

Snover Road Bridge #12662 over Beach Drain
Bridge Design
Letting Date – March 12th, 2026 8:45am

Consultant: _____

Address: _____

Sign & Print: _____

Date: _____

Phone: _____

Email: _____

Snover Road Bridge #12662 over the Beach Drain

Cost for Design Package: \$ _____

Proposed Replacement Structure: \$ _____

Estimated Construction Cost: \$ _____

Bids are to be submitted on the Road Commission forms in a plainly marked, sealed envelope. No faxed or emailed bids accepted. Plans and specifications are available online at www.tuscolaroad.org. Please contact Brent Dankert, Tuscola County Highway Engineer at 989-233-7472 or highwayengineer@tuscolaroad.org with any questions. Any addenda must be noted and initialed.

If you are interested in bidding and have downloaded plans from the website, please email highwayengineer@tuscolaroad.org and ahewitt@tuscolaroad.org to be added to the plan holders list to make sure you receive addendums.

Proposal Intent

The Tuscola County Road Commission seeks to hire a qualified, professional engineering team to provide design services, environmental permitting, and preparation of plans, specifications, and preliminary estimates of cost in accordance with MDOT standards for the replacement of Structure No. 12662, Snover Road over the Beach Drain. The TCRC expects consultants proposing on this project to have the qualifications, experience, personnel, and overall understanding of the work.

Background

Structure No. 12662, Snover Road over Beach Drain, is nearing the end of its life and needs to be replaced. The Snover Road Bridge over the Beach Drain is a single span structure totaling 25.5 feet in length. This structure carries 2 lanes of traffic and has an inside width of 28 feet. The bridge superstructure consists of thirteen steel I-beams with chip sealed HMA wearing surface. Corrugated steel deck panels left in place on deck bottom with light corrosion. Both reference line joints are paved over with faint reflective cracking. The railing along each side of structure consists of W-beam guardrail mounted to steel posts anchored to the fascia beams. Fascia beams are spliced and longer than the interior beams and have been repainted. Beams 5S-9S have additional sections of welded bottom flange repair plates. Beams 6S-8S, 12S and 13S have plate web repairs. Beams 5S and 9S have bolted repairs of holes in the web near the west backwall. The substructures consist of concrete cantilever abutments with scaling along the waterline. The east abutment has an open vertical and horizontal crack with settlement occurring. This abutment is being monitored. HMA approaches have been chip sealed. See attachments for MDOT Local Bridge Program submittal packet.

Basic Information:

- The bridge has a length of 25.5 feet and a clear width of 28 feet.
- Snover Road is a Rural Local Road with average daily traffic of 384 vehicles per day.
- The bridge is posted for load at 29 – 51 – 66 tons currently.
- Snover Road received a Scrub with Fog Seal in 2023 over 2007 HMA Bit Mat
- The Snover Road Bridge #12662 over the Beach Drain received funding for replacement in 2028 through the MDOT Local Bridge Program

- **Final plans, special provisions, preliminary estimates of cost and EGLE permitting must be completed for a fall of 2027 bid letting and construction in 2028**

Design Requirements

- The proposed bridge design must follow all MDOT Local Agency design standards and guidelines and include the following:
 - A clear width of 32 feet inside-of-rail to inside-of-rail
 - Minimum of a 50-foot bridge approach
 - Tuscola County Road Commission standard name plate
 - A final plan set with all necessary special provisions associated to the construction of the proposed design
- Traffic shall be maintained via a detour including M-24. Tuscola County Road Commission will apply for the MDOT permit for the detour route once MOT is finalized.
- Final Deliverables
 - A signed and sealed completed plan set, a copy of all special provisions, load rating calculations and computations, a preliminary estimate of construction cost completed in MERL, and an electronic copy of all design files.
 - Costs to include all soil borings, hydraulic analysis, and any other services necessary for a complete design.
 - Minimum of one soil boring per side to a minimum depth of 50 feet, 75 feet if piles are utilized.

The following items shall not be included in the proposal:

- Any cost or qualifications for ROW or land acquisition. If these services are required, a cost will be determined prior to beginning the work.
- Any cost related to asbestos/lead testing. The Tuscola County Road Commission will be responsible for obtaining any testing or related items if deemed necessary.

Proposal Submittal

The following information is required of the Consultant in response to this Scope of Services. Failure to provide all of the information will be caused to consider the proposal non-responsive and reject the proposal.

- Cover page of RFP with pricing and contact info (does not count towards page limit)
- Proposal (Max 6 pages)
 - Proposed structure type and why it is both the most cost effective and has the longest life expectancy.
 - Includes Understanding of Services
 - Includes Qualifications of Team
 - Includes Prior Experience / Past Performance
- Design Fee and Breakdown with hours (does not count towards page limit)
- Resumes of Key Personnel (does not count towards page limit)

Scoring

The scoring of the submitted proposal will be based on the following criteria:

25%	Understanding of Services
30%	Qualifications of Team
20%	Design Fee
20%	Prior Experience / Past Performance
5%	Location

Award and Payment

Award will be made in the best interest of the Road Commission. Payment will be made by monthly invoicing. The Tuscola County Road Commission job number 490-2014 shall be included on all invoices along with the project name. At a minimum the survey and soil borings shall be completed in 2026. Any questions should be made to Brent Dankert at highwayengineer@tuscolaroad.org

Attachments

- Agreement
- Title IV and VI Compliance
- Section 9.7 Insurance Requirements
- Snover Road Bridge 2025 Local Bridge Programming Application
- Existing structure Plans
- Detour Route
- Steel Beam Repair plans 1-6-23
- Special Provision for Structure Name Plate
- Asbestos and Lead Survey, Sampling, Testing Report

Liability

The consultant shall at all times exercise extreme care and shall assume all liability for any damages resulting from his operations and shall hold the Tuscola County Road Commission harmless from any such claims or damages.

The consultant must obtain a Tuscola County Right of Way Permit before any work can begin.

The successful bidder must also furnish certificates or policies giving satisfactory evidence of insurance coverage in accordance with *Tuscola County Road Commission Policies and Procedures Manual Section 9.7 Insurance Requirements*, to insure adequate payment for any damage caused by his operations.

The consultant shall, prior to the start of work, file with the Tuscola County Road Commission a certificate that he carries Workmen's Compensation Insurance. The attached certificate of insurance is required for the successful bidder or bidders.

NON-COMPLIANCE WITH PROJECT SPECIFICATION PROVISIONS

Any variation from the specifications of the project herein without written approval from the Tuscola County Road Commission and/or its authorized representative may result in, at the discretion of the Tuscola County Road Commission, the voiding and/or canceling of the acceptance of any contract, resulting from this project.

The Tuscola County Board of Road Commissioners reserves the right to accept or reject any or all proposals and to re-advertise or to accept the proposal, that in their opinion, is in the best interest of Tuscola County.

AGREEMENT

TUSCOLA COUNTY ROAD COMMISSION – 1733 S. MERTZ ROAD, CARO, MI 48723
PAGE 1 OF 1

This agreement made this _____ day of _____, 20_____
by and between the Board of Tuscola County Road Commissioners and _____
_____.

1. _____ hereby agrees to undertake the following work
in the status of an independent contractor performing the following job:

_____.

2. Said contractor, _____, shall at all
times exercise extreme care and shall assume any and all liability for property damage or bodily
injury resulting from the above operation by this employees, agents, assigns, sub-contractors
and anyone else acting under his control or direction; and will indemnify, hold harmless and
defend the Tuscola County Road Commission, its Commissioners or employees from any and all
claims for property damage or bodily injury arising out of this Agreement.

3. Said contractor, _____, while
engaged in said job shall maintain and furnish certificates of insurance, naming the Tuscola
County Road Commission and Commissioners as an additional insured under the policy,
evidence of insurance coverage in accordance with *Tuscola County Road Commission Policies
and Procedures Manual Section 9.7 Insurance Requirements*, and shall furnish the Tuscola
County Road Commission copies of said certificates of insurance prior to commencing any work
on said project.

Additionally, said contractor, _____, shall furnish
prior to start of said job with the Board of Tuscola County Road Commissioners, a policy of
insurance certifying he carries and has in effect worker's compensation insurance on all those
required to be covered under Michigan law.

4. The address of the Board of Tuscola County Road Commissioners is 1733 S, Mertz Rd., Caro, MI
48723.

Witnessed:

Board of Tuscola County Road Commissioners

Contractor

Contractor bid will not be accepted unless the enclosed Agreement is Signed and Returned with your bid.

TUSCOLA COUNTY ROAD COMMISSION

TITLE IV COMPLIANCE

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor shall comply with the Regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation, Title 49, code of Federal Regulations, Part 21 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment.
3. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulation, including employment practices when the contractor covers a program set forth in Appendix B of the Regulations.
4. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, or national origin.
5. Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Tuscola County Road Commission to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses this information, the contractor shall so certify to the State highway department, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
6. Sanctions for Non-compliance: In the event of the contractor's non-compliance with the non-discrimination provisions of this contract, the Tuscola County Road Commission Shall Impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a) Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b) Cancellation, termination, or suspension of the contract, in whole or in part.
7. Incorporation of Provisions: The contractor shall Include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives Issues pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Tuscola County Road Commission may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event u contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Tuscola County Road Commission to enter into such litigation to protect the interests of the County, and, in addition, the contractor may request the State highway department to enter into such litigation to protect the interests of the State and/or the United States to enter into such litigation to protect the interests of the United States.

"The TUSCOLA COUNTY ROAD COMMISSION, in accordance with Title VI of the Civil Rights Act of 1964, 78-252, 42 U.S.C. 2000d-222d-4, the Civil Rights Act of 1987, P.L. 100-259, and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, Non-discrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise firms will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of Race, Color, Sex, Age, National Origin, or Handicap in consideration for an award. For additional compliance information, please see Appendix A."



9.7. INSURANCE REQUIREMENTS

Agriculture Hauling Permit	
Type of Insurance	Notes
None	As required by Statute per the Attorney General Opinion

Oversize / Overweight Permits						
Type of Insurance	Coverage Limits	Addl. Insured	Waiver of Subrogation	Primary/Non Contributory	Claims Made	Indemnification
Auto Liability	Michigan No Fault Coverage/Property Protection (PPI) \$1M Statutory Limit	No	No	No	No	Yes

Driveway Permit	
Individual Homeowner Permit Holder - Residential Driveway	
Type of Insurance	Notes
None	Advise homeowner they will be responsible for any damage done to the ROW
	Advise homeowner they will be responsible for any injuries as a result of the work in the ROW
	Advise homeowner they will be required to indemnify the RC as outlined in the ROW permit

Contractor Permit Holder - Commercial or Residential Driveway

Type of Insurance	Coverage Limits	Addl. Insured	Waiver of Subrogation	Primary/Non Contributory	Claims Made	Indemnification
Commercial General Liability (CGL)	Each Occurrence	\$2,000,000	No	No	No	Yes
	Products Comp/Op Aggregate	\$3,000,000				
	General Aggregate	\$3,000,000				

Special Event / Parade Permits						
Type of Insurance	Coverage Limits	Addl. Insured	Waiver of Subrogation	Primary/Non Contributory	Claims Made	Indemnification
Commercial General Liability (CGL)	Each Occurrence	\$2,000,000	Yes	Yes	Yes	No
	General Aggregate	\$2,000,000				
Notes		For special events requiring participant waivers - Endeavor to have the RC added to the waiver. If alcohol is being served, host liquor liability is required.				

General Right of Way Permit	
Individual Homeowner Permit Holder	
Type of Insurance	Notes
None	Advise homeowner they will be responsible for any damage done to the ROW
	Advise homeowner they will be responsible for any injuries as a result of the work in the ROW
	Advise homeowner they will be required to indemnify the RC as outlined in the ROW permit

Contractor Permit Holder

Type of Insurance	Coverage Limits	Addl. Insured	Waiver of Subrogation	Primary/Non Contributory	Claims Made	Indemnification
Commercial General Liability (CGL)	Each Occurrence	\$2,000,000	Yes	Yes	Yes	No
	Products Comp/Op Aggregate	\$3,000,000				
	General Aggregate	\$3,000,000				
Auto Liability	Michigan No Fault Coverage/Property Protection (PPI) \$1M Statutory Limit	No	No	No	No	Yes
Professional Liability, as required	Each Occurrence & Aggregate	\$2,000,000	N/A	N/A	N/A	Yes

Umbrella may be used to meet limit requirements: Commercial General Liability & Auto Liability
 Retro Date for Professional Liability must be prior to issuing permit date.
 It is recommended the Self Insured Retention (SIR) for CGL be no greater than \$25,000.

LOCAL BRIDGE PROGRAM CALL FOR APPLICATIONS FUNDING YEAR 2028

NOTE TO USERS: Please be sure that all structure information is correct on your SI&A form in MiBridge before submitting your application. Applications received after April 1st, 2025 will not be accepted. For assistance, please call Keith Cooper at (517) 331-1395 or Rita Levine at (517) 335-4528.

Instructions: (This form requires Adobe Acrobat Standard or Professional and is not enabled for use in the free Adobe Reader. If you only have access to Adobe Reader, please submit paper documents.)

1. Complete the required application information below.
2. Click on ADD APPLICATION DOCS button to add your signed resolution, cost estimate, map showing structure location and detour route, narrative description of project, bridge inspection documents and photos of the structure.
3. When you have finished, click on SAVE AS to keep a copy for each structure you are submitting.
4. Click on SUBMIT to email your application to MDOT-DesignLAP-Bridge@michigan.gov.

