



Latitude:36.37105, Longitude:-90.77957

Route:328 Section:01 Log:9.07

Arnold Road ID:61x328x1xA, Arnold Log mile:9.046

District 10, 121 - Randolph County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

Bridge Posting Information

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

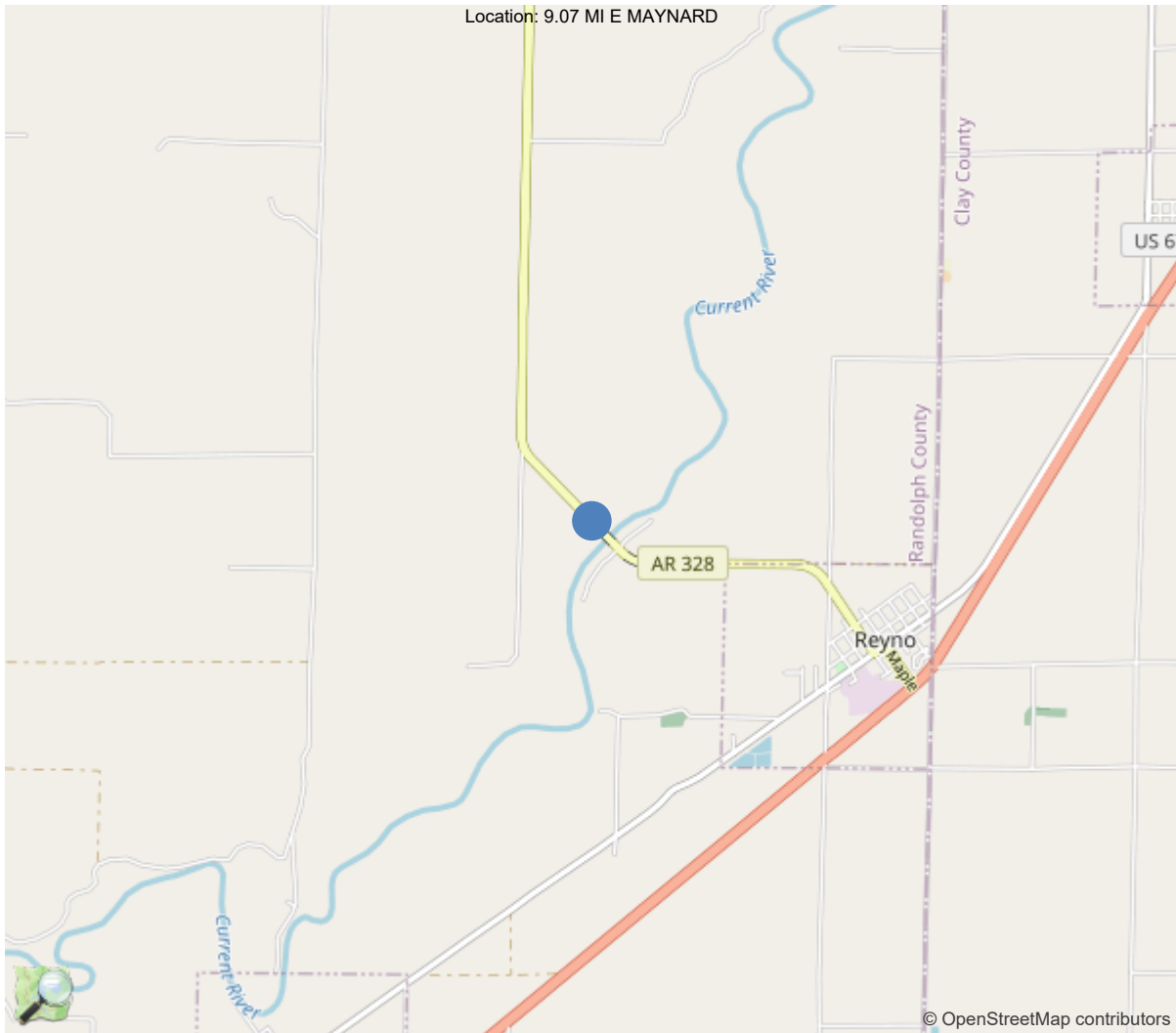
70 - Bridge Posting: 5 - Equal to or above legal loads

