

# Bridge Inspection Report

**03457**  
**SH 282-SEC 1**  
**over**  
**I 40-SEC 11**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

Inspector:

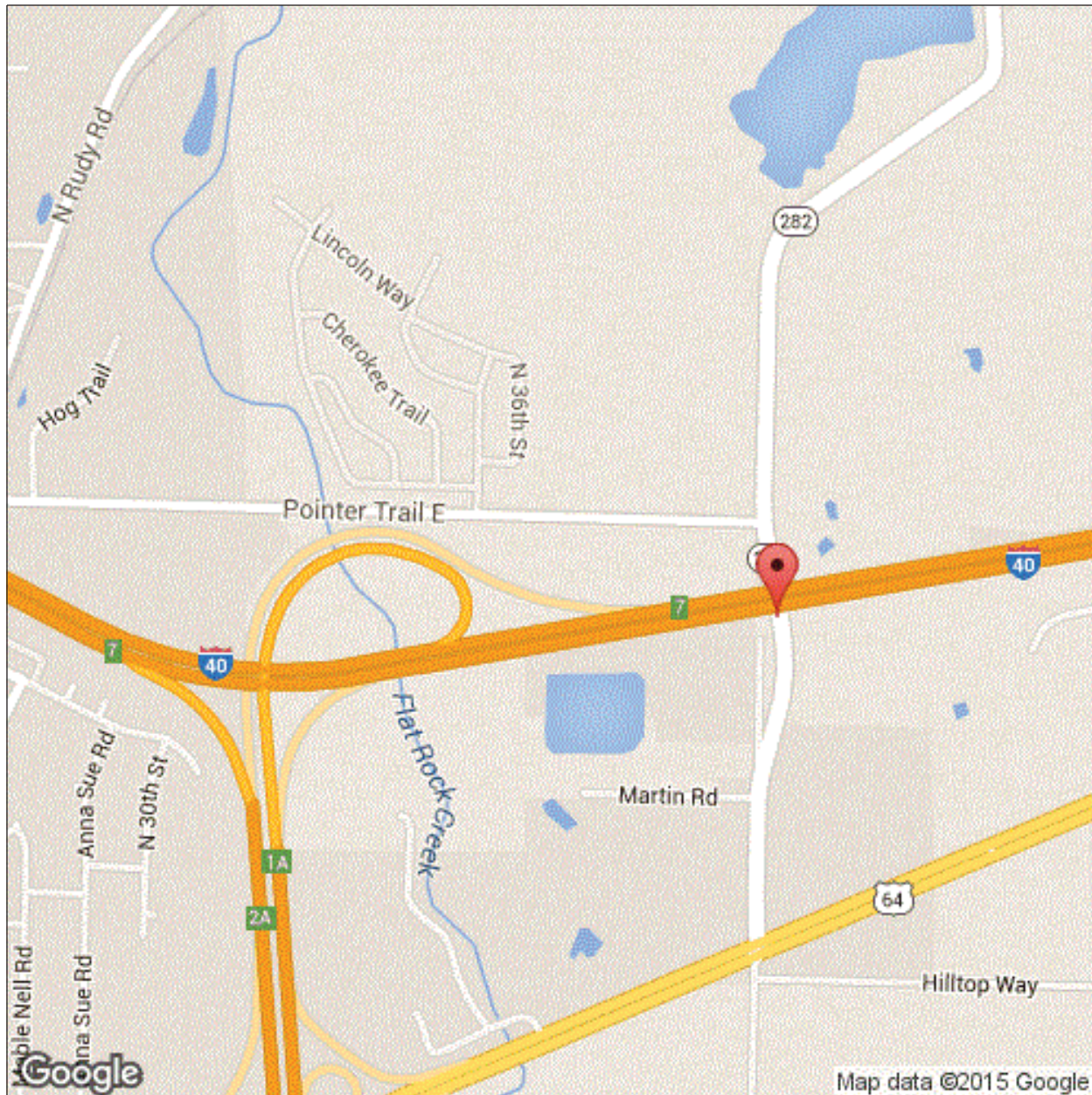
Structure Number: 03457

Inspection Date:

Facility Carried: SH 282-SEC 1

## Bridge Inspection Report

### Location Map



Latitude: 35.45627933776934

Longitude: -94.31052605125643

**Inspector:**

**Structure Number:** 03457

**Inspection Date:**

**Facility Carried:** SH 282-SEC 1

## **Bridge Inspection Report**

### **Executive Summary**

09/23/2015 - JCJ & JML - The vertical underclearances for this structure were actual field verified during this inspection. There are no changes to the vertical underclearances this inspection.



