

Bridge 03356 Inspection Report



Latitude:35.35258, Longitude:-93.53499

Route:109 Section:03 Log:4.939

Arnold Road ID:42x109x3xA, Arnold Log mile:4.888

District 08, 83 - Logan County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

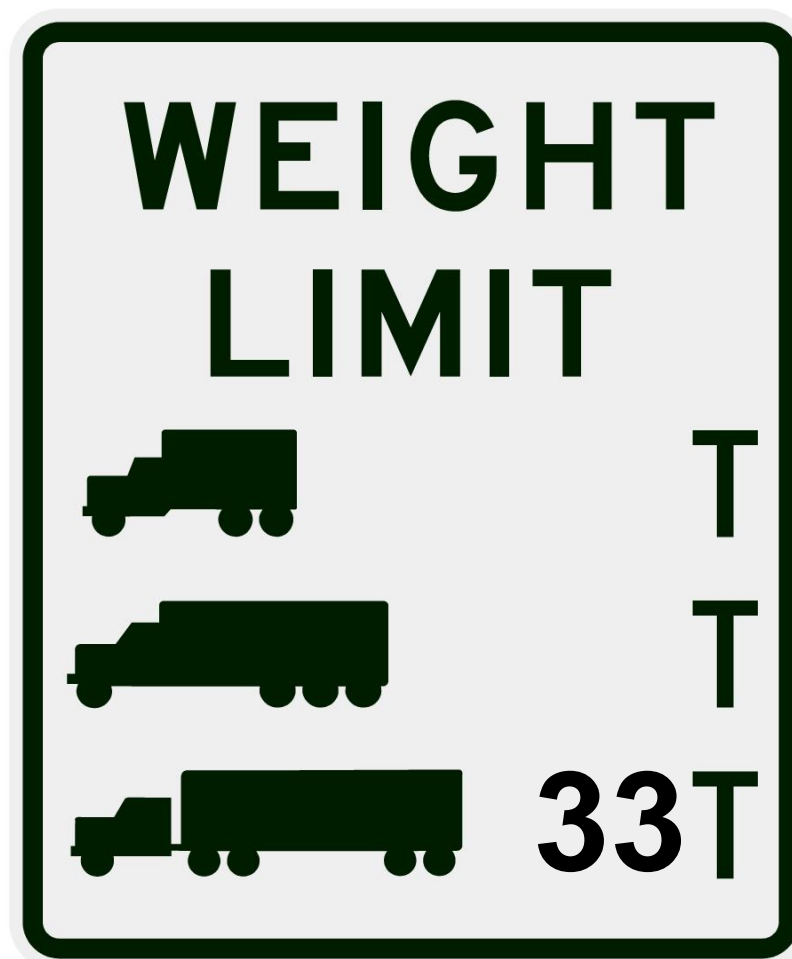
Bridge Posting Information

41 - Structure Open/Posted/Closed: P - Posted for load (may include other restrictions such a temporary bridges which are load posted)

