



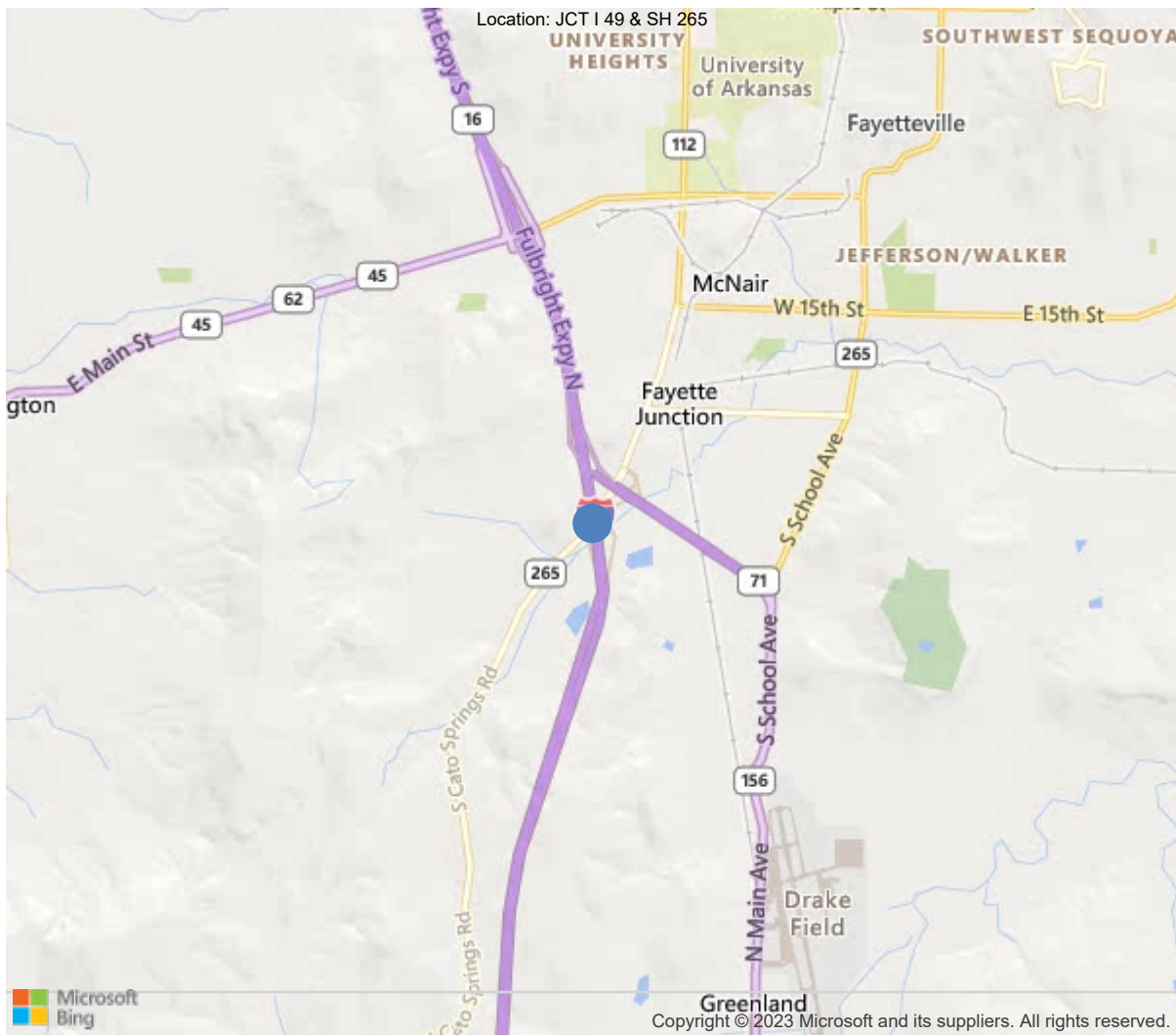
Latitude:36.03333, Longitude:-94.18820

Route:49 Section:28 Log:60.5

Arnold Road ID:72x49x28xB, Arnold Log mile:30.886

District 04, 143 - Washington County

Owner: 1 - State Highway Agency



36.03333, -94.18820



Asset #A6243(Routine)

I-49 SB LNS over State Highway 265

Location: JCT I 49 & SH 265

Team Lead: Eric West, Inspection Date: 07/18/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A6243
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	143 - Washington County
(4) Place Code	0
(6) Features Intersected	State Highway 265
(7) Facility Carried	I-49 SB LNS
(9) Location	JCT I 49 & SH 265
(11) Mile Point	60.5 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000049080
(16) Latitude	36.03333
(17) Longitude	-94.1882
(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	16056
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	100 ft
(49) Structure Length	243 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	45 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	17.58 ft
Ref:	
(55) Min Lat Underclear RT	20.7 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	23910
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	07/18/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<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>			



General Observation

07/18/2022 - EJW & JPW - Routine Inspection conducted on this date.

