



Latitude:36.37132, Longitude:-92.95630

Route:7 Section:20 Log:15.478

Arnold Road ID:5x7x20xA, Arnold Log mile:14.93

District 09, 9 - Boone County

Owner: 1 - State Highway Agency

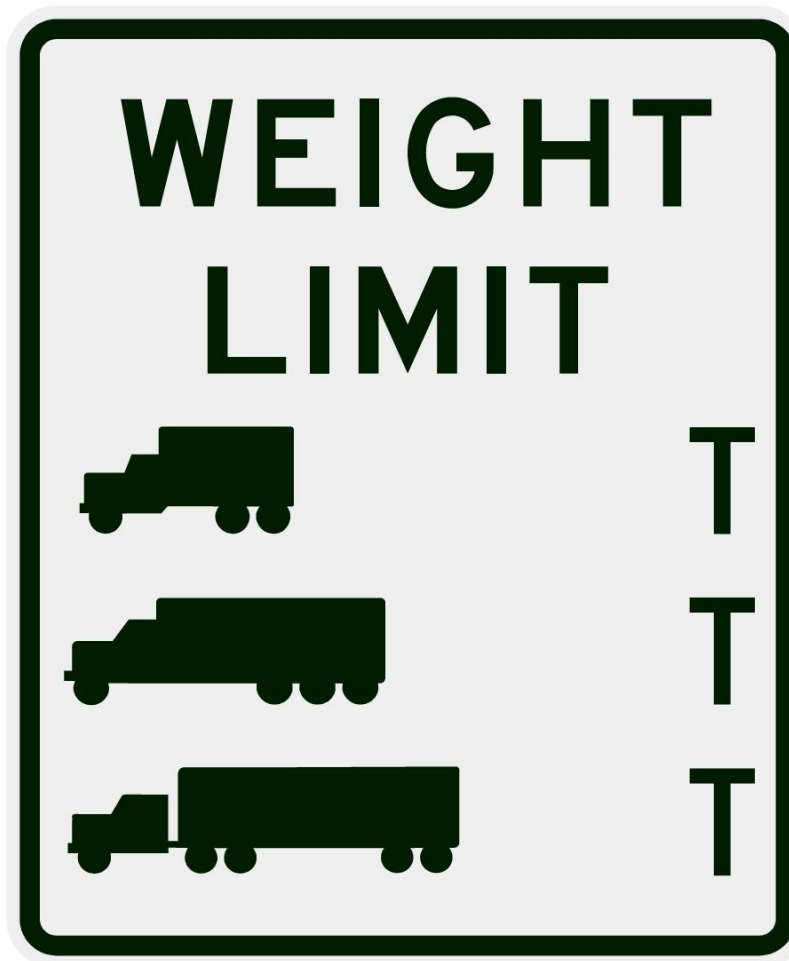
Bridge Posting Information

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

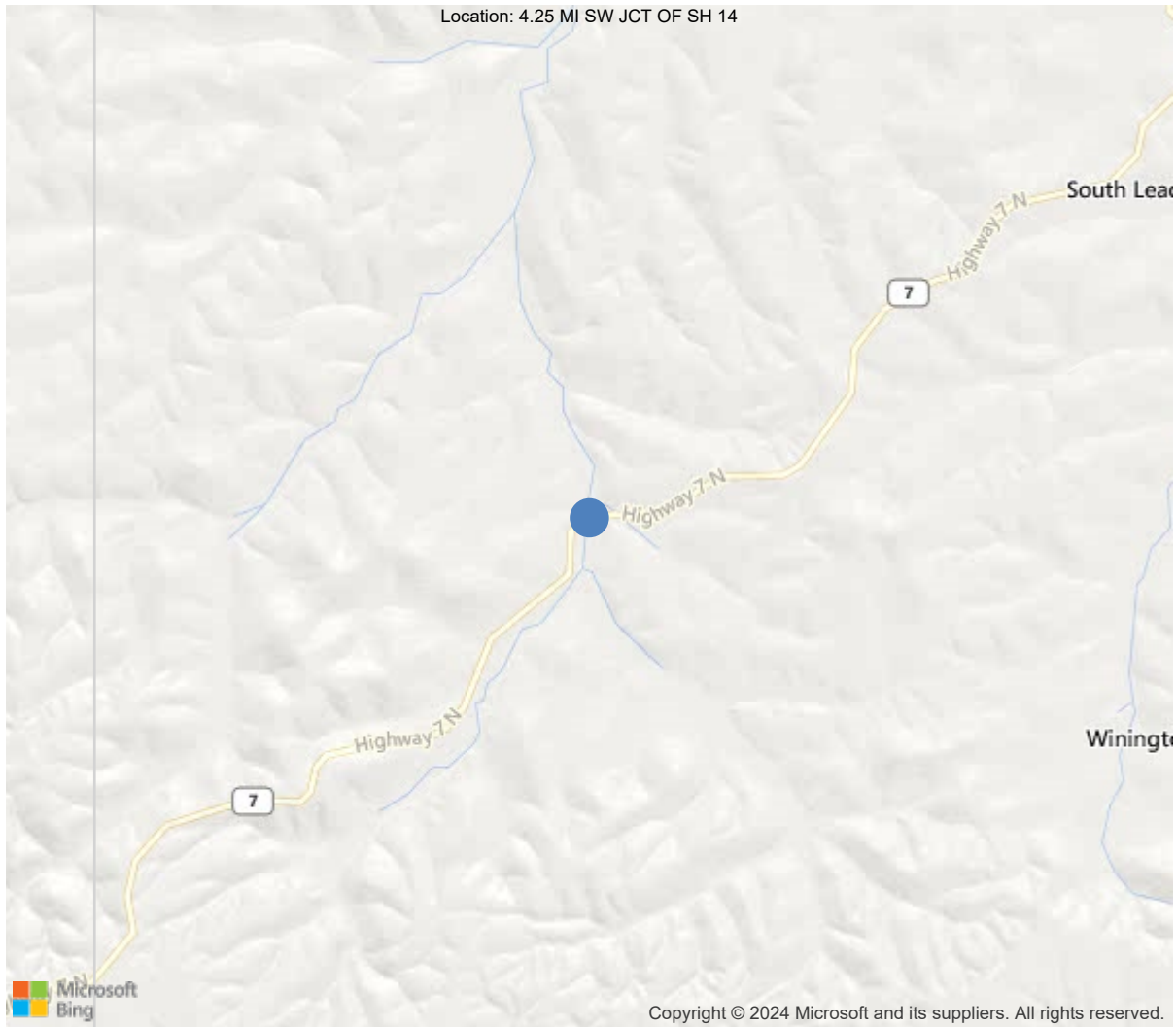
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	32		
Code 9 (31 Tons)	35		
Code 5 (40 Tons)	41		

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



36.37132, -92.95630



Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, Inspection Date: 09/19/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	01396
(5) Inventory Route	1
(2) Highway Agency District	09 - District 09
(3) County Code	9 - Boone County
(4) Place Code	0
(6) Features Intersected	E. SUGAR LOAF
(7) Facility Carried	SH 7 Boone Co.
(9) Location	4.25 MI SW JCT OF SH 14
(11) Mile Point	15.478 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.3713200372169
(17) Longitude	-92.9562995302677
(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	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	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1930
(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	2767
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	17 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	35 ft
(49) Structure Length	105 ft
(50) Curb or Sidewalk Width	
Left	1.3 ft
Right	1.3 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	27 ft
(32) Approach Roadway Width (W/Shoulders)	25 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	26.6 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	7 - Rural Major Collector
(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	5
(59) Superstructure	5
(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	46
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	28
(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	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(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	1 - Inspected feature meets current
(113) Scour Critical Bridges	8 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	132 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 125
(96) Total Project Cost	\$ 377
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	2863
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	09/19/2022		
(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.			