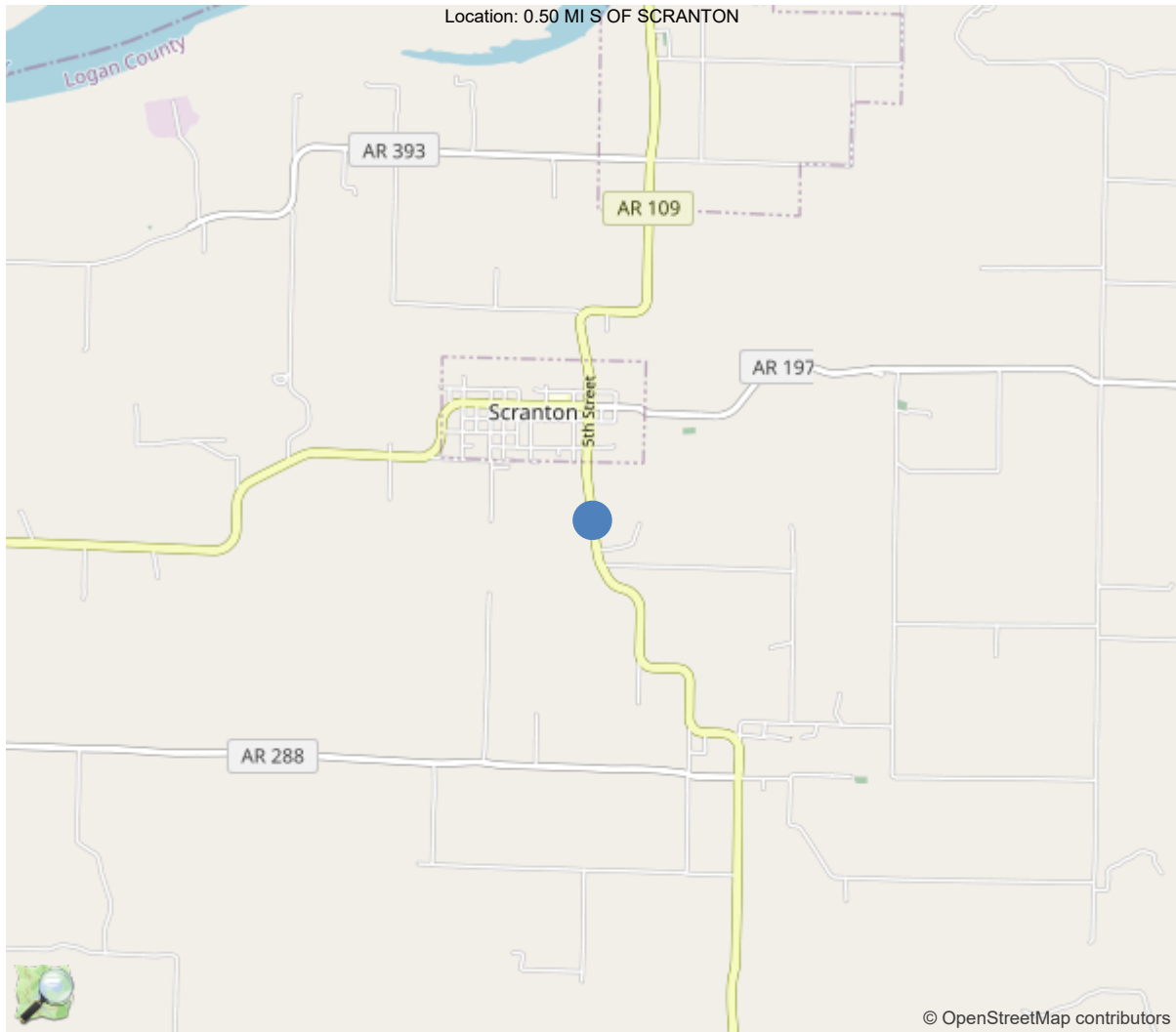
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	27		
Code 9 (31 Tons)	31		
Code 5 (40 Tons)	33	33	33

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



35.35258, -93.53499

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03356
(5) Inventory Route	1
(2) Highway Agency District	08 - District 08
(3) County Code	83 - Logan County
(4) Place Code	0
(6) Features Intersected	Cane Creek Logan Co.
(7) Facility Carried	State Highway 109
(9) Location	0.50 MI S OF SCRANTON
(11) Mile Point	4.939 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000109030
(16) Latitude	35.35258
(17) Longitude	-93.53499
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
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	5
(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	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1960
(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	1400
(30) Year of ADT	2018
(109) Truck ADT	10 %
(19) Bypass, Detour Length	6 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	90 ft
(49) Structure Length	259 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	28.5 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 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	24 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	5
(59) Superstructure	4
(60) Substructure	6
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	36
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	22
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	P - Posted for load (may include
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(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	2282
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			04/08/2025
(91) Frequency			12
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
<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>			

Team Lead: Rhett Franks, Inspection Date: 04/08/2025

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	03356
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	1960

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	83 - Logan County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	08 - District 08
B.L.05 Latitude	35.35258
B.L.06 Longitude	-93.53499
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	0.50 MI S OF SCRANTON
B.L.12 Metropolitan Planning Organization	

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	258.9
B.G.02 Total Bridge Length	258.9
B.G.03 Max Span Length	89.9
B.G.04 Min Span Length	38
B.G.05 Bridge Width Out-to-Out	28.5
B.G.06 Bridge Width Curb-to-Curb	24
B.G.07 Left Curb or Sidewalk Width	1
B.G.08 Right Curb or Sidewalk Width	1
B.G.09 Approach Roadway Width	27.9

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	20
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	7388.7

