2021 ROUTINE BRIDGE SAFETY INSPECTION REPORT

Cleveland Township, Columbia County
T-356 (Shakespeare Road) over Roaring Creek
County Bridge No. 12
BMS No. 19-7205-0356-0012
BRKEY: 12785

PREPARED FOR:

Columbia County
and
Pennsylvania Department of Transportation
Engineering District 3-0

PREPARED BY:

Larson Design Group
1000 Commerce Park Drive, Suite 201
Williamsport, PA 17701

Report Approved By:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
KURT A. BRUNGARD
ENGINEER
061035

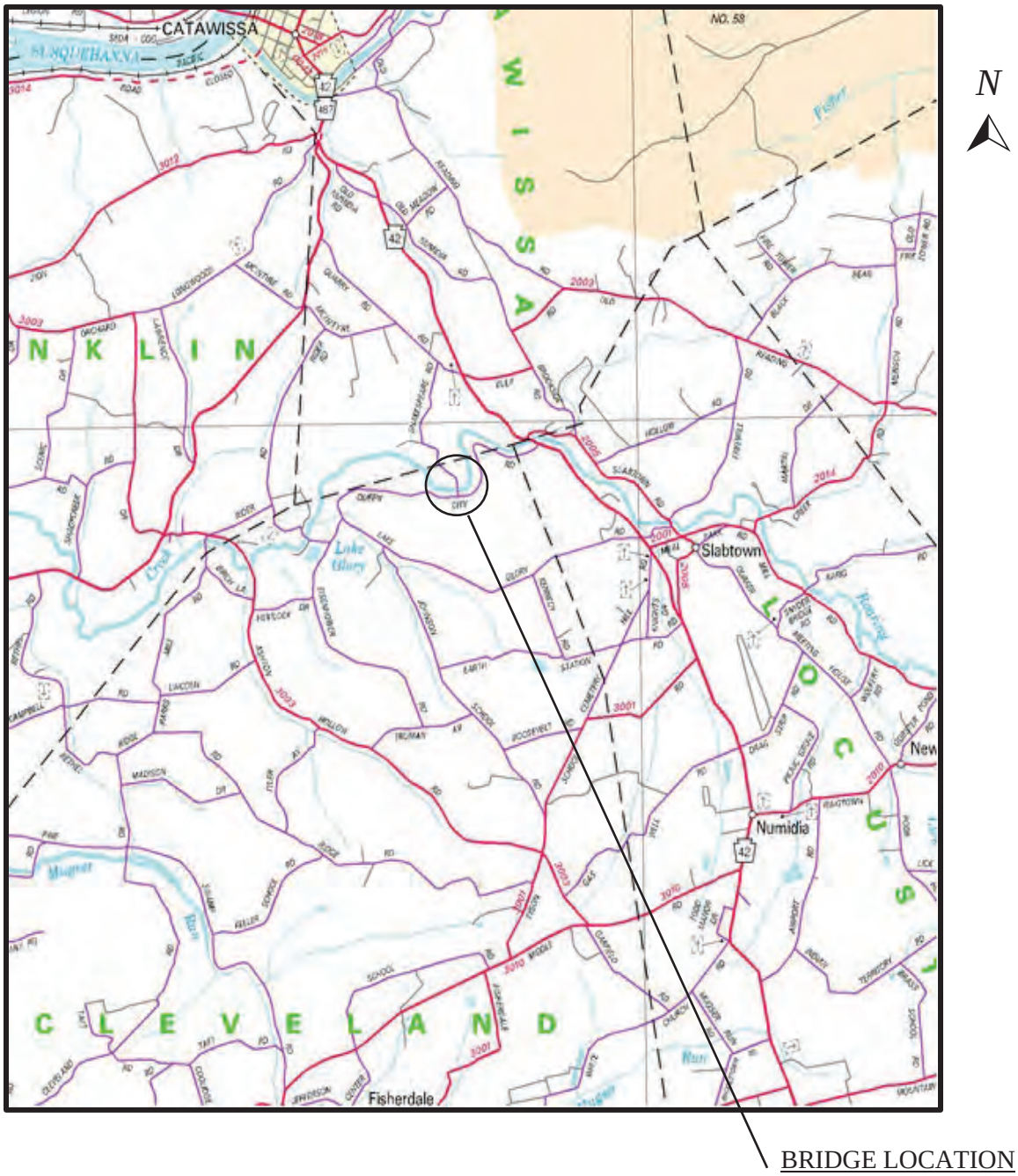
4/23/21

Kurt A. Brungard, P.E.

DATE OF INSPECTION: March 24, 2021
CATEGORY: C1
INSPECTION FREQUENCY: 12 Months
INSPECTION BY: Dale J. Sitler, P.E., C.B.S.I.
and
Andrew J. Susen, C.B.S.I.

TABLE OF CONTENTS

SITE LOCATION MAP



T-356 (Shakespeare Road) over Roaring Creek
BMS No. 19-7205-0356-0012
40° 54’ 36.82” Latitude 76° 26’ 23.40” Longitude

INSPECTION SUMMARY

General Description:

The structure carrying T-356 over Roaring Creek is a single span burr arch truss timber covered bridge on stone masonry encased concrete abutments.

- Year built: 1875 (Rehabilitated in 1997)
- Clear span: 67.8’
- Clear roadway width: 12.7’
- Minimum underclearance: 9.2’
- Skew: 90°

The Routine Inspection was performed on March 24, 2021. A hands-on inspection of all elements was performed by Dale J. Sitler, P.E., C.B.S.I. and Andrew J. Susen, C.B.S.I. No special access equipment was needed for this inspection.

Historical data was investigated for this structure. The structure was rehabilitated in 1997. The bridge was damaged during the September 2011 flood. Portions of the low chord were damaged resulting in loss of bearing to the floorbeam and stringers. The lower lateral bracing and siding were damaged as well. The damage was repaired prior to the 2012 inspection. The vehicular damage to the bridge sustained in 2017 was repaired prior to the 2018 inspection. There is no history of significant scour at this structure.

The National Register Files were also consulted, and this bridge was placed on the register November 29, 1979, along with all other covered bridges in Columbia County.

Summary of Inspection Findings and Changes Since the last inspection:

The overall physical condition is fair, as indicated by the condition ratings given on PennDOT Form D-450.

The center running board at the near end of the right wheel path is no longer attached to the deck but is confined by the adjacent boards. There was an increase in deterioration of the concrete encasement at the far abutment. Far left portal sill is loose and disconnected from the vertical L8U8. The far left portal sill also exhibits decay below the far left portal vertical.

Please refer to the current D-450 (iforms attached) for specific documentation of this inspection.

Approach Roadway Description:

Current Condition Rating - 5
Previous Condition Rating - 5

The overall condition of the approach roadway is fair.

There are two panels of Type 2-S weathering steel approach guide rail with steel offset brackets and boxing glove end treatments at all four corners. The guide rail is not connected to the structure. The approach guide rail at the near is flared due to the intersection. There are some minor scrapes on the approach guide rail at the near left and near right, and there are minor dents in the guide rail at the far left and far right. The boxing glove end treatments are adequately flared from the roadway. One post at the

near right and one post at the far left are disconnected, and the first two posts adjacent to the timber railing at the near left and near right have no offset brackets. The approach guide rail requires repair due to the disconnected posts at the near right and far left.

The near bituminous approach roadway exhibits minor gravel deposits. There is 2 1/2" of maximum settlement along the near backwall. The bituminous exhibits minor wear with shallow depressions. The far approach exhibits 1 1/4" of maximum settlement along the backwall and a full width open transverse joint approximately 10' from the structure.

There are 3" high bituminous drainage curbs and a full width trench drain in the backwall at the near end of the structure. The bituminous curbs have settled with the approach and are no longer directing drainage toward the trench drain. There is a minor debris accumulation in the trench drain, but it is still functional. There was minor water ponding at the near left approach due to the settlement. The drainage at the far approach is natural and appears adequate. The drainage flows toward the structure at the near end, and away from the structure at the far end.

The gravel and dirt shoulders with grass are stable with minor build-up.

The far One Lane Bridge Sign is missing. All other required signing is present and is clearly legible.

Superstructure Description: Current Condition Rating - 5
Previous Condition Rating - 5

The overall condition of the superstructure is fair.

The bridge exhibits minor checks and splits throughout. The bridge railing is adequate for the site.

The deck wearing surface consists of longitudinal timber running boards with asphalt coating. The running boards exhibit minor checks and splits and up to a 1/4" elevation difference at the joints. There is moderate wear of the surface of the timber resulting in minor protruding nail heads. There are isolated open checks and random wide splits in the boards especially at the board ends. There is very minor decay at the near end of the right running board; the board remains secure. The center board at the near end of the right wheel path is not attached to the deck. The board is confined by the adjacent boards and does not present a threat to the traveling public. All the other boards remain secure. There are several newer boards along the deck. Approximately 90% of the asphalt coating is worn off.

The transverse timber plank deck is coated with asphalt and exhibits minor checks and splits, and up to 2" gaps between the planks. There are areas of missing asphalt. There are also a few isolated heavy splits at the ends of the boards outside of the travel way, especially at the near right. There is an isolated 2" wide decay hole through the deck board to the right of the running boards near mid-span. The underside of the deck exhibits minor checks and splits.

The solid sawn timber floorbeams exhibit minor to moderate checks and splits and areas of minor insect infestation. There is 3/8" wide by 1.5" deep checking at the ends of a few of the floorbeams around the connection bolts.

The solid sawn timber stringers exhibit minor to moderate checks and splits throughout. The most severe checks and splits are at the centerline stringers. There is a severe split at the end of Stringer 1 at Floorbeam 5 that extends to approximately 1' to the near side of the floorbeam. There are also heavy splits behind the bearing area at the end of Stringer 3 at Floorbeam 2 and at the end of Stringer 5 at the end of Floorbeam 1. There is a heavy side check on the bottom of Stringer 3 in Bay 6. A newer shim board was placed between Floorbeam 3 and the stringers, which now bear fully on the floorbeam.

The timber truss members exhibit minor to moderate checks and splits throughout, minor surface decay, and areas of minor insect damage. The upper chord joints are sound. Member U5U6 at the right truss is twisted out of plane by 1/2" at the splice. Member L0U1 on the right truss is newer with 1/8" checks and 3/4" awl penetration. There are splits starting in several of the verticals at the top diagonal connections with the worst at U5 right with 3/16" wide split through the vertical above the notch. The verticals at L4 left and right and L5 on the left exhibit moderate splits below the low chord. Member L0U0 and L8U8 at the left and right truss have been previously replaced and spliced into existing vertical members. L0U0 right exhibits a 1/8" wide check at splice with 11/16" awl penetration. Member L2U2 on the right was repaired due to damage from the 2011 flood. There is minor decay at the lower truss diagonal member connection to L5U5 on the left truss with section loss due to the decay. There was no change in the decay since 2016. There is also an area of decay at the connection of member L6U6 and member U5L6 at the right truss with decay in both members. The ends of the verticals below the lower chords exhibit moderate surface decay and collision damage from high water debris. The diagonals exhibit checking up to 3/8" wide and 2" awl penetration. There is 1/8" separation of the lap splice at the far right and far left corners. There are 1/2" gaps at the upper chord to vertical connection at U5 and U8 on the left.

The original lower chords exhibit minor surface decay and minor insect infestation. The newer lower chords are spliced into the existing members. The splices are secure with slight misalignment between Vertical 3 and 4 on the left. The members were repaired due to the September 2011 flood.

The original arch members exhibit minor checks, splits and isolated minor surface decay. The top of the interior arch at the far right has a decay behind the curb with no increase in decay since the 2016 inspection. The interior arches above the deck also have minor scrapes due to collisions. There are newer arch members spliced into the existing members. The splices are sound. The newer arch and low chord members are CCA treated.

There is a missing longitudinal knee brace at L5 on the left truss. The knee brace at U7 left is missing a dowel at the bottom connection and U8 left is missing a dowel at the top. The knee braces are loose. There is minor decay at a few of the lower diagonal and vertical connections.

The roofing is composed of aluminum panels attached to timber slats and rafters. There is minor water staining and decay on the top of the ridge beam. The truss was repainted prior to the 2019 inspection. The loose siding boards were re-attached. There are newer nailer boards in Panel 2 on the bottom at the right side, and moderate decay at several locations in the other nailer boards.

The portals and bracing exhibit minor checks and splits. The near left portal vertical was replaced at the base. There is minor collision damage to the near portal header beam, and minor insect damage on far portal header beam and on the upper chord at the far left. The near right portal vertical appears newer with minor decay at the bottom. Both far portal verticals appear newer as well. The vehicular damage to the near portal from July 2017 was repaired prior to the 2018 inspection. The near left portal knee brace was reattached, the siding boards were reattached, and several portal members were reset. There is heavy decay to the near right portal sill. The far left portal sill is loose and exhibits minor decay at the end below the portal vertical. The decay and loose condition are new in 2021.

The upper lateral struts are solid sawn rough cut with minor checks and splits. There is minor collision damage at the centerline of the roadway at the near portal.

The neoprene bearing pads under the low chords exhibit no defects. The steel arch bearing shoes exhibit minor spot rust and are stable. The stringer bearings at the near abutment consist of timber shims and steel angle clips. The stringers at the far abutment bear only on the end floorbeam and are cantilevered to the backwall. The far stringer seats exhibit no defects.

C58

Substructure Description: Current Condition Rating - 5
Previous Condition Rating - 5

The overall condition of the substructure is fair.

The backwalls are reinforced concrete. There is a 6" trench drain outlet pipe from the backwall at the near left that is open and functional. The far backwall exhibits a minor spall in the left wheel path and a hairline crack in the right wheel path and at the centerline of the roadway.

The near stringer seats, low chord seats, and arch seats are reinforced concrete and exhibit no defects. There are also steel keeper angles in front of the bearing for the stringers at the near abutment. The far low chord and arch seats are reinforced concrete and exhibit a hairline horizontal crack in the grout under the left low chord and a full height hairline to open vertical crack at the centerline. Stringers at the far abutment bear on the end floorbeam and are cantilevered for a short length behind the floorbeam. The stringers at the far end do not bear on the concrete seats.

The stone masonry abutment stems exhibit a two-tier full-height concrete encasement. The original stone masonry abutment is not visible. The top tier of the near abutment concrete encasement exhibits moderate scaling, isolated areas of unsound concrete and a few full height vertical cracks. There are vertical cracks in construction joints at the left and right ends of the abutment at the top of the abutment. There is also a full height vertical crack near the center of the stem that has not increased since the last inspection. The bottom tier exhibits moderate deterioration at the bottom left corner and a few full height vertical hairline cracks that extend into the top tier.

The top tier of the concrete encasement on the far abutment exhibits moderate scaling in the older portions with light scaling at the waterline, areas of unsound concrete, and a full height vertical crack at the left end with edge spalling. The bottom tier exhibits moderate deterioration, areas of unsound concrete, and horizontal and vertical hairline cracks with moderate efflorescence. There is concrete deterioration at both corners that has increased slightly since the 2017 inspection. The deterioration at the left corner is active with adjacent unsound concrete. There is a full height hairline vertical crack adjacent to the right bottom chord and below Stringer 2.

