# 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

| pullant 03 Deal Area 273 CFO anti-  |          |   |  |
|---|----------|---|--|
| DECK out/out 83 Deck Area 272,652 sqft  1 FLOOP 1 REINF CONCRT (PRESTRSD, PRECAST | 3        | C MICROSILICA MODIFIED CONCRETE OVERLAY  Thk 1.5 Wear Date 9/1/2001 | 1  |
| Left 2 SIDEWALK(>2') / Right 2 SIDEWALK(>2')                                      | 1        | 2. WEARING SURFACE  |  |
| 3. CURBS, SIDEWALKS AND WALKWAYS  5 REINF CONCR POST & CONCR PANE                 |          | 4. MEDIAN   |  |
| 5. RAILING  5 REINF CONCR POST & CONCR PANE                                       | 1        | 6. DRAINAGE 3 SCUPPERS & DWNSPTS                                    | 1  |
| 7. EXPANSION JOINTS OOTHER  | 2        | 8. SUMMARY  | 5  |
| SUPERSTRUCTURE  9. ALIGNMENT  Max Spans 299                                       | 1        | 15 ROLLED STEEL  10. BEAMS/GIRDERS/SLAB                             | 1  |
| 11. DIAPHRAGMS or CROSSFRAMES   | 1        | 12. JOISTS/STRINGERS  | 2  |
| 13. FLOOR BEAMS   | 2        | 14. FIOOR 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 <sup>1 ROLLERS</sup>                            | 2  |
| 25. ARCH  |          | 26. ARCH COLUMNS or HANGERS Paint Date 3/4/2004                     |  |
| 27. SPANDREL WALLS  |          | 28. PROTECTIVE COATING SYSTEM 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 33. ABUTMENTS 3 SOLID WALL   | 1        | 2 CANTILEVER  34. ABUTMENT SEATS Abutment: NOT ON PILING            | 1  |
| 35. PIERS   | 2        | 4 OPEN COLUMN  36. PIER SEATS Piers: NOT ON PILING                  | 1  |
| 37. BACKWALLS   | 1        | 38. WINGWALLS   | 1  |
| Piers = 15 03 01  39. FENDERS and DOLPHINS Spans = 20                             | 4        | 40. SCOUR (INSP TYPE - 1,2,3)                                       | 2  |
| 41. SLOPE PROTECTION  N NONE-NATURAL PROTECTION(GRA                               |          | 42. SUMMARY   | 6  |
| CULVERTS 43. GENERAL  N NONE/NOT APPLICABLE                                       |          | 44. ALIGNMENT   | Ī  |
|   |          |   |  |
| 45. SHAPE  Culvert Length 0   |          | 46. SEAMS   |  |
| 47. HEADWALLS or ENDWALLS   |          | 48. SCOUR (INSP TYPE - 1,2,3)                                       | <del></del>                                      |
| 49. ABUTMENT  |          | 50. SUMMARY   | <u> </u>   |
| CHANNEL<br>51. ALIGNMENT  | 2        | 52. PROTECTION  4 PILING  | 2  |
| 8 SLIGHT CHANCE OVERTOPPING   | 1        |   | 6  |
| 53. HYDRAULIC OPENING   | <u> </u> | 54. SUMMARY   |  |
| APPROACHES  55. PAVEMENT  2 BITUMINOUS  | 1        | 56. APPROACH SLABS  | 1  |
| 57. GUARDRAIL   | 1        | 58. RELIEF JOINTS   |  |
| 59. EMBANKMENT  | 1        | 60. SUMMARY   | 8  |
| GENERAL   | 1        |   |  |
| 61. NAVIGATION LIGHTS  Signs on = N   | <u> </u> | 62. WARNING SIGNS  Maint Resp 1 OHIO TRAN DEPT                      | <del>                                     </del> |
| 63. SIGN SUPPORTS  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 69991  |          |   |  |
|   |          |   |  |

Name ANTHONY KOLOZE

SIGNED

Name WESLEY WEIR

PE Number SIGNED

PE Number

DECK

FLOOR: THE EAST CELLULAR UNIT EXHIBITS ONE 10' DIAMETER SPALLED AREA EXHIBITING 7 CONSECUTIVE TRANVERSE BARS WITH 100% SECTION LOSS, AS WELL AS 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 UNDERSIDE EXHIBITS WIDESPREAD SPALLING DUE TO 1" TO 2" THICK CONCRETE THAT WAS POURED BELOW THE UNDERSIDE OF FLOORBEAM TOP FLANGES, WHICH ARE POTENTIAL FALLING HAZARDS OVER THE STREETS AND INDUSTRIAL YARD BELOW. EXPANSION JOINTS: ISOLATED EXPANSION JOINTS EXHIBIT AREAS OF TORN NEOPRENE GLANDS.

#### SUPERSTRUCTURE

STRINGERS: The first interior stringers of the main truss spans exhibit isolated holed through sections and minor pitting (cleaned and painted) on the web and bottom flanges.

VERTICALS: Moderate section loss (cleaned and painted) noted with isolated locations up to 1/4" due to previous corrosion. Pack rust between web plates and flange angles is beginning to reactivate.

DIAGONALS: Moderate section loss with isolated advanced section loss to web up to 1/4" at gusset plate interface (cleaned and painted).

LOWER CHORD: Moderate section loss with isolated areas of advanced loss due to previous corrosion of web plates and rivet heads. Pack rust is beginning to reactivate in several locations, mainly between web plates and top flange angles.

GUSSET PLATES: Typical moderate section loss up to 10%widespread thoughout gusset plates with isolated areas of advanced section loss up to 50%. Isolated average section loss of 20% noted on gusset plates along lower chord members. Gusset plate CL70S exhibits a laminar split on the west free edge below the diagonal, reducing the effective gusset plate thickness to 1/4" remaining.

PCS: Rust staining over the top coat on truss members primarily beneath leaking joints.

PINS/HANGERS/HINGES: Pins exhibit pack rust between web plates and gusset plates which have caused bending in chord web plates, 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 1/4" along one-third of the pin diameter. FPD(E&E'): Utility deck floorbeams exhibit cracks due to lack of radial coping at truss connections.

Isolated cracks in floorbeams have not been arrested, and crack ends without arrest holes have been marked and dated to monitor propagation.

#### SUBSTRUCTURE

PIERS: Large spalls with exposed rebar are typical throughout pier towers above truss bearings, with many spalls now sealed. The exterior walls of the piers exhibit hairline cracks and isolated corner spalls along outside corbels.

FENDERS: Severe timber rot and collision damage have caused total failure of the fender system.

## CHANNEL

ALIGNMENT: CHANNEL HAS A SHARP BEND JUST UPSTREAM OF THE BRIDGE.

PROTECTION: 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.