



Latitude:35.11578, Longitude:-92.44838

Route:40 Section:32 Log:124.34

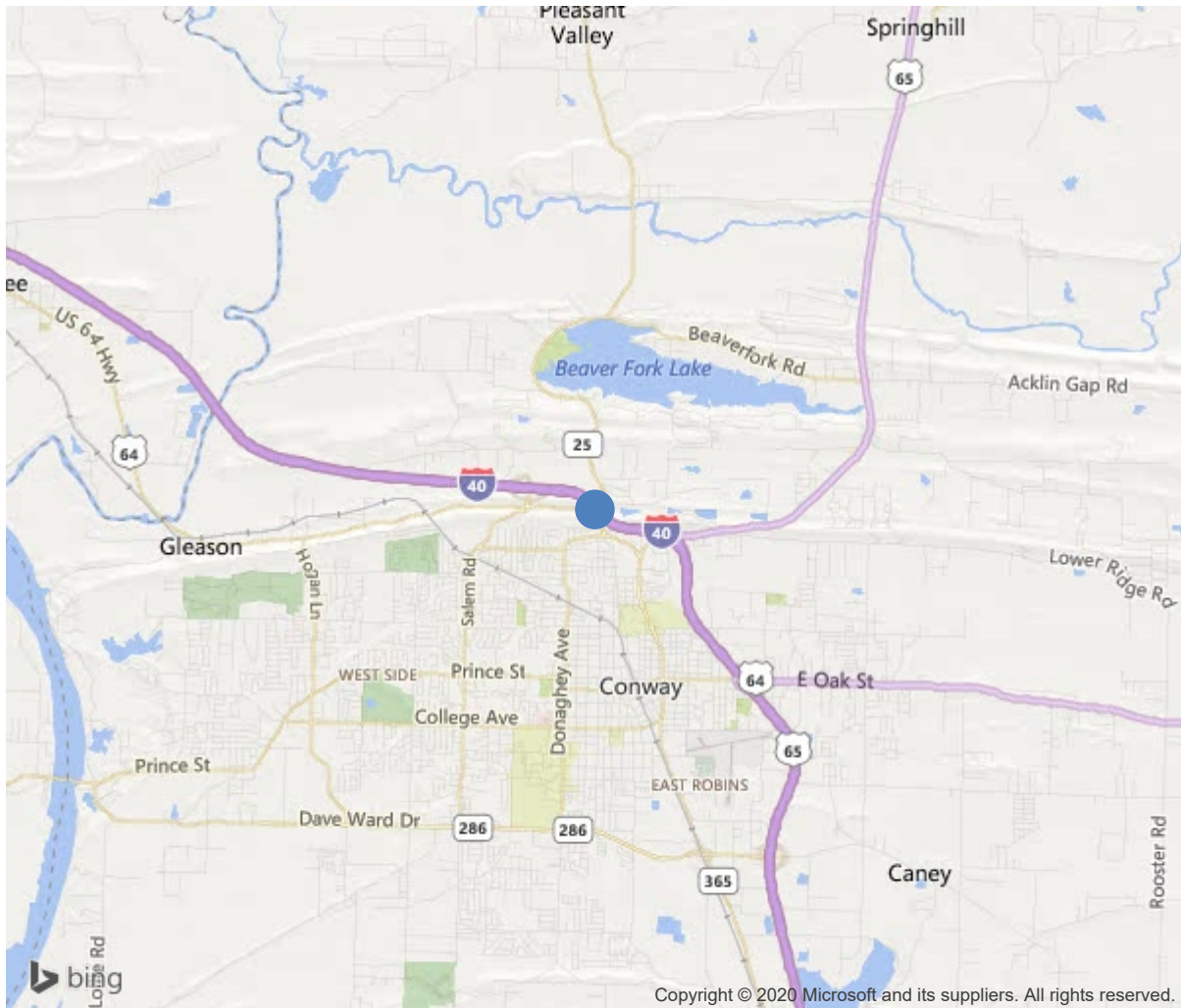
Arnold Road ID:23x40x32xA, Arnold Log mile:124.272

District 08, Faulkner County

Owner: 1-State Highway Agency

Place Code: 14560 - CONWAY

4.05 MI E CONWAY CO LINE



35.11578, -92.44838



Bridge #B3919(Routine)
I 40-SEC 32, EB LN over Friendship Rd.
Location: 4.05 MI E CONWAY CO LINE

