



Latitude:33.34800, Longitude:-93.20106

Route:79 Section:02 Log:3.649

Arnold Road ID:14x79x2xA, Arnold Log mile:3.645

District 07, 27 - Columbia County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

Bridge Posting Information

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

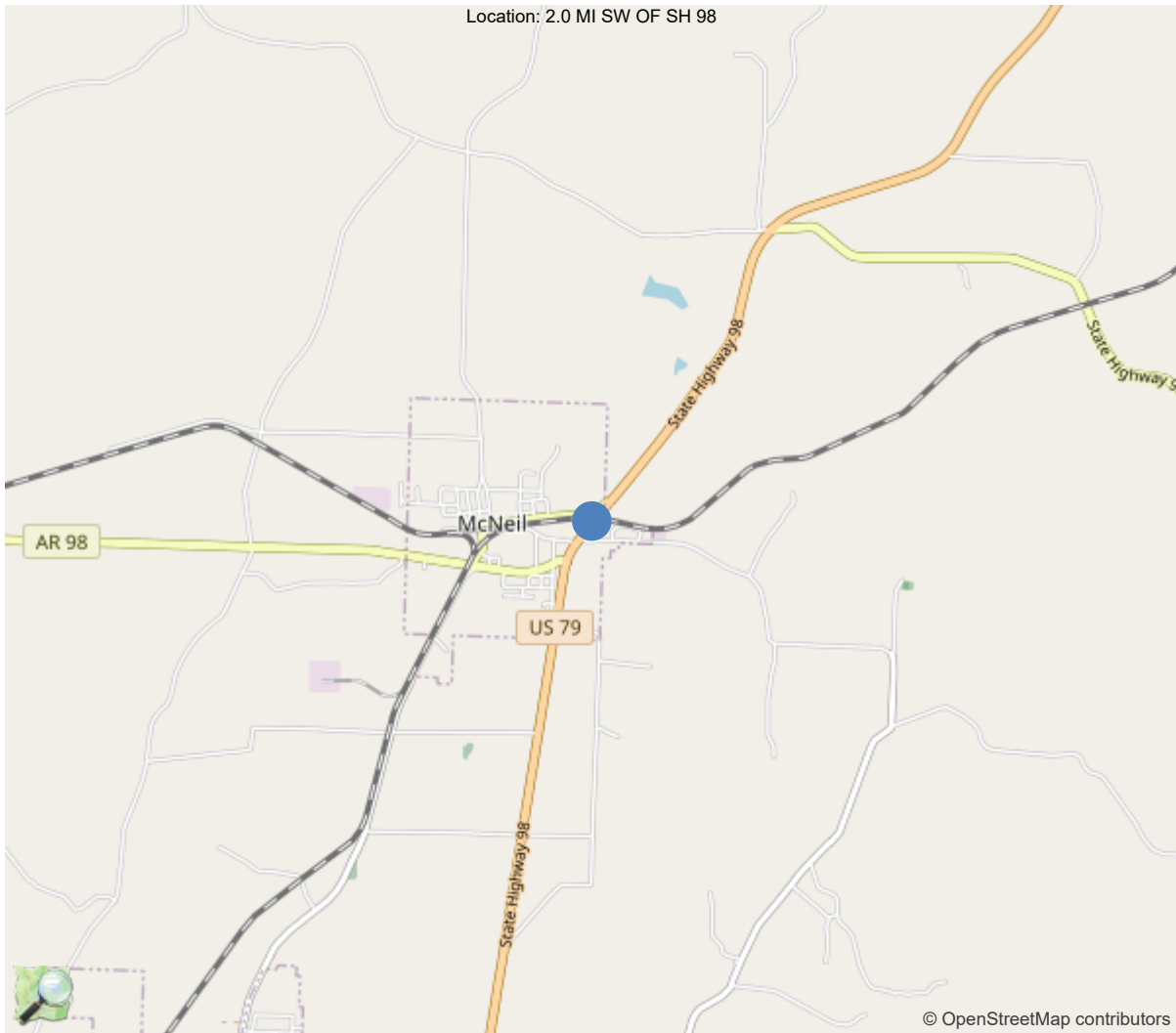
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	32		
Code 9 (31 Tons)	34		
Code 5 (40 Tons)	40		

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



33.34800, -93.20106



Asset #01978(Routine)

