



Latitude:35.12599, Longitude:-90.52351

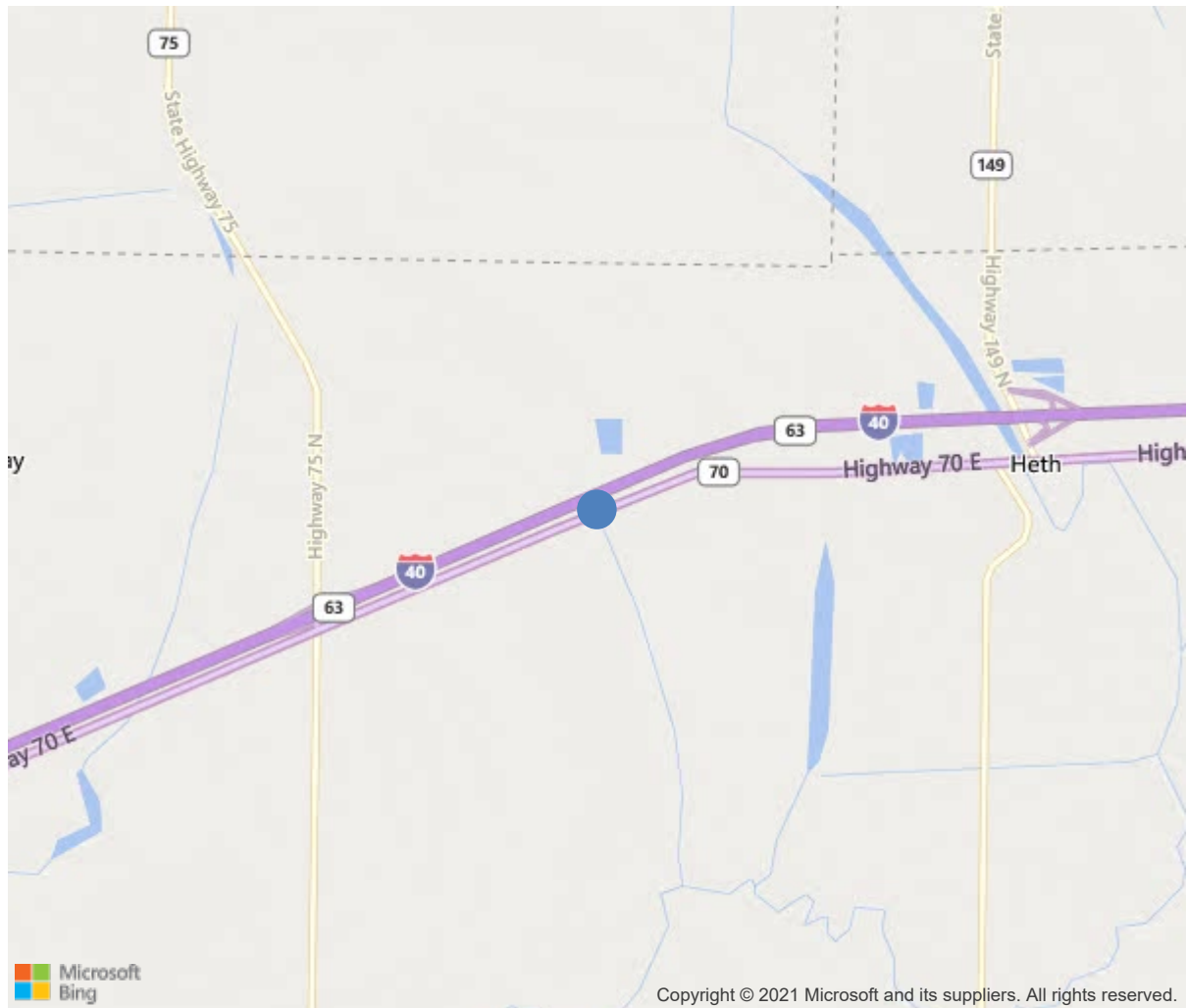
Route:70 Section:19 Log:17.73

Arnold Road ID:68x70x19xA, Arnold Log mile:17.733

District 01, St. Francis County

Owner: 1-State Highway Agency

2.00 Mi Sw Jct Of Sh 149



35.12599, -90.52351



**Bridge #01372(Routine, Underwater type 2)**

**Us70/Sec-19/L17.73 over Allen Bayou**

**Location: 2.00 Mi Sw Jct Of Sh 149**

**Team Lead: Myron Futrell Inspection Date: October 29, 2020**

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	01372
(5) Inventory Route	70
(2) Highway Agency District	01
(3) County Code	123-St. Francis County, Arkansa
(4) Place Code	0
(6) Features Intersected	Allen Bayou
(7) Facility Carried	Us70/Sec-19/L17.73
(9) Location	2.00 Mi Sw Jct Of Sh 149
(11) Mile Point	17.73 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.12599
(17) Longitude	-90.52351
(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	2
(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	1930
(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	1200
(30) Year of ADT	2019
(109) Truck ADT	18 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	33 ft
(49) Structure Length	69 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	27 ft
(52) Deck Width Out to Out	30 ft
(32) Approach Roadway Width (W/Shoulders)	28 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 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 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	7
(59) Superstructure	6
(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	47
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	2
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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0-Inspected feature does not meet cur
(36B) Transitions	1-Inspected feature meets currently a
(36C) Approach Guardrail	1-Inspected feature meets currently a
(36D) Approach Guardrail Ends	1-Inspected feature meets currently a
(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	94 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 125
(96) Total Project Cost	\$ 314
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	1573
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	10/2020		
(91) Frequency	24 Months		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			





Bridge #01372(Routine, Underwater type 2)

Us70/Sec-19/L17.73 over Allen Bayou

Location: 2.00 Mi Sw Jct Of Sh 149

Team Lead: Myron Futrell, Inspection Date: October 29, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1932	1886	44	2	0
1080	Delamination/Spall/Patched Area	SF	2	0	0	2	0
1090	Exposed Rebar	SF	16	0	16	0	0
1120	Efflorescence/Rust Staining	SF	28	0	28	0	0
510	Wearing Surfaces	SF	1725	1725	0	0	0
(16)	Soffit has open hairline transverse cracks with areas of light efflorescence. Soffit span #1 bay #4 at bent #2 has 1' delamination and 6' of exposed rebar. Soffit span #2 cracks extend into tee beams four inches. Soffit span #2 bay #4 has a one foot spall and a eight inch spall with exposed rebar with 5% section loss. Soffit overhangs have several small spalls with exposed rebar and delamination's.						
