



Latitude:36.25265, Longitude:-94.48506

Route:59 Section:01 Log:20.07

Arnold Road ID:4x59x1xA, Arnold Log mile:19.985

District 09, 7 - Benton County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

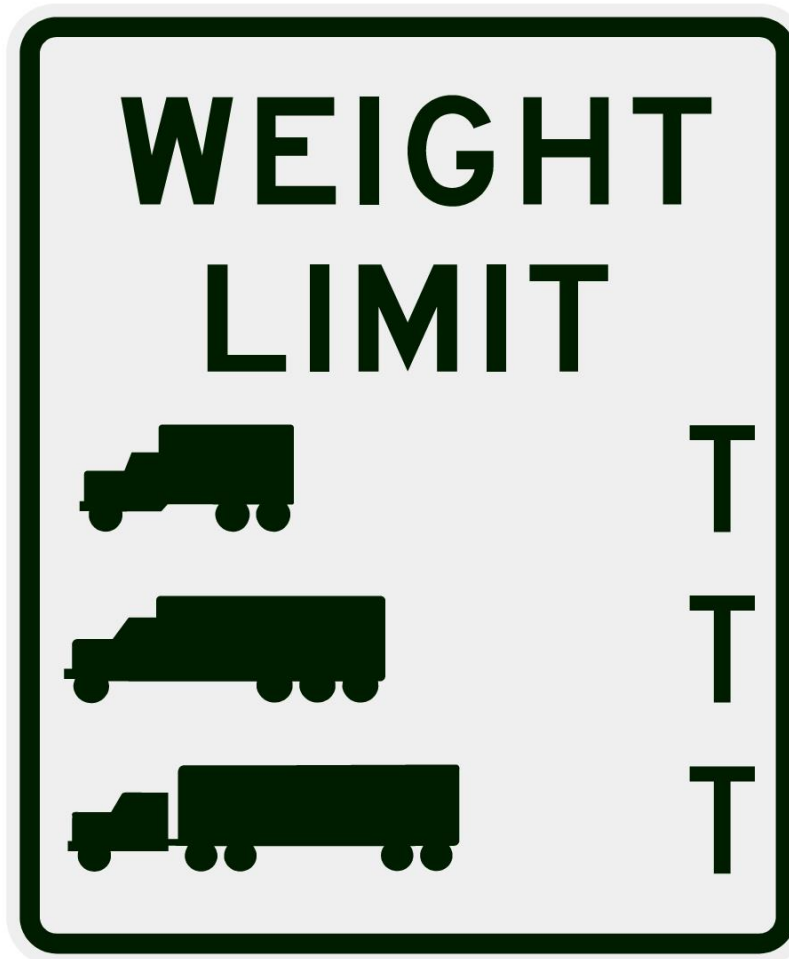
Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

