

Bridge 07231 Inspection Report



Latitude:35.79630, Longitude:-91.98050

Route:5 Section:16 Log:8.52

Arnold Road ID:69x5x16xA, Arnold Log mile:8.558

District 05, 137 - Stone County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

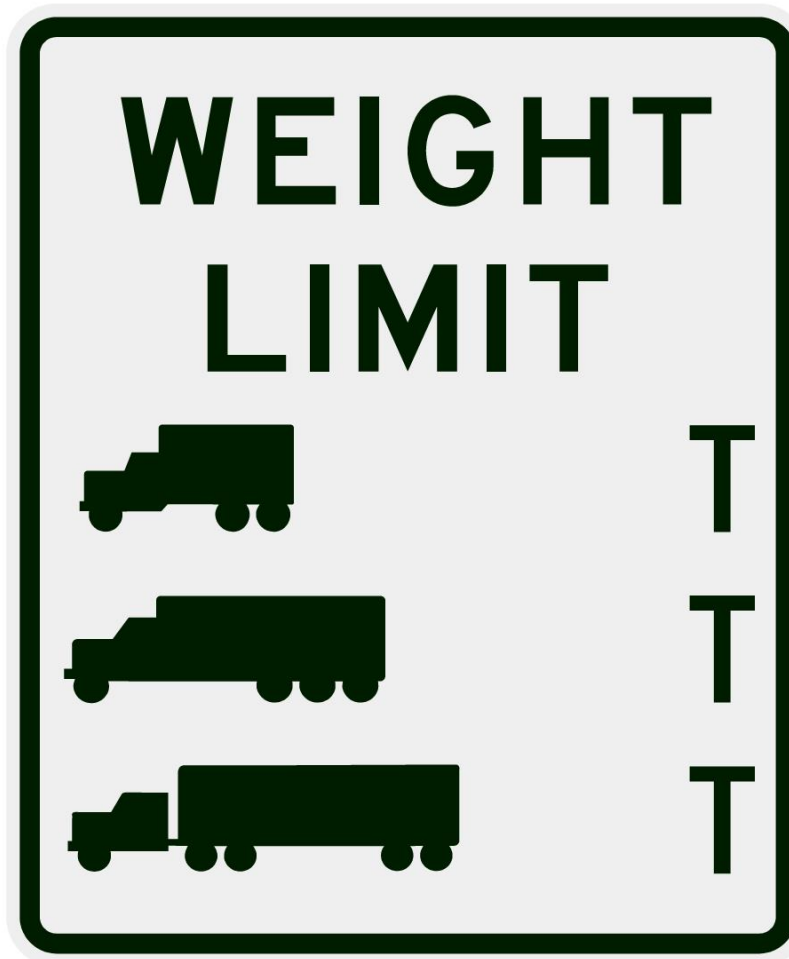
Bridge Posting Information

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

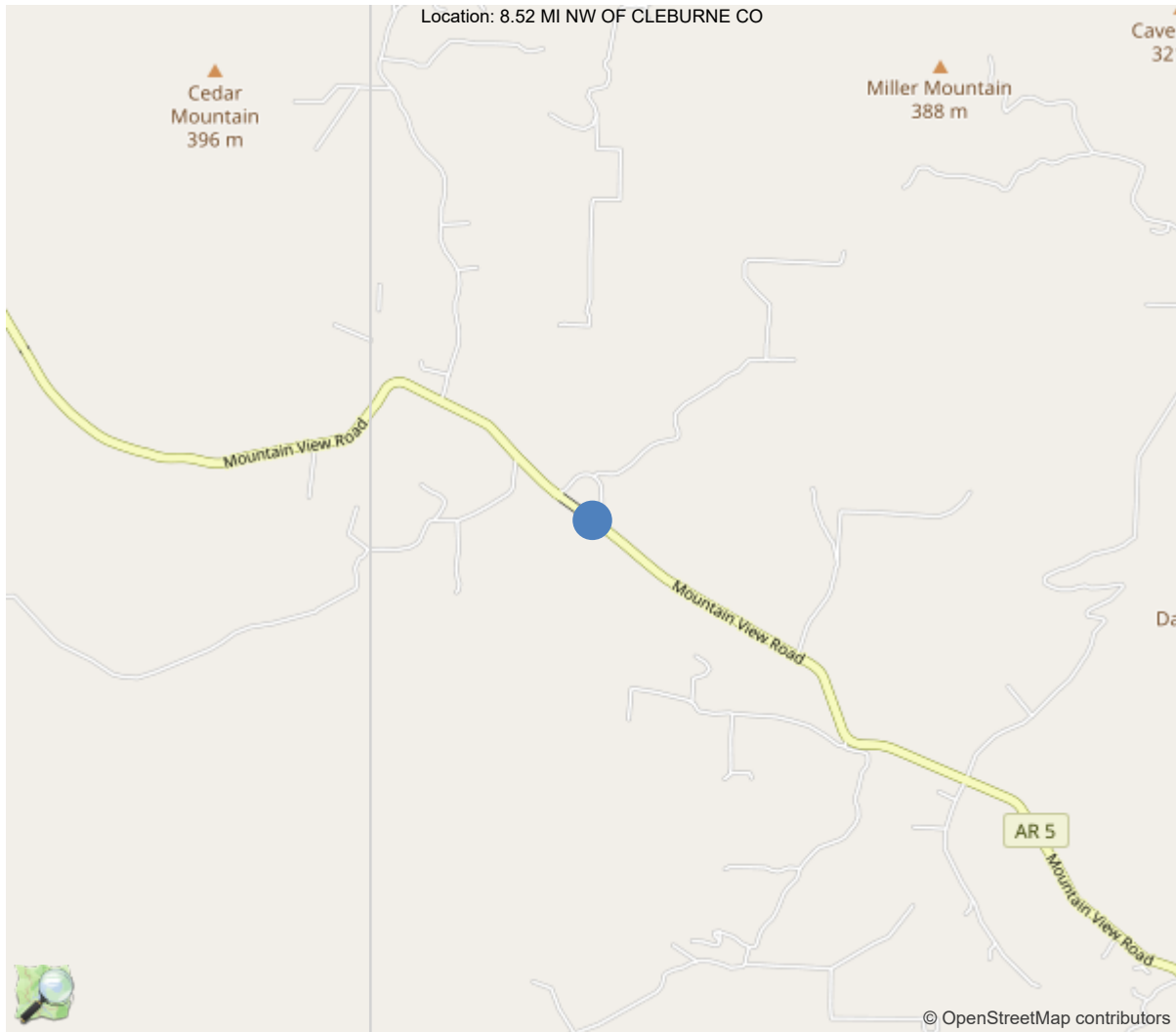
70 - Bridge Posting: 5 - Equal to or above legal loads

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)	50		
Code 5 (40 Tons)	60		

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



35.79630, -91.98050

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	07231
(5) Inventory Route	1
(2) Highway Agency District	05 - District 05
(3) County Code	137 - Stone County
(4) Place Code	0
(6) Features Intersected	Little Racoon Creek
(7) Facility Carried	SH 5/ Stone County
(9) Location	8.52 MI NW OF CLEBURNE CO
(11) Mile Point	8.52 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000005160
(16) Latitude	35.7963
(17) Longitude	-91.9805
(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	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	7
(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	2016
(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	1900
(30) Year of ADT	2018
(109) Truck ADT	10 %
(19) Bypass, Detour Length	19 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	139 ft
(49) Structure Length	891.2 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	40 ft
(52) Deck Width Out to Out	43.2 ft
(32) Approach Roadway Width (W/Shoulders)	40 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	99.9 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	8
(60) Substructure	7
