

STAFF REPORT

Date: April 12, 2023

To: Mayor and City Council

Thru: Doug Thornley, City Manager

Subject: Staff Report (For Possible Action): Approval of Consulting Agreement for Final Design Services with Carollo Engineers, Inc. for the Truckee Meadows Water Reclamation Facility Aeration Tank 1A Rehabilitation Project in the amount of \$263,016 with Reno's share being \$180,507.88. (Sewer Fund)

From: Matt Smith, Senior Civil Engineer

Department: Utility Services

Summary:

Aeration tanks are relied upon for secondary wastewater treatment at the Truckee Meadows Water Reclamation Facility (TMWRF). Aeration tanks are large concrete structures that utilize pressurized air and specific biological organisms to treat and remove nutrients from the wastewater. Carollo Engineers, Inc. (Carollo) performed an evaluation of all of TMWRF's aeration tanks last year, and Aeration Tank 1A was determined to be in the worst condition. This agreement with Carollo is to provide design services and bid documents for improving and rehabilitating Aeration Tank 1A at TMWRF. Staff recommends Council approve the Agreement for Final Design Services with Carollo as described in the attached scope of work in an amount not to exceed \$263,016 (Reno's share being \$180,507.88 from the Sewer Fund).

Alignment with Strategic Plan:

Fiscal Sustainability

Infrastructure, Climate Change, and Environmental Sustainability

Previous Council Action:

April 28, 2021 – Council approved item B.6 Staff Report: Approval of Agreement with Carollo for the TMWRF Aeration Tank Evaluation and Rehabilitation Project in the amount of \$287,253 with Reno's share being \$197,141.73 (Sewer Fund)

Background:

TMWRF is jointly owned by the Cities of Reno and Sparks, and was originally built in 1964. Aeration tank 1A is one of the original 1964 aeration tanks and has been in-service since the

plant was brought online. Since the 2006 TMWRF plant expansion, there had not been an evaluation or rehabilitation on the aeration tanks and aeration system. Carollo and their subconsultants conducted an investigation and evaluation of the aeration tanks between August 2021 and September 2022, and determined all the aeration tanks at TMWRF were in need of improvements and/or rehabilitation – with aeration tank 1A being the most near-term priority.

As part of the TMWRF Capital Improvement Program (CIP), “Risk Ranking” and paired comparison of infrastructure identifies project priorities, condition, and risk of failure. The Fiscal Year 23 ranking process identified aeration tank rehabilitation as priority #15. However after the recent evaluation, the Fiscal Year 24 ranking process identified aeration tank rehabilitation as priority #9.

Discussion:

Based on Carollo’s TMWRF Aeration Tank Rehabilitation Preliminary Design Report (March 2023), Aeration Tank 1A (1964) was determined to be the highest priority. Staff recommends final design services to rehabilitate Aeration Tank 1A. This agreement will provide final design services that include safety planning, repair of the aeration tank concrete structure, replacement of aeration tank mechanical piping components, preparation of construction-ready drawings for the improvements, and preliminary construction cost estimates.

Financial Implications:

The City has allocated funds for TMWRF capital improvement projects, as outlined on pages 246 and 261 in the council approved City of Reno Annual Budget for FY23. The Aeration Tank 1A Rehabilitation Project is included in the current fiscal year’s CIP as approved by the TMWRF Joint Coordinating Committee (JCC).

The City of Reno will administer the agreement and will be reimbursed for a portion of the costs by the City of Sparks through the current cost sharing agreement for TMWRF operations and maintenance. The City of Reno and the City of Sparks share the cost of this project as follows: 68.63% for Reno and 31.37% for Sparks, as shown in Table 1. Costs for the City of Reno are budgeted in the Sewer Fund.

Table 1 – Cost Sharing Between Reno and Sparks

Total Cost of Agreement	Reno Share	Sparks Share
\$263,016	\$180,507.88	\$82,508.12
Percentages	68.63%	31.37%

Legal Implications:

The parties are bound by the terms of the agreement as prepared by the Office of the City Attorney.

Recommendation:

Staff recommends Council approval of the consultant agreement with Carollo for final design services for the TMWRF Aeration Tank 1A Rehabilitation Final Design Project in an amount not to exceed \$263,016 with the City of Reno's portion being \$180,507.88 (Sewer Fund), and authorize the Mayor to sign.

Proposed Motion:

I move to approve the staff recommendation.

Attachments:

- Area & Vicinity Map for TMWRF Aeration Tank 1A Rehabilitation Final Design Project
- Agreement with Carollo TMWRF Aeration Tank 1A Rehabilitation Final Design Project