

ENGINEERING COMMITTEE

AGENDA

Thursday, January 19, 2023
2:00 p.m.

Calaveras County Water District
120 Toma Court
San Andreas, California 95249

The following alternatives are available to members of the public to watch these meetings and provide comments to the Board before and during the meeting:

Microsoft Teams meeting

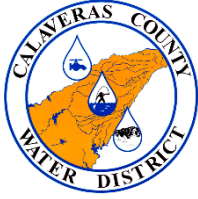
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Phone Conference ID: 167 550 195#

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ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. **PUBLIC COMMENT:** Comments limited to three minutes per person.
2. **APPROVAL OF MINUTES:** For the meetings of September 6, 2022 and November 1, 2022
3. **NEW BUSINESS**
 - a. Fleet and Equipment Fueling Regimen
4. **OLD BUSINESS**
 - a. Capital Improvement Updates
 - b. Other Project Updates
5. **GENERAL MANAGER COMMENTS**
6. **DIRECTOR COMMENTS**
7. **FUTURE AGENDA ITEMS**
8. **NEXT COMMITTEE MEETING:** Tuesday, March 7, 2023, at 2:00 p.m.
9. **ADJOURNMENT**



CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

MINUTES
September 6, 2022

Directors/Committee Members present:

Jeff Davidson
Russ Thomas

Staff present:

Michael Minkler	General Manager
Kate Jesus	Engineering Coordinator
Damon Wyckoff	Director of Operations
Charles Palmer	District Engineer
Kevin Williams	Senior Civil Engineer
Sam Singh	Senior Engineering Technician
Jared Gravette	Senior Supervisor Construction & Inspection
Jesse Hampton	Plant Operations Manager
Pat Burkhardt	Construction and Maintenance Manager
Jessica Self	External Affairs Manager

Others present:

Bruce Hudkins	Member of the Public
Cami Jackson	Lumos Associates

CALL TO ORDER / PLEDGE OF ALLEGIANCE

Director Davidson called the meeting to order at 2:02 p.m.

1. PUBLIC COMMENT:

Bruce Hudkins expressed concerns regarding the location of survey markers near his vacant property and inquired if they were related to a CCWD project. Staff will follow up with Mr. Hudkins.

2. APPROVAL OF MINUTES:

The June 16, 2022 minutes were approved by a motion from Director Thomas and seconded by Director Davidson.

3. NEW BUSINESS

a. Potential Bulk Water Program Expansion

Mr. Minkler gave a brief presentation in Brad Arnold's absence, on possible plans to develop and construct Bulk Water Stations (BWSs) around CCWD's water service areas to supplement existing in-County options for small water suppliers, contractors, fire protection and other uses. Mr.

Minkler also discussed the possibility of grants that could fund the proposed project. The Committee discussed the idea and agreed to provide the information to the full Board at a future meeting.

b. Regional Biosolids Composting Facility

A developer had recently approached the District regarding a proposed Regional Biosolids Composting Facility for Calaveras County. Staff met with the developer and discussed possible locations, including CCWD's Copper Cove Wastewater Treatment Plant. Mr. Minkler explained that the proposed project is very early on in the development and gave a brief update on the recent Calaveras County Planning Commission meeting where the proposed project was discussed. The Committee and staff discussed the benefits and concerns of such a project, including the concerns of the Copperopolis community.

4. OLD BUSINESS

a. Capital Improvement Project Updates

Mr. Palmer gave brief updates on the following projects:

- District Corp Yard (CIP 11101) – Plummerbuilt is working on the site improvements and should be completed by the end of October. The District advertised for the interior tenant improvements on August 19th with bids due September 15th. CCWD Staff are working on the installation of electrical and lighting.
- AMI/AMR Project (CIP 11096) – Mueller has completed the fixed network and there are approximately 100 locations that need follow up. They are also replacing meter lids certain locations and will perform quality checks to ensure all meters are transmitting to the network.
- Jenny Lind Water System A-B Water Transmission Pipeline (CIP 11088) – Coleman Engineering submitted the pre-design report on August 22nd. The project is anticipated to go into construction in July 2023.
- West Point Water Supply Reliability Improvements (CIP 11106) – KW Emerson has mobilized to the project site and started work on the underground piping installation and potholing existing piping. The design consultant, PBI has been working with staff and the contractor to resolve any utility conflicts. The pre-purchased treatment filter should be delivered to the site in January 2023.
- West Point and Wilseyville WWTP Consolidation Project (CIP 15091) – KW Emerson has mobilized to the project site and work will start on September 19th. Staff has reviewed and approved material submittals that have long lead times.
- Copper Cove Lift Stations 6, 8, 15, 16 and Force Main Project (CIP 15076/15080) – A Pre-Construction Kick-Off meeting with Mazingo, County Public Works and CCWD staff was held on August 11th. Mazingo and CCWD staff are working with the County to coordinate the County paving project along with the CCWD project.
- Copper Cove WWTP Tertiary Treatment and UV Improvements and Facilities Plan (CIP 15094) – CCWD continues to work with the U.S. Army Corps of Engineer's staff on the draft letter agreement for the project. The design consultant, Keller Associates, submitted a draft pre-design report of the Phase 1 Tertiary Improvements on August 16th which is currently under review by staff. Due to the significant scope of work and critical deadlines,

