIELD SOILS AND MATERIAL
TESTER, AND NON-DESTRUCTIVE TESTING (MULTI-SHIFT)
(SC-23-63-2-2017-1D2)**

**ALL LOCALITIES WITH IMPERIAL, INYO, KERN, LOS ANGELES, MONO,
ORANGE, RIVERSIDE, SAN BERNARDINO, SAN LUIS OBISPO,
SANTA BARBARA, AND VENTURA COUNTIES**

These predetermined increases for the above named crafts apply only to the current determinations for work being performed on public works projects with bid advertisement dates on or after **September 1, 2017**, until the determination(s) is/are superseded by a new determination(s) or a predetermined increase modification notice becomes effective.

When referencing our prevailing wage determinations, please note that if the prevailing wage rate determination which was in effect on the bid advertisement date of a project has a single asterisk (*) after the expiration date, the rate will be good for the life of the project. However, if a prevailing wage rate determination has double asterisks (**) after the expiration date, the rate must be updated on the following date to reflect the predetermined rate change(s).

OPERATING ENGINEER: All Classifications and All Shifts

The above Determinations are currently in effect and will expire on June 30, 2018**.

Effective on July 1, 2018, there will be an increase of \$2.30 to be allocated to wages and/or fringes.

There will be no further increases applicable to these determinations.

Issued 8/22/2017, Effective 9/1/2017 until superseded.

This page will be updated when wage rate breakdown information becomes available.

Last Updated: September 1, 2017

April 23, 2018

Prepared by: W. Stewart/S. Malloy

Submitted by: K. Burton *KLB*

Approved by: Paul A. Cook *[Signature]*

ACTION CALENDAR

MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES CONTRACT CHANGE ORDER NO. 78

SUMMARY:

Filanc/Balfour Beatty (FBB) is constructing the Michelson Water Recycling Plant (MWRP) Biosolids and Energy Recovery Facilities (Biosolids Project). Contract Change Order (CCO) No. 78 includes costs for several software, structural, piping, and hardscaping items. Staff recommends that the Board approve CCO No. 78 in the amount of \$344,006.55 with FBB.

BACKGROUND:

Construction of the Biosolids Project was awarded to FBB in March 2013 in the amount of \$163,465,940. The Biosolids Project will provide biosolids digestion, dewatering, energy production, and on-site sludge drying. The project includes excavation for subsurface structures; installation of foundation piles; three egg-shaped digesters; a state-of-the-art odor control system; a biogas conditioning system and power generation using microturbines; a fats, oil and grease (FOG) receiving station; and new utility services. These facilities are being constructed on the land north of IRWD's Operations Center, maintenance shops, water quality laboratory, and warehouse.

CCO No. 78:

The negotiation of CCOs sometimes require an extended period of time to fully agree on the changes and costs and then to submit paperwork for approval. This extended period of time may adversely impact the cash flow to the contractor, its subcontractors and suppliers. As an act of good faith, staff is submitting CCO No. 78 in amounts that staff has unilaterally estimated. When staff and FBB agree to a final CCO amount, any cost differences will be accounted for in a subsequent CCO.

CCO No. 78, in the amount of \$344,006.55, includes:

- *Operator Interface Terminal (OIT) Indusoft Licensing Cost in the amount of \$4,618.13 –* This item is for the licensing cost of two OIT screens for the gas conditioning system.
- *Retaining Wall Modifications at Solids Handling Building in the amount of \$26,508 –* To address the actual site conditions, a retaining wall was enlarged on the west side of the Solids Handling Building. This change request is for the cost for labor and material to enlarge the retaining wall at the Solids Handling Building.

- *Andritz Air Compressor Equipment Pad Modifications in the amount of \$6,729* – Two air compressor equipment pads were modified to fit the dimensions of the air compressors actually supplied by Andritz for the project. This change request is for the time and materials to make the equipment pad modifications.
- *Waste Activated Sludge (WAS), Digested Sludge (DS), and Primary Sludge (PS) Piping Modifications in the amount of \$28,967.68* – The WAS, DS, and PS piping changes were added to allow operators to provide feed sludge to the sequencing batch reactors (SBRs) during periods of down-time between dewatering/drying operations. The SBR uses a biological process similar to activated sludge to treat dewatering centrate high in ammonia so it can be safely reintroduced into the water recycling process. During design, it was anticipated that dewatering/drying runs would occur three to four days per week, with the same use of the SBRs anticipated. Nutrient feed to the operating SBR for these short standby periods would be from the second SBR basin. Due to water conservation, it is anticipated that the dewatering/drying systems will be shut down for periods of up to nine days; therefore, the SBR system will need nutrient feeding via sludge to maintain the biological activity within the SBRs. Connections to WAS, PS, and DS will allow operators to feed the SBRs between drying operations. This item is for the cost of materials and the painting subcontractor. Labor and equipment will be tracked as a separate item.
- *Modifications to Site Hardscape in the amount of \$277,183.74* – In preparation for the upcoming hardscape and landscape contract for the biosolids site, staff performed a complete review of the proposed site improvements and how similar improvements from the MWRP Phase II project are working. This review resulted in changes to both the landscape and hardscape due to aesthetic and operational needs. The hardscape modifications include additional concrete sidewalks and driveways throughout the Biosolids site. This item is for the labor, equipment, and materials to make the modifications.

Staff recommends that the Board approve CCO No. 78 in the amount of \$344,006.55, which is attached as Exhibit “B”. The construction change order summary is attached as Exhibit “C”. The following is a summary of the change order categories:

Category	Total Amount	% of Original Contract
A - District Convenience/Initiation - Project Related	\$ 3,327,1554.54	2.04%
B - Differing Site Conditions	\$12,570,797.75	7.69%
C - Design Oversight	\$ 3,331,282.80	2.04%
D - District Convenience/Initiation - Non-Project Related	\$ -	0.00%
E - Contractor Convenience/Initiation	\$ 98,302.54	0.06%
F - Contractor Requested Inspection Overtime	\$ (262,020.00)	-0.16%
TOTAL (All Items A - F)	\$19,065,517.63	11.66%

Action Calendar: Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities
Contract Change Order No. 78
April 23, 2018
Page 3

FISCAL IMPACTS:

The MWRP Biosolids and Energy Recovery Facilities Project 04286 is included in the FY 2017-18 Capital Budget. The existing budget is sufficient to fund the change order.

ENVIRONMENTAL COMPLIANCE:

The MWRP Biosolids and Energy Recovery Facilities is subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, a Supplemental Environmental Impact Report (SEIR), SCH # 2011031091, was certified by IRWD at its October 22, 2012 meeting. The City of Irvine Planning Commission approved a conditional use permit for the IRWD Biosolids Project at its December 6, 2012 meeting.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on April 17, 2018.

RECOMMENDATION:

THAT THE BOARD APPROVE CONTRACT CHANGE ORDER NO. 78 IN THE AMOUNT OF \$344,006.55 WITH FILANC/BALFOUR BEATTY FOR SEVERAL SOFTWARE, STRUCTURAL, PIPING, AND HARDSCAPING ITEMS FOR THE MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES, PROJECT 04286.

LIST OF EXHIBITS:

Exhibit "A" – Contract Change Order No. 78 with FBB
Exhibit "B" – Construction Change Order Summary

CONTRACT CHANGE ORDER

EXHIBIT "A"



Irvine Ranch Water District

15600 Sand Canyon Avenue
 P.O. Box 57000
 Irvine, CA 92619-7000
 (949) 453-5300

C.O. No. 78
 Final
 Project No. 04286

MWRP Biosolids and Energy Recovery Facilities

Project Title

Date: 04/02/2018

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
1. Operator Interface Terminal (OIT) Indusoft Licensing Cost (CR-244) PR 04286 Task 5.30	\$4,618.13	\$0.00	See Notes
2. Retaining Wall Modifications at Solids Handling Building (CR-331E) PR 04286 Task 5.29	\$26,508.00	\$0.00	See Notes
3. Andritz Air Compressor Equipment Pad Modifications (CR-550) PR 04286 Task 5.31	\$6,729.00	\$0.00	See Notes
4. Waste Activated Sludge (WAS), Digested Sludge (DS), and Primary Sludge (PS) Piping Modifications (CR-594) PR 04286 Task 5.31	\$28,967.68	\$0.00	See Notes
5. Modifications to MWRP Biosolids Hardscape (CR-331K) PR 04286 Task 5.29	\$277,183.74	\$0.00	See Notes
Notes: 1. For all items noted above, the Contractor reserves the right to compensable and/or excusable time extensions provided that time impacts to the Project's critical path are demonstrated to be beyond the Contractor's control. 2. Contractor reserves any and all rights it has and otherwise does not waive or release any claims it may have for additional compensation related to impact, including but not limited to the cumulative effect of the number, nature, or extent of any changes or design clarifications. 3. The project completion date of October 31, 2017 per CCO No. 45 is unchanged by this Change Order.			
TOTAL	\$344,006.55	\$0.00	0


NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies will be made as required. The parties mutually agree the pricing set forth in this Change Order are complete and fair compensation for the entirety of the work authorized under this Change Order and that no additional compensation is warranted nor shall it be allowed.

CHANGES: All workmanship and materials called for by this Change Order shall be fully in accord with the original Contract Documents insofar as the same may be applied without conflict to the conditions set forth by this Change Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	\$344,006.55	0
2. ORIGINAL CONTRACT AMOUNT	=	\$163,465,940.00	1,278
3. TOTAL PREVIOUS CHANGE ORDER(S)	=	\$18,721,511.08	368
4. TOTAL BEFORE THIS CHANGE ORDER (2+ 3)	=	\$182,187,451.08	1,646
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$182,531,457.63	1,646

We hereby agree to make the above change subject to the terms of this change order for the sum of: _____
 -----Three Hundred Forty-Four Thousand Six and 55/100 -----Dollars

Date		Contractor	By: Harry Cosmos, President	
Date		Contractor		By: Harry Cosmos, President
SIGNATURE	DATE	APPROVAL LEVEL REQUIRED		
	4/5/18	Department Director Approval Required <input type="checkbox"/> Executive Director Approval Required <input type="checkbox"/> General Manager Approval Required <input type="checkbox"/> Board Approval Required <input checked="" type="checkbox"/>		
IRWD Engineer or Consulting Engineer	Date			
Principal Engineer	Date			
Executive Director of Engineering & Water Quality	Date			
General Manager	Date	Purchase Order No.		

NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies will be made as required. The parties mutually agree the pricing set forth in this Change Order are complete and fair compensation for the entirety of the work authorized under this Change Order and that no additional compensation is warranted nor shall it be allowed.

CHANGES: All workmanship and materials called for by this Change Order shall be fully in accord with the original Contract Documents insofar as the same may be applied without conflict to the conditions set forth by this Change Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

CSG-02

EXHIBIT "B"

MWRP Biosolids and Energy Recovery Facilities PR 21146 (4286) Construction Change Order Summary

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

Change Order	Description	Category	IRWD or FBB	Contract Amount						Contract Days				Original Completion Date:
				Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum Total C.O. days	Revised Total Contract Days	10/28/2016
														Original Contract Amount: \$163,465,940.00
1	Approved by Exe. Director of Engineering and Water Quality Approved on October 24, 2013 1.1 Modifications to Road to Development Area - Delete AC to Triangle, add AB to Michelson (CR-004)	A	IRWD	\$ 20,202.42	\$20,202.42	\$0.00	\$20,202.42	0.01%	\$163,486,142.42	0	0	0	1,278	10/28/2016
2	Approved by Exe. Director of Engineering and Water Quality Approved on November 13, 2013 2.1 Street Light Conduit Modifications (CR-007)	B	IRWD	\$ 12,475.08	\$12,475.08	\$20,202.42	\$32,677.50	0.02%	\$163,498,617.50	0	0	0	1,278	10/28/2016
3	Approved by Board of Directors Approved on March 10, 2014 3.1 Bid Quantity Adjustment of Bid Item 8.6 Pre-Drill	B	FBB	\$ 745,503.00	\$745,503.00	\$32,677.50	\$778,180.50	0.48%	\$164,244,120.50	0	0	0	1,278	10/28/2016
4	Approved by Exe Dir of Eng & Water Quality Approved on March 14, 2014 4.1 Installation of Five Additional Groundwater Wells and Monitoring - (CR-006) PR 21146 (4286) Task 3505 4.2 Brace Bay Modifications at the FOG Station - (CR-015) PR 21146 (4286) Task 3505 4.3 Grounding Extension at Nitrogen and Mineral Oil System (CR-025) PR 21146 (4286) Task 3510	A	IRWD	\$11,047.81	\$23,029.22	\$778,180.50	\$801,209.72	0.49%	\$164,267,149.72	0	0	0	1,278	10/28/2016
5	Approved by Exe Dir of Eng & Water Quality Approved on March 14, 2014 5.1 Unidentified Utility - Meter Shop Discharge (CR-008) PR 21146 (4286) Task 3505 5.2 Connection Beam Modifications at Solids Handling Facility (CR-014) PR 21146 (4286) Task 3235 5.3 Increased Grating Thickness at Solids Handling Facility (CR-041) PR 21146 (4286) Task 3505	B	IRWD	\$15,225.75	\$24,851.73	\$801,209.72	\$826,061.45	0.51%	\$164,292,001.45	0	0	0	1,278	10/28/2016
6	Approved by General Manager Approved on March 20, 2014 6.1 Additional Costs to Install Piles to the Design Tip (CR-033) PR 21146 (4286) Task 3505	B	FBB	\$31,815.00	\$31,815.00	\$826,061.45	\$857,876.45	0.52%	\$164,323,816.45	0	0	0	1,278	10/28/2016

A - District Convenience/Initiation - Project Related
B - Differing Site Conditions
C - Design Oversight
D - District Convenience/Initiation - Non-Project Related
E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overtime

B - 1

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Contract Amount					Contract Days				Original Completion Date:
					Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	10/28/2016
														Original Contract Amount: \$163,465,940.00
7	Approved by Exe Dir of Eng & Water Quality Approved on April 21, 2014				\$24,725.00	\$857,876.45	\$882,601.45	0.54%	\$164,348,341.45	0	0	0	1,278	10/28/2016
7.1	Meter Shop Discharge Pipe Leak Investigation and Repair (CR-013) PR 21146 (4286) Task 3505	B	IRWD	\$2,542.00						0				
7.2	Additional Reinforcement and Lifting Eyes for Removable Slabs at Solids Handling Building (CR-021) PR 21146 (4286) Task 3505	C	FBB	\$14,059.00						0				
7.3	Increased Grating Thickness at Solids Handling Facility (CR-041) PR 21146 (4286) Task 3505 Additional Conductance Probe Materials for Relay Level Switches for Various Sumps Located at the Microturbine Area PR 21146 (4286) Task 3510	C	FBB	\$8,124.00						0				
8	Approved by General Manager Approved on April 21, 2014				(\$49,990.00)	\$882,601.45	\$832,611.45	0.51%	\$164,298,551.45	0	0	0	1,278	10/28/2016
8.1	Cost Sharing for Project Partnering (CR-002) PR 21146 (4286) Task 3235	A	IRWD	(\$14,611.00)						0				
8.2	Deletion of Concrete Pad near Development Area (CR-004A) PR 21146 (4286) Task 3235	A	IRWD	(\$3,865.00)						0				
8.4	Deletion of Ground Test Device (CR-034) PR 21146 (4286) Task 3210	A	IRWD	(\$15,579.00)						0				
8.5	Deletion of Existing T-4 Switchgear Level Indicating Switch (CR-035) PR 21146 (4286) Task 3210	A	IRWD	(\$9,167.00)						0				
8.6	Change to NEMA 4X Panels and Modification to NEMA 4X Bar Graph Display (CR-046) PR 21146 (4286) Task 3210	A	IRWD	(\$4,068.00)						0				
9	Approved by Exe. Director of Eng. & Water Quality Approved on May 31, 2014				\$24,840.17	\$832,611.45	\$857,451.62	0.52%	\$164,323,391.62	0	0	0	1,278	10/28/2016
9.1	Additional Circuits for Gas Monitors and Re-route of Conduits in Solids Handling Facility (CR-028) PR 21146 (4286) Task 3510	C	FBB	\$1,187.49						0				
9.2	Cantilevered Beam Support Modifications in the Solids Handling Facility (CR-049) PR 21146 (4286) Task 3505	C	FBB	\$4,605.30						0				
9.3	Additional Ethernet Switches (CR-062) PR 21146 (4286) Task 3510	C	IRWD	\$19,047.38						0				
10	Approved by Exe. Director of Eng. & Water Quality Approved on May 31, 2014				\$21,398.99	\$857,451.62	\$878,850.61	0.54%	\$164,344,790.61	0	0	0	1,278	10/28/2016
10.1	Additional Grace Ports for Various PLCs (CR-030) PR 21146 (4286) Task 3510	C	IRWD	\$8,580.62						0				
10.2	Provide H-20 Rated Hatches at WAS Pump Station and Valve Vault (CR-061) PR 21146 (4286) Task 3505	C	IRWD	\$12,818.37						0				