110	Reinforced Concrete Open Girder/Beam	LF	345	319	18	8	0
1080	Delamination/Spall/Patched Area	LF	10	0	10	0	0
1090	Exposed Rebar	LF	13	0	5	8	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
(110)	Girder #5 is spalled on outside face at bearing bent #2 with exposed rebar with 5% section loss in both spans. Girders have hairline vertical flexure cracks in sides. Span #1 girder #5 at bent #1 left side has several six inch spalls with exposed rebar. Span #1 girder #2 right side at bent #2 has three 6' spalls with exposed rebar and 3' of cracking. Span #1 girder #3 at bent #2 right side has a six inch delamination. Span #1 girder #3 at bent #2 left side has a six inch spall with exposed rebar. Span #2 girder #3 has 3 six inch delaminations on right side. Span #2 girder #2 has a 6' delamination on left side. Span #2 girder #3 at bent #2 left side has a six inch spall with exposed rebar. Span #2 girder #4 at bent #3 left side has a four inch spall with exposed rebar. Span #2 girder #5 at bent #3 left side has two six inch spalls with exposed rebar.						
215	Reinforced Concrete Abutment	LF	64	60	4	0	0
1120	Efflorescence/Rust Staining	LF	1	0	1	0	0
6000	Scour	LF	3	0	3	0	0
(215)	Abutment #1 has one vertical crack on left side with light efflorescence.						
227	Reinforced Concrete Pile	EA	6	6	0	0	0
(227)	Bent #2 pile #5 has vertical hairline crack at top. Abutment #2 has one exposed pile due to sandbags being misplaced.						
234	Reinforced Concrete Pier Cap	LF	26	17	6	3	0



**Team Lead:** Myron Futrell, **Inspection Date:** October 29, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1090	Exposed Rebar	LF	7	0	6	1	0
1120	Efflorescence/Rust Staining	LF	2	0	0	2	0
(234)							
Bent #2 cap back face has two four inch spalls with exposed rebar.							
Bent #2 cap both ends have a four inch spall with exposed rebar.							
Bent #2 cap both faces have vertical hairline cracks with ahead face having two with light efflorescence.							
Bent #2 cap ahead face bottom right end has a one foot spall with exposed rebar with 5% section loss.							
331	Reinforced Concrete Bridge Railing	LF	138	113	8	15	2
1090	Exposed Rebar	LF	8	0	8	0	0
7000	Damage	LF	17	0	0	15	2
(331)							
Abutment #1 end post right side has light collision damage.							
Abutment #1 left side monument post has been broken off with first fifteen feet of rail having collision damage, with 6' of exposed rebar.							
Approach rail has collision damage full length.							
Right bridge rail span #2 has collision damage with a few posts damaged.							



**Bridge #01372**(Routine, Underwater type 2)

**Us70/Sec-19/L17.73 over Allen Bayou**

**Location: 2.00 Mi Sw Jct Of Sh 149**

**Team Lead:** Myron Futrell **Inspection Date:** October 29, 2020

## Maintenance Needs

**Date Reported:** 12/28/2010

**Priority:** D- Routine

**Type of Work:** N/A

**Status:** Monitor

**Component:**

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### Deficiency Description

Soffit has open hairline transverse cracks with areas of light efflorescence.

