



ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA
TRABUCO CANYON WATER DISTRICT
ADMINISTRATION FACILITY
32003 DOVE CANYON DRIVE, TRABUCO CANYON, CA
MAY 1, 2024 AT 7:00 AM

COMMITTEE MEMBERS

Michael Safranski, Committee Chair
Stephen Dopudja, Committee Member
Don Chadd, Committee Member Alternate

DISTRICT STAFF

Fernando Paludi, General Manager
Michael Perea, District Secretary
Lorrie Lausten, District Engineer
Gary Kessler, Water System Superintendent
Oscar Ulloa, Wastewater Superintendent
Jason Stroud, Maintenance Superintendent

AGENDA NOTE:

Trabuco Canyon Water District (District) will make this Engineering/Operational Committee Meeting available by telephone audio as follows:

Telephone Audio: 1 (669) 900-6833

Access Code: 973-7562-7682

Persons desiring to monitor the Committee meeting agenda items may download the agenda and documents on the internet at www.tcwd.ca.gov. You may submit public comments by email to the Committee at mperea@tcwd.ca.gov. In order to be part of the record, emailed comments on meeting agenda items must be received by the District at the referenced e-mail address not later than 7:00 a.m. (PDT) on the day of the meeting.

CALL MEETING TO ORDER

VISITOR PARTICIPATION

Members of the public wishing to address the Committee regarding a particular item on the agenda are requested to submit public comments by email to the Committee at mperea@tcwd.ca.gov. The Committee Chair will call on the visitor following the Committee's discussion about the matter. Committees do not constitute a quorum of the Board of Directors and Committee Members cannot make decisions on matters. The Committee makes recommendations only to the Board of Directors. Members of the public will be given the opportunity to speak to the Committee prior to making a recommendation on the matter. For persons desiring to make verbal comments and utilizing a translator to present their comments into English reasonable time accommodations, consistent with State law, shall be provided. Please limit comments to three minutes.

ORAL COMMUNICATION

Members of the public who wish to make comment on matters not appearing on the agenda are requested to submit oral communication by email to the Committee at mperea@tcwd.ca.gov. Under the requirements of State Law, Directors cannot take action on items not identified on the agenda and will not make decisions on such matters. The Board President may direct District Staff to follow up on issues as may be deemed appropriate. For persons desiring to make verbal comments and utilizing a translator to present their comments into English reasonable time accommodations, consistent with State law, shall be provided. Please limit comments to three minutes.

COMMITTEE MEMBER COMMENTS

REPORT FROM THE GENERAL MANAGER

TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | MAY 1, 2024

ENGINEERING MATTERS

PRESENTER(S): FERNANDO PALUDI, GENERAL MANAGER
MICHAEL PEREA, ASSISTANT GENERAL MANAGER
LORRIE LAUSTEN, DISTRICT ENGINEER

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

RECOMMENDED ACTION:

Approve the following Engineering/Operational Committee Meeting Recap(s) and recommend that the Board receive and file same (Consent Calendar).

1. April 3, 2024 Committee Meeting

ITEM 2: ROBINSON RANCH WASTEWATER TREATMENT PLANT BLOWER MODIFICATION PROJECT

RECOMMENDED ACTION:

Committee to receive project status updates at the time of the Committee Meeting.

ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Golf Club Sewer Lift Station Construction Update
2. DWTP Vault Lid Improvements
3. SCADA Project Update
4. LCRR Update
5. Oaks at Trabuco Development
6. Other projects

RECOMMENDED ACTION:

Committee to receive project status updates at the time of the Committee Meeting.

OPERATIONAL MATTERS

PRESENTER(S): GARY KESSLER, WATER SYSTEM SUPERINTENDENT
OSCAR ULLOA, WASTEWATER OPERATIONS SUPERINTENDENT
JASON STROUD, MAINTENANCE DEPARTMENT SUPERINTENDENT

ITEM 4: WATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 5: WASTEWATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 6: MAINTENANCE DEPARTMENT UPDATES



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | MAY 1, 2024**

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

REGULATORY AND OTHER MATTERS

ITEM 7: OTHER MATTERS/REPORTS

RECOMMENDED ACTION:

Hear Other Matters/Reports that may have arisen after the posting of the agenda.

ADJOURNMENT

AVAILABILITY OF AGENDA MATERIALS

Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Trabuco Canyon Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection at the Trabuco Canyon Water District Administrative Facility, 32003 Dove Canyon Drive, Trabuco Canyon, California (District Administrative Facility) or will be posted online on the District's website located at www.tcwd.ca.gov. If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available online at www.tcwd.ca.gov at the same time as they are distributed to the Board Members, except that, if such writings are distributed immediately prior to or during the meeting, they will be posted online on the District's website located at www.tcwd.ca.gov.

COMPLIANCE WITH THE REQUIREMENTS OF CALIFORNIA GOVERNMENT CODE SECTION 54954.2

In compliance with California law and the Americans with Disabilities Act, if you need special disability-related modifications or accommodations, including auxiliary aids or services in order to participate in the meeting, or if you need the agenda provided in an alternative format, please contact the District Secretary at (949) 858-0277, at least 48 hours in advance of the scheduled Board meeting. Notification at least 48 hours prior to the meeting will assist the District in making reasonable arrangements to accommodate your request. The Board Meeting Room is wheelchair accessible.