*** Multiple structure applications need to be applied for as individual structures and choose "Multiple PM" for "Type of Work".**

APPLICATION INFORMATION (REQUIRED)

Agency Name:

Structure Number:

County:

Region:

Facility Carried:

Feature Intersected:

Cost Estimate (Bridge and Approach construction cost):

Type of Work:

Local Match (Minimum 5%):

(This form requires Adobe Acrobat Standard or Professional and is not enabled for use in the free Adobe Reader. If you only have access to Adobe Reader, please submit paper documents.)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12662

BRIDGE SAFETY INSPECTION REPORT

Facility SNOVER ROAD	Latitude / Longitude 43.3508 / -83.3937	MDOT Structure ID 79311H00009B010	Structure Condition Fair Condition(5)	
Feature BEACH DRAIN	Length / Width / Spans 25.5 / 28 / 1	Owner County: Tuscola(79)		
Location SEC 22-27 FREMONT TWP	Built / Recon. / Paint / Ovly. 1935 / 1971 / 2008 / 2008	TSC Huron(28)	Operational Status P Posted for load(295166)	
Region / County Bay(4) / Tuscola(79)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 06/11/2024 / JX37	Scour Evaluation 5 Stable w/in footing	

NBI INSPECTION

JX37

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
James Brock	ROWE Professional Services Company	12	06/11/2024

GENERAL NOTES

Assisted by: Finn Tobiczyk
Established directions: Snover Rd E/W, Beach Drain N/S
TCRC ID: B-FRE-L-5

Weight limit signs in place on both ends of bridge	YES
Weight limit shown on signs at bridge	426176
Required advance warning weight limit signs in place	YES
Weight limit shown on advance warning signs	426176

DECK

	06/22	06/23	06/24	
1. Surface (SIA-58A)	7	7	7	Chip sealed HMA surface along traveled lanes, original HMA surface visible along outer edges. No deficiencies noted. Minor vegetation growth along northern edge under railing. (06/24) Chip sealed HMA surface along traveled lanes, original HMA surface visible along outer edges. No deficiencies noted. (06/23) HMA surface. Full length longitudinal crack along centerline, partially sealed. Random transverse cracking in each lane up to 1/4" wide. (06/22)
2. Expansion Joints	N	N	N	(06/24) (06/23) (06/22)
3. Other Joints	N	N	N	Paved over with chip sealed HMA. Faint reflective cracking above reference lines. (06/24) Paved over with chip sealed HMA. (06/23) Reflective crack along the west abutment reference line, partially sealed. (06/22)
4. Railings	6	6	6	W-Beam guardrail mounted on steel I-posts that are welded to steel I-struts and connected to outer two fascia beams. No offset blocks. Minor impact damage to top of north rail near midspan. (06/24) W-Beam guardrail mounted on steel I-posts that are welded to steel I-struts and connected to outer two fascia beams. No offset blocks. Impact damage to top of north rail near midspan. (06/23) W-Beam guardrail mounted on steel I-posts that are welded to steel I-struts and connected to outer two fascia beams. No offset blocks. Impact damage to top of north rail. (06/22)
5. Sidewalks or Curbs	N	N	N	(06/24) (06/23) (06/22)
6. Deck Bottom Surface (SIA-58B)	6	6	6	Corrugated steel deck panels with light corrosion at a few pan drain holes and seams. Corrosion is heavier near each abutment reference line. (06/24) Corrugated steel deck panels with light corrosion at a few pan drain holes and seams. Corrosion is heavier near each abutment reference line. (06/23) Corrugated steel deck panels with light corrosion at a few pan drain holes and seams. Corrosion is heavier near each abutment reference line. (06/22)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12662

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
SNOVER ROAD	43.3508 / -83.3937	79311H00009B010	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
BEACH DRAIN	25.5 / 28 / 1	County: Tuscola(79)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
SEC 22-27 FREMONT TWP	1935 / 1971 / 2008 / 2008	Huron(28)	P Posted for load(295166)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Bay(4) / Tuscola(79)	3 Steel / 02 Multi Str Non Comp	06/11/2024 / JX37	5 Stable w/in footing	

7. Deck (SIA-58) 6 6 6 Surface: Chip sealed HMA surface along traveled lanes, original HMA surface visible along outer edges. No deficiencies noted. Minor vegetation growth along northern edge under railing.
 Bottom: Corrugated steel deck panels with light corrosion at a few pan drain holes and seams. Corrosion is heavier near each abutment reference line.
 Fascias: Steel angle edge dams, no deficiencies noted. (06/24)
 Surface: Chip sealed HMA surface along traveled lanes, original HMA surface visible along outer edges. No deficiencies noted.
 Bottom: Corrugated steel deck panels with light corrosion at a few pan drain holes and seams. Corrosion is heavier near each abutment reference line.
 Fascias: Steel angle edge dams, no deficiencies noted. (06/23)
 Surface: HMA surface. Full length longitudinal crack along centerline, partially sealed. Random transverse cracking in each lane up to 1/4" wide.
 Bottom: Corrugated steel deck panels with light corrosion at a few pan drain holes and seams. Corrosion is heavier near each abutment reference line.
 Fascias: Steel angle edge dams, no deficiencies noted. (06/22)

8. Drainage
 Off structure. (06/24)
 Off structure. (06/23)
 Off structure. (06/22)

SUPERSTRUCTURE

06/22 06/23 06/24

9. Stringer (SIA-59) 4 4 5 (13) Painted steel I-beams. The fascia beams are spliced and longer than the interior beams. Repainted. Beams 5s, 6s, 7s, 8s and 9s have additional sections of sporadic bottom flange repair plates varying in length (welded). Beams 6s, 7s, 8S, 12S and 13S also have plate web repairs. Beam 5S: bolted repair (1"x7" hole in lower portion of web approximately 1'-9" from west backwall.) Beam 9S: bolted repair (1"x9" hole in lower portion of web approximately 13" from west backwall). Pack rust on the bottom flange of beams 6S and 7S at the west abutment bearing location. Missed painting 1 beam end at the east abutment. (06/24)
 (13) Painted steel I-beams. The fascia beams are spliced and longer than the interior beams. Repainted. Beams 5s, 6s, 7s, 8s and 9s have additional sections of sporadic bottom flange repair plates varying in length (welded). Beams 6s, 7s, 8S, 12S and 13S also have plate web repairs. Beam 5S: 1"x7" hole in lower portion of web approximately 1'-9" from west backwall. Beam 9S: 1"x9" hole in lower portion of web approximately 13" from west backwall. Pack rust on the bottom flange of beams 6S and 7S at the west abutment bearing location. Missed painting 1 beam end at the east abutment. (06/23)
 (13) Painted steel I-beams. The fascia beams are spliced and longer than the interior beams. Repainted. Beams 5s, 6s, 7s, 8s and 9s have additional sections of sporadic bottom flange repair plates varying in length (welded). Beams 6s, 7s, 8S, 12S and 13S also have plate web repairs. There are 5 small holes in the web of beam 5s and 9S near the west end that has been painted over. Pack rust on the bottom flange of beams 6S and 7S at the west abutment bearing location. Missed painting 1 beam end at the east abutment. (06/22)

10. Paint (SIA-59A) 6 6 6 Recent paint appears to have been applied by hand and lacking proper prep. Painted over pitting and holes. Rust beginning to form. One beam end web at the east abutment has 6' length unpainted. (06/24)
 Recent paint appears to have been applied by hand and lacking proper prep. Painted over pitting and holes. Rust beginning to form. One beam end web at the east abutment has 6' length unpainted. (06/23)
 Recent paint appears to have been applied by hand and lacking proper prep. Painted over pitting and holes. Rust beginning to form. One beam end web at the east abutment has 6' length unpainted. (06/22)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12662

BRIDGE SAFETY INSPECTION REPORT

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11. Section Loss	0	0	2	Bolted repairs at previous areas of section loss at (Beam 5S: 1"x7" hole in lower portion of web approximately 1'-9" from west backwall. Beam 9S: 1"x9" hole in lower portion of web approximately 13" from west backwall. Detailed beam measurements completed in 2022, notes uploaded in document tab.) (06/24) Beam 5S: 1"x7" hole in lower portion of web approximately 1'-9" from west backwall. Beam 9S: 1"x9" hole in lower portion of web approximately 13" from west backwall. Detailed beam measurements completed in 2022, notes uploaded in document tab. (06/23) There are 5 small holes in the web of beam 5s near the west end. There are 5 holes in the bottom of the web of beam 9s at the west end. (06/22)
12. Bearings	7	7	7	Steel plate bearings at each beam end. Steel plates have uniform surface rust throughout. (06/24) Steel plate bearings at each beam end. Steel plates have uniform surface rust throughout. (06/23) Steel plate bearings at each beam end. Steel plates have uniform surface rust throughout. (06/22)

SUBSTRUCTURE

	06/22	06/23	06/24	
13. Abutments (SIA-60)	5	5	5	Concrete cantilever abutments. There is a 3/4"-1" open vertical and horizontal crack in the east abutment below beams 3S-5S with slight settlement. Scaling on both abutment walls near waterline. Offset corner patch in the west abutment in the southwest quadrant. The east footing face is buried in very soft sediment. (06/24) Concrete cantilever abutments. There is a 3/4"-1" open vertical and horizontal crack in the east abutment below beams 3S-5S with slight settlement. Scaling on both abutment walls near waterline. Offset corner patch in the west abutment in the southwest quadrant. The east footing face is buried in very soft sediment. (06/23) Concrete cantilever abutments. There is a 3/4"-1" open vertical and horizontal crack in the east abutment below beams 3S-5S with slight settlement. Scaling on both abutment walls near waterline. Offset corner patch in the west abutment in the southwest quadrant. The east footing face is buried in very soft sediment. (06/22)
14. Piers (SIA-60)	N	N	N	(06/24) (06/23) (06/22)
15. Slope Protection	N	N	N	Over water. (06/24) Over water. (06/23) Over water. (06/22)
16. Channel (SIA-61)	6	6	6	Improved county drain, meandering alignment. The channel is approximately 3' wide upstream and downstream of the bridge. The channel widens and deepens up to 5 inches under the structure with portions of both abutments partially in the water. (06/24) Improved county drain, meandering alignment. The channel is approximately 3' wide upstream and downstream of the bridge. The channel widens and deepens up to 12 inches under the structure with both abutments partially in the water. (06/23) Improved county drain, meandering alignment. The channel is approximately 3' wide upstream and downstream of the bridge. The channel widens and deepens up to 12 inches under the structure with both abutments partially in the water. (06/22)
17. Scour Inspection	4	4	4	Previous inspection notes indicated The middle 1/3 of the east abutment footing face was exposed up to 2" with up to 2' of soft sediment blow the top of footing, during inspection footing covered with approximately 12 inches of silt. West footing is buried. (06/24) Previous inspection notes indicated The middle 1/3 of the east abutment footing face was exposed up to 2" with up to 2' of soft sediment blow the top of footing, during inspection footing covered with approximately 12 inches of silt. West footing is buried. (06/23) The middle 1/3 of the east abutment footing face was previously exposed up to 2" with up to 2' of soft sediment blow the top of footing, during inspection footing covered with approximately 12 inches of silt. West footing is buried. (06/22)

APPROACH

06/22 06/23 06/24

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12662

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Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Bay(4) / Tuscola(79)	3 Steel / 02 Multi Str Non Comp	06/11/2024 / JX37	5 Stable w/in footing	

18. Approach Pavement	7	7	7	Chip sealed HMA approaches. No deficiencies noted. (06/24) Chip sealed HMA approaches. No deficiencies noted. (06/23) HMA approach pavement with sealed transverse cracks. Partially sealed with the deck. Newer HMA wedge along east end of structure. (06/22)
19. Approach Shoulders Sidewalks	7	7	7	Gravel/grass. Minor erosion noted along the east approach shoulder at north end. (06/24) Gravel/grass. Minor erosion noted along the east approach shoulder at north end. (06/23) Gravel/grass. No distress noted. (06/22)
20. Approach Slopes				Stable grass covered slopes in all four quadrants. New approach guardrail and endings with one post missing at end of steel sheet return wall in all four quadrants. (06/24) Stable grass covered slopes in all four quadrants. New approach guardrail and endings with one post missing at end of steel sheet return wall in all four quadrants. (06/23) Stable grass covered slopes in all four quadrants. New approach guardrail and endings with one post missing at end of steel sheet return wall in all four quadrants. (06/22)
21. Utilities				(1) 1/2" diameter HDPE conduit draped behind the north beam guardrail. (1) 3" diameter galvanized steel conduit along the north fascia. Buried cable marker in SE quadrant. Aerial lines over east approach. (06/24) (1) 1/2" diameter HDPE conduit draped behind the north beam guardrail. (1) 3" diameter galvanized steel conduit along the north fascia. Buried cable marker in SE quadrant. Aerial lines over east approach. (06/23) There is a 1/2" diameter HDPE conduit draped behind the north beam guardrail. There is a 3" diameter galvanized steel conduit along the north fascia. Buried cable marker in SE quadrant. Aerial lines over east approach. (06/22)
22. Drainage Culverts				None noted. (06/24) None noted. (06/23) (06/22)

MISCELLANEOUS

Guard Rail		Other Items	
Item	Rating	Item	Rating
36A. Bridge Railings	0	71. Water Adequacy	6
36B. Transitions	0	72. Approach Alignment	6
36C. Approach Guardrail	1	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	1	High Load Hit (M)	No
		Special Insp. Equipment	2
		Underwater Insp. Method	1
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	

Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
SNOVER ROAD	43.3508 / -83.3937	79311H00009B010	Fair Condition(5)	
Feature	Length / Width / Spans	Owner	Operational Status	
BEACH DRAIN	25.5 / 28 / 1	County: Tuscola(79)	P Posted for load(295166)	
Location	Built / Recon. / Paint / Ovly.	TSC	Scour Evaluation	
SEC 22-27 FREMONT TWP	1935 / 1971 / 2008 / 2008	Huron(28)	5 Stable w/in footing	
Region / County	Material / Design	Last NBI Inspection		
Bay(4) / Tuscola(79)	3 Steel / 02 Multi Str Non Comp	06/11/2024 / JX37		

SUPPORTING IMAGES

JX37 06/11/2024



Document Name: IMG_0042.jpeg
 Category: Elevation
 Span Number:
 Comments: South elevation



Document Name: IMG_0048.jpeg
 Category: Elevation
 Span Number:
 Comments: North elevation



Document Name: IMG_6935.jpeg
 Category: Posting
 Span Number:
 Comments: Advanced posting sign east of structure



