



Legislation Text

File #: 2022-340, Version: 1

Contract No. 2102859

Conveyance System Infrastructure Improvements

CIP #260701 / BCE Score: 60.1

Agenda of: August 24, 2022

Item No.: **2022-340**

Amount: \$36,863,000.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: July 29, 2022

RE: **Contract No. 2102859**
Conveyance System Infrastructure Improvements
Vendor: Jay Dee Contractors, 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. 2102859 “Conveyance System Infrastructure Improvements” with Jay Dee Contractors, Inc., at a cost not to exceed \$36,863,000.00 for a duration of 790 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

GLWA is responsible for the operation and maintenance of over 60 combined sewage overflow (CSO) outfalls on the Detroit and Rouge Rivers. Each of these outfalls are critical wastewater infrastructures that convey flows from local sewers to the interceptors.

Phase I of the Conveyance System Infrastructure Improvements Project consists of 59 CSO outfalls.

These outfalls are made up of connecting sewers, diversion dams, regulator gates and backwater gates. Although not every outfall has regulator gates or backwater gates, the purpose of these outfalls is the same. During wet weather periods, these CSO outfalls can redirect a portion of the wet weather flow from the Detroit River Interceptor (DRI), Oakwood Northwest Interceptor (OWNI) or Northwest Interceptor (NWI) through the outfall and to the Detroit or Rouge Rivers. Dry weather flow and wet weather flow that does not get redirected is sent to the Water Resource and Recovery Facility (WRRF) via the DRI, OWNI, and NWI.

Due to the years of use and weathering, many of the structural, mechanical, and electrical aspects of the CSO outfalls have become deteriorated and difficult to maintain or operate. The backwater gates are well past their design life, and completely missing in some cases. The regulator gates are corroding and in need of rehabilitation or replacement and most of the electrical equipment is out-of-date and past its design life.

JUSTIFICATION

This project is required to improve the overall performance and reliability of the CSO outfalls, particularly sites that currently do not have backwater gates. New backwater gates will be added, and existing backwater gates will be replaced to reduce the volume of river inflow into GLWA's interceptors. The size of regulator openings will be increased, and regulator gates will be replaced. Larger regulator openings will allow for increased hydraulic capacities of the connections to the interceptor, thus reducing the amount of CSO during wet weather. New access hatches and manholes will create safer and easier access to GLWA's assets. Finally, upgraded instrumentation will result in higher quality monitoring data and more accurate CSO estimations. These improvements are needed to bring long-term reliability, maintainability, and uniformity.

FINANCIAL PLAN IMPACT

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

Funding Source: Wastewater Construction Bond

Cost Center: Wastewater Engineering

Expense Type: Construction (5421-892411.000-616900-260701)

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

Fiscal Year

FY 2023 Plan	\$15,573,000.00
FY 2024 Plan	12,547,000.00
FY 2025 Plan	7,079,000.00
FY 2026 Plan	<u>3,449,000.00</u>

Financial Plan Estimate	\$38,648,000.00
Proposed Contract Award	<u>36,863,000.00</u>
Estimating Variance	\$ 1,785,000.00

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on August 10, 2022. 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.