

BRIDGE INSPECTION REPORT

1801503

BRIDGE NUMBER

CUY 00010 1613

YEAR BUILT

1932

Structure File Number

DIST 12

Bridge Type 343

TYPE SERVICE 5 7

CUY RIVER VALLEY & FI RR

DECK	out/out 83 Deck Area 303,556 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 PANEL	1	6. DRAINAGE	3 SCUPPERS & DWNSPTS 2
7. EXPANSION JOINTS	0 OTHER	2	8. SUMMARY	4
SUPERSTRUCTURE				
9. ALIGNMENT	Max Spans 299	1	10. BEAMS/GIRDERS/SLAB	15 ROLLED STEEL 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 OZEU 7
29. PINS/HANGERS/HINGES		2	30. FATIGUE PRONE DETAIL (E, E')	
31. LIVE LOAD RESPONSE (E OR S)		S	32. SUMMARY	4
SUBSTRUCTURE				
33. ABUTMENTS	3 SOLID WALL	1	34. ABUTMENT SEATS	2 CANTILEVER 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(GRASS,B		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 APPR	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 7
GENERAL				
61. NAVIGATION LIGHTS		1	62. WARNING SIGNS	Maint Resp 1 OHIO TRAN DEPT 4
63. SIGN SUPPORTS	Signs on = N MVC on = 9999.9		64. UTILITIES	3
65. VERTICAL CLEARANCE	Under C = 0 Under NC = 0	N	66. GENERAL APPRAISAL & OPERATIONAL STATUS	4 A

67. INSPECTED BY

68. REVIEWED BY

SIGNED

PE Number

SIGNED

59487

PE Number

Name KENNETH BANASZAK

Name YOUSSEF SEIF

DATE 11/7/2013

1 1 1 1 0 1 0 N
SURVEY

DATE 1/14/2014

DECK

FLOOR: THE EAST CELLULAR UNIT UNDERSIDE OF DECK EXHIBITS A 10' DIAMETER SPALL 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 10' 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.

WS: AREAS OF CRACKS.

CSW: SOME AREAS OF CRACKS.

RAIL: CRACKS. SOME SPALLS AND DELAMS.

EXJTS: TORN NEOPRENE GLANDS AT ISOLATED AREAS. MINOR POP-OUT AREA.

SUPERSTRUCTURE

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

FLOORBEAMS: exhibit isolated holed-through sections and minor pitting on the web and web stiffeners adjacent to Truss A and D at joint locations. Several areas of the utility deck floorbeams exhibit fatigue cracks due to lack of radial coping at truss connections. Isolated cracks in floorbeams have not been arrested.

FL BEAM CONNECT: Some areas of pack rust.

VERTICALS: moderate section loss up to 1/4' at isolated locations. Pack rust between web plates and flange angles is beginning to reactivate.

DIAGONALS: Moderate to advanced section loss was noted to diagonal member webs with up to 1/4" pitting at gusset plate interfaces. Pack rust up to 3/4" was noted between web plates and flanges.

LOWER CHORD: 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.

GUSSET PLATES: 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 CL70S exhibits a lamellar split on the

west free edge below the diagonal, reducing the

effective gusset plate thickness to 1/4" remaining.

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

PCS: AREAS of rust and isolated paint failures is typical at joint locations. PCS is 1 to 5% det.

PINS: Areas of 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 AL17 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. Pin CL12S has moved north as much as 7/8".

SUBSTRUCTURE

PIERS: 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.

FENDERS: system has failed due to severe timber rot and collision damage.

CHANNEL

ALIGN: SHARP BEND UPSTREAM AND DOWNSTREAM OF THE BRIDGE.

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

APPROACHES

PAVEMENT: SOME AREAS NEW AT 2013 INSPECTION.

ASLAB: CRACKS.

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. MANY AREAS OF BROKEN CONDUIT. AREAS OF HEAVY RUSTING SECTION LOSS TO JUNCTION BOXES JUST ABOVE UTIL DECK.