US 79 SEC2 LM3.65 over SL SW RR

Location: 2.0 MI SW OF SH 98

Team Lead: John Parks Inspection Date: 05/30/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	01978
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	27 - Columbia County
(4) Place Code	43100
(6) Features Intersected	SL SW RR
(7) Facility Carried	US 79 SEC2 LM3.65
(9) Location	2.0 MI SW OF SH 98
(11) Mile Point	3.649 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000079020
(16) Latitude	33.348
(17) Longitude	-93.20106
(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	14
Material	1 - Concrete
Type	4 - Tee beam
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	10
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1936
(106) Year Reconstructed	0
(42) Type of Service	12
On	1 - Highway
Under	2 - Railroad
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	3636
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	48 ft
(49) Structure Length	302 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	27.2 ft
(32) Approach Roadway Width (W/Shoulders)	34.1 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	24 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	21.39 ft
Ref:	
(55) Min Lat Underclear RT	12.1 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterway
(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	1 - Bridge is on the National
CONDITION	
(58) Deck	6
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	41
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	24
(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	2
(69) Clearances, Vertical/Horizontal	5
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	6
(36A) Bridge Railings	0 - Inspected feature does not meet
(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	N - Bridge not over waterway.
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	338 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 400
(96) Total Project Cost	\$ 1642
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	4204
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	05/30/2023		
(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 #01978(Routine)

US 79 SEC2 LM3.65 over SL SW RR

Location: 2.0 MI SW OF SH 98

Team Lead: John Parks Inspection Date: 05/30/2023

General Observation

This structure is logged from Southwest to Northeast.

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

AC OL is worn with a patched area, joints are covered with tar. Soffit shows stained efflorescent cracks.

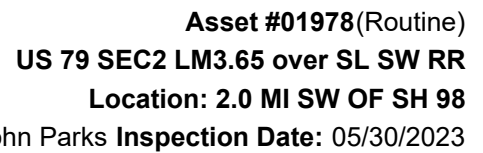
59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Some spalling and cracking of concrete T girders, encased girders have some rust and section loss. Encasements are cracked and spalled at ends.

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Some cracking and spalls. Bearings are rusty with rotation and section loss, pads and anchor bolts are rusty with section loss.

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	1296	1250	46	0	0
1090	Exposed Rebar	SF	21	0	21	0	0
1120	Efflorescence/Rust Staining	SF	25	0	25	0	0
510	Wearing Surfaces	SF	1152	960	192	0	0
3220	Crack (Wearing Surface)	SF	192	0	192	0	0
(12) Span 6: -21' of exposed rebar CS2. 25' of cracks with efflorescence CS2. (510-12) Span 6: Longitudinal cracks in the wheel path.							
16	Reinforced Concrete Top Flange	SF	6864	6465	399	0	0
1080	Delamination/Spall/Patched Area	SF	9	0	9	0	0
1090	Exposed Rebar	SF	42	0	42	0	0
1120	Efflorescence/Rust Staining	SF	348	0	348	0	0
510	Wearing Surfaces	SF	6101	5072	1029	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	13	0	13	0	0
3220	Crack (Wearing Surface)	SF	1016	0	1016	0	0
(16) Span 1: -5' efflorescence CS2. Span 2: -36' efflorescence CS2. Span 3: -22' efflorescence CS2. -18' exposed rebar CS2. Span 4: -15' efflorescence CS2. Span 5: -24' efflorescence CS2. -9' exposed rebar CS2. -3' spalls CS2. Span 7: -60' efflorescence CS2. -1' exposed rebar CS2. Span 9: -44' efflorescence CS2. Span 10: -110' efflorescence CS2. -14' exposed rebar CS2. Span 11: -32' efflorescence CS2. -6' spall CS2. (510-16) Asphalt wearing surface has potholes at joint lines and longitudinal cracks along the wheel path.							