staff is considering bringing in an additional consultant, HydroScience, to help expedite work.

- Copper Cove WWTP Pond 6 Dam and Effluent Storage Reservoir Enlargement Project (CIP 15112) – Staff is making further progress on identifying a borrow site, utility relocation plans, acquisitions of additional easements, and aligning funding sources.
- Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103) – Cal-OES is reviewing the Phase 1 portion of the design and plans in order to complete the NEPA Environmental Review. Blackwater is working on the 90% design drawings.
- Ebbetts Pass Redwood Tanks Project (CIP 11095) – The steel tank manufacturer has had significant material supply chain issues that have impacted the construction schedule. Heather Tank was completed in July but a leak was recently found. California Aquastore has been on site to investigate and repair. Work continues at the other tank locations.
- Forest Meadows WWTP UV System Replacement (CIP 15106) – The new UV system has been purchased and will be delivered in January 2023. Staff is working on the conceptual design and the Construction Crew has cleared vegetation and some grading of the project site. Construction should start in Summer 2023.
- Arnold Wastewater Secondary Clarifier Improvement Project (CIP 15095) – Staff has had routine meetings with the design consultant, HydroScience. The 90% plans were submitted on July 15th and reviewed by staff.

b. Other Project Updates

Mr. Wyckoff gave brief updates on the following:

- Copper Valley Town Square – Staff has an upcoming meeting scheduled with CV Developers to discuss the sewer force main and pump station projects.
- Jenny Lind Elementary School Force Main Project – Staff continues to work with the project consultant, KASL Engineering, and continue to discuss the progress of the project.
- North Vista Plaza / LGI Homes – Staff will meet with the developer to discuss the submitted design and required improvements to be done by the developer.
- Accessory Dwelling Units – Staff has had ongoing meetings with other utility districts and County agencies to discuss the application process and impacts on water and wastewater systems.

5. GENERAL MANAGER COMMENTS

None.

6. DIRECTOR COMMENTS

None.

7. FUTURE AGENDA ITEMS

None.

8. NEXT COMMITTEE MEETING

November 1, 2022 at 2:00 p.m. which will most likely be rescheduled with updates to follow.

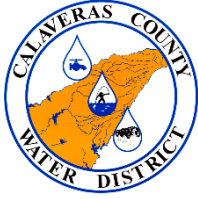
9. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:20 p.m.

Respectfully submitted,

Kate Jesus
Engineering Coordinator

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CALAVERAS COUNTY WATER DISTRICT ENGINEERING COMMITTEE MEETING

MINUTES
November 1, 2022

Directors/Committee Members present:

Russ Thomas
Cindy Secada (Alternate)

Staff present:

Michael Minkler	General Manager
Kate Jesus	Engineering Coordinator
Damon Wyckoff	Director of Operations
Charles Palmer	District Engineer
Kevin Williams	Senior Civil Engineer
Sam Singh	Senior Engineering Technician
Jared Gravette	Senior Supervisor Construction & Inspection
Jesse Hampton	Plant Operations Manager
Pat Burkhardt	Construction and Maintenance Manager
Jessica Self	External Affairs Manager

Others present:

Ralph Copeland Member of the Public

CALL TO ORDER / PLEDGE OF ALLEGIANCE

Director Thomas called the meeting to order at 2:13 p.m. Director Davidson was absent and President Secada, the Alternate, was present.

1. PUBLIC COMMENT:

None.

2. APPROVAL OF MINUTES:

The September 6, 2022 minutes were tabled for the next meeting.

3. OLD BUSINESS

a. Capital Improvement Project Updates

Engineering staff gave brief updates on the following projects:

- District Corp Yard (CIP 11101) – The District advertised for the interior tenant improvements and received one bid from Plummerbuilt. A construction contract was awarded at the October 26th Board meeting along with a budget amendment for additional work including security fencing and lighting. A pre-construction meeting is scheduled for November 3rd. The Committee discussed future plans to upgrade the current security

camera system and the continued work on the electrical installation including equipment delays.

