



Latitude:34.84844, Longitude:-90.63278

Route:79 Section:16 Log:9.89

Arnold Road ID:39x79x16xA, Arnold Log mile:9.889

District 01, 77 - Lee County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

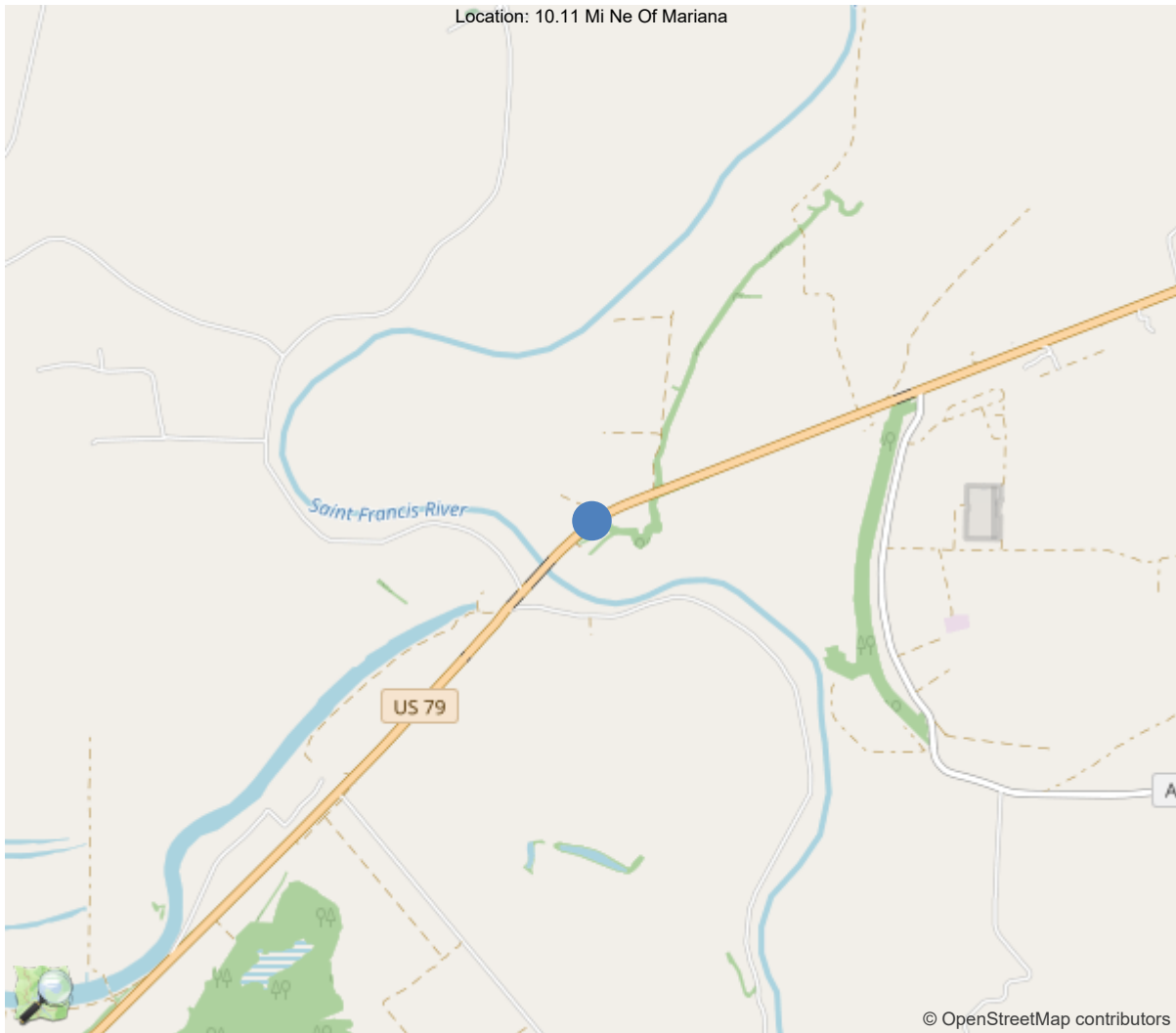
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	28		
Code 9 (31 Tons)	31		
Code 5 (40 Tons)	41		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



34.84844, -90.63278



Asset #M1465(Routine)

