



AGENDA

18700 Ward St.
Fountain Valley, CA 92708
(714) 378-3200

WATER ISSUES COMMITTEE MEETING WITH BOARD OF DIRECTORS * ORANGE COUNTY WATER DISTRICT **Wednesday, October 14, 2026 12:00 p.m., Boardroom**

*The OCWD Water Issues Committee meeting is noticed as a joint meeting with the Board of Directors for the purpose of strict compliance with the Brown Act and it provides an opportunity for all Directors to hear presentations and participate in discussions. Directors receive no additional compensation or stipend as a result of simultaneously convening this meeting. Items recommended for approval at this meeting will be placed on the **October 21** Board meeting Agenda for approval.

This meeting will be held in person. As a convenience for the public, the meeting may also be accessed by Zoom Webinar and will be available by either computer or telephone audio as indicated below. Because this is an in-person meeting and the Zoom component is not required, but rather is being offered as a convenience, if there are any technical issues during the meeting, this meeting will continue and will not be suspended.

Computer Audio: Join the Zoom Webinar by clicking on the following link:
<https://ocwd.zoom.us/j/98592928069>

Webinar ID: 985 9292 8069

Telephone Audio: (213) 338 8477

Teleconference Sites:
10382 Bonnie Drive, Garden Grove
1454 Madison Street, Tustin
19 Cannery, Buena Park
20 Civic Center, Santa Ana
303 W. Commonwealth Ave., Fullerton
1502 North Broadway, Santa Ana
6148 Baja Drive, Anaheim

* Members of the public may attend and participate at all locations.

PLEDGE OF ALLEGIANCE

ROLL CALL

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

RECOMMENDATION: Adopt resolution determining need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda (requires two-thirds vote of the Board members present, or, if less than two-thirds of the members are present, a unanimous vote of those members present.)

VISITOR PARTICIPATION

Time has been reserved at this point in the agenda for persons wishing to comment for up to three minutes to the Board of Directors on any item that is not listed on the agenda, but within the subject matter jurisdiction of the District. By law, the Board of Directors is prohibited from taking action on such public comments. As appropriate, matters raised in these public comments will be referred to District staff or placed on the agenda of an upcoming Board meeting.

At this time, members of the public may also offer public comment for up to three minutes on any item on the Consent Calendar. While members of the public may not remove an item from the Consent Calendar for separate discussion, a Director may do so at the request of a member of the public.

CONSENT CALENDAR (ITEMS NO. 1 – 13)

All matters on the Consent Calendar are to be approved by one motion, without separate discussion on these items, unless a Board member or District staff request that specific items be removed from the Consent Calendar for separate consideration.

1. MINUTES OF WATER ISSUES COMMITTEE MEETING HELD SEPTEMBER 9, 2026

RECOMMENDATION: Approve minutes as presented

2. CITY OF TUSTIN EDINGER WELL PFAS TREATMENT SYSTEMS PROJECT:
CONSTRUCTION MANAGEMENT RFP AND CATEGORICAL EXEMPTION

RECOMMENDATION: Agendize for October 21 Board meeting:

1. Authorize issuance of a Request for Proposals for Construction Management Services for the City of Tustin Edinger Well PFAS Treatment Systems Project
2. Authorize filing of a Categorical Exemption for the City of Tustin Edinger Well PFAS Treatment Systems Project in compliance with the California Environmental Quality Act (CEQA) guidelines

3. GAP EMERGENCY REPAIR WORK ORDER RATIFICATION

RECOMMENDATION: Agendize for October 21 Board meeting: Ratify Work Order No. 16 of Agreement No. 1451 and payment to W.A. Rasic, Inc. for emergency repairs totaling \$8,456

4. AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT WITH CRAFTWATER
ENGINEERING – PRADO DAM WATER CONTROL MANUAL UPDATE #2 SUPPORT

RECOMMENDATION: Agendize for October 21 Board meeting: Authorize the General Manager to amend the professional services agreement with Craftwater Engineering, Inc. for an additional \$44,888 for a total agreement amount not to exceed \$154,564 to provide technical and coordination support for Prado Dam Water Control Manual Update #2

5. NATIONAL WATER RESEARCH INSTITUTE CALVAL PROJECT

RECOMMENDATION: Agendize for October 21 Board meeting: Authorize support for the NWRI CalVal effort in the amount of \$20,000

6. RECHARGE OPERATIONS EMERGENCY REPAIR WORK ORDER RATIFICATION

RECOMMENDATION: Agendize for October 21 Board meeting:

1. Ratify Work Order No. 12 of Agreement No. 1452 and payment to T.E. Roberts for emergency repairs totaling \$3,860
2. Ratify Work Order No. 13 of Agreement No. 1451 and payment to T.E. Roberts for emergency repairs totaling \$4,832

7. AUTHORIZE AGREEMENTS FOR ON-CALL REGULATORY COMPLIANCE SERVICES

RECOMMENDATION: Agendize for October 21 Board meeting: Authorize on-call service agreements for regulatory compliances services with:

- Chamber Group
- PSOMAS
- All 4, Inc
- Ultra Systems
- Helix Environmental Planning

8. PROPOSED AGREEMENTS WITH CITY OF ANAHEIM FOR BURRIS BASIN STORM DRAIN FACILITIES

RECOMMENDATION: Agendize for October 21 Board meeting: Authorize the General Manager to finalize and execute the Repair and Maintenance Agreement and Drainage Easement with the City of Anaheim for repair and maintenance of storm drain facilities at Burris Basin, subject to approval by General Counsel

9. WF-2025-1: 2025 ASPHALT PAVEMENT REHABILITATION NOTICE OF COMPLETION AND RATIFY CHANGE ORDERS

RECOMMENDATION: Agendize for October 21 Board meeting:

1. Ratify issuance of Change Order Numbers 1, 2, and 3 to PaveWest for a net total amount of \$70,707
2. Accept completion of work and authorize filing a Notice of Completion for Contract No. WF-2025-1: Asphalt Pavement Rehabilitation 2025 Project

10. FIELD HEADQUARTERS VEHICLE CHARGING INFRASTRUCTURE ENGINEERS REPORT AND CATEGORICAL EXEMPTION

RECOMMENDATION: Agendize for October 21 Board meeting:

1. Receive and file the Engineer's Report for the Field Headquarters Electric Vehicle Charging Project and determine the Project to be feasible, necessary, and beneficial to the District
2. Authorize filing of a Categorical Exemption for the Field Headquarters Electric Vehicle Charging Project in compliance with the California Environmental Quality Act (CEQA) guidelines

11. AWARD DESIGN OF 2026 ASPHALT PAVEMENT REHABILITATION

RECOMMENDATION: Agendize for October 21 Board meeting: Authorize issuance of agreement to NV5, Inc. for an amount not to exceed \$88,500 for the 2026 Asphalt Pavement Rehabilitation Design

12. AUTHORIZE CHANGE ORDER TO MURRAY COMPANY FOR REVERSE OSMOSIS CLEAN-IN-PLACE PIPE REPLACEMENT

RECOMMENDATION: Agendize for October 21 Board meeting:

1. Authorize Change Order No. 2 to Murray Company for Reverse Osmosis Piping Gasket Replacements in the amount of \$35,450
2. Increase the Reverse Osmosis CIP Valve Relocation Project budget to \$824,287

13. **ISSUE AMENDMENT NO. 1 TO AGREEMENT 1861 TO JAMISON ENGINEERING FOR THE GWRS PIPELINE INSPECTION WORK**

RECOMMENDATION: Agendize for October 21 Board meeting: Authorize issuance of Amendment No. 1 to Agreement 1861 with Jamison Engineering Contractors, Inc for an amount not to exceed \$258,000 for repair of vent lines on the GWRS pipeline

END OF CONSENT CALENDAR

MATTERS FOR CONSIDERATION

14. **AMENDMENT TO METROPOLITAN WATER DISTRICT CYCLIC STORAGE AGREEMENT**

RECOMMENDATION: Agendize for October 21 Board meeting: Authorize the General Manager to execute an amendment to the Cyclic Storage Agreement with MWD and MWDOC extending the agreement for an additional 10 years effective December 1, 2026, subject to review and approval by legal counsel

15. **AWARD CONTRACT NO. SB-2026-1 TO TE ROBERTS, INC. AND BUDGET INCREASE**

RECOMMENDATION: Agendize for October 21 Board meeting:

1. Receive and file Affidavit of Publication of Notice Inviting Bids for Contract No. SB-2026-1 Santiago Pump Station Modifications Project
2. Ratify issuance of Addenda 1 through 3 to Contract No. SB-2026-1
3. Approve request for withdrawal of bid by Pyramid Building and Engineering, Inc. without penalty due to clerical error in filling out the bid
4. Accept bid and award Contract No. SB-2025-1 to the lowest responsive and responsible bidder, TE Roberts, Inc., in the amount of \$5,338,735
5. Establish project budget in the amount of \$6,633,000

CHAIR DIRECTION AS TO ITEMS IF ANY TO BE AGENDIZED AS MATTERS FOR CONSIDERATION AT THE OCTOBER 21 BOARD MEETING

DIRECTORS' ANNOUNCEMENTS/REPORTS

GENERAL MANAGER'S ANNOUNCEMENTS/REPORTS

ADJOURNMENT

WATER ISSUES COMMITTEE MEMBERS

Committee Members

Cathy Green – Chair
Erik Weigand – Vice Chair
Roger Yoh
Van Tran
Dina Nguyen

Alternates

Valerie Amezcua
Fred Jung
Natalie Meeks
Steve Sheldon
Denis Bilodeau

In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted at the guard shack entrance and in the main lobby of the Orange County Water District, 18700 Ward Street, Fountain Valley, CA and on the OCWD website not less than 72 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the District Secretary. Backup material for the Agenda is available at the District offices for public review and can be viewed online at the District's website: www.ocwd.com

Pursuant to the Americans with Disabilities Act, persons with a disability who require a disability-related modification or accommodation in order to participate in a meeting, including auxiliary aids or services, may request such modification or accommodation from the District Secretary at (714) 378-3234, by email at cfuller@ocwd.com by fax at (714) 378-3373. Notification 24 hours prior to the meeting will enable District staff to make reasonable arrangements to assure accessibility to the meeting.

As a general rule, agenda reports or other written documentation has been prepared or organized with respect to each item of business listed on the agenda and can be reviewed at www.ocwd.com. Copies of these materials and other disclosable public records distributed to all or a majority of the members of the Board of Directors in connection with an open session agenda item are also on file with and available for inspection at the Office of the District Secretary, 18700 Ward Street, Fountain Valley, California, during regular business hours, 8:00 am to 5:00 pm, Monday through Friday. If such writings are distributed to members of the Board of Directors on the day of a Board meeting, the writings will be available at the entrance to the Board of Directors meeting room at the Orange County Water District office.

MINUTES OF BOARD OF DIRECTORS MEETING
Water Issues Committee
Orange County Water District
September 9, 2026 @ 12:00 p.m.

Director Green called the Water Issues Committee meeting to order at 12:00 p.m. in the District Boardroom. Public access was also provided via Zoom webinar. The Secretary called the roll and reported a quorum as follows:

Committee Members

Cathy Green
Erik Weigand
Roger Yoh
Van Tran
Dina Nguyen (arrived 12:08 p.m.)

Alternates

Valerie Amezcua (arrived 12:10 p.m.)
Fred Jung (arrived 12:03 p.m.)
Natalie Meeks
Steve Sheldon (arrived 12:17 p.m.)
Denis Bilodeau (arrived 12:06 p.m.)

OCWD

John Kennedy – General Manager
Chris Olsen – Executive Director of Engineering and Water Resources
Jason Dadakis – Executive Director of Water Quality and Technical Resources
Randy Fick – CFO
Roy Herndon – Chief Hydrogeologist
Megan Plumlee – Director of Research
Ben Smith – Director of Recharge & Wetland Ops
Tim Sovich – Principal Engineer
Gina Ayala – Director of Public Affairs
Jeremy Jungreis – General Counsel
Leticia Villarreal – Assistant District Secretary

CONSENT CALENDAR

Director Yoh requested that Item No. 2, *Award Contract No. FUL-2026-1 Fullerton Well 10 PFAS Treatment Project to Big Ben, Inc.*, be removed from the Consent Calendar and considered separately.

The Consent Calendar was then approved upon motion by Director Weigand, seconded by Director Yoh and carried [5-0], as follows:

Ayes: Green, Weigand, Yoh, Tran, Meeks

1. Minutes of Water Issues Committee Meeting

The Minutes of the Water Issues Committee meeting held August 12, 2026, were approved as presented.

2. Award Contract No. FUL-2026-1 Fullerton Well 10 PFAS Treatment Project to Big Ben Inc.

This matter was removed from the Consent Calendar and considered separately.

3. Contract No. SA-2026-1 City of Santa Ana Walnut PFAS Treatment Plant Categorical Exemption and Request for Proposals for Construction Management

Recommended for approval at September 16 Board meeting:

1. **Authorize filing of a Categorical Exemption for the City of Santa Ana Walnut PFAS Treatment Plant Project in compliance with the California Environmental Quality Act (CEQA) guidelines**

2. **Authorize issuance of a Request for Proposals for Construction Management Services for the City of Santa Ana Walnut PFAS Treatment Plant Project.**

4. Basin Storage Expansion Evaluation – Agreement with INTERA to Develop Historical Ground Surface Elevation Database
-

Recommended for approval at September 16 Board meeting: Authorize issuance of a services agreement to Intera, Inc. in an amount not to exceed \$54,000 to review, process, and provide a geospatial-temporal database of historical ground surface benchmark elevations in support of the District's land subsidence risk evaluation.

5. Replacement of Existing 910 Area Main Switchgear Batteries

Recommended for approval at September 16 Board meeting:

1. **Authorize issuance of a purchase order to Vertiv for an amount not to exceed \$101,587 for services to replace, test, and certify the 910 area switchgear batteries**
 2. **Authorize additional funds in the amount of \$1,587 for R&R account R26012.**
 6. Authorize Issuance of an Agreement to Smaart Power to Perform Comprehensive Coordination and ARC Flash Study Assessment and Update of GWRS/Fountain Valley Power Distribution System
-

Recommended for approval at September 16 Board meeting: Authorize issuance of an agreement to Smaart Power in the amount of \$70,270 to provide a comprehensive power system coordination and arc flash hazard study of the OCWD Fountain Valley power distribution system.

7. Agreement with ESRI to Update Spatial Database Engine Software

Recommended for approval at September 16 Board meeting: Authorize execution of a services agreement with Esri in an amount not to exceed \$27,400 to update OCWD's existing SDE software to the latest version.

8. Amendment No.1 to Agreement 1826 with Bender/CCP for Reverse Osmosis Transfer Pump A01 Vertical Turbine Pump Inspection and Rehabilitation
-

Recommended for approval at September 16 Board meeting:

1. **Authorize issuance of Amendment No 1 to Agreement 1826 with Bender/CCP for an amount not to exceed \$118,701 for the refurbishment of RO Transfer Pump A01**
 2. **Authorize additional funds in the amount of \$118,701 for R&R account R25015.**
 9. Amendment No.1 to Agreement 1827 with Bender/CCP for GWRS Product Water Pump A02 Vertical Turbine Pump Inspection and Rehabilitation
-

Recommended for approval at September 16 Board meeting:

1. **Authorize issuance of Amendment No 1 to Agreement 1827 with Bender/CCP for an amount not to exceed \$59,283 for the refurbishment of Product Water Pump A02**
2. **Authorize additional funds in the amount of \$59,283 for R&R account R25015.**

10. Authorize Purchase Order to Bender/CCCP for Repair of Microfiltration Backwash Waste Pump A03
-

Recommended for approval at September 16 Board meeting: Authorize issuance of a purchase order to Bender/CCP in the amount of \$99,859 for repair of Microfiltration Backwash Waste Pump A03.

11. Authorize Change Order 2 and Increase Budget for Contract BP-2026-1 Buena Park Linden Well Packer Installation – Well Screen Isolation to Reduce PFAS
-

Recommended for approval at September 16 Board meeting:

1. **Authorize issuance of Change Order No.2 to General Pump Company, Inc, for an amount not to exceed \$150,000 to furnish and install a VFD at the Buena Park Linden Well**
2. **Increase project budget by \$150,000 for a total project budget of \$808,739.**

ITEM REMOVED FROM THE CONSENT CALENDAR FOR CONSIDERATION

2. Award Contract No. FUL-2026-1 Fullerton Well 10 PFAS Treatment Project to Big Ben Inc.

Director Yoh inquired about the relatively high cost of the project compared to previous well projects. Executive Director of Engineering Chris Olsen explained that this project is unique because a significant portion of work involves pipeline construction to connect the new well facility to another location for KIM 2. Mr. Olsen also addressed previous irregularities with Big Ben, Inc. bid and assured that they have been resolved. He stated that the contractor confirmed that all work would be completed in accordance with contract documents and advised that staff was comfortable proceeding with the award.

Upon motion by Director Jung, seconded by Director Yoh and carried [5-0], the Committee recommended for approval at the September 16 Board meeting:

1. **Receive and file Affidavit of Publication of Notice Inviting Bids for Contract FUL-2026-1, Fullerton Well 10 PFAS Treatment Project**
2. **Ratify issuance of Addenda 1 & 2**
3. **Accept bid and authorize award of Contract FUL-2026-1 to the lowest responsive bid and responsible bidder, Big Ben Inc. in the amount of \$6,747,796.48.**

Ayes: Green, Weigand, Yoh, Tran, Jung

INFORMATIONAL ITEM

12. Basin Storage Update for Water Year 2025-26

Principal Engineer Tim Sovich reported that staff evaluated water level conditions throughout the basin and constructed groundwater elevation contour maps representing the end of the water year. He advised that using the “full basin” benchmark for all three aquifer layers in the basin, an accumulated overdraft of 162,000 acre-feet (AF) was calculated as of June 30, 2026. He noted that the basin experienced an annual storage decrease of 21,000 AF for water year (WY) 2025-26. Mr. Sovich presented details of the water level change and accumulated overdraft calculation.

**CHAIR DIRECTION AS TO ITEMS IF ANY TO BE AGENDIZED AS MATTERS FOR
CONSIDERATION AT THE SEPTEMBER 16 BOARD MEETING**

ADJOURNMENT

There being no further business, the meeting was adjourned at 12:31 p.m.

Cathy Green, Chair

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: R. Bouley/F. Almario

Budgeted: Yes

Budgeted Amount: \$7,000,000

Cost Estimate: \$0

Funding Source: CIP / SRFEC

Program/Line Item No.: C25007

General Counsel Approval: Yes

Engineers Report: In Progress

CEQA Compliance: Cat. Ex.

**Subject: CITY OF TUSTIN EDINGER WELL PFAS TREATMENT SYSTEMS
PROJECT: CONSTRUCTION MANAGEMENT RFP AND CATEGORICAL
EXEMPTION**

SUMMARY

The design for the City of Tustin Edinger Well PFAS Treatment Systems Project is currently in progress. Staff recommends issuing a Request for Proposals for a construction management firm to oversee construction and filing a Categorical Exemption in compliance with the California Environmental Quality Act guidelines. Staff expect to receive a \$3 million grant from the State Water Resources Control Board to assist in funding the project.

