### STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

2800152 **GEA 00044 0135** 1960 BRIDGE NUMBER YEAR BUILT

Structure File Number

Bridge Type 112 TYPE SERVICE 5 5 **LA DUE RES. 1.23 MIS 422** DIST **12** out/out 43.8 Deck Area 4,650 sqft 3 LATEX MODIFIED CONCRETE OVERLAY DECK 3 3 1 REINF CONCRT (PRESTRSD, PRECAST 2. WEARING SURFACE <u> 1. FLOOR</u> Left N NONE / Right N NONE 4. MEDIAN 3. CURBS, SIDEWALKS AND WALKWAYS 6. DRAINAGE

1 OVER THE SIDE (W/O DRIP STRIP) 7 STL GUARDRL ON STL, CONCR, OR T 1 1 5. RAILING 2 4 3 COMPRESSION SEAL 7. EXPANSION JOINTS 8. SUMMARY SUPERSTRUCTURE 3 OTHER (CONCRETE RIGID FRAME) 1 2 Max Spans 40 9. ALIGNMENT 10. BEAMS/GIRDERS/SLAB 11. DIAPHRAGMS or CROSSFRAMES 12. JOISTS/STRINGERS 13. FLOOR BEAMS 14. FIOOR BEAM CONNECTIONS 15. VERTICALS 16. DIAGONALS 17. END POSTS 18. TOP CHORD 19. LOWER CHORD 20. LOWER LATERAL BRACING 21. TOP LATERAL BRACING 22. SWAY BRACING 1 24. BEARING DEVICES O OTHER 23. PORTALS 25. ARCH 26. ARCH COLUMNS or HANGERS Paint Date 1/10/1967 6 28. PROTECTIVE COATING SYSTEM U UNKNOWN 27. SPANDREL WALLS 29. PINS/HANGERS/HINGES 30. FATIGUE PRONE CONNECTIONS S 5 31. LIVE LOAD RESPONSE 32. SUMMARY SUBSTRUCTURE 3 SOLID WALL 2 3 SOLID WALL 2 34. ABUTMENT SEATS Abutment: ON PILING 33. ABUTMENTS 4 OPEN COLUMN 1 2 35. PIERS 36. PIER SEATS Piers: ON PILING 2 2 37. BACKWALLS 38. WINGWALLS Piers = 02 NN NN 2 1 39. FENDERS and DOLPHINS Spans = 3 40. SCOUR N NONE-NATURAL PROTECTION(GRA Dive Date 12/30/1899 5 3 41. SLOPE PROTECTION 42. SUMMARY **CULVERTS** N NONE/NOT APPLICABLE 43. GENERAL 44. ALIGNMENT <u>45. SHAPE</u> <u>46. SEAMS</u> Culvert Fill Depth 0 Culvert Length 0 47. HEADWALLS or ENDWALLS 48. SCOUR 49. 50. SUMMARY **CHANNEL** 1 3 5 RIP RAP (DUMPED ROCK OR ROCK) 52. PROTECTION 51. ALIGNMENT 8 SLIGHT CHANCE OVERTOPPING 5 1 53. WATERWAY ADEQUACY 54. SUMMARY **APPROACHES** 2 1 2 BITUMINOUS 56. APPROACH SLABS 55. PAVEMENT 1 1 STEEL BEAM 57. GUARDRAIL 58. RELIEF JOINTS 3 5 Percent Legal = 150 60. SUMMARY 59. EMBANKMENT **GENERAL** Maint Resp 1 OHIO TRAN DEPT 62. WARNING SIGNS 61. NAVIGATION LIGHTS Signs on = NMVC on = 9999.9 64. UTILITIES 63. SIGN SUPPORTS Under C = 0

> **INITIALS** SIGNED PE Number INITIALS PE Number

68. REVIEWED BY

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MJS

65. VERTICAL CLEARANCE Under NC = 0

SIGNED

67. INSPECTED BY

66. GENERAL APPRAISAL & OPERATIONAL STATUS

60048

MJM

Structure File Number 2800152 BRIDGE NUMBER GEA 00044 0135 ON/UNDER 1

DECK

FLOOR: SEE ITEM #10 (SLAB). FLOOR IS 25-30% DET.

