

Bridge Inspection Report

01891

US 412-07- LM 6.41

over

FLAT BOARD ROAD SLOUGH



Inspection Date:

Inspected By:

Inspection Type(s):

TABLE OF CONTENTS

	PAGE NUMBER
LOCATION MAP	3
NATIONAL BRIDGE INVENTORY	9
ELEMENTS	10
PICTURES	11
SKETCHES	13

Inspector:

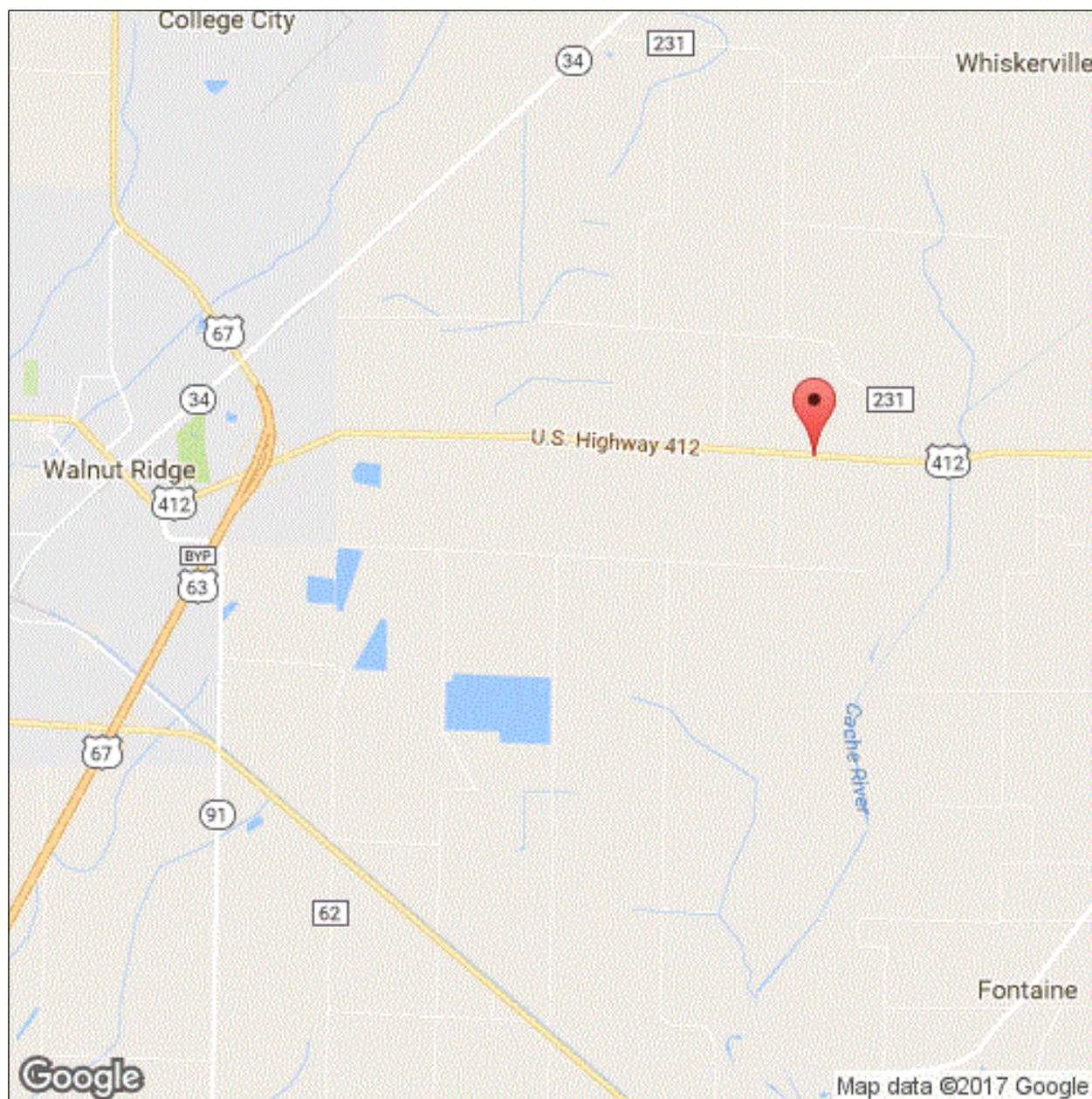
Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Location Map



