

CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

To be held on
October 19, 2021 at 3:00 PM

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

Posted October 18, 2021 at 1:00 PM

TELECONFERENCING NOTICE

[This meeting will be held by teleconference only.]

Under AB 361 and District Resolution No. 772, the District will continue to hold Board and Committee meetings by teleconference, due to the continuing State of Emergency for COVID-19 and the ongoing imminent risks to the health or safety of the attendees from COVID-19.

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
(253) 215-8782

(346) 248-7799
(301) 715-8592

(929) 205-6099
(312) 626-6799

Then, enter Access Code: 898 4985 5407

[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/89849855407>

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. Discussion of Request for Proposal for the 2022 Wastewater Master Plan
2. Discussion of Zone 7 to Zone 5 Pressure Reducing Station and cost sharing agreement with GUSD
3. Review Final Costs for FY 20/21 CIP Program
4. Update of Costs for FY 21/22 CIP Program

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – November 16, 2021, at 2:30 pm

Adjournment

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 1

October 19, 2021

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering & Operations
Subject: Discussion for Request for Proposal for 2022 Wastewater Master Plan – Project M-1037

BACKGROUND:

In 1975, the District, under the Clean Water Act was required by the Department of Water Resources to remove the existing sewer septic system and install a new wastewater collection system within the La Crescenta area. From 1980 to 1986, CVWD constructed about 64 miles of the new sewer collections system including sewer mains, manholes, lateral connections, and cleanouts and abandonment of the existing septic tanks system. In addition, a 6.2-mile sewer interceptor line was construction from the La Crescenta area, through the City of Glendale to the Los Angeles Glendale Water Reclamation Plant (LAGWRP) in Glendale for treatment and disposal of CVWD's wastewater.

When the sewer collections system piping system was designed in 1979, the design flow was based on estimated residential flow at that time and projection of future housing growth within the Crescenta Valley. In the last 35 years, the sewer flow characteristics within the service area have changed and we need the assistance of a professional consulting firm to prepare the 2022 Wastewater Master Plan as we look towards wastewater infrastructure upgrades into the future.

CVWD has an agreement with the City of Los Angeles (City of LA) for conveyance, treatment & disposal of CVWD's wastewater. The City of LA costs represents about 50% of the annual wastewater budget and we have seen a steady increase in cost over the last 5 years. Staff has concerns about the future costs from the City of LA and will be including in the WWMP a task to looking into alternative treatment systems.

DISCUSSION:

We are seeking proposals from qualified consulting firms to prepare the CVWD's 2022 Wastewater Master Plan (WWMP), which will be the District's first WWMP since the collection system was installed in the 1980's.

The goal of the WWMP's will be to evaluate and provide recommendations for the following:

- Review system-wide sewer flow characteristics, assess the existing hydraulic capacity of the collection system, force mains, and lift station, and evaluating pipeline and lift station conditions.
- Estimate future sewer flow based on population projections and potential development projects utilizing the Los Angeles County and City of La Canada Flintridge Future Land Use Map, General Plan and Housing Plan.
- Create and run a sewer hydraulic computer model that can be easily updated by staff.
- Determine potential pipeline replacement, size upgrades and/or rehabilitation needs based on the hydraulic model and future sewer flows.
- Create a prioritized 10-Year CIP sewer plan with a funding approach.
- Review CVWD's existing contract with the City of Los Angeles for treatment and disposal costs in preparation of future contract negotiations.
- Investigate potential alternatives for future treatment and disposal systems that could reduce CVWD's costs to the City of Los Angeles.

The Master Plan will help determine the CIP projects needed to repair, replace, and/or upgrade CVWD's aging infrastructure, to increase system operating efficiencies and reliability, while improving cost predictability and maintaining a high level of customer satisfaction as we move into the future.

Project Budget:

Staff has estimated the cost of the 2022 WWMP at \$175,000 and this amount was included in the FY 21/22 budget. This estimate was based on a preliminary scope of work and discussion with several consulting firms that proved WWMP services.

Project Schedule:

Staff's goal is to award the consultant contact at the December 14, 2021, board meeting and the WWMP should be completed by December 2022 as shown below.

Wastewater Master Plan Preliminary Project Schedule			
Task	State Date	End Date	Days
Draft RFP	Monday, September 13, 2021	Wednesday, October 13, 2021	30
Staff Report	Wednesday, October 13, 2021	Friday, October 15, 2021	2
Engineering Com	Friday, October 15, 2021	Tuesday, October 19, 2021	4
Final RFP	Tuesday, October 19, 2021	Tuesday, October 26, 2021	7
Send out	Tuesday, October 26, 2021	Thursday, October 28, 2021	2
Pre-Proposal Mtg	Thursday, October 28, 2021	Wednesday, November 17, 2021	20
Proposal Due	Wednesday, November 17, 2021	Wednesday, December 1, 2021	14
Staff Report	Wednesday, December 1, 2021	Friday, December 10, 2021	9
Board Meeting - Award Contract	Friday, December 10, 2021	Tuesday, December 14, 2021	4
Kickoff Mtg	Tuesday, December 14, 2021	Tuesday, January 11, 2022	28
Data Request	Tuesday, January 11, 2022	Tuesday, January 25, 2022	14
50% Submittal	Tuesday, January 25, 2022	Wednesday, May 25, 2022	120
90% Submittal	Wednesday, May 25, 2022	Thursday, November 10, 2022	169
Staff Report	Thursday, November 10, 2022	Friday, November 11, 2022	1
Engineering Com	Friday, November 11, 2022	Tuesday, November 15, 2022	4
100% Submittal	Tuesday, November 15, 2022	Wednesday, December 7, 2022	22
Staff Report	Wednesday, December 7, 2022	Friday, December 9, 2022	2
Board Meeting - Approved	Friday, December 9, 2022	Tuesday, December 13, 2022	4

RECOMMENDATION:

It is staff's recommendation to send out the request for proposal to qualified consulting firms for the 2022 WWMP that will be due on December 1, 2022. Staff will review each proposal based on ranking of the consultants understanding of the project concept, scope of work, previous work experience, project schedule and project costs. Staff will review the proposals with the Engineering Committee for recommendation to the Board of Directors.

Prepared & Submitted by:



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

Attachments:

1. Draft Request for Proposal



2022 WASTEWATER MASTER PLAN

Project M-1037

Request for Proposal

Proposal Delivery Due Date:

Wednesday, December 1, 2021

12:00 PM PST

Delivery Address:

Crescenta Valley Water District
Attn: Brook Yared, Engineering Manager
2700 Foothill Blvd
La Crescenta, CA 91214

1. INTRODUCTION:

Crescenta Valley Water District (CVWD) is seeking proposals from qualified consultants to provide engineering services to prepare CVWD's 2022 Wastewater Master Plan (WWMP), which will be the District's first WWMP since the collection system was installed in the 1980's.

