



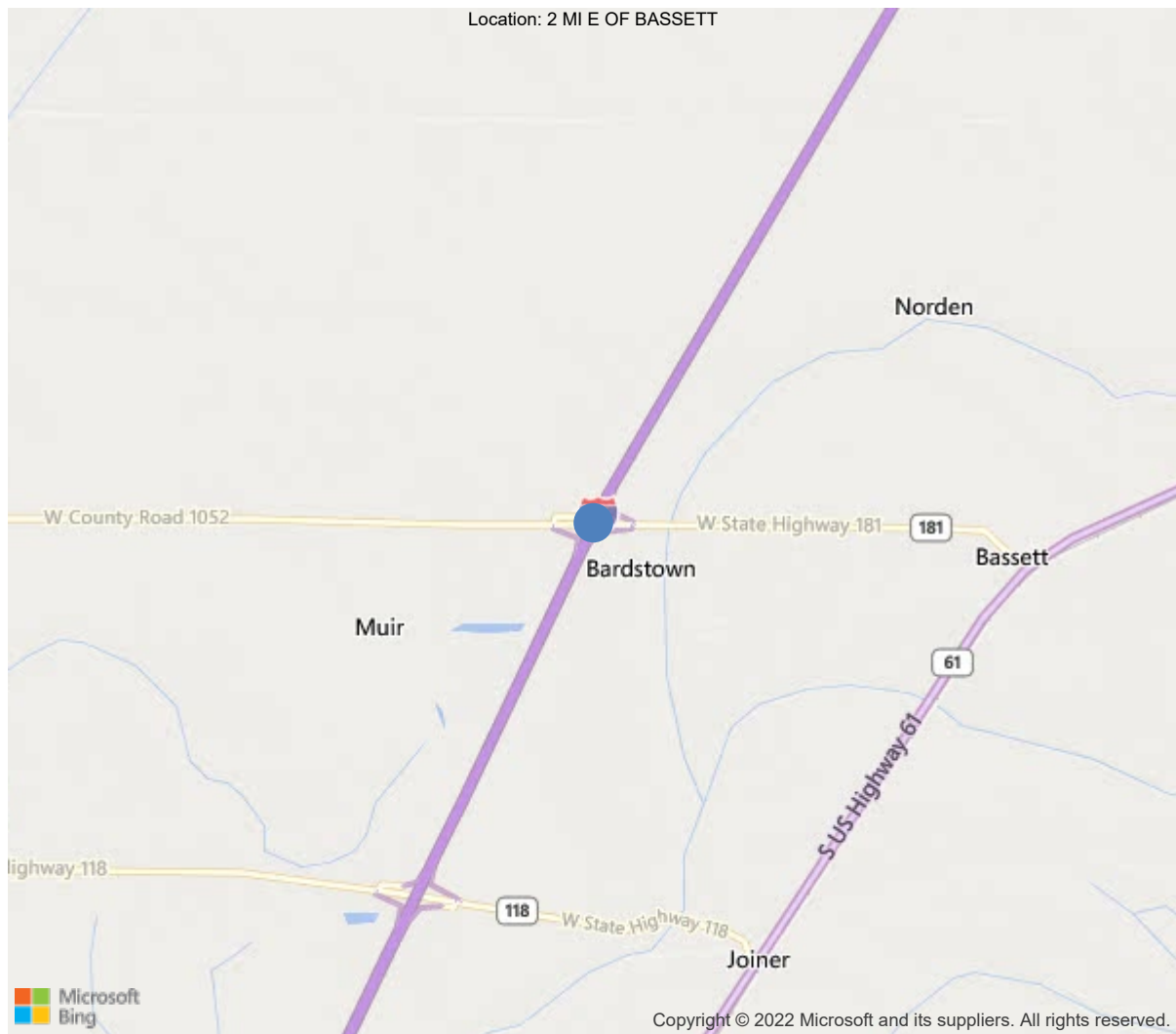
Latitude:35.53860, Longitude:-90.16418

Route:181 Section:00 Log:2.19

Arnold Road ID:47x181x0xA, Arnold Log mile:2.221

District 10, 93 - Mississippi County

Owner: 1 - State Highway Agency



35.53860, -90.16418



Asset #03180(Routine)

