



Latitude:33.83935, Longitude:-92.56298

Route:273 Section:01 Log:7.558

Arnold Road ID:20x273x1xA, Arnold Log mile:7.523

District 07, 39 - Dallas County

Owner: 1 - State Highway Agency

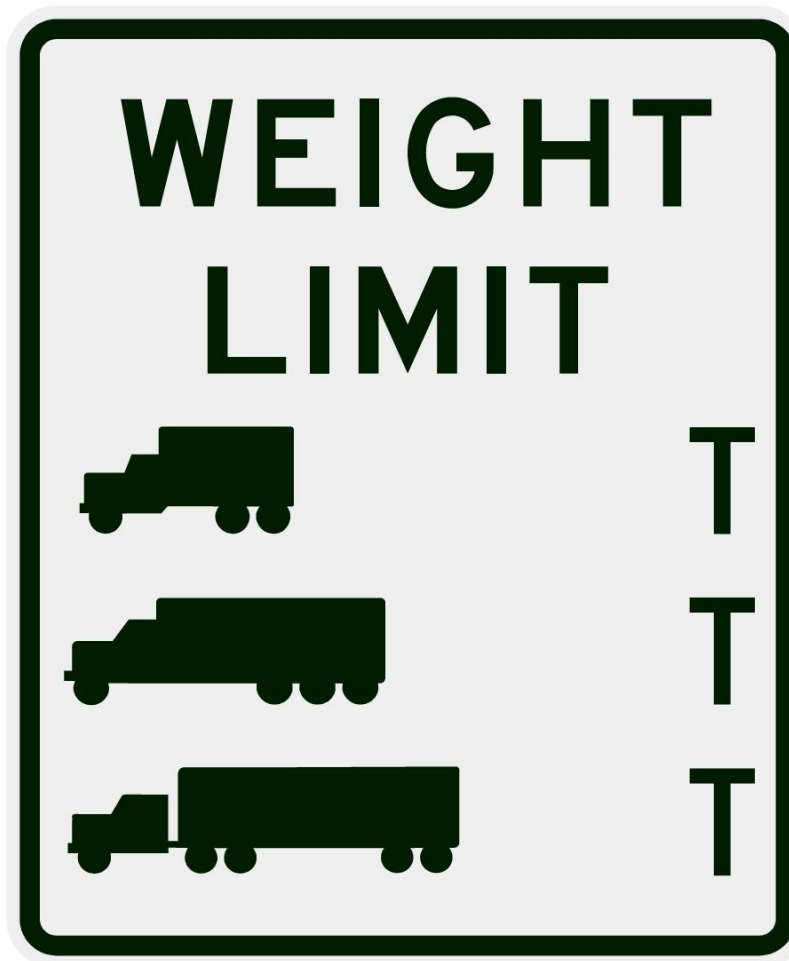
Bridge Posting Information

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

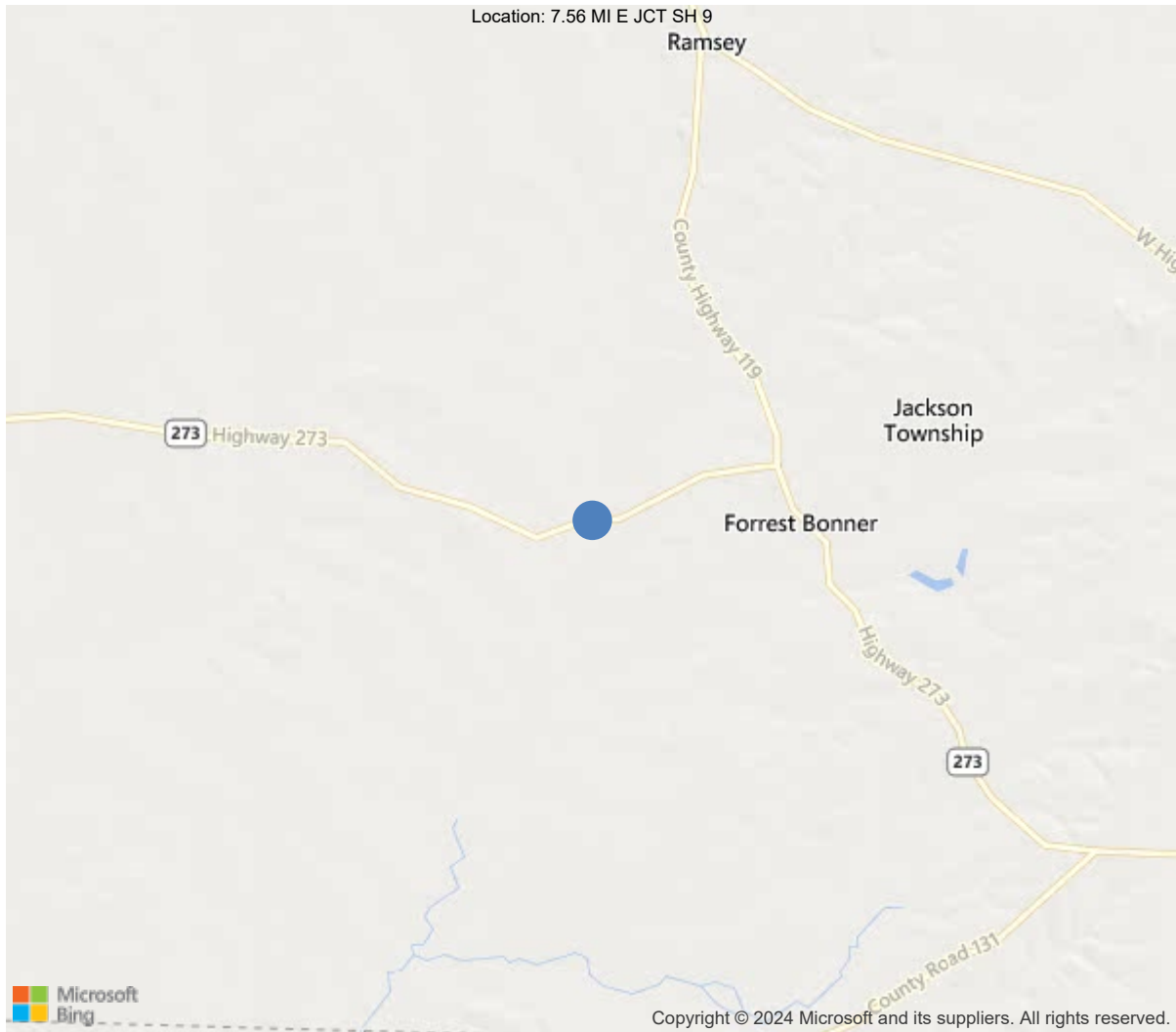
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	60		

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



33.83935, -92.56298



Asset #06148(Routine, Underwater type 2)

SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, Inspection Date: 09/13/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06148
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	39 - Dallas County
(4) Place Code	0
(6) Features Intersected	FREEO CREEK
(7) Facility Carried	SH 273 S-1 LM 7.55
(9) Location	7.56 MI E JCT SH 9
(11) Mile Point	7.558 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.83935
(17) Longitude	-92.56298
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel beam
(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	2 - Concrete Precast Panels
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1985
(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	8 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	31 ft
(49) Structure Length	124 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	28.2 ft
(52) Deck Width Out to Out	30.8 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	28.2 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 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 exists
(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 structure
(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	7
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	36
(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	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	9
(36A) Bridge Railings	1 - Inspected feature meets current
(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	
(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	09/13/2022		
(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.			



Asset #06148(Routine, Underwater type 2)

District: 07, County: 39 - Dallas County

Team Lead: John Parks, Inspection Date: 09/13/2022

General Observation

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

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

Small chips along keyways, unit 3 span 1 has large chips with loose concrete. Keyway grout is missing for a large portion of the structure.

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

Units are grouted and bolted.

