

Bridge B6816 Inspection Report



Latitude:33.38580, Longitude:-94.02679

Route:151 Section:00 Log:0.95

Arnold Road ID:46x151x0xA, Arnold Log mile:0.952

District 03, 91 - Miller County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

Bridge Posting Information

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

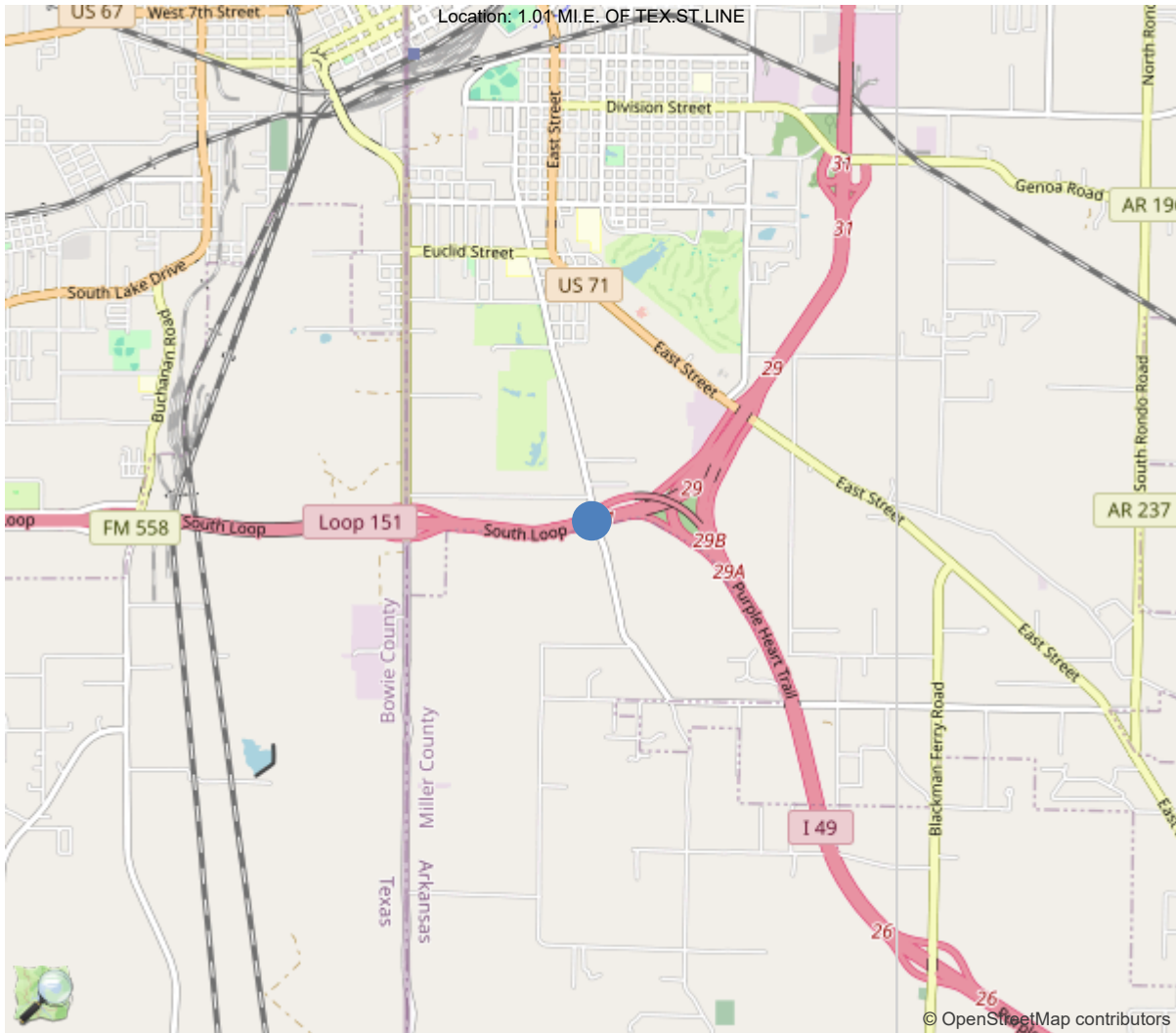
70 - Bridge Posting: 5 - Equal to or above legal loads

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



33.38580, -94.02679

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	B6816
(5) Inventory Route	1
(2) Highway Agency District	03 - District 03
(3) County Code	91 - Miller County
(4) Place Code	68810
(6) Features Intersected	LINE FERRY RD.
(7) Facility Carried	S.H.151 N.BND-0.95
(9) Location	1.01 MI.E. OF TEX.ST.LINE
(11) Mile Point	0.95 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.3858
(17) Longitude	-94.026787
(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	2002
(106) Year Reconstructed	0
(42) Type of Service	11
On	1 - Highway
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	3
Under	2
(29) Average Daily Traffic	6000
(30) Year of ADT	2018
(109) Truck ADT	14 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	69 ft
(49) Structure Length	180.4 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	51.1 ft
(52) Deck Width Out to Out	54.2 ft
(32) Approach Roadway Width (W/Shoulders)	54.1 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	51.1 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	20 ft
Ref:	
(55) Min Lat Underclear RT	25.2 ft
Ref:	
(56) Min Lat Underclear LT	21.6 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	12 - Urban Principal Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	R - The right structure of par
(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	7
(59) Superstructure	8
(60) Substructure	7
(61) Channel & Channel Protection	N
(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	5
(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	16500
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date			08/14/2024
(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.			

Team Lead: Jared Kegley, Inspection Date: 08/14/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	B6816
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	2002

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	91 - Miller County
B.L.03 Place Code	68810 - Texarkana
B.L.04 Highway Agency District	03 - District 03
B.L.05 Latitude	33.3858
B.L.06 Longitude	-94.026787
B.L.07 Border Bridge Number	
B.L.08 Border Bridge State or Country Code	
B.L.09 Border Bridge Insp. Resp.	
B.L.10 Border Bridge Designated Lead State	
B.L.11 Bridge Location	1.01 M.I.E. OF TEX.ST.LINE
B.L.12 Metropolitan Planning Organization	6

CLASSIFICATION	
B.CL.01 Owner	S01 - State transportation departme
B.CL.02 Maint. Responsibility	S01 - State transportation departme
B.CL.03 Federal or Tribal Land Access	N - Not Applicable
B.CL.04 Historic Significance	N - Bridge is not eligible for the
B.CL.05 Toll	N - Bridge does not carry a toll ro
B.CL.06 Emergency Evacuation Designation	

ROADSIDE HARDWARE	
B.RH.01A Bridge Railing Type	
B.RH.01B Bridge Railing Year (YY)	
B.RH.01C Bridge Railing Test Level	
B.RH.02A Transition Type	
B.RH.02B Transition Year (YY)	
B.RH.02C Transition Test Level	

BRIDGE GEOMETRY	
B.G.01 NBIS Bridge Length	176.3
B.G.02 Total Bridge Length	180.4
B.G.03 Max Span Length	68.9
B.G.04 Min Span Length	55.8
B.G.05 Bridge Width Out-to-Out	54.1
B.G.06 Bridge Width Curb-to-Curb	51.2
B.G.07 Left Curb or Sidewalk Width	0
B.G.08 Right Curb or Sidewalk Width	0
B.G.09 Approach Roadway Width	54.1

B.G.10 Bridge Median	0 - No median
B.G.11 Skew	0
B.G.12 Curved Bridge	N - Not curved
B.G.13 Max Bridge Height	24
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	9768.2

LOADS AND LOAD RATING	
B.LR.01 Design Load	HS20 - HS-20
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	LFR - Load Factor Rating
B.LR.05 Inventory Load Rating Factor	1
B.LR.06 Operating Load Rating Factor	1.67
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	N - NSTM inspection not required.
B.IR.02 Fatigue Details	N - No E/E' details
B.IR.03 UW Inspection Required	N - Underwater inspection not requi
B.IR.04 Complex Feature	N - Bridge does not have complex fe

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	7 - GOOD - Some minor defects.
B.C.02 Superstructure Condition	8 - VERY GOOD - Some inherent
B.C.03 Substructure Condition	8 - VERY GOOD - Some inherent
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	7 - GOOD - Some minor defects.
B.C.06 Bridge Railing Transitions Condition	7 - GOOD - Some minor defects.
B.C.07 Bridge Bearings Cond.	7 - GOOD - Some minor defects.
B.C.08 Bridge Joints Condition	7 - GOOD - Some minor defects.
B.C.09 Channel Condition Rating	N - NOT APPLICABLE - Bridge do
B.C.10 Channel Protection Condition	N - NOT APPLICABLE - Bridge do
B.C.11 Scour Condition Rating	N - Bridge does not cross over
B.C.12 Bridge Condition Classification	G - Good
B.C.13 Lowest Condition Rating	7 - GOOD - Some minor defects.
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
B.AP.02 Overtopping Likelihood	0 - Never
B.AP.03 Scour Vulnerability	
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	A - Seismic evaluation completed. B

Team Lead: Jared Kegley, **Inspection Date:** 08/14/2024

SPAN SETS			
M1			
B.SP.02 # of Spans	3	B.SP.08 Deck Interaction	CU - Composite - unshored cons
B.SP.03 # of Beam Lines	7	B.SP.09 Deck Material and Type	C01 - Reinforced concrete - ca
B.SP.04 Span Material	S02 - Steel - welded	B.SP.10 Wearing Surface	P01 - Polymer - epoxy
B.SP.05 Span Continuity	2 - Continuous	B.SP.11 Deck Protective System	CX - Coating - other
B.SP.06 Span Type	G02 - Girder/beam - I-shaped s	B.SP.12 Deck Reinforcing Protective System	C01 - Coating - epoxy coated
B.SP.07 Span Protective System	P01 - Patina - uncoated weathe	B.SP.13 Deck Stay-In-Place Forms	M01 - Metal

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	CX - Coating - other
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	P01 - Pile - steel H-shape
B.SB.04 Substructure Type	A02 - Abutment - stub	B.SB.07 Foundation Protective System	0 - None
P1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	CX - Coating - other
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	P01 - Pile - steel H-shape
B.SB.04 Substructure Type	B01 - Bent - column or open	B.SB.07 Foundation Protective System	0 - None

Team Lead: Jared Kegley, Inspection Date: 08/14/2024

HIGHWAY FEATURES

H1

B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	6000
B.F.03 Feature Name	S.H.151 N.BND-0.95	B.H.10 Annual ADTT	840
B.H.01 Functional Classification	2 - Principal Arterial - Other	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	T-U	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	Y - NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	1-T - TEMP - NHFN - 1 or 2 or	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID		B.H.16 Highway Max Usable Surface Width	51.5
B.H.07 LRS Mile Point	0.95	B.H.17 Bypass Detour Length	1
B.H.08 Lanes On Highway	3	B.H.18 Crossing Bridge Number	

H2

B.F.02 Feature Location	B - Below bridge	B.H.09 Annual ADT	361
B.F.03 Feature Name	LINE FERRY RD.	B.H.10 Annual ADTT	3
B.H.01 Functional Classification	5 - Major Collector	B.H.11 Year of Annual ADT	1987
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	19.9
B.H.03 NHS Designation	N - Non-NHS	B.H.13 Highway Min Vertical Clearance	19.9
B.H.04 National Highway Freight Network	N - Not on the NHFN	B.H.14 Highway Min Horizontal Clearance, Left	21.3
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	24.9
B.H.06 LRS Route ID		B.H.16 Highway Max Usable Surface Width	65.2
B.H.07 LRS Mile Point	4.53	B.H.17 Bypass Detour Length	0
B.H.08 Lanes On Highway		B.H.18 Crossing Bridge Number	

HIGHWAY ROUTES

Highway Parent	B.RT.01 Route Designation	B.RT.02 Route Number	B.RT.03 Route Direction	B.RT.04 Route Type	B.RT.05 Service Type
H1	1	151N	1-T - TEMP - One-way traffic - NB or EB or SB or WB	3 - State route	1 - Mainline
H2	1	33590	2-T - TEMP - Two-way traffic - NS or EW	5 - City street	1 - Mainline

OTHER FEATURES

B1

B.F.02 Feature Location	B - Below bridge	B.F.01A Feature Type	B - Urban feature
B.F.03 Feature Name	Line Ferry Rd		

POSTING STATUS DATA

B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date
PO - Permanent and Open	



Team Lead: Jared Kegley, Inspection Date: 08/14/2024

LOAD EVALUATION AND POSTING

B.EP.01 Legal Load Configuration	B.EP.02 Legal Load Rating Factor	B.EP.03 Posting Type	B.EP.04 Posting Value
----------------------------------	----------------------------------	-------------------------	--------------------------



Inspection Notes

General Observation

8/14/2024 - Routine inspection done by J. Kegley and T. Cook.

Tools Needed

Laser Measuring Device used to check clearances.

58 - Deck (7 - GOOD CONDITION - some minor problems.)

The deck rating is a 7 this inspection due to minor problems being present on the driving surface as well as the overhangs. The deck cracking that is located on the driving surface of the bridge deck has been sealed with a polymer overlay prior to this inspection. Both the right and left overhangs throughout all spans have various locations of minor efflorescence.

59 - Superstructure (8 - VERY GOOD CONDITION - no problems noted.)

The superstructure rating is an 8 this inspection due to no noteworthy defects being located to superstructure elements. The weathering steel beams are weathering properly per this inspection.

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

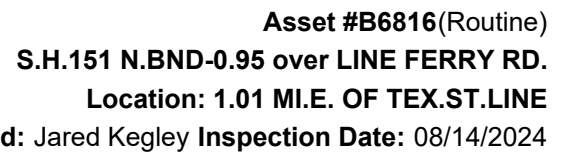
The substructure rating is a 7 this inspection due to various locations of cracking found throughout both the bents 1 & 4 abutments as well as throughout the concrete pier caps at intermediate bents 2 & 3.

A-53 - PermitHorizontalClearance (51.1)

curb to curb

B.IR.02 - Fatigue Prone Details (N)

Both outside beams have welded connections at diaphragms.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	9854	9814	40	0	0
1120	Efflorescence/Rust Staining	SF	40	0	40	0	0
1130	Cracking (RC and Other)	SF	200	200	0	0	0
510	Wearing Surfaces	SF	9345	9345	0	0	0
(12) Concrete bridge deck, Undersurface, Both right & left overhangs, Efflorescence, CS2, 40 Sq Ft							
(510-12) Concrete bridge deck, Driving surface, Cracking has been sealed per polymer overlay added per this inspection.							
107	Steel Open Girder/Beam	LF	1263	1263	0	0	0
515	Steel Protective Coating	SF	10632	10632	0	0	0
(107) 8/22 weathering steel beams are in very good condition							
205	Reinforced Concrete Column	EA	4	4	0	0	0
215	Reinforced Concrete Abutment	LF	130	123	7	0	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
(215) Bent 1 abutment, Cracking is located throughout various locations of the backwall, CS2, 2 LF							
Bent 4 abutment, Cracking is located throughout various locations of the backwall, CS2, 5 LF							
234	Reinforced Concrete Pier Cap	LF	108	105	3	0	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
(234) Concrete pier caps, Bents 2 & 3, Various locations of cracking, CS2, 3 LF							
302	Compression Joint Seal	LF	108.5	106.5	0	2	0
2330	Seal Damage	LF	2	0	0	2	0
(302) Compression joint seal, Beginning of bridge, Various locations of joint damage, CS3, 2 LF							
310	Elastomeric Bearing	EA	28	28	0	0	0
(310) 8/22 bearings are in good shape							
321	Reinforced Concrete Approach Slab	SF	3500	3499	1	0	0
1080	Delamination/Spall/Patched Area	SF	1	0	1	0	0
(321) Concrete approach slab, Beginning of bridge, Patched area where plowable pavement marking was located, CS2, 1 Sq Ft							
331	Reinforced Concrete Bridge Railing	LF	365	335	0	30	0
1130	Cracking (RC and Other)	LF	30	0	0	30	0
(331) Concrete bridge railing, Both right & left sides throughout all spans, Cracking, CS2, 30 LF							

Inspection Photos and Notes



Elevation



Deck photo, Driving surface



Deck photo, Undersurface



Steel beam photo



Abutment photo



Bent photo



Stay in place forms



Inventory



Both outside beams, Welded connections at diaphragms



Both outside beams, Welded connections at diaphragms



Bridge railing



Bridge railing transition



Bearing photo



Bridge joints



Deck, Undersurface, Efflorescence is present in various locations on both right and left overhangs, CS2



Deck, Undersurface, Efflorescence is present in various locations on both right and left overhangs, CS2



Polymer wearing surface photo



Bent 1 abutment, Cracking in backwall, CS2



Bent 4 abutment, Cracking in backwall, CS2



Bents 2 and 3 caps, Various locations of cracking, CS2



Beginning of bridge, Joint damage, CS3



Beginning of bridge approach slab, Patched area, CS2



Concrete bridge railing, Cracking on both right and left sides,
CS2



Asset #B6816(Routine)

S.H.151 N.BND-0.95 over LINE FERRY RD.

