



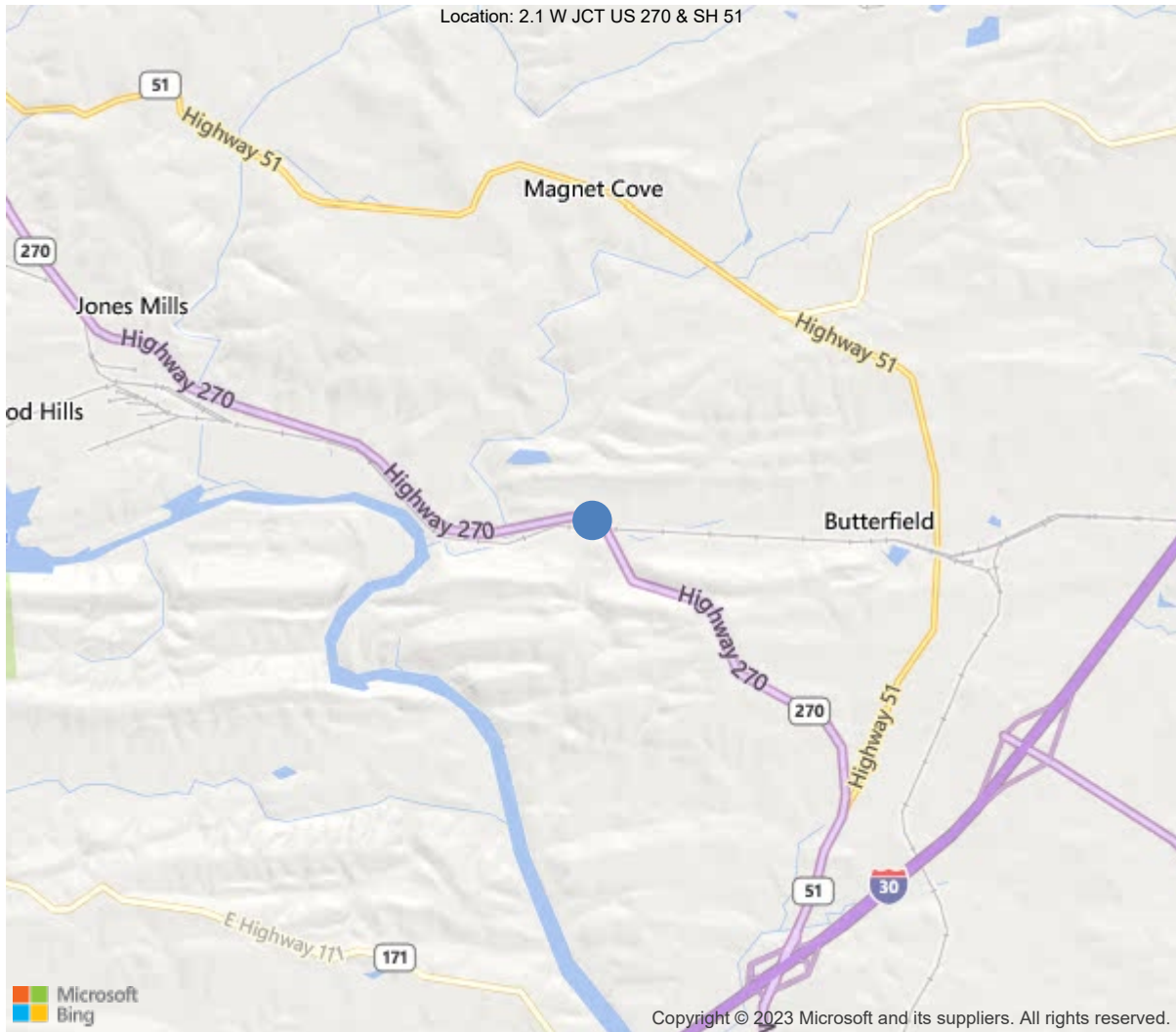
Latitude:34.42946, Longitude:-92.84378

Route:270 Section:07 Log:5.1

Arnold Road ID:30x270x7xA, Arnold Log mile:5.258

District 06, 59 - Hot Spring County

Owner: 1 - State Highway Agency



34.42946, -92.84378



Asset #06026(Routine)

