



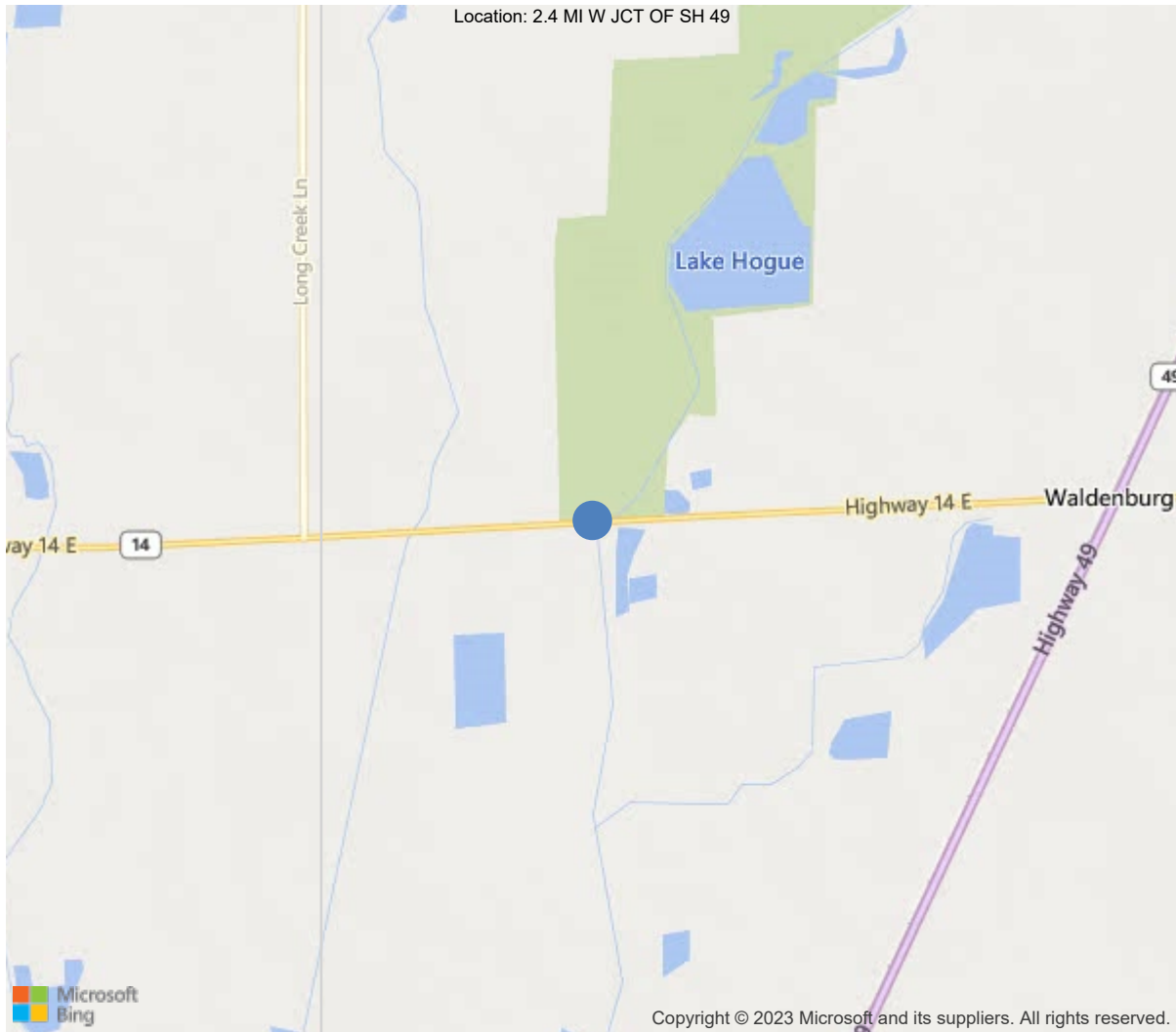
Latitude:35.56358, Longitude:-90.97618

Route:14 Section:13 Log:3.56

Arnold Road ID:56x14x13xA, Arnold Log mile:3.554

District 10, 111 - Poinsett County

Owner: 1 - State Highway Agency



35.56358, -90.97618



Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, Inspection Date: 02/19/2020

