

CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

To be held on
May 18, 2021 at 2:30 PM

Agenda for the Meeting of the Engineering Committee
of the Crescenta Valley Water District

Posted May 17, 2021 at 10:00 AM

TELECONFERENCING NOTICE

[This meeting will be held by teleconference only.]

Pursuant to the provisions of Executive Order N-29-20 issued by Governor Gavin Newsom on March 18, 2020, the public may not attend the meeting in person.

Any member of the public may participate using a touchtone phone. You may select any of the following phone numbers (there are more than one for increased reliability during this time of increased phone traffic)

(669) 900-6833

(346) 248-7799

(929) 205-6099

(253) 215-8782

(301) 715-8592

(312) 626-6799

Then, enter Access Code: 837 2816 1540

[Pursuant to the above Executive Order, the public may not attend the meeting in person]

Those members of the public who are able to and would like to additionally participate with a computer through videoconference may access the Zoom videoconferencing tool available at the following link – <https://us02web.zoom.us/j/83728161540>

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by contacting the District by phone or in writing at customerservice@cvwd.com. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

Call to Order

Adoption of Agenda

Public Comment:

At this time, members of the public shall have an opportunity to address the Committee on items of interest that are within the subject matter jurisdiction of this Committee. This opportunity is non-transferable, and speakers are limited to three (3) minutes each. Under the provisions of the Brown Act, the Board is prohibited from taking action on items not listed on the agenda, except under certain circumstances.

Action Items

The public shall have an opportunity to comment on any action item as each item is considered by the Committee. This opportunity is non-transferrable, and speakers are limited to one two-minute (2) comment each.

1. Award of Contract for the Design of a New Pressure Reducing Station & Rehabilitation of the Ramsdell Mixing Station, Project E-977
2. Discussion of the FY 21/22 Capital Improvement Project Budget
3. Project Cost Update - FY 20/21 Capital Improvement Project Program

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – June 15, 2021 at 2:30 pm

Adjournment

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 1

May 18, 2021

To: Engineering Committee
From: Brook Yared, M.S., P.E. – Engineering Manager
Subject: **Request for Proposal** - Professional Engineering Services for Design of a New Pressure Reducing Station & Rehabilitation of the Ramsdell Mixing Station, Project E-977

BACKGROUND:

CVWD has been operating a break point chlorination station at the corner of Mayfield Ave. and Ramsdell Ave. where CVWD mixes local groundwater with imported water from Foothill Municipal Water District (FMWD). Over the years, this station has experienced high levels of corrosion inside the vault and has not been able to be properly maintained. The primary reason is currently, it is not possible to isolate the mixing station without shutting off the water supplied to CVWD's Zone 1. A secondary water source will be needed for CVWD's Zone 1, which is available from a higher-pressure zone (Zone 2). To facilitate the transfer of water from Zone 2 to Zone 1, CVWD's Engineering Department designed a second Pressure Reducing Station and a new isolation valve at the intersection of Mayfield Ave. and Ramsdell Ave. This would allow for the temporary removal of the RMS from service for necessary repairs (see attached preliminary design plans).

For CVWD to meet the accelerated pipeline replacement schedule along with a full CIP budget, we will need the assistance of a consulting engineering firm to review and prepare final design plans and specifications for the installation of a new PRV and upgrade and possible expansion of the RMS equipment and existing vault.

CVWD has worked with DMc Engineering in preparing a topographic survey of the project area as well as identifying the right-of-way within the City of Glendale and Caltrans. CVWD also worked with Cannon Corp on the electrical design of the project, which is included in this packet.

The selected consultant will be responsible to review the existing design and make recommendations to enhance the mixing operations, extend the life of the station and expand the existing vault and lid to accommodate for maintenance inside of the vault in the future.

Phase 1: The new PRV must be tested in conjunction with CVWD's Montrose PRV (see attached Location Map) to ensure that there is enough flow provided to CVWD's Zone 1 to maintain normal operations during the future isolation of the RMS. This will also require design of electrical and telemetry elements for powering and controlling the PRV via CVWD's SCADA system.

Phase 2: After the PRV has been installed and tested along with a new isolation valve, the RMS can be isolated. All pipelines, isolation valves, and flow control valves shall be replaced and all appurtenant electrical, SCADA, telemetry and sampling systems reinstated. The design should include the expansion of the vault to allow for CVWD operators to access equipment in the vault in the future.

CVWD is planning to bid out both phases of the work as a single project that will be under construction in sequence and completed before June 30, 2022.

DISCUSSION:

In April 2021, staff sent out a request for proposal (RFP) to five (5) consulting engineering firms to prepare design plans and specifications for the proposed project. Each firm has prior experience with professional services for the design of multifaceted water infrastructure projects. Attached for your review is the RFP that included the scope of work and other project parameters.

On April 17, 2021, staff held a pre-proposal web conference with the consulting firms and provided information about CVWD, the scope of work and proposed project schedule. The proposals were accepted on May 10, 2021, and CVWD received two (2) proposals.

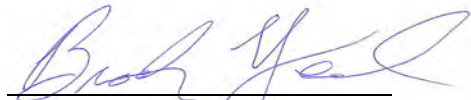
Staff reviewed each proposal and ranked them in accordance to the following categories and weighted percentages: 1) Proposal, Project Concept & Scope of Work– 30%, 2) Previous work experience – 30%, 3) Expertise of project staff on similar projects – 20%, 4) Coordination with agencies – 10%, and 5) Costs of service – 10%.