Latitude: 36.06999796741778

Longitude: -90.84620996114415

Inspector:

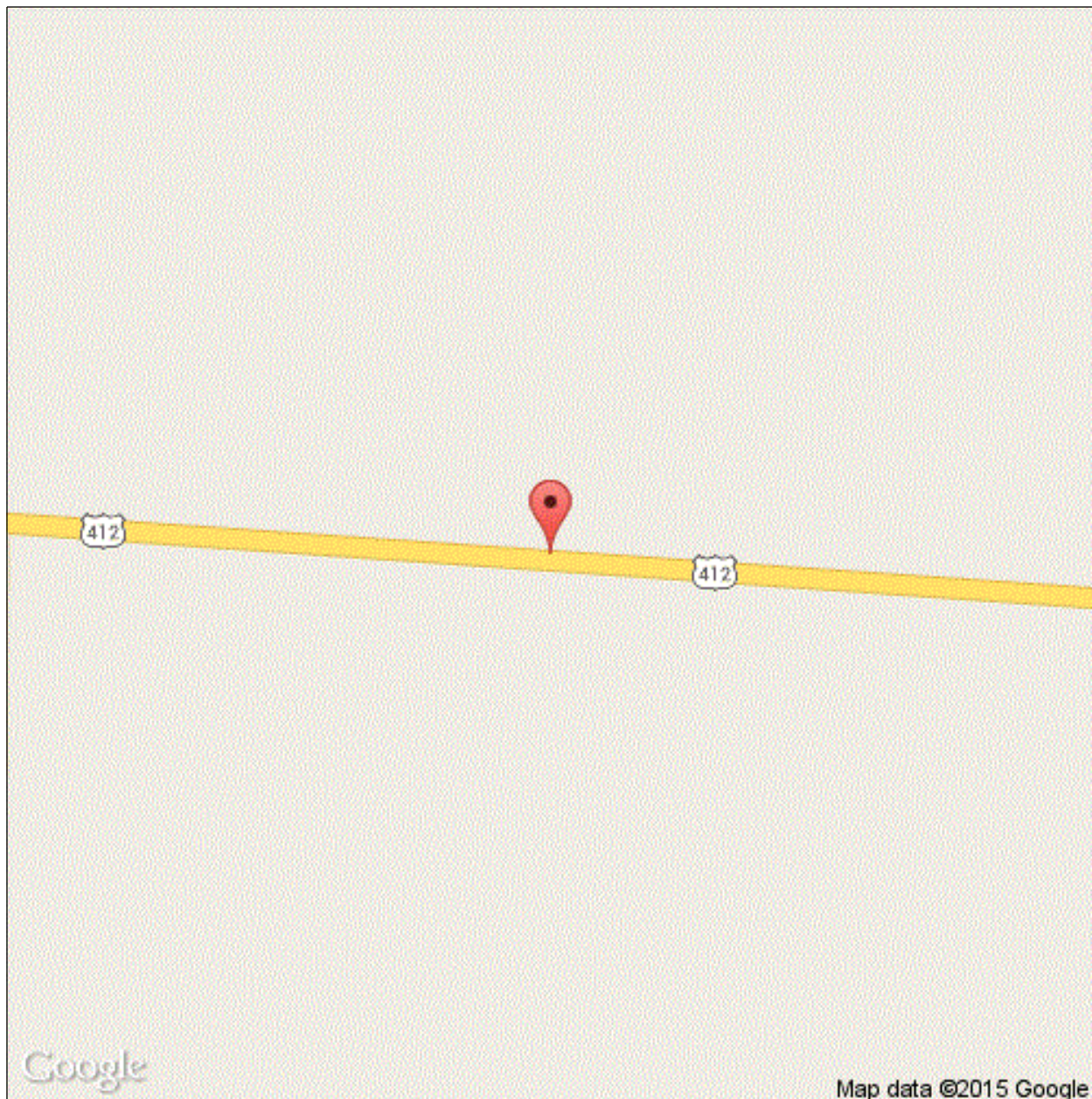
Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Location Map



Latitude: 36.06999796741778

Longitude: -90.84620996114415

Inspector:

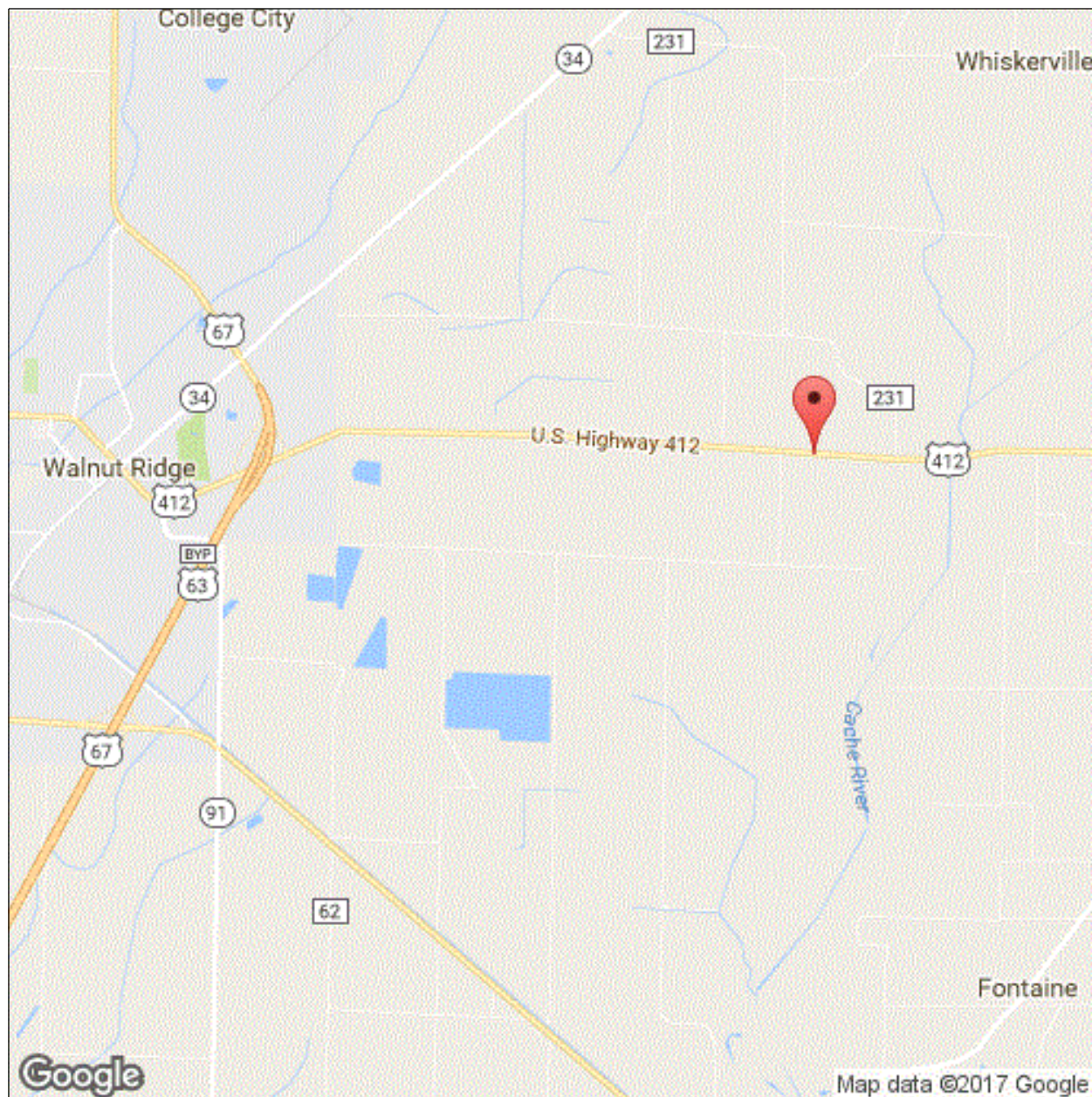
Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Location Map



Latitude: 36.06999796741778

Longitude: -90.84620996114415

Inspector:

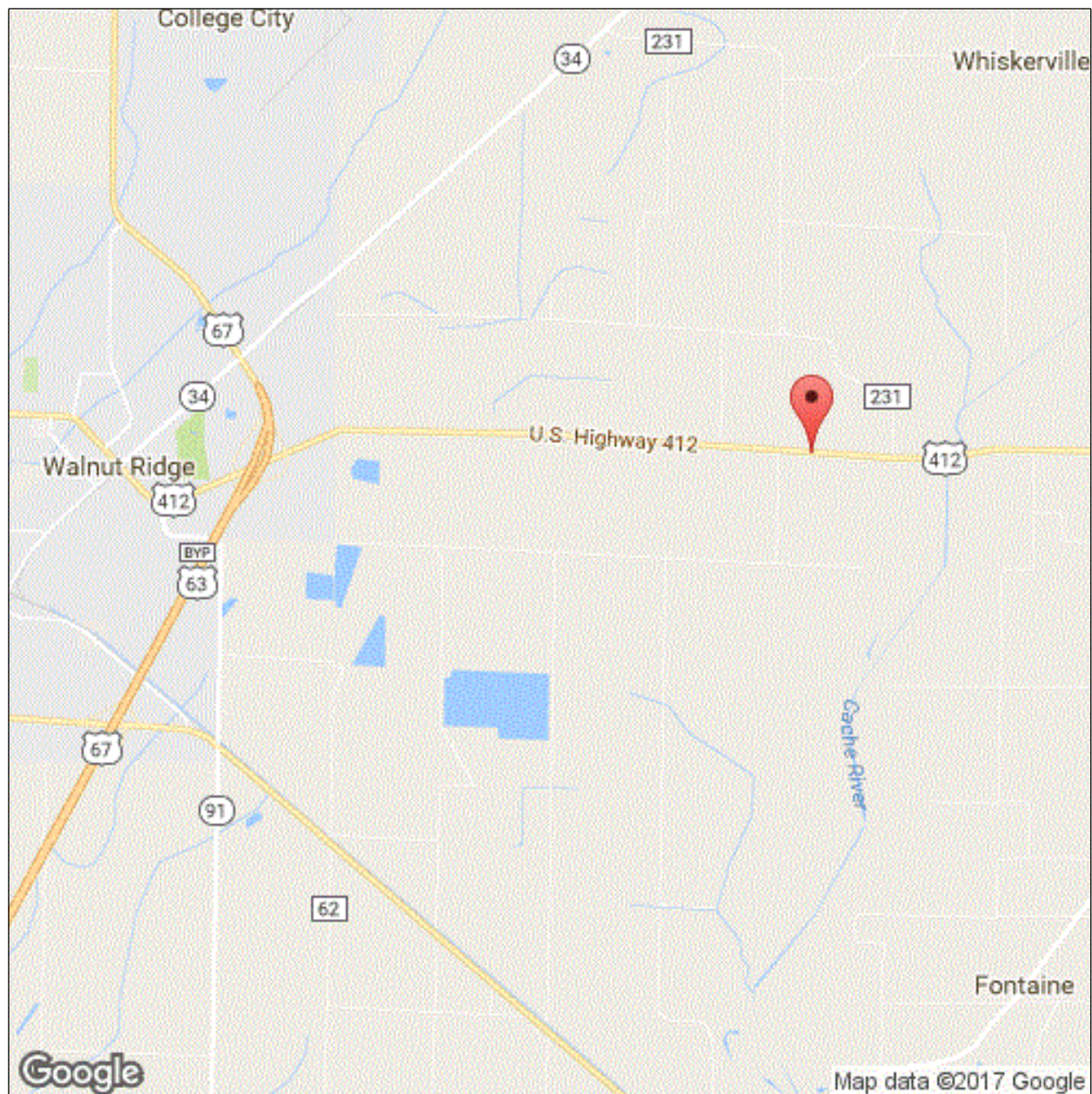
Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Location Map



Latitude: 36.06999796741778

Longitude: -90.84620996114415

Inspector:

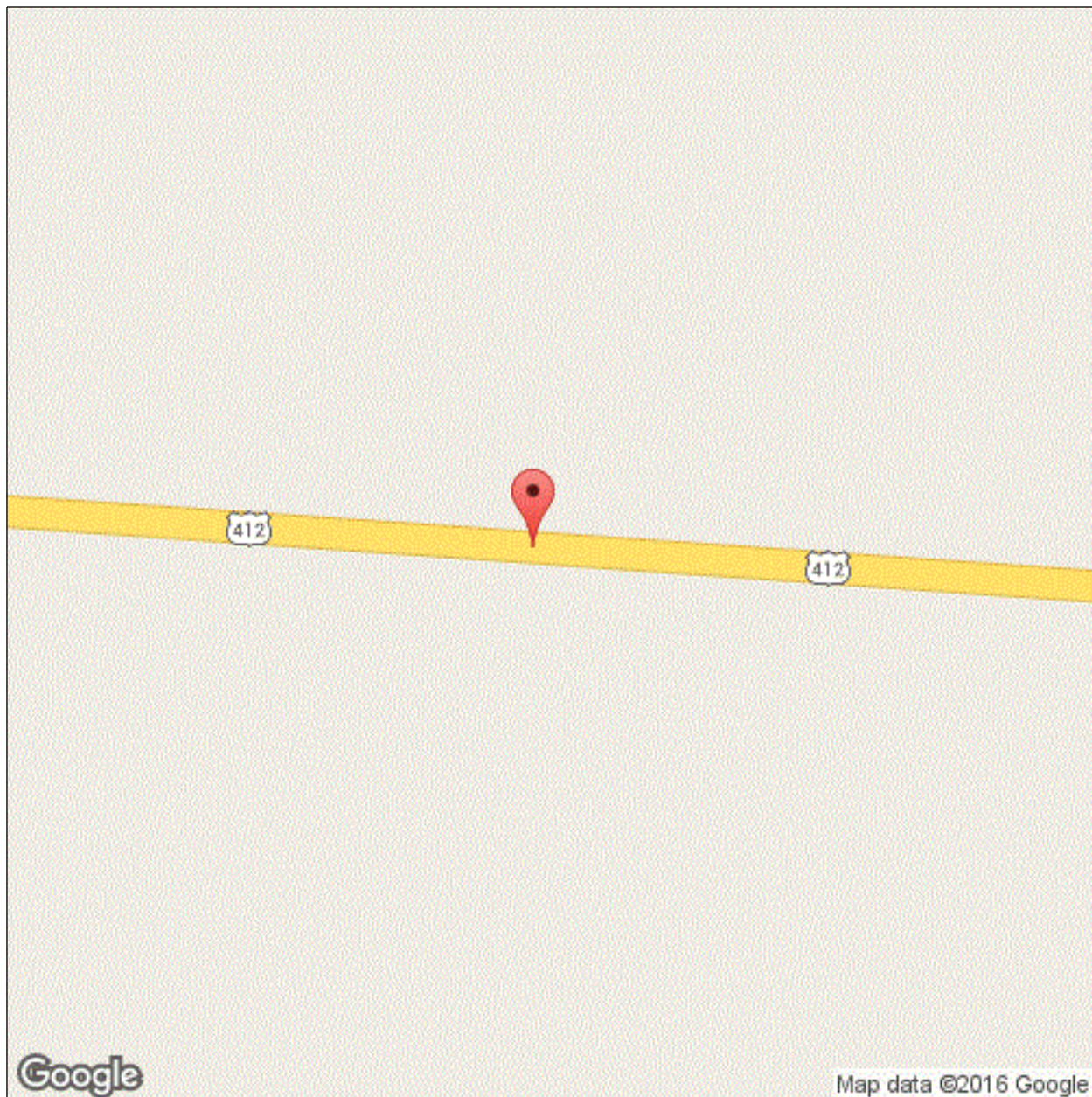
Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Location Map



