



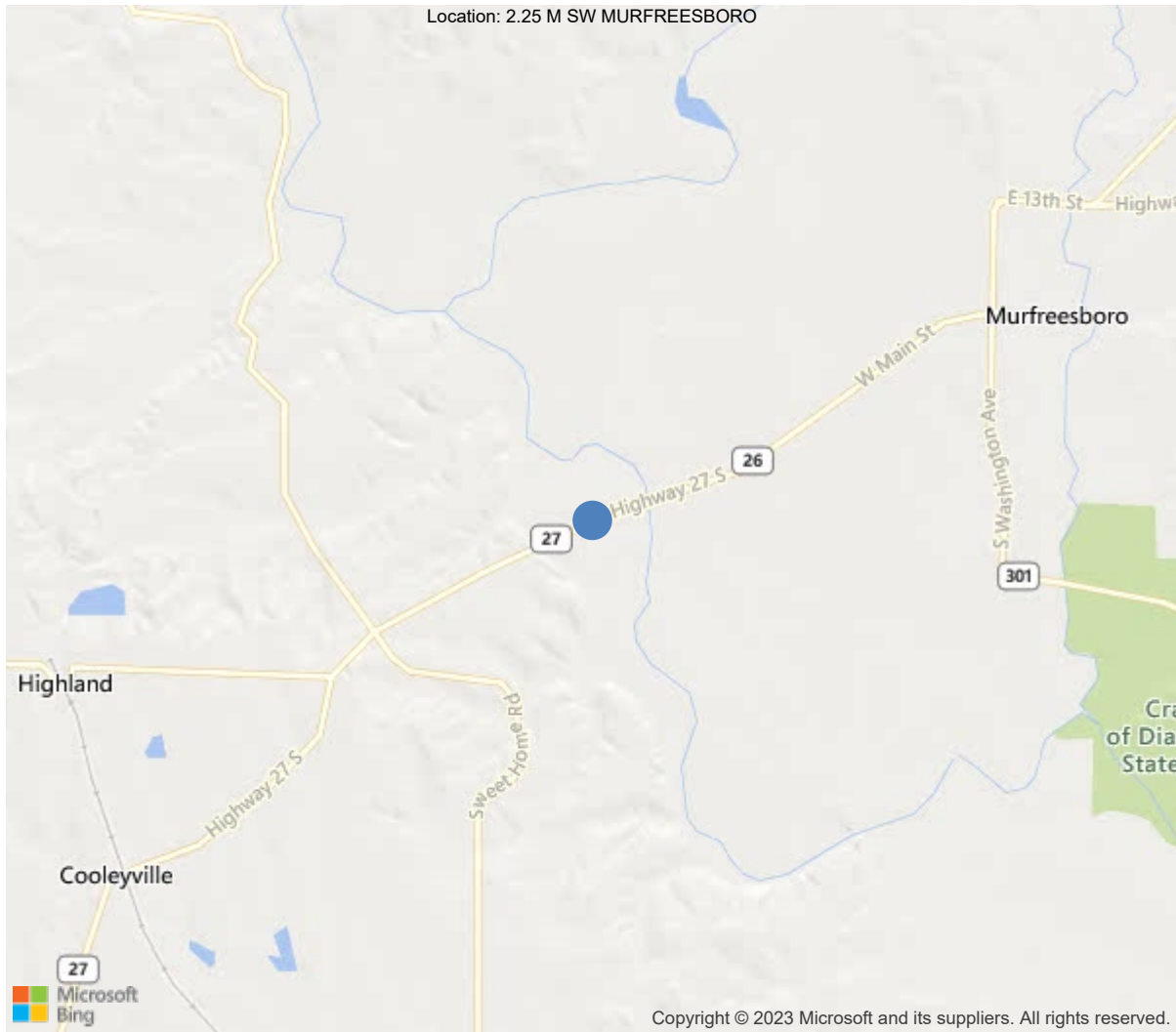
Latitude:34.04720, Longitude:-93.72519

Route:27 Section:04 Log:4.15

Arnold Road ID:55x27x4xA, Arnold Log mile:4.148

District 03, 109 - Pike County

Owner: 1 - State Highway Agency



34.04720, -93.72519



Asset #01623(Routine)

