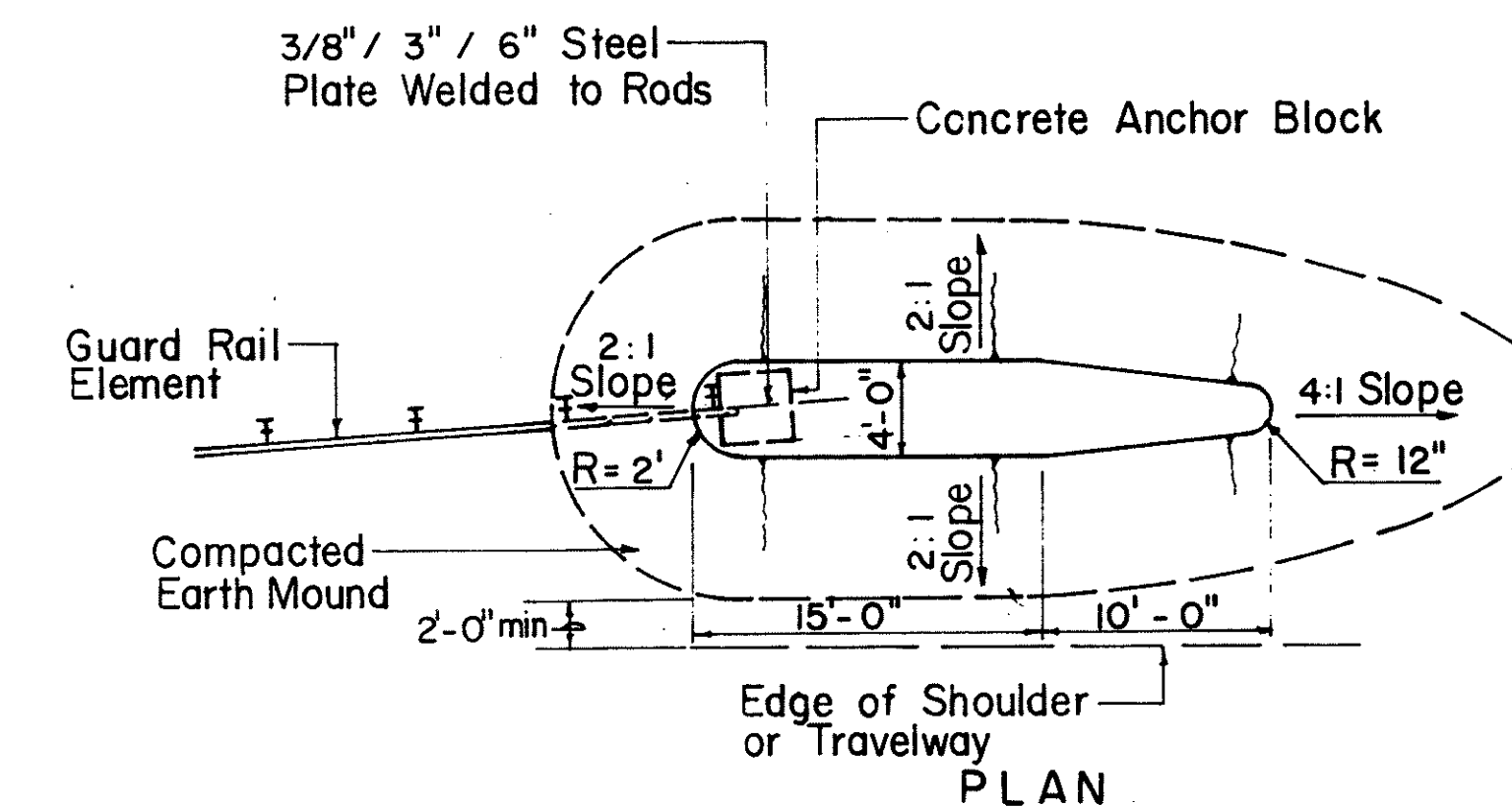


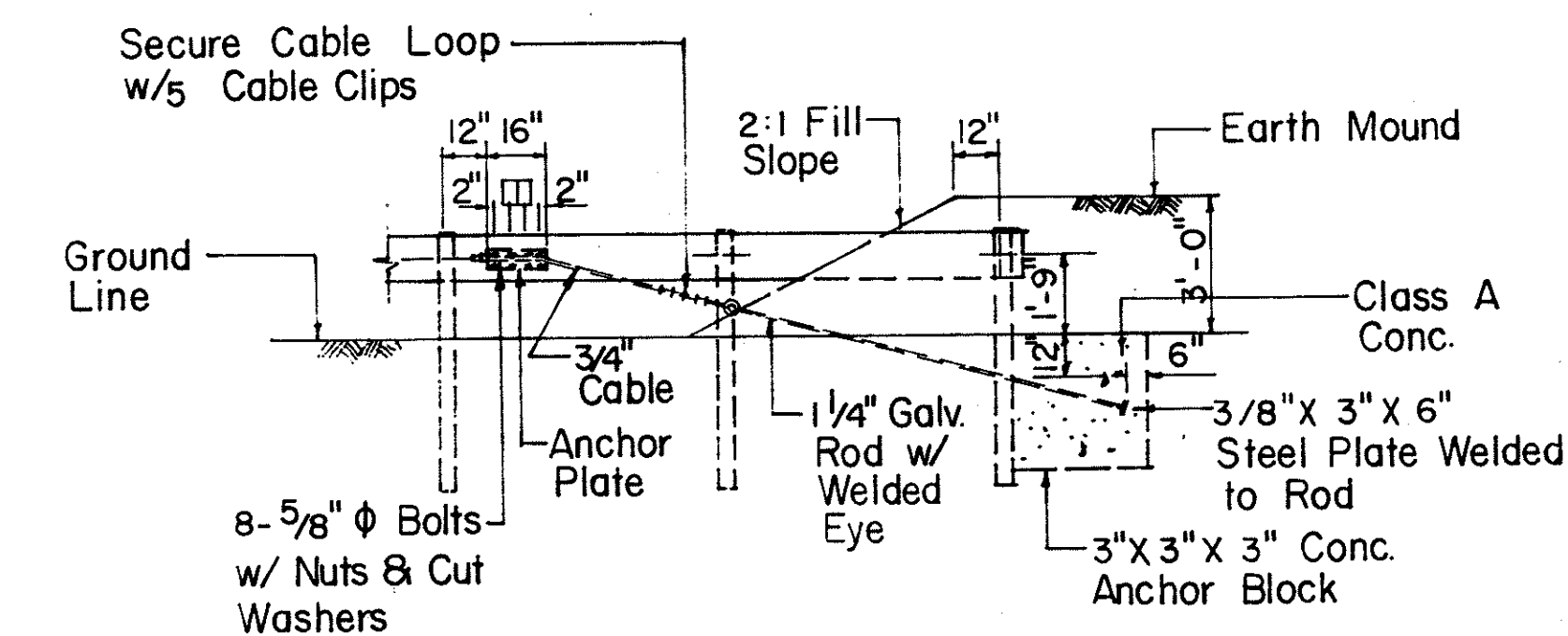
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	96	115

GENERAL NOTES

- Both of the alternate type posts may be used on any one project however, only one type of post shall be used in any single run of guardrail.
- All hardware, posts and blocks shall be galvanized. No punching, drilling or cutting will be permitted after galvanizing.
- Connection details for bent plate post and block shall be similar to the details shown for structural shape post, and block.
- Where conditions require, special post lengths in increments of 6 inches may be specified.
- For details of rail elements, bolts and nuts, see Standard Plan TE-51.
- All fasteners, posts, blocks and rail elements shall conform to the latest edition and amendments of "A Guide to Standardized Highway Barrier Rail Hardware," a report prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee.



EARTH MOUND DETAIL
NO SCALE



NOTES:-

- Galvanized anchor rod, metal guard rail and post buried in ground shall be covered with a min. 20-mil thickness of coal tar enamel conforming to AWWA standard: C-203.
- Concrete, G.R.P., excavation, earth mound, anchor rods and miscellaneous appurtenances necessary to anchor the guard rail ends shall be incidental to the metal guard rail.

ANCHOR BLOCK DETAIL IN EARTH MOUND

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
Royce S. Fukunaga
FUKUNAGA & ASSOCIATES