- AMI/AMR Project (CIP 11096) – Mueller has approximately 70-80 meters and 200 lid replacements remaining before completion. The Committee discussed the benefits of the water usage data through the Sentryx system.
- Jenny Lind Water System A-B Water Transmission Pipeline (CIP 11088) – Coleman Engineering should have the 50% and 100% design deliverables complete by the end of January 2023. The project is anticipated to go to bid in February 2023 with construction starting in the Summer of 2023.
- West Point Water Supply Reliability Improvements (CIP 11106) – KW Emerson has mobilized to the project site and started work on the underground piping installation and potholing existing piping which should be complete in the upcoming weeks. The pre-purchased treatment filter should be delivered to the site in January 2023 pending weather conditions.
- West Point and Wilseyville WWTP Consolidation Project (CIP 15091) – KW Emerson has mobilized to the project site and started clearing and grubbing, mass grading/earthwork and raising the pond levee. They are also preparing the project site for the upcoming winter months. Staff continue to review and approve material submittals that have long lead times in preparation for Spring. SRF has notified the District that the requested amendment for additional grant funds should be approved in next few weeks.
- Copper Cove Lift Stations 6, 8, 15, 16 and Force Main Project (CIP 15076/15080) – The contractor, Mazingo, has installed 1700-feet of 6-inch force main on O’Byrnes Ferry Road and George Reed has completed the final paving of this portion. The paving portion was done in coordination with the County’s paving project. Mazingo will continue work after the first of the year.
- Copper Cove WWTP Tertiary Treatment and UV Improvements and Facilities Plan (CIP 15094) – Staff has reviewed and submitted a Draft Letter Report to the U.S. Army Corps of Engineers for project funding. Keller, the design consultant, submitted a draft of the Pre-Design Report (PDR) of the Phase 1 Tertiary Improvements. The District plans to secure the services of another design firm to build on the PDR for the completion of the design, along with input from the U.S. Army Corps.
- Copper Cove WWTP Pond 6 Dam and Effluent Storage Reservoir Enlargement Project (CIP 15112) – Staff is making further progress on identifying a borrow site, utility relocation plans, acquisitions of additional easements, and aligning funding sources. Staff will resubmit the application and fees to DSOD when further progress is made. A lot line adjustment was approved at the October 12th Board meeting to facilitate the dam raise.
- Copper Cove Water System Improvements Project (CIP 11111) – The consultant, Peterson Brustad, Inc., has completed multiple preliminary design plans for staff review. Construction of the Phase 1 and 2 improvements, which includes a redwood water tank replacement, will start in May 2023. Ralph Copeland inquired about the sizing of the waterline proposed in the design; the Committee clarified.
- Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103) – Blackwater has submitted the 90% design drawings. Cal-OES is reviewing the Phase 1 portion of the design and plans in order to complete the NEPA Environmental Review. The District advertised for the pre-purchase of pumps and electrical equipment which are currently being reviewed by staff.

- Ebbetts Pass Redwood Tanks Project (CIP 11095) – The piping for Heather tank has been completed and will be put online by the end of the week. Tank 4 in Dorrington has been erected with some minor items being completed by the end of week and filled within the next few weeks. Flume Court tank should be erected within the next few weeks.
- Arnold Wastewater Secondary Clarifier Improvement Project (CIP 15095) – The design consultant, HydroScience, should have the 100% deliverable prepared within the next few weeks for staff review. The project should go out to bid in February 2023 with construction starting in the Spring.

b. Other Project Updates

Engineering staff gave brief updates on the following:

- Copper Valley Town Square – Staff continue to work with CV Developers to discuss the sewer force main and pump station projects.
- Copper Valley (Saddle Creek 7B) – The punchlist items were completed and inspected and staff will continue to work with the developer on the project close out and acceptance.
- Gold Creek Subdivision Unit 3 – Staff continue to work with the developer on the project close out and acceptance.
- Jenny Lind Elementary School Force Main Project – Staff continues to work with the project consultant, KASL Engineering, and continue to discuss the progress of the project.
- North Vista Plaza / LGI Homes – Staff continue to meet with the developer to discuss the submitted design and required improvements to be done by the developer. Discussions continue between the developer and CCWD on the funding program (BOLD) which would pay for the water and wastewater capacity fees.
- Tri-Dam Lake Tulloch Day Use Area – The District is working with Tri-Dam to approve water and wastewater service connections to the newly constructed day-use area. Staff continues to secure an easement from the neighboring property owner to improve the existing water main located in the parking lot.
- Big Trees Verizon Cell Tower Lease – Staff was contacted by a representative from Epic Wireless Group (Verizon) regarding the structure and terms of the lease and will continue to discuss and bring any action items to the full Board for approval.

