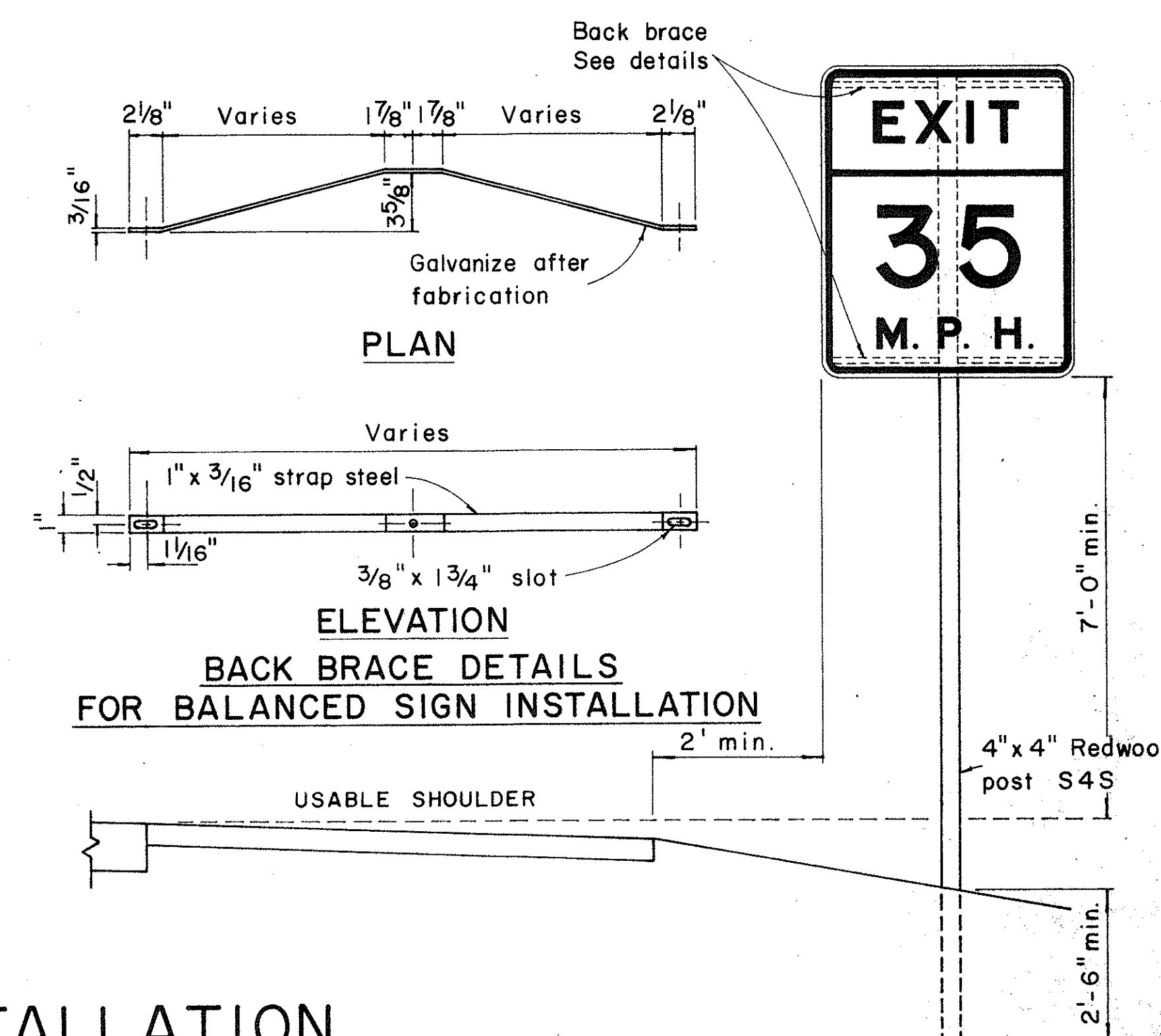
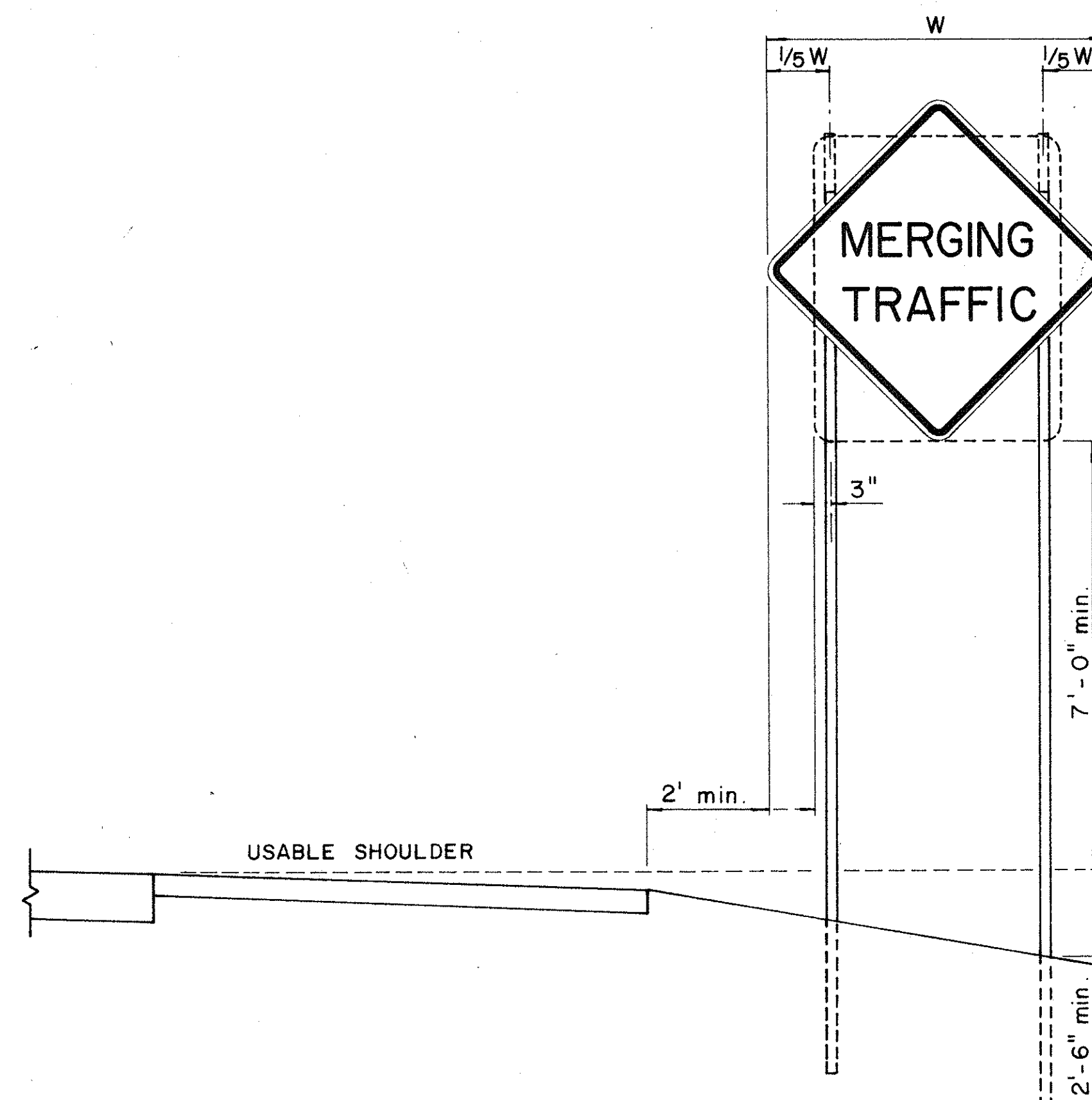
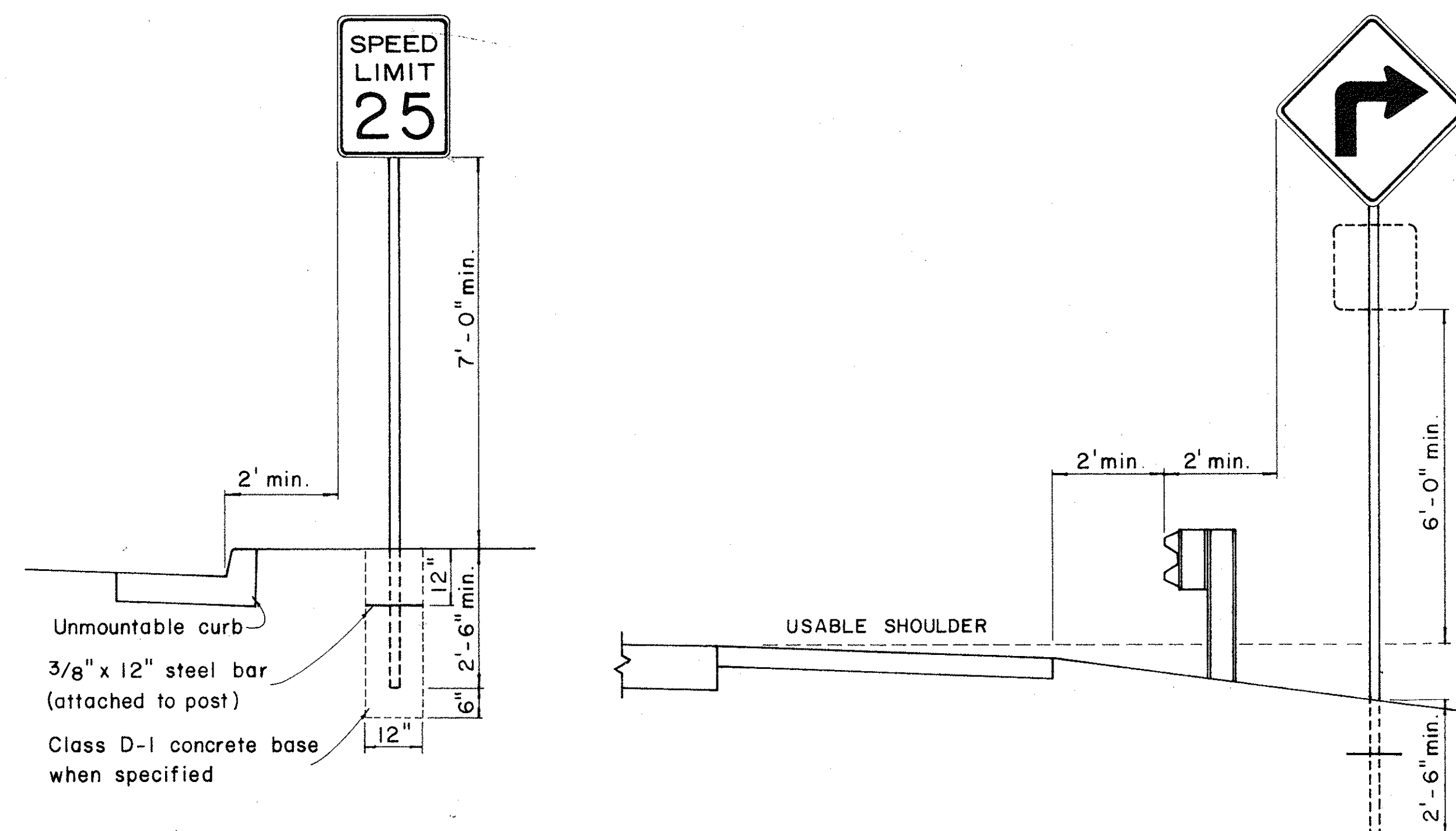
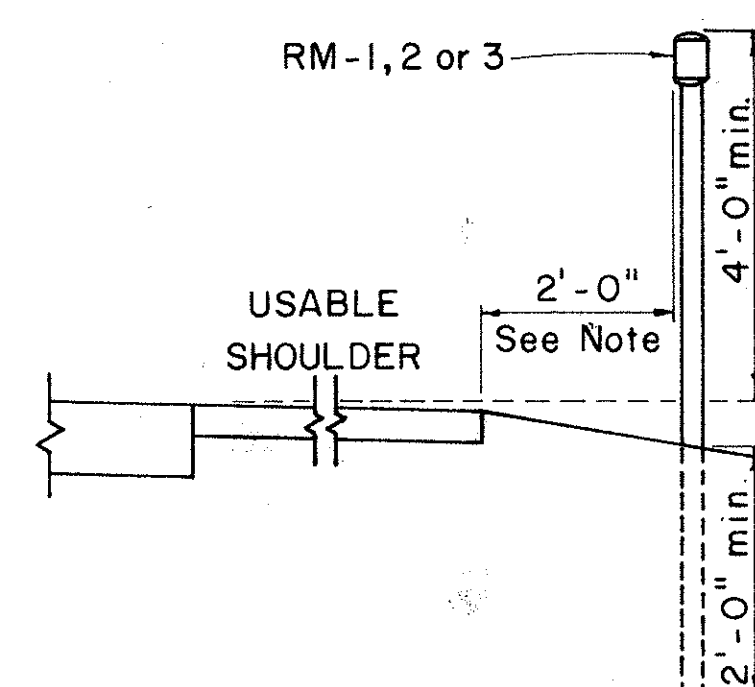