Asset #01396(Routine, Underwater type 2)

District: 09, County: 9 - Boone County

Team Lead: Benjamin Smith, Inspection Date: 09/19/2022

General Observation

Structure is logged from SW to NE and is accessible from the ground /small ladder.
No bat activity was noted.

A-46 - Asset Files

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Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, Inspection Date: 09/19/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	2835	1504	0	1331	0
1080	Delamination/Spall/Patched Area	SF	127	0	0	127	0
1090	Exposed Rebar	SF	69	0	0	69	0
1120	Efflorescence/Rust Staining	SF	1135	0	0	1135	0
510	Wearing Surfaces	SF	2520	2415	96	9	0
3210	Delam/Spall/Patched Area/Pothole	SF	9	0	0	9	0
3220	Crack (Wearing Surface)	SF	96	0	96	0	0
<p>(16) Driving surface- has a 2.5" indiscriminate asphalt overlay (wearing surface) with 96' of reflective cracking at the joints. The right lane has 7' of spalling in the overlay that has been patched. The left lane has 2' of patched area.</p> <p>Left lane- the visible portion of the curb has 47' of spalled deteriorated concrete with 33' of exposed rebar. The joint area at bent #1 has spalling in the left lane at the end of span #1.</p> <p>Right lane- the visible portion of the curb has 67' of spalling with 28' of rebar exposed.</p> <p>The left and right deck edges have efflorescence map cracking with delamination and spalling.</p> <p>Under surface-</p> <p>Span #1- has 553' of efflorescence map cracking in the left and right overhangs and all 3 bays, bay #3 is the worst case condition. The left and right overhangs have 11' of spalls and deterioration on the edges, with 5' of rebar exposed.</p> <p>Span #2- has 188' of efflorescence cracking. Bay #3 and the right overhang are the worst case condition.</p> <p>Span #3- has 394' of efflorescence map cracking. The left and right overhangs and bays #1,3 are the worst case conditions. Bay #1 has 2' of cs3 delamination. Bay #3 has 3' of cs3 rebar.</p> <p>(510-16) The wearing surface is a 2.5" indiscriminate asphalt overlay with 96' of reflective cracking at the joints. The right lane has 7' of spalling in the overlay that has been patched. The left lane has 2' of patched area.</p>							
110	Reinforced Concrete Open Girder/Beam	LF	420	252	0	168	0
1080	Delamination/Spall/Patched Area	LF	3	0	0	3	0
1090	Exposed Rebar	LF	7	0	0	7	0
1120	Efflorescence/Rust Staining	LF	158	0	0	158	0



Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, Inspection Date: 09/19/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>(110) Span #1- tee beams #1 and #4 have map cracking with efflorescence, tee beam #4 is the worst case with numerous longitudinal cracks that have heavy efflorescence on the vertical face and under surface of the beam, the efflorescence on the undersurface extends the length of the span. Tee beam #1 has a shallow spall with exposed rebar in the under surface at the end of the span, and an area of spalling / concrete deterioration on exterior side over pier wall #1. The haunch area of tee beams #2,3 both have spalling with 1' of exposed rebar each.</p> <p>Span #2- Tee beam #1 has shallow spalling with exposed high chairs in the undersurface adjacent to both bents. Tee beam #2 has a delaminated area in the haunch area over pier wall #1 on the right side. Tee beam #2 has 1' of exposed rebar at the end of the beam over bent #2. Tee beam #3 has a spall with exposed rebar at the beginning of the span that extends into the haunch area. Tee beam #4 has heavy map cracking with cs3 efflorescence in the exterior side and undersurface for the full length of the beam (32'). The haunch at the end of span #2 under beam #4 has spalling with no exposed rebar.</p> <p>Span #3- Tee beam #1- has 5' of vertical cs2 efflorescence cracking. Tee beam #2 has an 11' long area of efflorescence cracking on the bottom and exterior faces. Tee beam #4 has heavy map cracking with efflorescence on the interior and exterior side and undersurface for 32'. Tee beam #3 has longitudinal efflorescence cracking for the last 14' of the span, with intermittent efflorescence cracking. All 4 beams have random vertical hairline cracks with efflorescence.</p>							
205	Reinforced Concrete Column	EA	4	0	0	4	0
1090	Exposed Rebar	EA	4	0	0	4	0
<p>(205) Bent #1 columns-</p> <p>Right column-The right column has a large spall with exposed vertical rebar and moderate width vertical cracking. The exposed rebar has initial section loss.</p> <p>Left column- has a small spall with exposed rebar at the top of the column on the span #2 side.</p> <p>Bent #2 columns-</p> <p>Left column- has a 14" spall with exposed rebar below the bent cap on the span #3 side.</p> <p>Right column- has a large delaminated area on the span #3 side.</p>							
210	Reinforced Concrete Pier Wall	LF	38	16	20	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	20	0	20	0	0
<p>(210) The pier wall consists of 13' of web wall between the columns, and 6' of pier wall on the left side of column #1.</p> <p>Pier wall #1- has 9' of diagonal and vertical hairline cracks. The footing is exposed for the length of the wall, but is cast on solid rock.</p> <p>Pier wall #2- has 11' of vertical and horizontal hairline cracking and a 2' patched area on the span #2 side.</p>							
215	Reinforced Concrete Abutment	LF	101	38	36	27	0
1080	Delamination/Spall/Patched Area	LF	25	0	0	25	0
1090	Exposed Rebar	LF	2	0	0	2	0
1120	Efflorescence/Rust Staining	LF	18	0	18	0	0
1130	Cracking (RC and Other)	LF	18	0	18	0	0



Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, **Inspection Date:** 09/19/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>(215) Abutment #1- has 10' of horizontal, diagonal, and vertical cracking, with 14' of efflorescence. The vertical face of the wall and the wing walls have diagonal cracking concentrated mostly on the left and right sides. The top of the stem wall next to tee beam #4 has a small spall with exposed rebar. The top of the stem wall next to tee beam #1 has a 1' spall with no exposed rebar. The center weep hole has patched area around it.</p> <p>Abutment #2- has 8' of cracking, 23' of delamination, 4' of efflorescence, and 1' of exposed rebar. The abutment has concrete deterioration, map cracking with efflorescence and large spalls on the left side of stem wall next to tee beam #1. The stem wall has a shallow spall under beam #4.</p> <p>The left wing wall has heavy map cracking with concrete deterioration and spalling along the top of the wing wall.</p>							
220	Reinforced Concrete Pile Cap/Footing	LF	52	42	5	5	0
1080	Delamination/Spall/Patched Area	LF	5	0	0	5	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
<p>(220) Exposed footing at bent #1- The concrete footing has 3' of concrete deterioration and spalling on the upstream side. The concrete footing has 5' of cracking.</p> <p>Exposed footing #2- has 2' of shallow spalling with no rebar exposed on the span #2 side.</p>							
234	Reinforced Concrete Pier Cap	LF	32	13	11	8	0
1080	Delamination/Spall/Patched Area	LF	7	0	0	7	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	2	0	2	0	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
<p>(234) Bent #1 cap- has 1' of efflorescence map cracking on the right end and 3' of horizontal delamination under bay #3 on the span #2 side. The left cap end has 1' of spalling with efflorescence present. The cap haunches have spalls and cracking under beam #2 and 3 in span #1. The haunch under beam #3 in span #2 has spalling with rebar exposed.</p> <p>Bent #2 cap- has 6' of vertical and horizontal cracks between beams # 2,3 and in the haunches of beams #2, 3 and 4 on the span #3 side. The beam #4 haunch has spalling with no exposed rebar with efflorescence map cracking present.</p>							
301	Pourable Joint Seal	LF	54	0	42	11	1
2310	Leakage	LF	12	0	0	11	1
2350	Debris Impaction	LF	42	0	42	0	0
<p>(301) Bent #1 pourable seal- has 5' of cs3 leakage and 1' of cs4 leakage. It has 21' of debris impaction.</p> <p>Bent #2 pourable seal- has 6' of cs3 leakage and 21' of debris impaction.</p>							
311	Movable Bearing	EA	6	6	0	0	0
<p>(311) Moveable bearings- No noteworthy deficiencies at this inspection.</p>							
330	Metal Bridge Railing	LF	210	0	210	0	0
1000	Corrosion	LF	210	0	210	0	0
515	Steel Protective Coating	SF	630	315	0	315	0
3440	Effectiveness (Steel Protective Coatings)	LF	315	0	0	315	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	(330) Left side- has freckled rust forming on the front side. Back side has corrosion. The lower portion of the bridge rail posts have not been repainted and have a rust coating.						
	Right side- has freckled rust forming on the front side. Back side has corrosion. The lower portion of the bridge rail posts have not been repainted and have a rust coating.						
	Approach railing- no deficiencies noted.						

