



Latitude:35.12553, Longitude:-90.29312

Route:147 Section:01 Log:13.85

Arnold Road ID:18x147x1xA, Arnold Log mile:13.851

District 01, 35 - Crittenden County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

Bridge Posting Information

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

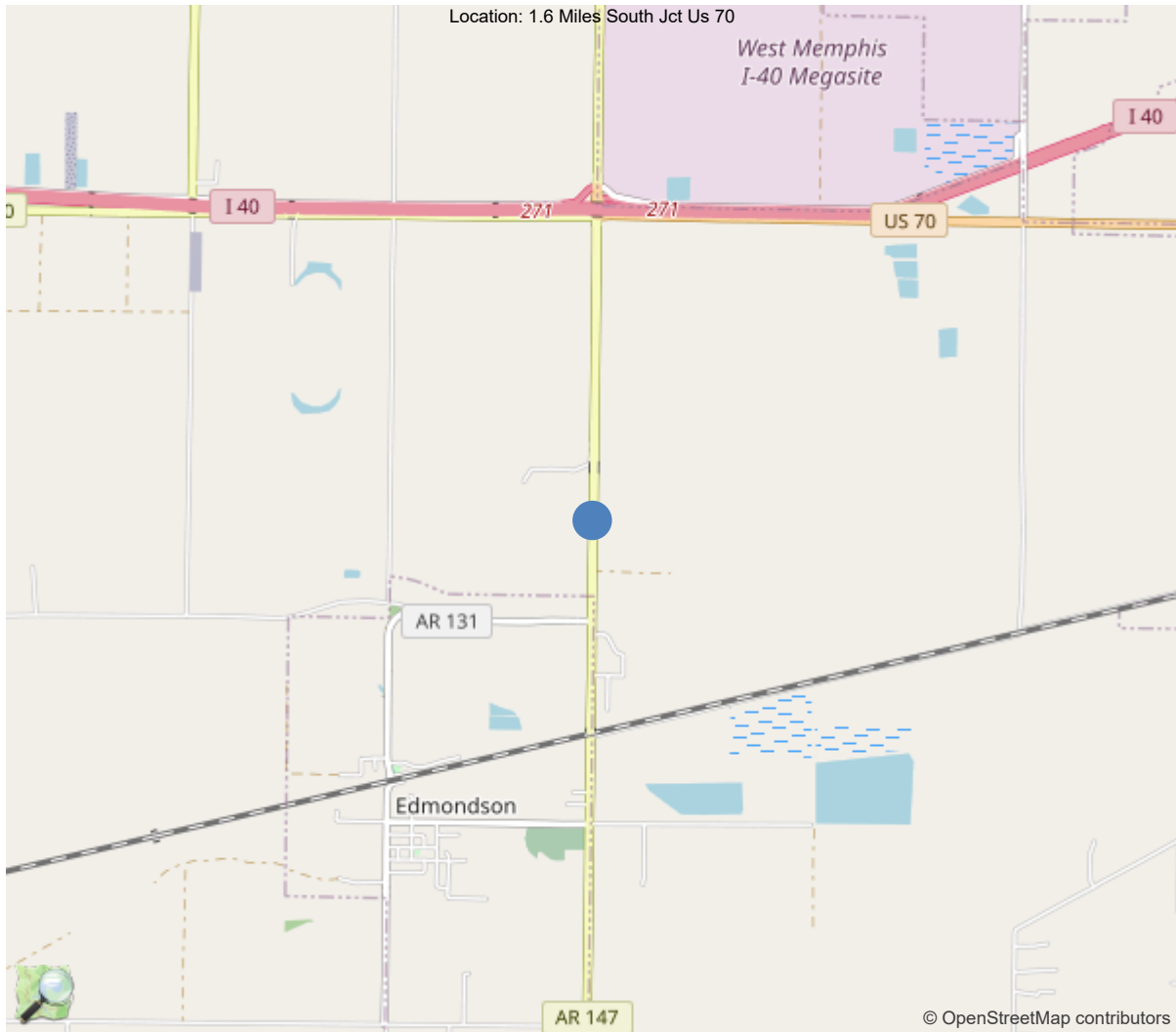
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	60		

