

**GOGEBIC COUNTY ROAD COMMISSION
BIDS FOR SEAL COAT APPLICATION INCLUDING MATERIALS**

DUE THURSDAY, MARCH 22, 2018 @ 1:00 P.M. CST

Estimated Quantities

10,970 Syds - Double Chip Seal

213,217 Syds - Single Chip Seal

Option 1:

Per single seal coat Crs-2 and 29A \$ _____ per sq. yd.
(Specify Aggregate: Natural or Slag): _____

Option 2:

Per double seal coat Crs-2 and 29A \$ _____ per sq. yd.
(Specify Aggregate: Natural or Slag): _____

Option 3: (alternate bid – Explain)

Fog Seal Application

Fog seal to be used as an option on selected roads on a per square yard basis

Fog Seal (CSS-1H)-----\$ _____ per sq.yd.

Fog Seal (Alternate)-----\$ _____ per sq.yd.

Equipment:

All equipment must meet the requirements under Section 505 of MDOT's 2012 Standard Specifications for Construction, except as modified herein:

Pressure Distributor:

The pressure distributor shall have a computerized application rate and speed control device interconnected with the asphalt emulsion pump such that the specified application rate will be supplied at any speed. This control shall have a radar ground sensing device that controls the application rate regardless of ground speed or spray bar width. The pressure distributor shall be capable of maintaining the asphalt emulsion at the specified temperature. The spray bar nozzles shall produce a uniform fan spray, and the shutoff shall be instantaneous with no dripping. Each pressure distributor shall be capable of maintaining the specified rate of application within +/- 0.015 gallons per square yard for each load.

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Aggregate Chip Spreader:

Use a self-propelled chip spreader shall be a computerized application rate and speed control device capable of uniformly spreading the cover material at the designated rate. Equipped with pneumatic tires and with a screen to remove oversized material.

Compacting Equipment:

Use two (2) self-propelled, pneumatic-tired rollers, weighing not less than 8 tons.

Broom/Sweeper:

The use of rotary-powered brooms are required to remove the loose material from the surface to be treated and for removing loose aggregate after the work has been completed.

Miscellaneous:

Provide all equipment including hand tools, thermometers, etc. Equip all self-propelled equipment with at least one approved, flashing, rotating or oscillating amber light, visible to traffic in all directions. Equip chip spreaders with one such light on each side of the spreader.

Pre-paving Meeting:

A pre-paving meeting will be held on site with the Engineer before beginning work to discuss the following:

- Work schedule: Work to be scheduled by June, and completed by August 1.
- Traffic control plan.
- Equipment calibration and adjustments.
- Condition of materials and equipment, including transport units.
- Mix design(s) including job-mix-formula (JMF); coarse aggregate gradation; application rate of asphalt emulsion and coarse aggregate (by stationing and course).
- Contractor's quality control plan (method of yield check, etc.).

General Placement Operations:

1. Perform all surface preparation that may affect the performance of the chip seal. Clean all pavements to be treated with a motorized power broom to remove all loose material. Clean all depressions not reached by the power broom using a hand broom. Thoroughly clean the outer edges of the pavement or shoulder.
2. Keep all vehicles and equipment involved in the chip sealing operation as close to each other as practical. Keep the asphalt emulsion distributor within 150 feet of the chip spreader. Do not place cover aggregate on asphalt after it breaks.
3. Locate longitudinal construction joints as follows:
 - Double chip seal-place the joint to overlap the centerline by 6 inches for the first course and place the joint on the centerline for the second course.
 - Full width application shall be allowed as directed by the Engineer.
 - Single application chip seal: full width application will not be allowed.

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4. Perform rolling within five minutes of placing the coarse aggregate and before the asphalt has begun to cool. Make a minimum of two complete passes over the coarse aggregate. A complete pass is one trip, forward and backward, over the same path. Overlap each pass by one-half the width of the roller. Use a minimum of two rollers and proceed in a longitudinal direction at a speed not greater than 5 mph.
5. Use the appropriate equipment and perform an initial sweeping of the completed chip seal to remove excess loose aggregate before the end of each day's work or within 24 hours with the approval of the County Inspector. For single chip seal, sweep beyond the edge of pavement to help prevent migration of loose aggregate back onto the pavement. Do not sweep loose aggregate into curbed areas or intersections.
6. Before opening to traffic, place W8-7 (LOOSE GRAVEL) signs with 35 mph speed plaques mounted below. Place these signs throughout the completed work, beginning 50 feet before the treated area in the direction of oncoming traffic at a maximum spacing of 0.5 mile.
7. Before beginning the chip seal operation, protect all utility castings, monument boxes and raised pavement markers using tarpaper or other approved materials. Remove these protective coverings before sweeping and opening to traffic.
8. Allow the new surface sufficient cure time to prevent damage by vehicle tires before opening to traffic. Protect the new surface from potential damage at intersections and driveways. Repair all traffic damage to the new surface at the Contractor's expense.

