



Latitude:34.78070, Longitude:-92.16160

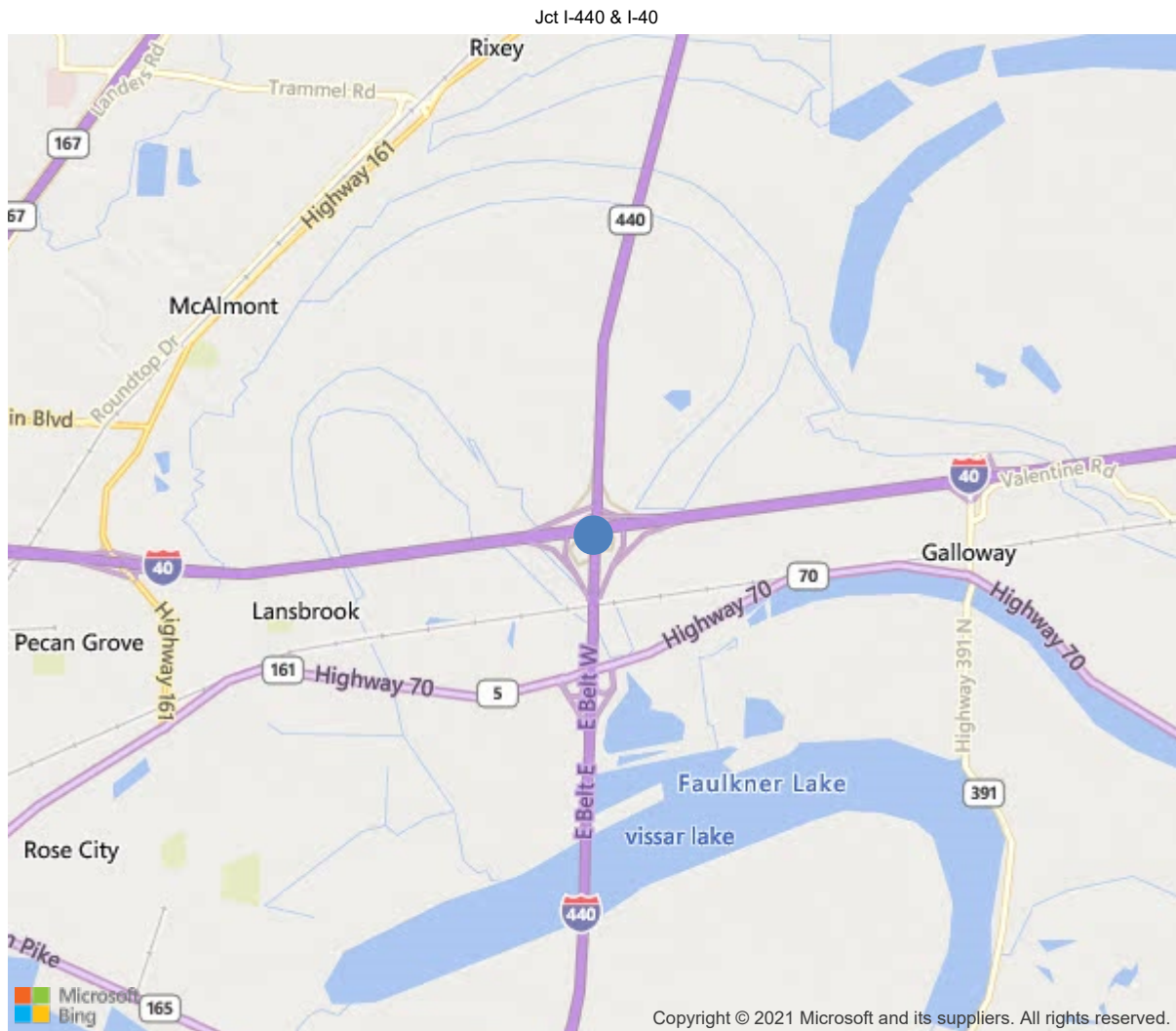
Route:440 Section:02 Log:10.36

Arnold Road ID:60x440x2xB, Arnold Log mile:3.923

District 06, Pulaski County

Owner: 1-State Highway Agency

Place Code: 47940 - NORTH LITTLE ROCK



34.78070, -92.16160



Bridge #A5985(Routine)