Document Name: IMG_6936.jpeg
 Category: Posting
 Span Number:
 Comments: Posting sign at west end of structure

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BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
SNOVER ROAD	43.3508 / -83.3937	79311H00009B010	Fair Condition(5)
Feature	Length / Width / Spans	Owner	Operational Status
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Region / County	Material / Design	Last NBI Inspection	
Bay(4) / Tuscola(79)	3 Steel / 02 Multi Str Non Comp	06/11/2024 / JX37	



Document Name: IMG_6940.jpeg
 Category: Posting
 Span Number:
 Comments: Posting sign at east end of structure



Document Name: IMG_6952.jpeg
 Category: Posting
 Span Number:
 Comments: Advanced posting west of structure



Document Name: IMG_6942.jpeg
 Category: Approach
 Span Number:
 Comments: West approach



Document Name: IMG_6943.jpeg
 Category: Approach
 Span Number:
 Comments: East approach

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BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
SNOVER ROAD	43.3508 / -83.3937	79311H00009B010	Fair Condition(5)	
Feature	Length / Width / Spans	Owner	Operational Status	
BEACH DRAIN	25.5 / 28 / 1	County: Tuscola(79)	P Posted for load(295166)	
Location	Built / Recon. / Paint / Ovly.	TSC	Scour Evaluation	
SEC 22-27 FREMONT TWP	1935 / 1971 / 2008 / 2008	Huron(28)	5 Stable w/in footing	
Region / County	Material / Design	Last NBI Inspection		
Bay(4) / Tuscola(79)	3 Steel / 02 Multi Str Non Comp	06/11/2024 / JX37		



Document Name: IMG_6938.jpeg
 Category: Railing
 Span Number:
 Comments: Railing, typical



Document Name: IMG_0047.jpeg
 Category: Deck
 Span Number:
 Comments: Deck bottom surface, typical



Document Name: IMG_6937.jpeg
 Category: Deck
 Span Number:
 Comments: Chip seal HMA surface above structure



Document Name: IMG_0045.jpeg
 Category: Superstructure
 Span Number:
 Comments: Steel beams, typical

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
SNOVER ROAD	43.3508 / -83.3937	79311H00009B010	Fair Condition(5)	
Feature	Length / Width / Spans	Owner	Operational Status	
BEACH DRAIN	25.5 / 28 / 1	County: Tuscola(79)	P Posted for load(295166)	
Location	Built / Recon. / Paint / Ovly.	TSC	Scour Evaluation	
SEC 22-27 FREMONT TWP	1935 / 1971 / 2008 / 2008	Huron(28)	5 Stable w/in footing	
Region / County	Material / Design	Last NBI Inspection		
Bay(4) / Tuscola(79)	3 Steel / 02 Multi Str Non Comp	06/11/2024 / JX37		



Document Name: IMG_0046.jpeg
 Category: Superstructure
 Span Number:
 Comments: Bolted steel plate repair at beam 9S



Document Name: IMG_0043.jpeg
 Category: Substructure
 Span Number:
 Comments: West abutment



Document Name: IMG_0044.jpeg
 Category: Substructure
 Span Number:
 Comments: East abutment



Document Name: IMG_6939.jpeg
 Category: Channel
 Span Number:
 Comments: Looking south off structure

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
SNOVER ROAD	43.3508 / -83.3937	79311H00009B010	Fair Condition(5)
Feature	Length / Width / Spans	Owner	Operational Status
BEACH DRAIN	25.5 / 28 / 1	County: Tuscola(79)	P Posted for load(295166)
Location	Built / Recon. / Paint / Ovly.	TSC	Scour Evaluation
SEC 22-27 FREMONT TWP	1935 / 1971 / 2008 / 2008	Huron(28)	5 Stable w/in footing
Region / County	Material / Design	Last NBI Inspection	
Bay(4) / Tuscola(79)	3 Steel / 02 Multi Str Non Comp	06/11/2024 / JX37	



Document Name: IMG_6941.jpeg
 Category: Channel
 Span Number:
 Comments: Looking north off structure

MICHIGAN DEPARTMENT OF TRANSPORTATION

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STRUCTURE INVENTORY AND APPRAISAL

Facility SNOVER ROAD	Latitude / Longitude 43.3508 / -83.3937	MDOT Structure ID 79311H00009B010	Structure Condition Fair Condition(5)	
Feature BEACH DRAIN	Length / Width / Spans 25.5 / 28 / 1	Owner County: Tuscola(79)		
Location SEC 22-27 FREMONT TWP	Built / Recon. / Paint / Ovly. 1935 / 1971 / 2008 / 2008	TSC Huron(28)	Operational Status P Posted for load(295166)	
Region / County Bay(4) / Tuscola(79)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 06/11/2024 / JX37	Scour Evaluation 5 Stable w/in footing	

Bridge History, Type, Materials

27 - Year Built	1935	
106 - Year Reconstructed	1971	
202 - Year Painted	2008	
203 - Year Overlay	2008	
43 - Main Span Bridge Type	3	02
44 - Appr Span Bridge Type		
77 - Steel Type	1	
78 - Paint Type	2	
79 - Rail Type	1	
80 - Post Type	1	
107 - Deck Type	6	
108A - Wearing Surface	6	
108B - Membrane	0	
108C - Deck Protection	0	

Structure Dimensions

34 - Skew	0
35 - Struct Flared	N
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	22.5
49 - Structure Length	25.5
50A - Width Left Curb/SW	0
50B - Width Right Curb/SW	0
33 - Median	0
51 - Width Curb to Curb	27.9
52 - Width Out to Out	28
112 - NBIS Length	Y

Inspection Data

90 - Inspection Date	06/11/2024	
91 - Inspection Freq	12	
92A - Frac Crit Req/Freq	N	
93A - Frac Crit Insp Date		
92B - Und Water Req/Freq	N	
93B - Und Water Insp Date		
92C - Oth Spec Insp Req/Freq	N	
93C - Oth Spec Insp Date		
92D - Fatigue Req/Freq	N	
93D - Fatigue Insp Date		
176A - Und Water Insp Method	1	
58 - Deck Rating	6	
58A/B - Deck Surface/Bottom	7	6
59 - Superstructure Rating	5	
59A - Paint Rating	6	
60 - Substructure Rating	5	
61 - Channel Rating	6	
62 - Culvert Rating	N	

Navigation Data

38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)

5A - Record Type	1	
5B - Route Signing	4	
5C - Level of Service	8	
5D - Route Number	00000	
5E - Direction Suffix	0	
10L - Best 3m Unclr-Lt	0	0
10R - Best 3m Unclr-Rt	99	99
PR Number		
Control Section		
11 - Mile Point		
12 - Base Highway Network	0	
13 - LRS Route-Subroute	0000037900	16
19 - Detour Length	2	
20 - Toll Facility	3	
26 - Functional Class	09	
28A - Lanes On	2	
29 - ADT	547	
30 - Year of ADT	2021	
32 - Appr Roadway Width	27.9	
32A/B - Ap Pvt Type/Width	4	21
42A - Service Type On	1	
47L - Left Horizontal Clear	0.0	
47R - Right Horizontal Clear	26.2	
53 - Min Vert Clr Ov Deck	99	99
100 - STRAHNET	0	
102 - Traffic Direct	2	
109 - Truck %	5	
110 - Truck Network	0	
114 - Future ADT	695	
115 - Year Future ADT	2024	
Freeway	0	

Structure Appraisal

36A - Bridge Railing	0
36B - Rail Transition	0
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	3
68 - Deck Geometry	5
69 - Underclearance	N
71 - Waterway Adequacy	6
72 - Approach Alignment	6
103 - Temporary Structure	
113 - Scour Criticality	5

Miscellaneous

37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)

5A - Record Type		
5B - Route Signing		
5C - Level of Service		
5D - Route Number		
5E - Direction Suffix		
10L - Best 3m Unclr-Lt		
10R - Best 3m Unclr-Rt		
PR Number		
Control Section		
11 - Mile Point		
12 - Base Highway Network		
13 - LRS Route-Subroute		
19 - Detour Length		
20 - Toll Facility		
26 - Functional Class		
28B - Lanes Under		
29 - ADT		
30 - Year of ADT		
42B - Service Type Under	5	
47L - Left Horizontal Clear		
47R - Right Horizontal Clear		
54A - Left Feature		
54B - Left Underclearance	99	99
54C - Right Feature		
54D - Right Clearance	99	99
Under Clearance Year		
55A - Reference Feature	N	
55B - Right Horiz Clearance	99.9	
56 - Left Horiz Clearance	0	
100 - STRAHNET		
102 - Traffic Direct		
109 - Truck %		
110 - Truck Network		
114 - Future ADT		
115 - Year Future ADT		
Freeway		

Proposed Improvements

75 - Type of Work		
76 - Length of Improvement		
94 - Bridge Cost		
95 - Roadway Cost		
96 - Total Cost		
97 - Year of Cost Estimate		

Load Rating and Posting

31 - Design Load	4	
41 - Open, Posted, Closed	P	
63 - Fed Oper Rtg Method	6	
64F - Fed Oper Rtg Load	.27	
64MA - Mich Oper Rtg Method	6	
64MB - Mich Oper Rtg	.7	
64MC - Mich Oper Truck	14	
65 - Inv Rtg Method	6	
66 - Inventory Load	.16	
70 - Posting	0	
141 - Posted Loading	295166	
193 - Overload Class		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12662

WORK RECOMMENDATIONS

Facility SNOVER ROAD	Latitude / Longitude 43.3508 / -83.3937	MDOT Structure ID 79311H00009B010	Structure Condition Fair Condition(5)	
Feature BEACH DRAIN	Length / Width / Spans 25.5 / 28 / 1	Owner County: Tuscola(79)		
Location SEC 22-27 FREMONT TWP	Built / Recon. / Paint / Ovly. 1935 / 1971 / 2008 / 2008	TSC Huron(28)	Operational Status P Posted for load(295166)	
Region / County Bay(4) / Tuscola(79)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 06/11/2024 / JX37	Scour Evaluation 5 Stable w/in footing	

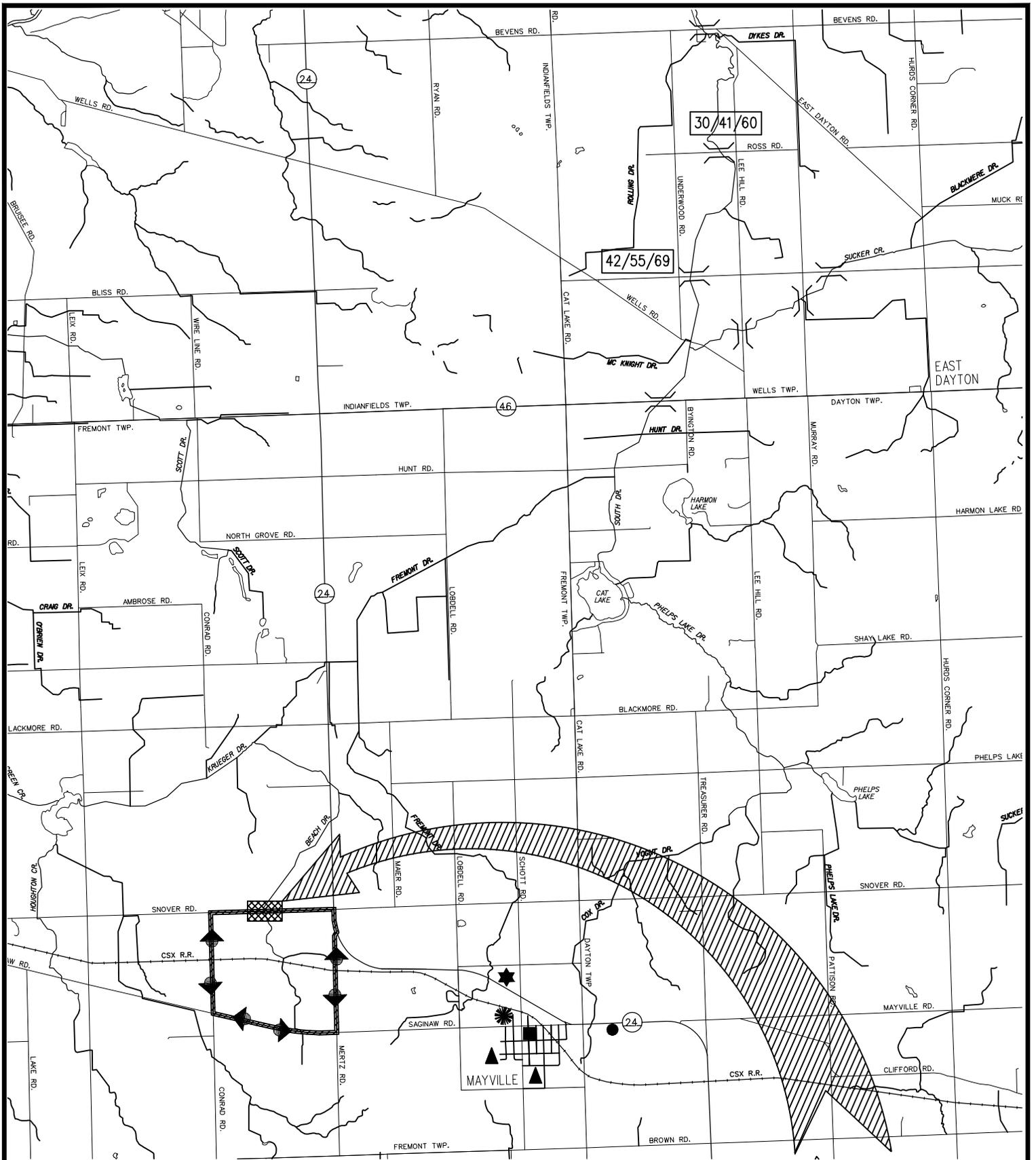
WORK RECOMMENDATIONS

JX37

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
James Brock	ROWE Professional Services Company	12	06/11/2024