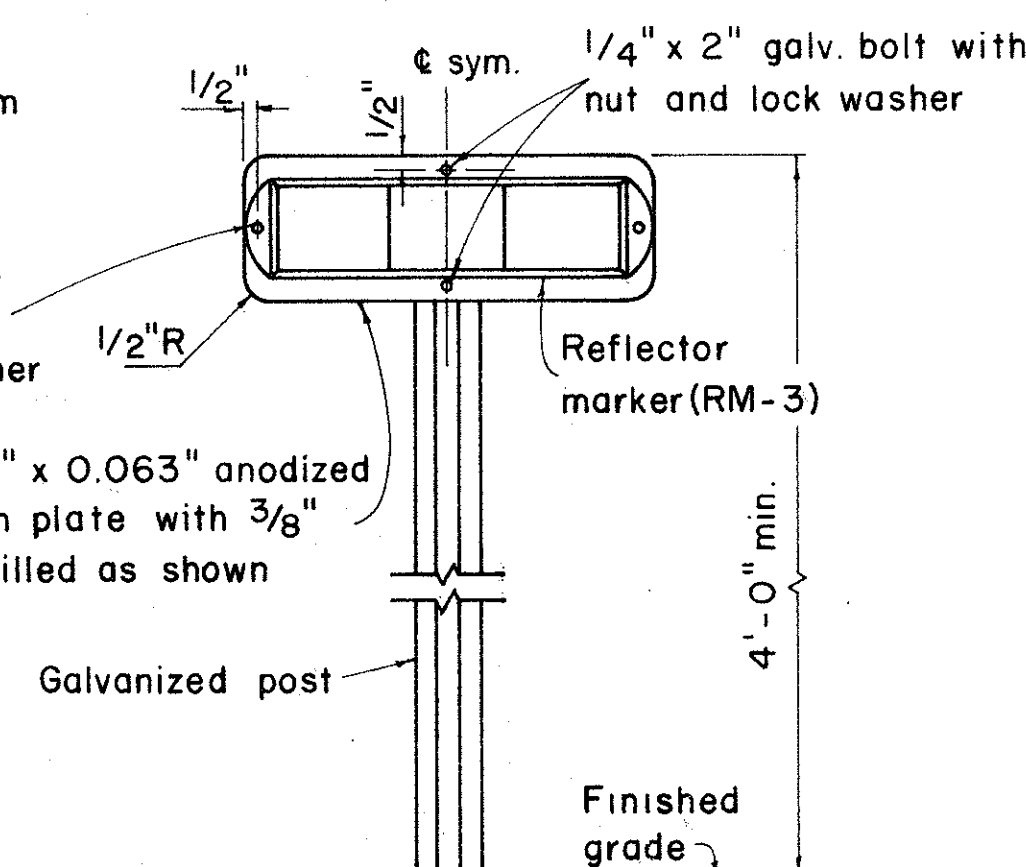
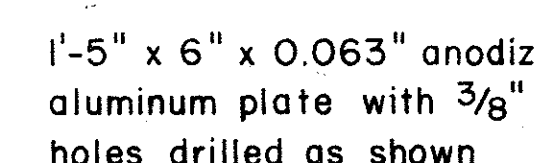
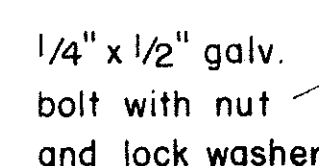
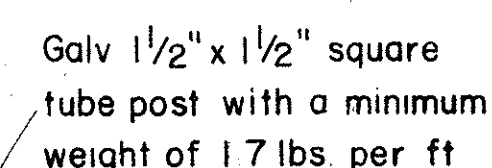
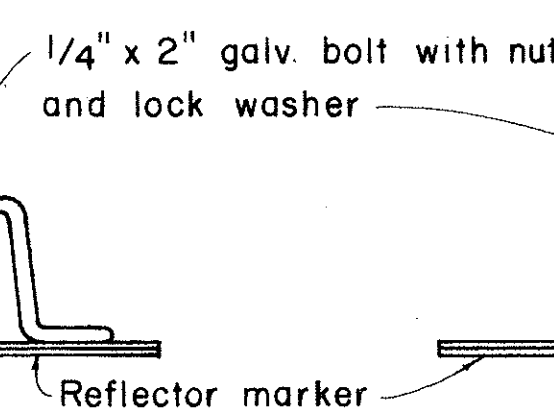
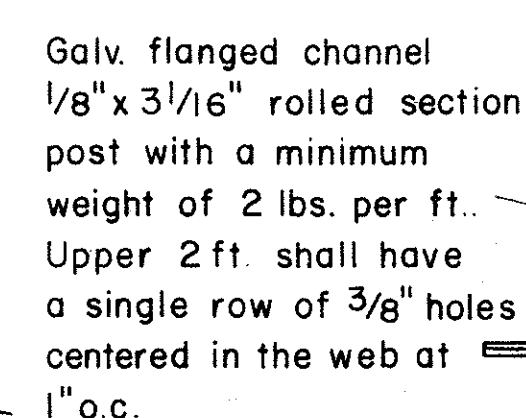
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(74):10	1960	15	20