(61) Channel & Channel Protection	8
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	A - HL93
(63) Operating Rating Method	3
(64) Operating Rating	
Type	3 - Load and Resistance Factor(LRFR)
Rating	54
(65) Inventory Rating Method	3 - Load and Resistance Factor
(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	7
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	9
(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	2400
(115) Year of Future ADT	2032

INSPECTIONS *			
(90) Inspection Date			04/15/2024
(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		
<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>			

Team Lead: Floyd Haley, Inspection Date: 04/15/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	07231
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	X0332
B.W.01 Year Built	2016

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	137 - Stone County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	05 - District 05
B.L.05 Latitude	35.7963
B.L.06 Longitude	-91.9805
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	8.52 MI NW OF CLEBURNE CO
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	S01 - State transportation departme
B.CL.02 Maint. Responsibility	S01 - State transportation departme
B.CL.03 Federal or Tribal Land Access	N - Not Applicable
B.CL.04 Historic Significance	N - Bridge is not eligible for the
B.CL.05 Toll	N - Bridge does not carry a toll ro
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	891.1
B.G.02 Total Bridge Length	891.1
B.G.03 Max Span Length	139.1
B.G.04 Min Span Length	125
B.G.05 Bridge Width Out-to-Out	43.3
B.G.06 Bridge Width Curb-to-Curb	40
B.G.07 Left Curb or Sidewalk Width	0
B.G.08 Right Curb or Sidewalk Width	0
B.G.09 Approach Roadway Width	40

