



ENGINEERING COMMITTEE

AGENDA

Committee Meeting:
Tuesday, September 1, 2020
2:00 PM (Board Room)

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

Based on guidance from the California Governor's Office, social distancing measures are imposed, Board chamber's capacity will be limited to 8 persons during public meetings. Social distancing and cloth facemasks are required.

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:

Meeting number (access code): 126 791 7349

Meeting password: nMpckzps335 (66725977 from phones and video systems)

[Join meeting](#)

Tap to join from a mobile device (attendees only)
[+1-408-418-9388](tel:+14084189388), [1267917349#66725977#](tel:+14084189388) United States Toll

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**

- Date of Prior Minutes of July 7, 2020

3. **NEW BUSINESS**

- 3a Discussion/Review – Contingency Plan for Emergency Implementation if the District’s Cross-Lake Potable Water Pipeline in Lake Tulloch Fails
(Damon Wyckoff, Director of Operations)
- 3b Presentation/Discussion – Residential Water Service Installation Practices and Proposed Update to Standardized Fees
(Charles Palmer, District Engineer)

4. **OLD BUSINESS**

- 4a* Presentation/Discussion – Copperopolis Above Ground Pipeline, Mitigating Risk of Possible Damage to Pipeline and Loss of Water Service to the Community
(Charles Palmer, District Engineer)
- 4b Discussion/Review of the Contract for the AMR/AMI Radio Read Meter Project, CIP #11096
(Charles Palmer, District Engineer)
- 4c Presentation/Discussion – Update for the Capital Improvement Program and Other Projects
(Charles Palmer, District Engineer)

5. **FUTURE AGENDA ITEMS**

6. **NEXT COMMITTEE MEETING**

7. **ADJOURNMENT**

*No Paperwork included in package

CCWD ENGINEERING COMMITTEE
CALAVERAS COUNTY WATER DISTRICT
July 7, 2020

The Engineering Committee of CALAVERAS COUNTY WATER DISTRICT met at the CCWD Offices in San Andreas, California, at approximately 2:20 p.m.

The following Directors/Committee Members were present:

Jeff Davidson
Russ Thomas

Also present:

Michael Minkler	General Manager
Charles Palmer	District Engineer
Rebecca Hitchcock	Executive Assistant/Clerk to the Board
Damon Wyckoff	Director of Operations
Rebecca Callen	Director of Administrative Services
Jack Scroggs	KASL Consulting Engineers
Hugh Logan	Calaveras Unified School District

1. PUBLIC COMMENT:

There was no public comment.

2. APPROVAL OF MINUTES:

The May 5, 2020 Minutes were approved as presented by a motion from Director Thomas, and seconded by Director Davidson.

3. NEW BUSINESS:

There was no new business.

4. OLD BUSINESS:

- 4a Presentation/Discussion on Update Regarding the Jenny Lind Elementary School Connection and Regionalization with the La Contenta Wastewater System
(Charles Palmer, District Engineer)

Mr. Palmer briefly reviewed the Jenny Lind Elementary School Connection and introduced Hugh Logan and Jack Scroggs to the Committee. Mr. Logan, representing the Calaveras Unified School District, provided an update regarding the construction grant through the State Water Resources Control Board (SWRCB) Clean Water State

Revolving Fund (CWSRF). This grant will be used to connect the Jenny Lind Elementary School to the La Contenta sewer system. Mr. Scroggs, from KASL Consulting Engineers provided the Committee with a technical overview and preliminary design report. There was discussion about the route of the infrastructure and the possibilities for CCWD to expand service in the area.

- 4b Alternatives and Recommendations for Implementing Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI)
(Damon Wyckoff, Director of Operations and Charles Palmer, District Engineer)

Mr. Minkler discussed the alternatives and recommendations for implementing the Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI) project. He reviewed the bids on the project stating that the lowest bidder just happened to be the manufacturer of the meter that the District staff prefer. He also reviewed the alternative of purchasing meters and installing them with in-house labor. This option could result in delayed implementation and would most likely be more expensive than the lowest contractor bid. He also explained that staff considered whether to finance the project or pay as we go. The District secured a low-interest loan from USDA that could cover the full cost of the project with plans to repay it in 15 years.

There was discussion on the various options between the Committee and Mr. Minkler, Mr. Palmer, Mr. Wyckoff, and Ms. Callen. The Committee recommends bringing this item to the full Board for approval of the construction contract.

5. FUTURE AGENDA ITEMS:

Director Thomas would like an update on the exposed water pipe in Copperopolis.

Director Davidson would like an update on the Jenny Lind Project. Pipeline replacement or pre-treatment plant?

6. NEXT MEETING

September 1, 2020 @ 2:00 p.m.

7. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:46 p.m.

Respectfully submitted,

Rebecca Hitchcock
Executive Assistant/Clerk to the Board

Agenda Item

DATE: September 1, 2020

TO: Engineering Committee
Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

SUBJECT: Discussion/Review of the Contingency Plan for Emergency Implementation if the District's Cross-Lake Potable Water Pipeline in Lake Tulloch Fails

SUMMARY:

The Calaveras County Water District's 2018 Copper Cove Water System Master Plan (Peterson/Brustad, Inc.) identified the water system's B-4 Pressure Zone (Connor's Estates and Poker Flat Subdivisions) as a High-Risk Zone due to the fact that it is served by a single transmission main that crosses beneath Lake Tulloch Reservoir. Unfortunately, the District does not have tanks for treated water storage on the east side of the lake, so water service would be interrupted immediately if the transmission main failed. Without adequate advanced planning, should the portion of the main in the lake fail, an extended outage is certain due to the fact that Distribution Staff would be unable to repair the main at the bottom of the Lake.

The District is assessing both short-term and long-term solutions to potential failures associated with this cross-lake pipeline in order to ensure an adequate and reliable water supply to Customers in the B-4 Pressure Zone in all cases. District Staff have identified two feasible short-term options:

Option 1

Enter into an agreement with an outside entity to install a floating pipeline immediately post Tulloch line failure. This would be an on-call arrangement with a contractor who would store the materials for a temporary bypass and be ready to install the bypass on short notice. This is essentially an insurance policy to ensure a rapid temporary restoration of service until a repair is complete.

Pros -

1. Would not tax District resources providing staff the opportunity to complete other work efforts. The contractor would work to:
 - a. Coordinate a barge to be onsite to set up as a mobile pipe welding station
 - b. Weld the sections of pipe and float on buoys across the lake
 - c. Connect to existing piping on each side of the lake

2. Would provide a sense of security to the District that there would be enough available workers on-hand within a short amount of time to work to complete the objective

Cons –

1. It would require the District pay for an agreement they may never execute.
2. It would require the District to pay for the piping, buoys, and associated equipment up front and store them until use.

Option 2

Purchase an HDPE welder and train staff to be proficient in the use of the welder. Secure the experience, material, and equipment needed to install a cross-lake pipeline with District staff immediately upon a Tulloch line failure.

Pros –

1. Does not require a purchase of labor that may never be utilized
2. Allows District staff to use associated equipment elsewhere (pipe welding equipment) and as a result, gain experience needed to address the issue in the future should the need arise. This would be a District-wide benefit.
3. Provided vendors can ensure same-day delivery of piping, does not require the pre-purchase and storage of approximately 1,500 linear feet of 10" HDPE pipe.

Cons –

1. Transmission main failures can occur at any time. The bypass installation will require a large crew to mobilize immediately to complete a difficult repair.
2. Even with training, Staff may not be as well-versed in methods as a contractor possibly resulting in a slower completion time.
3. Will compel the District to complete all pre-planning associated with successful completion of the project: securing a barge, ensuring supply reliability, etc.

In either case, work must be done to prepare the Distribution System for this emergency project implementation. Additional valves, and tees with blind flanges need to be installed at the connection points on either side of the lake. A coordination agreement must be secured with Tri-Dam to address the impacts an emergency floating pipeline would pose to their operation. A barge operator must be placed under contract to respond immediately to an emergency, and material and equipment must be purchased.

The 2018 Copper Cove Water System Master Plan also recommended a long-term solution to the situation; the construction of additional looped piping to the B-4 Pressure zone to ensure the supply of water from multiple directions. The District has also discussed the possibility of installing a potable water storage tank on the east side of the lake to provide supply reliability. District Engineering staff continue to work to assess the best possible long-term solution for this problem.

FINANCIAL CONSIDERATIONS:

Option 1 - \$64,651 up-front cost for a material, equipment, and a labor contract with Rain for Rent to be on standby to install a floating cross-lake pipeline within 24 hrs. of notification.