The stone masonry wingwalls have a two-tier full-height concrete encasement. The near left wingwall exhibits light weathering and heavy edge scaling under the backwall drain pipe. The near right wingwall exhibits light weathering and a hairline to open vertical crack at the safety wing interface, and a minor surface spall adjacent to the vertical construction joint at the groundline. The far wingwalls exhibit moderate concrete deterioration at the top of the bottom tiers with efflorescence staining at the right. Both far wings also exhibit minor honeycomb and full height open vertical cracks at mid-length. The far left wingwall has minor weathering on top of the fixed end.

The footings at both abutments are not exposed.

There are no drains provided through either abutment.

There is no scour, undermining, or visible settlement at the abutments.

Channel Description: Current Condition Rating - 7
Previous Condition Rating – 7

The overall condition of the channel is good.

The channel is fairly straight upstream and downstream.

The near channel banks are approximately 10' high. The far channel banks are approximately 6' high. All the channel banks have approximately a 2:1 slope and are heavily vegetated with trees.

There is minor lateral scour along the far upstream and downstream banks with no repair required.

The channel bank slopes have large tree growth with some exposed root systems at the far upstream slope. There is minor debris accumulation present along the far upstream bank.

There is large natural rock present along the near upstream and downstream banks and smaller field rock on the far banks.

No new high water mark is visible. Water overtopped the near and far approaches and impacted the bridge in 2011.

The streambed material consists of cobbles and a few boulders.

RECOMMENDATIONS AND SUMMARIES

We recommend that the following repairs be made in order of priority to retard further deterioration, preserve the structural integrity of the bridge and extend its useful life:

** The following repair costs were developed solely for repairs completed by the Owner. The estimates do not reflect potential additional expenses for right-of-ways, contractor costs or design fees. For budget planning of significant repairs or replacement, more detailed studies and cost estimates are recommended.

Current Recommendations:

Immediate Improvements: (Requires Prompt Action)

No immediate improvements are required at this time.

Short Term Improvements: (Within the Next 2 Years)

Priority Code 2 (PRIORITY – RE-PRIORITIZE SCHEDULE)

1. Replace the missing One Lane Bridge sign at the far approach. ($200). **
2. Install current standard approach guide rail transitions ($4,000). **
3. Repair the decayed vertical and diagonal members at L6 and L7 on the right truss ($2,640). **
4. Repair the decayed interior arch member at the far right ($660). **
5. Repair the split at the top of member L5U5 right above the diagonal notch ($660). **

Priority Code 3 (SCHEDULE – ADD TO SCHEDULED WORK)

1. Raise the bituminous approach roadways at the backwall to provide a smooth transition onto the bridge. Also reconstruct the bituminous curbs at the near approach to channel roadway drainage toward the trench drain ($400). **
2. Reattach the loose running board at the near end of the right wheel path ($100). **

Priority Code 4 (PROGRAM – ROUTINE STRUCTURAL)

1. Replace the missing longitudinal knee brace at L5 on the left truss ($660). **
2. Repair loose knee brace at U8 left ($660). **
3. Repair the decayed portal sill member at the near right ($660). **
4. Repair the deteriorated concrete on the far abutment ($1,200). **
5. Reattach the loose portal sill to the truss vertical L8U8 left ($660). **

Priority Code 5 (ROUTINE – ROUTINE NON-STRUCTURAL)

1. Clean and flush the bridge deck and trench drain in the near backwall as part of your routine maintenance ($675). **

Long Term Improvements:

There are no long term improvements recommended at this time.

C58

Previous Recommendations:

Immediate Improvements: (Requires Prompt Action)

No immediate improvements are required at this time.

Short Term Improvements: (Within the Next 2 Years)

Priority Code 2 (PRIORITY – RE-PRIORITIZE SCHEDULE)

1. Replace the missing One Lane Bridge sign at the far approach and the missing Hazard Clearance marker at the near left ($400). **
2. Install current standard approach guide rail transitions ($4,000). **
3. Repair the decayed vertical and diagonal members at L6 and L7 on the right truss ($2,640). **
4. Repair the decayed interior arch member at the far right ($660). **
5. Repair the split at the top of member L5U5 right above the diagonal notch ($660). **

Priority Code 3 (SCHEDULE – ADD TO SCHEDULED WORK)

1. Raise the bituminous approach roadways at the backwall to provide a smooth transition onto the bridge. Also reconstruct the bituminous curbs at the near approach to channel roadway drainage toward the trench drain ($400). **

Priority Code 4 (PROGRAM – ROUTINE STRUCTURAL)

1. Replace the missing longitudinal knee brace at L5 on the left truss ($660). **
2. Repair loose knee brace at U8 left ($660). **
3. Repair the decayed portal sill member at the near right ($660). **
4. Repair the deteriorated concrete on the far abutment ($1,200). **

Priority Code 5 (ROUTINE – ROUTINE NON-STRUCTURAL)

1. Clean and flush the bridge deck and trench drain in the near backwall as part of your routine maintenance ($675). **

Long Term Improvements:

There are no long term improvements recommended at this time.

Program Status and Project Development for Replacement/Rehabilitation:

This bridge is not programmed for replacement or rehabilitation. If program status information is desired, please reference the PennDOT Website (www.state.pa.us) for the Twelve Year Program or contact Kurt Brungard at Larson Design Group. Phone: 570-323-6603 or e-mail: kbrungard@larsondesigngroup.com.

C58

Need for Specialty Inspection and/or Analysis:

Fracture Critical:	Not Required
Underwater Inspection:	Not Required
Scour Analysis:	Not Recommended

Recommended Inspection Frequency:

The recommended inspection frequency is 12 months due to the bridge weight restriction per PennDOT PUB 238, Table IP 2.3.2.4-1.

Load Rating Summary:

Because the condition of the main load carrying members has not changed significantly, the 2002 Load Rating Analysis is still valid. The Inventory and Operating Ratings from that Allowable Stress Analysis are listed below:

	Inventory Rating - Tons				Operating Rating - Tons			
Component	H20	HS20	ML80	TK527	H20	HS20	ML80	TK527
Interior Stringer	4	7	8	9	5	10	11	13
Exterior Stringer	13	24	24	27	18	33	32	37
*Floorbeam	2	3	2	3	3	6	4	6

* Indicates controlling ratings

Load Posting Review:

The structure is currently posted for Bridge Weight Limit 3 Tons. This bridge restriction is necessary because the main bridge members cannot carry the legal loads safely. In accordance with Section §4902(a) of the PA Vehicle Code, we recommend this structure remain posted as is.

Signing Needs:

Replace the missing One Lane Bridge sign at the far approach.

Americans with Disabilities Act:

This bridge does not have a sidewalk; therefore, no pedestrian access deficiencies were noted.

C58

References Used in Preparation of this Report

The inspection was performed in accordance with NBI standards. Reference documents for the inspection included the following:

PennDOT PUB 100A BMS2 Coding Manual, 2018 Edition
PennDOT PUB 238 Bridge Safety Inspection Manual, 2010 2nd Edition (including updates)
The AASHTO Manual for Bridge Evaluation, 2010 Edition with 2013 Interim Revisions
2019 NBIS Inspection Report Performed by Larson Design Group
2020 Interim Inspection Report Performed by Larson Design Group

NEAR APPROACH

FAR APPROACH
Note: One Lane Bridge sign is missing.

INLET ELEVATION
Note: Structure was painted since the 2018 inspection.

OUTLET ELEVATION
Note: Structure was painted since the 2018 inspection.

UPSTREAM CHANNEL

DOWNSTREAM CHANNEL

GENERAL VIEW OF BRIDGE WEARING SURFACE AND RAILING

GENERAL UNDERSIDE

NEAR ABUTMENT

FAR ABUTMENT

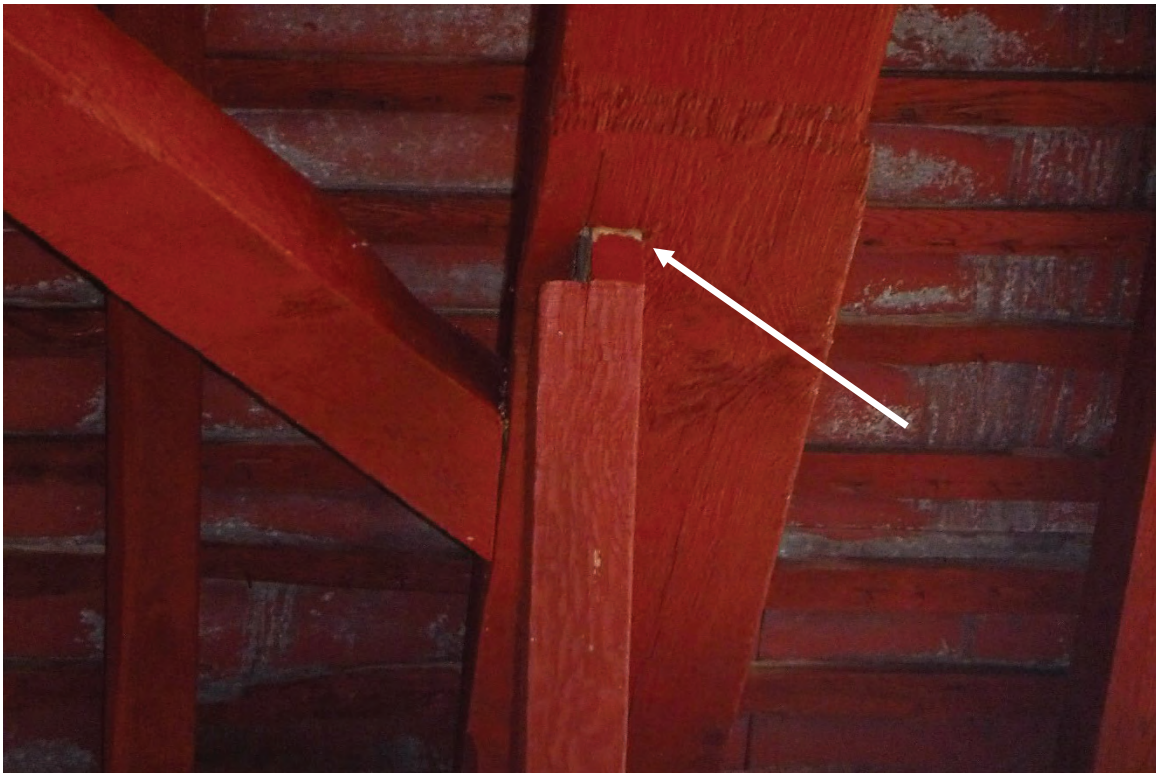
TYPICAL GUIDE RAIL
Note: Far left shown. Guide rail not attached to the structure.

TYPICAL BEARING
Note: Near left shown.

GENERAL VIEW OF TRUSS
Note: Right truss shown.

SETTLEMENT AT NEAR APPROACH ROADWAY
Note: No change in settlement. Bituminous curbs are settled and do not direct drainage to the trench drain.

DECAY IN NEAR RIGHT SILL PLATE
Note: No increase since 2019 inspection. Sill set in place during inspection.



LOOSE KNEE BRACE AT U8 LEFT
Note: No change.

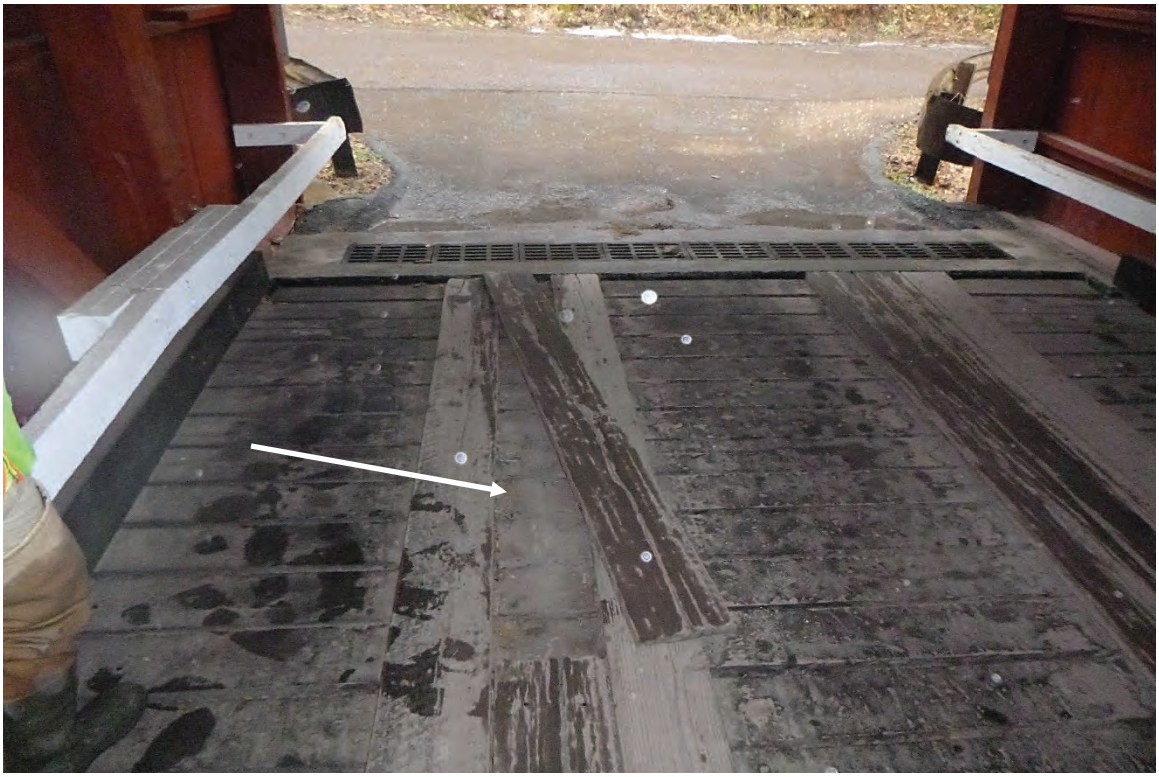
MISSING LOWER LONGITUDINAL KNEE BRACE AT L5 LEFT TRUSS
Note: No change.

SPLIT IN VERTICAL U5L5 RIGHT ABOVE DIAGONAL NOTCH
Note: No change since the 2019 inspection.

DECAYED VERTICAL AND DIAGONAL MEMBERS AT L6 RIGHT TRUSS
Note: Typical at L7 right truss. No change.

DECAYED INTERIOR ARCH MEMBER AT FAR RIGHT
Note: No change in the decay.

FAR LEFT PORTAL SILL
Note: Minor decay below the portal. Portal is not attached to the vertical member L8U8



LOOSE RUNNING BOARD IN THE NEAR RIGHT WHEEL PATH
Note: New in 2021.

FAR RIGHT ABUTMENT CORNER

Note: Deteriorated and unsound concrete; typical at far left. Slight increase since 2019.

