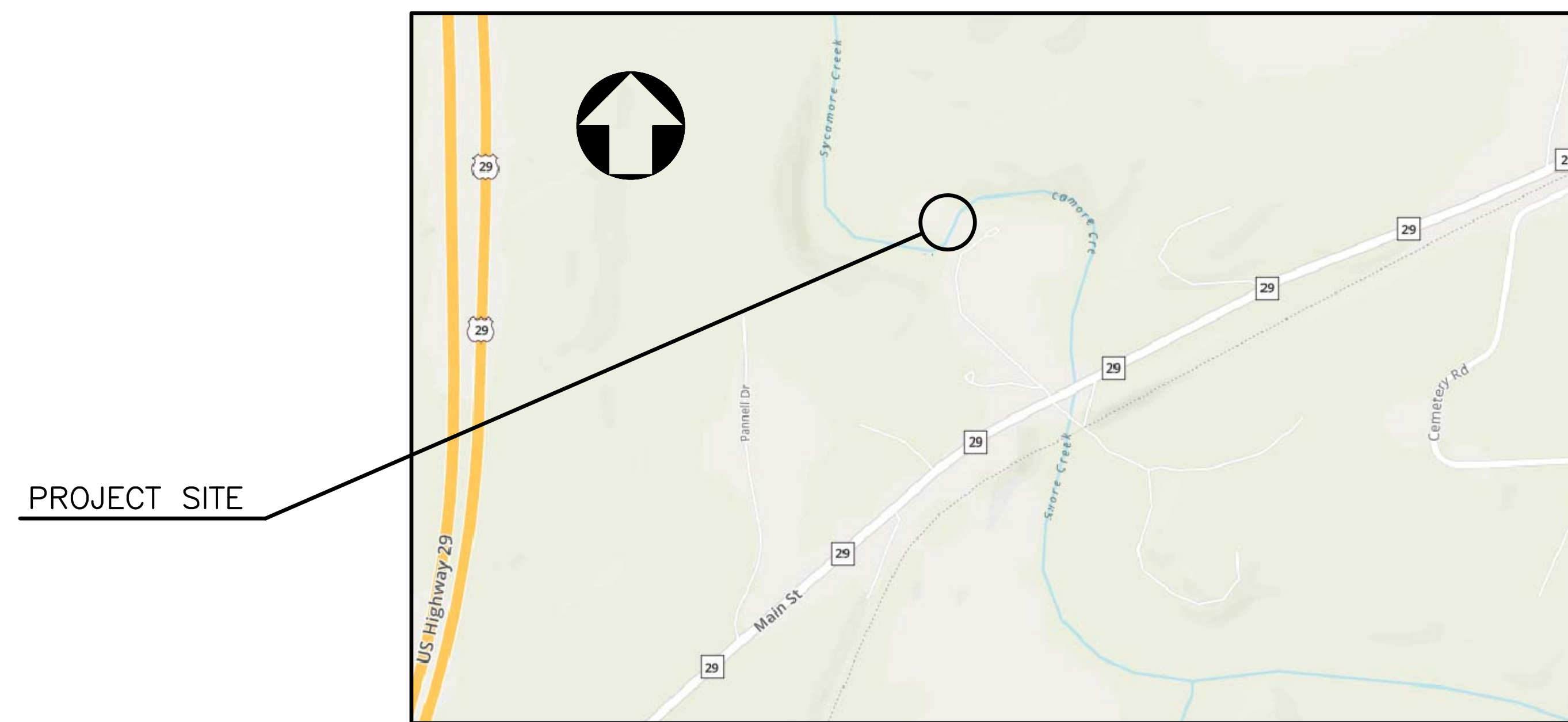




PITTSYLVANIA COUNTY, VIRGINIA

PARKS AND RECREATION

PROPOSED BRIDGE REPAIR OF PEDESTRIAN SUSPENSION BRIDGE PITTSYLVANIA WAYSIDE PARK OVER SYCAMORE CREEK



GENERAL CONSTRUCTION NOTE:

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATIONS, VDOT ROAD AND BRIDGE SPECIFICATIONS, 2020 AND VDOT ROAD AND BRIDGE STANDARDS, 2020.

LEGEND

	EXISTING OBJECT LINES
	PROPOSED OBJECT LINES
	EXISTING REINF. STEEL
	PROPOSED REINF. STEEL
	CUTTING PLANE LINE
	CENTER LINE
	HIDDEN LINES

LOCATION MAP
(Not to Scale)

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.



SCHWARTZ & ASSOCIATES, INC.
CONSULTING ENGINEERS
7331 TIMBERLAKE ROAD
LYNCHBURG, VA.

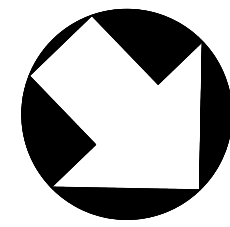
**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
PITTSYLVANIA COUNTY WAYSIDE PARK
COVER**

DESIGNED BY: MBH	DRAWN BY: MBH	CHECKED BY: RWS
SCALE: AS NOTED	PLAN NO.: N/A	
DATE: October 16, 2021	SHEET: 1	OF 8

COMM. NO. 2020019

CADD REFERENCE NO.: BRIDGE2020019.DWG

Scale: 3/32" = 1'-0" unless otherwise shown.



GENERAL NOTE:

Widths: 3'-9" clear walkway

Span layout: 1 - 78'-5" cable suspension span

Capacity: 34 max people

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2020.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016 including all current revisions.

All timber shall be treated in accordance with the current Virginia Department of Transportation "Road and Bridge Specifications, 2020", Section 236.

All structural timber and lumber shall be treated, southern pine 1,550 FB minimum and meet all requirements of Section 236 of the Road and Bridge Specifications

Suspension Cable 1 1/8" shall be ASTM A603 galvanized structural bridge rope (construction 7x1 or 6x25) Class C coating throughout.

Closed Bridge sockets shall be ASTM A148 Steel, grade 105-85, be galvanized and equal to CBSI clodfelter 2600 closed series.

Open strand sockets shall be ASTM A148 steel, grade 105-85, be galvanized and equal to CBSI clodfelter 2400 series.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

This project is to be constructed in accordance with the Virginia Department of Transportation Work Area Protection Manual, August 2011 and current revisions.

The Contractor shall submit to the Engineer a detailed plan for containing construction related material (i.e. timber, steel, etc.) and preventing its entry into Sycamore Creek. This work shall be included in the price bid for appropriate bid items.

The Contractor shall plan and execute the work such that no more than 10,000 square feet of land disturbance occurs at any given time.

The Contractor shall provide the Engineer safe access to all areas of work throughout course of construction and for final inspection after all work is complete.

The contractor shall use all new bolts, washers and nuts.

All steel material including bolts, washers, nuts, screws, and miscellaneous metals shall be galvanized as per ASTM A123.

All structural steel shapes including channels, angles and plates shall be ASTM A36, all round structural shapes shall be ASTM A500 grade B.

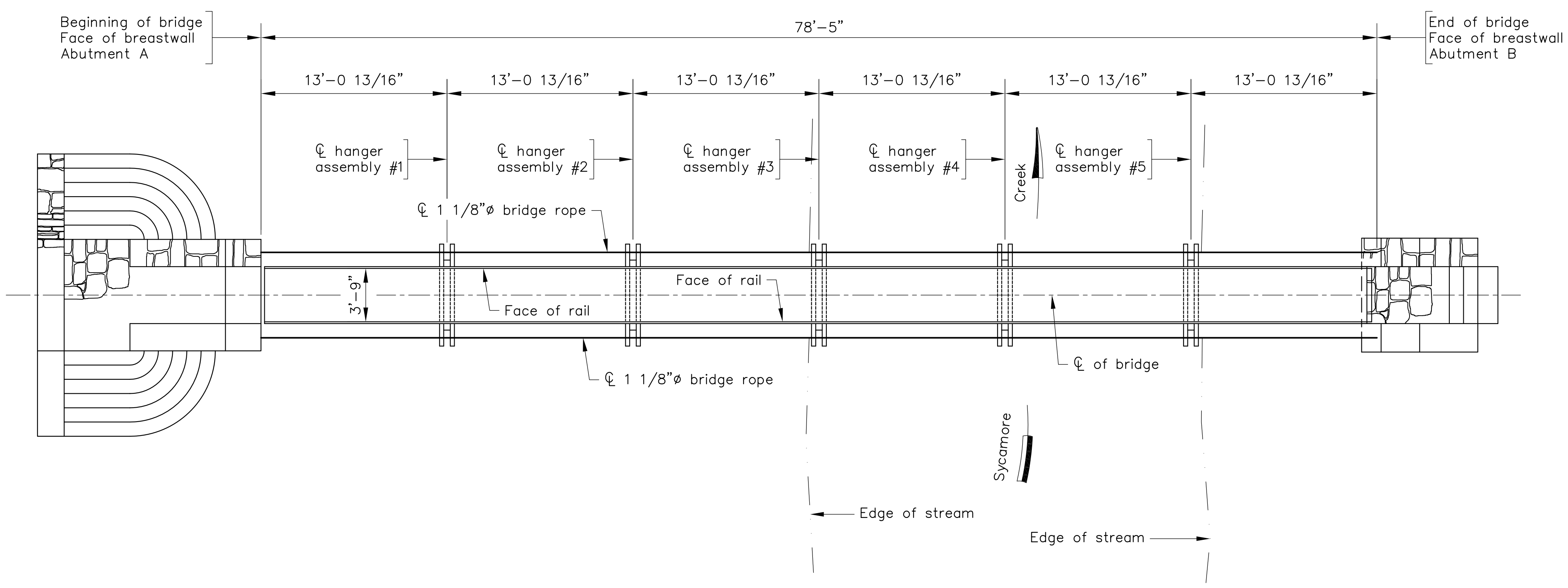
The contractor shall verify in the field all dimensions necessary for construction of the project (before fabrication).

Before proceeding with any work within or adjacent to the existing structure, the contractor shall become familiar with existing conditions. During construction operations, it shall be the contractor's responsibility to maintain the integrity of the existing structure where the existing structure is modified to accommodate new construction, and to protect from damage those portions of the structure which are to remain.

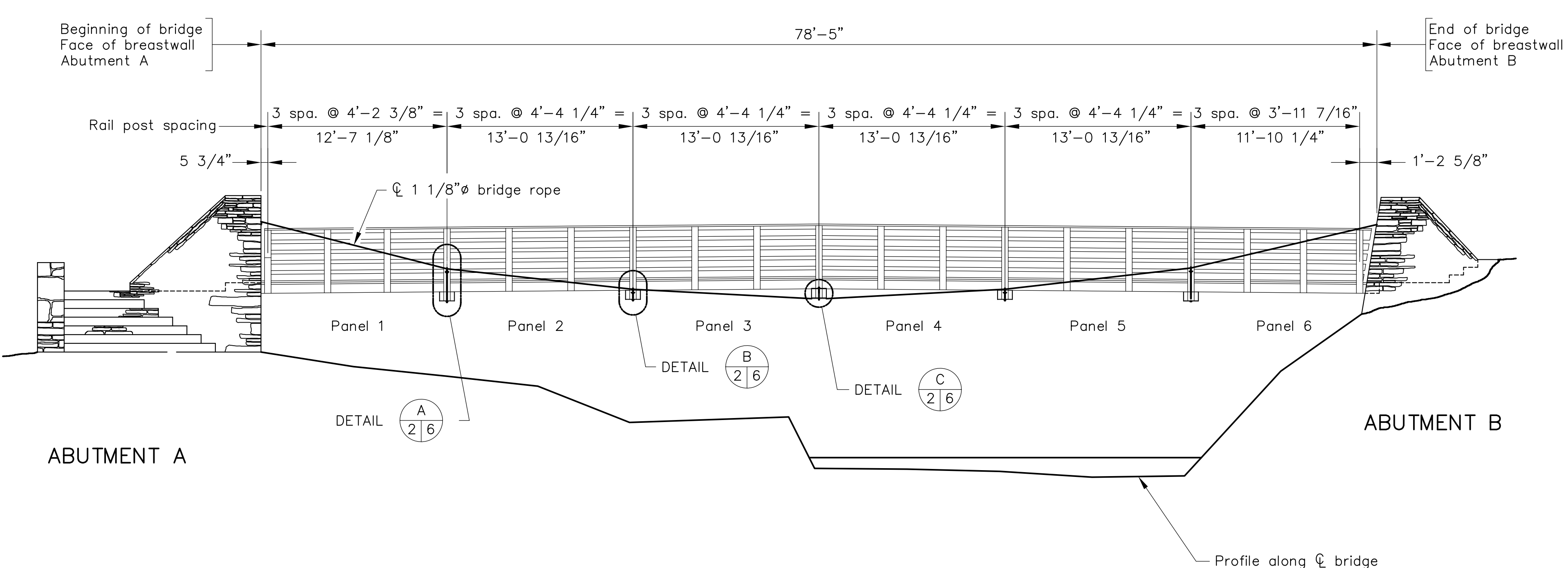
Contractor shall take extreme caution in his operations so that no damage is done to utilities in the vicinity of bridge or on the bridge.

The contractor shall verify, in field all dimensions, skew and elevations before beginning construction and before submitting shop drawings.

General Note continued on sheet 3.



PLAN



DEVELOPED SECTION ALONG CL

Scale: 3/16" = 1'-0" unless otherwise shown.

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		



SCHWARTZ & ASSOCIATES, INC.
CONSULTING ENGINEERS
7331 TIMBERLAKE ROAD
LYNCHBURG, VA.

**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
PITTSYLVANIA COUNTY WAYSIDE PARK
PLAN, ELEVATION AND
GENERAL NOTE**

DESIGNED BY: MBH	DRAWN BY: MBH	CHECKED BY: RWS
SCALE: AS NOTED	PLAN NO.: N/A	
DATE: October 16, 2021	SHEET: 2	OF 8

COMM. NO. 2020019

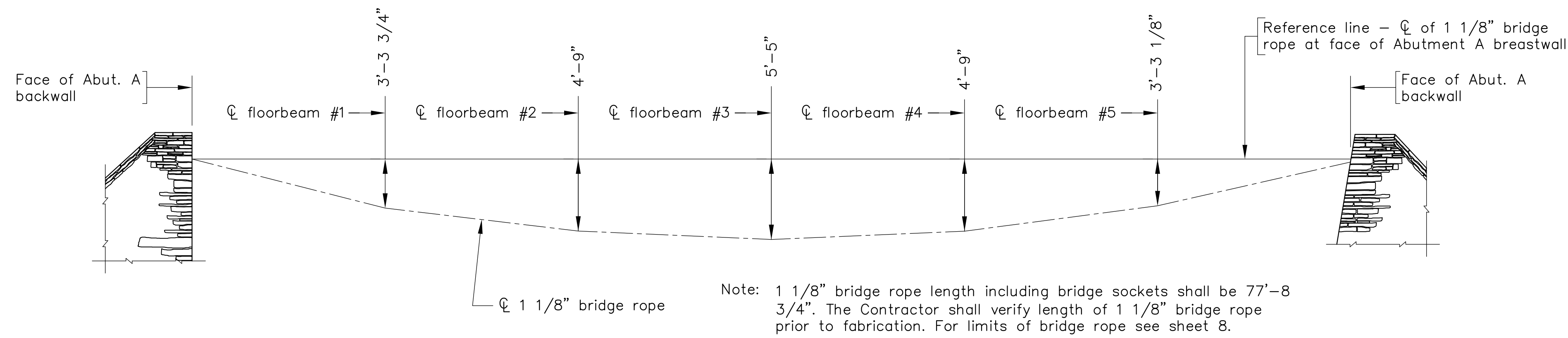
CADD REFERENCE NO.: BRIDGE2020019.DWG

GENERAL NOTE CONT.:

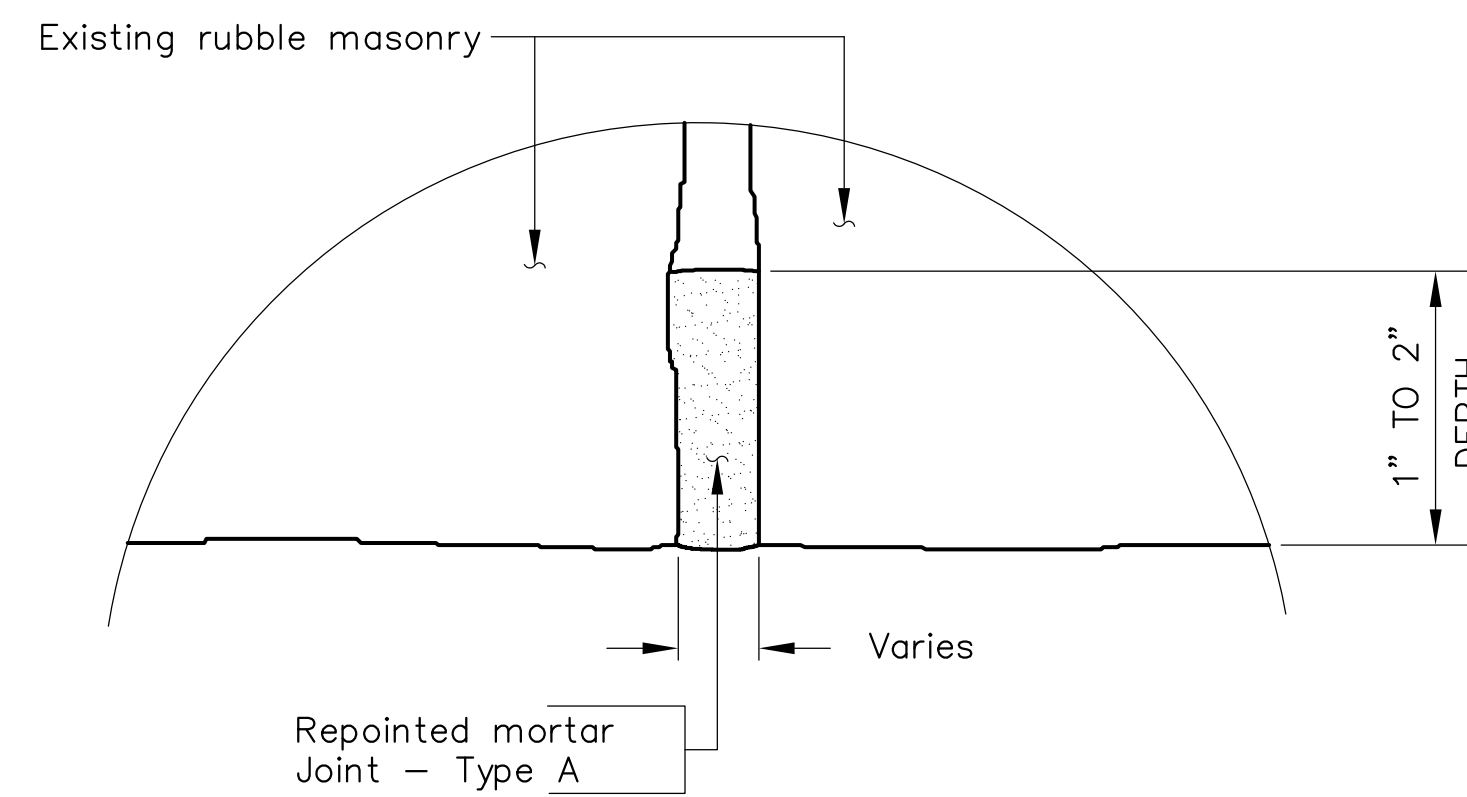
The locations of existing utilities, including underground utilities, is indicated on the drawings insofar as their existence and location were known at the time of preparation of the drawings. However, nothing in these contract documents shall be construed as a guarantee that such utilities are in the location indicated or that they actually exist, or that other utilities are not within the area of operations. The Contractor shall make all necessary investigations to determine the existence and locations of such utilities. The Contractor shall pay for any damage to and for maintenance and protection of existing utilities and structures.

