

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

DECK	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
SUPERSTRUCTURE				
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
SUBSTRUCTURE				
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	
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			52. PROTECTION	
	N NOT OVER WATERWAY		X N/A	
53. WATERWAY ADEQUACY			54. SUMMARY	
APPROACHES				
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 = 150	
GENERAL				
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
67. INSPECTED BY			68. REVIEWED BY	A

70223

AWH

SIGNED

PE Number

INITIALS

SIGNED

PE Number INITIALS

DATE 11/15/2010

1 1 1 1 1 N N 1
SURVEY

DATE

DECK

FLOOR: LEACHING TRANSVERSE CRACKS. MOTTLED AREAS IN SPAN 7&8, BAYS 3 & 4. TWO FULL DEPTH REPAIRS, ONE WITH FORMWORK. SPALL FORMING OVER TRAFFIC. 5-10% DET.

WS: OVER 2000 SF OF CONCRETE PATCHES. 80 SF BREAKING UP. 490 SF OF ASPHALT PATCHES. DELAMINATED AREAS. 5-10% DET.

RAILING: SPALLS & DELAMINATED AREAS. 6' LONG DETERIORATED AREA IN RIGHT RAIL OF RAMP TO WEST 14TH/WB 90 (UNIT 4AE). TROWLEABLE MORTAR WEDGE DELAMINATING FROM PARPET RETROFIT (1990) FORMING POSSIBLE SPALLS OVER TRAFFIC. IMPACT ATTENUATOR DAMAGED @ GORE RAMP AE.

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. DOWNSPOUT PLUGGED @ FINISH ABUT AE.

EXPANSION JOINTS: TORN SEALS. ALL BEAMS 1/2" TO BACKWALL AT WEST 14TH EXIT RAMP ABUTMENT. (2009 BEAMS #1&2 INTO BACKWALL @ W. 14TH RAMP ABUT.)

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: ROCKERS FOR BEAMS L AND N ARE TIPPED IN AT PIER 1. ROCKER #1 TIPPED OUT AT ABUTMENT AW.

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.

4SF DELAM PIER 18AE. 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 AW I-90 EB. SPALLS & DELAMS @ FINISH ABUTMENT AE.