Team Lead: William Wood Inspection Date: February 24, 2020

| IDENTIFICATION | |
|---|---|
| (1) State Names | Arkansas |
| (8) Structure Number | B3919 |
| (5) Inventory Route | 40 |
| (2) Highway Agency District | 08 |
| (3) County Code | 45-Faulkner County, Arkansas |
| (4) Place Code | 14560 |
| (6) Features Intersected | Friendship Rd. |
| (7) Facility Carried | I 40-SEC 32, EB LN |
| (9) Location | 4.05 MI E CONWAY CO LINE |
| (11) Mile Point | 124.34 mi |
| (12) Base Highway Network | Yes |
| (13) LRS Inventory Rte & Subrte | 0000040320 |
| (16) Latitude | 35.11578 |
| (17) Longitude | -92.44838 |
| (98) Border Bridge State Code | |
| (99) Border Bridge Structure No. | |
| STRUCTURE TYPE AND MATERIAL | |
| (43) Main Structure Type | 32 |
| Material | 3-Steel |
| Type | 2-Stringer/Multi-beam or girder |
| (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 | 1966 |
| (106) Year Reconstructed | 0 |
| (42) Type of Service | 61 |
| On | 6-Overpass structure at an interchange or secon |
| Under | 1-Highway, with or without pedestrian |
| (28) Lane | |
| On | 2 |
| Under | 2 |
| (29) Average Daily Traffic | 10000 |
| (30) Year of ADT | 2018 |
| (109) Truck ADT | 1 % |
| (19) Bypass, Detour Length | 6 mi |
| GEOMETRIC DATA | |
| (48) Length of Maximum Span | 56 ft |
| (49) Structure Length | 170 ft |
| (50) Curb or Sidewalk Width | |
| Left | 0 ft |
| Right | 0 ft |
| (51) Bridge Roadway Width Curb to Curb | 38.4 ft |
| (52) Deck Width Out to Out | 42.5 ft |
| (32) Approach Roadway Width (W/Shoulders) | 40 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 | 38.4 ft |
| (53) Min Vert Clear Over Bridge Rdwy | 99.99 ft |
| (54) Min Vert Underclear | 24.25 ft |
| Ref: | |
| (55) Min Lat Underclear RT | 3 ft |
| Ref: | |
| (56) Min Lat Underclear LT | 3 ft |
| NAVIGATION DATA | |
| (38) Navigation Control | N-Not applicable, no waterway. |
| (111) Pier Protection | 5-None present but re-evaluation |
| (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 | 11-Urban 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 | | | 5 |
| (59) Superstructure | | | 6 |
| (60) Substructure | | | 6 |
| (61) Channel & Channel Protection | | | N |
| (62) Culverts | | | N |
| LOAD RATING AND POSTING | | | |
| (31) Design Load | 6-MS 18+Mod / HS 20+Mod | | |
| (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 | | | 6 |
| (68) Deck Geometry | | | 6 |
| (69) Clearances, Vertical/Horizontal | | | 3 |
| (71) Waterway Adequacy | | | N |
| (72) Approach Roadway Alignment | | | 8 |
| (36) Traffic Safety Features | | | 0111 |
| A) Bridge Railings | 0-Inspected feature does not meet cur | | |
| B) Transitions | 1-Inspected feature meets currently a | | |
| C) Approach Guardrail | 1-Inspected feature meets currently a | | |
| D) Approach Guardrail Ends | 1-Inspected feature meets currently a | | |
| (113) Scour Critical Bridges | N-Bridge not over waterway. | | |
| 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 | | | 53600 |
| (115) Year of Future ADT | | | 2038 |
| INSPECTIONS | | | |
| (90) Inspection Date | | | 202002 |
| (91) Frequency | | | 24 Months |
| (92) Critical Feature Inspection | Done | Freq. (Mon) | Date |
| A: Fracture Critical Detail | No | 24 | |
| B: Underwater Inspection | No | 0 | |
| C: Other Special Inspection | No | 0 | |

| | |
|---------------------|-----------------------|
| SUFFICIENCY RATING | 80 |
| STATUS (SD/FO/None) | Functionally Obsolete |

