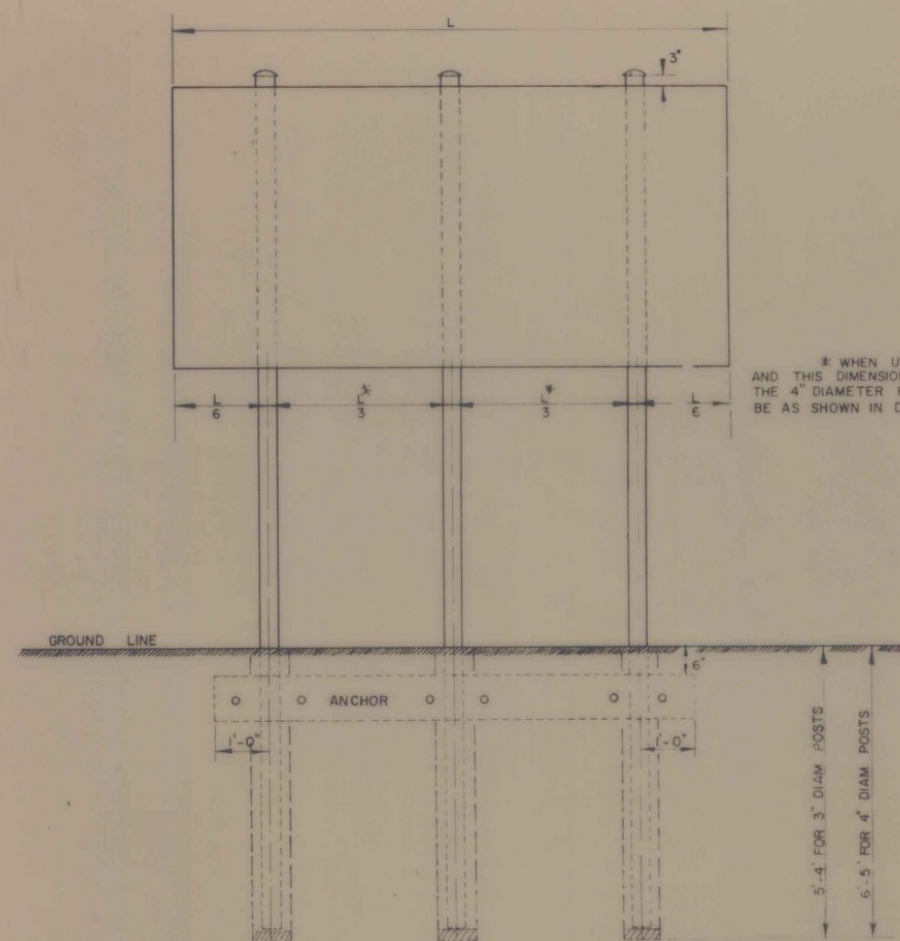
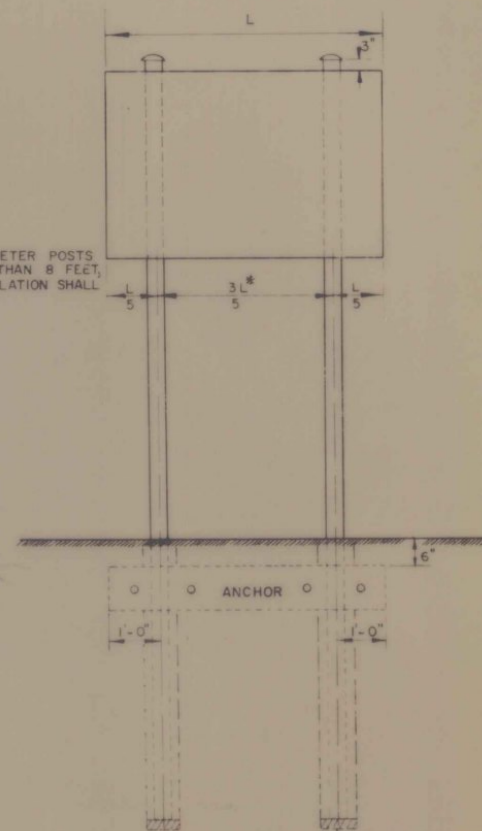
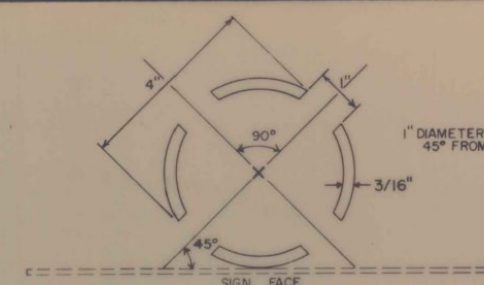
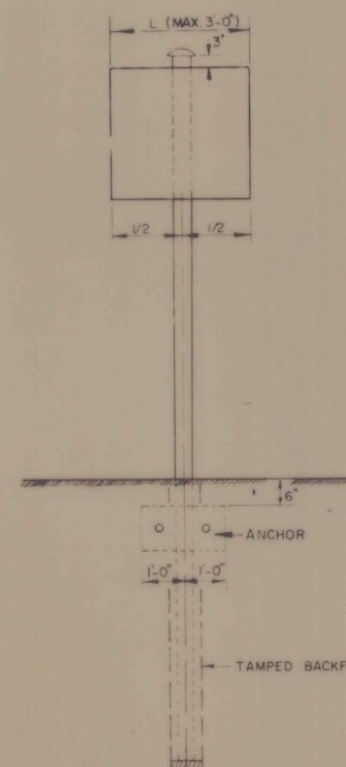




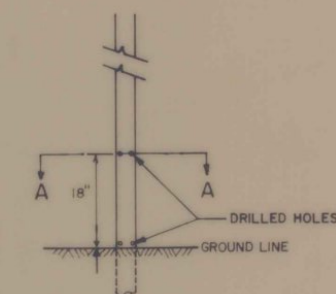
* WHEN USING 4" DIAMETER POSTS AND THIS DIMENSION IS LESS THAN 8 FEET, THE 4" DIAMETER POST INSTALLATION SHALL BE AS SHOWN IN DETAIL 'A'



FLAT STONE TO OBTAIN MORE BEARING AREA DURING THE INSTALLATION PHASE

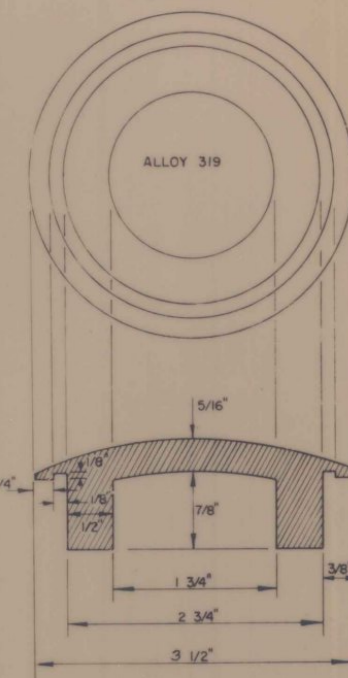


SECTION A-A

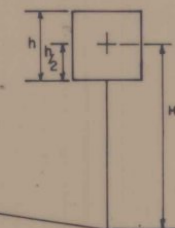


DETAIL A
4" DIAMETER POST (MODIFIED)

CAST ALUMINUM CAP FOR SIGN POSTS



DIMENSIONS SHOWN ARE FOR 3" O.D., 2 3/4" I.D. ± COMMERCIAL TOLERANCES. CAPS DESIGNED FOR DRIVE FIT. DIMENSIONS ARE PROPORTIONAL FOR LARGER DIAMETER TUBING.



POSTS THE POSTS FOR THESE INSTALLATIONS SHALL BE EXTRUDED TUBULAR POSTS OF ALUMINUM ALLOY 6061-T6.

HARDWARE THE ASSEMBLY HARDWARE USED TO FASTEN A SIGN TO THE POSTS SHALL BE ALUMINUM OR STAINLESS STEEL OF A STANDARD COMMERCIAL DESIGN APPROVED BY THE DEPARTMENT.

