

## Bridge 06592 Inspection Report



Latitude:34.87976, Longitude:-92.76466

Route:10 Section:06 Log:0.54

Arnold Road ID:53x10x6xA, Arnold Log mile:0.528

District 08, 105 - Perry County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

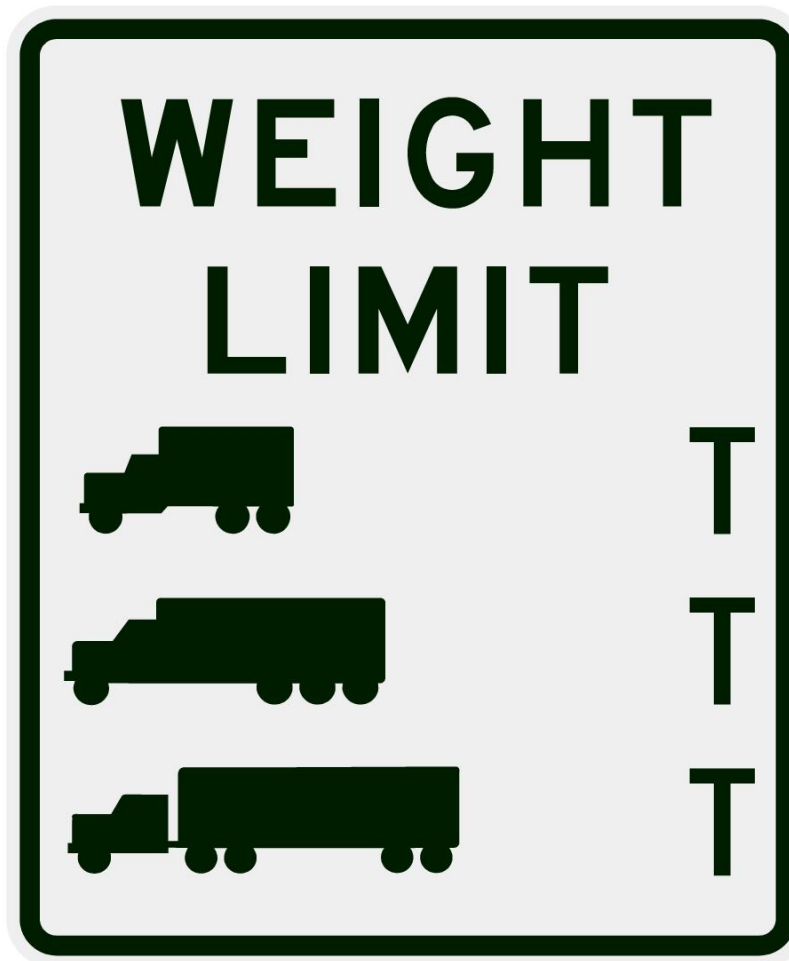
### Bridge Posting Information

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

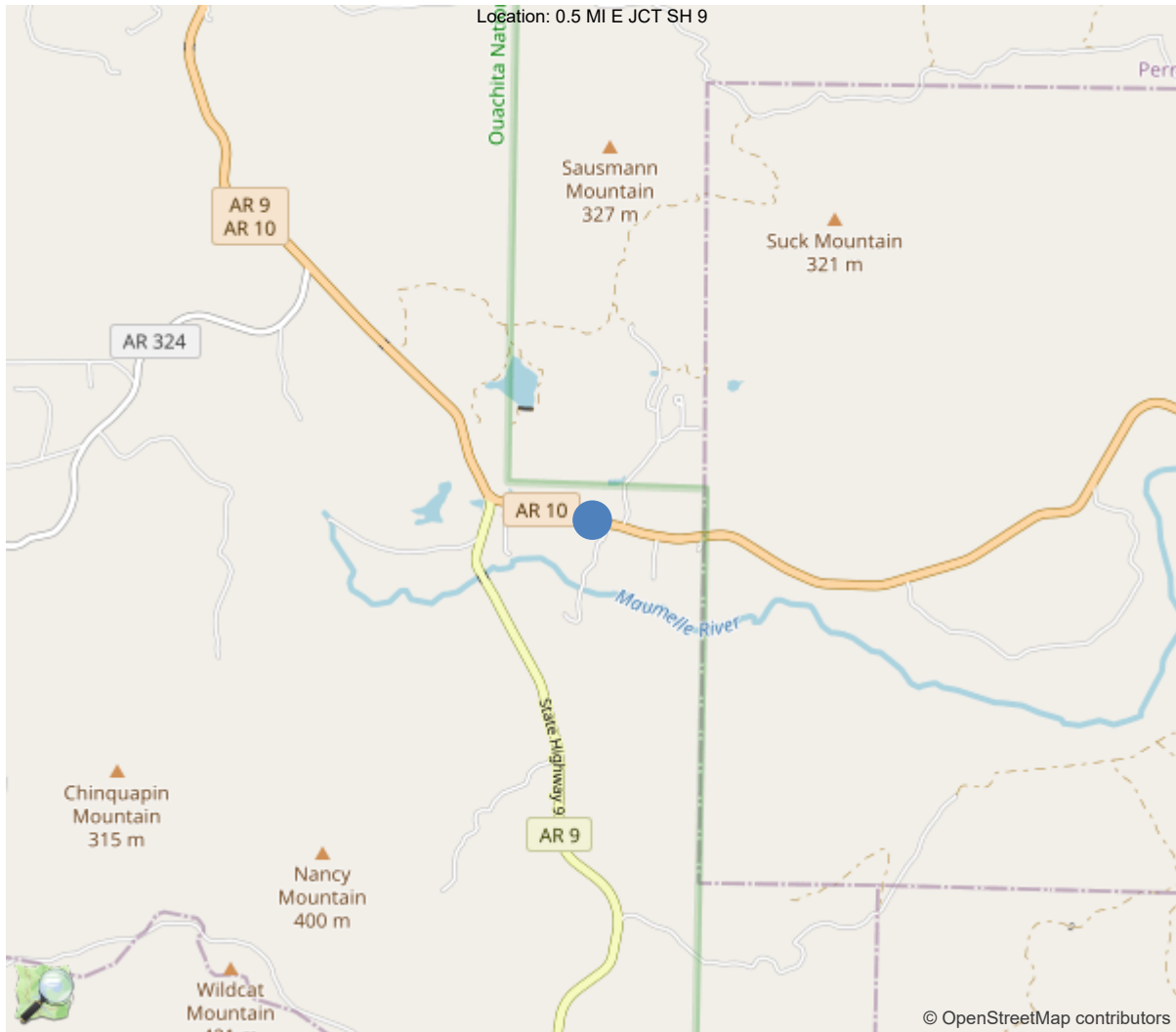
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	49		
Code 5 (40 Tons)	57		

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



34.87976, -92.76466



## National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06592
(5) Inventory Route	1
(2) Highway Agency District	08 - District 08
(3) County Code	105 - Perry County
(4) Place Code	0
(6) Features Intersected	Big Branch
(7) Facility Carried	SH 10
(9) Location	0.5 MI E JCT SH 9
(11) Mile Point	0.54 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000010060
(16) Latitude	34.87976
(17) Longitude	-92.76466
(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	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	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1996
(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	2000
(30) Year of ADT	2018
(109) Truck ADT	4 %
(19) Bypass, Detour Length	30 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	40 ft
(49) Structure Length	122 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	32.2 ft
(52) Deck Width Out to Out	34.8 ft
(32) Approach Roadway Width (W/Shoulders)	39 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	32.5 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	6 - Rural Minor 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	7
(60) Substructure	7
(61) Channel & Channel Protection	8
(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	
(68) Deck Geometry	4
(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	1 - Inspected feature meets current
(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	2490
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			11/02/2022
(91) Frequency			24
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	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.			



