

Bridge Inspection Report

03539

SH 46-02 LM 11.67

over

Turkey Creek



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: 03539

Inspection Date:

Facility Carried: SH 46-02 LM 11.67

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	06/13/2016
(8) STRUCTURE NUMBER	03539	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 46 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	02 (3) COUNTY CODE 053	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Turkey Creek	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 46-02 LM 11.67	CONDITION	
(9) LOCATION	1.5 Mi N SH 291-Prattsvil	(58) DECK	7
(11) MILEPOINT 11.670	(12) BASE HIGHWAY NETWORK 0	(59) SUPERSTRUCTURE	6 (60) SUBSTRUCTURE 7
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00	(61) CHANNEL & CHANNEL PROTECTION	5 (62) CULVERT N
(16) LATITUDE 34.24998	(17) LONGITUDE -92.50251	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	60.0
(43) STRUCTURE TYPE, MAIN		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
A) KIND OF MATERIAL/DESIGN:	1 - Concrete	(66) INVENTORY RATING	36.0
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 (46) NUMBER OF APPROACH	(68) DECK GEOMETRY	4
(107) DECK STRUCTURE TYPE	2 (108A) WEARING SURFACE	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(108B) DECK MEMBRANE	0 (108C) DECK PROTECTION	(71) WATERWAY ADEQUACY	8
AGE OF SERVICE		(72) APPROACH ROADWAY ALIGNMENT	7
(27) YEAR BUILT	1966 (106) YEAR RECONSTRUCTED	(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	1200 (19) BYPASS DETOUR LENGTH	36C) APPROACH GUARDRAIL:	0
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	36D) APPROACH GUARDRAIL ENDS:	0
(109) AVERAGE DAILY TRUCK TRAFFIC	1	(113) SCOUR CRITICAL BRIDGES	5
GEOMETRIC DATA		SUFFICIENCY RATING	82.2 STATUS ND
(48) LENGTH OF MAX SPAN (ft.)	19 (49) STRUCTURE LENGTH (ft.)	CLASSIFICATION	
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 1 RIGHT 1	(112) NBIS BRIDGE LENGTH	Y
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	25.9	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(52) DECK WIDTH, OUT-TO-OUT (ft.)	28	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(32) APPROACH ROADWAY WIDTH (ft.)	26.9	(100) STRAHNET HIGHWAY DESIGNATION	0
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	(101) PARALLEL STRUCTURE DESIGNATION	N
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	(102) DIRECTION OF TRAFFIC	2
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	26.9	(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	0
(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	35 (75B) WORK DONE BY	(37) HISTORICAL	5
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	76.0	NAVIGATION DATA	
(94) BRIDGE IMPROVEMENT COST (\$)	0	(38) NAVIGATION CONTROL	0
(95) ROADWAY IMPROVEMENT COST (\$)	0	(111) PIER OR ABUTMENT PROTECTION	5
(96) TOTAL PROJECT COST	95	(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	928 (115) YEAR OF FUTURE ADT	(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
16 - Reinforced Concrete Top Flange	1- Ben.	2128	sq. ft.	2128			
1.0" of ACHM overlay on deck	Deck: 28.0' wide x 76' long. Some minor-sized cracking on asphalt wearing surface at bents and joints between units. Gutterlines - both side: Some minor build-up of sand and other debris. Soffit: Some signs of leakage and minor efflorescence along joints of units and spans.						
510 - Wearing Surfaces		1976	sq. ft.	1976			
110 - Reinforced Concrete Open Girder/Beam	1- Ben.	608	ft.	458	150	0	0
	Girders: 8 per span / 19' spans (4 spans) = 76' total (channel beam units). Some spalling with steel exposed (minor section loss) along bottom of legs in various locations. (5' total) Some cracking and delaminations along bottom of legs in various locations. (68' total) (See linked Form 5 for detailed locations.) Span 1 Unit 2,3,4,5 & 6: Cracking on top of left & right legs from 50-80% points (37' total). Some spalling with exposed rebar in diaphragms at bents. Span unit 3,4 & 5 have spalls with exposed rebar. Span 1 Unit 8: Cracking on top of left leg from 2/3 to 95% points (8' total). Span 2 Unit 8: Cracking on top of left leg near Bent 3 (8' total). Span 2 unit 3,4,7 & 8 cracking to bottom of legs. Span 3 unit 1,2 & 4 have some small spalls and delams. NOTE: Span 4 Unit 6 has been replaced.						
1080 - Delamination/Spall/Patched Area		98			98		
1090 - Exposed Rebar		7			7		
1130 - Cracking (RC and Other)		45			45		
215 - Reinforced Concrete Abutment	1- Ben.	72	ft.	36	36	0	0
	Abutments: 36' each / Bents 1 & 5. Bent 5: Some minor-sized horizontal cracking on top corner of cap at various locations.						
1130 - Cracking (RC and Other)		36			36		
227 - Reinforced Concrete Pile	1- Ben.	9	each	8	1	0	0
	Piling: 3 per bent / Bents 2-4. Some very minor abrasion and loss of mortar on surface, especially near waterline. Scour: Spans 2 & 3: Some minor scouring and erosion of channel material, especially to left side of bridge at Span 3.						
6000 - Scour		1			1		

