

Bridge Inspection Report

02718

SH 135-05- LM 4.45

over

LOCUST CREEK RELIEF



Inspection Date:

Inspected By:

Inspection Type(s):



Inspector:

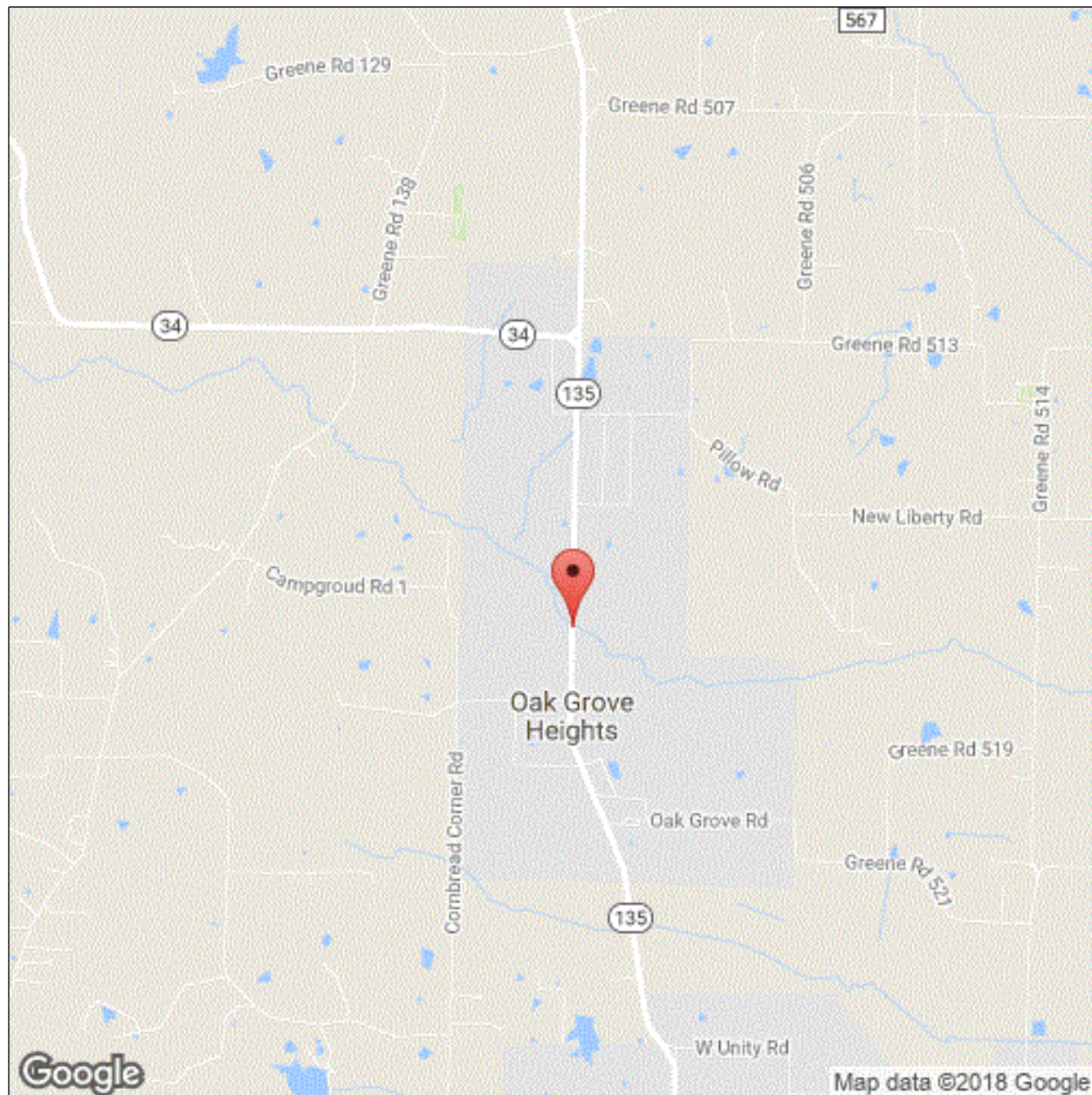
Structure Number: 02718

Inspection Date:

Facility Carried: SH 135-05- LM 4.45

Bridge Inspection Report

Location Map



Latitude: 36.12655

Longitude: -90.51059

Inspector:

Structure Number: 02718

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	03/13/2018
(8) STRUCTURE NUMBER	02718	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 135 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	10 (3) COUNTY CODE 055	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	LOCUST CREEK RELIEF	C. OTHER SPECIAL	Y 24 02/22/2017
(7) FACILITY CARRIED	SH 135-05- LM 4.45		
(9) LOCATION	1.0 MI S JCT OF SH 34		
(11) MILEPOINT 4.450	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000135050 (13B) SUBROUTE NUMBER 01		
(16) LATITUDE 36.12655	(17) LONGITUDE -90.51059		
(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	3 (60) SUBSTRUCTURE 6
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION	5 (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	1950 (106) YEAR RECONSTRUCTED	0000	
(42) TYPE OF SERVICE	ON 1 UNDER 5		
(28) LANES	ON 02 UNDER 00		
(29) AVERAGE DAILY TRAFFIC	6900 (19) BYPASS DETOUR LENGTH	3	
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014		
(109) AVERAGE DAILY TRUCK TRAFFIC	1		
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.)	34 (49) STRUCTURE LENGTH (ft.)	104	
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 1.4 RIGHT 1.4		
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	24.0		
(52) DECK WIDTH, OUT-TO-OUT (ft.)	26.8		
(32) APPROACH ROADWAY WIDTH (ft.)	32.2		
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	0	
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	99.99	
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	24.0		
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99		
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0		
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9		
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0		
PROPOSED IMPROVEMENTS		STATUS	
(75A) TYPE OF WORK PROPOSED	31 (75B) WORK DONE BY	1	
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	131.0		
(94) BRIDGE IMPROVEMENT COST (\$)	0		
(95) ROADWAY IMPROVEMENT COST (\$)	400		
(96) TOTAL PROJECT COST	954		
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2003		
(114) FUTURE ADT	8968 (115) YEAR OF FUTURE ADT	2028	
		CLASSIFICATION	
		(112) NBIS BRIDGE LENGTH	Y
		(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
		(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	02
		(100) STRAHNET HIGHWAY DESIGNATION	0
		(101) PARALLEL STRUCTURE DESIGNATION	N
		(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	5
		(39) NAV VERT CLEARANCE (ft.)	0
		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
		(40) NAV HORIZONTAL CLEARANCE (ft.)	0

Structural

BRIDGE GROUP

WEARING SURFACE THICKNESS WEATHERING STEEL PIN / HANGER STAY IN PLACE FORMS STEEL TONS (41) STRUCTURE
OPEN/POSTED/CLOSED**Location**ROAD / ROUTE NAME SECTION ZONE **Seismic**SEISMIC SEISMIC YEAR / ZONE **Notification**SCHOOL DISTRICT EMAIL OWNER EMAIL LATE REASON **Forms**

Report Info

Report Sections

Pictures/Files

Location Map

Asset Files

Inventory & Condition

National Bridge Inventory

Under Records

Element Inspection

Notes

Executive Summary

Notes

Appraisal and Rating

Load Rating

NBI Calculations

NBI Error Check

Inspector:

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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.	2805	sq. ft.	1725	0	1080	0
1120 - Efflorescence/Rust Staining		1080				1080	
510 - Wearing Surfaces		2448	sq. ft.	1740	0	708	0
3220 - Crack (Wearing Surface)		708				708	
107 - Steel Open Girder/Beam	1- Ben.	510	ft.	0	346	139	25
1000 - Corrosion		510			346	139	25
515 - Steel Protective Coating		3567	sq. ft.	0	0	1996	1571
3440 - Effectiveness (Steel Protective Coatings)		3567				1996	1571
215 - Reinforced Concrete Abutment	1- Ben.	67	ft.	0	67	0	0
6000 - Scour		67			67		
227 - Reinforced Concrete Pile	1- Ben.	8	each	0	8	0	0
1190 - Abrasion/Wear (PSC/RC)		8			8		
234 - Reinforced Concrete Pier Cap	1- Ben.	50	ft.	43	0	7	0
1080 - Delamination/Spall/Patched Area		4				4	
1120 - Efflorescence/Rust Staining		3				3	
311 - Movable Bearing	1- Ben.	15	each	0	0	15	0
1000 - Corrosion		15				15	
313 - Fixed Bearing	1- Ben.	15	each	0	0	15	0
1000 - Corrosion		15				15	
330 - Metal Bridge Railing	1- Ben.	208	ft.	0	208	0	0
1000 - Corrosion		208			208		

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 1/19/2011 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Channel has heavy embankment erosion under and adjacent to span 1.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description

Inspector:

Structure Number: 02718

Inspection Date:

Facility Carried: SH 135-05- LM 4.45

Bridge Inspection Report

Maintenance Needs

Date Reported: 1/19/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Rt bridge rail end post at bent 1 is missing.