Submittals:

Upon completion the contractor shall provide an inspector's daily report for each day work was performed containing the following information:

- Road Name / project number
- Date / air temperature / pavement temperature / humidity
- Asphalt Emulsion temperature
- Yield checks on asphalt emulsion
- Yield checks on coarse aggregate
- Length / Width / Total Square Yards
- Contractor's Signature

Other required documentation:

- Aggregate Certification or Shipment of Tested Stock Report (MDOT Form 1922).
- Asphalt Emulsion/ MultiGrade Asphalt: per current acceptance procedures.

The above submittals shall be placed in order by date in a folder with the certification statement in the back.

Application:

The contractor shall apply (CRS-2) at a temperature 170°F min, immediately followed by a uniform application of coarse aggregate. Asphalt emulsion (CRS-2) shall be as specified in Section 904 of MDOT's 2012 Standard Specifications for Construction

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Asphalt Emulsion:

Asphalt emulsion and coarse aggregate target rates shall be per Section 502 of MDOT's 2012 Standard Specifications for Construction.

CRS-2 shall be spread at a residual target rate (after correction for temperature expansion and distillate loss) of .40 gallons per square yard. (min application rate .39). If the target rate of .40 gallons per square yard is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the contractor shall notify the Road Commission's inspector immediately and prior to application. Upon approval of changes by the engineer, the contractor shall then document the new JMF rate(s) by stationing. All truck demurrage will be the responsibility of the contractor.

Coarse Aggregate Application Rates:

Double Chip Seal: Base Course material to be used will be 5/8" chip stone at an application rate of approximately 35 pounds per square yard. Gradation of base course ship stone shall be as follows:

Sieve	% Passing Gradation
3/4"	90-100
1/2"	20-55
3/8"	0-15
#4	0-5
#200	0-2

Top course for Double Chip Seal shall be 29A (Aggregate or Slag). 29A placement rate shall be within the range of 20 to 24 pounds per square yard. With a target rate of 22 pounds per syd. If the target rate is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the contractor shall notify the Road Commission's inspector immediately and prior to application. Upon approval of changes by the engineer, the contractor shall then document the new JMF rate(s) by stationing. All truck demurrage will be the responsibility of the contractor.

Single Chip Seal: Cover material to be used will be 29A (Aggregate or Slag). 29A placement rate shall be within the range of 20 to 24 pounds per square yard. With a target rate of 22 pounds per syd. If the target rate is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the contractor shall notify the Road Commission's inspector immediately and prior to application. Upon approval of changes by the engineer, the contractor shall then document the new JMF rate(s) by stationing. All truck demurrage will be the responsibility of the contractor.

Stockpiling Aggregate Material:

The GCRC will provide several stockpile locations throughout the county; all provided stockpile locations would be located on property in which the Road Commission owns or has easement to use. If the contractor wishes to stockpile their material at a location not provided by the Road Commission, they would be doing so at their own risk and expense.

Maintaining Traffic:

The contractor shall provide all equipment, labor, and materials to properly control traffic throughout the length of the project. All traffic control feature shall be in accordance with the current Michigan Manual of Uniform Traffic Control Devices to protect the traveling public, their workforce and the work.

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Delayed Acceptance:

After 30 days from the time of placement of the chip seal, the Road Commission's inspector, in the company of the contractor, shall inspect the work for any deficiencies. These deficiencies will be limited to surface flushing, surface patterns, or loss of stone retention. All correction work shall be accomplished within seven (7) working days after notification or an agreed upon date. The contractor shall furnish the materials, equipment and labor to make the identified corrections to the satisfaction of the Road Commission at no additional cost to the Road Commission.