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING MAY 1, 2024**

ADMINISTRATIVE MATTERS

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

RECOMMENDED ACTION:

Approve the following Engineering/Operational Committee Meeting Recap(s) and recommend that the Board receive and file same (Consent Calendar):

1. *April 3, 2024 Committee Meeting*

CONTACTS (staff responsible): PALUDI/PEREA



TRABUCO CANYON WATER DISTRICT ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | APRIL 3, 2024

DIRECTORS PRESENT

Mike Safranski, Committee Chair
Stephen Dopudja, Committee Member

STAFF PRESENT

Fernando Paludi, General Manager
Michael Perea, District Secretary
Lorrie Lausten, District Engineer
Gary Kessler, Water Superintendent
Blake Smith, Wastewater Chief Plant Operator
Phil Serpas, CMMS/SCADA Administrator
Roseann Lejsek, Administrative Assistant

STAFF ABSENT

Oscar Ulloa, Wastewater Superintendent
Jason Stroud, Maintenance Superintendent

PUBLIC PRESENT

None

CALL MEETING TO ORDER

Director Safranski called the April 3, 2024 Engineering/Operational Committee Meeting to order at 7:00 a.m.

VISITOR PARTICIPATION

No comments were received.

ORAL COMMUNICATION

No comments were received.

COMMITTEE MEMBER COMMENTS

None

REPORT FROM THE GENERAL MANAGER

None

ITEM 1: LIVE OAK PIPELINE REPLACEMENT ENGINEERING DESIGN

Mr. Paludi presented this matter for discussion and review. Ms. Lausten provided an overview of the project, and she reported that the District has received three proposals, and she presented a proposal evaluation which compared the costs of each proposer. Ms. Lausten recommended awarding the project to DRP Engineering, Inc.

MOTION: Approve and recommend the Board of Directors authorize the General Manager to execute a contract for Engineering Design Services for the Live Oak Pipeline Replacement to DRP Engineering, Inc. for a total of \$375,947 (Action Calendar) – Director Dopudja

SECOND: Director Safranski

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | APRIL 3, 2024**

AYES: Directors Dopudja & Safranski

NOES: None

ABSTAIN: None

MOTION PASSED/FAILED: Passed 2 – 0

ITEM 2: QUARTERLY CAPITAL IMPROVEMENT PROGRAM (CIP) UPDATE

Ms. Lausten presented this matter for Committee consideration and review, and she provided an overview and status update of the FY 2023-24 CIP projects. Ms. Lausten reported the Dimension Water Treatment Plant office replacement project has not been canceled but has been modified to rehab the existing office, and that the total budget amount has remained unchanged. Discussion occurred concerning revising the CIP budget sheet to include a third column showing the total cost for each project.

MOTION: None – Informational item only.

ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Golf Club Sewer Lift Station Construction

Ms. Lausten delivered a PowerPoint presentation to the Committee concerning the Golf Club Sewer Lift Station improvements. Ms. Lausten highlighted the completed surge tank and improvements as well as the construction of the new wet well. Ms. Lausten reported that this portion of the project is expected to be completed at the end of the week and she provided information on the next phases of the project.

2. The Oaks at Trabuco Development Update

Mr. Paludi provided a brief history of the District's past agreement for the sewage collection system in the Oaks at Trabuco development. Discussion occurred concerning the District's potential future responsibilities and the operational challenges at the site.

3. SCADA Upgrade Project Update

Mr. Paludi provided an update on this matter, and he reported that the District has sent a termination letter to Tesco Controls Inc., immediately ending our contract due to their ongoing challenges in completing the project. Mr. Paludi also reported that the District is coordinating with a new contractor, to finish the project within the original budget.

ITEM 4: WATER SYSTEM UPDATES

Mr. Kessler reviewed the projects and repairs for the prior month, and he reported that Water Operations staff had completed the following tasks:

1. Repaired a leaking potable service on Morningside Drive in the Trabuco Highlands community.
2. Repaired a leaking PRV on North Lane in the Trabuco Oaks community.
3. Worked with Maintenance Department staff to replace the mechanic seal on the 3 CFS pump at Robinson Ranch Booster Pump Station.
4. Worked with Maintenance Department staff to replace the backup generator automatic transfer switch at Topanga Canyon Booster Pump Station.
5. Worked with Mr. Phil Serpas on resolving SCADA-related issues at the Trabuco Canyon Groundwater Treatment Facility (Wells). The wells are started on March 20th.

Mr. Kessler presented the Water System Summary for Committee review, and he reported that the District's Electronic Annual Report (eAR) has been submitted to the California State Water Resources Control Board.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | APRIL 3, 2024**

MOTION: None – Informational item only.

ITEM 5: WASTEWATER SYSTEM UPDATES

In Mr. Ulloa's absence, Mr. Smith reviewed the projects and repairs for the prior month, and he reported that Wastewater Operations staff had completed the following tasks:

1. Worked with TESCO Controls and Hydrotech Electric to complete PLC upgrades and testing at Via Allegre Sewer Lift Station (SLS), and installation of OIT screen at O'Neill SLS.
2. Worked with Pacific Hydrotech to complete the installation/startup of the new surge tank at Golf Club SLS.
3. Completed weed abatement at Dove Lake and the Robinson Ranch Wastewater Treatment Plant (WWTP)
4. Met with State Department of Dam Safety to complete the annual inspection of WWTP Dam and Dove Dam.
5. Worked with Water Operations Department to repair a potable water line break in the Dove Canyon community.
6. Repaired damaged electrical conduit at Dove Lake in the Dove Canyon community.

Mr. Smith presented the Recycled Water System Summary for Committee review. Mr. Paludi reported that the District is looking at possible grant opportunities for the necessary repairs at Dove Dam.

