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

Bridge Type: 3 - STEEL/2 - BEAM/2 - CONTINUOUS Structure File Number: 4302044 Inventory Bridge Number: LAK 00006 04.610

Sufficiency Rating: 53.5 Date Built: 7/1/1951

c32. Fatigue (LF) d

N59. Superstructure Summary

#### District: 12 Place Code (FIPS): WILLOUGHBY HILLS USR 6 over CHAGRIN RIV .85 MI E 174 Type of Service on: HIGHWAY condition state condition state **SUBSTRUCTURE ITEMS APPROACH ITEMS** QTY 2 3 4 TR QTY 2 3 4 TR 2 c1. Approach Wearing Surface (EA) 2 c33. Abutment Walls (LF) 78.5 2 c2. Approach Slabs (SF) c34. Abutment Caps (LF) 0 2 c3. Relief Joint (LF) c35. Abut. Columns/Bents (EA) 4 1 c4. Embankment (EA) d c36. Pier Walls (LF) c5. Guardrail (EA) 4 3 c37. Pier Caps (LF) 117.8 1 N36. Safety Features: c38. Pier Columns/Bents (EA) 0.0 1 Tr, Gr, Tm 36)B <u>1</u> 36)C <u>1</u> 36)D c39. Backwalls (LF) 78.5 2 6 c6. Approach Summary c40. Wingwalls (EA) 4 1 condition state cr c42. Scour (EA) d 5 1 **DECK ITEMS** 3 TR QTY. 2 c43. Slope Protection (EA) d 2 2 c7.1 Floor/Slab (SF) 13022 2 N60. Substructure Summary 6 (9-0)c7.2 Edge of Floor/Slab (LF) 766 1 condition state cr c8. Wearing Surface (SF) 10724 2 **CULVERT ITEMS** QTY. 1 2 3 4 TR 1 c9. Curb/Sidewalk/Walkway (LF) 766.0 c44. General (LF) c10. Median (LF) c45. Alignment (LF) d 766 1 c11. Railing (LF) c46. Shape (LF) d N36. Safety Features: Rail 36)A c47. Seams (LF) d c12. Drainage (EA) d 2 0.0 c48. Headwall/Endwall (LF) c13. Expansion Joint (LF) d 0.0 2 c49. Scour (LF) d N58. Deck Summary (9-0)6 c50. Abutments (LF) condition state cr (9-0)N62. Culvert Summary Ν SUPERSTRUCTURE ITEMS QTY 3 TR condition state cr c14. Alignment (EA) d 4 1 **CHANNEL ITEMS** QTY 4 TR c15.1 Beams/Girders (LF) 0.0 3 c51. Alignment (LF) d 200.0 1 c15.2 Slab (SF) c52. Protection (LF) d c16. Diaphragm/X-Frames (EA) 0.0 2 1 c53. Hydraulic Opening (EA) d 1 0.0 c17. Stringers (LF) c54. Navigation Lights (EA) d c18. Floorbeams (LF) 0.0 (9-0)7 N61. Channel Summary c19. Truss Verticals (EA) condition state cr c20. Truss Diagonals (EA) **SIGN/UTILITY ITEMS** 4 TR QTY c21. Truss Upper Chord (EA) c55. Signs (EA) d 1 c22. Truss Lower Chord (EA) c56. Sign Supports (EA) d c23. Truss Gusset Plate (EA) d c57. Utilities (LF) d c24. Lateral Bracing (EA) **General Appraisal** (9-0)4 c25. Sway Bracing (EA) N41. Operating Status Α 2 0.0 c26. Bearing Devices (EA) d Inspector Name Persanyi, Andrea c27. Arch (LF) Inspection Date/Type 07/29/2019 Routine c28. Arch Column/Hanger (EA) **PE Number** c29. Arch Spandrel Walls (LF) Seif, Youssef **Reviewer Name** c30. Prot. Coating System (LF) d 0.0 3 **Review Date** 09/04/2019 c31. Pins/Hangers/Hinges (EA) d **PE Number** 59487

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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

SNOOPER INSPECTION 6/13/19.

#### Comments

#### **APPROACH**

c1. Approach Wearing Surface

CRACKS. ASPHALT BREAK UP ALONG CONCRETE APPROACH SLABS. ASPHALT PATCHES, SMALL POTHOLES AT FORWARD.

c2. Approach Slabs

LONG CRACKS TO BOTH SLABS. NOTE: FORWARD-LEFT APPROACH CURB IS SPALLED.

c5. Guardrail

COLLISION DAMAGE TO BOTH FORWARD GUARDRAILS. BOTH FORWARD END TREATMENTS ARE NEARLY RUST SEVERED. DAMAGED & MISSING SPACERS AT FORWARD-LEFT.