A - District Convenience/Initiation - Project Related
B - Differing Site Conditions
C - Design Oversight
D - District Convenience/Initiation - Non-Project Related
E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overtime

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Contract Days				Original Completion Date:
										Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	1.278
11	Approved by Exe. Director of Eng. & Water Quality Approved on June 4, 2014				\$24,739.76	\$878,850.61	\$903,590.37	0.55%	\$164,369,530.37	#REF!	0	#REF!	#REF!	10/28/2016
11.1	Waste Activated Sludge (WAS) Pump Station Structural Modifications (CR-023) PR 21146 (4286) Task 3505	C	IRWD	\$12,905.49						0				
11.2	Removable Slab Modifications on the Second Floor of Solids Handling Building (CR-064) PR 21146 (4286) Task 3505	C	IRWD	\$11,834.27						0				
12	Approved by Board of Directors Approved on July 21, 2014				\$156,580.22	\$903,590.37	\$1,060,170.59	0.65%	\$164,526,110.59	0	0	0	1,278	10/28/2016
12.1	Final Bid Quantity Adjustment for Bid Item No. 5.2 - Undocumented Fill (suitable) - Remedial Grading - Remove and Re-compact a net increase of 8,104.7 CY from 51,700 CY to 59,804.7 CY at \$5/CY. PR 21146 (4286) Task 3505	B	N/A	\$40,523.37						0				
12.2	Final Bid Quantity Adjustment for Bid Item No. 5.5 - Undocumented Fill (not suitable) - Remedial Grading - Remove and Export Offsite, a net increase of 60 CY, from 1,800 CY to 1,860 CY at \$25 /CY. PR 21146 (4286) Task 3505	B	N/A	\$1,500.00						0				
12.3	Final Bid Quantity Adjustment for Bid Item No. 5.6 - Geotextile Fabric - Remedial Grading, a net decrease of 5,414 SF, from 181,500 SF to 176,086 SF at \$0.40/SF. PR 21146 (4286) Task 3505	B	N/A	(\$2,165.60)						0				
12.4	Final Bid Quantity Adjustment for Bid Item No. 5.6 - Geotextile Fabric - Remedial Grading, a net decrease of 5,414 SF, from 181,500 SF to 176,086 SF at \$0.40/SF. PR 21146 (4286) Task 3505	B	N/A	(\$6,523.33)						0				
12.5	Final Bid Quantity Adjustment for Bid Item No. 5.8 - Undocumented Fill - Deep Foundations - Removal, a net increase of 966 CY, from 21,650 CY to 22,616 CY at \$5.50/CY. PR 21146 (4286) Task 3505	B	N/A	\$5,313.00						0				
12.6	Final Bid Quantity Adjustment for Bid Item No. 5.9 - Alluvium - Remedial Grading - Removal and Export Offsite, a net increase of 2,076 CY, from 28,154 CY to 30,230 CY at \$35/CY. PR 21146 (4286) Task 3505	B	N/A	\$72,665.98						0				
12.7	Final Bid Quantity Adjustment for Bid Item No. 5.10 - Undocumented Fill Deep Foundations - Compaction of stockpiled materials, a net increase of 3,117 CY, from 11,400 CY to 14,517 CY at \$15/CY. PR 21146 (4286) Task 3505	B	N/A	\$46,755.00						0				
12.8	Final Bid Quantity Adjustment for Bid Item No. 5.11 - Undocumented Fill - Deep Foundations - Export excess offsite a net decrease of 2,151 CY, from 10,250 CY to 8,099 CY PR 21146 (4286) Task 3505	B	N/A	(\$30,114.00)						0				

A - District Convenience/Initiation - Project Related
B - Differing Site Conditions
C - Design Oversight
D - District Convenience/Initiation - Non-Project Related
E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overtime

B - 3

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
12.9	Final Bid Quantity Adjustment for Bid Item No. 5.12 - Geotextile Fabric - Deep Foundations, a net increase of 9,218 SF, from 51,500 SF to 60,718 SF at \$0.60/SF. PR 21146 (4286) Task 3505	B	N/A	\$5,530.80						0				
12.10	Final Bid Quantity Adjustment for Bid Item No. 5.13 - Aggregate Base - Deep Foundations, a net increase of 513.2 CY, from 2,860 CY to 3,373.2CY at \$45/CY. PR 21146 (4286) Task 3505	B	N/A	\$23,095.00						0				
13	Approved by Exe. Director of Engineering & Water Quality Approved on July 10, 2014				\$10,129.18	\$1,060,170.59	\$1,070,299.77	0.65%	\$164,536,239.77	0	0	0	1,278	10/28/2016
13.1	Modifications to Switchgear 16 (CR-070) PR 21146 (4286) Task 3510	A	FBB	\$10,129.18						0				
14	Approved by General Manager Approved on June 24, 2014				\$44,543.19	\$1,070,299.77	\$1,114,842.96	0.68%	\$164,580,782.96	0	0	0	1,278	10/28/2016
14.1	Slide Gates Clarification Regarding Actuators (CR-039) PR 21146 (4286) Task 3520	A	IRWD	\$44,543.19						0				
15	Approved by General Manager Approval on July 31, 2014				\$45,214.40	\$1,114,842.96	\$1,160,057.36	0.71%	\$164,625,997.36	0	0	0	1,278	10/28/2016
15.1	Provide Masonry Shelf Angle at Digester Control Building (CR-031) PR 21146 (4286) Task 3505	C	FBB	\$27,543.19						0				
15.2	Beam Size Increase for Monorail Runway in Solids Handling Building - (CR-074) PR 21146 (4286) Task 3505	C	FBB	\$1,200.47						0				
15.3	Upsize Odor Control Circulation Pump Motor Disconnects (CR-082) PR 21146 (4286) Task 3510	B	FBB	\$1,184.83						0				
15.4	Additional Deck Support for the Solids Handling Building Roof (CR-044) PR 21146 (4286) Task 3505	C	FBB	\$15,285.91						0				
16	Approved by E&O Committee Approved on August 19, 2014				\$62,037.10	\$1,160,057.36	\$1,222,094.46	0.75%	\$164,688,034.46	0	0	0	1,278	10/28/2016
16.1	Installation of Level 3 Diesel Particulate Filter (DPF) on the Standby Generator - (CR-073) PR 21146 (4286) Task 3520	B	IRWD	\$62,037.10						0				
17	Approved by Board of Directors Approved on August 25, 2014				(\$106,241.99)	\$1,222,094.46	\$1,115,852.47	0.68%	\$164,581,792.47	0	0	0	1,278	10/28/2016
17.1	Modifications to Switchgear 16 (CR-070A) PR 21146 (4286) Task 3510	A	FBB	(\$106,241.99)						0				
18	Approved by Board of Directors Approved on August 25, 2014				\$108,087.55	\$1,115,852.47	\$1,223,940.02	0.75%	\$164,689,880.02	0	0	0	1,278	10/28/2016
18.1	Stormwater Drainage System Modification (CR-017) PR 21146 (4286)	A	IRWD	\$108,087.55						0				

A - District Convenience/Initiation - Project Related
B - Differing Site Conditions
C - Design Oversight
D - District Convenience/Initiation - Non-Project Related
E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overruns

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum Total C.O. days	Revised Total Contract Days	Revised Completion Date
19	Approved by Executive Director of Engineering & Water Quality Approved on September 30, 2014				\$72,572.86	\$1,223,940.02	\$1,296,512.88	0.79%	\$164,762,452.88	0	0	0	1,278	10/28/2016
19.1	Modification to Switchgear 16 (CR-070B) PR 21146 (4286) Task 3510	A	IRWD	\$1,125.75						0				
19.2	Alluvium Removal Due to 36-inch Storm Drain Installation (CR-085) PR 21146 (4286) Task 3520	B	N/A	\$14,140.00						0				
19.3	Additional Structural Support for Fats, Oils, and Grease (FOG) Grinders (CR-081) PR 21146 (4286) Task 3505	C	FBB	\$8,323.99						0				
19.4	Portable Lift Truck for 480V ABB Breakers (CR-108) PR 21146 (4286) Task 3510	A	IRWD	\$2,625.12						0				
19.5	Retaining Wall North and West of Biosolids Site (CR-010) PR 21146 (4286) Task 3505	B	IRWD	\$46,358.00						0				
20	Approved by Executive Director of Engineering & Water Quality Approved on November 19, 2014				\$54,485.63	\$1,296,512.88	\$1,350,998.51	0.83%	\$164,816,938.51	0	0	0	1,278	10/28/2016
20.1	Nitrogen Slab Modifications (CR-052) PR 21146 (4286) Task 3505	A	IRWD	\$24,855.80						0				
20.2	Additional Conduits and Circuits for the Access Control Systems for the Solids Handling Building and the Digester Control Building (CR-082) PR 21146	A	IRWD	\$3,412.13						0				
20.3	Digital Power Meters Change for SWGR-14 and SWGR-15 (CR-109) PR 21146 (4286) Task 3510	A	IRWD	\$3,863.22						0				
20.4	Truck Unloading Panel Modifications (CR-115) PR 21146 (4286) Task 3510	A	IRWD	\$12,843.50						0				
20.5	Switchgear SWGR-14 Modifications (CR-116) PR 21146 (4286) Task 3510	A	IRWD	\$9,510.98						0				
21	Approved by General Manager Approved on January 30, 2015				\$ 98,506.19	\$1,350,998.51	\$1,449,504.70	0.89%	\$164,915,444.70	0	0	0	1,278	10/28/2016
21.1	Additional Anchorage for Methane Digesters (CR-051A) PR 21146 (4286) Task 3520	B	FBB	\$92,367.44						0				
21.2	Additional Input/Outputs Review of Master I/O List (CR-136) PR 21146 (4286) Task 3510	C	FBB	\$6,138.75						0				

A - District Convenience/Initiation - Project Related
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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
22	Approved by Board of Directors Approved on February 9, 2015				\$964,324.51	\$1,449,504.70	\$2,413,829.21	1.48%	\$165,879,769.21	0	0	0	1,278	10/28/2016
22.1	Electrical Conduit Overfill (CR-055) PR 21146 (4286) Task 3510	C	FBB	\$485,250.28						0				
22.2	Heat Dryer Equipment Escalation Costs (CR-057) PR 21146 (4286) Task 3520	B	FBB	\$333,477.50						0				
22.3	Glass-lining Sludge Density Meters (CR-067) PR 21146 (4286) Task 3510	A	IRWD	\$71,010.74						0				
22.4	Switchgear-16 Enclosure (CR-040) PR 21146 (4286) Task 3510	C	FBB	\$56,882.30						0				
22.5	Propane Gas Tank Foundation Demolition (CR-084) PR 21146 (4286) Task 3505	C	IRWD	\$2,004.98						0				
22.6	Credit for travel costs related to inspection of centrifuges in Germany (CR-091) PR 21146 (4286) Task 3520	A	IRWD	(\$5,573.42)						0				
22.7	Deletion of MMC Switchgear-14 Breaker (CR-092) PR 21146 (4286) Task 3510	A	IRWD	(\$5,032.00)						0				
22.8	Increase of Fiber Optic Conduit Size (CR-097) PR 21146 (4286) Task 3510	C	IRWD	\$23,269.61						0				
22.9	Overtime to perform work in the Solids Handling electrical room (CR-103) PR 21146 (4286) Task 3510	A	IRWD	\$1,384.47						0				
22.10	Credit for modification to the Uninterruptible Power System (CR-118) PR 21146 (4286) Task 3510	A	IRWD	(\$9,771.72)						0				
22.11	Addition of Low Voltage Compartment in SCE Switch "C" (CR-160) PR 21146 (4286) Task 3510	A	IRWD	\$2,156.20						0				
22.12	Addition of input/output points relating to sump pumps located at the Solids Handling Building (CR-161) PR 21146 (4286) Task 3510	A	FBB	\$9,265.57						0				

- A - District Convenience/Initiation - Project Related
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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

