

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

**February 27, 2012**

**PLEDGE OF ALLEGIANCE**

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

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

**NOTICE**

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

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**COMMUNICATIONS TO THE BOARD**

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1.    A. Written:
- B. Oral: Mrs. Joan Irvine Smith relative to the Dyer Road Wellfield.

2.    **ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

Recommendation: Determine that the need to discuss and/or take immediate action on item(s) introduced come to the attention of the District subsequent to the agenda being posted.

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<b>CONSENT CALENDAR</b>	<b>Next Resolution No. 2012- 12</b>	<b>Items 3-13</b>
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3.    **MINUTES OF REGULAR BOARD MEETINGS**

Recommendation: That the minutes of the February 13, 2012 Regular Board Meeting, the February 21, 2012 Adjourned Regular Board Meeting, and the February 22, 2012 Regular Board Meeting be approved as presented.

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

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Peer Swan and John Withers.

**CONSENT CALENDAR**

**Next Resolution No. 2012-12**

**Items 3-13**

5. JANUARY 2012 FINANCIAL REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report and the Monthly Interest Rate Swap Summary for January 2012; approve the January 2012 Summary of Payroll ACH payments in the total amount of \$1,386,762.97, and approve the January 2012 accounts payable Disbursement Summary of Warrants Nos. 326347 through 327178, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$15,655,484.60.

6. DISTRICT STRATEGIC MEASURES DASHBOARDS

Recommendation: That the Board receive and file the Strategic Measures Dashboards and Information items.

7. UPCOMING PROJECTS STATUS UPDATE

Recommendation: That the Board receive and file.

8. QUITCLAIM OF REAL PROPERTY TO VON KARMAN PLAZA, LLC.

Recommendation: That the Board adopt a Resolution approving execution of the Quitclaim Deed to Von Karman Plaza, LLC.

Reso No. 2012-

9. QUITCLAIM OF REAL PROPERTY TO WAL-MART REAL ESTATE BUSINESS TRUST.

Recommendation: That the Board adopt a Resolution approving execution of the Quitclaim Deed to Wal-Mart Real Estate Business Trust.

Reso No. 2012-

10. ADDENDUM NO. 1 TO THE BAKER WATER TREATMENT PLANT ENVIRONMENTAL IMPACT REPORT

Recommendation: That the Board approve the proposed Addendum No. 1 to the Baker Water Treatment Plant Project Environmental Impact Report, including the determination set forth in the addendum, and approve the modifications to the project consisting of changes to the Mechanical Design and Planned Operation to the product water pump station and alignment of the treated water pipeline.

CONSENT CALENDAR	Next Resolution No. 2012- 12	Items 3-13
11	<u>DOMESTIC AND RECYCLED VAULT LIDS REHABILITATION EXPENDITURE AUTHORIZATIONS AND CONSULTANT SELECTION</u>  Recommendation: That the Board approve an Expenditure Authorization in the amount of \$154,600 for the Domestic Vault Lid Rehabilitation, project 11358 (1800), and approve an Expenditure Authorization in the amount of \$115,500 for the recycled vault lid rehabilitation, project 31358 (1065).	
12.	<u>PLANNING AREA 9B JEFFREY ROAD PIPELINES EXPENDITURE AUTHORIZATIONS AND POTENTIAL CHANGE OF WORK WITH IRVINE COMMUNITY DEVELOPMENT COMPANY</u>  Recommendation: That the Board approve Expenditure Authorizations for project 10423 (1519) in the amount of \$38,100 and project 30422 (1024) in the amount of \$47,400; and approve a potential change of work in the amount of \$83,146 to the Reimbursement Agreement with the Irvine Community Development Company for Planning Area 9B to construct PA 9B Jeffrey Road IRWD Capital Facilities, projects 10423 (1519) and 30422 (1024).	
13.	<u>EMERGENCY DOMESTIC WATER INTERCONNECTION AGREEMENT WITH SANTA MARGARITA WATER DISTRICT</u>  Recommendation: That the Board authorize the General Manager to execute an agreement with Santa Margarita Water District that terminates the 1979 Capacity Agreement and provides for an emergency domestic water interconnect; authorize the District officers to execute a Quitclaim Deed to transfer IRWD's capacity ownership in various pipelines and the Alicia Reservoir A to Santa Margarita Water District; and adopt a resolution approving execution of the Quitclaim Deed to Santa Margarita Water District.	

Reso No. 2012-

ACTION CALENDAR	
14.	<u>BAKER WATER TREATMENT PLANT DESIGN VARIANCE NO. 6</u>  Recommendation: That the Board authorize the General Manager to execute Variance No. 6, in the amount of \$73,000, with RBF Consulting for the Baker Water Treatment Plant, project 11218 (1417).

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**ACTION CALENDAR**

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15. WELL 115 REPLACEMENT – CAPITAL BUDGET ADDITION, EXPENDITURE AUTHORIZATION, AND VARIANCE No. 1

Recommendation: That the Board authorize the addition of project 11627 (3717) in the amount of \$3,685,600 to the Fiscal Year 2011-12 Capital budget for Well 115 Replacement; approve an Expenditure Authorization in the amount of \$551,300 for project 11627 (3717); and approve a no-cost Variance No. 1 with Tetra Tech for the Well 115 Replacement, project 11627 (3717).

16. MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS CHANGE ORDERS, VARIANCE, AND REDUCTION OF RETENTION

Recommendation: That the Board approve Contract Change Order (CCO) No. 57 in the amount of \$116,206.53 with J. R. Filanc Construction Co. to install a 5-ton crane for Michelson Water Recycling Plant Phase 2 Expansion (MWRPP2), projects 20214 (1599) and 30214 (1706); approve CCO No. 58 in the credit amount of \$669,030.20 with J. R. Filanc Construction Co. due to final quantity adjustment of the structure piles within MWRPP2 expansion, projects 20214 (1599) and 30214 (1706); authorize the General Manager to execute Variance No. 2 in the amount of \$24,700 with Ninyo and Moore for supplemental construction phase services for pile installation for the MWRPP2 expansion, projects 20214 (1599) and 30214 (1706) and flood protection improvement, projects 20542 (1150) and 30542 (1118); find that satisfactory progress is being made on the MWRPP2 expansion and flood protection improvements contract; authorize the reduction of retention from 10% to 5% of the contract amount; and release funds in excess of 5% of the contract amount from retention currently held for MWRPP2 expansion and flood protection improvements, projects 20214 (1599), 20542 (1150), 30214 (1706), and 30542 (1118).

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**OTHER BUSINESS**

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

17. A. General Manager's Report

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**OTHER BUSINESS - Continued**

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17. B. Directors' Comments

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C. Adjourn.

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

February 27, 2012  
Prepared and  
Submitted by: L. Bonkowski  
Approved by: P. Cook 

CONSENT CALENDAR

MINUTES OF REGULAR BOARD MEETING

SUMMARY:

Provided are the minutes of the February 13, 2012 Regular Board Meeting, February 21, 2012 Regular Board Meeting, and February 21, 2012 Adjourned Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE FEBRUARY 13, 2012 REGULAR BOARD MEETING, THE FEBRUARY 21, 2012 REGULAR BOARD MEETING, AND THE FEBRUARY 21, 2012 ADJOURNED REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

- Exhibit "A" – February 13, 2012 Regular Board Meeting
- Exhibit "B" – February 21, 2012 Regular Board Meeting
- Exhibit "C" – February 21, 2012 Adjourned Regular Board Meeting

## EXHIBIT "A"

### MINUTES OF REGULAR MEETING –FEBRUARY 13, 2012

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Matheis on February 13, 2012 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Reinhart (arrived at 5:13 p.m.), LaMar, Matheis, Swan and Withers

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Operations Pedersen, Executive Director of Engineering and Planning Burton, Executive Director of Finance Cherney, Executive Director of Water Policy Heiertz, Treasurer/Assistant Director of Finance Jacobson, Director of Wastewater Operations Posey, Secretary Bonkowski, Legal Counsel Arneson, Director of Public Affairs Beeman, Director of Human Resources Wells, Director of Water Resources Weghorst, Ms. Shannon Reed, Mr. Jacob Moeder, Ms. Shannon Reed, Ms. Fiona Sanchez, Mr. Carl Spangenberg, Ms. Kirsten McLaughlin, Mr. Ray Bennett, Mr. Jim Reed, and other members of the public and staff.

WRITTEN COMMUNICATION: None.

ORAL COMMUNICATION:

Mrs. Joan Irvine Smith's assistant addressed the Board of Directors with respect to the Dyer Road wellfield. She said it was her understanding that currently wells C-8, C-9, 10, 11, 12, 15, 16, 17 and 18 will operate in accordance with the District's annual pumping plan. Wells, 1, 2, 3, 4, 5, 6, 7, 13 and 14 will be off. This was confirmed by Mr. Cook, General Manager of the District.

With respect to the Orange County Basin Groundwater Conjunctive Use Program being coordinated by Municipal Water District of Orange County (MWDOC) and Orange County Water District (OCWD), a Notice of Completion was approved by the OCWD Board of Directors on March 19, 2009. Metropolitan Water District has given notice to OCWD to extract 22,000 acre feet in fiscal year 2009/10. The extraction is being performed by agencies that constructed conjunctive use wells under this program. IRWD is not a participant. This was confirmed by Mr. Cook.

With respect to the OCWD annexation of certain IRWD lands, on June 5, 2009, IRWD received a letter from OCWD noting that OCWD has completed the formal responses to comments they previously received on the draft program Environmental Impact Report. The letter further noted that with this task completed, OCWD has exercised its right to terminate the 2004 Memorandum of Understanding (MOU) regarding annexation. OCWD also indicated that due to the lack of progress on the annexation issue, the draft program Environmental Impact Report will not be completed. On June 8, 2009, OCWD completed the Long-Term Facilities Plan which was received and filed by the OCWD Board in July 2009. Staff has been coordinating with the City of Anaheim (Anaheim) and Yorba Linda Water District (YLWD) on their most

recent annexation requests and has reinitiated the annexation process with OCWD. IRWD, YLWD and Anaheim have negotiated a joint MOU with OCWD to process and conduct environmental analysis of the annexation requests. The MOU was approved by the OCWD Board on July 21, 2010. This was confirmed by Mr. Cook.

With respect to the Groundwater Emergency Service Plan, IRWD has an agreement in place with various south Orange County water agencies, MWDOC and OCWD, to produce additional groundwater for use within IRWD and transfer imported water from IRWD to south Orange County in case of emergencies. IRWD has approved the operating agreement with certain south Orange County water agencies to fund the interconnection facilities needed to affect the emergency transfer of water. MWDOC and OCWD have also both approved the operating agreement. This was confirmed by Mr. Cook.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED: None.

### PRESENTATIONS

#### PARTNER COMMENDATION

General Manager Cook presented a Certificate of Commendation to the District's consultant on State legislative issues, Ms. Maureen O'Haren of O'Haren Government Relations.

#### 2012 STATE LEGISLATIVE BRIEFING

The District's consultant, Ms. Maureen O'Haren, provided the Board with an update on 2012 State legislative issues.

#### PRESENTATION

#### TUSTIN LEGACY WELL NO. 1 ALTERNATIVE (WELL 52) WATER QUALITY AND PRODUCTION UPDATE

General Manager Cook reported that at the December 12, 2011 Board meeting, staff was asked to provide an update on the water quality and production for the completed Tustin Legacy Well No. 1 Alternative, also known as Well 52.

Using a PowerPoint presentation, Mr. Jacob Moeder provided a water quality and production update on Well No. 52. He reviewed the project background of the site, the groundwater monitoring from the ITT Cannon site estimated at 10 ppb TCE concentration, a comparison of the original well design versus the final modified design, volatile organic compound sampling results, color and odor results, anticipated production and water quality options for blending, and future use and interim maintenance of the well. Following discussion, staff was asked to provide a summary of estimated water production and hydrostatic pressures at various zone levels.



CONSENT CALENDAR

Director LaMar asked that Item No. 6, Minutes of Board Meetings, be placed on the Action Calendar for discussion. There being no further comments, On MOTION by Withers, seconded and unanimously carried, CONSENT CALENDAR ITEMS 7 THROUGH 11 WERE APPROVED AS FOLLOWS:

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

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Douglas Reinhart, Peer Swan and John Withers.

8. RESOLUTION COMMENDING ED ROYCE, SR. FOR HIS DEDICATED SERVICE TO THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Recommendation: That the Board adopt the following resolution by title commending Mr. Ed Royce, Sr. for his dedicated service to the Municipal Water District of Orange County.

RESOLUTION NO. 2012-6

RESOLUTION OF THE BOARD OF DIRECTORS  
OF IRVINE RANCH WATER DISTRICT, ORANGE  
COUNTY, CALIFORNIA COMMENDING ED ROYCE, SR.  
FOR HIS DEDICATED SERVICE TO THE MUNICIPAL  
WATER DISTRICT OF ORANGE COUNTY

9. CULVER DRIVE/WALNUT AVENUE INTERSECTION CAPITAL IMPROVEMENT PROJECT FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Culver Drive/Walnut Avenue Intersection Capital Improvement Project 11540 (1055); authorize filing of a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

10. WELLS 21 AND 22 DESALTER PROJECT REDUCTION OF RETENTION

Recommendation: That the Board find that satisfactory progress is being made on the District's construction contract with Pascal & Ludwig Constructors; authorize the reduction of retention from 10% to 5% of the contract amount; and release funds in excess of 5% of the contract amount from retention currently held for the Wells 21 and 22 Desalter, project 10286 (1081).

11. ASSET OPTIMIZATION – LAKE FOREST PROPERTY SERRANO SUMMIT  
COMMUNITY FACILITIES DISTRICT FORMATION

Recommendation: That the Board adopt the following resolution by title authorizing the approval of documents related to formation of the Lake Forest Community Facilities District No. 2010-1 (Serrano Summit).

RESOLUTION NO. 2012-7

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
IRVINE RANCH WATER DISTRICT APPROVING THE  
JOINT COMMUNITY FACILITIES AGREEMENT, IMPLEMENTING  
AGREEMENTS AND OTHER DOCUMENTS AND APPROVING  
CERTAIN ACTIONS RELATING TO CITY OF LAKE FOREST  
COMMUNITY FACILITIES DISTRICT NO. 2010-1 (SERRANO SUMMIT)

ACTION CALENDAR

MINUTES OF REGULAR AND ADJOURNED REGULAR BOARD MEETINGS

In response to Director LaMar's comment under the IRWD Goals and Objectives on the January 30, 2012 Adjourned Regular Meeting, Director Swan clarified that the Vision statement was deleted, and that a new category was included under the Values statement entitled Wastewater. There being no further comments, on MOTION by Withers, seconded and unanimously carried, THE MINUTES OF THE JANUARY 23, 2012 REGULAR BOARD MEETING AND THE JANUARY 30, 2012 ADJOURNED REGULAR BOARD MEETING WERE APPROVED.

PROPOSED DECREASES TO CALPERS - EMPLOYER-PAID MEMBER CONTRIBUTIONS

General Manager Cook reported that during the review of the Operating Budget for Fiscal Year 2011-12, opportunities to manage costs associated with the current IRWD employee pension program were identified. Mr. Cook said that on April 25, 2011, the Board approved a multi-year process that would eventually transition the District's employees to paying the full 8% of the CalPERS employee contribution. He said that effective July 1, 2011, the following initial adjustments of employee-paid contributions were approved: 1) Executive Management CalPERS employee contributions increased from 1% to 6%; 2) Senior Management CalPERS employee contributions increased from 1% to 5%; and 3) all other Full-Time Regular Employee CalPERS employee contributions increased from 1% to 3%. At that time, all Full-Time Regular Employee positions and the Senior Management positions also received a 2% increase in salary (effective July 1, 2011).

Mr. Cook said that at its meeting on November 14, 2011, the Board took the following actions: 1) approved a 2.47% cost of living adjustment (COLA) for all eligible employees; 2) adopted a resolution to reflect this adjustment; and 3) directed staff to notify employees that in February 2012, the Board would consider an increase of at least 2% of the employee-paid contribution to CalPERS, effective March 1, 2012. Notification of the Board's intent, as expressed at this meeting, was communicated to all employees through an all-employee e-mail sent on November

15, 2011 and verbally at the various departmental all-hands/safety meetings conducted during the subsequent weeks.

Mr. Cook said that for the Board to make the adjustments to the employer-paid portions of the employee contributions to CalPERS, resolutions need to be adopted stipulating the specific amount of each adjustment. Staff is recommending adjustments to the employer-paid portions of the employee contributions as follows: 1) effective March 1, 2012 the General Manager and the Assistant General Manager positions (Executive Management) will pay an additional 2% into CalPERS, increasing the employee contributions from 6% to the full 8%; 2) effective March 1, 2012 all Department Director and Executive Director positions (Senior Management) will pay an additional 2% into CalPERS, increasing their employee contributions from 5% to 7%; and 3) effective March 1, 2012 all other Full-Time Regular Employees will pay an additional 2% into CalPERS, increasing their employee contributions from 3% to 5%.

Mr. Cook said, as suggested at the November 14, 2011 Board meeting, that staff has developed recommendations regarding the schedule for transitioning all employees to paying the full 8% of the CalPERS employee contribution. Staff is proposing, for the Board's consideration, the following steps: 1) all Full-Time Regular Employees will pay an additional 3% into CalPERS; increasing their employee contributions from 5% to the full 8% effective March 1, 2013; 2) Senior Management will pay an additional 1% into CalPERS increasing their employee contribution from 7% to 8% effective March 1, 2013; and 3) the General Manager and the Assistant General Manager will already be paying the full 8% contribution; therefore, no action will be taken on March 1, 2013. Staff is recommending these adjustments become effective March 1, 2013 so they occur after the 2012 holiday season. Additional resolutions would need to be adopted for the adjustments described above.

Director LaMar said that at the Finance and Personnel Committee meeting on February 27, 2012, his recommendation for the District's contribution for full-time regular employees be decreased by 2.0% effective March 1, 2012, then 1% on March 1, 2013, 1% on March 1, 2014, and 1% on March 1, 2015 for full-time regular employees. He said under this scenario, all District employees would be paying their full 8% employee contribution by March 1, 2015, which would be reasonable given the state of the economy at this time.

Director Swan said that the District procured the services of a consultant in the spring of 2011, Aon Hewett, to assist in evaluating the retirement/pension plans, and they determined that that District's unfunded pension obligation is estimated to be over \$100 million. He said that in July 2011, the District approved a one time 2% increase in employee pay at the same time as the increased contribution to offset the increase from 1% to 3% of pay put into the plan by the employees. He said that currently the District is paying the majority of the CalPERS contribution. He said that he recommends that the District's contributions for full-time regular employees be decreased by 2.5% effective March 1, 2012 and another 2.5% effective March 1, 2013. He said under this scenario, all District employees would be paying their full 8% employee contribution by March 1, 2013. Director Reinhart commented that he was leaning towards making an adjustment to the employee contributions beginning in July 1, 2012 and making additional adjustments over a three-year period. Both Director Withers and President Matheis concurred with Director Reinhart's suggestion of the adjustments over the three-year time period. Mr. Jesse Perez, an employee of the District, expressed concern that the proposed employee CalPERS increases would create financial hardships to employees due to current

economic conditions. Following discussion, President Matheis said that she would like to continue this matter to February 22, 2012 at 5:00 p.m. to allow a forum for the employees to provide feedback. Staff was asked to advise employees of this Board meeting, and to also ask for comments. On MOTION by Swan, seconded and unanimously carried, THE PROPOSED DECREASES TO CALPERS - EMPLOYER-PAID MEMBER CONTRIBUTIONS ITEM WAS CONTINUED TO AN ADJOURNED REGULAR BOARD MEETING ON FEBRUARY 22, 2012 AT 5 P.M.

PROPOSED EARLY REDEMPTION OF THE ELECTION 1988 BONDS

The District currently has three Election 1988 bond issues with a total par amount of \$3.1 million. The bonds are backed by letters of credit issued by Landesbank Hessen-Thuringen Girozentrale (Helaba). Helaba has exercised its right to opt-out of the letter of credit effective May 2, 2012. Staff is recommending approval of redeeming the bonds on April 2, 2012, rather than incurring significant expense to substitute the Helaba letter of credit for 18 months through final maturity of November 2013. On MOTION by Swan, seconded and unanimously carried, THE FOLLOWING RESOLUTION WAS ADOPTED BY TITLE:

RESOLUTION NO. 2012-8

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT CALLING BONDS OF SAID DISTRICT FOR REDEMPTION AND AUTHORIZING CERTAIN ACTIONS IN CONNECTION THEREWITH (WATERWORKS BONDS, ELECTION 1988, SERIES A, IMPROVEMENT DISTRICT NO. 182; SEWER BONDS, ELECTION 1988, SERIES A, IMPROVEMENT DISTRICT NO. 282; AND SEWER BONDS, ELECTION 1988, SERIES A, IMPROVEMENT DISTRICT NO. 284).

ENERGY AND GREEN HOUSE GAS MASTER PLAN AND JACKSON RANCH SOLAR FEASIBILITY STUDY

Using a PowerPoint presentation, Director of Water Resources Weghorst provided an overview of the goals of the Energy and Greenhouse Gas Master Plan; steps taken in the development of the Master Plan; IRWD's existing and projected future energy use and Greenhouse gas emissions; a summary of the 12 recommended project costs and benefits; reacting to future regulatory changes; sensitivity of Master Plan to important assumptions; feasibility of leasing the District's Jackson Ranch for a solar project, and recommendations. Following discussion, Director Swan asked that an item be submitted to the Finance and Personnel Committee to review costs and offsets. On MOTION by Swan, seconded and unanimously carried, THE BOARD AUTHORIZED AN INCREASE TO THE FY 2011-12 CAPITAL BUDGET FOR PROJECT 11482 (1620) IN THE AMOUNT OF \$36,000, FROM \$378,900 TO \$414,900; APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$51,000 FOR PROJECT 11482 (1620) FOR STAFF TO ASSIST IN DEVELOPING THE ENERGY AND GREEN HOUSE GAS MASTER PLAN AND TO INITIATE ADDITIONAL INVESTIGATIONS OF THE PORTFOLIO OF RECOMMENDED ENERGY AND GREEN HOUSE GAS MASTER PLAN PROJECTS; AUTHORIZED THE ADDITION OF THE

JACKSON RANCH SOLAR PROJECT 11637 (3667) TO THE FY 2011-12 CAPITAL BUDGET IN THE AMOUNT OF \$98,600; APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$98,600 FOR PROJECT 11637 (3667) TO INVESTIGATE THE FEASIBILITY OF DEVELOPING A SOLAR POWER GENERATING FACILITY AT THE JACKSON RANCH; AUTHORIZED THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 1 IN THE AMOUNT OF \$13,577 FOR PROJECT 11637 (3667) WITH ZGLOBAL, INC. TO PROVIDE ADDITIONAL ANALYSIS OF POWER GRID INTERCONNECTION ISSUES; AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$36,000 FOR PROJECT 11637 (3667) WITH PROVOST AND PRITCHARD CONSULTING GROUP TO ANALYZE LAND USE CONVERSION AND ENTITLEMENT ISSUES, DEVELOP A PROPERTY PROSPECTUS, PERFORM A PRELIMINARY ENERGY PRODUCTION ANALYSIS, REVIEW IRWD'S REQUEST FOR PROPOSAL (RFP), AND ASSIST IN IDENTIFYING A PRE-QUALIFIED LIST OF SOLAR POWER DEVELOPERS TO RECEIVE THE REQUEST FOR PROPOSAL.

#### GENERAL MANAGER'S COMMENTS

General Manager Cook reported on his recent trip to Washington, DC with Directors Matheis and LaMar where consultant Hal Furman had scheduled various meetings with legislators relative to potential Syphon Reservoir federal funding. Mr. Cook said that they will also be in Sacramento on Wednesday to attend various meetings with legislators scheduled by the District's consultant Maureen O'Haren.

Mr. Cook said that as reported in his Weekly Report, the District's Index-Based Tender Notes were remarketed this week for the first time since their original issuance in April 2011.

Mr. Cook further said that a tour of the MWRP Phase II will be held on February 21 at 8:00 a.m., and invited the Board to attend. Following a poll of the Board, it was determined that tonight's Board meeting will be adjourned to Tuesday, February 21 at 8:00 a.m.

#### DIRECTORS' COMMENTS

Director LaMar reported on his attendance at a MWDOC Board Workshop, a MWDOC Planning and Operations Committee meeting, a MWDOC Water Policy Forum, and Federal legislative meetings in Washington, DC.

Director Reinhart reported on his attendance at a MWDOC Board Workshop, a SOCWA Board meeting, a MWDOC Water Policy Forum, MWDOC's Planning and Operations Committee meeting, and an Urban Water Institute conference.

Director Swan reported on his attendance at an ACWA Region 10 Strategic Board meeting, a San Joaquin Wildlife Board meeting, a WACO Committee meeting, and an ACWA Management Committee meeting. He further said he was looking forward to an ACWA Region 10 meeting this week being held at Western Municipal Water District.

Director Withers said that he attended various standing meetings representing the District.

Director Matheis reported on her attendance at the City of Tustin's Mayor's Inaugural event, a SAWPA workshop on climate change, a WACO Committee meeting, an ISDOC Executive Committee meeting, a City of Irvine State of the City Address, a Federal Legislative meeting in Washington, DC, and MWDOC's retirement event for Mr. Ed Royce.

CLOSED SESSION

President Matheis said that a Closed Session would be held with Legal Counsel relative to Initiation of Litigation - Government Code Section 54956.9(c) - involving one potential case (potential settlement with design consultants).

OPEN SESSION

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

ADJOURNMENT

President Matheis adjourned the meeting to Tuesday, February 21 at 8:00 a.m. at the District's Operations Center, 3512 Michelson, Irvine, for a tour of the MWRP Phase II Expansion project.

APPROVED and SIGNED this 27th day of February, 2012.

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President, IRVINE RANCH WATER DISTRICT

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Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

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Legal Counsel - Bowie, Arneson, Wiles & Giannone

## EXHIBIT "B"

### MINUTES OF REGULAR MEETING – FEBRUARY 21, 2012

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order by Secretary Bonkowski at 5:00 p.m., February 21, 2012 in the District Office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: None

Directors Absent: LaMar, Reinhart, Matheis, Withers, and Swan

In the absence of a quorum, Secretary Bonkowski adjourned the meeting to Wednesday, February 22, 2012 at 5:00 p.m. in the principle office of the District.

APPROVED and SIGNED this 27th day of February, 2012.

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President, IRVINE RANCH WATER DISTRICT

\_\_\_\_\_  
Secretary, IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

\_\_\_\_\_  
Legal Counsel - Bowie, Arneson, Wiles and Giannone

## EXHIBIT "C"

MINUTES OF ADJOURNED REGULAR MEETING – FEBRUARY 21, 2012

The adjourned regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 8:00 a.m. by President Matheis on February 21, 2012 in the District's Operations Committee Room, 3512 Michelson, Irvine, California.

Directors Present: LaMar, Matheis, Reinhart, and Swan

Directors Absent: Withers.

Also Present: General Manager Cook, Executive Director of Operations Pedersen, Executive Director of Engineering and Planning Burton, Principle Engineer Malloy and Senior Engineer Bill Stewart.

WRITTEN COMMUNICATION: None.

ORAL COMMUNICATION: None.

### OTHER BUSINESS

### MICHELSON WATER RECYCLING EXPANSION PROJECT, PHASE II OVERVIEW AND TOUR

The Board and staff toured the Michelson Water Recycling Expansion Project, Phase II site, specifically the influent sewers, headworks, primary sedimentation, central electrical building, membrane bioreactor, ultraviolet disinfection, sodium hypochlorite disinfection, floodwall, and high rate clarifier. The Board and staff regrouped in the Committee room and staff placed before each Director a map of the expansion facilities along with a chart showing the existing treatment process versus the Phase II treatment process. Staff further reviewed the project budget and schedule.

### ADJOURNMENT

There being no further business, President Matheis adjourned the meeting at 10:00 a.m.

APPROVED and SIGNED this 27th day of February, 2012.

\_\_\_\_\_  
President, IRVINE RANCH WATER DISTRICT

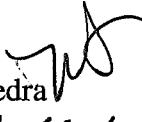

\_\_\_\_\_  
Secretary, IRVINE RANCH WATER DISTRICT



APPROVED AS TO FORM:

---

Legal Counsel - Bowie, Arneson, Wiles and Giannone

February 27, 2012  
Prepared and  
Submitted by: N. Savedra   
Approved by: 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

2/21/12 MWDOC Public Perception Brainstorming Workshop  
2/24/12 Lake Forest City Council's Leadership Meeting

Mary Aileen Matheis

2/24/12 Concordia University-Managing Pension Costs Seminar

Peer Swan

1/10/12 OCBC Infrastructure Committee Meeting  
2/24/12 Concordia University-Managing Pension Costs Seminar

John Withers

2/24/12 Concordia University-Managing Pension Costs Seminar  
3/01/12 Exchange Club of Irvine-Irvine Police Department Awards Event

RECOMMENDATION:

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

LIST OF EXHIBITS:

None

February 27, 2012

Prepared by: Tanja Fournier/Rob Jacobson

Submitted by: Debby Cherney

Approved by: Paul Cook

## CONSENT CALENDAR

### JANUARY 2012 FINANCIAL REPORTS

#### SUMMARY:

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

- A. The Investment Summary Report for January 2012. This Investment Summary Report is in conformity with the 2012 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Monthly Interest Rate Swap Summary as of January 31, 2012, as outlined in Exhibit "B".
- C. The Summary of Payroll ACH payments in the total amount of \$1,386,762.97, as outlined in Exhibit "C".
- D. The January 31, 2012 Disbursement Summary of the tabulation of Warrant Nos. 326347 through 327178, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$15,655,484.60.

#### FISCAL IMPACTS:

As of January 31, 2012, the book value of the investment portfolio was \$366,340,455 with a 0.40% rate of return and a market value of \$366,734,647.48. Based on the District's January 31, 2012 quarterly real estate investment rate of return of 9.66%, the District's weighted average return for the fixed income and real estate investments was 1.77%.

As of January 31, 2011, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in January from all swaps was negative \$632,602 and negative \$4,350,771 fiscal year to date.

Payroll ACH payments totaled \$1,386,762.97, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll and water purchases for January totaled \$15,655,484.60.

#### 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 AND THE MONTHLY INTEREST RATE SWAP SUMMARY FOR JANUARY 2012; APPROVE THE JANUARY 2012 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$1,386,762.97, AND APPROVE THE JANUARY 2012 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS NOS. 326347 THROUGH 327178, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$15,655,484.60.

**LIST OF EXHIBITS:**

- Exhibit "A" - Investment Summary Report
- Exhibit "B" - Monthly Interest Rate Swap Summary
- Exhibit "C" - Monthly Payroll ACH Summary
- Exhibit "D" - Monthly Summary of District Disbursements

01/31/12

SETTLEMENT	INTEREST PERIOD		NEXT RESET	Call Date	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON	YIELD	YTC	ORIGINAL COST	CARRY VALUE	MARKET VALUE 1/31/2012	UNREALIZED GAIN/(LOSS)(2)		
	FROM	THROUGH																
01/31/12	01/01/12	01/31/12			02/01/12		LAIF	State of California Tsy.	\$50,000,000		0.380%		\$50,000,000.00	\$50,000,000.00	50,082,599.85	82,599.85		
01/31/12	01/01/12	01/31/12			02/01/12		LAIF-JPA	State of California Tsy.	50,000,000		0.380%		\$50,000,000.00	\$50,000,000.00	50,082,599.85	82,599.85		
01/13/12	01/01/12	01/31/12			02/05/12		LAIF-2009A	State of California Tsy.	468,000		0.380%		\$468,000.00	\$468,000.00	468,773.13	773.13		
01/13/12	01/01/12	01/31/12			02/05/12		LAIF-2009B	State of California Tsy.	468,000		0.380%		\$468,000.00	\$468,000.00	468,773.13	773.13		
01/18/12	01/01/12	01/31/12			02/17/12		LAIF BABS	State of California Tsy.	111,529,467		0.380%		\$111,529,467.30	\$111,529,467.30	111,713,713.65	184,246.35		
01/31/12	01/01/12	01/31/12			02/01/12		B of A Tsy. Reserves	Bank of America	13,822,199.03		0.009%		13,822,199.03	13,822,199.03	13,822,199.03			
02/10/11				02/08/12	02/08/13	Aaa/AAA/NR	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.850%	0.997%	1.144%	4,985,500.00	4,992,580.93	5,000,500.00	7,919.07		
04/04/11				03/14/12	03/14/13	Aaa/AAA/NR	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.500%	1.013%	0.500%	5,000,000.00	5,000,000.00	5,001,000.00	1,000.00		
05/23/11				04/11/13	04/11/13	Aaa/AAA/AAA	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	1.720%	0.517%		5,112,550.00	5,071,058.42	5,088,100.00	17,041.58		
04/25/11				04/25/12	04/25/13	NA/AAA/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.750%	0.750%	0.750%	5,000,000.00	5,000,000.00	5,005,600.00	5,600.00		
06/27/11				06/27/12	09/27/13	Aaa/AAA/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.700%	0.700%	0.700%	5,000,000.00	5,000,000.00	5,006,450.00	6,450.00		
10/25/11				04/25/12	10/25/13	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.625%	0.625%	0.625%	5,000,000.00	5,000,000.00	5,002,150.00	2,150.00		
11/29/11				11/29/12	11/29/13	Aaa/AA+/AA+	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.500%	0.596%	0.690%	4,990,500.00	4,991,331.74	4,995,100.00	3,768.26		
01/31/12				04/27/12	01/27/14	Aaa/AA+/NR	FHLMC - Note	Fed Farm Credit Bank	5,000,000	0.350%	0.350%	0.350%	5,000,000.00	5,000,000.00	5,000,900.00	900.00		
01/30/12				01/30/13	01/30/14	Aaa/AA+/NR	FHLMC - Note	Fed Farm Credit Bank	5,000,000	0.330%	0.355%	0.380%	4,997,500.00	4,997,506.84	4,997,800.00	293.16		
06/27/11				06/27/12	06/27/14	Aaa/AA+/NR	FHLMC - Note	Fed Farm Credit Bank	10,000,000	1.050%	1.050%	1.050%	10,000,000.00	10,000,000.00	10,024,800.00	24,800.00		
07/14/11				07/11/12	07/11/14	Aaa/AAA/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	0.962%	0.962%	5,008,000.00	5,006,521.49	5,012,500.00	5,978.51		
08/22/11				08/22/12	08/22/14	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.650%	0.660%	0.680%	4,998,500.00	4,998,723.09	5,002,650.00	3,926.91		
08/29/11				08/28/12	08/28/14	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.650%	0.650%	0.650%	5,000,000.00	5,000,000.00	5,000,500.00	500.00		
10/13/11				08/28/12	08/28/14	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.650%	0.791%	1.110%	4,980,000.00	4,982,114.29	5,000,500.00	18,385.71		
12/15/11				03/15/12	09/15/14	Aaa/AA+/NR	FHLMC - Note	Fed Farm Credit Bank	5,000,000	0.700%	0.700%	0.700%	5,000,000.00	5,000,000.00	5,002,650.00	2,650.00		
10/19/11				10/17/12	10/17/14	Aaa/AA+/NR	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.750%	0.801%	0.902%	4,992,500.00	4,993,219.84	5,005,650.00	12,430.16		
12/05/11				06/05/12	12/05/14	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.000%	1.010%	1.060%	4,998,500.00	4,998,579.38	5,003,750.00	5,170.62		
12/19/11				12/19/12	12/19/14	Aaa/AA+/NR	FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.625%	1.038%	0.625%	5,000,000.00	5,000,000.00	5,005,650.00	5,650.00		
01/31/12				04/26/12	01/26/15	Aaa/AA+/NR	FHLMC - Note	Fed Farm Credit Bank	5,000,000	0.570%	0.570%	0.570%	5,000,000.00	5,000,000.00	5,003,125.00	3,125.00		
01/30/12				01/30/14	01/30/15	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.750%	0.500%	0.500%	5,024,850.00	5,024,804.65	4,999,250.00	(25,554.65)		
01/30/12				01/30/14	01/30/15	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	0.750%	0.453%	0.453%	10,059,000.00	10,058,892.34	9,998,500.00	(60,392.34)		
09/22/11				N/A	06/26/12	MIG1/SP-1+/F1	CA ST-RANS-A2	State of California	2,000,000	2.000%	0.400%		2,024,280.00	2,012,751.38	2,014,160.00	1,408.62		
SUB-TOTAL									\$343,287,666				\$343,459,346.33	\$343,415,750.70	\$343,809,943.64	\$394,192.94		
<b>RESTRICTED CASH (Swap Collateral Deposits)</b>																		
01/03/12	01/01/12	01/31/12					Collateral Deposit	Citi-Group	\$15,864,704		0.082%		\$15,864,703.84	\$15,864,703.84	15,864,703.84			
09/23/11	01/01/12	01/31/12					Collateral Deposit	Merrill Lynch	\$7,060,000		0.082%		\$7,060,000.00	\$7,060,000.00	7,060,000.00			
SUB-TOTAL									\$22,924,704				\$22,924,703.84	\$22,924,703.84	\$22,924,703.84			
<b>TOTAL INVESTMENTS</b>									\$366,212,370				\$366,384,050.17	\$366,340,454.54	\$366,734,647.48			
												Petty Cash	3,300.00					
												Bank Bal. (unrec.)	Bank of America	(3,388,013.97)				
														\$363,007,336.20				

(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 \$380,260,000  
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps) \$250,260,000  
Investment Balance: \$363,007,336  
Investment to Variable Rate Debt Ratio: 145%  
Portfolio - Average Number of Days To Maturity 282

	Investment Portfolio	Real Estate Portfolio (3)	Weighted Avg. Return
January	0.40%	9.66%	1.77%
December	0.41%	9.66%	1.77%
Change	-0.01%		

This Investment Summary Report is in conformity with the 2012 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.

IRVINE RANCH WATER DISTRICT  
SUMMARY OF MATURITIES

01/31/12

PORTFOLIO \$366,212,370

DATE	TOTAL	%	LAIF	AGENCIES	CAL. REV. NOTES	MONEY MARKET SAVINGS & SWEEP	Collateral * Deposit
2/12	\$251,212,370	68.60%	\$212,465,467		2,000,000	13,822,199	\$22,924,704
3/12							
4/12							
5/12							
6/12							
7/12							
8/12							
9/12							
10/12							
11/12							
12/12							
1/13							

<b>SUB-TOTAL</b>	<b>\$251,212,370</b>	<b>68.60%</b>	<b>\$212,465,467</b>	<b>-</b>	<b>2,000,000</b>	<b>13,822,199</b>	<b>\$22,924,704</b>
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**12 Months - 3 YEARS**

2/1/2013 - 3/31/2013	\$10,000,000	2.73%		10,000,000			
4/1/2013 - 6/30/2013	\$10,000,000	2.73%		10,000,000			
7/1/2013 - 9/30/2013	\$5,000,000	1.37%		5,000,000			
10/1/2013 - 12/31/2013	\$10,000,000	2.73%		10,000,000			
1/1/2014 - 3/31/2014	\$10,000,000	2.73%		10,000,000			
4/1/2014 - 6/30/2014	\$10,000,000	2.73%		10,000,000			
7/1/2014 - 9/30/2014	\$25,000,000	6.83%		25,000,000			
10/1/2014 - 12/31/2014	\$15,000,000	4.10%		15,000,000			
1/1/2015 - 3/31/2015	\$20,000,000	5.46%		20,000,000			

<b>TOTALS</b>	<b>\$366,212,370</b>	<b>100.00%</b>	<b>\$212,465,467</b>	<b>115,000,000</b>	<b>2,000,000</b>	<b>13,822,199</b>	<b>\$22,924,704</b>
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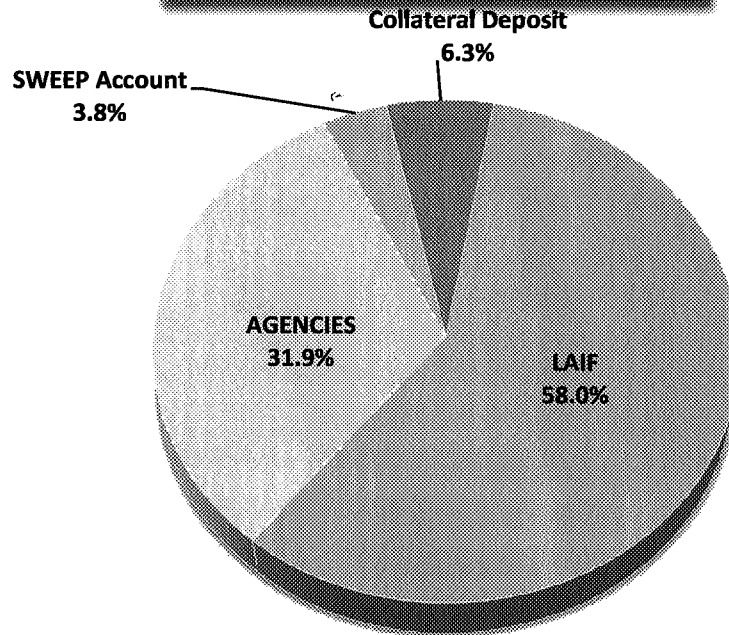
<b>% OF PORTFOLIO</b>			<b>58.02%</b>	<b>31.40%</b>	<b>0.55%</b>	<b>3.77%</b>	<b>6.26%</b>
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\* Return of posted collateral is dependant on interest rates.

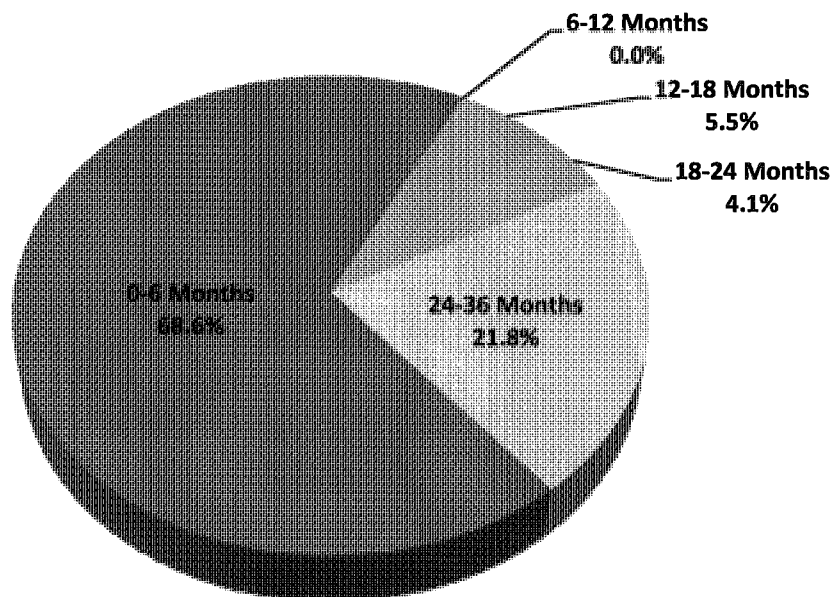
# JANUARY 2012 INVESTMENT PORTFOLIO

As of January 31, 2012

## Portfolio by Investment Type



## Portfolio by Maturities



**IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT**  
**INVESTMENT ACTIVITY**  
**Jan-12**

**MATURITIES/SALES**

**PURCHASES**

DATE	SECURITY TYPE	PAR	YIELD	DATE	SECURITY TYPE	PAR	YIELD
01/11/12	FFCB Note - 1/11/12	\$5,000,000	0.90%	01/30/12	FNMA Note - 1/30/15	\$10,000,000	0.45%
01/24/12	VRDO - East Bay Muni	\$9,600,000	0.06%	01/30/12	FFCB Note - 01/30/14	\$5,000,000	0.36%
01/24/12	VRDO - Rancho Calif Wtr D	\$6,500,000	0.08%	01/30/12	FNMA Note - 1/30/15	\$5,000,000	0.50%
01/30/12	VRDO -LA Waste Water	\$4,900,000	0.03%	01/31/12	FFCB Note - 01/27/14	\$5,000,000	0.35%
01/30/12	VRDO - Chino Basin	\$11,280,000	0.05%	01/31/12	FFCB Note - 01/26/15	\$5,000,000	0.57%
01/31/12	VRDO - Sacramento Water	\$10,000,000	0.07%				
01/31/12	VRDO- Eastern Muni Water	\$7,900,000	0.06%				
01/31/12	VRDO - West Basin Water	\$9,200,000	0.08%				
01/31/12	VRDO - Orange County Water	\$5,000,000	0.08%				
01/31/12	VRDO - Metropolitan Water	\$7,500,000	0.07%				

**LAIF ACTIVITY**

01/03/12	LAIF	(\$2,000,000)
01/04/12	LAIF	(\$1,000,000)
01/13/12	LAIF	(\$521,646)
01/13/12	LAIF - JPA	(\$43,846)
01/13/12	LAIF 2009A	(\$216,590)
01/13/12	LAIF 2009B	(\$216,590)
01/18/12	LAIF	\$3,600,000
01/18/12	LAIF BAB's	(\$4,500,000)
01/19/12	LAIF	\$2,000,000
01/24/12	LAIF - JPA	\$6,500,000
01/24/12	LAIF	\$9,900,000
01/25/12	LAIF	\$1,500,000
01/27/12	LAIF	(\$500,000)
01/30/12	LAIF - JPA	(\$3,800,000)
01/31/12	LAIF - JPA	\$3,800,000
01/31/12	LAIF	\$9,400,000
	Increase/(Decrease)	<u>\$23,901,328</u>

**COLLATERALIZED DEPOSIT ACTIVITY**

Balance Forward	\$22,758,048
CITIGROUP	\$166,656
MERRILL LYNCH	-
Balance at 1/31/2012	<u>\$22,924,704</u>



**IRVINE RANCH WATER DISTRICT  
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL  
January 31, 2012**

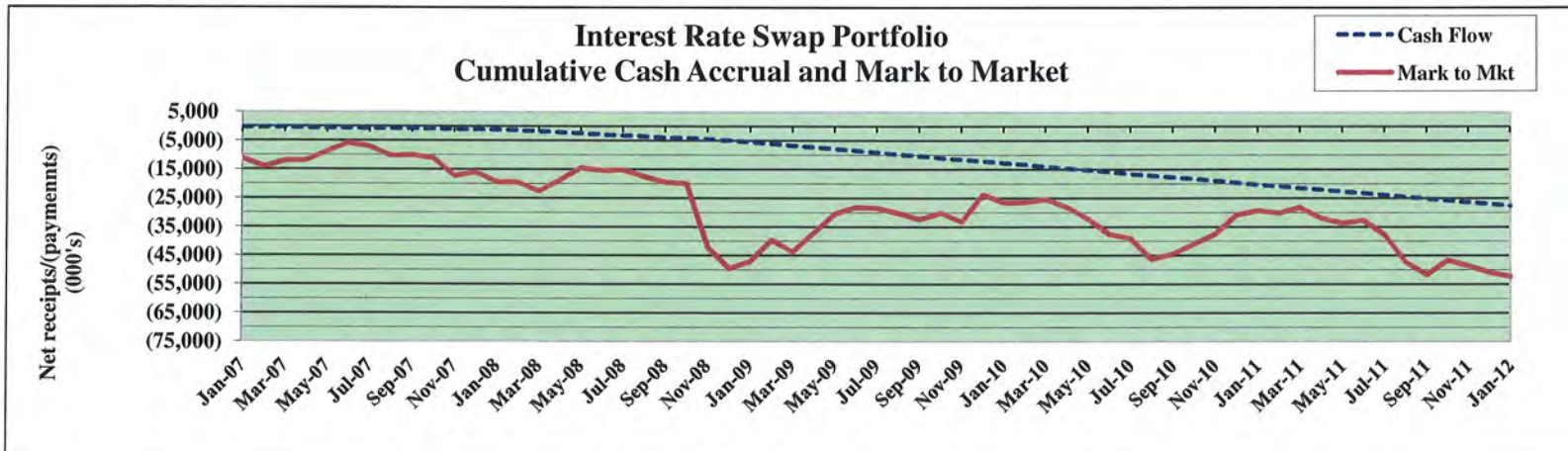
Exhibit "B"

	<b>Prior Mo.</b>	<b>Current Mo.</b>	<b>12-Mo Avg</b>
<b>LIBOR Avg %</b>	0.24%	0.28%	0.24%

Current Fiscal Year Active Swaps								Cash Flow				(Since 6/06)	Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference	
<b>Fixed Payer Swaps - By Effective Date</b>														
6/4/2006	6/4/2019	7.3	ML	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (98,867)	\$ (101,594)	\$ (698,687)	\$ (4,550,277)	\$ 13,280,182	\$ (6,719,818)	
6/4/2006	6/4/2019	7.3	CG	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (98,867)	\$ (101,594)	(698,687)	(4,550,277)	13,268,959	(6,731,041)	
6/17/2006	6/17/2019	7.4	CG	\$ 30,000,000	FXP	LIBOR	6.140%	\$ (146,851)	\$ (151,022)	(1,037,737)	(6,735,923)	19,999,576	(10,000,424)	
3/10/2007	3/10/2029	17.1	ML	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (135,505)	\$ (139,196)	(957,830)	(5,878,364)	15,586,278	(14,413,722)	
3/10/2007	3/10/2029	17.1	CG	\$ 30,000,000	FXP	LIBOR	5.687%	(135,505)	(139,196)	(957,830)	(5,878,364)	15,602,025	(14,397,975)	
<b>Totals/Weighted Avgs</b>		<b>11.9</b>		<b>\$ 130,000,000</b>			<b>5.949%</b>	<b>\$ (615,595)</b>	<b>\$ (632,602)</b>	<b>\$ (4,350,771)</b>	<b>\$ (27,593,206)</b>	<b>\$ 77,737,020</b>	<b>\$ (52,262,980)</b>	
<b>Total Current Year Active Swaps</b>				<b>\$ 130,000,000</b>				<b>\$ (615,595)</b>	<b>\$ (632,602)</b>	<b>\$ (4,350,771)</b>	<b>\$ (27,593,206)</b>	<b>\$ 77,737,020</b>	<b>\$ (52,262,980)</b>	

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

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference								
<b>Total Current Year Active &amp; Terminated Swaps</b>								<b>\$ (615,595)</b>	<b>\$ (632,602)</b>	<b>\$ (4,350,771)</b>	<b>\$ (27,593,206)</b>	<b>\$ 77,737,020</b>	<b>\$ (52,262,980)</b>



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt	
	<u>Cash Flow to Date</u>
Synthetic Fixed =	\$47,542,259
Fixed Rate =	\$52,660,995
<u>Assumptions:</u>	
- 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 + all-in cost of to date	

Exhibit "C"

MONTHLY SUMMARY OF ACH PAYMENTS

JANUARY  
2012

DATE	AMOUNT	VENDOR	PURPOSE
1/13/2012	693,916.98	BANK OF AMERICA	PAYROLL 1/13/12
1/27/2012	692,845.99	BANK OF AMERICA	PAYROLL 1/27/12
	<u>\$1,386,762.97</u>		

Exhibit "D"

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 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								
326347		03-JAN-12	PASCAL & LUDWIG CONSTRUCTORS	ONTARIO	1,013,451.04			Negotiable
326348		03-JAN-12	Michele Drzymkowski	HOME	250.00			Negotiable
326349		05-JAN-12	A & Y ASPHALT CONTRACTORS INC		6,777.00			Negotiable
326350		05-JAN-12	AAF INTERNATIONAL		413.83			Negotiable
326351		05-JAN-12	AARP HEALTH CARE OPTIONS		210.92			Negotiable
326352		05-JAN-12	ACTION ELECTRIC CORP		404.12			Negotiable
326353		05-JAN-12	ACWA		30,973.45			Negotiable
326354		05-JAN-12	ADT SECURITY SERVICES INC		2,862.16			Negotiable
326355		05-JAN-12	AFLAC		8,160.33			Negotiable
326356		05-JAN-12	AIRGAS-WEST, INC.		145.96			Negotiable
326357		05-JAN-12	ALEXANDER CONTRACT SERVICES INC		98,048.93			Negotiable
326358		05-JAN-12	ALLIANCE APPRAISAL, LLC		3,865.00			Negotiable
326359		05-JAN-12	ALMEGA ENVIRONMENTAL & TECHNICAL SERVICES		16,800.64			Negotiable
326360		05-JAN-12	ANIXTER INC		8,645.86			Negotiable
326361		05-JAN-12	AQUA-METRIC SALES COMPANY		46,529.90			Negotiable
326362		05-JAN-12	ARCADIS U.S., INC.		1,060.05			Negotiable
326363		05-JAN-12	ARCADIS U.S., INC.		3,398.64			Negotiable
326364		05-JAN-12	AT&T		3,944.50			Negotiable
326365		05-JAN-12	AT&T		2,060.12			Negotiable
326366		05-JAN-12	AT&T		49.93			Negotiable
326367		05-JAN-12	ATHENS SERVICES		1,983.12			Negotiable
326368		05-JAN-12	AVISTA TECHNOLOGIES, INC		4,915.35			Negotiable
326369		05-JAN-12	AYRES HOTEL AND SUITES (DBA)		1,680.45			Negotiable
326370		05-JAN-12	BAILEY, OFELIA		1,200.00			Negotiable
326371		05-JAN-12	BALLARD, CARL		1,800.00			Negotiable
326372		05-JAN-12	BCGR		522.50			Negotiable
326373		05-JAN-12	BILL'S SWEEPING SERVICE INC		1,265.00			Negotiable
326374		05-JAN-12	BIOMAGIC INC		17,268.83			Negotiable
326375		05-JAN-12	BLASICK, DIANE		1,080.00			Negotiable
326376		05-JAN-12	BORKMAN, CHARLES E		1,500.00			Negotiable
326377		05-JAN-12	BORROTO, JORGE		600.00			Negotiable
326378		05-JAN-12	BRADLEY, CARRIE		1,800.00			Negotiable

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 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								
326379		05-JAN-12	BREITER, JOE		1,800.00			Negotiable
326380		05-JAN-12	BRENTAG PACIFIC INC		23,449.44			Negotiable
326381		05-JAN-12	BRITHINEE ELECTRIC		13,152.56			Negotiable
326382		05-JAN-12	BTF PRECISE MICROBIOLOGY INC.		524.10			Negotiable
326383		05-JAN-12	BUSH & ASSOCIATES INC		2,810.00			Negotiable
326384		05-JAN-12	C WELLS PIPELINE MATERIALS INC		2,831.85			Negotiable
326385		05-JAN-12	CAL WATER PURIFICATION		80.00			Negotiable
326386		05-JAN-12	CALIFORNIA BARRICADE INC		2,050.00			Negotiable
326387		05-JAN-12	CALIFORNIA BATH RESTORATION		360.50			Negotiable
326388		05-JAN-12	CAMERON WELDING SUPPLY		176.43			Negotiable
326389		05-JAN-12	CAPTIVE AUDIENCE MARKETING INC.		85.12			Negotiable
326390		05-JAN-12	CDW GOVERNMENT LLC		548.74			Negotiable
326391		05-JAN-12	CELAYA, MARY		1,800.00			Negotiable
326392		05-JAN-12	CHEESMAN, ENRIQUE		3,360.00			Negotiable
326393		05-JAN-12	CHEM TECH INTERNATIONAL INC		6,261.20			Negotiable
326394		05-JAN-12	CHO DESIGN ASSOCIATES, INC		1,200.00			Negotiable

326395	05-JAN-12	CITY CIRCUIT BREAKERS		2,155.00		Negotiable
326396	05-JAN-12	COASTAL TRAFFIC SYSTEMS, INC		510.00		Negotiable
326397	05-JAN-12	COLONIAL LIFE & ACCIDENT INSURANCE CO.		3,308.22		Negotiable
326398	05-JAN-12	COMILLAS, TEOFY E		1,800.00		Negotiable
326399	05-JAN-12	COMMERCE ENERGY INC		424.43		Negotiable
326400	05-JAN-12	COMMERCIAL CLEANING SYSTEMS INC		10,700.49		Negotiable
326401	05-JAN-12	COMMERCIAL COATING RESOURCE INC		7,850.00		Negotiable
326402	05-JAN-12	CONEYBEARE INC		5,839.04		Negotiable
326403	05-JAN-12	CORTECH ENGINEERING, INC		2,106.04		Negotiable
326404	05-JAN-12	COX COMMUNICATIONS		191.18		Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 3  
 Bank Account Currency: USD ( US Dollar )      Payment Currency: USD ( US Dollar )  
 Payment Type: All      Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326405		05-JAN-12	CRAWFORD, JOHN P		1,320.00			Negotiable
326406		05-JAN-12	CRIM, RON		1,800.00			Voided
326407		05-JAN-12	D & H WATER SYSTEMS INC.		7,251.15			Negotiable
326408		05-JAN-12	DATA CLEAN CORPORATION		513.25			Negotiable
326409		05-JAN-12	DEAKYNE, SCOTT		750.00			Negotiable
326410		05-JAN-12	DELPHIN COMPUTER SUPPLY		643.27			Negotiable
326411		05-JAN-12	DENGER, LOU		1,800.00			Negotiable
326412		05-JAN-12	DJ NELSON & SON POOL SERVICE		2,245.61			Negotiable
326413		05-JAN-12	DUDEK		5,839.60			Negotiable
326414		05-JAN-12	ENGINEERING RESOURCES		8,500.00			Negotiable
326415		05-JAN-12	ENVIRON INTERNATIONAL CORP.		11,026.65			Negotiable
326416		05-JAN-12	ERVIN, CRAIG J		1,800.00			Negotiable
326417		05-JAN-12	FEDEX		1,071.87			Negotiable
326418		05-JAN-12	FIRST HEALTH LIFE AND HEALTH INSURANCE COMPANY		38.70			Negotiable
326419		05-JAN-12	FISERV		616.00			Negotiable
326420		05-JAN-12	FISHER SCIENTIFIC COMPANY LLC		4,642.99			Negotiable
326421		05-JAN-12	FRANCHISE TAX BOARD		242.31			Negotiable
326422		05-JAN-12	FRONTLINE MANAGEMENT INC		1,985.06			Negotiable
326423		05-JAN-12	GEISER, DON		1,800.00			Negotiable
326424		05-JAN-12	GENERAL ELECTRIC GLOBAL RESEARCH		797.20			Negotiable
326425		05-JAN-12	GENTERRA CONSULTANTS INC		3,468.57			Negotiable
326426		05-JAN-12	GEOSCIENCE SUPPORT SERVICES INC		3,575.00			Negotiable
326427		05-JAN-12	GLOBALSTAR INC		168.88			Negotiable
326428		05-JAN-12	GRAINGER		4,033.31			Negotiable
326429		05-JAN-12	GSC IRVINE / MAIN LLC		385.00			Negotiable
326430		05-JAN-12	HABIGER, STEVE		1,800.00			Negotiable
326431		05-JAN-12	HACH COMPANY		402.37			Negotiable
326432		05-JAN-12	HANSON BRIDGETT LLP		9,604.00			Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 4  
 Bank Account Currency: USD ( US Dollar )      Payment Currency: USD ( US Dollar )  
 Payment Type: All      Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326433		05-JAN-12	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY		270.57			Negotiable
326434		05-JAN-12	HASSETT, MARY KAY		1,800.00			Negotiable
326435		05-JAN-12	HDR ENGINEERING INC		156,709.53			Negotiable
326436		05-JAN-12	HEARNEY, DAVID		1,800.00			Negotiable
326437		05-JAN-12	HILL BROTHERS CHEMICAL COMPANY		18,194.14			Negotiable