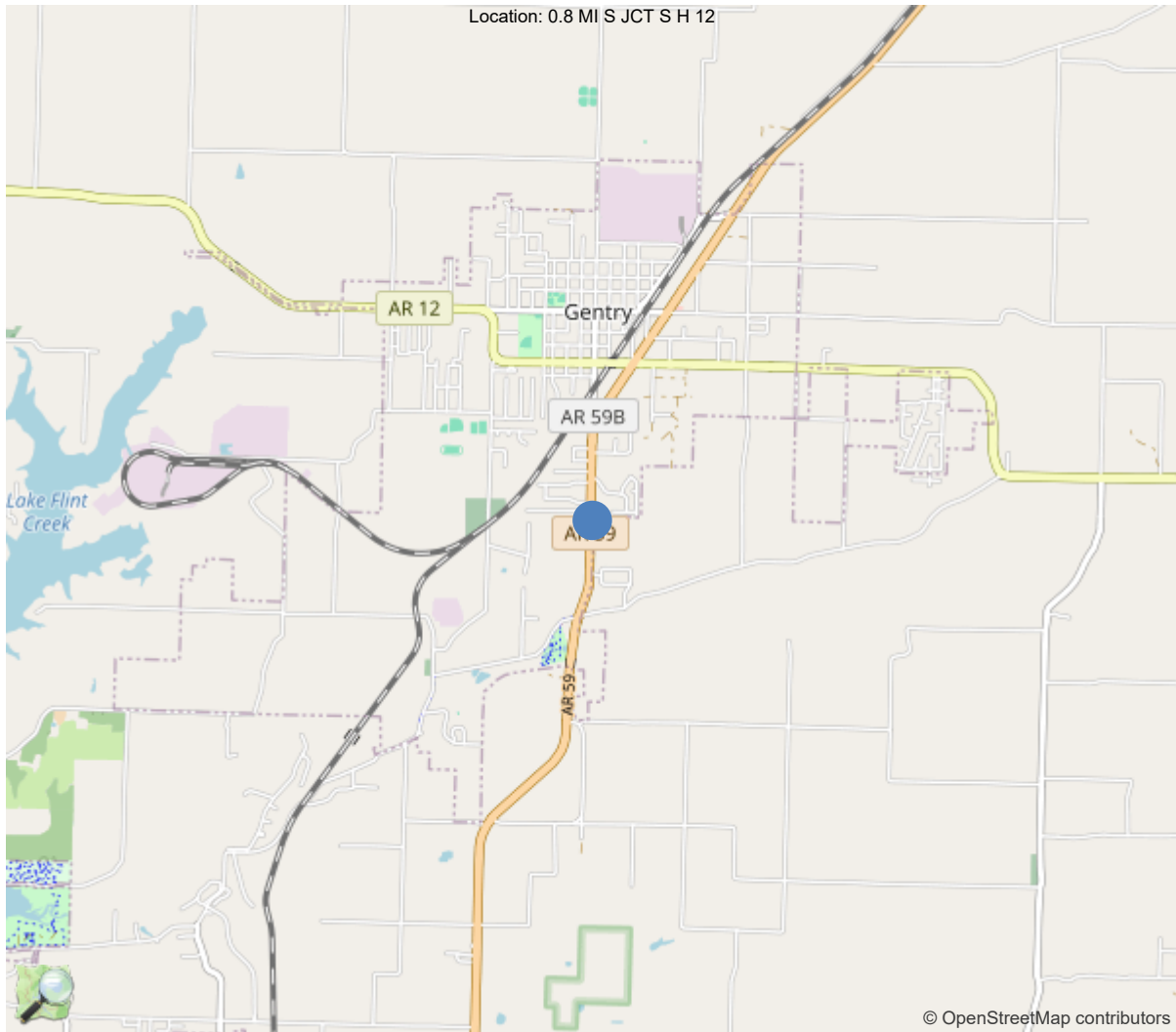
70 - Bridge Posting: 5 - Equal to or above legal loads

| Legal Load | Calculated Capacity | Beginning of Bridge Sign Current Value | End of Bridge Sign Current Value |
|------------------|---------------------|--|----------------------------------|
| Code 4 (22 Tons) | 31 | | |
| Code 9 (31 Tons) | 39 | | |
| Code 5 (40 Tons) | 54 | | |

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



36.25265, -94.48506



Asset #X1294(Routine)
SH 59 SD Benton 2 over BRANCH
Location: 0.8 MI S JCT S H 12