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	2835	1504	0	1331	0
1080	Delamination/Spall/Patched Area	SF	127	0	0	127	0
1090	Exposed Rebar	SF	69	0	0	69	0
1120	Efflorescence/Rust Staining	SF	1135	0	0	1135	0
510	Wearing Surfaces	SF	2520	2415	96	9	0
3210	Delam/Spall/Patched Area/Pothole	SF	9	0	0	9	0
3220	Crack (Wearing Surface)	SF	96	0	96	0	0
<p>(16) Driving surface- has a 2.5" indiscriminate asphalt overlay (wearing surface) with 96' of reflective cracking at the joints. The right lane has 7' of spalling in the overlay that has been patched. The left lane has 2' of patched area.</p> <p>Left lane- the visible portion of the curb has 47' of spalled deteriorated concrete with 33' of exposed rebar. The joint area at bent #1 has spalling in the left lane at the end of span #1.</p> <p>Right lane- the visible portion of the curb has 67' of spalling with 28' of rebar exposed. The left and right deck edges have efflorescence map cracking with delamination and spalling.</p> <p>Under surface-</p> <p>Span #1- has 553' of efflorescence map cracking in the left and right overhangs and all 3 bays, bay #3 is the worst case condition. The left and right overhangs have 11' of spalls and deterioration on the edges, with 5' of rebar exposed.</p> <p>Span #2- has 188' of efflorescence cracking. Bay #3 and the right overhang are the worst case condition.</p> <p>Span #3- has 394' of efflorescence map cracking. The left and right overhangs and bays #1,3 are the worst case conditions. Bay #1 has 2' of cs3 delamination. Bay #3 has 3' of cs3 rebar.</p> <p>(510-16) The wearing surface is a 2.5" indiscriminate asphalt overlay with 96' of reflective cracking at the joints. The right lane has 7' of spalling in the overlay that has been patched. The left lane has 2' of patched area.</p>							