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	240	230	6	4	0
1000	Corrosion	LF	10	0	6	4	0
515	Steel Protective Coating	SF	2040	2020	0	0	20
7000	Damage	LF	20	0	0	0	20
(107) Span 6: -Beam 1 & 5, both beam ends have active corrosion. The upper flange around the deck haunch and the lower web have pitting that is upto 1/8" deep. 4' corrosion CS3. -Beams 2-4, both beam ends have active surface corrosion. 6' corrosion CS2. (515-107) 2' of each end of the beams, the concrete encasement has been removed.							
110	Reinforced Concrete Open Girder/Beam	LF	1016	953	35	28	0
1080	Delamination/Spall/Patched Area	LF	12	0	7	5	0
1090	Exposed Rebar	LF	22	0	11	11	0
1130	Cracking (RC and Other)	LF	29	0	17	12	0
(110) Span 1: -Girders 1 & 3 have vertical cracks. 2' cracking CS2. Span 2: -Girder 1, 1' exposed rebar CS3. -Girder 4, 2' exposed rebar CS2. -Girders 2 - 4 have vertical cracks, 3' cracking CS3. Span 3: -Girder 1, 2' cracking CS3, 2' spall CS2. -Girder 2 & 3 have vertical cracks, 3' cracking CS3. Span 5: -Girder 1, 3' spall CS3. -Girder 2, 1' spall CS2, 1' exposed rebar CS2, 1' cracking CS2. -Girder 3, 1 spall CS2, 1' cracking CS2. -Girder 4, 5' exposed rebar CS2, 2' spall CS2. Span 7: -Girders 1-4 have large spalls with exposed rebar @ Bent 7. 10' exposed rebar CS3, 1' exposed rebar CS2, 2' spall CS2. Span 9: -Girders 1 - 4 have small spalls, 4' spall CS2. -Girder 4 has 1' exposed rebar CS2. Span 10: -Girder 1 - 4 have vertical cracks. Girder 1 & 4 have 1/4" vertical crack at Bent 11. 8' cracking CS3. -Girder 2 has delam. 1' spall CS2. -Girder 3, 1' exposed rebar CS2.							
205	Reinforced Concrete Column	EA	28	18	6	4	0
1080	Delamination/Spall/Patched Area	EA	3	0	0	3	0
1090	Exposed Rebar	EA	6	0	6	0	0
1130	Cracking (RC and Other)	EA	1	0	0	1	0
(205) Bent 2: -Column 3 spall. 1 spall CS3. Bent 4: -Column 1 spall. 1 spall CS3. Bent 6: -Column 1 & 3 exposed rebar. 2 exposed rebar CS2.							



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Location: 2.0 MI SW OF SH 98

Team Lead: John Parks Inspection Date: 05/30/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Bent 7: -Column 2 & 3, exposed rebar. 2 exposed rebar CS2. Bent 8: -Column 1 & 3 exposed rebar. 2 exposed rebar CS2. Bent 10: -Column 1 crack. 1 cracking CS3. -Column 3 spall. 1 spall CS3.							
215	Reinforced Concrete Abutment	LF	64	64	0	0	0
234	Reinforced Concrete Pier Cap	LF	315	308	6	1	0
1080	Delamination/Spall/Patched Area	LF	7	0	6	1	0
(234) Bent 2: -3' spall CS2. Bent 3: -2' spall CS2. Bent 5: -1' spall CS2. Bent 11: -1' spall CS3.							
311	Movable Bearing	EA	21	0	0	21	0
1000	Corrosion	EA	21	0	0	21	0
(311) All bearings have heavy corrosion with section lose to the masonry plates.							
313	Fixed Bearing	EA	69	0	0	69	0
1000	Corrosion	EA	69	0	0	69	0
(313) All bearings have heavy corrosion with section lose to the masonry plates.							
331	Reinforced Concrete Bridge Railing	LF	604	584	20	0	0
7000	Damage	LF	20	0	20	0	0



Elevation



Approach



Overview



Top Flange Underview



Typical Superstructure, encased steel beams.



Typical superstructure



Typical substructure



Span 10 bent 11 cracks in girders 3 and 4



Span 10 girder 3 vertical crack 0.050" with efflorescence



Bent 11 right end of cap spalled

Maintenance Needs

Date Reported: 03/06/2011

Priority: C - Important

Type of Work: Superstructure Repair

Status: Monitor

Component: Superstructure

Deficiency Description

Span 6, Beams 1 & 5, flange and bottom web have upto 1/8" pitting at the beam ends.

Remarks



Span 6, Beam 5 @ Bent 6, flange and bottom web have upto 1/8" pitting at the beam end.



Span 6, Beam 1 @ Bent 7, flange and bottom web have upto 1/8" pitting at the beam end.



Span 6 @ bent 7, girder 1 web has heavy pack rust that is causing the encasement to shell off the girder.

Maintenance Needs

Date Reported: 03/06/2011

Priority: C - Important

Type of Work: Superstructure Repair

Status: Monitor

Component: Superstructure

Deficiency Description

Span 7 @ Bent 7, Girder 2 - 4 have spalls with exposed rebar in the bearing area.

Remarks



Span 7 @ Bent 7, Girder 2 - 4 have spalls with exposed rebar in the bearing area.



Span 7 @ Bent 7, Girder 3 exposed rebar.

Maintenance Needs

Date Reported: 03/06/2011

Priority: C - Important

Type of Work: Bearing Repair/Replacement

Status: Monitor

Component: Superstructure

Deficiency Description

All bearings have heavy corrosion and pack rust that is inhibiting the movement of the bridge.

