



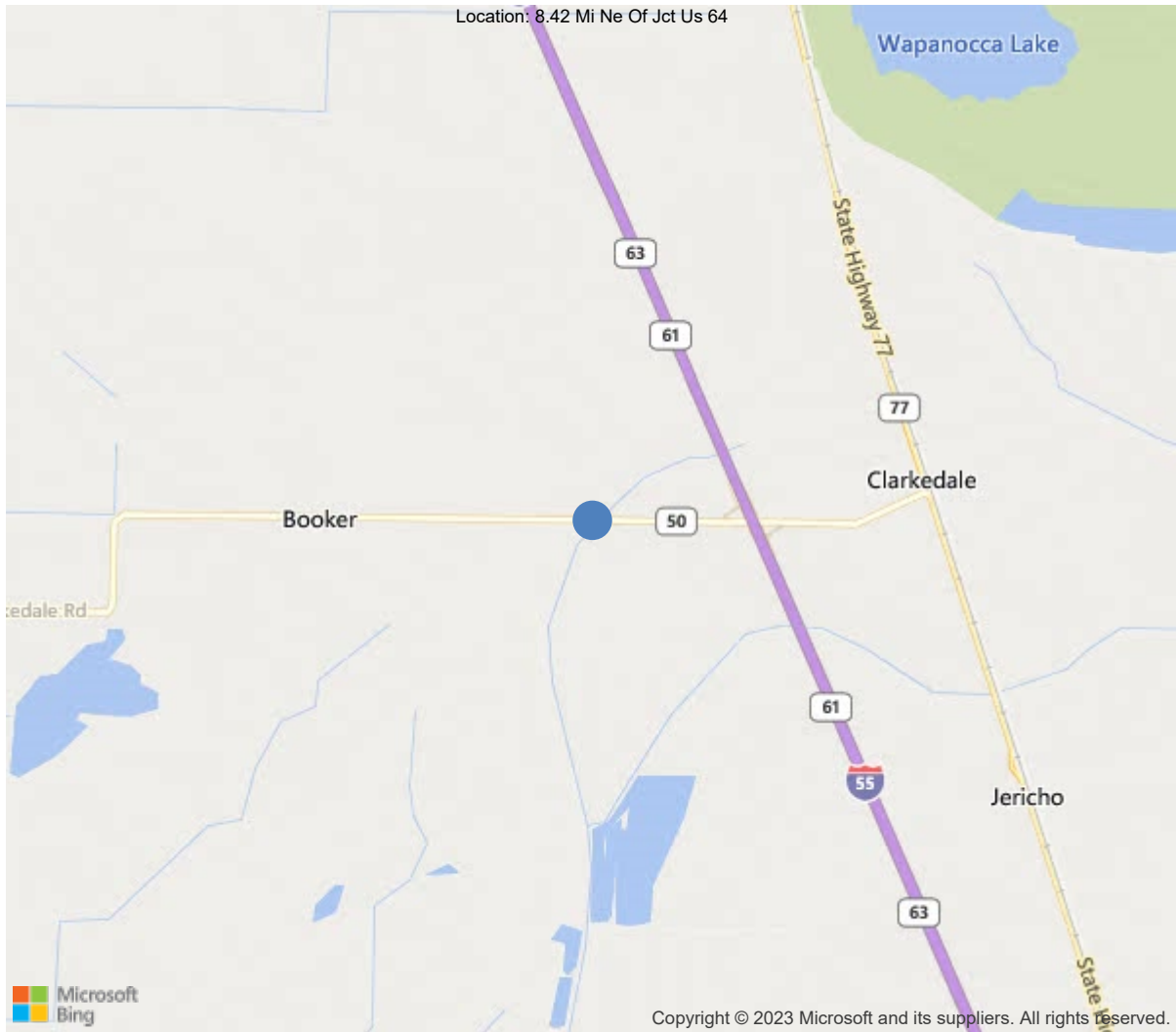
Latitude:35.30706, Longitude:-90.26539

Route:50 Section:04 Log:8.42

Arnold Road ID:18x50x4xA, Arnold Log mile:8.421

District 01, 35 - Crittenden County

Owner: 1 - State Highway Agency



35.30706, -90.26539



Asset #M3876(Routine)

