



Latitude:35.36243, Longitude:-91.80145

Route:16 Section:13 Log:5.97

Arnold Road ID:73x16x13xA, Arnold Log mile:5.958

District 05, 145 - White County

Owner: 1 - State Highway Agency

Inspection Direction: 1 - N to S

Bridge Posting Information

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

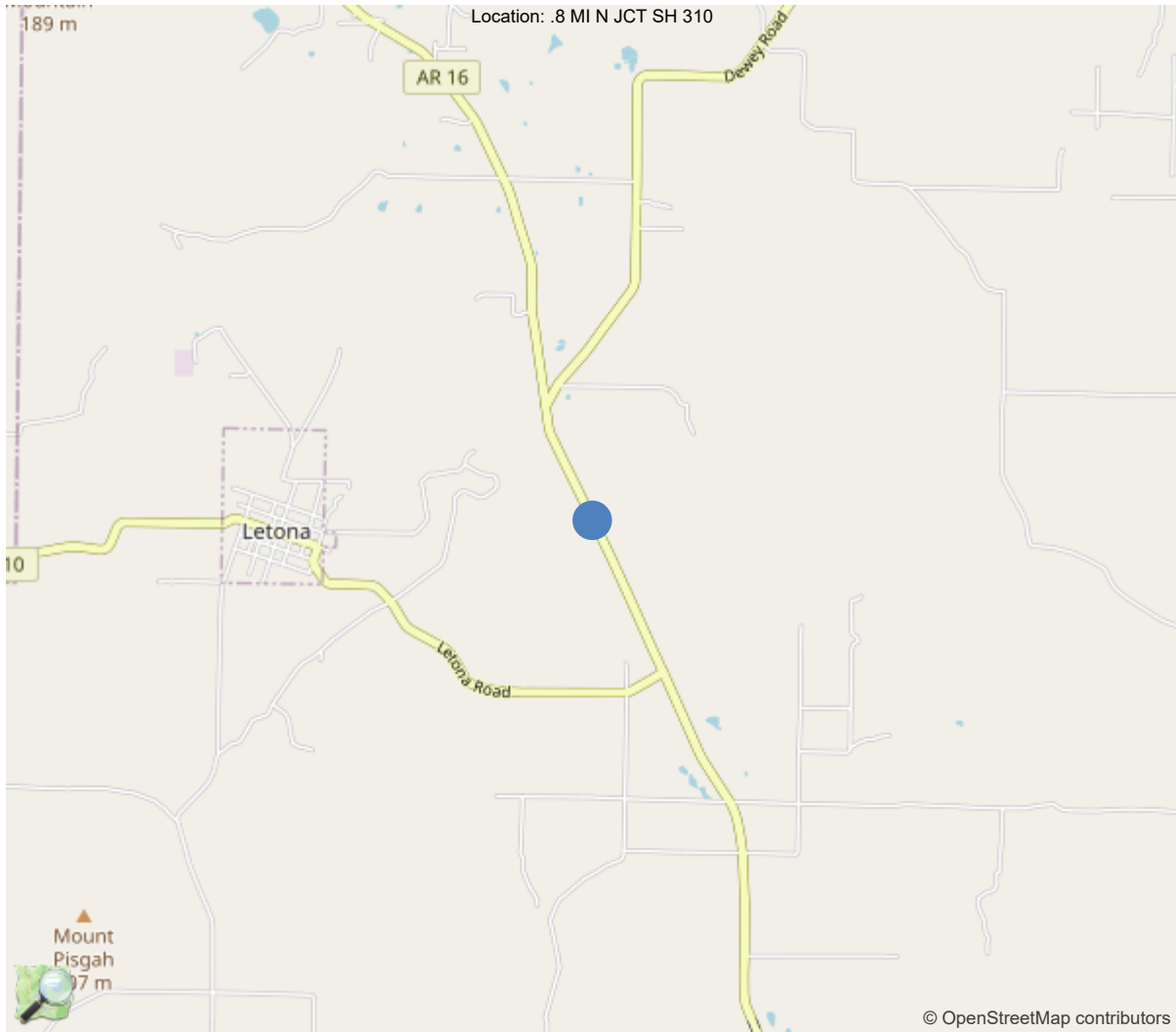
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	35		
Code 9 (31 Tons)	37		
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



35.36243, -91.80145



Asset #05338(Routine)
SH 16 White County over BIG CREEK
Location: .8 MI N JCT SH 310

