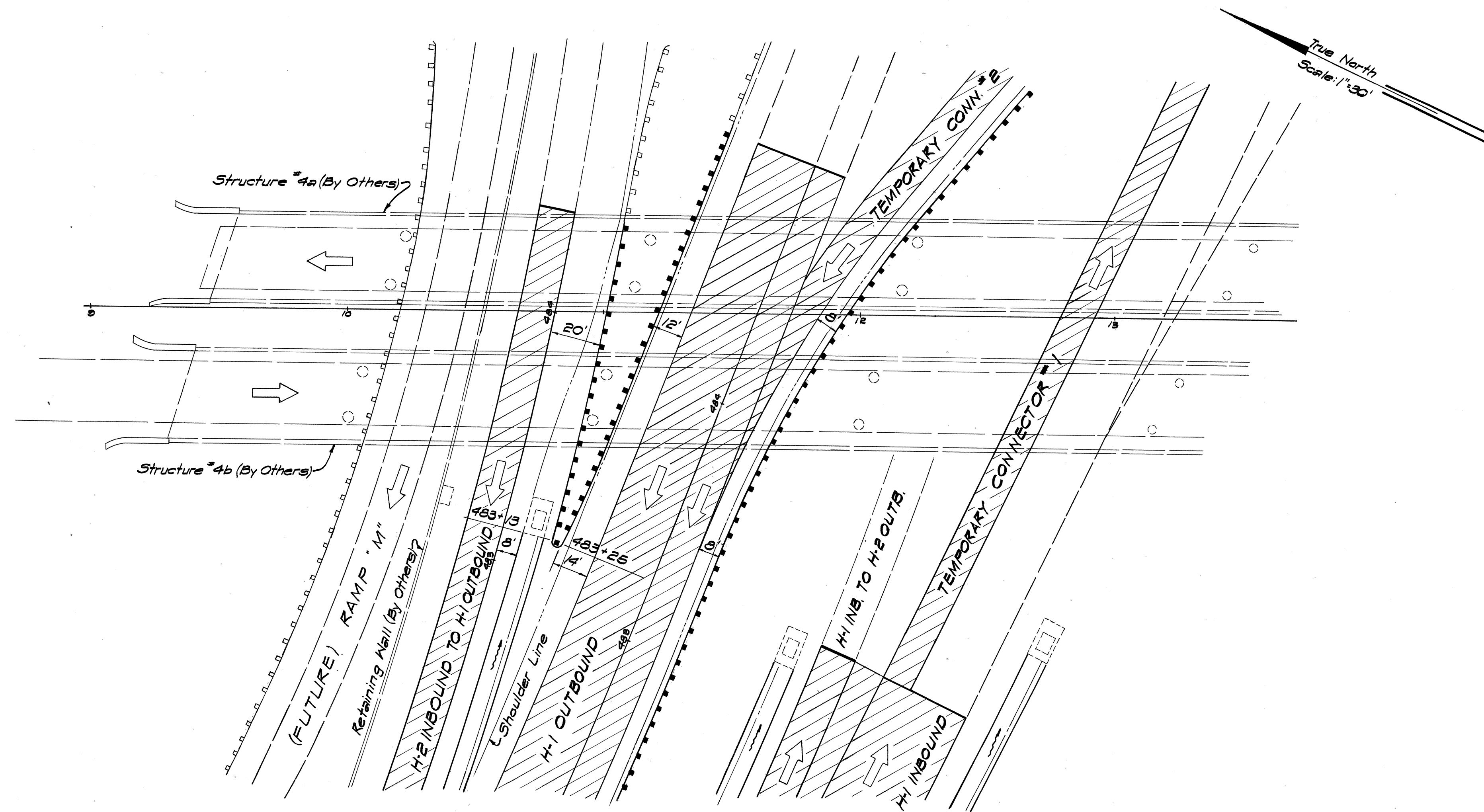
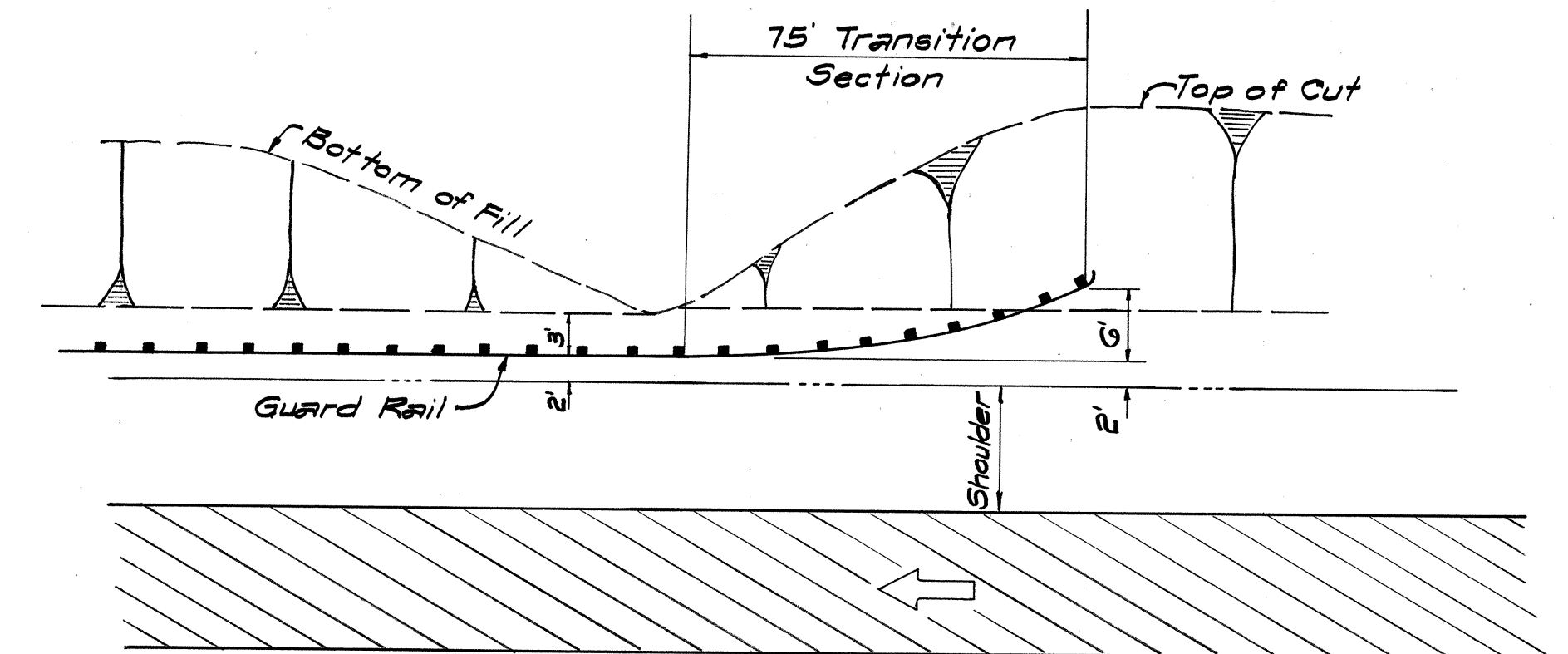


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	141-1(44)8	1967	21	28



GUARD RAIL LAYOUT UNDER STRUCTURES #4a & #4b

Scale: 1"=30'

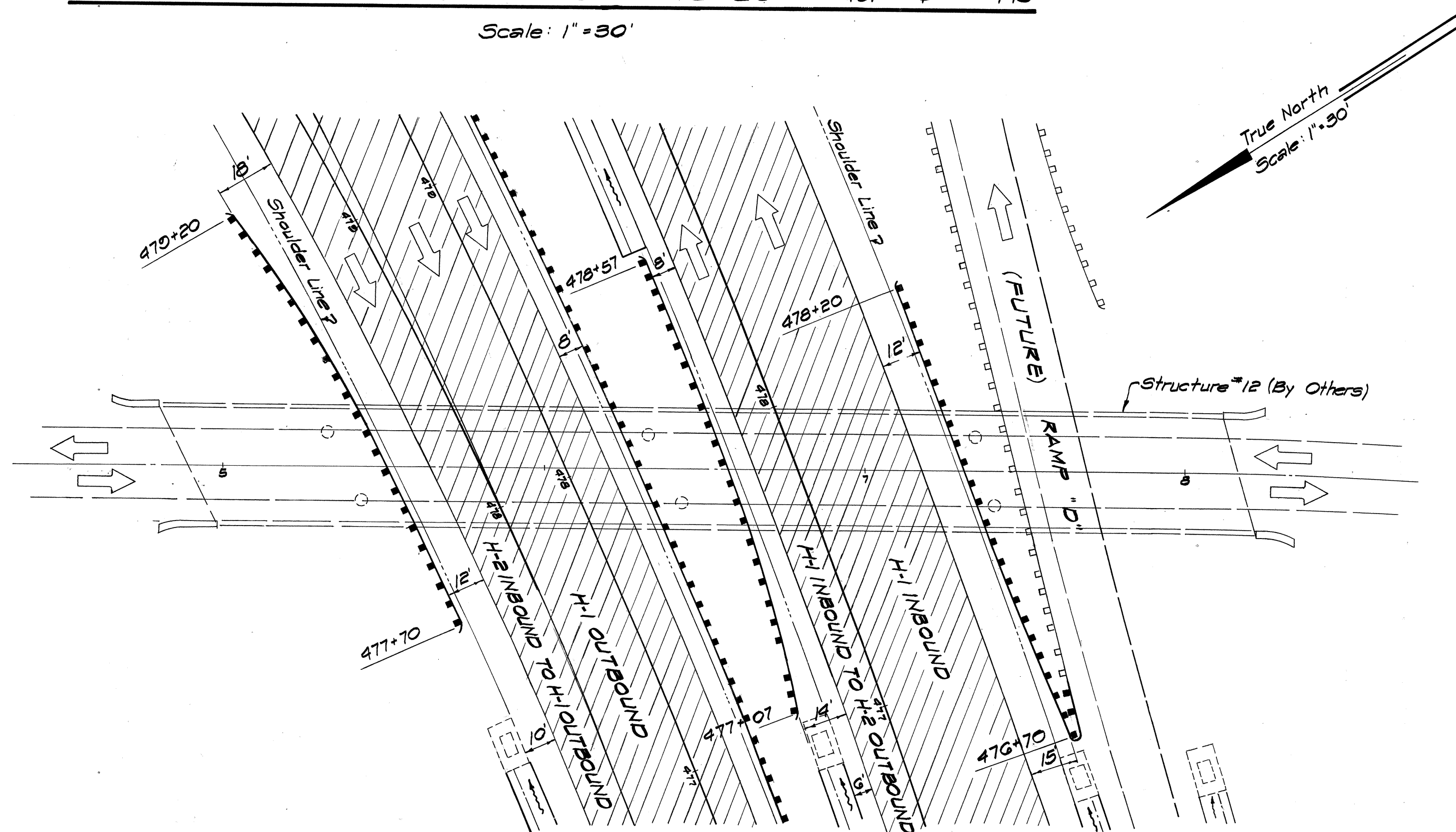


TYPICAL FLARED APPROACH

Not To Scale.

