TOWN OF CARY

CONTRACT DOCUMENTS

FOR

FY20-21 SEWER REHABILITATION PROJECT

Project No: SW3501

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ADDENDUM NO. 2

ISSUE DATE: MARCH 26, 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 00300 – BID PROPOSAL:**

   MODIFY The note on page 00300-14 by deleting the portion that is struck through and by adding the portion that is underlined below:

   NOTE: PROPOSAL SIGNATURE REQUIRED ON PAGE 00300-~~16~~17**.** ALL PROPOSALS MUST BE PROPERLY EXECUTED TO BE CONSIDERED A VALID BID.

2. **SECTION 00700 – EJCDC - AMENDED GENERAL CONDITIONS:**

   CLARIFICATION OF ARTICLE 6.06: This project is fully funded by the Town of Cary. The Town does not have established minority participation goals for maintenance or construction of utility line projects. Bidders will not be required to provide documentation of good faith efforts to procure minority business participation but are encouraged to utilize minority businesses.

3. **SECTION 02150 – BYPASS SYSTEM:**

   MODIFY Paragraph 1.01.A - DESCRIPTION by deleting the portion that is struck through below:

   Scope: The Contractor shall furnish, construct, maintain and operate bulkheads, containment system, plugs, hoses, piping, and pumps to bypass sewage flow around the project area as necessary. The bypass system shall, at all times, prevent backup or overflow onto streets, yards and unpaved areas or into buildings, adjacent ditches, storm sewers, and waterways. The Contractor shall design and provide the bypass system with sufficient firm pumping capacity to pump the existing sewer being bypassed ~~flowing full~~. Firm capacity is defined as the capacity of the pumping system when the largest pump is out of service. ~~The capacity of the sewer shall be calculated based on the minimum slope of the smallest diameter of the section of sewer that is being bypassed.~~ The Contractor is advised that during rain events the flow in the existing sewers will increase rapidly and will fill the pipe and in many cases surcharge the pipe. Bypass pumping systems will be paid as specified in the Bid.

MODIFY Paragraph 2.01.B - MATERIALS by deleting the portion that is struck through below:

The pumps shall be designed to provide a firm capacity adequate to handle the existing sewer ~~flowing full~~. Firm capacity shall be defined as the pumping capacity available when the largest pump in the system is out of service. The system shall contain at least two identical duty (primary) pumps and at least one identical backup pump. For short duration bypass activities during dry-weather periods as determined and agreed to by the Engineer, the bypass system may contain one duty (primary) pump and one identical backup pump. Contractor and pump supplier shall determine system pressure requirements based on proposed bypass piping size and layout and shall submit the proposed system curve for the pumping system.

4. **SECTION 02650 – SEWER CLEANING AND TELEVISION INSPECTION:**

MODIFY Paragraph 3.3 - DIGITAL VIDEO INSPECTIONS AND CCTV DATABASE by deleting the portion that is struck through and by adding the portion that is underlined below:

3.3 DIGITAL VIDEO INSPECTIONS AND CCTV DATABASE

A. All televised sewer inspections performed under this Contract (including pre-rehabilitation and post-rehabilitation inspections) shall be submitted to the Engineer in electronic (digital) format. All inspections performed will be imported into ITpipes inspection software.

All inspections shall be performed using ITpipes software in the field. ITpipes must be installed in the truck that is performing the television inspections and used for the live field inspections. If ITpipes is not in the truck(s), the work shall immediately cease until it is installed in the truck(s) to be used during the inspection process.

B. ~~Each submittal to the Engineer shall include the database file along with the video files. Video files shall be MPEG4, wmv or other approved format (Engineer to approve).~~ WMV recording with embedded meta-data is required. Each submittal to the Engineer shall include the ITpipes software database file within the approved structure along with the WMV video files. The Contractor shall make all adjustments necessary to adhere to the required format specified herein at no additional cost to the Owner. After the first submittal, the Engineer will notify the Contractor of any required changes in the data and file format, and the Contractor shall make such modifications at no additional cost.

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

MODIFY Paragraph 1.5 - QUALIFICATIONS by deleting the portion that is struck through and by adding the portion that is underlined below:

1.5 QUALIFICATIONS

A. The Contractor performing the CIPP installation shall be fully qualified, experienced and equipped to complete this work expeditiously and in a satisfactory manner and shall be certified and/or licensed as an installer by the CIPP manufacturer. The Contractor must have successfully installed at least 1,000,000 feet of CIPP for a minimum of 10 years in wastewater collection systems of which at least 100,000 feet shall be the exact glass fiber reinforced, UV light cured product proposed by the Contractor. Alternatively, the Contractor must have successfully installed at least 300,000 feet of the exact glass fiber reinforced, UV light cured product proposed by the Contractor for a minimum of 10 years in wastewater collection systems. In addition, the Contractor shall have successfully installed ~~three separate projects that included~~ a minimum of 5,000 ~~10,000~~ feet of 24-inch diameter or larger glass fiber reinforced, UV light cured CIPP ~~or larger each~~. ~~Included in the 30,000 feet of 24-inch diameter CIPP or larger shall be pipe diameters that are equal to or greater than the largest pipe diameter included in this project.~~

The Contractor shall submit detailed references (project names, dates, owner contact names and numbers, project descriptions with lengths installed, etc.) to the Engineer as requested to demonstrate compliance with the above experience requirements. The Engineer's decision on whether the Contractor meets the experience requirements shall be final, and the Contractor shall not be due any additional money if the experience requirements are not met.