Team Lead: Nathan Rowland Inspection Date: 02/14/2024

| IDENTIFICATION | |
|---|--|
| (1) State Names | 5 - Arkansas |
| (8) Structure Number | X1294 |
| (5) Inventory Route | 1 |
| (2) Highway Agency District | 09 - District 09 |
| (3) County Code | 7 - Benton County |
| (4) Place Code | 0 |
| (6) Features Intersected | BRANCH |
| (7) Facility Carried | SH 59 SD Benton 2 |
| (9) Location | 0.8 MI S JCT S H 12 |
| (11) Mile Point | 20.07 mi |
| (12) Base Highway Network | No |
| (13) LRS Inventory Rte & Subrte | 0000000000 |
| (16) Latitude | 36.2526456271486 |
| (17) Longitude | -94.4850608366721 |
| (98) Border Bridge State Code | |
| (99) Border Bridge Structure No. | |
| STRUCTURE TYPE AND MATERIAL | |
| (43) Main Structure Type | 119 |
| Material | 1 - Concrete |
| Type | 19 - Culvert |
| (44) Approach Structure Type | 00 |
| Material | 0 - Other |
| Type | 0 - Other |
| (45) No. of Spans in Main Unit | 2 |
| (46) No. of Approach Spans | 0 |
| (107) Deck Structure Type | N - Not applicable |
| (108) Wearing Surface/Protective System | |
| Type of Wearing Surface | N - Not applicable (applies only to stru |
| Type of Membrane | N - Not applicable (applies only to stru |
| Type of Deck Protection | N - Not applicable (applies only to stru |
| AGE AND SERVICE | |
| (27) Year Built | 2007 |
| (106) Year Reconstructed | 0 |
| (42) Type of Service | 15 |
| On | 1 - Highway |
| Under | 5 - Waterway |
| (28) Lane | |
| On | 2 |
| Under | 0 |
| (29) Average Daily Traffic | 15813 |
| (30) Year of ADT | 2018 |
| (109) Truck ADT | 10 % |
| (19) Bypass, Detour Length | 1 mi |
| GEOMETRIC DATA | |
| (48) Length of Maximum Span | 10 ft |
| (49) Structure Length | 21 ft |
| (50) Curb or Sidewalk Width | |
| Left | 1 ft |
| Right | 1 ft |
| (51) Bridge Roadway Width Curb to Curb | 32.8 ft |
| (52) Deck Width Out to Out | 34.9 ft |
| (32) Approach Roadway Width (W/Shoulders) | 28.9 ft |
| (33) Bridge Median | 0 - No median |
| (34) Skew | 0 Deg |
| (35) Structure Flared | 0 - No flare |
| (10) Inventory Route Min Vert Clear | 99.99 ft |
| (47) Inventory Route Total Horiz Clear | 99.9 ft |
| (53) Min Vert Clear Over Bridge Rdwy | 99.9 ft |
| (54) Min Vert Underclear | 0 ft |
| Ref: | |
| (55) Min Lat Underclear RT | 99.9 ft |
| Ref: | |
| (56) Min Lat Underclear LT | 0 ft |
| NAVIGATION DATA | |
| (38) Navigation Control | 0 - No navigation control on w |
| (111) Pier Protection | 1 - Navigation protection not |
| (39) Navigation Vertical Clearance | 0 ft |
| (116) Vert-Lift Bridge Nav Min Vert Clear | 0 ft |
| (40) Navigation Horizontal Clearance | 0 ft |

| CLASSIFICATION | |
|--|-------------------------------------|
| (112) NBIS Bridge Length | Y |
| (104) Highway System | 0 |
| (26) Functional Class | 16 - Urban Minor Arterial |
| (100) Defense Highway | 0 - The inventory route is not |
| (101) Parallel Structure | N - No parallel structure exis |
| (102) Direction of Traffic | 2 - way traffic |
| (103) Temporary Structure | |
| (105) Federal Lands Highways | 0 - N/A |
| (110) Designated National Network | 0 - The inventory route is not |
| (20) Toll | 3 - On free road. The structu |
| (21) Maintain | 1 - State Highway Agency |
| (22) Owner | 1 - State Highway Agency |
| (37) Historical Significance | 5 - Bridge is not eligible for |
| CONDITION | |
| (58) Deck | N |
| (59) Superstructure | N |
| (60) Substructure | N |
| (61) Channel & Channel Protection | 8 |
| (62) Culverts | 7 |
| LOAD RATING AND POSTING | |
| (31) Design Load | 4 - M 18 / H 20 |
| (63) Operating Rating Method | 1 |
| (64) Operating Rating | |
| Type | 1 - Load Factor(LF) |
| Rating | 44 |
| (65) Inventory Rating Method | 1 - Load Factor(LF) |
| (66) Inventory Rating | |
| Type | |
| Rating | 26 |
| (70) Bridge Posting | 5 - Equal to or above legal loads |
| (41) Structure Open/Posted/Closed | A - Open, no restriction |
| APPRAISAL | |
| (67) Structural Evaluation | |
| (68) Deck Geometry | 4 |
| (69) Clearances, Vertical/Horizontal | N |
| (71) Waterway Adequacy | 9 |
| (72) Approach Roadway Alignment | 9 |
| (36A) Bridge Railings | 1 - Inspected feature meets current |
| (36B) Transitions | 1 - Inspected feature meets current |
| (36C) Approach Guardrail | 1 - Inspected feature meets current |
| (36D) Approach Guardrail Ends | 1 - Inspected feature meets current |
| (113) Scour Critical Bridges | 8 - Bridge foundations determined t |
| PROPOSED IMPROVEMENTS | |
| (75) Type of Work | |
| (76) Length of Structure Improvement | ft |
| (94) Bridge Improvement Cost | \$ |
| (95) Roadway Improvement Cost | \$ |
| (96) Total Project Cost | \$ |
| (97) Year of Improvement Cost Estimate | |
| (114) Future ADT | 22900 |
| (115) Year of Future ADT | 2038 |

