

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION FIELD REPORT

Structure File Number: 4305884

Inventory Bridge Number: LAK 00306 04.330

Bridge Type: 3 - STEEL/2 - BEAM/2 - CONTINUOUS

Sufficiency Rating: 61.5

Date Built: 7/1/1952

District: 12 Place Code (FIPS): KIRTLAND

SR 306 over E BRANCH CHAGRIN RIVER

Type of Service on: HIGHWAY

APPROACH ITEMS

- c1. Approach Wearing Surface (EA)
- c2. Approach Slabs (SF)
- c3. Relief Joint (LF)
- c4. Embankment (EA) d
- c5. Guardrail (EA)
- N36. Safety Features:
Tr, Gr, Tm
- c6. Approach Summary

QTY.	condition state				cr
	1	2	3	4	TR
2	2	0			1.00
1200	600	600	0	0	1.60
4	4				1.00
4	4	0	0	0	1.00
36)B <u> </u> N <u> </u> 36)C <u> </u> 1 <u> </u> 36)D <u> </u> 1					(9-0) 7

DECK ITEMS

- c7.1 Floor/Slab (SF)
- c7.2 Edge of Floor/Slab (LF)
- c8. Wearing Surface (SF)
- c9. Curb/Sidewalk/Walkway (LF)
- c10. Median (LF)
- c11. Railing (LF)
- N36. Safety Features: Rail
- c12. Drainage (EA) d
- c13. Expansion Joint (LF) d
- N58. Deck Summary

QTY.	condition state				cr
	1	2	3	4	TR
4809.96	4088	481	241		1.72
240	96	60	84		3.00
4800	4560	240			1.07
	NaN	0	0	0	
240	0	180	60		2.67
36)A <u> </u> 1					
2	1	1	0	0	1.60
80	46	32	2	0	1.75
N58. Deck Summary					(9-0) 6

SUPERSTRUCTURE ITEMS

- c14. Alignment (EA) d
- c15.1 Beams/Girders (LF)
- c15.2 Slab (SF)
- c16. Diaphragm/X-Frames (EA)
- c17. Stringers (LF)
- c18. Floorbeams (LF)
- c19. Truss Verticals (EA)
- c20. Truss Diagonals (EA)
- c21. Truss Upper Chord (EA)
- c22. Truss Lower Chord (EA)
- c23. Truss Gusset Plate (EA) d
- c24. Lateral Bracing (EA)
- c25. Sway Bracing (EA)
- c26. Bearing Devices (EA) d
- c27. Arch (LF)
- c28. Arch Column/Hanger (EA)
- c29. Arch Spandrel Walls (LF)
- c30. Prot. Coating System (LF) d
- c31. Pins/Hangers/Hinges (EA) d
- c32. Fatigue (LF) d
- N59. Superstructure Summary

QTY.	condition state				cr
	1	2	3	4	TR
3	3				1.00
720	464.4	180	72	3.6	2.22
50	29	10	10	1	2.64
0.00					
0.00					
720	180	468	72	0	2.31
720	720	0	0	0	1.00
N59. Superstructure Summary					(9-0) 4

SUBSTRUCTURE ITEMS

- c33. Abutment Walls (LF)
- c34. Abutment Caps (LF)
- c35. Abut. Columns/Bents (EA)
- c36. Pier Walls (LF)
- c37. Pier Caps (LF)
- c38. Pier Columns/Bents (EA)
- c39. Backwalls (LF)
- c40. Wingwalls (EA)
- c42. Scour (EA) d
- c43. Slope Protection (EA) d
- N60. Substructure Summary

QTY.	condition state				cr
	1	2	3	4	TR
82.99	54	21	8		2.11
	NaN	0	0	0	
0.0	NaN	0	0	0	
	NaN	0	0	0	
82.99	75	4	4		1.67
8	8	0	0	0	1.00
82.99	71	8	4		1.71
4	4	0	0	0	1.00
4	3	1	0	0	1.33
2	2	0	0	0	1.00
N60. Substructure Summary					(9-0) 6