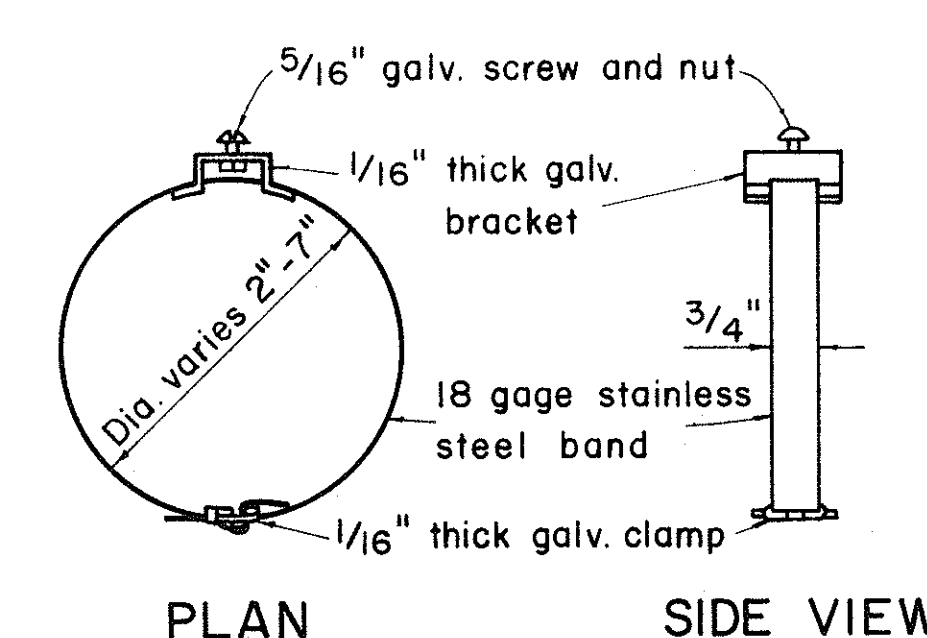
HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION



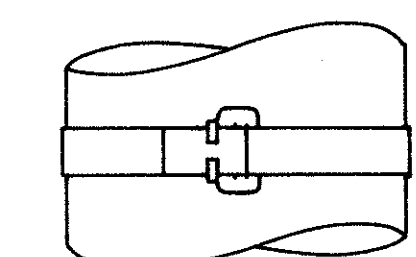
ROAD DELINEATOR



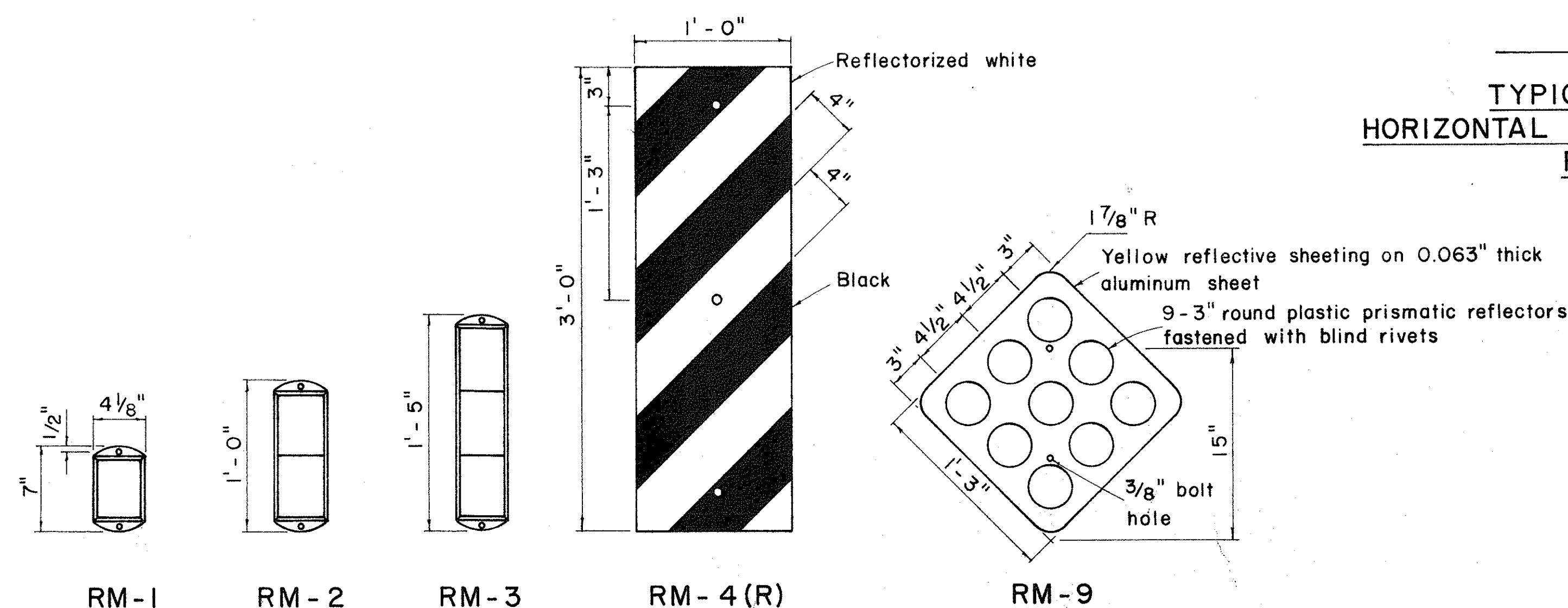
TYPICAL DETAIL
HORIZONTAL REFLECTOR MARKER
RM - 3H



FRONT VIEW



TYPICAL BAND BRACKET FOR MOUNTING TRAFFIC SIGNS



REFLECTOR MARKERS

- GENERAL NOTES:

1. Sign posts shall be 2" galv. standard pipe or 2" x 2" galv. sq. tube post.
2. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 2" galv. standard pipe or two 2" x 2" galv. sq. tube post or 4" x 4" redwood post S4S.
3. Signs shall be attached to post with 5/16" galv. bolts with nuts and 7/8" x 0.06 stainless steel washers with neoprene rubber gasket.
4. Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
5. Reflector markers RM-1, 2, 3 shall be glass sphere reflector markers with 4" x 5" reflector units (as shown) or plastic prismatic reflector markers with 3" diameter reflector units.
6. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
7. (R) or (L) indicates right or left and shall be as shown on the plans.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS SIGN DETAILS

Not to scale

March, 1968

SHEET No. 1 OF 6 SHEETS DT 100

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(74)-10	1969	16	20



W7-2 48"x48"



W8-7 30"x30"



W14-1 30"x30"



W20-1a 48"x48"



W20-2d 48"x48"



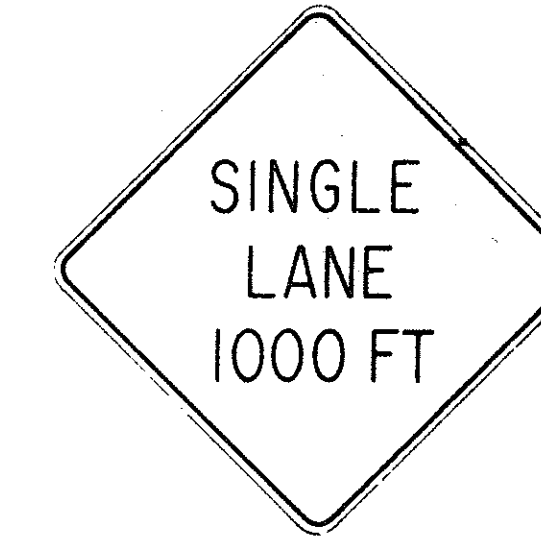
W20-3b 48"x48"



W20-4d 48"x48"



W20-5d(L) 48"x48"



W20-6b 48"x48"



W20-7c 48"x48"



W21-1 30"x30"



W21-2 24"x24"



W21-3 36"x36"



W21-4 30"x30"



W21-5 30"x30"



W21-6 30"x30"



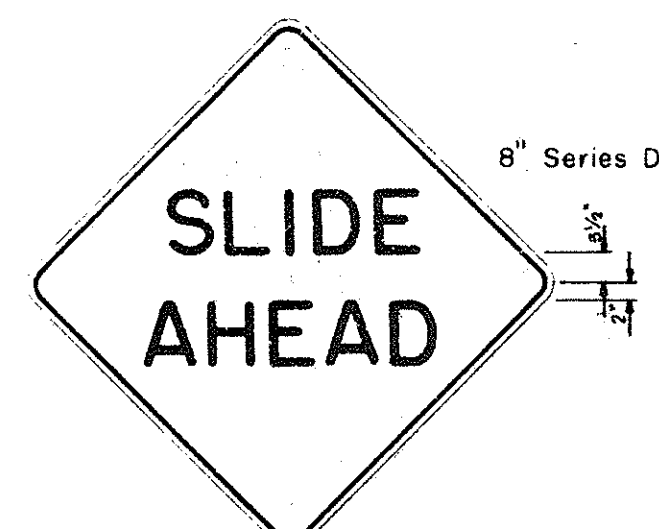
W22-1 30"x30"



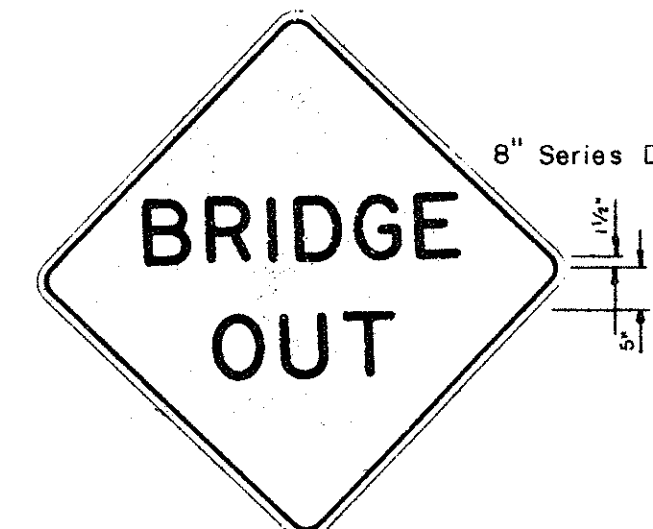
W22-2 30"x30"