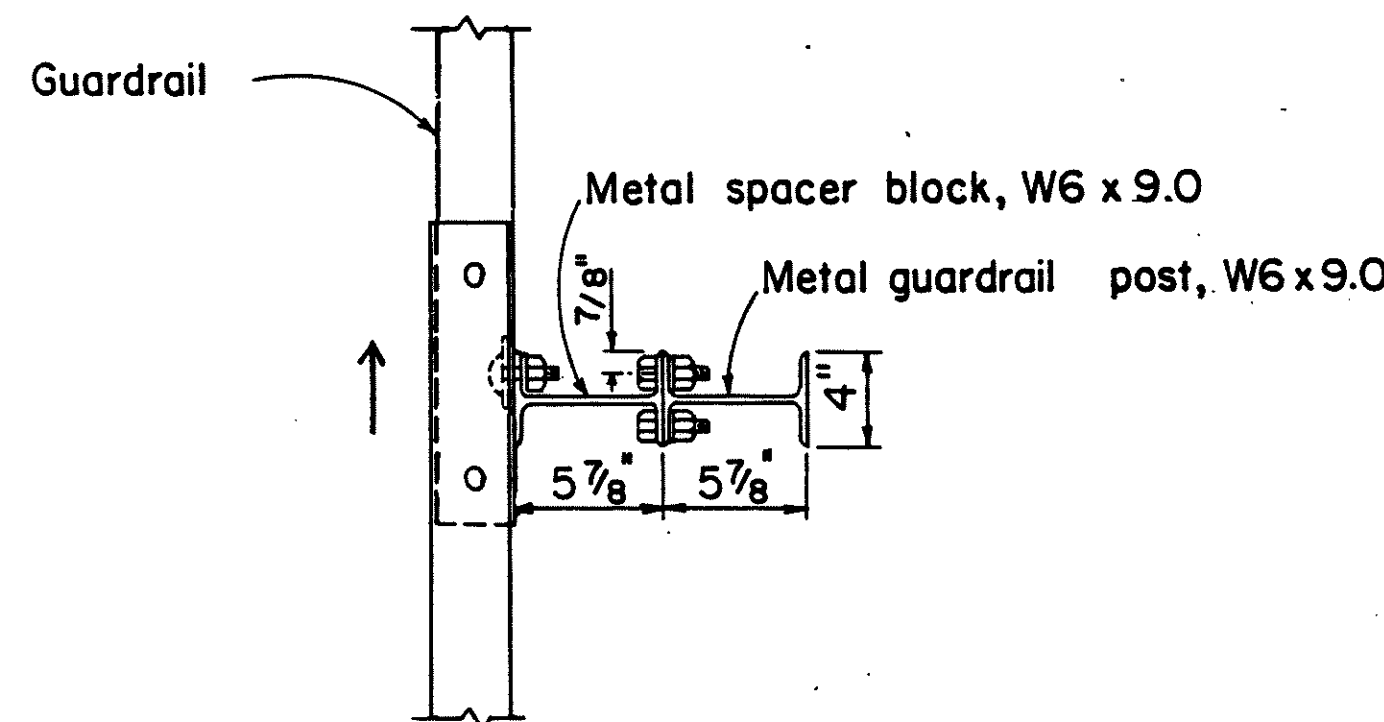
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS

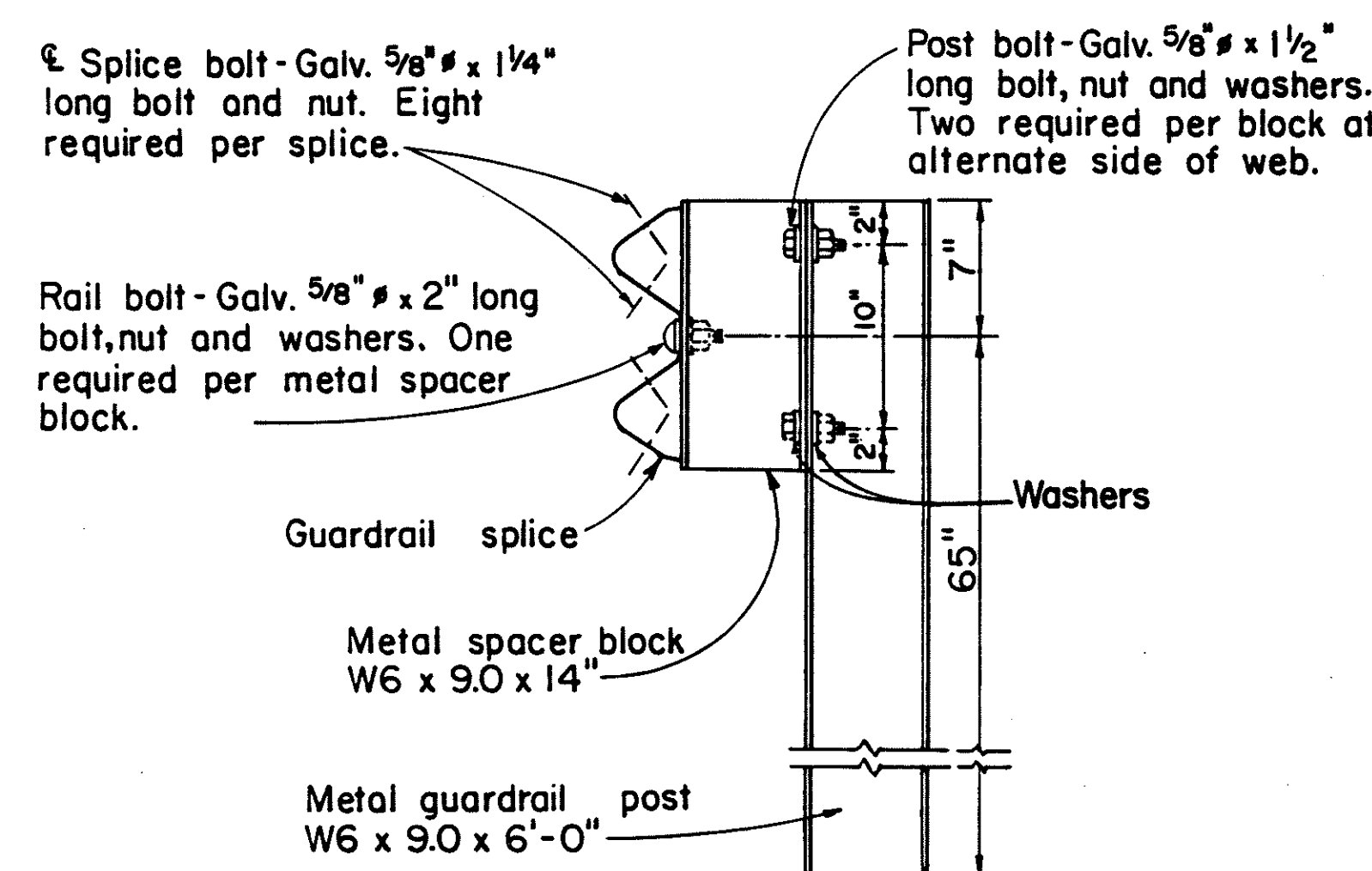
MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A

PROJECT NO. HWY-H-01-86
Scale: As Shown

SHEET NO. 1 OF 1 SHEETS



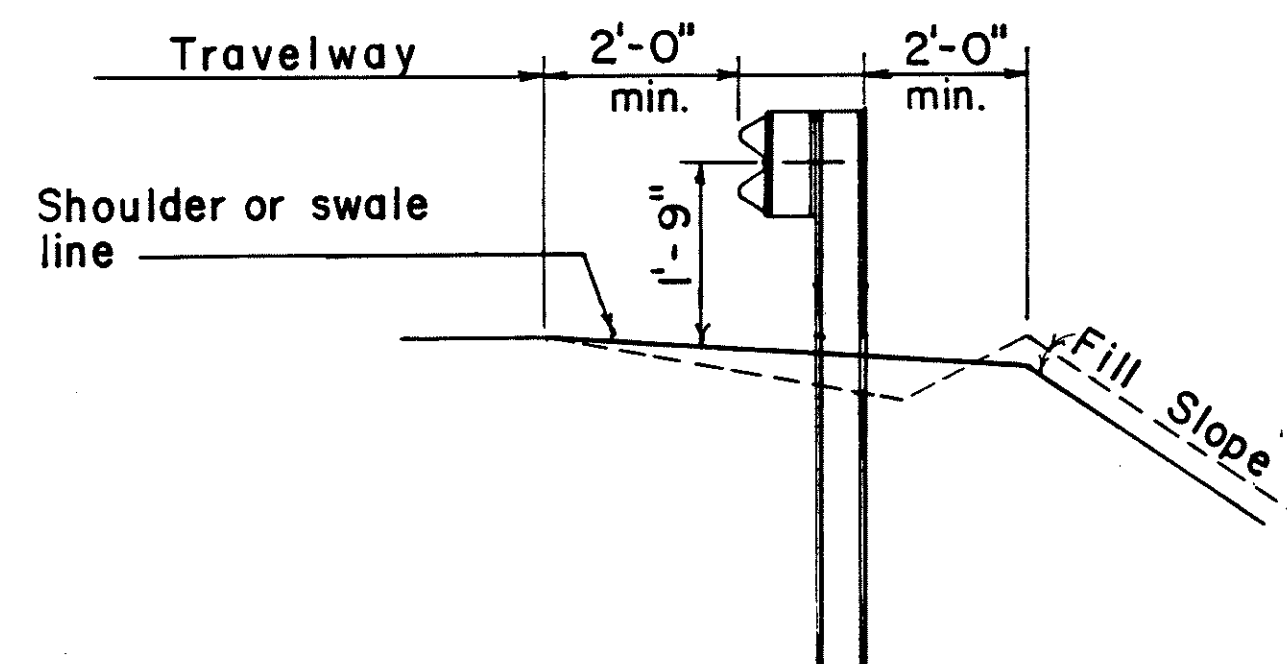
PLAN



ELEVATION

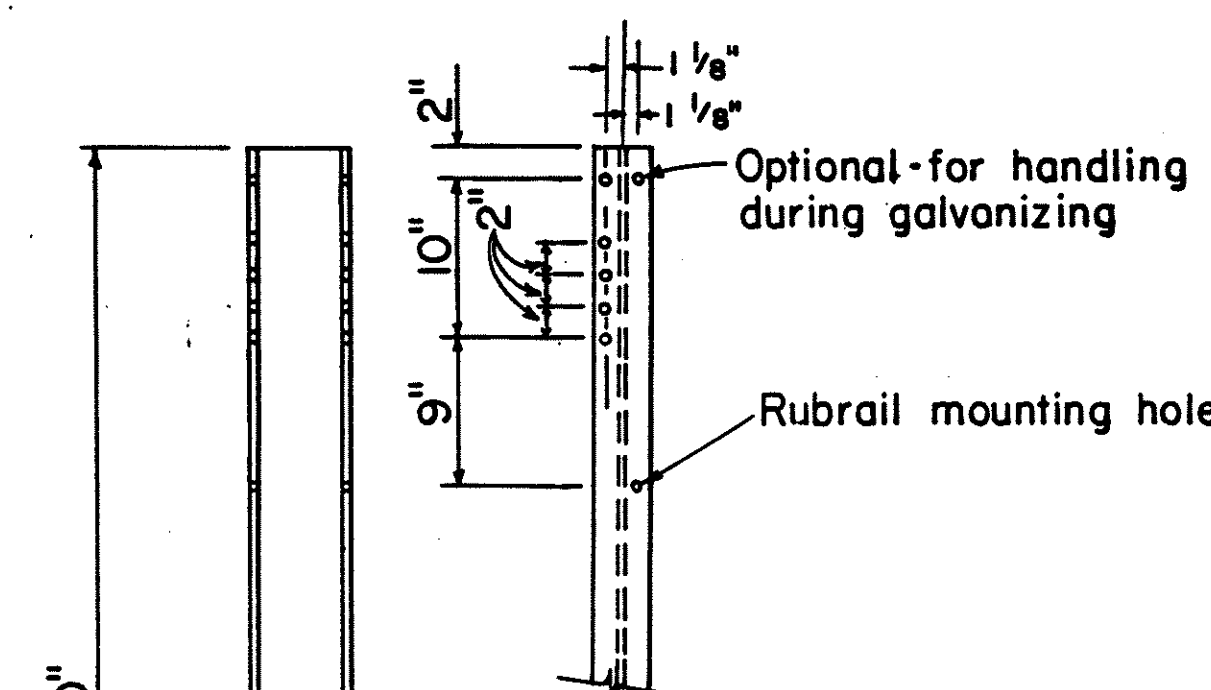
SINGLE METAL GUARDRAIL ON METAL POST WITH METAL SPACER BLOCK

SCALE: 1 1/2" = 1'-0"



