



# Agenda Report

**MEETING DATE:** Tuesday, September 27, 2022

**TO:** City Council

**FROM:** PUBLIC WORKS & UTILITIES DIRECTOR DI RENZO  
RYAN SMITH, WASTEWATER DIVISION MANAGER

**THROUGH:** CITY MANAGER MENDEZ

**SUBJECT:** CONTRACT WITH CAROLLO ENGINEERS, INC. FOR THE  
HEADWORKS AND INFLUENT PUMP STATION IMPROVEMENTS  
EVALUATION PROJECT

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## **RECOMMENDED ACTION:**

Adopt a resolution awarding a contract to Carollo Engineers, Inc. for the Headworks and Influent Pump Station Improvements Evaluation Project in the amount of \$157,244; and authorizing the City Manager to execute said contract.

## **BACKGROUND:**

The City's Wastewater Treatment Facility (WWTF) comprises multiple stages of treatment processes. The area known as the headworks is where the first stage occurs: influent pumping and preliminary treatment (screening and grit removal). The headworks structure was originally constructed in the 1950's, is operating beyond its expected useful life, and now must be replaced. Staff proposes to use a qualified firm to assist with an evaluation of the headworks and influent pump station to inform the design of a future capital improvement project.

## **DISCUSSION:**

The headworks area at the City's WWTF consists of an influent pump station and preliminary wastewater treatment facilities. The influent pump station lifts water up from the underground sewer lines that convey sewage to the WWTF, and into the concrete headworks structure that contains preliminary treatment processes. The preliminary treatment systems are screening for rags/wipes and other debris removal, followed by a grit removal system to remove rocks and sand. As a whole, the influent pump station and headworks are a single point of failure at the WWTF.

Unfortunately, the influent pump station and headworks structures are significantly aged and in need of replacement. Decades of corrosive sewer gasses have severely corroded the concrete, exposing aggregate and rebar, and making the structure unsafe to walk on in certain areas. Additionally, the structure was designed and constructed prior to modern

day seismic codes. To highlight the importance of the headworks, a significant failure of the structure that could not be fixed immediately would result in needing to mobilize emergency pump-around equipment and staffing the facility 24/7 until repaired. It could also result in violations of environmental regulations due to improper operation of the treatment plant. Replacing the headworks with a new structure and screening/grit removal technologies will reduce these types of risks and additional costs to the City, by improving the WWTF's reliability and performance.

Carollo was selected from the City's list of On-Call Water and Wastewater Design consultants for their knowledge and experience in wastewater facilities and their specific experience working with the City's WWTF. Additionally, Carollo was previously under contract for the design of a new headworks facility until the WWTF electrical distribution system replacement project took priority. The on-call consultants list was selected from the publicly advertised Request for Qualification Statements from Consulting Engineering Firms for Periodic and On-Call Water and Wastewater Professional Design Services in June 2020 that is valid for three years.

Between June and July 2022, City staff conducted a series of meetings with Carollo to discuss a plan to move a future headworks and influent pump station replacement project forward. Carollo submitted a proposal on July 12 for a holistic evaluation of the headworks area facilities that will inform the design of a future facility that City staff then reviewed and found to be satisfactory.

Staff therefore recommends a professional services agreement be executed with Carollo Engineers, Inc. in the amount of \$157,244 for the Headworks and Influent Pump Station Improvements Evaluation Project.

**STRATEGIC PLAN:**

This project supports Strategic Plan Priority:

3 – Infrastructure & Environment

**FINANCIAL IMPACT:**

Funds for this project are budgeted in account code 0710-911-7855-14410.

**ALTERNATIVE ACTION:**

Council could elect not to award the contract to Carollo Engineers, Inc.

**ATTACHMENTS AND/OR REFERENCES (If any):**

None.