Roscommon County Road Commission

James Porath, Commissioner
Justin Wykoff, Commissioner
Clint Stauffer, Commissioner
Brian Vaughn, Commissioner
Scott Eckstorm, Commissioner

820 E. West Branch Road
Prudenville, MI 48651

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NOTICE TO BIDDERS

The Roscommon County Road Commission will receive sealed bids until 3:00 p.m. on June 8, 2023. Bids will be opened for tabulation and review at the Roscommon County Road Commission on June 8, 2023 beginning at 3:00 p.m. The Project will be awarded at the Roscommon County Road Commission's regular board meeting on June 8, 2023, beginning at 7:00 p.m. Our office is located at 820 E. West Branch Road, Prudenville, MI 48651.

Roscommon County CIPP

Specifications may be obtained by contacting the Roscommon County Road Commission at the above address, by calling (989)-366-0333 ext.1003, emailing Belangern@roscommoncrc.com or by going to www.roscommoncrc.com. Please check the website for any inquiries pertaining to this bid document.

Submit bids in a sealed envelope that is clearly marked with the words **"Roscommon County CIPP"**

The Roscommon County Road Commission reserves the right to reject any or all bids, to waive irregularities in any bid, and to accept the bid deemed to be in the best interest of Roscommon County Road Commission.

ROSCOMMON COUNTY BOARD
OF ROAD COMMISSIONERS

Jim Porath, Commissioner
Justin Wykoff, Commissioner
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Roscommon County Road Commission
General Specification
For
Roscommon County CIPP

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
- See Attachment B for map of Attachment A pipe locations

The Michigan Department of Transportation Special Provision for Cured-In-Place Pipe Liner for Culverts and Storm Sewers, and the MDOT 2020 Standard Specifications for Construction shall be followed.

- Work may begin after award of project.
- Successful Contractor will be responsible for all traffic control.
- No work can be performed from July 1 to July 16.
- All work must be completed on or before August 15, 2023

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.

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 addition 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.

Cured-In-Place Pipe Lining, 12 inch $_____/Foot; 551.10 foot $_____
Cured-In-Place Pipe Lining, 15 inch $_____/Foot; 342.70 foot $_____
Cured-In-Place Pipe Lining, 18 inch $_____/Foot; 55.70 foot $_____
Cured-In-Place Pipe Lining, 24 inch $_____/Foot; 15.30 foot $_____
Cured-In-Place Pipe Lining, 30 inch $_____/Foot; 358.10 foot $_____
Total: $_____

_____ _____
Company Name Date

_____ _____
Address Telephone

_____ _____
City, State & Zip Fax

_____
E-mail Address

_____ _____
Authorized Signature Printed Name of Authorized Signer

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
CURED-IN-PLACE PIPE LINER FOR CULVERTS AND STORM SEWERS

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 specified 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.

Provide 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.

Provide a tube consisting of one or more layers of flexible needled felt or equivalent woven or nonwoven material capable of carrying resin and 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. Provide at least 10 work days notice to the Engineer 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 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 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 process water is not discharged directly or indirectly to 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, will be measured and paid for at the contract unit price using the following pay item:

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

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.

Attachment A		
LINE	Length (Ft)	Diameter
5-6	5.6	12"
11-15	253.8	12"
15-18	52.9	15"
18-19	4.4	12"
34-37	276.1	30"
45-43	36.6	18"
DITCH-45	19.1	18"
48-46	36.1	12"
49- OUTLET	52.8	30"
51-49	29.2	30"
50-49	7.7	12"
INLET-51	15.3	24"
52-51	7.6	15"
53-49	282.2	15"
56-53	243.5	12"

Attachment B

3 13

M-55 Roscommon M 72022 08530

NOTE

All quantities and proposed sewer grades, etc. are derived from old plans # W-26-1.

All sewer grades are to be verified by the Engineer prior to beginning construction and revised to fit existing conditions.

Restoration of disturbed Earth areas, including but not limited to raking, Class A Seeding, Fertilizer and mulch shall be considered incidental to the sewer items.

