



Latitude:34.79825, Longitude:-91.78244

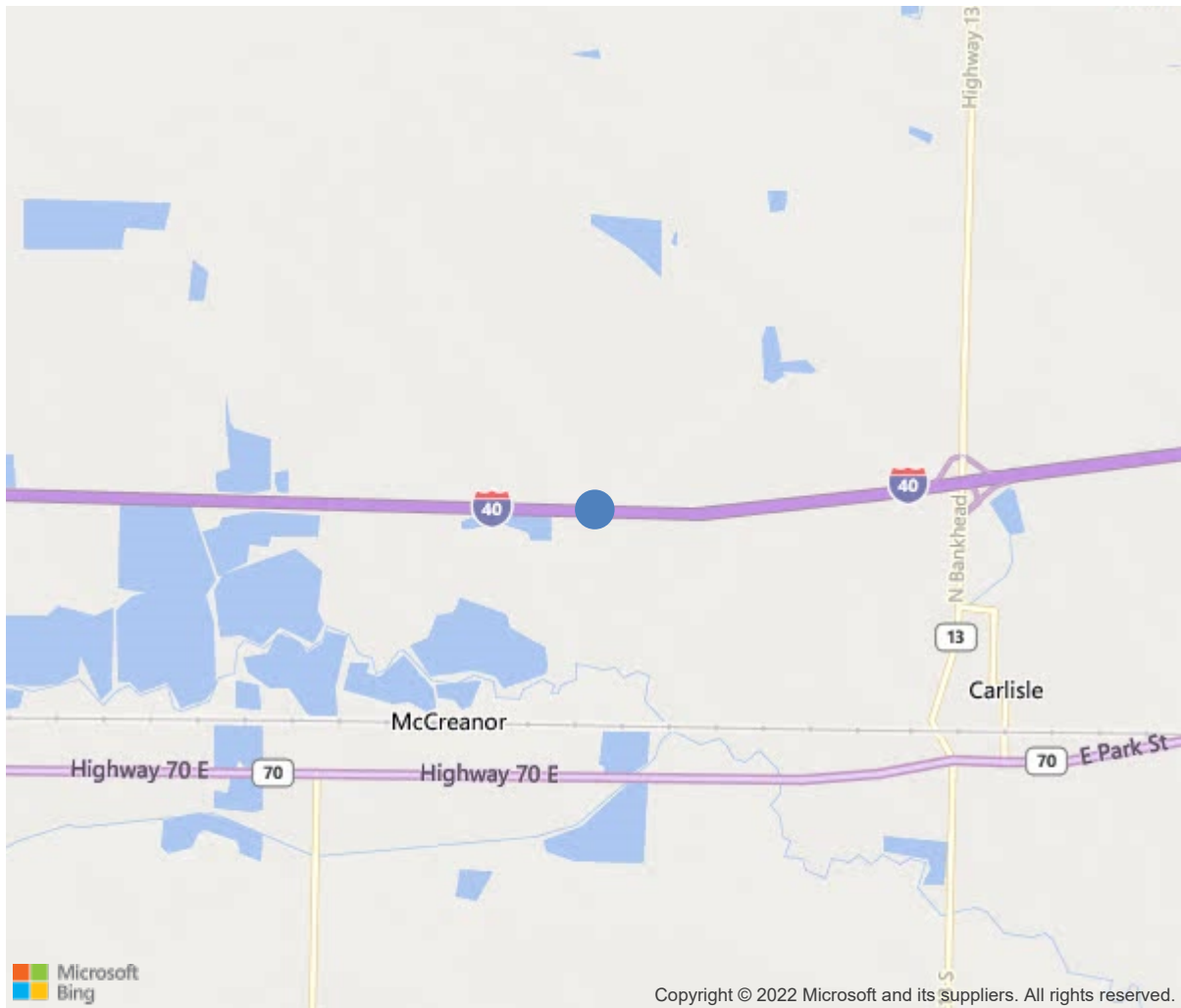
Route:40 Section:41 Log:180.68

Arnold Road ID:43x40x41xA, Arnold Log mile:180.6

District 06, Lonoke County

Owner: 1-State Highway Agency

2 MI W SH 13-EASTBOUND



34.79825, -91.78244

Inspection Direction : W to E



Bridge #B3654(Routine)