Change Order	Description	Category	IRWD or FBB	Contract Amount						Contract Days				Original Completion Date:
				Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	10/28/2016
														Original Contract Amount: \$163,465,940.00
23	Approved by General Manager Approved on February 26, 2015				\$97,005.10	\$2,413,829.21	\$2,510,834.31	1.54%	\$165,976,774.31	0	0	0	1,278	10/28/2016
23.1	Additional Steel Reinforcement the Pellet Storage Silos Anchor Bolts (CR-094) PR 21146 (4286) Task 3505	B	FBB	\$5,514.57						0				
23.2	Differential Pressure Transmitter (CR-094) PR 21146 (4286) Task 3510	A	IRWD	\$2,535.33						0				
23.3	Additional Aluminum Trench Grating in Digester Control Building (CR-107) PR 21146 (4286) Task 3520	A	IRWD	\$7,552.11						0				
23.4	Light Weight Concrete for Electrical Conduits Underneath the Solids Handling Building Electrical Room (CR-113) PR 21146 (4286) Task 3510	A	IRWD	\$30,535.94						0				
23.5	Adding Energyjets Weir Plates to Dewatering Centrifuges – (CR-124) PR 21146 (4286) Task 3520	A	IRWD	\$11,139.25						0				
23.6	Provide Angle Supports for the Removable Slabs at the Solids Handling Building – (CR-137) PR 21146 (4286) Task 3520	A	IRWD	\$20,671.61						0				
23.7	Structural Modification at Solids Handling Building – (CR-140) PR 21146 (4286) Task 3520	C	FBB	\$1,109.42						0				
23.8	Increase of Fiber Optic Conduit Size (CR-097) PR 21146 (4286) Task 3510	A	IRWD	\$5,516.45						0				
23.9	Steel Joist Framing Modifications at Digester Control Building (CR-151) PR 21146 (4286) Task 3505	C	FBB	\$2,286.29						0				
23.10	WAS Valve Vault and Piping Modifications (CR-100) PR 21146 (4286) Task 3520	A	IRWD	\$10,144.13						0				
24	Approved by General Manager Approved on March 6, 2015				\$99,122.95	\$2,510,834.31	\$2,609,957.26	1.60%	\$166,075,897.26	0	0	0	1,278	10/28/2016
24.1	Coating of WAS/Primary Sludge Pump Stations & Sludge Wetwells per RFI-0612A (CR-127) PR 21146 (4286) Task 3505	A	FBB	\$99,122.95						0				
25	Approved by Board of Directors Approved on March 23, 2015				\$280,575.97	\$2,609,957.26	\$2,890,533.23	1.77%	\$166,356,473.23	0	0	0	1,278	10/28/2016
25.1	Lightning Protection for the Methane Digesters (CR-121) PR 21146 (4286) Task 3505	C	FBB	\$158,259.68						0				
25.2	Deflagration Quench Tubes outside of the Dryer Room (CR-143) PR 21146 (4286) Task 3505	B	FBB	\$122,316.29						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
26	Approved by Exe. Dir. Of Engineering & Water Quality Approved on April 14, 2015				\$74,815.79	\$2,890,533.23	\$2,965,349.02	1.81%	\$166,431,289.02	0	0	0	1,278	10/28/2016
26.1	UPS and Power Fail Alarms per RFI 357 (CR-056) PR 21146 (4286) Task 3510	C	FBB	\$3,646.82						0				
26.2	I/O Points for Methane Digester Sump Pumps per RFI-356 (CR-077) PR 21146 (4286) Task 3510	C	FBB	\$6,489.00						0				
26.3	Loss of Power Alarms to the SCADA Network per RFI-0393B (CR-093) PR	A	FBB	\$20,297.16						0				
26.4	FOG Flushing and Rock Trap Modifications per RFI-0534 (CR-101) PR 21146	A	IRWD	\$18,093.61						0				
26.5	Install Grounding Pig Tails in Solids Handling Building Area Electrical Room per RFI 0594 (CR-105) PR 21146 (4286) Task 3510	A	IRWD	\$1,593.10						0				
26.6	Additional Pushbuttons, Light and Relays for the FOG Receiving Control Panel (CR-114) PR 21146 (4286) Task 3510	A	IRWD	\$6,892.40						0				
26.7	Changes to the HMI Enclosures at the Sludge Receiving Area (CR-133) PR 21146 (4286) Task 3510	A	IRWD	\$7,114.17						0				
26.8	Provide Storage Shelf for Keyboard and Mouse to the HMI Enclosures at the Sludge Receiving Area (CR-135) PR 21146 (4286) Task 3510	A	IRWD	\$1,163.26						0				
26.9	Dewatering Feed Pump Station Guardrail Additions (CR-142) PR 21146 (4286) Task 3520	C	FBB	\$4,204.00						0				
26.10	Additional I/O Points for PLC-4300 (CR-156) PR 21146 (4286) Task 3510	C	FBB	\$3,035.28						0				
26.11	Shoring Revision to Roof Slab of Dewatering Feed Pump Station (CR-189) PR 21146 (4286) Task 3510	B	FBB	\$1,286.99						0				
26.12	Coating of the Sludge Receiving Bins (CR-199) PR 21146 (4286) Task 3520	A	FBB	\$1,000.00						0				
27	Approved by Board of Directors Approved on April 27, 2015				\$107,253.26	\$2,965,349.02	\$3,072,602.28	1.88%	\$166,538,542.28	0	0	0	1,278	10/28/2016
27.1	Modifications to Human-Machine Interface (HMI) for the Microturbine Area (CR-078) PR 21146 (4286) Task 3510	A	IRWD	\$29,744.43						0				
27.2	Modifications to the Piping and Automation Features at Fats, Oils, and Grease (FOG) Facility (CR-129) PR 21146 (4286) Task 3510	A	IRWD	\$35,771.81						0				
27.3	Structural Support to the Monorail at the Dewatering Feed Pump Station (CR-152) PR 21146 (4286) Task 3505	C	FBB	\$13,697.51						0				
27.4	Two Additional Magnetic Flowmeters at Polymer Feed System (CR-158) PR 21146 (4286) Task 3510	A	IRWD	\$9,522.81						0				
27.5	Modifications to PLCs at Sludge Receiving Area (CR-180) PR 21146 (4286) Task 3510	A	IRWD	\$18,516.70						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
28	Approved by Exe. Dir. Of Eng. & Water Quality Approved on May 15, 2015				\$74,550.35	\$3,072,602.28	\$3,147,152.63	1.93%	\$166,613,092.63	0	0	0	1,278	10/28/2016
28.1	Decanter Control Panel Modifications (CR-215) Task 3520	C	FBB	\$22,451.01						0				
28.2	Additional Structural Support in the Solids Handling Building (CR-075) Task 3505	C	FBB	\$12,028.44						0				
28.3	Additional Sump Pump Drain Line in the Bulk Polymer Storage Area (CR-119) Task 3520	C	FBB	\$1,433.86						0				
28.4	Install Three 5-inch conduits on Southwest Side of the Biosolids Site (CR-120) Task 3510	C	FBB	\$16,033.58						0				
28.5	Provide Power to Several Instruments Located at the Solids Handling Building and Digester Control Building (CR-154) Task 3520	C	FBB	\$3,454.91						0				
28.6	Install Foam Separator Drain at Digester Control Building (CR-167) Task 3520	C	FBB	\$11,013.75						0				
28.7	Install Support for 14-inch Plug Valve at Centrate Treatment Wetwell (CR-197) Task 3520	C	FBB	\$1,715.20						0				
28.8	Trench Modifications at the Sludge Cake Load-Out Area of the Solids Handling Building (CR-123) Task 3505	C	FBB	\$6,419.60						0				
29	Approved by Board of Directors Approved on June 22, 2015				\$225,971.77	\$3,147,152.63	\$3,373,124.40	2.06%	\$166,839,064.40	0	0	0	1,278	10/28/2016
29.1	Foul Air Pipe Supports in the Solids Handling Building Basement (CR-106) PR 21146 (4286) Task 3520	C	FBB	\$119,937.87						0				
29.2	Secondary Circuit Breaker for Transformer T-14 (CR-185) PR 21146 (4286) Task 3510	A	IRWD	\$106,033.90						0				

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E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overtime

B - 9

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
30	Approved by Board of Directors Approved on July 27, 2015				(\$47,976.59)	\$3,373,124.40	\$3,325,147.81	2.03%	\$166,791,087.81	0	0	0	1,278	10/28/2016
30.1	Credit for Changing Storm Drain line from Ductile Iron to PVC (CR-042) PR 21146 (4286) Task 3520	A	IRWD	(\$1,890.92)						0				
30.2	Installation of Additional Digester Anchorage (CR-051B) PR21146 (4286) Task 3505	B	FBB	\$118,335.54						0				
30.3	Huber Screens I/O Modifications per RFI-0391 and RFI-0525A (CR-068) PR 21146 (4286) Task 3510	A	IRWD	\$12,579.20						0				
30.4	Credit for FBB's Portion of Partnering (CR-090) PR 21146 (4286) Task Deletion of Waterstops at Methane Digester Complex (CR-102) PR 21146 (4286) Task 3505	E A	FBB IRWD	(\$81,948.33) (\$2,505.79)						0 0				
30.5	Deletion of Bid Item No. 18.4 - Computers and Networking Hardware for the Control System (CR-138) PR 21146 (4286) Task 3510	A	IRWD	(\$200,000.00)						0				
30.6	Electrical and Gas Modifications (CR-146) PR 21146 (4286) Task 3510	C	IRWD	\$363,978.41						0				
30.7	Credit for Changing Heat Dryer Wet Material Mixer from A24 Steel to A36 Steel (CR-157) PR 21146 (4286) Task 3520	E	FBB	(\$2,392.66)						0				
30.8	Credit for Travel Cost of On-Site Inspection for Acid Phase Digester (CR-175) PR 21146 (4286) Task 3520	B	IRWD	(\$683.39)						0				
30.9	Heat Dryer I/O Modifications per RFI-0626 (CR-179) PR 21146 (4286) Task 3510	A	IRWD	\$11,191.41						0				
30.10	Decant Trough I/O Modifications per RFI-0979 (CR-202) PR 21146 (4286) Task 3510	A	IRWD	\$9,960.55						0				
30.11	Deletion of Interior Coating of Methane Digesters (CR-188) PR 21146 (4286) Task 3520	A	IRWD	(\$398,571.00)						0				
30.12	Piping Modifications and Addition of Carbon Canisters (CR-218) PR 21146 (4286) Task 3520	A	IRWD	\$88,076.01						0				
30.13	Pickling and Passivation of Sludge Mixers (CR-248) PR 21146 (4286) Task 3520	C	IRWD	\$73,997.23						0				
30.14	IRWD Costs Associated to Repairing the Pile and Installing Couplers (CR-139) PR 21146 (4286) Task 3505	E	FBB	(\$38,102.85)						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C. O. days	Revised Total Contract Days	Revised Completion Date
31	Approved by Exe. Dir. Of Eng. & Water Quality Approved on July 28, 2015				\$74,999.74	\$3,325,147.81	\$3,400,147.55	2.08%	\$166,866,087.55	0	0	0	1,278	10/28/2016
31.1	Provide Circuit and Breaker for Standby Generator in the Microturbine Area (CR-170) PR 21146 (4286) Task 3510	C	FBB	\$4,296.86						0				
31.2	Additional Pipe Support for 14-inch Air Line at the Centrate Facility (CR-226) PR 21146 (4286) Task 3520	C	FBB	\$893.78						0				
31.3	Addition of E-stops (CR-128) PR 21146 (4286) Task 3510	A	FBB	\$57,916.71						0				
31.4	Structural Support of Jib Crane at Dewatering Feed Pump Station Stairwell (CR-243) PR 21146 (4286) Task 3520	C	FBB	\$11,892.39						0				
32	Approved by Exe. Dir. Of Eng. & Water Quality Approved on August 31, 2015				\$74,682.96	\$3,400,147.55	\$3,474,830.51	2.13%	\$166,940,770.51	0	0	0	1,278	10/28/2016
32.1	Additional Conduits and Circuits for Fire Alarm in the Solids Handling Building	A	IRWD	\$21,637.57						0				
32.2	Additional Davit Bases at Centrate Treatment Facility (CR-111) PR 21146 (4286) Task 3520	A	IRWD	\$1,809.77						0				
32.3	Additional Fire Alarm Panel in Digester Control Building (CR-169) PR 21146 (4286) Task 3510	A	IRWD	\$25,153.79						0				
32.4	Modifications to FOG Sump Pumps Controls (CR-177) PR 21146 (4286) Task 3510	A	IRWD	\$5,690.83						0				
32.5	Additional Truck Load-out Conveyor Input and Output (CR-201) PR 21146 (4286) Task 3510	A	IRWD	\$2,220.12						0				
32.6	Additional Spare Conduits in the Microturbine Area (CR-229) PR 21146 (4286) Task 3510	A	FBB	\$14,602.41						0				
32.7	Conduits for Electrical Disconnect Switch for Roll-Up Doors of the Digester Control Building (CR-230) PR 21146 (4286) Task 3510	A	IRWD	\$3,568.47						0				
33	Approved by Executive Director of Engineering & Water Quality Approved on September 30, 2015				\$58,247.75	\$3,474,830.51	\$3,533,078.26	2.16%	\$166,999,018.26	0	0	0	-	1/0/1900
33.1	Realignment of 8-inch Reclaimed Water Line at Gate 2 (CR-225) PR 21146 (4286) Task 3520	B	FBB	\$24,017.48						0				
33.2	Additional Conduits and Wires for Lighting Circuits to Minimize Voltage Drop (CR-228) PR 21146 (4286) Task 3510	C	IRWD	\$32,399.41						0				
33.3	Cable and Conduit Changes at Solids Handling Building and Dewatering Feed Pump Station (CR-231) PR 21146 (4286) Task 3510	C	IRWD	\$1,830.86						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
34	Approved by Board of Directors Approved on October 26, 2015				\$164,775.28	\$3,533,078.26	\$3,697,853.54	2.26%	\$167,163,793.54	0	0	0	1,278	10/28/2016
34.1	Credit for Third Submittal Review Through 05/31/2015 (CR-088) PR 21146 (4286) Task 1065	B	IRWD	(\$39,502.50)						0				
34.2	Credit for Overtime Inspection Hours Through 05/31/2015 (CR-089) PR 21146 (4286) Task 3520	F	FBB	(\$80,850.00)						0				
34.3	Credit for Special Inspections for Structural Anchors and Geotechnical Investigation (CR-295) PR 21146 (4286) Task 1065	A	IRWD	(\$27,500.00)						0				
34.4	Change in Knife Gate Valve Manufacturer (CR-187) PR 21146 (4286) Task 3520	E	FBB	\$275,954.90						0				
34.5	Credit for Changes in Low Voltage SWGR-14 Circuit Breaker (CR-163) PR 21146 (4286) Task 3510	A	IRWD	(\$1,978.00)						0				
34.6	Change to Addressable Smoke Detectors (CR-220) PR 21146 (4286) Task 3510	B	IRWD	\$38,650.88						0				
35	Approved by General Manager Approved on November 25, 2015				\$97,980.57	\$3,697,853.54	\$3,795,834.11	2.32%	\$167,261,774.11	0	0	0	1,278	10/28/2016
35.1	Change in Naming Convention for Storm Water Pump Station (Area 1500) SCADA Programming (CR-181) PR 21146 (4286) Task 3510	E	FBB	\$9,027.03						0				
35.2	Valve Status Override Functionality (CR-182) PR 21146 (4286) Task 3510	E	FBB	\$38,999.08						0				
35.3	Control Changes for Primary Sludge and Waste Activated Pump Stations (Area 1900) SCADA Programming (CR-184) PR 21146 (4286) Task 3510	A	IRWD	\$36,772.78						0				
35.4	Motor Protection Relay (CR-239) PR 21146 (4286) Task 3510	A	IRWD	\$13,181.68						0				
36	Approved by General Manager Approved on December 3, 2015				\$86,007.50	\$3,795,834.11	\$3,881,841.61	2.37%	\$167,347,781.61	0	0	0	1,278	10/28/2016
36.1	Light Weight Concrete for Underslab Conduits at Microturbine Area (CR-253) PR 21146 (4286) Task 3510	A	FBB	\$21,117.50						0				
36.2	Outstanding CB&I Items (CR-099A) PR 21146 (4286) Task 3520 – This change order includes: CR-098 (Guard Rail at Biogas Storage Tank); CR-099 (Tube Steel Supports); additional Off-Site Storage Costs; and credit for Use of SS 308 in Lieu of SS 316L Welds.	B	FBB	\$64,890.00						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

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				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
37	Approved by Exe. Director of Engineering and Water Quality Approved on January 21, 2016				\$47,446.49	\$3,881,841.61	\$3,929,288.10	2.40%	\$167,395,228.10	0	0	0	1,278	10/28/2016
37.1	Additional Pressure Relief Valves in the Digester Control Building Slab (CR-112) PR 21146 (4286) Task 3520	C	IRWD	\$1,065.72						0				
37.2	Change Feeder Circuit Breaker Size in MCC-4102 (CR-165) PR 21146 (4286) Task 3510	C	IRWD	\$4,157.60						0				
37.3	Change Feeder Circuit Breaker Size for the Primary Sludge Pump Variable Frequency Drive (CR-233) PR 21146 (4286) Task 3510	C	IRWD	\$2,430.59						0				
37.4	SCADA Programming Changes Due to Change to Schweitzer Power Quality	A	FBB	\$16,814.00						0				
37.5	Additional Labeling of Parallel Conduits and Cables (CR-262) PR 21146 (4286) Task 3510	A	IRWD	\$8,410.00						0				
37.6	Change in Sludge Receiving Entrance Beacon Operation (CR-263) PR 21146 (4286) Task 3510	A	IRWD	\$5,382.19						0				
37.7	Anodize Aluminum Light Fixture Stanchions/Sun Shades (CR-283) PR 21146 (4286) Task 3510	A	IRWD	\$5,911.61						0				
37.8	Hot Tap 8-Inch ACP Potable Water Line (CR-311) PR 21146 (4286) Task 3520	A	FBB	\$3,274.78						0				

