STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

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

3

Structure File Number

DIST **12**

DECK

<u> 1. FLOOR</u>

Bridge Type 112

out/out 43.8 Deck Area 4,650 sqft

1 REINF CONCRT (PRESTRSD, PRECAST

TYPE SERVICE 5 5

LA DUE RES. 1.23 MIS 422

3 LATEX MODIFIED CONCRETE OVERLAY

2. WEARING SURFACE

3

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 = N MVC on = 9999.9 64. UTILITIES 63. SIGN SUPPORTS Under C = 065. VERTICAL CLEARANCE Under NC = 0 Ν 66. GENERAL APPRAISAL & OPERATIONAL STATUS 67. INSPECTED BY 68. REVIEWED BY ACP 60048 MJM SIGNED **INITIALS** SIGNED PE Number INITIALS PE Number

DECK

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

WEARING SURFACE: CRACKS. 175 SF OF ASPHALT PATCHES. 10% DELAMINATED. 10 SF BREAKING UP. WS IS 15-20% DETERIORATED.

RAILING: VERTICAL CRACKS.

EXPANSION JOINTS: ASPHALT PATCHES AT BOTH EXPANSION JOINTS.

SUPERSTRUCTURE

NOTE: THE SLAB RATING DIFFERS FROM THE FLOOR RATING DUE TO 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' 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' OF 360 DEGREE EXPOSED REBAR. 370 SF OF FLOOR SPALLS ALONG RIGHT EDGE OF SLAB REVEAL 130' 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.

CENTERLINE OF SR 44.

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", 44', 1');
SEE ATTACHED PHOTOS #1 AND #2 DATED 12/5/02. FINISH
ABUTMENT IS SLIGHTLY UNDERMINED NEAR LEFT END AND BELOW

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 MIKE SUTAK ON 11/06/07.

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.