Cannon Corporation (Cannon) was the highest ranked consultant as shown on the attached consultant ranking table. Cannon's proposal addressed the critical design issues such as the channel crossing on Encinal Ave, coordination with Glendale and Los Angeles County, the design of new pipelines/vaults, installation of SCADA/Telemetry, implementation of water quality measures, meeting the District's project schedule, and their proposed costs are within CVWD's budget for this project. Cannon's team members have completed several similar projects within Los Angeles County and have previously provided consulting services to CVWD for the Rockhaven Well, advanced treatment facilities at Well 2, and design of the new emergency generator at CVWD's La Granada Lift Station.

RECOMMENDATION:

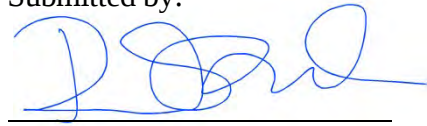
It is staff's recommendation to the Engineering Committee to award a consulting contract to Cannon for \$89,868 to prepare design plans and specifications as they provide a cost-effective proposal to meet the District's needs.

Prepared by:



Brook Yared, M.S., P.E.
Engineering Manager

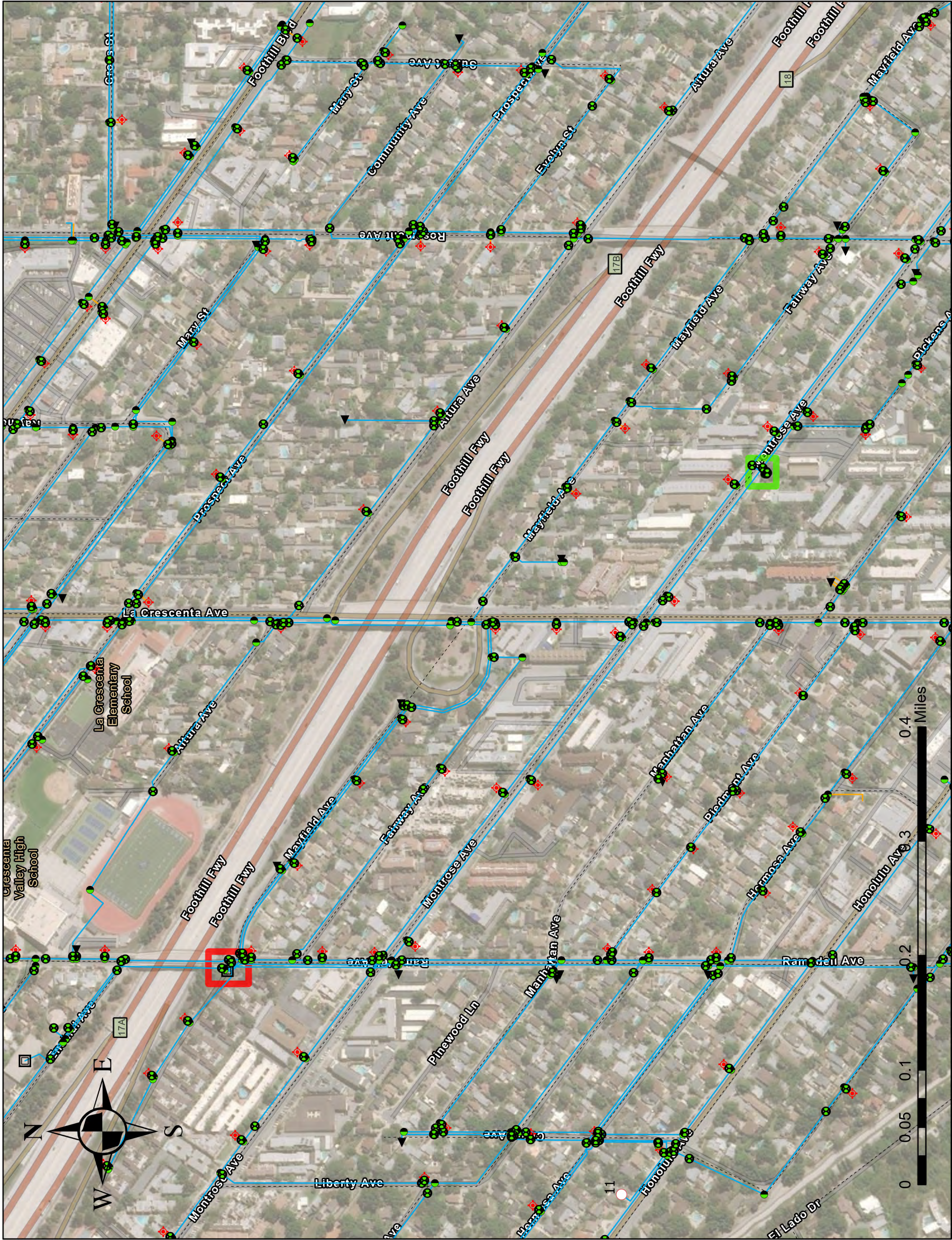
Submitted by:



David S. Gould, P.E.
Director of Engineering

Attachments:

1. Project Location Map
2. Request for Proposal
3. Consultant Ranking Table



Legend

Existing System:

- wwell
- wsvalve
- wmetstr
- whyd
- wfitting
- wcvalve
- wmain
- wlatine
- StreetCenterline

Existing Pipe Material: Bare Steel

Proposed Construction:

- PRV and RMS Construction Area
- Montrose Pressure Reducing Station

FY 21/22 CIP

Project E-977

Ramsdell Mixing Station

Rehabilitation



Crescenta Valley Water District



REQUEST FOR PROPOSAL

PROFESSIONAL ENGINEERING SERVICES FOR DESIGN OF A NEW PRESSURE REDUCING STATION & REHABILITATION OF THE RAMSDELL MIXING STATION, PROJECT E-977

PROPOSAL DUE DATE: May 3, 2021

INTRODUCTION:

Crescenta Valley Water District (CVWD) is embarking on its FY 21/22 capital improvement project program to install a new pressure reducing valve station (PRV) and rehabilitation of CVWD's Ramsdell Mixing Station (RMS) near the intersection of Mayfield Avenue and Ramsdell Avenue. Maintenance and possible expansion of the RMS have been deferred until a PRV and additional isolation valves can be installed to isolate the station while still providing adequate water supply to CVWD's Zone 1.