RECOMMENDATION

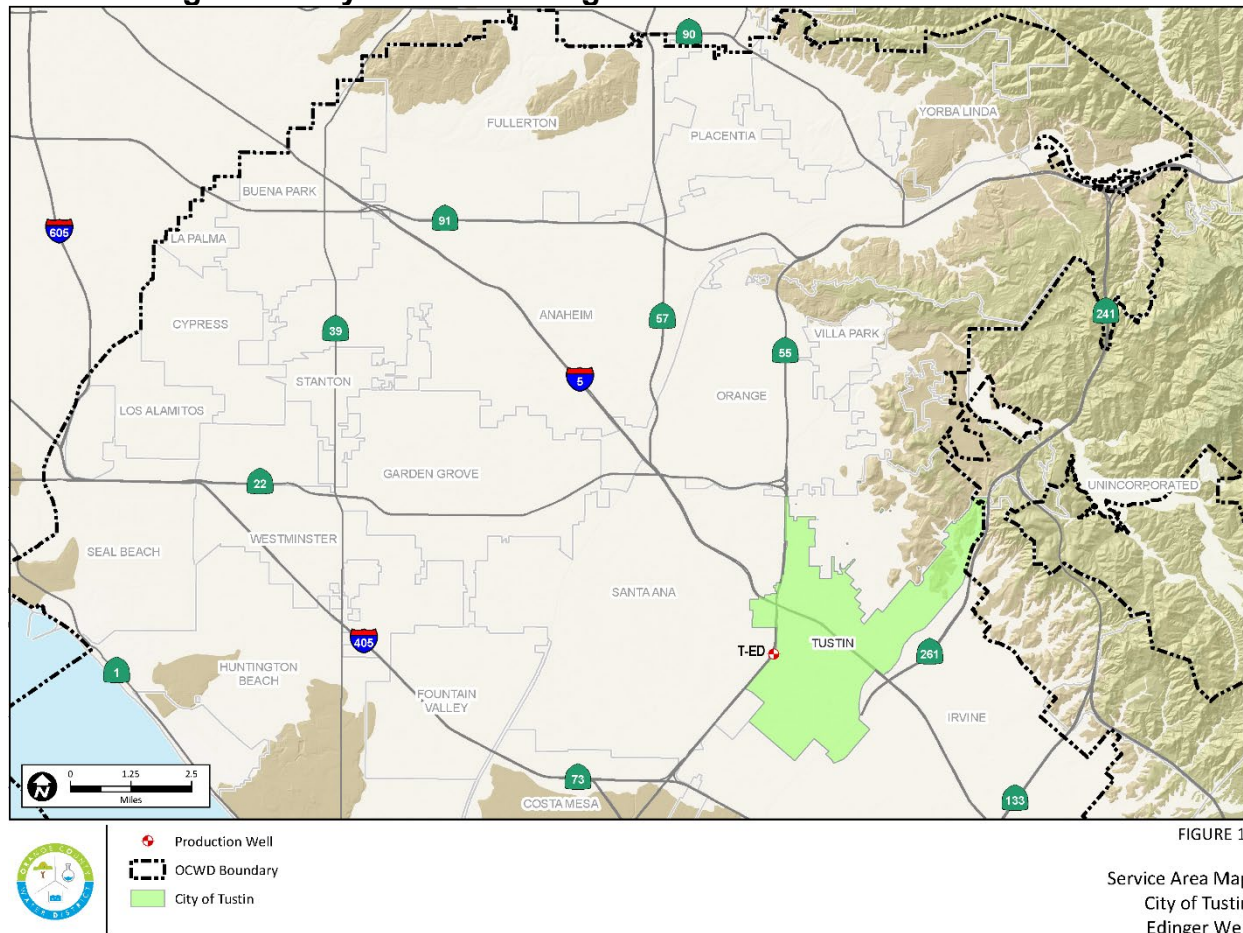
Agendize for October 21 Board Meeting:

1. Authorize issuance of a Request for Proposals for Construction Management Services for the City of Tustin Edinger Well PFAS Treatment Systems Project; and
2. Authorize filing of a Categorical Exemption for the City of Tustin Edinger Well PFAS Treatment Systems Project in compliance with the California Environmental Quality Act (CEQA) guidelines

BACKGROUND/ANALYSIS

To restore the use of groundwater supplies impacted by PFAS contaminants with minimal delay, the engineering firm, AKM Engineers, began design of the City of Tustin Edinger Well PFAS Treatment Systems Plant Project in June of 2026. Due to property constraints at the wells site, a wellhead Ion Exchange (IX) treatment system has been selected as the treatment method. The number of vessels and required support systems needed for IX allows for less area to be occupied by the treatment plant than would be required for Granular Activated Carbon (GAC), Nanofiltration (NF), or Reverse Osmosis (RO). Without additional land acquisition, IX quickly became the treatment choice for this site. AKM is currently designing the PFAS treatment systems for the Edinger Well, and plans will be available for review by OCWD and the City of Tustin in October 2026. Figure 1 shows the location of the City of Tustin Edinger Well:

Figure 1: City of Tustin Edinger Well PFAS Well Treatment Site



The Edinger Well Project will include installing IX vessel systems and all pre-filtration, site piping, well modifications, electrical upgrades, and other appurtenances. Staff has determined that the City of Tustin Edinger Well PFAS Treatment Systems Project is consistent with a California Environmental Quality Act (CEQA) Categorical Exemption for New Construction or Conversion of Small Structures (Class 3) because it consists of the construction and operation of a limited number of new, small facilities or structures.

The expected project schedule is shown in Table 1.

Table 1: City of Tustin Edinger Well PFAS Treatment Systems Plant Project Schedule Summary

Description	Date
Edinger Well PFAS Treatment Systems Plant Project	
Design	June 2026 – Feb 2027
DDW Permitting	Oct 2026 – Aug 2027
Construction Contract	Mar 2027 – Jun 2028

The City of Tustin Well Edinger PFAS Treatment Systems Project is included in the approved Intended Use Plan of the Drinking Water State Revolving Fund Emerging Contaminant (EC) Grant Program for State fiscal year 2026-27, which is administered

by the State Water Resources Control Board (SWRCB) Division of Financial Assistance. This PFAS project is, therefore, eligible to receive an EC Grant in the amount of approximately \$3,000,000.

Prior to any construction costs being eligible for EC Grant reimbursement, the SWRCB requires that the District process a Categorical Exemption as part of the CEQA compliance. Upon completion of CEQA, the SWRCB will act as the lead agency for compliance with the National Environmental Policy Act (NEPA), a federal environmental compliance program. This NEPA process is in addition to OCWD filing the CEQA Categorical Exemption and cannot proceed until after OCWD's filing is complete.

Construction of the Edinger PFAS Treatment Systems Project is complex and requires additional monitoring to meet Grant requirements. Due to the project's technical challenges and importance, Staff recommends issuing a Request for Proposals (RFP) to hire a construction management firm to oversee construction and provide inspection services. The firm's duties will include managing construction activities, leading progress meetings, coordinating submittals, RFIs, and change orders, performing daily inspections for compliance, and completing materials testing and special inspections that the District cannot perform in-house.

Staff recommend authorizing issuance of a Request for Proposal for a construction management firm to oversee construction and filing a Categorical Exemption in compliance with the California Environmental Quality Act guidelines.

PRIOR RELEVANT BOARD ACTION(S)

None

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: R. Bouley/F. Almario

Budgeted: Yes

Budgeted Amount: \$300,000

Cost Estimate: \$266,415

Funding Source: R&R

Program/Line Item No.: R25011

General Counsel Approval: N/A

Engineers Report: N/A

CEQA Compliance: N/A

Subject: GAP EMERGENCY REPAIR WORK ORDER RATIFICATION

SUMMARY

The District annually establishes an emergency repair budget to support rapid response to unforeseen infrastructure failures and necessary repairs. This budget is funded through the District's Replacement and Refurbishment (R&R) reserves. Emergency expenditures for the past fiscal year totaled \$266,415.

RECOMMENDATION

Agendize for October 21 Board meeting: Ratify Work Order No. 16 of Agreement No. 1451 and payment to W.A. Rasic, Inc. for emergency repairs totaling \$8,456.

BACKGROUND/ANALYSIS

The District has implemented several measures to ensure rapid response to emergency repair needs, including situations that pose a threat to life or property. These measures enable immediate action on emergencies that cannot wait for the District's standard processes for scoping, design, bidding, award, and construction. The District maintains multi-year agreements with three contractors to provide on-call emergency response services, and the General Manager is authorized to issue Work Orders under these agreements. An annual budget line item funded by the Replacement and Refurbishment (R&R) fund is established to support emergency work. For FY 2025–26, the District allocated \$300,000 for this purpose. A brief description of the emergency repair is provided below:

In July 2026, staff discovered a damaged blow-off vault on S. Bear Street between Alton Avenue and MacArthur Boulevard in the City of Santa Ana. Temporary repairs were made to avoid any traffic disruptions. The General Manager authorized Emergency Repair Work Order No. 16, assigning W.A. Rasic to complete the permanent repairs. The contractor obtained the required lane-closure permits, excavated and replaced the damaged vault, and restored the street surface. Total contractor invoicing for this repair was \$8,456.

Table 1: FY 2025-26 Emergency Repair Budget Summary

Description	Budget
GAP Valve Boxes – July 2025	
W.A. Rasic. W.O. 13 (<i>Ratified March 2026</i>)	\$ 42,451
FPW Pipeline Leak – January 2026	
W.A. Rasic. W.O. 14/14A (<i>Ratified June 2026</i>)	\$ 209,187
Garfield Ave GAP Meter – March 2026	
W.A. Rasic. W.O. 15 (<i>Ratified June 2026</i>)	\$ 6,320
Bear St Blow-Off Valve Vault – July 2026	
W.A. Rasic. W.O. 16	\$ 8,456
Emergency Repairs Total:	\$ 266,415
FY 2025-26 Budget Balance	\$ 33,585
Total Budget	\$ 300,000

Staff recommends ratification of Work Order 16 of Agreement 1451 and payment to W.A. Rasic Construction.

PRIOR RELEVANT BOARD ACTIONS

6/17/2026; R26-6-96: Emergency Repair Work Authorization

3/18/2026; R26-3-51: Emergency Repair Work Authorization

3/20/24; R24-3-19: Authorize Amendments to Agreements for Emergency On-Call Repair Services with W.A. Rasic Construction Company, Inc., Doty Bros. Equipment Company, and T.E. Roberts, Inc. for Emergency On-Call Repair Services; and Authorize General Manager to Initiate Emergency Repairs with On-Call Firms.

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: A. Hutchinson

Budgeted: Yes

Budgeted Amount: \$50,000

Cost Estimate: \$ 44,888

Funding Source: General Fund

Program/Line Item No.: 1044.53001

General Counsel Approval: N/A

Engineers/Feasibility Report: N/A

CEQA Compliance: N/A

Subject: AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT WITH CRAFTWATER ENGINEERING – PRADO DAM WATER CONTROL MANUAL UPDATE #2 SUPPORT

SUMMARY

Staff requests Board approval to amend the professional services agreement with Craftwater Engineering, Inc. to provide continued technical and coordination support for the Prado Dam Water Control Manual (WCM) Update #2. Craftwater previously completed work to provide OCWD technical, regulatory, and project management support related to Prado Dam operations and coordination with the U.S. Army Corps of Engineers (USACE).

Attachment: Scope of Work – FY26/27 Prado Dam WCM Update #2 OCWD Support

RECOMMENDATION

Agendize for October 21 Board meeting: Authorize the General Manager to amend the professional services agreement with Craftwater Engineering, Inc. for an additional \$44,888 for a total agreement amount not to exceed \$154,564 to provide technical and coordination support for Prado Dam Water Control Manual Update #2.

DISCUSSION

Prado Dam is a cornerstone of OCWD's water supply system. The dam provides flood protection while allowing OCWD to capture and conserve Santa Ana River storm flows for groundwater recharge. Maintaining and improving the District's ability to conserve water at Prado Dam is therefore important to long-term water supply reliability.

OCWD has been working closely with USACE on several initiatives intended to improve water conservation operations at Prado Dam. A key component of these efforts is updating the Prado Dam Water Control Manual, which establishes the procedures governing reservoir operations. The WCM update process involves multiple engineering, environmental, cultural, regulatory, and administrative reviews within USACE.

In February 2026, the Board authorized Task Order #2 with Craftwater Engineering for \$109,676 to provide technical, regulatory, and project management support related to Prado Dam operations, sediment management, and USACE coordination. A principal component of that work was documenting the USACE WCM update process so that OCWD would have a clearer understanding of the required tasks, sequencing, decision points, and review process. Craftwater has completed that work and developed a WCM update process flowchart and related planning information that can now be applied specifically to Prado Dam WCM Update #2.

OCWD is now moving into the next phase of this effort. Continued support is needed to apply the general WCM process developed under the prior task order to the specific requirements and status of Prado Dam WCM Update #2 and to maintain coordination with USACE as the update progresses.

Craftwater's proposed scope focuses specifically on supporting OCWD through the Prado Dam WCM Update #2 process. Craftwater will customize the WCM update flowchart developed under the previous task order to identify the specific steps applicable to Prado Dam and show where WCM Update #2 currently stands in the process.

Craftwater will also develop a project schedule identifying dependent tasks and required reviews, with input from the USACE Los Angeles District, and update the schedule quarterly. This will provide OCWD with a tool for tracking progress, identifying upcoming decisions and dependencies, and anticipating potential schedule issues.

An important element of the work will be continued coordination with both OCWD and USACE. Craftwater will assist OCWD in determining which activities can be performed by District staff and when engagement with different levels of USACE may be appropriate to advance the process. Craftwater will also coordinate with USACE regarding the status and schedule of the Prado Dam WCM updates, including tracking both WCM Update #1 and Update #2.

Craftwater will meet virtually with OCWD staff on a biweekly basis to report on coordination with USACE, discuss issues affecting the WCM update process, and assist in identifying approaches to resolve those issues.

The principal deliverables are:

- A Prado Dam WCM Update #2-specific process flowchart identifying where the project is within the USACE process;
- A Prado Dam WCM Update #2 schedule, including dependent tasks and required reviews, updated quarterly; and,
- Ongoing OCWD and USACE coordination, with findings and status reported to OCWD during biweekly meetings.

This work will allow OCWD to build on the investment made under Task Order #2 rather than recreating the WCM process work already completed. More importantly, continued involvement by Craftwater provides OCWD with specialized knowledge of USACE procedures as the District moves from understanding the overall WCM process to actively navigating WCM Update #2.

RELEVANT PRIOR BOARD ACTION(S)

2/4/26, R26-2-19: Authorize the General Manager to execute Task Order #2 with Craftwater Engineering, Inc. to provide Technical, Regulatory, and Project Management Support Related to Prado Dam Operations.



phone: 805.729-0943
email: info@craftwater.com
web: craftwater.com
Pasadena | San Diego | Orange

September 22, 2026

Ms. Adam Hutchinson
Orange County Water District
P.O. Box 8300
Fountain Valley, CA 92728-8300

Subject: FY 26/27 Prado Dam WCM Update #2 OCWD Support

Dear Mr. Hutchinson:

Craftwater Engineering is pleased to submit this proposal to support the Orange County Water District's interactions with USACE Los Angeles District in the 2026/2027 Fiscal Year.

In order to meet this request, Craftwater will perform the following tasks for the subsequent fee that is enclosed herein.

Scope of Services

Task 1. Prado Dam Water Control Manual Update #2 Coordination

Coordinate with OCWD to advise them on what tasks they can self-perform and identify when to engage with USACE at different levels to help progress the Prado Dam Water Control Manual (WCM) Update #2. Customize the previously developed WCM Update flow chart to be specific to Prado Dam WCM Update #2. Use the flow chart to identify where Update #2 is in the process. Develop a WCM Update #2 schedule including dependent tasks and reviews required, with input from USACE Los Angeles District. Update the schedule quarterly.

Coordination and collaboration with USACE to understand the status and schedule of the Prado Dam WCM Updates. It will be important to track both WCM Update #1 and #2.

Coordination and collaboration with OCWD to understand concerns or issues they are having with the Prado Dam WCM Update process and help resolve those issues. Report out to OCWD during 1-hr virtual bi-weekly meetings.

Deliverables:

- Water Control Manual Update Flowchart Specific for Prado Dam WCM Update #2 (Task 1)
- Develop Prado Dam WCM Update #2 Schedule w/ Quarterly Updates (Task 1)
- Verbally report out information found out during coordination with SPL during 1h virtual bi-weekly meetings with OCWD Staff until hours in Task 1 are expended. (Task 1)

Assumptions:

- All meetings will be virtual.



Mr. Adam Hutchinson
September 22, 2026
Page 2

Fee Proposal

Craftwater proposes to perform the scope of services on a time and materials basis for a fee of \$44,888. If additional out of scope services are requested, these items will be negotiated based on the approved billing rates. See attachment for the fee breakdown.

Thank you for the opportunity to submit this proposal and we look forward to the opportunity to support Orange County Water District. If you have further questions or require additional information, please contact me at 714.793.4028 or tim.fairbank@craftwater.com.

Respectfully submitted,

Tim Fairbank, PE
Director of Hydrology & Hydraulics | Craftwater Engineering, Inc

Attachment – Fee Proposal

FEE PROPOSAL FOR: Prado Dam WCM Update #2 OCWD Support										
Contract Type: Time and Materials										
				CRAFTWATER ENGINEERING INC				ODC	TOTAL	
				Employee	Fairbank, Tim	Kalnozola, Aleksandra	Nguyen, Ky	Total Labor Hours	Total Labor Effort	ODC
				Default Title	Principal	Sr. Assistant Water Resources Engineer/Scientist/Planner	Project Controller			
				Chosen Title	Principal	Sr. Associate Water Resources Engineer/Scientist	Project Accountant			
Task Description				Billing Rates	\$ 336	\$ 243	\$ 194			
Task 1.	Prado Dam Water Control Manual Update #2 Coordination									
Task 1. A.	Customize WCM Update Flowchart for Prado #2			6	8			14	\$ 3,960	\$ 3,960
Task 1. B.	Prado Dam WCM Update #2 Schedule	4		20	12			32	\$ 9,636	\$ 9,636
Task 1. C.	OCWD Coordination	18		42	12	10		64	\$ 18,968	\$ 18,968
Task 1. D.	USACE Coordination			28	12			40	\$ 12,324	\$ 12,324
Task 1. E.								-	\$ -	\$ -
SUBTOTAL Task 1. Prado Dam Water Control Manual Update #2 Coordination				96	44	10		150	\$44,888	\$- \$ 44,888

AGENDA ITEM SUBMITTAL

Meeting Date: Oct 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: J. Dadakis

Budgeted: Yes

Budgeted Amount: \$20,000

Cost Estimate: \$20,000

Funding Source: General Fund

Program/ Line Item No. 1046.53001.9922

General Counsel Approval: N/A

Engineers/Feasibility Report: N/A

CEQA Compliance: N/A

Subject: NATIONAL WATER RESEARCH INSTITUTE CALVAL PROJECT

SUMMARY

The National Water Research Institute (NWRI)-led CalVal project is a multi-year initiative focused on developing uniform, science-based guidance for the permitting, implementation, and operation of potable reuse projects across California. Since 2023, the District has participated in CalVal during its initial two phases staff serving as a Co-Principal Investigator (PI), providing modest financial support, hosting workshops, and providing in-kind analytical laboratory services. Ongoing support for CalVal will be directed to its future Phase 3 module focused on the demonstration of underground retention time (URT), a key regulatory requirement for the District's Groundwater Replenishment System (GWRS) and similar projects statewide

Attachments:

- CalVal Fact Sheet and Objectives
- NWRI Invoice 2026-1044, dated September 4, 2026

RECOMMENDATION

Agendize for Oct 21 Board meeting: Authorize support for the NWRI CalVal effort in the amount of \$20,000.

BACKGROUND/ANALYSIS

The NWRI-led CalVal effort is a multi-year initiative focused on developing uniform, science-based guidance for the permitting, implementation, and operation of potable reuse projects across California. It brings together NWRI, industry-recognized expert treatment technology practitioners, California public agencies and utilities, state regulators, WaterReuse California, and Water Research Australia. CalVal's primary goal is to establish more consistent and transparent standards to meet existing regulatory requirements that protect public health and build public trust in potable reuse systems (see attached specific Objectives).

CalVal completed its foundational Phase 1 effort in Summer 2025 with over \$450,000 in total funding from Water Research Foundation and California utilities/public agencies; the District provided \$10,000 to support Phase 1, along with staff serving as co-PI for the effort. Phase 1 reviewed the regulatory and operating history of the 13 permitted

indirect potable reuse (IPR) projects in California, including the GWRS; District staff led the effort to document the range of computer modeling and tracer test approaches used to comply with state underground retention time (i.e., travel time) requirements. The Phase I effort identified many inconsistencies across projects, as well as opportunities to improve regulatory efficiency through streamlining compliance with existing regulations.

CalVal's current Phase 2 effort involves the development of individual guidance documents for three core treatment processes used by nearly all potable reuse projects in California: low pressure membrane filtration (i.e., microfiltration and/or ultrafiltration), reverse osmosis (RO), and an ultraviolet light advanced oxidation process (UV-AOP). Each guidance module is developed in a very deliberate and iterative fashion, featuring two repeated cycles of separate in-person workshops with treatment experts, then utilities, and lastly state regulators. CalVal has crucially secured the formal participation of the State Water Resources Control Board (State Board) Division of Drinking Water (DDW), whose buy-in is key given its lead role in regulating potable reuse projects. Phase 2 is supported by more than \$4.5 million in funding provided by the State Board's Recycled Water Research Program and the Los Angeles Department of Water & Power (LADWP). District staff have supported CalVal Phase 2 through continuing to serve as a co-PI, hosting individual workshops, and providing in-kind analytical laboratory testing.

Building on the success of Phase 1 and Phase 2, the CalVal team has begun planning Phase 3 efforts to develop guidance for the following additional treatment technologies: free chlorine, ozone, membrane bioreactors (MBR), and underground retention time (URT). The District's GWRS project is subject to URT requirements that must be satisfied at all three of its current recycled water injection/recharge locations: Talbert Seawater Intrusion Barrier, Mid-Basin Injection, and the permitted recharge areas in the Anaheim Forebay. Any additional future recycled water recharge locations would also be subject to the URT requirement and the District would be required to separately demonstrate URT for those locations to state regulators. As such, staff will work to ensure that future CalVal URT guidance appropriately balances site-specific considerations within a more consistent and transparent regulatory permitting and compliance process. Phase 3 will begin in Summer 2027, contemporaneous with the completion of the Phase 2 effort.

The estimated budget for the Phase 3 URT guidance module is \$1,000,000. Like Phase 2, funding for the Phase 3 modules is being pursued from both the state of California and utilities. Current Phase 3 funding partners include LADWP, Valley Water (formerly Santa Clara Valley Water District), the City of San Diego, and OCWD via an FY25-26 initial contribution of \$20,000 towards the future Phase 3 URT module made in June 2026. Staff recommends providing an additional FY26-27 budgeted \$20,000 funding contribution to the NWRI CalVal effort.

PRIOR RELEVANT BOARD ACTION(S)

6/17/26, R26-6-110: Authorize support for the NWRI CalVal effort in the amount of \$20,000

Ensuring Purified Water Quality in California

BUILDING TRUST THROUGH SCIENCE-BASED STANDARDS

WHAT IS CalVal?

CalVal is a multi-year initiative focused on developing uniform, science-based guidance for the permitting, implementation, and operation of potable reuse projects across California.

This collaborative effort brings together National Water Research Institute (NWRI), California Water Utilities, WaterReuse, Water Research Australia, the Water Research Foundation, and State of California regulators. Together, they are working to establish consistent and transparent standards that protect public health and build public trust in potable reuse systems.



Ensure safe, reliable drinking water for all Californians.



