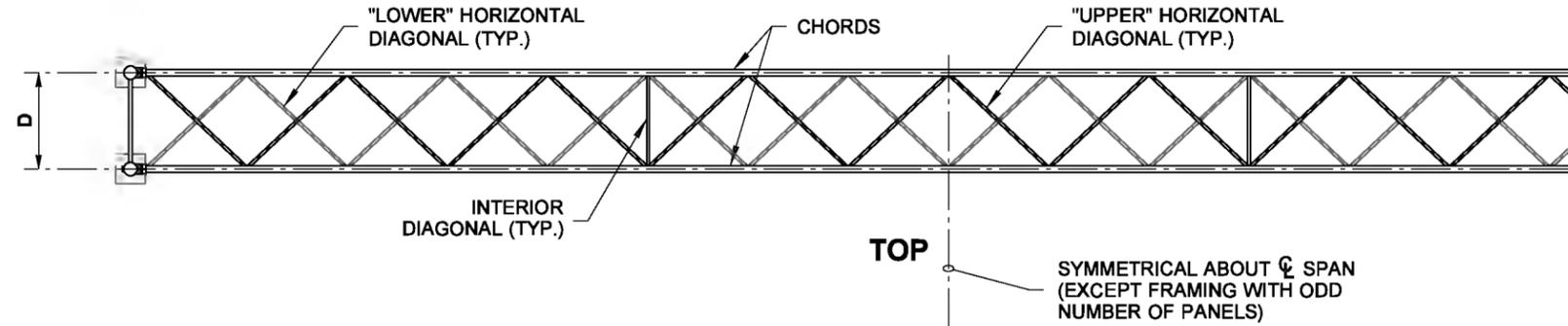


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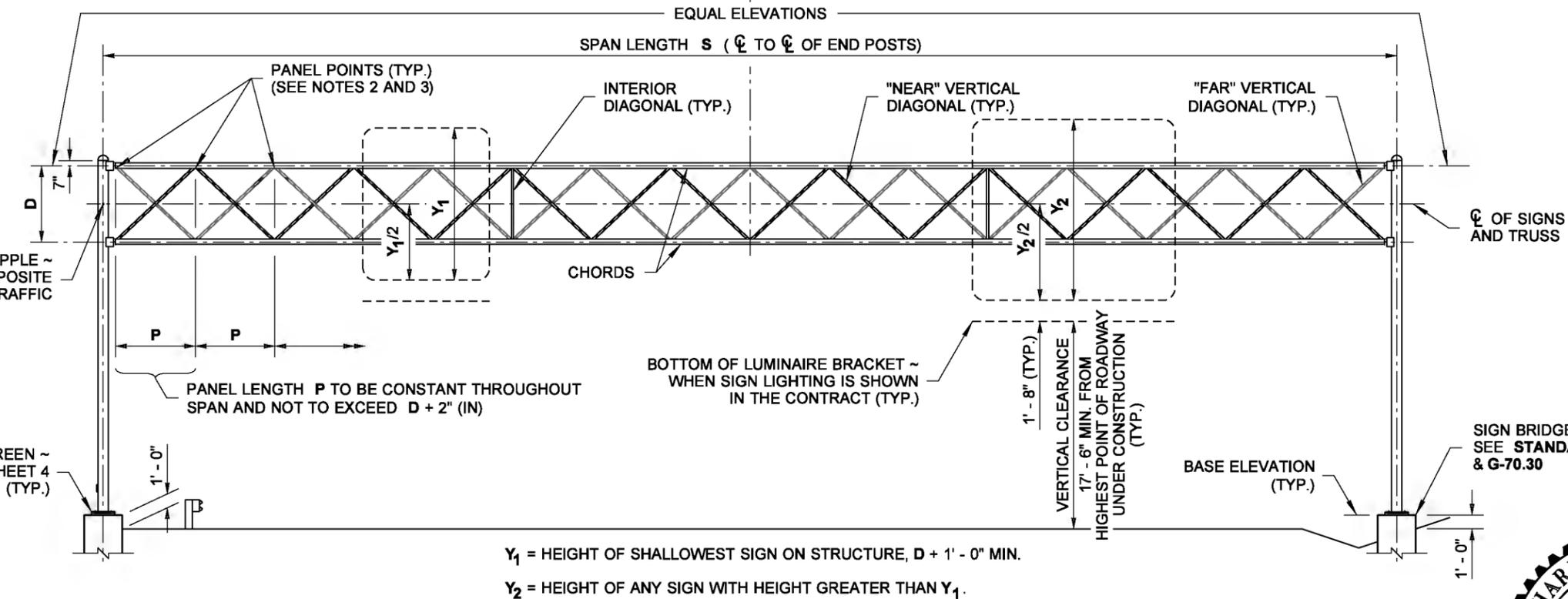
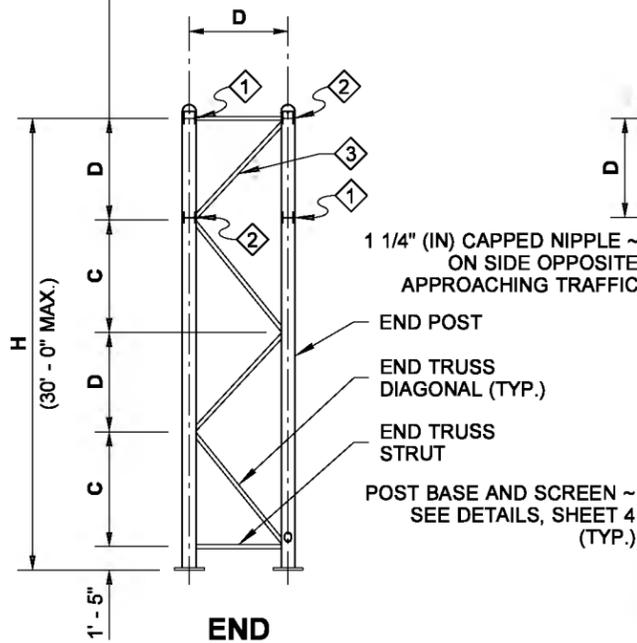
- ① SEE CHORD TO END POST CONNECTION TYPE Q
- ② SEE CHORD TO END POST CONNECTION TYPE R
- ③ TOP END TRUSS DIAGONAL JOINS END POSTS AT CHORDS WHERE VERTICAL AND HORIZONTAL DIAGONALS CONNECT