Sh-50/Sec-4/L-8.42 over Ditch Number 9

Location: 8.42 Mi Ne Of Jct Us 64

Team Lead: Drew Melton, Inspection Date: 04/11/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M3876
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	35 - Crittenden County
(4) Place Code	0
(6) Features Intersected	Ditch Number 9
(7) Facility Carried	Sh-50/Sec-4/L-8.42
(9) Location	8.42 Mi Ne Of Jct Us 64
(11) Mile Point	8.42 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.307056
(17) Longitude	-90.265388
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	14
Material	1 - Concrete
Type	4 - Tee beam
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	2
(46) No. of Approach Spans	0
(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	1930
(106) Year Reconstructed	1968
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	200
(30) Year of ADT	2019
(109) Truck ADT	1 %
(19) Bypass, Detour Length	6 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	31 ft
(49) Structure Length	50 ft
(50) Curb or Sidewalk Width	
Left	0.9 ft
Right	0.9 ft
(51) Bridge Roadway Width Curb to Curb	25.5 ft
(52) Deck Width Out to Out	27.5 ft
(32) Approach Roadway Width (W/Shoulders)	20.4 ft
(33) Bridge Median	0 - No median
(34) Skew	40 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	25.5 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 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	5
(60) Substructure	7
(61) Channel & Channel Protection	6
(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	23
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	14
(70) Bridge Posting	1 - 30.0 - 39.9 % below
(41) Structure Open/Posted/Closed	P - Posted for load (may include
APPRAISAL	
(67) Structural Evaluation	4
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	8
(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	5 - Bridge foundations determined to
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	297
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	04/11/2023		
(91) Frequency	12		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<p>* 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.</p>			



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

Deck is in satisfactory condition with a few cracks in soffit-undersurface reflecting through to deck possibly structural.

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

Superstructure is in fair condition with possibly structural cracks leading into soffit-undersurface. Girders also have some spalls.

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

Substructure is in good condition with some minor cracks and spalling to concrete and wood has some cracks weathering and some decay.

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.)
04/11/2023 lowerewd channel from 8 to 6 due to some erosion of banks and channel alignment with bridge.

Channel banks have some vegetation with areas of minor to moderate erosion. Channel is aligned fair at best with bridge structure. Channel has little to no restrictions to water flow.

A-46 - Asset Files

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Asset #M3876(Routine)

Sh-50/Sec-4/L-8.42 over Ditch Number 9

Location: 8.42 Mi Ne Of Jct Us 64

Team Lead: Drew Melton, Inspection Date: 04/11/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1275	1229	1	0	45
1090	Exposed Rebar	SF	1	0	1	0	0
1130	Cracking (RC and Other)	SF	45	0	0	0	45
510	Wearing Surfaces	SF	1175	972	200	3	0
3210	Delam/Spall/Patched Area/Pothole	SF	3	0	0	3	0
3220	Crack (Wearing Surface)	SF	200	0	200	0	0
<p>(16) Achm has crack full length of bridge left and right sides. All spans of original structure have open hairline longitudinal & transverse cracks in soffit-under surface and at construction joints with no efflorescence.</p> <p>Span #1 between girder #4 & 5 has a small area of honeycomb in soffit-under surface with 6" of rebar exposed. Span #1,2 girders are cracked vertically & transversely approx. 3' east and west of bent #2, cracks extend up stem and across soffit-under surface and continue from girder #2 to girder #7.</p>							
110	Reinforced Concrete Open Girder/Beam	LF	400	370	11	5	14
1080	Delamination/Spall/Patched Area	LF	5	0	0	5	0
1090	Exposed Rebar	LF	11	0	11	0	0
1130	Cracking (RC and Other)	LF	14	0	0	0	14
<p>(110) Several hairline cracks in various locations with small delaminated areas. Connection bolts on outside units are corroded with laminations.</p> <p>Span #1 & 2 girders are cracked vertically & transversely approx. 3' east & west of bent #2 cracks extend up stem and across soffit-under surface and continue from girder #2 to girder #7.</p> <p>Span #2 girder #7 has 10' on bottom chord with rebar exposed at end of span and 1' at beginning of span.</p>							
205	Reinforced Concrete Column	EA	6	0	0	6	0
1130	Cracking (RC and Other)	EA	6	0	0	6	0
(205) All columns are cracked all the way around at top at cold joint to cap connection.							
215	Reinforced Concrete Abutment	LF	55	34	20	1	0
1080	Delamination/Spall/Patched Area	LF	20	0	20	0	0
1130	Cracking (RC and Other)	LF	1	0	0	1	0
<p>(215) Concrete wings only holding dirt back has lots of areas of spalling on top. Abutment #1 by left column has cs3,cs4 vertical crack.</p>							
216	Timber Abutment	LF	32	0	17	15	0
1140	Decay/Section Loss	LF	15	0	0	15	0
1160	Crack (Timber)	LF	17	0	17	0	0