Location: 1.01 MI.E. OF TEX.ST.LINE

Team Lead: Jared Kegley Inspection Date: 08/14/2024

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (No)



Asset #B6816(Routine)

S.H.151 N.BND-0.95 over LINE FERRY RD.

Location: 1.01 MI.E. OF TEX.ST.LINE

Team Lead: Jared Kegley Inspection Date: 08/14/2024

A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)

A-65 - Clogged deck drains?



Asset #B6816(Routine)

S.H.151 N.BND-0.95 over LINE FERRY RD.

Location: 1.01 MI.E. OF TEX.ST.LINE

Team Lead: Jared Kegley Inspection Date: 08/14/2024

A-66 - Approach minor pothole/leveling needed

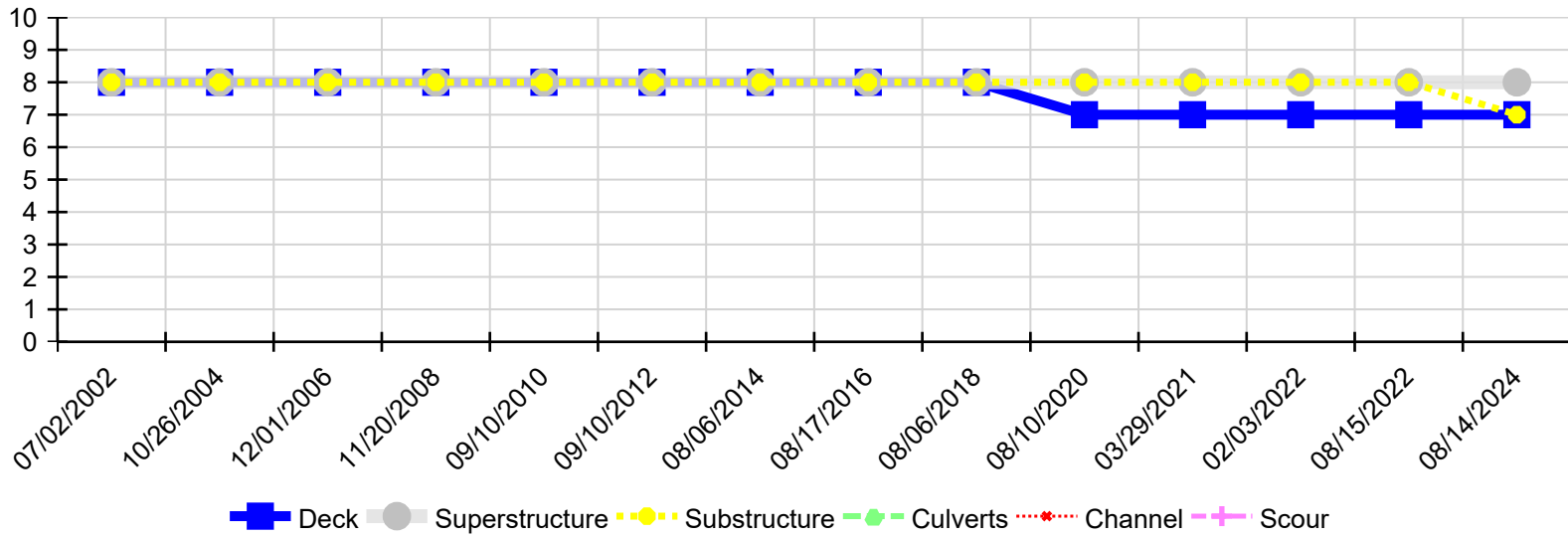


Asset #B6816(Routine)
S.H.151 N.BND-0.95 over LINE FERRY RD.

Location: 1.01 MI.E. OF TEX.ST.LINE

Team Lead: Jared Kegley Inspection Date: 08/14/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/14/2024	7	8	7	N	N	N
08/15/2022	7	8	8	N	N	N
02/03/2022	7	8	8	N	N	N
03/29/2021	7	8	8	N	N	N
08/10/2020	7	8	8	N	N	N
08/06/2018	8	8	8	N	N	N
08/17/2016	8	8	8	N	N	N
08/06/2014	8	8	8	N	N	N
09/10/2012	8	8	8	N	N	N
09/10/2010	8	8	8	N	N	N
11/20/2008	8	8	8	N	N	N
12/01/2006	8	8	8	N	N	N
10/26/2004	8	8	8	N	N	N
07/02/2002	8	8	8	N	N	N