ANCHORS USE TWO (2) PIECES OF 2" X 12" ROUGH PLANK WELL SEASONED, STRAIGHT AND SOUND SPRUCE OR OTHER APPROVED SPECIES, CUT FROM LIVE GROWING TIMBER, FREE FROM LOOSE KNOTS OR OTHER DEFECTS. PLANKS SHALL HAVE A PRESERVATIVE TREATMENT COVERED BY SECTION 728.01 OF THE SPECIFICATION FOR PLANK GUARD RAIL, SECTION 728. THESE PLANKS SHALL BE CLAMPED POST TO POST WITH A MINIMUM OF ONE (1) FOOT OVERHANG, TO BE PARALLEL TO THE SIGN FACE. THE TOP EDGE OF THE PLANKS SHALL BE APPROXIMATELY PARALLEL TO THE GROUND. BOLTS FOR THE ANCHORS SHALL BE 3/8" CARRIAGE BOLTS WITH NUTS AND WASHERS AND SHALL BE GALVANIZED BY THE HOT-DIPPED PROCESS IN CONFORMANCE WITH ASTM SPECIFICATION A-153 AFTER FABRICATION, AND SHALL DEVELOP THE REQUIRED JOINT STRENGTH.

ERECTION ALL POSTS SHALL BE PLUMB AND LOCATED AS SPECIFIED BY DRAWINGS OR BY THE ENGINEER IN THE FIELD. LOCK NUTS ON 3/8"-16 ALUMINUM POST BOLT CLIPS SHALL BE TORQUED TO 225 INCH POUNDS USING DRY, CLEAN, UNLUBRICATED THREADS. WHERE ALUMINUM SURFACES ARE TO BE PLACED IN CONTACT WITH WOOD, THEY SHALL BE GIVEN A THICK COAT OF AN ALKALI-RESISTANT BITUMINOUS PAINT MEETING THE REQUIREMENTS OF MILITARY SPECIFICATION MIL-P-6883, WHICH SHALL BE DRY BEFORE INSTALLATION.

THE HOLE SHALL BE CAREFULLY DUG AND THE POST SET TO THE DEPTH SPECIFIED ABOVE. POSTS SHALL NOT BE DRIVEN. THE BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF GRANULAR BACKFILL FOR STRUCTURES OR SHALL BE MATERIAL APPROVED BY THE ENGINEER.

IN AREAS WHERE LEDGE ROCK IS ENCOUNTERED POSTS WILL BE SET AND GROUTED 24" DEEP IN THE LEDGE UNLESS THE POSTS PENETRATE THE GROUND 4".

POST DIAMETER	WALL THICKNESS	WEIGHT PER FT
3" Round	3/16"	1.9 lbs
4" Round	3/16"	2.6 lbs
3" Square	3/16"	2.5 lbs

TUBULAR ALUMINUM POST

POST SELECTION CHART		
SIGN AREA (FT. ²) X H (FT.) ≤ Sv (SELECTION VALUE)		
POST SIZE	Sv (FT. ³)	DESIGN CRITERIA
3" DIA.	225	WIND VELOCITY=60 MPH (10 YEAR MEAN RECURRENT INTERVAL) WIND PRESSURE=12 PSF, ALUMINUM Fy=21,000 PSI, ALLOWABLE STRESS = 1.4 (21,000) PSI
4" DIA. (MODIFIED)	276	
3" SQUARE TUBE*	307	
4" DIA.	418	

*USE ON SINGLE POST INSTALLATIONS ONLY

REVISIONS AND CORRECTIONS

JAN. 6, 1973 - REVISED TO INCLUDE CHART FOR WEIGHT OF POST.
AUG. 21, 1975 - REMOVE 5" ALUMINUM TUBES PER FHWA REQUEST.
DEC. 15, 1978 - TAMPED BACKFILL NOTES ADDED.
JUNE 17, 1981 - ADDED 4" PIPE MOD. AND SV CHART.
FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED

DATE Dec. 29, 1971

R. W. Currell
CHIEF ENGINEER

E. H. Stinchney
ASST. CHIEF ENGINEER

G. M. Lane
HIGHWAY ENGINEER

TUBULAR ALUMINUM SIGN SUPPORTS



STANDARD

E-25