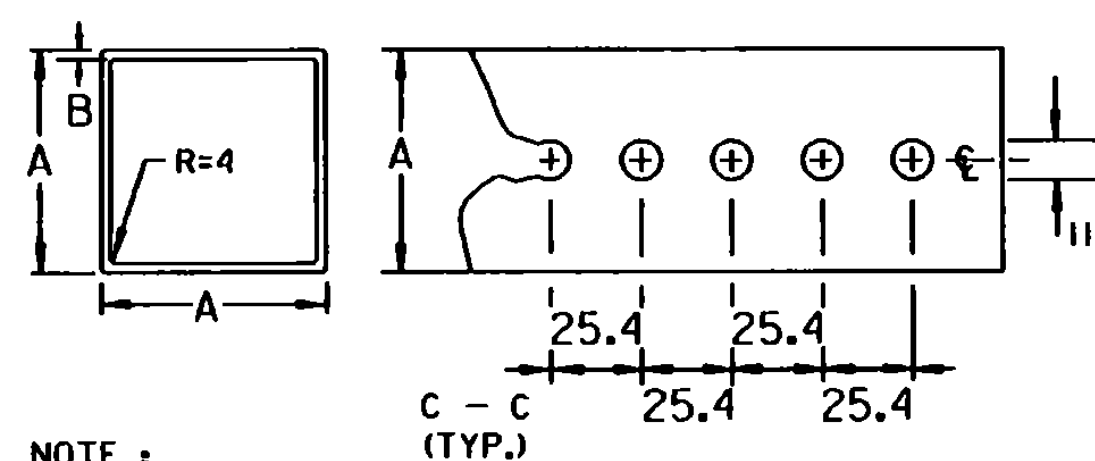


GUARDRAIL DEFLECTION CHART (PER AASHTO - ROADSIDE DESIGN GUIDE)		
TYPE	GR POST SPACING	DEFLECTION
THREE CABLE W/STEEL POSTS	5.0 m	3.5 m
W-BEAM	W/WEAK POST	3.8 m
	W/STRONG POST	1.9 m
BOX BEAM	1.83 m	1.5 m
THRE BEAM	W/WEAK POST	3.8 m
	W/STRONG POST	1.9 m

THIS CHART LISTS THE THEORETICAL DEFLECTION DISTANCE UPON IMPACT OF VARIOUS GUARDRAIL WITH DIFFERENT TYPES AND SPACING OF POSTS.



NOTE :

THE POSTS SHALL BE CAREFULLY FORMED OF STEEL, WITH A MINIMUM YIELD OF 380 MPa INTO A SIZE AND SHAPE WITH CORNERS INDUCTION WELDED IN SUCH A MANNER THAT NEITHER FLASH NOR WELD SHALL INTERFERE WITH THE TELESCOPING PROPERTIES NOR DAMAGE THE GALVANIZATION.

- THE 2.7-mm WALL THICKNESS TOLERANCES SHALL BE +0.125 mm AND -0.250 mm.
- THE 2.0-mm WALL THICKNESS TOLERANCES SHALL BE +0.050 mm AND -0.200 mm.

DIMENSION DETAILS AND POST SELECTION CHART

POST SELECTION CHART							
SIGN AREA (m ²) X H (m) ≤ Sv (SELECTION VALUE)							
POST SIZE	DIMENSIONS		SECTION MODULUS mm ³	ONE POST Sv	TWO POST Sv	THREE POST Sv	NUMBER PERMITTED IN 2.4-m PATH
	kg/m	A					
2.8	45	2.0	3770	1.63	3.26	4.89	TWO
3.2	51	2.0	4850	2.09	4.18	6.27	TWO
5.0	64	2.7	10 520	4.54	9.08	13.62	ONE

