

Bridge Inspection Report

A6881
I 540 SB-Crawford
over
Union Pacific Rail Road



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

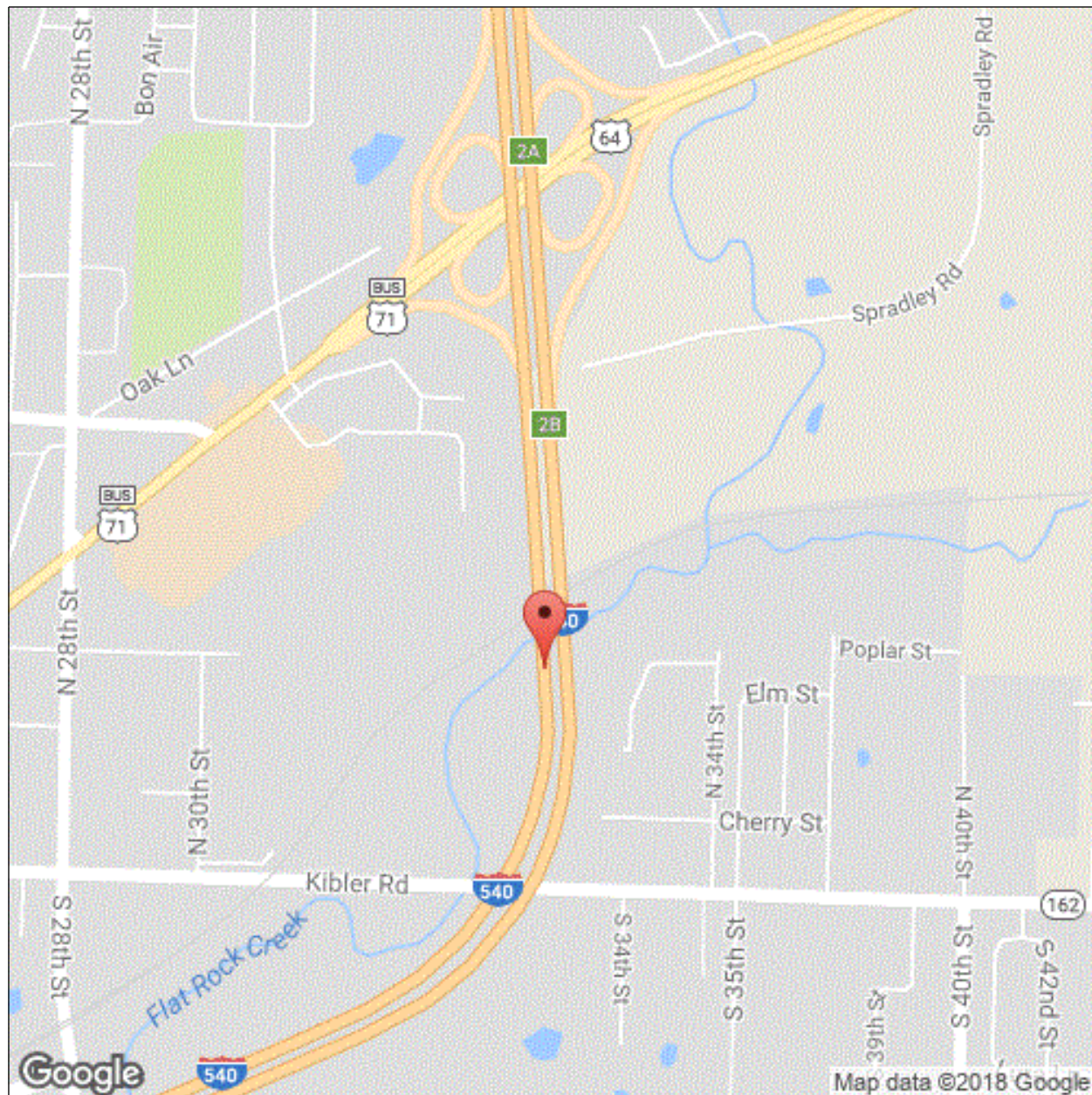
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Bridge Inspection Report

Location Map



Latitude: 35.43970

Longitude: -94.31969

Inspector:

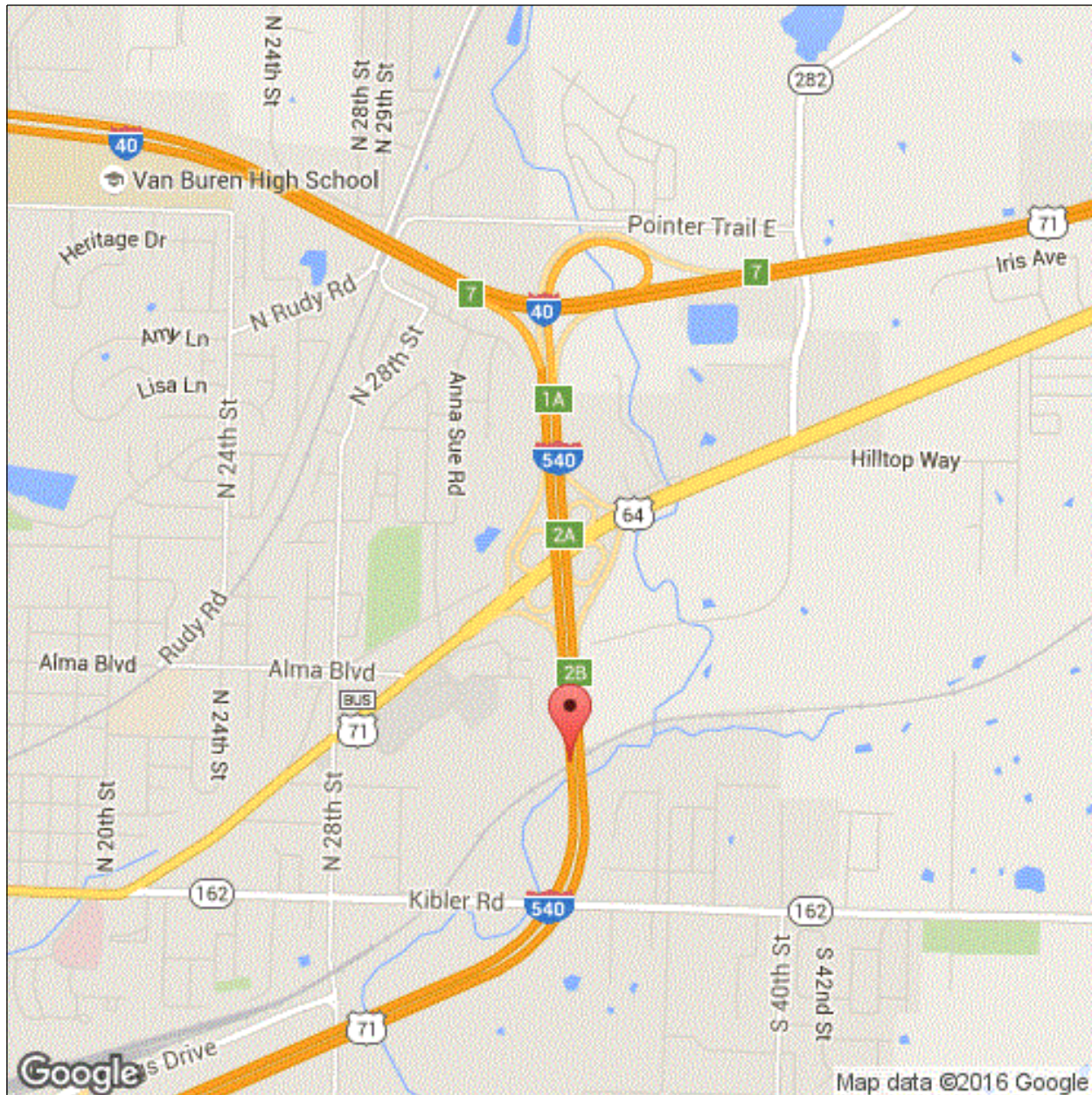
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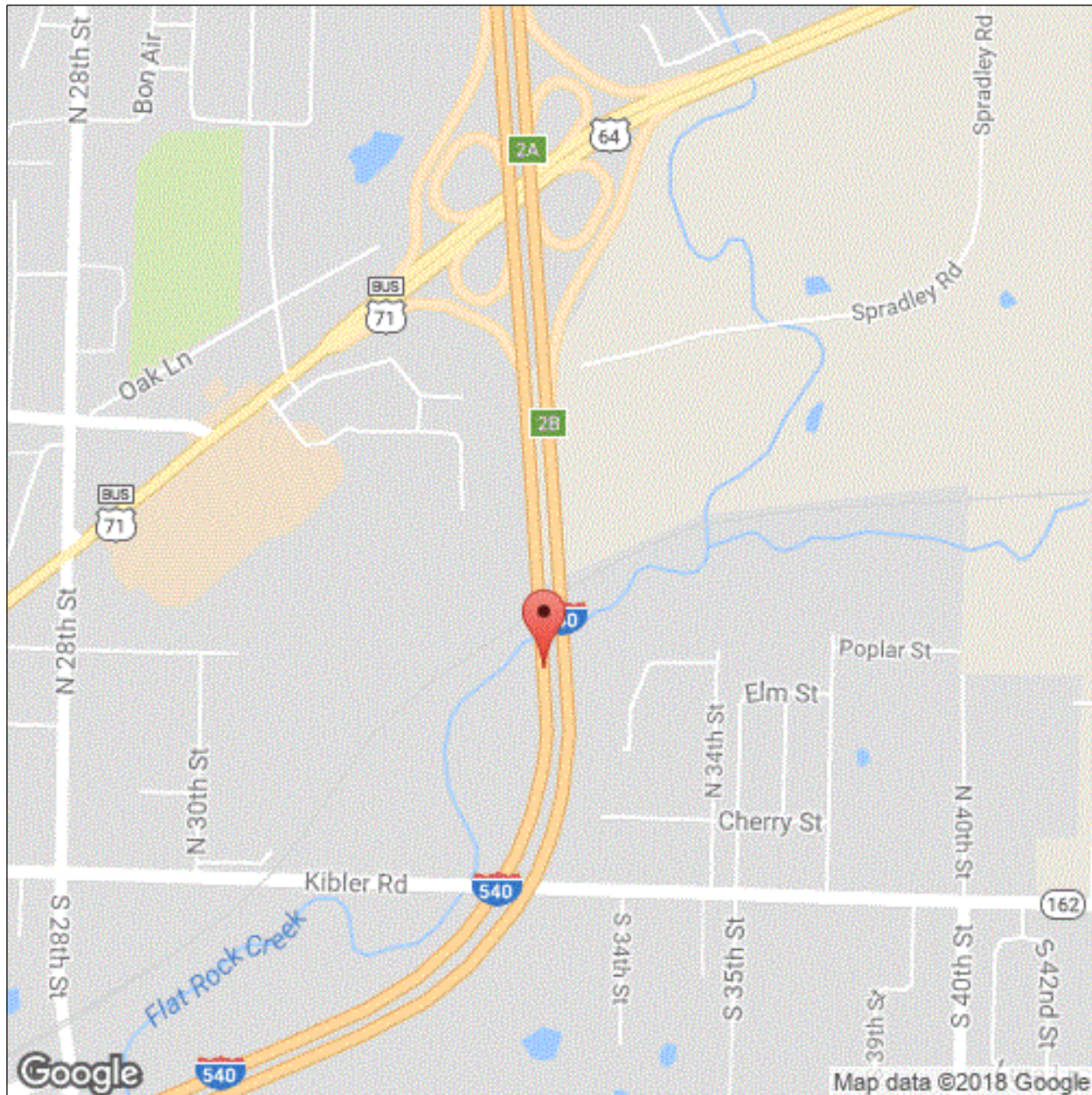
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Executive Summary