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**MWRP Biosolids and Energy Recovery Facilities
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Construction Change Order Summary**

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				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
38	Approved by General Manager Approved on February 29, 2016				\$83,345.07	\$3,929,288.10	\$4,012,633.17	2.45%	\$167,478,573.17	0	0	0	1,278	10/28/2016
38.1	Software Control Block Revision for Area 4300 – Dewatering (CR-211) PR 4286 Task 3510	C	FBB	\$18,908.76						0				
38.2	Revised Master List of SCADA Templates (CR-247) PR 4286 Task 3510	C	FBB	\$47,274.54						0				
38.3	Additional Overflow Alarms at Sludge Holding Tanks (CR-280) PR 4286 Task 3510	A	IRWD	\$9,654.54						0				
38.4	Leak Detection at Sulfuric Acid Facility (CR-290) PR 21146 (4286) Task 3510	A	IRWD	\$5,499.97						0				
38.5	Insulation for Acid Phase Gas Piping (CR-218A) PR 21146 (4286) Task 3520	A	IRWD	\$2,007.26						0				
39	Approved by General Manager Approved on March 7, 2016				\$98,006.46	\$4,012,633.17	\$4,110,639.63	2.51%	\$167,576,579.63	0	0	0	1,278	10/28/2016
39.1	SCE Installation - Final Accounting of Work Items Between Negotiated Change Order and Actual Work (CR-146E) PR 4286 Task 3510	B	FBB	\$7,809.51						0				
39.2	Installation of Southern California Gas (SCG) Boxes (CR-146F) PR 4286 Task 3510	A	FBB	\$3,479.81						0				
39.3	Schweitzer SEL-735 Power Monitors for Centrifuge Panels (CR-207) PR 4286 Task 3510	A	IRWD	\$34,274.40						0				
39.4	Hirschmann Ethernet Switches for Centrifuge Panels (CR-208) PR 4286 Task 3510	A	IRWD	\$9,569.15						0				
39.5	Addition of Sample Pump Variable Frequency Drives for Thickening Centrifuges (CR-237) PR 4286 Task 3520	E	IRWD	\$24,496.55						0				
39.6	Upgrade of Exit Signs and Ceiling Lights in the Gas Room of the Digester Control Building to NEC Class 1 Division 1 (CR-313) PR 4286 Task 352	A	IRWD	\$18,377.04						0				
40	Approved by General Manager Approved on April 20, 2016				\$97,287.05	\$4,110,639.63	\$4,207,926.68	2.57%	\$167,673,866.68	0	0	0	1,278	10/28/2016
40.1	Brace Plates in Solids Handling Building (CR-069) PR 4286 Task 3505	C	FBB	\$40,216.76						0				
40.2	Relocation of RIO-50 Panel (CR-186) PR 4286 Task 3510	B	FBB	\$4,818.64						0				
40.3	Addition of Two Doors at the bases of the stairways at Methane Digesters Nos. 1 and No. 2 (CR-232) PR 4286 Task 3505	C	FBB	\$52,251.65						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filane/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C. O. days	Revised Total Contract Days	Revised Completion Date
41	Approved By Board of Directors Approved on May 23, 2016				\$1,103,650.56	\$4,207,926.68	\$5,311,577.24	3.25%	\$168,777,517.24	0	0	0	1,278	10/28/2016
41.1	Additional SCE and SCG Modifications (CR-146A) PR 4286 Task 3510	B	FBB	\$51,238.69						0				
41.2	Additional Potholing Due to SCE and SCG Realignment (CR-146B) PR 4286 Task 3510	B	FBB	\$36,706.57						0				
41.3	Additional Cameras at the Unloading/Loading Area of the Solids Handling Facility (CR-164) PR 4286 Task 3505	A	IRWD	\$61,731.96						0				
41.4	Fire Sprinkler System Modifications – Mechanical (CR-174) PR 4286 Task 3520	B	IRWD	\$154,592.08						0				
41.5	Fire Sprinkler System Modifications – Electrical (CR-166) PR 4286 Task 3510	B	IRWD	\$13,730.06						0				
41.6	Fiber Optic System Modifications (CR-172/CR-306/CR-314) PR 4286 Task 3510	A	IRWD	\$178,879.46						0				
41.7	T-15, T-16, and T-17 Secondary Breakers (CR-185A, CR-185B, and CR-185C) PR 4286 Task 3510	A	IRWD	\$254,941.66						0				
41.8	Cable and Conduit Changes at the Sludge Receiving Area of the Solids Handling Building (CR-203) PR 4286 Task 3510	C	FBB	\$14,338.94						0				
41.9	Concrete Surface Treatment (CR-222) PR 4286 Task 3505	A	IRWD	\$68,714.34						0				
41.1	Heating Water Boiler Control Modifications (CR-246) PR 4286 Task 3510	A	IRWD	\$71,379.00						0				
41.11	SCADA Control Modifications for the Acid Phase Digesters, Methane Digesters, and Sludge Holding Tank (CR-252) PR 4286 Task 3510	A	IRWD	\$50,540.23						0				
41.12	Ambient Gas Analyzer Wiring Modification (CR-264) PR 4286 Task 3510	B	IRWD	\$19,734.51						0				
41.13	Disconnect Switches for Flow Valves in the Solids Handling Building (CR-272) PR 4286 Task 3510	C	IRWD	\$25,550.26						0				
41.14	Centrifuge Pedestal Modifications (CR-301) PR 4286 Task 3505	C	IRWD	\$30,603.14						0				
41.15	SCADA, Instrumentation, and Electrical Modifications (CR-287, CR-294, and CR-322) PR 4286 Task 3510	A	IRWD	\$70,969.66						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
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Contractor: Filanc/Balfour-Beatty
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Change Order	Description	Category	IRWD or FBB	Contract Amount						Contract Days				Original Completion Date:
				Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C. O. days	Revised Total Contract Days	10/28/2016
														Original Contract Amount: \$163,465,940.00
42	Approved By Board of Directors Approved on May 23, 2016				(\$199,771.09)	\$5,311,577.24	\$5,111,806.15	3.13%	\$168,577,746.15	0	0	0	1,278	10/28/2016
42.1	Value Engineering of Chemical Pump Systems (CR-054) PR 4286 Task 3520	E	FBB		(\$48,549.90)					0				
42.2	Change in Lightning Protection Installation for Egg-Shaped Digesters (CR-121A) PR 4286 Task 3510	E	FBB		(\$97,141.74)					0				
42.3	Deletion of Seal Water Stations and Seal Water Piping (CR-214) PR 4286 Task 3520	A	IRWD		(\$10,557.28)					0				
42.4	Deletion of Low Pressure Switches for Centrate Pumps (CR-257) PR 4286 Task 3510	A	IRWD		(\$1,748.17)					0				
42.5	Centrifuge Seismic Restraint Design Costs (CR-345) PR 4286 Task 1065	A	IRWD		(\$24,064.00)					0				
42.6	Credit for Overtime Inspection Hours From 6/1/2015 to Through 12/31/2015 (CR-089B) PR 4286 Task 1065	F	FBB		(\$17,710.00)					0				
43	Approved by Exe. Director of Engineering and Water Quality Approved on May 31, 2016					\$74,731.69	\$5,111,806.15	3.17%	\$168,652,477.84	0	0	0	1,278	10/28/2016
43.1	Combustible Gas Detection System (CR-234) PR 21146 (4286) Task 3510	E	FBB		\$18,843.39					0				
43.2	Additional Wires and Cables Between MCC-4102 and PLC-4000 (CR-278) PR 21146 (4286) Task 3510	C	FBB		\$1,775.13					0				
43.3	SCADA Programming Modifications (CR-282) PR 21146 (4286) Task 3510	E	FBB		\$49,679.02					0				
43.4	Change of Waste Gas Burner Feeder Circuit Breaker (CR-344) PR 21146 (4286) Task 3510	B	FBB		\$4,434.15					0				
44	Approved by Exe. Director of Engineering and Water Quality Approved on June 29, 2016					\$74,912.99	\$5,186,537.84	3.22%	\$168,727,390.83	0	0	0	1,278	10/28/2016
44.1	Electrical and Telephonic Modifications for Elevators for Solids Handling Building and Digester Control Building (CR-037A) PR 4286 Task 3510	C	FBB		\$38,882.06					0				
44.2	Odor Control Recirculation Pump Selector Switch SCADA Modifications (CR-343) PR 4286 Task 3510	A	IRWD		\$9,294.71					0				
44.3	SCADA Valve Matrix Tables Animation Clarification for Milestone 1 (CR-353) PR 4286 Task 3510	A	IRWD		\$9,195.86					0				
44.4	PLC Status Object Update (CR-234) PR 4286 Task 3510	B	FBB		\$4,783.14					0				
44.5	Elevator Safety Beam in the Digester Control Building (CR-302) PR 4286 Task 3505	C	FBB		\$3,830.95					0				
44.6	Masonry Changes to the North Retaining Wall (CR-365) PR 4286 Task 3505	B	IRWD		\$8,926.27					0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

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Design Engineer: Black & Veatch

Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Contract Days				Original Completion Date:
										Change Order Days	Previous Change Orders	Cum Total C.O. days	Revised Total Contract Days	10/28/2016
45	Approved by Board of Directors Approved on July 25, 2016/December 20, 2016 Recovery Plan PR 4286 Task 3510	B	FBB	\$9,250,000.00	\$9,250,000.00	\$5,261,450.83	\$14,511,450.83	8.88%	\$177,977,390.83	368	0	368	1,646	10/31/2017
46	Approved by General Manager Approved on January 27, 2017				\$94,696.76	\$14,511,450.83	\$14,606,147.59	8.94%	\$178,072,087.59	0	368	368	1,646	10/31/2017
46.1	Additional Masonry Anchor in the Solids Handling Building (CR-200) PR 4286	C	IRWD	\$1,457.22						0				
46.2	Additional Auto Dialer (CR-234A) PR 4286 Task 3510	A	IRWD	\$6,081.90						0				
46.3	Grating and Handrail Modifications at Bulk Polymer Storage Platform (CR-300) PR 4286 Task 3505	A	IRWD	\$5,568.83						0				
46.4	SCADA IP Address Update (CR-309) PR 4286 Task 3510	A	IRWD	\$1,227.96						0				
46.5	Masonry Modifications at Solids Handling Building Stairwell (CR-324) PR 4286 Task 3505	C	FBB	\$5,939.45						0				
46.6	Change in Valve Operator at the Centrate Treatment Facility (CR-329) PR 4286 Task 3520	A	IRWD	\$4,824.29						0				
46.7	Boot Wash Landing Addition (CR-349) PR 4286 Task 3505	C	FBB	\$1,834.60						0				
46.8	Updating Valve Analog SCADA Template (CR-354) PR 4286 Task 3510	A	IRWD	\$692.72						0				
46.9	Additional Light Fixtures and Lamps (CR-355A) PR 4286 Task 3510	A	IRWD	\$8,508.46						0				
46.10	Addition of Rebate Angle in the FOG Unloading Sump Area (CR-363) PR 4286 Task 3505	A	IRWD	\$763.62						0				
46.11	MCC-4103 Hot Water Circulation Pump Breakers Change (CR-366) PR 4286 Task 3510	B	IRWD	\$2,316.03						0				
46.12	MCC-4100/4101 Cake Transfer Pump Breakers Change (CR-370) PR 4286 Task 3510	B	IRWD	\$23,720.61						0				
46.13	MCC-4102 Breaker Change (CR-374) PR 4286 Task 3510	B	IRWD	\$2,316.03						0				
46.14	SCADA Programming Modifications During Benchtest No.1 for Areas 1900 and 2000 (CR-376) PR 4286 Task 3510	A	IRWD	\$24,092.32						0				
46.15	Additional Light Fixture Above Door in Digester Control Building Gas Room (CR-399) PR 4286 Task 3510	A	IRWD	\$1,478.19						0				
46.16	Change in Size of Disconnect Switches for Digested Sludge Mixers (CR-408) PR 4286 Task 3510	B	FBB	\$1,290.10						0				
46.17	Additional Thickening Feed Grinder Control Panel Circuits (CR-438) PR 4286 Task 3510	B	IRWD	\$1,286.63						0				
46.18	Thickness and Glazing Change for Windows (CR-438) PR 4286 Task 3510	C	IRWD	\$1,297.80						0				

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**MWRP Biosolids and Energy Recovery Facilities
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				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
47	Approved by General Manager Approved on February 28, 2017				\$96,414.36	\$14,606,147.59	\$14,702,561.95	8.99%	\$178,168,501.95	0	368	368	1,646	10/31/2017
47.1	Relocation of Neutralization Tank Drainage Piping PR 4286 Task 3520	B	FBB	\$2,312.08						0				
47.2	Modifications to Digester Control Building Door and Piping Due to Heating Water Expansion Tank Pad Adjustment (CR-221) PR 4286 Task 3505	C	FBB	\$5,500.74						0				
47.3	PLC-3100 Changes (CR-284) PR 4286 Task 3510	C	FBB	\$1,070.38						0				
47.4	Additional Angle Support to Acid Phase Digester Bridges (CR-298) PR 4286 Task 3505	C	FBB	\$4,986.21						0				
47.5	Additional Potable Water Gate Valves (CR-332) PR 4286 Task 3520	A	IRWD	\$3,892.44						0				
47.6	T-4 Kirk Key Interlock Installation (CR-335) PR 4286 Task 3510	B	IRWD	\$6,924.69						0				
47.7	Solids Handling Building Dumpster Room Channel Frames Modifications (CR-338) PR 4286 Task 3505	C	FBB	\$5,093.87						0				
47.8	PCS Server Configuration Clarification (CR-352) PR 4286 Task 3510	A	IRWD	\$6,824.35						0				
47.9	Additional Anchorage Support for Ledgers of the Digester Control Building Roof (CR-361) PR 4286 Task 3505	C	FBB	\$13,794.95						0				
47.10	Change of MCC-4103 Hot Water Circulation Pump Breakers (CR-366B) PR 4286 Task 3510	A	IRWD	\$1,336.13						0				
47.11	Centrate Treatment Facility Pull Boxes Duct Bank Settlement (CR-383) PR 4286 Task 3510	B	FBB	\$3,300.13						0				
47.12	Modifications to the MCC-4100/4101/4102/4103 (CR-405) PR 4286 Task 3510	B	FBB	\$7,418.52						0				
47.13	Cake Storage Hopper Modifications (CR-421) PR 4286 Task 3510	C	FBB	\$2,250.67						0				
47.14	Removing Installed Lighting in the Solids Handling Building (CR-427) PR 4286 Task 3510	A	IRWD	\$8,947.37						0				
47.15	Electrical Changes for Generator MPC (CR-430) PR 4286 Task 3510	A	IRWD	\$10,950.14						0				
47.16	Electrical Modifications to MCC-4100 and 4103 (CR-431) PR 4286 Task 3510	A	FBB	\$4,500.00						0				
47.17	Occupancy Sensors in the Solids Handling Building Shower Areas (CR-444) PR 4286 Task 3510	C	FBB	\$1,601.36						0				
47.18	Digester Gas Pre-Treatment In-Slab Conduit Size Change (CR-454) PR 4286 Task 3510	C	FBB	\$5,710.33						0				

