



Legislation Text

File #: 2019-043, Version: 1

Proposed Change Order No. 2

GLWA-CON-183

Detroit River Interceptor Construction

(CIP# 222002)

Agenda of: February 27, 2019
Item No.: **2019-043**
Amount: Original Contract Price \$ 2,159,925.00
Change Order No. 1 2,424,009.90
Change Order No. 2 0.00
New Contract Total \$ 4,583,934.90

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: February 6, 2019

RE: Proposed Change Order No. 2
Contract No. GLWA-CON-183
Detroit River Interceptor Construction
Vendor: Inland Waters Pollution Control, 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-183 Change Order No. 2 "Detroit River Interceptor Construction" with Inland Waters Pollution Control, Inc., at a cost not to exceed \$4,583,934.90 with an increased duration of 161 days for a total contract duration of 578 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The GLWA Wastewater Conveyance System consists of a network of sewers which collect and transfer wastewater through major interceptors to the Water Resource Recovery Facility (WRRF). There are three major interceptors - Detroit River Interceptor (DRI), North West Interceptor (NWI), and North Interceptor East Arm (NIEA). The DRI runs parallel to the Detroit River. The pipe size varies from 8 ft. to 16 ft. in diameter and carries about 36% of the total flow to the WRRF. The NWI runs parallel to the Rouge River. The pipe sizes are up to 13.5 ft. and carries about 35% of the flow. The NIEA is 15 miles long. The pipe size varies from 12 ft. to 17.5 ft. and it carries about 29% of the flow.

The DRI is the oldest of the three interceptors, constructed in 1927. The purpose of the DRI was to bring the majority of Detroit's sewage to a common point to prevent newly constructed sewers from discharging directly into the river. It also allowed the sewage to be discharged further downriver from the water supply inlet.

A Closed-Circuit Television (CCTV) inspection of the DRI, in accordance with the Pipeline Assessment Certification Program (PACP) as developed by the National Association of Sewer Service Companies (NASSCO), was completed in February to March of 2016. This inspection determined that an auger had perforated the DRI and raised concerns due to high PACP ratings, indicating structural and corrosion issues within the interceptor. Stretches of the DRI had manual entry inspections completed on them in December 2016 and January 2017.

The scope of the repairs for GLWA-CON-183, "Detroit River Interceptor Construction" (2017), were limited to these identified needs: (1) removal and repair of the auger between MH-3 and MH-4; (2) removal of debris from MH-2 to MH-5 and MH-7 to MH-8; (3) installation of 1700 linear feet of a springline working platform; (4) various repairs to joints, leaks, cracks; (5) manhole improvements; and (6) removal of the platform and restoration. The design of the repairs and construction documents were prepared by FK Engineering Associates (FKE) under Purchase Order No. 0005030, "Capital Project: CIP-1263 - DRI Inspection."

A separate design build project (GLWA-DB-226 "Repair and Rehabilitation of Detroit River Interceptor (DRI) from Alter Road to Water Resource Recovery Facility") was awarded and initiated that addresses portions of the DRI outside of the limits of GLWA-CON-183.

GLWA-CON-183 Change Order No.1 for this project was a significant increase in the level of effort for this project based on the poor condition of concrete and joints within the project work boundaries. The Board approved the additional cost in work and extended the contract time. The explanation for the cost and time increases was included as part of the Change Order No. 1 and backup documentation and the revised final completion date was established as December 21, 2018.

GLWA-CON-183 Change Order No. 2 is requested due to additional wet weather delays within the DRI that have further extended the time to complete the work. A final completion date of May 31, 2019 is requested to allow for restoration work to be completed in the spring.

JUSTIFICATION

Flows must be controlled to create proper and safe environments for work to proceed within the DRI. Wet weather events have resulted in project delays. Based on prior experience, GLWA staff anticipates an additional 161 days to be sufficient for Change Order No. 2 to complete this work. GLWA staff have directed the delays and the contractor has agreed to hold its price for the work for GLWA-CON-183 Change Order No. 1.

PROJECT MANAGEMENT STATUS

The project is approximately 80 percent complete. Remaining tasks include repair of less than 10 additional joints,

removal of the 1,700 lineal feet of scaffolding, and surface restoration.

Original Contract Time	273 Days
Change Order No. 1	144 Days
Change Order No. 2	161 Days
New Contract Time	578 Days

PROJECT ESTIMATE

Original Contract Price	\$ 2,159,925.00
Change Order No. 1	2,424,009.90
Change Order No. 2	0.00
New Contract Total	\$ 4,583,934.90

FINANCIAL PLAN IMPACT

This change order is for extension in time only. There is no substantive financial impact.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on February 13, 2019. 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.