All costs for grading, shaping, seeding, fertilizing, liming, overseeding, furnishing & placing topsoil and mulching, in disturbed areas of the project shall be paid for under price bid "General Maintenance," lump sum. This bid item shall also include all costs for replacing damaged shrubs, flowers, etc. any shrubs or flowers damaged shall be replaced with the original size and type that was damaged.

The costs of any necessary construction surveying shall be included in unit price bid for other items in contract.

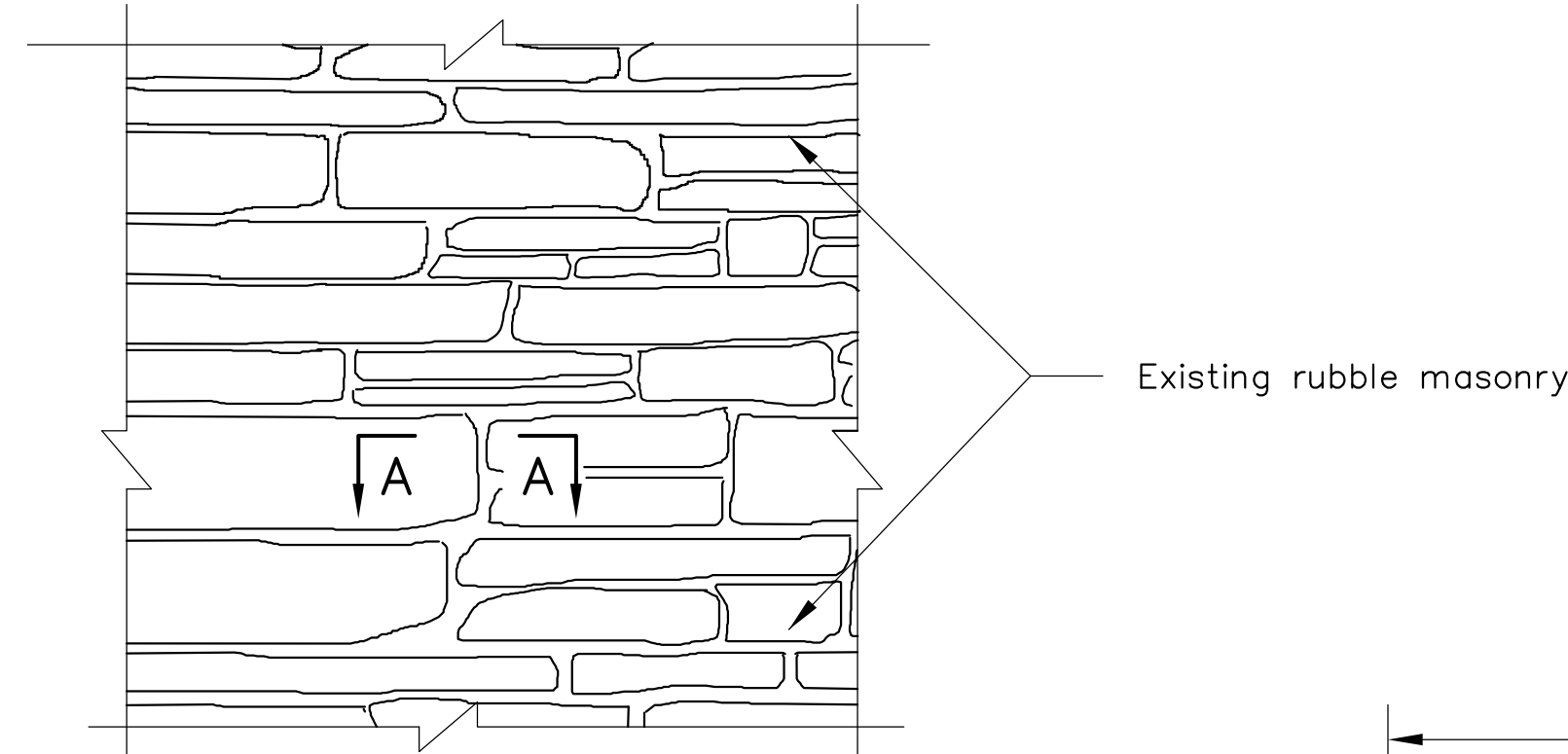


BRIDGE ROPE - SIDE ELEVATION
Scale: 3/16" = 1'-0"



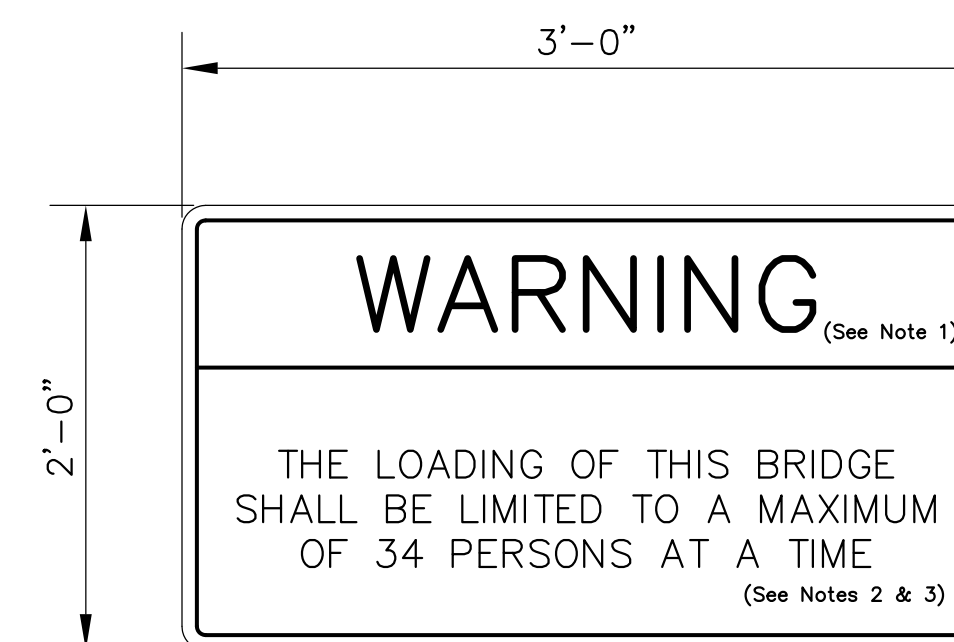
SECTION A-A
Not to scale

Note: All mortar joint openings shall be prepared by removing loose or soft mortar and cleaned with compressed air to remove any loose dirt and debris prior to repointing joints with mortar.



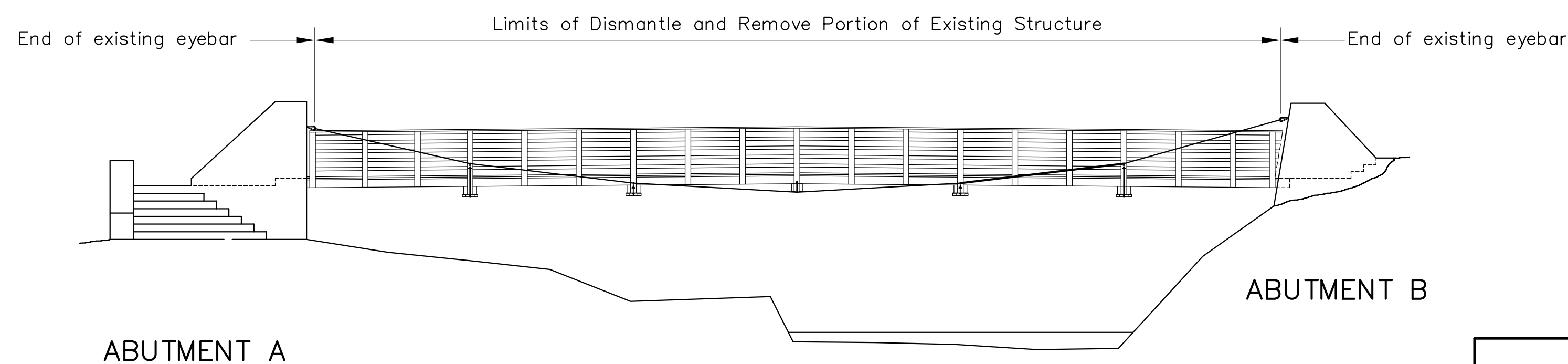
TYPICAL PART ELEVATION
NOT TO SCALE

TYPICAL DETAIL REPOINT MORTAR JOINT - TYPE A



Note 1: "WARNING" shall be in red & 4".
Note 2: Lettering shall be in black & 2".
Note 3: Background shall be white, border shall black

POSTED WEIGHT LIMIT SIGN



LIMITS OF DISMANTLE AND REMOVE PORTION OF EXISTING STRUCTURE
Not to scale

ESTIMATED QUANTITIES - SUPERSTRUCTURE ONLY		
Item	Units	Quantity
① Timber Decking	SF	333
① Timber Stringers and Timber Diaphragms	LF	263
① Timber Floor Beams	EA	10
① Timber Rail	LF	157
① Repointing Masonry Joints - Type A	LF	135

LUMP SUM BID ITEMS	
Mobilization	LS
Maintenance of Traffic	LS
① Dismantle and Remove Portion of Exist. Structure	LS
① Suspension Cable and Floorbeam Hanger System	LS

⊗ - Denotes items to be paid for on basis of plan quantities in accordance with current road and bridge specifications.

① - Refer to Special Provisions located in Project Manual

Areas of the structure to be removed under the bid item "Dismantle and Remove Portion of Existing Structure" shall include but are not limited to the following: entire lengths of 1 1/8"Ø bridge rope, floor beams and hanger system, stringers, timber decking, all components of timber railing.

Lump sum bid item "Maintenance of Traffic" shall include furnishing, fabricating, and installing including all materials, tools, and labor, treated timber 6x6 sign posts, concrete and all other materials required to place posted weight limit sign at both abutments as directed by the Engineer.

INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION
1	Cover
2	Plan, Elevation and General Note
3	Estimated Quantities, Index of Sheets, and General Note cont'd.
4	Transverse Section and Miscellaneous Details
5	Framing Plan and Miscellaneous Details
6	Floor Beam Hanger Details
7	Floor Beam Hanger Parts
8	Wire Rope Connection Details

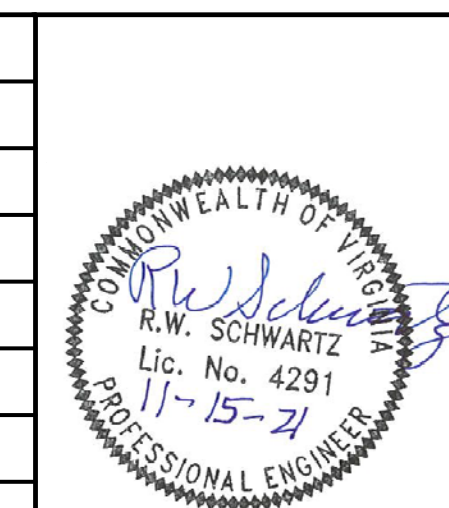
CADD REFERENCE NO.: BRIDGE2020019.DWG

Rev. No.	Sheets Revised	Date

TABLE OF REVISIONS

No.	Description	Date

REVISIONS



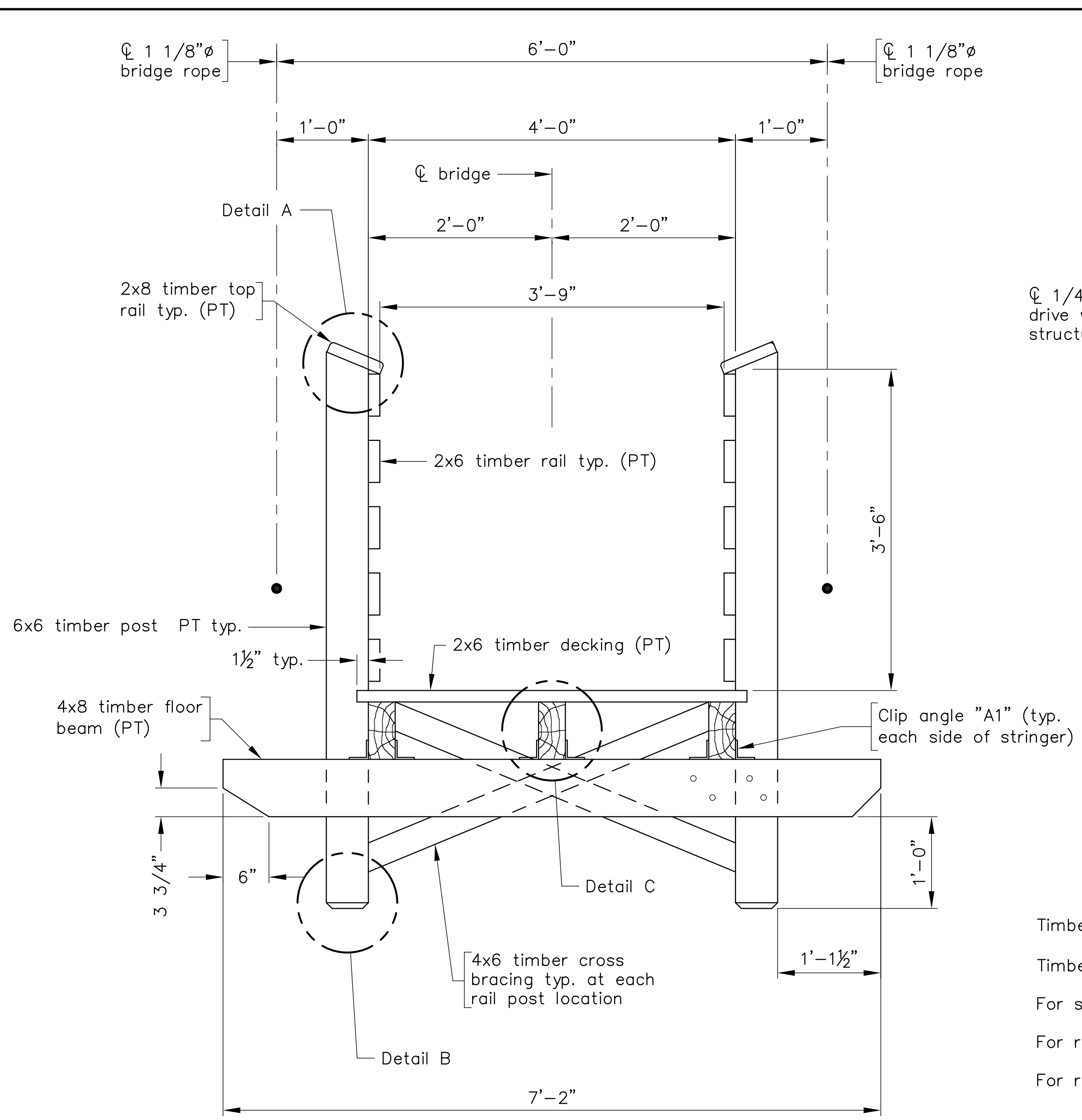
Schwartz & Associates, Inc.
CONSULTING ENGINEERS
7331 TIMBERLAKE ROAD
LYNCHBURG, VA.

**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
PITTSYLVANIA COUNTY WAYSIDE PARK
ESTIMATED QUANTITIES AND
INDEX OF SHEETS**

