

TOWN OF CARY

CONTRACT DOCUMENTS

FOR

FY20-21 SEWER REHABILITATION PROJECT

Project No: SW3501

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ADDENDUM NO. 4

ISSUE DATE: APRIL 16, 2021

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Bidders on this Contract are hereby notified that this Addendum shall be attached to and made a part of the above named Contract Documents dated March 2021.

The following items add to, modify and clarify the Contract Documents and shall have the full force and effect of the original Documents. Bids shall conform with these items and the cost change, if any, of these items shall be included in the Bid. This Addendum shall be acknowledged by the Bidder on Page 00300-1 of the Bid Proposal.

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**IN THE SPECIFICATIONS:**

1. **SECTION 02651A – CURED-IN-PLACE PIPE LINING (CIPP) FOR MAIN SEWERS - ULTRAVIOLET LIGHT CURED CIPP:**

**MODIFY** Paragraph 3.W by deleting the portion that is struck through and by adding the portion that is underlined below:

W. For every sewer segment that is lined (sewer segment is defined as the sewer between two manholes), the Contractor shall provide a sample per ASTM F2019-20 ~~remove one restrained sample of the installed liner at least 12 inches in length~~ for testing of installed CIPP flexural properties and thickness. The CIPP testing shall include determining flexural strength, flexural modulus, tensile strength and thickness of each sample. These four separate individual tests make up one completed CIPP test. Payment will be made for each completed CIPP test at the unit price bid after the test results are submitted to the Engineer.

~~For sewers 12 inches in diameter and smaller, the sample shall be captured by installing the lining through a section of PVC pipe (same diameter as the existing sewer diameter) within the most downstream manhole of the installation and at all intermediate manholes if multiple sewer segments are lined at the same time. For sewers 15 inches in diameter and larger, plate samples shall be taken and cured in the same water as the installed CIPP.~~

The Contractor shall be responsible for capturing the samples and preparing the samples for testing ~~(cutting the samples to the required dimensions, removing the PVC pipe, etc.). The testing laboratory shall specify the dimensions for the samples.~~ In addition and where possible, the Contractor shall cut a 1-inch wide representative sample (taken at least 2 inches from the end of the specimen) for the Engineer's records. The Contractor shall label all samples including writing on the samples where they were taken (manhole numbers, work orders, and other relevant information) and the date they were taken.

The Engineer will direct the Contractor which samples to submit to the testing laboratory. The Contractor shall retain a sample from all samples that are submitted to the testing laboratory until the end of the project. These samples shall be available upon request from the Engineer. The Contractor will copy the Engineer on all submittals to the testing laboratory. The testing laboratory shall submit all test results directly back to the Contractor with a copy to the Engineer. The test results shall be returned to the Contractor and Engineer within 21 days from the laboratory receiving the samples. If the results are not received in this timeframe, payment will be withheld. It shall be the Contractor's responsibility to ensure that the laboratory meets the specified schedule.

The Contractor shall select the independent testing laboratory and shall pay the laboratory for all tests. The Contractor will be paid for the tests through the Contract at the unit price bid for each completed test. All testing shall be performed by an independent, accredited, certified and experienced (minimum 5 years of experience) testing laboratory as chosen by the Contractor. The Contractor shall submit the name and location of the testing laboratory for approval. The submittal shall include the laboratory's experience testing CIPP samples, the laboratory's accreditation/certification to perform CIPP testing from a recognized accreditation body, and a certified statement from the laboratory that they are independent from and not associated with the Contractor in any way.

The tests shall be used to verify that the installed CIPP meets these specifications. CIPP thickness shall be measured in accordance with ASTM D5813. Flexural properties shall be determined per ASTM D790. Tensile strength shall be determined per ASTM D638.

**ON THE PLANS:**

1. **SHEET C-5:**

**MODIFY** Note 9 (as amended by Addendum No. 2) by adding the portion that is underlined below:

9. FOR THE SEWERS FROM SP76506003 TO SP76506002 AND SP76506002 TO SP76506001 AND SP76506001 TO SP76506016, THE SOIL MODULUS CAN BE 1,500 PSI WHEN CALCULATING UV GRP CIPP LINER THICKNESS. IN ADDITION, THE SAFETY FACTOR FOR THESE SEWERS CANNOT BE LESS THAN 1.75 WHEN CALCULATING UV GRP CIPP LINER THICKNESS. ALL OTHER SEWER SECTIONS WILL HAVE A SOIL MODULUS OF 1,000 PSI AND A SAFETY FACTOR OF 2.0 WHEN CALCULATING UV GRP CIPP LINER THICKNESS AS INDICATED IN SPECIFICATION 02651A - CIPP FOR MAIN SEWERS - UV CURED.

(END OF ADDENDUM NO. 4)