

BRIDGE INSPECTION REPORT

1812246
Structure File Number

BRIDGE NUMBER CUY 00322 1534

YEAR BUILT 1939

DIST 12 Bridge Type 322 TYPE SERVICE 1 5 CHAGRIN RIV .25 MI W 174#

DECK out/out 65.1 Deck Area 9,763 sqft			0 OTHER	
1. FLOOR	1 REINF CONCRT (PRESTRSD, PRECAST) Left 2 SIDEWALK(>2') / Right 2 SIDEWALK(>2')	2	2. WEARING SURFACE	Thk 2 2
3. CURBS, SIDEWALKS AND WALKWAYS		2	4. MEDIAN	Lanes on 4 1
5. RAILING	6 STEEL POST & STEEL PANEL (DECO)	1	6. DRAINAGE	3 SCUPPERS & DWNSPTS 1
7. EXPANSION JOINTS	2 SLIDING METAL PLATE ANGLE	3	8. SUMMARY	5
SUPERSTRUCTURE			2 WELDED BUILT-UP STEEL	
9. ALIGNMENT	Max Spans 72	1	10. BEAMS/GIRDERS/SLAB	2
11. DIAPHRAGMS or CROSSFRAMES		2	12. JOISTS/STRINGERS	
13. FLOOR BEAMS			14. FLOOR 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	
23. PORTALS			24. BEARING DEVICES	3 SLIDING (BRONZE) 2
25. ARCH			26. ARCH COLUMNS or HANGERS	
27. SPANDREL WALLS			28. PROTECTIVE COATING SYSTEM	Paint Date 1/1/1939 1 RED LEAD 4
29. PINS/HANGERS/HINGES			30. FATIGUE PRONE CONNECTIONS	
31. LIVE LOAD RESPONSE		S	32. SUMMARY	5
SUBSTRUCTURE			1 GRAVITY	
33. ABUTMENTS	1 GRAVITY	2	34. ABUTMENT SEATS	Abutment: ON PILING 3
35. PIERS		1	36. PIER SEATS	1 GRAVITY Piers: ON PILING 1
37. BACKWALLS		2	38. WINGWALLS	2
39. FENDERS and DOLPHINS	Piers = 01 NN NN Spans = 2		40. SCOUR	2 2
41. SLOPE PROTECTION	N NONE-NATURAL PROTECTION(GRA)		42. SUMMARY	Dive Date 12/30/1899 4
CULVERTS				
43. GENERAL	N NONE/NOT APPLICABLE		44. ALIGNMENT	
45. SHAPE			46. SEAMS	
47. HEADWALLS or ENDWALLS	Culvert Length 0		48. SCOUR	Culvert Fill Depth 0
49.			50. SUMMARY	
CHANNEL				
51. ALIGNMENT	6 (SEE CODING GUIDE)	2	52. PROTECTION	2 STONE 2
53. WATERWAY ADEQUACY		1	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
63. SIGN SUPPORTS	Signs on = N MVC on = 9999.9 Under C = 0		64. UTILITIES	1
65. VERTICAL CLEARANCE	Under NC = 0	N	66. GENERAL APPRAISAL & OPERATIONAL STATUS	4 A
67. INSPECTED BY			68. REVIEWED BY	

SIGNED

PE Number

KJB
INITIALS

SIGNED

60048 MJM
PE Number INITIALS

DATE 8/27/2008

1 1 1 N 1 N N N
SURVEY

DATE 2/17/2009

DECK

FL: TRANSVERSE LEACHED CRACKS AT 25' SPACING. MOTTLED AREAS.
EFFLORESCENCE AROUND THE CRACKS. 120 SF OF SPALLS
(MOSTLY HAUNCH). FLOOR IS 5-10% DET.
WEARING SURFACE: WIDE CRACKS.
SIDEWALKS: HEAVY SCALING OF LEFT WALK.
EXJTS: PAVED OVER. START EXJT COVER PLATE IS MISSING FROM
LEFT SIDEWALK LEAVING A 1" WIDE GAP. FINISH EXJT IS
CLOSED.

SUPERSTRUCTURE

BEAMS: AREAS OF HEAVY RUSTING SECTION LOSS AND RUSTING THRU
HOLES; SEE ATTACHED PHOTOS 1-7 DATED 5/21/08. KNIFE
EDGED EFFECT IN LOWER FLANGES OF BOTH FASCIA BEAMS.

XFRAMES: ENDFRAME RUSTING SECTION LOSS WITH RUSTING THRU
HOLES; SEE ATTACHED PHOTO 5 DATED 5/21/08.
BEARINGS: HEAVY RUSTING; SEE ATTACHED PHOTO 9 DATED 5/10/05.
PCS: 5-10% RUST. RUSTING IN STRUCTURALLY CRITICAL AREAS; SEE
ITEM #10 (BEAMS). PCS IS 5-10% DET.

