

Bridge Inspection Report

02719

SH 115-01-LM 12.81

over

FOURCHE CRK



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

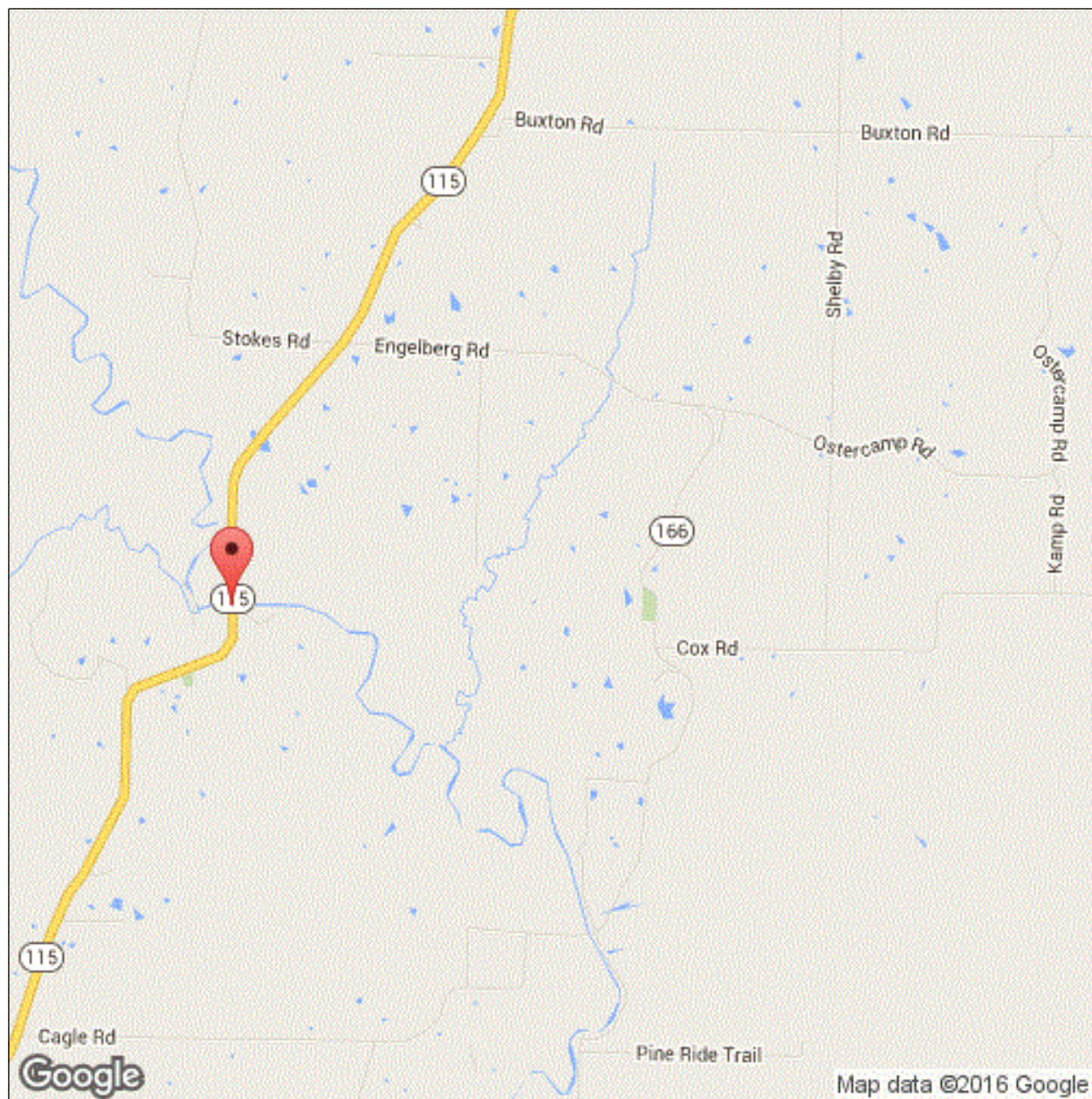
Structure Number: 02719

Inspection Date:

Facility Carried: SH 115-01-LM 12.81

Bridge Inspection Report

Location Map



Latitude: 36.34024

Longitude: -90.94242

Inspector:

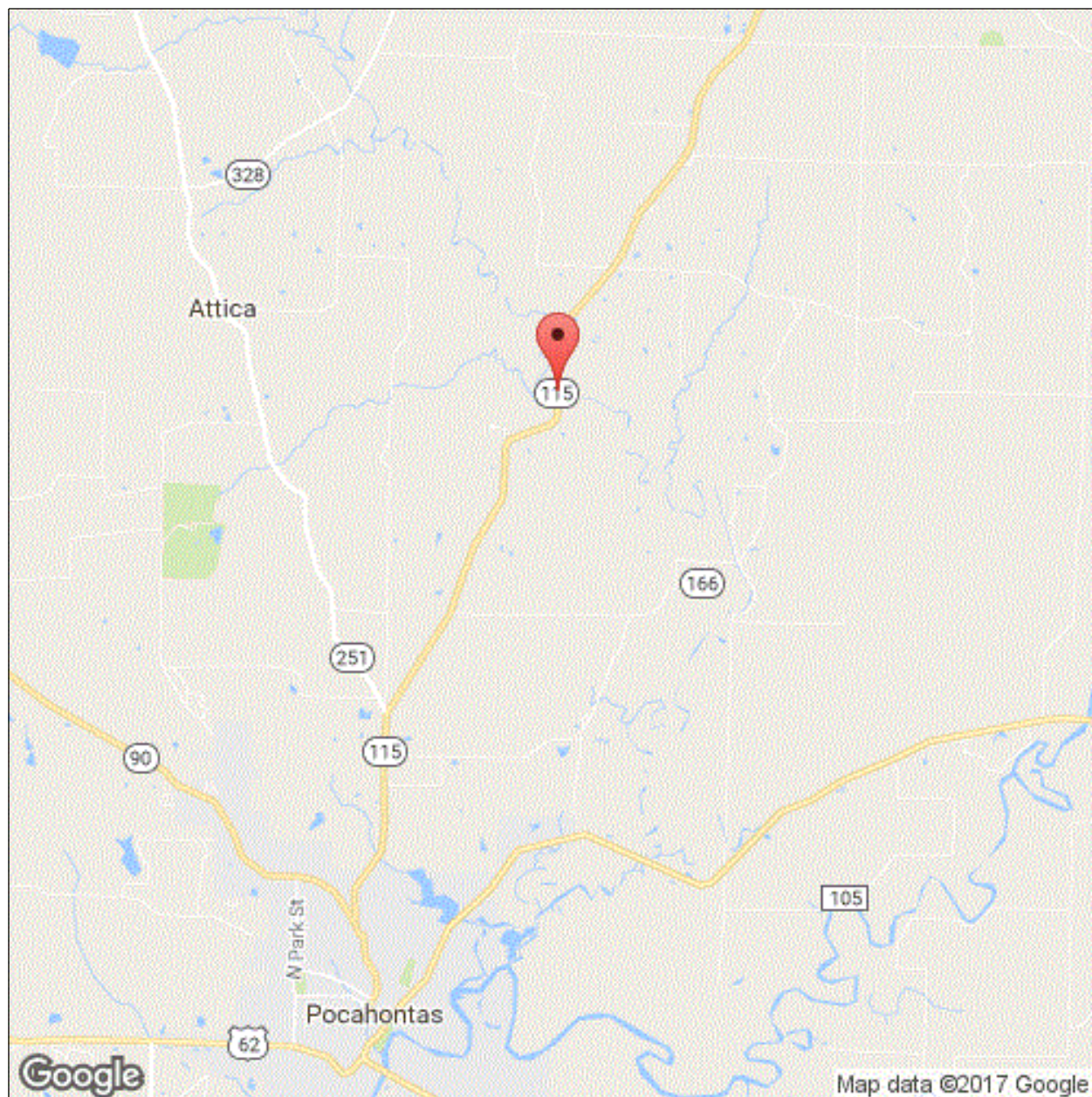
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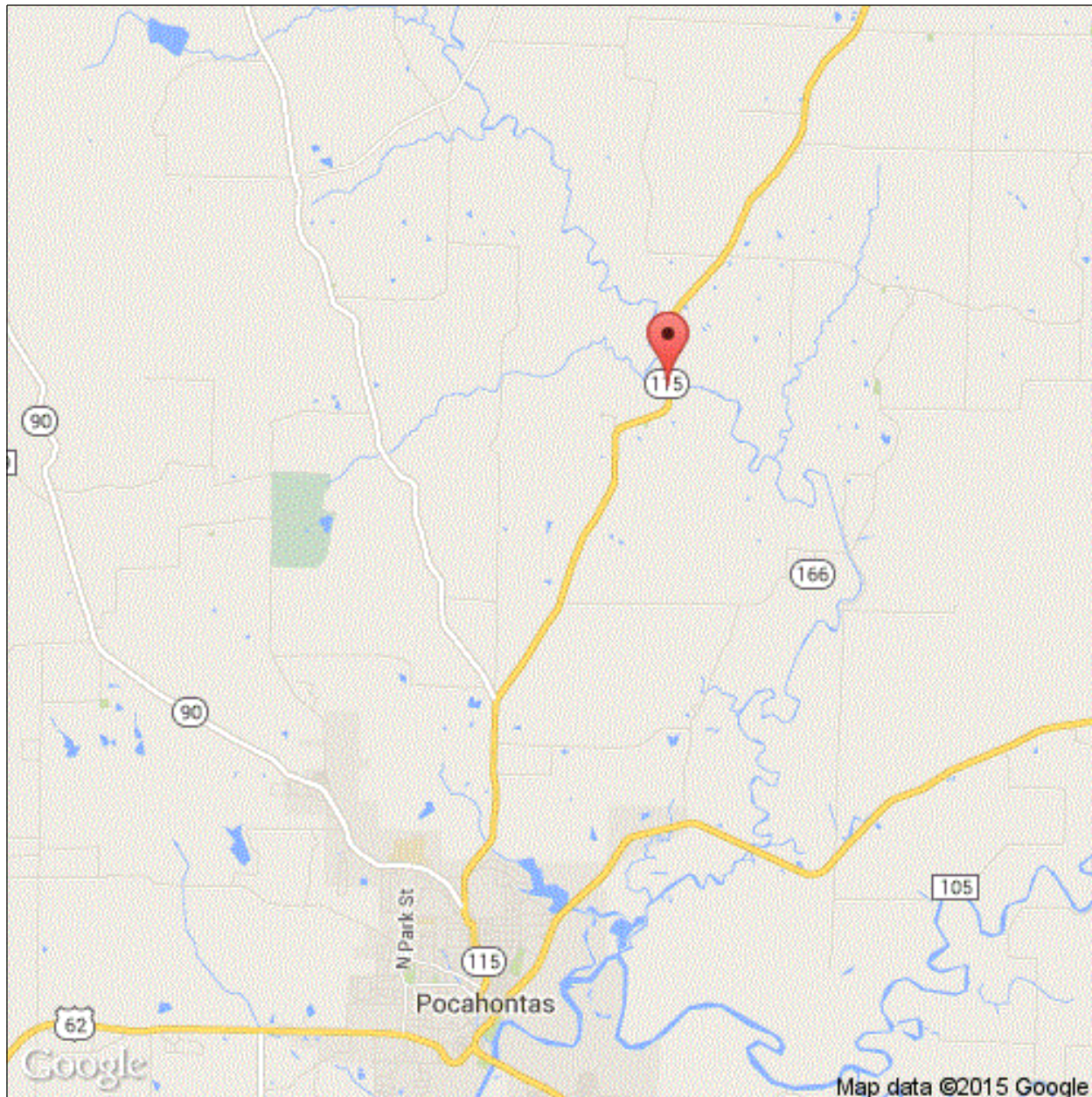