Remarks



Bearing @ Bent 3 are rotated back, the masonry plates have heavy pack rust.



Span 9 @ Bent 10, bearing 2 has heavy corrosion.



Span 9 @ Bent 10, bearings 2-4 heavy corrosion.

Maintenance Needs

Date Reported: 03/07/2012

Priority: C - Important

Type of Work: Bearing Repair/Replacement

Status: Monitor

Component: Superstructure

Deficiency Description

Bents 3 & 7 (ahead), girder #1 nuts connecting sole plate bracket to girder rusted with 100% sec. loss.
Bent 7, Girder # 1, outside bracket pushed away from the girder by pack rust.

Remarks



Bent 7, girder 1 the plate is bowed out approx. 1/3" from pack rust, and anchor bolt nut and head are rusted away.



Bent 7, Girder #4 nut connecting sole plate bracket to girder is rusted with 100% sec. loss.



Bent 3 (ahead), girder #1 nuts connecting sole plate bracket to girder is rusted with 100% sec. loss.

Maintenance Needs

Date Reported: 03/06/2011

Priority: D- Routine

Type of Work: Superstructure Repair

Status: Monitor

Component: Superstructure

Deficiency Description

Span 3, @ Bent 3, Girder 4 has a spall with exposed rebar.

Remarks



Bent 3 girder 4 with delamns and spalls with exposed rebar.

Maintenance Needs

Date Reported: 03/07/2012

Priority: D- Routine

Type of Work: Superstructure Repair

Status: Monitor

Component: Superstructure

Deficiency Description

Span 10, @ mid-span.

Soffit crack that propagates across entire deck and down all of the girders

Remarks



Span 10 girder 2, crack with efflorescences.



Span 10 cracks in girders

Maintenance Needs

Date Reported: 03/07/2012

Priority: D- Routine

Type of Work: Superstructure Repair

Status: Monitor

Component: Superstructure

Deficiency Description

Bent 2, girders 1 & 4 @ jct with cap.
Have cracks and spalls.

Remarks



Span 2 girder 1 spalled

Maintenance Needs

Date Reported: 03/07/2012

Priority: D- Routine

Type of Work: Substructure Repair

Status: Open

Component: Substructure

Deficiency Description

Bent 2, column 3, spall with exposed rebar.

Remarks



Bent 2 column 3 spalled with exposed rebar

Maintenance Needs

Date Reported: 03/04/2014

Priority: D- Routine

Type of Work: Superstructure Repair

Status: Monitor

Component: Substructure

Deficiency Description

Column 3 bent 10 large vert crack, no exposed steel

Remarks



01978 column 3 BT. 10 vertical crack.



Bent 10, column 3 has a large crack on back side below bottom of the cap.

Maintenance Needs

Date Reported: 04/01/2015

Priority: D- Routine

Type of Work: Substructure Repair

Status: Monitor

Component: Substructure

Deficiency Description

Bent 11 Left end of pier cap is spalled with extensive salt contamination.

Remarks



04/28/2020

Bt. 11 Lt. end of pier cap is spalled with extensive salt contamination.

Maintenance Needs

Date Reported: 04/30/2021

Priority: D- Routine

Type of Work: Repair (General)

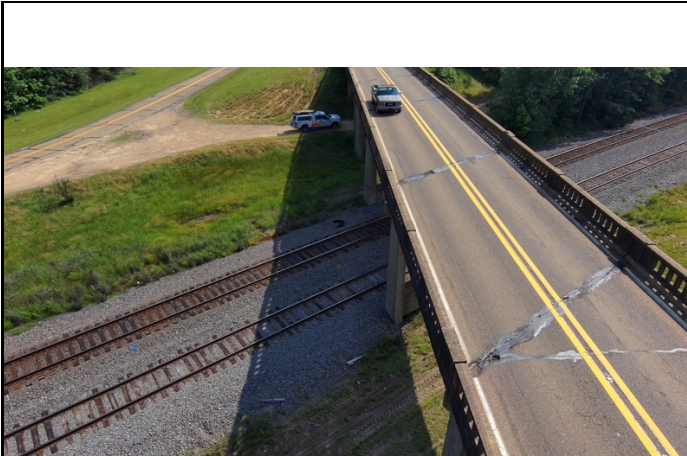
Status: Monitor

Component: Deck

Deficiency Description

The asphalt wearing surface has scattered potholes through out the deck along the joint lines.

Remarks



05/31/2023

Pothole in the wearing surface along joint lines.