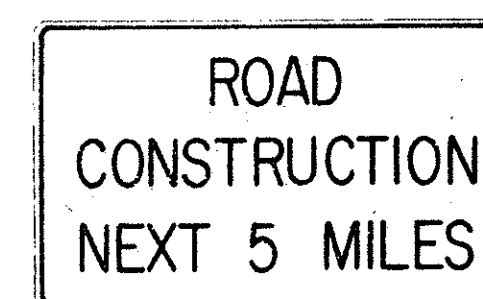
W22-3 30"x30"



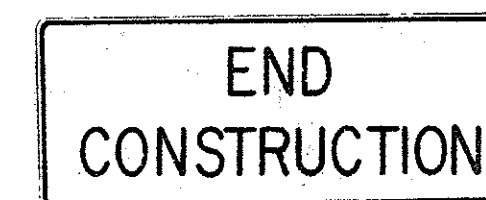
W22-4 48"x48"



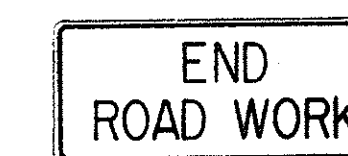
W22-5 48"x48"



G20-1(5) 60"x36"



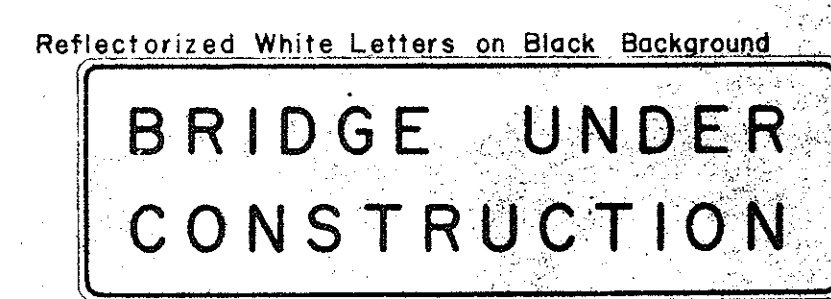
G20-2 60"x24"



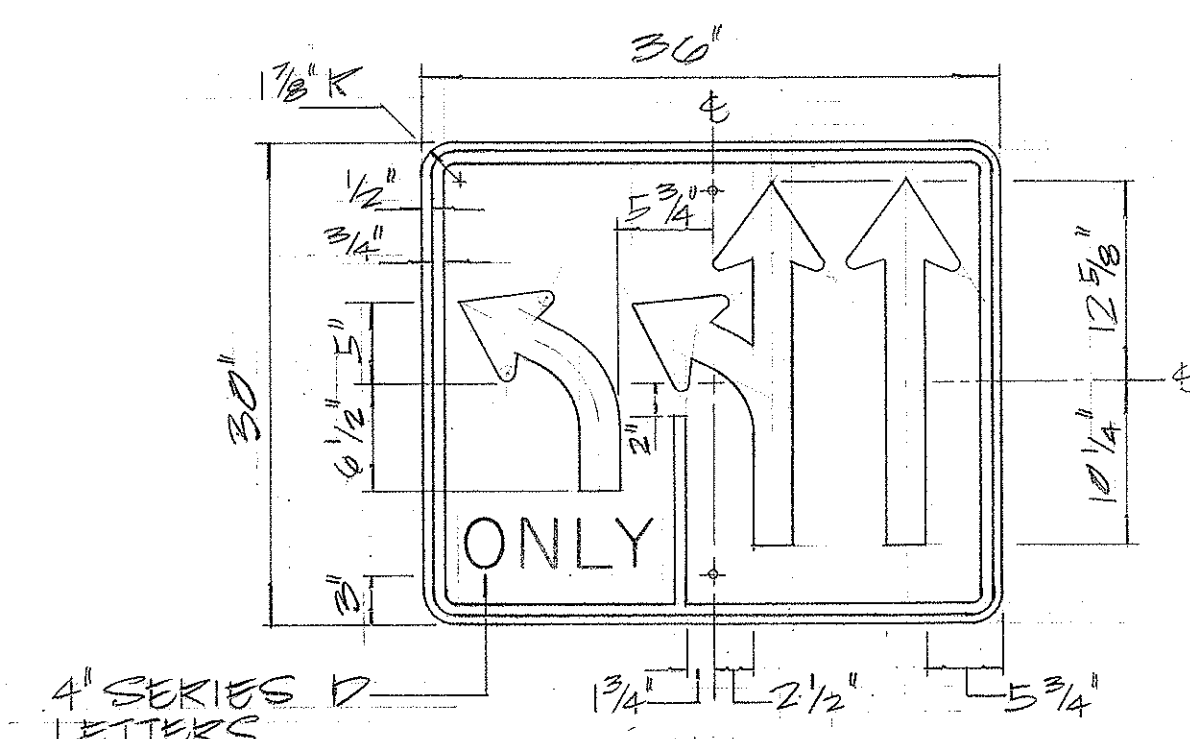
G20-3 42"x18"



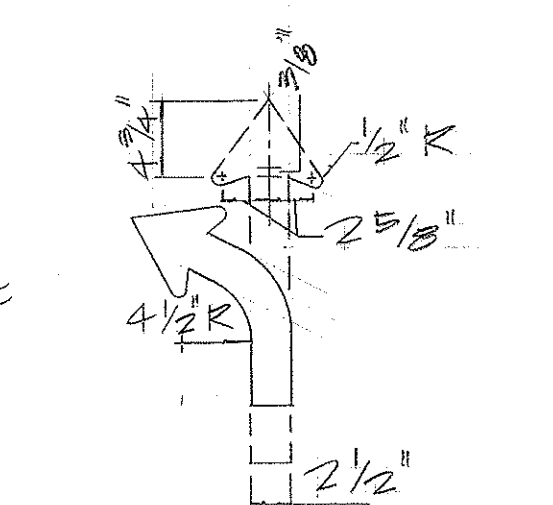
M5-7(L) 48"x18"



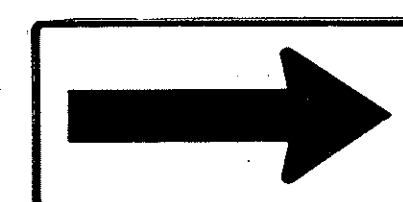
CW-1 96"x30"



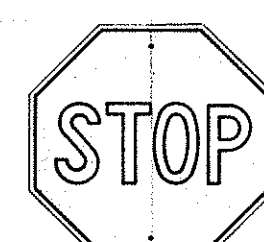
R3-17 36"x30"



ARROW DETAIL FOR SIGN R3-17



W1-6 48"x24"



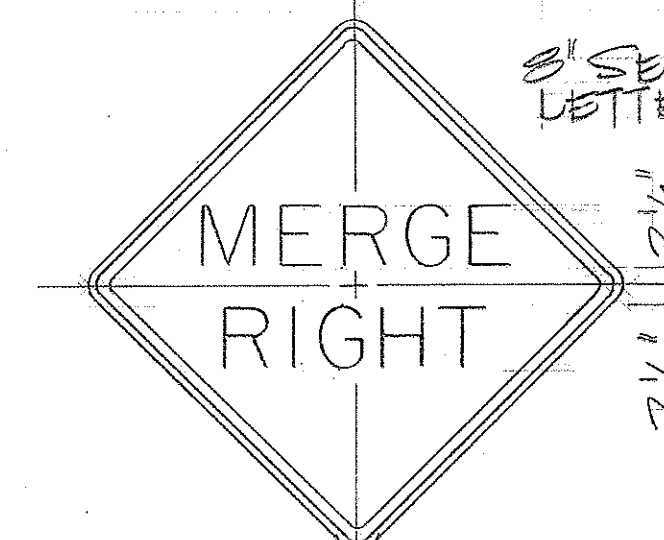
R1-1 30"x30"



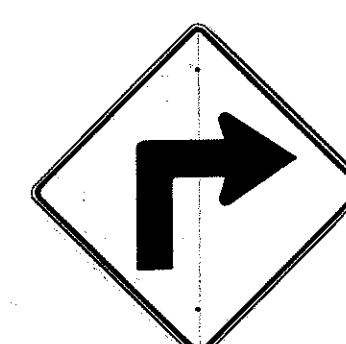
R6-1(R) 36"x12"



R6-5 24"x30"



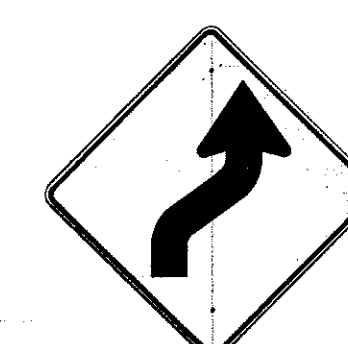
W4-4(R) 48"x48"



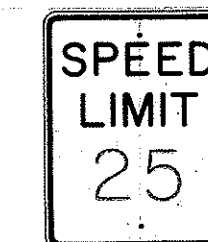
W1-1(R) 30"x30"



W13-1(25)-E 24"x24"



W1-4(R) 30"x30"