4. GENERAL MANAGER COMMENTS

None.

5. DIRECTOR COMMENTS

President Secada requested a report on the allocation of the CIP bond funds. Director Thomas asked for an update on the decommission of District infrastructure located on Kiva Drive; Mr. Wyckoff stated that field staff has done some evaluation and determined that the facility is still hydraulically connected to the distribution system. Further investigation will be required, and more information will be provided to the Committee.

6. FUTURE AGENDA ITEMS

None.

7. NEXT COMMITTEE MEETING

January 3, 2023 at 2:00 p.m.

8. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:28 p.m.

Respectfully submitted,

Kate Jesus
Engineering Coordinator

Agenda Item

DATE: January 19, 2023

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

RE: Fleet and Equipment Fueling Regimen

SUMMARY:

Recent increases in the price of fuel warrant a discussion of the District's fuel purchasing, handling, storage, and re-fueling regimen. The 21/22 Fiscal Year Operations Budget allocated Two-hundred thirty-one thousand dollars for General Ledger (GL) account #60610 of the Operations Budget (Operating Expenditures, fuel, and oil). As of May 2022, expenditures for this GL totaled \$367,169.00. This GL overrun is a result of a couple things. There has been an increase in field staff (3) resulting in an increase in vehicle and equipment usage and an increase in fuel costs.

To optimize the best price for fuel without limiting operational flexibility, CCWD purchases fuel in three ways. Two of them are by way of delivery to County-wide fuel storage locations at District Facilities from vendors. Ebbetts Pass Gas provides re-fueling assistance on the Pass for propane deliveries and Hunt & Sons provides diesel and gasoline deliveries throughout the County as directed by CCWD Staff. The third method of fuel purchasing is via gas card. CCWD works with a company called WEX to provide fuel cards to sixty-three Staff members for the re-fueling of vehicles and equipment. The WEX fuel cards provide flexibility to Staff for the effective and efficient re-fueling of vehicles and equipment. WEX cards are usable at most gas stations and savings can be achieved through a reduction of per gallon cost at the pump. All three methods of purchase and delivery are implemented to keep fuel costs as low as possible.

Another component that can be used to this end is red diesel fuel. Red diesel fuel can only be used for off-road vehicles and equipment. It is cheaper, is not subject to applicable taxes, and has been dyed red to illustrate that fact. One-thousand gallons of red diesel is stored at the La Contenta Wastewater Treatment Plant for use in the off-road equipment and generator housed at the facility. This tank is re-fueled by a vendor once a year. Beyond that, CCWD does not store red diesel.

Historically, CCWD has not used red diesel extensively. The District used to report its fuel use quarterly to the California Department of Tax and Fee Administration and would receive a refund on taxes paid for clear diesel used in off-highway equipment. Fuel use

tracking proved timely and unwieldy. It was determined that the effort associated with tracking and reporting consumed any savings in cost brought about by the refund.

There are penalties if red diesel is found to be used in on-highway vehicles. The District can be fined ten dollars per gallon in the tank or a maximum of one-thousand dollars per violation. In consideration of the penalties, the stakes are high if Staff inadvertently put red diesel fuel in a District vehicle. It only takes one accidental fill of a truck, and the tank is dyed red. Subsequent refuels of clear diesel can appear dyed for some time afterward. All District vehicles one ton and heavier are required to enter the CHP truck scales for weight and review. Dipping the trucks fuel tanks is part of their inspection effort.

The concern that the District could be subject to fines and penalties because of refueling mistakes is easily remedied by only using clear diesel in District in-truck auxiliary fuel tanks. CCWD field crews utilize twelve auxiliary fuel tanks for District-wide refueling of generators, vehicles, and equipment. The Mechanical Crew refuels generators from their auxiliary tanks on a routine and an emergency basis. All generators are inspected monthly, and their fuel tanks are topped off when their level falls below 5/8's of a tank resulting from weekly generator exercising and/or actual loaded operation. This generator refueling effort amounts to approximately 15 gallons of diesel used per week as it takes on average six months for a standby generator to reach 5/8's and week to week, only a small portion of the District's collection of approximately seventy generators require topping off.

During emergencies and widespread outages, Operations augments the Mechanics efforts by calling in Vendors under contract to re-fuel generators. Vendors use red diesel fuel for these efforts. Emergencies like PSPS events can result in the use of thousands of gallons of fuel. During the PSPS event of October 7th through the 13th, 2019 CCWD spent thirteen thousand seven hundred dollars on vendor supplied red diesel fuel.

80% of the excavation work completed by this District is done by Vac truck hydro-excavation. These are on-highway vehicles. This being the case, the amount of fuel used by off-highway vehicles that can use red fuel is way less compared—on a percentage—to a smaller construction business that would typically have more off-highway equipment than on-highway equipment. Most of The District's diesel fuel is used and purchased for 27 on-highway diesel service trucks.

