

STATE OF OHIO
BRIDGE INSPECTION REPORT

Structure File Number: 4301056

Inventory Bridge Number: LAK-00002-1029 _(4301056)

MUNSON RD over SR-2

Inspection Type: Routine

Inspection Date: 07/31/2020

District: 12

County: 43 - Lake

Place Code (FIPS): 49056

Bridge Type:

4 - Steel continuous

02 - Stringer/Multi-beam or Girder

N- Not Applicable

Type of Service:

1 - Highway

Maintenance Responsibility:

01 - State Highway Agency

Inspection Responsibility:

01 - State Highway Agency

Routine Maintenance Responsibility:

04 - City or Municipal Highway Agency

Lead Inspector: Gerstenslager,
Michael

Reviewed by: Youssef Seif

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Ohio Bridge Inspection Summary Report

LAK-00002-1029 (4301056)

2: District 12 49056 - MENTOR (LAK county)
 21: Major Maint A/B 01 - State Highway Agency /
 225 Routine Main A/B 04 - City or Municipal Highway /
 Agency
 221 Inspection A/B 01 - State Highway Agency /
 220: Inv. Location LAK

5A: Inventory Route 1 M0510
 7: Facility On MUNSON RD
 6: Feature Ints SR-2
 9: Location 3/4 MI EAST OF SR-615

Condition	
58: Deck	7 - Good Condition
58.01 Wearing Surface	7 - Good (1% distress)
58.02 Joint	6- Satisfactory (isolated leaking)
59: Superstructure	6 - Satisfactory Condition
59.01 Paint & PCS	6 - Satisfactory (5-10% corr.)
60: Substructure	5 - Fair Condition
61: Channel	N - Not Applicable
61.01 Scour	N - Not Applicable
62: Culverts	N - Not Applicable

Structure Type	
43: Bridge Type	4 - Steel continuous
	02 - Stringer/Multi-beam or Girder
	N- Not Applicable
45: Spans Main / Approach	4 / 0
107: Deck Type	1 - Concrete Cast-in-Place
408: Composite Deck	Y - Composite Construction
414A Joint Type 1	8 - Elastomeric Strip Seal
414B: Joint Type 2	N - None
108A: Wearing Surface	1 - Monolithic Concrete (concurrently placed with structural deck)
	N- Not Applicable

67.01 GA 5

Appraisal				
36: Rail, Tr, Gd, Term Std	1	1	1	1
72: Approach Alignment	8 - Equal to present desirable criteria			
113: Scour Critical	N - Not over waterway			
71: Waterway Adequacy	N - Not Applicable			

422: WS Date	01/01/1991
423: WS Thick (in)	1.2
482: Protective Coating	5 - Paint System OZEU
483: PCS Date	09/20/2000
453: Bearing Type 1	2 - Rockers & Bolsters
455: Bearing Type 2	N - None
528: Foundn: Abut Fwd	1 - Steel H Piles (Other size)
533: Foundn: Abut Rear	1 - Steel H Piles (Other Size)
536: Foundn: Pier 1	1 - Steel H Piles (Other size)
539: Foundn: Pier 2	0 - Other

Geometric	
48: Max Span Length (ft)	72.0
49: Structure Length (ft)	249.0
52: Deck Width, Out-To-Out (ft)	40.0
424: Deck Area (sf)	9957.0
32: Appr Roadway Width (ft)	30.0
51: Road Width, Curb-Curb (ft)	28.0
50A: Curb/SW Width: Left (ft)	5
50A: Curb/SW Width: Right (ft)	5
34: Skew (deg)	15
33: Bridge Median	0 - No median
54B: Min Vert Underclearance (ft)	16.25
336A: Min Vert Clrnce IR Cardinal (ft)	99
336B: Min V Clr IR Non-Cardinal (ft)	0
578: Culvert Length (ft)	0

Age and Service	
27: Year Built/ 106 Rehab	1959 / 1991
42A: Service On	1 - Highway
42B: Service Under	1 - Highway, with or w/out pedestrian
28A: Lanes on	02
28B: Lanes Under	04
19: Bypass Length	2
29: ADT	5967
109: % Trucks (%)	7