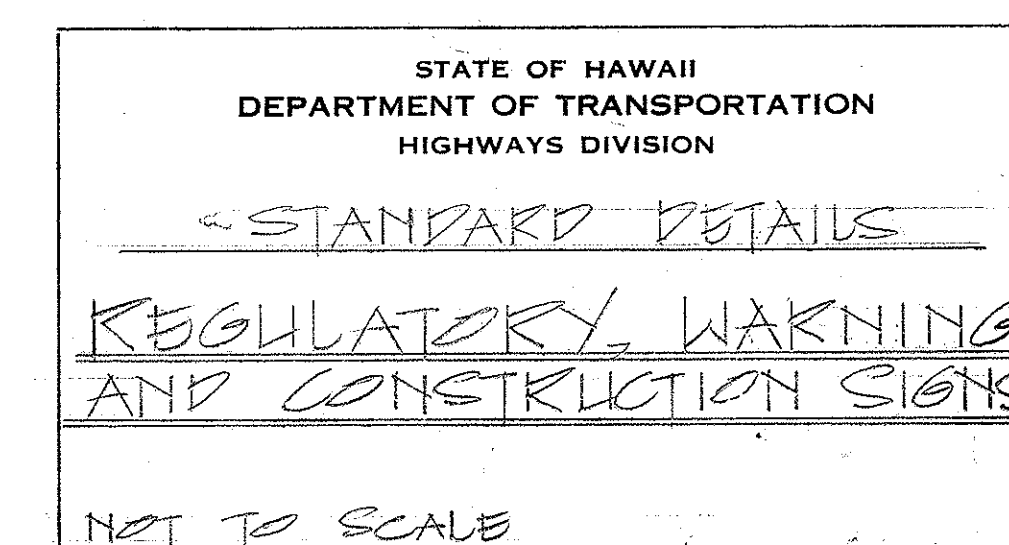


R2-1(25) 24"x30"



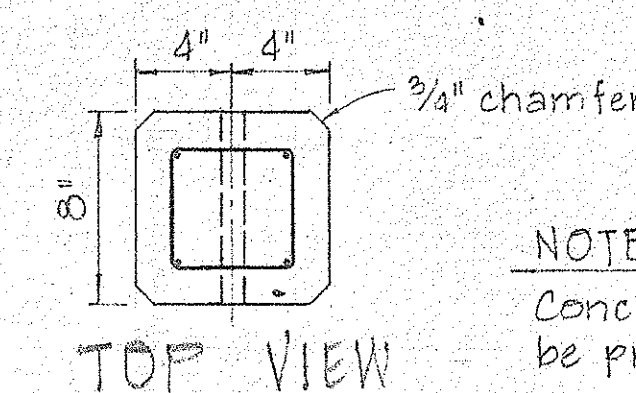
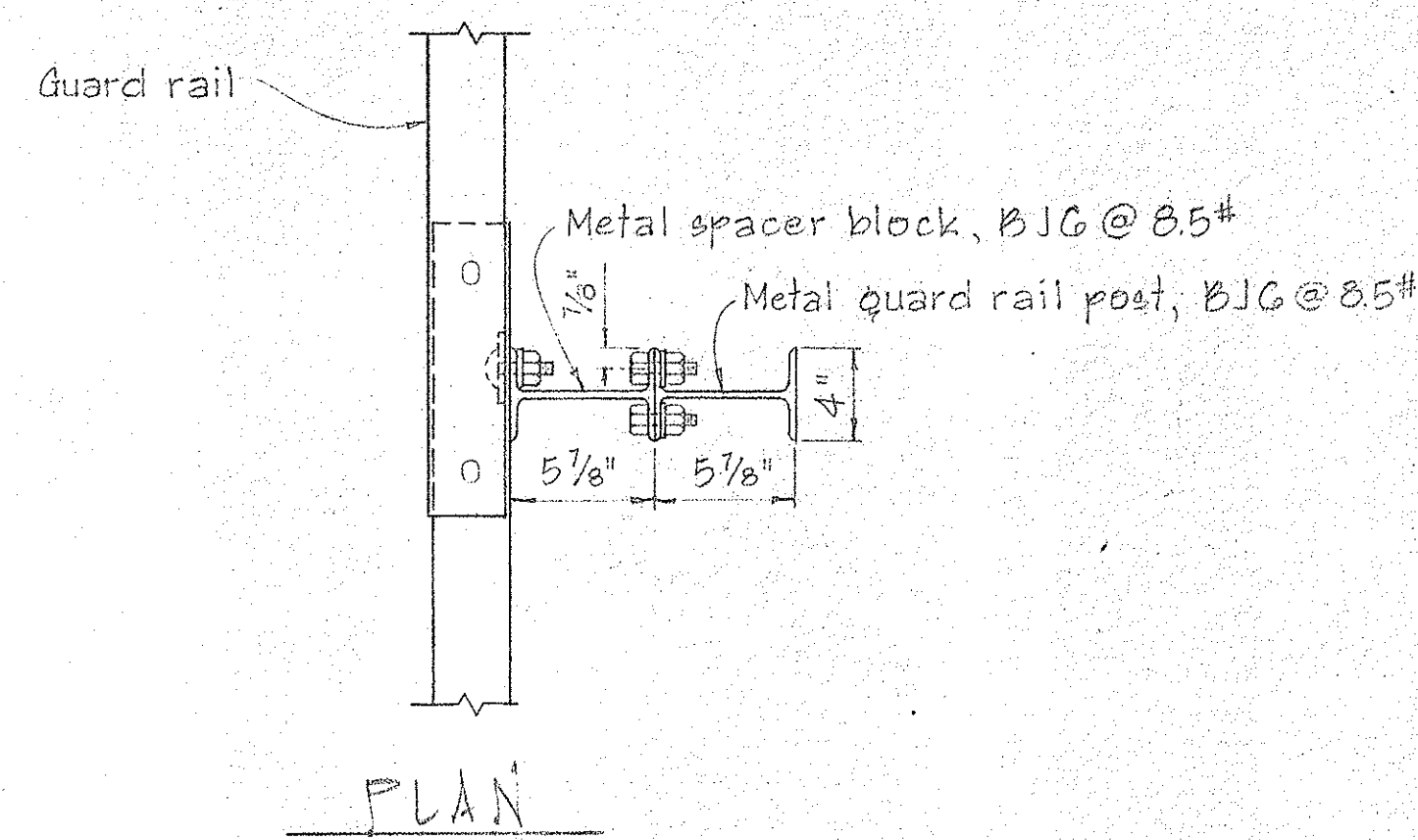
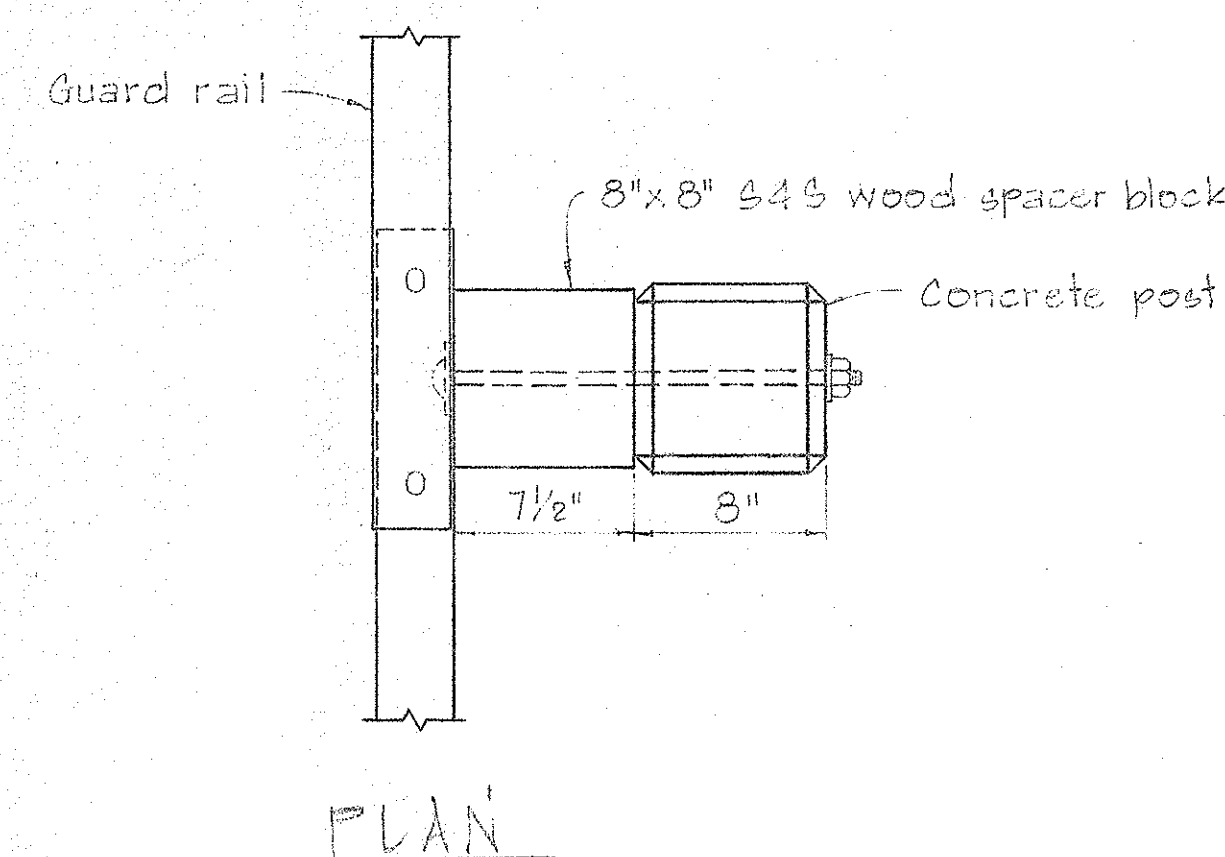
R2-5 24"x30"

- NOTE:
- The shape, color, dimensions, symbols, wording, lettering and reflectorization of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961 unless otherwise specified.
 - All signs shall be reflectorized unless otherwise specified.
 - All signs shall have 3/8" bolt holes drilled at appropriate locations unless otherwise noted.
 - For W20 series signs, suffixes a,b,c and d are as follows: a 1500 FT, b 1000 FT, c 500 FT and d AHEAD.
 - (R) or (L) indicates right or left and shall be as shown on the plans.
 - Number in () indicates miles and shall be as shown on the plans.