326438	05-JAN-12	HILLS, JOHN	900.00	Negotiable
326439	05-JAN-12	HOLLIDAY, MARY E	1,200.00	Negotiable
326440	05-JAN-12	HOME DEPOT USA INC	420.34	Negotiable
326441	05-JAN-12	HSG INC	1,462.00	Negotiable
326442	05-JAN-12	HUMANA INSURANCE COMPANY	25.20	Negotiable
326443	05-JAN-12	HYDE, JIM	1,800.00	Negotiable
326444	05-JAN-12	IDENTICARD SYSTEMS WORLDWIDE INC	6,470.91	Negotiable
326445	05-JAN-12	IDEXX DISTRIBUTION, INC	6,331.39	Negotiable
326446	05-JAN-12	II FUELS INC	23,359.70	Negotiable
326447	05-JAN-12	INDUSTRIAL ELECTRIC MACHINERY LLC	5,619.61	Negotiable
326448	05-JAN-12	INDUSTRIAL METAL SUPPLY CO	662.23	Negotiable
326449	05-JAN-12	INTERNAL REVENUE SERVICE	1,504.32	Negotiable
326450	05-JAN-12	IRVINE CHAMBER OF COMMERCE	500.00	Negotiable
326451	05-JAN-12	IRVINE PIPE & SUPPLY INC	1,682.66	Negotiable
326452	05-JAN-12	IRWD-PETTY CASH CUSTODIAN	1,341.53	Negotiable
326453	05-JAN-12	JCI JONES CHEMICALS INC	5,505.50	Negotiable
326454	05-JAN-12	JOHANNESSEN, JOHNNIE	1,800.00	Negotiable
326455	05-JAN-12	JOHN G. ALEVIZOS D.O. INC.	1,904.20	Negotiable
326456	05-JAN-12	JOHN MICHAEL COVAS	99.90	Negotiable
326457	05-JAN-12	JONES & STOKES ASSOCIATES, INC	1,320.00	Negotiable
326458	05-JAN-12	KAMINSKE, ED	600.00	Negotiable
326459	05-JAN-12	KAZARIANS & ASSOCIATES, INC.	4,225.75	Negotiable

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 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								
326460		05-JAN-12	KELLY SERVICES INC		672.00			Negotiable
326461		05-JAN-12	KENNEDY/JENKS CONSULTANTS INC		9,310.00			Negotiable
326462		05-JAN-12	KIM, SOON TAE		1,800.00			Negotiable
326463		05-JAN-12	KINDBERG, JOE		1,800.00			Negotiable
326464		05-JAN-12	KNUTH, MICHAEL C		900.00			Negotiable
326465		05-JAN-12	KONVES, JIM		1,560.00			Negotiable
326466		05-JAN-12	KS DIRECT LLC		1,018.24			Negotiable
326467		05-JAN-12	LAGUNA BEACH COUNTY WATER DISTRICT		3,320.91			Negotiable
326468		05-JAN-12	LENOVO UNITED STATES INC		5,638.28			Negotiable
326469		05-JAN-12	LEONARD CHALDEZ TREE SERVICE		4,000.00			Negotiable
326470		05-JAN-12	LEWIS OPERATING CORP		19,687.88			Negotiable
326471		05-JAN-12	LOCHRIDGE, DAVID		6,252.00			Negotiable
326472		05-JAN-12	LOOMIS, TERRELL		1,560.00			Negotiable
326473		05-JAN-12	LYNCH, JAN		1,400.00			Negotiable
326474		05-JAN-12	MALCOLM PIRNIE INC		61,508.97			Negotiable
326475		05-JAN-12	MC MASTER CARR SUPPLY CO		1,355.87			Negotiable
326476		05-JAN-12	MCCORMICK, LESTER		1,000.00			Negotiable
326477		05-JAN-12	MERCHANTS LANDSCAPE SERVICES INC		8,191.70			Negotiable
326478		05-JAN-12	MOBILE MODULAR MANAGEMENT CORPORATION		1,108.75			Negotiable
326479		05-JAN-12	MOUSE GRAPHICS		918.67			Negotiable
326480		05-JAN-12	MUTUAL PROPANE		28.53			Negotiable
326481		05-JAN-12	MWH AMERICAS INC		10,068.57			Negotiable
326482		05-JAN-12	NATIONAL ROOFING CONSULTANTS, INC.		4,996.88			Negotiable
326483		05-JAN-12	NEWPORT BAY NATURALISTS & FRIENDS		5,000.00			Negotiable
326484		05-JAN-12	NEWPORT REAL ESTATE SERVICES INC		7,500.00			Negotiable
326485		05-JAN-12	NEWPORT WINDOW MAINTENANCE INC		450.00			Negotiable
326486		05-JAN-12	NIAGARA CONSERVATION CORP.		787.57			Negotiable
326487		05-JAN-12	OLIN CORPORATION		15,510.82			Negotiable

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40

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								
326488		05-JAN-12	ONESOURCE		159.96			Negotiable
326489		05-JAN-12	DISTRIBUTORS LLC		7,101.00			Negotiable
326490		05-JAN-12	ORANGE COUNTY FIRE AUTHORITY		1,259.38			Negotiable
326491		05-JAN-12	ORANGE COUNTY SANITATION DISTRICT		2,565.85			Negotiable
326492		05-JAN-12	ORANGE COUNTY WATER DISTRICT		840.00			Negotiable
326493		05-JAN-12	PABIS, SHARON		1,130.00			Negotiable
326494		05-JAN-12	PALLANTE, MICHELLE		1,800.00			Negotiable
326495		05-JAN-12	PALOMARES, JOHN		577.50			Negotiable
326496		05-JAN-12	PARKWAY LAWNMOWER SHOP		1,626.89			Negotiable
326497		05-JAN-12	PERS LONG TERM CARE		1,740.00			Negotiable
326498		05-JAN-12	PHAM, BINH T		2,398.74			Negotiable
326499		05-JAN-12	PRE-PAID LEGAL SERVICES INC		1,591.12			Negotiable
326500		05-JAN-12	PRUDENTIAL OVERALL SUPPLY		1,859.34			Negotiable
326501		05-JAN-12	PSOMAS		459.26			Negotiable
326502		05-JAN-12	RAINBOW DISPOSAL CO INC		1,467.38			Negotiable
326503		05-JAN-12	RAM AIR ENGINEERING INC		72,781.09			Negotiable
326504		05-JAN-12	RBF CONSULTING		785.20			Negotiable
326505		05-JAN-12	REACH EMPLOYEE ASSISTANCE INC		1,434.74			Negotiable
326506		05-JAN-12	RIDGE LANDSCAPE ARCHITECTS		6,399.00			Negotiable
326507		05-JAN-12	ROCK STRUCTURES CONSTRUCTION COMPANY		6,904.56			Negotiable
326508		05-JAN-12	RRM DESIGN GROUP		1,300.00			Negotiable
326509		05-JAN-12	SANCHEZ, AL		1,800.00			Negotiable
326510		05-JAN-12	SANCHEZ, NOAH		635.92			Negotiable
326511		05-JAN-12	SANTA ANA BLUE PRINT		9,978.24			Negotiable
326512		05-JAN-12	SANTA MARGARITA WATER DISTRICT		1,740.00			Negotiable
326513		05-JAN-12	SCHEAFER, TOM		1,541.78			Negotiable
326514		05-JAN-12	SHAMROCK SUPPLY CO INC		15.04			Negotiable

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 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								
326515		05-JAN-12	SOUTHERN CALIFORNIA EDISON COMPANY		319,372.00			Negotiable
326516		05-JAN-12	SOUTHERN COUNTIES LUBRICANTS LLC		2,007.35			Negotiable
326517		05-JAN-12	SPARKLETTTS		353.15			Negotiable
326518		05-JAN-12	SPATIAL WAVE, INC.		4,760.00			Negotiable
326519		05-JAN-12	STANTEC CONSULTING SERVICES INC.		3,132.00			Negotiable
326520		05-JAN-12	STEVEN ENTERPRISES INC		559.93			Negotiable
326521		05-JAN-12	SULTAN, SAID		1,800.00			Negotiable
326522		05-JAN-12	SUPPORT PRODUCTS SERVICES		842.06			Negotiable
326523		05-JAN-12	SYNAGRO SOUTH, LLC		14,694.97			Negotiable
326524		05-JAN-12	TETRA TECH, INC		57,143.72			Negotiable
326525		05-JAN-12	THE GAS COMPANY		1,626.65			Negotiable
326526		05-JAN-12	TROPICAL PLAZA NURSERY INC		24,225.00			Voided
326527		05-JAN-12	TRUGREEN LANDCARE LLC		41,000.00			Negotiable
326528		05-JAN-12	TUCKER, TOM		1,800.00			Negotiable
326529		05-JAN-12	URS CORPORATION		4,326.25			Negotiable
326530		05-JAN-12	US PEROXIDE LLC		14,008.25			Negotiable
326531		05-JAN-12	VA CONSULTING, INC		5,528.46			Negotiable
326532		05-JAN-12	VCI TELCOM INC		1,747.00			Negotiable
326533		05-JAN-12	VEHICLE REGISTRATION		134.00			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
COLLECTIONS								
326534	05-JAN-12		VELAZQUEZ, LORETTA		1,800.00			Negotiable
326535	05-JAN-12		VERIZON CALIFORNIA INC		430.93			Negotiable
326536	05-JAN-12		VERIZON WIRELESS SERVICES LLC		7,502.70			Negotiable
326537	05-JAN-12		VPSI INC		9,792.00			Negotiable
326538	05-JAN-12		VULCAN MATERIALS COMPANY		1,244.44			Negotiable
326539	05-JAN-12		WALKER, JOHN		1,800.00			Negotiable
326540	05-JAN-12		WALSH, SANDY		1,140.00			Negotiable
326541	05-JAN-12		WALTERS WHOLESALE ELECTRIC		173.32			Negotiable
326542	05-JAN-12		WATEREUSE FOUNDATION		6,000.00			Negotiable
326543	05-JAN-12		WAXIE'S ENTERPRISES, INC		1,391.16			Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 8  
 Bank Account Currency: USD ( US Dollar )      Payment Currency: USD ( US Dollar )  
 Payment Type: All      Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326544	05-JAN-12		WECK LABORATORIES INC		415.00			Negotiable
326545	05-JAN-12		WESTON SOLUTIONS INC		2,500.00			Negotiable
326546	05-JAN-12		WILHELMI, DOUGLAS GENE		1,800.00			Negotiable
326547	05-JAN-12		WIRELESS WATCHDOGS LLC		1,248.00			Negotiable
326548	05-JAN-12		Carl Spangenberg		255.00			Negotiable
326549	05-JAN-12		Darrin Hall		25.00			Negotiable
326550	05-JAN-12		Didene Martin		116.37			Negotiable
326551	05-JAN-12		Gabriel Vargas		140.00			Negotiable
326552	05-JAN-12		Harry Cho		20.35			Negotiable
326553	05-JAN-12		Janet Wells		506.00			Negotiable
326554	05-JAN-12		Lars Oldewage		356.55			Negotiable
326555	05-JAN-12		Paul Weghorst		62.42			Negotiable
326556	05-JAN-12		Ricky Ruiz		150.00			Negotiable
326557	05-JAN-12		CRIM, RON		700.00			Negotiable
326558	05-JAN-12		FIRST CHOICE SERVICES		318.89			Negotiable
326559	05-JAN-12		GODWIN PUMPS OF AMERICA, INC.		2,366.19			Negotiable
326560	05-JAN-12		GRAINGER		1,031.21			Negotiable
326561	05-JAN-12		HDR ENGINEERING INC		158,789.60			Negotiable
326562	05-JAN-12		JON LEE		3,955.00			Negotiable
326563	05-JAN-12		NATIONAL READY MIXED CONCRETE CO		1,244.57			Negotiable
326564	05-JAN-12		NINYO & MOORE		18,971.25			Negotiable
326565	05-JAN-12		ONESOURCE DISTRIBUTORS LLC		589.76			Negotiable
326566	05-JAN-12		ORANGE, COUNTY OF ROBERTSONS		1,459.00			Negotiable
326567	05-JAN-12		ROBERTSONS		523.17			Negotiable
326568	05-JAN-12		SOUTHERN CALIFORNIA EDISON COMPANY		203,742.87			Negotiable
326569	05-JAN-12		SOUTHLAND WATER TECHNOLOGIES LLC		436.39			Negotiable
326570	05-JAN-12		SPECIALTY TECHNICAL PUBLISHERS		552.00			Negotiable
326571	05-JAN-12		TETRA TECH, INC		8,855.35			Negotiable
326572	05-JAN-12		THE GAS COMPANY		23.94			Negotiable
326573	05-JAN-12		TROPICAL PLAZA NURSERY INC		18,025.00			Voided

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 9  
 Bank Account Currency: USD ( US Dollar )      Payment Currency: USD ( US Dollar )  
 Payment Type: All      Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326574	05-JAN-12		VERIZON CALIFORNIA INC		210.72			Voided
326575	12-JAN-12		A & Y ASPHALT CONTRACTORS INC		5,500.00			Negotiable
326576	12-JAN-12		A&A WIPING CLOTH CO		508.58			Negotiable
326577	12-JAN-12		ABAJIAN, JOHN		485.86			Negotiable
326578	12-JAN-12		ACCURATE AIR ENGINEERING INC		366.95			Negotiable
326579	12-JAN-12		ACKLIN, CHARLES		13.93			Negotiable
326580	12-JAN-12		ACTION ELECTRIC		325.59			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
CORP								
326581	12-JAN-12	12	ADS LLC		1,936.50			Negotiable
326582	12-JAN-12	12	AIRGAS-WEST, INC.		1,574.26			Negotiable
326583	12-JAN-12	12	ALHASSAN, GAIL Y		21.45			Negotiable
326584	12-JAN-12	12	ALLEN, GREGORY		18.49			Negotiable
326585	12-JAN-12	12	ALVIZO, MARIA		13.63			Negotiable
326586	12-JAN-12	12	AMERICAN MESSAGING SERVICES LLC		287.76			Negotiable
326587	12-JAN-12	12	AT&T		3,125.35			Negotiable
326588	12-JAN-12	12	AT&T		1,757.71			Negotiable
326589	12-JAN-12	12	ATLANTIC & PACIFIC RE		50.71			Negotiable
326590	12-JAN-12	12	ATLANTIC AND PACIFIC REAL ESTA		25.65			Negotiable
326591	12-JAN-12	12	AUTOMATED GATE SERVICES INC		196.50			Negotiable
326592	12-JAN-12	12	BANTUGAN, MARVIN		26.56			Negotiable
326593	12-JAN-12	12	BATTERY SPECIALTIES		124.81			Negotiable
326594	12-JAN-12	12	BECCWAR, JACQUE		26.00			Negotiable
326595	12-JAN-12	12	BEDADNIA, GOHAR		30.20			Negotiable
326596	12-JAN-12	12	BEHANI, HOOMAN		27.47			Negotiable
326597	12-JAN-12	12	BENDHEIM, PETER W		28.83			Negotiable
326598	12-JAN-12	12	BENNANI, RITA		34.37			Negotiable
326599	12-JAN-12	12	BESH BEANS INC		62.76			Negotiable
326600	12-JAN-12	12	BILCO COMPANY		273.60			Negotiable
326601	12-JAN-12	12	BILL'S SWEEPING SERVICE INC		460.00			Negotiable
326602	12-JAN-12	12	BIOMAGIC INC		6,154.53			Negotiable
326603	12-JAN-12	12	BIOMERIEUX INC		599.86			Negotiable
326604	12-JAN-12	12	BIRMINGHAM, JUDY		107.05			Negotiable
326605	12-JAN-12	12	BREWER, THOMAS		39.11			Negotiable
326606	12-JAN-12	12	BRITHINEE ELECTRIC		4,627.85			Negotiable
326607	12-JAN-12	12	BROOKS, GREG		158.40			Negotiable
326608	12-JAN-12	12	BROWN, MARTIN		32.32			Negotiable

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 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								
326609	12-JAN-12	12	BRUCE NEWELL		2,632.00			Negotiable
326610	12-JAN-12	12	BRUM, ROGER		15.00			Negotiable
326611	12-JAN-12	12	BURKE, COLBY		135.00			Negotiable
326612	12-JAN-12	12	BUSH & ASSOCIATES INC		7,166.00			Negotiable
326613	12-JAN-12	12	C WELLS PIPELINE MATERIALS INC		80.26			Negotiable
326614	12-JAN-12	12	CAL WATER PURIFICATION		80.00			Negotiable
326615	12-JAN-12	12	CALIFORNIA BARRICADE INC		855.00			Negotiable
326616	12-JAN-12	12	CALIFORNIA HOMES OF		32.17			Negotiable
326617	12-JAN-12	12	CAMPBELL & LEVINE LLC		67.50			Negotiable
326618	12-JAN-12	12	CANON BUSINESS SOLUTIONS INC		6,844.02			Negotiable
326619	12-JAN-12	12	CANON FINANCIAL SERVICES INC		2,931.05			Negotiable
326620	12-JAN-12	12	CARSON, TARYN		25.84			Negotiable
326621	12-JAN-12	12	CARTER-JOHNSON, JEANNIE		85.30			Negotiable
326622	12-JAN-12	12	CH2M HILL, INC		65,912.17			Negotiable
326623	12-JAN-12	12	CHEN, JENNIFER		53.85			Negotiable
326624	12-JAN-12	12	CHI, CHRISTINE		42.88			Negotiable
326625	12-JAN-12	12	CHOU, IWEI		60.38			Negotiable
326626	12-JAN-12	12	CHOW, KEVIN M		83.08			Negotiable
326627	12-JAN-12	12	CHUNG, HONG		121.20			Negotiable
326628	12-JAN-12	12	CHUNG, MIN		25.65			Negotiable
326629	12-JAN-12	12	CIRIGNANI, DIANE		148.57			Negotiable
326630	12-JAN-12	12	CITY OF IRVINE		1,043.47			Negotiable
326631	12-JAN-12	12	CITY OF TUSTIN		43.71			Negotiable
326632	12-JAN-12	12	COASTAL TRAFFIC SYSTEMS, INC		600.00			Negotiable
326633	12-JAN-12	12	COLLINS, MICHAEL		16.73			Negotiable
326634	12-JAN-12	12	CONEYBEARE INC		1,101.60			Negotiable
326635	12-JAN-12	12	CONTROL TECHNOLOGIES		13,523.70			Negotiable
326636	12-JAN-12	12	CONTROLLED KEY SYSTEMS INC		1,229.32			Negotiable
326637	12-JAN-12	12	CORBAT, WESLEY		29.47			Negotiable
326638	12-JAN-12	12	CORPORATE OFFICE INTERIORS		18.23			Negotiable
326639	12-JAN-12	12	CORTES, BRIAN		130.65			Negotiable
326640	12-JAN-12	12	DARANI, M.		48.77			Negotiable

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



Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326641		12-JAN-12	DELTA SYSTEMS ENGINEERING		27,825.25			Negotiable
326642		12-JAN-12	DEPARTMENT OF INDUSTRIAL RELATIONS STATE OF CALIFORNIA		3,649.62			Negotiable
326643		12-JAN-12	DESHLER, TODD		1,000.00			Negotiable
326644		12-JAN-12	DOUGLAS ENVIRONMENTAL GROUP		1,150.00			Negotiable
326645		12-JAN-12	DOUGLAS, MONICA		44.70			Negotiable
326646		12-JAN-12	EMPLOYEE BENEFIT SPECIALIST, INC		685.00			Negotiable
326647		12-JAN-12	ENVIRONMENTAL WATER MANAGEMENT INC		4,100.00			Negotiable
326648		12-JAN-12	FARRELL & ASSOCIATES		249.41			Negotiable
326649		12-JAN-12	FERGUSON, DAVID		6,593.59			Negotiable
326650		12-JAN-12	FINANCIAL CREDIT FIRST		26.56			Negotiable
326651		12-JAN-12	FISH, PATRICIA L		140.00			Negotiable
326652		12-JAN-12	FISHER SCIENTIFIC COMPANY LLC		1,762.32			Negotiable
326653		12-JAN-12	FULGENCIO, IRIS		30.51			Negotiable
326654		12-JAN-12	GARCIA, SALLY		42.86			Negotiable
326655		12-JAN-12	GERACE, EVELYN		40.73			Negotiable
326656		12-JAN-12	GERMOND, E.T.		109.17			Negotiable
326657		12-JAN-12	GIFREHC		4,623.06			Negotiable
326658		12-JAN-12	GODDESS NAILS		297.42			Negotiable
326659		12-JAN-12	GOLDEN STATE LABOR COMPLIANCE LLC		1,803.75			Negotiable
326660		12-JAN-12	GRAB, PAULA		15.00			Negotiable
326661		12-JAN-12	GRAINGER		2,248.98			Negotiable
326662		12-JAN-12	HACH COMPANY		3,373.57			Negotiable
326663		12-JAN-12	HALSTEAD, JEFF		22.09			Negotiable
326664		12-JAN-12	HAMBLIN, CRYSTAL		135.14			Negotiable
326665		12-JAN-12	HAMILTON, KURT		316.44			Negotiable
326666		12-JAN-12	HAN, PHILLIP		22.36			Negotiable
326667		12-JAN-12	HARKINS, ALICE		25.65			Negotiable
326668		12-JAN-12	HARRINGTON INDUSTRIAL PLASTICS LLC		3,174.36			Negotiable
326669		12-JAN-12	HARRIS, THOMAS		14.02			Negotiable
326670		12-JAN-12	HEARLE, SALLY		51.28			Negotiable
326671		12-JAN-12	HENSON, RICHARD		19.72			Negotiable

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 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								
326672		12-JAN-12	HEWITT ASSOCIATES LLC		111,232.00			Negotiable
326673		12-JAN-12	HILL BROTHERS CHEMICAL COMPANY		12,574.95			Negotiable
326674		12-JAN-12	HILLEBRECHT, WARREN K		182.59			Negotiable
326675		12-JAN-12	HOLLIDAY ROCK CO INC		144.54			Negotiable
326676		12-JAN-12	HOME DEPOT USA INC		808.51			Negotiable
326677		12-JAN-12	HOMES OC		86.33			Negotiable
326678		12-JAN-12	HOMMEZ, MICHELLE		24.58			Negotiable
326679		12-JAN-12	HORN, SHARON		28.50			Negotiable
326680		12-JAN-12	HU, EDDI		656.60			Negotiable
326681		12-JAN-12	HUA, BRYAN		25.09			Negotiable
326682		12-JAN-12	HUNTER-SANDLAND, KAY		26.56			Negotiable
326683		12-JAN-12	HUR, RYAN		16.64			Negotiable
326684		12-JAN-12	HYDRO-SCAPE PRODUCTS INC		120.94			Negotiable
326685		12-JAN-12	IBARA, JULIE		54.64			Negotiable
326686		12-JAN-12	IDEXX DISTRIBUTION, INC		1,253.02			Negotiable
326687		12-JAN-12	INGRAM, DREW		76.89			Negotiable
326688		12-JAN-12	IRVINE IMAGING SERVICES		63.07			Negotiable
326689		12-JAN-12	IRVINE PACIFIC, LP		54.82			Negotiable
326690		12-JAN-12	IRVINE PIPE & SUPPLY INC		375.57			Negotiable
326691		12-JAN-12	IRWD-PETTY CASH CUSTODIAN		460.61			Negotiable
326692		12-JAN-12	JAMES, RON		16.96			Negotiable

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326693	12-JAN-12	JCI JONES	5,505.50	Negotiable
		CHEMICALS INC		
326694	12-JAN-12	JEON, KWANG HEE	15.00	Negotiable
326695	12-JAN-12	JIANG, BEI	38.12	Negotiable
326696	12-JAN-12	JOHN G. ALEVIZOS	469.68	Negotiable
		D.O. INC.		
326697	12-JAN-12	JOHNSTON, AL	25.65	Negotiable
326698	12-JAN-12	JON POLENTZ P.M.	25.65	Negotiable
		CO		
326699	12-JAN-12	JONES, JEFF	17.02	Negotiable
326700	12-JAN-12	JUNG, SEUNGEUN	31.13	Negotiable
326701	12-JAN-12	KB HOMES	26.56	Negotiable
326702	12-JAN-12	KELLY SERVICES INC	840.00	Negotiable
326703	12-JAN-12	KEY EQUIPMENT	3,972.94	Negotiable
		FINANCE		

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 13  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326704		12-JAN-12	KIM, DAVID		96.24			Negotiable
326705		12-JAN-12	KIM, DIANE		10.65			Negotiable
326706		12-JAN-12	KIM, KI		33.63			Negotiable
326707		12-JAN-12	KIM, YONG		29.68			Negotiable
326708		12-JAN-12	KINJO, CARMELITA		104.37			Negotiable
326709		12-JAN-12	KISELJAK, SONJA		143.34			Negotiable
326710		12-JAN-12	KO, KWANGBAE		9.88			Negotiable
326711		12-JAN-12	KOHL'S DEPARTMENT		1,337.44			Negotiable
			STORE					
326712		12-JAN-12	KUNZIK & SARA		754.68			Negotiable
			CONST INC					
326713		12-JAN-12	KUPPANNAN,		26.73			Negotiable
			RAGUPATHI					
326714		12-JAN-12	LAMO REAL ESTATE		36.30			Negotiable
			INC					
326715		12-JAN-12	LAZARO, DELIA		31.01			Negotiable
326716		12-JAN-12	LENOVO UNITED		12,955.95			Negotiable
			STATES INC					
326717		12-JAN-12	LIM, EDDY		28.79			Negotiable
326718		12-JAN-12	LOCHRIDGE, DAVID		3,564.00			Negotiable
326719		12-JAN-12	LOENE, SUSAN		19.67			Negotiable
326720		12-JAN-12	LOPEZ, MARIA		31.73			Negotiable
326721		12-JAN-12	LOWRY, KARI		25.38			Negotiable
326722		12-JAN-12	LUNA, DANIEL		29.29			Negotiable
326723		12-JAN-12	MAHER, KATHRYN		16.47			Negotiable
326724		12-JAN-12	MARQUARDT, ROSE		11.46			Negotiable
326725		12-JAN-12	MARTIN, ROBERT		12.14			Negotiable
326726		12-JAN-12	MAYER HOFFMAN		29,090.00			Negotiable
			MCCANN P.C.					
326727		12-JAN-12	MBC APPLIED		3,000.00			Negotiable
			ENVIRONMENTAL					
			SCIENCES					
326728		12-JAN-12	MC MASTER CARR		687.72			Negotiable
			SUPPLY CO					
326729		12-JAN-12	MCCLEARY, KYLE		37.52			Negotiable
326730		12-JAN-12	MCCLOSKEY, JULIE		32.52			Negotiable
326731		12-JAN-12	MCCORMICK, LESTER		800.00			Negotiable
326732		12-JAN-12	MESCH, REBECCA		22.46			Negotiable
326733		12-JAN-12	MIZRAHI, RONEN		39.34			Negotiable
326734		12-JAN-12	MOBASHER, MEHRDAD		26.17			Negotiable
326735		12-JAN-12	MOHAMMED, CAROL		26.10			Negotiable
326736		12-JAN-12	MOLTONI, JOHNATHAN		488.60			Negotiable
326737		12-JAN-12	MONSOUR, MEDHAD		113.37			Negotiable
326738		12-JAN-12	MORRIS, DONNA		644.31			Negotiable
326739		12-JAN-12	MOUSE GRAPHICS		1,494.25			Negotiable
326740		12-JAN-12	MY1STOP LLC		796.55			Negotiable

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 14  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326741		12-JAN-12	MYILLER, CHARLES		24.58			Negotiable
326742		12-JAN-12	NAJERA, LAURA		33.12			Negotiable
326743		12-JAN-12	NATIONAL READY		319.26			Negotiable
			MIXED CONCRETE CO					
326744		12-JAN-12	NCH CORPORATION		504.99			Negotiable
326745		12-JAN-12	NEPTUNE TECHNOLOGY		49,630.51			Negotiable
326746		12-JAN-12	NEWAGE INDUSTRIES		986.04			Negotiable
			INC					
326747		12-JAN-12	NEWPORT BEACH,		698.19			Negotiable
			CITY OF					
326748		12-JAN-12	NGUYEN, HUNG		26.56			Negotiable
326749		12-JAN-12	NGUYEN, LIEN-CHI		192.52			Negotiable

326750	12-JAN-12	NINYO & MOORE	1,616.00	Negotiable
326751	12-JAN-12	OLIN CORPORATION	18,168.54	Negotiable
326752	12-JAN-12	ON ASSIGNMENT LAB SUPPORT	3,485.44	Negotiable
326753	12-JAN-12	ONESOURCE DISTRIBUTORS LLC	956.11	Negotiable
326754	12-JAN-12	ORACLE AMERICA, INC.	123,187.01	Negotiable
326755	12-JAN-12	ORANGE COUNTY WATER ASSOCIATIO	300.00	Negotiable
326756	12-JAN-12	ORANGECOAST INTERFAITH SHELTER	18.81	Negotiable
326757	12-JAN-12	PENDERGIST, MARILYN	28.38	Negotiable
326758	12-JAN-12	PENN, ASHLEY	24.49	Negotiable
326759	12-JAN-12	PEREZ, JESUS	790.39	Negotiable
326760	12-JAN-12	PINNACLE LANDSCAPE COMPANY	6,560.00	Negotiable
326761	12-JAN-12	PRAXAIR DISTRIBUTION INC	1,188.72	Negotiable
326762	12-JAN-12	PREFERRED GROUP PROPERTIES	25.63	Negotiable
326763	12-JAN-12	PRINCE, SCOTT	24.91	Negotiable
326764	12-JAN-12	PRO GROWERS INC	625.59	Negotiable
326765	12-JAN-12	PROP LP CAL MAX	129.68	Negotiable
326766	12-JAN-12	PRUDENTIAL OVERALL SUPPLY	64.96	Negotiable
326767	12-JAN-12	R&B AUTOMATION INC	2,205.63	Negotiable
326768	12-JAN-12	RAFIQ, TIMOR	35.45	Negotiable
326769	12-JAN-12	RAINBOW NUT & BOLT INC	1,454.63	Negotiable
326770	12-JAN-12	RAYMOND ARI DESIGN	4,200.00	Negotiable
326771	12-JAN-12	RBF CONSULTING	3,342.83	Negotiable
326772	12-JAN-12	REDDY, SATISH	40.63	Negotiable

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 15  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326773		12-JAN-12	REED, JAMES D		1,942.17			Negotiable
326774		12-JAN-12	REFRIGERATION SUPPLIES		107.06			Negotiable
326775		12-JAN-12	REMINE, JAMES		624.96			Negotiable
326776		12-JAN-12	RIVERA, JORGE		55.74			Negotiable
326777		12-JAN-12	ROSENCRANTZ, MARCUS		116.41			Negotiable
326778		12-JAN-12	RUBIO, LAURA		15.00			Negotiable
326779		12-JAN-12	RYDER, STEVEN		28.38			Negotiable
326780		12-JAN-12	SAIDUDDIN, NAJAM		1,071.42			Negotiable
326781		12-JAN-12	SALIMY, SHAHRAM		138.76			Negotiable
326782		12-JAN-12	SANTA ANA BLUE PRINT		1,313.27			Negotiable
326783		12-JAN-12	SAYAD, DAVID		63.31			Negotiable
326784		12-JAN-12	SCHAFFER, RANDY		38.36			Negotiable
326785		12-JAN-12	SELBO, PATRICIA		29.29			Negotiable
326786		12-JAN-12	SHAMROCK SUPPLY CO INC		3,410.76			Negotiable
326787		12-JAN-12	SIGNATURE FLOORING INC		3,387.00			Negotiable
326788		12-JAN-12	SINGH, HARBANS		13.77			Negotiable
326789		12-JAN-12	SMILEY, STEVE		45.39			Negotiable
326790		12-JAN-12	SMITHCO BROKERAGE		24.37			Negotiable
326791		12-JAN-12	SNYDER LANGSTON L.P.		210,123.00			Negotiable
326792		12-JAN-12	SOMERSET APARTMENTS		147.28			Negotiable
326793		12-JAN-12	SONG, JAEWOOK		10.24			Negotiable
326794		12-JAN-12	SOUKAPHAY, CAY		338.81			Negotiable
326795		12-JAN-12	SOUTH COAST ANSWERING SERVICE		614.40			Negotiable
326796		12-JAN-12	SOUTHERN CALIFORNIA EDISON COMPANY		8,220.78			Negotiable
326797		12-JAN-12	SOUTHERN CALIFORNIA SECURITY CENTER, INC.		302.54			Negotiable
326798		12-JAN-12	STAFFORD, TERRI		28.10			Voided
326799		12-JAN-12	STANFORD COURT APTS		488.88			Negotiable
326800		12-JAN-12	STANTEC CONSULTING SERVICES INC.		4,679.12			Negotiable
326801		12-JAN-12	SUPERIOR WATER TECHNOLOGIES		59,796.00			Negotiable

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

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326802		12-JAN-12	SWAINS ELECTRIC MOTOR SERVICE		18,168.05			Negotiable
326803		12-JAN-12	TEKDRAULICS		2,150.69			Negotiable
326804		12-JAN-12	TESTAMERICA LABORATORIES, INC		192.15			Negotiable
326805		12-JAN-12	THE DESIGN FACTOR		1,400.00			Negotiable
326806		12-JAN-12	THE FENCE GUY		790.00			Negotiable
326807		12-JAN-12	THORP, KAREN L		2,206.59			Negotiable
326808		12-JAN-12	TIANGCO, GRACE		54.06			Negotiable
326809		12-JAN-12	TIC-AGRICULTURAL DIV		8,858.34			Negotiable
326810		12-JAN-12	TIC-IPG-COMMON		48.93			Negotiable
326811		12-JAN-12	TIC-RETAIL PROPERTIES		238.80			Negotiable
326812		12-JAN-12	TOBEY, GLENN		162.76			Voided
326813		12-JAN-12	TONG, CHI T		236.43			Negotiable
326814		12-JAN-12	TOPINATH, SWAPNA		140.09			Negotiable
326815		12-JAN-12	TROPICAL PLAZA NURSERY INC		19,325.00			Negotiable
326816		12-JAN-12	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA		486.00			Negotiable
326817		12-JAN-12	UNITED STATES POSTAL SERVICE		54.33			Negotiable
326818		12-JAN-12	VALDEZ, ANDREA E		109.56			Negotiable
326819		12-JAN-12	VENTURA, LOUIS		31.13			Negotiable
326820		12-JAN-12	VERIZON CALIFORNIA INC		210.72			Negotiable
326821		12-JAN-12	VIEBECK, GEORGE		91.75			Negotiable
326822		12-JAN-12	VOIT REAL ESTATE SERVICES, L.P.		22,001.46			Negotiable
326823		12-JAN-12	VORTEX INDUSTRIES INC		270.00			Negotiable
326824		12-JAN-12	WALCHER, BRAD		28.38			Negotiable
326825		12-JAN-12	WARDECKI, KELLIE		21.04			Negotiable
326826		12-JAN-12	WAXIE'S ENTERPRISES, INC		61.42			Negotiable
326827		12-JAN-12	WEI CHANG, HELEN		13.60			Negotiable
326828		12-JAN-12	WERRA, STEPHEN P		38.60			Negotiable
326829		12-JAN-12	WESTERN EXTERMINATOR COMPANY		7,064.50			Negotiable
326830		12-JAN-12	WIELAND ACOUSTICS INC		672.00			Negotiable
326831		12-JAN-12	YAMADA, GAYLE		37.58			Negotiable
DIRWD Ledger      Payment Register For      01-JAN-12 To      31-JAN-12      Report Date: 02-FEB-2012 15:40								
BANK: Bank of America N.A.			Branch : Los Angeles		Account: Checking AP and PR		Page: 17	
Bank Account Currency: USD ( US Dollar )					Payment Currency: USD ( US Dollar )			
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								
326832		12-JAN-12	YIU, JEI-YIN		30.12			Negotiable
326833		12-JAN-12	ZEVE, DAVID		79.59			Negotiable
326834		12-JAN-12	ZUGHNI, SAM		123.78			Negotiable
326835		12-JAN-12	David Chaney		130.00			Negotiable
326836		12-JAN-12	David McCarter		140.00			Negotiable
326837		12-JAN-12	Eric Akiyoshi		25.00			Negotiable
326838		12-JAN-12	Matthew Daniel		80.00			Negotiable
326839		12-JAN-12	Michael Hoolihan		305.00			Negotiable
326840		12-JAN-12	Steve Habiger		260.00			Negotiable
326841		12-JAN-12	ASSOCIATED POWER INC		2,018.97			Negotiable
326842		12-JAN-12	AT&T		103.48			Negotiable
326843		12-JAN-12	CASA		18,000.00			Negotiable
326844		12-JAN-12	CITY OF LAKE FOREST		2,500.00			Negotiable
326845		12-JAN-12	CLEARINGHOUSE		528.45			Negotiable
326846		12-JAN-12	EAST ORANGE COUNTY WATER DISTRICT		1,357.91			Negotiable
326847		12-JAN-12	FRANCHISE TAX BOARD		242.31			Negotiable
326848		12-JAN-12	INTERNAL REVENUE SERVICE		1,488.67			Negotiable
326849		12-JAN-12	IRVINE PIPE & SUPPLY INC		233.90			Voided
326850		12-JAN-12	J.P. MORGAN SECURITIES, INC.		22,684.93			Negotiable
326851		12-JAN-12	JOHNSON-PELTIER		957.68			Negotiable
326852		12-JAN-12	MOODY'S INVESTORS SERVICE INC		5,500.00			Negotiable
326853		12-JAN-12	ORANGE COUNTY VECTOR CONTROL DISTRICT		127.21			Negotiable

326854	12-JAN-12	ORDONEZ, CYNTHIA MARIE	500.17	Negotiable
326855	12-JAN-12	PERS LONG TERM CARE	1,859.51	Negotiable
326856	12-JAN-12	SECURTEC DISTRICT PATROL INC	3,700.00	Negotiable
326857	12-JAN-12	SHAMROCK SUPPLY CO INC	727.57	Negotiable
326858	12-JAN-12	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	3,027.72	Negotiable
326859	12-JAN-12	SOUTH COAST WATER	191.66	Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
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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								
326860		12-JAN-12	SOUTHERN CALIFORNIA EDISON COMPANY		264.96			Negotiable
326861		12-JAN-12	TETRA TECH, INC		14,535.00			Negotiable
326862		12-JAN-12	WILLIAMS, TWYLA		658.62			Negotiable
326863		13-JAN-12	ACCIDENT RESEARCH AND BIOMECHANICS, INC		1,653.50			Negotiable
326864		13-JAN-12	ANTHEM BLUE CROSS		487.00			Negotiable
326865		13-JAN-12	AQUA-METRIC SALES COMPANY		3,401.67			Negotiable
326866		13-JAN-12	CARL WARREN & CO		3,668.22			Negotiable
326867		13-JAN-12	CITY OF IRVINE		28,500.00			Negotiable
326868		13-JAN-12	CONEYBEARE INC		1,331.10			Negotiable
326869		13-JAN-12	FEDEX		251.97			Negotiable
326870		13-JAN-12	FLATIRON WEST INC		437,567.71			Negotiable
326871		13-JAN-12	HOME DEPOT USA INC		116.12			Negotiable
326872		13-JAN-12	MICROSURVEY SOFTWARE INC		585.00			Negotiable
326873		13-JAN-12	ORANGE COUNTY FIRE AUTHORITY		467.00			Negotiable
326874		13-JAN-12	SANTA ANA BLUE PRINT		1,146.26			Negotiable
326875		13-JAN-12	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		2,478.06			Negotiable
326876		13-JAN-12	SOUTHERN CALIFORNIA EDISON COMPANY		3,525.64			Negotiable
326877		13-JAN-12	STATE WATER RESOURCES CONTROL BOARD		466.00			Negotiable
326878		19-JAN-12	AIRGAS-WEST, INC.		269.66			Negotiable
326879		19-JAN-12	AT&T		91.25			Negotiable
326880		19-JAN-12	AT&T		30.58			Negotiable
326881		19-JAN-12	AT&T		4,623.64			Negotiable
326882		19-JAN-12	AT&T		42.70			Negotiable
326883		19-JAN-12	BCGR		385.00			Negotiable
326884		19-JAN-12	BDC SPECIAL WASTE		200.00			Negotiable
326885		19-JAN-12	BIOMAGIC INC		4,801.56			Negotiable
326886		19-JAN-12	BORCHARD SURVEYING & MAPPING, INC.		3,650.00			Negotiable
326887		19-JAN-12	BOWIE, ARNESON, WILES & GIANNONE		32,986.33			Negotiable
326888		19-JAN-12	CALIFORNIA BARRICADE INC		1,705.08			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								
326889		19-JAN-12	CALIFORNIA WATER ENVIRONMENT ASSOCIATION		78.00			Negotiable
326890		19-JAN-12	CITY OF IRVINE		3,510.00			Negotiable
326891		19-JAN-12	CITY OF IRVINE		2,692.20			Negotiable
326892		19-JAN-12	CITY OF LAKE FOREST		2,500.00			Negotiable
326893		19-JAN-12	CLEAN ENERGY FUELS		1,534.51			Negotiable
326894		19-JAN-12	COASTAL IGNITION & CONTROLS, INC		8,760.28			Negotiable
326895		19-JAN-12	COASTAL TRAFFIC SYSTEMS, INC		420.00			Negotiable
326896		19-JAN-12	CONEYBEARE INC		947.52			Negotiable
326897		19-JAN-12	CORELOGIC INC		24.00			Negotiable
326898		19-JAN-12	CPI-INTERNATIONAL,		131.53			Negotiable

326899	19-JAN-12	INC CR & R INCORPORATED	11.98	Negotiable
326900	19-JAN-12	DCSE INC	453.36	Negotiable
326901	19-JAN-12	DEE JASPAR & ASSOCIATES, INC.	1,688.53	Negotiable
326902	19-JAN-12	DELTA SYSTEMS ENGINEERING	70,935.76	Negotiable
326903	19-JAN-12	DURANCEAU CONSULTING SERVICES,	562.50	Negotiable
326904	19-JAN-12	EAST ORANGE COUNTY WATER DISTRICT	10,063.40	Negotiable
326905	19-JAN-12	EATON CORP	3,630.00	Negotiable
326906	19-JAN-12	EI&C ENGINEERING INC	13,110.00	Negotiable
326907	19-JAN-12	EMPLOYEE BENEFIT SPECIALIST, INC	705.00	Negotiable
326908	19-JAN-12	ESA PWA	2,075.00	Negotiable
326909	19-JAN-12	EXPRESSAIR	188.00	Negotiable
326910	19-JAN-12	FARRELL & ASSOCIATES	331.81	Negotiable
326911	19-JAN-12	FARWEST CORROSION CONTROL CO	897.37	Negotiable
326912	19-JAN-12	FEDEX	277.66	Negotiable
326913	19-JAN-12	FIRE EXTINGUISHING SAFETY	493.29	Negotiable
326914	19-JAN-12	FIRST CHOICE SERVICES	162.49	Negotiable
326915	19-JAN-12	FISERV	10,052.76	Negotiable
326916	19-JAN-12	FOX, SAUL	212.82	Negotiable

IRWD Ledger  
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 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar ) Page: 20  
 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								
326917		19-JAN-12	G.M. SAGER CONSTRUCTION CO, INC		13,800.00			Negotiable
326918		19-JAN-12	GANAHL LUMBER CO.		1,050.13			Negotiable
326919		19-JAN-12	GRAINGER		2,200.39			Negotiable
326920		19-JAN-12	HACH COMPANY		734.02			Negotiable
326921		19-JAN-12	HARMSWORTH ASSOCIATES		1,065.00			Negotiable
326922		19-JAN-12	HDR ENGINEERING INC		27,452.49			Negotiable
326923		19-JAN-12	HILL BROTHERS CHEMICAL COMPANY		16,030.81			Negotiable
326924		19-JAN-12	HOME DEPOT USA INC		1,995.13			Negotiable
326925		19-JAN-12	HUNSAKER & ASSOCIATES IRVINE		6,104.00			Negotiable
326926		19-JAN-12	INDUSTRIAL METAL SUPPLY CO		22.80			Negotiable
326927		19-JAN-12	INDUSTRIAL NETWORKING		2,439.16			Negotiable
326928		19-JAN-12	IRVINE PIPE & SUPPLY INC		11,212.51			Negotiable
326929		19-JAN-12	IRWD-PETTY CASH CUSTODIAN		1,034.97			Negotiable
326930		19-JAN-12	J.R. FILANC CONSTRUCTION COMPANY INC.		2,265.23			Voided
326931		19-JAN-12	JM MCCONKEY AND COMPANY INC		4,296.70			Negotiable
326932		19-JAN-12	JOHN G. ALEVIZOS D.O. INC.		240.00			Negotiable
326933		19-JAN-12	JOHN G. ALEVIZOS D.O. INC.		69.92			Negotiable
326934		19-JAN-12	KIM, SOON TAE		3,850.00			Negotiable
326935		19-JAN-12	KOELLER NEBEKER CARLSON & HALUCK, LLP		793.89			Negotiable
326936		19-JAN-12	LAGUNA BEACH COUNTY WATER DISTRICT		5,397.46			Negotiable
326937		19-JAN-12	LEWIS OPERATING CORP		3,500.00			Negotiable
326938		19-JAN-12	LIGHT COMMUNICATIONS INC		20,034.96			Negotiable
326939		19-JAN-12	LSA ASSOCIATES INC		7,574.40			Negotiable
326940		19-JAN-12	MALCOLM PIRNIE INC		18,586.09			Negotiable
326941		19-JAN-12	MALCOLM PIRNIE INC		737.70			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326942		19-JAN-12	MC MASTER CARR SUPPLY CO		2,886.28			Negotiable
326943		19-JAN-12	MERCHANTS LANDSCAPE SERVICES INC		13,441.28			Negotiable
326944		19-JAN-12	MICHAEL A BACA		5,000.00			Negotiable
326945		19-JAN-12	MOTION INDUSTRIES INC		2,651.88			Negotiable
326946		19-JAN-12	MUELLERLEILE, JOHN		286.64			Negotiable
326947		19-JAN-12	MUTUAL PROPANE		3,290.35			Negotiable
326948		19-JAN-12	NATIONAL READY MIXED CONCRETE CO		493.01			Negotiable
326949		19-JAN-12	NEPTUNE TECHNOLOGY		95,126.87			Negotiable
326950		19-JAN-12	NMG GEOTECHNICAL INC		2,195.90			Negotiable
326951		19-JAN-12	O'HAREN GOVERNMENT RELATIONS		6,500.00			Negotiable
326952		19-JAN-12	OLIN CORPORATION		25,763.80			Negotiable
326953		19-JAN-12	ON ASSIGNMENT LAB SUPPORT		1,991.68			Negotiable
326954		19-JAN-12	ONESOURCE DISTRIBUTORS LLC		246.98			Negotiable
326955		19-JAN-12	ORACLE AMERICA, INC.		137.50			Negotiable
326956		19-JAN-12	ORANGE COUNTY FIRE AUTHORITY		750.00			Negotiable
326957		19-JAN-12	ORANGE COUNTY SANITATION DISTRICT		44,014.72			Negotiable
326958		19-JAN-12	ORANGE, COUNTY OF		35.00			Negotiable
326959		19-JAN-12	PACIFIC TECHNOLOGIES INC		5,069.66			Negotiable
326960		19-JAN-12	PAUL E BRADLEY INC		10,935.00			Negotiable
326961		19-JAN-12	PIVOT INTERIORS INC		1,965.79			Negotiable
326962		19-JAN-12	POLYDYNE INC		4,600.00			Negotiable
326963		19-JAN-12	PRAXAIR DISTRIBUTION INC		1,264.99			Negotiable
326964		19-JAN-12	PRUDENTIAL OVERALL SUPPLY		865.01			Negotiable
326965		19-JAN-12	PTI SAND & GRAVEL INC		1,555.85			Negotiable
326966		19-JAN-12	PUMP CHECK		630.00			Negotiable
326967		19-JAN-12	RED WING SHOES		9,249.61			Negotiable
326968		19-JAN-12	RJS SOFTWARE SYSTEMS INC		8,280.00			Negotiable

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
326969		19-JAN-12	SANTIAGO AQUEDUCT COMMISSION		10,470.05			Negotiable
326970		19-JAN-12	SARBS-CALIFORNIA WATER		160.00			Negotiable
326971		19-JAN-12	SEAL ANALYTICAL INC		285.56			Negotiable
326972		19-JAN-12	SEMA CONSTRUCTION INC		1,530.34			Negotiable
326973		19-JAN-12	SEMA CONSTRUCTION INC		13,773.02			Negotiable
326974		19-JAN-12	SIGMA-ALDRICH INC		324.02			Negotiable
326975		19-JAN-12	SIGNATURE FLOORING INC		1,950.25			Negotiable
326976		19-JAN-12	SOUTHERN CALIFORNIA EDISON COMPANY		3,324.03			Negotiable
326977		19-JAN-12	SOUTHERN CALIFORNIA EDISON COMPANY		176,007.59			Negotiable
326978		19-JAN-12	STAFFORD, TERRI		14.05			Negotiable
326979		19-JAN-12	STANTEC CONSULTING SERVICES INC.		9,126.00			Negotiable
326980		19-JAN-12	TELEDYNE TEKMAR COMPANY		4,875.00			Negotiable
326981		19-JAN-12	TESTAMERICA LABORATORIES, INC		1,444.80			Negotiable
326982		19-JAN-12	TETRA TECH, INC		11,210.00			Negotiable
326983		19-JAN-12	THE GAS COMPANY		379.71			Negotiable
326984		19-JAN-12	TRANSWORLD SYSTEMS INC		5,685.00			Negotiable
326985		19-JAN-12	TRUGREEN LANDCARE LLC		549.70			Negotiable
326986		19-JAN-12	ULINE INC		91.85			Negotiable
326987		19-JAN-12	UNITED GENERATOR		14,651.28			Negotiable

326988	19-JAN-12	LLC UNITED SITE SERVICES OF CALIFORNIA INC	139.24	Negotiable
326989	19-JAN-12	US BANK NAT'L ASSOCIATION NORTH DAKOTA	54,463.76	Negotiable
326990	19-JAN-12	US PEROXIDE LLC	18,463.75	Negotiable
326991	19-JAN-12	VERIZON CALIFORNIA INC	37.94	Negotiable
326992	19-JAN-12	WAXIE'S ENTERPRISES, INC	1,008.99	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								
326993		19-JAN-12	WECK LABORATORIES INC		225.00			Negotiable
326994		19-JAN-12	WESTERN EXTERMINATOR COMPANY		429.00			Negotiable
326995		19-JAN-12	ZEE MEDICAL SERVICE CO		548.70			Negotiable
326996		19-JAN-12	Alejandro Coria		95.00			Negotiable
326997		19-JAN-12	Beth Beeman		36.00			Negotiable
326998		19-JAN-12	Brian Bystrom		210.00			Negotiable
326999		19-JAN-12	Douglas Reinhart		254.10			Negotiable
327000		19-JAN-12	Han-Tsuei Shih		80.00			Negotiable
327001		19-JAN-12	Jeffrey Smyth		125.00			Negotiable
327002		19-JAN-12	Joshua Leonard		70.00			Negotiable
327003		19-JAN-12	Juan Guzman		25.20			Negotiable
327004		19-JAN-12	Noah Fehser		165.00			Negotiable
327005		19-JAN-12	Omar Escobar		145.00			Negotiable
327006		19-JAN-12	Peer Swan		1,040.93			Negotiable
327007		19-JAN-12	Pio Reynoso		130.00			Negotiable
327008		19-JAN-12	Steven LaMar		41.88			Negotiable
327009		19-JAN-12	BOWIE, ARNESON, WILES & GIANNONE	PAY	30,809.28			Negotiable
327010		19-JAN-12	BOWIE, ARNESON, WILES & GIANNONE	PAY	11,313.35			Negotiable
327011		19-JAN-12	ORANGE COUNTY FIRE AUTHORITY	IRVINE	5,430.00			Negotiable
327012		19-JAN-12	AMERICAN WATER WORKS ASSOC		238.00			Negotiable
327013		19-JAN-12	DEVISE ENGINEERING INC		692.36			Negotiable
327014		19-JAN-12	FLEET SOLUTIONS LLC		3,867.25			Negotiable
327015		19-JAN-12	SANTA ANA CITY OF		26.05			Negotiable
327016		19-JAN-12	CHARLES Z FEDAK & PURCHASE COMPANY		19,500.00			Negotiable
327017		23-JAN-12	RRM DESIGN GROUP	SAN LUIS OBISPO	5,002.36			Negotiable
327018		26-JAN-12	A&A WIPING CLOTH CO		508.58			Negotiable
327019		26-JAN-12	ACTION ELECTRIC CORP		708.15			Negotiable
327020		26-JAN-12	ADT SECURITY SERVICES INC		341.08			Negotiable
327021		26-JAN-12	Alexander Murphy		1,199.94			Negotiable
327022		26-JAN-12	AQUA-METRIC SALES COMPANY		1,175.97			Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 24  
 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								
327023		26-JAN-12	ARMORCAST PRODUCTS COMPANY		1,671.54			Negotiable
327024		26-JAN-12	AT&T		1,568.07			Negotiable
327025		26-JAN-12	AT&T		5,191.36			Negotiable
327026		26-JAN-12	AT&T		48.00			Negotiable
327027		26-JAN-12	AT&T INTERNET SERVICES		299.00			Negotiable
327028		26-JAN-12	BANK OF AMERICA MERRILL LYNCH		28,198.63			Negotiable
327029		26-JAN-12	BATTERY SPECIALTIES		89.76			Negotiable
327030		26-JAN-12	BILL'S SWEEPING SERVICE INC		805.00			Negotiable
327031		26-JAN-12	BORCHARD SURVEYING & MAPPING, INC.		9,660.00			Negotiable





Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327077		26-JAN-12	II FUELS INC		29,481.63			Negotiable
327078		26-JAN-12	IRVINE PIPE & SUPPLY INC		804.48			Negotiable
327079		26-JAN-12	IRWD-PETTY CASH CUSTODIAN		865.26			Negotiable
327080		26-JAN-12	JOE RHODES MAINT. SERVICE, INC.		970.25			Negotiable
327081		26-JAN-12	JOHNSON-PELTIER		36,086.00			Negotiable
327082		26-JAN-12	JP MACHINE TOOL SERVICE		325.00			Negotiable
327083		26-JAN-12	KERN COUNTY WATER AGENCY		25,000.00			Negotiable
327084		26-JAN-12	KIMBALL MIDWEST		472.56			Negotiable
327085		26-JAN-12	KOELLER NEBEKER CARLSON & HALUCK, LLP		1,969.50			Negotiable
327086		26-JAN-12	KPRS CONSTRUCTION SERVICES, INC		437,803.47			Negotiable
327087		26-JAN-12	LEATHERWOOD CONSTRUCTION INC		341,957.20			Negotiable
327088		26-JAN-12	LENOVO UNITED STATES INC		334.03			Negotiable
327089		26-JAN-12	LGC GEOTECHNICAL, INC.		2,950.00			Negotiable
327090		26-JAN-12	LOCHRIDGE, DAVID		1,782.00			Negotiable
327091		26-JAN-12	MC MASTER CARR SUPPLY CO		152.78			Negotiable
327092		26-JAN-12	MERCHANTS LANDSCAPE SERVICES INC		1,700.00			Negotiable
327093		26-JAN-12	MUTUAL PROPANE		9.88			Negotiable
327094		26-JAN-12	NATIONAL READY MIXED CONCRETE CO		1,173.65			Negotiable
327095		26-JAN-12	NINYO & MOORE		18,616.13			Negotiable
327096		26-JAN-12	NMG GEOTECHNICAL INC		9,028.90			Negotiable
327097		26-JAN-12	OLIN CORPORATION		2,625.79			Negotiable
327098		26-JAN-12	ON ASSIGNMENT LAB SUPPORT		2,489.60			Negotiable
327099		26-JAN-12	ONESOURCE DISTRIBUTORS LLC		3,791.59			Negotiable
327100		26-JAN-12	ORANGE COUNTY FIRE AUTHORITY		271.00			Negotiable
327101		26-JAN-12	ORANGE COUNTY SANITATION DISTRICT		1,570.00			Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 27  
 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	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
327102		26-JAN-12	ORANGE, COUNTY OF		385.00			Negotiable
327103		26-JAN-12	PALMER PRODUCTS INC		576.81			Negotiable
327104		26-JAN-12	PAULUS ENGINEERING INC		113,757.73			Negotiable
327105		26-JAN-12	PEARPOINT		2,778.76			Negotiable
327106		26-JAN-12	PERKINELMER HEALTH SCIENCES INC		2,707.91			Negotiable
327107		26-JAN-12	PINNACLE TOWERS LLC		577.69			Negotiable
327108		26-JAN-12	PRAK AIR DISTRIBUTION INC		890.53			Negotiable
327109		26-JAN-12	PRIME CONTROLS COMPANY INC		431.67			Negotiable
327110		26-JAN-12	PRINCIPAL LIFE INSURANCE		23,375.87			Negotiable
327111		26-JAN-12	PRUDENTIAL OVERALL SUPPLY		1,222.09			Negotiable
327112		26-JAN-12	PRUDENTIAL OVERALL SUPPLY		229.22			Negotiable
327113		26-JAN-12	PSOMAS		10,885.41			Negotiable
327114		26-JAN-12	RAM AIR ENGINEERING INC		798.79			Negotiable
327115		26-JAN-12	RAND MCNALLY		8,568.00			Negotiable
327116		26-JAN-12	SANDERS PAVING INC		41,271.00			Negotiable
327117		26-JAN-12	SANTA ANA BLUE PRINT		2,701.23			Negotiable
327118		26-JAN-12	SANTA ANA CITY OF		38,071.99			Negotiable
327119		26-JAN-12	SHAMROCK SUPPLY CO INC		888.19			Negotiable
327120		26-JAN-12	SHOETERIA INDUSTRIAL		5,490.42			Negotiable
327121		26-JAN-12	SOUTH COAST WATER DISTRICT		393.82			Negotiable

327122	26-JAN-12	SOUTHERN CALIFORNIA EDISON COMPANY		71,325.58		Negotiable
327123	26-JAN-12	SOUTHERN CALIFORNIA SECURITY CENTER, INC.		242.44		Negotiable
327124	26-JAN-12	SPARKLETT'S		179.34		Negotiable
327125	26-JAN-12	STANFORD COURT APTS		64.22		Negotiable
327126	26-JAN-12	STATE BOARD OF EQUALIZATION		800.38		Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 28  
 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								
327127		26-JAN-12	STATE BOARD OF EQUALIZATION		819.00			Negotiable
327128		26-JAN-12	STERIS CORPORATION		4,075.32			Negotiable
327129		26-JAN-12	SUCHY, MARY		50.00			Negotiable
327130		26-JAN-12	SUPPORT PRODUCTS SERVICES		560.52			Negotiable
327131		26-JAN-12	THE GAS COMPANY		8,592.15			Negotiable
327132		26-JAN-12	THE IRVINE COMPANY LLC		1,815.54			Negotiable
327133		26-JAN-12	TIC-IPG-COMMON		1,708.69			Negotiable
327134		26-JAN-12	TIC-OFFICE PROPERTIES		138.50			Negotiable
327135		26-JAN-12	TIC-RESORT PROPERTIES		10,940.17			Negotiable
327136		26-JAN-12	TIC-RETAIL PROPERTIES		2,251.34			Negotiable
327137		26-JAN-12	TIC-SPECTRUM OFFICE		352.65			Negotiable
327138		26-JAN-12	TRIPAC MARKETING INC		120.15			Negotiable
327139		26-JAN-12	TROPICAL PLAZA NURSERY INC		12,995.72			Negotiable
327140		26-JAN-12	TRUCPARCO		328.19			Negotiable
327141		26-JAN-12	TRUGREEN LANDCARE LLC		41,000.00			Negotiable
327142		26-JAN-12	UNITED STATES POST OFFICE		58,500.00			Negotiable
327143		26-JAN-12	US PEROXIDE LLC		14,439.80			Negotiable
327144		26-JAN-12	USDA FOREST SERVICE		301.00			Negotiable
327145		26-JAN-12	VERIZON CALIFORNIA INC		392.25			Negotiable
327146		26-JAN-12	VILLA SIENNA APTS		285.81			Negotiable
327147		26-JAN-12	VPSI INC		9,374.00			Negotiable
327148		26-JAN-12	VWR INTERNATIONAL, LLC		59.05			Negotiable
327149		26-JAN-12	WAXIE'S ENTERPRISES, INC		1,844.47			Negotiable
327150		26-JAN-12	WESTERN EXTERMINATOR COMPANY		440.00			Negotiable
327151		26-JAN-12	WINGTIP, LLC		12,625.10			Negotiable
327152		26-JAN-12	YORK INSURANCE SERVICES GROUP INC - CA		7,228.50			Negotiable

IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40  
 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 29  
 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								
327153		26-JAN-12	ZEE MEDICAL SERVICE CO		317.54			Negotiable
327154		26-JAN-12	Daniel O'Donnell		634.45			Negotiable
327155		26-JAN-12	Ives Sosa		160.00			Negotiable
327156		26-JAN-12	Matthew Daniel		150.00			Negotiable
327157		26-JAN-12	Steven Malloy		220.00			Negotiable
327158		26-JAN-12	HR/LABOR SOLUTIONS	MANHATTAN BEACH	1,955.34			Negotiable
327159		26-JAN-12	CAMPBELL & LEVINE LLC		37.54			Negotiable
327160		26-JAN-12	RINGCLEAR LLC		51.72			Negotiable
327161		27-JAN-12	ACTION ELECTRIC CORP		681.19			Negotiable
327162		27-JAN-12	AYRES HOTEL AND SUITES (DBA)		1,077.34			Negotiable
327163		27-JAN-12	CALIFORNIA DEPART		1,958.41			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
327164	27-JAN-12		OF CHILD SUPPORT SERVICES		528.45			Negotiable
327165	27-JAN-12		CLEARINGHOUSE		465.39			Negotiable
327166	27-JAN-12		DJ NELSON & SON					Negotiable
327167	27-JAN-12		POOL SERVICE		242.31			Negotiable
327168	27-JAN-12		FRANCHISE TAX BOARD		1,477.67			Negotiable
327169	27-JAN-12		INTERNAL REVENUE SERVICE		2,265.23			Negotiable
327170	27-JAN-12		J.R. FILANC CONSTRUCTION COMPANY INC.		2,350.00			Negotiable
327171	27-JAN-12		LEONARD CHAIDEZ TREE SERVICE		500.17			Negotiable
327172	27-JAN-12		ORDONEZ, CYNTHIA MARIE		1,394.27			Negotiable
327173	27-JAN-12		PERS LONG TERM CARE		1,165.91			Negotiable
327174	27-JAN-12		PTI SAND & GRAVEL INC		403.52			Negotiable
327175	27-JAN-12		RESPONSE ENVELOPE, INC		50,756.81			Negotiable
327176	27-JAN-12		SIRIUS COMPUTER SOLUTIONS INC		17,925.00			Negotiable
327177	27-JAN-12		TROPICAL PLAZA NURSERY INC		344.28			Negotiable
327177	30-JAN-12		UNITED SITE SERVICES OF CALIFORNIA INC		4,860.00			Negotiable
<input type="checkbox"/> IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 30 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								
327178	30-JAN-12		EVOLVE MEDIA	PAY	8,000.00			Negotiable
Payment Document Subtotal:					7,534,728.25			
Payment Document : IRWD Wire								
9269	03-JAN-12		YORK INSURANCE SERVICES GROUP INC - CA	PAY	2,298.46			Negotiable
9270	10-JAN-12		YORK INSURANCE SERVICES GROUP INC - CA	PAY	736.65			Negotiable
9271	24-JAN-12		YORK INSURANCE SERVICES GROUP INC - CA	PAY	6,688.44			Negotiable
9272	24-JAN-12		YORK INSURANCE SERVICES GROUP INC - CA	PAY	1,430.20			Negotiable
9273	27-JAN-12		HELABA LANDESBANK HESSEN-THUERINGEN	NEW YORK	3,459.13			Negotiable
9274	27-JAN-12		U.S. BANK NATIONALST. ASSOCIATION	LOUIS	125,975.94			Negotiable
9275	30-JAN-12		SUMITOMO MITSUI BANKING CORPORAION	NEW YORK	135,174.94			Negotiable
9276	30-JAN-12		U.S. BANK NATIONALST. ASSOCIATION	LOUIS	2,424.66			Negotiable
9277	30-JAN-12		BANK OF AMERICA	SAN FRANCISCO	3,041.12			Negotiable
9278	30-JAN-12		BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	13,593.51			Negotiable
9279	30-JAN-12		SUMITOMO MITSUI BANKING CORPORAION	NEW YORK	1,801,539.81			Negotiable
9280	30-JAN-12		U.S. BANK NATIONALST. ASSOCIATION	LOUIS	250.00			Negotiable
9281	30-JAN-12		HELABA LANDESBANK HESSEN-THUERINGEN	NEW YORK	84.94			Negotiable
9282	30-JAN-12		BANK OF AMERICA	SAN FRANCISCO	3,363.07			Negotiable
9283	30-JAN-12		SUMITOMO MITSUI BANKING CORPORAION	NEW YORK	3,929.42			Negotiable
9284	30-JAN-12		BANK OF AMERICA	SAN FRANCISCO	295.00			Negotiable
9285	30-JAN-12		BANK OF AMERICA	SAN FRANCISCO	218,451.53			Negotiable
<input type="checkbox"/> IRWD Ledger      Payment Register For 01-JAN-12 To 31-JAN-12      Report Date: 02-FEB-2012 15:40 BANK: Bank of America N.A.      Branch : Los Angeles      Account: Checking AP and PR      Page: 31 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 Wire  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
9286		30-JAN-12	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	361,380.52			Negotiable
9287		31-JAN-12	YORK INSURANCE SERVICES GROUP INC - CA	PAY	1,941.75			Negotiable
9288		31-JAN-12	ORANGE COUNTY WATER DISTRICT	F.V.	3,691,178.80			Negotiable
9289		31-JAN-12	CITIGROUP GLOBAL MARKETS INC.	NEW YORK	166,656.39			Negotiable
9290		31-JAN-12	INTERNAL REVENUE SERVICE	FRESNO	325,237.82			Negotiable
9291		31-JAN-12	FRANCHISE TAX BOARD	SACRAMENTO	91,831.42			Negotiable
9292		31-JAN-12	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	20,938.79			Negotiable
9293		31-JAN-12	WILLIAMS, TWYLA	PARKER	658.62			Negotiable
9294		31-JAN-12	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	1,203.22			Negotiable
9295		31-JAN-12	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	24,277.08			Negotiable
9296		31-JAN-12	GREAT WEST	DENVER	284,580.99			Negotiable
9297		31-JAN-12	CALPERS	SACRAMENTO	505,483.94			Negotiable
9298		31-JAN-12	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	395.83			Negotiable
9299		31-JAN-12	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	194.44			Negotiable
9300		31-JAN-12	CALPERS	PAY	322,059.92			Negotiable
Payment Document Subtotal:					8,120,756.35			


Bank Account Subtotal : 15,655,484.60

Report Count : 864 Report Total: 15,655,484.60

IRWD Ledger Payment Register For 01-JAN-12 To 31-JAN-12 Report Date: 02-FEB-2012 15:40  
 BANK: Branch : Account: Page: 32  
 Bank Account Currency: ( ) Payment Currency: ( )  
 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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\*\*\* End of Report \*\*\*

February 27, 2012  
Prepared and Submitted by: Various  
Approved by: Paul Cook 

CONSENT CALENDAR

STRATEGIC MEASURES DASHBOARD

SUMMARY:

Provided as Exhibits "A", "B", and "C" are the Strategic Measures Dashboard and informational items for Board review.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE STRATEGIC MEASURES DASHBOARD AND INFORMATION ITEMS.

EXHIBITS:

- Exhibit "A" – Strategic Measures Dashboard
- Exhibit "B" – Dyer Road Wellfield Status
- Exhibit "C" – Reservoir Data

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES DASHBOARD

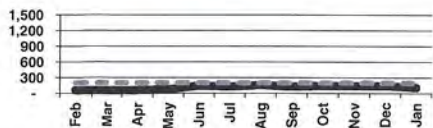
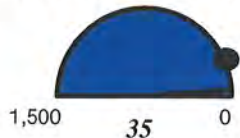
EXHIBIT "A"

January 2012

Note: The more blue area displayed on the dial, the more favorable the measure.

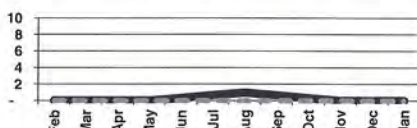
Reliability-Potable/Nonpotable

Target = 200 customer hours out of service this month



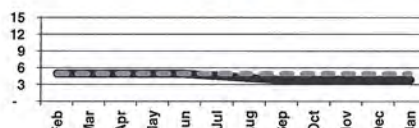
Sewer Spills

Target = 0 Spills this month



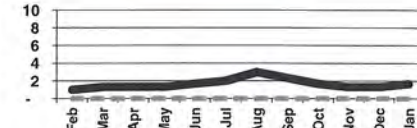
OCSD CORF Flows

Target = 4.95 MGD  
CORF flow to OCSD this month



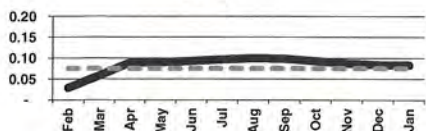
OSHA Recordables

Target = 0 reportable accidents this month



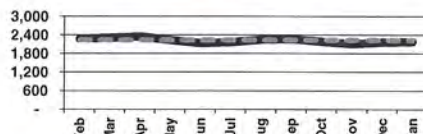
MWRP Energy Cost per kwh

Target = .0792 cost per kWh this month



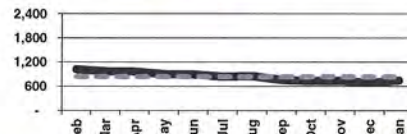
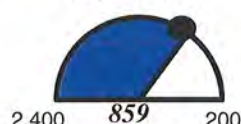
Wastewater Cost

Target = \$2,232/MG processed this month



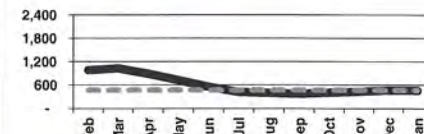
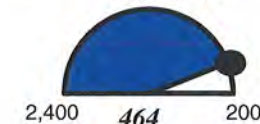
Water System Cost--Potable

Target = \$836/ac-ft delivered this month



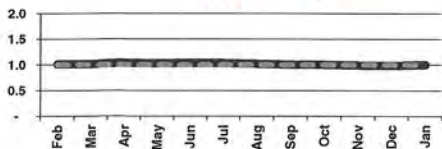
Water System Cost--Nonpotable

Target = \$473/ac-ft delivered this month



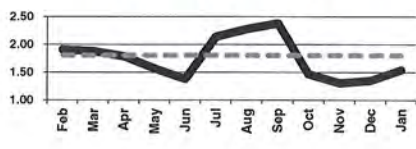
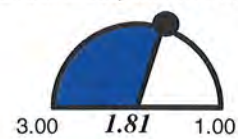
Enterprise Return

Target = 1.0 (net income/goal) last month



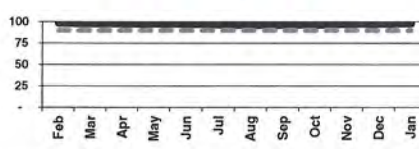
Overhead Ratio

Target = 1.80 (G&A expenses/direct labor) this month



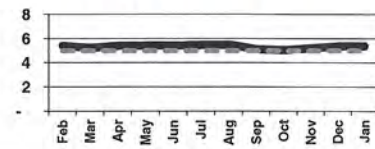
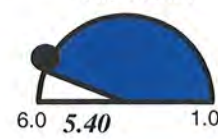
Customer Satisfaction

Target = 90% satisfaction this month



Employee Satisfaction

Target = 5.0 score this month



● Target shown on gauge  
00.00 Figure for Current Month

----- Target shown on trend graph  
----- 3-month rolling average

Exhibit "A"

A-1

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Reliability-Potable/Nonpotable***

**MONTHLY STATUS REPORT**

Metric Owner: Water Ops

Definition of Measure:

The relative magnitude of system outages due to failures or scheduled maintenance for Potable and Non Potable Water.

Method:

Summation of the time any part of the system was out of service times the number of customers affected by the given outage during the month.

Data Collection

Data was derived from the CSR database for customer based reports of "no water" and from the work order database for scheduled maintenance requiring the shut down of water service during repairs.

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> February 2011
February 2011	20.33		<b>Thru:</b> January 2012
March 2011	59.22		<b>Goal:</b> 200.00
April 2011	120.60		
May 2011	45.68		
June 2011	283.80		
July 2011	62.33		
August 2011	148.10		
September 2011	176.90		
October 2011	130.00		
November 2011	114.50		
December 2011	197.10		
January 2012	35.42		



IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

*Sewer Spills*

**MONTHLY STATUS REPORT**

Metric Owner: Gregory Springman

Collection System Manager

Definition of Measure:

Number of sewer overflows of any quantity, regardless of cause, in IRWD's sanitary sewer collection system. This does not include spills from private sewers within IRWD's service area. IRWD has no control over private spills and is not responsible for them. However, it should be noted that IRWD will assist the County Health Care Agency in responding to and cleaning up private spills in the interest of the community.

Method:

Total number of IRWD sewer spills

Data Collection

Data is obtained from the California State Water Boards CIWQS data base for reporting SSO's.

Current Issues

1. June, 2011 - MWRP MPS-3 Forcemain Pigging Operation, blockage occurred at the termination point of the 18" MPS-3 forcemain due to debris accumulation. 250 gals SSO with 250 gals of wastewater contained and recovered.
2. July, 2011-MWRP MPS-3 Forcemain Pigging Operation (2nd Phase), blockage occurred due to same cause. 25 gals SSO with 25 gals of wastewater contained and recovered.
3. August, 2011 - Irvine, 8" VCP. 165 gals SSO with 100% of wastewater contained and recovered. Caused by root intrusion.

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> February 2011
February 2011	0		<i>Thru:</i> January 2012
March 2011	0		<i>Goal:</i> 0
April 2011	0		
May 2011	0		
June 2011	1.00		
July 2011	1.00		
August 2011	1.00		
September 2011	0		
October 2011	0		
November 2011	0		
December 2011	0		
January 2012	0		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***OCSD CORF Flows***

**MONTHLY STATUS REPORT**

Metric Owner: Wayne Posey

Director of Wastewater Operations

Definition of Measure:

Estimated CORF flow for current FY. CORF flow ownership as of the end of FY 2009/2010 was 8.62 MGD.

Method:

IRWD's CORF flow is derived by using the actual Main Street Flume Meter flow and subtracting the MWRP biosolid discharge flow and all non Revenue Area 14 (IRWD) flows tributary to the Main Street Flume meter/MWRP and adding in the San Joaquin Hills Planned Community flow and flow discharges from the Gas Recovery System (Formerly Laidlaw) for the FY four calendar months with the highest flow totals multiplied by three, averaging the result thereof with the same result of the same calculation for the preceding two fiscal years and adding in the current IBC transfer flow.

Note: All of the Newport Coast flows with the exception of the San Joaquin Hills Planned Community and Gas Recovery System flow are excluded from IRWD's CORF flow calculation. The OCSD's 1988 Downcoast Area Agreement only requires for IRWD to provide local wastewater collection service and requires OCSD to provide wastewater regional collection, transmission, treatment and disposal for that area.

Data Collection

The OCSD's Monthly Gallonage Flow Summary Report provides the actual flows used in calculating IRWD's CORF flow. This includes the Main Street Flume Meter actual monthly flow. All non Revenue Area 14 (IRWD) flows that are tributary to the Main Street Flume Meter is adjusted every year based on the results of OCSD's Flow Verification Study. The San Joaquin Hills Planned Community flow is adjusted every year based on the results of IRWD's Flow Verification Study. The Gas Recovery System flow is the actual monthly meter flow. The IBC transfer flow is adjusted every five years based on the results of OCSD's Flow Verification Study.

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> February 2011
February 2011	4.92		<b>Thru:</b> January 2012
March 2011	4.92		<b>Goal:</b> 4.95
April 2011	4.92		
May 2011	4.93		
June 2011	4.95		
July 2011	3.85		
August 2011	3.83		
September 2011	3.83		
October 2011	3.83		
November 2011	3.83		
December 2011	3.84		
January 2012	3.84		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***OSHA Recordables***

**MONTHLY STATUS REPORT**

Metric Owner: Ken Erwin

District Safety & Security Manager

Definition of Measure:

OSHA Recordables are a monthly measure of injuries and illnesses that occurred and must be entered on the OSHA 300 (Log of Work Related Injuries and Illnesses), in conformance with OSHA requirements. This measure is standardized not only in the water/wastewater industry, but throughout industries nationwide.

Method:

OSHA Recordables = Number of OSHA Recordable cases occurring during the subject month.

Data Collection

All injuries/illnesses and near-misses are reported to the District Safety & Security Manager immediately when they occur. All are investigated and cases meeting the recordable definition are logged. This measure simply reports the number of accidents whose occurrence date is within the calendar month.

Current Issues

1. Scientist incurred contusion of left hand while removing a water sample from truck

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> February 2011
February 2011	1.00		<i>Thru:</i> January 2012
March 2011	2.00		<i>Goal:</i> 0
April 2011	1.00		
May 2011	1.00		
June 2011	3.00		
July 2011	2.00		
August 2011	4.00		
September 2011	1.00		
October 2011	0		
November 2011	3.00		
December 2011	1.00		
January 2012	1.00		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***MWRP Energy Cost per kWh***

**MONTHLY STATUS REPORT**

Metric Owner: Wayne Posey

Director of Wastewater Operations

Definition of Measure:

Actual MWRP Cost per kWh used at MWRP with new generating facility.

Method:

MWRP cost per kWh is calculated by the monthly total energy purchased from imported SCE electricity, purchased natural gas for the generators from Coral Energy, and SCG natural gas transportation charge divided by the total monthly kWh generated and imported from SCE. We then add in actual maintenance costs, including g/a.

Data Collection

Data collected from actual monthly SCE, Coral Energy and SCG Invoices. Total kWh is collected from the two generator kWh meters and SCE main electric meter.

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> February 2011
February 2011	.09		<b>Thru:</b> January 2012
March 2011	.09		<b>Goal:</b> .08
April 2011	.09		
May 2011	.09		
June 2011	.10		
July 2011	.10		
August 2011	.10		
September 2011	.10		
October 2011	.09		
November 2011	.08		
December 2011	.08		
January 2012	.08		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Wastewater Cost***

**MONTHLY STATUS REPORT**

Metric Owner: Wayne Posey

Director of Wastewater Operations

Definition of Measure:

Total cost of collection and treatment (primary, secondary, and solids disposal) of wastewater, on a unit basis (\$/million gallons) for this month.

Method:

( MWRP cost of collections(G/L #530) + MWRP cost of treatment(G/L #551,552,565) + OCSD cost(G/L #535,555) + SMWD cost(G/L #531,556) ) divided by the total sewage flows emanating from OCSD District #14 (Includes MWRP flow + OCSD flow + SMWD flow)

Data Collection

Data used for this measure are collected from the general ledger and from Orange County Sanitation District (OCSD) and Santa Margarita Water District (SMWD) staff. Costs and flows from OCSD District #7 are not included in the calculation.

Current Issues

1. Flows information not available at time of reporting.

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> February 2011
February 2011	2,492.00	2,380.00	<b>Thru:</b> January 2012
March 2011	2,277.00	2,375.00	<b>Goal:</b> 2,232.00
April 2011	2,297.00	2,378.00	
May 2011	2,143.23	2,375.00	
June 2011	1,973.19	2,378.00	
July 2011	2,393.00	2,380.00	
August 2011	2,390.00	2,386.00	
September 2011	2,040.00	2,386.00	
October 2011	2,126.00	2,190.00	
November 2011	2,186.00	2,196.00	
December 2011	Not available	2,206.00	
January 2012	Not available	2,232.00	

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Water System Cost--Potable***

**MONTHLY STATUS REPORT**

Metric Owner: Denise To-Nguyen

Accountant

Definition of Measure:

Total cost of potable water delivered to IRWD's customers this month, on a unit basis (\$/acre-foot). These monthly costs can vary greatly due to variation in water sales and power cost billing cycles. Thus, monthly expenses do not match up with their corresponding water sales.

Method:

Sum of all potable water costs accrued this month divided by the quantity of potable water sold this month.

Data Collection

Potable water costs collected from current month general ledger. This cost includes labor, power, distribution, and other costs. The quantity of water sold is collected from the Water Usage Variance Report, which summarizes metered water sales. Wide fluctuations in this measure may occur due to the billing delays for such expenses as electrical power (ie, bills are not paid in the same month as the water is sold).

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b><i>From:</i></b> February 2011
February 2011	937.62	903.89	<b><i>Thru:</i></b> January 2012
March 2011	1,031.46	897.43	<b><i>Goal:</i></b> 836.00
April 2011	951.24	873.74	
May 2011	728.69	920.18	
June 2011	1,005.05	943.89	
July 2011	798.49	854.55	
August 2011	773.00	789.00	
September 2011	731.00	768.00	
October 2011	699.00	866.00	
November 2011	795.17	858.00	
December 2011	587.43	828.00	
January 2012	859.01	836.00	

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Water System Cost--Nonpotable***

**MONTHLY STATUS REPORT**

Metric Owner: Denise To-Nguyen

Accountant

Definition of Measure:

Total cost of nonpotable water delivered to IRWD's customer this month, on a unit basis (\$/acre-foot). These monthly costs can vary greatly due to variation in water sales and power cost billing cycles. Thus, monthly expenses do not match up with their corresponding water sales.

Method:

Sum of all nonpotable water costs accrued this month divided by the quantity of nonpotable water sold this month.

Data Collection

Nonpotable water costs collected from current month general ledger. This cost includes labor, power, distribution, and other costs related to tertiary treatment and reclaimed water distribution. The quantity of water sold is collected from the Water Usage Variance Report, which summarizes metered water sales. Wide fluctuations in this measure may occur due to the billing delays for such expenses as electrical power (ie, bills are not paid in the same month as the water is sold).

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> February 2011
February 2011	905.02	607.02	<i>Thru:</i> January 2012
March 2011	1,000.90	707.32	<i>Goal:</i> 473.00
April 2011	777.61	563.92	
May 2011	424.12	452.90	
June 2011	471.96	413.85	
July 2011	394.00	432.00	
August 2011	338.00	408.00	
September 2011	413.08	422.00	
October 2011	490.00	451.00	
November 2011	404.40	468.00	
December 2011	517.82	485.00	
January 2012	463.75	473.00	

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Enterprise Return***

**MONTHLY STATUS REPORT**

Metric Owner: Jayne George

Debt and Investment Analyst

Definition of Measure:

This is a monthly measure of performance by IRWD's various enterprise activities, including residential and commercial real estate, Strawberry Farms Golf Course, and wireless communications leases.

Method:

Enterprise Return = Actual Net Income/Budgeted Net Income x 100

Data Collection

The various enterprise activities generate revenues and expenses at different frequencies through the year. Except for the real estate projects, the enterprise projects are primarily revenue generating activities with relatively little associated expenses. The measure reflects a comparison between the actual and budgeted net income of the various projects on a monthly basis.

Current Issues

1. The January measure is above budget due to better lease ups at the two commercial properties and higher than budgeted income at the Strawberry Farms Golf Course property. Also, the wireless communication sites were way above average due to December lease payments not being received until January.

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> February 2011
February 2011	1.04		<i>Thru:</i> January 2012
March 2011	1.02		<i>Goal:</i> 1.00
April 2011	1.06		
May 2011	1.02		
June 2011	1.05		
July 2011	1.04		
August 2011	.98		
September 2011	1.00		
October 2011	1.03		
November 2011	.95		
December 2011	.99		
January 2012	1.07		



IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

*Customer Satisfaction*

**MONTHLY STATUS REPORT**

Metric Owner: Gina Jackson

Customer Service Manager

Definition of Measure:

Customer Satisfaction is measured by IRWD's Customer Satisfaction Index. The index is measured by sending surveys to a statistically-significant, random selection of customers that have called IRWD for some type of service. Services range from answering questions about water conservation or billing to repairing a sewer blockage in the street. The surveys allow the customer to rate IRWD's response to their request in eight categories. Each category is rated from 1 to 5, with 1 indicating the highest level of satisfaction. A total score of 100 indicates the highest level of satisfaction in all eight categories. The scores of all responses in the subject month are a weighted average for the monthly index figure.

Method:

Data Collection

Surveys are mailed at the end of each work week for the customer requests completed that week. The monthly index reflects the surveys received within the subject month.

Current Issues

1. Total Overall Satisfaction: 98%  
Satisfaction: 97%  
Timely: 96%  
Phone: 100%  
Field Contact: 100%

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> February 2011
February 2011	100.00		<b>Thru:</b> January 2012
March 2011	97.00		<b>Goal:</b> 90.00
April 2011	98.00		
May 2011	98.00		
June 2011	98.00		
July 2011	95.00		
August 2011	96.00		
September 2011	99.00		
October 2011	95.00		
November 2011	100.00		
December 2011	98.00		
January 2012	98.00		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Employee Satisfaction***

**MONTHLY STATUS REPORT**

Metric Owner: Gretchen Maswadeh

Human Resources Manager

Definition of Measure:

Level of employee satisfaction with employment at IRWD.

Method:

Average of all scores on surveys for performance evaluations presented this month

Data Collection

A survey is sent to each employee receiving a performance evaluation this month. The survey simply asks the employee to rate his/her overall employment satisfaction on a scale of 1 to 6 (1 being very dissatisfied and 6 being very satisfied). The ratings are compiled and averaged by Human Resources.

Current Issues

1. 5 surveys were returned of 17 surveys sent (29%). 5 of 17 respondents (100%) rated satisfaction as 5 or 6 on a scale of 1 to 6. In the 12 month period ending January 2012, 102 surveys have been returned of 295 surveys sent (35%). 88 of 102 respondents (86%) rated satisfaction as 5 or 6 on a scale of 1 to 6. 12 month average rating is 5.31%.

**MONTHLY DATA**

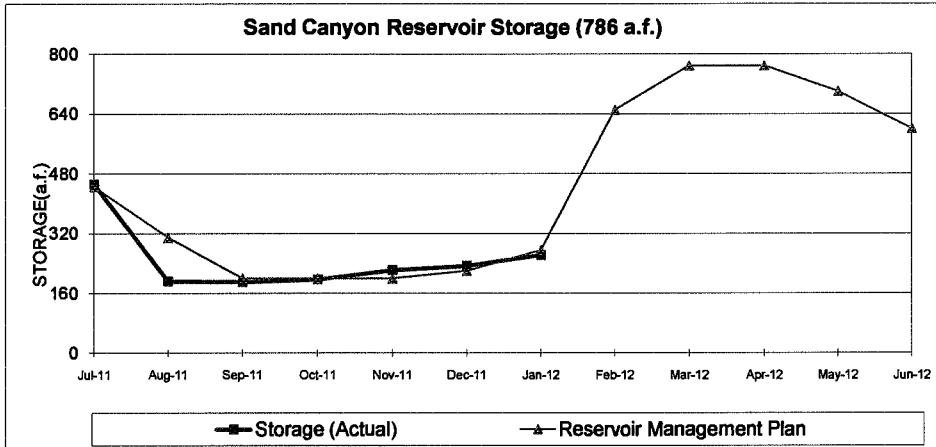
<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> February 2011
February 2011	5.20		<i>Thru:</i> January 2012
March 2011	5.50		<i>Goal:</i> 5.00
April 2011	5.46		
May 2011	5.33		
June 2011	5.50		
July 2011	5.63		
August 2011	5.38		
September 2011	4.38		
October 2011	5.36		
November 2011	5.91		
December 2011	4.86		
January 2012	5.40		

**EXHIBIT "B"**

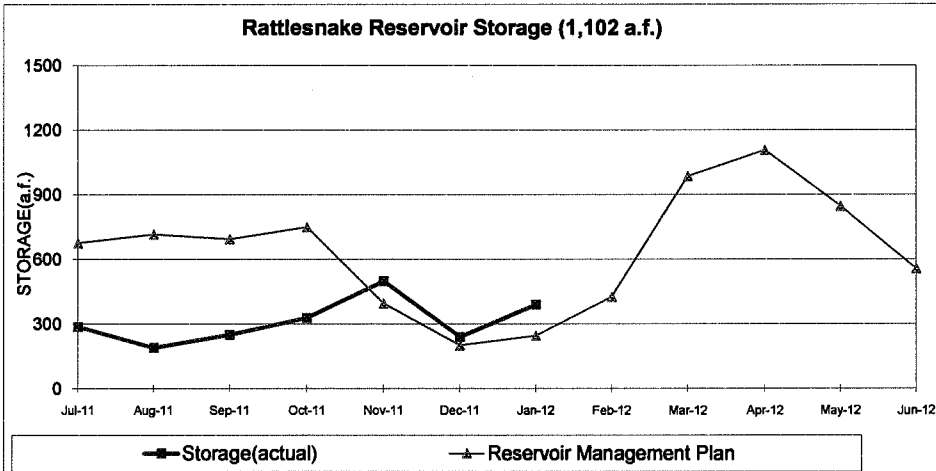
<b>DYER ROAD WELL FIELD STATUS</b>							<b>Jan-2012</b>
Well Number	Production Mo./YTD	Ref. Point Elevation	Depth to Water 1/31/2012	Water Level-MSL	Depth of Bowls	Bowl Setting-MSL	Feet of Water Above Intake
1	176.7 AF 495.8 AF	34	N/A	N/A	270	-236	N/A
2	232.4 AF 849.4 AF	37	162	-126	270	-234	108
			Pumping				
3	0.0 AF 0.0 AF	55	82	-27	215	-160	133
			Static				
4	199.5 AF 612.8 AF	38	138	-100	216	-178	78
			Pumping				
5	176.6 AF 651.8 AF	48	259	-211	290	-242	31
			Pumping				
6	161.0 AF 575.8 AF	43	133	-90	250	-207	117
			Pumping				
7	145.6 AF 513.1 AF	40	218	-178	290	-250	72
			Pumping				
C-8 DATS	416.0 AF 2,923.2 AF	37	119	-82	305	-268	186
			Pumping				
C-9 DATS	319.8 AF 2,256.1 AF	23	121	-98	305	-282	184
			Pumping				
10	367.4 AF 983.0 AF	47	150	-103	250	-203	100
			Pumping				
11	66.0 AF 422.7 AF	40	161	-121	300	-260	139
			Pumping				
12	108.8 AF 601.5 AF	51	152	-101	300	-249	148
			Pumping				
13	91.4 AF 167.1 AF	40	182	-142	300	-260	118
			Pumping				
14	234.9 AF 565.3 AF	47	172	-125	311	-264	139
			Pumping				
15	292.9 AF 1,045.0 AF	44	152	-108	300	-256	148
			Pumping				
16	0.0 AF 391.5 AF	47	108	-61	280	-233	172
			Static				
17	295.4 AF 1,180.5 AF	52	162	-111	250	-199	88
			Pumping				
18	63.6 AF 343.8 AF	45	211	-166	300	-255	89
			Pumping				
Clear production:	2,612.2 AF for the month						
FYTD:	9,399.1 AF						
DATS production:	735.8 AF for the month						
FYTD:	5,179.3 AF						

# EXHIBIT "C"

## RESERVOIR DATA FY 11-12

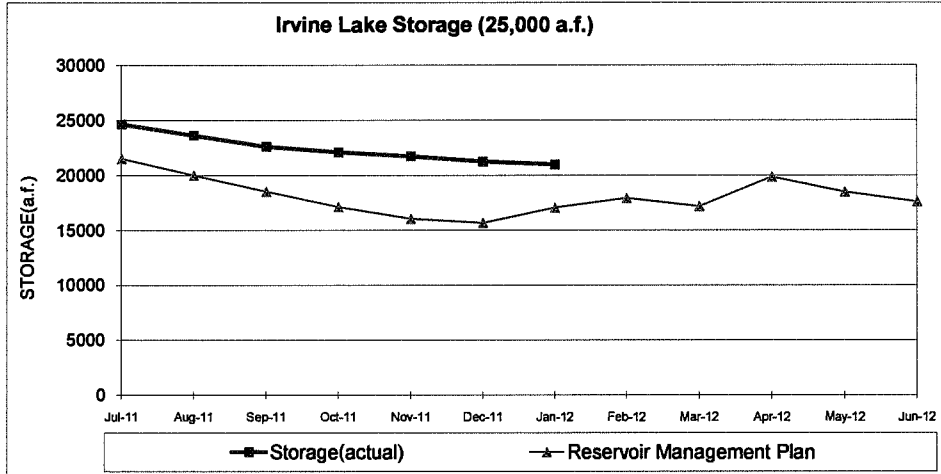


Storage was under 200 AF by October 1 as required by Regional Board permit.

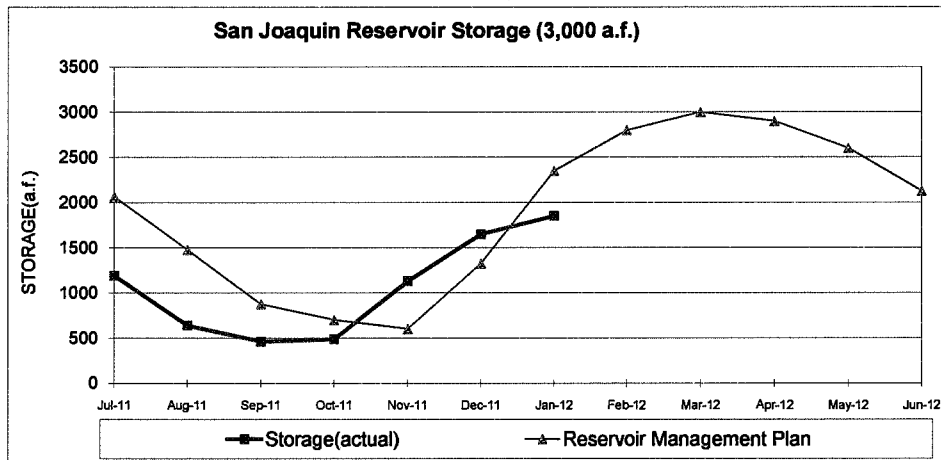


Rattlesnake storage is below average due to dry weather.

RESERVOIR DATA FY 11-12



Irvine Lake storage is above average due to rainfall and reduced demands.



All Lake Forest recycled demand is being supplied from the East Irvine Zone B system. The GAP was started on to help control seasonal storage.

February 27, 2012  
Prepared by: M. Cortez/M. Hoolihan/  
S. Malloy/P. Uematsu  
Submitted by: K. Burton  
Approved by: Paul Cook

CONSENT CALENDAR

UPCOMING PROJECTS STATUS REPORT

SUMMARY:

A status report of Irvine Ranch Water District's Upcoming Projects is presented to the Board for information.

BACKGROUND:

The information, which is attached as Exhibit "A", is a status report submitted quarterly to the Committee and Board for their review.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on February 23, 2012.

RECOMMENDATION:

RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit "A" – Upcoming Projects Status Report

IRWD UPCOMING PROJECTS STATUS REPORT

Project Name	Planning	Start	Construction	Construction
	Start	Design	Award	Final Acceptance
OPA PRVs and Fire Flow Improvements				Spring 2012
Trabuco Road Bridge DW and RW Upsizing				Spring 2012
Newport Blvd. (SAH) Waterline Relocation				Fall 2012
RMS at 5 DW Reservoirs		Winter 2013		
SCWD BPS Generators/Walls			Spring 2012	Fall 2012
NTS Site 62 & SAMS1			Spring 2012	Winter 2013
Syphon Reservoir Interim Facilities		Spring 2012		
Portola Hills LS Abandonment & Sewer Installation		Summer 2012		
Jamboree Center Miscellaneous Improvements for Sewer Maintenance		Summer 2012		
Modjeska Canyon DW Pipeline Relocation		Summer 2012		
University Drive Pipelines Cathodic Protection				Summer 2012
Santiago Dam and Outlet Tower Seismic Stability Study	On-going			
Alton Parkway, Commercentre to Towne Centre (City)				Spring 2012
Alton Parkway, Irvine Boulevard to Commercentre (County)				Spring 2012
OPA 16" Pipeline Replacement				Summer 2012
Barranca-Dyer Redhill Widening -Misc Relocations (RA w/ COI)				Spring 2012
Zone C Pipeline Relocation Lake Forest Glass Creek Sports Park (RA w/ LF)			Spring 2012	Spring 2013
Lake Forest Rancho Parkway Extension (RA w/ LF)			Spring 2012	Winter 2013
PA 40 Capital Pipelines DW & RW, Phase 2 (RA w/ ICDC)				Fall 2012
Capital Pump Sta Zone A to B (completion concurrent w/ PA 40 Phz 3)		Summer 2012	Winter 2013	Fall 2013
PA 39 Phase I Capital Pipelines S & RW, (RA w/ ICDC)				Summer 2012
PA-6 PH2 Neighborhood 3 MCAS RW Zone C 12" (RA w/ ICDC)			Summer 2012	Summer 2013
PA-9B Jeffrey Road Zones 3, A, B and C Pipelines (RA w/ICDC)			Summer 2012	Summer 2013
Tustin Ranch Road (RA w/Tustin)			Spring 2012	Winter 2013
Bee Canyon Pump Station			Spring 2012	Winter 2013
Bake Pkwy S.D. Creek to Future Lake Forest RA w/ ICDC 12" DW 24" RW				Summer 2012
Lake Forest Drive, Bake Pkwy to Romano RA w/ ICDC 12" DW 24" RW				Summer 2012
MWRP Biosolids and Energy Recovery Facilities			Fall 2012	Fall 2015
MWRP Phase 2 Expansion				Fall 2012
Lake Forest (LAWD) PLC Replacement and Control System Upgrades			Summer 2012	Winter 2013
Water Operations Transdyn Replacement				Spring 2012
Sand Canyon Avenue Grade Separation				Fall 2014

A-1


EXHIBIT "A"

**IRWD UPCOMING PROJECTS STATUS REPORT**

Project Name	Planning	Start	Construction	Construction
	Start	Design	Award	Final Acceptance
Well 21 & 22 Wellhead Facilities				Summer 2012
Well 21 & 22 Pipelines				Summer 2012
Well 21 & 22 Treatment Plant (Design/Build)				Summer 2012
Baker Water Treatment Plant			Summer 2013	Winter 2014
PA 18 Zone 3 to 4 and B to C Booster Pump Stations		Spring 2012		
Well 78 Replacement				Spring 2012
Well LF-2 Wellhead Facilities				Fall 2012
Well OPA-1 Drilling			Summer 2012	Fall 2013
LAWRP Zone A & B Pump Station Upgrades			Summer 2012	Winter 2013
Well 107 Replacement				Fall 2012
Well 115 Replacement		Spring 2012	Fall 2012	
LAWRP Solids Handling Facility		Fall 2012		
Poseidon Water Purchase Agreement	On-going			
DW System Hydraulic Modeling	Summer 2012			
RW System Hydraulic Modeling	Fall 2012			
Anaheim Well Field Implementation Plan	Spring 2013			
Groundwater Development Program / OCWD Annexation	On-going			
MCWD, NB, SA, IRWD Interconnection Study	In-Process			
Sewer System Emergency Response Plan	Summer 2012			
Syphon Reservoir Engineering Feasibility Study	In-Process			
Syphon Reservoir Environmental Analysis	In-Process			
Zone A and Green Acres Project Supply Hydraulic Modeling Analysis	In-Process			
UCI/NIST Advanced SCADA Research and Development	In-Process			
2012-13 Capital Budget	In-Process			
WRMP Update for 2010 UWMP - Chap 2,3,4,5	In-Process			
	<b>Category</b>	<b>Months</b>		
	Winter	Jan. Feb. & Mar.		
	Spring	Apr. May & June		
	Summer	Jul. Aug. & Sep.		
	Fall	Oct. Nov. & Dec.		

A-2



February 27, 2012  
Prepared by: R. Thatcher/M. Hoolihan  
Submitted by: K. Burton  
Approved by: Paul Cook 

CONSENT CALENDAR

QUITCLAIM OF REAL PROPERTY

SUMMARY:

Von Karman Plaza, LLC is re-configuring its retail center located at the west corner of Von Karman Ave. and Barranca Pkwy. As part of the re-configuration, a water pipeline is being relocated. MK Engineering Group, on behalf of the property owner, has requested that the District quitclaim a portion of the existing water easement. A new easement for the relocated facilities has already been executed by the property owner. Staff has reviewed and approved the plans and recommends the Board approve the request for the quitclaim. The Resolution authorizing said quitclaim is attached as Exhibit "A", the Quitclaim Deed is attached as Exhibit "B", and a map showing the location of the existing easement and quitclaim area is attached as Exhibit "C".

FISCAL IMPACT:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable. Not a project as defined under CEQA.

COMMITTEE STATUS:

Quitclaim of real property are not routinely taken to Committee prior to submittal for Board approval.

RECOMMENDED MOTION:

ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2012 - \_\_\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
VON KARMAN PLAZA, LLC

LIST OF EXHIBITS:

- Exhibit "A" – Resolution
- Exhibit "B" – Quitclaim Deed
- Exhibit "C" – Location Map

# EXHIBIT "A"

RESOLUTION NO. 2012 - \_\_\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
VON KARMAN PLAZA, LLC

WHEREAS, Von Karman Plaza, LLC, has requested that the Irvine Ranch Water District (IRWD) Board approve the quitclaim of a portion of an existing easement for water pipeline purposes that was granted to IRWD per Instrument No. 87-392071 of Official Records of Orange County; and

WHEREAS, the purpose of the quitclaim is to allow the reconfiguration of an existing retail center and clear title; and

WHEREAS, relocated water facilities were installed and a new easement has be granted by the property owner; and

WHEREAS, staff has reviewed and confirmed that the portion of said easement herein referred can be quitclaimed; and

WHEREAS, the proposed Quitclaim has been presented to this Board of Directors, copy of which is attached hereto as Exhibit "B".

NOW, THEREFORE, BE IT RESOLVED, the Quitclaim Deed attached hereto as Exhibit "B" to Von Karman Plaza, LLC, a Delaware limited liability company, herein described and hereby is approved and execution by the District's officers is authorized.

ADOPTED, SIGNED and APPROVED this 27th day of February, 2012.

\_\_\_\_\_  
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:  
BOWIE, ARNESON, WILES & GIANNONE  
IRWD Legal Counsel

By \_\_\_\_\_

# EXHIBIT "B"

**RECORDING REQUESTED BY AND  
WHEN RECORDED RETURN TO:**

Von Karman Plaza, LLC  
c/o Harsch Investment Properties  
1121 SW Solomon St., suite 500  
Portland, OR 97205  
Attn: J. Randy Kyte

ASSESSOR PARCEL NO(S).:  
435-021-39

(Space Above This Line For Recorder's Use)

IRWD Doc. No. E \_\_\_\_\_  
IRWD Res.No. \_\_\_\_\_

DOCUMENTARY TRANSFER TAX \$ consideration less than \$100  
\_\_\_\_\_ Computed on the consideration or value of property conveyed; OR  
\_\_\_\_\_ Computed on the consideration or value less liens or encumbrances  
remaining at time of sale.

\_\_\_\_\_  
Signature or Declarant or Agent determining tax – Firm Name

## EASEMENT QUITCLAIM DEED

**FOR VALUABLE CONSIDERATION**, receipt of which is hereby acknowledged, IRVINE RANCH WATER DISTRICT, a California Water District organized under and existing pursuant to Section 34000 *et seq.* of the California Water Code, does hereby REMISE, RELEASE, AND FOREVER QUITCLAIM to Von Karman Plaza, LLC, a Delaware limited liability company, or the current owner of record,

all RIGHT, TITLE and INTEREST in the real property located in the City of Irvine, County of Orange, State of California, , as more particularly described on Exhibit "A" and depicted on Exhibit "B", attached hereto and by this reference mad a part hereof.

The rights hereby quitclaimed are not necessary or useful in the performance of the duties of said Irvine Ranch Water District.

Dated: \_\_\_\_\_, 2012

IRVINE RANCH WATER DISTRICT,  
a California Water District

By: \_\_\_\_\_  
Name: Mary Aileen Matheis  
Title: President

By: \_\_\_\_\_  
Name: Leslie Bonkowski  
Title: District Secretary

MAIL TAX STATEMENTS TO THE ABOVE ADDRESS

STATE OF CALIFORNIA    )  
                                  )  
COUNTY OF ORANGE    )

On \_\_\_\_\_, 2012, before me, \_\_\_\_\_, a Notary Public in and for said State, personally appeared Mary Aileen Matheis and Leslie Bonkowski, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (SEAL)  
Notary Public in and for said State

**EXHIBIT "A"**  
**LEGAL DESCRIPTION**  
**QUITCLAIM OF I.R.W.D. EASEMENT**

THAT PORTION OF PARCEL 1 OF PARCEL MAP NO. 88-134, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, PER MAP FILED IN BOOK 237, PAGES 39 THROUGH 43, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THOSE PORTIONS OF THAT CERTAIN GRANT OF EASEMENT TO IRVINE RANCH WATER DISTRICT RECORDED JULY 9, 1987 AS INSTRUMENT NO. 87-392071, OF OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, BEING THREE (3) STRIPS OF LAND, EACH 10.00 FEET WIDE, THE CENTERLINE OF SAID STRIPS BEING DESCRIBED AS FOLLOWS:

**STRIP 1**

COMMENCING AT "POINT D" AS DESCRIBED IN PARCEL "A" OF SAID GRANT OF EASEMENT;

THENCE ALONG THE CENTERLINE OF SAID PARCEL "A" SOUTH 49°21'39" EAST, 171.86 FEET TO **TRUE POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE CONTINUING ALONG SAID CENTERLINE OF PARCEL "A" SOUTH 49°21'39" EAST, 44.01 FEET TO AN ANGLE POINT;

THENCE CONTINUING ALONG SAID CENTERLINE OF PARCEL "A" NORTH 40°38'21" EAST, 238.50 FEET TO THE NORTHWESTERLY PROLONGATION OF THE SOUTHWESTERLY SIDELINE OF THAT CERTAIN 10.00 FOOT WIDE EASEMENT DESCRIBED AS PARCEL "H" IN SAID GRANT OF EASEMENT.

SIDELINES OF SAID STRIP SHALL BE LENGTHENED OR SHORTENED TO TERMINATE NORTHEASTERLY ON SAID NORTHWESTERLY PROLONGATION OF THE SOUTHWESTERLY SIDELINE OF PARCEL "H".

**STRIP 2**

COMMENCING AT "POINT D" AS DESCRIBED IN PARCEL "A" OF SAID GRANT OF EASEMENT;

THENCE ALONG THE CENTERLINE OF SAID PARCEL "A" SOUTH 49°21'39" EAST, 191.87 FEET TO THE CENTERLINE OF PARCEL "F" AS DESCRIBED IN SAID GRANT OF EASEMENT, SAID POINT BEING THE **TRUE POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE ALONG SAID CENTERLINE OF PARCEL "F" NORTH 49°21'39" EAST, 14.00 FEET.

EXCEPT THEREFROM THAT PORTION LYING WITHIN SAID PARCEL "A".

**STRIP 3**

COMMENCING AT "POINT D" AS DESCRIBED IN PARCEL "A" OF SAID GRANT OF EASEMENT;

THENCE ALONG THE CENTERLINE OF SAID PARCEL "A" SOUTH 49°21'39" EAST, 203.87 FEET TO THE CENTERLINE OF PARCEL "G" AS DESCRIBED IN SAID GRANT OF EASEMENT, SAID POINT BEING THE **TRUE POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE ALONG SAID CENTERLINE OF PARCEL "G" SOUTH 40°38'21" WEST, 30.00 FEET.

EXCEPT THEREFROM THAT PORTION LYING WITHIN SAID PARCEL "A".

SUBJECT TO ALL COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS AND RIGHTS OF WAYS OF RECORD, IF ANY.

ALL AS MORE PARTICULARLY SHOWN ON EXHIBIT "B", ATTACHED HERETO AND MADE A PART HEREOF.

THIS DOCUMENT HAS BEEN PREPARED BY ME, OR UNDER MY DIRECTION, IN CONFORMANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT.

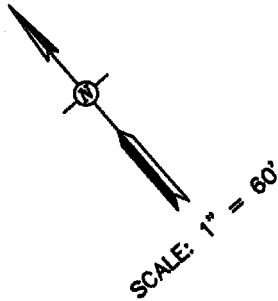


DEAN J. BOULDIN, P.L.S. 7842  
REGISTRATION EXPIRES 12/31/12

11/16/11  
DATE



**EXHIBIT "B"**  
**QUITCLAIM OF I.R.W.D. EASEMENT**  
IN THE CITY OF IRVINE  
COUNTY OF ORANGE, STATE OF CALIFORNIA



LINE TABLE		
LINE	BEARING	LENGTH
L1	(S 49°21'39" E)	44.01'
L2	(N 49°21'39" E)	(14.00')
L3	(S 40°38'21" W)	(30.00')
L4	<N 49°21'39" W>	<50.00'>

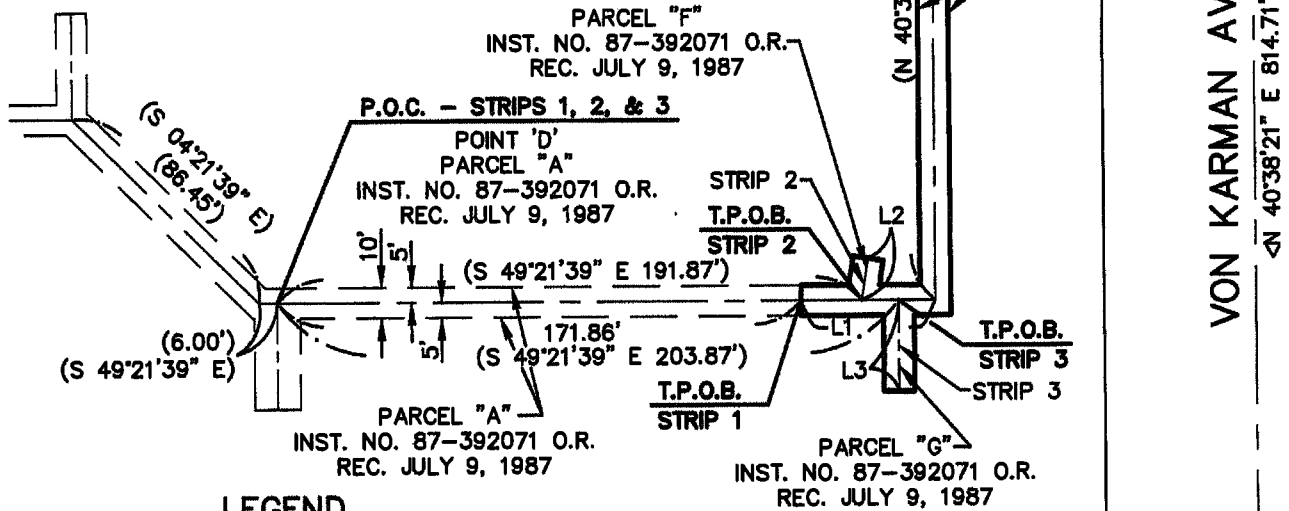
**BARRANCA  
PARKWAY**

PARCEL "H"  
INST. NO. 87-392071 O.R.  
REC. JULY 9, 1987

POINT 'G'  
PARCEL "A"  
INST. NO. 87-392071 O.R.  
REC. JULY 9, 1987

PARCEL "A"  
INST. NO. 87-392071 O.R.  
REC. JULY 9, 1987

PARCEL 1  
PARCEL MAP NO. 88-134  
P.M.B. 237/39-43



**LEGEND**

(XXXX) INDICATES RECORD DATA PER  
INST. NO. 87-392071 O.R.  
RECORDED JULY 9, 1987

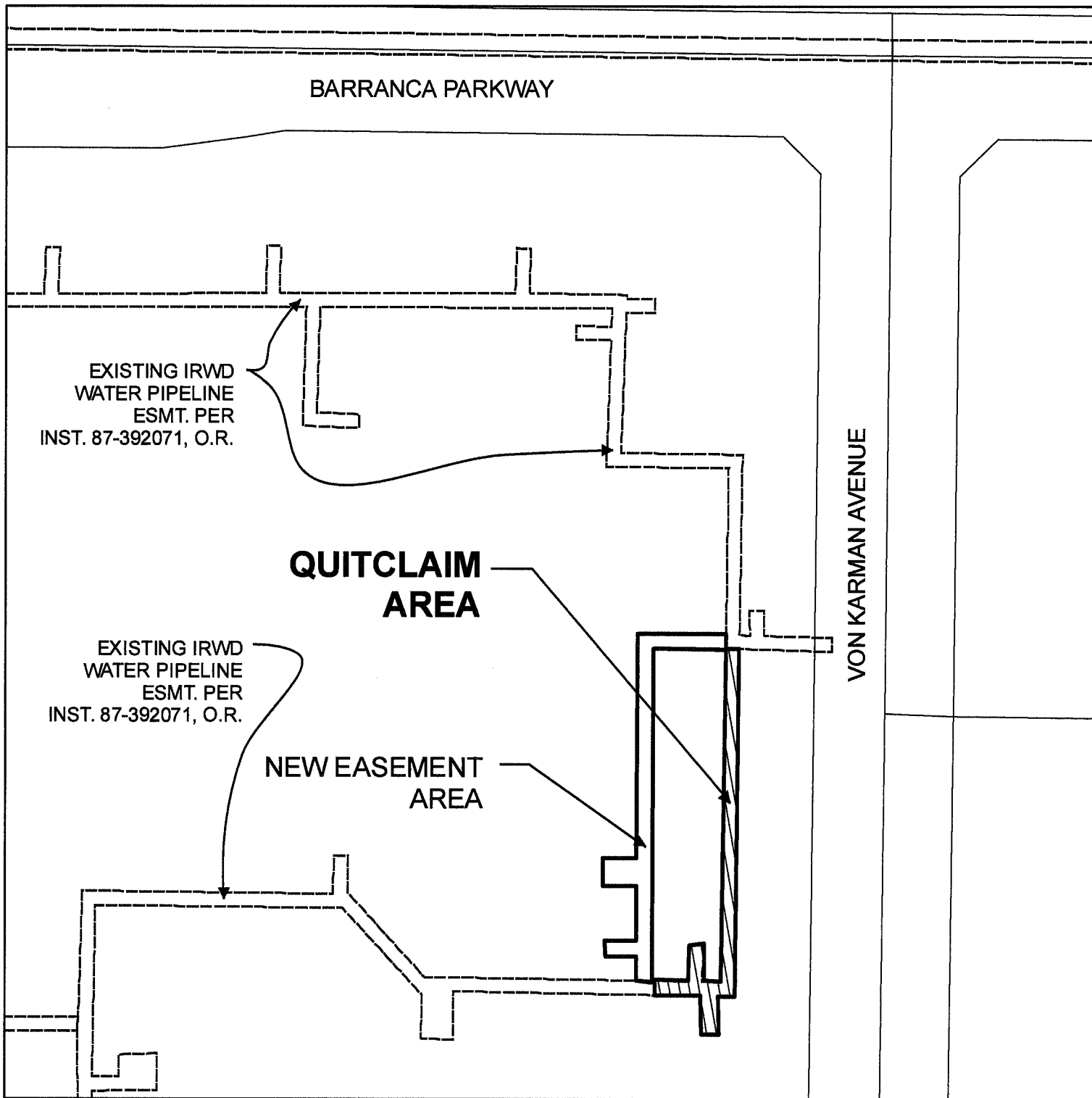
<XXXX> INDICATES RECORD DATA PER  
P.M. NO. 88-134, PMB 237/39-43

PREPARED BY ME OR UNDER MY DIRECTION:

*Dean J. Bouldin* 11/16/12  
DEAN J. BOULDIN, P.L.S. 7842      DATE  
EXP. 12-31-12




# EXHIBIT "C" LOCATION MAP



**QUITCLAIM OF WATER PIPELINE EASEMENT  
TO VON KARMAN PLAZA, LLC**





February 27, 2012  
Prepared by: R. Thatcher/M. Hoolihan  
Submitted by: K. Burton  
Approved by: Paul Cook 

CONSENT CALENDAR

QUITCLAIM OF REAL PROPERTY

SUMMARY:

Walmart is in the process of expanding the size of its store in Foothill Town Centre in Foothill Ranch. As part of that project, existing water and sewer pipelines serving the store are being relocated to accommodate the new store layout. IDS Civil Engineers, on behalf of Walmart, has requested that the District quitclaim the portion of the existing water and sewer easement that was relocated. A new easement for the relocated facilities has already been granted to the District by Walmart. Staff has reviewed and approved the plans and recommends the Board approve the request for the quitclaim. The Resolution authorizing said quitclaim is attached as Exhibit "A", the Quitclaim Deed is attached as Exhibit "B", and a map showing the location of the existing easement and quitclaim area is attached as Exhibit "C".

