

AGENDA
IRVINE RANCH WATER DISTRICT
ENGINEERING AND OPERATIONS COMMITTEE
TUESDAY, JANUARY 17, 2017

CALL TO ORDER 7:00 a.m., IRWD's Operations Center, First Floor Committee Room,
3512 Michelson, Irvine Ranch Water District

ATTENDANCE Committee Chair: Douglas Reinhart _____
Committee Member – Steve LaMar _____

<u>ALSO PRESENT</u>	Paul Cook	_____	Patrick Shields	_____	Harry Cho	_____
	Kevin Burton	_____	Eric Akiyoshi	_____	Paul Weghorst	_____
	Rich Mori	_____	Scott Toland	_____	Tom Roberts	_____
	Kellie Lew	_____	Ken Drake	_____	Ken Pfister	_____
	Lars Oldewage	_____	Arseny Kalinsky	_____	Steve Malloy	_____
	Malcolm Cortez	_____	Bruce Newell	_____	_____	_____

COMMUNICATIONS

1. Notes: Burton
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted.
4. Determine which items may be approved without discussion.

ACTION

5. MICHELSON WATER RECYCLING PLANT SECURITY – RONEY

Recommendation: That the Board authorize the addition of the Michelson Water Recycling Plant Security Projects 7824, 7825 and 7826 to the FY 2016-17 Capital Budget in the amount of \$99,000 each, for a total of \$297,000, for the design and construction of a guardhouse kiosk, vehicle barrier gates and lighting at the MWRP campus.

6. AMENDMENT NO. 1 TO AMENDED AND RESTATED AGREEMENT FOR OPERATION AND MAINTENANCE OF THE BAKER PIPELINE – BURTON

Recommendation: That the Board approve and authorize the execution of Amendment No. 1 to Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline.

OTHER BUSINESS

7. A. Directors Comments

B. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee 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 Committee 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 Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance of the meeting room at the District's Operation's Committee Room at 3512 Michelson, Irvine, California. The Irvine Ranch Water District's Committee 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) 453-5312 during business hours at least seventy-two (72) hours prior to the scheduled meeting.

January 17, 2017

Prepared and submitted by: J. Roney

Approved by: Paul Cook 

ENGINEERING AND OPERATIONS COMMITTEE

MICHELSON WATER RECYCLING PLANT SECURITY UPGRADES

SUMMARY:

A security and vulnerability assessment of District facilities was conducted in April 2015. A key finding of this assessment was that the open-campus nature at the Michelson Water Recycling Plant (MWRP) provides an opportunity for theft, vandalism, assaults and accidents to unauthorized personnel entering the site. To mitigate the risks as identified in the assessment, the report recommended several alternatives to improve security at the MWRP. A key recommended improvement is the construction of a controlled access point at the entrance of the MWRP with a guardhouse, vehicle barrier gates, and lighting. Staff recommends the addition of Projects 7824, 7825, and 7826 for \$99,000 each to the Capital Budget, for a total of \$297,000, and that the General Manager approve Expenditure Authorizations for same amount for the design and construction of the recommended security improvements at the MWRP.

BACKGROUND:

In April 2015, a security assessment of District facilities and report of findings was completed by IRWD's consultant, TelSec, Inc. A significant security risk to IRWD identified was the open-campus nature of the 45-acre MWRP, which includes the water recycling plant, the biosolids dewatering facilities (currently under construction), maintenance buildings and equipment, a state-of-the-art water quality laboratory, warehousing, supply and equipment storage, and administrative offices that also serve as IRWD's primary Emergency Operations Center. Factors that contribute to the security concerns at the MWRP facility include:

- Significant increase in value of facilities, equipment and assets located at the MWRP;
- Encroaching urbanism surrounding the MWRP site resulting in an increase in security breaches as shown in Exhibit "A"; and
- Significant increase in traffic through the MWRP access points; up to 4,500 vehicles per week as measured by an August 2016 traffic study.

TelSec's assessment reports suggested alternatives to mitigate the identified MWRP security risks including: 1) construction of a controlled access point into and out of the MWRP campus as shown in Exhibit "B"; 2) segregation of the plant operation facilities from the parking and administrative components of the campus via fencing and locked gates as shown in Exhibit "C"; and 3) locking all entrance gates at all times which would require the installation of sophisticated intercom systems to provide staff a method to grant access to visitors and contractors when needed as shown in Exhibit "D".

Staff has reviewed and evaluated these alternatives and concluded that the most secure and efficient method to mitigate security risks to the MWRP is to implement TelSec's recommendation to construct a guard house, vehicle barrier gates and lighting adjacent to Tree Hill's parking area and staff the guard house with full-time contract security services as described in Exhibit "B". It is anticipated that implementation of this recommended alternative

will include construction of a small building consisting of a work space, restroom and storage and electrical/communication room, extension of water sewer and power and communication utilities from the Operations Center, security gates and monitoring equipment. This project would also include minor grading and street improvements adjacent to Tree Hill's parking area and asphalt replacement surrounding the guardhouse's perimeter and along the utility trenches.

If staff's recommendation to proceed with this project is approved, staff will prepare a Request for Proposal for engineering services to evaluate and then design the facilities. A Preliminary Design Report will be presented to the Engineering and Operations Committee for review prior to commencing with the final design. The award of a Professional Services Agreement for the preliminary and final design services is anticipated to be within the authority of the General Manager.

FISCAL IMPACTS:

Staff request the addition of Michelson Campus Security Projects 7824, 7825 and 7826 to the FY 2016-17 Capital Budget in the amount of \$99,000 each. Expenditure Authorizations, attached as Exhibit "E", will be approved by the General Manager.

Project No.	Current Budget	Addition <Reduction>	Total Budget
7824	-0-	\$99,000	\$99,000
7825	-0-	\$99,000	\$99,000
7826	-0-	\$99,000	\$99,000
Total	-0-	\$297,000	\$297,000

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations, Title 14, Chapter 3, Section 15004, the appropriate environmental documents will be prepared when the 'meaningful information' becomes available.

RECOMMENDATION:

That the Board authorize the addition of the Michelson Water Recycling Plant Security Projects 7824, 7825 and 7826 to the FY 2016-17 Capital Budget in the amount of \$99,000 each, for a total of \$297,000, for the design and construction of a guardhouse kiosk, vehicle barrier gates and lighting at the MWRP campus.

LIST OF EXHIBITS:

- Exhibit "A" – MWRP and San Joaquin Marsh Security Incidents
- Exhibit "B" – Diagram of Security Kiosk Location
- Exhibit "C" – Diagram of Internal Fencing/Gates
- Exhibit "D" – Diagram of Locked Gates/Intercom System
- Exhibit "E" – Expenditure Authorizations

EXHIBIT "A"

MWRP & MARSH SECURITY INCIDENTS

04/2015 TO 12/2016

TYPE OF INCIDENT	MWRP	MARSH	TOTAL
Arrests	2	1	3
Graffiti	0	24	24
Homeless Encampment	0	1	1
Lewd Acts	0	1	1
Police/ Fire Dept. Visits	3	2	5
Public/ Irrate Customers	2	0	2
Suspicious Person/Activities	5	10	15
Theft/ Burglary	0	2	2
Trespassing	7	0	7
Unauthorized/ Towing Vehicles	0	0	0
Unauthorized Visitors	25	0	25
Unlock door/ gates/ facilities	15	10	25
Vandalism/ Property Damages	5	1	6
Workplace Threat	2	0	2
TOTAL	66	52	118

EXHIBIT "A"

MWRP & MARSH SECURITY INCIDENTS

04/2015 TO 12/2016

TYPE OF INCIDENT	MWRP	MARSH	TOTAL
Arrests	2	1	3
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Homeless Encampment	0	1	1
Lewd Acts	0	1	1
Police/ Fire Dept. Visits	3	2	5
Public/ Irate Customers	2	0	2
Suspicious Person/Activities	5	10	15
Theft/ Burglary	0	2	2
Trespassing	7	0	7
Unauthorized/ Towing Vehicles	0	0	0
Unauthorized Visitors	25	0	25
Unlock door/ gates/ facilites	15	10	25
Vandalism/ Property Damages	5	1	6
Workplace Threat	2	0	2
TOTAL	66	52	118

EXHIBIT "B"