LOADS AND LOAD RATING	
B.LR.01 Design Load	H15 - H-15
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	0.61
B.LR.06 Operating Load Rating Factor	1
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	Y - E/E' details are present
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	5 - FAIR - Some moderate defec
B.C.02 Superstructure Condition	4 - POOR - Widespread moderate
B.C.03 Substructure Condition	6 - SATISFACTORY - Widespread
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	6 - SATISFACTORY - Widespread
B.C.06 Bridge Railing Transitions Condition	6 - SATISFACTORY - Widespread
B.C.07 Bridge Bearings Cond.	4 - POOR - Widespread moderate
B.C.08 Bridge Joints Condition	6 - SATISFACTORY - Widespread
B.C.09 Channel Condition Rating	6 - SATISFACTORY - Widespread
B.C.10 Channel Protection Condition	5 - FAIR - Some moderate defec
B.C.11 Scour Condition Rating	7 - Some minor scour.
B.C.12 Bridge Condition Classification	P - Poor
B.C.13 Lowest Condition Rating	4 - POOR - Widespread moderate
B.C.14 NSTM Insp. Condition	N - NOT APPLICABLE - Component
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
B.AP.02 Overtopping Likelihood	3 - Low - once every 26 to 50 years
B.AP.03 Scour Vulnerability	0 - Scour appraisal has not been co
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	0 - Seismic evaluation not complete

Team Lead: Rhett Franks, Inspection Date: 04/08/2025

SPAN SETS			
M1			
B.SP.02 # of Spans	5	B.SP.08 Deck Interaction	CU - Composite - unshored cons
B.SP.03 # of Beam Lines	5	B.SP.09 Deck Material and Type	C01 - Reinforced concrete - ca
B.SP.04 Span Material	S01 - Steel - rolled	B.SP.10 Wearing Surface	0 - None
B.SP.05 Span Continuity	1 - Simple or single span	B.SP.11 Deck Protective System	0 - None
B.SP.06 Span Type	G02 - Girder/beam - I-shaped s	B.SP.12 Deck Reinforcing Protective System	0 - None
B.SP.07 Span Protective System	C01 - Coating - paint	B.SP.13 Deck Stay-In-Place Forms	0 - None

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
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	4	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	F02 - Footing - on rock
B.SB.04 Substructure Type	B01 - Bent - column or open	B.SB.07 Foundation Protective System	0 - None

HIGHWAY FEATURES			
H1			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	1400
B.F.03 Feature Name	State Highway 109	B.H.10 Annual ADTT	140
B.H.01 Functional Classification	4 - Minor Arterial	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	N - Non-NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	N - Not on the NHFN	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	109030	B.H.16 Highway Max Usable Surface Width	23.9
B.H.07 LRS Mile Point	4.939	B.H.17 Bypass Detour Length	6
B.H.08 Lanes On Highway	2	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	109	2-T - TEMP - Two-way traffic - NS or EW	3 - State route	1 - Mainline



Team Lead: Rhett Franks, Inspection Date: 04/08/2025

WATERWAY FEATURES

W1

B.F.02 Feature Location	B - Below bridge	B.N.03 Movable Bridge Max Navigation Vertical Clearance	
B.F.03 Feature Name	Cane Creek Logan Co.	B.N.04 Navigation Channel Width	
B.N.01 Navigable Waterway	N - Not navigable waters	B.N.05 Navigation Channel Min Horizontal Clearance	
B.N.02 Navigation Min Vertical Clearance		B.N.06 Substructure Navigation Protection	

POSTING STATUS DATA

B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date
(Inactive) (Inactive) PP-T - T	

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
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Inspection Notes

General Observation

Traffic Control contact ARDOT Logan Co. Supervisor and/or Crew leader. Phone # (479) 963-2656

Tractor snoopers contact Bridge operations. Kenny Voss (479) 880-6567

Tractor/Snooper Driver/Operator contact ARDOT District 8 Bridge Inspection office.

58 - Deck (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Overall, the deck is in fair condition with spalling, exposed reinforcing steel, large delaminated areas, map cracking, abrasion in the wheel paths and cracking with efflorescence in the overhangs.

59 - Superstructure (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour.)

Overall, the superstructure is in poor condition with active corrosion, advanced section loss in girder ends with some holes in the webs in the ends of the girders.

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Overall, the substructure is in satisfactory condition with moderate cracking in the caps, columns and spalling with exposed reinforcing steel in the face of caps.

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.)

Overall, the channel is in satisfactory condition on fair alignment in a forked channel with banks beginning to slump with large trees in the channel at span 4, up and down stream sides. The banks are well vegetated with small trees, drift and Johnson grass that could use a trim/removal.

A-54 - Sealable Deck Cracks (Y)

Sealable cracking in all spans.

A-55 - Deck Washing Needed (Y)

Typical debris restricts the deck drains.

