



Latitude:35.13076, Longitude:-90.45654

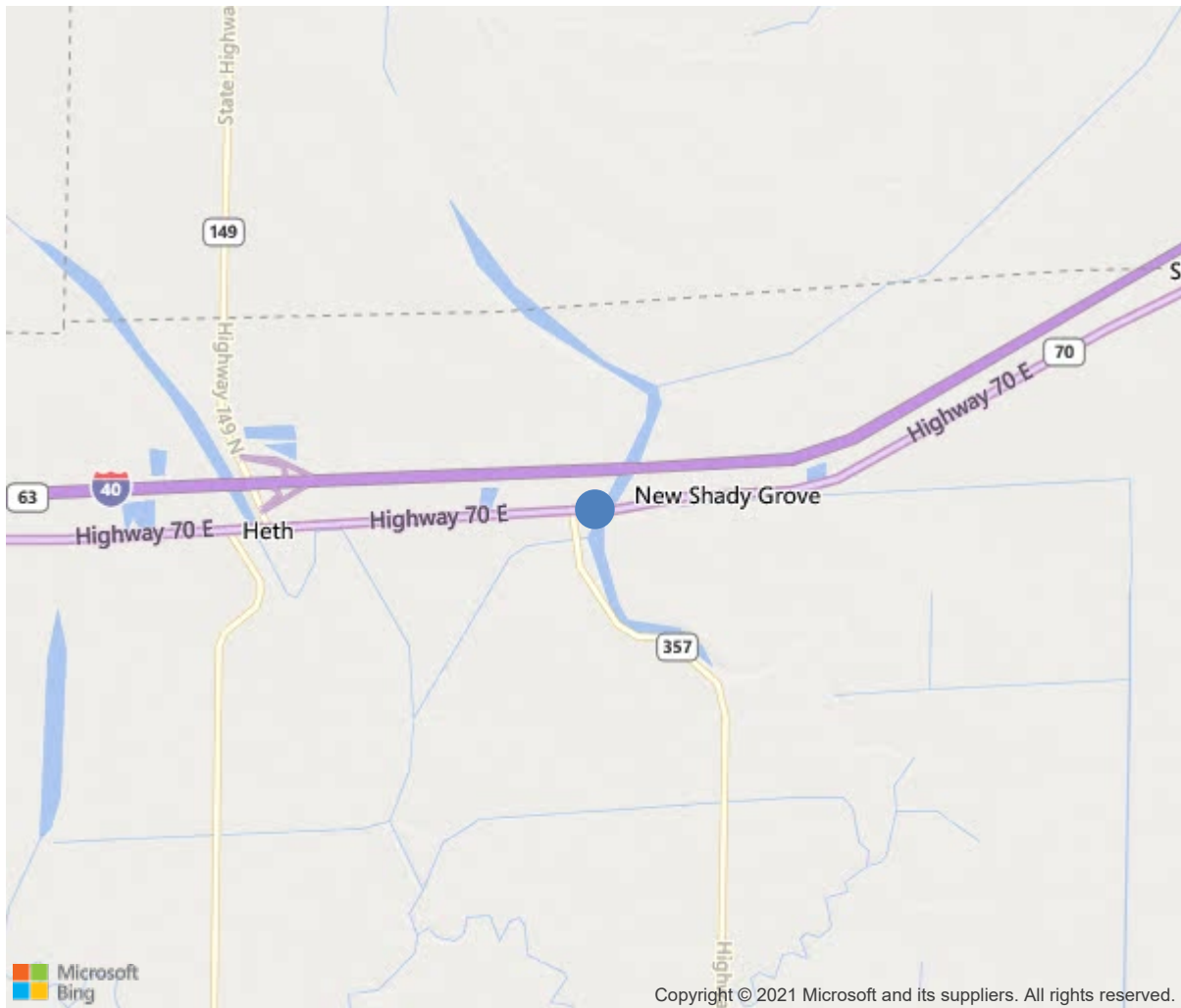
Route:70 Section:19 Log:21.6

Arnold Road ID:68x70x19xA, Arnold Log mile:21.568

District 01, St. Francis County

Owner: 1-State Highway Agency

3.45 Mi Sw Crittenden Co



35.13076, -90.45654



Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	01377
(5) Inventory Route	70
(2) Highway Agency District	01
(3) County Code	123-St. Francis County, Arkansa
(4) Place Code	0
(6) Features Intersected	Blackfish Lake
(7) Facility Carried	Us-70/Sec-19/L21.6
(9) Location	3.45 Mi Sw Crittenden Co
(11) Mile Point	21.6 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.13076
(17) Longitude	-90.456543
(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	32
Material	3-Steel
Type	2-Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	9
(46) No. of Approach Spans	1
(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	2010
(30) Year of ADT	2018
(109) Truck ADT	18 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	60 ft
(49) Structure Length	470 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	27.2 ft
(52) Deck Width Out to Out	30 ft
(32) Approach Roadway Width (W/Shoulders)	27.6 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	27.5 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	4
(59) Superstructure	4
(60) Substructure	5
(61) Channel & Channel Protection	7
(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	44
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	9
Rating	27
(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	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	5-Bridge foundations determined to be
PROPOSED IMPROVEMENTS	
(75) Type of Work	Replacement of bridge or other
(76) Length of Structure Improvement	509 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 125
(96) Total Project Cost	\$ 1005
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	1331
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	03/2020		
(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.			

[illegible]



Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell, Inspection Date: March 25, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>Girders #1&5 at abutment #2 have been spliced on end, spliced area is corroded with laminations with up to 10% section loss. Girder #2 last 10" has 1" tall area of 100% section loss in web near bottom flange at girder end. bottom flange has up to 80% section loss last 3'. Girder #3 has 6" x 1" long hole in web near bottom flange, bottom flange has 100% section loss both sides at abutment #2. Girder #4 has 1" hole in bottom flange with up to 85% section loss last 1', web has up to 50% section loss last 3' near bottom flange at abutment #2.</p>							
110	Reinforced Concrete Open Girder/Beam	LF	1885	1797	20	68	0
1080	Delamination/Spall/Patched Area	LF	8	0	0	8	0
1090	Exposed Rebar	LF	8	0	0	8	0
1130	Cracking (RC and Other)	LF	1	0	0	1	0
(110)	<p>Span #1 girder #5 cracked and delaminated at bent #1. Girder #1 at bent #3 longitudinal and vertical crack on end. All girders are cracked and spalled on ends. Span #9 all girders delaminated over cap.</p>						
210	Reinforced Concrete Pier Wall	LF	168	140	0	28	0
1080	Delamination/Spall/Patched Area	LF	10	0	0	10	0
1090	Exposed Rebar	LF	18	0	0	18	0
(210)	<p>Bent #4 back face spalled at top on right with exposed rebar. Bent 4 left side spalled near cap with exposed rebar. Bent #5 back face has several areas of exposed rebar and delaminations. Bent #6 back face 3' spall with exposed rebar with 15% section loss in center at top. Bent # 7 ahead face at top has several areas of spalls with exposed rebar. Bent #8 back side at waterline has large area of honeycomb with exposed rebar.</p>						
215	Reinforced Concrete Abutment	LF	64	56	7	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
(215)	<p>Abutment #1 cap is spalled on right end with exposed rebar with 10% section loss. Abutment 1 cap 4' longitudinal crack between girders 1 and 2 and a 3' longitudinal crack under girder 4.</p>						
227	Reinforced Concrete Pile	EA	15	6	5	4	0
1130	Cracking (RC and Other)	EA	4	0	0	4	0
1190	Abrasion/Wear (PSC/RC)	EA	5	0	5	0	0
(227)	<p>Bent #2 piles #1,4 cracked near top 3' down from cap. Bent #2 pile #4 cracked and delaminated for 4' at top. Bent #9 pile #5 is cracked near top for 3' Bent #2 piles and bent #9 piles have minor abrasion with no loose aggregate.</p>						
228	Timber Pile	EA	5	5	0	0	0

