

GENERAL NOTES:

Designed in accordance with AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals", 5th Edition and Interem Specifications.
 Provide Class C concrete (f'c = 3600 psi).
 Provide Grade 60 reinforcing steel.
 Chamfer all exposed edges 3/4" unless noted otherwise.
 Unless otherwise noted, all concrete surfaces must be smooth and finished with the following paints or approved equivalent:

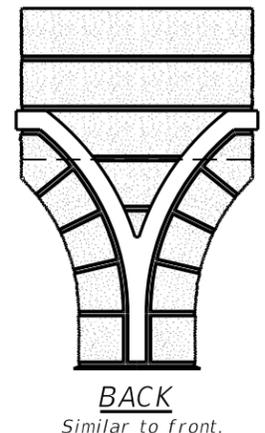
BASE COLOR: SHERMAN WILLIAMS 6142 "MACADAMIA"

OSB must be paid under Item 650 "OVERHEAD SIGN SUPPORTS" or as shown in the plans.
 All connection bolts must conform to Item 447 "Structural Bolting".
 All structural steel components must be galvanized in accordance with Item 455, "Galvanizing".
 Details called for hereon are applicable for Design Wind Heights up to 35' structure.
 Design wind speed 100 mph.

- ① Height "Z" is the total height of the column from the top of the drilled shaft. See quantities note on sheet 4 of 5.
- ② See Roadway plans for the height of the truss above the finished grade.
- ③ Electrical system conduit: Use 6" minimum radius sweeps for bends. No 90 degree elbows are permitted. Install pull tape in empty conduit. Pull tape must have 1250 lbs. minimum tensile strength, and foot length markings. Conduit must extend 6" beyond the concrete as shown, and must be threaded and capped. This conduit may be cut to exact dimension shown on the TMS or other electrical system detail sheet when installed.
- ④ Type DS fill must conform to Item 423, "Retaining Walls", Table 2.

Contractor is responsible for verifying all dimensions and quantities in the field before beginning work.