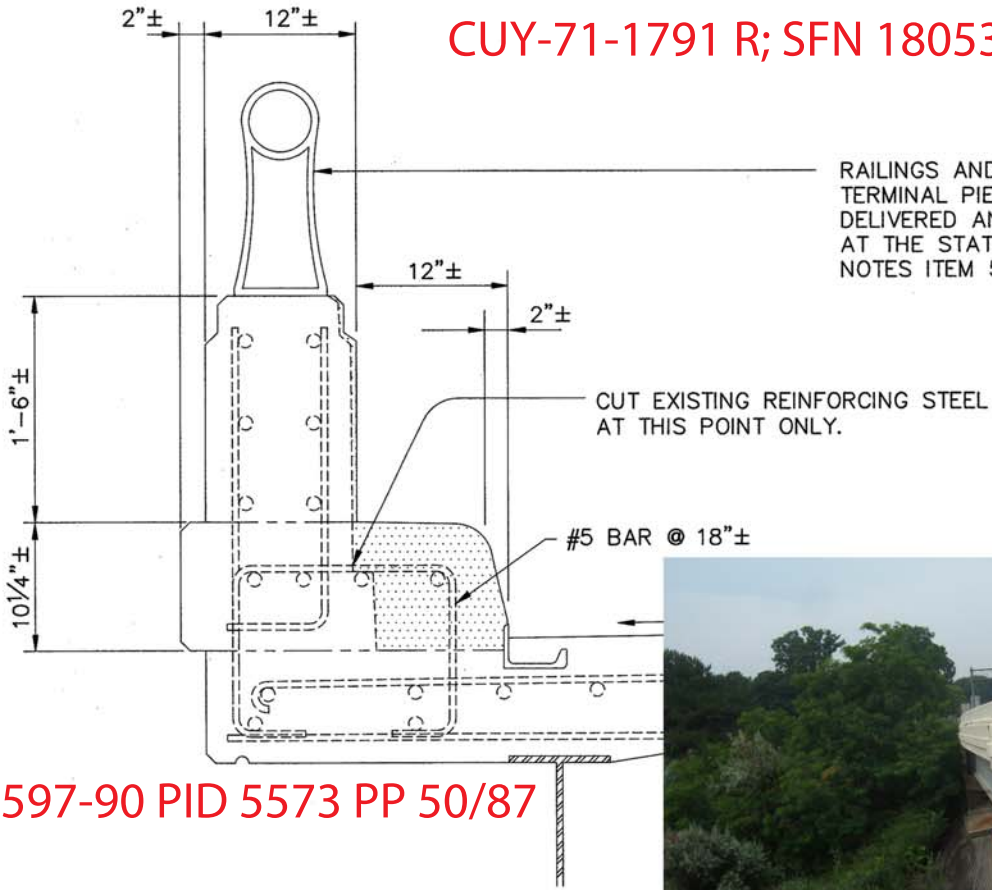
GENERAL

LAST CONSULTANT INSPECTION BY EUTHENICS IN 2006.

SNOOPERED ON 07/13/10 BY AH KB.

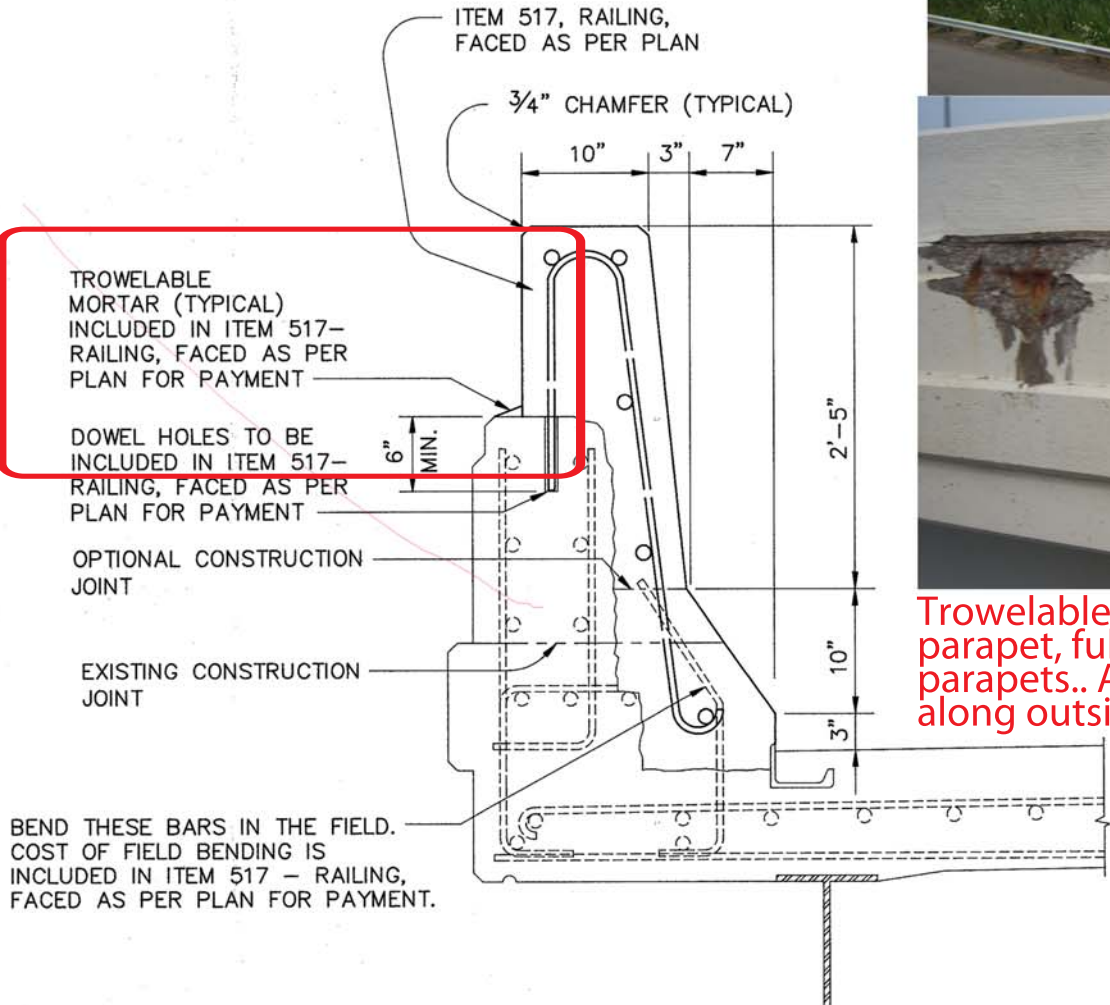
GROUND 11/15/10, AH.