Support both Indirect Potable Reuse (IPR) and Direct Potable Reuse (DPR) projects.



PHASE 1

Complete Summer 2025

PHASE 2

Summer 2025 - Summer 2027

KEY BENEFITS

- ▶ Trust & Transparency from open, collaborative process
- ▶ Informed decision-making
- ▶ Consistent safety standards

CalVal FOCUS AREAS



Pathogen Removal in Treatment Plants.



Membrane Technologies (Ultrafiltration, Microfiltration, Reverse Osmosis).



Disinfection (UV, UV-AOP, Ozone, Chlorine Dioxide, Free Chlorine).



Biological Activated Carbon Filtration.



Reservoir & Groundwater Modeling for Reuse Projects.



CalVal OBJECTIVES

1. **Standardize Potable Reuse Practices Across California**

Develop consistent, science-based guidance for permitting, implementing, and operating Indirect Potable Reuse (IPR) and, eventually, Direct Potable Reuse (DPR) projects.

2. **Support the Implementation of Potable Reuse Projects in California**

Provide project proponents with clear protocols to reduce inconsistencies that slow regulatory approval, increase costs, and delay implementation.

3. **Improve Regulatory Clarity and Permitting Efficiency**

Assist the Division of Drinking Water (DDW) by creating uniform guidance that accelerates the regulatory review process.

4. **Ensure Public Health Protection**

Establish clear operational and monitoring requirements that safeguard water quality and minimize public health risks.

5. **Promote Public and Stakeholder Trust**

Build confidence among the public, utilities, engineers, and regulators through transparency, collaboration, and independent expert review.

6. **Reduce Project Delays and Operational Disruptions**

Identify and resolve technical inconsistencies that lead to shutdowns, untimely and unplanned repairs, or production inefficiencies in potable reuse systems.

7. **Document and Share Best Practices**

Compile and analyze existing permits, operational standards, and data to inform future projects with proven approaches.

8. **Facilitate Informed Decision-Making**

Provide guidance that helps utilities and municipalities plan, design, and operate reuse projects more predictably and cost-effectively.

9. **Support Long-Term Sustainability and Water Resilience**

Help California achieve its water reuse goals and adapt to climate change and drought by supporting safe, scalable reuse systems.

10. **Secure Continued Funding and Industry Support**

Advocate for sustained investment from research foundations, utilities, and public agencies to ensure long-term project success.



INVOICE

9/4/26

INVOICE # 2026-1044

Bill To:

Orange County Water District
18700 Ward Street
Fountain Valley, CA 92708

DESCRIPTION	AMOUNT
CalVal Project Support - Phase 3 - Underground Retention Time (URT) Module	\$ 20,000.00
	Total Due
Make all checks payable to National Water Research Institute If you have any questions concerning this invoice, contact Julie Abshire, via phone 562/556-9599 or email jabshire@nwri-usa.org .	\$ 20,000.00

THANK YOU FOR YOUR BUSINESS!

www.nwri-usa.org

JPA MEMBERS: Inland Empire Utilities Agency • Irvine Ranch Water District • Los Angeles Department of Water and Power
Metropolitan Water District of Southern California • Orange County Sanitation District • Orange County Water District

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: R. Bouley/F. Almario

Budgeted: Yes

Budgeted Amount: \$100,000

Cost Estimate: \$44,754

Funding Source: R&R

Program/Line Item No.: R25032

General Counsel Approval: N/A

Engineers Report: N/A

CEQA Compliance: N/A

**Subject: RECHARGE OPERATIONS EMERGENCY REPAIR WORK ORDER
RATIFICATION**

SUMMARY

The District annually establishes an emergency repair budget to facilitate a rapid response to periodic infrastructure failures and repairs. This budget item is funded from the District's Replacement and Refurbishment (R&R) reserves. Emergency expenditures in the past fiscal year have totaled \$44,754.

RECOMMENDATION

Agendize for October 21 Board meeting:

1. Ratify Work Order No. 12 of Agreement No. 1452 and payment to T.E. Roberts for emergency repairs totaling \$3,860; and
2. Ratify Work Order No. 13 of Agreement No. 1451 and payment to T.E. Roberts for emergency repairs totaling \$4,832.

BACKGROUND/ANALYSIS

The District has implemented several measures to ensure rapid response to emergency repair needs, including situations that pose a threat to life or property. These measures enable immediate action on emergencies that cannot wait for the District's standard processes for scoping, design, bidding, award, and construction. The District maintains multi-year agreements with three contractors to provide on-call emergency response services, and the General Manager is authorized to issue Work Orders under these agreements. An annual budget line item funded by the Replacement and Refurbishment (R&R) fund is established to support emergency work. For FY 2025–26, the District allocated \$100,000 for this purpose. A brief description of the emergency repair is provided below:

In March 2026, FHQ staff identified excessive sediment buildup at the pump intakes at the La Palma Basin. The General Manager authorized Emergency Repair Work Order No. 12, assigning T.E. Roberts to mobilize a vacuum truck and remove the accumulated sediment. Total contractor invoicing for this work was \$3,860.

In May 2026, FHQ staff discovered erosion at the Miller Basin GWRS pipeline vent. The General Manager authorized Emergency Repair Work Order No. 13, authorizing T.E. Roberts to place slurry backfill at the erosion site to restore the area. Total contractor invoicing for this work was \$4,382.

Table 1: FY 2025-26 Emergency Repair Budget Summary

Description	Budget
Anaheim Lake Valve Gear Box – June 2025	
Doty Bros. W.O. 5/5A (ratified Feb 2026)	\$ 36,511
La Palma Basin Sediment – March 2026	
T.E Roberts W.O. 12	\$ 3,860
Miller Basin Vent Erosion – May 2026	
T.E Roberts W.O. 13	\$ 4,382
Emergency Repairs Total:	\$ 44,754
FY 2025-26 Budget Balance	\$ 55,246
Total Budget	\$ 100,000

Staff recommends ratification of Work Orders 12 and 13 of Agreement 1452 and payments to T.E Roberts.

PRIOR RELEVANT BOARD ACTIONS

2/18/26; R26-2-33: Emergency Repair Work Authorization

3/20/24; R24-3-19: Authorize Amendments to Agreements for Emergency On-Call Repair Services with W.A. Rasic Construction Company, Inc., Doty Bros. Equipment Company, and T.E. Roberts, Inc. for Emergency On-Call Repair Services; and Authorize General Manager to Initiate Emergency Repairs with On-Call Firms.

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: S. Nevill

Budgeted: N/A

Budgeted Amount: N/A

Cost Estimate: N/A

Funding Source: N/A

Program/Line Item No.: N/A

General Counsel Approval: N/A

Engineers/Feasibility Report: N/A

CEQA Compliance: N/A

Subject: AUTHORIZE AGREEMENTS FOR ON-CALL REGULATORY COMPLIANCE SERVICES

SUMMARY

The District currently has pre-qualified firms available for on-call environmental consulting services which primarily support CEQA and NEPA environmental compliance document preparation. The District issued a Request for Qualifications (RFQ) to have pre-qualified firms available to provide regulatory compliance support services to optimize the District's regulatory compliance and permitting capabilities for the Planning and Natural Resources Departments. Based on evaluation of the submitted proposals, staff recommends authorizing on-call services agreements with five firms.

RECOMMENDATION

Agendize for October 21 Board Meeting: Authorize on-call service agreements for regulatory compliances services with:

- Chamber Group;
- PSOMAS;
- All 4, Inc;
- Ultra Systems;
- And Helix Environmental Planning

DISCUSSION

OCWD maintains a number of regulatory obligations that are derived primarily from existing permits and mitigation measures for facilities and activities located throughout the District's service area. These regulatory compliance obligations include certain tasks that District staff within the Planning and Natural Resources departments perform, such as monitoring for sensitive status wildlife species and habitat. Other regulatory compliance obligations, such as archeological construction monitoring, are outside of the scope of work that these staff are qualified to perform, necessitating the need for the use of consulting firms for these work efforts.

Additionally, recent and pending changes to the regulatory environment have the potential to affect certain District environmental permitting requirements in the future. As

OCWD will be required to renew several key permits in future years, staff have identified a critical need for specialized work efforts to better understand and plan for shifting regulatory requirements.

For the on-call environmental firms, individual work activities are managed through work orders issued by the District. A work order for a budgeted cost less than \$50,000 is issued under the General Manager's authority. A work order for a cost of \$50,000 or greater is only issued after review and approval by the Board of Directors. Any work orders issued under the on-call agreements with the consultants will utilize project-specific budget.

The Board previously authorized the issuance of a Request for Qualifications (RFQ) to select consulting firms to be included on a new list of pre-qualified on-call regulatory support consultants. OCWD received nine proposals in response to the RFQ. The proposals were independently reviewed and scored by staff from the Planning, Natural Resources, and Engineering departments, and the scoring of the proposals included evaluating each firm's experience and qualifications, organizational support resources, record of success on similar projects, and billing rates.

See Table 1 for the average proposal score and ranking for each firm.

**Table 1:
Proposal Score and Ranking**

Firm	Average Proposal Score (out of 100)	Ranking
Chambers Group	87	1
PSOMAS	84	2
All 4 Inc	83	3
Ultra Systems	82	4
Helix	82	5
LSA		
ESA		
Michael Baker International		
Dudek		

Staff's evaluation of the proposals resulted in a recommendation of the top five consultants for on-call agreements. Staff recommends authorizing service agreements with Chambers Group, PSOMAS, All 4 Inc., Ultra Systems and Helix for On-Call Regulatory Compliance Services.

PREVIOUS BOARD ACTION(S)

5-6-2026, R26-5-74 -Authorize Request for Qualifications for On-Call Regulatory Compliance Support Services.

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: C. Olsen/B. Smith/D. Park

Budgeted: N/A

Budget Amount: N/A

Cost Estimate: N/A

Funding Source: N/A

Program/Line Item No.: N/A

General Counsel Approval: Yes

Engineers/Feasibility Report: N/A

CEQA Compliance: N/A

**Subject: PROPOSED AGREEMENTS WITH CITY OF ANAHEIM FOR BURRIS
BASIN STORM DRAIN FACILITIES**

SUMMARY

The City of Anaheim (City) has agreed to repair its storm drain facilities and the adjacent slope on District property at Burris Basin. No prior agreement or easement establishing maintenance responsibility could be located. The District and City have drafted a Repair and Maintenance Agreement and a Drainage Easement under which Anaheim will assume full responsibility for all current repairs and future maintenance of the storm drain facilities and affected slope area. With a potentially heavy rain season approaching, staff recommends proceeding promptly to stabilize the area, prevent further erosion, and ensure continued operation of the storm drain facilities.

Attachments:

1. Draft of Repair and Maintenance Agreement
2. Draft of Drainage Easement

RECOMMENDATION

Agendize for October 21 Board meeting: Authorize the General Manager to finalize and execute the Repair and Maintenance Agreement and Drainage Easement with the City of Anaheim for repair and maintenance of storm drain facilities at Burris Basin, subject to approval by General Counsel.

BACKGROUND

The District owns real property at Burris Basin where the City's storm drain system conveys storm water into the basin. Although the facilities are part of the City's storm drain system, no prior agreement or recorded easement specifying ownership, access rights, or maintenance responsibilities for the storm drain facilities could be located.

District staff advised the City that portions of the storm drain system and the adjacent slope on District property were damaged, resulting in erosion and potential slope destabilization. Without repair, saturated soils and continued erosion could compromise the slope and affect basin operations. The City acknowledged the need for repairs and agreed to perform both the storm drain repair work and the slope stabilization work.

The storm drain facilities on District property consist of a buried 18-inch reinforced concrete pipe and outlet structure totaling approximately 100 feet in length. The drain discharges runoff from a small portion of Ball Road into Burris Basin. The expected flowrate and volume of discharge are de minimis to the basin's operation.

The City has agreed to assume full responsibility for the current repair project and all future maintenance and repair obligations associated with the storm drain facilities and the affected slope area. To support this commitment, District staff and General Counsel drafted a Repair and Maintenance Agreement establishing Anaheim's repair obligations, future maintenance responsibilities, and access rights, along with a Drainage Easement granting the City ongoing rights to drain storm water and maintain the storm drain facilities on District property.

Given the approaching heavy-rain season, staff recommends proceeding promptly with the Repair and Maintenance Agreement and Drainage Easement to prevent further erosion, stabilize the slope, and ensure continued operation of the storm drain facilities.

PRIOR RELEVANT BOARD ACTION(S)

None

LOCATION MAP



Figure 1

REPAIR MAINTENANCE AND ACCESS AGREEMENT

This REPAIR AND MAINTENANCE AGREEMENT (“Agreement”) is made and entered into effective as of this _____ day of _____, 2026 (the “Effective Date”), by and between the CITY OF ANAHEIM, a municipal corporation (“City”) and ORANGE COUNTY WATER DISTRICT, a special governmental district of the State of California (“District”). The District and City are referred to below collectively as the “Parties”.

RECITALS

A. The District owns approximately 3.86 acres of real property located at 14893 E. Ball Road, Anaheim, California (APN 253-472-01) and adjacent parcels, as illustrated in the depiction set forth in Exhibit “1” (the “District Property”). District operates a groundwater recharge basin, commonly referenced as Burris Basin, on and adjacent to the District Property.

B. The City owns and operates drainage facilities that cross and discharge onto the District Property, including a storm drain as roughly depicted in Exhibit “2” (the “City Storm Drain”). The Parties acknowledge that there is no recorded easement granting the City rights to maintain, operate, or access these facilities on District Property, and the Parties desire to memorialize the City’s rights on the District Property via this Agreement.

C. The Parties acknowledge that erosion (“Land Failures”) has occurred adjacent to the City Storm Drain due to stormwater conveyed through the City’s drainage facilities located on District Property. No dispute exists between the Parties regarding responsibility for the Land Failures.

D. The Parties desire to clarify ownership, access rights, and maintenance responsibilities for the City’s drainage facilities located on District Property, thereby allowing the City to promptly repair and improve those facilities.

E. District and City desire to enter into this Agreement, whereby the City shall construct, repair, replace, and improve the pipes, drains, manholes, and storm sewer drainage systems (“Drainage Facilities”), as described and depicted in Exhibit “3”, and repair adjacent slopes (in total referred to as the “Project”). The Parties also desire to establish and memorialize responsibility for future slope protection and maintenance of the Drainage Facilities.

AGREEMENT

NOW, THEREFORE, in consideration of mutual promises set forth in this Agreement, the sufficiency of which is hereby acknowledged, and based on the facts stated in the Recitals above, which are incorporated herein as though fully set forth, the Parties agree to the following:

1. Plan Approvals. City shall prepare all Plans and Specifications for the Project, at City’s sole cost, and submit them to District for review and comment as landowner. Upon completion of the Project construction, City shall provide District with record drawings. The Plans and Specifications shall be prepared by a registered California Civil Engineer.

1.1 Approvals. City shall obtain all governmental approvals, permits, and entitlements necessary for the Project, at City's sole cost. District shall reasonably cooperate as landowner. District shall have no financial responsibility for any approvals or permits. City shall serve as lead agency for all environmental reviews, including CEQA.

1.2 Cooperation. District agrees to reasonably cooperate with City to facilitate City's performance of the Project. Such cooperation may include granting access to the District Property. Nothing in this Agreement shall be construed as requiring District to perform, manage, oversee, inspect, direct, or supervise any portion of the Project.

1.3 Drainage Easement. District shall grant City a Drainage Easement, in a form substantially similar to that attached hereto and incorporated herein as Exhibit __, recognizing City's ownership of, and responsibility for, the Drainage Facilities and granting City rights to access, maintain, repair, replace, and operate the Drainage Facilities.

2. Operation and Maintenance Responsibilities

2.1 City Responsibilities. City owns all Drainage Facilities located on District Property and shall be solely responsible for maintaining, repairing, replacing, upgrading, and operating the Drainage Facilities at all times, including during and after completion of the Project. If the Drainage Facilities cause Land Failures, City shall promptly repair the Drainage Facilities and any resulting slope damage within ninety (90) days of notification by OCWD. City shall provide reasonable advance notice to District prior to any non-emergency entry onto District Property.

2.2 District Responsibilities. District shall maintain slopes, vegetation, and erosion control measures within District Property, except where slope failure is caused, in whole or in part, by City's Drainage Facilities. District's slope maintenance obligations do not include any portion of the Drainage Facilities. If District's failure to maintain those slopes adjacent to the Drainage Facilities in accordance with prudent engineering practices causes damage to the Drainage Facilities, District shall repair the damaged slope and reimburse City for the cost of repairing the Drainage Facilities.

2.3 Notification of Damage. Each Party shall promptly notify the other Party upon discovering any damage, failure, or defective condition affecting the Drainage Facilities or adjacent slopes.

2.4 District Access. The access granted to City herein is non-exclusive. Nothing in this Agreement shall restrict District's ability to access, operate, maintain, or improve Burris Basin or any District facilities. City's activities shall not unreasonably interfere with District operations.

3. Indemnification and Insurance

3.1 Indemnification. City agrees to indemnify, defend, and hold harmless District, its respective officers, employees, agents and attorneys from and against any claims, actions, damages and liabilities arising out of or in any manner connected with any negligent or willful misconduct resulting from the action of City pursuant to this Agreement, except to the extent solely caused by District's negligence or willful misconduct.

3.2 Insurance. City shall, at its own cost, carry and maintain (or cause its contractors to carry and maintain) commercial general liability insurance (\$2,000,000 per occurrence / \$4,000,000 general aggregate), automobile liability (\$1,000,000 per accident), and statutory workers' compensation (\$1,000,000 per occurrence). All commercial liability policies shall name District, its directors, officers, employees, and agents as additional insureds on a primary and non-contributory basis, and shall include a waiver of subrogation in favor of District. Prior to entering District Property, City shall provide certificates of insurance or other satisfactory evidence of coverage. Notwithstanding the foregoing, City's insurance obligations under this Section may be satisfied through its internal program of self-insurance or participation in a public-agency risk-sharing pool, the coverage of which shall be accepted by District as the functional equivalent of commercial insurance.

4. Miscellaneous.

4.1 Notice. In the event that any notice is given under this Agreement, it shall be personally delivered, in which case it shall be effective upon delivery, or may be mailed by certified mail, which notice shall become effective three (3) days after mailing, to the addresses set forth below:

To District: Orange County Water District
18700 Ward St.
Fountain Valley, CA 92708 3161
Attn: Property Management Office

To City: City of Anaheim

Attn: _____

Either party may change its address for notices by giving notice to the other party in the manner herein provided or may request that not more than two (2) additional copies of any notice be sent to addresses specified in a notice to the other party given pursuant to this Section.

4.2 Required Actions. City and District agree to execute such instruments and documents and to diligently undertake such actions that may be required in order to consummate the agreements contemplated herein.

4.3 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

4.4 Amendment to this Agreement. The terms of this Agreement may not be modified or amended except by an instrument in writing executed by each of the Parties hereto, or their designees.

4.5 Waiver. The waiver or failure to enforce any provisions of this Agreement shall not operate as a waiver of any future breach of any of the provisions or any other provision hereof.

4.6 Disputes and Dispute Resolution. If a dispute arises between the Parties in connection with, or arising out of this Agreement, the Parties shall first attempt to settle their disagreements through good faith negotiation, and then via mediation before a third-party neutral, prior to filing any litigation. Any litigation regarding this Agreement or the obligations of the Parties stated herein, shall be filed in the Superior Court for the County of Orange. In any litigation between the Parties arising out of this Agreement, each Party shall be responsible for their own costs and attorneys' fees.

4.7 Severability. If any section of this Agreement is found by competent authority to be invalid, illegal or unenforceable in any respect and for any reason, the validity, legality and enforceability of the unaffected remainder of such section in every other respect and the remainder of the Agreement shall continue in effect.

4.8 Entire Agreement. This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter hereof, and all prior and contemporaneous agreements, representations, negotiations and understandings of the Parties, oral or written, are hereby superseded and merged herein or therein.

4.9 Exhibits. All exhibits attached hereto and referred to herein are expressly incorporated herein as though set forth at length.

4.10 No Presumption Against Drafting Party. This Agreement and the provisions contained herein shall not be construed or interpreted for or against any party hereto because said party drafted or caused the party's legal representative to draft any of its provisions. This Agreement shall be construed without reference to the identity of the party or Parties preparing the same, it being expressly understood and agreed that the Parties hereto participated equally or had equal opportunity to participate in the drafting hereof. The Parties hereto acknowledge that each has read this Agreement; that they each fully understand their respective rights, privileges and duties under said Agreement; and that each enters into said Agreement freely and voluntarily.

4.11 Warranty of Authority. Each officer of the District and the City affixing his or her signature to this Agreement warrants and represents by such signature that he or she has the full legal authority to bind his or her respective party to all of the terms, conditions and provisions of this Agreement, that his or her respective party has the full legal right, power, capacity and authority to enter into this Agreement and perform all of its provisions and obligations, and that no other approvals or consents are necessary in connection therewith.

4.12 Counterparts. This Agreement may be executed in one or more counterparts, by either an original signature or signature transmitted by facsimile or electronic transmission or other similar process, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

4.13 Force Majeure. Upon written notice by a Party, the respective duties and obligations of the Parties will be suspended for the time period that performance by the Party is prevented or substantially impeded by workforce strikes; riots; fire; flood; federal, state or county regulatory action; pandemics; war; or terrorism. The Parties shall work together in good faith to minimize the impact and duration of the force majeure event.

4.14 No Obligation to Third Parties. The approval, execution and performance of this Agreement does not confer any rights upon any person or entity other than District and City. There are no third-party beneficiaries to this Agreement.