FISCAL IMPACT:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable. Not a project as defined under CEQA.

COMMITTEE STATUS:

Quitclaim of real property are not routinely taken to Committee prior to submittal for Board approval.

RECOMMENDED MOTION:

ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2012 - \_\_\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
WAL-MART REAL ESTATE BUSINESS TRUST

LIST OF EXHIBITS:

- Exhibit "A" – Resolution
- Exhibit "B" – Quitclaim Deed
- Exhibit "C" – Location Map

# EXHIBIT "A"

RESOLUTION NO. 2012 - \_\_\_\_\_

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
WAL-MART REAL ESTATE BUSINESS TRUST

WHEREAS, Wal-Mart Real Estate Business Trust, has requested that the Irvine Ranch Water District (IRWD) Board approve the quitclaim of a portion of an existing easement for water and sewer pipeline purposes that was granted to IRWD per Instrument No. 93-0676565 of Official Records of Orange County; and

WHEREAS, the purpose of the quitclaim is to allow the expansion of an existing Walmart Store and clear title; and

WHEREAS, relocated water and sewer facilities were installed and a new easement has be granted by the property owner; and

WHEREAS, staff has reviewed and confirmed that the portion of said easement herein referred can be quitclaimed; and

WHEREAS, the proposed Quitclaim has been presented to this Board of Directors, copy of which is attached hereto as Exhibit "B".

NOW, THEREFORE, BE IT RESOLVED, the Quitclaim Deed attached hereto as Exhibit "B" to Wal-Mart Real Estate Business Trust, a Delaware business trust, herein described and hereby is approved and execution by the District's officers is authorized.

ADOPTED, SIGNED and APPROVED this 27th day of February, 2012.

\_\_\_\_\_  
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:  
BOWIE, ARNESON, WILES & GIANNONE  
IRWD Legal Counsel

By \_\_\_\_\_

# EXHIBIT "B"

**RECORDING REQUESTED BY AND  
WHEN RECORDED RETURN TO:**

Wal-Mart Real Estate Business Trust  
2001 S.E. 10<sup>th</sup> Street  
Bentonville, AR 72716-6489  
Attn:

ASSESSOR PARCEL NO(S):

612-093-06

(Space Above This Line For Recorder's Use)

IRWD Doc. No. E \_\_\_\_\_

IRWD Res.No. \_\_\_\_\_

DOCUMENTARY TRANSFER TAX \$ consideration less than \$100

\_\_\_\_\_ Computed on the consideration or value of property conveyed; OR

\_\_\_\_\_ Computed on the consideration or value less liens or encumbrances  
remaining at time of sale.

\_\_\_\_\_  
Signature or Declarant or Agent determining tax – Firm Name

## EASEMENT QUITCLAIM DEED

**FOR VALUABLE CONSIDERATION**, receipt of which is hereby acknowledged, IRVINE RANCH WATER DISTRICT, a California Water District organized under and existing pursuant to Section 34000 *et seq.* of the California Water Code, does hereby REMISE, RELEASE, AND FOREVER QUITCLAIM to WAL-MART REAL ESTATE BUSINESS TRUST, a Delaware business trust, or the current owner of record,

all RIGHT, TITLE and INTEREST in the real property located in the City of Lake Forest, County of Orange, State of California, , as more particularly described on Exhibit "A" and depicted on Exhibit "B", attached hereto and by this reference mad a part hereof.

The rights hereby quitclaimed are not necessary or useful in the performance of the duties of said Irvine Ranch Water District.

Dated: \_\_\_\_\_, 2012

IRVINE RANCH WATER DISTRICT,  
a California Water District

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

Name: Mary Aileen Matheis

Title: President

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

Name: Leslie Bonkowski

Title: District Secretary

**MAIL TAX STATEMENTS TO THE ABOVE ADDRESS**

STATE OF CALIFORNIA    )  
                                  )  
COUNTY OF ORANGE    )

On \_\_\_\_\_, 2012, before me, \_\_\_\_\_, a Notary Public in and for said State, personally appeared Mary Aileen Matheis and Leslie Bonkowski, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (SEAL)  
Notary Public in and for said State

**EXHIBIT "A"**

**EASEMENT QUITCLAIM  
WITHIN LOT 9 OF TRACT NO. 14753**

**LEGAL DESCRIPTION**

THOSE PORTIONS OF THOSE CERTAIN STRIPS OF LAND IN THE CITY OF LAKE FOREST, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED IN A GRANT OF EASEMENT TO IRVINE RANCH WATER DISTRICT FILED OCTOBER 5, 1993, AS INSTRUMENT NO. 93-0676565 OF OFFICIAL RECORDS OF SAID COUNTY, LYING WITHIN LOT 9 OF TRACT NO. 14753, AS SHOWN ON A MAP THEREOF FILED IN BOOK 697, PAGES 1 THROUGH 9, INCLUSIVE, OF MISCELLANEOUS MAPS, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

THAT PORTION OF PARCEL 2 OF SAID GRANT OF EASEMENT DESCRIBED AS FOLLOWS:

A STRIP OF LAND, 20.00 FEET WIDE, THE CENTERLINE OF WHICH BEING DESCRIBED AS FOLLOWS:

**BEGINNING** AT INTERSECTION OF THAT CERTAIN COURSE IN THE SOUTHEASTERLY BOUNDARY OF SAID LOT 9 SHOWN ON SAID MAP AS BEING NORTH 62°17'01" EAST, 433.96 FEET, WITH THE CENTERLINE OF SAID PARCEL 2, SAID POINT BEING DISTANT ALONG SAID CENTERLINE NORTH 27°42'59" WEST, 28.92 FEET FROM POINT "J", AS DESCRIBED IN SAID GRANT OF EASEMENT, AND DISTANT SOUTH 62°17'01" WEST, 3.35 FEET FROM THE NORTHEASTERLY TERMINUS OF SAID CERTAIN COURSE;

THENCE ALONG SAID CENTERLINE AS FOLLOWS:

NORTH 27°42'59" WEST, 104.04 FEET;

NORTH 32°50'07" WEST, 136.78 FEET;

NORTH 27°42'59" WEST, 374.84 FEET; AND

SOUTH 59°03'38" WEST, 354.22 FEET TO THE SOUTHWESTERLY TERMINUS THAT CERTAIN COURSE IN SAID CENTERLINE DESCRIBED IN SAID GRANT OF EASEMENT AS BEING SOUTH 59°03'38" WEST, 184.85 FEET, SAID POINT BEING THE POINT OF TERMINATION OF THIS STRIP.

**TOGETHER WITH STRIP 4, STRIP 5 AND STRIP 6, AS DESCRIBED IN SAID PARCEL 2 OF GRANT OF EASEMENT.**

**TOGETHER WITH THAT PORTION OF PARCEL 5 OF SAID GRANT OF EASEMENT LYING SOUTHWESTERLY FROM A LINE PARALLEL WITH AND 10.00 FEET, AS MEASURED AT RIGHT ANGLES, NORTHEASTERLY FROM THE FOLLOWING DESCRIBED LINE:**

**BEGINNING** AT INTERSECTION OF THAT CERTAIN COURSE IN THE SOUTHEASTERLY BOUNDARY OF SAID LOT 9 SHOWN ON SAID MAP AS BEING NORTH 62°17'01" EAST, 433.96 FEET, WITH THE CENTERLINE OF SAID PARCEL 2, SAID POINT BEING DISTANT ALONG SAID CENTERLINE NORTH 27°42'59" WEST, 28.92 FEET FROM POINT "J", AS DESCRIBED IN

SAID GRANT OF EASEMENT, AND DISTANT SOUTH 62°17'01" WEST, 3.35 FEET FROM THE NORTHEASTERLY TERMINUS OF SAID CERTAIN COURSE;

THENCE ALONG SAID CENTERLINE NORTH 27°42'59" WEST, 2.99 FEET;

THENCE NORTH 5°13'33" WEST, 13.16 FEET;

THENCE NORTH 27°43'33" WEST, 599.97 FEET.

**EXHIBIT "B"** ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.



THIS DESCRIPTION WAS PREPARED  
BY ME OR UNDER MY DIRECTION:

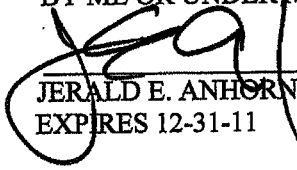
  
\_\_\_\_\_  
JERALD E. ANHORN JR., L.S. 7159  
EXPIRES 12-31-11

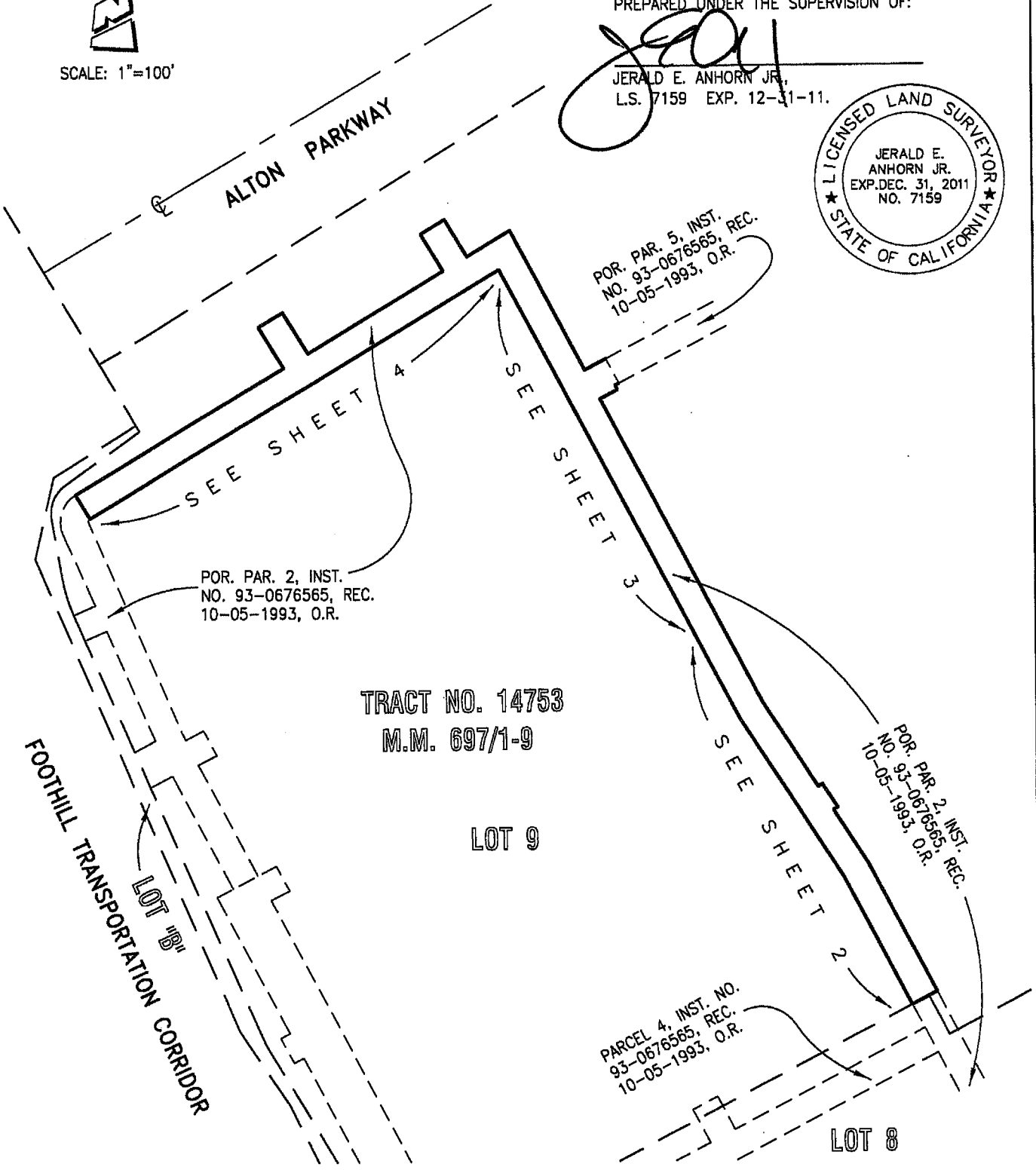
EXHIBIT "B"  
MAP TO ACCOMPANY LEGAL DESCRIPTION  
EASEMENT QUITCLAIM  
IN THE CITY OF LAKE FOREST  
COUNTY OF ORANGE, STATE OF CALIFORNIA



SCALE: 1"=100'

PREPARED UNDER THE SUPERVISION OF:

*[Signature]*  
JERALD E. ANHORN JR.,  
L.S. 7159 EXP. 12-31-11.



TRACT NO. 14753  
M.M. 697/1-9

LOT 9

LOT 8

**EXHIBIT "B"**  
MAP TO ACCOMPANY LEGAL DESCRIPTION  
**EASEMENT QUITCLAIM**  
IN THE CITY OF LAKE FOREST  
COUNTY OF ORANGE, STATE OF CALIFORNIA

SEE SHEET 3



SCALE: 1"=40'

POR. PAR. 2, INST. NO.  
93-0676565, REC.  
10-05-1993, O.R.

STRIP 4, PAR. 2, INST.  
NO. 93-0676565, REC.  
10-05-1993, O.R.

TRACT NO. 14753  
M.M. 6971-9

TRACT NO. 14753  
M.M. 6971-9

LOT 9

LOT 9

LOT 8

LOT 8

PARCEL 4, INST. NO.  
93-0676565, REC.  
10-05-1993, O.R.

PARCEL 4, INST. NO.  
93-0676565, REC.  
10-05-1993, O.R.

PARCEL 4, INST. NO.  
93-0676565, REC.  
10-05-1993, O.R.

POR. PAR. 2, INST.  
NO. 93-0676565, REC.  
10-05-1993, O.R.

**DETAIL**

SCALE: 1"=20'

SEE DETAIL HEREON

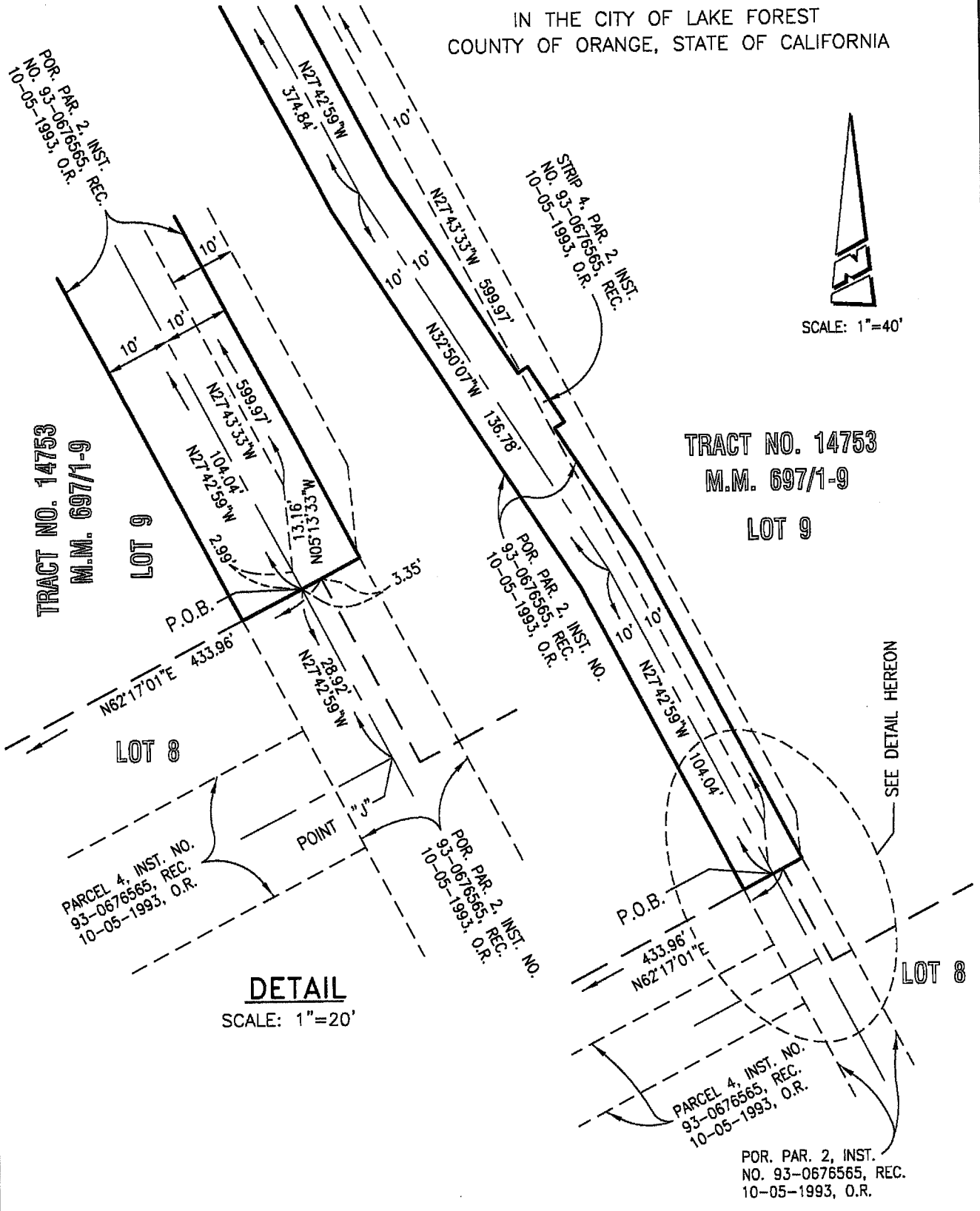




EXHIBIT "B"  
MAP TO ACCOMPANY LEGAL DESCRIPTION  
EASEMENT QUITCLAIM  
IN THE CITY OF LAKE FOREST  
COUNTY OF ORANGE, STATE OF CALIFORNIA

STRIP 5, PAR. 2, INST. NO. 93-0676565, REC. 10-05-1993, O.R.

POR. PAR. 2, INST. NO. 93-0676565, REC. 10-05-1993, O.R.

POR. PAR. 5, INST. NO. 93-0676565, REC. 10-05-1993, O.R.

POR. PAR. 2, INST. NO. 93-0676565, REC. 10-05-1993, O.R.

TRACT NO. 14753  
M.M. 697/1-9

LOT 9

N27°42'59"W 374.84'

N27°43'33"W 589.97'

N59°03'38"E  
354.22'

10' 10'  
10' 10'

10' 10'  
10' 10'

SEE SHEET 4

SEE SHEET 2



SCALE: 1"=40'

EXHIBIT "B"

SHEET 4 OF 4

MAP TO ACCOMPANY LEGAL DESCRIPTION  
EASEMENT QUITCLAIM  
IN THE CITY OF LAKE FOREST  
COUNTY OF ORANGE, STATE OF CALIFORNIA

LOT "B"

FOOTHILL  
TRANSPORTATION  
CORRIDOR



SCALE: 1"=40'

POR. PAR. 2, INST. NO.  
93-0676565, REC.  
10-05-1993, O.R.

184.85'

10'

10'

N59°03'38"E

354.22'

ALTON  
PARKWAY

STRIP 6, PAR. 2, INST.  
NO. 93-0676565, REC.  
10-05-1993, O.R.

TRACT NO. 14753  
M.M. 697/1-9

LOT 9

POR. PAR. 2, INST. NO.  
93-0676565, REC.  
10-05-1993, O.R.

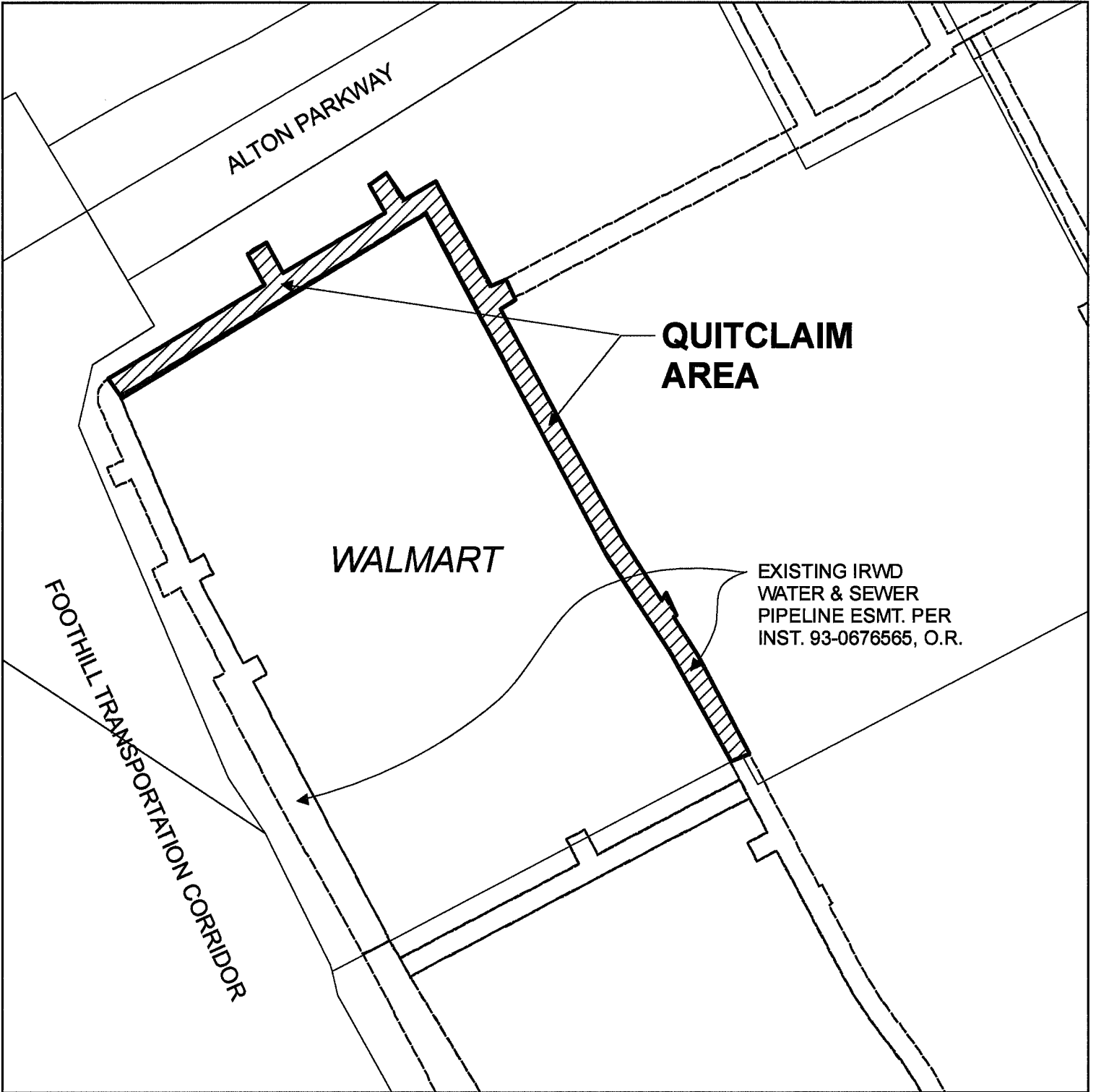
STRIP 5, PAR. 2, INST.  
NO. 93-0676565, REC.  
10-05-1993, O.R.

374.84'

N27°42'59"W

SEE SHEET 3

# EXHIBIT "C" LOCATION MAP



**QUITCLAIM OF WATER AND SEWER PIPELINE EASEMENT  
TO WALMART REAL ESTATE BUSINESS TRUST**



February 27, 2012  
Prepared by: C. Kessler/P. Weghorst  
Submitted by: G. P. Heiertz  
Approved by: Paul Cook

## CONSENT CALENDAR

### ADDENDUM NO. 1 TO THE BAKER WATER TREATMENT PLANT ENVIRONMENTAL IMPACT REPORT

#### SUMMARY:

Irvine Ranch Water District (IRWD) proposes modifications to the Baker Water Treatment Plant (WTP) Project. The proposed modifications include changes to the mechanical design and planned operation of the product water pump station (PWPS) and modifications to the alignment of the treated water pipeline. Environmental review has been completed for the proposed modifications. Staff recommends that the Board:

- Approve Addendum No. 1 to the Baker WTP Environmental Impact Report (EIR); and
- Approve the modifications.

#### BACKGROUND:

In April of 2011, the IRWD's Board of Directors certified the Baker WTP Project Final EIR which identified that a preferred method of delivering treated water to the partner agencies would be through an existing connection to the Allen McColloch Pipeline (AMP) onsite at the Baker WTP. The AMP is a major potable water transmission pipeline owned by Metropolitan Water District (MWD) that bisects the Baker WTP Project site. Following the review of the potential AMP connection with MWD, it was determined that the connection would not be feasible.

The Baker WTP Project Final EIR also described and evaluated two potential alternative alignments for a treated water pipeline to connect the Baker WTP to the South County Pipeline. However, due to constraints on land acquisitions and easement acquisitions associated with these alignments, IRWD has identified a new alignment that would make use of existing right-of-ways, eliminate the need for land acquisition and avoid impacts to future development. The modified treated water pipeline alignment would result in minor design and planned operation modifications to the PWPS located onsite at the Baker WTP.

The proposed modifications would not change the regulatory framework, impact discussion, mitigation measures, or significant conclusions as described in the Baker WTP EIR. Environmental review has been completed for the proposed modifications to the Baker WTP Project as described above and Addendum No. 1 to the EIR has been prepared. A copy of Addendum No. 1 is attached as Exhibit "A".

#### FISCAL IMPACTS:

None.

**ENVIRONMENTAL COMPLIANCE:**

Section 15164 of the State of California Environmental Quality Act (CEQA) Guidelines provides for the preparation of an addendum to a previously certified EIR by lead agency or a responsible agency if some changes or additions to the project are necessary but none of the conditions described in CEQA calling for preparation of a subsequent EIR have occurred. Based on the information and analysis in the proposed Addendum No. 1, the Determination section of the Addendum sets forth the proposed determinations by the District that none of such conditions have occurred.

**COMMITTEE STATUS:**

Addendums to environmental impact reports are not typically taken to Committee prior to submittal for Board approval.

**RECOMMENDATION:**

**THAT THE BOARD APPROVE THE PROPOSED ADDENDUM NO. 1 TO THE BAKER WATER TREATMENT PLANT PROJECT ENVIRONMENTAL IMPACT REPORT, INCLUDING THE DETERMINATION SET FORTH IN THE ADDENDUM, AND APPROVE THE MODIFICATIONS TO THE PROJECT CONSISTING OF CHANGES TO THE MECHANICAL DESIGN AND PLANNED OPERATION TO THE PRODUCT WATER PUMP STATION AND ALIGNMENT OF THE TREATED WATER PIPELINE.**

**LIST OF EXHIBITS:**

Exhibit "A" – Addendum No. 1 to the Baker Water Treatment Plant Project Environmental Impact Report

# EXHIBIT "A"

Addendum No. 1 to the

## **BAKER WATER TREATMENT PLANT PROJECT**

Environmental Impact Report (State Clearinghouse No.2010051055)

Prepared for:  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

February 2012



Addendum No. 1 to the  
**BAKER WATER TREATMENT PLANT PROJECT**  
Environmental Impact Report (State Clearinghouse No.2010051055)

Prepared for:  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

February 2012



626 Wilshire Boulevard  
Suite 1100  
Los Angeles, CA 90017  
213.599.4300  
[www.esassoc.com](http://www.esassoc.com)

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209247

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# **ADDENDUM NO. 1 TO THE BAKER WATER TREATMENT PLANT PROJECT ENVIRONMENTAL IMPACT REPORT**

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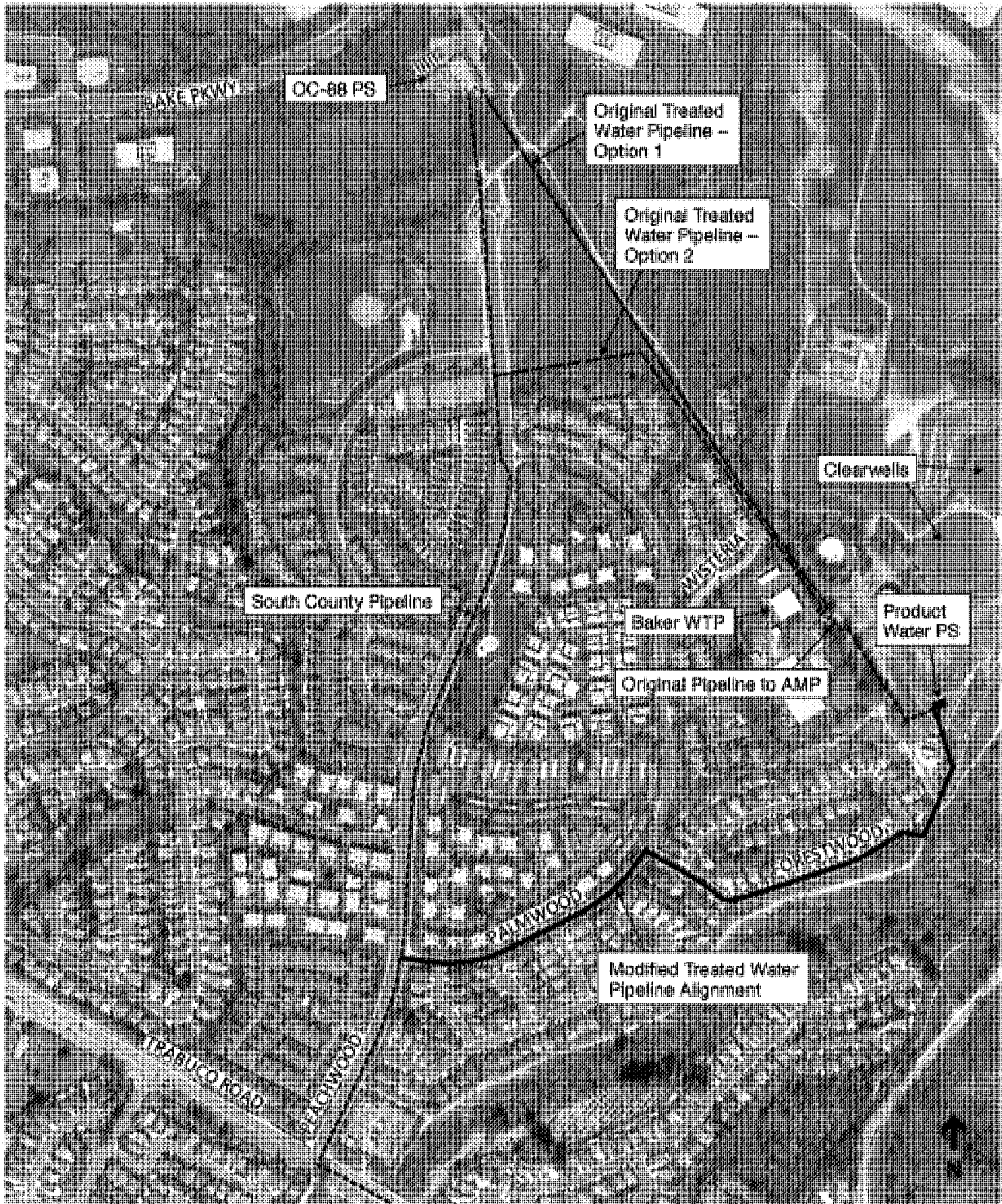
## **1.0 Introduction**

The Irvine Ranch Water District (IRWD) proposes modifications to the Baker Water Treatment Plant (WTP) Project. The proposed modifications include changes to the alignment of the treated water pipeline (Figure 1) and changes to the mechanical design of the product water pump station (PWPS). The potential environmental effects of the proposed modifications to the Project are addressed in this Addendum No. 1 to the Baker WTP Project Final Environmental Impact Report (EIR). All other planned Baker WTP facilities and project objectives outlined in the Final EIR remained unchanged.

IRWD has prepared this Addendum pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15164, to describe the modifications to the Project and to evaluate whether the modifications present any new significant impacts not identified in the previously certified Final EIR that would require preparation of a subsequent or supplemental EIR. As documented in the analysis presented below, the proposed modifications would not result in substantial changes that warrant preparation of a subsequent or supplemental EIR pursuant to Section 15162 of the CEQA Guidelines.

## **1.1 Project Background**

In April of 2011, the IRWD's Board of Directors certified the Baker WTP Project Final EIR. The Final EIR evaluated the environmental effects of constructing and operating a new potable water treatment facility in the City of Lake Forest that will enhance water supply reliability in southern Orange County. The Baker WTP Project will provide redundant treatment capacity to Metropolitan Water District of Southern California's (MWD) Diemer Treatment Plant by treating raw water at a normal operating capacity of 43.5 cubic feet per second (28 million gallons per day). The Project will not increase the capacity of regional treated water distribution pipelines, but rather improve regional potable water system reliability and operational flexibility. The Project also will provide treated water to four partnering water agencies in southern Orange County: El Toro Water District (ETWD), Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), and Trabuco Canyon Water District (TCWD).



SOURCE: RBF Consulting, 2012.

Baker Water Treatment Plant Project Addendum No. 1 . 209247.07

**Figure 1**  
Treated Water Pipeline Alignment

## 1.2 Purpose of Addendum

Under CEQA, the lead agency or a responsible agency shall prepare an addendum to a previously-certified EIR if some changes or additions are necessary to the prior EIR, but none of the conditions calling for preparation of a subsequent or supplemental EIR have occurred (CEQA Guidelines §§ 15162, 15164). Once an EIR has been certified, a subsequent EIR is only required when the lead agency or responsible agency determines that one of the following conditions has been met:

- (1) Substantial changes are proposed in the project, or substantial changes occur with respect to the circumstances under which the project is undertaken, which require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects (CEQA Guidelines §15162(a)(1), (2));
- (2) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
  - a. The project will have one or more significant effects not discussed in the previous EIR;
  - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative (CEQA Guidelines §15162(a)(3)).

If one or more of the conditions described above for a subsequent EIR exist, but only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation, then the lead agency may prepare a supplement to an EIR, rather than a subsequent EIR (CEQA Guidelines §15163(a)).

CEQA recommends that a brief explanation of the decision to prepare an addendum rather than a subsequent or supplemental EIR be included in the record (CEQA Guidelines §15164(e)). IRWD has evaluated the potential environmental impacts of the proposed modifications as set forth below in Section 1.3 of this Addendum No. 1. IRWD acting as the Lead Agency, has determined that none of the above CEQA conditions apply and that Addendum No. 1 to the adopted Final EIR is the appropriate environmental documentation for the proposed modifications and fully complies with CEQA, as described in the CEQA Guidelines.

An addendum does not need to be circulated for public review, but rather can be attached to the Final EIR (CEQA Guidelines §15164(c)). Prior to initiating the modified Project, the IRWD

Board of Directors will consider this Addendum No. 1 together with the adopted Final EIR and make a decision regarding the modified Project (CEQA Guidelines §15164(d)).

### **1.3 Modification Description**

The Baker WTP Project Final EIR identified that the preferred method of delivering treated water to the partner agencies would be through an existing connection to the Allen McCulloch Pipeline (AMP) onsite at the Baker WTP. The AMP is a major potable water transmission pipeline owned by MWD that bisects the Baker WTP Project site (Baker site). During review of the AMP connection with MWD, this point-of-delivery location was determined to be infeasible. Therefore, as described in the Final EIR, the treated water would be delivered to partner agencies via the South County Pipeline, which is located southwest of the Baker WTP in the Peachwood right-of-way (ROW) (see Figure 1). The Final EIR described and evaluated two potential alignments for a treated water pipeline to connect the Baker WTP to the South County Pipeline (see Treated Water Pipeline Option 1 and Option 2 in Figure 1). However, due to constraints on land acquisitions and easement acquisitions associated with these alignments, IRWD has since identified a new alignment that would maximize use of existing ROWs, eliminate the need for land acquisition, and avoid impacts to future development (see Modified Treated Water Pipeline Alignment in Figure 1). The modified treated water pipeline alignment would result in minor design changes to the PWPS located onsite at the Baker WTP. These modifications are described in more detail below.

#### **Treated Water Pipeline Alignment**

The proposed treated water pipeline alignment is shown in Figure 1. The modified alignment would run offsite from the south corner of the Baker site, crossing under the AMP and IRWD's Lake Forest Zone 1 and Zone 2 pipelines, and running parallel to the Project's sewer pipeline alignment for approximately 320 feet along the Serrano Creek Trail. Then the pipeline would run up the slope embankment, adjacent to IRWD's existing easement for two other potable water lines, and cross into the ROW of Forestwood. From Forestwood, the pipeline would continue west within the ROWs of Autumnwood, Palmwood Drive, and Peachwood where a connection to the South County Pipeline would be constructed near the Peachwood–Palmwood intersection. The total pipeline length would be approximately 3,200 linear feet (LF), with a diameter of 36 inches. An underground vault would be constructed near the intersection of Palmwood Drive and Sprucewood to house an isolation valve that will be installed on the treated water pipeline at the connection point to the South County Pipeline.

New easements would be required to accommodate the modified treated water pipeline alignment. IRWD would need to secure an easement from the County of Orange to expand its existing pipeline easements between the Baker site and Forestwood. IRWD also may need to secure an easement from the Serrano Highland Master Homeowner's Association that owns a parcel of land located between the Baker site and Valewood.

## **Product Water Pump Station**

As described in the Final EIR, the PWPS would pump treated water from the Baker WTP storage reservoirs to the South County Pipeline for delivery to the Project's partner water agencies. Due to the change in the pipeline alignment and point of delivery along the South County Pipeline, modifications to the mechanical design of the PWPS are required to accommodate an increased discharge pressure in the treated water pipeline. The footprint and design of the PWPS building would not change from that described in the Final EIR (page 2-12). The PWPS would continue to house five pumps (four duty and one standby) and have a capacity of 33 cfs; however, the size of each pump would increase to 450 HP from 300 HP. There would be no measurable environmental impacts associated with this modification, and as such the PWPS is not addressed further in this Addendum No. 1.

### **1.4 Construction Methods**

The treated water pipeline would be installed primarily using trench installation construction techniques as described in the Final EIR (pages 2-14 and 2-15). For installation of the pipeline where it crosses under the AMP and IRWD's Zone 1 and Zone 2 pipelines and runs along the Serrano Creek Trail, jack-and-bore construction methods may be used. Construction of this segment would require a temporary construction easement from the County of Orange (already identified in the Final EIR on page 2-17). To install the pipeline from the Serrano Creek Trail to city streets and within city streets, open trench methods would be utilized. Depth of excavation would be approximately six to eight feet to accommodate the 36-inch pipe with an engineered bed and cover. Once installed, the pipeline alignment would be returned to its previous condition along the entire length of the alignment.

### **1.5 Project Phasing and Schedule**

The treated water pipeline would be constructed at the same time as the Baker WTP. Construction duration would not change from that described in the Final EIR, taking approximately six months to complete, moving on average at a rate of 50 to 100 feet per day.

## **2.0 Incorporation by Reference**

Consistent with Section 15150 of the CEQA Guidelines, the following documents were used in the preparation of this Addendum and are incorporated herein by reference:

- Baker Water Treatment Plant Project Draft Environmental Impact Report, January 2011 (State Clearinghouse No. 2010051055).
- Baker Water Treatment Plant Project Final Environmental Impact Report, April 2011 (State Clearinghouse No. 2010051055).
- Technical Memorandum for Baker Water Treatment Plant – Product Water Delivery to South County Pipeline, RBF Consulting, December 1, 2011.

These documents are available for review during regular business hours at IRWD located at 15600 Sand Canyon Avenue, Irvine, California 92618-3102.

## **3.0 Analysis of Potential Environmental Impacts Associated with the Proposed Modification**

The proposed modification would not change the regulatory framework, impact discussion, mitigation measures, or significant conclusions for the following resource areas as currently described in the adopted Final EIR: Agricultural Resources, Air Quality and Greenhouse Gases; Hazards and Hazardous Materials; Hydrology and Water Quality; Public Services and Utilities.

### **3.1 Aesthetics**

The Final EIR concluded that potential impacts to the aesthetics of the Project area would be less than significant after mitigation. This section provides an analysis of the potential aesthetics impacts associated with the modification of the treated water pipeline alignment.

#### **3.1.1 Setting**

The corridor for the treated water pipeline would run onsite at the Baker WTP for 360 feet south, then through an open space area of Serrano Creek Trail for approximately 320 feet, where it would then turn northwest into Forestwood and continue within city streets. Surrounding land uses primarily consist of low density residential, public facility, community park/open space, and light industrial. Existing natural features in the vicinity of the Baker site include Serrano Creek and Serrano Creek Trail. The City of Lake Forest has not designated any scenic roadways or scenic vistas/viewpoints in the area surrounding the Project.

#### **3.1.2 Summary of Potential Impact**

As already analyzed Chapter 3.1 of the Final EIR (page 3.1-9), during pipeline construction, equipment would be visible from surrounding streets, including hilltop residential units located east of the Baker site. However, there are no City-designated scenic vistas in the vicinity of the Baker WTP and construction activities would be temporary. Upon completion of construction, the treated water pipeline would be located underground within Serrano Creek Trail and city streets and no longer visible. The modified pipeline would not impact scenic vistas.

The Final EIR analyzed the potential for Project pipelines to affect the visual character of the Project sites, including open space areas around Serrano Creek and adjacent to residential land uses (Final EIR page 3.1-10). A portion of the modified treated water pipeline would be constructed in this open space area, parallel to the Project sewer pipeline. As documented in the Final EIR, construction would affect the visual character of the pipeline corridor; however, once constructed the pipelines would be underground and would not alter permanently the visual character of the sites or their surroundings. Implementation of Mitigation Measure AES-2, as included in the Final EIR, would ensure that construction of the modified treated water pipeline would not substantially degrade the visual character of the pipeline alignment by requiring post-

construction site restoration, including restoring topography, vegetation, and repaving roadways. Impacts would be less than significant with mitigation.

### **3.1.3 Conclusion**

The Project would not result in a new significant impact or substantially increase the severity of an impact identified in the Final EIR. No mitigation is required beyond the existing commitments contained within the Mitigation Monitoring and Reporting Program (MMRP). Impacts to aesthetics would be less than significant with mitigation.

## **3.2 Biological Resources**

The Final EIR assessed potential impacts to biological resources and concluded that construction of the Project would have a less than significant impact with the incorporation of mitigation. The following discussion addresses potential impacts from the modified Project.

### **3.2.1 Setting**

The modified treated water pipeline alignment would cross the drainage channel at the south corner of the Baker WTP that is tributary to Serrano Creek. The crossing would be accomplished with jack and bore methods to avoid impacts to the drainage and creek. The modified pipeline would be located beneath the Serrano Creek Trail for approximately 320 feet, and then within the public ROW until it connects to the South County Pipeline in Peachwood. The portion of the alignment beneath the Serrano Creek Trail would be located within Non-Reserve Lands in the Central Subarea of the Orange County Natural Communities Conservation Program (NCCP).

### **3.2.2 Summary of Potential Impact**

The Final EIR assessed the potential impacts of Project implementation on sensitive species, riparian habitat, natural communities, wetlands, and compliance with local biological resource policies. The Final EIR concluded that with implementation of mitigation the Project would have less than significant impacts to biological resources. A portion of the new treated water pipeline alignment would parallel the previously-approved sewer pipeline alignment along Serrano Creek Trail adjacent to Serrano Creek. Impacts associated with installation of the new treated water pipeline in this open space area would be identical to those identified for the sewer pipeline. Because the previous Final EIR analyzed the impacts of a pipeline installation along the Serrano Creek Trail, there would be no new impacts associated with development of the modified treated water pipeline. With implementation of Mitigation Measures BIO-3, BIO-4, BIO-6 and BIO-10 identified in the Final EIR, the potential impacts to biological resources would be mitigated to less than significant levels.

### **3.2.3 Conclusion**

The Project would not result in a new significant impact not previously identified in the Final EIR, nor would it substantially increase the severity of an impact identified in the Final EIR. No mitigation is required beyond the existing commitments contained within the MMRP. Impacts to biological resources would be less than significant with mitigation.

## **3.3 Cultural Resources**

The Final EIR assessed potential impacts to cultural resources and concluded that construction of the Project would have a less than significant impact with incorporation of mitigation. The following discussion addresses potential impacts from the modified Project.

### **3.3.1 Setting**

An archaeological survey of the sewer pipeline alignment along Serrano Creek was conducted by an ESA archaeologist on June 25, 2010. A portion of the modified treated water pipeline would run parallel to the sewer pipeline alignment before crossing into paved city streets. Undeveloped land was systematically surveyed in transects of 20 meters or less and the ground surface subject to careful inspection for cultural resources. The surveys found no cultural resources within the pipeline alignments but concluded that due to the number of prehistoric archaeological sites in close proximity to the Project area, previously-unknown resources may be uncovered during excavation activities.

### **3.3.2 Summary of Potential Impact**

The Final EIR assessed the potential impacts of Project implementation on cultural and paleontological resources and determined that with implementation of mitigation the modified Project would have less than significant impacts to these resources. The area has been previously disturbed by the construction of the existing Baker Facility, existing pipelines, the adjacent housing development, and the Serrano Creek Trail. The Final EIR determined that due to the large number of prehistoric archaeological sites in close proximity to the Project area and its location along a reliable water source, the Project area has some archaeological sensitivity, particularly for prehistoric archaeological resources. With implementation of Mitigation Measures CUL-1, CUL-2, CUL-3 and CUL-4, the potential construction impacts to cultural resources and paleontological resources would be mitigated to less than significant. Because the Final EIR analyzed the portions of the modified treated water pipeline alignment that would be located on undeveloped, unpaved lands, no new impacts associated with development of the modified Project would occur. Therefore, with implementation of mitigation measures identified in the Final EIR, the potential construction impacts to cultural resources would be mitigated to less than significant levels.

### **3.3.3 Conclusion**

The Project would not result in a new significant impact or substantially increase the severity of an impact identified in the Final EIR. No mitigation is required beyond the existing commitments contained within the MMRP. Impacts to cultural resources would be less than significant with mitigation.

## **3.4 Geology, Soils and Mineral Resources**

The Final EIR assessed potential impacts associated with geologic events and concluded that construction and operation of the proposed Project would have a less than significant impact with



incorporation of mitigation. The following discussion addresses potential impacts from the modified Project.

### **3.4.1 Setting**

The Project area lies within a region of California referred to as the Peninsular Ranges geomorphic province. The Peninsular Ranges consist of a series of ranges that are separated by northwest trending valleys, subparallel to faults branching off of the San Andreas Fault. The trend of topography is similar to the Coast Ranges, but the geology is more like the Sierra Nevada, with granite rock intruding the older metamorphic rocks. The province extends into lower California and is bound on the east by the Colorado Desert Province (Final EIR, 2011).

### **3.4.2 Summary of Potential Impact**

The Final EIR assessed the potential impacts of Project implementation associated with geologic hazards and seismic events, including seismic ground shaking, landslides and liquefaction, subsidence, expansive soils, and erosion. With the implementation of Mitigation Measures GEO-1 and GEO-2, impacts associated with these hazards would be reduced to less than significant levels. The modified pipeline alignment would be located within the Project area analyzed in the Final EIR. Similar to the sewer pipeline, a portion of the treated water pipeline would be located within an area of potential liquefaction around Serrano Creek. Implementation of Mitigation Measure GEO-2 would apply to the modified pipeline alignment and would mitigate potential impacts associated with liquefaction and other hazards such as expansive soils to less than significant levels. In addition, implementation of the best management practices recommended in Mitigation Measure GEO-1 would minimize impacts associated with erosion and sedimentation during construction of the pipeline to less than significant levels.

### **3.4.3 Conclusion**

The Project would not result in a new significant impact or substantially increase the severity of an impact identified in the Final EIR. No mitigation is required beyond the existing commitments contained within the MMRP. Impacts to geology, soils and mineral resources would be less than significant with mitigation.

## **3.5 Land Use, Planning and Recreation**

The Final EIR assessed potential impacts to land use and recreation and concluded that construction and operation of the approved Project would have a less than significant impact with incorporation of mitigation. The following discussion addresses potential impacts from the modified Project.

### **3.5.1 Setting**

The modified Project is located in the City of Lake Forest. The modified treated water pipeline alignment would require expansion of an easement for the portion of the pipeline alignment between the Baker WTP and Forestwood, in the vicinity of Serrano Creek Trail. A new easement from the Serrano Highland Homeowners Association also would be required for the portion of the

pipeline that runs between Serrano Creek Trail and Forestwood. The current land use designation for the modified pipeline alignment is Regional Park/Open Space and Low-Medium Density Residential, (Final EIR, 2011).

### **3.5.2 Summary of Potential Impact**

Water and wastewater transmission facilities are not subject to city building or zoning ordinances, per Government Code 53091, and therefore a site development permit would not be required for the modified treated water pipeline. A portion of the modified treated water pipeline alignment would be located in a similar location as the sewer pipeline, along the Serrano Creek Trail. To avoid impacts to public use of the trail during construction and installation of the pipeline, implementation of a trail detour plan as described in Mitigation Measure LU-1 in the Final EIR would reduce impacts to recreational facilities to less than significant levels. Once the pipeline is installed, the trail would be restored to pre-construction conditions as required by Mitigation Measure AES-2, also as described in the Final EIR, such that there would be no long-term permanent impacts to recreational facilities. Installing the pipeline within existing public ROWs would not conflict with current zoning and land use designations. Therefore, with implementation of mitigation measures identified in the Final EIR, the potential construction impacts associated with land use conflicts would be mitigated to less than significant.

### **3.5.3 Conclusion**

The modified Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact. No mitigation is required beyond the existing commitments contained within the MMRP. Impacts to land use and recreation would be less than significant with mitigation.

## **3.6 Noise and Vibration**

The Final EIR assessed potential impacts to sensitive receptors due to Project noise and vibration and concluded that construction and operation of the approved Project would have a less than significant impact with incorporation of mitigation. The following discussion addresses potential impacts from the modified Project.

### **3.6.1 Setting**

The modified treated water pipeline alignment would be located in an area consisting of open space and residential land uses. The nearby residences qualify as noise sensitive land uses and would potentially be exposed to noise generated from Project activities. The distance from the modified pipeline construction activities to the closest residences would be approximately 30 feet.

### **3.6.3 Summary of Potential Impact**

Construction activities would create a temporary increase in ambient noise levels in the immediate vicinity of the construction zone. The nearest sensitive receptor to pipeline construction activities would be approximately 30 feet from the modified treated water pipeline alignment. The Final EIR found the greatest noise levels associated with excavation and finishing

and would be 89 dBA at a distance of 50 feet and evaluated the impact of the sewer pipeline installation 30 feet from residential land uses. Installation of the modified treated water pipeline would result in construction noise impacts similar to those analyzed for the sewer pipeline. An average of 50 to 100 feet of pipeline would be installed per day; therefore sensitive receptors would be exposed to pipeline construction noise only for up to two weeks. The modified Project would parallel the previously-analyzed sewer pipeline alignment for the first segment and then run within the existing public ROW, 30 feet from the nearest sensitive receptors. With implementation of Mitigation Measures NOISE-1 and NOISE-2 identified in the Final EIR, potential construction noise impacts on sensitive receptors would be mitigated to less than significant levels. Once constructed and operational, the modified pipeline would be underground and would have no impacts due to noise or vibration.

### **3.6.3 Conclusion**

The modified Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact. No mitigation is required beyond the existing commitments contained within the MMRP. Impacts to sensitive receptors associated noise and vibration are less than significant with mitigation.

## **3.7 Transportation and Traffic**

The Final EIR assessed potential impacts to traffic and concluded that construction and operation of the approved Project would have a less than significant impact with incorporation of mitigation. The following discussion addresses potential impacts from the modified Project.

### **3.7.1 Setting**

The majority of the modified treated water pipeline would be installed within city streets. Forestwood, Autumnwood, and Palmwood Drive are local feeder streets that serve a residential area. Peachwood conveys local traffic to arterial roadways within the City of Lake Forest.

### **3.7.2 Summary of Potential Impact**

The modified treated water pipeline would be installed within city street ROWs and would temporarily slow traffic serving the local residential community. The two optional treated water pipeline alignments analyzed in the Final EIR affected different streets in the neighborhood adjacent to the Baker site. However, impacts associated with construction would be similar to those described in the Final EIR (pages 3.12-9 and 3.12-10). Mitigation Measure TR-1 would require a Traffic Control/Traffic Management Plan to be implemented during pipeline construction. At least one lane of traffic would be maintained within the streets at all times. Access to each driveway within the city streets would be maintained during installation. As a result, the temporary impacts to traffic would be less than significant with mitigation.

### **3.7.3 Conclusion**

The modified Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact. No mitigation is required beyond the

existing commitments contained within the MMRP. Impacts to traffic and circulation are less than significant with mitigation.

## 4.0 Summary of Environmental Effects

As discussed above in this Addendum, the proposed modifications would not change the conclusions of the certified Final EIR. The construction and operation of the proposed modified treated water pipeline would meet the same objectives of improving water reliability to areas of south Orange County, providing a reliable local water supply in the event of emergency conditions or scheduled maintenance of the MWD delivery system; increased operational flexibility by creating redundancy within the raw water supply system.

No new potentially significant impacts would occur, and the Project would not increase the severity of previously identified significant impacts. The proposed modifications to the previously-approved Project do not meet any of the conditions that would require the preparation of a subsequent EIR or negative declaration set forth in Section 15162 of the CEQA Guidelines or any of the conditions set forth in Section 15163 of the CEQA Guidelines.

## 5.0 Determination

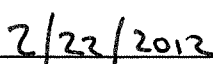
Section 15164(a) of the CEQA Guidelines states the following:

“The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of subsequent EIR have occurred.”