Inspector:

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Inspection Date:

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## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	09/23/2015
(8) STRUCTURE NUMBER	03457	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 282 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	04 (3) COUNTY CODE 033	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	I 40-SEC 11	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 282-SEC 1		
(9) LOCATION	0.35 MI N US 64		
(11) MILEPOINT 0.360	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.	(17) LONGITUDE -94.31052605125643		
45627933776934			
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	5
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(59) SUPERSTRUCTURE	7 (60) SUBSTRUCTURE 6
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION	N (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 4	(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 1963	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	4
(42) TYPE OF SERVICE ON 1 UNDER 1		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 02 UNDER 04		(64) OPERATING RATING	60.0
(29) AVERAGE DAILY TRAFFIC 3800	(19) BYPASS DETOUR LENGTH 5	(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.) 66	(49) STRUCTURE LENGTH (ft.) 214	(67) STRUCTURAL EVALUATION	6
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1.5 RIGHT 1.5		(68) DECK GEOMETRY	3
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	25.9	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	2
(52) DECK WIDTH, OUT-TO-OUT (ft.)	31.6	(71) WATERWAY ADEQUACY	N
(32) APPROACH ROADWAY WIDTH (ft.)	23.0	(72) APPROACH ROADWAY ALIGNMENT	7
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 0	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99	36A) BRIDGE RAILINGS:	0
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	27.2	36B) TRANSITIONS:	0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	36C) APPROACH GUARDRAIL:	0
(54) VERTICAL UNDER CLEARANCE (ft.)	H 16.20	36D) APPROACH GUARDRAIL ENDS:	1
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	H 8.8	(113) SCOUR CRITICAL BRIDGES	N
(56) MIN LATERAL UNDER CLEARANCE (ft.)	27.6	SUFFICIENCY RATING	2 STATUS 72.0
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED 31	(75B) WORK DONE BY 1	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	247.0	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	08
(95) ROADWAY IMPROVEMENT COST (\$)	197	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	652	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2002	(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 4785	(115) YEAR OF FUTURE ADT 2028	(103) TEMP STRUCTURE	
		(105) FEDERAL LANDS HIGHWAYS	0
		(110) DESIGNATED NATIONAL NETWORK	0
		(20) TOLL	3
		(21) MAINTENANCE RESPONSIBILITY	01
		(22) OWNER	01
		(37) HISTORICAL	5
		NAVIGATION DATA	
		(38) NAVIGATION CONTROL	N
		(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

Inspector:

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## Bridge Inspection Report

## National Bridge Inventory

## UNDER RECORD A

## IDENTIFICATION

(1) STATE CODE	056 - Arkansas	(7) FACILITY CARRIED	SH 282-SEC 1
(3) COUNTY CODE	033	(8) STRUCTURE NUMBER	03457
(4) PLACE CODE	00000	(9) LOCATION	0.35 MI N US 64
(5) INV. ROUTE (ON/UNDER)	A 1 1 40 2	(11) MILEPOINT	7.968 (12) BASE HIGHWAY NETWORK 1
(6) FEATURES INTERSECTED	I 40-SEC 11	(13A) LRS INVENTORY ROUTE	0000040110 (13B) SUBROUTE NUMBER 00
		(16) LATITUDE	35. (17) LONGITUDE -94.310555555556
			4563055555556

## STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN A) KIND OF MATERIAL/DESIGN: 3 - Steel  
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder

## AGE OF SERVICE

(19) BYPASS DETOUR LENGTH	2	(30) YEAR OF AVERAGE DAILY TRAFFIC	2014
(27) YEAR BUILT	1963	(42) TYPE OF SERVICE	ON 1 UNDER 1
(28) LANES	ON 04 UNDER 02	(109) AVERAGE DAILY TRUCK TRAFFIC	1
(29) AVERAGE DAILY TRAFFIC	17000		

## GEOMETRIC DATA

(10) INV RTE, MIN VERT CLEARANCE	16.3	(48) LENGTH OF MAXIMUM SPAN	66 (49) STRUCTURE LENGTH 214
(47) TOTAL HORIZONTAL CLEARANCE	61.7		

## CLASSIFICATION

(20) TOLL	3	(102) DIRECTION OF TRAFFIC	1
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	01	(103) TEMP STRUCTURE	
(100) STRAHNET HIGHWAY DESIGNATION	1	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(101) PARALLEL STRUCTURE DESIGNATION	N	(110) DESIGNATED NATIONAL NETWORK	1

## UNDER RECORD B

## IDENTIFICATION

(1) STATE CODE	056 - Arkansas	(7) FACILITY CARRIED	SH 282-SEC 1
(3) COUNTY CODE	033	(8) STRUCTURE NUMBER	03457
(4) PLACE CODE	00000	(9) LOCATION	0.35 MI N US 64
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(27) YEAR BUILT	1963	(42) TYPE OF SERVICE	ON 1 UNDER 1
(28) LANES	ON 04 UNDER 02	(109) AVERAGE DAILY TRUCK TRAFFIC	1
(29) AVERAGE DAILY TRAFFIC	17000		

## GEOMETRIC DATA

(10) INV RTE, MIN VERT CLEARANCE	16.4	(48) LENGTH OF MAXIMUM SPAN	66 (49) STRUCTURE LENGTH 214
(47) TOTAL HORIZONTAL CLEARANCE	61.3		