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Scour Repair	H	Place riprap along east abutment. (21) (22) (23) (24)
Substr Repair	H	Monitor crack/settlement in East abutment (21) (22) (23) (24)



KEY

- POLICE STATION
- FIRE STATIONS
- AMBULANCE SUB STATION
- SCHOOL
- MEDICAL CLINIC

XX/XX/XX () - POSTED STRUCTURE



12662 - SNOVER ROAD
BRIDGE BEACH DRAIN

- DETOUR ROUTE

Exhibit 4 - Cost Estimating Worksheet

2025

BRIDGE COST ESTIMATE WORKSHEET - CPM, REHAB, REPLACE -

REV. 02/6/2024

OWNER: Tuscola County	FISCAL YEAR: 2028	Out to Out	Curb to Curb	DATE: 3/25/2025	ENGINEER: ANH
REGION: Bay		LENGTH 25.5	WIDTH 28.0	WIDTH 27.9	STRUCTURE ID: 12662
TSC: Huron	PR: 3790016 MP: 3.441				BRIDGE ID: N/A
LOCATION: SNOVER ROAD over BEACH DRAIN					
PRIMARY WORK ACTIVITY: Bridge Replacement			DECK AREA: 714 SFT	STR. TYPE: Steel	
OTHER WORK:			CLEAR ROADWAY: 711 SFT	Multi-Stringer, W or I-Beam	

WORK ACTIVITY	MDOT Bridge Design Guides	QUANTITY	UNIT	UNIT COST	TOTAL
NEW BRIDGE (increase deck area based on design standards and hydraulic requirements)					
Single or Multiple Spans, Grade Separation	(add demo, approach, MOT)		SFT	\$435.00 /SFT	
Single Span, Over Water	Length < 100ft (add demo, approach, MOT)	960.0	SFT	\$525.00 /SFT	\$504,000.00
Multiple Spans, Over Water	Length > 100ft (add demo, approach, MOT)		SFT	\$470.00 /SFT	
Precast Culvert	Length < 40ft (add demo, approach, MOT)		SFT	\$565.00 /SFT	
NEW SUPERSTRUCTURE					
New Superstructure, Grade Separation	(incl. remove exist deck/super; add MOT & approach)		SFT	\$310.00 /SFT	
New Superstructure, Over Water	(incl. remove exist deck/super; add MOT & approach)		SFT	\$315.00 /SFT	
WIDENING					
Structure Widening, ___ ft	(incl. deck/super/sub widening, add approach transition)		SFT	\$630.00 /SFT	
NEW DECK					
New Bridge Deck & Barrier	(incl. remove exist deck/railing, add approach, MOT)		SFT	\$150.00 /SFT	
DEMOLITION					
Entire Structure, Grade Separation			SFT	\$75.00 /SFT	
Entire Structure, Over Water		714.0	SFT	\$95.00 /SFT	\$67,830.00
DECK REPAIR / TREATMENTS					
Bridge Railing Replacement	(incl. removal and replacement)		FT	\$750.00 /FT	
Concrete Brush Block / Curb Patch	(incl. hand chipping and formwork)		FT	\$29.00 /FT	
Concrete Barrier Patch	(incl. hand chipping and formwork)		SFT	\$85.00 /SFT	
Concrete Deck Patch	(incl. hand chipping)		SFT	\$68.00 /SFT	
Deep Overlay	(incl. joint repl & hydro)		SFT	\$46.00 /SFT	
Epoxy Overlay	(incl. warranty)		SYD	\$48.00 /SYD	
Expansion Joint Gland Replacement	(remove and replace elastomeric gland)		FT	\$125.00 /FT	
Expansion Joint Replacement	(incl. removal)		FT	\$860.00 /FT	
Full Depth Patch			SFT	\$140.00 /SFT	
Healer / Sealer	(penetrates cracks in bridge deck)		SYD	\$30.00 /SYD	
HMA Overlay with WP membrane			SYD	\$60.00 /SYD	
Overlay Removal	(Epoxy: \$22/syd Latex: \$26/syd HMA: \$7/syd)		SYD	\$22.00 /SYD	
Reseal Bridge Joints			FT	\$28.00 /FT	
Shallow Overlay	(incl. joint repl & hydro)		SFT	\$46.00 /SFT	
SUPERSTRUCTURE REPAIR					
Bearing Realignment / Replacement	(incl. temporary supports)		EA	\$6,450.00 /EA	
Heat Straightening	(incl. clean and coat)		EA	\$57,000.00 /EA	
Pack Rust Repair	(greater than 3/8" separation)		FT	\$1,150.00 /FT	
Paint - Complete	(incl. clean & coat)		SFT	\$30.00 /SFT	
Paint - Partial / Spot / Zone	(incl. clean & coat - \$20k minimum)		SFT	\$60.00 /SFT	
PCI Beam End Blockout	(incl. temporary supports)		EA	\$7,200.00 /EA	
Pin & Hanger Replacement	(incl. temporary supports)		EA	\$17,000.00 /EA	
Structural Steel Repair	(based on 6ft repair length)		EA	\$4,000.00 /EA	
Structural Steel Repair - Stiffener	(includes each side of beam)		EA	\$1,500.00 /EA	
SUBSTRUCTURE REPAIR					
Substructure Patching	(measured x 2) replace if repair area > 30%		CFT	\$360.00 /CFT	
Substructure Replacement	(incl. temporary supports, excavation)		CFT	\$375.00 /CFT	
Substructure Horizontal Surface Sealer			SYD	\$75.00 /SYD	
Temporary Supports	(add Structural Steel Repair - Stiffener for ea steel beam)		EA	\$4,000.00 /EA	
MISCELLANEOUS					
Articulating Concrete Block System (ACB)			SYD	\$320.00 /SYD	
Concrete Surface Coating			SYD	\$47.00 /SYD	
Culvert Cleanout			FT	\$125.00 /FT	
Epoxy Crack Injection	(structural crack repair)		FT	\$70.00 /FT	
Metal Mesh Panels	(48" width, max 6'-6" length)		SFT	\$28.00 /SFT	
Pressure Relief Joint	(use when approach concrete roadway exceeds 1,000ft)		FT	\$110.00 /FT	
Riprap	(assume 10ft distance around perimeter of substructure)		SYD	\$275.00 /SYD	
Silane Treatment	(penetrating sealer for concrete surfaces)		SFT	\$7.00 /SFT	
Slope Protection Repairs			SYD	\$150.00 /SYD	
Other					

STRUCTURE CONSTRUCTION BUDGET \$571,830

ROAD WORK					
Approach Pavement, 12" RC	(incl. removal; add curb, gutter, guardrail) 40' ea. end		SYD	\$230.00 /SYD	
Approach Curb & Gutter	(incl. removal) 40' ea. quadrant		FT	\$57.00 /FT	
Guardrail Anchorage to Bridge	(each quadrant)		EA	\$2,540.00 /EA	
Guardrail	(incl. removal) < 200ft beyond reference line	200.0	FT	\$41.00 /FT	\$8,200.00
Guardrail Terminal	(each quadrant)	4.0	EA	\$3,900.00 /EA	\$15,600.00
Roadway Approach Work	(beyond approach pavement)	1.0	LSUM	\$70,000.00 /LSUM	\$70,000.00
Utilities			LSUM		
TRAFFIC CONTROL <i>Unit Cost to be determined by Region or TSC Traffic & Safety</i>					
Part Width Construction			LSUM		
Crossovers			EA		
Temporary Traffic Signals			set		
RR Flagging			LSUM		
Detour		1.0	LSUM	\$30,000.00 /LSUM	\$30,000.00

RELATED ROAD/TRAFFIC CONSTRUCTION BUDGET \$123,800

CONTINGENCY	(10% - 20%) (use higher contingency for small projects)	15	%	\$696,000.00	\$104,000
MOBILIZATION	(estimate at 10%)	10	%	\$800,000.00	\$80,000
INFLATION	(assume 4% per year, beginning in 2025)	12	%	\$880,000.00	\$106,000

(Does not include PE or CE)
(Refer to programming guidelines in Bridge Cost Estimating Worksheet-Key for CE, PE & PE-S)

TOTAL CONSTRUCTION BUDGET		\$986,000
% CE	CON BUDGET	\$986,000
% PE	PE BUDGET	\$0
% PE	PE-S BUDGET	\$0

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12662

LOAD RATING ASSUMPTIONS

Facility SNOVER ROAD	Latitude / Longitude 43.3508 / -83.3937	MDOT Structure ID 79311H00009B010	Structure Condition Fair Condition(5)	
Feature BEACH DRAIN	Length / Width / Spans 25.5 / 28 / 1	Owner County: Tuscola(79)		
Location SEC 22-27 FREMONT TWP	Built / Recon. / Paint / Ovly. 1935 / 1971 / 2008 / 2008	TSC Huron(28)	Operational Status P Posted for load(295166)	
Region / County Bay(4) / Tuscola(79)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 06/11/2024 / JX37	Scour Evaluation 5 Stable w/in footing	

Rating Considers Field Condition of Members: Yes **Inspection Date:** 06/11/2024

Deterioration:

Deficiencies do not impact the load rating of the structure.

Most Recent Year Construct / Reconstruct / Overlay: 2008

History of Work Impacting Load Rating:

HMA overlay

Superstructure Component: 3 Steel **Beam fy:** 36.0 ksi **Beam f'c / fb:** ksi

Composite: No **Number of Beams:** 13 **Shop Drawings Verified:** No

Beam Size(s) & Names (each span): W14x34

Deck: **Thickness (in.):** 2.5 **Fy / f'c:** / ksi **Deck Design Load > H15:** Yes

Wearing Surface: **Mat'l:** HMA **Thickness (in.):** 6.0 **Unit Weight (pcf.):** 150.0

	LEFT		CENTER		RIGHT
Barrier: Type / Weight (plf.):	guardrail / 50.0		/		guardrail / 50.0

Sidewalk: Width / Thick (in.): / / /

Clear Roadway (ft.): 27.9

Additional Loads:

See hand calcs. The HMA is 6" thick over 2.5" deep corrugated steel deck.

Unique Factors That Affect Capacity:

Plans do not exist for the structure. Use unknown properties from MDOT BAG. From detailed inspection, a rolled shape could not be determined. Use provided dimensions to determine beam section properties.

Analyzed By: Mike Soteropoulos

Date: 09/11/2024

MICHIGAN DEPARTMENT OF TRANSPORTATION

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LOAD RATING SUMMARY

Facility SNOVER ROAD	Latitude / Longitude 43.3508 / -83.3937	MDOT Structure ID 79311H00009B010	Structure Condition Fair Condition(5)	
Feature BEACH DRAIN	Length / Width / Spans 25.5 / 28 / 1	Owner County: Tuscola(79)		
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Region / County Bay(4) / Tuscola(79)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 06/11/2024 / JX37	Scour Evaluation 5 Stable w/in footing	

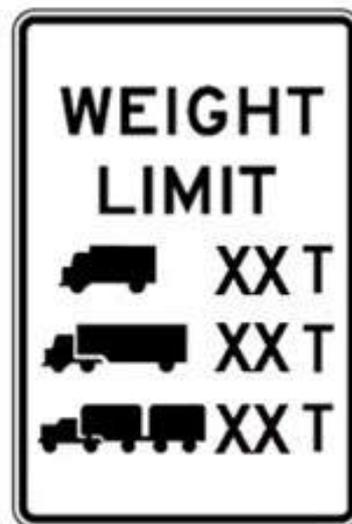
Compliance Issue: None
Compliance Verified: No
Analysis Program: AASHTOWare Bridge Rating (BrR)
Analysis Program Version: 7.3
Rating Considers Field Condition of Members: Yes **Inspection Date:** 06/11/2024
Controlling component and failure mode:

Exterior beam moment

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method 6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings 0.27
MDOT Item 64MA - Michigan Operating Method 6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating 0.7
MDOT Item 64MC - Michigan Operating Truck 14
NBI Item 65 - Inventory Rating Method 6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating 0.16
NBI Item 41 - Structure Open Posted Closed P P Posted for load
NBI Item 70 - Bridge Posting 0 0 - 59% or less
Posted By Truck Type
MDOT Item 141 - Posted Loading 295166
MDOT Item 193A - Michigan Overload Class
MDOT Item 193C - Overload Status

Sample Sign



R12-5

Analyzed By: Mike Soteropoulos **Date:** 09/11/2024
Checked By: Jonathan Lidgard **Date:** 10/31/2024

APPLICATION FOR FUNDING
FOR
REPLACEMENT OF
12662 – SNOVER ROAD BRIDGE OVER THE BEACH DRAIN
PRIORITY #1

Fremont Township, Tuscola County

Submitted by:
Tuscola County Road Commission
April 2025

Snover Road Bridge over the Beach Drain

The Tuscola County Road Commission is requesting local bridge funds for the **replacement** of the Snover Road Bridge over the Beach Drain. The Tuscola County Road Commission is committed to having this structure funded for the 2028 fiscal year. This bridge is the Road Commission's #1 priority for funding.

CONTACT

Brent Dankert, PE – County Highway Engineer
Tuscola County Road Commission
1733 Mertz Road
Caro, MI 48723
Phone: (989) 751-3873

BACKGROUND

The Snover Road Bridge over the Beach Drain is a single span structure totaling 25.5 feet in length. This structure carries 2 lanes of traffic and has an inside width of 28 feet. The bridge superstructure consists of thirteen steel I-beams with chip sealed HMA wearing surface. Corrugated steel deck panels left in place on deck bottom with light corrosion. Both reference line joints are paved over with faint reflective cracking. The railing along each side of structure consists of W-beam guardrail mounted to steel posts anchored to the fascia beams. Fascia beams are spliced and longer than the interior beams and have been repainted. Beams 5S-9S have additional sections of welded bottom flange repair plates. Beams 6S-8S, 12S and 13S have plate web repairs. Beams 5S and 9S have bolted repairs of holes in the web near the west backwall. The substructures consist of concrete cantilever abutments with scaling along the waterline. The east abutment has an open vertical and horizontal crack with settlement occurring. This abutment is being monitored. HMA approaches have been chip sealed.

