



Latitude:35.12977, Longitude:-90.48039

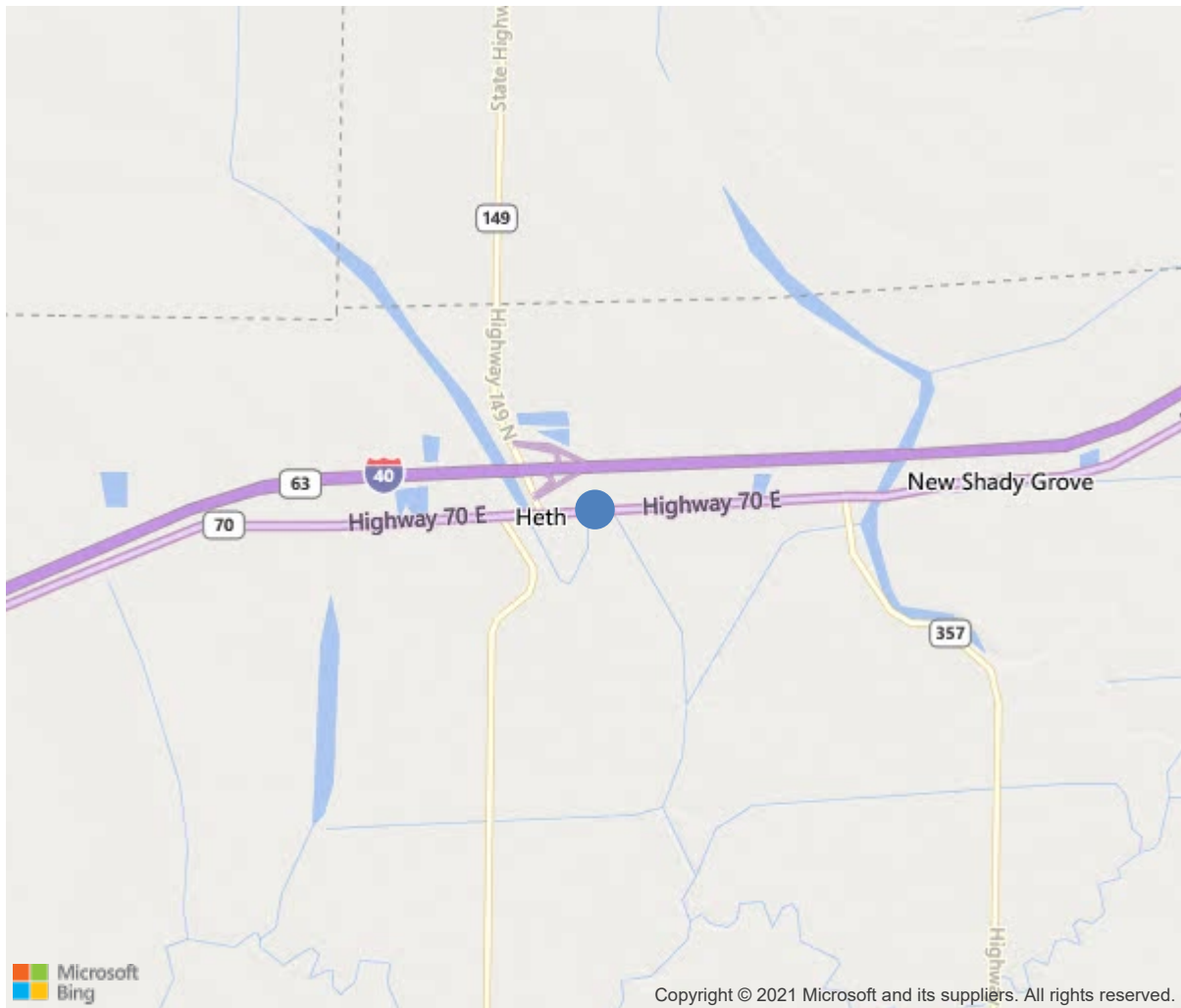
Route:70 Section:19 Log:20.24

Arnold Road ID:68x70x19xA, Arnold Log mile:20.215

District 01, St. Francis County

Owner: 1-State Highway Agency

.50 Mi Ne Jct Of Sh 149



35.12977, -90.48039



Bridge #01376(Underwater type 2, Routine)

Us-70/Sec-19/L20.2 over Drainage Canal

Location: .50 Mi Ne Jct Of Sh 149

Team Lead: Myron Futrell Inspection Date: February 11, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	01376
(5) Inventory Route	70
(2) Highway Agency District	01
(3) County Code	123-St. Francis County, Arkansa
(4) Place Code	0
(6) Features Intersected	Drainage Canal
(7) Facility Carried	Us-70/Sec-19/L20.2
(9) Location	.50 Mi Ne Jct Of Sh 149
(11) Mile Point	20.24 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.129768
(17) Longitude	-90.480392
(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	1700
(30) Year of ADT	2014
(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	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	27 ft
(52) Deck Width Out to Out	30 ft
(32) Approach Roadway Width (W/Shoulders)	26 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	27.2 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	7
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	5
(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	48
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	2
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	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	0-Inspected feature does not meet cur
(36D) Approach Guardrail Ends	1-Inspected feature meets currently a
(113) Scour Critical Bridges	7-Countermeasures have been installed
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	1936
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			02/2020
(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	Yes		02/2021
* 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.			