Us-79/Sec-16/L9.89 over Ditch

Location: 10.11 Mi Ne Of Mariana

Team Lead: Austin Janes Inspection Date: 10/01/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M1465
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	77 - Lee County
(4) Place Code	0
(6) Features Intersected	Ditch
(7) Facility Carried	Us-79/Sec-16/L9.89
(9) Location	10.11 Mi Ne Of Mariana
(11) Mile Point	9.89 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000079160
(16) Latitude	34.848438
(17) Longitude	-90.632782
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	119
Material	1 - Concrete
Type	19 - Culvert
(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	N - Not applicable
(108) Wearing Surface/Protective System	
Type of Wearing Surface	N - Not applicable (applies only to stru
Type of Membrane	N - Not applicable (applies only to stru
Type of Deck Protection	N - Not applicable (applies only to stru
AGE AND SERVICE	
(27) Year Built	1919
(106) Year Reconstructed	1950
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	1800
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	14 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	11.2 ft
(49) Structure Length	23.7 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	0 ft
(52) Deck Width Out to Out	0 ft
(32) Approach Roadway Width (W/Shoulders)	36 ft
(33) Bridge Median	0 - No median
(34) Skew	45 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	36 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 w
(111) Pier Protection	1 - Navigation protection not
(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	1
(26) Functional Class	2 - Rural Principal Arterial -
(100) Defense Highway	0 - The inventory route is not
(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 par
(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	N
(59) Superstructure	N
(60) Substructure	N
(61) Channel & Channel Protection	5
(62) Culverts	6
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	43
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	26
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	N
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	N - Not applicable or a safety feat
(36B) Transitions	N - Not applicable or a safety feat
(36C) Approach Guardrail	N - Not applicable or a safety feat
(36D) Approach Guardrail Ends	N - Not applicable or a safety feat
(113) Scour Critical Bridges	8 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	1936
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	10/01/2024		
(91) Frequency	24		
(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.			



Asset #M1465(Routine)

Us-79/Sec-16/L9.89 over Ditch

Location: 10.11 Mi Ne Of Mariana

Team Lead: Austin Janes Inspection Date: 10/01/2024

General Observation

Culvert was accessed with Hip Boots.
No lane closure required.

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

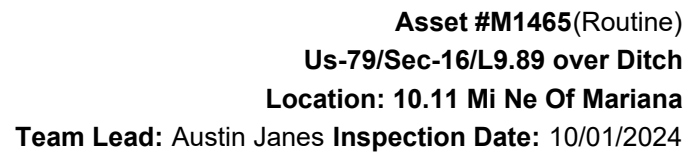
Overall, the Channel/Channel Protection is in Fair condition with embankment erosion on both sides of the culvert, along with heavy sediment build up in both barrels.

62 - Culverts (6 - Deterioration or initial disintegration, minor chloride contamination, cracking with some leaching, or spalls on concrete or masonry walls and slabs. Local minor scouring at curtain walls, wingwalls or pipes. Metal culverts have a smooth curvature, non-symmetrical shape, significant corrosion or moderate pitting.)

Overall, the Culvert is in Satisfactory condition with areas of spalling with exposed reinforcing steel, cracking with efflorescence and abrasion throughout the structure.

A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (7 - Some minor scour.)

Overall, the Scour is in Good condition with minor scour holes at inlet and outlet ends of the structure and some aggradation of sediment within the structure.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	<div> <div></div> <div></div> <div></div> <div></div> </div>			
				CS1	CS2	CS3	CS4
241	Reinforced Concrete Culvert	LF	248	0	224	22	2
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
1090	Exposed Rebar	LF	14	0	0	12	2
1120	Efflorescence/Rust Staining	LF	27	0	20	7	0
1190	Abrasion/Wear (PSC/RC)	LF	206	0	204	2	0
<p>(241) Barrel 1, right end: efflorescence with build up along top box edge. 1LF CS3.</p> <p>Barrel 1: sediment build up up to 4.5 feet.</p> <p>Barrel 2, 15' from left side: exposed rebar. 9 LF cs3</p> <p>Barrel 2, end of structure, left side, head wall: spall with exposed reinforcing steel. CS3.</p> <p>Barrel 2, intermediate wall, 20' from left end: abrasion with aggregate loss. 2LF CS3.</p> <p>Barrel 2, right end: efflorescence along top corner. 4LF CS2. Vertical crack. 1LF CS3.</p> <p>Barrel 2, right end: exposed rebar. 1LF CS3.</p> <p>Barrel 2: sediment build up, up to 3.5 feet.</p> <p>Beginning of structure, left side, wing wall: cracking and efflorescence.</p> <p>End of structure, left side, wing wall: diagonal crack.</p> <p>Intermediate wall, right side: spall. 1LF CS3.</p> <p>Left end of structure. Sediment accumulation in both boxes.</p> <p>Left side, intermediate wall efflorescence with build up. 1LF CS3.</p> <p>Left side: head wall is disintegrating with efflorescence and spalling. 1LF CS3.</p>							