Option 2 - Material costs and equipment rental are estimated to be between \$30,000 and \$40,000. Purchase of a 2" thru 6" HDPE pipe welder is recommended as its use will provide District field staff the ability to become proficient with welding HDPE pipe now. The cost for a 2" thru 6" HDPE Pipe Welder is \$9,500. There would also be a substantial staff effort to implement the repair, likely including significant overtime hours.

RECOMMENDATION AND CONCLUSION

Preparation and plan development to prepare the District to best respond to emergencies associated with high-risk portions of the distribution system is a critical component of responsible utility operation and maintenance. District Operations staff feel Option 2 is the most cost-effective in that it does not require the District to pay for labor it may never actually use while allowing the District to gain experience with HDPE pipe welding on other projects in other service areas to meet the needs of the District. Completing multiple smaller HDPE pipe welding projects will provide District staff the experience necessary to address a future potential cross-lake pipeline emergency. Moreover, the contemplation of how best to keep this High-Risk Zone in water has elicited an effective planning effort and spurred conversation as to how best address multiple similar issues District wide.

Agenda Item

DATE: September 1, 2020

TO: Engineering Committee

FROM: Charles Palmer, District Engineer

RE: Presentation/Discussion – Standard Fees for Installation of Residential Water Meters and Services

SUMMARY

The District's current standard residential water service consists of a single 1" service lateral along with 5/8" meter valves. The meter box is normally set at the property corner. Several decades ago, the District allowed "dual services" consisting of a 1" service lateral extending to the property line, then splitting with a tee into two 3/4" service lines to serving two 5/8" meters at the property corners of adjoining lots. Now, for new construction a 1" meter is needed to supply a high enough flow rate for residential fire sprinklers. The NFPA 13D code is for residential homes and is not applicable to commercial buildings. These different conditions can exist in the field and must be evaluated when installing a new residential water service.

By Ordinance 2006-03, a flat "fee" of \$454 is charged to furnish and set a standard 5/8" radio read meter for properties that already have a pre-existing service lateral with 5/8" meter valves. Otherwise, the District charges are made "at cost" to furnish and set 1" and larger meters and several other work tasks are done "at cost", e.g. installing service laterals and upgrading meter (5/8" to 1") for fire sprinklers. Fees are adjusted annually by the consumer price index (CPI), but it is overdue for staff to revise these fees since last done in 2006. Also, staff advises that flat fees are preferred to improve efficiency by minimizing extra time to make cost estimates on a case by case basis.

All residential meters are counted only as one (1) equivalent single-family home regardless if a 5/8" or 1" meter. The installation costs for residential meter installation can vary depending upon if there is a pre-existing service lateral or not, if this service lateral has 5/8" or 1" meter valves, and if it is necessary to upsize from 5/8" to 1" meter size. If there is no existing service lateral, all new residential construction will consist of a 1" meter to supply fire sprinklers.

The District's maintenance and construction staff have provided costs estimates (below) for common residential water meter installation tasks. Proposed flat fees are shown below. As is the current practice, fees will be adjusted annually by the CPI to account for inflation in materials and labor costs.

Cost Estimate - Furnish & Install New 5/8" Meter (Existing 5/8" Lateral)				
Labor	Rate	Duration, hr.	x2.5	Total
Maintenance Worker	\$ 44.07	1	\$ 110.18	\$ 110.18
Equipment	Rate	Duration,hr.	Total	
SVC Truck/day	\$ 50.00	0.042		\$ 2.10
Material	QTY	Cost	Total	
5/8" Meter	1	\$ 200.00		\$ 200.00
5/8"strt mtr vlv	1.00	\$ 58.34		\$ 58.34
				\$ -
Grand Total				\$ 370.62

Cost Estimate - Upsize Lateral (5/8" to 1") for New 1" Meter				
Labor	Rate	Duration, hr.	x2.5	Total
Maintenance Worker	\$ 44.07	2	\$ 110.18	\$ 220.35
Equipment	Rate	Duration,hr.	Total	
SVC Truck/day	\$ 50.00	0.042		\$ 2.10
VacCon/Hr.	\$ 125.00	1		\$ 125.00
Material	QTY	Cost	Total	
1" Meter	1	\$ 265.00		\$ 265.00
1" Cub Stop	1	\$ 115.00		\$ 115.00
1"strt mtr vlv	1.00	\$ 58.34		\$ 58.34
1"CTS/FT	3.00	\$ 0.43		\$ 1.29
1"INSTxMIP Adaptor	2	\$ 17.62		\$ 35.24
1"Brs 90	1	\$ 5.19		\$ 5.19
1" Instatite Tee	1	\$ 88.38		\$ 88.38
1"x3" Full Circle Clamp	1	\$ 27.27		\$ 27.27
Grand Total				\$ 943.16

Cost Estimate - New 1" Service Lateral with Meter				
Labor	Rate	Duration, hr.	x2.5	Total
Maintenance Worker	\$ 44.07	18	\$ 110.18	\$ 1,983.15
Equipment	Rate	Duration,hr.		Total
SVC Truck/day	\$ 50.00	0.250		\$ 12.50
Dumptruck/hr.	\$ 90.00	6		\$ 540.00
VacCon/Hr.	\$ 125.00	6		\$ 750.00
Material	QTY	Cost		Total
1" Meter	1	\$ 265.00		\$ 265.00
1" Curb Stop	1	\$ 115.00		\$ 115.00
1"strt mtr vlv	1.00	\$ 58.34		\$ 58.34
1"CTS/FT	20.00	\$ 0.43		\$ 8.60
1"INSTxMIP Adaptor	2	\$ 17.62		\$ 35.24
6"x1" Tap Saddle	1	\$ 44.13		\$ 44.13
1" Corp MxM	1	\$ 53.73		\$ 53.73
Base Rock/ton	3	\$ 10.00		\$ 30.00
Asphalt (\$23sq.ft.)	20	\$ 23.00		\$ 460.00
Meter Box&Lid	1	\$ 36.93		\$ 36.93
Grand Total				\$ 4,392.62

FINANCIAL CONSIDERATIONS

None at this time. At a future date, staff proposes to present an agenda item and resolution or ordinance to the Board of Directors for adoption of standard fees as shown below:

ITEM / DESCRIPTION	FEE
Furnish & Set 5/8" Res. Meter (pre-existing 5/8" meter valve, no upsizing)	\$371
Furnish & Set 1" Res. Meter (pre-existing 1" meter valve, no upsizing)	\$436
Furnish & Set 1" Res. Meter & Upsize (convert pre-existing 5/8" to 1")	\$943
Install New Res. Service Lateral (including Furnish & Set 1" Res. Meter)	\$4,395

Agenda Item

DATE: September 1, 2020
TO: Engineering Committee
FROM: Charles Palmer, District Engineer
SUBJECT: Discussion/Review of the Contract for the AMR/AMI Radio Read Meter Project, CIP #11096

SUMMARY:

Discussion and review of the Mueller Systems Contract for the AMR/AMI Radio Read Meter Project, CIP #11096. The staff report from the July 22, 2020 Board Meeting is included for more information.

*Attachment: July 22, 2020 Board Meeting Staff Report
CCWD & Mueller Systems Agreement
CCWD Addendum
CCWD & Mueller Systems Software Agreement (provided at the Committee Meeting)*

Agenda Item

DATE: July 22, 2020

TO: Board of Directors, Calaveras County Water District

FROM: Michael Minkler, General Manager
Damon Wyckoff, Director of Operations
Charles Palmer, District Engineer
Rebecca Callen, Director of Administrative Services

SUBJECT: Discussion/Action Award of Contract and Adoption of USDA Loan
Resolution for AMR/AMI Radio Read Meter Project, CIP #11096

RECOMMENDED ACTION:

Motion _____ / _____ approving Resolution No. 2020-____ Accepting bids Awarding a Construction Contract for the Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI) Radio Read Meter Project, CIP #11096

Motion _____ / _____ approving Resolution No. 2020-____ Authorizing and Providing for the Incurrence of Indebtedness for the Purpose of Providing the Costs of Acquiring and Installing Radio Read Meters, CIP #11096

Motion _____ / _____ approving Resolution No. 2020-____ Approving a Project Specific Legal Services Agreement

SUMMARY:

The Calaveras County Water District provides water service to over 13,100 customers in six independent systems including the Ebbetts Pass, Jenny Lind, Copper Cove, West Point, Wallace, and Sheep Ranch. The District's customers are primarily single family residential with some commercial and wholesale customers. The District proposes to furnish and install radio read meters, often referred to as automatic meter reading (AMR) and advanced metering infrastructure (AMI), for all its customers throughout the County. The proposed new AMR/AMI systems will replace old, conventional manual-read meters and the District expects to gain multiple benefits from this program.