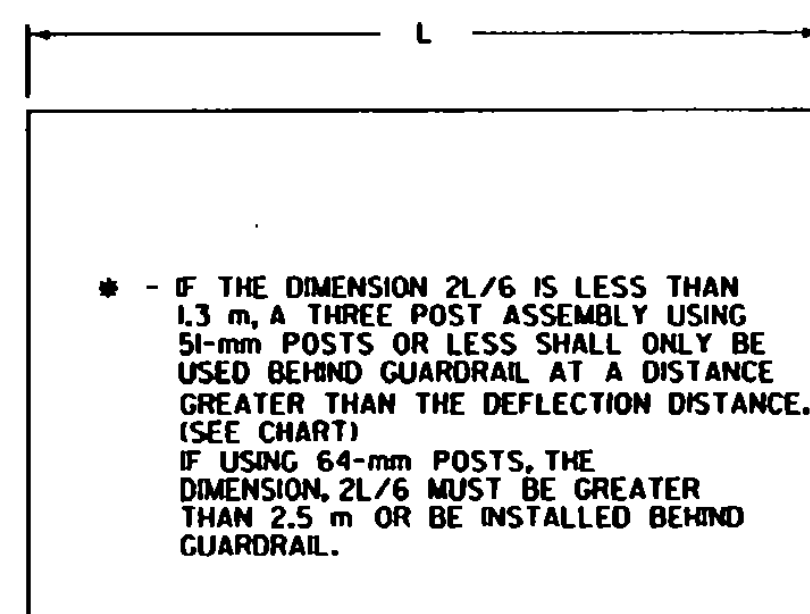
DESIGN CRITERIA:

WIND SPEED = 100 km/h (10 -YEAR MEAN RECURRENCE INTERVAL)
 WIND PRESSURE = 740 Pa
 STEEL MINIMUM YIELD = 380 MPa
 ALLOWABLE STRESS = (1.4) 0.60 Fy