The WWMP's goal is to evaluate the system-wide flow characteristics, assess existing hydraulic capacity of the collection system, force mains, and a lift station, evaluate pipeline and lift station conditions, determine potential replacement and/or rehabilitation needs, and create a prioritized 10-Year CIP plan with a funding approach to allow a sustainable level of service to the District's customers. The Master Plan will help determine the CIP projects needed to repair, replace, and/or upgrade CVWD's aging infrastructure, to increase system operating efficiencies and reliability, while improving cost predictability and maintaining a high level of customer satisfaction into the future.

Additional goals for the WWMP will be to review CVWD's existing contract with the City of Los Angeles for treatment and disposal costs in preparation of future contract negotiations and to investigate and review potential alternatives for future treatment and disposal systems that could reduce CVWD's costs to the City of Los Angeles.

Proposal Requirements:

Prospective firms are required to provide team qualification, proposed work plan, proposed schedule, and other related items as described in this Request for Proposals (RFP). All services provided by the consultant shall be performed by individuals who meet the qualifications, education, and certification/licensing requirements for a WWMP.

Qualified firms that submit a proposal will be evaluated in accordance with the requirements defined within this RFP. Upon successful negotiations with the District, the selected firm will provide professional services for the Wastewater Master Plan as described in this RFP

A virtual pre-proposal meeting is scheduled for November 9, 2021, at 10:00 a.m.

All communications and questions relative to this RFP shall be directed in writing no later than November 11, 2019, 3:00 p.m. Questions submitted after this date will not receive a response. CVWD will respond in writing to each question and include the pre-proposal meetings notes by November 16, 2021.

Please submit one (1) copy of the proposal as a PDF file via e-mail by 12:00 pm on December 1, 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.

2. BACKGROUND

Crescenta Valley Water District (CVWD or the District) was formed as a “County” Water District in 1950 to provide water service to the La Crescenta area (unincorporated Los Angeles County) and portions of Glendale and La Canada Flintridge. In 1975, the District, under the Clean Water Act was required by the Department of Water Resources to remove the existing sewer septic system and install a new wastewater collection system within the La Crescenta area.

CVWD Wastewater Collection System:

In 1979, CVWD created Assessment District 79-1 (Above Foothill Blvd) & 79-2 (Below Foothill Blvd) to collect funds for installation of the new sewer system and connection of customers to the new sewer laterals. CVWD’s Sewer Assessment District boundary is different than the Water District boundary and water service area. The Sewer Assessment District includes the La Crescenta area (unincorporated LA County) and small part of La Canada Flintridge. The sewer system does not include any areas within the City of Glendale. The District has about 6,300 sewer accounts, which is less than its 8,100 water accounts.

From 1980 to 1986, CVWD constructed about 64 miles of new sewer collections system including sewer mains, manholes, lateral connections, and cleanouts as shown on the attached sewer atlas. At that time, customers were required to abandon their existing septic tanks system and connect their property to the new sewer laterals.

In addition, a separate 6.2 mile, 21-inch to 27-inch sewer main was construction from the La Crescenta area, through the City of Glendale to the Los Angeles Glendale Water Reclamation Plant (LAGWRP) near the intersection of the 5 freeway and 134 freeway in Glendale. This sewer main called “Sewer Interceptor Line” transmits all CVWD’s wastewater flow to LAGWRP.

In 1990, CVWD installed a Nitrate Removal Ion Exchange Treatment plant at its Glenwood facilities to remove nitrates from local groundwater. The ion exchange process creates brine waste during regeneration of the ion resin. The brine waste is stored in a 64,000-gallon waste tank and between 12 am and 2 am, the brine waste is pumped into the sewer interceptor line. Since the brine waste could upset the biological process at LAGWRP, a valve was installed that diverts CVWD’s sewer flow from LAGWRP to the Hyperion Water Reclamation Plant in Playa Del Rey.

Wastewater Treatment & Disposal Agreements

From 1985 to 2005, CVWD had an agreement with the City of Glendale for the treatment & disposal of CVWD’s wastewater. CVWD paid Glendale for part of its capacity at LAGWRP and treatment costs to the City of Los Angeles. The agreement between Glendale and CVWD was terminated in 2004.

In 2005, CVWD enter into an agreement with the City of Los Angeles (City of LA) for conveyance, treatment & disposal of wastewater, which will be renewed in 2030 and CVWD became one of the 24 contracting agencies to the City of LA. The City of LA contract includes universal terms and conditions that were negotiated between Los Angeles and the original contracting entities that provides the same cost recovery for the amalgamated system expenses based on quantity of flow and strength of sewage.

The Amalgamated System Sewerage System Charges (ASSSC) are charged to CVWD to recover CVWD’s proportional share of the Net Amalgamated System expenses. The ASSSC consists of two components 1) Operations & Maintenance charges and 2) Capital Improvement charges, which are paid on an annual basis. A summary of City of LA charges are included in Appendix “_”

CVWD also has specific terms as part of the City of LA Agreement that includes the following:

- City of La Canada Flintridge transports a portion of their sewer system through CVWD’s system to City of LA for the treatment and disposal of its wastewater. The flow and strength of discharged from La Canada to CVWD’s facilities is subtracted from the quantity measured at CVWD’s Monitoring Station in determining CVWD’s quantity of flow and strength.

- Calculation of Contracting Entity's MGD-miles is based all or part of the wastewater tributary to LAGWRP that may be diverted from the North Outfall Sewer or other sewers into LAGWRP.
- Bypass of Nitrate Wastewater – All wastewater from CVWD shall bypass the Los Angeles-Glendale Water Reclamation Plant through a bypass sewer when it contains nitrate laden wastewater and includes a diverter valve to insure the diversion of nitrate laden wastewater into the North Outfall bypass sewer.

The City of LA agreement also includes Amalgamated System Sewerage Facilities Charges (ASSFC) which covers CVWD responsible to the City of LA for any new or upgraded land use changes relative to new developments.

Attached for review are two (2) presentations with respect to the “Overview & History of CVWD’s Wastewater System – Part 1 & Part 2.

DRAFT

3. SCOPE OF SERVICES

The scope of services should include data collection and assessment of existing wastewater collection system, research and incorporate updates to the General Plan or specific plans that will impact future buildout assumptions, system capacity, and calculations for development fees, evaluate the wastewater condition and capacity assessments, development of a wastewater hydraulic model, preparation of a 10-year capital improvement program, wastewater treatment & disposal alternative study and evaluate operation and maintenance program as discussed herein.