Team Lead: Kerry Little Inspection Date: 03/21/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05338
(5) Inventory Route	1
(2) Highway Agency District	05 - District 05
(3) County Code	145 - White County
(4) Place Code	0
(6) Features Intersected	BIG CREEK
(7) Facility Carried	SH 16 White County
(9) Location	.8 MI N JCT SH 310
(11) Mile Point	5.97 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000016130
(16) Latitude	35.36243
(17) Longitude	-91.80145
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4 - Steel continuous
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	3
(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	1971
(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	5400
(30) Year of ADT	2018
(109) Truck ADT	4 %
(19) Bypass, Detour Length	19 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	80 ft
(49) Structure Length	214 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	34.1 ft
(52) Deck Width Out to Out	37.7 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	35.1 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	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	6
(61) Channel & Channel Protection	5
(62) Culverts	N
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	42
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	25
(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	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(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	7453
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	03/21/2024		
(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 #05338(Routine)

SH 16 White County over BIG CREEK

Location: .8 MI N JCT SH 310

Team Lead: Kerry Little Inspection Date: 03/21/2024

General Observation

Elevation with Log Mile running to the Right.
Construction Job 5610.

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

Deck is in overall satisfactory condition with some spalls and cracks @ all Spans.

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

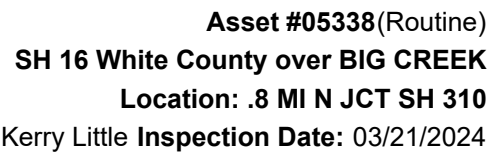
Superstructure is in overall satisfactory condition with some areas of corrosion, pack rust & some section loss @ Abutments.

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

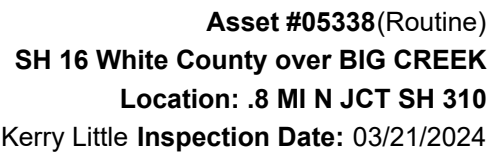
Substructure is in overall satisfactory condition with cracking & spalls to Abutments 1 & 2.

A-51 - Inspection Direction (1 - N to S)

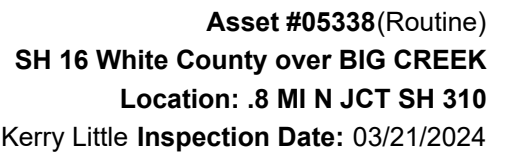
Roadway with Log Mile running North to South.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	7710	4607	2695	408	0
1080	Delamination/Spall/Patched Area	SF	11	0	10	1	0
1090	Exposed Rebar	SF	8	0	1	7	0
1120	Efflorescence/Rust Staining	SF	200	0	200	0	0
1130	Cracking (RC and Other)	SF	884	0	484	400	0
1190	Abrasion/Wear (PSC/RC)	SF	2000	0	2000	0	0
(12) Deck: Debris in Lt. & Rt gutter lines @ all spans. Abrasion to deck @ all spans. 2000' CS2 Several transv. cracks to deck @ all spans. 484' CS2 400' CS3 Span 1 - 1' minor spall to deck. 1' CS2 Span 3 - 8' minor spalls to deck . 8' CS2 Spalls with 1' rebar exp. to Rt. curb @ end of span. Rebar 1' CS2 Spall 1' CS3 Underside of deck: Transverse efflorescent cracks to soffit @ all spans. 200' CS2 Span 1 - Spall to underside of deck with 4' rebar exposed near 2nd drain on Right. 4' CS3 Span 2 - Spall to underside of deck with 2' rebar exposed near 1st drain on Right. 2' CS3 Span 3 - Spall to underside of deck with 1' rebar exposed near 2nd drain on Right. 1' CS3							
107	Steel Open Girder/Beam	LF	1060	1021	12	27	0
1000	Corrosion	LF	39	0	12	27	0
515	Steel Protective Coating	SF	8697	8365	0	102	230
3440	Effectiveness (Steel Protective Coatings)	LF	332	0	0	102	230
(107) Span 1 - Girder 1 has 2' of pack rust & section loss @ beg. of span. 2' CS3 Girder 2 has 3' of corrosion @ beg. of span. 3' CS2 Girder 3 has 3' of pack rust & section loss @ beg. of span. 3' CS3 Girder 4 has 4' of pack rust & section loss @ beg. of span. 4' CS3 Girder 5 has 1' of corrosion @ beg. of span. 1' CS2 Span 3 - Girder 1 has 5' of pack rust & section loss @ end of span. 5' CS3 Girder 2 has 4' of pack rust & section loss @ end of span. 4' CS3 Girder 3 has 2' of pack rust & section loss @ end of span. 2' CS3 Girder 4 has 4' of pack rust & section loss @ end of span. 4' CS3 Girder 5 has 2' of pack rust & section loss @ end of span. 2' CS3 * Rust on girders are @ web below paving haunch & bottom flange. Few minor random areas of corrosion to girders. 8' CS2							
205	Reinforced Concrete Column	EA	4	2	2	0	0
1190	Abrasion/Wear (PSC/RC)	EA	2	0	2	0	0
(205) Bent 2 - Lt. & Rt. column has abrasion @ flow line. 2 CS2							