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



35.12553, -90.29312



Asset #05135(Routine, Underwater type 2)

Sh-147/Sec1/L13.85 over Ditch Number 50

Location: 1.6 Miles South Jct Us 70

Team Lead: Drew Melton Inspection Date: 01/08/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05135
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	35 - Crittenden County
(4) Place Code	0
(6) Features Intersected	Ditch Number 50
(7) Facility Carried	Sh-147/Sec1/L13.85
(9) Location	1.6 Miles South Jct Us 70
(11) Mile Point	13.85 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000147010
(16) Latitude	35.12553
(17) Longitude	-90.29312
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(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	3 - Latex Concrete or similar additive
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1969
(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	3100
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	75 ft
(50) Curb or Sidewalk Width	
Left	0.4 ft
Right	0.4 ft
(51) Bridge Roadway Width Curb to Curb	43.3 ft
(52) Deck Width Out to Out	46.2 ft
(32) Approach Roadway Width (W/Shoulders)	48 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	43.3 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 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	6 - Rural Minor Arterial
(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	6
(59) Superstructure	6
(60) Substructure	7
(61) Channel & Channel Protection	5
(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	
(68) Deck Geometry	6
(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	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined to
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	4079
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	01/08/2024		
(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 #05135(Routine, Underwater type 2)

Sh-147/Sec1/L13.85 over Ditch Number 50

Location: 1.6 Miles South Jct Us 70

Team Lead: Drew Melton **Inspection Date:** 01/08/2024

General Observation

Drawing # 13833, 13835, 15102,A.

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Deck is a slab so deck and superstructure is rated the same. Deck is in satisfactory condition with a hydro blasted deck with soffit-under surface having large delaminated areas and cracks.

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Superstructure is a slab so deck and superstructure is rated the same. Superstructure is in satisfactory condition with cracks in the sides of the slab.

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

Substructure is in good condition with minor spalls and delaminations on caps.

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

Channel has good alignment with structure. Banks have areas of erosion and slumping including abutment slopes. Channel has debris restrictions causing water flow restrictions.

Bent #3 slope is eroded to a vertical face exposing pile #2,3 up to four feet.
Abutment #1 slope as eroded within two feet of abutment #1.

A-55 - Deck Washing Needed (Y)

Gutters have dirt and debris in them.

A-63 - Missing/Incorrect Log Mile Signage (Y)

Log mile signs are incorrect should read Sh-147, Section-1, Log mile 13.85.

A-64 - Vegetation Removal Requested (Y)

Vegetation is growing under and beside bridge left and right sides.



Asset #05135(Routine, Underwater type 2)

Sh-147/Sec1/L13.85 over Ditch Number 50

Location: 1.6 Miles South Jct Us 70

Team Lead: Drew Melton Inspection Date: 01/08/2024

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	3468	2936	450	82	0
1080	Delamination/Spall/Patched Area	SF	332	0	330	2	0
1120	Efflorescence/Rust Staining	SF	110	0	30	80	0
1130	Cracking (RC and Other)	SF	90	0	90	0	0
(38) Soffit-under surface all spans have several open longitudinal cracks with areas of light to moderate efflorescence and rust staining. Soffit-under surface has some graffiti on it. Span #1 soffit-under surface has two four foot wide by twenty foot long delaminated areas left and right of center line. Span #3 soffit-under surface has a two foot wide by twenty foot long delaminated area near center line. Span #1 slab right side at bent #2 has vertical crack and minor spalling at end of slab.							
215	Reinforced Concrete Abutment	LF	100	85	15	0	0
6000	Scour	LF	15	0	15	0	0
(215) Abutment #1 cap left side undermined up to four inches for fifteen feet exposing pile #1.							
227	Reinforced Concrete Pile	EA	11	11	0	0	0
(227) Abutment #1 cap left side undermined up to four inches for fifteen feet exposing pile #1							
234	Reinforced Concrete Pier Cap	LF	93	87	0	6	0
1080	Delamination/Spall/Patched Area	LF	3	0	0	3	0
1090	Exposed Rebar	LF	3	0	0	3	0
(234) Bent #2 cap has a 6" delaminated area over pile #3 ahead face. Bent #3 cap on left end has a three foot spall with exposed rebar with minor section loss area on back face. Bent #3 cap back face near centerline has two one foot spalls with no exposed rebar.							
301	Pourable Joint Seal	LF	185	185	0	0	0
330	Metal Bridge Railing	LF	150	150	0	0	0



