

# Bridge Inspection Report

**A6458**

**US 412 Sec 2, WB L**

**over**

**Wildcat Creek-Washington**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

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Inspector:

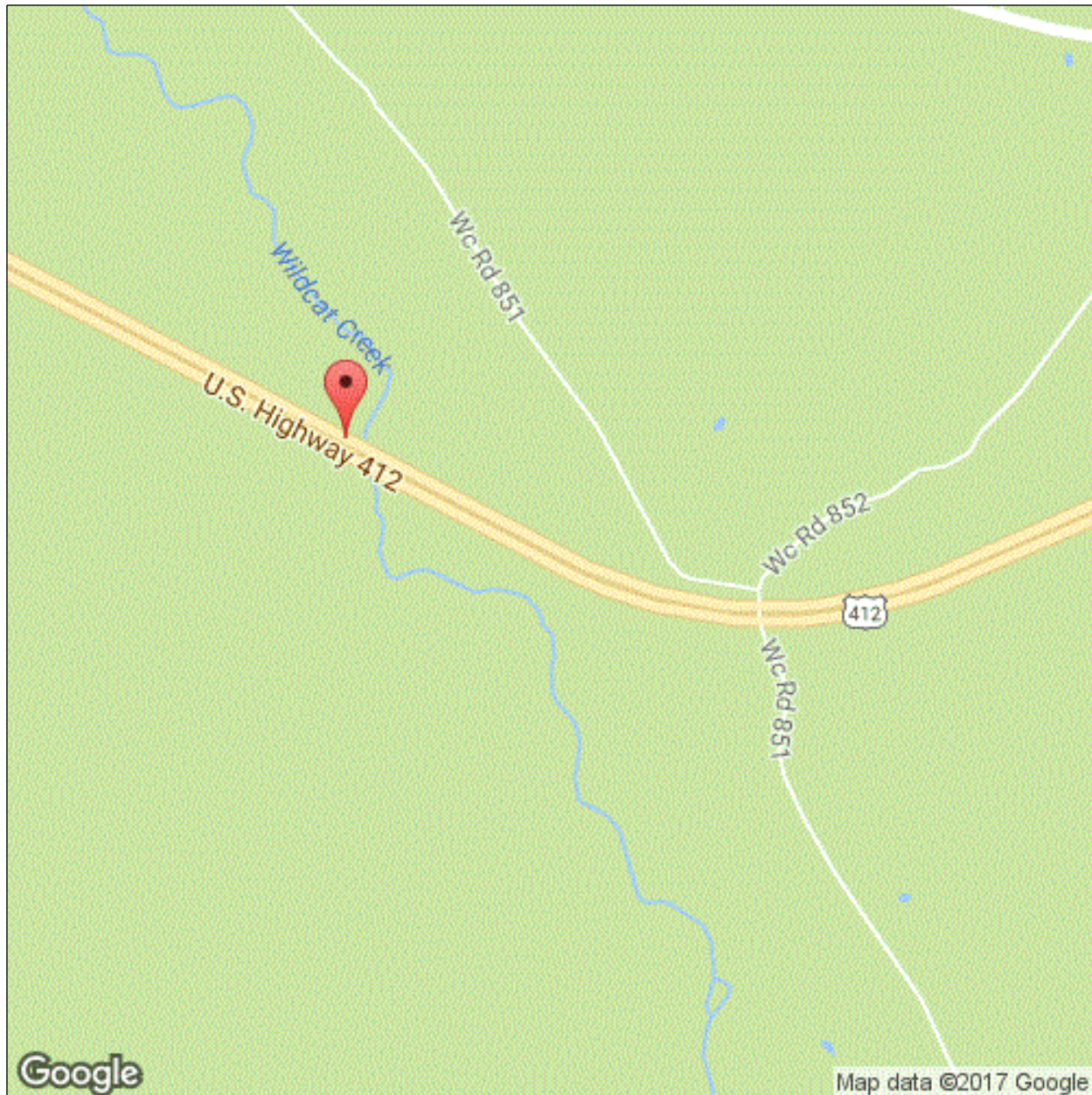
Inspection Date:

Structure Number: A6458

Facility Carried: US 412 Sec 2, WB L

## Bridge Inspection Report

### Location Map



Latitude: 36.17695

Longitude: -94.32535



Inspector:

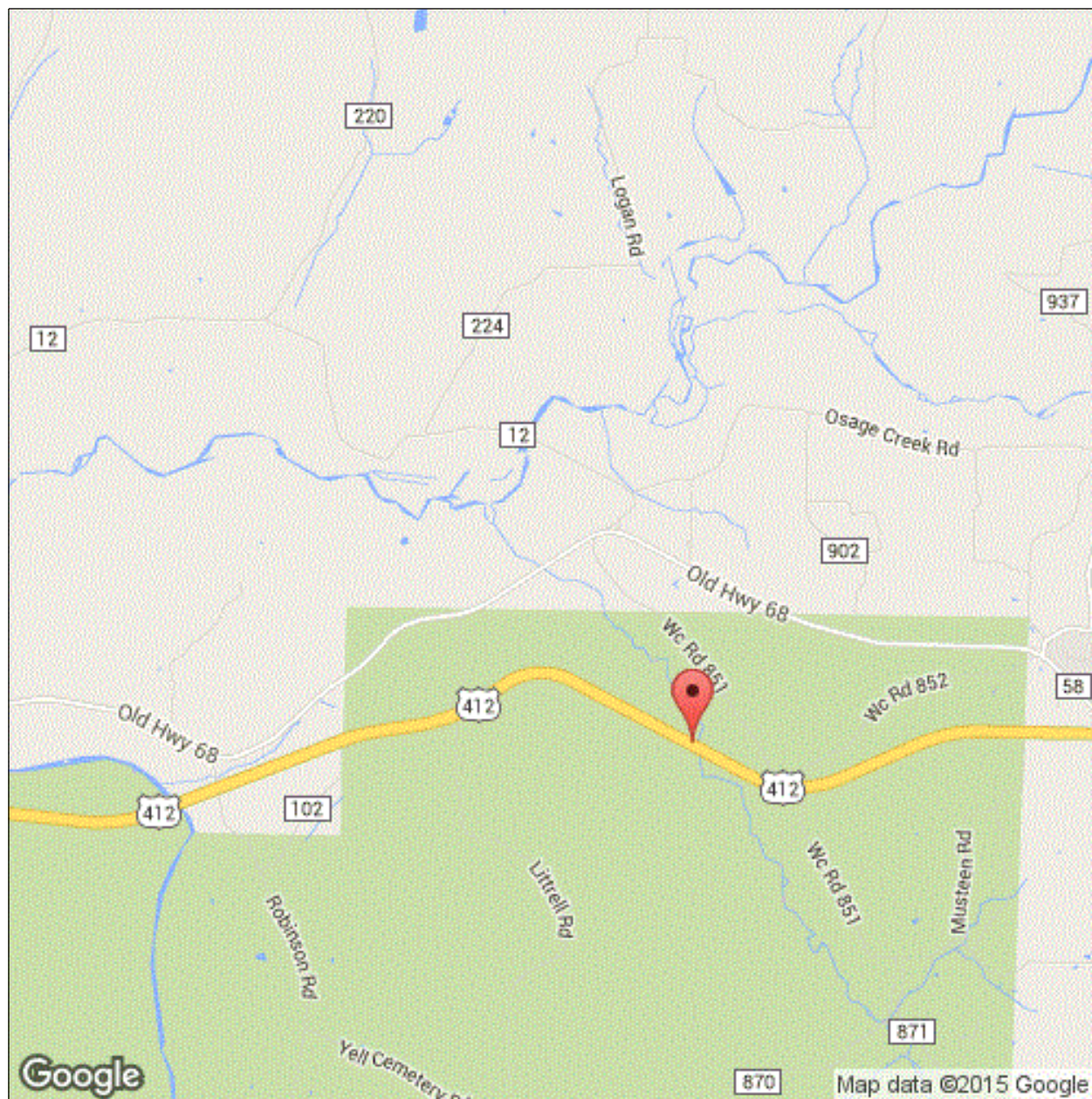
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### Bridge Inspection Report