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
210	Reinforced Concrete Pier Wall	LF	42	16	10	16	0
1190	Abrasion/Wear (PSC/RC)	LF	13	0	10	3	0
6000	Scour	LF	13	0	0	13	0
(210) Bent 2 - Moderate scour @ pier wall & embankment of Span 2. 13' CS3 Pier wall has abrasion @ water level. 10' CS2 3' CS3							
215	Reinforced Concrete Abutment	LF	102	85	11	6	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	3	0	0	3	0
1120	Efflorescence/Rust Staining	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
(215) Abut. 1 - Erosion behind Lt. wing 2' down 3' back under. Debris on cap. Vertical cracks to abut. Few with rust. Abut. 2 - Debris on cap. 3' spall with 6' rebar exposed near Lt. end. Rebar 3' CS3 2' delam. to Lt. end of cap. 2' CS2 Vertical cracks to abut. Few with rust. Cracks 9' CS2 Efflor/Rust 3' CS3							
234	Reinforced Concrete Pier Cap	LF	75	75	0	0	0
302	Compression Joint Seal	LF	87	0	0	12	75
2310	Leakage	LF	75	0	0	0	75
2340	Seal Cracking	LF	12	0	0	12	0
(302) Abutment 1 - 31' joint seal has failed. 31' CS4 12' joint seal is cracked. 12' CS3 Abutment 2 - All of joint seal has failed. 44' CS4							
311	Movable Bearing	EA	15	5	0	10	0
1000	Corrosion	EA	7	0	0	7	0
1020	Connection	EA	3	0	0	3	0
515	Steel Protective Coating	SF	30	10	0	0	20
3440	Effectiveness (Steel Protective Coatings)	EA	20	0	0	0	20
(311) Span 1 @ beg. of span: Bearing 1 - Bearing has pack rust/section loss and 1 anchor bolt missing. Connection 1 CS3 Bearing 2,3,4,5 - Bearing has pack rust/section loss. 4 CS3 Span 4 @ end of span: Bearing 1,2 - Bearing has pack rust/section loss. 1 CS3 Bearing 3 - Bearing has pack rust/section loss and 1 anchor bolt missing. Connection 1 CS3 Bearing 4 - Bearing has pack rust/section loss. 1 CS3							



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Bearing 5 - Bearing has pack rust/section loss and 1 anchor bolt missing. Connection 1 CS3							
313	Fixed Bearing	EA	5	5	0	0	0
515	Steel Protective Coating	SF	20	20	0	0	0
(313) Minor areas of rust.							
330	Metal Bridge Railing	LF	428	428	0	0	0
(330) Appr. Rail: Timber spacer block missing to approach guard rail post @ Abutment 1. 3rd post on Left & 3rd post on Right @ Abutment 2.							



03/21/2024

Roadway with log mile going right.



03/21/2024

3' Spall with 6' of (#3) rebar exposed to Abutment 2 on Left end.(#3)



03/25/2024

3' Spall with 6' of (#3) rebar exposed to Abutment 2 on Left end.(#3)



03/21/2024

Typical efflorescence cracks to undersurface @ span 2.



Overall undersurface @ span 2.



Span 2 - Spall to soffit with 2' rebar exposed near 1st drain on Right.



Span 2 - Spall to soffit with 2' rebar exposed near 1st drain on Right.



Span 1 has spall with 2' rebar exposed to soffit @ 2nd drain opening on Right.



Typical (#3) rust & pack rust to Moveable Bearings.
Girder 1, Abutment 1.



Overall deck.



Roadway with log mile looking south.