Elevation.



Inventory.



Left side channel.



Right side channel.



Typical roadway.



Culvert: heavy vegetation growth on both sides.



Culvert: heavy vegetation growth on both sides.



Culvert: buried in vegetation.



10/03/2024

Barrel 2, end of structure, left side, head wall: spall with exposed reinforcing steel with 100% section loss. 1' CS4.



10/03/2024

Barrel 2, 15' from left side: exposed rebar. 9 LF cs3



10/03/2024

Barrel 2, left side: sediment build up.



10/03/2024

Barrel 2, intermediate wall, 20' from left end: abrasion with aggregate loss. 2LF CS3.



End of structure, left side, wing wall: diagonal crack.



Beginning of structure, left side, wing wall: cracking and efflorescence.



Left side: head wall is disintegrating with efflorescence and spalling. 1LF CS3.
Left side, intermediate wall efflorescence with build up. 1LF CS3.



Left end of structure. Sediment accumulation in both boxes.



Intermediate wall, right side: spall. 1LF CS3.



Barrel 2: sediment build up, up to 4 feet.



Barrel 1: sediment build up up to 4.5 feet.



Barrel 1, right end: efflorescence with build up along top box edge. 1LF CS3.



Barrel 2, right end: efflorescence along top corner. 4LF CS2.
Vertical crack. 1LF CS3.



Barrel 2, right end: exposed rebar. 1LF CS3.

Maintenance Needs

Date Reported: 08/06/2012

Priority: C - Important

Type of Work: Channel Work/Drift Removal

Status: Monitor

Component: Channel

Deficiency Description

Large vegetation is growing on left & right sides of box and in channel.

Remarks



Trees and vegetation growing behind wing walls and on top of culvert ends



Vegetation and trees growing on wings.

Maintenance Needs

Date Reported: 08/06/2012

Priority: D- Routine

Type of Work: Channel Work/Drift Removal

Status: Monitor

Component: Channel

Deficiency Description

Barrel 1: sediment build up up to 4.5 feet.

Barrel 2: sediment build up, up to 3.5 feet.

Remarks



Barrel 2, left side: sediment build up.



Barrel #2 has 3' of silt full length



Barrel #1 has 4' of silt full length

Maintenance Needs

Date Reported: 08/05/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Culverts

Deficiency Description

Barrels 1 & 2, Headwalls: Spalling with exposed reinforcing steel with up to 100% section loss. 2' CS3, 2' CS4.

Remarks



Barrel 2, end of structure, left side, head wall: spall with exposed reinforcing steel with 100% section loss. 1' CS4.



Right side head wall heavily scaled with exposed rebar with 100% section loss.



Interior wall right side spalled with no exposed rebar.



Exposed rebar right side head wall



Left side head wall heavily scaled with exposed rebar with up to 100% section loss



Left side at abutment #2 head wall exposed rebar with 5% section loss.



right side head wall

Maintenance Needs

Date Reported: 08/05/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

End of structure, right side wing wall: cracked and separated 1ft. at the top. due to large vegetation growing behind wing wall.

Remarks



End of structure, right side wing wall: cracked and separated 1ft. at the top. due to large vegetation growing behind wing wall.



Cracking in barrel #2 outer wall right side



Right side abutment #2 wing

Maintenance Needs

Date Reported: 08/05/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Barrel 1, undersurface, 15' from left side: exposed rebar. 2 LF cs3

Barrel 2, undersurface, 15' from left side: exposed rebar. 9 LF cs3

Remarks



Barrel 2, 15' from left side: exposed rebar. 9 LF cs3



Exposed rebar barrel #2 left end.