B. The Contractor's personnel shall have the following experience with the products and installation method to be used on this project.

Project Manager – Shall have a minimum of 5 years managing CIPP projects for wastewater collection systems.

Superintendent - Shall have a minimum of 5 years of on-site supervision of CIPP projects for wastewater collection systems. The superintendent shall have supervised a minimum of 300,000 feet of installed CIPP in wastewater collection systems ~~of the pipe diameters included in the project~~ of which 50,000 linear feet must be with the exact glass fiber reinforced, UV cured product proposed by the Contractor. In addition, the superintendent shall have been the direct, on-site superintendent for ~~three separate projects that included~~ a minimum of ~~5,000~~ 15,000 feet of 24-inch diameter CIPP or larger

~~each~~. Included in the 15,000 feet of 24-inch diameter CIPP or larger shall be pipe diameters that are equal to or greater than the largest pipe diameter included in this project. Alternatively, the glass fiber reinforced, UV light cured CIPP manufacturer may provide a full-time, on-site representative that in conjunction with the Contractor's superintendent meets these requirements.

6. **APPROVED PRODUCTS LIST:**

CLARIFICATION: Protecto 401 ceramic epoxy interior coating will not be required on ductile iron pipe or fittings as part of this project, unless directed otherwise.

ON THE PLANS:

1. **SHEET C-4:**

   MODIFY Note 6 by deleting the portion that is struck through and by adding the portion that is underlined below:

   6. FLOW METER IS INSTALLED IN MH-SP76505015. PROVIDE 30 DAYS NOTICE TO THE ENGINEER BEFORE ANY ACTIVITY AT THIS MANHOLE (INCLUDING CLEANING THE SEWER, CIPP INSTALLATION, MANHOLE REHABILITATION, ETC.) SO THAT THE FLOW METER CAN BE REMOVED. FLOW DATA FROM THIS FLOW METER INDICATES AN AVERAGE FLOW OF APPROXIMATELY 4.3 MGD AND A PEAK FLOW OF APPROXIMATELY ~~23.1~~ 18.0 MGD. THIS DATA IS PROVIDED AS GENERAL INFORMATION ONLY. THE BY-PASS PUMPING SYSTEM SHALL BE SIZED ACCORDING TO THE SPECIFICATIONS.

2. **SHEET C-5:**

   ADD the following new information to the BLACK CREEK 54 INTERCEPTOR table:

UPSTREAM MANHOLE	DOWNSTREAM MANHOLE	MAX DEPTH (GROUND TO TOP OF PIPE) (FT)	GROUNDWATER HEIGHT ABOVE INVERT (FT)	MAXIMUM OVALITY (%)	SOIL MODULUS (PSI)
SP76506047	SP76506017	23.74	17.77	3.79	1,000
SP76506017	SP76506005	18.74	18.01	5.16	1,000
SP76506005	SP76506004	18.74	18.16	6.00	1,000
SP76506004	SP76506003	18.75	18.36	5.95	1,000
SP76506003	SP76506002	39.83	18.58	5.44	1,500
SP76506002	SP76506001	39.83	18.66	5.29	1,500
SP76506001	SP76506016	36.26	18.80	5.43	1,500
SP76506016	SP76507015	18.22	19.20	2.78	1,000
SP76507015	SP76507025	18.22	19.64	3.12	1,000
SP76507025	SP76507040	10.49	21.88	assumed 2%	1,000

NOTE: The required structural CIPP wall thickness shall be based at a minimum on the physical properties in Section 1.2.C of Section 02651A - CURED-IN-PLACE PIPE LINING (CIPP) FOR MAIN SEWERS - ULTRAVIOLET LIGHT CURED CIPP and in accordance with ASTM F2019-20 and the design equations in the Appendix X1 of ASTM F1216, with the design parameter considerations for groundwater height above invert, maximum ovality, and soil modulus information presented in this table.

MODIFY Note 6 by deleting the portion that is struck through and by adding the portion that is underlined below:

6. FLOW METER IS INSTALLED IN MH-SP76506017. PROVIDE 30 DAYS NOTICE TO THE ENGINEER BEFORE ANY ACTIVITY AT THIS MANHOLE (INCLUDING CLEANING THE SEWER, CIPP INSTALLATION, MANHOLE REHABILITATION, ETC.) SO THAT THE FLOW METER CAN BE REMOVED. FLOW DATA FROM THIS FLOW METER INDICATES AN AVERAGE FLOW OF APPROXIMATELY 5.4 MGD AND A PEAK FLOW OF APPROXIMATELY ~~45.5~~ 20.0 MGD. THIS DATA IS PROVIDED AS GENERAL INFORMATION ONLY. THE BY-PASS PUMPING SYSTEM SHALL BE SIZED ACCORDING TO THE SPECIFICATIONS.