SH 181-00- LM 2.19 over I 55-SEC 12

Location: 2 MI E OF BASSETT

Team Lead: Richard Jones, Inspection Date: 08/18/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03180
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	93 - Mississippi County
(4) Place Code	0
(6) Features Intersected	I 55-SEC 12
(7) Facility Carried	SH 181-00- LM 2.19
(9) Location	2 MI E OF BASSETT
(11) Mile Point	2.19 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.5386
(17) Longitude	-90.16418
(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	4
(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	1960
(106) Year Reconstructed	0
(42) Type of Service	61
On	6 - Overpass structure at an interchange or s
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	2
Under	4
(29) Average Daily Traffic	1200
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	6 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	72 ft
(49) Structure Length	242.9 ft
(50) Curb or Sidewalk Width	
Left	1.6 ft
Right	1.6 ft
(51) Bridge Roadway Width Curb to Curb	26 ft
(52) Deck Width Out to Out	30.9 ft
(32) Approach Roadway Width (W/Shoulders)	29.9 ft
(33) Bridge Median	0 - No median
(34) Skew	25 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	26 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	16.69 ft
Ref:	
(55) Min Lat Underclear RT	11.7 ft
Ref:	
(56) Min Lat Underclear LT	8 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(111) Pier Protection	5 - None present but re-evalua
(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 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	3
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	N
(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	56
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	34
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	P - Posted for load (may inclu
APPRAISAL	
(67) Structural Evaluation	6
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	6
(71) Waterway Adequacy	N
(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	N - Bridge not over waterway.
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	1147
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/18/2022		
(91) Frequency	12		
(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.			

58 - Deck (3)

Bridge received an asphalt overlay and was posted for load in March 2022, after being closed due to a deck failure that was too large for steel plates. Deck at span 2 was patched with a 14' x 26' full depth patch.

Approach slabs are covered with asphalt.

Concrete curbs have cracks and areas of abrasion.

Wearing surface is cracked over bent 2 joint.

Majority of deck has been noted in the past as being spalled, delaminated, or patched. Patches were noted to be in mostly poor condition.

Soffit has several areas of map cracking. Some areas have efflorescence or rust stains.

Soffit at spans 2 and 3 have 2 spalls with rebar exposed that run from exterior girder to exterior girder along the skew.

Spans 2 and 3 have considerable leakage with some efflorescent staining on under structure routes. North bound and South bound exterior lanes each have stains.

59 - Superstructure (6)

Girders have scattered areas of surface rust. Top flange of girders has areas of flaking rust from leakage through deck.

Ends of girders have rust with some section loss at web below haunch.

Bearings have pack rust and section loss.

Span 1 bent 1 bearings 2 - 5 are each missing 1 anchor bolt.

Span 1 bent 2 bearing 3 is missing 1 anchor bolt.

Span 2 bent 2 bearings 3 and 4 are each missing 1 anchor bolt.

Span 3 bent 4 bearing 4 sole plate "ears" are bowed from pack rust at cap screw connection.

Span 3 bent 4 bearing 5 is missing a cap screw on Lt side.

Span 4 bent 4 bearings 2 and 3 have a 1/4" gap between bearing and masonry plate.

Span 4 bent 5 bearings 1, 3, 4, and 5 are missing both anchor bolts. Bearing 2 is missing 1 anchor bolt.

60 - Substructure (6)

Slope protection has some undermining near end bents. Slope protection has some settlement.

Bent 1 abutment has horizontal cracks with some efflorescence and rust stains along front face of cap. Front face has spalls with rebar exposed from lack of coverage.

Interior bent caps have horizontal cracks with some rust stains and delaminated areas.

Columns have a few cracks/delaminated areas.

Bent 2 column 2 has some rebar exposed.

Bent 5 abutment has a few cracks.

A-46 - Asset Files

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Asset #03180(Routine)