EXHIBIT 'C

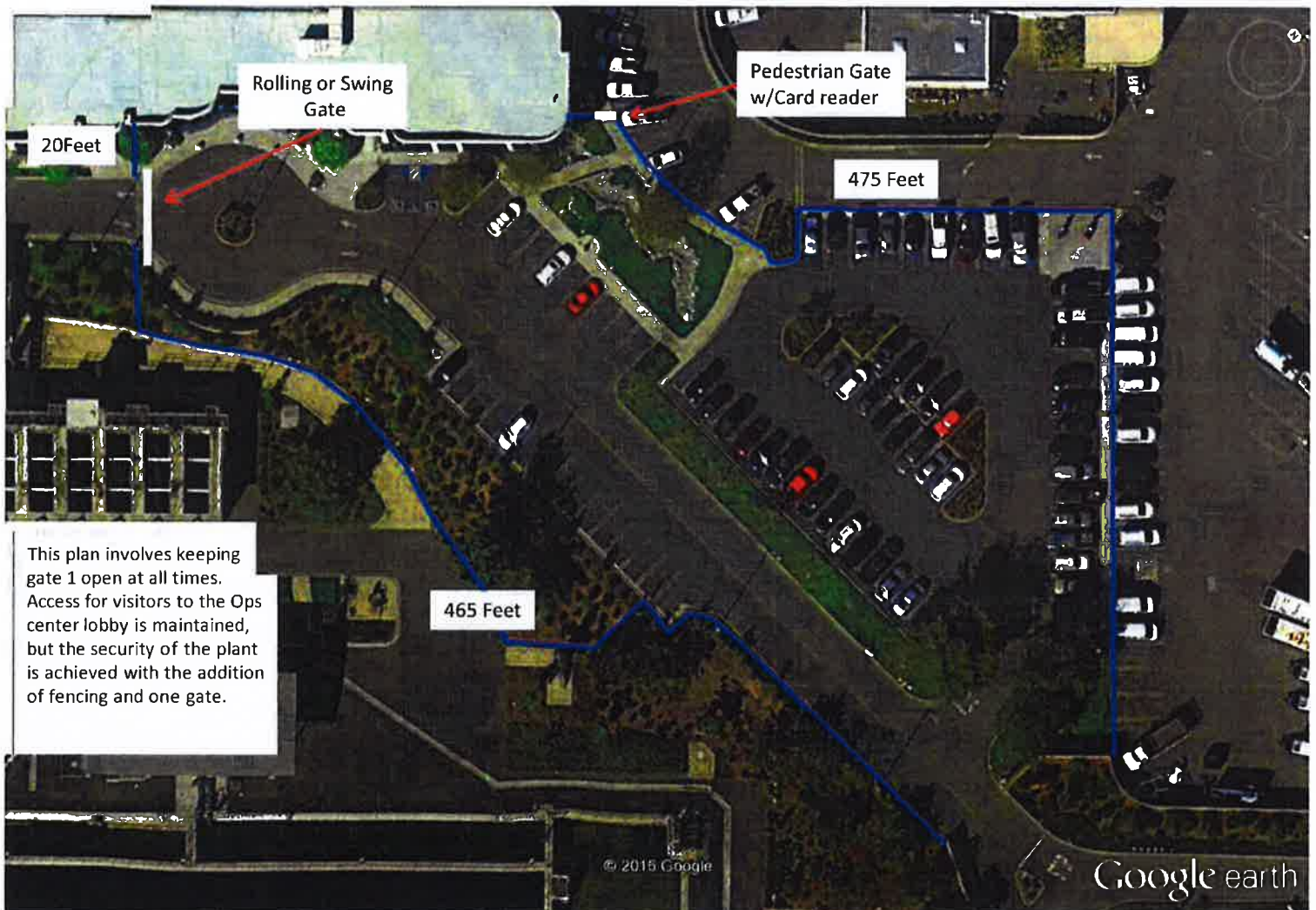
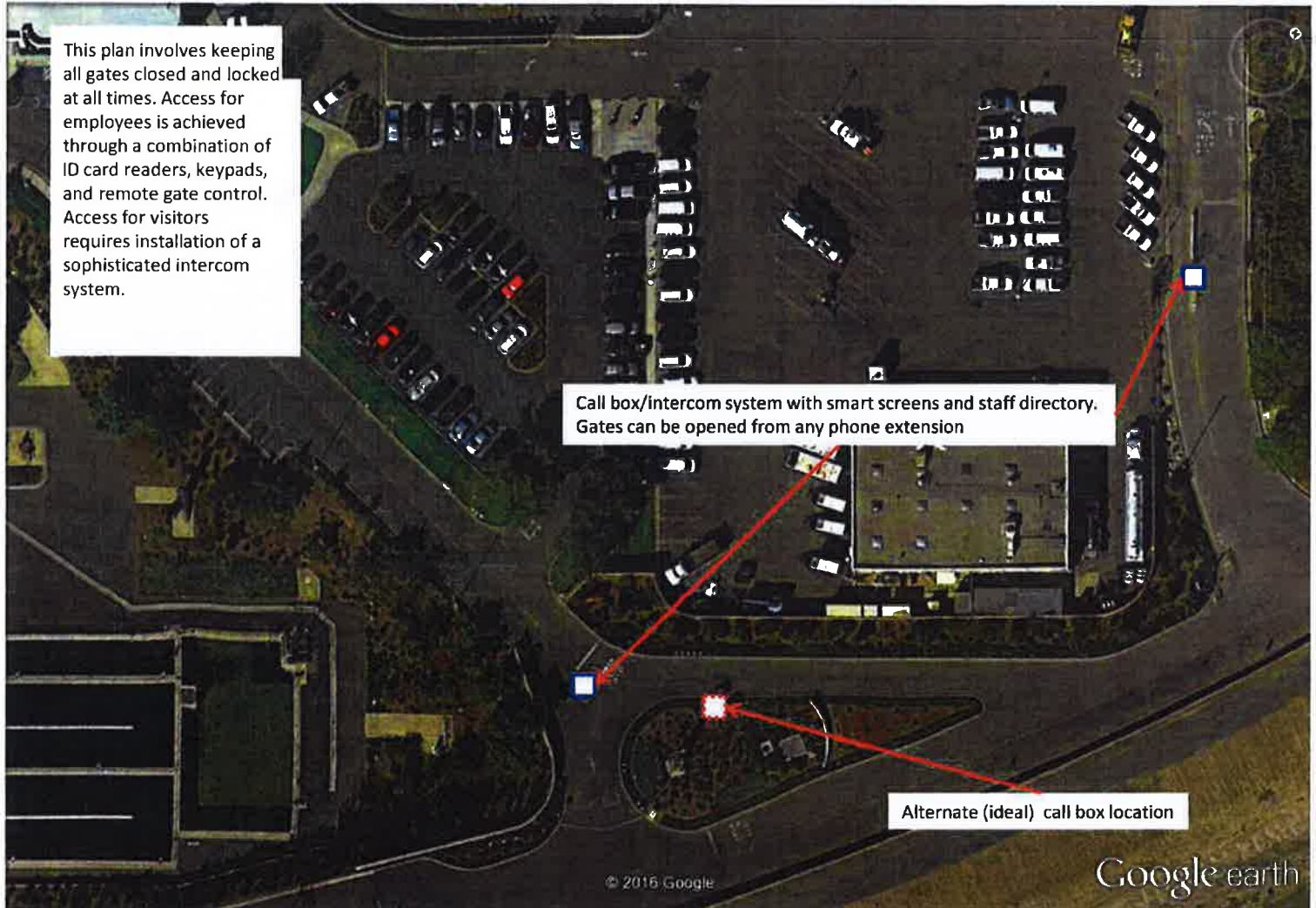