DESIGNED BY: MBH | DRAWN BY: RSH | CHECKED BY: RWS
SCALE: AS NOTED | PLAN NO.:
DATE: October 16, 2021 | SHEET: 3 OF 8

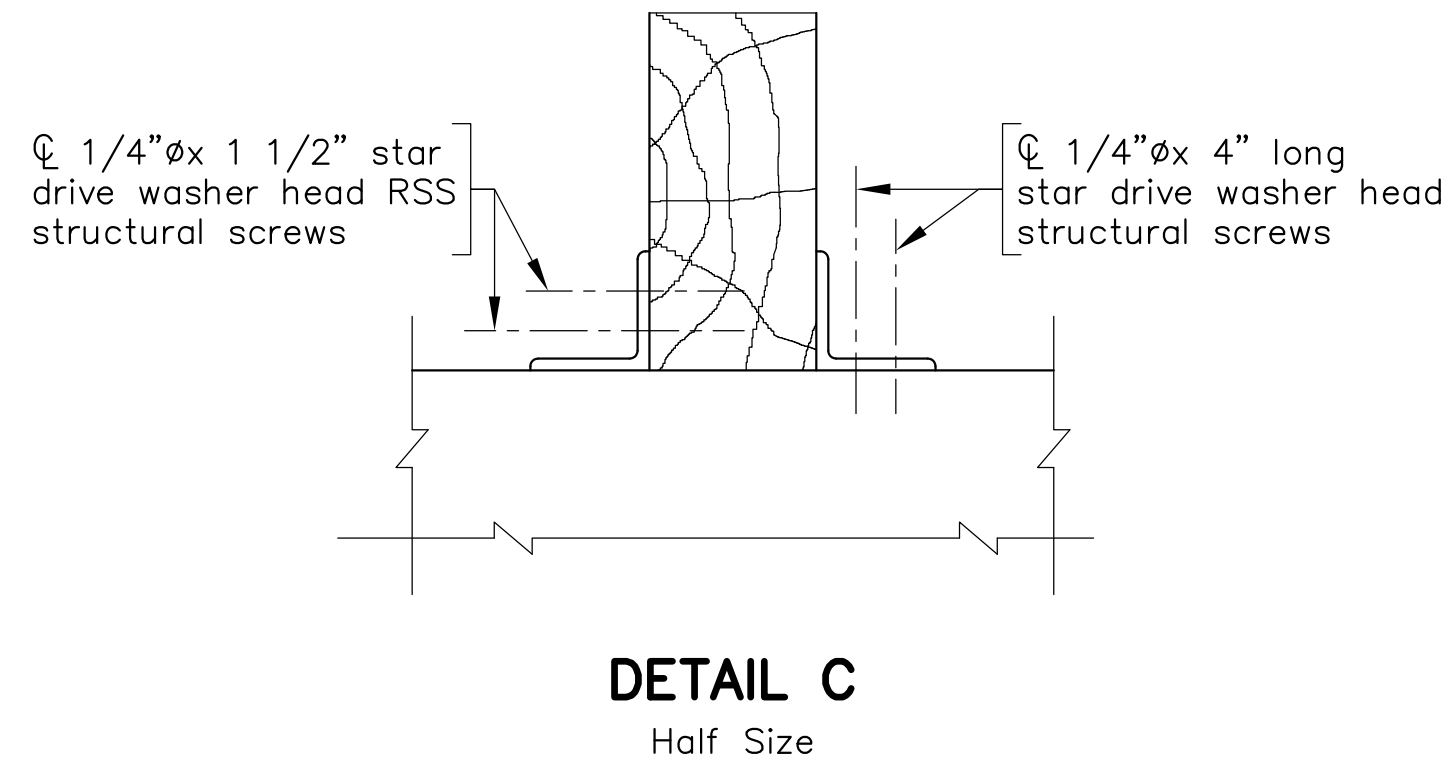
COMM. NO. 2020019

CADD REFERENCE NO.: BRIDGE2020019.DWG

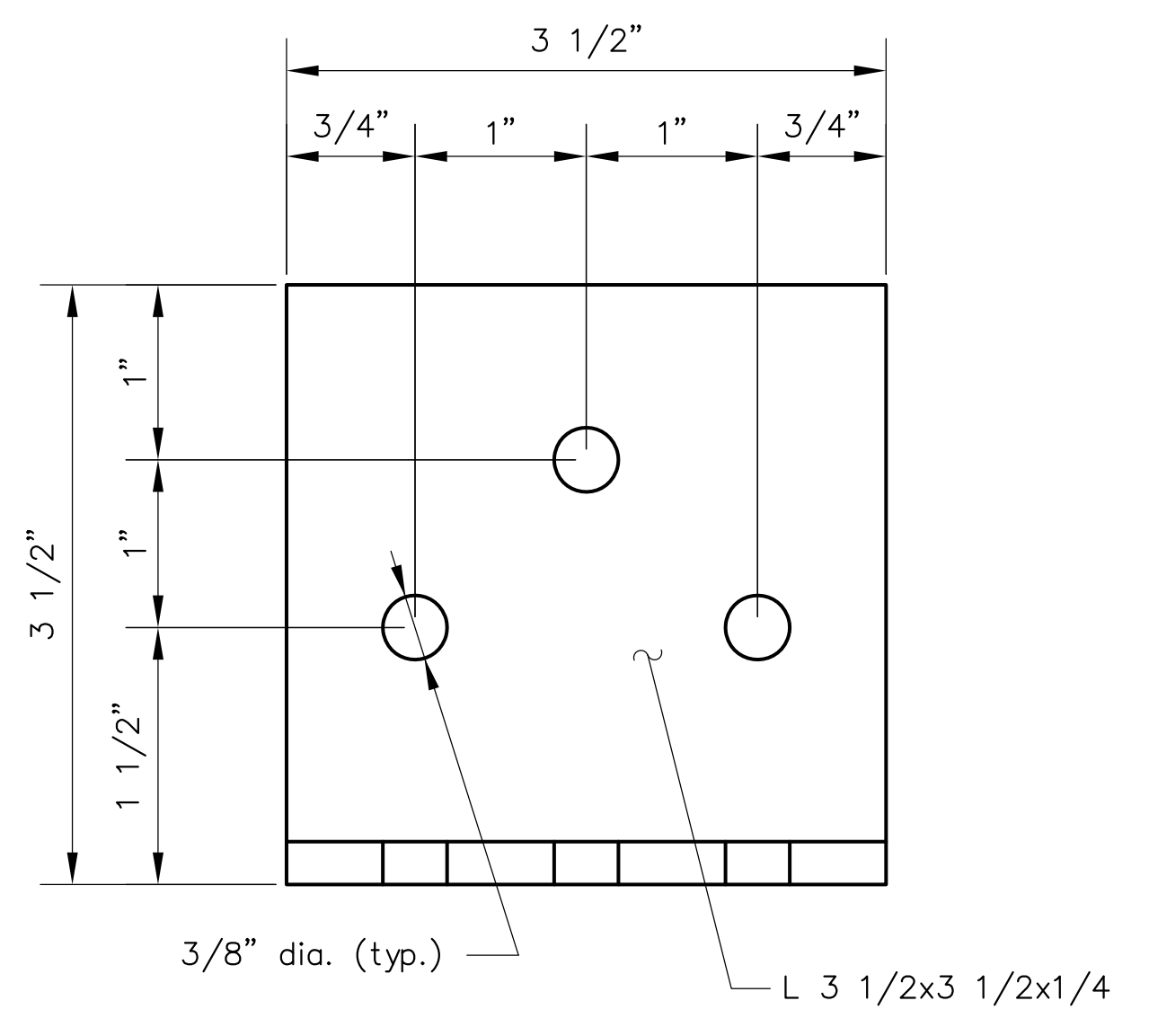


TRANSVERSE SECTION

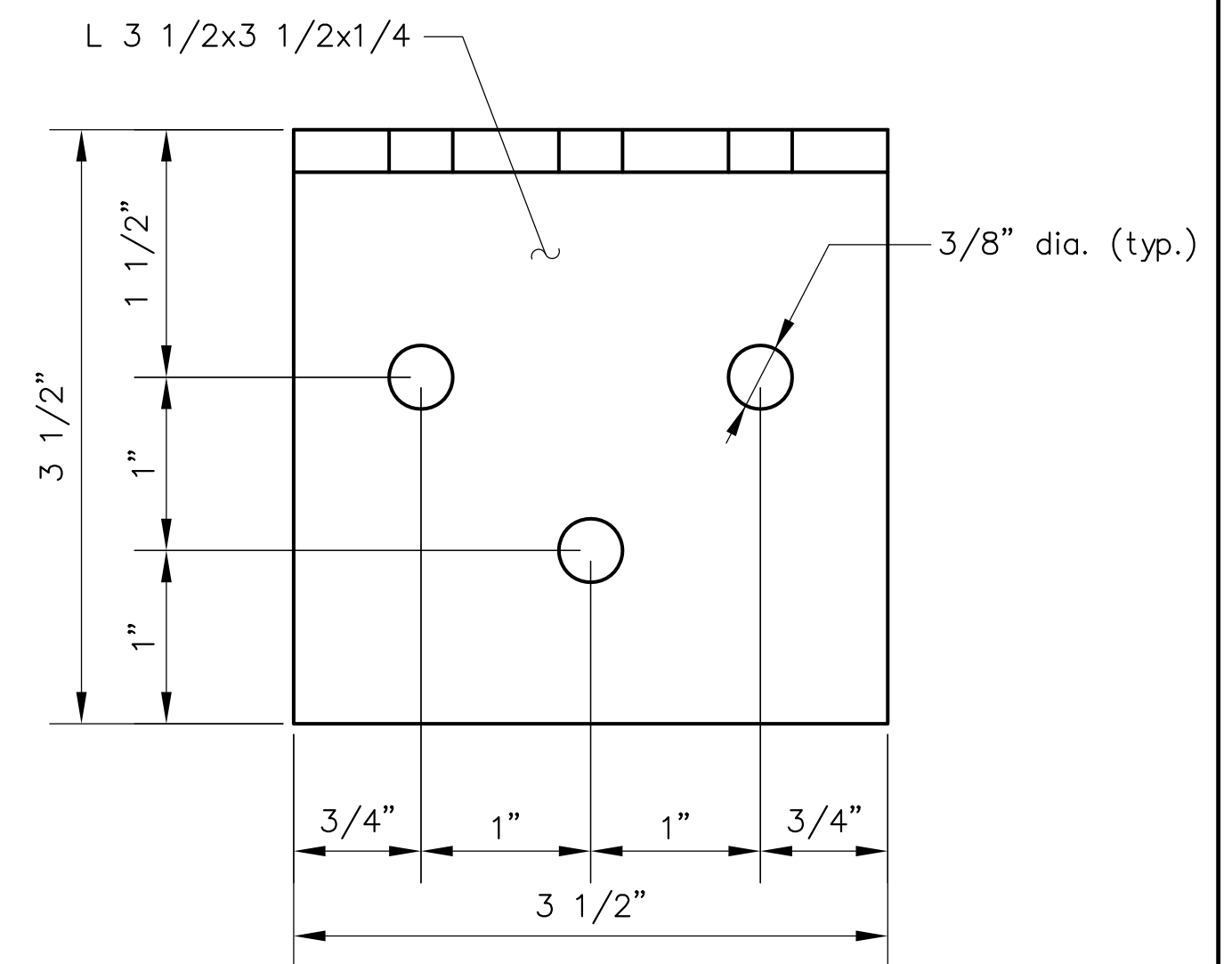
Timber railing shall be attached to rail posts with #8x3" long exterior grade wood screws.
 Timber deck shall be attached to timber stringers with #8x3" long exterior grade wood screws.
 For spacing of timber stringers, see framing plan on sheet 5.
 For rail post spacing, see plan on sheet 2.
 For railing details, see sheet 8.



DETAIL C
Half Size

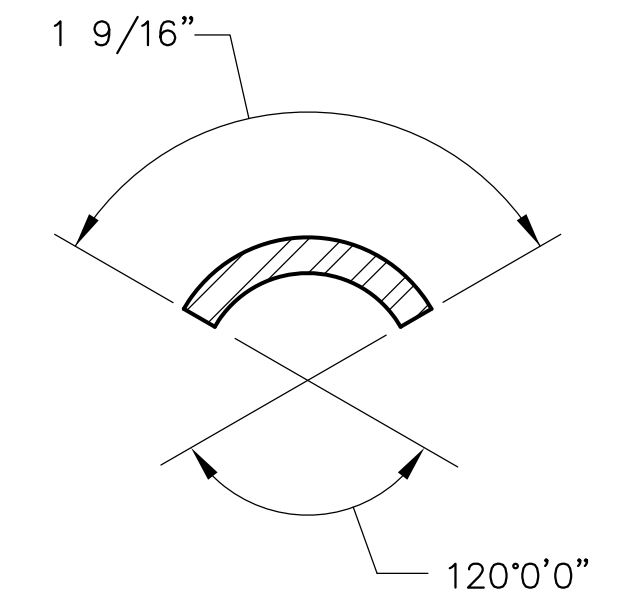


STRINGER VIEW

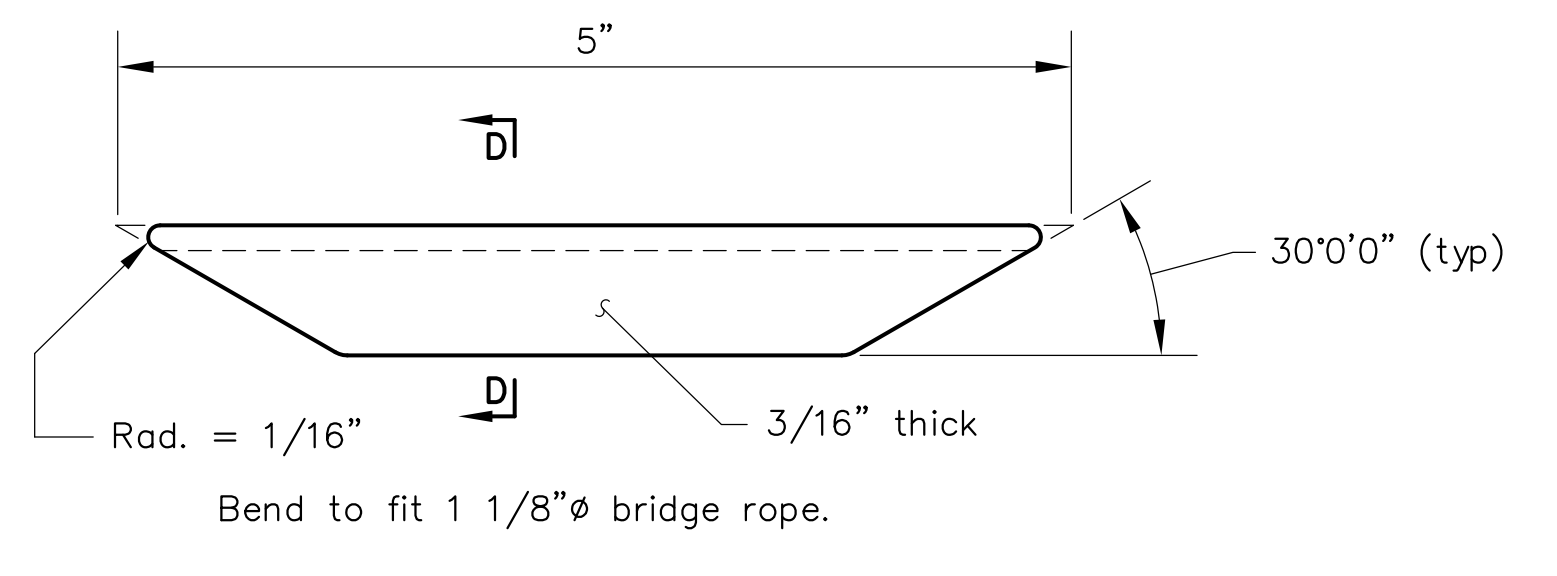


FLOORBEAM VIEW

CLIP ANGLE - "A1" (60 REQ'D)
Full Size

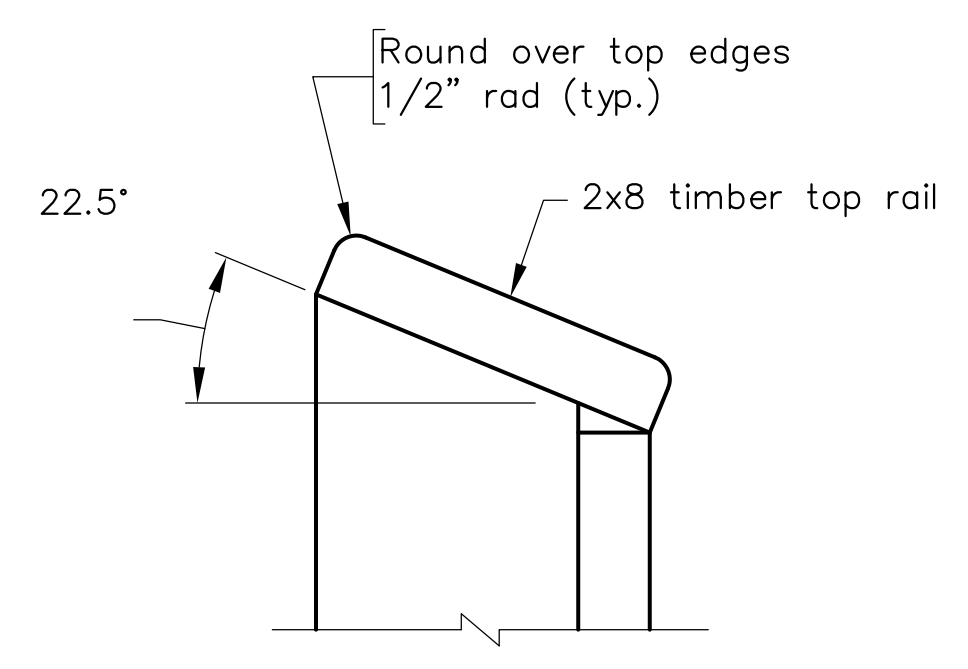


SECTION D-D

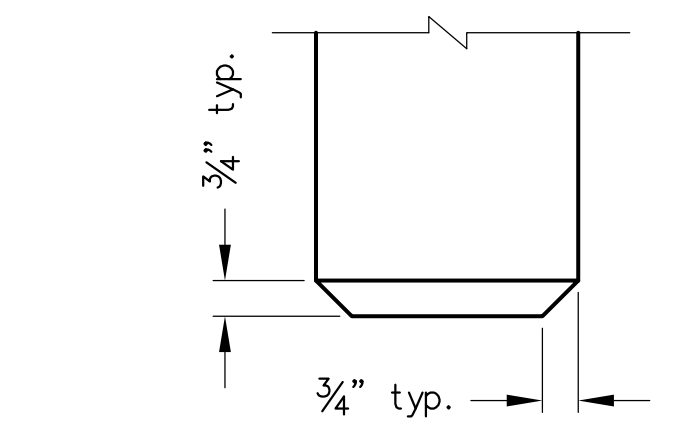


ELEVATION

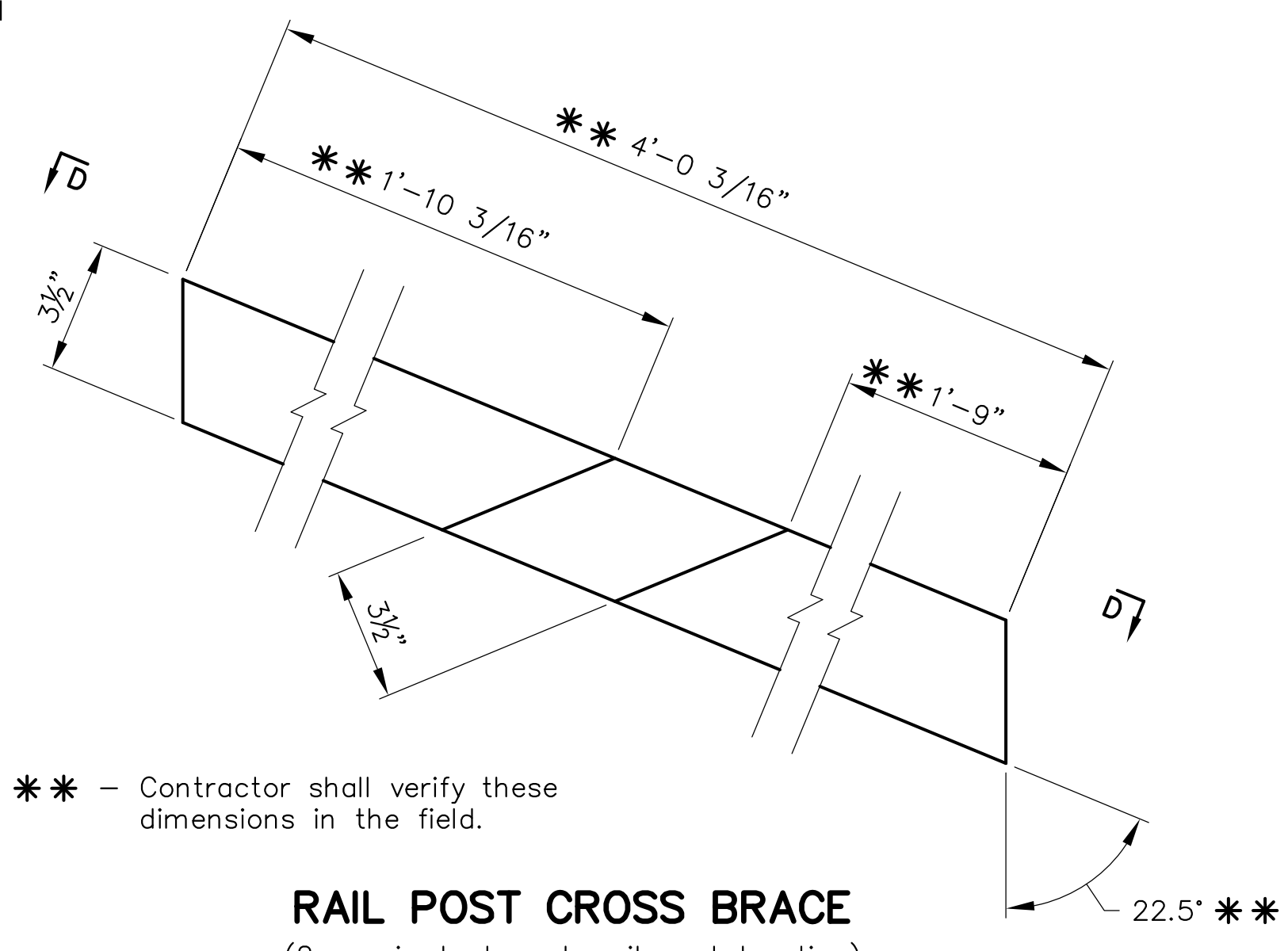
CABLE SLEEVE - "S1" (10 REQ'D)
Full Size



