

BRIDGE INSPECTION REPORT

1801503
Structure File Number

BRIDGE NUMBER CUY 00010 1613

YEAR BUILT 1932

DIST 12

Bridge Type 343

TYPE SERVICE 5 7

CUY RIVER VALLEY & FI RR

DECK	out/out 83 Deck Area 272,652 sqft		C MICROSILICA MODIFIED CONCRETE OVERLAY	
1. FLOOR	1 REINF CONCRT (PRESTRSD, PRECAST)	3	2. WEARING SURFACE	Thk 1.5 Wear Date 9/1/2001 1
3. CURBS, SIDEWALKS AND WALKWAYS	Left 2 SIDEWALK(>2') / Right 2 SIDEWALK(>2')	1	4. MEDIAN	Lanes on 4
5. RAILING	5 REINF CONCR POST & CONCR PANE	1	6. DRAINAGE	3 SCUPPERS & DWNSPTS 1
7. EXPANSION JOINTS	0 OTHER	2	8. SUMMARY	5
SUPERSTRUCTURE			15 ROLLED STEEL	
9. ALIGNMENT	Max Spans 299	1	10. BEAMS/GIRDERS/SLAB	1
11. DIAPHRAGMS or CROSSFRAMES		1	12. JOISTS/STRINGERS	2
13. FLOOR BEAMS		2	14. FLOOR BEAM CONNECTIONS	1
15. VERTICALS		2	16. DIAGONALS	2
17. END POSTS			18. UPPER CHORD	1
19. LOWER CHORD		3	20. GUSSET PLATES	3
21. LATERAL BRACING		1	22. SWAY BRACING	1
23. PORTALS			24. BEARING DEVICES	1 ROLLERS 2
25. ARCH			26. ARCH COLUMNS or HANGERS	
27. SPANDREL WALLS			28. PROTECTIVE COATING SYSTEM	Paint Date 3/4/2004 5 PAINT SYSTEM OZE 7
29. PINS/HANGERS/HINGES		2	30. FATIGUE PRONE DETAIL (E, E')	1
31. LIVE LOAD RESPONSE (E OR S)		S	32. SUMMARY	4
SUBSTRUCTURE			2 CANTILEVER	
33. ABUTMENTS	3 SOLID WALL	1	34. ABUTMENT SEATS	Abutment: NOT ON PILING 1
35. PIERS		2	36. PIER SEATS	4 OPEN COLUMN Piers: NOT ON PILING 1
37. BACKWALLS		1	38. WINGWALLS	1
39. FENDERS and DOLPHINS	Piers = 15 03 01 Spans = 20	4	40. SCOUR (INSP TYPE - 1,2,3)	1 2
41. SLOPE PROTECTION	N NONE-NATURAL PROTECTION(GRA)		42. SUMMARY	Dive Date 12/30/2010 6
CULVERTS				
43. GENERAL	N NONE/NOT APPLICABLE		44. ALIGNMENT	
45. SHAPE			46. SEAMS	
47. HEADWALLS or ENDWALLS	Culvert Length 0		48. SCOUR (INSP TYPE - 1,2,3)	
49. ABUTMENT			50. SUMMARY	
CHANNEL				
51. ALIGNMENT		2	52. PROTECTION	4 PILING 2
53. HYDRAULIC OPENING	8 SLIGHT CHANCE OVERTOPPING	1	54. SUMMARY	6
APPROACHES				
55. PAVEMENT	2 BITUMINOUS	1	56. APPROACH SLABS	1
57. GUARDRAIL	0 OTHER	1	58. RELIEF JOINTS	
59. EMBANKMENT		1	60. SUMMARY	Percent Legal = 150 8
GENERAL				
61. NAVIGATION LIGHTS		1	62. WARNING SIGNS	Maint Resp 1 OHIO TRAN DEPT
63. SIGN SUPPORTS	Signs on = N MVC on = 9999.9 Under C = 0		64. UTILITIES	3
65. VERTICAL CLEARANCE	Under NC = 0	N	66. GENERAL APPRAISAL & OPERATIONAL STATUS	4 A

