

Bridge Inspection Report

02397

US 79/sec15/L7.21

over

BIG HOG TUSK CREEK

BRIDGE #02397 - SIDE VIEW



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION						INSPECTIONS						
(1) STATE CODE		056 - Arkansas				(90) INSPECTION DATE		07/21/2016				
(8) STRUCTURE NUMBER		02397				(91) DESIGNATED INSPECTION FREQUENCY		24				
(5) INV. ROUTE (ON/UNDER)		1	2	1	79	0	(92) CRITICAL FEATURE INSPECTION		(93) CFI DATE			
(2) HIGHWAY AGENCY 01		(3) COUNTY CODE 077				A. FRACTURE CRITICAL DETAIL		N				
(4) PLACE CODE		44600				B. UNDERWATER INSPECTION		N				
(6) FEATURES INTERSECTED		BIG HOG TUSK CREEK				C. OTHER SPECIAL		N				
(7) FACILITY CARRIED		US 79/sec15/L7.21				CONDITION						
(9) LOCATION		0.50 MI W OF SH 238				(58) DECK		7				
(11) MILEPOINT 7.210		(12) BASE HIGHWAY NETWORK 1				(59) SUPERSTRUCTURE 5		(60) SUBSTRUCTURE 7				
(13A) LRS INVENTORY ROUTE 0000079150		(13B) SUBROUTE NUMBER 00				(61) CHANNEL & CHANNEL PROTECTION 6		(62) CULVERT N				
(16) LATITUDE 34.776276		(17) LONGITUDE -90.997261				LOAD RATING AND POSTING						
(98A) BORDER BRIDGE CODE						(31) DESIGN LOAD		4				
PERCENT RESPONSIBILITY		(99) BORDER BRIDGE STRUCT				(63) METHOD USED TO DETERMINE OPERATING RATING		1				
STRUCTURE TYPE AND MATERIAL						(64) OPERATING RATING		54.0				
(43) STRUCTURE TYPE, MAIN						(65) METHOD USED TO DETERMINE INVENTORY RATING		1				
A) KIND OF MATERIAL/DESIGN: 3 - Steel						(66) INVENTORY RATING		33.0				
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder						(70) BRIDGE POSTING		5				
(44) STRUCTURE TYPE, APPROACH SPANS						(41) STRUCTURE OPEN/POSTED/CLOSED		A				
A) KIND OF MATERIAL/DESIGN: 0 - Other						APPRAISAL						
B) TYPE OF DESIGN/CONSTR: 00 - Other						(67) STRUCTURAL EVALUATION		5				
(45) NUMBER OF SPANS IN MAIN 3		(46) NUMBER OF APPROACH 0				(68) DECK GEOMETRY		5				
(107) DECK STRUCTURE TYPE 1		(108A) WEARING SURFACE 6				(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL		N				
(108B) DECK MEMBRANE 0		(108C) DECK PROTECTION 0				(71) WATERWAY ADEQUACY		8				
AGE OF SERVICE						(72) APPROACH ROADWAY ALIGNMENT		8				
(27) YEAR BUILT 1952		(106) YEAR RECONSTRUCTED 0000				(36) TRAFFIC SAFETY FEATURE						
(42) TYPE OF SERVICE ON 1		UNDER 5				36A) BRIDGE RAILINGS:		0				
(28) LANES ON 02		UNDER 00				36B) TRANSITIONS:		0				
(29) AVERAGE DAILY TRAFFIC 820		(19) BYPASS DETOUR LENGTH 21				36C) APPROACH GUARDRAIL:		0				
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014						36D) APPROACH GUARDRAIL ENDS:		0				
(109) AVERAGE DAILY TRUCK TRAFFIC 14						(113) SCOUR CRITICAL BRIDGES		5				
GEOMETRIC DATA						SUFFICIENCY RATING 0		STATUS 66.7				
(48) LENGTH OF MAX SPAN (ft.) 30		(49) STRUCTURE LENGTH (ft.) 92				CLASSIFICATION						
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1.5		RIGHT 1.5				(112) NBIS BRIDGE LENGTH		Y				
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)		25.9				(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE		1				
(52) DECK WIDTH, OUT-TO-OUT (ft.)		31.5				(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE		02				
(32) APPROACH ROADWAY WIDTH (ft.)		35.1				(100) STRAHNET HIGHWAY DESIGNATION		0				
(33) BRIDGE MEDIAN 0		(34) SKEW (DEG.) 0				(101) PARALLEL STRUCTURE DESIGNATION		N				
(35) STRUCTURE FLARED 0		(10) INV RTE, MIN VERT CLEAR (ft.) 99.99				(102) DIRECTION OF TRAFFIC		2				
(47) TOTAL HORIZONTAL CLEARANCE (ft.)		28.9				(103) TEMP STRUCTURE						
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99						(105) FEDERAL LANDS HIGHWAYS		0				
(54) VERTICAL UNDER CLEARANCE (ft.)		N 0				(110) DESIGNATED NATIONAL NETWORK		1				
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)		N 99.9				(20) TOLL		3				
(56) MIN LATERAL UNDER CLEARANCE (ft.)		0				(21) MAINTENANCE RESPONSIBILITY		01				
PROPOSED IMPROVEMENTS						(22) OWNER		01				
(75A) TYPE OF WORK PROPOSED 31		(75B) WORK DONE BY 1				(37) HISTORICAL		5				
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 119.0						NAVIGATION DATA						
(94) BRIDGE IMPROVEMENT COST (\$)		0				(38) NAVIGATION CONTROL		0				
(95) ROADWAY IMPROVEMENT COST (\$)		235				(111) PIER OR ABUTMENT PROTECTION		1				
(96) TOTAL PROJECT COST		541				(39) NAV VERT CLEARANCE (ft.)		0				
(97) YEAR OF IMPROVEMENT COST ESTIMATE		2003				(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)		0				
(114) FUTURE ADT 934		(115) YEAR OF FUTURE ADT 2028				(40) NAV HORIZONTAL CLEARANCE (ft.)		0				

Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

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.	2898	sq. ft.	2767	131	0	0
	RIGHT & LEFT GUTTERS HAVE DIRT, DEBRIS & VEGETATION GROWING IN THEM. SPAN #1 LEFT CURB HAS 6" POPOFF WITH EXPOSED REBAR. SOFFIT HAS HAIRLINES TRANSVERSE CRACKS SPACED 4' APART 2 CRACKS EACH SPAN HAS LIGHT EFFLORESCENCE. Wearing surface has transverse cracks at all bents and 5 longitudinal cracks each span.						
1120 - Efflorescence/Rust Staining		131			131		
510 - Wearing Surfaces		2392	sq. ft.	1828	564	0	0
3220 - Crack (Wearing Surface)		564			564		
107 - Steel Open Girder/Beam	1- Ben.	368	ft.	267	89	10	2
	GIRDER #1 & 4 ARE CORRODED WITH LAMINATIONS ON WEBS AT EXPANSION DAM HAUNCHES WITH UP TO 50% SECTION LOSS SPAN #3 GIRDER #1 AT BENT #3 RIGHT LOWER FLANGE HAS UP TO 50% SECTION LOSS FOR 2'. SPAN #3 GIRDER #4 AT BENT #3 LEFT LOWER FLANGE FOR 2' UP TO 35% SECTION LOSS. SPAN #3 GIRDER #4 AT BENT #4 LEFT LOWER FLANGE FOR 1' ON END HAS UP TO 90% SECTION LOSS MIGRATING INTO WEB WITH UP TO 50%SECTION LOSS. SPAN #3 GIRDER #1AT BENT #4 HAS AREA OF 100% SECTION LOSS TO LOWER FLANGE AT BEARING AND 1' AREA OF SECTION LOSS TO WEB AT LOWER FLANG WITH SLIGHT DOWNWARD DEFORMATION OF GIRDER. WEB AT HAUNCH ALSO HAS AREA OF 100%SECTION LOSS. 2' OF BEAM IS EFFECTED BY THIS CORROSION. DIAPHRAGM AT THIS LOCATION ALSO HAS 100% SECTION LOSS. OUTSIDE GIRDERS AT HAUNCHES ARE DEFORMING / BOWING OUT DUE TO PACK RUST AT HAUNCHES. Paint has surface rust full length with 20% of beam being bare steel.						
1000 - Corrosion		85			73	10	2
1900 - Distortion		16			16		
515 - Steel Protective Coating		2510	sq. ft.	0	13	1870	627
3440 - Effectiveness (Steel Protective Coatings)		2510			13	1870	627
215 - Reinforced Concrete Abutment	1- Ben.	74	ft.	74			
227 - Reinforced Concrete Pile	1- Ben.	8	each	8			
234 - Reinforced Concrete Pier Cap	1- Ben.	50	ft.	50			
305 - Assembly Joint without Seal	1- Ben.	126	ft.	110	0	16	0
	Steel has surface rust with little to paint left. Joint steel under bridge has corrosion with laminations with up to 10% section loss on 2' of each end, center has only surface rust little to no section loss.						
2370 - Metal Deterioration or Damage		16				16	

Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

Element Inspection

515 - Steel Protective Coating		378	sq. ft.	0	16	0	362
3440 - Effectiveness (Steel Protective Coatings)		378			16		362
311 - Movable Bearing	1- Ben.	12	each	0	0	12	0
MOVEABLE BEARINGS ARE CORRODED WITH LAMINATIONS WITH UP TO 20% SECTION LOSS. Bearings have no paint left on them.							
1000 - Corrosion		12				12	
515 - Steel Protective Coating		36	sq. ft.	0	0	0	36
3440 - Effectiveness (Steel Protective Coatings)		36					36
313 - Fixed Bearing	1- Ben.	12	each	0	6	6	0
FIXED BEARINGS ARE CORRODED WITH LAMINATIONS WITH UP TO 10% SECTION LOSS. Bearings have no paint left on them.							
1000 - Corrosion		12			6	6	
515 - Steel Protective Coating		36	sq. ft.	0	0	0	36
3440 - Effectiveness (Steel Protective Coatings)		36					36
330 - Metal Bridge Railing	1- Ben.	184	ft.	182	2	0	0
Left rail is is corroded with little to no paint left no section loss. Right rail has 2' long collision area near abutment 2.							
1900 - Distortion		2			2		
515 - Steel Protective Coating		552	sq. ft.	276	0	276	0
3440 - Effectiveness (Steel Protective Coatings)		276				276	

Inspector:

Inspection Date:

Structure Number: 02397

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

Pictures

BRIDGE #02397 - TOP VIEW



Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/21/2016

Priority: B - Pressing; 6 month completion goal

Work Code: N/A

Deficiency Description:

SPAN #3 GIRDER #1 AT BENT #4 HAS AREA OF 100% SECTION LOSS TO LOWER FLANGE AT BEARING AND 1' AREA OF SECTION LOSS TO WEB AT LOWER FLANGE WITH SLIGHT DOWNWARD DEFORMATION OF GIRDER. WEB AT HAUNCH ALSO HAS AREA OF 100% SECTION LOSS. 2' OF BEAM IS AFFECTED BY THIS CORROSION.

SPAN #3 GIRDER #4 AT BENT #4 LEFT LOWER FLANGE FOR 1' ON END HAS UP TO 90% SECTION LOSS MIGRATING INTO WEB WITH UP TO 50% SECTION LOSS.

Work Description:

Tee - splice On span 3 girder 1 and 4 at bent 4. and painted

Date Repairs Completed: 12/02/2016

Maintenance Comments:

Stage: Open



PHOTO 1 Description SPAN #3 GIRDER #1 AT BENT #4 HAS AREA OF 100% SECTION LOSS TO LOWER FLANGE AT BEARING AND 1' AREA OF SECTION LOSS TO WEB AT LOWER FLANGE WITH SLIGHT DOWNWARD DEFORMATION OF GIRDER. WEB AT HAUNCH ALSO HAS AREA OF 100%SECTION LOSS. 2' OF BEAM IS EFFECTED BY THIS CORROSION.

Stage: Open



PHOTO 2 Description SPAN #3 GIRDER #4 AT BENT #4 LEFT LOWER FLANGE FOR 1' ON END HAS UP TO 90% SECTION LOSS MIGRATING INTO WEB WITH UP TO 50%SECTION LOSS.

Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/30/2012 12:00:00 AM

Priority: D - Routine

Work Code: N/A

Deficiency Description:

GIRDER #1 & 4 ARE CORRODED WITH LAMINATIONS ON WEBS AT EXPANSION DAM HAUNCHES WITH UP TO 50% SECTION LOSS.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Typical girder ends.

Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/23/2014 12:00:00 AM

Priority: C - Important

Work Code: N/A

Deficiency Description:

MOVEABLE BEARINGS ARE CORRODED WITH LAMINATIONS WITH UP TO 20% SECTION LOSS.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Typical bearings.

Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/23/2014 12:00:00 AM

Priority: D - Routine

Work Code: N/A

Deficiency Description:

DECK RIGHT & LEFT GUTTERS HAVE DIRT, DEBRIS & VEGETATION GROWING IN THEM.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Typical vegetation in gutters.

Inspector:

Structure Number: 02397

Inspection Date:

Facility Carried: US 79/sec15/L7.21

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/23/2014 12:00:00 AM

Priority: D - Routine

Work Code: N/A

Deficiency Description:

VEGETATION IS GROWING UNDER & BESIDE BRIDGE IN SPAN #1 & 3 RIGHT & LEFT SIDE.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Typical vegetation.