

Bridge Inspection Report

06044

**SH 282-Crawford Co
over
FROG BAYOU**



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

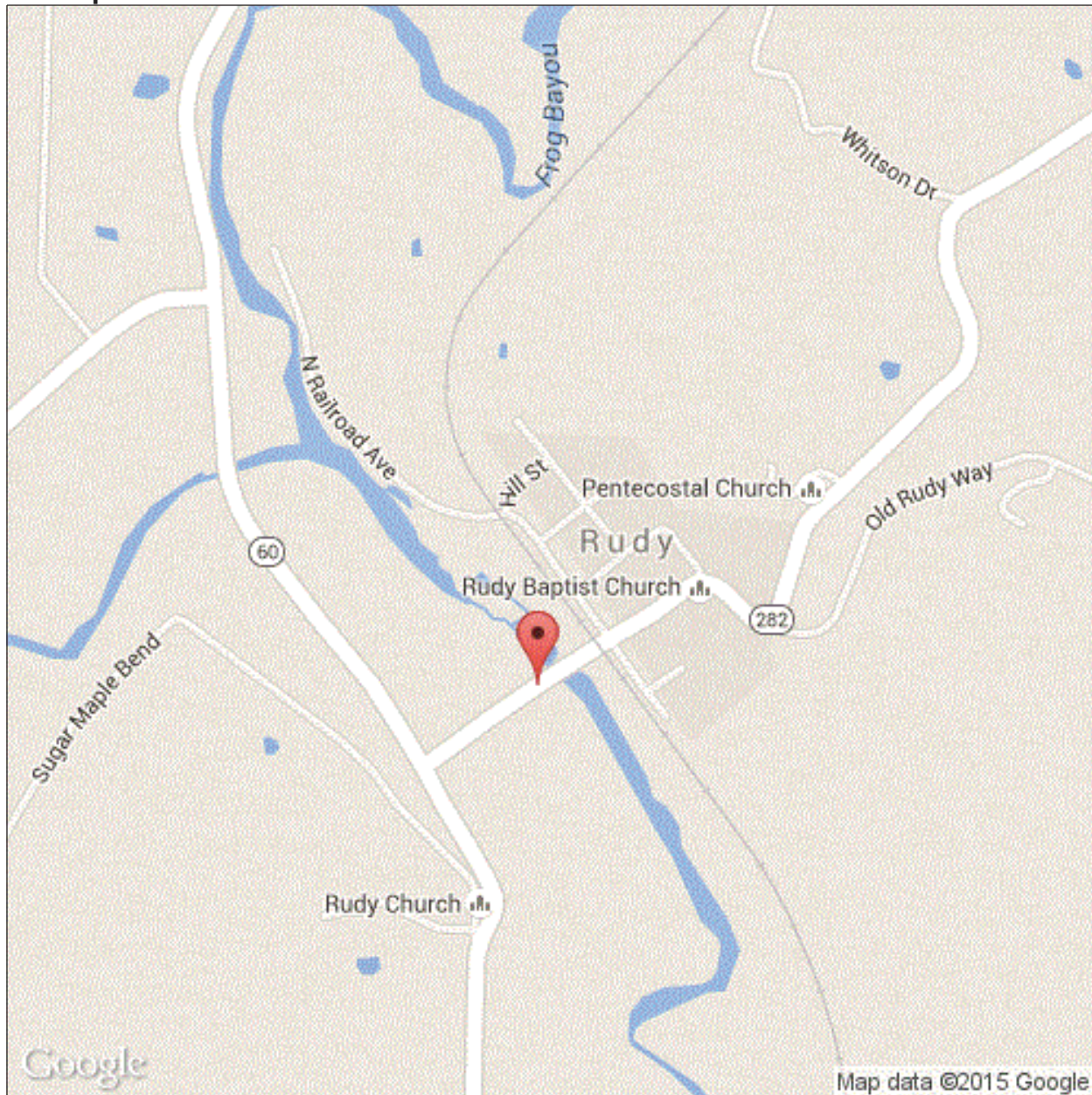
Inspection Date:

Structure Number: 06044

Facility Carried: SH 282-Crawford
Co

Bridge Inspection Report

Location Map



Latitude: 35.525559321074525

Longitude: -94.27252682209013

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Executive Summary

09/16/2015 - JCJ & JML - Underwater Inspection- Wading and probing during low and clear water conditions indicate that the footings have cover with no apparent scour problems at this inspection.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	09/16/2015
(8) STRUCTURE NUMBER	06044	(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	FROG BAYOU	C. OTHER SPECIAL	Y 48 09/16/2015
(7) FACILITY CARRIED	SH 282-Crawford Co		
(9) LOCATION	0.1MI E JCT SH 60 & 282		
(11) MILEPOINT 6.669	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.52555932107452	(17) LONGITUDE -94.27252682209013		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	6
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(59) SUPERSTRUCTURE	6 (60) SUBSTRUCTURE 5
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION	7 (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 0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1985	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	4
(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	47.0
(29) AVERAGE DAILY TRAFFIC 1500	(19) BYPASS DETOUR LENGTH 16	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	28.0
(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.) 65	(49) STRUCTURE LENGTH (ft.) 327	(67) STRUCTURAL EVALUATION	5
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	5
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 27.9		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 31		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 27.9		(72) APPROACH ROADWAY ALIGNMENT	8
(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:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 28.9		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	8
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	0 STATUS 71.9
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	0
(94) BRIDGE IMPROVEMENT COST (\$) 0		(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(95) ROADWAY IMPROVEMENT COST (\$) 0		(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST 0		(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	2
		(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	0
		(111) PIER OR ABUTMENT PROTECTION	1
		(39) NAV VERT CLEARANCE (ft.)	0
		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0

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(114) FUTURE ADT 1423 (115) YEAR OF FUTURE ADT 2028 (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.	9100	sq. ft.	4963	2337	1800	0
	09/16/2015 - JCJ & JML - There are quarter size shallow spalls with exposed reinforcing steel in the right side of the deck at approximately 4' centers. Spalls appear to be the tops of shear connectors or posts for a transverse screed used during the construction process. There are isolated areas of sealable map cracking and sealable transverse cracks at variable spacing visible from the driving surface of deck. Numerous pop outs due to shale inclusion from the construction process. There are baseball size spalls with exposed reinforcing steel visible from the undersurface of the overhang.						
1080 - Delamination/Spall/Patched Area		17			17		
1090 - Exposed Rebar		20			20		
1130 - Cracking (RC and Other)		4100			2300	1800	
107 - Steel Open Girder/Beam	1- Ben.	1300	ft.	676	600	24	0
	09/16/2015 - JCJ & JML - Ends of beams have areas of active corrosion where water leaks onto the beams through the deck joint seals. Ends of beams at Bent # 1 have areas of active corrosion with layers of flaking rust on the bottom flanges where dirt and debris accumulate. The beams in Span # 5 have graffiti. Isolated areas of freckled rust is typical throughout the structure.						
1000 - Corrosion		624			600	24	
515 - Steel Protective Coating		8883	sq. ft.	7976	883	0	24
3440 - Effectiveness (Steel Protective Coatings)		907			883		24
205 - Reinforced Concrete Column	1- Ben.	8	each	3	5	0	0
	09/16/2015 - JCJ & JML - There is light / medium abrasion at the base of the columns in the channel. The Right Column at Bent # 4 has 8 spalls with exposed reinforcing steel. Exposed reinforcing steel appears to be hoops at approximately 12" centers with very little concrete cover from the construction process. No apparent section loss to the exposed reinforcing steel at this inspection. Substructure columns have isolated areas of exposed # 9 wire that was placed against the forms during the construction process.						
1080 - Delamination/Spall/Patched Area		1			1		
1090 - Exposed Rebar		1			1		
1190 - Abrasion/Wear (PSC/RC)		3			3		
215 - Reinforced Concrete Abutment	1- Ben.	66	ft.	60	5	1	0
	09/16/2015 - JCJ & JML - Bent 6 has a 12" delaminated area under Beam 4. There are vertical hairline cracks in the abutment backwalls and in the face of the stem walls.						
1080 - Delamination/Spall/Patched Area		1				1	
1130 - Cracking (RC and Other)		5			5		