Team Lead: Drew Melton, **Inspection Date:** 04/11/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(216) Timber is cracked and weathered Abutment #1 right and left timber caps are decayed on top with 30% section loss. Abutment #2 left timber cap is decayed on top with 15% section loss.							
228	Timber Pile	EA	8	0	8	0	0
1160	Crack (Timber)	EA	8	0	8	0	0
(228) All timber piles are cracked vertical and weathered. Timber piles have unknown depth or length.							
234	Reinforced Concrete Pier Cap	LF	51	51	0	0	0
(234) Bent #2 cap back face has 2' of delaminated areas between girders #3,4.							
235	Timber Pier Cap	LF	17	0	8	9	0
1140	Decay/Section Loss	LF	9	0	0	9	0
1160	Crack (Timber)	LF	8	0	8	0	0
(235) All timber caps have cracks, splits, and weathering. Abutment #1 right and left timber caps are decayed on top with 30% section loss. Abutment #2 left timber cap is decayed on top with 15% section loss.							



Asset #M3876(Routine)

Sh-50/Sec-4/L-8.42 over Ditch Number 9

Location: 8.42 Mi Ne Of Jct Us 64

Team Lead: Drew Melton, Inspection Date: 04/11/2023

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1275	1229	1	0	45
1090	Exposed Rebar	SF	1	0	1	0	0
1130	Cracking (RC and Other)	SF	45	0	0	0	45
510	Wearing Surfaces	SF	1175	972	200	3	0
3210	Delam/Spall/Patched Area/Pothole	SF	3	0	0	3	0
3220	Crack (Wearing Surface)	SF	200	0	200	0	0
(16) Achm has crack full length of bridge left and right sides. All spans of original structure have open hairline longitudinal & transverse cracks in soffit-under surface and at construction joints with no efflorescence. Span #1 between girder #4 & 5 has a small area of honeycomb in soffit-under surface with 6" of rebar exposed. Span #1,2 girders are cracked vertically & transversely approx. 3' east and west of bent #2, cracks extend up stem and across soffit-under surface and continue from girder #2 to girder #7.							

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

Comment: Deck is in satisfactory condition with a few cracks in soffit-undersurface reflecting through to deck possibly structural.



Asset #M3876(Routine)

Sh-50/Sec-4/L-8.42 over Ditch Number 9

Location: 8.42 Mi Ne Of Jct Us 64

Team Lead: Drew Melton, Inspection Date: 04/11/2023

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	400	370	11	5	14
1080	Delamination/Spall/Patched Area	LF	5	0	0	5	0
1090	Exposed Rebar	LF	11	0	11	0	0
1130	Cracking (RC and Other)	LF	14	0	0	0	14
(110) Several hairline cracks in various locations with small delaminated areas. Connection bolts on outside units are corroded with laminations. Span #1 & 2 girders are cracked vertically & transversely approx. 3' east & west of bent #2 cracks extend up stem and across soffit-undersurface and continue from girder #2 to girder #7. Span #2 girder #7 has 10' on bottom chord with rebar exposed at end of span and 1' at beginning of span.							

