



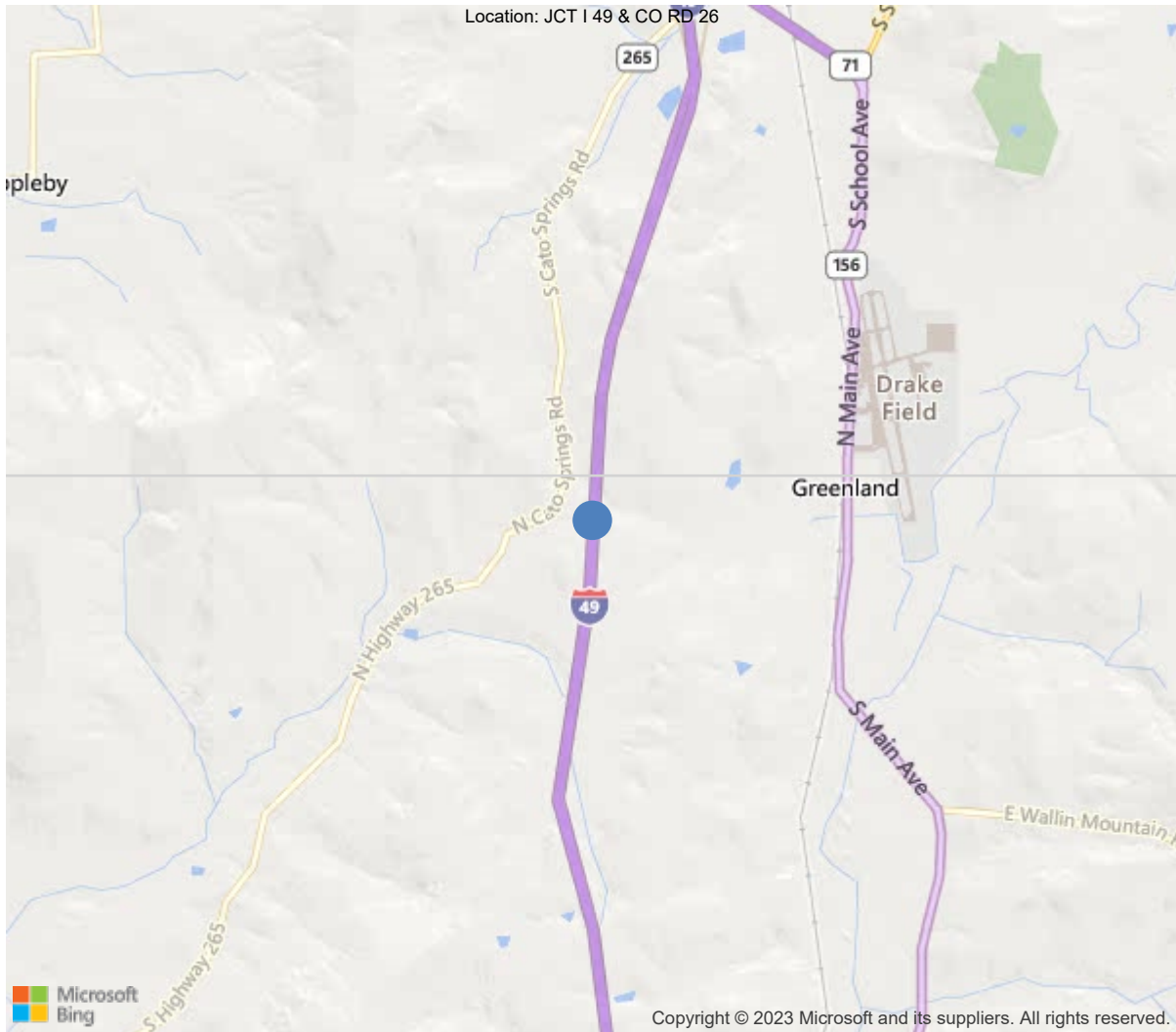
Latitude:35.99682, Longitude:-94.19640

Route:49 Section:28 Log:57.88

Arnold Road ID:72x49x28xB, Arnold Log mile:33.477

District 04, 143 - Washington County

Owner: 1 - State Highway Agency



35.99682, -94.19640



Asset #A6242(Routine)

I 49 SB LNS over W Wilson St -Washington

Location: JCT I 49 & CO RD 26

Team Lead: Eric West, Inspection Date: 07/19/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A6242
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	143 - Washington County
(4) Place Code	0
(6) Features Intersected	W Wilson St -Washington
(7) Facility Carried	I 49 SB LNS
(9) Location	JCT I 49 & CO RD 26
(11) Mile Point	57.88 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000049080
(16) Latitude	35.99682
(17) Longitude	-94.1964
(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	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	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1994
(106) Year Reconstructed	0
(42) Type of Service	11
On	1 - Highway
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	2
Under	2
(29) Average Daily Traffic	13000
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	68 ft
(49) Structure Length	160 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	42.9 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0 - No median
(34) Skew	8 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	41.3 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	17.3 ft
Ref:	
(55) Min Lat Underclear RT	20.5 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(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	11 - Urban 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	6
(61) Channel & Channel Protection	N
(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	N
(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	N - Bridge not over waterway.
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	19691
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	07/19/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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 #A6242(Routine)

District: 04, County: 143 - Washington County

Team Lead: Eric West, Inspection Date: 07/19/2022

#### General Observation

07/19/2022 - EJW & JPW - Routine Inspection conducted on this date.

06/11/2020 - RSM & SPC: Routine inspection conducted this date. See element notes for documentation. Underclearances field measured and verified this date. See Microstation sketch linked in "Files" tab for clearance measurements.

06/14/2018 - TJL - Elements were plan verified on this date.06/14/2018.

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

07/19/2022 - EJW - Structure inspected late due to heavy work load.

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#### A-46 - Asset Files

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Asset #A6242(Routine)

I 49 SB LNS over W Wilson St -Washington

Location: JCT I 49 & CO RD 26

Team Lead: Eric West, Inspection Date: 07/19/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	6768	6184	584	0	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1130	Cracking (RC and Other)	SF	4418	4034	384	0	0
1190	Abrasion/Wear (PSC/RC)	SF	198	0	198	0	0
(12) -Transverse saw joints in the deck have areas where the sealant is deteriorated and missing. -Maintenance forces have sealed the majority of the deck cracking in the travel lanes.  Deck Undersurface- -The SIP forms have an area of corrosion in span # 2, bay # 4.  Deck soffit - -There is one 12" delaminated area visible from the Left overhang of Span # 1. -Rust staining is visible from the undersurface of the Left overhang. -Span # 2, Bay # 5 stay in place form is rusted under leaking deck joint.							
107	Steel Open Girder/Beam	LF	948	624	320	4	0
1000	Corrosion	LF	324	0	320	4	0
515	Steel Protective Coating	SF	9795	8995	400	400	0
3410	Chalking (Steel Protective Coatings)	LF	400	0	400	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	400	0	0	400	0
(107) -The exterior surfaces of the exterior beams have areas that are chalking that exposes the primer coat. -There is minor active corrosion at the ends of the beams where the expansion joint seals at the abutments leak. -Superficial rust is beginning to form on the exterior surface of the the web of Beams # 1 and 6. -No visible cracks in the steel beams.							
205	Reinforced Concrete Column	EA	6	2	4	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1130	Cracking (RC and Other)	EA	3	0	3	0	0
(205) -Bent # 2, Column # 2 & 3 has a shallow delaminated area to Northwest edge of column. -Bent # 3, Column # 1, exterior face, has a vertical hairline crack at the base of the column.							
215	Reinforced Concrete Abutment	LF	128	65	11	52	0
1080	Delamination/Spall/Patched Area	LF	11	0	11	0	0
1090	Exposed Rebar	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	49	0	0	49	0



Asset #A6242(Routine)