4.15 Nature of Relationship. This Agreement does not create, and will not be construed or deemed to create, any agency, partnership, joint venture, landlord-tenant or other relationship between District and City except as specified in this Agreement.

4.16 Electronic Signatures. Any Party may execute this Agreement using an “electronic signature,” as that term is defined in California Civil Code Section 1633.2, or a “digital signature,” as defined by California Government Code Section 16.5. An electronic or digital signature will have full legal effect and enforceability. Nothing in this Agreement requires any Party to use or accept the submission of any subsequent or related document containing an electronic or digital signature where written notice is otherwise required by this Agreement.

[SIGNATURES ON FOLLOWING PAGES]

IN WITNESS WHEREOF, the Parties hereby duly execute this Reimbursement Agreement as of the date written above.

CITY OF ANAHEIM, a California municipal corporation

By: _____
[Name, Title]

APPROVED AS TO FORM:
City Attorney

By: _____
[Name, Title]

ORANGE COUNTY WATER DISTRICT

By: _____
Denis Bilodeau, Board President

By: _____
John Kennedy, General Manager

APPROVED AS TO FORM:
Jeremy Jungreis
General Counsel

By: _____
Jeremy Jungreis, General Counsel

Recording Requested by:

City Clerk of the City of Anaheim

WHEN RECORDED MAIL TO:

CITY CLERK
CITY OF ANAHEIM
P.O. BOX 3222
ANAHEIM, CA 92803



EXEMPT-GOVERNMENT AGENCY
(Government Code §§6103 & 27383)

By: _____
City Clerk, City of Anaheim

(Space Above Line For Recorder's Use Only)

EASEMENT DEED

City Deed #

APN #

File #

253-472-01

FOR A VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, the **ORANGE COUNTY WATER DISTRICT**, a special governmental district of the State of California organized under Chapter 924 of the Statutes of 1933, as amended ("Grantor") **HEREBY GRANTS** to the **CITY OF ANAHEIM**, a municipal corporation ("Grantee") a non-exclusive easement to discharge stormwater into Grantee's groundwater recharge basin, and to operate, maintain, and repair drainage facilities and related appurtenances in, on, over, under, upon, above, along and across the land in the City of Anaheim, County of Orange, State of California, described in Exhibit "A" and depicted in Exhibit "B", attached hereto and incorporated by reference herein ("Easement Area"), together with all rights of ingress and egress thereto, including the right to enter onto the Easement Area with such vehicles, machinery, and equipment as may be reasonably necessary or convenient to the operation, maintenance, and repair said facilities, equipment, and appurtenances.

Except as otherwise provided herein, Grantee has the right to prevent any activity on or use of the Easement Area that (a) is inconsistent with the purposes of this easement; (b) interferes with or is harmful to Grantee's rights herein, or (c) interferes with or is harmful to Grantee's facilities. Grantor agrees not to use or allow the use of the Easement Area in such a way as to impede, harm, or interfere with (a) the Grantee's rights as defined herein; or (b) Grantee's facilities. Grantee will backfill to grade and restore the Easement Area to Grantor's operational standards, and shall pay all reasonable costs of removal, repair, or restoration of the Land within the Easement Area affected by work performed by Grantee in furtherance of the rights granted herein.

1. **RESERVATION**: This grant of easement is subject to the following reservations in favor of Grantor: Subject to rights and obligations set forth above, Grantor hereby reserves perpetual access rights across, through, under, and over the Easement Area for the purpose of obtaining access to any above-surface or below surface facilities of Grantor as well as other lawful purposes of Grantor occurring within the Easement

Area . Grantor's access rights shall not be restricted by Grantee's Facilities or activities.

2. SUCCESSORS: This Easement Deed, and all of the terms, conditions and provisions herein, shall inure to the benefit of, and be binding upon, Grantor, Grantee, and their respective successors, transferors, and assigns.

3. GOVERNING LAW: This Easement Deed and the performance thereof shall be governed, interpreted, construed, and regulated by the laws of the State of California, with venue in Orange County.

4. MAINTENANCE: Grantee shall maintain Grantee's facilities in the Easement Area in good condition at its sole cost and expense.

5. IMPROVEMENTS: Prior to the commencement of construction of any improvements or modifications of Grantee's facilities, Grantee shall coordinate activities on OCWD property with OCWD's Engineering Department, which is located at OCWD's Fountain Valley Office, 18700 Ward Street, Fountain Valley, CA 92708, (714) 378-3232. In the event Grantee ceases to use the Facilities for their intended public utility purpose, or the Facilities are rendered obsolete, Grantee shall, at its sole cost and expense, either (i) upgrade or replace the Facilities to ensure they are no longer obsolete, or (ii) remove the Facilities from the Easement Area and restore the Easement Area to the condition existing immediately prior to the installation of the Facilities, reasonable wear and tear excepted. For purposes of this provision, "obsolete" means the Facilities are no longer reasonably capable of serving their intended public utility function and cannot be made so through ordinary maintenance or repair, and shall not include circumstances in which newer technology is available, but the existing Facilities remain functional and in service.

6. INDEMNIFICATION: Grantee shall indemnify and hold Grantor, Grantor's directors, officers, employees and agents harmless from and against damages, liability, and costs (including reasonable attorneys' fees and costs of defense) to the extent arising out of Grantee's licensees', permittees', and/or other persons for whom Grantee has legal responsibility, usage of the Easement Area and any Grantee improvements, installations, or Facilities thereon. This obligation shall not be restricted by any insurance amounts or proceeds.

Dated: _____, 2026

"GRANTOR"

ORANGE COUNTY WATER DISTRICT,
a political subdivision of the State of California
organized under Chapter 924 of the Statutes of 1933,
as amended

APPROVED AS TO FORM:

Rutan & Tucker, LLP

By: _____
Denis Bilodeau, President

By: _____
General Counsel,
Orange County Water District

By: _____
John Kennedy, General Manager

EXHIBIT 'A'
LEGAL DESCRIPTION
BALL ROAD BASIN



PARCEL 1

IN THE CITY OF ANAHEIM, COUNTY OF ORANGE, STATE OF CALIFORNIA, BEING THAT PORTION OF LOT 9 OF THE FLETCHER TRACT AS SHOWN ON A MAP RECORDED IN BOOK 1, PAGE 41 OF MISCELLANEOUS RECORDS LA (BOOK 3, PAGE 320 OF MISCELLANEOUS RECORDS OF LOS ANGELES COUNTY), IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE CENTERLINE INTERSECTION OF BALL ROAD AND PHOENIX CLUB DRIVE (FORMERLY AUTO CENTER DRIVE) AS SHOWN ON RECORD OF SURVEY 93-1051, BOOK 170, PAGES 6-21 IN SAID OFFICE OF THE COUNTY RECORDER OF SAID COUNTY;

THENCE ALONG THE CENTERLINE OF BALL ROAD SOUTH $58^{\circ} 09' 22''$ EAST 178.61 FEET;

THENCE LEAVING SAID CENTERLINE NORTH $31^{\circ} 50' 38''$ EAST 50.00 FEET MEASURED AT RIGHT ANGLES TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF BALL ROAD AND THE **TRUE POINT OF BEGINNING**;

THENCE LEAVING SAID NORTHERLY LINE NORTH $31^{\circ} 50' 38''$ EAST 100.00 FEET PERPENDICULAR TO SAID NORTHERLY LINE;

THENCE SOUTH $58^{\circ} 09' 22''$ EAST 30.00 FEET PARALLEL WITH THE CENTERLINE OF BALL ROAD;

THENCE SOUTH $31^{\circ} 50' 38''$ WEST 100.00 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF BALL ROAD;

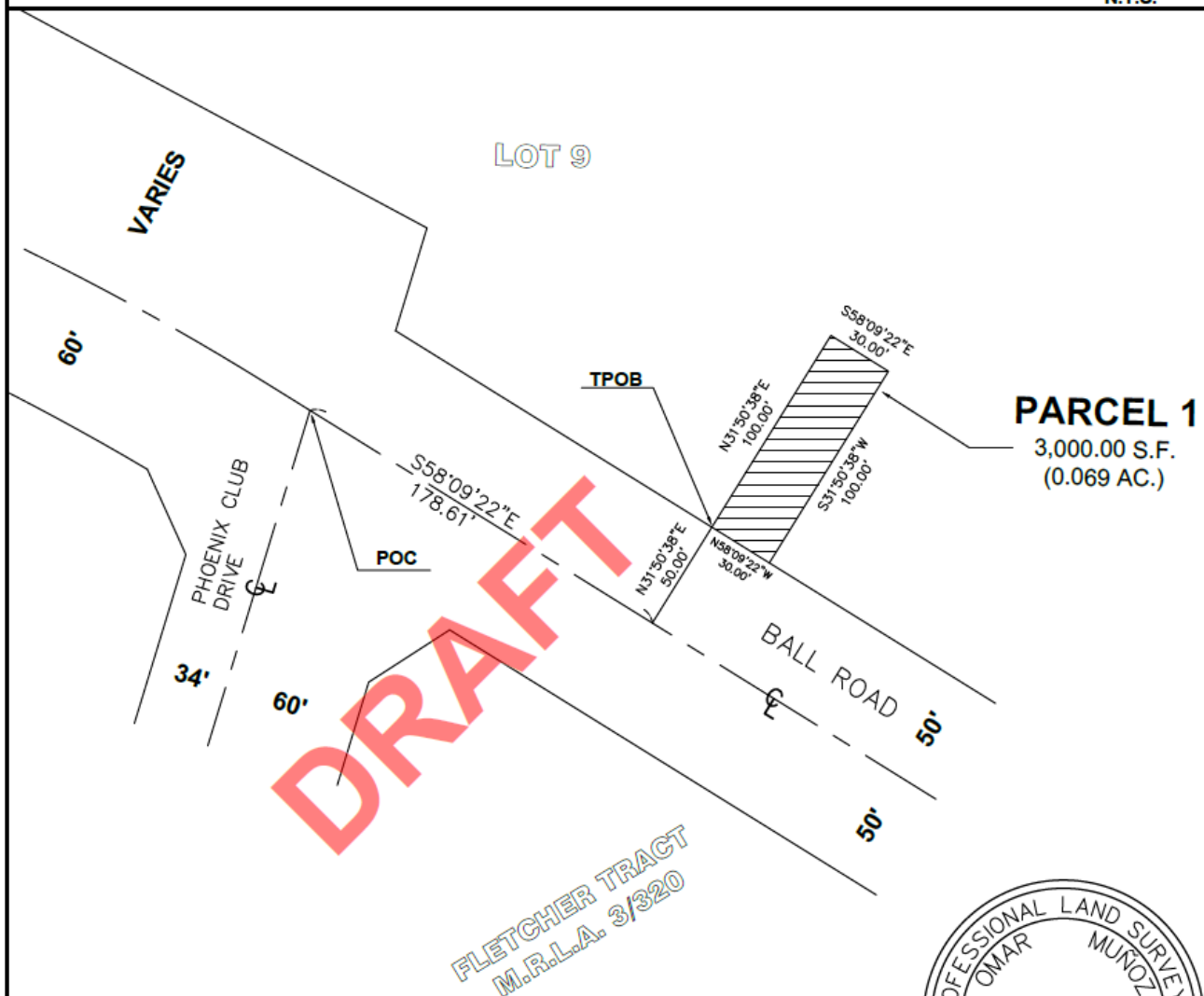
THENCE ALONG SAID NORTHERLY LINE NORTH $58^{\circ} 09' 22''$ WEST 30.00 FEET PARALLEL WITH THE CENTERLINE OF BALL ROAD TO THE **TRUE POINT OF BEGINNING**;

ALL AS SHOWN ON EXHIBIT 'B' ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

CONTAINING AN AREA OF **3,000.00 SQUARE FEET (0.069 ACRES)** MORE OR LESS.

SUBJECT TO ALL MATTERS OF RECORD IF ANY.

THIS DESCRIPTION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.



NOTES

POC = POINT OF COMMENCEMENT

TPOB = TRUE POINT OF BEGINNING



SURVEYOR'S NOTE

INFORMATION ON THIS PLAT WAS COMPILED FROM RECORD DATA PER
RECORD OF SURVEY 93-1051, RSB 170/6-21

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS PLAT IS THE CENTERLINE OF BALL ROAD (S58°09'22"E) AS SHOWN ON RECORD OF SURVEY 93-1051, RSB 170/6-21

CITY OF ANAHEIM
DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION SERVICES DIVISION
SURVEY SECTION

OMAR MUÑOZ, PLS 10002

DATE: SEPTEMBER 9, 2026

PLAT ACCOMPANYING

LEGAL DESCRIPTION FOR PARCEL 1.

BALL ROAD BASIN
ANAHEIM, CA 92806
APN: 253-472-01

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: M. Patel/B. Smith

Budgeted: Yes

Budgeted Amount: \$1,617,000

Cost Estimate: \$1,542,955

Funding Source: R&R

Program/Line Item No.: R25052

General Counsel Approval: N/A

Engineers Report: N/A

CEQA Compliance: Cat. Ex.

**Subject: WF-2025-1: 2025 ASPHALT PAVEMENT REHABILITATION
NOTICE OF COMPLETION AND RATIFY CHANGE ORDERS**

SUMMARY

Construction of the 2025 Asphalt Pavement Rehabilitation project by PaveWest began in April and was completed in October 2026. Staff recommends filing a Notice of Completion and ratifying three change orders for Contract WF-2025-1.

RECOMMENDATION

Agendize for October 21 Board Meeting:

1. Ratify issuance of Change Order Numbers 1, 2, and 3 to PaveWest for a net total amount of \$70,707; and
2. Accept completion of work and authorize filing a Notice of Completion for Contract No. WF-2025-1: Asphalt Pavement Rehabilitation 2025 Project.

BACKGROUND/ANALYSIS

The District's properties include asphalt pavements on roadways, parking lots, and maintenance yards that total an area greater than 35 acres across more than a dozen different sites. The sites are located in the cities of Fountain Valley, Anaheim, Orange, Corona, and unincorporated Orange County areas. Some of the asphalt pavements are failing, while others are in various stages of disrepair. If proactively managed, asphalt pavements can have a long lifespan. Active maintenance of the surfaces reduces the lifecycle costs of asphalt pavements compared to replacements required after catastrophic failures. As part of its Replacement and Rehabilitation (R&R) program, the District sets aside funds each year for pavement maintenance.

In 2024, a Pavement Management Plan (PMP) was created that defines the Pavement Condition Index (PCI) for each section of asphalt, estimates the annual investment amounts that are required to maintain or improve the asphalt conditions, and recommends the sequence of work to be the most cost effective in the long-term. The PCI scale ranges from 0 to 100 and the weighted total PCI for District asphalts was found to be 74. Staff are following a multi-year plan to accomplish the recommendations

in the PMP. The work is not expected to be eligible for grant funding since the pavement areas are generally not open for public use.

The scope of work for fiscal year 2025-26 included approximately 10 acres of asphalt pavement at the Fountain Valley campus (administration and GWRS treatment plant areas), the Green Acres Project's (GAP) Santa Ana Reservoir, and recharge facility sites at Burris, Riverview, Five Coves, and Kraemer Basins. The construction contract was awarded to PaveWest on March 18, 2026.

Three change orders were executed under the General Manager's signing authority. The net total change order amount is \$70,707 which represents 4.9% of the contract's awarded value. The change orders are summarized below and the project budget is summarized in Table 1.

1. Additional work to place asphalt caps in-lieu of cape seals: \$100,260
2. Additional details of work identified during the pre-construction site walk: \$83,051
3. Primarily credits to OCWD for the City of Santa Ana not electing to move forward with the portion of their pavement on the South Station Reservoir (GAP) site: (\$112,604).

Table 1: R25052 Project Budget

Description	3/18/2026 Budget	Final Budget
Permitting		
City of Anaheim	\$ 2,200	\$ 3,600
Inspection		
Field Inspection Services	\$ 99,660	\$ 28,465
Construction		
Contract WF-2025-1	\$ 1,437,882	\$ 1,437,882
Change Order 1		\$ 100,260
Change Order 2		\$ 83,051
Change Order 3		\$ (112,604)
Project Contingency	\$ 77,258	\$ 2,301
Total Project Budget	\$ 1,617,000	\$ 1,542,955

Staff recommends ratification of Change Order Numbers 1, 2, and 3 and authorizing a Notice of Completion for Contract WF-2025-1 with PaveWest.

PRIOR RELEVANT BOARD ACTIONS

03/18/26, R26-3-53: The Affidavit of Publication of Notice Inviting Bids for Contract No. WF-2025-1 is received and filed; An increase to the 2025 Asphalt Pavement

Rehabilitation project budget by \$617,000, for a total project budget of \$1,617,000 authorized; Accept bid and authorize award of Contract WF-2025-1 to the lowest responsive and responsible bidder, PaveWest, in the amount of \$1,437,881.75; Issuance of Agreement to Ninyo & Moore is authorized for an amount not to exceed \$99,660 for inspection services of the 2025 Asphalt Pavement Rehabilitation project

01/21/26, R26-1-8: Authorize Publication of Notice Inviting Bids for Contract No. WF-2025-1: Asphalt Rehabilitation project 2026; Authorize filing of a Categorical Exemption for the Asphalt Rehabilitation 2026 project in compliance with the California Environmental Quality Act (CEQA) guidelines.

05/21/25, R25-5-74: Authorize issuance of Agreement to Tait and Associates, Inc. for an amount not to exceed \$100,000 for the 2025 Asphalt Pavement Rehabilitation Design.

03/19/2025, R25-3-34: Authorize issuance of a Request for Proposals for the 2025 Asphalt Pavement Rehabilitation Design.

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: R. Bouley/L. Esguerra

Budgeted: Yes

Budgeted Amount: \$400,000

Cost Estimate: \$0

Funding Source: CIP

Program/Line Item No.: C25001

General Counsel Approval: N/A

Engineers Report: Completed

CEQA Compliance: Cat. Ex.

**Subject: FIELD HEADQUARTERS VEHICLE CHARGING INFRASTRUCTURE
ENGINEERS REPORT AND CATEGORICAL EXEMPTION**

SUMMARY

Staff has completed a Fleet Electric Vehicle Charging Station Infrastructure Report and is preparing documents to potentially build electric vehicle charging stations at Field Headquarters in Anaheim. The Engineer's Report for the Field Headquarters Electric Vehicle Charging Project is provided for Board Consideration. Staff recommends approving the Engineer's Report for the project and filing a Categorical Exemption in compliance with the California Environmental Quality Act guidelines.

Attachment: Engineer's Report for the Field Headquarters Electric Vehicle Charging Project

RECOMMENDATION

Agendize for October 21 Board Meeting:

1. Receive and file the Engineer's Report for the Field Headquarters Electric Vehicle Charging Project and determine the Project to be feasible, necessary, and beneficial to the District; and
2. Authorize filing of a Categorical Exemption for the Field Headquarters Electric Vehicle Charging Project in compliance with the California Environmental Quality Act (CEQA) guidelines.

BACKGROUND/ANALYSIS

The California Air Resources Control Board adopted the Advance Clean Fleets (ACF) regulation requiring state and local governments to transition to zero-emissions vehicles (ZEV) for medium and heavy-duty fleet vehicles starting January 1, 2024. The District has elected to follow the purchase pathway option for new vehicle purchases to comply with ACF. Beginning on January 1, 2024, 50% of the District fleet purchases in these weight classes shall be ZEV, and on January 1, 2030, 100% of fleet vehicles purchased shall be ZEV. OCWD maintains a fleet of 39 medium and heavy-duty fleet vehicles across three locations: Fountain Valley, Anaheim Field Headquarters (FHQ), and Prado. Additional electric vehicle charging infrastructure at all locations is required to support

the District's transition to zero-emission vehicles; however, the most immediate need is at FHQ.

OCWD completed a Fleet Electric Vehicle Charging Station Infrastructure Report which evaluated OCWD's existing vehicle fleet to identify vehicles subject to ACF, estimate electrical charging needs of the fleet, and assess electric infrastructure.

To support electrification of twenty-eight (8) fleet vehicles domiciled at Anaheim Field Headquarters, six (6) Level 2 chargers and four (4) DCFC chargers are proposed. The DCFC chargers will connect to the existing 400A, 480V, 3-phase electrical service located east of the administration building and distribute shareable power to DCFC ports. Dual Port Level 2 chargers will receive power from the existing 800A, 208V, 3-phase electrical service to the warehouse. The electric vehicle charging systems will require key fob or card to activate and a web-based portal to monitor and record data including but not limited to: charging station status notifications, authorization ID and timestamp, instantaneous meter values, diagnostic logs, and power consumption. Panels containing fuses and circuit breakers, underground conduits, cable, trenching, pavement repair, and miscellaneous site improvements will be constructed to provide a complete working system. A conceptual layout of the proposed electric vehicle charging systems is provided in Figure 1.

Figure 1: FHQ Electric Vehicle Charging Concept



Constructing the proposed Field Headquarters Electric Vehicle Charging Project will:

- Meet statutory compliance with the California Air Resources Board the Advanced Clean Fleets Regulation thus avoiding per vehicle, per day fines and legal fees.

- Lower maintenance costs of vehicles and reduce vulnerability to sudden changes to gasoline and diesel fuel costs.
- Provide possibility of electric vehicle charging for employees and visitors.
- Improve local air quality and reduce noise pollution providing a healthier local environment.

Staff estimates the capital cost of this project is \$1,140,000 as detailed in Table 1.