Team Lead: Kevin Milligan, Inspection Date: 11/02/2022

## Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	06592
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	105 - Perry County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	08 - District 08
B.L.05 Latitude	34.87976
B.L.06 Longitude	-92.76466
B.L.07 Border Bridge Number	
B.L.08 Border Bridge State or Country Code	
B.L.09 Border Bridge Insp. Resp.	
B.L.10 Border Bridge Designated Lead State	
B.L.11 Bridge Location	
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	
B.CL.02 Maint. Responsibility	
B.CL.03 Federal or Tribal Land Access	
B.CL.04 Historic Significance	
B.CL.05 Toll	
B.CL.06 Emergency Evacuation Designation	

ROADSIDE HARDWARE	
B.RH.01A Bridge Railing Type	
B.RH.01B Bridge Railing Year (YY)	
B.RH.01C Bridge Railing Test Level	
B.RH.02A Transition Type	
B.RH.02B Transition Year (YY)	
B.RH.02C Transition Test Level	

BRIDGE GEOMETRY	
B.G.01 NBIS Bridge Length	
B.G.02 Total Bridge Length	
B.G.03 Max Span Length	
B.G.04 Min Span Length	
B.G.05 Bridge Width Out-to-Out	
B.G.06 Bridge Width Curb-to-Curb	
B.G.07 Left Curb or Sidewalk Width	
B.G.08 Right Curb or Sidewalk Width	
B.G.09 Approach Roadway Width	

B.G.10 Bridge Median	
B.G.11 Skew	
B.G.12 Curved Bridge	
B.G.13 Max Bridge Height	
B.G.14 Sidehill Bridge	
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	

LOADS AND LOAD RATING	
B.LR.01 Design Load	
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	
B.LR.05 Inventory Load Rating Factor	
B.LR.06 Operating Load Rating Factor	
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	
B.IR.02 Fatigue Details	
B.IR.03 UW Inspection Required	
B.IR.04 Complex Feature	

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	
B.C.02 Superstructure Condition	
B.C.03 Substructure Condition	
B.C.04 Culvert Condition	
B.C.05 Bridge Railing Condition	
B.C.06 Bridge Railing Transitions Condition	
B.C.07 Bridge Bearings Cond.	
B.C.08 Bridge Joints Condition	
B.C.09 Channel Condition Rating	
B.C.10 Channel Protection Condition	
B.C.11 Scour Condition Rating	
B.C.12 Bridge Condition Classification	
B.C.13 Lowest Condition Rating	
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	
B.AP.02 Overtopping Likelihood	
B.AP.03 Scour Vulnerability	
B.AP.04 Scour Plan of Action	
B.AP.05 Seismic Vulnerability	



Team Lead: Kevin Milligan, Inspection Date: 11/02/2022

HIGHWAY ROUTES					
Highway Parent	B.RT.01 Route Designation	B.RT.02 Route Number	B.RT.03 Route Direction	B.RT.04 Route Type	B.RT.05 Service Type

POSTING STATUS DATA	
B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date

LOAD EVALUATION AND POSTING			
B.EP.01 Legal Load Configuration	B.EP.02 Legal Load Rating Factor	B.EP.03 Posting Type	B.EP.04 Posting Value



Asset #06592(Routine)  
SH 10 over Big Branch  
Location: 0.5 MI E JCT SH 9

Team Lead: Kevin Milligan Inspection Date: 11/02/2022

## Inspection Notes

### General Observation

Routine Inspection: 11/2/2022

Team Lead: Kevin Milligan

Assistant Inspector: Mark McClanahan

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### 58 - Deck (7 - GOOD CONDITION - some minor problems.)

KRM & MLM 11/2/2022

- Deck has a few transverse cracks along the joints.
- Wheel paths have minor abrasion.
- Soffit has cracks with efflorescence in the overhangs.

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### 59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

KRM & MLM 11/2/2022

- Girders 1 and 5 have minor corrosion with flaking rust on the bottom flange at bents 2 and 3.

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

KRM & MLM 11/2/2022

- Both abutments have a few cracks in the top of the back wall.
- Abutment 1 has a few vertical cracks with efflorescence.

