



Latitude:35.98266, Longitude:-91.33639

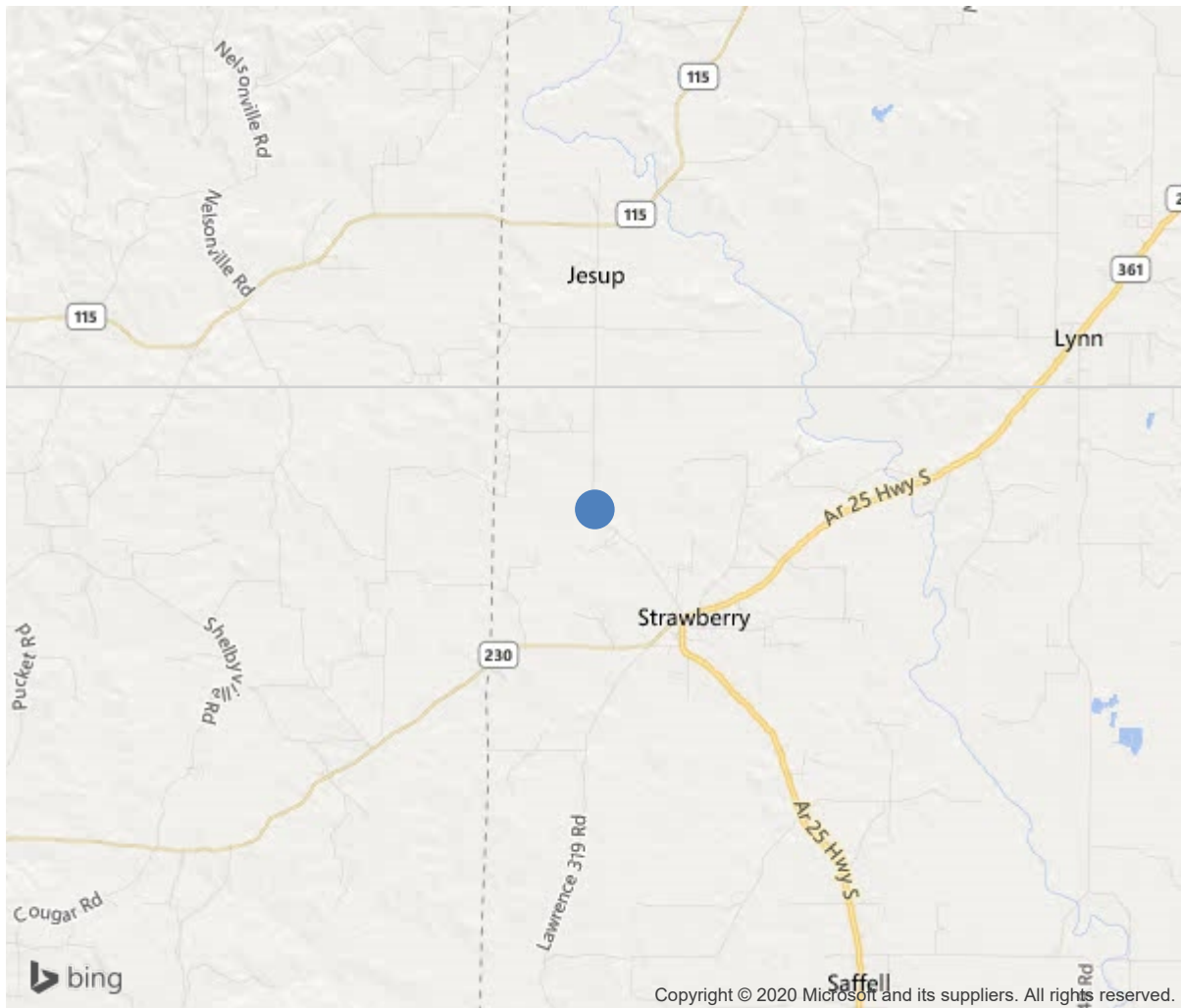
Route:117 Section:01 Log:1.4

Arnold Road ID:38x117x1xA, Arnold Log mile:1.37

District 10, Lawrence County

Owner: 1-State Highway Agency

1.40 MI NW JCT SH 25



35.98266, -91.33639



Bridge #03467(Routine)

SH 117-01- LM 1.40 over REEDS CREEK

Location: 1.40 MI NW JCT SH 25

Team Lead: James Adams Inspection Date: October 16, 2019

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	03467
(5) Inventory Route	117
(2) Highway Agency District	10
(3) County Code	75-Lawrence County, Arkansas
(4) Place Code	0
(6) Features Intersected	REEDS CREEK
(7) Facility Carried	SH 117-01- LM 1.40
(9) Location	1.40 MI NW JCT SH 25
(11) Mile Point	1.4 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.98266
(17) Longitude	-91.33639
(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	5
(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	1962
(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	1300
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	22 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	150 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	28 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 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	24 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	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	0
(26) Functional Class	7-Rural Major Collector
(100) Defense Highway	0-The inventory route is not a S
(101) Parallel Structure	N-No parallel structure exists.
(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 part of
(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	6
(59) Superstructure	6
(60) Substructure	4
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2-M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	43
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	5
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	4
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36) Traffic Safety Features	0000
A) Bridge Railings	0-Inspected feature does not meet cur
B) Transitions	0-Inspected feature does not meet cur
C) Approach Guardrail	0-Inspected feature does not meet cur
D) Approach Guardrail Ends	0-Inspected feature does not meet cur
(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	950
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	201910
(91) Frequency	24 Months
(92) Critical Feature Inspection	Done Freq. (Mon) Date
A: Fracture Critical Detail	No 24
B: Underwater Inspection	Yes 0
C: Other Special Inspection	No 0

