



Latitude:35.90649, Longitude:-91.29048

Route:25 Section:06 Log:1.39

Arnold Road ID:38x25x6xA, Arnold Log mile:1.376

District 10, Lawrence County

Owner: 1-State Highway Agency



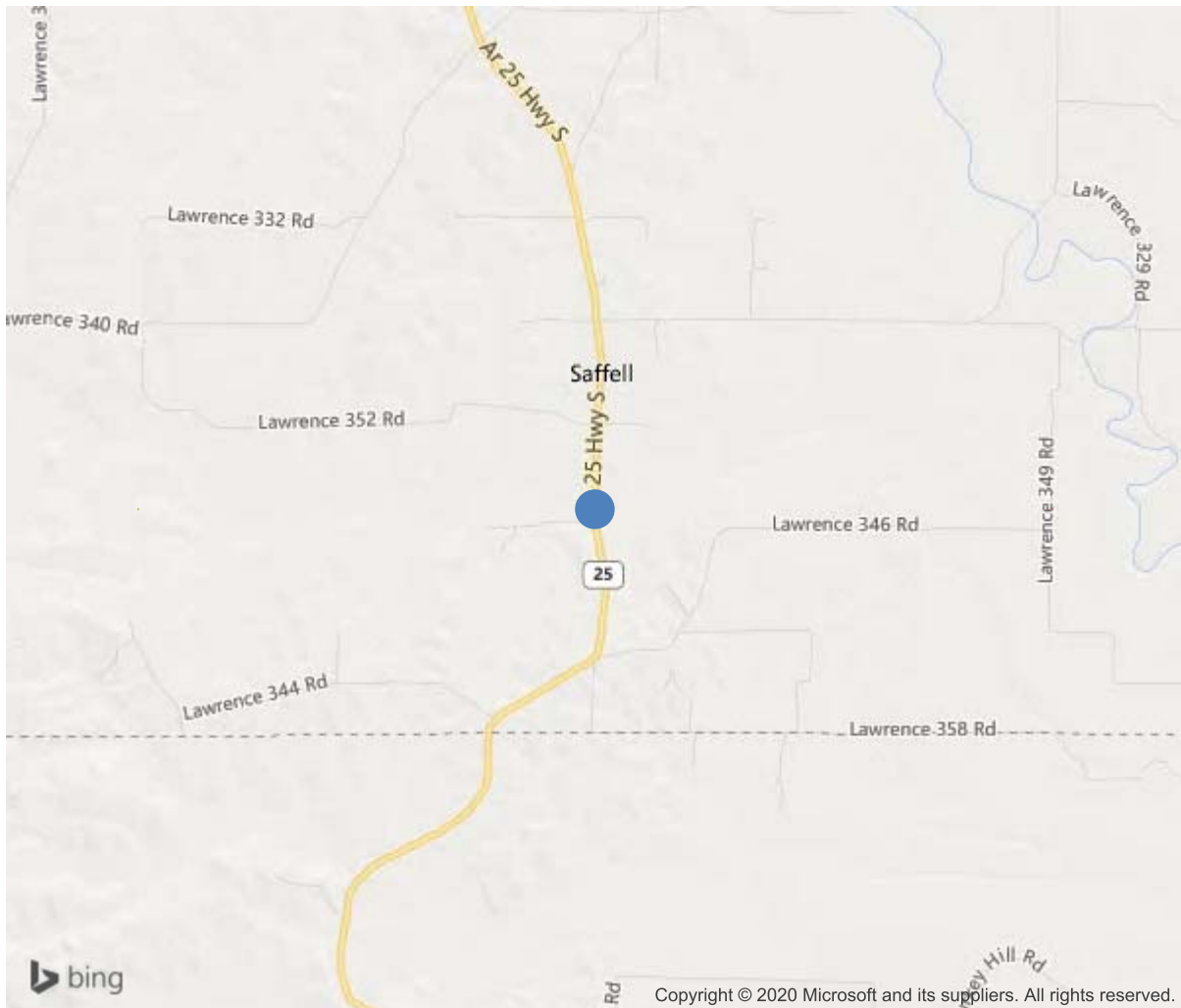
Bridge #M0603(Routine, Underwater type 2)

