



Latitude:34.84441, Longitude:-92.12209

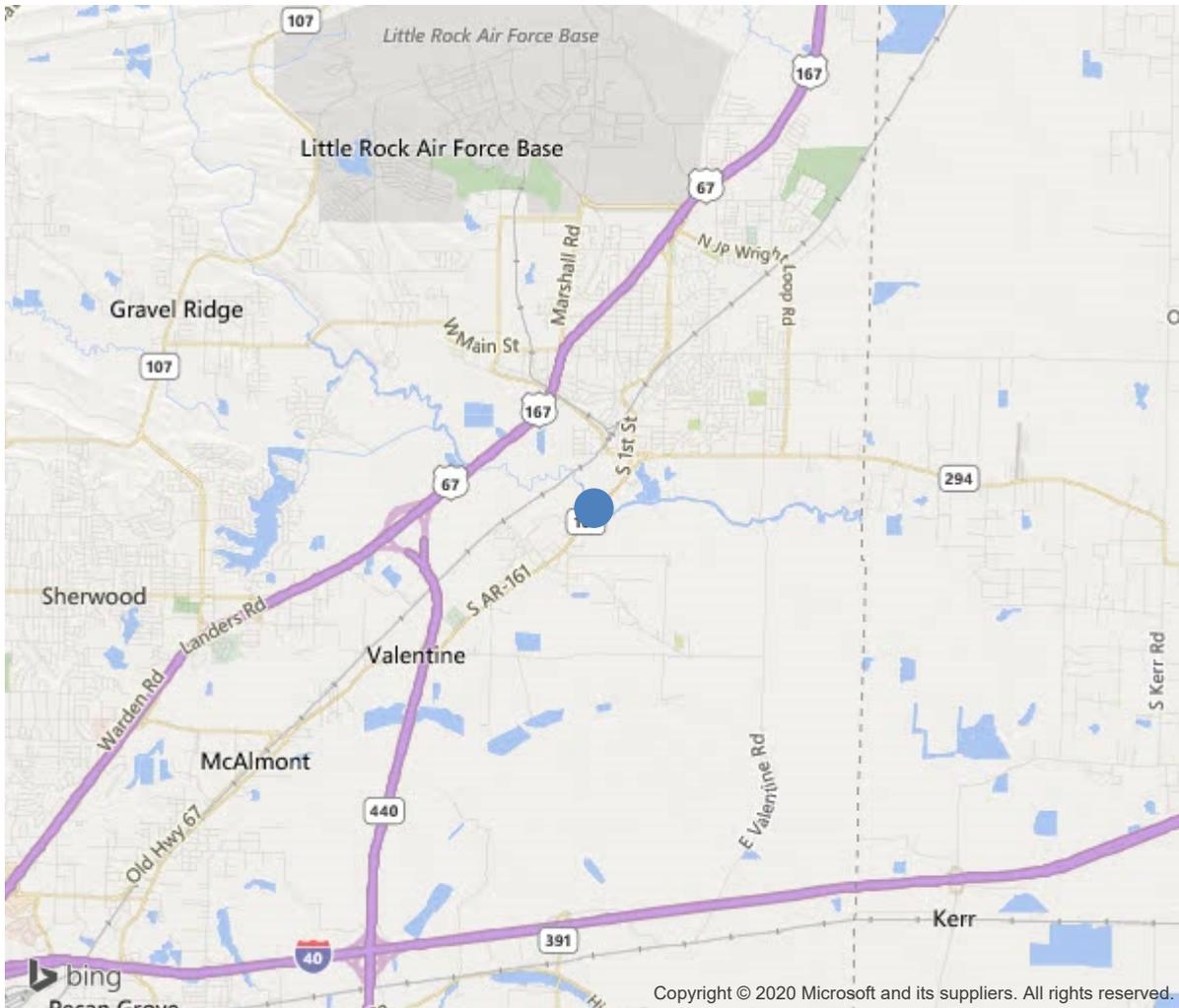
Route:161 Section:03 Log:3.45

Arnold Road ID:60x161x3xA, Arnold Log mile:3.441

District 06, Pulaski County

Owner: 1-State Highway Agency

7.77 MI N OF SH 70(I-I)



34.84441, -92.12209



Bridge #02913(Routine)
SH 161 Log 3.45 over BAYOU METO
Location: 7.77 MI N OF SH 70(I-I)