Latitude: 36.06999796741778

Longitude: -90.84620996114415

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Executive Summary

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	07/16/2018
(8) STRUCTURE NUMBER	01891	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 2 1 412 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	10 (3) COUNTY CODE 075	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	FLAT BOARD ROAD SLOUGH	C. OTHER SPECIAL	Y 24 06/26/2017
(7) FACILITY CARRIED	US 412-07- LM 6.41		
(9) LOCATION	1.26 MI W OF GREENE CO		
(11) MILEPOINT 6.410	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000412070 (13B) SUBROUTE NUMBER 01		
(16) LATITUDE 36.06999796741778	(17) LONGITUDE -90.84620996114415		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	4
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(59) SUPERSTRUCTURE	4
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(60) SUBSTRUCTURE	7
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	7
A) KIND OF MATERIAL/DESIGN: 0 - Other		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 4	(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 1934	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	2
(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	44
(29) AVERAGE DAILY TRAFFIC 3000	(19) BYPASS DETOUR LENGTH 4	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	26
(109) AVERAGE DAILY TRUCK TRAFFIC 22		(70) BRIDGE POSTING	5
GEOMETRIC DATA		(41) STRUCTURE OPEN/POSTED/CLOSED	A
(48) LENGTH OF MAX SPAN (ft.) 25	(49) STRUCTURE LENGTH (ft.) 102		
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0	RIGHT 0		
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	24.0		
(52) DECK WIDTH, OUT-TO-OUT (ft.)	25.5		
(32) APPROACH ROADWAY WIDTH (ft.)	40.0		
(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		APPRAISAL	
(75A) TYPE OF WORK PROPOSED 31	(75B) WORK DONE BY 1	(67) STRUCTURAL EVALUATION	4
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 129.0		(68) DECK GEOMETRY	2
(94) BRIDGE IMPROVEMENT COST (\$)	0	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(95) ROADWAY IMPROVEMENT COST (\$)	176	(71) WATERWAY ADEQUACY	8
(96) TOTAL PROJECT COST	423	(72) APPROACH ROADWAY ALIGNMENT	8
(97) YEAR OF IMPROVEMENT COST ESTIMATE 2003		(36) TRAFFIC SAFETY FEATURE	
(114) FUTURE ADT 4600	(115) YEAR OF FUTURE ADT 2033	36A) BRIDGE RAILINGS:	1
		36B) TRANSITIONS:	1
		36C) APPROACH GUARDRAIL:	1
		36D) APPROACH GUARDRAIL ENDS:	1
		(113) SCOUR CRITICAL BRIDGES	5
		SUFFICIENCY RATING	39.9
		STATUS	1
		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	1
		(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

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

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.	2589	sq. ft.	1029	0	1560	0
1120 - Efflorescence/Rust Staining		1560				1560	
510 - Wearing Surfaces		2436	sq. ft.	2280	0	156	0
3210 - Delamination/Spall/Patched Area/Pothole (Wearing Surfaces)		36				36	
3220 - Crack (Wearing Surface)		120				120	
107 - Steel Open Girder/Beam	1- Ben.	500	ft.	185	185	80	50
1000 - Corrosion		315			185	80	50
515 - Steel Protective Coating		3502	sq. ft.	212	1217	1217	856
3440 - Effectiveness (Steel Protective Coatings)		3290			1217	1217	856
215 - Reinforced Concrete Abutment	1- Ben.	94	ft.	94			
227 - Reinforced Concrete Pile	1- Ben.	12	each	0	12	0	0
1190 - Abrasion/Wear (PSC/RC)		12			12		
234 - Reinforced Concrete Pier Cap	1- Ben.	74	ft.	69	3	2	0
1080 - Delamination/Spall/Patched Area		3			3		
1090 - Exposed Rebar		2				2	
301 - Pourable Joint Seal	1- Ben.	120	ft.	120			
311 - Movable Bearing	1- Ben.	20	each	0	0	0	20
1000 - Corrosion		20			0		20
313 - Fixed Bearing	1- Ben.	20	each	0	0	0	20
1000 - Corrosion		20			0		20
330 - Metal Bridge Railing	1- Ben.	203	ft.	203			

Inspector:
Inspection Date:

Structure Number: 01891
Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Pictures