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Slope areas are heavily eroded below the rip rap zone. Bank lines are eroded also. Most rip rap is in place but will eventually erode. Scour hole under span 2 and along bent 2.



Asset #06148(Routine, Underwater type 2)

SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, **Inspection Date:** 09/13/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	3819	3332	422	65	0
1080	Delamination/Spall/Patched Area	SF	487	0	422	65	0
(16) Small chips along keyways, unit 3 span 1 has large chips with loose concrete. Keyway grout is missing for a large portion of the structure.							
110	Reinforced Concrete Open Girder/Beam	LF	992	666	43	283	0
1080	Delamination/Spall/Patched Area	LF	2	0	1	1	0
1090	Exposed Rebar	LF	4	0	2	2	0
1130	Cracking (RC and Other)	LF	320	0	40	280	0
(110) Some water staining, all joints leaking, transverse and longitudinal.							
215	Reinforced Concrete Abutment	LF	62	62	0	0	0
(215) Slope areas are heavily eroded below the rip rap zone.							
227	Reinforced Concrete Pile	EA	12	8	4	0	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
234	Reinforced Concrete Pier Cap	LF	92	90	0	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
(234) Spall bent 3 cap spalled right side							
304	Open Expansion Joint	LF	92	0	0	92	0
2350	Debris Impaction	LF	92	0	0	92	0
331	Reinforced Concrete Bridge Railing	LF	248	248	0	0	0



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Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, Inspection Date: 09/13/2022

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
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Comment: Small chips along keyways, unit 3 span 1 has large chips with loose concrete. Keyway grout is missing for a large portion of the structure.



Asset #06148(Routine, Underwater type 2)

SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, Inspection Date: 09/13/2022

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	992	666	43	283	0
1080	Delamination/Spall/Patched Area	LF	2	0	1	1	0
1090	Exposed Rebar	LF	4	0	2	2	0
1130	Cracking (RC and Other)	LF	320	0	40	280	0
(110) Some water staining, all joints leaking, transverse and longitudinal.							

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

Comment: Units are grouted and bolted.



Asset #06148(Routine, Underwater type 2)

SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, Inspection Date: 09/13/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	62	62	0	0	0
(215) Slope areas are heavily eroded below the rip rap zone.							
227	Reinforced Concrete Pile	EA	12	8	4	0	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
234	Reinforced Concrete Pier Cap	LF	92	90	0	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
(234) Spall bent 3 cap spalled right side							

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Comment: Slope areas are heavily eroded below the rip rap zone. Bank lines are eroded also. Most rip rap is in place but will eventually erode. Scour hole under span 2 and along bent 2.



Elevation



Elevation



Overview



Underview



Downstream



Upstream



Approach



Spalls in the keyways and keyway grout.



Span 2 girder 8, cracks & exposed rebar.



Span 3, girder 7, cracks & spalls with exposed rebar.



Bt. 3 pile have abrasion



Bt. 3, right end of the cap.



Joint material is gone and joints are full of debris.

Maintenance Needs

Date Reported: 08/07/2012

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Deck

Deficiency Description

PC units are spalled and chipped . Grout is missing along several key ways. 08/06/2018 JPR -- There has been some minor changes as can be seen in the pictures below from 2012 till 2016 & 2018.

Remarks



06148 grout missing from key ways



06148 span 1 unit 3



Deck



Spalls along the keyways and missing grout.

Maintenance Needs

Date Reported: 08/07/2012

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Channel

Deficiency Description

Channel scour. Bent 4. Large hole scoured under spans 1 & 4. 08/06/2018 JPR -- Little or no change since 2012 inspection.

Remarks



Abutment 2 slope erosion, this is caused by the missing keyway grout.



Large hole scoured under span 2 @ Bt. 2.



Span 1, embankment has been scoured.



Scour in span 4.



Asset #06148(Routine, Underwater type 2)

SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, **Inspection Date:** 09/13/2022

Maintenance Needs

Date Reported: 09/15/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Element

Deficiency Description

Joint material is gone and joints are impacted with debris.