67. INSPECTED BY

68. REVIEWED BY

SIGNED

PE Number

SIGNED

69991

PE Number

Name ANTHONY KOLOZE

Name WESLEY WEIR

DATE 11/16/2012

1 1 1 1 0 0 0 N
SURVEY

DATE 12/19/2012

DECK

1. THE EAST CELLULAR UNIT UNDERSIDE OF DECK EXHIBITS A 1 0' DIAMETER SPA II WITH 100% SECTION LOSS TO 7 CONSECUTIVE TRANSVERSE BARS AND SPALLS WITH EXPOSED REBAR EXHIBITING MINOR SECTION LOSS OVER 10% OF THE DECK AREA. THE MAIN TRUSS SPANS DECK SOFFIT EXHIBITS SPALLS WITH EXPOSED REBAR IN ISOLATED LOCATIONS OVER UP TO 5% OF TOTAL DECK AREA, AND TRANSVERSE CRACKING AT 1 0' SPACINGS WITH EFFLORESCENCE. THE UTILITY DECK SOFFIT EXHIBITS WIDESPREAD SPALLING OF THE 1" TO 2' THICK CONCRETE THAT WAS POURED BELOW THE UNDERSIDE OF FLOORBEAM TOP FLANGES, WHICH REPRESENTS POTENTIAL FALLING HAZARDS OVER THE STREETS AND INDUSTRIAL YARD BELOW.

3. THE NORTH SIDEWALK WAS BEING MODIFIED FOR THE ADDITION OF A BIKE LANE AT THE TIME OF INSPECTION AND WAS NOT FULLY ACCESSIBLE.

7. EXPANSION JOINTS WERE BEING REHABBED AT THE TIME OF INSPECTION AND COULD NOT BE INSPECTED. PREVIOUS INSPECTIONS NOTED AREAS OF TORN NEOPRENE GLANDS AT ISOLATED EXPANSION JOINTS.

SUPERSTRUCTURE

The first interior stringers adjacent to Truss A and D of the main truss spans exhibit isolated holed-through sections and minor pitting (cleaned and painted) on the web and bottom flanges.

The floorbeams exhibit isolated holed-through sections and minor pitting (cleaned and painted) on the web and web stiffeners adjacent to Truss A and D at joint locations. Verticals exhibit moderate section loss (cleaned and painted) up to 1/4' at isolated locations. Pack rust between web plates and flange angles is beginning to reactivate. Moderate to advanced section loss was noted to diagonal member webs with up to 1/4" pitting at gusset plate interfaces (cleaned and painted). Pack rust up to 3/4" was noted between web plates and flanges.

Moderate section loss is typical with isolated areas of advanced loss to web plates, bottom flange angles, and rivet heads. Pack rust is beginning to reactivate in several locations, mainly between web plates and top flange angles.

Up to 10% section loss is typical throughout gusset plates with isolated areas of advanced section loss up to 50%. Lower chord gusset plates exhibit average section loss of 20% along the interface with lower chord members. Gusset plate CL20S exhibits a lamellar split on the west free edge below the diagonal, reducing the

effective gusset plate thickness to 1/4" remaining.

Isolated bearing pins exhibit moderate pitting and pack rust between bearing castings and gusset plates.

Rust staining and isolated paint failures with activating rust is typical at joint locations.

Pins exhibit pack rust up to 1' between web plates and gusset plates in isolated locations, preventing sliding pins from fully bearing on chord members. Lower chord sliding pins at Panel Points AL 17 and BL41 appear to be frozen as a result of pack rust. Several pins exhibit advanced wear up to 1/2" along one-third of the pin diameter.

Utility deck floorbeams exhibit fatigue cracks due to lack of radial coping at truss connections. Isolated cracks in floorbeams have not been arrested. Previously noted cracks have not propagated since the 2011 inspection.

SUBSTRUCTURE

Large spalls with exposed rebar are typical throughout architectural pier towers above truss bearings. Pier walls exhibit hairline cracks with rust staining and isolated corner spalls along outside corbels.

The fender system has failed due to severe timber rot and collision damage.

Channel has a sharp bend upstream and downstream of the bridge.

The west bank sheet piling is washed out 200 yards north (downstream) of the bridge.

The light poles were in the process of being replaced as part of the rehabilitation being performed during the inspection. Previous inspections noted widespread cracking with isolated spalls and numerous missing access covers for electrical boxes on the precast concrete light poles mounted outside bridge railing. During the current inspection, a precast concrete light pole on the west approach was noted to have collision damage. Several decorative pier lights were noted to be damaged or missing. For additional comments, see report in bridge file.

CHANNEL

CHANNEL HAS A SHARP BEND UPSTREAM AND DOWNSTREAM OF THE BRIDGE.

THE WEST BANK SHEET PILING IS WASHED OUT 200 YARDS NORTH (DOWNSTREAM) OF THE BRIDGE.

GENERAL

UTILITIES: WIDESPREAD CRACKING WITH ISOLATED SPALLS NOTED ON

PRECAST CONCRETE LIGHT POLES MOUNTED OUTSIDE

BRIDGE RAILING. NUMEROUS ACCESS COVERS FOR ELECTRICAL BOXES
AND HAND ACCESS HATCHES ON LIGHT POLES MISSING.
SEVERAL DAMAGED OR MISSING DECORATIVE LIGHTS LOCATED ON
PIERS.