



CITY OF WAUKESHA

Administration

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Committee: Board of Public Works	Date: 2/21/2019
Common Council Item Number: ID #19-0188	Date: 3/5/2019
Submitted By: Fred Abadi, Director of Public Works	City Administrator Approval: Kevin Lahner, City Administrator
Finance Department Review: Rich Abbott, Finance Director RA	City Attorney's Office Review: Brian Running, City Attorney BR
Subject: Review and act on Contract Change Order No. 1 with Super Excavators, Inc. for the Greenmeadow Sanitary Interceptor Sewer project.	

Details:

The Contract Change Order details additional work completed by Super Excavators, Inc.:

Item #1 - Horizontal Directional Drill – River Crossing

Since this project involves a significant amount of underground tunneling and drilling work, the City's project design team of Donohue Associates and Brierley Associates prepared a Geotechnical Baseline Report (GBR) based on 26 soil borings that were taken along the project sewer route. The GBR represents the geotechnical basis of design for the project and establishes geotechnical baseline conditions with respect to subsurface ground conditions in and around the proposed construction horizons for the tunnels and shafts. Although alternative ground conditions could occur, the GBR is to provide a basis for resolving potential allegations of differing site conditions encountered during construction.

The project includes two sewer pipes which cross the Fox River: an 18" normal flow pipe, and an 18" high flow pipe. Each of these pipes are separate horizontal directional drills (HDD) beneath the river. For this drilling work, the GBR baselined that the contractor should anticipate three (3) redirects as a result of ground conditions for each borehole, at least two (2) inadvertent returns (IR) causing downtime greater than four (4) hours, and no bedrock would be encountered. A redirect is withdrawal of the drill steel in an attempt to maneuver around an obstruction in the borehole, while an inadvertent return is when drilling fluid is unintentionally transferred to the surface during boring operations.

In the course of the horizontal directional drilling operations, Gabe's Construction Co. Inc. (Gabe's), a subcontractor to Super Excavators, Inc., experienced circumstances that fell outside of the baseline scoped in the project Geotechnical Baseline Report related to redirects, IRs, and a change in condition due to encountering bedrock for both normal and high flow bores.



1. Extra No. 1 Additional Costs Due to Normal Flow Bore - Redirects

Description: During the horizontal directional drilling for the normal flow bore, the contractor experienced 5.5 redirects due to ground conditions which is greater than the 3 redirects baselined in the GBR. The costs related to the work included additional labor, equipment, and materials. The lump sum amount was calculated from actual additional hours of labor and equipment plus additional materials.

Lump Sum \$ 65,990.24

2. Extra No. 2 Additional Costs Due to Normal Flow Bore - Inadvertent Returns

Description: During the horizontal directional drilling for the normal flow bore, the contractor experienced 5 inadvertent returns (IR) due to ground conditions which is greater than the 2 IRs baselined in the GBR. The costs related to the work included additional labor, equipment, and materials. The lump sum amount was calculated from actual additional hours of labor and equipment plus additional materials.

Lump Sum \$ 22,216.33

3. Extra No. 3 Additional Costs Due to Normal Flow Bore - Change in Condition: Rock Ledge

Description: During the horizontal directional drilling for the normal flow bore, the contractor encountered a rock ledge which necessitated additional steering and scrubbing of the bore hole. Bedrock was not baselined in the GBR. The costs related to the work included additional labor, equipment, and materials. The lump sum amount was calculated from actual additional hours of labor and equipment plus additional materials.

Lump Sum \$ 26,082.49

4. Extra No. 4 Additional Costs Due to High Flow Bore - Change in Condition: Bore through Bedrock

Description: During the horizontal directional drilling for the high flow bore, the contractor encountered bedrock at an elevation which required boring through the bedrock. Bedrock work was not baselined in the GBR. The costs related to the work included additional labor, equipment, and materials necessary to bore through the bedrock. The lump sum amount was calculated from actual additional hours of labor and equipment plus additional materials.

Lump Sum \$ 217,829.11

Subtotal \$ 332,118.17

Item #2 - Siphon Inlet Structure Relocation

Due to the bedrock encountered by the subcontractor during the horizontal directional drilling, the inlet siphon structure needed to be moved 40 feet further to the north. This required a 40 foot extension of the normal flow sewer pipe. However, moving the structure reduced the proposed upstream 36" sewer by a corresponding 40 feet. The result is a net credit.

1. Extra No. 5 Piping Changes Related to Inlet Siphon Relocation
Description: Additional 40 lineal feet of HDPE pipe for normal flow sewer pipe including labor, equipment, and materials
Lump Sum \$ 13,544.94

2. Decrease of quantity for Line Item #63, Bid Item # 05980 - 36 Inch PVC Sanitary Sewer Pipe - F679, PS46
Description: Decrease in 40 lineal feet of PVC sewer pipe
40.0 LF @ \$550.00/LF \$ 22,000.00
Subtotal (Credit) \$ -8,455.06

Total Change Order \$ 323,663.11

This change order encompasses all extra work and expenses related to the horizontal directional drilling operations.

Item #3 - Contract Completion Date Extension:

At the commencement of this contract on September 4, 2018 there was a significant 3rd party utility conflict by AT&T at the Madison St and Joellen Dr intersection within the project limits that directly impacted controlling items on the prime contractor's project schedule. The conflict was resolved on October 5, 2018. This allowed the contractor to begin controlling item work on October 8, 2018.

Given the significant impact of the 3rd party utility delay, it is proposed to extend the contract by 34 calendar days (28 working days, which will be charged to AT&T), which is the equivalent number of days due to the documented utility delay on controlling contract items. Completion date was September 20, 2019. Revised completion date for all work shall be October 24, 2019.

Options & Alternatives:

There were no feasible alternatives. The work was time sensitive and had to be completed with this project.

Financial Remarks:

Original Contract: \$18,461,976.00

Contract prior to this Change Order: \$18,461,976.00

Account 7399-68290-71440 for Sewer \$323,663.11

Contract Change Order #1: \$323,663.11

Total Contract Amount after Change Order #1 = \$18,785,639.11

Executive Recommendation:

Recommend approval of Contract Change Order No. 1 with Super Excavators, Inc. for the Greenmeadow Sanitary Interceptor Sewer project.