NOTES

1. Horizontal and vertical clearance requirements shall be as shown in Contract Plans.
2. Horizontal diagonals must join chords where vertical diagonals connect (panel points).
3. Interior diagonals shall be placed at panel points, 40' (ft) maximum spacing. Locate symmetrically about centerline of span if possible. An interior diagonal is not required at span ends.
4. No post splices permitted in lower third of height, nor closer than 3' - 0" to bottom of chord. No chord shop splices permitted in middle third of span. Maximum of one splice in each end post.
5. For electrical requirements See **Standard Plan J-75.45**.

NUMBER OF PANELS VARIES. ALTERNATE DIAGONALS TO BE PARALLEL. DIMENSION C NOT TO EXCEED 1.25 TIMES D



Y_1 = HEIGHT OF SHALLOWEST SIGN ON STRUCTURE, $D + 1' - 0''$ MIN.
 Y_2 = HEIGHT OF ANY SIGN WITH HEIGHT GREATER THAN Y_1 .

ELEVATION

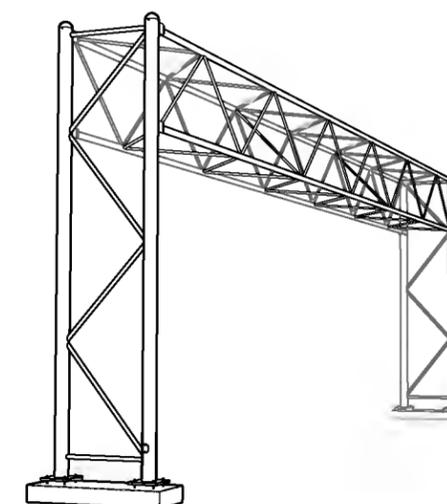
MATERIAL SPECIFICATIONS

PIPE (CHORDS, DIAGONALS, STRUTS AND POSTS)	ASTM A 36 OR ASTM A 53 GRADE B, TYPE E OR S, OR A 500 GRADE B
PLATES	ASTM A 36
SHAPES	ASTM A 36 ASTM A 992
BOLTS, NUTS, & WASHERS	STD. SPEC. 9-06.5(3)
PIPE, PLATE & SHAPE GALVANIZING	AASHTO M 111
FASTENER GALVANIZING	AASHTO M 232

STRUCTURE DIMENSIONS

SPAN LENGTH S	DIMENSION D	TOP AND BOTTOM CHORDS	DIAGONALS	END TRUSS POSTS	END TRUSS STRUTS AND DIAGONALS	TOTAL SIGN AREA (MAX.) (SQ. FT.)
60' OR LESS	4' - 0"	3" x .216"	1 1/4" x .140"	10" x .279"	2 1/2" x .203"	384
61' to 90'	5' - 0"	4" x .237"	2" x .154"	10" x .279"	2 1/2" x .203"	624
91' to 120'	6' - 0"	5" x .258"	2" x .154"	10" x .307"	3" x .216"	864
121' to 150'	7' - 0"	6" x .280"	2 1/2" x .203"	10" x .365"	3 1/2" x .226"	1104

ALL MEMBERS ARE PIPE. VALUES SHOWN ARE NOMINAL PIPE SIZE AND WALL THICKNESS.



PERSPECTIVE



SIGN BRIDGE (TRUSS-TYPE)

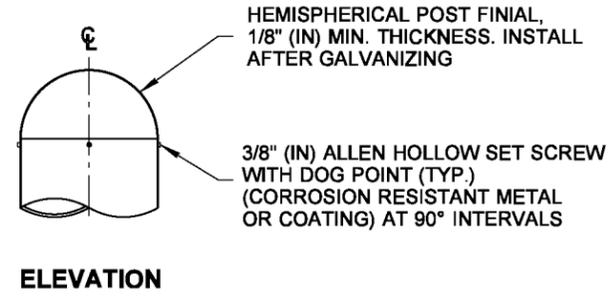
STANDARD PLAN G-70.10-03

SHEET 1 OF 4 SHEETS

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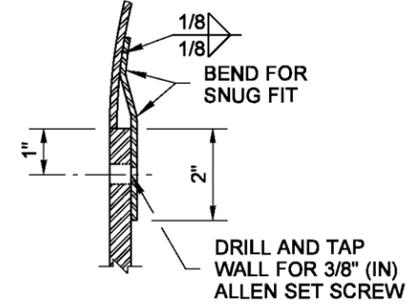
STATE DESIGN ENGINEER
 Washington State Department of Transportation

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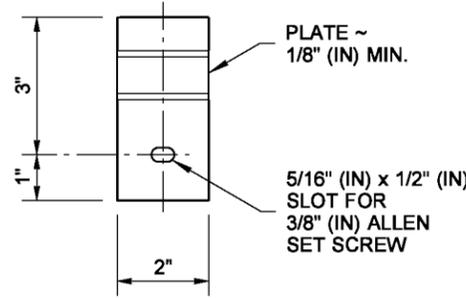


ELEVATION

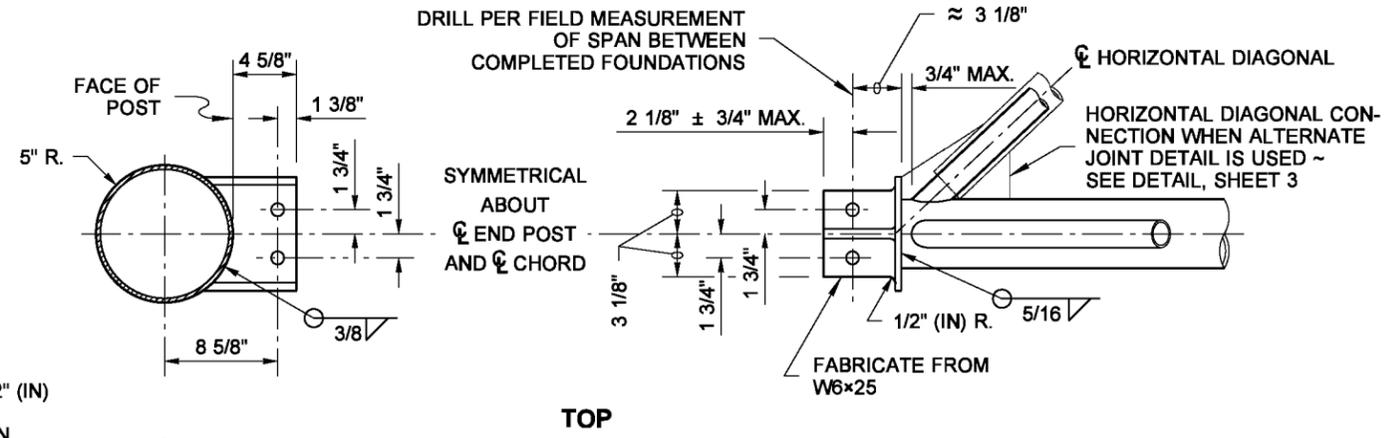
FINIAL DETAIL



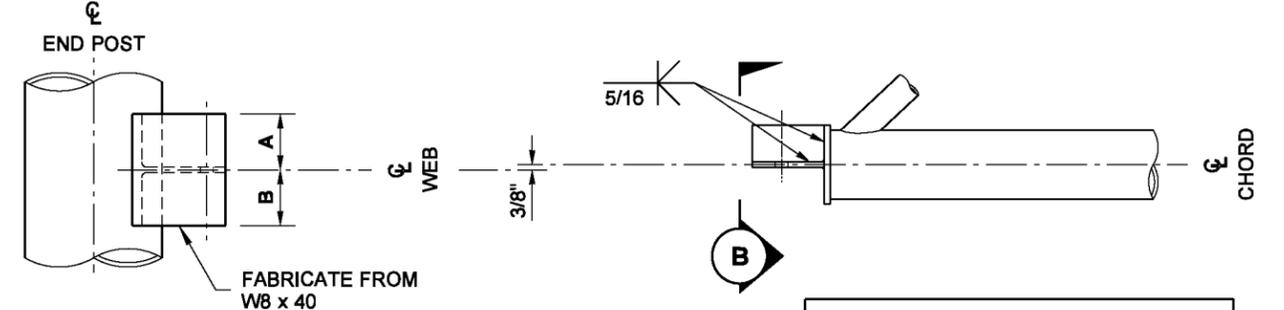
SECTION THROUGH FINIAL AND POST



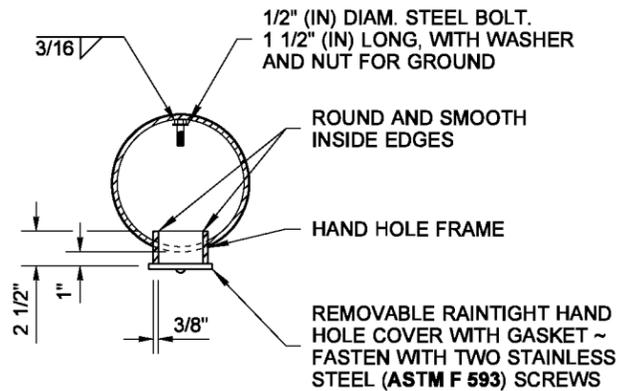
FINIAL BRACKET



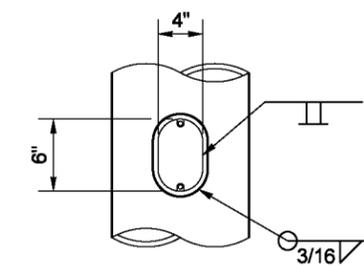
TOP



ELEVATION



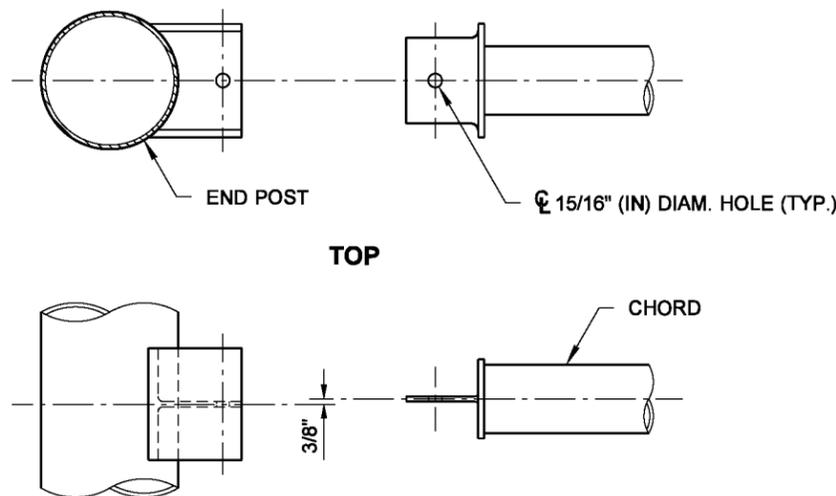
TOP



ELEVATION

(COVER NOT SHOWN FOR CLARITY)

HAND HOLE DETAIL



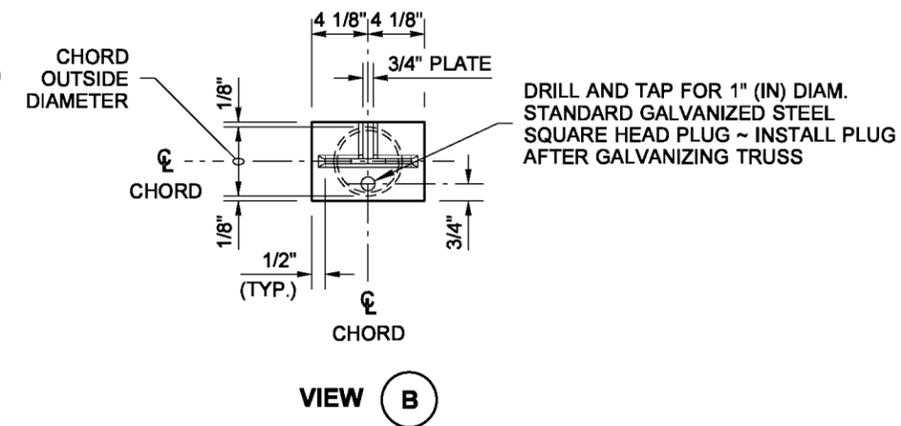
TOP

ELEVATION

CHORD TO END POST CONNECTION TYPE Q

USED WHERE NO DIAGONALS CONNECT

DETAILS NOT SHOWN ARE SAME AS CHORD TO END POST CONNECTION TYPE R, OMITTING THE 3/4\"/>



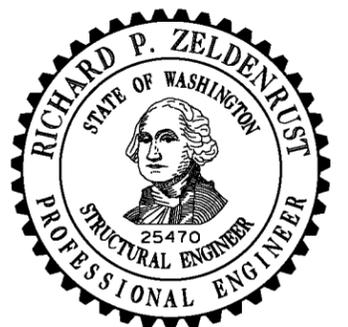
VIEW B

CHORD TO END POST CONNECTION TYPE R

USED WHERE DIAGONALS CONNECT

CONNECTION DATA			
SPAN LENGTH	A	B	BOLT DIAMETER
60' OR LESS	2 3/8"	1 5/8"	7/8" \diamond
61' TO 90'	2 7/8"	2 1/8"	
91' TO 120'	3 3/8"	2 5/8"	
121' TO 150'	4 1/16"	3 1/4"	

\diamond INSTALL BOLTS WITH HEAD UPWARD. EXCLUDE BOLT THREADING FROM GRIP.



SIGN BRIDGE (TRUSS-TYPE)

STANDARD PLAN G-70.10-03

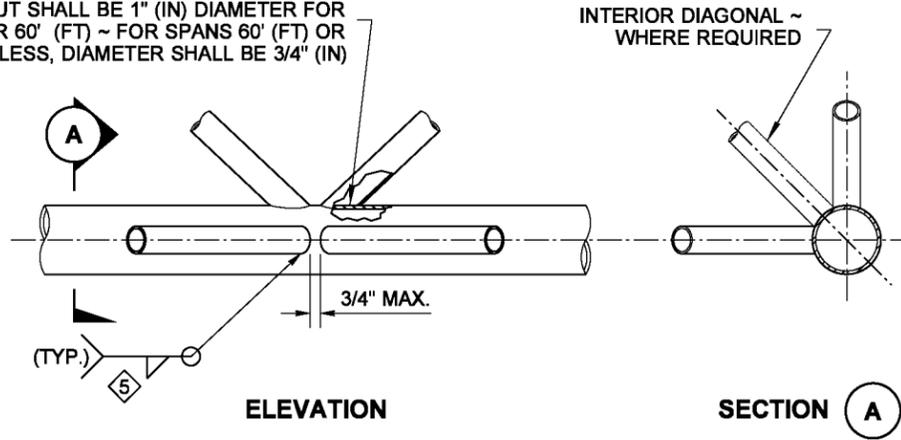
SHEET 2 OF 4 SHEETS

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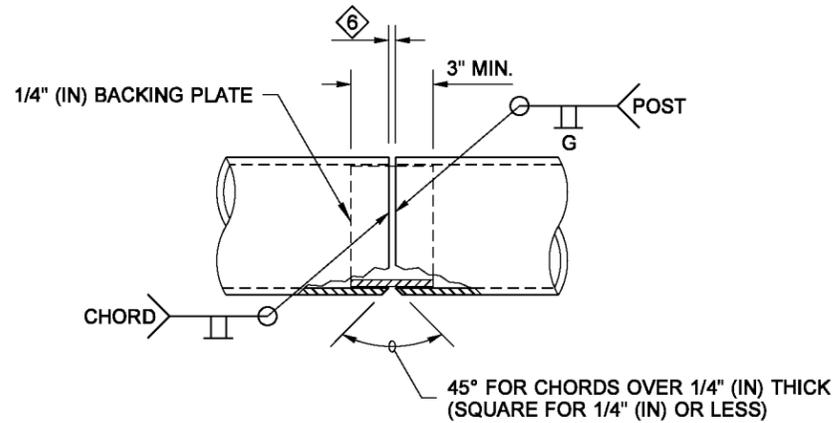
DRILLED HOLE IN CHORD AT EACH DIAGONAL AND STRUT SHALL BE 1" (IN) DIAMETER FOR SPANS OVER 60' (FT) ~ FOR SPANS 60' (FT) OR LESS, DIAMETER SHALL BE 3/4" (IN)



5 ENDS OF DIAGONALS SHALL BE CUT TO FIT NEATLY AGAINST CHORD OR POST. FILLET WELD SIZE TO BE DIAGONAL TUBE OR PIPE THICKNESS PLUS 1/16" (IN).

TYPICAL JOINT DETAIL

CHORD SHOWN ~ END POST SIMILAR

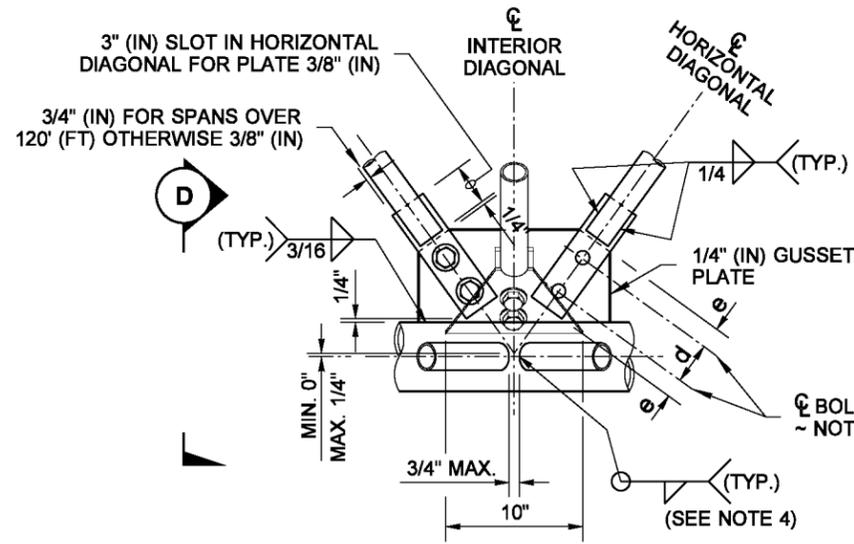


6 DIMENSION SHALL EQUAL CHORD THICKNESS OR 1/4" (IN), WHICHEVER IS LESS.

END POST OR CHORD SHOP SPLICE

NO POST SPLICES PERMITTED IN LOWER THIRD OF HEIGHT, NOR CLOSER THAN 3' - 0" TO BOTTOM OF CHORD. NO CHORD SHOP SPLICES PERMITTED IN MIDDLE THIRD OF SPAN. MAXIMUM OF ONE SPLICE IN EACH END POST.

INTERIOR DIAGONAL ~ WHERE REQUIRED

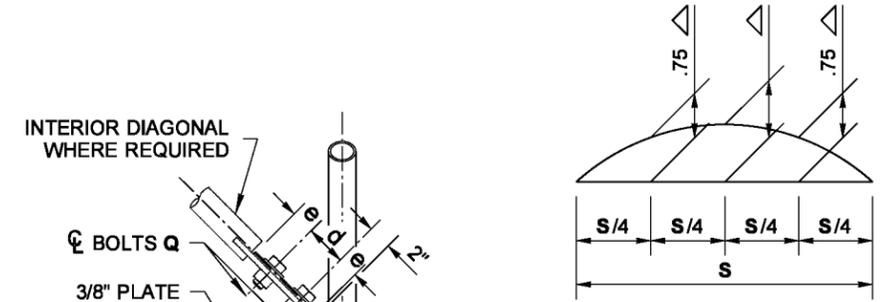


TOP

ALTERNATE JOINT DETAIL

NOT FOR CONNECTIONS BETWEEN VERTICAL DIAGONALS AND CHORDS

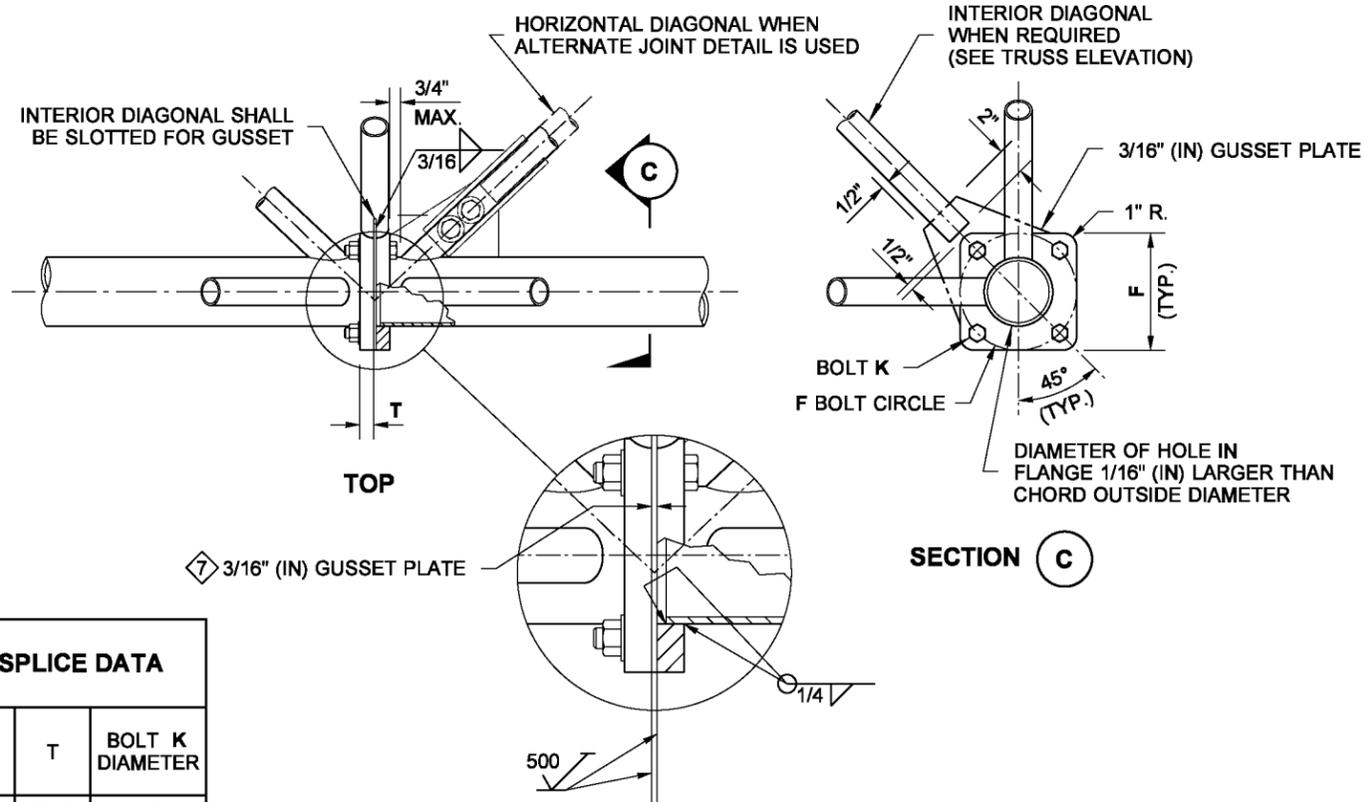
ALTERNATE JOINT DATA			
SPAN LENGTH	d	e	BOLT Q DIAMETER
60' OR LESS	2 1/2"	1 1/4"	3/4"
61' TO 90'	3"	1 1/2"	7/8"
91' TO 120'	3"	1 1/2"	7/8"
121' TO 150'	3 1/2"	1 3/4"	1"



SPAN LENGTH S (FT.)	Δ (IN.)
40	1/2
50	3/4
60	7/8
61	7/8
70	1
80	1 1/4
90	1 1/2
91	1 3/8
100	1 5/8
110	2
120	2 3/8
121	2 1/8
130	2 1/2
140	2 7/8
150	3 3/8

FOR SPAN LENGTHS NOT LISTED, INTERPOLATE VALUES OF Δ.
FABRICATE TRUSS WITH CHORDS CURVED TO PROVIDE CAMBER. DO NOT CAMBER BY USING SHIMS BETWEEN CHORDS AT SPLICES.

DEAD LOAD CAMBER



TOP

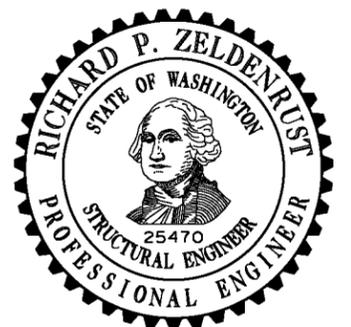
SECTION C

CHORD FIELD SPLICE DATA			
SPAN LENGTH	F	T	BOLT K DIAMETER
60' OR LESS	6"	3/4"	1/2"
61' TO 90'	7"	7/8"	5/8"
91' TO 120'	8 1/2"	1"	3/4"
121' TO 150'	9 1/2"	1 1/4"	7/8"

CHORD FIELD SPLICE

(NO CHORD FIELD SPLICE PERMITTED IN MIDDLE THIRD OF SPAN LENGTH)

7 3/16" (IN) SHIMS ARE REQUIRED AT THE REMAINING TWO CHORD JOINTS WHEN INTERIOR DIAGONAL IS INSTALLED.



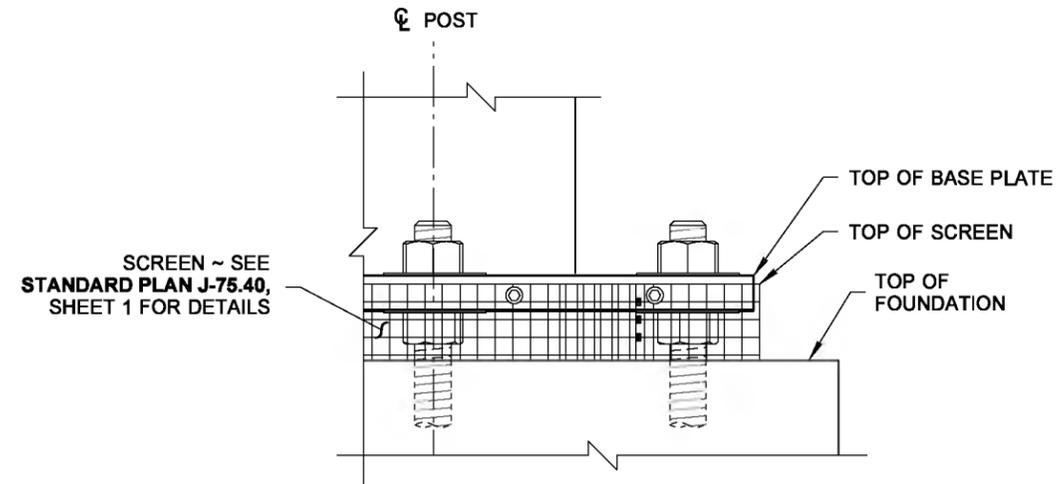
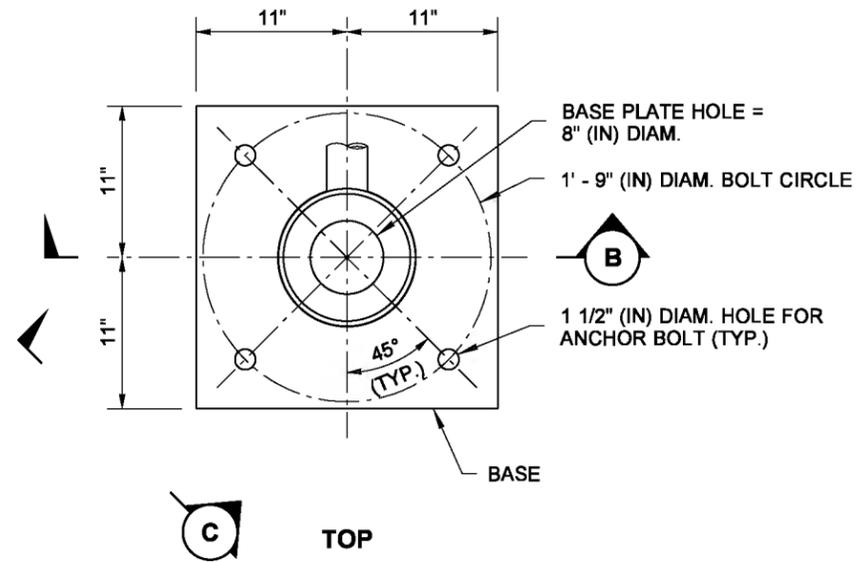
SIGN BRIDGE (TRUSS-TYPE)

STANDARD PLAN G-70.10-03

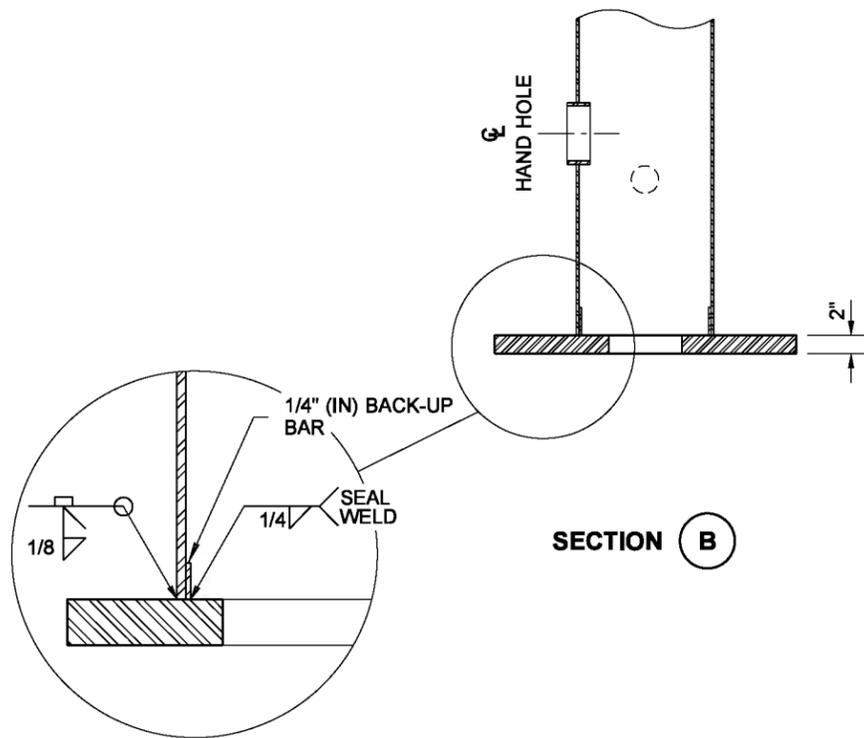
SHEET 3 OF 4 SHEETS

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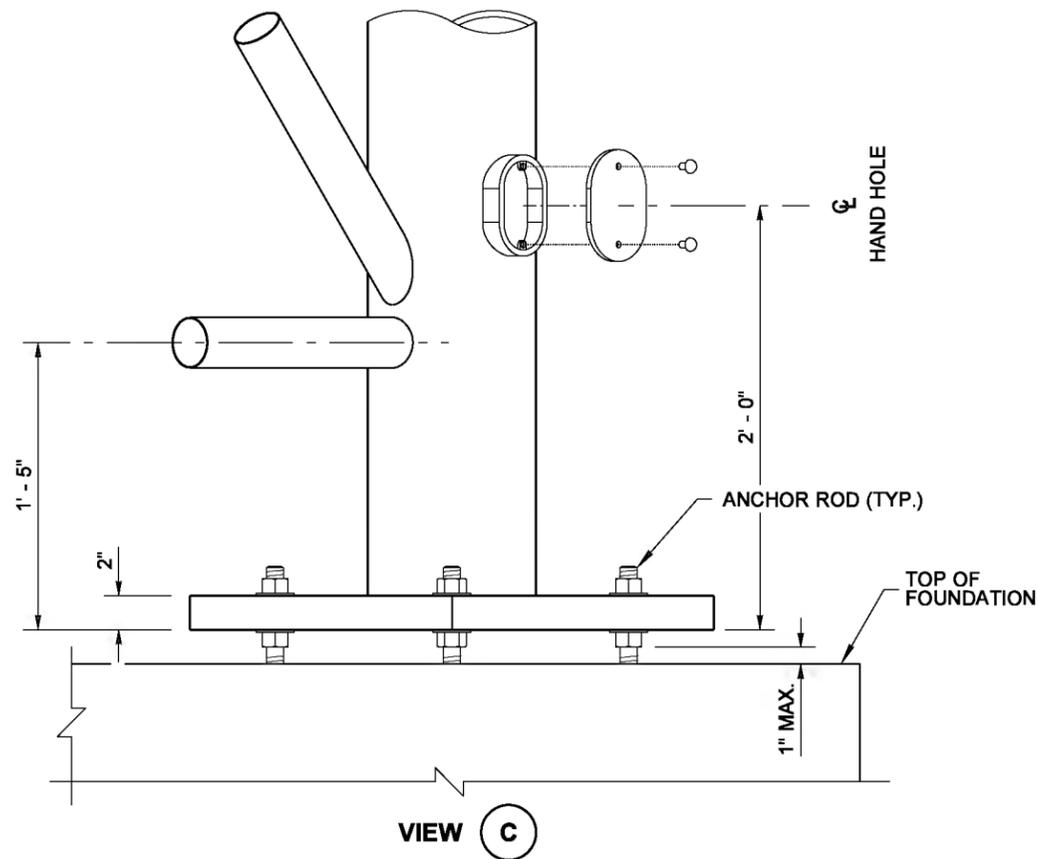
STATE DESIGN ENGINEER
Washington State Department of Transportation



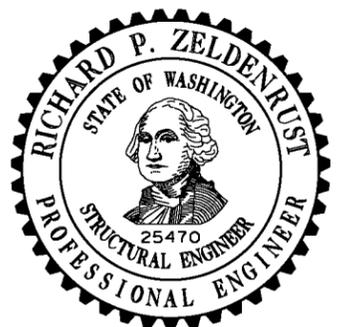
SCREEN DETAIL
CONDUIT OMITTED FOR CLARITY ~ FOR ELECTRICAL REQUIREMENTS SEE STANDARD PLAN J-75.45



BASE WELD DETAIL



POST BASE DETAILS
CONDUIT OMITTED FOR CLARITY ~ FOR ELECTRICAL REQUIREMENTS SEE STANDARD PLAN J-75.45



**SIGN BRIDGE
(TRUSS-TYPE)**
STANDARD PLAN G-70.10-03

SHEET 4 OF 4 SHEETS

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