SH 25-06- LM 1.39 over CANEY CREEK

Location: 1.39 M N INDEPENDENCE COL

Team Lead: James Adams **Inspection Date:** October 15, 2019

1.39 M N INDEPENDENCE COL



35.90649, -91.29048



Bridge #M0603(Routine, Underwater type 2)

SH 25-06- LM 1.39 over CANEY CREEK

Location: 1.39 M N INDEPENDENCE COL

Team Lead: James Adams Inspection Date: October 15, 2019

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	M0603
(5) Inventory Route	25
(2) Highway Agency District	10
(3) County Code	75-Lawrence County, Arkansas
(4) Place Code	0
(6) Features Intersected	CANEY CREEK
(7) Facility Carried	SH 25-06- LM 1.39
(9) Location	1.39 M N INDEPENDENCE COL
(11) Mile Point	1.39 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000025060
(16) Latitude	35.90649
(17) Longitude	-91.29048
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	72
Material	7-Wood or timber
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	4
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6-Bituminous
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	1000
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	7 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	15 ft
(49) Structure Length	62 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	24.6 ft
(52) Deck Width Out to Out	25.5 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	25.3 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	6-Rural Minor Arterial
(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	4
(60) Substructure	4
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0-Other or Unknown
(63) Operating Rating Method	2
(64) Operating Rating	
Type	2-Allowable Stress(AS)
Rating	16
(65) Inventory Rating Method	2-Allowable Stress(AS)
(66) Inventory Rating	
Type	4
Rating	13
(70) Bridge Posting	0-> 39.9% below
(41) Structure Open/Posted/Closed	B-Open, posting recommended but
APPRAISAL	
(67) Structural Evaluation	2
(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	Replacement of bridge or other
(76) Length of Structure Improvement	87 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 156
(96) Total Project Cost	\$ 371
(97) Year of Improvement Cost Estimate	2004
(114) Future ADT	1087
(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	19.6
STATUS (SD/FO/None)	Structurally Deficient



Bridge #M0603(Routine, Underwater type 2)

SH 25-06- LM 1.39 over CANEY CREEK

Location: 1.39 M N INDEPENDENCE COL

Team Lead: Cory Shaw, **Inspection Date:** October 15, 2019

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	1581	1544	1	36	0
1090	Exposed Rebar	SF	1	0	1	0	0
1120	Efflorescence/Rust Staining	SF	36	0	0	36	0
510	Wearing Surfaces	SF	1525	1167	0	358	0
3220	Crack (Wearing Surface)	SF	358	0	0	358	0
111	Timber Open Girder/Beam	LF	915	0	894	0	21
1140	Decay/Section Loss	LF	32	0	29	0	3
1150	Check/Shake	LF	865	0	865	0	0
1170	Split/Delamination (Timber)	LF	18	0	0	0	18
216	Timber Abutment	LF	52	0	35	17	0
1140	Decay/Section Loss	LF	52	0	35	17	0
228	Timber Pile	EA	26	1	22	0	3
1140	Decay/Section Loss	EA	12	0	9	0	3
1150	Check/Shake	EA	13	0	13	0	0
235	Timber Pier Cap	LF	128	51	75	2	0
1140	Decay/Section Loss	LF	2	0	0	2	0
1150	Check/Shake	LF	75	0	75	0	0
330	Metal Bridge Railing	LF	124	0	124	0	0
1000	Corrosion	LF	97	0	97	0	0
7000	Damage	LF	27	0	27	0	0
515	Steel Protective Coating	SF	422	317	0	105	0
3440	Effectiveness (Steel Protective Coatings)	SF	105	0	0	105	0



Deck



End posting incorrect Code 9&5



Span 3 girder 10 at bent 3 2019



Roadway



Span 3 girder 13 at bent 4 2019



Span 4 girder 11 at bent 5 2019



Bent 3 drift LT SIDE 2019



Bent 5 pile 3 replaced 2019



Span 4 girder 10 at bent 5 2019



Span 2 soffit



Span 4 girder 7 at bent 5 2019



Span 3 girder 10 at bent 4 2019



Bent 5 RT END approach roadway 2019



Bent 3 pile 5 2019



Bent 1 pile 5 2019



Beg posting



Bridge #M0603(Routine, Underwater type 2)

SH 25-06- LM 1.39 over CANEY CREEK

Location: 1.39 M N INDEPENDENCE COL

Team Lead: James Adams **Inspection Date:** October 15, 2019

Maintenance Needs



Bridge #M0603(Routine, Underwater type 2)

SH 25-06- LM 1.39 over CANEY CREEK

Location: 1.39 M N INDEPENDENCE COL

Team Lead: James Adams **Inspection Date:** October 15, 2019

Inspection Comments

Deck Notes

Ending bridge end posting is posted incorrectly. Right approach guard rail at bent 1 has embankment erosion undermining guardrail and edge of roadway.