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)	42		
Code 5 (40 Tons)	46		

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



36.37105, -90.77957



Asset #05735(Routine)

SH 328-01- LM 9.07 over CURRENT RIVER

Location: 9.07 MI E MAYNARD

Team Lead: Brandon Sutton Inspection Date: 05/08/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05735
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	121 - Randolph County
(4) Place Code	0
(6) Features Intersected	CURRENT RIVER
(7) Facility Carried	SH 328-01- LM 9.07
(9) Location	9.07 MI E MAYNARD
(11) Mile Point	9.07 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.37105
(17) Longitude	-90.77957
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4 - Steel continuous
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	3
(46) No. of Approach Spans	6
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	5 - Epoxy Overlay
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1978
(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	630
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	130 ft
(49) Structure Length	724.2 ft
(50) Curb or Sidewalk Width	
Left	1.3 ft
Right	1.3 ft
(51) Bridge Roadway Width Curb to Curb	26 ft
(52) Deck Width Out to Out	28.7 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 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	26 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	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	7
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	48
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	29
(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	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(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 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	746
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	05/08/2023		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	Yes	60	03/28/2022
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.			



General Observation

Inspected with drone. 2023

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

see elements

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

see elements

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

see elements

A-15 - Late Reason (Inspectors Position Open)

Inspector retired in beginning of April.

A-59 - Joint Repair Needed (Y)

compression seals are torn, missing, or falling down

A-114 - Underwater Inspection General Observation

Engineer of Record: Samuel Williams, PE

Team Leader: Samuel Williams, PE

Team Members: BG, LA, CK

Total Substructure Units: 10

Substructure Units in Water: Bents 8-9

Inventory Direction: W to E

Direction of Flow: N to S

Deepest Water Depth: 23 ft

Water Velocity: 1.5 FPS

Attachments: Channel Profile/Contour Map, Soundings Table, Inspection Procedures, Stamped Final Report

A-115 - Underwater Inspection Channel/Channel Protection (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

Overall, the channel is in good condition. The upstream channel is well aligned with the substructure units. There is minor timber debris on the upstream nose of Bent 8, however it is not adversely affecting flow through the channel. The banks upstream and downstream of the bridge are stable and well vegetated. The east bank under the bridge is stable and protected with rip rap. The west bank under the bridge is partially vegetated with an areas of runoff erosion.

A-116 - Underwater Inspection Substructure Condition (B.C.15) (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Overall the substructure units are in satisfactory condition with minor defects located on the footing of Pier 8. These defects include minor edge spalls and footing exposure up to 4'H. All defects are quantified in the element level portion of this report.



Asset #05735(Routine)

SH 328-01- LM 9.07 over CURRENT RIVER

Location: 9.07 MI E MAYNARD

Team Lead: Brandon Sutton Inspection Date: 05/08/2023

A-117 - Underwater Scour Condition (5 - Bridge foundations determined to be stable for assessed or calculated scour condition. Scour is determined to be within the limits of footing or piles (Example B) by assessment (i.e., bridge foundations are on rock formations that have been determined to resist scour within the service life of the bridge), by calculations or by installation of properly designed countermeasures (see HEC 23).)

According to the available bridge drawings (DWG. NO 21532) dated June 17, 1977, Piers 8 and 9 are supported by piles and a concrete footing. A comparison of inspection findings to these drawings indicates that approximately 8' of scour has occurred since construction exposing the upstream (north) nose, east face, and west face of the Pier 8 footing for a distance of 10.5'. The maximum height of vertical exposure is 4' and no undermining of the footing was found.