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
234	Reinforced Concrete Pier Cap	LF	245	152	0	93	0
1080	Delamination/Spall/Patched Area	LF	4	0	0	4	0
1090	Exposed Rebar	LF	25	0	0	25	0
(234)							
Bent #9 cap has a 1' spall above pile #2.							
Bent #10 cap is spalled on end and ahead face has a large spall full length with exposed rebar.							
Bent #10 cap has large delamination on bottom chord between piles #1&2.							
301	Pourable Joint Seal	LF	330	210	0	120	0
2350	Debris Impaction	LF	120	0	0	120	0
(301)							
Joints have been overlaid.							
311	Movable Bearing	EA	38	0	0	38	0
1000	Corrosion	EA	8	0	0	8	0
515	Steel Protective Coating	SF	104	80	0	0	24
3440	Effectiveness (Steel Protective Coatings)	SF	24	0	0	0	24
(311)							
Heavily rusted with laminations, section loss, and loss of movement.							
313	Fixed Bearing	EA	40	20	0	20	0
1000	Corrosion	EA	20	0	0	20	0
515	Steel Protective Coating	SF	120	120	0	0	0
(313)							
Surface rust with minor section loss.							
331	Reinforced Concrete Bridge Railing	LF	921	857	0	64	0
1090	Exposed Rebar	LF	10	0	0	10	0
(331)							
Several spandrels are spalled with exposed rebar.							
Abutment 1 left and right end posts spalled with no exposed rebar.							



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Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell **Inspection Date:** March 25, 2020

Maintenance Needs

Date Reported: 03/29/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

SOFFIT

SPAN#1 BAY #1

SPAN#8 BAY #4

SPAN #9 BAY ALL BAYS

SPAN#10 ALL BAYS

GUTTER AT JOINTS

BAYS HAVE AREAS OF DELAMINATIONS AND SPALLS WITH EXPOSED REBAR

Remarks





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Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell **Inspection Date:** March 25, 2020

Date Reported: 03/29/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

GIRDERS

SPANS # 2,3,4,5,6,7,8

SEVERAL GIRDERS HAVE SMALL SPALLS (EXPOSED CAGE REBAR)

Remarks





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Team Lead: Myron Futrell Inspection Date: March 25, 2020



Span #5 bent #5 girder #4



Bent #6 girder #4 span # 5&6



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Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell **Inspection Date:** March 25, 2020

Date Reported: 03/29/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

PILE

BENT # 2 PILE #1,4,5

BENT #9 PILE #5

PILES ARE CRACKED NEAR TOP 3'+- DOWN FROM CAP

Remarks





Bent #2 pile #5



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Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020

Date Reported: 03/29/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

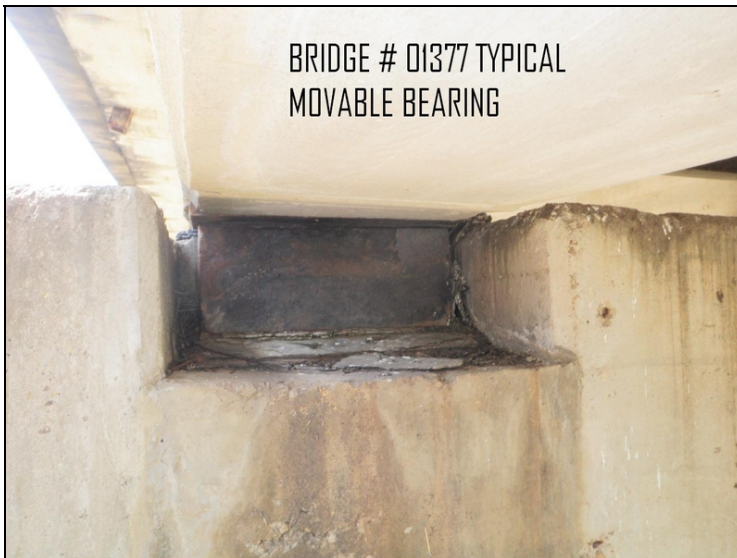
Deficiency Description

MOVABLE BEARINGS

ALL

CORODED WITH LAMINATIONS SOME SECTION LOSS NON- MOVING

Remarks





Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020

Date Reported: 03/29/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

CAP

BENT # 4 RIGHT END
BENT #6 AHEAD FACE
BENT #7 BOTH FACES
BENT #10 AHEAD FACE

SPALLED WITH EXPOSED REBAR

Remarks







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Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020







Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020





Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell **Inspection Date:** March 25, 2020

Date Reported: 04/01/2014

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

GIRDERS

BENT #5 GIRDER #4

BENT #6 GIRDER #4

BENT #7 GIRDER #4

SPALLED ON GIRDER ENDS WITH PRIMARY REBAR EXPOSED.