SH 27 - 04 - 4.15 over LITTLE MISSOURI RIVER RE

Location: 2.25 M SW MURFREESBORO

Team Lead: John King, Inspection Date: 07/20/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	01623
(5) Inventory Route	1
(2) Highway Agency District	03 - District 03
(3) County Code	109 - Pike County
(4) Place Code	0
(6) Features Intersected	LITTLE MISSOURI RIVER RE
(7) Facility Carried	SH 27 - 04 - 4.15
(9) Location	2.25 M SW MURFREESBORO
(11) Mile Point	4.15 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.0472
(17) Longitude	-93.72519
(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	11
Material	1 - Concrete
Type	1 - Slab
(45) No. of Spans in Main Unit	8
(46) No. of Approach Spans	2
(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	1933
(106) Year Reconstructed	1983
(42) Type of Service	19
On	1 - Highway
Under	9 - Relief for waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	3700
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	36 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	300 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	44 ft
(52) Deck Width Out to Out	46.9 ft
(32) Approach Roadway Width (W/Shoulders)	44.9 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	45.6 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 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	6
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	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	5
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(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	5 - 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	0
(114) Future ADT	4013
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	07/20/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<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>			

**General Observation**

7/23/2018 AL,SS,DECK PHOTOS TAKEN...7/16/2020...AL, Elevation, Deck, Def photos taken. Soundings taken this inspection...

07/22 AL, Elevation photos taken, added spall photos to elements and updated elements..

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

Joints need cleaned and resealed all spans.----tranv. and long. cracks mainly on R.C. slab portion have been sealed in 2003.----REPAIRS MADE TO SPALL ON TOP OF DECK IN 2012.....7/16/2020....20' section of deck is RC Top Flange over T-Beams with RC Slab on both sides all the way to edges of bridge...07/22 Little change per this inspection...

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

CONCRETE GIRDERS GIRDER 4 SPAN 3 AT BENT 4 SPALL W/REBAR EXPOSED (2 LF) GIRDER 2 BENT 8 END OF GIRDER SPALL W/REBAR EXPOSED (1LF) GIRDER 2 AT BENT 9 SPALL W/REBAR EXPOSED AND CRACK ACROSS BOTTOM (1LF)...

CONCRETE GIRDERS
GIRDER 4 SPAN 3 AT BENT 4 SPALL W/REBAR EXPOSED (2 LF)

GIRDER 2 BENT 8 END OF GIRDER SPALL W/REBAR EXPOSED (1LF)

GIRDER 2 AT BENT 9 SPALL W/REBAR EXPOSED AND CRACK ACROSS BOTTOM (1LF)

FIXED 02/12/2018...07/22 Spalls shown in elements added...

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

CHANGE SUBSTRUCTURE TO 5 FAIR DUE TO SPALLS ON CONCRETE CAPS W/REBAR EXPOSED AND MEASURABLE SECTION LOSS TO REBAR 07/2016.....CONCRETE CAPS BENT 1 GOOD.....BENT 2 SMALL SPALL ON CAP W/REBAR EXPOSED AT PILE 4...BENT 3 SMALL SPALL ON CAP AT GIRDER 2, AND DELAM AT GIRDER 1....BENT 4 SPALL ON CAP W/REBAR EXPOSED....BENT 5 LG SPALL ON CAP W/REBAR EXPOSED, REBAR HAS 1/8" OR MORE SECTION LOSS TO REBAR GIRDERS 2,3,4 ,DELAM AT GIRDER 1....BENT 6 SMALL SPALL ON CAP AT PILE 8...BENT 7 LARGE DELAMS ON CAP AT GRIDERS 1,2,3,4....BENT 8 SPALL ON END OF CAP RIGHT SIDE....BENT 9 (2) DELAMS ON CAP AT GRIDERS 1 AND 4 , 2 PATCH AREA ON CAP AT GRIDERS 2 AND 3. AT GIRDER 2 PATCH HAS A LARGE DELAM IN PATCH AREA....BENT 10 GOOD....BENT 11 RIGHT END CAP SPALLED WITH REBAR EXPOSED....ALL FIXED PER 02/12/2018 CHAD HODGES7/16/2020....Raised substructure to a 6 due to repairs made to caps....07/22 No change per this inspection