SUFFICIENCY RATING	43.7
STATUS (SD/FO/None)	Structurally Deficient



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Team Lead: Cory Shaw, Inspection Date: October 16, 2019

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	3900	980	2750	170	0
1080	Delamination/Spall/Patched Area	SF	60	0	0	60	0
1090	Exposed Rebar	SF	6	0	0	6	0
1120	Efflorescence/Rust Staining	SF	4	0	0	4	0
1130	Cracking (RC and Other)	SF	520	0	420	100	0
1190	Abrasion/Wear (PSC/RC)	SF	2330	0	2330	0	0
215	Reinforced Concrete Abutment	LF	65	46	19	0	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
6000	Scour	LF	16	0	16	0	0
225	Steel Pile	EA	16	0	0	11	5
1000	Corrosion	EA	16	0	0	11	5
515	Steel Protective Coating	SF	1141	0	0	228	913
3440	Effectiveness (Steel Protective Coatings)	SF	1141	0	0	228	913
234	Reinforced Concrete Pier Cap	LF	106	84	4	18	0
1080	Delamination/Spall/Patched Area	LF	4	0	0	4	0
1090	Exposed Rebar	LF	13	0	0	13	0
1130	Cracking (RC and Other)	LF	5	0	4	1	0
301	Pourable Joint Seal	LF	144	0	0	48	96
2330	Seal Damage	LF	144	0	0	48	96
330	Metal Bridge Railing	LF	300	299	0	1	0
7000	Damage	LF	1	0	0	1	0
515	Steel Protective Coating	SF	1020	88	0	932	0
3440	Effectiveness (Steel Protective Coatings)	SF	932	0	0	932	0



Bent 2 pile 1 2019



Bent 3 drift 2019



Span 3 bent 3 cap RT END 2019



Bent 4 pile 4 2019



Side



Bent 3 pile 1 2019



Span 5 LT SIDE over bent 5 2019



Roadway



Bent 4 pile 4 2019



Span 3 bent 3 pile 4 2019



Deck



Span 4 soffit



Span 2 Bent 3 pile 4 2019



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Location: 1.40 MI NW JCT SH 25

Team Lead: James Adams **Inspection Date:** October 16, 2019

Maintenance Needs



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Location: 1.40 MI NW JCT SH 25

Team Lead: James Adams Inspection Date: October 16, 2019

Deck Notes

Span 1 right rail has 1 damaged post.

Span 5 left rail has 2 post & 26 ft. of rail replaced due to collision damage.

Top of slab has areas of abrasion, especially at spans 1 and 5. Slab has several longitudinal unsealed cracks, some with leakage thru deck.

Poured joints are torn or separated.

Superstructure Notes

Span 2 soffit has a 6 ft. x 1 ft. x 2 in. deep spall with exposed rebar near right drain. See 2019 photo.

Span 5 left and right corners of slab are spalled over bent 5 cap. Left side is spalled with exposed rebar, see 2019 photo. Outside edge of slabs have horizontal cracking at all drain locations.

Substructure Notes

Steel piles have rust with areas of section loss at bottom of caps, at angle brace connections, and near ground line.

Bent 1 abutment has a few vertical cracks.

Left end of bent 1 has 10 ft. minor embankment erosion 6 in. below & 2 ft. back under cap. 6 in. of pile 1 is exposed. 4 ft. of berm remains.

Bent 2 cap has a 3 ft. diameter spall with exposed rebar near right end.

Bent 2 pile 1 has a 1 x 3 in. hole in left flange span 1 side & a 1 in. x 5 in. hole in left flange in span 2 side near bottom of cap. See 2019 photo.

Bent 3 cap has a spall with exposed rebar on span 2 side over pile 2. Cap has a 6 in. x 2 ft. spall on left end of span 3 side. Right end of cap on span 3 side has a 1.5 ft. x 5 ft. x 1 1/2 in. deep spall with exposed rebar, see 2019 photo.

Bent 3 pile 1 has several minor bows in flange near bottom of pile.

Bent 3 pile 1 left flange span 2 side has a 5 in. x 1 in. hole in flange near bottom of cap. Span 3 side left flange has a 1 in. diameter hole, see 2019 photo.

Bent 3 pile 4 span 2 side left flange has (2) 1 in. diameter holes, right flange has a 5 in. x 1 in. hole in flange near



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bottom of cap. See 2019 photo.

Bent 3

pile 4 span 3 side left flange has a 1 in. x 5 in. hole in flange. Span 3 side right flange has a 5 in x 3 ½ in hole in flange. See 2019 photo.

Bent 4 cap has an open vertical crack over pile 3.

Bent 4 pile 1 left flange span 3 side has a 5 in. x 1 in. hole in flange near bottom of cap, right flange span 4 side has a 1 in. x 5 in. hole in flange, see 2019 photo. Bent 4 pile 4 span 3 side right flange has a 2 ½ in x 1 in. hole in flange, see 2019 photo.

Bent 4 pile 4 has 1/8 in. section loss to flanges near groundline.

Bent 5 cap has several spalls with exposed rebar. Right end of cap has a 2.5 ft. x 1 ft. x 2 in. deep spall with exposed rebar.

Bent 5 pile 1 has a 8 in. x 2 in. area of section loss on flange near ground line. Flange has heavy section loss and has a 3 in. x 1 in. hole rusted through. See 2019 photo.

Bent 5 pile 2 has a 1 ft. area of measurable section loss near cross brace connection.

Bent 6 pile 2 has 6 in. of pile exposed from embankment erosion.

Bent 6 abutment has a 6 ft. long area 6 in. deep 2 ft. back under cap of erosion near centerline of cap.

Trees & brush on channel bank.

Trees & drift lodged on bents 3 & 4 piling, see 2019 photo.