## CLASSIFICATION

(20) TOLL	3	(102) DIRECTION OF TRAFFIC	1
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	01	(103) TEMP STRUCTURE	
(100) STRAHNET HIGHWAY DESIGNATION	1	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(101) PARALLEL STRUCTURE DESIGNATION	N	(110) DESIGNATED NATIONAL NETWORK	1

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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.	5564	sq. ft.	2847	2717	0	0
	09/23/2015 - JCJ & JML - Underside of Spans 1 & 4 have numerous transverse cracks with light efflorescence & rust staining. Surface of Spans 1 & 4 have transverse cracks on approx. 4' centers. -Span 1, Bay 4 has a delaminated area along a transverse crack approx. 4' from Bent 2. -Underside of Span 2, Bay 1 has scaling along the entire length of the Span that is reflective of the Left lane and gutter deterioration on the driving surface. -Driving surface of Span 2 Lt lane and gutter has heavy scaling and spalling with exposed rebar along the entire length of the Span. -Driving surface of Span 2 Rt lane has a transverse spall with exposed rebar approx. 20' from Bent 2 and transverse cracks on approx. 4' centers. -Span 3 Lt and Rt lanes have transverse cracks with delaminated areas on approx. 4' centers.						
1080 - Delamination/Spall/Patched Area		860			860		
1090 - Exposed Rebar		7			7		
1120 - Efflorescence/Rust Staining		750			750		
1130 - Cracking (RC and Other)		1100			1100		
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	1070	ft.	1062	8	0	0
	09/23/2015 - JCJ & JML - Maintenance forces have painted the superstructure since the last inspection.						
1000 - Corrosion		8			8		
515 - Steel Protective Coating		9005	sq. ft.	8997		8	
<b>205 - Reinforced Concrete Column</b>	1- Ben.	6	each	0	6	0	0
	09/23/2015 - JCJ & JML - Some columns have minor cracks and shallow spalls with no exposed reinforcing steel. Bent 4 Left column has a shallow 12" spall with exposed # 9 wire placed against the forms during the construction process.						
1080 - Delamination/Spall/Patched Area		3			3		
1130 - Cracking (RC and Other)		3			3		
<b>215 - Reinforced Concrete Abutment</b>	1- Ben.	66	ft.	64	2	0	0
	09/23/2015 - JCJ & JML - The Right side of Bent # 1 has a 10" spall with exposed reinforcing steel.						
1080 - Delamination/Spall/Patched Area		1			1		
1090 - Exposed Rebar		1			1		
<b>234 - Reinforced Concrete Pier Cap</b>	1- Ben.	78	ft.	63	13	2	0
	09/23/2015 - JCJ & JML -						
1080 - Delamination/Spall/Patched Area		3			1	2	
1090 - Exposed Rebar		5			5		
1130 - Cracking (RC and Other)		7			7		

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## Element Inspection

<b>305 - Assembly Joint without Seal</b>	1- Ben.	155	ft.	139	16	0	0
	09/23/2015 - JCJ & JML - There are shallow spalls with no exposed reinforcing steel adjacent to the expansion joints.						
2360 - Adjacent Deck or Header		16			16		
<b>311 - Movable Bearing</b>	1- Ben.	20	each	18	2	0	0
	09/23/2015 - JCJ & JML - There is minor fretting visible in some of the expansion bearings.						
1000 - Corrosion		2			2		
<b>313 - Fixed Bearing</b>	1- Ben.	20	each	17	3	0	0
	09/23/2015 - JCJ & JML - There are a few bearings with minor pack rust between the sole plate and the masonry plate.						
1000 - Corrosion		3			3		
<b>330 - Metal Bridge Railing</b>	1- Ben.	428	ft.	428			
	09/23/2015 - JCJ & JML - There are no apparent noteworthy deficiencies at this inspection.						



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## Bridge Inspection Report

### Pictures





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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 09/23/2015

Priority: C - Important

Work Code: Repair

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#### Deficiency Description:

The driving surface of the deck has sealable cracks, delaminated areas, and spalls with exposed reinforcing steel.

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Open



PHOTO 1    Description    Span 3

Stage: Open



PHOTO 2    Description    Span 2

Inspector:

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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 09/23/2015

Priority: D - Routine

Work Code:

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#### Deficiency Description:

Substructure -

Bent # 2 cap has an 18" vertical delaminated area in the Right side of the cap. Bent # 3 cap has a 24" spall in the undersurface of the cantilever portion of the cap on the right side at the juncture of column # 2 and a 12" long spall under the left side adjacent to column # 1. Bent # 4 cap has a 10" area of concrete section loss at the top Right end of the cap. Bent # 4 cap has 3 spalls with exposed reinforcing steel and two delaminated areas in the North face of cap. Exposed reinforcing steel has initial section loss at this inspection. The right side of the south abutment has an area of spalling with exposed reinforcing steel in the vertical face of the stem wall.

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Assigned



PHOTO 1      Description      Right side of Bent 1.

Stage: Assigned



PHOTO 2      Description      Span 4 side of Bent 4.