Measurement and Payment:

Completed work, as measured, will be paid for at the contract unit price for the following contract items:

Pay Item	Pay Unit
Single Chip Seal (materials)	Square Yard
Double Chip Seal (materials)	Square Yard

Payment for the chip seal (as selected by GCRC from the prices for each material combination) includes all equipment, labor and materials for placement of a single application of asphalt emulsion and coarse aggregate, brooming, establishment of yield intervals, maintaining traffic, and delayed acceptance inspection.

No adjustments in the unit price will be made for approved rate of asphalt emulsion and/or coarse aggregate that are within the ranges identified in Asphalt Emulsion and Coarse Aggregate Application.

The contract unit price shall be payment in full for all labor and equipment needed to accomplish the work.

Fog-Seal Application Rates:

CSS-1H (at 50% dilution) shall be spread at a target rate between 0.10 and 0.15 gallons per square yard with a target rate of 0.13 gallons per square yard.

If the target rate of 0.13 gallons per square yard is not the optimum application rate due to the gradation of the coarse aggregate or due to existing surface conditions of the pavement, the contractor shall notify the Road Commission's inspector immediately and prior to application. Upon approval of changes by the engineer, the contractor shall then document the new JMF rate(s) by stationing. All truck demurrage will be the responsibility of the contractor.

Fog Seal shall be placed 24-48 hours after completion of chipseal and brooming.

Payment for the fog seal (as selected by GCRC from the prices for each material combination) includes all equipment, labor and materials for placement of a single application of asphalt emulsion, brooming before fogging, establishment of yield intervals.

No adjustments in the unit price will be made for approved rate of asphalt emulsion and/or coarse aggregate that are within the ranges identified in Asphalt Emulsion and Coarse Aggregate Application.

The contract unit price shall be payment in full for all labor and equipment needed to accomplish the work.

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Measurement and Payment:

Completed work, as measured, will be paid for at the contract unit price for the following contract items:

Pay Item	Pay Unit
Fog Seal (materials)	Square Yard

Payment for the fog seal (as selected by GCRC from the prices for each material combination) includes all equipment, labor and materials for placement of a single application of asphalt emulsion, brooming before fogging, establishment of yield intervals, maintaining traffic, and delayed acceptance inspection.

No adjustments in the unit price will be made for approved rate of Fog-Seal that are within the ranges identified in Fog-Seal Application Rates.

The contract unit price shall be payment in full for all labor and equipment needed to accomplish the work.

Tentative List of Roads

1. Lake Road (Ironwood Township):	1.1 miles – Single Chipseal (~22' wide: 14,197 syds)
2. Airport Road (Ironwood Township):	2.85 miles – Single Chipseal (~22' wide: 36,784 syds)
3. Chaney Lake Road (Wakefield Township):	1.8 miles – Single Chipseal (~22' wide: 23,232 syds)
4. Puritian Road (Bessemer Township):	0.85 miles – Single Chipseal (~22' wide: 10,970 syds)
5. Johnson Road (Bessemer Township):	1.85 miles – Single Chipseal (~22' wide: 23,877 syds)
6. Cisco Lake Road (Watersmeet Township):	3.57 miles – Single Chipseal (~22' wide: 46,077 syds)
7. Indian Village Road (Watersmeet Township):	3.5 miles – Single Chipseal (~22' wide: 45,173 syds)
8. Old US-2 (Wakefield Township):	1.0 miles- Single Chipseal (~22' wide: 12,907 syds)
9. South Geneva Road (Bessemer Township):	0.85 miles – Double Chipseal (~22' wide: 10,970 syds)
	17.37 miles Total

**** Note: This is the GCRC tentative list of roads. Specific lengths and quantities are contingent on funding sources GCRC is working to secure. Adjustments may be necessary once funding levels are known.*

Bidder shall provide proof of insurance including but not limited to: public liability and property damage, workers compensation, unemployment and all coverage required by law. Furthermore, bidder shall provide indemnification for Gogebic County Road Commission for any and all claims arising as a result of operations in the performance of the above services.

Bid prices shall be valid for a period of one year from date of award of bid. Bids may be extended for a second year upon mutual agreement of the bidder and the Board.

The Commission reserves the right to accept or reject any or all proposals, to waive irregularities and or informalities and to make an award as may appear to them to be in the best interest of the Gogebic County Road Commission.

