



Legislation Text

File #: 2020-226, Version: 1

Proposed Amendment No. 1

Contract No. GLWA-CS-282

Design and Construction Assistance Services for the Springwell's Administrative Building & Underground Fire Protection Loop Replacement

CIP# 114005

Agenda of: July 22, 2020

Item No.: **2020-226**

Amount:	Original Contract Price	\$1,306,152.40
	Proposed Amendment No. 1	109,297.00
	Total Revised Contract	\$1,415,449.40

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: July 1, 2020

RE: Proposed Amendment No. 1
Contract No. GLWA-CS-282
Design and Construction Assistance Services for the Springwell's Administrative Building & Underground Fire Protection Loop Replacement
Vendor: WSP Michigan, 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-CS-282 Proposed Amendment No. 1 "Design and Construction Assistance Services for the Springwell's Administrative Building & Underground Fire Protection Loop Replacement" with WSP Michigan, Inc., at an increased cost of \$109,297.00 for a total cost of \$1,415,449.40, and no increase in duration for a total duration of 1,305 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The existing buried fire protection system at the Springwells Water Treatment Plant was installed around 1930 and needs replacement to restore its reliable function. The buried fire protection piping has had numerous breaks, leaks and many of the existing yard hydrants are not operable. Furthermore, the existing buried fire protection system does not surround some of the larger campus buildings that were constructed in the mid-1950s. The entire existing buried fire protection system will be replaced with new, as well as extended to cover the site so that fire-fighting capability is provided for all campus buildings. The project also includes architectural, building mechanical, electrical, and security-related improvements in the administration building and an ancillary support building at the site.

During Task 3 preliminary design efforts, additional design work for the underground fire protection loop replacement and other minor improvements to the ancillary support building were identified. The scope of work for the buried fire protection system was predicated on all underground construction. It was discovered, however, during preliminary design that a portion of the new fire protection piping to surround the 1958 Filter Building would best be routed through an existing pipe chase inside the 1958 Filter Building. Routing the piping inside the building pipe chase will benefit a future planned capital project at Springwells, namely the planned yard piping replacement project. The additional design work involves the following:

- Design the above-ground, exposed fire protection piping, in addition to the buried piping, to be installed in the 1958 Filter Building pipe chase. Above-ground, exposed piping design includes specifications and drawing details for wall penetrations, pipe supports and a reduced-pressure principle backflow preventer.
- Design a training room in the ancillary support building that is larger than the existing conference rooms used at Springwells for training sessions. The larger training room will accommodate the necessary holding capacity for trainings.

The additional engineering cost associated with these above-mentioned improvements is \$9,297.00.

Currently, there is no provisional allowance in Contract No. CS-282. This proposed amendment is requesting to add a Provisional Allowance in the amount of \$100,00.00. We anticipate that some more additional design and possibly construction administration work will be required due to encountering unforeseen subsurface conditions such as buried utilities and structures that are not shown on the facility as-built drawings. Similarly, there is an existing large-diameter ductile iron spent filter wash water return pipeline in the 1958 Filter Building pipe chase where the new exposed fire protection pipeline will be installed. It is not within the current scope to design and oversee the removal of this existing spent wash water return pipeline. This spent wash water return pipeline has not been used in many years. If it is determined that it would be beneficial to remove this spent wash water return pipeline, then engineering services related to removal of it could be funded by the addition of this provisional allowance. Lastly, the addition of the provisional allowance will provide funds to address other conditions at the Springwells Treatment Plant when such conditions pose threats to reliable drinking water production.

JUSTIFICATION

The base scope of engineering services was predicated on installing the new fire protection pipeline

as all underground with no design for above-ground, exposed installation requirements. Adding the design of above-ground exposed fire protection piping inside the 1958 filter building pipe chase will likely avoid future conflicts with the installation of new yard piping at Springwells. The existing conference rooms at Springwells that are used for training are relatively small. A larger training room would accommodate more staff in a single training session. Lastly, adding the provisional allowance will afford flexibility during the remainder of the design and construction to address such conditions noted in the background section or any other improvement needs at the Springwells Water Treatment Plant that require attention to preserve water production reliability and redundancy at the facility.

PROJECT MANAGEMENT STATUS

Original Contract Time 1,305 days

Proposed Amendment No. 1 0 days

Contract Time 1,305 days

PROJECT ESTIMATE

Original Contract Price \$1,306,152.40

Proposed Amendment No. 1 109,297.00

New Contract Total \$1,415,449.40

FINANCIAL PLAN IMPACT

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

Funding Source: Water Construction Bond

Cost Center: Water Engineering

Expense Type: Construction (5519-882111.000-617950-114005)

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

Original Contract Price \$ 1,306,152.40

Proposed Amendment Order No. 1 109,297.00

New Contract Total 1,415,449.40

Amended Financial Plan Estimate	<u>1,561,000.00</u>
Positive Estimating Variance	\$ 145,550.60

A budget amendment will be prepared for the related adjustment to capital reserves associated with this change.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on July 8, 2020. The Operations and Resources Committee unanimously recommended that GLWA Board adopt the resolution as presented.

SHARED SERVICES IMPACT

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