5A01 **SR ID:** 19720503560012 5A03 **BR Key:** 12785 7A01 **Inspection Date:** March 24, 2021

1A09 **Inspection Status:** 2 - Submitted
7A02 **Team Leader:** D. Sitler (1046)
7A03 **Inspection Type:** R - Regular (routine)
7A05 **Inspected By:** 8 - Consulting Firm

Structure Description

5A08 **FHWA Facility Carried:** DAVIS (CTY BR 12)
5A07 **Features Intersected:** ROARING CREEK
5A09 **Location:** 1.5 MI NW SLABTOWN
5C01 **Roadway Name:** T-356 Shakespeare Road
5A06 **City / Borough Name:** 19/205 - CLEVELAND
6B48 **Combust. Mat. Under Bridge:** 12 - No Reportable Materials
Combust. Mat. Under Bridge Note:

Structure Type (Dept)

Main		Approach	
6A26 **Material Makeup:**	5 - Timber	6A26 **Material Makeup:**	
6A27 **Physical Makeup:**	9 - Other or none	6A27 **Physical Makeup:**	
6A28 **Span Interaction:**	1 - Simple, non-comp	6A28 **Span Interaction:**	
6A29 **Structural Config:**	18 - Truss - thru	6A29 **Structural Config:**	

Sign Information

ID01	ID02	ID03	ID04	ID06	ID07	ID05	ID08
Type of Sign	Sign Needed	Sign Message	Near Adv	Bridge Site Near	Bridge Site Far	Far Adv	Signing Notes
0 - Bridge	Yes		N	G	G	G	Clearly visible, Not required at N adv due to structure at intersection.
1 - Bridge Weight Limit	Yes	3	N	G	G	G	Clearly visible, Not required at N adv due to structure at intersection.
2 - Except Combinations	No	_					_
3 - One Truck at a Time	No						_
4 - Vertical Clearance On	Yes	9 ft-0 in	N	G	G	G	Clearly visible, Not required at N adv due to structure at intersection. Signs not current standard. Adequate for site
5 - Vertical Clearance Under	No	_					_
6 - One Lane Bridge	Yes	OLB		G	M		Missing at far approach. Near located on Left side of intersection, Visible to traffic coming from both sides of the intersection.
7 - Narrow Bridge	No						_
8 - Hazardous Clearance	Yes			G	G		Located behind GR a far and on portal verticals at N.
9 - Other	Yes	Dist Ahead	N			G	N - not required; F - 1 mile ahead; Clearly visible

5A01 **SR ID:** 19720503560012 5A03 **BR Key:** 12785 7A01 **Inspection Date:** March 24, 2021

Features Intersected

6C02 SR ID SR	6C02 SR ID Seg	5C03 On/ Under	5B09 Skew Angle	5C06 Dir	5C29 NHS	4A20 Min Lat Cl Left	4A19 Min Lat Cl Right	6C18 Tot Hor Cl Left	6C19 Tot Hor Cl Right	6C20 Min Vrt Cl Rdwys Left	6C21 Min Vrt Cl Rdwys Right	6C22 Vrt Cl Over 10ft Left	6C23 Vrt Cl Over 10ft Right	6B17 ADT
_	_	1	90	N/A	0 - Not on NHS	0.0	0.0	0.0	12.7	99.9	8.9	99.9	9.3	50
		2	-1	N/A		0.0	0.0	-1.0	-1.0	-1.0	11.0	-1.0	-1.0	-1

Vertical Details

6C02 SR ID SR	6C02 SR ID Seg	5C03 On/ Under	6C35 Left Vertical Clearance Signing	6C37 Left Vertical Clear Posting	6C36 Right Vertical Clearance Signing	6C38 Right Vertical Clear Posting
_	_	1		0 ft 0 in	1 - Req and existing	9 ft 0 in
		2		0 ft 0 in		0 ft 0 in

6B15 **Design Exceptions:**

6A50 **Sup Latent Problem:**

6A51 **Sub Latent Problem:**

Deck Geometry

6B14 **Table Used for Appraisal:** 3 - 2E

Controlling Values

5C10 **ADT:** 50

5C27 **Bridge Road Width:** 12.7

4A10 **Appraisal:** 2 - Intolerable-Replace

Notes: Table 2E used for appraisal. Appraisal based on the low clearance on the bridge.

4A11 **Underclr Appr:** N - Not applicable (NBI)

6B13 **Controlling Vertical:** -1.0 FT

Controlling Lateral:

5A01 **SR ID:** 19720503560012 5A03 **BR Key:** 12785 7A01 **Inspection Date:** March 24, 2021

Traffic Safety Features

Feature Type	IA01 Location	IA02 Adequacy Rating	IA03 Description	5C08 Posted Spd Lmt (mph)
1 - Railing		4 - does not meet code 6	3" x 6" TIMBER RAILING BOARDS	35
Comment: Bolted to truss verticals, arch and diagonals - 24" Ht, minor checks and splits thru-out w/ random open.				
2 - Transition		2 - Req not provided	None Provided.	35
Comment: Appr. guide rail not attached to structure. Boxing glove ends at str. w/ damage				
3 - Approach Guiderail		3 - inadeq for cond	2 PANELS OF 2-S @ ALL CORNERS	35
Comment: Boxing glove ends adjacent to bridge - min vehicle scrapes at both N, 1 post at the near right w/ small bolt, stl offsets, flared @ N due to intersection, minor dents in W-rail at FL & FR. 1 disconnected post at FL. First 2 posts adjacent to timber railing @ NL and NR w/ no offset brackets. Minor damage to boxing glove at NR, NL and FL adjacent to bridge. Overall non-standard but adequate for site. Requires repair due to the disconnected posts at the NR, FL.				
4 - Approach railend		4 - does not meet code 6	Boxing Gloves	35
Comment: Flared 90 degrees and outside clear zone at both F. NL flared approx 45 degrees and NR flared approx 30 degrees along interecting road. Both N adequate for site due to low speed and ADT.				

Approach Alignment

4A02 **Code:** 6 - Equal Min Criteria

Comment: T-intersection @ N. F w/ verical crest curve and slight horiz curve. Minor speed reduction.

Approach Roadway

6B39 **Code:** 5 - Fair

Pavement: BITUMINOUS - N - minor gravel deposits, 2 1/2" max settlement along backwall, bituminous exhibits minor wear w/ shallow depressions. F - 1 1/4" max settlement along backwall, full width open transv joint approx 10' from bridge.

Drainage: N - Drains toward bridge. 3"H bituminous drain curbs w/ full width trench drain in backwall - minor debris in drain but functional. Ponding @ Near due to settlement. The trench drain at the near is ineffective due to the settlement of the approach roadway preventing water from flowing into the trench drain.
F - Drains away from bridge, natural and adequate.

Shoulders: Dirt/gravel w/ grass growth - stable w/ minor build-up.

Approach Slab

6B38 **Code:** N - N/A

Pavement: N/A

6B04 **Bump at Bridge:** Bump Due to settlement at backwalls

6A39 **Relief Joints:** 0 - Joints not present 6A41 **Number of Joints:** 0

Comment: N/A

6B02 **New Wearing Surface Under Bridge:** No

5A01 **SR ID:** 19720503560012 5A03 **BR Key:** 12785 7A01 **Inspection Date:** March 24, 2021

Deck Wearing Surface

Main

5B02 **Type of Wearing Surface:** 7 - Wood or Timber
5B03 **Type of Memb. Water-Proof:** 0 - None
5B04 **Deck Corrosion Protection:** 0 - None
6A33 **Thickness:** 2.0
6A34 **Date Recorded:** 03/17/2008

Approach

6A30 **Type of Wearing Surface:** _ - Unknown (NBI)
6A31 **Type of Memb. Water-Proof:** _ - Unknown (NBI)
6A32 **Deck Corrosion Protection:** _ - Unknown (NBI)
6A33 **Thickness:** 0.0
6A34 **Date Recorded:** 01/01/1901

6B40 **Condition Rating:** 6 - Satisfactory-structural elements show some minor deterioration.

IC02 **Dk WS Notes:** Longitudinal timber running boards w/ asphalt coating, up to 1/4" elevation difference @ joints. Minor checks & splits. Moderate wear with minor protruding nail heads, isolated open checks, random wide splits in boards especially ends. There is very minor decay at the near end of the right running boards. The center board at the near end of the right wheel path is not attached to the deck. The board is confined by the adjacent boards and does not present a threat to the traveling public. All the other boards remain secure. Several newer boards. Asphalt coating approx. 90% worn off.

Expansion Joints:

6A41 **Number of Expansion Joints:** 0

	VD25	VD26	VD27
Joint Number	Joint Type	Movement Class	Manufacture Code
0			

Bridge Cleaning

VD31 **Bridge Seat Cleaning:** 0
VD32 **Bridge Seat Cleaning Note:**
VD33 **Scuppers w/ Downspouts:** 0
VD34 **Scuppers w/o Downspouts:** 0

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Joint Inventory and Inspection Information

IJ01 Overall Joint Condition Rating: N - Not Applicable

IJ02 / IJ03 Joint / Record Key	IJ04 Joint Type	IJ05 Joint Location	IJ06 Joint Movement	IJ07 Joint Manufacturer	IJ08 Joint Length (ft)	IJ09 Debris Impact?	IJ10 Leaking?	IJ13 Condition Rating
						N	N	

IJ02 / IJ03 Joint / Record Key	IJ11 Damaged?	IJ12 Covered?	IJ14 Extrusion Install Year	IJ15 Seal Install Year	IJ16 ECMS NO	IJ17 Replacement Reason	IJ18 Replacement Comments	IJ19 Condition Summary
	N	N						

Bearing Inventory and Inspection Information

IB01 Overall Bearing Condition Rating: 8 - Very Good

IB02/IB03 Bearing / Record Key	IB04 Bearing Type	IB05 Bearing Location	IB06 Bearing Count	IB07 Bearing Movement	IB08 Corrosion?	IB09 Alignment Issues?	IB10 Anchor Bolt Issues?	IB11 Loss of Bearing Area?	IB12 Condition Rating
1 - 1	10 - Neoprene (plain)	Abutment - NAB - Single	2	F - Fixed	0 - No	0 - No	0 - No	0 - No	8 - Very Good
2 - 1	10 - Neoprene (plain)	Abutment - FAB - Single	2	F - Fixed	0 - No	0 - No	0 - No	0 - No	8 - Very Good
3 - 1	03 - Steel Plates	Abutment - NAB - Single	2	F - Fixed	0 - No	0 - No	0 - No	0 - No	8 - Very Good
4 - 1	03 - Steel Plates	Abutment - FAB - Single	2	F - Fixed	0 - No	0 - No	0 - No	0 - No	8 - Very Good

IB02/IB03 Bearing / Record Key	IB13 Install Year	IB14 ECMS NO	IB15 Replacement Reason	IB16 Replacement Comment	IB17 Condition Summary
1 - 1					Lower chords bear on neoprene bearing pads - no defects.
2 - 1					Lower chords bear on neoprene bearing pads - no defects.
3 - 1					Arches bear on steel bearing shoes - light spot rust, stable.
4 - 1					Arches bear on steel bearing shoes - light spot rust, stable.

5A01 **SR ID:** 19720503560012 5A03 **BR Key:** 12785 7A01 **Inspection Date:** March 24, 2021

Deck

1A01 **Condition** 6 - Satisfactory-structural elements show some minor deterioration.

6B07 **Est. Spall Delamination:** 0.00% 6B08 **Date:** 03/17/2008

6B10 **Est. Chloride Content:** 0.00% 6B11 **Date:** 03/17/2008

1A07 **Unrepaired Spalls:** 0.00 SF 6B47 **Deck Cracking Metric:** 0.00 YD/SY

Deck Top: Transverse timber planks w/ up to 2" gaps, asphalt coated w/ areas of missing, minor checks and splits, isolated heavy splits @ ends of boards outside of travelway especially at NR. 2" wide decay hole through board at 25' from far end to the right of the running boards, due to knot hole in deck board.

Deck Underside: Minor checks and splits.

Deck Drainage: None

Expansion Joints: None

Deck Notes: N/A

Superstructure

1A04 **Condition Rating:** 5 - Fair-all primary structural elements are sound but may have minor section loss, cracking spalling.

Narrative: Rating based on decay @ L6 and L7 connections on RT truss.

Girders/Beams: TRUSS (cont'd):

Lower Chords: Original Lt LC's generally exhibit minor surf decay and minor insect infestation. Original LC joints appear stable. Newer int & ext LC members at NL (9.5'L), NR (15'L) and FL (9.0'L) - spliced into existing members on left and newer on right and are sound. Newer interior and exterior lower chord members are spliced (repair from September 2011 flood. Splices appear secure, very slight misalignment of splice between Vert 3 and 4.

Orig arch members w/ min checks, splits and isolated min surf decay (up to 1/4" of awl penetration). Top of int arch at FR has a 12"L by three quarter width area of decay behind curb 2.5"D max. (No increase since 2016 inspection.) Int arches above deck w/ min scrapes due to collision. Newer arch members at NL ext (7'L), NR int (7'L) and at FL int and ext (7'L) - spliced into orig arches, sound. Newer arch and lower chord repairs are treated with CCA.

Diagonals w/ checking upto 3/8" wide with 2" awl penetration.

The missing knee brace at U3 right was prev replaced in 2019. There is also a missing longitudinal knee brace at L5 on the left truss. Loose Knee brace, missing dowel @ top U8 LT. Missing dowel at bottom of knee brace U7 Lt at conn's.

Floorbeams: (9) Solid sawn rough cut timber w/ minor to moderate checks and splits, minor areas of insect infestation. 3/8"W by approx 1.5"D checking at ends of few FB's around connection bolts - FB0 Lt, F1 Rt, FB2 Lt and Rt, FB3 Lt, FBs 6 & 7 Lt and Rt.

Stringers: (7) Solid sawn rough cut timber w/ minor to moderate checks and splits. Checks and splits most severe @ centerline stringers. Severe split @ end of S1 @ FB 5 extends approx 1' to N side of FB - Very little live load on S1. Heavy splits @ ends of S3 @ FB 2 & @ S5 @ FB 1 - both behind bearing area. Heavy wide check on the bottom of S3 in Bay 6. S6 bay 6 and 7 do not bear on FB7. Newer shim board prev placed between FB3 and stringers over FB3, stringers bear fully on FB.

Diaphragms:

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Truss Members: Timber truss members - min to mod checks & splits (3/8" max), min surf decay, few areas min insect damage.

U/C joints sound. U5U6 Rt displacement 1/2" at splice. L0U1 Rt is newer w/ 1/8" checks w/ 3/4" awl penetration.

Vert's L0U0 Lt, L1U1 Lt, L2U2 Lt, L3U3 Lt, L4U4 Lt and Rt, and L8U8 Lt and Rt w/ upto 3/8"W checks - typ 2" to 3"D. L2U2 Rt - hvy check on N side from bridge rail to top - 7/16"W x 4"D meas @ top. Splits starting above several notches in vert's at top of members (@ diag conn) - worst is at U5 Rt w/ 3/16"W split thru vert above notch. Vert's L5 Lt and L4 Lt & Rt w/ mod splits below LC. Bot of L0U0 Lt & Rt and L8U8 Lt & Rt prev replaced in kind for 6'L & spliced into existing vert's - splices are sound, also splice at L2U2 at right to repair damage from 2011 flood. L0U0 Rt exhibits a 1/8"W check at splice w/ 11/16" awl penetration. L5U5 left w/ approx 10% Sx loss due to splitting at bot. Hvy decay hole in vert and diag at L6 Rt - decay at L6 Rt w/ no increase in decay since the 2016 insp, slightly greater than 25% of total connection area. Decay has exposed the steel dowel in diag U5L6. Minor decay at few lower diag/vert conn's. Mod decay w/ up to 2" awl penetration in diag & vert at U6L7 & L7U7. Ends of vert's below LC w/ mod surf decay & collision damage from high water debris. 1/8" separation of lap splice at FR & FL corners (member L8U8) due to ice damage on March 4, 2007. 1/2" gaps at UC to vert connection at U5 and U8 above top of strut on Lt.