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**MWRP Biosolids and Energy Recovery Facilities
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										Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	10/28/2016
									Original Contract Amount: \$163,465,940.00			Original Days: 1,278		
48	Approved by Board of Directors Approved on March 13, 2017				\$728,237.74	\$14,702,561.95	\$15,430,799.69	9.44%	\$178,896,739.69	0	368	368	1,646	10/31/2017
48.1	Structural Modifications of the Elevator Shafts (CR-037) PR 4286 Task 3505200) PR 4286 Task 3505	B	FBB	\$58,705.90						0				
48.2	SCADA Programming Update of Polymer Feed and Storage System (CR-148A) PR 4286 Task 3510	A	FBB	\$23,685.14						0				
48.3	Stairs and Platform at SHB Load-Out Area (CR-149) PR 4286 Task 3505	C	FBB	\$39,622.65						0				
48.4	Additional Polymer Dilution Flow Meters and Associated Conduits and Cables (CR-159B) PR 4286 Task 3510	A	IRWD	\$38,978.70						0				
48.5	Miscellaneous Andritz Items (CR-205) PR 4286 Task 3520	A	IRWD	\$41,246.71						0				
48.6	RIO-4001 Changes (CR-286) PR 4286 Task 3510	A	IRWD	\$27,889.74						0				
48.7	RIO-3102 Changes (CR-310) PR 4286 Task 3510	A	IRWD	\$18,280.62						0				
48.8	Mini Power Center - Additional Outlet and Data Locations in the SHB (CR-419) PR 4286 Task 3510	A	IRWD	\$13,261.60						0				
48.9	New Lighting in the SHB First Floor Area (CR-427A) PR 4286 Task 3510	A	IRWD	\$102,503.46						0				
48.10	Additional Conduits and Cables for Thermocouples for Several Pumps (CR-424, CR-424A through CR-424F) PR 4286 Task 3510	B	FBB	\$54,982.68						0				
48.11	Additional Wall Panel Framework at the SHB (CR-445) PR 4286 Task 3505	C	FBB	\$128,000.00						0				
48.12	Changes in Uninterruptible Power Supply Units (CR-162/CR-162A) PR 4286 Task 3510	A	IRWD	\$128,052.94						0				
48.13	Addition of Circuit Breaker at Transformer T-14 (CR-474) PR 4286 Task 3510	A	IRWD	\$53,027.60						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filaro/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
49	Approved by Board of Directors Approved on March 13, 2017				(\$47,099.20)	\$15,430,799.69	\$15,383,700.49	9.41%	\$178,849,640.49	0	368	368	1,646	10/31/2017
49.1	Related Mechanical Piping Modifications Due to Change in Chemical Pumps in CCO No. 42 (CR-054A) PR 4286 Task 3520	E	FBB		(\$23,897.73)					0				
49.2	Changing the Solids Handling Building Roofing from EPDM to PVC (CR-255) PR 4286 Task 3505	E	FBB		(\$9,000.00)					0				
49.3	Net Reduction of Scope of Work in CR-353 – SCADA Valve Matrix Tables Animation Clarifications (CR-353B/353C) PR 4286 Task 3510	A	IRWD		(\$4,429.09)					0				
49.4	Change in Starters for MCC-4100/4101 Cake Transfer Pump Breakers (CR-370A) PR 4286 Task 3510	A	IRWD		(\$4,047.43)					0				
49.5	Deletion of Insulation for the Solids Handling Building Foundation (CR-393) PR 4286 Task 3505	A	IRWD		(\$5,724.95)					0				
50	Approved by Executive Director of Engineering & Water Quality Approved on March 31, 2017				\$72,150.89	\$15,383,700.49	\$15,455,851.58	9.46%	\$178,921,791.38	0	368	368	1,646	10/31/2017
50.1	Electrical Modifications to FOG Local Control Panel 70-LCP-0710 (CR-304) PR 4286 Task 5.30	A	IRWD		\$6,614.77					0				
50.2	Condensate Modifications at Digester Gas Pre-Treatment Area (CR-312) PR 4286 Task 5.31	C	FBB		\$9,826.09					0				
50.3	Installation of Lindapters Instead of Eye Bolts (CR-413) PR 4286 Task 5.29	A	FBB		\$13,346.01					0				
50.4	T-5 Connection to Biosolids Switch-14 (CR-480) PR 4286 Task 5.30	A	IRWD		\$35,170.26					0				
50.5	Polymer Feeder Blender Skids Flow Element Grounding Conductor (CR-482) PR 4286 Task 5.30	C	IRWD		\$7,193.76					0				
51	Approved by Executive Director of Engineering & Water Quality Approved on March 31, 2017				(\$126,390.00)	\$15,455,851.38	\$15,329,461.38	9.38%	\$178,795,401.38	0	368	368	1,646	10/31/2017
51.1	Credit for Overtime Inspection Hours From 1/1/2016 to Through 12/31/2016 (CR-089C) PR 4286 Task 4.0	F	IRWD		(\$97,570.00)					0				
51.2	Credit for Overtime Inspection Hours From 1/1/2017 to Through 03/31/2017 (CR-089D) PR 4286 Task 4.0	E	IRWD		(\$28,820.00)					0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filano/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
52	Approved by General Manager Approved on April 28, 2017				\$98,342.16	\$15,329,461.38	\$15,427,803.54	9.44%	\$178,893,743.54	0	368	368	1,646	10/31/2017
52.1	Removal of Unsuitable Alluvium (CR-146H) PR 4286 Task 5.29	B	FBB	\$3,564.32						0				
52.2	Polymer Dilution Water Flowmeters (CR-159A) PR 4286 Task 5.31	A	IRWD	\$14,090.39						0				
52.3	Aluminum Handrail and Guardrail Modifications at Liquid Chemical and Polymer Areas (CR-171) PR 4286 Task 5.30	A	IRWD	\$13,765.20						0				
52.4	Modifications Due to Solids Handling Building Electrical Room Equipment Clearance Issues (CR-196) PR 4286 Task 5.30	C	FBB	\$9,382.01						0				
52.5	Data and Telephone Outlets in Solids Handling Building (CR-261) PR 4286 Task 5.30	A	IRWD	\$27,620.21						0				
52.6	HVAC Duct Modifications in Dewatering Feed Pump Station (CR-268) PR 4286 Task 5.31	C	FBB	\$16,023.50						0				
52.7	Coating of 8 Roll-up doors (CR-358) PR 4286 Task 5.29	A	IRWD	\$5,710.32						0				
52.8	Upsizing Wire Size of Dewatering Feed Pump Station Main Breaker Light Panel LP-3501 (CR-390) PR 4286 Task 5.30	A	IRWD	\$1,449.75						0				
52.9	Modifications to the Roofs of the Solids Handling Building and Digester Control Building (CR-528) PR 4286 Task 5.29	A	IRWD	\$6,736.46						0				
53	Exe. Director of Water Quality and Engineering Approved on June 5, 2017				\$42,281.96	\$15,427,803.54	\$15,470,085.50	9.46%	\$178,936,025.50	0	368	368	1,646	10/31/2017
53.1	Modifications to Regenerative Thermal Oxidizer (RTO) Drainage and Utility Water Piping (CR-267) PR 4286 Task 5.31	C	IRWD	\$33,814.80						0				
53.2	Modifications to Liquid Chemical Feed Control Panel Wiring (CR-396) per RFI-1602 PR 4286 Task 5.30	C	FBB	\$8,467.16						0				
54	Approved by General Manager Approved on June 19, 2017				\$44,210.51	\$15,470,085.50	\$15,514,296.01	9.49%	\$178,980,236.01	0	368	368	1,646	10/31/2017
54.1	Modifications to Thickening and Dewatering Platforms (CR-195) PR 4286 Task 5.29	C	FBB	\$44,210.51						0				
55	Approved by General Manager Approved on July 3, 2017				\$94,352.43	\$15,514,296.01	\$15,608,648.44	9.55%	\$179,074,588.44	0	368	368	1,646	10/31/2017
55.1	Additional Pipe Supports of 54-Inch Fiberglass Reinforced Air Duct (CR-106A) PR 4286 Task 5.29	C	FBB	\$14,211.18						0				
55.2	Natural Gas Step Down Manifolds and Gas Transition Piping (CR-146G) PR	B	IRWD	\$20,489.32						0				
55.3	Modifications to the West End Stair Landing of the Solids Handling Building (CR-315) PR 4286 Task 5.29	B	IRWD	\$5,622.11						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
55.4	Regenerative Thermal Oxidizer (RTO) Pad Modifications (CR-400) PR 4286 Task 5.29	C	FBB	\$8,471.16						0				
55.5	Addition of Thin Client at the Dryer Facility (CR-485) PR 4286 Task 5.30	A	IRWD	\$36,874.10						0				
55.6	Change in Size to 2 Check Valves in the Digester Control Building (CR-514) PR 4286 Task 5.31	C	FBB	\$8,684.56						0				
56	Approved by Board Approved on July 24, 2017				\$201,744.33	\$15,608,648.44	\$15,810,392.77	9.67%	\$179,276,332.77	0	368	368	1,646	10/31/2017
56.1	Addition Of Stairs and Platform to RTO (CR-266) PR 4286 Task 5.29	A	IRWD	\$101,744.33						0				
56.2	Microturbine CLC (ESC Capstone) per RFI 1141 (CR-277) PR 4286 Task 5.30	B	FBB	\$100,000.00						0				
57	Approved by General Manager Approval on August 5, 2017				\$98,886.90	\$15,810,392.77	\$15,909,279.67	9.73%	\$179,375,219.67	0	368	368	1,646	10/31/2017
57.1	Additional Support at Digester Control Building (CR-342) PR 04286 Task 5.29	C	IRWD	\$2,522.47						0				
57.2	Pipe and Duct Hanger Modifications (CR-362) PR 04286 Task 5.29	C	IRWD	\$4,083.12						0				
57.3	Increase Wire Size of Main Breaker PP-3501 (CR-418) PR 04286 Task 5.30	C	FBB	\$696.66						0				
57.4	Roof Vent at DCB Elevator/Stair Tower (CR-437) PR 04286 Task 5.29	B	IRWD	\$8,563.72						0				
57.5	T-14 Fixed Type Manual Operator per Submittal 16443-0016A (CR-540) PR 04286 Task 5.31	C	IRWD	\$1,945.62						0				
57.6	Area Classification at Methane Digesters to meet NFPA Table 6.2(a) - Plug Valves Limit Switches (CR-557) PR 04286 Task 5.30	C	FBB	\$64,195.15						0				
57.7	Area Classification at Methane Digesters to meet NFPA Table 6.2(a) - Sump Pump Cable Retrofit PR 04286 Task 5.30	C	FBB	\$16,880.16						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
58	Approved by Board of Directors Approval on August 28, 2017				\$182,938.94	\$15,909,279.67	\$16,092,218.61	9.84%	\$179,558,158.61	0	368	368	1,646	10/31/2017
58.1	Concrete Cap over Shallow Pipe Crossings (CR-348) PR 04286 Task 5.31	B	FBB	\$7,923.00						0				
58.2	Additional Conduit and Wiring for Sludge Screen Moisture Sensors (CR-381) PR 04286 Task 5.30	C	FBB	\$8,355.32						0				
58.3	SCADA Programming Modifications (CR-433/476/546/547/551) PR 04286 Task 5.30	A	IRWD	\$15,758.38						0				
58.4	Polymer Storage Power Panels Wire and Breaker Modifications (CR-456) PR 04286 Task 5.30	C	FBB	\$24,238.65						0				
58.5	Odor Control Starter Modifications (CR-466) PR 04286 Task 5.30	B	FBB	\$41,436.09						0				
58.6	Odor Control Fan Remote Temperature Device Revisions (CR-522) PR 04286 Task 5.30	A	IRWD	\$52,484.50						0				
58.7	Re-location of Digester Control Building Gas Room Local Control Panels (CR-534) PR 04286 Task 5.30	A	FBB	\$32,743.00						0				
59	Approved by Exe. Director of Water Quality and Engineering Approval on September 6, 2017				\$98,988.68	\$16,092,218.61	\$16,191,207.29	9.90%	\$179,657,147.29	0	368	368	1,646	10/31/2017
59.1	Modifications to Building 101 (CR-212) PR 04286 Task 5.30	E	FBB	\$26,500.00						0				
59.2	Change in Conduit Size in Area 20 (CR-292) PR 04286 Task 5.10	C	FBB	\$1,946.70						0				
59.3	Centrifuge Discharge Cake Conveyors Schematic Modifications (CR-422) PR 04286 Task 5.10	C	FBB	\$6,410.04						0				
59.4	Power Monitor Programming Modifications (CR-539) PR 04286 Task 5.10	A	IRWD	\$2,595.60						0				
59.5	SCADA Programming Modifications (CR-547A) PR 04286 Task 5.10	A	IRWD	\$1,574.86						0				
59.6	Change in Area Classification at Methane Digesters to meet NFPA Standards - MOVs (CR-557B) PR 04286 Task 5.10	C	FBB	\$54,736.73						0				
59.7	FOG Heating Disconnect Switch Relocation (CR-559) PR 04286 Task 5.10	C	FBB	\$5,224.75						0				
60	Approved by Exe. Director of Water Quality and Engineering Approval on September 5, 2017				(\$34,540.00)	\$16,191,207.29	\$16,156,667.29	9.88%	\$179,622,607.29	0	368	368	1,646	10/31/2017
60.1	Credit for Overtime Inspection Hours From 4/1/2017 Through 6/30/2017 (CR-089E) PR 04286 Task 4.0	F	FBB	(\$34,540.00)						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
61	Approved by Exe. Director of Water Quality and Engineering Approved on September 6, 2017 61.1 Credit for Bulk Polymer Storage Changes per RFI-0863 and Submittal 15140-013B (CR-168) PR 04286 Task 5.16	E	FBB	(\$1,752.39)	(\$1,752.39)	\$16,156,667.29	\$16,154,914.90	9.88%	\$179,620,854.90	0	368	368	1,646	10/31/2017
62	Approved by Board of Directors Approved on October 9, 2017 62.1 Fats, Oil, and Grease (FOG) Modifications (CR-223A) PR 04286 Task 5.30 62.2 Density Meter Conduit and Cabling Modifications (CR-326) PR 04286 Task 5.30 62.3 Fiber Optic Modifications (CR-356) PR 04286 Task 5.30 62.4 Sludge Screen Pneumatic Control Panel Conduit and Cabling (CR-380) PR 04286 Task 5.30 62.5 Additional Circuits for Control of the Thickening Centrifuges (CR-386) PR 04286 Task 5.30 62.6 Upsize of Power Panel PP-8001 Circuit Breaker (CR-414) PR 04286 Task 5.30 62.7 Electrical Power Feeders to Electric Water Heater (CR-426) PR 04286 Task 5.30 62.8 Chemical Sump Pump Control Panel Space Heater Wiring Modifications (CR-461) PR 04286 Task 5.30 62.9 Relocate Electrical Feeders to Generator Bus (CR-462) PR 04286 Task 5.30 62.10 Electrical and Instrumentation Related Components for the Installation of Thin Client at Dryer Facility (CR-485A) PR 04286 Task 5.30 62.11 Polymer Room Eye Wash Station Flow Switches (CR-535) PR 04286 Task 5.30 62.12 Chemical Storage and Feed Modifications (CR-563) PR 04286 Task 5.30 62.13 PLC Redundancy Hot Standby Status Register (CR-568) PR 04286 Task 5.30	A	IRWD	\$52,174.90	\$708,162.72	\$16,154,914.90	\$16,863,077.62	10.32%	\$180,329,017.62	0	368	368	1,646	10/31/2017