A-46 - Asset Files

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Asset #01623(Routine)

SH 27 - 04 - 4.15 over LITTLE MISSOURI RIVER RE

Location: 2.25 M SW MURFREESBORO

Team Lead: John King, Inspection Date: 07/20/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	4800	4703	97	0	0
1080	Delamination/Spall/Patched Area	SF	32	0	32	0	0
1120	Efflorescence/Rust Staining	SF	65	0	65	0	0
(16) Main Span.....32 SQFT PATCH AREA IN SPAN 2							
38	RC Slab	SF	9270	9170	100	0	0
1120	Efflorescence/Rust Staining	SF	90	0	90	0	0
1130	Cracking (RC and Other)	SF	10	0	10	0	0
(38) Main Span RC Slab Approach span RC Slab (1120-38) 07/22 efflorescence in span 2 (1130-38) 07/22 cracking in deck							
110	Reinforced Concrete Open Girder/Beam	LF	960	960	0	0	0
(110) CONCRETE GIRDERS GIRDER 4 SPAN 3 AT BENT 4 SPALL W/REBAR EXPOSED (2 LF) GIRDER 2 BENT 8 END OF GRIDER SPALL W/REBAR EXPOSED (1LF) GRIDER 2 AT BENT 9 SPALL W/REBAR EXPOSED AND CRACK ACROSS BOTTOM (1LF) FIXED 02/12/2018							
215	Reinforced Concrete Abutment	LF	108	108	0	0	0
227	Reinforced Concrete Pile	EA	72	70	2	0	0
1080	Delamination/Spall/Patched Area	EA	2	0	2	0	0
(1080-227) 7/16/2020...Spall on bent 7 pile 2...							
234	Reinforced Concrete Pier Cap	LF	428	402	26	0	0
1080	Delamination/Spall/Patched Area	LF	26	0	26	0	0
(234) ALL SPALLS AND DELAMS WERE FIXED IN ALL BENTS PER 2/12/2018 (1080-234) 07/22 bent 7 both ends of center cap have spalls in top corner, bent 6 has spall on face of cap.							
301	Pourable Joint Seal	LF	484	0	0	359	125
2310	Leakage	LF	37	0	0	0	37
2320	Seal Adhesion	LF	359	0	0	359	0
2350	Debris Impaction	LF	88	0	0	0	88
(301) Approach span joints. Joints in main span							
331	Reinforced Concrete Bridge Railing	LF	600	600	0	0	0



Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	4800	4703	97	0	0
1080	Delamination/Spall/Patched Area	SF	32	0	32	0	0
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1130	Cracking (RC and Other)	SF	10	0	10	0	0
(38) Main Span RC Slab Approach span RC Slab							
(1120-38) 07/22 efflorescence in span 2							
(1130-38) 07/22 cracking in deck							

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

Comment: Joints need cleaned and resealed all spans.----tranv. and long. cracks mainly on R.C. slab portion have been sealed in 2003.----REPAIRS MADE TO SPALL ON TOP OF DECK IN 2012.....7/16/2020....20' section of deck is RC Top Flange over T-Beams with RC Slab on both sides all the way to edges of bridge...07/22 Little change per this inspection...

**Superstructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	960	960	0	0	0
(110) CONCRETE GIRDERS GIRDER 4 SPAN 3 AT BENT 4 SPALL W/REBAR EXPOSED (2 LF) GIRDER 2 BENT 8 END OF GRIDER SPALL W/REBAR EXPOSED (1LF) GRIDER 2 AT BENT 9 SPALL W/REBAR EXPOSED AND CRACK ACROSS BOTTOM (1LF) FIXED 02/12/2018							

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

Comment: CONCRETE GIRDERS
GIRDER 4 SPAN 3 AT BENT 4 SPALL W/REBAR EXPOSED (2 LF)
GIRDER 2 BENT 8 END OF GRIDER SPALL W/REBAR EXPOSED (1LF)
GRIDER 2 AT BENT 9 SPALL W/REBAR EXPOSED AND CRACK ACROSS BOTTOM (1LF)...

CONCRETE GIRDERS
GIRDER 4 SPAN 3 AT BENT 4 SPALL W/REBAR EXPOSED (2 LF)
GIRDER 2 BENT 8 END OF GRIDER SPALL W/REBAR EXPOSED (1LF)
GRIDER 2 AT BENT 9 SPALL W/REBAR EXPOSED AND CRACK ACROSS BOTTOM (1LF)
FIXED 02/12/2018...07/22 Spalls shown in elements added...



Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	108	108	0	0	0
227	Reinforced Concrete Pile	EA	72	70	2	0	0
1080	Delamination/Spall/Patched Area	EA	2	0	2	0	0
(1080-227) 7/16/2020...Spall on bent 7 pile 2...							
234	Reinforced Concrete Pier Cap	LF	428	402	26	0	0
1080	Delamination/Spall/Patched Area	LF	26	0	26	0	0
(234) ALL SPALLS AND DELAMS WERE FIXED IN ALL BENTS PER 2/12/2018							
(1080-234) 07/22 bent 7 both ends of center cap have spalls in top corner, bent 6 has spall on face of cap.							

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Comment: CHANGE SUBSTRUCTURE TO 5 FAIR DUE TO SPALLS ON CONCRETE CAPS W/REBAR EXPOSED AND MEASURABLE SECTION LOSS TO REBAR 07/2016.....CONCRETE CAPSBENT 1 GOOD.....BENT 2 SMALL SPALL ON CAP W/REBAR EXPOSED AT PILE 4...BENT 3 SMALL SPALL ON CAP AT GIRDER 2, AND DELAM AT GIRDER 1....BENT 4 SPALL ON CAP W/REBAR EXPOSED....BENT 5 LG SPALL ON CAP W/REBAR EXPOSED, REBAR HAS 1/8" OR MORE SECTION LOSS TO REBAR GIRDERS 2,3,4 ,DELAM AT GRIDER 1....BENT 6 SMALL SPALL ON CAP AT PILE 8...BENT 7 LARGE DELAMS ON CAP AT GRIDERS 1,2,3,4....BENT 8 SPALL ON END OF CAP RIGHT SIDE....BENT 9 (2) DELAMS ON CAP AT GRIDERS 1 AND 4 , 2 PATCH AREA ON CAP AT GRIDERS 2 AND 3.AT GRIDER 2 PATCH HAS A LARGE DELAM IN PATCH AREA....BENT 10 GOOD....BENT 11 RIGHT END CAP SPALLED WITH REBAR EXPOSED....ALL FIXED PER 02/12/2018 CHAD HODGES7/16/2020....Raised substructure to a 6 due to repairs made to caps....07/22 No change per this inspection



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Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



07/22 Elevation



07/22 Alignment



Slab section of main spans



Bent 3 pile 6 patch



07/22 typical deck photo



07/22 underside of deck



07/22 typical substructure photo



07/22 typical superstructure photo



07/22 bent 7 both ends of center cap have spalls in top corner



07/22 bent 6 top of right side outer cap has spall area



07/22 efflorescence in span 2



07/22 cracking in deck



07/22 bent 6 large cracking in deck



Asset #01623(Routine)