The project will include only revenue meters of 5/8", 3/4" and 1" sizes. The new meters will be either nutating disc meters (same as our existing meters) with attachable radio read registers or ultrasonic, solid state radio read meters with integrated registers. The meter pit antennas will be mounted in new meter box covers. Also, the project scope will include purchasing new handheld data collectors and software for drive-by reads.

The District has obtained several propagation studies identifying potential locations for placement of fixed network data collectors, which have a small footprint and could be located on existing radio towers or water tanks on District property. A fixed network, known as AMI, is a method of collecting radio meter reads using fixed, remote data collectors (instead of drive-by reads). This type of data collection is better suited to areas with open topography where radio signals can transmit over longer distances with minimal interference. For this project, the District is looking at fixed networks in the Copper Cove, Jenny Lind, and West Point systems. A fixed network in the Ebbetts Pass system poses more challenges due to the topography and tree cover, but it could be done at additional cost. The deployment of an AMI network would allow the District to collect water meter data automatically over radio frequency and almost entirely eliminate the necessity of doing drive-by readings.

District staff have evaluated the need for the project as well as multiple options for project implementation. As discussed below, the District received multiple bids from contractors who would supply the equipment and install all meters within a two-year construction period. Alternatively, the District could purchase the meters and install them with in-house labor or temporary hires, however, these options would result in delayed implementation, present operational and logistical challenges, and would likely be more expensive than the lowest contractor bid.

In addition to evaluating multiple options for project implementation, staff considered whether to finance the project or pay as we go out of capital reserves. The District has secured a low-interest loan from USDA that could cover the full cost of the project. Since the District's capital improvement needs far exceed our ability to self-finance projects, and because of the favorable terms of the USDA loan, staff's recommendation is to finance the project with the USDA loan and repay the loan within 15 years.

ANALYSIS

Project Rationale

Upon full deployment of the radio read meters, the District anticipates improvements in several operational and regulatory compliance efficiencies, as well as, direct financial benefits to District revenues. For the former, the AMI/AMR project will improve the District's ability to track and benchmark water conservation measures mandated by the State of California under the 2018 "Making Water Conservation a California Way of Life" legislation (SB606/AB1668). As retail water suppliers will be expected to develop efficiency standards and water use objectives under this legislation this AMR/AMI technology will be an essential tool in collecting water user data, assessing system water losses, validating annual water audits, correlating consumption and production data, and planning future water loss mitigation projects. Reporting of these metrics to the State Water Resources Control Board (SWRCB) is expected to be due after they adopt long-term water use and loss standards prior to June 30, 2022. The District's current lack of timely, reliable data constrains the District's ability to report accurate data and could lead to unnecessarily aggressive use constraints or infrastructure updates to meet SWRCB

standards. The new and more accurate data obtained from the AMI/AMR system will be a critical component to the District's effort to comply with the conservation mandates and reporting requirements, and helps the District identify key user and infrastructure needs.

The District expects to gain direct financial benefits such as recovering lost revenue caused by under-registering and broken meters, reducing staff time spent repairing or replacing meters, and by using drive-by and fixed network data collectors versus manual reads. The District currently employs two full-time meter readers to manually read all 13,100+ water meters. Once this project is complete, they will be able to complete meter reads in a fraction of the time freeing them up to provide much needed assistance to the distribution, collections, and construction crews. The District could also switch to monthly billing cycles, which is currently impossible, and customers would have better information regarding their water use.

The project is critical for future regulatory compliance and will provide multiple financial and operational benefits. The increased revenue and potential cost savings are difficult to quantify, but they will be substantial.

Meter Replacement Work Effort

In considering options, it is important to understand the field work and highlight conditions associated with meter replacements, as follows:

Best Case Scenario – Quick meter replacement taking only a matter of minutes presumes very favorable conditions:

- Isolation valves exist and are easy to access and operate without any difficulty.
- Existing meter is fully exposed and easy to access within the box
- New meters are exactly same size and length as existing meters being replaced
- Customer is not home or has no issue with a brief shutdown of water supply.

Worst Case Scenarios – More often than not the circumstances generally encountered do not align with the best-case scenario, requiring additional effort that could take several hours for a single meter:

- Meters are covered in dirt that must be dug out for replacement
- No isolation valve on the meter thereby requiring the service lateral to be crimped (creating a weak spot in the lateral) or an isolation valve installed prior to replacement.
- New meter is too tall and box must be reset to accommodate a greater height.
- Service lateral or customer's service line cracks or breaks during replacement of the meter.

The actual conditions are often somewhere in between the best- and worst-case scenarios. Staff currently assumes a meter replacement will take 30 minutes on average.

Options for Implementation

While the Board members previously expressed support for an AMR/AMI project, the project is costly and it was suggested that options be considered in how to best implement the project most efficiently and cost-effectively. The District contemplated different installation options and their cost and schedule implications in determining the best solution. One option is to award the project to the low bidder who will independently purchase and install the radio read meters and fixed network equipment. Other options include purchasing the meters and equipment directly from a vendor and having either existing field staff install the meters or hire temporary staff to install them.

Option One: Private Contractor

The project as proposed would be awarded to one Contractor who will then bear the responsibility of fully implementing the project and installing all 13,100+ AMR meters and the AMI fixed network systems. The project includes purchase of the radio read meters and AMI equipment and installation, startup and testing of the systems. The project will be completed within 2-years (with 50% of the project required to be complete in the first 12-months). Within the shortest possible timeframe, it achieves key objectives (reduced water loss and increased revenues associated with better meter accuracy). This option does not create significant additional work load for District Staff and allows Staff (both field and management) to focus on regular work tasks and overall work effort efficiencies are not compromised. Also, timely completion of the project allows the meter readers more time to attend to other tasks such as better on-going maintenance of our meter population (currently there is a backlog of broken and non-registering meters) and the ability to assist the Distribution and Construction Crews several days per month.

Staff prepared contract bid documents for the AMR/AMI project and advertised and solicited bids beginning in late May 2020. A bid opening was conducted on June 30, 2020. A total of three bids were received with the lowest bidder being submitted by Mueller Systems in the amount of \$3,975,273.87. A bid summary is provided below.

Table 1. Bid Results for AMR/AMI Meter Project (June 30, 2020)

BIDDER	MUELLER	FERGUSON	TEICHERT
Purchase AMR Meters	\$2,392,456.66	\$2,748,753.73	\$5,425,405.22
Install AMR Meters	\$1,018,650.76	\$1,338,320.66	\$1,938,315.64
Purchase AMI Equipment	\$ 223,381.24	\$ 466,975.33	\$ 353,972.40
Install AMI Equipment	\$ 138,858.06	\$ 341,092.02	\$ 365,106.10
Data Collectors & Software	\$ 201,927.16	\$ 92,324.03	\$ 137,883.64
TOTAL	\$3,975,273.87	\$4,987,465.77	\$8,220,683.00

Option Two: Meters Installed by Existing Staff

One proposal is to have the District's Meter Readers (two employees) install meters daily as they work through their regular meter reading regimen. Staff has determined this approach is not efficient given the District's scheduling constraints for on-going bi-monthly meter reading.

The District's meter reading regimen is divided in two cycles:

Cycle 1 – Valley Springs, Copperopolis and West Point

- 20 Routes in this cycle
- 7,151 Meters in total
- 3 weeks needed to read all meters
- 1,440 hours per year

Cycle 2 – Ebbetts Pass

- 22 Routes in this cycle
- 6,040 meters in total
- 3 weeks needed to read all meters
- 1,440 hours per year

The 4th week of each month is used to issues door tags for lock-offs, perform restoration (restores) of those lockoffs, re-reads, herbicide spraying, and complete any equipment maintenance and administrative tasks.

To remain on track, each employee averages 220 meter reads per day, or 1 meter read every 2 minutes over 6 hours plus 2 hours of drive time. When you contemplate the amount of meters that are required to be read each day vs. the variables associated with each meter installation (e.g. soil, accessibility, check appurtenances for leaks, reporting any issues, are there dogs, cars, yard art that make reading the meter problematic, customer interactions, weather, etc.), it becomes clear there is not much time, if any, remaining to install new meters. Furthermore, any additional time meter readers do have is quickly consumed by assisting with other work efforts in the field where additional staff are needed.

For existing staff to replace meters in-house, a conservative average for a meter replacement is 30 minutes each. This is the time frame field staff currently give to customers when replacing a customer's meter. Even if each meter reader could free up two hours per day for meter replacement, which is not currently realistic, with an average replacement time of 30 minutes, this equates to 8 meters replaced per day. At that rate, assuming 8 meters are replaced each day meter readers are on their routes (approximately 188 days per year), the replacement would take 8.8 years.

