OPERATIONS COMMITTEE



Agenda Report

File #: 2024-3818

Agenda Date: 9/25/2024

Agenda Item No: 13.

FROM: Robert Thompson, General Manager Originator: Mike Dorman, Director of Engineering

SUBJECT:

PRIMARY CLARIFIERS F AND G ROTATING MECHANISM REHABILITATION AT PLANT NO. 2, PROJECT NO. FE23-09, SPECIFICATION NO. S-2024-612BD

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Services Contract to Vicon Enterprise, Inc. for Primary Clarifiers F and G Rotating Mechanism Rehabilitation at Plant No. 2, Project No. FE23-09, Specification No. S-2024-612BD, for a total amount not to exceed \$3,150,000; and
- B. Approve a contingency of \$472,500 (15%).

BACKGROUND

The A-side Primary Clarifiers, originally constructed in 1962, consist of four circular clarifiers responsible for treating non-reclaimable flows at Orange County Sanitation District's (OC San) Plant No. 2. Under normal operations, three clarifiers are in service, with the fourth serving as a redundant or backup unit. In February of 2023, Clarifier F failed due to metal loss from corrosion at the connections between the rotating mechanism and center cage structure. An inspection of Clarifier G showed similar levels of corrosion, raising concerns that its rotating mechanism could fail at any time. Consequently, Clarifiers F and G have remained offline since then. The A-Side is currently operating with only Clarifiers D and E in service. A-Side Primary Clarifiers Replacement at Plant No. 2, Contract No. P2-98A, is currently constructing four new A-Side clarifiers due to age and condition, which are expected to be completed by late 2027.

RELEVANT STANDARDS

- Comply with California Public Contract Code Section 20103.8, award construction contract to lowest responsive, responsible bidder
- 24/7/365 treatment plant reliability

PROBLEM

The A-Side clarifiers are currently running with reduced treatment capacity during dry weather operating conditions due to Clarifiers F and G being out of service. Operating less than three primary

File #: 2024-3818

basins means that more solids are passed to the following secondary treatment process which impacts secondary effluent quality, consistency, and operating costs when operating in separated mode for GWRS.

PROPOSED SOLUTION

Approve a Services Contract for Primary Clarifiers F and G Rotating Mechanism Rehabilitation at Plant No. 2, Project No. FE23-09. This project will repair and/or replace the corroded metal sections of the rotating mechanisms and extend the operability of Clarifiers F and G for several years until they are replaced by Contract No. P2-98A.

Staff recommends approving a contingency of 15% rather than the typical 10%. The first order of work for this project is to sandblast the clarifier mechanism to inspect, identify, and quantify the areas of rehabilitation. Once the mechanisms are sandblasted, there is a concern that the extent of the damage may be greater than initially anticipated.

TIMING CONCERNS

The A-Side clarifiers are currently operating at a reduced capacity with no available redundancy to maintain plant operations in a separated mode of treatment. The rotating mechanisms for Clarifiers F and G need to be rehabilitated and returned to service as soon as possible to restore redundancy and improve overall plant reliability.

RAMIFICATIONS OF NOT TAKING ACTION

OC San is currently operating the A-Side with only two clarifiers in service. Losing another A-Side clarifier would force plant operations into a combined mode of treatment, greatly reducing reclaimable flow to GWRS.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

OC San advertised Project No. FE23-09 for bids on May 9, 2024, and two sealed bids were received on July 2, 2024. A summary of the bid opening follows:

Engineer's Estimate	\$ 2,594,150
<u>Bidder</u>	Amount of Bid
Vicon Enterprise, Inc.	\$ 3,150,000
J.R. Filanc Construction Co. Inc.	\$ 4,110,700

The two bids received were 21% and 58% higher than the engineer's estimate. Staff has reviewed the bid breakdown provided by Vicon Enterprise, Inc. and J.R. Filanc Construction Co. Inc. The main difference between the estimate and bid cost was attributed to higher labor rates and steel coating costs. The engineer's estimate underestimated the cost to prepare and coat the structural steel for

the rotating mechanism and used outdated prevailing wage labor rates that did not account for recent increases. Given the labor-intensive nature of this work, the higher labor rates and steel quantity significantly impacted the overall price.

The bids were evaluated in accordance with OC San's policies and procedures. A notice of intent to award was sent out to the bidders on July 15, 2024, informing them of the intent of OC San staff to recommend approval of the Services Contract to Vicon Enterprise, Inc.

Staff recommends approving a Services Contract to the lowest responsive and responsible bidder, Vicon Enterprise, Inc. for a total amount not to exceed \$3,150,000.

CEQA

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations sections 15301. A Notice of Exemption will be filed with the OC Clerk-Recorder and State Clearing House after the OC San's Board of Directors approval of the Services Contract.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Budget FY 2024-2025 and 2025-26, Section 8, Page 49, Small Construction Projects Program, Project No. M-FE) and the budget is sufficient for the recommended action.

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

- Services Contract
- Presentation

HO:lb