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

Comment: Superstructure is in fair condition with possibly structural cracks leading into soffit-undersurface. Girders also have some spalls.



Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	0	0	6	0
1130	Cracking (RC and Other)	EA	6	0	0	6	0
(205) All columns are cracked all the way around at top at cold joint to cap connection.							
215	Reinforced Concrete Abutment	LF	55	34	20	1	0
1080	Delamination/Spall/Patched Area	LF	20	0	20	0	0
1130	Cracking (RC and Other)	LF	1	0	0	1	0
(215) Concrete wings only holding dirt back has lots of areas of spalling on top. Abutment #1 by left column has cs3,cs4 vertical crack.							
216	Timber Abutment	LF	32	0	17	15	0
1140	Decay/Section Loss	LF	15	0	0	15	0
1160	Crack (Timber)	LF	17	0	17	0	0
(216) Timber is cracked and weathered. Abutment #1 right and left timber caps are decayed on top with 30% section loss. Abutment #2 left timber cap is decayed on top with 15% section loss.							
228	Timber Pile	EA	8	0	8	0	0
1160	Crack (Timber)	EA	8	0	8	0	0
(228) All timber piles are cracked vertical and weathered. Timber piles have unknown depth or length.							
234	Reinforced Concrete Pier Cap	LF	51	51	0	0	0
(234) Bent #2 cap back face has 2' of delaminated areas between girders #3,4.							
235	Timber Pier Cap	LF	17	0	8	9	0
1140	Decay/Section Loss	LF	9	0	0	9	0
1160	Crack (Timber)	LF	8	0	8	0	0
(235) All timber caps have cracks, splits, and weathering. Abutment #1 right and left timber caps are decayed on top with 30% section loss. Abutment #2 left timber cap is decayed on top with 15% section loss.							

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

Comment: Substructure is in good condition with some minor cracks and spalling to concrete and wood has some cracks weathering and some decay.

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.)

Comment: 04/11/2023 lowerwd channel from 8 to 6 due to some erosion of banks and channel alignment with bridge.

Channel banks have some vegetation with areas of minor to moderate erosion. Channel is aligned fair at best with bridge structure. Channel has little to no restrictions to water flow.



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Location: 8.42 Mi Ne Of Jct Us 64

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Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Side view-elevation



Top view-inventory



Abutment #1 posting



Abutment #2 posting



Channel under bridge



Channel left side



Channel right side



Typical deck



Typical soffit-under surface original bridge



Typical soffit-under surface for extensions



Typical transverse soffit-under surface crack in span #2



Span #1 & 2 girders are cracked vertically & transversely approx. 3' east & west of bent #2 cracks extend up stem and across soffit-under surface and continue from girder #2 to girder #



Exposed rebar in span #1 girder #7 bottom face



Span #1 girder #2 has 2' long delaminated area at bent #2



Span #1 girder #2 has 3' long delaminated area on bottom face mid span.



Bent #2 cap back face has 2' of delaminated areas between girders #3 and 4.



Bent #2 left side



Bent #2 right side



Abutment #1



Abutment #1 by left column has cs3,cs4 vertical crack.



Abutment #1 left side



Abutment #1 right side



Abutment #2 right side



Abutment #2



Abutment #2 left side

Maintenance Needs

Date Reported: 04/20/2011

Priority: C - Important

Type of Work: Replace (General)

Status: Monitor

Component: Bridge

Deficiency Description

Span #1 & 2 girders are cracked vertically & transversely approx. 3' east & west of bent #2 cracks extend up stem and across soffit-undersurface and continue from girder #2 to girder #7.

Remarks



Typical crack up side of t beam into soffit.



Typical crack in stem and soffit span #2.



Typical crack in stem and soffit span #1.



Typical soffit to girder crack.

Maintenance Needs

Date Reported: 04/19/2012

Priority: D- Routine

Type of Work: Replace (General)

Status: Monitor

Component: Element

Deficiency Description

Abutment #1 right and left timber caps are decayed on top with 30% section loss.
Abutment #2 left timber cap is decayed on top with 15% section loss.

