

STAFF REPORT

Date: June 5, 2024

To: Mayor and City Council

Through: Doug Thornley, City Manager

Subject: Staff Report (For Possible Action): Approval of Consulting Agreement for Engineering Services During Construction with Carollo Engineers, Inc. (Carollo) for the Truckee Meadows Water Reclamation Facility (TMWRF) Heat Loop System Improvements Project in the amount of \$426,175 with the City of Reno's share being \$292,483.90. (Sewer Fund)

From: Matt Smith, Senior Civil Engineer

Department: Utility Services

Summary:

Truckee Meadows Water Reclamation Facility (TMWRF) is a wastewater treatment plant that requires heating to operate plant processes and warm buildings. The TMWRF Heat Loop System Improvements Project includes the replacement of valves and hot water piping and the repair of damaged pipe insulation. Engineering services during construction and special inspection services are necessary for the TMWRF Heat Loop System Improvements Project. Staff recommends approval of the agreement with Carollo Engineers, Inc. (Carollo) in an amount not to exceed \$426,175 with the City of Reno's share being \$292,483.90 from the Sewer Fund.

Table 1: Consent Review

Consent Review	Yes	No
1. Is this item an annual or standard item that comes before Council for regular approval?		X
2. Is this item an agreement required based on an item previously approved by Council?	X	
3. Is this item included in the current budget approved and adopted by Council?	X	
Other Considerations		
What percent of the total City budget does this item represent?	0.05%	

Alignment with Strategic Plan:

Fiscal Sustainability

Infrastructure, Climate Change, and Environmental Sustainability

Previous Council Action:

December 7, 2022 – Council approved a consulting agreement for engineering design services with Carollo for the TMWRF Heat Loop System Improvements Project.

Background:

TMWRF was constructed in the 1960s and uses the heat loop, in service since 1966, to service its buildings and wastewater processes. The heat loop utilizes gas generated from the digestion system to heat water in boilers and delivers hot water to hydronic heating equipment and heat exchangers throughout the treatment plant. The heat loop system has seen various expansions and additions over the years. Many of the boilers and sludge heaters have been in service prior to 1990. Much of the heat loop infrastructure is 30 to 50 years old and is at the end of its useful and reliable service life and is experiencing failures. In addition, the system does not have redundant heating capacity and recent facility improvements have increased heating loads on the system. During colder periods of the year, buildings cannot maintain temperature set points and equipment has been damaged due to freezing.

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 2024 ranking process identified heat loop improvements as priority #7.

Also on today’s agenda for Council consideration is the construction bid award to TNT Industrial Contractors, Inc. (TNT) to perform the construction for the TMWRF Heat Loop Improvements Project.

Discussion:

This agreement includes engineering services during construction and special inspection services required for the TMWRF Heat Loop Improvements construction contract. Carollo will provide quality assurance inspection and testing, and inspection reports to assure the contractor performs the construction and installation methods in accordance with manufacturer’s recommendations. Carollo is a qualified engineering consultant for construction services based on their experience designing this project, and their familiarity with the operational and maintenance constraints at TMWRF.

Financial Implications:

The current fiscal year’s CIP includes the TMWRF Heat Loop Improvements Project as approved by the TMWRF Joint Coordinating Committee (JCC) and the respective City Councils

of Reno and Sparks through the budget process. The City of Reno will administer the agreement and the City of Sparks will reimburse Reno for a portion of the costs through the current cost-sharing agreement for TMWRF operations and maintenance. Reno and Sparks share the cost of this project as follows: 68.63% for Reno and 31.37% for Sparks, as shown in Table 2. The Sewer Fund budget accounts for these costs.

Table 2 – Cost Sharing Between Reno and Sparks

Total Cost of Agreement	Reno Share	Sparks Share
\$426,175	\$292,483.90	\$133,691.10
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 approve the consulting agreement with Carollo for engineering services during construction for the TMWRF Heat Loop Improvements Project in an amount not to exceed \$426,175, with the City of Reno's share being \$292,483.90 from the Sewer Fund and authorize the Mayor to sign.

Proposed Motion:

I move to approve staff recommendation.

Attachments:

Area & Vicinity Map for TMWRF Heat Loop Improvements Project
TMWRF Heat Loop Improvements Project ESDC Agreement - Carollo