WEIGHT LIMIT

The structure is currently posted for load **29/51/66**.

FUNCTIONAL CLASSIFICATION AND ECONOMIC IMPORTANCE

Snover Road is classified as a "local". It is a 2-lane HMA road which carries residential and agricultural equipment. The replacement of this bridge would help feed the residential growth and retain the agricultural sector in this region. The 2021 average daily traffic volume was 547 vehicles per day (vpd). The future traffic volumes (2045) are estimated to be 695 vpd. The economic importance of this structure is based on the extra travel time that will be needed due to the detour route if this structure is closed or posted for loading.

LOCAL IMPACTS AND DETOUR ROUTE

The detour route for traffic when the bridge will be closed is as follows: Snover Road, to Mertz Road (M-24), to Saginaw Road, to Conrad Road, and back to Snover Road. If the structure is closed, the detour would affect the route of residential traffic, school buses for nearby schools, agricultural operations, and the response time of emergency vehicles for emergencies. The approximate length of this detour is 3.8 miles utilizing paved, primary, and local roads.

ESTIMATED REPLACEMENT COST

A. Approach Construction	\$123,800
B. Structure Construction	<u>\$862,200</u>
Total	<u>\$986,000</u>

If selected, the Tuscola County Road Commission is committed to a **20%** local match to fund the project.

Tuscola County Road Commission



Looking across Snover Road Bridge



Fascia of Snover Road Bridge





HMA pavement over the Snover Road Bridge



Railing along Snover Road Bridge





Deck bottom surface



Beam end repairs



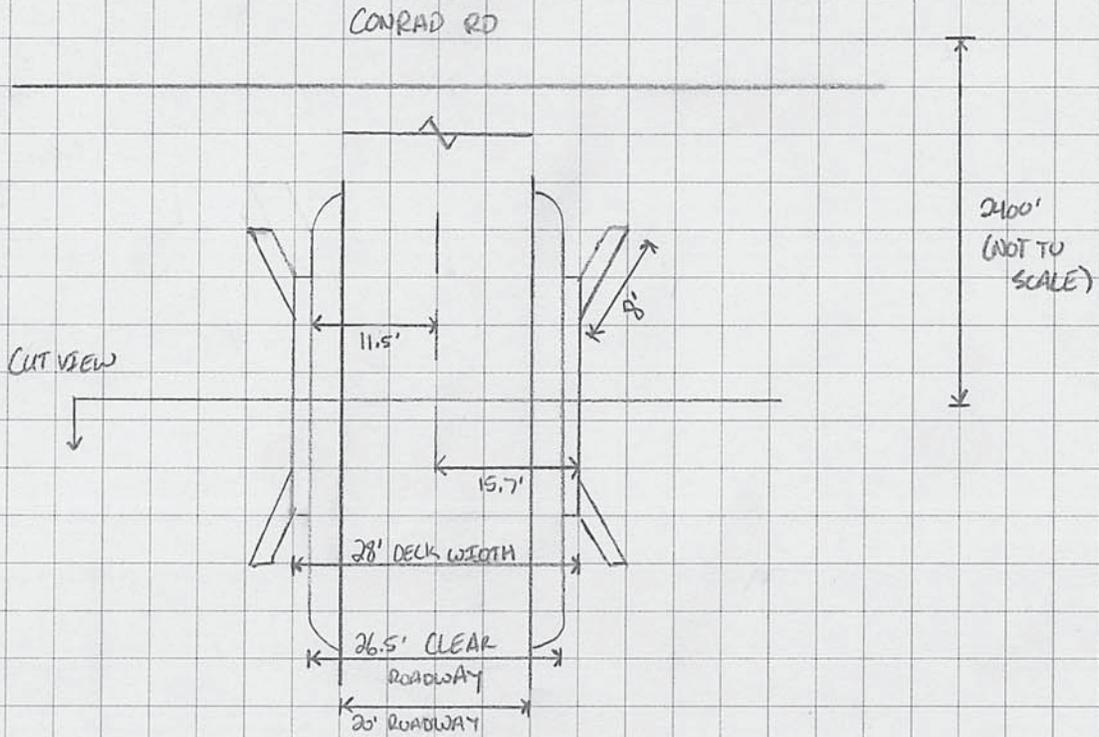
West Abutment



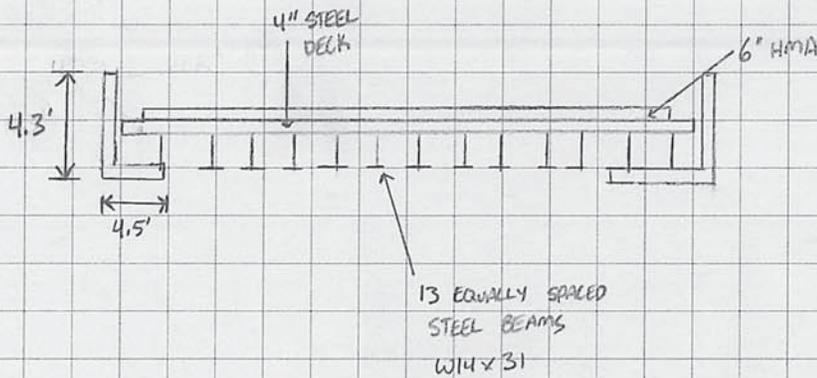
East Abutment



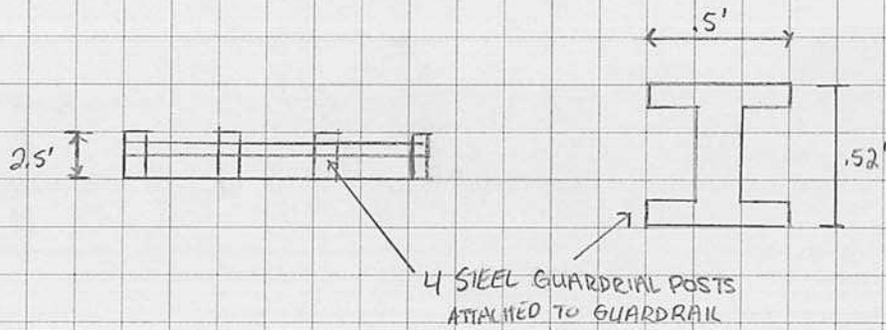
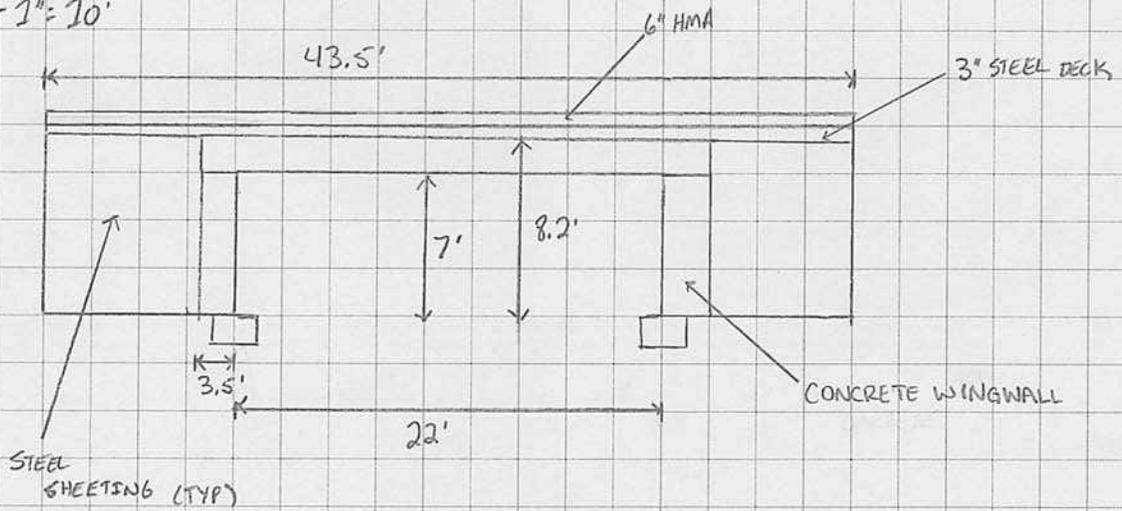
SCALE - 1" = 20'

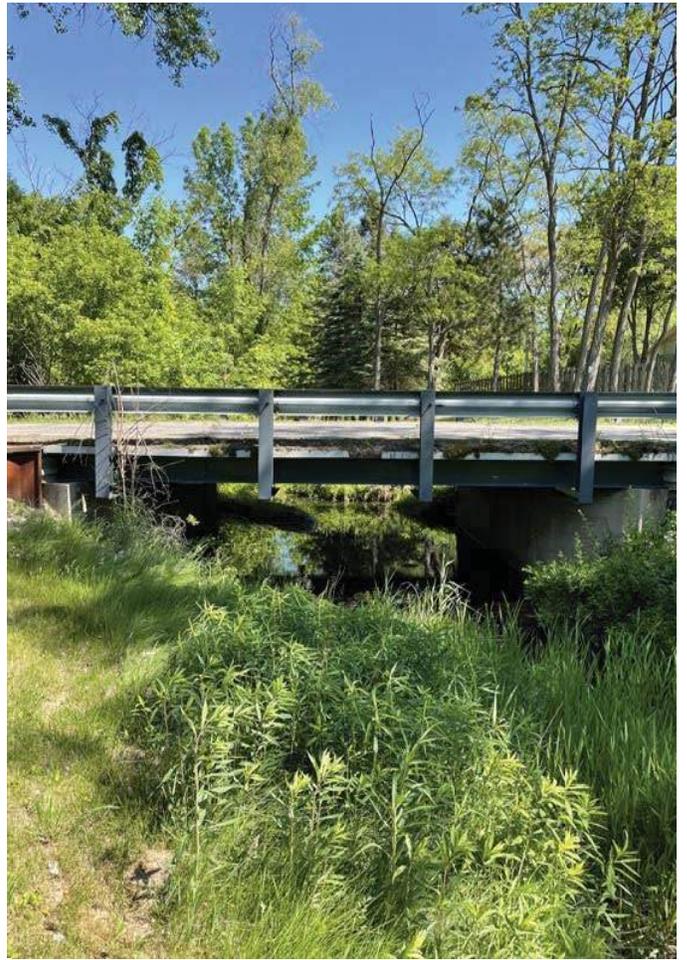


SCALE - 1" = 10'



SCALE - 1" = 10'





Snover Rd Bridge 12662 Detour Route



FINAL PLAN REVISIONS

NO.	DATE	AUTH	DESCRIPTION



Tuscola County Road Commission
 1733 Mertz
 Caro, MI 48723
 Phone: 989 673-2128
 Fax: 989 673-3294

TITLE SHEET: Snover #12662 Detour Route

TCRC PROJECT NO:

Created By: MBH

Date: 2/25/26

Approved By: BJD

Date: 2/25/26

SHEET

1

**ROAD
CLOSED**

R11-2
48" x 30"



TYPE III - 8 FT
BARRICADE - DOUBLE SIDED, LIGHTED

①

**ROAD CLOSED
TO
THRU TRAFFIC**

R11-4
60" x 30"



TYPE III - 8 FT
BARRICADE - DOUBLE SIDED, LIGHTED

②

**ROAD CLOSED
MILES AHEAD
LOCAL TRAFFIC ONLY**

R11-3
60" x 30"

③



④



M4-10
48" x 18"

⑤



W20-1 6 REQ'D
48" x 48"

⑥



W20-3 2 REQ'D
48" x 48"

⑦



W20-2 2 REQ'D
48" x 48"

⑧



⑨



⑩



M4-9
RIGHT

30" x 24"

⑪



M4-9
LEFT

⑫



M4-9
UP

⑬



M4-8a 2 REQ'D
24" x 18"

⑭

FINAL PLAN REVISIONS

NO.	DATE	AUTH	DESCRIPTION



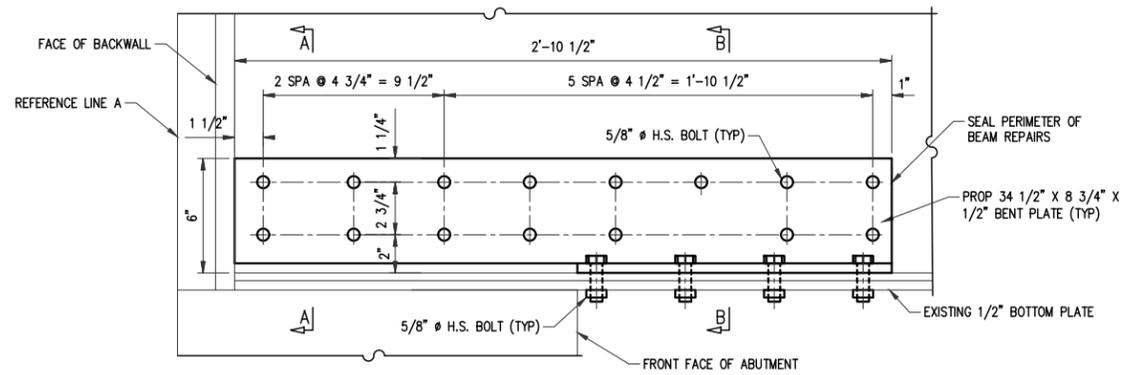
Tuscola County Road Commission
1733 Mertz
Caro, MI 48723
Phone: 989 673-2128
Fax: 989 673-3294

TITLE SHEET: Snover 12662 Detour

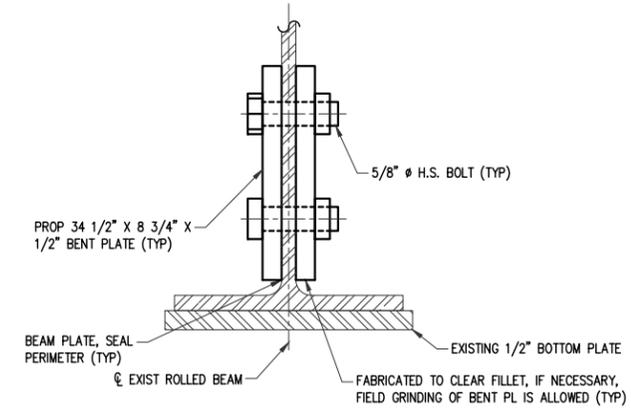
TCRC PROJECT NO:	
Created By: MBH	Date: 2/25/26
Approved By: BJD	Date: 2/25/26