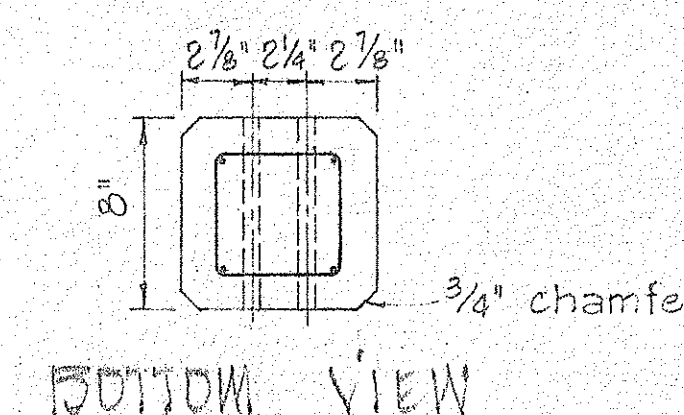
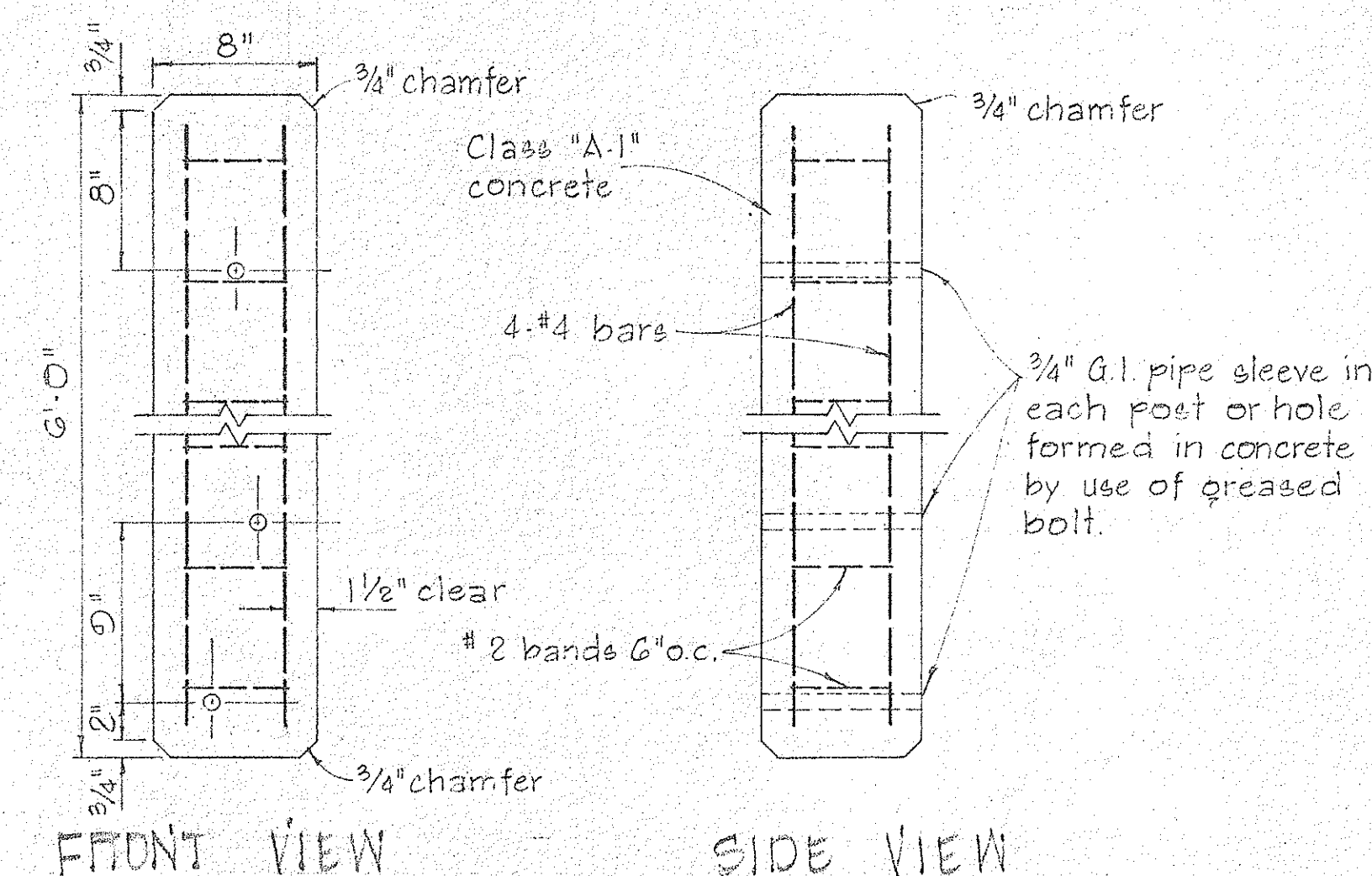