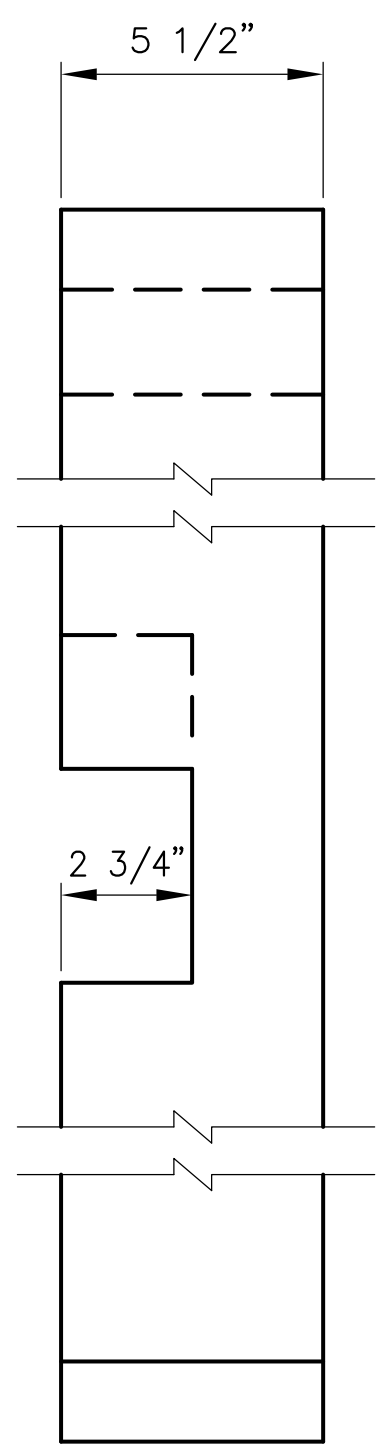
DETAIL A
Half Size



DETAIL B
Half Size



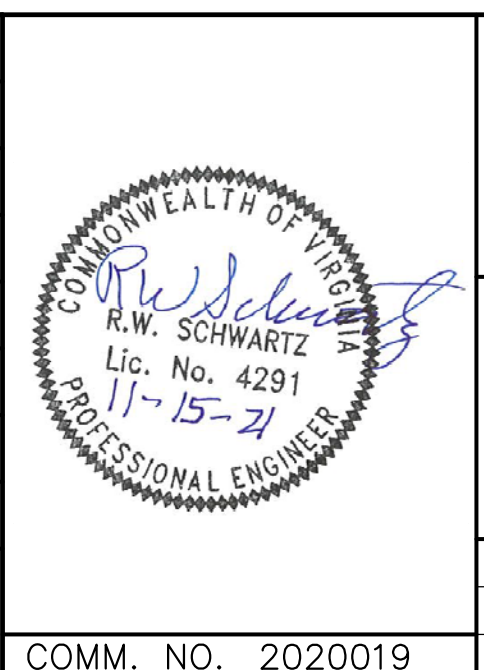
RAIL POST CROSS BRACE
(2 required at each rail post location)
Half Size



VIEW D-D
Half Size

Scale: 1" = 1'-0" unless otherwise shown.

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

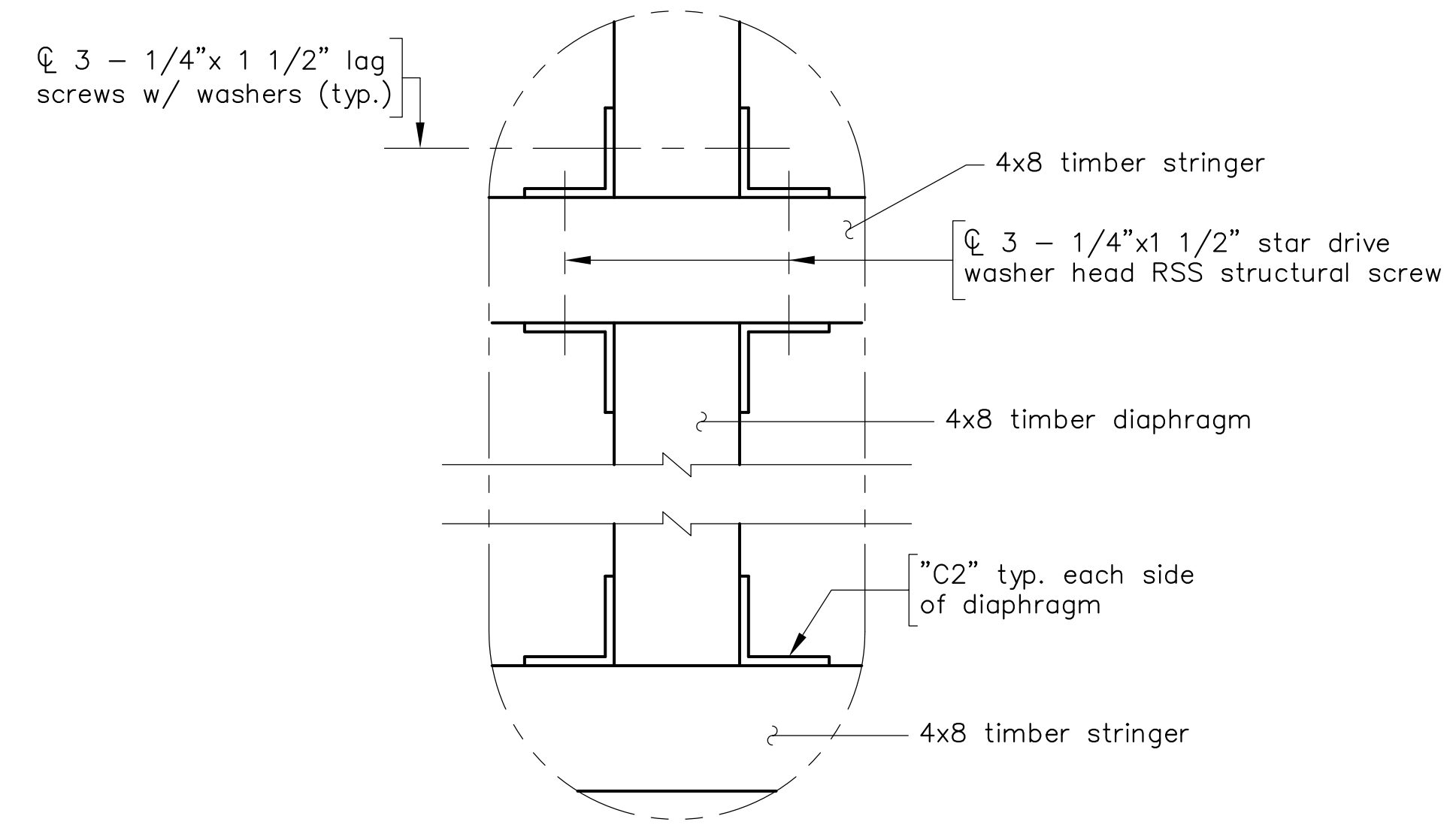
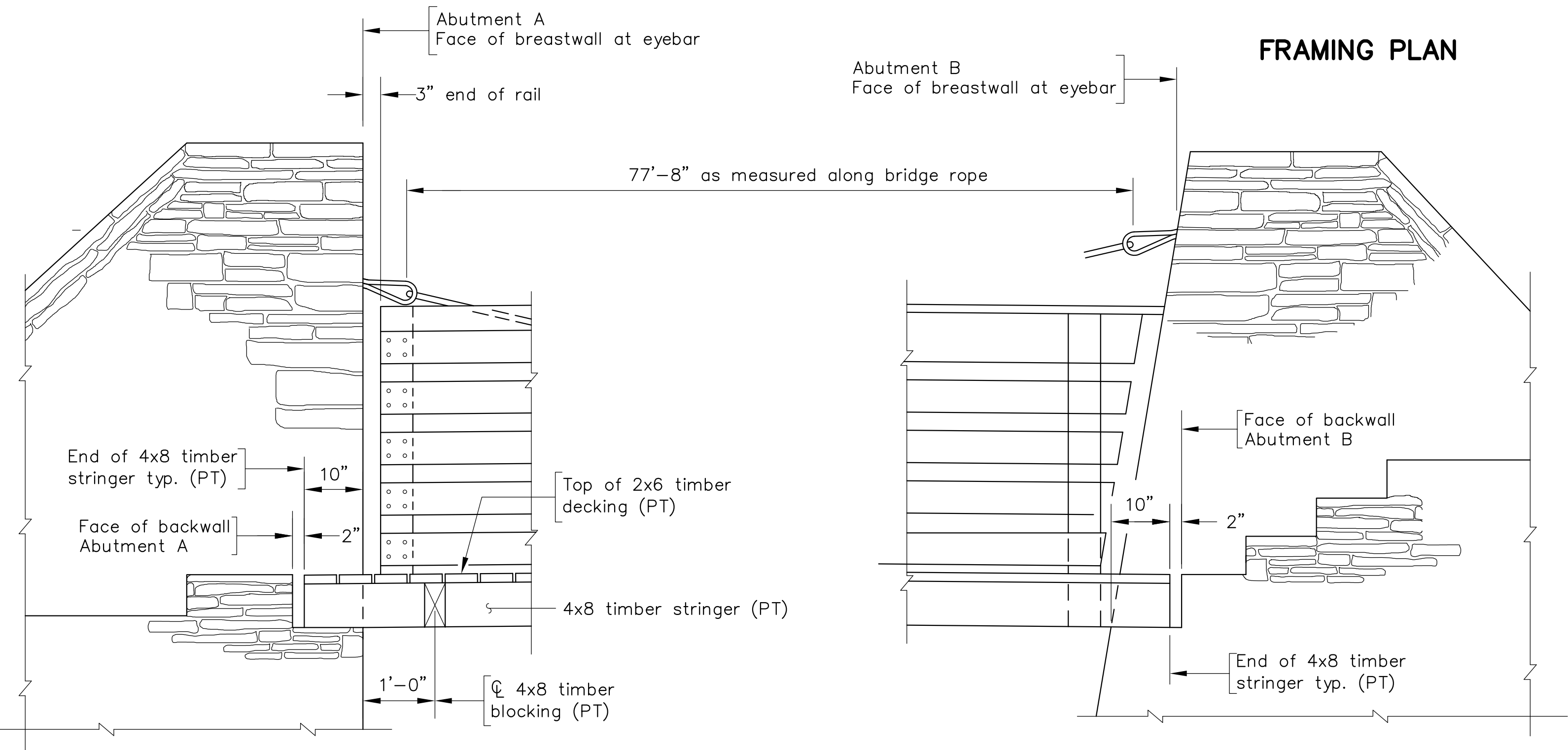
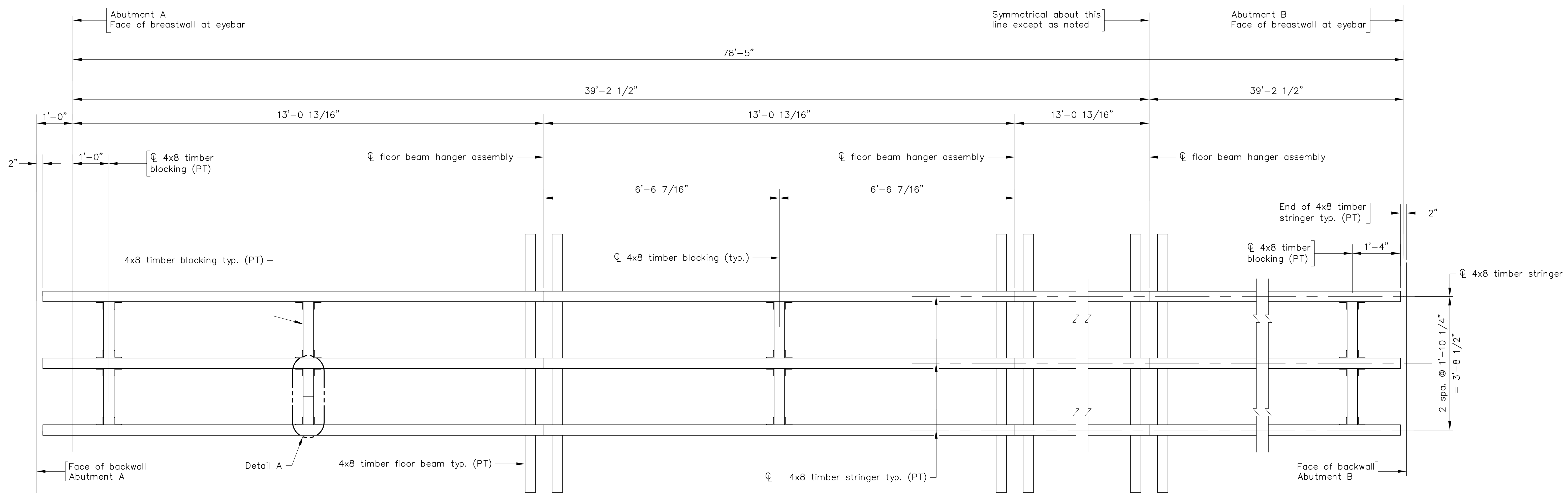


SCHWARTZ & ASSOCIATES, INC.
CONSULTING ENGINEERS
7331 TIMBERLAKE ROAD
LYNCHBURG, VA.

**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
PITTSYLVANIA COUNTY WAYSIDE PARK
TRANSVERSE SECTION AND
MISCELLANEOUS DETAILS**

DESIGNED BY: MBH	DRAWN BY: MBH	CHECKED BY: RWS
SCALE: AS NOTED	PLAN NO.: N/A	
DATE: October 16, 2021	SHEET: 4	OF 8

COMM. NO. 2020019

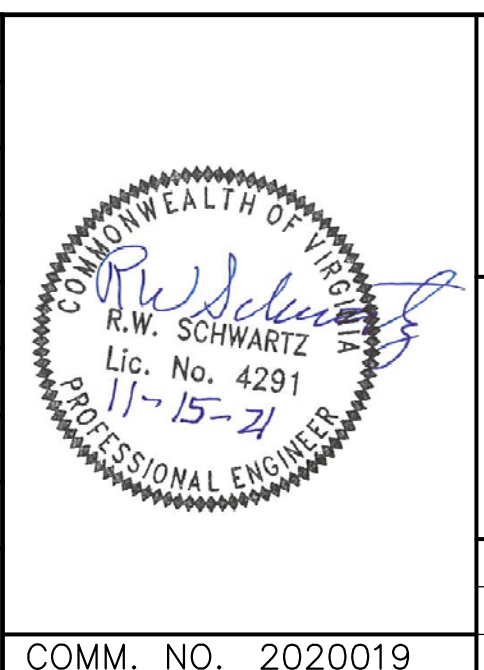


CADD REFERENCE NO.: BRIDGE2020019.DWG

BEARING DETAILS AT EACH ABUTMENT
Scale: 3/4" = 1'-0"

Scale: 3/4" = 1'-0" unless otherwise shown.

