

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 Construction Administration Services with BJB Architecture & Engineering (BJB) for the Truckee Meadows Water Reclamation Facility (TMWRF) Rehabilitation of Secondary Clarifier 2A and Centrate Storage Tanks 2A and 1C Project in the amount of \$151,340 with Reno's share being \$103,864.64. (Sewer Fund)

From: Matt Smith, Senior Civil Engineer

Department: Utility Services

Summary:

Due to the corrosive nature of wastewater treatment processes at Truckee Meadows Water Reclamation Facility (TMWRF), steel and concrete infrastructure needs to be periodically repaired/rehabilitated for continued operation. The goal of the 2023 TMWRF Secondary Clarifier 2A Rehabilitation Project is to improve the condition of the concrete tank infrastructure and repair and coat steel components as necessary. Limited concrete and joint replacement within Centrate Storage Tanks 2A and 1C are also included within this contract. Construction administration and special inspection services are necessary for the 2023 TMWRF Secondary Clarifier 2A Rehabilitation Construction Project. BJB Architecture & Engineering (BJB) is a qualified engineering consultant for the construction management of this project because of their experience designing the project, and their familiarity with the operational and maintenance constraints at TMWRF. This project is listed in the FY 2023 Capital Improvement Program, and staff recommends agreement award to BJB in an amount not to exceed \$151,340 (Reno's share being \$103,864.64 from the Sewer Fund).

Alignment with Strategic Plan:

Infrastructure, Climate Change, and Environmental Sustainability

Previous Council Action:

May 18, 2022 – Council adopted the FY23 Capital Improvement Plan (CIP)

Background:

TMWRF is jointly owned by the Cities of Reno and Sparks, and was originally constructed in 1964. Secondary clarifier 2A and the centrate storage tanks were added in the 1978 TMWRF expansion. Clarifier are settling tanks that removal solids particulates from the waste water as the solid materials settle to the bottom of the tank. The clarifiers use mechanical scrapers to collect the remove the deposited solids as part of the treatment process. Centrate is a nutrient-rich, corrosive byproduct of the dewatering process, and must be stored in the centrate tanks for treatment. The clarifiers and centrate storage tanks are primarily constructed of reinforced concrete with sealed concrete joints and a carbon steel mechanism. Over time, the harsh environment of wastewater and centrate degrade the concrete and steel, and periodic repairs to the tanks must be performed for continued operation. Centrate storage tanks 2A and 1C currently pose an active safety concern with joint failure to the point of leaking centrate into the neighboring pipe gallery. In addition to degradation and failure in the tank structures, corrosion of the mechanical piping and other components inside the tanks has also occurred and the extent of the degraded steel must be identified and replaced.

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 clarifier and centrate storage tank rehabilitation as priority #7.

Also on today’s agenda for Council consideration in conjunction with this agreement is the construction bid award to Resource Development Company dba Farr Construction Corporation (RDC) to perform the construction for the 2023 TMWRF Secondary Clarifier 2A Rehabilitation Project.

Discussion:

The Capital Improvement Program at TMWRF earmarks funds each Fiscal Year for clarifier rehabilitation projects. This item includes the construction administration and special inspection services required for the 2023 TMWRF Secondary Clarifier 2A construction contract. Inspection reports and quality assurance inspection and testing will be completed to assure construction and installation methods are performed in accordance with manufacturer’s recommendations.

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 2023 TMWRF Secondary Clarifier 2A 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 Contract	Reno Share	Sparks Share
\$151,340	\$103,864.64	\$47,475.36
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 BJB for construction administration services for the 2023 TMWRF Secondary Clarifier 2A Rehabilitation Project in an amount not to exceed \$151,340, with the City of Reno's portion being \$103,864.36 (Sewer Fund), and authorize the Mayor to sign.

Proposed Motion:

I move to approve the staff recommendation.

Attachments:

- Area & Vicinity Map for the 2023 TMWRF Secondary Clarifier 2A Rehabilitation Project
- 2023 TMWRF Secondary Clarifier 2A Rehabilitation Project Construction Administration Agreement - BJB