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	420	252	0	168	0
1080	Delamination/Spall/Patched Area	LF	3	0	0	3	0
1090	Exposed Rebar	LF	7	0	0	7	0
1120	Efflorescence/Rust Staining	LF	158	0	0	158	0
<p>(110) Span #1- tee beams #1 and #4 have map cracking with efflorescence, tee beam #4 is the worst case with numerous longitudinal cracks that have heavy efflorescence on the vertical face and under surface of the beam, the efflorescence on the undersurface extends the length of the span. Tee beam #1 has a shallow spall with exposed rebar in the under surface at the end of the span, and an area of spalling / concrete deterioration on exterior side over pier wall #1. The haunch area of tee beams #2,3 both have spalling with 1' of exposed rebar each.</p> <p>Span #2- Tee beam #1 has shallow spalling with exposed high chairs in the undersurface adjacent to both bents. Tee beam #2 has a delaminated area in the haunch area over pier wall #1 on the right side. Tee beam #2 has 1' of exposed rebar at the end of the beam over bent #2. Tee beam #3 has a spall with exposed rebar at the beginning of the span that extends into the haunch area. Tee beam #4 has heavy map cracking with cs3 efflorescence in the exterior side and undersurface for the full length of the beam (32'). The haunch at the end of span #2 under beam #4 has spalling with no exposed rebar.</p> <p>Span #3- Tee beam #1- has 5' of vertical cs2 efflorescence cracking. Tee beam #2 has an 11' long area of efflorescence cracking on the bottom and exterior faces. Tee beam #4 has heavy map cracking with efflorescence on the interior and exterior side and undersurface for 32'. Tee beam #3 has longitudinal efflorescence cracking for the last 14' of the span, with intermittent efflorescence cracking. All 4 beams have random vertical hairline cracks with efflorescence.</p>							



Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, Inspection Date: 09/19/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	4	0	0	4	0
1090	Exposed Rebar	EA	4	0	0	4	0
<p>(205) Bent #1 columns-</p> <p>Right column-The right column has a large spall with exposed vertical rebar and moderate width vertical cracking. The exposed rebar has initial section loss.</p> <p>Left column- has a small spall with exposed rebar at the top of the column on the span #2 side.</p> <p>Bent #2 columns-</p> <p>Left column- has a 14" spall with exposed rebar below the bent cap on the span #3 side.</p> <p>Right column- has a large delaminated area on the span #3 side.</p>							
210	Reinforced Concrete Pier Wall	LF	38	16	20	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	20	0	20	0	0
<p>(210) The pier wall consists of 13' of web wall between the columns, and 6' of pier wall on the left side of column #1.</p> <p>Pier wall #1- has 9' of diagonal and vertical hairline cracks. The footing is exposed for the length of the wall, but is cast on solid rock.</p> <p>Pier wall #2- has 11' of vertical and horizontal hairline cracking and a 2' patched area on the span #2 side.</p>							
215	Reinforced Concrete Abutment	LF	101	38	36	27	0
1080	Delamination/Spall/Patched Area	LF	25	0	0	25	0
1090	Exposed Rebar	LF	2	0	0	2	0
1120	Efflorescence/Rust Staining	LF	18	0	18	0	0
1130	Cracking (RC and Other)	LF	18	0	18	0	0
<p>(215) Abutment #1- has 10' of horizontal, diagonal, and vertical cracking, with 14' of efflorescence. The vertical face of the wall and the wing walls have diagonal cracking concentrated mostly on the left and right sides. The top of the stem wall next to tee beam #4 has a small spall with exposed rebar. The top of the stem wall next to tee beam #1 has a 1' spall with no exposed rebar. The center weep hole has patched area around it.</p> <p>Abutment #2- has 8' of cracking, 23' of delamination, 4' of efflorescence, and 1' of exposed rebar. The abutment has concrete deterioration, map cracking with efflorescence and large spalls on the left side of stem wall next to tee beam #1. The stem wall has a shallow spall under beam #4.</p> <p>The left wing wall has heavy map cracking with concrete deterioration and spalling along the top of the wing wall.</p>							
220	Reinforced Concrete Pile Cap/Footing	LF	52	42	5	5	0
1080	Delamination/Spall/Patched Area	LF	5	0	0	5	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
<p>(220) Exposed footing at bent #1- The concrete footing has 3' of concrete deterioration and spalling on the upstream side. The concrete footing has 5' of cracking.</p> <p>Exposed footing #2- has 2' of shallow spalling with no rebar exposed on the span #2 side.</p>							
234	Reinforced Concrete Pier Cap	LF	32	13	11	8	0
1080	Delamination/Spall/Patched Area	LF	7	0	0	7	0
1090	Exposed Rebar	LF	1	0	0	1	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1120	Efflorescence/Rust Staining	LF	2	0	2	0	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
<p>(234) Bent #1 cap- has 1' of efflorescence map cracking on the right end and 3' of horizontal delamination under bay #3 on the span #2 side. The left cap end has 1' of spalling with efflorescence present. The cap haunches have spalls and cracking under beam #2 and 3 in span #1. The haunch under beam #3 in span #2 has spalling with rebar exposed.</p> <p>Bent #2 cap- has 6' of vertical and horizontal cracks between beams # 2,3 and in the haunches of beams #2, 3 and 4 on the span #3 side. The beam #4 haunch has spalling with no exposed rebar with efflorescence map cracking present.</p>							



