

ROSCOMMON COUNTY ROAD COMMISSION

CIPP #3
Addendum A

General Specification - Add in a unit price for 28-inch pipe lining.

Cured-In-Place Pipe Lining, 28 inch \$ _____

SPECIAL PROVISION FOR CURED-IN-PLACE PIPE LINER FOR CULVERTS AND STORM SEWERS ON FIXED PRICE VARIABLE SCOPE PROJECTS – Change Pay Unit from “Foot” to “Each”

Priority __, Cured-In-Place Pipe Lining, __ inch ~~Foot~~ Each

If there are any questions regarding this addendum, please do not hesitate to contact us at 989-366-0333.

**Roscommon County Road Commission
General Specification
For
Roscommon County CIPP #3**

General

The Roscommon County Road Commission is accepting sealed bids for the Cured-in-Place Pipe(CIPP) Liner for storm sewers:

- M-55, Houghton Lake, See Attachment A for list of pipes
- “Attachment B” for maps of “Attachment A” pipe locations, can be found for download at the following link: https://roscommonroad-my.sharepoint.com/:f/g/personal/belangern_roscommoncrc_com/EtDn3Fk2MIZOn0Pck7xtAI0BrI-bIsAKPdr3k4YHokOjEQ?e=beWBFs

This is a fixed price variable scope(FPVS) bid, with a priority list. The project budget is \$1,000,000. On the pipe priority list, each pipe priority has to be bid 100% prior to moving down to the next pipe on the list. Prospective bidders must place a check mark in each row under the “Check Each for Completion” within Attachment A, no partial quantities will be allowed. The diameters and quantities in Attachment A are shown for information only and verification should be made by the prospective bidder prior to submitting a bid. No additional compensation will be made for differences found in field conditions after award of the project.

The Michigan Department of Transportation Special Provision for Cured-In-Place Pipe Liner for Culverts and Storm Sewers, the MDOT 2020 Standard Specifications for Construction, and ASTM F1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube or approved equivalents, shall be followed.

- Work may begin after award of project. No work during inclement weather, i.e. during snow and ice removal operations.
- Successful Contractor will be responsible for all traffic control. Traffic control devices shall be removed during inclement weather for facilitation of snow and ice removal operations.
- All work must be completed on or before September 30, 2024.
- Roscommon County Road Commission reserves the right to increase or decrease quantities outside of the priority list in order to meet budgetary constraints.
- Other Contractors will be performing work in the area, see the Contractor Coordination Clause.

Insurance requirements

The Roscommon County Road Commission requires that a “Certification of Insurance” be on file prior to allowing work within the right-of-way of any road under the jurisdiction of the Road Commission or MDOT.

The certificate of insurance shall contain or include the following:

1. Board of County Road Commissioners and Roscommon County Road Commission and all employees named as additional insured to all coverage.
2. General liability coverage - \$1,000,000 each occurrence.
3. Automotive liability - \$1,000,000 each occurrence.
4. Worker’s compensation – statutory limits.

CIPP #3

Bidder confirms they can complete priority Number 1 through _____ for a total cost of \$_____.

If all priorities can be completed for less than \$1,000,000, please provide pricing for additional units. The RCRC reserves the right to add additional quantities to reach the \$1,000,000 budget.

| | |
|-------------------------------------|----------|
| Cured-In-Place Pipe Lining, 12 inch | \$ _____ |
| Cured-In-Place Pipe Lining, 15 inch | \$ _____ |
| Cured-In-Place Pipe Lining, 18 inch | \$ _____ |
| Cured-In-Place Pipe Lining, 21 inch | \$ _____ |
| Cured-In-Place Pipe Lining, 28 inch | \$ _____ |
| Cured-In-Place Pipe Lining, 24 inch | \$ _____ |
| Cured-In-Place Pipe Lining, 30 inch | \$ _____ |
| Cured-In-Place Pipe Lining, 36 inch | \$ _____ |

Company Name

Date

Address

Telephone

City, State & Zip

Fax

E-mail Address

Authorized Signature

Printed Name of Authorized Signer

ROSCOMMON
COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
**CURED-IN-PLACE PIPE LINER FOR CULVERTS AND STORM SEWERS ON FIXED
PRICE VARIABLE SCOPE PROJECTS**

RCRC:NAB

1 of 3

01-25-24

a. Description. This work consists of the design and installation of the cured-in-place resin impregnated felt liner into an existing culvert or storm sewer by hydrostatic inversion or by the direct pulled-in-place method at the locations shown on the plans. Cure the liner in place so that the finished installation is continuous, provides structural support and is tight fitting to the existing pipe. The manufacturer of the liner system must provide the design, installation and inspection of the liner and must have an authorized representative on site during installation.

