



Legislation Details (With Text)

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Title: Proposed Change Order No. 2
GLWA-CON-253
Springwells Water Treatment Plant Reservoir Fill Line Improvements
CIP# 114013 / BCE Score: 77.2

Sponsors: Cheryl Porter, Grant Gartrell

Indexes: Water Operations

Code sections:

Attachments: 1. CON-253 Change Order 2 Question - Communication to the Board

Date	Ver.	Action By	Action	Result
6/24/2020	1	Board of Directors	Approved	Pass
6/10/2020	1	Operations and Resources Committee	Recommended for Approval	Pass

Proposed Change Order No. 2

GLWA-CON-253

Springwells Water Treatment Plant Reservoir Fill Line Improvements

CIP# 114013 / BCE Score: 77.2

Agenda of: June 24, 2020

Item No.: **2020-188**

Amount:	Original Contract	\$4,270,500.00
	Change Order No. 1	0.00
	Proposed Change Order No. 2	0.00
	Total Contract Amount	\$4,270,500.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: June 3, 2020

RE: Proposed Change Order No. 2
Contract No. GLWA-CON-253
Springwells Water Treatment Plant Reservoir Fill Line Improvements
Vendor: Ric-Man Construction, Inc.

MOTION

Upon recommendation of Cheryl Porter, Chief Operating Officer - Water and Field Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. GLWA-CON-253 Proposed Change Order No. 2 “Springwells Water Treatment Plant Reservoir Fill Line Improvements” with Ric-Man Construction, Inc., with no increase in cost for a total cost not to exceed \$4,270,500.00, and an increase in duration of 272 days for a total contract duration of 1,132 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

Contract No. GLWA-CON-253 is a construction contract that involves constructing a reservoir fill line, energy-dissipating valve station, and related electrical, instrumentation and control system improvements at the Springwells Water Treatment Plant (SPP). Contract No. CON-253 was awarded to Ric-Man Construction, Inc. on April 6, 2018, the Notice to Proceed was issued on May 10, 2018, and the contract is currently set to end on September 1, 2020. The project design was prepared by AECOM Great Lakes, Inc. (AECOM) under its professional engineering services Contract No. CS-038 with GLWA.

The purpose of the reservoir fill line is to allow filling of the SPP reservoir system from the intermediate pressure transmission system when conditions occur that may interrupt SPP raw water supply or SPP production. The source of finished water to fill the SPP reservoir system is primarily from the Southwest Water Treatment Plant. Capital improvements being constructed under Contract CON-253 include construction of: 1) a cast-in-place concrete valve vault on SPP property that houses piping, isolation valves, flow control valves, and miscellaneous mechanical and electrical auxiliary equipment; 2) buried yard piping connecting the valve vault piping to SPP Reservoir No. 1; 3) buried yard piping connecting the valve vault piping to the intermediate pressure system network of piping in the Warren Avenue right-of-way, and 4) electrical instrumentation and controls allowing the flow control valves to be powered from SPP and controlled remotely through the Ovation control system.

Contract No. CON-253 initially included a Provisional Allowance in the amount of \$1,500,000 to perform a live tap, if necessary, on the 72-inch diameter intermediate pressure main supplying the reservoir fill line. At the time of contract execution, it was unknown if adequate isolation could be attained using existing 90-year-old valves to allow connection to the main. During execution of the contract, adequate isolation was attained and the connection to the main was made without having to use a live tap.

Due to vendor performance issues and associated delays with water quality modeling provided by AECOM under Contract No. CS-038, performance demonstration testing of the flow control valves provided under construction Contract No. CON-253 has been delayed. Therefore, a Contract Time extension is needed on Contract No. CON-253 to complete performance testing during non-peak demand season.

JUSTIFICATION

GLWA is presently starting the 2020 peak demand season and Contract No. CS-038 water quality modeling is still not

complete. Consequently, performance demonstration testing under Contract No. CON-253 has been delayed until the next low-demand season, which starts in October 2020.

In the meantime, deficiencies have been identified with the controls that operate phosphoric acid, polymer and alum feed systems. The principle deficiencies with the controls consist of no redundant or backup process controllers and outdated network switches that lack the reliability of switches now used. Likewise, the filter washwater supply vent piping is deteriorated and requires replacement to prevent excess or uncontrolled air from entering the filters. The chemical feed systems control upgrades are most serious because if this system fails, then water production capability at SPP will be impacted. There are sufficient funds available in the base Contract Price of Contract No. CON-253 (that includes the allowance that was going to be used for the live tap) to upgrade the chemical feed system controls and replace the deteriorated filter washwater vent piping. Use of Contract No. CON-253 to perform this additional work using the provisional allowance funds is the quickest means to complete this work. Therefore, this proposed Change Order No. 2 requests that the controls work for phosphoric acid, polymer and alum feed as well as the filter washwater vent piping replacement be added to the scope of Contract No. CON-253. This proposed Change Order No. 2 also requests additional Contract Time to start and complete the performance demonstration testing of the reservoir fill line, which is already part of the base scope of work under Contract No. CON-253.

PROJECT MANAGEMENT STATUS

Original Contract Time	450 Calendar Days
Change Order No.1	410 Calendar Days
Proposed Change Order No. 2	272 Calendar Days
New Contract Time	1,132 Calendar Days

PROJECT ESTIMATE

Original Contract Price	\$ 4,270,500.00
Change Order No. 1	0.00
Proposed Change Order No. 2	0.00
New Contract Total	\$ 4,270.500.00

FINANCIAL PLAN IMPACT

This proposed change order is for an extension of time only. Although the change order extends the final completion date into FY 2021, there is no substantive financial impact.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on June 10, 2020. 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.