The proposed modifications to the original Project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Furthermore, new information associated with the proposed modifications do not indicate that the Project will have one or more significant effects not discussed in the adopted Final EIR; that significant effects previously examined will be substantially more severe than shown in the adopted Final EIR; that mitigation measures or alternatives previously found not to be feasible would in fact be feasible; or that mitigation measures or alternatives which are considerably different from those analyzed in the adopted Final EIR would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measures or alternative. Accordingly, an addendum has been prepared as opposed to a supplemental or subsequent EIR. IRWD is adopting this Addendum No. 1 in accordance with the CEQA Guidelines (§15164).

Irvine Ranch Water District

  
Signature

  
Date

Christian Kessler  
Printed Name

Assistant Engineer/Planner  
Title

February 27, 2012

Prepared by: H. Cho/M. Cortez

Submitted by: K. Burton

Approved by: Paul Cook

## CONSENT CALENDAR

### DOMESTIC AND RECYCLED VAULT LIDS REHABILITATION EXPENDITURE AUTHORIZATIONS AND CONSULTANT SELECTION

#### SUMMARY:

The Domestic and Recycled Vault Lids Rehabilitation Projects will replace 13 corroded vault lids and two vaults located throughout the IRWD service area. Staff recommends that the Board:

- Approve an Expenditure Authorization in the amount of \$154,600 for the Domestic Vault Lid Rehabilitation Project; and
- Approve an Expenditure Authorization in the amount of \$115,500 for the Recycled Vault Lid Rehabilitation Project.

#### BACKGROUND:

The Domestic Vault Lids Rehabilitation Project and Recycled Vault Lids Rehabilitation Project will replace 13 corroded meter and valve vault lids throughout the IRWD service area. Additionally, the project will replace two existing domestic water facility vaults in their entirety. These vaults are the IRWD and Trabuco Canyon Water District (TCWD) intertie meter vault and intertie valve vault on Santiago Canyon Road. Larger replacement vaults are required to provide adequate space for maintenance. A project location map is attached as Exhibit "A".

To expedite the lid replacements, staff separated the project into two phases. Phase 1 consists of replacing nine of the 13 facility vault lids with lids in kind, without any alterations to the existing vaults. These installations do not require engineering design plans. Phase 1 was advertised to 15 contractors with six contractors submitting bids. GCI Construction, Inc. was the apparent low bidder with a bid of \$90,100. The bid summary is attached as Exhibit "B". An informal construction contract will be awarded to GCI Construction, Inc. under the authority of the General Manager for Phase 1.

Phase 2 consists of the remaining four vault lids and two IRWD/TCWD intertie vaults. These facilities require an engineering design. Staff issued a Request-for-Proposal to APD Consultants, Inc., Atkins Global, Arcadis-US, Inc. and URS Corporation. The Engineering and Operations Committee authorized the General Manager to enter a Professional Services Agreement with Arcadis-US, Inc. on February 23, 2012.

**FISCAL IMPACTS:**

The Domestic Vault Lid Rehabilitation, Project 11358 (1800), and the Recycled Vault Lid Rehabilitation, Project 31358 (1065), are included in the FY 2011-12 Capital Budget. Approval of Expenditure Authorizations is requested as shown in the table below and in Exhibit "C".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11358 (1800)	\$297,600	\$-0-	\$297,600	\$-0-	\$154,600	\$154,600
31358 (1065)	\$297,600	\$-0-	\$297,600	\$-0-	\$115,500	\$115,500
Total	\$595,200	\$-0-	\$595,200	\$-0-	\$270,100	\$270,100

**ENVIRONMENTAL COMPLIANCE:**

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 which provides exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

**COMMITTEE STATUS:**

This item was reviewed by the Engineering and Operations Committee on February 23, 2012.

**RECOMMENDATION:**

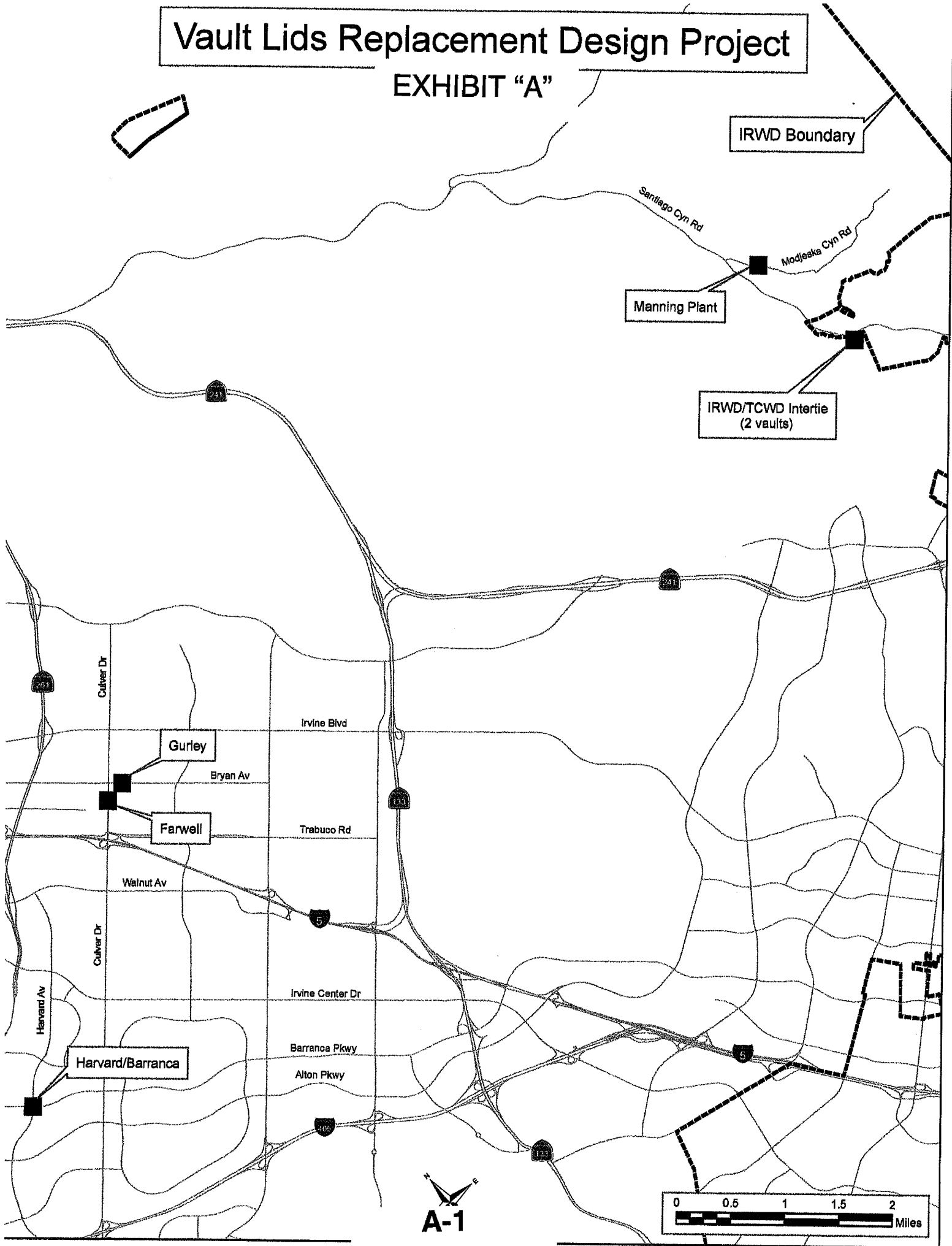
THAT THE BOARD APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$154,600 FOR THE DOMESTIC VAULT LID REHABILITATION, PROJECT 11358 (1800), AND APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$115,500 FOR THE RECYCLED VAULT LID REHABILITATION, PROJECT 31358 (1065).

**LIST OF EXHIBITS:**

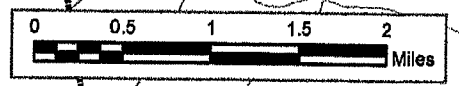
- Exhibit "A" – Location Map
- Exhibit "B" – Bid Summary for Phase 1
- Exhibit "C" – Expenditure Authorizations

# Vault Lids Replacement Design Project

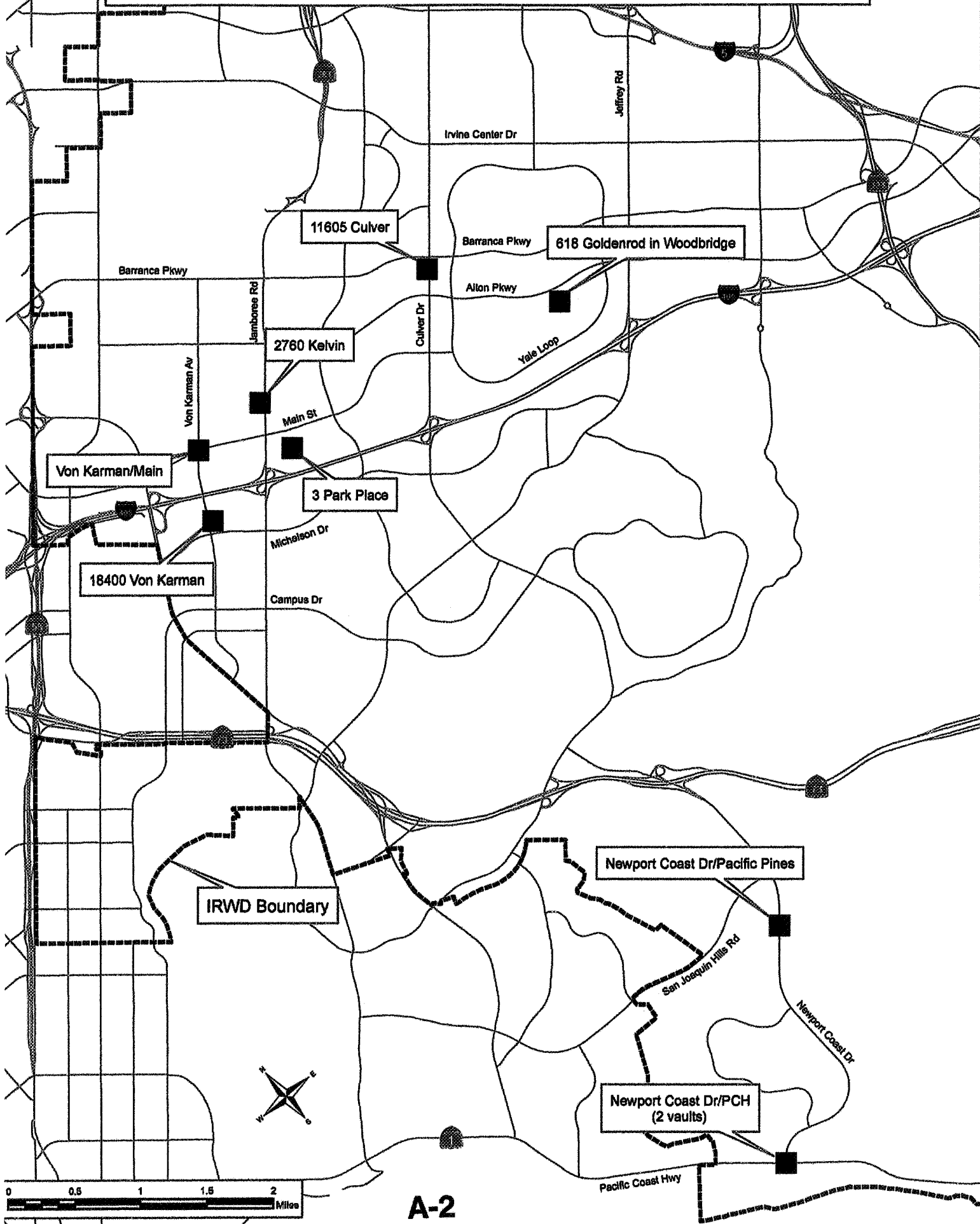
## EXHIBIT "A"



A-1



# Vault Lids Replacement Construction Project





Irvine Ranch Water District Bid Summary For  
 Meter and Valve Vault Lid Replacement Project  
 PR 11358 and 31358

		Engineer's Estimate		1 GCI Construction, Inc. Costa Mesa, CA		2 L&S Construction, Inc. Orange, CA		3 Paulus Engineering, Inc. Anaheim, CA		4 Leatherwood Construction Fountain Valley, CA		5 Kennedy Pipeline Co. Aliso Viejo, CA		6 Vido Artukovich & Son So. El Monte, CA			
Item No.	Description	Qty	Unit	Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total		
				Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount
1	Mobilization, Demobilization, and Clean Up	1	LS	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$20,000.00	\$20,000.00	\$5,000.00	\$5,000.00	\$25,400.00	\$25,400.00	\$3,500.00	\$3,500.00	\$20,000.00	\$20,000.00
2	Remove and Replace Vault Lid At 6664 Pacific Coast Hwy in Newport Beach	1	LS	\$15,000.00	\$15,000.00	\$9,000.00	\$9,000.00	\$12,000.00	\$12,000.00	\$13,500.00	\$13,500.00	\$18,700.00	\$18,700.00	\$22,065.00	\$22,065.00	\$25,000.00	\$25,000.00
3	Remove and Replace Vault Lid At 6684 Pacific Coast Hwy in Newport Beach	1	LS	\$15,000.00	\$15,000.00	\$11,000.00	\$11,000.00	\$12,000.00	\$12,000.00	\$13,500.00	\$13,500.00	\$16,000.00	\$16,000.00	\$20,613.00	\$20,613.00	\$25,000.00	\$25,000.00
4	Remove and Replace Vault Lid At Newport Coast Dr., & Pacific Pines Dr. in Newport Beach	1	LS	\$15,000.00	\$15,000.00	\$8,000.00	\$8,000.00	\$9,500.00	\$9,500.00	\$12,000.00	\$12,000.00	\$13,300.00	\$13,300.00	\$13,750.00	\$13,750.00	\$25,000.00	\$25,000.00
5	Remove and Replace Vault Lid At 11605 Culver Dr. in Irvine	1	LS	\$15,000.00	\$15,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$25,000.00	\$25,000.00	\$13,700.00	\$13,700.00	\$35,700.00	\$35,700.00	\$22,500.00	\$22,500.00
6	Remove and Replace Vault Lid At 618 Goldenrod in Irvine	1	LS	\$15,000.00	\$15,000.00	\$8,000.00	\$8,000.00	\$9,500.00	\$9,500.00	\$11,000.00	\$11,000.00	\$12,600.00	\$12,600.00	\$18,660.00	\$18,660.00	\$22,500.00	\$22,500.00
7	Remove and Replace Vault Lid At 2760 Kelvin in Irvine	1	LS	\$15,000.00	\$15,000.00	\$8,000.00	\$8,000.00	\$10,000.00	\$10,000.00	\$9,900.00	\$9,900.00	\$13,400.00	\$13,400.00	\$20,830.00	\$20,830.00	\$22,500.00	\$22,500.00
8	Remove and Replace Vault Lid At 3 Park Plaza in Irvine	1	LS	\$15,000.00	\$15,000.00	\$8,000.00	\$8,000.00	\$10,000.00	\$10,000.00	\$9,800.00	\$9,800.00	\$12,800.00	\$12,800.00	\$17,595.00	\$17,595.00	\$20,000.00	\$20,000.00
9	Remove and Replace Vault Lid At 17903 Von Karman in Irvine	1	LS	\$15,000.00	\$15,000.00	\$8,000.00	\$8,000.00	\$9,500.00	\$9,500.00	\$9,800.00	\$9,800.00	\$12,700.00	\$12,700.00	\$17,212.00	\$17,212.00	\$20,000.00	\$20,000.00
10	Remove and Replace Vault Lid At 18400 Von Karman in Irvine	1	LS	\$15,000.00	\$15,000.00	\$7,500.00	\$7,500.00	\$9,500.00	\$9,500.00	\$9,700.00	\$9,700.00	\$14,300.00	\$14,300.00	\$18,376.00	\$18,376.00	\$20,000.00	\$20,000.00
	Subtotal				\$135,000.00	\$0.00	\$91,500.00	\$0.00	\$120,000.00	\$0.00	\$119,200.00	\$0.00	\$152,900.00	\$0.00	\$188,301.00	\$0.00	\$222,500.00
	Adjustment (+ or -)				\$0.00	\$0.00	\$0.00	(\$7,000.00)	\$0.00	\$3,000.00	\$0.00	\$0.00	\$0.00	\$0.00	(\$5,000.00)	\$0.00	\$0.00
	<b>TOTAL AMOUNT OF BID</b>				<b>\$135,000.00</b>	<b>\$91,500.00</b>	<b>\$113,000.00</b>	<b>\$122,200.00</b>	<b>\$152,900.00</b>	<b>\$183,301.00</b>	<b>\$222,500.00</b>						
	<b>Item Delivery Dates:</b>				<b>Item Delivery Dates:</b>		<b>Item Delivery Dates:</b>		<b>Item Delivery Dates:</b>		<b>Item Delivery Dates:</b>		<b>Item Delivery Dates:</b>		<b>Item Delivery Dates:</b>		
					Vault Lids: 4 Weeks		Vault Lids: 40 Days		Vault Lids: 28 Days		Vault Lids: 56 Days		Vault Lids: 45 Days		Vault Lids: 6 Weeks		
					<b>Manufacturers:</b>		<b>Manufacturers:</b>		<b>Manufacturers:</b>		<b>Manufacturers:</b>		<b>Manufacturers:</b>		<b>Manufacturers:</b>		
					Vault Lids: USF		Vault Lids: Jensen		Vault Lids: USF Fabrication		Vault Lids: Olson Precast		Vault Lids: Olson Precast		Vault Lids: Olson Precast		
					<b>Subcontractors:</b>		<b>Subcontractors:</b>		<b>Subcontractors:</b>		<b>Subcontractors:</b>		<b>Subcontractors:</b>		<b>Subcontractors:</b>		
					Concrete Vaults: U&R Concrete Products		None Listed		None Listed		None Listed		None Listed		Olson Precast: Vault Lids/Set Tops		

EXHIBIT "B"

# IRVINE RANCH WATER DISTRI

# Exhibit "C"

## Expenditure Authorization

**Project Name:** RECYCLED VAULT LID REHABILITATION  
**EPMS Project No:** 31358 **EA No:** 1  
**Oracle Project No:**  
**Project Manager:** CORTEZ, MALCOLM  
**Project Engineer:** CHO, HARRY  
**Request Date:** February 6, 2012

**ID Split:** Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
210	100.0	REPLACEMENT FUND**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$115,500
<b>Total EA Requests:</b>	<b>\$115,500</b>
Previously Approved Budget:	\$297,600
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$297,600</b>
<b>Budget Remaining After This EA</b>	<b>\$182,100</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	0	0	0	10,000	10,000	7/11	6/13
ENGINEERING DESIGN - OUTSIDE	0	0	0	0	20,000	20,000	7/11	6/13
DESIGN STAFF FIELD SUPPORT	0	0	0	0	5,000	5,000	7/11	6/13
ENGINEERING - CA&I IRWD	10,000	0	10,000	0	10,000	10,000	3/12	6/14
ENGINEERING - CA&I OUTSIDE	10,000	0	10,000	0	20,000	20,000	3/12	6/14
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	3/12	6/14
CONSTRUCTION	80,000	0	80,000	0	200,000	200,000	3/12	6/14
LEGAL	0	0	0	0	500	500	7/11	6/14
Contingency - 10.00% Subtotal	\$10,500	\$0	\$10,500	\$0	\$27,100	\$27,100		
<b>Subtotal (Direct Costs)</b>	<b>\$115,500</b>	<b>\$0</b>	<b>\$115,500</b>	<b>\$0</b>	<b>\$297,600</b>	<b>\$297,600</b>		
Estimated G/A - 180.00% of direct labor*	\$27,000	\$0	\$27,000	\$0	\$54,000	\$54,000		
<b>Total</b>	<b>\$142,500</b>	<b>\$0</b>	<b>\$142,500</b>	<b>\$0</b>	<b>\$351,600</b>	<b>\$351,600</b>		
Direct Labor	\$15,000	\$0	\$15,000	\$0	\$30,000	\$30,000		

\*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:

*H. Cho*

2/8/12

Department Director:

*Kevin J. Burton*

2/10/12

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 \$359,600. This project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The 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: DOMESTIC VAULT LID REHABILITATION  
 EPMS Project No: 11358 EA No: 1  
 Oracle Project No:  
 Project Manager: CORTEZ, MALCOLM  
 Project Engineer: CHO, HARRY  
 Request Date: February 6, 2012

ID Split: Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
101	100.0	REPLACEMENT FUND**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$154,600
<b>Total EA Requests:</b>	<b>\$154,600</b>
Previously Approved Budget:	\$297,600
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$297,600</b>
<b>Budget Remaining After This EA</b>	<b>\$143,000</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	25,000	0	25,000	15,000	10,000	25,000	7/11	12/12
ENGINEERING DESIGN - OUTSIDE	45,000	0	45,000	25,000	20,000	45,000	7/11	12/12
DESIGN STAFF FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	7/11	12/12
ENGINEERING - CA&I IRWD	10,000	0	10,000	0	10,000	10,000	3/12	6/14
ENGINEERING - CA&I OUTSIDE	10,000	0	10,000	0	20,000	20,000	3/12	6/14
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	3/12	6/14
CONSTRUCTION	40,000	0	40,000	(40,000)	200,000	160,000	3/12	6/14
LEGAL	500	0	500	0	500	500	7/11	6/14
Contingency - 10.00% Subtotal	\$14,100	\$0	\$14,100	\$0	\$27,100	\$27,100		
<b>Subtotal (Direct Costs)</b>	<b>\$154,600</b>	<b>\$0</b>	<b>\$154,600</b>	<b>\$0</b>	<b>\$297,600</b>	<b>\$297,600</b>		
Estimated G/A - 180.00% of direct labor*	\$81,000	\$0	\$81,000	\$27,000	\$54,000	\$81,000		
<b>Total</b>	<b>\$235,600</b>	<b>\$0</b>	<b>\$235,600</b>	<b>\$27,000</b>	<b>\$351,600</b>	<b>\$378,600</b>		
Direct Labor	\$45,000	\$0	\$45,000	\$15,000	\$30,000	\$45,000		

\*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:

*Hy Cho*

2/8/12

Department Director:

*Karin F. Burt*

2/10/12

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 \$378,600. This project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. It is the official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150

February 27, 2012  
Prepared by: K. Lew/M. Cortez  
Submitted by: K. Burton  
Approved by: Paul Cook

CONSENT CALENDAR

PLANNING AREA 9B JEFFREY ROAD PIPELINES  
EXPENDITURE AUTHORIZATIONS AND POTENTIAL CHANGE OF WORK WITH  
IRVINE COMMUNITY DEVELOPMENT COMPANY

SUMMARY:

Irvine Community Development Company (ICDC) is proceeding with Planning Area 9B (Stonegate) Jeffrey Road Improvements from Irvine Boulevard to Portola Parkway. As part of the project, ICDC will design and construct IRWD's domestic water and recycled water capital facilities under a Supplemental Reimbursement Agreement. Staff recommends that the Board:

- Approve Expenditure Authorizations for Project 10423 in the amount of \$38,100 and Project 30422 in the amount of \$47,400; and
- Approve a Potential Change of Work in the amount of \$83,146 to the Supplemental Reimbursement Agreement with ICDC for Planning Area 9B to design the Jeffrey Road IRWD Capital Pipelines.

BACKGROUND:

IRWD and ICDC have had a Reimbursement Agreement (RA) for design and construction of IRWD capital facilities in place since May 1997. Under this RA, a Supplemental Reimbursement Agreement serves to define the improvements to be designed and constructed within a specific Planning Area as well as the estimated reimbursable costs. A Supplemental Reimbursement Agreement was previously approved for all IRWD Capital pipelines within Planning Area 9. All required IRWD Capital Improvements are documented in the Planning Area 9B and 9C Sub-Area Master Plan, dated March 2006, prepared by Stantec. The improvements are shown in Exhibit "A".

In November 2006 the Board authorized the Jeffrey Road pipelines design under the Supplemental Reimbursement Agreement. The selected consultant was Penco Engineering (Penco) in the amount of \$209,518. The design was nearly complete when the project was put on hold by ICDC in September 2007 due to the development slowdown. The project remained on hold until August 2011, when ICDC decided to restart the design. Staff met with ICDC, Penco, and Penco's subconsultant SAIC to discuss several IRWD required revisions to the design including:

- Upsizing the 16-inch Zone B recycled water main to a 36-inch main from Irvine Boulevard to Encore including a new valve vault and connection detail modifications;
- Preparing exhibits for valve vault location alternatives due to the congestion of existing and proposed utilities;
- Preparing plans for the realignment of the proposed 16-inch Zone B recycled water main;
- Extending and updating the 12-inch Zone 3 domestic water plans to include a connection to a proposed 12-inch domestic water main located at Jeffrey and Encore;

- Additional coordination and meetings; and
- Updating the technical specifications.

Staff has reviewed the Potential Change of Work in the amount of \$83,146 as shown in Exhibit “B” and finds the scope of work and fee to be acceptable.

**FISCAL IMPACTS:**

Projects 10423 (1519) and 30422 (1024) are included in the FY 2011-12 Capital Budget. Approval of Expenditure Authorizations are requested in the amounts shown in the table below and in Exhibit “C”.

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
10423 (1519)	\$1,755,600	\$-0-	\$1,755,600	\$227,000	\$ 38,100	\$265,100
30422 (1024)	\$3,499,100	\$-0-	\$3,499,100	\$305,700	\$ 47,400	\$353,100
Total	\$5,254,700	\$-0-	\$5,254,700	\$532,700	\$85,500	\$618,200

**ENVIRONMENTAL COMPLIANCE:**

The construction of the capital facilities for Planning Area 9B is subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, an Environmental Impact Report, SCH #2001051010, was certified by the lead agency, the City of Irvine.

**COMMITTEE STATUS:**

This item was reviewed by the Engineering and Operations Committee on February 23, 2012.

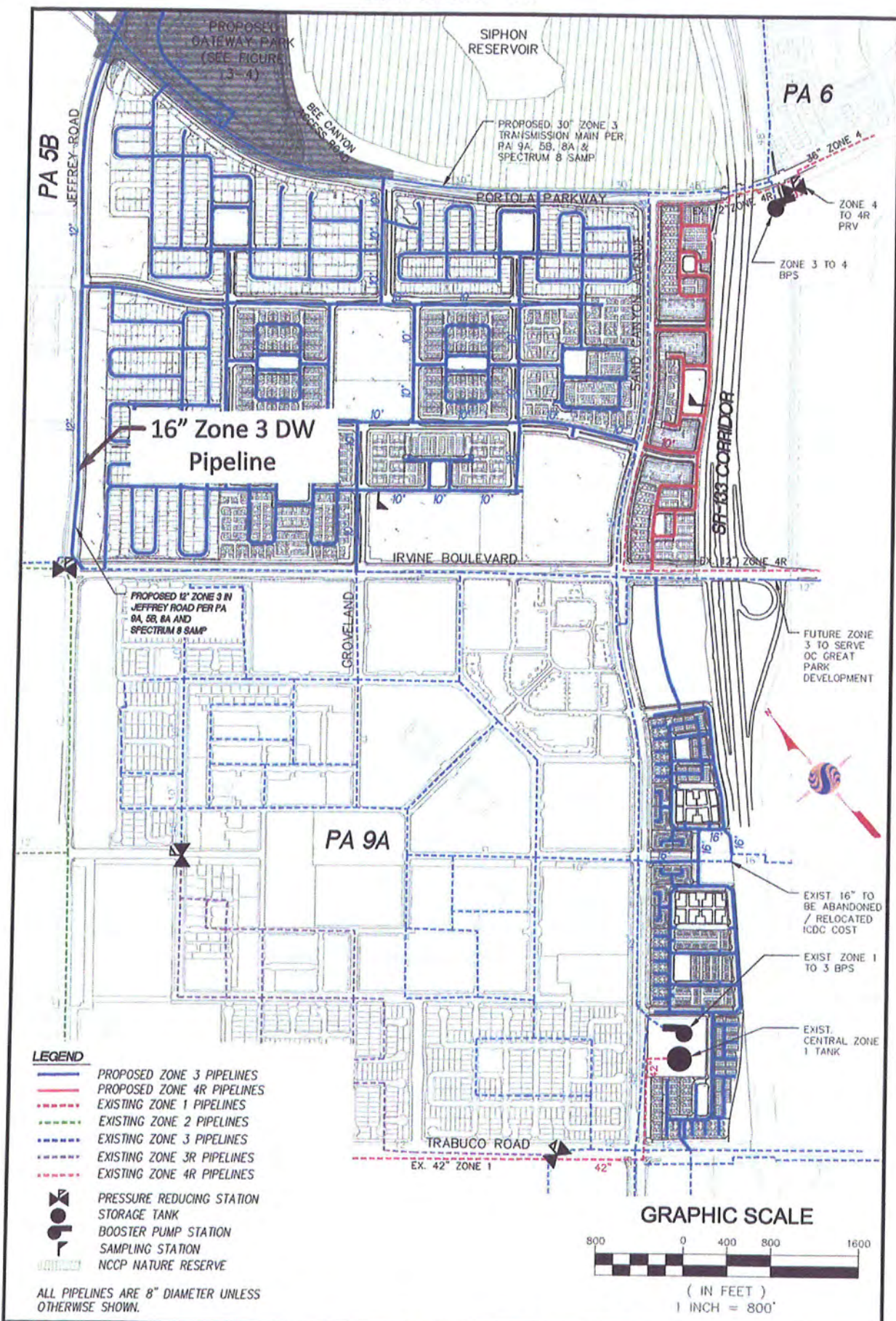
**RECOMMENDATION:**

THAT THE BOARD APPROVE EXPENDITURE AUTHORIZATIONS FOR PROJECT 10423 (1519) IN THE AMOUNT OF \$38,100 AND PROJECT 30422 (1024) IN THE AMOUNT OF \$47,400; AND APPROVE A POTENTIAL CHANGE OF WORK IN THE AMOUNT OF \$83,146 TO THE REIMBURSEMENT AGREEMENT WITH THE IRVINE COMMUNITY DEVELOPMENT COMPANY FOR PLANNING AREA 9B TO CONSTRUCT PA 9B JEFFREY ROAD IRWD CAPITAL FACILITIES, PROJECTS 10423 (1519) AND 30422 (1024).

**LIST OF EXHIBITS:**

- Exhibit “A” – Project Location Map
- Exhibit “B” – Potential Change of Work
- Exhibit “C” – Expenditure Authorizations





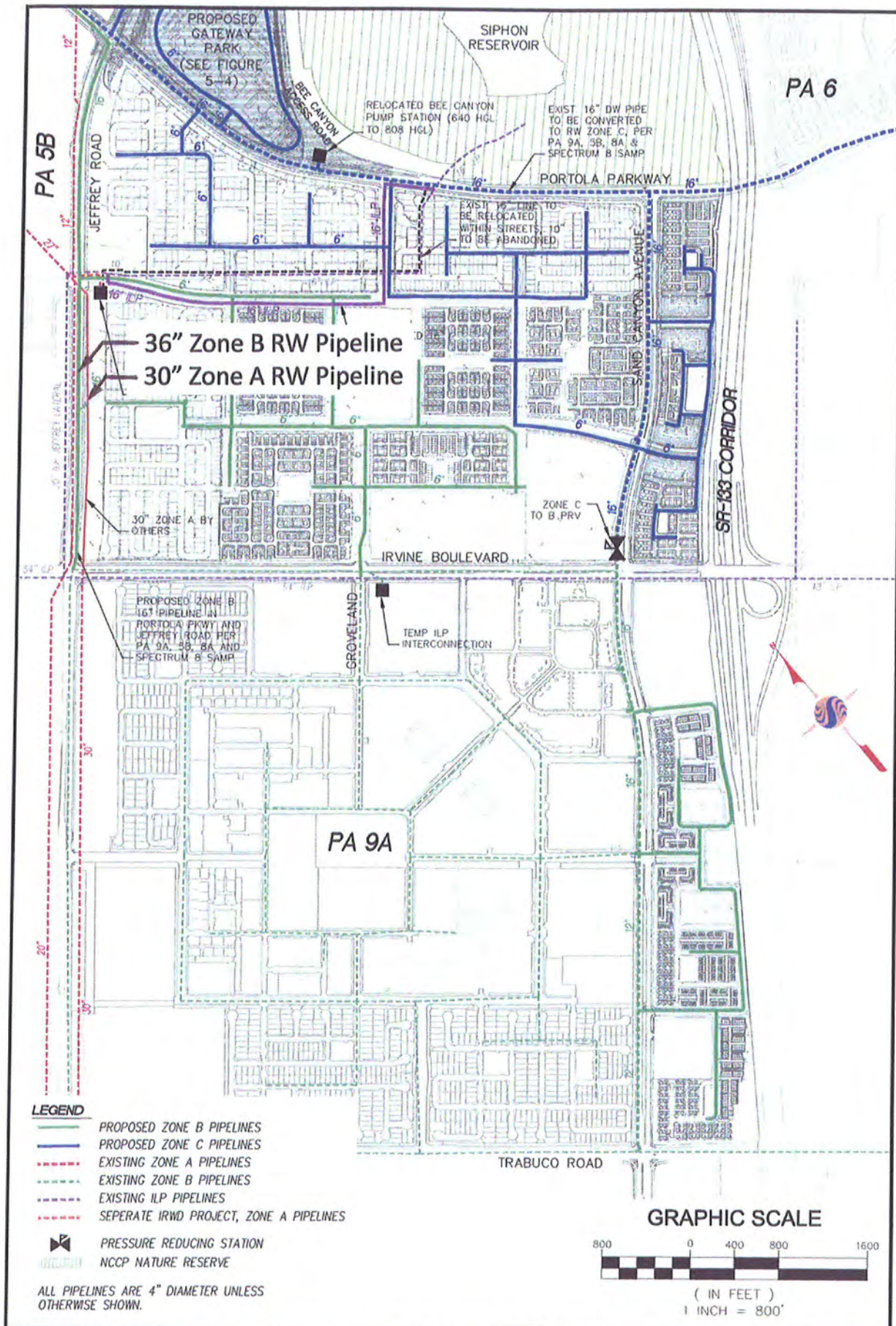
STANTEC CONSULTING INC.  
19 TECHNOLOGY DRIVE  
IRVINE, CA 92618  
949.923.6000



**PLANNING AREA 9B, 9C SAMP  
DOMESTIC WATER FACILITIES**

**FIGURE 3-3**






**STANTEC CONSULTING INC.**  
 19 TECHNOLOGY DRIVE  
 IRVINE, CA 92618  
 949.923.6000  
 stantec.com



**PLANNING AREA 9B, 9C SAMP**  
**NON-POTABLE WATER**

**FIGURE 5-3**

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

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

IRWD P.O. No.: \_\_\_\_\_ ICDC Original Contract #: \_\_\_\_\_  
ICDC Original SAP PO #: 4500034113  
ICDC SAP CO PO #: \_\_\_\_\_  
Owner: Irvine Community Development Company  
Consultant: Penco Engineering  
Sewer   
Domestic Water   
Reclaim Water   
Other   
Design Engineer: \_\_\_\_\_  
IRWD Mgr. Malcolm Cortez

Project Description: PA9B 36" Syphon

**PART A - POTENTIAL CHANGE OF WORK:**

Plan Revision Required:  YES  NO Estimated Cost: N/A

Change Initiated By: IRWD

Work Description: See attached change order.

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

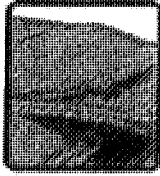
**PART B - CHANGE OF WORK VALUE:**

\$ 83,146.00

Detailed Backup Attached

- 1. Submitted by: Jamie Yoshida 11/28/11  
Jamie Yoshida / Date
- 2. Recommended by: KNL Keith L. Burton 2/28/12  
IRWD Representative / Date





**PENCO Engineering, Inc.**  
Civil Engineering  
Planning  
Surveying

Revised November 14, 2011  
October 26, 2011  
Planning Area 9B  
Contract No. 4500034113  
PENCO Engineering Job No. 1790.19

Mr. Jamie Yoshida  
**THE IRVINE COMPANY**  
550 Newport Center Drive  
Newport Beach, CA 92658

**RE: ADDENDUM FOR ADDITIONAL ENGINEERING SERVICES FOR PLANNING AREA  
9B JEFFREY ROAD STREET IMPROVEMENTS AND IRWD CIP PLANS**

Dear Jamie:

*PENCO Engineering, Inc.* (PENCO) is pleased to submit this addendum for professional services to revise the Jeffrey Road Plan Specifications and Estimates. These changes have been originated by your request, field conditions and by request of the Irvine Ranch Water District (IRWD). We have classified the changes as AD work and IRWD CIP work. The following is an explanation of the specific tasks and associated budgets for completion of the Project.

## I. IRWD – CIP WORK

### Plan Revision Summary – IRWD CIP

The ICDC has requested that the Jeffrey Road Domestic and Recycled Water Main Plans be completed for construction. In September 2007, the Jeffrey Road Domestic and Recycled Water Main Plans were put on hold at the request of ICDC. SAIC met with the Irvine Ranch Water District (IRWD) on August 13, 2011 to discuss design changes to accommodate temporary and future connections to a proposed 36" Recycled Water (siphon line) where Hunsaker and Associates (Hunsaker) is designing near the intersection of Encore and Jeffrey Road. During the meeting IRWD decided that the proposed 16" Zone B Recycled Water Main would be upsized to a 36" from Irvine Boulevard to Encore and a new 36" valve and vault will be required for a future tie-over to a proposed 36" Zone A Recycled Water Main. In addition, a 12" Zone 3 Domestic Water connection will be added to connect to a proposed 12" Domestic Water line that Hunsaker is designing at the intersection of Encore and Jeffrey Road. A meeting at the offices of ICDC was held on September 1, 2011 to discuss a realignment of Encore and additional plan revisions to move an existing irrigation water filtering system to outside of the proposed Encore realignment. In this meeting, ICDC and IRWD directed that a new 10" irrigation water line be extended from an existing irrigation water line in Jeffrey Road to the newly proposed lateral location for the irrigation water filtering system. In addition, several existing irrigation valve structures currently located above ground on the west side of Jeffrey Road will be modified to below ground.

1. **Recycled Water Plan Redesign and Updates** **\$46,959.00**
  - 1.1 **Revise Plan and Profile of 16" Zone B to 36" Zone A**

PENCO shall work with SAIC to revise the plan and profile of approximately three (3) sheets (Sta. 10+00 to 36+00) of the 16" Zone B Recycled Water Main plans to upsize the Recycled Water Main from 16" to 36". In addition, the connection detail at Sta. 10+00 will need to be

revised to reflect connecting to a 36" Recycled Water Main. A tee will be added around Sta. 36+00 for future connection to the proposed 36" Zone A Recycled Water Main. The proposed 30" Zone A Recycled Water Main will need to be lowered to accommodate the future connection to the proposed Zone B 36" Recycled Water Main in Encore. A detail of the future connection may be necessary to illustrate how the future connection between the Zone A and Zone B Recycled Water Mains will be accomplished which is included in this task.

**1.2 Revise Plan and Profile of 30" Zone A Main and Prepare Plan and Profile for 36" Zone A Connection at Encore**

PENCO will work with SAIC to revise the plan and profile of one (1) sheet of the 30" Zone A Recycled Water Main plans to add a tee for connection to a proposed 36" Recycled Main (siphon line) that is currently being designed by Hunsaker. Additional plan and profile will be required to extend a newly proposed 36" Recycled Water Main from the proposed tee location to the connection point provided by Hunsaker.

**1.3 Prepare Detail Sheets for 36" Valve and Vault**

A valve vault will be required along the 36" Zone A Recycled water main to accommodate a new 36" isolation valve. A new valve and enlarged vault details will be designed, based on the Zone A 30" valve vault design that has been previously reviewed by IRWD, to accommodate the proposed 36" isolation valve. It is anticipated that new isolation valve vault details will require the addition of two (2) plan sheets.

**1.4 Prepare Exhibit for Valve Vault Location Alternatives**

Due to the congestion of existing and proposed utilities at the intersection of Jeffrey Road and Encore, IRWD has requested several valve vault alternative locations to choose from and development of these alternatives will be required. An exhibit of valve vault locations has been prepared and provided to IRWD for consideration.

**1.5 Zone B Recycled Water Alignment and Plan and Profile Sheets**

PENCO will work with SAIC to prepare a preliminary realignment of the proposed 16" Zone B Recycled Water Main. New plan and profile design sheets based on approval of the 16" realignment by IRWD will be prepared as well. This task is anticipated to require three (3) sheets of additional plan and profile between the connection point at Irvine Boulevard and the return to the originally proposed alignment on the northwest side of Encore in Jeffrey Road.

**2. Domestic Water Plan Redesign and Updates**

**\$5,518.00**

PENCO shall work with SAIC to revise the plan and profile of one (1) sheet of the 12" Zone 3 Domestic Water Main plans to add a tee for connection to a proposed 12" Domestic Main that is currently being designed by Hunsaker on the west side of Jeffrey Road at Encore. Additional plan and profile and connection details will be required to extend a newly proposed 12" Domestic Water Main from the proposed tee location to the connection point provided by Hunsaker.

**3. Coordination and Meetings**

**\$24,764.00**

Since the Jeffrey Road project began in March 2011, PENCO and SAIC have attended approximately five (5) coordination meetings. We anticipate additional coordination and meetings with SAIC, IRWD, Hunsaker and ICDC on the plan and connection detail revisions as mentioned above. This task also includes the preparation of several exhibits required for coordination meetings.

4. Update Technical Specifications

\$5,085.00

PENCO shall work with SAIC to update current technical specifications to reflect the revisions indicated in tasks 1 thru 3.

**IRWD – CIP Work Subtotal \$82,326**

**Reimbursables \$820**

**GRAND TOTAL: \$83,146.00**

Our team is ready to start working on these Scope of Services described above upon receipt of your signed authorization. PENCO looks forward to working on successful completion of this project with ICDC. Should you have any questions regarding this document, please contact me at (949) 753-8111 or by email at [Cpineda@pencoeng.com](mailto:Cpineda@pencoeng.com) / [Gjurica@pencoeng.com](mailto:Gjurica@pencoeng.com) .

Sincerely,  
**PENCO Engineering Inc.**



Carlos A. Pineda, P.E., LEED A.P.  
Director of Engineering

Sincerely,  
**PENCO Engineering Inc.**



George A. Jurica, P.E.  
President



**PENCO Engineering, Inc.**  
Civil Engineering,  
Planning,  
Surveying

"Client Success Is Our Success"

## COMPENSATION FOR SERVICES

FOR: IRWD CIP WORK

JN #: 1790.19

DATE: 12/16/11

TASK	DEPT & PHASE	DESCRIPTION	P	SPM	TM	PM	SMM	SPE	PE	SR	DE	DE	AE	ET	PA	PRO	SPS	PS	SST	ST	SC2	SC2 w/GPS	SC1	SUB	TOT. HRS	TOTAL FEE
		SAIC	295	170	180	195	145	143	135	145	110	85	80	80	85	143	120	105	85	190	225	165				
		<b>RECYCLED WATER PLAN REDESIGN &amp; UPDATES</b>																								
		1.1. REVISE PLAN & PROFILE 16" ZONE B - 36" ZONE A	1.5			20				35					2										56.5	\$ 8,852.50
		1.2. REVISE PLAN & PROFILE 30" ZONE A & 36" ZONE CONNECTION AT ENCORE	1.5			30				50					2										83.5	\$ 12,687.50
		1.3. PREPARE DETAIL SHEETS FOR 36" VALVE & VAULT	0.5			10				30					1										41.5	\$ 6,192.50
		1.4. PREPARE EXHIBIT FOR VALVE VAULT LOCATION ALT.	0.5			2				5															7.5	\$ 1,157.50
		1.5. PREPARE NEW 16" ZONE B RECYCLED WATER ALIGN.	2			30				80					2										114	\$ 17,140.00
		DOMESTIC WATER PLAN REDESIGN & UPDATES	2			10				20					5										37	\$ 5,410.00
		MEETINGS AND COORDINATION	12			60				25					5										102	\$ 16,435.00
		UPDATE TECHNICAL SPECIFICATIONS	2			25									5										32	\$ 4,985.00
		<b>TOTALS</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>187</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>478</b>	

Sub-Total **\$72,870**  
Reimbursables **\$1,456**  
**TOTAL \$74,326**

TASK	DEPT & PHASE	DESCRIPTION	P	SPM	TM	PM	SMM	SPE	PE	SR	DE	DE	AE	ET	PA	PRO	SPS	PS	SST	ST	SC2	SC2 w/GPS	SC1	SUB	TOT. HRS	TOTAL FEE
001	F000	PENCO Engineering, Inc.	130	170	180	155	145	143	135	145	110	85	80	80	85	143	120	105	85	190	225	165				
		<b>PENCO COORDINATION AND MEETINGS</b>	<b>2</b>			<b>22</b>				<b>24</b>					<b>9.38</b>										<b>57.38</b>	<b>\$8,000</b>
		<b>TOTALS</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9.38</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57.38</b>	

Sub-Total **\$8,000**  
Reimbursables **\$820**

**GRAND TOTAL \$83,146**

B-5

# IRVINE RANCH WATER DISTRICT Exhibit "C"

## Expenditure Authorization

Project Name: PA9 JEFFREY RD 12" ZONE 3 - IRVINE BLVD TO PORTOLA

EPMS Project No: 10423 EA No: 3

Oracle Project No: 1519

Project Manager: CORTEZ, MALCOLM

Project Engineer: LEW, KELLY

Request Date: February 6, 2012

ID Split: Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
150	100.0	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$227,000
This Request:	\$38,100
<b>Total EA Requests:</b>	<b>\$265,100</b>
Previously Approved Budget:	\$1,755,600
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$1,755,600</b>
<b>Budget Remaining After This EA</b>	<b>\$1,490,500</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	25,000	25,000	0	25,000	25,000	9/06	9/12
ENGINEERING DESIGN - OUTSIDE	25,000	185,000	210,000	25,000	185,000	210,000	9/06	9/12
DESIGN STAFF FIELD SUPPORT	0	3,000	3,000	0	3,000	3,000	9/06	9/12
ENGINEERING - CA&I IRWD	0	0	0	0	25,000	25,000	5/13	6/14
ENGINEERING - CA&I OUTSIDE	0	0	0	(25,000)	100,000	75,000	5/13	6/14
CONSTRUCTION FIELD SUPPORT	0	0	0	0	5,000	5,000	5/13	6/14
CONSTRUCTION	0	0	0	0	1,250,000	1,250,000	5/13	6/14
LEGAL	0	3,000	3,000	0	3,000	3,000	9/06	6/14
Contingency - 10.00% Subtotal	\$13,100	\$11,000	\$24,100	\$0	\$159,600	\$159,600		
<b>Subtotal (Direct Costs)</b>	<b>\$38,100</b>	<b>\$227,000</b>	<b>\$265,100</b>	<b>\$0</b>	<b>\$1,755,600</b>	<b>\$1,755,600</b>		
Estimated G/A - 180.00% of direct labor*	(\$1,500)	\$51,900	\$50,400	\$0	\$104,400	\$104,400		
<b>Total</b>	<b>\$36,600</b>	<b>\$278,900</b>	<b>\$315,500</b>	<b>\$0</b>	<b>\$1,860,000</b>	<b>\$1,860,000</b>		
Direct Labor	\$0	\$28,000	\$28,000	\$0	\$58,000	\$58,000		

\*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:

*Kelly Lew*

2/6/12

Department Director:

*Kevin L. Burton*

2/9/12

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 \$1 million. Additional documents, if any, which are hereby incorporated by reference into this project is made under Treasury Regulation Section 1.150-2.

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

Project Name: PA9 JEFFREY RD PIPELINES 16" ZNB, 6" ZNC, 30" ZNA

EPMS Project No: 30422 EA No: 3

Oracle Project No: 1024

Project Manager: CORTEZ, MALCOLM

Project Engineer: LEW, KELLY

Request Date: February 6, 2012

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**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$305,700
This Request:	\$47,400
<b>Total EA Requests:</b>	<b>\$353,100</b>
Previously Approved Budget:	\$3,499,100
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$3,499,100</b>
<b>Budget Remaining After This EA</b>	<b>\$3,146,000</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	25,000	25,000	0	25,000	25,000	9/06	9/12
ENGINEERING DESIGN - OUTSIDE	30,000	260,000	290,000	30,000	270,000	300,000	9/06	9/12
DESIGN STAFF FIELD SUPPORT	0	3,000	3,000	0	3,000	3,000	9/06	9/12
ENGINEERING - CA&I IRWD	0	0	0	0	25,000	25,000	5/13	6/14
ENGINEERING - CA&I OUTSIDE	0	0	0	(30,000)	200,000	170,000	5/13	6/14
CONSTRUCTION FIELD SUPPORT	0	0	0	0	5,000	5,000	5/13	6/14
CONSTRUCTION	0	0	0	0	2,650,000	2,650,000	5/13	6/14
LEGAL	0	3,000	3,000	0	3,000	3,000	9/06	6/14
Contingency - 10.00% Subtotal	\$17,400	\$14,700	\$32,100	\$0	\$318,100	\$318,100		
<b>Subtotal (Direct Costs)</b>	<b>\$47,400</b>	<b>\$305,700</b>	<b>\$353,100</b>	<b>\$0</b>	<b>\$3,499,100</b>	<b>\$3,499,100</b>		
Estimated G/A - 180.00% of direct labor*	(\$1,500)	\$51,900	\$50,400	\$0	\$104,400	\$104,400		
<b>Total</b>	<b>\$45,900</b>	<b>\$357,600</b>	<b>\$403,500</b>	<b>\$0</b>	<b>\$3,603,500</b>	<b>\$3,603,500</b>		
Direct Labor	\$0	\$28,000	\$28,000	\$0	\$58,000	\$58,000		

\*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:

*Kelley Lew*

2/6/12

Department Director:

*Kevin L. Burton*

2/9/12

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 \$3,676,000. The above mentioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The project is made under Treasury Regulation Section 1.150-

February 27, 2012

Prepared and

Submitted by: K. Burton

Approved by: Paul Cook

## CONSENT CALENDAR

### EMERGENCY DOMESTIC WATER INTERCONNECTION AGREEMENT WITH SANTA MARGARITA WATER DISTRICT

#### SUMMARY:

IRWD, as the successor to the Los Alisos Water District (LAWD), owns capacity in certain Santa Margarita Water District (SMWD) pipelines, the Alicia Reservoir A, and an emergency intertie. The facilities are no longer utilized by IRWD. SMWD has agreed to accept the IRWD capacity at no capital cost and assume the operation and maintenance responsibility. The emergency intertie will remain a joint facility for the benefit to both IRWD and SMWD. Staff recommends that the Board:

- Authorize the General Manager to execute an Agreement with SMWD that terminates the 1979 capacity Agreement and provides for an emergency domestic water interconnect; and
- Adopt a resolution authorizing the District officers to execute a Quitclaim Deed of IRWD's capacity ownership in various pipelines and the Alicia Reservoir A to SMWD.

#### BACKGROUND:

In April 1979 LAWD and SMWD entered into an agreement where LAWD acquired capacity in certain pipelines, the Alicia Reservoir A, and an emergency intertie. As the successor to LAWD, IRWD now owns the capacity in the SMWD facilities. Per the 1979 Agreement, IRWD's capacity is 4 cfs through approximately 18,150 feet of pipelines ranging from 20-inch to 42-inch, 25% reservoir capacity (1 MG), and 50% emergency intertie capacity. The pipeline, reservoir and intertie are managed and operated by SMWD. The 1979 Agreement is attached as Exhibit "A".

In September 2009 SMWD performed a routine dive inspection of Alicia Reservoir A which revealed that a significant number of rust zones had developed on the walls and floor of the reservoir. The numerous corrosion locations and the age of the interior coal tar enamel lining indicated that the protection system had reached the end of its useful service life. To prevent additional interior corrosion, SMWD's consultant recommended full removal and replacement of the lining within two to five years. SMWD notified IRWD of the proposed rehabilitation project and IRWD's estimated cost of \$150,000.

#### IRWD Water System Evaluation:

Since the pipelines, reservoir and intertie capacity have not been utilized by IRWD since the consolidation with LAWD, staff performed a need assessment of the facilities as part of the 2010 Lake Forest Sub Area Master Plan (SAMP). Water system modeling demonstrated that the Alicia Reservoir capacity was no longer needed due to the Foothill Ranch connections within the IRWD system.

Due to the age of pipelines and reservoir, increasing maintenance costs, lack of IRWD use for many years, and the SAMP modeling results, staff approached SMWD to determine if SMWD would accept the IRWD pipelines and reservoir capacity at no capital cost and assume the operation and maintenance responsibility, including IRWD's share of the upcoming reservoir rehabilitation. IRWD also proposed to keep the emergency intertie for the joint benefit to both IRWD and SMWD. SMWD agreed to the terms proposed by IRWD. An Agreement, attached as Exhibit "B", was prepared by IRWD to formalize the capacity quitclaim in the various pipelines and the Alicia Reservoir A. SMWD's Board approved the Agreement on January 13, 2012. A resolution authorizing execution of the Quitclaim Deed for the various pipelines and the reservoir is attached as Exhibit "C".

FISCAL IMPACTS:

LAWD's capital cost in 1979 for capacity in the pipelines, reservoir and intertie was \$559,845. The facilities are now approximately 33 years old with a depreciated value of approximately \$98,000. IRWD will avoid a cost of approximately \$150,000 by quitclaiming the facilities to SMWD.

ENVIRONMENTAL COMPLIANCE:

This activity is not subject to the California Environmental Quality Act (CEQA) and does not require CEQA compliance. CEQA defines a project as any activity that may cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on February 23, 2012.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT WITH SANTA MARGARITA WATER DISTRICT THAT TERMINATES THE 1979 CAPACITY AGREEMENT AND PROVIDES FOR AN EMERGENCY DOMESTIC WATER INTERCONNECT; AUTHORIZE THE DISTRICT OFFICERS TO EXECUTE A QUITCLAIM DEED TO TRANSFER IRWD'S CAPACITY OWNERSHIP IN VARIOUS PIPELINES AND THE ALICIA RESERVOIR A TO SANTA MARGARITA WATER DISTRICT; AND ADOPT THE FOLLOWING RESOLUTION BY TITLE.

RESOLUTION NO. 2012 -

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA,  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
SANTA MARGARITA WATER DISTRICT



LIST OF EXHIBITS:

- Exhibit "A" – 1979 Agreement between SMWD and LAWD for Acquisition of Capacity
- Exhibit "B" – 2012 Agreement between SMWD and IRWD for Emergency Domestic Water Interconnection
- Exhibit "C" – Resolution approving execution of the Quitclaim Deed to Santa Margarita Water District

## EXHIBIT "A"

AGREEMENT FOR THE ACQUISITION OF CAPACITY IN CERTAIN  
PIPELINES OF THE SANTA MARGARITA WATER DISTRICT, THE  
CONSTRUCTION AND JOINT OWNERSHIP OF CERTAIN PIPELINES  
AND A RESERVOIR, AND FOR THE USE, OPERATION AND  
MAINTENANCE OF SAID FACILITIES

THIS AGREEMENT made and entered into as of this 16th day of April, 1979 by and between the LOS ALISOS WATER DISTRICT (hereinafter referred to as "Los Alisos") and the SANTA MARGARITA WATER DISTRICT (hereinafter referred to as "Santa Margarita"), both of which are formed under and exist pursuant to the California Water District Law of the State of California.

### R E C I T A L S:

1. Los Alisos and Santa Margarita desire to provide water service by joint participation to certain zones within their respective districts (hereinafter referred to as "Zone 3"), which zones are at substantially the same elevation, and additionally to provide an emergency intertie between said districts.
2. Santa Margarita has constructed certain pipelines for the benefit of its Zone 3 and has plans for the construction of additional pipelines and a reservoir to service its Zone 3.
3. Los Alisos and Santa Margarita find that it is in the best interests of the lands and inhabitants within their respective districts if Los Alisos acquires capacity in the pipelines constructed for the benefit of Santa Margarita's

Zone 3 and to participate in the construction of new pipelines and a reservoir planned to be constructed by Santa Margarita for its Zone 3 as said Facilities are described in Exhibit A and shown on Exhibit B, attached hereto and made a part hereof, (hereinafter the "Facilities"), so that after the acquisition of capacity hereinbefore referred to and the construction of the new facilities, said Zone 3 system can be maintained and operated for the benefit of the two districts.

4. Santa Margarita has taken proceedings as provided in the California Environmental Quality Act relating to the pipelines heretofore constructed and Los Alisos has included certain Zone 3 facilities in its Plan of Works and has taken proceedings as provided in the California Environmental Quality Act relating to said Plan of Works.

NOW, THEREFORE, in consideration of the mutual covenants and promises between the parties hereinafter set forth the parties to this Agreement agree as follows:

SECTION 1. Existing Transmission Pipelines

Los Alisos agrees to purchase from Santa Margarita capacity in those pipelines described in Exhibit "A" designated "Facility Nos. 3.9, 3.7D, 3.7C and 3.4", and Santa Margarita agrees to sell said capacity to Los Alisos. The capacity to be acquired by Los Alisos is set forth in Column 5 of Exhibit "A" and the amount to be paid by Los Alisos to Santa Margarita

is set forth in Column 15 of Exhibit "A". Los Alisos agrees to pay said amount within ninety (90) days of the date of the execution of this Agreement.

SECTION 2.      Facility No. 3.24(b)

Santa Margarita has received bids for the construction of Facility 3.24(b). The low bidder for said work is Peter C. David and the amount of the construction contract is set forth in Column 9 of Exhibit "A". The capacity to be acquired by Los Alisos is set forth in Column 5 of said Exhibit "A". Santa Margarita has awarded the contract to Peter C. David and Los Alisos agrees to pay Santa Margarita fifty percent (50%) of all payments to be made by Santa Margarita pursuant to said contract plus fifteen percent (15%) of said payments made by Los Alisos for engineering and administrative expenses incurred and to be incurred by Santa Margarita. Bills for progress payments submitted by Santa Margarita on or before the 25th of the month will be paid by Los Alisos by the Friday following the second Wednesday of the next month. Los Alisos shall pay its pro rata share of any change orders authorized by Santa Margarita and approved by Los Alisos. Any dispute unresolved by the parties regarding change orders shall be resolved by arbitration in the same manner as provided in Section 6 hereof.

