

**TOWN OF COLCHESTER
RAPALLO VIADUCT FORCE MAIN REPAIR**

ADDENDUM NO. 1

June 28, 2021

This addendum modifies the original bid document dated June 10, 2021. Please acknowledge receipt of this addendum in the space provided on the bid form. Failure to do so may subject the bidder to disqualification.

QUESTIONS, ANSWERS, AND CLARIFICATIONS

The following questions were received and are answered below for clarification:

Question 1

What is the current operating pressure of the existing system, including the bypass section?

Answer 1

The bypass pipe is rated at 80 psi. The pressure inside the force main system is approximately 30 psi to 40 psi.

Question 2

What is the diameter and thickness of the existing bypass piping?

Answer 2

The bypass piping is 18" HDPE DR26 with IPS dimensions as follows:

- Nominal OD: 18-inches
- Minimum Wall Thickness: 0.692-inches
- Minimum OD: 17.914-inches
- Average ID: 16.533-inches

Question 3

Is there a constant flow through the existing system, including the bypass section?

Answer 3

The existing system (including the bypass section) is always pressurized but not constantly flowing. The Prospect Hill Pump Station in Colchester controls the flow, and there is a check valve, which prevents backflow at the pump station.

Question 4

What is the anticipated method for draining the temporary bypass piping prior to disassembly and removal?

Answer 4

The temporary bypass piping is expected to be contained and pumped into a Pump Out Truck and driven to WWTP at 20 Gildersleeve Road in East Hampton, CT for proper disposal. Historically, the Owner has had success utilizing the port from the lower-elevation air release valve, and attaching the pump out truck, while ensuring that the upper-elevation air release valves were open, free and clear, to prevent collapse of the bypass pipe. The Contractor shall safely remove wastewater from the bypass pipe without spilling.

Question 5

What is the anticipated method for cleaning the temporary bypass piping prior to disassembly and removal?

Answer 5

At this time, United Rentals does not require cleaning and disinfection of the rented pipe prior to return. Contractors shall protect the area from spills and shall handle the bypass pipe using PPE proper for handling items that have been in contact with wastewater.

Question 6

Will mechanical cleaning [of the host pipe] be an acceptable alternative to the required water jet cleaning?

Answer 6

The contractor must clean the host pipe until it is free and clear of tuberculation and the inner diameter is at least 16.4-inches. Mechanical methods are acceptable provided they do not compromise the integrity of the pipe. Contractor must properly dispose of all debris from pipe cleaning.

Question 7

Will the 18-inch Primus Line fit inside the 16-inch Host Pipe?

Answer 7

Yes. As per the Primus Line pipe connection detail on the design drawing sheet CD-2 the OD of the 18" Primus Liner is 16.06 inches. The host pipe is nominal 16-inch cement lined ductile iron, installed in the early 1980s. Contractors commonly installed Class 51 DI in the early 1980s. See thickness class dimensions with cement liner to calculate internal diameter of existing host pipe. There are no bends in the segment of this repair. Contractor must remove all tuberculation prior to liner installation to ensure proper annulus space. Contractor must provide reducers to properly attach connections to host pipe.

Question 8

Sheet C-1: call out for test pit and removal of bolts at approximately 120 LF and 127 LF from cut end of pipe. Is there a detail or additional information as to what these bolts are? Or level of effort to perform this task?

Answer 8

The bolts to be removed were installed as part of the May 2020 repairs done to the line. These bolts currently protrude into the inner diameter of the host pipe and therefore must be removed. The force main is approximately 5-feet deep at the locations of the bolts. The Contractor may select means and methods to excavate and remove the bolts, as long as they do not damage the host pipe.

Question 9

I would believe that our access pit and receiving pits for the FFRP liner are where the pictures of the bypass are, and the test pits are?

Answer 9

Correct. The access pits are to be located at both the 16" Gate Valve West and 16" Gate Valve East locations, which are shown in Photo 1 and Photo 2 on page C-3 of the Drawings. The test pits to remove the bolts should be located approximately 120-feet from the cut western end of the host pipe.

Question 10

Why is Sheet C-2 included? The details of the Viaduct and the notes about cutting and replacing with concrete etc. Do we actually cut into the stone abutment and 30" steel pipe to access either the force main or the test pit/bolt removal?

Answer 10

The information on Drawing C-2 was included for historical reference of the conditions as they were installed in 1980. Drawing C-2 does NOT represent work to be done as part of the project. The structures pictured on C-2 are subterranean, and should not be disturbed as part of this work

Question 11

Please share the engineering firm's anticipated estimated bid amount.

Answer 11

The Town of Colchester does not provide anticipated estimates to bidders or the public until after the opening of public bids.

Question 12

What is the estimated timeframe of the project, specifically the beginning date?