CUY-71-1791 R; SFN 1805371



RAILINGS AND POSTS SHALL BE REMOVED
TERMINAL PIECES WITH END PLATES ARE
DELIVERED AND UNLOADED AT A DESIGNA
AT THE STATE MAINTENANCE YARD. SEE
NOTES ITEM 517-RAILING, FACED AS PER

Project 597-90 PID 5573 PP 50/87



Trowelable Mortar delaminating from
parapet, full length, all retrofitted
parapets.. Additional Spalls forming
along outside parapet .

MODIFIED TYP

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.

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...



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	Bridge Number		Yard No.
1805371	CUY - 071 - 1791		240
	Feature Intersected		
	SR 176(1328)JENNINGS FWY		
County	Route	Start Mile	End Mile
CUY	071	246.55	246.55
			Maintenance Yard
			Cleveland Yard
WO Number	PGAC	SPALL REMOVAL	
6112002C0075	6163		
REMOVE LOOSE SPALLS			
Open Date	Closed Date		
15 Aug 2001	12 Sep 2001		
WO Number	PGAC	SPALL REMOVAL	
6142005000*2	6163	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.	
REMOVE LOOSE SPALLS			
Open Date	Closed Date		
29 Jul 2004	30 Nov 2004		
WO Number	PGAC	L1 REMOVE RAILING SPALLS FORMING OVER TRAFFIC.	
2442008*0014	6163	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.	
REMOVE LOOSE SPALLS			
Open Date	Closed Date		
28 Sep 2007	2 Dec 2009		
WO Number	PGAC	L1 SPALL REMOVAL	
241200800009	6163	SPALLS FORMING OVER WEST 14TH RAMP TO STEELYARD COM WORK WAS COMPLETED ON FRIDAY 9 28 2007	
REMOVE LOOSE SPALLS			
Open Date	Closed Date		
28 Sep 2007	28 Sep 2007		
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 DAVE EVERETT AT 216-584-2231.	
REMOVE LOOSE SPALLS			
Open Date	Closed Date		
28 Feb 2008	2 Dec 2009		
WO Number	PGAC	L1 SPALL REMOVAL	
2402010*0004	6163	REMOVE 2 SF FLOOR SPALL FORMING NEAR TOP FLANGE OF STEEL BOX PIER CAP OVER SR 176 NORTHBOUND LANE #1. SEE JPEG ON THE I-DRIVE. BRIDGE CARRIES I-71 NORTHBOUND OVER SR 176 NRTHBOUND (DOUBLE DECKER) BY STEEL YARD COMMONS. QUESTIONS CALL 312-0124.	
REMOVE LOOSE SPALLS			
Open Date	Closed Date		
2 Dec 2009	17 Aug 2010		
WO Number	PGAC	L1 SPALL REMOVAL	
240201000004	6163	REMOVE 2 SF FLOOR SPALL FORMING NEAR TOP FLANGE OF STEEL BOX PIER : CAP OVER SR 176 NORTHBOUND LANE #1. SEE JPEG ON THE I-DRIVE. BRIDGE : CARRIES I-71 NORTHBOUND OVER SR 176 NRTHBOUND (DOUBLE DECKER) BY : STEEL YARD COMMONS. QUESTIONS CALL 312-0124.	
REMOVE LOOSE SPALLS			
Open Date	Closed Date		
8 Mar 2010	OPEN		

SFN 1805371		Bridge Number CUY - 071 - 1791		Yard No. 240
		SR 176(1328)JENNINGS FWY		
County CUY	Route 071	Start Mile 246.55	End Mile 246.55	Maintenance Yard Cleveland Yard
WO Number 24420116153S	PGAC 6153	BRIDGE DECK REPAIR / 1805371		
BRIDGE DECK REPAIR				
Open Date 8 Nov 2010	Closed Date OPEN			