Staff did contemplate the fact that as more radio read meters are installed and with a gradual transition to drive-by reads, less time will be needed for manual reads. Over time this could free up more time for employees to replace meters, but only after a significant number of meters have been installed, the data collection software has been installed and integrated into the District's finance system, and the AML infrastructure is in place in

the service areas where that is needed. The IT integration and infrastructure installation would require coordination among the District's IT administrator, electricians, construction crew – all of whom already have significant backlogs of projects to complete – as well as the District's finance and customer service staff. It would be a significant undertaking for a workforce that is already stretched thin. Factoring in all of these considerations, it is likely the project would take at least seven years.

Were the District to use in-house staff (Meter Readers) to install the meters, labor costs for that 9-year effort would be \$286,393.80, and the cost to purchase the meters is \$4,085,000. Mobile data collectors and software are expected to cost \$73,000. The Customer Service Department's work associated with updating customer accounts and meter information is estimated to be \$14,000 over the course of the project. The AMI fixed network systems is estimated to cost \$197,000 to purchase equipment and \$114,000 for installation, which this work effort is to be performed by the District's Construction Crew and Electricians. The grand total estimate for Option 2 is \$5.7 Million excluding administrative costs, legal costs, or contingencies.

Option 3: Meters Installed by Temporary Staff

Another option is hiring temporary staff to complete the project. The District would look to hire two temporary employees possibly using the Meter Reader 1 Job Description. Hiring temporary staff to complete work objectives poses challenges for CCWD, as it could be construed that temporary employees take work away from regular union positions. The potential uncertainty and complications associated with this option may prove to be a significant burden to making this option viable.

If viable, to estimate the number of meters temporary staff would be able to replace, an average of 30 minutes per meter replacement was used. With this average timeframe in mind, and accounting for a 5.5-hour day (and subtracting sick days, vacations, drive time, bathroom breaks, administrative tasks, etc.), two temporary staff members should be able to replace 21 meters per day or approximately 5,208 meters per year. At this rate the project would be completed in approximately 2.5 years. Were the District to hire two temporary employees, labor and benefits for 2.5-years would be \$531,774. It is possible the schedule could be accelerated by freeing up time from the District's existing meter readers as the project is gradually implemented, however that would depend on other District staff's availability to install other necessary infrastructure and software and integrate the remote read data.

Other project costs for the AMR meters include an estimated \$4,085,000 to purchase the new meters, \$73,000 for mobile data collectors and software, and \$16,000 for Customer Service staff time to update customer accounts with new meter information for the duration of the project. The AMI fixed network systems will be installed by the District's Construction Crew and Electricians. The costs to purchase and install the AMI systems is \$197,000 and \$114,000, respectively. The estimated grand total for Option 3 is \$4.8 Million excluding administrative time, legal costs, or other contingencies.\

Options Comparison

Summarized below are the costs and timeframe for each of the three options. Bid results for a private contractor to complete the project and estimated costs to furnish and install the AMR/AMI systems using in-house or temporary staff.

Table 2. -

DESCRIPTION	OPTION 1 (Contractor)	OPTION 2 (In-House Staff)	OPTION 3 (Temp. Staff)
Purchase AMR Meters	\$2,392,457	\$4,085,000	\$4,085,000
Install AMR Meters	\$1,018,651	\$286,393.80	\$531,774
Purchase AMI Equipment	\$223,381	\$197,000	\$197,000
Install AMI Equipment	\$138,858	\$114,000	\$114,000
Software, Training & Mobile DCU's	\$201,927	\$73,000	\$73,000
Other Costs	-	\$14,000	\$16,000
TOTAL CONSTRUCTION COST	\$3,975,274	\$ 4,769,393.80	\$5,016,774
Time to Completion	Max 2 years	8.8 years	2.5 years

Staff Recommendation

Option 1, awarding the contract to a private contractor to furnish and install the AMR/AMI project, is recommended by Staff as the most efficient, cost-effective, and timely option. It does not pull District staff time away from their regular duties to ensure project completion, nor does it potentially strain internal relationships by using temporary staff to complete union work. These efficiencies allow CCWD to proceed with working to meet other objectives while the vendor works to complete the project within the required time frame of less than two-years. This time-frame requirement is also the shortest of the available options. The sooner the better it will be to implement the AMR/AMI project. Currently, consumptive revenue represents nearly 17% of the total billed water rate revenue. Based on historical information from implemented AMI/AMR projects, it is anticipated that this project will increase consumptive revenues by at least 5%, or \$70,000 annually. Roughly 2% of the meters are currently reading nothing or drastically under-reading, while the remaining meters are under reading due to age. As such, we anticipate the industry estimate of 5% to be low compared to what we are likely to experience. This project will also free up staff time compared to manual meter reads. It also enables the District to start compiling and reporting accurate water loss data, which will ensure regulatory compliance and assist capital infrastructure planning efforts.

The District has been approved for financial assistance through USDA Rural Development, which as of August 2019 obligated \$6 million dollars for the project including a propose \$5 million low-interest, 40-year loan and a \$1 million grant if the project cost exceeds \$5 million. Because the low bidder was \$3.975 million, grant funds will not likely become available but that does not diminish the favorable terms of the low interest loan. To potentially take advantage of grant funds, the District would have to significantly increase the scope of work by either: a) adding an AMI fixed network to the

Ebbetts Pass service area, b) replacing all meter boxes with new boxes, and c) replacing old curb stops with new valves. This, however, would also require the District to take on an additional \$1 million in debt to reach the \$5 million loan amount.

Up to the point of awarding a construction contract and starting construction, the District has no obligation to accept a loan through USDA. Staff has maintained contact with USDA and is ready to move forward with a USDA loan to fund the project, pending Board approval.

FINANCIAL CONSIDERATIONS:

Staff brought forward the fiscal discussion to the Finance Committee on June 10, 2020 to address the debt coverage ratio and loan terms.

The June 30, 2019 audited financials have the water debt coverage ratio at 4.13, where the ratio required by our 2014 water revenue loans and 2016 water enterprise revenue bonds is 1.25.

In reviewing Fiscal Year 2020-21 budgeted revenues, budgeted expenditures, and projected debt service (inclusive of this additional debt), the District's adjusted debt coverage ratio would drop from 4.13 to 2.9 based on the required coverage debt. Taking all debt into consideration, our debt coverage ratio would drop from 2.74, as reported June 30, 2019 to 1.77 by taking on this additional debt.

The 2020-21 fiscal year is the final payment year for the Umpqua debt. This will free up \$1.18 million for the 21-22 fiscal year. Taking this into consideration, the debt coverage ratio will be dramatically different in the 2021-22 Fiscal Year with 14.64 for water and 3.47 combined.

The loan term is 40 years but there is no penalty for early payoff. The current interest rate is slated to be 2.25%, which is .50% lower than the original projection for this agreement.

The Finance Committee gave direction to staff to bring forward to the full Board.

Staff also brought forward the project discussion to the Engineering Committee with the recommendation to utilize the USDA Loan/grant option based on extensive analysis of other options that would take longer and cost more. The Engineering Committee also agreed and gave direction to staff to bring forward to the full Board.

Based on this staff are requesting the Board of Directors approve the attached Resolution authorizing the General Manager to sign the necessary forms and authorizing and providing the incurrence of indebtedness to acquire and install the Radio Read Meters for the AMI/AMR Project, CCWD CIP #11096.

The District would agree to the term of 40 years, as required by the contract. However, we would be able to pre-pay based on a shorter-term utilizing Water R&R funds for the term of the loan upon construction completion.

The project will be primarily funded by a USDA loan, with a grant option if the project cost exceeds five million, as follows:

USDA Loan	\$5,000,000
USDA Grant	<u>\$1,000,000</u>
TOTAL	\$6,000,000

The annual debt service payments using the 40-year term would be \$190,887.

The annual debt service payments using the 20-year term would be \$313,211.

The annual debt service payments using the 15-year term would be \$396,443.

Lastly, it is estimated that the District will see increases in consumptive revenue of approximately \$70,000 annually.

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT

This Agreement is by and between CALAVERAS COUNTY WATER DISTRICT (“Owner”) and
MUELLER SYSTEMS, LLC (“Contractor”).

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: The Project will replace all of existing conventional manual, direct read water meters with radio read meters along with constructing a fixed network of data collectors to automatically read the new water meters.

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Advanced Metering Infrastructure Project

ARTICLE 3—ENGINEER

3.01 The Owner has retained Charles Palmer, P.E., District Engineer (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.

