



Legislation Text

File #: 2021-352, Version: 1

Contract No. 2100891

Rehabilitation of Outfall B-39

CIP# 260508 / BCE Score: N/A

Agenda of: September 22, 2021

Item No.: **2021-352**

Amount: \$9,742,646.35

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: September 1, 2021

RE: **Contract No. 2100891**
Rehabilitation of Outfall B-39
Vendor: LGC Global, 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 Interim Chief Executive Officer (ICEO) to **enter into Contract No. 2100891 “Rehabilitation of Outfall B-39” with LGC Global, Inc., at a cost not to exceed \$9,742,646.35 for a duration of 670 days;** and authorizes the Interim CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

Outfall B-39 is located at the extension of Junction Street south of W. Jefferson Avenue in Detroit. A portion of the outfall is adjacent to the idled Mistersky Power Plant, with the remainder located adjacent to Waterfront Petroleum Terminal, a bulk liquid storage and marine fuel supplier. Previous CCTV, ROV, and diver inspections of Outfall B-39 were conducted in 2017 and again in 2020. The

last inspection indicated that the existing 13-foot internal diameter outfall sewer is in poor condition and in need of repair. Based on the completed inspections, a repair plan was formulated consisting of the construction of an access and lining shaft near the river and slip-lining the 13-foot outfall sewer with 10-foot internal diameter glass fiber reinforced polymer mortar pipe. The outfall functions to divert dry weather sewer flow to the Detroit River Interceptor (DRI), while allowing wet weather flows of sufficient size to overflow to the Detroit River. The overflow control mechanism of Outfall B-39 consists of two stainless steel backwater gates, positioned in parallel to each other. In a wet weather event of sufficient size, wet weather flow builds up against the backwater gates until a sufficient differential between river level and sewer level allows the gates to open, and a combined sewer overflow (CSO) occurs. The backwater gates are located near W. Jefferson Avenue. As a result, the remaining 900 feet of the outfall from the backwater gates to the river is hydraulically connected to the Detroit River and is generally completely submerged, depending on seasonal variations in the river level.

JUSTIFICATION

Findings from recent investigations of Outfall B-39 indicate that the outfall barrel is structurally compromised, with significant cracking, springline crushing, and general deterioration of the concrete liner. These investigations have indicated that the outfall tunnel is progressing toward a failure, which could put upstream infrastructure at risk in the event of a collapse. Rehabilitation of this outfall including cleaning of accumulated debris and full structural rehabilitation is essential to restore the outfall's integrity and protect upstream and adjacent infrastructure.

FINANCIAL PLAN IMPACT

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

Funding Source: Wastewater Construction Fund

Cost Center: Wastewater Field Engineering

Expense Type: Construction (5421-892411.000-616900-260508)

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

| <u>Fiscal Year</u> | <u>Amount</u> |
|---------------------------|----------------------|
| FY 2022 Plan | \$ 3,824,352.22 |
| FY 2023 Plan | 5,307,561.07 |
| FY 2024 Plan | <u>610,733.06</u> |
| Financial Plan Estimate | \$ 9,742,646.35 |
| Proposed Contract Award | <u>9,742,646.35</u> |

This proposed contract is being funded from the unallocated Program 260500 - CSO Outfall Rehabilitation balance identified in FY 2022 - 2026 CIP Plan.

SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT

The cost savings are not determinable at the time of award.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on September 8, 2021. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented, subject to receiving additional information from staff regarding the age of the outfall and length being lined.

SHARED SERVICES IMPACT

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