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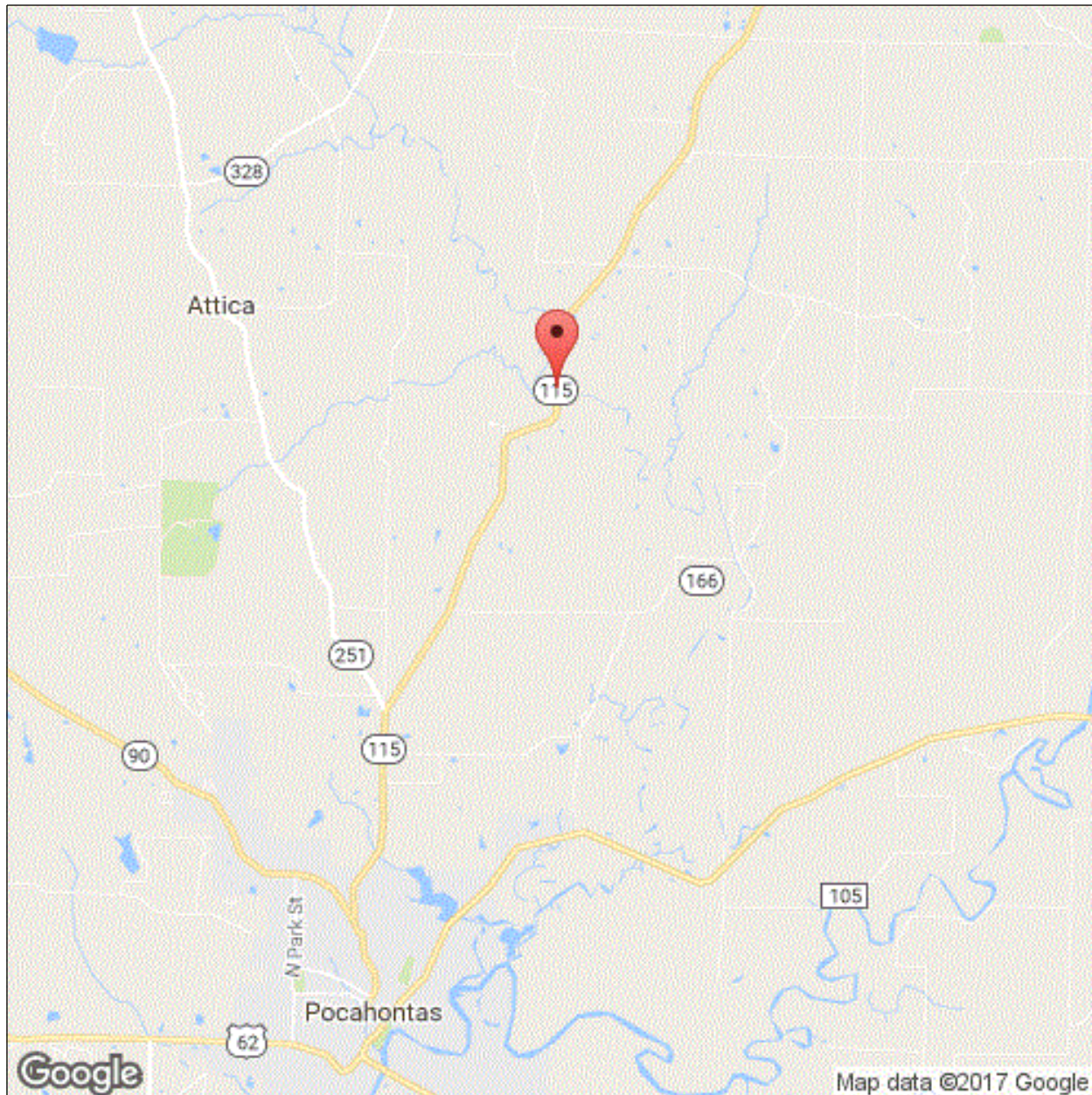
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Bridge Inspection Report

