

Bridge Inspection Report

06880

I-540 NB & SB Lane

over

Ark. River Relief-Seb Co



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

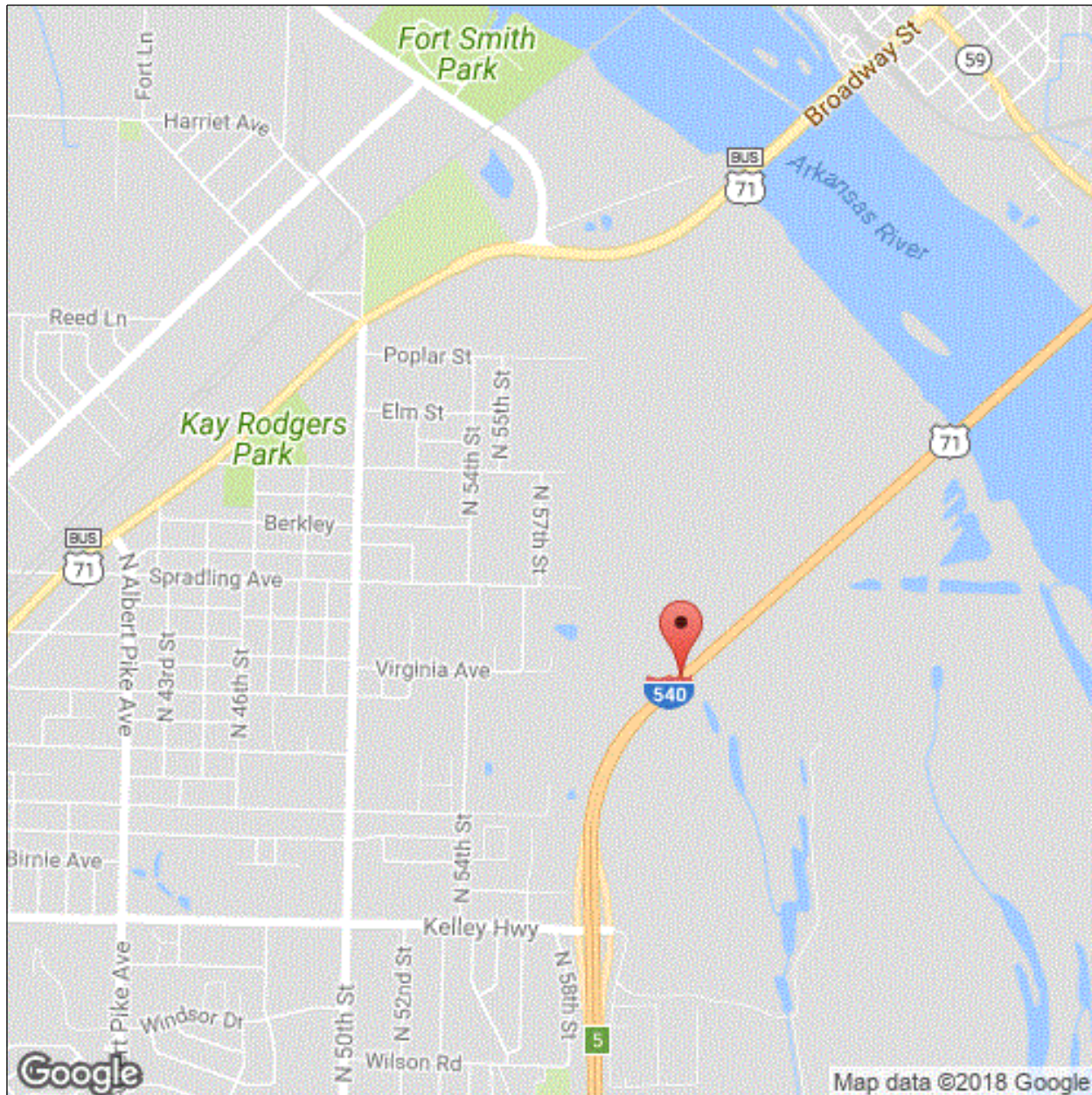
Structure Number: 06880

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Location Map



Latitude: 35.41148

Longitude: -94.36285

Inspector:

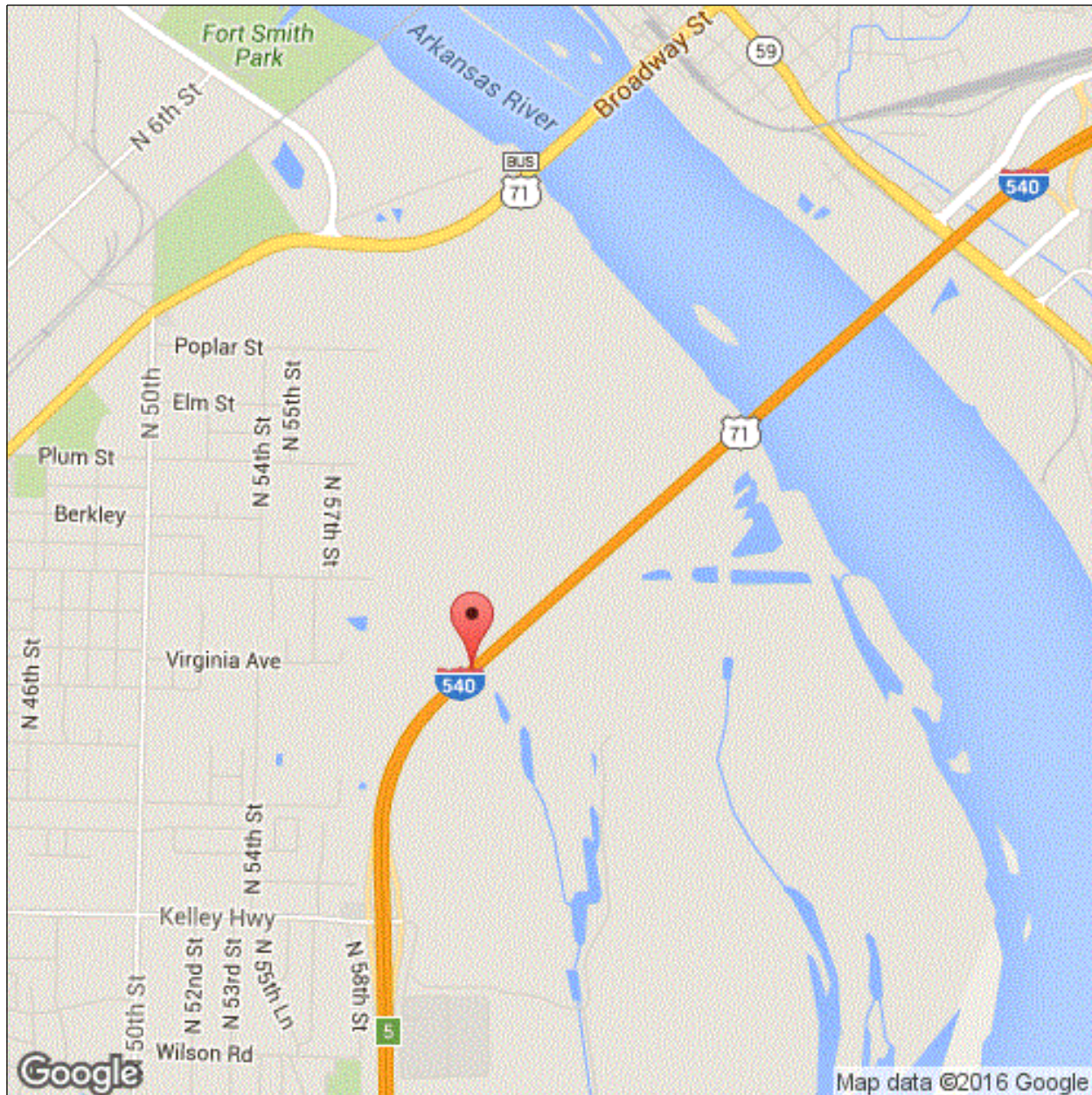
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