



Legislation Text

File #: 2021-315, Version: 1

Proposed Amendment No. 2

Contract No. 1802575

GLWA Conveyance System Engineering Services

CIP# 260204

Agenda of: September 1, 2021

Item No.: **2021-315**

Amount:	Original Contract	\$3,149,897.00
	Amendment No. 1	0.00
	Proposed Amendment No. 2	1,942,907.14
	Total Revised Contract	\$5,092,804.14

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: August 4, 2021

RE: Proposed Amendment No. 2
Contract No. 1802575
GLWA Conveyance System Engineering Services
Vendor: Brown and Caldwell, LLC

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. 1802575 Proposed Amendment No. 2 "GLWA Conveyance System Engineering Services" with Brown and Caldwell, LLC, with an increased cost of \$1,942,907.14 for a total cost not to exceed \$5,092,804.14 and an increased duration of 24 months for a total duration of 60 months;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Great Lakes Water Authority's (GLWA) Sewer Conveyance System has approximately 180 miles of trunk sewers and interceptors. The Woodward Sewer System (WWSS) is an important trunk sewer located in GLWA's Central Sewer District and is approximately 8 miles in length. WWSS is one of the oldest sewers in the City of Detroit (circa pre-1900), is generally of brick construction, and consists of various sizes and shapes. The WWSS is aligned with Woodward Avenue in Highland Park (WW-100's) and Detroit (WS-100's and WS-200's), from McNichols Road at the upstream end to the Detroit River Interceptor in downtown Detroit, flowing generally north to south. The WS-300's segment services an area east of Woodward Avenue and connects to the Woodward Sewer at Woodward Avenue and Chandler Street. The Woodward Extension sewer segment that serves an area west of Woodward Avenue in Highland Park is also a part of the WWSS.

The Connor Creek Sewer is a major sewer on the east side of Detroit. It extends from 8 Mile Road west of Van Dyke Avenue to a gate structure close to the intersection of Conner Street and Jefferson Avenue. The alignment is approximately 7 miles long and was constructed between 1924 and 1926. The reach of sewer inspected is partially of brick construction with the remaining sewer being cast-in-place concrete and varies in size from a 24" to 13' 6" diameter before it transitions to an arch approximately 17' high by 22' wide as it passes below Olivet Cemetery and Coleman Young Airport. Farther downstream it becomes rectangular 12' x 17' 6" and three cell 15' 9" x 17' 6" boxes. Considering the multiple barrels in this system, the total length of sewer to be addressed by this project is over 60,000 feet.

Amendment No. 1 was executed to change the form of the contract to a "Task Authorization Contract" to align the contract method to the intent of its execution.

JUSTIFICATION

Additional funds are requested for necessary services due to increased project scope and greater than anticipated rehabilitation requirements. The connector sewers downstream of the Connors Creek and Freud Pump Stations and upstream of the Conner Creek CSO treatment facility will be added to the Conner Creek sewer project because they are similar structures with similar rehab requirements, which will reduce construction cost and will provide efficiencies in construction administration and resident project representative labor. Preparing the Clean Water State Fund application is added so that GLWA can take advantage of low-interest loan funding. Finally, limited geotechnical investigations at two new permanent access structures will be added to provide for future maintenance activities.

A portion of the Woodward Sewer will be sliplined to re-establish structural stability, requiring construction administration beyond the originally planned repairs. The Conner Creek CSO sewer will require cured-in-place pipe (CIPP), sliplining, and shotcrete spot repairs for damage uncovered during recent manned inspections. These are necessary to extend the pipe lifespan more than 20 years and are more extensive than originally anticipated.

The following tasks are included in this amendment:

- (1) Increasing technical oversight during construction for structural rehabilitation methods beyond chemical grouting such as sliplining, CIPP, and shotcrete
- (2) Increasing duration of Resident Project Representative services to match contractual terms for the Conveyance System construction projects
- (3) Preparing and submitting Clean Water State Revolving Fund application

- (4) Performing geotechnical investigations near insertion pits and access structures
- (5) Extending the project limits to include Connor Connector Sewers
- (6) Extending the contract end date to accommodate Connors Creek Sewer Rehabilitation construction schedule

Finally, a 24 month contract extension is requested to cover anticipated construction duration.

PROJECT MANAGEMENT STATUS

Original Contract Time	36 months
Amendment No. 1	0 months
Proposed Amendment No. 2	24 months
New Contract Time	60 months

PROJECT ESTIMATE

Original Contract Price	\$3,149,897.00
Amendment No. 1	0.00
Proposed Amendment No. 2	1,942,907.14
New Contract Total	\$5,092,804.14

FINANCIAL PLAN IMPACT

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

Funding Source: Wastewater Construction Bond

Cost Center: Field Engineering

Expense Type: Construction (5421-892411.000-617950-260204)

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

Original Contract Price	\$3,149,897.00
Amendment No. 1	0.00
Proposed Amendment No. 2	<u>1,942,907.14</u>
New Contract Total	5,092,804.14
Amended Financial Plan Estimate	<u>5,092,804.14</u>
Estimating Variance	\$ 0.00

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on August 11, 2021. 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.