Data Collection and Assessment of Wastewater System:

- A. Consultant should become fully familiar with CVWD's wastewater mains, lift station, sewer interceptor, divertor valve and appurtenance and be able to provide a conditional assessment. This will require the consultant to perform some field assessment and not solely rely on District's GIS or as-built plans.
- B. Consultant should review any available pertinent records that will assist in the preparation of the WWMP.
- C. Consultant should review the District's Sewer System Management Plan (SSMP) to be included in the WWMP and provide recommendations.
- D. Consultant should perform an Infiltration and Inflow (I&I) study based on available information from the District.
- E. Consultant should develop a flow monitoring program including:
 - i. Conduct field verification and data collection to obtain measured system data for determining existing capacities, various land use loading factors, future capacities, and projections, and for supporting the wastewater hydraulic modeling calibration.
 - ii. Consultant shall utilize best available technologies to ensure accurate data collection.
 - iii. Identify appropriate locations/ stations for flow monitoring and daily flow within the collection system; perform flow monitoring and collect needed data under wet and dry weather conditions. Appropriate numbers of flow meters shall be in place for a minimum duration of at least 30 days.
 - iv. Perform field verification and comprehensive assessment of existing facilities.

Population and Development Projections:

- A. Consultant should review the Los Angeles County and City of La Canada Flintridge Future Land Use Map, General Plan and Housing Plan to develop land use data and criteria.
- B. District to provide population projections and potential development projects for the Consultant to review.
- C. Consultant should review all active or current Development projects.
- D. Consultant should review current and future flow into CVWD's lift station.

Condition/Capacity Assessments:

- A. Consultant should review and analyze existing wastewater flows, estimated sewage flow, and develop land use data and criteria.
- B. Consultant should perform an evaluation of the District's conveyance system for existing and future capacity before and after installation of flow monitoring stations.
- C. Consultant should perform an evaluation of the District's Lift Station including a full condition assessment and capacity analysis for both existing and future.

- D. Consultant should develop preferred solutions and/or alternative solutions to correct deficiencies within the wastewater collection system.
- E. It is the District's expectation that the consultant will utilize the best available technologies appropriate to this study, which results in gathering the most accurate large-scale condition data of the sewer infrastructure.
- F. Consultant should document known system deficiencies, maintenance efforts, and identify possible future capital improvement projects.
- G. Consultant should assess the exiting capacity of the system, specifically identifying the critical segments based on the data gathered from the field, existing documents, and projected growth.
- H. Consultant should identify the critical segments in the order of priority that require immediate, near-term, and long-term attention.

Hydraulic Model Development:

- A. Consultant should develop a dynamic, comprehensive hydraulic model from the compiled data. Utilizing an agreed upon software platform.
- B. Consultant should develop a detailed hydraulic model of the wastewater collection system using CVWD's existing GIS information and calibrated against collected flow monitoring data.

Capital Improvement Plan Development:

- A. Consultant should identify and prioritize future capacity projects for the wastewater collection system, lift station, sewer interceptor and appurtenances by existing and future EDUs.
- B. Consultant should develop a procedure for evaluating the condition of existing infrastructure and prioritization of improvements.
- C. Consultant should address existing and future anticipated State Water Board and EPA regulations along with their impacts to the CVWD's wastewater systems including:
 - a. Capacity, Management, Operations and Maintenance (CMOM) Program
 - b. Inflow and Infiltration (I/I) study
 - c. Sanitary Sewer Overflow (SSO) Initiatives.
- D. Consultant should address existing and future issues related to the system's functionality.
- E. Consultant should develop a multi-year phased capital improvement program including short term (1-5 years) and long term (5-10 years) programs.
- F. Consultant should prioritize improvements with engineered cost estimates and escalators (CPI).
- G. Consultant should develop individual project sheets for each recommended improvement.

Wastewater Treatment & Disposal Alternative Study

- A. Consultant should review the City of Los Angeles Agreement including universal terms and specific terms and provide recommendations in anticipation of contract renewal in 2030.
- B. Consultant should provide a technical study of possible alternative treatment and disposal systems that should including the following:
 - a. Identify potential wastewater treatment technologies and options
 - b. Identify potential permitting issues and requirements

- c. Perform a preliminary siting study to evaluate potential sites for a wastewater treatment plant.
- d. Evaluate potential uses of advanced treated tertiary recycled water effluent for application within CVWD service area or other benefit to CVWD via regional stakeholder partnership
- e. Identify potential stakeholders and partnerships that would impact project implementation and/or project costs
- f. Identify potential CEQA considerations and requirements, include a cursory environmental and public health risk assessment.
- g. Determine impacts on personnel and certifications
- h. Develop multiple alternatives to consider (including status quo) to collect, treat, dispose or reuse treated wastewater effluent. Perform a life-cycle economic evaluation to derive a preliminary recommendation based on least cost.
- i. Determine a preliminary project implementation schedule, a not-to-exceed project cost, and a preferred project delivery method.

Evaluate Operation and Maintenance Program

- A. Evaluate existing operation and maintenance practices and identify specific improvements in current level of service and maintenance program where areas of opportunities allow.
- B. Prepare detailed lists and goals required to meet level of service goals consistent with local and State regulatory agencies. Include applicable cost estimates, and comparable costs against similar type operations and maintenance programs of other municipal agencies, etc.

Public Meetings and Presentations

- A. Consultant should plan to attend two (2) workshop meetings with the CVWD's Engineering Committee
- B. Consultant should plan for one (1) formal presentation to CVWD's Board of Directors.

Project Meetings

- A. Attend a kick-off meeting to begin the project. Meet or confer with District staff as needed
- B. Prepare related graphics, composite development land use and demand maps, and Geographic Information System (GIS) shape files

Project Schedule

- A. Provide a project schedule for developing the preliminary and final reports and WWMP adoption.
- B. The final report shall be delivered to the District within **365 days** or sooner from Notice to Proceed.

Update of Engineering Design Standards:

- A. Consultant should review and update District's standard wastewater construction drawings, specifications, requirements, and regulatory criteria.

Annual Hydraulic Model Update:

- A. Consultant should provide a cost estimate for an annual hydraulic model update for annual developments and new GIS information within the system.
- B. Consultant should provide an hourly cost basis to review and analyze proposed development projects utilizing the developed model on an on-call basis.

Prepare and Submit Draft and Final Master Plan Reports

- A. Provide a complete package of the WWMP including Executive Summary, Maps & Exhibits for approval and adoption.

- B. Submit, as a deliverable task, a draft, final draft, and final report to the City. All reports must be in hardcopy prints, Microsoft Word, and Adobe PDF file formats.
- C. Consultant should provide the digital Wastewater System Model.
- D. Consultant should provide supporting wastewater system model operating manual

4. PROPOSAL CONTENT AND REQUIREMENTS

- A. Title Page
- B. Table of Contents
- C. Statement of Qualifications
- D. Company Information
- E. Subcontractor Information
- F. Project Team
- G. Project Approach
- H. Project Schedule
- I. Fee and Fee Schedule
- J. Experience
- K. References
 - a. Three (3) references from similar projects performed within the last five -years.
 - b. References for water agencies or cities of comparable size and terrain to CVWD (approximately 10,000 service connections in a challenging terrain).