03/06/2018 - EJW - Routine Inspection conducted on this date. Underclearance verified with no change since the last inspection.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	03/06/2018
(8) STRUCTURE NUMBER	A6881	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 1 1 540 3	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY 04	(3) COUNTY CODE 033	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	69380	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Union Pacific Rail Road	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	I 540 SB-Crawford		
(9) LOCATION	0.99 Mi South of I-40		
(11) MILEPOINT 13.700	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE 0000540020	(13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.43970	(17) LONGITUDE -94.31969		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	8
A) KIND OF MATERIAL/DESIGN: 4 - Steel continuous		(59) SUPERSTRUCTURE 9	(60) SUBSTRUCTURE 9
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION 8	(62) CULVERT N
(44) STRUCTURE TYPE, APPROACH SPANS			
A) KIND OF MATERIAL/DESIGN: 0 - Other			
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 5	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 1		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 2014	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	6
(42) TYPE OF SERVICE ON 1 UNDER 7		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 02 UNDER 00		(64) OPERATING RATING	60.0
(29) AVERAGE DAILY TRAFFIC 64018	(19) BYPASS DETOUR LENGTH 1	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	36.0
(109) AVERAGE DAILY TRUCK TRAFFIC 12		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 100	(49) STRUCTURE LENGTH (ft.) 485	(67) STRUCTURAL EVALUATION	9
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	7
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 40.0		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	9
(52) DECK WIDTH, OUT-TO-OUT (ft.) 43.1		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 40.0		(72) APPROACH ROADWAY ALIGNMENT	8
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 30	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99	36A) BRIDGE RAILINGS:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 40.0		36B) TRANSITIONS:	1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.90		36C) APPROACH GUARDRAIL:	1
(54) VERTICAL UNDER CLEARANCE (ft.) R 24.16		36D) APPROACH GUARDRAIL ENDS:	1
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) R 39.7		(113) SCOUR CRITICAL BRIDGES	5
(56) MIN LATERAL UNDER CLEARANCE (ft.) 000		SUFFICIENCY RATING	0
		STATUS	92.0
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)		(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(94) BRIDGE IMPROVEMENT COST (\$)		(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	01
(95) ROADWAY IMPROVEMENT COST (\$)		(100) STRAHNET HIGHWAY DESIGNATION	1
(96) TOTAL PROJECT COST		(101) PARALLEL STRUCTURE DESIGNATION	L
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	1
(114) FUTURE ADT 36790	(115) YEAR OF FUTURE ADT 2032	(103) TEMP STRUCTURE	
		(105) FEDERAL LANDS HIGHWAYS	0
		(110) DESIGNATED NATIONAL NETWORK	1
		(20) TOLL	3
		(21) MAINTENANCE RESPONSIBILITY	01
		(22) OWNER	01
		(37) HISTORICAL	5
		NAVIGATION DATA	
		(38) NAVIGATION CONTROL	0
		(111) PIER OR ABUTMENT PROTECTION	1
		(39) NAV VERT CLEARANCE (ft.)	000
		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
		(40) NAV HORIZONTAL CLEARANCE (ft.)	0000