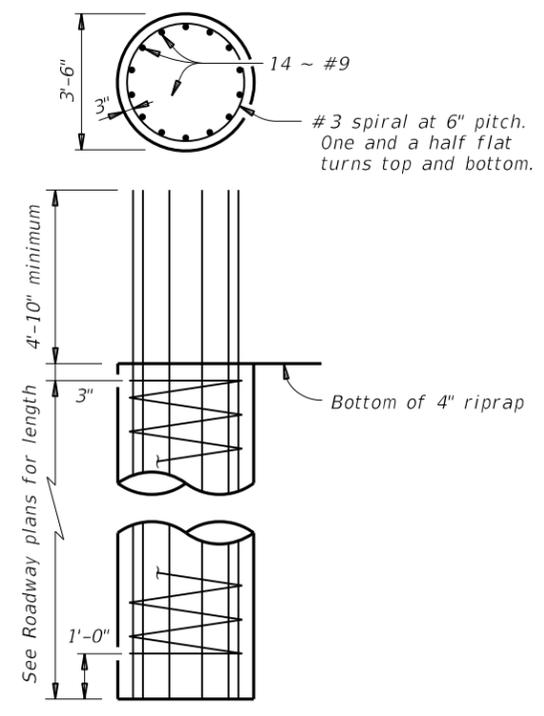
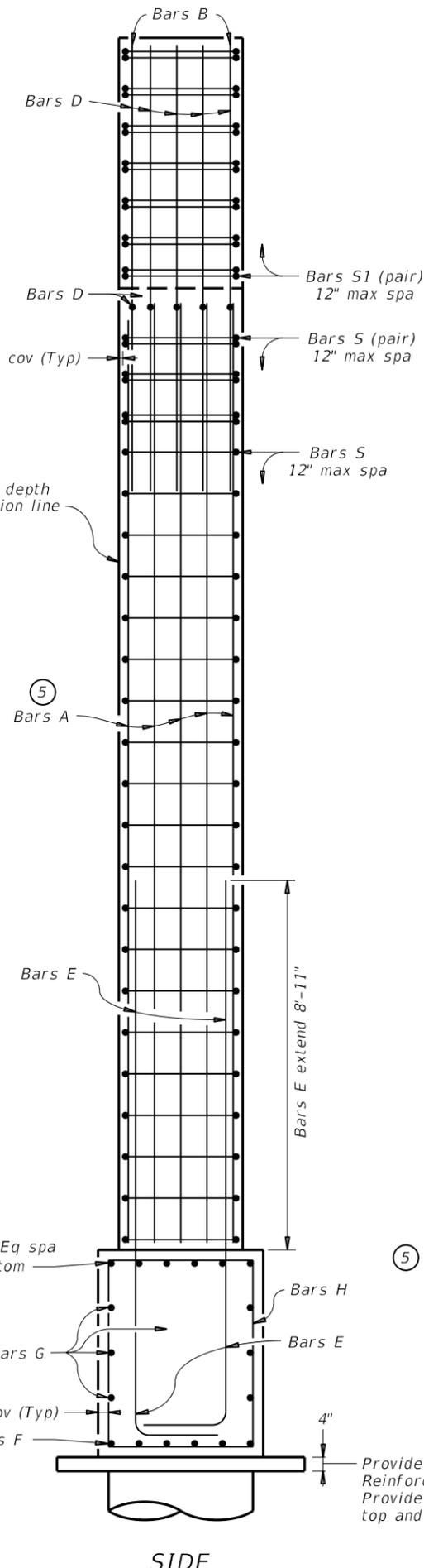
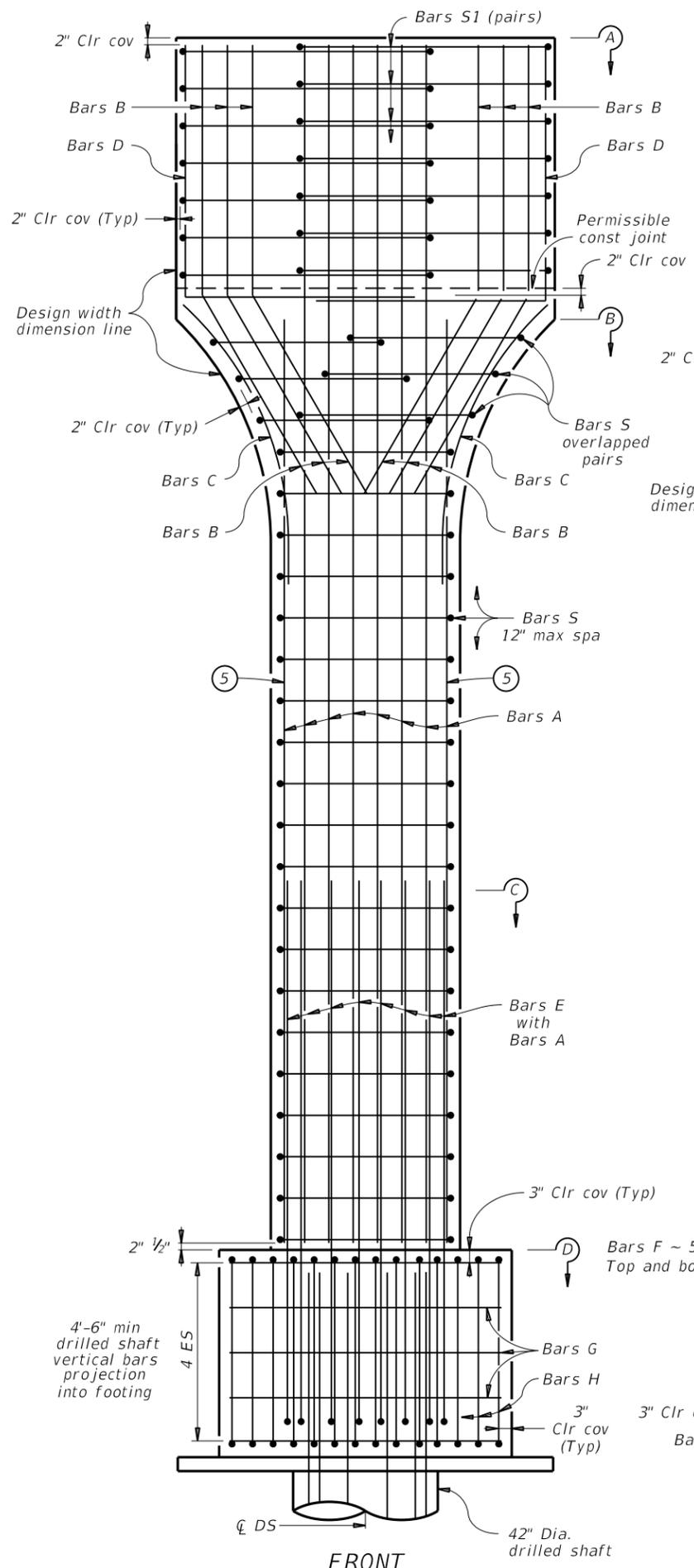
Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bar.