5. Additional Requirements

- A. 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.
- B. 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.
- C. 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.
- D. 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.

- E. District Responsibilities - District will provide the following to assist the selected consultant with the project and its completion:
- a. Geographic information system (GIS) information and topographic surveys as available.
 - b. Reports, plans, and drawings, as available and pertinent to the WWMP.
 - c. Design criteria, preferred manufacturer's information, and other technical information, as available and pertinent to the project.
 - d. Current operational condition and performance of existing infrastructure pertinent to the WWMP

6. EVALUATION PROCESS

CVWD reserves the right to contact all or any of the references provided in response; contact the Vendor to clarify any response; contact any current user of the Proposer's services or products; solicit information from any available source concerning any aspect of the information submitted; and seek and review any other information deemed pertinent.

CVWD reserves the right to consider other factors at its discretion.

Any award is contingent upon the successful negotiation of final contract terms. If contract negotiations cannot be concluded successfully, CVWD reserves the right to negotiate a contract with another Proposer or withdraw the RFP.

7. PROPOSAL DUE DATE:

Please submit one (1) copy of the proposal as a PDF file via e-mail by 12:00 pm on December 1, 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.

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 2
October 19, 2021

To: Engineering Committee
From: Brook Yared, M.S., P.E. – Engineering Manager
Subject: **Discussion** – Professional Engineering Services for Installation of a New Zone 7 to Zone 5 Pressure Reducing Station, Project D-21-G2

BACKGROUND:

Crescenta Valley Water District (CVWD) has been assisting Glendale Unified School District's (GUSD) during the planning process for a proposed development at Anderson W. Clark Magnet High School (Clark). CVWD found that a critical portion of the existing water distribution system in the area could not provide Clark with adequate water pressure and flow for fire protection for the new project.

CVWD has since employed the use of a hydraulic model (model) to determine the best course of action to improve the water system in the area. The model shows that the installation of the following improvements should sufficiently increase water supply and pressure in the area:

- Installation of approximately 275 linear feet of 8-inch water main and connection to existing 8-inch main on Santa Carlotta (Zone 7).
- Installation of an 8-inch Pressure Reducing Station on Cloudsdale Ave.
- Installation of 100 linear feet of 8-inch water main from the PRS on Cloudsdale Ave to Clark (Zone 5).

The water main extension would provide a new connection between CVWD's Zones 5 and 7 and should remedy the insufficient fire protection for the proposed development.

For CVWD to meet the current pipeline replacement schedule along with the remaining CIP budget, we will need the assistance of a consulting engineering firm to review and prepare design plans and specifications for the installation of a new pressure reducing station, fire service, water main and appurtenances.

Since this new development is being proposed by GUSD, they have agreed to reimburse CVWD's costs for these improvements based on initial estimates from CVWD of approximately \$380,000. This preliminary estimate also includes costs for a third-party design and inspection of the project.

DISCUSSION:

On July 29, 2021, staff sent out a request for proposal (RFP) to six (6) 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 such as this. Attached for your review is the RFP that included the scope of work and other project parameters.

On August 12, 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 August 27, 2021, and CVWD received four (4) proposals.

Staff reviewed each proposal and ranked them in accordance with 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%. The final proposal ranking was then sent to GUSD for their review and approval on September 15, 2021 (See attached).

MKN was not the highest ranked consultant, as shown on the attached consultant ranking table. After discussion with GUSD, they determined that they would like to proceed with MKN because of the closeness in the rankings and the lower cost per hour of the MKN proposal.

RECOMMENDATION:

Cost Sharing Agreement

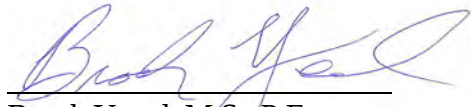
With a project of this size and scope staff recommends finalize the cost sharing agreement (See attached) with GUSD to cover the preliminary cost estimate for design and construction, and the cost of any unforeseen costs. The next step will be to bring this to the next Board meeting for approval to authorize the General Manager to sign the agreement. The attached Cost Sharing Agreement has been reviewed and approved by CVWD's legal counsel.

Staff will also prepare an amended agreement with GUSD after the final cost estimate including material and labor cost fluctuations, may arise during design or construction to cover the cost of the work.

Design Consulting Services

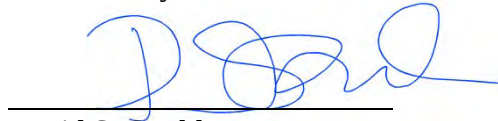
Staff is also recommending to award a consulting services contract to MKN Engineers for \$69,590 with a 10% contingency of \$6,960 to prepare design plans and specifications as they provide a cost-effective proposal that meets both GUSD and CVWD's needs at the next Board meeting.

Prepared by:



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

Submitted by:



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

Attachments:

1. Project Location Map
2. Request for Proposal
3. Consultant Ranking Table
4. Cost Sharing Agreement



Legend

Existing System:

- w valve
- w hydrant
- w main
- w lateral
- Street Centerline

New 8-inch CMC x CML Steel Water Main

New Pressure Reducing Station w/ New H2O Vault

New Fire Service per CVWD Std Dwg 40-03 to service Clark Magnet High School

D-21-G2
Clark Magnet High School



Crescenta Valley Water District



REQUEST FOR PROPOSAL

PROFESSIONAL ENGINEERING SERVICES FOR INSTALLATION OF A NEW ZONE 7 TO ZONE 5 PRESSURE REDUCING STATION, PROJECT D-21-G2

PROPOSAL DUE DATE: August 27, 2021

INTRODUCTION:

The City of Glendale has requested that the Crescenta Valley Water District (CVWD) construct a new fire service and pressure reducing station (PRS) for the addition of a new robotics lab at Clarke Magnet High School. The new pressure reducing station shall be located on the Southeast corner of the intersection of Santa Carlotta St. and Cloudsdale Ave. The school is constructing a new robotics lab and there is not sufficient fire protection in the area to allow for this construction without with the new PRS being constructed. In addition, new steel pipeline that connects the upper and lower zones to the new PRS will need to be constructed along with a new vault and electrical/telemetry equipment for the operation and monitoring of the site. The PRS would be a new source of water for Zone 5 that provides additional support during times of high demand, such as for fire protection.

CVWD needs to get the PRS installed and back into service before the 22/23 school year begins in Fall of 2022. CVWD needs a consulting firm to provide surveying and engineering design services for the installation of the new PRS with a new vault, new transmission main, new electrical/telemetry wiring and conduit. Additionally, the project requires that a new fire service be constructed on the Northside of Clarke Magnet High School (see attached location map) per CVWD Std 40-03.

