#### EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: November 6, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager

FROM: Serge V. Terentieff, Director of Engineering and Construction for SVT

SUBJECT: Upper San Leandro (USL) Water Treatment Plant (WTP) Maintenance and

Reliability and USL and Sobrante WTPs Chemical System Safety

Improvements Project Update

This memo provides an update on construction of the USL WTP Maintenance and Reliability and USL and Sobrante WTPs Chemical System Safety Improvements Project (Project). The attached progress report includes accomplishments and progress since the July 3, 2025 update, including community outreach, fiscal status, and near-term planned work. As noted in this report, the Project has passed its halfway point in construction, representing a major milestone towards completion of this important project.

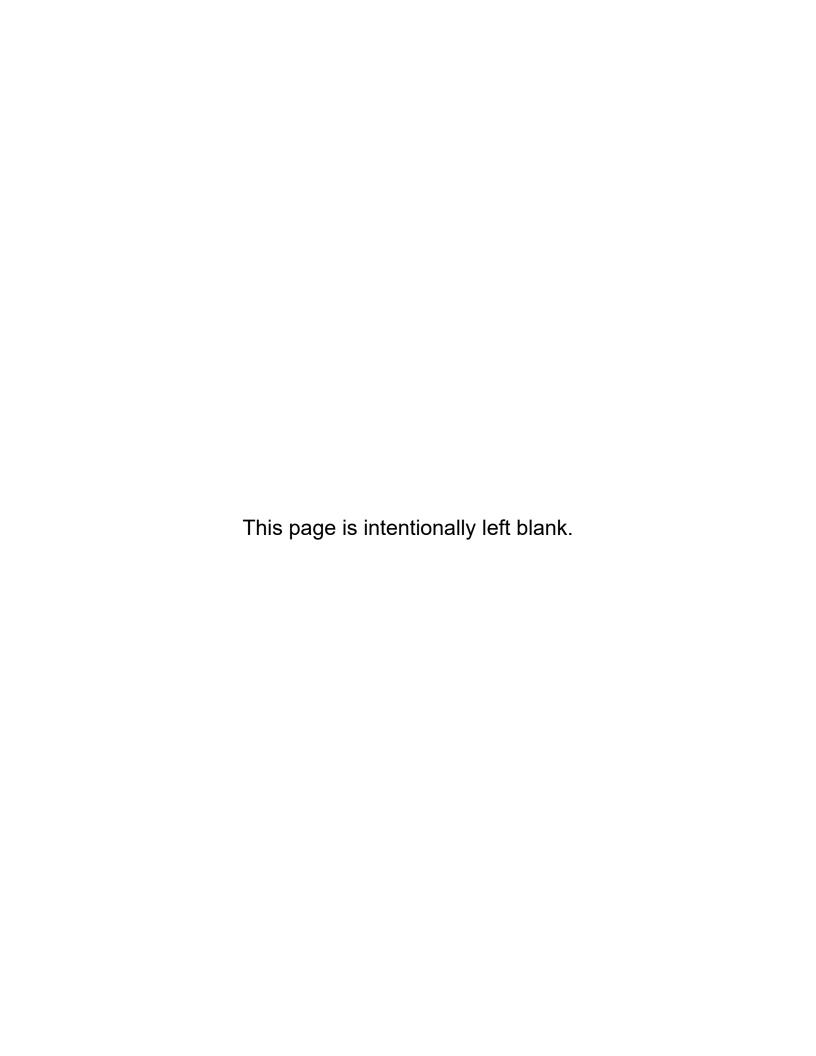
A major project highlight was the completion of various work areas such as the sedimentation tanks' flocculation baffle walls, improvements to two existing steel detention basins, and improvements to existing spent wash water basins, which allowed USL WTP to return to service in October 2025. In addition, the temporary chemical systems were completed, tested, and put into operation at both USL and Sobrante WTPs, allowing for the construction of the new permanent chemical facilities.

The next update will be provided in an information memo on March 5, 2026.

