

# Bridge Inspection Report

**02377**  
**US 270-10 LM 0.63**  
**over**  
**Little Creek**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

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Inspector:

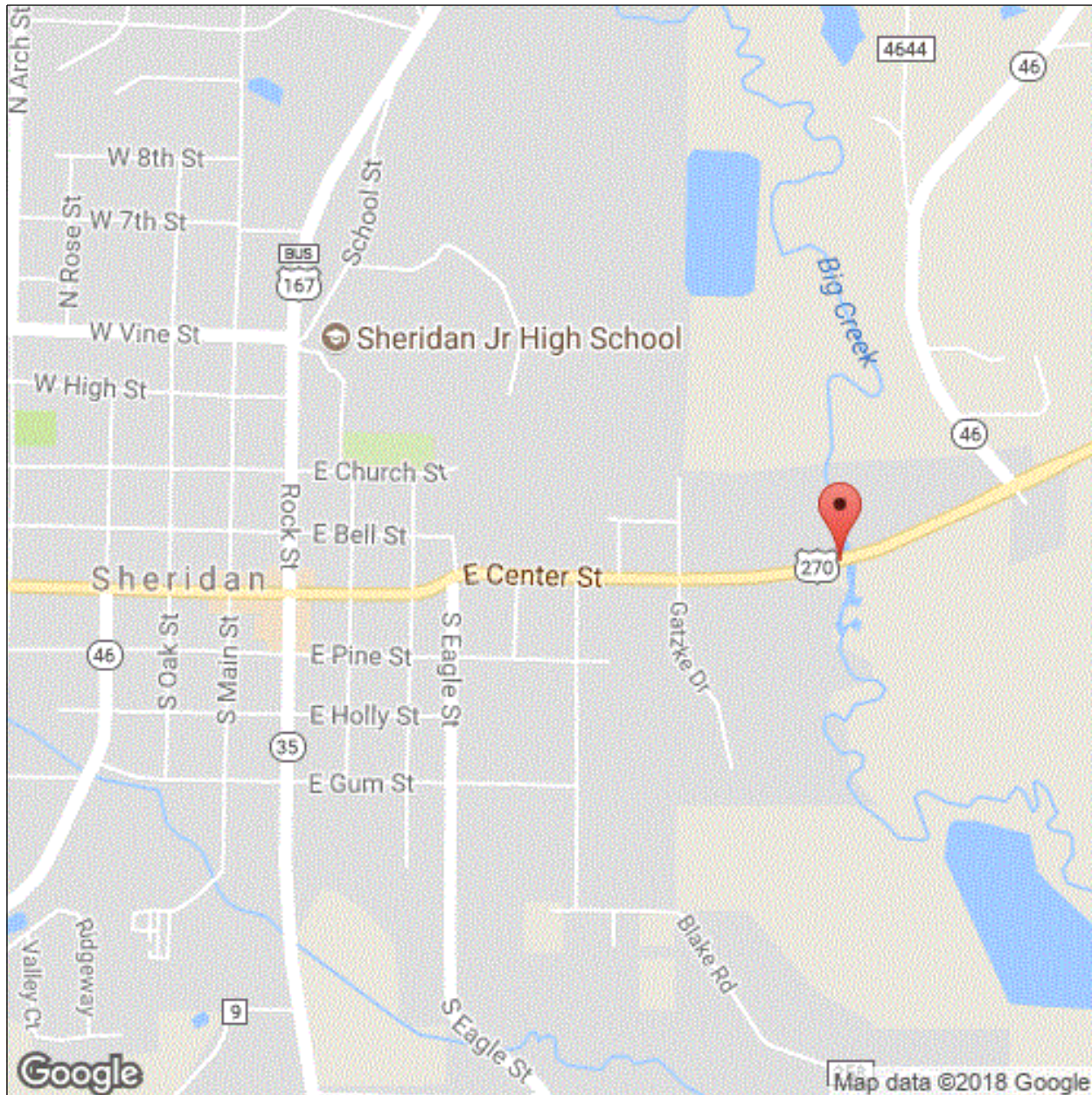
Structure Number: 02377

Inspection Date:

Facility Carried: US 270-10 LM 0.63

## Bridge Inspection Report

### Location Map



Latitude: 34.30731

Longitude: -92.38826



Inspector:

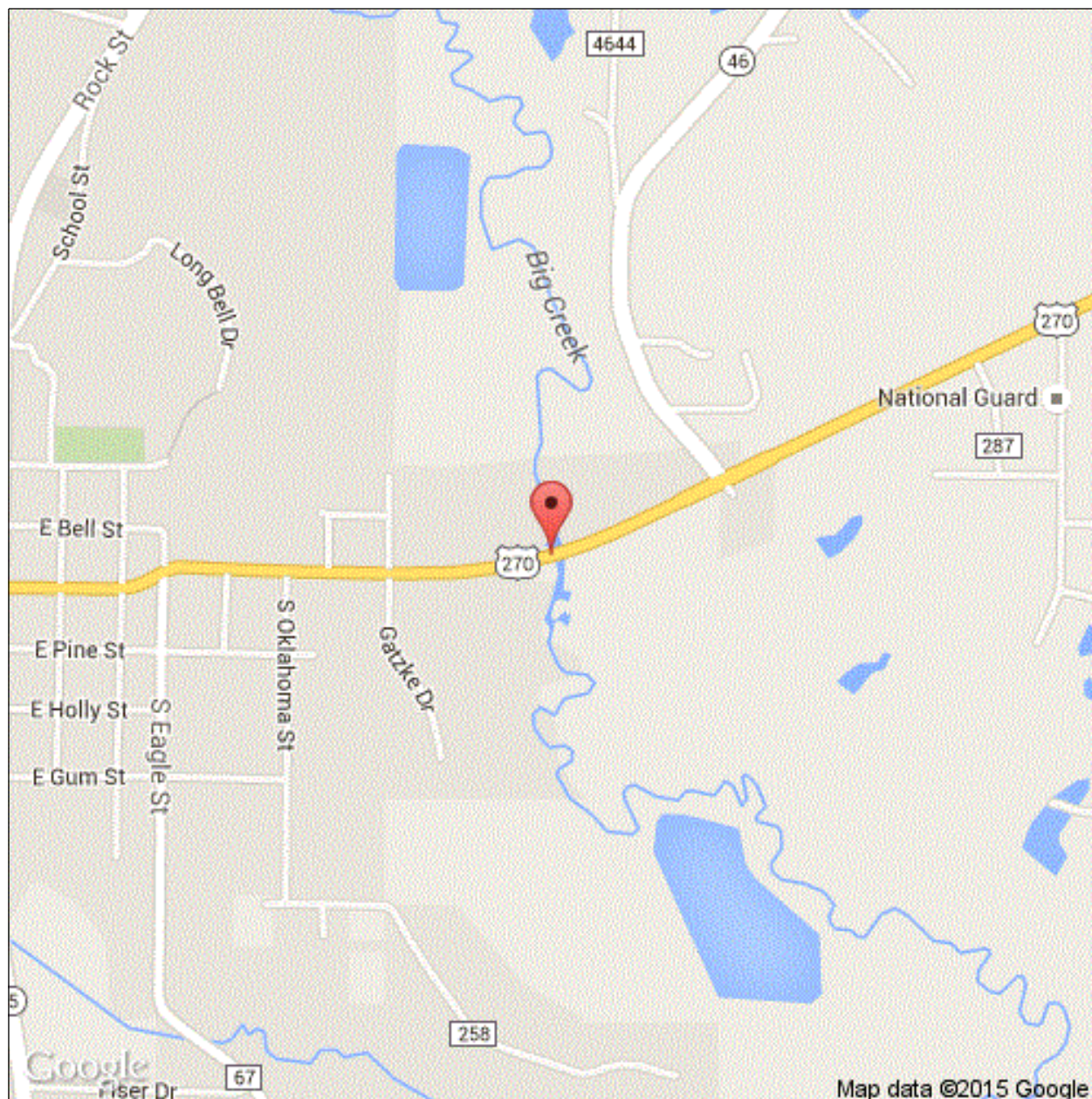
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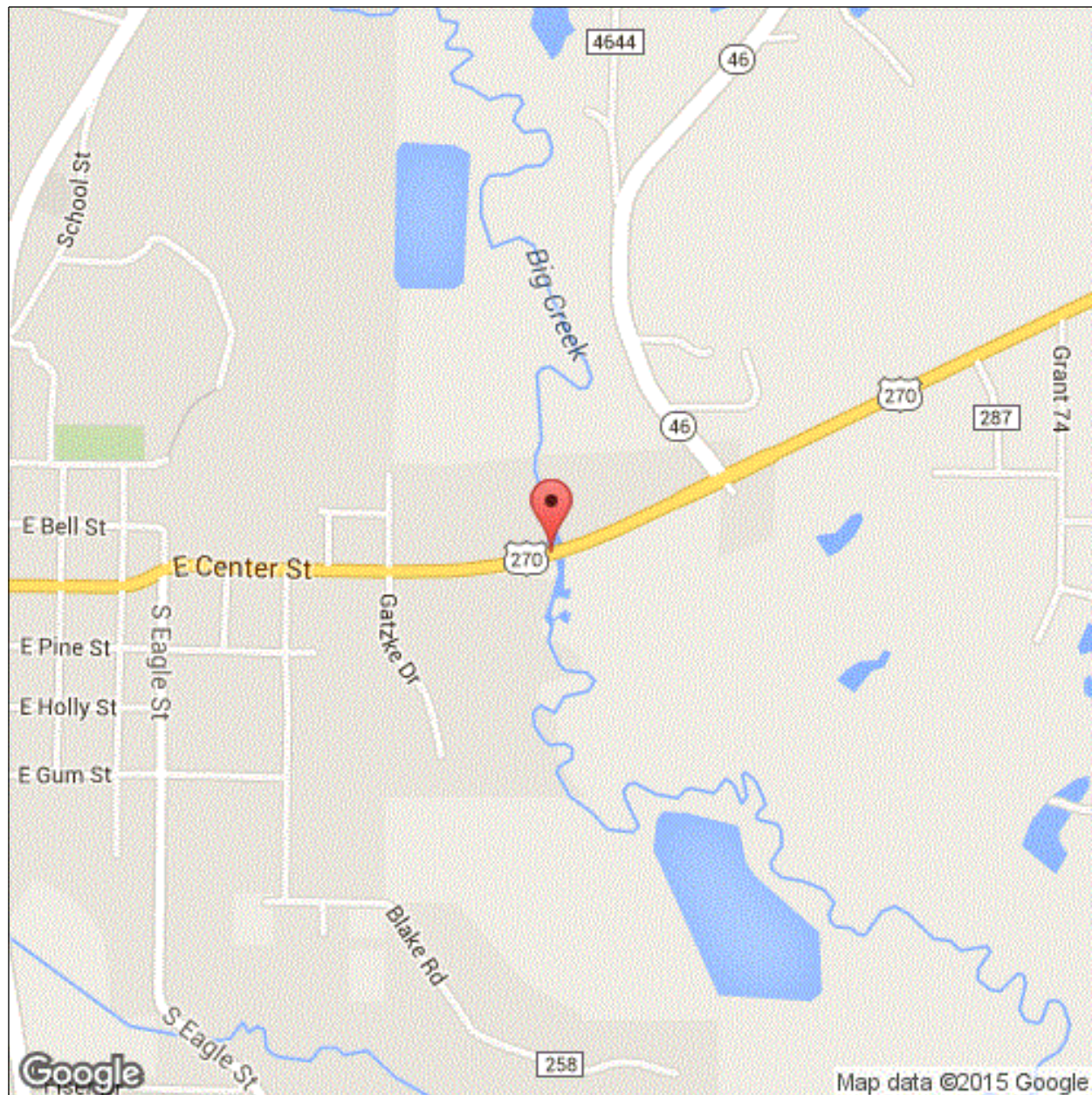
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### Executive Summary