CVWD's Board agreed to pursue additional funding, totaling \$5M with the understanding that the bond proceeds must be spent within 3-years of issuance of the bond. CVWD's Board of Directors have instructed staff to use these bond proceeds to fund new projects such as the RMS. This increase in available spending has given CVWD staff the opportunity to increase our normal annual CIP spending on long deferred infrastructure projects.

BACKGROUND:

CVWD has been operating a break point chlorination station at the corner of Mayfield Ave. and Ramsdell Ave. where CVWD mixes local groundwater with imported water from Foothill Municipal Water District (FMWD). Over the years, this station has experienced high levels of corrosion inside the vault and has not been able to be properly maintained. The primary reason is currently, it is not possible to isolate the mixing station without shutting off the water supplied to CVWD's Zone 1. A secondary water source will be needed for CVWD's Zone 1, which is available from a higher-pressure zone (Zone 2). To facilitate the transfer of water from Zone 2 to Zone 1, CVWD's Engineering Department designed a second Pressure Reducing Station and a new isolation valve at the intersection of Mayfield Ave. and Ramsdell Ave. This would allow for the temporary removal of the RMS from service for necessary repairs (see attached preliminary design plans).

For CVWD to meet the accelerated pipeline replacement schedule along with a full CIP budget, we will need the assistance of a consulting engineering firm to review and prepare final design plans and specifications for the installation of a new PRV and upgrade and possible expansion of the RMS equipment and existing vault.

CVWD has worked with DMc Engineering in preparing a topographic survey of the project area as well as identifying the right-of-way within the City of Glendale and Caltrans. CVWD also worked with Cannon Corp on the electrical design of the project, which is included in this packet.

The selected consultant will be responsible to review the existing design and make recommendations to enhance the mixing operations, extend the life of the station and expand the existing vault and lid to accommodate for maintenance inside of the vault in the future.

The PRV and RMS are located adjacent to a large condominium community and several single-family residents. Parking is limited within the area, and it is a high traffic area due to a nearby high school.

Phase 1: The new PRV must be tested in conjunction with CVWD's Montrose PRV (see attached Location Map) to ensure that there is enough flow provided to CVWD's Zone 1 to maintain normal operations during the future isolation of the RMS. This will also require design of electrical and telemetry elements for powering and controlling the PRV via CVWD's SCADA system.

Phase 2: After the PRV has been installed and tested along with a new isolation valve, the RMS can be isolated. All pipelines, isolation valves, and flow control valves shall be replaced and all appurtenant electrical, SCADA, telemetry and sampling systems reinstated. The design should include the expansion of the vault to allow for CVWD operators to access equipment in the vault in the future.

CVWD is planning to bid out the construction of both the new PRV and the upgrades to the existing RMS under the same construction project with anticipated end of construction before June 14, 2022.

SCOPE OF WORK:

CVWD is seeking a professional engineering firm to design and prepare construction specifications documents for the installation of the new PRS and RMS as described above. The major elements of the project include the following:

- Review of preliminary plans prepared by CVWD and its consultants
- Utility research and compiling for base map.
- Prepare a pothole plan for utility crossing and connection to existing water mains. Potholing will be performed by CVWD crews.
- Pipeline, valve, and vault design per CVWD design and AutoCAD standards including:
 - o The PRV installation includes the design of three (3) new isolation valves, one (1) new PRV, one (1) new 16-inch isolation valve, one (1) new vault, electrical conduit, SCADA/telemetry program updates, and reconnection to existing water mains.
 - o The RMS review of existing equipment, study vault expansion option, replace existing 10" flow control valves.
- Details of vaults and connection to existing water mains
- Review and coordinate Electrical design plans and specifications with Cannon.
- Traffic Control Plans per City of Glendale requirements
- Coordination with City of Glendale Department of Public Works
 - o Design requirements relative to pavement replacement, backfill requirements, water discharge BMPs and traffic control.
 - o Excavation Permit – Submittal and preliminary approval. Contractor will obtain the final permit. CVWD will pay all permit fees.
- Coordination with the California Department of Transportation
 - o Additional permitting for construction adjacent to a freeway crossing, (if required).
- Coordination with Southern California Edison (SCE) for upgrade of the electrical meter
- Project Front-end Specifications provided by CVWD
- Project Special and Technical Provisions. Sample provided by CVWD
- Bidding Schedule and Engineer's construction cost estimate.
- Project Schedule for design phase and estimated construction schedule
- Construction services for bidding & shop drawing review. If CVWD needs additional assistance during construction for RFI's, CVWD will request a separate proposal.

Deliverables:

- Prepare 100% submittal and final submittal of construction drawings and specifications for both the PRV and vault construction as well as upgrades to the RMS.