CCC:SVT:mjh

Attachment: 2025 Triannual Progress Report No. 3

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### 2025 Triannual Progress Report No. 3

Specification 2128: Upper San Leandro (USL) Water Treatment Plant (WTP) Maintenance and Reliability, and USL and Sobrante WTP Chemical Systems Safety Improvements Project

The project has made significant progress in multiple process areas and was successfully returned to service in fall 2025. USL WTP will operate in Fall 2025 to test newly installed equipment, support rate restrictions at Orinda WTP to support tie-in work, support a winter outage of Central Reservoir, and to support the investigation and possible repair of a leak on the Sequoia Aqueduct. Underground shoring is completed on the chlorine contact basin, allowing for the start of mass excavation. After initial scheduled delays, the first temporary chemical facilities have been commissioned at USL and Sobrante WTP. A detailed summary of work progress is listed in this attachment.

#### **Project Scope**

The scope of work at the USL WTP includes:

- Replacement of the raw water control valve, demolition and replacement of existing flocculation baffle walls, and installation of a fifth stage of flocculation
- Replacement of the solids removal system in the sedimentation basin
- Demolition of filter No. 1 and demolition of the fluoride building
- Demolition and replacement of the chlorine contact basin (CCB)
- Demolition and replacement of the clear well wood-framed roof with an aluminum roof
- Construction of a new spent wash water basin (No. 3), and associated improvements to existing spent wash water basins (No. 1 and No. 2), and the reclaim system
- Construction of a new concrete gravity thickener and improvements to two existing steel detention basins
- Demolition and replacement of main plant switchgear, installation of two new substations, a new power building, and other electrical improvements throughout the plant
- Demolition and replacement of the chemical feed systems and other chemical systems safety improvements
- Implementation of security improvements

The scope of work at the Sobrante WTP includes:

• Demolition and replacement of the chemical feed system and other chemical system safety improvements

The scope of work at the USL Reservoir Outlet Tower includes:

• Installation of a seismic accelerometer and uninterruptable power supply (UPS) at the shore of USL Reservoir

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## **Community Outreach Update**

- Resident concerns regarding noise and vibration continue to be addressed
- Resident concerns voiced at a meeting on October 23, 2025 included the removal of trees to construct security fencing and new primary switchgear; the District is reviewing the replanting plan to decide whether replanting can begin sooner
- The District's website was updated to show site work progress

#### **Progress Status Update**

### Safety

• Continued active safety culture to encourage everyone at the jobsite to identify safety hazards for immediate correction

# Maintenance and Reliability Improvements

- Completed the work in the north flocculation-sedimentation basin; both basins are now complete
- Completed the mechanical and instrumentation installation and testing work at Detention Basins No. 1 and No. 2; both basins are now in service
- Completed instrumentation installation and testing at Spent Washwater Basins No. 1, No. 2, and No. 3. Mechanical improvements are ongoing. Spent Washwater Basins No. 1 and No. 2 are now in service
- Began gravity thickener subgrade and foundation work
- Completed vault valve installation, startup, and testing
- Completed the installation of the secant pile shoring system at the CCB
- Completed the second and third level of the CCB shoring waler bracing
- Began CCB floor demolition and subgrade preparation
- Continued the installation of the electrical duct banks throughout the site and other improvements

### Chemical Safety System Improvements

- Completed the mechanical and electrical internal demolition for first phase of chemical systems at the USL and Sobrante WTP primary coagulant (PC), cationic polymer (CP), and caustic soda (CS)
- Began the replacement at USL WTP and Sobrante WTP of the existing chemical lines, tanks, and pumps for PC, CP, and CS chemicals

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Specification 2128

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#### **Scheduled Work**

### Maintenance and Reliability Improvements

- Begin the CCB foundation work
- Complete rehabilitation of detention basin No. 2
- Complete rehabilitation of spent wash water basins No. 1 and No. 2
- Complete installation of piping and vault work in the reclaim area
- Start construction of the gravity thickener, which will reduce WTP water loss
- Start construction of the bioretention area that will reduce stormwater runoff
- Continue installation of electrical duct banks
- Begin installation of the new raw water control valve
- Begin installation of medium voltage power infrastructure Cabling, Power Building, Unit Substation 02

### **Chemical Safety Systems Improvements**

Significant process has been made on the chemical system improvements. However, this portion of work has been delayed approximately one year due to differing site conditions, operational constraints, and supply chain issues.

• Continue the replacement at USL WTP and Sobrante WTP of the existing chemical lines, tanks, and pumps for PC, CP, and CS chemicals and place in service.