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	02446
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	111 - Poinsett County
(4) Place Code	0
(6) Features Intersected	BAYOU DEVIEW
(7) Facility Carried	SH 14-13- LM 3.56
(9) Location	2.4 MI W JCT OF SH 49
(11) Mile Point	3.56 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000014130
(16) Latitude	35.56358
(17) Longitude	-90.97618
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	15
(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	1956
(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	3500
(30) Year of ADT	2014
(109) Truck ADT	1 %
(19) Bypass, Detour Length	11 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	28 ft
(49) Structure Length	420 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	27.8 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 ft
(33) Bridge Median	0 - No median
(34) Skew	30 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	25.9 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 w
(111) Pier Protection	5 - None present but re-evalua
(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	6 - Rural Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(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
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	5
(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	45
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
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	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	458 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 265
(96) Total Project Cost	\$ 1879
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	5091
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	02/23/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<p>* 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.</p>			

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Inspection late due to snooper broken down & high water.

Approach roadway at bent 1 end has settled ½ in. with minor spalls in approach roadway asphalt.

Right rail at span 13 collision damage has been repaired see 2020 photo.

Approach roadway at bent 16 end has settled up to 1 in.

Left rail at span 2 has minor impact damage.

Several bridge rail posts have cracks or minor spalls.

Left and right curbs have a few delaminated or spalled areas.

Slabs have 2 in. – 3 in. lateral shift over all bents.

Asphalt wearing surface has several transverse and diagonal cracks especially at joints.

Wearing surface has several large asphalt patches in poor condition with map cracking and rutting, especially in left lane near bents.

Span 7 left lane near bent 8 has a 2 ft. diameter spall in asphalt. See 2020 photo.

Span 14 left lane has a 2 ft. diameter spall in asphalt. See 2020 photo.

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Soffit has several cracks, delaminated areas, and spalls with exposed rebar along edges of slabs and near drains. Soffit has a few minor longitudinal cracks, some with light efflorescence.

Span 7 soffit has some map cracking with efflorescence.

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Embankment at bent 1 has some minor settlement.

Interior bent caps have several small spalls on faces of caps. Caps have several spalls with exposed rebar on bottom of cap.

Ends of caps have some deterioration & spalls with exposed rebar.

Bent 7 cap has several spalled & delaminated areas on top of cap span 7 side.

Bent 10 cap has 18 ft. of spalls on span 10 side with some loss of bearing area.

Bent 12 cap span 11 side has exposed rebar with efflorescence in face of cap over pile 4.

Bent 15 pile 2 has horizontal ring crack near top of pile.

Bent 16 abutment is undermined in 2 locations. Approximately 10 ft. of cap is undermined up to 1.5 ft. below and 2 ft. back under. Very little berm remains at centerline of abutment.

Drift buildup on bents 12, 13 & 14.

Trees & brush in channel.

Minor scour under bridge near centerline of bridge due to overflow from main channel.

Channel profiled on 2/6/18. Channel embankment has scoured near bent 11. Bent 11 has approx. 4 ft. loss of pile penetration.