A-56 - Joint Cleaning/Flushing Needed (Y)

Joints have debris impaction.

A-57 - Girder End and Bearing Painting Needed (Y)

Span 1 Bent 1 Girder 1 Active corrosion with flaking rust typical on girder ends. CS3 8 LF

A-58 - Cap Cleaning/Flushing Needed (Y)

05/15/2023 - RSM - The bearing areas have dirt and debris accumulated against the steel superstructure.

Typical debris on caps

Typical dirt and debris on caps.

Caps have debris built up on top of them.



Asset #03356(Routine)

State Highway 109 over Cane Creek Logan Co.

Location: 0.50 MI S OF SCRANTON

Team Lead: Rhett Franks Inspection Date: 04/08/2025

A-59 - Joint Repair Needed (Y)

Typical debris impact in joints.

A-60 - Full Girder Painting Needed (Y)

Superstructure has a failing paint system with corrosion / section loss.

Girder have a failing paint system.

A-64 - Vegetation Removal Requested (Y)

Large drift in the channel and under bridge in most spans.

A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (7 - Some minor scour.)

Minor scour around the columns with no footings exposed.



Asset #03356(Routine)

State Highway 109 over Cane Creek Logan Co.

Location: 0.50 MI S OF SCRANTON

Team Lead: Rhett Franks Inspection Date: 04/08/2025

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	Span1 Bent 2 Girder 5 active corrosion with no section loss. 1 LF						
	Span 2 Bent 2 Girder 1 active corrosion with flaking rust and section loss up to 1/16" CS3 8 LF						
	Span 2 Bent 2 Girder 2 active corrosion with no section loss CS3 3 LF						
	Span 2 Bent 2 Girder 3 active corrosion with flaking rust and section loss up to 1/16" CS3 4 LF						
	Span 2 Bent 2 Girder 4 active corrosion with flaking rust and no section loss . CS3 1 LF						
	Span 2 Bent 2 Girder 5 active corrosion with flaking rust and section loss up to 1/16" CS3 8 LF						
	Span 2 Bent 3 Girder 1 active corrosion with flaking rust and section loss up to 1/16" CS3 2						
	Span 2 Bent 3 Girder 2 active corrosion with flaking rust and section loss up to 1/16" and 1/4" section loss to bottom flange CS3 2 LF						
	Span 2 Bent 3 Girder 3 active corrosion with flaking rust and section loss up to 1/16" and 1/4" section loss to bottom flange CS3 2 LF						
	Span 2 Bent 3 Girder 4 active corrosion with flaking rust and no section loss CS3 2 LF						
	Span 2 Bent 3 Girder 5 active corrosion with flaking rust and section loss up to 1/16" CS3 2 LF						
	Span 3 Bent 3 Girder 1 active corrosion with flaking rust and section loss up to 1/8" CS3 2 LF						
	Span 3 Bent 3 Girder 2 active corrosion with flaking rust and no section loss CS2 2 LF						
	Span 3 Bent 3 Girder 3 active corrosion with flaking rust and no section loss CS3 2 LF						
	Span 3 Bent 3 Girder 4 active corrosion with flaking rust and advanced section loss 4" hole in web CS3 2 LF						
	Span 3 Bent 3 Girder 5 active corrosion with flaking rust and advanced section loss 1/8" in web CS3 2 LF						
	Span 3 Bent 4 Girder 1 active corrosion with flaking rust with section loss 3/16" CS3 8 LF						
	Span 3 Bent 4 Girder 2 active corrosion with flaking rust with section loss 3/16" CS3 4 LF						
	Span 3 Bent 4 Girder 3 active corrosion with flaking rust with section loss 3/16" CS3 3 LF						
	Span 3 Bent 4 Girder 4 active corrosion with flaking rust with section loss 3/16" CS3 2 LF						
	Span 3 Bent 4 Girder 5 active corrosion with flaking rust with section loss 3/16" CS3 8 LF						
	Span 4 Bent 4 Girder 1 active corrosion with flaking rust with section loss 1/16 CS3 4 LF						
	Span 4 Bent 4 Girder 2 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 4 Bent 4 Girder 3 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 4 Bent 4 Girder 4 active corrosion with flaking rust with no section loss. CS3 1 LF						
	Span 4 Bent 4 Girder 5 active corrosion with flaking rust with section loss 1/16" CS3 6 LF						
	Span 4 Bent 5 Girder 1 active corrosion with flaking rust with section loss 3/16" CS3 6LF						
	Span 4 Bent 5 Girder 2 active corrosion with flaking rust with section loss 1/16" CS3 3LF						
	Span 4 Bent 5 Girder 3 active corrosion with flaking rust with section loss 1/8" CS3 2 LF						
	Span 4 Bent 5 Girder 4 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 4 Bent 5 Girder 5 active corrosion with flaking rust with section loss 3/16" CS3 8 LF						
	Span 5 Bent 5 Girder 1 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 5 Bent 5 Girder 2 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 5 Bent 5 Girder 3 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 5 Bent 5 Girder 4 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 5 Bent 5 Girder 5 active corrosion with flaking rust with section loss 1/16" CS3 2 LF						
	Span 5 Bent 6 Girder1 has a failing paint system CS3 2 LF						
	Span 5 Bent 6 Girder 2 failing paint system. CS2 3 LF						
	Span 5, Bent 6, girder 3, has hole in the web at the haunch. CS3 1"						
	Span 5, Bent 6, girder 4, has hole in the web at the haunch. CS3 1"						
	Span 5 Bent 6 Girder 5 has a failing paint system. CS3 6 LF						