Table 1: FHQ Electric Vehicle Charging Capital Cost Estimate

Item	Cost
Engineering, Permitting, Construction, Management and Inspection & CEQA	\$ 120,000
Construction	\$ 830,000
Contingency	\$ 190,000
Total =	\$1,140,000

Given the initial capital cost of this project, construction of the electric vehicle charging stations can be phased in conjunction with the District's gradual transition to electric vehicles. A project schedule has been presented in Table 2.

Table 2: FHQ Electric Vehicle Charging Tentative Schedule

Activity	Date
Board Authorize Notice Inviting Bids	January 2027
Advertise for Construction Bids	February 2027
Board Awards Construction Contract	March 2027
Completion of Construction	December 2027

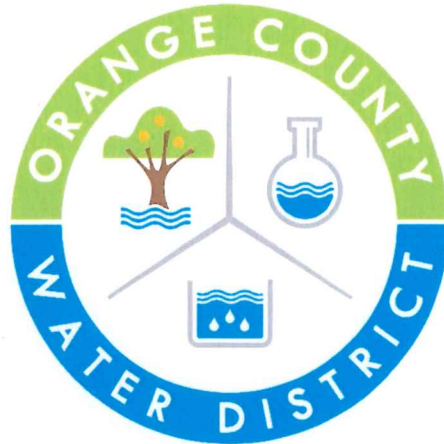
Staff has determined the Field Headquarters Electric Vehicle Charging Project is consistent with the Categorical Exemption for New Construction or Conversion of Small Structures (Class 3) because it consists of the construction and operation of a limited number of new, small facilities of structures.

Staff recommends approving the Engineer's Report for the project and filing a Categorical Exemption in compliance with the California Environmental Quality Act guidelines.

PRIOR RELEVANT BOARD ACTIONS

2/18/2026, R26-2-36: Authorizing Agreement with Glumac for Field Headquarters Diesel Fuel Tank Replacement and Vehicle Charging Infrastructure Design.

11/19/2025, R25-11-196: Authorizing Request for Proposals for Field Headquarters Diesel Fuel Tank Replacement and Vehicle Charging Infrastructure Design.



ENGINEER'S REPORT

FOR

FIELD HEADQUARTERS

ELECTRIC VEHICLE CHARGING PROJECT

Prepared By:

Laurence Esguerra, P.E.

October 2026



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1.0 EXECUTIVE SUMMARY

The purpose of this Engineer's Report is for the Orange County Water District (OCWD; the District) to evaluate the need, benefits, and cost of constructing electric vehicle charging infrastructure at Field Headquarters in Anaheim to comply with the California Air Resources Board's Advanced Clean Fleets regulations.

In April of 2023, the California Air Resources Board enacted a regulation known as the Advanced Clean Fleets (ACF) mandating fleet owners convert medium and heavy duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds to zero emissions vehicles. ACF was implemented as part of California's overall strategy to reduce greenhouse gas emissions in order to meet the State's goal of carbon neutrality by 2045. As a public agency, Orange County Water District is mandated to comply with ACF regulations.

OCWD completed a Fleet Electric Vehicle Charging Station Infrastructure Report which evaluated OCWD's existing vehicle fleet to identify vehicles subject to ACF, estimate electrical charging needs of the fleet, and assess electric infrastructure at locations where District fleet vehicles are primarily parked.

Field Headquarters does not have existing electric vehicles chargers but has the electrical service capacity to construct the recommended chargers.

Constructing the proposed Field Headquarters Electric Vehicle Charging Project will:

- Meet statutory compliance with the California Air Resources Board the Advanced Clean Fleets Regulation thus avoiding per vehicle, per day fines and legal fees.
- Lower maintenance costs of vehicles and reduce vulnerability to sudden changes in gasoline and diesel fuel costs.
- Provide electric vehicle charging for employees and visitors.
- Improve local air quality and reduce noise pollution providing a healthier local environment.

The current estimated capital cost of this project is \$1,140,000. Given the initial capital cost of this project, it is recommended construction of the electrical vehicle charging stations be phased in conjunction with the District's gradual transition to electric vehicles.

2.0 BACKGROUND

The California Air Resources Board (CARB) enacted a regulation known as the Advanced Clean Fleets (ACF). ACF was adopted on April 18, 2023 and became effective October 1, 2023. This regulation applies to medium and heavy duty on-road vehicles with a gross vehicle weight rating (GVWR) greater than 8,500 pounds. ACF was implemented as part of California's overall strategy to reduce greenhouse gas emissions in order to meet the State's goal of carbon neutrality by 2045. As a public agency, Orange County Water District is mandated to comply with ACF regulations. Public agencies select between two primary operational pathways for compliance listed below.

Zero Emission Vehicle Purchase Schedule - Beginning January 1, 2024, through January 1, 2027, the regulation requires 50% of vehicle purchases be zero emission vehicles (ZEV) and 100% ZEV purchases after January 1, 2027 for vehicles with a GVWR greater than 8,500 pounds. On September 14, 2026 the 50% ZEV purchase requirement was extended to January 1, 2030. Under this pathway, existing internal combustion engine (ICE) vehicles may be operated until removed by the fleet owner.

Zero Emission Vehicle Milestone Option - Beginning January 1, 2025, fleet owners shall meet or exceed ZEV fleet percentage targets across different vehicle groups over time. Which may require removing older ICE vehicles from the fleet to meet percentages milestones.

Orange County Water District (OCWD or District) selected the Zero Emission Vehicle Purchase Schedule pathway for ACF compliance. To date, the District purchased two ZEVs to offset the purchase of two ICE vehicles. In anticipation of future ZEV fleet purchases a Fleet Electric Vehicle Charging Station Infrastructure Report was prepared by Glumac to support conceptual planning and budget development for the installation of electric vehicle charge stations necessary for electric fleet vehicles.

The Fleet Electric Vehicle Charging Station Infrastructure Report evaluated OCWD's existing vehicle fleet to identify vehicles subject to ACF, estimate electrical charging needs of the fleet, and assess electric infrastructure at locations where District fleet vehicles are primarily parked.

OCWD currently operates seventy-four (74) on-road fleet vehicles where thirty-six (36) vehicles are subject to ACF regulation. Each vehicle was assigned a domicile that represents its primary parking location and designated charging location. The following table summarizes OCWD's existing fleet by domicile and vehicles subject to ACF.

Table 1: Total OCWD Fleet Vehicles

Domicile	Number of ACF Vehicles	Number of ACF-Exempt Vehicles¹	Number of Non-ACF Vehicles²	Total Number of Vehicles
Anaheim Field Headquarters	13	0	15	28
Fountain Valley	20	0	17	37
Prado	3	0	6	9
Total Vehicles	36	0	38	74

Fleet vehicles may qualify for exemption from ACF regulation if there are no suitable commercially available electric vehicle alternatives. CARB maintains a Purchase Exemption List for fleet owners to identify vehicles that are exempt. A ZEV Purchase Exemption application shall be submitted to confirm eligibility.

An Electric Vehicle Charging Needs Assessment was performed to define battery availability, energy losses, utilization, and charging opportunity. The assessment determined charging strategy, charger power level, and provided a conceptual charger layout per domicile. To calculate the electrical vehicle charging needs the following assumptions were applied:

- a) Battery usable state-of-charge window: 20% to 90% - This industry recommended window determines total available energy a vehicle may use in one charge and determines charging frequency
- b) Energy losses or auxiliary loads – Energy allowances for non-driving energy consumption such as vehicle climate control, running lights, accessory loads, driving style, and weather.
- c) Daily vehicle miles traveled (VMT) – Estimated driven miles-per-day-per vehicle varies from 10 to 100 miles per day and vehicle use per week varies from daily to once a week.
- d) Vehicle parking dwell time available for charging – Assumed vehicle operational hours: 7:00 am to 4:00 pm; fourteen-hour dwell time (maximum charging duration). Maximizing dwell time reduces infrastructure and power demand. Actual charge time is dependent on charger power, vehicle charge acceptance rate, and remaining battery.

To determine the charging power level required for each vehicle the total usable battery capacity was used to determine the charge time necessary at various charger power levels. The preferred power charger level for a vehicle will be the lowest power level that is within the available dwell time. A graphical representation of this process is shown on Figure 1.

¹ Vehicles >8,500 lbs GVWR, but meets exemption criteria.

² Vehicles <8,500 lbs GVWR.

Figure 1: Vehicle Charger Power Selection

	Charge Time (Hours)																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
9.6 kW Charger																		
19.2 kW Charger																		
30 kW Charger																		
125 kW Charger																		



= Within dwell time



= Exceeds dwell time



= Maximum dwell time



= Preferred charger power

Three levels of charging power are typically used for most fleet applications: Level 2 (3-19 kW per connector); Low Power DC (20-60 kW per connector); and DC fast charging (60-350 kW per connector). The vehicle charging needs assessment used charging stations rated at 9.6 kW per connector, 19.2 kW per connector, 40 kW per connector, 33-50 kW per connector, and 50-57 kW per connector. Dual-connector charging stations have the capability to output twice the nominal output (9.6 kW x 2 = 19.2 kW). Following determination of the charging level power required for each vehicle, the daily battery usage per vehicle was used to determine how many vehicles could share the same level charging station per location. The figure below shows a theoretical electrical charger port sharing using daily battery use.

Figure 2: Daily Port Sharing Strategy

Legend:  Vehicle 1  Vehicle 2  Vehicle 3  Vehicle 4  Vehicle 5							
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Dedicated Port Vehicles with 40+% Daily Battery Use							
2 Vehicles Share Vehicles with 30-40% Daily Battery Use							
3 Vehicles Share Vehicles with 20-30% Daily Battery Use							
4 Vehicles Share Vehicles with 10-20% Daily Battery Use							
5 Vehicles Share Vehicles with 5-10% Daily Battery Use							

Electric vehicle chargers vary in their ability to how fast electricity can be delivered to the vehicle's battery. The most common charges are Level 2 and DC fast chargers (DCFC). The chargers are separated by voltage and power output which directly

influences how fast it takes to charge a vehicle. The electric vehicles onboard charge controller also influences the actual charger duration. Therefore, some vehicles will not use all the available power of a high-power charging station.

Level 2 chargers are commonly used in most residential applications and public charging stations. Level 2 chargers utilize 208-volt or 240-volt power and typically deliver 3 kW to 12kW of power with the most powerful Level 2 charger having an output of 19.2 kW. These chargers provide alternating current (AC) to the vehicle which the vehicle converts to direct current (DC) to charge the battery, increasing charge time. Level 2 chargers can fully charge light duty vehicles overnight and are ideal for vehicles that average less than 200 miles per day. Level 2 chargers are also the most economical charger option.

DC fast charging is designed for rapid charging or heavy-duty vehicles. DCFC chargers deliver DC electricity directly to the vehicle battery allowing higher power levels, 60 kW up to 350 kW, enabling some electrical vehicles to charge from 10% to 80% in 20 to 30 minutes. DCFC chargers are most expensive to install and use and are typically used for retail charging stations and fleet vehicles. As electric vehicle technologies progress, it is possible heavy-duty vehicles with larger batteries will require DCFC chargers.

Low-power DC chargers bridge the gap between Level 2 and DC fast chargers, typically delivering 20–60 kW of power. For heavy-duty vehicles, they are more likely than Level 2 chargers to provide a full charge overnight. Most electric vehicles are compatible with all three charging types. For large fleet owners, DCFC chargers provide greater charging flexibility, have the capacity to charge heavy-duty vehicles, and support future electric vehicle technology charge rates.

Tables 2 and 3 summarize the total charging requirements per domicile for ACF-regulated vehicles only and for full fleet conversion to electric vehicles respectively. The minimum port quantity indicates the minimum number of charging ports recommended to support the fleet. Additional ports can be included to provide additional operational flexibility or to provide electric vehicle charging for employees or visitors. Fountain Valley is the only location with existing electric vehicle charging ports. One (1) Level 2 charger is provided adjacent to the Reverse Osmosis Building for fleet vehicles and fourteen (14) Level 2 chargers are available for fleet vehicles, employees, and visitors within the employee parking lot.

Table 2: ACF Vehicles: Total Number of Charging Ports

Domicile	Vehicle Qty.	Designated Use	Charger Level	Minimum Port Quantity	Existing Ports	kW/ port	Demand, kW
Anaheim Field Headquarters	13	Employee/Visitor	Level 2	0	0	9.6	0
		Fleet	Level 2	0	0	9.6	0
		Fleet	DCFC	4	0	50	200
Fountain Valley	20	Employee/Visitor	Level 2	0	14	9.6	134.4
		Fleet	Level 2	0	1	9.6	9.6
		Fleet	DCFC	7	0	57	400
Prado	3	Employee/Visitor	Level 2	0	0	9.6	0
		Fleet	Level 2	0	0	9.6	0
		Fleet	Low DC	1	0	40	40

Table 3: Entire Fleet: Total Number of Charging Ports

Domicile	Vehicle Qty.	Designated Use	Charger Level	Minimum Port Quantity	Existing Ports	kW/ port	Demand, kW
Anaheim Field Headquarters	28	Employee/Visitor	Level 2	0	0	9.6	0
		Fleet	Level 2	6	0	9.6	57.6
		Fleet	DCFC	4	0	50	200
Fountain Valley	37	Employee/Visitor	Level 2	0	14	9.6	134.4
		Fleet	Level 2	6	1	9.6	67.2
		Fleet	DCFC	7	0	57	400
Prado	9	Employee/Visitor	Level 2	0	0	9.6	0
		Fleet	Level 2	2	0	9.6	19.2
		Fleet	Level 2	1	0	19.2	19.2
		Fleet	Low DC	1	0	40	40

Each domicile was evaluated to identify the locations of the proposed electric vehicle charging stations and assess the availability of existing electrical service connections for Level 2 and Low Power DC chargers. Higher-power DCFC systems typically require dedicated electrical infrastructure and may require a new utility service, transformer, or service upgrade.

Field Headquarters does not have existing electric vehicle chargers installed but has the electrical service capacity to construct recommended chargers. An existing 400A 480V 3-phase service with no connected loads is located east of the administration building and is suitable for DCFC chargers. The existing 800A 208V 3-phase electrical service to the warehouse has capacity for the Level 2 chargers. However, replacement of the existing electrical switchboard is recommended due to its age and condition.

The Fountain Valley campus has multiple parking areas for fleet vehicles with the plant. To minimize construction costs and maximize operational flexibility, electric vehicle chargers for the fleet shall be consolidated to a single location. The existing T-GAP transformer and switchgear west of the Warehouse has the available power for the recommended number Level 2 and DCFC chargers and suitable number of parking stalls. The campus is currently equipped with fourteen Level 2 charges in the employee parking lot and one charger within the plant that is available for fleet vehicles.

The Prado office is supplied by a single 400A, 480V service which will need to be upgraded to install the maximum number recommended chargers. As an alternative, a separate utility service can be installed to take advantage of utility programs. However, the existing electrical service may have the capacity to install one Level 2 charger.

The District's electric vehicle fleet conversion pathway for ACF compliance requires that 50% of applicable vehicle purchases be zero-emission vehicles, increasing to 100% of applicable purchases beginning January 1, 2030, for vehicles with a GVWR greater than 8,500 pounds. Under this pathway, the District is not required to replace existing ICE vehicles and may continue to operate them until they are retired from the fleet. Therefore, the installation of electric vehicle charging infrastructure can be phased in conjunction with the District's gradual transition to electric vehicles.

3.0 PROJECT PURPOSE AND DESCRIPTION

3.1 Project Purpose

The purpose of the Field Headquarters Electric Vehicle Charging Project is to install the electric vehicle charging infrastructure necessary to support compliance with the California Air Resources Board's Advanced Clean Fleets (ACF) regulations.

3.2 Project Components

To support electrification of twenty-eight (28) fleet vehicles domiciled at Field Headquarters, six (6) Level 2 chargers and four (4) DCFC chargers shall be constructed.

One 200kW minimum DCFC Power Cabinet will connect to the existing 400A, 480V, 3-phase, electrical service located east of the administration building and distribute sharable power to four (4) DCFC ports. Three (3) Dual Port Level 2 chargers (six (6) ports in total) will receive power from the existing 800A, 208V, 3-phase electrical service to the warehouse. The electric vehicle charging systems will require key fob or card to activate and a web-based portal to monitor and record data including but not limited to: charging station status notifications, authorization ID and timestamp, instantaneous meter values, diagnostic logs, and power consumption.

Panels containing fuses and circuit breakers, underground conduits, cable, trenching, pavement repair, and miscellaneous site improvement will be constructed to provide a complete working system.

3.3 Permits and Regulatory Issues

The project is contained within District property however the electrical service provider for Field Headquarters is the City of Anaheim Public Utilities. An Electrical Permit will be required to connect/upgrade to the existing electrical service.

In accordance with the California Environmental Quality Act (CEQA) guidelines, it is proposed to file a Categorical Exemption for the project. The project is consistent with the Categorical Exemption for New Construction or Conversion of Small Structures (Class 3) because it consists of the construction and operation of a limited number of new, small facilities or structures.

4.0 FINANCIAL ANALYSIS

4.1 Construction Cost Estimates

The estimated construction cost for the Field Headquarters Electric Vehicle Charging Project is \$830,000, as detailed in Table 4.

Table 4: Construction Cost Estimate

Description	Quantity	Units	Unit Cost (\$/unit)	Cost (\$)
Mobilization	1	LS	\$35,000	\$35,000
General Conditions	1	LS	\$75,000	\$75,000
DCFC Charging System	1	LS	\$350,000	\$350,000
DCFC Electrical Improvements	1	LS	\$110,000	\$110,000
Level 2 Charging Systems	1	LS	\$95,000	\$95,000
Level 2 Electrical Improvements	1	LS	\$115,000	\$115,000
Site Work	1	LS	\$50,000	\$50,000
Total =				\$830,000

4.2 Capital Cost Estimate

The estimated total capital cost for the Field Headquarters Electric Vehicle Charging Project is \$1,140,000, as shown in Table 5. The table includes the cost of furnishing and installing vehicle charging system, constructing electrical and site improvements, engineering services for design and construction phases, construction management and the cost associated with meeting regulatory requirements.

Table 5: Capital Cost Estimate

Item	Cost
Engineering, Permitting, Construction Management and Inspection & CEQA	\$ 120,000
Construction	\$ 830,000
Contingency	\$ 190,000
Total =	\$ 1,140,000

4.3 Annual Operation and Maintenance Cost Estimate

The estimated annual Operation and Maintenance (O&M) cost for the electric vehicle charging cost is \$71,000 per year, as detailed in Table 6. It conservatively assumes that electric vehicle charging maintenance, scheduled inspections, and cloud-based

monitoring software management will be performed by an outside entity instead of OCWD. The unit price for maintenance is based on charger type and number of ports.

The estimated O&M costs assume the following: 28-vehicle fleet traveling 150,000 miles per year; energy consumption of 75 kilowatt-hours (kWh) per 100 miles for medium-duty trucks; a conservative electrical cost from Anaheim Public Utilities of \$0.32/kWh.

Table 6: EV Charging Annual O&M Cost Estimate

Description	Quantity	Units	Unit Cost (\$/unit)	Cost (\$)
Power	112,500	kWh	\$0.32	\$36,000
DCFC Charging Maintenance	4	Year	\$6,500	\$26,000
Level 2 Charging Maintenance	6	Year	\$1,500	\$9,000
Total =				\$ 71,000

Annual O&M costs of ICE vehicles and electric vehicles are comparable with electric vehicles providing slight savings advantage. Operation and Maintenance cost comparison of ICE versus EV a fleet per year is detailed in Table 7. The O&M costs for ICE vehicles were obtained from the FY 2026-27 Recharge Operations Budget. Maintenance of electric vehicles are typically 40% lower than equivalent ICE vehicles due to elimination of engine upkeep and exhaust system maintenance.

Table 7: ICE versus EV O&M Costs

ICE		EV	
Description	Cost (\$)	Description	Cost (\$)
Fuel and Dispenser Maintenance	\$ 62,000	Power and Charger Maintenance	\$ 71,000
Vehicle Maintenance	\$ 33,000	Vehicle Maintenance	\$ 20,000
Total =	\$ 95,000	Total =	\$ 91,000

4.4 Funding Options

State and Federal funding programs for electric vehicle charging infrastructure change frequently, have variable application timelines, and may have specific program constraints that may not align with the District's needs. The California Energy Commission previously offered the Energy Conservation Assistance Act 1% Loan Program and the Charging Infrastructure for Government Fleet Grant programs for

charging infrastructure that may have been beneficial for the District however, both programs are currently closed. Currently, there are no funding opportunities available that OCWD could use to offset capital costs.

If the \$830,000 capital cost were financed and amortized over 30 years at an interest rate of 4.5%, the annual payment for the electric vehicle charging infrastructure would be approximately \$51,000.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Constructing the proposed Field Headquarters Electric Vehicle Charging Project will:

- Meet statutory compliance with the California Air Resources Board the Advanced Clean Fleets Regulation thus avoiding per vehicle, per day fines and legal fees.
- Lower maintenance costs of vehicles and reduce vulnerability to sudden changes to gasoline and diesel fuel costs.
- Provide electric vehicle charging for employees and visitors.
- Improve local air quality and reduce noise pollution providing a healthier local environment.

It is recommended that OCWD proceed with construction of the Field Headquarters Electric Vehicle Charging Project to comply with ACF. Given the initial capital cost of this project, it is recommended construction of the electrical vehicle charging stations be phased in conjunction with the District's gradual transition to electric vehicles.