Project Meetings - Attendance at least five (5) design and bidding project meeting

- o Kick-off Meeting
- o Community Outreach Meeting (Design Consideration)
- o 50% Submittal for Pressure Reducing Station and Ramsdell Mixing Station construction.
- o 90% Submittal for Pressure Reducing Station and Ramsdell Mixing Station construction.
- o Final Submittal
- o Pre-Bid Meeting

Project Schedule:

<u>Task</u>	<u>Date</u>
Pre-Proposal Meeting – Video Conference	April 21, 2021
Proposal Due	May 3, 2021
Award of Contract	May 25, 2021
Kick Off Meeting	June 2, 2021
50% Design Submittal and Review	May 26 – July 15, 2021
90% Design Submittal and Review	July 15 – August 19, 2021
Permitting (City of Glendale)	July 15 – August 26, 2021
Public Outreach (Design Consideration)	July 22, 2021
Board Approval – Advertisement for Bids	September 7, 2021
Pre-Bid Meeting	September 22, 2021
Bid Opening	October 13, 2021
Board Approval – Award of Contract	October 26, 2021
Public Outreach (Contractor/Inspector meet the Public)	November 4, 2021
Preconstruction Meeting	November 11, 2021
Start Construction	November 15, 2021
End Construction	June 14, 2022

PROPOSAL REQUIREMENTS:

Scope of Work

The proposal shall include a detailed list itemizing the tasks required to complete the scope of work addressing all project criteria outlined above. Each task shall include a detailed estimate of man-hours required to complete each task.

Proposal Fee Schedule

The proposal shall include a "Fee Schedule" outlining all applicable hourly rates and costs for services. The proposal shall provide a breakdown of fees associated with the project task as specified above. The proposal shall also include a "not-to exceed" total fee, which shall include all work necessary to complete the project objective.

Schedule

The proposal shall include a proposed project schedule detailing the time of completion for design and permitting. The schedule shall include the number of calendar days required to perform each task and the total number of calendar days required to complete the entire project.

Project Experience

The proposal shall include description of comparable pipeline projects completed by consultant including experience working with the City of Glendale and Los Angeles County within past three (3) years including: 1) names, addresses, and phone numbers of project managers, 2) date completed, location of work, and the name and address of the agency or firm for whom the project was constructed.

Consultant's Representative

The proposal shall name a responsible representative, an alternate, and all sub-consultants to perform the assigned tasks. The chosen consultant's representative will remain responsible and in charge of all duties from contract negotiations through project completion. If the primary representative is unable to continue with the project, then the alternate representative will become the primary representative. The District must approve any other changes in responsible representative, in advance. The District will have the right to reject other proposed changes in personnel and may consider any other changes in responsible personnel a breach of contract.

Professional Service Agreement

The chosen consultant shall be responsible for completing the specified services in accordance with the District's standard "Professional Services Agreement," which will be prepared by the District. Services specified in this agreement shall be taken directly from the consultant's accepted proposal and from this "Request for Proposal", if applicable.

Insurance Requirements

The District will require employer's liability, comprehensive commercial liability insurance, and errors and omissions insurance coverage for at least \$2,000,000 and comprehensive automobile liability for at least \$1,000,000. The District requires that the District be named as additional insured on the policy and such insurance policy shall not be terminated or canceled without thirty (30) days prior written notice to the District.

District Reimbursements

The District normally reimburses consultants for the actual cost (plus 15%) for all outside expenses, including those for material costs authorized in advance by the District. Other reasonable expenses will be reimbursed where such costs have been advanced by consultant and approved by the District.

The chosen consultant shall not be compensated for use of computers, office equipment, hardware, or software materials. Said costs are not compensated and time expended by consultant's personnel on such equipment is included within the hourly rate as shown on the consultant's fee schedule.

District Responsibilities:

District will provide the following to assist the selected consultant with the project and its completion:

- Topographic survey and right-of-way mapping prepared by DMc Engineering.
- Electrical plans prepared by Cannon Corp.
- Geographic information system (GIS) information and topographic surveys as available.
- Reports, plans, and drawings, as available and pertinent to the proposed plan.
- Design criteria, preferred manufacturer's information, and other technical information, as available and pertinent to the project.
- Current operational condition and performance of existing infrastructure pertinent to the proposed plan.

Proposal Due Date:

Please submit one (1) copy of the proposal as a PDF file via e-mail by 12:00 pm by May 3, 2021 to byared@cvwd.com. Send three (3) copies of the proposal to the attention of Mr. Brook Yared, Engineering Manager at Crescenta Valley Water District, 2700 Foothill Boulevard, La Crescenta CA 91214. If you have any questions or comments, contact Mr. Yared at 828-236-4117.



N.T.S.

**POTHOLE PRIOR TO CONSTRUCTION
FOR DEPTH, LOCATION & CONDITION
OF UNDERGROUND FACILITIES**

CRESCENTA VALLEY WATER DISTRICT
INSTALL 8"
PRESSURE ZONE INTER-TIE STATION
AT RAMSDELL AVE. & MAYFIELD AVE.

SHT. 1 OF 2 SHTS.	
COMPLETION DATE:	LINEAR FT.
JOB NO. E-977	FILE NO. C-408

PRELIMINARY
NOT FOR
CONSTRUCTION

SUBJECT TO CHANGE

Crescenta Valley Water District

Professional Engineering Services for Design of a New Pressure Reducing Station & Rehabilitation of the Ramsdell Mixing Station, Project E-977

Consultant Ranking

Ranking		Weighted Percent	Cannon		Tetra Tech		MKN		DMC Engineering		SWCA	
			Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Proposal - Project Concept & Scope of Work		30%	4.5	1.35	4.8	1.43						
Project Experience		30%	4.8	1.43	4.8	1.43						
Project Team Qualifications		20%	3.8	0.75	4.0	0.80						
Coordination with Agencies		10%	4.8	0.48	4.5	0.45						
Consultant's Fee		10%	4.8	0.48	2.8	0.28						
Final Weighted Score		100%		4.48		4.38						
Total				\$89,868		\$179,600		\$0		\$0		\$0

Each consultant's proposal rated 1 - 5 (5 outstanding - 3 average - 1 unsatisfactory) on each category above. Each rating is multiplied by the weighted average for each category and totaled for the final weighted score.

