



Legislation Details (With Text)

File #: 2024-091 **Version:** 1 **Name:**
Type: Resolution **Status:** Passed
File created: 2/29/2024 **In control:** Board of Directors
On agenda: 3/21/2024 **Final action:** 3/21/2024
Title: Proposed Change Order No. 5
Contract No. 1903598
Construction Manager at Risk for the Assessment and
Rehabilitation of WRRF Yard Piping and Underground Utilities
CIP #216006/BCE Score: 79.0
Sponsors: Navid Mehram
Indexes: Wastewater Operations
Code sections:
Attachments:

Date	Ver.	Action By	Action	Result
3/21/2024	1	Board of Directors	Approved	Pass
3/13/2024	1	Operations and Resources Committee	Recommended for Approval	Pass

Proposed Change Order No. 5
Contract No. 1903598
Construction Manager at Risk for the Assessment and
Rehabilitation of WRRF Yard Piping and Underground Utilities
CIP #216006/BCE Score: 79.0

Agenda of: March 21, 2024

Item No.: **2024-091**

Amount:	Original Contract	\$4,863,051.00
	Change Order No. 1	685,450.00
	Change Order No. 2	596,779.00
	Change Order No. 3	0.00
	Change Order No. 4	5,000,000.00
	Proposed Change Order No. 5	9,483,057.00
	Total Revised Contract	\$20,628,337.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.
Chief Executive Officer
Great Lakes Water Authority

DATE: February 29, 2024

**RE: Proposed Change Order No. 5
Contract No. 1903598
Construction Manager at Risk for the Assessment and Rehabilitation of WRRF
Yard Piping and Underground Utilities
Vendor: The Christman Company**

MOTION

Upon recommendation of Navid Mehram, Chief Operating Officer - Wastewater Operating Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. 1903598, Proposed Change Order No. 5, “Construction Manager at Risk for the Assessment and Rehabilitation of WRRF Yard Piping and Underground Utilities” with The Christman Company, at an increased cost of \$9,483,057.00 for a total cost not to exceed \$20,628,337.00 and an increased duration of 580 days for a total duration of 1,812 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The GLWA awarded Contract No. 1903598, Construction Manager at Risk for the Assessment and Rehabilitation of the WRRF Yard Piping and Underground Utilities, to The Christman Company (TCC), construction manager, with a start work date of January 15, 2021. This contract is divided into several phases including site investigation, design assistance, cost estimating, constructability review, and construction phase.

Four (4) change orders were issued under this contract. Change Order No.1 for additional investigation of the underground utilities for the study phase. Change Order No. 2 for the preliminary and design phases. Change Order No. 3 extended the contract time to align the completion of the final design between the Construction Manager at Risk (CMAR) and design contracts. Change Order No. 4 extended the contract time, to align with the completion of the final design between the CMAR and design contracts, allowing for bidding and negotiation of the final design package. Change Order No. 4 allowed the construction team to advance work on demolition and abatement precursor work in the tunnels under the administrative buildings and award the electrical contract to begin work on large lead time items like design, submittal, and ordering of the transformer.

This contract now has 21 separate improvements and one (1) program. The 17 improvements are 100% designed with bids received. Four (4) pending design and one (1) program which includes assessment of large diameter Screened Final Effluent (SFE) loop gate valves has been identified.

JUSTIFICATION

This contract model will include several packages to deliver the job and each package will be presented to the Board for authorization to release more funds to support the construction project.

This request will support the construction of Package 3. Package 3 is the Guaranteed Maximum Price (GMP) for 10 improvements including the SFE Gate Valve assessment program.

The improvements include rehabilitation of secondary final effluent (SFE) lines, work on the potable water (PW), low pressure secondary water (LPSW), and intermediate pressure secondary water (IPSW), replacement of natural gas lines, steam and condensate lines, protective coating and restraint replacement of the return activated sludge (RAS) line, and sanitary sewer lining.

Furthermore, included in this package is a program to assess the large valves on the SFE system. The SFE loop provides screened final effluent from the SFE pumping station around the incinerators and dewatering complex in a large diameter pressurized water system mostly constructed of prestressed concrete cylinder pipe (PCCP). The loop was installed in the 70s and has been identified by plant operations and maintenance to have shutdown difficulty in both seating of valves and actuator problems. During the assessment portion of the yard piping project, partial operation of valves and continued feedback from operations and maintenance led the project team to create a large diameter valve assessment team with a detailed project plan to assess, perform minor repairs, partially operate, and then perform full operation of the 14 valves around the SFE loop. Without this program, it will result in this scope being added to each of the three individual projects and their individual contractors creating duplication in scope across all three projects, likely increasing the total cost as well as inconsistent results at the plant.

Package 4 and 5 will be included in a future change order. GLWA is completing final review of the GMP for Package 4, while Package 5 is pending design. Package 4 includes five utilities in a common trench from Pump Station 1 to the rectangular clarifiers and the new water main in the tunnels from meter pit A to the machine shop. Package 5 includes new IPSW and PW from the machine shop to the tunnel Pump station 1 junction, a second feed from the SFE loop to the rectangular clarifier loop, and the plans for a butterfly valve replacement for the branch of the SFE loop that feeds Complex B. Based on a preliminary estimate, GLWA anticipates the remaining change orders to total to an additional \$6 Million.

PROJECT MANAGEMENT STATUS

Original Contract Time	792 days (01/15/2021 - 03/17/2023)
Change Order No. 1	0 days
Change Order No. 2	0 days
Change Order No. 3	197 days (03/18/2023 - 09/30/2023)
Change Order No. 4	243 days (10/01/2023 - 05/30/2024)
Proposed Change Order No. 5	580 days (05/31/2024 - 12/31/2025)
New Contract Time	1,812 days (01/15/2021 - 12/31/2025)

PROJECT ESTIMATE

Original Contract Price	\$4,863,051.00
Change Order No. 1	685,450.00
Change Order No. 2	596,779.00
Change Order No. 3	0.00
Change Order No. 4	5,000,000.00
Proposed Change Order No. 5	9,483,057.00
New Contract Total	\$20,628,337.00

FINANCIAL PLAN IMPACT

Summary: Sufficient funds are provided in the financial plan for this project.

Funding Source: Sewer Construction Fund

Cost Center: Wastewater

Expense Type: Construction (5421-892211.000-616900-216006)

Estimated Cost by Year and Related Estimating Variance: See table below.

Original Contract Price	\$4,863,051.00
Change Order No. 1	685,450.00
Change Order No. 2	596,779.00
Change Order No. 3	0.00
Change Order No. 4	5,000,000.00
Proposed Change Order No. 5	9,483,057.00
New Contract Total:	\$20,628,337.00
Amended Financial Plan Estimate	<u>27,665,000.00</u>
Balance reserved for construction	\$7,036,663.00

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on March 13, 2024. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.