SH 440 SB / I-40 over I 40-SEC 33 LOG 158.94

Location: Jct I-440 & I-40

Team Lead: Chris Doggett Inspection Date: July 29, 2019

| IDENTIFICATION | |
|---|--|
| (1) State Names | Arkansas |
| (8) Structure Number | A5985 |
| (5) Inventory Route | 440 |
| (2) Highway Agency District | 06 |
| (3) County Code | 119-Pulaski County, Arkansas |
| (4) Place Code | 47940 |
| (6) Features Intersected | I 40-SEC 33 LOG 158.94 |
| (7) Facility Carried | SH 440 SB / I-40 |
| (9) Location | Jct I-440 & I-40 |
| (11) Mile Point | 10.36 mi |
| (12) Base Highway Network | Yes |
| (13) LRS Inventory Rte & Subrte | 0000440020 |
| (16) Latitude | 34.7807 |
| (17) Longitude | -92.1616 |
| (98) Border Bridge State Code | |
| (99) Border Bridge Structure No. | |
| STRUCTURE TYPE AND MATERIAL | |
| (43) Main Structure Type | 22 |
| Material | 2-Concrete continuous |
| Type | 2-Stringer/Multi-beam or girder |
| (44) Approach Structure Type | 32 |
| Material | 3-Steel |
| Type | 2-Stringer/Multi-beam or girder |
| (45) No. of Spans in Main Unit | 8 |
| (46) No. of Approach Spans | 5 |
| (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 | 1986 |
| (106) Year Reconstructed | 0 |
| (42) Type of Service | 11 |
| On | 1-Highway |
| Under | 1-Highway, with or without pedestrian |
| (28) Lane | |
| On | 2 |
| Under | 8 |
| (29) Average Daily Traffic | 26600 |
| (30) Year of ADT | 2013 |
| (109) Truck ADT | 1 % |
| (19) Bypass, Detour Length | 1 mi |
| GEOMETRIC DATA | |
| (48) Length of Maximum Span | 87 ft |
| (49) Structure Length | 888 ft |
| (50) Curb or Sidewalk Width | |
| Left | 0 ft |
| Right | 0 ft |
| (51) Bridge Roadway Width Curb to Curb | 44 ft |
| (52) Deck Width Out to Out | 46.8 ft |
| (32) Approach Roadway Width (W/Shoulders) | 51.8 ft |
| (33) Bridge Median | 0-No median |
| (34) Skew | 9 Deg |
| (35) Structure Flared | Yes, flared |
| (10) Inventory Route Min Vert Clear | 99.99 ft |
| (47) Inventory Route Total Horiz Clear | 45.3 ft |
| (53) Min Vert Clear Over Bridge Rdwy | 99.99 ft |
| (54) Min Vert Underclear | 16.92 ft |
| Ref: | |
| (55) Min Lat Underclear RT | 19.9 ft |
| Ref: | |
| (56) Min Lat Underclear LT | 27.2 ft |
| NAVIGATION DATA | |
| (38) Navigation Control | N-Not applicable, no waterway. |
| (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 | 12-Urban Principal Arterial - Oth |
| (100) Defense Highway | 0-The inventory route is not a S |
| (101) Parallel Structure | L-The left structure of parallel |
| (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 | N |
| (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 | 8 |
| 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 | 9 |
| (69) Clearances, Vertical/Horizontal | 6 |
| (71) Waterway Adequacy | N |
| (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 | N-Bridge not over waterway. |
| PROPOSED IMPROVEMENTS | |
| (75) Type of Work | Replacement of bridge or other |
| (76) Length of Structure Improvement | 928 ft |
| (94) Bridge Improvement Cost | \$ 0 |
| (95) Roadway Improvement Cost | \$ 223 |
| (96) Total Project Cost | \$ 2515 |
| (97) Year of Improvement Cost Estimate | 2003 |
| (114) Future ADT | 15554 |
| (115) Year of Future ADT | 2028 |

| INSPECTIONS * | | | |
|--|------|-------------|-----------|
| (90) Inspection Date | | | 07/2019 |
| (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 #A5985(Routine)
SH 440 SB / I-40 over I 40-SEC 33 LOG 158.94

Location: Jct I-440 & I-40

Team Lead: Chris Doggett, Inspection Date: July 29, 2019

| ELEM | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|-------|---|-------|-------|-------|------|-----|-----|
| 12 | Reinforced Concrete Deck | SF | 45729 | 44586 | 1143 | 0 | 0 |
| 1130 | Cracking (RC and Other) | SF | 1143 | 0 | 1143 | 0 | 0 |
| (12) | Widely scattered cracks in the all spans. 0.030 inch avg.width. | | | | | | |
| 107 | Steel Open Girder/Beam | LF | 5942 | 5893 | 49 | 0 | 0 |
| 1000 | Corrosion | LF | 49 | 0 | 49 | 0 | 0 |
| 515 | Steel Protective Coating | SF | 50707 | 50707 | 0 | 0 | 0 |
| (107) | Active rust with minor pitting to the beam ends at bent 2,6,7,8,9,10 &11 due leaking joint seals. | | | | | | |
| 205 | Reinforced Concrete Column | EA | 36 | 36 | 0 | 0 | 0 |
| 215 | Reinforced Concrete Abutment | LF | 107 | 96 | 11 | 0 | 0 |
| 1130 | Cracking (RC and Other) | LF | 11 | 0 | 11 | 0 | 0 |
| (215) | Bent 14 has horizontal cracking in the beam seat on the left end. | | | | | | |
| 234 | Reinforced Concrete Pier Cap | LF | 583 | 580 | 3 | 0 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 1 | 0 | 1 | 0 | 0 |
| 1130 | Cracking (RC and Other) | LF | 2 | 0 | 2 | 0 | 0 |
| (234) | Bent 4, back face, small spall on the right end. | | | | | | |
| 301 | Pourable Joint Seal | LF | 463 | 415 | 0 | 48 | 0 |
| 2310 | Leakage | LF | 48 | 0 | 0 | 48 | 0 |
| (301) | All joint seals have areas of cracks and splits. | | | | | | |
| 310 | Elastomeric Bearing | EA | 99 | 99 | 0 | 0 | 0 |
| 311 | Movable Bearing | EA | 21 | 21 | 0 | 0 | 0 |
| 313 | Fixed Bearing | EA | 21 | 21 | 0 | 0 | 0 |
| 321 | Reinforced Concrete Approach Slab | SF | 2217 | 2217 | 0 | 0 | 0 |
| 331 | Reinforced Concrete Bridge Railing | LF | 1776 | 1125 | 651 | 0 | 0 |
| 1090 | Exposed Rebar | LF | 45 | 0 | 45 | 0 | 0 |
| 1130 | Cracking (RC and Other) | LF | 606 | 0 | 606 | 0 | 0 |



Soffit view



Deck view



Span 10, girder 1: outside of beam with flaking paint. Multiple locations in similar condition



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Team Lead: Chris Doggett Inspection Date: July 29, 2019

Inspection Comments

BM-040-60-49 mounted to bridge.

AHTD Job 60184, 25683 and R60015.

Logged East bound.