Team Lead: Shane Byrd Inspection Date: July 24, 2019

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	02913
(5) Inventory Route	161
(2) Highway Agency District	06
(3) County Code	119-Pulaski County, Arkansas
(4) Place Code	0
(6) Features Intersected	BAYOU METO
(7) Facility Carried	SH 161 Log 3.45
(9) Location	7.77 MI N OF SH 70(I-I)
(11) Mile Point	3.45 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000161030
(16) Latitude	34.84441
(17) Longitude	-92.12209
(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	32
Material	3-Steel
Type	2-Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	4
(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	1954
(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	12000
(30) Year of ADT	2018
(109) Truck ADT	2 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	38 ft
(49) Structure Length	165 ft
(50) Curb or Sidewalk Width	
Left	1.6 ft
Right	1.6 ft
(51) Bridge Roadway Width Curb to Curb	25.9 ft
(52) Deck Width Out to Out	31.8 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	29.9 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	0
(26) Functional Class	16-Urban 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	5
(60) Substructure	5
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	4-M 18 / H 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	48
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	1
Rating	29
(70) Bridge Posting	5-Equal to or above legal loads
(41) Structure Open/Posted/Closed	A-Open, no restriction
APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(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	195 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 341
(96) Total Project Cost	\$ 1000
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	15554
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	201907
(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	
SUFFICIENCY RATING	60.8
STATUS (SD/FO/None)	
STATUS (SD/FO/None)	Functionally Obsolete



Bridge #02913(Routine)
SH 161 Log 3.45 over BAYOU METO
Location: 7.77 MI N OF SH 70(I-I)

Team Lead: Shane Byrd, Inspection Date: July 24, 2019

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	5192	0	5192	0	0
1080	Delamination/Spall/Patched Area	SF	30	0	30	0	0
1130	Cracking (RC and Other)	SF	3182	0	3182	0	0
1190	Abrasion/Wear (PSC/RC)	SF	1980	0	1980	0	0
(12)							
Spans 2&4 have areas of scaling with some small delaminations. All spans have transverse cracks with heavy map cracking. All spans have traffic abrasion. Spans 3 and 4 have small spalls.							
Span 5, 2 ft delam soffit. Spans 3 and 4, exposed rebar on overhangs							
107	Steel Open Girder/Beam	LF	813	685	78	50	0
1000	Corrosion	LF	126	0	76	50	0
7000	Damage	LF	2	0	2	0	0
515	Steel Protective Coating	SF	4112	0	3112	748	252
3410	Chalking (Steel Protective Coatings)	SF	2912	0	2912	0	0
3420	Peeling/Bubbling/Cracking	SF	200	0	200	0	0
3440	Effectiveness (Steel Protective Coatings)	SF	1000	0	0	748	252
(107)							
All of the beams are/ were re-used from another bridge. All of the beams have bolt holes in the bottom flange ahead of the bearings. All of the beams have active rust with pitting to 3/16 to 3/8" inch deep on the bottom flanges at bearing area. Beams 2&3 of spans 2&4 have had some section loss repairs to the bottom flange in the past, these repair have flaking rust on the bottom flange repairs. See photo. Span 1, beams 1&4 have dents in the bottom flange.							
205	Reinforced Concrete Column	EA	2	0	0	2	0
1090	Exposed Rebar	EA	1	0	0	1	0
1190	Abrasion/Wear (PSC/RC)	EA	1	0	0	1	0
(205)							
Bent 3 column 1 spall with exposed rebar. Bent 3 column 2 has severe abrasion at bottom of column.							
210	Reinforced Concrete Pier Wall	LF	17	0	17	0	0
1190	Abrasion/Wear (PSC/RC)	LF	17	0	17	0	0
215	Reinforced Concrete Abutment	LF	80	70	7	3	0
1130	Cracking (RC and Other)	LF	10	0	7	3	0
(215)							
Vertical cracks in bents 1 and 6 up to 0.060"							
227	Reinforced Concrete Pile	EA	12	0	12	0	0



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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1190	Abrasion/Wear (PSC/RC)	EA	12	0	12	0	0
(227)							
The pile at bents 2,4&5 have abrasion up from the channel bottom 4 to 6 feet tall.							
234	Reinforced Concrete Pier Cap	LF	106	87	4	15	0
1080	Delamination/Spall/Patched Area	LF	3	0	0	3	0
1090	Exposed Rebar	LF	16	0	4	12	0
(234)							
Bent 2 has Spalls with exposed rebar. Photo linked.							
Bent 4 cap back spalls with exposed rebar.							
Bent 5 has Spalls with exposed rebar on left end.							
Bent 5 spall with exposed rebar bottom of cap between columns 2 & 3.							
304	Open Expansion Joint	LF	189	189	0	0	0
311	Movable Bearing	EA	25	0	0	25	0
1000	Corrosion	EA	25	0	0	25	0
(311)							
All bearings have active rust with pitting and layered rust due to open joints.							
313	Fixed Bearing	EA	25	0	0	25	0
1000	Corrosion	EA	25	0	0	25	0
(313)							
All bearings have active rust with pitting and layered rust due to open joints.							
330	Metal Bridge Railing	LF	330	0	0	330	0
1000	Corrosion	LF	330	0	0	330	0
(330)							
All of the rail has active rust with pitting on all surfaces.							