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

Change Order	Description	Category	IRWD or FBB	Contract Amount						Contract Days				Original Completion Date:
				Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum Total C.O. days	Revised Total Contract Days	10/28/2016
														Original Contract Amount: \$163,465,940.00
63	Approved by General Manager Approved on October 2, 2017				\$91,766.09	\$16,863,077.62	\$16,954,843.71	10.37%	\$180,420,783.71	0	368	368	1,646	10/31/2017
63.1	Electrical Modifications to RIO-2001 (CR-269) PR 04286 Task 5.30	C	IRWD	\$30,563.48						0				
63.2	Modifications to RIO-4002 (CR-285) PR 04286 Task 5.30	C	FBB	\$14,563.39						0				
63.3	Cap for 12-Inch Storm Drain (CR-351) PR 04286 Task 5.16	B	FBB	\$2,394.54						0				
63.4	Access Hatch for Regenerative Thermal Oxidizer Pipe Chase (CR-473) PR 04286 Task 5.31	C	FBB	\$3,958.91						0				
63.5	Electrical Upgrades to RIO-4002 (CR-447) PR 04286 Task 5.30	A	FBB	\$40,285.77						0				
64	Approved by Board of Directors Approved on October 23, 2017				\$231,100.22	\$16,954,843.71	\$17,185,943.93	10.51%	\$180,651,883.93	0	368	368	1,646	10/31/2017
64.1	Modifications to Centrate Treatment Facility Stairs (CR-379) PR 04286 Task 5.29	B	FBB	\$9,758.16						0				
64.2	Modifications to Ductwork in Solids Handling Building (CR-401) PR 04286 Task 5.31	C	FBB	\$9,537.05						0				
64.3	Electrical Conduits and Wires for Additional Bridge Breakers for Cake Receiving Pumps (CR-416) PR 04286 Task 5.30	B	FBB	\$21,678.83						0				
64.4	Handrail Modifications at the Methane Digesters (CR-472) PR 04286 Task 5.29	B	FBB	\$22,154.53						0				
64.5	Electrical and Instrumentation Related Components for the Installation of Thin Client at Dryer Facility (CR-485B) PR 04286 Task 5.30	A	IRWD	\$53,090.84						0				
64.6	Electrical Modifications at the Motor Control Centers for the Acid Phase Sludge Heating Recirculation Pumps (CR-517) PR 04286 Task 5.30	A	IRWD	\$47,611.11						0				
64.7	FOG Receiving Pumps Thermocouple and Thermostat Wiring (CR-525) PR 04286 Task 5.30	C	FBB	\$37,826.58						0				
64.8	SCADA Programming Changes (CR-537/570/573/573A) PR 04286 Task 5.30	A	IRWD	\$23,694.13						0				
64.9	Change of Limit Switches for Buried Service (CR-560) PR 04286 Task 5.30	C	FBB	\$5,748.99						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
65	Approved by Board of Directors Approved on October 23, 2017				\$149,591.14	\$17,185,943.93	\$17,335,535.07	10.60%	\$180,801,475.07	0	368	368	1,646	10/31/2017
65.1	Additional Conduits and Wires for the Engine Generator, Switchgear-16, and Switchgear-16 Programmable Logic Controller (CR-204) PR 04286 Task 5.30	C	FBB	\$100,000.00						0				
65.2	Modifications to Spirac Conveyor in the Solids Handling Building (CR-409) PR 04286 Task 5.31	B	FBB	\$13,641.00						0				
65.3	Additional Metal Bridge Walkway Structural Support Angles (CR-420) PR 04286 Task 5.29	B	FBB	\$35,950.14						0				
66	Approved by General Manager Approved on November 30, 2017				\$98,201.20	\$17,335,535.07	\$17,433,736.27	10.67%	\$180,899,676.27	0	368	368	1,646	10/31/2017
66.1	SCADA Programming Modifications and Updates (CR-247A/CR-469/CR-485C/CR-571/CR-575A/CR-579/CR-580/CR-585) PR 04286 Task 5.30	A	IRWD	\$61,734.78						0				
66.2	Installation of Sump Pump Floats (CR-452) PR 04286 Task 5.31	A	IRWD	\$17,228.56						0				
66.3	Electrical Work Associated with Air Handling/Heating Units, Recycle Bin Feed Conveyor, and Recycle Bucket Elevator in the Solids Handling Building (CR-457/CR-529) PR 04286 Task 5.30	B	IRWD	\$11,003.85						0				
66.4	Additional Wires and Conduits for FOG Receiving Valves (CR-565) PR 04286 Task 5.30	B	FBB	\$6,368.21						0				
66.5	Additional Door Cover Plates for MCC-4100 and MCC-4101	B	IRWD	\$1,865.80						0				
67	Approved by Exe. Dir of Engineering and Water Quality Approved on November 30, 2017				(\$53,626.83)	\$17,433,736.27	\$17,380,109.44	10.63%	\$180,846,049.44	0	368	368	1,646	10/31/2017
67.1	Credit for Overtime Inspection Hours from 07/1/2017 to 09/30/2017 (CR-089F) PR 04286 Task 4.0	F	FBB	(\$19,140.00)						0				
67.2	Credit for Additional Conduits and Wires for the Engine Generator, Switchgear-16, and Switchgear-16 Programmable Logic Controller (CR-204A) PR 04286 Task 5.30	E	FBB	(\$13,591.83)						0				
67.3	Deletion of Pavement Prime Coat (CR-331D) PR 04286 Task 5.29	A	IRWD	(\$20,895.00)						0				

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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
68	Approved by Board of Directors Approved on December 11, 2017				\$569,553.19	\$17,380,109.44	\$17,949,662.63	10.98%	\$181,415,602.63	0	368	368	1,646	10/31/2017
	68.1 Fats, Oil, and Grease (FOG) Modifications (CR-223) PR 04286 Task 5.30	A	IRWD	\$83,648.47						0				
	68.2 Additional Electrical Outlets and Circuits in the Solids Handling Building (CR-453) PR 04286 Task 5.30	A	IRWD	\$44,054.83						0				
	68.3 Control Panel Modifications in the Methane Digester Complex (CR-545) PR 04286 Task 5.30	C	IRWD	\$55,414.03						0				
	68.4 Additional Electrical, Instrumentation, and Controls for the Heat Dryer System (CR-270 and CR-471A through CR-471G, CR-496, and CR-555) PR 04286 Task 5.30	B	FBB	\$386,435.86						0				
69	Approved by General Manager Approved on December 20, 2017				\$90,846.69	\$17,949,662.63	\$18,040,509.32	11.04%	\$181,506,449.32	0	368	368	1,646	10/31/2017
	69.1 Power Supply Failure Alarms for Acid Gas Boosters (CR-477) PR 04286 Task	A	IRWD	\$10,965.90						0				
	69.2 Addition of Waste Gas Burner Instrument Air Compressor System (Electrical) (CR-484A) PR 04286 Task 5.30	C	IRWD	\$8,046.52						0				
	69.3 Circuit Breaker for MOC-2034 (CR-541) PR 04286 Task 5.30	B	IRWD	\$2,389.56						0				
	69.4 Change in Limit Switches Located in the Methane Digester Complex Due Electrical Classification Change (CR-557D) PR 04286 Task 5.30	C	IRWD	\$37,744.12						0				
	69.5 Change in Limit Switches Located in the Methane Digester Complex Due Electrical Classification Change (CR-582) PR 04286 Task 5.30	C	IRWD	\$16,228.03						0				
	69.6 SCADA Programming Changes – Totalizers (CR-590) PR 04286 Task 5.30	A	IRWD	\$7,830.90						0				
	69.7 Control Panel Modifications in the Methane Digester Complex (CR-592) PR 04286 Task 5.30	A	IRWD	\$7,641.66						0				

A - District Convenience/Initiation - Project Related
B - Differing Site Conditions
C - Design Oversight
D - District Convenience/Initiation - Non-Project Related
E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overtime

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
70	Approved by Exe. Dir of Engineering and Water Quality Approved on January 23, 2018				\$73,972.77	\$18,040,509.32	\$18,114,482.09	11.08%	\$181,580,422.09	0	368	368	1,646	10/31/2017
70.1	Addition of Limit Switches on Gas Dryer Heat Exchanger (CR-303) PR 04286 Task 5.30	A	IRWD	\$17,367.32						0				
70.2	Change of Electrical Classification of Valve Limit Switches at Acid Phase Digester Complex (CR-415) PR 04286 Task 5.30	C	IRWD	\$24,018.04						0				
70.3	Power Source to the Solids Handling Building Bridge Cranes (CR-574) PR 04286 Task 5.30	C	IRWD	\$27,479.58						0				
70.4	Investigation of Street Lights, South side of Biosolids Site (CR-613) PR 04286 Task 5.30	A	IRWD	\$1,204.20						0				
70.5	Additional Switches in the Solids Handling Building (CR-625) PR 04286 Task 5.30	A	IRWD	\$3,903.63						0				
71	Approved by Exe. Dir of Engineering and Water Quality Approved on January 31, 2018				(\$12,210.00)	\$18,114,482.09	\$18,102,272.09	11.07%	\$181,568,212.09	0	368	368	1,646	10/31/2017
71.1	Credit for Overtime Inspection Hours from 10/1/2017 to 12/31/2017 (CR-089G) PR 04286 Task 4.0	F	IRWD	(\$12,210.00)						0				
72	Approved by General Manager Approved on January 25, 2018				\$25,256.29	\$18,102,272.09	\$18,127,528.38	11.09%	\$181,593,468.38	0	368	368	1,646	10/31/2017
72.1	Installation of Breakers for Power Panel PP-8001 (CR-414A) PR 04286 Task 5.30	A	IRWD	\$25,256.29						0				
73	Approved by Board of Directors Approved on March 12, 2018				\$150,755.29	\$18,127,528.38	\$18,278,283.67	11.18%	\$181,744,223.67	0	368	368	1,646	10/31/2017
73.1	Additional Circuits for Control of the Dewatering Centrifuges (CR-386B) PR 04286 Task 5.30	B	FBB	\$150,755.29						0				

A - District Convenience/Initiation - Project Related
B - Differing Site Conditions
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E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overtime

B - 28

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C. O. days	Revised Total Contract Days	Revised Completion Date
74	Approved by General Manager Approved on February 22, 2018				\$99,467.47	\$18,278,283.67	\$18,377,751.14	11.24%	\$181,843,691.14	0	368	368	1,646	10/31/2017
74.1	Access Platform to Heat Dryer Acid Scrubber (CR-485D) PR 04286 Task 5.30	A	IRWD	\$14,637.02						0				
74.2	Modifications to the FRP Ducting in the Solids Handling Building (CR-491) PR 04286 Task 5.31	A	IRWD	\$20,171.39						0				
74.3	Power to Air Compressors and Pre-Action Panels of the Fire Sprinkler System (CR-526) PR 04286 Task 5.30	B	IRWD	\$24,442.16						0				
74.4	Electrical and Instrumentation Revisions to the FOG System (CR-578) PR 04286 Task 5.30	A	IRWD	\$13,035.52						0				
74.5	Addition of Centrate Air Purge System (CR-581) PR 04286 Task 5.30	A	IRWD	\$17,777.95						0				
74.6	Addition of Flame Checks on Foam Separator Digested Sludge Line (CR-587) PR 04286 Task 5.3	A	IRWD	\$3,038.27						0				
74.7	Modifications to 10-Ton Crane Stops (CR-589) PR 04286 Task 5.31	C	FBB	\$6,365.16						0				

A - District Convenience/Initiation - Project Related
B - Differing Site Conditions
C - Design Oversight
D - District Convenience/Initiation - Non-Project Related
E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Override

**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filano/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
75	Approved by General Manager Approved on March 2, 2018				\$98,698.78	\$18,377,751.14	\$18,476,449.92	11.30%	\$181,942,389.92	0	368	368	1,646	10/31/2017
75.1	Electrical Modifications to the Acid Phase Digester and Methane Phase Digester System (CR-252C) PR 04286 Task 5.30	A	IRWD	\$31,492.38						0				
75.2	Modifications to the Odor Control Panels (CR-382) PR 04286 Task 5.30	A	IRWD	\$12,726.70						0				
75.3	Additional Lock-Out Switch for the Bridge Breaker (CR-384A) PR 04286 Task 5.30	B	IRWD	\$14,276.72						0				
75.4	Additional On/Off Switch for Duct Fans (CR-384B) PR 04286 Task 5.30	A	IRWD	\$12,100.47						0				
75.5	Aeration Blower MCC Modifications (CR-481) PR 04286 Task 5.30	C	IRWD	\$14,441.86						0				
75.6	Addition of Level Switches and Solenoid Valves for Gas/Foam Separator Tanks (CR-566) PR 04286 Task 5.30	B	IRWD	\$7,568.99						0				
75.7	SCADA Template Update (CR-622) PR 04286 Task 5.30	A	IRWD	\$2,775.05						0				
75.8	Additional Lights in the Shower Stalls of the Solids Handling Building (CR-628) PR 04286 Task 5.30	C	FBB	\$1,639.80						0				
75.9	Relocation of Flow Switch in Sample Analysis Room (CR-637) PR 04286 Task 5.30	A	IRWD	\$1,676.81						0				
76	Approved by Board of Directors Approved on March 26, 2018				\$150,690.04	\$18,476,449.92	\$18,627,139.96	11.40%	\$182,093,079.96	0	368	368	1,646	10/31/2017
76.1	Power Feed to Microturbine CLCs (CR-289) PR 04286 Task 5.30	B	FBB	\$49,534.35						0				
76.2	Upsizing of Electrical Cables related to the Heat Drying System (CR-510) PR 04286 Task 5.30	B	FBB	\$4,670.94						0				
76.3	Additional Cables to MCC-1 (CR-538) PR 04286 Task 5.30	B	FBB	\$5,679.24						0				
76.4	Electrical Code Area Classification Change in the Digester Control Building Gas Room (CR-582A) PR 04286 Task 5.30	C	IRWD	\$8,804.31						0				
76.5	Addition of Water Source for the Foam Separator (CR-583) PR 04286 Task 5.31	C	FBB	\$8,418.23						0				
76.6	SCADA Modifications on Solids Handling Polymer System (CR-620) PR 04286 Task 5.30	A	IRWD	\$7,761.00						0				
76.7	3-Way Valve Graphical Modifications to SCADA (CR-621) PR 04286 Task 5.30	A	IRWD	\$22,540.18						0				
76.8	SCADA Modifications on FOG System (CR-623) PR 04286 Task 5.30	A	IRWD	\$7,970.58						0				
76.9	SCADA Modifications on the Digested Tank Level (CR-626) PR 04286 Task 5.30	A	IRWD	\$8,898.86						0				
76.10	Solids Handling Building Stair Modifications (CR-634) PR 04286 Task 5.29	C	FBB	\$26,412.35						0				

A - District Convenience/Initiation - Project Related
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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

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Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
77	Pending Approval by General Manager Pending Approval on April 10, 2018				\$94,371.12	\$18,627,139.96	\$18,721,511.08	11.45%	\$182,187,451.08	0	368	368	1,646	10/31/2017
77.1	Modifications of Notching Shear Lugs - Solids Handling Building (CR-299A) PR 04286 Task 5.29	C	FBB	\$1,269.23						0				
77.2	Cake Storage Hopper Conveyor SCADA Control Changes (CR-384) PR 04286 Task 5.30	A	IRWD	\$30,869.71						0				
77.3	Electrical Testing for Manual Transfer Switchgear SWGR-14 (CR-474A) PR 04286 Task 5.30	C	FBB	\$5,891.73						0				
77.4	Additional HVAC Fan Coil Power Circuits (CR-474A) PR 04286 Task 5.30	B	FBB	\$16,053.47						0				
77.5	Modifications to Digester Control Building Roof Guardrail and Bridge Steps (CR-617) PR 04286 Task 5.29	B	IRWD	\$10,147.48						0				
77.6	Electrical Modifications to the Condensing Unit and Heat Pumps in the Solids Handling Building (CR-635) PR 04286 Task 5.30	A	FBB	\$9,551.13						0				
77.7	SCADA Control Logic Change in the Acid Phase Digester Area (CR-668) PR 04286 Task 5.30	A	IRWD	\$9,741.22						0				
77.8	SCADA Control Logic Change in the Polymer Thickening Tank Area (CR-669) PR 04286 Task 5.30	A	IRWD	\$8,144.54						0				
77.9	SCADA Control Logic Change in the Polymer Thickening Tank Area (CR-669) PR 04286 Task 5.30	A	IRWD	\$2,702.61						0				
78	Pending Approval by Board of Directors Pending Approval on April 26, 2018				\$344,006.55	\$18,721,511.08	\$19,065,517.63	11.66%	\$182,531,457.63	0	368	368	1,646	10/31/2017
78.1	Operator Interface Terminal (OIT) Indusoft Licensing Cost (CR-244) PR 04286 Task 5.30	A	IRWD	\$4,618.13						0				
78.2	Retaining Wall Modifications at Solids Handling Building (CR-331E) PR 04286 Task 5.29	C	IRWD	\$26,508.00						0				
78.3	Andritz Air Compressor Equipment Pad Modifications (CR-550) PR 04286 Task 5.31	C	FBB	\$6,729.00						0				
78.4	Waste Activated Sludge (WAS), Digested Sludge (DS), and Primary Sludge (PS) Piping Modifications (CR-594) PR 04286 Task 5.31	A	IRWD	\$28,967.68						0				
78.5	Modifications to MWRP Biosolids Hardscape (CR-331K) PR 04286 Task 5.29	A	IRWD	\$277,183.74						0				


A - District Convenience/Initiation - Project Related
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**MWRP Biosolids and Energy Recovery Facilities
PR 21146 (4286)
Construction Change Order Summary**

Contractor: Filanc/Balfour-Beatty
Design Engineer: Black & Veatch

				Contract Amount						Contract Days				Original Completion Date:
				Original Contract Amount: \$163,465,940.00						Original Days: 1,278				10/28/2016
Change Order	Description	Category	IRWD or FBB	Change Order Line Item Amount	Change Order Amount	Previous Change Orders	Cumulative Total of Change Orders	% of Original Contract Amount	Revised Contract Amount	Change Order Days	Previous Change Orders	Cum. Total C.O. days	Revised Total Contract Days	Revised Completion Date
Category				Total Amount	% of Original Contract									
A - District Convenience/Initiation - Project Related				\$ 3,327,154.54	2.04%									
B - Differing Site Conditions				\$ 12,570,797.75	7.69%									
C - Design Oversight				\$ 3,331,282.80	2.04%									
D - District Convenience/Initiation - Non-Project Related				\$ -	0.00%									
E - Contractor Convenience/Initiation				\$ 98,302.54	0.06%									
F - Contractor Requested Inspection Overtime				\$ (262,020.00)	-0.16%									
TOTAL (A + B + C + D + E + F)				\$ 19,065,517.63	11.66%									
Category				Total Amount	% of Original Contract									
IRWD-Initiation/Driven				\$ 4,361,081.75	2.67%									
FBB-Initiation/Driven				\$ 14,533,715.66	8.89%									
N/A				\$ 170,720.22	0.10%									
TOTAL				\$ 19,065,517.63	11.66%									

A - District Convenience/Initiation - Project Related
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C - Design Oversight
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E - Contractor Convenience/Initiation
F - Contractor Requested Inspection Overtime

April 23, 2018
Prepared and
submitted by: C. Compton
Approved by: Paul A. Cook 

ACTION CALENDAR

AB 2241 (RUBIO): THE OPEN AND TRANSPARENT WATER DATA ACT

SUMMARY:

Staff regularly provides the Board with an update on the 2018 legislative session and IRWD's legislative and regulatory priorities. As legislation and regulations develop, staff provides updates and recommendations to the Water Resources Policy and Communications Committee and the Board, as appropriate.

AB 2241 has been authored by Assemblymember Blanca Rubio (D-West Covina). The bill would amend the Open and Transparent Water Data Act, to require the Department of Water Resources, the State Water Resources Control Board, and the Department of Fish and Wildlife to “work to improve the open and transparent access to data by reducing the fractured or duplicative reporting of the same or similar data to multiple governmental agencies or departments, and by reducing the reporting burden on entities providing data to governmental agencies.”

Staff recommends that the Board consider adopting a “SUPPORT” position on AS 2241 (Rubio, D-West Covina): The Open and Transparent Water Data Act.

BACKGROUND:

In 2016, then Assemblymember Bill Dodd (D-Napa) authored AB 1755. AB 1755 enacted the Open and Transparent Water Data Act. The Act requires the Department of Water Resources (DWR), the State Water Resources Control Board (State Board), and the Department of Fish and Wildlife (DFW) to coordinate and integrate existing water and ecological data from local, state, and federal agencies. Additionally, the Act requires DWR, the State Board and DFW to develop protocols for data sharing, documentation, quality control, public access, and promotion of open-source platforms and decision support tools related to water data.

In January 2018, DWR released the “Progress Report Implementing the Open and Transparent Water Data Act with Initial Draft Strategic Plan and Preliminary Protocols” (Progress Report). The Progress Report outlines the strategy and preliminary protocols for implementing the Open and Transparent Water Data Act. One of the aspects noticeably missing from the Progress Report was how the implementation of the Open and Transparent Water Data Act would reduce fracture and duplicative reporting of data and reduce the reporting burden of entities that provide data to the state. The Progress Report can be read at: https://www.water.ca.gov/LegacyFiles/ab1755/docs/AB1755_InitialProgressReport_Jan2018.pdf.

In its comments on the Progress Report, IRWD commented that DWR, the State Board and DFW should reduce fracture and duplicative reporting of data and reduce the reporting burden of entities that provide data to the state.

AB 2241, authored by Assemblymember Blanca Rubio (D-West Covina), would amend the Open and Transparent Water Data Act. Specially, the bill would require DWR, the State Board and DFW to “work to improve the open and transparent access to data by reducing the fractured or duplicative reporting of the same or similar data to multiple governmental agencies or departments, and by reducing the reporting burden on entities providing data to governmental agencies”. A copy of AB 2241 is attached as Exhibit “A”.

Given IRWD’s past statements on the implementation of AB 1755, the Progress Report and the need to reduce duplicative reporting, staff recommends that the Board adopt a “support” positions on AB 2241. AB 2241 is scheduled to be heard by the Assembly Water, Parks and Wildlife Committee on April 24, 2018. If the Board adopts a “support” position on the bill, IRWD will send a letter of support to the author and will indicate its support for the bill at the hearing.

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 ADOPT A “SUPPORT” POSITION ON AB 2241 (RUBIO, D-WEST COVINA).

LIST OF EXHIBITS:

Exhibit “A” – Text of AB 2241

EXHIBIT "A"

AMENDED IN ASSEMBLY MARCH 15, 2018

CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

ASSEMBLY BILL

No. 2241

Introduced by Assembly Member Rubio

February 13, 2018

An act to ~~amend Section 10608 of~~ *add Section 12407* to the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

AB 2241, as amended, Rubio. ~~Sustainable water use and demand reduction: legislative findings and declarations. The Open and Transparent Water Data Act.~~

Existing law, the Open and Transparent Water Data Act, requires the Department of Water Resources, the State Water Resources Control Board, and the Department of Fish and Wildlife to coordinate and integrate existing water and ecological data from local, state, and federal agencies.

This bill would require the Department of Water Resources, the board, and the Department of Fish and Wildlife to work to improve the open and transparent access to data by reducing the fractured or duplicative reporting of the same or similar data to multiple governmental agencies or departments, and by reducing the reporting burden on entities providing data to governmental agencies.

~~Existing law requires the State Water Resources Board to implement and administer various water conservation and demand reduction programs in the state. Existing law makes legislative findings and declarations regarding the need to reduce urban water use statewide by 20% and to effectively measure a water supplier's efforts to reduce urban water use in its service area.~~

~~This bill would make nonsubstantive changes in those legislative findings and declarations.~~

Vote: majority. Appropriation: no. Fiscal committee: ~~no~~ yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 ~~SECTION 1. Section 12407 is added to the Water Code, to~~
2 ~~read:~~

3 ~~12407. The department, the state board, and the Department~~
4 ~~of Fish and Wildlife shall work to improve the open and~~
5 ~~transparent access to data by reducing the fractured or duplicative~~
6 ~~reporting of the same or similar data to multiple governmental~~
7 ~~agencies or departments, and by reducing the reporting burden~~
8 ~~on entities providing data to governmental agencies.~~

9 ~~SECTION 1. Section 10608 of the Water Code is amended to~~
10 ~~read:~~

11 ~~10608. The Legislature finds and declares all of the following:~~

12 ~~(a) Water is a public resource that the California Constitution~~
13 ~~protects against waste and unreasonable use.~~

14 ~~(b) Growing population, climate change, and the need to protect~~
15 ~~and grow California's economy while protecting and restoring our~~
16 ~~fish and wildlife habitats make it essential that the state manage~~
17 ~~its water resources as efficiently as possible.~~

18 ~~(c) Diverse regional water supply portfolios will increase water~~
19 ~~supply reliability and reduce dependence on the Delta.~~

20 ~~(d) Reduced water use through conservation provides significant~~
21 ~~energy and environmental benefits, and can help protect water~~
22 ~~quality, improve streamflows, and reduce greenhouse gas~~
23 ~~emissions.~~

24 ~~(e) The success of state and local water conservation programs~~
25 ~~to increase efficiency of water use is best determined on the basis~~
26 ~~of measurable outcomes related to water use or efficiency.~~

27 ~~(f) Improvements in technology and management practices offer~~
28 ~~the potential for increasing water efficiency in California over~~
29 ~~time, providing an essential water management tool to meet the~~
30 ~~need for water for urban, agricultural, and environmental uses.~~

31 ~~(g) The Governor has called for a 20 percent per capita reduction~~
32 ~~in urban water use statewide by 2020.~~

1 ~~(h) The factors used to formulate water use efficiency targets~~
2 ~~can vary significantly from location to location based on factors~~
3 ~~including weather, patterns of urban and suburban development,~~
4 ~~and past efforts to enhance water use efficiency.~~

5 ~~(i) Per capita water use is a valid measure of a water supplier's~~
6 ~~efforts to reduce urban water use within its service area. However,~~
7 ~~per capita water use is less useful for measuring relative water use~~
8 ~~efficiency between different water suppliers. Differences in~~
9 ~~weather, historical patterns of urban and suburban development,~~
10 ~~and density of housing in a particular location need to be~~
11 ~~considered when assessing per capita water use as a measure of~~
12 ~~efficiency.~~

O

April 23, 2018

Prepared by: J. Zepeda

Submitted by: J. Zepeda / P. Weghorst *PW*

Approved by: Paul A. Cook *PA Cook*

ACTION CALENDAR

AMENDMENTS TO ENERGY MANAGEMENT SERVICES AGREEMENTS

SUMMARY:

In August 2016, IRWD entered into two agreements related to the installation and operation of a portfolio of battery energy storage systems at IRWD sites. Through these agreements, Advanced Microgrid Systems (AMS) contracted 11 energy storage systems totaling 7 megawatts (MW), with a net cost savings to IRWD of \$381,000 per year. AMS is proposing to revise the agreements, consistent with the general terms and conditions related to project feasibility, allowing AMS to install nine energy storage systems (totaling 7.29 MW) with a net savings to IRWD of \$359,100. Staff recommends that the Board authorize the General Manager to:

- Execute an Amended and Restated Energy Management Services (DRES Portfolio B) Agreement with Hybrid-Electric Building Technologies West Los Angeles 1, LLC, and Hybrid-Electric Building Technologies West Los Angeles 2, LLC; and
- Execute an Amended and Restated Energy Management Services Amendment with Redwood Energy Storage, LLC subject to substantive revisions approved by the Committee.

BACKGROUND:

In August 2016, the Board authorized the General Manager to execute an agreement between IRWD and Hybrid-Electric Building Technologies Irvine 1, LLC, Hybrid-Electric Building Technologies West Los Angeles 1, LLC, and another agreement between IRWD and Redwood Energy Storage, LLC to provide energy management services related to battery based energy storage systems to be hosted at IRWD sites. Through these agreements, AMS contracted 11 energy storage systems totaling 7 MW with a total minimum guaranteed cost savings (MGCS) to IRWD of \$613,000 per year. The net costs savings to IRWD after paying service fees to AMS would be \$381,000.

AMS is now proposing revisions to the two executed agreements consistent with general terms and conditions related to project feasibility. The proposed amended and restated agreements are provided as Exhibits "A" and "B". These agreements are referred to below as the Demand Response Energy Storage (DRES) and Demand Management (DM) Agreements, respectively. Through these revised agreements, AMS would install nine energy storage systems instead of 11 totaling 7.29 MW with a total guaranteed savings and revenue to IRWD of \$629,000 per year. After payment of service fees to AMS, IRWD would net \$359,100.

Site-by-Site Analysis:

The DRES and DM Agreements executed in August 2016 include provisions for the addition and removal of individual sites from the energy storage project portfolios as additional engineering feasibility studies and financial analyses are completed during the project development process.

AMS completed a site-by-site analysis to determine the appropriate battery sizes, installation feasibility, and best financial return to IRWD. As a result of this analysis, AMS is proposing to amend and restate the DRES and DM Agreements to reflect the removal and addition of sites consistent with the general terms and conditions of the agreements.

The general terms and conditions of the DRES and DM agreements define the circumstances under which sites may be removed from each portfolio. Consistent with these circumstances, AMS is requesting to remove three sites that were found to not be viable during the site-by-site analysis. The sites to be removed from the agreements are summarized below:

Site:	Reason for Change
Dyer Road Well 10	Unable to obtain third party lease for land (DRES Agreement)
Foothill Zone 6 Pump Station	Installation costs with step-up transformer outweigh the cost savings (DM Agreement)
East Irvine Zone 1-3 Pump Station	Site cannot accommodate a battery system as there is no space near an electrical tie-in point (DM Agreement)

AMS is also proposing to add the Baker Water Treatment Plant to the DRES Agreement portfolio and to transfer 2015 Self Generation Incentive Program funding from the non-viable sites to the Baker Plant. The Baker Water Treatment Plant site can accommodate a 1 MW battery system and provide additional savings to IRWD. Staff has worked with AMS to analyze the addition of the Baker Plant to the DRES project portfolio. Based on this analysis, staff supports amending the DRES Agreement to include this site.

Cost Savings and Revenue Sharing:

As a result of the proposed site revisions described above, the nine facilities at which IRWD will host energy storage systems will provide significant cost saving benefits by reducing both energy and demand charges on IRWD's electrical bills. These nine systems will also provide an opportunity to generate revenue through participation in programs such as the Automated Demand Response program. Following is an overview of the cost savings expected from the systems proposed in the amended and restated DRES and DM Agreements.

Demand Response Energy Storage Systems:

Six of the nine sites are referred to as DRES sites which will have battery storage systems with six-hour capacities – four hours dedicated to SCE's DRES needs and two hours dedicated to IRWD demand management. A complete list of the six DRES sites and associated system sizes is provided in Table 1 below. The Michelson Water Recycling Plant is covered under a separate DRES agreement. The five other sites would be covered under the amended and restated DRES Agreement. The MGCS for all six sites, guarantees a minimum gross annual savings of \$578,000 to IRWD resulting in a net minimum \$342,350 annual savings to IRWD after paying \$235,650 annually to AMS in the form of monthly service fees.