Truss continued see Girders;

Portals/Bracings: UPPER LATERAL STRUTS: Solid sawn rough cut w/ minor checks & splits. Minor collision damage @ centerline roadway @ N portal.

PORTALS AND BRACING: Min checks and splits. NL portal vert replaced for 2'-6"H at base. Min collision damage to N portal header beam. Minor insect damage on F portal header beam and on UC at FL. NR vert appears newer with minor decay at bottom. Both F portal vert's appear newer. Damage done during the July 2017 impact was repaired; NL portal knee brace reattached with scab board at top and siding reattached to vertical. Heavy decay to near right portal sill. The far left portal sill is loose and exhibits mionr decay at the end below the portal vert (new in 2021)

ROOF MEMBERS AND ROOF SYSTEM: Generally in satisfactory condition and are composed of aluminum panels attached to timber slats and rafters. Minor water stains and decay on top of ridge beam. Isolated broken/missing slats. No holes detected.

SIDING: Timber plank siding in fair condition. Siding nailers exhibit mod decay at several locations. The siding was painted, newer nailers installed at Panel 2 on right at bottom, and loose siding boards were reattached in 2018.

Bearings: Lower chords bear on neoprene bearing pads - no defects. Arches bear on steel bearing shoes - light spot rust, stable. Stringers bear on treated timber shims & steel angle clips @ N, only bear on end FB and are cantilevered at backwall @ F - no defects.

Drainage System: N/A

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Substructure

1A02 **Substructure Condition Rating:** 5 - Fair-all primary structural elements are sound but may have minor section loss, cracking spalling.

Notes: Stone masonry w/ concrete jacket

Near Abutment

Backwall: Reinforced Concrete - no visible defects. 6" trench drain outlet from behind backwall @ NL - open.

Bridge Seats: Reinforced Concrete for Stringer, lower chord & arch seats. Also steel keeper angles present under stringers. no visible defects.

Cheekwalls: N/A

Stem: Stone masonry w/ full concrete encasement (two tiers) stone masonry not visible. TOP TIER - Top portion of top tier is newer rehab w/ isolated hairline cracks; Below rehab portion - areas of moderate scaling, isol. unsound conc., full height 1/8" W(max.) crack measured at gauge point, crack @ centerline, crack extends into bottom tier w/ light efflor. Full height 1/2" W crack, measured at top corner approx. 2.0' from LT lower chord (construction joint) increase in width in 2021. 3/16" W vert crack (construction joint) w/ minor spall adjacent to WNR extending into 1/2" wide horiz. crack on top of tier, crack on top face. BOTTOM TIER - area of moderate concrete deterioration @ lower LT corner 2.5'L x 8"D x 1'H. Full height hairline to open vertical crack approx. 4' left of CL w/ minor efflor, extends into top face of tier. Minor spalls at left below drain pipe and below stringer 3, 26"L x 9"H x 4"D spall at bottom left corner (at water line)

Wings: Stone masonry w/ full concrete encasement, WNL - light weathering scale, area of heavy edge scale under backwall drain pipe (12"l x 4"h x 1/2" dp max.) WNR - light weathering scale, HL to open diagonal crack at safety wing interface. Minor surface spall adjacent to vert construction joint 4' from fixed end at ground line.

Footing: Not exposed

Piles: N/A

IN20 **Scour Undermine:** 0 - No

Settlement: None apparent

Embank Slope-wall: N/A

Wall Drainage: N/A

Far Abutment

Backwall: Reinforced Concrete - top has minor spall in LT wheel path, HL crack in RT wheel path & at the centerline of the roadway

Bridge Seats: Lower Chord & Arch seats are Reinforced Concrete - HL horizontal crack in grout under LT lower chord. Full ht HL to open vertical crack @ center. Stringers bear on end floorbeam and are cantilevered for short length to backwall (not supported at ends of stringers).

Cheekwalls: N/A

Stem: Stone masonry w/ full concrete encasement (two tiers) stone masonry not visible. TOP TIER - newer concrete at top from rehab w/ a HL to open vertical crack approx. center Section below rehab - moderate scaling, areas of unsound concrete, full ht 1/16" W vertical crack approx. 2' from left end w/ edge spalling (Construction Joint). BOTTOM TIER - Moderate concrete deterioration, areas of unsound concrete w/ horiz. and vert. hairline cracks w/ moderate efflor, 58"W x 45"L x 42"H at top right corner of bottom tier, 57"L x 30"W x 12"H at top of left corner (active deter w/ unsound conc adj increase in deter in 2021.). Full height vert HL to open crack under Stringer 2&6. light scaling along top face and at bottom water line.

Wings: Stone masonry w/ full concrete encasement, moderate deterioration to top of bottom tier w/ efflor staining @ right. Both wings have minor honeycomb & full ht open vert cracks @ mid length. WFL has minor scaling and a hairline to open crack at safety wing

Footing: Not exposed

Piles: N/A

IN20 **Scour Undermine:** 0 - No

Settlement: None apparent

Embank Slope-wall: N/A

Wall Drainage: N/A

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

IU00a **UW Reviewer Action:**

IU00b **Reviewer Comments:**

IU02 **Number of Units:** 0

IU03 **SCBI Source:** O - observed

IU04 **Overall SCBI:** 4

IU04b **SCBI Recalculated:** ☐

IU01 **Recalculate SCBI:** 0 - no recalc needed

4A08 **SCBI:** 4 - Stable, needs action

4A08b **Scour Critical Category:** D

IU06 **Streambed Material #1:** A6 - Stable Alluvium

IU06 **Streambed Material #2:**

IU07 **Notes:** STABLE ALLUVIUM, COBBLES, FEW BOULDERS. (D=10.0') No scour at abutments w/ isolated channel scour at center

Current Countermeasures

CM Num	IU21 Type	IU22 Location	IU23 Condition	IU24 Subunit

Possible Countermeasures

PCM Num	IU25 Location	IU26 Work Candidate

SAR Calculation Data

IU11 **NAB Location:** 1 - Left

IU12 **FAB Location:** 2 - Right

US Left Wingwall

IU13 **Presence:** 1 - Yes

IU14 **Condition:** 1 - Good

US Right Wingwall

IU15 **Presence:** 1 - Yes

IU16 **Condition:** 1 - Good

Horizontal Debris Blockage

IU17 **Start:** 0

IU18 **End:** 0

Vertical Debris Blockage

IU19 **Start:** 0

IU20 **End:** 0

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Sub Unit OSA Data

Observed Scour Rating Components

IN01 Sub Unit	IN12 Pier/ Abut Type	IN13 Inv. Found Type	IN14 Found Type	IN15 Strmbd Mat	IN19 Move Ind	IN04 Chg Since Last Insp	IN05 Scour Hole	IN06 Debris Potential	IN07 Scour-ability	IN08 Opening Adeq. / Channel	IN09 Sediment	IN10 Align-ment	IN11 Velocity/ Stream Slope	IN03 Observed Scour Rating
B - FAB	6	L	2	A6	0	8	9	6	6	7	9	8	7	6
B - NAB	6	L	2	A6	0	8	9	6	6	7	9	8	7	6

Other Subunit Details

IN01 Sub Unit	IN16 UW Insp Type	IN18 Water Dept	IN17 Observed Scour Depth	IN20 Scour Undermine	IN21 Counter-measures	IN02 Info from Current Insp	IN22 100 yr Flood Calc Scour Depth	IN23 500 yr Flood Calc Scour Depth	IU27 SCBI Code
B - FAB	E	1.1	0.0	0	0	1	0.0	0.0	4

IN24 **Notes:** NO SCOUR, NO U/M, FOOTING NOT EXP. IN=9.2' OUT=9.3' MAX.H2O=1.1'

B - NAB	E	0.5	0.0	0	0	1	0.0	0.0	4

IN24 **Notes:** NO SCOUR, NO U/M, FOOTING NOT EXP. IN=9.4' OUT=9.8' MAX.H2O=0.5'

Underclearance

IL09 **Origin Description:**
IL10 **Horizontal:**
IL11 **Vertical:**
IL12 **Notes:**

pennsylvania
DEPARTMENT OF TRANSPORTATION

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Channel

1A05 **Channel/ Channel Protection Cond. Rating:** 7 - Good

Channel: Channel is straight U/S, D/S & through the structure.

Banks: Near is approximately 10' high, far approximately 6' high. All with 2:1 slope & heavy vegetation and trees

Streambed Movements: Min lateral scour at F U/S & D/S bank, no repair required.

Debris, Vegetation: Some minor debris at all banks not adjacent to the structure - all will pass under structure

River Control Devices: None

Embank/Strmbed Contr: Larger natural rock along near U/S & D/S banks; Smaller field rock at far

Drift Other: None

Waterway Adequacy

1A06 **Appraisal Code:** 7 - Good

Narrative: Slight chance of overtopping approaches and deck (SCOUR VULN: Not)

IL02 **Overtop Risk:** S - Slight

IL03 **Traffic Delay:** I - Insignificant

5C22 **Functional Class:** 09 - Rural Local

IL13 **Worst Flood Event:**

IL14 **Worst Flood Event Date:** January 01, 2001

High Water Mark

IL05 **Elevation:** -1 **IL06** **Date:** September 13, **IL07** **New High Water Mark:** No

IL08 **High Water Notes:** Water overtopped N & F approaches, HW mark at bottom of stingers based on flood debris at N side.

pennsylvania DEPARTMENT OF TRANSPORTATION

Form K

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Paint Condition

6B36 **Paint Cond Rating:** N - Not Applicable **6B37** **Ext of Paint Cond:** N - Not Applicable

6B35 **New Paint:** 0 - no new paint

Int Beam / Gird: N/A
Fascias: N/A
Splsh Zone Truss Gird: N/A
Truss: N/A
Bearings: N/A
Other: N/A

Load Ratings

IR01a **Load Rating Review Recommended:** Recalc not required
Due To:

IR03 **Calculation Date:** August 07, 2002

IR02 **Rating Approval Date:** April 23, 2019

Load Rating Details

	IR10	IR11	IR11a	IR21	IR20	IR05	IR06	IR07	IR16	IR14	IR15	IR13	IR12
LOAD TYPE	IR LOAD	OR LOAD	SLC RATING	IR Rating Factor	OR Rating Factor	NBI IND	RTNG ANAL METH	CONT MEM TYPE	ANALYSIS ENGINEER	AASHTO MANUAL YEAR	AASHTO SPEC YEAR	OPR GOV CRIT	INV GOV CRIT
1	2	3	3	-1.00	-1.00	0	1	2		2000	1996	M	M
IR19 Notes Description:													
2	3	6	6	-1.00	-1.00	1	1	2		2000	1996	M	M
IR19 Notes Description:													
8	2	4	4	-1.00	-1.00	0	1	2		2000	1996	M	M
IR19 Notes Description:													
0	3	6	6	-1.00	-1.00	0	1	2		2000	1996	M	M
IR19 Notes Description:													

Posting

VP01 **Status Date:** 03/20/2013
VP02 **Posting Status:** P - Posted for load
VP03 **Special Restrictive Posting:** 0 - Not Applicable
VP04 **Posted Weight Limit:** 3 ton
VP05 **Posted Limit Combination:** -1 ton
VP06 **Posting Reason:** B - Super/Main Overstres

5A01 **SR ID:** 19720503560012 5A03 **BR Key:** 12785 7A01 **Inspection Date:** March 24, 2021

Proposed Maintenance Items :-

IM01 Type of Work	IM03 Action	IM04 Est Qty	UOM	IM05 Priority	IM06 Init Recm'd Date	IM08 Target Year	IM11 Work Assign
Flexible	27 - RDGDERL-CONNECT GDERAIL TO BR	4	EA	2	3/24/2009	0	

IM07 **Status:** 0 - Work not planned IM15 **Notes:** Install current standard approach guide rail transitions.
IM09 **Location:** NL, NR, FL, FR

Flexible 51 - RDCLSGN-RPL.CLEARANCE SIGN 1 EA 2 3/24/2009 0

IM07 **Status:** 0 - Work not planned IM15 **Notes:** Replace missing OLB sign at far approach.

Missing Hazard Clearance Marker replaced prior to the 2020 inspection.

IM09 **Location:** F

Flexible 60 - B744601-RPR/RPL.TMBR.MBR 8 EA 2 3/16/2011 0

IM07 **Status:** 0 - Work not planned IM15 **Notes:** (Priority 2; QTY = 4):
1-Repair decayed vertical and diagonal members at L6 and L7 on the right truss and inside arch member at far right.
2- Repair the split at the top of member L5U5 right above the diagonal notch.
(Priority 4; QTY = 4):
1-Replace missing lower longit knee brace at L5 Lt truss.
2-Repair loose Knee Brace @ U8 Lt.
3- Replace the decayed portal sill member at the near right.
4 - Reattach the loose portal sill to the truss vertical L8U8 left.

IM09 **Location:** 1

Flexible 40 - RDPAVMT-PATCH/RAISE PAVEMENT 10 SY 3 3/24/2009 0

IM07 **Status:** 0 - Work not planned IM15 **Notes:** Raise approach roadways at the backwalls to provide a smooth transition onto the structure. Also reconstruct the bituminous curbs at the near approach to channel roadway drainage toward the trench drain.

IM09 **Location:** N and F

Flexible 35 - B744301-RPR/RPL.TMBR.DK. 1 SY 3 3/24/2021 0

IM07 **Status:** 0 - Work not planned IM15 **Notes:** Reattach the loose running board at the near end of the right wheel path.
IM09 **Location:** 1

Flexible 28 - B744802-REPAIR ABUTMENT 1 CY 4 3/24/2009 0

IM07 **Status:** 0 - Work not planned IM15 **Notes:** repair deteriorated concrete on the far abutment encasement.
IM09 **Location:**

Flexible 23 - A743101-CLEAN/FLUSH DK 1 EB 5 3/24/2009 0

IM07 **Status:** 0 - Work not planned IM15 **Notes:** Routine Maintenance.
IM09 **Location:** Entire Bridge

Flexible 1 - B743101-FLUSH SCUP/DNSPTG 1 EB 5 3/24/2009 0

IM07 **Status:** 0 - Work not planned IM15 **Notes:** Flush the trench drain trough at the near end as part of routine maintenance.

IM09 **Location:** N Trench Drain

Completed Maintenance Items :-

5A01 **SR ID:** 19720503560012 5A03 **BR Key:** 12785 7A01 **Inspection Date:** March 24, 2021

IM01 Type of Work	IM03 Action	IM04 Est Qty	UOM	IM05 Priority	IM14a Completed Date	IM08 Target Year	IM11 Work Assign
Flexible	35 - B744301-RPR/RPL.TMBR.DK.	2	SY	3	1/1/1901	0	

IM07 **Status:** 5 - Completed/Dept IM15 **Notes** Replace the decayed running boards at the near end of the structure.

IM09 **Location:**

Flexible	36 - A744701-RPR/RPL.TRUSS MEMBER	4	EA	3	1/1/1901	0	

IM07 **Status:** 5 - Completed/Dept IM15 **Notes** Reset the near portal vertical to the vertical position. Shift the first rafter so that it is flush at the eve. Reattach the near left portal knee brace. Add a scab board to the portal header where damaged.