CULVERT ITEMS

- c44. General (LF)
- c45. Alignment (LF) d
- c46. Shape (LF) d
- c47. Seams (LF) d
- c48. Headwall/Endwall (LF)
- c49. Scour (LF) d
- c50. Abutments (LF)
- N62. Culvert Summary

QTY.	condition state				cr
	1	2	3	4	TR
0					
N62. Culvert Summary					(9-0) N

CHANNEL ITEMS

- c51. Alignment (LF) d
- c52. Protection (LF) d
- c53. Hydraulic Opening (EA) d
- c54. Navigation Lights (EA) d
- N61. Channel Summary

QTY.	condition state				cr
	1	2	3	4	TR
200.00	200.00				1.60
200.00	100	100			1.60
4	2	2	0	0	1.60
N61. Channel Summary					(9-0) 6

SIGN/UTILITY ITEMS

- c55. Signs (EA) d
- c56. Sign Supports (EA) d
- c57. Utilities (LF) d

QTY.	condition state				cr
	1	2	3	4	TR
2	0	0	0	2	3.00
	NaN	0	0	0	
240	0	240	0	0	2.00
General Appraisal					(9-0) 4
N41. Operating Status					A

General Appraisal

N41. Operating Status

Inspector Name Sutak, Mike
Inspection Date/Type 07/16/2019 Routine
PE Number
Reviewer Name Seif, Youssef
Review Date 08/23/2019
PE Number 59487

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION FIELD REPORT**

Structure File Number: 4305884

Inventory Bridge Number: LAK 00306 04.330

Bridge Type: 3 - STEEL/2 - BEAM/2 - CONTINUOUS

Sufficiency Rating: 61.5

Date Built: 7/1/1952

District: 12 Place Code (FIPS): KIRTLAND

SR 306 over E BRANCH CHAGRIN RIVER

Type of Service on: HIGHWAY

Key: "Qty" = Quantity for Element Level inspection; "(LF)" = Linear Feet; "(SF)" = Square Feet; "(EA)" = Each or count; "CR" = 1-4 Condition Rating or average of worst span unless Summary item 9-0, then the average of entire bridge influenced by the bold boxes; "TR" = Transition Rating or weighted average of condition states; "d" = dedicated or specific chart and guidance, all others use Material specific chart/guidance; "c" = condition prefix; "N" = NBIS rating

Inspection Procedures

Comments

APPROACH

c1. Approach Wearing Surface

NEW PAVEMENT. A FEW CRACKS.

c2. Approach Slabs

BOUNCE ONTO BRIDGE AT REAR. PAVED OVER WITH ASPHALT.

DECK

c7.1 Floor/Slab

LEACHING CRACKS. APPROX 50 SF OF DELAMS & 20 SF OF SPALLS (SOME WITH EXPOSED REBAR). MOTTLED AREAS. A FEW RUST STAINS.

c7.2 Edge of Floor/Slab

CRACKS. DELAMS. RUST STAINS. APPROX 80 SF OF SPALLS WITH EXPOSED REBAR.

c8. Wearing Surface

MANY CRACKS (SOME LONGITUDINAL). A FEW DELAMS.

c11. Railing

COLLISION DAMAGE IN NUMEROUS LOCATIONS TO BOTH RAILS. DECK EDGE SPALLS REVEAL EXPOSURE OF SOME RAIL ANCHOR BOLTS. RUSTED THROUGH HOLES TO RAILING.

c12. Drainage

MANY BENT DRIP STRIPS.

c13. Expansion Joint

CRACKS IN HEADER WITH BREAKING UP AREA AT REAR IN SB LANE. RIGHT HALF OF REAR RISER BAR MISSING WITH LOSE END VIBRATING UNDER LIVE LOAD IN SB TURNING LANE. GAP BETWEEN TOP OF BACKWALL AND DECK ARMOR AT REAR IN SB TURNING LANE.