EXHIBIT "D"



IRVINE RANCH WATER DISTRICT EXHIBIT "E"

Expenditure Authorization

Project Name: MICHELSON CAMPUS SECURITY - DW
EPMS Project No: 11991 **EA No:** 1
Oracle Project No: 7824
Project Manager: CORTEZ, MALCOLM
Project Engineer: MURPHY, ALEXANDER
Request Date: January 4, 2017

ID Split: Regional Water Split with LAWD (11/08)

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	3.6	BONDS YET TO BE SOLD**
113	4.4	BONDS YET TO BE SOLD**
115	6.2	CAPITAL FUND
121	12.8	BONDS YET TO BE SOLD**
130	10.0	BONDS YET TO BE SOLD**
135	16.2	PREVIOUSLY SOLD BONDS
140	3.5	BONDS YET TO BE SOLD**
150	26.1	BONDS YET TO BE SOLD**
153	2.9	BONDS YET TO BE SOLD**
154	1.2	BONDS YET TO BE SOLD**
161	6.7	BONDS YET TO BE SOLD**
182	2.5	BONDS YET TO BE SOLD**
184	2.3	BONDS YET TO BE SOLD**
186	.8	BONDS YET TO BE SOLD**
188	.8	BONDS YET TO BE SOLD**
Total	100.0%	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$99,000
Total EA Requests:	\$99,000
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$99,000
Updated Budget:	\$99,000
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	6,000	0	6,000	6,000	0	6,000	1/17	6/17
ENGINEERING DESIGN - OUTSIDE	13,000	0	13,000	13,000	0	13,000	2/17	7/17
DESIGN STAFF FIELD SUPPORT	2,000	0	2,000	2,000	0	2,000	2/17	7/17
ENGINEERING - CA&I IRWD	6,000	0	6,000	6,000	0	6,000	8/17	1/18
ENGINEERING - CA&I OUTSIDE	10,000	0	10,000	10,000	0	10,000	9/17	1/18
CONSTRUCTION FIELD SUPPORT	2,000	0	2,000	2,000	0	2,000	9/17	1/18
CONSTRUCTION	50,000	0	50,000	50,000	0	50,000	9/17	12/17
LEGAL	1,000	0	1,000	1,000	0	1,000	2/17	1/18
Contingency - 10.00% Subtotal	\$9,000	\$0	\$9,000	\$9,000	\$0	\$9,000		
Subtotal (Direct Costs)	\$99,000	\$0	\$99,000	\$99,000	\$0	\$99,000		
Estimated G/A - 185.00% of direct labor*	\$29,600	\$0	\$29,600	\$29,600	\$0	\$29,600		
Total	\$128,600	\$0	\$128,600	\$128,600	\$0	\$128,600		
Direct Labor	\$16,000	\$0	\$16,000	\$16,000	\$0	\$16,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: Malcolm Cortez 1/4/17