I 49 SB LNS over W Wilson St -Washington

Location: JCT I 49 & CO RD 26

Team Lead: Eric West, Inspection Date: 07/19/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(215) -The top of both backwalls have transverse and longitudinal cracking with minor spalling that is visible from the driving surface of the deck. Maintenance forces have sealed the majority of the cracks since the last inspection. -Abutment # 1 has 2 spalls with exposed reinforcing steel at the base of the back wall adjacent to Beam # 3 and 1 spall with exposed reinforcing steel at beam # 5. Exposed reinforcing steel has active corrosion with very little concrete cover from the construction process. -Abutment # 1 is map cracked at the ends of the abutment cap. -Abutment # 2 is mostly map cracked. -Maintenance forces have painted over the map cracking in the ends of abutment # 2 cap in the past as type of repair. -Vertical cracking and staining typical in back walls from apparent joint leakage.							
234	Reinforced Concrete Pier Cap	LF	83	82	1	0	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
(234) -Bent # 3 cap texicoat is beginning to peel. -Bent #3 Lt end of the cap is cracking.							
302	Compression Joint Seal	LF	87	0	56	31	0
2310	Leakage	LF	56	0	56	0	0
2330	Seal Damage	LF	31	0	0	31	0
(302) -The expansion joint seal at both abutments are protruding above the driving surface of the deck. -There are numerous cracked and torn areas. -Stains on the abutments indicate that the seals leak. -Abutment # 1 & 2 has a portion of the joint that supports the compression seal in between the road irons that has fractured and dropped down in bays # 3, 4 & 5.							
311	Movable Bearing	EA	12	9	0	3	0
1000	Corrosion	EA	9	9	0	0	0
1020	Connection	EA	3	0	0	3	0
515	Steel Protective Coating	SF	60	48	12	0	0
3440	Effectiveness (Steel Protective Coatings)	EA	60	48	12	0	0
(311) -Abutment # 1 & 2 maintenance forces have painted the masonry plates and approximately 3/4 of each bearing rocker. -Random bearings at the abutments have the tilt bolt sheared off.							
313	Fixed Bearing	EA	12	10	2	0	0
1020	Connection	EA	2	0	2	0	0
515	Steel Protective Coating	SF	60	24	36	0	0
3410	Chalking (Steel Protective Coatings)	EA	36	0	36	0	0
(313) -The bolt that attaches the beam to the bearing device is not fully seated at bearings # 1 and 3 over bent # 3. -The paint system on the exterior bearings is beginning to oxidize.							
321	Reinforced Concrete Approach Slab	SF	1776	1650	125	1	0
1080	Delamination/Spall/Patched Area	SF	36	0	35	1	0
1130	Cracking (RC and Other)	SF	1170	1170	0	0	0
1190	Abrasion/Wear (PSC/RC)	SF	90	0	90	0	0



## Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	6768	6184	584	0	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1130	Cracking (RC and Other)	SF	4418	4034	384	0	0
1190	Abrasion/Wear (PSC/RC)	SF	198	0	198	0	0
(12) -Transverse saw joints in the deck have areas where the sealant is deteriorated and missing. -Maintenance forces have sealed the majority of the deck cracking in the travel lanes.							
Deck Undersurface-							
-The SIP forms have an area of corrosion in span # 2, bay # 4.							
Deck soffit -							
-There is one 12" delaminated area visible from the Left overhang of Span # 1.							
-Rust staining is visible from the undersurface of the Left overhang.							
-Span # 2, Bay # 5 stay in place form is rusted under leaking deck joint.							