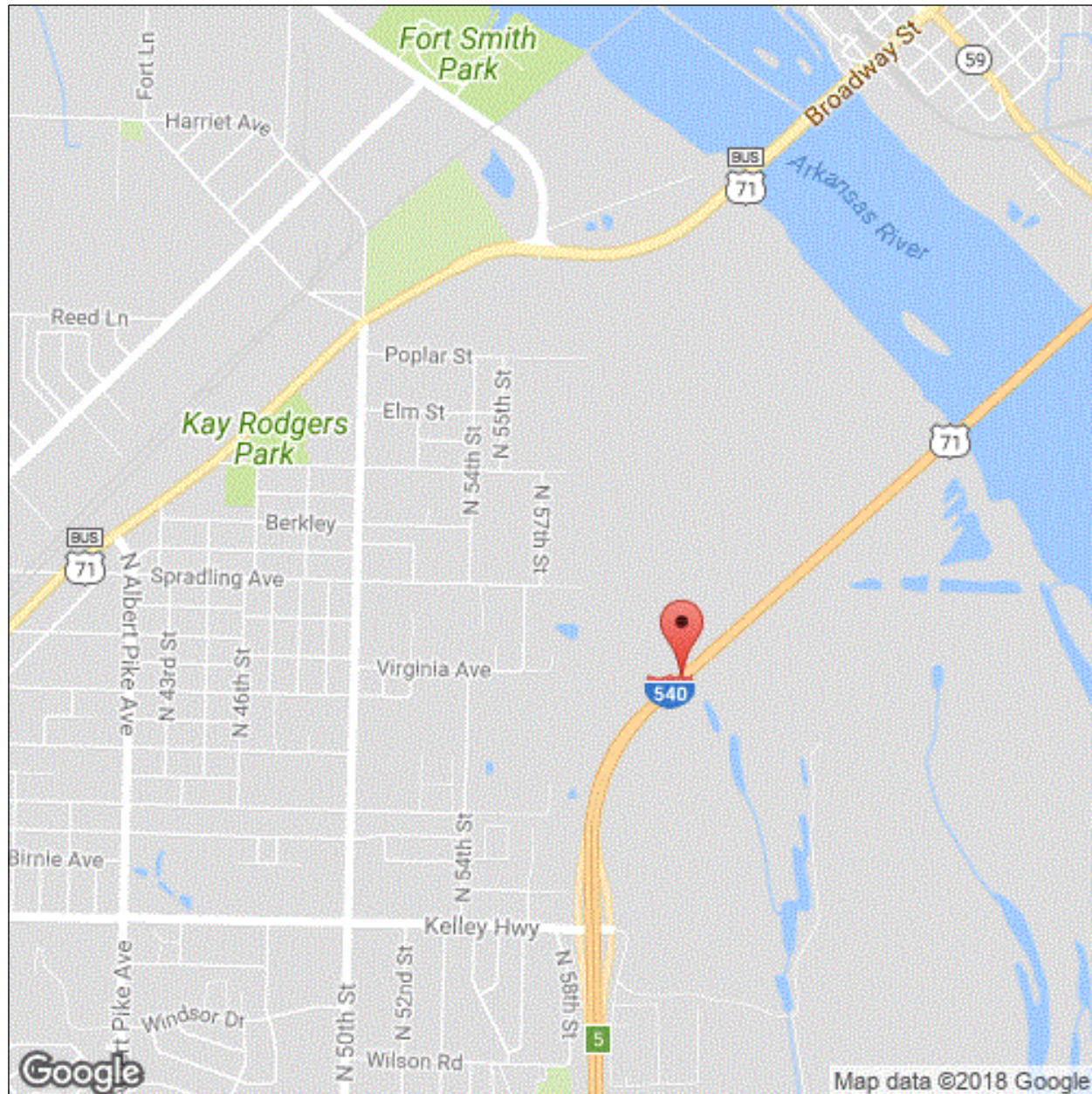
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Executive Summary