Department Director: Kari L. Burt 1/4/17

Finance: _____

Board/General Manager: _____

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$137,000. The project is further described in the attached staff report and official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2

IRVINE RANCH WATER DISTRICT

Expenditure Authorization

Project Name: MICHELSON CAMPUS SECURITY - SS
EPMS Project No: 21991 **EA No:** 1
Oracle Project No: 7825
Project Manager: CORTEZ, MALCOLM
Project Engineer: MURPHY, ALEXANDER
Request Date: January 4, 2017

ID Split: Regional Sewer Split with LAWD (11/08)

Improvement District (ID) Allocations

ID No. Allocation % Source of Funds

211	7.7	CAPITAL FUND
212	3.3	BONDS YET TO BE SOLD**
213	4.4	BONDS YET TO BE SOLD**
215	7.2	CAPITAL FUND
221	15.4	BONDS YET TO BE SOLD**
230	10.1	BONDS YET TO BE SOLD**
235	13.3	PREVIOUSLY SOLD BONDS
240	2.9	BONDS YET TO BE SOLD**
250	24.0	BONDS YET TO BE SOLD**
253	.9	BONDS YET TO BE SOLD**
261	6.3	BONDS YET TO BE SOLD**
282	1.7	BONDS YET TO BE SOLD**
284	1.8	BONDS YET TO BE SOLD**
286	.5	BONDS YET TO BE SOLD**
288	.5	BONDS YET TO BE SOLD**
Total		100.0%

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$99,000
Total EA Requests:	\$99,000
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$99,000
Updated Budget:	\$99,000
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	6,000	0	6,000	6,000	0	6,000	1/17	6/17
ENGINEERING DESIGN - OUTSIDE	13,000	0	13,000	13,000	0	13,000	2/17	7/17
DESIGN STAFF FIELD SUPPORT	2,000	0	2,000	2,000	0	2,000	2/17	7/17
ENGINEERING - CA&I IRWD	6,000	0	6,000	6,000	0	6,000	8/17	1/18
ENGINEERING - CA&I OUTSIDE	10,000	0	10,000	10,000	0	10,000	9/17	1/18
CONSTRUCTION FIELD SUPPORT	2,000	0	2,000	2,000	0	2,000	9/17	1/18
CONSTRUCTION	50,000	0	50,000	50,000	0	50,000	9/17	12/17
LEGAL	1,000	0	1,000	1,000	0	1,000	2/17	1/18
Contingency - 10.00% Subtotal	\$9,000	\$0	\$9,000	\$9,000	\$0	\$9,000		
Subtotal (Direct Costs)	\$99,000	\$0	\$99,000	\$99,000	\$0	\$99,000		
Estimated G/A - 185.00% of direct labor*	\$29,600	\$0	\$29,600	\$29,600	\$0	\$29,600		
Total	\$128,600	\$0	\$128,600	\$128,600	\$0	\$128,600		
Direct Labor	\$16,000	\$0	\$16,000	\$16,000	\$0	\$16,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

Malcolm Cortez

1/4/17

Department Director:

John L. Burt

1/4/17

Finance:

Board/General Manager:

** IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$132, further described in the attached staff report and additional documents, if any, which are hereby incorporated into this project is made under Treasury Regulation Section 1.150-2.

IRVINE RANCH WATER DISTRICT

Expenditure Authorization

Project Name: MICHELSON CAMPUS SECURITY - RW
EPMS Project No: 31991 **EA No:** 1
Oracle Project No: 7826
Project Manager: CORTEZ, MALCOLM
Project Engineer: MURPHY, ALEXANDER
Request Date: January 4, 2017

ID Split: Regional Reclaimed Water Split with LAWD (11/08)

Improvement District (ID) Allocations

ID No. **Allocation %** **Source of Funds**

211	2.1	CAPITAL FUND
212	13.2	BONDS YET TO BE SOLD**
213	4.8	BONDS YET TO BE SOLD**
215	.7	CAPITAL FUND
221	13.2	BONDS YET TO BE SOLD**
230	9.6	BONDS YET TO BE SOLD**
235	7.9	PREVIOUSLY SOLD BONDS
240	7.7	BONDS YET TO BE SOLD**
250	31.7	BONDS YET TO BE SOLD**
261	9.1	BONDS YET TO BE SOLD**

Total **100.0%**

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$99,000
Total EA Requests:	\$99,000
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$99,000
Updated Budget:	\$99,000
Budget Remaining After This EA	\$0