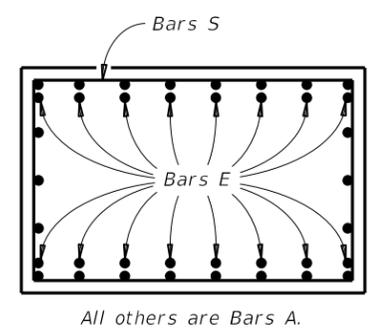
Texas Department of Transportation
 San Antonio District (Structural Design)
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**HILL COUNTRY THEME
 CANTILEVERED OVERHEAD
 SIGN SUPPORT (COSS)**
 SPANS UP TO 40 FEET

DN: BCL	CK:	FILENAME: Hill Country Theme COSS Standard.dgn		
DW: SRF	CK:	ORIGINAL DRAWING DATE: March 2020		
DIST	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	COUNTY	
SAT	6		COUNTY	
CONTROL	SECTION	JOB	SHEET NO.	ROUTE
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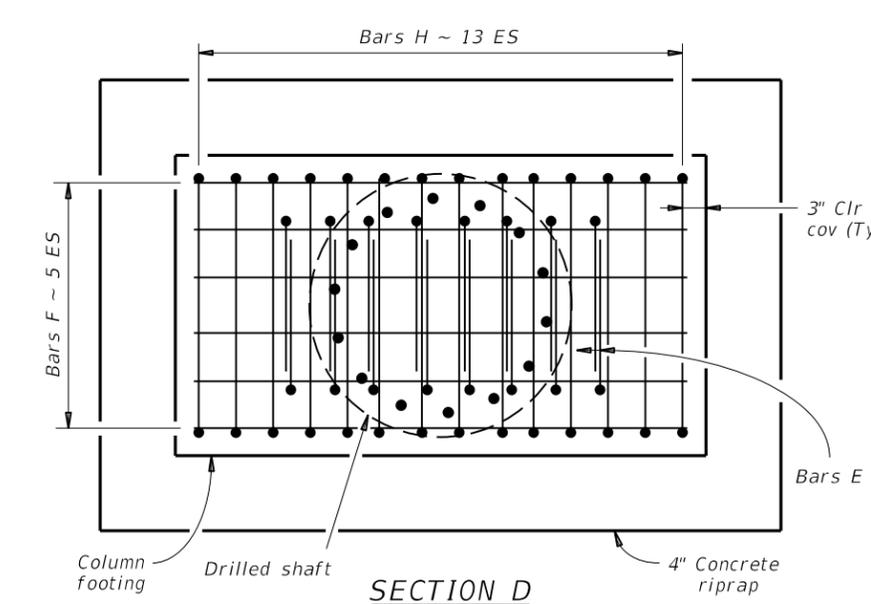
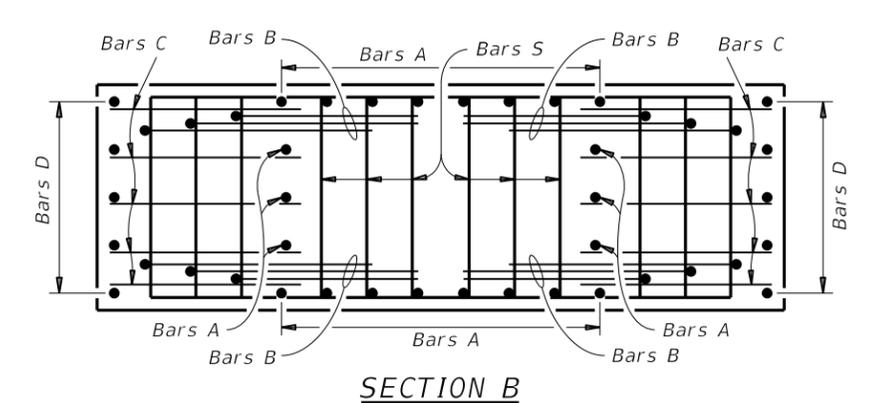
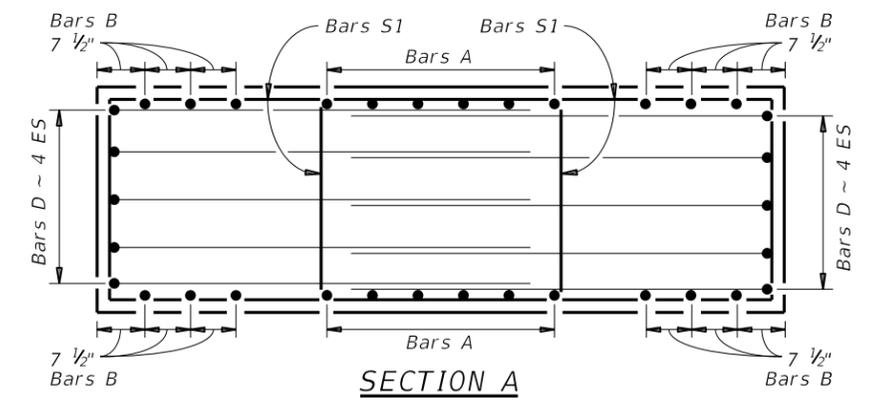
REVISIONS:



DRILLED SHAFT DETAIL



SECTION C



5 This bar may be stopped at Section B to make room for the chord stubs.

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Provide #3 reinforcing bars at 18" Spa c-c. or Welded Wire Reinforcement (WWR) as 6x6-D2.9xD2.9 or D3xD3. Provide 3" clear cover at edges and minimum 1" clear cover top and bottom.

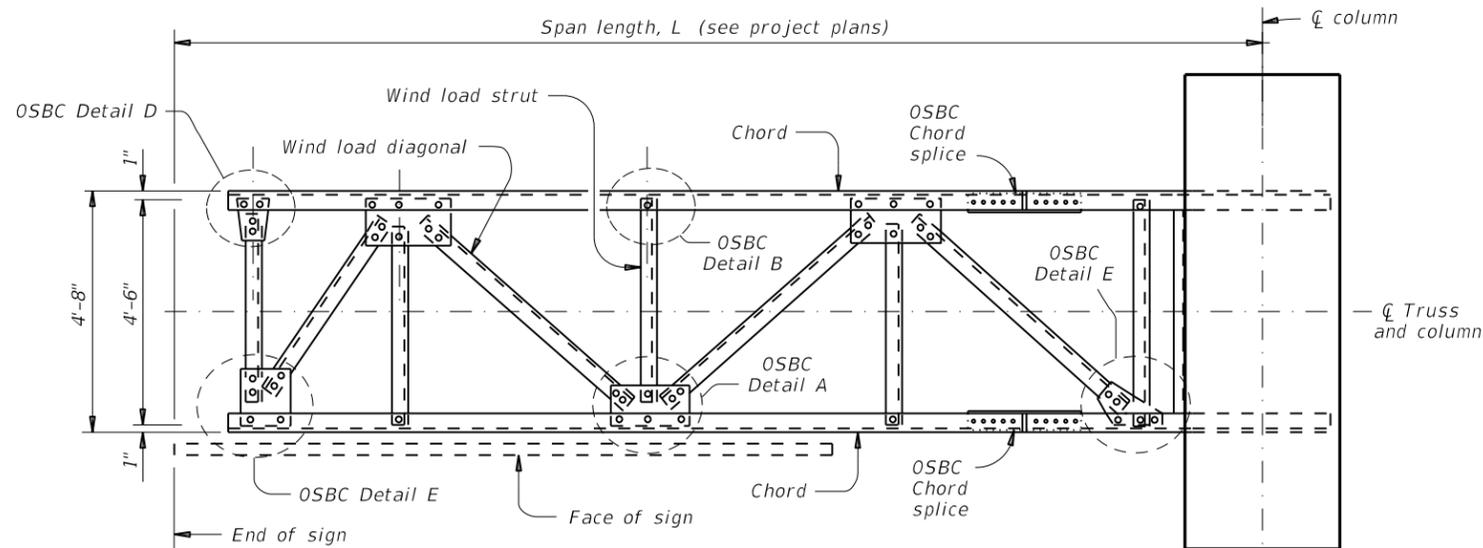