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	8	0	7	1	0
1190	Abrasion/Wear (PSC/RC)	EA	8	0	7	1	0
(205) Typical abrasion on the columns.							
210	Reinforced Concrete Pier Wall	LF	28	28	0	0	0
(210) No noticeable defects during this inspection.							
215	Reinforced Concrete Abutment	LF	68	67	1	0	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
(215) Abutments have staining from apparent joint leakage with no apparent noteworthy deficiencies during this inspection. A large portion of the hand placed stone rip rap on the North embankment is displaced.							
234	Reinforced Concrete Pier Cap	LF	104	94	0	10	0
1090	Exposed Rebar	LF	10	0	0	10	0
(234) Span 3, bent 4, back side, has a spalling with exposed reinforcing steel. CS3							
305	Assembly Joint without Seal	LF	144	134	0	10	0
2370	Metal Deterioration or Damage	LF	10	0	0	10	0
(305) Typical debris impact in joints.							
311	Movable Bearing	EA	25	4	2	19	0
1000	Corrosion	EA	19	0	2	17	0
2210	Movement	EA	2	0	0	2	0
515	Steel Protective Coating	SF	25	0	0	0	25
3440	Effectiveness (Steel Protective Coatings)	SF	25	0	0	0	25
(311) Span 4, bent 4, bearing 2 under girder 2, is fully extended. Span 4, bent 4 ahead side, movable bearings has active corrosion with section loss. CS3 All bearing need clean and painted. All other bearing placed in check box.							
313	Fixed Bearing	EA	25	0	1	24	0
1000	Corrosion	EA	25	0	1	24	0
515	Steel Protective Coating	SF	25	0	0	0	25
3440	Effectiveness (Steel Protective Coatings)	SF	25	0	0	0	25
(313) Typical pack rust on all bearings. CS3							
330	Metal Bridge Railing	LF	514	0	514	0	0
1000	Corrosion	LF	503	0	503	0	0
7000	Damage	LF	11	0	11	0	0
515	Steel Protective Coating	SF	1542	0	0	0	1542
3440	Effectiveness (Steel Protective Coatings)	SF	1542	0	0	0	1542



Asset #03356(Routine)

State Highway 109 over Cane Creek Logan Co.

Location: 0.50 MI S OF SCRANTON

Team Lead: Rhett Franks Inspection Date: 04/08/2025

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	(330) Typical paint failure on rail. Spans 2, 3, and 4, left side, has damaged guard rail. 11 LF						

Inspection Photos and Notes



Elevation



Over View (Drone)



Inventory 2



Inventory 1



Typical undersurface



Typical deck



Large trees under structure.



Typical upstream



Typical downstream



Over View of channel interaction. (Drone)



Sealable deck cracking



Typical debris restricts the deck drains.



Dirt and debris in gutters



Joints need to be cleaned.



Span 1 Bent 1 Girder 1 Active corrosion with flaking rust
typical on girder ends. CS3 8 LF



Beam ends could use a painting.



Typical debris on caps



Typical dirt and debris on caps.



Caps have debris built up on top of them.



Typical debris impact in joints.



Girder have a failing paint system.



Full beam painting is recommended.



It is recommended that the deck gets a polymer overlay.



Typical trees and brush left side



Typical brush right side



E details



Span 4 Right edge of deck cracking with efflorescence. CS2
20 SF



Span 3 Right spalling in the deck drain. CS2 2 SF



Typical transverse cracking in all spans.



