

BRIDGE INSPECTION REPORT

1800930

Structure File Number

BRIDGE NUMBER

CUY 00006 1456

YEAR BUILT

1917

DIST 12

Bridge Type 354

TYPE SERVICE 5 7

(1499)CUY. RIVER & RTA

| | | | |
|--|---|--|-----|
| DECK out/out 85.2 Deck Area 226,205 sqft | | 2 INTEGRAL CONCRETE (MONOLITHIC) | |
| 1. FLOOR 1 REINF CONCRT (PRESTRSD, PRECAST) | 2 | 2. WEARING SURFACE Trk 1 Wear Date 11/15/1996 | 1 |
| 3. CURBS, SIDEWALKS AND WALKWAYS Left 2 SIDEWALK(>2) / Right 2 SIDEWALK(>2) | 1 | 4. MEDIAN Lanes on 6 | |
| 5. RAILING 5 REINF CONCR POST & CONCR PANEL | 1 | 6. DRAINAGE 3 SCUPPERS & DWNSPTS | 2 |
| 7. EXPANSION JOINTS 8 ELASTOMERIC STRIP SEAL | 2 | 8. SUMMARY | 6 |
| SUPERSTRUCTURE Max Spans 591 | | 1 N/A (CULVERTS, TRUSSES, ETC.) | |
| 9. ALIGNMENT | 1 | 10. BEAMS/GIRDERS/SLAB | 2 |
| 11. DIAPHRAGMS or CROSSFRAMES | | 12. JOISTS/STRINGERS | 3 |
| 13. FLOOR BEAMS | 3 | 14. FLOOR BEAM CONNECTIONS | 2 |
| 15. VERTICALS | 2 | 16. DIAGONALS | 2 |
| 17. END POSTS | 1 | 18. UPPER CHORD | 1 |
| 19. LOWER CHORD | 2 | 20. GUSSET PLATES | 3 |
| 21. LATERAL BRACING | 2 | 22. SWAY BRACING | 1 |
| 23. PORTALS | 2 | 24. BEARING DEVICES 8 FIXED ARCH-RIB | 2 |
| 25. ARCH | 2 | 26. ARCH COLUMNS or HANGERS | 3 |
| 27. SPANDREL WALLS | | 28. PROTECTIVE COATING SYSTEM Paint Date 7/15/1999 5 PAINT SYSTEM OZEU | 6 |
| 29. PINS/HANGERS/HINGES | 2 | 30. FATIGUE PRONE DETAIL (E, E') | 2 |
| 31. LIVE LOAD RESPONSE (E OR S) | S | 32. SUMMARY | 4 |
| SUBSTRUCTURE 3 SOLID WALL | | 3 SOLID WALL | |
| 33. ABUTMENTS | 2 | 34. ABUTMENT SEATS Abutment: NOT ON PILING | |
| 35. PIERS | 3 | 36. PIER SEATS B TOWER Piers: NOT ON PILING | 2 |
| 37. BACKWALLS | | 38. WINGWALLS | 2 |
| 39. FENDERS and DOLPHINS Piers = 12 NN NN Spans = 13 | 3 | 40. SCOUR (INSP TYPE - 1,2,3) | 1 2 |
| 41. SLOPE PROTECTION N NONE-NATURAL PROTECTION(GRASS) | | 42. SUMMARY Dive Date 10/2/2010 | 4 |
| CULVERTS N NONE/NOT APPLICABLE | | 44. ALIGNMENT | |
| 43. GENERAL | | 46. SEAMS | |
| 45. SHAPE Culvert Length 0 | | 48. SCOUR (INSP TYPE - 1,2,3) | |
| 47. HEADWALLS or ENDWALLS | | 50. SUMMARY | |
| 49. ABUTMENT | | | |
| CHANNEL | | | |
| 51. ALIGNMENT 8 SLIGHT CHANCE OVERTOPPING AP | 1 | 52. PROTECTION 3 SHEET PILING | 2 |
| 53. HYDRAULIC OPENING | 1 | 54. SUMMARY | 6 |
| APPROACHES 1 CONCRETE | | | |
| 55. PAVEMENT | 2 | 56. APPROACH SLABS | |
| 57. GUARDRAIL 0 OTHER | 2 | 58. RELIEF JOINTS | |
| 59. EMBANKMENT | 2 | 60. SUMMARY Percent Legal = 135 | 6 |
| GENERAL | | | |
| 61. NAVIGATION LIGHTS Signs on = Y | 1 | 62. WARNING SIGNS Maint Resp 1 OHIO TRAN DEPT | 2 |
| 63. SIGN SUPPORTS MVC on = 14 Under C = 30 | 1 | 64. UTILITIES | 3 |
| 65. VERTICAL CLEARANCE Under NC = 0 | 1 | 66. GENERAL APPRAISAL & OPERATIONAL STATUS | 4 A |