**Asset #A6242(Routine)**

## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	2	4	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1130	Cracking (RC and Other)	EA	3	0	3	0	0
(205) -Bent # 2, Column # 2 & 3 has a shallow delaminated area to Northwest edge of column. -Bent # 3, Column # 1, exterior face, has a vertical hairline crack at the base of the column.							
215	Reinforced Concrete Abutment	LF	128	65	11	52	0
1080	Delamination/Spall/Patched Area	LF	11	0	11	0	0
1090	Exposed Rebar	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	49	0	0	49	0
(215) -The top of both backwalls have transverse and longitudinal cracking with minor spalling that is visible from the driving surface of the deck. Maintenance forces have sealed the majority of the cracks since the last inspection. -Abutment # 1 has 2 spalls with exposed reinforcing steel at the base of the back wall adjacent to Beam # 3 and 1 spall with exposed reinforcing steel at beam # 5. Exposed reinforcing steel has active corrosion with very little concrete cover from the construction process. -Abutment # 1 is map cracked at the ends of the abutment cap. -Abutment # 2 is mostly map cracked. -Maintenance forces have painted over the map cracking in the ends of abutment # 2 cap in the past as type of repair. -Vertical cracking and staining typical in back walls from apparent joint leakage.							
234	Reinforced Concrete Pier Cap	LF	83	82	1	0	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
(234) -Bent # 3 cap texicoat is beginning to peel. -Bent #3 Lt end of the cap is cracking.							



Asset #A6242(Routine)

I 49 SB LNS over W Wilson St -Washington

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## Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation



Roadway



Typical driving surface of the deck.



Span #2 typical undersurface of the deck.





Span #3 typical undersurface of the deck.



South approach roadway joint seal missing and fractured concrete slabs.



Failing saw joint sealant.



Abutment #2 typical.





Abutment #1 top of back wall cracks sealed.



Abutment #2 top of back wall cracks sealed.



Abutment #1 road iron compression joint seal support fractured loose and dropped down out of position.



Abutment #2 compression joint seal.





Abutment #2 road iron compression joint seal support fractured loose and dropped down out of position.



Abutment #1 bearings have been painted.



Abutment #2 bearings mostly painted



Abutment #1 approach slab cracks sealed.





North approach slab cracking sealed.



Abutment #1 approach slab repairs.



Rt bridge rail cracking with efflorescence buildup.



Typical concrete bridge rail.





Asset #A6242(Routine)

I 49 SB LNS over W Wilson St -Washington

Location: JCT I 49 & CO RD 26

Team Lead: Eric West, Inspection Date: 07/19/2022

#### Maintenance Needs

Date Reported: 07/20/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Approach

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#### Deficiency Description

Approach Roadway-

The south approach roadway has joint sealant missing between the approach slab and the roadway slabs.

The approach roadway concrete slabs are cracking and settling.

#### Remarks

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South approach roadway joint seal missing and fractured concrete slabs.

### Maintenance Needs

Date Reported: 06/15/2018

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Element

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### Deficiency Description

The South approach slab has several large spalls adjacent to the abutment backwall. The most extreme area is in the outside lane with a 7' long x 10" wide spall.

### Remarks

07/19/2022 - EJW - Maintenance forces have made epoxy repairs to the spalling.

7/1/2020 - CD - Temporary patched with HPM by crew 04172. Priority lowered from an A to a B.

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Abutment #1 approach slab repairs.



The South approach slab has several large spalls adjacent to the abutment backwall. The most extreme area is in the outside lane with a 7' long x 10" wide spall.



The South approach slab spall temporarily patched with HPM 7/1/20.



### Maintenance Needs

Date Reported: 06/14/2018

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

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### Deficiency Description

Expansion joint seals -

The expansion joint seals at both abutments are protruding above the bridge deck. The joint seals have areas that are torn. Staining on the abutments indicate the joint seals leak.

### Remarks

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Abutment 1 expansion joint seal in left shoulder protruding above assembly.



**Maintenance Needs**

**Date Reported:** 07/30/2012

**Priority:** D- Routine

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

**Status:** Monitor

**Component:** Element

---

**Deficiency Description**

R. C. Deck -

The transverse saw joints in the deck have areas where the sealant is missing.

Metal SIP Forms have areas with active corrosion.

**Remarks**

07/19/2022 - EJW - maintenance forces have sealed the cracking in the travel lanes. Deficiency description updated to reflect current conditions.