**DECK** 

c7.1 Floor/Slab

AREAS OF TRANSVERSE LEACHED CRACKS AT 5' SPACING. MINOR SPALLS & DELAMS. REAR END OF DECK MOVES INDEPENDENTLY OF GIRDERS WITH SQUEAK. FLOOR IS 5-10% DETERIORATED.

c7.2 Edge of Floor/Slab

A FEW DELAMS.

c8. Wearing Surface

MINOR CRACKS. SOME CONCRETE PATCHES. 1% DELAMINATED. WS IS 1-5% DETERIORATED.

c9. Curb/Sidewalk/Walkway

RUSTING TO STEEL SIDEWALK (DIAMOND PLATE).

c11. Railing

THREE AREAS OF COLLISION DAMAGE TO LEFT RAIL.

c12. Drainage

WATER FROM BAY 1 DRAINAGE FLUME FALLS AGAINST NORTH COLUMN OF P3. DRAINAGE DOWNSPOUT RUBS AGAINST RIGHT FASCIA.

c13. Expansion Joint

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GOUGES TO FORWARD ARMOR. SEAL PARTIALLY MISSING & PULLED OUT AT BOTH JOINTS. RUSTING THROUGH HOLES IN ALL FOUR CURB PLATES. DIRT & DEBRIS AS THICK AS 4" ON REAR ABUTMENT SEAT. ASPHALT PATCH IN REAR EXJT HEADER.

#### SUPERSTRUCTURE

#### c15.1 Beams/Girders

HEAVY RUSTING SECTION LOSS AT BEAM ENDS WITH RUSTING THRU HOLES TO THE LEFT FASCIA AT BOTH ABUTMENTS & BEAM 2 AT THE REAR ABUTMENT. AREAS OF HEAVY RUSTING SECTION LOSS TO LOWER FLANGES WITH FASCIA FLANGES HAVING AS MUCH AS 40% SECTION LOSS TO OUTSIDE ANGLE. PACK RUSTING WITH SCALLOPED LOWER FLANGES. RUSTING THRU HOLES TO SOME OUTSIDE STIFFENERS OF FASCIA BEAMS. TACK WELDED STIFFENERS. A FEW DENTS TO LOWER FLANGES. RUSTING SECTION LOSS WITH FAILED BOLTED REPAIRS WHERE PORK-CHOPS ATTACH TO GIRDER WEBS. DOG BONE RETROFITS TO PORK-CHOPS. AREAS OF RUST DETERIORATED / MISSING RIVET HEADS. DAMAGE TO SOME FORWARD BEAM ENDS.

#### c16. Diaphragm/Cross Frames

RUSTING SECTION LOSS THROUGHOUT WITH SOME THRU HOLES TO ENDFRAMES. RUST SEVERED ENDFRAME IN REAR BAY 3. BENT ENDFRAME ANGLE IN FORWARD BAY 3. OTHER BENT XFRAME ANGLES. NOTE: XFRAMES WELDED TO GIRDER WEBS IN UNCONVENTIONAL WAYS.

#### c26. Bearing Devices

RUSTING SECTION LOSS. PACK RUST BETWEEN SHIM PLATES. NOTE: PIER ROCKERS HAVE BEEN RETROFITTED TO ACT LIKE FIXED BEARINGS.

### c30. Protective Coating System

15% RUST. PEELING PAINT. AREAS OF PCS FAILURE ALONG LOWER FLANGES & AT BEAM ENDS. PCS IS 20-25% DETERIORATED.

#### **SUBSTRUCTURE**

c33. Abutment Walls

CRACKS, SOME LEACHING. SPALLED & DELAMINATED AREA TO FORWARD SEAT AT ROCKER 2. OTHER DELAMS.

c38. Pier Columns/Bents

CRACKED CONCRETE PATCHES. 2012 QAR STICKER 12-03.

c37. Pier Caps

CRACKS. A FEW RUST STAINS. MINOR DELAMS ON P2. AREAS OF CONCRETE DETERIORATION TO SOME PIER SEATS.

c39. Backwalls

SEVERAL SPALLS AT BOTH ENDS, SOME AS DEEP AS 4". RIGHT FASCIA IS <1/2" FROM REAR BACKWALL.

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c40. Wingwalls

CRACKS. RUST STAINS.

c42. Scour

PROBING INDICATES SCOUR HOLES AS DEEP AS 4' AROUND P3. 4" OF P3 FOOTING EXPOSED ON SOUTH COLUMN. 14" OF P2 FOOTING EXPOSED ON NORTH COLUMN & 2" EXPOSED ON SOUTH COLUMN. NOTE: PIERS ARE ON ROCK.

c43. Slope Protection

EROSION RUTS TO REAR SLOPE (WORST IS 3' DEEP BELOW RIGHT FASCIA). HEAVY EROSION TO SHALE AT FORWARD SLOPE.

**CHANNEL** 

c53. Hydraulic Opening

LOG & MINOR DEBRIS CAUGHT ON UPSTREAM NOSE OF P3.

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