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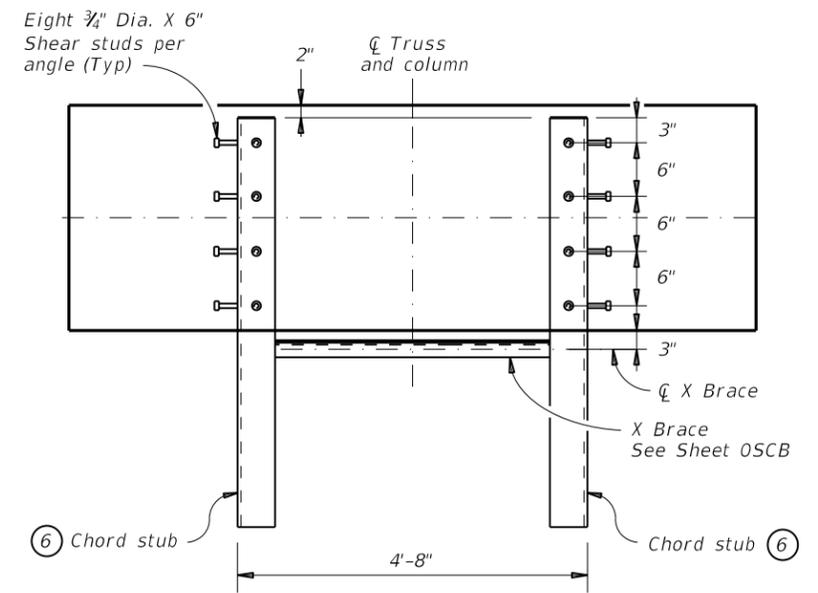
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REVISIONS:



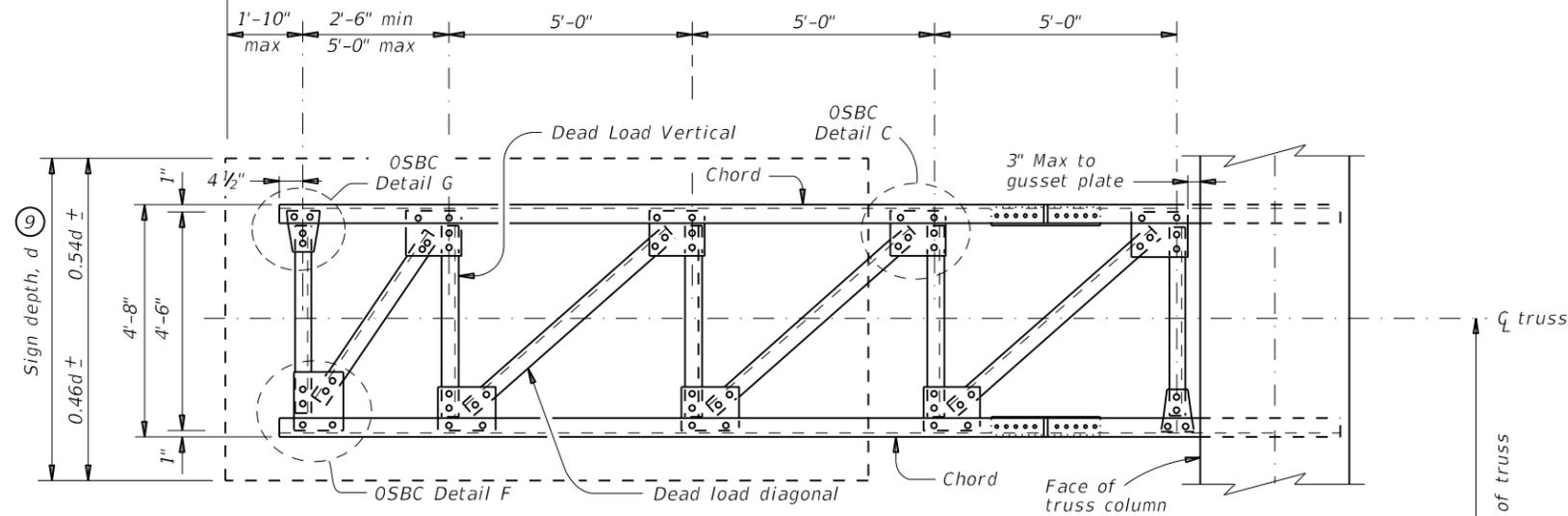
TRUSS DETAIL - PLAN

See Standard Sheet OSBC for truss details not shown here
If single shear chord splices conflict with the gusset plates, then use double shear splices.



