



Latitude:34.77904, Longitude:-91.76912

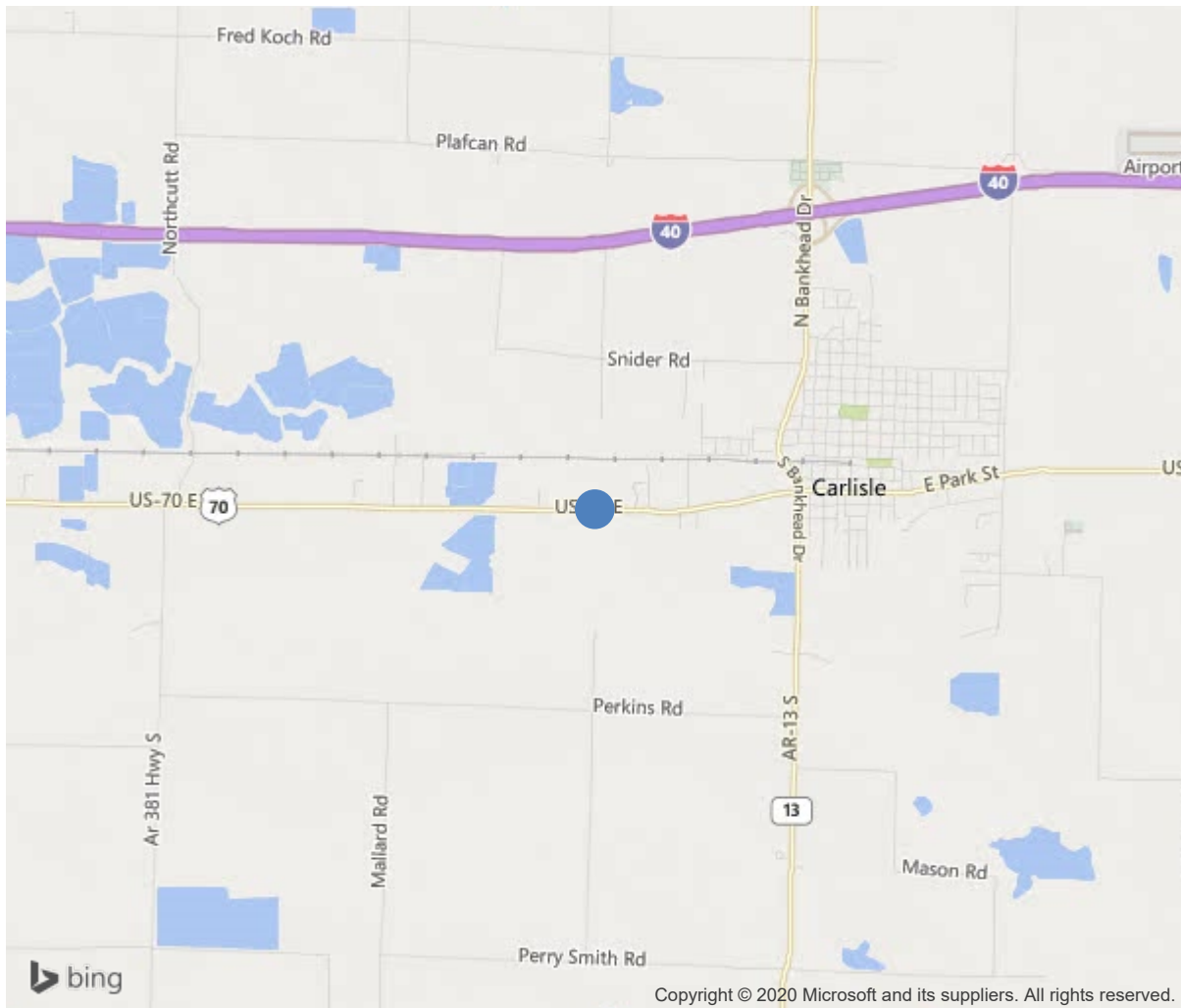
Route:70 Section:15 Log:7.478

Arnold Road ID:43x70x15xA, Arnold Log mile:7.476

District 06, Lonoke County

Owner: 1-State Highway Agency

1.1 MI W OF CARLISLE



34.77904, -91.76912



Bridge #01469(Routine)