The District's Construction, Mechanical, and Utility Crews use their auxiliary tanks to refuel generators, equipment, and light/heavy-duty trucks with clear diesel. This approach provides the Team with the flexibility to use their diesel fuel for any application without worry of committing a DOT violation. Field Crews have never used off-highway equipment without on-highway equipment use. Because of this fact, the operational approach of fueling with only clear diesel from auxiliary tanks has been considered optimal for multiple reasons. It provides a fool-proof approach to compliance, it eliminates the need to designate certain service trucks and auxiliary tanks as "red diesel only," and continues to

provide the flexibility necessary in ensuring the most efficient refueling effort occurs in the field whatever the scenario.

As of December of 2022, red diesel was a dollar per gallon cheaper than at the pump and sixty cents cheaper per gallon from vendors. Once again, the District's Mechanical Crew uses approximately 15 gallons a week to re-fuel generators, the Utility Crew uses approximately 40 gallons per week, and the Construction Crew utilizes approximately 20 gallons of diesel per week in off-highway equipment. Equating the gallons of red diesel used per week to dollars per year, CCWD could save approximately 75 dollars per week and \$3,920 annually. When you push the savings of \$3,920 per year up against the additional equipment cost requirements (new auxiliary tanks, pumps, hoses, etc.) and the additional maintenance (replacement of fuel filters more often) associated with red diesel fuel use, it would not save the District any money to designate certain trucks auxiliary tanks as "red diesel fuel" only. Moreover, this course of action would reduce operational flexibility in that certain trucks would have to be on off-highway equipment jobs to re-fuel equipment and would also have to be designated as the specific vehicle needed to re-fuel generators. Not all applicable trucks and their drivers are available for every job necessary. This fact can lead to coordination issues when it comes to working to meet daily objectives.

CCWD has developed a cost-effective and efficient field equipment re-fueling regimen over time. One that works to ensure District needs are effectively met without exposure to potential regulatory violations. The method of deploying vendors to re-fuel District Generators in emergencies with red diesel is an effective utilization of the cost saving benefits of tax-free diesel fuel, while utilizing clear diesel in District auxiliary tanks continues to provide operational flexibility without concern of triggering regulatory violations. A 500-gallon diesel storage tank is approximately six-thousand dollars. Were the District to amend its field operations to ensure routine red diesel use it would need to purchase two of these tanks and associated equipment and amend its field operation so that each crew had at least one truck with a red diesel auxiliary tank. Considering these changes, Staff feel it most effective and efficient to keep field operations status quo.

Staff are investigating the viability of reinstating quarterly reporting to the State Department of Tax and Fee Administration to determine if there have been improvements made to the reporting process that would make this an option to receive reimbursement for taxes paid on off-highway equipment use.

Agenda Item

DATE: January 19, 2023

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Engineering Department

RE: Capital Improvement Project Updates

District Corp Yard (CIP 11101)

Plummerbuilt Construction began work on the Interior Improvements for the Maintenance Building on December 12. Plummerbuilt is currently working on the interior framework and District electrical staff will begin installing electrical and lighting fixtures rooms. The main electrical switchgear has been installed and underground electrical conduits have been inspected and mandrelled by PG&E. The District is waiting for PG&E to set the new transformer, pull underground conductors and energize the panel. District Staff will be installing a new 6" Fire Water Line and Backflow device to the building for the Fire Sprinkler System. The Project should be substantially complete by the end of March 2023. A 100Kw natural gas standby generator was ordered in March 2022, the generator delivery was recently delayed from February 2023 until June 2023. Staff will have to utilize a smaller trailer mounted generator to power the new maintenance facility in the event of a power outage as larger standby generators of all types are out of stock everywhere.

Operations, Purchasing, and Maintenance staff will be meeting over the next couple of weeks to plan the organized move into the new building.

AMI / AMR Project (CIP 11096)

Mueller Systems is near substantial completion, meters are being read with good success through the AMI network. The hold up with completion of the Project is waiting for approximately 1,300 plastic lids that are needed to replace the existing concrete meter box lids. The missing lids are more custom sizes that were not readily available or on backorder during the meter installation. Deficiencies with the meter installations have been discovered at some locations. The District Staff is going back through the installations as quality control check, a punchlist is being created and deficiencies will be corrected prior to releasing Mueller from their contract. The Customer Service Department is creating a punchlist of any outstanding issues that need to be corrected on the Mueller interface with Tyler. Staff has been working with Sean Dingman at Mobile MMS to integrate the Mueller Meter information into Work Order System. This interface should produce work orders that can be pushed into Mueller/Tyler system for meter swaps and new meter installations.