Remarks



Abutment 2 left end of cap.



Abutment 1 right side timber cap.



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Sh-50/Sec-4/L-8.42 over Ditch Number 9

Location: 8.42 Mi Ne Of Jct Us 64

Team Lead: Drew Melton, Inspection Date: 04/11/2023

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	
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	



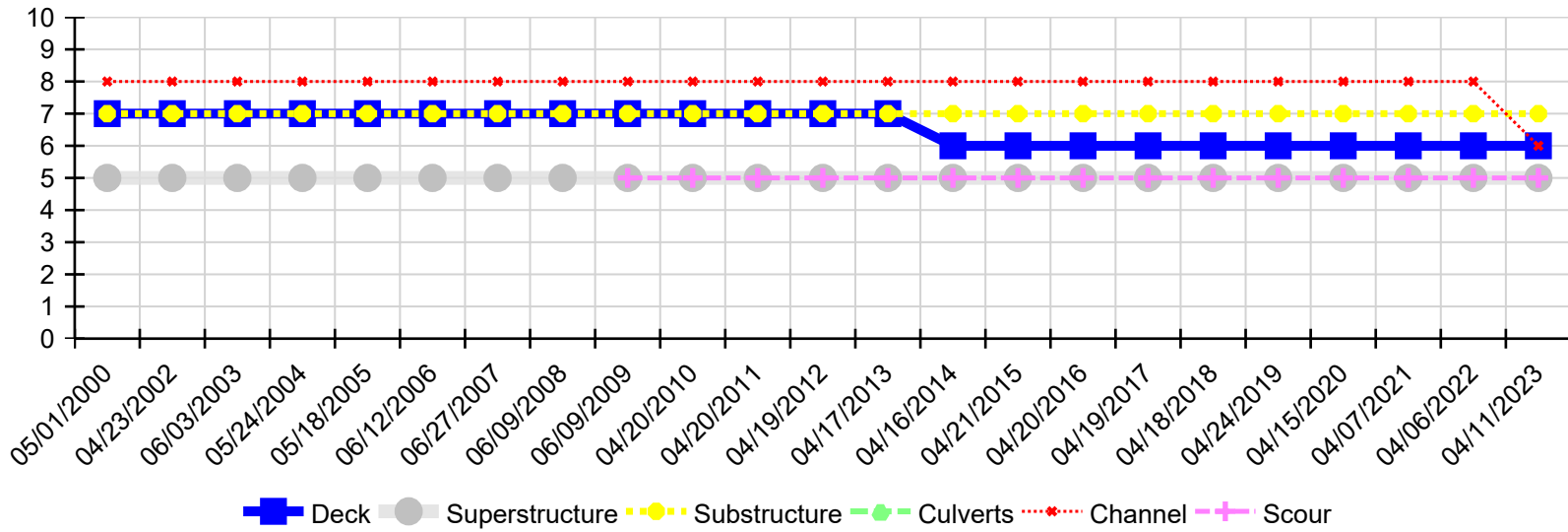
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/11/2023	6	5	7	N	6	5
04/06/2022	6	5	7	N	8	5
04/07/2021	6	5	7	N	8	5
04/15/2020	6	5	7	N	8	5
04/24/2019	6	5	7	N	8	5
04/18/2018	6	5	7	N	8	5
04/19/2017	6	5	7	N	8	5
04/20/2016	6	5	7	N	8	5
04/21/2015	6	5	7	N	8	5
04/16/2014	6	5	7	N	8	5
04/17/2013	7	5	7	N	8	5
04/19/2012	7	5	7	N	8	5
04/20/2011	7	5	7	N	8	5
04/20/2010	7	5	7	N	8	5
06/09/2009	7	5	7	N	8	5
06/09/2008	7	5	7	N	8	N
06/27/2007	7	5	7	N	8	N
06/12/2006	7	5	7	N	8	N
05/18/2005	7	5	7	N	8	N
05/24/2004	7	5	7	N	8	N
06/03/2003	7	5	7	N	8	N
04/23/2002	7	5	7	N	8	N
05/01/2000	7	5	7	N	8	N