



ENGINEERING COMMITTEE

AGENDA

Committee Meeting:
Tuesday, May 5, 2020
2:00 PM - WebEx

Calaveras County Water District
120 Toma Court / P.O. Box 846
San Andreas, California 95249

Based on guidance from the California Governor's Office and Department of Public Health, in order to minimize the potential spread of the COVID-19 virus, the Calaveras County Water District will convene its public Committee Meetings via teleconference.

[Join meeting](#)

Or join by phone [+1-408-418-9388](tel:+14084189388) Meeting number (access code): 623 514 160

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at (209) 754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility for this meeting. Any documents that are made available to the Committee before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for public review.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. **PUBLIC COMMENT**

At this time, members of the public may address the Committee on any non-agendized items. The public is encouraged to work through staff to place items on the agenda for consideration by the Committee. Comments are limited to three (3) minutes per person.

2. **APPROVAL OF MINUTES**

- March 3, 2020

3. **NEW BUSINESS**

- 3a Presentation / Discussion Update Regarding District's New Operations Maintenance Facility Bid Results and Options Moving Forward (Kevin Williams, Civil Engineer)

Committee Members

Jeff Davidson, Director

Russ Thomas, Director

3b* Review of Proposed District Actions to Facilitate Continued Wastewater Effluent Disposal on Closed Golf Courses (Damon Wyckoff, Director of Operations)

3c Presentation/Discussion of Calaveras County Water District's FY 2020-21 5-Year Capital Improvement Project (CIP) Program (Charles Palmer, District Engineer)

4. **OLD BUSINESS**
Nothing to report

5. **FUTURE AGENDA ITEMS**

6. **NEXT COMMITTEE MEETING**
Tuesday, July 7, 2020 at 2:00 p.m.

7. **ADJOURNMENT**

* No Paperwork included in package

CCWD ENGINEERING COMMITTEE
CALAVERAS COUNTY WATER DISTRICT
March 3, 2020

The Engineering Committee of CALAVERAS COUNTY WATER DISTRICT met at the CCWD Offices in San Andreas, California, at approximately 2:00 p.m.

The following Directors/Committee Members were present:

Jeff Davidson
Russ Thomas

Also present:

Michael Minkler	General Manager
Charles Palmer	District Engineer
Alesia Danner	Administrative Technician
Damon Wyckoff	Director of Operations
Bob Godwin	Senior Engineer
Jesse Hampton	Plant Operations Manager
Mike Johnson	Ebbetts Pass Dire District
David Powell	S.R. Diversified

1. PUBLIC COMMENT:
There was no public comment.

2. APPROVAL OF MINUTES:

The January 14, 2020 Minutes were approved as presented by a motion from Director Thomas, and seconded by Director Davidson.

3. NEW BUSINESS:

3a Discussion/ Increasing the Per Hydrant Payment for Fire Department Operation and Maintenance (O&M) (Damon Wyckoff, Director of Operations)

Mr. Wyckoff discussed the request received from the Ebbetts Pass Fire District expressing their desire to increase the fire hydrant inspection fees that are currently being charged to the district. In addition, the top priority would be a collective effort to repair all out of service hydrants.

Director Davidson advised staff to confirm that the District maintains an adequate training program for opening and closing hydrants available to the fire districts.

3b Presentation/Discussion Recommendations for Slurry Line Improvements
(Sam Singh, Senior Engineering Technician)

Mr. Singh provided a presentation on the history of the Slurry line and the requirements necessary to get water flowing through this line. Will need to install PRVs to help control the high PSI. There are several costs considerations for testing, improvements, maintenance, monitoring and easement acquisitions.

Director Thomas advised staff to look for funding availability for fire suppression and other possible avenues of funding.

3c Presentation/Discussion Concerning the Arnold Wastewater Treatment Facility, District 4 (Bob Godwin, Senior Engineer)

Mr. Godwin provided a presentation on the overview of the Arnold wastewater treatment plant and total number of accounts being served. Currently there is a flow rate of 196,000 gallons per day. To meet the current rate of flow the clarifier needs to be upgraded or replaced by either adding a second clarifier and running two clarifiers or enlarging/upgrading the current one by using a secondary temporary clarifier until the upgraded one is completed.

3d Presentation / Discussion of FY 2020-21 Capital Improvement Program Schedule and Priorities (Charles Palmer, District Engineer)

Mr. Palmer provided a presentation on the first submittal of the FY 2020-21 CIP program providing the schedules for both water and wastewater. Schedule is being vetted at the Engineering Committee meeting for staff approval for final submittal to the Board and budget placement.

3e ** Discussion/White Pines Historical (Jesse Hampton, Plant Operations Manager)

Mr. Hampton discussed the history of the creation of White Pines Lake/Park, the current conditions of the area and how to go forward. This location has become an expensive asset due to regulatory and water rights issues and infrastructure costs.

Director Davidson inquired if Calaveras County was taking any responsibility in the maintenance and upkeep of the park as the park is leased to the county, and does CCWD have adequate water supply without White Pines lake? Staff was advised to explore alternative options and future costs for these options.

Director Thomas requested a map be provided of the White Pines area for further review.

3f ** Discussion/Vallecito Headworks CIP (Jesse Hampton, Plant Operations Manager)

Mr. Hampton discussed the need to rename the Wastewater CIP Vallecito Headworks to District Wide Headworks.