06/29/2020 - 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. NBIS Condition Rating for item "59" lowered from "8" to "7" due to minor longitudinal movement of the Superstructure causing beams to make contact with the South abutment backwall. The movable bearings at abutments are expanded to a point that is not consistent with the Ambient temperature.

06/26/2018 - TJL - Elements were plan verified on this date.

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

NBIS Condition Rating for item "59" lowered from "8" to "7" due to minor longitudinal movement of the Superstructure causing beams to make contact with the South abutment backwall. The movable bearings at abutments are expanded to a point that is not consistent with the Ambient temperature.

A-15 - Late Reason (Optimize Schedule)

07/18/2022 - EJW - Structure inspected late due to heavy work load.

A-46 - Asset Files

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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	10280	8510	1616	154	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1130	Cracking (RC and Other)	SF	1286	0	1132	154	0
1190	Abrasion/Wear (PSC/RC)	SF	482	0	482	0	0
(12) -The driving surface of the deck has sealable transverse, longitudinal, and map cracking in all spans. -There are a couple of softball sized spalls with temporary asphalt patches adjacent to the expansion joint at abutment # 1.							
107	Steel Open Girder/Beam	LF	1200	712	486	2	0
1000	Corrosion	LF	488	0	486	2	0
515	Steel Protective Coating	SF	17195	15237	0	1928	30
3410	Chalking (Steel Protective Coatings)	LF	1928	0	0	1928	0
3420	Peeling/Bubbling/Cracking	LF	30	0	0	0	30
(107) -The exterior surface of beam # 1 paint system is chalking in areas that expose the primer undercoat. -There is minor rust at the ends of the beams adjacent to the backwalls and along the bottom flanges of the exterior beams. The most extreme case is Beam # 2 of Span # 1 at abutment # 1 which has corrosion with flaking rust to the upper portion of web behind bearing area. -Abutment # 1 backwall appears to have been constructed with a bulge in the concrete behind Beam # 4 (Appears to be poor alignment in the construction formwork). Beam # 4 makes contact with the backwall in the bulged area. There is no apparent spalling or cracking at the point of contact. -Span # 2 Beam # 1 over Eastbound lane has an insignificant scrape marks to undersurface of bottom flange. -Span # 3 Beam # 1 bottom flange has insignificant scrape marks. -No visible cracks in the steel beams.							
205	Reinforced Concrete Column	EA	8	3	5	0	0
1130	Cracking (RC and Other)	EA	5	0	5	0	0
(205) -Bent # 2 columns have short vertical hairline cracks at revetment level. -Bent # 3 column # 4 has several vertical cracks in the exterior face.							
215	Reinforced Concrete Abutment	LF	160	79	76	5	0
1080	Delamination/Spall/Patched Area	LF	18	0	18	0	0
1130	Cracking (RC and Other)	LF	67	4	58	5	0
(215) -There is hairline map cracking visible in the ends of both abutments. -Abutment # 1 backwall appears to have been constructed with a bulge in the concrete behind Beam # 4 (Appears to be poor alignment in the construction formwork). Beam # 4 makes contact with the backwall in the bulged area. There is no apparent spalling or cracking at the point of contact. -There are no apparent changes since last inspection. -There are 2 softball sized spalls with no exposed reinforcing steel in the Right side of abutment # 1 adjacent to the drainage trough visible from the undersurface of the deck. -There are shallow spalls in the top of abutment # 1 backwall adjacent to the sliding plate anchorage where Maintenance Forces have made repairs in the past. -Abutments have transverse hairline cracks in the top of the backwalls visible from the driving surface of the deck. The top of back walls at both abutments have several areas of longitudinal cracking. Cracking is moderate width in some locations. -Abutment # 2 Lt cap has map cracking adjacent to beam #1 and a horizontal crack below the expansion joint in the backwall.							