EMBEDDED CHORD STUBS - PLAN

Chord stubs are the same size as the truss chords.
Chord stubs, complete with studs and holes, must be provided by the truss fabricator.
Contractor is responsible for determining and maintaining location and orientation of the embedded angles for truss fit-up, camber, and deflection. Templates may be needed to hold the angles in place (no direct pay).
Weld studs to angle legs in accordance with AWS D1.5.



TRUSS DETAIL - ELEVATION

See Standard Sheet OSBC for truss details not shown here

DEAD LOAD DEFLECTIONS	
40' SPAN	2.4"

9 Sign depth d

Where signs of different depths are used, the bottom edges of all signs may be placed in line.
Where this is done, all signs should be so positioned that the bottom edges are approximately 0.46 of the depth of the deepest sign below the Cl of the truss.

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TRUSS DETAILS	
Maximum span	40'
W X D = Width X Depth	4.5' X 4.5'
Chord (6)	3 1/2 X 3 1/2 X 3/8 [8]
Dead load diagonal (7)	3 X 2 X 3/16 [2]
Wind load diagonal (7)	3 X 3 X 1/4 [3]
Dead load vertical (7)	3 X 2 X 3/16 [2]
Wind load strut (7)	2 1/2 X 2 1/2 X 3/16 [1]
Truss dead load	70 lb/ft
Size of HS bolts in splice connection	3/4" diameter
No. & size of HS bolts in chord angle to bearing angle connection	Top (both sides) 16 3/4" bolts Bot (both sides) 16 3/4" bolts
No. & size of tie rod in concrete column	Top 8 7/8" dia X 4'-3" Bottom 8 7/8" dia X 4'-3"

Number of High Strength (HS) bolts required in truss connection or splice are indicated with brackets [] after the member size.

(6) "Low-Alloy Steel" for non-bridge structures per Item 442, "Metal For Structures".

(7) "Carbon Steel" for non-bridge structures per Item 442, "Metal For Structures".

All truss members are angles.

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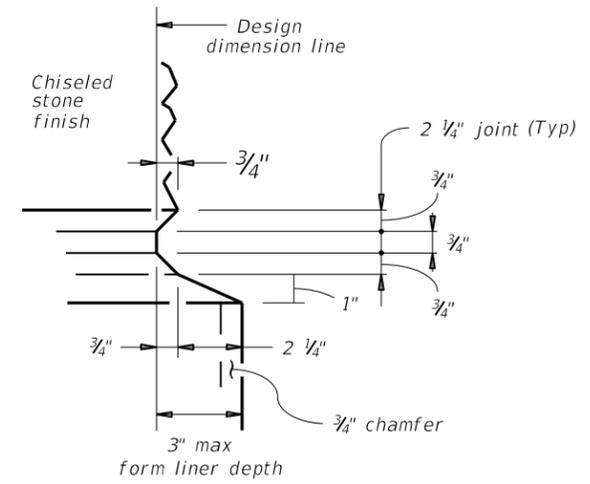
REVISIONS:

TABLE OF ESTIMATED QUANTITIES FOR ONE COLUMN "Z" = 30 FT (1)

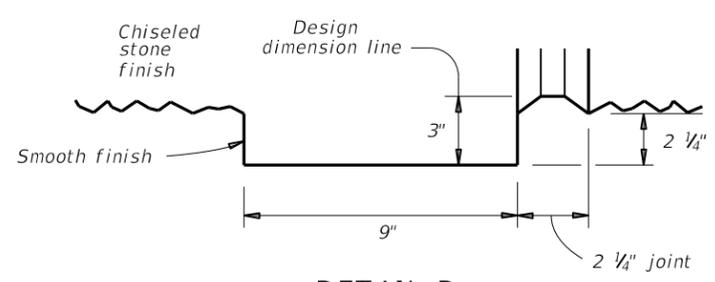
BAR	NO.	SIZE	LENGTH	WEIGHT	
A	22	#11	24'-6"	2864	
B	12	#8	11'-7"	372	
C	10	#8	7'-2"	192	
D	10	#8	11'-7"	308	
E	16	#11	15'-3"	1297	
F	12	#11	6'-7"	420	
G	6	#6	6'-7"	60	
H	14	#5	17'-0"	249	
S	26	#5	14'-10"	403	
S1	14	#5	18'-6"	271	
REINFORCING STEEL				LB	6436
CLASS C CONCRETE (COLUMN)				CY	21.5
CLASS C CONCRETE (FOOTING)				CY	6.0

Quantities shown are for Contractor information only. Footing quantity includes riprap.

