### STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

1805371 CUY 00071 1791 R 1969 BRIDGE NUMBER YEAR BUILT

Structure File Number TYPE SERVICE 6 1 SR 176(1328)JENNINGS FWY DIST **12** Bridge Type **322** 

		<b>-</b>	
DECK out/out 64 Deck Area 115,907 sqft  1. FLOOR 1 REINF CONCRT (PRESTRSD, PRECAST	2	4 DENSE CONCRETE (IOWA SYSTEM) OVERLAY  2. WEARING SURFACE  Thk 1.2	2
Left N NONE / Right N NONE		Large on 2	
3. CURBS, SIDEWALKS AND WALKWAYS		4. MEDIAN	
5. RAILING  1 REINFORCED CONCRETE PARAPET	2	6. DRAINAGE 3 SCUPPERS & DWNSPTS	2
7. EXPANSION JOINTS 8 ELASTOMERIC STRIP SEAL	2	8. SUMMARY	6
SUPERSTRUCTURE  9. ALIGNMENT  Max Spans 121	1	28 ROLLED STEEL  10. BEAMS/GIRDERS/SLAB	1
11. DIAPHRAGMS or CROSSFRAMES	2	12. JOISTS/STRINGERS	
13. FLOOR BEAMS		14. FIOOR BEAM CONNECTIONS	
15. VERTICALS		16. DIAGONALS	
17. END POSTS		18. TOP CHORD	
			1
19. LOWER CHORD		20. LOWER LATERAL BRACING	
21. TOP LATERAL BRACING		22. SWAY BRACING	
23. PORTALS	<del>                                     </del>	24. BEARING DEVICES <sup>2 ROCKERS</sup>	2
25. ARCH	<b></b> '	26. ARCH COLUMNS or HANGERS Paint Date 1/1/1991	
27. SPANDREL WALLS		28. PROTECTIVE COATING SYSTEM 5 PAINT SYSTEM OZE	6
29. PINS/HANGERS/HINGES	2	30. FATIGUE PRONE CONNECTIONS	1
31. LIVE LOAD RESPONSE	S	32. SUMMARY	6
SUBSTRUCTURE 33. ABUTMENTS 5 STUB GRAVITY	1	5 STUB GRAVITY  34. ABUTMENT SEATS Abutment: ON PILING	1
	2	5 CAPPED COLUMN	1
35. PIERS	2	36. PIER SEATS Piers: ON PILING	1
37. BACKWALLS  Piers = 20 07 NN		38. WINGWALLS	<del>'</del>
39. FENDERS and DOLPHINS Spans = 28		40. SCOUR	$\vdash$
41. SLOPE PROTECTION  2 STONE (NO.1 AGGREGATE)	1	42. SUMMARY Dive Date 12/30/1899	6
CULVERTS 43. GENERAL  N NONE/NOT APPLICABLE		44. ALIGNMENT	
43. GENERAL			
45. SHAPE  Culvert Length 0	-	46. SEAMS  Culvert Fill Depth 0	
47. HEADWALLS or ENDWALLS		48. SCOUR	
49.		50. SUMMARY	
CHANNEL 51. ALIGNMENT		52. PROTECTION X N/A	
N NOT OVER WATERWAY  53. WATERWAY ADEQUACY		54. SUMMARY	
APPROACHES 2 DITUMNOUS	1		1
55. PAVEMENT		56. APPROACH SLABS	
57. GUARDRAIL	1	58. RELIEF JOINTS	1
59. EMBANKMENT	1	60. SUMMARY	7
GENERAL 61. NAVIGATION LIGHTS		62. WARNING SIGNS  Maint Resp 1 OHIO TRAN DEPT	
Signs on = Y	1		
63. SIGN SUPPORTS MVC on = 9999.9  Under C = 15.2		64. UTILITIES	
65. VERTICAL CLEARANCE Under NC = 14.8	1	1 00. GENERAL APPRAISAL & OPERATIONAL STATUS	6 A
67. INSPECTED BY	MJS		MJM
SIGNED PE Number	INITIALS	S SIGNED PE Number I	INITIALS

DATE 10/14/2008

**1 1 1 1 1 N N N** DATE 2/3/2009 SURVEY

Structure File Number 1805371 BRIDGE NUMBER CUY 00071 1791 R ON/UNDER

DECK

FLOOR: LEACHING TRANSVERSE CRACKS. MOTTLED AREAS IN SPAN 7.

