

# Bridge Inspection Report

**A6879**  
**I-540 SB Lanes**  
**over**  
**Clayton Branch-Sebastian**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

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Inspector:

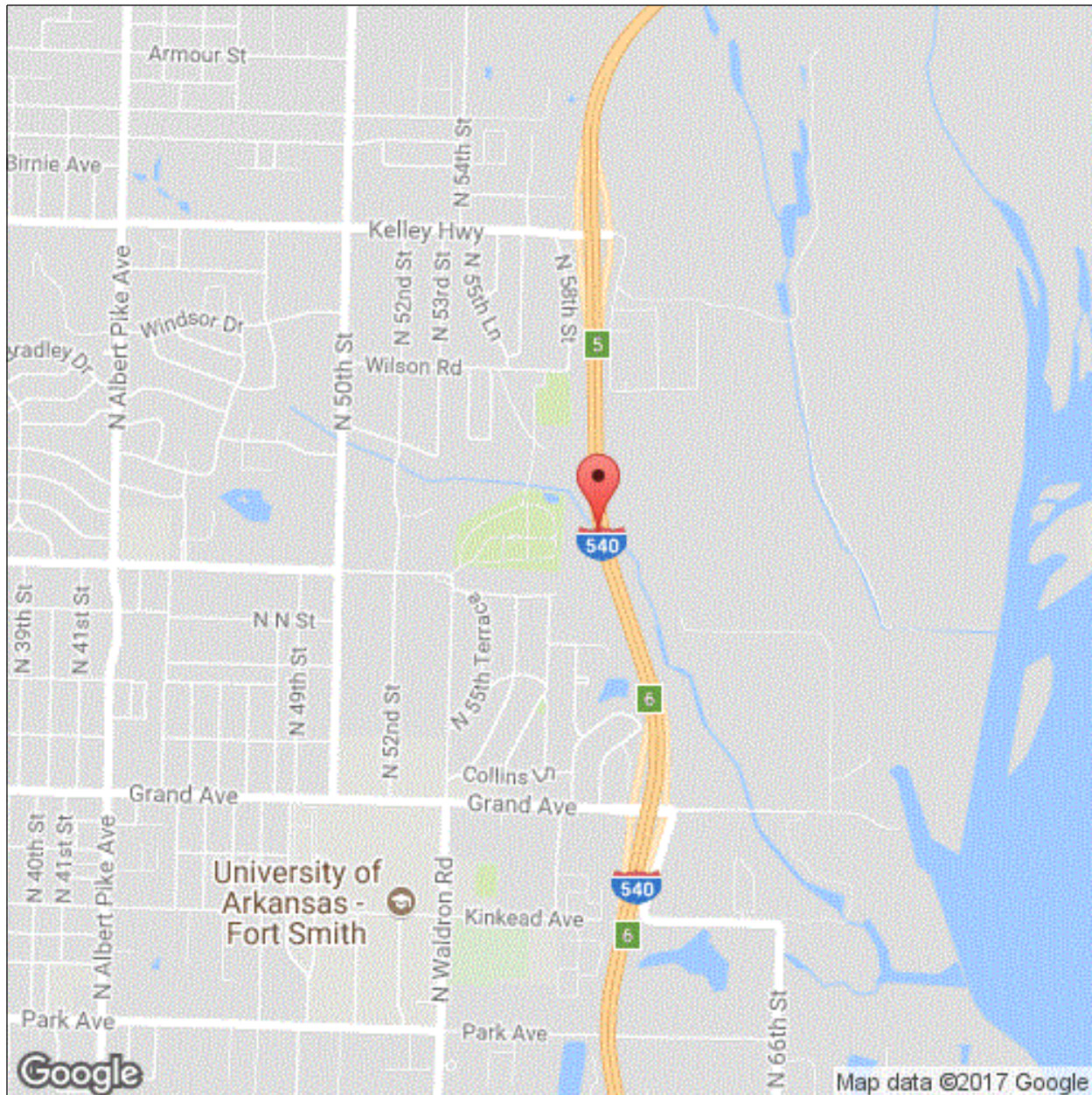
Structure Number: A6879

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Facility Carried: I-540 SB Lanes

## Bridge Inspection Report

### Location Map



Latitude: 35.39396

Longitude: -94.36614



Inspector:

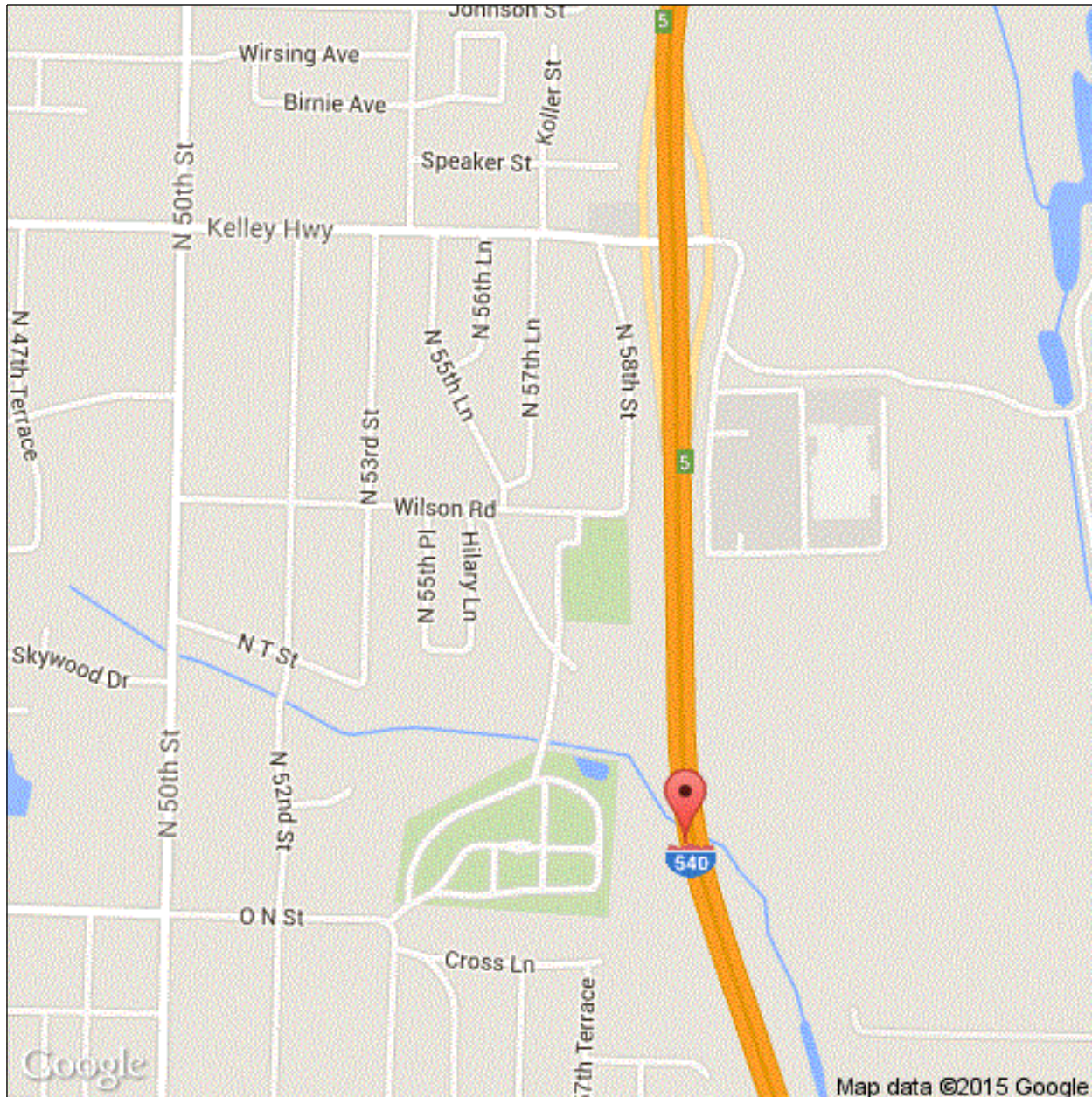
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### Location Map