#### **Fiscal Update**

<b>Budget Category</b>	To-date	Budget	% Spent
Construction Contract (base)	\$149,588,795.63	\$237,332,710	63.1%
Construction Contract (change orders contingency)	\$9,548,630	\$11,866,636	80.5%
Engineering Support and Construction Management Costs	\$24,298,869	\$26,098,599	93.1%

#### **Schedule Update**

<b>Schedule Category</b>	Days Elapsed	<b>Contract Days</b>	% Elapsed
Construction Contract Calendar Days	934	1,310* (3.6 years)	71%

<sup>\*</sup>The latest schedule update from the District's contractor forecasts a Ready for Service for the project of 1,900 days (5.2 years), approximately 600 days (1.6 years) behind schedule.

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The District is actively working with the contractor to make additional improvements to the overall construction schedule and will continue to develop and implement a recovery plan.

## **Construction Progress Photos**



Figure 1 – South Flocculation Basin – Completed sedimentation basin and cable-vacuum testing underway

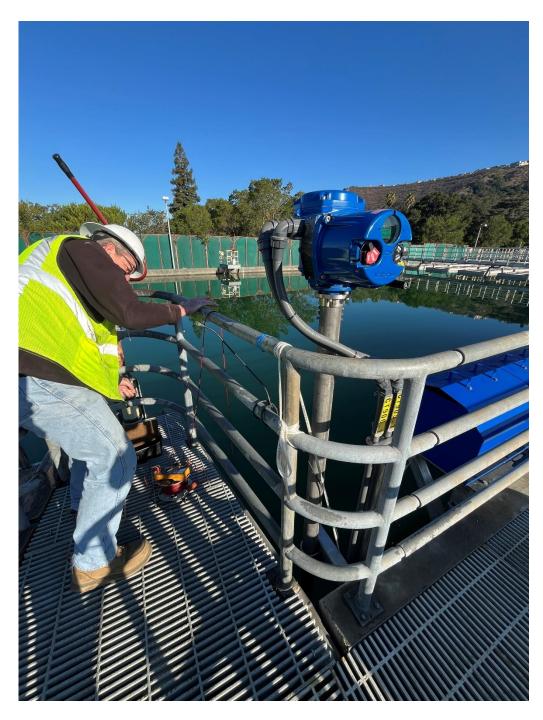


Figure 2 – North Sedimentation Basin – sedimentation basin testing for return to service