SECTION 3.      New Construction

Santa Margarita agrees to complete the construction of

Facility Nos. 3.22, 3.25 and 3.19 on or before two years from the date of this Agreement. Santa Margarita agrees to take competitive bids for the construction of each of said facilities and to present said bids to Los Alisos for approval by Los Alisos prior to the award of any contract by Santa Margarita. Any dispute unresolved by the parties regarding the award of any contract shall be resolved by arbitration in the same manner as provided in Section 6 hereof. Following the award of each construction contract Los Alisos shall pay to Santa Margarita that percentage of the construction contract, including change orders, as shown in Column 7 of said Exhibit "A", plus fifteen percent (15%) thereof for engineering and administrative expenses. Bills for progress payments submitted by Santa Margarita on or before the 25th of the month will be paid by Los Alisos by the Friday following the second Wednesday of the next month.

SECTION 4.      Ownership of the Facilities

Upon the payment of the respective percentages of the cost of each Facility as shown on Exhibit "A", Los Alisos and Santa Margarita shall jointly own in perpetuity the capacity in the Facilities as determined from Columns 6 and 7 of Exhibit "A". Any increase or decrease in the design capacities shall be shares by the parties in proportion to their design capacities.

SECTION 5.      Option to Acquire Initial Capacity  
In Facility No. 3.19

As hereinbefore provided, Los Alisos is acquiring 1 mg capacity in Facility No. 3.19. Los Alisos and Santa Margarita agree that Los Alisos shall have the option for a period of one year from the date of execution of this Agreement to acquire an additional 1 mg of capacity in Facility 3.19. Los Alisos shall give Santa Margarita thirty (30) days prior written notice that it intends to exercise the option to acquire the additional 1 mg. Los Alisos shall acquire said additional 1 mg capacity upon the payment to Santa Margarita of the additional pro rata cost for said capacity plus interest on said pro rata amount at the rate of eight percent (8%) per annum from the date that Facility No. 3.19 is completed by Santa Margarita to the date that said option is exercised. Los Alisos may give Santa Margarita written notice at any time on or before the anniversary date of this Agreement.

SECTION 6.      Maintenance and Operation

The Facilities shall be maintained and operated by Santa Margarita for the benefit of Los Alisos and Santa Margarita, including its operation as an emergency intertie facility commencing on the date of completion by Los Alisos of its Zone III Phase IV Transmission Main from Santa Margarita's 3.24(b)20" Facility to Los Alisos Zone III pump station. All maintenance and operation costs shall be shared on the basis of the capacity that each entity has in each Facility.

For the purposes of this Agreement, all references to "maintenance and operation costs" shall include those costs that are attributable to the protection and preservation of the Facilities, such as the expense of mending or replacing a broken portion of the line, the expense of cathodic protection, the expense of restoring defective valves to reasonable operating condition, or (in the event that repair is not economically feasible) the replacement of same, the expense of regrading portions of the easement after flooding or other acts of God, to restore eroded cover or remove excessive material, as well as the more direct costs of providing service personnel and related facilities necessary to insure continued and reasonable performance of the Facilities. Any obligation imposed on a party by any other public entity for the payment of taxes, assessments or charges because of their interest in the Facilities shall be paid by said party. Any water delivered by one party to the other party due to an emergency shall be replaced by the receiving party delivering a like amount of water to the supplying party within a reasonable time after the emergency ceases.

Bills for progress payments submitted by Santa Margarita on or before the 25th of the month will be paid by Los Alisos by the Friday following the second Wednesday of the next month. Any dispute unresolved by the parties as to the necessity for a maintenance and operation expenditure or the amount of said costs shall be settled by arbitration. Los

Alisos and Santa Margarita shall select an engineer to be the arbitrator. In the event that Los Alisos and Santa Margarita cannot agree upon an engineer to arbitrate the dispute, each entity shall appoint an engineer to act as arbitrator and the two engineers so appointed shall appoint a third engineer to arbitrate the dispute. The American Arbitration Association rules shall be followed for any arbitration conducted pursuant to this Agreement.

The parties recognize that the precise method of operating the Facilities for the mutual benefit of Los Alisos and Santa Margarita cannot be ascertained until the Facilities have been constructed and operated for a period of time. The parties agree that within eighteen (18) months of the execution of this Agreement the parties shall execute a supplemental agreement which will set forth the operating procedures. Until said supplemental agreement is executed Santa Margarita shall have the sole authority to operate the Facilities in the manner it deems to be in the best interest of both districts.

SECTION 7.      Notice

All notices, demands and requests which may be or are required to be given or made by any party to the other party shall be in writing. All notices, demands and requests by Los Alisos to Santa Margarita shall be sent by United States registered mail, postage prepaid, addressed to Santa Margarita as follows:



SANTA MARGARITA WATER DISTRICT  
25571 Marguerite Parkway  
Mission Viejo, California 92675

or to such other addressee and at such other place as Santa Margarita may from time to time designate in written notice to Los Alisos.

All notices, demands, requests and payments by Santa Margarita to Los Alisos shall be sent by United States registered mail, postage prepaid, addressed to Los Alisos as follows:

LOS ALISOS WATER DISTRICT  
22312 Muirlands Boulevard  
Post Office Box 595  
El Toro, California 92630

or to such other addressee and at such other place as Los Alisos may from time to time designate in written notice to Santa Margarita. Notices, demands, and requests which shall be served upon the parties in the manner aforesaid shall be deemed sufficiently served or given for all purposes hereunder at the time such notice, demand or request is thus mailed.

SECTION 8.      Cooperation

Santa Margarita and Los Alisos agree that each party shall cooperate with the other in carrying out all of the terms of this Agreement, including joinder in any request for County of Orange construction permits, road encroachment permits, acquisition or any necessary easements or rights of

way, and compliance with all other State and County Regulations necessary for the accomplishment of the purposes of this Agreement.

SECTION 9. Successors and Assigns

The interests of the parties in the Facilities shall not be assigned without the consent of the other party.

SECTION 10. Districts Securities Division

This Agreement shall not be effective, except as to the provision hereinafter set forth, until it is approved by the Office of the State Treasurer, Districts Securities Division, or until the parties are informed by said office that such approval is not required.

As it is uncertain whether this Agreement must be approved by the Office of the State Treasurer, Districts Securities Division, Los Alisos and Santa Margarita agree that should said office disapprove of the Agreement as it relates to the acquisition of capacity in Santa Margarita's existing facilities and the future expenditures by Los Alisos, Los Alisos shall nevertheless be obligated to Santa Margarita to pay the cost of oversizing Facility 3.24(b) from a 16" to a 20" pipeline.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first hereinabove

written.

LOS ALISOS WATER DISTRICT

By *[Signature]*  
President

By *E T Mc Jadden*  
Secretary

SANTA MARGARITA WATER DISTRICT

By *Thomas C. [Signature]*  
President

By *Fred [Signature]*  
Secretary

EXHIBIT "A"

PROPOSED SMWD - LAWD JOINT ZONE III SYSTEM

ESTIMATED COST ALLOCATION FOR LOS ALISOS WATER DISTRICT

Column 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Fac. No.	Description	Install. Date	Length	Proposed LAWD Capacity	Total Capacity	% LAWD Capacity Total Capacity	Est. 1978 Unit Price	Est. 1978 Const. Cost	Est. Cost Escal <sup>(1)</sup>	Engr. Admin. & Conting. <sup>(2)</sup>	Total Est. Project Cost	Less <sup>(3)</sup> Deprec.	Est. Current Value	Est. Prorata Cost for LAWD
3.24(b)	20" El Toro Rd to Antonio Rd	1978	3,800'	4 cfs	8 cfs	50.0%	\$ (4)	\$252,090	\$ 0	\$ 37,800	\$289,890	\$ 0	\$289,890	\$144,945
3.9	30" Antonio Rd, Los Alisos to Marguerite Pkwy	1977	1,600'	4 cfs	27 cfs	14.8%	\$ (5)	\$ 94,900	\$ 0	\$ 14,300	\$109,200	\$ 1,900	\$107,300	\$ 15,900
3.7D	30" Marguerite Pkwy Antonio Rd to O'Neill Rd	1977	3,400'	4 cfs	27 cfs	14.8%	\$ (5)	\$159,700	\$ 0	\$ 24,000	\$183,700	\$ 3,200	\$180,500	\$ 26,700
3.7C	20" O'Neill Rd, Marguerite Pkwy to Melinda	1976	2,350'	4 cfs	10 cfs	40.0%	\$ (5)	\$ 97,900	\$ 0	\$ 14,700	\$112,600	\$ 3,900	\$108,700	\$ 43,500
3.4	30" O'Neill Rd, Melinda to Alicia Pkwy	1978	3,400'	4 cfs	27 cfs	14.8%	\$ (5)	\$195,700	\$ 0	\$ 29,400	\$225,100	\$ 0	\$225,100	\$ 33,300
3.22	42" Alicia Pkwy, O'Neill to Nijar	1979	1,600'	4 cfs	57 cfs	7.0%	\$137/ft	\$219,200	\$21,900	\$ 60,300	\$301,400	\$ 0	\$301,400	\$ 21,100
3.25	24" Connection to Zone III Reservoir	1979	2,000'	4 cfs	15 cfs	26.7%	\$ 70/ft	\$140,000	\$14,000	\$ 38,500	\$192,500	\$ 0	\$192,500	\$ 51,400
3.19	4 MG Zone III Reservoir	1979	---	1 MG	4 MG	25.0%	\$.137/gal.	\$662,000 <sup>(6)</sup>	\$51,400	\$178,400	\$891,800	\$ 0	\$891,800	\$223,000

TOTAL ESTIMATED COST FOR LAWD PRORATA CAPACITY \$559,845

- (1) Cost escalation assumed at 10% per year, compounded for future installations
- (2) Engr. & Administration estimated @ 15%; an allowance of 10% is included for contingencies on future projects
- (3) Straight line depreciation based on 50 year life
- (4) Based on bids received November 15, 1978
- (5) 1978 replacement cost based on contract prices updated to June, 1978 based on ENR const. cost indices for Los Angeles area

Fac. No.	Contract Price	ENR Ratio	Est. 1978 Replacement Cost
3.9	\$ 87,058.20	3209/2941	\$ 94,900
3.7D	\$146,519.00	3209/2941	\$159,700
3.7C	\$ 80,884.37	3209/2649	\$ 97,900
3.4	\$195,718.60	3209/3209	\$195,700

- (6) Includes site grading costs estimated @ \$147,700 based on bids received December 18, 1978; estimated cost escalation excludes site grading costs.

Revised 1-24-79

A-11

# I-W SYSTEM - ZONE 3 (HGL = 1050)

- PUMP STATION
- STORAGE TANK

5N1851B



santa margarita water district

Figure No.

EXHIBIT B

# EXHIBIT "B"

## AGREEMENT BETWEEN SANTA MARGARITA WATER DISTRICT AND IRVINE RANCH WATER DISTRICT TERMINATING 1979 AGREEMENT AND PROVIDING FOR DOMESTIC WATER EMERGENCY INTERCONNECTION

This AGREEMENT [TERMINATING 1979 AGREEMENT AND] PROVIDING FOR DOMESTIC WATER EMERGENCY INTERCONNECTION ("Agreement") is entered into the \_\_\_\_ day of \_\_\_\_\_, 2012, by and between the SANTA MARGARITA WATER DISTRICT ("SMWD") and the IRVINE RANCH WATER DISTRICT ("IRWD"), each a California water district formed and existing under Section 34000 *et seq.* of the California Water Code (each, a "Party" and together, the "Parties").

### RECITALS

A. SMWD and the Los Alisos Water District entered into that certain agreement entitled, "Agreement for the Acquisition of Capacity in Certain Pipelines of the Santa Margarita Water District, the Construction and Joint Ownership of Certain Pipelines and a Reservoir, and for the Use, Operation and Maintenance of Said Facilities," dated as of April 16, 1979 (the "1979 Agreement"). The former Los Alisos Water District and IRWD were consolidated on December 31, 2000, with IRWD as the consolidated successor district, and as a result IRWD is the successor in interest to LAWD's rights and obligations under the 1979 Agreement.

B. IRWD no longer needs its capacity interests in the Facilities (as that term is defined in the 1979 Agreement) and desires to transfer and relinquish them to SMWD, except for the emergency intertie referred to in Section 6 of the 1979 Agreement.

C. Both Parties desire to retain joint ownership and of the emergency intertie and continue to operate and maintain it to serve as a two-way emergency interconnection that can be operated by either Party for emergency purposes.

D. The Parties desire to terminate the 1979 Agreement.

### AGREEMENT

1. Termination of 1979 Agreement. The 1979 Agreement is hereby terminated in its entirety. Except as provided hereinafter in this Agreement with respect to the emergency interconnection, IRWD hereby transfers, quitclaims and relinquishes to SMWD all of IRWD's interests in the Facilities, SMWD hereby accepts the same, and the Parties agree that IRWD shall have no further rights and obligations with respect to the Facilities.

2. Emergency Interconnection. The emergency interconnection located on El Toro Road between Normandale Drive and Glenmeadows Drive, as depicted on Exhibit "A" attached hereto and incorporated herein by this reference shall be jointly used as provided herein for the mutual benefit of the Parties. The interconnection shall be defined to consist of the meters, valves, vault

and other appurtenances, together with the pipeline extending from either side of the vault to the adjacent isolation valves.

3. Ownership, Maintenance and Operation; Vault Access. The Parties shall jointly own the emergency interconnection facilities and the capacity therein. SMWD shall maintain the emergency interconnection as needed and periodically invoice IRWD for a one-half share of maintenance costs, and IRWD agrees to pay each such invoice within 30 days of receipt. Each Party shall have all necessary rights of access to the interconnection vault for the purposes of reading the meters and for the purpose of opening, using and closing the interconnection as provided in this Agreement.

4. Water Pressure, Quality and Flow Requirements. The interconnection is designed to supply a flow of four (4) cubic feet per second, provided, however, that neither Party guarantees any specified water flow rate, quantity, pressure, or quality of the water that may be delivered from its system to the other Party's system through the interconnection for any purpose. Each Party acknowledges and agrees to the foregoing limitations and agrees to use the interconnection for temporary supply purposes, only, in the event and to the extent it cannot meet demands from its own sources.

5. Operational Limitations. The provision of a temporary water supply by either Party to the other through the interconnection is subject to availability and is conditioned upon the supplying Party's ability to satisfy all of its obligations for the provision of water service to its own customers. In the event a Party determines, in its discretion, that any of its operations may reduce its ability to provide the temporary supply, the Party will, when practical, notify the other Party of said operations, but will incur no obligation or liability in respect of such reduced ability or any defect, delay or failure in giving such notice. Each Party acknowledges and agrees that the provision of a temporary supply by the supplying Party may be limited or affected by the supplying Party's operations and services to its own customers, including, but not limited to, said other Party's issuance of will serve letters and granting of new service connections. Each Party further acknowledges and agrees that the provision of a temporary supply by the supplying Party may also be limited or affected by the occurrence of unanticipated outages or failures sustained by the supplying Party, regional outages or failures, or other factors beyond the supplying Party's control. If determined by a Party to be necessary in an emergency, the Party may reduce supply through or shut off the interconnection without prior notice to the other Party, but in such event the Party making such reduction or shut off will notify the other Party as soon as practical.

6. No Dedication of Capacity. Each Party acknowledges and agrees that this Agreement provides only for temporary transmission of water through the interconnection, and nothing herein creates any implied dedication of any facilities or capacity in facilities, or any other right or entitlement in or to water or capacity in the other Party's water system.

7. Term and Termination of Agreement. Either Party may terminate this Agreement by giving the other Party one hundred eighty (180) days' prior written notice. This Agreement shall continue in effect until either Party exercises such right to terminate. Upon termination, the interconnection shall be removed or otherwise taken out of service, with the cost to be shared

equally by the Parties.

8. Metering. The interconnection meters shall be used for the purpose of measurement, invoicing and payment of water supplied through the interconnection.

9. Invoicing and Payment. The Party supplying any water through the interconnection shall invoice the other Party for all water metered through the interconnection, on a monthly basis. The water supplied will be charged at the prevailing rate paid by the supplying Party for full-service Metropolitan Water District treated water or equivalent, plus any incremental increase in readiness-to-serve charges paid by the supplying Party and attributable to the water supplied. Each invoiced amount shall be due and payable within thirty (30) days of mailing of the invoice. In lieu of payment as specified above, with the mutual consent of the Parties any water supplied to a Party through the interconnection may be repaid by the return or delivery of a like quantity of water to the supplying Party, in a manner and location(s) as the Parties shall agree.

10. Indemnification.

10.1. Water Supply. Each Party shall indemnify and hold the other Party harmless from and against any and all claims arising from said other Party's inability or failure to provide the temporary water supply or arising from any condition of flow, pressure or quality of the water supplied. Said indemnification and hold-harmless obligations shall include, without limitation, all costs and attorneys' fees incurred in the defense of any claim or any action or proceeding brought against the indemnified Party. For claims *other than* as described in this paragraph 10.1, the following paragraphs shall apply.

10.2. Indemnification by IRWD. IRWD shall indemnify, defend and hold SMWD, its officers, agents, employees harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen out of the performance of this Agreement, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of SMWD, its officers, agents or employees or by any act or omission for which SMWD, its officers, agents or employees are liable without fault.

10.3. Indemnification by SMWD. SMWD shall indemnify, defend and hold IRWD, its officers, agents, employees harmless from any expense, liability or claim for death, injury, loss, damage or expense to persons or property which may arise or is claimed to have arisen out of the performance of this Agreement, save and except to the extent such expense, liability or claim is proximately caused in whole or in part by any act, omission, or negligence of IRWD, its officers, agents or employees or by any act or omission for which IRWD, its officers, agents or employees are liable without fault.

11. Amendment. This Agreement may be amended only by a writing executed by both parties.

12. Notice. Any notice or other document and all billings and payments required or



permitted to be given by either party hereto to the other party shall be deemed received upon delivery in person to the recipient or within two (2) business days after the date of deposit in the United States mail in the State of California, with postage prepaid, and addressed to the party for whom intended at the following address:

If to SMWD: Santa Margarita Water District  
26111 Antonio Parkway  
Rancho Santa Margarita, California 92688  
Attention: General Manager

If to IRWD: Irvine Ranch Water District  
P.O. Box 57000  
15600 Sand Canyon Avenue  
Irvine, California 92619-7000  
Attention: General Manager

13. Severability. If any portion, provision or part of this Agreement is held, determined or adjudicated to be invalid, unenforceable, or void for any reason whatsoever, each such portion, provision, or part shall be severed from the remaining portions, provisions, or parts of this Agreement, and shall not affect the validity or enforceability of such remaining portions, provisions or parts.

14. Entire Agreement. This Agreement contains the entire understanding and agreement between the parties with respect to the compromise set forth herein. No other representations, covenants, undertakings or other prior or contemporaneous oral agreements respecting such matters which are not specifically incorporated herein shall be deemed in any way to exist or bind either of the parties. The parties, and each of them, acknowledge that they have not executed this Agreement in reliance on any such promises, representations, or warranties.

15. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Parties.

16. No Third Party Beneficiaries. No person or entity other than SMWD and IRWD shall be deemed to be a third party beneficiary hereof, and nothing in this Agreement, either express or implied, is intended to confer upon any person or entity, other than the parties and their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

17. Authority. The representative of each party signing this Agreement warrants and represents that he/she has the full authority to execute the Agreement on behalf of the party on whose signature he/she so executes and he/she is acting within the express scope of such authority.

IRVINE RANCH WATER DISTRICT

SANTA MARGARITA WATER DISTRICT

By \_\_\_\_\_  
Paul Cook  
General Manager

By \_\_\_\_\_  
John Schatz  
General Manager

By \_\_\_\_\_  
Leslie Bonkowski  
Secretary

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

Approved as to form:

Approved as to form:

By: \_\_\_\_\_  
IRWD Legal Counsel

By: \_\_\_\_\_  
SMWD Legal Counsel

# EXHIBIT A

## SMWD / IRWD Emergency Interconnection Agreement

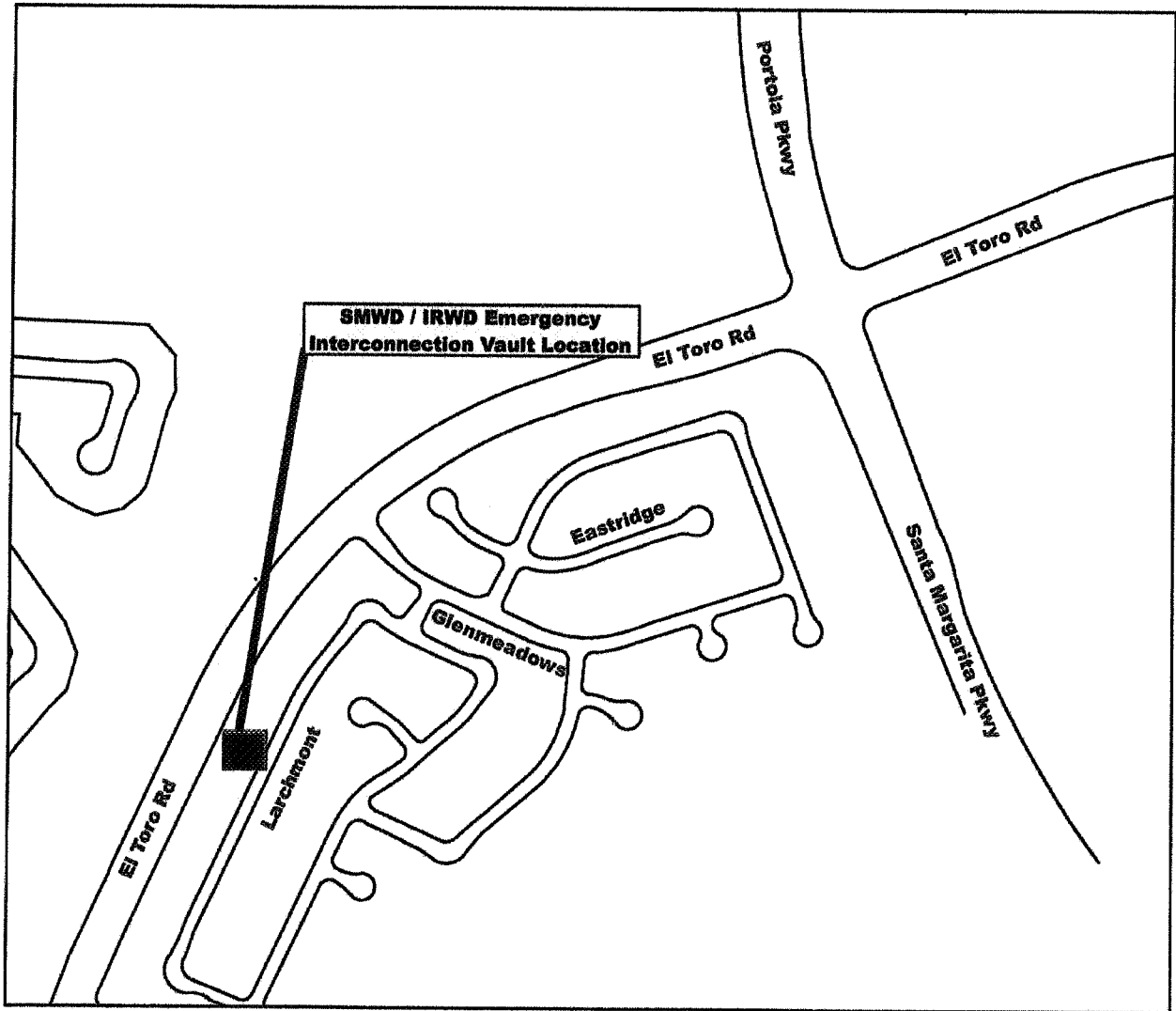


EXHIBIT "C"

RESOLUTION NO. 2012 -

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
SANTA MARGARITA WATER DISTRICT

WHEREAS, Santa Margarita Water District ("SMWD") and Los Alisos Water District ("LAWD") entered into that certain agreement entitled, "Agreement for the Acquisition of Capacity in Certain Pipelines of the Santa Margarita Water District, the Construction and Joint Ownership of Certain Pipelines and a Reservoir, and for the Use, Operation and Maintenance of Said Facilities," dated as of April 16, 1979 (the "1979 Agreement"); and

WHEREAS, the former LAWD and Irvine Ranch Water District ("IRWD") were consolidated on December 31, 2000, with IRWD as the consolidated successor district, and as a result IRWD is the successor in interest to LAWD's rights and obligations under the 1979 Agreement; and

WHEREAS, IRWD no longer needs its capacity interests in the Facilities (as that term is defined in the 1979 Agreement) and desires to transfer and relinquish them to SMWD, except for the emergency intertie referred to in Section 6 of the 1979 Agreement with the execution and recordation of a quitclaim deed; and

WHEREAS, IRWD and SMWD have entered into a new agreement terminating the 1979 Agreement in its entirety, and providing that except for the emergency intertie, IRWD transfers, quitclaims and relinquishes to SMWD all of IRWD's interests in the Facilities, and SMWD accepts the same; and

WHEREAS the purpose of the quitclaim is to implement the quitclaim, transfer and relinquishment all of IRWD's interests in the Facilities except for the emergency intertie referred to above; and

WHEREAS, the proposed quitclaim has been presented to this Board of Directors, copy of which is attached hereto as Exhibit "A".

NOW, THEREFORE, BE IT RESOLVED, the Quitclaim Deed to Santa Margarita Water District, a California Water District, herein described and hereby is approved and execution by the District's officers is authorized.

ADOPTED, SIGNED and APPROVED this 27th day of February, 2012.

---

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:  
BOWIE, ARNESON, WILES & GIANNONE  
IRWD Legal Counsel

By \_\_\_\_\_

**RECORDING REQUESTED BY AND  
WHEN RECORDED RETURN TO:**

**EXHIBIT "A"**

Ray Thatcher, District R/W Agent  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
P.O. Box 57000  
Irvine CA, 92619-7000

ASSESSOR PARCEL NO. (S):  
\_\_\_\_\_

(Space Above This Line For Recorder's Use)

IRWD Res. No. \_\_\_\_\_

This document is recorded at the request of and for the benefit of Irvine Ranch Water District and is therefore exempt from the payment of the recording fee pursuant to Government Code Section 6103 and from the payment of the documentary transfer tax pursuant to Revenue and Taxation Code Section 11922.

## QUITCLAIM DEED

**FOR VALUABLE CONSIDERATION**, receipt of which is hereby acknowledged, IRVINE RANCH WATER DISTRICT, a California Water District organized under and existing pursuant to Section 34000 *et seq.* of the California Water Code and Consolidated Successor District to Los Alisos Water District, does hereby REMISE, RELEASE, AND FOREVER QUITCLAIM to SANTA MARGARITA WATER DISTRICT, a California Water District organized under and existing pursuant to Section 34000 *et seq.* of the California Water Code,

all RIGHT, TITLE and INTEREST in the real property located in the City of Irvine, County of Orange, State of California, as more particularly described in Exhibit "A", attached hereto and by this reference, made a part hereof.

The rights hereby quitclaimed are not necessary or useful in the performance of the duties of said Irvine Ranch Water District.

Dated: \_\_\_\_\_, 2012

IRVINE RANCH WATER DISTRICT,  
a California Water District

By: \_\_\_\_\_  
Name: Mary Aileen Matheis  
Title: President

By: \_\_\_\_\_  
Name: Leslie Bonkowski  
Title: District Secretary

MAIL TAX STATEMENTS TO THE ABOVE ADDRESS

STATE OF CALIFORNIA    )  
  )  
COUNTY OF ORANGE    )

On \_\_\_\_\_, 2012, before me, \_\_\_\_\_, a Notary Public in and for said State, personally appeared Mary Aileen Matheis and Leslie Bonkowski, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (SEAL)  
  Notary Public in and for said State

Exhibit "A"

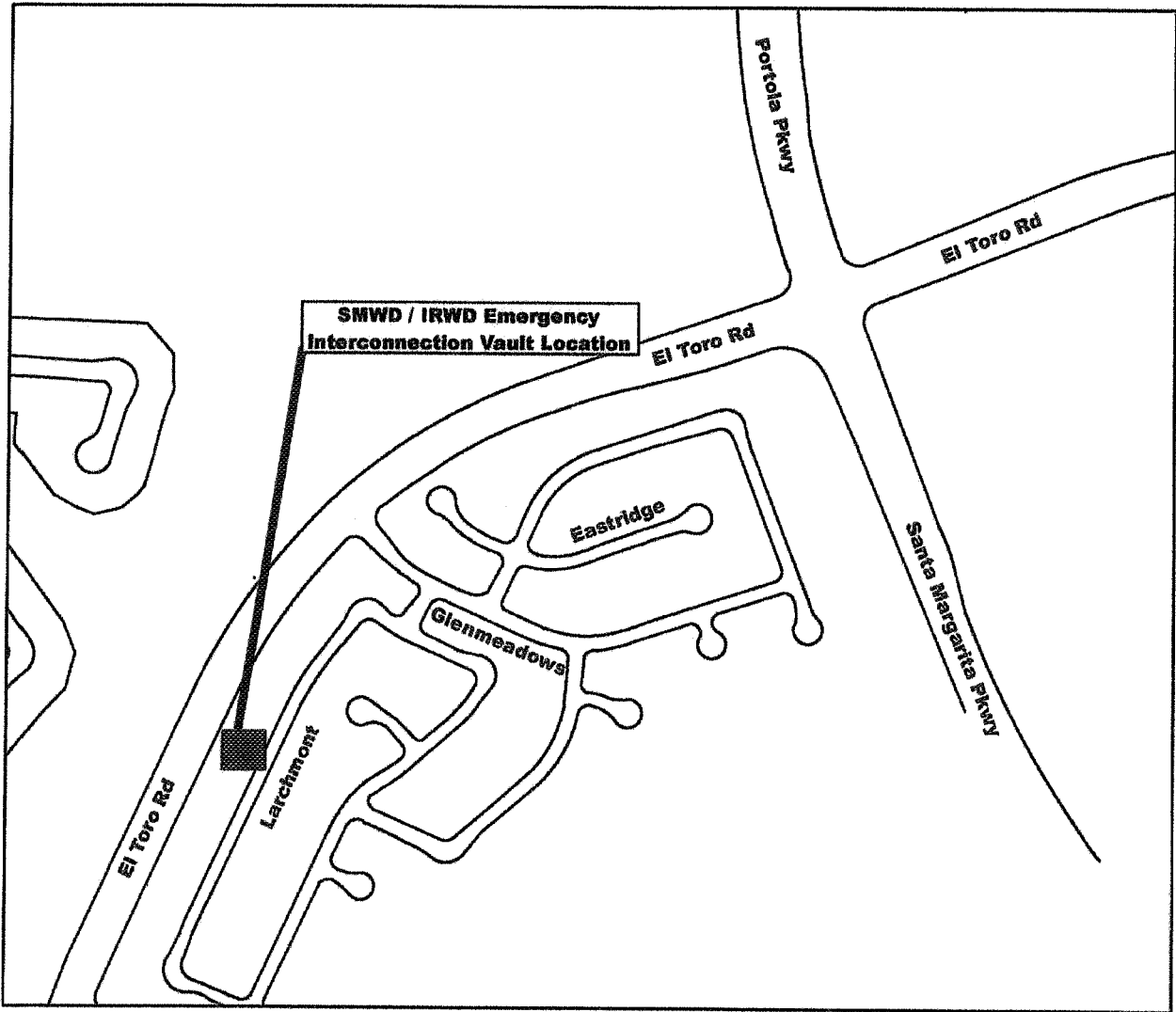
All that real property located in the cities of Lake Forest and Mission Viejo, County of Orange, State of California, more particularly described as the "Facilities" in that certain Agreement for the Acquisition of Capacity in Certain Pipelines of the Santa Margarita Water District, The Construction and Joint Ownership of Certain Pipelines and a Reservoir. And for the Use, Operation and Maintenance of Said Facilities, Dated April 16, 1979. Said Facilities are described below (diameters, lengths, street intersections, volumes, capacities and other descriptions are approximate).

Fac. No.	Description	Install Date	Length	Proposed LAWD Capacity	Total Capacity	% LAWD Capacity Total Capacity
3.24(b)	20" El Toro Rd. to Antonio Rd.	1978	3,800'	4 cfs	8 cfs	50.0%
3.9	30" Antonio Rd., Los Allisos to Marguerite Pkwy	1977	1,600'	4 cfs	27 cfs	14.8%
3.7B	30" Marguerite Pkwy, Antonio Rd. to O'Neill Rd	1977	3,400'	4 cfs	27 cfs	14.8%
3.7C	20" O'Neill Rd., Marguerite Pkwy. To Melinda	1976	2,350'	4 cfs	10 cfs	40.0%
3.4	30" O'Neill Rd, Melinda to Alicia Pkwy.	1978	3,400'	4 cfs	27 cfs	14.8%
3.22	42" Alicia Pkwy., O'Neill Rd. to Nijar	1979	1,600'	4 cfs	57 cfs	7.0%
3.25	24" Connection to Zone III Reservoir	1979	2,000'	4 cfs	15 cfs	26.7%
3.19	4 MG Zone III Reservoir (Alicia Res.)	1979	-----	1 MG	4 MG	25.0%

**EXCEPTING THEREFROM** the emergency interconnection located on El Toro Road between Normandale Drive and Glenmeadows Drive, as depicted on Exhibit "B" attached hereto and incorporated herein by this reference, which interconnection shall be defined to consist of the meters, valves, vault and other appurtenances, together with the pipeline extending from either side of the vault to the adjacent isolation valves.



# SMWD / IRWD Emergency Interconnection Agreement



February 27, 2012 <sup>PS</sup> JM RKM  
Prepared by: J. McGehee/R. Mori  
Submitted by: K. Burton <sup>RMB</sup>  
Approved by: Paul Cook <sup>/</sup>

## ACTION CALENDAR

### BAKER WATER TREATMENT PLANT DESIGN VARIANCE NO. 6

#### SUMMARY:

Staff recommends that the Board authorize the General Manager to execute Variance No. 6, in the amount of \$73,000, with RBF Consulting (RBF) for the design of the Baker Water Treatment Plant (Baker WTP) project. The variance proposal includes additional design tasks that were identified through the development of the final design that were not included in RBF's original contract scope of work.

#### BACKGROUND:

At the onset of the project, the Baker WTP residuals were planned to be delivered to the Los Alisos Water Recycling Plant (LAWRP) for processing if available sewer capacity between Baker WTP and LAWRP could be confirmed. Through hydraulic modeling efforts, sewer capacity was confirmed, provided that a new 16-inch sewer be constructed from the plant to an existing sewer crossing the Serrano Creek Trail. The construction of that 16-inch sewer, the non-reclaimable waste (NRW) pipeline, was incorporated into the project at the start of the final design process and the decision to deliver plant residuals to LAWRP was confirmed.

Two sources of supply are planned for the Baker WTP. The primary raw water supply to the Baker WTP will be untreated Metropolitan Water District of Southern California (MWD) water from the Santiago Lateral. During unplanned outages of MWD untreated water or the availability of excess water in Irvine Lake, Irvine Lake Water (ILW) can be used as an alternative supply. For planning purposes, staff anticipates that untreated MWD water will be delivered to the plant for 10 months per year while ILW will be delivered to the plant for two months per year.

As the costs associated with delivering residuals to LAWRP were being developed, a detailed review of the residuals production estimates and the water quality characteristics of the Baker WTP residuals associated with each source of supply was conducted. The projected residual flow rates and residuals production estimates vary greatly depending upon which source of supply is delivered to the Baker WTP. The lowest residual flow rates and residuals production estimates are associated with untreated MWD water, while the highest residual flow rates and residuals production estimates are associated with ILW. For untreated MWD water, at a design turbidity level of 3 NTU, RBF/Carollo estimated that 1,800 dry pounds per day of residuals would be produced. For ILW, at a design turbidity level of 15 NTU, RBF/Carollo estimated that 7,400 dry pounds per day of residuals would be produced. The residuals quantities generated from coagulant addition are included within the previous estimates and are based upon anticipated coagulant dosages provided by RBF/Carollo. Typically, the design criteria for residuals handling facilities are governed by the maximum anticipated residual flow rate and residuals loading scenarios, which in this case would be governed by ILW.

### LAWRP and MWRP Residuals Handling Concerns:

With the RBF/Carollo residuals production estimates defined, staff became concerned about LAWRP's ability to process the residuals, especially when ILW is used as the source of supply to the Baker WTP, while continuously meeting plant effluent discharge requirements. More significantly though, staff realized that the current method of sludge disposal at LAWRP is being modified. Currently, LAWRP solids are mechanically dewatered onsite and delivered to a composting facility in Arizona. When the Michelson Water Recycling Plant (MWRP) biosolids project is online, which is anticipated for Fall 2015, the LAWRP solids will no longer be trucked to Arizona, but rather to MWRP, where they will be processed through the solids processing facilities currently in design.

With LAWRP residuals being trucked to MWRP in the future, staff coordinated with the MWRP biosolids engineering design consultant, Black & Veatch, to identify potential impacts associated with introducing the Baker WTP residuals into the proposed solids processing facilities. Black & Veatch has expressed concerns regarding the potential impacts to the proposed facilities including:

- Lower quality pellet produced from the dryer due to the high concentration of inorganics (primarily silt and coagulation chemicals) present in the Baker WTP residuals. The composition of the pellet will become more variable and the overall BTU content of the pellet will decrease.
- Concerns associated with pellet formation and pellet stabilization during transport.
- Increased digested sludge production of 5 to 20 percent depending on the source water quality to the Baker WTP.
- Increased drying and disposal costs given the anticipated 5 to 20 percent increase in solids production.
- Increased complexities associated with operation of the acid phase digestion process.
- Extensive operational impacts associated with variable incoming solids loading (as a result of the Baker WTP residuals) to the primary sludge thickening processes.

All of these issues pose significant risks to the overall success of the proposed MWRP biosolids project. To avoid these risks, staff is evaluating the construction of onsite residuals handling facilities at the Baker WTP.

### Onsite Residuals Handling:

Staff requested RBF/Carollo to perform a high-level analysis to identify a conceptual treatment process that would be capable of processing and dewatering the Baker WTP residuals onsite. The goal of the analysis was to identify a conceptual residuals handling process and to estimate the associated order-of-magnitude capital cost of those facilities. Carollo identified a conceptual treatment process consisting of residuals thickening and mechanical dewatering facilities that included a sludge pumping station, primary and secondary thickeners, thickened sludge pumping station, polymer storage and feed facility, mechanical dewatering with centrifuges, and a truck

loading facility. RBF/Carollo based the size of the conceptual facilities on historical water quality and turbidity data for both MWD untreated water and ILW.

RBF/Carollo developed initial estimates for the capital and operations and maintenance (O&M) costs associated with the conceptual facilities. The capital cost estimates range from \$5.5 to \$9 million and the O&M cost estimates range from \$500,000 to \$600,000 per year. Due to the preliminary level of the analysis, the capital cost estimates include 30 percent for contingency and 20 percent for engineering and administrative costs.

The current cost of water estimate includes costs associated with the transmission and treatment of the plant residuals at LAWRP including a sewer connection fee, the 16-inch NRW sewer line construction, and the annual sewer disposal costs. With the implementation of onsite residuals handling facilities, these costs may be eliminated and/or reduced in magnitude. If these costs can be completely eliminated, the unit cost of water could be decreased and that reduction could then help to offset the cost increase resulting from the implementation of onsite residuals handling facilities. Using the range of capital and O&M costs provided above along with the offset for the eliminated items, the unit cost of treated water from the Baker WTP is anticipated to increase between \$11 and \$18/AF with the implementation of onsite residuals handling facilities. This equates to an increase in the overall unit cost of treated water of between 1 to 2%.

As part of Variance No. 6, RBF/Carollo will refine the design criteria for the residuals handling facilities in an effort to further reduce the size and cost of the facilities. At the completion of the variance work, the unit cost of water estimates will be updated and refined.

#### RBF Design Variance for First Phase of Solids Handling Facilities Analysis:

Staff proposes to proceed with the incorporation of onsite residuals handling facilities in a two-phased approach. The first phase, which is addressed by Variance No. 6, will identify the recommended residuals handling facilities, define the design criteria, site the facilities, identify the impacts of those facilities on the current design, and update the overall capital and O&M costs for the project. The second phase, which will be addressed by a future design variance, will be the development of the final design and the incorporation of the residuals handling facilities into the overall project.

RBF/Carollo submitted Variance No. 6, in the amount of \$73,000, to complete the first phase of the work described above. Staff has reviewed the variance and finds it to be acceptable. Staff recommends that the Board approve Variance No. 6 to RBF's agreement, in the amount of \$73,000, as summarized in Exhibit "A".

#### Stakeholder Coordination:

Throughout this entire process, staff has closely coordinated with the Baker Project Committee stakeholders. An initial meeting with the stakeholders was held December 21, 2011 to present the issues and to obtain concurrence on proceeding with the evaluation of onsite residuals handling facilities. A second meeting was held January 26, 2012 to present the approach to completing the evaluation and RBF/Carollo's preliminary scope of work and fee to complete the

work. The stakeholders concur with the two-phased approach defined above and are planning to take the variance to their respective Boards in February and March.

Schedule:

RBF/Carollo submitted the 100 percent design plans February 6, 2012. Staff is currently reviewing the plans. The work included in Variance No. 6 is scheduled for completion in March 2012. RBF/Carollo has indicated that an additional six months will be needed to develop the design of the recommended facilities and to incorporate the facilities into the overall project. As a result, the bid advertisement will be delayed from March 2012 to September 2012.

FISCAL IMPACTS:

Project 11218 (1417) is included in the FY 2011-12 Capital Budget. The existing budget and Expenditure Authorizations are sufficient to fund Variance No. 6.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA) and an Environmental Impact Report (EIR) was prepared in conformance with California Code of Regulations Title 14, Chapter 3, Article 7. The Final EIR was certified and adopted by the Board in April 2011.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on February 23, 2012.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 6, IN THE AMOUNT OF \$73,000, WITH RBF CONSULTING FOR THE BAKER WATER TREATMENT PLANT, PROJECT 11218 (1417).

LIST OF EXHIBITS:

Exhibit "A" – Professional Services Variance – Variance No. 6



February 2, 2012

JN 10-106232

Mr. Richard Mori, P.E.  
Senior Project Manager  
**IRVINE RANCH WATER DISTRICT**  
15600 Sand Canyon Avenue  
Irvine, CA 92618

Subject: Baker Water Treatment Plant – Variance No. 6

Dear Rich:

RBF/Carollo appreciates the opportunity to provide this proposal to IRWD and the Stakeholders to add mechanical dewatering facilities to the Baker Water Treatment Plant (WTP). What follows is our proposed scope of work, schedule, and budget that outlines the level of effort needed to identify the recommended mechanical dewatering facilities, site the facilities, and determine the impacts of those facilities on the current design. In summary, we anticipate eight (8) weeks to complete the project, and our estimated fee is \$73,000.

#### **PROJECT UNDERSTANDING**

The Baker Water Treatment Plant (WTP) is currently approaching completion of the final design stage. Originally, solids from the WTP were planned to be discharged to the sewer. Recently, it was decided by IRWD and the Stakeholders to include design of mechanical dewatering facilities at the Baker Site.

#### **SCOPE OF WORK**

The Scope of Work is for determining the recommended mechanical dewatering facilities, siting the facilities, and determining the impact on the current design. The Scope for final design, which is not included herein, will be developed at the completion of this scope of work when the solids handling facility criteria are fully defined. Individual scope items are defined below.

##### **Task 1: Selection of Mechanical Dewatering Facilities**

Mechanical dewatering facilities at the Baker Water Treatment Plant (Baker) will be developed. The desired outcome of the task is a recommendation for solids dewatering facilities for Baker including design criteria, process elements, redundancy, and a site layout. Task 1 is expected to last eight weeks. Key tasks in the development of this work will include:

##### *Task 1.1 Stakeholder Meeting*

The first activity within this task will be a workshop with the project stakeholders to present and discuss the preliminary concepts and design criteria for mechanical dewatering facilities. It is the intent of this workshop to select a preferred option that will be further evaluated by the design team.

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evada ■ [www.RBF.com](http://www.RBF.com)

Task 1.2: Alternatives Evaluation

Alternatives will be evaluated over the range of solids loads anticipated at the plant. The solids load will be based on Irvine Lake Water data provided by IRWD from Irvine Lake Park as well as Lake Matthews water.

Capital and Operations & Maintenance Costs - Estimates for operating costs including, but not limited to, energy, chemical, dewatered solids disposal, and labor costs will be developed for each alternative. The capital cost evaluations will include impacts to estimated sewer connection fees used in the current project cost estimates and ongoing operating costs associated with sewer disposal.

Plant Sewer Discharge Analysis - Sewer discharges will be tabulated for the mechanical dewatering facilities and for all other project facilities on the Baker site. A capacity study of the existing residential sewer collection system adjacent to the site will be performed to determine whether the anticipated sewer dischargers can be discharged through the existing collections system. In addition, water quality projections will be performed to determine the anticipated constituents for all sewer discharges. The projections will be used to coordinate and confirm with IRWD LAWRP Operations staff that the sewer discharges can be accommodated at LAWRP.

Level of Redundancy - Dewatering facility redundancy is dependent on the selected design solids loading. For example, solids equipment sized for full redundancy for the 80th percentile load will not provide full redundancy at the 90th percentile load. The maximum solids loading capacity of the dewatering equipment and possible impacts on plant capacity will be evaluated for the scenarios listed previously. Options for temporarily increasing the solids handling capacity in the event the installed solids handling is exceeded will be identified.

Operational Philosophy - The solids loading to the plant will vary with the surface water source and water quality. Operating the dewatering facilities under these conditions will require dewatering equipment run time to be coordinated with available sludge storage. Impacts to run times and operations labor will be included in the evaluation.

Identify Necessary Changes to the Current Design - Key impacts to the current design will be identified for the recommended alternative. These impacts will then be quantified, and a final design scope of work will be prepared that includes the solids handling facilities and the associated changes to the existing design.

The evaluation will also consider the following options:

1. Role of the currently designed membrane filter waste washwater (MFWW) basins; i.e., keep both, eliminate both, or eliminate one.
2. Role and number of sludge thickeners needed, if any.
3. Comparison of centrifuge versus filter belt press for solids processing.

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Task 1.3: Deliverables

Draft and final reports will be delivered to IRWD for review. The schedule assumes a one-week review period for each submission. This report will include evaluation and refinement of the following:

- Process flow diagrams
- Site plans
- Hydraulic profiles
- Process performance
- Benefits & drawbacks
- Cost estimates
- Alternatives Evaluation
- Plant sewer discharge analysis
- Scope/Fee/Schedule for second phase work
- Updated cost estimate for total project
- Sewer connection fees
- Sewer disposal costs
- Unit cost of water projections (\$/AF)
- Project O&M costs

Results of the evaluation will be presented in a draft and final report. A draft report review workshop will take place one to two weeks after submission. The final report will be presented to IRWD at a final review workshop.

**Task 2: Meetings and Workshops**

A project kickoff meeting, two four-hour workshops, and bi-weekly coordination meeting will be conducted for the project. Carollo will prepare agendas, handouts, and minutes for each meeting and workshop. RBF will provide input to Carollo for preparation of agendas, handouts and minutes.

**ITEMS NOT INCLUDED IN SCOPE OF WORK**

In preparing this Scope of Work, the following were not included:

- Additional geotechnical investigations
- Additional surveying
- Architectural
- HVAC
- Hazardous materials testing
- Landscaping
- OCFA Coordination
- Preparation of a separate bidding package for the mechanical dewatering facilities
- Potholing
- Permitting
- CEQA
- Final Design

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**SCHEDULE**

The proposed project schedule is shown below. The project duration is estimated to be 8 weeks.

Task		Jan-12	Feb-12	Mar-12
Stakeholder Participation	1/26/2012	◆		
Task 1 - Development and Evaluation of Mechanical Dewatering Alternatives		●	●	●
Draft Report	28 days	■		
IRWD Review	7 days		■	
Review Workshop	3/1/2012			◆
Final Report	14 days			■
Review Workshop	3/23/2012			◆
Task 2 - Meetings and Workshops		●	●	●
Bi Weekly Coordination Meetings		◆	◆	

**BUDGET**

Projected labor hours and fee are shown in the table below.

	Labor Hours	Estimated Fee
Task 1 - Selection of Mechanical Dewatering Facilities	312	\$57,000
Task 2 - Meetings and Workshops	76	\$16,000
<b>TOTALS</b>	<b>388</b>	<b>\$73,000</b>

We appreciate your consideration of this request for variance and look forward to the opportunity to provide ongoing service to the District and Project Stakeholders for the Baker WTP project. Should you require additional information or have any questions, please do not hesitate to contact me at 949.855.3616.

Sincerely,



Cindy L. Miller, P. E.  
 Vice President  
 Water Resources

Pc: Joseph McGehee, IRWD  
 Jim Meyerhofer, Carollo

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**IRVINE RANCH WATER DISTRICT  
PROFESSIONAL SERVICES VARIANCE**

Project Title: Baker Water Treatment Plant File No.: \_\_\_\_\_  
 \_\_\_\_\_ Date: February 2, 2012  
 \_\_\_\_\_ Variance No.: 6  
 Project Purchase Order No.: 503424 Project No.: PR 11218 (1417)

Originator:  IRWD  ENGINEER/CONSULTANT  Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*):

Variance No.6 is for completion of a study to determine the recommended mechanical dewatering facilities, siting the facilities, and determining the impact on the current design for the Baker Water Treatment Plant.

**Engineering & Management Cost Impact:**

Classification	Man Hours	Billing Rate	Labor \$	Direct Costs \$	Subcon. \$	Total \$
Task 1 – Selection of Mechanical Dewatering Facilities	312	Varies				\$57,000
Task 2 – Meetings and Workshops	76	Varies				\$16,000
<b>Total \$ =</b>						<b>\$73,000</b>

**Schedule Impact:**

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
1 & 2	See attached Scope & Fee Table	Final Design by March 2012	56 days for study completion	Final Design by Sept 2012

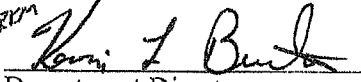
**Required Approval Determination:**

Total Original Contract	\$4,047,164	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000. <input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000. <input type="checkbox"/> Board: Single Variance greater than \$60,000. <input checked="" type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
Previous Variances \$	<u>1,205,755</u>	
This Variance	\$ <u>73,000</u>	
Total Sum of Variances	\$ <u>1,278,755</u>	
New Contract Amount	\$ <u>5,325,919</u>	
Percentage of Total Variances to Original Contract	<u>31.6%</u>	

ENGINEER/CONSULTANT: RBF Consulting

IRVINE RANCH WATER DISTRICT

Cindy Miller   
Project Manager Date 02/02/12

  
Department Director Date 2/13/12

\_\_\_\_\_  
Engineer's/Consultant's Management Date

\_\_\_\_\_  
General Manager/Comm./Board Date

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: <u>Baker Water Treatment Plant</u>				
Project No.: <u>PR 11218 (1417)</u> Project Manager: <u>Richard K. Mori</u>				
Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Baker Pipeline Flow Test	12/11/08	1/15/09	\$29,974
2	- Forebay - Feedwater PS - TCWD PS - Hazardous Material Inspection Testing	01/26/10	02/11/10	\$361,000
3	-MWD / TCWD Surge Analysis - SWPPP & WQMP - Potholing	01/13/11	01/24/11	\$95,370
4	- Add'l Design Effort - Air Valves - Legal Descriptions - Membrane & UV - MWD Coordination - Project Mgmt - South County Pipeline	06/24/2011	07/25/11	\$710,096
5	- Potholing- Design / Engineering Coordination - Field Survey	12/28/2011	01/3/2012	\$9,315
6	- Mechanical Dewatering Facilities Study	02/01/2012		\$73,000

February 27, 2012

Prepared by: J. Moeder/C. Spangenberg

Submitted by: K. Burton

Approved by: Paul Cook

## ACTION CALENDAR

### WELL 115 REPLACEMENT – CAPITAL BUDGET ADDITION, EXPENDITURE AUTHORIZATION, AND VARIANCE NO. 1

#### SUMMARY:

IRWD pursued replacement of Wells 106 and 107 in an effort to promptly augment flow to the Irvine Desalter Project Potable Treatment Plant (IDP-PTP). Tetra Tech was retained to provide design and construction phase services for both wells. Well 107 is currently under construction. Well 106 replacement was evaluated and deemed extremely difficult due to site constraints and extensive coordination required with the stakeholders. Staff recommends that Well 115 be substituted for the Well 106 replacement. Staff recommends that the Board:

- Authorize the addition of Well 115 Replacement Project 11627 (3717) in the amount of \$3,685,600 to the FY 2011-12 Capital Budget;
- Approve an Expenditure Authorization in the amount of \$551,300 for Well 115 Replacement Project; and
- Approve a no-cost Variance No. 1 with Tetra Tech for Well 115 preliminary design, final design, bid support, and construction phase services.

#### BACKGROUND:

Tetra Tech was retained in December 2009 to provide preliminary design, final design, bid support, and construction phase services for Well 106 and 107 replacements and for improvements to the IDP-PTP. Tetra Tech has completed the design phase services for Well 107 and is currently providing construction phase services for the project. Tetra Tech has also evaluated the need for installing a new cartridge filter, performing piping modifications at IDP-PTP, and supporting the District during construction of these improvements.

Pascal & Ludwig and Best Drilling & Pump are currently contracted to destruct Well 107 and replace the existing well based on Tetra Tech's completed well and wellhead facilities design. Well 107 is expected to be operational by Fall 2012 and supply approximately 1,000 gallons per minute (gpm) of raw water; Well 115 is expected to supply approximately 900 gpm. With the replacement of Wells 107 and 115, the IDP-PTP will have the needed 4,100 gpm of flow from IDP Wells 115, 110, 107, 77, and 76 (as shown in Exhibit "A") to operate two reverse osmosis (RO) treatment trains and optimize plant efficiency.

At the beginning of the replacement Well 107 construction, Well 115 was turned off due to casing integrity issues and high dissolved oxygen levels. This further reduced the raw water supply to IDP-PTP which was already operating at less than its design rated production capacity. As part of Tetra Tech's original scope, several Well 106 replacement options within the same site were evaluated, but due to the small site and limited access, drilling a new well on the same site was considered extremely difficult and would require extensive coordination with the stakeholders. Due to the challenges associated with relocating Well 106, Well 115 being turned

off, and the need for additional raw water supplies to meet production levels at the IDP-PTP, staff opened discussions with the stakeholders, the Irvine Company (TIC) and the City of Irvine (City) regarding the relocation and replacement of Well 115. Based on these meetings, both parties are amenable to relocating Well 115 within the existing parking lot in which the well is currently located. As the City has an encumbrance on the proposed Well 115 replacement site which is owned by TIC, both parties are involved in the relocation discussions.

Consultant Services Variance:

Tetra Tech is providing preliminary design, design, bid, and construction phase services for both Well 107 and Well 106. Additionally, Tetra Tech is providing modifications to the RO vessels and cartridge filters, modifications to pretreatment and post treatment chemicals, and modifications to the hypochlorite and de-chlorination facilities at IDP-PTP. Variance No. 1 with Tetra Tech includes:

- An additional \$15,000 for additional preliminary design work for Well 106;
- Deletion of the Well 106 pipeline portion of the project;
- Deletion of Well 106 replacement design and construction services component; and
- The addition of Well 115 replacement project.

Variance No. 1 does not change Tetra's Tech existing scope to provide modifications to IDP-PTP. When Well 107 and Well 115 are replaced and all of the IDP wells are operational, the need for modifications at IDP-PTP will be examined to determine if the modifications will be required. Tetra Tech's original proposal for Well 106 and 107 assumed that the two well projects would be designed and constructed at the same time. Since the two projects are no longer concurrent, Tetra Tech will realize an increased level of effort to complete two separate bid packages. The deletion of the Well 106 project re-allocates these previously Board approved funds to the Well 115 replacement project and results in a no cost Variance No. 1, attached as Exhibit "C".

FISCAL IMPACTS:

Project 11627 (3717) requires inclusion into the FY 2011-12 Capital Budget. An Expenditure Authorization for preliminary design, final design, and bid phase services is requested as shown in the table below and in Exhibit "B".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11627 (3717)	\$0	\$3,685,600	\$3,685,600	\$0	\$551,300	\$551,300

Action Calendar: Well 115 Replacement Capital Budget Addition, Expenditure Authorization, and Variance No. 1

February 27, 2012

Page 3

**ENVIRONMENTAL COMPLIANCE:**

Well 115 replacement is subject to the California Environmental Quality Act (CEQA). A Notice of Exemption will be prepared and filed with the County of Orange. Project 11325 IDP-PTP cartridge filter modifications is subject to CEQA and a Notice of Exemption will be prepared and filed with the County of Orange.

**COMMITTEE STATUS:**

This item was reviewed by the Engineering and Operations Committee on February 23, 2012.

**RECOMMENDATION:**

THAT THE BOARD AUTHORIZE THE ADDITION OF PROJECT 11627 (3717) IN THE AMOUNT OF \$3,685,600 TO THE FY 2011-12 CAPITAL BUDGET FOR WELL 115 REPLACEMENT; APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$551,300 FOR PROJECT 11627 (3717); AND APPROVE A NO-COST VARIANCE NO. 1 WITH TETRA TECH FOR THE WELL 115 REPLACEMENT, PROJECT 11627 (3717).