Categories:

Project Concept & Scope of Work - How well the consultant's proposal addressed the needs of the District as outlined in the request for proposal & how well the consultant showed how its firm would complete the project

Project Experience - How much previous experience has the consultant on projects similar to this project

Project Team Qualifications - How did the consultant's proposal use its staff and the experience of the individual people involved

Consultants Fee - How well the consultant's proposal utilized their staff and the costs associated with the proposal

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 2
May 18, 2021

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering
Subject: Discussion of FY 21/22 Capital Improvement Project Budget and Consultants

BACKGROUND:

Staff has been discussing the draft FY 21/22 Capital Improvement Project (CIP) budget with respect to the Long-Term Infrastructure and Funding Roadmap, including future financing through bonds and/or PayGo. Budgeting and financing of the FY 21/22 Capital Improvement Project has been discussed in-depth at Finance Committee meetings, Engineering Committee meetings and Board of Director meetings. The Board has tentatively agreed to the FY 21/22 CIP budget, and the schedule presented will be to finalize the budget and proposed water rate increase in October 2021.

DISCUSSION:

There are several CIP projects that need the assistance of outside consultants to begin design services so that construction could start earlier this year (October or November 2021) instead of starting after January 2022 as shown in the projects listed below:

1. Design consultant for the new pipelines on the 2800 to 3100 Blocks of Los Olivos; 3200 Block of Alabama 4700 & 4800 Blocks of Cheryl & 3300 Block of Thelma St.
2. Design consultant for the steel reservoir rehabilitation at Edmund #2.
3. Design consultant for the replacement of SCADA communication radio network
4. Design consultant for the replacement of SCADA Equipment, Programming & Integration
5. Consultant to assist operations staff with conversion, monitoring and standard operating procedures for the conversion to chloramines.
6. Consultant to prepare the Wastewater Master Plan, including Wastewater Treatment Plant Feasibility Study.

Staff will be preparing request for proposals (RFP) for each of these projects within the next few weeks and sending the RFP's out to consultants. Staff is planning to bring to future Board meetings the consultant award of contract for approval. The RFP will also include a statement that the District can stop design if the final CIP budget is revised, or the specific project is cancelled. Staff is estimating about \$100,000 to \$150,000 of consulting fees will be spent prior to the October 2021 approval of the CIP budget.

RECOMMENDATION:

Staff is recommending to the Engineering Committee that staff move forward with preparing and awarding design consultant contracts prior to the final adoption of the FY 21/22 CIP Budget.

Prepared & Submitted by:



David S. Gould, P.E.
Director of Engineering

Crescenta Valley Water District

FY 21/22 Capital Improvement Project Priority List

Capital Improvement Project Program	Budget FY 21/22	Category	Bond (B) or PayGo (P)	Cumulative Estimated Costs	Completion Date	Project Description
Bond Proceeds						
Annual Pipeline Replacement - 5,450 LF	\$ 1,795,326	Water Distribution	B	\$ 1,795,326	Jun-22	Pipeline Replacement - 2800 to 3100 Blocks of Los Olivos; 3200 Block of Alabama, 4700 & 4800 Blocks of Cheryl & 3300 Block of Thema - Total 5,450 LF; 69% Bond Funding
Bond Proceeds Subtotal	\$ 1,795,326					
Pay-Go						
Annual Pipeline Replacement - 5,450 LF	\$ 804,674	Water Distribution	P	\$ 804,674	May-22	Pipeline Replacement - 2800 to 3100 Blocks of Los Olivos; 3200 Block of Alabama 4700 & 4800 Blocks of Cheryl & 3300 Block of Thema - Total 5,450 LF; 31% Pay-Go Funding
Steel Reservoir Rehabilitation - Edmund #2	\$ 590,000	Water Storage	P	\$ 1,394,674	Mar-22	Reservoir Rehabilitation - Structural repairs and re-coating at Edmund #2 Reservoir during low demand (Winter) season
Well 14 Rehabilitation	\$ 105,000	Water Supply	P	\$ 1,499,674	Jan-22	Well Rehabilitation - Remove & Inspect Well Pump & Casing, Chemical Treatment Well Casing, Pump Test, New Pump & Motor
PRS - Zone 2 to Zone 1/Upgrade - Ramsdell Mixing Station	\$ 728,000	Water Distribution	P	\$ 2,227,674	Jun-22	New Pressure Reducing Station & Upgrade Ramsdell Mixing Station - <u>Continuation from FY 20/21</u> - Construction of PRS from Zone 2 to zone 1 & Upgrade to Ramsdell Mixing Station
Replacement - SCADA System	\$ 374,000	Technology	P	\$ 2,601,674	Dec-21	Replacement of SCADA System - <u>Continuation from FY 20/21</u> - Completion of the replacement of RTU/PLC Equipment including new equipment, programing, integration and testing
Replacement - Communication Radio Network	\$ 125,000	Technology	P	\$ 2,726,674	Sep-21	Replacement of SCADA Radio Communication System - <u>Continuation from FY 20/21</u> - Completion to Upgrading Radio System to 5.8GHz radios
AMI - 3/4" to 1" - Smart Meters & AMI Customer Portal	\$ 520,000	Technology	P	\$ 3,246,674	Feb-22	Advanced Metering Infrastructure (AMI) - <u>Continuation from FY 20/21</u> 1) Install 590 3/4" and 1" water meters in Zone 1 2) Install AMI Customer Engagement Portal 3) Install 3" & 4" meters - USBR Grant
Annual Booster Pump Replacement	\$ 53,000	Water Distribution	P	\$ 3,299,674	Jan-22	Booster Pump Replacement - Replace 15-yr and older booster pump with new pump assembly and high efficiency motor - Replace Booster 26 at Cresta Heights Reservoir
Stormwater Recharge CVC Park - Planning	\$ 30,000	Water Supply	P	\$ 3,329,674	Jun-22	Stormwater Recharge - <u>Continuation from FY 20/21</u> - Concept plan, grant funding options and coordination with stakeholders
Disinfection - Conversion to Chloramines	\$ 75,000	Water Treatment	P	\$ 3,404,674	Dec-21	Disinfection Changeover - Utilizing a consultant to assist operations staff with conversion, monitoring and standard operating procedures
Pay-Go Subtotal	\$ 3,404,674					
Total CIP	\$ 5,200,000					

