Agenda Date: 7/15/2020
Agenda Placement: 7E

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:	Authorize Increase of Change Order Signing Authority of the General Manager for the Primary Clarifier and DAF Clarifier Rehabilitation Project (CIP 16712)

RECOMMENDATION

Authorize an increase of change order signing authority for the General Manager from $96,880.00 (10% of original contract) to a maximum of $296,480 (31% of original contract) for the Primary Clarifier and DAF Clarifier Rehabilitation Project (CIP 16712) for a potential total approved contract amount of $1,265,280.

EXECUTIVE SUMMARY

Construction of the Primary Clarifier and DAF Clarifier Rehabilitation Project (CIP 16712) is currently in progress. After issuance of a contract to Farr Construction Corporation, NapaSan's contracted inspector, HDR, identified that the existing brackets supporting the scum baffles, which are located in the primary clarifiers, are severely deteriorated and unsuitable for blasting and coating, as specified in the contract documents. NapaSan's Construction Manager requested a quote from Farr Construction to replace the scum baffles and support brackets under contract change order. NapaSan's procurement rules allow the General Manager to approve contract change orders up to 10% of the original contract amount. The proposed contract change order to replace the scum baffles and support brackets will exceed 10% of the original contract amount. Board approval is required to authorize the General Manager to sign contract change orders that exceed 10% of the original contract amount. Attached for reference is NapaSan Code Section 2.03.030 (Formal Bidding for Construction) with Subsection M (Change Orders) highlighted.

The primary clarifier scum baffles separate floating scum from the primary clarifier effluent and divert the scum into the solids process train. The existing baffles are constructed from fiberglass reinforced plastic (FRP) panels, and are supported by a system of aluminum brackets that are attached to the outer face of the steel effluent launders. The baffles extend along the circumference of the primary clarifiers at the clarifiers' normal operating water level.

Condition assessments of the primary clarifiers were performed in 2015 by V&A consulting engineers and in 2018 by HDR as part of the preliminary design effort. The aluminum brackets supporting the scum baffles were not mentioned in either of the two condition assessment reports. HDR's condition assessment team claims that condition of the brackets was not able to be evaluated due to poor access and visibility due to attached residue at the time of initial inspection. The Contract Documents call for blasting and applying a protective coating on the existing aluminum support brackets, while protecting the existing FRP baffle in place.

During prepatory work for construction, HDR's inspector and the contractor observed that the aluminum brackets are severely corroded and structurally unsound. The surface preparation required for epoxy based repair composites (coatings) may further promote section loss and may render the support brackets ineffective. Replacement of the brackets alone would require custom fabrication which would extend lead times and increase labor costs. HDR's design engineer's recommendation is to replace the scum baffles and brackets with a new prefabricated FRP system.

NapaSan has currently negotiated a price with Farr Construction to perform the baffle and bracket replacement work. The total change order price is $199,600. NapaSan requested that the design engineer and the construction manager compare the quote to similar projects they have experienced. Both parties confirmed that the expected price is competitive and within the range they expected. The price includes material costs of $41,856 and installation costs of $157,744. The General Manager has executed a change order authorizing procurement of materials in order to reduce impacts to the project schedule.

Staff expects the change order to perform the scum baffle and bracket replacement to be approximately 21% of the original contract amount of $968,800. Staff is requesting that the Board authorize the General Manager to approve 21% of the original contract amount for this change order, plus an additional 10% of the original contract amount for potential future change orders. Without the additional 10% signing authority, NapaSan's process to approve change orders could delay construction progress. The resulting total maximum contract amount for the project would be $1,265,280, which is 31% greater than the original contract amount.

FISCAL & STRATEGIC PLAN IMPACT

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	Yes
Where is it budgeted?	The project is budgeted in the Capital Improvement Program, with a total of $1,666,300. The engineer's estimate of probable construction cost was $1,200,000, and the low bid was received at $968,800.00. Costs for design, engineering services during construction, construction management, and staff time are anticipated to total approximately $350,000, leaving approximately $350,000 to cover change orders and other project costs.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	The proposed contract change order exceeds the General Manager's current signing authority. The General Manager cannot approve change orders above the signing authority without Board authorization. The proposed change order will replace components that are in immediate need of repair.
Is the general fund affected?	Yes

Future fiscal impact:	There are sufficient funds available in the project budget to cover the proposed contract change order to replace the scum baffles and brackets. If additional funds are needed to cover future change orders then savings will be used from other projects.
Consequences if not approved:	The primary clarifier scum baffle and bracket replacements will be delayed until at least Spring 2021 and would be replaced as part of a future project.
Additional Information:	None.

ENVIRONMENTAL IMPACT

None.

BACKGROUND AND DISCUSSION

The primary clarifiers were converted to their current use in 1998 as part of the Phase II Soscol 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.

SUPPORTING DOCUMENTS

A . District Code Section 2.03.030

Napa Sanitation District: Approve

Reviewed By: Timothy Healy