

# LIVERMORE

**DATE:** October 13, 2025

CITY COUNCIL STAFF REPORT

**TO:** Honorable Mayor and City Council

FROM: Brent Smith, Community Development Director

**SUBJECT:** Resolution authorizing execution of an agreement with Carollo Engineers, Inc., in an

amount not-to-exceed \$1,783,054 and a term ending June 30, 2029, to provide design and construction support services for the Water Reclamation Plant Digester Heating

Loop Replacement Project WW202315.

## **RECOMMENDED ACTION**

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute an agreement with Carollo Engineers, Inc., in an amount not-to-exceed \$1,783,054 and a term ending June 30, 2029, to provide design and construction support services for the Water Reclamation Plant Digester Heating Loop Replacement Project WW202315.

#### **DECISION TYPE**

Administrative

## **SUMMARY**

The City of Livermore (City) Water Reclamation Plant (WRP) anaerobic digester hot water loop system boilers are near the end of their expected useful life and need to be replaced to increase system reliability, redundancy, and efficiency. The Programmable Logic Controller (PLC) for the heating loop system is also outdated and needs to be replaced with equipment that meets current standards. Carollo Engineers, Inc. (Carollo) was identified as the most qualified consultant to provide the design and construction support services for the WRP Digester Heating Loop Replacement Project WW202315 (project). This agreement with Carollo, in an amount not-to-exceed \$1,783,054, provides design and engineering construction support services for the project including project management, as-built conditions verification, permitting support, preliminary design, detailed design, bidding support, construction support, and project closeout. The contract amount of \$1,783,054 represents 30% of the estimated total cost of the project, which is typical for wastewater treatment projects involving complex mechanical and electrical systems.

### **DISCUSSION**

The current WRP biogas boilers heating the anaerobic digesters as well as the Administration and Maintenance Buildings are near the end of their expected useful life and need to be replaced. Additionally, the PLC that controls this system is outdated and needs to be replaced with equipment that meets current standards as identified in the WRP 2022 Supervisory Control and Data Acquisition (SCADA) Master Plan. The digester heating loop system in its entirety is critical in ensuring the anaerobic digesters function properly to produce biosolids for regulated disposal. The location of the anaerobic digester hot water loop system is shown on Attachment 1.

In May 2024, staff sent out a request for qualifications for consultants to perform engineering services for utility projects, including water and wastewater projects, associated with the City's Capital Improvement Plan. The purpose of this process was to receive Statements of Qualifications (SOQs) from multiple consultants, and based on review of these qualifications, execute on-call utility engineering services agreements and establish a short list of consultants who would be eligible for supporting future utility projects. Based on review of the SOQs, including qualifications, interest, and coverage, a selection committee comprised of staff from Engineering and Water Resources found Carollo to be the top-ranked consultant for utility engineering services with a wastewater emphasis.

In March 2025, staff requested a proposal from Carollo to perform engineering services for the project. Staff from Engineering and Water Resources reviewed the submitted proposal and determined it met the project requirements. This agreement with Carollo will provide design and construction phase support services for the project. The not-to-exceed amount for the agreement of \$1,783,054 represents approximately 30% of the total estimated project cost, which is typical for wastewater treatment projects involving complex mechanical and electrical systems. The agreement includes the following major tasks:

- Project Management Carollo will be responsible for project management activities throughout the life of the project, including project setup, administration, coordination with the City, and managing scope, schedule, and budget.
- Digester Building 3D Light Detection And Ranging (LiDAR) Carollo will conduct a LiDAR survey
  to capture the as-built configuration of the interiors of the existing Digester Building and generate a
  3D model that can support design and future maintenance.
- Permitting Support Carollo will assist the City in obtaining an Authority to Construct permit from
  the Bay Area Air Quality Management District (BAAQMD), conducting all coordination with the
  BAAQMD that may be required to secure approval of the design and construction of the project,
  preparing and submitting the necessary permit applications with supporting technical information,
  coordinating with BAAQMD during the permit submittal and approval process, and preparing a
  memorandum summarizing any products or designs constrained by regulations.
- Preliminary Design Carollo will perform preliminary design activities to develop a basis for detailed design that will include a summary of project elements, design criteria, preliminary design drawings, a construction cost estimate, and a construction schedule with discussion of construction sequencing.
- Detailed Design Carollo will prepare detailed construction documents suitable for permitting, advertising, bidding, and construction. Progress submittals will include plans, specifications, cost estimates, calculations, construction schedule, and equipment lists with updated projected lead times for procurement.
- Bidding Phase Services Carollo will attend a pre-bid meeting and site walk scheduled by the City, assist the City in answering technical questions from prospective bidders, and prepare addenda during the bid period.

- Engineering Services During Construction Carollo will review Requests for Information, review submittals, prepare design clarifications, and assist with processing change order requests. This task also includes attending meetings, making site observations, and providing on-site start-up and commissioning support.
- Project Closeout Carollo will prepare record drawings.

### FISCAL AND ADMINISTRATIVE IMPACTS

The budget for the WRP Digester Heating Loop Replacement Project WW202315 in the FY2025-30 Capital Improvement Plan covers the cost of this agreement and other project costs including construction, change orders, construction management, project management, and materials testing. The project is funded with Wastewater Replacement Funds (622).

The total fee of \$1,783,054 represents approximately 30% of the estimated total cost, which is typical for design and engineering construction support services for a project of this scope. The estimated total budget for this project is \$5,634,000, which covers design, permit fees, construction, change orders, materials testing, construction management, and project management.

This maintenance project will not increase operation and maintenance costs.

## **COMMUNITY PILLAR**

1: A Safe Community That Thrives

## **GOAL**

11: Operate and maintain municipal water systems that provide safe, efficient delivery of potable and recycled water, collect and treat wastewater, and comply with all federal, state, and local regulations

## **GUIDING DOCUMENT**

Fiscal Year 2025-2030 5-Year Capital Improvement Plan

#### **ATTACHMENTS**

- 1. Location Map
- 2. Resolution
- 3. Exhibit A Agreement

Prepared by: Li-Teck Lau

**Assistant Engineer** 

Approved by:

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