CVWD is planning to bid out to a construction contractor and the goal is to complete the work by the end of February 2022.

SCOPE OF WORK

CVWD is seeking a professional engineering firm to design and prepare construction plans and specification documents for the project as described above. The major elements of the project include the following:

- Topographic survey and right-of-way mapping
- Utility research and compiling for base map.
- Pothole plan for utility crossings, limits of work and connection to existing water mains. Potholing will be performed by CVWD crews.
- PRS design utilizing CVWD's AutoCAD and design standards including the following.
 - o Design of Pressure Reducing Valve
 - Zone 7 = 160 psi
 - Zone 5 = 90 psi
 - Vault Size
 - Piping and Valving
 - Bypass Piping
 - Flow Meter
 - Pressure Gauges
 - Power Source – Solar
 - SCADA

- Flow Meter
 - Pressure Gauges & switches
 - Radio Communication
- New Pipeline Alignment
- Details of connection to existing water mains
- Coordination with City
- of Glendale & Glendale Unified School District
 - o Design requirements relative to pavement replacement, backfill requirements, water discharge BMPs, and traffic control.
 - o Traffic Control Plans (may not be required by City of Glendale). If required, CVWD will request a separate proposal)
 - o Excavation Permit – Submittal and preliminary approval. Contractor will obtain the final permit. CVWD will pay all permit fees.
- 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: If CVWD requires additional assistance during construction for bidding, shop drawing review, or RFI response, CVWD will request a separate proposal.
- As-built drawing updates per redline information from the Contractor.

Deliverables:

- Prepare 100% submittal and final submittal of construction drawings and specifications.
- Project Meetings – Attendance at least three (3) design project meeting.
 - o Kick-off Meeting
 - o 50% Submittal
 - o Final Submittal

Project Schedule:

<u>Task</u>	<u>Date</u>
Pre-Proposal Meeting – Web Conference	August 12, 2021 – 10:00 am
Proposal Due	August 27, 2021
Award of Contract	September 14, 2021
Kick Off Meeting	September 16, 2021
Board Approval – Advertisement for Bids	November 19, 2021
Pre-Bid Meeting	December 1, 2021
Bid Opening	December 8, 2021
Board Approval – Award of Contract	December 14, 2021
Start Construction	January 3, 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 date completed, location of work names, addresses, and phone numbers of persons in charge of project, and the name and address of the public 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:

- 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 via e-mail by 12:00 pm by August 27, 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 (818) 236-4117.

Crescenta Valley Water District

PROFESSIONAL ENGINEERING SERVICES FOR INSTALLATION OF A NEW ZONE 7 TO ZONE 5 PRESSURE REDUCING

Consultant Ranking

Ranking	Weighted Percent	CivilTec		MKN		Tetrattech		Cannon					
		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Proposal - Project Concept & Scope of Work	30%	3.7	1.10	4.3	1.30	3.5	1.05	4.0	1.20		0.00		0.00
Project Experience	30%	4.0	1.20	4.0	1.20	4.5	1.35	4.3	1.30		0.00		0.00
Project Team Qualifications	20%	3.5	0.70	3.8	0.77	4.2	0.83	4.2	0.83		0.00		0.00
Coordination with Agencies	10%	3.3	0.33	3.7	0.37	3.5	0.35	4.2	0.42		0.00		0.00
Consultant's Fee	10%	3.0	0.30	3.7	0.37	3.7	0.37	3.0	0.30		0.00		0.00
Final Weighted Score	100%		3.63		4.00		3.95		4.05		0.00		0.00
Total			\$39,880		\$69,589		\$85,890		\$102,679				

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

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

COOPERATIVE AGREEMENT FOR THE INSTALLATION OF PRESSURE REDUCING STATION AND APPURTANCES FOR CLARK HIGH SCHOOL PROJECT

This Agreement is made by and between the CRESCENTA VALLEY WATER DISTRICT ("CVWD") and GLENDALE UNIFIED SCHOOL DISTRICT ("Glendale") (collectively referred to as the "Parties").

1. Purpose

The Parties agree that the best interests of the Parties, as well as the public in general, will be served by entering into this Agreement providing for the reimbursement of costs for the installation of a new pressure reducing station and fire service, which are necessary to provide fire protection to a proposed new development at Clark Magnet High School, as part of the Installation of a New Zone 7 to Zone 5 Pressure Reducing Station, Project D-21-G2 (hereinafter referred to as the "Work"), a description of which is attached hereto and incorporated herein as Exhibit "A".

2. Responsibilities and Costs

A. The Work shall be done by CVWD pursuant to plans, drawings, and specifications generated by CVWD's design consultant and approved by Glendale and CVWD or by some other body or employee exercising discretionary authority to give such approval for the plans, drawings, and specifications prepared in conformity with CVWD's design standards. The Work shall be done in compliance with all applicable sections of the Latest Edition of the Standard Plans and Specifications for Public Works Construction (the "Green Book") except for those sections that have been amended by CVWD. CVWD represents and warrants that all construction contracts will be in accordance with prevailing wage requirements under either state or local law.

B. Glendale will reimburse CVWD for the total costs of the design consultant, construction management services provider, and construction contractor for all labor and materials to install the new pressure reducing station, fire service, and all other appurtenances. CVWD will provide the materials and Glendale will reimburse CVWD for all costs associated with materials, including any freight or storage expenses. CVWD will invoice Glendale for costs when paid by CVWD. The final invoice will be after inspection and acceptance of the Work by Glendale as provided in Section 4. Glendale will pay all invoices within 30 days of receipt.

C. Glendale's obligation to reimburse CVWD will not exceed \$380,000.00, except for unforeseen conditions, changes in the scope of work, or changes in costs of materials. CVWD shall provide documentation for the costs of the Work to Glendale, including fees paid to the selected design consultant and construction inspection service provider.

3. Indemnity and Insurance

A. Pursuant to Government Code Section 895.4, CVWD shall fully defend and indemnify and hold Glendale harmless from any liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by CVWD under or in connection with the Work.

B. Pursuant to Government Code Section 895.4, Glendale shall fully defend and indemnify and hold CVWD harmless from any liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by Glendale under or in connection with the Work.

C. Workers' Compensation claims shall be paid by the employer of the injured worker, and subrogation rights against any Party to this Agreement are expressly waived.

D. Both CVWD and Glendale will maintain comprehensive general liability insurance with the following limits: General Liability \$2,000,000; Automobile Liability \$2,000,000.

E. Glendale shall be named as additional insured on CVWD's policy.

4. Inspection and Acceptance

Glendale shall, upon notice of completion of the Work by CVWD, inspect the Work within ten (10) days from the date of the notice of completion. Upon inspection of the work, Glendale shall have ten (10) days to either accept or reject the Work. If the Work is rejected, CVWD shall have sixty (60) days to correct the Work and request re-inspection. The same time periods noted for inspection shall apply to any re-inspection. Upon acceptance of the Work, CVWD shall own and maintain all improvements and utilities constructed within the public right-of-way as part of this project..