Side view-elevation



Typical soffit-under surface



Typical deck



Abutment #2 slope



Abutment #1 slope



Channel under bridge



Channel left side



Channel right side



Top view-inventory



Typical debris in gutters



Typical log mile sign



Typical trees and vegetation.



Span #3 soffit-under surface delaminated area



Soffit-under surface has some graffiti on it.



Span #1 soffit-under surface delaminated areas.



Span #1 slab right side at bent #2 has vertical crack and minor spalling at end of slab



Bent #3 cap back face

Maintenance Needs

Date Reported: 01/19/2016

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Channel

Deficiency Description

Bent #3 slope is eroded to a vertical face exposing pile #2,3 up to four feet.
Abutment #1 slope as eroded within two feet of abutment #1.

Remarks



Erosion at bent #3.



Abutment #1 slope erosion.



Bent #3 slope erosion.

Maintenance Needs

Date Reported: 01/18/2016

Priority: C - Important

Type of Work: Repair (General)

Status: Repair Documented

Component: Element

Deficiency Description

Joint material has failed allowing non-compressibles to enter.

Remarks

01/08/2024 Joints have been replaced since last inspection



Joints have been replaced since last inspection.



Bent #2 joint



Bent #3 joint



Typical joint

Maintenance Needs

Date Reported: 01/10/2020

Priority: C - Important

Type of Work: Repair (General)

Status: Repair Documented

Component: Deck

Deficiency Description

Span #2 has a one foot by four foot spall with no exposed rebar in left lane at bent #2.
Span #2 mid span, right lane has 1' x 2' spall in deck.

Remarks

01/08/2024 Deck has been replaced since last inspection.



01/09/2024

Deck has been replaced since last inspection



01/03/2022

Span #2 bent #2 left lane spalled one foot by four feet



01/03/2022

Span #2 right lane mid span has one foot by two foot spall.



01/03/2022

Span #2 bent #2 left lane spalled one foot by four feet



Span #2 has a two foot spall with no exposed rebar in left lane at bent #2.

Maintenance Needs

Date Reported: 01/04/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Abutment #1 right approach rail has collision damage.

Remarks



Abutment #1 right approach rail

Maintenance Needs

Date Reported: 01/04/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Channel

Deficiency Description

Abutment #1 cap left side undermined up to four-inches for fifteen-feet exposing pile #1

Remarks



Abutment #1 cap left side undermined up to four inches
for fifteen feet exposing pile #1



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Sh-147/Sec1/L13.85 over Ditch Number 50

Location: 1.6 Miles South Jct Us 70

Team Lead: Drew Melton Inspection Date: 01/08/2024

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	Yes
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	Yes
A-64 - Vegetation Removal Requested	Yes

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed (Yes)

Gutters have dirt and debris in them.



Typical debris in gutters

A-56 - Joint Cleaning/Flushing Needed

A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed

A-60 - Full Girder Painting Needed

A-61 - Polymer Overlay Advised

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage (Yes)

Log mile signs are incorrect should read Sh-147, Section-1, Log mile 13.85.



Typical log mile sign

A-64 - Vegetation Removal Requested (Yes)

Vegetation is growing under and beside bridge left and right sides.



Typical trees and vegetation.