Elevation view.



Approach view in direction of log mile.



typical view of the driving surface.



Typical view of driving surface.



View of span #2 undersurface.



View of span #3 undersurface.



View of span #1 undersurface.



Upstream channel view.



Downstream channel view.



Approach view in direction of log mile.



Approach view in direction of log mile.



Elevation view. Log mile from left to right.



Elevation view. Log mile from left to right.



Right column of bent #1 has a spall with exposed rebar.



The pourable joint seal has Cs4 leakage at the bent #1 left deck edge.



Freckled rust beginning to form on front side of railing.

Maintenance Needs

Date Reported: 09/21/2022

Priority: B - Pressing

Type of Work: Repair (General)

Status: Open

Component: Deck

Deficiency Description

The deck at the joint area at bent #1 has a full depth failure in the gutter line of the left lane at the end of span #1.

Remarks



Spalling in the left lane at the end of span #1.

Maintenance Needs

Date Reported: 09/08/2014

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 9 - None

Status: Assigned

Component:

Deficiency Description

Abutment #2 has a large area of concrete deterioration, map cracking with efflorescence and spalling on the left side of stem wall adjacent to tee beam #1. The left wing wall has heavy map cracking with concrete deterioration and spalling along the top of the wing wall.

Remarks



Abutment #2 has a large area of deteriorated concrete with efflorescence map cracking next to beam #1. The left wing wall has heavy map cracking with concrete deterioration and spalling along the top of the wing wall.



Abutment #2, Left side, Concrete deterioration with mapcracking and spalling.



Northwest wing wall, Concrete deterioration and spalling

Maintenance Needs

Date Reported: 09/24/2012

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 9 - None

Status: Assigned

Component:

Deficiency Description

The concrete curb sections on the left and right sides of the structure have large areas of concrete deterioration and spalling with exposed rebar.

Remarks



Span #2, Left side, concrete deterioration / spalling with exposed reinforcing steel to curb.



Span #1 concrete curb, Left side, concrete deterioration with exposed reinforcing steel to curb.

Maintenance Needs

Date Reported: 09/24/2012

Priority: D- Routine

Status: Assigned

Type of Work: (Inactive) (Inactive) 9 - None

Component:

Deficiency Description

Substructure -

Bent #1- the right column has a large spall with exposed rebar and moderate width vertical cracking. The left column has spall with exposed rebar at the top of the column on the span #2 side.

Bent #2- the left column has a 14" spall with exposed rebar below the bent cap, the right column has a spall with rebar exposed on the span #3 side.

Remarks



Bent #3, column #1 has a 14" spall with exposed primary reinforcing steel below bent cap.



Bent #3, Right column, large delaminated area.

Maintenance Needs

Date Reported: 09/24/2012

Priority: D- Routine

Status: Assigned

Type of Work: (Inactive) (Inactive) 9 - None

Component:

Deficiency Description

Tee beam #1 in span #1 has an area of spalling with rebar exposed over bent #1.

Tee beam #4 has heavy efflorescence map cracking in spans #1,3.

Remarks



Girder #1 of span #1 over bent #2 has an area of spalling.