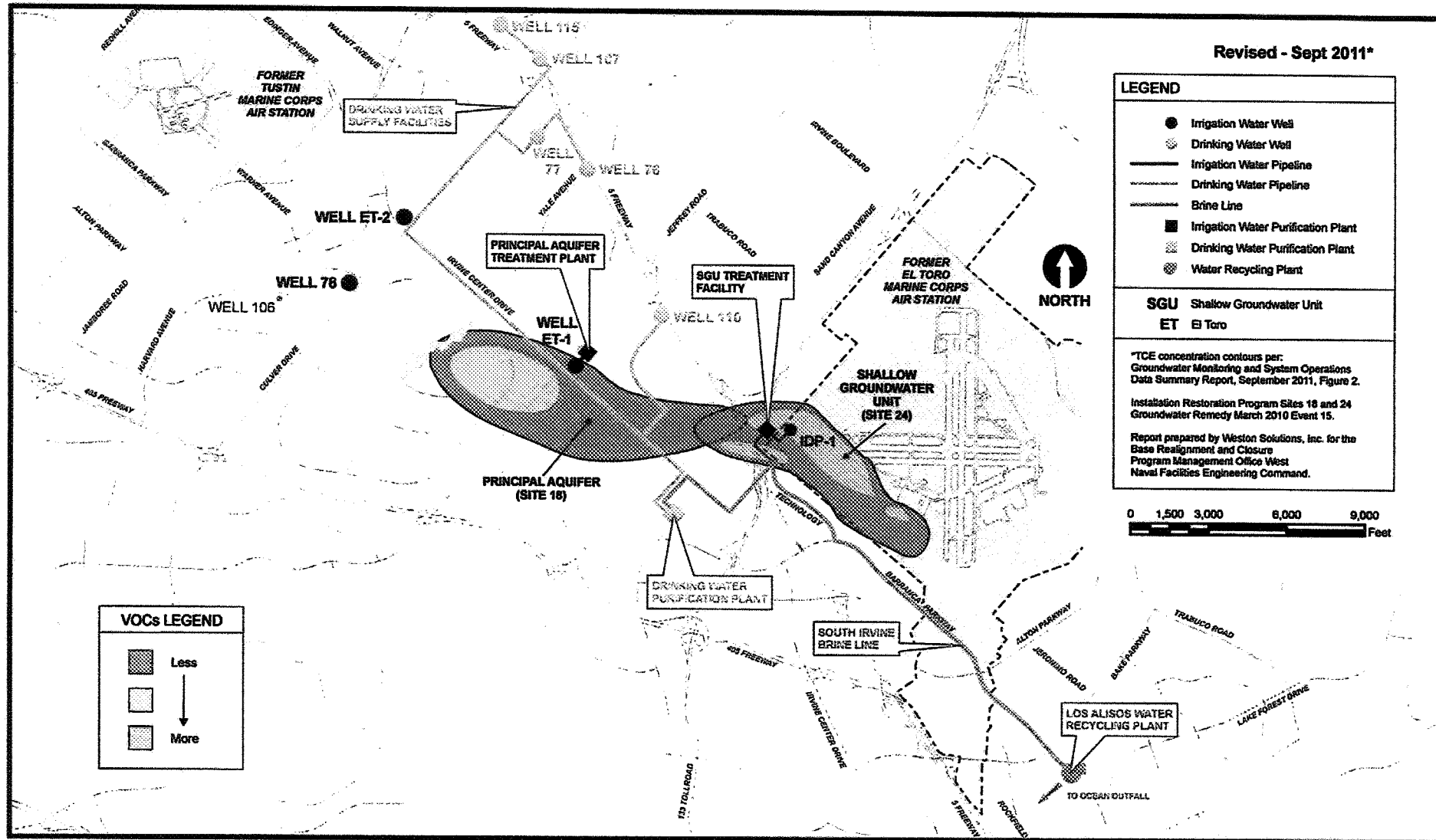
**LIST OF EXHIBITS:**

Exhibit "A" – Project Location Map

Exhibit "B" – Expenditure Authorization

Exhibit "C" – Variance No. 1 with Tetra Tech

# SITE MAP



## IRVINE DESALTER PROJECT

# IRVINE RANCH WATER DIST EXHIBIT D

## Expenditure Authorization

Project Name: WELL 115 REPLACEMENT WELL/WELLHEAD & SITE ACQUIS.

EPMS Project No: 11627 EA No: 1

ID Split: Miscellaneous

Oracle Project No:

### Improvement District (ID) Allocations

Project Manager: UEMATSU, PATRICIA

ID No.	Allocation %	Source of Funds
101	100.0	REPLACEMENT FUND**
<b>Total</b>	<b>100.0%</b>	

Project Engineer: MOEDER, JACOB

Request Date: February 7, 2012

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$551,300
<b>Total EA Requests:</b>	<b>\$551,300</b>
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$3,685,600
<b>Updated Budget:</b>	<b>\$3,685,600</b>
<b>Budget Remaining After This EA</b>	<b>\$3,134,300</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING IRWD	0	0	0	0	0	0	1/12	1/13
ENGINEERING - PLANNING OUTSIDE	0	0	0	0	0	0	1/12	1/13
ENGINEERING DESIGN - IRWD	30,000	0	30,000	30,000	0	30,000	1/12	1/13
ENGINEERING DESIGN - OUTSIDE	300,000	0	300,000	300,000	0	300,000	1/12	1/13
DESIGN STAFF FIELD SUPPORT	10,000	0	10,000	10,000	0	10,000	1/12	1/13
ENGINEERING - CA&I IRWD	0	0	0	20,000	0	20,000	7/13	6/14
ENGINEERING - CA&I OUTSIDE	0	0	0	160,000	0	160,000	7/13	6/14
CONSTRUCTION FIELD SUPPORT	0	0	0	5,000	0	5,000	7/13	6/14
CONSTRUCTION	0	0	0	2,800,000	0	2,800,000	7/13	6/14
LEGAL	5,000	0	5,000	5,000	0	5,000	1/12	6/14
LAND	150,000	0	150,000	150,000	0	150,000	1/12	1/13
WATER QUALITY	10,000	0	10,000	10,000	0	10,000	1/12	1/14
ENGINEERING ENVIRONMENTAL-OUTS	20,000	0	20,000	20,000	0	20,000	1/12	1/14
Contingency - 5.00% Subtotal	\$26,300	\$0	\$26,300	\$175,600	\$0	\$175,600		
<b>Subtotal (Direct Costs)</b>	<b>\$551,300</b>	<b>\$0</b>	<b>\$551,300</b>	<b>\$3,685,600</b>	<b>\$0</b>	<b>\$3,685,600</b>		
Estimated G/A - 180.00% of direct labor*	\$90,000	\$0	\$90,000	\$135,000	\$0	\$135,000		
<b>Total</b>	<b>\$641,300</b>	<b>\$0</b>	<b>\$641,300</b>	<b>\$3,820,600</b>	<b>\$0</b>	<b>\$3,820,600</b>		
Direct Labor	\$50,000	\$0	\$50,000	\$75,000	\$0	\$75,000		

\*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: \_\_\_\_\_ 2/13/12

Department Director: Kevin L. Buxton 2/13/12

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 \$3,898,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.





**TETRA TECH**

February 7, 2012

Mr. Jacob Moeder, P.E.  
Associate Engineer – Capital Projects  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92619-7000

**Reference: Irvine Desalter Wells, Pipeline, and Treatment Plant Improvements,  
Project No. 11325 and No. 11432  
Request for Authorization of Additional Tasks and Reallocation of Overall Budget**

Dear Mr. Moeder:

Tetra Tech has been working with the District on the Irvine Desalter Wells, Pipeline, and Treatment Plant Improvements since January 2010. Our proposal dated November 30, 2009 is the basis of our agreement for engineering services between the District and Tetra Tech. The original proposal budget amount for the project was \$1,120,800. Tetra Tech has previously been authorized to perform specific tasks with a total budget of \$593,012. Attached herewith is spreadsheet that provides a summary of the Contract Authorization Summary as of January 31, 2012, our additional requested authorization, and our recommended reallocation of the overall budget. We have also attached herewith our Variance Request for the scope of work re-allocation.

After extensive efforts to try to find an acceptable location for Well 106, the District has decided to place Well 106 on hold. Due to the poor condition of Well 115, the District is proceeding with obtaining a new site for Well 115. Once the site is approved by the City, the District is proposing to drill and equip a new replacement Well 115 as soon as possible. In addition, the District is requesting Tetra Tech to prepare plans and specifications for the installation of the cartridge filters on the CIP at the IDP-PTP site.

The following correspondence provides a brief summary of: the extra work that Tetra Tech has already performed; requested additional authorization for Well 115; requested authorization for the installation of the CIP cartridge filters and piping modifications at the IDP PTP; and our recommended reallocation of the original budget due to the deletion of Well 106 and the corresponding conveyance pipeline improvements.

## **SUMMARY OF REQUESTED AUTHORIZATION**

### **Extra Work Already Completed**

#### ***Task No. 1: Additional Work for Well 106 Siting Evaluation***

Tetra Tech was required to perform additional work in evaluating alternative sites for the replacement Well 106. Tetra Tech prepared a draft Memorandum that evaluated five alternative sites for Well 106 and four alternative sites for Well 107. Subsequent to this memo, Tetra Tech performed the following additional tasks: worked with the City of Irvine to confirm parking requirements for the site across the channel from the existing well site; prepared exhibits for the well facility at this building site; evaluated several additional locations within the commercial center at Culver and Harvard; and re-evaluated locating the replacement well at the existing site including several optional layouts and relocation of an existing cable facility. We are requesting an additional \$15,000 to compensate us for this additional work.

Tetra Tech, Inc.

17885 Von Karman Avenue, Suite 500, Irvine, CA 92614-6213  
Tel 949.909.5000 Fax 949.809.5010 www.tetrattech.com

***Task No. 2: Well 115 Siting Evaluation***

Due to placing Replacement Well 106 on hold, the District requested Tetra Tech and Richard C Slade and Associates (RCS) to evaluate alternative sites for a Replacement Well 115. Tetra Tech has prepared a total of twelve (12) versions of the exhibits showing the various feasible site locations for the replacement well. This additional work included the preparation of the exhibits, investigating the power service requirements for each site; and meeting with the District and TIC to reach an acceptable well location. For the final submittal to the City of Irvine, we are assuming that Tetra Tech will assist the District in submitting the application which will include the preparation of renderings and possibly attending the public meeting. We are recommending a total of \$20,000 for this additional work (\$17,000 for Tetra Tech and \$3,000 for RCS).

**Requested New Authorization**

***Task No. 3: Well 115 Drilling and Equipping Final Design***

Our original proposal included the final design of the drilling and equipping (including drilling construction support) for two new wells. We are requesting that the final design of Well 115 replace the original scope for Well 106. However, the original proposal assumed both of the wells would be completed at the same time within the same construction plans and specifications bid package. Therefore, we are requesting an increase to design the Well 115 to account for separating the two wells into two different bid packages, the additional general sheets and bid schedules, the difficulties of the new Well 115 site, and the additional processing and review times. The requested increase comes to about a 20% increase from the original proposal amount. We may also have to include landscape and irrigation plans to install about 14 eucalyptus trees along the back of the well site. We are requesting the following authorization for the Well 115 drilling and equipping final design:

- Well 115 Drilling and Destruction Plans, Specifications and Construction Support (RCS): \$108,000 or an additional authorization of \$48,236 above the original proposal budget. This budget request includes the additional amount of construction support (not full time but more than the time assumed in the original proposal) that has been requested by IRWD during the drilling and destruction of Well 107.
- Well 115 Drilling and Equipping Plans and Specifications (Tetra Tech): \$101,713 or an additional \$40,085 above the original proposal budget;
- Well 115 Landscape & Irrigation Plans: \$9,000 (not included within the original proposal budget);
- Well 115 Meetings/Processing/etc. for additional bid package (Tetra Tech): \$5,580 (same cost as in the original proposal)

***Task No. 4: Final Design of IDP Well Pump Modifications***

Based on the anticipated new well capacities for both Well 107 and Well 115, Tetra Tech will confirm the necessary modifications (if any) of the existing IDP Wells. This will include providing the necessary specifications for the modifications. We are requesting an authorization of \$5,000 for this task (an additional \$3,308 from the original proposal due to adding the site locations and specifications that would have been included within the pipeline general sheets).

**Task No. 5: CIP Cartridge Filter Modifications at IDP PTP Final Design**

Our original proposal included the installation of a CIP cartridge filter and corresponding piping modifications at the IDP-PTP plant. We are requesting the District authorize a portion of the work included within the IDP-PTP Modification construction plan set. The following is a summary of our request:

- CIP Cartridge Filter addition and piping modifications plan and specifications (general sheets, overall site plan, addition of the CIP cartridge filter and piping modifications including SPI support, and specifications from the original proposal) for a total requested authorization of \$28,386.
- CIP Cartridge Filter Meetings/Processing/etc. for additional bid package: \$5,581.

**Task No. 6: Bid Phase for Well 115**

Tetra Tech is requesting authorization for the bid phase services for the Well 115 drilling and equipping contract: \$3,100 (about the same as for Well 107).

**Task No. 7: Bid Phase for CIP Cartridge Filter**

Tetra Tech is requesting authorization for the bid phase services for the CIP Cartridge Filter contract: \$4,904 (the same as for Well 107 plus the additional support of SPI).

**Task No. 8: Additional IDP Water Quality Forensics**

Tetra Tech is requesting authorization to perform the following additional IDP Water Quality Forensics. Based on the anticipated flows from Replacement Wells 107 and 115, Tetra Tech will prepare a final IDP Water Quality Forensics Summary Report including monitoring and testing recommendations (update the previous prepared Memorandum). Once the anticipated water quality is determined from the replacement wells, SPI will prepare a modified IDP treatment assessment for the future operations of the IDP plant. We are recommending a total of \$25,000 for this additional work (\$10,000 for Tetra Tech, \$10,000 for SPI, and \$5,000 for RCS).

**Recommended Reduction of Original Scope**

Since Well 106 is on hold and is no longer within our scope of work, we are recommending that the portion of our original design for the 106 conveyance pipeline be deleted from our remaining budget. This will reduce the original budget by \$119,693. In addition, due to only a small incremental increase in flows from the Replacement Wells 107 and Well 115, we are also recommending that the District delete the replacement of the existing Navy Line within Irvine Center Drive. This will reduce the original budget by an additional \$64,113. We will confirm this recommendation once the anticipated flow from Well 115 is verified. As a result of deleting these items, the District will then have an unallocated budget (contingency) of \$7,000 remaining in the original approved budget.

It should also be noted that the following tasks that are still remaining within the recommended revised budget may or may not be required since the replacement wells will only result in a small incremental increase in flows:

- Final Design of IDP-PTP Modifications (additional RO vessels and cartridge filter, modifications to pretreatment and post treatment chemicals, hypochlorite and de-chlorination facilities): \$79,868;
- Final Design of IDP-PTP Modifications Specifications: \$3,176;
- Meetings/Processing of the IDP-PTP Modifications Contract: \$5,580.
- Post Construction Phase (including SPI): \$24,400.

If these tasks are not required, the District will have an additional contingency budget of \$113,024.

**SUMMARY**

Tetra Tech is requesting the District to authorize the above items of work.

Item No.	Description of the Work	Requested Budget
<b><i>Extra Work Already Completed</i></b>		
1	Additional Work for Well 106 Siting Evaluation	\$ 15,000
2	Well 115 Siting Evaluation	\$ 20,000
<b><i>Requested New Authorization</i></b>		
3	Well 115 Drilling and Equipping Final Design	\$ 224,293
4	Final Design of IDP Well Pump Modifications	\$ 5,000
5	CIP Cartridge Filter Modifications at PTP Final Design	\$ 33,967
6	Bid Phase for Well 115	\$ 3,100
7	Bid Phase for CIP Cartridge Filter Modifications	\$ 4,904
7	Bid Phase for CIP Cartridge Filter Modifications	\$ 25,000
<b>Total Requested Amount</b>		<b>\$ 331,264</b>

We are requesting the District authorize the above tasks for \$331,264. This will increase our authorization amount from \$593,012 to \$924,276. We have included herewith a summary of the Project Authorization including the recommended deletions in the proposed overall budget. In addition, we have attached our Variance Request for this re-allocation of the scope of work.

Sincerely,

Tom Epperson, P.E.  
Project Manager  
TLE/te

P:\Project\09368-10002\WordproDrafts\IDP Well 115 Authorization request

**IRVINE RANCH WATER DISTRICT**  
Irvine Desalter Wells, Pipeline Treatment Plant Improvements Project

Project Authorization Summary

Task Description	Original Proposal Budget	Prior Authorization	Requested Authorization	Total Requested Authorization	Recommended Revised Budget	Delta from Original Proposal Budget	Remaining Budget
<b>1 Project Management</b>	\$ 46,200.00	\$ 46,200.00	\$ -	\$ 46,200.00	\$ 46,200.00	\$ -	\$ -
2 Permitting Labor/Reimbursables	\$ 39,200.00	\$ 39,200.00	\$ -	\$ 39,200.00	\$ 39,200.00	\$ -	\$ -
Permit Fee Allowance	\$ 15,000.00	\$ 15,000.00	\$ -	\$ 15,000.00	\$ 15,000.00	\$ -	\$ -
<b>Permitting Total</b>	\$ 54,200.00	\$ 54,200.00	\$ -	\$ 54,200.00	\$ 54,200.00	\$ -	\$ -
3 Preliminary Design TT - Well 106 and Well 107	\$ 4,169.00	\$ 4,169.00	\$ 15,000.00	\$ 19,169.00	\$ 19,169.00	\$ 15,000.00	\$ -
Preliminary Design RCS - Wells 106 and Well 107	\$ 16,686.00	\$ 16,686.00	\$ -	\$ 16,686.00	\$ 16,686.00	\$ -	\$ -
Preliminary Design TT - Well 115	\$ -	\$ -	\$ 17,000.00	\$ 17,000.00	\$ 17,000.00	\$ 17,000.00	\$ -
Preliminary Design RCS - Well 115	\$ -	\$ -	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ -
Preliminary Design TT - Additional Pipeline	\$ 6,912.00	\$ 6,912.00	\$ -	\$ 6,912.00	\$ 6,912.00	\$ -	\$ -
Flow Science - Pipeline Surge Analysis	\$ 10,010.00	\$ 10,010.00	\$ -	\$ 10,010.00	\$ 10,010.00	\$ -	\$ -
Preliminary Design TT - Well Pump Mods	\$ 4,728.00	\$ 4,728.00	\$ -	\$ 4,728.00	\$ 4,728.00	\$ -	\$ -
Preliminary Design TT - IDP-PTP Mods	\$ 20,220.00	\$ 20,220.00	\$ -	\$ 20,220.00	\$ 20,220.00	\$ -	\$ -
SPI - Membrane Preliminary Design	\$ 21,043.00	\$ 21,043.00	\$ -	\$ 21,043.00	\$ 21,043.00	\$ -	\$ -
RDR Preparation - Tetra Tech	\$ 21,452.00	\$ 21,452.00	\$ -	\$ 21,452.00	\$ 21,452.00	\$ -	\$ -
<b>Preliminary Design Total</b>	\$ 105,200.00	\$ 105,200.00	\$ 35,000.00	\$ 140,200.00	\$ 140,200.00	\$ 35,000.00	\$ -
4 Final Design - Well 107 Drilling and Equiping	\$ 112,992.00	\$ 112,992.00	\$ -	\$ 112,992.00	\$ 112,992.00	\$ -	\$ -
Well 107 - RCS (assumed 60% of original)	\$ 109,140.00	\$ 109,140.00	\$ -	\$ 109,140.00	\$ 109,140.00	\$ -	\$ -
Meetings/Processing/etc. - Well 107	\$ 5,580.00	\$ 5,580.00	\$ -	\$ 5,580.00	\$ 5,580.00	\$ -	\$ -
Final Design - 2nd Well (Well 115)	\$ 61,615.00	\$ -	\$ 110,713.00	\$ 172,328.00	\$ 110,713.00	\$ 49,098.00	\$ -
2nd Well (Well 115) - RCS	\$ 59,784.00	\$ -	\$ 108,000.00	\$ 167,784.00	\$ 108,000.00	\$ 46,236.00	\$ -
Meetings/Processing/etc. - 2nd Well (Well 115)	\$ -	\$ -	\$ 5,580.00	\$ 5,580.00	\$ 5,580.00	\$ 5,580.00	\$ -
Final Design Well Pump Modifications	\$ 1,892.00	\$ -	\$ 5,000.00	\$ 6,892.00	\$ 5,000.00	\$ 3,388.00	\$ -
Final Design Pipeline	\$ 74,260.00	\$ -	\$ -	\$ 74,260.00	\$ -	\$ (74,260.00)	\$ -
Polishing Subcontractant	\$ 5,500.00	\$ -	\$ -	\$ 5,500.00	\$ -	\$ (5,500.00)	\$ -
Traffic Control	\$ 39,600.00	\$ -	\$ -	\$ 39,600.00	\$ -	\$ (39,600.00)	\$ -
Geotechnical - Leighton	\$ 32,450.00	\$ -	\$ -	\$ 32,450.00	\$ -	\$ (32,450.00)	\$ -
Survey and Mapping - Coast Survey	\$ 24,860.00	\$ -	\$ -	\$ 24,860.00	\$ -	\$ (24,860.00)	\$ -
Essements	\$ 7,136.00	\$ -	\$ -	\$ 7,136.00	\$ -	\$ (7,136.00)	\$ -
Final Design IDP-PTP Mods (General Sheets)	\$ 5,224.00	\$ -	\$ 5,224.00	\$ 10,448.00	\$ 5,224.00	\$ 5,224.00	\$ -
Final Design IDP-PTP Mods (CIP Cartridge Filter)	\$ 3,564.00	\$ -	\$ 3,564.00	\$ 7,128.00	\$ 3,564.00	\$ 3,564.00	\$ -
Membrane Final Design - SPI	\$ 15,598.00	\$ -	\$ 15,598.00	\$ 31,196.00	\$ 15,598.00	\$ 15,598.00	\$ -
Final Design IDP-PTP (CIP Cartridge Filter) Specs	\$ 4,000.00	\$ -	\$ 4,000.00	\$ 8,000.00	\$ 4,000.00	\$ 4,000.00	\$ -
Meetings/Processing/etc. - CIP Cartridge	\$ 5,581.00	\$ -	\$ 5,581.00	\$ 11,162.00	\$ 5,581.00	\$ 5,581.00	\$ -
Final Design IDP-PTP Modifications (remaining)	\$ 79,868.00	\$ -	\$ -	\$ 79,868.00	\$ 79,868.00	\$ -	\$ 79,868.00
Final Design IDP-PTP (Remaining Work) Specs	\$ 3,176.00	\$ -	\$ -	\$ 3,176.00	\$ 3,176.00	\$ -	\$ 3,176.00
Meetings/Processing/etc. - Rest of Work	\$ -	\$ -	\$ -	\$ -	\$ 5,580.00	\$ 5,580.00	\$ -
<b>Final Design Total</b>	\$ 651,800.00	\$ 227,712.00	\$ 282,260.00	\$ 934,072.00	\$ 579,596.00	\$ (72,004.00)	\$ 88,624.00
5 Bid Phase - 1st Package	\$ 3,200.00	\$ 3,200.00	\$ -	\$ 3,200.00	\$ 3,200.00	\$ -	\$ -
Bid Phase - 2nd Bid Package	\$ 1,196.00	\$ -	\$ 3,100.00	\$ 4,296.00	\$ 3,100.00	\$ 1,904.00	\$ -
Bid Phase - 3rd Bid Package	\$ -	\$ -	\$ 3,100.00	\$ 3,100.00	\$ 3,100.00	\$ 3,100.00	\$ -
Bid Phase - SPI	\$ 1,804.00	\$ -	\$ 1,804.00	\$ 3,608.00	\$ 1,804.00	\$ 1,804.00	\$ -
<b>Bid Phase Total</b>	\$ 6,200.00	\$ 3,200.00	\$ 8,004.00	\$ 14,204.00	\$ 11,204.00	\$ 5,004.00	\$ -
6 Construction Phase - 1st Package	\$ 76,500.00	\$ 76,500.00	\$ -	\$ 76,500.00	\$ 76,500.00	\$ -	\$ -
Construction Phase - 2nd Package	\$ 66,127.00	\$ -	\$ -	\$ 66,127.00	\$ 66,127.00	\$ -	\$ 66,127.00
Construction Phase - 3rd Package	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction Phase - SPI	\$ 10,373.00	\$ -	\$ -	\$ 10,373.00	\$ 10,373.00	\$ -	\$ 10,373.00
<b>Construction Phase Total</b>	\$ 153,000.00	\$ 76,500.00	\$ -	\$ 229,500.00	\$ 153,000.00	\$ 76,500.00	\$ -
7 Post Construction Phase	\$ 22,090.00	\$ -	\$ -	\$ 22,090.00	\$ 22,090.00	\$ -	\$ 22,090.00
Post Construction Phase - SPI	\$ 2,310.00	\$ -	\$ -	\$ 2,310.00	\$ 2,310.00	\$ -	\$ 2,310.00
<b>Post Construction Phase Total</b>	\$ 24,400.00	\$ -	\$ -	\$ 24,400.00	\$ 24,400.00	\$ -	\$ 24,400.00
8 IDP Water Quality Forensics	\$ 80,000.00	\$ 80,000.00	\$ 25,000.00	\$ 105,000.00	\$ 165,000.00	\$ 25,000.00	\$ -
<b>Unallocated Budget (Contingency)</b>	\$ -	\$ -	\$ -	\$ -	\$ 7,000.00	\$ 7,000.00	\$ 7,000.00
<b>Totals</b>	\$ 1,120,800.00	\$ 593,012.00	\$ 331,264.00	\$ 924,276.00	\$ 1,120,800.00	\$ -	\$ 196,524.00

Contract Authorization Summary as of February 7, 2012

C-5

# IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Project Title: IDP Wells, Pipeline & Treatment Plant Imp. File No.: 11325  
 Date: February 7, 2012  
 Variance No.: 1  
 Project No.: 11325 and 11432  
 Purchase Order No.: 123049-02 and PO# 500908

Originator:  IRWD  ENGINEER/CONSULTANT  Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*): District requested the following deletions in the original scope of work: Well 106 drilling and equipping final design; and the final design of Well 106 conveyance pipeline and the replacement of the existing Navy Line within Irvine Center Drive. The District has added the following additional scope of services: additional Well 106 siting evaluation; Well 115 siting evaluation; Well 115 drilling and equipping final design; and additional IDP water quality forensics. The above changes are summarized in the attached February 7, 2012 correspondence prepared by Tetra Tech. The variance request is a zero cost variance.

**Engineering & Management Cost Impact:**

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
<b>Total \$ =</b>						<b>\$0</b>

**Schedule Impact:**

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
4,5&8	Well 115 final design	NA	1 year from City approval of site	1 year from City approval of site

**Required Approval Determination:**

Total Original Contract	\$ <u>1,120,800</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000. <input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000. <input type="checkbox"/> Board: Single Variance greater than \$60,000. <input checked="" type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
Previous Variances \$	<u>0</u>	
This Variance \$	<u>0</u>	
Total Sum of Variances	\$ <u>0</u>	
New Contract Amount	\$ <u>1,120,800</u>	
Percentage of Total Variances to Original Contract	<u>0.0%</u>	

ENGINEER/CONSULTANT: Tetra Tech  
 Company Name  
Tom Eggen 2/13/12  
 Project Engineer/Manager Date  
[Signature] 2/13/12  
 Engineer's/Consultant's Management Date

IRVINE RANCH WATER DISTRICT  
[Signature] 2/14/12  
 Department Director Date  
 \_\_\_\_\_  
 General Manager/Comm./Board Date

# IRVINE RANCH WATER DISTRICT

## PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: IDP Wells, Pipeline & Treatment Plant Improvements

PO# 123049-02 and PO# 500908

Project No.: 11325 Project Manager: Jacob Moeder, P.E.

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Deletion of final design of Well 106 and pipelines. Add final design of Well 115 and miscellaneous additional work (RCS and Tetra Tech)	2/07/12		\$0

p8  
February 27, 2012 *SLM*  
Prepared by: S. Malloy  
Submitted by: K. Burton *KLB*  
Approved by: Paul Cook *P. Cook*

## ACTION CALENDAR

### MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS CHANGE ORDERS, VARIANCE, AND REDUCTION OF RETENTION

#### SUMMARY:

The Michelson Water Recycling Plant (MWRP) Phase 2 Expansion and Flood Protection Improvements are currently being constructed by J. R. Filanc Construction Company (Filanc). Staff recommends the Board:

- Approve Contract Change Order (CCO) No. 57 in the amount of \$116,206.53 to install a 5-ton bridge crane for the MWRP Phase 2 Expansion;
- Approve CCO No. 58 in the credit amount of \$669,030.20 due to final quantity adjustment of the structure piles within the MWRP Phase 2 Expansion;
- Authorize the General Manager to execute Variance No. 2 in the amount of \$24,700 with Ninyo and Moore for supplemental construction phase services associated with pile installation for the MWRP Phase 2 Expansion and Flood Protection Improvements; and
- Find that satisfactory progress is being made on the MWRP Phase 2 Expansion and Flood Protection Improvements contract;
- Authorize the reduction of retention from 10% to 5% of the contract amount; and
- Release funds in excess of 5% of the contract amount from retention currently held for MWRP Phase 2 Expansion and Flood Protection Improvements.

#### BACKGROUND:

Construction of the MWRP Phase 2 Expansion and Flood Protection Improvements project was awarded to J. R. Filanc Construction, Co. in July 2009 in the amount of \$87,479,450. This project will expand the recycled water production capacity of MWRP to 28 million gallons per day and protect MWRP from flooding of San Diego Creek. A Project Overview Diagram of the MWRP Phase 2 Expansion is attached as Exhibit "A".

#### Contract Change Order No. 57:

The Phase 2 Expansion contract documents show that Filanc was to install a 2-ton bridge crane over the membrane bioreactors (MBR) to allow lifting of the membrane modules and moving them to the south side of the MBR for membrane module cleaning. Our design engineer, HDR, later discovered after review of the GE/Zenon submittal that a 5-ton bridge crane would be required. CCO No. 57 is for the incremental cost for material and labor to construct and install the 5-ton bridge crane. IRWD would have had to pay these costs had the Contract Documents shown a 5-ton crane. Additionally, the bridge crane was modified to extend an additional 9 feet to the north side of the MBR to allow the membrane modules to be lifted to and from trucks.



CCO No. 57 is attached as Exhibit "B". CCO No. 57 includes the incremental costs associated with changing from a 2-ton crane to a 5-ton crane. These costs are related to material, labor, commissioning, and applicable taxes. CCO No. 57 also includes \$14,817 of unusable material and re-engineering by the crane manufacturer since the manufacturer had started manufacturing the 2-ton crane before the discovery was made. Staff has negotiated with the HDR to credit IRWD an equivalent amount on their construction services invoices to reimburse IRWD for this portion of the CCO. IRWD staff reviewed these costs and recommends approval of CCO No. 57.

Contract Change Order No. 58:

Contract Change Order No. 58 is for the final quantity adjustment for Bid Item No. A.06 – Precast Pre-stressed Concrete Drive Piles – Structure Piles. The adjustment was due to differing site conditions. This CCO credit amount represents a 23% decrease from the original \$2,916,000 amount for the bid item. CCO No. 58 is attached as Exhibit "C".

The Contract Change Order Summary is attached as Exhibit "D". The total amount of all change orders for this construction project is \$2,327,807.14 (2.7% of the original bid). The amount of change orders directly related to MWRP Phase 2 Expansion and Flood Protection Improvements is \$1,104,804.82 (1.3% of the original bid). Change orders for work items related to other projects, such as the pipelines for the biosolids project, account for the difference.

Variance No. 2 with Ninyo and Moore:

Ninyo and Moore has been providing construction phase services associated with pile installation since the start of the project. Ninyo and Moore is requesting additional authorization due to Filanc's anticipated need for more time to install the piles. Slow pile installation has been as a result of (1) discovery of several previously unknown utilities; (2) realignment of several piles; and (3) constraints due to potential noise impact on the surrounding habitat.

Variance No. 2, attached as Exhibit "E", is to provide supplemental construction phase services for pile installation for the remaining 237 piles. Specifically, these services include monitoring of pile driving operations, geotechnical engineering, data complication and analysis, consultations, and a final report. Filanc has installed between 3 and 26 piles per day. Ninyo and Moore has assumed about 12 piles per day for Variance No. 2. Should the remaining piles take longer than this installation rate, another variance may be required.

Reduction of Retention:

Construction of MWRP Phase 2 Expansion and Flood Protection Improvements is 72.5% completed. Filanc has formally requested that the project retention be reduced pursuant to the project manual. According to General Provisions Section 11.4.3 "At any time after fifty (50) percent of the work has been satisfactorily completed and if DISTRICT determines that aggressive progress will continue to a timely completion of the Work, DISTRICT may pay any of the remaining progress payments in full for actual work completed."

Action Calendar: Michelson Water Recycling Plant Phase 2 Expansion Change Orders, Variance, and Reduction of Retention

February 27, 2012

Page 3

Staff has reviewed Filanc's request and verified that they are currently working at a pace to complete the contract work prior to the contract completion date. Filanc has consistently maintained good construction progress throughout the project duration.

**FISCAL IMPACTS:**

The MWRP Phase 2 Expansion, Project 20214 (1599) and Project 30214 (1706) and Flood Protection Improvements, Project 20542 (1150) and Project 30542 (1118), are included in the FY 2011/12 Capital Budget. The existing budgets and Expenditure Authorizations are sufficient to fund Contract Change Order No. 57 and No. 58 with Filanc and Variance No. 2 with Ninyo and Moore.

Approval of the request to reduce the retention from 10% to 5% of the contract amount will not impact the project budget.

**ENVIRONMENTAL COMPLIANCE:**

The Michelson Water Recycling Plant Phase 2 Expansion and Flood Protection Improvements, Projects 20214 (1599), 20542 (1706), 30214 (1150), and 30542 (1118) are subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, an Environmental Impact Report, SCH # 2005051174, was certified by the lead agency on February 27, 2006.

**COMMITTEE STATUS:**

This item was reviewed by the Engineering and Operations Committee on February 23, 2012.

**RECOMMENDATION:**

THAT THE BOARD APPROVE CONTRACT CHANGE ORDER NO. 57 IN THE AMOUNT OF \$116,206.53 WITH J. R. FILANC CONSTRUCTION CO. TO INSTALL A 5-TON CRANE FOR MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 (1599) AND 30214 (1706); APPROVE CONTRACT CHANGE ORDER NO. 58 IN THE CREDIT AMOUNT OF \$669,030.20 WITH J. R. FILANC CONSTRUCTION CO. DUE TO FINAL QUANTITY ADJUSTMENT OF THE STRUCTURE PILES WITHIN MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 (1599) AND 30214 (1706); AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 IN THE AMOUNT OF \$24,700 WITH NINYO AND MOORE FOR SUPPLEMENTAL CONSTRUCTION PHASE SERVICES FOR PILE INSTALLATION FOR THE MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 (1599) AND 30214 (1706) AND FLOOD PROTECTION IMPROVEMENT, PROJECTS 20542 (1150) AND 30542 (1118); FIND THAT SATISFACTORY PROGRESS IS BEING MADE ON THE MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS CONTRACT; AUTHORIZE THE REDUCTION OF RETENTION FROM 10% TO 5% OF THE CONTRACT AMOUNT; AND RELEASE FUNDS IN EXCESS OF 5% OF THE CONTRACT AMOUNT FROM RETENTION CURRENTLY HELD FOR MWRP PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS, PROJECTS 20214 (1599), 20542 (1150), 30214 (1706), AND 30542 (1118).

Action Calendar: Michelson Water Recycling Plant Phase 2 Expansion Change Orders, Variance,  
and Reduction of Retention

February 27, 2012

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LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Contract Change Order No. 57

Exhibit "C" – Contract Change Order No. 58

Exhibit "D" – Contract Change Order Summary

Exhibit "E" – Variance No. 2 – Ninyo and Moore



# Overview of MWRP Phase 2 Expansion



# EXHIBIT B

## CONTRACT CHANGE ORDER

**IRVINE RANCH WATER DISTRICT**  
 15600 Sand Canyon Avenue  
 Irvine, California 92618  
 (949) 453-5300



C.O. No. 57  
 Final

Project No. 20214, 30214,  
 20542, 30542  
 (1599,1706,1150,1118)

MWRP Phase 2 Expansion and Flood Protection Improvements

Project Title

Date: February 7, 2012

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
1. Change from 2-ton Bridge Crane to 5-ton Bridge Crane at Membrane Bioreactors (CR-195) (PR 20214,30214/Oracle 1599,1706)	\$116,206.53	\$0	0
Note 1. The project's overall completion date of January 15, 2013 is unchanged with this Change Order.			
<b>TOTAL</b>	<b>\$116,206.53</b>	<b>\$0.00</b>	<b>0</b>

DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	\$116,206.53	0
2. ORIGINAL CONTRACT AMOUNT	=	\$87,479,450.00	1,094
3. TOTAL PREVIOUS CHANGE ORDER(S)	=	\$2,880,630.81	167
4. TOTAL BEFORE THIS CHANGE ORDER (2+ 3)	=	\$90,360,080.81	1,261
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$90,476,287.34	1,261

We hereby agree to make the above change subject to the terms of this change order for the sum of: \_\_\_\_\_

-----One Hundred Sixteen Thousand Two Hundred Six and 53/100-----Dollars

2/9/12                      J R Filanc Construction Co.                      [Signature]  
 Date                                      Contractor                                      By: Bill Hanley, Project Manager

SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
<u>[Signature]</u> IRWD Engineer or Consulting Engineer	<u>2/9/12</u> Date	Department Director Approval Required <input type="checkbox"/>
<u>Steve Mahony</u> Principal Engineer - MWRP Construction	<u>2-9-12</u> Date	General Manager Approval Required <input type="checkbox"/>
<u>[Signature]</u> Director of Engineering and Construction	<u>2-13-12</u> Date	Committee Approval Required <input type="checkbox"/>
<u>[Signature]</u> General Manager	_____ Date	Board Approval Required <input checked="" type="checkbox"/>
		By _____ 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 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 Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.

J.R. FILANC CONSTRUCTION COMPANY, INC.

**FILANC**

740 North Andreasen Drive, Escondido, California 92029 Ph 760-941-7130 Fax 760-941-3880 www.filanc.com

January 12, 2012

Mr. Steve Malloy  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

Re: CR-195 2Ton to 5Ton Crane Change at MBR- Revised

Dear Mr. Malloy:

Please note that based on an email received from Scott Toland on 10/19, Filanc has provided a price proposal to upgrade the bridge crane over the MBR tanks from a 2ton to a 5ton capacity. The cost has been revised per district request to add a 9' cantilever section and additional breakdown of costs has been included. Please note that any time impacts will be determined once the change request is formally approved and the new crane is released for fabrication. The total cost of upgrading the crane is ~~\$448,488~~. Please note we are waiting for current fabrication/installation durations to provide a theoretical time impact.

\$116,206.53

Please contact me at (760)801-0675 if you have any questions.

Sincerely,

J. R. FILANC CONSTRUCTION CO., INC.

  
Bill Hanley  
Project Manager

Enclosures:3

CA Lic No. 134887

**J.R. FILANC CONSTRUCTION COMPANY**

DATE: 01/12/12

JOB: IRWD - MWRP Expansion Phase 2

CR # 195

DESC:

ITEM	DESCRIPTION	Labor	Equipment	Materials	Subcontract	TOTAL
1	Upgrade from 2ton to 5ton crane at the MBR tank area.	\$ -	\$ -	\$ -	\$ 109,539.00	\$ 109,539.00
	OH & Profit @ 15% L,M,E 5% S	\$0.00	\$0.00	\$0.00	\$5,476.95	\$ 5,476.95
	Subtotal with Profit & Overhead	\$ -	\$ -	\$ -	\$ 115,015.95	\$ 115,015.95
	<b>Prime Contractor Totals</b>					<b>\$115,015.95</b>
	Bond Premium @ 1%					\$1,150.16
	Small Tools & Consumables @ 2% *					<del>\$2,300.32</del>
	<b>Total Change Order Request</b>					<b>\$118,466.43</b>

40.42  
\$116,206.53

MADE IN THE USA

\* on the new work only  
\$2021.00

B-3

# CraneNetics, Inc.

CRANES - HOISTS - MONORAILS

4780 Cheyenne Way  
Chino, CA 91710

CA. LIC. #788423  
Phone: (909) 590-1444  
Fax: (909) 590-0295  
Email: cranenetics@msn.com

## PROPOSAL

Page 1 Of 2.

January 12, 2012

PROPOSAL NO. CA-05870-A3

**J R Filanc Construction Co., Inc.**  
740 N Andreasen Drive  
Escondido, CA 92029  
Fax No.: (760) 941-3969

REF: Michelson Water Reclamation Plant

Upgrade 2-Ton Crane System To 5-Ton Capacity  
Membrane Bioreactor – Addendum No. 3  
EQUIPMENT PRICE BREAKDOWN (Additional)  
And Price Addition For 9'-0" Runway Overhang

**Attention: Mr. Bill Hanley**  
**For: Mr. Nathaniel Johnson**

The following is a "Price Breakdown Comparison" of the 2-Ton Capacity crane system as originally offered and the upgrade to a 5-Ton Capacity system AND cost addition to extend crane runway (overhang) 9'-0" at north end:

<u>ITEM DESCRIPTION</u>	<u>2-TON SYSTEM</u>	<u>5-TON SYSTEM</u>
Five Support Frames (With Bracing, Etc.)	\$ 58,266.00	\$ 81,133.00
Runway Beam System, Rail, Stops, Electrification, Etc.	14,352.00	21,355.00
Crane Bridge, Hoist, Mat'ls & Shop Labor	18,360.00	36,049.00
Engineering, Submittals, Etc.	2,860.00	4,280.00
Jobsite Delivery Of Materials/Equipment	1,580.00	2,155.00
Special Coatings/Paint Requirements	11,300.00	37,983.00
Field Labor Installation w/Equipment	17,407.00	27,320.00
Commissioning/Certification	1,980.00	2,990.00
Applicable Sales Tax	<u>7,391.00</u>	<u>12,932.00</u>
	\$ 133,496.00	\$ 226,197.00
Wasted Materials (Crane Trucks, Controls, Frame & Runway Steel)	<u>--0--</u>	<u>\$ 14,817.00</u>
	\$ 133,496.00	\$ 241,014.00

**Sum Total Additional Net Costs: . . . . . \$ 107,518.00**



To: J R Filanc Construction Co., Inc.  
Escondido, CA 92029

Date: January 12, 2012

PROPOSAL NO.: CA-05870-A3 Page: 2 Of 2

RE: Michelson Water Reclamation Plant; Upgrade 2-Ton Crane System To 5-Ton Capacity; Addendum #3

**Cost Addition For 9'-0" Overhang Extension At North End Of Runway System:**

Materials -	\$ 1,248.00
Labor -	628.00
Sales Tax -	<u>145.00</u>

**Total Additional Cost - \$ 2,021.00**

Should you have any questions or require additional assistance, kindly email or call.

Respectfully submitted  
**CraneNetics, Inc.**

*Jim Bogucci*

*CraneNetics, Inc.*

**Bill Hanley**

---

**From:** Jim Bogucci [cranenetics@msn.com]  
**Sent:** Thursday, January 12, 2012 12:24 PM  
**To:** Bill Hanley  
**Subject:** Michelson; 2-Ton Crane System Upgraded To 5-Ton  
**Attachments:** 5870A3bd.doc

Bill:

I am attaching another revised cost comparison breakdown. We were able to save monies on the installation. We have been advised by the paint supplier that our equipment is unable to apply the special paint so we really don't have any room to reduce the price on this item. Keep in mind, the amount of steel for the 5-Ton system has increase in weight by approx. 15,000 Lbs.. Back in 2009 we were quited .38 cents per pound. Now we have been quoted approx. .60 cents per pound (plus trucking to and fro). Let me know.

Thanks & best regards,

Jim Bogucci  
**CraneNetics, Inc.**  
Ph: (909) 590-1444  
Fax: (909) 590-0295  
Cell: (909) 241-6387

# Exhibit "C"

## CONTRACT CHANGE ORDER

**IRVINE RANCH WATER DISTRICT**  
 15600 Sand Canyon Avenue  
 Irvine, California 92618  
 (949) 453-5300



C.O. No. 58  
 Final

Project No. 20214, 30214,  
20542, 30542  
(1599,1706,1150,1118)

MWRP Phase 2 Expansion and Flood Protection Improvements

Project Title

Date: February 10, 2012

THE FOLLOWING CHANGE TO CONTRACT, DRAWINGS AND SPECIFICATIONS IS PROPOSED.	\$ ADDITIONS	\$ DELETIONS	DAYS ±
1. Final Quantity Adjustment for Bid Item A.06 – Precast Prestressed Concrete Driven Piles – Structure Piles (PR 20214,30214/Oracle 1599,1706)	\$0.00	\$669,030.20	0
Note 1. The project's overall completion date of January 15, 2013 is unchanged with this Change Order.			
<b>TOTAL</b>	<b>\$0.00</b>	<b>\$669,030.20</b>	<b>0</b>

DAYS ±

1. NET AMOUNT THIS CHANGE ORDER	=	(\$669,030.20)	0
2. ORIGINAL CONTRACT AMOUNT	=	\$87,479,450.00	1,094
3. TOTAL PREVIOUS CHANGE ORDER(S)	=	\$2,996,837.34	167
4. TOTAL BEFORE THIS CHANGE ORDER (2+ 3)	=	\$90,476,287.34	1,261
5. PROPOSED REVISED CONTRACT AMOUNT TO DATE (1+4)	=	\$89,807,257.14	1,261

We hereby agree to make the above change subject to the terms of this change order for the sum of: \_\_\_\_\_

-----A CREDIT OF Six Hundred Sixty-Nine Thousand Thirty and 20/100-----Dollars

2/13/12  
Date

J R Filanc Construction Co.  
Contractor

Sean MacAvoy  
By: Bill Hanley, Project Manager

SIGNATURE	DATE	APPROVAL LEVEL REQUIRED
<u>[Signature]</u>	<u>2/13/12</u>	Department Director Approval Required <input type="checkbox"/>
IRWD Engineer or Consulting Engineer	Date	General Manager Approval Required <input type="checkbox"/>
<u>[Signature]</u>	<u>2-13-12</u>	Committee Approval Required <input type="checkbox"/>
Principal Engineer – MWRP Construction	Date	Board Approval Required <input checked="" type="checkbox"/>
<u>[Signature]</u>	<u>2-14-12</u>	
Director of Engineering and Construction	Date	By _____ Date _____
General Manager	Date	Purchase Order No. _____

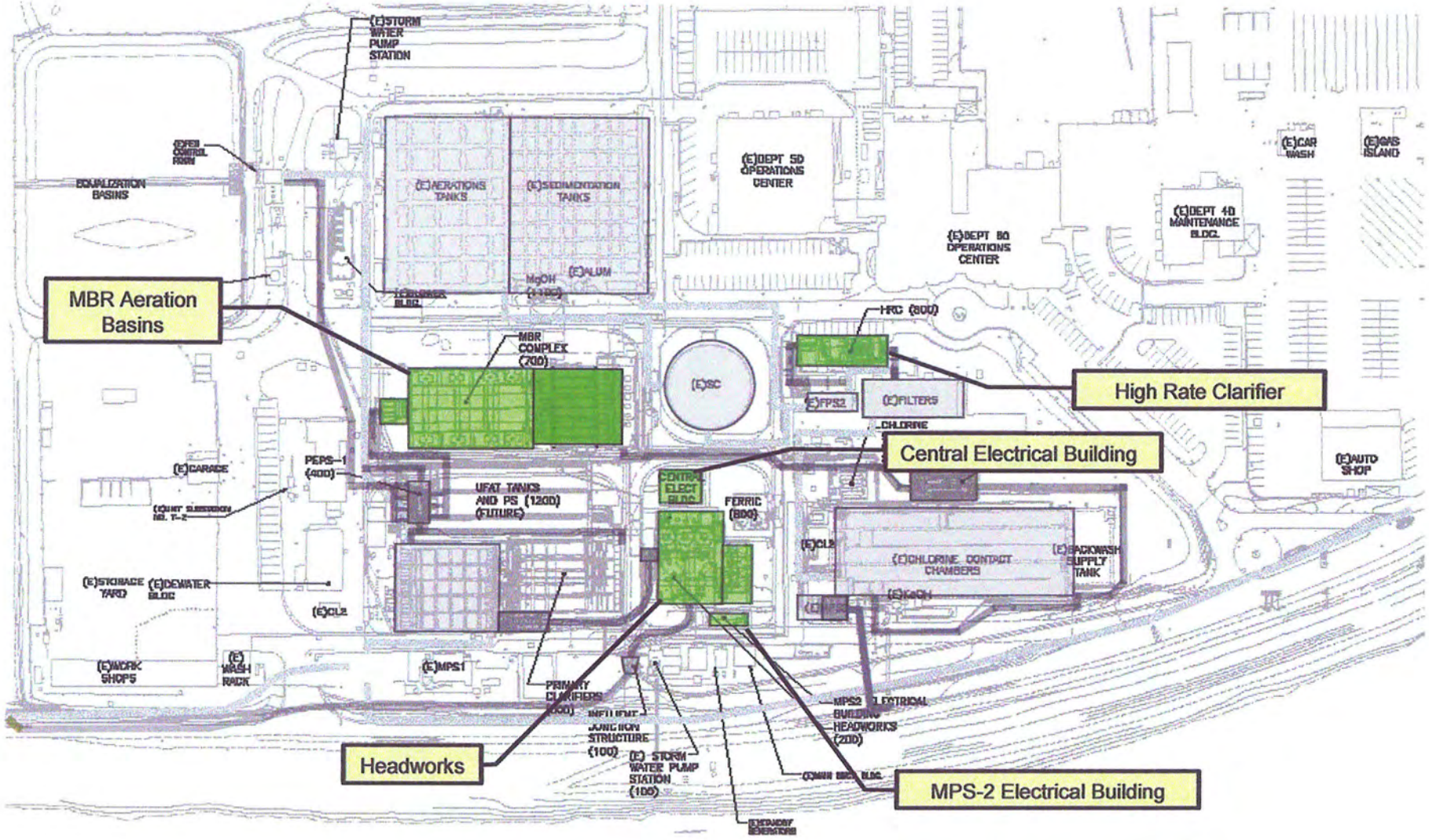
NOTE: The documents supporting this Change Order, including any drawings and estimates of cost, if required are attached hereto and made a part hereof. This Change Order shall not be considered as such until it has been signed by the Owner and the Contractor. Upon final approval, distribution of copies 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 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 Order. The time for completing the contract will not be extended unless expressly provided for in this Change Order.