MOTION: None – Informational item only.

ITEM 6: MAINTENANCE DEPARTMENT UPDATES

In Mr. Stroud's absence, Mr. Perea reviewed the projects and repairs for the prior month, and he reported that Maintenance staff completed the following tasks:

Projects and Repairs

Maintenance staff performed and/or completed the following tasks and projects:

Water Operations

1. Assisted Water Operations staff with potable service line repair on Morningside Drive in the Trabuco Highlands community.
2. Worked with Duthie Electric and Water Operations to install a new automatic transfer switch at Topanga Canyon BPS.
3. Worked with Evans Hydro to install a new mechanical seal at Robinson Ranch BPS.

Wastewater Operations

1. Assisted Wastewater Operations staff to bypass Via Allegre SLS during PLC upgrade with TESCO Controls.
2. Witnessed installation of new surge tank at Golf Club SLS.
3. Participated in job walk for electrical trunk line at WWTP.
4. Participated in condition assessment at Crystal Canyon WWTP (The Oaks at Trabuco community).
5. Worked with Hydrotech Electric on upgrades/repairs at O'Neill SLS, Golf Club SLS, Heritage SLS, and WWTP.

District Fleet Upgrades & Other Projects

1. Repurposed Unit No. 8 for emergency mobile pump service truck.
2. Completed BIT inspection on heavy duty fleet vehicles.
3. Completed CARB Zero Emission Vehicles (ZEV) reporting prior to April 1 deadline.

MOTION: None – Informational item only.

**TRABUCO CANYON WATER DISTRICT
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ITEM 7: OTHER MATTERS/REPORTS

There were no other matters reported.

MOTION: None

ADJOURNMENT

Director Safranski adjourned the April 3, 2024 Engineering/Operational Committee Meeting at 8:08 a.m.

DRAFT

TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING MAY 1, 2024

ENGINEERING MATTERS

ITEM 2: ROBINSON RANCH WASTEWATER TREATMENT PLANT BLOWER MODIFICATION PROJECT

The District’s Robinson Ranch Wastewater Treatment Plant operates a blower-aeration system consisting of four (4) blower-motor configurations. The existing Sutorbilt positive displacement blowers lack the needed capacity to effectively overcome pressure changes as a result of varying elevation within the sequencing batch reactors (SBR). The replacement of the two positive displacement blowers is budgeted for this fiscal year. Staff will be transitioning to multistage centrifugal air blowers, matching the existing Hoffman configuration, which will provide increased efficiency and redundancy.

In March 2024, staff solicited bids from six (6) contractors and received the following bids:

WWTP Blower Bids	
Pacific Hydrotech	\$874,400
Ferreira Construction	\$880,000

JIG Consultants prepared plans and specifications for the project and their Engineers Estimate was \$547,000 (Exhibit 1). In tracking equipment price increases, staff received quotes for the two blowers prior to developing the FY23-24 budget, prior to bidding project (October 2023), and after bids were received (April 2024). The cost for the two skid mounted blowers has increased 50% since originally budgeted.

The majority of the bid cost above the engineer’s estimate is related to installation of the blower assemblies, including that the existing trolley system is inefficient and does not allow removal and installation of the new equipment and the District’s requirement of maintaining one blower in service at all times during construction.

Future Blower Room Motor Control Center (MCC) Replacement (repeated from March 2024 staff report)

During the design of the blower replacement project, the Electrical Engineer communicated that the current Motor Control Center (MCC) inside the blower room is undersized for the existing equipment. The MCC is fed from the Main Service Board with a 500-amp circuit breaker and feeder. The calculated load of existing equipment is 662 amps. At any given time, the 500-amp circuit breaker can trip, depending on which equipment is operating. With the addition of the two 60-hp blowers, the updated load would be 736 amps. The replacement of the MCC is a separate project recommended by Hazen during the District’s Condition Assessment and is currently scheduled for FY25-26 in the CIP. Due to blower room equipment’s critical role to efficient wastewater plant operation, and the risk posed to the equipment by the existing MCC, Staff has begun planning for the MCC replacement. Due to persistent post-pandemic supply chain challenges, current procurement time for an MCC is approximately 18 months; therefore, the earliest this equipment can be placed into service is December 2025 which is consistent with the timing of that project in the CIP.

In support of the MCC upgrade in FY25-26, Staff solicited proposals from several surveying/mapping firms to provide a utility investigation relative to preparation of a base map for the design of a new electrical duct bank. Staff received two proposals for this work, and the recommendation for the contract, within the General Manager’s signing authority, was to DMc Engineering, in the amount of \$43,400. The MCC Replacement project budget in the CIP is \$871,000.