5. Term

This Agreement shall become effective when executed by the Parties and shall remain operative and effective until terminated, in writing, by either of the Parties to this Agreement or until the Work has been completed, accepted, and paid for by Glendale. The provisions of Section 3 shall survive the expiration or termination of this Agreement.

6. Termination Provisions

A. This Agreement may be terminated upon sixty (60) days written notice by either party.

B. Upon termination of this Agreement, all outstanding debts are to be paid in accordance with Section 2.B.

7. All notices and correspondence between the Parties to this Agreement regarding

provisions within said agreement shall be addressed as follows:

For CVWD:

General Manager
Crescenta Valley Water District
2700 Foothill Boulevard
La Crescenta, CA 91214

For Glendale:

Administrator
Glendale Unified School District
349 W Magnolia Ave.
Glendale, CA 91204

8. The Parties agree to meet and confer concerning all claims, disputes, or other matters in question between the Parties arising out of or relating to this Agreement or breach thereof prior to the institution of any litigation. In the event any claim or dispute is subject to litigation, the Parties agree that each shall pay their own costs, including attorney's fees.

9. Nothing under this Agreement shall be construed to give any rights or benefits to any party other than the Parties hereto. Neither of the Parties shall assign any right or interest in this Agreement, nor delegate any duty owed, without the other's prior written consent. This Agreement shall be binding on the heirs, executors, administrators, successors, and assigns of the respective Parties.

10. Neither Party shall be considered in default in the performance of its obligations hereunder or any of them, if such obligations were prevented or delayed by any cause, existing or future, beyond the reasonable control of such Party which include but are not limited to acts of God, labor disputes, civil unrest, water supply deficiencies, mechanical failure, interruption in electrical energy, natural disaster, drought, and regulatory issues.

11. This Agreement represents the entire integrated agreement between the Parties, and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by both Glendale and CVWD.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed and attested by the proper officers thereunto duly authorized, their official seals to be heretofore affixed.

Date: _____
CRESCENTA VALLEY WATER DISTRICT

Approved as to Form
Director of Finance and
Administration

By: _____

By: _____

Name: Nemesciano Ochoa
Title: General Manager

Attest
Office of Planning, Development
and Facilities

Date: _____
Glendale Unified School District

Approved as to Form
Michael J. Garcia, City Attorney

By: _____

By: _____

Name: Hagop Kassabian
Title: Administrator

Attest
Office of the City Clerk

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 3

October 19, 2021

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering & Operations
Subject: Project Update – Final - 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, for FY 20/21 CIP. The \$5M Bond process was completed on September 15, 2020.

DISCUSSION:

The following is the **September 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: Construction is complete, reservoir back in service
Final retention being held until site clean-up.
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. **Projects 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: Construction is complete & project costs are finalized.
 - B. **Projects 3:** Replacement of 8-inch pipeline on the 3400 & 3500 Blocks of Encinal (Project 3)
Progress: Construction is complete & project costs have been finalized.
 - 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: Construction is complete and final project costs to be included in FY 21/22.
3. **Local Hazard Mitigation Plan** - CVWD was awarded a grant from Cal OES and FEMA to prepare a Local Hazard Mitigation Plan (LHMP). 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: Tetra Tech completed the report, LHMP approved by Cal OES & FEMA & Grant Applications are due in January 2022.
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.
Progress: Behind Schedule
 - LA County Parks & Recreation Department – waiting on final license agreement
 - December 2021 – Construction to begin.

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 Zone 2, and 2) installation of the AMI network communication system.
[Progress: Completed and field crews replaced 537, ¾-inch & 1-inch, water meters](#)
6. **Groundwater Well Rehabilitation** – This project is for the rehabilitation of Well 12, which was last rehabilitated in 2010.
[Progress: Construction complete](#)
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, has been malfunctioning, which indicates it is nearing the end of its useful life.
[Progress: SCADA radio feasibility study complete; Staff working on Request for Proposal.](#)
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 and Cannon have started on the design](#)
[Project Schedule: Under Design – Cannon; November 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. The SCADA system provides information on the status of the water system, controls for pump operation, and communication of 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: Pilot Project under design; Ordered equipment, delivery delayed until December 2021.](#)
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: Staff working on alternatives regarding water rights.](#)
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

SUMMARY:

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:



David S. Gould, P.E.

Director of Engineering & Operations

Attachment: FY 20/21 Capital Improvement Project Program - Cost Update: 9/30/21

FY 20/21 Capital Improvement Project Program Cost Update: 10/06/21	Budget FY 20/21	<u>FY 20/21</u> Cost to date from 7/1/20 to 06/30/21	<u>FY 20/21</u> Cost Committed - Transfer to FY 21/22	Projected FY 20/21
Capital Improvement Project Summary				
1. Water Supply	\$ 170,000	\$ 158,414	\$ -	\$ 158,414
2. Water Storage	\$ 480,000	\$ 643,371	\$ 26,900	\$ 670,271
3A. Water Distribution - Pipeline	\$ 2,300,000	\$ 2,105,725	\$ 400,000	\$ 2,505,725
3B. Water Distribution - Other	\$ 710,000	\$ 133,014	\$ -	\$ 133,014
4. Water Treatment	\$ -	\$ 54,073	\$ -	\$ 54,073
5. Technology	\$ 1,070,000	\$ 465,667	\$ -	\$ 465,667
6. Public Safety/Emergency Response	\$ 165,000	\$ 134,549	\$ 30,451	\$ 165,000
7. Facilities & Planning	\$ 105,000	\$ 3,956	\$ -	\$ 3,956
Capital Improvement Projects - Total	\$ 5,000,000	\$ 3,698,768	\$ 457,351	\$ 4,156,120
Bond Financing - CIP	\$ 2,695,174	\$ 2,569,497	\$ 400,000	\$ 2,969,497
Water Fund Financing - CIP	\$ 2,304,826	\$ 1,129,271	\$ 57,351	\$ 1,186,623
Total Financing - CIP	\$ 5,000,000	\$ 3,698,768	\$ 457,351	\$ 4,156,120