US 270 -7 Log 5.10 over ARMDRR & CREEK

Location: 2.1 W JCT US 270 & SH 51

Team Lead: Chris Doggett, Inspection Date: 12/06/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06026
(5) Inventory Route	1
(2) Highway Agency District	06 - District 06
(3) County Code	59 - Hot Spring County
(4) Place Code	0
(6) Features Intersected	ARMDRR & CREEK
(7) Facility Carried	US 270 -7 Log 5.10
(9) Location	2.1 W JCT US 270 & SH 51
(11) Mile Point	5.1 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000270070
(16) Latitude	34.42946
(17) Longitude	-92.84378
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	6
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(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	1984
(106) Year Reconstructed	0
(42) Type of Service	17
On	1 - Highway
Under	7 - Railroad-waterway
(28) Lane	
On	4
Under	0
(29) Average Daily Traffic	12000
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	82 ft
(49) Structure Length	495 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	68 ft
(52) Deck Width Out to Out	71 ft
(32) Approach Roadway Width (W/Shoulders)	67.9 ft
(33) Bridge Median	0 - No median
(34) Skew	50 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	68.9 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	23.75 ft
Ref:	
(55) Min Lat Underclear RT	26.1 ft
Ref:	
(56) Min Lat Underclear LT	22.2 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	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	7
(59) Superstructure	5
(60) Substructure	7
(61) Channel & Channel Protection	7
(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	5
(68) Deck Geometry	9
(69) Clearances, Vertical/Horizontal	9
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(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	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	0
(114) Future ADT	15525
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	12/06/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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 #06026(Routine)

District: 06, County: 59 - Hot Spring County

Team Lead: Chris Doggett, Inspection Date: 12/06/2022

A-46 - Asset Files

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General Observation (False)

job 60117 dwg 26173

Approach going east

US 270 -7 Log 5.10 over ARMDRR & CREEK

Location: 2.1 W JCT US 270 & SH 51

Team Lead: Chris Doggett, **Inspection Date:** 12/06/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	35145	32647	2495	3	0
1080	Delamination/Spall/Patched Area	SF	10	0	10	0	0
1090	Exposed Rebar	SF	7	0	4	3	0
1120	Efflorescence/Rust Staining	SF	493	0	493	0	0
1130	Cracking (RC and Other)	SF	1128	0	1128	0	0
1190	Abrasion/Wear (PSC/RC)	SF	860	0	860	0	0
510	Wearing Surfaces	SF	33610	33610	0	0	0
(12) Span 3, right edge of the soffit, multiple spalls with exposed rebar. Abrasion and spalls patched and cracks sealed with polymer overlay under Job 012350. 12/14/2020 (510-12) Polymer overlay under Job 012350 12/14/2020							
107	Steel Open Girder/Beam	LF	3936	3278	395	263	0
1000	Corrosion	LF	650	0	390	260	0
1020	Connection	LF	8	0	5	3	0
515	Steel Protective Coating	SF	43624	41624	1232	0	768
3440	Effectiveness (Steel Protective Coatings)	LF	2000	0	1232	0	768
(107) All beams have areas of freckling rust. Bents 1,3,4,5,6 and 7 have 1/8" section loss typical in the lower web and bottom flange girders 1-8. Span 2, bent 2, girders 6-8 have section loss on the ends. Girder 6, up to 3/16" section loss in the stiffener at the girder end and up to 1/8" section loss in the lower web. Span 1 girder 2 diaphragm 4 has 3 loose bolts. Span 1 girder 5 diaphragm 6 has missing and loose bolts. Span 2 girder 1 diaphragm 7, 4 loose bolts., girder 4 diaphragm 7, 6 loose bolts. Span 4 girder 7 diaphragm 8, 1 missing and 6 loose bolts. Span 5 girder 2, 2 missing bolts in diaphragm 1.							
205	Reinforced Concrete Column	EA	20	12	8	0	0
1080	Delamination/Spall/Patched Area	EA	5	0	5	0	0
1090	Exposed Rebar	EA	2	0	2	0	0
1120	Efflorescence/Rust Staining	EA	1	0	1	0	0
(205) Bent 3 column 1 has small spalls. Bent 3 columns 2 and 3 has small spall with exposed rebar. Column 4 has cracks with efflorescence. Bent 4 column 1 has small spalls. Bent 5 column 1, small spalls. Bent 6 columns 3 and 4, small spalls.							
210	Reinforced Concrete Pier Wall	LF	76	62	14	0	0
1130	Cracking (RC and Other)	LF	14	0	14	0	0
(210) Bent 5, multiple vertical cracks.							