SHEET

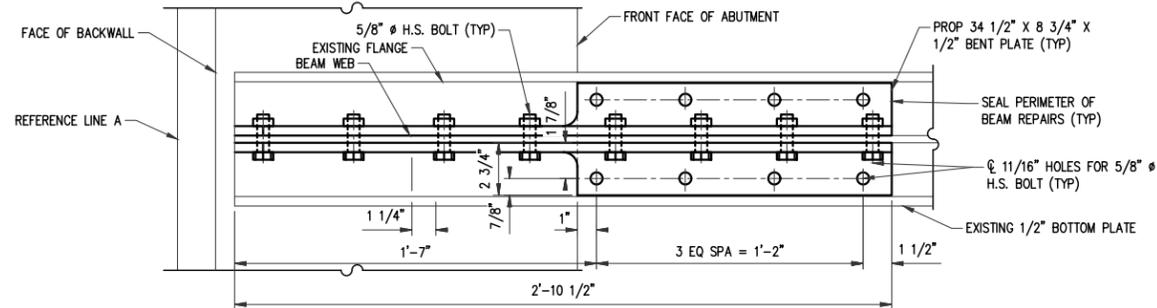
2



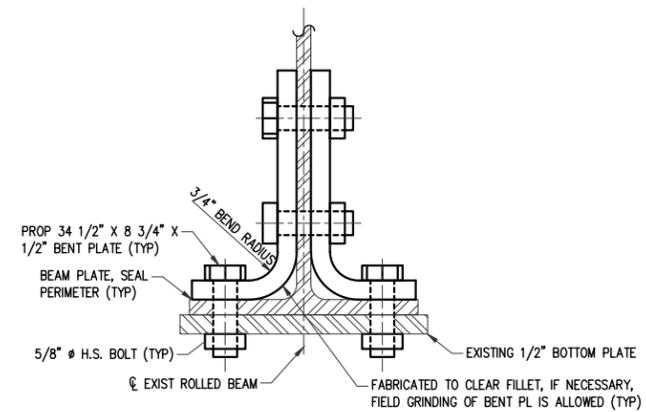
BOLTED REPAIR ELEVATION - WEB AND BOTTOM FLANGE
BEAM 5S NEAR WEST ABUTMENT



SECTION A-A



BOLTED REPAIR PLAN - WEB AND BOTTOM FLANGE
BEAM 5S NEAR WEST ABUTMENT



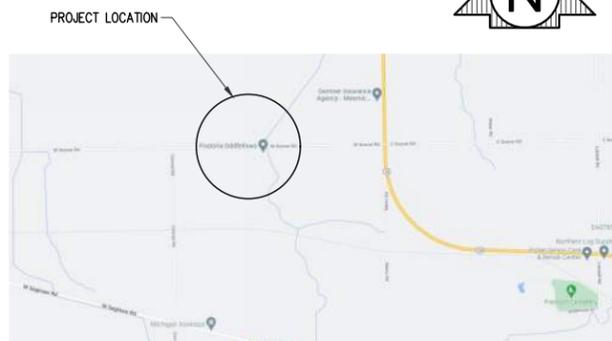
SECTION B-B

MISCELLANEOUS QUANTITIES

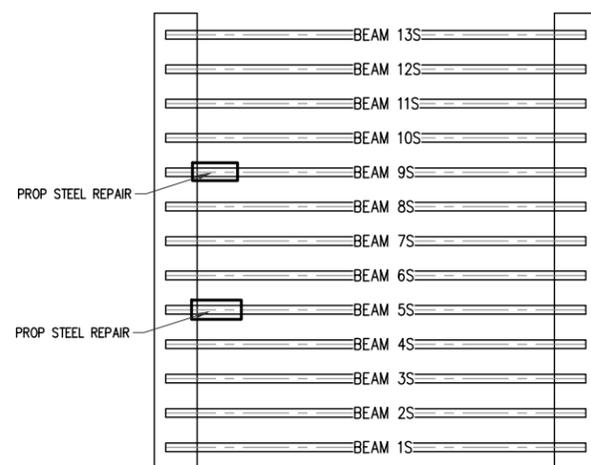
PAY ITEM	UNIT	TOTAL
STRUCTURAL STEEL, RETROFIT, FURN, FAB, AND ERECT	LBS	225
BEAM PLATE, SEAL PERIMETER	FT	34

NOTES:

- THE DESIGN OF THE STRUCTURAL MEMBERS IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES:
- STRUCTURAL STEEL FOR STEEL REPAIRS:
AASHTO M270 GRADE 50, 50W Fy = 50,000 psi
- FIELD CONNECTIONS ARE BOLTED WITH 5/8" HIGH-STRENGTH BOLTS.
- GRIND ALL PROPOSED BENT PLATES TO FILL BEAM FILLET.
- THE PLATE SURFACES OF ALL BOLTED CONNECTIONS ARE CONSIDERED SLIP CRITICAL CONNECTIONS.
- APPLY SEALANT AROUND THE PERIMETER OF BOLTED NEW CONNECTION PLATES TO EXISTING STRUCTURAL STEEL MEMBER.



PROJECT LOCATION MAP



ERECTION PLAN



Know what's below.
Call before you dig.

DATE OF PLAN: DECEMBER 2022

ROWE PROFESSIONAL SERVICES COMPANY
The Rowe Building
540 S. Saginaw St., Suite 200
Ann Arbor, MI 48102
O: (810) 341-7500
F: (810) 341-7573
www.rowepsc.com

TUSCOLA COUNTY ROAD COMMISSION
BEAM REPAIR - BEAM 5S

SNOVER ROAD
OVER THE
BEACH DRAIN

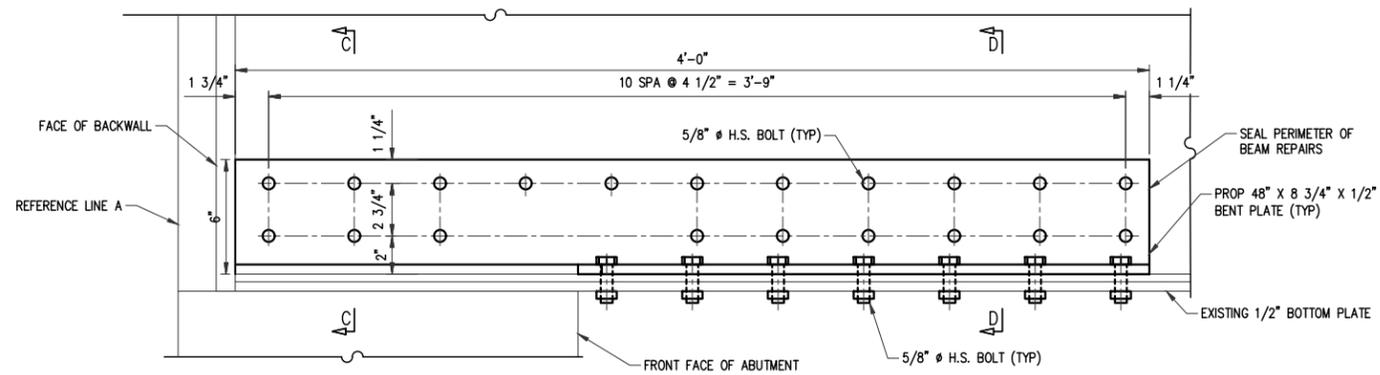
APPROVED _____

PLAN SUBMITTALS AND CHANGES

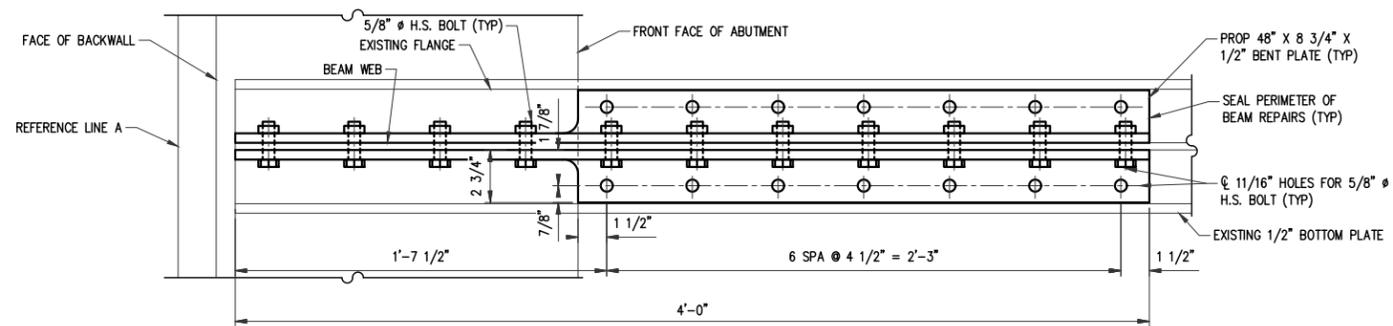
PRELIMINARY PLANS - **NOT FOR CONSTRUCTION**

DATE	DESCRIPTION

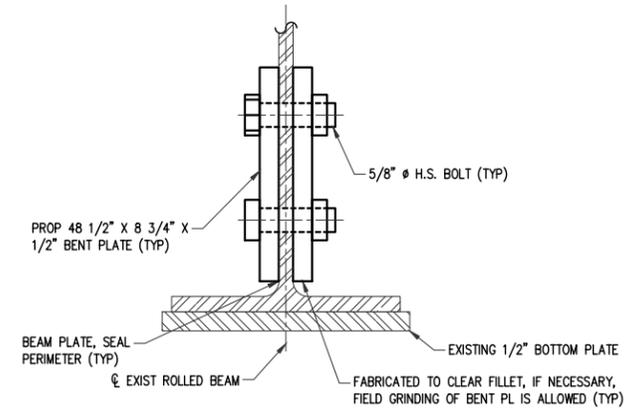
MDOT UNIT	CONSULT UNIT	DATE
DRAWN BY	MJS	12/1/22
CHECKED BY	ANH	12/8/22
SHEET	01	OF 2
STR NO.	12662	



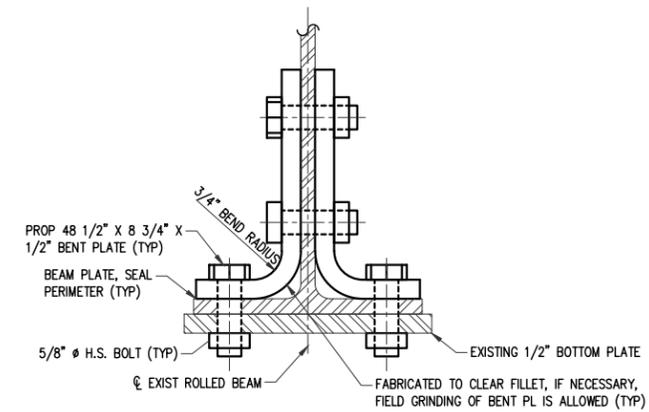
BOLTED REPAIR ELEVATION - WEB AND BOTTOM FLANGE
BEAM 9S NEAR WEST ABUTMENT



BOLTED REPAIR PLAN - WEB AND BOTTOM FLANGE
BEAM 9S NEAR WEST ABUTMENT



SECTION C-C



SECTION D-D

NOTES:

FOR NOTES, SEE BEAM REPAIR DETAIL SHEET 1.



Know what's below.
Call before you dig.

DATE OF PLAN: DECEMBER 2022

ROWE PROFESSIONAL SERVICES COMPANY
The Rowe Building
540 S. Saginaw St., Suite 200
Flint, MI 48502
O: (810) 341-7500
F: (810) 341-7573
www.rowepsc.com

TUSCOLA COUNTY ROAD COMMISSION
BEAM REPAIR - BEAM 9S

SNOVER ROAD
OVER THE
BEACH DRAIN

APPROVED _____

MDOT UNIT	
CONSULT UNIT	
DRAWN BY	MJS 12/1/22
CHECKED BY	ANH 12/8/22
SHEET	02 OF 2
STR NO.	12662

PLAN SUBMITTALS AND CHANGES	
PRELIMINARY PLANS - **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION

TUSCOLA COUNTY ROAD COMMISSION
SPECIAL PROVISION FOR STRUCTURE NAME PLATE

TCRC:MBH

PAGE 1 OF 1

2025

- a. **Description.** This work consists of furnishing and placing nameplate at the location shown on the plans or as approved by the Engineer, and in accordance with the details shown, expect that the final lettering on the plate shall be as approved by the road commission prior to fabrication.
- b. **Material.** The nameplate shall be cast from bronze ingots (81% copper, 7% lead, 3% tin, 9% zinc) with polished letters and border. The plates shall be given two coats of lacquer or other oxidation retardant.

1. Casting

The castings shall be free from blow holes, porosity, hard spots, shrinkage defects or cracks, or other injurious defects and shall be smooth and well cleaned.

The castings shall not be repaired, plugged, welded, or "burned in", unless permission has been secured. This permission will be given only when the defects are such that after the approved repair, the appearance and strength of the casting has not been impaired.

All castings shall be true to pattern, free from swells, etc... Wall thickness shall be uniform throughout the lot of castings and all cores shall be accurately set.