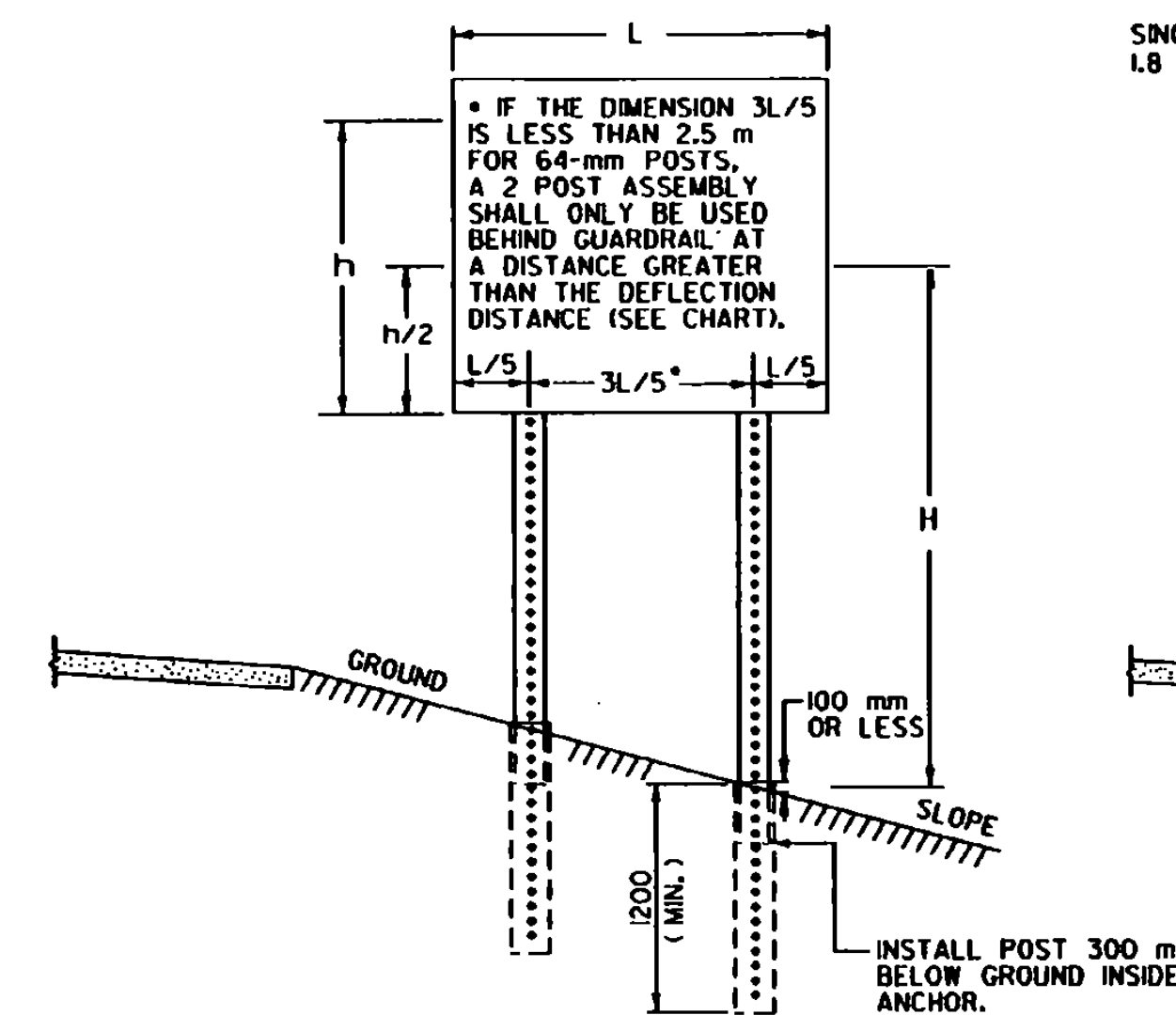
REVISIONS AND CORRECTIONS
 JUNE 13, 1997 - ORIGINAL APPROVAL DATE

APPROVED

[Signature]
 DIRECTOR OF ENGINEERING
[Signature]