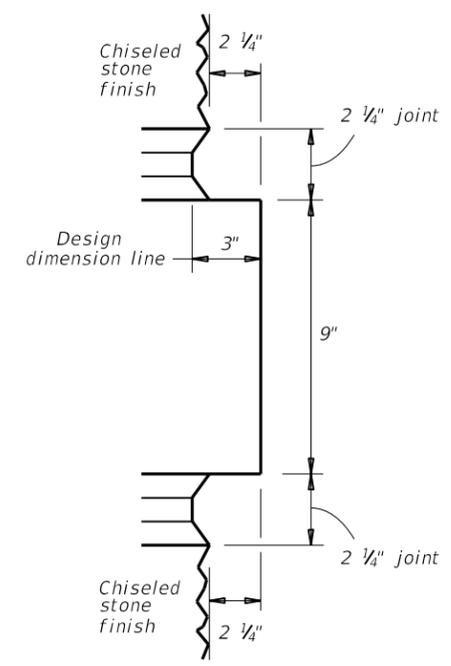
(1) QUANTITIES ARE BASED ON A TOTAL HEIGHT "Z" OF 30'-0". FOR EACH 1'-0" VARIATION IN "Z", ADJUST AS FOLLOWS:
 BARS A LENGTH BY 1'-0"
 WEIGHT BY 43 LBS
 BARS S COUNT BY 1
 WEIGHT BY 16 LBS
 CLASS C CONCRETE (COLUMN) BY 0.66 CY



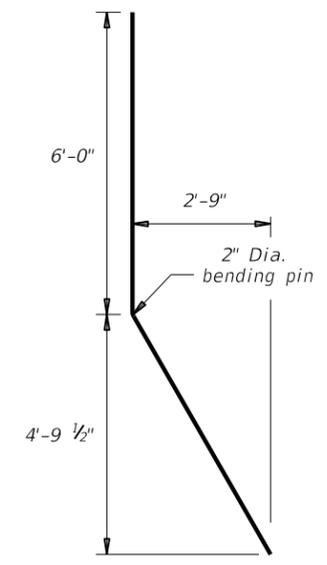
DETAIL A



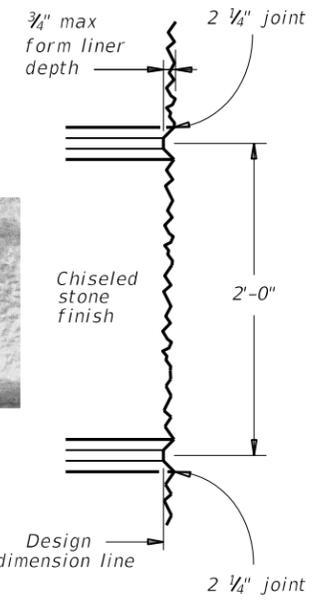
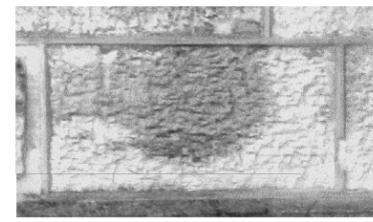
DETAIL D