TWO FULL DEPTH REPAIRS, ONE WITH FORMWORK. SPALL
FORMING OVER TRAFFIC. SEE WO 244 2008\*0023.

5-10% DET.

WS: OVER 2000 SF OF CONCRETE PATCHES. 15 SF BREAKING UP.

10 SF OF ASPHALT PATCHES. DELAMINATED AREAS. 5-10% DET.

RAILING: DELAMINATED AREAS. SPALLS FORMING OVER TRAFFIC.

SEE WO 244 2008\*0013. 6' LONG DETERIORATED AREA IN
RIGHT RAIL OF RAMP TO WEST 14TH/WB 90 (UNIT 4AE).

DRAINAGE: HOLES IN DOWNSPOUTS NEAR BOTH MAINLINE ABUTMENTS.

SEE ATTACHED PHOTO DATED 09/25/08. DOWNSPOUT AT

EAST END OF PIER 18 AE IS PLUGGED WITH CONCRETE

AT OUTLET. LOOSE DRAINAGE TROUGH AT JOINT 2A HAS

BEEN REMOVED.

EXPANSION JOINTS: TORN SEALS. ALL BEAMS 1/2" TO BACKWALL AT WEST 14TH EXIT RAMP ABUTMENT.

#### SUPERSTRUCTURE

BEAMS: RUST SECTION LOSS UNDER EXPANSION JOINTS.

XFRAMES: RUST THRU HOLES, RUST SEVERED ANGLES AND CRACKED

WELDS OF XFRAMES UNDER SEATED HINGES. SEE ATTACHED

PHOTO DATED 09/18/08.

BEARINGS: ALL ROCKERS TIPPED OUT AT WEST 14TH/WB 90

ABUTMENT AE. ROCKERS FOR BEAMS L AND N ARE TIPPED

IN AT PIER 1.

PAINT: ACTIVE CORROSION UNDER EXPANSION JOINTS. 2% RUST OVERALL. 5-10% DET.

HINGES: RUST SECTION LOSS. A FEW BENT STIFFENERS. SEE ATTACHED PHOTO DATED 09/18/08.

#### SUBSTRUCTURE

PIERS: DELAMINATIONS AND SPALLS TO COLUMNS BEHIND PARAPETS
OF LOWER BRIDGE. SEE ATTACHED PHOTO DATED 09/25/08.
SOME CAPS HAVE BEEN FIBER WRAPPED.
STEEL PIER CAPS HAVE MANY POOR WELDING DETAILS. SEE
ATTACHED PHOTOS DATED 07/22/05.

BACKWALLS: SPALLS BEHIND BOTH FASCIA BEAMS AT FINISH ABUTMENT I-90 EB.

### GENERAL

LAST CONSULTANT INSPECTION BY EUTHENICS IN 2006. SNOOPERED ON 09/18/08 BY MJS.

# CUY-71-1791 R SFN 1805371 I-71 over SR 176 Photos taken on 07/22/05



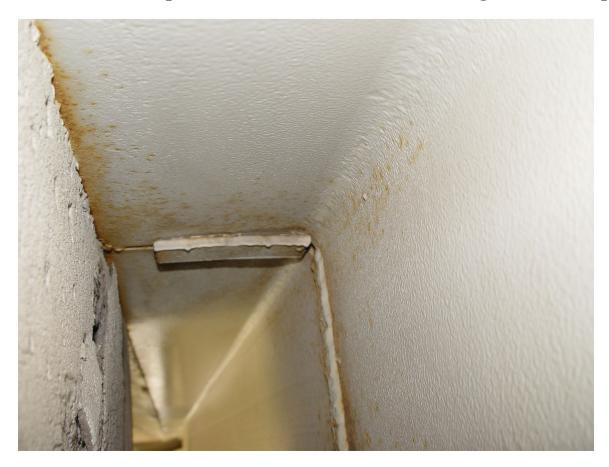


Photo 2. Close up of Photo 1, showing a backer bar used to weld the lower flange of beam 6 into the web of the pier cap.