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Sawn joint sealant missing.



Span 1, left lane-Longitudinal cracking.



Span 3, left lane-Mapcracking.

#### Maintenance Needs

Date Reported: 07/30/2012

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

---

#### Deficiency Description

Superstructure -

The exterior beams have areas that are chalking that expose the primer coat.

There is minor active corrosion at the ends of the beams where the expansion joint seals at the abutments leak.

#### Remarks

07/19/2022 - EJW - maintenance forces have applied rust inhibitor to the corrosion at the beam ends.

---



Right side



Abutment #1 beam #1 rust inhibitors applied to areas of active corrosion.



#### Maintenance Needs

Date Reported: 06/14/2018

Priority: D- Routine

Type of Work: Repair (General)

Status: Repair Documented

Component: Element

---

#### Deficiency Description

Bearings -

Some of the bearings at the abutments have active corrosion between the rocker and the masonry plate.

#### Remarks

07/19/2022 - EJW - maintenance forces have painted the bearings and masonry plates.

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Abutment #2 bearings mostly painted



Abutment #1 bearings have been painted.



Some of the bearings at the abutments have active corrosion between the rocker and the masonry plate.



### Maintenance Needs

Date Reported: 07/20/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Element

---

### Deficiency Description

Expansion Joint-

The expansion joints have sections of metal that help support the compression joint seal that have fractured and dropped out of position from inside the joint.

### Remarks

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Abutment #2 road iron compression joint seal support fractured loose and dropped down out of position.



Abutment #1 road iron compression joint seal support fractured loose and dropped down out of position.



Asset #A6242(Routine)

I 49 SB LNS over W Wilson St -Washington

Location: JCT I 49 & CO RD 26

Team Lead: Eric West, Inspection Date: 07/19/2022

#### Maintenance Needs

Date Reported: 06/18/2020

Priority: (Inactive) (Inactive) G - General/  
Preventive maintenance

Status: RepairDocumented

Type of Work: Repair (General)

Component: Element

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#### Deficiency Description

Approach slabs -  
The North and South approach slabs have sealable cracking.

#### Remarks

07/19/2022 - EJW - maintenance forces have sealed the cracks in the approach slabs.

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The approach slabs have sealable cracking .



Asset #A6242(Routine)

I 49 SB LNS over W Wilson St -Washington

Location: JCT I 49 & CO RD 26

Team Lead: Eric West, Inspection Date: 07/19/2022

## 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	





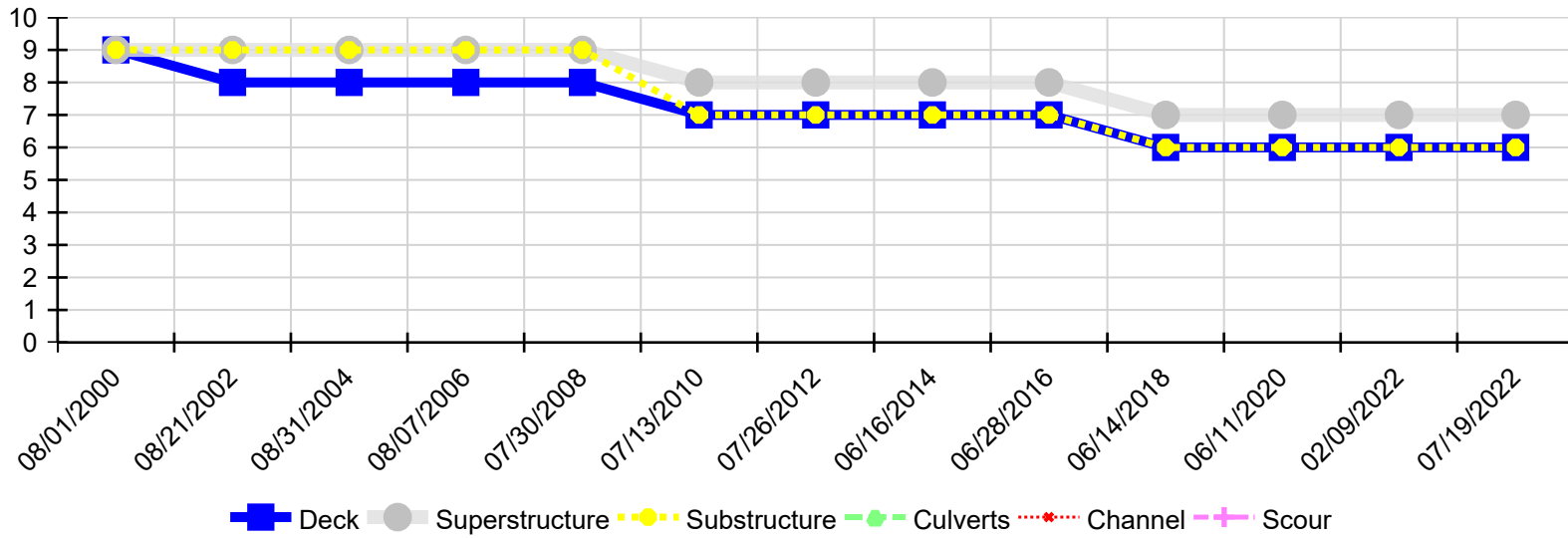
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Location: JCT I 49 & CO RD 26