SUBSTRUCTURE

ABUTS: DELAMINATIONS. DEEP SPALLS; SEE ATTACHED PHOTOS 8, &
11 DATED 5/10/05 & 12/6/05. 2 FULL HEIGHT CRACKS IN
FINISH ABUT; SEE ATTACHED PHOTO 10 DATED 12/6/05 (CRACK
BELOW BAY #7 IS 1/4" WIDE AT GROUND LEVEL). STONE FACING
IS MISSING BELOW RIGHT BAY AT FINISH ABUT; SEE ATTACHED
PHOTO 11 DATED 12/6/05.
ABUT SEATS: DEEPS SPALLS AND DETERIORATION. APPROACHING
SEAT LOSS @ START ABUT MASONRY PLATE #4. 20" SQUARE SEAT
SEAT LOSS UNDER START ABUT MASONRY PLATE #5 WITH 5 LF OF
NEARBY 360 DEGREE EXPOSURE OF LONGITUDINAL REBARS; SEE
ATTACHED PHOTOS 9 DATED 5/10/05. 5" SQUARE SEAT LOSS
UNDER START ABUT MASONRY PLATE #6; SEE ATTACHED PHOTO 9
DATED 5/10/05. 1" SQUARE SEAT LOSS UNDER START ABUT
MASONRY PLATE #7. A TOTAL OF 15" SQUARE OF SEAT LOSS
UNDER MASONRY PLATES #2R, #5R, & #6R AT FINISH.

PIER: CRACKS. SCALING.
BACKWALLS: DEEP SPALLS. 2 LF OF 360 DEGREE REBAR EXPOSURE
OF START BACKWALL IN BAY #6.
WINGWALLS: FULL HEIGHT CRACKS IN START-LEFT AND FINISH-RIGHT
WINGWALLS. CRACK IN START-LEFT WINGWALL IS 1" WIDE @
GROUND LEVEL; SEE ATTACHED PHOTO 12 DATED 12/6/05.

SCOUR: PARTS OF THE PIER FOOTER ARE EXPOSED; SEE ATTACHED
PLAN SHEET DATED 8/27/08.

CHANNEL

ALIGNMENT: RIVER FLOWS INTO START ABUTMENT AND FINISH FACE
OF PIER #1.
PROTECTION: UNEVEN SETTLEMENT OF STONE SLABS NEAR START
ABUTMENT.

APPROACHES

PAVEMENT: CRACKS. ASPHALT PATCHES.

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APPROACHES:

PAVEMENT: CRACKS. ASPHALT PATCHES.

GENERAL:

UTILS: SOME RUSTING SECTION LOSS AT ABUTS.
SNOOPER INSPECTION ON 5/21/08. DRY SUIT ON 8/27/08. LAST DIVE INSPECTION ON
9/24/07.

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P8: START ABUTMENT SPALLED WITH ABUTMENT SEAT LOSS.



P9: CLOSE-UP OF SEAT LOSS AT BEAM #5 FROM P8.



P10: FINISH ABUTMENT CRACKS.



P11: FINISH ABUT UNDER BAY 1R MISSING DECORATIVE STONE.



P12: START-LEFT WINGWALL CRACK.

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4" DIAMETER
HOLE FROM
P4



05/21/2008



LEFT FASCIA

05/21/2008

P7: RUSTED AWAY STIFFENER. RUST THRU HOLE TO LOWER FLANGE. THIS IS THE FINISH SIDE OF THE PIER.



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P6: ARROW POINTS TO CRACKED LOWER FLANGE OF RIGHT FASCIA AT THE START ABUT. NOTE SECTION LOSS TO FLANGE.

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P1: ARROW POINTS TO RUSTING SECTION LOSS TO LOWER FLANGE OF LEFT FASCIA 3' FROM FINISH ABUTMENT. LINES SHOW EDGE OF LOWER FLANGE. THIS IS TYPICAL TO SEVERAL AREAS OF BOTH FASCIAS.



05/21/2008

P2: LOOKING AT WEB OF THE SAME LOCATION AS P1. NOTE THE HEAVY SECTION LOSS AT LOWER FLANGE RIVETS.