I-40 EB Log 180.68 over RICKETY BRANCH

Location: 2 MI W SH 13-EASTBOUND

Team Lead: Keith Harris Inspection Date: March 16, 2021

| IDENTIFICATION | |
|---|--|
| (1) State Names | Arkansas |
| (8) Structure Number | B3654 |
| (5) Inventory Route | 40 |
| (2) Highway Agency District | 06 |
| (3) County Code | 85-Lonoke County, Arkansas |
| (4) Place Code | 0 |
| (6) Features Intersected | RICKETY BRANCH |
| (7) Facility Carried | I-40 EB Log 180.68 |
| (9) Location | 2 MI W SH 13-EASTBOUND |
| (11) Mile Point | 180.68 mi |
| (12) Base Highway Network | Yes |
| (13) LRS Inventory Rte & Subrte | 0000040410 |
| (16) Latitude | 34.798248 |
| (17) Longitude | -91.78244 |
| (98) Border Bridge State Code | |
| (99) Border Bridge Structure No. | |
| STRUCTURE TYPE AND MATERIAL | |
| (43) Main Structure Type | 11 |
| Material | 1-Concrete |
| Type | 1-Slab |
| (44) Approach Structure Type | 00 |
| Material | 0-Other |
| Type | 0-Other |
| (45) No. of Spans in Main Unit | 3 |
| (46) No. of Approach Spans | 0 |
| (107) Deck Structure Type | 1-Concrete Cast-in-Place |
| (108) Wearing Surface/Protective System | |
| Type of Wearing Surface | 1-Monolithic Concrete (concurrently placed |
| Type of Membrane | 0-None |
| Type of Deck Protection | 0-None |
| AGE AND SERVICE | |
| (27) Year Built | 1963 |
| (106) Year Reconstructed | 1990 |
| (42) Type of Service | 15 |
| On | 1-Highway |
| Under | 5-Waterway |
| (28) Lane | |
| On | 2 |
| Under | 0 |
| (29) Average Daily Traffic | 32000 |
| (30) Year of ADT | 2014 |
| (109) Truck ADT | 1 % |
| (19) Bypass, Detour Length | 1 mi |
| GEOMETRIC DATA | |
| (48) Length of Maximum Span | 25 ft |
| (49) Structure Length | 75 ft |
| (50) Curb or Sidewalk Width | |
| Left | 0 ft |
| Right | 0 ft |
| (51) Bridge Roadway Width Curb to Curb | 40 ft |
| (52) Deck Width Out to Out | 43 ft |
| (32) Approach Roadway Width (W/Shoulders) | 38.1 ft |
| (33) Bridge Median | 0-No median |
| (34) Skew | 0 Deg |
| (35) Structure Flared | No flare |
| (10) Inventory Route Min Vert Clear | 99.99 ft |
| (47) Inventory Route Total Horiz Clear | 41 ft |
| (53) Min Vert Clear Over Bridge Rdwy | 99.99 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 water |
| (111) Pier Protection | 1-Navigation protection not requ |
| (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 | 1 |
| (26) Functional Class | 1-Rural Principal Arterial - Int |
| (100) Defense Highway | 1-The inventory route is on a In |
| (101) Parallel Structure | R-The right structure of paralle |
| (102) Direction of Traffic | 1 - way traffic |
| (103) Temporary Structure | |
| (105) Federal Lands Highways | 0-N/A |
| (110) Designated National Network | 1-The inventory route is part of the |
| (20) Toll | 3-On free road. The structure is toll- |
| (21) Maintain | 1-State Highway Agency |
| (22) Owner | 1-State Highway Agency |
| (37) Historical Significance | 5-Bridge is not eligible for the NRHP |
| CONDITION | |
| (58) Deck | 7 |
| (59) Superstructure | 7 |
| (60) Substructure | 7 |
| (61) Channel & Channel Protection | 7 |
| (62) Culverts | N |
| LOAD RATING AND POSTING | |
| (31) Design Load | 5-MS 18 / HS 20 |
| (63) Operating Rating Method | 1 |
| (64) Operating Rating | |
| Type | 1-Load Factor(LF) |
| Rating | 60 |
| (65) Inventory Rating Method | 1-Load Factor(LF) |
| (66) Inventory Rating | |
| Type | 3 |
| Rating | 36 |
| (70) Bridge Posting | 5-Equal to or above legal loads |
| (41) Structure Open/Posted/Closed | A-Open, no restriction |
| APPRAISAL | |
| (67) Structural Evaluation | 7 |
| (68) Deck Geometry | 7 |
| (69) Clearances, Vertical/Horizontal | N |
| (71) Waterway Adequacy | 8 |
| (72) Approach Roadway Alignment | 8 |
| (36A) Bridge Railings | 1-Inspected feature meets currently a |
| (36B) Transitions | 1-Inspected feature meets currently a |
| (36C) Approach Guardrail | 1-Inspected feature meets currently a |
| (36D) Approach Guardrail Ends | 1-Inspected feature meets currently a |
| (113) Scour Critical Bridges | 5-Bridge foundations determined to be |
| PROPOSED IMPROVEMENTS | |
| (75) Type of Work | |
| (76) Length of Structure Improvement | 0 ft |
| (94) Bridge Improvement Cost | \$ 0 |
| (95) Roadway Improvement Cost | \$ 0 |
| (96) Total Project Cost | \$ 0 |
| (97) Year of Improvement Cost Estimate | |
| (114) Future ADT | 22787 |
| (115) Year of Future ADT | 2028 |