6.0 PROPOSED IMPLEMENTATION SCHEDULE (TENTATIVE)

<u>Date</u>	<u>Activity</u>
January 2027	Board authorizes Notice Inviting Bids
February 2027	Advertise for construction bids
March 2027	Board awards construction contract
December 2027	Completion of construction

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: M. Patel/B. Smith/
O. Reynoso

Budgeted: Yes

Proposed Budget: \$100,000

Cost Estimate: \$88,500

Funding Source: R&R

Program/Line Item No. R26021

General Counsel Approval: N/A

Engineers/Feasibility Report: N/A

CEQA Compliance: TBD

Subject: AWARD DESIGN OF 2026 ASPHALT PAVEMENT REHABILITATION

SUMMARY

A Request for Proposals was issued in August for design of the construction work in the second year of the District's pavement management plan to rehabilitate a total of 35-acres of asphalt surface. Staff recommends issuing an agreement to NV5 to perform this year's rehabilitation design of 8.3 acres.

RECOMMENDATION

Agendize for October 21 Board meeting: Authorize issuance of Agreement to NV5, Inc. for an amount not to exceed \$88,500 for the 2026 Asphalt Pavement Rehabilitation Design.

BACKGROUND/ANALYSIS

Many of the District's properties include asphalt pavements on roadways, parking lots, and maintenance yards that total an area greater than 35 acres across more than a dozen different sites. The sites are located in the cities of Fountain Valley, Anaheim, Orange, Corona, and unincorporated county areas. Some of the asphalt pavements are failing, while others are in various stages of disrepair. If proactively managed, asphalt pavements can have a long lifespan. Active maintenance of the surfaces reduces the lifecycle costs of asphalt pavements compared to replacements required after catastrophic failures. As part of its Replacement and Rehabilitation (R&R) program, the District sets aside funds each year for pavement maintenance.

In 2024, Staff worked with the consultant Bucknam Infrastructure Group, Inc. to assess existing pavement qualities and to map out a plan for their rehabilitations. The effort culminated in a Pavement Management Plan (PMP) that defines the Pavement Condition Index (PCI) for each section of asphalt, estimates the annual investment amounts that are required to maintain or improve the asphalt conditions, and recommends the sequence of work to be the most cost effective in the long-term. The PCI scale ranges from 0 to 100 and the weighted total PCI for District asphalts was found to be 74. Staff have interpreted the PMP and laid out a multi-year plan to accomplish its recommendations for which funding would draw from the District's R&R

fund (Replacement and Refurbishment). The first year of the plan was undertaken in fiscal year 2025-26 and included approximately 10-acres of pavement rehabilitation.

Staff prepared and advertised a Request for Proposals (RFP) on August 20 for design of the second year (fiscal year 2026-27) asphalt pavement construction work. The scope of work for this year will include approximately 362,000 square feet (8.3 acres) of asphalt pavement at OC San Plant 2, Warner Basin, Field Headquarters access road, and Santiago Basin. The RFP was advertised via the District's website and was directly sent to potential firms that may be interested in the project. Three proposals were received by the due date of September 22. The proposals were independently reviewed and scored by District staff. The scoring of the proposals included evaluating the qualifications of the firms and key staff, project approach, estimated level of effort, and related project experience. After the independent review, the scores were combined as summarized in Table 1.

Table 1: 2026 Asphalt Design Proposals

Firm	Score (out of 100)	Proposed Fee
NV5, Inc	83	\$ 88,500
Tait and Associates	81	\$112,285
Kreuzer Consulting Group	78	\$ 75,840

The NV5 proposal provided a strong team with relevant prior experience and a good understanding of the project scope and schedule. Staff recommends awarding an agreement to NV5, Inc. for an amount not to exceed \$88,500 for the 2026 Asphalt Pavement Rehabilitation Design.

A summary of the budget for fiscal year 2026-27 is provided in Table 2.

Table 2: 2026 Asphalt Rehabilitation Budget Summary

Description	Concept Budget	Proposed Budget
Asphalt Pavement Design	\$ 100,000	\$ 88,500
Asphalt Pavement Construction	\$ 1,400,000	\$ 1,411,500
Total	\$ 1,500,000	\$ 1,500,000

PRIOR RELEVANT BOARD ACTION(S)

08/19/26, R26-8-144: Authorize issuance of a Request for Proposals for the 2026 Asphalt Pavement Rehabilitation Design.

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: M. Patel/R. Bouley/A. Perry

Budgeted: No

Proposed Budget: \$35,450

Cost Estimate: \$35,450

Funding Source: R&R

Program/Line Item No.: R22011

General Counsel Approval: Yes

Engineers Report: N/A

CEQA Compliance: N/A

Subject: AUTHORIZE CHANGE ORDER TO MURRAY COMPANY FOR REVERSE OSMOSIS CLEAN-IN-PLACE PIPE REPLACEMENT

SUMMARY

OCWD awarded Murray Company a contract for the Reverse Osmosis (RO) Clean-In-Place (CIP) Valve Relocation Project, Contract GWRS-2025-1, in May 2025. Murray is currently completing the work associated with this contract, and deterioration of several RO piping gaskets has been found that requires emergency repairs. Staff recommends authorizing a change order to OCWD's contract with Murray Company in the amount of \$35,450 to replace the leaking gaskets and increase the total project budget to \$824,287.

RECOMMENDATION

Agendize for October 21 Board meeting:

1. Authorize Change Order No. 2 to Murray Company for Reverse Osmosis Piping Gasket Replacements in the amount of \$35,450; and
2. Increase the Reverse Osmosis CIP Valve Relocation Project budget to \$824,287.

BACKGROUND/ANALYSIS

During construction of the GWRS a Clean-in-Place (CIP) system was installed to clean the Reverse Osmosis (RO) membranes without having to remove them from their housings. The CIP system runs throughout the RO Building and consists of hundreds of feet of PVC piping and multiple valves that feed cleaning solution to the RO units. Several valves needed to be relocated so they could be safely operated from the RO building's ground floor, instead of requiring entry into the basement and navigation around several large pipes to access the valves directly. In May 2025, the Board awarded a contract to Murray Company to relocate these valves and replace the piping at the old valve locations with new stainless-steel pipe, using a portion of the R&R funds previously budgeted for RO CIP piping replacements.

During construction, staff realized that some of the original PVC piping for the CIP system was starting to fail. The Board authorized CCO No. 1 to replace several failing "elbow" and "T" fittings to maintain employee safety.

Staff have also observed that several of the “spiral wound” gaskets that were used on the Reverse Osmosis (RO) “E” train have deteriorated and are leaking due to the high pressure of the RO system. These gaskets are on pipes that are up to 24 inches in diameter and are situated in very isolated locations of the plant, making repairs difficult for OCWD Staff. Staff requested and received a quote from Murray Company to replace the leaking gaskets.

Due to the potential for further damage to the RO pipe flanges due to leaking gaskets, Staff recommends authorizing issuance of Change Order No. 1 to Murray Company to complete RO piping gasket replacements in the amount of \$35,450 and increasing the project budget to \$824,287.

The new project budget for the project is summarized in Table 1 below:

Table 1: RO CIP Valve Relocation Budget Summary

Description	Approved Budget	Proposed Expenditure
Design		
Black and Veatch	\$49,150	\$49,150
Design Subtotal	\$49,150	\$49,150
Construction		
Contract GWRS-2025-1	\$340,885	\$340,885
CCO No. 1 – Additional CIP Pipe Replacement	\$288,827	\$288,827
<i>CCO No. 2 – RO Piping Gasket Replacements</i>	<i>\$0</i>	<i>\$35,450</i>
Permits and Advertisement Costs	\$50,000	\$50,000
Staff Expenses	\$40,000	\$40,000
Construction Subtotal	\$719,712	\$755,162
Project Contingency	\$19,965	\$19,965
Total Project Budget	\$788,827	\$824,287

PRIOR RELEVANT BOARD ACTIONS

01/21/26, R26-1-10: Authorizing Change Order to Murray Company for the Reverse Osmosis Clean-in-Place Pipe Replacement and Increasing Project Budget

05/21/25, R25-5-77: Approve Agreement to Murray Company for the Reverse Osmosis Clean-in-Place (CIP) Valve Relocation Project, Contract GWRS-2025-1

11/14/24, R24-11-145: Authorizing Publication of Notice Inviting Bids for Contract No. GWRS-2024-1, Reverse Osmosis CIP Valve Relocation Project

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: M. Patel/R. Bouley

Budgeted: No

Proposed Budget: \$746,000

Cost Estimate: \$704,000

Funding Source: R&R

Program/Line Item No.: R26040,R24010

General Counsel Approval: NA

Engineers/Feasibility Report: NA

CEQA Compliance: NA

**Subject: ISSUE AMENDMENT NO. 1 TO AGREEMENT 1861 TO JAMISON
ENGINEERING FOR THE GWRS PIPELINE INSPECTION WORK**

SUMMARY

Projects were completed in 2018 and 2021 to inspect, replace and repair damaged cement mortar lining (CML) inside the GWRS Pipeline. Staff has discovered significant amounts of sand in GWRS outlets that indicate additional damage to the CML. In September 2026 a GWRS pipeline inspection project was completed using Jamison Engineering Contractors (Jamison) with a budget of \$486,000. During the course of the inspection repair work was found to be needed at several vent line locations and staff is requesting an amendment to existing agreement 1861 to Jamison in the amount of \$258,000 to complete the necessary repairs.

Attachment: Jamison Proposal

RECOMMENDATION

Agendize for October 21 Board Meeting: Authorize issuance of Amendment No. 1 to Agreement 1861 with Jamison Engineering Contractors, Inc for an amount not to exceed \$258,000 for repair of vent lines on the GWRS pipeline.

DISCUSSION

The 13.8-mile Groundwater Replenishment System (GWRS) pipeline was put into service in January 2008. The pipeline was constructed as a CML and coated steel pipe, which telescopes in diameter from 78 inches to 72 inches, to 66 inches, and finally to 60 inches. Inspections of the interior of the pipeline have revealed signs of deterioration of the CML on the interior of the steel pipeline due to the corrosive index of GWRS water. The water appears to break down the CML by absorbing minerals from the cement mortar, thereby releasing sand particles from within the CML into the product water. Water Production staff have revised operations to increase alkalinity in the GWRS product water to better protect the mortar lining. However, the deterioration of the CML gradually continues, causing dissolved mortar and sand to flow from the lining into the OCWD's recharge basins and injection wells.

In June 2026 the board authorized agreement 1861 to Jamison to perform an inspection of the entire GWRs pipeline as well as provide entry points and dewatering at several points along the pipeline's path. Agreement 1861 to Jamison was in the amount of \$446,000 using a newly establish Refurbishment & Replacement (R&R) account R26040. The scope of work proposal received from Jamison for the pipeline inspection also included two additional optional tasks which were not ultimately included as part of agreement 1861. Those tasks were to repair several one-inch vent lines that showed signs of deterioration during prior pipeline inspections.

During prior pipeline inspections staff observed deterioration of one-inch stainless steel vent line connections located at sixteen different locations along the pipeline. The level of deterioration indicated that any of them could begin to leak at anytime if not repaired or replaced. The method to address all repair locations requires work within the pipeline under a dewatered condition as well as work done from the outside the pipeline while pressurized. In response a budget of \$300,000 was established in fiscal year 2024-2025 as R&R account R24010 to address the repairs of the vent line connections. During the recently completed GWRs pipeline inspection in September 2026, it was observed that the sixteen vent line location continued to show signs of deterioration. Staff authorized Jamison to make the portion of the repairs required to be done within the pipeline during the recent inspection while the pipeline remained out of service. Staff is also now ready to have Jamison address the portion of the repairs to occur outside of the pipeline now that the pipeline is back in service and pressurized.

To finish the necessary vent line repairs, staff is requesting authorization to issue an amendment to the existing agreement 1861 to Jamison to complete this work as well as to pay for previously completed repairs. The complete cost of the vent line repair work would be funded by R&R account R24010 since that budget was set up specifically for that purpose. Using the existing agreement will allow Jamison to proceed quickly with the remaining work required to be done while the pipeline is now pressurized and back in operation. The total cost of the vent line repairs is \$258,000 as shown in the original Jamison pipeline inspection scope of work as optional items 1 and 2. Staff requests authorization to issue Amendment No. 1 to agreement 1861 in the amount of \$258,000 funded by R24010. This will bring the total value of agreement 1861 to Jamison to \$704,000.

PRIOR RELEVANT BOARD ACTIONS

10/6/2021, R21-10-145: Approve Amendment to Agreement with Jamison Engineering Contractors, Inc. for 2021 GWRs Pipeline Repair Work.

3/3/2021, R21-3-34: Authorize issuance of an Agreement to FD Thomas, Inc, Jamison Engineering, and CSI for the GWRs Pipeline Repair Work in 2021.

2/19/2020, R20-2-19: Approve Agreement with Jamison Engineering Contractors, Inc. to Support the GWRs Pipeline Inspection Work

6/20/2018, R18-6-69: Authorize filing of Categorical Exemption with Orange County Recorder's Office; and Accept bid, waive inconsequential bid informalities, and award Contract GWRs-2018-1, Groundwater Replenishment System Unit I Pipeline

Rehabilitation Project: Alternative A (30 days) to the lowest responsive bidder F.D. Thomas, Inc. in the amount of \$4,833,540; and Authorize issuance of Agreement to CSI Services, Inc. for Inspection and Testing Services for an amount not to exceed \$72,252; and Authorize issuance of Agreement to Jamison Engineering Contractors, Inc for Construction Support Services for an amount not to exceed \$159,400; and Reduce project budget by \$1.9 million, for a total project budget of \$6,100,000.

Quote # 03628

DATE: May 7, 2026
TO: OCWD
ATTENTION: John
REFERENCE: Inspection Services for the GWRS Pipeline

Dear John,

We propose to do the following Not To Exceed the price **\$703,841.00** (*Seven Hundred Three Thousand Eight Hundred Forty-One Dollars and no/100 cents*), including all applicable taxes).

Jamison Engineering Contractors will supply labor, materials and equipment to:

• **Task #1 – Preparation**

- Remove all bolts from 46 blind flanges, remove and inspect all blind flanges and associated ball valves.
- Contractor to remove 46 blind flanges and gaskets and prepare seating surface
- Contractor to inspect the man-way nozzles
- Contractor to wire wheel brush all blind flange hardware and lubricate with anti-seize (Loctite Paste Anti-Seize Lubricant - Marine Grade – 34026 or approved equal)
- Contractor to provide all confined space entry equipment including but not limited to proper ventilation, gas monitors, confined space rescue team, video recording equipment, communication equipment, Safety plan with job safety analysis and certificates of confined space training for employees.
- Contractor to pump and clean man-way vaults over 40-inches deep.
- Contractor to provide and operate all dewatering equipment necessary – 22 locations for complete inspection. Approximately 500 – 50,000 gallons of water per location. Water for under crossings along Riverview Golf Course will need appropriately discharged. All other water may be discharged to the Santa Ana River or OCWD recharge basins. Provide bike trail crossings and flagmen during dewatering.
- Contractor to provide, set up and take down all traffic control equipment required, including pedestrian/bike traffic control.

• **Task #2 – Inside Pipeline**

- Contractor to provide entire pipe interior inspection services utilizing one person, Contractor may be accompanied by a District staff member during entire pipe inspection. Contractor to provide video image recording equipment with sufficient lighting to capture moving and still photography of pipeline interior at the request of District staff.
- Bit testing at 12 locations approximately every mile inside pipe.
- Contractor to wheel measure distance between man-ways and provide measurements in writing to District staff. Contractor shall provide measurements to District staff of all repair locations along the pipeline alignment.
- Results shall be delivered in writing to District personnel.

• **Task #3 – Reinstall Flanges**

- Contractor to reinstall 46 blind flanges and gaskets using existing bolts
- Contractor to provide 46, 36-inch full face(non-asbestos) paper 1/8-inch thick 32-hole gaskets
- Contractor shall log torque for each bolt for all 46 blind flanges
- Contractor to provide, set up and take down all traffic control equipment required, including pedestrian/bike traffic control.

Labor:

Labor Total = \$241,420.00

Vehicles and Equipment:

Vehicle Total = \$172,861.00

Rentals:

Rental Total = \$16,560.00

Materials:

Material Total = \$15,000.00

Quote/Grand Total = \$445,841.00

• **Optional Task-**

- **Item #1 – Install new 1” SS vent line as follows (16 locations)**
- Excavate approximately 2’ deep
- Core drill new hole in vault
- Install new 1” SS pipe from blind flange to existing air vac
- Backfill and compact trench
- **Item #2 – Abandon existing vent line penetrations (11 locations)**
- Remove cement lining around hole
- Install beveled plug and fully weld
- Install cement lining over weld plug
- Remove copper line

Item #1 Total

Total = \$192,000.00

Item#2 Total

Total = \$66,000.00

Optional Task Total = \$258,000.00

NOTE:

- *Any additional rentals and/or additional materials and outside services required will be billed at cost plus 15%.*
- *All additional work required beyond normal work shift of eight (8) hours due to conditions added or required outside of the quoted scope of work will be charged at the rate of 1 ½ times the quoted wage/hourly rate.*
- *All above Prices are an estimate only and can change depending on unforeseen site conditions*
- *All work will be performed and billed based on our current “Time and Material” billing rate sheets attached to this quote*

We appreciate the opportunity of presenting this quotation. It will remain firm for 90 days.

If you have any questions, please call Andrew at (714) 325-1857

Respectfully submitted,

Andrew Jamison

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: C. Olsen

Budgeted: N/A

Budgeted Amount: N/A

Cost Estimate: N/A

Funding Source: N/A

Program/Line Item No.: N/A

General Counsel Approval: N/A

Engineers/Feasibility Report: N/A

CEQA Compliance: N/A

**Subject: AMENDMENT TO METROPOLITAN WATER DISTRICT CYCLIC
STORAGE AGREEMENT**

Staff recommends approval of an amendment to the existing Cyclic Storage Agreement among OCWD, the Metropolitan Water District of Southern California (MWD), and the Municipal Water District of Orange County (MWDOC). The amendment would extend the agreement for an additional 10 years effective December 1, 2026, allowing continued use of the cyclic storage program when excess imported water is available.

Attachment: Draft amendment to extend the Cyclic Storage Agreement 10 years

RECOMMENDATION

Agendize for October 21 Board meeting: Authorize the General Manager to execute an amendment to the Cyclic Storage Agreement with MWD and MWDOC extending the agreement for an additional 10 years effective December 1, 2026, subject to review and approval by legal counsel.

BACKGROUND/ANALYSIS

On July 19, 2017, the Board authorized the General Manager to execute a Cyclic Storage Agreement with MWD. The agreement established a framework for storing imported water in the Orange County Groundwater Basin through direct deliveries or in-lieu deliveries, in which groundwater producers use treated imported water instead of pumping groundwater. Under the Cyclic Storage Agreement, MWD could provide up to 100,000 acre-feet of treated water to groundwater basin agencies in lieu of those agencies pumping groundwater to indirectly store excess imported water in Southern California.

The cyclic storage program provides a mechanism to capture imported water when supplies are available and to coordinate subsequent recovery and payment under the agreement. Continuing this Cyclic Storage Agreement supports the District's management of the groundwater basin and its ability to coordinate storage opportunities with MWD and MWDOC. The Agreement could be implemented in the

event MWD has a surplus of imported water due to exceptionally wet winter(s) in California, where it would be at risk of not storing all of the water available and unable to bring it to Southern California.

The proposed amendment would extend the existing agreement by 10 years. Staff recommends executing the amendment to maintain the contractual framework for future cyclic storage activities. The extension and any other provisions included in the amendment would be subject to legal counsel's review before execution.

Staff recommends approval of the agreement amendment. Any future water purchases and related expenditures would remain subject to the original agreement terms and District budget and approval requirements.

RELEVANT PRIOR BOARD ACTION(S)

7/19/17, R17-7-105: Authorized (1) the General Manager to execute a Metropolitan Water District Cyclic Storage Agreement according to the terms provided and review by legal counsel; (2) the purchase of up to an additional 100,000 acre-feet of water under the Cyclic Agreement; and (3) staff to access \$25 million of the taxable Commercial Paper program to assist in purchasing the additional water.

**FIRST AMENDMENT TO CYCLIC AGREEMENT NO. A0-5213 BETWEEN
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY, AND ORANGE COUNTY
WATER DISTRICT**

This FIRST AMENDMENT (“Amendment”), is effective as of December 1, 2026 to the Cyclic Storage Agreement (“Agreement”), by and among the METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (“Metropolitan”), a public agency of the State of California, the MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (“MWDOC”), a public agency of the State of California, and ORANGE COUNTY WATER DISTRICT (“OCWD”), which was created by a special act of the California Legislature (Ch. 924, Stats. 1933, as amended, the “OCWD Act”) for the purpose of protecting and managing the Orange County groundwater basin. Metropolitan, MWDOC, and OCWD may collectively be referred to as the “Parties.”

RECITALS

- A. The Parties entered into the Agreement on July 1, 2017, for the purpose of giving Metropolitan the right to store up to 100,000 acre-feet of Metropolitan water in the Orange County Groundwater Basin, a groundwater basin located in Orange County.
- B. The Parties seek to amend Section 6 of the Agreement to state that purchases must be made according to the purchase schedule in accordance with Sections 2 and 4 of the Agreement.
- C. The Parties seek to amend Section 9 of the Agreement to extend the termination date to 10 years after the effective date of the Agreement.

D. The Parties seek to amend Section 12 of the Agreement to state that MWDOC would be obligated to purchase all water remaining in the Cyclic Account within 90 days of the end of the purchase schedule or the Agreement termination date, whichever comes later.