Load Posting	
41: Op/Post/Closed	A - Open
70: Posting	5 - Equal to or above legal loads
70.01: Date	
70.02: Sign Type	
734: Percent Legal (%)	150
704: Analysis Date	07/01/1991
63: Analysis Method	6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Inspections		
	Months	
90: Routine Insp.	12	07/31/2020
92A: FCM Insp.	N	
92B: Dive Insp.	N	
92C: Special Insp.	N	
92D: UBIT Insp.	N	
92E: Drone Insp.		
Inspector	Gerstenslager, Michael	

Inspector: Michael Gerstenslager

Inspection Date: 07/31/2020

Structure Number: 4301056

Facility Carried: MUNSON RD

Bridge Inspection Report

Location Map

Inspector: Michael Gerstenslager

Inspection Date: 07/31/2020

Structure Number: 4301056

Facility Carried: MUNSON RD

Bridge Inspection Report

Executive Summary

ODOT District: 12

LAK-00002-1029_(4301056)

Date Built: 07/01/1959

Major Maint: 01 - State Highway Agency

Facility Carried: MUNSON RD

Traffic On: 1 - Highway

Rehab Date: 01/01/1991

Routine Maint: 04 - City or Municipal Highway Agency

Feature Inters: SR-2

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp. 01 - State Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Location: LAK

3/4 MI EAST OF SR-615

Resp A:

Insp

Resp B:

Inspector Gerstenslager,Michael Inspection Date 07/31/2020

Reviewer Youssef Seif

National Bridge Inventory

Status 0 - ND Sufficiency Rating 68.7

Identification	Inspections
----------------	-------------

(1) State Code	395 - Ohio	(90) Inspection Date	07/31/2020
(8) Structure File Number (SFN)	4301056	(91) Designated Inspection Frequency	12
(7) Facility Carried	MUNSON RD	(92) Critical Feature Inspection	(93) CFI Date
(208) Route on the Bridge	41 - Municipal	A. Fracture Critical Detail	N
(2) Highway Agency District	12	B. Underwater Inspection	N
(3) County Code	43 - Lake	C. Other Special Inspection	N
(209) Interstate Mile Marker		D.01 Snooper Inspection	N
(201) Special Designation		E.01 Drone Inspection	

Condition

(4) Place Code (FIPS)	49056 - MENTOR (LAK county)	(58) Deck	7 - Good Condition
(5) Inventory Route		(58.01) Wearing Surface	7 - Good (1% distress)
(A) Record Type On/Under Always "On"	1: Route carried "on" the structure	(58.02) Expansion Joint	6- Satisfactory (isolated leaking)
(B) Route Signing Prefix (Highway System)	5 - CITY STREET	(59) Superstructure	6 - Satisfactory Condition
(C) Designated Level of Service (Highway Designation)	1 - MAINLINE	(59.01) Protective Coating System (PCS)	6 - Satisfactory (5-10% corr.)
(D) Route Number	M0510	(60) Substructure	5 - Fair Condition
(E) Directional Suffix	0 - NOT APPLICABLE	(61) Channel & Channel Protection	N - Not Applicable
(6) Features Intersected	SR-2	(61.01) Scour	N - Not Applicable
(9) Location	3/4 MI EAST OF SR-615	(62) Culvert	N - Not Applicable
(11) Milepoint	0.26	(67.01) General Appraisal	5 - Fair Condition (minor section loss)
(12) Base Highway Network	Inventory Route is not on the Base Network		
(13A) LRS Inventory Route			
(13B) Subroute Number			
(16) Latitude	41.69242 Degrees		
(17) Longitude	-81.32783 Degrees		
(16.01) Latitude - Ohio	41.692417		
(17.01) Longitude - Ohio	-81.327825		
(98A) Border Bridge State Code			
(98B) Border Bridge State Percent Responsibility			
(99) Border Bridge Struct No.			