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

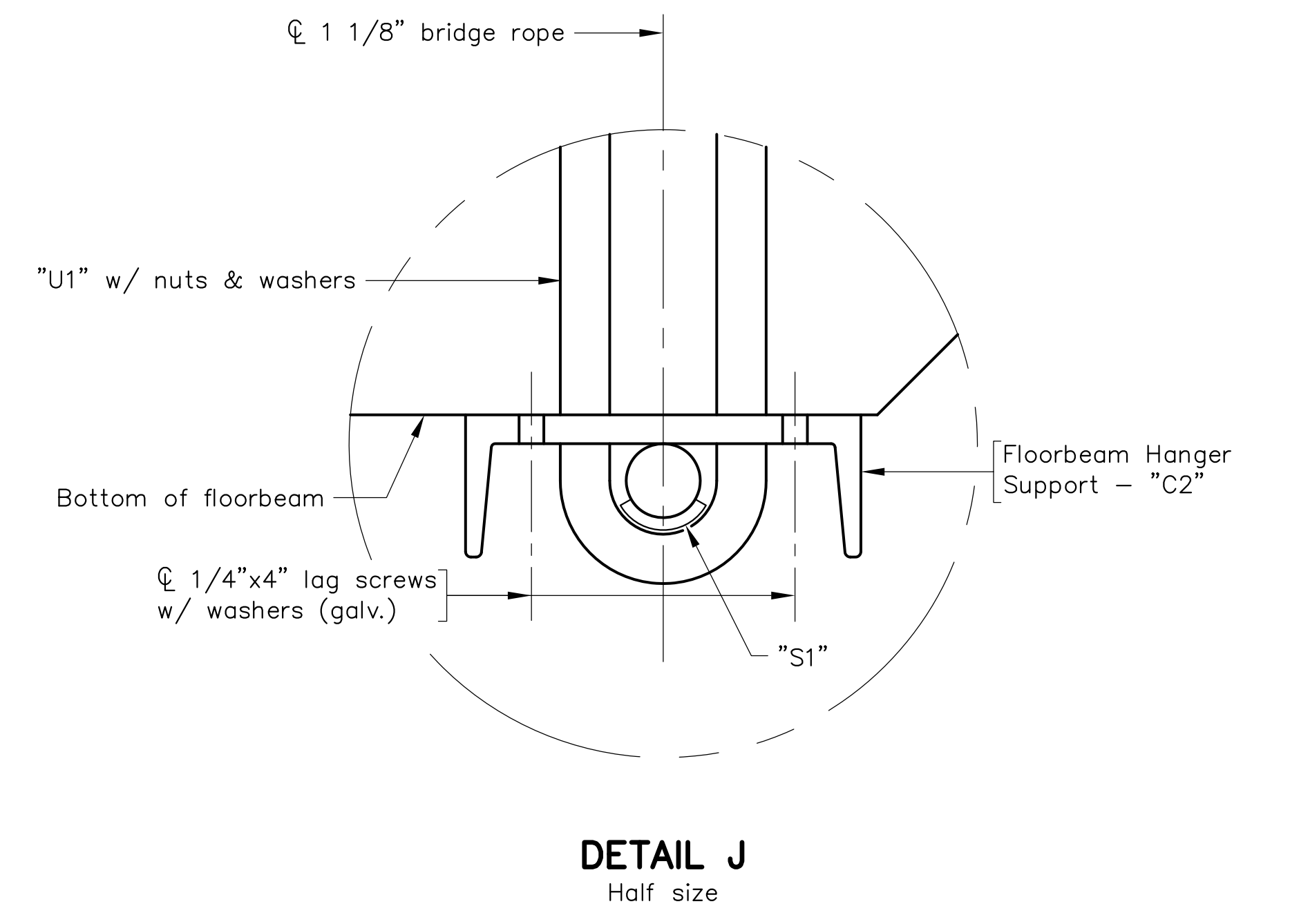
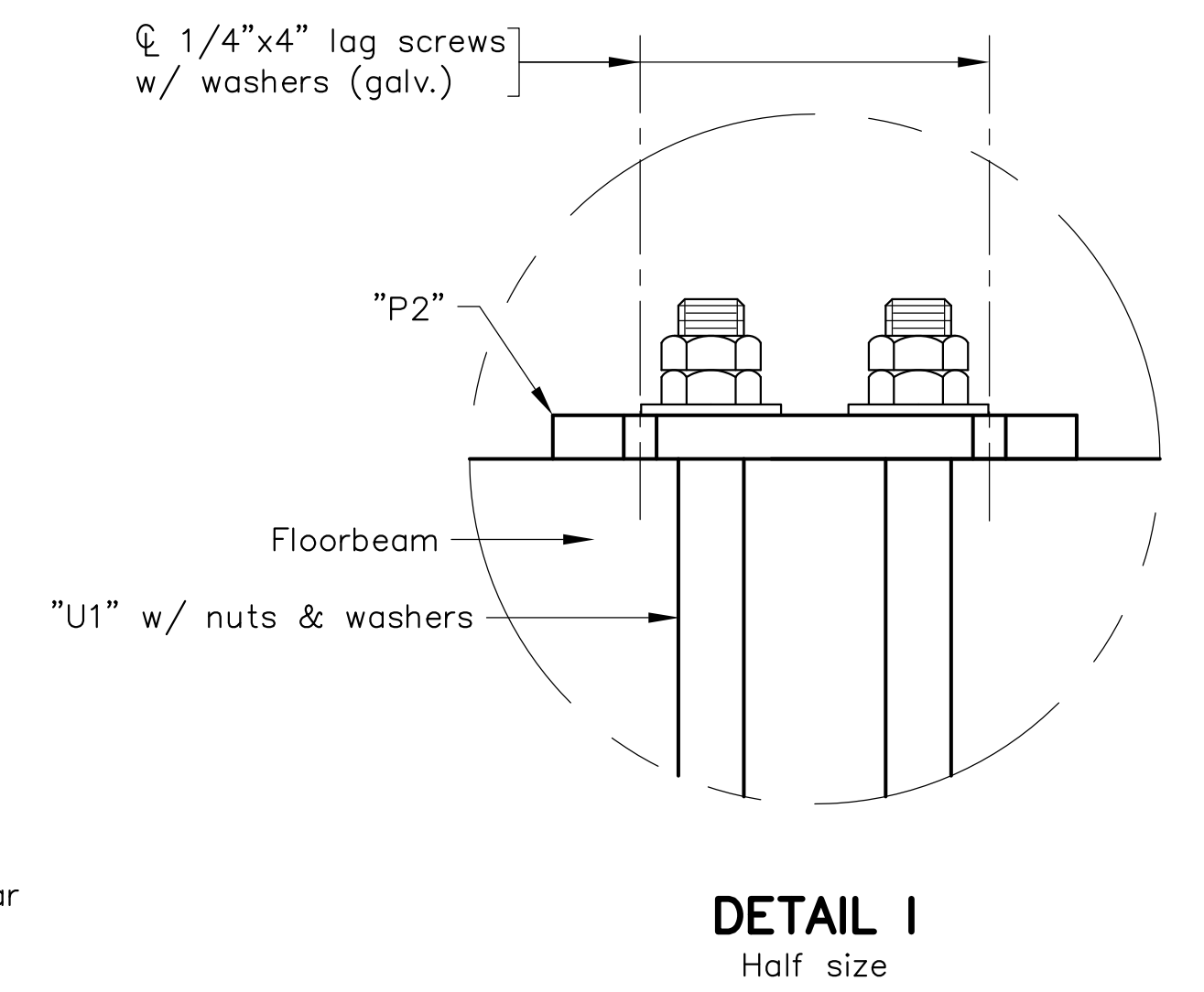
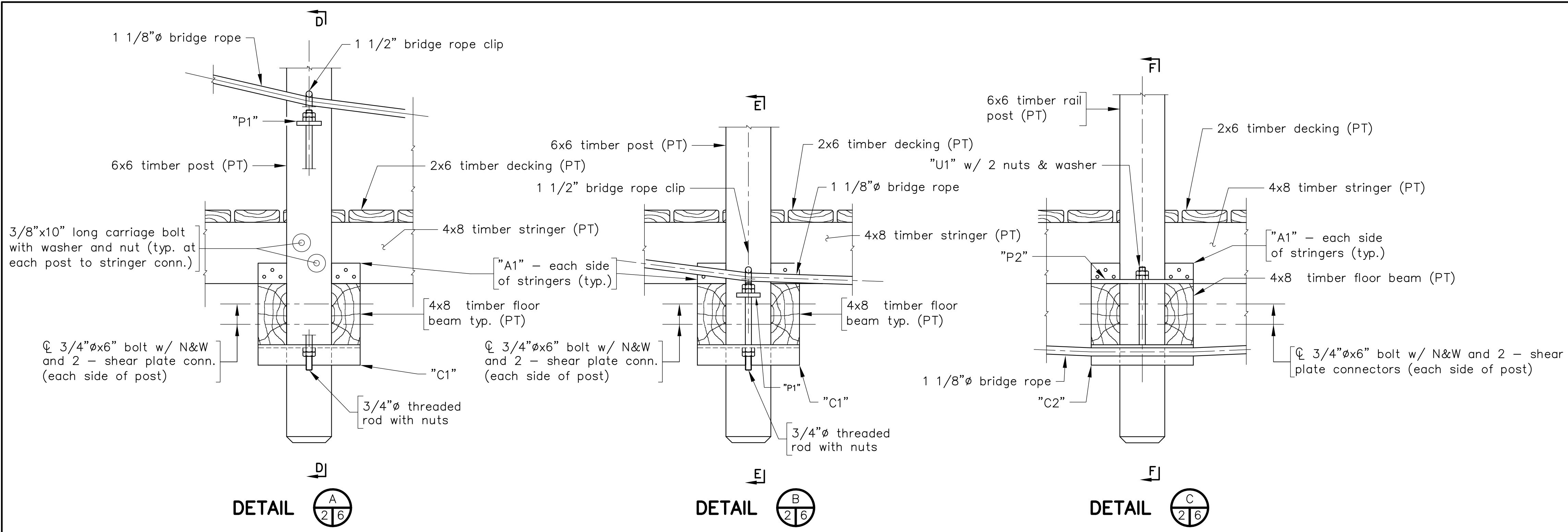


SCHWARTZ & ASSOCIATES, INC.
CONSULTING ENGINEERS
7331 TIMBERLAKE ROAD
LYNCHBURG, VA.

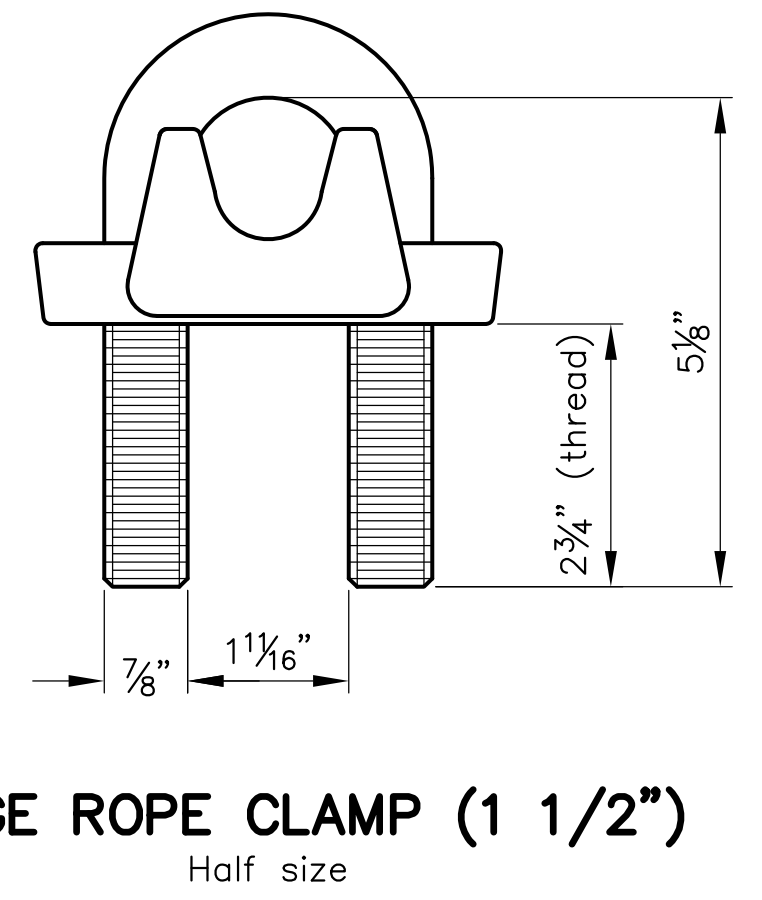
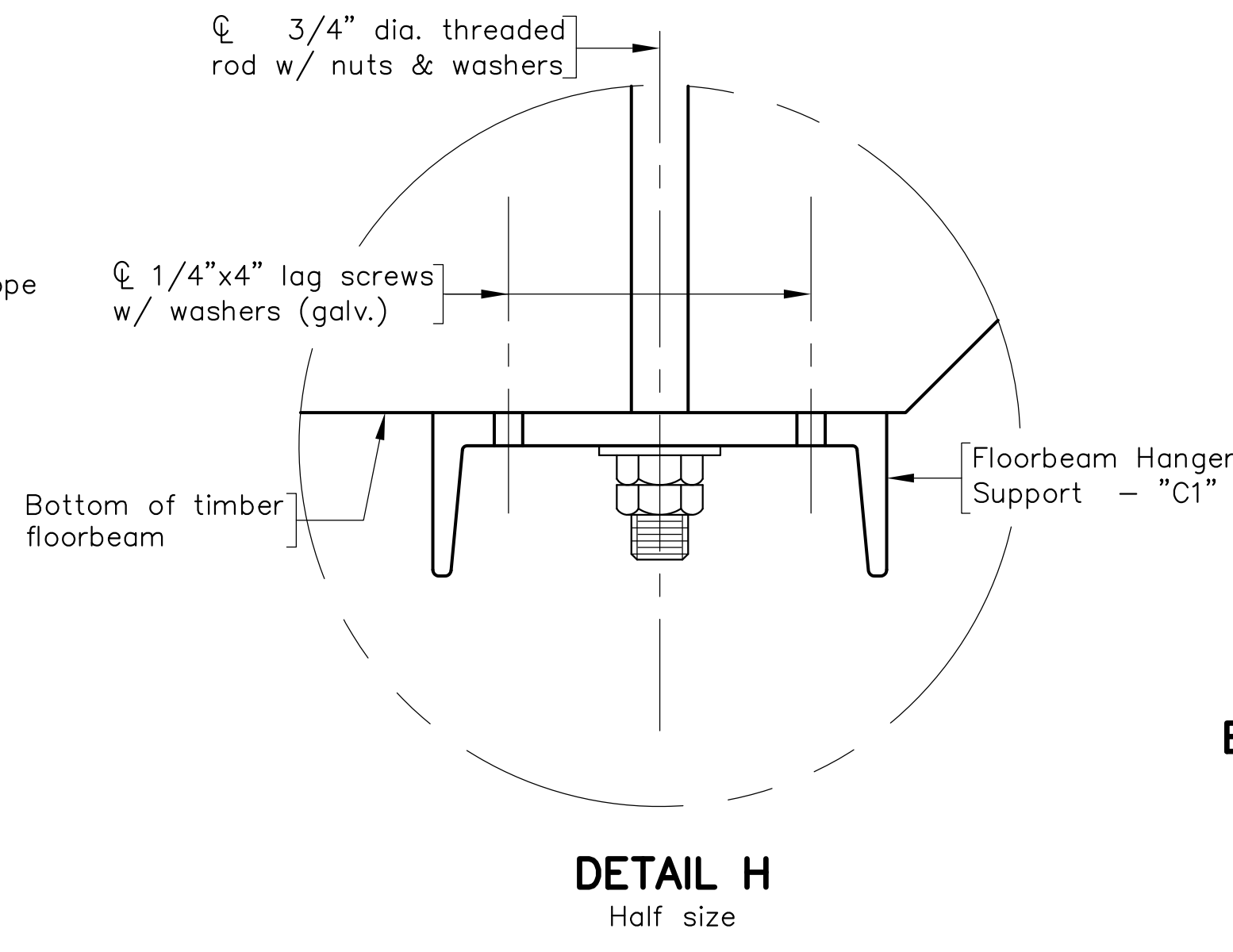
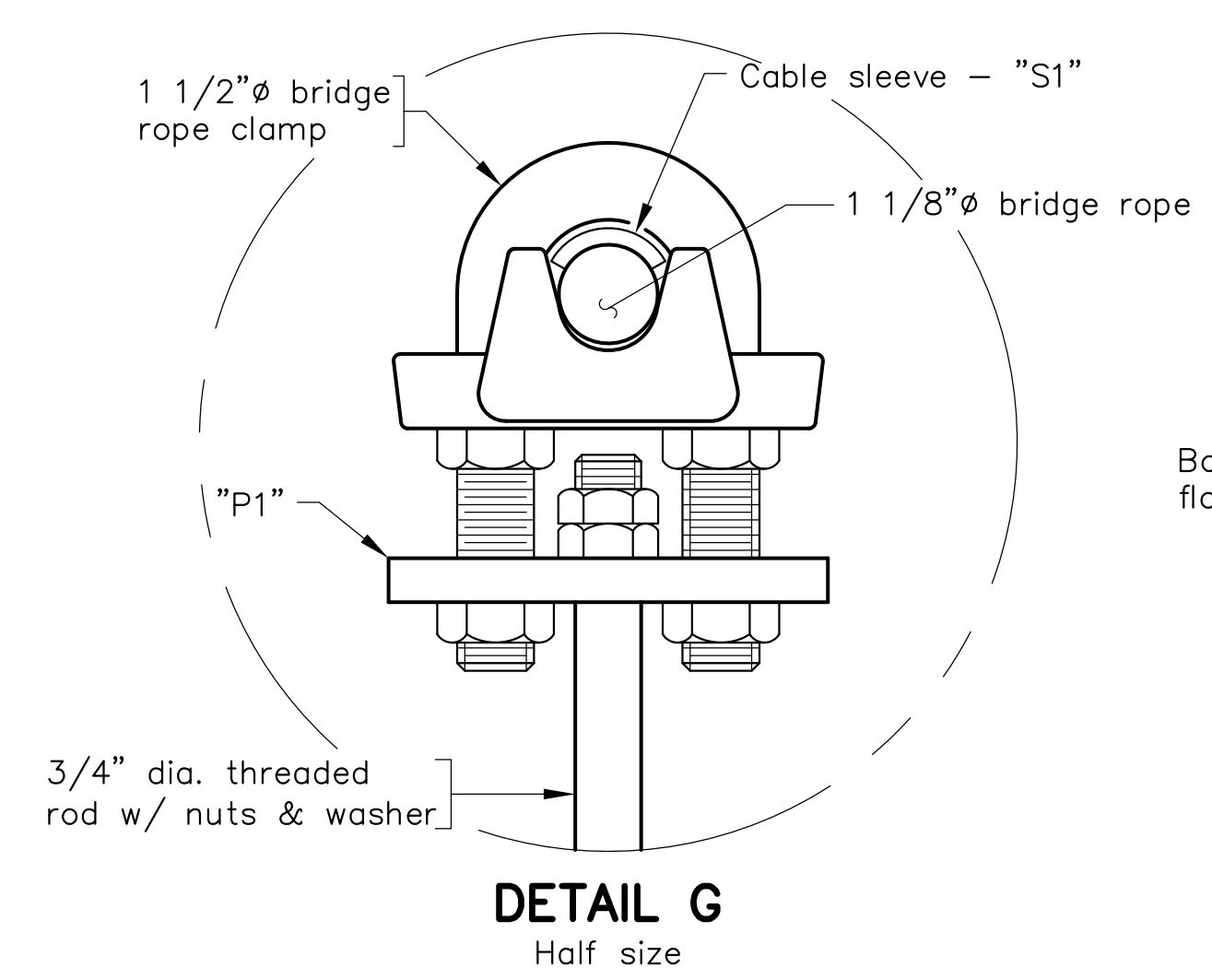
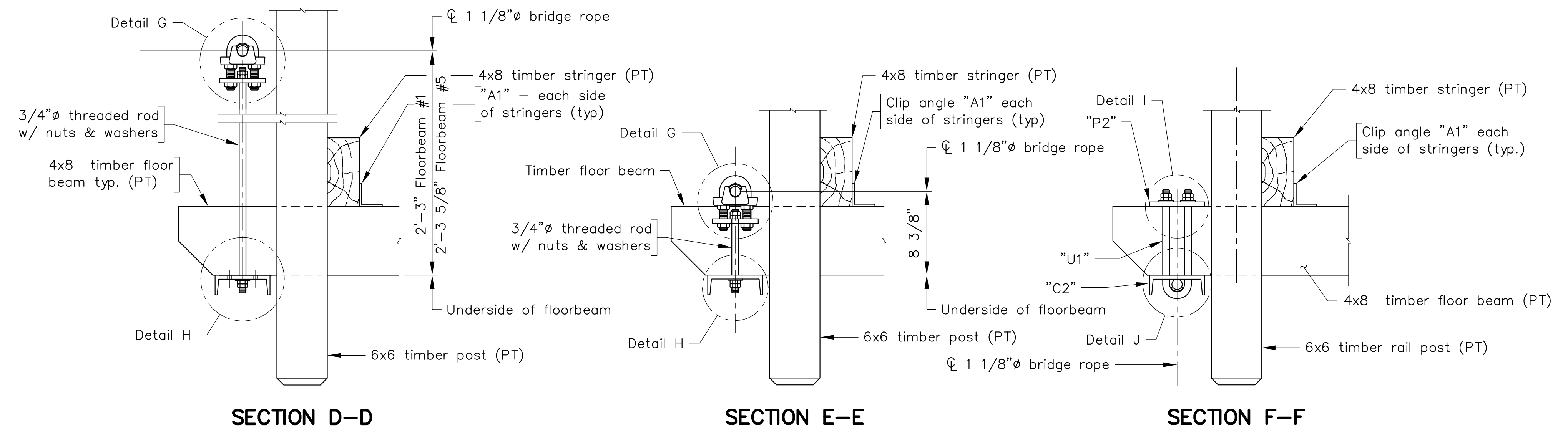
**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
PITTSYLVANIA COUNTY WAYSIDE PARK
FRAMING PLAN AND MISCELLANEOUS
DETAILS**

DESIGNED BY: MBH	DRAWN BY: MBH	CHECKED BY: RWS
SCALE: AS NOTED	PLAN NO.: N/A	
DATE: October 16, 2021	SHEET: 5	OF 8

COMM. NO. 2020019

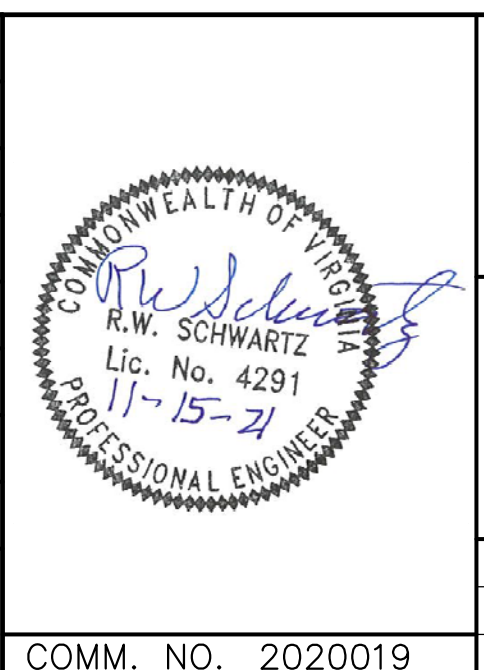


For framing plan details, see sheet 5.
For transverse section see sheet 4.
For floorbeam hanger parts, see sheet 7.