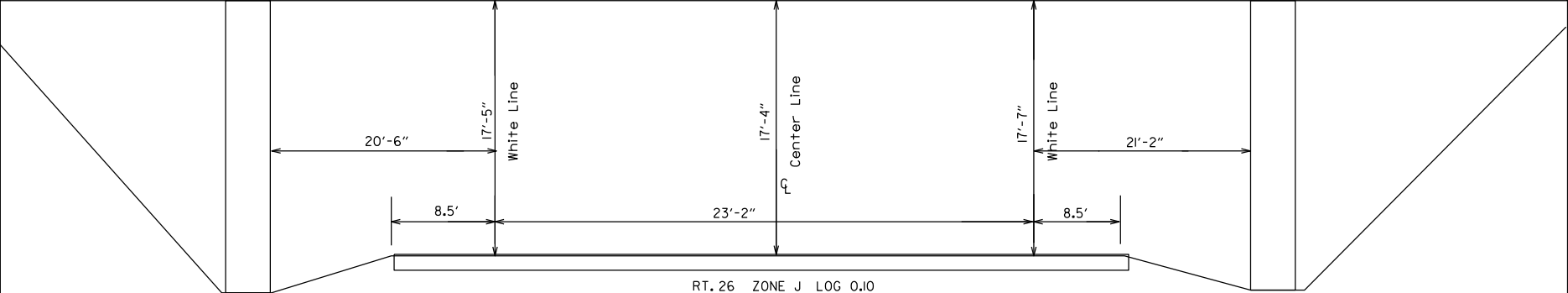
Team Lead: Eric West, Inspection Date: 07/19/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/19/2022	6	7	6	N	N	N
02/09/2022	6	7	6	N	N	N
06/11/2020	6	7	6	N	N	N
06/14/2018	6	7	6	N	N	N
06/28/2016	7	8	7	N	N	N
06/16/2014	7	8	7	N	N	N
07/26/2012	7	8	7	N	N	N
07/13/2010	7	8	7	N	N	N
07/30/2008	8	9	9	N	N	N
08/07/2006	8	9	9	N	N	N
08/31/2004	8	9	9	N	N	N
08/21/2002	8	9	9	N	N	N
08/01/2000	9	9	9	N	N	N

RT. 49 SEC. 28 LOG: 57.88 BR \*A6242



RT. 26 ZONE J LOG 0.10  
Looking East

Bent#3

Bent#2

Insp. EJW&JPW

Date 07/9/2022

BRIDGE INSPECTION REPORT FORM III

Dist. 4 Co. 72 Rt. 540 Sec. 4 Log 57.88 Br. No. A6242