



Latitude:33.84618, Longitude:-92.61941

Route:273 Section:01 Log:4.149

Arnold Road ID:20x273x1xA, Arnold Log mile:4.108

District 07, 39 - Dallas County

Owner: 1 - State Highway Agency

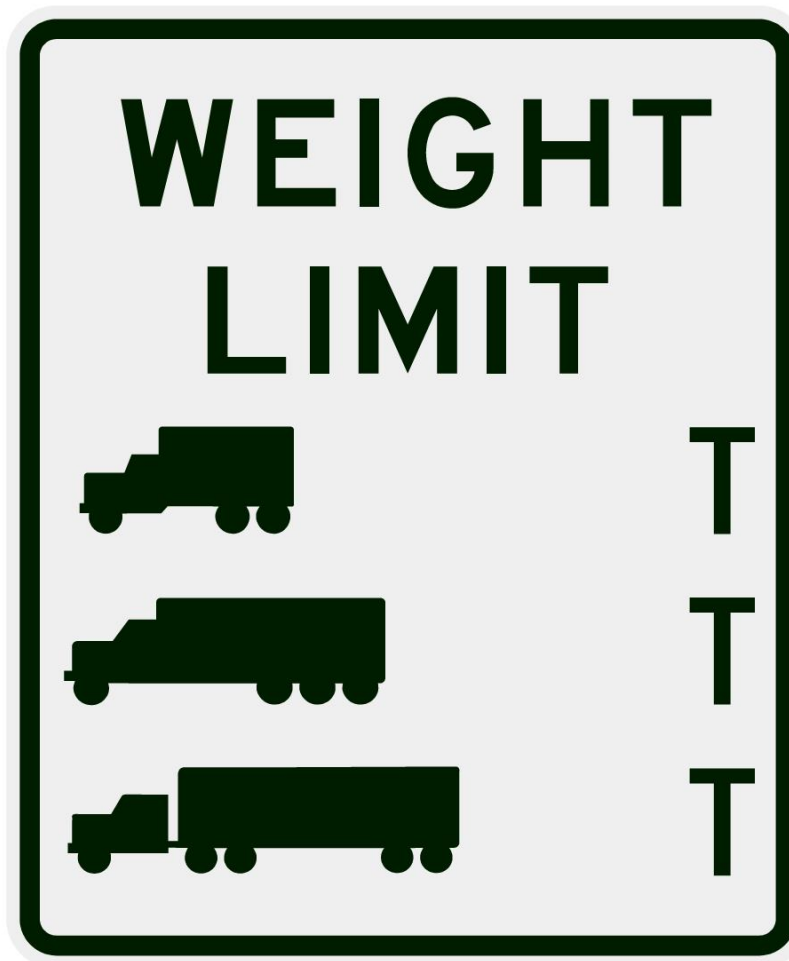
Bridge Posting Information

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

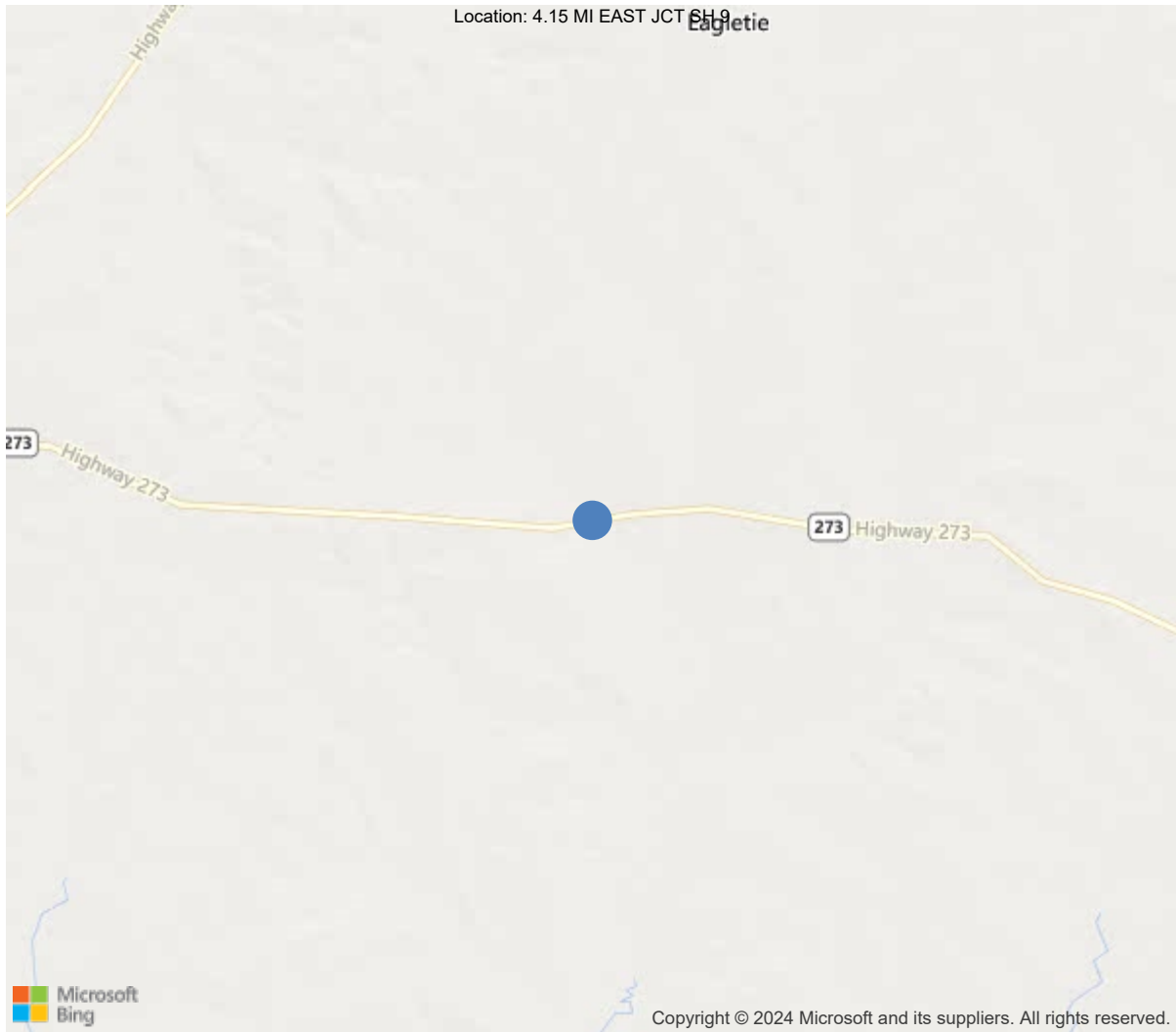
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	38		
Code 9 (31 Tons)	48		
Code 5 (40 Tons)	56		

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



33.84618, -92.61941



Asset #X0645(Routine)

SH 273 S-1 LM 4.15 over MARSHALL CREEK

Location: 4.15 MI EAST JCT SH 9

Team Lead: John Parks, Inspection Date: 08/25/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	X0645
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	39 - Dallas County
(4) Place Code	0
(6) Features Intersected	MARSHALL CREEK
(7) Facility Carried	SH 273 S-1 LM 4.15
(9) Location	4.15 MI EAST JCT SH 9
(11) Mile Point	4.149 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.84618
(17) Longitude	-92.61941
(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	4
(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	1986
(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	470
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	9 ft
(49) Structure Length	41 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)	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	27.9 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	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	0
(26) Functional Class	7 - Rural Major Collector
(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	N
(59) Superstructure	N
(60) Substructure	N
(61) Channel & Channel Protection	6
(62) Culverts	6
LOAD RATING AND POSTING	
(31) Design Load	4 - M 18 / H 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	56
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	34
(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	9