4. OLD BUSINESS:
There was nothing to report.

5. FUTURE AGENDA ITEMS:

- Continue with CIP
- Reeds Turnpike Pipeline / Exposed water line

6. NEXT MEETING

Tentatively Scheduled: April 14, 2020 @ 2:00 p.m.

7. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:58 p.m.

Respectfully submitted,

Alesia Danner
Administrative Technician

Agenda Item

DATE: May 5th, 2020

TO: Engineering Committee
Michael Minkler, General Manager

FROM: Kevin Williams, Civil Engineer

RE: Presentation/Discussion Update Regarding District's New Operations
Maintenance Facility Bid Results and Options Moving Forward

SUMMARY:

The Calaveras County Water District received bids for the New Operations and Maintenance Building and Warehouse. The Bid was divided up into three separate schedules: A) Site Work, Grading, Site Utilities, and Paving, B) Building Slab and Metal Building, and C) Interior Walls, Electrical, Plumbing, Lighting, and HVAC. The bid incorporated the desired features that were brought from engineering, operations, and management staff and recommendations of this committee. The Project was advertised in the local newspaper, plan rooms, Public Purchase and District websites and had a large amount of interest from prospective bidders and subcontractors.

There were four General Contractors that submitted Bids on the Project. A detailed bid tabulation is attached. The criteria for determining the lowest bidder on the project was the Contractor with lowest overall bid or a combination of the next three lowest bid schedules. Roland Construction from Stockton had the lowest overall bid and Roland's bid was lower than a combination of the next lowest bidders' individual schedules. Local Contractor K.W. Emerson was the listed grading subcontractor on Roland Construction's bid. The overall bid submitted by Roland Construction was \$2.5 Million which included: \$967,177 for Schedule A (Site Work, Grading, Utilities and Paving), \$711,068 for Schedule B (Metal Building and Slab), and \$892,764 in Schedule C (Interior Walls, Electrical, Pumping, Lighting, and HVAC). The bids amount for Schedule B (Building Slab and Metal Building) had a small margin between the lowest three bids at \$711,068, \$712,758.38, and \$775,198.00 respectively.

Staff has contacted Roland Construction regarding the bid, and Roland Construction is willing to work with the District to value engineer the project, to reduce project costs and potentially find an opportunity to move forward with an amended contract. According to Roland Construction they have been successful in the past with value engineering projects for other public agencies. Staff has reviewed the bid provided by Roland Construction and has identified items on the project that can be modified or eliminated to reduce costs, some of these items are listed below:

- Reduce Concrete Site work and replace with Asphalt Pavement.
- Reduce the number of floor drains in the Building.
- Change gates from automatic ornamental gates to standard chain-link.
- Change sanitary sewer pumping system to smaller packaged system.
- Change from buried communication lines to a wireless system.
- Modify buried downspout drains.
- Reduce length of drainage and number of drainage structures.
- Eliminate gas service to building.
- Modify and simplify site footprint and grading limits.
- Reduce size and footprint of building, make expandable a future date.
- Increase primary frame spacing and reduce number of column footings.
- Eliminate depressed slab in fluid storage area.
- Simplify plumbing and number of plumbing fixtures
- Reduce number of Bollards.
- Eliminate most of Schedule C including internal offices (modular office space could be added in future as needed).
- Elimination of thickened slab for utilities and internal walls.
- Eliminate one of the bathrooms with ability to add second bathroom in the future.
- Eliminate Internal walls insulation.
- Eliminate Heating and Air Conditioning (HVAC) to internal office areas.
- Reduce scope of electrical and lighting.

FINANCIAL CONSIDERATIONS:

Attachments: Bid Tabulation

CALAVERAS COUNTY WATER DISTRICT

NEW MAINTENANCE AND WAREHOUSE BUILDING PROJECT CIP # 11101

BID ABSTRACT (COMPARE LOWEST OVERALL TO INDIVIDUAL SCHEDULES)

				Roland Construction (Lowest Overall Bidder)		Next Lowest Bidder Sch. A (Robert E. Boyer)	
ITEM #	UNIT	QUNTY	DESCRIPTION	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
SCHEDULE A							
1A	LS	1	Mobilization & Demobilization For Bid Schedule A Activities	\$152,805.00	\$152,805.00	\$126,522.00	\$126,522.00
2A	LS	1	Grading Permit Actual Cost of Grading Permit	\$1,297.00	\$1,297.00	\$1,297.00	\$1,297.00
3A	LS	1	Storm Water Pollution Preventions (SWPPP/BMP)	\$33,925.00	\$33,925.00	\$58,511.00	\$58,511.00
4A	LS	1	Demolition, Clearing and Stripping	\$12,599.00	\$12,599.00	\$91,671.00	\$91,671.00
5A	LF	580	Storm Drains	\$152.00	\$88,165.00	\$130.49	\$75,684.20
6A	EA	4	Drainage Inlets (36" Drop Inlet)	\$5,681.00	\$22,724.00	\$9,627.17	\$38,508.68
7A	LS	1	Sidewalk with Curb/Gutter Sidewalk on George Reed Drive. Includes	\$16,539.00	\$16,539.00	\$36,461.34	\$36,461.34
8A	LS	1	Floor Drains Piping and Industrial Sumps	\$70,157.00	\$70,157.00	\$54,013.39	\$54,013.39
9A	SF	7,830	Concrete Flatwork with Reinforcement Does Not Include Building Slab)	\$58,529.00	\$58,529.00	\$11.94	\$93,490.20
10A	TON	300	Asphalt Paving	\$149.50	\$44,850.00	\$184.03	\$55,209.00
11A	TON	1,655	Class 2 Aggregate Base (Under Site Concrete, Building Slabs,	\$41.40	\$68,517.00	\$82.84	\$137,100.20
12A	LS	1	Earthwork - Site Construction (Includes All Earthwork and Grading Required	\$161,936.00	\$161,936.00	\$387,479.38	\$387,479.38
13A	LF	230	Chain Link Fencing (6-Ft Fence with 3 Strands of Barbed Wire)	\$87.11	\$20,036.00	\$71.86	\$16,527.80
14A	LS	1	30-Ft Wide Ornamental Motor Operated Gate Same Style as existing Gates at CCWD	\$32,536.00	\$32,536.00	\$40,641.17	\$40,641.17
15A	EA	3	6-Ft High Ornamental Man Gate Same Style as Existing Gates at CCWD	\$13,210.00	\$39,630.00	\$8,511.48	\$25,534.44
16A	TON	45	1/4 Ton Rip Tap Rock Slope Protection	\$107.91	\$4,896.00	\$193.23	\$8,695.35
17A	LS	1	New 1" Water From Existing Meter to Building	\$6,529.00	\$6,529.00	\$8,051.40	\$8,051.40
18A	LS	1	New Gas and Electrical Service Lines from Existing Meter to Building	\$30,321.00	\$30,321.00	\$5,751.00	\$5,751.00
19A	LF	280	Sanitary Sewer System	\$135.20	\$37,856.00	\$164.15	\$45,962.00
20A	EA	4	Buried Downspout Drain Lines	\$8,808.50	\$35,234.00	\$2,300.40	\$9,201.60
21A	LS	1	2" PVC Communication Conduits	\$28,096.00	\$28,096.00	\$80,514.00	\$80,514.00
					\$967,177.00		\$1,396,826.15
				Roland (Lowest Overall Bidder)		Next Lowest Bidder Sch. B (Robert E. Boyer)	
ITEM #	UNIT	QUNTY	DESCRIPTION	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
SCHEDULE B							
1B	LS	1	Mobilization & Demobilization For Bid Schedule B Activities	\$120,127.00	\$120,127.00	\$57,510.00	\$57,510.00
2B	LS	1	Building Permit Actual Cost of Building Permit	\$6,800.00	\$6,800.00	\$6,800.00	\$6,800.00
3B	LS	1	Metal Building Materials Delivery Cannot Exceed 25% of Total Value of Schedule B. Includes Cost of Metal Building Design	\$181,924.00	\$181,924.00	\$279,340.00	\$279,340.00
4B	LS	1	Metal Building Concrete Slab and Footings	\$152,713.00	\$152,713.00	\$143,775.00	\$143,775.00
5B	LS	1	Metal Building Construction Complete Metal Building	\$228,847.00	\$228,847.00	\$186,226.58	\$186,226.58
6B	EA	34	3-Inch Removable Guard Post CCWD Standard Dwg G12	\$607.56	\$20,657.00	\$1,150.20	\$39,106.80
					\$711,068.00		\$712,758.38
				Roland (Lowest Overall Bidder)		Lowest Bidder on Sch. C (DF Construction)	
ITEM #	UNIT	QUNTY	DESCRIPTION	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
SCHEDULE C							
1C	LS	1	Mobilization & Demobilization For bid Schedule C Activities. Cannot Exceed 10% of total amount for Schedule C	\$188,920.00	\$188,920.00	\$1,200.00	\$1,200.00
2C	LS	1	Wood Framing	\$49,010.00	\$49,010.00	\$47,000.00	\$47,000.00
3C	LS	1	Cold Formed Metal Framing	\$24,971.00	\$24,971.00	\$31,000.00	\$31,000.00
4C	LS	1	Interior Finishes Building Insulation	\$221,295.00	\$221,295.00	\$182,700.00	\$182,700.00
5C	LS	1	(Interior Walls/Ceiling)	\$9,488.00	\$9,488.00	\$6,600.00	\$6,600.00
6C	LS	1	Plumbing	\$88,111.00	\$88,111.00	\$82,800.00	\$82,800.00
7C	LS	1	Interior Doors and Windows	\$29,414.00	\$29,414.00	\$33,715.00	\$33,715.00
8C	LS	1	Lighting	\$87,924.00	\$87,924.00	\$66,336.00	\$66,336.00
9C	LS	1	Electrical	\$162,640.00	\$162,640.00	\$110,048.00	\$110,048.00
10C	LS	1	HVAC	\$30,901.00	\$30,901.00	\$78,000.00	\$78,000.00
			Contractor added Item			\$103,200.00	\$103,200.00
					\$892,674.00		\$742,599.00
TOTALS							
SCHEDULE A					\$967,177.00		\$1,396,826.15
SCHEDULE B					\$711,068.00		\$712,758.38
SCHEDULE C					\$892,674.00		\$742,599.00
ACCUMULATED TOTALS: A,B,C					\$2,570,919.00		\$2,852,183.53
OVERALL BID LOWER THAN COMBINATION OF NEXT LOWEST INDIVIDUAL BIDS COMBINED							

CALAVERAS COUNTY WATER DISTRICT							
NEW MAINTENANCE AND WAREHOUSE BUILDING PROJECT CIP # 11101							
BID ABSTRACT SCHEDULE A (2 LOWEST)							
				Roland Construction		Robert E Boyer Construction	
ITEM				UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
#	WORK / MATERIAL	UNIT	QUNTY	(Figures)	(Figures)	(Figures)	(Figures)
1A	Mobilization & Demobilization For Bid Schedule A Activities	LS	1	\$152,805.00	\$152,805.00	\$126,522.00	\$126,522.00
2A	Grading Permit Actual Cost of Grading Permit	LS	1	\$1,297.00	\$1,297.00	\$1,297.00	\$1,297.00
3A	Storm Water Pollution Preventions (SWPPP/BMP)	LS	1	\$33,925.00	\$33,925.00	\$58,511.00	\$58,511.00
4A	Demolition, Clearing and Stripping	LS	1	\$12,599.00	\$12,599.00	\$91,671.00	\$91,671.00
5A	Storm Drains	LF	580	\$152.00	\$88,165.00	\$130.49	\$75,684.20
6A	Drainage Inlets (36" Drop Inlet)	EA	4	\$5,681.00	\$22,724.00	\$9,627.17	\$38,508.68
7A	Sidewalk with Curb/Gutter Sidewalk on George Reed Drive. Includes Accessible Curb Ramps	LS	1	\$16,539.00	\$16,539.00	\$36,461.34	\$36,461.34
8A	Floor Drains Piping and Industrial Sumps	LS	1	\$70,157.00	\$70,157.00	\$54,013.39	\$54,013.39
9A	Concrete Flatwork with Reinforcement Does Not Include Building Slab)	SF	7,830	\$58,529.00	\$58,529.00	\$11.94	\$93,490.20
10A	Asphalt Paving	TON	300	\$149.50	\$44,850.00	\$184.03	\$55,209.00
11A	Class 2 Aggregate Base (Under Site Concrete, Building Slabs, Sidewalks, and Asphalt)	TON	1,655	\$41.40	\$68,517.00	\$82.84	\$137,100.20
12A	Earthwork - Site Construction (Includes All Earthwork and Grading Required for Project Except Building Columns Footings)	LS	1	\$161,936.00	\$161,936.00	\$387,479.38	\$387,479.38
13A	Chain Link Fencing (6-Ft Fence with 3 Strands of Barbed Wire) Installed per CCWD Standard Drawing G07	LF	230	\$87.11	\$20,036.00	\$71.86	\$16,527.80
14A	30-Ft Wide Ornamental Motor Operated Gate Same Style as existing Gates at CCWD Headquarters	LS	1	\$32,536.00	\$32,536.00	\$40,641.17	\$40,641.17
15A	6-Ft High Ornamental Man Gate Same Style as Existing Gates at CCWD Headquarters	EA	3	\$13,210.00	\$39,630.00	\$8,511.48	\$25,534.44
16A	1/4 Ton Rip Tap Rock Slope Protection	TON	45	\$107.91	\$4,896.00	\$193.23	\$8,695.35
17A	New 1" Water From Existing Meter to Building	LS	1	\$6,529.00	\$6,529.00	\$8,051.40	\$8,051.40
18A	New Gas and Electrical Service Lines from Existing Meter to Building	LS	1	\$30,321.00	\$30,321.00	\$5,751.00	\$5,751.00
19A	Sanitary Sewer System	LF	280	\$135.20	\$37,856.00	\$164.15	\$45,962.00
20A	Buried Downspout Drain Lines	EA	4	\$8,808.50	\$35,234.00	\$2,300.40	\$9,201.60
21A	2" PVC Communication Conduits	LS	1	\$28,096.00	\$28,096.00	\$80,514.00	\$80,514.00
					\$967,177.00		\$1,396,826.15
	Subcontractors				Russ F. Carroll		
					K.W. Emerson		
					Stockton Fencing		
					GN Plumbing		
					Collins Electric		

CALAVERAS COUNTY WATER DISTRICT									
NEW MAINTENANCE AND WAREHOUSE BUILDING PROJECT CIP # 11101									
SCHEDULE B BID ABSTRACT (3 LOWEST)									
				Roland Construction		Robert E Boyer		DF Construction	
ITEM				UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
#	WORK / MATERIAL	UNIT	QUNTY	(Figures)	(Figures)	(Figures)	(Figures)	(Figures)	(Figures)
1B	Mobilization & Demobilization For Bid Schedule B Activities	LS	1	\$120,127.00	\$120,127.00	\$57,510.00	\$57,510.00	\$4,500.00	\$4,500.00
2B	Building Permit Actual Cost of Building Permit	LS	1	\$6,800.00	\$6,800.00	\$6,800.00	\$6,800.00	\$6,800.00	\$6,800.00
3B	Metal Building Materials Delivery Cannot Exceed 25% of Total Value of Schedule B. Includes Cost of Metal Building Design	LS	1	\$181,924.00	\$181,924.00	\$279,340.00	\$279,340.00	\$0.00	\$0.00
4B	Metal Building Concrete Slab and Footings	LS	1	\$152,713.00	\$152,713.00	\$143,775.00	\$143,775.00	\$312,000.00	\$312,000.00
5B	Metal Building Construction Complete Metal Building	LS	1	\$228,847.00	\$228,847.00	\$186,226.58	\$186,226.58	\$441,698.00	\$441,698.00
6B	3-Inch Removable Guard Post CCWD Standard Dwg G12	EA	34	\$607.56	\$20,657.00	\$1,150.20	\$39,106.80	\$300.00	\$10,200.00
					\$711,068.00		\$712,758.38		\$775,198.00
	Subcontractors				Russ F Carroll				