3.02 The part of the Project that pertains to the Work has been designed by Calaveras County Water District.

ARTICLE 4—CONTRACT TIMES

4.01 *Time is of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Days*

A. The Work will be substantially complete within **730** calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **780** calendar days after the date when the Contract Times commence to run.

4.05 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and

Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. *Substantial Completion*: Contractor shall pay Owner **\$1,200** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
 2. *Completion of Remaining Work*: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner **\$750** for each day that expires after such time until the Work is completed and ready for final payment.
 3. Liquidated damages for failing to timely attain Substantial Completion, and final completion are not additive, and will not be imposed concurrently.
- B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

ARTICLE 5—CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:

- A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item).

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
1	Mobilization/Demobilization	Lump Sum	1	\$68,910.00	\$68,910.00
2A	Furnish 5/8" Positive Displacement Type Radio Read Water Meter	Each	13,022	\$149.00	\$1,940,278.00
2B	Install 5/8" Positive Displacement Type Radio Read Water Meter	Each	13,022	\$71.00	\$924,562.00
3A	Furnish 3/4" Positive Displacement Type Radio Read Water Meter	Each	5	\$154.25	\$771.25
3B	Install 3/4" Positive Displacement Type Radio Read Water Meter	Each	5	\$71.00	\$355.00
4A	Furnish 1" Ultrasonic Type Radio Read Water Meter	Each	75	\$225.00	\$16,875.00
4B	Install 1" Ultrasonic Type Radio Read Water Meter	Each	75	\$71.00	\$5,325.00
5A	Furnish AMI Fixed Network Equipment – Copper Cove Service Area	Lump Sum	1	\$67,669.00	\$67,669.00

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
5B	Install AMI Fixed Network – Copper Cove Service Area	Lump Sum	1	\$44,890.00	\$44,890.00
6A	Furnish AMI Fixed Network Equipment – Jenny Lind Service Area	Lump Sum	1	\$93,062.00	\$93,062.00
6B	Install AMI Fixed Network – Jenny Lind Service Area	Lump Sum	1	\$56,383.00	\$56,383.00
7A	Furnish AMI Fixed Network Equipment – West Point Service Area	Lump Sum	1	\$58,778.00	\$58,778.00
7B	Install AMI Fixed Network – West Point Service Area	Lump Sum	1	\$35,178.00	\$35,178.00
8	Furnish Mobile Read Data Collector Units	Each	7	\$6,000.00	\$42,000.00
9	Software and Training	Lump Sum	1	\$156,426.82	\$156,426.82
10A	Install new Meter Box Lids	Each	13,102	\$5.40	\$70,750.80
10B	Furnish new meter box lids (Allowance)	Each	13,102	\$30.00	\$393,060.00
TOTAL OF ALL BID ITEMS					\$3,975,273.87

- B. The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

ARTICLE 6—PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

- 6.02.A.1. a. 95 percent of Work completed (with the balance being retainage).
b. 95 percent of cost of materials and equipment not incorporated into the Work (with the balance being retainage).

- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to **95** percent of the Work completed, less such amounts set off by

Owner pursuant to Paragraph 15.01.E of the General Conditions, and less **100** percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 *Consent of Surety*

- A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

- A. The Contract Documents consist of all of the following:
1. This Agreement.
 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
 3. General Conditions.
 4. Supplementary Conditions.
 5. Specifications as listed in the table of contents of the project manual (copy of list attached).
 6. Addenda
 7. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
 - e. Warranty Bond, if any.
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 *Contractor's Representations*

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
 7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 *Standard General Conditions*

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on **SEPTEMBER 21, 2020** (which is the Effective Date of the Contract).

Owner:

CALAVERAS COUNTY WATER DISTRICT

(typed or printed name of organization)

By:

(individual's signature)

Date:

(date signed)

Name:

Michael J. Minkler

(typed or printed)

Title:

General Manager

(typed or printed)

Attest:

(individual's signature)

Title:

Rebecca Hitchcock, Executive Assistant

(typed or printed)

Address for giving notices:

Calaveras County Water District

P.O. Box 846 / 120 Toma Court

San Andreas, CA 95249

Designated Representative:

Name: Charles Palmer, PE

(typed or printed)

Title:

District Engineer

(typed or printed)

Address:

Same as above.

Phone:

(209) 642-3209

Email:

charlesp@ccwd.org

(If [Type of Entity] is a corporation, attach evidence of authority to sign. If [Type of Entity] is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Contractor:

MUELLER SYSTEMS, LLC

(typed or printed name of organization)

By:

(individual's signature)

Date:

(date signed)

Name:

John DeYarman

(typed or printed)

Title:

Vice President & General Manager

(typed or printed)

(If [Type of Entity] is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

(individual's signature)

Title:

Katherine Gallup, Legal Operations Assistant

(typed or printed)

Address for giving notices:

Mueller Systems, LLC

P.O. Box 128 / 10210 Statesville Blvd.

Cleveland, NC 27013

Designated Representative:

Name: Kevin Cornejo

(typed or printed)

Title:

Territory Manager

(typed or printed)

Address:

Same as above.

Phone:

(858) 731-6274

Email:

KCornejo@muellerwp.com

License No.:

(where applicable)

State:

CERTIFICATE OF OWNERS ATTORNEY AND AGENCY CONCURRENCE

This attachment is to the Contract made and entered into on **SEPTEMBER 21, 2020**, by and between the **CALAVERAS COUNTY WATER DISTRICT** hereinafter "Owner", and **MUELLER SYSTEMS, LLC** hereinafter called "Contractor." This Contract is for that Work described in the Contract Documents entitled Advanced Water Metering Infrastructure Project.

CERTIFICATE OF OWNER’S ATTORNEY

I, the undersigned, Matthew J. Weber of Downey Brand LLP, the duly authorized and acting legal representative of the CALAVERAS COUNTY WATER DISTRICT, do hereby certify as follows:

I have examined the attached Contract(s) and performance and payment bond(s) and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements is adequate and has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties attached Contract agreement constitutes a valid and legally binding obligation upon the parties executing the same in accordance with terms, conditions, and provisions thereof.

(Attorney’s Signature) Date

AGENCY CONCURRENCE

As lender or provider of funds to the Owner to provide for the costs of this Contract, and without any liability for any payments thereunder, the Agency hereby concurs in the form, content, and execution of this Agreement.

Agency Representative Date

Michael Starinsky, PE, State Engineer, Rural Development, United States Dept. of Agriculture

Name

Addendum to the Agreement Between Owner and Contractor for Construction Contract

This Addendum to the Agreement Between Owner and Contractor for Construction Contract (the “Addendum”) is made and effective on _____, between CALAVERAS COUNTY WATER DISTRICT (“Owner”) and MUELLER SYSTEMS, LLC (“Contractor”).

RECITALS

Owner and Contractor have or will concurrently enter a contract by which Contractor will supply meters, infrastructure, and monitoring services for the Advanced Metering Infrastructure Project (“Contract”). Owner and Contractor hereby mutually agree to amend the Contract to include the following:

1. Limitation on Liability. ALL LIABILITY, IN THE AGGREGATE, OF CONTRACTOR FOR CLAIMS ARISING UNDER THE CONTRACT OR OTHERWISE HOWSOEVER ARISING SHALL BE LIMITED TO THE GREATER OF TEN MILLION DOLLARS (\$10,000,000.00) OR THE AMOUNT COVERED BY CONTRACTOR’S INSURANCE. THIS LIMITATION OF LIABILITY IS CUMULATIVE AND NOT PER-INCIDENT.

2. Liquidated Damages. Contractor’s maximum liability for liquidated damages shall not exceed ten percent (10%) of the amount paid by Owner to the Contractor under the Contract. For all delays not caused by Contractor and events out of Contractor’s control, e.g. diseases and pandemics, including the Coronavirus (COVID-19), Contractor shall have additional time added to the Contract Times equivalent to the number of delayed days.