Several bridge rail posts have cracks and/or spalls. Some have rebar exposed.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 1/19/2011 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Steel superstructure has paint deterioration and corrosion throughout. Ends of girders have areas of section loss. Diaphragms at ends of spans have heavy section loss.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 1/19/2011 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Moveable and fixed bearings have heavy rust, pack rust, and section loss.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: 02718

Inspection Date:

Facility Carried: SH 135-05- LM 4.45

Bridge Inspection Report

Maintenance Needs

Date Reported: 1/25/2013 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Span 1 bent 2 girder 3 has a 9" x 1" hole rusted thru web below haunch.

Span 1 bent 2 girder 4 has 4.5' of section loss (1/8" – 3/16") along bottom of web, and a 6" x 1" hole rusted thru web below haunch.

Span 2 bent 3 girder 1 has 2' of 1/8" section loss along end of web and bottom flange.

Span 2 bent 3 girder 5 has 15" of section loss along bottom of web with three 1.5" holes rusted through at old diaphragm connection.

Span 3 bent 4 girder 1 has 1/8" section loss at web below haunch and at diaphragm connection.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description

Inspector:

Inspection Date:

Structure Number: 02718

Facility Carried: SH 135-05- LM 4.45

Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description

Inspector:

Structure Number: 02718

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 1/27/2015 12:00:00 AM

Priority: B - Pressing; 6 month completion goal

Work Code:

Deficiency Description:

Span 1 bent 1 girder 5 has 3.5' of heavy section loss at web below haunch, at diaphragm connection, and along bottom of web.

Span 2 bent 2 girder 1 has 3' of 1/8" section loss along bottom of web and bottom flange. 1' on end has heavy section loss at web below haunch and diaphragm connection. Web has a slight bow below haunch. Approx. 15' of girder has section loss along top and bottom flange.

Span 2 girder 5 has areas of heavy section loss along top and bottom flange and bottom of web throughout span.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description

Stage: Assigned



PHOTO 2 Description

Inspector:

Inspection Date:

Structure Number: 02718

Facility Carried: SH 135-05- LM 4.45

Bridge Inspection Report

Maintenance Needs

Stage: Assigned



PHOTO 3 Description

Stage: Assigned



PHOTO 4 Description

Stage: Assigned



PHOTO 5 Description

Inspector:

Structure Number: 02718

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 03/13/2018

Priority: CF - Critical Finding

Work Code:

Deficiency Description:

Span 1 bent 1 girder 1 has 4' of heavy section loss and holes rusted through bottom of web with a 3" crack at end of girder. Girder has 1' on end with heavy section loss at web below haunch and at diaphragm connection. Web is beginning to buckle.

Span 1 bent 2 girder 1 has 7' of heavy section loss along bottom of web and bottom flange. Interior bottom flange is beginning to knife edge with 3/16" remaining on edge. End of girder has 1' of heavy section loss with a 6" diameter hole rusted thru web below haunch.

Span 1 bent 2 girder 5 has 5' of heavy section loss with holes rusted thru bottom of web. Interior bottom flange is knife edged with holes rusted thru. Web below haunch has a 14" x 3" hole rusted thru. Web has holes rusted thru at diaphragm connection. Web is buckling.

Span 2 bent 2 girder 5 has 4' of heavy section loss at end with holes rusted through web below haunch, at diaphragm connection, and along bottom of web. Web is buckled at end.

Work Description:

Date Repairs Completed:

Maintenance Comments:

reviewing with District Bridge Crew - KAW 3/29/18

Stage: Monitor



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description

Inspector:

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description

Stage: Monitor

Stage: Monitor



PHOTO 5 Description

Stage: Monitor



PHOTO 4 Description



PHOTO 6 Description

Inspector:

Inspection Date:

Structure Number: 02718

Facility Carried: SH 135-05- LM 4.45

Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 7 Description