 DIRECTOR OF CONSTRUCTION AND MAINTENANCE



MULTI-POST INSTALLATIONS



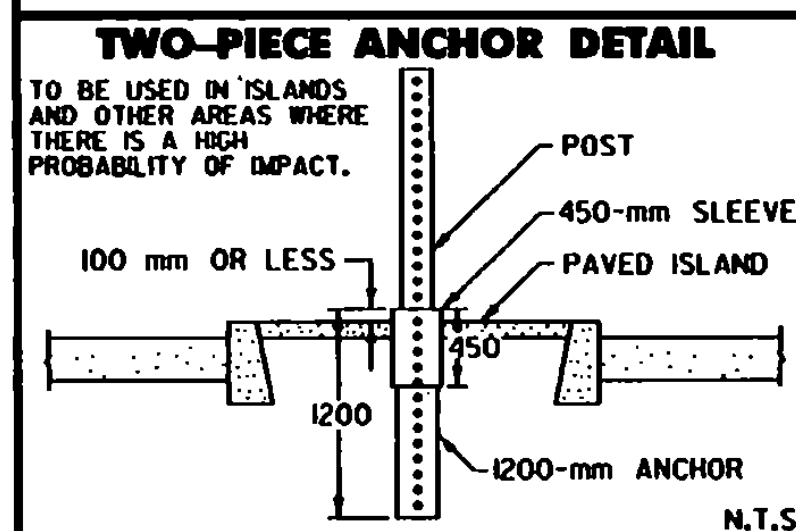
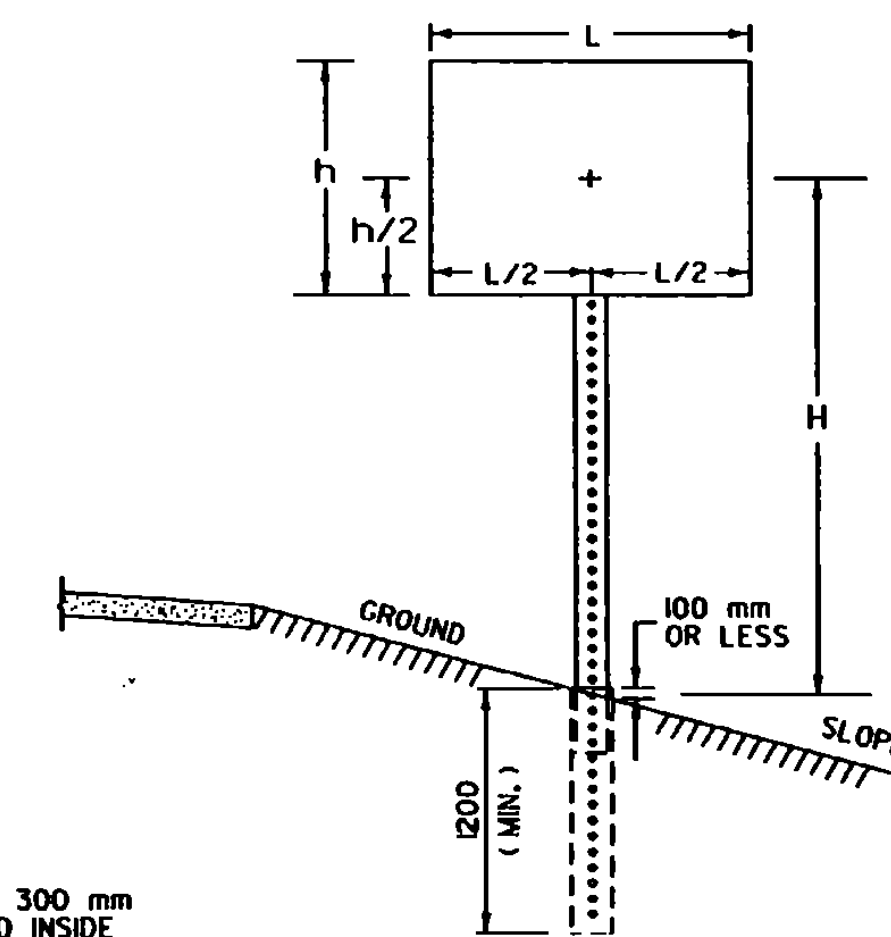
POST SPACING DETAILS