ODOT District: 12

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Rehab Date: 01/01/1991

Routine Maint: 04 - City or Municipal Highway

Feature Inters: SR-2

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Location: LAK

3/4 MI EAST OF SR-615

Insp Resp B:

Inspector Gerstenslager, Michael Inspection Date 07/31/2020

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Structure Type and Material

Load Rating and Posting

- (43) Main Structure Type
 - A. 4 - Steel continuous
 - B. 02 - Stringer/Multi-beam or Girder
 - C. N- Not Applicable

- (31) Design Load 6 - HS 20+Mod
- (63) Operating Rating Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.
- (64) Operating Rating Factor 1.3

- (44) Approach Type
 - A. 0 - Other
 - B. 00 - Other
 - C. N- Not Applicable

- (65) Inventory Rating Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.
- (66) Inventory Rating Factor 1
- (41) Structure Open, Posted, or Closed to Traffic A - Open

(45) Number of Spans in Main Unit 4

(70) Bridge Posting 5 - Equal to or above legal loads

(46) Number of Approach Spans 0

(70.01) Date Posted

(107) Deck Structure Type 1 - Concrete Cast-in-Place

(70.02) Posted Sign Type

(107.01)

(70.03) Posted Weight

(108B) External Deck Protection N - NA

(108C) Internal Deck Protection 1 - Epoxy Coated Reinforcing

(422) Wearing Surface Date 01/01/1991

(108A) Wearing Surface Type 1 - Monolithic Concrete (concurrently placed with structural deck)

Appraisal

(108A.01) N- Not Applicable

(67) Structural Evaluation 5 - Somewhat better than minimum adequacy

(423) Wearing Surface Thickness 1.2 in

(68) Deck Geometry 4 - Meets minimum tolerable limits

(483) Protective Coating System Date 09/20/2000

(69) Underclearances, Horizontal and Vertical 4 - Meets minimum tolerable limits

Age of Service

(27) Year Built 1959

(71) Waterway Adequacy N - Not Applicable

(263) Date Built 07/01/1959

(72) Approach Roadway Alignment 8 - Equal to present desirable criteria

(106) Year Reconstructed 1991

(36) Traffic Safety Feature

(264) Major Reconstruction Date 01/01/1991

(42) Type of Service

On 1 - Highway

Under 1 - Highway, with or w/out pedestrian

A. Bridge Railings: 1 - Meets acceptable standards

B. Transitions: 1 - Meets acceptable standards

C. Approach Guardrail 1 - Meets acceptable standards

D. Approach Guardrail Ends 1 - Meets acceptable standards

(28) Lanes On 02 Under 04

(113) Scour Critical N - Not over waterway

(29) Average Daily Traffic 5967 (30) ADT Yr. 2015

(109) Truck Percentage 7 % Truck

(114) Future Avg Daily Traffic 75500 (115) Future ADT Yr. 2038

(19) Bypass Detour Length 2 mi.

ODOT District: 12

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Traffic On: 1 - Highway

Rehab Date: 01/01/1991

Routine Maint: 04 - City or Municipal Highway Agency

Feature Inters: SR-2

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Location: LAK

3/4 MI EAST OF SR-615

Insp Resp B:

Inspector Gerstenslager,Michael Inspection Date 07/31/2020

Reviewer Youssef Seif

Classification	Geometric Data
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(112) NBIS Bridge Yes

(104) Highway System of the Inventory Route 0 - Structure/Route is NOT on NHS

(26) Functional Classification of Inventory Route 16 - Urban - Minor Arterial

(100) Strahnet Highway Designation Not a STRAHNET route

(101) Parallel Structure Designation N - No parallel structure

(102) Direction of Traffic 2-way traffic

(103) Temporary Structure Design Not Applicable

(105) Federal Lands Highways Inventory route not on network

(110) Designated National Network

(20) Toll 3 - On Free Road

(48) Longest Span 72.0 Ft.

(49) Structure Length 249.0 Ft.

(50A) Curb/Sidewalk Left Side - Width 5 Ft.

(50B) Curb/Sidewalk Right Side - Width 5 Ft.

(51) Brdg Roadway Width Curb-to-Curb 28.0 Ft.

(52) Deck Width, Out-to-Out 40.0 Ft.

(32) Approach Roadway Width 30.0 Ft.

(33) Bridge Median 0 - No median

(34) Skew 15 Deg.

(35) Structure Flared 0 - No flare

Clearances

(225) Routine Maintenance Responsibility A. 04 - City or Municipal Highway Agency
B. 01 - State Highway Agency

(21) Maintenance Responsibility (21B) Major Maint. Responsibility B A. 01 - State Highway Agency
B. 01 - State Highway Agency

(22) Owner 01 - State Highway Agency

(37) Historical Significance 5 - Not eligible

(10) Practical Maximum Vertical Clearance 99 Ft.

