

500 West Big Beaver Troy, MI 48084 troymi.gov

CITY COUNCIL AGENDA ITEM

| Date: | March 2, 2020 |
|----------|---|
| То: | Mark F. Miller, City Manager |
| From: | Robert J. Bruner, Assistant City Manager Robert C. Maleszyk, Chief Financial Officer Lisa Burnham, Accounting Manager Kurt Bovensiep, Public Works Director William J. Huotari, City Engineer |
| Subject: | I75 Segment 2 – Betterments – Water Main and Road Improvements |

<u>History</u>

Segment 2 of the I-75 reconstruction project, from 13 Mile to Coolidge, is underway. The City requested additional work to be included as part of the work scheduled for this construction season:

- Replacement of the existing 12" cast iron water main that crosses I-75 between 14 Mile and Maple Road
- Replacement of the existing 12" cast iron water main that crosses I-75 at Maple
- Extension of the right turn lane and associated widening of Coolidge, south of Square Lake

In order to accurately price the requested work, design must be completed by the design/build team of Walsh/Toebe. The most opportune time to complete these betterments is while construction continues on I-75 as traffic control and the ability to work within the confines of the construction zone are available and coordination with the new improvements can be incorporated into the design of these betterments.

Financial

The estimated design cost for all three betterments is \$89,340. This design fee is within the typical range that we pay consultants of 8%-12% of the estimated construction cost. The estimated construction cost for the water main and road improvements is \$800,000. Funds are included in the Water Fund and Major Roads Fund pursuant to the design costs outlined in PCO-023 City of Troy Betterment Design, dated February 27, 2020.

Recommendation

It is recommended that City Council approve PCO-023 City of Troy Betterment Design submitted by Walsh/Toebe for water main improvements between 14 Mile and Maple Road, at Maple Road and on Coolidge Highway, south of Square Lake Road as part of the I-75 reconstruction project in the amount of \$89,340. In addition, we are requesting authorization to approve additional work, if needed, not to exceed 10% of the original design cost due to unforeseen issues.



February 27, 2020

W/T JV-218099-086

Bill Huotari City of Troy Engineer <u>HuotariWJ@troymi.gov</u>

RE: MDOT Project 201437 | I-75 Segment 2

PCO-023 City of Troy Betterment Design

Dear Mr. Huotari,

Walsh/Toebe JV (W/T) respectfully submits this Potential Change Order (PCO) per Book 1, Section 13.4.1.2(a) and Book 2, Section 6.3.4 to design betterments to the project from a request made by the City of Troy.

| ITEM | DESCRIPTION | QTY | UO M | UNIT \$ | AMOUNT |
|---------|--|-----|-------------|-------------|-------------|
| 230-001 | DESIGN 12 IN CAST IRON WATERMAIN BETWEEN 14 & MAPLE ACROSS I-75 | 1 | LS | \$28,250.00 | \$28,250.00 |
| 230-002 | DESIGN 12 IN CAST IRON WATERMAIN AT MAPLE | 1 | LS | \$29,050.00 | \$29,050.00 |
| 230-003 | DESIGN EB COOLIDGE RT TURN EXTENSION AT SQUARE LAKE | 1 | LS | \$32,040.00 | \$32,040.00 |
| | | | \$89,340.00 | | |

Accordingly, W/T respectfully requests compensation from MDOT in accordance with Book 1, Section 13:

A brief description of what the pricing includes:

DESIGN 12 IN CAST IRON WATERMAIN BETWEEN 14 & MAPLE ACROSS I-75

- Design, preliminary, and final plans for 12" HDPE to replace 12" cast iron water main between 14 Mile Rd. and Maple Rd. across I-75
- Design of the water main replacement
- Plan development for water main replacement
- Concept and anticipated specifications are attached

DESIGN 12 IN CAST IRON WATERMAIN AT MAPLE



- Design, preliminary, and final plans for 12" HDPE to replace 12" cast iron water main on Maple Rd.
- Design of the water main replacement
- Plan development for water main replacement
- Concept and anticipated specifications are attached

DESIGN EB COOLIDGE RT TURN EXTENSION AT SQUARE LAKE

- Design, preliminary, and final plans for a right turn lane extension on Coolidge Road under I-75
- Roadway design and plan development
- MOT design and plan development
- Drainage design and plan development
- Erosion control and plan development
- Signing/striping design and plan development
- Utility coordination
- Concept is attached

The purpose of this request is to gain approval to start design. At this point, we do not have enough information to accurately price the requested work. Once design costs are approved our designer can produce sufficient plans for us to price the work in approximately 3 weeks. Overall design is anticipated to take 6 weeks from issuance of a Contract Modification depending on the review process. If you have any questions, please feel free to contact me at (317) 538-8549. We respectfully request a response to our proposal by March 17, 2020.

Respectfully,

Pete Jerrell Project Manager

Cc: Jeff Stover, W/T

Attachments: 1 – PCO-023 City of Troy Betterment Design 2 – Bill Huotari E-mail Request

WALSH/TOEBE JV



PROJECT NAME:I-75 SEGMENT 2 | 13 MILE TO COOLIDGEMDOT JOB NUMBER:201437CONTROL SECTION:63174FEDERAL PROJECT NUMBER:1800433WALSH/TOEBE JV NUMBER:218099TITLE:PCO 023 - CITY OF TROY BETTERMENTS DESIGN

| ITEM # | DESCRIPTION | QTY | Unit | | UNIT \$ | TOTAL AN | NOUNT |
|--------|--|-------------------|------|-----------------|-------------------------------|----------|------------------|
| 230 | DESIGN 12 IN CAST IRON WATERMAIN BETWEEN 14 & MAPLE ACROSS I-75 SUBCONTRACTOR (PARSONS) | 1.0 1.0 | LS | \$ \$ | 28,247.10 26,902.00 | - | 28,250 28,247 |
| 230 | DESIGN 12 IN CAST IRON WATERMAIN AT MAPLE SUBCONTRACTOR (PARSONS) | 1.0 1.0 | LS | \$ \$ | 29,047.20 27,664.00 | • | 29,050 29,047 |
| 230 | DESIGN EB COOLIDGE RT TURN EXTENSION AT SQUARE LAKE SUBCONTRACTOR (PARSONS) | 1.0 1.0 | LS | \$ \$ | 32,034.45 30,509.00 | • | 32,040 32,034 |
| | | | | | | \$ | 89,340 |

Note: Mark-up rules are L=55% or 60% Labor, E=0% Equipment, M=15% Materials, S=5% Subcontractor

COMMENTS:

- 1. Design, preliminary, and final plans for 12" HDPE to replace 12" cast iron water main between 14 Mile Rd. and Maple Rd. across I-75
 - Design of the water main replacement
 - Plan development for water main replacement
 - •Doncept and anticipated specifications are attached
- 2. Design, preliminary, and final plans for 12" HDPE to replace 12" cast iron water main on Maple Rd.
 - Design of the water main replacement
 - Blan development for water main replacement
 - Concept and anticipated specifications are attached

3. Design, preliminary, and final plans for a right turn lane extension on Coolidge Road under I-75

- Boadway design and plan development
 - MOT design and plan development
 - •Drainage design and plan development
 - Brosion control and plan development
 - •Signing/striping design and plan development
 - Dtility coordination