FUNDING SOURCE:

Capital Improvement Program

**TRABUCO CANYON WATER DISTRICT
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FISCAL IMPACT (PROJECT BUDGET):

\$400,000 for Blower Replacements – FY 2023-24 CIP Budget

ENVIRONMENTAL COMPLIANCE:

Notice of Exemption

RECOMMENDED ACTION:

Committee to receive project status updates at the time of the Committee Meeting

EXHIBIT(S):

1. Bid Comparison

CONTACTS (staff responsible): PALUDI/LAUSTEN

BID COMPARISON

Robinson Ranch Wastewater Treatment Plant Blower Modifications PROJECT (Project # 2223-105)
Bid Opening Date: April 1, 2024

						#1		#2	
						Pacific Hydrotech Corp.		Ferreira Construction	
						Joselito Guinto		Brandon Pensick	
						erivero@pachydro.com			
						314 E 3rd Street		10370 Commerce Center Drive Suite B200	
						Perris, CA 92570		Rancho Cucamonga CA 91730	
						(951)-943-8803		(909)-606-5900	
						License #	518355	License #	985180
Item	Description	Quantity	Unit	Engineer's Unit Price	Engineer's Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1	Mobilization / Demobilization	1	LS	\$53,700.00	\$53,700.00	\$102,400.00	\$102,400.00	\$20,000.00	\$20,000.00
2	Field Assessment and Verification of Utility Locations, Dimensions, and Existing Electrical Work	1	LS	\$4,900.00	\$4,900.00	\$10,200.00	\$10,200.00	\$5,000.00	\$5,000.00
3	Miscellaneous Structural, Electrical, and Mechanical Demolition	1	LS	\$50,000.00	\$50,000.00	\$54,300.00	\$54,300.00	\$60,000.00	\$60,000.00
4	Construction of Blower Assemblies, Piping, and Concrete Slabs	1	LS	\$325,950.00	\$325,950.00	\$650,100.00	\$650,100.00	\$733,500.00	\$733,500.00
5	Miscellaneous Electrical Work	1	LS	\$40,000.00	\$40,000.00	\$23,400.00	\$23,400.00	\$30,000.00	\$30,000.00
6	Startup and Testing, Record Documents, O&M Manuel's and Warranty	1	LS	\$14,300.00	\$14,300.00	\$22,700.00	\$22,700.00	\$11,500.00	\$11,500.00
7	All Other Work	1	LS	\$48,880.00	\$48,880.00	\$1,300.00	\$1,300.00	\$10,000.00	\$10,000.00
8	Allowance for Field Orders	1	LS	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
TOTAL (1 THROUGH 8) :					\$547,730.00	\$874,400.00		\$880,000.00	

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING MAY 1, 2024**

ENGINEERING MATTERS

ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Golf Club Sewer Lift Station Construction Update
2. DWTP Vault Lid Improvements
3. SCADA Project Update
4. LCRR Update
5. Oaks at Trabuco Development
6. Other Projects

RECOMMENDED ACTION:

Committee to receive project status updates at the time of the Committee Meeting.

EXHIBIT(S):

1. Golf Club SLS Monthly Construction Report

CONTACTS (staff responsible): PALUDI/PEREA/LAUSTEN

Golf Club Sewer Lift Station Improvement Project TCWD Project No. 2122-010

Construction Report
February – March 2024



I. GENERAL PROJECT INFORMATION

Contract

Golf Club Sewer Lift Station Improvement
Project

Contractor

Pacific Hydrotech Corporation (PHC)

Contract Time

Original Calendar Days:	200 Calendar Days from Notice to Proceed
Notice to Proceed:	January 29, 2024
Original Contract Completion Date:	August 16, 2024
Allowed Calendar Days via Change Orders:	0 Days
Revised Completion Date via Change Orders:	August 16, 2024
Weather-Related Delay Days:	3 Days

Contract Price

Original Contract Amount:	\$1,889,300.00
Approved Change Order Amount:	\$0.00
Revised Contract Amount:	\$1,889,300.00

II. CONSTRUCTION MANAGER SUMMARY

This report provides a summary of activities for the months of February through March 2024 for the Golf Club Sewer Lift Station Project.

Before the end of 2023, Pacific Hydrotech Corporation (PHC), provided Submittals and Requests for Information (RFIs) to Trabuco Canyon Water District (TCWD) and the Design Engineer, JIG Consultants (JIG) for review and disposition. After the Pre-Construction Meeting, dated January 16, 2024, PHC filed a UtiliQuest request to field locate and mark existing underground utilities within the Golf Club Sewer Lift Station (the Project). PHC proceeded to pothole and verify existing underground utilities, particularly to start the new Surge Tank efforts. On January 29, 2024, PHC mobilized and secured the Project, and started the Surge Tank efforts.

The Surge Tank is a TCWD-furnished item, it was delivered to the Project, and PHC was prepared to set and install this item. The Surge Tank efforts consisted of excavating the new location which was east of and adjacent to the exterior of existing Lift Station. After excavation, removals, and establishing subgrade, PHC proceeded to form and pour the concrete pedestal of the Surge Tank. TCWD's geotechnical/materials consultant, GMU, observed the subgrade and obtained concrete samples to perform compressive testing. Results of the concrete compressive tests were distributed to the District Engineer and PHC.

The concrete pedestal for the Surge Tank continued to cure through the end of January 2024.

III. CONSTRUCTION ACTIVITIES FOR THIS REPORTING PERIOD

The following work activities were performed during this reporting period:

In February 2024:

- PHC continued to set and install the Surge Tank. Further, installation of the associated valves, instruments, and accessories.
- Mechanical piping to service the Surge Tank was furnished and installed. This required coring penetrations on the eastern, exterior wall of the existing Lift Station and inside the Dry Pit.
- The existing air compressor was protected-in-place and mechanical piping was furnished, extended, and installed within the Dry Pit of the existing Lift Station.
- The electrical subcontractor, Hydrotech Electric, installed new conduits and pulled wire between the Surge Tank and terminated into the existing electrical panel.
- PHC removed and demolished portions of the mechanical piping to allow for the new piping alignments.
- Hydrotech Electric continued completing the instrumentation of the Surge Tank, and this consisted of a new level controller, gauges, and grounding rod.