| INSPECTIONS * | | | |
|--|------------|-------------|------|
| (90) Inspection Date | 02/14/2024 | | |
| (91) Frequency | 24 | | |
| (92) Critical Feature Inspection | Done | Freq. (Mon) | Date |
| A: Fracture Critical Detail | No | | |
| B: Underwater Inspection | No | | |
| C: Other Special Inspection | No | | |
| * The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted. | | | |



Asset #X1294(Routine)
SH 59 SD Benton 2 over BRANCH
Location: 0.8 MI S JCT S H 12

Team Lead: Nathan Rowland **Inspection Date:** 02/14/2024

General Observation

Logged South to North with Hwy. 59 but documented West to East. Accessible from the barrel floor.

Team Lead: Nathan Rowland **Inspection Date:** 02/14/2024

| ELEMENTS | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|--|-----------------------------|-------|-------|-----|-----|-----|-----|
| 241 | Reinforced Concrete Culvert | LF | 94 | 80 | 14 | 0 | 0 |
| 1120 | Efflorescence/Rust Staining | LF | 4 | 0 | 4 | 0 | 0 |
| 1130 | Cracking (RC and Other) | LF | 10 | 0 | 10 | 0 | 0 |
| (241) Driving surface- has an asphalt overlay with minor cracking. | | | | | | | |
| -The wingwalls are monolithic and are added to the quantity of the box culvert as of this inspection. -Wingwalls have full eight diagonal cracks. The barrel #2 left wing wall has 1' of cs2 efflorescence. -Full height vertical cracking in all barrels -Barrel 1 top slab near mid span has a transverse crack with cs2 efflorescence accumulation. Barrel #2- the back wall has 2' of cs2 efflorescence. No deficiencies noted in the barrel floor. | | | | | | | |
| The inlet end of the channel is armored with rip rap. | | | | | | | |



Elevation looking north



Inventory looking east



Barrel #2



Barrel #1



Downstream view



Upstream view



Elevation view.



Approach view in direction of log mile.



Typical view of the driving surface.



Inventory looking East



Elevation looking North



Barrel #1



Barrel #2



Upstream view



Downstream view



Routine Maintenance

Check Box Maintenance Items

| Type of Maintenance | Is recommended? |
|---|-----------------|
| A-54 - Sealable Deck Cracks | |
| A-55 - Deck Washing Needed | |
| A-56 - Joint Cleaning/Flushing Needed | |
| A-57 - Beam End and Bearing Paint Needed | |
| A-58 - Cap Cleaning/Flushing Needed | |
| A-59 - Joint Repair Needed | |
| A-60 - Full Beam Painting Needed | |
| A-61 - Polymer Overlay Advised | |
| A-62 - Hydro and LMC Advised | |
| A-63 - Missing/Incorrect Log Mile Signage | |
| A-64 - Vegetation Removal Requested | |

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



Asset #X1294(Routine)
SH 59 SD Benton 2 over BRANCH
Location: 0.8 MI S JCT S H 12