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 3
May 18, 2021

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering
Subject: Project Update – May 2021 - FY 20/21 Water Capital Improvement Program

BACKGROUND:

The Board approved the FY 20/21 Water Budget at the June 9, 2020 meeting with \$2.3M available for CIP projects. The Board also agreed to pursue refinancing CVWD's existing bond debt and requesting additional funding, totaling \$5M available for FY 20/21 CIP. The \$5M Bond process was completed on September 15, 2020.

DISCUSSION:

The following is the **May 2021** update of the progress and schedule for the FY 20/21 CIP projects. Project costs are shown on the attached Updated Project Cost Summary:

1. **Steel Reservoir Rehabilitation – Rosemont Reservoir** – This project is for the structural repairs and re-coating of the reservoir interior to maintain the District's water storage capacity and to increase the life expectancy of the steel tank.
Progress: Harper and Associates Engineering (Harper) and staff completed the design, and the project was awarded to Crosno Construction.
Project Schedule: On Schedule
 - May 2021 – Filling Reservoir & WQ testing; Reservoir to be back in service by 5/24/21.
2. **Annual Pipeline Replacement** – This project is for the replacement of steel pipelines that are at least 50-years old or older in a timely manner.
 - A. **Project 1 & 2:** Replacement of 4-inch & 6-inch pipelines on the 2400 & 2500 Blocks of Janet Lee (Project 1), and the 4300 Block of Rosemont (Project 2).
Progress: Staff completed design, and project was awarded to Brkich Construction.
Project Schedule: On Schedule
 - Project 1 – 2400 & 2500 Blocks of Janet Lee – Final Paving – Complete by 5/21/21
 - Project 2 – 4300 Block of Rosemont - 90% complete; Complete by 5/31/21
 - B. **Projects 3:** Replacement of 8-inch pipeline on the 3400 & 3500 Blocks of Encinal (Project 3)
Progress: Civiltec and staff completed the design and project awarded to T.E. Roberts Const.
Project Schedule: On Schedule
 - May 2021 – Complete
 - C. **Projects 4:** Replacement of 4-inch, 6-inch & 8-inch pipelines on the 4800 Block of Dyer, 2800 Block of El Caminito, 4800 Block of Glenwood, 2800 Block of Stevens and 2700 Block of Paraiso Way (Project 4).
Progress: Civiltec and staff completed the design and project was awarded to Brkich Construction.
Project Schedule: On Schedule
 - May 24, 2021 – Begin Construction
 - July 2021 – Anticipate work to be completed.

3. **Local Hazard Mitigation Plan** - CVWD awarded a grant from Cal OES and FEMA to prepare a Local Hazard Mitigation Plan (LHMP) to address high priority hazards related to its water and sewer systems during a drought, energy shortage/outage, wildfire, earthquake, terrorism or cyber-attack. The total grant amount to prepare a local hazard mitigation plan is \$165,000, with \$125,000 grant funding from FEMA and \$40,000 funding from CVWD.

Progress: Steering Committee Meeting #8 on 6/09/21 and information updated regularly on CVWD's website.

Project Schedule: On Schedule

- May 28, 2021 – Draft review by CVWD
- June 8 – June 22, 2021 – Public Comment Period
- July 2021 – LHMP submitted to Cal OES.
- September 2021 – Grant Applications due

4. **New Emergency Generator at La Granada Sewer Lift Station** – Installation of a new emergency electrical generator at the sewer lift station.

Progress: Cannon and staff have completed the design and project was awarded to Affordable Generator Services.

Project Schedule: Behind Schedule

- May 2021 – Working with LA County Parks & Recreation Dept & LCF on license agreement.
- August 2021 – Anticipated delivery date for emergency generator & begin construction.

5. **Advanced Metering Infrastructure (AMI) Program** – This project has two (2) components: 1) replacement of ¾" & 1" meters with new Sensus iPERL "Smart Meters" in Pressure Zones 1 & 2, and 2) installation of the AMI network communication system.

Progress: Field crews have replaced around 493 ¾-inch & 1-inch, water meters for FY 20/21. Esource completed the RFQ, and the contract was awarded to Aqua Metric for the AMI network communication system.

Project Schedule: On Schedule

- April 2021 – Completed AMI network communication system & installation of 100 meters.
- May to July 2021 – Analysis of data and incorporating into customer billing system.
- May 2021 – Discussion of Customer Engagement Platform with staff.
- June 2021 – Finalize Opt-Out policy for Board approval.

6. **Groundwater Well Rehabilitation** – This project is for the rehabilitation of Well 12, which was last rehabilitated in 2010.

Progress: The project design is complete, and the contract was awarded to Legend Pump.

Project Schedule: On Schedule

- May 2021 – Completed well casing cleaning and installation of new pump.
- June 2021 – Water quality testing and put back into service.

7. **Replacement of SCADA Communication Radio Network** – CVWD has an existing radio communication network that operates on the 900 MHz radio frequency. In the past year, the radio system has seen interference with other communication devices, and the equipment, which was installed 7 years ago, is nearing the end of its useful life and has been malfunctioning.