Maintenance Needs

Date Reported: 03/21/2024

Priority: C - Important

Type of Work: Bearing Repair/Replacement

Status: Open

Component:

Deficiency Description

Rust with pack rust to moveable bearings at Abutments 1 & 2.

Anchor bolt missing to Bearing 1 at Abut. 1

Anchor bolt missing to Bearing 3 & 5 @ Abut. 2.

Remarks



Anchor bolt missing to Bearing Assembly 1 at Abutment 1.



Rust, corrosion & flaking to moveable bearings at Abutments 1 & 2. Abutment 1, bearing 2.



Rust, corrosion & flaking to moveable bearings at
Abutments 1 & 2.

Anchor bolt missing to Bearing Assembly 1 at Abutment
1.



Rust, corrosion & flaking to moveable bearings at
Abutments 1 & 2.

Anchor bolt missing to bearing assembly 1 at Abutment 1.

Maintenance Needs

Date Reported: 03/26/2018

Priority: C - Important

Type of Work: Joint Repair

Status: Monitor

Component:

Deficiency Description

Abut. 1 - 31' of compression joint seal has lost adhesion & is missing.
Abut. 2 - 44' of compression joint seal has lost adhesion & is missing.

Remarks



31' of compression joint seal has lost adhesion & is missing @ Abutment 1.



44' of compression joint seal has lost adhesion & is missing @ Abutment 2.

Maintenance Needs

Date Reported: 03/28/2018

Priority: C - Important

Type of Work: Channel Work/Drift Removal

Status: Monitor

Component:

Deficiency Description

Moderate scour @ Bent 2 & to embankment @ Span 3.

Remarks



Moderate scour @ Bent 2 & to embankment @ Span 3.



Moderate scour @ Bent 2 & to embankment @ Span 3.

Maintenance Needs

Date Reported: 03/21/2024

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Bridge

Deficiency Description

2'x3' erosion behind Lt wing @ abutment 1.

Remarks



2'x3' erosion behind Lt wing @ abutment 1.

Maintenance Needs

Date Reported: 03/26/2012

Priority: D- Routine

Type of Work: Deck Repair

Status: Monitor

Component:

Deficiency Description

Span 1 has spall with 2' rebar exposed to soffit @ 2nd drain opening on Right.

Remarks



03/21/2024

Span 1 has spall with 2' rebar exposed to soffit @ 2nd drain opening on Right.



03/23/2020

Span 1 has spall with 2' rebar exposed to soffit @ 2nd drain opening on Right.



03/23/2020

Span 1 has spall with 2' rebar exposed to soffit @ 2nd drain opening on Right.

Maintenance Needs

Date Reported: 03/25/2012

Priority: D- Routine

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

Status: Assigned

Component:

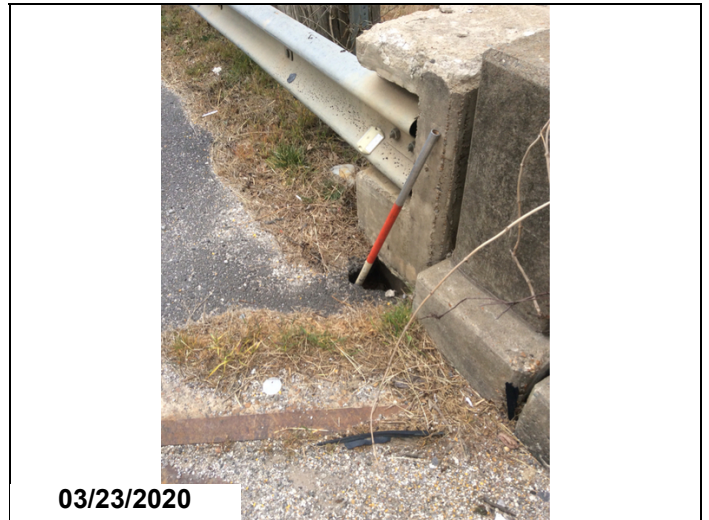
Deficiency Description

Eroded area 1' deep @ roadway & ±4' long under Right approach at Abutment 2.
Repaired

Remarks



Eroded area 1' deep @ roadway & ±4' long under Right approach at Abutment 2.
Repaired



Eroded area 1' deep @ roadway & ±4' long under Right approach at Abutment 2.

Maintenance Needs

Date Reported: 03/25/2012

Priority: D- Routine

Type of Work: Substructure Repair

Status: Monitor

Component:

Deficiency Description

Spall with 6' rebar exposed to left end of Abutment 2.