Exposed rebar barrel #1 soffit left side



Span # 2 soffit has areas of delamination with small spalls on lt. end 15' - 20' inside and exposed rebar 8' total.



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Location: 10.11 Mi Ne Of Mariana

Team Lead: Austin Janes Inspection Date: 10/01/2024

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	Yes

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (No)



Asset #M1465(Routine)

Us-79/Sec-16/L9.89 over Ditch

Location: 10.11 Mi Ne Of Mariana

Team Lead: Austin Janes Inspection Date: 10/01/2024

A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (Yes)



Culvert: heavy vegetation growth on both sides.



Culvert: heavy vegetation growth on both sides.



Culvert: buried in vegetation.

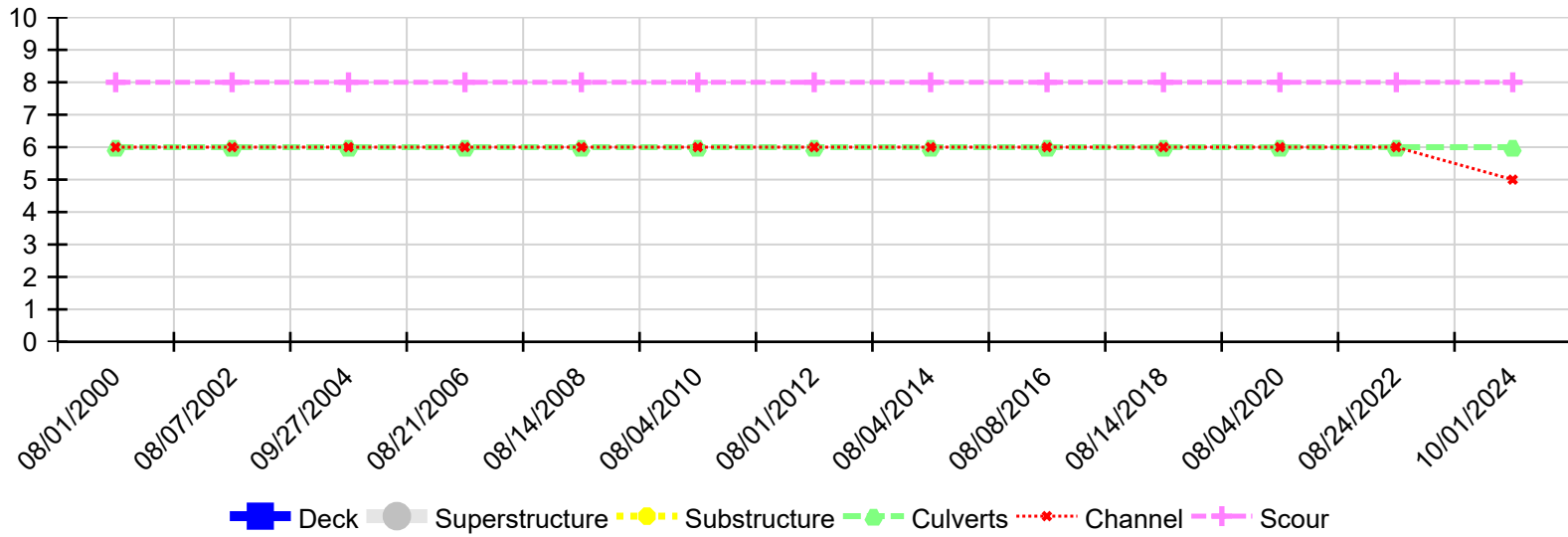


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Us-79/Sec-16/L9.89 over Ditch

Location: 10.11 Mi Ne Of Mariana

Team Lead: Austin Janes Inspection Date: 10/01/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/01/2024	N	N	N	6	5	8
08/24/2022	N	N	N	6	6	8
08/04/2020	N	N	N	6	6	8
08/14/2018	N	N	N	6	6	8
08/08/2016	N	N	N	6	6	8
08/04/2014	N	N	N	6	6	8
08/01/2012	N	N	N	6	6	8
08/04/2010	N	N	N	6	6	8
08/14/2008	N	N	N	6	6	8
08/21/2006	N	N	N	6	6	8
09/27/2004	N	N	N	6	6	8
08/07/2002	N	N	N	6	6	8
08/01/2000	N	N	N	6	6	8