The Mueller contract duration has been extended 212 calendar days to allow time for remaining meter box lids to be delivered and installed along with adequate time for the District and Mueller to complete any punchlist items. Mueller will have crews back onsite in March to complete all remaining items. The Project is unique as it involves many different departments and every customer within the District. The global shortage of materials including meters, lids, network devices along with the complexity of changing to Tyler CIS concurrently has made a very simple Project more complex.

Jenny Lind Water System A-B Water Transmission Pipeline (CIP 11088)

This project includes replacing 20,000-ft of water transmission pipeline to improve conveyance from the Tank A to Tank B sites. The pipeline will be aligned along Hartvickson, Baldwin, Usher and Wind River Court. It will consist of approximately 13,400-ft of 14-inch diameter pipe and 6,500-ft of 12-inch diameter pipe. The piping material will be ductile iron. CCWD retained a consultant, Coleman Engineering, to design the project and ECORP to complete the CEQA document. Coleman is scheduled to complete a 100% design by the end of January 2023. The project is anticipated go to bid by March 2023 and ready for Award of a construction contract by May 2023. Construction would start in summer of 2023 and be complete by end of 2024.

Jenny Lind Water Treatment Plant Filter Rehab Project (CIP 11131)

The project includes removing and replacing the adsorption clarifier beads and mixed media, silica sand, high-density support gravel, surface wash arms, and underdrain system from the filter, disassembling and rehab and/or replacing associated appurtenances as needed, and removing/re-coating the adsorption clarifier and filter both internally and externally as well as all associated piping and appurtenances.

CCWD publicly advertised for bids starting November 30th through December 9th and held a bid opening on December 15th. One bid was received from ERS Industrial Services, Inc in the amount of \$906,260.

West Point Water Supply Reliability Improvements (CIP 11106)

CCWD received Prop. 1 Grant funds through UMRWA and DWR to supplement the cost of purchasing and installing a backup water filter at the West Point Water Treatment Plant. K.W. Emerson (KWE) mobilized to the site on July 15, 2022 and started work on underground piping installation and potholing existing piping within the foundation subgrade for a new metal building. Peterson Brustad, Inc. has been working with staff and KWE to resolve utility conflicts on the site. As of January 2023, KWE is waiting for clear weather to finish the building and foundation pads. Delivery of the pre-purchased treatment filter unit from WesTech was re-scheduled from September 2022 to January 2023. KWE plans to proceed with delivery of the filter equipment and will store it locally near the project site.

West Point and Wilseyville Wastewater Consolidation Project (CIP 15091)

The Water Board staff completed the Final Budget Approval (FBA), which was then executed by the General Manager. Staff continue to review and approve material

submittals. K.W. Emerson (KWE) implemented BMP's, started clearing and grubbing, and began mass grading/earthwork the week of August 29th. Levees around effluent storage reservoir were cleared and fencing removed in preparation of placement of additional fill to raise levee height. As of October 14th, KWE completed raising the pond levees. Fence sub mobilized on October 25th to replace fencing around ponds and then final rock road section placed to complete the pond, levee raise. KWE relocated the 8-inch FE line and started working on the mass grading for the sludge basins and sludge drying beds. KWE is currently shutdown work for the winter. KWE installed hydroseeding and is maintaining BMP's for the winter in accordance with the Storm Water Pollution Prevention Plan (SWPPP).

Copper Cove Lift Stations 6, 8, 15 & 16 and Lift Stations 12 & 13 Force Main Bypass Project (CIP 15076/15080)

The construction contract was awarded to Mozingo Construction in the amount of \$7,658,400.00 at the July 27th Board meeting. A Pre-Construction Kick-off Meeting with Mozingo, County Public Work and CCWD was held on August 11th. The District, and Mozingo are working to expedite construction of force main and paving on O'Byrnes Ferry Road under a very short timeframe (August 12-17). The County hired George Reed to pave the full length of O'Byrnes Ferry Road at this same time, and everyone is working to coordinate work on the two projects. CCWD expedited approval of critical piping materials to allow Mozingo to immediately ship these materials. Mozingo has installed 1700-feet of 6-inch force main on O'Byrnes Ferry Road. George Reed completed the final paving of this portion on October 21st. Mozingo looks to re-mobilize the end of January at earliest to complete work on the force main

Copper Cove Wastewater Treatment Plant Tertiary Treatment Improvements and Facilities Plan (CIP 15094)

During December 2022 and January 2023, CCWD and U.S. Army Corps of Engineer's staff has made significant progress on the Draft Letter Report/Agreement for the project. Hydroscience Engineers is providing engineering and design services. Dewberry is providing environmental services for CEQA and NEPA. The tertiary improvements will include adding Dissolved Air Flootation (DAF) units and replacing the tertiary filters. Through the Letter Report, the tertiary improvements will be coordinated with dam raise and relocation of pipelines to make way for the dam. CCWD's goal is to award an initial phase of construction to obligate Federal Funds by October 2023.