## CUY-71-1791 R SFN 1805371 I-71 over SR 176 Photos taken on 07/22/05



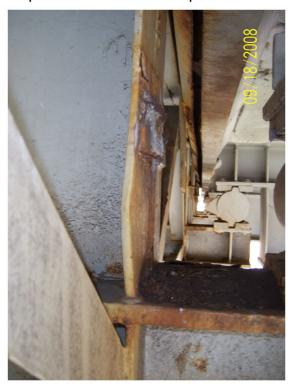
**Photo 3.** In several locations where a backer bar was not used the weld lacks full penetration between the flange and web plates.



**Photo 4.** Backer bar and lack of penetration where top flanges were welded together above the steel pier caps.



Holes top and bottom at downspout 1R near star...



Under Joint 1A bent stiffener of Beam 3.JPG



Spalls and delams of right column of Pier14 .JPG



Under Joint 2A rust severed xframe angle in Bay...

Bridge Number SFN Yard No. 1805371 CUY - 071 - 1791 241 Feature Intersected SR 176(1328)JENNINGS FWY **End Mile** County Route Start Mile Maintenance Yard CUY 246.55 246.55 **Independence Yard** 071 WO Number **PGAC SPALL REMOVAL** 6112002C0075 6163 **REMOVE LOOSE SPALLS** Closed Date Open Date 15 Aug 2001 12 Sep 2001 WO Number **PGAC SPALL REMOVAL** 6142005000\*2 COUNT FROM THE SOUTH END TO THE NORTH. PIER CAP #6 AND #11 HAVE 6163 SPALLSFORMING OVER TRAFFIC. #6 ALL LANES. #11 OVER LANES #2 & #3. SEE REMOVE LOOSE SPALLS PHOTOSON THE I:DRIVE. SPALLS ARE ALL FORMING OVER SR 176 TRAFFIC. Open Date Closed Date 29 Jul 2004 30 Nov 2004 WO Number L1 SPALL REMOVAL **PGAC** 241200800009 6163 SPALLS FORMING OVER WEST 14TH RAMP TO STEELYARD COM WORK WAS COMPLETEDON FRIDAY 9 28 2007 REMOVE LOOSE SPALLS Open Date Closed Date 28 Sep 2007 28 Sep 2007 WO Number **PGAC** L1 REMOVE RAILING SPALLS FORMING OVER TRAFFIC. 2442008\*0014 RAILING SPALLS ARE FORMING OVER SR 176 TRAFFIC: SEE THE JPEG DOCUMENT 6163 ON THE I-DRIVE FOR THE LOCATIONS. IF YOU HAVE ANY QUESTIONS CALL DAVE **REMOVE LOOSE SPALLS** EVERETT AT 216-584-2231. Open Date Closed Date 28 Sep 2007 OPEN **WO Number PGAC** L1 REMOVE FLOOR SPALL FORMING OVER TRAFFIC. 2442008\*0023 6163 A 2 SQUARE FOOT FLOOR SPALL IS FORMING AT THE NORTH VERTICAL FACE OF THE TOP FLANGE OF THE STEEL BOX CROSS GIRDER OVER SR 176 NB LANE #1; SEE THE JPEG DOCUMENT ON THE I-DRIVE. IF YOU HAVE ANY QUESTIONS CALL REMOVE LOOSE SPALLS DAVE EVERETT AT 216-584-2231. Open Date Closed Date 28 Feb 2008 OPEN