SH 181-00- LM 2.19 over I 55-SEC 12

Location: 2 MI E OF BASSETT

Team Lead: Richard Jones, Inspection Date: 08/18/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	7389	167	2925	4297	0
1080	Delamination/Spall/Patched Area	SF	5386	0	2197	3189	0
1090	Exposed Rebar	SF	294	0	0	294	0
1120	Efflorescence/Rust Staining	SF	124	0	0	124	0
1130	Cracking (RC and Other)	SF	1418	0	728	690	0
510	Wearing Surfaces	SF	6214	6185	0	29	0
3220	Crack (Wearing Surface)	SF	29	0	0	29	0
107	Steel Open Girder/Beam	LF	1195	1032	143	20	0
1000	Corrosion	LF	163	0	143	20	0
515	Steel Protective Coating	SF	11206	9853	1103	0	250
3440	Effectiveness (Steel Protective Coatings)	LF	1353	0	1103	0	250
205	Reinforced Concrete Column	EA	6	1	0	5	0
1090	Exposed Rebar	EA	1	0	0	1	0
1130	Cracking (RC and Other)	EA	4	0	0	4	0
215	Reinforced Concrete Abutment	LF	114	96	0	18	0
1090	Exposed Rebar	LF	8	0	0	8	0
1120	Efflorescence/Rust Staining	LF	5	0	0	5	0
1130	Cracking (RC and Other)	LF	5	0	0	5	0
234	Reinforced Concrete Pier Cap	LF	101	70	0	31	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	29	0	0	29	0
305	Assembly Joint without Seal	LF	167	125	14	28	0
2360	Adjacent Deck or Header	LF	42	0	14	28	0
311	Movable Bearing	EA	20	0	0	20	0
1000	Corrosion	EA	14	0	0	14	0
1020	Connection	EA	6	0	0	6	0
313	Fixed Bearing	EA	20	0	0	20	0
1000	Corrosion	EA	18	0	0	18	0
1020	Connection	EA	2	0	0	2	0



Asset #03180(Routine)

SH 181-00- LM 2.19 over I 55-SEC 12

Location: 2 MI E OF BASSETT

Team Lead: Richard Jones, Inspection Date: 08/18/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
321	Reinforced Concrete Approach Slab	SF	1760	1599	0	161	0
1130	Cracking (RC and Other)	SF	161	0	0	161	0
(321) Approach slabs were covered with asphalt in 2022							
330	Metal Bridge Railing	LF	478	472	6	0	0
7000	Damage	LF	6	0	6	0	0
331	Reinforced Concrete Bridge Railing	LF	478	351	70	57	0
1130	Cracking (RC and Other)	LF	127	0	70	57	0

**Deck**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	7389	167	2925	4297	0
1080	Delamination/Spall/Patched Area	SF	5386	0	2197	3189	0
1090	Exposed Rebar	SF	294	0	0	294	0
1120	Efflorescence/Rust Staining	SF	124	0	0	124	0
1130	Cracking (RC and Other)	SF	1418	0	728	690	0
510	Wearing Surfaces	SF	6214	6185	0	29	0
3220	Crack (Wearing Surface)	SF	29	0	0	29	0

58 - Deck (3)

Comment: Bridge received an asphalt overlay and was posted for load in March 2022, after being closed due to a deck failure that was too large for steel plates. Deck at span 2 was patched with a 14' x 26' full depth patch.

Approach slabs are covered with asphalt.

Concrete curbs have cracks and areas of abrasion.

Wearing surface is cracked over bent 2 joint.

Majority of deck has been noted in the past as being spalled, delaminated, or patched. Patches were noted to be in mostly poor condition.

Soffit has several areas of map cracking. Some areas have efflorescence or rust stains.

Soffit at spans 2 and 3 have 2 spalls with rebar exposed that run from exterior girder to exterior girder along the skew.

Spans 2 and 3 have considerable leakage with some efflorescent staining on under structure routes. North bound and South bound exterior lanes each have stains.

**Superstructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	1195	1032	143	20	0
1000	Corrosion	LF	163	0	143	20	0
515	Steel Protective Coating	SF	11206	9853	1103	0	250
3440	Effectiveness (Steel Protective Coatings)	LF	1353	0	1103	0	250

59 - Superstructure (6)

Comment: Girders have scattered areas of surface rust. Top flange of girders has areas of flaking rust from leakage through deck.

Ends of girders have rust with some section loss at web below haunch.

Bearings have pack rust and section loss.

Span 1 bent 1 bearings 2 - 5 are each missing 1 anchor bolt.

Span 1 bent 2 bearing 3 is missing 1 anchor bolt.

Span 2 bent 2 bearings 3 and 4 are each missing 1 anchor bolt.

Span 3 bent 4 bearing 4 sole plate "ears" are bowed from pack rust at cap screw connection.

Span 3 bent 4 bearing 5 is missing a cap screw on Lt side.

Span 4 bent 4 bearings 2 and 3 have a 1/4" gap between bearing and masonry plate.

Span 4 bent 5 bearings 1, 3, 4, and 5 are missing both anchor bolts. Bearing 2 is missing 1 anchor bolt.

**Substructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	1	0	5	0
1090	Exposed Rebar	EA	1	0	0	1	0
1130	Cracking (RC and Other)	EA	4	0	0	4	0
215	Reinforced Concrete Abutment	LF	114	96	0	18	0
1090	Exposed Rebar	LF	8	0	0	8	0
1120	Efflorescence/Rust Staining	LF	5	0	0	5	0
1130	Cracking (RC and Other)	LF	5	0	0	5	0
234	Reinforced Concrete Pier Cap	LF	101	70	0	31	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	29	0	0	29	0

60 - Substructure (6)

Comment: Slope protection has some undermining near end bents. Slope protection has some settlement.