Remarks



Spall with 6' rebar exposed to left end of Abutment 2.



Spall with 6' rebar exposed to left end of Abutment 2.



Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	Yes
A-55 - Deck Washing Needed	Yes
A-56 - Joint Cleaning/Flushing Needed	Yes
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	
A-63 - Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

A-54 - Sealable Deck Cracks (Yes)

A-55 - Deck Washing Needed (Yes)

A-56 - Joint Cleaning/Flushing Needed (Yes)



Asset #05338(Routine)

SH 16 White County over BIG CREEK

Location: .8 MI N JCT SH 310

Team Lead: Kerry Little Inspection Date: 03/21/2024

A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed (Yes)

A-60 - Full Girder Painting Needed

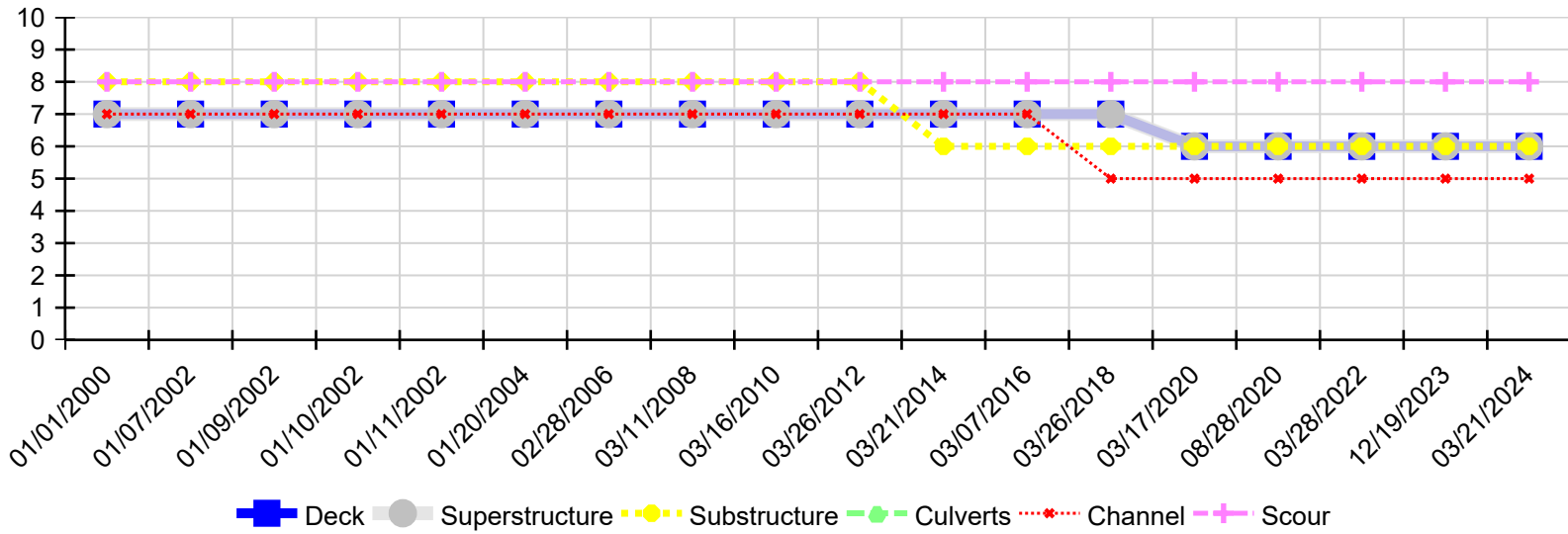
A-61 - Polymer Overlay Advised (Yes)

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
03/21/2024	6	6	6	N	5	8
12/19/2023	6	6	6	N	5	8
03/28/2022	6	6	6	N	5	8
08/28/2020	6	6	6	N	5	8
03/17/2020	6	6	6	N	5	8
03/26/2018	7	7	6	N	5	8
03/07/2016	7	7	6	N	7	8
03/21/2014	7	7	6	N	7	8
03/26/2012	7	7	8	N	7	8
03/16/2010	7	7	8	N	7	8
03/11/2008	7	7	8	N	7	8
02/28/2006	7	7	8	N	7	8
01/20/2004	7	7	8	N	7	8
01/11/2002	7	7	8	N	7	8
01/10/2002	7	7	8	N	7	8
01/09/2002	7	7	8	N	7	8
01/07/2002	7	7	8	N	7	8
01/01/2000	7	7	8	N	7	8