In March 2024:

- TCWD Operations requested that the existing Surge Tank be pulled out of service, and to transition to the use of the new Surge Tank.
- PHC proceeded to complete the installation of the Surge Tank by performing leak tests, along with Hydrotech Electric testing leads and contacts towards full commissioning.
- TCWD and PHC coordinated and scheduled a Start-Up and Commissioning with the Surge Tank manufacturer, Blacoh. Blacoh's Engineers were on the Project site to inspect and validate the installation of the Surge Tank and conducted a training session for TCWD Operations.
- The Surge Tank was considered operable by March 12, 2024.
- Conduct field survey for the layout of the Bypass Wet Well, Diversion Manhole, and Flowmeter Vault.
- PHC proceeded with removing asphalt pavement areas to accommodate the excavation of the Bypass Wet Well.
- A "Slide Rail Shoring" system provided by Trench Shoring was utilized to facilitate and accommodate an excavated depth to about 33 feet, and installation of the 8-foot diameter Bypass Wet Well.
- GMU continued to conduct periodic inspections and observations during the excavation and confirming bottom of excavation for the Bypass Wet Well.
- Upon GMU confirming the bottom of the excavation, PHC proceeded to place a 2-foot, thick of $\frac{3}{4}$ -inch rock base for stabilization.
- PHC delivered and installed the pre-cast base and shafts of the Bypass Wet Well.
- At the end of the month, PHC started to backfill and compact the first lift of the Bypass Wet Well. Compaction was achieved by a "jumping jack" compactor along the circumferential edge of the Bypass Wet Well, a remote controlled "walk-behind" compactor for larger areas within the excavation.

IV. ANTICIPATED CONSTRUCTION ACTIVITIES – NEXT REPORTING PERIOD

The work activities anticipated in the next reporting period:

- PHC to complete backfill and compaction of the Bypass Wet Well, while removing the "Slide Rail Shoring" system.
- Proceed to start excavation of the 12-inch PVC gravity sewer pipeline between the Bypass Wet Well and Diversion Manhole, along with shoring trench boxes.
- Proceed to start excavation and installation of the 5-foot, diameter Diversion Manhole, along with shoring trench boxes.
- PHC to pour and install the chamfer or fillet features at the bottom insides of the Bypass

Wet Well and Diversion Manhole.

- Backfill and compact the 12-inch PVC gravity sewer pipeline and Diversion Manhole and remove shoring trench boxes.
- Prepare inside surfaces of the Bypass Wet Well and Diversion Manhole for the liner system installation to be performed by PCH subcontractor, Techno Coatings.

V. **CONTRACTOR SUBMITTALS**

Through the end of the reporting period, the following submittals have been received:

	Lift Station
Prior Submittals	16
Submittals Received This Period	13
TOTAL SUBMITTALS	29

VI. **CONTRACTOR REQUEST FOR INFORMATION (RFIs)**

Through the end of the reporting period, the following RFIs have been received:

	Lift Station
Prior RFIs	4
RFIs Received This Period	3
TOTAL RFIs	7

VII. **CHANGE ORDERS**

No change order requests were submitted by PHC and change orders process by TCWD.

VIII. **SCHEDULE**

As a result of the Blacoh Surge Tank considered operational on March 13, 2024. At this moment, the long lead items are the stainless steel air release valves, projected for July 2024. Pacific Hydrotech Corporation proceeded to continue with work efforts soon after the Surge Tank is operational. Should the air release valves continue to be delayed, TCWD Engineering and Operations will allow the use of the pre-existing air release valves through Substantial Completion. Upon arrival of the stainless steel, air release valves, the pre-existing air release valves will be replaced.

As such, an updated Progress Schedule was prepared by PHC, and reflects a completion date of October 28, 2024.

IX. PHOTOS

Construction photos documenting PHC's activities and progress during this reporting period are provided in Appendix A.

APPENDIX A

Construction Photos



Continued installation of the Surge Tank



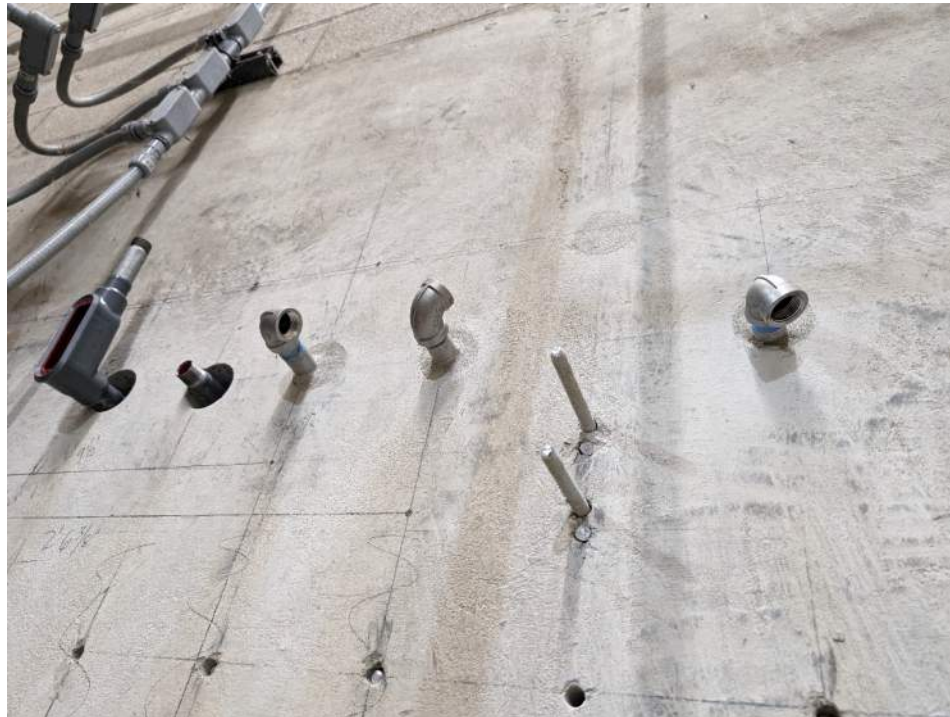
Installation of mechanical piping in Dry Pit of Existing Lift Station