(53) Minimum Vertical Clearance Over Bridge Roadway 99 Ft.

(47) Total Horizontal Clearance (Inventory Route) 48 Ft.

(54) Minimum Vertical Under Clearance B. 16.25 Ft.
A. H - Highway beneath structure

(56) Minimum Lateral Under Clearance on Left 10 Ft.

(55) Minimum Lateral Under Clearance on Right B. 10 Ft.
A. H - Highway beneath structure

Navigation Data

(38) Navigation Control N - Not applicable, no waterway

(39) Nav Vert Clearance 0.0 Ft.

(40) Nav Horizontal Clearance 0.0 Ft.

(111) Pier or Abutment Protection

(116) Minimum Navigation Vertical Clearance, Vertical Lift Bridge 0.0 Ft.

Inventory Route Clearances

NBI 005A: On/Under 1: Route carried "on" the structure

NBI 005D: Route No. M0510

	<u>Cardinal Direction</u>		<u>Non-Cardinal Direction</u>	
(336) Minimum Vertical Clearance on IR	99	Ft.	0	Ft.
(335) Minimum Horizontal Clearance on IR	48	Ft.	48	Ft.

Ohio Bridge Inventory

General

(203) Bridge Name (Dedicated Name)	
(204) Ohio Designated MPO	08 - NOACA (Cleveland)
(205) Route Number Extension	
(206) Inventory Preferred Route	NP - Non Preferred Route
(5.01) Priority System Code (Inventory Route)	
(213) NLF_ID Inventory Route	MLAKMR00510**C
(218) Major Bridge	N - No
(220) Inventory Location	LAK
(226) Seismic Susceptibility	N - not applicable
(227) GASB	Y - Yes
(236) Future Traffic Factor	1.388
(245) Aperture Cards Fabrication	1 - Yes
(246) Aperture Cards Original	1 - Yes
(247) Aperture Cards Repair	2 - No
(248) Original Construction Project Number	059558
(251) Standard Drawing Number	CSB-2-56
(252) Microfilm Reel Number	LAK005
(261) Bridge Remarks	

LAK-00002-10290-

(265) Electric Line Present	U - Unknown
(266) Gas Line Present	U - Unknown
(269) Sanitary Sewer Present	U - Unknown
(306) NBIS Bridge Length	249
(207) Route Under the Bridge	10

Inventory Route Clearances

<u>Inventory Route</u>	<u>Cardinal</u>	<u>Non-Cardinal</u>	
(336) Minimum Vertical Clearance	99	0	ft.
(335) Minimum Horizontal Clearance	48	48	ft.

Load Rating

(717) 2F1 Operating Rating Factor (GVW 15 T)	
(720) 3F1 Operating Rating Factor (GVW 23 T)	
(723.01) 4F1 Operating Factor (GVW 27 T)	
(726.01) 5C1 Operating Rating Factor (GVW 40 T)	
(723.02) SU4 Operating Rating Factor (GVW 27 T)	
(726.02) SU5 Operating Rating Factor (GVW 31 T)	
(732.01) SU6 Operating Rating Factor (GVW 34.75 T)	
(732.02) SU7 Operating Rating Factor (GVW 38.75 T)	
(735) EV2 Operating Rating Factor (GVW 28.75 T)	
(738) EV3 Operating Rating Factor (GVW 43 T)	
(734) Ohio Percent Legal	150
(705) Load Rater First Name	
(706) Load Rater Last Name	
(707) Load Rater PE Number	0
(704) Load Rating Date	07/01/1991
(708) Load Rating Software	1 - BARS
(709) Rating Source	1 - Plan information available for load rating analysis (Default)

Inspection Access

(92.02) Snooper Inspection Traffic Control	
(92.03) Snooper Inspection Est. Crew Hours	
(459) Inspection Access	N - The bridge does not include this feature