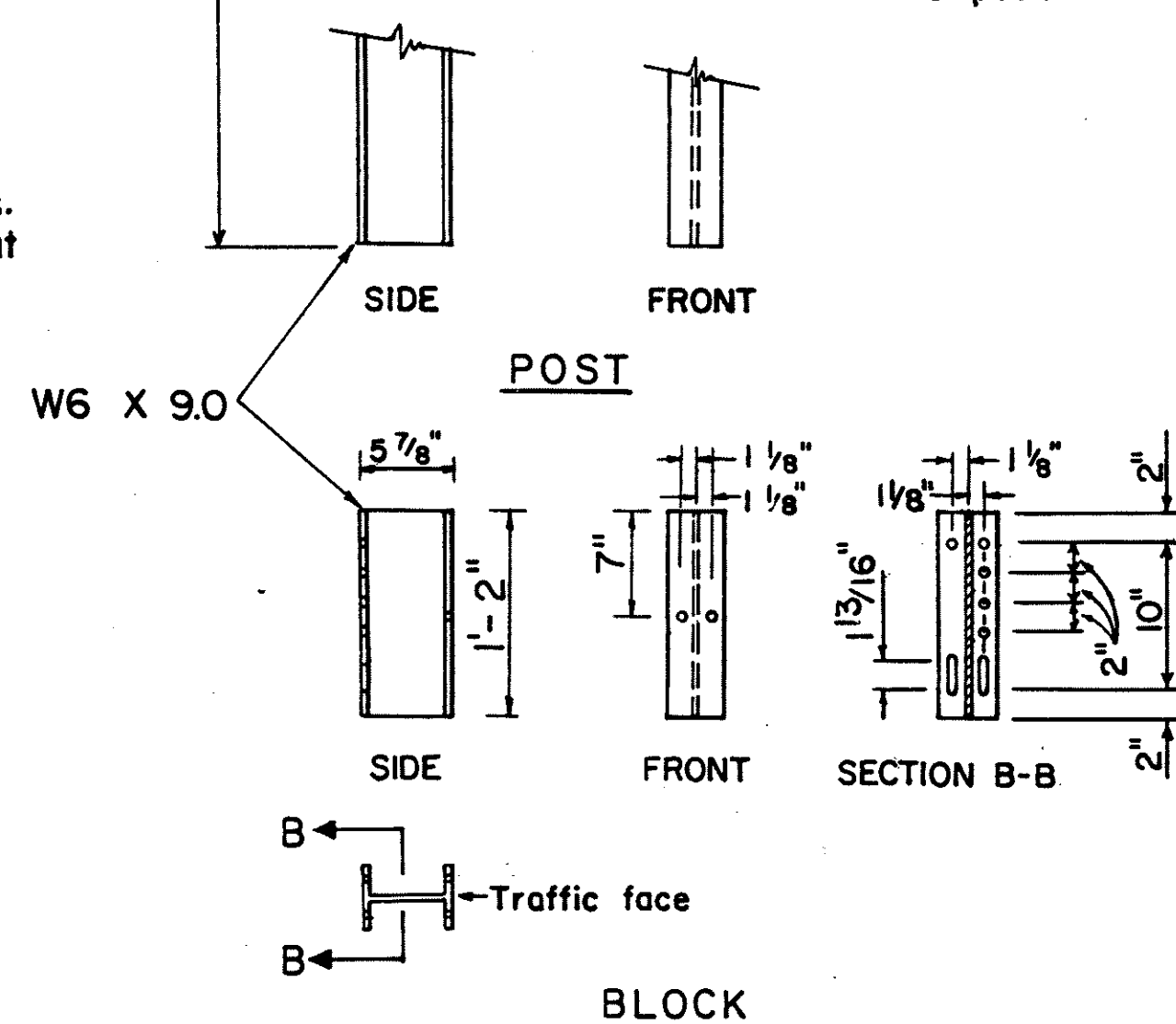
TYPICAL METAL GUARDRAIL DETAIL

SCALE: 1/2" = 1'-0"



NOTE:

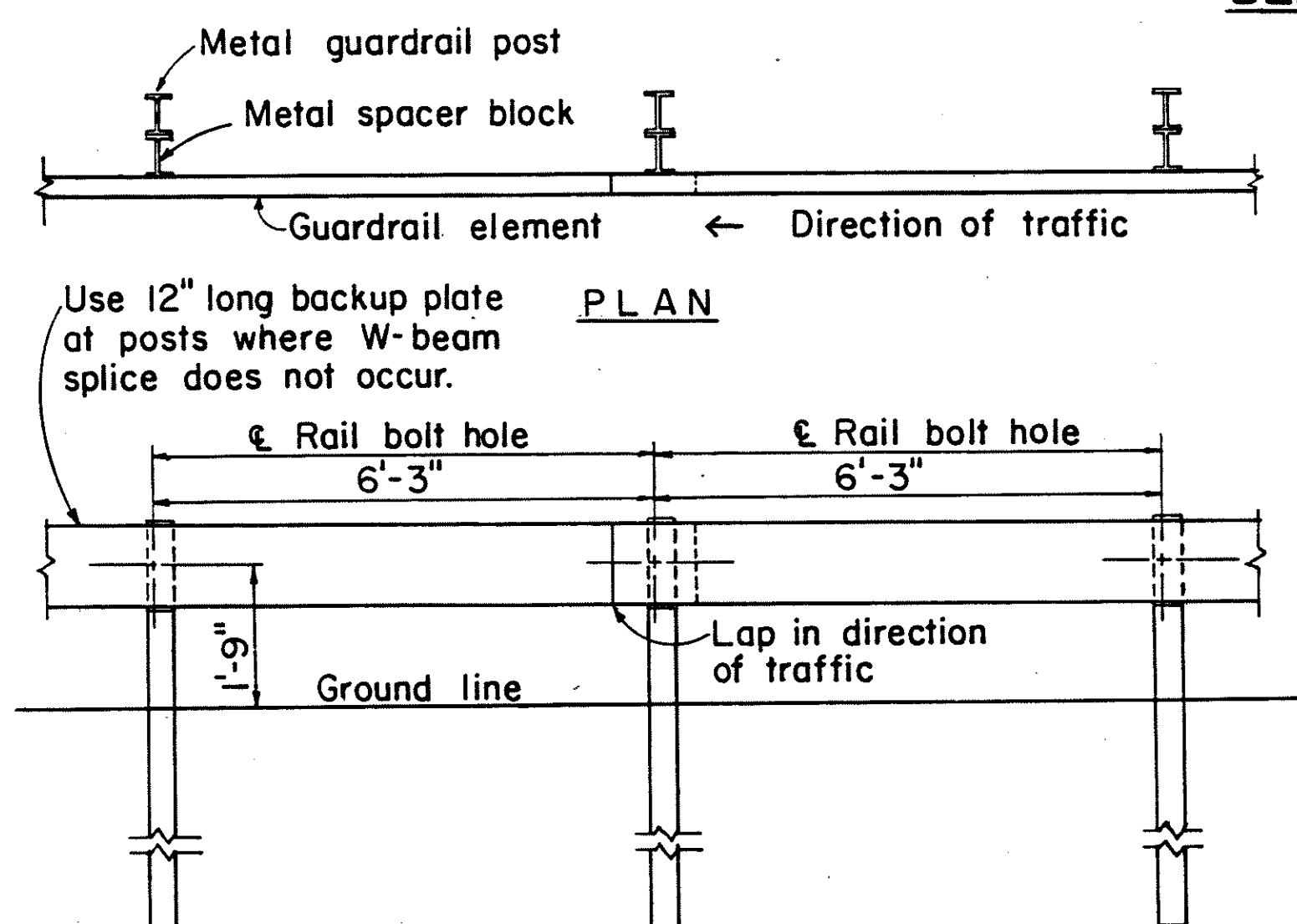
All holes 13/16" ϕ . Bolt hole pattern is symmetrical with respect to the vertical axis of the post.