2. Type of Letter

All lettering shall be Gothic Condensed Deep Block Type of approximately the following proportions: (Height as shown on plans)

Depth	1/16 inch
Face Thickness	1/6 of height

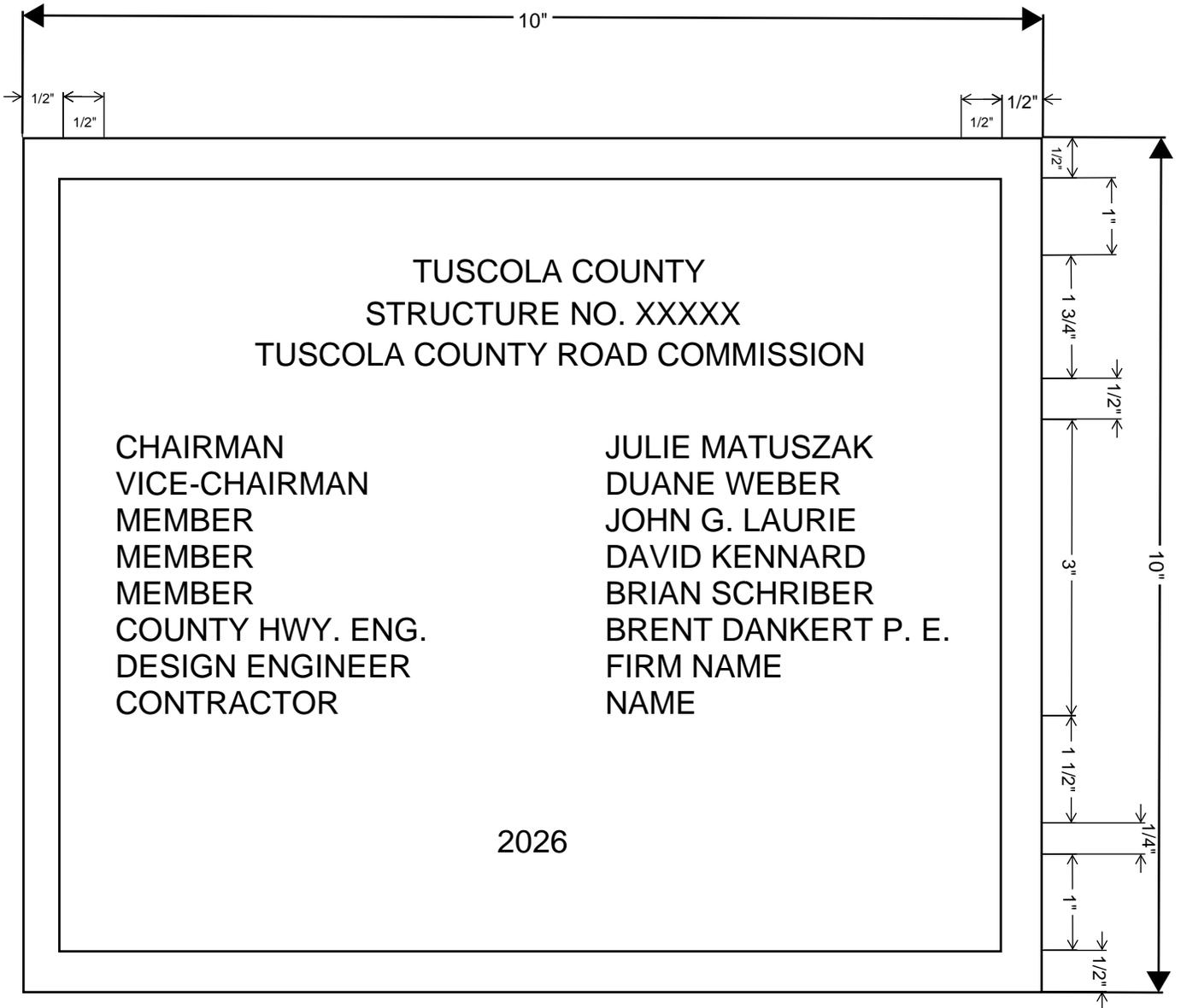
It is the intention that stock letters be used as furnished by the manufacturer subject to the approval of the engineer.

Three full-size rubbings of the actual nameplate shall be submitted to the Engineer for approval. Casting shall not be done until written approval of the rubbings has been received from the County.

- c. **Payment.** The completed work as measured for Structure Name Plate will be paid for at the contract unit price for the following contract pay item:

Pay Item	Pay Unit
Structure Name Plate	Each

Payment for Structure Name Plate shall include all labor, equipment and materials to complete this work.



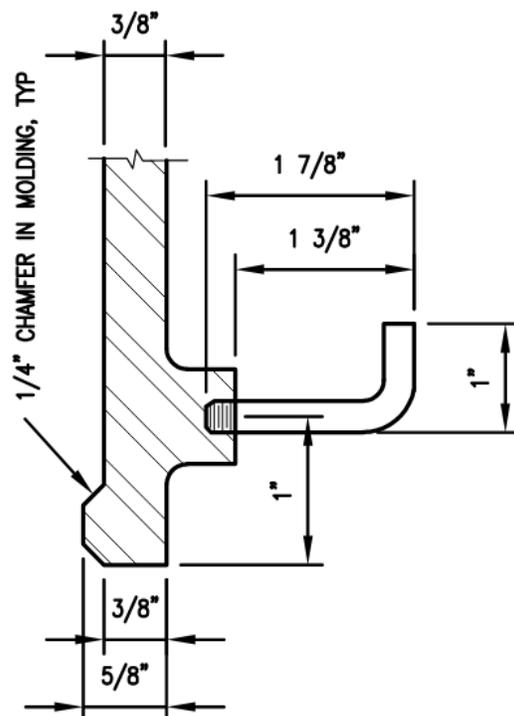
NOTES:

BOARD MEMBERS NAMES AND YEAR OF CONSTRUCTION SUBJECT TO CHANGE.

PEBBLE BACKGROUND WITH POLISHED BORDER CONSTRUCTION SUBJECT TO CHANGE.

LETTER AND NUMBER SIZES ARE APPROXIMATE SLIGHT VARIATIONS FROM SIZE ARE ALLOWED.

PROVIDE (4) 3/8" DIAMETER L-SHAPED ANCHORS, MINIMUM 3" EMBEDMENT.





Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

February 24, 2026

Tuscola County Road Commission
1733 S Mertz Road
Caro, Michigan 48723

Job No. 26-650325

Attention: Mr. Brent Dankert, P.E.

Subject: Asbestos Survey and Limited Lead Chip Sampling and Testing
Bridge Structure 12662
Snover Road over Beach Drain
Fremont Township, Tuscola County, Michigan

Dear Mr. Dankert:

Pursuant to your request, McDowell & Associates has completed this Asbestos Survey and Limited Paint Chip Sampling and Testing for the existing bridge located at Snover Road over Beach Drain, Fremont Township, Tuscola County, Michigan. A Site Location Map, which shows the approximate location of the subject structure, accompanies this letter as Attachment I.

It is our understanding the entire bridge structure is intended to be replaced. Observations were made of the visible materials, from the accessible areas on and around the structure.

The purpose of this survey was to identify regulated asbestos-containing materials (ACM) in the structure prior to demolition, in accordance with the National Emissions Standard for Hazardous Air Pollutants (NESHAP) and the Michigan Department of Licensing and Regulatory Affairs (LARA) Part 602 - Asbestos Standards for Construction. In addition, two paint chip samples were collected for lead testing.

As part of this survey, bulk samples for asbestos testing were obtained, in triplicate, from four suspect materials on the bridge, for a total of twelve samples submitted for PLM testing. Results of PLM testing show asbestos was not detected in any of the samples.

Two paint chip samples were obtained from steel beams on the bridge. Results of testing show lead was detected in each of the samples at concentrations of 0.024% and 0.018% lead by weight. OSHA/ MIOSHA Lead regulations would apply for materials containing lead at any concentration.

If additional suspect materials are encountered in the demolition process that were not sampled in this asbestos survey, McDowell & Associates should be notified so that we can conduct supplemental investigation.

Southeast Michigan Office
21355 Hatcher Avenue, Ferndale, MI 48220
P: (248) 399-2066 • F: (248) 399-2351

Mid-Michigan Office
3730 James Savage Rd, Midland, MI 48642
P: (989) 496-3610 • F: (989) 496-3190

This survey was completed for the exclusive use of Tuscola County Road Commission, and they may rely on its contents.

The results of our investigation are presented below.

Structure Description

The subject structure is a concrete/steel bridge with steel guard rails and asphalt surface located on Snover Road, west of Mertz Road (M24), Fremont Township, Tuscola County, Michigan. The bridge spans Beach Drian. Summarized below is information obtained from observations made during the survey and from provided information.

- Built in approximately 1935 and rebuilt in approximately 1971
- Single span deck approximately 25' x 30'
- Concrete construction with steel underdeck and steel beams
- Asphalt surface, metal guardrails, concrete abutment/wall

Field Work

On February 16, 2026, a Certified Asbestos Building Inspector with McDowell & Associates observed the structure for the presence of suspect asbestos-containing materials. Suspect materials were sampled in triplicate, designated A, B, C.

The following table summarizes sample materials, designated 650325-1 A-C through 650325-4 A-C.

Sample ID	Material /Description	Location
650325-1 A,B,C	Abutment / Wall Concrete	Abut/Walls
650325-2 A,B,C	Abutment / Wall Concrete	Patches on Walls
650325-3 A,B,C	Deck Surface Asphalt	Deck Top
650325-4 A,B,C	Caulk on Supports	Supports on Beams

Samples were submitted to EMSL Analytical, Inc. of Indianapolis, Indiana for testing by polarized light microscopy (PLM, EPA Method 600/R-93/116).

Two paint samples were obtained from the paint on the beams, designated 650325-4 and 65325-5. 650325-4 was the darker gray paint and 650325-5 was the lighter gray paint. There appeared to be several layers of paint/primer. An attempt was made to collect a representative sample of the paint cross-sections.

PLM Results

According to the National Emission Standard for Hazardous Air Pollutants (NESHAP) definition, materials which contain greater than one percent asbestos are considered asbestos-containing materials.

Results of PLM testing show asbestos was not detected in any of the samples.

Lead Testing Results

The paint sample was submitted to EMSL Analytical, Inc. of Indianapolis, Indiana for flame atomic absorption testing to determine the presence of lead (Pb, Method 7000).

Results of testing show lead was detected in the paint samples at concentrations of 0.024% by weight for 650325-4 and 0.018% by weight for 650325-5.

A copy of the PLM and lead results and chain-of-custody documentation are attached.

Limitations

Observations were made of the visible materials, from the accessible areas on and around the structure. Lighting and winter conditions limited some observation.

It is possible that additional materials will be encountered during demolition / renovation activities. In the event suspect materials are observed that were not identified in this assessment, the materials should be presumed to contain lead and/or asbestos and removed by a licensed abatement contractor or sampled and tested by a certified inspector.

Conclusions

McDowell & Associates has completed this Asbestos Survey and Limited Paint Chip Sampling and Testing for the existing bridge located at Snover Road over Beach Drain, Fremont Township, Tuscola County, Michigan.

As part of this survey, bulk samples for asbestos testing were obtained, in triplicate, from four suspect materials on the bridge, for a total of twelve samples submitted for PLM testing. Results of PLM testing show asbestos was not detected in any of the samples.

Two paint chip samples were obtained from steel beams on the bridge. Results of testing show lead was detected in each of the samples at concentrations of 0.024% and 0.018% lead by weight. OSHA/ MIOSHA Lead regulations would apply for materials containing lead at any concentration.

If you have any questions, or if we can be of further service, please do not hesitate to call.

Respectfully Submitted,

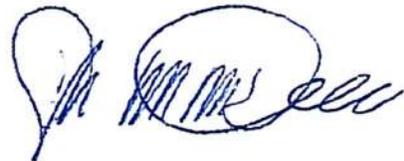
MCDOWELL & ASSOCIATES



Erik L. Johnson, B.S.
Environmental Scientist /
Midland Operations Manager
Michigan Asbestos Insp# A29674



Jennifer Lagerbohm, M.S., CHMM
Environmental Manager



Douglas M. McDowell, M.S., P.E.
President

Attachments:

- Site Location Map
- Laboratory Results

McDowell & Associates - 26-650325

Snover Road over Beach Drain



26-650325

W Snover Rd

W Snover Rd

Fostoria Oddfellows

Gentner Insuran

24

DTE Put

Meritz Rd





EMSL Analytical, Inc.

6340 CastlePlace Dr. Indianapolis, IN 46250
Tel/Fax: (317) 803-2997 / (317) 803-3047
<http://www.EMSL.com> / indianapolislab@emsl.com

EMSL Order: 162601949
Customer ID: MCDO51
Customer PO:
Project ID:

Attention: Erik Johnson
McDowell & Associates
3730 James Savage Road
Midland, MI 48642

Phone: (989) 496-3610
Fax: (989) 496-3190
Received Date: 02/19/2026 1:03 PM
Analysis Date: 02/23/2026
Collected Date:

Project: 26-650325

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
650325-1 A <small>162601949-0001</small>	ABUT - CONCRETE	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
650325-1 B <small>162601949-0002</small>	ABUT - CONCRETE	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
650325-1 C <small>162601949-0003</small>	ABUT - CONCRETE	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
650325-2 A <small>162601949-0004</small>	PATCH- CONCRETE - ABUT @ DECK	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
650325-2 B <small>162601949-0005</small>	PATCH- CONCRETE - ABUT @ DECK	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
650325-2 C <small>162601949-0006</small>	PATCH- CONCRETE - ABUT @ DECK	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
650325-3 A <small>162601949-0007</small>	DECK - ASPHALT	Black Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
650325-3 B <small>162601949-0008</small>	DECK - ASPHALT	Black Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
650325-3 C <small>162601949-0009</small>	DECK - ASPHALT	Black Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
650325-6 A <small>162601949-0010</small>	CAULK @ BRACES - BEAMS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
650325-6 B <small>162601949-0011</small>	CAULK @ BRACES - BEAMS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
650325-6 C <small>162601949-0012</small>	CAULK @ BRACES - BEAMS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 02/23/2026 13:11:56



EMSL Analytical, Inc.