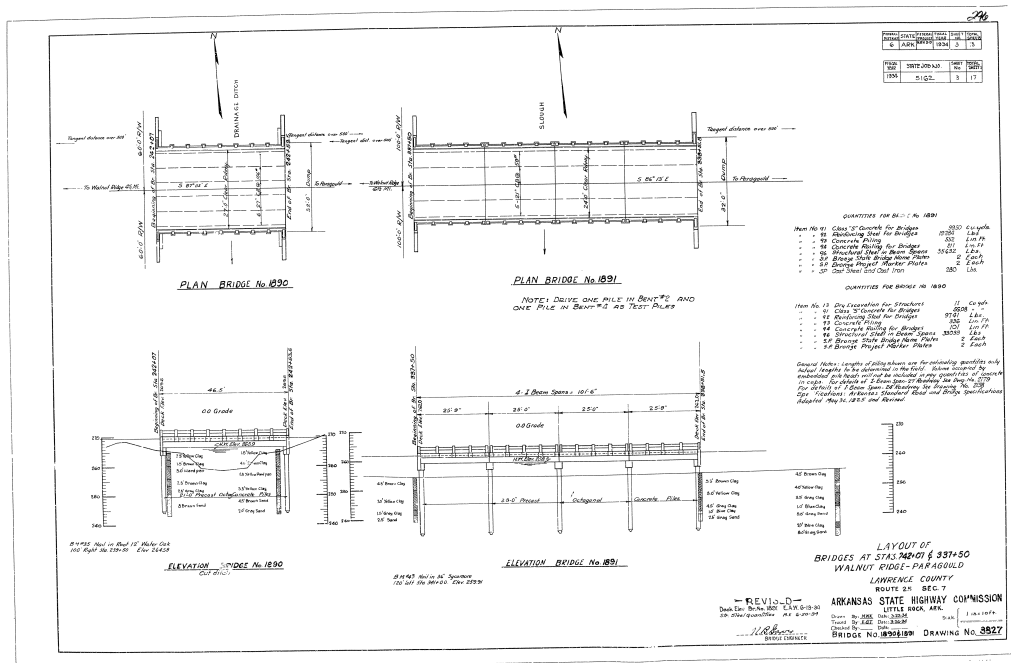


PHOTO 1
Description layout

PHOTO 1
Description

Structure Number: 01891

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Pictures

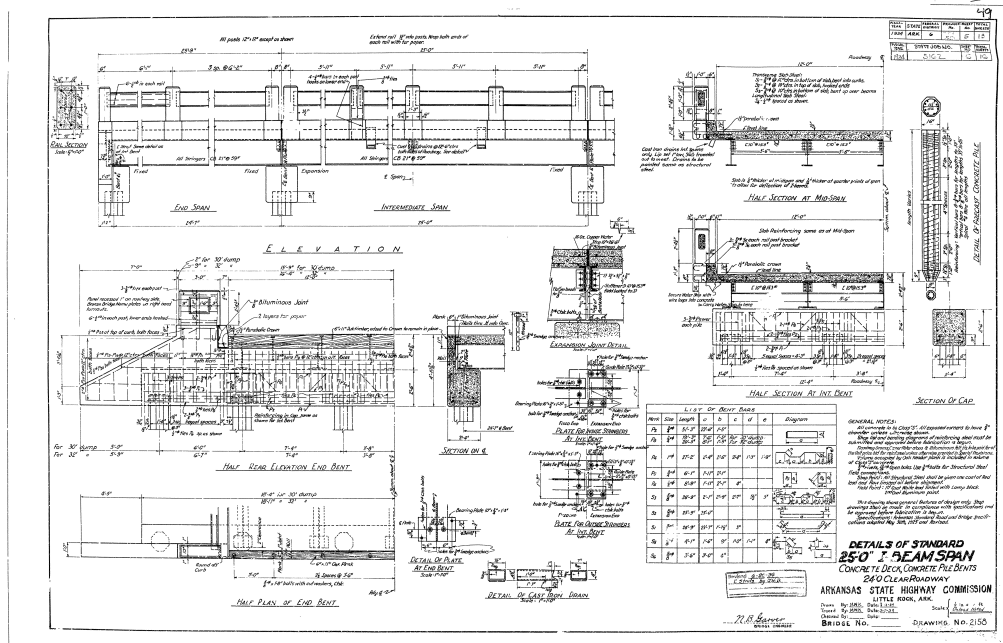


PHOTO 2

Description	span detail
-------------	-------------

Inspector:

Inspection Date:

Structure Number: 01891

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Sketches

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/16/2018

Priority: C - Important

Work Code:

Deficiency Description:

Soffit has excessive number of cracks with efflorescence, rust stains, and heavy buildup, especially under gutters. Overhangs, outside edge of curbs, and bottoms of bridge rail posts have numerous cracks with efflorescence and concrete disintegration.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/16/2018

Priority: B - Pressing; 6 month completion goal

Work Code:

Deficiency Description:

Girders have several areas where top flange has separated from deck, especially near bents 1 and 2. Deck has some deflection and moving under traffic. Span 1 bent 2 girder 3 has 1.5" of separation between top flange and deck. Span 2 bent 2 girder 3 has 1" of separation between top flange and deck.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description

Stage: Assigned



PHOTO 2 Description

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/16/2018

Priority: B - Pressing; 6 month completion goal

Work Code:

Deficiency Description:

Span 1 bent 2 girder 5 has a 4" x ¾" hole in bottom of web. Lt bottom flange has 3" x 4" hole near bearing. Rt bottom flange has a 1.5" diameter hole near bearing.