Executive Summary

Inspector:

Structure Number: 02719

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Bridge Inspection Report

National Bridge Inventory

| IDENTIFICATION | | INSPECTIONS | |
|--|--|---|-----------------------|
| (1) STATE CODE | 056 - Arkansas | (90) INSPECTION DATE | 08/27/2019 |
| (8) STRUCTURE NUMBER | 02719 | (91) DESIGNATED INSPECTION FREQUENCY | 24 |
| (5) INV. ROUTE (ON/UNDER) | 1 3 1 115 0 | (92) CRITICAL FEATURE INSPECTION | (93) CFI DATE |
| (2) HIGHWAY AGENCY | 10 (3) COUNTY CODE 121 | A. FRACTURE CRITICAL DETAIL | N |
| (4) PLACE CODE | 00000 | B. UNDERWATER INSPECTION | N |
| (6) FEATURES INTERSECTED | FOURCHE CRK | C. OTHER SPECIAL | N |
| (7) FACILITY CARRIED | SH 115-01-LM 12.81 | | |
| (9) LOCATION | 1.10 MI S OF STOKES | | |
| (11) MILEPOINT 12.810 | (12) BASE HIGHWAY NETWORK 1 | | |
| (13A) LRS INVENTORY ROUTE | 0000115010 (13B) SUBROUTE NUMBER 01 | | |
| (16) LATITUDE 36.34024 | (17) LONGITUDE -90.94242 | | |
| (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 | 6 (60) SUBSTRUCTURE 6 |
| 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 8 | (46) NUMBER OF APPROACH 0 | | |
| (107) DECK STRUCTURE TYPE 1 | (108A) WEARING SURFACE 1 | | |
| (108B) DECK MEMBRANE 0 | (108C) DECK PROTECTION 0 | | |
| AGE OF SERVICE | | LOAD RATING AND POSTING | |
| (27) YEAR BUILT 1951 | (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 | 39 |
| (29) AVERAGE DAILY TRAFFIC 2800 | (19) BYPASS DETOUR LENGTH 4 | (65) METHOD USED TO DETERMINE INVENTORY RATING | 1 |
| (30) YEAR OF AVERAGE DAILY TRAFFIC 2014 | | (66) INVENTORY RATING | 23 |
| (109) AVERAGE DAILY TRUCK TRAFFIC 1 | | (70) BRIDGE POSTING | 3 |
| | | (41) STRUCTURE OPEN/POSTED/CLOSED | P |
| GEOMETRIC DATA | | APPRAISAL | |
| (48) LENGTH OF MAX SPAN (ft.) 50 | (49) STRUCTURE LENGTH (ft.) 402 | (67) STRUCTURAL EVALUATION | 5 |
| (50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1 RIGHT 1 | | (68) DECK GEOMETRY | 2 |
| (51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) | 24.0 | (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL | N |
| (52) DECK WIDTH, OUT-TO-OUT (ft.) | 26.5 | (71) WATERWAY ADEQUACY | 9 |
| (32) APPROACH ROADWAY WIDTH (ft.) | 27.9 | (72) APPROACH ROADWAY ALIGNMENT | 8 |
| (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.) | 26.2 | 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: | 0 |
| (55) LATERAL UNDER CLEARANCE RIGHT (ft.) | N 99.9 | (113) SCOUR CRITICAL BRIDGES | 5 |
| (56) MIN LATERAL UNDER CLEARANCE (ft.) | 0 | SUFFICIENCY RATING | 63.0 STATUS 2 |
| 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.) | 440 | (104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE | 0 |
| (94) BRIDGE IMPROVEMENT COST (\$) | 0 | (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE | 06 |
| (95) ROADWAY IMPROVEMENT COST (\$) | 156 | (100) STRAHNET HIGHWAY DESIGNATION | 0 |
| (96) TOTAL PROJECT COST | 1080 | (101) PARALLEL STRUCTURE DESIGNATION | N |
| (97) YEAR OF IMPROVEMENT COST ESTIMATE | 2002 | (102) DIRECTION OF TRAFFIC | 2 |
| (114) FUTURE ADT 3540 | (115) YEAR OF FUTURE ADT 2028 | (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 |