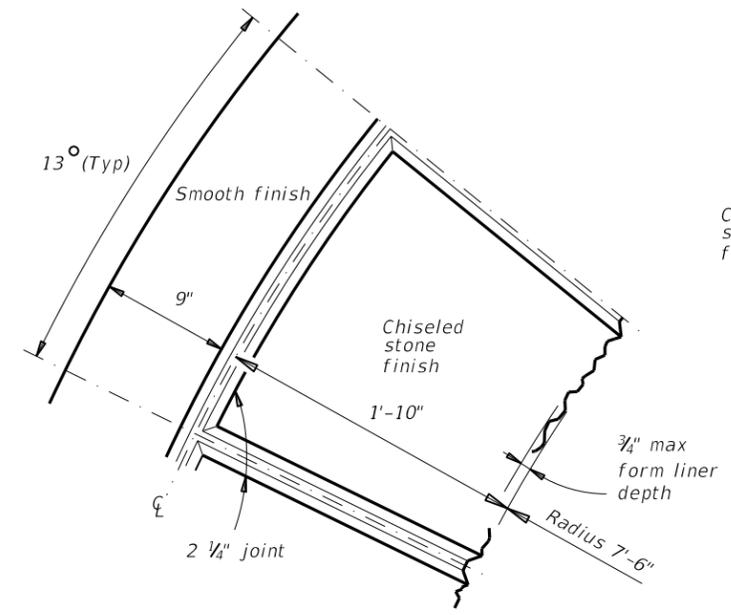
DETAIL F



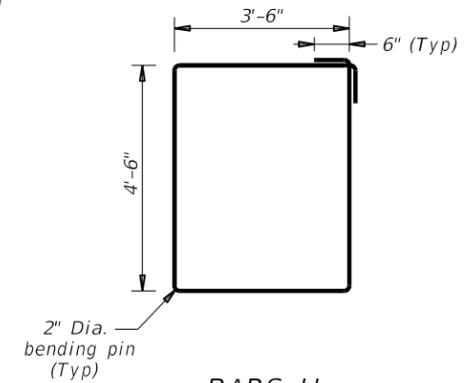
BARS B



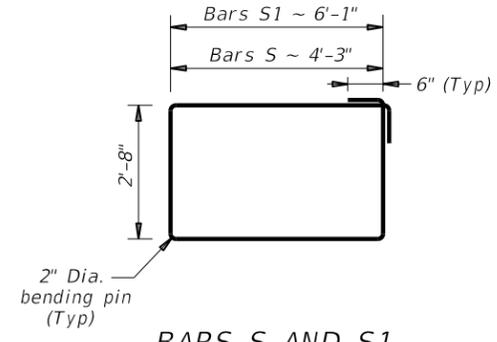
DETAIL B



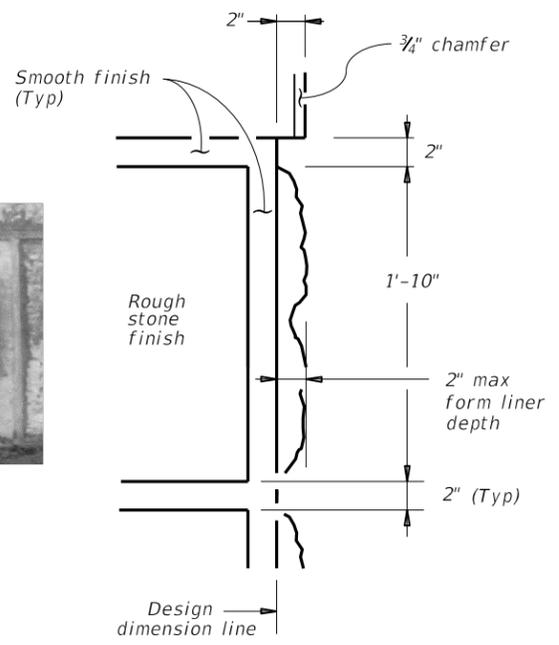
DETAIL E



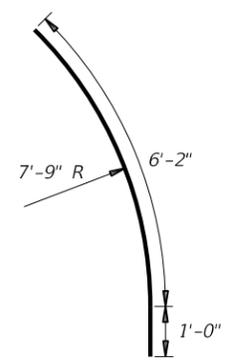
BARS H



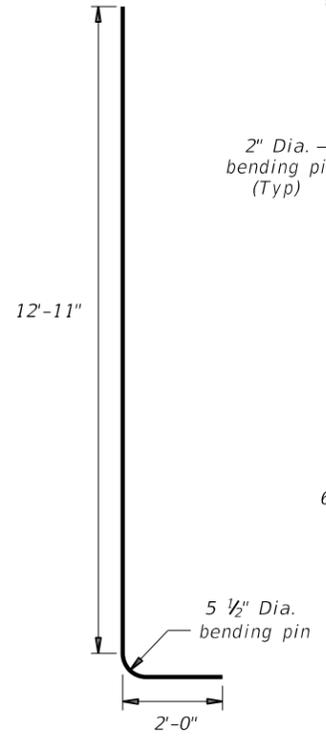
BARS S AND S1



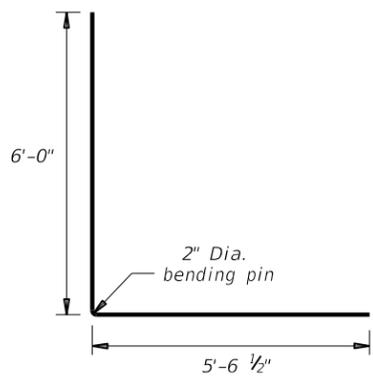
DETAIL C



BARS C



BARS E



BARS D

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