Scale: 1 1/2" = 1'-0" unless otherwise shown.

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		



SCHWARTZ & ASSOCIATES, INC.
CONSULTING ENGINEERS
7331 TIMBERLAKE ROAD
LYNCHBURG, VA.

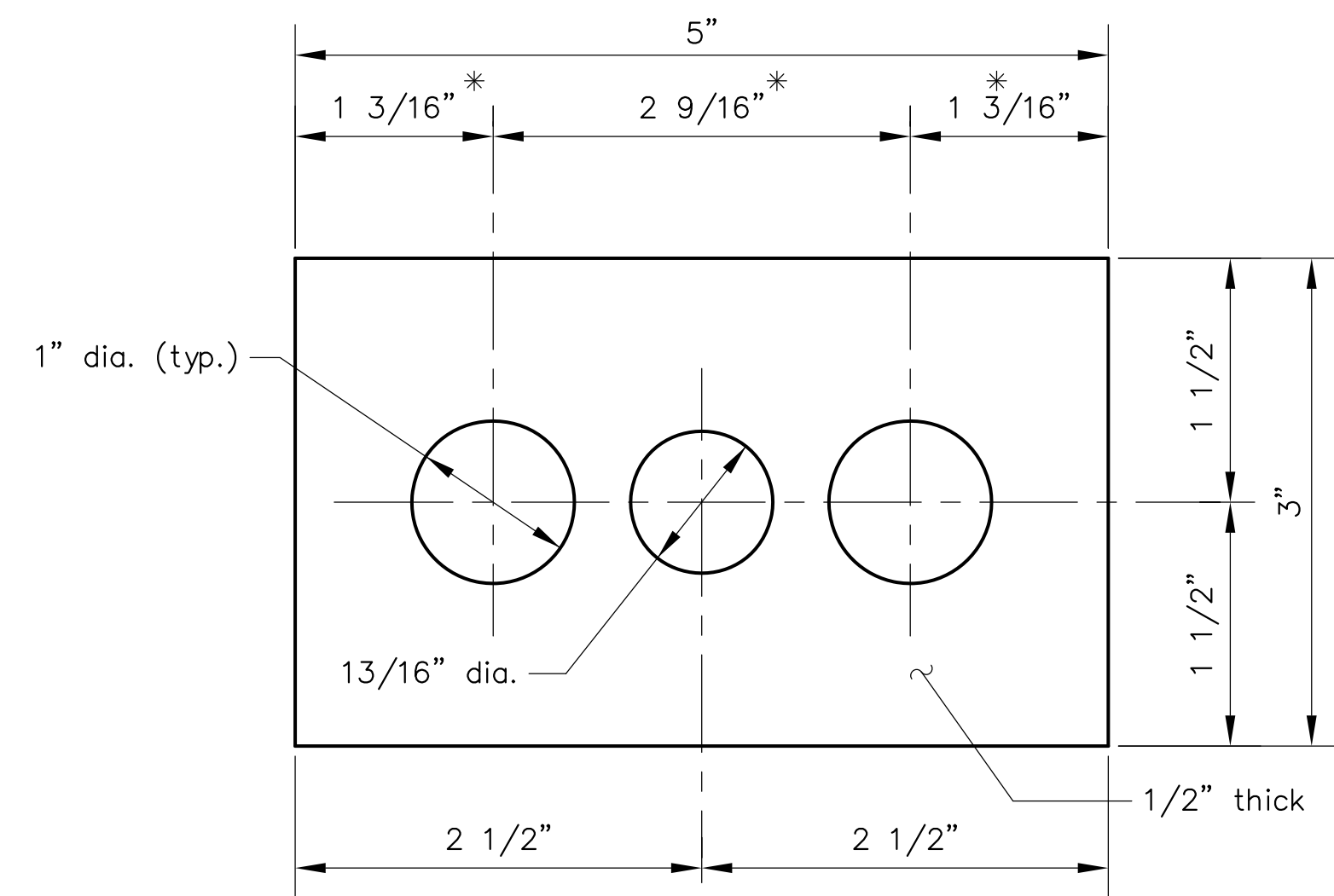
**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
PITTSYLVANIA COUNTY WAYSIDE PARK
FLOOR BEAM HANGER DETAILS**

DESIGNED BY: MBH	DRAWN BY: MBH	CHECKED BY: RWS
SCALE: AS NOTED	PLAN NO.: N/A	
DATE: October 16, 2021	SHEET: 6	OF 8

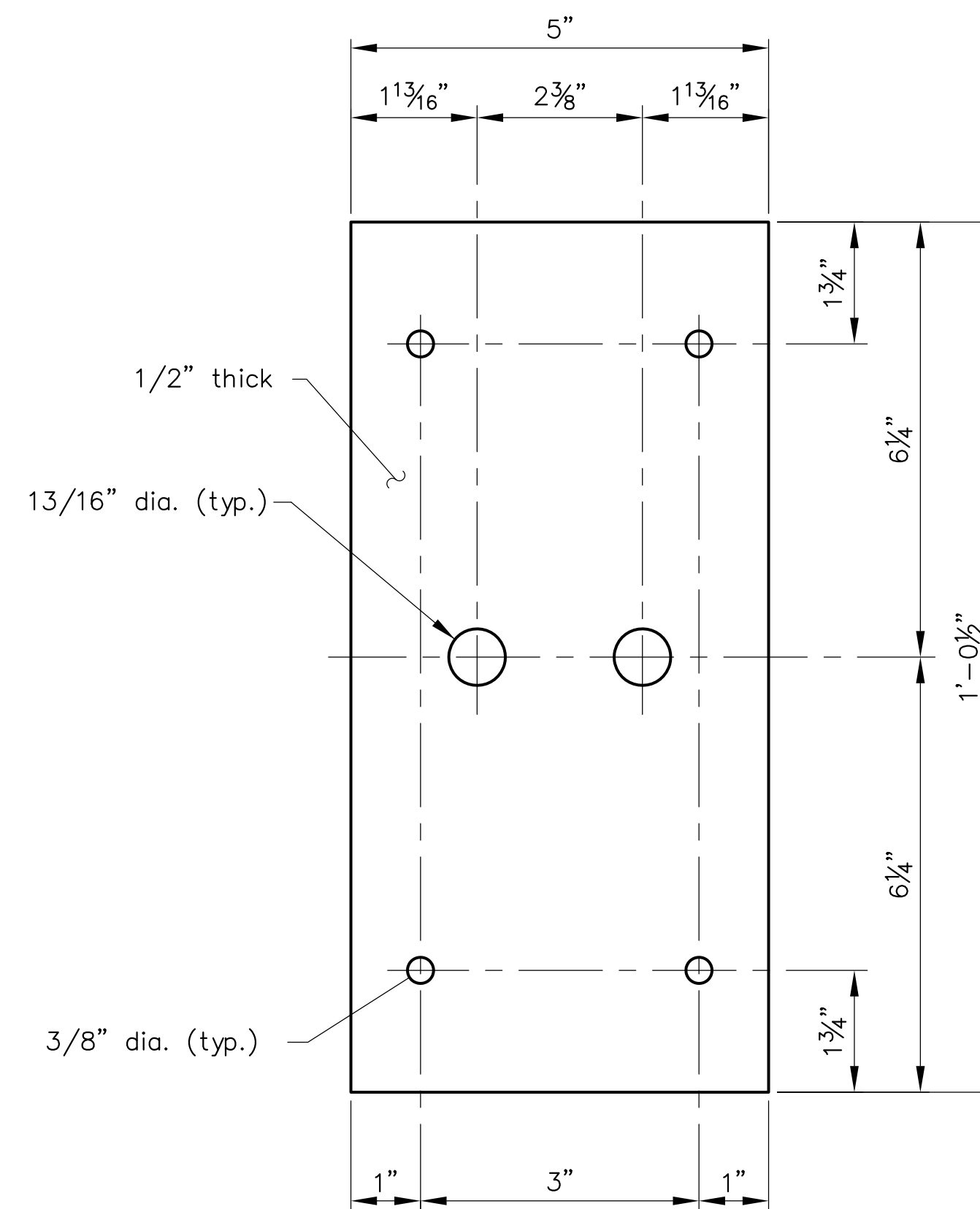
COMM. NO. 2020019

CADD REFERENCE NO.: BRIDGE2020019.DWG

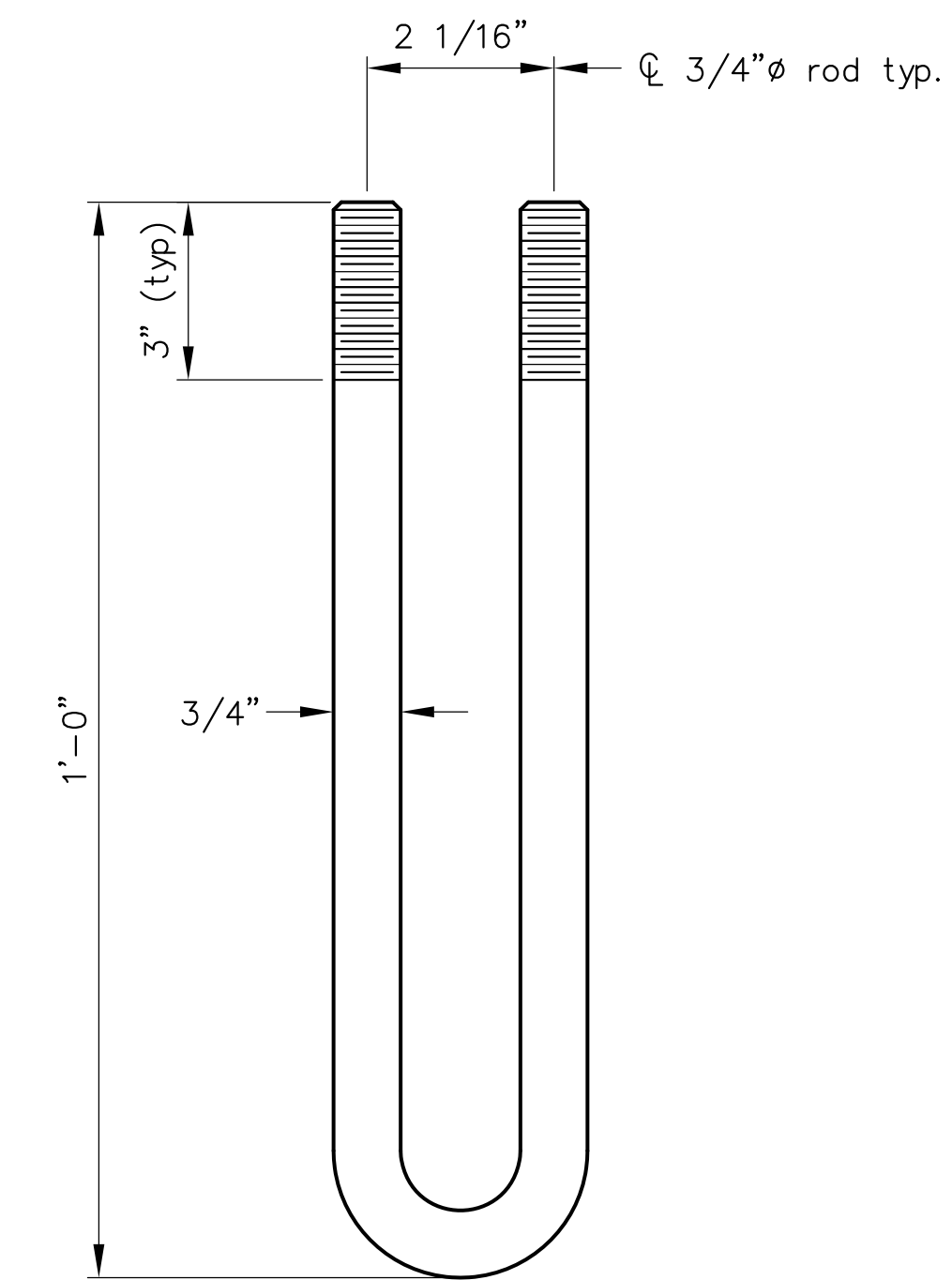
* - Contractor shall verify these dimensions based on wire rope clamp provided.