OWNER: CALAVERAS COUNTY WATER DISTRICT

CONTRACTOR: MUELLER SYSTEMS, LLC

By:

By:

Date:

Date:

Name:

Name:

Title

Title

**MUELLER SYSTEMS
END USER LICENSE AGREEMENT**

THIS END USER LICENSE AGREEMENT (this “**Agreement**”) is entered into this _____ day of _____ between MUELLER SYSTEMS, LLC, a Delaware limited liability corporation having its principal offices at 10210 Statesville Blvd, Cleveland, North Carolina 27013 (referred to in this Agreement as “**Mueller Systems**” or “**Provider**”), and _____ (referred to in this Agreement as “**Customer**”). This Agreement governs the sale by Provider and the purchase by Customer for its own use and not for resale of, as applicable Software related to advanced metrology infrastructure systems. In the event of any conflict or inconsistency between the terms and conditions of this Agreement and terms and conditions of any other agreement or document, the terms and conditions of this Agreement shall govern and control and the conflicting or inconsistent terms and conditions are hereby rejected. In consideration of the mutual obligations set forth in this Agreement, Customer and Mueller Systems agree as follows:

1. DEFINITIONS.

a. “**Content**” means the information developed or legally acquired by Customer which may be used in connection with or accessed by any module of the Software.

b. “**Documentation**” means the user guides, reference manuals, and installation materials provided by Provider to Customer related to the Software and Equipment.

c. “**Equipment**” means the components, devices, products, equipment and related items provided by Provider identified in Appendix A.

d. “**Services**” means activities related to deployment and installation services, repair services, hosting services and technical support/maintenance services as provided by Mueller Systems and as identified in Appendix B.

e. “**Software**” means the object code versions of Mueller Systems’ software identified in Appendix A, together with all subsequent authorized updates, replacements, modifications or enhancements.

2. SOFTWARE

a. Software on Equipment License. For Equipment purchased by Customer from Mueller Systems, Mueller Systems hereby grants Customer a limited, non-exclusive, non-sublicensable, non-transferable, perpetual, irrevocable license to use and execute the Software embedded in the Equipment for its internal business purposes in connection with such Equipment (“Firmware”).

b. Online Software Access. Subject to the terms of this Agreement and the payment of the fees specified in Section 6a herein, Mueller Systems grants to Customer, for its internal business purposes and during the term of this agreement, a limited, non-exclusive, non-sublicensable, non-transferable right to access and use and make available to Customer’s utility users, as applicable, and/or employees the online, hosted Software specified herein.

c. Restrictions. Except as specifically and expressly permitted in writing by Mueller Systems, Customer shall not (i) violate any restriction set forth in this Agreement; (ii) modify, translate, de-compile, reverse compile, disassemble, or create or attempt to create, by reverse engineering or otherwise, the source code from the object code of the Software; (iii) adapt the Software in any way for use to create a derivative work; or (iv) include or combine the Software in or with any other software.

d. Ownership. This Agreement does not grant to Customer any ownership interest in the Software or Documentation. Customer has a license to use the Software and Documentation as provided in this Agreement. Customer hereby agrees and acknowledges that Mueller Systems owns all right, title, and interest in the Software and Documentation, and Customer will not contest those rights or engage in any conduct contrary to those rights. Any copy, modification, revision, enhancement, adaptation, translation, or derivative work of or created from the Software and Documentation made by or at the direction of Customer shall be owned solely and exclusively by Mueller Systems, as shall all patent rights, copyrights, trade secret rights, trademark rights and all other proprietary rights, worldwide.

e. Reservation. Mueller Systems reserves all rights not specifically granted under this Agreement.

3. **INTENTIONALLY OMITTED.**

4. **INTENTIONALLY OMITTED.**

5. **CONFIDENTIALITY** The Software, Equipment and Documentation, including any ideas, concepts, know-how and technology contained therein, shall be considered the proprietary and confidential information of Mueller Systems and, as such, shall be subject to the confidentiality provisions of this Agreement. If a separate, written non-disclosure agreement exists between Mueller Systems and Customer, such agreement will control and will apply according to its terms and conditions to all confidential information the parties exchange with each other. If no separate, written non-disclosure agreement exists between Mueller Systems and Customer, the terms listed in Appendix C will apply to the confidential information the parties exchange with each other unless otherwise stated in the California Public Records Act.

6. **FEES AND PAYMENT**

a. Software Fees. Customer shall pay the Software fees set forth in Appendix D of this Agreement. At the conclusion of the first contract year and prior to the commencement of the second contract year, or any subsequent contract extension period, Mueller Systems may implement price increases. The price increase shall be the original purchase price plus the U. S. Bureau of Labor Statistics PPI for Data Processing and Related Services, Hosting, ASP, and other IT Infrastructure Provisioning Services Series ID: PCU5182105182105, 12-month percent change to year one.

b. Payment. Unless provided otherwise herein, Customer agrees to pay all amounts specified in Appendix D or otherwise due under this Agreement within thirty (30) days after the date of invoice. Past due amounts will shall bear interest from the due date until paid at a rate of (i) one and one-half percent (1.5%) per month or (ii) the maximum rate permitted by law, whichever is less. All payments made under this Agreement shall be nonrefundable, except as specifically provided otherwise in this Agreement.

7. **TERM; TERMINATION**

a. Term. The term of this Agreement is one (1) year commencing upon the date of this Agreement. This Agreement will automatically renew for subsequent, successive one (1) year periods at the then-current Mueller Systems prices unless either party gives the other party written notice of its intent to not renew at least thirty (30) days prior to the expiration of the then current term. Upon the anniversary of the date of this Agreement, Mueller Systems may increase support fees annually on thirty (30) days prior notice to Customer. Within such thirty (30) days, Customer may terminate the Agreement by providing written notice to Mueller Systems.

b. Termination for Breach. If either party breaches this Agreement, and such breach is not cured within ten (10) days of the breach, after receiving written notice, the non-breaching party may terminate this Agreement, including all licenses provided herein, effective upon written notice to the other party. The breaching party agrees that if it breaches this Agreement, the non-breaching party will be entitled to injunctive or similar equitable relief.

c. Effect of Termination. Termination of this Agreement shall have the effect designated in Appendix B.

d. Non-Exclusive Remedy. Termination of this Agreement or any license granted hereunder shall not limit the remedies otherwise available to either party, including injunctive relief.

e. Survival. Unless otherwise stated herein, any provision that, by its nature or terms, is intended to survive the expiration or termination of this Agreement, will survive.

8. **LIMITED WARRANTIES; REMEDIES**

a. Software. Subject to the exclusions herein, including those in Appendix A, Mueller Systems warrants that commencing from the date placed in service or provision to Customer and continuing for the period set forth in Appendix A (the "**Warranty Period**"), (i) the media on which the Software is furnished will be free of defects in materials and workmanship under normal use; and (ii) the Software will perform substantially in conformance with the

applicable Documentation provided to Customer by Mueller Systems. Mueller Systems does not warrant that the Software will operate in combinations with other software, except as specified in the Documentation, that the Software will meet the Customer's requirements or that the operation of the Software will be uninterrupted or error-free. Customer assumes responsibility for taking adequate precautions against damages which could be caused by defects, interruptions or malfunctions in the Software or the hardware on which it is installed. Mueller Systems' entire obligation with respect to the Software warranties set forth above shall be, at Mueller Systems' option, to either (x) repair or replace any Software containing an error or condition which is reported by Customer in writing to Mueller Systems which causes the Software not to conform with the warranty set forth herein; or (y) refund the amount paid by Customer to Mueller based on a ten (10) year straight-line depreciation rate and terminate this Agreement and all licenses provided herein.

b. Services. Mueller Systems warrants that all services provided by it to Customer under this Agreement shall be performed in a workmanlike manner.

c. Exclusions. The warranties provided by Mueller Systems shall not apply to Equipment and/or Software which: (i) have been altered, except with the express written consent, permission or instruction of Mueller Systems, (ii) have been used in conjunction with another product resulting in the defect, except for those third party products specifically approved by Mueller Systems, (iii) were other than the most current version of the Software (but only to the extent that any failure of the Software would have been avoided by the use of the most current version), (iv) have been damaged by improper environment, abuse, misuse, accident, negligence, act of God, excessive operating conditions, or unauthorized attachments or modifications, (v) have not been properly installed and operated in accordance with the Documentation, or as otherwise instructed by Mueller Systems, or (vi) any other exclusion set forth in any Appendix hereto.

d. DISCLAIMERS. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE WARRANTIES AND REMEDIES STATED ABOVE ARE EXCLUSIVE AND NO OTHER WARRANTIES OR REMEDIES EXPRESS, IMPLIED OR STATUTORY, APPLY TO THE

DOCUMENTATION, THE SOFTWARE, TO BE PROVIDED BY MUELLER SYSTEMS UNDER THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUALITY OR PERFORMANCE, AND ANY IMPLIED WARRANTY ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING OR USAGE OF TRADE, ALL OF WHICH MUELLER SYSTEMS EXPRESSLY DISCLAIMS.