67. INSPECTED BY

68. REVIEWED BY

SIGNED

PE Number

SIGNED

69991

PE Number

Name DONALD CARTWRIGHT

Name WESLEY WEIR

DATE 10/11/2012

1 N 1 0 0 1 N
SURVEY

DATE 12/19/2012

DECK

FLOOR: ISOLATED HEAVY SPALLS W/ EXP. REBAR W/ MOD. SECTION LOSS, FLOOR CRACKING WITH EFFLO THROUGHOUT THE WEST APPROACH AND TUNNELS.

WEARING SURFACE: ISOLATED DECK SPALLS NOTED, UP TO 20 SQUARE FEET, TYPICALLY WITH ASPHALTIC PATCHES.

CSW: ISOLATED MINOR DAMAGE TO ISOLATED SECTIONS OF PEDESTRIAN FENCING, MINOR CRACKING IN SIDEWALKS, ISOLATED SMALL SPALLS.

DRAINAGE: PARTIALLY CLOGGED CURB DRAINS, JOINTS TYPICALLY FILLED WITH DEBRIS, MISSING GRATING IN NORTH LONGITUDINAL SIDEWALK TROUGH. PONDED WATER WAS NOTED ALONG THE NORTH SIDEWALK IN SPAN 4.

EX.JOINTS: HEAVY DEBRIS IN GLANDS, ISOLATED MINOR PLOW DAMAGE WAS NOTED DUE TO VERTICAL MISALIGNMENT OF ADJACENT JOINT ARMOR. SHALLOW SPALLING OF JOINT HEADERS NOTED THROUGHOUT THE BRIDGE.

SUPERSTRUCTURE

BEAM/G/S: LOCALIZED AREAS OF HEAVY SPALLS AND DELAMINATED CONCRETE IN THE WEST APPROACH/TUNNEL SECTIONS, MINOR SECTION LOSS TO REINFORCEMENT TYPICAL. MINIMAL CHANGE SINCE THE 2011 INSPECTION.

JOISTS/STRINGERS: UPPER AND LOWER DECK STRINGERS IN SPAN 4 WITH LOCALIZED ADVANCED SECTION LOSS. STRINGER P IN BAY 21 WITH ADVANCED WEB LOSSES (UP TO 100%) ADJACENT TO FB 20 IN THE LOWER 4" OF THE WEB.

FLOORBEAMS: LOCALIZED HOLED THROUGH SECTIONS OF FLOORBEAM WEBS, PARTICULARLY ALONG THE ARCH LINES AND NEAR LATERAL BRACING CONNECTIONS. THE CIRCULAR WELD RETROFIT AT UPPER DECK FB 22 WAS PREVIOUSLY CRACKED, BUT NOTED TO HAVE PROPAGATED A TOTAL OF ~3/8" SINCE LAST MARKED (2010). THIS CRACK REMAINS CONFINED TO THE WELD MATERIAL. THE EXTERIOR FLOORBEAM CORBELS IN THE CONCRETE APPROACH SPANS EXHIBIT LARGE SPALLS AND EXPOSED REINFORCING WITH ISOLATED LOCATIONS WITH THE ENTIRE FRONT FACE SPALLED OFF.

FL BM CONNECT: LOWER FLOORBEAMS WITH HEAVY LOSSES ADJACENT TO HANGER CONNECTIONS. PREVIOUSLY CLEANED AND PAINTED BUT NOW RUSTING WITH LOCALIZED SIGNIFICANT ADDITIONAL LOSSES.

VERTICALS: LOCATIONS BELOW THE UPPER DECK LEVEL (PPS 0-4 AND 20-24) WITH ACTIVE CORROSION AT VERTICAL MEMBER CONNECTIONS.

DIAGONALS: LOCATIONS BELOW THE UPPER DECK LEVEL (PPS 0-4 AND 20-24) WITH ACTIVE CORROSION AT DIAGONAL MEMBER CONNECTIONS.