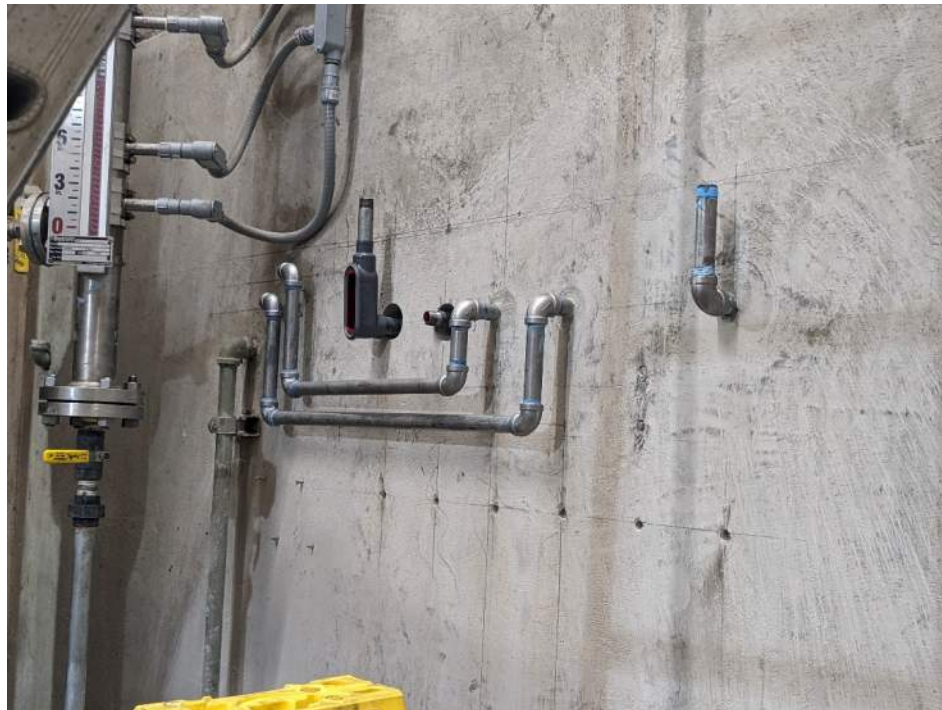
Installation of mechanical piping in from Surge Tank at exterior of Existing Lift Station



Hydrotech Electric installing instruments and conduits to supply Surge Tank



Mechanical and Electrical conduit penetrations inside of Dry Pit



Continued with Mechanical Piping



Mechanical Piping and Solenoids at Air Compressor



Level Controller, Gauges, and Sensors installed on the Surge Tank



Completed Mechanical Piping for Surge Tank



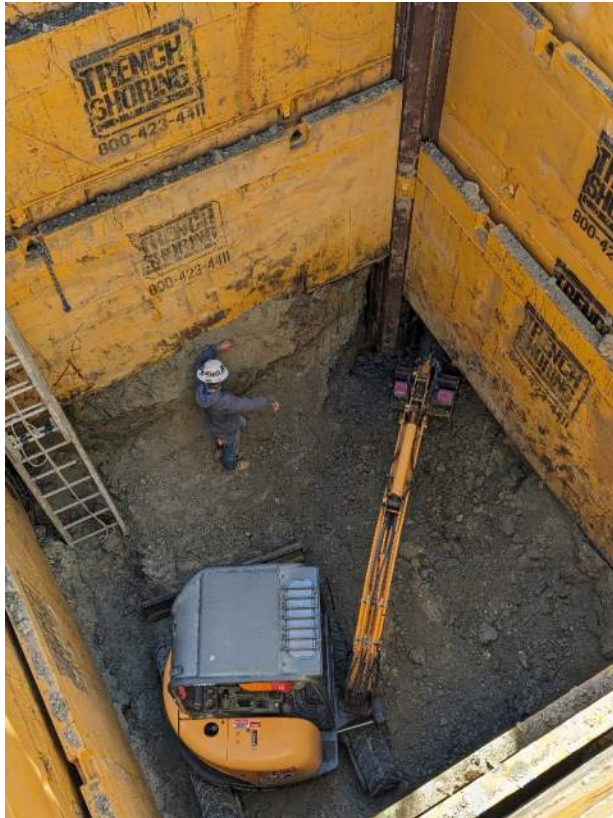
Asphalt Pavement Removals in Preparation of Bypass Wet Well Excavation



Excavation and Installation of Slide Rail Shoring Components



Slide Rail Shoring System Installation



Continued Excavation with Mini Excavator to Achieve Depth



Continued Excavation with 100,000 Pound Excavator



Bottom of Excavation and Placement of Rock Base



Furnish and Install Pre-Cast Shaft of Bypass Wet Well

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING MAY 1, 2024**

OPERATIONAL MATTERS

ITEM 4: WATER SYSTEM UPDATES

The following is a brief report of the water system through **April 2024**.