Remarks





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Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020





Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020





Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell **Inspection Date:** March 25, 2020

Date Reported: 03/30/2016

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

GUTTERS FULL OF DIRT AND VEGETATION.

Remarks



Gutters full of dirt and debris



Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020



Date Reported: 03/26/2018
Priority: C - Important
Type of Work: N/A
Status: Assigned
Component:

Deficiency Description

Bent 9 right gutter between spans 8 and 9 has 8" hole through deck.
Bent #10 right shoulder has hole in deck

Remarks



Bent#10 right shoulder hole in deck



Hole in right gutter of bent 9.



Hole in right gutter at bent 10.



Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell **Inspection Date:** March 25, 2020

Date Reported: 03/26/2018
Priority: C - Important
Type of Work: N/A
Status: Monitor
Component:

Deficiency Description

All spans have spalls in asphalt overlay both lanes. Spans # 5,6,7,8,9 are the worst.

Remarks





Bridge #01377(Routine, Underwater type 2)

Us-70/Sec-19/L21.6 over Blackfish Lake

Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell Inspection Date: March 25, 2020



Span 9 deck



Span 8 deck.

Date Reported: 03/30/2020
Priority: A - Safety deficiency; requires prompt action
Type of Work: Repair
Status: Open
Component: Superstructure

Deficiency Description

Girder #2 last 10" has 1" tall area of 100% section loss in web near bottom flange at girder end. Bottom flange has up to 80% section loss last 3'.
Girder #3 has 6" x 1" long hole in web near bottom flange, bottom flange has 100% section loss both sides at abutment #2.
Girder #4 has 1" hole in bottom flange with up to 85% section loss last 1', web has up to 50% section loss last 3' near bottom flange at abutment #2.

Remarks



Span 10 girder 3 left side.



Span 10 girder 4 right side at abutment 3



Span 10 girder 4 at abutment 2



Span 10 girder 4 left side at abutment 2.



Span 10 girder 3 right side at abutment 2.



Girder #2 last 10" has 1" tall area of 100% section loss in web near bottom flange at girder end. Bottom flange has up to 80% section loss last 3'.

Date Reported: 03/30/2020
Priority: A - Safety deficiency; requires prompt action
Type of Work: Repair
Status: Open
Component: Deck

Deficiency Description

Span 10 soffit between girders 3 and 4 has approximately 60 square feet of spalling up to 3" deep with exposed rebar with up to 40% section loss and approximately 80 square feet of delamination.

Remarks



Span 10 soffit between girders 3 and 4.



Span 10 soffit between girders 3 and 4.



Span 10 soffit between girders 3 and 4.

Date Reported: 03/30/2020
Priority: C - Important
Type of Work: Repair
Status: Open
Component: Approach

Deficiency Description

Abutment #1 left approach shoulder overlay spalled 2' x 3' x 3" deep.
Abutment 2 right shoulder overlay spalled 3' x 4' x 4" deep.

Remarks



Abutment 1 left shoulder overlay spalled.



Abutment 2 right shoulder overlay spalled 3' x 4' x 4" deep.



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Location: 3.45 Mi Sw Crittenden Co

Team Lead: Myron Futrell **Inspection Date:** March 25, 2020

Inspection Comments

3-26-18-Lowered channel from 8 to 7 due to erosion.

03/26/2020-lowered deck from 6 to 4 due to spalling with exposed rebar and delaminations in span #10 soffit.

03/26/2020-lowered superstructure from 5 to 4 due to girder condition in span #10 at abutment #2.