Deck & Approach

(224) Temporary Subdecking		N - No		
(404) Approach Slab Type		1 - Reinforced Concrete		
(405) Approach Slab Length		0		
	1		2	3
(406) Bridge Median Type	N - None		N - Non Barrier	N - No Joint
(407) Bridge Railing Type		1 - Reinforced Concrete Parapet		
(408) Composite Deck Code		Y - Composite Construction		
(419) Expansion Joint with Trough Retrofit 2		N - No		
(421) Joint Trough (Y/N)		N - No		
(431) Fence		Y - The bridge includes this feature		
(432) Fence Height on Bridge		0		
(433) Glare Screen		N - The bridge does not include this feature		
(434) Noise Barrier Walls		N - The bridge does not have Noise Barrier Walls		
(424) Deck Area		9957.0		
(427) Left Sidewalk/Curb Material		2 - Steel		
(428) Left Sidewalk/Curb Type		1 - Safety Curb (2' or less width)		
(429) Right Sidewalk/Curb Material		2 - Steel		
(430) Right Sidewalk/Curb Type		1 - Safety Curb (2' or less width)		

Substructure

(526) Abutment Forward Type	5 - Stub Gravity
(527) Abutment Forward Material Type	2 - Concrete
(528) Abutment Forward - Foundation Type	1 - Steel H Piles (Other size)
(531) Abutment Rear Type	5 - Stub Gravity
(532) Abutment Rear Material Type	2 - Concrete
(533) Abutment Rear - Foundation Type	1 - Steel H Piles (Other Size)
(534) Pier 1 (Predominate) Type	5 - Capped Column
(535) Pier 1 (Predominate) Material	2 - Concrete
(536) Pier 1 Type - Foundation Type	1 - Steel H Piles (Other size)
(537) Pier 2 Type	N - None
(538) Pier 2 Material	N - None
(539) Pier 2 Type - Foundation Type	0 - Other
(547) Slope Protection Type	2 - Stone (No. 1 Aggregate)

Superstructure

(711) Live Load Response	S - Satisfactory		
(468) Hinges/Pins/Hangers Type	N - Not Applicable (structures with no hinges)		
(409) Deck Drainage Type	0 - Other (Natural-off the bridge ends)		
(411) Deck Concrete Type	U - Unknown		
	A	B	C
(414) Expansion Joint Type	8 - Elastomeric Strip Seal	N - None	N - None
(301) Horizontal Curve Degree			
(453) Bearing Device 1, Type	2 - Rockers & Bolsters		
(455) Bearing Device 2, Type	N - None		
(465) Framing Type	4 - Straight Beams/Girders		
(466) Haunched Girder	N - Bridge does not contain a haunched girder		
(467) Haunched Girder Depth	0		
(474) Main Structure System	N - Not Applicable (i.e. Culvert, Beam, Slab, etc.)		
(475) Main Member Type	1 - Rolled Steel		
(482) Protective Coating System Type	5 - Paint System OZEU		
(487) Structural Member Steel Type	5 - A373		
(498) Protective Coating System Surface Area	13821		
(499) Structural Steel Paint	2 - Field		
(478) Post Tensioned Main Member Code	N - Bridge is not Post Tensioned		

Culvert and Waterway

(575) Culvert Type	N - Not a Culvert or Rigid Frame		
(578) Culvert Length Inlet_to_Outlet	0		
(580) Fill Depth Over Culvert	0		
(651) Scenic River	N - Waterway is not classified as Scenic River		
(587) Rise			
(588) Shape			
(655) Channel Protection Type	X - Not Applicable		
(663) Stream Velocity	0.0		
(672) pH			

Inspector: Michael Gerstenslager

Structure Number: 4301056

Inspection Date: 07/31/2020

Facility Carried: MUNSON RD

Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	3 - Mod.	9272	sq. ft.	7797	1475	0	0
805 - Wearing Surface - Monolithic Concrete		6832	sq. ft.	6272	560	0	0
107 - Steel Open Girder/Beam	3 - Mod.	1220	ft.	1062	150	8	0
515 - Steel Protective Coating		10795	sq. ft.	0	9575	1100	120
205 - Reinforced Concrete Column	3 - Mod.	12	each	6	3	3	0
215 - Reinforced Concrete Abutment	3 - Mod.	79	ft.	27	40	12	0
234 - Reinforced Concrete Pier Cap	3 - Mod.	108	ft.	89	15	4	0
300 - Strip Seal Expansion Joint	3 - Mod.	76	ft.	38	38	0	0
311 - Movable Bearing	3 - Mod.	20	each	10	10	0	0
313 - Fixed Bearing	3 - Mod.	5	each	5	0	0	0
321 - Reinforced Concrete Approach Slab	3 - Mod.	1400	sq. ft.	1350	50	0	0
331 - Reinforced Concrete Bridge Railing	3 - Mod.	488	ft.	244	244	0	0
815 - Drainage	3 - Mod.	2	each	2	0	0	0
830 - Abutment Backwall	3 - Mod.	79	ft.	63	16	0	0

ODOT District: 12

LAK-00002-1029_(4301056)

Major Maint: 01 - State Highway Agency

Facility Carried: MUNSON RD

Traffic On: 1 - Highway

Date Built: 07/01/1959

Rehab Date: 01/01/1991

Routine Maint: 04 - City or Municipal Highway Agency

Feature Inters: SR-2

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp: 01 - State Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Location: LAK

3/4 MI EAST OF SR-615

Resp A:

Insp

Resp B:

Inspector

Gerstenslager, Michael

Inspection Date

07/31/2020

Reviewer

Youssef Seif

Inspector Comments - Deck and Approach

Deck

Floor/Slab (SF)

Transverse leached cracks. A few haunch spalls.

Edge of Floor/Slab (LF)

Transverse cracks, some leaching.

Bridge Wearing Surface (SF)

A few transverse cracks.

Curbs/Sidewalk (LF)

Many cracks. Rusting to steel curb plate.

Bridge Railing (LF)

Many map cracks. Rusting section loss to some posts & hardware.

Expansion Joint (LF)

Forward joint closed at 90° F.

Approach

Approach Wearing Surface (EA)

Cracks. Asphalt break up & small asphalt patch at rear.

Approach Slab (SF)

Partially sealed cracks at rear (one full length). Note: forward slab paved over.

Approach Embankment (EA)

18" Deep erosion at forward-left guardrail post 1 (covered with vegetation). 24" deep erosion hole to forward-right at approach walk. Minor settlement to all four approach walks.

Approach Guardrail (EA)

Note: gaps as wide as 6' between concrete approach rail and first guardrail post at all corners.

Signs (EA)

No bridge end markers.

Inspector Comments - General Appraisal

Superstructure

Superstructure Alignment (EA)

Note: bent lower flanges over EB & WB traffic (collision damage).

Beams/Girders (LF)

Pitting & rusted section loss at beam ends. Lower flange of beam 5 bent up 1/2" with small gouge next to bent area over WB lane 3. Beam 2 lower flange bent up 1" & beam 4 lower flange bent up 1.25" over EB traffic. Scrapes & minor gouges to all other lower flanges over EB traffic. Small hole in bottom of top flange of beam 4 at rear.

Diaphragm/X-Frames (EA)

Endframe rusted section loss with a few rusting pin holes. Cracked welds to forward endframe 4 (at beams 4 & 5). Bent diagonal angle to forward endframe 4. Bent horizontal xframe angle in bay 4 span 4.

Bearing Devices (EA)

Shim plates rusted away with loss of bearing at corner of rear bearing 2.

Protective Coating System (LF)

Rust. Peeling paint. Fading throughout.

Fatigue (LF)

Welded cover plates at piers.

Utilities (LF)

Anchors missing from conduit along outside left rail over both slopes. Conduit hanger detached from xframe in bay 4 over EB lane #3. Slight misalignment to bay 4 utilities in span 3.

Substructure

Abutment Walls (LF)

Cracks. Rust stains. Concrete patches. Delaminated areas & spalls with exposed rebar (some deep) in rear bays 1 & 2 and forward bay 1. Some delams & spalls to cheekwalls.

Pier Caps (LF)

Cracks. Spall on P3 cap above C4. Large delams on P1 cap between C1 & C2. Other delams.

Pier Columns/Bents (EA)

Spalls with exposed rebar as large as 20sf to Pier 1 columns 1,2, & 4. 15 sf delams to P1C3 and P3C2 and C3.

Backwalls(LF)

Cracks, some leaching. Delams & spalls.

Wingwalls (EA)

Cracks.

Slope Protection (EA)

Some exposure of abutment footing at forward-right.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical

ODOT District: 12

LAK-0002-1029_(4301056)

Date Built: 07/01/1959

Major Maint: 01 - State Highway Agency

Facility Carried: MUNSON RD

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Rehab Date: 01/01/1991

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Feature Inters: SR-2

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp. 01 - State Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Location: LAK

3/4 MI EAST OF SR-615

Resp A:

Insp

Resp B:

Inspector

Gerstenslager,Michael

Inspection Date 07/31/2020

Reviewer Youssef Seif

Under Records

Under Record 1

Identification

(1) State Code	395 - Ohio	(6) Features Crossed Over	MUNSON RD
(11) Milepoint	10.290	(7) Facility Carried Under	MUNSON RD
(201) Special Designation		(8) Structure No.	4301056
(5A) Roadway On/Under	2: Single route goes "under" the structure	(12) Base Highway Network	Inventory Route is not on the Base Network
(5B) Route Type	3 - STATE HIGHWAY	(13A) LRS Route	
(5C) Level of Service	1 - MAINLINE	(13B) Subroute Number	
(5D) Route Number	00005	(213) NLF_ID Under Route	SLAKSR00002**C
(5E) Directional Suffix	0 - NOT APPLICABLE	(206) Preferred Under Route	

Age of Service

(19) Bypass Detour Length		(381) Intersected Route Daily Truck Traffic	1570
(29) Est Average Daily Traffic	54395	(109) Average Daily Truck Traffic	3
(30) Year of Average Daily Traffic	2015		

Geometric Data

(10) Practical Maximum Vertical Clearance		(47) Total Horizontal Clearance	28
	CARDINAL		NON-CARDINAL
(336A) Minimum Vertical Clearance	16.25	(336B) Minimum Vertical Clearance	16.25
(335A) Minimum Horizontal Clearance	28	(335B) Minimum Horizontal Clearance	0

Classification

(20) Toll	3 - On Free Road	(101) Parallel Highway	N - No parallel structure
(26) Functional Classification	12 - Urban - Principal Arterial - Other Freeway or Expressway	(102) Direction of Traffic	2-way traffic
(209) Interstate Mile Marker		(104) Highway System of the Under Route	1 - Under Route is on NHS
(100) STRAHNET Highway	Not a STRAHNET route	(110) Designated National Network	Under route not on network

Inspector: Michael Gerstenslager

Inspection Date: 07/31/2020

Structure Number: 4301056

Facility Carried: MUNSON RD

Bridge Inspection Report

Channel Measurement

Date of Channel Measurements:

Distance Measured From:

Depth Measured From:

Number of Measurement Points Taken:

Number of Fixed Objects in Channel:

Water Level:

High Water Mark:

Measurement Type:



Inspector: Michael Gerstenslager

Inspection Date: 07/31/2020

Structure Number: 4301056

Facility Carried: MUNSON RD

Bridge Inspection Report

Pictures

Inspector: Michael Gerstenslager

Inspection Date: 07/31/2020

Structure Number: 4301056

Facility Carried: MUNSON RD

Bridge Inspection Report

Sketches

LAK-00002-1029_(4301056)

ODOT District: 12

Major Maint: 01 - State Highway Agency

Routine Maint: 04 - City or Municipal Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Facility Carried: MUNSON RD

Feature Inters: SR-2

Location: LAK

Traffic On: 1 - Highway

Traffic Under: 1 - Highway, with or w/out pedestrian

3/4 MI EAST OF SR-615

Date Built: 07/01/1959

Rehab Date: 01/01/1991

Insp. Resp A: 01 - State Highway Agency

Insp Resp B:

Inspector

Gerstenslager,Michael

Inspection Date

07/31/2020

Reviewer

Youssef Seif

Summary Recommendations

LAK-00002-1029_(4301056)

ODOT District: 12

Major Maint: 01 - State Highway Agency

Facility Carried: MUNSON RD

Traffic On: 1 - Highway

Date Built: 07/01/1959

Rehab Date: 01/01/1991

Routine Maint: 04 - City or Municipal Highway Agency

Feature Inters: SR-2

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Location: LAK

3/4 MI EAST OF SR-615

Insp Resp B:

Inspector

Gerstenslager, Michael

Inspection Date

07/31/2020

Reviewer Youssef Seif

Governing Members

LAK-00002-1029_(4301056)

ODOT District: 12

Major Maint: 01 - State Highway Agency

Routine Maint: 04 - City or Municipal Highway Agency

FIPS Code: 49056 - MENTOR (LAK county)