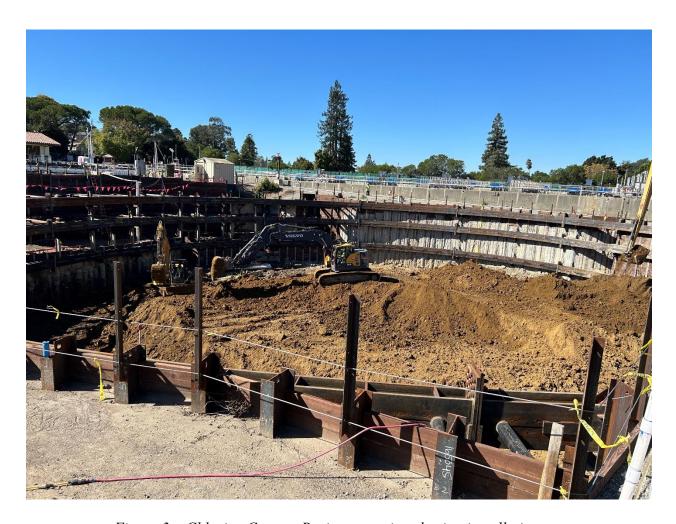


Figure 3 – Chlorine Contact Basin excavation shoring installation

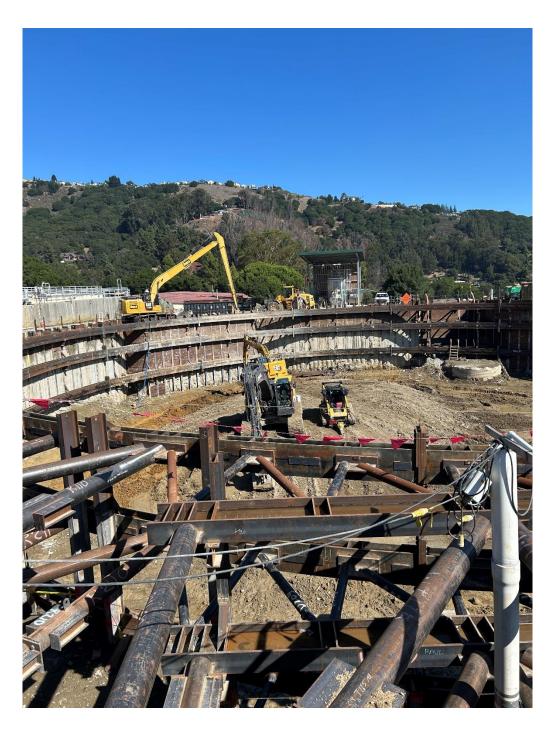


Figure 4 – Chlorine Contact Basin west side excavation bracing



Figure 5 – Old Chlorine Contact Basin structure complete demolition



Figure 6 – Electrical duct bank installation preparation



Figure 7 – Reclaim area vault construction completion and backfill



Figure 8 – Spent Washwater Basin No. 2 in service



Figure 9 – Newly recoated Detention Basin No. 1 and 2 exterior



Figure 10 – Installation of Gravity Thickener Center Ring, Foundation, and Subgrade Preparation