GENERAL NOTES

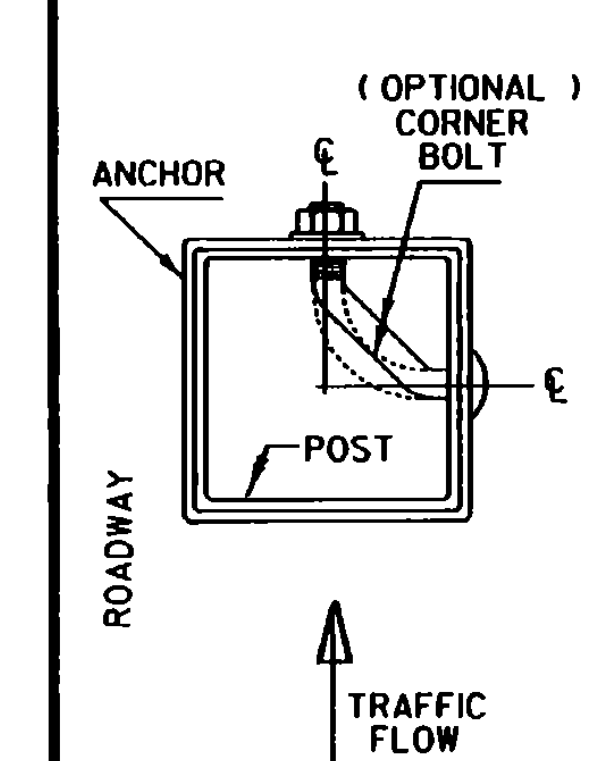
CONSTRUCTION METHODS - POSTS MAY BE DRIVEN OR SET IN A DUG HOLE AND BACKFILLED, IF DRIVEN, A DRIVING CAP SHALL BE USED, THE DUG HOLE INSTALLATION SHALL BE USED IN AREAS OF POOR SOIL CONDITIONS OR AS DIRECTED BY THE RESIDENT ENGINEER. BACKFILL SHALL BE COMPACTED AS DIRECTED BY THE RESIDENT ENGINEER.