These items were added as a result of the July 2017 damage inspection.

The near left portal vertical has been properly repaired since the July 2017 inspection.

IM09 **Location:** NL

Flexible	60 - B744601-RPR/RPL.TMBR.MBR	2	EA	4	1/1/1901	0	No

IM07 **Status:** 5 - Completed/Dept IM15 **Notes** Replace the damaged lower chord at L2L4 on the right truss. (Repaired 3-9-12 insp)
Repair or replace the bottom of L3U3 vertical on the right truss. (Repaired 3-9-12 insp)
Replace the damaged siding between Panel Point 2 to 4 at the U/S side and between Panel Point 2 & 3 on the D/S side. (Repaired 3-9-12 insp)
Reattach the disconnected lower chord bracing by the near abutment. (Repaired 3-9-12 insp)

IM09 **Location:** U3, L5

Flexible	36 - A744701-RPR/RPL.TRUSS MEMBER	2	EA	5	1/1/1901	0	

IM07 **Status:** 5 - Completed/Dept IM15 **Notes** Reattach the siding along the near left corner. Reinstall the broken siding at the near portal.

These items were added as a result of the July 2017 damage inspection.

The siding has been reattached at the near left portal since the July 2017 inspection.

IM09 **Location:** NL

Flexible	46 - RDSHLDR-RPR/RECONST	200	SY	1	3/9/2012	0	

IM07 **Status:** 6 - Completed/Contr IM15 **Notes** Reconstruct the shoulder at the F approach. (Repaired 3-9-12 insp)

IM09 **Location:** F APP

Flexible	3 - ECREMVG-REMOVE VEG/DEBRIS	2	CY	4	3/9/2012	0	

IM07 **Status:** 6 - Completed/Contr IM15 **Notes** Remove the large tree at the FL shoulder. (Repaired 3-9-12 insp)

IM09 **Location:** FL

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

IM01	IM03	IM04		IM05	IM14a	IM08	IM11
Type of Work	**Action**	**Est Qty**	**UOM**	**Priority**	**Completed Date**	**Target Year**	**Work Assign**
Flexible	70 - RDLDSGN-RPL.LOAD LIMIT SIGN	1	EA	0	7/10/2012	0	

IM07 **Status:** 5 - Completed/Dept **IM15** **Notes** Reset the F BLPA that is lying on the ground.
Clean or Replace the N BLP sign.

IM09 **Location:** N & F

Flexible	57 - A743201-SPOT PAINT SUPERSTR	1	EB	4	3/26/2019	0	

IM07 **Status:** 5 - Completed/Dept **IM15** **Notes** Repaint the timber siding.

The siding and the timber members above the deck were painted prior to the 2019 inspection.

IM09 **Location:** 1

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Current Inspection

7A03 **Primary Type:** R - Regular (routine)

7A06 **Types of Inspections Performed:**

NBI	Underwater	Element	Fracture Critical	Other Special
Yes	No	No	No	Yes

Actual Inspection Workforce Hours

6B26 **NBI Crew:** 0.00

6B28 **Fracture Critical:** 0.00

6B27 **Crane:** 0.00

6B30 **Underwater:** 0.00

6B29 **Other 1:** 0.00

6B31 **Other 2:** 0.00

Inspection Costs (Entered to nearest dollar)

6B32 **Engineering:** 3832

6B33 **Rigging:** 0

6B34 **Office:** 0

Special Equip Used:

6B12 **Temperature:** 52.0

6B09 **Weather:** 6 - Rain

6B03 **Inventory Review Recommended:** No

Change Notes:

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Inspection Team

7A05	**Inspected By:**	8 - Consulting Firm
7A05a	**Insp. Org. Name:**	Larson Design Group, Inc.
7A02	**Team Leader:**	D. Sitler (1046)
6B23	**Team Member:**	Andrew J. Susen, CBSI
6B24	**Hired By:**	1
6B25	**Insp Contract Num:**	E04777
2A02	**Inspection Notes:**	LDG No. C58 Timber Truss Covered Bridge Clear Span = 67.7' Category = C1/I4 Maintain 12 month inspection frequency due to the bridge weight restriction. 3/24/2021: Routine hands-on inspection of all bridge elements performed. The center running board at the near end of the right wheel path is no longer attached to the deck, but is confined by the adjacent boards. There was an increase in deterioration on the concrete encasement at the far abutment. Far left Portal sill is loose and exhibis decay. 4/1/2020: An Interim hands-on inspection was performed on the superstructure without the use of specialized equipment. This structure was completed in April due to a mandated inspection shutdown from Central Office in portions of March. Future inspections will be completed in March. A new Hazard Clearance Marker has been installed at the near left. There is no significant change in decay on the superstructure. 3/26/2019: Routine hands-on inspection of all bridge elements performed. The bridge was painted since the 2018 inspection. The near left hazard clearance marker is missing. The missing knee brace at U3 right was replaced since the 2018 inspection. There is additional decay to the near right portal sill that is new since the 2018 inspection. There was an increase in deterioration to the concrete encasement at the far abutment. 3/12/2018: An hands-on interim inspection was performed on the superstructure without the use of specialized equipment. The near left portal impact damage was repaired. The left knee brace was reinstalled, and the bottom of the left vertical was replaced. All elements were shifted back into their original position and the siding was reattached. There are no other significant changes since the 2017 inspection.

6B49	**Inaccessible Portion of Structure:**	
IC01	**Inaccessible Inspection Location:**	
	Damage Inspection Comment:	

5A01 **SR ID:** 19720503560012 **5A03** **BR Key:** 12785 **7A01** **Inspection Date:** March 24, 2021

Next Inspection

7A14 **Next Inspection By:** 8 - Consulting Firm

6B20 **Next Insp Type:** I - Interim (special)

Schedule

Insp Types	7A07 Required	7A09 Frequency	7A10 Next Date
NBI:	**----**	24	March 24, 2023
Fracture Critical:	No	-1	January 01, 1901
Underwater:	No	-1	January 01, 1901
Other Special:	Yes	12	March 24, 2022
Element:	No	-1	January 01, 1901
Crane:	**----**	**6B21**	January 01, 1901

7A19 **Ext Insp Interval Eligiblity** No **7A20** **Ext Insp Interval Concurrence** No

6B01 **Special InspType:**

Estimated Inspection Workforce Hours

7A12 **NBI Crew:** 0.00 **7A17** **Underwater:** 0.00

7A15 **Fracture Critical:** 0.00 **7A16** **Other 1:** 0.00

7A13 **Crane:** 0.00 **7A18** **Other 2:** 0.00

SAFETY FEATURES RATING SHEET

REFER TO PUB 100-A CODING GUIDE AND PDT FORM D-450-A FOR ADDITIONAL INFORMATION

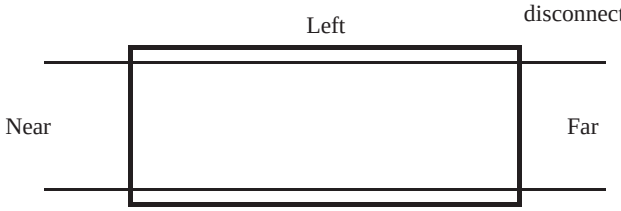
Created by : DJS/JWL 3/7/2017 Checked by: DJS/AJS 3/24/2021

Near Left Notes:

Type 2-S weathering stl guide rail, stl offset brackets, Boxing glove adjacent to structure w/ damage, flared at intersection, no offset brackets on first two posts Boxing Glove End Treatment - flared ± 45°

Far Left Notes:

Type 2-S weathering stl guide rail, stl offset brackets Boxing glove adjacent to structure, minor dents, Boxing Glove End Treatment - flared 90° Damage to boxing glove, disconnected at the 1st post.



Near Right Notes:

Type 2-S weathering stl guide rail, stl offset brackets, Boxing glove adjacent to structure w/ damage, flared at intersection, no offset brackets on first two posts Boxing Glove End Treatment - flared ± 30°. The third post is disconnected

Far Right Notes:

Type 2-S weathering stl guide rail, stl offset bracket. 1 disconnected post, boxing glove adjacent to structure, boxing glove end treatment - flared 90°

LEGEND: Appr. Pave: 12' Speed Limit: 35 mph

Measure guide rail height = guide lines ---

If between 2' $6^{15/16}$" and 2' 3" code no higher than "6"

If between 2' 3" and 2' 0" code no higher than "4"

If less than 2' then code G.R. "3"

T - Trailing Edge

R - Required/Missing

D - Damaged

■ - Steel Brackets

Trans - Remember Spacer Tube

Rubrail

Distance from Roadway includes SPET Offset when applicable.

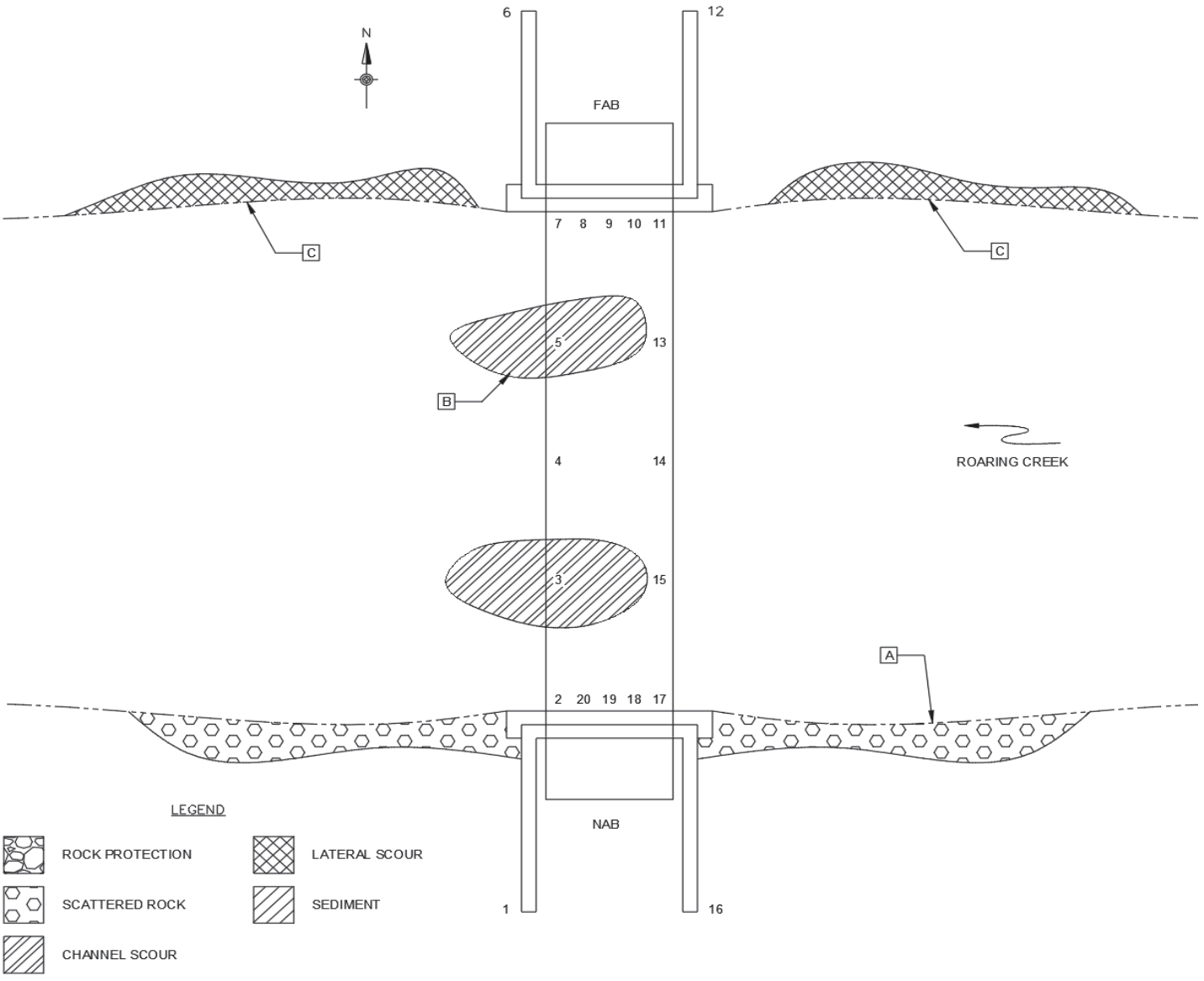
	BRIDGE RAILING RATING			**Controlling Rating (IA02)**
	Height	Description	Code	
Left	2' 0"	3" by 6" timber rail bolted to truss verticals.	4	**4**
Right	2' 0"	3" by 6" timber rail bolted to truss verticals.	4	

LOCATION	TRANSITION = First 25' GR				APPROACH GUIDE RAIL (25' plus)				APPROACH RAIL ENDS			
	Length	Height	Gradual Stiffening/ Spacing	Code	Length	Height	Post Spacing	Code	Length	SPET Offset Dist.	Distance From Roadway	Code
Near Left	None Provided			2	25'	2' 5"	Type 2S	4	N/A	N/A	5'	4
Near Right	None Provided			2	25'	2' 5"	Type 2S (D)	3	N/A	N/A	5'	4
Far Left	None Provided			2	25'	2' 5"	Type 2S (D)	3	N/A	N/A	10'	8
Far Right	None Provided			2	25'	2' 5"	Type 2S	4	N/A	N/A	10'	8

CONTROLLING RATINGS (IA02): **2** **3** **4**

UNDERCLEAR SHEET

Bridge Site Map



Notes:

A	Large natural rock
B	Channel Scour - Minor
C	Lateral Scour - Minor

General Comments:

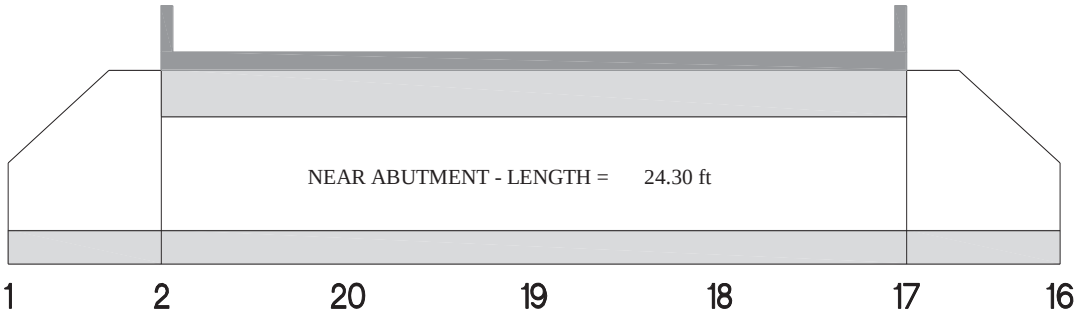
Numbers on plan represent underclearance measurement location points. See following pages.

BASE MAP: Created from field measurements and observations during baseline data measurements.