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(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	484
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/25/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	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.			



General Observation

08/06/2018 JPR -- This structure is logged from West to East.

61 - Channel/Channel Protection (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.) The channel at the upstream end of the culvert is has moved due to sediment build up at the mouth of the culvert and is scouring the embankment behind barrel 1 wing wall.

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.)
All barrels 1/3 silted in
Barrels 1, 2, & 3 have exposed rebar in the tops due to insufficient concrete cover.



Asset #X0645(Routine)

SH 273 S-1 LM 4.15 over MARSHALL CREEK

Location: 4.15 MI EAST JCT SH 9

Team Lead: John Parks, Inspection Date: 08/25/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
241	Reinforced Concrete Culvert	LF	188	149	37	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1090	Exposed Rebar	LF	13	0	13	0	0
1190	Abrasion/Wear (PSC/RC)	LF	24	0	24	0	0

**Culvert**

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
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1190	Abrasion/Wear (PSC/RC)	LF	24	0	24	0	0

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.)

Comment: All barrels 1/3 silted in

Barrels 1, 2, & 3 have exposed rebar in the tops due to insufficient concrete cover.



Elevation



Elevation



Barrel 3, typical view of the barrels.



Upstream



Downstream



Approach

Maintenance Needs

Date Reported: 08/06/2018

Priority: C - Important

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Assigned

Component: Culverts

Deficiency Description

Left of the culvert side has silt built up @ outlet end of all barrels for 3/4 of the openings.

Remarks



Outlet end, Lt. side has silt built up @ outlet end of all barrels for 3/4 of the openings.