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	20700	18639	1133	928	0
1080	Delamination/Spall/Patched Area	SF	25	0	25	0	0
1090	Exposed Rebar	SF	26	0	8	18	0
1120	Efflorescence/Rust Staining	SF	976	0	66	910	0
1130	Cracking (RC and Other)	SF	4608	4608	0	0	0
1190	Abrasion/Wear (PSC/RC)	SF	1034	0	1034	0	0
(12) Deck received a polymer overlay on 8/24/22.							
Past notes are left to show what was taking place prior to polymer overlay:							
Concrete deck has areas of abrasion with some coarse aggregate pop-outs.							
Deck has several unsealed transverse cracks and a few areas of map cracking in wheel path & a few shallow spalls and delaminated areas.							
Soffit has several transverse cracks with efflorescence, especially at main spans. Overhangs have several small delaminated areas and rebar exposed.							
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(1090-12) Lt over hang							
107	Steel Open Girder/Beam	LF	2888	2520	364	4	0
1000	Corrosion	LF	345	0	345	0	0
1020	Connection	LF	23	0	19	4	0
515	Steel Protective Coating	SF	29308	26938	0	1152	1218
3440	Effectiveness (Steel Protective Coatings)	LF	2370	0	0	1152	1218
(107) Girders have a few areas of scattered rust along bottom of web and bottom flange.							
Ends of girders have rust with areas of section loss along bottom of web and bottom flange, especially near bearings and stiffener connections.							
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Main spans have diaphragms and lateral bracing in bay 2. A few of these connections have loose bolts.							
Span 7 girder 2 lateral connection between diaphragms 5 and 6 has 2 loose bolts.							
Span 7 girder 3 diaphragm 4 has 1 loose bolt. Lateral connection under diaphragm has 2 loose bolts.							
Span 7 girder 3 diaphragm 5 has 2 loose bolts at lateral connection.							
Span 7 girder 3 diaphragm 7 has 3 loose bolts at lateral connection.							
Span 8 girder 2 lateral connection between diaphragms 2 and 3 has 1 loose bolt.							

[illegible]

Team Lead: Brandon Sutton **Inspection Date:** 05/08/2023

[illegible]



DOWNSTREAM ELEVATION



UPSTREAM ELEVATION



EAST EMBANKMENT



WEST EMBANKMENT



VIEW OF DOWNSTREAM CHANNEL, FROM ABOVE BRIDGE



VIEW OF UPSTREAM CHANNEL, FROM ABOVE BRIDGE



RUNOFF EROSION ON THE WEST BANK UNDER THE BRIDGE



PIER 9



PIER 8



Elevation facing north



Elevation facing south



Inspection Direction facing east



Aerial Deck Photo



Aerial Deck Photo



Span 6 soffit



Span 7 soffit



Bent 6 joint seal



Span 5 It overhang



Deck before Polymer



Span 4 bent 4 bearing 4 (pic 1) 2021



Span 4 bent 4 bearing 2 2021



Span 4 bent 4 bearing 4 (pic 2) 2021

Maintenance Needs

Date Reported: 04/15/2019

Priority: B - Pressing

Type of Work: Bearing Repair/Replacement

Status: Assigned

Component: Superstructure

Deficiency Description

Span 4 bent 4 girder 2 bearing pad is missing.

Span 4 bent 4 girder 3 bearing pad is beginning to slide out from under girder.

Span 4 bent 4 girder 4 bearing pad is sliding out from under girder. Approximately 20% of pad is still under girder.

Remarks

to Dist Bridge Crew for review when priorities allow. KAW 5/14/19



Span 4 bent 4 girder 4 elastomeric bearing pad < 20% remaining in place.



Span 4 bent 4 girder 4 elastomeric bearing pad < 20% remaining in place.



Span 4 bent 4 girder 4 elastomeric bearing pad < 20% remaining in place.



