

Ohio Bridge Inspection Summary Report

LAK-00020-1723 (4302206)

2: District 12 59430 - PAINESVILLE TWP (LAK county)
 21: Major Maint A/B 01 - State Highway Agency /
 225 Routine Main A/B 01 - State Highway Agency /
 221 Inspection A/B 01 - State Highway Agency /
 220: Inv. Location LAK

5A: Inventory Route 1 00020
 7: Facility On USR 20
 6: Feature Ints GRAND RIV. 1.17 MI W 535
 9: Location 0.95 MI E SR86

Condition	
58: Deck	5 - Fair Condition
58.01 Wearing Surface	5 - Fair (10-15%, 2% asphalt patch)
58.02 Joint	6- Satisfactory (isolated leaking)
59: Superstructure	7 - Good Condition
59.01 Paint & PCS	6 - Satisfactory (5-10% corr.)
60: Substructure	7 - Good Condition
61: Channel	7
61.01 Scour	7 - Good
62: Culverts	N - Not Applicable
67.01 GA	7

Structure Type	
43: Bridge Type	4 - Steel continuous 02 - Stringer/Multi-beam or Girder N- Not Applicable
45: Spans Main / Approach	3 / 0
107: Deck Type	1 - Concrete Cast-in-Place
408: Composite Deck	Y - Composite Construction
414A Joint Type 1	7 - Steel Reinforced Elastomeric
414B: Joint Type 2	3 - Compression Seal
108A: Wearing Surface	2 - Integral Concrete (separate non-modified layer of concrete added to structural deck) 1- Super Plasticized

Appraisal	
Sufficiency Rating	76.8 SD/FO 0 - ND
36: Rail, Tr, Gd, Term Std	1 1 1 1
72: Approach Alignment	8 - Equal to present desirable criteria
113: Scour Critical	8 - Stable for scour conditions
71: Waterway Adequacy	7 - Slight Chance of Overtopping Bridge

422: WS Date	10/15/2008
423: WS Thick (in)	2.0
482: Protective Coating	3 - Paint System A
483: PCS Date	09/01/1988
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	4 - Spread Footing

Geometric	
48: Max Span Length (ft)	152.0
49: Structure Length (ft)	399.0
52: Deck Width, Out-To-Out (ft)	40.3
424: Deck Area (sf)	16079.7
32: Appr Roadway Width (ft)	38.0
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)	20
33: Bridge Median	0 - No median
54B: Min Vert Underclearance (ft)	0
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	1988 / 0000
42A: Service On	5 - Highway-pedestrian
42B: Service Under	5 - Waterway
28A: Lanes on	02
28B: Lanes Under	00
19: Bypass Length	8
29: ADT	6724
109: % Trucks (%)	5

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	07/01/1900
63: Analysis Method	6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Inspections	
90: Routine Insp.	Months 12 03/16/2021
92A: FCM Insp.	N
92B: Dive Insp.	N
92C: Special Insp.	N
92D: UBIT Insp.	N
92E: Drone Insp.	Y 36
Inspector	Gerstenslager,Michael

Inspector: Michael Gerstenslager

Structure Number: 4302206

Inspection Date: 03/16/2021

Facility Carried: USR 20

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.	16060	sq. ft.	13023	1100	1825	112
	112 sf spall with exposed rebar with section loss in span 1 bay 3 (CS 4). 1525 sf of leaching cracks with heavy efflorescence and mottled areas in span 1 (CS 3). 300 sf of mottled areas with rust stains and efflorescence in span 2 (CS 3). Rust stains from chairs throughout (CS 2).						
510 - Wearing Surfaces		11172	sq. ft.	5222	5225	725	0
	Longitudinal full-length cracks spaced from 1 to 5 feet, as wide as 1/8" with delaminated areas along cracks (CS 3). Areas of map cracking . Crack width 1/8" (CS 2).						
107 - Steel Open Girder/Beam	3 - Mod.	1995	ft.	1546	399	50	0
	Rusting section loss to beam ends at rear (CS 3). Areas of minor corrosion throughout (CS 2).						
515 - Steel Protective Coating		26933	sq. ft.	0	25488	1350	95
	Heavy rusting at rear to beam ends. Exposure of bare metal to some lower flanges in span 1 (CS 4). Areas of peeling and blistering paint mainly at rear (CS 3). Faded paint throughout (CS 2).						
210 - Reinforced Concrete Pier Wall	3 - Mod.	56	ft.	56	0	0	0
215 - Reinforced Concrete Abutment	3 - Mod.	86	ft.	81	5	0	0
	A few cracks to both (CS 2).						
234 - Reinforced Concrete Pier Cap	3 - Mod.	86	ft.	86	0	0	0
306 - Other Joint	3 - Mod.	86	ft.	0	50	36	0
	Joint leaking down backwall at rear in bays 1,3, and 4 and at forward in bay 4 (CS3). Seal falling out at rear-left and popped out at forward-left (CS 3). Minor gouges to armor (CS 2). Debris in both joints (CS 2).						
311 - Movable Bearing	3 - Mod.	15	each	10	0	5	0
	Rusting section loss and pack rust to rear bearings (CS 3).						
313 - Fixed Bearing	3 - Mod.	5	each	5	0	0	0
321 - Reinforced Concrete Approach Slab	3 - Mod.	1900	sq. ft.	1840	60	0	0
	Full width cracks in both slabs near expansion joints (CS 2).						
331 - Reinforced Concrete Bridge Railing	3 - Mod.	798	ft.	723	40	35	0
	Delaminations and spalls with exposed rebar mainly on left rail (CS 3). Collision damage to aluminum post and rail at forward-left, and three damaged posts to right rail (CS 2). Cracks to both (CS2).						
815 - Drainage	3 - Mod.	2	each	2	0	0	0
830 - Abutment Backwall	3 - Mod.	86	ft.	81	5	0	0
	A few leaching cracks to both (CS 2).						