MODIFY Note 9 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. ALL OTHER SEWER SECTIONS WILL HAVE A SOIL MODULUS OF 1,000 PSI WHEN CALCULATING UV GRP CIPP LINER THICKNESS AS INDICATED IN SPECIFICATION 02651A - CIPP FOR MAIN SEWERS - UV CURED.

QUESTIONS FROM THE PRE-BID MEETING:

Q: Will bypass pumping flows for the larger sewers be given in an addendum? This way everyone is estimating off of the same information.

A: See this Addendum No. 2 for a change to Section 02150 – Bypass System. As noted in paragraph 1.01.A of Section 02150 – Bypass System (as amended herein), "The bypass system shall, at all times, prevent backup or overflow onto streets, yards and unpaved areas or into buildings, adjacent ditches, storm sewers, and waterways. The Contractor shall design and provide the bypass system with sufficient firm pumping capacity to pump the existing sewer being bypassed. Firm capacity is defined as the capacity of the pumping system when the largest pump is out of service. The Contractor is advised that during rain events the flow in the existing sewers will increase rapidly and will fill the pipe and in many cases surcharge the pipe."

In addition, the following are the expected peak flows for use when sizing the main bypass systems in the Back Creek 24"/30" Interceptor, the Crabtree Creek 48" Interceptor, and the Black Creek 54" Interceptor:

- Back Creek 24"/30" Interceptor = 4 mgd
- Crabtree Creek 48" Interceptor = 18 mgd
- Black Creek 54" Interceptor = 20 mgd

Q: Why can't CIPP GRP be used in this area along with UV GRP?

A: Unclear of the exact question.

Q: Regarding Bid item 10 A. 1-6 (Manhole Rehabilitation), will the Town of Cary accept HDPE liner, PP liners or PVC risers as an alternative to cementitious liners?

A: Alternative products should be submitted to the Engineer to be reviewed as an "or equal" product.

Q: Can any or all of the "UV Cure Only" segments be allowed to be done water/steam?

A: No.

Q: Can water be pumped out of Lake Crabtree for CIPP installation?

A: Per Section 02651 – Cured-In-Place Pipe Lining (CIPP) for Main Sewers in paragraph 3.G, "The Contractor may use water from nearby streams, lakes, and ponds as needed. The water

shall be filtered before use. All water pulled from nearby streams, lakes, and ponds must be discharged to the wastewater collection system."

Q: Can Geopolymer Liners be installed for the 54" Segments in lieu of UV?

A: No.

Q: Will the qualifications for UV Contractor be lowered?

A: See this Addendum No. 2.

Q: Can you provide as-built plan and profile drawings of the interceptors?

A: "Record Drawings" will be made available via the Town's Electronic Plan Room website. Bidders are advised that the drawings are not stamped "as-built drawings" and neither the Owner nor the Engineer can attest to their accuracy. For verification of existing pipe diameters, material types, and invert elevations, prospective bidders should refer to the construction plans for this project. Additionally, bidders may obtain access to available CCTV inspection footage of the sewer lines in this project (with the exception of the "connector sewers") by contacting Mark Lambert at mlambert@frazier-engineering.com.

Q: What is the last day for questions?

A: Per Section 00250 – Instructions to Bidders, "Questions received less than five business days prior to the date for opening of Bids may not be answered." Therefore, the last day for questions is March 30, 2021.

The attendance list for the pre-bid meeting is attached.

(END OF ADDENDUM NO. 2)

FY20-21 SEWER REHABILITATION PROJECT
PRE-BID MEETING ATTENDEES (VIRTUAL)
MARCH 23, 2021 2:00 PM

Name	Company
Mark Lambert	Frazier Engineering
Mike Woodcock	Portland Utilities Constr. Co.
Andrew.Parks	Kiewit
Connor Corrigan	Kiewit
Lorne Jacobs	Portland Utilities Constr. Co.
Freddie Hudson	Xylem Rentals
Lynn Brilz	Town of Cary
Tyler Daniel	Rain for Rent
Preston Downs	Rain for Rent
Ryan Hogenmiller	SAK Constr.
Annastacia Tooke	Granite Inliner
Andy Cook	Ruby-Collins, Inc.
Patrick Haines	Kiewit
Mark McClymonds	Granite Inliner
B Brown	Pipeline Utilities
Allen Robinson	NAPM
Eoin Kelly	Predyl Systems
Scot O'Bryan	Sunbelt Rentals
Terry Adderhold	SAK Constr.
Cody Beal	Granite Inliner
Ben Becker	Kiewit
Bob Van Horne	Insituform
Victor Howard	Spiniello
John Saintsing	Tri-State Utilities
Randy Hansbrough	SAK Constr.
John Sybrandt	SAK Constr.
Billy Jennings	CaJenn Construction
Andrew Palahnuk	Kiewit
Justin Childers	Sunbelt Rentals
Samuel Trawick	Insituform
Mark Colangelo	Frazier Engineering
Shaun Mizell	Town of Cary
Craig Welsh	Tri-State Utilities