Latitude: 35.39396

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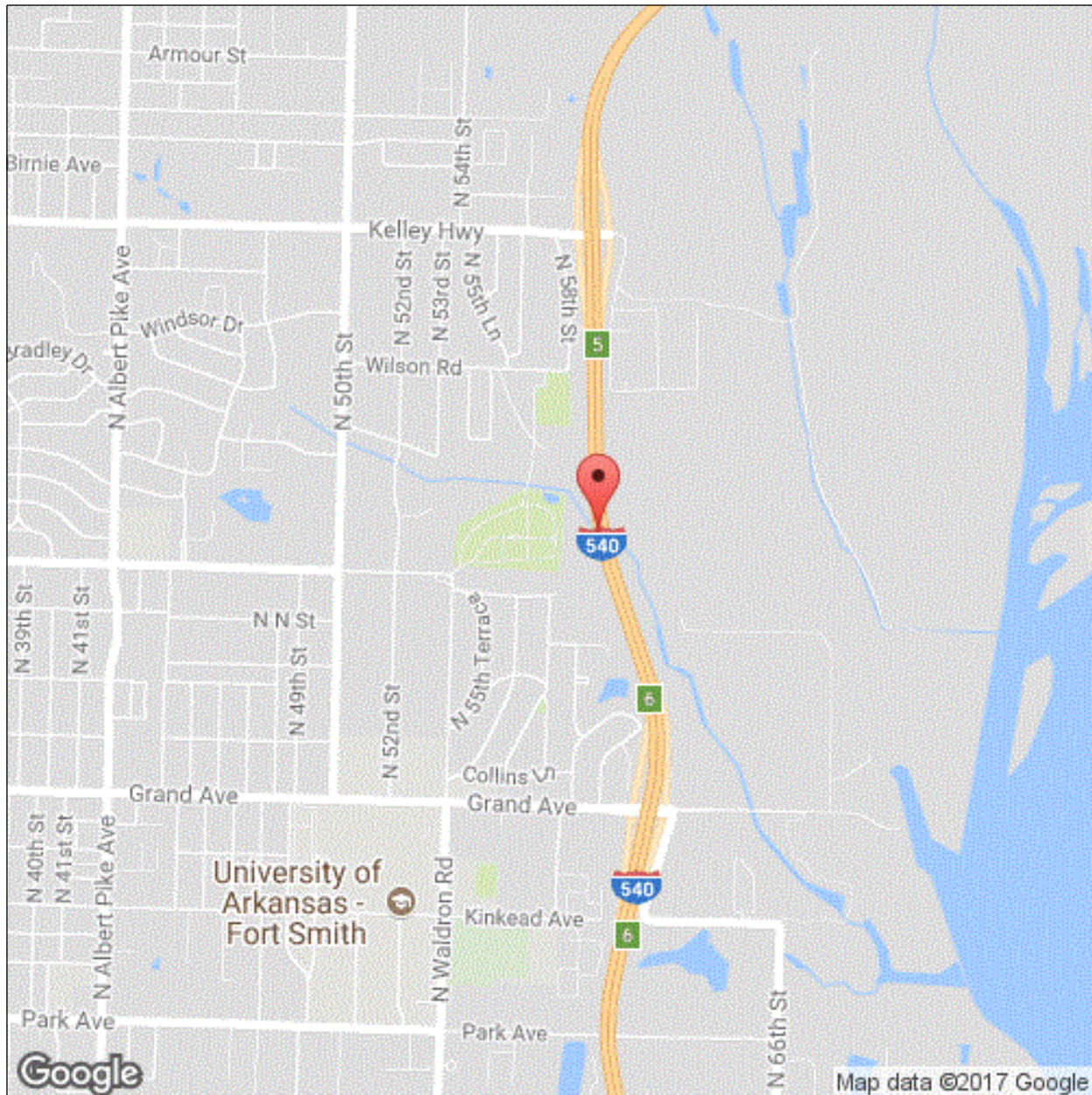
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### Executive Summary

07/31/2017 - JCJ & JML - Type 2 Underwater Inspection - Visual observation during low water conditions indicate that the footings have cover with no apparent scour problems at this inspection.

07/31/2017 - JCJ & JML - The driving surface of the deck has a new polymer overlay that is approximately 0.25" thick that has been applied since the last inspection.

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## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	07/31/2017
(8) STRUCTURE NUMBER	A6879	(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 131	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	24060	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Clayton Branch-Sebastian	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	I-540 SB Lanes		
(9) LOCATION	9.14 Mi N. OK State Line		
(11) MILEPOINT 9.140	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000540010 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.39396	(17) LONGITUDE -94.36614		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	7
A) KIND OF MATERIAL/DESIGN: 4 - Steel continuous		(59) SUPERSTRUCTURE	8
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(60) SUBSTRUCTURE	7
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	8
A) KIND OF MATERIAL/DESIGN: 0 - Other		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 3	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 5		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 1		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 2013	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	6
(42) TYPE OF SERVICE ON 1 UNDER 5		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 02 UNDER 00		(64) OPERATING RATING	60.0
(29) AVERAGE DAILY TRAFFIC 96051	(19) BYPASS DETOUR LENGTH 1	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2013		(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.) 53	(49) STRUCTURE LENGTH (ft.) 162	(67) STRUCTURAL EVALUATION	7
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	5
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 40.0		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 43.2		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 38.1		(72) APPROACH ROADWAY ALIGNMENT	8
(33) BRIDGE MEDIAN 3	(34) SKEW (DEG.) 45	(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.) 41.0		36B) TRANSITIONS:	1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.90		36C) APPROACH GUARDRAIL:	1
(54) VERTICAL UNDER CLEARANCE (ft.) N 0		36D) APPROACH GUARDRAIL ENDS:	1
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9		(113) SCOUR CRITICAL BRIDGES	5
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	0
		STATUS	87.9
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	11
(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	2
(114) FUTURE ADT 37560	(115) YEAR OF FUTURE ADT 2028	(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	4
		NAVIGATION DATA	
		(38) NAVIGATION CONTROL	0
		(111) PIER OR ABUTMENT PROTECTION	1
		(39) NAV VERT CLEARANCE (ft.)	0
		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
		(40) NAV HORIZONTAL CLEARANCE (ft.)	0