Team Lead: Nathan Rowland **Inspection Date:** 02/14/2024

A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed

A-60 - Full Girder Painting Needed

A-61 - Polymer Overlay Advised

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

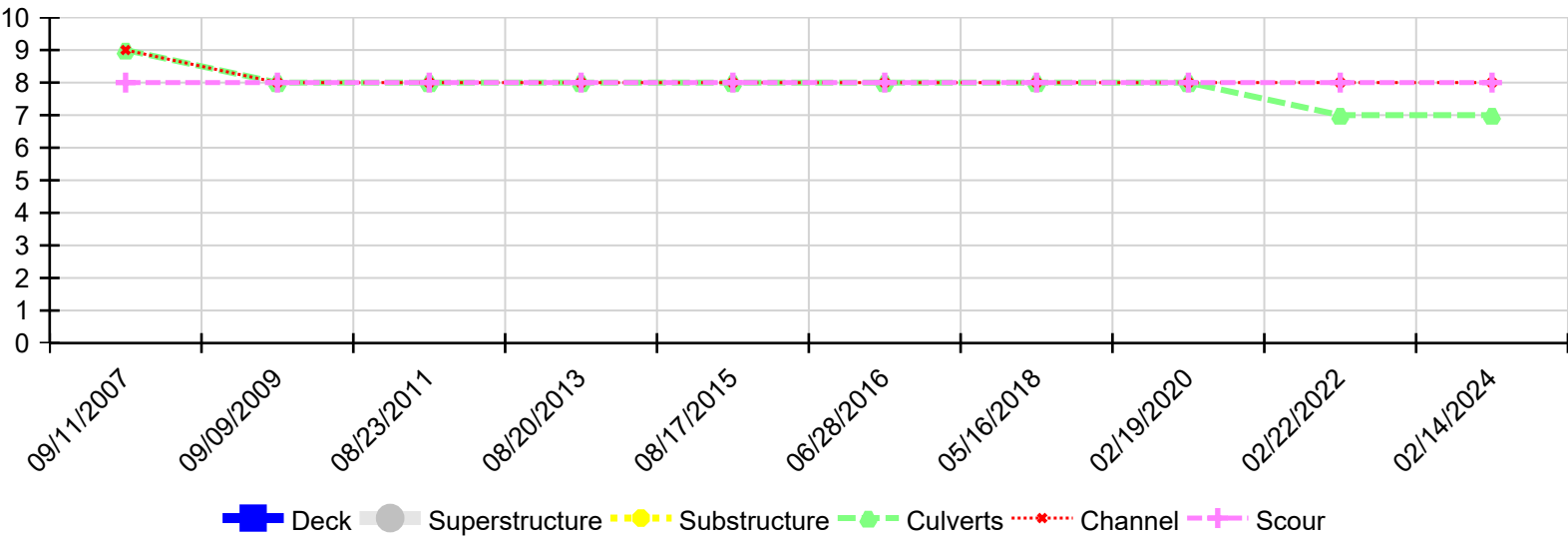
A-64 - Vegetation Removal Requested



Asset #X1294(Routine)
SH 59 SD Benton 2 over BRANCH
Location: 0.8 MI S JCT S H 12

Team Lead: Nathan Rowland Inspection Date: 02/14/2024

Condition History



| Inspection Date | Deck | Superstructure | Substructure | Culverts | Channel | Scour |
|-----------------|------|----------------|--------------|----------|---------|-------|
| 02/14/2024 | N | N | N | 7 | 8 | 8 |
| 02/22/2022 | N | N | N | 7 | 8 | 8 |
| 02/19/2020 | N | N | N | 8 | 8 | 8 |
| 05/16/2018 | N | N | N | 8 | 8 | 8 |
| 06/28/2016 | N | N | N | 8 | 8 | 8 |
| 08/17/2015 | N | N | N | 8 | 8 | 8 |
| 08/20/2013 | N | N | N | 8 | 8 | 8 |
| 08/23/2011 | N | N | N | 8 | 8 | 8 |
| 09/09/2009 | N | N | N | 8 | 8 | 8 |
| 09/11/2007 | N | N | N | 9 | 9 | 8 |