CALAVERAS COUNTY WATER DISTRICT									
NEW MAINTENANCE AND WAREHOUSE BUILDING PROJECT CIP # 11101									
SCHEDULE C BID ABSTRACT (3 LOWEST)									
				DF Construction		Robert E Boyer		Roland Construction	
ITEM				UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
#	WORK / MATERIAL	UNIT	QUNTY	(Figures)	(Figures)	(Figures)	(Figures)	(Figures)	(Figures)
	Mobilization & Demobilization For bid Schedule C Activities. Cannot Exceed 10% of total amount for Schedule C	LS	1	\$1,200.00	\$1,200.00	\$69,012.00	\$69,012.00	\$188,920.00	\$188,920.00
2C	Wood Framing	LS	1	\$47,000.00	\$47,000.00	\$33,930.90	\$33,930.90	\$49,010.00	\$49,010.00
3C	Cold Formed Metal Framing	LS	1	\$31,000.00	\$31,000.00	\$123,473.97	\$123,473.97	\$24,971.00	\$24,971.00
4C	Interior Finishes	LS	1	\$182,700.00	\$182,700.00	\$189,673.73	\$189,673.73	\$221,295.00	\$221,295.00
5C	Building Insulation (Interior Walls/Ceiling)	LS	1	\$6,600.00	\$6,600.00	\$4,543.29	\$4,543.29	\$9,488.00	\$9,488.00
6C	Plumbing	LS	1	\$82,800.00	\$82,800.00	\$109,269.00	\$109,269.00	\$88,111.00	\$88,111.00
7C	Interior Doors and Windows	LS	1	\$33,715.00	\$33,715.00	\$115,069.46	\$115,069.46	\$29,414.00	\$29,414.00
8C	Lighting	LS	1	\$66,336.00	\$66,336.00	\$67,861.80	\$67,861.80	\$87,924.00	\$87,924.00
9C	Electrical	LS	1	\$110,048.00	\$110,048.00	\$103,518.00	\$103,518.00	\$162,640.00	\$162,640.00
10C	HVAC	LS	1	\$78,000.00	\$78,000.00	\$32,741.59	\$32,741.59	\$30,901.00	\$30,901.00
	Contractor added Item			\$103,200.00	\$103,200.00				
					\$742,599.00		\$849,093.74		\$892,674.00
	Subcontractors				No Listings			Commercial Specialty	
								GN Plumbing	
								Comfort Air	
								Collins Electric	

Agenda Item

DATE: May 5, 2020

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

FROM: Damon Wyckoff, Director of Operations

SUBJECT: Review of Proposed District Actions to Facilitate Continued Wastewater Effluent Disposal on Closed Golf Courses

SUMMARY

The Calaveras County Water District (CCWD) relies on three different golf courses to dispose of treated wastewater Title 22 tertiary effluent:

- **Forest Meadows Golf Course** – effluent disposal for the Forest Meadows Wastewater Treatment Plant that serves the community of Forest Meadows (approximately 600 service connections) off Highway 4 between Murphys and Arnold.
- **La Contenta Golf Course** – effluent disposal for the La Contenta Wastewater Treatment Plant that serves the community of La Contenta (approximately 1,020 service connections) off Highway 26 near Rancho Calaveras.
- **Copper Valley Golf Course** – effluent disposal for the community of Copperopolis (approximately 1,800 service connections) off Little John Road in Copperopolis.

These Golf Courses (and the Copper Valley CSD) are important partners that provide CCWD with an effective means to dispose of tertiary treated wastewater effluent. This operation reduces overall concerns associated with effluent storage and the possibility of illegal discharges during years of heavy precipitation and/or 100-year precipitation cycles. Using reclaimed water for golf course irrigation also reduces the demand for raw water supplies, leaving more fresh water available for other uses. The Golf Courses benefit in that they receive a reliable supply of inexpensive irrigation water which in turn improves their bottom line. Without these mutually beneficial relationships with our golf course partners, the District would potentially have to develop other means of treated effluent disposal that may be costly.

The District has dealt with the fact that its golf course partners may close from time to time for various reasons, such as the recently mandated closures due to COVID-19 or other economic or business challenges. In fact, La Contenta has gone out of business in the past and Forest Meadows is currently closed and is on the market. In the unfortunate event of a golf course closure, the owner of the property is still responsible for discharging the District's treated effluent in a manner that complies with the Waste Discharge Requirements (WDRs) issued by the State Water Quality Control Board (Water Board). The golf course owner has strong incentive to continue to irrigate and maintain the golf course even after a closure to maintain the value of the property and to avoid penalties from the Water Board. Such is the case in Forest Meadows

where the golf course owner continues to collaborate with the District and is honoring its obligations under the WDR even after the course closure.

In the unlikely event that a golf course closes and the property owner fails to satisfy its obligations to dispose of the District's treated effluent due, CCWD may have to step in and operate the golf course irrigation system to avoid storage pond spills. Accordingly, District staff have contemplated the work effort and potential costs associated with maintaining golf course irrigation at the three sites to ensure the continuity of District operations while maintaining responsible effluent supply management to protect public health and safety. The District's work effort will depend on the unique circumstances of the course and therefore it is difficult to project costs with specificity. It is also important to note that if the District were forced to step in and operate a golf course's irrigation system, the District's operations and maintenance activities would be limited to sprayfield operations for the purpose of disposing of treated water effluent, not golf course maintenance. The District would operate the property as a sprayfield in the most cost-effective manner possible and would not use District resources for the purpose of maintaining the golf course itself.