FY 20/21 Capital Improvement Project Program Cost Update: 10/06/21		Budget FY 20/21	<u>FY 20/21</u> Cost to date from 7/1/20 to 06/30/21	<u>FY 20/21</u> Cost Committed - Transfer to FY 21/22	Projected FY 20/21
1. Water Supply					
A. Groundwater Water Supply					
i. Well Rehabilitation					
	<i>Well 7 Rehabilitation</i>				
	<i>Well 16 Rehabilitation</i>				
	<i>Well 11 Rehabilitation</i>	\$ -	\$ 56,106	\$ -	\$ 56,106
	<i>Well 12 Rehabilitation</i>	\$ 95,000	\$ 98,590	\$ -	\$ 98,590
iii. Groundwater Basin Recharge					
	<i>Stormwater Recharge Project at CVC Park - Planning</i>	\$ 75,000	\$ 3,718	\$ -	\$ 3,718
WS Total		\$ 170,000	\$ 158,414	\$ -	\$ 158,414
2. Water Storage					
A. Reservoir Rehabilitation					
i. Steel Reservoir Re-Coating/Roof/Vents Rehabilitation					
	<i>Markridge</i>	\$ -	\$ 367	\$ -	\$ 367
	<i>Rosemont</i>	\$ 480,000	\$ 587,823	\$ 26,900	\$ 614,723
	<i>Oak Creek - 16" Manifold Repair</i>	\$ -	\$ 55,181	\$ -	\$ 55,181
WS Total		\$ 480,000	\$ 643,371	\$ 26,900	\$ 670,271
3. Water Distribution					
A. Pipeline Replacement					
	<i>3200 & 3300 Blocks of Brookhill</i>				
	<i>4700 & 4800 Block of Pennsylvania</i>				
	<i>2400 & 2500 Block of Janet Lee - Project 1</i>	\$ 538,000	\$ 610,657	\$ -	\$ 610,657
	<i>Project 2</i>	\$ 280,000	\$ 317,390	\$ -	\$ 317,390
	<i>Project 3</i>	\$ 707,000	\$ 761,744	\$ -	\$ 761,744
	<i>Project 4</i>	\$ 775,000	\$ 415,933	\$ 400,000	\$ 815,933
	<i>Annual Pipeline Replacement</i>	\$ 2,300,000	\$ 2,105,725	\$ 400,000	\$ 2,505,725
C. Booster Pump System					
i. Annual Pump /Motor Replacement					
	<i>Boosters - Glenwood 32 & 33</i>	\$ -	\$ 85,951	\$ -	\$ 85,951
	<i>Booster Replace - Booster B at Paschall</i>	\$ 75,000	\$ 20,385	\$ -	\$ 20,385
D. Pressure Reducing Stations					

FY 20/21 Capital Improvement Project Program Cost Update: 10/06/21	Budget FY 20/21	<u>FY 20/21</u> Cost to date from 7/1/20 to 06/30/21	<u>FY 20/21</u> Cost Committed - Transfer to FY 21/22	Projected FY 20/21
PRS - Zone 2 to Zone 1	\$ 150,000	\$ 26,677	\$ -	\$ 26,677
i. Water Surge Control				
Rehabilitation Surge Tank at Glenwood	\$ 35,000	\$ -	\$ -	\$ -
iii. Misc.				
Upgrade - Ramsdell Mixing Station	\$ 450,000	\$ -	\$ -	\$ -
WD Total	\$ 3,010,000	\$ 2,238,739	\$ 400,000	\$ 2,638,739
4. Water Treatment				
C. Disinfection - Convert to Chloramines				
Conversion to Chloramination	\$ -	\$ 54,073	\$ -	\$ 54,073
WT Total	\$ -	\$ 54,073	\$ -	\$ 54,073
5. Technology				
A. Automated Meter Information (AMI) System				
AMI - 3/4" to 1" - Smart Meters	\$ 50,000	\$ 71,693	\$ -	\$ 71,693
AMI - Communication	\$ 150,000	\$ 215,080	\$ -	\$ 215,080
B. Supervisory Control and Data Acquisition (SCADA)				
Communication Radio Network	\$ 260,000	\$ 72,917	\$ -	\$ 72,917
SCADA Replacement - Installation	\$ 610,000	\$ 105,977	\$ -	\$ 105,977
TECH Total	\$ 1,070,000	\$ 465,667	\$ -	\$ 465,667
6. Public Safety/Emergency Response				
D. Miscellaneous				
FEMA Local Hazard Mitigation Plan	\$ 165,000	\$ 134,549	\$ 30,451	\$ 165,000
SF/ER Total	\$ 165,000	\$ 134,549	\$ 30,451	\$ 165,000
7. Facilities & Planning				
Roof for Old Encinal - Storage Bldg	\$ 105,000	\$ 3,956	\$ -	\$ 3,956
F & P Total	\$ 105,000	\$ 3,956	\$ -	\$ 3,956
Capital Improvement Projects - Total	\$ 5,000,000	\$ 3,698,768	\$ 457,351	\$ 4,156,120

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 4

October 19, 2021

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

BACKGROUND:

Staff has been discussing the FY 21/22 Capital Improvement Project (CIP) budget with respect to the Long-Term Infrastructure and Funding Roadmap, including future financing through the PayGo option. The Board has tentatively agreed to the FY 21/22 CIP budget, and the following is an update of projects and status of design.

DISCUSSION:

There are several CIP projects that need the assistance of outside consultants to begin design services so that construction can start in October or November 2021 instead of starting after January 2022. Shown below are the proposed projects and status update:

1. Design consultant for the new pipelines on the 2800 to 3100 Blocks of Los Olivos (E-1033); 3200 Block of Alabama 4700 & 4800 Blocks of Cheryl & 3300 Block of Thelma St (E-1034).
 - a. *E-1033 - Tetra Tech finalizing project design for advertisement for bids on 10/26/21.*
 - b. *E-1034 - Tetra Tech finalizing project design for advertisement for bids on 11/09/21.*
2. Design consultant for a new Pressure Reducing Station & Rehabilitation of the Ramsdell Mixing Station.
 - a. *Cannon is finalizing preliminary design of Ramsdell Mixing Station Vault*
3. Design consultant for the steel reservoir rehabilitation at Edmund #2.
 - a. *Pre-bid meeting on October 13, 2021*
 - b. *Bid Opening – October 20, 2021*
 - c. *Award of Contract on October 26, 2021, Board Meeting*
4. Design consultant for the replacement of SCADA communication radio network.
 - a. *Staff finalizing the Request for Quote (RFQ) for installation of new radios and antennas.*
 - b. *RFQ to be sent out November 1, 2021, and due back-on December 1, 2021*
5. Design consultant for the replacement of SCADA Equipment, Programing & Integration.
 - a. *Staff working with Apex Manufacturing Services (APEX) on Pilot Program.*
6. Consultant to assist operations staff with conversion, monitoring and standard operating procedures for the conversion to chloramines.
 - a. *Staff working on Request for Proposal.*
7. Consultant to prepare a Wastewater Master Plan, with Wastewater Treatment Plant Feasibility Study.
 - a. *See Staff Report.*

FY 2021/21 CIP Budget

See attached for updated CIP Budget

RECOMMENDATION:

Staff is recommending to the Engineering Committee that staff move forward with preparing and awarding design consultant contracts as the FY 21/22 CIP Budget was adopted on October 12, 2021.

