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GOVERNOR

TRANSPORTATION CABINET

200 Mero Street
Frankfort, Kentucky 40601

Jim Gray
SECRETARY

July 6, 2023

CALL NO. 318
CONTRACT ID NO. 232378
ADDENDUM # 1

Subject: Hancock County, FD04 046 0060 002-010
Letting July 20, 2023

(1) Added - Special Notes - Page 11a-11f of 62

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills,

A handwritten signature in cursive script that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:so
Enclosures

FD05 046 0060 002 010 Notes

Project begins 0.34 miles east of intersection with KY657 in Lewisport, KY. Project ends 0.1 miles west of KY3101 near Hawesville, KY. Work is to be completed on the east bound lanes ONLY. Project may not begin until completion of existing project CID 221058 let Nov. 17, 2022. Completion date for that project is June 30, 2024. Four new portable changeable message boards are included in this project. Portable changeable message boards are to become the property of KYTC at the end of the project. Contractor is required to coordinate with existing project in the area. Project involves the following:

Replacing transverse joints

Removing and replacing JPC pavement

Removing existing shoulder and replacing

Repair/Patching of JPC pavement

Sealing cracks in JPC pavement

Diamond grinding mainline JPC pavement

The contractor will be responsible for diverting and maintaining traffic. Traffic is to be transitioned at the initial split to 4 lanes at Lewisport. East bound traffic will be diverted to the left west bound lane. Allowing the contractor to work freely within the zone. East end crossover is considered a lump sum item. At east crossover an 18in pipe will be needed to drain the median. West end crossover will be covered under temporary striping. Shoulders are in very poor condition and are to be removed. Quantities of roadway excavation have been included for work on the shoulders. Shoulder material that is removed may be removed from the job site or graded into the slope. Shoulders are to be reconstructed with 4.25in of CL3 ASPH BASE 1.0D PG64-22 and 1.5in of CL3 ASPH SURF 0.5B PG64-22.

Removal and replacement of JPC pavement will be completed according to section 501 of the 2019 Standard Specifications. The cabinet has found 80 transverse joints that are to be removed and replaced. Quantities were calculated by full pavement width and allowing three feet on each side of the joint. Quantities for full depth removal and replacement were calculated based on the actual measurements. DGA base has been included to level areas where JPC pavement has been removed. A list of locations and sizes is attached.

Patching of locations where pavement markers have been removed are considered incidental to remove pavement marker bid item.

A diamond grind of all mainline and turn lanes is required. A ride quality must be completed.

Temporary striping has been included for the restripe of the west bound lanes. Water blasting has also been included for removing the temporary paint when the project is near completion.

Located at KY1957 (MM 4.67) is a 600ft turn lane. Three hundred feet of the turn lane is asphalt. The contractor is to mill out 1.25in of asphalt and replace with 1.0in of asphalt to match pavement after diamond grinding.

There are several access locations throughout the project crossing the median. These locations have asphalt surfacing. Contractor is to mill 1.25in at mainline and replace with 1.0in to match pavement after diamond grinding. Quantities and locations have been included in the milling summary. Milling at center of median is to be 1.0in. At KY1957 there is a 600ft turn lane is has 300ft of asphalt surface. Contractor is to mill 1.25in out of asphalt and replace with 1.0 inch to match concrete after diamond grind.

Bid item 20259ED TEMPORARY MEDIAN CROSSOVER is intended to cover the cost of the crossover.

According to archived plans there should be 10 to 12 inches of DGA at the shoulder. A sealer was added to the top inch of the DGA when constructed. The department intends for the contractor to remove the upper DGA and install a paved shoulder. The DGA that is removed may be graded to the existing slope or removed from the job site. Seeding should not be necessary.

0270 Concrete Patching repair is intended for locations where the concrete has deteriorated or formed potholes that are not full depth.

Use Special note for partial depth concrete pavement repair to patch back the pavement markers.

The asphalt milling, and texturing bid item was added to allow the contractor the option to remove shoulder areas that may have asphalt that was added after the original construction and to cover the cost of milling the asphalt crossovers for local road access so that the asphalt and concrete will more closely match after diamond grinding if necessary.

SPECIAL NOTE

MAINTENANCE OF TRAFFIC OVER WINTER TRAFFIC PATTERN

US 60 HANCOCK COUNTY

FD04 046 0060 002-010

Normal traffic pattern needs to be restored by November 15 through May 31 unless alternate dates are approved by the engineer.