Progress: Award contract to Systems Integrated to prepare SCADA radio feasibility study (Study).

Project Schedule: On Schedule

- May 2021 – Finalize SCADA radio feasibility study.
- June 2021 – Send out Request for Quote to replace Radio Communication System.

8. **New Pressure Reducing Valve (PRV) Station & Upgrade Ramsdell/Mayfield Mixing Station** – This project includes installing a new PRV station near the intersection of Mayfield Ave. and Ramsdell Ave. and upgrading the Ramsdell/Mayfield Mixing Station. The new PRV Station is needed to provide water from Zone 2 to Zone 1 when Encinal Reservoir and the Ramsdell/Mayfield Mixing Station are out of service. To meet the current FY 20/21 CIP schedule, staff will need assistance from a consulting firm to complete the specifications and advertise for bids.
- Progress:** Staff completed Request for Proposal (RFP).
- Project Schedule:** On Schedule
- May 2021 – Award of Consulting Contract – See staff report.
 - October 2021 – Advertise for Bids.
9. **Replacement of Supervisory Control and Data Acquisition (SCADA) System Upgrade** – CVWD has an existing SCADA system with RTU/PLCs that were installed at each of the District's facilities in 1996 that provides information on the status of the water system, controls for booster pump operation, and relays alarms to the System Operators. The upgraded SCADA system will include upgrading equipment, programing, and integration based on industry standards, which can be repaired and/or replaced by various consultants/contractors.
- Progress:** Staff is currently working on an assessment of the existing equipment and programing to prepare a request for proposal with a scope of work for a consulting firm.
- Project Schedule:** Behind Schedule.
- May 2021 – Continued working on Request for Proposal (RFP).
 - June 2021 – Review project with Engineering Committee.
10. **Stormwater Recharge Program** - Stormwater Recharge Project at Crescenta Valley County Park (CVC Park) includes the design and installation of a stormwater infiltration system within CVC Park that will direct stormwater from the Verdugo Wash into infiltration galleries for groundwater recharge. The focus will be to coordinate with the City of Los Angeles on stormwater rights.
- Progress:** Sent a letter outlining the project and water rights to discuss further with LADWP.
- Project Schedule:** On Schedule
- May 2021 – Staff met with LADWP, looking into alternatives.
 - June 2021 – Presentation to Engineering Committee on status of project.
11. **Rehabilitation Surge Tank at Glenwood** – This project is the rehabilitation of the surge tank at the Glenwood Operations Facility. A preliminary design was completed in 2017.
- Progress:** Project put on hold
12. **16-inch Manifold and Valve Replacement at Oak Creek Reservoir** – CVWD's operations staff observed a leak on the underside of the existing inlet/outlet pipeline manifold that joins Oak Creek #1 and #2 reservoirs. The inlet/outlet manifold was installed 1961 and is a critical junction point as it allows influent water to fill each reservoir.
- Progress:** Complete.
13. **Annual Booster Pump Replacement** – This project was originally planned to replace Markridge Booster 25. However, Booster B at Paschall was shut down due to what appears to be mechanical failure. Staff is working with the pump contractor that replaced the pump in 2018 to remove and replace the pump.
- Progress:** Complete

14. **Facility Improvement Program** – This project is for the installation of a new roof on the existing 70 ft diameter concrete reservoir at Encinal for material and equipment storage. Staff will be preparing an RFP for a consulting firm to perform the structural design of the new roof.

Progress: Complete – Project put on hold.

SUMMARY:

In summary, many of the FY 20/21 CIP projects are either under design or under construction. Attached for review is a summary of project costs including costs spent to date, cost committed to for the remainder of the year, and the total cost for each project.

Prepared & Submitted by:

A handwritten signature in blue ink, appearing to read 'D. Gould', is written over a horizontal line.

David S. Gould, P.E.
Director of Engineering

Attachment: FY 20/21 Capital Improvement Project Program - Cost Update: 5/17/21

FY 20/21 Capital Improvement Project Program Cost Update: 05/17/21	Recorded FY 19/20	Budget FY 20/21	<u>FY 20/21</u> Cost to date from 7/1/20 to 04/30/21	<u>FY 20/21</u> Cost Committed from 5/1/21 to 6/30/21	Projected FY 20/21
Capital Improvement Project Summary					
1. Water Supply	\$ 300,375	\$ 170,000	\$ 67,026	\$ 114,080	\$ 181,106
2. Water Storage	\$ 498,530	\$ 480,000	\$ 136,421	\$ 499,127	\$ 635,548
3A. Water Distribution - Pipeline	\$ 1,126,030	\$ 2,300,000	\$ 849,349	\$ 1,571,151	\$ 2,420,500
3B. Water Distribution - Other	\$ 10,892	\$ 710,000	\$ 128,153	\$ 108,016	\$ 236,169
4. Water Treatment	\$ 469,205	\$ -	\$ 54,073	\$ -	\$ 54,073
5. Technology	\$ 152,597	\$ 1,070,000	\$ 301,337	\$ 430,663	\$ 732,000
6. Public Safety/Emergency Response	\$ 5,810	\$ 165,000	\$ 62,785	\$ 102,215	\$ 165,000
7. Facilities & Planning	\$ -	\$ 105,000	\$ 1,555	\$ -	\$ 1,555
Capital Improvement Projects - Total	\$ 2,563,438	\$ 5,000,000	\$ 1,600,700	\$ 2,825,252	\$ 4,425,951
Bond Financing - CIP	\$ -	\$ 2,695,174	\$ 1,191,460	\$ 2,013,214	\$ 3,204,674
Water Fund Financing - CIP	\$ 2,563,438	\$ 2,304,826	\$ 409,240	\$ 812,037	\$ 1,221,277
Total Financing - CIP	\$ 2,563,438	\$ 5,000,000	\$ 1,600,700	\$ 2,825,252	\$ 4,425,951