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## Bridge Inspection Report

## Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	1- Ben.	6480	sq. ft.	6430	50	0	0
	<p>07/31/2017 - JCJ &amp; JML - The driving surface of the deck has a new polymer overlay that is approximately 0.25" thick that has been applied since the last inspection.</p> <p>There are transverse cracks with light efflorescence at variable that are visible from the undersurface of the overhangs.</p> <p>07/22/2015 - EJW &amp; RWF - Transverse hairline cracks that appear to correspond with the saw joints in the parapet walls are visible in the gutters on the driving surface of the deck. The deck has numerous pop outs visible from the driving surface of the deck.</p>						
1120 - Efflorescence/Rust Staining		6			6		
1130 - Cracking (RC and Other)		44			44		
510 - Wearing Surfaces		6480	sq. ft.	6480			
107 - Steel Open Girder/Beam	1- Ben.	972	ft.	972			
	07/31/2017 - JCJ & JML - A588 weathering steel that appears to be weathering normally. There are no apparent noteworthy deficiencies at this inspection.						
515 - Steel Protective Coating		8168	sq. ft.	8168			
205 - Reinforced Concrete Column	1- Ben.	6	each	6			
	07/31/2017 - JCJ & JML - There are no apparent noteworthy deficiencies at this inspection.						
215 - Reinforced Concrete Abutment	1- Ben.	116	ft.	53	63	0	0
	<p>07/31/2017 - JCJ &amp; JML - There are a few isolated vertical hairline cracks in the face of the backwalls. There are numerous transverse cracks (53) in the top of the backwalls that are visible from the driving surface of the deck.</p> <p>07/22/2015 - EJW &amp; RWF - Bent # 4, The bearing areas under Beams # 3, 5, and 6 have areas up to 1" deep that have been ground out of the abutment cap to lower the bearing area to grade during the construction process. The tops of the back walls have transverse cracks, some cracks have been sealed with epoxy since the last inspection. Bent # 1 abutment has a few hairline vertical cracks with light efflorescence.</p>						
1120 - Efflorescence/Rust Staining		3			3		
1130 - Cracking (RC and Other)		60			60		
234 - Reinforced Concrete Pier Cap	1- Ben.	120	ft.	120			
	07/31/2017 - JCJ & JML - There are no apparent noteworthy deficiencies at this inspection.						
300 - Strip Seal Expansion Joint	1- Ben.	122	ft.	122			
	07/31/2017 - JCJ & JML - Strip seals appear to be functioning as intended with no apparent noteworthy deficiencies at this inspection.						



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310 - Elastomeric Bearing	1- Ben.	24	each	24			
	07/31/2017 - JCJ & JML - There are no apparent noteworthy deficiencies at this inspection.						
321 - Reinforced Concrete Approach Slab	1- Ben.	2380	sq. ft.	1919	461	0	0
	07/31/2017 - JCJ & JML - There are sealable transverse and diagonal cracks in both approach slabs. Some cracks have been sealed in the past, numerous others still exist.						
	07/22/2015 - EJW & RWF - There are two transverse cracks in the Northwest approach gutter and one short duration transverse crack in the Southeast approach gutter. No apparent settlement problems at this inspection.						
1130 - Cracking (RC and Other)		461			461		
331 - Reinforced Concrete Bridge Railing	1- Ben.	324	ft.	311	13	0	0
	07/31/2017 - JCJ & JML - There are vertical and horizontal hairline cracks in the face of the parapet walls.						
1130 - Cracking (RC and Other)		13			13		

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## Bridge Inspection Report

Pictures

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## Bridge Inspection Report

Sketches



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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 07/31/2017

Priority: D - Routine

Work Code:

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#### Deficiency Description:

The approach slabs have numerous transverse and diagonal cracks that have been sealed in the past. There are additional cracks that are sealable.

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Open



PHOTO 1    Description    South approach slab.

Stage: Open



PHOTO 2    Description    North approach slab.