Asset #A6243(Routine)

I-49 SB LNS over State Highway 265

Location: JCT I 49 & SH 265

Team Lead: Eric West, Inspection Date: 07/18/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
234	Reinforced Concrete Pier Cap	LF	112	105	4	3	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	6	0	3	3	0
(234) Bent # 2 - -Bent #2 cap has map cracking in both ends of the cap. -Bent #2 cap has a longitudinal hairline crack visible from the undersurface of the cap between Columns # 2 & 3. Bent # 3 - -Bent #3 has a 3" spall and map cracking in the Left end of the cap.							
305	Assembly Joint without Seal	LF	114	114	0	0	0
(305) -Stains on abutment # 1 indicate that the drainage trough leaks. -There are spalls that expose the anchorage adjacent to the sliding plate in the abutment # 1 backwall. -Sliding plate repairs appear to be holding at this inspection and appear to sound normal when impacted by traffic during this inspection.							
311	Movable Bearing	EA	10	0	5	5	0
1000	Corrosion	EA	9	0	4	5	0
1020	Connection	EA	1	0	1	0	0
515	Steel Protective Coating	SF	40	21	2	2	15
3440	Effectiveness (Steel Protective Coatings)	EA	19	0	2	2	15
(311) -There is light rust on the masonry plates at both abutments. -The expansion bearings are still at various stages of expansion. See history for additional information. -Bearings at abutment # 1 appear to transition from normal at Beam # 1 to fully expanded at Beam # 5. -The bolts that attach the beams to the rocker portion of bearings are not fully seated in some locations. -Abutment #1 bearings # 2, 3 & 5 have active corrosion with pack rust on the base of the rocker and masonry plate. -Abutment #2 bearings # 2 & 3 have active corrosion with pack rust in the masonry plate.							
313	Fixed Bearing	EA	10	5	5	0	0
1000	Corrosion	EA	2	0	2	0	0
1020	Connection	EA	3	0	3	0	0
515	Steel Protective Coating	SF	50	50	0	0	0
(313) -The fixed bearings at Bents # 2 & 3 have no apparent noteworthy deficiencies during this inspection. -The bolts that attach the beams to the bearings are not fully seated in some locations.							
321	Reinforced Concrete Approach Slab	SF	1680	1117	534	29	0
1080	Delamination/Spall/Patched Area	SF	1	0	1	0	0
1130	Cracking (RC and Other)	SF	480	0	451	29	0
1190	Abrasion/Wear (PSC/RC)	SF	82	0	82	0	0
(321) -Sealable map cracking typical in both approach slabs. -Approach slabs have areas of wide transverse cracks.							
331	Reinforced Concrete Bridge Railing	LF	480	1	62	417	0
1130	Cracking (RC and Other)	LF	479	0	62	417	0
1234	ASR	LF	1	1	0	0	0

Team Lead: Eric West, **Inspection Date:** 07/18/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	<p>(331) -Previous documentation indicates that the parapet walls have been sand blasted and sealed under contract in the past. Open mapcracking is visible throughout the left and right parapets at this inspection.</p> <p>-Left parapet has scuff marks the entire length of parapet.</p> <p>Approach railing:</p> <p>-The Northeast transition parapet appears to be constructed with poor quality concrete. The parapet has soft deteriorated concrete with numerous areas of spalling.</p>						

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	10280	8510	1616	154	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1130	Cracking (RC and Other)	SF	1286	0	1132	154	0
1190	Abrasion/Wear (PSC/RC)	SF	482	0	482	0	0
(12) -The driving surface of the deck has sealable transverse, longitudinal, and map cracking in all spans. -There are a couple of softball sized spalls with temporary asphalt patches adjacent to the expansion joint at abutment # 1.							

**Superstructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	1200	712	486	2	0
1000	Corrosion	LF	488	0	486	2	0
515	Steel Protective Coating	SF	17195	15237	0	1928	30
3410	Chalking (Steel Protective Coatings)	LF	1928	0	0	1928	0
3420	Peeling/Bubbling/Cracking	LF	30	0	0	0	30
<p>(107) -The exterior surface of beam # 1 paint system is chalking in areas that expose the primer undercoat.</p> <p>-There is minor rust at the ends of the beams adjacent to the backwalls and along the bottom flanges of the exterior beams. The most extreme case is Beam # 2 of Span # 1 at abutment # 1 which has corrosion with flaking rust to the upper portion of web behind bearing area.</p> <p>-Abutment # 1 backwall appears to have been constructed with a bulge in the concrete behind Beam # 4 (Appears to be poor alignment in the construction formwork). Beam # 4 makes contact with the backwall in the bulged area. There is no apparent spalling or cracking at the point of contact.</p> <p>-Span # 2 Beam # 1 over Eastbound lane has an insignificant scrape marks to undersurface of bottom flange.</p> <p>-Span # 3 Beam # 1 bottom flange has insignificant scrape marks.</p> <p>-No visible cracks in the steel beams.</p>							

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Comment: NBIS Condition Rating for item "59" lowered from "8" to "7" due to minor longitudinal movement of the Superstructure causing beams to make contact with the South abutment backwall. The movable bearings at abutments are expanded to a point that is not consistent with the Ambient temperature.

