



Agenda Date: 12/18/2019
Agenda Placement: 8D

Napa Sanitation District Board Agenda Letter

TO: Honorable Board of Directors
FROM: Timothy Healy - General Manager
NS-Technical Services/Engineer
REPORT BY: Karl Ono, Associate Engineer - (707) 258-6013
SUBJECT: Award Construction Contract for the Primary Clarifier Rehabilitation Project (CIP 16712)

RECOMMENDATION

Award construction contract for the Primary Clarifier and DAF Clarifier Rehabilitation Project (CIP 16712) to Farr Construction Corporation for the bid amount of \$968,800 and authorize the General Manager to execute the Agreement with the Contractor and issue the Notice to Proceed, when appropriate.

EXECUTIVE SUMMARY

On December 5, 2019, NapaSan received four bids for the Primary Clarifier and DAF Clarifier Rehabilitation Project (CIP 16712). The engineer's estimate of probable construction cost for the project was \$1,200,000. Farr Construction Corporation is the lowest qualified bidder in the amount of \$968,800, which is 19% less than the engineer's estimate.

Farr Construction Corporation's Bid Schedule listed a total bid of \$1,040,800. However, during evaluation of the bids received, a discrepancy was discovered between a listed unit price and the extended total price for the bid item. This discrepancy was interpreted in accordance with procedures set forth in the contract documents, and the total bid amount was corrected as a result.

The second low bid was submitted by GSE Construction, Inc. in the amount of \$1,043,500, which is approximately 8% higher than the low bid. The high bid was submitted at \$1,511,000. A summary of all bids is attached.

Notice To Proceed is expected to be issued in January 2020. Construction is scheduled for the dry-weather season of 2020 to take advantage of lower plant flows during the summer.

FISCAL & STRATEGIC PLAN IMPACT

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	Yes
Where is it budgeted?	The project is budgeted in FY 19/20 and 20/21 of NapaSan's Capital Improvement Plan. The total project budget is \$1,514,000.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	Protective coatings in the primary clarifiers have reached the end of their service life and the mechanical and structural components have begun to deteriorate. Protective coatings in the DAF clarifier are showing signs of premature failure and need to be replaced in order to protect mechanical equipment from deterioration.
Is the general fund affected?	Yes
Future fiscal impact:	Construction will be completed in FY 20/21. Unused budget in this fiscal year will be carried forward into next fiscal year.
Consequences if not approved:	Protective coatings in the primary clarifiers and DAF clarifiers would continue to degrade, resulting in accelerated deterioration of structural and mechanical components. In addition to increased risks of failure, the costs to repair and replace these components would increase significantly with continued degradation.
Additional Information:	None.

ENVIRONMENTAL IMPACT

The project was previously determined to be Categorically Exempt by the Board on October 16, 2019. A Notice of Exemption was filed with the Napa County Recorder on October 17, 2019.

BACKGROUND AND DISCUSSION

The primary clarifiers were converted to their current use in 1998 as part of the Phase II Socol Water Recycling Facility Upgrade Project. The structures were originally constructed as flocculating clarifiers in 1977. The primary clarifiers receive wastewater from the headworks that has been screened and aerated to remove large solids and grit. The primary clarifiers allow suspended solids to settle and collect as sludge, which is then conveyed to the digester, treated, thickened, dewatered, and land-applied for disposal. Wastewater passing through the primary clarifiers continues through the treatment process.

Equipment and coatings in the primary clarifiers have been in service for approximately 20 years and are subject to a corrosive environment typical of the wastewater treatment process. Protective coatings have reached the end of their useful life, which has led to visible deterioration of some components. A condition assessment revealed that some mechanical components are in need of repair or replacement and recommended that protective coatings throughout the clarifier be replaced to prevent further deterioration.

The dissolved air floatation (DAF) clarifier was constructed in 2016 as part of the Phase I Recycled Water Expansion Project. During peak recycled water production periods (currently July, through September), the DAF

clarifier receives water that has been treated in the ponds and removes algae before it is disinfected, filtered, and distributed for reuse as recycled water. The protective coatings on the majority of the carbon steel components are beginning to deteriorate, leaving portions directly exposed. The mechanical components in the DAF clarifier are exposed to sun and wind when the DAF is not in service and exposed to treated wastewater containing algae when the DAF is in service. NapaSan staff believes that the existing protective coatings are failing prematurely, and that inadequate environmental controls (dust, moisture, and temperature) associated with field coating during original construction may have led to the premature failure.

The project, which consists of repairing deteriorated mechanical equipment and failing protective coatings in the primary clarifiers DAF clarifier, was identified in a 2015 condition assessment study. Operations staff has also observed similar conditions of protective coatings in the nearby DAF clarifier process area. Because of the similar nature of work required to rehabilitate mechanical and structural components in each process area, there is an anticipated cost savings by combining work in both process areas into one project.

SUPPORTING DOCUMENTS

- A . CIP 16712 Bid Results
- B . Presentation Slides

Napa Sanitation District: Approve

Reviewed By: Timothy Healy