#### WOOD RIVER DRAINAGE AND LEVEE DISTRICT

### **EFLUENT PIPING REPLACEMENT AND REHABILITATION**

### ADDENDUM NO. 2

# 12/03/2024

### TO ALL BIDDERS BIDDING ON THE ABOVE PROJECT:

All bidders are hereby notified that the CONTRACT DOCUMENTS issued for the Effluent Piping Replacement and Rehabilitation project are amended only in the respects set out below and all bids shall be submitted for the work described in the Contract Documents as modified by this **ADDENDUM NO. 2.** All Bidders submitting a Bid on the above Contract shall carefully read this Addendum and give it consideration in the preparation of their Bid.

BIDS CLOSE: December 6, 2024, at 2:00 p.m., Local Time

## **PROJECT MANUAL**

**Specification 40 05 59.23: Stainless Steel Slide Gates**. In the Stainless Steel Slide Gate Schedule table at the end of specification, the Operating Floor elevation should read 428.00.

**Specification 33 01 30.72: Cured-in-Place Pipe Ling**. See changes noted in question #5, #6, #7, and #8 below.

# **QUESTIONS**

The following questions have been received. Answers to these questions are provided.

Question #1: If debris is removed from the sewer main during the cleaning operation, can the owner provide a location for the debris removed?

Answer #1: If material is removed from the sewer during or after cleaning, that material shall be placed in a roll off dumpster to be provided by the contractor. The material in the roll off dumpster will be disposed of by others at no cost to the contractor.

<u>Question #2:</u> For the CIPP lining, will leakage testing be required? If so, can the leakage testing be accomplished during cure?

Answer #2: Yes, leakage testing is required, see specification 33 01 30.72, 3.04.C. The same water may be used for curing and testing, but the testing shall not occur until curing and cooling is complete.

Question #3: For the CIPP lining, the plan notes state that heavy mechanical cleaning will be required, can a bid item for heavy cleaning be added? It would

be hard for the contractor to put a price to cleaning not knowing what it will take to clean the pipe or what the expectations will be for how much of the scaling will need to be removed?

Answer #3: The cleaning is included in each unit price bid item (Bid Item No. 6: Cleaning, Inspection and CIPP Lining of 24-inch CIP and Bid Item No. 7: Cleaning, Inspection and CIPP Lining of 36-inc CIP). No separate bid item for heavy cleaning related to the CIPP lining will be added. In addition, existing CCTV videos of the 24-inch and 36-inch CIP pipes were provided to firms that requested it.

<u>Question #4:</u> Specification 01 52 00, 2.03 notes that water is not available on site. Is there a location we can fill up a jetter truck? <u>Answer #4:</u> For access to water, you can contact the Village of Hartford, IL to get access to one of their hydrants.

Question #5: Specification 33 01 30.72 (Cured-in-place Pipe Lining), 2.07.B notes that the end seal must meet the standards in ASTM C923. However, that ASTM specification "covers the minimum performance and material requirements for resilient connectors used for connections between precast reinforced concrete manholes conforming to Specification C478 and pipes, and between precast reinforced concrete pipe and laterals." This doesn't fit with a rehabilitation project with CIPP. Can the end seals be LMK End Seals?

Answer #5: LMK End Seals are acceptable. Agree that the ASTM C923 requirement does not apply – disregard that requirement. The intent of this section of the specification is that the end seal is watertight.

Question #6: Specification 33 01 30.72 (Cured-in-place Pipe Lining), 3.03.A.3 notes that "Liner bag shall be impregnated with resin not more than 24 hrs before proposed time of installation..." This spec language was appropriate in the 1980's when wetout liners had a shelf life of 6 days after the resin impregnation process. However, the current resin/catalyst systems provide the wet-out liner with a shelf life of 6 weeks, making this language unnecessary and adding cost without delivering any value. It would also hinder shipping efficiency for getting liners to the job site and contradict green engineering principles.

Answer #6: Revise the first sentence in 3.03.A.3 to state that the "Liner bag shall be impregnated with resin and installed within allowable time as determined by the manufacturer". That section of the specification also states that "Longer liner impregnation times will be allowed upon written notification of resin manufacturer."

Question #7: Specification 33 01 30.72 (Cured-in-place Pipe Lining), 3.04.C.2.c notes that "For pipes 18 inches and larger, obtain 2-inch diameter sample from the crown of the CIPP a minimum of one diameter length from the end of the CIPP." This is describing a "destructive sample" technique that is typically reserved for traditional "down tube" samples that have fall short in one of the testing result categories. It is generally frowned upon to cut into a brand new liner and then have to repair it. Your specification already requires us to take a sample and test for physical properties which includes thickness.

Answer #7: Remove the requirement for destructive sample testing.

Question #8: Specification 33 01 30.72 (Cured-in-place Pipe Lining), 3.04.C.3 discusses the "Leakage Test" and states that every installation must have a water exfiltration test or air pressure test. Air pressure tests are virtually unheard of with CIPP and a water exfiltration test is unusual these days and requires us to perform a "downtube exfiltration test" that's outlined in ASTM F-1216. The challenge with this language is that it means you would perform all the installations with water inversion. The most popular and efficient installation method today is using an "air inversion, steam cure" installation method and it's this method that has really helped to keep the cost of CIPP low. It's also preferred because it uses only 10% of the water consumed by the water inversion method. By requiring the exfiltration test, you lose all the efficiencies of the "air inversion, steam cure" installation method.

Answer #8: Specification 33 01 30.72 allows for curing of the liner using steam (3.03.D). For the leakage testing, the specification allows for either water exfiltration test or low pressure air test. If the Contractor's means and methods for the work includes the use of steam for curing, a low pressure air test can be used for leakage testing.

Any revisions to any of the Contract Documents made by this Addendum shall be considered as the same revision to any and all related areas of the Contract Documents not specifically called out in this Addendum.

The Bidder shall acknowledge receipt of this Addendum by inserting the date and number in the spaces provided in the BID FORM.