BLOCK

STRUCTURAL SHAPE POST AND BLOCK

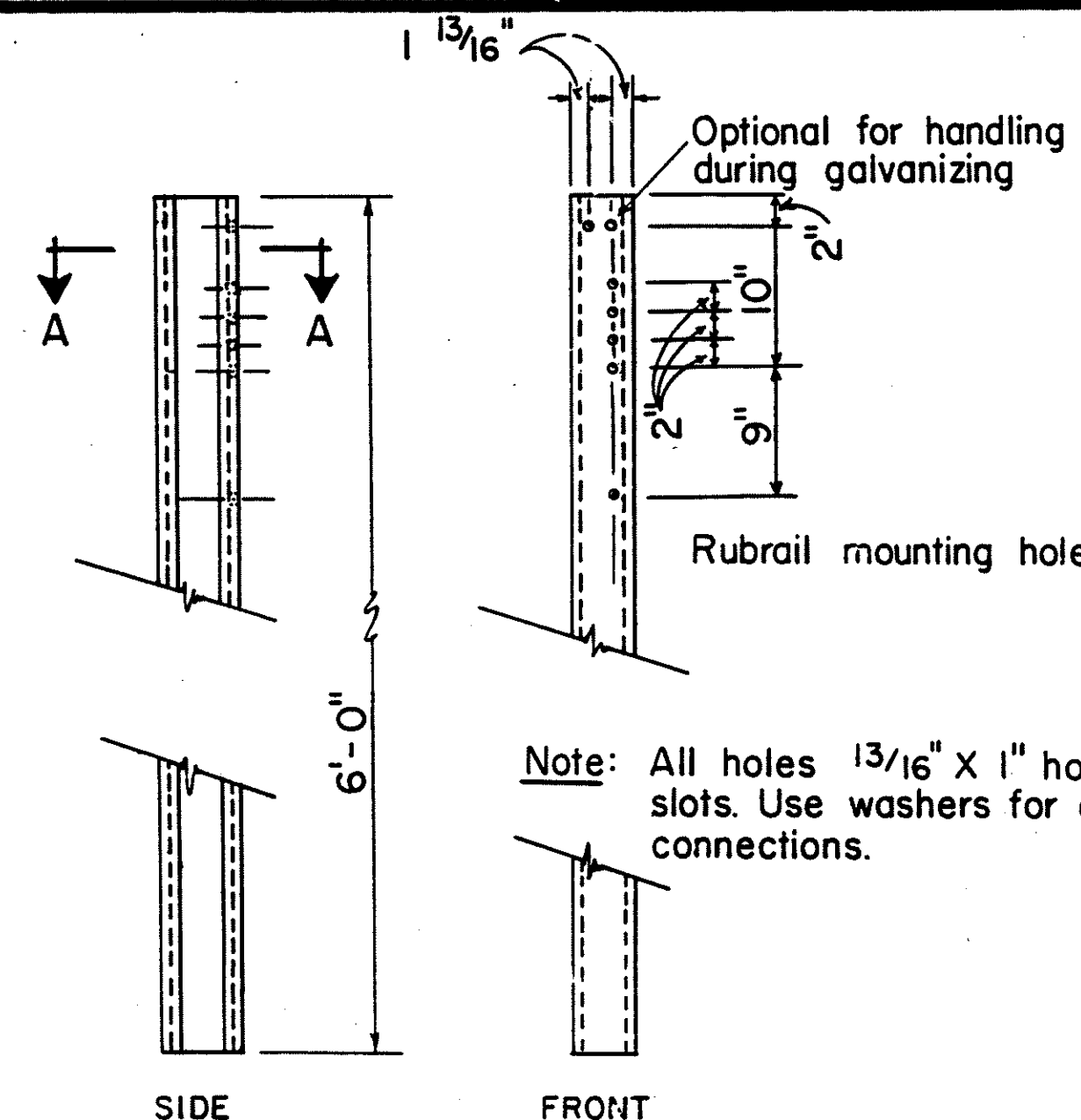
SCALE: 1" = 1'-0"