Soffit span #1 bay #4 at bent #2 has 1' delamination and 6' of exposed rebar.

Soffit span #2 cracks extend into tee beams four inches.

Soffit span #2 bay #4 has a one foot spall and a eight inch spall with exposed rebar with 5% section loss.

Soffit overhangs have several small spalls with exposed rebar and delamination's.

### Remarks

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Span #2 bay #4 soffit.



Soffit crack with efflorescence extending into girder.





Soffit span #1 bay #4 at bent #2 has 1' delamination and 6' of exposed rebar.



Typical soffit overhang spall with exposed rebar.

**Date Reported:** 12/04/2012  
**Priority:** C - Important  
**Type of Work:** N/A  
**Status:** Assigned  
**Component:**

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### Deficiency Description

Girder #5 is spalled on outside face at bearing bent #2 with exposed rebar with 5% section loss in both spans.  
Girders have hairline vertical flexure cracks in sides.  
Span #1 girder #5 at bent #1 left side has several six inch spalls with exposed rebar.  
Span #1 girder #2 right side at bent #2 has three 6' spalls with exposed rebar and 3' of cracking.  
Span #1 girder #3 at bent #2 right side has a six inch delamination.  
Span #1 girder #3 at bent #2 left side has a six inch spall with exposed rebar.  
Span #2 girder #3 has 3 six inch delaminations on right side.  
Span #2 girder #2 has a 6' delamination on left side.  
Span #2 girder #3 at bent #2 left side has a six inch spall with exposed rebar.  
Span #2 girder #4 at bent #3 left side has a four inch spall with exposed rebar.  
Span #2 girder #5 at bent #3 left side has two six inch spalls with exposed rebar.

### Remarks

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Girder #5 spans #1,2 at bent #2.



Spans #1 and 2 girder #5 spalled with exposed rebar at bent #2.



**Date Reported:** 12/04/2012

**Priority:** D- Routine

**Type of Work:** N/A

**Status:** Monitor

**Component:**

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### Deficiency Description

Bent #2 cap back face has two four inch spalls with exposed rebar.

Bent #2 cap both ends have a four inch spall with exposed rebar.

Bent #2 cap both faces have vertical hairline cracks with ahead face having two with light efflorescence.

Bent #2 cap ahead face bottom right end has a one foot spall with exposed rebar with 5% section loss.

### Remarks

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Bent #2 cap ahead face bottom right corner.



Bent #2 cap ahead face bottom right end has a one foot spall with exposed rebar with 5% section loss.



**Date Reported:** 11/20/2018  
**Priority:** C - Important  
**Type of Work:** N/A  
**Status:** Monitor  
**Component:**

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**Deficiency Description**

Abutment #1 left side monument post has been broken off with first fifteen feet of rail having collision damage, and approach rail has collision damage full length.

**Remarks**

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Abutment #1 left side monument post has been broken off and approach rail has collision damage.



Abutment #1 left approach rail left side.



Abutment #1 left monument post broken off.



Span #2 right rail damage.



**Date Reported:** 12/02/2014  
**Priority:** C - Important  
**Type of Work:** N/A  
**Status:** Monitor  
**Component:**

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**Deficiency Description**

Abutment #2 left side has a void under approach slab extending into roadway with hole in approach roadway shoulder. Abutment #1 left approach gutter has small hole due to end rail post being pushed over.

**Remarks**

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Abutment #2 left side



Abutment #2 left side.





Erosion under abutment #2 left approach gutter.



Hole at abutment #2 left approach shoulder.



Void under abutment #2 approach slab left side.



3' long by 2 1/2' deep hole in abutment #2 left approach gutter.





Hole in abutment #1 left approach gutter.





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**Location: 2.00 Mi Sw Jct Of Sh 149**

**Team Lead:** Myron Futrell **Inspection Date:** October 29, 2020

### **Inspection Comments**

Abutment #1 left approach gutter has small hole due to end rail post being pushed over.

Abutment #2 left approach gutter has 3' long by 2 1/2' deep hole due to void under approach slab.

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### **Substructure Notes**

ABUTMENT #2 HAS ONE EXPOSED PILE DUE TO SANDBAGS BEING MISPLACED.

BENT #2 CAP FRONTFACE BOTTOM RIGHT END IS SPALLED 1' WITH EXPOSED REBAR.

BENT #2 LEFT & RIGHT END HAS 4" POP-OUT WITH EXPOSED REBAR.

BENT #2 CAP FRONTFACE AND BACK FACE HAVE VERTICAL HAIRLINE CRACKS FULL LENGTH.

FRONT FACE HAS TWO VERTICAL CRACKS WITH EFFLORESCENCE.

BENT #2 CAP FRONTFACE BOTTOM RIGHT END IS SPALLED 1' WITH EXPOSED REBAR WITH 5%+- SECTION LOSS.