Prepared & submitted by:



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

FY 21/ 22 Capital Improvement Project Program Cost Update: 10/15/21	Recorded FY 20/21	Budget FY 21/22	<u>FY 21/22</u> Cost to date from 7/1/21 to 09/30/21	<u>FY 21/22</u> Cost Committed from 10/1/21 to 6/30/22	Projected FY 21/22
Capital Improvement Project Summary					
1. Water Supply	\$ 158,414	\$ 135,000	\$ 4,548	\$ 135,000	\$ 139,548
2. Water Storage	\$ 643,371	\$ 616,900	\$ 885	\$ 698,376	\$ 699,261
3A. Water Distribution - Pipeline - Pyramid - 20 yrs	\$ 2,105,725	\$ 3,000,000	\$ 4,892	\$ 2,995,108	\$ 3,000,000
3B. Water Distribution - Other	\$ 133,014	\$ 781,000	\$ 17,819	\$ 763,181	\$ 781,000
4. Water Treatment	\$ 54,073	\$ 75,000	\$ -	\$ 75,000	\$ 75,000
5. Technology	\$ 465,667	\$ 1,019,000	\$ 50,354	\$ 629,646	\$ 1,019,000
6. Public Safety/Emergency Response	\$ 134,549	\$ 30,450	\$ 5,870	\$ 24,580	\$ 30,450
7. Facilities & Planning	\$ 3,956	\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total	\$ 3,698,769	\$ 5,657,350	\$ 84,368	\$ 5,320,891	\$ 5,744,259
Bond Financing - CIP	\$ 2,695,174	\$ 2,304,826			
Water Distribution - Pipeline Total		\$ 3,000,000			
Remaining CIP		\$ 2,657,350			
Water Fund Financing - CIP	\$ 1,003,595	\$ 3,352,524			
Total Financing - CIP	\$ 3,698,769	\$ 5,657,350			

FY 21/ 22 Capital Improvement Project Program Cost Update: 10/15/21		Recorded FY 20/21	Budget FY 21/22	<u>FY 21/22</u> Cost to date from 7/1/21 to 09/30/21	<u>FY 21/22</u> Cost Committed from 10/1/21 to 6/30/22	Projected FY 21/22
1. Water Supply						
A. Groundwater Water Supply						
i. Well Rehabilitation						
	Well 11 Rehabilitation	\$ 56,106				
	Well 12 Rehabilitation	\$ 98,590	\$ -	\$ 4,548	\$ -	\$ 4,548
	Well 14 Rehabilitation		\$ 105,000	\$ -	\$ 105,000	\$ 105,000
iii. Groundwater Basin Recharge						
	Stormwater Recharge Project at CVC Park - Planning	\$ 3,718	\$ 30,000	\$ -	\$ 30,000	\$ 30,000
WS Total		\$ 158,414	\$ 135,000	\$ 4,548	\$ 135,000	\$ 139,548
2. Water Storage						
A. Reservoir Rehabilitation						
i. Steel Reservoir Rehabilitation						
	Markridge	\$ 367				
	Rosemont	\$ 587,823	\$ 26,900	\$ -	\$ 26,886	\$ 26,886
	Oak Creek - 16" Manifold Repair	\$ 55,181				
	Edmund #2		\$ 590,000	\$ 885	\$ 671,490	\$ 672,375
WS Total		\$ 643,371	\$ 616,900	\$ 885	\$ 698,376	\$ 699,261
3. Water Distribution						
A. Pipeline Replacement						
	FY 20/21 Pipeline Replacement	\$ 2,105,725	\$ 400,000	\$ -	\$ 400,000	\$ 400,000
	FY 21/22 Pipeline Replacement		\$ 2,600,000	\$ 4,892	\$ 2,595,108	\$ 2,600,000
i. Annual Pump /Motor Replacement						
	Boosters - Glenwood 32 & 33	\$ 85,951				
	Booster - Paschall Booster B	\$ 20,385				
	Annual Booster Replace - 1 Booster		\$ 53,000	\$ -	\$ 53,000	\$ 53,000
D. Pressure Reducing Stations						
	PRS - Zone 2 to Zone 1	\$ 26,677				
	PRS - Upgrade Zone 4 to Zone 3		\$ -			\$ -
	New PRS - Zone 7 to Zone 5		\$ -			
E. Miscellaneous Projects						
iii. Misc.						
	Upgrade - Ramsdell Mixing Station	\$ -	\$ 728,000	\$ 17,819	\$ 710,181	\$ 728,000
WD Total		\$ 2,238,739	\$ 3,781,000	\$ 22,711	\$ 3,758,289	\$ 3,781,000

FY 21/ 22 Capital Improvement Project Program Cost Update: 10/15/21		Recorded FY 20/21	Budget FY 21/22	<u>FY 21/22</u> Cost to date from 7/1/21 to 09/30/21	<u>FY 21/22</u> Cost Committed from 10/1/21 to 6/30/22	Projected FY 21/22
4. Water Treatment						
C. Disinfection - Convert to Chloramines						
	Conversion to Chloramination	\$ 54,073	\$ 75,000	\$ -	\$ 75,000	\$ 75,000
WT Total		\$ 54,073	\$ 75,000	\$ -	\$ 75,000	\$ 75,000
5. Technology						
A. Automated Meter Information (AMI) System						
	AMI - 3/4" to 1" - Smart Meters	\$ 71,693	\$ 233,000	\$ -	\$ 233,000	\$ 233,000
	3" & 4" Smart Meters		\$ 200,000	\$ -	\$ 200,000	\$ 200,000
	AMI - Communication	\$ 215,080				
	AMI - Customer Service Interface		\$ 87,000	\$ 45,262	\$ 41,738	\$ 87,000
B. Supervisory Control and Data Acquisition (SCADA) System						
	Communication Radio Network	\$ 72,917	\$ 125,000	\$ 1,370	\$ 123,630	\$ 125,000
	SCADA Replacement - Installation	\$ 105,977	\$ 374,000	\$ 3,722	\$ 31,278	\$ 374,000
TECH Total		\$ 465,667	\$ 1,019,000	\$ 50,354	\$ 629,646	\$ 1,019,000
6. Public Safety/Emergency Response						
D. Miscellaneous						
	FEMA Local Hazard Mitigation Plan	\$ 134,549	\$ 30,450	\$ 5,870	\$ 24,580	\$ 30,450
SF/ER Total		\$ 134,549	\$ 30,450	\$ 5,870	\$ 24,580	\$ 30,450
7. Facilities & Planning						
D. Reservoir Site Improvements						
	Roof for Old Encinal - Storage Bldg	\$ 3,956				
F & P Total		\$ 3,956	\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total		\$ 3,698,769	\$ 5,657,350	\$ 84,368	\$ 5,320,891	\$ 5,744,259