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### 61 - Channel/Channel Protection (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)

CHANNEL: GRAVEL & ROCK - NO SCOUR.

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### National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	4249	4049	200	0	0
1120	Efflorescence/Rust Staining	SF	10	0	10	0	0
1130	Cracking (RC and Other)	SF	80	0	80	0	0
1190	Abrasion/Wear (PSC/RC)	SF	110	0	110	0	0
(12) KRM & MLM 11/2/2022 - Deck has a few transverse cracks along the joints. - Wheel paths have minor abrasion. - Soffit has cracks with efflorescence in the overhangs.							
107	Steel Open Girder/Beam	LF	600	560	40	0	0
1000	Corrosion	LF	40	0	40	0	0
515	Steel Protective Coating	SF	3750	3550	0	200	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	SF	200	0	0	200	0
(107) KRM & MLM 11/2/2022 - Girders 1 and 5 have minor corrosion with flacking rust on the bottom flange at bents 2 and 3.							
205	Reinforced Concrete Column	EA	4	4	0	0	0
(205) KRM & MLM 11/2/2022 - No notable defects at this inspection.							
215	Reinforced Concrete Abutment	LF	78	67	11	0	0
1120	Efflorescence/Rust Staining	LF	6	0	6	0	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
(215) KRM & MLM 11/2/2022 - Both abutments have a few cracks in the top of the back wall. - Abutment 1 has a few vertical cracks with efflorescence.							
234	Reinforced Concrete Pier Cap	LF	76	75	1	0	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
(234) KRM & MLM 11/2/2022 - Bent 2 back side of cap has a vertical crack above column 2.							
302	Compression Joint Seal	LF	160	160	0	0	0
(302) KRM & MLM 11/2/2022 - No notable defects at this inspection.							
311	Movable Bearing	EA	15	9	4	2	0
1000	Corrosion	EA	6	0	4	2	0
(311) KRM & MLM 11/2/2022 - Bearings 1 and 5 have minor corrosion with flaking rust at bents 2 and 3.							
313	Fixed Bearing	EA	15	9	4	2	0



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1000	Corrosion	EA	6	0	4	2	0
(313) KRM & MLM 11/2/2022 - Bearings 1 and 5 have minor corrosion with flaking rust at bents 2 and 3.							
331	Reinforced Concrete Bridge Railing	LF	244	244	0	0	0
(331) KRM & MLM 11/2/2022 - No notable defects at this inspection.							

## Inspection Photos and Notes



Drone photo: East side elevation



Drone photo: East side elevation



Inventory.



Typical deck.





Typical view of under surface.



Drone photo: Elevation



Drone photo: Roadway



No scour.





Elevation.



Deck has a few transverse cracks along the joints.



Girders 1 and 5 have minor corrosion on the bottom flange at bents 2 and 3.



Typical condition of columns.





Abutment 4 has a few cracks in the top of back wall.



Abutment 1 has a few cracks in the top of the back wall.



Abutment 1 has a few vertical cracks with efflorescence.



Bent 2 back side of cap has a vertical crack above column 2.





Bearings 1 and 5 have minor corrosion with flaking rust at bents 2 and 3.



Bearings 1 and 5 have minor corrosion with flaking rust at bents 2 and 3.



Concrete bridge rail has minor cracks that have been sealed.



Soffit has cracks with efflorescence in the overhangs.



Abutment 1 has a few vertical cracks with efflorescence.



Typical condition of compression joints.



### Maintenance Needs

**Date Reported:** 11/03/2022

**Priority:** D- Routine

**Type of Work:** Repair (General)

**Status:** Open

**Component:** Miscellaneous

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### Deficiency Description

Mile marker signs are missing at both ends of the bridge.

### Remarks

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Mile marker signs are missing at both ends of bridge.