E. The Parties intend to amend the Agreement to state that purchases must be made no later than the purchase schedule or the Agreement termination date, whichever comes later.

COVENANTS

1. Obligation for Purchase and Payment

Section 6 of the Agreement is amended to state that purchases must be made according to the purchase schedule in accordance with Sections 2 and 4 of the Agreement. The first sentence of Section 6 is amended to read:

“MWDOC agrees to purchase water from Metropolitan’s Cyclic Account in accordance with Sections 2 and 4 of this Agreement, but no later than the schedule by which MWDOC shall purchase the delivered water.”

2. Term

Section 9 of the Agreement is amended to state that the term of Agreement will be extended to 10 years after the effective date of the First Amendment. The first sentence of Section 9 is amended to read:

“The term of this Amendment shall commence on December 1, 2026 and shall terminate 10 years thereafter.”

3. Purchase of Water After Termination

Section 12 of the Agreement is amended to state that MWDOC would be obligated to purchase all water remaining in the Cyclic Account within 90 days of the end of the purchase

schedule or the Agreement termination date, whichever comes later. The first sentence of Section 12 is amended to read:

“Upon notice of termination of the Agreement or of the schedule agreed by the parties pursuant to Section 2, whichever comes later, MWDOC is obligated to purchase all water remaining in the Cyclic Account within 90 days.”

4. Notices

Any notice required hereunder may be given by mail, postage prepaid, addressed as follows:

To: Municipal Water District of Orange County
P.O. Box 20895
Fountain Valley, CA 92728
Attention: General Manager

To: Metropolitan Water District
700 N. Alameda Street
Los Angeles, CA 90012
Attention: Water Resource Management Group Manager

5. Scope of Amendment

Except as amended herein, all provisions of the Agreement remain in full force and effect.

[Signatures on Following Page]

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be duly executed by its authorized officers.

Approved as to Form:

Municipal Water District of Orange County

By: _____
NAME
General Counsel

By: _____
NAME
General Manager

Date: _____

Date: _____

Approved as to Form:

Orange County Water District

By: _____
NAME
General Counsel

By: _____
NAME
General Manager

Date: _____

Date: _____

Approved as to Form:

The Metropolitan Water District of Southern
California

Marcia L. Scully
General Counsel

Shivaji Deshmukh
General Manager

By: _____
Patricia Quilizapa
Senior Deputy General Counsel

By: _____
Brandon J. Goshi
Group Manager
Water Resource Management

Date: _____

Date: _____

AGENDA ITEM SUBMITTAL

Meeting Date: October 14, 2026

To: Water Issues Committee
Board of Directors

From: John Kennedy

Staff Contact: R. Bouley/L. Esguerra

Budgeted: Yes

Budgeted Amount: \$3,501,104

Cost Estimate: \$6,633,000

Funding Source: R&R

Program/Line Item No.: R22014

General Counsel Approval: N/A

Engineers Report: N/A

CEQA Compliance: N/A

**Subject: AWARD CONTRACT NO. SB-2026-1 TO TE ROBERTS, INC. AND
BUDGET INCREASE**

SUMMARY

The Santiago Floating Pump Station expands OCWD's groundwater recharge capacity by pumping water from Santiago Basin into Santiago Creek. The value of this recharged water is approximately \$6.1 million annually. The pump station controls and power cables need to be replaced. A total of five construction bids were received on September 24, 2026, for the Santiago Pump Station Modifications Project, Contract No. SB-2026-1. Staff recommends awarding a construction contract to TE Roberts, Inc., in the amount of \$5,338,735 and increasing the project budget to \$6,633,000.

Attachments:

- Affidavit of Publication for Notice Inviting Bids for Contract No. SB-2026-1
- Pyramid Building and Engineering, Inc. letter dated September 28, 2026

RECOMMENDATION

Agendize for October 21 Board meeting:

1. Receive and file Affidavit of Publication of Notice Inviting Bids for Contract No. SB-2026-1 Santiago Pump Station Modifications Project;
2. Ratify issuance of Addenda 1 through 3 to Contract No. SB-2026-1;
3. Approve request for withdrawal of bid by Pyramid Building and Engineering, Inc. without penalty due to clerical error in filling out the bid;
4. Accept bid and award Contract No. SB-2025-1 to the lowest responsive and responsible bidder, TE Roberts, Inc., in the amount of \$5,338,735 and;
5. Increase the project budget to \$6,633,000.

BACKGROUND/ANALYSIS

Orange County Water District (OCWD) owns Blue Diamond and Bond Basins, collectively known as Santiago Basin, which are located near the intersection of Villa

Park Road and N. Hewes Street in the City of Orange. OCWD pumps Santa Ana River water from Burris Basin to Santiago Basin for groundwater recharge. There is a floating pump station in Santiago Basin that pumps water from the Basin to Santiago Creek or back to Burris Basin to increase the groundwater recharge. The annual value of the additional recharge from the Santiago Floating Pump Station is approximately \$6.1 million. The configuration of the Santiago Basin and pump stations is shown below in Figure 1:

Figure 1: Santiago Basin



In October 2018, the Board authorized an agreement with Tetra Tech to prepare engineered construction drawings and bid documents to modify the floating pump station to work at higher water elevations since the submerged pump station stopped functioning. The project was placed on hold for several years while the Santiago Intertie Repairs and Bond Basin Slope Repairs were completed. Staff modified the design for the project after it was discovered that one of the pump drives and the power cables to the floating pump station were all damaged. This damage made the floating pump station inoperable. Tetra Tech performed an additional assessment of the 1,400-foot-long power conduits and multiple cable bundles that connect the pump station control building to the floating pump station to design a permanent repair to the power wires.

In June 2024, the Board authorized an agreement with T.E. Roberts to perform Phase 1 emergency repairs to the pump station that included repairs to the eight existing power

wires and 12-inch floating conduits connected to the two existing pumps at the floating pump station. During Phase 1 construction, three of eight power wires failed electrical testing, and staff determined that replacing all eight (8) existing power wires, approximately 11,200 linear feet, and two existing 20-year-old, 450-horsepower pump drives was necessary to maximize operational reliability of the pump station. Therefore, these improvements were incorporated into the Santiago Pump Station Modifications Project.

The bid advertisement period for Contract No. SB-2025-1 commenced August 18, 2026, and spanned 37 calendar days. Addendum No. 1 was issued on September 9, 2026, to provide responses to potential bidder's questions. Addendum No. 2 was issued on September 16, 2026, to provide a revised bid schedule and to extend the bid due date. Addendum No. 3 was issued on September 17, 2026, to provide responses to potential bidder's questions. Five construction bids were received on September 24, 2026. All five construction bids exceeded the construction estimate amount of \$4,500,000. This initial estimate was based on information provided by staff and the design consultant and was higher than originally budgeted since the electrical cables now need to be replaced. Staff discussed this cost variance with the low Contractor and determined that this variance can be attributed to the substantial increase in raw materials costs of copper used for the power cables, iron used for steel pipe, and valves, the significant increase in fuel costs, and site-specific construction constraints when working within an operating recharge basin. The four responsible construction bids were all within 6%, demonstrating that the level of effort from each bidder was commensurate with the scope of work for the project.

The apparent low bidder, Pyramid Building and Engineering, Inc., claimed they made a clerical error when filling out their bid that rendered their bid materially different than intended, and they have requested to withdraw their construction bid. Pyramid Building and Engineering, Inc., contacted the District in writing within five days, as required by the District's contract documents. Staff reviewed this request with the District's legal counsel and recommends relieving Pyramid Building and Engineering, Inc. of its bid without penalty. A summary of all bids is shown below in Table 1.

Table 1: Construction Bid Summary

Contractor	Bid Price
Pyramid Building and Engineering, Inc.	\$ 4,667,450
TE Roberts, Inc.	\$ 5,338,735
Big Ben, Inc.	\$ 5,523,813
Pacific Hydrotech Corporation	\$ 5,551,200
MMC, Inc,	\$ 5,666,000

Staff recommends award to the next second lowest bidder, TE Roberts, Inc. Staff reviewed the bid of TE Roberts, checked references, and confirmed that its contractor's license is current, active, and in good standing with the State of California. Staff recommends awarding the construction contract to TE Roberts as the lowest responsive bidder in the amount of \$5,338,735.

Staff further recommends establishing the project budget for the Santiago Pump Station Modifications Project at \$6,633,000 as summarized in Table 2.

Table 2: Santiago Pump Station Modifications Budget Summary

Description	Budget
Design, Construction Management, Permitting	
Design (Tetra Tech)	\$ 460,000
In-house Construction Management	\$ 0
Bid Advertisement, Permitting, Expenses	\$ 50,000
Design, Construction Management, Permitting Sub-Total	\$ 510,000
Construction	
Phase 1 Emergency Repair (TE Roberts)	\$ 517,213
Contract SB-2025-1 (TE Roberts)	\$ 5,338,735
Construction Sub-Total	\$ 5,855,948
Project Contingency	\$ 267,052
Total Project Budget:	\$ 6,633,000

The expected project schedule is shown below in Table 3

Table 3: Schedule Summary

Description	Dates
Design	Oct 2018 – July 2026
Construction Contract	Nov 2026 – Jan 2028

PRIOR RELEVANT BOARD ACTIONS

12/17/2025, R25-12-208: Authorizing Publication of Notice Inviting Bids for Contract No. SB-2026-1, Santiago Pump Station Modifications Project

2/19/2025, R25-2-18: Amendment to Agreement with T.E. Roberts for the Santiago Floating Pump Station Power Wire and Conduit Repairs

6/19/2024, R24-6-68: Authorize Agreement with T.E. Roberts for the Santiago Floating Pump Station Power Wire and Conduit Repairs

5/18/2022, R22-5-56: Authorize Amendment to Agreement with Tetra Tech for Santiago Pump Station Modifications Project Design and Construction Support Services

10/16/2019, R19-10-146: Authorize Amendment to Agreement with Tetra Tech for Santiago Pump Station Modifications Project Design and Construction support Services

10/17/2018, R18-10-144: Authorize Agreement to Tetra Tech for Santiago Pump Station Modifications Project Design and Construction Support Services

08/15/2018, M18-97: Establish A Project Budget and Authorize Issuance of RFP for Santiago Pump Station Modifications Design Services

THE ORANGE COUNTY
REGISTER

1920 Main Street, Suite 209
Irvine, California 92614
(714) 796-7000
legals@inlandnewspapers.com

Orange County Water District
18700 Ward Street
Fountain Valley, California 92708

<i>Account Number:</i>	5179533
<i>Ad Order Number:</i>	0011807552
<i>Customer's Reference/PO Number:</i>	
<i>Publication:</i>	The Orange County Register
<i>Publication Dates:</i>	08/18/2026
<i>Total Amount:</i>	\$909.64
<i>Payment Amount:</i>	\$0.00
<i>Amount Due:</i>	\$909.64
<i>Notice ID:</i>	KcHeeZQeti2qGVo155N4
<i>Invoice Text:</i>	

0011807552

Orange County Water District
18700 Ward Street
Fountain Valley, California 92708

**PROOF OF PUBLICATION
(2015.5 C.C.P.)**

**STATE OF CALIFORNIA
County of Orange**

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not party to or interested in the above-entitled matter. I am the principal clerk of the printer of The Orange County Register, a newspaper of general circulation, printed and published in the City of Irvine*, County of Orange, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of County of Orange, State of California, under the date of November 19, 1905, Case No.A-21046. The notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

08/18/2026

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated at Irvine, California

On this 18th day of August, 2026.



Signature

**NOTICE INVITING BIDS
SANTIAGO PUMP STATION MODIFICATIONS
CONTRACT NO. SB-2026-1**

PLEASE TAKE NOTICE that sealed bids will be received at the office of the Contracts Administrator of the Orange County Water District ("District"), 18700 Ward Street, Fountain Valley, CA, until 2:00 PM PT. local time on September 21, 2026 which time the bids will be publicly opened and read aloud for performing all work and furnishing all labor, materials and equipment for: The Santiago Pump Station Modifications project will re-establish OCWD's ability to pump water from Santiago Basin when the water surface elevation is above 240 feet. The original Santiago Pump Station was constructed at the bottom of Bond Basin in 2002. During commissioning 3 of 4 submersible pumps failed leaving one functional pump capable of operating at basin water elevations between 285 feet and 240 feet. The floating pump station was constructed in 2011, and two 450 horsepower pumps were installed designed to operate at a basin water level below 240 feet. Recently the submersible pump failed requiring OCWD to operate the 450 horsepower pumps above basin water surface elevation of 240 feet. As a result, the larger pumps operate outside their design curve due to insufficient head. The Contractor shall furnish all labor, materials, equipment and incidentals required for the construction of the Santiago Pump Station Modifications project per the plans and specifications, including: the construction of an 18-inch bypass to be used when the basin water level is above 240 feet, installation of 16-inch modulating valve, installation of an electrical actuator on an existing 36-inch butterfly valve, replacement of two existing solid state pump drives, replacement of the existing power cables, electrical, instrumentation, and other ancillary and support facilities; site improvements, excavation, pavement replacement and other ancillary facilities; and associated commissioning, training, and acceptance testing of the Santiago Pump Station Modifications.

MANDATORY PREBID CONFERENCE: A pre-bid conference and Job Walk will be held at the Project Site, 821 Prospect Street, Orange, CA on Monday, August 31, at 10:00 AM PT. All potential bidders, contractors and other interested parties are required to attend this conference conducted by the District and Engineer. Any potential bidder that does not attend the pre-bid conference will be charged with knowledge of all information that was available at the pre-bid conference.

PROJECT ADMINISTRATION: All questions regarding the Bid must be submitted in writing before the deadline due date of Friday, September 4, 2026, at 2:00 PM PT. Questions received after the questions due date may not be considered. All questions relative to this project prior to the opening of bids shall be directed, in writing, to OCWD:

ORANGE COUNTY WATER DISTRICT
18700 Ward Street
Fountain Valley, CA 92708

Attention: Laurence Esquerra, Senior Engineer
Telephone: (714) 378-3200
Email: procurement@ocwd.com

COMPLETION OF WORK AND LIQUIDATED DAMAGES: All Work must be completed within Three-Hundred-Seventy (370) consecutive calendar days from the date of the Notice to Proceed issued by the District. Failure to complete the Work within the time set forth herein will result in the imposition of liquidated damages for each day of delay, in the amount set forth in the Information for Bidders.

OBTAINING CONTRACT DOCUMENTS: Plans and specifications and all contract documents must be purchased through HB Digital at www.ocwdplanroom.com. Payment will not be refunded and the plans and specifications and contract documents are not required to be returned.

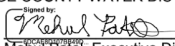
WAGE RATE: As required by Section 1773 of the California Labor Code, the Director of the Department of Industrial Relations of the State of California has determined the general prevailing rates of wages in the locality in which the Work is to be performed. The prevailing wage determinations are available at the following web site: <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. The Contractor and any subcontractor under it shall not pay less than the specified prevailing rates of wages to all workers employed in the execution of the Contract.

CONTRACTOR'S LICENSE SPECIFICATION: In accordance with the provisions of California Public Contract Code Section 3300, the District requires that the bidder possess the following classification of contractor's license at the time that the bid proposal is submitted: Class A.

CONTRACTOR'S REGISTRATION: In accordance with Labor Code Section 1771.1.a, contractor or subcontractor shall not be qualified to bid on or be listed in a bid proposal or engage in the performance of this Work unless currently registered and qualified to perform the Work pursuant to Labor Code Section 1725.5.

DISTRICT'S RIGHTS RESERVED: The Orange County Water District reserves the right to reject any or all bids, and to waive any informality in any bid.

ORANGE COUNTY WATER DISTRICT

By: 
Mehul Patel, Executive Director of Operations
on behalf of John C. Kennedy, General Manager

Dated: 8/14/2026

The Orange County Register
Published: 8/18/26



GENERAL ENGINEERING CONTRACTOR
LIC. NUMBER 782024
A, B, C-8
10975 'G' AVENUE
HESPERIA, CA 92345
760-949-9005

Via Email to: Laurence Esguerra, PE
lesguerra@ocwd.com
procurement@ocwd.com

September 28, 2026

Orange County Water District
18700 Ward Street
Fountain Valley, CA 92708

RE: **Santiago Pump Station Modifications SB-2026-1**

To whom it may concern,

By this correspondence, we request withdrawal of our bid on the above-referenced project as allowed under Public Contract Code 5103.

We used a computer-based bidding program to prepare our bid numbers that were submitted to the City on bid day. After we were notified that we were the apparent low bidder and the \$671,285 disparity between our bid and the next lowest bidder, we reviewed our bid numbers and discovered we made a clerical error in compiling our bid numbers in that they do not include any markup (m/u) for profit or overhead. It appears we failed to perform the necessary steps in our computer-based bidding program to apply any markup for the profit or overhead to our direct cost bid numbers that we submitted to the City on bid day. It was never our intention to bid this project without any profit or overhead. Omission of our markup for profit or overhead was a mistake and clerical error on our part. Attached hereto are true and correct copies of our bid sheets from our computer-based bidding program that we used to submit our bid to the City showing 0% mark up for profit or overhead to our direct cost bid numbers.

Based on the facts of law [now Public Contract Code 5103] stated in M.F. Kemper Const. Co. v. City of Los Angeles (1951) 37 Cal.2d 696, 702, the California Supreme Court has held that omission of an item in compiling estimates of cost of various parts of work resulting in bid being substantially less than amount intended was a material mistake and entitled plaintiff to rescind its bid.

That is exactly what happened here, due to our clerical error and mistake in using our computer-based bidding program, rather than an error of judgment or choice. Pyramid's submitted bid numbers

does not include markup for profit or overhead that were meant to be included but were mistakenly omitted and makes Pyramid's bid substantially less than Pyramid intended the bid to be when it was submitted to the City.

Should you have any questions and/or comments, please feel free to contact John A. Garrison at (760) 949-9005. Sorry for any inconvenience this may cause, and we look forward to bidding to Orange County Water District in the future.

Sincerely,
Pyramid Building and Engineering, Inc.

A handwritten signature in dark ink, appearing to read "John A. Garrison", written over a horizontal line.

John A. Garrison – President

Proposal

Project Owner	Orange County Water District	Eng. Est.	\$4.5 million	Addendum's	
Project Name	Santiago Pump Station Modifications	LD's		Proposal Date	
Engineer		Duration		Proposal No.	

Items No.	Description	Qty	Unit	Unit Bid Price	Bid Extension	
1	Mobilization, demobilization, and cleanup for the lump sum of:	1	LS		\$ 225,400.00	\$ 225,000.00
2	Furnish and install repairs to existing 12" HDPE floating electrical conduit (south) and construct 9-foot extensions on 12-inch HDPE floating electrical conduits, complete in place, for the lump sum price of:	1	LS		\$ 78,507.86	\$ 78,500.00
3	Furnish and install power cable restraint system within existing electrical vault, remove existing vault precast concrete top section and metal hatch lid and replace with new precast concrete top section and aluminum spring assist double leaf vault hatch, complete in place, for the lump sum price of:	1	LS		\$ 76,642.29	\$ 76,600.00
4	Remove and dispose deteriorated 12-inch pipe floats and wire cable tethers, for the price per each of:	76	EA	\$ 325.38	\$ 24,729.20	\$ 24,700.00
5	Furnish and install 12-inch pipe floats and chain tethers at 20-foot spacing, complete in place, for the price per each of:	90	EA	\$ 2,659.89	\$ 239,390.25	\$ 239,400.00
6	Remove and relocate existing 12-inch pipe floats and chain tethers (2025 installed) at 20-foot spacing, complete in place, for the price per each of:	50	EA	\$ 1,497.57	\$ 74,878.40	\$ 75,000.00
7	Remove and replace existing deadman cable restraints, complete in place, for the lump sum price of:	1	LS		\$ 27,678.03	\$ 27,700.00
8	Remove and dispose five (5) existing pump motor power conductor cables and Construct eight (8) pump motor power conductor cables, complete in place, for the lump sum price of:	1	LS		\$ 1,325,506.60	\$ 1,325,500.00
9	Remove and replace three (3) pump dock transformer power conductor cables, complete in place, for the lump sum price of:	1	LS		\$ 108,889.72	\$ 108,900.00
10	Furnish and install pump station discharge bypass piping, ball valve, trenching, bedding, backfill and access road pavement restoration, complete in place, for the lump sum price of:	1	LS		\$ 519,984.82	\$ 520,000.00
11	Construct connection to 36-inch discharge pipeline, complete in place, for the lump sum price of:	1	LS		\$ 29,227.79	\$ 29,300.00
12	Construct connection to 30-inch discharge pipeline, complete in place, for the lump sum price of:	1	LS		\$ 26,652.79	\$ 26,650.00
13	Furnish and install electric actuator on existing 36-inch butterfly valve, complete in place, and repaint existing valve and piping within vault, for the lump sum price of:	1	LS		\$ 69,931.68	\$ 70,000.00
14	Furnish and install steel pipe modifications, valves, pressure transmitters, limit switches, gauges, instrumentation, dive inspection of barge and re-torquing of bolts, and all other ancillary work per Drawing C-103, complete in place, for the lump sum price of:	1	LS		\$ 64,787.88	\$ 65,000.00
15	Construct bypass piping enclosure, complete in place, for the lump sum price of:	1	LS		\$ 188,537.81	\$ 188,500.00
16	Abandon existing 36-inch submerged pump station discharge pipeline and construct air vent assembly, complete in place, for the lump sum of:	1	LS		\$ 18,925.29	\$ 18,900.00
17	Furnish and install electrical equipment and facilities at the existing electrical building, complete in place, for the lump sum price of:	1	LS		\$ 927,670.76	\$ 930,000.00
18	Contractor shall be responsible for PLC modifications as well as integration into existing SCADA by KDC. OCWD will contact KDC to provide a quote to be included as an Exhibit in the Contract Documents, for the lump sum price of:	1	LS		\$ 182,241.20	\$ 182,300.00
19	Furnish and install instrumentation and ancillary work complete in place, for the lump sum price of:	1	LS		\$ 52,772.92	\$ 52,800.00
20	Perform startup and testing, prepare operation and maintenance manuals and prepare record drawings for the lump sum price of:	1	LS		\$ 82,715.97	\$ 82,700.00
21	Sheeting, shoring, and bracing for the lump sum price of:	1	LS		\$ 10,105.84	\$ 10,000.00
22	Provide Builder's All Risk Insurance pursuant to Public Contract Code Section 7105, for the lump sum price of:	1	LS		\$ 10,000.00	\$ 10,000.00
23	Additional work items as directed by the Engineer* as defined in the Contract Documents	1	LS	\$ 300,000.00	\$ 300,000.00	\$ 300,000.00
24		1	LS		\$ -	
25		1	LS		\$ -	
26		1	LS		\$ -	
27		1	LS		\$ -	
28		1	LS		\$ -	
29		1	LS		\$ -	
30		1	LS		\$ -	
31		1	LS		\$ -	
32		1	LS		\$ -	
33		1	LS		\$ -	
34		1	LS		\$ -	
Total					\$ 4,665,177.08	\$ 4,667,450.00

		\$	
ELEC MOVE IN	\$	55,000.00	
Temp Fence	\$	3,500.00	
temp Fac.			
Toilet	\$	5,000.00	
Insurance			
Mob	\$	10,000.00	
Permits	\$	5,000.00	
Wash Out	\$	2,500.00	
Swpp	\$	10,000.00	
Bond	\$	45,000.00	
PM	\$	20,000.00	
Scheduler	\$	40,000.00	
Total	\$	196,000.00	
15%	\$	29,400.00	
Grand Total	\$	225,400.00	

Eng Est.