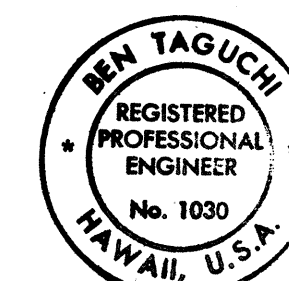
LEGEND:

- Roadway to be paved.
- Guard rail to be installed under this contract.
- Future guard rail.



GUARD RAIL LAYOUT UNDER STRUCTURE #12

Scale: 1"=30'



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARD RAIL LAYOUT

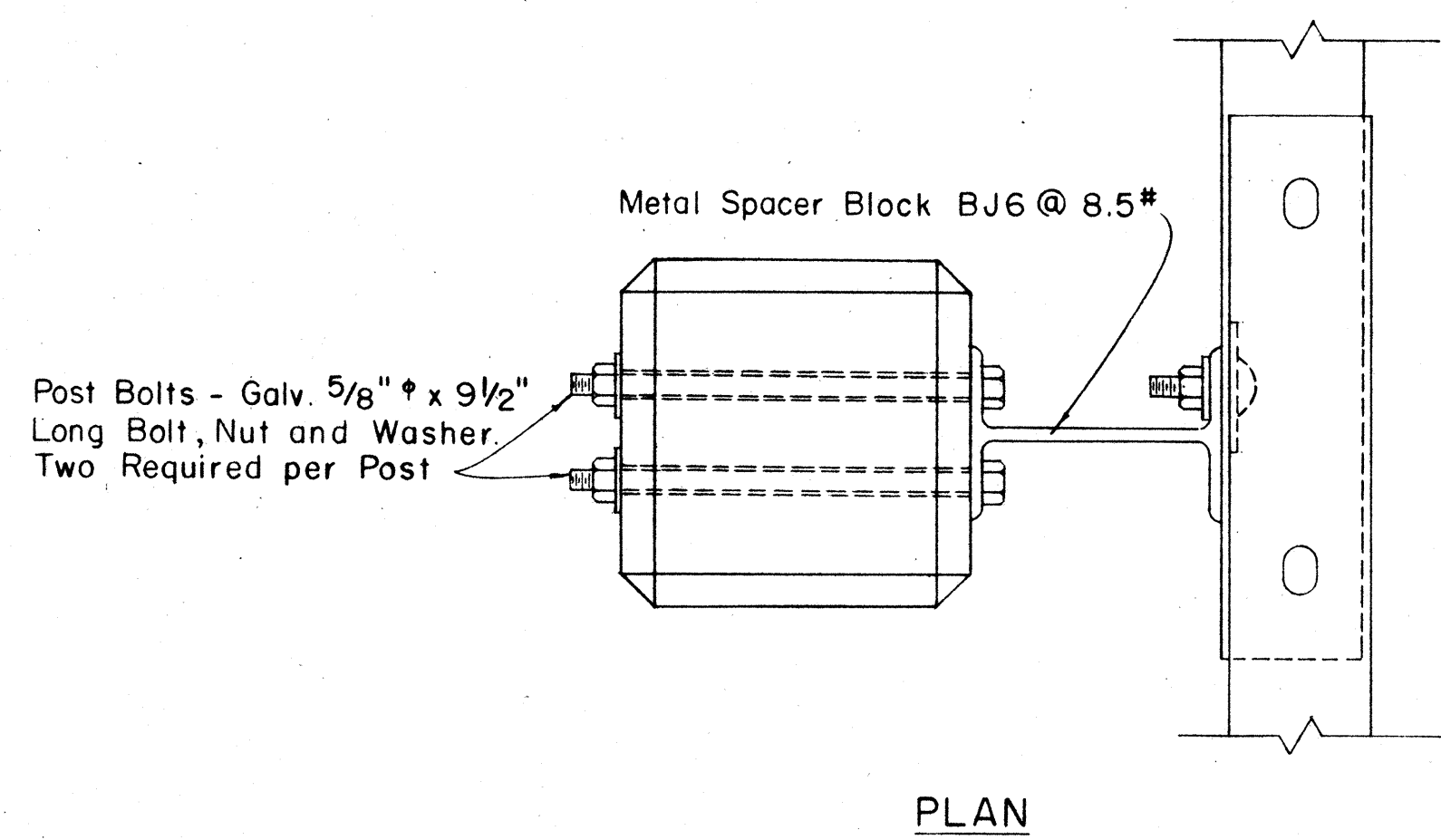
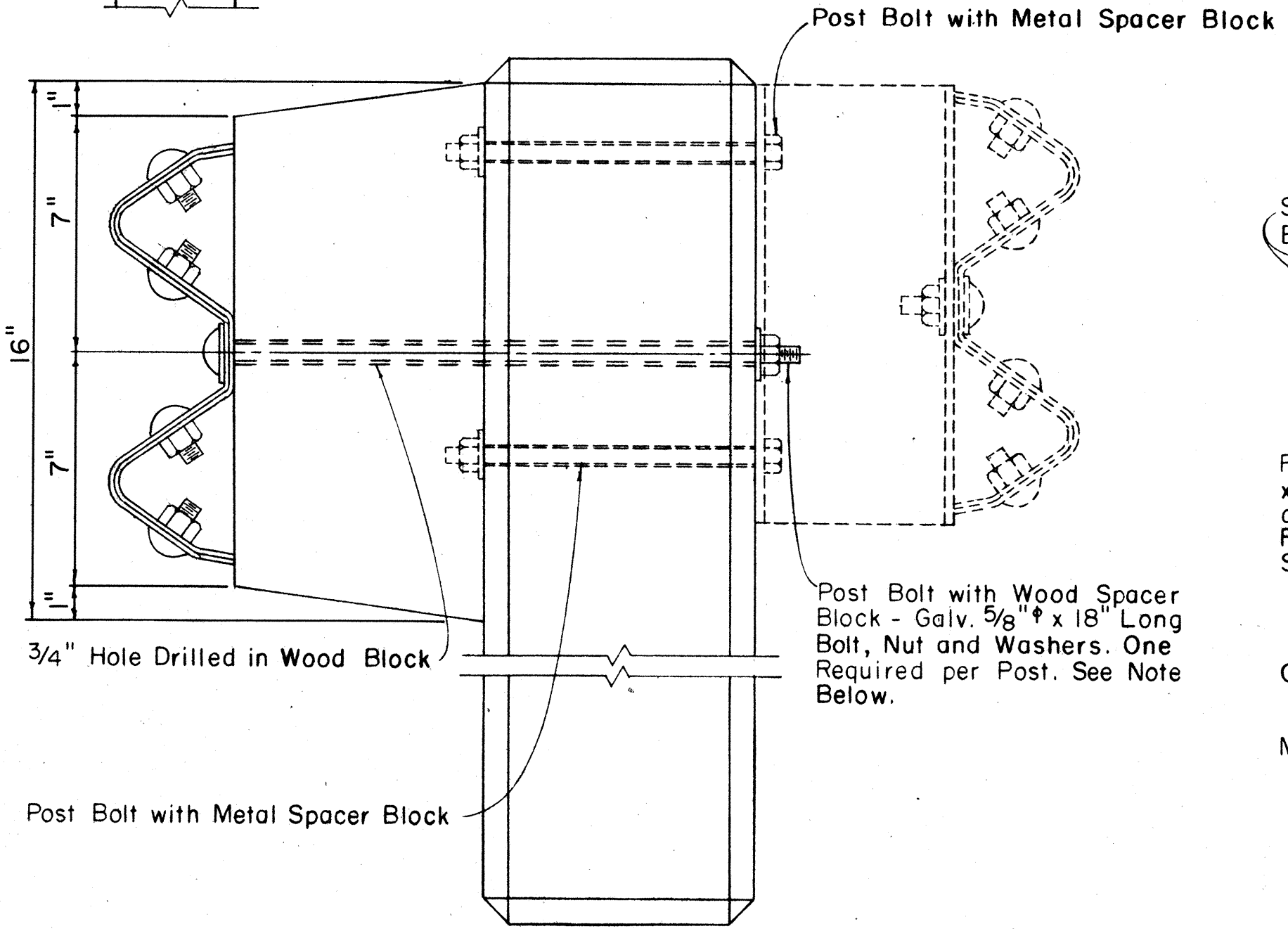
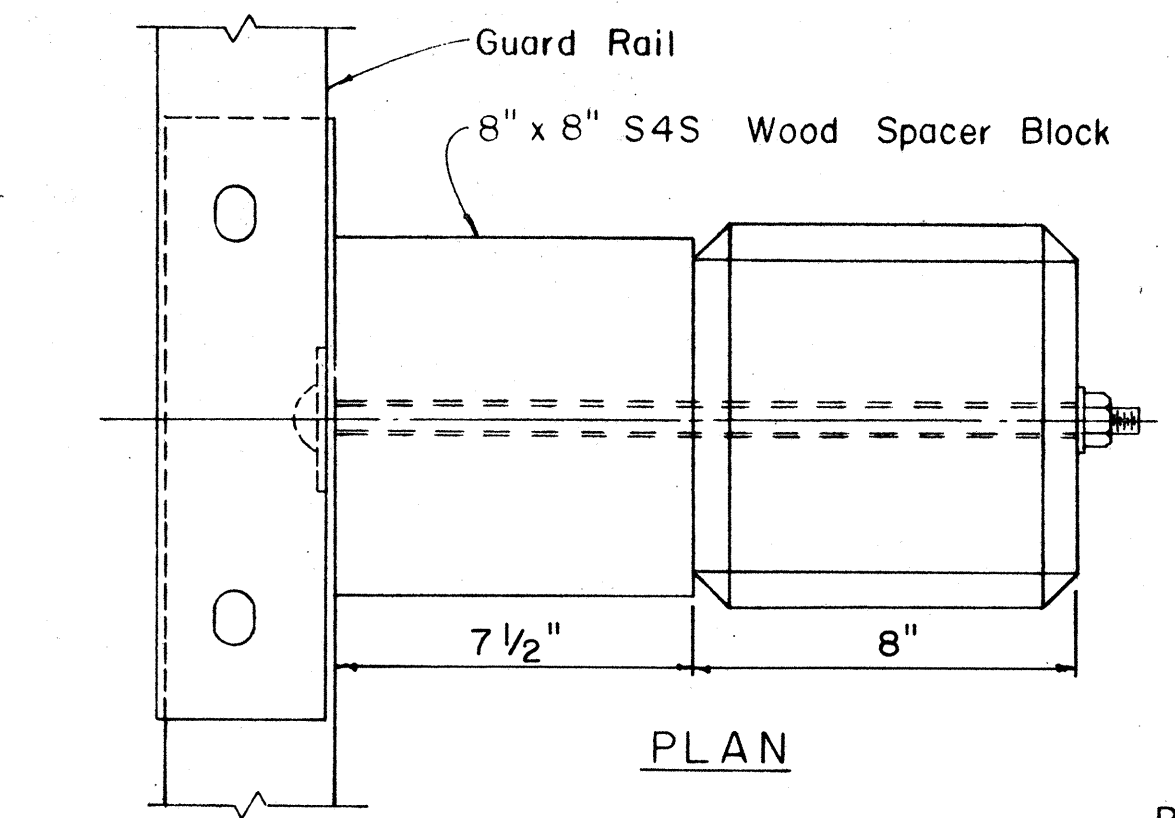
WAIAWA INTERCHANGE
F.A.I. Proj. No. I-HI-1(44)8

