

Bridge Inspection Report

M2853
SH 312-01- LM 0.82
over
NATL DITCH



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: M2853

Inspection Date:

Facility Carried: SH 312-01- LM 0.82

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	11/29/2016
(8) STRUCTURE NUMBER	M2853	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 312 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	10 (3) COUNTY CODE 093	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	NATL DITCH	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 312-01- LM 0.82		
(9) LOCATION	0.82 MI E JCT SH 18 & 312		
(11) MILEPOINT 0.820	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.87216	(17) LONGITUDE -89.99107		
(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	4 (60) SUBSTRUCTURE 5
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION	6 (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 3	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 6		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1965	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	0
(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	14.0
(29) AVERAGE DAILY TRAFFIC 1800	(19) BYPASS DETOUR LENGTH 8	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	9.0
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(70) BRIDGE POSTING	0
		(41) STRUCTURE OPEN/POSTED/CLOSED	P
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 30.5	(49) STRUCTURE LENGTH (ft.) 63.3	(67) STRUCTURAL EVALUATION	3
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0.5 RIGHT 0.5		(68) DECK GEOMETRY	4
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 24.6		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 25.6		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 24.9		(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.) 25.3		36B) TRANSITIONS:	0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99		36C) APPROACH GUARDRAIL:	0
(54) VERTICAL UNDER CLEARANCE (ft.) N 0		36D) APPROACH GUARDRAIL ENDS:	0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9		(113) SCOUR CRITICAL BRIDGES	5
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	1 STATUS 14.2
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED 35	(75B) WORK DONE BY 1	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 64.0		(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	73	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2003	(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 2196	(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	0
		(111) PIER OR ABUTMENT PROTECTION	5
		(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.	1621	sq. ft.	1498	0	123	0
1080 - Delamination/Spall/Patched Area		4				4	
1090 - Exposed Rebar		3				3	
1120 - Efflorescence/Rust Staining		116				116	
510 - Wearing Surfaces		1621	sq. ft.	1256	0	365	0
3220 - Crack (Wearing Surface)		365				365	
107 - Steel Open Girder/Beam	1- Ben.	826	ft.	0	714	100	12
1000 - Corrosion		826			714	100	12
515 - Steel Protective Coating		2652	sq. ft.	0	2132	200	320
3440 - Effectiveness (Steel Protective Coatings)		2652			2132	200	320
216 - Timber Abutment	1- Ben.	51	ft.	33	0	18	0
1140 - Decay/Section Loss		18				18	
228 - Timber Pile	1- Ben.	22	each	10	10	2	0
1140 - Decay/Section Loss		12			10	2	
235 - Timber Pier Cap	1- Ben.	51	ft.	51			
330 - Metal Bridge Railing	1- Ben.	127	ft.	0	127	0	0
1000 - Corrosion		127			127		

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Bridge Inspection Report

Maintenance Needs

Date Reported: 12/16/2015

Priority: C - Important

Work Code:

Deficiency Description:

Several holes in End of Girders, see 2015 & 2016 photos:

Span 1 Girder 3 over Bent 1 has a 2in. x 2 1/2in. hole rusted thru web near Top Flange.

Span 3 Girder 1 over Bent 3 has a 1 1/2in. x 1in. hole rusted thru web near Top Flange.

Span 3 Girder 2 over Bent 3 has a 1 1/2in. x 1in. hole rusted thru web near Top Flange and the end of web has section loss with several small holes rusted thru web, 1/4in. typical.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Span 1 girder 3 over bent 1.

Stage: Monitor



PHOTO 2 Description

Inspector:

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description

Stage: Monitor



PHOTO 4 Description Span 1 girder 5 over bent 1.

Stage: Monitor



PHOTO 5 Description Span 1 girder 6 over bent 1.

Stage: Monitor



PHOTO 6 Description Span 1 girder 1 over bent 2.

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Maintenance Needs

Stage: Monitor



PHOTO 7 Description Span 1 girder 13 over bent 2.

Stage: Monitor



PHOTO 9 Description Span 3 girder 2 over bent 3.

Stage: Monitor



PHOTO 8 Description Span 3 girder 1 over bent 3.