Deck overview.



Bent 2 left end of cap spall with 100% section loss to hoop bars.



Span 5 looking back soffit overview.



Abutment 1 vertical cracks up to 0.060"



Bent 6 beam 4 deep pitting up to 3/8" on bottom flange at bearing area.



Span 4 has spall in the deck.



Bent 3 span 2 beam 3 section loss repair has laminated rust at bottom flange. Common beam 2 this location.



Bent 1 joint seal missing.



Span 2 has spall in the deck.



Bent 3 column 1 has spall with exposed rebar.



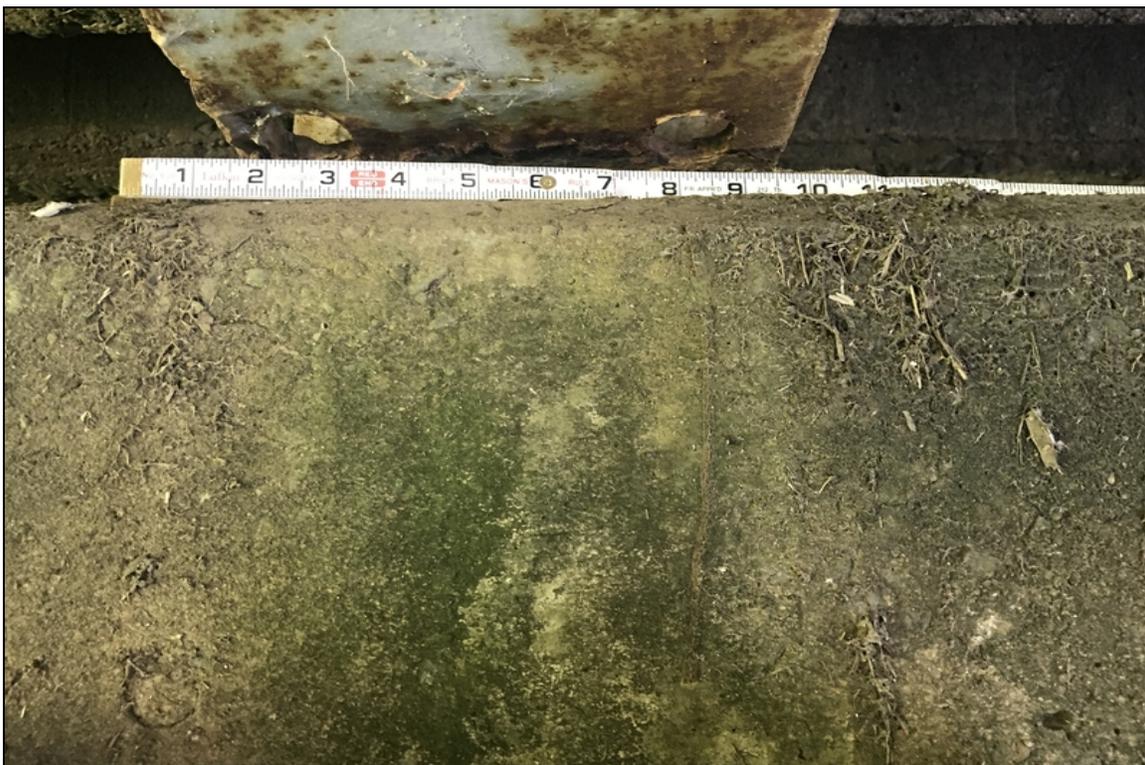
Bent 1 beam 3 deep pitting up to 3/8" on bottom flange at bearing area.



Bent 2 cap right end above pile 4 has spall with exposed rebar.



Bent 3 column 2 severe abrasion at bottom.



Bent 2 span 2 beam 3 deep pitting up to 3/16" to bottom flange at bearing.



Approach Southbound.



Span 2 has large unsealed transverse cracks in deck.



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Maintenance Needs



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Inspection Comments

AHTD Job 6460, 8393 for layout.

Logged north to south.

24' ladder needed , during dry periods you can drive under bridge on the northeast corner.