Scale: As shown

Date: JAN. 1968

SHEET No. OF SHEETS

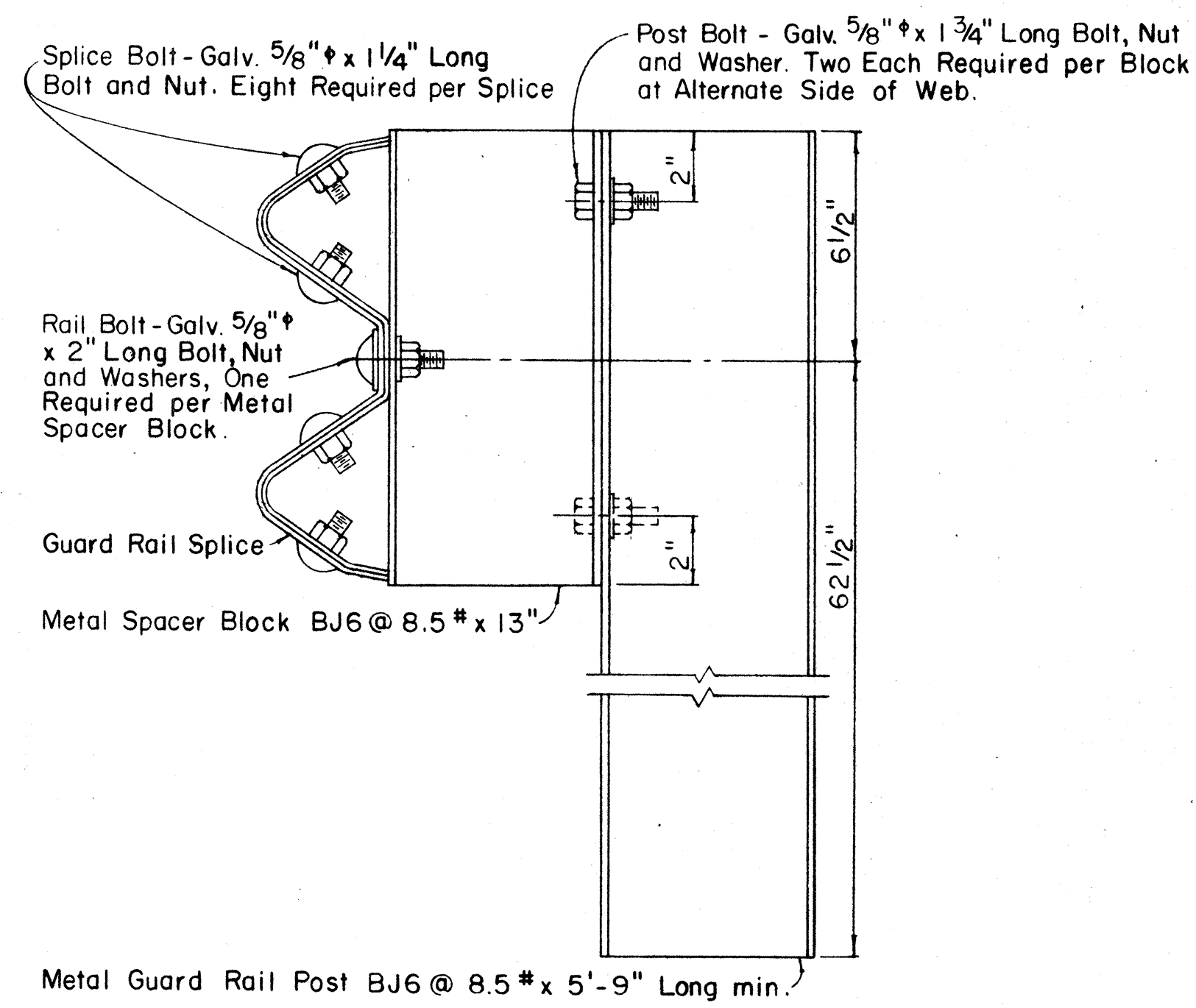
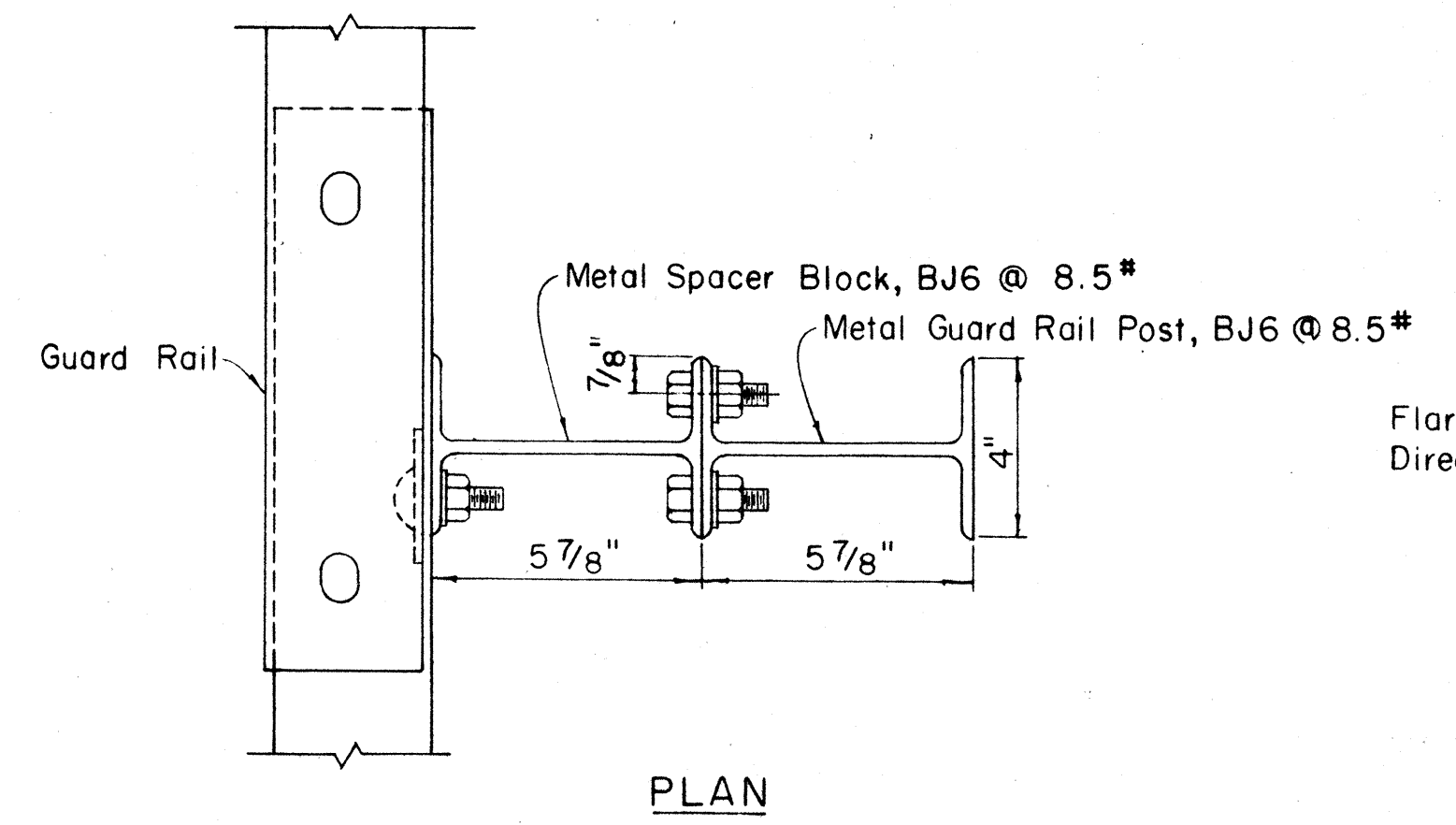
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	CH-148	1967	22	28