Remarks



Joint material is gone and joints are full of debris.



Asset #06148(Routine, Underwater type 2)

SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, **Inspection Date:** 09/13/2022

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



Asset #06148(Routine, Underwater type 2)

SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, Inspection Date: 09/13/2022

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



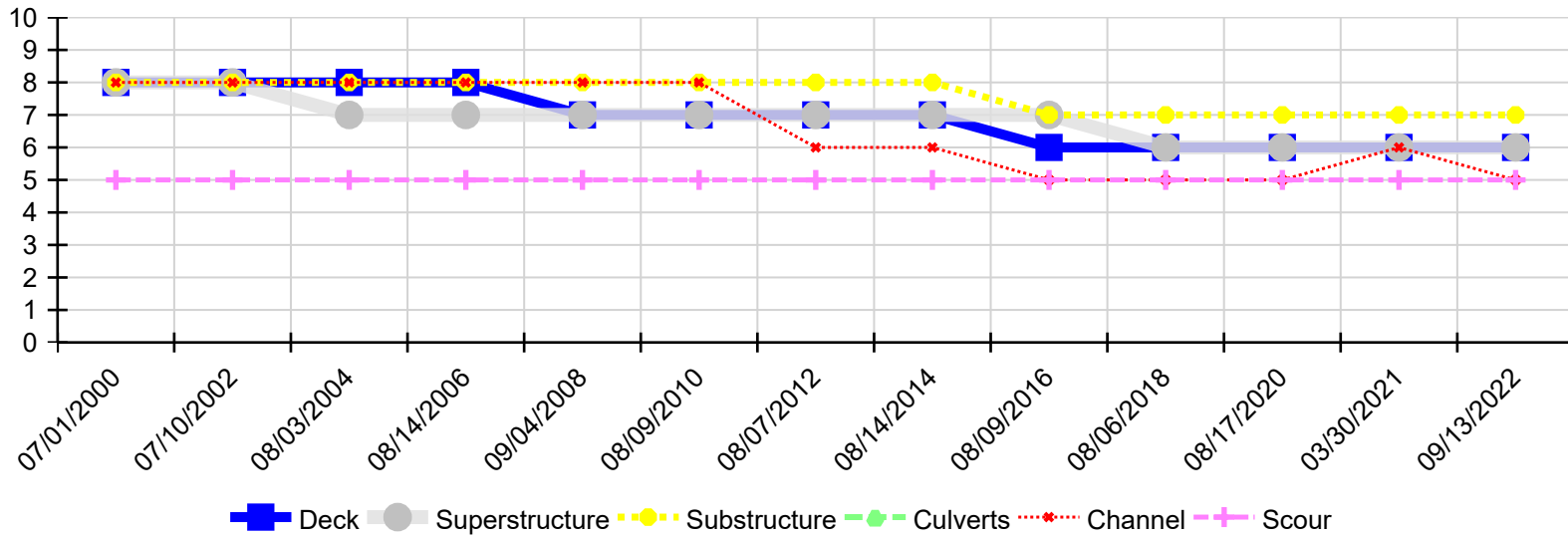
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SH 273 S-1 LM 7.55 over FREEO CREEK

Location: 7.56 MI E JCT SH 9

Team Lead: John Parks, Inspection Date: 09/13/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/13/2022	6	6	7	N	5	5
03/30/2021	6	6	7	N	6	5
08/17/2020	6	6	7	N	5	5
08/06/2018	6	6	7	N	5	5
08/09/2016	6	7	7	N	5	5
08/14/2014	7	7	8	N	6	5
08/07/2012	7	7	8	N	6	5
08/09/2010	7	7	8	N	8	5
09/04/2008	7	7	8	N	8	5
08/14/2006	8	7	8	N	8	5
08/03/2004	8	7	8	N	8	5
07/10/2002	8	8	8	N	8	5
07/01/2000	8	8	8	N	8	5