6340 CastlePlace Dr. Indianapolis, IN 46250

Tel/Fax: (317) 803-2997 / (317) 803-3047

<http://www.EMSL.com> / indianapolislab@emsl.com

EMSL Order: 162601949
Customer ID: MCDO51
Customer PO:
Project ID:

Analyst(s)

Amanda Straw (8)

Hilary Jarvis (4)

Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Indianapolis, IN NVLAP Lab Code 200188-0, AZ0939, CA 2575, CO AL-15132, TX 300262, A2LA Accredited - Certificate #2845.25

Initial report from: 02/23/2026 13:11:56



EMSL ANALYTICAL, INC. LABORATORY PRODUCTS TRADING

EMSL Order Number / Lab Use Only

162601949

Tampa, FL 33634 PHONE: (813) 280-8752 EMAIL: tampalab@emsl.com

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information and Billing Information section containing company names, contact details, and addresses for both the customer and the billing entity.

Project Information

Project Name/No: 26-650325, EMSL LIMS Project ID, US State where samples collected: MI, State of Connecticut (CT) must select project location.

Sampled By Name: Erik Johnson, Sampled By Signature: Erik Johnson, No. of Samples in Shipment: 12

Turn-Around-Time (TAT) section with options for 3 Hour, 6 Hour, 24 Hour, 32 Hour, 48 Hour (checked), 72 Hour, 96 Hour, 1 Week, 2 Week.

ASBESTOS section including PCM Air, TEM - Air, TEM - Settled Dust, TEM - Bulk, and Soil - Rock - Vermiculite (reporting limit) options.

LEAD (PB) section with options for Flame Atomic Absorption and ICP.

MICROBIOLOGY section including Swab and Bulk Samples, Air Samples, and DNA & PCR Testing options.

MAT-SCI (TAT End of Business Day) and IAQ (TAT End of Business Day) sections with various testing options like Common Particle ID, Full Particle ID, etc.

Other Test (please specify) section.

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment: UPS, Relinquished by, Date/Time, Sample Condition Upon Receipt, Received by, Date/Time.



EMSL Analytical, Inc.

6340 Castleplace Drive, Indianapolis, IN, 46250
Telephone: 317.803.2997 Fax:317.803.3047
www.emsl.com

EMSL Order ID: 162651546
LIMS Reference ID: CE51546
EMSL Customer ID: MCDO51

Attention: Erik Johnson
McDowell & Associates [MCDO51]
3730 James Savage Road,
Midland, MI 48642
(989) 496-3610
erik.johnson@mcdowasc.com

Project Name: 26-650325

Customer PO:
EMSL Sales Rep: Jennifer Abels

Received: 02/19/2026 13:03

Reported: 02/23/2026 11:50

Analytical Results

Analyte	Results	RL	Weight	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
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Client Sample ID: 650325-4/Dark Gray Paint - Beams+Rails

Date Sampled: 02/18/26

Matrix: Chips

LIMS Reference ID: CE51546-01

Lead	0.024 % wt	0.0064 % wt	0.2561 g	02/20/26 CG	SW-846 3050B	02/20/26 CG	SW 846-7000B		1
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Client Sample ID: 650325-5/Lt. Gray Paint - Beams

Date Sampled: 02/18/26

Matrix: Chips

LIMS Reference ID: CE51546-02

Lead	0.018 % wt	0.0078 % wt	0.2052 g	02/20/26 CG	SW-846 3050B	02/20/26 CG	SW 846-7000B		1
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Certified Analyses included in this Report

Analyte	Certifications
SW 846-7000B in Chips	
Lead	16-OHDOH,16-AIHA ELLAP

List of Certifications

Code	Description	Number	Expires
16-MO	Missouri Drinking Water	10180	03/31/2026
16-NYDOH	New York Potable Water, Metals Solid and Hazardous Waste - Asbestos	12130	04/01/2026
16-AIHA ELLAP	American Industrial Hygiene Association (AIHA LAP, LLC) - ELLAP	157245	08/01/2027
16-AIHA IHLAP	American Industrial Hygiene Association (AIHA LAP, LLC) - IHLAP	157245	08/01/2027
16-CA ELAP	California Metals in DW, Chemistry and Bulk Asbestos in Hazardous Waste	2575	06/30/2026
16-A2LA Food	A2LA Food Microbiology	2845.11	01/31/2028
16-A2LA Chemistry	A2LA Environmental and Chemistry	2845.25	01/31/2028
16-IN Metals/Asbestos	Indiana Lead and Metals and Asbestos in Drinking Water	C-49-09	12/31/2026
16-OHDOH	Ohio - Lead in Paint Chips, Wipes, Soil and Air	E10040	05/03/2026
16-FLDOH	Florida Asbestos and Metals in Drinking Water, PCBs	E871170	06/30/2026
16-NJDEP	New Jersey Metals, Organics and Inorganics in DW PCBs	IN002	06/30/2026
16-IN Colilert/HPC	Indiana Colilert and HPC	M-49-06	12/31/2026

Please see the specific Field of Testing (FOT) on www.emsl.com for a complete listing of parameters for which EMSL is certified.

Notes and Definitions

Item	Definition
(Dig)	For metals analysis, sample was digested.
[2C]	Reported from the second channel in dual column analysis.
DA	Direct Analysis
DF	Dilution Factor
MDL	Method Detection Limit.
ND	Analyte was NOT DETECTED at or above the reporting limit, or the mdl if provided.
NR	Spike/Surrogate showed no recovery.
Q	Qualifier
RCS	Respirable Crystalline Silica
RL	Reporting Limit
Wet	Sample is not dry weight corrected.

Measurement of uncertainty and any applicable definitions of method modifications are available upon request. Per EPA NLLAP policy, sample results are not blank corrected.



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Project Name: 26-650325

Customer PO:
EMSL Sales Rep: Jennifer Abels

Received: 02/19/2026 13:03
Reported: 02/23/2026 11:50

Aleks Kuchenbrod Laboratory Manager or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. QC sample results are within quality control criteria and met method specifications unless otherwise noted. All results for soil samples are reported on a dry weight basis, unless otherwise noted.

Analysis following EMSL SOP for the Determination of Environmental Lead by FLAA. The laboratory has a reporting limit of 0.0064% by wt., based upon a minimum sample weight of 0.25g submitted to the lab, and is not responsible for any result or reporting limit provided in mg/cm² since it is dependent upon an area value provided by non-lab personnel. A "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty and definitions of modifications are available upon request. Results in this report are not blank corrected unless specified.



EMSL Chain of Custody - One Chain

EMSL Analytical, Inc.

EMSL Order Number / Lab Use Only

EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

102051540

Tampa, FL 33634
PHONE: (813) 280-8752
EMAIL: tampalab@emsl.com

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information	Customer ID:		Billing Information	Billing ID:	
	Company Name:	McDowell & Associates		Company Name:	McDowell & Associates
	Contact Name:	Erik Johnson		Billing Contact:	Robert Korte
	Street Address:	3730 James Savage Rd		Street Address:	21355 Hatcher Avenue
	City, State, Zip:	MIDLAND MI 48644 Country: US		City, State, Zip:	Ferndale MI Country: US
	Phone:	9894963610		Phone:	9894963610
Email(s) for Report: erik.johnson@mcdowasc.com			Email(s) for Invoice: bob.korte@mcdowasc.com		

Project Information

Project Name/No:	26-650325	Purchase Order:	
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected:	MI
		State of Connecticut (CT) must select project location:	<input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)

Sampled By Name:	Erik Johnson	Sampled By Signature:	<i>Erik Johnson</i>	No. of Samples in Shipment:	2
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Turn-Around-Time (TAT)

3 Hour 6 Hour 24 Hour 32 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. 32 Hour TAT available for select tests only, samples must be submitted by 11:30am.

<p>PCM Air</p> <p><input type="checkbox"/> NIOSH 7400</p> <p><input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA</p> <p>PLM - Bulk (reporting limit)</p> <p><input type="checkbox"/> PLM EPA 600/R-93/116 (<1%)</p> <p><input type="checkbox"/> PLM EPA NOB (<1%)</p> <p><input type="checkbox"/> POINT COUNT</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%)</p> <p>POINT COUNT w/ GRAVIMETRIC</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%)</p> <p><input type="checkbox"/> NIOSH 9002 (<1%)</p> <p><input type="checkbox"/> NYS 198.1 (Friable - NY)</p> <p><input type="checkbox"/> NYS 198.6 NOB (Non-Friable - NY)</p> <p><input type="checkbox"/> NYS 198.8 (Vermiculite SM-V)</p>	<p>TEM - Air</p> <p><input type="checkbox"/> AHERA 40 CFR, Part 763</p> <p><input type="checkbox"/> NIOSH 7402</p> <p><input type="checkbox"/> EPA Level II</p> <p><input type="checkbox"/> ISO 10312*</p> <p>TEM - Bulk</p> <p><input type="checkbox"/> TEM EPA NOB</p> <p><input type="checkbox"/> NYS NOB 198.4 (Non-Friable-NY)</p> <p><input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%)</p> <p>Other Test (please specify)</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<p>TEM - Settled Dust</p> <p><input type="checkbox"/> Microvac - ASTM D5755</p> <p><input type="checkbox"/> Wipe - ASTM D6480</p> <p><input type="checkbox"/> Qualitative via Filtration Prep</p> <p><input type="checkbox"/> Qualitative via Drop Mount Prep</p> <p>Soil - Rock - Vermiculite (reporting limit)*</p> <p><input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%)</p> <p><input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.1%)</p> <p><input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%)</p> <p><input type="checkbox"/> TEM Qualitative via Filtration Prep</p> <p><input type="checkbox"/> TEM Qualitative via Drop Mount Prep</p>
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*Please call with your project-specific requirements.

Positive Stop - Clearly Identified Homogeneous Areas (HA) Filter Pore Size (Air Samples) 0.8um 0.45um

<p>LEAD (PB)</p> <p>Flame Atomic Absorption</p> <p><input checked="" type="checkbox"/> Chips SW846-7000B or AOAC 974.2</p> <p><input type="checkbox"/> Soil SW846-7000B/7420</p> <p><input type="checkbox"/> Air NIOSH 7082</p> <p><input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420</p> <p><input type="checkbox"/> ASTM Wipe SW846-7000B/7420</p> <p><input type="checkbox"/> Non-ASTM Wipe SW846-7000B/7420</p> <p><input type="checkbox"/> TCLP SW846-1311/ 7420/ SM3111B</p>	<p>ICP</p> <p><input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%)</p> <p><input type="checkbox"/> Chatfield SOP</p>	<p>MAT-SCI (TAT End of Business Day)</p> <p><input type="checkbox"/> Common Particle ID (large particles)</p> <p><input type="checkbox"/> Full Particle ID (environmental dust) Basic</p> <p><input type="checkbox"/> Material ID (solids)</p> <p><input type="checkbox"/> Advanced Material ID</p> <p><input type="checkbox"/> Physical Testing (Tensile, Compression)</p> <p><input type="checkbox"/> Combustion-By-Products (Soot, Char, etc.)</p> <p><input type="checkbox"/> X-Ray Fluorescence (Elem. Analysis)</p> <p><input type="checkbox"/> X-Ray Diffraction (Crystalline Part.)</p> <p><input type="checkbox"/> MMVFs (Fibrous Glass, RCFs)</p> <p><input type="checkbox"/> Particle Size (Sieve, Microscopy, Laser)</p> <p><input type="checkbox"/> Combustible Dust</p> <p><input type="checkbox"/> Petrographic Examination</p>
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<p>MICROBIOLOGY</p> <p>Swab and Bulk Samples</p> <p><input type="checkbox"/> Mold & Fungi - Direct Examination</p> <p><input type="checkbox"/> Mold & Fungi Culture (Genus Only)</p> <p><input type="checkbox"/> Mold & Fungi Culture (Genus & Species)</p> <p><input type="checkbox"/> Bacterial Count & ID (Up to 3 Types)</p> <p><input type="checkbox"/> Bacterial Count & ID (Up to 5 Types)</p> <p>Sewage Screen</p> <p><input type="checkbox"/> Sewage Screen (PIA)</p> <p><input type="checkbox"/> Sewage Screen (Membrane Filtration)</p> <p>Water Samples</p> <p><input type="checkbox"/> Total Coliform & E. Coli (PIA, SM 9223B)</p> <p><input type="checkbox"/> Heterotrophic Plate Count (PP, SM 9251B)</p> <p><input type="checkbox"/> Fecal Coliform (SM 9222D)</p>	<p>Air Samples</p> <p><input type="checkbox"/> Mold & Fungi (Spore Trap)</p> <p><input type="checkbox"/> Mold & Fungi Culture (Genus Only)</p> <p><input type="checkbox"/> Mold & Fungi Culture (Genus & Species)</p> <p><input type="checkbox"/> Bacterial Count & ID (Up to 3 Types)</p> <p><input type="checkbox"/> Bacterial Count & ID (Up to 5 Types)</p> <p>DNA & PCR Testing: (See Analytical Guide for Code)</p> <p>Test Code:</p> <p>Legionella: (See Analytical Guide for Code)</p> <p>Test Code:</p> <p>PIA= Presence/Absence, PP= Pour Plate</p>	<p>IAQ (TAT End of Business Day)</p> <p><input type="checkbox"/> Nuisance Dust <input type="checkbox"/> NIOSH 0500 <input type="checkbox"/> NIOSH 0600</p> <p><input type="checkbox"/> Airborne Dust <input type="checkbox"/> PM10 <input type="checkbox"/> TSP</p> <p>Silica Analysis: <input type="checkbox"/> All Species</p> <p>Silica Analysis - Single Species</p> <p><input type="checkbox"/> Alpha Quartz <input type="checkbox"/> Cristobalite <input type="checkbox"/> Tridymite</p> <p><input type="checkbox"/> HVAC Efficiency</p> <p><input type="checkbox"/> Carbon Black</p> <p><input type="checkbox"/> Airborn Oil Mist</p> <p>Radon Testing: Call for Kit and COC</p>
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Other Test (please specify)

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:	UPS	Sample Condition Upon Receipt:	
Relinquished by:	<i>Erik Johnson</i>	Received by:	<i>Robert Korte</i>
Date/Time:	2/17/26 12:50	Date/Time:	2/17/26 10:31
Relinquished by:		Received by:	
Date/Time:		Date/Time:	