Substructure

[illegible]



Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
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Elevation



Roadway



Typical undersurface of the deck.



Typical driving surface of the deck.



Sealable deck cracking.



Failed saw joint sealant.



Span #2 beam #1 scrape marks on the undersurface of the bottom flange with no visible cracks.



Chalked paint system.



Abutment # 1 typical.



Bent #3 Lt cap map cracking.



Abutment #1 sliding plate.



Abutment #2 sliding plate.



Abutment #1 bearing #2 active corrosion with pack rust.



South approach slab wide transverse cracks.



North approach slab cracking.



Typical bridge rail map cracking.



Maintenance Needs

Date Reported: 07/19/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Element

Deficiency Description

Moveable Bearings-

The bearings at the abutments have active corrosion with pack rust.

Remarks



Abutment #1 bearing #2 active corrosion with pack rust.

Maintenance Needs

Date Reported: 07/01/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Northeast transition parapet -

The Northeast transition parapet appears to be constructed with poor quality concrete. The parapet has soft deteriorated concrete with numerous areas of spalling.

Remarks



The Northeast transition parapet appears to be constructed with poor quality concrete. The parapet has soft deteriorated concrete with numerous areas of spalling.

Maintenance Needs

Date Reported: 06/04/2014

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Abutments -

There are shallow spalls with temporary patches in the top of abutment # 1 backwall adjacent to the sliding plate anchorage where maintenance forces have made repairs in the past.

The top of both abutment backwalls have longitudinal cracking.

Remarks



Abutment 1-Longitudinal cracking in top of backwall.



Abutment 1 backwall-Spalling with longitudinal cracking.

Maintenance Needs

Date Reported: 08/01/2012

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Superstructure -

The paint system on the exterior beams is chalking in areas that expose the primer undercoat. There is minor rust at the ends of the beams adjacent to the backwalls. The most notable area is Beam # 2 of Span # 1 at abutment # 1 which has corrosion with flaking rust to the upper portion of web behind bearing area.

Remarks



The paint system on the exterior beams is chalking in areas that expose the primer undercoat.



Span 1, Beam # 2 at abutment # 1 has corrosion with flaking rust to the upper portion of web behind bearing area.

Maintenance Needs

Date Reported: 08/01/2012

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

R.C. Deck -

The driving surface of the deck has sealable cracking in all spans.

Remarks



Span 1-Cracking in wheel path.



Span 1, left lane-Transverse cracking.

Maintenance Needs

Date Reported: 07/20/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Element

Deficiency Description

R.C. Approach Slabs-
The approach slabs have sealable cracking.

Remarks



South approach slab wide transverse cracks.



North approach slab cracking.



Asset #A6243(Routine)