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	6,000	0	6,000	6,000	0	6,000	1/17	6/17
ENGINEERING DESIGN - OUTSIDE	13,000	0	13,000	13,000	0	13,000	2/17	7/17
DESIGN STAFF FIELD SUPPORT	2,000	0	2,000	2,000	0	2,000	2/17	7/17
ENGINEERING - CA&I IRWD	6,000	0	6,000	6,000	0	6,000	8/17	1/18
ENGINEERING - CA&I OUTSIDE	10,000	0	10,000	10,000	0	10,000	9/17	1/18
CONSTRUCTION FIELD SUPPORT	2,000	0	2,000	2,000	0	2,000	9/17	1/18
CONSTRUCTION	50,000	0	50,000	50,000	0	50,000	9/17	12/17
LEGAL	1,000	0	1,000	1,000	0	1,000	2/17	1/18
Contingency - 10.00% Subtotal	\$9,000	\$0	\$9,000	\$9,000	\$0	\$9,000		
Subtotal (Direct Costs)	\$99,000	\$0	\$99,000	\$99,000	\$0	\$99,000		
Estimated G/A - 185.00% of direct labor*	\$29,600	\$0	\$29,600	\$29,600	\$0	\$29,600		
Total	\$128,600	\$0	\$128,600	\$128,600	\$0	\$128,600		
Direct Labor	\$16,000	\$0	\$16,000	\$16,000	\$0	\$16,000		

*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

Malcolm Cortez

1/4/17

Department Director:

Rain L. Burton

1/4/17

Finance:

Board/General Manager:

** IRWD hereby declares that it reasonably expects those exp incurred by IRWD in a maximum principal amount of \$132,000 additional documents, if any, which are hereby incorporated into this project is made under Treasury Regulation Section 1.150-2.

E-3

to be reimbursed with proceeds of future debt to be further described in the attached staff report and intent to reimburse costs of the above-captioned

January 17, 2017

Prepared and submitted by: K. Burton 

Approved by: Paul Cook 

ENGINEERING AND OPERATIONS COMMITTEE

AMENDMENT NO. 1 TO AMENDED AND RESTATED AGREEMENT FOR OPERATION AND MAINTENANCE OF THE BAKER PIPELINE

SUMMARY:

The Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline dated July 1, 2007 (Agreement) between the Santiago Aqueduct Commission (Commission) and IRWD expired June 30, 2012. Neither party to the Agreement provided notice of renewal or non-renewal and the terms of the Agreement have been continued in effect by implied mutual consent. Staff recommends that the Board approve and authorize the execution of Amendment No. 1 to Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline.

BACKGROUND:

In July 2007 the Commission and IRWD entered into the Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline, which is attached as Exhibit "A". The 2007 Agreement was for a period of five years with the option to be renewed for additional periods of five years by mutual consent. In June 2012 neither party provided notice of renewal or non-renewal and the terms of the Agreement have been continued in effect by implied mutual consent.

Per Section 7 of the Agreement, IRWD has provided notice of its intent to continue to provide the operation and maintenance of the Baker Pipeline to June 30, 2021, unless terminated earlier in accordance with the Amendment. The Amendment continues all terms of the prior Agreement, with modification that the renewal for additional periods of five years shall be automatic unless notice of non-renewal or written notice of a request to modify the terms is provided by either the Commission or IRWD six months in advance of the expiration date. The Amendment is attached as Exhibit "B". On December 15, 2016, the Commission approved and executed the Amendment.

FISCAL IMPACTS:

Operation and maintenance budgets are prepared by IRWD and presented annually to the Commission. IRWD's costs are reimbursed per the terms of the Agreement.

ENVIRONMENTAL COMPLIANCE:

The activity is categorically exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 (class 1) which provides exclusions for operations and maintenance of existing public facilities.

RECOMMENDATION:

That the Board approve and authorize the execution of Amendment No. 1 to Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline.

LIST OF EXHIBITS:

- Exhibit “A” – Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline, dated July 1, 2007
- Exhibit “B” – Amendment No. 1 to Amended and Restated Agreement for Maintenance and Operation of the Baker Pipeline

EXHIBIT "A"

AMENDED AND RESTATED AGREEMENT FOR MAINTENANCE AND OPERATION OF THE BAKER PIPELINE

This Amended and Restated Agreement is entered into as of and becomes effective on July 1, 2007 by and between SANTIAGO AQUEDUCT COMMISSION ("SAC") and IRVINE RANCH WATER DISTRICT ("IRWD").