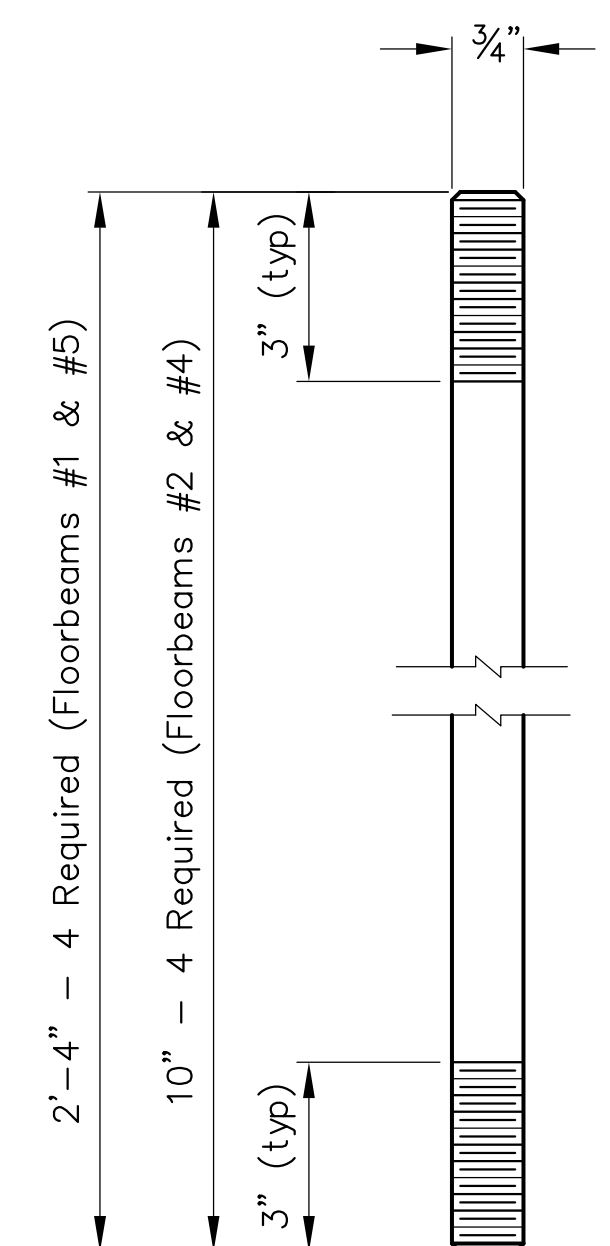
P1 - 8 REQ'D.
Full-size



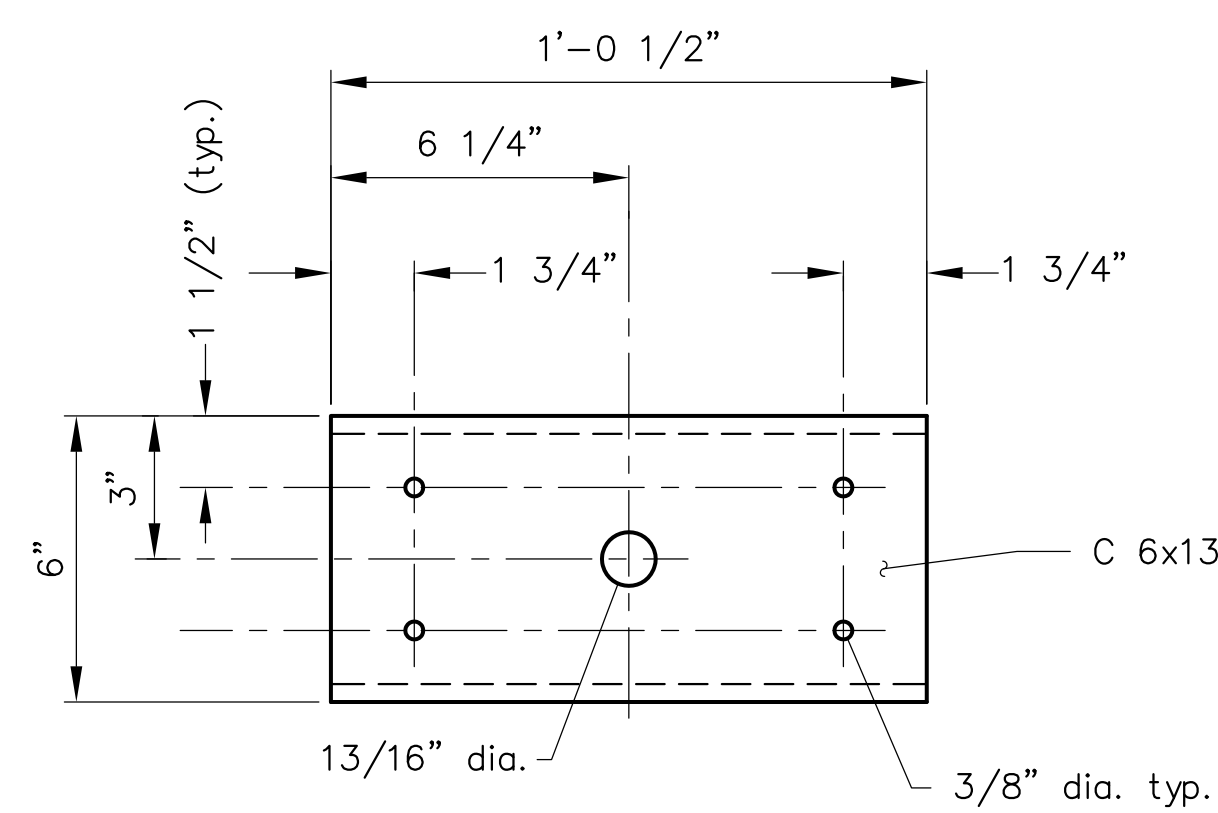
P2 - 2 REQ'D
Half-size



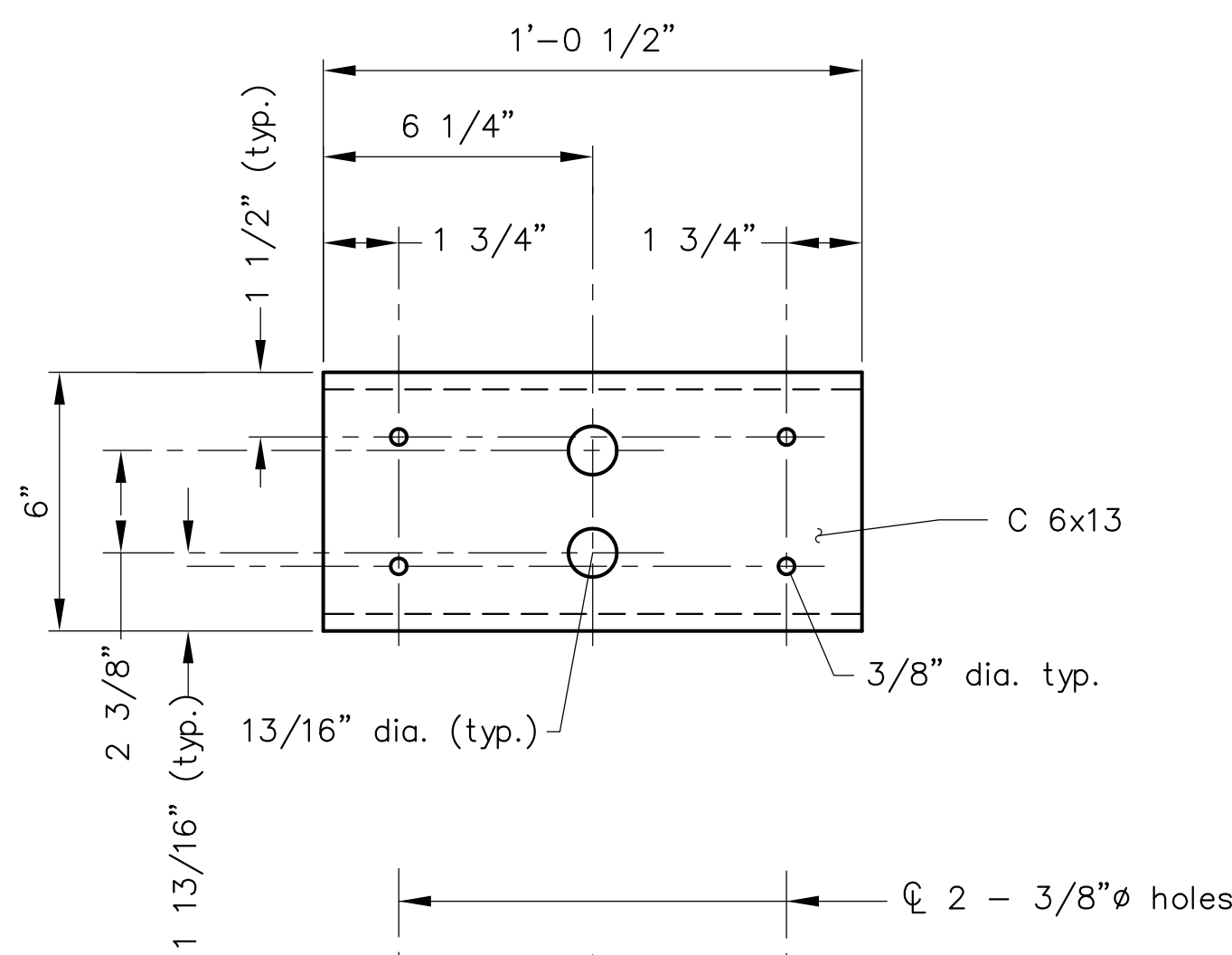
U1 - 2 REQUIRED
Half-size



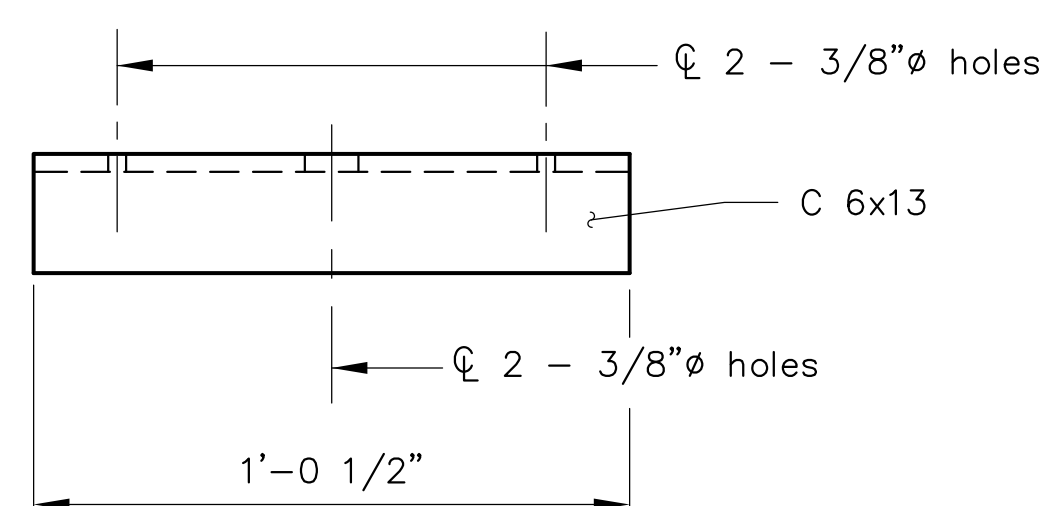
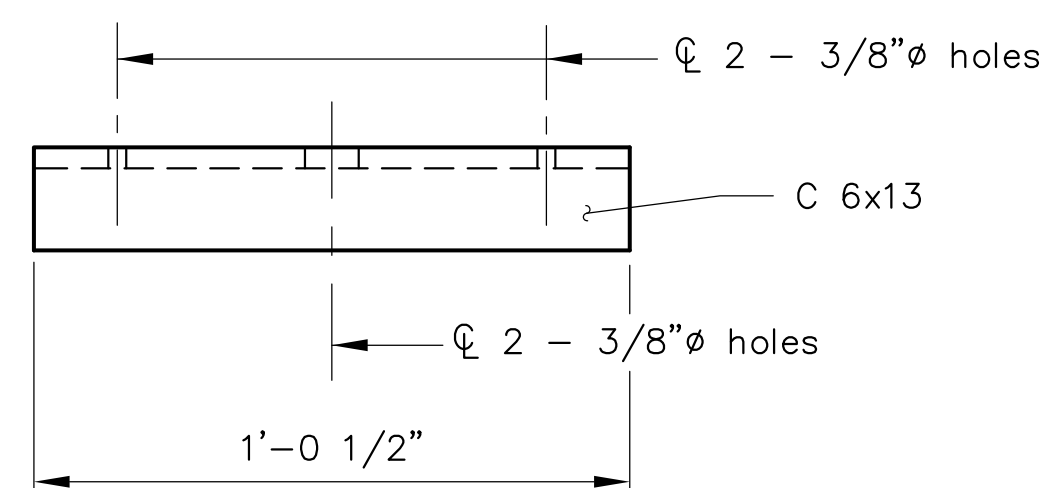
THREADED ROD
Half-size



C1 - 8 REQUIRED



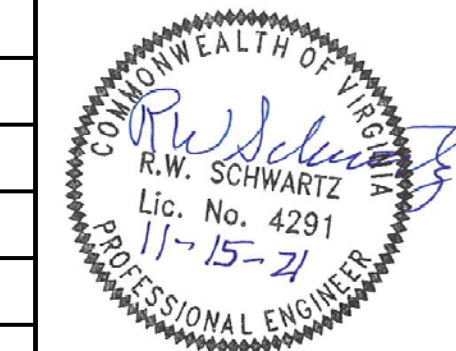
C2 - 2 REQUIRED



CADD REFERENCE NO.: BRIDGE2020019.DWG

Scale: 3" = 1'-0" unless otherwise shown.

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

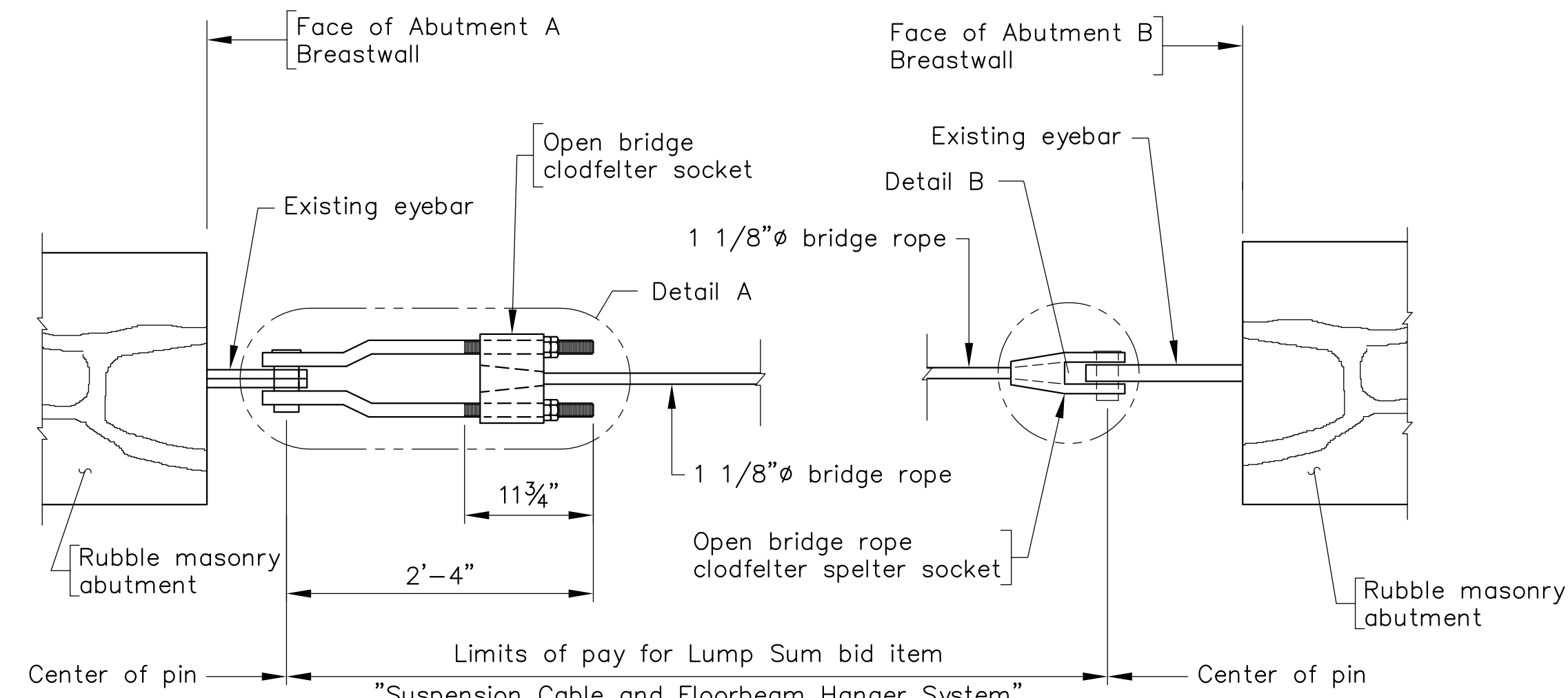


SCHWARTZ & ASSOCIATES, INC.
CONSULTING ENGINEERS
7331 TIMBERLAKE ROAD
LYNCHBURG, VA.

**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
PITTSYLVANIA COUNTY WAYSIDE PARK
FLOOR BEAM HANGER PARTS**

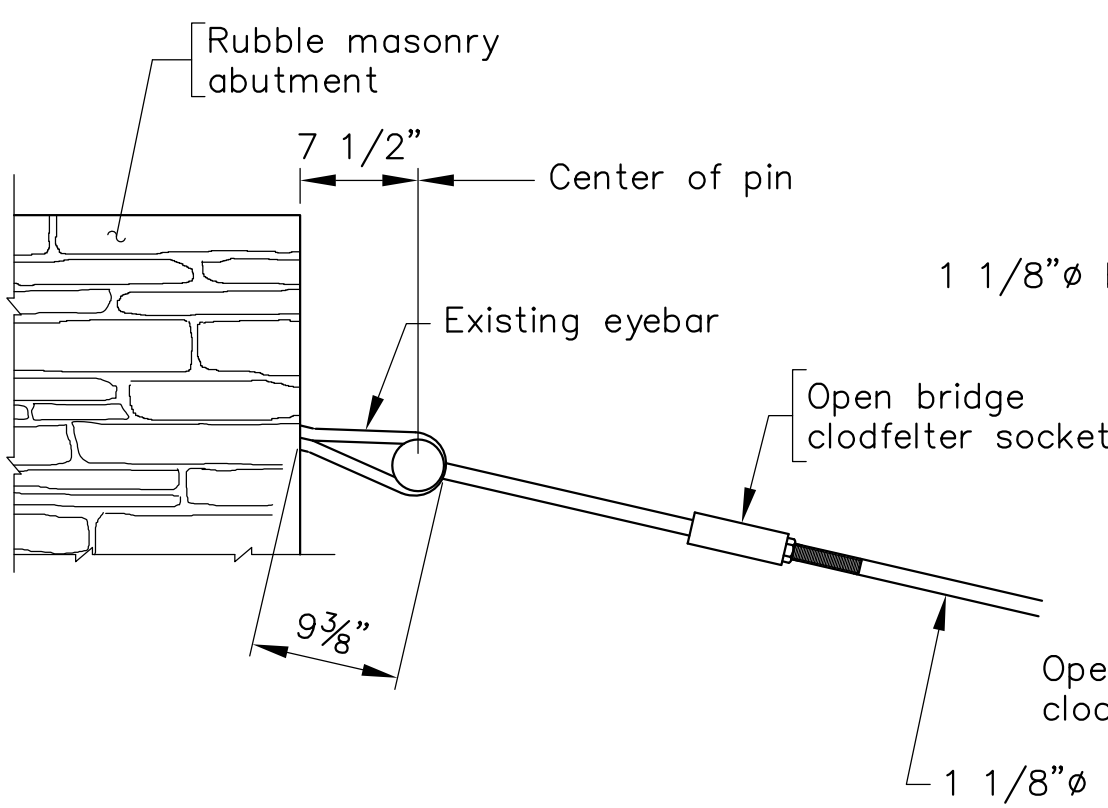
DESIGNED BY: MBH	DRAWN BY: MBH	CHECKED BY: RWS
SCALE: AS NOTED	PLAN NO.: N/A	
DATE: October 16, 2021	SHEET: 7	OF 8