SH 27 - 04 - 4.15 over LITTLE MISSOURI RIVER RE

Location: 2.25 M SW MURFREESBORO

Team Lead: John King, Inspection Date: 07/20/2022

Maintenance Needs

Date Reported: 07/23/2014

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Monitor

Component: Element

Deficiency Description

ALL JOINTS NEED CLEANED AND RESEALED

Remarks





Asset #01623(Routine)

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Asset #01623(Routine)

SH 27 - 04 - 4.15 over LITTLE MISSOURI RIVER RE

Location: 2.25 M SW MURFREESBORO

Team Lead: John King, Inspection Date: 07/20/2022

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	



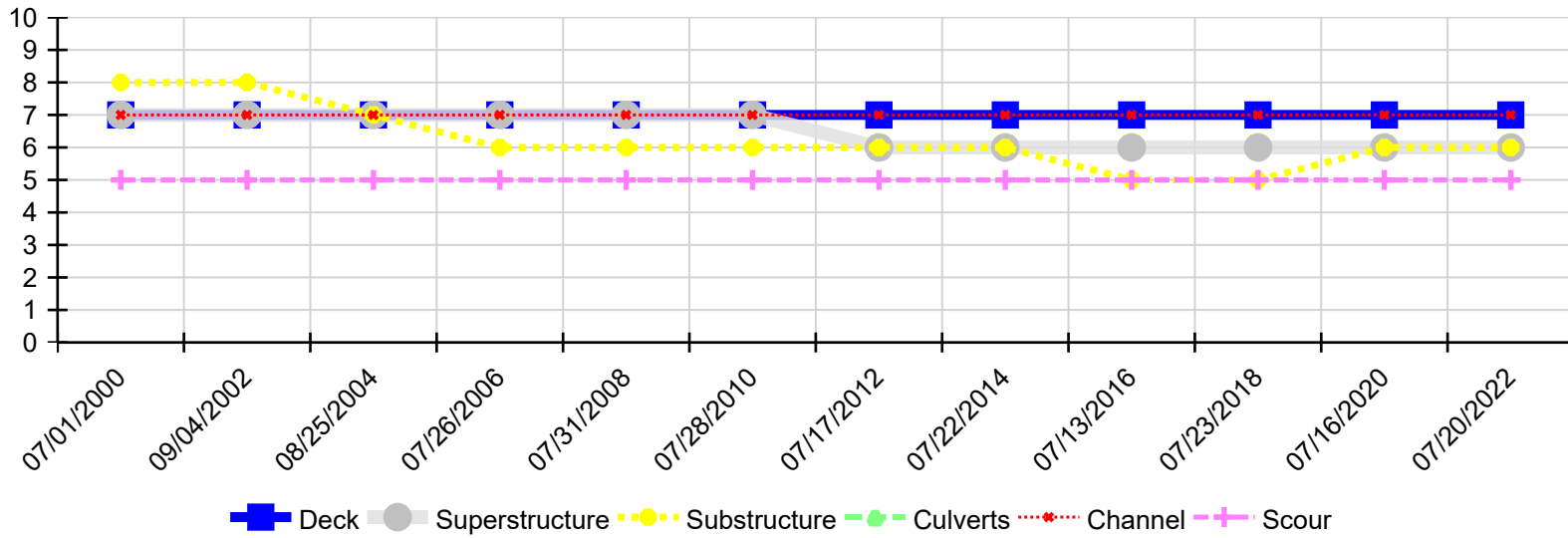
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Location: 2.25 M SW MURFREESBORO

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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/20/2022	7	6	6	N	7	5
07/16/2020	7	6	6	N	7	5
07/23/2018	7	6	5	N	7	5
07/13/2016	7	6	5	N	7	5
07/22/2014	7	6	6	N	7	5
07/17/2012	7	6	6	N	7	5
07/28/2010	7	7	6	N	7	5
07/31/2008	7	7	6	N	7	5
07/26/2006	7	7	6	N	7	5
08/25/2004	7	7	7	N	7	5
09/04/2002	7	7	8	N	7	5
07/01/2000	7	7	8	N	7	5