9. **INDEMNIFICATION.** Mueller Systems will indemnify and defend Customer from any third party claim that the Software and Equipment infringe on another person's or company's patent, copyright or other intellectual property right as specified in this Section. This indemnity does not cover and specifically excludes (a) intellectual property rights recognized in countries and jurisdictions other than the United States, and (b) claims relating to infringement of intellectual property rights by a third party's products and software. Mueller Systems has no obligation under this Section for any claim to the extent it results from or arises out of Customer's modification of the Equipment or Software or from any combination, operation or use of the Software or Equipment with other third party products or services. Mueller Systems' duty to indemnify under this Section is contingent upon Mueller Systems receiving prompt notice of a claim and Mueller Systems' right to solely control resolution of a claim. Customer's sole remedy for an indemnified claim under this Section is as follows: Mueller Systems will, at its expense and in its discretion either (a) resolve the claim in a way that permits Customer's continued ownership and use of the affected Software and Equipment, (b) provide a comparable, non-infringing replacement, and install such replacement, at no cost to Customer, or (c) refund the amount paid by Customer to Mueller based on a ten (10) year straight-line depreciation rate and terminate this Agreement and all licenses provided herein. This Section is the exclusive statement of Mueller Systems' liability and responsibility for indemnifying Customer for infringement of intellectual property rights

10. **INTENTIONALLY OMITTED.**

11. **NOTICE.** All notices required to be given hereunder shall be in writing. Notice shall be considered delivered and effective upon receipt when sent by registered or certified mail, return receipt requested, addressed to the parties as set forth above. Either party, upon written notice, may change any name or address to which future notice shall be sent.

Agreement.

[Signatures Appear on the Following Page]

12. **GENERAL.** The Software will not be exported or re-exported in violation of any export provisions of the United States or any other applicable jurisdiction. The rights and obligations of this Agreement are personal rights granted to the Customer only. The Customer may not transfer or assign any of the rights or obligations granted under this Agreement to any other person or legal entity. Any such purported transfer or assignment shall be null and void. Mueller Systems will be free of liability to the Customer where Mueller Systems is prevented from executing its obligations under this Agreement in whole or in part due to force majeure, such as earthquake, typhoon, flood, fire, and war or any other unforeseen and uncontrollable. Any modification or amendment to any of the provisions of this Agreement will be in writing and signed by an authorized officer of each party. This Agreement does not create or imply any relationship in agency or partnership between the parties. Headings are inserted for the convenience of the parties only and are not to be considered when interpreting this Agreement. The validity of this Agreement and the rights, obligations, and relationship of the parties resulting from same will be interpreted and determined in accordance with the law of the State of California, and applicable federal law, without regard to its choice of law provisions. The parties specifically exclude from application to the Agreement the United Nations Convention on Contracts for the International Sale of Goods and the Uniform Computer Information Transactions Act. If any provision of this Agreement is contrary to and in violation of any applicable law, such provision will be considered null and void to the extent that it is contrary to such law, but all other provisions will remain in effect. The waiver or failure of either party to exercise any right herein shall not be deemed a waiver of any further right hereunder. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all other prior and contemporary agreements, understandings, and commitments between the parties regarding the subject matter of this

EACH PARTY ACKNOWLEDGES THAT IT HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

Mueller Systems

By: _____

Name (Print or Type)

Title

Customer

By: _____

Name (Print or Type)

Title

Note: Please initial and return all pages

Appendix A

Mueller Systems – Product Warranty Statement

1. **Limited Warranty.** Mueller Systems, LLC (“Mueller”) warrants that, for the duration of the Warranty Period (defined below): (a) each product purchased from Mueller (“Product”) will be free from defects in materials and workmanship under normal use, installation and service conditions; (b) the media on which any Software is furnished will be free of defects in materials and workmanship under normal use; and (c) any such Software will substantially conform to the applicable published Mueller functional specifications for such Software. Products will have a warranty period of the greater of (i) one (1) year from date of shipment or (ii) the applicable warranty period for a specific Product stated below in Section 6 (“Warranty Period”).

2. **Exclusive Remedy.** Mueller will, at its option, either repair or replace with an equivalent substitute a Product that is in breach of the foregoing warranty during the Warranty Period if Customer reports the breach to Mueller within sixty (60) days after Customer discovers the breach. At Mueller’s request, Customer will ship the allegedly defective Product to a repair facility designated by Mueller at Customer’s expense and risk. If Mueller, in its sole discretion, determines that the Product breached the applicable warranty, Mueller will ship the repaired or replaced Product to Customer at Mueller’s expense and risk. If Mueller determines that it is unable to repair or replace such Product, it will, at Mueller’s sole discretion provide a cash or credit refund to Customer. If Mueller repairs or replaces any such defective Product, the Warranty Period for the repaired or replaced Product will continue for the longer of (y) thirty (30) days, or (z) the remainder of the original Warranty Period. Mueller’s warranty is subject to exclusions, as set forth in Section 3. This Section 2 sets forth Mueller’s entire liability, and the Customer’s exclusive remedy, for any alleged breach of warranty for any Products.

3. **Exclusions.** Mueller has no obligation under this Product Warranty Statement if (a) a Product has been subject to misuse, neglect or accident or has been damaged through abuse, alternation, installation or application inconsistent with AWWA guidelines or Mueller specifications, including but not limited to Mueller propagation studies, failure to follow Mueller’s operation or maintenance instructions or negligence in transportation, handling, or storage, or repaired by anyone other than Mueller or its authorized personnel, (b) with respect to software, there has been a change to the software’s operating environment not made or authorized by Mueller or if Customer fails to install any correction or enhancement provided by Mueller, or if a virus is introduced through no fault of Mueller, or (c) if any Product fails to satisfy the applicable warranty as a result of any force majeure event. Mueller’s Product Return process can be found at www.muellersystemsreturns.com.

4. **Important Disclaimer.** EXCEPT AS EXPRESSLY SET FORTH HEREIN, MUELLER DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT AND WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE. TO THE EXTENT ANY IMPLIED WARRANTY CANNOT BE EXCLUDED, SUCH WARRANTY IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD.

5. **Limitation on Liability.** Mueller has no liability with respect to damage or destruction of property or the personal injury or death of persons resulting from defects in Products or from improper installation, use, maintenance or operation of any Products. In all cases, Mueller’s liability shall not exceed the total amount paid by Customer to Mueller under this Order.

6. **Product Warranties.** The following provisions in this Section 6 modify the limited warranty in Section 1 with respect to the specific Products identified below:

Automated Meter Reading (AMR) / Advanced Metering Infrastructure (AMI) Products		
Product	Description	Warranty Period
AMR / AMI Software	These items of Software will perform in accordance with Mueller’s published specifications for the duration of the Warranty Period.	One (1) year from date of shipment to Customer.

Appendix B

Services

1. Software Services and Support Obligations

a. "Update" to the Software means a subsequent release of the Software that Provider makes generally available to its current customers for the Software. Updates include changes and corrections to the Software as are required to keep the Software in substantial conformance with the applicable Documentation and that are created by Provider as corrections for defects in the Software. Updates shall not include any release, option or future product that Provider licenses separately. Provider shall in its sole discretion determine the nature, content, timing and release of any Updates.

b. Web-based support, consisting of information on the most current release of the Software through Provider's web site.

c. Phone support in the form of advice and counsel via telephone regarding Customer's use of the most current release of the Software, as well as Customer's connectivity and ability to access Content. Phone Support is provided from 8:00 AM to 7:00 PM Eastern Time, Monday through Thursday and 8:00 AM to 5:00 PM Eastern Time on Fridays. All hours and days exclude recognized U.S. holidays observed by Mueller Systems.

2. Software Hosting Services

a. Except as specifically permitted in this Agreement, Customer shall have web-based access the Software hosted by Provider pursuant to this Agreement.

b. Provider shall provide Customer with access and related hosting services to the Software installed on Provider's servers. Provider will also install the Content provided by Customer. Provider will define the appropriate performance specifications and will host the server at a Provider's location. Provider will monitor and perform routine maintenance on the server, and if the server is not operating properly, will make a good faith effort to operate Customer's system on a backup server, if available. Access to Customer's server is restricted to authorized Provider information technology and support personnel only. Differential and full server backups are performed when reasonably practicable.

c. Customer shall be responsible for installing, operating and maintaining the equipment, software, and/or facilities at Customer location recommended by Provider for effective access to and use of the Software installed on Mueller Systems server. Customer shall be responsible for providing and maintaining its own Internet access and all necessary telecommunications equipment at Customer's location necessary for accessing the Software.

d. Upon termination, for any reason, of the Agreement or any license(s) granted herein, Provider shall immediately cease providing access to the Software and Hosting Services. Customer shall (i) immediately stop access and use of all such Provider confidential information (including Software); (ii) shall return all copies of the Software, Documentation, and any Provider confidential information to Provider; and (iii) delete all Software, Documentation, and other confidential information off of any and all storage media possessed or controlled by Customer. Customer shall provide Provider with written certification signed by an officer of Customer that Customer has complied with the provisions of this Section. Customer shall immediately pay all amounts due to Provider.