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
15	Prestressed Concrete Top Flange	SF	2010	1980	22	8	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1090	Exposed Rebar	SF	8	0	0	8	0
1120	Efflorescence/Rust Staining	SF	20	0	20	0	0
510	Wearing Surfaces	SF	1863	1863	0	0	0
(15) Transverse few cracks in soffit with light efflorescence 20 feet total. Gutters have dirt and debris in them. Span #2 soffit bay #4 near abutment #2 has a two foot delamination. Each soffit overhang has a few small pieces of rebar exposed with 10% section loss eight feet total.							
110	Reinforced Concrete Open Girder/Beam	LF	335	328	0	7	0
1080	Delamination/Spall/Patched Area	LF	4	0	0	4	0
1090	Exposed Rebar	LF	3	0	0	3	0
(110) Several small areas of rebar exposed and delamination's on sides of girders span #1 due to poor concrete coverage 4 feet total span #1 only. Girder #1 span #1 at bent #2 left side has a 1' spall with exposed rebar with 10% section loss. Girders have vertical hairline flexure cracks spaced foot and a half apart.							
215	Reinforced Concrete Abutment	LF	64	0	33	31	0
1130	Cracking (RC and Other)	LF	3	0	0	3	0
6000	Scour	LF	61	0	33	28	0
(215) Horizontal crack in back wall abutment #2 between girders #4&5 Abutment #1 slope is eroded to a 1:1, and is encroaching cap within 3' except at piles #2,3,4 it is one foot away and piles are exposed 1'. Abutment #1 slope is eroding and cap is undermined at pile #2 3" exposing pile.							
227	Reinforced Concrete Pile	EA	9	4	5	0	0
1190	Abrasion/Wear (PSC/RC)	EA	5	0	5	0	0
(227) Bent #2 piles have light to moderate abrasion.							
234	Reinforced Concrete Pier Cap	LF	26	21	0	5	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1090	Exposed Rebar	LF	3	0	0	3	0
(234) Bent #2 right end back face has three foot delamination.							

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Bent #2 right end front face has two foot spall with exposed rebar with 10% section loss.							
Bent #2 left end is cracked and delaminated with one foot spall with exposed rebar with 10% section loss.							
331	Reinforced Concrete Bridge Railing	LF	138	132	0	6	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
1090	Exposed Rebar	LF	5	0	0	5	0
(331)							
Span #2 right side outside of rail has 4' area of spall with exposed rebar at mid span with 5% section loss.							
Span #1 right side one upright of rail is spalled with exposed rebar with 5% section loss.							
Abutment #1 left end post has collision damage with exposed rebar with no section loss.							



Bridge #01376(Underwater type 2, Routine)

Us-70/Sec-19/L20.2 over Drainage Canal

Location: .50 Mi Ne Jct Of Sh 149

Team Lead: Myron Futrell **Inspection Date:** February 11, 2020

Maintenance Needs

Date Reported: 02/24/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

Bent #2 right end back face has two foot delamination.

Bent #2 right end front face has two foot spall with exposed rebar with 10% section loss.

Bent #2 left end is cracked and delaminated with one foot spall with exposed rebar with 10% section loss.

Remarks



Bent #2 cap right end front face



Bent #2 cap right end back face



Left end cap at bent #2 and side of concrete t
beam span #1 bent #2



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Location: .50 Mi Ne Jct Of Sh 149

Team Lead: Myron Futrell **Inspection Date:** February 11, 2020

Date Reported: 02/24/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

Abutment #1 slope is eroding and cap is undermined at pile #2 3" exposing pile.

Remarks



Abutment #1



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Us-70/Sec-19/L20.2 over Drainage Canal

Location: .50 Mi Ne Jct Of Sh 149

Team Lead: Myron Futrell **Inspection Date:** February 11, 2020

Date Reported: 02/01/2016

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

Gutters have dirt and debris in them with vegetation.

Remarks



Gutters full of dirt and vegetation



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Us-70/Sec-19/L20.2 over Drainage Canal

Location: .50 Mi Ne Jct Of Sh 149

Team Lead: Myron Futrell **Inspection Date:** February 11, 2020

Date Reported: 02/05/2018
Priority: C - Important
Type of Work: N/A
Status: Monitor
Component:

Deficiency Description

Left side channel is blocked with debris.

Remarks



Left side channel is blocked with debris.



Bridge #01376(Underwater type 2, Routine)

Us-70/Sec-19/L20.2 over Drainage Canal

Location: .50 Mi Ne Jct Of Sh 149

Team Lead: Myron Futrell **Inspection Date:** February 11, 2020

Date Reported: 02/05/2018
Priority: C - Important
Type of Work: N/A
Status: Monitor
Component:

Deficiency Description

Brush and small trees are growing beside and under bridge.

Remarks



Brush and small trees are growing beside and under bridge.

Date Reported: 02/05/2018

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

Abutment #1 right side at drain has four foot hole in slope due to drain erosion.

Remarks



Abutment #1 right side at drain has four foot hole in slope due to drain erosion.

Date Reported: 02/18/2020
Priority: C - Important
Type of Work: Clean
Status: Open
Component: Deck

Deficiency Description

Deck drains plugged causing water to pool on deck.

Remarks



Right deck drain plugged causing water to pool on deck.

Date Reported: 02/18/2020

Priority: D- Routine

Type of Work: Repair

Status: Open

Component: Approach

Deficiency Description

Abutment 2 left approach gutter has small void underneath.

Remarks



Small void under abutment 2 left approach gutter.



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Location: .50 Mi Ne Jct Of Sh 149

Team Lead: Myron Futrell **Inspection Date:** February 11, 2020

Inspection Comments

Drawing Nos. 1036, 1958, 1963.

2/13/2017-Special inspection to monitor scour at abutments.

02/05/2018 lowered deck from 8 to 7 due to transverse cracks with light efflorescence in soffit.

02/05/2018 lowered substructure from 7 to 6 due to scour at abutments.

Brush and small trees are growing beside and under bridge.

Abutment #1 right side at drain has four foot hole in slope due to drain erosion.