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Location: 2.1 W JCT US 270 & SH 51

Team Lead: Chris Doggett, **Inspection Date:** 12/06/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	236	194	42	0	0
1090	Exposed Rebar	LF	5	0	5	0	0
1120	Efflorescence/Rust Staining	LF	32	0	32	0	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
(215) Both abutments have cracks and cracks with efflorescence staining. Bent 7 has spalls with exposed rebar in the back wall.							
234	Reinforced Concrete Pier Cap	LF	551	529	21	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	20	0	20	0	0
(234) Bent 4 cap has small spall with exposed rebar, crack with efflorescence. All caps have small cracks							
301	Pourable Joint Seal	LF	636	636	0	0	0
(301) New pourable joint has been poured under Job 012350.							
303	Assembly Joint with Seal	LF	106	106	0	0	0
(303) No notable defects at this inspection.							
310	Elastomeric Bearing	EA	96	16	80	0	0
1000	Corrosion	EA	77	0	77	0	0
2220	Alignment	EA	3	0	3	0	0
(310) Bent 2 girder 8, backside bearing is leaning. Bent 4 girder 8, both bearings leaning. All sole plates and anchor bolts have active corrosion at bents 1,3,4,5,6 & 7.							
331	Reinforced Concrete Bridge Railing	LF	984	983	1	0	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
(331) Spall span 2 right side.							

US 270 -7 Log 5.10 over ARMDRR & CREEK

Location: 2.1 W JCT US 270 & SH 51

Team Lead: Chris Doggett, **Inspection Date:** 12/06/2022

Deck

[illegible]

US 270 -7 Log 5.10 over ARMDRR & CREEK

Location: 2.1 W JCT US 270 & SH 51

Team Lead: Chris Doggett, **Inspection Date:** 12/06/2022

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	3936	3278	395	263	0
1000	Corrosion	LF	650	0	390	260	0
1020	Connection	LF	8	0	5	3	0
515	Steel Protective Coating	SF	43624	41624	1232	0	768
3440	Effectiveness (Steel Protective Coatings)	LF	2000	0	1232	0	768
(107) All beams have areas of freckling rust. Bents 1,3,4,5,6 and 7 have 1/8" section loss typical in the lower web and bottom flange girders 1-8. Span 2, bent 2, girders 6-8 have section loss on the ends. Girder 6, up to 3/16" section loss in the stiffener at the girder end and up to 1/8" section loss in the lower web. Span 1 girder 2 diaphragm 4 has 3 loose bolts. Span 1 girder 5 diaphragm 6 has missing and loose bolts. Span 2 girder 1 diaphragm 7, 4 loose bolts., girder 4 diaphragm 7, 6 loose bolts. Span 4 girder 7 diaphragm 8, 1 missing and 6 loose bolts. Span 5 girder 2, 2 missing bolts in diaphragm 1.							

Substructure

[illegible]



Asset #06026(Routine)

US 270 -7 Log 5.10 over ARMDRR & CREEK

Location: 2.1 W JCT US 270 & SH 51

Team Lead: Chris Doggett, Inspection Date: 12/06/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation



Bent 1: large amounts of debris on top of beam seat. This is common at both abutments.



Span 1, girder 7: active corrosion is a common condition of beam ends.



Bent 3, column 2: small spall with exposed rebar



Span 3: active corrosion to the bottom flange at the bent.



Bent 4: backside of cap has small spall with exposed rebar



Bent 3 joint seal has been replaced under job #012350, common all joints.