FY 20/21 Capital Improvement Project Program Cost Update: 05/17/21		Recorded FY 19/20	Budget FY 20/21	FY 20/21 Cost to date from 7/1/20 to 04/30/21	FY 20/21 Cost Committed from 5/1/21 to 6/30/21	Projected FY 20/21
1. Water Supply						
A. Groundwater Water Supply						
i. Well Rehabilitation						
	Well 7 Rehabilitation	\$ 102,696				
	Well 16 Rehabilitation	\$ 103,713				
	Well 11 Rehabilitation	\$ 14,694	\$ -	\$ 56,106	\$ -	\$ 56,106
	Well 12 Rehabilitation		\$ 95,000	\$ 8,385	\$ 86,615	\$ 95,000
ii. New Wells						
	Re-Activate Well 2 - Construction	\$ 79,272				
iii. Groundwater Basin Recharge						
	Stormwater Recharge Project at CVC Park - Planning		\$ 75,000	\$ 2,535	\$ 27,465	\$ 30,000
WS Total		\$ 300,375	\$ 170,000	\$ 67,026	\$ 114,080	\$ 181,106
2. Water Storage						
A. Reservoir Rehabilitation						
i. Steel Reservoir Re-Coating/Roof/Vents Rehabilitation						
	Markridge	\$ 498,530	\$ -	\$ 367	\$ -	\$ 367
	Rosemont		\$ 480,000	\$ 80,873	\$ 499,127	\$ 580,000
	Oak Creek - 16" Manifold Repair		\$ -	\$ 55,181	\$ -	\$ 55,181
WS Total		\$ 498,530	\$ 480,000	\$ 136,421	\$ 499,127	\$ 635,548
3. Water Distribution						
A. Pipeline Replacement						
	3200 & 3300 Blocks of Brookhill	\$ 623,009				
	4700 & 4800 Block of Pennsylvania	\$ 503,021				
	Project 1		\$ 538,000	\$ 174,408	\$ 388,343	\$ 562,750
	Project 2		\$ 280,000	\$ 20,205	\$ 284,545	\$ 304,750
	Project 3		\$ 707,000	\$ 491,468	\$ 258,532	\$ 750,000
	Project 4		\$ 775,000	\$ 163,268	\$ 639,731	\$ 803,000
	Annual Pipeline Replacement		\$ 2,300,000	\$ 849,349	\$ 1,571,151	\$ 2,420,500
C. Booster Pump System						
i. Annual Pump /Motor Replacement						
	Boosters - Glenwood 32 & 33	\$ 4,384	\$ -	\$ 85,951	\$ -	\$ 85,951
	Booster Replace - Booster B at Paschall		\$ 75,000	\$ 20,218	\$ -	\$ 20,218

FY 20/21 Capital Improvement Project Program Cost Update: 05/17/21		Recorded FY 19/20	Budget FY 20/21	FY 20/21 Cost to date from 7/1/20 to 04/30/21	FY 20/21 Cost Committed from 5/1/21 to 6/30/21	Projected FY 20/21
D. Pressure Reducing Stations						
	PRS - Zone 2 to Zone 1	\$ 6,508	\$ 150,000	\$ 21,984	\$ 58,016	\$ 80,000
i. Water Surge Control						
	Rehabilitation Surge Tank at Glenwood		\$ 35,000	\$ -	\$ -	\$ -
iii. Misc.						
	Upgrade - Ramsdell Mixing Station	\$ -	\$ 450,000	\$ -	\$ 50,000	\$ 50,000
WD Total		\$ 1,136,922	\$ 3,010,000	\$ 977,502	\$ 1,679,166	\$ 2,656,669
4. Water Treatment						
C. Disinfection - Convert to Chloramines						
	Conversion to Chloramination	\$ 469,205	\$ -	\$ 54,073	\$ -	\$ 54,073
WT Total		\$ 469,205	\$ -	\$ 54,073	\$ -	\$ 54,073
5. Technology						
A. Automated Meter Information (AMI) System						
	AMI - 3/4" to 1" - Smart Meters	\$ 83,590	\$ 50,000	\$ 45,954	\$ 54,546	\$ 100,500
	AMI - Communication		\$ 150,000	\$ 159,736	\$ 141,764	\$ 301,500
B. Supervisory Control and Data Acquisition (SCADA)						
	Communication Radio Network		\$ 260,000	\$ 6,677	\$ 123,323	\$ 130,000
	SCADA Replacement - Design	\$ 69,007				
	SCADA Replacement - Installation		\$ 610,000	\$ 88,970	\$ 111,030	\$ 200,000
TECH Total		\$ 152,597	\$ 1,070,000	\$ 301,337	\$ 430,663	\$ 732,000
6. Public Safety/Emergency Response						
	Dunsmore/Pickens - Seismic Sensors	\$ 5,810				
D. Miscellaneous						
	FEMA Local Hazard Mitigation Plan		\$ 165,000	\$ 62,785	\$ 102,215	\$ 165,000
SF/ER Total		\$ 5,810	\$ 165,000	\$ 62,785	\$ 102,215	\$ 165,000
7. Facilities & Planning						
	Roof for Old Encinal - Storage Bldg		\$ 105,000	\$ 1,555	\$ -	\$ 1,555
F & P Total		\$ -	\$ 105,000	\$ 1,555	\$ -	\$ 1,555
Capital Improvement Projects - Total		\$ 2,563,438	\$ 5,000,000	\$ 1,600,700	\$ 2,825,252	\$ 4,425,951