Typical wear in all spans.



Typical map cracking in all spans.



Span 4 Large areas of delamination. CS3 80SF



Span 4 Left lane large delaminated areas, potholes with temporary repairs. CS3 85 SF



Span 4 Right lane large delaminated areas, potholes with temporary repairs. CS3 60 SF



Span 3 Right lane right wheel paths spalling. CS3 2 SF



Span 2 Right lane delaminated area. CS3 8 SF



Span 1 left lane transverse cracking. CS3 .070 30 SF



Span 3 Bent 3 Girder 4 active corrosion with flaking rust and advanced section loss 4" hole in web CS3 2 LF



Span 2 Bent 3 Girder 3 active corrosion with flaking rust and section loss up to 1/16" and 1/4" section loss to bottom flange CS3 2 LF



Span 2 Bent 3 Girder 2 active corrosion with flaking rust and section loss up to 1/16" and 1/4" section loss to bottom flange CS3 2 LF



Span 2 Bent 2 Girder 5 active corrosion with flaking rust and section loss up to 1/16" CS3 8. LF



Span 2 Bent 2 Girder active corrosion with flaking rust and section loss up to 1/16" CS3 8 LF



Span 3, bent 3, ahead side, girder 5, has active corrosion and advanced section loss in bottom flange. CS3 1/4



Span 3, bent 3, ahead side, girder 4, has a hole in the web at the haunch. CS3



Span 3 Bent 3 Typical abrasion on all columns. CS2 1 EA



Span 5 Bent 5 Spalling with exposed reinforcing steel. CS3
4 LF



Span 3 Bent 4 Spalling with exposed reinforcing steel in face
of cap. CS3 2 LF



All joints have debris impaction. CS2 full length



Typical debris impact in joints.



Span 4 Bent 4 Girder 3 Active corrosion with flaking rust.
CS3 1 EA



Span 4 Bent 4 Girder 2 Bearing fully extended at 60 degree
CS3 1 EA



Span 4 Bent 4 Girder 5 Active corrosion with pack rust. CS3
1 EA



Span 1 Bent 1 Girder 5 Bearing has active corrosion with flaking rust. CS3 1 EA



Span 4 Bent 5 fixed bearings have active corrosion with flaking rust. CS3 1 EA



Typical bridge railing.



Spans 2, 3, and 4, left side, has damaged guard rail. 11 LF



Typical paint failure on rail.



Inventory

Maintenance Needs

Date Reported: 03/06/2013

Priority: C - Important

Type of Work: Superstructure Repair

Status: Open

Component: Element

Deficiency Description

Superstructure:

The superstructure has a failing paint system with areas of active corrosion, flaking rust and significant section loss to the base of webs and bottom flanges. Most notable areas are listed below.

Span 2, girder 1, at bent 2 has 4' long area of corrosion to the web and bottom flange. Bottom flange reduced to 3/8" remaining section.

Span 2, girder 3, at bent 2 has 7/16" section loss to the bottom flange.

Span 2, girder 3, at bent 3 bottom flange reduced to 3/8" at bearing device.

Span 3, girder 1, at bent 3 has a 1/2" hole in end of web at expansion dam. Bottom flange reduced to 3/8" adjacent to bearing.

Span 3, girder 4 at bent 3 has a 3" long x 1" wide hole rusted through the web at the expansion dam.

Span 3, girder 1 at bent 4 has heavy corrosion to base of web and bottom flange with 7/16" section loss to web at expansion dam.

Span 4, girder 3 at bent 4 has heavy corrosion with thick flaking rust to base of web and bottom flange with 50% section loss to web adjacent to bearing with 1/2" remaining section.

Span 4, girder 1 and 5 over bent 5 have corrosion with flaking rust/section loss.

Span 5, girder 1 has heavy corrosion with an estimated 50% section loss to bottom flange.

Remarks

Monitor 4/12/2024



Span 2 Bent 3 Girder 2 active corrosion with flaking rust and section loss up to 1/16" and 1/4" section loss to bottom flange CS3 2 LF



Span 3, bent 4, girder 5, has active corrosion and advanced section loss in haunch area. CS3 3/16"



Span 3, bent 4, girder 4, has active corrosion and advanced section loss in haunch area. CS3 1/16



Span 3, bent 3, ahead side, girder 4, has a hole in the web at the haunch. CS3



Span 2, bent 2, ahead side, girder 4, has active corrosion in haunch area with section loss. CS3 1 LF



Span # 3, Girder 1 at bent 4-Section loss to bottom flange.