Bridge is logged from west to east.

SPOA: bottom of cap is trigger elevation for flood monitoring program.

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## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	07/19/2016
(8) STRUCTURE NUMBER	02377	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 2 1 270 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	02 (3) COUNTY CODE 053	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	61600	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Little Creek	C. OTHER SPECIAL	Y 24 07/19/2017
(7) FACILITY CARRIED	US 270-10 LM 0.63		
(9) LOCATION	0.63 Mi E US 167-Sheridan		
(11) MILEPOINT 0.630	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000270100 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 34.30731	(17) LONGITUDE -92.38826		
(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	5 (60) SUBSTRUCTURE 7
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION	7 (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 1948	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	4
(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	54.0
(29) AVERAGE DAILY TRAFFIC 9100	(19) BYPASS DETOUR LENGTH 37	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	32.0
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 36	(49) STRUCTURE LENGTH (ft.) 110	(67) STRUCTURAL EVALUATION	5
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 2.1 RIGHT 2.1		(68) DECK GEOMETRY	2
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	25.9	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.)	30.8	(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.)	29.9	(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.)	29.9	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:	1
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9	(113) SCOUR CRITICAL BRIDGES	3
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	SUFFICIENCY RATING	2 STATUS 50.9
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED 31	(75B) WORK DONE BY 1	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	137.0	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	02
(95) ROADWAY IMPROVEMENT COST (\$)	400	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	974	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2004	(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 10549	(115) YEAR OF FUTURE ADT 2028	(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