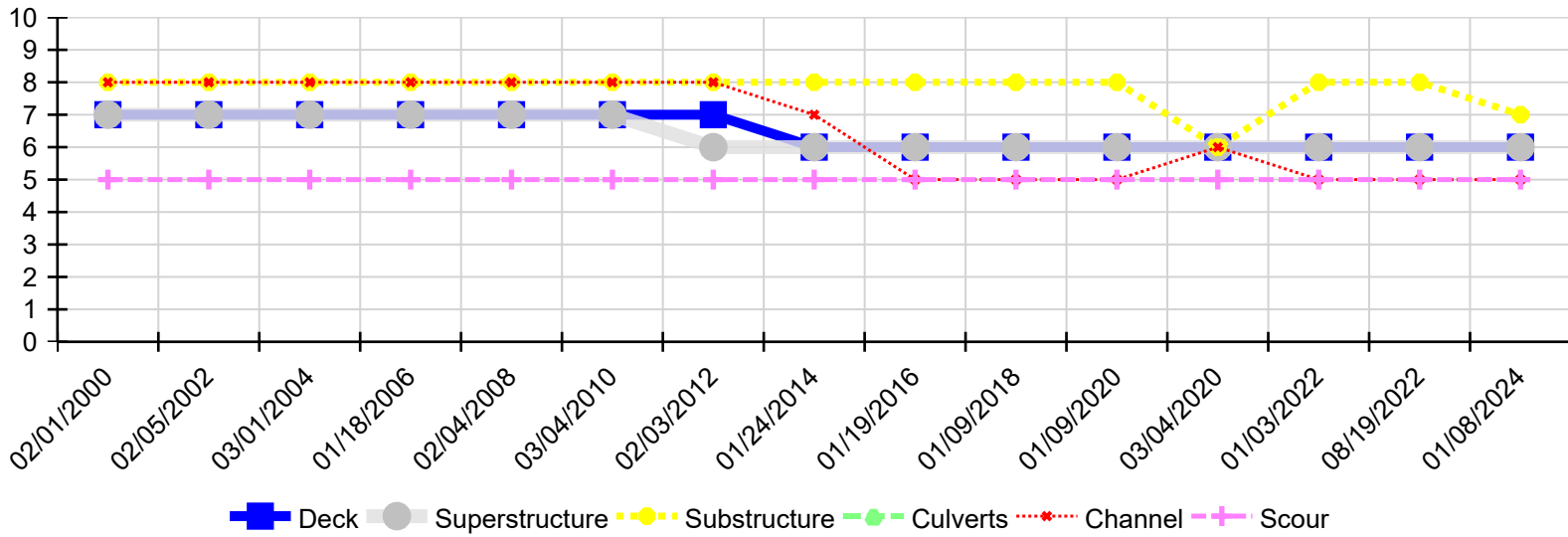
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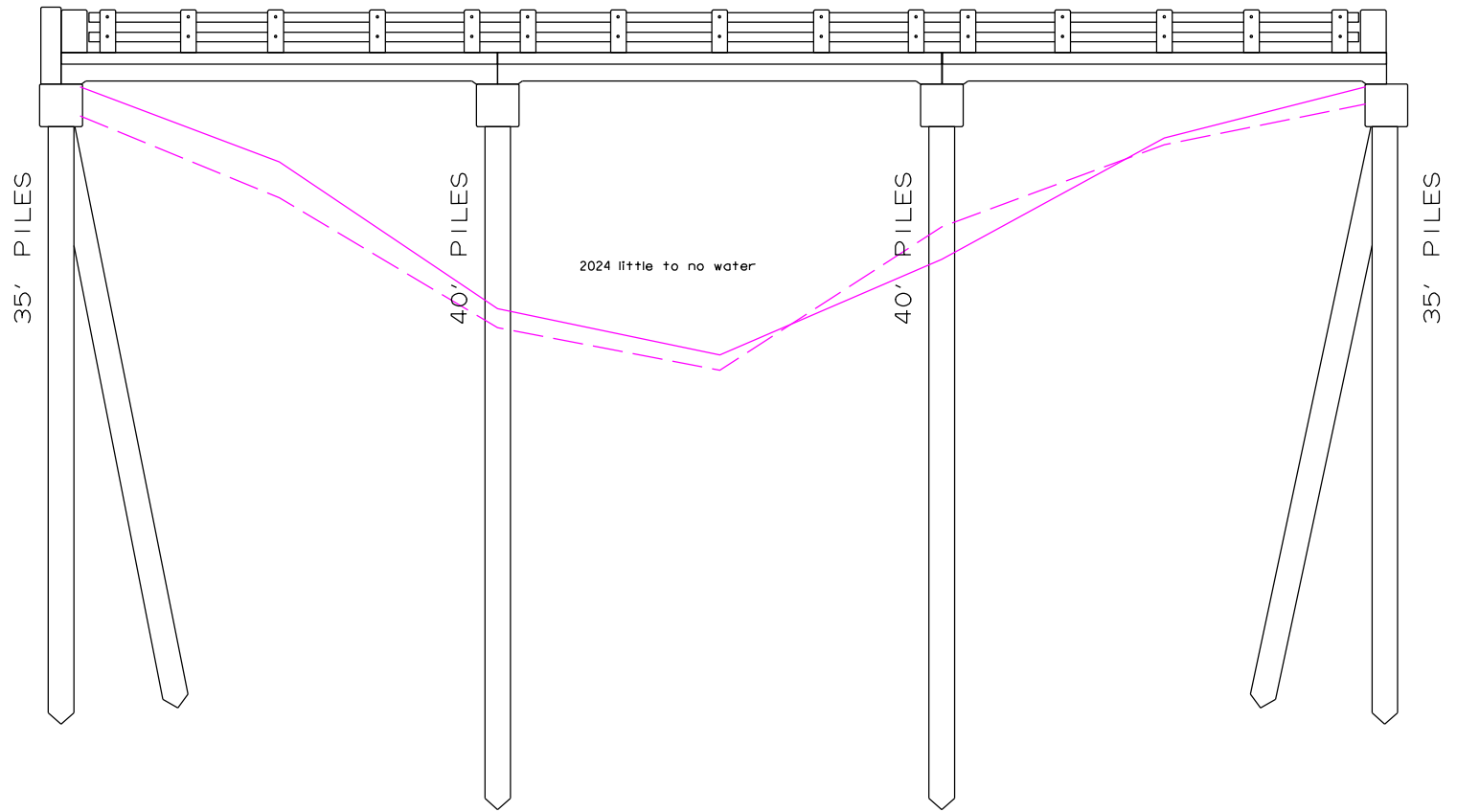
Team Lead: Drew Melton Inspection Date: 01/08/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
01/08/2024	6	6	7	N	5	5
08/19/2022	6	6	8	N	5	5
01/03/2022	6	6	8	N	5	5
03/04/2020	6	6	6	N	6	5
01/09/2020	6	6	8	N	5	5
01/09/2018	6	6	8	N	5	5
01/19/2016	6	6	8	N	5	5
01/24/2014	6	6	8	N	7	5
02/03/2012	7	6	8	N	8	5
03/04/2010	7	7	8	N	8	5
02/04/2008	7	7	8	N	8	5
01/18/2006	7	7	8	N	8	5
03/01/2004	7	7	8	N	8	5
02/05/2002	7	7	8	N	8	5
02/01/2000	7	7	8	N	8	5

READINGS TAKEN FROM SIDE OF BRIDGE, TOP OF BRIDGE RAIL



BENT #1 1/2 BENT #2 1/2 BENT #3 1/2 BENT #4

01/08/2024 Left 6.2' 11.0' 18.6' 21.1' 12.7' 7.9' 5.5'

01/08/2024 Right 4.5' 8.9' 17.5' 20.2' 14.6' 7.5' 4.5'