Copper Cove Wastewater Treatment Plant – Pond 6 Dam and Effluent Storage Reservoir Enlargement Project (CIP 15112)

This project is being coordinated with the tertiary treatment plant improvements through the Letter Report/Agreement between CCWD and USACE. The project will raise the dam by 10 feet and increase the capacity of the Copper Cove Effluent Storage Pond 6 from 205 AF to 442 AF. Also, the project will include relocating an 8" sewer force main, 10" raw water line, pumps and other existing facilities in conflict with raising the dam. The estimated construction cost is \$9.8 million including engineering, inspection and applicable fees. . The consultant, Wagner & Bosignore, is designing the dam and has resubmitted a project application to the Division of Safety of Dams (DSOD) Application.

DSOD is starting its review. Hydrosience Engineers is providing design for relocating the existing pipelines, pumps and other facilities. Dewberry is providing environmental services for CEQA and NEPA. An updated version of the 2009 Environmental Impact Report (EIR) will likely be relied upon for the project.

Copper Cove Water System Improvements Project (CIP 11111)

Peterson Brustad Inc. (PBI) was awarded a contract at the May 11th Board meeting and a project kickoff meeting was held on site on May 24th. Since that time PBI has worked to complete multiple preliminary design plans for District Staff to review and provide commentary. The Phase 1 and 2 improvements include rehabilitating the existing clearwell and existing steel Tank-B, adding a new second clearwell, and replacing the existing redwood Tank-B. PBI is working on the 50% design plans for Phase 1 and 2. CCWD proposes to bid and award the Phase 1 and 2 improvements in early 2023 and complete construction by June 2024. Also, as of January 2023, PBI is currently working with staff evaluating alternatives for a critical project to replace the main pump station and transmission main conveying treated water from the Water Treatment Plant to Tank C. This is a substantial project including 12,000 feet of new 16" to 20" transmission main and new additional high horsepower pumps and related electrical upgrades.

Ebbetts Pass Hunters Raw Water Intake Pumps (CIP 11103)

This Project is a Hazard Mitigation Grant Project (HMGP) partly grant funded by Cal-OES/FEMA. CCWD with its consultant, Blackwater, has completed the Phase 1 portion of the design which included the 60% Design and the initial Environmental Studies. The Phase 1 Design has been under FEMA NEPA environmental review since April 2022. Since completion of the Phase 1 design Blackwater Engineers has completed 90% Design, Project Specification, and materials Pre-Purchase Specifications. Blackwater is currently on hold until we receive comments back on the NEPA Environmental review that need to be incorporated into the final design specifications. In anticipation of the Phase 2 being approved the District solicited pre-purchase bids for long lead time items including vertical turbine pumps and electrical components. Some of the electrical components for the Project have lead times from the manufactures of over one year. The District cannot enter into purchase agreements for materials until the Phase 2 is approved or the cost for materials could be de-obligated from the grant. Cal-OES has recently been seeing extended review times of over one year on NEPA reviews by Federal Agencies.

Cal-OES/FEMA is working on completing their evaluations of the Phase 1 plans in order to complete its NEPA Environmental Review. After competing Phase 1 approval, Phase 2 will authorize funding for implementation and construction of the project. CCWD plans to pre-purchase the pumps and electrical equipment once Cal-OES/FEMA authorizes Phase 2. Blackwater has been working on completing the 90% design drawings which includes the structural improvements to the pump house and mechanical buildings to support the new pumps and relocate the electrical control to top side of the Reservoir.

Ebbetts Pass Redwood Tanks Hardening (CIP 11095)

This project is receiving significant hazard mitigation grant program (HMGP) funding from Cal-OES/FEMA. The District has been concentrating on completing the four tank

locations covered under the Cal-OES/FEMA grant. These tanks will be substantially complete and placed online within the next month. This schedule should provide the District adequate time to close out the Grant by the deadline of April 2023. The District has exhausted the funds currently obligated under the Grant, the District is compiling the cost in excess of the obligated cost and will be requesting the additional funds from Cal-OES. Larkspur Tank location in Forest Meadows is not part of the HMGP Redwood Tank Hazard Mitigation Project but is part of the Construction Contract with KW Emerson/California Aquastore. The Larkspur Tank foundation has not been started as the materials were significantly delayed which pushed start of work into the winter season. The District along with the Contractors have decided not to start earthwork at this location until winter weather clears. Larkspur tank location is within a very congested residential area and risk of mud flows onto the streets and adjoining properties is too significant to try to complete work without extended clear weather forecast ahead of the work.