04/27/2021

Joint 6 spalled



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Maintenance Needs

Date Reported: 05/30/2023

Priority: D- Routine

Type of Work: Miscellaneous

Status: Open

Component: Channel

Deficiency Description

Vegetation both sides

Remarks



Vegetation



Asset #01978(Routine)

US 79 SEC2 LM3.65 over SL SW RR

Location: 2.0 MI SW OF SH 98

Team Lead: John Parks Inspection Date: 05/30/2023

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	Yes
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 #01978(Routine)

US 79 SEC2 LM3.65 over SL SW RR

Location: 2.0 MI SW OF SH 98

Team Lead: John Parks Inspection Date: 05/30/2023

A-57 - Girder End and Bearing Painting Needed (Yes)

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed

A-60 - Full Girder 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



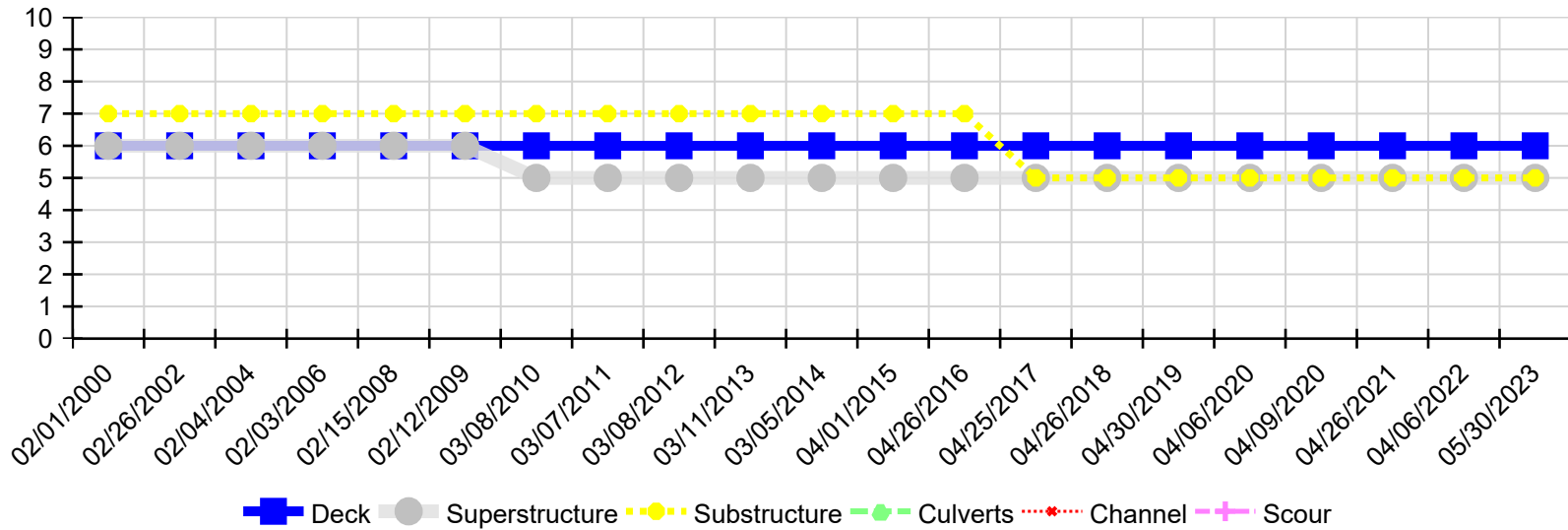
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US 79 SEC2 LM3.65 over SL SW RR

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Team Lead: John Parks Inspection Date: 05/30/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/30/2023	6	5	5	N	N	N
04/06/2022	6	5	5	N	N	N
04/26/2021	6	5	5	N	N	N
04/09/2020	6	5	5	N	N	N
04/06/2020	6	5	5	N	N	N
04/30/2019	6	5	5	N	N	N
04/26/2018	6	5	5	N	N	N
04/25/2017	6	5	5	N	N	N
04/26/2016	6	5	7	N	N	N
04/01/2015	6	5	7	N	N	N
03/05/2014	6	5	7	N	N	N
03/11/2013	6	5	7	N	N	N
03/08/2012	6	5	7	N	N	N
03/07/2011	6	5	7	N	N	N
03/08/2010	6	5	7	N	N	N
02/12/2009	6	6	7	N	N	N
02/15/2008	6	6	7	N	N	N
02/03/2006	6	6	7	N	N	N
02/04/2004	6	6	7	N	N	N
02/26/2002	6	6	7	N	N	N
02/01/2000	6	6	7	N	N	N