Bent 1 abutment has horizontal cracks with some efflorescence and rust stains along front face of cap. Front face has spalls with rebar exposed from lack of coverage.

Interior bent caps have horizontal cracks with some rust stains and delaminated areas.

Columns have a few cracks/delaminated areas.

Bent 2 column 2 has some rebar exposed.

Bent 5 abutment has a few cracks.



Team Lead: Richard Jones, Inspection Date: 08/18/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Load posting at beginning



Load posting at end



Wearing surface



1/28/22 - Span 1



1/28/22 - Span 2



1/28/22 - Span 3



1/28/22 - Span 4



1/28/22 - Span 1



8/18/22 - Span 2



1/28/22 - Span 3



1/28/22 - Span 4



Bent 4

Maintenance Needs

Date Reported: 09/18/2012
Priority: C - Important
Type of Work: Repair (General)
Status: Monitor
Component: Superstructure

Deficiency Description

Bearings have pack rust and section loss.
Span 1 bent 2 bearing 3 is missing 1 anchor bolt.
Span 2 bent 2 bearings 3 and 4 are each missing 1 anchor bolt.
Span 3 bent 4 bearing 4 sole plate "ears" are bowed from pack rust at cap screw connection.
Span 3 bent 4 bearing 5 is missing a cap screw on Lt side.
Span 4 bent 4 bearings 2 and 3 have a 1/4" gap between bearing and masonry plate.

Remarks



Span 3 bent 4 rockers



Bent 4 bearing 1



Bent 4 bearing 2



Bent 4 bearing 3



Bent 4 bearing 4



Bent 4 bearing 4



Bent 4 bearing 5

Date Reported: 09/19/2012
Priority: B - Pressing
Type of Work: Repair (General)
Status: Assigned
Component: Deck

Deficiency Description

Soffit has several areas of map cracking. Some areas have efflorescence or rust stains.
Soffit at spans 2 and 3 have 2 spalls with rebar exposed that run from exterior girder to exterior girder along the skew.
Spans 2 and 3 have considerable leakage with some efflorescent staining on under structure routes. North bound and South bound exterior lanes each have stains.

Remarks





S2



S3



2021 - Span 3



2021 - Span 2



1/28/22 - Span 2 under route (North bound)



1/28/22 - Span 2 bay 1



1/28/22 - Span 2 bay 4



1/28/22 - Span 3 under route (South bound)



Span 3 bay 4

Date Reported: 09/18/2012
Priority: C - Important
Type of Work: Repair (General)
Status: Monitor
Component: Substructure

Deficiency Description

Bent 1 abutment has horizontal cracks with some efflorescence and rust stains along front face of cap. Front face has spalls with rebar exposed from lack of coverage.
Interior bent caps have horizontal cracks with some rust stains and delaminated areas.
Bent 5 abutment has a few cracks.

Remarks



Bent 1





Bent 1 abutment



Bent 4



Bent 3



Bent 2



Asset #03180(Routine)

SH 181-00- LM 2.19 over I 55-SEC 12

Location: 2 MI E OF BASSETT

Team Lead: Richard Jones, **Inspection Date:** 08/18/2022

Date Reported: 09/19/2012
Priority: C - Important
Type of Work: Repair (General)
Status: Monitor
Component: Deck

Deficiency Description

Majority of deck is spalled, delaminated, or patched. Patches are in mostly poor condition.

Remarks

Deck received an asphalt overlay in 2022.



2021 - Span 1



2021 - Span 2



2021 - Span 3



2021 - Span 4

Date Reported: 09/18/2012
Priority: (Inactive) (Inactive) G - General/ Preventive maintenance
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component: Miscellaneous

Deficiency Description

Slope protection has some undermining near end bents. Slope protection has some settlement.

Remarks





Asset #03180(Routine)

SH 181-00- LM 2.19 over I 55-SEC 12

Location: 2 MI E OF BASSETT

Team Lead: Richard Jones, Inspection Date: 08/18/2022

Date Reported: 09/03/2014
Priority: D- Routine
Type of Work: (Inactive) (Inactive) 1 - Clean
Status: Monitor
Component: Superstructure

Deficiency Description

Girders have scattered areas of surface rust. Top flange of girders has areas of flaking rust from leakage through deck. Ends of girders have rust with some section loss at web below haunch.