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-44-14-10	1969	17	20

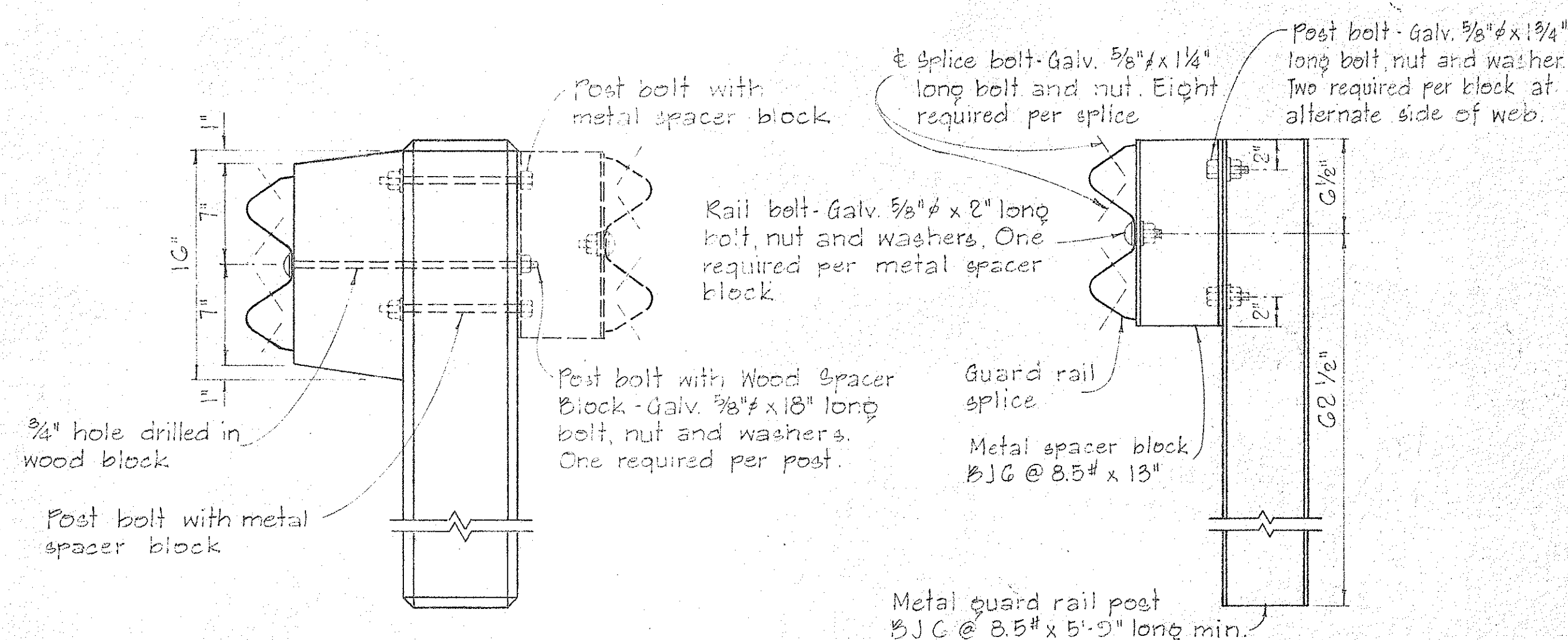
REVISED: 12-11-68
REVISED: 2-26-69



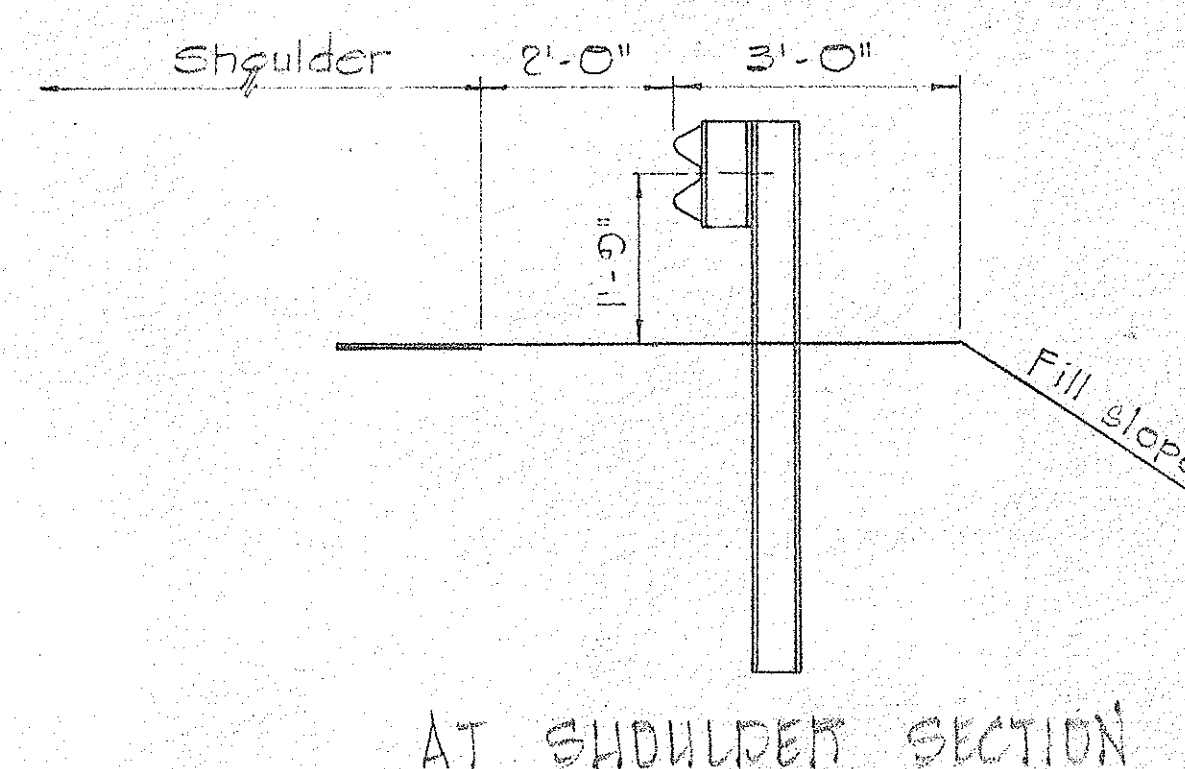
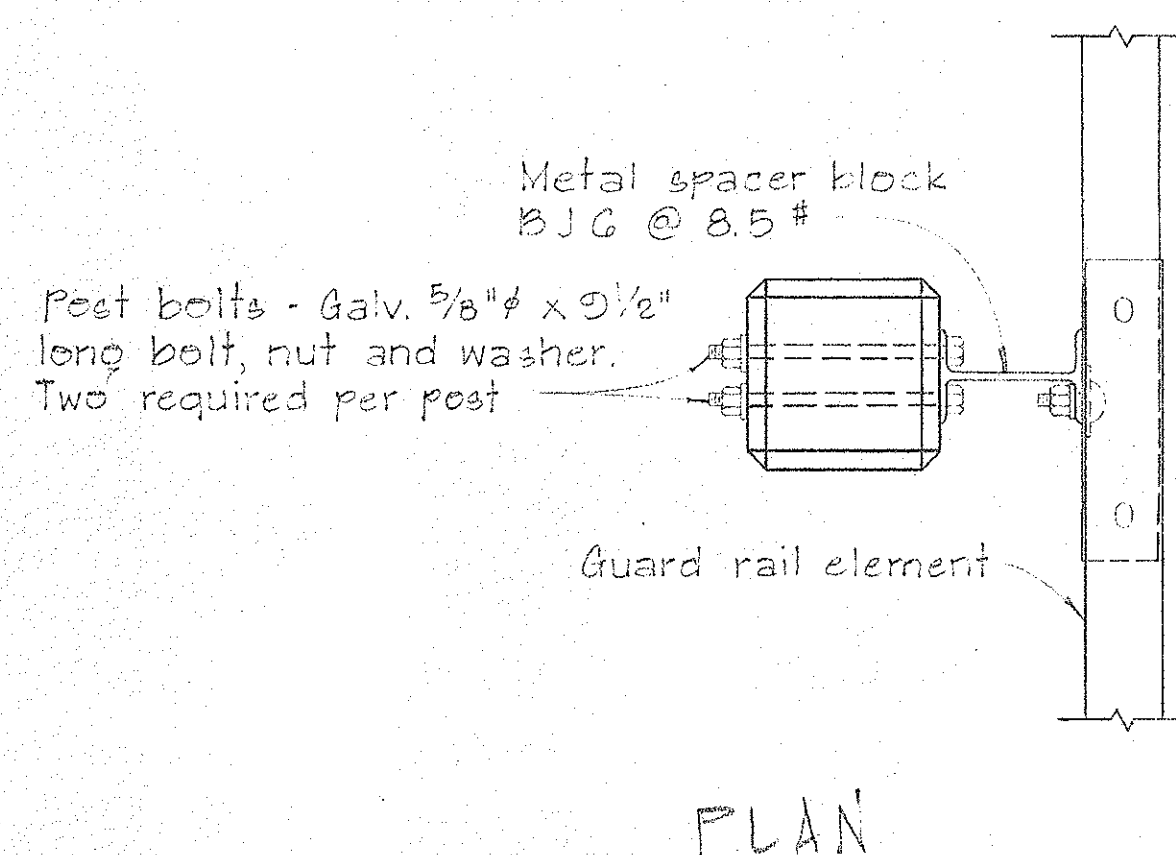
NOTE:
Concrete post shall be precast



DETAIL OF CONCRETE POST
SCALE: 1 1/2" = 1'-0"

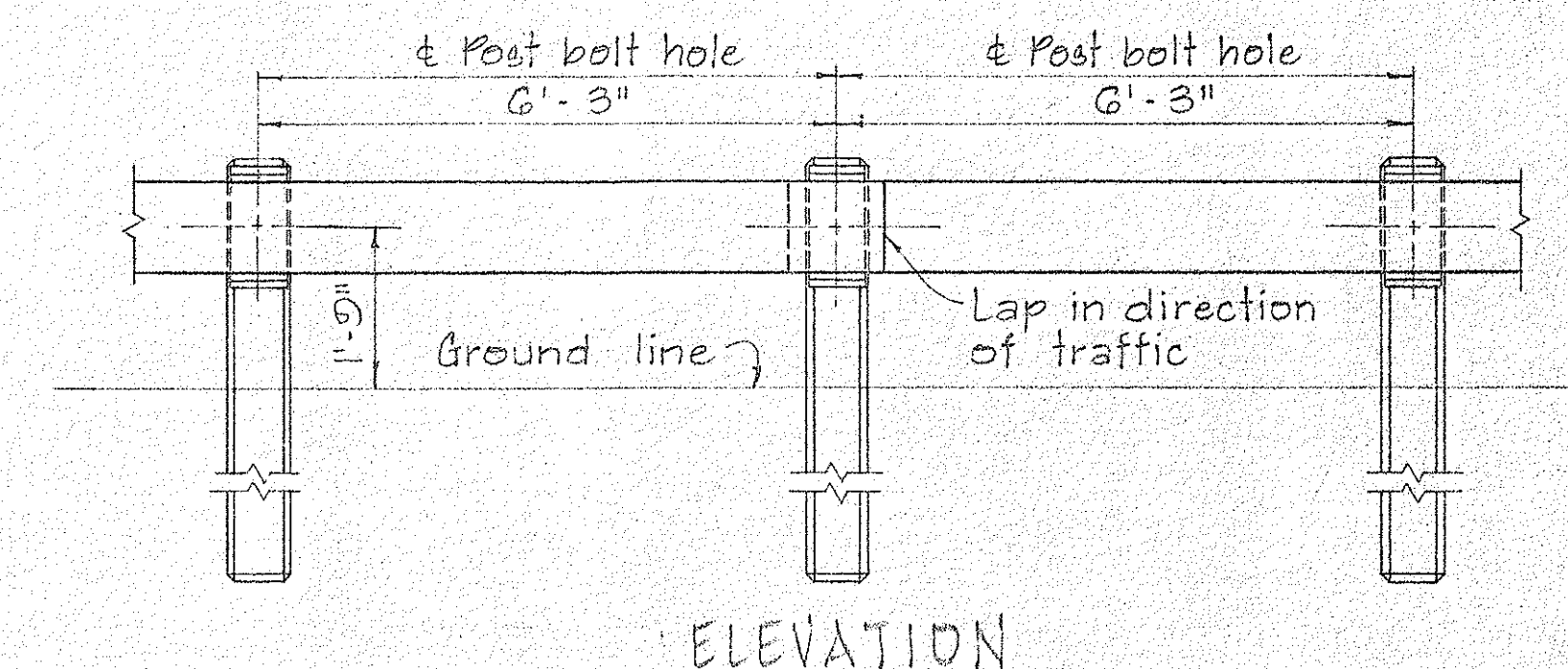
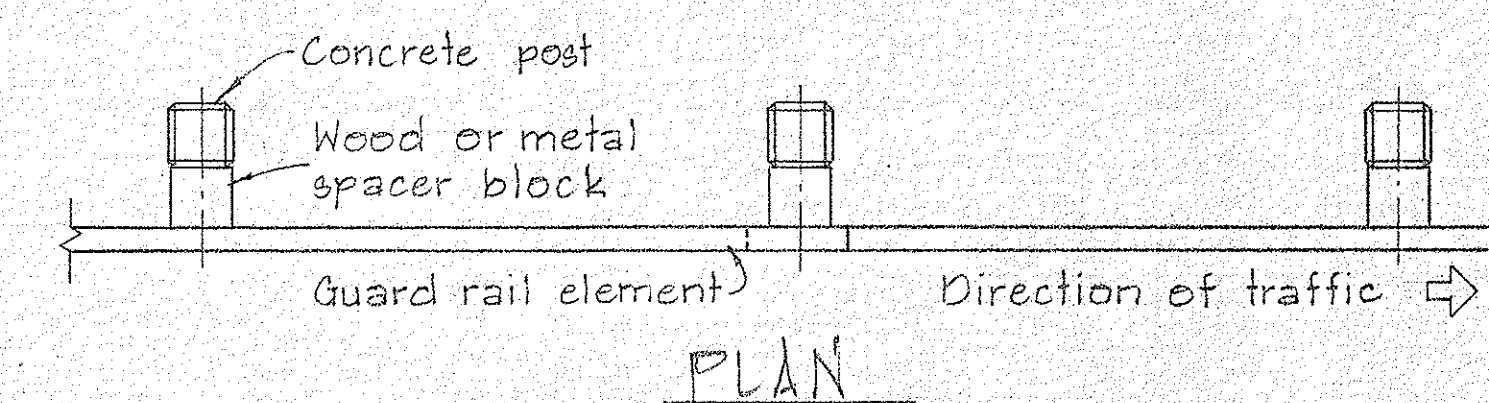