Span 4 bent 4 girder 3 elastomeric bearing pad moving



Span 4 bent 4 girder 2 elastomeric bearing pad missing



Span 4 bent 4 girder 4



Span 4 bent 4 bearing 2



Span 4 bent 4 bearing 2



Span 4 bent 4 bearing 4 (pic 1)



Span 4 bent 4 bearing 4 (pic 2)



Asset #05735(Routine)
SH 328-01- LM 9.07 over CURRENT RIVER
Location: 9.07 MI E MAYNARD

Team Lead: Brandon Sutton **Inspection Date:** 05/08/2023

Maintenance Needs

Date Reported: 04/15/2019

Priority: D- Routine

Type of Work: Bearing Repair/Replacement

Status: Monitor

Component: Superstructure

Deficiency Description

Elastomeric pads are torn/split along edges. Sole plates have rust with section loss.

Remarks

Maintenance Needs

Date Reported: 04/25/2011

Priority: D- Routine

Type of Work: Bearing Repair/Replacement

Status: Monitor

Component: Superstructure

Deficiency Description

Span 6 bent 6 girder 2 has 1 anchor bolt missing.

Span 7 bent 7 girder 2 has 2 anchor bolts missing. Bearing pad has shifted approximately ½".

Span 7 bent 7 girder 3 is missing 1 anchor bolt.

Remarks



Span 7 Bent 7 Girder 2 missing anchor bolt



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SH 328-01- LM 9.07 over CURRENT RIVER
Location: 9.07 MI E MAYNARD

Team Lead: Brandon Sutton Inspection Date: 05/08/2023

Maintenance Needs

Date Reported: 04/15/2019

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Superstructure

Deficiency Description

Main spans have diaphragms and lateral bracing in bay 2. A few of these connections have loose bolts.
Span 7 girder 3 diaphragm 4 has 1 loose bolt. Lateral connection under diaphragm has 2 loose bolts.
Span 7 girder 3 diaphragm 5 has 2 loose bolts at lateral connection.
Span 7 girder 2 lateral connection between diaphragms 5 and 6 has 2 loose bolts.
Span 7 girder 3 diaphragm 7 has 3 loose bolts at lateral connection.
Span 8 girder 3 diaphragm 2 has 3 loose bolts at lateral connection.
Span 8 girder 2 lateral connection between diaphragms 2 and 3 has 1 loose bolt.
Span 8 girder 3 diaphragm 4 has 1 loose bolt at lateral connection.
Span 8 girder 2 lateral connection between diaphragms 7 and 8 has 3 loose bolts.
Span 9 girder 3 diaphragm 3 has 1 loose bolt at lateral connection.

Remarks

Maintenance Needs

Date Reported: 04/15/2019

Priority: D- Routine

Type of Work: Substructure Repair

Status: Monitor

Component: Substructure

Deficiency Description

Concrete caps have several cracks, delaminated areas, and spalls with rebar exposed.

Remarks



Typical cap cracking and bearings



Bent 7 cap



Asset #05735(Routine)
SH 328-01- LM 9.07 over CURRENT RIVER
Location: 9.07 MI E MAYNARD

Team Lead: Brandon Sutton **Inspection Date:** 05/08/2023

Maintenance Needs

Date Reported: 05/02/2013

Priority: D- Routine

Type of Work: Channel Work/Drift Removal

Status: Monitor

Component: Channel

Deficiency Description

Small trees growing under and adjacent to span 7.

Remarks

Maintenance Needs

Date Reported: 04/15/2019

Priority: D- Routine

Type of Work: Substructure Repair

Status: Monitor

Component: Substructure

Deficiency Description

A few concrete columns have honeycombed areas, cracks, delaminated areas, and spalls with rebar exposed.