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BID FORM

BID FIRM FOR: _____ DAYS

DISCOUNTS: _____ TERMS OF PAYMENT: _____

DELIVERY LEAD TIME: _____

COMPANY NAME: _____

ADDRESS: _____

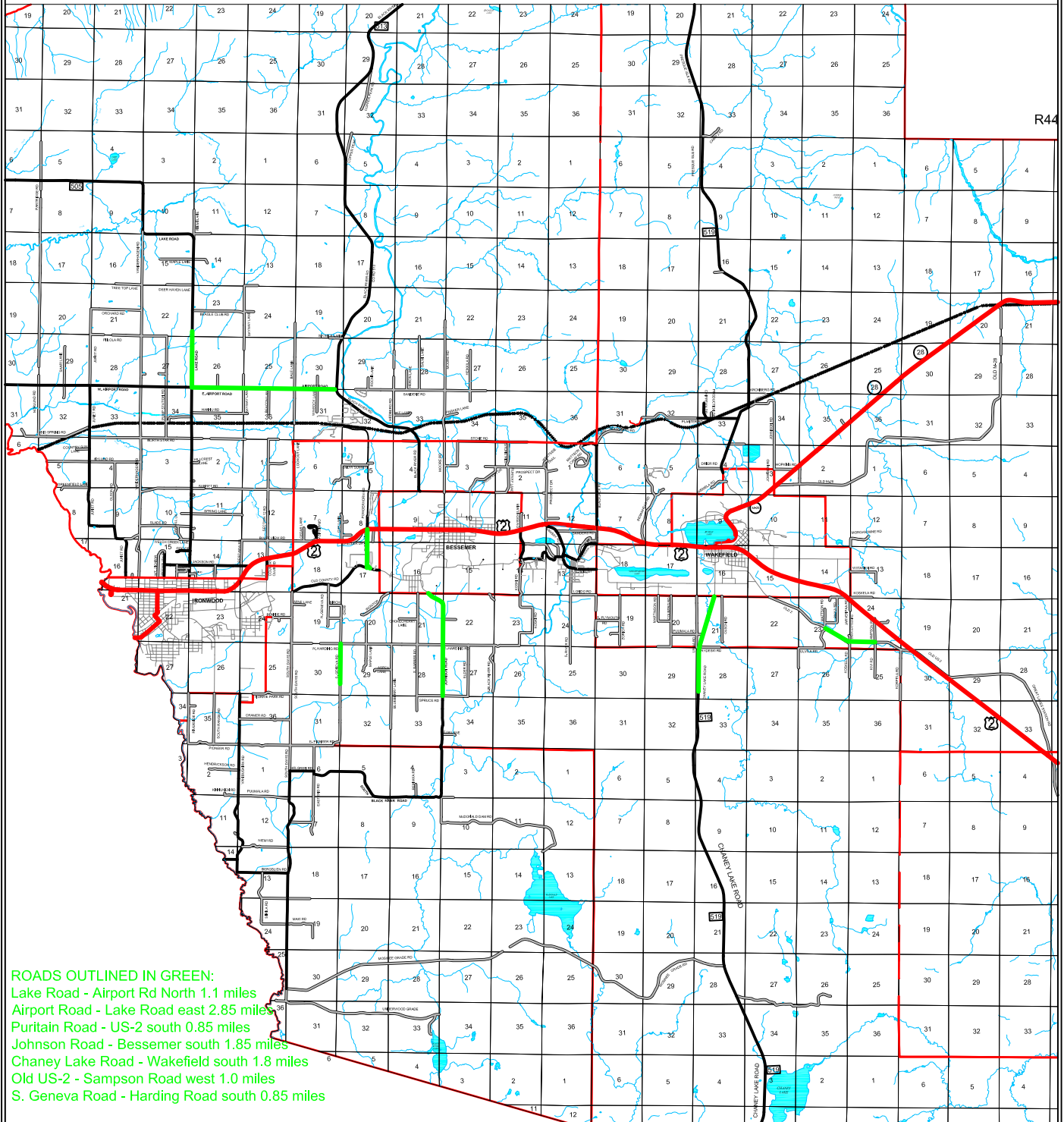
PHONE: _____ FAX: _____ EMAIL: _____

BIDDER'S NAME: _____ TITLE: _____

BIDDER'S SIGNATURE: _____ DATE: _____