Projects and Repairs

Water Operations staff performed and/or completed the following tasks and projects:

1. Worked with Ferreira Construction on Dimension Water Treatment Plant (DWTP) Influent Vault replacement project.
2. Assisted Meter Department with the replacement of 2 residential curb stop valve replacements in the Dove Canyon community.
3. Replaced vault sump pumps at Lindsay, Robinson Ranch, and GWTF.
4. Replaced High Country pressure transducer.
5. Conducted Fire Flow Test on Live Oak Canyon Road for future residential development.
6. Valve Exercise Program Update: Exercised 82 valves in the Dove Canyon and Robinson Ranch communities.

Monthly Water System Operations Summary

The Monthly Water System Operations Summary is attached for the Committee's review. Any anomalies will be presented at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

1. Monthly Water System Operations Summary

CONTACTS (staff responsible): PEREA/KESSLER

TRABUCO CANYON WATER DISTRICT
MONTHLY WATER SYSTEM OPERATIONS SUMMARY - 2024

[illegible]

TRABUCO CANYON WATER DISTRICT
MONTHLY WATER SYSTEM OPERATIONS SUMMARY - 2024

System Demands**													
AF/Day	3.1	2.8	3.0										3.0
Daily Average, CFS	1.5	1.4	1.5										1.5
Other Water Deliveries/Purchases													
Ridgeline (DWTP Delivery)	0.0	51.5	43.4										94.9
El Toro (Interconnection Purchase)	0.0	0.0	0.0										0.0
Baker WTP (CSC Delivery)	89.1	89.7	106.2										285.0
Portola Hills (Wholesale Purchase)	8.5	7.5	7.0										23.0
Skyridge (Wholesale Purchase)	1.7	1.5	1.5										4.7
<i>* Usage estimated</i> <i>** Excludes Operational use, losses, and supplement to Recycled Water Reservoir (RW)</i>													

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING MAY 1, 2024**

OPERATIONAL MATTERS

ITEM 5: WASTEWATER SYSTEM UPDATES

The following is a brief report of the wastewater system through **April 2024**.

Projects and Repairs

Wastewater Operations staff performed and/or completed the following tasks and projects:

1. Installed variable frequency drives (VFD) for the East and West SBR Hoffman blowers at WWTP.
2. Repaired the electrical feed wires at Tick Creek Pump Station in preparation for upcoming dry season recovery.
3. Underground field surveying at WWTP for electrical duct bank to feed proposed new MCC at blower building.
4. Jackhammered and removed the old NEQ pump base in preparation to install a new NEQ pump.
5. Worked with Maintenance Dept. on weed abatement at WWTP and surrounding areas for OCFA inspections.
6. Repaired mooring line for reservoir mixer.
7. Started sampling raw influent at The Oaks to better understand the incoming wastewater.
8. Replaced El Toro Sewer Lift Station 12" flowmeter.

Sewer System Management Plan (SSMP) Report

The purpose of the program is to communicate on a regular basis with the public on the development, implementation, and performance of TCWD's SSMP. Status updates on the work and type of work performed on the sewer system will be provided, including sewer line and manhole cleaning, system repairs, lift station cleaning, and updates from satellite facilities:

Sewer System Management Plan (SSMP) Monthly Update	
Total Sewer Line, Feet*	212,045
Total Sewer Line Cleaned (Ft) – Month	25,953
Total Sewer Line Cleaned (Ft) – Cleaning Cycle	59,674
Cleaning Cycle Period (Mos.) [Start date: 1/1/24]	4
Total Sewer Line Cleaned, %	28%
The Oaks at Trabuco – Pumping Frequency for the Month	12
O'Neill Park Sewer System Status	Ok
O'Neill Park Sewer System Repairs	None
SSMP Quarterly Report – <i>Next Quarterly Report</i>	2Q 2024
SSMP Program Audit – <i>Next Audit Report**</i>	February 2025

**This amount includes the OC Parks-owned O'Neill Park sewer system the District is contracted to clean.*

***Periodic internal audits shall be conducted, at a minimum every two years, with reports kept on file. The audit shall focus on evaluating the effectiveness of the SSMP and TCWD's compliance with the mandatory elements of TCWD's SSMP:*

Monthly Recycled Water System Operations Summary

The Monthly Recycled Water System Operations Summary is attached for the Committee's review. Any anomalies will be presented at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