US 70 Log 7.48 over BAYOU TWO

Location: 1.1 MI W OF CARLISLE

Team Lead: Chris Doggett Inspection Date: September 11, 2019

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	01469
(5) Inventory Route	70
(2) Highway Agency District	06
(3) County Code	85-Lonoke County, Arkansas
(4) Place Code	0
(6) Features Intersected	BAYOU TWO
(7) Facility Carried	US 70 Log 7.48
(9) Location	1.1 MI W OF CARLISLE
(11) Mile Point	7.478 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.77904
(17) Longitude	-91.76912
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	14
Material	1-Concrete
Type	4-Tee beam
(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	6-Bituminous
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1931
(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	2900
(30) Year of ADT	2014
(109) Truck ADT	1 %
(19) Bypass, Detour Length	4 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	34 ft
(49) Structure Length	103 ft
(50) Curb or Sidewalk Width	
Left	1.5 ft
Right	1.5 ft
(51) Bridge Roadway Width Curb to Curb	26.9 ft
(52) Deck Width Out to Out	30.1 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	27.9 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	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	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	5
(60) Substructure	7
(61) Channel & Channel Protection	6
(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	46
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	3
Rating	28
(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	3
(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	130 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 125
(96) Total Project Cost	\$ 374
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	4143
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	
(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

**Team Lead:** Chris Doggett, **Inspection Date:** September 11, 2019

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	3090	2905	0	185	0
1080	Delamination/Spall/Patched Area	SF	10	0	0	10	0
1090	Exposed Rebar	SF	15	0	0	15	0
1120	Efflorescence/Rust Staining	SF	160	0	0	160	0
510	Wearing Surfaces	SF	2781	2481	0	300	0
3220	Crack (Wearing Surface)	SF	300	0	0	300	0
(16) All spans, both sides of the fascia have cracking with efflorescence, photo linked. Span 3, between all girders a large transverse crack with efflorescence. Span 3, between girders 1 & 2, 6' of spall with exposed rebar, other small Spalls with exposed rebar scattered. Also scattered small delams.							
110	Reinforced Concrete Open Girder/Beam	LF	515	396	113	6	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1090	Exposed Rebar	LF	3	0	1	2	0
1120	Efflorescence/Rust Staining	LF	14	0	12	2	0
1130	Cracking (RC and Other)	LF	100	0	100	0	0
(110) Span 1 girder 1 spall with exposed rebar on right side. Span 2, girder 1 has spall with exposed rebar on the left side & a delam on the right side at bent 2, photo linked. Span 2 girder 5 has cracking with efflorescence on the end at bent 2, photo linked. Hairline cracks scattered on the sides of all girders. Span 3, girder 5 has a 25' hairline crack at the top of the left haunch.							
215	Reinforced Concrete Abutment	LF	70	70	0	0	0
227	Reinforced Concrete Pile	EA	10	0	10	0	0
1190	Abrasion/Wear (PSC/RC)	EA	10	0	10	0	0
(227) All piles have abrasion.							
234	Reinforced Concrete Pier Cap	LF	54	54	0	0	0
311	Movable Bearing	EA	5	5	0	0	0
331	Reinforced Concrete Bridge Railing	LF	206	0	206	0	0
1080	Delamination/Spall/Patched Area	LF	206	0	206	0	0
(331) Spalls at the base of bridge rail due to concrete deterioration.							





Span 2, Right side facia: numerous cracks with efflorescence staining



Soffit view





Span 2, bent 2, girder 1: spall with exposed rebar that has lost section



Span 2, bent 2, girder 1: opposite side with a large spall and exposed rebar and loss of bearing.  
There are 9" of bearing area remaining.



Deck view





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**US 70 Log 7.48 over BAYOU TWO**  
**Location: 1.1 MI W OF CARLISLE**

**Team Lead:** Chris Doggett **Inspection Date:** September 11, 2019

## **Maintenance Needs**





**Bridge #01469**(Routine)  
**US 70 Log 7.48 over BAYOU TWO**  
**Location: 1.1 MI W OF CARLISLE**

**Team Lead:** Chris Doggett **Inspection Date:** September 11, 2019

**Inspection Comments**

Job #6115, drawing #2830.

Logged east bound.