Remarks



Bent 5 column 1



Bent 5 column 2



Bent 5 column 2



Span 5 Bent 5 Column 2



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	Yes
A-59 - Joint Repair Needed	Yes
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



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

A-58 - Cap Cleaning/Flushing Needed (Yes)

A-59 - Joint Repair Needed (Yes)
compression seals are torn, missing, or falling down

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

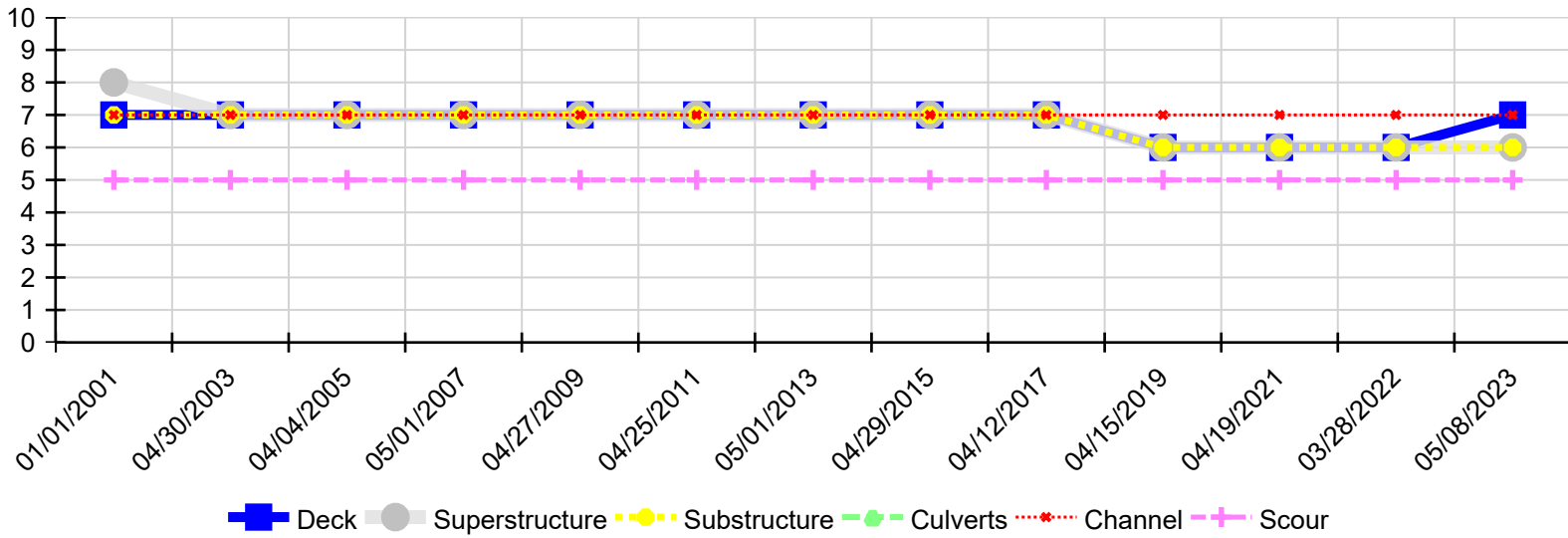


Asset #05735(Routine)
SH 328-01- LM 9.07 over CURRENT RIVER

Location: 9.07 MI E MAYNARD

Team Lead: Brandon Sutton Inspection Date: 05/08/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/08/2023	7	6	6	N	7	5
03/28/2022	6	6	6	N	7	5
04/19/2021	6	6	6	N	7	5
04/15/2019	6	6	6	N	7	5
04/12/2017	7	7	7	N	7	5
04/29/2015	7	7	7	N	7	5
05/01/2013	7	7	7	N	7	5
04/25/2011	7	7	7	N	7	5
04/27/2009	7	7	7	N	7	5
05/01/2007	7	7	7	N	7	5
04/04/2005	7	7	7	N	7	5
04/30/2003	7	7	7	N	7	5
01/01/2001	7	8	7	N	7	5