Provide video inspection of the culverts and sewers before (after cleaning) and after lining. All culvert and sewer cleaning, maintaining flow, bypass pumping and site preparation is included in this work except as described below.

b. Materials. Use tube and resin material in accordance with one of the following standards: *ASTM F1216*, *ASTM F1743*, or *ASTM F2019*, as applicable.

Design the liner for HS-20 live loading. Design the required cured-in-place liner wall thickness in accordance with *Appendix X1 of ASTM F1216*. Use the formulas assuming a fully deteriorated pipe condition and assume the water table is at the top surface of the pavement over the existing pipe.

Furnish documentation and calculations to the Engineer indicating the proposed design liner thickness for each run of pipe, all component materials, and that the liner meets the minimum chemical resistance requirements in accordance with *Appendix X2 of ASTM F1216* prior to installation.

Furnish a tube consisting of one or more layers of flexible needled felt or equivalent woven or nonwoven material capable of carrying resin, withstanding installation pressures and curing temperatures. Ensure the tube is compatible with the resin system used. Ensure the tube material can stretch to fit irregular culvert or sewer sections. Ensure the outside layer of the tube is plastic-coated with a material that is compatible with the resin system used. Fabricate the tube to the required size to fit the inside diameter for the full length of the existing culvert or sewer when cured. Ensure allowance is made for circumferential stretch during the hydrostatic inversion method and for longitudinal stretch during the direct pulled-in-place method.

c. Construction. Notify the Engineer at least 10 work days prior to starting the work. Electronically submit all required documentation to the Engineer for approval prior to starting the work. Do not begin work until approval is received from the Engineer.

Video inspect the existing and lined pipe in accordance with subsection 402.03.J of the Standard Specifications for Construction. Thoroughly clean the existing pipe prior to video inspection. Dispose of all debris in accordance with subsection 205.03.P of the Standard Specifications for

Construction.

Propose a corrective action to eliminate any obstruction revealed by the pre-installation inspection that cannot be removed by conventional pipe cleaning equipment and that prevents the cured-in-place liner from being installed properly. Ensure the proposed corrective action is approved by the Engineer prior to commencement of the work.

Maintain flow around the run of the pipe designated for lining as necessary. Ensure the bypass pumping system can provide adequate capacity to handle the existing flow plus any additional flow that may occur during periods of precipitation. Electronically submit a bypass pumping plan containing all necessary details to the Engineer for approval at least 10 work days prior to conducting the work.

Continuously monitor all pumps and equipment. Follow local noise ordinances if pumping is required on a 24-hour basis.

Install the cured-in-place liner in accordance with the manufacturer's guidelines and *ASTM F1216*, *ASTM F1743*, or *ASTM F2019*, as applicable. Ensure the finished liner is continuous over the entire length of the pipe and is free from visual defects, such as foreign inclusions, dry spots, pinholes, lifts, and delamination. Wrinkles or other flaws in the cured liner that reduce the hydraulic capacity of the pipe are unacceptable. Correct any deficiency found at no cost to the contract, utilizing a method approved by the Engineer. Remove and dispose of excess resin and other materials generated from the installation.

For all types of resin and installation methods, capture and dispose of all process water and wastewater resulting from the installation and flushing of the cured-in-place liner. Ensure the captured water is disposed of at a local wastewater treatment facility or as otherwise approved by the Engineer in accordance with applicable federal, state, and local regulations and permit requirements. Provide written authorization to the Engineer for acceptance of this water from the local wastewater treatment facility prior to starting the work. Provide written confirmation to the Engineer from the disposal facility verifying the process water was disposed of properly. Ensure the process water is not discharged directly or indirectly into a ditch, storm sewer, surface water body, or other unapproved location.

Prepare and test samples for each lined run of pipe in accordance with *ASTM F1216*, section 8.1 or *ASTM F2019*, section 7.1, as applicable.

Provide a certification, sealed by a Professional Engineer licensed in the State of Michigan, verifying that the lining system has been designed, manufactured, and installed in accordance with the applicable *ASTM standards* and this special provision.

d. Measurement and Payment. The completed work, as described within the priority list, will be measured and paid for at the established unit price, which will be determined by dividing the fixed construction cost amount by the Contractor’s total completed priority bid quantity. Completed work will be paid for by using the following pay item:

| Pay Item | Pay Unit |
|---|-----------------|
| Priority __, Cured-In-Place Pipe Lining, __ inch..... | Each |

The completed work, as described, not within the priority list, will be measured and paid for at the established unit price. Completed work will be paid for by using the following pay item:

| Pay Item | Pay Unit |
|---|-----------------|
| Cured-In-Place Pipe Lining, __ inch | Foot |

Priority __, Cured-In-Place Pipe Lining, __ inch and **Cured-In-Place Pipe Lining, __ inch** includes cleaning, debris disposal and video inspection necessary to line the culverts and storm sewers as described.

The cost for the work to remove an obstruction that cannot be removed with conventional pipe cleaning equipment will be paid for separately in accordance with the contract.