SUPERSTRUCTURE

c15.1 Beams/Girders

NOTE: REPAIRS HAVE BEEN MADE TO ALL FASCIA BEAM ENDS EXCEPT REAR-LEFT (SOUTHWEST). RUSTED SECTION LOSS (AS MUCH AS 30%) NEAR

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION FIELD REPORT

Structure File Number: 4305884

Inventory Bridge Number: LAK 00306 04.330

Bridge Type: 3 - STEEL/2 - BEAM/2 - CONTINUOUS

Sufficiency Rating: 61.5

Date Built: 7/1/1952

District: 12 Place Code (FIPS): KIRTLAND

SR 306 over E BRANCH CHAGRIN RIVER

Type of Service on: HIGHWAY

ABUTMENTS & ALONG OUTSIDE OF FASCIAS. RUSTED THRU HOLES AS LARGE AS 1" IN WEB OF BOTH FASCIAS @ FORWARD ABUTMENT (IN FRONT OF BOLTED REPAIRS). SEVERE RUSTING SECTION LOSS WITH SMALL THRU HOLE TO RIGHT FASCIA ABOVE P1. 2006 QAR STICKER 12-235 (REMOVED DUE TO BEAM REPAIR). 2008 QAR STICKER 12-0002 (PAINTED OVER). 2018 QAR STICKER 12-11.

c16. Diaphragm/Cross Frames

RUSTING SECTION LOSS. MANY RUSTED THRU HOLES IN ENDFRAMES. SEVERAL BENT HORIZONTAL ANGLES IN SPAN 2 (1 BROKEN WELD & 1 MISSING HORIZONTAL ANGLE IN BAY 5). NOTE: ENDFRAME ANGLES ARE WELDED TO LOWER FLANGES.

c26. Bearing Devices

HEAVY RUSTED SECTION LOSS / DETERIORATION. SOLE PLATES HAVE BEEN BENT BY PACK RUST.

c30. Protective Coating System

SURFACE RUST. SURFACE DULLING THROUGH OUT.

c32. Fatigue

WELDED MOMENT PLATES @ PIERS. UNCOPE BEAM WELD INTERSECTIONS OVER PIERS. OLD RAILING MOUNT PLATES WELDED TO WEBS OF FASCIAS (SOME WELDED TO TENSION AREAS OF WEBS). UTILITY MOUNTS ON LEFT FASCIA WELDED TO LOWER FLANGE.

SUBSTRUCTURE

c33. Abutment Walls

MANY CRACKS. LARGE DELAMS. A FEW SPALLS. RUST STAINS.

c37. Pier Caps

DELAMS TO LEFT END OF P2 CAP. SPALLS WITH EXPOSED REBAR (SOME 360°) TO RIGHT END OF BOTH PIER CAPS.

c39. Backwalls

CRACKS. DELAMS. SMALL SPALLS IN BAY 3 @ BOTH ABUTMENTS.

c42. Scour

PROBING INDICATES AS MUCH AS 6" OF P1 FOOTING EXPOSED TO FLOWING WATER WITH NO UNDERMINING (FOOTING ON ROCK).

CHANNEL

c52. Protection

SOME STONE HAS WASHED AWAY. SOME DAMAGE TO REAR PROTECTION @ UPSTREAM END.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION FIELD REPORT**

Structure File Number: 4305884

Inventory Bridge Number: LAK 00306 04.330

Bridge Type: 3 - STEEL/2 - BEAM/2 - CONTINUOUS

Sufficiency Rating: 61.5

Date Built: 7/1/1952

District: 12 Place Code (FIPS): KIRTLAND

SR 306 over E BRANCH CHAGRIN RIVER

Type of Service on: HIGHWAY

c53. Hydraulic Opening

BRANCHES IN XFRAMES, ON P2 SEAT & ON FORWARD ABUTMENT SEAT
(EVIDENCE OF FLOWING FULL). A FEW BRANCHES CAUGHT ON UPSTREAM
END OF BOTH PIERS.