ODOT District: 12

LAK-00020-1723_(4302206)

Date Built: 07/01/1988

Major Maint: 01 - State Highway Agency

Facility Carried: USR 20

Traffic On: 5 - Highway-pedestrian

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: GRAND RIV. 1.17 MI W 535

Traffic Under: 5 - Waterway

Insp. 01 - State Highway Agency

FIPS Code: 59430 - PAINESVILLE TWP (LAK county)

Location: LAK

0.95 MI E SR86

Resp A:

Insp

Resp B:

Inspector

Gerstenslager,Michael

Inspection Date

03/16/2021

Reviewer

Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Floor/Slab (SF)

20 sf full-depth repair in bay 2 span 1.

Bridge Wearing Surface (SF)

CRACKS, SOME AS WIDE AS 1/8". MAP CRACKS. MINOR DELAMS. SCALING ALONG LEFT CURB. WS IS 1-5% DETERIORATED.

Curbs/Sidewalk (LF)

Spalls & delams along curbs. Spall to left sidewalk at rear exjt.

Bridge Railing (LF)

COLLISION DAMAGE TO ALUMINUM POST & RAIL AT FORWARD-LEFT. THREE COLLISION DAMAGED ALUMINUM POSTS TO RIGHT RAIL. MINOR CRACKS. DELAMS. SPALLS, SOME WITH EXPOSED REBAR.

Expansion Joint (LF)

MINOR GOUGES TO ARMOR. LEAKING DOWN REAR BACKWALL & AT FORWARD-RIGHT. SEAL FALLING OUT AT REAR-LEFT AND POPPED OUT AT FORWARD-LEFT.

Approach

Approach Wearing Surface (EA)

A FEW CRACKS.

Approach Slab (SF)

FULL WIDTH CRACKS NEAR BOTH EXJTS. A FEW OTHER CRACKS. BOUNCE ON & OFF BRIDGE AT FORWARD APPROACH.

Approach Embankment (EA)

MINOR SETTLEMENT TO ALL 4 APPROACH WALKS.

Approach Guardrail (EA)

COLLISION DAMAGE TO BOTH REAR GUARDRAIL.

Inspector Comments - General Appraisal

Superstructure

Beams/Girders (LF)

RUSTING SECTION LOSS AT BEAM ENDS, MORE ADVANCED AT REAR. NOTE: 2012 QAR STICKER 12-01, 2014 QAR STICKER 12-02, 2016 QAR STICKER 12-13.

Diaphragm/X-Frames (EA)

ENDFRAME RUSTING SECTION LOSS AT REAR.

Bearing Devices (EA)

RUSTING SECTION LOSS & PACK RUST AT REAR. SPILLED HARDENED CONCRETE ON REAR SEAT RESTRICTS MOVEMENT OF ROCKERS 3 & 4.

Protective Coating System (LF)

HEAVY RUSTING AT REAR. AREAS OF PEELING & BLISTERING. FADED PAINT THROUGHOUT. 1-5% RUST. PCS IS 5-10% DETERIORATED.

Substructure

Abutment Walls (LF)

A few cracks.

Backwalls (LF)

A FEW CRACKS & SPALLS.

Slope Protection (EA)

As much as 9" of rear abutment footing exposed below bay 1.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical