

GENERAL NOTES

110'-140' ALUMINUM OVERHEAD SIGN SUPPORT

SPECIFICATIONS: All References to the Standard Specifications are to the Current Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. All References to the AASHTO Specifications are to the 2002 Edition of the AASHTO Standard Specifications for Highway Bridges.

DESIGN: Designed in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals published by AASHTO, 2000 with wind velocity to 80 MPH.

SUPERELEVATION OF ROADWAY: The Contractor shall allow for differences in elevations across the full shoulder width as shown on the Roadway Plans in maintaining the required 18 foot minimum vertical clearance to the bottom of the lowest part of the sign or support. Sign shall to be centered over the lane or lanes to which it applies unless shown otherwise.

CONCRETE: Class "A" Concrete is to be used throughout.

BEVELED EDGES: All exposed concrete edges are to be beveled $\frac{3}{4}$ " unless otherwise shown.

REINFORCEMENT: Dimensions from face of concrete to bars are clear except as otherwise shown. Dimensions for bar spacings are distances center to center of bars.

SHOP DRAWINGS: The contractor shall submit detailed Shop Drawings to the Division of Construction for review prior to fabrication in accordance with the specifications. The Roadway Cross Section developed by the contractor is to accompany the Shop Drawings. The Shop Drawings and Roadway Cross Section will also be forwarded to the engineer for review.

FABRICATION: The aluminum sign support shall be fabricated in accordance with AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

MILL TEST REPORTS: Notarized test reports in triplicate shall be furnished to the Department of Highways stating that the materials used conform to the specifications.

FOOTINGS: All footings shall be poured against undisturbed earth and are to transfer no more than 1 1/2 Tons Per Square Foot Bearing Pressure to the soil under any design loading conditions.

VERTICAL DIMENSIONS: Vertical Dimensions HR and HL shall not exceed 27 feet and the combined Dimensions (HR + FR) or (HL + FL) shall not exceed 36 feet.

MATERIAL SPECIFICATIONS: The following ASTM designations shall govern all materials used.

ASTM	MATERIAL
B221-08	Extruded Tube, Aluminum Alloy 6061-T6511
B241-02	Pipe, Aluminum 6061-T6
B308-02	Structural Shapes, Aluminum Alloy 6061-T6
B221-08	Extruded Bar, Rod and Shapes, Aluminum Alloy 6061-6511
B209-07	Sheet and Plate, Aluminum Alloy 6061-T651
A320-08	Stainless Steel Hardware, Nuts, Bolts, Washers and Screws
B766-86	Class 12, Cadmium Coating for ASTM A36 Anchor Bolts, Nuts and Washers
B26-05	Sand Mold Casting, Aluminum Alloy 356.0-T6
B108-08	Permanent Mold Casting, Aluminum Alloy 356.0-T6

ROADWAY CROSS SECTION: The Contractor shall take field measurements at each Sign location and develop a cross section showing the Sign Footing Heights and elevations, Sign Clearance above the Roadway and Column Heights. These cross sections shall be submitted to the Engineer for approval before ordering any Sign components. This cost is included in the unit price bid for "Roadway Cross Section". A copy of these cross sections shall also accompany the Shop Drawings.

MAXIMUM SIGN AREA: Designed for a sign area of 800 sq. ft.

FABRICATOR CERTIFICATION: The fabricator shall be AISC Certified for SBR (Certified Bridge Fabricator - Simple).

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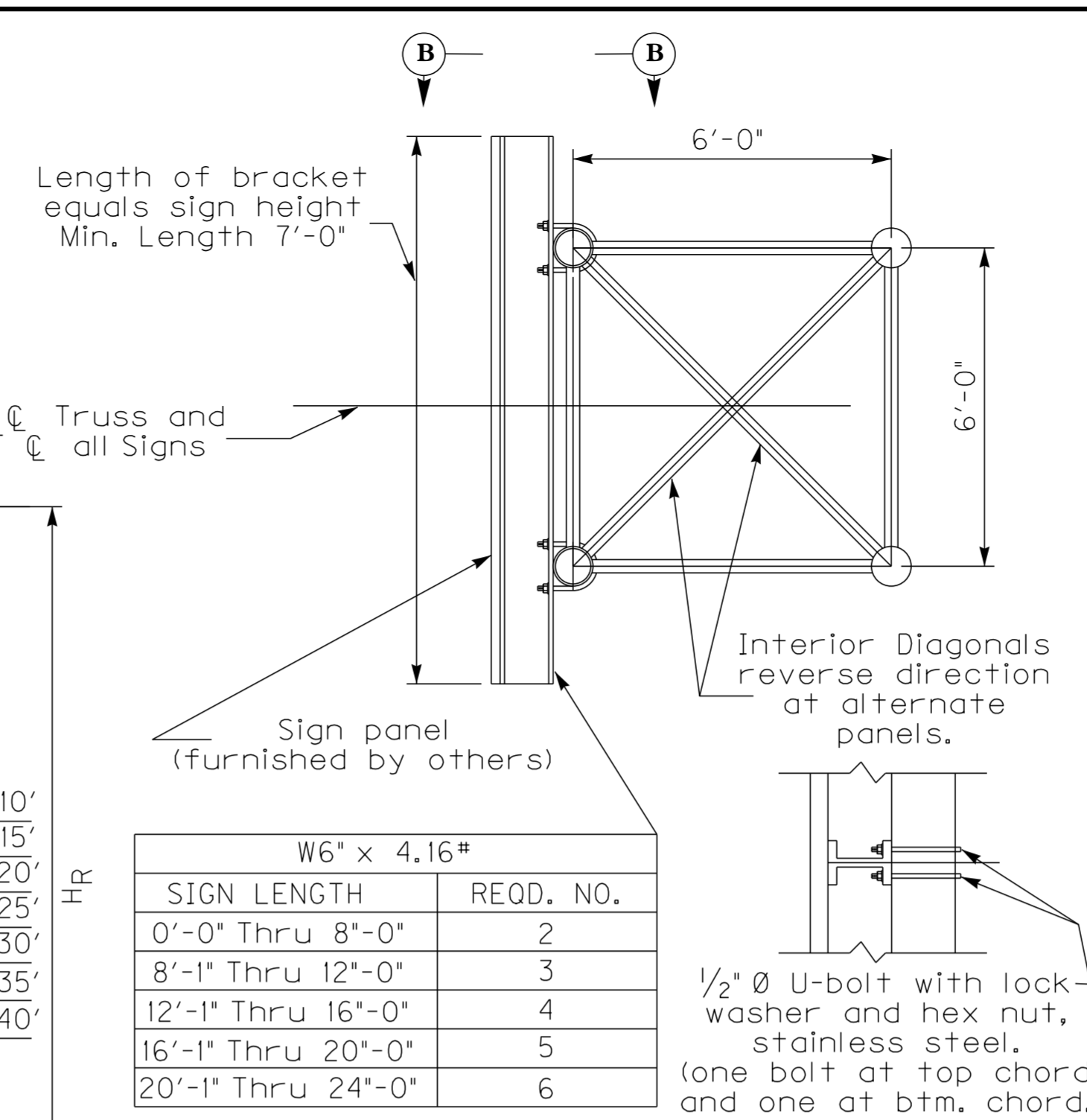
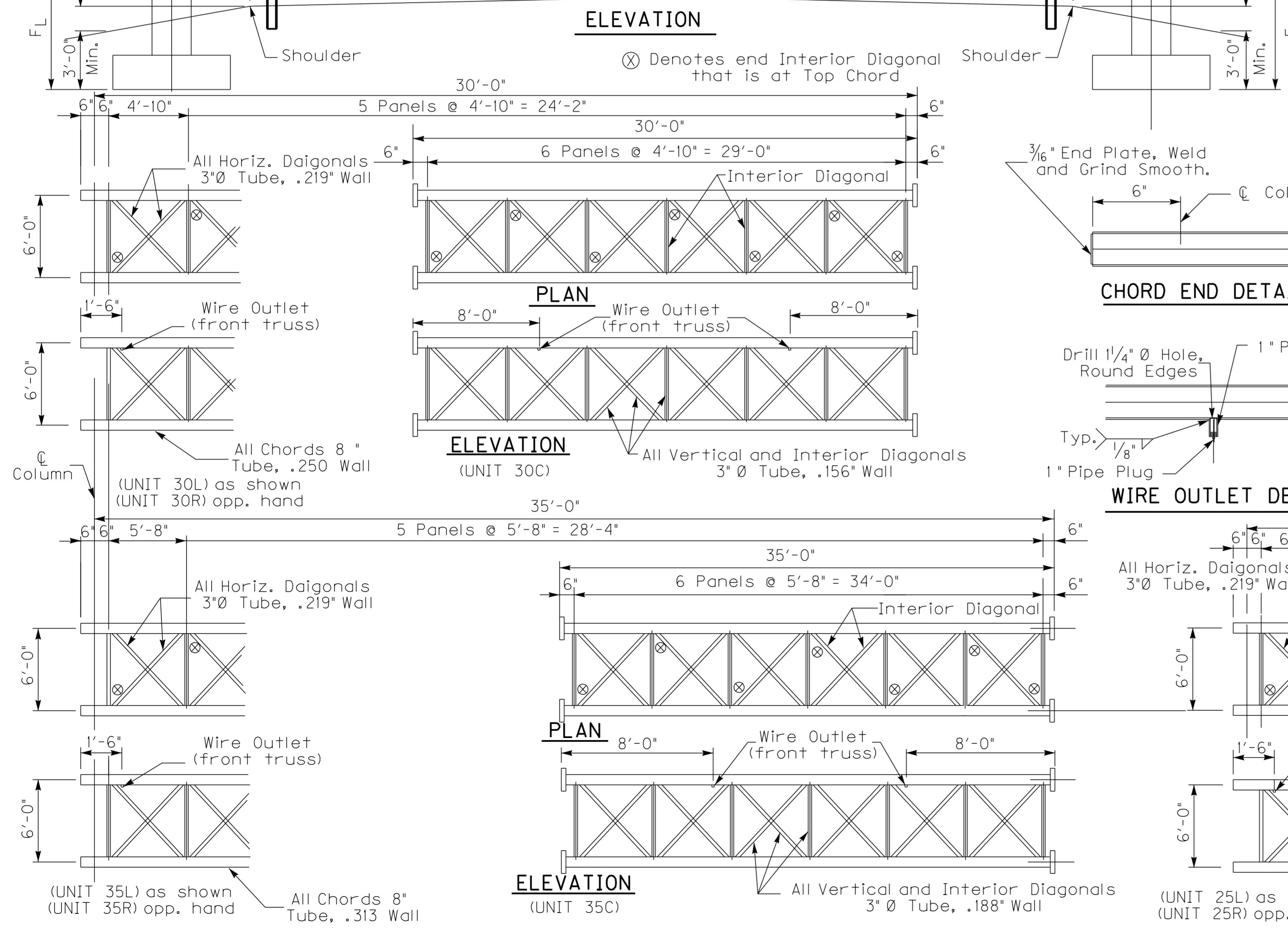
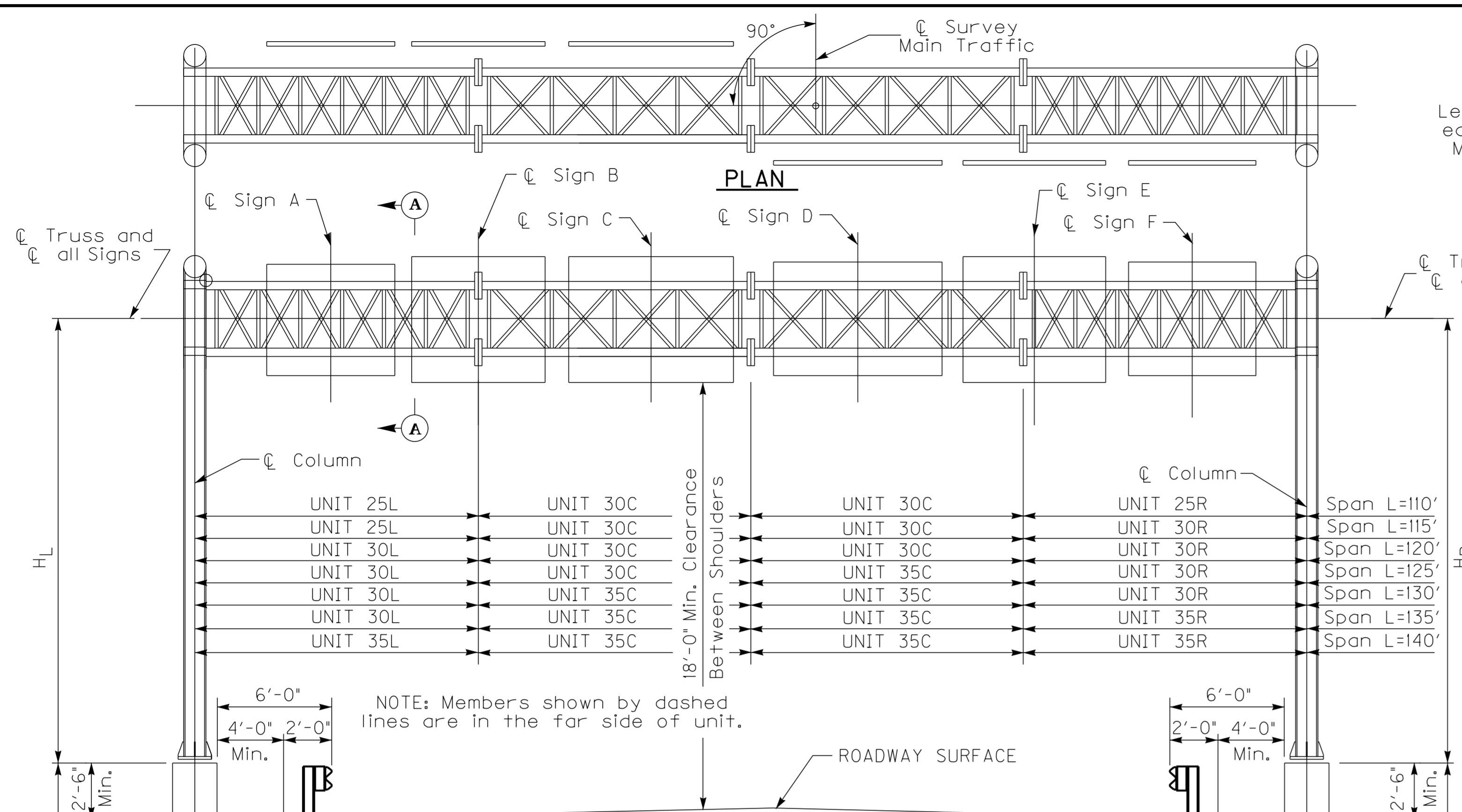
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DATE: 12-APR-2017

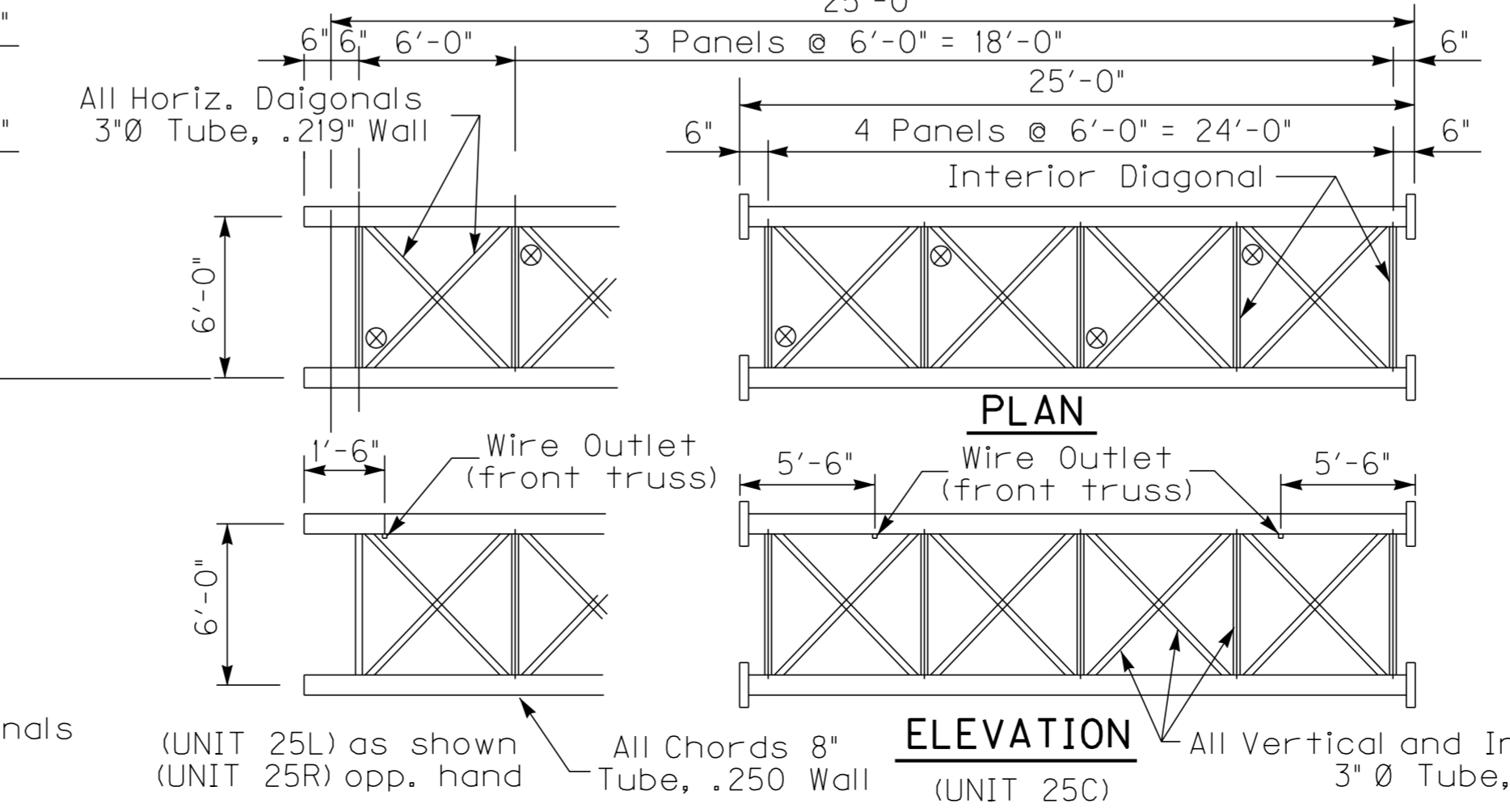
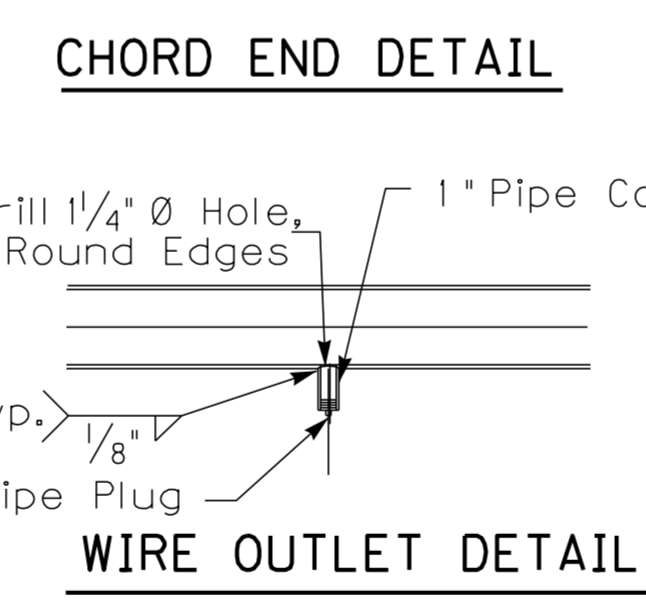
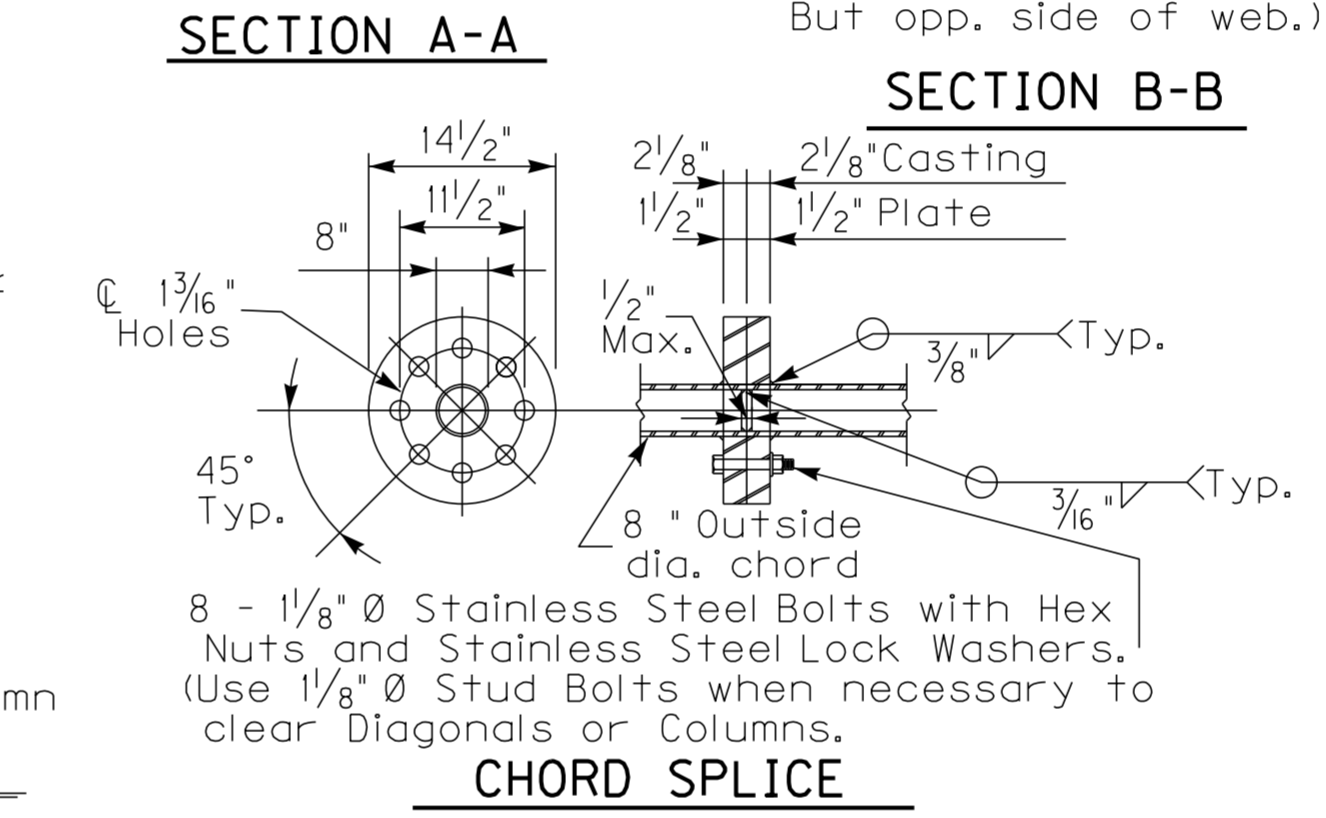
SHEET LOCATION:

DATE:	CHECKED BY:
DESIGNED BY: Standard Sheet ***	
DETAILED BY:	
Commonwealth of Kentucky	
DEPARTMENT OF HIGHWAYS	
COUNTY	
ROUTE	ITEM NUMBER
110'-140' OVERHEAD SIGN SUPPORT	
PREPARED BY	
Division of Structural Design	
DRAWING NO.	SHEET NO.

FILE NAME: U:\Bridges\Pro\Sign\2017\110-140truss.dgn
 USERNAME: eugene.kilgore
 DATE: 12-APR-2017
 SHEET LOCATION:



SIGN LENGTH	REQD. NO.
0'-0" Thru 8'-0"	2
8'-1" Thru 12'-0"	3
12'-1" Thru 16'-0"	4
16'-1" Thru 20'-0"	5
20'-1" Thru 24'-0"	6

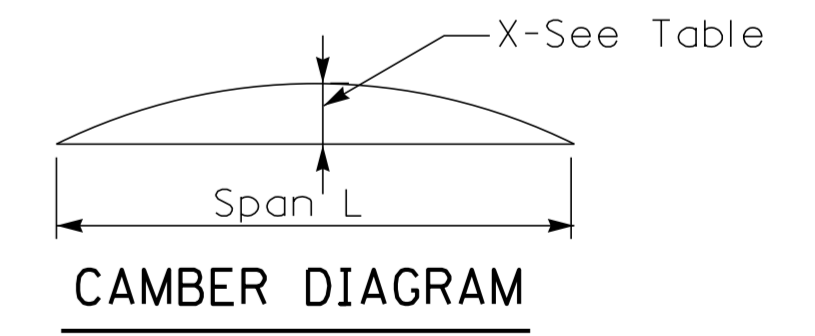


Support No.	STATION	SPAN		SUPPORT HEIGHT		FOOTING HEIGHT	
		L		H _L	H _R	F _L	F _R
Total Area**	SIGN A		SIGN B		SIGN C		
	I.D.	Horiz. Vert. Area*	I.D.	Horiz. Vert. Area	I.D.	Horiz. Vert. Area	
	SIGN D		SIGN E		SIGN F		
	I.D.	Horiz. Vert. Area	I.D.	Horiz. Vert. Area	I.D.	Horiz. Vert. Area	

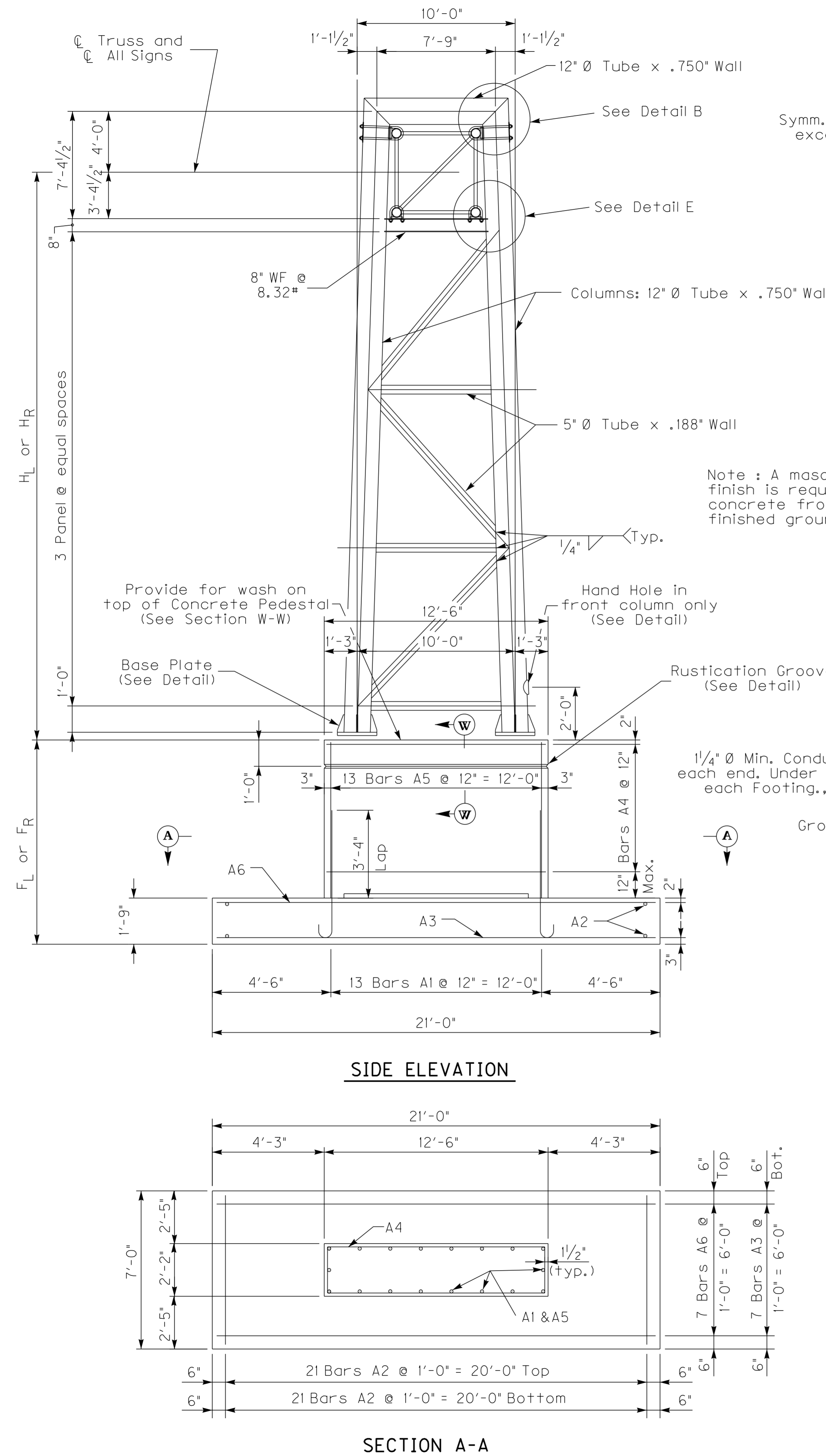
* Area includes Exit Number Signs that are not shown.
 ** Total Area includes the sum of all of the signs on the structure and shall not exceed 800 square feet.

A registered professional engineer licensed to practice in the Commonwealth of Kentucky shall fill out the chart above based on the design cross section at the locations where the truss is to be erected, the actual signs to be used on the truss, and the instructions herein. The engineer's name is to appear in the "Checked By" box (***) of the title block on each sheet. The engineer is responsible for verifying the information based on the contractor's submitted cross sections and for reviewing the fabricator's shop drawings in detail.

L	X
110	4"
115	4 1/4"
120	4 1/2"
125	4 3/4"
130	5"
135	5 1/4"
140	5 1/2"



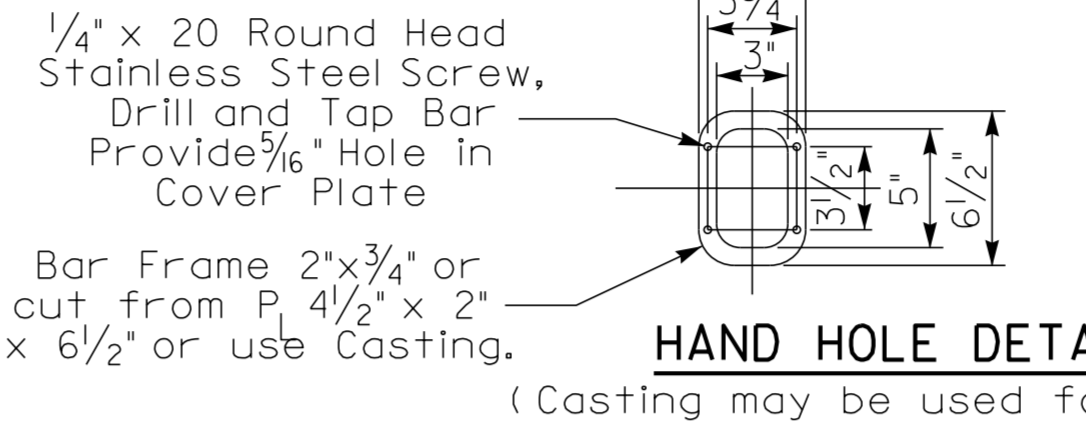
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DESIGNED BY: Standard Sheet ***	
DETAILED BY:	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY	
ROUTE	ITEM NUMBER
110-140' OVERHEAD SIGN SUPPORT	
PREPARED BY:	SHEET NO.
Division of Structural Design	
DRAWING NO.	



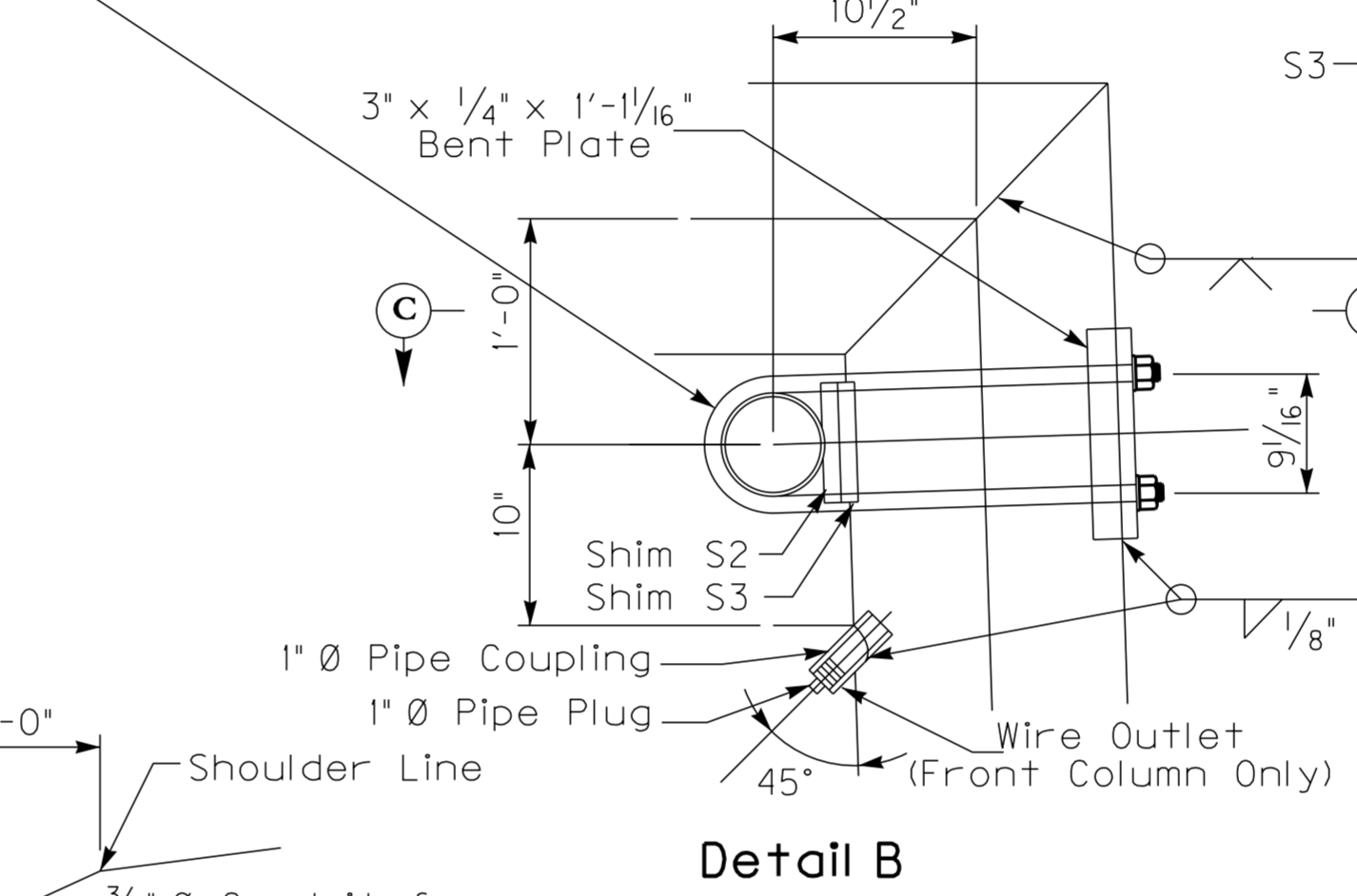
Symm. about this $\text{\textcircled{C}}$ except conduit.

Note: Weld 1/2" x 13 Hex Nut to inside of Column opposite hand hole for ground wire.

Cover Plate 4 1/2" x 3 1/8" x 6 1/2"

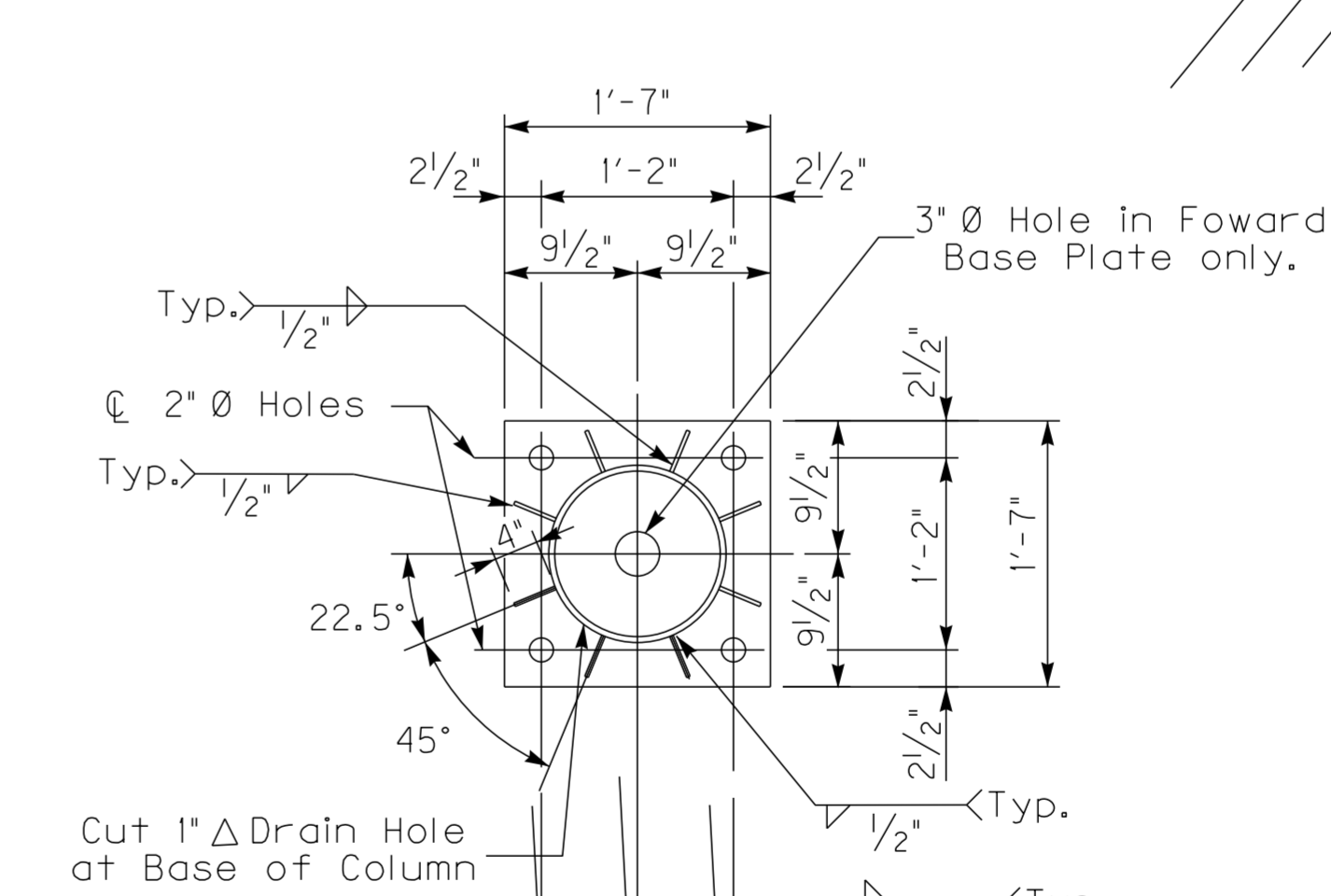


1" $\text{\textcircled{O}}$ U-Bolt with two Hex Nuts and two Lock Washers. Stainless Steel. 1/16" $\text{\textcircled{O}}$ Holes in Column and Plate.

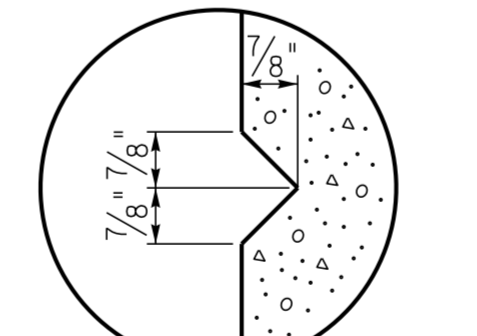


RUSTICATION GROOVE

Detail B



BASE PLATE DETAIL



SECTION C-C

SECTION D-D

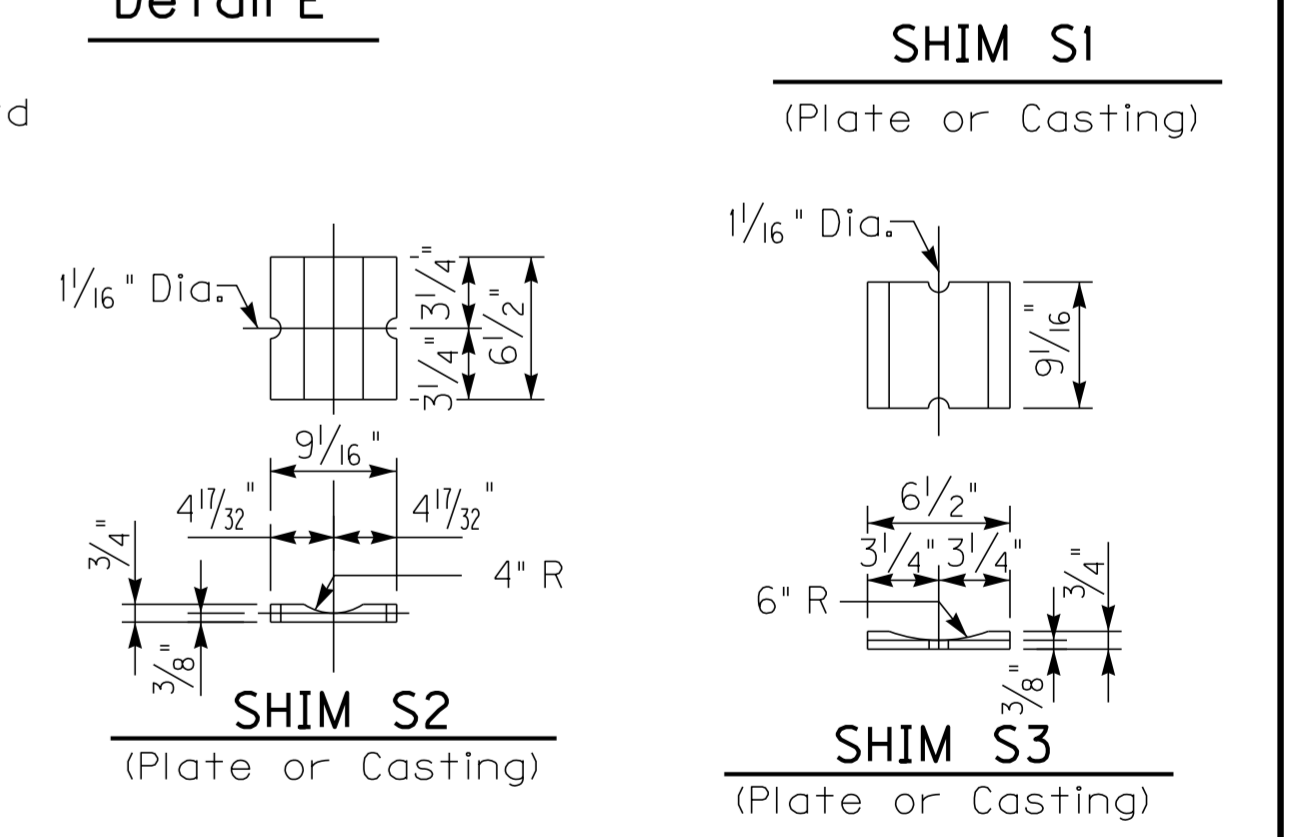
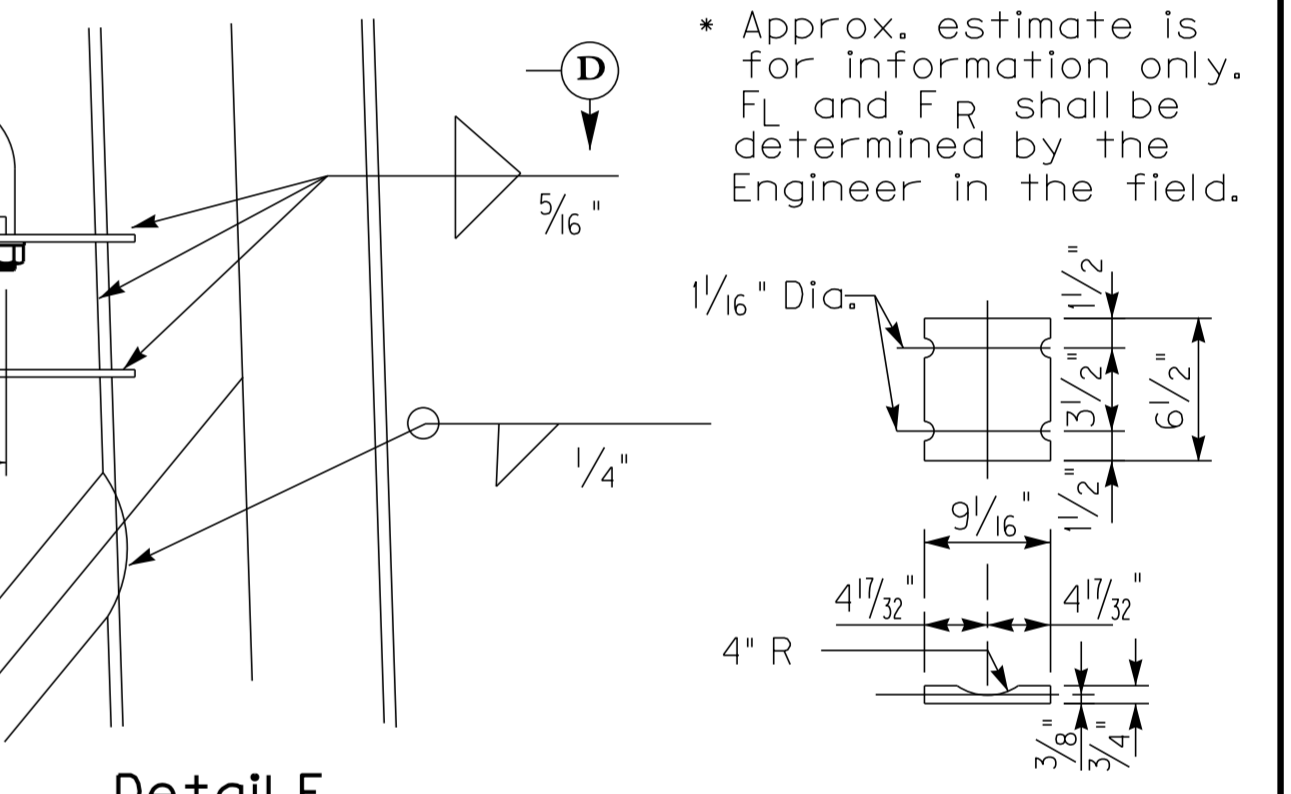
SECTION E-E

BILL OF REINFORCEMENT FOR FOOTING

MARK	TYPE	NO.	SIZE	LENGTH		LOCATION
				FT.	IN.	
A1		42	#6	5	7	Footing & Wall
A2	Str	42	#5	6	8	Footing & Wall
A3	Str	7	#9	20	8	Footing & Wall
A4	14	Var	#4	29	1	Wall
A5	Str	28	#5	F - 1'-11"		Wall
A6	Str	7	#5	20	8	Footing

ESTIMATE OF QUANTITIES FOR FOOTING

	Conc. Class "A"	Reinforcement
F=6'-0"	13.8 Cu.Yds.	1386 lbs.
1' of additional Pedestal height	1.0 Cu.Yds.	49 lbs.



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