Answer 12

The project begins at the Notice to Proceed and shall be accomplished expeditiously. The Town of Colchester has anticipated lead time for certain required products and has already included this time in the Contract duration (Invitation to Bid, 00020-2, Item 12).

Question 13

At any point can the trail be closed to the public at both ends of the work area?

Answer 13

The trail may be closed to through traffic within the confines of the work area and areas where construction equipment is in operation. Any trail closures are to be coordinated with the Owner in advance as part of the construction schedule.

Question 14

Can the parking area by Smith Street be closed to the public when construction mobilization work is being done in that space?

Answer 14

The parking area by Smith Street may be closed when necessary for construction mobilization to be coordinated with the Owner in advance as part of the construction schedule.

Question 15

What is the maximum length of time the force-main can be left out of service for this repair work? (i.e. during the lining operation)

Answer 15

The maximum allowable time of force-main shutdown is 24 hours. During this time bypass trucking must be in operation between the Prospect Hill Pump Station in Colchester, CT and WWTP at 20 Gildersleeve Road in East Hampton, CT. Contractor shall be responsible for arranging trucking of bypass wastewater and coordination with facilities.

Question 16

Please provide the designated location for the disposal of any flow-able sewer matter.

Answer 16

Flow-able sewer matter shall be properly contained and shall be disposed of at 20 Gildersleeve Road, East Hampton, CT.

Question 17

What is the requirement for free and clear access along the Airline Trail for pedestrians during construction activities?

Answer 17

There are no free and clear pedestrian access requirements along the trail during active construction activities. Please see question 13 and 14 for further clarification.

Question 18

Are there specific working day time hours?

Answer 18

There are no specific hours of the day within which work must be performed. With written authorization from the Owner work may be performed outside of daylight hours. The trail is typically "open" during daylight hours. During bypass shutdown it is expected and preferred that work be continuous until complete. Typical work hours for this project are considered daylight hours Monday through Friday.

Question 19

Would a 5 psi air pressure test be permitted in lieu of the hydrostatic pressure test of the FFRP liner?

Answer 19

Pressure testing of the repaired sewer force main shall comply with requirements outlined in Section 02570.

Question 20

What is the deadline for asking questions?

Answer 20

That date is specified in the RFP as the close of business seven (7) days prior to the fixed date for the opening of bids (Instructions to Bidders, 00100-4, Item 11). In this case questions must be submitted prior to 5:00pm on Friday, July 2nd, 2021.

CONTRACT PLANS & SPECIFICATIONS

Make the following changes, revision, additions, and/or deletions to the Contract Documents:

Section 01010 – Summary of Work

- REMOVE Section 01010 entirely and REPLACE with the attached section.

END OF ADDENDUM NO. 1

SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this section.

1.2 LOCATION OF WORK

- A. The work of this Contract is located in the Town of East Hampton, Connecticut, at the Rapallo Viaduct, which is located along Airline Trail where it intersects with Flat Brook.

1.3 BACKGROUND

- A. The Colchester sanitary sewer force main was constructed in 1981 to transfer between 600,000 and 800,000 gallons of wastewater from Colchester, Hebron, and Marlborough to the East Hampton Joint Facilities collection system. The pump station is located on Prospect Hill Road in Colchester, and it connects to a 16-inch diameter cement-lined ductile iron pipe (CLDIP) sanitary sewer force main that runs along the Connecticut Airline Trail and discharges to a gravity system on Smith Street in East Hampton.
- B. The Rapallo Viaduct is approximately 6.1 miles from the Colchester Pump Station, and about 1.6 miles from the discharge point. The Rapallo Viaduct is a buried structure along the Airline Trail which traverses Flat Brook. The 16-in CLDIP force main passes through the Rapallo Viaduct structure.
- C. The line experienced three (3) consecutive breaks directly west of the Rapallo Viaduct in May 2020, which motivated the Town of Colchester to install gate valves on either side of the viaduct, and establish approximately 1,600 linear feet of bypass piping.
 - a. Bolt-like spacers were used during one of the repairs, and currently intrude into the force main, as observed on CCTV approximately 120 feet and 127 feet from the start of the footage which began at the pipe to be repaired near the western valve on the viaduct side.
- D. The work in this project is to make repairs to the 16-inch CLDIP force main between the 2020-installed gate valves along the Rapallo Viaduct.