W I T N E S S E T H:

WHEREAS, SAC was formed by joint exercise of powers agreement on September 11, 1961 to build, operate and manage the Santiago Aqueduct Pipeline; and

WHEREAS, the Santiago Aqueduct Pipeline has been modified in connection with the construction of the Allen McColloch Pipeline and is now known as the Baker Pipeline; and

WHEREAS, SAC has heretofore contracted with Irvine Ranch Water District ("IRWD") to maintain and operate the Baker Pipeline; and

WHEREAS, SAC and IRWD have been maintaining and operating the Baker Pipeline pursuant to an Agreement for Maintenance and Operation of the Baker Pipeline, as extended by letter of January 17, 2002 evidencing the parties' mutual consent ("Prior Agreement"), which by its terms will expire on June 30, 2007; and

WHEREAS, SAC and IRWD desire to continue to have IRWD provide the maintenance and operation of the Baker Pipeline and desire to amend and restate the Prior Agreement, to become effective when the Prior Agreement expires;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

Section 1. Authority.

SAC shall retain ultimate responsibility and authority for management, operation and maintenance of the Baker Pipeline and shall direct IRWD from time to time with respect to performance of its obligations hereunder.

Section 2. Maintenance and Operation Duties of IRWD.

IRWD shall on behalf of SAC maintain and operate the Baker Pipeline for the benefit of the owners of capacity in the Baker Pipeline.

IRWD shall prepare annual projected maintenance and operation budgets and present such to SAC each April during the term of the Agreement.

IRWD shall prepare and keep proper and appropriate records. Copies of all such reports shall be furnished to SAC.

IRWD shall make periodic bills to SAC for the cost of operation, maintenance and any repair or any capital improvement costing less than \$20,000 as set forth in Section 3 below. Repairs and capital improvements in excess of \$20,000 shall be approved by SAC prior to the expenditure and reimbursement to IRWD.

Section 3. Reimbursement of IRWD Expenses.

SAC shall reimburse IRWD for expenses incurred in rendering the services pursuant to this Agreement as follows:

- a. Direct Labor. Direct labor costs shall be paid within thirty (30) days after presentation by IRWD of an invoice setting forth the costs of direct labor, multiplied by a factor of 1.5. The overhead factor shall apply to all direct labor, including administration and management personnel.
- b. Materials, Supplies and Equipment. Costs of materials, supplies and equipment use shall be paid within thirty (30) days after presentation by IRWD of an invoice setting forth the cost of materials, supplies and equipment use. Materials and supplies shall be charged to SAC at their actual cost without mark-up added for such materials or supplies. Equipment use shall be charged to SAC at actual cost including G&A.

c. Administration Services. In addition to the overhead factor applied to direct labor there shall be paid to IRWD, for administrative services, an amount to be agreed upon by the General Managers for SAC and IRWD, which payment shall be a fixed amount paid monthly and included in the budgets for the respective agencies.

Section 4. Responsibility/Liability.

IRWD and SAC promise and agree that they will, to the fullest extent permitted by law, at all times defend, indemnify and hold harmless each other and their officers, agents, directors, servants and employees, jointly and severally, against all claims, injuries, damages, demands, liability or expense, of whatever nature, sustained by the other as result of or arising out of the negligent or intentional acts, errors or omissions of the other in the performance of this Agreement.

Section 5. Relationship.

It is agreed that the relationship of IRWD to SAC is that of an independent contractor, and that in no event shall IRWD or its employees be deemed to be agents, officers or employees of SAC.

Section 6. Attorney's Fees.

In the event an action is commenced by any party to this Agreement to enforce or construe its rights, the party prevailing in such action, in addition to any other relief and recovery awarded by the court, shall be entitled to recover all taxable costs plus a reasonable amount of attorney's fees.

Section 7. Term and Termination of Services.

The maintenance and operation of the Baker Pipeline provided for in this Agreement shall commence as of the 1st day of July 2007 and shall terminate on the 30th day of June 2012, unless terminated earlier in accordance with this Agreement. This Agreement may be renewed for additional periods of five (5) years by mutual consent of

the parties on like terms or as otherwise agreed. Notice of renewal or non-renewal shall be given six (6) months in advance of the expiration date of the original term or any extension of the term of this Agreement.

This agreement may be terminated by either party upon ninety (90) days written notice to the other party. Also, this Agreement may be terminated for cause by either party upon thirty (30) days written notice; however either party may remedy the cause of termination and in such instance this Agreement shall remain in existence for the remainder of its specified term.

Section 8. Notices.

