



## Legislation Details (With Text)

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**On agenda:** 7/24/2019      **Final action:** 7/24/2019

**Title:** Proposed Change Order No. 3  
Contract No. 1901819 GLWA-CON-183  
Detroit River Interceptor Construction

**Sponsors:** Cheryl Porter, Todd King

**Indexes:** Water Operations

**Code sections:**

**Attachments:**

Date	Ver.	Action By	Action	Result
7/24/2019	1	Board of Directors	Approved	Pass
7/24/2019	1	Operations and Resources Committee	Recommended for Approval	Pass

**Proposed Change Order No. 3**  
**Contract No. 1901819 GLWA-CON-183**  
**Detroit River Interceptor Construction**

Agenda of: July 24, 2019  
Item No.: **2019-273**  
Amount: Original Contract \$2,159,925.00  
Change Order No. 1 \$2,424,009.90  
Change Order No. 2 0.00  
Proposed Change Order No. 3 0.00  
Total Revised Contract \$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:** July 3, 2019

**RE: Proposed Change Order No. 3**  
**Contract No. 1901819 GLWA-CON-183**  
**Detroit River Interceptor Construction**  
**Vendor: Inland Water 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. 1901819 GLWA-CON-183 Change Order No. 3 “Detroit River Interceptor Construction” with Inland Waters Pollution Control, Inc., at a cost not to exceed \$4,583,934.90 for an increased duration of 183 days for a total contract duration of 761 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. NIEA is 15 miles long and works as a relief to the DRI. 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 and 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 (2017) were limited to: (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 1,700 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 from Alter Road to Water Resource Recovery Facility (WRRF)”) was awarded and initiated that addresses portions of the DRI outside of the limits of 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 request and backup documentation, and the revised final completion date was established as December 21, 2018.

Change Order No. 2 was requested due to additional wet weather delays within the DRI that have further extended the time to complete the work, establishing a final completion date of May 31, 2019.

Although all construction work has been completed, due to wet weather delays, the extensive scaffolding system still

needs to be removed. DB-226, the full rehabilitation of the DRI from Alter Road to the WRRF has commenced. A final completion date of November 30, 2019 is requested to allow for restoration work to be completed in the fall.

**JUSTIFICATION**

In order to control flows into the DRI, GLWA has limited work under this contract to allow for other work to proceed within the DRI. This resulted in an overall delay to the project work at GLWA's request. Based on the historic and unanticipated rainfall, GLWA requested delay days, an additional 183 days are requested to complete this work. GLWA staff has directed the delays, and the contractor has agreed to hold its price for the work within the negotiated limits, as stated in Change Order Nos. 1 and 2.

**PROJECT MANAGEMENT STATUS**

Original Contract Time	273 Days
Change Order No. 1	144 Days
Change Order No. 2	161 Days
Proposed Change Order No. 3	183 Days
New Contract Time	761 Days

**PROJECT ESTIMATE**

Original Contract Price	\$ 2,159,925.00
Change Order No. 1	\$ 2,424,009.90
Change Order No. 2	\$0.00
Proposed Change Order No. 3	\$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 Special Meeting on July 24, 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.