# MWRP Phase 2 Structural Pile Locations

C-2





**CONTINUATION SHEET**

APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached

APPLICATION NO: 421-29  
 APPLICATION DATE: 01/31/12  
 PERIOD TO: 01/31/12  
 J. R. FILANC PROJECT NO: 421

Use Column I on Contracts where variable retainage for line items may apply

A ITEM NO	B DESCRIPTION OF WORK	B1 LF COST OR LS	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E-F)	H % (G ÷ C)	I BALANCE TO FINISH (C - G)	J RETAINAGE (IF VARIABLE RATE)
				FROM PREVIOUS APPLICATION	THIS PERIOD					
<b>Schedule A Bid Items</b>										
A.01	Trench safety, shoring	LS	\$ 1,000,000.00	\$ 697,800.00	\$ 22,000.00	\$ -	\$ 719,800.00	72%	\$ 280,200.00	
A.02	Mobilization (\$40,000/month)	LS	\$ 3,000,000.00	\$ 2,540,000.00	\$ 40,000.00	\$ -	\$ 2,580,000.00	86%	\$ 420,000.00	
A.03	Bonds	LS	\$ 580,000.00	\$ 580,000.00	\$ -	\$ -	\$ 580,000.00	100%	\$ -	
A.04	Settlement monitoring... (\$2760/month)	LS	\$ 100,000.00	\$ 80,540.00	\$ 2,760.00	\$ -	\$ 83,300.00	83%	\$ 16,700.00	
A.05	Vibration monitoring... (\$4000/month)	LS	\$ 100,000.00	\$ 98,000.00	\$ -	\$ -	\$ 98,000.00	98%	\$ 2,000.00	
A.06	Precast Prestressed Concrete Driven Piles - Structure Piles (54,000 LF)	\$ 54.00	\$ 2,916,000.00	\$ 2,097,474.22	\$ -	\$ -	\$ 2,097,474.22	72%	\$ 818,525.78	
A.07	Predrilled Precast/stressed Concrete Driven Piles-Influent Sewer Piles (21,000 LF)	\$ 43.00	\$ 903,000.00	\$ 362,795.00	\$ -	\$ -	\$ 362,795.00	40%	\$ 540,205.00	
A.08	Additional Predrilling for Items A.6 & A.7 (22,000 LF)	\$ 7.00	\$ 154,000.00	\$ 154,000.00	\$ -	\$ -	\$ 154,000.00	100%	\$ -	
A.09	Overall project	LS	\$ 53,327,028.00	\$ 35,496,903.46	\$ 1,864,390.17	\$ -	\$ 37,361,293.63	70%	\$ 15,965,734.37	
A.10	GE/Zenon MBR	LS	\$ 9,049,700.00	\$ 7,694,081.00	\$ -	\$ -	\$ 7,694,081.00	85%	\$ 1,355,619.00	
A.11	Eutek grit package	LS	\$ 572,520.00	\$ 567,720.00	\$ -	\$ -	\$ 567,720.00	99%	\$ 4,800.00	
A.12	Turblex blowers	LS	\$ 1,758,000.00	\$ 1,758,000.00	\$ -	\$ -	\$ 1,758,000.00	100%	\$ -	
A.13	Kruger ACTIFLO	LS	\$ 1,988,000.00	\$ 1,789,200.00	\$ -	\$ -	\$ 1,789,200.00	90%	\$ 198,800.00	
A.14	Sanitaire difusers	LS	\$ 188,440.00	\$ 188,440.00	\$ -	\$ -	\$ 188,440.00	100%	\$ -	
A.15	Viking primary clarifier	LS	\$ 253,335.00	\$ 250,335.00	\$ -	\$ -	\$ 250,335.00	99%	\$ 3,000.00	
A.16	Siemens Odor Control	LS	\$ 208,478.00	\$ -	\$ -	\$ -	\$ -	0%	\$ 208,478.00	
A.17	Cornell Prim Sludge	LS	\$ 52,765.00	\$ 52,765.00	\$ -	\$ -	\$ 52,765.00	100%	\$ -	
A.18	Allen Bradley MCC's...	LS	\$ 2,325,701.00	\$ 2,325,701.00	\$ -	\$ -	\$ 2,325,701.00	100%	\$ -	
A.19	Modicon PLC's...	LS	\$ 276,997.00	\$ 276,997.00	\$ -	\$ -	\$ 276,997.00	100%	\$ -	
A.20	Krohne Mag Meters...	LS	\$ 142,000.00	\$ 141,682.00	\$ -	\$ -	\$ 141,682.00	100%	\$ 318.00	
A.21	Hallsten Alum Covers	LS	\$ 350,240.00	\$ 127,562.34	\$ -	\$ -	\$ 127,562.34	36%	\$ 222,677.66	
A.22	Sodium Hypochlorite Tanks...	LS	\$ 122,145.00	\$ 122,145.00	\$ -	\$ -	\$ 122,145.00	100%	\$ -	
A.23	Street sweeping... (\$1480/month)	LS	\$ 50,000.00	\$ 36,560.00	\$ 1,480.00	\$ -	\$ 38,040.00	76%	\$ 11,960.00	
A.24	Startup & testing...	LS	\$ 200,000.00	\$ 29,000.00	\$ -	\$ -	\$ 29,000.00	15%	\$ 171,000.00	
A.25	O&M manuals...	LS	\$ 80,000.00	\$ 6,000.00	\$ 12,000.00	\$ -	\$ 18,000.00	23%	\$ 62,000.00	
A.26	Final record drawings... (\$4000/M@24M w/ \$54,000 Final Payment)	LS	\$ 150,000.00	\$ 72,000.00	\$ 4,000.00	\$ -	\$ 76,000.00	51%	\$ 74,000.00	
A.27	Project dewatering...	LS	\$ 175,000.00	\$ 129,322.44	\$ 8,000.00	\$ -	\$ 137,322.44	78%	\$ 37,677.56	
A.28	System integration...	LS	\$ 1,624,460.00	\$ 1,624,460.00	\$ -	\$ -	\$ 1,624,460.00	100%	\$ -	
A.29	Worker's Comp Ins...	LS	\$ 320,000.00	\$ 320,000.00	\$ -	\$ -	\$ 320,000.00	100%	\$ -	
A.30	Gen'l liability insurance...	LS	\$ 345,000.00	\$ 345,000.00	\$ -	\$ -	\$ 345,000.00	100%	\$ -	
A.31	Auto liability insurance...	LS	\$ 65,000.00	\$ 65,000.00	\$ -	\$ -	\$ 65,000.00	100%	\$ -	
A.32	Differing site conditions...	AL	\$ 100,000.00	\$ 72,944.00	\$ -	\$ -	\$ 72,944.00	73%	\$ 27,056.00	
A.33	SWPPP (\$1850/month)	LS	\$ 85,000.00	\$ 71,900.00	\$ 1,850.00	\$ -	\$ 73,750.00	87%	\$ 11,250.00	
<b>SUBTOTAL SCHEDULE A BID ITEMS</b>			\$ 82,562,809.00	\$ 60,174,327.46	\$ 1,956,480.17	\$ -	\$ 62,130,807.63	75%	\$ 20,432,001.37	

<b>Schedule A-1</b>										
A-01	Builder's Risk Insurance	LS	\$ 635,000.00	\$ 635,000.00	\$ -	\$ -	\$ 635,000.00	100%	\$ -	
<b>SUBTOTAL BUILDER'S RISK</b>			\$ 635,000.00	\$ 635,000.00	\$ -	\$ -	\$ 635,000.00	100%	\$ -	

<b>Schedule B Bid Items</b>										
B.01	Precast Prestressed Concrete Driven Pile (46,580 LF)	\$ 51.00	\$ 2,389,350.00	\$ 1,973,882.00	\$ -	\$ -	\$ 1,973,882.00	83%	\$ 415,468.00	
B.02	Predrilled Precast Prestressed Concrete Driven Piles (650 LF)	\$ 52.00	\$ 33,800.00	\$ 33,800.00	\$ -	\$ -	\$ 33,800.00	100%	\$ -	
B.03	Furnish and Install Removable Floodwalls	LS	\$ 250,000.00	\$ 163,916.00	\$ -	\$ -	\$ 163,916.00	66%	\$ 86,084.00	
B.04	Impermeable membrane (4,659 LF)	\$ 20.00	\$ 93,180.00	\$ 32,417.00	\$ 10,400.00	\$ -	\$ 42,817.00	46%	\$ 50,363.00	

C-3

**MWRP Phase 2 Expansion Construction  
Determination of Credit for  
Structure Piles - MWRP (within Plant)**

**1. Unrealized Mobilization Costs**

	<u>Rate (\$/LF)</u>	<u>Length (ft)</u>	<u>Total Cost (\$)</u>
Bid	\$ 7.07	54,000	\$381,780.00
Actual Installed	\$ 7.07	36,415	\$257,454.05
<b>Unrealized Production</b>		<b>17,585</b>	<b>\$124,325.95</b>

**2. Under Payment - Foundation Pile**

Foundation Pile Cost	\$ 1,908,912.85
Amount Paid to Foundation Pile	\$ 1,887,389.45
<b>Amount Due to Foundation Pile</b>	<b>\$ 21,523.40</b>

<b>3. Settlement Offer</b>	\$ 145,849.35
2.5% to Filanc	\$ 3,646.23
	<b>\$ 149,495.58</b>

2/9/2012

**MWRP Phase 2 Expansion and Flood Protection Improvements  
PR 20214, 20542, 30214, and 30542  
Construction Summary**

Contractor: J R Filanc Construction  
Design Engineer: HDR

D-1

			Contract Amount						Contract Days				Original Completion Date:
Change Order	Description	Category	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
1	Approved by Director of Engineering and Construction Approved on November 19, 2009			\$195.40	\$0.00	\$195.40	0.0%	\$87,479,645.40	0	0	0	1,094	8/1/2012
1.1	Partnering Workshop – IRWD and the Contractor agreed to split equally the cost of partnering. The initial partnering workshop was held on September 3, 2009. This change request represents the Contractor's portion of the cost of that initial workshop. It is a credit to IRWD.	A	(\$6,561.60)					0					
1.2	Installation of Bollards – The Contractor installed bollards around the IRWD MWRP Phase 2 Field Office Trailer and K-rails around the interim soium hypochlorite System to protect from traffic	A	\$ 3,655.72					0					
1.3	Relocation of 4-inch Natural Gas Pipeline	B	\$ 3,101.28					0					
2	Approved by Director of Engineering and Construction Approved on December 3, 2009			\$16,018.04	\$195.40	\$16,213.44	0.0%	\$87,495,663.44	0	0	0	1,094	8/1/2012
2.1	Previously Approved Change Request #4 – Tree Removal and Grinding at Flood Improvements and Duck Club	A	\$ 6,696.00					0					
2.2	Previously Approved NOPE #1 – Demolish Abandoned Building	D	\$ 7,641.87					0					
2.3	Repair of 10-inch PVC Groundwater Line at the New Headworks Area	B	\$ 1,680.17					0					
3	Approved by Director of Engineering and Construction Approved on December 18, 2009			\$0.00	\$16,213.44	\$16,213.44	0.0%	\$87,495,663.44	0	0	0	1,094	8/1/2012
3.1	Construct Temporary Access Road to Staging Area 3	A	\$ -					0					
4	Approved by Board of Directors Approved on January 25, 2010			\$143,950.10	\$16,213.44	\$160,163.54	0.2%	\$87,639,613.54	0	0	0	1,094	8/1/2012
4.1	Upsize Area 600 Aeration Blower from 350 to 500 hp	C	\$ 66,355.57					0					
4.2	Upsizing Soft Starters for Area 700 Blowers from 350 to 450 hp	C	\$ 41,529.75					0					
4.3	Infrared Windows to Measure Stray Currents	A	\$ 36,064.78					0					
5	Approved by Director of Engineering and Construction Approved on December 29, 2009			\$5,081.52	\$160,163.54	\$165,245.06	0.2%	\$87,644,695.06	0	0	0	1,094	8/1/2012
5.1	Relocation of K-rail to Allow Construction Equipment access for pond maintenance (PR 10942)	D	\$ 5,081.52					0					
6	Approved by Engineering & Operations Comm Approved on January 19, 2010			\$77,478.00	\$165,245.06	\$242,723.06	0.3%	\$87,722,173.06	0	0	0	1,094	8/1/2012
6.1	WAS and Skimming Pumps Replacement (PR 20779)	D	\$ 77,478.00					0					

**MWRP Phase 2 Expansion and Flood Protection Improvements**  
**PR 20214, 20542, 30214, and 30542**  
**Construction Summary**

Contractor: J R Filanc Construction  
 Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:			
Change Order	Description	Category	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	Original Contract Amount: \$ 87,479,450.00	Original Days: 1,094	8/1/2012
														7	Approved by AGM Approved on February 9, 2010 7.1 Relocation and Repair of Unknown Utilities. The Contractor relocated a 1-inch air line and repaired a 2-inch chlorine line, both of which were not shown on the Plans. (CCR #10) 7.2 Removal and Disposal of Unknown Electrical Ductbanks at future Sodium Hypochlorite Feed Facility. (CCR #12) 7.3 Non-compensable Weather-Related Delay 7.4 Non-compensable Time Extension Due to Change Order No. 4 7.5 Addition of Manways on Sodium Hypochlorite Tanks (CCR #23)	B B B C A
8	Approved by Board of Directors Approved on February 22, 2010 8.1 Delete Bid Item A.28 – System Integration 8.2 System Integration Coordination and SCADA Hardware Procurement	A A	\$ (1,624,460.00) 488,639.25	-\$1,135,820.75	\$252,937.93	-\$882,882.82	-1.0%	\$86,596,567.18	0 0 0	0 0 0	0 0 0	1,094	8/1/2012			
9	Approved by AGM Approved on March 18, 2010 9.1 Deletion of Change Order 4, Line Item 3 – Installation of Infrared Windows.	A	\$ (36,064.78)	-\$36,064.78	-\$882,882.82	-\$918,947.60	-1.1%	\$86,560,502.40	0	0	0	1,094	8/1/2012			
10	Approved by AGM Approved on March 23, 2010 10.1 Removal of 18-inch pipe and installation of 24-inch blind flange at Sodium Hypochlorite System excavation (CR #24) 10.2 Addition of 24-inch side manway for Manganese Hydroxide tanks (CR #27) 10.3 Relocation of 54" Primary Effluent Line (CR #29) 10.4 Change in PVC C900/C905 Manufacturer (CR #30)	B A A A	\$2,708.66 \$5,667.83 (\$15,928.00) \$14,514.96	\$6,963.45	-\$918,947.60	-\$911,984.15	-1.0%	\$86,567,465.85	0 0 0 0	0 0 0 0	0 0 0 0	1,094	8/1/2012			

D-2



**MWRP Phase 2 Expansion and Flood Protection Improvements**  
**PR 20214, 20542, 30214, and 30542**  
**Construction Summary**

Contractor: J.R. Filanc Construction  
 Design Engineer: HDR

D-3

			Contract Amount						Contract Days				Original Completion Date:	
Change Order	Description	Category	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	Original Completion Date:
														Original Contract Amount: \$ 87,479,450.00
11	Approved by Director of Engineering and Construction Approved on April 26, 2010			\$21,033.73	-\$911,984.15	-\$890,950.42	-1.0%	\$86,588,499.58	0	0	0	1,094	8/1/2012	
11.1	Abandoned 24-inch line at high rate clarifier location (CR #026)	B	\$15,782.97						0					
11.2	Exploratory Excavation for Duct Bank at MPS-2 electrical building	B	\$3,035.98						0					
11.3	Provide chain operators and chain, and grease fittings for plug valves for the WAS/Skinning Pumps Replacement Project (PR 20779) (CR #036)	D	\$2,214.78						0					
12	Approved by Director of Engineering and Construction Approved on April 28, 2010			\$17,121.47	-\$890,950.42	-\$873,828.95	-1.0%	\$86,605,621.05	0	0	0	1,094	8/1/2012	
12.1	Relocation of Existing 10-inch and 6-inch GW line (CR #014)	B	\$17,121.47						0					
13	Approved by AGM Approved on April 28, 2010			\$34,095.00	-\$873,828.95	-\$839,733.95	-1.0%	\$86,639,716.05	0	0	0	1,094	8/1/2012	
13.1	Modifications in Checkered Aluminum Plates at the Headworks Area (CR 037)	C	\$34,095.00						0					
14	Approved by Director of Engineering and Construction Approved on May 4, 2010			\$16,655.10	-\$839,733.95	-\$823,078.85	-0.9%	\$86,656,371.15	0	0	0	1,094	8/1/2012	
14.1	Electrical Substation Work (Two additional 5-inch Conduits and Connection btwn IRWD and SCE) (CR 028)	A	\$16,655.10						0					
15	Approved by AGM Approved on May 21, 2010			-\$49,007.95	-\$823,078.85	-\$872,086.80	-1.0%	\$86,607,363.20	0	0	0	1,094	8/1/2012	
15.1	Credit for Not Relocating the 18-inch diameter drain line at HRC (CR #019)	A	(\$42,262.00)						0					
15.2	Credit for Slab Penetration Modifications, Detail P17 (RFI 0102) (CR #032)	A	(\$6,745.95)						0					
16	Approved by Director of Engineering and Construction Approved on May 25, 2010			\$22,358.42	-\$872,086.80	-\$849,728.38	-1.0%	\$86,629,721.62	0	0	0	1,094	8/1/2012	
16.1	Abandonment of 6" Pipes at MBR Screen Area (CR 042)	B	\$2,536.36						0					
16.2	Addition of Three Transformers at UV Disinfection Facility (RFI 0149)	C	\$18,633.63						0					
16.3	Remove encasement on existing utilities to allow construction of future Primary Sedimentation Tanks (CR 051)	B	\$1,188.43						0					

**MWRP Phase 2 Expansion and Flood Protection Improvements**  
**PR 20214, 20542, 30214, and 30542**  
**Construction Summary**

Contractor: J.R. Filanc Construction  
 Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	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
17	Approved by Engineering & Operations Committee Approved on June 15, 2010			-\$55,420.00	-\$849,728.38	-\$905,148.38	-1.0%	\$86,574,301.62	0	0	0	1,094	8/1/2012
17.1	Demolition of Old Clarifier Bottoms (CR 013)	B	(\$55,420.00)						0	0	0		
18	Approved by Director of Engineering and Construction Approved on July 28, 2010			\$24,882.24	-\$905,148.38	-\$880,266.14	-1.0%	\$86,599,183.86	0	0	0	1,094	8/1/2012
18.1	Water Control Gate Revisions (CR #034)	C	\$17,923.23						0	0	0		
18.2	Repair of Existing Vault west of High Rate Clarifier (CR #057)	B	\$1,451.75						0	0	0		
18.3	Additional Demolition at Abandoned Aerobic Digester Area (CR #063)	B	\$5,507.26						0	0	0		
19	Approved by Director of Engineering and Construction Approved on July 30, 2010			\$16,058.68	-\$880,266.14	-\$864,207.46	-1.0%	\$86,615,242.54	0	0	0	1,094	8/1/2012
19.1	Platform modifications at Sodium Hypochlorite Feed System (CR 025)	A	\$2,478.67						0	0	0		
19.2	Pothole of existing 36-inch filter influent pipe (CR 043)	A	\$4,503.99						0	0	0		
19.3	Delete 6" knife gate valve and add 6" plug valve at Primary Sedimentation (CR 046)	A	\$662.31						0	0	0		
19.4	Repair of reclaimed water leak near old control room (CR 054)	B	\$1,173.07						0	0	0		
19.5	MBR fine screen cover plates modifications (CR 064)	B	\$7,240.64						0	0	0		
20	Approved by Assistant GM Approved on August 26, 2010			\$34,622.27	-\$864,207.46	-\$829,585.19	-0.9%	\$86,649,864.81	0	0	0	1,094	8/1/2012
20.1	Area 600 Blower Discharge Modifications (CR 050)	A	\$34,622.27						0	0	0		
21	Approved from Board of Directors Approved on August 23, 2010			\$277,384.97	-\$829,585.19	-\$552,200.22	-0.6%	\$86,927,249.78	0	0	0	1,094	8/1/2012
21.1	Valve Vaults Modifications (CR 020)	A	\$277,384.97						0	0	0		
22	Approved by Director of Engineering and Construction Approved on August 26, 2010			\$23,117.06	-\$552,200.22	-\$529,083.16	-0.6%	\$86,950,366.84	0	0	0	1,094	8/1/2012
22.1	Site Cleanup Due to Existing Filter Overflow (CR 065)	B	\$4,271.51						0	0	0		
22.2	Hollow shaft motor modifications to Vertical Turbine & Vertical Propeller Pumps (CR 069)	A	\$18,845.55						0	0	0		
23	Approved by Director of Engineering and Construction Approved on September 9, 2010			\$23,569.60	-\$529,083.16	-\$505,513.56	-0.6%	\$86,973,936.44	0	0	0	1,094	8/1/2012
23.1	MBR Anoxic Wall Modifications (CR 061)	C	\$6,399.86						0	0	0		
23.2	Repair Existing 6-inch GW near SCE Station (CR 067)	B	\$3,449.83						0	0	0		
23.3	Unforeseen Conditions at SCE Conduit Installation (CR 075)	B	\$13,719.91						0	0	0		

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**MWRP Phase 2 Expansion and Flood Protection Improvements  
PR 20214, 20542, 30214, and 30542  
Construction Summary**

Contractor: J R Filanc Construction  
Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:
Change Order	Description	Category	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
24	Approved by Engineering and Operations Committee Approved on September 21, 2010 24.1 UVE Piping Modifications at Chlorine Contact Tanks (CR 056)	A	(\$52,172.00)	-\$52,172.00	-\$505,513.56	-\$557,685.56	-0.6%	\$86,921,764.44	0	0	0	1,094	8/1/2012
25	Approved by Board of Directors Approved on September 27, 2010 25.1 Modifications to Campus Drive Entrance (CR 022)	A	\$186,651.45	\$186,651.45	-\$557,685.56	-\$371,034.11	-0.4%	\$87,108,415.89	0	0	0	1,094	8/1/2012
26	Approved by Director of Engineering and Construction Approved on October 20, 2010 26.1 Change of Strut Material from FRP to Stainless Steel 316/Install CATS Cable from PLC 1600 to PLC 9 (CR 074) [PR 20214, 30214] 26.2 Existing Primary Sludge Pump Room Demolition and Modifications (CR 076) [PR 20214, 30214] 26.3 Fence Repair at SCE Substation (CR 078) [PR 20214, 30214] 26.4 SHC Electrical and Controls and Milestone Revisions (CR 079) [PR 20214, 30214] 26.5 Change to more Energy Efficient Air Conditioning Units (Five Total) (Submittal 15604-001) (CR 081) [PR 20214, 30214] 26.6 Grouting of the Sodium Hypochlorite Tanks at their Permanent Site (CR 084) [PR 20214, 30214]	A C B B A A	\$1,539.18 \$3,909.94 \$1,957.62 \$324.07 \$9,101.41 \$2,560.52	\$19,392.74	-\$371,034.11	-\$351,641.37	-0.4%	\$87,127,808.63	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	1,094	8/1/2012
27	Approved by Engineering & Operations Committee Approved on November 4, 2010 27.1 Primary Sedimentation Tanks Flo-Clip Baffles Value Engineering (CR 080)	A	(\$58,157.82)	-\$58,157.82	-\$351,641.37	-\$409,799.19	-0.5%	\$87,069,650.81	0	0	0	1,094	8/1/2012
28	Approved by GM Approved on November 24, 2010 28.1 Ducts for Future Phase 3 MBR (RFI 44) (RFI 016) 28.2 Sodium Hypochlorite LCP Modifications (CR 071)	A A	\$32,021.80 \$7,503.44	\$39,525.24	-\$409,799.19	-\$370,273.95	-0.4%	\$87,109,176.05	0 0	0 0	0 0	1,094	8/1/2012
29	Approved by Director of Engineering & Construction Approved on December 22, 2010 29.1 MBR Aeration Piping Access Platforms (CR-066) 29.2 Electrical Conduit Installation near MWRP Phase 2 Trailers (Unforeseen Conditions) (CR 077)	A B	\$14,074.73 \$9,889.88	\$23,964.61	-\$370,273.95	-\$346,309.34	-0.4%	\$87,133,140.66	0 0	0 0	0 0	1,094	8/1/2012

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**MWRP Phase 2 Expansion and Flood Protection Improvements  
PR 20214, 20542, 30214, and 30542  
Construction Summary**

Contractor: J R Filanc Construction  
Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	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 Assistant GM Approved on December 22, 2010			\$48,684.10	-\$346,309.34	-\$297,625.24	-0.3%	\$87,181,824.76	0	0	0	1,094	8/1/2012
	30.1 Pipe Support (20-PE and 18-ML) Modifications per Submittal 15090-003 (CR 073)	C	\$20,880.97						0				
	30.2 Material Change to SS 316 for Dry Type Transformer Submittal 16460-001 and Panelboard Submittal 16441-002 (CR 093)	A	\$27,803.13						0				
31	Pending Approval from Engineering & Operations Committee Approval scheduled for January 18, 2011			\$61,136.74	-\$297,625.24	-\$236,488.50	-0.3%	\$87,242,961.50	0	0	0	1,094	8/1/2012
	31.1 Modifications at Campus Drive Access (CR 085)	A	\$61,136.74						0				
32	Approved by Director of Engineering & Construction Approved on January 31, 2011			\$24,303.15	-\$236,488.50	-\$212,185.35	-0.2%	\$87,267,264.65	0	0	0	1,094	8/1/2012
	32.1 Delete Grout Fillet and Add Embeds at Headworks Grit Chambers (CR 090)	A	\$8,156.20						0				
	32.2 LCPs for Vertical Recirculating Chopper Pumps and Sump Pumps (CR 097)	C	\$15,000.00						0				
	32.3 Install Additional "Pipe Below Ground" Warning Tape (CR-099)	A	\$1,146.95						0				
33	Pending Approval from Board of Directors Pending Approval on February 28, 2011			\$282,840.15	-\$212,185.35	\$70,654.80	0.1%	\$87,550,104.80	0	0	0	1,094	8/1/2012
	33.1 Revised chlorine feed to filters (CR-038)	C	-\$3,510.68						0				
	33.2 PEPS meter vaults and bypass piping revisions (CR-039)	C	-\$165,696.50						0				
	33.3 MPS-2 Pump Discharge Pipe Modifications (NOPE #003/CR-040)	D	\$54,005.58						0				
	33.4 Modifications to MPS-2 Building Due to Unknown Duct Banks (RFI 160) (CR-049)	B	\$16,500.00						0				
	33.5 WAS/Foam Pump Revisions (CR-053)	C	-\$5,696.40						0				
	33.6 Floodwall Revisions per County of Orange and FEMA comments (CR-083)	A	\$350,685.85						0				
	33.7 Modifications to Grating Supports at PST Splitter Box (CR-102)	C	\$3,266.73						0				
	33.8 Change to NEMA 3R SS 316 Cabinets and Additional Taps for UV Disinfection Transformers Added by CR 047/CO 16 (CR-104)	A	\$12,003.29						0				
	33.9 Miscellaneous Time & Material Items								0				
	Demo Oversized Footing/Rebar on Existing Retaining Wall behind Paint Shop (CR-100)	B	\$5,391.41						0				
	Removal of Unknown Concrete at the North Interceptor (CR-107)	B	\$2,917.38						0				
	Thrust block on storage line at HRC vault (CR-108)	B	\$3,638.22						0				
	Removal of encased pipe for pile driving at MBR (CR-109)	B	\$2,756.79						0				
	Repair pile damaged when performing CR-109 (CR-110)	B	\$1,320.34						0				
	Install hydrophilic waterstop at PST launders (CR-113)	B	\$3,258.14						0				

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**MWRP Phase 2 Expansion and Flood Protection Improvements  
PR 20214, 20542, 30214, and 30542  
Construction Summary**

Contractor: J R Filanc Construction  
Design Engineer: HDR

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			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	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 Director of Engineering & Construction Approved on March 23, 2011			\$21,844.56	\$70,654.80	\$92,499.36	0.1%	\$87,571,949.36	0	0	0	1,094	8/1/2012
	34.1 Groundwater Well Modifications (CR-041) [PR 20214, 30214]	A	\$2,338.20						0				
	34.2 Bypass for Shutdown at HRC Vault (CR-106) [PR 20214, 30214]	A	\$11,200.90						0				
	34.3 Removal and Disposal of Abandoned 8-inch Reclaimed Water Line in the area of North Influent Interceptor Junction Structure (CR-111) [PR 20214, 30214]	B	\$3,039.17						0				
	34.4 Additional Pipe Supports for 20" PE at MBR (CR-135) [PR 20214, 30214]	B	\$2,811.22						0				
	34.5 Repair existing 6-in Reclaimed Water Line near Headworks (CR-138) [PR 20214, 30214]	C	\$2,455.07						0				
35	Approved by Asst. GM Approved on April 18, 2011			\$43,741.00	\$92,499.36	\$136,240.36	0.2%	\$87,615,690.36	0	0	0	1,094	8/1/2012
	35.1 Area 600 Blower Discharge Modifications (CR-055) [PR 20214, 30214]	A	\$28,785.00						0				
	35.2 Area 600 Blower Structural Support Modifications (CR-077) [PR 20214, 30214]	B	\$14,956.00						0				
36	Approved by Director of Engineering and Construction Approved on May 16, 2011			\$23,514.97	\$136,240.36	\$159,755.33	0.2%	\$87,639,205.33	0	0	0	1,094	8/1/2012
	36.1 Area 300 Primary Sedimentation and Area 700 Membrane Bioreactors FRP Launder Modifications (CR-087) [PR 20214, 30214]	A	\$4,757.27						0				
	36.2 Area 700 Membrane Bioreactors GE Piping Modifications (CR-136) [PR 20214, 30214]	B	\$16,933.64						0				
	36.3 Addition of speed feedback on Various variable speed pumps (Chemical Systems) (CR-116) [PR 20214, 30214]	A	\$1,824.06						0				
37	Approved by Assistant GM Approved on May 30, 2011			\$46,369.50	\$159,755.33	\$206,124.83	0.2%	\$87,685,574.83	0	0	0	1,094	8/1/2012
	37.1 Replacement of Existing Area 600 Discharge Pipe Coupling (CR-117) [PR 20214, 30214]	A	\$14,011.85						0				
	37.2 Modifications to Primary Sedimentation Tank Embeds and Cover Plates (CR-125) [PR 20214, 30214]	A	\$6,751.65						0				
	37.3 Increase of Bid Item A.8 - Additional Pre-drilling of Piles (CR-098) - 3,658 LF@ \$7/LF [PR 20214, 30214]	B	\$25,606.00						0				
38	Approved by Director of Engineering and Construction Approved on May 30, 2011			\$24,692.00	\$206,124.83	\$230,816.83	0.3%	\$87,710,266.83	0	0	0	1,094	8/1/2012
	38.1 Two-Sided (Split Faced) Masonry for Flood Protection Improvements (CR-088) [PR 20542, 30542]	C	\$19,704.00						0				
	38.2 Architectural Modifications of MBR Building per Revised Drawing A-702 (CR-149) [PR 20214, 30214]	C	\$4,988.00						0				

**MWRP Phase 2 Expansion and Flood Protection Improvements  
PR 20214, 20542, 30214, and 30542  
Construction Summary**

Contractor: J R Filanc Construction  
Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	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
39	Approved by Engineering & Operations Committee Approved on June 21, 2011 39.1 Additional Architectural Modifications at High Rate Clarifier (CR-082) [PR 20214, 30214]	A	\$60,515.80	\$60,515.80	\$230,816.83	\$291,332.63	0.3%	\$87,770,782.63	0	0	0	1,094	8/1/2012
40	Approved by Director of Engineering and Construction Approved on June 23, 2011 40.1 Double Containment Piping Modification for Sodium Hypochlorite System (CR-095) [PR 20214, 30214/Oracle 1599, 40.2 Change of Enclosure from NEMA 4 to NEMA 4X SS for Chopper Pumps in CR-097 (CR-133) [PR 20214, 40.3 Sodium Hypochlorite Tank Pad at PST Odor Control (CR-146) [PR 20214, 30214/Oracle 1599, 1706]	A A B	\$16,157.16 \$1,347.00 \$5,709.89	\$23,214.05	\$291,332.63	\$314,546.68	0.4%	\$87,793,996.68	0 0 0	0 0 0	0 0 0	1,094	8/1/2012
41	Approved Assistant GM Approved on June 24, 2011 41.1 MPS-2 replacement of existing valves (NOPE #4) (CR-126) [PR 20214, 30214/Oracle 1599, 1706] 41.2 Graybar Modifications per RFI 372 (CR-144) [PR 20214, 30214/Oracle 1599, 1706] 41.3 Steel Joists Modifications Due to Additional Load Requirements per Submittal 05221-001 (CR-153) [PR 20214, 30214/Oracle	A A B	\$35,068.26 \$3,429.00 \$9,508.00	\$48,005.26	\$314,546.68	\$362,551.94	0.4%	\$87,842,001.94	0 0 0	0 0 0	0 0 0	1,094	8/1/2012
42	Approved by Engineering & Operations Committee Approved on July 13, 2011 42.1 MBR Aeration and Permeate Piping Modifications (CR-048) [PR 20214, 30214/Oracle 1599, 1706]	B	\$59,150.74	\$59,150.74	\$362,551.94	\$421,702.68	0.5%	\$87,901,152.68	0	0	0	1,094	8/1/2012
43	Approved by Board of Directors Approved on July 25, 2011 43.1 Pipelines and Utilities for Future Biosolids (CR-017) (PR 20847/Oracle 1617) 43.2 Biosolids Sewer Force Main (CR-045) (PR 20847/Oracle 1617) 43.3 Geotechnical Investigation at Staging Area 2 for Biosolids Project (CR 137) (PR 20847/Oracle 1617)	D D D	\$503,272.17 \$626,976.14 \$2,035.40	\$1,132,283.71	\$421,702.68	\$1,553,986.39	1.8%	\$89,033,436.39	120 60 60	0	120	1,214	11/29/2012
44	Pending Approval from Director of Engineering & Construction Approval Pending on August 18, 2011 44.1 Chemical Systems Pump Pad Modifications (CR-105) (PR 20214,30214/Oracle 1599,1706) 44.2 Installation of 6" Gate Valve and Change of Pipe Size on PW near SII Junction (CR-140) (PR 20214,30214/Oracle 44.3 PLC-300 additional I/O to accommodate VFD change of Primary Sludge Pumps (PR 20214,30214/Oracle 1599,1706) 44.4 Non-compensable time extension of Milestone 5 – Floodwall Installation delay due to FEMA review and regulatory compliance	A A A B	\$1,833.71 \$9,141.00 \$13,999.77 \$0.00	\$24,974.48	\$1,553,986.39	\$1,578,960.87	1.8%	\$89,058,410.87	0 0 0 0	120	120	1,214	11/29/2012

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**MWRP Phase 2 Expansion and Flood Protection Improvements**  
**PR 20214, 20542, 30214, and 30542**  
**Construction Summary**

Contractor: J R Filanc Construction  
 Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	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
45	Approved by Director of Engineering & Construction Approved on August 29, 2011			\$24,935.87	\$1,578,960.87	\$1,603,896.74	1.8%	\$89,083,346.74	0	0	0	1,214	11/29/2012
45.1	Deletion of Monorail and Door Modifications at Headworks (CR-103) (PR 20214,30214/Oracle 1599,1706)	A	\$3,570.03						0				
45.2	Hollow Metal Door Modifications (CR-156) (PR 20214,30214/Oracle 1599,1706)	A	\$7,396.38						0				
45.3	Miscellaneous T&M (CR-166) (PR 20214,30214/Oracle 1599,1706)	B	\$13,969.46						0				
46	Approved by Board of Directors Approved on September 26, 2011			\$476,789.37	\$1,603,896.74	\$2,080,686.11	2.4%	\$89,560,136.11	0	120	120	1,214	11/29/2012
46.1	Replacement of Sand Canyon Zone A and Associated Piping, Valves, and Appurtenances (CR-130) (PR 30038/Oracle 1643)	D	\$455,216.07						0				
46.2	As Needed Potholing Related to Strainer Replacement and Pipe Installation (CR-130) (PR 30038/Oracle 1643)	D	\$21,573.30						0				
47	Approved by Director of Engineering & Construction Approved on October 13, 2011			\$24,215.90	\$2,080,686.11	\$2,104,902.01	2.4%	\$89,584,352.01	0	120	120	1,214	11/29/2012
47.1	Installation of Davits at PST, MBR, SBW Walkway, and HRC (CR-134) (PR 20214 (1599)/30214 (Oracle 1706))	A	\$6,153.02						0				
47.2	Miscellaneous T&M Work (CR-183) (PR 20214 (1599)/30214 (Oracle 1706))	B	\$18,062.88						0				
48	Approved by Director of Engineering & Construction Approved on October 18, 2011			\$24,860.93	\$2,104,902.01	\$2,129,762.94	2.4%	\$89,609,212.94	0	120	120	1,214	11/29/2012
48.1	Primary splitter box low pressure air pipe material and restraints (CR-162)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$6,583.45						0				
48.2	FRP Launder Modifications at MBR RAS Box (CR-168)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$4,318.00						0				
48.3	Concrete with PVC behind Auto Shop (CR-112)/(PR 20214 (1599)/30214 (Oracle 1706))	B	\$1,262.67						0				
48.4	Door Hardware Modifications per RFI-0339 (CR-139)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$7,428.82						0				
48.5	SBW Pumps Low Level Circuit modifications (CR-178)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$2,261.42						0				
48.6	Site Lighting Modifications (CR-068)/(PR 20214 (1599)/30214 (Oracle 1706))	C	\$3,006.57						0				

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**MWRP Phase 2 Expansion and Flood Protection Improvements  
PR 20214, 20542, 30214, and 30542  
Construction Summary**

Contractor: J.R. Filanc Construction  
Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	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 from Board of Directors Approved on October 24, 2011 49.1 Biosolids Indicator Piles (CR-175)/PR 20847 (1617)	D	\$318,886.24	\$318,886.24	\$2,129,762.94	\$2,448,649.18	2.8%	\$89,928,099.18	188	120	308	1,214	11/29/2012
50	Approved by Director of Engineering & Construction Approved on November 21, 2011 50.1 Odor scrubber cleaning at Primary Sedimentation Tanks (CR-158) (PR 20214,30214/Oracle 1599,1706) 50.2 Existing Ductbank Modifications (CR-185) (PR 20214,30214/Oracle 1599,1706) 50.3 Additional Concrete Fillets at High Rate Clarifier (CR-188) (PR 20214,30214/Oracle 1599,1706)	A A A	\$2,564.33 \$13,764.46 \$8,629.05	\$24,957.84	\$2,448,649.18	\$2,473,607.02	2.8%	\$89,953,057.02	0 0 0	308	308	1,214	11/29/2012
51	Approved by Director of Engineering & Construction Approved on November 22, 2011 51.1 Filter Pump Station-2(FPS-2) Potable Water Line Addition (CR-172) (PR 20214 (1599)/30214 (Oracle 1706)) 51.2 Pothole 8 Inch Drain Line from High Rate Clarifier to Manhole #3 (CR-197) (PR 20214 (1599)/30214 (Oracle 1706))	A B	\$6,296.80 \$18,045.37	\$24,342.17	\$2,473,607.02	\$2,497,949.19	2.9%	\$89,977,399.19	0 0	308	308	1,214	11/29/2012
52	Approved by Board of Directors Approved on December 12, 2011 52.1 36" Stormwater Pipeline for Biosolids (CR-174) (PR 20847)	D	\$284,442.00	\$284,442.00	\$2,497,949.19	\$2,782,391.19	3.2%	\$90,261,841.19	188	308	496	1,214	11/29/2012
53	Approved by Director of Engineering & Construction Approved on December 8, 2011 53.1 Modifications to MBR Pump Room Drains and Valve Vaults (CR-096) (PR 20214/30214 (1599/1706)) 53.2 Central Electrical Building Masonry Veneer Modifications (CR-159) (PR 20214/30214 (1599/1706)) 53.3 Sodium Hydroxide Tank Pad Modifications (CR-161) 53.4 Addition of Gutter and Downspout at Membrane Bioreactors Structure (CR-164) (PR 20214/30214 (1599/1706))	C C A C	\$8,460.88 \$5,243.55 \$2,578.57 \$8,602.30	\$24,885.30	\$2,782,391.19	\$2,807,276.49	3.2%	\$90,286,726.49	0 0 0 0	496	496	1,214	11/29/2012
54	Approved by Director of Engineering & Construction Approved on December 9, 2011 54.1 Grit Pump and Mixer Power Feed Modifications (CR-115) (PR 20214,30214/Oracle 1599,1706) 54.2 8-inch Plant Drain Residuals to Headworks Piping Modifications at High Rate Clarifier (CR-171) (PR 20214,30214/Oracle 1599,1706) 54.3 Vault Drain Line to PEPS (CR-176) (PR 20214,30214/Oracle 1599,1706)	A A B	\$3,764.78 \$11,720.63 \$9,083.93	\$24,569.34	\$2,807,276.49	\$2,831,845.83	3.2%	\$90,311,295.83	0 0 0	496	496	1,214	11/29/2012

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**MWRP Phase 2 Expansion and Flood Protection Improvements  
PR 20214, 20542, 30214, and 30542  
Construction Summary**

Contractor: J R Filanc Construction  
Design Engineer: HDR

			Contract Amount						Contract Days				Original Completion Date:
			Original Contract Amount: \$ 87,479,450.00						Original Days: 1,094				8/1/2012
Change Order	Description	Category	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	Approved by Director of Engineering & Construction Approved on January 11, 2012			\$24,469.23	\$2,831,845.83	\$2,856,315.06	3.3%	\$90,335,765.06	94	496	590	1,214	11/29/2012
55.1	Sodium Hypochlorite and Ferric Chloride Chemical Piping Additions (CR-128) (PR 20214,30214/Oracle 1599,1706)	A	\$9,994.81						0				
55.2	Modifications to the Existing Filter Effluent Channels (CR-204) (PR 20214,30214/Oracle 1599,1706)	C	\$14,474.42						0				
56	Approved by Director of Engineering & Construction Approved on January 20, 2012			\$24,315.75	\$2,856,315.06	\$2,880,630.81	3.3%	\$90,360,080.81	47	590	637	1,261	1/15/2013
56.1	Existing Sludge Pump Room Modifications (CR-147) (PR 20214,30214/Oracle 1599,1706)	B	\$19,483.75						0				
56.2	Structural Modifications for 20" LPA Penetration at MBR Building (CR-213) (PR 20214,30214/Oracle 1599,1706)	C	\$4,832.00						47				
57	Pending Approval from Board of Directors Pending Approval on February 27, 2012			\$116,206.53	\$2,880,630.81	\$2,996,837.34	3.4%	\$90,476,287.34	0	637	637	1,261	1/15/2013
57.1	Change from 2-Ton Bridge Crane to 5-Ton Bridge Crane (CR-195) (PR 20214,30214/Oracle 1599,1706)	C	\$116,206.53						0				
58	Pending Approval from Board of Directors Pending Approval on February 27, 2012			(\$669,030.20)	\$2,996,837.34	\$2,327,807.14	2.7%	\$89,807,257.14	0	637	637	1,261	1/15/2013
58.1	Final Bid Item Quantity Adjustment due to Differing Site Conditions of Bid Item A.06 - Precast Prestressed Concrete Driven Piles - Structure Piles (PR 20214,30214/Oracle	B	(\$669,030.20)						0				

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A - District Convenience/Initiation - Project Related	\$ 75,427.63	0.1%
B - Differing Site Conditions	\$ (370,099.67)	-0.4%
C - Design Oversight	\$ 263,656.11	0.3%
D - District Convenience/Initiation - Non-Project Related	\$ 2,358,823.07	2.7%
<b>TOTAL (A+B+C+D)</b>	<b>\$ 2,327,807.14</b>	<b>2.7%</b>
<b>TOTAL (A+B+C - (CCO No. 8 - SCADA))</b>	<b>\$ 1,104,804.82</b>	<b>1.3%</b>

## IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

**Project Title:** Michelson Water Reclamation Plant – Phase 2 Expansion Project & Flood Protection Improvements

Project No.: 20214, 30214, 20542 and 30542  
Purchase Order No.: 501695

Date: 1/24/2012  
Variance No.: 2

Originator:       IRWD       ENGINEER/CONSULTANT       Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*):

Supplemental pile foundation installation and geotechnical consulting services. Revised schedule by contractor exceeded our most recent estimate of time provided in variance 1. This variance request is based on revised contractors time and current charges to date. See attached letter proposal.

**Engineering & Management Cost Impact:**

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Production Piles						\$24,700
<b>Total \$ =</b>						<b>\$24,700</b>

**Schedule Impact:**


Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
		November 29, 2012	Add 4 months	March 29, 2012


**Required Approval Determination:**

<p><b>Total Original Contract</b>                      \$ <u>304,900</u></p> <p>Previous Variances \$ <u>121,595</u></p> <p>This Variance        \$ <u>24,700</u></p> <p><b>Total Sum of Variances</b>                      \$ <u>146,295</u></p> <p><b>New Contract Amount</b>                         \$ <u>451,195</u></p> <p><b>Percentage of Total Variances to Original Contract</b>                      _____ 48 %</p>	<p><input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.</p> <p><input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.</p> <p><input type="checkbox"/> Board: Single Variance greater than \$60,000.</p> <p><input checked="" type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.</p>
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ENGINEER/CONSULTANT: Ninyo & Moore

IRVINE RANCH WATER DISTRICT

  
Project Engineer/Manager  
Date: 2/2/12

  
Department Director  
Date: 2/9/12

  
Engineer's/Consultant's Management  
Date: 2/2/12

General Manager/Comm./Board  
Date: \_\_\_\_\_

February 2, 2012  
Proposal No. P-14173B

Mr. Billy Stewart, P.E.  
Irvine Ranch Water District  
P.O. Box 57000  
Irvine, California 92619-7000

**Subject: Proposal for Additional Pile Foundation Consulting Services  
Michelson Water Reclamation Plant - Phase 2 Expansion  
Irvine Ranch Water District  
Irvine, California**

Dear Mr. Stewart:

Ninyo & Moore is pleased to submit this proposal to provide additional construction services during the remainder of the installation of driven piles for the Phase 2 Expansion of the Michelson Water Reclamation Plant. We have been providing these services since October 2009 for the project. Due to the Contractor's schedule, our original estimate provided in our referenced proposal dated August 6, 2009, and our referenced revised supplemental proposal dated September 7, 2011, has been exceeded. Based on the current contractor's schedule and amount remaining in our authorized budget, we anticipate we will exceed our budget with approximately 20 days left of production pile installation. Our additional services for the project will include geotechnical engineering, monitoring of pile driving operations, consultations and documentation of the foundation construction. Our work will include the responsibilities of the geotechnical engineer as indicated in the project specifications and evaluation of the contractor conformance to the project specifications.

The Phase 2 Expansion project will include construction of multiple new structures, piping systems and associated infrastructure improvements. Driven pre-cast concrete piles will be used to support the Influent Trunk Sewers, Headworks Facility, MBR Complex, High Rate Clarifier and Electrical Buildings. Per project Addendum No. 4, the new Flood Wall construction will be included in the project. The Flood Wall project will include installation of piles for wall support. The general sequence of work will involve: 1) review and evaluation of contractor submittals regarding pile driving equipment, pile driving plans/construction sequence, and Wave Equation Analysis (WEAP) data, 2) field evaluation and engineering analysis of Indicator Piles, including Pile Driving Analyzer (PDA) tests and Case Pile Wave Analysis Program (CAPWAP) results,

and 3) monitoring and documentation of Production Piles. The WEAP analysis, PDA testing and CAPWAP programs will be performed by the contractor in accordance with the project specifications and the data will be provided to Ninyo & Moore for review and evaluation.

## **SCOPE OF SERVICES**

Based on our experience and our project understanding, we have prepared the following scope of services.

### **Production Piles**

- Check pile location, depth of pre-drill, pile length, concrete strength and pile plumbness before driving. This task will be based on review of the contractor's field survey data, project plans, pile schedules and pile rig set up.
- Record blow counts and pile hammer performance information, including hammer type, hammer stroke, and cushion material and dimension during pile driving operation.
- Evaluate and consult with Irvine Ranch Water District (IRWD), the project structural engineer and the contractor for cutting off piles or over-driving piles, if refusal is encountered before reaching the specified tip elevation.
- Evaluate and consult with IRWD, the project structural engineer and the contractor for re-striking or over-driving the pile if blow counts are less than required near the specified tip elevation.
- Evaluate and make recommendations to IRWD if pile damage and/or obstacles are encountered during pile driving, as well as other conditions, such as ground heaving.
- Prepare daily field reports to document work performed, piles completed, and observations regarding pile driving conditions and contractor conformance to project specifications. The pile plan and spread sheet will be updated daily and will be available for review by the IRWD/contractor.
- Provide as-needed engineering support and consultations.
- Prepare a report presenting the results of the pile construction with conclusions regarding the adequacy of the pile installation. Our report will include detailed information regarding the pile driving in tabulated form, including pile number, pile depth, blow counts, and additional pertinent data for each pile.

## ASSUMPTIONS

The following assumptions have been made in the preparation of this scope of services:

- We have assumed that the contractor will complete the pile installation within their current schedule.
- We have assumed that our representative(s) will be on site full time (8-hour working days) for the duration of the pile driving.

## ESTIMATED FEE

Our services will continue to be performed on a time-and-materials basis in accordance with the attached Schedule of Fees. Based on the scope of services and assumptions presented above, we estimate that our fees for the additional production piles will be approximately \$24,700 (twenty-four thousand seven hundred dollars). A detailed breakdown of our estimated fee is presented in the attached Table 1.

Thank you for the opportunity to provide continued services on this project.

Respectfully submitted,  
**NINYO & MOORE**



Michael T. Pearce, PE, GE  
Senior Engineer



Carol A. Price, PG, CEG  
Principal Geologist

MTP/CAP/sc

Attachments: References

Table 1 – Breakdown of Estimated Fee – Production Piles

Schedule of Fees

Schedule of Fees for Laboratory Testing

Distribution: (1) Addressee (via e-mail)

## REFERENCES

- HDR Engineering, Inc., 2009, Project Manual for Michelson Water Reclamation Plant, Phase 2 Expansion, Project No. 20214, 30214, Volumes 1, Volumes 2A and 2B (Specifications), Volumes 4A and 4B (Construction Plans), and Volume 5, dated March.
- Ninyo & Moore, 2008a, Geotechnical Evaluation, Phase 2 Expansion, Michelson Water Reclamation Plant, Irvine Ranch Water District, Irvine, California, dated January 7.
- Ninyo & Moore, 2008b, Geotechnical Evaluation, Proposed Floodwall Improvements, Michelson Water Reclamation Plant, Irvine Ranch Water District, Irvine, California, dated July 8.
- Ninyo & Moore, 2008c, Geotechnical Report, Phase 2 Expansion, Michelson Water Reclamation Plant, Irvine Ranch Water District, Irvine, California, dated July 17.
- Ninyo & Moore, 2009a, Geotechnical Recommendations, Project Improvements within Orange County Flood Control District Right-of-Way, Phase 2 Expansion, Michelson Water Reclamation Plant, Irvine, California, dated February 27.
- Ninyo & Moore, 2009b, Geotechnical Evaluation, FEMA Levee Certification and San Diego Creek Flood Protection Improvements, Michelson Water Reclamation Plant, Irvine Ranch Water District, Irvine, California, dated June 23.
- Ninyo & Moore, 2009c, Proposal for Pile Foundation Consulting Services, Michelson Water Reclamation Plant – Phase 2 Expansion, Irvine Ranch Water District, Irvine, California, dated August 6.
- Ninyo & Moore, 2011, Revised Proposal for Supplemental Pile Foundation Consulting Services, Michelson Water Reclamation Plant – Phase 2 Expansion, Irvine Ranch Water District, Irvine, California, dated September 7.

**TABLE 1 – BREAKDOWN OF ESTIMATED FEE - PRODUCTION PILES**

<b>PROJECT MANAGEMENT AND MEETINGS</b>			
Principal Engineer/Geologist/Environmental Scientist	1 hour @ \$ 139.00 /hour	\$	139.00
Project Engineer/Geologist/Environmental Scientist	4 hours @ \$ 123.00 /hour	\$	492.00
<b>Subtotal</b>			<b>\$ 631.00</b>

<b>PILE DRIVING MONITORING ( 20 Rig Days)</b>			
Project Engineer/Geologist/Environmental Scientist	160 hours @ \$ 123.00 /hour	\$	19,680.00
<b>Subtotal</b>			<b>\$ 19,680.00</b>

<b>DATA COMPILATION AND ANALYSIS</b>			
Principal Engineer/Geologist/Environmental Scientist	4 hours @ \$ 139.00 /hour	\$	556.00
Project Engineer/Geologist/Environmental Scientist	16 hours @ \$ 123.00 /hour	\$	1,968.00
<b>Subtotal</b>			<b>\$ 2,524.00</b>

<b>REPORT PREPARATION</b>			
Principal Engineer/Geologist/Environmental Scientist	2 hours @ \$ 139.00 /hour	\$	278.00
Project Engineer/Geologist/Environmental Scientist	5 hours @ \$ 123.00 /hour	\$	615.00
Staff Engineer/Geologist/Environmental Scientist	8 hours @ \$ 96.00 /hour	\$	768.00
Technical Illustrator/CAD Operator	2 hours @ \$ 69.00 /hour	\$	138.00
Data Processing, Technical Editing, or Reproduction	2 hours @ \$ 44.00 /hour	\$	88.00
<b>Subtotal</b>			<b>\$ 1,887.00</b>

<b>TOTAL ESTIMATED FEE</b>			<b>\$ 24,722.00</b>
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**SCHEDULE OF FEES**

**HOURLY CHARGES FOR PERSONNEL**

Principal Engineer/Geologist/Environmental Scientist .....	\$ 139
Senior Engineer/Geologist/Environmental Scientist.....	\$ 133
Senior Project Engineer/Geologist/Environmental Scientist .....	\$ 127
Project Engineer/Geologist/Environmental Scientist.....	\$ 123
Senior Staff Engineer/Geologist/Environmental Scientist.....	\$ 109
Staff Engineer/Geologist/Environmental Scientist.....	\$ 96
GIS Analyst.....	\$ 96
Field Operations Manager .....	\$ 87
Supervisory Technician* .....	\$ 87
Nondestructive Examination Technician, UT, MT, LP* .....	\$ 87
Pull Test Technician and Equipment* .....	\$ 87
Senior Field/Laboratory Technician* .....	\$ 69
Field/Laboratory Technician* .....	\$ 69
ACI Concrete Technician* .....	\$ 69
Concrete/Asphalt Batch Plant Inspector.....	\$ 69
Special Inspector, Reinforced Concrete* .....	\$ 69
Special Inspector, Pre-stressed Concrete* .....	\$ 69
Special Inspector, Reinforced Masonry* .....	\$ 69
Special Inspector, Structural Steel* .....	\$ 69
Special Inspector, Welding, AWS* .....	\$ 69
Special Inspector, Fireproofing*.....	\$ 69
Technical Illustrator/CAD Operator.....	\$ 69
Geotechnical/Environmental/Laboratory Assistant .....	\$ 53
Information Specialist.....	\$ 52
Data Processing, Technical Editing, or Reproduction.....	\$ 44

**OTHER CHARGES**

Expert Witness Testimony.....	\$ 400 /hr
Concrete Coring Equipment (includes one technician) .....	\$ 160 /hr
Special Preparation of Standard Test Specimens .....	\$ 64 /hr
Inclinometer Usage .....	\$ 32 /hr
Vapor Emission Kits.....	\$ 30 /kit
Rebar Locator (Pachometer).....	\$ 10 /hr
Nuclear Density Gauge Usage.....	\$ 9 /hr
Field Vehicle Usage.....	\$ --
Direct Project Expenses.....	Cost plus 15 %
Laboratory testing, geophysical equipment, and other special equipment provided upon request.	

**NOTES (Field Services)**

For field and laboratory technicians and special inspectors, regular hourly rates are charged during normal weekday construction hours. Overtime rates at 1.5 times the regular rates will be charged for work performed outside normal construction hours and all day on Saturdays. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day or on Sundays and holidays. Lead time for any requested service is 24 hours. Field Technician rates are based on a 2-hour minimum. Special inspection rates are based on a 4-hour minimum for the first 4 hours and an 8-hour minimum for hours exceeding 4 hours. Field personnel are charged portal to portal.

\*Indicates rates that are based on Prevailing Wage Determination made by the State of California, Director of Industrial Relations on a semiannual basis. Our rates will be adjusted in conjunction with the increase in the Prevailing Wage Determination during the life of the project.

**INVOICES**

Invoices will be submitted monthly and are due upon receipt. A service charge of 1.0 percent per month may be charged on accounts not paid within 30 days.

**TERMS AND CONDITIONS**

The terms and conditions of providing our consulting services include our limitation of liability and indemnities as presented in Ninyo & Moore's Work Authorization and Agreement.



**SCHEDULE OF FEES FOR LABORATORY TESTING**  
**Laboratory Test, Test Designation, and Price Per Test**

<b>Soils</b>		<b>Concrete</b>	
Atterberg Limits, D 4318, CT 204 .....	\$ 145	Cement Analysis Chemical and Physical, C 109 .....	\$ 1,650
California Bearing Ratio (CBR), D 1883 .....	\$ 440	Compression Tests, 6x12 Cylinder, C 39 .....	\$ 22
Chloride and Sulfate Content, CT 417 & CT 422 .....	\$ 135	Concrete Mix Design Review, Job Spec .....	\$ 140
Consolidation, D 2435, CT 219 .....	\$ 275	Concrete Mix Design, per Trial Batch, 6 cylinder, ACI .....	\$ 750
Consolidation – Time Rate, D 2435, CT 219 .....	\$ 70	Concrete Cores, Compression (excludes sampling), C 42 .....	\$ 55
Direct Shear – Remolded, D 3080 .....	\$ 290	Drying Shrinkage, C 157 .....	\$ 250
Direct Shear – Undisturbed, D 3080 .....	\$ 250	Flexural Test, C 78 .....	\$ 50
Durability Index, CT 229 .....	\$ 150	Flexural Test, C 293 .....	\$ 55
Expansion Index, D 4829, UBC 18-2 .....	\$ 165	Flexural Test, CT 523 .....	\$ 60
Expansion Potential (Method A), D 4546 .....	\$ 145	Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI .....	\$ 250
Expansive Pressure (Method C), D 4546 .....	\$ 145	Jobsite Testing Laboratory .....	Quote
Geofabric Tensile and Elongation Test, D 4632 .....	\$ 165	Lightweight Concrete Fill, Compression, C 495 .....	\$ 40
Hydraulic Conductivity, D 5084 .....	\$ 300	Petrographic Analysis, C 856 .....	\$ 1,100
Hydrometer Analysis, D 422, CT 203 .....	\$ 190	Splitting Tensile Strength, C 496 .....	\$ 80
Moisture, Ash, & Organic Matter of Peat/Organic Soils .....	\$ 110		
Moisture Only, D 2216, CT 226 .....	\$ 30		
Moisture and Density, D 2937 .....	\$ 39		
Permeability, CH, D 2434, CT 220 .....	\$ 230	<b>Reinforcing and Structural Steel</b>	
pH and Resistivity, CT 643 .....	\$ 140	Fireproofing Density Test, UBC 7-6 .....	\$ 55
Proctor Density D 1557, D 698, CT 216, & .....	\$ 180	Hardness Test, Rockwell, A-370 .....	\$ 50
AASHTO T-180 (Rock corrections add \$80)		High Strength Bolt, Nut & Washer Conformance, set, A-32 .....	\$ 120
R-value, D 2844, CT 301 .....	\$ 250	Mechanically Spliced Reinforcing Tensile Test, ACI .....	\$ 95
Sand Equivalent, D 2419, CT 217 .....	\$ 90	Pre-Stress Strand (7 wire), A 416 .....	\$ 140
Sieve Analysis, D 422, CT 202 .....	\$ 110	Chemical Analysis, A-36, A-615 .....	\$ 120
Sieve Analysis, 200 Wash, D 1140, CT 202 .....	\$ 90	Reinforcing Tensile or Bend up to No. 11, A 615 & A 706 .....	\$ 50
Specific Gravity, D 854 .....	\$ 90	Structural Steel Tensile Test: Up to 200,000 lbs.	
Triaxial Shear, C,D, D 4767, T 297 .....	\$ 390	(machining extra), A 370 .....	\$ 70
Triaxial Shear, C,U., w/pore pressure, D 4767, T 2297 per pt. ..	\$ 330	Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI .....	\$ 55
Triaxial Shear, C,U., w/o pore pressure, D 4767, T 2297 per pt. ..	\$ 190		
Triaxial Shear, U,U., D 2850 .....	\$ 140	<b>Asphalt Concrete</b>	
Unconfined Compression, D 2166, T 208 .....	\$ 100	Asphalt Mix Design, Caltrans .....	\$ 2,200
Wax Density, D 1188 .....	\$ 90	Asphalt Mix Design Review, Job Spec .....	\$ 150
		Extraction, % Asphalt, including Gradation, D 2172, CT 310 .....	\$ 215
<b>Roofing</b>		Film Stripping, CT 302 .....	\$ 100
Built-up Roofing, cut-out samples, D 2829 .....	\$ 165	Hveem Stability and Unit Weight CTM or ASTM, CT 366 .....	\$ 195
Roofing Materials Analysis, D 2829 .....	\$ 500	Marshall Stability, Flow and Unit Weight, T-245 .....	\$ 215
Roofing Tile Absorption, (set of 5), UBC 15-5 .....	\$ 190	Maximum Theoretical Unit Weight, D 2041 .....	\$ 120
Roofing Tile Strength Test, (set of 5), UBC 15-5 .....	\$ 190	Swell, CT 305 .....	\$ 165
		Unit Weight sample or core, D 2726, CT 308 .....	\$ 90
<b>Masonry</b>		<b>Aggregates</b>	
Brick Absorption, 24-hour submersion, C 67 .....	\$ 45	Absorption, Coarse, C 127 .....	\$ 35
Brick Absorption, 5-hour boiling, C 67 .....	\$ 55	Absorption, Fine, C 128 .....	\$ 35
Brick Absorption, 7-day, C 67 .....	\$ 60	Clay Lumps and Friable Particles, C 142 .....	\$ 100
Brick Compression Test, C 67 .....	\$ 45	Cleaness Value, CT 227 .....	\$ 120
Brick Efflorescence, C 67 .....	\$ 45	Crushed Particles, CT 205 .....	\$ 140
Brick Modulus of Rupture, C 67 .....	\$ 40	Durability, Coarse, CT 229 .....	\$ 130
Brick Moisture as received, C 67 .....	\$ 35	Durability, Fine, CT 229 .....	\$ 130
Brick Saturation Coefficient, C 67 .....	\$ 50	Los Angeles Abrasion, C 131 or C 535 .....	\$ 180
Concrete Block Compression Test, 8x8x16, C 140 .....	\$ 60	Mortar making properties of fine aggregate, C 87 .....	\$ 275
Concrete Block Conformance Package, C 90 .....	\$ 440	Organic Impurities, C 40 .....	\$ 55
Concrete Block Linear Shrinkage, C 426 .....	\$ 120	Potential Reactivity of Aggregate (Chemical Method), C 289 .....	\$ 390
Concrete Block Unit Weight and Absorption, C 140 .....	\$ 55	Sand Equivalent, CT 217 .....	\$ 90
Cores, Compression or Shear Bond, CA Code .....	\$ 55	Sieve Analysis, Coarse Aggregate, C 136 .....	\$ 105
Masonry Grout, 3x3x6 prism compression, UBC 21-18 .....	\$ 30	Sieve Analysis, Fine Aggregate (including wash), C 136 .....	\$ 105
Masonry Mortar, 2x4 cylinder compression, UBC 21-16 .....	\$ 30	Sodium Sulfate Soundness (per size fraction), C 88 .....	\$ 160
Masonry Prism, half size, compression, UBC 21-17 .....	\$ 110	Specific Gravity, Coarse, C 127 .....	\$ 75
		Specific Gravity, Fine, C 128 .....	\$ 85

Special preparation of standard test specimens will be charged at the technician's hourly rate.

Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.