



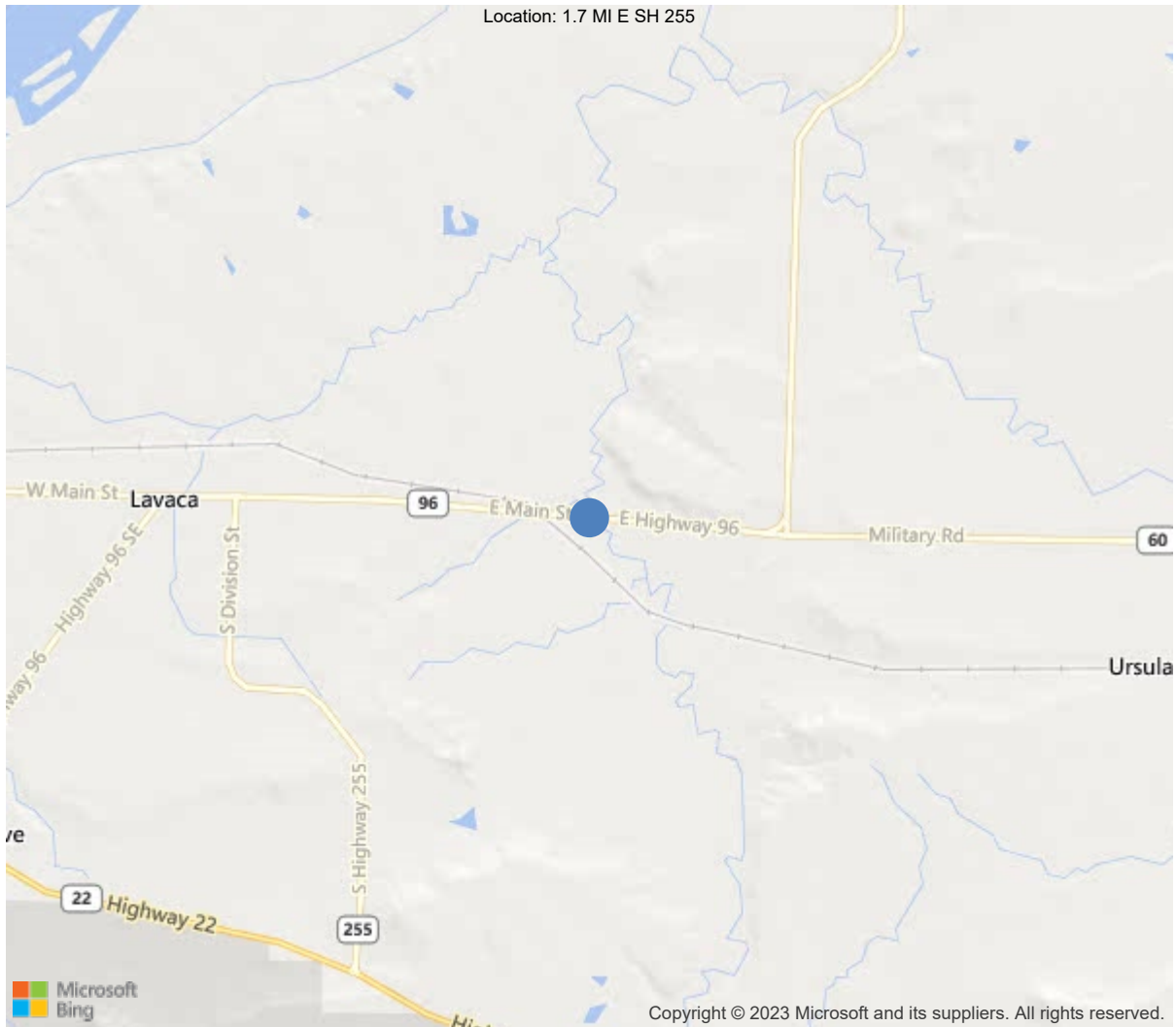
Latitude:35.33463, Longitude:-94.14175

Route:96 Section:03 Log:4.13

Arnold Road ID:65x96x3xA, Arnold Log mile:4.125

District 04, 131 - Sebastian County

Owner: 1 - State Highway Agency



35.33463, -94.14175



Asset #06114(Routine)

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, Inspection Date: 04/21/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06114
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	131 - Sebastian County
(4) Place Code	0
(6) Features Intersected	Big Creek Seb. Co.
(7) Facility Carried	State Highway 96
(9) Location	1.7 MI E SH 255
(11) Mile Point	4.13 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.33463
(17) Longitude	-94.14175
(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	4
(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	0 - None
AGE AND SERVICE	
(27) Year Built	1987
(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	2103
(30) Year of ADT	2018
(109) Truck ADT	3 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	43 ft
(49) Structure Length	174 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	29.9 ft
(52) Deck Width Out to Out	32.8 ft
(32) Approach Roadway Width (W/Shoulders)	38.1 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	31.2 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	7
(59) Superstructure	5
(60) Substructure	7
(61) Channel & Channel Protection	6
(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	6
(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	3163
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	04/21/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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 #06114(Routine)

District: 04, County: 131 - Sebastian County

Team Lead: Jeff Jones, Inspection Date: 04/21/2022

General Observation

04/21/2022 - JCJ & TJL - Routine Inspection conducted this date.

59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)
Girders/Beams: Flaking Rust.

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

04/30/2020 - EJW & JPW - Type 2 Underwater Inspection - Wading and probing during high turbid water conditions indicate that the footings have cover with no apparent scour problems at this inspection.

A-46 - Asset Files

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Asset #06114(Routine)

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, Inspection Date: 04/21/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	5648	5330	318	0	0
1120	Efflorescence/Rust Staining	SF	38	0	38	0	0
1130	Cracking (RC and Other)	SF	280	0	280	0	0
(12) -There are minor transverse cracks at variable spacing on the driving surface of the deck. -Transverse hairline cracks with light efflorescence are visible from the undersurface of the overhangs that appear to propagate from the parapet wall joints. -Minor popouts visible on the driving surface of the deck. -The driving surface of the deck has a few random hairline longitudinal cracks. Approach roadways: -Both approaches have new asphalt.							
107	Steel Open Girder/Beam	LF	860	635	180	45	0
1000	Corrosion	LF	225	0	180	45	0
515	Steel Protective Coating	SF	3675	875	2400	200	200
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	2800	0	2400	200	200
(107) -Superstructure is constructed from A588 Weathering Steel. Superstructure has abnormal weathering patina with light rust nodes at the base of the beams. High Water elevation marks on the beams indicate that the water has reached the superstructure in the past. -The ends of beams have active corrosion with flaking rust and section loss at the base of webs and bottom flanges where deck expansion joints leak water on the ends of the beams. A couple of areas were measured at the beam ends during this inspection to document section loss to the superstructure. -Span # 1. Bent # 2. Beam # 5 has 3/16" section loss to the web at the expansion dam juncture. There is a 3' x 4" tall area with up to 1/16" section loss at the base of the web. -Span # 2. Bent # 2. Beam # 5 bottom flange measures 9/16" remaining section adjacent to the bearing. The remaining base of web and bottom flange has active corrosion with initial section loss. (515-107) -Beams have an orange rust coating from apparent inundation during flooding in the past. -Beam ends have active corrosion with flaking rust where the expansion joints leak.							
205	Reinforced Concrete Column	EA	6	5	1	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
(205) -The ahead side of Column #1 of Bent # 4 has a shallow baseball sized spall mid-way up the column adjacent to a hole that appears to be from the construction process.							
215	Reinforced Concrete Abutment	LF	78	73	5	0	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	4	0	4	0	0

**Asset #06114(Routine)**

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, **Inspection Date:** 04/21/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(215) -There are a few isolated vertical hairline shrinkage cracks in the steps in the abutment caps. -Top of both abutment back walls are partially covered with asphalt. -The Right side of abutment # 2 (Bent # 5) has a shallow baseball sized spall with no exposed reinforcing steel under Beam # 5.							
234	Reinforced Concrete Pier Cap	LF	96	90	6	0	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0
(234) -The bent caps have stains where the deck expansion joint seals leak onto the Substructure. -The caps have minor vertical cracks over the exterior edges of the columns in the step of the cap.							
302	Compression Joint Seal	LF	165	15	40	55	55
2310	Leakage	LF	110	0	0	55	55
2320	Seal Adhesion	LF	20	0	20	0	0
2350	Debris Impaction	LF	20	0	20	0	0
(302) -Expansion joint seals were leaking during the time of inspection. -The compression joint seals are deteriorated with cracking visible in top of seals. -The assemblies have dirt and debris impaction in the gutters. -Joint anchorage was sounded with a hammer during this inspection and appears to solid and functioning as intended, -Stains on the substructure caps and active corrosion with flaking rust to the beams and the bearings are indications that the deck joint seals leak.							
311	Movable Bearing	EA	20	0	0	20	0
1000	Corrosion	EA	20	0	0	20	0
515	Steel Protective Coating	SF	20	0	0	0	20
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	EA	20	0	0	0	20
(311) -Bearings at the intermediate bents have active corrosion with flaking rust due to failing expansion joint seals allowing water to leak through onto the bearing devices.							
313	Fixed Bearing	EA	20	0	2	18	0
1000	Corrosion	EA	20	0	2	18	0
515	Steel Protective Coating	SF	20	0	0	0	20
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	EA	20	0	0	0	20
(313) -The bearings at the abutments have been painted. The paint system is failing with rust showing through in several locations. -Bearings have active corrosion with flaking rust where the deck expansion joint seals have failed and is allowing water to leak through onto the bearings.							
331	Reinforced Concrete Bridge Railing	LF	344	306	38	0	0
1090	Exposed Rebar	LF	33	0	33	0	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
(331) -There are numerous golf ball sized spalls with exposed reinforcing steel in the lower portion of railing.							

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, **Inspection Date:** 04/21/2022

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	5648	5330	318	0	0
1120	Efflorescence/Rust Staining	SF	38	0	38	0	0
1130	Cracking (RC and Other)	SF	280	0	280	0	0
<p>(12) -There are minor transverse cracks at variable spacing on the driving surface of the deck.</p> <p>-Transverse hairline cracks with light efflorescence are visible from the undersurface of the overhangs that appear to propagate from the parapet wall joints.</p> <p>-Minor popouts visible on the driving surface of the deck.</p> <p>-The driving surface of the deck has a few random hairline longitudinal cracks.</p> <p>Approach roadways:</p> <p>-Both approaches have new asphalt.</p>							

**Superstructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	860	635	180	45	0
1000	Corrosion	LF	225	0	180	45	0
515	Steel Protective Coating	SF	3675	875	2400	200	200
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	2800	0	2400	200	200
(107) -Superstructure is constructed from A588 Weathering Steel.							
Superstructure has abnormal weathering patina with light rust nodes at the base of the beams. High Water elevation marks on the beams indicate that the water has reached the superstructure in the past.							
-The ends of beams have active corrosion with flaking rust and section loss at the base of webs and bottom flanges where deck expansion joints leak water on the ends of the beams.							
A couple of areas were measured at the beam ends during this inspection to document section loss to the superstructure.							
-Span # 1. Bent # 2. Beam # 5 has 3/16" section loss to the web at the expansion dam juncture. There is a 3' x 4" tall area with up to 1/16" section loss at the base of the web.							
-Span # 2. Bent # 2. Beam # 5 bottom flange measures 9/16" remaining section adjacent to the bearing. The remaining base of web and bottom flange has active corrosion with initial section loss.							
(515-107) -Beams have an orange rust coating from apparent inundation during flooding in the past.							
-Beam ends have active corrosion with flaking rust where the expansion joints leak.							

59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Comment: Girders/Beams: Flaking Rust.



Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	5	1	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
(205) -The ahead side of Column #1 of Bent # 4 has a shallow baseball sized spall mid-way up the column adjacent to a hole that appears to be from the construction process.							
215	Reinforced Concrete Abutment	LF	78	73	5	0	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	4	0	4	0	0
(215) -There are a few isolated vertical hairline shrinkage cracks in the steps in the abutment caps.							
-Top of both abutment back walls are partially covered with asphalt.							
-The Right side of abutment # 2 (Bent # 5) has a shallow baseball sized spall with no exposed reinforcing steel under Beam # 5.							
234	Reinforced Concrete Pier Cap	LF	96	90	6	0	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0
(234) -The bent caps have stains where the deck expansion joint seals leak onto the Substructure.							
-The caps have minor vertical cracks over the exterior edges of the columns in the step of the cap.							

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

Comment: 04/30/2020 - EJW & JPW - Type 2 Underwater Inspection - Wading and probing during high turbid water conditions indicate that the footings have cover with no apparent scour problems at this inspection.



Asset #06114(Routine)

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, Inspection Date: 04/21/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation.



Elevation.



Approach roadway facing East.



Span # 2 deck soffit. Typical.



Deck. Typical.



Channel. West embankment.



There is embankment erosion with some displacement of rip rap at the West embankment.



West approach roadway with asphalt deterioration and settlement.



East approach asphalt settlement.



Span # 1 deck soffit. Typical.



Right overhang. Typical.



Span # 2 deck soffit. Typical.



Span # 2. Typical.



Span # 1. Typical.



Span # 4. Typical.



Superstructure has light rust nodes at the base of the beams. High Water elevation marks on the beams indicate that the water has reached the superstructure in the past.



Superstructure has light rust nodes at the base of the beams. High Water elevation marks on the beams indicate that the water has reached the superstructure in the past.



Span # 1. Bent # 2. Beam 5 has 3/16" section loss to the web at the expansion dam juncture. There is a 3' x 4" tall area with up to 1/16" section loss at the base of the web.



Span # 2. Beam # 5 beam corrosion.



Span # 2. Bent # 2. Beam # 5 bottom flange measures 9/16" remaining section adjacent to the bearing.



Span # 2. Bent # 2. Beam # 5 bottom flange measures 9/16" remaining section adjacent to the bearing. The remaining base of web and bottom flange has active corrosion with initial section loss.



Span # 2 superstructure. Typical.



Span # 3 superstructure. Typical.



Left column of Bent # 4. No apparent change since the last inspection.



Bent # 1. West abutment. Typical.



Top of Bent # 1 back wall. Partially covered with asphalt.



Top of Bent # 5 backwall.



Bent # 5. Typical.



Right side of Bent # 5. East abutment.



Bent # 2 back face. Typical.



Bent # 3 back face. Typical.



Bent # 2 ahead face. Typical.



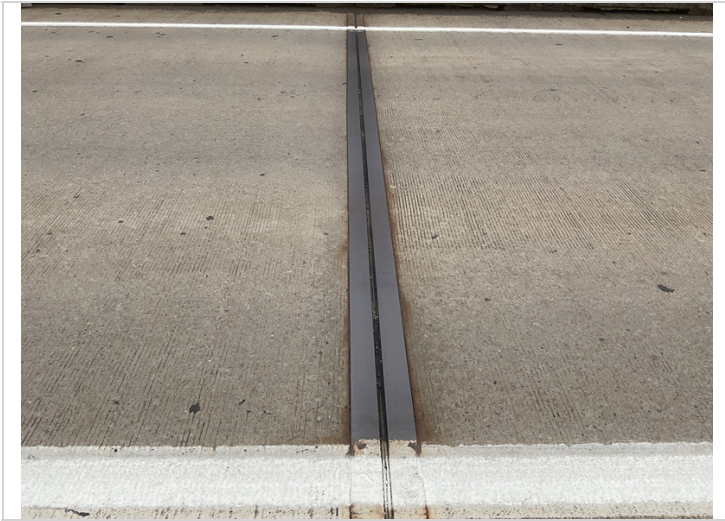
Bent # 4 back face. Typical.



Wet substructure caps due to leaking expansion joint seals.
Photo of Bent # 3. Typical.



Bent # 1 expansion joint seal.



Expansion joint seal over Bent # 2.



Expansion joint seal over Bent # 4.



Bent # 2. Beam # 3 bearing corrosion.



Bearing corrosion. Typical.



Left parapet wall. Typical.



2" spall with exposed reinforcing steel in the face of the Left parapet wall.



Minor spall in the base of the Left parapet.

Maintenance Needs

Date Reported: 04/05/2016

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Superstructure

Deficiency Description

Superstructure -

The bearings and the ends of the beams have flaking rust and abnormal weathering due to apparent leakage from the expansion joints.

-Span # 1. Bent # 2. Beam # 5 has 3/16" section loss to the web at the expansion dam juncture. There is a 3' x 4" tall area with up to 1/16" section loss at the base of the web.

-Span # 2. Bent # 2. Beam # 5 bottom flange measures 9/16" remaining section adjacent to the bearing. The remaining base of web and bottom flange has active corrosion with initial section loss.

Remarks



Bearings have layers of flaking rust that is causing section loss.



Bent # 1 bearings have been painted in the past with active corrosion under the paint.



Bent # 1. Beam # 3 bearing corrosion.



Span # 1. Bent # 2. Beam # 1 has 3/16" section loss to the web at the expansion dam juncture.



Bent # 2. Beam # 3 Bearing corrosion.



-Span # 2. Bent # 2. Beam # 5 bottom flange measures 9/16" remaining section adjacent to the bearing. The remaining base of web and bottom flange has active corrosion with initial section loss.

Maintenance Needs

Date Reported: 04/05/2016

Priority: D- Routine

Type of Work: Replace (General)

Status: Monitor

Component: Element

Deficiency Description

Deck expansion joints -

The deck expansion joint seals are deteriorated and leak water on the bearings and superstructure. The expansion joint assemblies have dirt and debris impaction in the gutters.

Remarks



Dirt and debris impaction in assemblies.



Deteriorated expansion joint seals.



Expansion joint seal over Bent # 3. Typical.

Maintenance Needs

Date Reported: 04/05/2016

Priority: D- Routine

Type of Work: Repair (General)

Status: Repair Documented

Component: Approach

Deficiency Description

Approach roadway -

The asphalt driving surface of the West approach roadway is deteriorated and coming apart with numerous potholes forming.

There is settlement in the asphalt adjacent to the abutments.

Remarks

04/21/2022 - JCJ & TJL - Both approaches have new asphalt.



West approach roadway with asphalt deterioration and settlement.



East approach asphalt settlement.



West approach roadway has new asphalt.



Asset #06114(Routine)

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, **Inspection Date:** 04/21/2022

Maintenance Needs

Date Reported: 04/22/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Element

Deficiency Description

There are a few sealable transverse cracks in the deck.

Remarks



Sealable cracks in the deck. Span # 2.



Asset #06114(Routine)

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, **Inspection Date:** 04/21/2022

Maintenance Needs

Date Reported: 04/22/2022

Priority: D- Routine

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

Status: Open

Component: Element

Deficiency Description

There is debris accumulation in the gutters.

Remarks



There is debris accumulation in the gutters.

Maintenance Needs

Date Reported: 04/22/2022

Priority: D- Routine

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

Status: Open

Component: Channel

Deficiency Description

There is drift accumulation at the base of Bent # 4.

Remarks



There is drift accumulation at the base of Bent # 4.

Maintenance Needs

Date Reported: 04/22/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Channel

Deficiency Description

There is embankment erosion with some displacement of rip rap at the West embankment.

Remarks



There is embankment erosion with some displacement of rip rap at the West embankment.



Asset #06114(Routine)

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, Inspection Date: 04/21/2022

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	



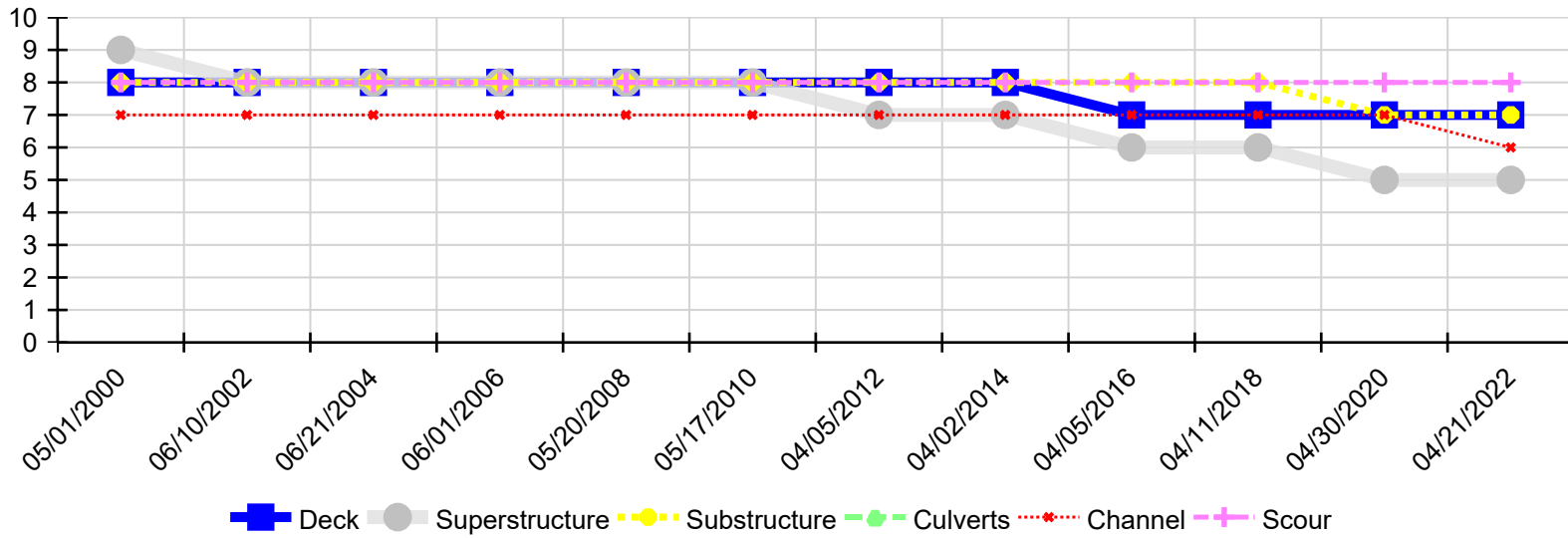
Asset #06114(Routine)

State Highway 96 over Big Creek Seb. Co.

Location: 1.7 MI E SH 255

Team Lead: Jeff Jones, Inspection Date: 04/21/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/21/2022	7	5	7	N	6	8
04/30/2020	7	5	7	N	7	8
04/11/2018	7	6	8	N	7	8
04/05/2016	7	6	8	N	7	8
04/02/2014	8	7	8	N	7	8
04/05/2012	8	7	8	N	7	8
05/17/2010	8	8	8	N	7	8
05/20/2008	8	8	8	N	7	8
06/01/2006	8	8	8	N	7	8
06/21/2004	8	8	8	N	7	8
06/10/2002	8	8	8	N	7	8
05/01/2000	8	9	8	N	7	8