Span 3 bent 4 girder 1 has a 5" x up to 2.5" hole in top of web near diaphragm connection.

Span 4 bent 4 girder 1 has a 5" x 3" hole in web 2.5" up from bottom flange at old T-splice. End of web over splice is knife edged.

Span 4 bent 4 girder 5 has heavy section loss along bottom of web with a ½" diameter hole 4" from end of girder. Lt bottom flange has a 4.5" x 4" hole near bearing. Rt bottom flange has a 1" x 4" hole near bearing.

Span 4 bent 5 girder 3 has heavy section loss on end with a ½" diameter hole in bottom of web. End of web has a slight bow. Lt and Rt bottom flanges are knife edged with 5" x 1" holes.

Span 4 bent 5 girder 4 has a 4.5" x up to 4" hole in Lt bottom flange. Rt bottom flange has a 4" x 1" hole near bearing.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Will continue to monitor - this bridge scheduled for demolition in construction project this year - KAW

Stage: Monitor

Stage: Monitor



PHOTO 1 Description



PHOTO 2 Description

Inspector:

Inspection Date:

Structure Number: 01891

Facility Carried: US 412-07- LM 6.41

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:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/21/2014 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Majority of girders have section loss on ends over caps. Girders have areas of section loss along top and bottom flanges from leakage through deck.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/21/2014 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Majority of diaphragms have advanced section loss. Several have holes rusted through. Some are rusted completely into.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/21/2014 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Approach roadway has settlement in Rt lane at bent 1 end.

Asphalt wearing surface has several cracks.

Wearing surface has areas of map cracks with depressions along joint at bent 3, middle of span 3, and along joint at bent 4.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 7/21/2014 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Bridge rail endposts and wing walls have cracks and spalls with some rebar exposed.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/16/2018

Priority: C - Important

Work Code:

Deficiency Description:

Span 1 bent 1 girder 1 has been T-spliced in the past, but end of splice has section loss with a 3" diameter hole.

Span 1 bent 1 girder 5 has a 4.5" x 3" hole in bottom flange. Bottom flange has 2' ahead of cap that is knife edged.

Span 3 bent 3 girder 1 has 1' of heavy section loss along bottom of web.

Span 3 bent 3 girder 2 bottom is bowed up from pack rust.

Span 3 bent 3 girder 4 has minor section loss along bottom of web.

Span 3 bent 3 girder 5 has 2' of moderate section loss along bottom of web.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Stage: Open



PHOTO 2 Description

Inspector:

Structure Number: 01891

Inspection Date:

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/16/2018

Priority: CF - Critical Finding

Work Code:

Deficiency Description:

Span 1 bent 2 girder 1 has a 12" x up to 2" hole/crack in bottom of web. Beam is crushed, bottom flange is bearing directly on cap. Lt bottom flange has a 1" x 4" hole/crack near bearing. Rt bottom flange has a 2" x 4" hole near bearing. Span 2 bent 2 girder 1 has a 8" x up to 1" hole/crack in bottom of web. Web is crushing, bottom flange is bearing directly on cap. Lt bottom flange has a 2" x 4" hole near bearing. Rt bottom flange has a 4" x up to 4" hole near bearing.

Work Description:

Date Repairs Completed:

Maintenance Comments:

this structure scheduled for replacement and to be let to contract 9/2018. Will monitor regularly until replacement occurs. KAW 8/8/18

9/6/18 - Reviewed by MAH, Asked Rating to review.

10/8/18 - Reviewed by Michael Hill. Posting lowered by Rating in September but leave as "CF".

11/5/18 - Reviewed by Michael Hill. Leave as "CF".

12/3/18 - Reviewed by Michael Hill. Leave as "CF".

1/2/19 - Reviewed by Michael Hill. Leave as "CF".

Stage: Open



PHOTO 1 Description

Stage: Open



PHOTO 2 Description

Inspector:

Inspection Date:

Structure Number: 01891

Facility Carried: US 412-07- LM 6.41

Bridge Inspection Report

Maintenance Needs

Stage: Open



PHOTO 3 Description