1. Monthly Recycled Water System Operations Summary
2. SSMP Quarterly Report – 1st Quarter

CONTACTS (staff responsible): PEREA/ULLOA

TRABUCO CANYON WATER DISTRICT | RECYCLED WATER SYSTEM SUMMARY - 2024

RECYCLED WATER SUPPLY															
	MAX	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	FIVE YEAR AVG
WWTP Reclaimed Water Production, AF	78.3	39.4	40.0	42.4										121.9	517.2
Reclaimed Reservoir Level, FT	1274.5	1,272.8	1,273.0	1,273.5										-	-
Reclaimed Reservoir Free Board, FT	25.5	1.7	1.5	1.0										-	-
Reclaimed Reservoir Storage, AF	145.5	134.3	135.7	137.5										-	-
Supplemental Domestic Water Added, AF	N/A	0.0	0.0	0.0										0.0	5.2
RECYCLED WATER SYSTEM DEMAND															
NON DOMESTIC WATER USER	ALLOC. AF	8% JAN	17% FEB	25% MAR	33% APR	42% MAY	50% JUN	58% JUL	67% AUG	75% SEP	83% OCT	92% NOV	100% DEC	TOTAL	ALLOC. %
Dahlia Court	8.2	0.00	0.1	0.1										0.19	2.3%
Dove Canyon Golf Course	106.7	0.54	1.1	0.4										2.04	1.9%
Dove Canyon Master Association	279.3	0.90	1.2	3.0										5.10	1.8%
Robinson Ranch	80.2	0.78	1.1	0.3										2.21	2.8%
Trabuco Highlands	159.7	1.97	2.0	0.2										4.19	2.6%
City of RSM	0.1	0.03	0.00	0.00										0.03	26.2%
Construction Water	N/A	0.00	0.0	0.0										0.00	N/A
Sakaida Nursery	1.1	0.00	0.0	0.0										0.00	0.0%
SMWD	N/A	-	-	-										0.00	N/A
TY Nursery	17.9	0.00	0.00	0.0										0.00	0.0%
TOTAL, AF	653.2	4.2	5.5	4.0										13.77	2.1%
PERCENTAGE OF NDW ALLOCATION/YEAR		0.6%	1.5%	2.1%											
TOTAL ANNUAL AVG. NDW AVAILABLE**	774.36														
URBAN RUNOFF CAPTURE AND REUSE															
DISTRICT FACILITY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	FIVE YEAR AVG
Shadow Rock Detention Basin Production		0.06	0.06	0.00										0.12	14.2
Dove Tick Creek Production*	Dry Season	4.9	0.0	0.0										4.9	43.5
	TCWD Portion	4.9	0.0	0.0										4.9	-
	SMWD Portion	0.0	0.0	0.0										0.0	-
Dove Lake Water Pumped		0.0	0.0	0.0										0.0	183.0
Dove Lake Free Board, Ft		0.0	0.0	0.0										-	-
Dove Lake Storage, AF		331.0	331.0	331.0										-	-
Total Rainfall, In.		4.7	11.0	4.5										20.2	14.7

* SMWD share of Dove/Tick Pump Station Dry Season Water is 50% of production.

** Based on 5-Year Average Reclaimed Water Reservoir Base Supply & Recycled Water Production

TRABUCO CANYON WATER DISTRICT
Sewer System Management Plan (SSMP) Quarterly Report

Report Date: April 1, 2024
Report Period: First Quarter 2024 - March 2024
Prepared By: Oscar Ulloa, Wastewater Operations Superintendent

District Sub-Section	Santiago/Portola Hills			Dove Canyon			Rancho Cielo/Walden			Robinson Ranch/Trabuco Highlands		
	Total Amount	Amount Completed	% Completed	Total Amount	Amount Completed	% Completed	Total Amount	Amount Completed	% Completed	Total Amount	Amount Completed	% Completed
Sewer Line Cleaned, Feet	44,625	13,898	31%	64,135	9,423	15%	29,865	0	0%	59,170	0	0%
Manholes, Inspected/Cleaned	205	64	31%	212	32	15%	124	0	0%	236	0	0%
Manholes Needing Repair	0	0	0%	0	0	0%	0	0	0%	0	0	0%
Wet Wells, Inspected/Cleaned	2	2	100%	3	3	100%	1	1	100%	2	2	100%
Lift Stations, Inspected/Maintained	2	2	100%	3	3	100%	1	1	100%	2	2	100%
Grease Interceptors Inspected	2	2	100%	2	2	100%	10	10	100%	n/a	n/a	n/a

Note: All Sewage Lift stations are inspected 3-4 times a week

Contract Services	O'Neill Park/OCFA			The Oak's		
	Total Amount	Amount Completed	% Completed	Total Amount	Amount Completed	% Completed
Sewer Line Cleaned, Feet	12,700	10,400	82%	1,550	0	0%
Manholes, Inspected/Cleaned	95	75	79%	5	0	0%
Manholes Needing Repair	0	0	0%	0	0	100%
Wet Wells, Inspected/Cleaned	1	1	100%	2	2	100%
Lift Stations, Inspected/Maintained	1	1	100%	1	1	100%
Grease Interceptors Inspected	0	0	0%	0	0	100%

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING MAY 1, 2024**

OPERATIONAL MATTERS

ITEM 6: MAINTENANCE DEPARTMENT UPDATES

The following is a brief report of work completed by Maintenance staff through **April 2024**

Projects and Repairs

Maintenance staff performed and/or completed the following tasks and projects:

Water Operations

1. Completed Lyndsay pressure reducing valve (PRV) vault electrical outlet repair.
2. Assisted DMC Engineering with underground utility markings.

Wastewater Operations

1. Assisted with variable frequency drive (VFD) installation in WWTP blower room.
2. Performed job walk with filter vendor for Dove Recycled Water Pump station.
3. Performed job walk with David Rodriguez for handrail project WWTP.
4. Weed abatement at Porter Ranch property and WWTP access road and dam face.

District Fleet Upgrades & Other Projects

1. Prepared #7 for new service body installation.
2. Scheduled Duthie Poer for backup emergency power generator preventative maintenance.
3. Worked with OCFA at Porter Ranch property for USAR Trench Rescue training.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

None

CONTACTS (staff responsible): PEREA/STROUD

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING MAY 1, 2024**

REGULATORY AND OTHER MATTERS

ITEM 7: OTHER MATTERS/REPORTS

Other Matters/Reports from the General Manager and/or District staff may be provided at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Hear Other Matters/Reports that may have arisen after the posting of the agenda.

EXHIBITS

None

CONTACTS (staff responsible): PALUDI/PEREA