Team Lead: Bruce Bryan, **Inspection Date:** February 24, 2020

| ELEM | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|--|---|-------|-------|------|------|-----|-----|
| 12 | Reinforced Concrete Deck | SF | 6804 | 4550 | 2214 | 40 | 0 |
| 1080 | Delamination/Spall/Patched Area | SF | 615 | 0 | 600 | 15 | 0 |
| 1120 | Efflorescence/Rust Staining | SF | 50 | 0 | 50 | 0 | 0 |
| 1130 | Cracking (RC and Other) | SF | 1539 | 0 | 1514 | 25 | 0 |
| 1190 | Abrasion/Wear (PSC/RC) | SF | 50 | 0 | 50 | 0 | 0 |
| (12) | | | | | | | |
| MINOR TO MODERATE DELAM, CRACKING, SCALING & SPALLING THROUGHOUT DECK. MINOR "D" CRACKING & SPALLING AT JOINTS. MINOR CRACKING W / EFFLOR, SCALING & SPALLING IN SOFFIT. | | | | | | | |
| 107 | Steel Open Girder/Beam | LF | 1176 | 1060 | 101 | 15 | 0 |
| 1000 | Corrosion | LF | 116 | 0 | 101 | 15 | 0 |
| 515 | Steel Protective Coating | SF | 8884 | 8584 | 200 | 80 | 20 |
| 3440 | Effectiveness (Steel Protective Coatings) | SF | 300 | 0 | 200 | 80 | 20 |
| (107) | | | | | | | |
| MINOR RUST ON ENDS OF BEAMS. MAINLY IN HAUNCHED AREAS. MINOR SECTION LOSS IN SOME AREAS. | | | | | | | |
| 205 | Reinforced Concrete Column | EA | 4 | 3 | 1 | 0 | 0 |
| 1080 | Delamination/Spall/Patched Area | EA | 1 | 0 | 1 | 0 | 0 |
| (205) | | | | | | | |
| COLUMN 2 AT PIER 3 AHD SIDE HAS BEEN REPAIRED. | | | | | | | |
| 215 | Reinforced Concrete Abutment | LF | 97 | 80 | 17 | 0 | 0 |
| 1090 | Exposed Rebar | LF | 7 | 0 | 7 | 0 | 0 |
| 1130 | Cracking (RC and Other) | LF | 10 | 0 | 10 | 0 | 0 |
| (215) | | | | | | | |
| MINOR CRACKING & SPALLING W / REBAR EXPOSED IN TOP OF HEAD WALL AT ABUTMENT 1. | | | | | | | |
| 234 | Reinforced Concrete Pier Cap | LF | 80 | 70 | 7 | 3 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 3 | 0 | 0 | 3 | 0 |
| 1130 | Cracking (RC and Other) | LF | 7 | 0 | 7 | 0 | 0 |
| (234) | | | | | | | |
| MINOR HORIZONTAL CRACKING IN CAP 2. MINOR DELAM, CRACKING & SPALLING W / REBAR EXPOSED IN BOTTOM FACE OF CAP 3. | | | | | | | |
| 305 | Assembly Joint without Seal | LF | 156 | 120 | 36 | 0 | 0 |
| 2360 | Adjacent Deck or Header | LF | 36 | 0 | 36 | 0 | 0 |
| (305) | | | | | | | |
| MINOR TO MODERATE POPPING IN PLATES AT ALL JOINTS. MINOR "D" CRACKING & SPALLING AT JOINTS. | | | | | | | |



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Location: 4.05 MI E CONWAY CO LINE

Team Lead: Bruce Bryan, **Inspection Date:** February 24, 2020

| ELEM | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|---|---|-------|-------|------|-----|-----|-----|
| 311 | Movable Bearing | EA | 21 | 0 | 17 | 4 | 0 |
| 1000 | Corrosion | EA | 21 | 0 | 17 | 4 | 0 |
| 515 | Steel Protective Coating | SF | 63 | 23 | 20 | 10 | 10 |
| 3440 | Effectiveness (Steel Protective Coatings) | SF | 40 | 0 | 20 | 10 | 10 |
| (311) | | | | | | | |
| MINOR TO MODERATE RUST & PACK RUST ON ALL BEARINGS. | | | | | | | |
| 313 | Fixed Bearing | EA | 21 | 0 | 14 | 7 | 0 |
| 1000 | Corrosion | EA | 21 | 0 | 14 | 7 | 0 |
| 515 | Steel Protective Coating | SF | 35 | 8 | 10 | 10 | 7 |
| 3440 | Effectiveness (Steel Protective Coatings) | SF | 27 | 0 | 10 | 10 | 7 |
| (313) | | | | | | | |
| MINOR TO MODERATE RUST & PACK RUST ON ALL BEARINGS. | | | | | | | |
| 321 | Reinforced Concrete Approach Slab | SF | 2160 | 2000 | 100 | 60 | 0 |
| 1130 | Cracking (RC and Other) | SF | 160 | 0 | 100 | 60 | 0 |
| (321) | | | | | | | |
| MINOR TO MODERATE CRACKING THROUGHOUT SLABS. | | | | | | | |
| 330 | Metal Bridge Railing | LF | 336 | 336 | 0 | 0 | 0 |
| (330) | | | | | | | |
| Aluminum Rail on top of Concrete Rail | | | | | | | |
| 331 | Reinforced Concrete Bridge Railing | LF | 336 | 336 | 0 | 0 | 0 |