UNDERCLEAR SHEET

Streambed Probing at substructure unit to assess scour and undermining

ABUTMENT TYPE:	Stone Masonry	REFERENCE POINT:	Varies as noted
WINGS INTEGRAL:	Yes	MAX WATER DEPTH:	0.50 ft
STREAMBED MAT'L:	A6	UNDERMINE/SCOUR PRESENT:	No



Location		1	2	20	19	18	17	16	*Gauge Depth is set measurement from reference point indicating max until scour occurs.Can vary due to difference in elevation of reference point (ie - superelevation)*
Reference Point Description		Top Wing	Low Chord	Stringer 2	Stringer 4	Stringer 6	Low Chord	Top Wing	
Gauge Depth		N/A	10.00 ft	12.10 ft	12.10 ft	12.10 ft	10.00 ft	N/A	
Ref Point to Bottom of Ftg		Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	
INSP BY:	DATE:	MEASURED UNDERCLEARS FROM REFERENCE POINT TO STREAMBED							COMMENTS:
DRD/KLM	9/5/1995		10.2 ft				9.6 ft		BASELINE MEASUREMENTS
	Scour Depth		0.2 ft				0.0 ft		
DJS/AJS	**3/24/2021**	**0.3 ft**	**9.8 ft**	**11.2 ft**	**11.1 ft**	**11.5 ft**	**9.4 ft**	**0.0 ft**	
	Scour Depth		**0.0 ft**	**0.0 ft**	**0.0 ft**	**0.0 ft**	**0.0 ft**		
SBJ/KMA	4/1/2020	0.3 ft	9.4 ft	11.6 ft	11.4 ft	11.6 ft	9.3 ft	0.0 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
DJS/ATR	3/26/2019	0.3 ft	9.4 ft	11.6 ft	11.4 ft	11.6 ft	9.3 ft	0.0 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
SBJ/JWL	3/12/2018	0.3 ft	9.6 ft	11.6 ft	11.4 ft	11.5 ft	9.3 ft	0.0 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
DJS/JWL	3/7/2017	0.3 ft	9.6 ft	11.5 ft	11.4 ft	11.5 ft	9.3 ft	0.0 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
RDT/SBJ	3/9/2016	0.3 ft	9.8 ft	11.4 ft	11.5 ft	11.7 ft	9.4 ft	0.0 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
RDT/DJS	3/25/2015		9.6 ft	11.5 ft	11.4 ft	11.5 ft	9.3 ft	0.0 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		

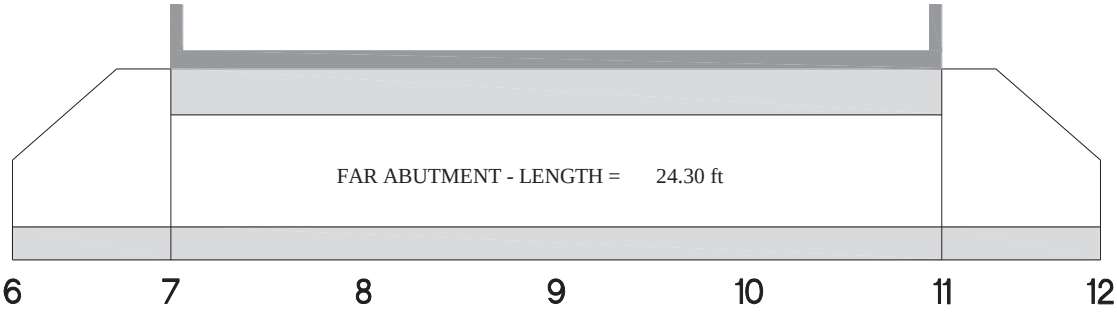
General Scour Comments:
Stone Masonry abutments fully concrete encased

Undermining Sketch:

UNDERCLEAR SHEET

Streambed Probing at substructure unit to assess scour and undermining

ABUTMENT TYPE:	Stone Masonry	REFERENCE POINT:	Varies as noted
WINGS INTEGRAL:	Yes	MAX WATER DEPTH:	1.10 ft
STREAMBED MAT'L:	A6	UNDERMINE/SCOUR PRESENT:	No



Location		6	7	8	9	10	11	12	*Gauge Depth is set measurement from reference point indicating max until scour occurs.Can vary due to difference in elevation of reference point (ie - superelevation)*
Reference Point Description		Top Wing	Low Chord	Stringer 2	Stringer 4	Stringer 6	Low Chord	Top Wing	
Gauge Depth		N/A	10.00 ft	12.10 ft	12.10 ft	12.10 ft	10.00 ft	N/A	
Ref Point to Bottom of Ftg		Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	
INSP BY:	DATE:	MEASURED UNDERCLEARS FROM REFERENCE POINT TO STREAMBED							COMMENTS:
DRD/KLM	9/5/1995		10.0 ft				9.9 ft		BASELINE MEASUREMENTS
	Scour Depth		0.0 ft				0.0 ft		
DJS/AJS	**3/24/2021**	**2.1 ft**	**9.3 ft**	**11.2 ft**	**11.9 ft**	**11.6 ft**	**9.2 ft**	**2.5 ft**	
	Scour Depth		**0.0 ft**	**0.0 ft**	**0.0 ft**	**0.0 ft**	**0.0 ft**		
SBJ/KMA	4/1/2020	2.1 ft	9.2 ft	11.2 ft	12.0 ft	11.4 ft	9.5 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
DJS/ATR	3/26/2019	2.1 ft	9.2 ft	11.2 ft	12.0 ft	11.3 ft	9.4 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
SBJ/JWL	3/12/2018	2.1 ft	9.3 ft	11.3 ft	12.1 ft	11.5 ft	9.7 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
DJS/JWL	3/7/2017	2.1 ft	9.1 ft	10.8 ft	12.0 ft	11.3 ft	9.2 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
RDT/SBJ	3/9/2016	2.1 ft	9.4 ft	11.0 ft	12.1 ft	11.7 ft	9.3 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		
RDT/DJS	3/25/2015	1.7 ft	9.3 ft	10.5 ft	11.8 ft	11.5 ft	9.0 ft	1.8 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft		

General Scour Comments:
Stone Masonry abutments fully concrete encased

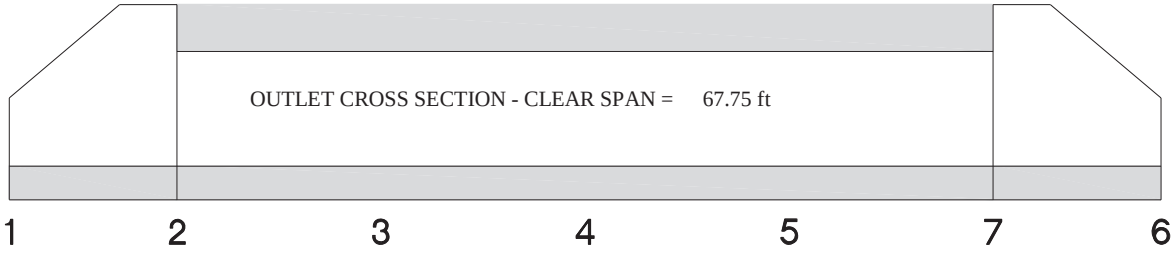
Undermining Sketch:

UNDERCLEAR SHEET

Bridge Waterway Cross Section Along Fascia

BRIDGE TYPE: Timber Covered
STREAMBED MAT'L: A6

REFERENCE POINT: Lower Chord bottom
REF POINT TO WATER SURFACE: 9.1 ft (at midspan)
CHANNEL SCOUR PRESENT: Yes



Location	1	2	3	4	5	7	6	*Gauge Depth is set measurement from reference point indicating max until scour occurs.*
Distance From NAB	N/A	0.00 ft	16.94 ft	33.88 ft	50.81 ft	67.75 ft	N/A	
Gauge Depth	N/A	10.00 ft	10.50 ft	11.00 ft	10.50 ft	10.00 ft	N/A	
Ref Point to Bottom of Ftg	Unknown	Unknown	N/A	N/A	N/A	Unknown	Unknown	

INSP BY:	DATE:	MEASURED UNDERCLEARS FROM REFERENCE POINT TO STREAMBED							COMMENTS:
DRD/KLM	9/5/1995		10.2 ft		10.1 ft		10.0 ft		BASELINE MEASUREMENTS
	Scour Depth		0.2 ft		0.0 ft		0.0 ft		
DJS/AJS	**3/24/2021**	**0.3 ft**	**9.8 ft**	**10.6 ft**	**10.1 ft**	**10.9 ft**	**9.3 ft**	**2.1 ft**	
	Scour Depth		**0.0 ft**	**0.1 ft**	**0.0 ft**	**0.4 ft**	**0.0 ft**		
SBJ/KMA	4/1/2020	0.3 ft	9.4 ft	10.2 ft	10.4 ft	11.7 ft	9.2 ft	2.1 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	1.2 ft	0.0 ft		
DJS/ATR	3/26/2019	0.3 ft	9.4 ft	10.0 ft	10.4 ft	11.7 ft	9.2 ft	2.1 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	1.2 ft	0.0 ft		
SBJ/JWL	3/12/2018	0.3 ft	9.6 ft	10.1 ft	10.3 ft	11.4 ft	9.3 ft	2.1 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.9 ft	0.0 ft		
DJS/JWL	3/7/2017	0.3 ft	9.6 ft	10.3 ft	10.4 ft	11.4 ft	9.1 ft	2.1 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.9 ft	0.0 ft		
RDT/SBJ	3/9/2016	0.3 ft	9.8 ft	10.4 ft	10.5 ft	11.3 ft	9.4 ft	2.1 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.8 ft	0.0 ft		
RDT/DJS	3/25/2015		9.6 ft	10.8 ft	10.1 ft	10.1 ft	9.3 ft	1.7 ft	
	Scour Depth		0.0 ft	0.3 ft	0.0 ft	0.0 ft	0.0 ft		

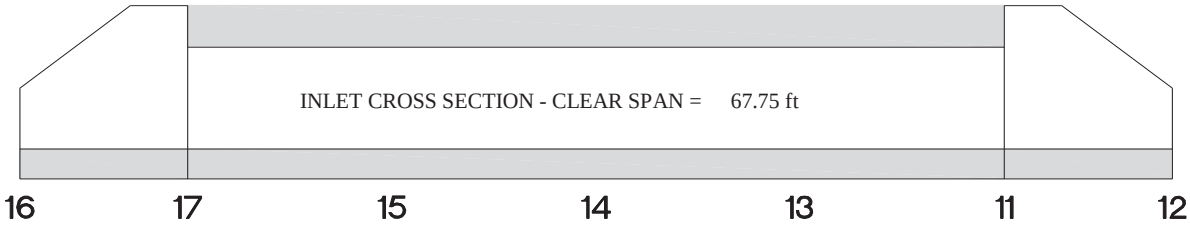
General Scour Comments:
Stone Masonry abutments fully concrete encased

UNDERCLEAR SHEET

Bridge Waterway Cross Section Along Fascia

BRIDGE TYPE: Timber Covered
STREAMBED MAT'L: A6

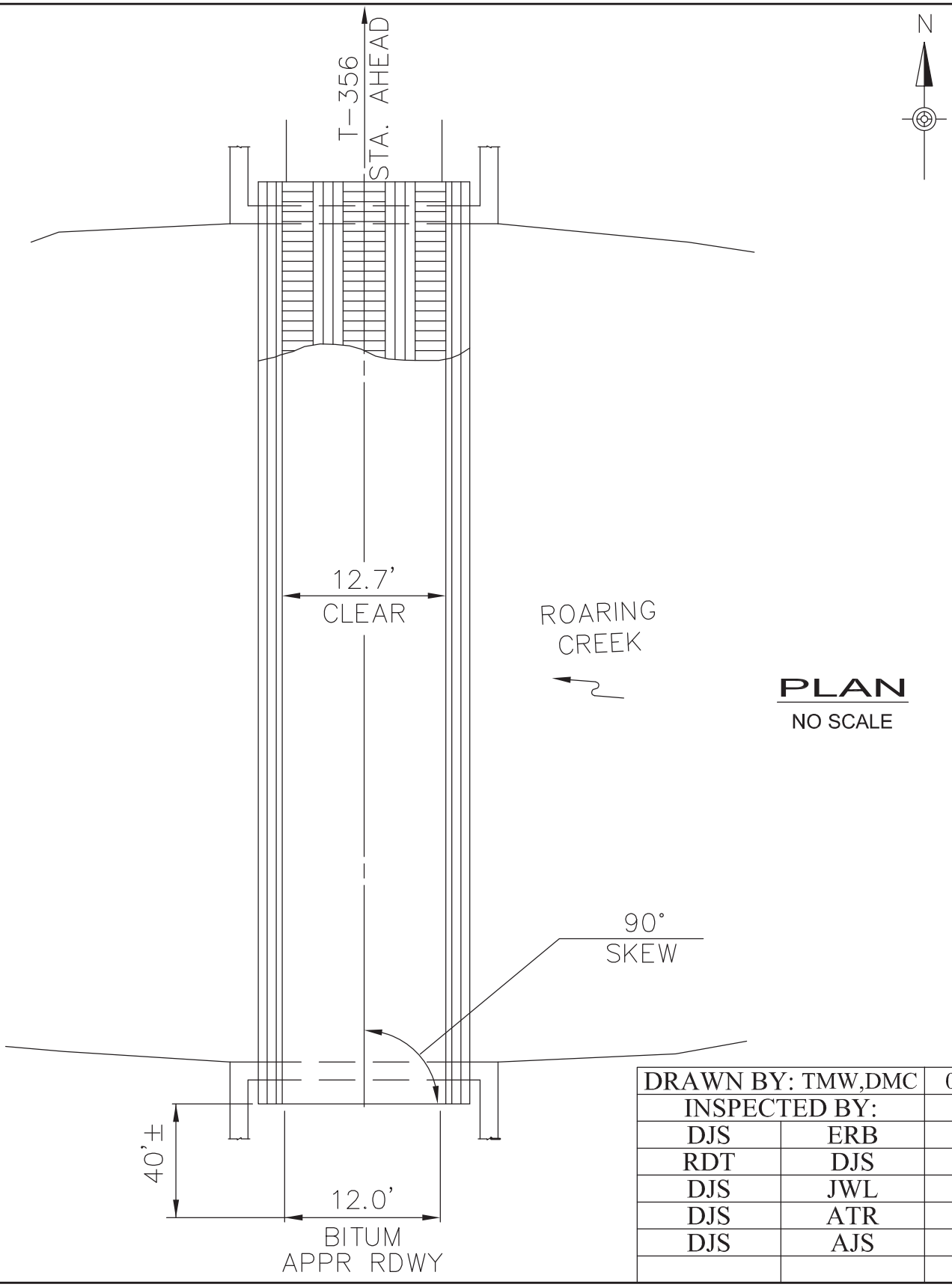
REFERENCE POINT: Lower Chord bottom
REF POINT TO WATER SURFACE: 9.0 ft (at midspan)
CHANNEL SCOUR PRESENT: No