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Element Inspection

234 - Reinforced Concrete Pier Cap	1- Ben.	124	ft.	35	37	52	0
<p>09/16/2015 - JCJ & JML - Deck joint seals leak water on the caps. Intermediate bent caps have water stains and debris accumulation due to leaking deck joints. Horizontal cracks with efflorescence and rust stains located approximately 6" below the top of caps typical. Bent # 2 cap has a 10" spall with exposed reinforcing steel and one 36" delaminated area.</p> <p>Bent # 4 has three 18" vertical spalls with exposed reinforcing steel and 1 softball size spall with exposed reinforcing steel. The Right end of Bent # 4 cap has soft deteriorated concrete.</p> <p>Bent # 5 cap has one 18" delaminated area and 4 base ball size spalls with exposed reinforcing steel. One 3 inch wide by 18 inch tall delaminated area at the Right corner of Bent # 5.</p> <p>Exposed reinforcing steel has areas of active corrosion with no apparent section loss at this inspection.</p> <p>There are areas that have shallow spalling with exposed # 9 wire that was placed against the forms during the construction process.</p>							
1080 - Delamination/Spall/Patched Area		14			6	8	
1090 - Exposed Rebar		15			11	4	
1120 - Efflorescence/Rust Staining		11			4	7	
1130 - Cracking (RC and Other)		49			16	33	
302 - Compression Joint Seal	1- Ben.	180	ft.	98	47	5	30
<p>09/16/2015 - JCJ & JML - Compression joint gasket at Bent # 4 has fallen out of the expansion joint and is resting on the cap.</p> <p>Compression joint gasket at Bents # 1,2,3, and 5 are deteriorated and have adhesion failures and are leaking water, dirt, and debris on the caps.</p>							
2310 - Leakage							
2320 - Seal Adhesion		30			30		
2330 - Seal Damage		30					30
2340 - Seal Cracking		5				5	
2360 - Adjacent Deck or Header		17			17		
310 - Elastomeric Bearing	1- Ben.	40	each	0	20	20	0
<p>09/16/2015 - JCJ & JML - The sole plates on the elastomeric bearing pads have active corrosion with flaking rust.</p>							
1000 - Corrosion		40			20	20	
331 - Reinforced Concrete Bridge Railing	1- Ben.	654	ft.	624	30	0	0
<p>09/16/2015 - JCJ & JML - Shallow spalls with exposed reinforcing steel in the face of the parapets. Exposed reinforcing steel has very little concrete cover from the construction process with no apparent section loss at this inspection. There are a few vertical hairline shrinkage cracks in the parapet walls.</p>							
1090 - Exposed Rebar		12			12		
1130 - Cracking (RC and Other)		18			18		

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Bridge Inspection Report

Pictures



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Bridge Inspection Report

Maintenance Needs

Date Reported: 09/16/2015

Priority: D - Routine

Work Code: Replace

Deficiency Description:

Expansion joint compression seals -

Compression joint seal at Bent # 4 has fallen out of the expansion joint assembly and is resting on the cap. Compression joint seals at Bents # 1, # 2, # 3, and # 5 have pulled away from the assemblies and are leaking dirt and debris on the caps.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Bent 5. Deck joint seal.

Stage: Assigned



PHOTO 2 Description Bent 4 deck joint seal missing

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Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 09/16/2015

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Superstructure -

Ends of beams have areas of active corrosion where water leaks onto the beams through the deck joint seals. Ends of beams at Bent # 1 have areas of active corrosion with layers of flaking rust on the bottom flanges where dirt and debris accumulate. The beams in Span # 5 have graffiti with racial slurs.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Bent 1. Beam 3.

Stage: Assigned



PHOTO 2 Description Span 5 graffiti

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Maintenance Needs

Date Reported: 09/16/2015

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Substructure -

Bents 2, 3 & 4 have horizontal cracking approx. 4" below top of Caps.

-Bent 2 Cap has a 10" spall with exposed reinforcing steel and one 36" delaminated area.

-Bent 2 Cap has shallow delaminated and spalled areas with exposed rebar.

-Bent 4 has numerous vertical spalls and delaminated areas with exposed rebar and a delaminated corner on the Right end of the Cap.

-Bent 5 Cap has delaminated areas and several baseball size spalls with exposed rebar.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Span 2 side of Bent 3 cap.

Stage: Assigned



PHOTO 2 Description Span 5 side of Bent 5.

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Maintenance Needs

Date Reported: 09/16/2015

Priority: G - General/ Preventive maintenance

Work Code: Clean

Deficiency Description:

Substructure -

The columns of bent # 5 have graffiti of a racial nature.

The bridge seats of the east and west abutments have dirt and debris accumulation due to failing compression joint seals.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Span 4 side of Bent 5.

Stage: Assigned



PHOTO 2 Description Bent 6. Beam 4.

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Maintenance Needs

Date Reported: 09/16/2015

Priority: G - General/ Preventive maintenance

Work Code: Repair

Deficiency Description:

Driving surface of the deck -
The driving surface of the deck has sealable cracking in all spans.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Sealable deck cracks