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234 - Reinforced Concrete Pier Cap	1- Ben.	84	ft.	56	28	0	0
Caps: 28' each / Bents 2-4. Bent 4 ahead: Some minor-sized cracking on top corner of cap. Minor areas of cracking, delamination, and small shallow spalls at various locations on cap surfaces.							
1080 - Delamination/Spall/Patched Area		14			14		
1130 - Cracking (RC and Other)		14			14		
330 - Metal Bridge Railing	1- Ben.	152	ft.	152			
Railing: 76' each side. Coating: 0.90 square feet per linear feet of railing. Metal railing with concrete posts.							
515 - Steel Protective Coating		69	sq. ft.	69			

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Maintenance Needs

Date Reported: 7/17/2012 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Channel beam units: Cracking and delaminations along bottom of legs at locations indicated:

- Span 1 Unit 2: Right leg 1/4 point – 2' long.
- Span 1 Unit 3: Left leg at 1/4 point – 2' long.
- Span 1 Unit 3: Right leg at 1/4 – 3' long.
- Span 1 Unit 4: Left leg at 60% point – 6' long.
- Span 1 Unit 4: Right leg at 40% – 4' long.
- Span 1 Unit 5: Right leg at 45% – 2' long.
- Span 1 Unit 6: Left leg at 10% - 2/3 point – 12' long.
- Span 2 Unit 3: Right leg at 10% point – 2' long.
- Span 2 Unit 4: Right leg at 45% point – 1' long.
- Span 2 Unit 7: Right leg at 1/4 – 95% point – 15' long.
- Span 3 Unit 3: Right leg at 3/4 point – 5' long.
- Span 3 Unit 5: Left leg at 1/4 point – 1' long.
- Span 3 Unit 6: Left leg at 50 - 100% point – 10' long.
- Span 4 Unit 4: Left leg at 1/4 – 2' long.
- Span 4 Unit 5: Left leg 20% point – 1' long.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 7/17/2012 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Channel - Spans 2 & 3: Some minor scouring and erosion of channel material, especially to left side of bridge at Span 3.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Maintenance Needs

Date Reported: 7/17/2012 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Channel beam units: Spalling with steel exposed (minor section loss) along bottom of legs at locations indicated:
See photos.

Span 1 Unit 4: Right leg at 60% point – 1' long.

Span 1 Unit 5: Left leg at 50%point – 2' long.

Span 4 Unit 4: Right leg a 45% point – 2' long.

Work Description:

Date Repairs Completed:

Maintenance Comments:
