



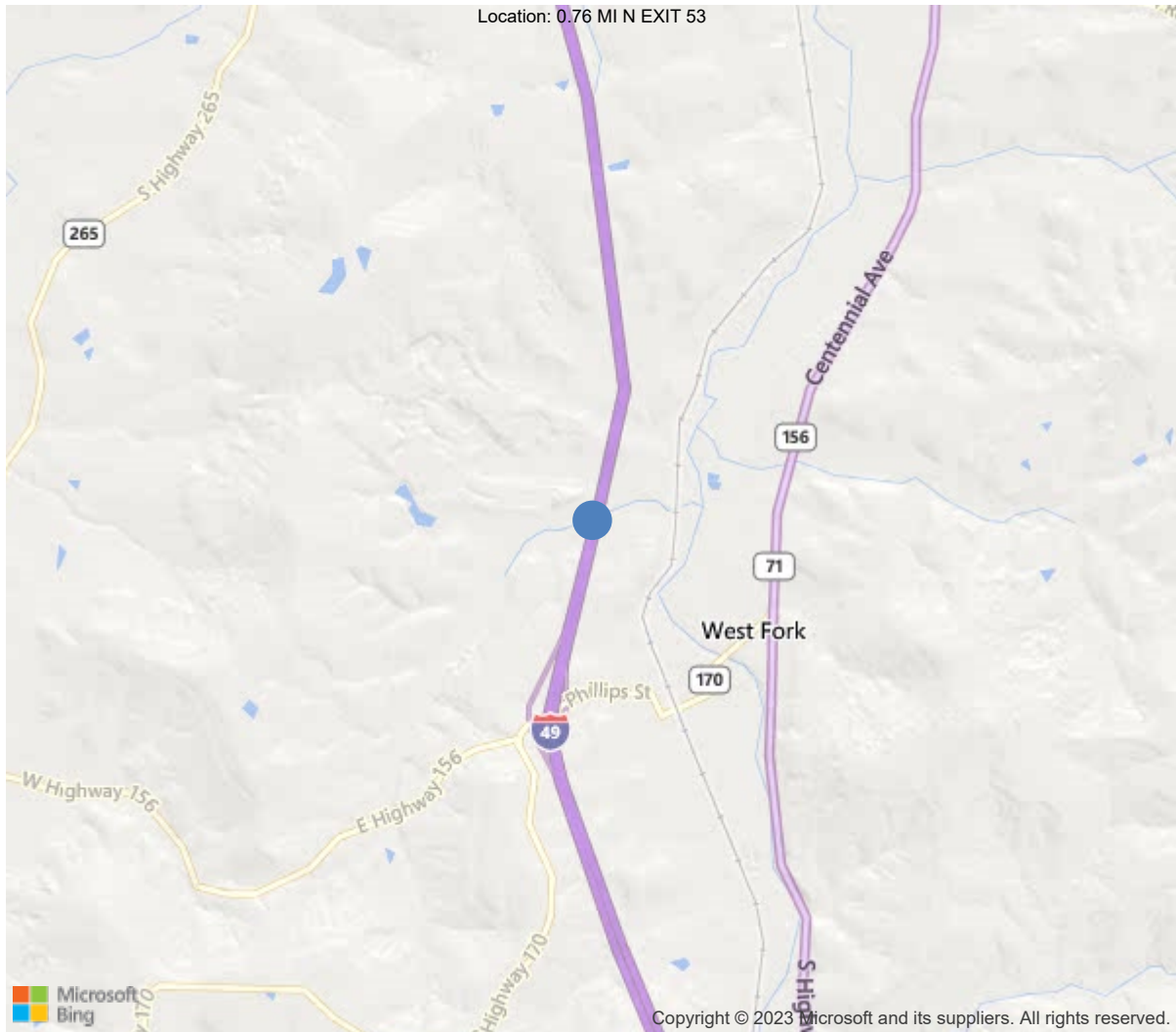
Latitude:35.93784, Longitude:-94.19576

Route:49 Section:28 Log:53.76

Arnold Road ID:72x49x28xB, Arnold Log mile:51.32

District 04, 143 - Washington County

Owner: 1 - State Highway Agency



35.93784, -94.19576



**Asset #A6239**(Routine, Underwater type 2)  
**I-49 Southbound over Farm Road - Wash. Co.**

**Location: 0.76 MI N EXIT 53**

**Team Lead: Eric West, Inspection Date: 04/05/2023**

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A6239
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	143 - Washington County
(4) Place Code	0
(6) Features Intersected	Farm Road - Wash. Co.
(7) Facility Carried	I-49 Southbound
(9) Location	0.76 MI N EXIT 53
(11) Mile Point	53.76 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000049080
(16) Latitude	35.93784
(17) Longitude	-94.19576
(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	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	0 - None (no additional concrete thickne
Type of Membrane	1 - Built-up
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1994
(106) Year Reconstructed	0
(42) Type of Service	16
On	1 - Highway
Under	6 - Highway-waterway
(28) Lane	
On	2
Under	4
(29) Average Daily Traffic	11500
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	82 ft
(49) Structure Length	276 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 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0 - No median
(34) Skew	58 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	41 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	20.75 ft
Ref:	
(55) Min Lat Underclear RT	14 ft
Ref:	
(56) Min Lat Underclear LT	3 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	1
(26) Functional Class	1 - Rural Principal Arterial -
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	L - The left structure of para
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	1 - The inventory route is par
(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	6
(59) Superstructure	7
(60) Substructure	5
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	6 - MS 18+Mod / HS 20+Mod
(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	7
(69) Clearances, Vertical/Horizontal	9
(71) Waterway Adequacy	9
(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	13361
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	04/05/2023		
(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 #A6239(Routine, Underwater type 2)

District: 04, County: 143 - Washington County

Team Lead: Eric West, Inspection Date: 04/05/2023

### General Observation

04/05/2023 - EJW & NS - Routine and Underwater Type II Inspection conducted on this date. Under clearances verified on this date.

03/01/2021 - RSM & SPC: Routine inspection conducted this date. See element notes for documentation. Underclearances field measured and verified this inspection. See Microstation sketch linked in "Files" tab for clearance measurements.

03/18/2019 - JCJ & TJL - Type 2 Underwater Inspection - Visual observation during low water conditions indicate that the substructure footings have cover with no apparent scour problems during this inspection. No substructure was in the water during this inspection.

03/18/2019 - JCJ & TJL - Vertical underclearance was actual field measured during this inspection.

---

**61 - Channel/Channel Protection** (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.)  
04/05/2023 - EJW - Underwater Type II Inspection conducted on this date. No substructure in the water. Minor localized erosion at Bent # 3 Column # 2. Footings have cover at this inspection.

---

### A-15 - Late Reason (Optimize Schedule)

04/05/2023 - EJW - Structure inspected late due to heavy work load.

---

### A-46 - Asset Files

-

---

### A-54 - Sealable Deck Cracks (Y)

-The driving surface of the deck has sealable transverse and longitudinal cracking.

---

### A-59 - Joint Repair Needed (Yes)

-The saw / construction joint sealant is deteriorated and completely missing in locations.

---





Asset #A6239(Routine, Underwater type 2)

I-49 Southbound over Farm Road - Wash. Co.

Location: 0.76 MI N EXIT 53

Team Lead: Eric West, Inspection Date: 04/05/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	11694	7671	3982	41	0
1080	Delamination/Spall/Patched Area	SF	5	0	2	3	0
1120	Efflorescence/Rust Staining	SF	96	0	96	0	0
1130	Cracking (RC and Other)	SF	3115	0	3077	38	0
1190	Abrasion/Wear (PSC/RC)	SF	807	0	807	0	0
(12) -The main lanes have map cracking. -The driving surface of the deck has numerous sealable longitudinal and wide transverse cracks. -Longitudinal cracking in the driving surface of the deck appears to correspond with the superstructure beams. -The overhang of the deck has transverse cracks with light efflorescence visible from the undersurface of the deck. -Active corrosion in the SIP forms in several locations visible from the undersurface of the deck. Areas of corrosion appear to correspond with the sawn construction joints in the deck. -The saw joint / construction joint sealant is deteriorated and missing in locations. -Span # 4 has a 30" long spall with a temporary asphalt patch near the centerline at Abutment # 2.							
107	Steel Open Girder/Beam	LF	1638	1637	1	0	0
1000	Corrosion	LF	1	0	1	0	0
515	Steel Protective Coating	SF	16832	15452	1380	0	0
3410	Chalking (Steel Protective Coatings)	LF	1380	0	1380	0	0
(107) -The paint system appears to be sound, The exterior beams are beginning to oxidize with light chalking visible. -There are no apparent noteworthy deficiencies during this inspection. -No visible cracks in the beams.							
205	Reinforced Concrete Column	EA	9	0	6	3	0
1130	Cracking (RC and Other)	EA	9	0	6	3	0
(205) -Bents # 2, 3 & 4 have vertical cracking at the ground elevation in the columns. -Bent # 4, column # 1 & Bent # 3 column # 3 vertical cracks measure up to 0.060" in width.							
215	Reinforced Concrete Abutment	LF	142	57	68	17	0
1080	Delamination/Spall/Patched Area	LF	14	0	13	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	25	21	3	1	0
1130	Cracking (RC and Other)	LF	66	0	52	14	0
(215) -Transverse cracks at variable spacing in the top of the back walls are visible from the driving surface of the deck. -There is shallow spalling in the top of the backwall that is visible from the driving surface of the deck.  -Abutment # 1 Lt back wall has map cracking with efflorescence buildup at the wing wall juncture. -Abutment # 1 Rt end of the back wall has map cracking. -Abutment # 2 Lt has a 2' vertical spall with exposed reinforcing steel in the back wall located approximately 1' left of beam # 1. -Abutment # 2 Lt end of the cap has concrete deterioration with up to 2" of section loss and map cracking in the bearing area. -Abutment # 2 Rt end of the cap and back wall has map cracking with light efflorescence buildup. -Abutment # 2 Rt has horizontal cracking under the bearing area of beam # 6.							
234	Reinforced Concrete Pier Cap	LF	153	120	18	15	0

**Team Lead:** Eric West, **Inspection Date:** 04/05/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1130	Cracking (RC and Other)	LF	33	0	18	15	0
(234) -The ends of caps at bents # 2 & 3 have map cracking. Cracks vary in width ranging from hairline up to approximately 3/16" in the most notable area on the left end of bent # 2 cap. -The ahead face of bent # 3 cap has a narrow diagonal shear type crack that propagates upward from exterior side of column # 1. -Bent # 4 cap has a couple hairline vertical cracks in the backface on the left and right sides. -There is hairline map cracking in the backface of bent # 4 cap on the right side. -The majority of the cracking appears to be in the ends of the caps located outside the columns.							
305	Assembly Joint without Seal	LF	96	93	3	0	0
2360	Adjacent Deck or Header	LF	3	0	3	0	0
(305) -The sliding plates are in place and the anchorage appears to be sound during this inspection. -The rubber troughs under the sliding plates are in place and appear to be functioning as intended. The rubber troughs appear to be in "As Built" condition and discharge water on the ends of the abutment caps. -There is shallow spalling with no exposed reinforcing steel adjacent to abutment # 1 expansion joint that is visible from the driving surface of the deck.							
311	Movable Bearing	EA	18	7	3	8	0
1000	Corrosion	EA	5	0	3	2	0
2220	Alignment	EA	6	0	0	6	0
515	Steel Protective Coating	SF	54	44	6	0	4
3440	Effectiveness (Steel Protective Coatings)	EA	10	0	6	0	4
(311) -Abutment # 1 Bearing # 1 & 6 has active corrosion with flaking rust.  -Abutment # 2 bearings are fully expanded. The temperature at the time of the inspection is approximately 50 degrees Fahrenheit. -Abutment # 2, Beam # 4 Rt bearing anchor bolt is working its way out of the cap. -Abutment # 2, Beam # 6 Rt anchor bolt is working out of the concrete abutment. The anchor bolt is approximately 9" higher than the average height of the left anchor bolt.  02/27/2013 - EJW - The bearings are almost fully expanded at Bent # 5. The temperature at the time of the inspection is approximately 32 degrees. -Bent # 5 Beam # 6 anchor bolt on the right side of the beam appears to working out of the concrete abutment and is approximately 5" higher than normal.							
313	Fixed Bearing	EA	12	12	0	0	0
515	Steel Protective Coating	SF	36	36	0	0	0
(313) -Bents # 3 & 4 are fixed bearings. -Paint system on the fixed bearings appear to be sound and functioning as intended. -No apparent noteworthy deficiencies during this inspection.							
321	Reinforced Concrete Approach Slab	SF	1680	698	798	184	0
1080	Delamination/Spall/Patched Area	SF	5	0	3	2	0
1130	Cracking (RC and Other)	SF	812	0	630	182	0
1190	Abrasion/Wear (PSC/RC)	SF	165	0	165	0	0
(321) -The approach slabs have sealable cracking. -The North approach slab has 2 fractured / spalled areas with a temporary asphalt patch in the North end of the slab. -The North approach slab has a few minor shallow spalls adjacent to the abutment back wall.							





**Asset #A6239**(Routine, Underwater type 2)  
**I-49 Southbound over Farm Road - Wash. Co.**

**Asset #A6239**(Routine, Underwater type 2)  
**I-49 Southbound over Farm Road - Wash. Co.**



Asset #A6239(Routine, Underwater type 2)

I-49 Southbound over Farm Road - Wash. Co.

Location: 0.76 MI N EXIT 53

Team Lead: Eric West, Inspection Date: 04/05/2023

## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	9	0	6	3	0
1130	Cracking (RC and Other)	EA	9	0	6	3	0
(205) -Bents # 2, 3 & 4 have vertical cracking at the ground elevation in the columns. -Bent # 4, column # 1 & Bent # 3 column # 3 vertical cracks measure up to 0.060" in width.							
215	Reinforced Concrete Abutment	LF	142	57	68	17	0
1080	Delamination/Spall/Patched Area	LF	14	0	13	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	25	21	3	1	0
1130	Cracking (RC and Other)	LF	66	0	52	14	0
(215) -Transverse cracks at variable spacing in the top of the back walls are visible from the driving surface of the deck. -There is shallow spalling in the top of the backwall that is visible from the driving surface of the deck.  -Abutment # 1 Lt back wall has map cracking with efflorescence buildup at the wing wall juncture. -Abutment # 1 Rt end of the back wall has map cracking. -Abutment # 2 Lt has a 2' vertical spall with exposed reinforcing steel in the back wall located approximately 1' left of beam # 1. -Abutment # 2 Lt end of the cap has concrete deterioration with up to 2" of section loss and map cracking in the bearing area. -Abutment # 2 Rt end of the cap and back wall has map cracking with light efflorescence buildup. -Abutment # 2 Rt has horizontal cracking under the bearing area of beam # 6.							
234	Reinforced Concrete Pier Cap	LF	153	120	18	15	0
1130	Cracking (RC and Other)	LF	33	0	18	15	0
(234) -The ends of caps at bents # 2 & 3 have map cracking. Cracks vary in width ranging from hairline up to approximately 3/16" in the most notable area on the left end of bent # 2 cap. -The ahead face of bent # 3 cap has a narrow diagonal shear type crack that propagates upward from exterior side of column # 1. -Bent # 4 cap has a couple hairline vertical cracks in the backface on the left and right sides. -There is hairline map cracking in the backface of bent # 4 cap on the right side. -The majority of the cracking appears to be in the ends of the caps located outside the columns.							

**61 - Channel/Channel Protection** (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.)

Comment: 04/05/2023 - EJW - Underwater Type II Inspection conducted on this date. No substructure in the water. Minor localized erosion at Bent # 3 Column # 2. Footings have cover at this inspection.





**Asset #A6239**(Routine, Underwater type 2)  
**I-49 Southbound over Farm Road - Wash. Co.**

**Location: 0.76 MI N EXIT 53**

**Team Lead:** Eric West, **Inspection Date:** 04/05/2023

**Culvert**

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation



Roadway



Typical driving surface of the deck.



Typical undersurface of the deck.





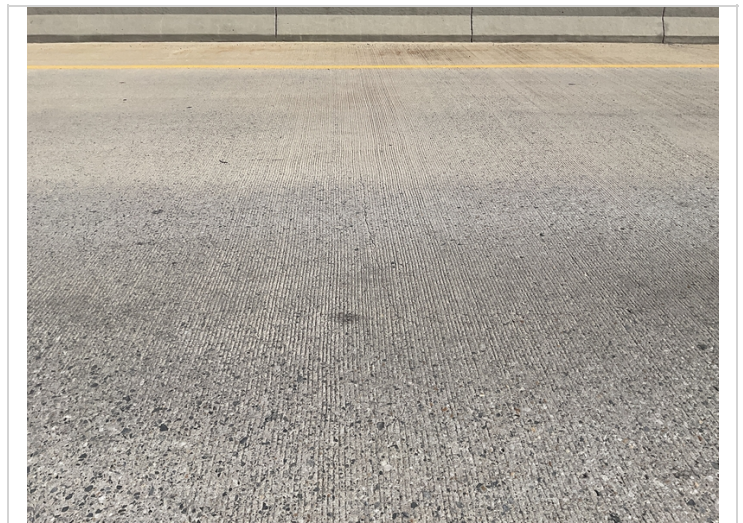
Bent #3 column # 2.



Span # 2 active corrosion in the deck pans.



Span # 4 bay # 1 active corrosion in the deck pans.



Sealable deck cracking.





Span # 4 active corrosion in the deck pans.



Span # 4 concrete spalling near the centerline at Abutment # 2.



Bent # 4 column # 1 with 0.060" wide vertical cracking.



Abutment # 2 Lt end of the cap has concrete deterioration with up to 2" of section loss and map cracking in the bearing area.





Abutment # 2 Lt back wall concrete spalling with exposed reinforcing steel.



Abutment # 2 Lt map cracking at the end of the cap.



Abutment # 2 Rt end of the cap and back wall has map cracking with light efflorescence buildup.



Bent # 3 Lt map cracking.





Bent # 3 Rt map cracking.



Bent # 2 Lt map cracking.



Bent # 2 Rt map cracking.



Abutment # 1 bearing # 6 active corrosion with flaking rust.





Abutment # 2 beam # 4 Rt bearing anchor bolt is working its way out of the cap.



Abutment # 2 beam # 6 art anchor bolt working out of the cap.



South approach slab missing joint seal.



South approach slab.





North approach slab.



North approach slab spalling with temporary asphalt patches.



Bridge rail with wide vertical and map cracking.



Typical driving surface.





Sealable deck cracking.



Span # 4 missing saw joint sealant.

**Maintenance Needs**

**Date Reported:** 03/18/2019

**Priority:** C - Important

**Type of Work:** Repair (General)

**Status:** Monitor

**Component:** Element

---

**Deficiency Description**

North approach slab -

The North approach slab has an 8" X 2' fractured / spalled area with a temporary asphalt patch in the Northwest corner of the slab.

**Remarks**

---



The North approach slab has an 8" X 2' fractured / spalled area with a temporary asphalt patch in the Northwest corner of the slab.

**Maintenance Needs**

**Date Reported:** 02/28/2013

**Priority:** D- Routine

**Type of Work:** Repair (General)

**Status:** Monitor

**Component:** Element

---

**Deficiency Description**

Substructure -

The left end of Bents # 2, 3, & 5 caps have open cracks. The ahead face of bent # 3 cap has a narrow diagonal shear type crack that propagates upward from exterior side of column # 1.

**Remarks**

---



Left end of Bent # 2 cap.



Left end of Bent # 3 cap.





Left end of Bent # 2 cap.



Left end of Bent # 5.



The ahead face of bent # 3 cap has a narrow diagonal shear type crack that propagates upward from exterior side of column # 1.



Bent 2 cap, left end-Wide mapcracking. Photo 1.



Bent 2 cap, left end-Wide mapcracking. Photo 2.



Bent 2 cap, left end-Wide mapcracking. Photo 1.



**Maintenance Needs**

**Date Reported:** 02/28/2013

**Priority:** D- Routine

**Type of Work:** Repair (General)

**Status:** Monitor

**Component:** Element

---

**Deficiency Description**

Abutment # 2 -

The Expansion bearings are fully expanded at approximately 50 degrees Fahrenheit.

The Right anchor bolt for Beam # 6 at abutment # 2 appears to be working its way up out of the concrete abutment.

The bearing connection is noisy under traffic and has rust staining due to apparent fretting.

**Remarks**

---



Abutment # 2 beam # 6 art anchor bolt working out of the cap.



Bearings # 1 & 2 at abutment # 2. Temperature is 60 degrees Fahrenheit.





**Asset #A6239**(Routine, Underwater type 2)  
**I-49 Southbound over Farm Road - Wash. Co.**

**Location: 0.76 MI N EXIT 53**

**Team Lead:** Eric West, **Inspection Date:** 04/05/2023

## **Routine Maintenance**

Check Box Maintenance Items

<b>Type of Maintenance</b>	<b>Is recommended?</b>
A-54 - Sealable Deck Cracks	Yes
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	Yes
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

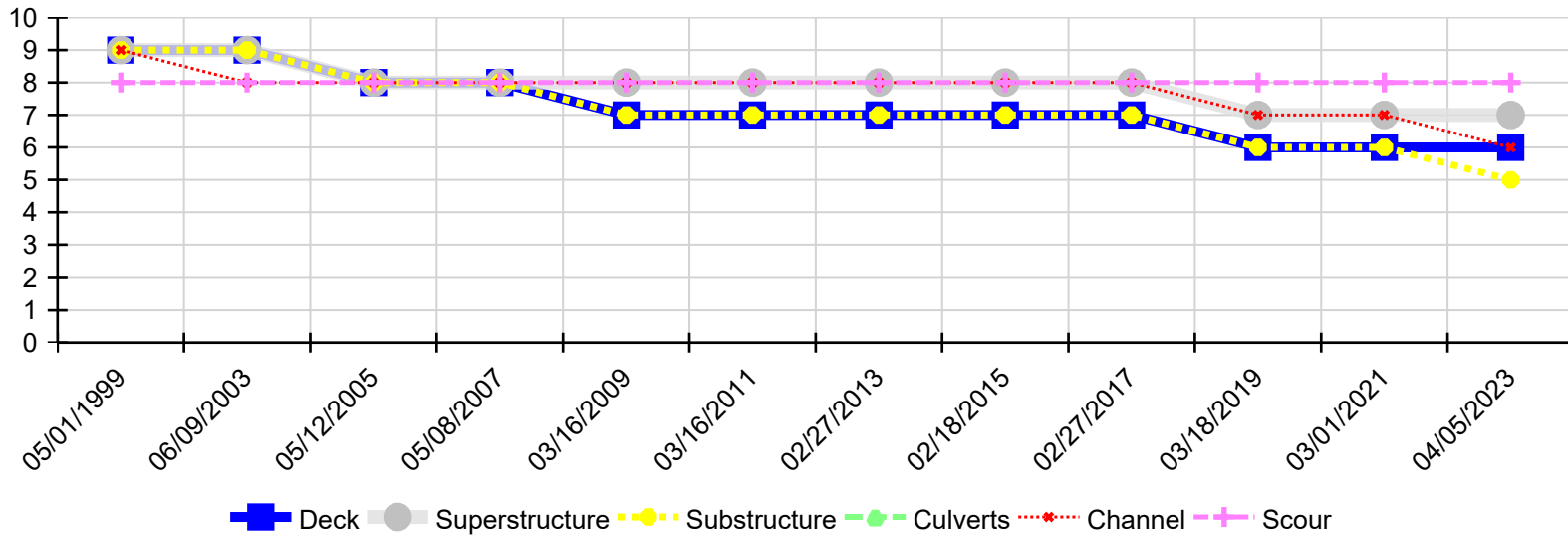


**Asset #A6239**(Routine, Underwater type 2)  
**I-49 Southbound over Farm Road - Wash. Co.**

**Location: 0.76 MI N EXIT 53**

**Team Lead: Eric West, Inspection Date: 04/05/2023**

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/05/2023	6	7	5	N	6	8
03/01/2021	6	7	6	N	7	8
03/18/2019	6	7	6	N	7	8
02/27/2017	7	8	7	N	8	8
02/18/2015	7	8	7	N	8	8
02/27/2013	7	8	7	N	8	8
03/16/2011	7	8	7	N	8	8
03/16/2009	7	8	7	N	8	8
05/08/2007	8	8	8	N	8	8
05/12/2005	8	8	8	N	8	8
06/09/2003	9	9	9	N	8	8
05/01/1999	9	9	9	N	9	8