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## 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.	3388	sq. ft.	3388			
	Deck: 30.8' wide x 110' long. Asphalt wearing surface: Some minor- to moderate-sized transverse cracking at bents (26' x 2 locations @ 1' wide).						
510 - Wearing Surfaces		2838	sq. ft.	2786	52	0	0
3210 - Delamination/Spall/Patched Area/Pothole (Wearing Surfaces)		52			52		
107 - Steel Open Girder/Beam	1- Ben.	550	ft.	312	208	30	0
	Girders: 5 per span / 110' total. Coating: 6.8 square feet per linear feet of girder.  Rust with some section loss on the webs at the ends of most girders at the haunches and around the diaphragm connections. Some rust on the bottom flanges at various locations. (1' each end of each girder = 30' total) Some scattered freckled rust forming, mainly on the outsides of Girders 1 & 5. (104' each girder = 208' total). NOTE: Some spot-painting has been done on ends of girders with plates welded over web in a few places to cover section loss on webs and flanges of girders, but rust is reappearing.						
1000 - Corrosion		238			208	30	
515 - Steel Protective Coating		3740	sq. ft.	816	1306	1414	204
3410 - Chalking (Steel Protective Coatings)		1306			1306		
3440 - Effectiveness (Steel Protective Coatings)		1618				1414	204
215 - Reinforced Concrete Abutment	1- Ben.	76	ft.	76			
	Abutments: 38' each / Bents 1 & 4.						
227 - Reinforced Concrete Pile	1- Ben.	10	each	10			
	Piling: 5 per bent / Bents 2 & 3. Some minor abrasion and loss of mortar, especially near waterline.						
234 - Reinforced Concrete Pier Cap	1- Ben.	60	ft.	60			
	Caps: 30' per bent / Bents 2 & 3.						
311 - Movable Bearing	1- Ben.	15	each	0	0	15	0
	Moveable bearings: 5 per bent / Bent 2 back, Bent 3 back & ahead. Coating: 2 square feet each.  Most bearings have heavy pack rust between rocker and masonry plate, restricting movement. Remaining bearings are covered with rust and pitting and have pack rust and section loss in various locations.						
1000 - Corrosion		15				15	
515 - Steel Protective Coating		30	sq. ft.	0	0	0	30
3440 - Effectiveness (Steel Protective Coatings)		30					30



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## Element Inspection

313 - Fixed Bearing	1- Ben.	15	each	0	0	15	0
Fixed bearings: 5 per bent / Bent 1, Bent 2 ahead, Bent 4. Coating: 2 square feet each.							
Bearings are covered with rust and pitting and have pack rust and section loss in various locations.							
1000 - Corrosion		15				15	
515 - Steel Protective Coating		30	sq. ft.	0	0	0	30
3440 - Effectiveness (Steel Protective Coatings)		30					30
331 - Reinforced Concrete Bridge Railing	1- Ben.	220	ft.	220			
Railing: 110' each side.							

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## Bridge Inspection Report

Pictures

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Inspection Date:

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## Bridge Inspection Report

Sketches



Inspector:

Structure Number: 02377

Inspection Date:

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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 7/18/2012 12:00:00 AM

Priority: C - Important

Work Code: N/A

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#### Deficiency Description:

Bearings – various locations: Most movable bearings have heavy pack rust between rocker and masonry plate, restricting movement. Remaining bearings are covered with rust and pitting and have pack rust and section loss in various locations.

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Monitor



PHOTO 1      Description      Bent 3 Bearings 1A & 1B (corrosion)

Stage: Monitor



PHOTO 2      Description      Bearings 4A & 4B @ Bent 3 (corrosion)

Inspector:

Inspection Date:

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## Bridge Inspection Report

### Maintenance Needs

Stage: Monitor



PHOTO 3      Description      Bent 1 Bearing 3 (corrosion)

Inspector:

Structure Number: 02377

Inspection Date:

Facility Carried: US 270-10 LM 0.63

## Bridge Inspection Report

### Maintenance Needs

Date Reported: 7/30/2014 12:00:00 AM

Priority: C - Important

Work Code: N/A

#### Deficiency Description:

Girders – All spans: Rust with some section loss on the webs at the ends of most girders at the haunches and around the diaphragm connections.

Some rust on the bottom flanges at various locations.

Some scattered freckled rust forming, mainly on the outsides of Girders 1 & 5.

NOTE: Some spot-painting has been done on ends of girders with plates welded over web in a few places to cover section loss on webs and flanges of girders, but rust is reappearing.

#### Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1      Description      Girder 1 left @ Bent 3 (corrosion)

Stage: Monitor



PHOTO 2      Description      Span 3 Girder 4 right (corrosion)



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### Maintenance Needs

Stage: Monitor



PHOTO 3    Description    Span 1 Girder 1 right @ Bent 1  
(corrosion)

Stage: Monitor



PHOTO 4    Description    Girders 2-3 @ Bent 2 (corrosion)