SINGLE METAL GUARD RAIL ON PRECAST CONCRETE POST WITH WOOD OR METAL SPACER BLOCK

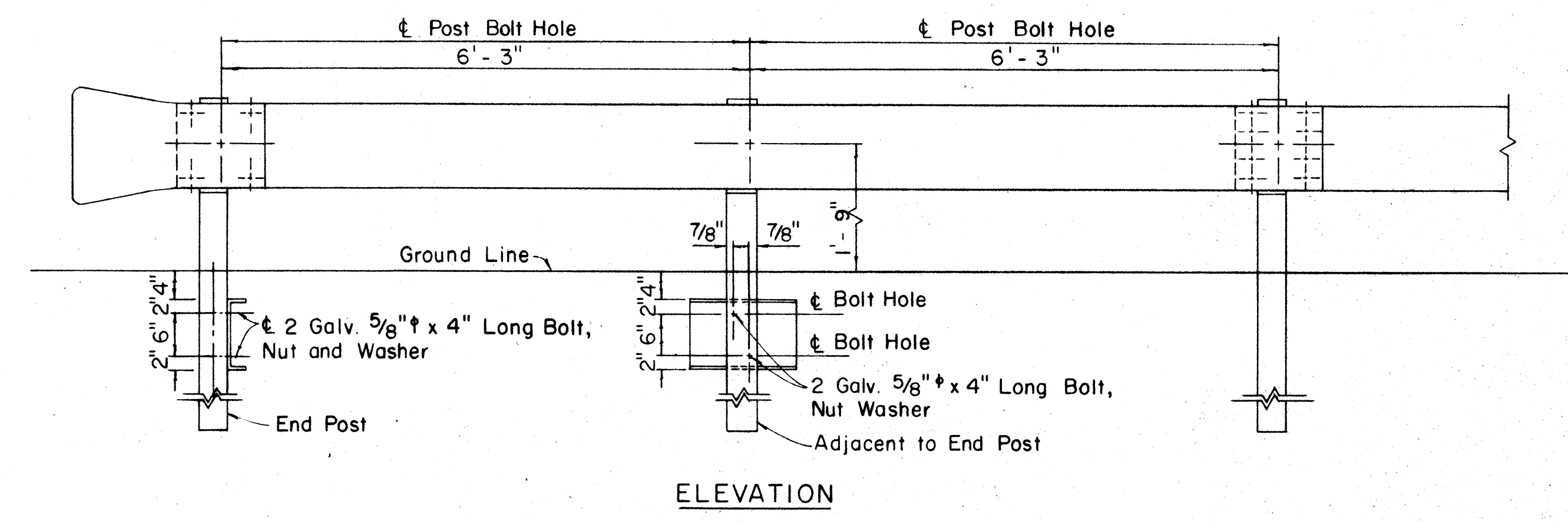
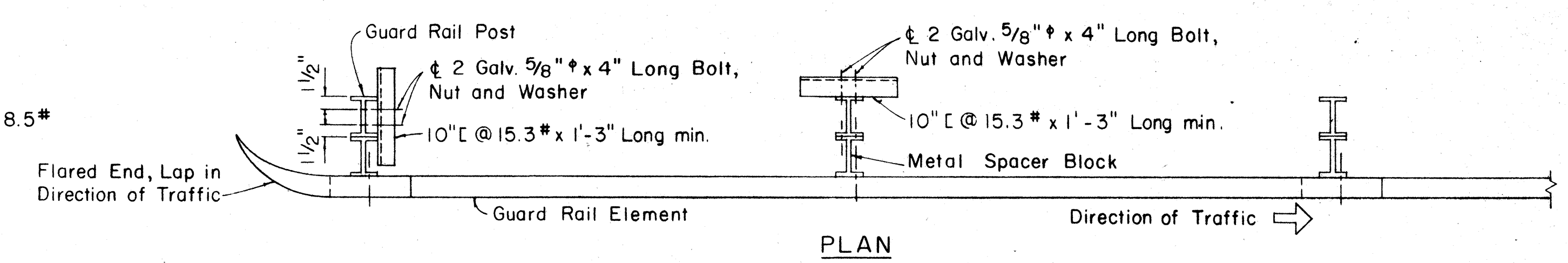
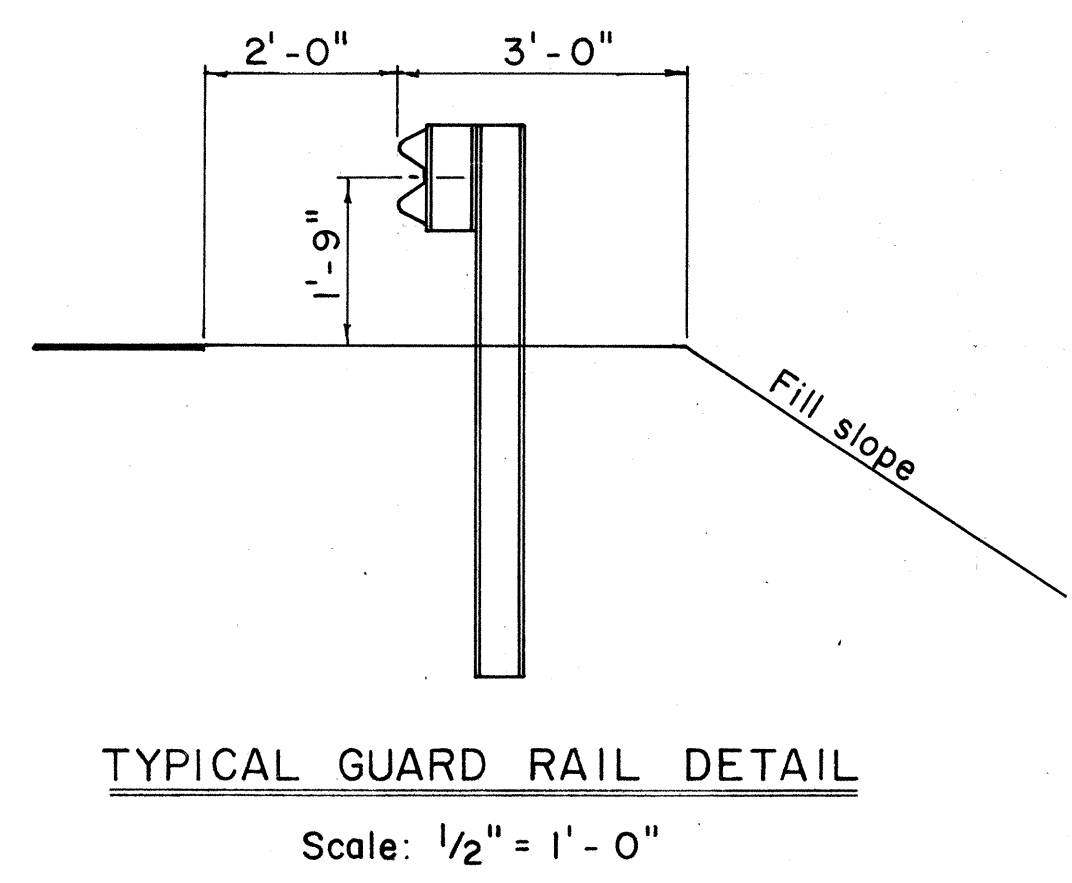
Scale: 3" = 1' - 0"

NOTE:
Single Guard Rails Shown. For Double Guard Rails Additional Spacer Blocks and Rail Elements Required on Opposite Side of Posts. See Bolt Schedule for Required Bolt Lengths.



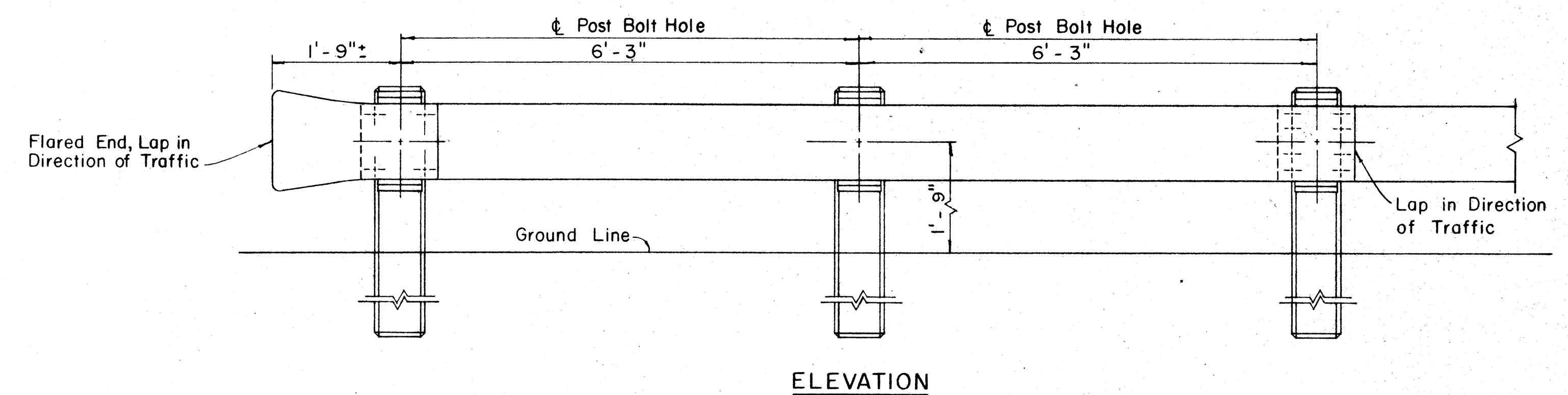
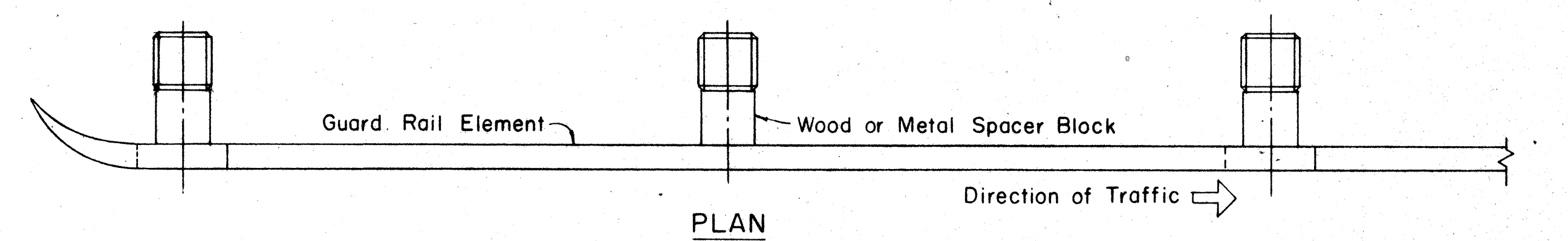
SINGLE METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

Scale: 3" = 1' - 0"



METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

Scale: 3/4" = 1' - 0"



METAL GUARD RAIL ON CONCRETE POST WITH WOOD OR METAL SPACER BLOCK

Scale: 3/4" = 1' - 0"

REVISED: October 27, 1967
REVISED: August 10, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

METAL GUARD RAIL

Scale: as noted

SHEET No. OF SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