LOWER CHORD: LOCALIZED MODERATE TO ADVANCED SECTION LOSS, TYPICALLY AT GUSSET PLATE TO LOWER CHORD INTERFACE, PANELS

0-4 AND 20-24, TYPICAL.

GUSSET PLATES: LOCALIZED ADVANCED SECTION LOSS TO GUSSET PLATES AT LOWER CHORD INTERFACE, PANELS 0-4 AND 20-24, TYPICAL.

LAT BRACE: ISOLATED LATERAL BRACING MEMBERS WITH LOCALIZED ADVANCED SECTION LOSS AND HOLED THROUGH AREAS NEAR THE CONNECTION LOCATIONS.

SWAY BRACE: LOCALIZED AREAS WITH 100% LOSS OF PORTAL BATTEN PLATES AND LACING MEMBERS.

BEARING: MODERATE RUSTING PRIMARILY ON THE INTERIOR OF THE TRUSS BOLSTERS, MULTIPLE SADDLE BEARINGS WITH 100% LOSS.

ARCH: MINOR CRACKING, SPALLING AND/OR DELAMINATED AREAS TYPICAL FOR ALL ARCHES. ISOLATED ARCHES EXHIBIT LARGE DELAMINATED AREAS AND/OR MODERATE LONGITUDINAL OR MAP CRACKING.

ARCH COLUMN: COLUMNS IN THE WEST APPROACH AND TUNNEL SECTIONS WITH HEAVY SPALLING AND EXPOSED REINFORCEMENT WITH MODERATE CORROSION. ISOLATED COLUMNS EXHIBIT LOSS OF CONCRETE BEHIND OUTERMOST REINFORCEMENT.

PCS: PAINT FAILURES TYPICAL AT TRUSS CONNECTIONS BELOW THE UPPER DECK. ESTIMATED BETWEEN 10%-15%

PINS/H/H: MODERATE PITTING AT EYEBAR HEADS AT THE LOWER CONNECTIONS AT ISOLATED PANEL POINTS. NOT SIGNIFICANTLY CHANGED SINCE 2011.

FPD: NO FATIGUE DISTRESS WAS NOTED AT THE EYEBAR HEADS.

SUBSTRUCTURE

ABUTMENTS: ABUTMENT CONCRETE WITH MINOR CRACKING.

PIERS: SOUTH TOWER B SETTLEMENT HAS CONTINUED. ON 9/21/12, THE CRACK GAUGE AT THE LOWER DECK SHOWED APPROXIMATELY 10MM OF MOVEMENT SINCE THE PREVIOUS INSPECTION (9/17/11).

PIER SEATS: MINOR CRACKING WAS NOTED AT THE TRUSS BEARING SEATS WITH NO SIGNIFICANT CHANGE SINCE THE PREVIOUS INSPECTION.

WINGWALLS: SOFT CONCRETE AT SOUTHWEST WING. CRACKING & SPALLS AT CURTAIN WALLS TYPICAL WITH NO SIGNIFICANT CHANGE SINCE PREVIOUS INSPECTION.

FENDERS AND DOLPHINS: NO FUNCTIONAL COLLISION PROTECTION IS PRESENT FOR PIER 3.

SCOUR: SCOUR HOLE AT PIER 4 HAS SLIGHTLY INCREASED IN SIZE SINCE LAST INSPECTION.

CHANNEL

PROTECTION: WEST EMBANKMENT LACKS ANY TYPE OF BANK PROTECTION.

APPROACHES

PAVEMENT: MINOR SHOIVING AND CRACKING THROUGHOUT BOTH ASPHALT
APPROACHES.

GUARDRAIL: EASTBOUND IMPACT ATTENUATOR DAMAGED FROM VEHICLE
IMPACT.

EMBANKMENT: MINOR EROSION CHANNEL AT THE NORTHEAST WING HAS
NOT SIGNIFICANTLY CHANGED SINCE THE PREVIOUS INSPECTION.

GENERAL

WARNING SIGNS: WARNING SIGNS PRESENT ONLY AT THE NORTHEAST
AND SOUTHWEST CORNERS OF THE TRUSS.

UTILS: UTILITY JUNCTION BOX IN SPAN 6 EXHIBITS ADVANCED
CORROSION THROUGHOUT ALL COMPONENTS WITH FAILED CORRUGATED
METAL OUTER CONTAINMENT. CONDITION IS A RESULT OF WATER
INFILTRATION THROUGH ACCESS MANHOLE ABOVE JUNCTION BOX.