Soffit view



Span 1 left side of girder 2: all bolts loose at the bottom connection



Span 1, girder 5, diaphragm 6



Deck view



Inventory looking east



Gutters are full of debris

Maintenance Needs

Date Reported: 11/06/2013
Priority: C - Important
Type of Work: Superstructure Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Beam ends at all bents have active rust.

Remarks



Bent 1 beam 4 corrosion



Bent 1 girder 3, section loss to lower web and bottom flange up to 1/8".



Bent 5 backside, girder 3, section loss in bottom flange behind bearing.



Bent 7, girder 5, 3/16" section loss to lower web.



Bent 7 beam 5 corrosion



Bent 3 span 3 girder 3 corrosion to bottom flange and lower web. Pitting 1/16" to 1/8" deep.



Span 3 at bent 4 beam 3 pitting to lower flange and lower web.

Date Reported: 11/06/2013
Priority: C - Important
Type of Work: Deck Repair
Status: RepairDocumented
Component:

Deficiency Description

Deck large unsealed cracks all spans
Span 2&5 have heavy scaling on westbound lanes
Span 5 has a spall in westbound lane

Remarks

Cracks have been sealed with polymer overlay under Job 012350



Large transverse cracks in span 3.



Span 2 heavy scaling



Span 5, large transverse cracks.



Span 5, westbound lanes, heavy abrasion and large pothole.



Span 2, westbound lanes, heavy abrasion.



Span 5 spall in deck



Span 3 crack up to 0.045"



New polymer overlay.

Date Reported: 11/06/2013
Priority: C - Important
Type of Work: Repair (General)
Status: Open
Component: Miscellaneous

Deficiency Description

West end of bridge both guard rails have damage due to traffic impact.

Remarks

Assigned Hot Springs 06301 12-1-15



Southwest guard rail is damaged due to traffic impact.
2022



West end, right side guardrail damaged.



Southwest guardrail damaged from traffic impact



West side approach guardrail damaged.



West end right side guardrail has damage due to traffic impact.



West end of bridge left guardrail has damage due to traffic impact.

Date Reported: 11/06/2013
Priority: C - Important
Type of Work: Joint Repair
Status: RepairDocumented
Component:

Deficiency Description

Joint seals at bents 3 & 4 have fallen out and are laying on top of cap.
The joint seals at bents 5 & 6 have partially fallen out on the left side.

Remarks

Compression joint have been replaced with pourable joint seals under Job 012350



Bent 6 joint has fallen out on the left side and the rest has lost adhesion and is leaking.



Bent 4 left side, debris build up and corrosion on girders. Joint has fallen out.



Bent 4 joint seal has fallen onto cap.



Bent 3 left side, the joint has fallen out and there is debris piled around the girders and bearings.



Bent 3 joint seal missing



Bent 3 joint seal has fallen on top of cap.



Joint seal has been replaced under job #012350,
common all joints.

Date Reported: 12/12/2018
Priority: C - Important
Type of Work: (Inactive) (Inactive) 1 - Clean
Status: Monitor
Component: Substructure

Deficiency Description

Large amount of debris built up in the caps at bents 3,4,5,6 and 7.

Remarks

Maintenance need has been removed and added to the check box.



Bent 3, debris build up on cap up to 18" deep due to missing joint.



Bent 7, bearing 2, corrosion on sole plate.



Bent 3 left side, the joint has fallen out and there is debris piled around the girders and bearings.



Bent 4, debris build up on cap covering bearings and bottom flanges.



Bent 3 cap debris buildup and old compression joint laying on cap.

Date Reported: 12/12/2018
Priority: D- Routine
Type of Work: Superstructure Repair
Status: Open
Component: Superstructure

Deficiency Description

Loose connections at diaphragms, at the following locations.

Span 1 girder 2 diaphragm 4 has 3 loose bolts.

Span 2 girder 1 diaphragm 7, 4 loose bolts, girder 4 diaphragm 7, 6 loose bolts.

Span 4 girder 7 diaphragm 8, 1 missing and 6 loose bolts.

Span 5 girder 2, 2 missing bolts in diaphragm 1.