COMM. NO. 2020019

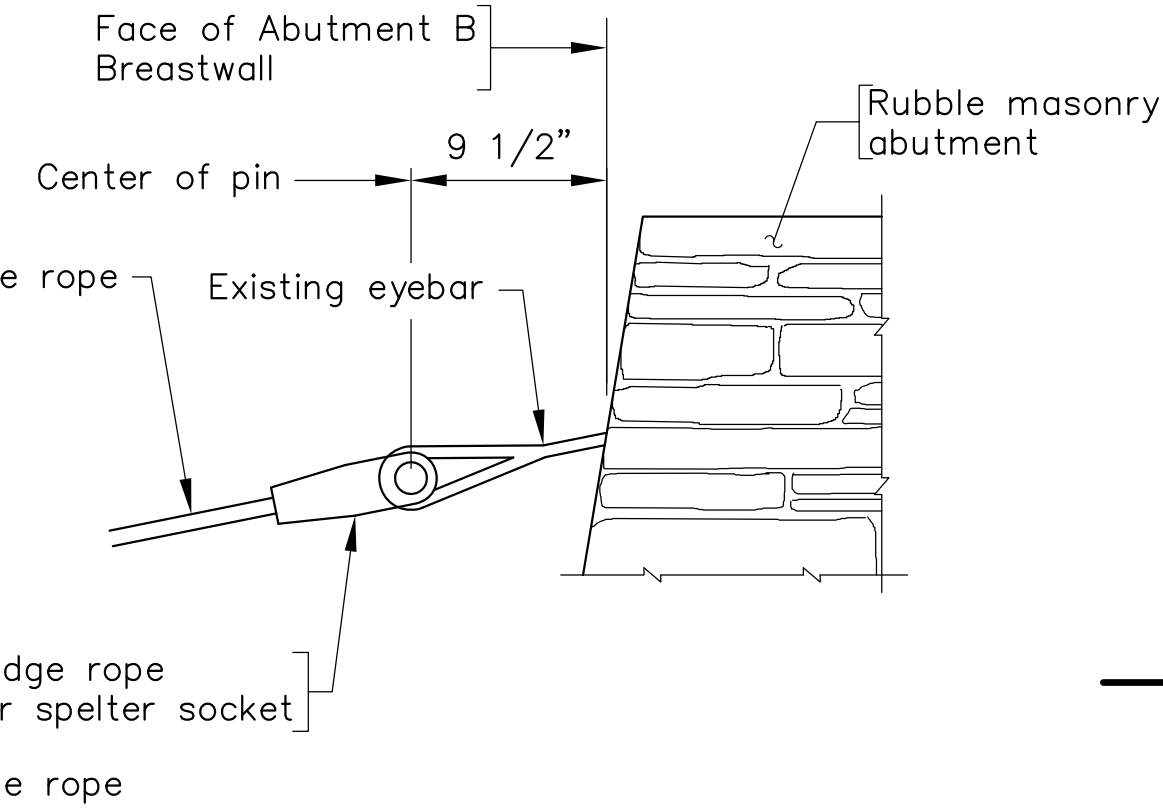


ABUTMENT A - PART PLAN

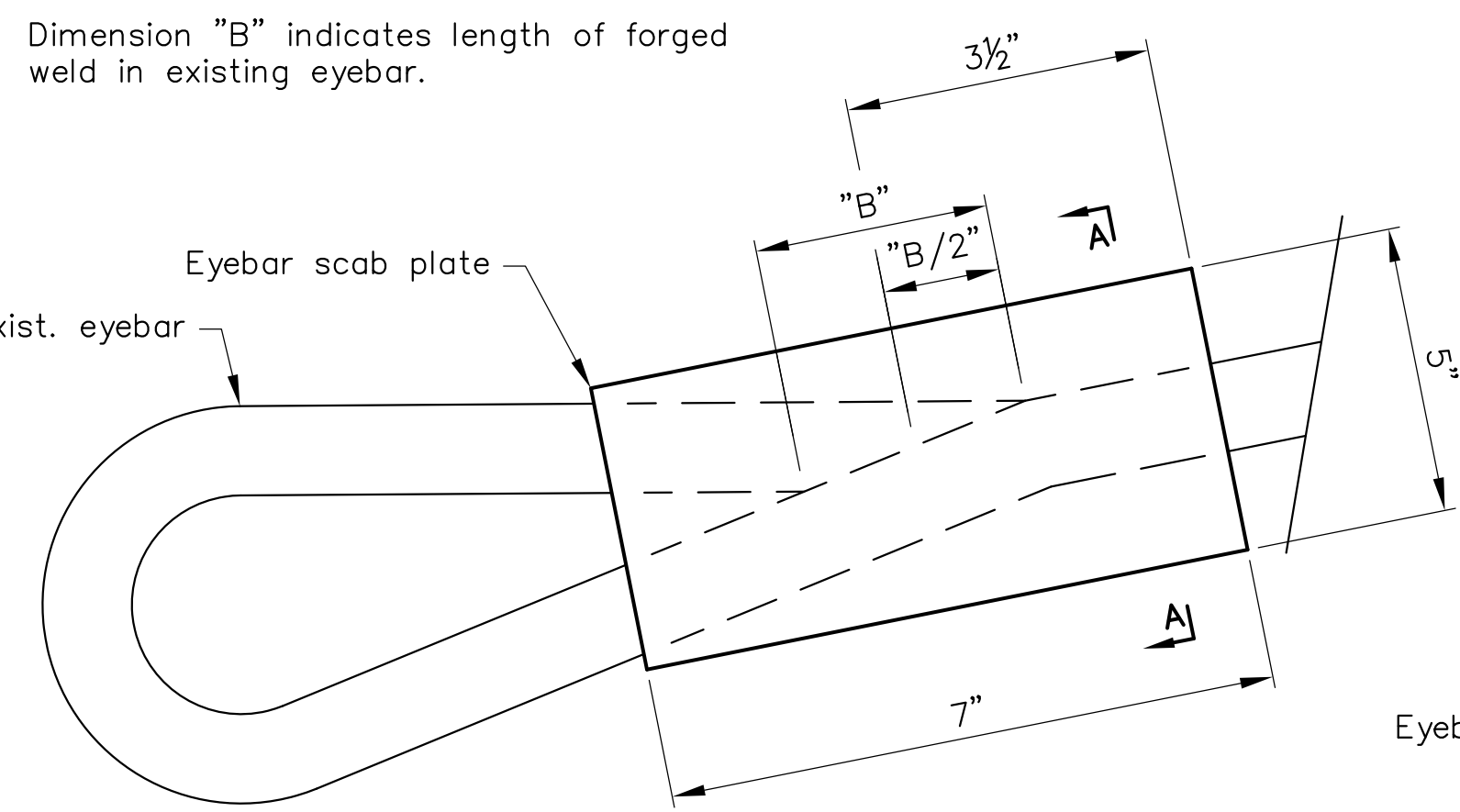
ABUTMENT B - PART PLAN



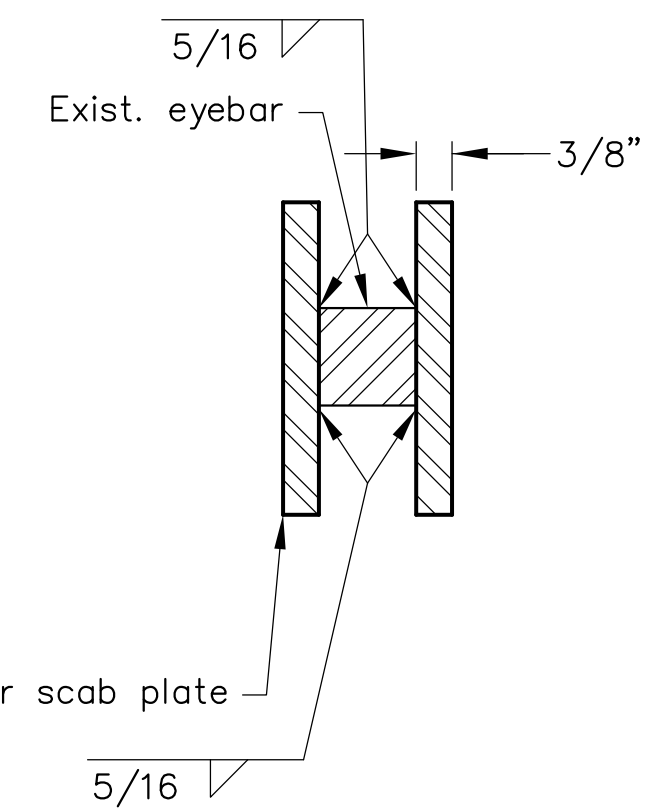
ABUTMENT A - PART ELEVATION



ABUTMENT B - PART ELEVATION



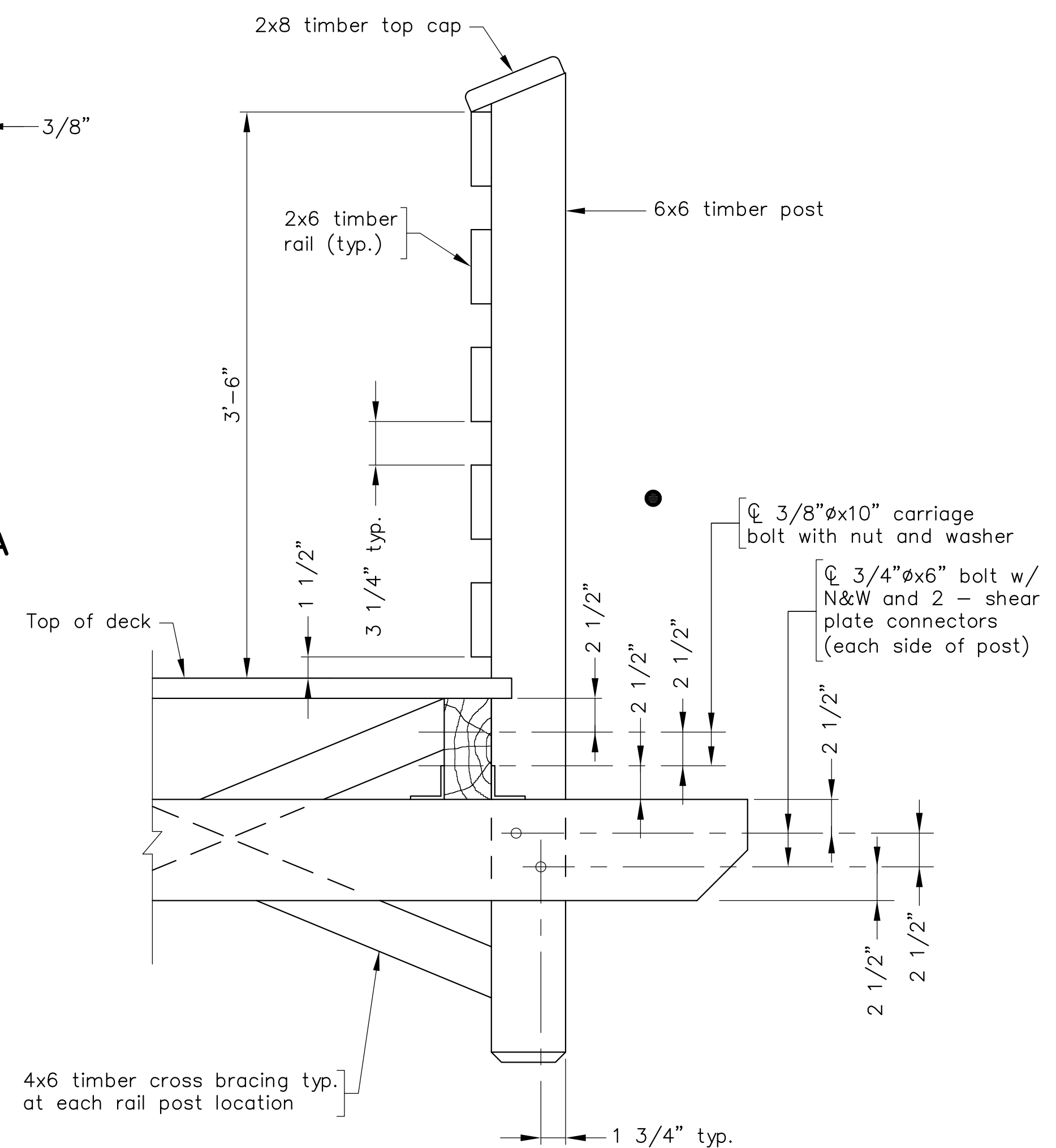
ELEVATION



SECTION A-A

Both vertical faces of existing eyebar shall be ground smooth prior to welding scab plate.
 Do not weld across ends of plate. (seal ends with silicone sealer).
 Plates shall be centered on forged weld in existing eyebar.
 All costs for furnishing and installing the eyebar scab plate shall be included in lump sum bid item "Suspension Cable and Floorbeam Hanger System".
 Existing rubble masonry may have to be removed to allow proper fitment of eyebar scab plate. All costs associated with removing existing rubble masonry shall be included in lump sum bid "Suspension Cable and Floorbeam Hanger System".

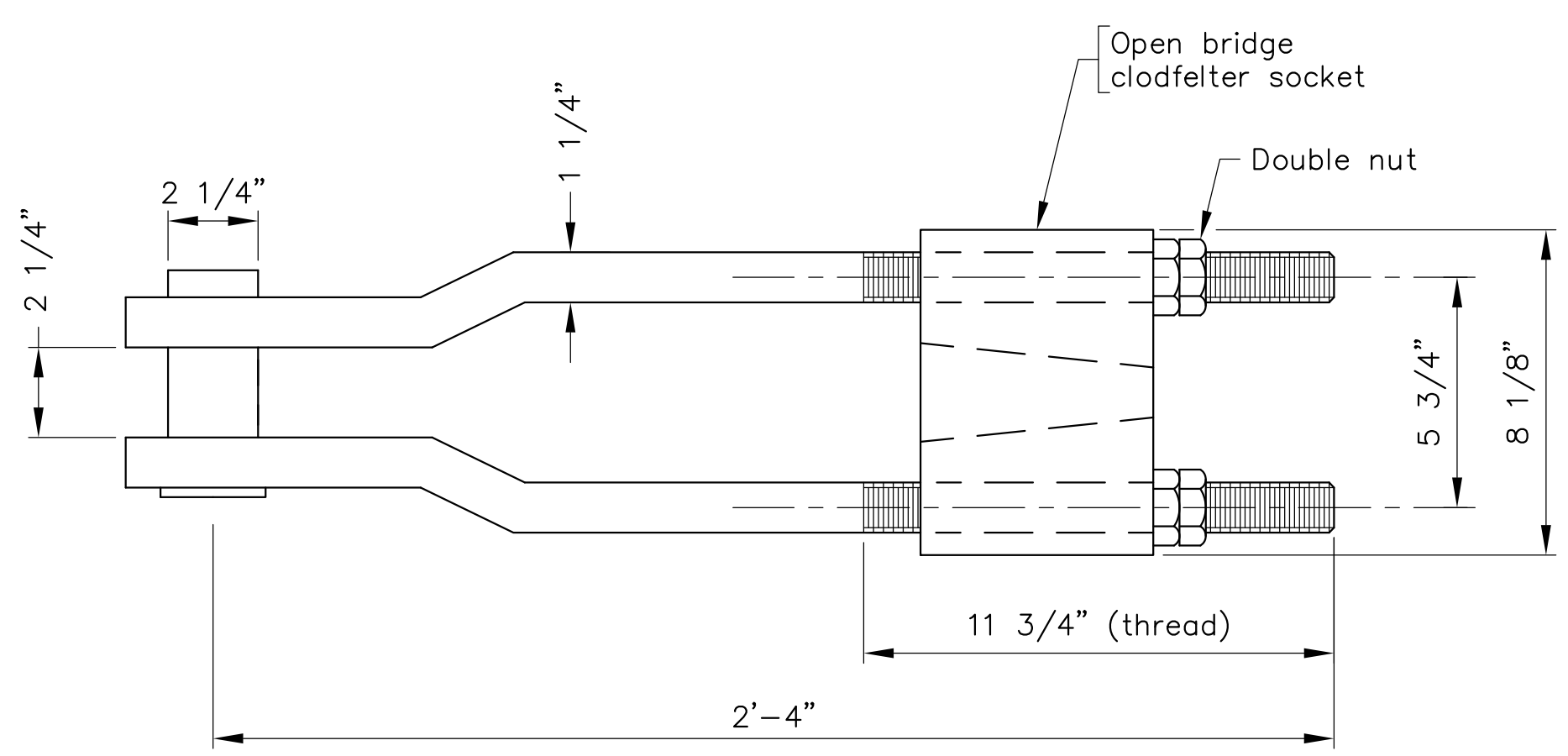
EYEBAR SCAB PLATE DETAIL
 (Typical at each eyebar at both abutments)
 Full Size



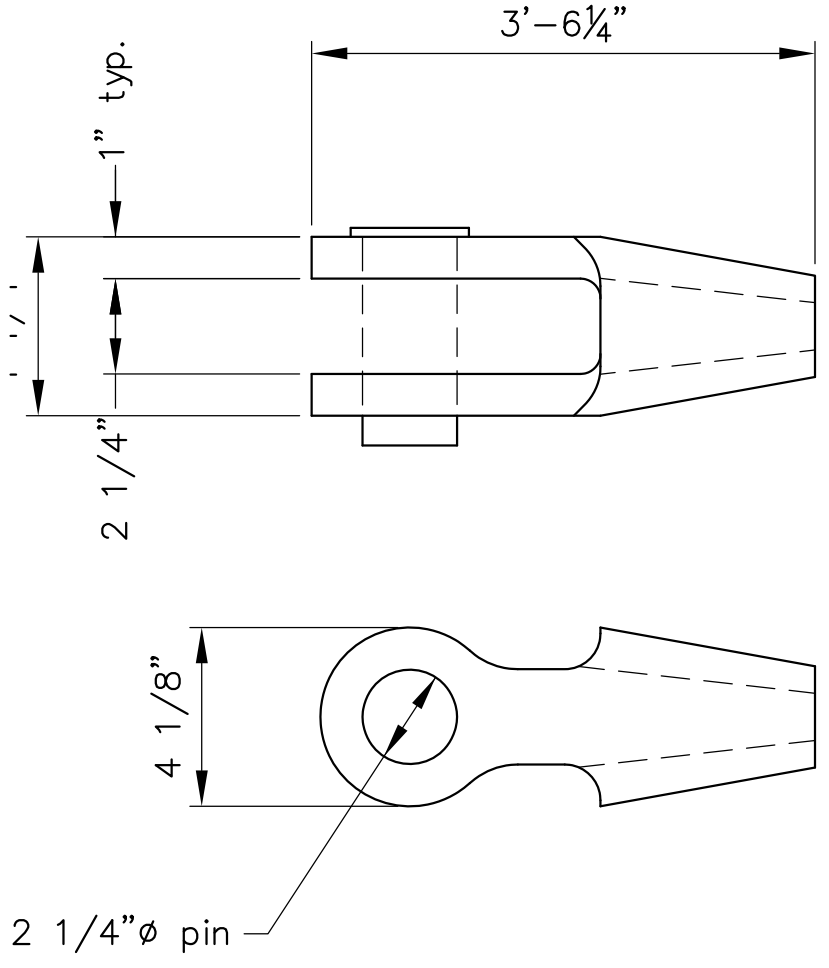
RAILING DETAILS
 Scale: 1 1/2" = 1'-0"

Timber cross bracing (4x6) shall be fastened with 5/16"x8" star drive washer head RSS structural screws as directed by the Engineer. Sufficient number of fasteners shall be used to securely attach cross bracing to rail posts and stringers.

Notes:
 Open bridge rope clodfelter sockets shall be CBSI Clodfelter 3400 series and ASSI 1038 steel, normalized & tempered.
 Open bridge clodfelter sockets shall be CBSI Clodfelter 2600 open series and ASTM A148 steel, grade 105/85.
 All sockets shall be magnetic particle inspected at critical areas.
 All metal components shall be galvanized as per ASTM 123.



DETAIL A
 Scale: 3" = 1'-0"

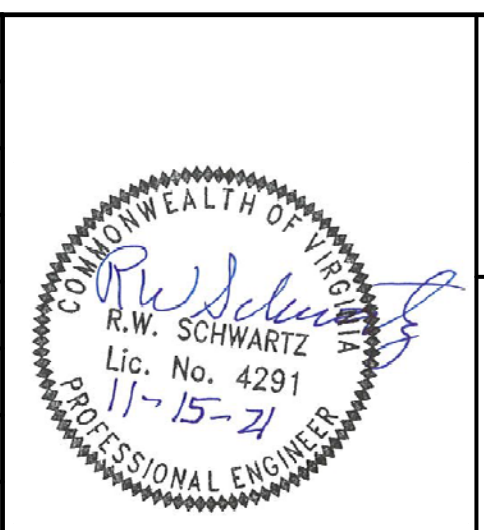


DETAIL B
 Scale: 3" = 1'-0"

WIRE ROPE CONNECTION TO ABUTMENT DETAILS

Scale: 1" = 1'-0" unless otherwise shown.

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		



SCHWARTZ & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 7331 TIMBERLAKE ROAD
 LYNCHBURG, VA.

**PEDESTRIAN BRIDGE OVER SYCAMORE CREEK
 PITTSYLVANIA COUNTY WAYSIDE PARK
 BRIDGE ROPE CONNECTION TO
 ABUTMENTS AND RAILING DETAILS**

DESIGNED BY: MBH | DRAWN BY: MBH | CHECKED BY: RWS
 SCALE: AS NOTED | PLAN NO.: N/A
 DATE: October 16, 2021 | SHEET: 8 OF 8

COMM. NO. 2020019

CADD REFERENCE NO.: BRIDGE2020019.DWG