Forest Meadows Wastewater Plant / U.V. System Replacement (CIP 15106)

The new U.V. system has been purchased, is being manufactured and has been shipped in January 2023. Staff have worked together to develop a conceptual design for the new installation. The Construction crew has cleared vegetation from the site and performed some rough grading of the project area. The existing UV System stainless-steel channel must be demolished and removed to make room for the new one. A new concrete channel must be constructed to house the new UV system. The construction of this new channel will be completed by a contractor. Staff proposes to develop design plans for bidding portions of this work. The project will go into construction next summer of 2023.

Arnold Wastewater Secondary Clarifier Improvements Project (CIP 15095)

The project will provide upgrades to the Arnold Wastewater Treatment Plant. The project will add a new secondary clarifier, RAS/WAS pump station, two additional aerobic digesters, and replace the plant's electrical motor controls, PLC and SCADA systems. The project will be advertised for bids in the next two months and a construction contract awarded by May 2024. The construction cost estimate is \$5.6 million. Staff has progress meeting with the design consultant, HydroScience, on a bi-weekly basis. HydroScience will provide 100% plans by end of January. Staff requested to add air blowers and extend air piping for the new aerobic digesters (versus mechanical aerators).

Agenda Item

DATE: January 19, 2023

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Engineering Department

RE: Other Updates

Copper Valley Town Square

Staff have met with representatives of CV Development Partners LLC to continue on-going discussions on key issues. These include planned redevelopment of the Copper Valley Square complex, and future development of the Sawmill subdivision. The discussion includes requirements for facility improvements including a permanent sewer force main and new lift station on Little John Road to serve Copper Valley Square (convey sewer to the wastewater plant) as well as rehabilitation of the existing lift station within Town Square. Also, a new Reeds Turnpike Water Booster Pump Station is needed to increase potable water delivery to Copperopolis and Copper Valley Square. Staff has reviewed a updated pre-design report for a sewer force main to serve the project. CV Development Partners has retained Weber Ghio to provide final design for the lift station and water booster pump station.

Copper Valley (Saddle Creek 7B)

A 2-year warranty bond needs to be secured by the developer before taking this to the Board of Directors for completion and acceptance, which is scheduled for January 25th.

Gold Creek Subdivision Unit 3

The owner was notified on October 19th by letter with a list of outstanding punchlist items prior to project acceptance by CCWD. Punchlist items include furnishing of a 2-year warranty bond and resolution of a cost share for offsite improvements to increase the capacity of the Huckleberry Lift Station. Staff has estimated \$1,123,000 in necessary improvements to Huckleberry Lift Station with a cost share to Gold Creek Unit 3 of \$140,474. Once all punchlist items are corrected, staff can bring the project before the Board for final transfer and acceptance by CCWD.

Jenny Lind Elementary School Force Main Project

This project includes a 20,000-ft sewer force main from the Jenny Lind Elementary School to a connection point with CCWD existing sewer system near Vista Del Lago. The project is being funded by the Clean Water State Revolving Fund (CWSRF) and CCWD has entered into a prior Letter Agreement with the School Board. Staff and KASL continue to discuss the design of the sewer force main, primary lift station at the Jenny Lind Elementary School and possible locations for a secondary/intermediate lift station near Berkesey Drive and Silver Rapids Road. Property acquisition for the secondary lift station

is a key issue. The School District's representative, Hugh Logan, KASL and CCWD will continue to coordinate to ensure an effective project. The new facilities will provide a future ability to provide sewer service to some lots along Berkesey Lane.

North Vista Plaza / LGI Homes

LGI Homes completed a sewer shed analysis as requested by the District. CCWD provided comments on design elements of LGI's plans and LGI completed amendments to those plans. Staff is reviewing the resubmitted plans and will be returning final comments. LGI Homes has retained Coleman Engineering to provide final design of the sewer lift stations. Staff discussed CCWD's design requirements with Coleman Engineering. Also, District Staff reviewed the applicability of the Bond Opportunities for Land Development (BOLD Program) as a financing mechanism for fees associated with the Project. The Water and Wastewater Facilities Agreement was approved by the Board at the December 14th meeting.

Tri-Dam Lake Tulloch Day Use Area

The District is working with Tri-Dam to approve service connections (W&WW) to their newly constructed day-use area in Copperopolis. Concurrently, the District is working to secure an easement from the neighboring property owner to improve the water main in their parking lot to secure water service to all the customers in proximity.