SPECIAL NOTE FOR STAKING

In addition to the requirements of Section 201, perform the following:

1. Contrary to Section 201.03.01, perform items 1-3 usually performed by the Engineer; and
2. Field survey the existing pavement in order to establish the existing cross slopes, transitions and profile. Irregularities in the existing pavement are to be eliminated with the construction of a smooth line and grade of the new JPC pavement to ensure the best rideability possible.
3. Verify intersection and lane profile and alignment.
4. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions to be provided by the Contractor; and
5. Produce and furnish to the Engineer "As Built" plans; and
6. Perform any and all other staking operations required to control and construct the work.
7. No direct payment will be made for staking. Staking will be incidental to other items of work.

**SPECIAL NOTE FOR FOLD AND FORM PVC PIPE LINERS
PIPE REHABILITATION BY THERMOFORMED (FOLD AND FORM) PIPE METHOD**

DESCRIPTION OF WORK

The work specified under this section provides for the rehabilitation of an existing culvert pipe using PVC Fold and Form trenchless technology. The process consists of installing a thermoformed PVC pipe liner inside an existing culvert (Host Pipe) from inlet to outlet as described in the following sections. When installed the liner will be a seamless, joint-less, solid wall PVC pipe liner that tightly conformed to the interior contours of the original host pipe. The liner shall be continuous from inlet to outlet with no seams or joints. In most cases required service connections will be reconnected using closed circuit television and remotely controlled cutters.

REFERENCED DOCUMENTS

This specification references ASTM standards and other related standards, which are made a part hereof by reference and shall be the latest edition thereof.

ASTM-F1504

ASTM-E831: Coefficient of Linear Thermal Expansion

ASTM-D638: Tensile Strength and Tensile Modulus

ASTM-D790: Flexural Strength and Flexural Modulus

ASTM-D792: Specific Gravity

ASTM-D256: IZOD Impact

CONSTRUCTION

PRE-INSTALLATION

Host Pipe Preparation

The host pipe shall be inspected and cleaned prior to culvert lining. Any cleaning or clearing of pipes shall be included in the item "Ditching and Shouldering" or "Clean Pipe Structure".

Prior to inserting the PVC liner, each pipe should be inspected to verify any connecting pipes and also to determine if additional work will be needed to prepare the host pipe for the PVC liner. Any work necessary to prepare the host pipe shall be incidental to PVC pipe liners.

LINER INSTALLATION

Pre Heating

Prior to insertion of the liner into the host pipe the Contractor shall pre-heat the liner in the manner prescribed by the manufacturer's installation instructions. The heated liner must be pliable enough to be pulled into the host pipe with as little resistance as possible.

Pipe Liner Insertion

The liner pipe shall be inserted into the culvert through existing catch basins or culvert inlet or outlets. Insertion of the liner into the host pipe will be accomplished by pulling the liner into the host pipe according to the manufacturer's recommendations.

Stress Relief

After the liner has been inserted into the host pipe, the Contractor shall relieve any stress imparted to the liner during the insertion in a manner prescribed in the manufacturer's installation instructions.

Processing

The Contractor shall supply suitable heat source equipment. The equipment shall be capable of delivering steam through the lining section to uniformly raise the temperature of the PVC material to effect forming of the liner pipe.

Suitable monitors shall be installed to gauge steam temperatures and temperatures at the input and exhaust ends of the liner. Steam monitoring methods and forming period shall be recommended by the liner manufacturer.

After forming the liner shall be cooled using compressed air or a mixture of compressed air and water. Cooling shall be deemed complete when the temperature of the exhaust air or air water mixture has remained constantly below 110°F for a minimum of 20 minutes.

Pipe Liner Trimming

After installation the ends of the PVC liner shall be cut off and the ends folded over the host pipe or pressed flush against the headwall.

Connecting pipes

The exact number and location of pipe connections shall be determined from the pre-lining inspection. It shall be the Contractor's responsibility to accurately locate all existing pipe connections. The Contractor shall reconnect all pipe connections to the pipe liner.

All existing service connections shall be reinstated by remotely controlled robotic device or other methods approved by the Engineer.

Pipe reconnections shall be smooth and circular in nature. The opening shall be smooth and conform to the inside shape and size of the original connection. Trial cuts should be repaired per the pipe liner manufacturer's recommendations not be at no cost to the Department.

DEFECT REPAIR OR REPLACEMENT

Any defects, which in the judgment of the Department and the pipe liner manufacturer that will affect the integrity or strength of the liner, shall be repaired or the pipe liner replaced at the Contractor's expense per the pipe liner manufacturers recommendations. All repairs or replacement of defective work shall be completed to the full satisfaction of the Department.

PAYMENT

Payment for the work included in this section will be paid by the linear foot of pipe lined. Work incidental to the lining process such as, by-pass pumping, traffic control, pipe preparation, and other activities necessary to line the pipe shall not be paid for directly but shall be considered incidental.