SIGN CLEARANCES - HORIZONTAL AND VERTICAL SIGN CLEARANCES SHALL BE SHOWN ON THE PLANS OR THE APPROPRIATE STD. SHEETS.

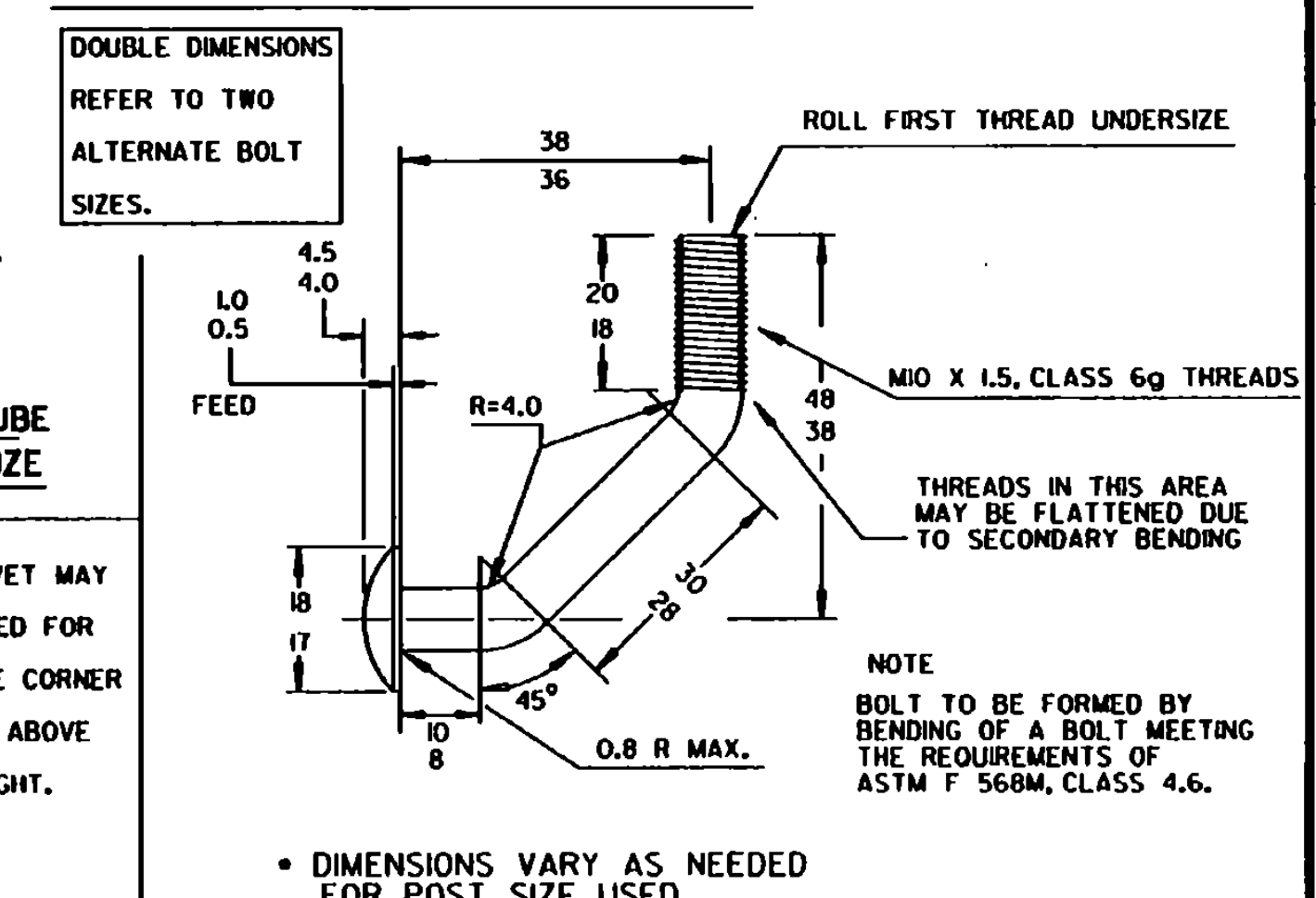
SINGLE POST INSTALLATIONS SHALL BE LIMITED TO A SIGN AREA OF 1.8 m² OR LESS



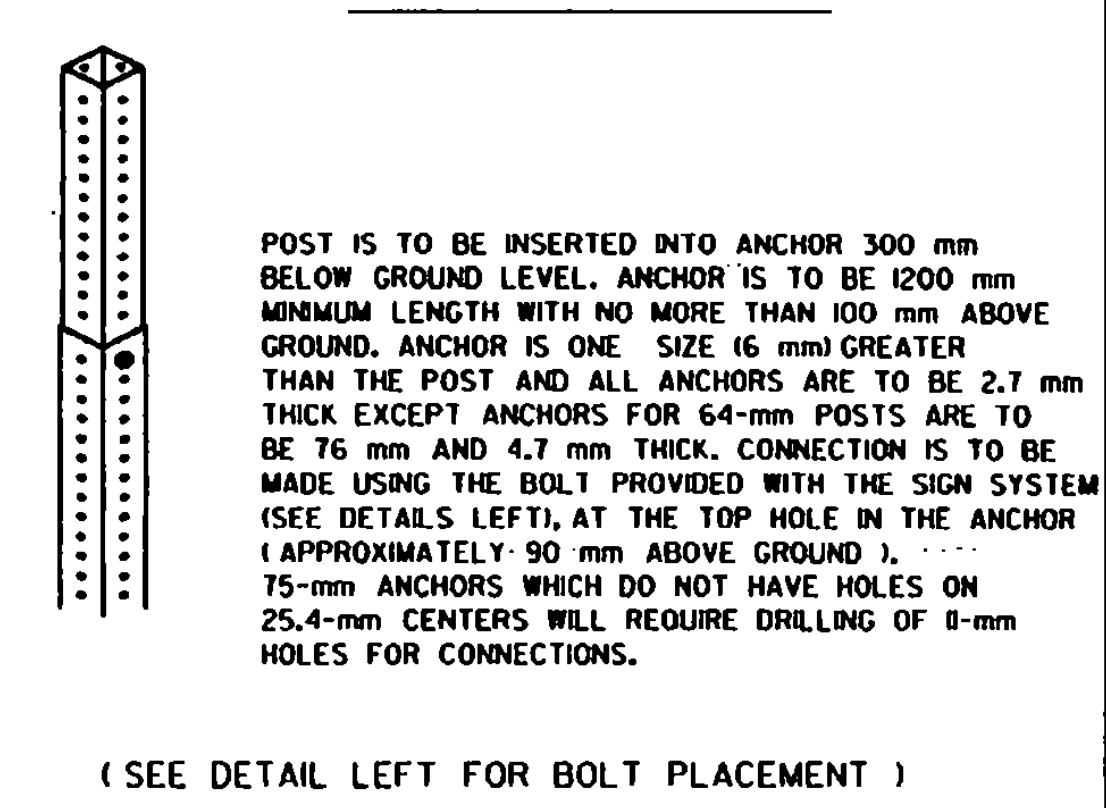
TOP VIEW OF ANCHOR, POST AND BOLT



OPTIONAL CORNER BOLT DETAILS

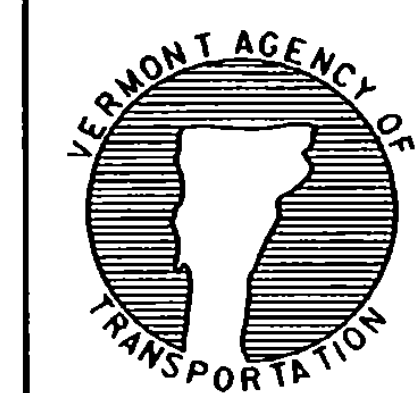


CONNECTION DETAIL



OTHER STDS. REQUIRED: E-120M E-160M
 NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT WHERE NOTED.

SQUARE STEEL SIGN POST



Metric STANDARD E-164M