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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. | 10189 | sq. ft. | 3955 | 3496 | 2738 | 0 |
| 1080 - Delamination/Spall/Patched Area | | 259 | | 0 | 30 | 229 | 0 |
| 1090 - Exposed Rebar | | 37 | | 0 | 0 | 37 | 0 |
| 1130 - Cracking (RC and Other) | | 2738 | | 0 | 266 | 2472 | 0 |
| 1190 - Abrasion/Wear (PSC/RC) | | 3200 | | 0 | 3200 | 0 | 0 |
| 107 - Steel Open Girder/Beam | 1- Ben. | 2000 | ft. | 1920 | 0 | 80 | 0 |
| 1000 - Corrosion | | 80 | | 0 | 0 | 80 | 0 |
| 515 - Steel Protective Coating | | 16494 | sq. ft. | 15901 | 475 | 59 | 59 |
| 3440 - Effectiveness (Steel Protective Coatings) | | 593 | | 0 | 475 | 59 | 59 |
| 205 - Reinforced Concrete Column | 1- Ben. | 4 | each | 4 | 0 | 0 | 0 |
| 210 - Reinforced Concrete Pier Wall | 1- Ben. | 49 | ft. | 39 | 4 | 6 | 0 |
| 1090 - Exposed Rebar | | 6 | | 0 | 0 | 6 | 0 |
| 1120 - Efflorescence/Rust Staining | | 4 | | 0 | 4 | 0 | 0 |
| 215 - Reinforced Concrete Abutment | 1- Ben. | 67 | ft. | 67 | 0 | 0 | 0 |
| 227 - Reinforced Concrete Pile | 1- Ben. | 25 | each | 25 | 0 | 0 | 0 |
| 234 - Reinforced Concrete Pier Cap | 1- Ben. | 173 | ft. | 161 | 5 | 7 | 0 |
| 1090 - Exposed Rebar | | 2 | | 0 | 0 | 2 | 0 |
| 1120 - Efflorescence/Rust Staining | | 3 | | 0 | 0 | 3 | 0 |
| 1130 - Cracking (RC and Other) | | 7 | | 0 | 5 | 2 | 0 |
| 305 - Assembly Joint without Seal | 1- Ben. | 216 | ft. | 216 | 0 | 0 | 0 |
| 311 - Movable Bearing | 1- Ben. | 40 | each | 0 | 40 | 0 | 0 |
| 1000 - Corrosion | | 40 | | 0 | 40 | 0 | 0 |
| 313 - Fixed Bearing | 1- Ben. | 40 | each | 0 | 40 | 0 | 0 |
| 1000 - Corrosion | | 40 | | 0 | 40 | 0 | 0 |
| 330 - Metal Bridge Railing | 1- Ben. | 804 | ft. | 402 | 402 | 0 | 0 |
| 1000 - Corrosion | | 402 | | 0 | 402 | 0 | 0 |
| 515 - Steel Protective Coating | | 2573 | sq. ft. | 1286 | 0 | 1287 | 0 |
| 3440 - Effectiveness (Steel Protective Coatings) | | 1287 | | 0 | 0 | 1287 | 0 |

