

## BRIDGE INSPECTION REPORT

1805371  
Structure File Number

BRIDGE NUMBER CUY 00071 1791 R

YEAR BUILT 1969

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

<b>DECK</b>	out/out 64 Deck Area 115,907 sqft		4 DENSE CONCRETE (IOWA SYSTEM) OVERLAY	
1. FLOOR	1 REINF CONCRT (PRESTRSD, PRECAST)	2	2. WEARING SURFACE	2
	Left N NONE / Right N NONE			
3. CURBS, SIDEWALKS AND WALKWAYS			4. MEDIAN	
			Lanes on 3	
5. RAILING	1 REINFORCED CONCRETE PARAPET	2	6. DRAINAGE	2
			3 SCUPPERS & DWNSPTS	
7. EXPANSION JOINTS	8 ELASTOMERIC STRIP SEAL	2	8. SUMMARY	6
<b>SUPERSTRUCTURE</b>				
9. ALIGNMENT	Max Spans 121	1	10. BEAMS/GIRDERS/SLAB	1
			28 ROLLED STEEL	
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	1
21. TOP LATERAL BRACING			22. SWAY BRACING	
23. PORTALS			24. BEARING DEVICES	2
			2 ROCKERS	
25. ARCH			26. ARCH COLUMNS or HANGERS	
27. SPANDREL WALLS			28. PROTECTIVE COATING SYSTEM	6
			Paint Date 1/1/1991	
29. PINS/HANGERS/HINGES		2	30. FATIGUE PRONE CONNECTIONS	1
			5 PAINT SYSTEM OZE	
31. LIVE LOAD RESPONSE		S	32. SUMMARY	6
<b>SUBSTRUCTURE</b>				
33. ABUTMENTS	5 STUB GRAVITY	1	34. ABUTMENT SEATS	1
			Abutment: ON PILING	
35. PIERS		2	36. PIER SEATS	1
			5 CAPPED COLUMN	
37. BACKWALLS		2	38. WINGWALLS	1
			Piers: ON PILING	
39. FENDERS and DOLPHINS	Piers = 20 07 NN Spans = 28		40. SCOUR	
41. SLOPE PROTECTION	2 STONE (NO.1 AGGREGATE)	1	42. SUMMARY	6
			Dive Date 12/30/1899	
<b>CULVERTS</b>				
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	
<b>CHANNEL</b>				
51. ALIGNMENT			52. PROTECTION	
	N NOT OVER WATERWAY		X N/A	
53. WATERWAY ADEQUACY			54. SUMMARY	
<b>APPROACHES</b>				
55. PAVEMENT	2 BITUMINOUS	1	56. APPROACH SLABS	1
57. GUARDRAIL	1 STEEL BEAM	1	58. RELIEF JOINTS	1
59. EMBANKMENT		1	60. SUMMARY	7
			Percent Legal = 100	
<b>GENERAL</b>				
61. NAVIGATION LIGHTS			62. WARNING SIGNS	
			Maint Resp 1 OHIO TRAN DEPT	
63. SIGN SUPPORTS	Signs on = Y MVC on = 9999.9 Under C = 15.2	1	64. UTILITIES	
65. VERTICAL CLEARANCE	Under NC = 14.8	1	66. GENERAL APPRAISAL & OPERATIONAL STATUS	6 A
67. INSPECTED BY			68. REVIEWED BY	

SIGNED

PE Number

MJS  
INITIALS

DATE 10/14/2008

SIGNED

60048 MJM  
PE Number INITIALS1 1 1 1 1 N N N  
SURVEY

DATE 2/3/2009

## 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 1.** Facing south looking at beam 6 framing into steel pier cap 22AE.



**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.

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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...



Spalls and delams of right column of Pier14 .JPG



Under Joint 1A bent stiffener of Beam 3.JPG



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

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