District operational considerations would likely include:

- Irrigation system inspection and testing to understand system operation and evaluate the most cost-effective way to dispose of the District's treated effluent. This may include reducing the size of irrigated acreage to the minimum necessary for the District's needs. Staff estimates this would take three operations staff-members over one to two days.
- Maximum of twelve days per month during the irrigation season for grounds maintenance, irrigation system repairs, rotation of fields, and inspections for ponding and adequate percolation.
- Minimal maintenance of the sprayfield during the offseason when effluent disposal is not needed.
- Power and fuel costs.
- Equipment availability (access to golf course equipment if needed).

In a worst case scenario, if the District were compelled – due to COVID-19 closures or other reasons – to operate the three golf courses as sprayfields simultaneously during the summer to ensure the adequate disposal of wastewater effluent, the District's additional labor would be accounted for in the operations budget. Budgeted staff time would have to be re-allocated from other District efforts in order to complete the golf course work and additional staff may be needed, although possibly only during the irrigation season. Power costs from operating the golf course pump stations would also be significant, even at CPPA rates.

FINANCIAL CONSIDERATIONS

The total monthly O&M costs associated with the simultaneous operation of all three golf courses to ensure treated wastewater effluent disposal are estimated to be between \$12,000 and \$16,000 per month during the peak irrigation season and significantly less than that for the rest of the year. CCWD would likely seek to recover these costs from the property owner or out of the value of the property. It should be emphasized that this is a worst-case scenario and the District does not anticipate any of its golf course partners ceasing irrigation activities to the extent that the District is forced to take over.

Agenda Item

DATE: May 5, 2020

TO: Engineering Committee
Michael Minkler, General Manager

FROM: Charles Palmer, District Engineer

SUBJECT: Presentation/Discussion of Calaveras County Water District's FY 2020-21
5-Year Capital Improvement Project (CIP) Program

SUMMARY

The District's 5-Year Capital Improvement Project (CIP) Program is updated each year prior to being inserted into the next fiscal year budget. The proposed 5-Year CIP program includes both water and wastewater segments and targets critical priorities: worker safety, reliability and redundancy, expansion of capacity for future growth, hazard mitigation (wildfire, flood, etc.), water supply, regulatory/permit compliance, and renovation and replacement (R&R) of aging facilities. The proposed FY 2020-21, 5-Year CIP program water and wastewater segments are shown in attached Tables 'A' and 'B'.

The CIP is funded by Capital R&R revenues, expansion fees, grants and other sources. Through the Capital R&R program – which annually generates about \$3 million for water and \$1 million for wastewater projects. The District is committed to systematic reinvestment in its water and wastewater facilities to maintain reliability, preserve functionality, and comply with regulations.

As shown in Tables A and B, the cost to fully fund the District's CIP far exceeds the District's resources. The District has been successful on several recent grant applications that will help close that gap, but a significant shortfall remains. In response, District staff are developing a comprehensive long-term CIP financing plan that will leverage R&R funds and make it possible to increase the pace of infrastructure improvements. An immediate effort is underway to explore financing options for near-term projects such as the Techite Line, Copperopolis collection system improvements, and the A to B transmission main in Jenny Lind. These are critical projects, among others, that the District cannot afford without outside financing. The borrowing environment is currently favorable to the District so we should be able to secure long-term financing without adding significant cost to the projects. The Director of Administrative Services recently issued an RFP seeking proposals from firms that can provide financial advising services for infrastructure financing to ensure we are maximizing our position.

District staff, in collaboration with ACWA and our federal lobbyist Mia O'Connell, are also advocating on the legislative front to ensure we take advantage of any federal infrastructure funds that may be available. This effort includes a request to increase our WRDA authorization from \$3 million to over \$13 million for much needed wastewater treatment plant upgrades. We hope that request will move forward in the near future and then we will seek an appropriation in the next federal budget to put that money to work. Additionally, the District has compiled a list of projects that could be completed in the near-term to inform our own advocacy efforts and to assist ACWA in an effort to quantify the scope of infrastructure assistance needed for water agencies in California.

CCWD has a long-standing funding gap in its CIP. The establishment of dedicated R&R funding has helped make resources available to fund infrastructure projects, but District staff recognize the need to increase the pace of that progress. An aggressive legislative effort combined with a long-term financing plan will maximize the productivity of each R&R dollar and help close the gap in the CIP.

FINANCIAL CONSIDERATIONS

The updated 5-Year CIP program will be incorporated into the FY 2020-21 annual budget for adoption prior to July 1, 2020. R&R funds will be utilized to pay for some of the projects budgeted for the upcoming fiscal year, but District staff are working to identify sources of financing for the larger projects.

