

STAFF REPORT

Date: September 27, 2023

To: Mayor and City Council

Thru: Doug Thornley, City Manager

Subject: Staff Report (For Possible Action): Approval of Consultant Agreement with HDR Engineering, Inc. for engineering services related to the Reno Stead Water Reclamation Facility Secondary Clarifier No. 2 and No. 3 Rehabilitation Project in an amount not to exceed \$223,024. (Sewer Fund)

From: Nicholas Brothers, Associate Civil Engineer

Department: Utility Services

Summary:

The expansion of the Reno Stead Water Reclamation Facility (RSWRF) is complete. With the newly constructed clarifiers in service, the older clarifiers numbered 2 and 3 can be inspected and rehabilitated. Clarifiers 2 and 3 have been in continuous operation for nearly 20 years warranting maintenance to preserve their useful life. HDR Engineering Inc. (HDR) has experience in structural inspection and wastewater clarifier rehabilitation. Staff seeks approval of an agreement with HDR for evaluation and design services for the RSWRF Secondary Clarifier No. 2 and No. 3 Rehabilitation Project. Staff recommends approval of the agreement for the consulting services with HDR in an amount not to exceed \$223,024.00 (Sewer Fund).

Alignment with Strategic Plan:

Infrastructure, Climate Change, and Environmental Sustainability

Previous Council Action:

There is no recent Council action relevant to this item.

Background:

The RSWRF treats and recycles wastewater for the North Valleys sewer service area. The secondary clarifiers remove solids from the treatment process prior to filtration. This important treatment step generally requires the facility to operate with at least two clarifiers in operation. The facility has run clarifiers 2 and 3 continuously for near 20 years. The clarifiers are primarily constructed of reinforced concrete with sealed concrete joints and carbon steel mechanisms. Over time, the highly corrosive wastewater environment degrades the concrete and steel.

Periodic repairs to this infrastructure must be performed for continued operation. These clarifiers are now due for an in depth inspection of the steel mechanisms and concrete tanks. The recent plant expansion included the construction of two new clarifiers, allowing the older units to be taken completely out of service for the purpose of inspection, and rehabilitation. The proposed rehabilitation project will provide inspection of the concrete tanks and steel mechanisms followed by recommendations and design services for repair, component replacement, coatings and other items needed for successful rehabilitation. Staff will then bid this project in accordance with NRS and return to Council for consideration of award of construction contract.

Discussion:

Staff has planned inspection and rehabilitation of these clarifiers for some time. Complete inspection and rehabilitation requires taking clarifiers completely out of service. The recent RSWRF expansion facilitates this work by providing redundancy of process elements and the flexibility to perform this work feasibly. Expected service life of clarifiers is typically 50 years plus. The clarifiers 2 and 3 are 30 and 20 years old respectively. Inspection and maintenance, including concrete inspection and potential rehabilitation, replacement of protective coatings and the replacement or rehabilitation of mechanical components is essential to keep equipment performing well for its expected service life.

Staff selected HDR from the Statement of Qualifications list to provide design services for the project not to exceed \$223,024 and recommends approval of the engineering agreement.

Financial Implications:

Funding is available from the Sewer Fund for this consulting services agreement and is budgeted for in the FY 24 Capital Improvement Program.

Legal Implications:

Legal review completed for compliance with City procedures and Nevada law.

Recommendation:

Staff recommends Council approve the agreement with HDR Engineering Inc. for design services related to the RSWRF Secondary Clarifier No. 2 and No. 3 Rehabilitation Project, in an amount not to exceed \$223,024.

Proposed Motion:

I move to approve staff recommendation.

Attachments:

- HDR Agreement for RSWRF Secondary Clarifier No. 2 and No. 3 Project w exhibits.pdf
- RSWRF Clarifier 2&3 supporting map and image.pdf