1.4 SUMMARY

- A. In general and without limitation, the work to be done under this contract includes, but is not necessarily limited to, furnishing all labor, services, equipment, materials, devices, facilities, and appurtenances for the installation of erosion control measures, excavation of launching and receiving pits, cleaning and preparing the existing pipe to be repaired, lining the force main, connecting to the existing force main at either end of the work area, and backfilling the launching and receiving pits within the limits of the easement as shown on the Drawings and as specified herein.
- B. The work to be performed shall include the work shown on the Drawings, as specified herein, and as indicated below.
- C. All construction activities must also be completed while meeting the requirements of Appendix A (State Wage Rates).
- D. The force main with the existing bypass piping will be in operation during test pits, access pit excavation, cleaning and inspection of the host pipe.
- E. FFRP Lining shall be winched through the host pipe, and connected at either end, and tested to the satisfaction of the Engineer.
- F. Contractor shall coordinate with the Colchester DPW and North Hampton Joint Facilities in anticipation of temporary force main shut down and wastewater hauling. Contractor shall make every effort to minimize force main shut down time, with **a maximum allowable shutdown time of 24-hours**. During this shut down period:
 - a. Wastewater should be trucked from the Prospect Hill Pump Station in Colchester to the WWTP at 20 Gildersleeve Road in East Hampton, CT for proper disposal.
 - b. Wastewater should be removed from the bypass piping and also trucked to WWTP at 20 Gildersleeve Road in East Hampton, CT for proper disposal.
 - c. Physical connection should be made to the existing force main on either end with the newly repaired segment.
 - d. Newly repaired segment should be put in service with the existing line.
- G. After the force main repair is back in service, return of existing bypass pipe must be coordinated with United Rentals of Worcester, MA, (508) 756-3306.

1.5 SCOPE OF WORK

- A. A general description of the work to be performed under this contract shall include, but will not be limited to, the following construction operations:
 - 1. Coordination of all activities with the Colchester DPW, East Hampton Joint Facilities, and all appropriate governing authorities and utility companies.

2. Attending the Pre-construction conference and the required job progress meetings.
 3. Submission of a construction schedule, list of subcontractors, and subcontractor certifications.
 4. Submission of all required shop drawings, in a timely manner, to the Engineer, for review.
 5. Mobilization/Demobilization to/from the site.
 6. Installation and maintenance of erosion controls; consisting of filter sock and providing dust control as required.
 7. Bracing and supporting of the existing bypass pipe.
 8. Locating and removing of intruding bolts on western side of Rapallo Viaduct.
 9. Cleaning, inspecting, FFRP lining, and reconnecting force main from existing gate valve west to existing gate valve east on either side of the Rapallo Viaduct.
 10. Draining and coordination of existing bypass pipe.
 - a. Equipment and labor to transport 50-foot segments of bypass pipe to Smith Street entrance for pick up by United Rentals of Worcester, MA.
 - b. United Rentals to provide labor and equipment to cut existing bypass pipe into 50-foot segments, and to provide transportation of the used pipe off-site from the Smith Street access point.
 11. Site cleanup and restoration.
- B. The work shall also conform to such additional Drawings and addenda to these Specifications and Drawings as may be published or exhibited prior to the opening of bid proposals and to such drawings in explanation of details, or as may be furnished by the Engineer from time to time during the construction.
- C. Work and materials which are necessary in the construction but which are not specifically referred to in the Specification, or shown on the Drawings, but implied by the Contract shall be furnished by the Contractor at his own cost and expense and shall be such as will correspond with the general character of the work as may be determined by the Engineer, whose decisions as to the necessity for and character of such work and materials shall be final and conclusive. It is the intent of these Specifications to produce a complete, finished job whether shown in every detail or not.

1.6 CONTRACTOR'S USE OF PREMISES

- A. Contractor shall limit the use of the premises for his/her Work and for storage to allow for:
 - 1. Owner occupancy.
 - 2. Site safety.
- B. Coordinate use of premises with Engineer, the Town of Colchester, and East Hampton Joint Facilities.
- C. Contractor shall assume full responsibility for security of all his/her and his/her subcontractors' materials and equipment stored on the site.
- D. If directed by the Owner, the Contractor shall move any stored items which interfere with operations of the Town or other contractors.
- H. Access to the existing sewer force main this project shall be via the entrance to the Airline Trail at Smith Street in East Hampton, which is approximately 1.25 miles from the project site.
- I. Contractor may use the site to store any and all salvaged items provided that the location for storage is approved by the Engineer, the salvaged items do not interfere with existing operations, and the salvaged items and method of storage do not pose a threat to site safety, security, or present a hazard to the environment or water supply.

1.7 WORK SEQUENCE

- A. The Recommended construction Sequence shown on the Drawings.
- B. The Contractor shall submit a sequence of work for the overall project for the Engineer's review and approval.

1.8 UTILITIES

- A. The utilities shown on the plans have been located primarily from information furnished by others and are considered approximate both as to size and location. It shall be the Contractor's responsibility to locate all existing utilities and to protect same from damage or harm. All utilities interfered with or damaged shall be properly restored, at the expense of the Contractor, to the satisfaction of its Owner.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01010