Attachments:

Table 'A' – FY 2020-21, 5-Year CIP Water Segment (2-pages)

Table 'B' – FY 2020-21, 5-Year CIP Wastewater Segment (1-page)

TABLE 'A' - WATER SEGMENT
CALAVERAS COUNTY WATER DISTRICT
5-YEAR CAPITAL IMPROVEMENT PROGRAM / FISCAL YEARS 2020-21 THRU 2024-25

PROJECT DESCRIPTION	TOTAL PROJECT COSTS (\$1,000's)	PRIOR COSTS THRU FY 19-20 (\$1,000's)	FUTURE CIP COSTS (\$1,000's)	SCHEDULE						PROJECTED CIP COSTS (\$1,000's)							
				FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	Future (> 5-yr)		
EBBETTS PASS																	
11085 Reach 1 Pipeline Replacement	\$ 8,353	\$ 4,853	\$ 3,500	■	■							\$ 3,500					
11084 Techite Pipeline Replacement	\$ 2,463	\$ 413	\$ 2,050		■	■	■					\$ 1,950	\$ 100				
11095 Redwood Tanks / Cal-OES HMGP	\$ 3,038	\$ 38	\$ 3,000		■	■	■	■				\$ 500	\$ 1,500	\$ 1,000			
11083L Larkspur Tank Replacement	\$ 373	\$ 23	\$ 350			■	■	■				\$ 50	\$ 150	\$ 150			
Larkspur Pump Station Rehab./Electrical	\$ -	\$ -	\$ 300		■	■						\$ 300					
11083S Sawmill & Hunters Tanks Rehab.	\$ 1,510	\$ -10	\$ 1,500				■	■	■	■				\$ 300	\$ 600	\$ 600	
- Pinebrook Tank Rehabilitation	\$ 400	\$ -	\$ 400														\$ 400
11099 Meadowmont Pump Station Rehab.	\$ 234	\$ 84	\$ 150	■	■	■						\$ 150					
11103 Hunters Raw Water Pump Replacement	\$ 2,005	\$ 5	\$ 2,000	■	■	■											\$ 2,000
11098 Hunters WTP Filter Rehab.	\$ 480	\$ 480	\$ -	■	■	■											
11108 Big Trees 1, 4 & 5 Pump Station Replace	\$ 850	\$ -	\$ 850		■	■	■	■	■	■				\$ 75	\$ 475	\$ 300	
- Avery Pumps / Motor Control Soft Starts	\$ 60		\$ 60		■	■						\$ 60					
JENNY LIND																	
11066g Kirby, Gabor, Garner Service Lines	\$ 625	\$ 375	\$ 250	■	■							\$ 250					
11088 A-B Transmission Pipeline	\$ 5,513	\$ 13	\$ 5,500	■	■	■	■	■				\$ 500	\$ 3,000	\$ 2,000			
11092 Jenny Lind WTP Pretreatment	\$ 5,067	\$ 5,027	\$ 40	■	■	■	■	■				\$ 40					
- Filters 3, 4 & 5 Rehab. / Coating	\$ 660		\$ 660		■	■	■					\$ 330	\$ 330				
- Jenny Lind Tanks A, B, E & F Rehab.	\$ 2,000		\$ 2,000														\$ 2,000
- Jenny Lind Raw Water Intake Structure	\$ 4,000		\$ 4,000														\$ 4,000
- Jenny Lind Tank C Replacement	\$ 500		\$ 500		■	■											\$ 500
11083j Clearwell #2 Repair & Paint	\$ 216	\$ 16	\$ 200						■	■					\$ 200		
COPPER COVE																	
11104 Tulloch North Loop/Submerged Crossing	\$ 3,500		\$ 3,500		■	■											\$ 3,500
11110 Reeds Turnpike Pump Station	\$ 350		\$ 350		■	■	■					\$ 50	\$ 300				
11111 Tank B Pump Station Rehab.	\$ 900		\$ 900		■	■	■	■					\$ 150	\$ 750			
11083C Tank B & Clearwell Rehab.	\$ 1,161	\$ 11	\$ 1,150		■	■	■	■					\$ 150	\$ 1,000			
- SCADA Improvements	\$ 100		\$ 100		■	■						\$ 100					
- Zone B-C Trans. Pipeline & Pump Station	\$ 9,000		\$ 9,000														\$ 9,000
SUBTOTAL (PAGE 1 OF 2)	\$ 53,358	\$ 11,348	\$ 42,310									\$ 7,780	\$ 5,680	\$ 5,275	\$ 1,275	\$ 900	\$ 21,400

DESIGN PHASE CONSTRUCTION PHASE

TABLE 'A' - WATER SEGMENT (CONTINUED)