Appendix C

Confidential Information

For purposes of this Attachment, “party” or “parties” shall mean Provider and Customer, including their respective subsidiaries and affiliates who are providing information under this Agreement. The parties agree to maintain confidential information as follows:

1. **Definition of Confidential Information.** The parties understand and agree that confidential information is any and all current and future Equipment, Documentation and/or Software information, roadmap, technical or financial information, customer names, addresses and related data, contracts, practices, procedures and other business information, including software reports, strategies, plans, documents, drawings, machines, tools, models, patent disclosures, samples, materials and requests for proposals that may be disclosed between the parties, whether written, oral, electronic or otherwise, however and wherever acquired (“Confidential Information”). Confidential Information excludes any information which would otherwise fall in the definitions above, but which was (a) known to the recipient of the information (“Recipient”) before receipt from the disclosing party; (b) publicly available through no fault of Recipient; (c) rightly received by Recipient from a third party without a duty of confidentiality; (d) disclosed by disclosing party to a third party without a duty of confidentiality on the third party; (e) independently developed by Recipient without breach of this or any other confidentiality agreement; or (f) disclosed by Recipient after prior written approval from the disclosing party.

2. **Obligations of Confidentiality and Remedies.** The Provider and Customer agree these obligations are subject to the California Public Records Act. Recipient agrees to protect the disclosing party’s Confidential Information with the same degree of care, but no less than a reasonable degree of care, as Recipient uses with respect to its own Confidential Information. Neither party has any obligation to exchange Confidential Information. Both parties acknowledge and agree that the disclosure of the other party’s Confidential Information could cause irreparable harm. Therefore, an injured party is entitled to applicable equitable relief, including injunctions, in addition to other remedies, for such wrongful disclosure of Confidential Information. In addition, disclosure of Confidential Information required by a government body or court of law is not a violation of this Section if the Recipient gives prompt notice of the required disclosure to the disclosing party.

3. **Term of Confidentiality Obligations.** Recipient’s duty to protect Confidential Information expires three (3) years from the date of disclosure of the particular Confidential Information.

4. **No Warranties on Confidential Information.** Neither party warrants or guarantees the accuracy of any Confidential Information transferred between the parties.

Appendix D

PART #	DESCRIPTION	UNITS	SALE PRICE	EXTENDED NET
MSW-S-PH-ALL-10K	MIHOST 5-10K (POINT/Y) INCLUDES NETWORK OPERATIONS CENTER SUPPORT	6,999	4.02	28,135.98
MSW-S-PH-WS-20K	WATERSMART CONSUMER PORTAL YEAR HOSTING FEE	13,102	1.92	25,155.84
Optional Extended Warranties				
PART #	DESCRIPTION	UNITS	SALE PRICE	EXTENDED NET
IAEZMAINT-SW-20K	EZ YR MAINT (10-20K) AMR V5 ONLY	1	2,025.00	2,025.00
MS-G-M-YR	MI.HUB COLLECTOR MAINT OPTIONAL	1	1,499.00	1,499.00
MS-H-M-YR	MI.TECH HH/INSTALL MAINT - YR	1	880.00	880.00
MS-R-M-YR	MI.NET REPEATER EXT WARRANTY OPTIONAL	1	259.00	259.00
OPTIONAL EXTENDED WARRANTIES TOTAL:				USD 4,663.00

Agenda Item

DATE: September 1, 2020
TO: Engineering Committee
FROM: Charles Palmer, District Engineer
RE: Presentation/Discussion – Projects Update

SUMMARY

Staff is providing updates on the following projects:

- A. West Point & Wilseyville Wastewater Consolidation
As of August 4, 2020, staff issued a request for proposals (RFP) for engineering services to design the project. Proposals are due September 24, 2020. Design is to be completed by December 2021 and bidding and construction is scheduled for March 2022 through December 2023.
- B. West Point Backup Water Filter
As of July 7, 2020, an IRWMP implementation grant award was issued to UMRWA by DWR providing Prop.1 funding to assist CCWD in purchasing and installing a backup water filter for the community of West Point. The grant is approximately \$450,000 and will help pay for about 25% of the total project cost. The scope of the project will be to purchase and install either a second Trident filter matching the existing filter or equivalent filter technology. The grant agreement between CCWD and UMRWA will be adopted in October.
- C. Ebbetts Pass Redwood Tank Wildfire Mitigation Project
This project is a HMGP project approved by Cal-OES/FEMA and includes replacement of the Forest Meadows Heather Drive Tank, Meadowmont Tank 13, Big Trees Tank 4 & 5, and Big Trees Tank 8. The project completion deadline is April 17, 2023. Staff is proposing to design this project in-house and then start construction within 12-months.
- D. Ebbetts Pass Techite Pipeline
As of August 19, 2020, K.W. Emerson has installed 5,300 feet of new 10-inch water main along Meko Drive between Hwy 4 and Blackfoot Circle. K.W. Emerson's has another 1,600 feet to complete the project including work on Blackfoot Circle, MeWuk Lane, Ottawa Drive and Bigfoot Circle extending to the Big Trees Tanks 4 & 5 site. K.W.'s goal is to substantially complete construction by the end of this year.

- E. Ebbetts Pass Reach 1
As of July 31, 2020, Mozingo had completed the full length 21,000 feet of 12-inch transmission main along State Route 4. During August, the pressure regulating stations, blow-offs, air valves have been installed and the main line was pressure tested. Mozingo anticipates being completed with construction by the end of October, expect for final cleanup and punch list items.
- F. Jenny Lind A-B Transmission Main
As in 2006, Tank B drained down entirely in a period of peak summer demand. This same situation is appearing in 2020 as staff has again had challenges maintaining the level in Tank B. During the past several months, staff has been checking PRV setting and modeling the water system in an effort to optimize water transmission and system pressures. Engineering staff have been analyzing requirements for the A-B Transmission Main and double checking recommendations in the water master plan. The District is considering a design/build contract as a means to expedite the project.
- G. Jenny Lind Service Line Replacement – Kirby, Gabor, and Garner
The project is complete and contractor has completed all punch list items as of August 8th, 2020. After final acceptance of the project by the Board and filing a notice of completion, staff will the issue a final payment.
- H. Copper Cove Secondary & Tertiary Treatment Plant Improvements
The Copper Cove Master Plan identified over \$13 million in improvements to the wastewater treatment plant secondary biological and tertiary facilities. During FY 2020-21, staff proposes to issue a request for proposals for an engineering consulting firm to perform a pre-design and develop a conceptual plan and cost estimates for the new facilities. Staff must identify funding for construction of the project, and one possibility is a Federal WRDA Section 219 authorization. Also, it is necessary to rehabilitate the existing filter during the interim period to continue on-going operation.
- I. Copper Cove Lift Station Replacement and Force Main Bypass
The design engineer consultant has agreed to complete the project design by the end of 2020. The District will then put the construction contract out to bid.
- J. Copper Cove Reeds Turnpike Pump Station
The existing Reeds Turnpike Pump Station is the weak link in the chain to the water supply for Copperopolis and Copper Town Square. The original facilities agreement for Copper Town Square identified replacement of this pump station as a future requirement for the development of the project. CV Developers recent plans for Copper Town Square are gradually increasing water demands. Given the pumping rate is only 100-gpm, if a pump breaks/fails in the hot summer months the water supply could be out of service for days, which is an

unacceptable risk to health and safety of the community. Staff has notified CV Developers about this situation, and CV Developers has agreed to construct the pump station at a future date. Staff will provide a preliminary design for the pump station.

K. Indian Rock Sand Filter Rehabilitation

Design work is nearly complete and the project is on schedule to be completed no later than Spring 2021.

L. Capacity Fee Update

The capacity fee analysis is in progress by HDR under the direction of Shawn Koorn. Staff replied to HDR's initial data request and most of the requested information has been forwarded to HDR.

M. Gold Creek Unit 3

Staff has reviewed and approved the subdivision water and sewer plans. The project is proposed to go to construction this fall pending final approval by the County and CCWD. Construction is scheduled to begin either this fall or next spring. Our inspector, Jared Gravette, will have to be present to inspect construction of the water and sewer facilities.

N. Other

Committee may request additional information from staff on other projects not described above.

FINANCIAL CONSIDERATIONS

None at this time.