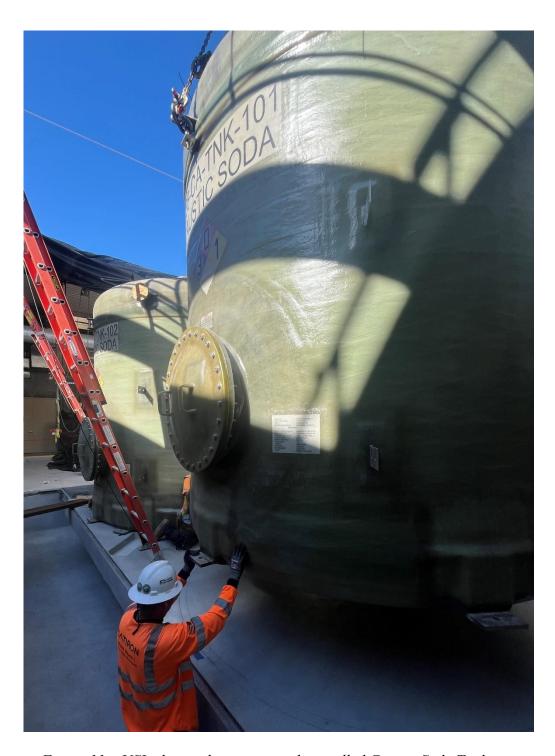


Figure 11 – USL chemical system - newly installed Caustic Soda Tanks

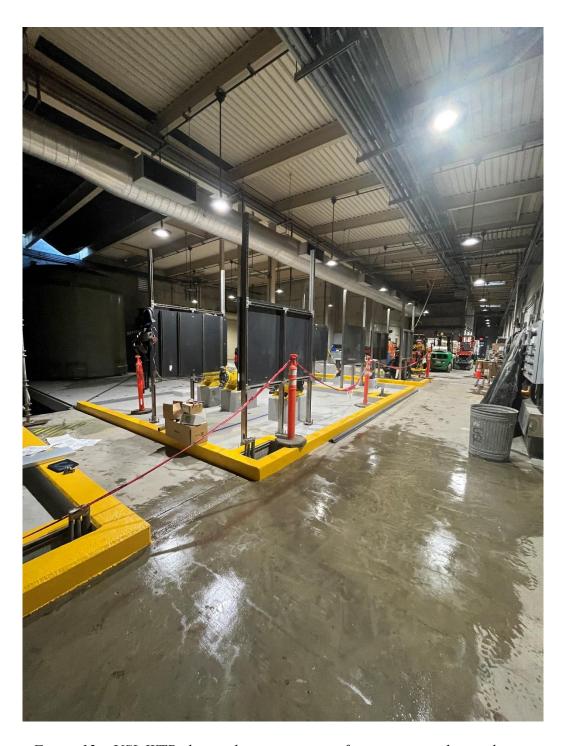


Figure 12 – USL WTP chemical area preparing for permanent chemicals

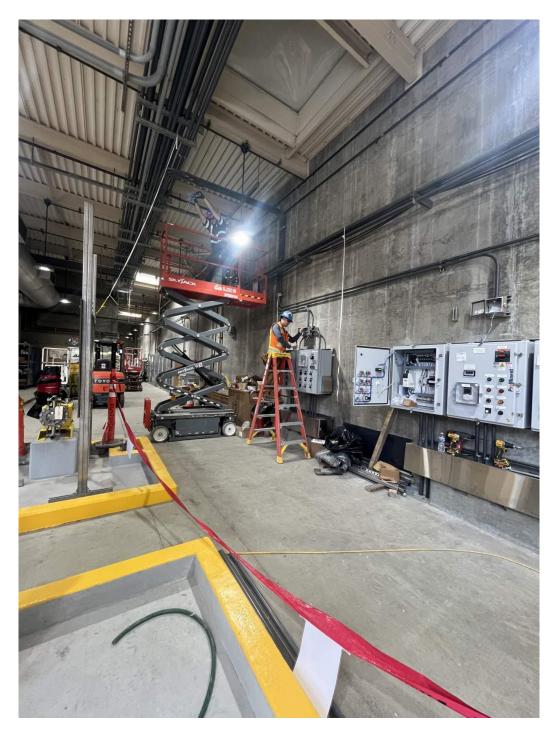


Figure 13 – USL WTP chemical area electrical sub pulling wire for new electrical controls

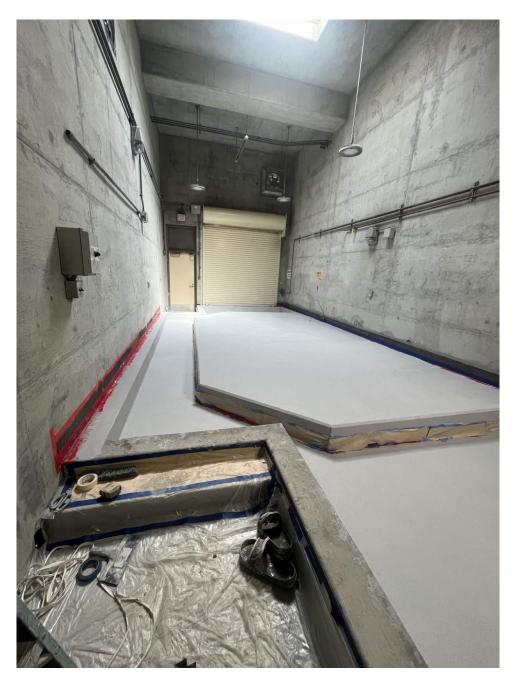


Figure 14 – USL WTP chemical system coagulant storage room tank pad completed



Figure 15 – Sobrante WTP chemical unloading roadway construction



Figure 16 – Sobrante WTP new fiberglass reinforced plastic (FRP) chemical storage tanks

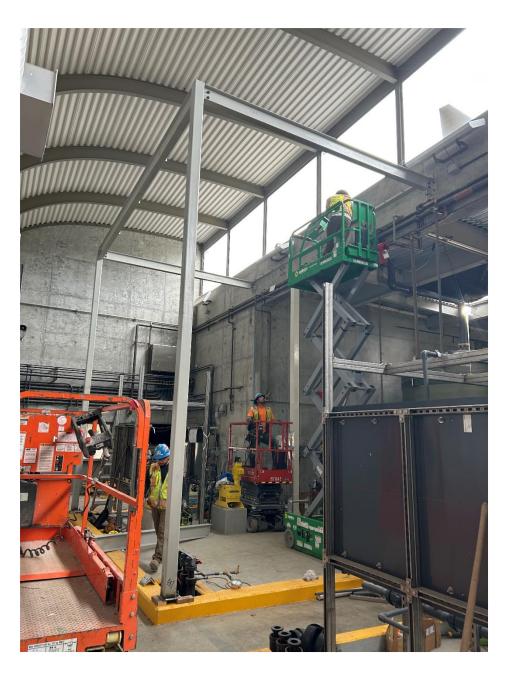


Figure 17 – Sobrante WTP Installation of new conduits