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Bridge Inspection Report

Pictures

PHOTO 1

Description

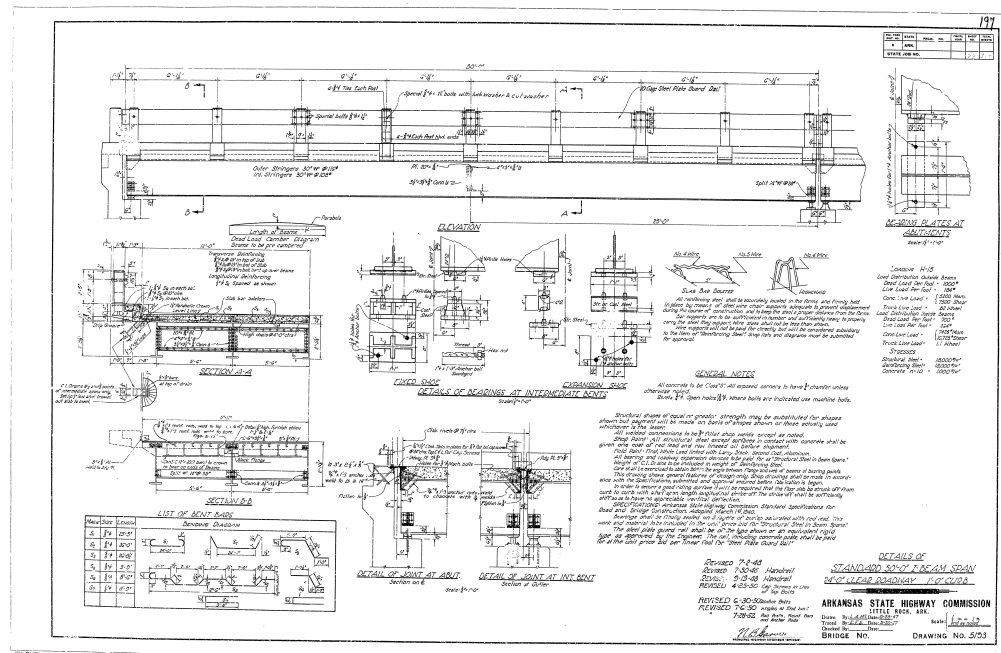



PHOTO 1

| Description | Cross Section View |
|--|---|
| 1. Base Plate The base plate is the foundation of the structure, providing a stable platform for the other components. It is typically made of a heavy-duty material like steel or aluminum. |  |
| 2. Support Structure The support structure is the central framework that holds the other components in place. It is designed to be rigid and stable, often made of steel or aluminum. |  |
| 3. Mounting Bracket The mounting bracket is a component that connects the support structure to the other parts, providing a secure and adjustable connection. It is typically made of steel or aluminum. |  |
| 4. Adjustable Arm The adjustable arm is a component that allows the user to adjust the position of the other parts, providing flexibility in the setup. It is typically made of steel or aluminum. |  |
| 5. Clamp The clamp is a component that secures the other parts in place, ensuring they remain stable during use. It is typically made of steel or aluminum. |  |