| INSPECTIONS * | | | |
|--|------|-------------|-----------|
| (90) Inspection Date | | | 03/2021 |
| (91) Frequency | | | 24 Months |
| (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. | | | |



Bridge #B3654(Routine)
I-40 EB Log 180.68 over RICKETY BRANCH
Location: 2 MI W SH 13-EASTBOUND

Team Lead: Keith Harris, **Inspection Date:** March 16, 2021

| ELEM | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|-------|---|-------|-------|------|-----|-----|-----|
| 38 | RC Slab | SF | 3225 | 2997 | 153 | 75 | 0 |
| 1080 | Delamination/Spall/Patched Area | SF | 3 | 0 | 3 | 0 | 0 |
| 1130 | Cracking (RC and Other) | SF | 225 | 0 | 150 | 75 | 0 |
| (38) | Longitudinal crack near centerline of all three spans up to 1/8" wide. Small spalls at bent 2. | | | | | | |
| 215 | Reinforced Concrete Abutment | LF | 94 | 92 | 0 | 2 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 2 | 0 | 0 | 2 | 0 |
| (215) | Spalls with exposed rebar at bent 4. | | | | | | |
| 227 | Reinforced Concrete Pile | EA | 14 | 14 | 0 | 0 | 0 |
| 234 | Reinforced Concrete Pier Cap | LF | 89 | 73 | 6 | 10 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 2 | 0 | 0 | 2 | 0 |
| 1090 | Exposed Rebar | LF | 8 | 0 | 0 | 8 | 0 |
| 1130 | Cracking (RC and Other) | LF | 6 | 0 | 6 | 0 | 0 |
| (234) | Spalls with exposed rebar to bottom of caps at bents 2&3 | | | | | | |
| 301 | Pourable Joint Seal | LF | 89 | 0 | 69 | 0 | 20 |
| 2310 | Leakage | LF | 89 | 0 | 69 | 0 | 20 |
| 321 | Reinforced Concrete Approach Slab | SF | 2788 | 2715 | 25 | 48 | 0 |
| 1080 | Delamination/Spall/Patched Area | SF | 1 | 0 | 1 | 0 | 0 |
| 1130 | Cracking (RC and Other) | SF | 72 | 0 | 24 | 48 | 0 |
| (321) | Both approach slabs have cracks. | | | | | | |
| 331 | Reinforced Concrete Bridge Railing | LF | 150 | 150 | 0 | 0 | 0 |



Cracks in West approach slab



Approach



Deck overview



Slab under view span 2



Cracks with efflorescence at centerline in Span 3.



Spalls with exposed rebar at Bent 3 bottom of cap.

Maintenance Needs

Date Reported: 03/20/2017
Priority: C - Important
Type of Work: None
Status: Monitor
Inspection Direction W to E
Component:

Deficiency Description

Deck all spans large unsealed longitudinal cracks.

Remarks



Longitudinal crack span 3 common span 1



Span 1 longitudinal cracks



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I-40 EB Log 180.68 over RICKETY BRANCH

Location: 2 MI W SH 13-EASTBOUND

Team Lead: Keith Harris **Inspection Date:** March 16, 2021

Inspection Comments

See AHTD job # R60044, drawing # 30712 for layout

Logged east bound.

Channel profile added 3-16-21