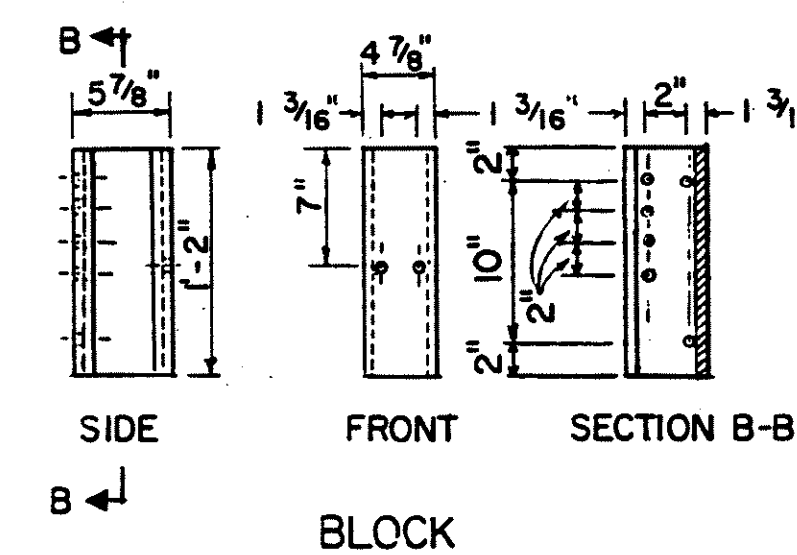
ELEVATION

METAL GUARDRAIL ON METAL POST WITH METAL SPACER BLOCK

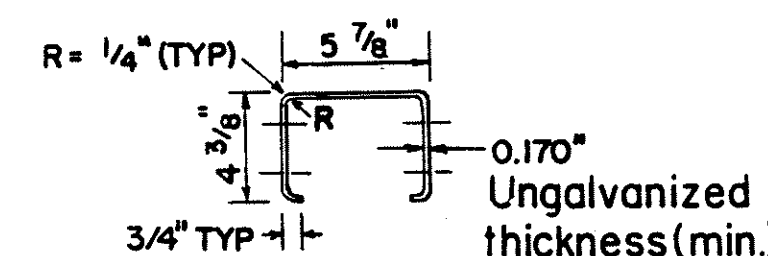
SCALE: 1/2" = 1'-0"



POST



BLOCK

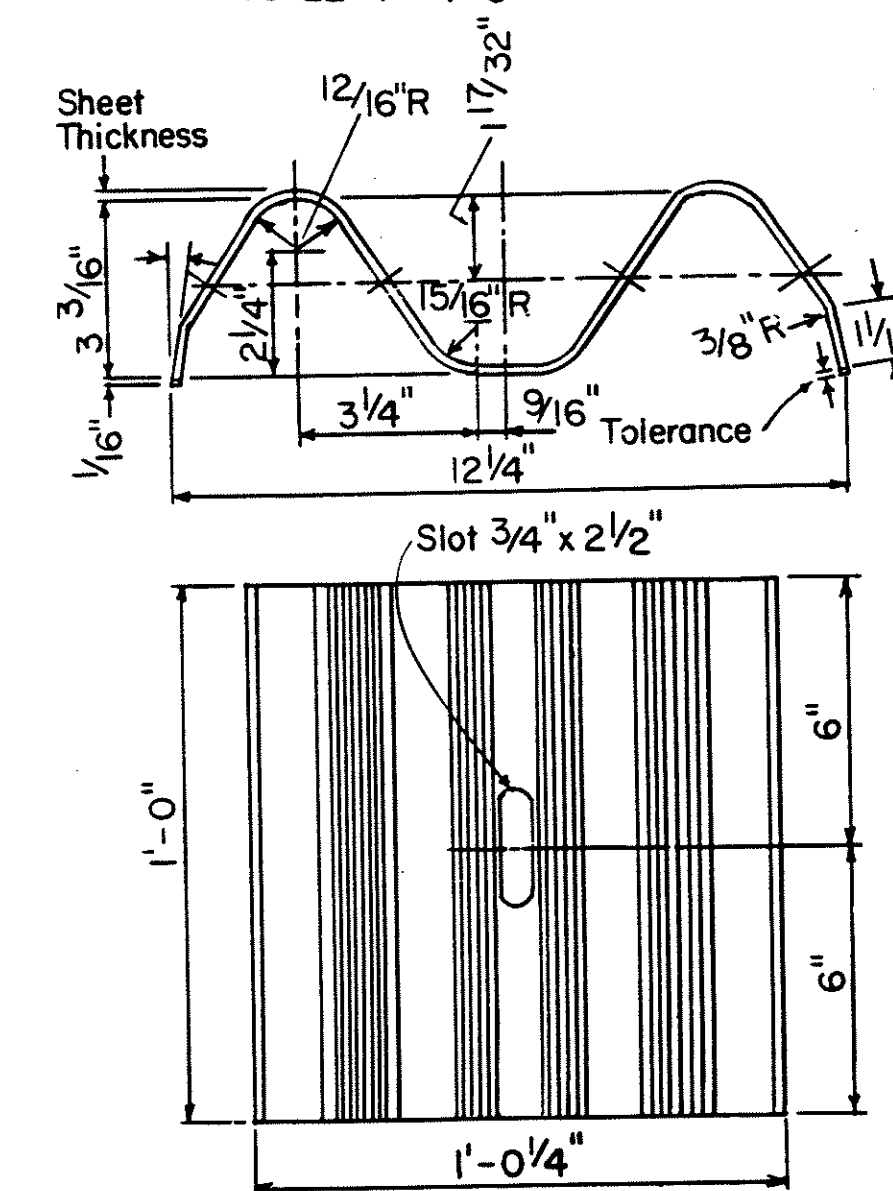


SECTION A-A

N.T.S.

BENT PLATE POST AND BLOCK

SCALE: 1" = 1'-0"



BACK-UP-PLATE

N.T.S.