5% Max	\$	-
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Item:
Furnish and install repairs to existing 12" HDPE floating electrical conduit (south) and construct 9-foot extensions on 12-inch HDPE floating e

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	104	104	\$159.51	\$16,589.04
LABORER	4	104	416	\$85.61	\$35,613.76
		104	0		\$0.00
Total	5	Total	520	Labor Total	\$52,202.80

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Barge	1	104	104	\$75.00	\$7,800.00
Tool Truck	1	104	104	\$45.00	\$4,680.00
Total	2	Total	208	Equipment Total	\$12,480.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
	0	8	0	\$ 25.00	\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental \$64,682.80

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
misc	\$3,100.00	1.00	\$ 3,100.00
HDPE	\$5,015.00	1.00	\$ 5,015.00
Total			\$ 8,115.00
Tax 8.75%			\$ 710.06

Material Total \$8,825.06

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
HDPE Iron	\$5,000.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total \$5,000.00

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$78,507.86	\$78,507.86	13

Item:
Furnish and install power cable restraint system within existing electrical vault, remove existing vault precast concrete top section a

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	40	40	\$159.51	\$6,380.40
LABORER	3	40	120	\$85.61	\$10,273.20
		40	0		\$0.00
Total	4	Total	160	Labor Total	\$16,653.60

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
EXCAVATOR	1	16	16	\$125.00	\$2,000.00
Tool Truck	1	40	40	\$45.00	\$1,800.00
Total	2	Total	56	Equipment Total	\$3,800.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$20,453.60**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Vault Lid	\$10,685.00	1.00	\$ 10,685.00
Restraint System	\$2,500.00	1.00	\$ 2,500.00
Total			\$ 13,185.00
Tax 8.75%			\$ 1,153.69

Material Total **\$14,338.69**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Electrical	\$38,000.00		\$0.00		\$0.00
Crane	\$3,850.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$41,850.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$76,642.29	\$76,642.29	5

Item:
Remove and dispose deteriorated 12-inch pipe floats and wire cable tethers, for the price per each of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	40	40	\$159.51	\$6,380.40
LABORER	2	40	80	\$85.61	\$6,848.80
		40	0		\$0.00
Total	3	Total	120	Labor Total	\$13,229.20

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Barge	1	40	40	\$75.00	\$3,000.00
Tool Truck	1	40	40	\$45.00	\$1,800.00
Total	2	Total	80	Equipment Total	\$4,800.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$18,029.20**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$80.00	0.00	\$ -
	\$0.00	0.00	\$ -
Total			\$ -
Tax 8.75%			\$ -

Material Total **\$0.00**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Dump Fee	\$1,500.00		\$0.00		\$0.00
Dumpster	\$5,200.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$6,700.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		76	
\$0.00	\$0.00	\$0.00	\$0.00	\$24,729.20	\$325.38	5

Item:
Furnish and install 12-inch pipe floats and chain tethers at 20-foot spacing, complete in place, for the price per each of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	120	120	\$159.51	\$19,141.20
LABORER	4	120	480	\$85.61	\$41,092.80
		120	0		\$0.00
Total	5	Total	600	Labor Total	\$60,234.00

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Barge	1	120	120	\$75.00	\$9,000.00
Tool Truck	1	120	120	\$45.00	\$5,400.00
Total	2	Total	240	Equipment Total	\$14,400.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental \$74,634.00

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Misc/Buoys	\$4,500.00	1.00	\$ 4,500.00
SS Chains/Shackles	\$75,000.00	1.00	\$ 75,000.00
Pipe Floats	\$72,000.00	1.00	\$ 72,000.00
Total			\$ 151,500.00
Tax 8.75%			\$ 13,256.25

Material Total \$164,756.25

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total \$0.00

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		90	
\$0.00	\$0.00	\$0.00	\$0.00	\$239,390.25	\$2,659.89	15

Item:
Remove and relocate existing 12-inch pipe floats and chain tethers (2025 installed) at 20-feet spacing, complete in place, for

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	112	112	\$159.51	\$17,865.12
LABORER	4	112	448	\$85.61	\$38,353.28
		112	0		\$0.00
Total	5	Total	560	Labor Total	\$56,218.40

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Barge	1	112	112	\$75.00	\$8,400.00
Tool Truck	1	112	112	\$45.00	\$5,040.00
Total	2	Total	224	Equipment Total	\$13,440.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$69,658.40**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$100.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
Misc/N.B.	\$4,800.00	1.00	\$ 4,800.00
		Total	\$ 4,800.00
		Tax 8.75%	\$ 420.00

Material Total **\$5,220.00**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$0.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		50	
\$0.00	\$0.00	\$0.00	\$0.00	\$74,878.40	\$1,497.57	14

Item:
Remove and replace existing deadman cable restraints, complete in place, for the lump sum price of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	32	32	\$159.51	\$5,104.32
LABORER	4	32	128	\$85.61	\$10,958.08
		32	0		\$0.00
Total	5	Total	160	Labor Total	\$16,062.40

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
BACKHOE	1	32	32	\$75.00	\$2,400.00
Tool Truck	1	32	32	\$45.00	\$1,440.00
Total	2	Total	64	Equipment Total	\$3,840.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental \$19,902.40

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
Dead Man Anchor System	\$7,150.00	1.00	\$ 7,150.00
			\$ 7,150.00
	Tax 8.75%		\$ 625.63

Material Total \$7,775.63

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total \$0.00

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$27,678.03	\$27,678.03	4

Item:
Remove and dispose five (5) existing pump motor power conductor cables and Construct eight (8) pump motor power cond

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	240	240	\$159.51	\$38,282.40
LABORER	3	240	720	\$85.61	\$61,639.20
		240	0		\$0.00
Total	4	Total	960	Labor Total	\$99,921.60

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
SKIF	1	240	240	\$250.00	\$60,000.00
Tool Truck	1	240	240	\$45.00	\$10,800.00
Total	2	Total	480	Equipment Total	\$70,800.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$170,721.60**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
Misc	\$4,400.00	1.00	\$ 4,400.00
		Total	\$ 4,400.00
		Tax 8.75%	\$ 385.00

Material Total **\$4,785.00**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Electrical	\$1,095,000.00		\$0.00		\$0.00
PM	\$15,000.00		\$0.00		\$0.00
Crane	\$40,000.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$1,150,000.00**

Crew/Equip. M/	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$1,325,506.60	\$1,325,506.60	30

Item:
Remove and replace three (3) pump dock transformer power conductor cables, complete in place, for the lump sum price of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	32	32	\$159.51	\$5,104.32
LABORER	1	32	32	\$85.61	\$2,739.52
		32	0		\$0.00
Total	2	Total	64	Labor Total	\$7,843.84

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Skif	1	32	32	\$250.00	\$8,000.00
Tool Truck	1	32	32	\$45.00	\$1,440.00
Total	2	Total	64	Equipment Total	\$9,440.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$17,283.84**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
Misc	\$3,850.00	1.00	\$ 3,850.00
		Total	\$ 3,850.00
		Tax 8.75%	\$ 336.88

Material Total **\$4,186.88**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Electrical	\$87,419.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$87,419.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$108,889.72	\$108,889.72	4

Item:

Furnish and install pump station discharge bypass piping, ball valve, trenching, bedding, backfill and access road pavement restoration

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	96	96	\$159.51	\$15,312.96
OPERATOR	1	96	96	\$112.33	\$10,783.68
LABORER	3	96	288	\$85.61	\$24,655.68
		96	0		\$0.00
Total	5	Total	480	Labor Total	\$50,752.32

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
EXCAVATOR	1	80	80	\$125.00	\$10,000.00
BACKHOE	1	96	96	\$75.00	\$7,200.00
WATER TRUCK	1	40	40	\$50.00	\$2,000.00
DUMP TRUCK	1	96	96	\$75.00	\$7,200.00
Tool Truck	1	96	96	\$45.00	\$4,320.00
Total	5	Total	408	Equipment Total	\$30,720.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental \$81,472.32

Material	Cost	Qty	Total
Sand SE 30	\$35.00	50.00	\$ 1,750.00
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$225.00	10.00	\$ 2,250.00
Temp	\$100.00	0.00	\$ -
Ball Valve/Air Vac/Appurt	\$249,000.00	1.00	\$ 249,000.00
Steel Piping	\$90,000.00	1.00	\$ 90,000.00
Total			\$ 343,000.00
Tax 8.75%			\$ 30,012.50

Material Total \$373,012.50

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Testing	\$5,000.00	WELDER	\$10,000.00		\$0.00
Paving	\$26,500.00		\$0.00		\$0.00
Painting	\$14,000.00		\$0.00		\$0.00
Shoring	\$5,000.00		\$0.00		\$0.00
Fuel	\$5,000.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total \$65,500.00

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$519,984.82	\$519,984.82	12

Item:
Construct connection to 36-inch discharge pipeline, complete in place, for the lump sum price of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	24	24	\$159.51	\$3,828.24
LABORER	3	24	72	\$85.61	\$6,163.92
		24	0		\$0.00
Total	4	Total	96	Labor Total	\$9,992.16

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
EXCAVATOR	1	24	24	\$125.00	\$3,000.00
Tool Truck	1	24	24	\$45.00	\$1,080.00
Total	2	Total	48	Equipment Total	\$4,080.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$14,072.16**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
FLG/Bolts	\$3,350.00	1.00	\$ 3,350.00
Mortar/Misc.	\$2,500.00	1.00	\$ 2,500.00
FLG Outlet	\$4,500.00	1.00	\$ 4,500.00
Total			\$ 10,350.00
Tax 8.75%			\$ 905.63

Material Total **\$11,255.63**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
WELDER	\$3,900.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$3,900.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$29,227.79	\$29,227.79	3

Item:
Construct connection to 30-inch discharge pipeline, complete in place, for the lump sum price of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	24	24	\$159.51	\$3,828.24
LABORER	3	24	72	\$85.61	\$6,163.92
		24	0		\$0.00
Total	4	Total	96	Labor Total	\$9,992.16

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
EXCAVATOR	1	24	24	\$125.00	\$3,000.00
Tool Truck	1	24	24	\$45.00	\$1,080.00
Total	2	Total	48	Equipment Total	\$4,080.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$14,072.16**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Slip FLG/Bolts	\$2,500.00	1.00	\$ 2,500.00
Morter/Misc	\$2,000.00	1.00	\$ 2,000.00
FLG Outlet	\$3,850.00	1.00	\$ 3,850.00
Total			\$ 8,350.00
Tax 8.75%			\$ 730.63

Material Total **\$9,080.63**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
WELDER	\$3,500.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$3,500.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$26,652.79	\$26,652.79	3

Item:

Furnish and install electric actuator on existing 36-inch butterfly valve, complete in place, and repaint existing valve and piping w

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	16	16	\$159.51	\$2,552.16
LABORER	2	16	32	\$85.61	\$2,739.52
		16	0		\$0.00
Total	3	Total	48	Labor Total	\$5,291.68

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Tool Truck	2	16	32	\$45.00	\$1,440.00
Total	2	Total	32	Equipment Total	\$1,440.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$6,731.68**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$100.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
	\$0.00	0.00	\$ -
Total			\$ -
Tax 8.75%			\$ -

Material Total **\$0.00**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Install Elec, Actuator	\$59,500.00		\$0.00		\$0.00
Painting	\$3,700.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$63,200.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$69,931.68	\$69,931.68	2

Item:
Furnish and install steel pipe modifications, valves, pressure transmitters, limit switches, gauges, instrumentation, dive inspect

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	32	32	\$159.51	\$5,104.32
LABORER	3	32	96	\$85.61	\$8,218.56
		32	0		\$0.00
Total	4	Total	128	Labor Total	\$13,322.88

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Tool Truck	1	32	32	\$45.00	\$1,440.00
Total	1	Total	32	Equipment Total	\$1,440.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$14,762.88**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Misc	\$1,000.00	1.00	\$ 1,000.00
FLG/Appurt	\$5,000.00	1.00	\$ 5,000.00
Total			\$ 6,000.00
Tax 8.75%			\$ 525.00

Material Total **\$6,525.00**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Divers	\$20,000.00		\$0.00		\$0.00
Electrical	\$18,500.00		\$0.00		\$0.00
Painting	\$5,000.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$43,500.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$64,787.88	\$64,787.88	4

Item:
Construct bypass piping enclosure, complete in place, for the lump sum price of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	40	40	\$159.51	\$6,380.40
LABORER	3	40	120	\$85.61	\$10,273.20
		40	0		\$0.00
Form Setter/Mason	2	40	80	\$82.26	\$6,580.80
Total	6	Total	240	Labor Total	\$23,234.40

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
BACKHOE	1	40	40	\$75.00	\$3,000.00
Tool Truck	1	40	40	\$55.00	\$2,200.00
Total	2	Total	80	Equipment Total	\$5,200.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$28,434.40**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$225.00	20.00	\$ 4,500.00
Forms/Appuirt	\$1,500.00	1.00	\$ 1,500.00
Base	\$40.00	10.00	\$ 400.00
Steel Enclosure	\$113,879.00	1.00	\$ 113,879.00
Total			\$ 120,279.00
Tax 8.75%			\$ 10,524.41

Material Total **\$130,803.41**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Rebar	\$4,300.00		\$0.00		\$0.00
Painting	\$15,000.00		\$0.00		\$0.00
Seismic/Calc's	\$10,000.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$29,300.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$188,537.81	\$188,537.81	5

Item:
Abandon existing 36-inch submerged pump station discharge pipeline and construct air vent assembly, complete in place, for th

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	24	24	\$159.51	\$3,828.24
LABORER	3	24	72	\$85.61	\$6,163.92
		24	0		\$0.00
Total	4	Total	96	Labor Total	\$9,992.16

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
EXCAVATOR	1	8	8	\$125.00	\$1,000.00
BACKHOE	1	8	8	\$75.00	\$600.00
Tool Truck	1	24	24	\$45.00	\$1,080.00
Total	3	Total	40	Equipment Total	\$2,680.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$12,672.16**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Mortor/Brick	\$750.00	1.00	\$ 750.00
Temp	\$100.00	0.00	\$ -
Air Vent/SS	\$3,500.00	1.00	\$ 3,500.00
CMLC	\$1,500.00	1.00	\$ 1,500.00
Total			\$ 5,750.00
Tax 8.75%			\$ 503.13

Material Total **\$6,253.13**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$0.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$18,925.29	\$18,925.29	3

Item:
Furnish and install electrical equipment and facilities at the existing electrical building, complete in place, for the lump sum price

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	160	160	\$159.51	\$25,521.60
LABORER	1	160	160	\$85.61	\$13,697.60
		80	0		\$0.00
Total	2	Total	320	Labor Total	\$39,219.20

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
BACKHOE/Petty Bone	1	80	80	\$75.00	\$6,000.00
Tool Truck	1	80	80	\$45.00	\$3,600.00
Total	2	Total	160	Equipment Total	\$9,600.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$48,819.20**

Material	Cost	Qty	Total
Sand SE 30	\$35.00	25.00	\$ 875.00
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
	\$0.00	0.00	\$ -
Total			\$ 875.00
Tax 8.75%			\$ 76.56

Material Total **\$951.56**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Electrical	\$865,400.00		\$0.00		\$0.00
Painting	\$12,500.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$877,900.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$927,670.76	\$927,670.76	10

Item:
Contractor shall be responsible for PLC modifications as well as integration into existing SCADA by KDC. OCWD will contact KDC

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	120	120	\$159.51	\$19,141.20
		120	0		\$0.00
Total	1	Total	120	Labor Total	\$19,141.20

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Tool Truck	1	120	120	\$45.00	\$5,400.00
Total	1	Total	120	Equipment Total	\$5,400.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$24,541.20**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
	\$0.00	0.00	\$ -
Total			\$ -
Tax 8.75%			\$ -

Material Total **\$0.00**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
PLC/SCADA	\$150,000.00		\$0.00		\$0.00
Coordinate/SCADA	\$7,700.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$157,700.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$182,241.20	\$182,241.20	15

Item:
Furnish and install instrumentation and ancillary work complete in place, for the lump sum price of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	32	32	\$159.51	\$5,104.32
LABORER	2	32	64	\$85.61	\$5,479.04
		32	0		\$0.00
Total	3	Total	96	Labor Total	\$10,583.36

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
BACKHOE	1	32	32	\$75.00	\$2,400.00
Tool Truck	1	32	32	\$45.00	\$1,440.00
Total	2	Total	64	Equipment Total	\$3,840.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$14,423.36**

Material	Cost	Qty	Total
Sand SE 30	\$35.00	25.00	\$ 875.00
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
	\$0.00	0.00	\$ -
Total			\$ 875.00
Tax 8.75%			\$ 76.56

Material Total **\$951.56**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Electrical	\$37,398.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$37,398.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$52,772.92	\$52,772.92	4

Item:

Perform startup and testing, prepare operation and maintenance manuals and prepare record drawings for the lump sum price c

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	56	56	\$159.51	\$8,932.56
LABORER	1	56	56	\$85.61	\$4,794.16
		56	0		\$0.00
Total	2	Total	112	Labor Total	\$13,726.72

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
Tool Truck	1	56	56	\$45.00	\$2,520.00
Total	1	Total	56	Equipment Total	\$2,520.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0		\$ -
		8	0		\$ -
Total	0	Total	0	Rental Equipment Total	\$ -

Total Crew/Equip/ Rental **\$16,246.72**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
Binders	\$300.00	1.00	\$ 300.00
Total			\$ 300.00
Tax 8.75%			\$ 26.25

Material Total **\$326.25**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Electrical	\$41,143.00		\$0.00		\$0.00
PM/ O&M's/Record Drawings	\$25,000.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$66,143.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$82,715.97	\$82,715.97	7

Item:

Sheeting, shoring, and bracing for the lump sum price of:

Crew	Qty	Hours	Total Hours	Wage Rate	Total
FORMEN w/ Truck	1	8	8	\$159.51	\$1,276.08
LABORER	2	8	16	\$85.61	\$1,369.76
		8	0		\$0.00
Total	3	Total	24	Labor Total	\$2,645.84

Equipment	Qty	Hours	Total Hours	Equipment Rate	Total
BACKHOE	1	8	8	\$75.00	\$600.00
Tool Truck	1	8	8	\$45.00	\$360.00
Total	2	Total	16	Equipment Total	\$960.00

Rental Equipment	QTY	Hours	Total Hours	Equipment Rate	Total
		8	0	\$	-
		8	0	\$	-
Total	0	Total	0	Rental Equipment Total	\$

Total Crew/Equip/ Rental **\$3,605.84**

Material	Cost	Qty	Total
Sand SE 30	\$15.00	0.00	\$ -
3/4" Rock	\$20.00	0.00	\$ -
Concrete	\$185.00	0.00	\$ -
Temp	\$100.00	0.00	\$ -
Base	\$30.00	0.00	\$ -
	\$0.00	0.00	\$ -
Total			\$ -
Tax 8.75%			\$ -

Material Total **\$0.00**

Subcontractor	Cost	Subcontractor	Cost	Subcontractor	Cost
Shoring	\$6,500.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00
	\$0.00		\$0.00		\$0.00

Subcontractor Total **\$6,500.00**

Crew/Equip. M/U	Mat. M/U	Sub. M/U	Bond	Total	Quantity / Unit Price	Production /Days
0%	0%	0%	0%		1	
\$0.00	\$0.00	\$0.00	\$0.00	\$10,105.84	\$10,105.84	1