Any notice or instrument required to be given or delivered may be given or delivered by depositing the same in any United States Post Office registered or certified, postage prepaid, addressed to:

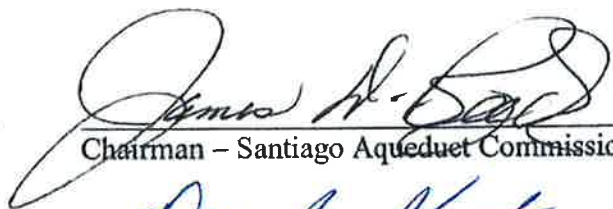
Santiago Aqueduct Commission
15600 Sand Canyon Avenue
Irvine, CA 92618
Attn: General Manager

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618
Attn: General Manager

Or such other address as a party may designate by notice to the other part in the manner provided herein.

IN WITNESS WHEREOF, the parties hereto have executed this Amended and Restated Agreement, and it is entered into and becomes effective on July 1, 2007.

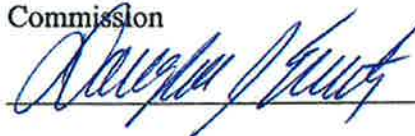
Dated: 2-8-07


Chairman - Santiago Aqueduct Commission


Secretary - Santiago Aqueduct Commission

APPROVED AS TO FORM:

Stradling, Yocca, Carlson and Rauth
Legal Counsel for Santiago Aqueduct
Commission



Dated: 1-30-07



President
IRVINE RANCH WATER DISTRICT
and the Board of Directors thereof



Secretary
IRVINE RANCH WATER DISTRICT
and the Board of Directors thereof

APPROVED AS TO FORM:

BOWIE, ARNESON,
WILES & GIANONE
Legal Counsel - IRWD

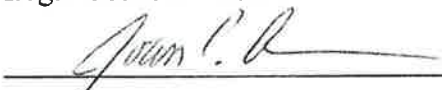


EXHIBIT "B"

AMENDMENT NO. 1 TO AMENDED AND RESTATED AGREEMENT FOR MAINTENANCE AND OPERATION OF THE BAKER PIPELINE

This Amendment No. 1 to Amended and Restated Agreement For Maintenance and Operation of the Baker Pipeline (this "Amendment") is entered into as of and become effective on _____, 2016, by and between SANTIAGO AQUEDUCT COMMISSION ("SAC") and IRVINE RANCH WATER DISTRICT ("IRWD") (each, a "Party" and together, the "Parties").

W I T N E S S E T H:

WHEREAS, the Parties have entered into the Amended and Restated Agreement For Maintenance and Operation of the Baker Pipeline, dated as of July 1, 2007 (the "O&M Agreement"); and

WHEREAS, the O&M Agreement provided for termination thereof on the 30th day of June 2012, and provided that the term may be renewed for additional periods of five (5) years by mutual consent of the parties on like terms or as otherwise agreed; and

WHEREAS, following the termination date of June 30, 2012, the term of the O&M Agreement has been continued in effect by the mutual consent of the Parties pending the preparation of an amendment or new agreement to extend the term; and

WHEREAS, SAC desires to continue to have IRWD provide the maintenance and operation of the Baker Pipeline as provided in the O&M Agreement and IRWD desires to continue providing such operation and maintenance;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

Section 1. Extension of Term.

Section 7 of the O&M Agreement is deleted in its entirety and amended to read as follows:

“Section 7. Term and Termination of Services.

a. Expiration. The term of the O&M Agreement shall continue until June 30, 2021, subject to renewal and non-renewal as provided in paragraph b of this Section, unless terminated earlier pursuant to paragraph c of this Section.

b. Renewal. The O&M Agreement may be renewed for additional periods of five (5) years. Renewal shall be automatic unless written notice of non-renewal or written notice of a Party's request to modify the terms and provisions of the O&M Agreement, shall be given by either of the Parties six (6) months in advance of the expiration date of the term set forth in paragraph a hereof or any renewal term

c. Termination. The O&M Agreement may be terminated by either Party upon ninety (90) days written notice to the other Party. In addition, the O&M Agreement may be terminated for cause by either Party upon thirty (30) days written notice; however either Party may remedy the cause of termination and in such instance the O&M Agreement shall remain in effect.”

IN WITNESS WHEREOF, the parties hereto have executed this Amendment to be effective on the date first referenced above.

[signatures on following page]

Dated: 12/15/16


Chairman – Santiago Aqueduct Commission


Secretary – Santiago Aqueduct Commission

APPROVED AS TO FORM:

Stradling, Yocca, Carlson and Rauth
Legal Counsel for Santiago Aqueduct
Commission



Dated: 12/15/16

President
IRVINE RANCH WATER DISTRICT
and the Board of Directors thereof

Secretary
IRVINE RANCH WATER DISTRICT
and the Board of Directors thereof

APPROVED AS TO FORM:

BOWIE, ARNESON,
WILES & GIANONE
Legal Counsel - IRWD