Right over hang and undersurface condition of beam #4 in span #3.



Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, **Inspection Date:** 09/19/2022

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	
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



Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, **Inspection Date:** 09/19/2022

A-57 - Beam End and Bearing Painting 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



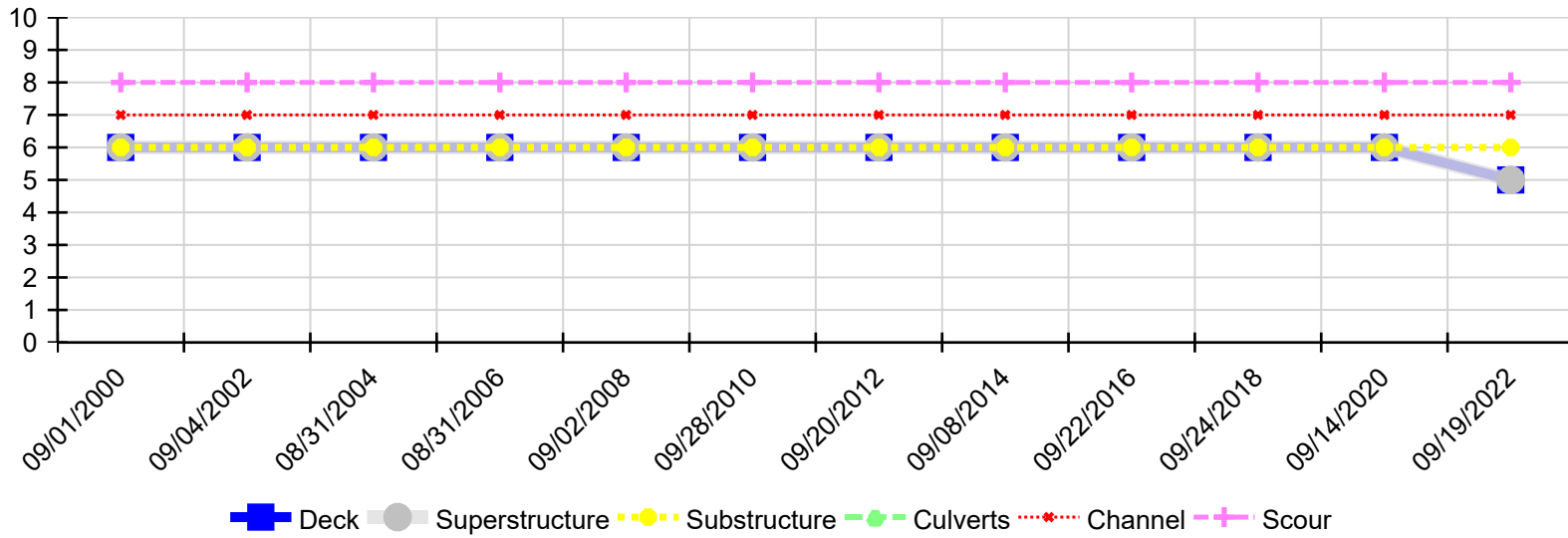
Asset #01396(Routine, Underwater type 2)

SH 7 Boone Co. over E. SUGAR LOAF

Location: 4.25 MI SW JCT OF SH 14

Team Lead: Benjamin Smith, Inspection Date: 09/19/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/19/2022	5	5	6	N	7	8
09/14/2020	6	6	6	N	7	8
09/24/2018	6	6	6	N	7	8
09/22/2016	6	6	6	N	7	8
09/08/2014	6	6	6	N	7	8
09/20/2012	6	6	6	N	7	8
09/28/2010	6	6	6	N	7	8
09/02/2008	6	6	6	N	7	8
08/31/2006	6	6	6	N	7	8
08/31/2004	6	6	6	N	7	8
09/04/2002	6	6	6	N	7	8
09/01/2000	6	6	6	N	7	8