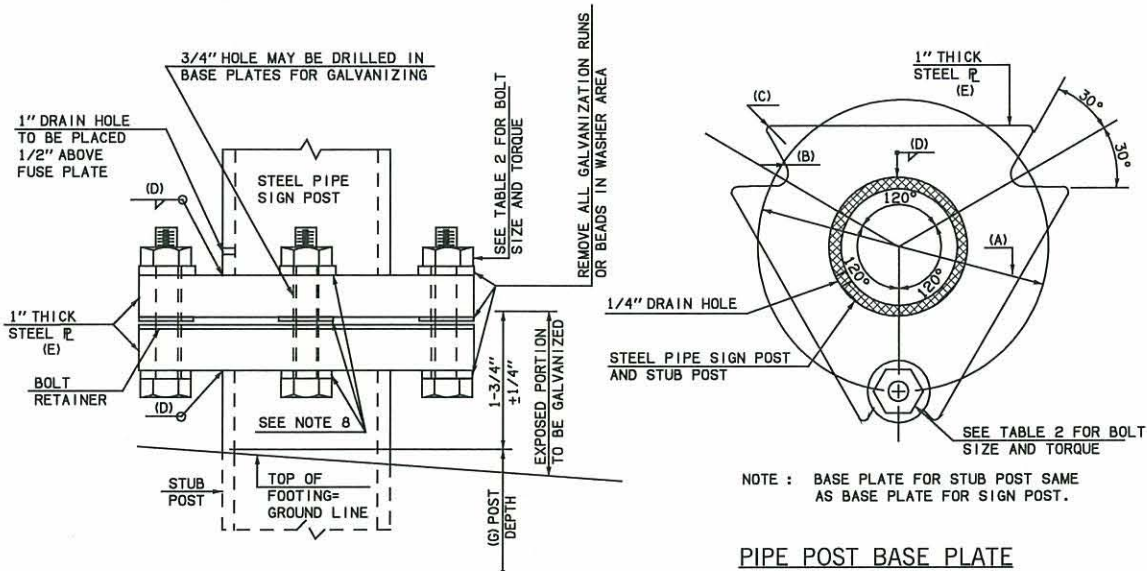


FTG. DES. NO.	POST SIZE REQUIRED	BASE PLATE DIMENSIONS					FOOTING DIMENSIONS				QUANTITIES		
		TRIANGLE SIZE	A	B	C	D	SIZE DIA.	LENGTH	POST (G) DEPTH	VERTICAL BARS NO./SIZE	HORIZONTAL BARS NO./SIZE	CLASS "A" CONCRETE	REINFORCING STEEL
A-1	1-1/2" ø 2.72 pif	NO BASE PLATE REQUIRED					12"	2'-0"	24"	NONE	NONE	.06 CY	NONE
A-2	2" ø 3.65 pif	NO BASE PLATE REQUIRED					12"	2'-0"	24"	NONE	NONE	.06 CY	NONE
A-3	2-1/2" ø 5.79 pif	9" x 9" x 9"	6-1/4"	9/16"	1/4"	18"	3'-0"	24"	4 / #5	4 #4	.20 CY	24 lbs	
A-4	3" ø 7.58 pif	9" x 9" x 9"	6-1/4"	9/16"	1/4"	18"	3'-6"	24"	6 / #5	4 #4	.23 CY	32 lbs	
A-5	3-1/2" ø 9.81 pif	10" x 10" x 10"	7-1/16"	1/16"	1/4"	18"	4'-0"	30"	6 / #5	5 #4	.26 CY	38 lbs	
A-6	4" ø 10.79 pif	10" x 10" x 10"	7-1/16"	1/16"	1/4"	18"	4'-6"	30"	6 / #5	5 #4	.30 CY	42 lbs	



PIPE POST BASE PLATE

STEEL PIPE POST BASE CONNECTION

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION

- ASSEMBLE POST TO STUB WITH BOLTS AND WASHERS. USE ONE FLAT WASHER PER BOLT AND BOLT RETAINER BETWEEN BASE PLATES.
- SHIM AS REQUIRED TO PLUMB AND ALIGN POST(S) BEFORE OR IMMEDIATELY AFTER POURING CONCRETE FOOTING.
- TIGHTEN ALL BOLTS, IN A SYSTEMATIC ORDER, TO THE PRESCRIBED TORQUE TO BED WASHERS AND SHIMS AND CLEAN BOLT THREADS.
- LOOSEN AND RETIGHTEN TO PRESCRIBED TORQUE IN THE SAME ORDER AS INITIAL TIGHTENING. DO NOT OVER TIGHTEN.

NO. REQ'D. R 9" X 9" X 9"

- (3) 1/2" ø X 3-1/4" H. S. BOLT
- (3) HEX. NUTS
- (9) FLAT WASHERS (SEE NOTE 8)

NO. REQ'D. R 10" X 10" X 10"

- (3) 5/8" ø X 3-3/4" H. S. BOLT
- (3) HEX. NUTS
- (9) FLAT WASHERS (SEE NOTE 8)

TABLE 2 BASE PLATE CONNECTION DATA TABLE		
BOLT TORQUE FOR BASE PLATES		
BOLT SIZE	MINIMUM	MAXIMUM
1/2" ø X 3-1/4"	16.6 FT LBS	25.0 FT LBS
5/8" ø X 3-1/4"	37.5 FT LBS	56.6 FT LBS
3/4" ø X 3"	67.5 FT LBS	88.3 FT LBS