02/13/2018 JPB & SPC-Routine Inspection conducted on this date.

02/09/2016 - JCJ & JML - Type 2 Underwater Inspection - Visual observation during dry conditions indicate that dumped rip rap is in place at all bents with no apparent scour problems at this inspection.

02/09/2016 - JCJ & JML - The Left half of the deck of this structure (Southbound Lanes) has significant pop outs due to shale inclusion in the concrete from the construction process and sealable deck cracking. There is 1" deep honeycomb on the driving surface of the deck adjacent to Bent # 1.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	02/13/2018
(8) STRUCTURE NUMBER	06880	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 1 1 540 0	(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	Ark. River Relief-Seb Co	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	I-540 NB & SB Lane		
(9) LOCATION	1.05MI SW Crawford Co		
(11) MILEPOINT 10.428	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000540010 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.41148	(17) LONGITUDE -94.36285		
(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	8
(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 6	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0		
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 5		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 04 UNDER 00		(64) OPERATING RATING	60
(29) AVERAGE DAILY TRAFFIC 49000	(19) BYPASS DETOUR LENGTH 3	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2012		(66) INVENTORY RATING	36
(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.) 108	(49) STRUCTURE LENGTH (ft.) 574.2	(67) STRUCTURAL EVALUATION	8
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	2
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 37.1		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 79.2		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 70.9		(72) APPROACH ROADWAY ALIGNMENT	8
(33) BRIDGE MEDIAN 3	(34) SKEW (DEG.) 0	(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.) 37.1		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	2
		STATUS	66.0
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	11
(95) ROADWAY IMPROVEMENT COST (\$)		(100) STRAHNET HIGHWAY DESIGNATION	1
(96) TOTAL PROJECT COST		(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 73100	(115) YEAR OF FUTURE ADT 2026	(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.)	0
		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
		(40) NAV HORIZONTAL CLEARANCE (ft.)	0

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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.	45303	sq. ft.	44481	822	0	0
	-There are transverse hairline cracks with light efflorescence visible from the undersurface of the deck near centerline of median. -The Rt and Lt sides of the deck have numerous transverse hairline cracks with efflorescence in the overhang that are visible from the undersurface of the deck. -There are numerous pop outs and sealable cracking in the driving surface of the Northbound lanes. -Maintenance forces have placed an epoxy seal coat over the entered deck on the South bound lanes.						
1120 - Efflorescence/Rust Staining		482			482		
1130 - Cracking (RC and Other)		340			340		
107 - Steel Open Girder/Beam	1- Ben.	5717	ft.	5717			
	-The superstructure is A588 weathering steel with no apparent noteworthy deficiencies at this inspection.						
515 - Steel Protective Coating		54788	sq. ft.	54788			
205 - Reinforced Concrete Column	1- Ben.	20	each	20			
215 - Reinforced Concrete Abutment	1- Ben.	152	ft.	122	30	0	0
	-Southbound half of Bent 1 has 2 vertical hairline cracks in the face of the backwall. -There are 11 transverse cracks in the top of Bent 1 backwall. -Bent 7 has 7 transverse cracks in the top of the backwall with shallow 3" spalls no exposed reinforcing steel in top of backwall.						
1080 - Delamination/Spall/Patched Area		2			2		
1130 - Cracking (RC and Other)		28			28		
234 - Reinforced Concrete Pier Cap	1- Ben.	380	ft.	380			
300 - Strip Seal Expansion Joint	1- Ben.	158	ft.	158			
310 - Elastomeric Bearing	1- Ben.	70	each	70			
321 - Reinforced Concrete Approach Slab	1- Ben.	5476	sq. ft.	5449	27	0	0
	-Approach slabs have grind marks from the construction process. -There are shallow spalls with no exposed reinforcing steel adjacent to the joints in the approach slabs.						
1080 - Delamination/Spall/Patched Area		27			27		
331 - Reinforced Concrete Bridge Railing	1- Ben.	1716	ft.	1622	94	0	0
	-Parapet walls have vertical hairline shrinkage cracks and a few short duration horizontal cracks. -Areas with light efflorescence are present at this inspection.						
1120 - Efflorescence/Rust Staining		10			10		
1130 - Cracking (RC and Other)		84			84		

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Pictures

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Sketches

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Maintenance Needs