Table 1 – DRES Site Specific Information

	Site	Energy Storage System Size (kW / kWh)
1.	Michelson Water Recycling Plant (MWRP)	2,500 kW / 15,000 kWh
2.	Deep Aquifer Treatment System (DATS)	1,000 kW / 6,000 kWh
3.	Los Alisos Water Recycling Plant (LAWRP)	1,000 kW / 5,600 kWh
4.	Potable Treatment Plant (PTP)	500 kW / 2,000 kWh
5.	Wells 21/22 Desalter Facility	250 kW / 1,100 kWh
6.	Baker Water Treatment Plant	1,000 kW / 6,000 kWh
	Total:	6,250 kW / 35,700 kWh

Demand Management Systems:

AMS assessed the financials for the remaining three-site DM portfolio, as identified in Table 2 below. These three sites will have battery storage systems, each with a two-hour capacity. The MGCS for the three sites guarantees a minimum gross annual saving of \$51,000 to IRWD resulting in net minimum \$16,750 annual savings to IRWD after paying \$34,250 to AMS in the form of monthly services fees. Significant revenue from participation in the Automated Demand Response program is expected to augment these savings.

Table 2 – Demand Management Site Specific Information

	Site	Energy Storage System Size (kW / kWh)
1.	Coastal Zone D Pump Station	500 kW / 1,000 kWh
2.	Coastal Zone 4 Pump Station	250 kW / 500 kWh
3.	Portola 3-5 & A-C Pump Station	250 kW / 500 kWh
	Total:	1,040 kW / 2,436 kWh

Conclusions:

Executing the amended and restated DRES and DM Agreements will allow the District to realize significant cost saving benefits with minimal capital outlay. The sustainable installations provided for in the agreements will enhance grid stability while contributing to greenhouse gas reduction and an improved carbon footprint. AMS bears all responsibility for project design, development (except for environmental studies and environmental commitments funded by IRWD), permitting, financing, maintenance, operations, and all legal and contractual obligations to SCE.

Staff recommends that the Board authorize the General Manager to execute the amended and restated DRES and DM Agreements subject to substantive revisions approved by the Committee. Legal counsel from Kronick, Moskovitz, Tiedemann and Girard has reviewed the proposed revisions and concurs with staff's recommendation.

FISCAL IMPACTS:

On August 8, 2016 the Board authorized the addition of the Energy Storage Systems, Project 07444, in the amount of \$222,000 to the FY 2016-17 to cover IRWD's costs associated with the implementation of the energy storage projects described above. Staff has included an additional \$50,000 to the capital budget request for FY 2018-19 for Project 07444. Upon approval of the budget, there will be adequate funding available to cover costs associated with adding the Baker Plant to the DRES Agreement.

ENVIRONMENTAL COMPLIANCE:

The Board approved the Baker Water Treatment Plant Final Environmental Impact Report (EIR) on April 26, 2011. Addendum No. 3 to the Final EIR, which evaluated the environmental effects of installing on-site solar and energy storage facilities at the Baker Plant, was approved by the Board on March 12, 2018. A Notice of Determination was filed with the Orange County Clerk-Recorder and the State Clearinghouse on March 13, 2018. All other sites included in the DRES and DM Agreements are exempt from CEQA as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 and Section 15303. In August 2016, staff submitted Notices of Exemption for each of these other sites.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on April 17, 2017.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AMENDED AND RESTATED ENERGY MANAGEMENT SERVICES (DRES PORTFOLIO B) AGREEMENT WITH HYBRID-ELECTRIC BUILDING TECHNOLOGIES WEST LOS ANGELES 1, LLC, AND HYBRID-ELECTRIC BUILDING TECHNOLOGIES WEST LOS ANGELES 2, LLC, AND AN AMENDED AND RESTATED ENERGY MANAGEMENT SERVICES AMENDMENT WITH REDWOOD ENERGY STORAGE, LLC SUBJECT TO SUBSTANTIVE REVISIONS APPROVED BY THE ENGINEERING AND OPERATIONS COMMITTEE.

LIST OF EXHIBITS:

Exhibit "A" – Amended and Restated Energy Management Services Agreement (DRES Portfolio B) with Hybrid-Electric Building Technologies West Los Angeles 1, LLC, and Hybrid-Electric Building Technologies West Los Angeles 2, LLC (DRES Agreement)

Exhibit "B" – Amended and Restated Energy Management Services Agreement with Redwood Energy Storage, LLC (DM Agreement)

**A COPY OF EXHIBIT
“A” CAN BE
OBTAINED FROM
THE DISTRICT
SECRETARY**

**A COPY OF EXHIBIT
“B” CAN BE
OBTAINED FROM
THE DISTRICT
SECRETARY**

April 23, 2018

Prepared by: R. Bennett / K. Welch

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook 

ACTION CALENDAR

SOUTHERN CALIFORNIA EDISON DIRECT ACCESS ELECTRIC SERVICE PROGRAM

SUMMARY:

The Southern California Edison (SCE) Direct Access Electric Service Program was established to allow non-residential customers to purchase electricity from a competitive Electric Service Provider (ESP) instead of SCE. Participation in the Direct Access Program would result in significant cost savings to IRWD in its annual purchases of electricity. In June 2017, IRWD provided notice to SCE of IRWD's desire to secure Direct Access service for select groups of electric service accounts. On April 17, 2018, SCE notified IRWD that it is offering IRWD the opportunity to participate in the Direct Access Program for up to 25 electric service accounts. Staff recommends that the Board concur with staff to accept the offer from SCE to transfer up to 25 electric service accounts to direct access service.

BACKGROUND:

SCE has implemented its Direct Access Program to provide an option for eligible non-residential customers to purchase electricity from an independent ESP. An ESP is responsible for generating or arranging for an adequate supply of electricity to meet its customer's needs. An entity can become an ESP with the approval of the California Public Utilities Commission (CPUC). SCE delivers the electricity that customers purchase from ESPs over SCE's transmission and distribution system. Exhibit "A" provides a graphical overview of how Direct Access energy supplies would be delivered to IRWD if it participates in the program.

Participation in SCE's Direct Access Program for the selected accounts would provide IRWD significant cost savings on its annual electricity purchases. As such, pursuing participation in Direct Access Program was included in IRWD's Target Activities for 2018. IRWD's actual savings, which are expected to average approximately 15% of SCE's billed energy use rate, will depend on ESP Direct Access energy rates, avoided SCE charges, and actual usage. Staff estimates the savings to be \$150,000 per year. Participation in Direct Access service would also provide a hedge against potential increases in electricity rates at SCE. IRWD's participation in the program would have no impact on the operational reliability of the District's facilities.

Offer to Participate in Direct Access Program:

Eligibility to participate is determined through a lottery-type selection process that is conducted annually. On June 16, 2017, IRWD provided SCE a six-month notice to transfer up to 68 electrical accounts to Direct Access which entered IRWD into the lottery process. The electrical accounts were broken into natural grouping such as potable wells, recycled water pumps, and non-potable water wells. On April 17, 2018, SCE notified IRWD that it was selected through the lottery process and SCE is offering IRWD the opportunity to participate in the Direct Access Program for up to 25 electric service accounts. The accounts that were selected by SCE are listed on Exhibits 'B' and 'C'. These exhibits include a list of 18 potable well accounts and six

recycled water pumping station accounts. The Coastal D Pump Station account that is listed on Exhibit "C" is expected to be a site for the installation of a battery-based energy storage project. Accordingly, staff will request that this account to be excluded from the Direct Access Program.

Direct Access Participation Process:

Now that IRWD has received notice of its eligibility to participate in the Direct Access Program, IRWD has until May 8, 2018 to accept or reject SCE's offer of participation. If IRWD accepts, it will have 45 days to review proposals and select an ESP provider. The ESP will then contract with SCE to deliver electricity to IRWD. If IRWD cannot select an ESP provider within the 45-day window, the Direct Access application will be withdrawn and the selected accounts will be transferred to a higher-than-normal electrical rate for eight months and then revert back to the original rate.

Next Steps:

Staff will retain Aviva Energy Corporation to assist in the selection and evaluation of ESP providers. Aviva has provided this type of service for over a dozen clients and has been recommended by the Orange County Water District. In cooperation with Aviva, IRWD will request proposals and select an ESP provider. Selection criteria will include, but not be limited to, experience, financial standing, indicative pricing and contract terms. During the evaluation process, Aviva will assist IRWD with evaluating any risks and uncertainties related to participation in the program as well as preparing a financial analysis that can be used when evaluating ESP pricing. With the assistance of Aviva, a standard bid form will be developed for each qualified ESP to submit its best and final energy pricing.

The acceptance of SCE's offer for participation in the Direct Access Program, as well as the execution of an agreement with an ESP to provide electricity for the selected accounts, is within the existing authority of the General Manager. Participation in SCE's Direct Access Program is a unique opportunity and staff recommends that the Board concur with the General Manager to exercise his authority to implement participation in the program.

FISCAL IMPACTS:

Sufficient funds exist in the Fiscal year 2017-18 Capital Budget under Project 07153 to cover the costs associated with the assistance to be provided by consultants at Aviva, legal counsel services and staff time to select and negotiate a Direct Access agreement with an ESP.

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 last reviewed by the Engineering and Operations Committee on June 16, 2015.

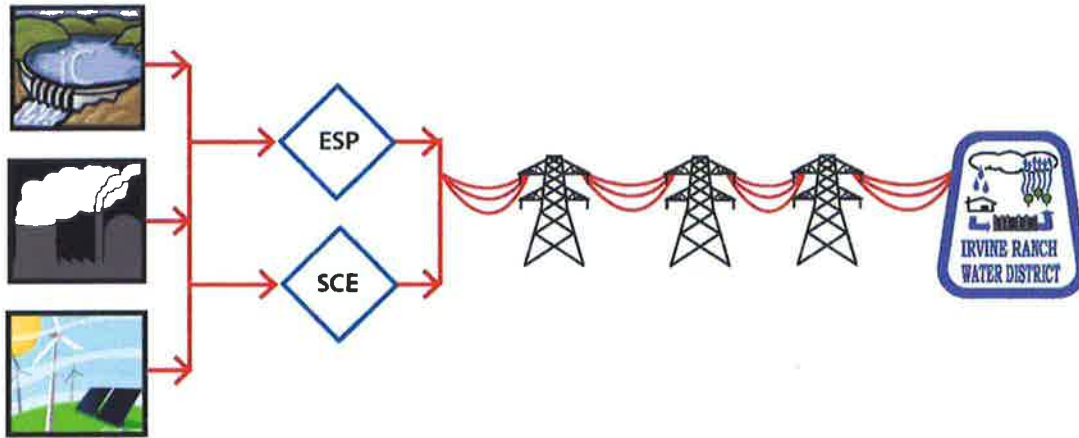
RECOMMENDATION:

THAT THE BOARD CONCUR WITH STAFF TO ACCEPT THE OFFER BY SOUTHERN CALIFORNIA EDISON TO TRANSFER UP TO 25 ELECTRIC SERVICE ACCOUNTS TO DIRECT ACCESS SERVICE, AND TO NEGOTIATE AND EXECUTE AN AGREEMENT WITH AN ELECTRIC SERVICE PROVIDER TO PROVIDE ELECTRICITY FOR THE SELECTED ACCOUNTS.

LIST OF EXHIBITS:

- Exhibit "A" – SCE Direct Access Program Schematic
- Exhibit "B" – Direct Access Accounts for Recycled Water Pumps
- Exhibit "C" – Direct Access Accounts for Selected Potable Wells

Exhibit "A"
SCE Direct Access Program
(Power Purchase Alternatives for IRWD)



Power Generation
Various Sources

Energy Supplier
Southern California Edison (SCE)
or an Energy Service Provider (ESP)

Power Distribution and Transmission
Southern California Edison

Power Use
Irvine Ranch
Water District
(IRWD)

Exhibit "B"
Direct Access Accounts for Selected Recycled Water Pumps

#	Direct Access Groups	Serv Acct Num	Service Street Addr	City Name	Zip	2016 Bill Amt (Sum)	2016 kWh Usage (Sum)	2016 Maximum kW (Max)	Description
1	RW Pump	39933543	5800 1/2 PORTOLA PKWY 1/2	IRVINE	92602	\$13,573	55,111	64	Bee Canyon Pump Station
2	RW Pump	19774792	20696 REGENCY	LAKE FOREST	92630	\$13,653	107,402	102	LF Zone C Pump station
3	RW Pump	4412044	11 STRAWBERRY FARM RD	IRVINE	92612	\$40,629	203,382	326	Turtle Rock Zone B Pump Station
4	RW Pump	25032574	2500 FORD	NEWPORT BEACH	92660	\$42,095	438,960	67	San Joaquin Zone B Pump Station
5	RW Pump	8169712	20544 NEWPORT COAST	NEWPORT BEACH	92660	\$96,651	968,462	479	Coastal G Pump Station
6	RW Pump	1573161	6747 IRVINE CENTER DRIV	IRVINE	92715	\$117,134	1,196,000	375	East Irvine Zone B Pump Station
7	RW Pump	3180640	4975 BONITA CANYON A	IRVINE	92618	\$325,380	2,445,488	1,031	Coastal Zone D Pump Station
Total						\$649,115	5,414,805	2,444	

Exhibit "C"

Direct Access Accounts for Selected Potable Wells

#	Direct Access Groups	Serv Acct Num	Service Street Addr	City Name	Zip	2016 Bill Amt (Sum)	2016 kWh Usage (Sum)	2016 Maximum kW (Max)	Description
1	DW Well	18288344	3232 1/2 S GREENVILLE ST	SANTA ANA	92704	\$4,281	14,737	84	DRWF - Well 7
2	DW Well	19055628	26001 DIMENSION	LAKE FOREST	92630	\$9,924	61,852	205	LF Well 7 Domestic
3	DW Well	293611	2302 S RAITT	SANTA ANA	92704	\$17,988	158,368	276	DRWF 18
4	DW Well	14452157	2915 HALLADAY ST	SANTA ANA	92705	\$31,913	334,494	74	DRWF Primary Disinfection Station
5	DW Well	1573123	2830 S FAIRVIEW ST	SANTA ANA	92704	\$61,828	352,706	332	DRWF 13
6	DW Well	38737417	1251 MITCHELL AVE	TUSTIN	92780	\$65,052	601,330	186	Tustin Well 21
7	DW Well	763215	1801 W SEGERSTROM	SANTA ANA	92704	\$75,779	770,133	265	DRWF Well 1
8	DW Well	14570911	2510 S SUSAN ST	SANTA ANA	92704	\$79,632	702,694	326	DRWF 16
9	DW Well	1679845	2922 W WARNER AVE	SANTA ANA	92704	\$95,068	752,776	439	DRWF 14
10	DW Well	1768919	2300 W SEGERSTROM	SANTA ANA	92704	\$100,962	908,899	334	DRWF 11
11	DW Well	25359479	3000 W HARVARD ST	SANTA ANA	92704	\$110,781	1,336,893	266	DRWF 12
12	DW Well	8789293	2500 1/2 S GARNSEY ST	SANTA ANA	92707	\$115,180	1,174,999	427	DRWF 6
13	DW Well	771996	1000 W HEMLOCK	SANTA ANA	92707	\$126,393	1,571,281	285	DRWF - Primary Disinfection Facility
14	DW Well	739415	500 W WALTON AVE	SANTA ANA	92707	\$132,216	1,610,811	313	DRWF 2
15	DW Well	38567159	14232 DEBUSK LN	TUSTIN	92780	\$133,328	1,033,920	296	Tustin Well 22
16	DW Well	17877936	2619 S CYPRESS CONT	SANTA ANA	92705	\$143,119	1,800,107	288	DRWF 5
17	DW Well	13147322	2114 S ANNE ST	SANTA ANA	92704	\$165,637	2,365,839	288	DRWF 17
18	DW Well	43045443	678 N GRAVIER ST	ORANGE	92869	\$184,751	1,075,430	512	NA
Total						\$1,653,835	16,627,269	5,196	