

Bridge Inspection Report

02841
SH 1-01 LM 18.41
over
Drainage Ditch



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

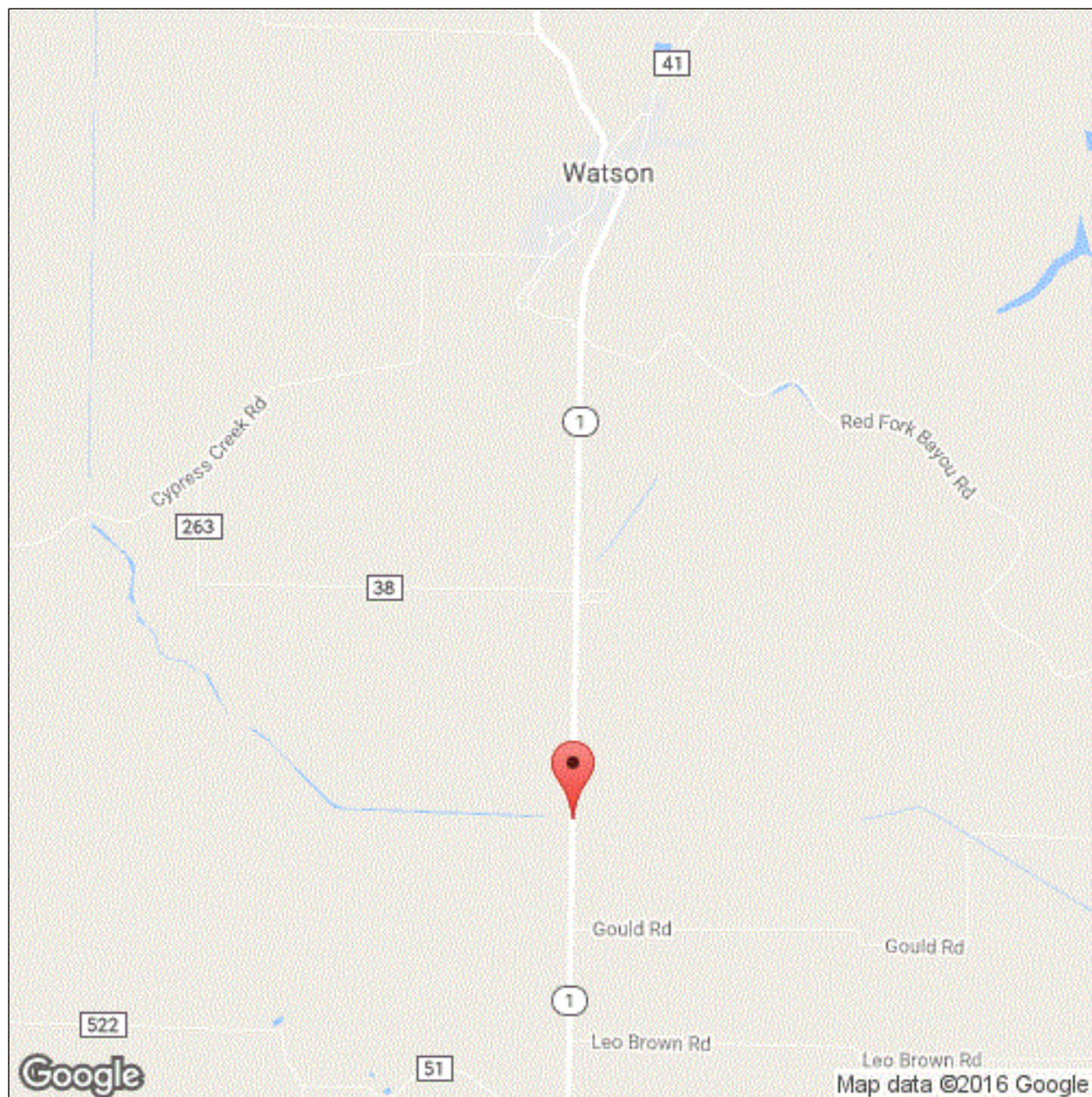
Structure Number: 02841

Inspection Date:

Facility Carried: SH 1-01 LM 18.41

Bridge Inspection Report

Location Map



Latitude: 33.85293370254074

Longitude: -91.25898511012394

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	01/09/2019
(8) STRUCTURE NUMBER	02841	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 1 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	02	(3) COUNTY CODE	041
(4) PLACE CODE	00000	A. FRACTURE CRITICAL DETAIL	N
(6) FEATURES INTERSECTED	Drainage Ditch	B. UNDERWATER INSPECTION	N
(7) FACILITY CARRIED	SH 1-01 LM 18.41	C. OTHER SPECIAL	N
(9) LOCATION	4.0 Mi N SH 138-Watson	CONDITION	
(11) MILEPOINT	18.410	(58) DECK	7
(12) BASE HIGHWAY NETWORK	0	(59) SUPERSTRUCTURE	6
(13A) LRS INVENTORY ROUTE	0000000000	(60) SUBSTRUCTURE	6
(13B) SUBROUTE NUMBER	00	(61) CHANNEL & CHANNEL PROTECTION	7
(16) LATITUDE	33.85293370254074	(62) CULVERT	N
(17) LONGITUDE	-91.25898511012394	LOAD RATING AND POSTING	
(98A) BORDER BRIDGE CODE		(31) DESIGN LOAD	2
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT	(63) METHOD USED TO DETERMINE OPERATING RATING	1
STRUCTURE TYPE AND MATERIAL		(64) OPERATING RATING	60
(43) STRUCTURE TYPE, MAIN		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
A) KIND OF MATERIAL/DESIGN:	1 - Concrete	(66) INVENTORY RATING	36
B) TYPE OF DESIGN/CONSTR:	22 - Channel Beam	(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	6
(45) NUMBER OF SPANS IN MAIN	4	(68) DECK GEOMETRY	4
(46) NUMBER OF APPROACH	0	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(107) DECK STRUCTURE TYPE	2	(71) WATERWAY ADEQUACY	8
(108A) WEARING SURFACE	6	(72) APPROACH ROADWAY ALIGNMENT	8
(108B) DECK MEMBRANE	0	(36) TRAFFIC SAFETY FEATURE	
(108C) DECK PROTECTION	0	36A) BRIDGE RAILINGS:	0
AGE OF SERVICE		36B) TRANSITIONS:	0
(27) YEAR BUILT	1952	36C) APPROACH GUARDRAIL:	0
(106) YEAR RECONSTRUCTED	0000	36D) APPROACH GUARDRAIL ENDS:	0
(42) TYPE OF SERVICE	ON 1 UNDER 5	(113) SCOUR CRITICAL BRIDGES	5
(28) LANES	ON 02 UNDER 00	SUFFICIENCY RATING	78.1
(29) AVERAGE DAILY TRAFFIC	620	STATUS	0
(19) BYPASS DETOUR LENGTH	31	CLASSIFICATION	
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	(112) NBIS BRIDGE LENGTH	Y
(109) AVERAGE DAILY TRUCK TRAFFIC	1	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
GEOMETRIC DATA		(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(48) LENGTH OF MAX SPAN (ft.)	19	(100) STRAHNET HIGHWAY DESIGNATION	0
(49) STRUCTURE LENGTH (ft.)	76	(101) PARALLEL STRUCTURE DESIGNATION	N
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 0.5 RIGHT 0.5	(102) DIRECTION OF TRAFFIC	2
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	23.0	(103) TEMP STRUCTURE	
(52) DECK WIDTH, OUT-TO-OUT (ft.)	24.6	(105) FEDERAL LANDS HIGHWAYS	0
(32) APPROACH ROADWAY WIDTH (ft.)	25.9	(110) DESIGNATED NATIONAL NETWORK	0
(33) BRIDGE MEDIAN	0	(20) TOLL	3
(34) SKEW (DEG.)	0	(21) MAINTENANCE RESPONSIBILITY	01
(35) STRUCTURE FLARED	0	(22) OWNER	01
(10) INV RTE, MIN VERT CLEAR (ft.)	99.99	(37) HISTORICAL	5
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	24.6	NAVIGATION DATA	
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	(38) NAVIGATION CONTROL	0
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0	(111) PIER OR ABUTMENT PROTECTION	5
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9	(39) NAV VERT CLEARANCE (ft.)	0
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
PROPOSED IMPROVEMENTS		(40) NAV HORIZONTAL CLEARANCE (ft.)	0
(75A) TYPE OF WORK PROPOSED	35		
(75B) WORK DONE BY	1		
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	76.0		
(94) BRIDGE IMPROVEMENT COST (\$)	0		
(95) ROADWAY IMPROVEMENT COST (\$)	0		
(96) TOTAL PROJECT COST	83		
(97) YEAR OF IMPROVEMENT COST ESTIMATE	1996		
(114) FUTURE ADT	565		
(115) YEAR OF FUTURE ADT	2028		