I-49 SB LNS over State Highway 265

Location: JCT I 49 & SH 265

Team Lead: Eric West, Inspection Date: 07/18/2022

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	



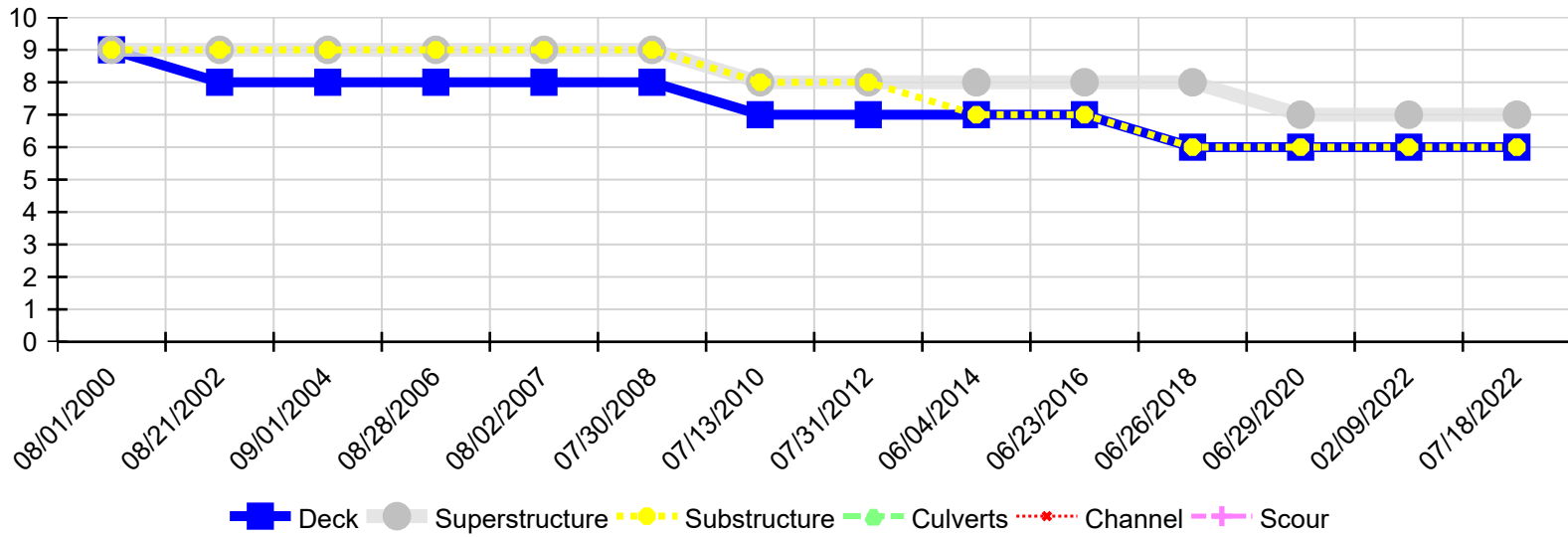
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I-49 SB LNS over State Highway 265

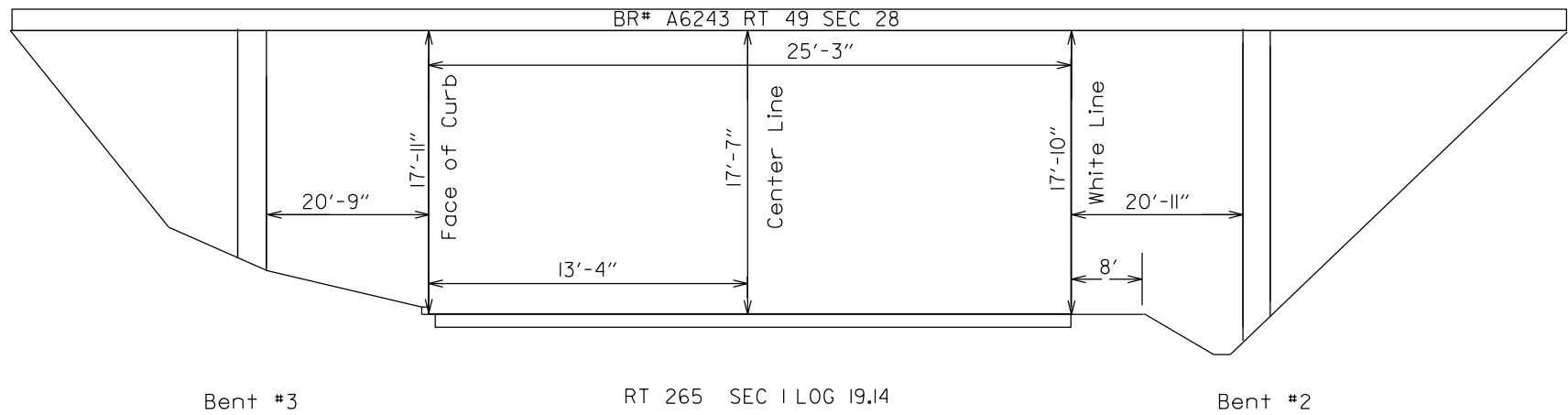
Location: JCT I 49 & SH 265

Team Lead: Eric West, Inspection Date: 07/18/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/18/2022	6	7	6	N	N	N
02/09/2022	6	7	6	N	N	N
06/29/2020	6	7	6	N	N	N
06/26/2018	6	8	6	N	N	N
06/23/2016	7	8	7	N	N	N
06/04/2014	7	8	7	N	N	N
07/31/2012	7	8	8	N	N	N
07/13/2010	7	8	8	N	N	N
07/30/2008	8	9	9	N	N	N
08/02/2007	8	9	9	N	N	N
08/28/2006	8	9	9	N	N	N
09/01/2004	8	9	9	N	N	N
08/21/2002	8	9	9	N	N	N
08/01/2000	9	9	9	N	N	N



LOOKING EAST

BRIDGE INSPECTION REPORT FORM III

Insp. EJW&JPW
 Date 07/18/2022

Dist. 4 Co. 72 Rt. 49 Sec. 28 Log 60.50 Br. No. A6243