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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	1- Ben.	20933	sq. ft.	20761	172	0	0
	-History files indicate numerous popouts visible on the driving surface of the deck, deck has been epoxy overlaid since the last inspection. No visible cracks in the wearing surface. -The deck overhangs have transverse cracking with light efflorescence that corresponds with the joints in the bridge rails. -One minor transverse crack approximately 7' long in the Right lane of span # 2 that is no longer visible due to epoxy overlay. -The sawn deck joints are missing the poured joint sealant in isolated areas.						
1120 - Efflorescence/Rust Staining		165			165		
1130 - Cracking (RC and Other)		7			7		
510 - Wearing Surfaces		19400	sq. ft.	19400			
107 - Steel Open Girder/Beam	1- Ben.	2910	ft.	2910			
	-A588 weathering steel. -Light orange rust film forming. -No apparent problems or cracks at this inspection.						
515 - Steel Protective Coating		31190	sq. ft.	31190			
205 - Reinforced Concrete Column	1- Ben.	12	each	12			
	No apparent problems at this inspection.						
210 - Reinforced Concrete Pier Wall	1- Ben.	95	ft.	95			
	-No apparent problems at this inspection.						
215 - Reinforced Concrete Abutment	1- Ben.	100	ft.	66	25	9	0
	-Bent 1 has 3 vertical cracks in the back wall and numerous cracks visible in the tops of the backwalls. -Bent 6 has 1 vertical crack with light efflorescence between Beams 3 & 4. -No apparent noteworthy additional problems at this inspection.						
1120 - Efflorescence/Rust Staining		1			1		
1130 - Cracking (RC and Other)		33			24	9	
220 - Reinforced Concrete Pile Cap/Footing	1- Ben.	105	ft.	105			
	-Footings have cover at this inspection.						
234 - Reinforced Concrete Pier Cap	1- Ben.	190	ft.	190			
	-No apparent problems or noteworthy deficiencies at this inspection.						
300 - Strip Seal Expansion Joint	1- Ben.	93	ft.	78	15	0	0
	-The strip seals are in place with no apparent problems. -The anchorage is sound. -Sand and gravel has partially accumulated in the troughs.						
310 - Elastomeric Bearing	1- Ben.	36	each	36			
	-No apparent problems at this inspection.						

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321 - Reinforced Concrete Approach Slab	1- Ben.	1776	sq. ft.	1764	12	0	0
	-The south approach has a transverse crack. - Approach slab grade appears to be good with no apparent major impacts to the bridge deck.						
1130 - Cracking (RC and Other)		12			12		
331 - Reinforced Concrete Bridge Railing	1- Ben.	970	ft.	895	75	0	0
	-New Jersey type bridge rail. -Previous ungrouted and loose anchor bolts on top of the bridge railing over the railroad have been repaired since last inspection. -Vertical cracking typical in the bridge rails that typically correspond with the drains in the base of the bridge rails, a few areas of longitudinal cracks near the top of the bridge rails. -The Right bridge rail has 5 shallow pieces of epoxy coated rebar exposed, they exposed reinforcing steel has light rust leaching out of the epoxy coating.						
1090 - Exposed Rebar		5			5		
1130 - Cracking (RC and Other)		70			70		

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Pictures

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Bridge Inspection Report

Sketches

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Maintenance Needs

Date Reported: 3/25/2014 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: Repair

Deficiency Description:

Deck

The poured joint material in the sawn joints over the intermediate bents is missing in locations.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Saw joint sealant deterioration.