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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
16 - Reinforced Concrete Top Flange	1- Ben.	1870	sq. ft.	1870	0	0	0
	Deck: 24.6' wide x 76' long. Wearing surface: Asphalt overlay has large cracks at seams of units and at bents.						
510 - Wearing Surfaces		1672	sq. ft.	836	0	836	0
3220 - Crack (Wearing Surface)		836		0	0	836	0
110 - Reinforced Concrete Open Girder/Beam	1- Ben.	532	ft.	456	0	0	76
	Girders: 7 precast units per span / Spans 1-4 - 4 spans @ 19' each = 76' total. Units are bolted transversely and longitudinally - scattered loose and missing bolts. Minor flexure cracks, mainly from 1/4 to 3/4 span points. Repaired by State Forces. Old Notes . Bent 3: Apparent lateral and longitudinal movement of piling and cap - leaning to the right and back. Cap appears to have moved approximately 6" to the right and 6" back from original position. Movement has resulted in the reduction of bearing area for precast channel beam units of Span 3 at Bent 3 - only 4-5" of legs remaining on cap on right side (Units 5-7) and half-width of outer leg of Unit 1 remaining on cap (left end of cap).						
7000 - Damage		76		0	0	0	76
215 - Reinforced Concrete Abutment	1- Ben.	68	ft.	56	12	0	0
	Abutments: 34' each / Bents 1 & 5. Endslope - Bent 5: - Minor settlement (4-5") of fill material under bottom face of cap - full length of abutment.						
6000 - Scour		12		0	12	0	0