CALAVERAS COUNTY WATER DISTRICT
5-YEAR CAPITAL IMPROVEMENT PROGRAM / FISCAL YEARS 2020-21 THRU 2024-25

PROJECT DESCRIPTION	TOTAL PROJECT COSTS (\$1,000's)	PRIOR COSTS THRU FY 2019-20 (\$1,000's)	FUTURE CIP COSTS (\$1,000's)	SCHEDULE						PROJECTED CIP COSTS (\$1,000's)						
				FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	Future (> 5-yr)	
WEST POINT																
11106 Backup Water Filter	\$ 2,000		\$ 2,000		■	■	■	■			\$ 500	\$ 500	\$ 1,000			
- Acorn Pump Station & Trans. Pipeline	\$ 2,000		\$ 2,000													\$ 2,000
- Middle Fork Pump Station	\$ 1,600		\$ 1,600													\$ 1,600
11107 SCADA / PLC / Radio Improvements	\$ 100		\$ 100			■	■						\$ 40	\$ 60		
SHEEP RANCH																
- Water Plant Replacement	\$ 800		\$ 800					■	■				\$ 100	\$ 700		
- Distribution System Replacement	\$ 750		\$ 750					■	■				\$ 50	\$ 700		
- SR Clearwell Rehab. / Repair & Paint	\$ 350		\$ 350					■	■				\$ 25	\$ 325		
11112 White Pines Dam Blanket Drain Repairs	\$ 100		\$ 100		■	■					\$ 100					
WALLACE																
11100 SCADA / PLC / Radio Improvements	\$ 101	\$ 1	\$ 100					■	■				\$ 40	\$ 60		
11083W Wallace Water Tanks / Repair & Paint	\$ 456	\$ 6	\$ 450					■	■				\$ 50	\$ 400		
OTHER / VARIOUS																
11101 District Corp Yard	\$ 1,720	\$ 220	\$ 1,500	■	■	■	■				\$ 1,500					
11096 AMR Radio Read Meters	\$ 6,112	\$ 112	\$ 6,000	■	■	■	■				\$ 2,000	\$ 2,000	\$ 2,000			
- Misc. Road Repairs / Cal-OES	\$ 65		\$ 65		■	■					\$ 65					
10029 Slurry Line Improvements	\$ 80		\$ 80		■	■					\$ 80					
SUBTOTAL (PAGE 2 OF 2)	\$ 16,234	\$ 339	\$ 15,895								\$ 4,245	\$ 2,500	\$ 3,130	\$ 695	\$ 1,725	\$ 3,600
TOTAL (BOTH PAGES)	\$ 69,592	\$ 11,687	\$ 58,205								\$ 12,025	\$ 8,180	\$ 8,405	\$ 1,970	\$ 2,625	\$ 25,000

DESIGN PHASE CONSTRUCTION PHASE

TABLE 'B' - WASTEWATER SEGMENT
CALAVERAS COUNTY WATER DISTRICT
5-YEAR CAPITAL IMPROVEMENT PROGRAM / FY 2020-21 THRU 2024-25

PROJECT DESCRIPTION	TOTAL PROJECT COSTS (\$1,000's)	PRIOR COSTS THRU FY 19-20 (\$1,000's)	FUTURE CIP COST (\$1,000's)	SCHEDULE						PROJECTED CIP COSTS (\$1,000's)									
				FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	Future (> 5-yr)				
ARNOLD																			
15095 Clarifier, RAS/WAS & Eff.Pumps, Digester	\$ 2,010	\$ 10	\$ 2,000											\$ 500	\$ 750	\$ 750			
15096 Leach Field Improvements	\$ 702	\$ 2	\$ 700											\$ 100	\$ 300	\$ 300			
- Tertiary Filter Rehab.	\$ 250		\$ 250											\$ 20	\$ 130	\$ 100			
- Effluent Storage Tank Rehab.	\$ 250		\$ 250											\$ 20	\$ 130	\$ 100			
- Lift Station 2 & 3 Improvements	\$ 1,000		\$ 1,000													\$ 250	\$ 750		
LA CONTENTA																			
15092 Huckleberry Lift Station Rehab.	\$ 153	\$ 88	\$ 65											\$ 65					
- La Contenta Spray Field Improvements	\$ 200		\$ 200											\$ 200					
15097 WWTP Biolac, Clarifier & UV Improvements	\$ 4,000		\$ 4,000												\$ 300	\$ 300	\$ 1,700	\$ 1,700	
COPPER COVE																			
15094 WWTP Secondary, Tertiary & UV Improv.	\$ 13,016	\$ 16	\$ 13,000											\$ 200	\$ 800	\$ 2,000	\$ 5,000	\$ 5,000	
- Reclamation Plant Filter Rehab.	\$ 230		\$ 230											\$ 230					
15076 Lift Stations 6, 8, & Force Main Bypass	\$ 3,652	\$ 152	\$ 3,500											\$ 500	\$ 1,500	\$ 1,500			
15080 Lift Station 15 & 18 Rehab./ Replacement	\$ 2,656	\$ 156	\$ 2,500											\$ 300	\$ 1,100	\$ 1,100			
WEST POINT																			
15091 West Point/Wilseyville Consolidation	\$ 4,757	\$ 7	\$ 4,750											\$ 450	\$ 2,150	\$ 2,150			
FOREST MEADOWS																			
- UV Disinfection System Replacement	\$ 300		\$ 300												\$ 300				
- Sludge Tank & Belt Press Improvements	\$ 50		\$ 50											\$ 50					
OTHER / VARIOUS																			
15099 Headworks Screen Replacement	\$ 275	\$ 135	\$ 140											\$ 140					
- Regional Biosolids / Sludge Handling	\$ 1,500		\$ 1,500																\$ 1,500
15087 Wallace Renovation, SCADA, PLC & Electrical	\$ 124	\$ 24	\$ 100											\$ 100					
15082 Vallecito Recycled Water Distribution Project	\$ 174	\$ 94	\$ 80											\$ 80					
- Collection System Rehab. and I&I Mitigation	\$ 150		\$ 150											\$ 50	\$ 50	\$ 50			
15093 Southworth Collection System / I&I Mitigation	\$ 150	\$ 100	\$ 50											\$ 50					
15098 Indian Rock Sand Filter Rehab.	\$ 200		\$ 200											\$ 200					
- Sequoia Woods Leach Field Rehab.	\$ 150		\$ 150														\$ 150		
TOTALS	\$ 35,949	\$ 784	\$ 35,165											\$ 3,255	\$ 7,510	\$ 8,600	\$ 7,600	\$ 6,700	\$ 1,500

DESIGN PHASE

CONSTRUCTION PHASE