## **Routine Maintenance**

### **Check Box Maintenance Items**

<b>Type of Maintenance</b>	<b>Is Recommended?</b>
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	
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

**A-54 - Sealable Deck Cracks**

**A-55 - Deck Washing Needed**

**A-56 - Joint Cleaning/Flushing Needed**



**Asset #06592(Routine)**

**SH 10 over Big Branch**

**Location: 0.5 MI E JCT SH 9**

**Team Lead: Kevin Milligan Inspection Date: 11/02/2022**

**A-57 - Girder End and Bearing Painting Needed**

**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**

**A-65 - Clogged deck drains?**



**Asset #06592(Routine)**

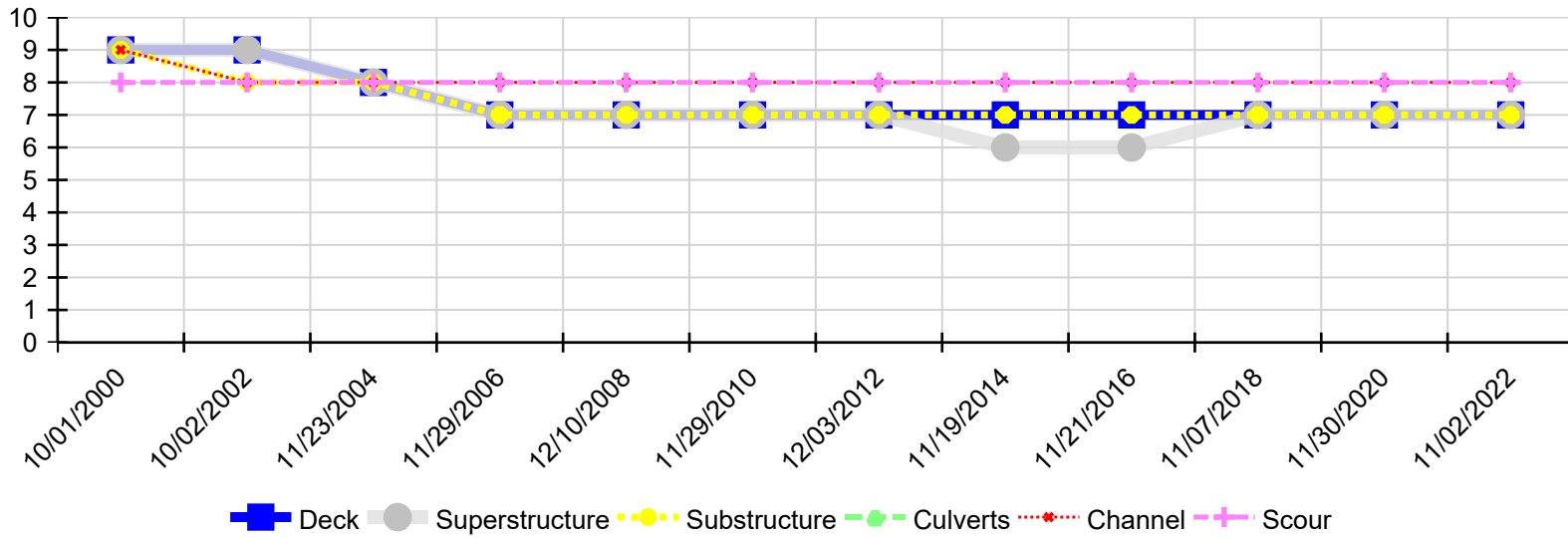
**SH 10 over Big Branch**

**Location: 0.5 MI E JCT SH 9**

**Team Lead: Kevin Milligan Inspection Date: 11/02/2022**

**A-66 - Approach minor pothole/leveling needed**

### Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
11/02/2022	7	7	7	N	8	8
11/30/2020	7	7	7	N	8	8
11/07/2018	7	7	7	N	8	8
11/21/2016	7	6	7	N	8	8
11/19/2014	7	6	7	N	8	8
12/03/2012	7	7	7	N	8	8
11/29/2010	7	7	7	N	8	8
12/10/2008	7	7	7	N	8	8
11/29/2006	7	7	7	N	8	8
11/23/2004	8	8	8	N	8	8
10/02/2002	9	9	8	N	8	8
10/01/2000	9	9	9	N	9	8