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228 - Timber Pile	1- Ben.	20	each	3	11	6	0
<p>Piling: 5 per bent / Bents 2-5. Bent 2 & 3 Piles 1-5 and Bent 4 Pile 2-5 have all been repaired/replaced (spliced). Bent 2 Pile 1: Surface checking widespread (checking - CS3). Bent 2 pile 1 has no collar at upper splice.</p> <p>Bent 3: Apparent lateral and longitudinal movement of piling and cap - leaning to the right and back Out-of-plumb measurement on piling (right side, back side) using 2' level. Pile 1: 3/4", 3/4". Pile 2: 2", 3/4". Pile 3: 2 1/4", 1 1/8". Pile 4: 1 1/2", 2 3/8". Pile 5: 3 1/4", 1 1/4".</p> <p>Bent 3 Piles 1, 2, & 4: Minor checking. Bent 3 pile 3 concrete at connection is cracked. Bent 3 Pile 5: Checking through half of member diameter.</p> <p>Bent 4 Piles 1 Heavy checking and decay with hollow area near ground line. Bent 4 pile 4 has crack in the concrete collar at splice.</p>							
1020 - Connection		14		0	11	3	0
1140 - Decay/Section Loss		1		0	0	1	0
1150 - Check/Shake		2		0	0	2	0
234 - Reinforced Concrete Pier Cap	1- Ben.	75	ft.	58	9	8	0
<p>Caps: 25' each / Bents 2-4. Bent 2: Small areas of delaminations and spalling on bottom face of cap - reinforcing steel exposed with some rust and section loss (exposed rebar - CS3 8'). Bent 2 & 4: Small contact spalls under channel legs (spall - CS2 9')</p> <p>Old Notes. Repaired by State Forces. Bent 3: Apparent lateral and longitudinal movement of piling and cap - leaning to the right and back. Cap appears to have moved approximately 6" to the right and 6" back from original position. Movement has resulted in the reduction of bearing area for precast channel beam units of Span 3 at Bent 3 - only 4-5" of legs remaining on cap on right side (Units 5-7) and half-width of outer leg of Unit 1 remaining on cap (left end of cap).</p>							
1080 - Delamination/Spall/Patched Area		9		0	9	0	0
1090 - Exposed Rebar		8		0	0	8	0
330 - Metal Bridge Railing	1- Ben.	152	ft.	152	0	0	0
<p>Railing: 76' each side. Coating: 2.5 square feet per linear feet of railing. Both sides railing dull and has no luster.</p>							
515 - Steel Protective Coating		380	sq. ft.	0	380	0	0
3410 - Chalking (Steel Protective Coatings)		380		0	380	0	0

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Maintenance Needs

Date Reported: 1/7/2013 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: N/A

Deficiency Description:

Cap - Bent 2: Small areas of delaminations and spalling on bottom face of cap - reinforcing steel exposed with some rust and section loss.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Cap - Bent 2 bottom face (corrosion)

Inspector:

Structure Number: 02841

Inspection Date:

Facility Carried: SH 1-01 LM 18.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 1/7/2013 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: N/A

Deficiency Description:

Endslope - Bent 5: - Minor settlement (4-5") of fill material under bottom face of cap - full length of abutment.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Endslope - Bent 5 (settlement)

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Maintenance Needs

Date Reported: 01/20/2017

Priority: C - Important

Work Code: N/A

Deficiency Description:

Signs - Bent 5: Object markers, posts, and log mile signs are missing (have been knocked down) on both side - object marker and broken post currently lying down behind railing on right side.

Work Description:

Repaired by state forces.

Date Repairs Completed: 07/10/2017

Maintenance Comments:

Stage: Open



PHOTO 1 Description Sign - Bent 5 left (missing)

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Maintenance Needs

Date Reported: 01/09/2019

Priority: A - Safety deficiency; requires prompt action

Work Code:

Deficiency Description:

South end of bridge, right side slope embankment and roadway have slipped causing settlement to roadway and drop off at edge of pavement.

Work Description:

County crew have sealed the top off, not allowing water infiltration. Additional work will be done as time and weather permits.

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Approach edge of roadway has erosion up to edge of asphalt and base failure and possible erosion under roadway.

Stage: Open



PHOTO 2 Description Approach bent 1 right side slope erosion.

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Maintenance Needs

Stage: Open



PHOTO 3 Description Approach right side of roadway has material sliding off of shoulder up to roadway.

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Maintenance Needs

Date Reported: 01/09/2019

Priority: C - Important

Work Code:

Deficiency Description:

Bent 2 pile 1 has been spliced near cap with no concrete collar.

Bent 4 pile 1 has decay with large checks and hollow area near ground line.

Work Description:

Charlie: lets place a splice around bent 2 pile 1 - cut out the bad section and replace the pile for bent 4 pile 1

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Bent 4 pile 1 has heavy checking and decay with hollow area near ground line.

Stage: Open



PHOTO 2 Description Bent 2 pile 1 has spliced piece of piling with no collar.

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Maintenance Needs

Stage: Open



PHOTO 3 Description Bent 2 pile 1 has spliced piece of piling with no collar.