

Document 00941
CHANGE ORDER No. 2

PROJECT: Roadway Pavement Replacement Martinville and Sunbeam

CONTRACT No.: 4600014558 PROJECT No.: N-321039-001A-4 (N-321039-001A)

TO: Precise Services, Inc

22337 Sandy Ln

Contractor and
Address for Written Notice Porter, TX 77365\

1.01 DESCRIPTION OF CHANGES

ITEM 1 SCOPE: Use borrow/select fill for the subgrade stabilization on
Sunbeam St.

CONTRACT CHANGE

Amount

Time

\$281,125.00

24 Days

CITY OF HOUSTON
STANDARD DOCUMENT

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JUSTIFICATION: The design documents do not account for use of borrow/select fill for the subgrade stabilization of the proposed pavement for Sunbeam St. During Martinville Dr. construction, Alliance Laboratories prepared the soil boring logs for Martinville Dr. and Sunbeam St. as there were issues on the subgrade stabilization of Martinville Dr. The boring log shows that some areas of Sunbeam St. have existing unsuitable soil up to 26 inches. The existing unsuitable soil needs replacement with select fill/borrow.

Based on the soil boring information, Engineer of Record (EOR) recommended four different options for the pavement design changes in Sunbeam St. One of the options using borrow/select fill for the entire limit is found economical and suitable for this pavement work. In this method, the proposed 8 inches stabilized subgrade would begin at depth of 10 inches from the existing grade. The contractor will remove an average 12 inches of additional base (Excavation range can be lower or higher than 12 inches) depending on each location) and replace with borrow/select fill. The pavement will still be 8 inches lime stabilization, 6 inches flexbase and 4 inches Hot Mix Asphalt Concrete (HMAC).

The overall pricing was determined by using pricing on WCD#4 and other bid items. The contractor agreed on the price used on this WCD for the new added item Borrow and other items are already on the contract.

The City recommends adding this change in the scope of contract. Thirty (30) additional calendar days were requested to be added to the contract. The City Project manager evaluated the project schedule and determined that twenty-four(24) days impacted the critical path of the project schedule.

| Unit Item No | Unit Item Description | Unit | Add/Deduct Qty | Unit Price | Add/Deduct Amount |
|--------------|---|------|----------------|------------|-------------------|
| 19 | Roadway Excavation with or without subgrade | CY | 6500.00 | \$13.25 | \$86,125.00 |
| 64 | Borrow/Select Fill | CY | 6500.00 | \$30.00 | \$195,000.00 |

| | | | |
|----------------------|---|-------------|---------|
| ITEM 2 SCOPE: | Remove timber, repair existing storm sewer pipe and stabilize subgrade in Martinville Dr. | \$47,609.86 | 30 Days |
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JUSTIFICATION: Contract documents do not account for timber and storm sewer pipe leakage underneath the subgrade. Contractor discovered the timbers underneath the subgrade between Station 14+80 to 21+22 during proof rolling. While excavating the subgrade to expose the timbers, the contractor found a storm pipe leakage at approximate station 17+50.

The Contractor submitted RFI No.15A ,15B and 17 requesting clarification for stabilization of subgrade. Engineer of Record (EOR) and the project team discussed this issue with the Technical Service Team, Testing Lab and Geotest Engineering. EOR recommended to excavate 1.5 ft the entire limit between 14+80 to 21+22 and remove the horizontal timbers and cut the vertical timbers at the excavated level of 1.5ft and backfill using suitable on site soils and remainder of the backfill using borrow/select fill. EOR also recommended to use a concrete collar to bridge the gap between pipes using TXDOT specification item 464 and its standard detail. During this time, contractor was delayed and incurred for additional cost.

WCD #2 and WCD #3 were executed to expedite the work. The contractor's pricing was evaluated by the parallel estimate, analysis of existing bid data, and prices on WCD #2 and 3.

The City recommends adding this change in the scope of contract. Thirty-seven (37) additional calendar days were requested to be added to the contract. The City Project manager evaluated the project schedule and determined that thirty (30) days impacted the critical path of the project schedule. (RFI #15A, 15B and 17; WCD #2 and 3 and Contractor's request letter).

| Unit Item No | Unit Item Description | Unit | Add/Deduct Qty | Unit Price | Add/Deduct Amount |
|--------------|--|------|----------------|-------------|-------------------|
| 19 | Roadway Excavation with or without subgrade | CY | 428.00 | \$13.25 | \$5,671.00 |
| 20 | Lime for Lime Stabilized Subgrade (7% Min. Dry Weight) | TON | 14.00 | \$180.00 | \$2,520.00 |
| 21 | Lime Stabilized Subgrade, 8 Inches Thick | SY | 856.00 | \$2.15 | \$1,840.40 |
| 57 | Excavation around obstructions | CY | 14.00 | \$10.00 | \$140.00 |
| 65 | Borrow/Select Fill | CY | 428.00 | \$30.00 | \$12,840.00 |
| 66 | Reinforced Concrete Pipe Collar | EA | 1.00 | \$750.00 | \$750.00 |
| 67 | Claim 2 - Delay Cost and Time | LS | 1.00 | \$23,848.46 | \$23,848.46 |

ITEM 3 SCOPE: Cost and Time due to unsuitable soil conditions on Martinville Dr. \$45,651.73 43 Days

00941-3

Print Date: 09/06/2018

[A.L]
Contractor Initial

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JUSTIFICATION: The subgrade soil condition in Martinville Dr. was found different from the contract documents. During construction, the contractor discovered inconsistent base material containing limestone, asphalt, brick and shell fragments along the entire length of Martinville Dr.