### Location Map



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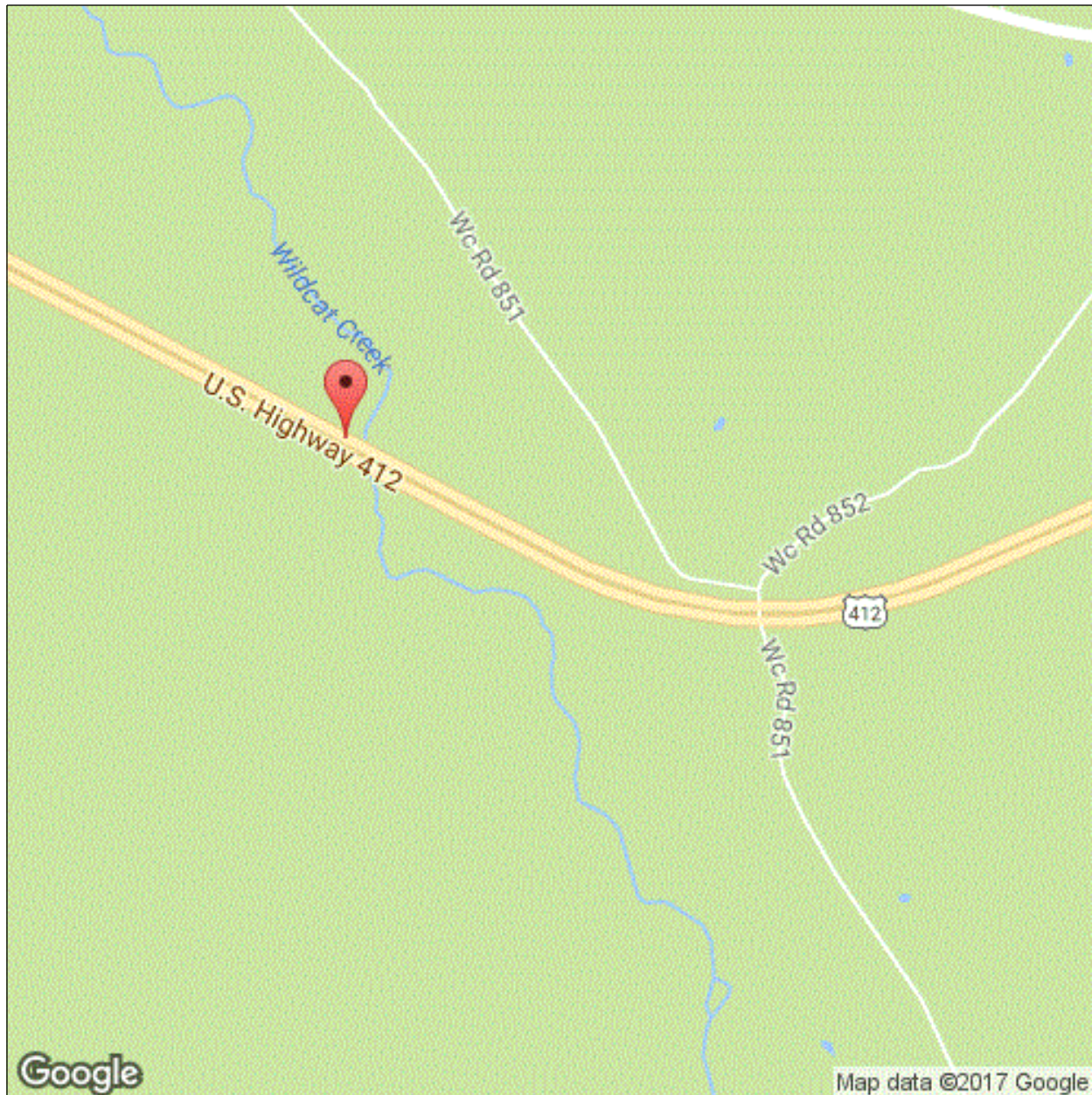
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### Location Map



Latitude: 36.17695

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## **Bridge Inspection Report**

### **Executive Summary**

09/30/2015JPB-Routine and Underwater Type 2 Inspections conducted on this date. Wading and probing indicate minor scouring around base of columns due to past (Spring 2011) high water event.