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Maintenance Needs

Date Reported: 12/16/2015

Priority: C - Important

Work Code:

Deficiency Description:

Bents 1&4 Timber Caps

have 4ft. on each end decayed with 30% section loss, see deficiency sketch 2010.

Bent 1 Cap between Piles 4&5 has a 24in. x 9in. area burnt with up to 2in. section loss, see 2015 photo.

Majority of Piles have decay and splitting.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Left end bent 1 cap.

Stage: Open



PHOTO 2 Description Bent 1 cap between pile 4 & 5.

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Stage: Open



PHOTO 3 Description Right end bent 1 cap.

Stage: Open



PHOTO 5 Description Right end bent 4 cap.

Stage: Open



PHOTO 4 Description Bent 4 cap left end.

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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/29/2016

Priority: B - Pressing; 6 month completion goal

Work Code:

Deficiency Description:

Several Girders has several holes in End of Girders, see 2015 & 2016 photos:

Span 1 Girder 4 over Bent 1 has a 6in. x 3/4in. hole rusted thru web near Bottom Flange.

Span 1 Girder 5 over Bent 1 has a 2 1/2in. x 5in. hole rusted thru web near top flange near end of Girder and a 6in. x 2 1/2in. hole near bottom flange.

Span 1 Girder 6 over Bent 1 has a 4in. x 1 1/2in. hole rusted thru web near bottom flange 12in. from end of Girder.

Span 1 Girder 9 over Bent 1 has a 13in. x 2in. hole rusted thru web near bottom flange with some crushing.

Span 1 Girder 10 over Bent 1 has a 4in. x 1/2in. hole rusted thru web near bottom flange near end of Girder.

Span 1 Girder 1 over Bent 2 has a 13in. x up to 2in. area of holes rusted thru web near Top Flange and a area 3in. x up to 1in. area of holes in web at end of girder.

Span 1 Girder 13 over Bent 2 has an 8in. x 3/4in. hole rusted thru web near top flange 7in. from end of Girder.

Span 2 Girder 13 over Bent 2 has a 9 1/2in. x up to 1in. hole rusted thru web near bottom flange with up to 1in. crushing.

Span 2 Girder 13 over Bent 3 has a 9in. x 3in. hole rusted thru web near bottom flange with up to 1in. crushing and the end of girder has the web paper thin with several small holes.

Span 3 Girder 12 over Bent 3 has a 16in. x 2in. hole rusted thru web near bottom flange with some crushing and several holes at end of girder; Girder has no support at this time.

Span 3 Girder 13 over Bent 3 has a 9in. x 2in. area with holes rusted thru web near bottom flange.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned

PHOTO 1 Description Span 1 girder 4 over bent 1.



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Maintenance Needs

Stage: Assigned



PHOTO 2 Description

Stage: Assigned



PHOTO 3 Description

Stage: Assigned



PHOTO 4 Description

Stage: Assigned



PHOTO 5 Description

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Bridge Inspection Report

Maintenance Needs

Stage: Assigned



PHOTO 6 Description

Stage: Assigned



PHOTO 7 Description

Stage: Assigned



PHOTO 8 Description

Stage: Assigned



PHOTO 9 Description

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Bridge Inspection Report

Maintenance Needs

Stage: Assigned



PHOTO 10 Description

Stage: Assigned



PHOTO 11 Description

Stage: Assigned



PHOTO 12 Description Span 1 girder 9 over bent 1.

Stage: Assigned



PHOTO 13 Description Span 1 girder 10 over bent 1.

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Bridge Inspection Report

Maintenance Needs

Stage: Assigned



PHOTO 14 Description Span 2 girder 13 over bent 2.

Stage: Assigned



PHOTO 15 Description Span 2 girder 13 over bent 3.

Stage: Assigned



PHOTO 16 Description Span 3 girder 12 over bent 3.

Stage: Assigned



PHOTO 17 Description Span 3 girder 13 over bent 3.

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Maintenance Needs

Date Reported: 1/21/2015 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

20LF of Concrete Curb & Right Side of Deck is deteriorated with section loss with rebar exposed on the right side of Span 1, see 2015 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Side view downstream.

Stage: Monitor



PHOTO 2 Description Span 1 right overhang.

Inspector:

Inspection Date:

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Maintenance Needs

Stage: Monitor



PHOTO 3 Description Right curb over bent 3.