The contractor submitted RFI No. 008,008A,009 and 009B requesting clarification for the method of stabilizing subgrade of inconsistent material. Engineer of Record (EOR) and the project team discussed the issue with Technical Services Team, Testing Lab and Geotest Engineering. Finally, after additional soil tests and some meetings on this issue, EOR recommended additional 4 inches of base thickness on the pavement. The cost of the design change has already been addressed in the change order no.1. Contractor incurred additional cost due to delay in evaluating and analyzing the soil samples and providing the new design for different site condition.

The contractor's pricing was evaluated by parallel estimate and analysis of differing site condition.

The City recommends adding the scope of this work to the contract. Fifty-three (53) additional calendar days were requested to be added to the contract. The City Project manager evaluated the project schedule and determined that forty-three (43) days impacted the critical path of the project schedule. (RFI No. 8, 8A, 9 and 9B, WCD 1 and Contractor's request letter)

| Unit Item No | Unit Item Description | Unit | Add/Deduct Qty | Unit Price | Add/Deduct Amount |
|--------------|-------------------------------|------|----------------|-------------|-------------------|
| 68 | Claim 1 - Delay Cost and Time | LS | 1.00 | \$45,651.73 | \$45,651.73 |

ITEM 4 SCOPE: Additional quantities for paving and drainage items on Martinville Dr. and Sunbeam St \$180,303.00 0 Days

JUSTIFICATION: The completion of Martinville Dr. and evaluation of Sunbeam St. identified the significant quantity overrun for the existing unit price items of flexible base course, Type-D hot mix asphalt base course, concrete driveway and storm sewer pipe.

The contractor submitted request for information on these overrun and Engineer of Record evaluated these items. The overrun is due to differing site condition and actual work needed to complete the project.

The overall pricing was determined by using existing unit price item in the contract.

The City recommends to add this additional scope of work to complete the project. No additional calendar days are added.

00941-4

Print Date: 09/06/2018

[A.L.]
Contractor Initial

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| Unit Item No | Unit Item Description | Unit | Add/Deduct Qty | Unit Price | Add/Deduct Amount |
|--------------|---|------|----------------|------------|-------------------|
| 25 | Flex Base Course Temporary Drive Commercial (24 foot maximum width) | EA | 6.00 | \$1,000.00 | \$6,000.00 |
| 26 | Type "D"- Hot Mix Asphaltic Concrete Pavement (4 inch) | TON | 1168.00 | \$88.00 | \$102,784.00 |
| 28 | Concrete Driveways, 6 Inches Thick | SF | 2700.00 | \$13.95 | \$37,665.00 |
| 29 | Concrete Driveways, 7 Inches Thick | SF | 120.00 | \$18.55 | \$2,226.00 |
| 36 | Remove and Dispose of Exist 15-Inch Diameter RCP Storm Pipe | LF | 384.00 | \$12.00 | \$4,608.00 |
| 38 | 24-Inch Diameter RCP Storm Sewer, Installed by Open Cut Construction (Elliptical) | LF | 193.00 | \$140.00 | \$27,020.00 |

TOTALS: \$554,689.59 97 Days

1.02 ACCEPTANCE BY CONTRACTOR

Contractor agrees to perform change(s) included in this Change Order for the price and time indicated. The prices for changes include all costs associated with this Change Order.

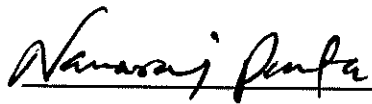


Contractor Signature and Title

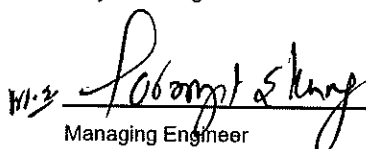
9-6-18

Date

1.03 ACCEPTANCE BY THE CITY

 9/10/2018
Project Manager Date

Deputy Director - Required for COs to Council Date

 9/12/18
Managing Engineer Date

Director - Required for COs to Council Date

City Engineer Date

Mayor - Required for COs to Council Date

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EXECUTIVE SUMMARY

1.01 CONTRACT PRICE SUMMARY

| | <u>DOLLAR AMOUNT</u> | <u>PERCENT</u> |
|----------------------------|----------------------|----------------|
| A. Original Contract Price | \$2,585,150.25 | 100.00% |
| B. Previous Change Orders | \$0.00 | 0.00% |
| C. This Change Order | \$554,689.59 | 21.46% |
| D. Contract Price | \$3,139,839.84 | 121.46% |

1.02 CONTRACT TIME SUMMARY

| | <u>DURATION</u> | <u>COMPLETION DATE</u> |
|---------------------------|-----------------|--------------------------|
| A. Original Contract Time | 335 Days | Sunday, December 9, 2018 |
| B. Previous Change Orders | 0 Days | Sunday, December 9, 2018 |
| C. This Change Order | 97 Days | Saturday, March 16, 2019 |
| D. Contract Time | 432 Days | Saturday, March 16, 2019 |

1.03 TOTAL VALUE OF INCREASES OUTSIDE OF GENERAL SCOPE OF WORK

- A. Including this Change Order, the following table is provided to track conditions related to Paragraph 7.1.2.3 of Document 00700 - General Conditions.

| <u>CHANGE ORDER</u> <u>No.</u> | <u>AMOUNT ADDED</u> | <u>PERCENT OF ORIGINAL</u> <u>CONTRACT PRICE</u> |
|-----------------------------------|---------------------|---|
| 1 | \$58,713.16 | 2.27% |
| 2 | \$554,689.59 | 21.46% |
| TOTALS | \$613,402.75 | 23.73% |