05/21/2008

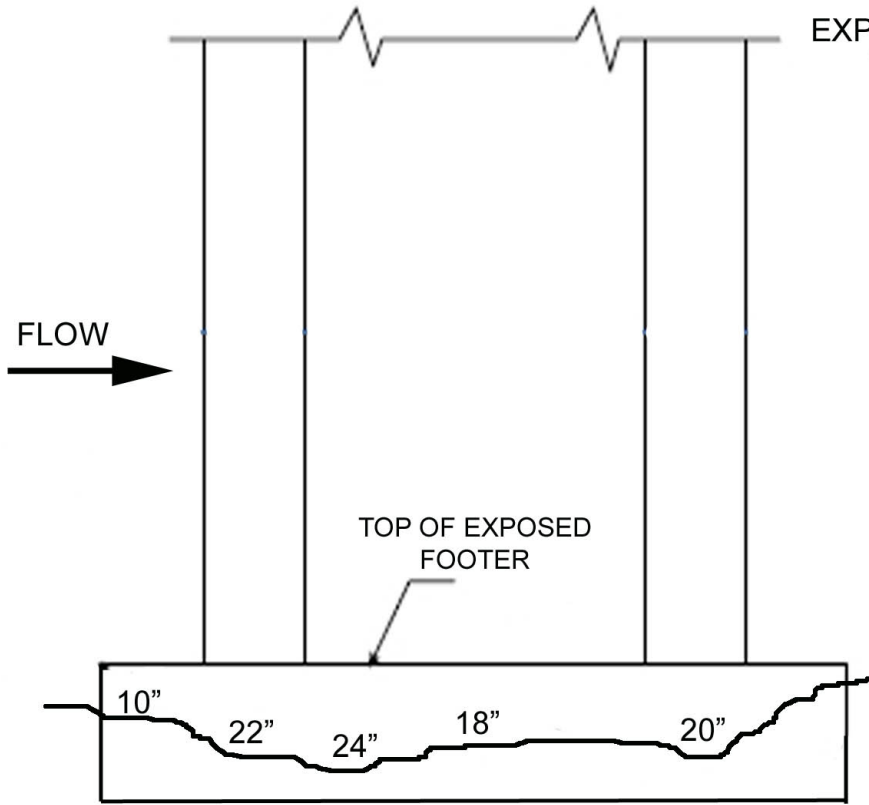
P3: HEAVY SECTION LOSS TO BEAM #5 AT FINISH. THIS IS TYPICAL TO OTHER BEAMS AT FINISH AND OTHER AREAS.



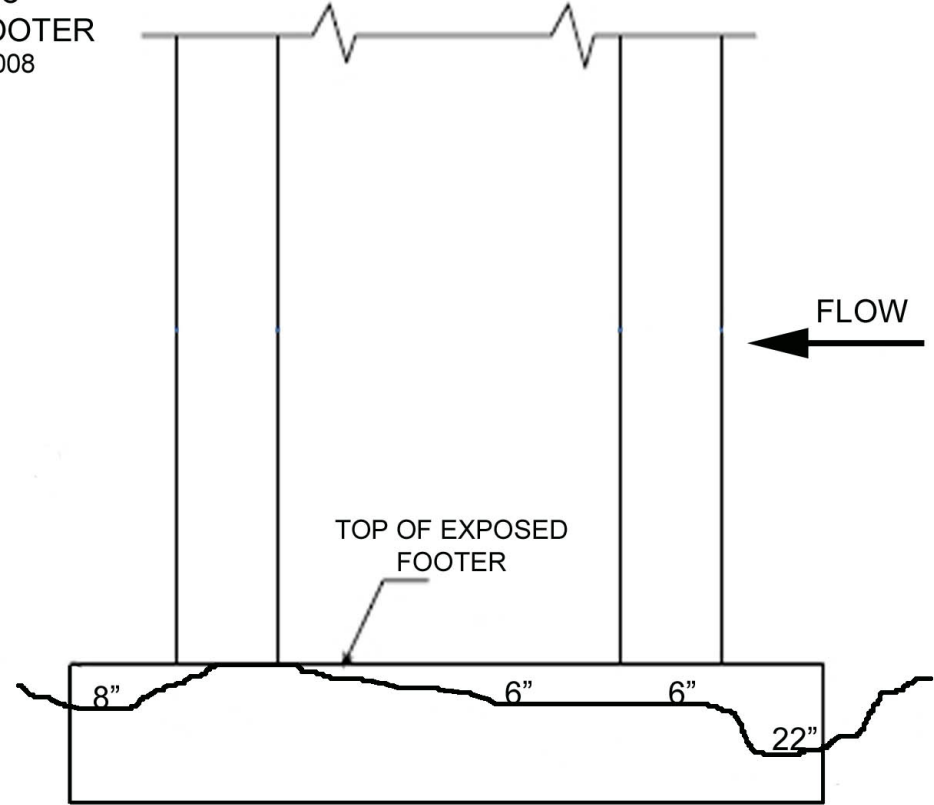
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P4: ARROW POINTS TO 4" DIAMETER RUSTING THRU HOLE IN RIGHT FASCIA AT FINISH ABUTMENT.

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EXPOSED PIER FOOTER
TAKEN ON 8/27/2008



LOOKING WEST TOWARDS
START ABUTMENT



LOOKING EAST TOWARDS
FINISH ABUTMENT