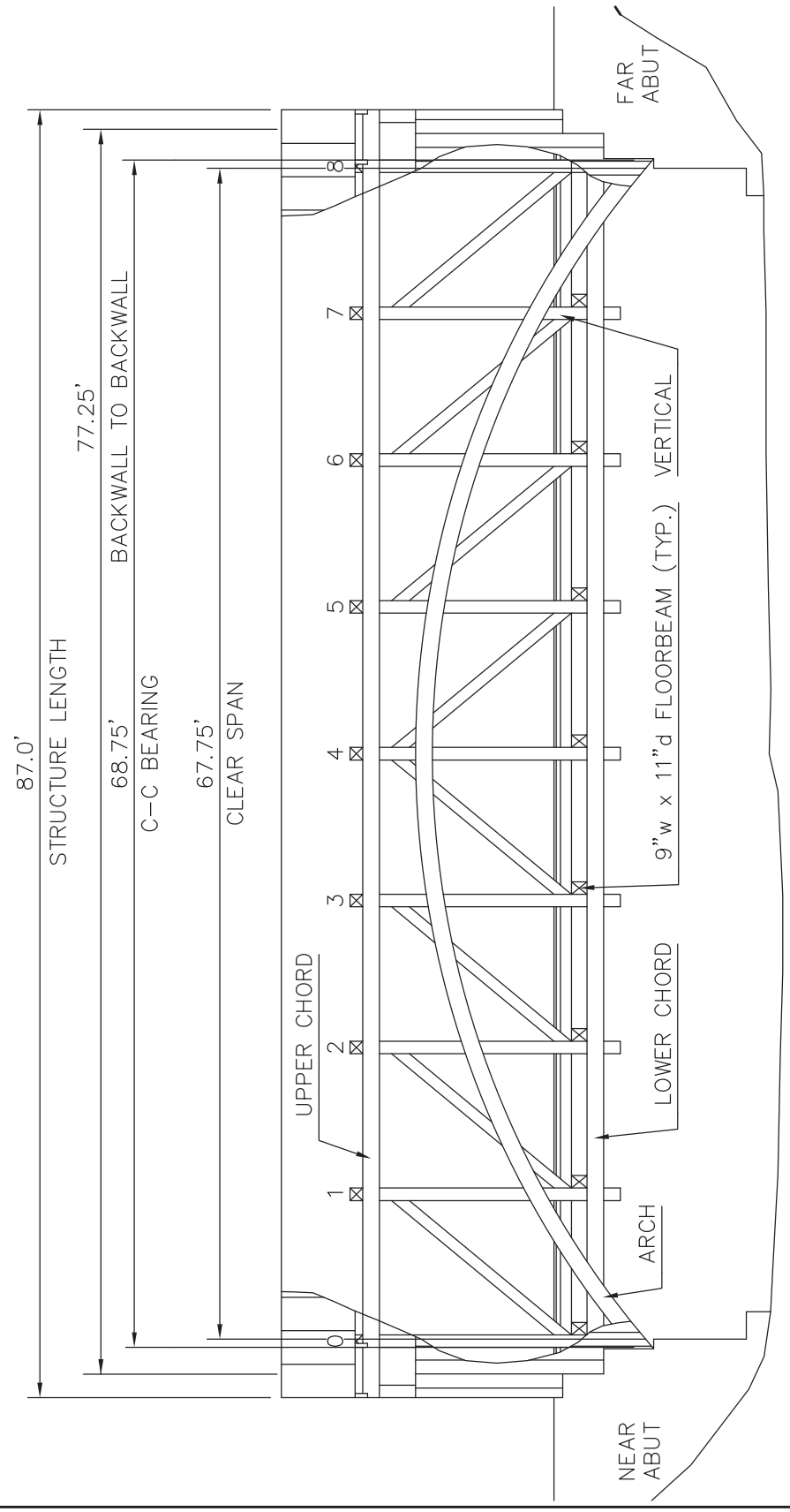
Location	16	17	15	14	13	11	12	*Gauge Depth is set measurement from reference point indicating max until scour occurs.*
Distance From NAB	N/A	0.00 ft	16.94 ft	33.88 ft	50.81 ft	67.75 ft	N/A	
Gauge Depth	N/A	10.00 ft	10.50 ft	11.00 ft	10.50 ft	10.00 ft	N/A	
Ref Point to Bottom of Ftg	Unknown	Unknown	N/A	N/A	N/A	Unknown	Unknown	

INSP BY:	DATE:	MEASURED UNDERCLEARS FROM REFERENCE POINT TO STREAMBED							COMMENTS:
DRD/KLM	9/5/1995		9.6 ft		9.9 ft		9.9 ft		BASELINE MEASUREMENTS
	Scour Depth		0.0 ft		0.0 ft		0.0 ft		
DJS/AJS	**3/24/2021**	**0.0 ft**	**9.4 ft**	**9.9 ft**	**9.9 ft**	**10.2 ft**	**9.2 ft**	**2.5 ft**	
	Scour Depth		**0.0 ft**	**0.0 ft**	**0.0 ft**	**0.0 ft**	**0.0 ft**		
SBJ/KMA	4/1/2020	0.0 ft	9.3 ft	9.9 ft	10.2 ft	10.7 ft	9.5 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.2 ft	0.0 ft		
DJS/ATR	3/26/2019	0.0 ft	9.3 ft	10.0 ft	10.2 ft	10.7 ft	9.4 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.2 ft	0.0 ft		
SBJ/JWL	3/12/2018	0.0 ft	9.3 ft	9.8 ft	10.1 ft	10.8 ft	9.7 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.3 ft	0.0 ft		
DJS/JWL	3/7/2017	0.0 ft	9.3 ft	9.7 ft	10.1 ft	11.3 ft	9.2 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.8 ft	0.0 ft		
RDT/SBJ	3/9/2016	0.0 ft	9.4 ft	10.0 ft	10.1 ft	11.2 ft	9.3 ft	2.5 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.7 ft	0.0 ft		
RDT/DJS	3/25/2015	0.0 ft	9.3 ft	9.8 ft	10.0 ft	11.3 ft	9.0 ft	1.8 ft	
	Scour Depth		0.0 ft	0.0 ft	0.0 ft	0.8 ft	0.0 ft		

General Scour Comments:
Stone Masonry abutments fully concrete encased

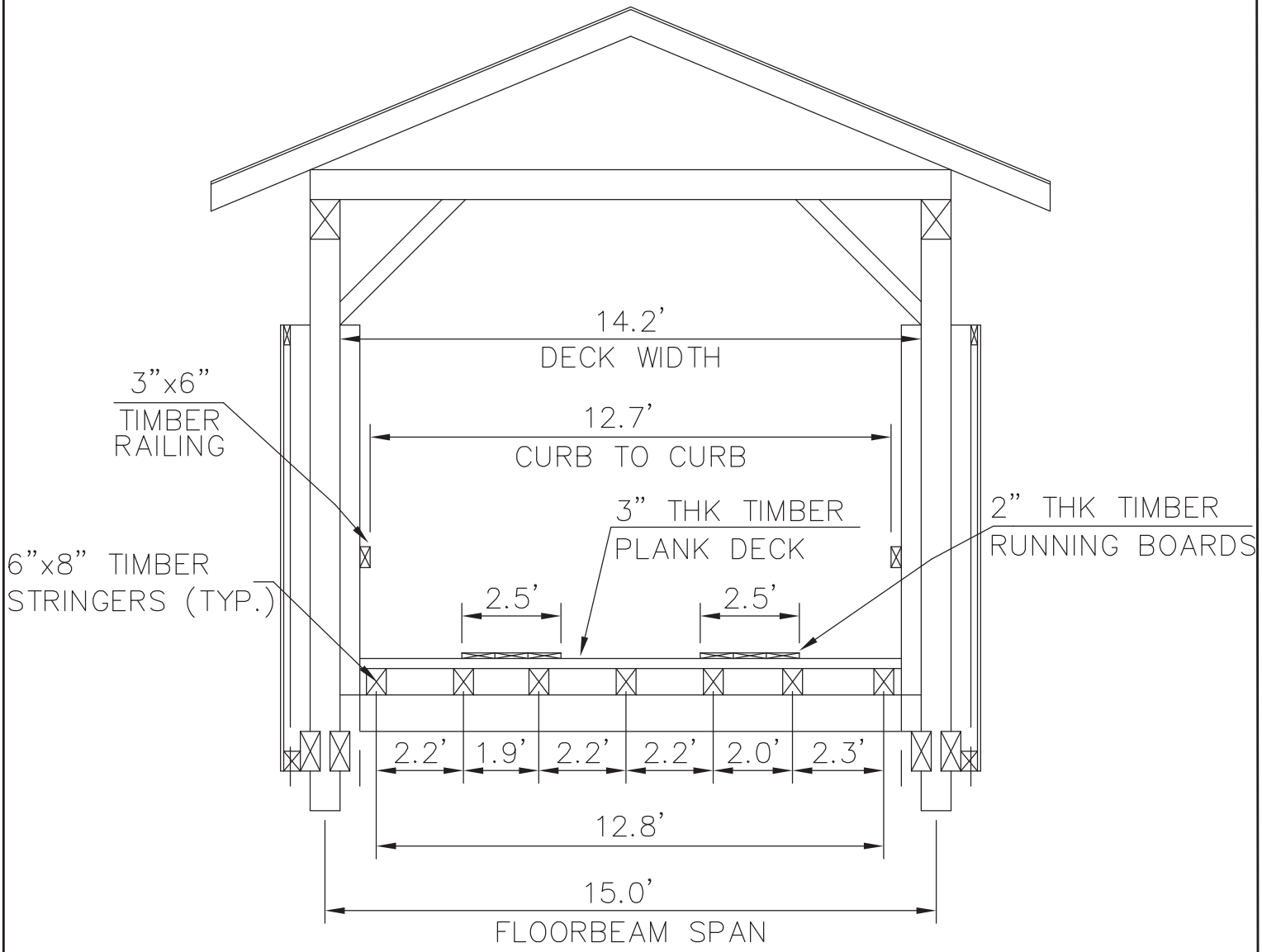


DRAWN BY: TMW,DMC		03/14/2001
INSPECTED BY:		DATE:
DJS	ERB	3/20/13
RDT	DJS	3/25/15
DJS	JWL	3/7/17
DJS	ATR	3/26/19
DJS	AJS	3/24/21



ELEVATION
NO SCALE

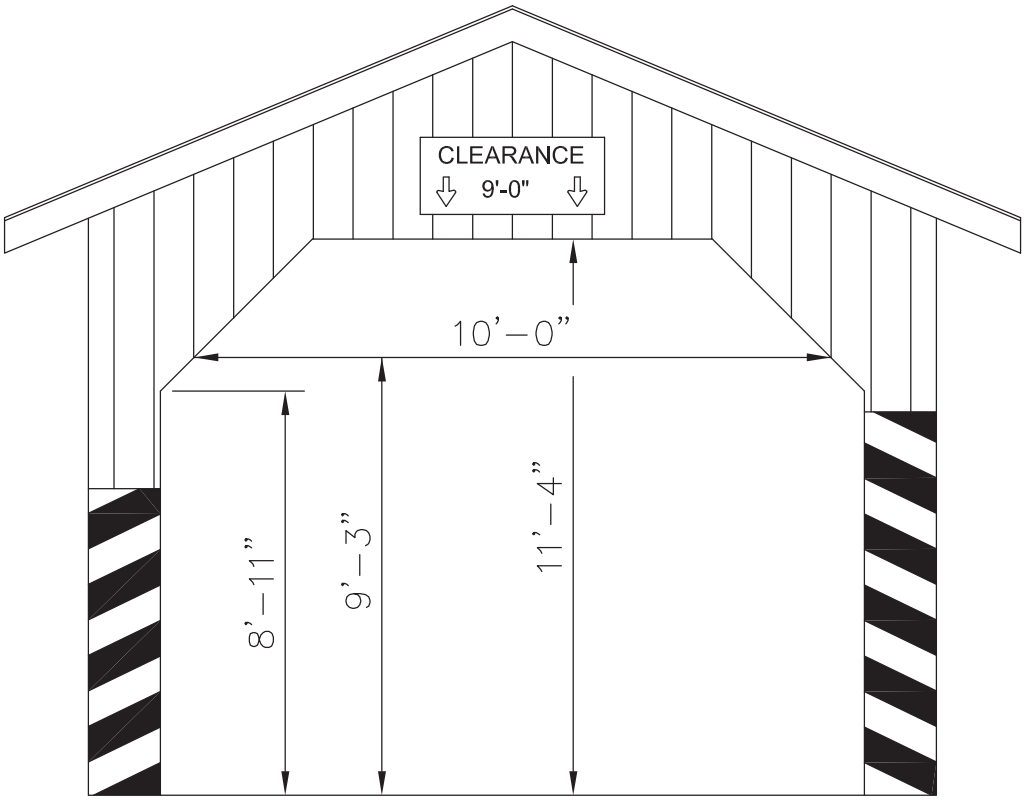
DRAWN BY: TMW,DMC		03/14/2001
INSPECTED BY:		DATE:
DJS	ERB	3/20/13
RDT	DJS	3/25/15
DJS	JWL	3/7/17
DJS	ATR	3/26/19
DJS	AJS	3/24/21



CROSS SECTION

NO SCALE

DRAWN BY: TMW,DMC		03/14/2001
INSPECTED BY:		DATE:
DJS	ERB	3/20/13
RDT	DJS	3/25/15
DJS	JWL	3/7/17
DJS	ATR	3/26/19
DJS	AJS	3/24/21



END VIEW

NO SCALE

DRAWN BY: TMW,DMC		03/14/2001
INSPECTED BY:		DATE:
DJS	ERB	3/20/13
RDT	DJS	3/25/15
DJS	JWL	3/7/17
DJS	ATR	3/26/19
DJS	AJS	3/24/21

Structure Identification

***5A01**	Structure ID:	19720503560012	**5A03**	NBI Structure No.: 12785
5A02	Name:	1.5 MI NW SLABTOWN		Agency ID:
				*7A01 Inspection Date: 03/24/2021

Location

5A04	District:	03
5A05	County:	19 - Columbia
***5A06**	City/Town/Place:	14184
***5A07**	Feature Intersected:	ROARING CREEK
***5A08**	Facility Carried:	DAVIS (CTY BR 12)
***5A09**	Location:	1.5 MI NW SLABTOWN
***5A10**	Lat / ***5A11** Long:	40d 54' 36.82" 76d 26' 23.40"
***5A12**	Border State/FHWA Reg:	
	Share:	0%
***5A13**	Border Struc No:	_
***5A14**	FIPS State:	42 - Pennsylvania
***5A14**	FIPS Region:	3 - Region 3-Baltimore

Age and Service

***5A15**	Year Built:	1875
***5A16**	Year Reconstruct:	1,997
***5A17**	Type Service On:	1 - Highway
***5A18**	Under:	5 - Waterway
***5A19**	# Lanes Under:	0

Management

5A20	Maint Resp:	02 - County Hwy Agency
***5A21**	Owner:	02 - County Hwy Agency
5A23	Agency Admin Area:	18 - SEDA-COG MPO

Deck Information

***5B02**	Deck Surface Type:	7 - Wood or Timber
***5B03**	Deck Membrane Type:	0 - None
***5B04**	Deck Protection:	0 - None
	***5B05** Curb Sidewalk Width: Left:	0.00 ft.
	***5B06** Right:	0.00 ft.
***5B07**	Deck Width:	14.20 ft.
***5B09**	Skew:	90 degrees
***5B10**	Structure Flared:	0 - No flare

Span Information

***5B11**	Number of Main Spans:	1
***5B12**	Main Span Material:	7 - Wood or Timber
***5B13**	Main Span Design:	10 - Truss-Thru
***5B14**	Number of Approach Spans:	0
***5B15**	Approach Span Material:	
***5B16**	Approach Span Design:	
***5B17**	Maximum Span Length:	69.00 ft.
***5B18**	Structure Length:	87.00 ft.
5B19	Deck Area:	1,235.40 sf.
5B20	Total Length:	87.00 ft.