Facility Carried: MUNSON RD

Feature Inters: SR-2

Location: LAK

Traffic On: 1 - Highway

Traffic Under: 1 - Highway, with or w/out pedestrian

3/4 MI EAST OF SR-615

Date Built: 07/01/1959

Rehab Date: 01/01/1991

Insp. 01 - State Highway Agency

Resp A:

Insp

Resp B:

Inspector

Gerstenslager,Michael

Inspection Date

07/31/2020

Reviewer

Youssef Seif

Complex Bridge Superstructure Comments

Historic Bridge Data

Status

(8) Structure File Number (SFN)	4301056	(37) Historical Significance Code	5 - Not eligible
(826) NR Recommendation		(837) Historical District	
(840) Historical National Register Listed		(834) Reviewed By	
(850) In Management Plan (2009)	N- No		

Identification

(825) Historical Bridge Name		(7) Facility Carried	MUNSON RD
(22) Owner	01 - State Highway Agency	(6) Feature Intersected	SR-2
(4) Place Code (FIPS)	49056 - MENTOR (LAK county)	(5) Inventory Route	
(3) County (Parish) Code	43 - Lake	(B) Route Signing Prefix	5 - CITY STREET
(2) Highway Agency District	12	(D) Route Number	M0510
(9) Location	3/4 MI EAST OF SR-615	(16) Latitude at Rear Abutment	41.69242 degrees
(883) UTM		(17) Longitude at Rear Abutment	-81.32783 degrees

Structural Information

(43) Main Structure Type	4 - Steel continuous	02 - Stringer/ Multi-beam or Girder	N- Not Applicable	(827) Historical Year Built	1959
(828) Historical Bridge Type	330 - CONTINUOUS			(836) Historical Data Source	
(49) Structure Length	249.0	ft		(831) Historical Builder	192
(45) No. of Main Spans	4			(842) Historical Bridge Designer	126
(407) Bridge Railing Type	1 - Reinforced Concrete Parapet			(106) Year Reconstructed	1991
				(829) Previous Inventory Date	

Classification of Service

(26) Functional Class of Inventory Route	16 - Urban - Minor Arterial	(29) Average Daily Traffic (ADT)	5967
(104) Highway System of the Inventory Route	0 - Structure/Route is NOT on NHS	(30) Year of ADT	2015
(71) Waterway Adequacy	N - Not Applicable	(109.01) Avg. Daily Truck Traffic (ADTT)	418
		(102) Direction of Traffic	2-way traffic

Historical Significance

(843) Historical Setting/Context

(844) Historical Physical Description

(845) Historical Integrity

(846) Historical Significant Description

The bridge is an excluded bridge type that has been recommended not eligible based on the context of its type/design and date of construction.

(847) Historical Bridge Remarks

(860) Justification

Capacity

(51) Bridge Rdwy Width Curb-Curb	28.0	ft	(66) Inventory Rating Load	1	
(873) Bridge Rdwy Width Required		ft	(64) Operating Rating Load	1.3	
(872) Bridge Rdwy Width Adequare	Y		(878) Inventory Rating Load - Required		
(32) Approach Rdwy Width	30.0	ft	(877) Inventory Rating Load - Adequate	Y	
(841) Bridge Wider	N		(28) Lanes On	02	
(52) Deck Width Out-Out	40.0	ft	(880) Lanes On - Required		ft
(50A) Curb/Sidewalk Left Side - Width	5	ft	(879) Lanes On - Adequate	Y- Yes	
(50B) Curb/Sidewalk Right Side - Width	5	ft	(876) Geometry Adequate		
(10) Minimum Vertical Clearance On, Cardinal	99	ft	(871) Alignment/Sight Distance Adeqaute		

(874) Conformance Comments

(882) Structural Deficiency Summary

(875) Crash Data

Historic Bridge Management Plan

(853) Historical Management Summary

Preservation Potential

(861) Prudent and Feasible to Leave Bridge in Place

(862) Preservation Potential

(863) Preservation Summary

(864) No Build Alternative Consideration

(881) Rehab Without Adverse Effect

(865) Historic Bypass Information

(866) Other Preservation Options

(867) Preservation Recommendation

(868) Comment Recommendation

(869) Comment Date

(870) Plan Comment