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## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	09/27/2017
(8) STRUCTURE NUMBER	A6458	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 2 1 412 4	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	04 (3) COUNTY CODE 143	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Wildcat Creek-Washington	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 412 Sec 2, WB L		
(9) LOCATION	0.6 MI E BENTON CO LN		
(11) MILEPOINT 0.620	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000412020 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 36.17695	(17) LONGITUDE -94.32535		
(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 4	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1		
(108B) DECK MEMBRANE 8	(108C) DECK PROTECTION 1		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1994	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	5
(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 26206	(19) BYPASS DETOUR LENGTH 10	(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 1		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 69	(49) STRUCTURE LENGTH (ft.) 253	(67) STRUCTURAL EVALUATION	8
(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	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 43		(71) WATERWAY ADEQUACY	9
(32) APPROACH ROADWAY WIDTH (ft.) 38.1		(72) APPROACH ROADWAY ALIGNMENT	8
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 40	(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.) 40.7		36B) TRANSITIONS:	1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99		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	85.0
		STATUS	0
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 0		(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	02
(95) ROADWAY IMPROVEMENT COST (\$)	0	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	0	(101) PARALLEL STRUCTURE DESIGNATION	L
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	1
(114) FUTURE ADT 11955	(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	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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## Bridge Inspection Report

## Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12 - Reinforced Concrete Deck</b>	1- Ben.	10040	sq. ft.	7387	2407	246	0
	Numerous pop outs and sealable cracks on the driving surface of the deck. The saw joint seals are deteriorating and leak water that is causing active corrosion on the deck pans. The driving surface has longitudinal cracks that appear to correspond with the top flanges of the beams. Transverse hairline cracks that correspond with joints in the parapet wall are visible from the undersurface of the soffit. Isolated areas of map cracking.						
1130 - Cracking (RC and Other)		1641			1395	246	
1190 - Abrasion/Wear (PSC/RC)		1012			1012		
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	1506	ft.	1482	24	0	0
	A588 weathering steel with dark layers of rust at the beam ends adjacent to the abutments where water and debris leaks through the failing expansion joint seals.						
1000 - Corrosion		24			24		
515 - Steel Protective Coating		11512	sq. ft.	11488	24		
<b>205 - Reinforced Concrete Column</b>	1- Ben.	9	each	9			
	No apparent problems at this inspection.						
<b>215 - Reinforced Concrete Abutment</b>	1- Ben.	108	ft.	85	23	0	0
	Dirt and debris accumulation on the abutments. Transverse cracking visible in the tops of the back walls at both abutments.						
1130 - Cracking (RC and Other)		23			23		
<b>234 - Reinforced Concrete Pier Cap</b>	1- Ben.	265	ft.	258	7	0	0
	Hairline vertical cracks over Columns 1 & 3 at Bents 2, 3 and 4.						
1130 - Cracking (RC and Other)		7			7		
<b>301 - Pourable Joint Seal</b>	1- Ben.	112	ft.	0	0	56	56
	East abutment joint has complete adhesion failure with 8' that has dropped out of position. West abutment joint seal is in place but has wide separation and allows dirt and water leakage.						
2320 - Seal Adhesion		112				56	56
<b>310 - Elastomeric Bearing</b>	1- Ben.	30	each	30			
	No apparent noteworthy problems at this inspection.						
<b>321 - Reinforced Concrete Approach Slab</b>	1- Ben.	1776	sq. ft.	1619	40	117	0
	The slabs have cracking with no apparent signs of settlement.						
1130 - Cracking (RC and Other)		157			40	117	



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Element Inspection

331 - Reinforced Concrete Bridge Railing	1- Ben.	506	ft.	101	405	0	0
Hairline map cracking in the face of parapet.							
1130 - Cracking (RC and Other)		405			405		

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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: 10/24/2011 12:00:00 AM

Priority: D - Routine

Work Code: Repair

---

### Deficiency Description:

Poured Silicone Joint Seals

The poured silicone joint seals have failed at the east and west abutments. They leak water and dirt on the abutments.

### Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Stage: Assigned



PHOTO 1      Description      Compression joint seals have failed at the East and West abutments. They leak water and dirt on the abutments.

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### Bridge Inspection Report

## Maintenance Needs

Date Reported: 10/24/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: Repair

---

### Deficiency Description:

Deck

Deck has sealable cracking.

### Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Stage: Assigned



PHOTO 1      Description      Deck has sealable cracking.

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## Maintenance Needs

Date Reported: 9/3/2013 12:00:00 AM

Priority: D - Routine

Work Code: Repair

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### Deficiency Description:

Deck Joints

The deck saw joints are deteriorating and leak water that appears to be causing active corrosion in the metal stay in place forms.

### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Assigned



PHOTO 1      Description      The deck saw joints are deteriorating and leak water that appears to be causing active corrosion in the metal stay in place forms.

Stage: Assigned



PHOTO 2      Description