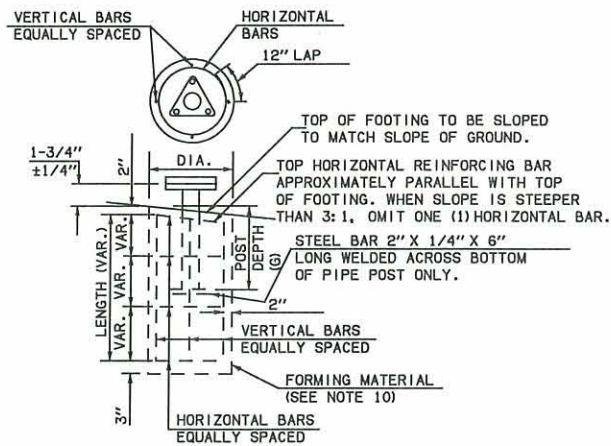
BOLT TORQUE LIMITS

THE HIGH STRENGTH BOLTS AT THE BASE CONNECTION SHOULD BE TORQUED WITHIN THE LIMITS SPECIFIED IN THE ABOVE TABLE. HOWEVER THE LOWER LIMIT SHOWN IN THE "BASE PLATE CONNECTION DATA TABLE" IS MORE DESIRABLE.



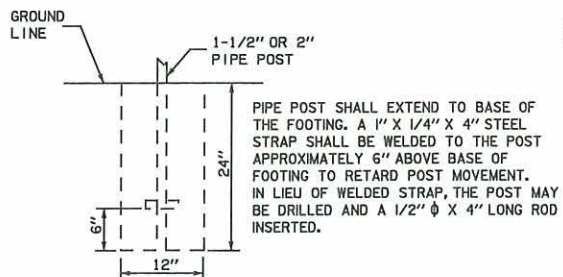
CUT FROM 30 GAUGE GALVANIZED SHEET METAL. PLACE BETWEEN BASE PLATES. SIZE---VARIES TO FIT BASE PLATES.

SHEET METAL BOLT RETAINER



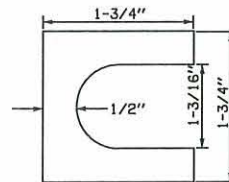
NOTE : PIPE STUB POST MAY BE INSTALLED TO THE BASE OF THE FOOTING IF DESIRED, BUT ONLY THE PIPE POST SPECIFIED IN THE FOOTING DESIGN WILL BE PAID FOR. PIPE POST EXTENDING TO THE BASE OF THE FOOTING SHALL HAVE THE STEEL BAR WELDED TO THE POST A MINIMUM OF 6" ABOVE THE BASE OF THE FOOTING.

TYPICAL "A" FOOTING DETAIL



WHEN HOLE FOR FOOTING CAN BE DRILLED AND MAINTAINED AS A "NEAT LINE" HOLE IN THE OPINION OF THE ENGINEER, THE UPPER PORTION NEED NOT BE FORMED. IF FORMING IS REQUIRED, A MINIMUM OF 6" SHALL BE REQUIRED AT THE TOP OF FOOTING. FORMING MAY BE ACCOMPLISHED BY USE OF A CARDBOARD CASING OR SIMILAR MATERIAL THAT MAY BE LEFT IN PLACE. ANY VOID AROUND FINAL FOOTING SHALL BE BACK-FILLED AND FIRMLY TAMPED.

TYPICAL "A-1" & "A-2" FOOTING DETAIL



FURNISH 2 ø 0.012 THICK AND 2 ø 0.32 THICK SHIMS FOR POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM-B36.

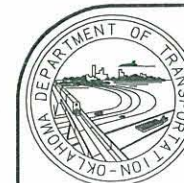
SHIM DETAIL

CONSTRUCTION NOTES

- ALL PIPE AND WIDE FLANGE BEAM POST SHALL CONFORM TO THE 2009 STANDARD SPECIFICATIONS.
- ALL BOLTS, NUTS AND WASHERS SHALL NOT BE GALVANIZED OR PLATED, BUT SHALL BE PAINTED, AFTER INSTALLATION, WITH A ZINC RICH PAINT.
- STRUCTURAL STEEL TO BE GALVANIZED AFTER FABRICATION, EXCEPT AS NOTED, IN ACCORDANCE WITH THE 2009 STANDARD SPECIFICATIONS.
- POST LENGTHS AS SHOWN ON THE PLANS INCLUDE BOTH SIGN POST AND STUB POST WHICH IS SET IN THE CONCRETE FOOTING.
- ALL WELDING MATERIALS AND METHODS, INCLUDING QUALIFICATIONS OF WELDERS, SHALL CONFORM WITH THE REQUIREMENTS OF THE 2009 STANDARD SPECIFICATIONS.
- STRUCTURAL EXCAVATION TO BE PAID FOR IN OTHER ITEMS OF WORK.
- TOP AND BOTTOM WASHERS ON BASE PLATE SHALL BE 1/4" THICK. WASHERS MAY BE ROUND OR SQUARE. USE STANDARD ROUND WASHERS BETWEEN BASE PLATES. REMOVE ALL GALVANIZING RUNS OR BEADS IN WASHER AREA.

BASIS OF PAYMENT

ITEM NO.	ITEM	UNIT
804(A)	STRUCTURAL CONCRETE	CY
804(B)	REINFORCING STEEL	LB
851(B)	GALVANIZED STEEL PIPE POST	LF



APPROVED BY TRAFFIC ENGINEER: *Chad G. ...* DATE: 8/2/10

TRAFFIC STANDARD
STANDARD FOOTINGS FOR
GROUND MOUNTED SIGNS
(GALVANIZED PIPE)