Remarks

Date Reported: 08/22/2018
Priority: C - Important

Type of Work: Repair (General)
Status: Monitor
Component: Superstructure

Deficiency Description

Bearings at end bents have heavy pack rust and section loss. Most anchor bolts are missing.

Remarks



Span 1 bent 1 girder 4



Span 4 bent 5 girder 4



Span 1 bent 1 bearing 4



Bent 1 bearing 2



typ bearing at end bents



Asset #03180(Routine)

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Location: 2 MI E OF BASSETT

Team Lead: Richard Jones, **Inspection Date:** 08/18/2022

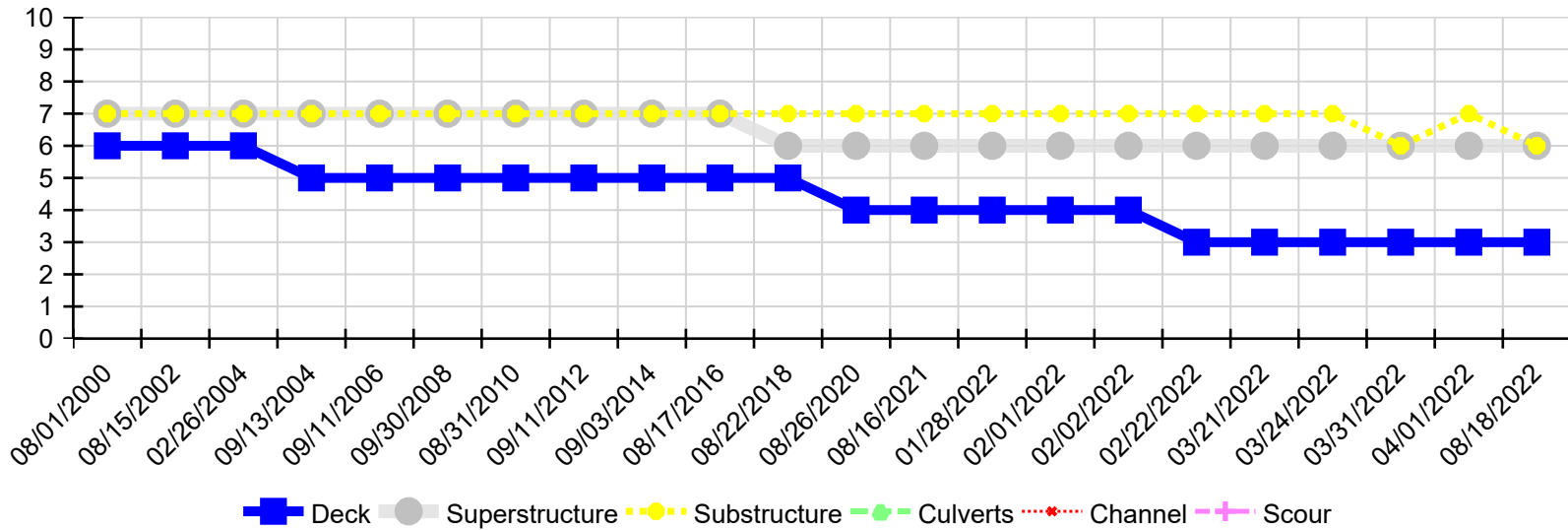
Routine Maintenance

Check Box Maintenance Items

Data Field	Value
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 - Hydo and LMC Advised	



Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/18/2022	3	6	6	N	N	N
04/01/2022	3	6	7	N	N	N
03/31/2022	3	6	6	N	N	N
03/24/2022	3	6	7	N	N	N
03/21/2022	3	6	7	N	N	N
02/22/2022	3	6	7	N	N	N
02/02/2022	4	6	7	N	N	N
02/01/2022	4	6	7	N	N	N
01/28/2022	4	6	7	N	N	N
08/16/2021	4	6	7	N	N	N
08/26/2020	4	6	7	N	N	N
08/22/2018	5	6	7	N	N	N
08/17/2016	5	7	7	N	N	N
09/03/2014	5	7	7	N	N	N
09/11/2012	5	7	7	N	N	N
08/31/2010	5	7	7	N	N	N
09/30/2008	5	7	7	N	N	N
09/11/2006	5	7	7	N	N	N
09/13/2004	5	7	7	N	N	N
02/26/2004	6	7	7	N	N	N
08/15/2002	6	7	7	N	N	N
08/01/2000	6	7	7	N	N	N