Remarks



Span 1, girder 5, diaphragm 6, 2 loose and 4 missing bolts.



Loose bolts, span 1 girder 2 diaphragm 4.



Asset #06026(Routine)

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Routine Maintenance

Check Box Maintenance Items

Data Field	Value
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	Yes
A-56 - Joint Cleaning/Flushing Needed	No
A-57-Beam End and Bearing Paint Needed	Yes
A-58 - Cap Cleaning/Flushing Needed	Yes
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydo and LMC Advised	No



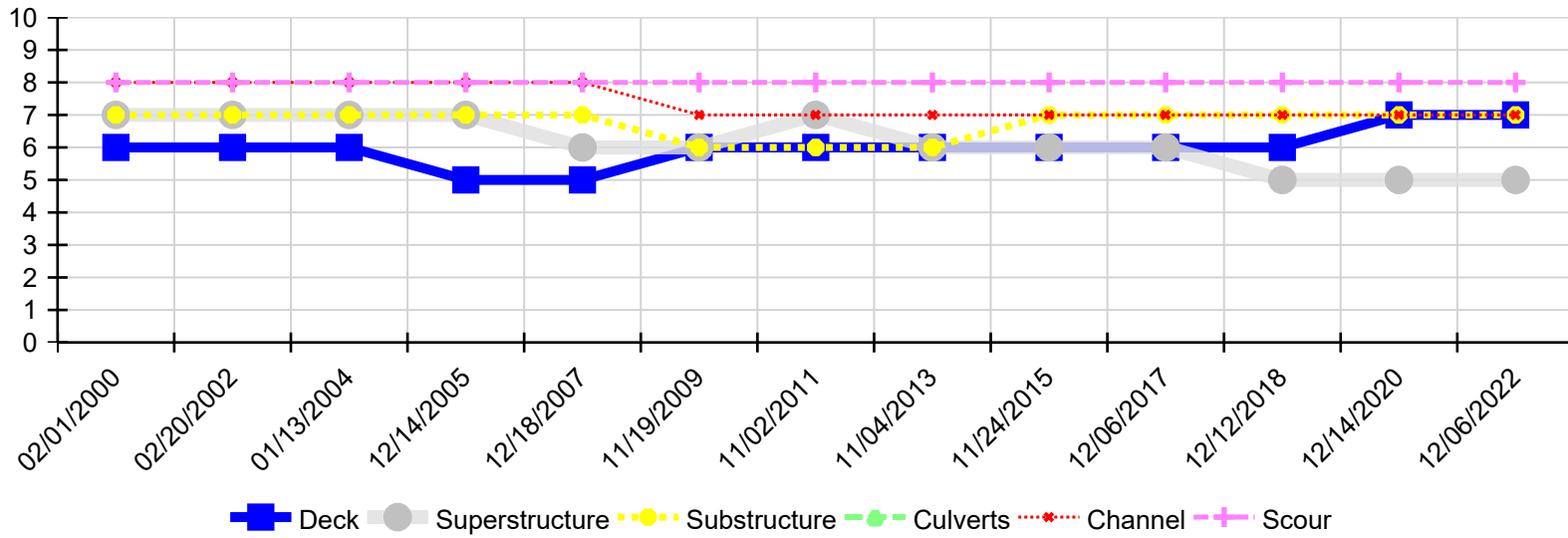
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Location: 2.1 W JCT US 270 & SH 51

Team Lead: Chris Doggett, Inspection Date: 12/06/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
12/06/2022	7	5	7	N	7	8
12/14/2020	7	5	7	N	7	8
12/12/2018	6	5	7	N	7	8
12/06/2017	6	6	7	N	7	8
11/24/2015	6	6	7	N	7	8
11/04/2013	6	6	6	N	7	8
11/02/2011	6	7	6	N	7	8
11/19/2009	6	6	6	N	7	8
12/18/2007	5	6	7	N	8	8
12/14/2005	5	7	7	N	8	8
01/13/2004	6	7	7	N	8	8
02/20/2002	6	7	7	N	8	8
02/01/2000	6	7	7	N	8	8