Left of the culvert side has silt built up @ outlet end of all barrels for 3/4 of the openings.

Maintenance Needs

Date Reported: 08/25/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Channel

Deficiency Description

The channel at the upstream end of the culvert is has moved due to sediment build up at the mouth of the culvert and is scouring the embankment behind barrel 1 wing wall.

Remarks



The channel at the upstream end of the culvert is has moved due to sediment build up at the mouth of the culvert and is scouring the embankment behind barrel 1 wing wall.



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Team Lead: John Parks, Inspection Date: 08/25/2022

Maintenance Needs

Date Reported: 08/06/2018

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Assigned

Component: Culverts

Deficiency Description

Vegetation right side

Remarks



Vegetation right side

Maintenance Needs

Date Reported: 08/06/2018

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Culverts

Deficiency Description

Barrel 1, left side, the wing wall has broken.
Barrel 4, right wing wall has separated.

Remarks



Wingwall left side broke at barrel 1



Barrel 1, left side, the wing wall has broken.



Barrel 4, right wing wall has separated.



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	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



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Location: 4.15 MI EAST JCT SH 9

Team Lead: John Parks, Inspection Date: 08/25/2022

A-57 - Beam End and Bearing Painting 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

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested



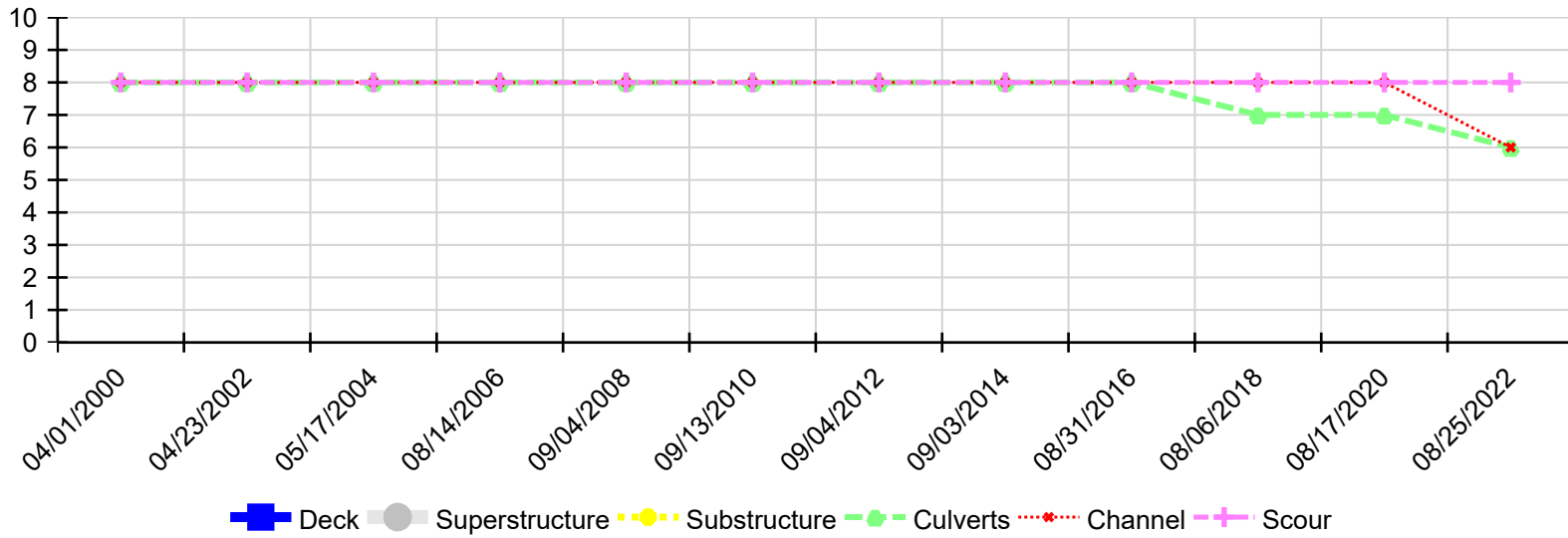
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Location: 4.15 MI EAST JCT SH 9

Team Lead: John Parks, Inspection Date: 08/25/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/25/2022	N	N	N	6	6	8
08/17/2020	N	N	N	7	8	8
08/06/2018	N	N	N	7	8	8
08/31/2016	N	N	N	8	8	8
09/03/2014	N	N	N	8	8	8
09/04/2012	N	N	N	8	8	8
09/13/2010	N	N	N	8	8	8
09/04/2008	N	N	N	8	8	8
08/14/2006	N	N	N	8	8	8
05/17/2004	N	N	N	8	8	8
04/23/2002	N	N	N	8	8	8
04/01/2000	N	N	N	8	8	8