A-46 - Asset Files

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Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, Inspection Date: 02/19/2020

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	11130	10548	284	298	0
1080	Delamination/Spall/Patched Area	SF	160	0	7	153	0
1090	Exposed Rebar	SF	61	0	0	61	0
1120	Efflorescence/Rust Staining	SF	174	0	90	84	0
1130	Cracking (RC and Other)	SF	187	0	187	0	0
510	Wearing Surfaces	SF	10080	8134	840	1102	4
3210	Delam/Spall/Patched Area/Pothole	SF	479	0	0	475	4
3220	Crack (Wearing Surface)	SF	1467	0	840	627	0
215	Reinforced Concrete Abutment	LF	88	78	10	0	0
6000	Scour	LF	10	0	10	0	0
227	Reinforced Concrete Pile	EA	70	69	1	0	0
1130	Cracking (RC and Other)	EA	1	0	1	0	0
234	Reinforced Concrete Pier Cap	LF	455	311	0	144	0
1080	Delamination/Spall/Patched Area	LF	61	0	0	61	0
1090	Exposed Rebar	LF	76	0	0	76	0
1120	Efflorescence/Rust Staining	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	5	0	0	5	0
301	Pourable Joint Seal	LF	388	388	0	0	0
330	Metal Bridge Railing	LF	840	824	9	7	0
7000	Damage	LF	16	0	9	7	0
515	Steel Protective Coating	SF	2856	2856	0	0	0

**Deck**

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Span 14 left lane has a 2 ft. diameter spall in asphalt. See 2020 photo.



Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

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1130	Cracking (RC and Other)	EA	1	0	1	0	0
234	Reinforced Concrete Pier Cap	LF	455	311	0	144	0
1080	Delamination/Spall/Patched Area	LF	61	0	0	61	0
1090	Exposed Rebar	LF	76	0	0	76	0
1120	Efflorescence/Rust Staining	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	5	0	0	5	0

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Comment:

Embankment at bent 1 has some minor settlement.

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Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, Inspection Date: 02/19/2020

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation



Roadway W TO E



Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, **Inspection Date:** 02/19/2020

Maintenance Needs

Date Reported: 04/10/2012
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component:

Deficiency Description

Wearing surface has several large delaminated areas with map cracking and rutting, especially in Lt lane near bents.

Remarks







Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, **Inspection Date:** 02/19/2020

Date Reported: 04/10/2012

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 9 - None

Status: Monitor

Component:

Deficiency Description

Lt and Rt curbs have a few delaminated and/or spalled areas.

Remarks

Date Reported: 04/10/2012
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component:

Deficiency Description

Interior bent caps have several small spalls on faces of caps. Caps have several spalls with rebar exposed on bottom. Ends of caps have some deterioration/spalls with rebar exposed. Bent 7 cap has several spalled/delaminated areas on ahead side. Bent 10 cap has 18' of spalls on ahead side with some loss of bearing area.

Remarks





Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, Inspection Date: 02/19/2020

Date Reported: 02/06/2018

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 9 - None

Status: Monitor

Component:

Deficiency Description

Channel profiled on 2/6/18. Channel embankment has scoured near bent 11. Bent 11 has approx. 4' loss of pile penetration.

Bent 16 is undermined in 2 locations. Approximately 10' of cap is undermined up to 1.5' below and 2' back under.

Remarks

Date Reported: 02/06/2018
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component:

Deficiency Description

Large drift buildup across channel under spans 10 – 14.

Remarks

Some drift in channel has been removed Observed at inspection 02-26-2020 JFA/CWS





Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, **Inspection Date:** 02/19/2020

Date Reported: 02/06/2018

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 9 - None

Status: Monitor

Component:

Deficiency Description

Approach roadway at bent 1 end has settled ½".
Approach roadway at bent 16 end has settled up to 1".

Remarks

Date Reported: 02/06/2018
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component:

Deficiency Description

Lt rail at span 2 has minor impact damage.
Rt rail at span 13 has collision damage. 7' of rail near bent 13 is torn loose.

Remarks

Span 13 rail has been repaired, see 2020 photo. Observed 02-26-2020 JFA/Cws



Span 13 rail right repaired

Date Reported: 02/27/2020
Priority: C - Important
Type of Work: Repair (General)
Status: Open
Component:

Deficiency Description

Span 7 left lane near bent 8 has a 2 ft. diameter spall in asphalt. See 2020 photo.
Span 14 left lane has a 2 ft. diameter spall in asphalt. See 2020 photo.