Span # 3, beam # 1 at bent # 4-Section loss to bottom flange.



Span # 3, beam # 1 at bent # 4-Section loss to web at expansion dam and diaphragm connection.



Span # 2, bay # 1-Section loss to diaphragm.



Beam # 1 at bent # 2-Active corrosion.

Maintenance Needs

Date Reported: 03/06/2013

Priority: C - Important

Type of Work: Deck Repair

Status: Open

Component: Deck

Deficiency Description

Deck:

The deck has shallow spalls with exposed reinforcing steel and numerous delaminated areas with sealable transverse cracks. The majority of span # 4 is delaminated with numerous spalls in the driving surface. The spalled areas have exposed reinforcing steel in several locations.

The gutters in all spans have numerous delaminated areas.

Remarks



04/08/2025

Span 4 Spalling with exposed reinforcing steel. CS3 40 SF



04/08/2025

Span 4 Right lane spalling with exposed reinforcing steel and temporary patching. CS3 80 SF



Span 4-Spall with exposed reinforcing steel



Span 4-Spall with exposed reinforcing steel



Span 4-Spall with exposed reinforcing steel



Span 4-Numerous spalls / delaminated areas



The majority of span # 4 is delaminated with numerous spalls in the driving surface. The spalled areas have exposed reinforcing steel in several locations. The gutters in all spans have numerous delaminated areas.



Sealable cracks that are beginning to delaminate.

Maintenance Needs

Date Reported: 06/15/2023

Priority: C - Important

Type of Work: Bearing Repair/Replacement

Status: Open

Component: Element

Deficiency Description

Bearings -

The bearings have heavy corrosion in areas with pack rust between the bearing plates that appear to restrict movement.

Remarks



04/14/2025

Span 4 Bent 5 fixed bearings have active corrosion with flaking rust. CS3 1 EA



06/15/2023

Span # 4, bearing # 4 at bent # 4-Heavy corrosion with pack rust between rocker and masonry plate.

Maintenance Needs

Date Reported: 04/03/2024

Priority: C - Important

Type of Work: Approach Leveling/Maintenance

Status: Repair Documented

Component: Approach

Deficiency Description

Bent 1 Approach:

Approach has settlement the the left lane with a pothole that is 3"x1' that reaches 2" in depth with a unknown width below the asphalt.

Remarks

4/8/2025 State maintenance forces have repaired the void in the approach roadway since last inspection.

Monitor 4/12/2024



Inventory



Abutment 1, approach, left lane, has settled. 2ft

Maintenance Needs

Date Reported: 03/06/2013

Priority: D- Routine

Type of Work: Substructure Repair

Status: Monitor

Component: Element

Deficiency Description

Substructure -

The caps of bents # 4 and # 5 have areas of shallow spalling with exposed reinforcing steel.

Remarks



Bent # 4 cap-Spalling with exposed reinforcing steel.

Maintenance Needs

Date Reported: 06/15/2023

Priority: D- Routine

Type of Work: Channel Work/Drift Removal

Status: Open

Component: Channel

Deficiency Description

Channel:

The channel has a tree under span 4 promoting additional drift accumulation.

Remarks



Large trees under structure.

Routine Maintenance

Check Box Maintenance Items

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

A-54 - Sealable Deck Cracks (Yes)

Sealable cracking in all spans.



Sealable deck cracking

A-55 - Deck Washing Needed (Yes)
Typical debris restricts the deck drains.



Typical debris restricts the deck drains.



Dirt and debris in gutters

A-56 - Joint Cleaning/Flushing Needed (Yes)
Joints have debris impaction.



Joints need to be cleaned.

A-57 - Girder End and Bearing Painting Needed (Yes)

Span 1 Bent 1 Girder 1 Active corrosion with flaking rust typical on girder ends. CS3 8 LF



Span 1 Bent 1 Girder 1 Active corrosion with flaking rust typical on girder ends. CS3 8 LF



Beam ends could use a painting.

A-58 - Cap Cleaning/Flushing Needed (Yes)

05/15/2023 - RSM - The bearing areas have dirt and debris accumulated against the steel superstructure.

Typical debris on caps

Typical dirt and debris on caps.

Caps have debris built up on top of them.



Typical debris on caps



Typical dirt and debris on caps.



Caps have debris built up on top of them.

A-59 - Joint Repair Needed (Yes)

Typical debris impact in joints.



Typical debris impact in joints.