B.G.10 Bridge Median	0 - No median
B.G.11 Skew	0
B.G.12 Curved Bridge	N - Not curved
B.G.13 Max Bridge Height	90
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	38589.9

LOADS AND LOAD RATING	
B.LR.01 Design Load	HL93 - HL-93
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	LRFR - Load and Resistance Factor R
B.LR.05 Inventory Load Rating Factor	1
B.LR.06 Operating Load Rating Factor	1.5
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	N - NSTM inspection not required.
B.IR.02 Fatigue Details	N - No E/E' details
B.IR.03 UW Inspection Required	N - Underwater inspection not requi
B.IR.04 Complex Feature	N - Bridge does not have complex fe

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	7 - GOOD - Some minor defects.
B.C.02 Superstructure Condition	8 - VERY GOOD - Some inherent
B.C.03 Substructure Condition	7 - GOOD - Some minor defects.
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	7 - GOOD - Some minor defects.
B.C.06 Bridge Railing Transitions Condition	8 - VERY GOOD - Some inherent
B.C.07 Bridge Bearings Cond.	7 - GOOD - Some minor defects.
B.C.08 Bridge Joints Condition	7 - GOOD - Some minor defects.
B.C.09 Channel Condition Rating	8 - VERY GOOD - Inherent defec
B.C.10 Channel Protection Condition	7 - GOOD - Some minor defects.
B.C.11 Scour Condition Rating	9 - No scour.
B.C.12 Bridge Condition Classification	G - Good
B.C.13 Lowest Condition Rating	7 - GOOD - Some minor defects.
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
B.AP.02 Overtopping Likelihood	1 - Remote - once every 100 years o
B.AP.03 Scour Vulnerability	AB-T - TEMP - Stable for scour, pos
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	A - Seismic evaluation completed. B

Team Lead: Floyd Haley, Inspection Date: 04/15/2024

SPAN SETS			
M1			
B.SP.02 # of Spans	7	B.SP.08 Deck Interaction	CU - Composite - unshored cons
B.SP.03 # of Beam Lines	5	B.SP.09 Deck Material and Type	C01 - Reinforced concrete - ca
B.SP.04 Span Material	S01 - Steel - rolled	B.SP.10 Wearing Surface	C01 - Concrete - monolithic
B.SP.05 Span Continuity	2 - Continuous	B.SP.11 Deck Protective System	0 - None
B.SP.06 Span Type	G02 - Girder/beam - I-shaped s	B.SP.12 Deck Reinforcing Protective System	C01 - Coating - epoxy coated
B.SP.07 Span Protective System	P01 - Patina - uncoated weathe	B.SP.13 Deck Stay-In-Place Forms	M01 - Metal

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	P01 - Pile - steel H-shape
B.SB.04 Substructure Type	A02 - Abutment - stub	B.SB.07 Foundation Protective System	0 - None
P1			
B.SB.02 No. of Substructure Units	6	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	P01 - Pile - steel H-shape
B.SB.04 Substructure Type	P02 - Pier - single column	B.SB.07 Foundation Protective System	0 - None

HIGHWAY FEATURES			
H1			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	1900
B.F.03 Feature Name	SH 5/ Stone County	B.H.10 Annual ADTT	190
B.H.01 Functional Classification	4 - Minor Arterial	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	N - Non-NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	N - Not on the NHFN	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID	5160	B.H.16 Highway Max Usable Surface Width	99.9
B.H.07 LRS Mile Point	8.52	B.H.17 Bypass Detour Length	19
B.H.08 Lanes On Highway	2	B.H.18 Crossing Bridge Number	

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
H1	1	5	2-T - TEMP - Two-way traffic - NS or EW	3 - State route	1 - Mainline



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WATERWAY FEATURES

W1

B.F.02 Feature Location	B - Below bridge	B.N.03 Movable Bridge Max Navigation Vertical Clearance	
B.F.03 Feature Name	Little Racoon Creek	B.N.04 Navigation Channel Width	
B.N.01 Navigable Waterway	N - Not navigable waters	B.N.05 Navigation Channel Min Horizontal Clearance	
B.N.02 Navigation Min Vertical Clearance		B.N.06 Substructure Navigation Protection	

POSTING STATUS DATA

B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date
PO - Permanent and Open	

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
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Asset #07231 (Routine)

SH 5/ Stone County over Little Racoon Creek

Location: 8.52 MI NW OF CLEBURNE CO

Team Lead: Floyd Haley Inspection Date: 04/15/2024

Inspection Notes

General Observation

Elevation with Log Mile running to the Right.