Approach roadways have minor settlement at bridge ends, some repairs have been made with asphalt.

Right end of bent 5 roadway is beginning to undermine 1 ft. back under 6 in. deep, see 2019 photo.

Bridge rails have surface rust throughout.

Left bridge rail has 25 ft. of collision damage.

Left rail span 3 near bent 4 has 2 loose posts.

Left curb at span 1 has 12 ft. of deterioration with some section loss at top of curb with some exposed rebar.

Dirt and debris buildup in left and right gutters.

Wearing surface has a few longitudinal and transverse cracks.

Soffit has cracking with some leakage through deck over Bents 1 and 5.

Left and right overhangs have several cracks with efflorescence.

Superstructure Notes



Bridge #M0603(Routine, Underwater type 2)

SH 25-06- LM 1.39 over CANEY CREEK

Location: 1.39 M N INDEPENDENCE COL

Team Lead: James Adams Inspection Date: October 15, 2019

Timber girders have moderate decay and checking mostly at ends over Bents 1 and 5.

Span 3 bent 3 girder 9 has a corner split on the bottom near bent.

Span 3 bent 3 girder 10 has a 6 in. deep check on the bottom corner near bent 3 & 4, see 2019 photo.

Span 3 girder 13 has a split with delamination through girder near bent 4, see 2019 photo.

Span 4 girder 7 at bent 5 is decayed with some possible crushing over cap. Girder is leaning to one side over cap. See 2019 photo.

Span 4 girder 10 at bent 5 is decayed on the end with some crushing over cap. See 2019 photo.

Span 4 girder 11 at bent 5 is decayed and hollow at end on bottom of girder, see 2019 photo.

Substructure Notes

Timber caps have moderate decay and checking. Majority of piles have moderate decay and checking. Bent 1 pile 6 is split and hollow with some possible crushing. Bent 1 pile 6 has only top 3 ft. of pile visible due to rip rap placement. Top 3 ft. of pile has open splits up to ½ in. wide. Decayed and partially hollow at splice noted in previous inspections is not visible at this time. See 2019 photo. Bent 2 pile 2 is decayed and partially hollow starting at connection to cross brace extending 3 ft. above connection. Bent 2 pile 3 has 1 in. of outside decay with some core decay. Moderate drift buildup at bent 3 and under span 2. See 2019 photo. Bent 3 piles 2 and 3 have up to 1 in. outside decay. Bent 3 pile 4 has up to 2 in. of outside decay with some section loss near sway brace on left side of pile. Bent 3 pile 5 is decayed and hollow with some crushing near cross brace connection, see 2019 photo. Bent 4 pile 1 has been spliced in the past, but has some outside decay below the splice. Bent 4 pile 2 has 1 1/4" of outside decay 1' below the x-brace connection. Bent 4 pile 5 has some core decay. Bent 5 cap has 1 ft. of decay with some section loss on left and right ends. Bent 5 pile 1 has 1 in. of outside decay. Bent 5 pile 3 has been replaced, see 2019 photo. Bent 5 pile 5 has 3 in. of outside decay. Bent 5 timber backwall between piles 1 - 4 has decay with areas of complete section loss. Some embankment settling through backwall. 4 ft. Left end timber backwall has section loss and losing embankment. Rip rap placed on slopes in 2010 to repair erosion. Embankment protection is in good condition. Trees & brush on banks. Underwater type 2 inspection performed this report.



Bridge #M0603(Routine, Underwater type 2)

SH 25-06- LM 1.39 over CANEY CREEK

Location: 1.39 M N INDEPENDENCE COL

Team Lead: James Adams **Inspection Date:** October 15, 2019