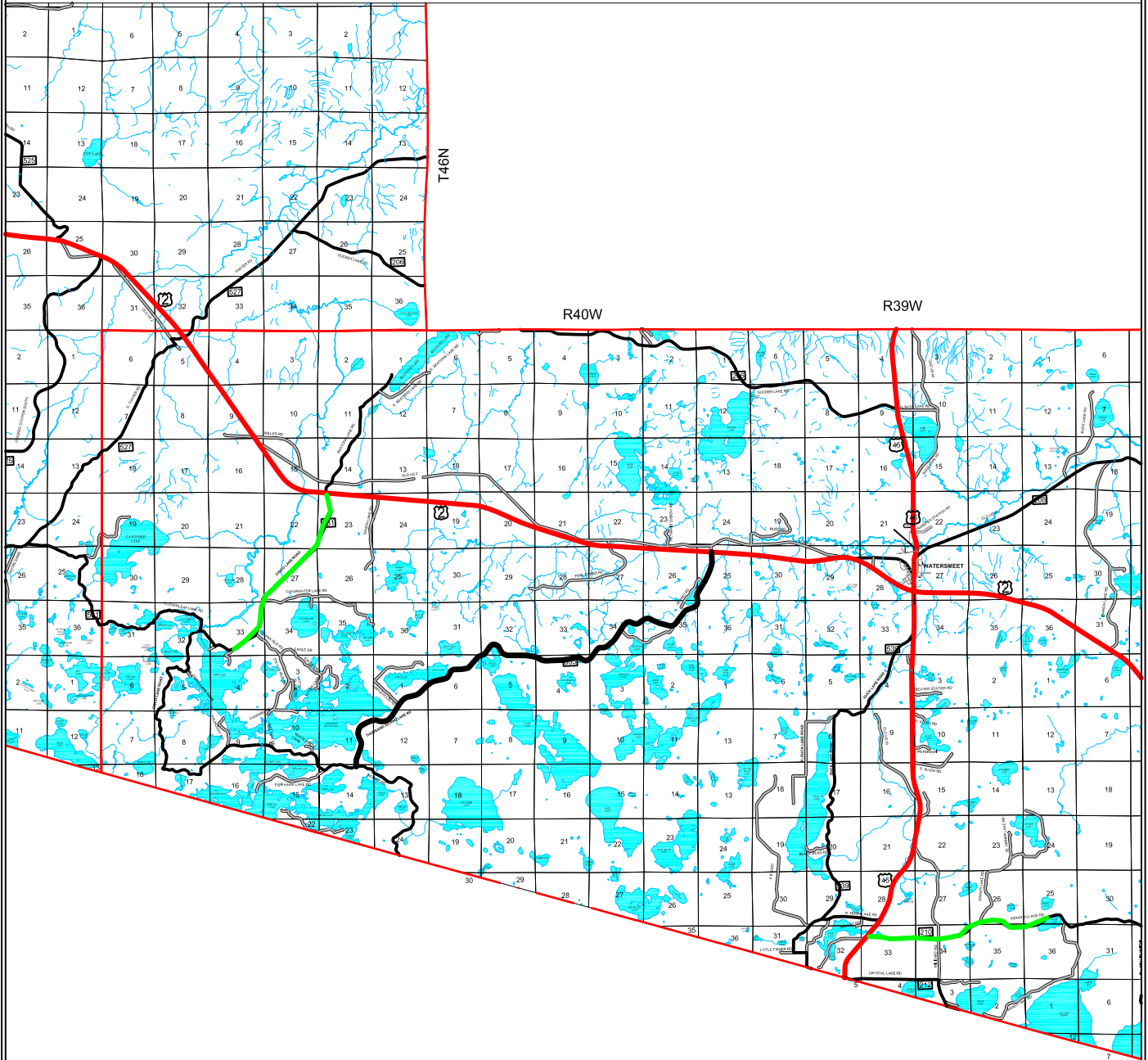
GOGEBIC COUNTY ROAD COMMISSION

2018 CHIP SEAL PROJECTS - GOGEBIC COUNTY WEST SIDE



GOGEBIC COUNTY ROAD COMMISSION

2018 CHIP SEAL PROJECTS - GOGEBIC COUNTY EAST SIDE



ROADS OUTLINED IN GREEN:
CiscoLake Road - US-2 south 3.57 miles
Indian Village Road - US-45 east 3.5 miles