Contract R50116.

Accessed by Foot and UAV.

No traffic control required.

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

Overall, the Deck is in Good condition with cracking throughout the driving surface and cracking with efflorescence along the overhangs.

59 - Superstructure (8 - VERY GOOD CONDITION - no problems noted.)

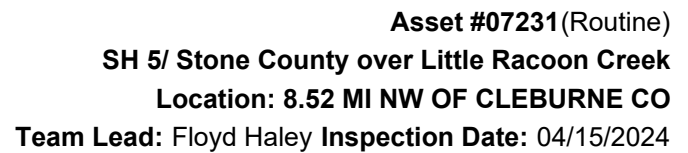
Overall, the Superstructure is in Very Good condition with no defects at this inspection.

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

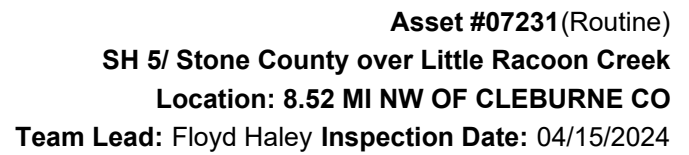
Overall, the Substructure is in Good condition with areas of cracking with efflorescence scattered throughout the structure at the Abutments and Bents.

A-51 - Inspection Direction (2 - S to N)

Roadway with Log Mile running South to North.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	38472	36017	2353	102	0
1120	Efflorescence/Rust Staining	SF	30	0	30	0	0
1130	Cracking (RC and Other)	SF	2425	0	2323	102	0
(12) Spans 1 - 7: longitudinal and transverse cracking throughout the structure. Spans 1 - 7, Right & Left Overhangs: cracking with efflorescence.							
107	Steel Open Girder/Beam	LF	4445	4445	0	0	0
515	Steel Protective Coating	SF	58896	58896	0	0	0
(107) No defects at the time of this inspection.							
210	Reinforced Concrete Pier Wall	LF	96	92	0	4	0
1120	Efflorescence/Rust Staining	LF	4	0	0	4	0
(210) Bent 2, Pier Wall: cracking with efflorescence near the top of the Pier Wall. Bent 4, Pier Wall: cracking with efflorescence near the top of the Pier Wall.							
215	Reinforced Concrete Abutment	LF	86	77	9	0	0
1120	Efflorescence/Rust Staining	LF	6	0	6	0	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
(215) Abutment 1: 5 cracks with efflorescence. Abutment 2: 1 crack with efflorescence adjacent to Girder 4 and 3 vertical cracks adjacent to Girders 2 - 4.							
220	Reinforced Concrete Pile Cap/Footing	LF	46	0	46	0	0
6000	Scour	LF	46	0	46	0	0
(220) Bents 3 & 6: Top of Footings exposed.							
234	Reinforced Concrete Pier Cap	LF	252	239	13	0	0
1120	Efflorescence/Rust Staining	LF	8	0	8	0	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
(234) Bent 1: 1 vertical crack to backside of cap. Bent 2: 2 efflorescent cracks to cap. Bent 3: 4 efflorescent cracks to cap. Bent 5: 2 efflorescent cracks to cap. Bent 6: 4 vertical cracks to backside of cap.							
300	Strip Seal Expansion Joint	LF	86	0	86	0	0
2350	Debris Impaction	LF	86	0	86	0	0
(300) Joints at Abutments 1 & 2: minor debris impaction.							
305	Assembly Joint without Seal	LF	86	86	0	0	0
(305) Bents 2 & 5: rust staining on Pier Cap from Assembly Joints without Seals.							



Inspection Photos and Notes



Elevation.



Roadway with Log Mile running South to North.



Underside of deck photo.



Deck photo.



Right side of Bridge: Channel view.



Left side of Bridge: Channel view.



Typical Girders.



Typical Girder Ends.



Bent 3: exposed Footing.



Bents 2 & 5: rust staining on Pier Cap from Assembly Joints without Seals.



Typical Elastomeric Bearing.



