

BRIDGE INSPECTION REPORT

4303040
Structure File NumberBRIDGE NUMBER **LAK 00084 1888**YEAR BUILT **2006**DIST **12** Bridge Type **221** TYPE SERVICE **1 5** **GRAND RIVER**

DECK	out/out 42 Deck Area 30,925 sqft		2 INTEGRAL CONCRETE (MONOLITHIC)	
1. FLOOR	1 REINF CONCRT (PRESTRSD, PRECAST)	1	2. WEARING SURFACE	Thk 1 Wear Date 8/16/2006 1
3. CURBS, SIDEWALKS AND WALKWAYS	Left 2 SIDEWALK(>2') / Right 2 SIDEWALK(>2')	1	4. MEDIAN	Lanes on 2
5. RAILING	1 REINFORCED CONCRETE PARAPET	1	6. DRAINAGE	3 SCUPPERS & DWNSPTS 1
7. EXPANSION JOINTS	8 ELASTOMERIC STRIP SEAL	1	8. SUMMARY	8
SUPERSTRUCTURE			7 CONCRETE GIRDER	
9. ALIGNMENT	Max Spans 110	1	10. BEAMS/GIRDERS/SLAB	1
11. DIAPHRAGMS or CROSSFRAMES		1	12. JOISTS/STRINGERS	
13. FLOOR BEAMS			14. FLOOR BEAM CONNECTIONS	
15. VERTICALS			16. DIAGONALS	
17. END POSTS			18. UPPER CHORD	
19. LOWER CHORD			20. GUSSET PLATES	
21. LATERAL BRACING			22. SWAY BRACING	
23. PORTALS			24. BEARING DEVICES	C ELASTOMERIC (LAMIN.) 1
25. ARCH			26. ARCH COLUMNS or HANGERS	
27. SPANDREL WALLS			28. PROTECTIVE COATING SYSTEM	
29. PINS/HANGERS/HINGES			30. FATIGUE PRONE DETAIL (E, E')	
31. LIVE LOAD RESPONSE (E OR S)		S	32. SUMMARY	8
SUBSTRUCTURE			9 STUB-CAPPED PILE(MULTIPLE ROW PILES)	
33. ABUTMENTS	6 STUB-CAPPED PILE (SINGLE ROW PILES)	1	34. ABUTMENT SEATS	Abutment: ON PILING 1
35. PIERS		1	36. PIER SEATS	5 CAPPED COLUMN Piers: ON PILING 1
37. BACKWALLS			38. WINGWALLS	1
39. FENDERS and DOLPHINS	Piers = 04 02 NN Spans = 7		40. SCOUR (INSP TYPE - 1,2,3)	2 2
41. SLOPE PROTECTION	3 RIP RAP (DUMPED ROCK)	2	42. SUMMARY	Dive Date 10/27/2009 7
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	5 RIP RAP (DUMPED ROCK OR ROCK) 2
53. HYDRAULIC OPENING	8 SLIGHT CHANCE OVERTOPPING	2	54. SUMMARY	5
APPROACHES				
55. PAVEMENT	2 BITUMINOUS	2	56. APPROACH SLABS	1
57. GUARDRAIL	1 STEEL BEAM	1	58. RELIEF JOINTS	
59. EMBANKMENT		1	60. SUMMARY	Percent Legal = 150 6
GENERAL				
61. NAVIGATION LIGHTS			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	7 A

67. INSPECTED BY

68. REVIEWED BY

SIGNED

PE Number

SIGNED

59487

PE Number

Name ANDREA PERSANYI

Name YOUSSEF SEIF

DATE 10/7/2011

1 1 1 1 N N N N
SURVEY

DATE 2/23/2012

DECK

FLOOR: MINOR CRACKS. <1% DETERIORATED.
WEARING SURFACE: MINOR CRACKS. <1% DETERIORATED.
RAILINGS: VERTICAL CRACKS, PEELED TOP COAT ON RIGHT RAIL, SP
2, 5'.
DRAINAGE: ISOLATED PONDING IN RIGHT CURBLINE
EXJTS: LOOSE BOLTS AT FWD DECK ARMOR.

SUPERSTRUCTURE

BEAMS: ONE SMALL CHIP ON LEFT FASCIA BEAM SPAN 3.
DIAPHRAGMS: 5 SF DELAMINATION TO CONCRETE IN BAY #2 OVER
PIER #1. SEE ATTACHED PHOTOS 1 AND 2 DATED 7/28/08.

SUBSTRUCTURE

PIERS: CRACKS IN STEMS. SEE DIVE REPORT DATED 10/27/09.
SCOUR: SCOUR HOLES AT UPSTREAM NOSES OF PIERS 2 AND 3
(PROBED).
SLOPE PROTECTION: SOME STONE HAS WASHED AWAY.

CHANNEL

ALIGNMENT: CHANNEL MAKES 90 DEGREE BEND JUST UPSTREAM OF
BRIDGE. BRAIDED CHANNEL DURING HIGH FLOW. SEE ATTACHED
PHOTO DATED 12/03/09. SOME DIAGONAL FLOW INTO PIER STEMS.
NOTE: USGS STREAM DATA
COLLECTION MONITOR STATIONED ON WEST BANK.
PROTECTION: LARGE STONE AROUND BASES OF PIERS 4, 5 AND 6
HAS PARTIALLY WASHED AWAY. SEE ATTACHED PHOTOS 4-7 DATED
7/28/08.

APPROACHES

PAVEMENT: SOME CRACKS TO REAR CONCRETE APPROACH SLAB.
TRANSVERSE CRACKS FULL WIDTH AT REAR AND LONGITUDINAL CRACKS
AT FORWARD. VEHICLES BOUNCE ONTO AND OFF OF BRIDGE

GENERAL

UTILITIES: SOME MISALIGNMENT OF 16" PIPE IN BAY #3. SPAN 6,
CONSTANT LEAKING AT THE RELEIF VALVE. SEE ATTACHED PHOTO 3
DATED 7/28/08.
INSPECTED WITH MIKE GERSTENSLAGER.



Looking upstream, both photos, note changed path of river from previous years.



LAK-084-1888 SFN 4303040 SR 84 over the Grand River



Braided channel upstream of SR 84.JPG

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P1: 5 SF DELAM TO CONCRETE DIAPHRAGM.



P2: CLOSE-UP OF P1.

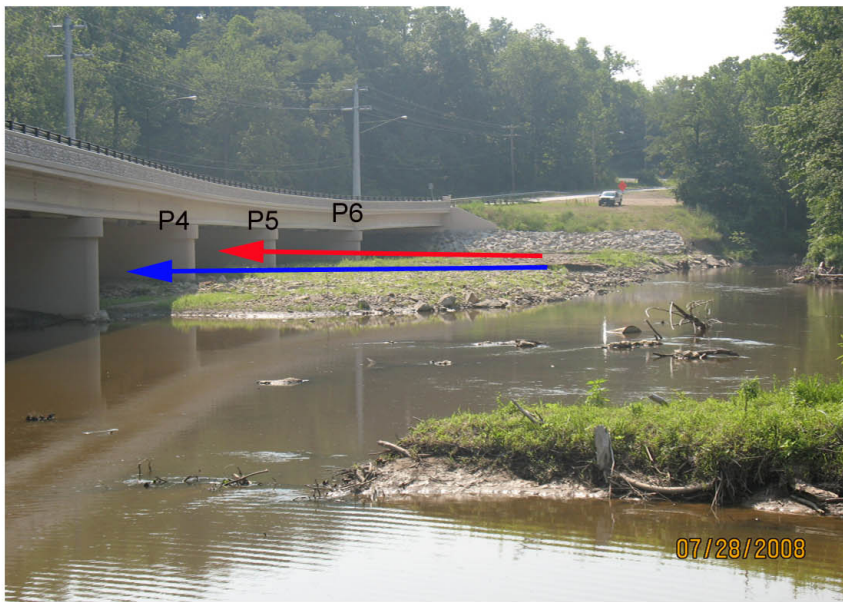


P3: TYPICAL MISALIGNMENT OF 16" PIPE IN BAY #3



P4: NOTE LOG JAM BETWEEN PIER 5 AND UTIL POLE FOUNDATION. HIGH WATER FLOWS THRU HERE.

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P5: RED LINE AND BLUE LINE SHOW PATH OF HIGH WATER FLOW.



P6: THIS IS THE PATH OF THE RED LINE IN P5. NOTE SOME WASH OUT TO FINISH SIDE OF PIER #4.



P7: THIS IS THE PATH OF THE BLUE LINE IN P5. NOTE THE SMALL POND THAT THE ARROW IS POINTING TO. POND IS AS DEEP AS 3 FT.