A-60 - Full Girder Painting Needed (Yes)

Superstructure has a failing paint system with corrosion / section loss.
Girder have a failing paint system.



Girder have a failing paint system.



Full beam painting is recommended.

A-61 - Polymer Overlay Advised (Yes)



It is recommended that the deck gets a polymer overlay.

A-62 - Hydro and LMC Advised (No)

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

A-64 - Vegetation Removal Requested (Yes)

Large drift in the channel and under bridge in most spans.



Typical trees and brush left side



Typical brush right side



Asset #03356(Routine)

State Highway 109 over Cane Creek Logan Co.

Location: 0.50 MI S OF SCRANTON

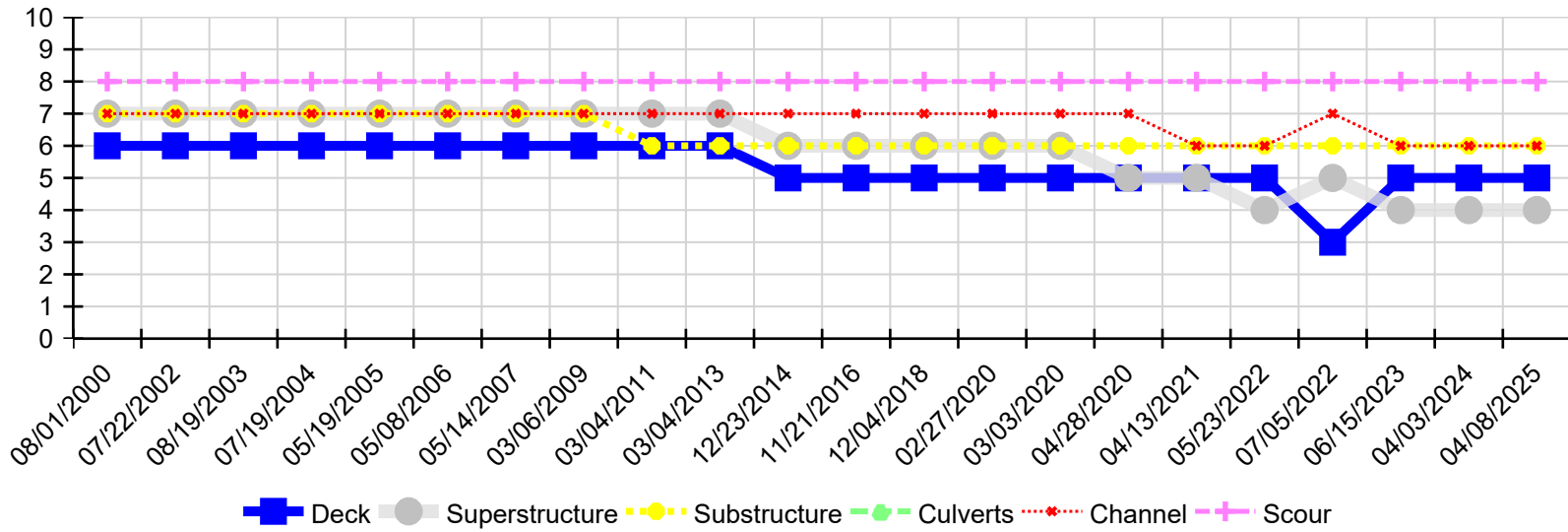
Team Lead: Rhett Franks Inspection Date: 04/08/2025

A-65 - Clogged deck drains?

A-66 - Approach minor pothole/leveling needed



Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/08/2025	5	4	6	N	6	8
04/03/2024	5	4	6	N	6	8
06/15/2023	5	4	6	N	6	8
07/05/2022	3	5	6	N	7	8
05/23/2022	5	4	6	N	6	8
04/13/2021	5	5	6	N	6	8
04/28/2020	5	5	6	N	7	8
03/03/2020	5	6	6	N	7	8
02/27/2020	5	6	6	N	7	8
12/04/2018	5	6	6	N	7	8
11/21/2016	5	6	6	N	7	8
12/23/2014	5	6	6	N	7	8
03/04/2013	6	7	6	N	7	8
03/04/2011	6	7	6	N	7	8
03/06/2009	6	7	7	N	7	8
05/14/2007	6	7	7	N	7	8
05/08/2006	6	7	7	N	7	8
05/19/2005	6	7	7	N	7	8
07/19/2004	6	7	7	N	7	8
08/19/2003	6	7	7	N	7	8
07/22/2002	6	7	7	N	7	8
08/01/2000	6	7	7	N	7	8