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Bridge Inspection Report

Pictures

PHOTO 1

Description

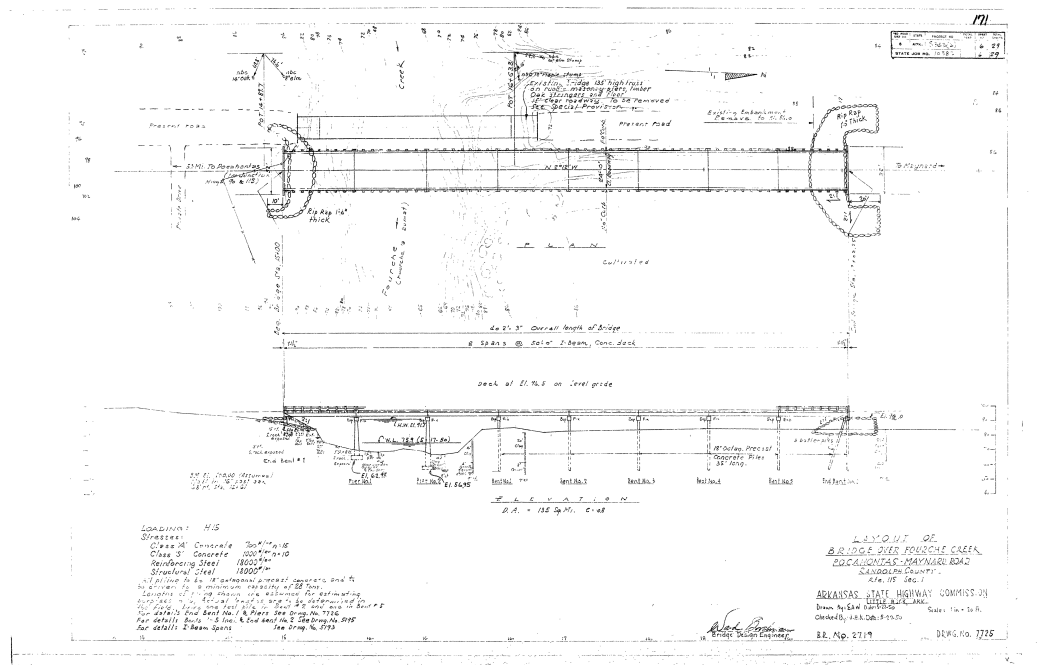


PHOTO 2

Description Layout View

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Bridge Inspection Report

Sketches

Inspector:

Structure Number: 02719

Inspection Date:

Facility Carried: SH 115-01-LM 12.81

Bridge Inspection Report

Maintenance Needs

Date Reported: 08/27/2019

Priority: C - Important

Work Code:

Deficiency Description:

Concrete deck has several unsealed moderate width transverse cracks.

Lt and Rt curbs have several spalls with rebar exposed.

Deck has delaminated areas and spalls with up to 2' of rebar exposed along joints over bents 2 – 8.

Span 6 has a few small spalled areas with some rebar exposed in Rt gutter.

Bent 8 slide plate is loose and moving under traffic.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description

Inspector:

Structure Number: 02719

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Bridge Inspection Report

Maintenance Needs

Date Reported: 4/25/2011 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Lt and Rt curbs have several spalls with rebar exposed.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 08/27/2019

Priority: D - Routine

Work Code:

Deficiency Description:

Majority of bearings have pack rust and section loss.

Several anchor bolts and nuts have section loss; some nuts have complete section loss.

Several rocker bearings have gaps between rocker and sole plate.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: 02719

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 08/27/2019

Priority: D - Routine

Work Code:

Deficiency Description:

Bent 4 cap has efflorescent map cracking on Lt end on ahead side.

Bent 5 cap has a spall with rebar exposed on Rt end.

Bent 7 – Lt end of cap has efflorescent map cracking, deterioration, and is spalled with rebar exposed.

Bent 7 – Concrete haunches under Lt and Rt ends of cap and web wall portion of pier have a few small spalls with rebar exposed. (1' typical) Web wall portion of pier also has minor size horizontal cracks with efflorescence.

Bent 8 – Lt. concrete haunch under cap has a small spall with 6 inches of rebar exposed on back face.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 5/15/2012 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Concrete haunches at ends of spans have numerous cracks with rust stains and efflorescence, several areas have spalls exposing reinforcing steel.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: 02719

Inspection Date:

Facility Carried: SH 115-01-LM 12.81

Bridge Inspection Report

Maintenance Needs

Date Reported: 08/27/2019

Priority: C - Important

Work Code:

Deficiency Description:

Ends of girders are rusted with up to 1/4" section loss at web below haunch, and around diaphragm connections. A few have holes rusted through web at haunch and/or diaphragm connection. See notes for specific locations.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Span 2 bent 3 girder 2

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 5/2/2013 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Soffit has a few transverse cracks with very light efflorescence, and a few small spalls with rebar exposed.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 5/22/2014 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Pile bents 2 - 6 have minor localized scour 1' - 2' feet deep typical.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 04/24/2019

Priority: D - Routine

Work Code:

Deficiency Description:

On 4/13/19 an accident occurred when a vehicle hit bent 9 Lt approach rail and was slung into Rt bridge rail at span 8. Approach rail and endpost was damaged. Endpost was rotated toward bridge. Rt bridge rail posts at span 8 were damaged/cracked at base of posts.

Work Description:

Bridge rail posts have been patched since accident inspection.

Date Repairs Completed: 08/27/2019

Maintenance Comments:

observed during routine inspection

Stage: Open



PHOTO 1 Description

Stage: Open



PHOTO 2 Description