Roadway



Typ. Condition of Soffit.



Typ. Condition of Deck.

Maintenance Needs

Date Reported: 02/27/2012
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

DECK

Head wall at abutment # 1 - Moderate spalls with rebar exposed.

Span # 1 - Minor spalls along ahead side of joint # 1. Moderate spall with rebar exposed for the full length of the span in the left shoulder.

Span # 2 - Spalls cover a large area of the right shoulder, some rebar exposed. Minor spalls along joint # 2.

Span # 3 - Several minor spalls and 1 moderate spall along ahead side of joint # 3, no rebar exposed. Moderate spall with rebar exposed covering a large area and a patched area in the right shoulder.

Inspection Date: 02/15/2018 some of the large spall areas have been patched. There is still spalls in the head wall, along the joint slide plates and at various location throughout deck. gldc103

Remarks



Joint #2, span #2 - minor spalls along ahead side of slide plate



Span #2, right side - minor spalls around patch area and next to curb.



Joint #3, span #3 - minor and moderate spalls
along slide plate



Joint #1 - minor spalls in deck and head wall along
slide plate.



Joint #4 - minor to moderate spalls along the back side of slide plate.



Span #3, right shoulder - moderate spall.



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Minor Spalling in Span 1.



Bridge #B3919(Routine)
I 40-SEC 32, EB LN over Friendship Rd.
Location: 4.05 MI E CONWAY CO LINE

Team Lead: William Wood **Inspection Date:** February 24, 2020

Date Reported: 02/21/2018

Priority: D- Routine

Type of Work: None

Status: Monitor

Component:

Deficiency Description

Minor and moderate unsealed transverse cracks throughout. Map cracking mostly in outside lane.

Remarks



Deck



Bridge #B3919(Routine)
I 40-SEC 32, EB LN over Friendship Rd.
Location: 4.05 MI E CONWAY CO LINE

Team Lead: William Wood **Inspection Date:** February 24, 2020

Date Reported: 02/21/2018
Priority: D- Routine
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Approach Slab at both ends of bridge - moderate and major unsealed cracks.

Remarks



Approach at beginning of bridge



Approach at end of bridge

Date Reported: 02/21/2018
Priority: D- Routine
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Abut #1, Bearings 2 thru 5 - Minor pack rust.
Abut #4, Bearings 3 thru 5 - Minor pack rust.
Minor rust on ends of beams at abutments at various locations.

Remarks



Abut #4



Abut #1, beam #4 - minor section loss in web.
Beam #5 typical. Bearings 2 - 5 minor pack rust.
B1, B6 & B7 minor rust.

Date Reported: 02/24/2020
Priority: D- Routine
Type of Work: Repair
Status: Open
Component: 205 - Reinforced Concrete Column

Deficiency Description

COLUMNS - MINOR CRACKING & SCALE IN ALL COLUMNS.

Remarks



Typ. Cracking in Column 1 at Pier 2 & Column 2 at Pier 3.



Typ Scale in Column 2 at Pier 2 & Column 1 at Pier 3.

Date Reported: 02/24/2020
Priority: D- Routine
Type of Work: Repair
Status: Open
Component: 234 - Reinforced Concrete Pier Cap

Deficiency Description

CAPS - MINOR DELAM, CRACKING & SPALLING W / REBAR EXPOSED IN BT. FACE OF CAP 3.
MINOR HORIZONTAL CRACKING IN CAP 2

Remarks



Delam, Cracking & Spalling W / Rebar Exposed in
Bt Face of Cap 3.



Bridge #B3919(Routine)

I 40-SEC 32, EB LN over Friendship Rd.

Location: 4.05 MI E CONWAY CO LINE

Team Lead: William Wood **Inspection Date:** February 24, 2020

Inspection Comments

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