Remarks



Span 7



Span 14



Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEW

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, Inspection Date: 02/19/2020

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	



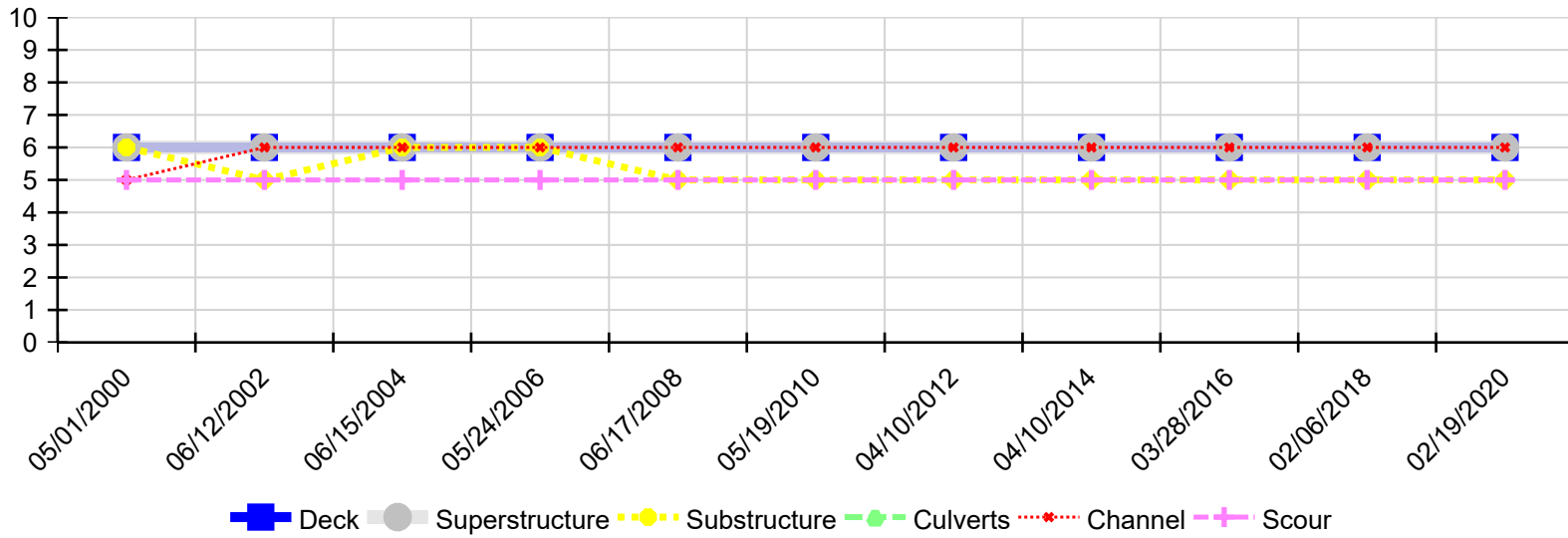
Asset #02446(Routine)

SH 14-13- LM 3.56 over BAYOU DEVIEU

Location: 2.4 MI W JCT OF SH 49

Team Lead: James Adams, Inspection Date: 02/19/2020

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
02/19/2020	6	6	5	N	6	5
02/06/2018	6	6	5	N	6	5
03/28/2016	6	6	5	N	6	5
04/10/2014	6	6	5	N	6	5
04/10/2012	6	6	5	N	6	5
05/19/2010	6	6	5	N	6	5
06/17/2008	6	6	5	N	6	5
05/24/2006	6	6	6	N	6	5
06/15/2004	6	6	6	N	6	5
06/12/2002	6	6	5	N	6	5
05/01/2000	6	6	6	N	5	5