This page is a clearer image of a portion of the following page.

POB
~STA 1494+00

Control Section M 72022
Job Number 08530A
Begins Sta. 494+00
Ends. Sta. 506+00

M 72022 08530A 3

Stanley St

Edgewood Dr

POB
~STA 1494+00

8" AGG. BASE COURSE. CONC. CURB & GUTTER DET #8A B.C.W.C. @ 330#/SYD (47' F.F.)

W-26-1

Beverly Dr

Tudor Dr

Sheridan Dr

Stratford Dr

Toepher Dr

19

18

17

20

22

21

24

23

See Pg 1

See Pg 1

8" AGG. BASE COURSE, CONC. CURB & GUTTER DET. # 8A, B.C. MIC. @ 330#/SYD (47.

W-26-1

Cottage Dr

Burill Dr

Kimberly Dr

Devonshire Dr

Owens Dr

26 27 28 25 29 32 31 30 33 35 34 36 38 37 39 41 40 42

SAUGATUCK

NEWTON

RUBICON

MUCK

8" AGG BASE COURSE, CONC. CURB & GUTTER DET'D A B.C.W.C. @ 330 #/SYD. (47' F.F.)

W-26-1

Chippewa Trail

Outflow to Open Ditch

Outflow to Open Ditch

Outflow to Open Ditch

44 43 45 47 46 48 49 50 51 52 53 54 55

MHIA & 300' of 30" Sewer

MHIA & 228' of 30" Sewer

MHIA & 287' of 15" Sewer

MHIA & 250' of 12" Sewer

CBGB & 6' of 12" Sewer

CBGB & 6' of 12" Sewer

CBGB & 8' of 15" Sewer

CBGB & 6' of 12" Sewer

CBGB & 8' of 12" Sewer

CBGB & 39' of 12" Sewer

CBGB & 39' of 12" Sewer

38' of 36" C.I.B. Cur. (1) Std. Hdwll. (1) Guard Post

MHIA & 8' of 12" Sewer Lt. 16' Rt. of C.I.B. Cur. Rt. (1) Std. Hdwll. (1) Guard Post

Remove Trees This Sheet
6"-12" Dia. 1 Each
12"-24" Dia. 2 Each
25"-36" Dia. 1 Each

Clearing for Peat Storage
±89.4 Acres Clearing

Clearing & Grubbing This Sheet (Other)
±1.1 Acres Clearing
176.36 Sqs. Grubbing

60' Dwy. Open'g.
25 Cyds. Emb.
60 Tons C.A. Appr.
10 Tons B.C.M.C.

NEWTON

MUCK

ROSELAWN

Slope Stake Lines

8" AGG. Base Course, Conc. Curb & Gutter Det. # BA, B.C.M.C. @ 330#/ Syd. (27' R.R.)

W-26-1

POE
~STA 1535+50

57

56

58

CB6B & 6' of 12" Sewer

CB6B & 39' of 12" Sewer

CB6B & 7' of 12" Sewer

MHIA & 222' of 12" Sewer

CB6B & 33' of 12" Sewer

CB6B & 9' of 12" Sewer

CB6B & 7' of 12" Sewer

CAGB & 39' of 12" Sewer

Place & F.B. Ditch 50 CYDS Exc. & Waste

Slope Stake Line

Clearing for Peat Storage

ROSE LAWN

MUCK

SAUGATUCK

1" Base Course, Conc. Curb & Gutter Det. BA B.C.N.C. @ 330#/SYD (47' F-F)

Prop. Fl. 1142.0

Prop. Fl. 1146.9

Prop. Fl. 1147.0

Prop. Fl. 1142.6

Prop. Fl. 1147.3

Prop. Fl. 1147.4

Prop. Hdwll. Fl. 1146.7

Prop. Fl. 1146.5

12" Sewer -0.30%

12" Sewer +0.30%

MUCK Elc. Muck Method # A-1

For Quantities See Sh. #17

W-26-1