Classification Information

5E01	NBIS Bridge Len:	Y - Long Enough
5E02	Parallel Structure:	N - No || bridge exists
5E03	Temporary Structure:	Not Applicable (P)
***5E04**	Hist Significance:	1 - Br on NRHP
5E05	Frac Crit Details:	

Agency Items

5E10	ACM Status:	A
5E11	IR:	0
5E12	IC:	0
5E13	ACM Insp Date:	MMDDYYYY
5E14	ACM Qty:	NO_ACM
5E15	ACM num Loc:	0
5E16	ACM Loc Desc 1:	***
5E17	ACM Loc Desc 2:	
5E18	9:	
5E19	10:	
5E20	11:	
5E21	12:	
5E22	13:	
5E23	14:	
5E24	15:	

DJS
4/12/2021

Structure Identification

***5A01** Structure ID: 19720503560012

5A02 Name: 1.5 MI NW SLABTOWN

5A03 NBI Structure No.: 12785

Agency ID:

*7A01 Inspection Date: 03/24/2021

2A01 Structure Notes

D
NO SCOUR ANALYSIS RECOMMENDED BY LDG 09/05/95.
SCOUR EVALUATION 15457 W06 = 5 E29-A = 5
SF SP SW DDDATE USGSFV USGSSD EP DSTAT USGSSF EF SAS FEDCAT
B L -- 08021999 MMYYYY 032001 7 ACCP 082002 7 093 2A1
MAP D13 D14 HSOR HSCCV SPR CK COMMENT OVER O DATE P/F
THIS LINE IS RESERVED FOR CCV DATA
STAT IR IC ACM INSP ACM QNTY # LOCATION OF ACM
A A 0 0 MMDDYYYY NO_ACM 0 ***
B L -- 08021999 MMYYYY 032001 7 ACCP 082002 7 093 2A1082

DJS
4/12/2021

Structure Identification

***5A01**	Structure ID:	19720503560012	**5A03**	NBI Structure No.: 12785
5A02	Name:	1.5 MI NW SLABTOWN		Agency ID:
				*7A01 Inspection Date: 03/24/2021

General

6A01	Senat Dist:	27	_
6A02	Cong Dist:	11	_
6A03	Leg Dist:	107	_
6A04	Bndy:	N - None	
6A05	Util Present:		
***6A06**	Sub Agency:	019	
6A07	Fed Fund:	_	
***6A08**	Dept Struc Len:	-1	ft.
6A09	Critical Facility:		
6A10	Flood Insp:		
6A11	Covered Bridge:	X	
6A12	Dem/Repl Ind:	0	
6A13	Dem/Repl Date:		
6A14	Hist Dist Cont:	0	
6A15	Hist Dist:		
6A16	Preserv Candidate:		
6A17	Future Bridge Bill:		
6A18	Network:		
6A19	Bus Plan Ntk:	L - Local Net (Non-NHS)	
6A20	Watershed:	_ - Res. for Future Use	
6A21	De-Ice Equip:		
6A22	Corridor:	_	
6A23	Owner Desc:	COLUMBIA CO.	
6A24	Turnback Desc:		

Structure Type

		Main	Approach
***6A26**	Material:	5 - Timber	_
***6A27**	Physical:	9 - Other or none	_
***6A28**	Span Interaction:	1 - Simple, non-comp	_
***6A29**	Struct Config:	18 - Truss - thru	_

Deck Wearing Surface Info

		Main	Approach
***5B02 / 6A30**	Surf:	7 - Wood or Timber	_ - Unknown (NBI)
***5B03 / 6A31**	Memb:	0 - None	_ - Unknown (NBI)
***5B04 / 6A32**	Protect:	0 - None	_ - Unknown (NBI)
6A33	Thickness (in):	2.00	0.00
6A34	Dt Recorded:	03/17/2008	01/01/1901
6A35	Surf Thick (Over/Under):	-1.00 in.	-1.00 in.
6A36	Protect Year:		
6A37	Protect Note:		

Latent Problem

6A50	Sup Struc:	_
6A51	Sub Struc:	_

Deck Info

6A38	Dept Structyp:	02 - Timber Plank Deck
6A39	Relief Joints:	
6A40	Form Type:	_
6A41	No. of Joints:	0
6A42	Rebar Type:	_
6A43	Appr Pav Width (ft):	12 ft.

Est Truck Traffic

6A52	Traffic:	-1
6A53	Fatig Life:	-1
6A54	Year:	-1

Fracture Critical

		Main	Approach
6A44	Group No.:	9 - Group 9	_
6A45	Mem Type:	9 - Non-Steel	0 - Suspended Assembly
6A46	Fatig Sus:	9 - Non-Steel Bridges	0 - Int Welds/Susp Assmb
6A47	Material:	9 - Non-Steel Bridges	0 - Int Welds/Susp Assmb
6A48	ADTT	3 - low	1 - high
6A49	Total Crf:	30	1

DJS
4/12/2021

BRIDGE MANAGEMENT SYSTEM 2
D-491 FEATURES INTERSECTED

Structure Identification

***5A01** Structure ID: 19720503560012 **5A03** NBI Structure No.: 12785

5A02 Name: 1.5 MI NW SLABTOWN Agency ID:

*7A01 Inspection Date: 03/24/2021

Roadway Detail

Roadway Identification

***5C01 Route Name:** T-356 Shakespeare Road
***5C03 On/Under:** 1 - Route On Structure
***5C04 Kind HWY(Rt Pref):** 5 - City Street
***5C05 Desig. Lvl Service:** 1 - Mainline
***5C06 Rte # / Suffix:** 00000 0 - Both Directions
5C07 Critical Facility:

Traffic

***5C08 Lanes:** 1 **Medians:** 0 **Speed:** 35 mph
5C09 ADT Class:
***5C10 Recent ADT:** 50 ***5C11 Year:** ~~2020~~ 2021
5C12 Future ADT: 77 **5C13 Year:** ~~2042~~ 2043
***5C14 Truck % ADT:** 0
***5C15 Detour Length:** 1 mi. **5C16 Speed:** 35 mph
6C27 ADTT: 0 **6C28 ADTT Year:** ~~2020~~ 2021

Highway Networks and Service Classifications

5C18 Mile Pt.: 0.00 mi.
5C19 Nat Base Net: 0 - Not on Base Network
5C20 LRS Inventory Rte: **Sub#:**
***5C21 Toll Facility:** 3 - On free road
***5C22 Functional Class:** 09 - Rural Local
5C23 Traffic Direction: 3 - 1-lane Br for 2-way

Width

***5C26 Appr. Road:** 12 ft. ***5C27 Roadway:** 12.7 ft.

Alternate Classifications

***5C28 Defense Hwy:** 0 - Not a STRAHNET hwy
***5C29 Nat. Hwy Sys.:** 0 - Not on NHS **5C30 SB:**
5C31 Fed Lands Hwy: 0 - N/A (NBI) **5C32 Trans:**
***5C33 Nat. Truck Net:** 0 - Not part of natl net **5C34 Emer:**

State Roadway Location

6C01 County: 19 - Columbia
6C02 SR Num: _
6C03 Seg: _
6C04 Offset: _

Roadway Admin

***6C05 Admin Juris:** 5 - County
6C07 Gov Cont: 02 - County Hwy Agency
6C06 Fed Aid: 0 - Not on Route
6C08 Urban / Rural: 1 - Rural
6C09 Hwy ind: N - Non-network
6C10 Hwy System Typ: 11 - Local Rural

Clearances

***4A20 Min Lat Under (L):** 0.00 ft.
***6C18 Horiz (L):** 0.00 ft.
***6C20 Min Vert (L):** 99.90 ft.
***6C22 Def Vert (L):** 99.90 ft.
***6C35 Vert Clearance Sign (L):** ft.
***6C37 Vert Clearance Post (L):** 0 ft. 0 in.

***4A19 Min Lat Under (R):** 0.00 ft.
***6C19 Horiz (R):** 12.70 ft.
***6C21 Min Vert (R):** 8.92 ft.
***6C23 Def Vert (R):** 9.25 ft.
***6C36 Vert Clearance Sign (R):** 1 ft.
***6C38 Vert Clearance Post (R):** 9 ft. 0 in.

Median

***6C25 Type:** 0 - No Median/barrier ***6C26 Width:** 0.00 ft.

Network

6C11 State Code: 0 - Not on a Network **6C12 INT:** _ - Unknown
6C13 CCVNET: **6C14 ATTT:**
6C15 RMS NHS: _ - Unknown **6C16 TTTN:** _ - Unknown

Roadway Labels

6C30 Gen Seg Ahead Lbl: _
6C31 User Seg Ahead Lbl: _
6C32 Gen Seg Back Lbl: _
6C33 User Seg Back Lbl: _
Notes:

DJS
4/12/2021

Structure Identification

***5A01** Structure ID: 19720503560012

5A02 Name: 1.5 MI NW SLABTOWN

5A03 NBI Structure No.: 12785

Agency ID:

*7A01 Inspection Date: 03/24/2021

Waterway Detail

***5C03 On/Under** 2 - One Route Under

***4A21 Nav Control Exists:** 0 - Permit Not Required

***4A22 Nav Vertical Clr:** 0.00 **ft.**

***4A23 Nav Horizontal Clr:** 0.00 **ft.**

***4A24 Min Vert Lft Clr:** 0.00 **ft.**

Waterway

***FW01 Stream Name:** ROARING CREEK

FW03 Stream Classification 1:

FW03 Stream Classification 2

FW04 Timeframe:

FW03 Stream Classification 3

FW06 Permit Type:

FW07 Drainage Area: -1.00 **sq. mi.**

FW08 Fishable:

FW09 Waterflow Direction: L - Right to Left

FW10 Primary Waterway:

FW11 Vertical Clearance: 11.0 **ft.**

FW12 Max W.S. Elevation: 0.00 **ft.**

FW13 Max W.S. Elevation Year: 0

Design Flood Data

FW14 Magnitude: -1.00 **cf/s**

FW15 Elevation: 0.00 **ft.**

FW16 Frequency: -1.00 **yrs**

FW17 Velocity: 0.00 **fps.**

FW18 Pollutant Description:

DJS
4/12/2021

Structure Identification

***5A01** Structure ID: 19720503560012

5A02 Name: 1.5 MI NW SLABTOWN

5A03 NBI Structure No.: 12785

Agency ID:

*7A01 Inspection Date: 03/24/2021

Number of Spans

5B11 Number of Main Spans: 1

5B14 Number of Approach Spans: 0

5D01 Unit Key	5D04 Type	5D02 Unit ID	SP03 Span Length
1	M - Main	1	68.80
2	B - Abutment	FAB	-1.00
3	B - Abutment	NAB	-1.00
4	F - Frame	Unit 4	-1.00

DJS
4/12/2021

Structure Identification

***5A01**	Structure ID:	19720503560012	**5A03**	NBI Structure No.:	12785
5A02	Name:	1.5 MI NW SLABTOWN		Agency ID:	
				*7A01 Inspection Date:	03/24/2021

Miscellaneous

VI01	Min Crane Reach:	-1.00	**VI02**	High Voltage Power Line Ind:	
VI03	RR Flagger Required:		**VI04**	Traffic Flagger Required:	

Sidewalk

VI05	Type (Left):	1 - Unprotected	**VI06**	Type (Right):	1 - Unprotected
VI07	Width (Left):	0.00 ft.	**VI08**	Width (Right):	0.00 ft.
VI09	Horizontal Curve:	1 - On a hor curve	**VI10**	Vertical Curve:	1 - On Vert (Hump)

Contact

District Bridge Engineer Name:	Lloyd Ayres	District Bridge Engineer Phone:	570-368-4262	District Bridge Engineer Email:	layres@pa.gov
Local Bridge Coordinator	Marc Schaeffer	Local Bridge Coordinator Phone:	570-368-4347	Local Bridge Coordinator Email:	maschaefer@pa.gov
Local Owner Name:	Chris E. Young	Local Owner Phone:	570-389-5608	Local Owner Email:	cyoung@columbiapa.org

VI11 Inspection Limitations

Equipment

Permits

DJS
4/12/2021

Structure Identification

***5A01**	Structure ID:	19720503560012	**5A03**	NBI Structure No..:	12785
5A02	Name:	1.5 MI NW SLABTOWN		Agency ID:	
				*7A01 Inspection Date:	03/24/2021

Posting Detail

VP01	**Status Date:**	03/20/2013	**VP06**	**Posting Reason:**	B - Super/Main Overstres
***VP02**	**Posting Status:**	P - Posted for load	**VP07**	**Field Conditions:**	0 - Not Applicable
VP03	**Special Restrictive Posting**	0 - Not Applicable	**VP08**	**Special Conditions:**	0 - Not Applicable
VP04	**Posted Weight Limit:**	3.00	**VP09**	**AASHTO Impact Code:**	1 - AASHTO Impact Factor
VP05	**Posted Limit Combination:**	-1.00			
VP01	**Status Date:**	09/09/2011	**VP06**	**Posting Reason:**	L - Flood/Accident
***VP02**	**Posting Status:**	C - Closed to traffic	**VP07**	**Field Conditions:**	(blank)
VP03	**Special Restrictive Posting**	(blank)	**VP08**	**Special Conditions:**	(blank)
VP04	**Posted Weight Limit:**	-1.00	**VP09**	**AASHTO Impact Code:**	(blank)
VP05	**Posted Limit Combination:**	-1.00			
VP01	**Status Date:**	11/19/1986	**VP06**	**Posting Reason:**	B - Super/Main Overstres
***VP02**	**Posting Status:**	P - Posted for load	**VP07**	**Field Conditions:**	0 - Not Applicable
VP03	**Special Restrictive Posting**		**VP08**	**Special Conditions:**	0 - Not Applicable
VP04	**Posted Weight Limit:**	3.00	**VP09**	**AASHTO Impact Code:**	1 - AASHTO Impact Factor
VP05	**Posted Limit Combination:**	0.00			

DJS
4/12/2021

Structure Identification

***5A01** Structure ID: 19720503560012

5A02 Name: 1.5 MI NW SLABTOWN

5A03 NBI Structure No.: 12785

Agency ID:

*7A01 Inspection Date: 03/24/2021

VD01 Design Method:

VD02 Live Load Continuity:

VD03 Geometry: 1 - Straight

Superstructure Steel

VD04 Steel Beam Splice:

VD05 Steel Types:

Superstructure Concrete

VD06 Vacuum Process:

VD11 Design Tension Methods :

VD07 Strand Type:

VD08 Comp Strength @ 28 Days: -1 psi.

VD09 Comp Strength @ Release: -1 psi.

VD10 Prestressed Splice Type: Design:
Filler:
Through:

VD12 Void Types:

VD13 Strand Sizes:

Substructure

VD14 Abutment Type:
Near: 4 - Stone/Masonry
Far: 4 - Stone/Masonry

VD15 Abutment Foundation Type:
Near: L - Footing on soil
Far: L - Footing on soil

VD17 Pier Foundation Types:

Pier Types

VD16 Material Type:

VD16 Configuration Type:

Culvert

Expansion Joint

Other

VD28 Haunch Type: 0 - no haunch

VD29 Special Pier Cap:

VD31 Bridge Seat Cleaning: 0

VD32 Seat Cleaning Note:

VD30 Bearing Types: 99 - Other

VD33 Scuppers w/ Downspouts: 0

VD34 Scuppers w/o Downspouts: 0

DJS
4/12/2021