Abutment 1: Efflorescent cracking. CS2



Abutment 2, Girder 2: Vertical crack.



Spans 6 & 7: longitudinal cracking. CS2.



Span 5: transverse cracking. CS2.



Span 4: longitudinal cracking. CS3.



Span 4: longitudinal cracking. CS2.



Span 3: transverse cracking. CS2.



Span 3: longitudinal cracking. CS2.



Span 2: longitudinal cracking. CS2.



Span 1: transverse cracking. CS2.



Span 1: longitudinal cracking. CS2.



Deck, Right & Left Overhangs: cracking with efflorescence typical throughout the structure. CS2.



Bent 3, Pier Cap, Back: cracking with efflorescence. CS2.



Span 3, Left Bridge Railing: map cracking with efflorescence. CS3.



Bridge Railing: typical cracking with efflorescence. CS2.



Joint at Abutment 1: Debris impactation. CS2.



Bent 2, Back, Top of Pier Wall: cracking with efflorescence.



Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	Yes
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	Yes
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (Yes)

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (Yes)



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A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (Yes)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (Yes)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)

A-65 - Clogged deck drains?



Asset #07231(Routine)

SH 5/ Stone County over Little Racoon Creek

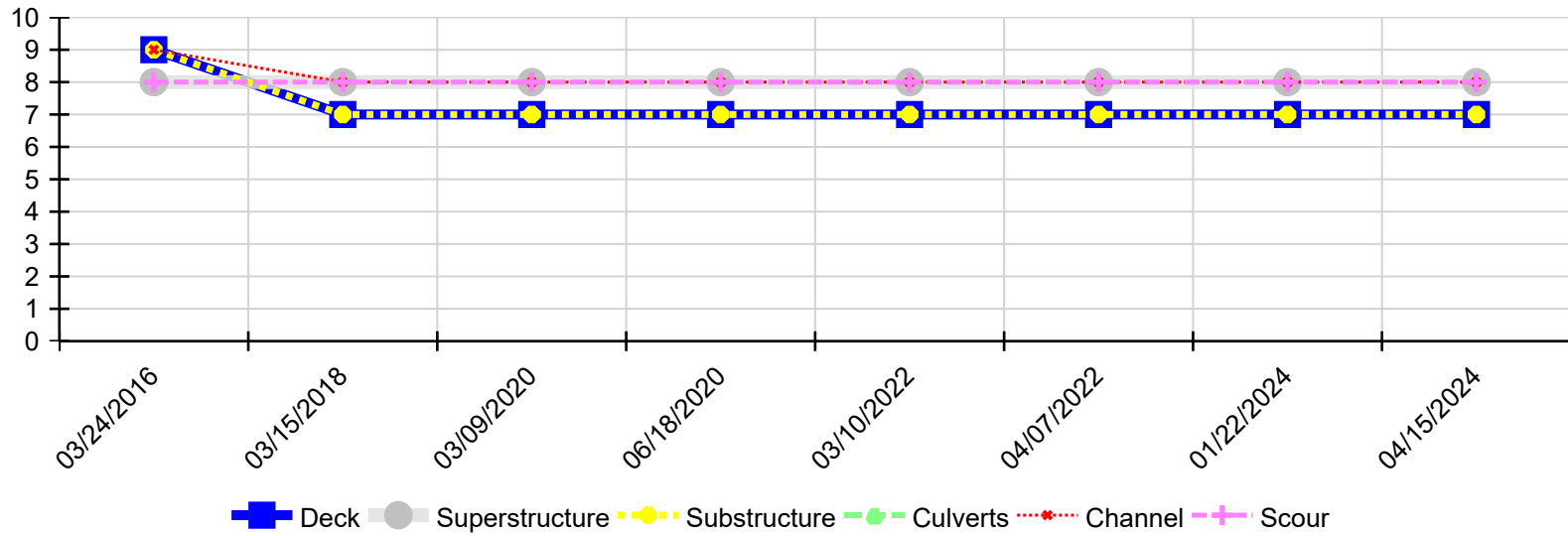
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A-66 - Approach minor pothole/leveling needed



Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/15/2024	7	8	7	N	8	8
01/22/2024	7	8	7	N	8	8
04/07/2022	7	8	7	N	8	8
03/10/2022	7	8	7	N	8	8
06/18/2020	7	8	7	N	8	8
03/09/2020	7	8	7	N	8	8
03/15/2018	7	8	7	N	8	8
03/24/2016	9	8	9	N	9	8