WS: CRACKS. 60 SF OF ASPHALT PATCHES. 10% DELAMINATED.

10 SF BREAKING UP. WS IS 15-20% DET.

RAILING: VERTICAL CRACKS.

EXPANSION JOINTS: ASPHALT PATCHES AT BOTH EXPANSION JOINTS.

#### SUPERSTRUCTURE

NOTE: THE SLAB RATING DIFFERS FROM THE FLOOR RATING DUE TO

NEW RAILINGS THAT REDUCED THE WIDTH OF THE BRIDGE FOR
LIVE LOAD.

SLAB: 380 SF OF FLOOR SPALLS ALONG CONSTRUCTION JOINT AT
CENTERLINE OF USR 44 REVEAL 110 LF OF 360 DEGREE
EXPOSURE OF LONGITUDINAL REBARS; SEE ATTACHED PHOTOS
#1 THRU #5 DATED 8/30/06 AND 11/14/06. 375 SF OF
FLOOR SPALLS ALONG LEFT EDGE OF SLAB REVEAL 210 LF OF
360 DEGREE EXPOSED REBAR. 370 SF OF FLOOR SPALLS
ALONG RIGHT EDGE OF SLAB REVEAL 130 LF OF 360 DEGREE
REBAR EXPOSURE. SOME MISSING LONGITUDINAL REBAR. THE
MAJORITY OF THE FLOOR SPALLS ALONG BOTH SLAB EDGES ARE
OUTSIDE THE INSIDE RAILINGS.

#### SUBSTRUCTURE

ABUTMENTS: SPALLS.

ABUTMENT SEATS: 4 SF OF SEAT LOSS AT ENDS OF ABUTMENTS. PIERS: MINOR DELAMINATIONS AND SPALLS OF CAPS. RUSTING

SECTION LOSS OF STEEL PIER COLUMNS NEAR WATERLINE.

SEE ATTACHED PHOTO #2 DATED 10/25/05.

SCOUR: NO SIGNIFICANT CHANGE FROM 2003 DIVER'S REPORT.

BACKWALLS: SPALLS. SOME DETERIORATED AREAS.

WINGWALLS: CRACKS. SPALLS. DETERIORATING CONCRETE.

SLOPE PROTECTION: UNDERMINING OF START ABUTMENT EXPOSES

PARTS OF SOME PILES TO WATER/AIR. ULTV IS

(42 INCHES, 44 LF, 1 LF); SEE ATTACHED

PHOTOS #1 AND #2 DATED 12/5/02. FINISH

ABUTMENT IS SLIGHTLY UNDERMINED NEAR LEFT

END AND BELOW CENTERLINE OF SR 44.

#### CHANNEL

PROTECTION: MOST OF THE STONE HAS WASHED AWAY FROM BOTH ABUTMENTS.

#### APPROACHES

PAVEMENT: CRACKS. ASPHALT PATCHES ALONG TOPS OF BOTH BACKWALLS.

EMBANKMENT: EROSION OF BOTH SIDES OF BOTH APPROACH

EMBANKMENTS. EROSION ALONG NORTHWEST CAUSEWAY

EMBANKMENT WITH SEVERAL WASHOUTS THAT EXTEND TO

GUARDRAIL POSTS.

#### GENERAL

INSPECTION FROM BOAT WITH DAVE EVERETT ON 10/03/07.

# SFN 2800152 Bridge GEA-44-0135

## USR 44 over La Due Reservoir

David Everett took these photographs on December 5, 2002



▲ Photo #1. Facing southwest. Note the undermining of the start (south) abutment. ULTV is (3 LF, 44 LF, 7 inches).



▲ Photo #2. Close-up of photo #1.



P1 360 degree exposure of slab rebars in span #1.psd



P3 360 degree exposure of slab rebars in span #2.psd



P2 360 degree exposure of slab rebars in span #1.psd



P4 360 degree exposure of slab rebars in span #2.psd



## GEA-44-0135 SFN 2800152 SR 44 over LaDue Reservoir Photos taken on 10/25/05



Photo 2. Facing north looking at the steel pile columns of Pier 1.

Note the rusting section loss occuring at the waterline.