SINGLE METAL GUARD RAIL ON METAL POST
WITH METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"

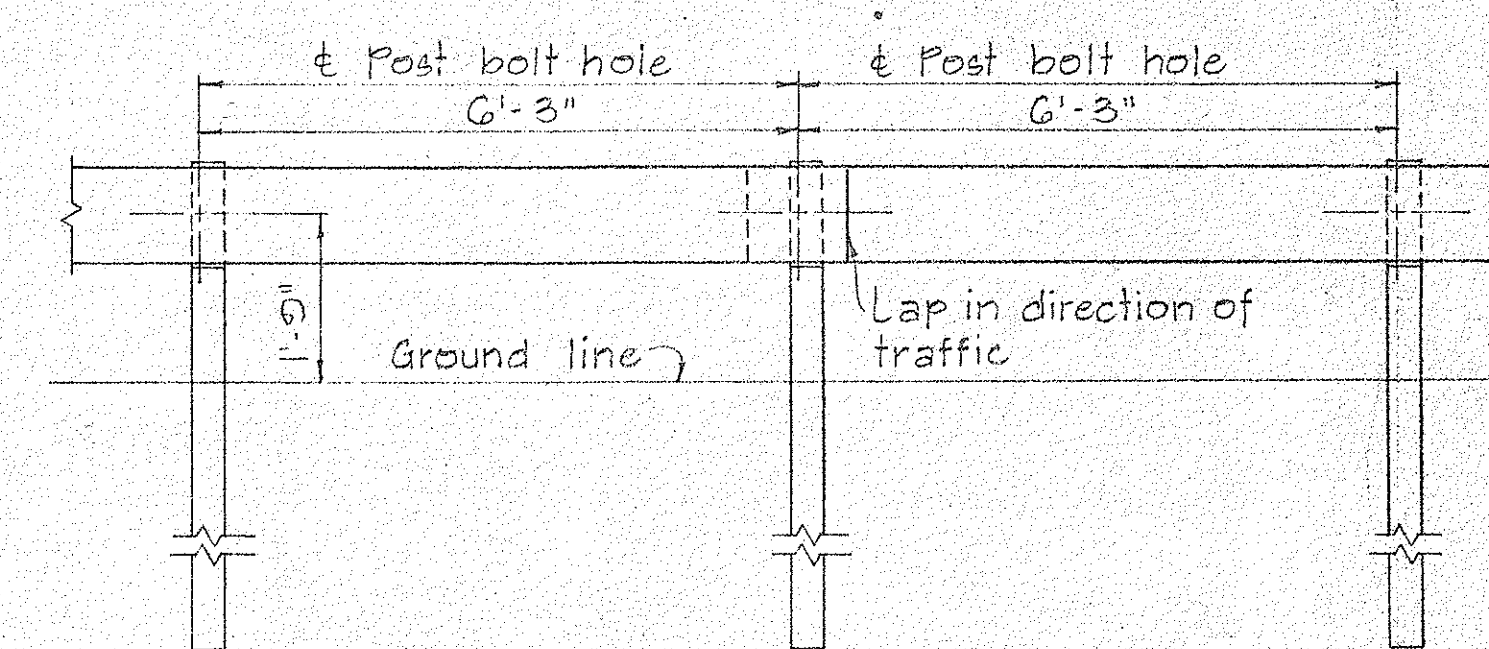
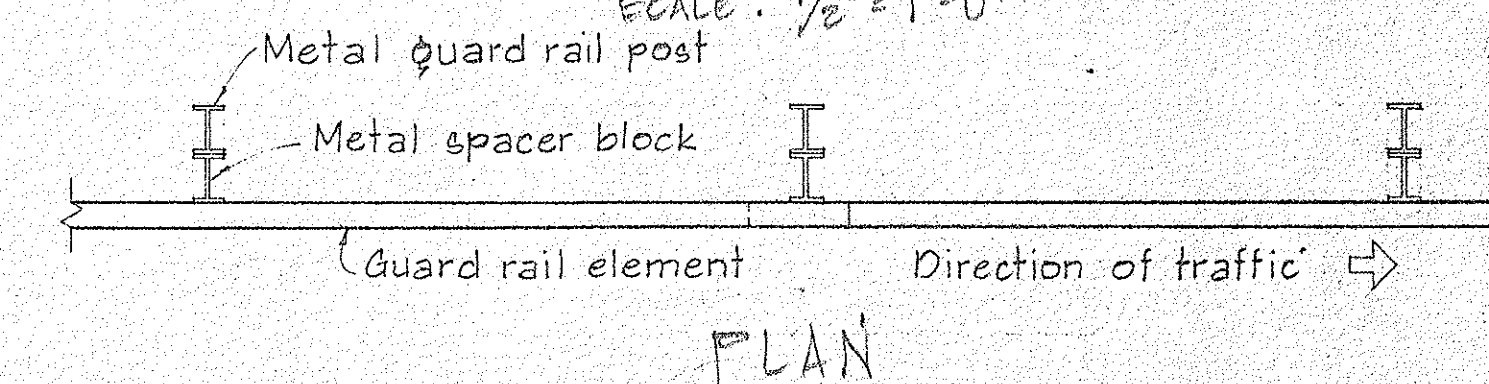


SINGLE METAL GUARD RAIL ON PRECAST
CONCRETE POST WITH WOOD OR METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"

TYPICAL METAL GUARD RAIL DETAIL
SCALE: 1 1/2" = 1'-0"



METAL GUARD RAIL ON CONCRETE POST
WITH WOOD OR METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"



METAL GUARD RAIL ON METAL POST
WITH METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

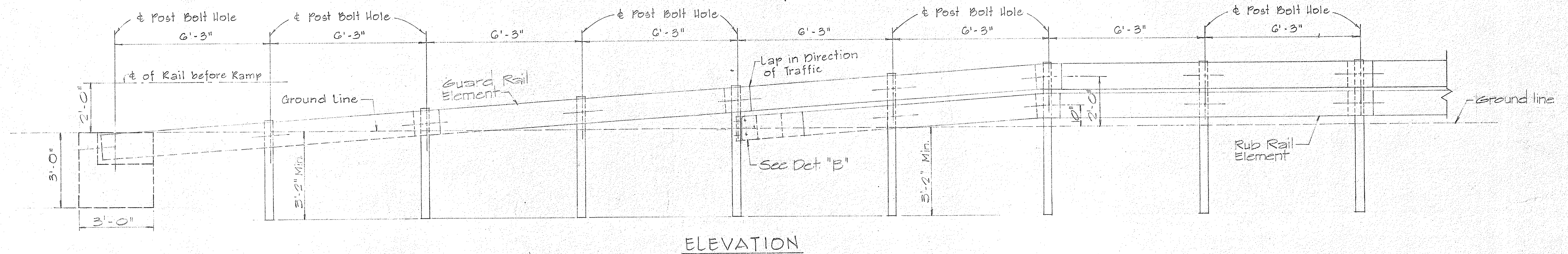
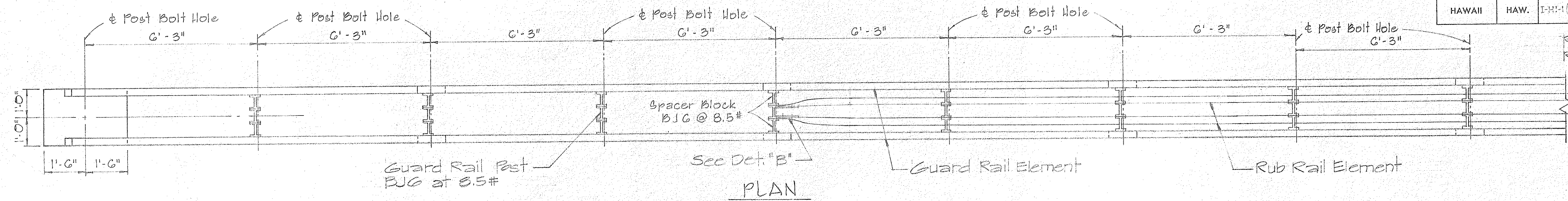
STANDARD DETAILS
METAL GUARD RAIL

SCALE: AS SHOWN NOV 1968

SHEET No. 3 OF 6 SHEETS PT 500

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-1-1 (4) 10	1969	10	20

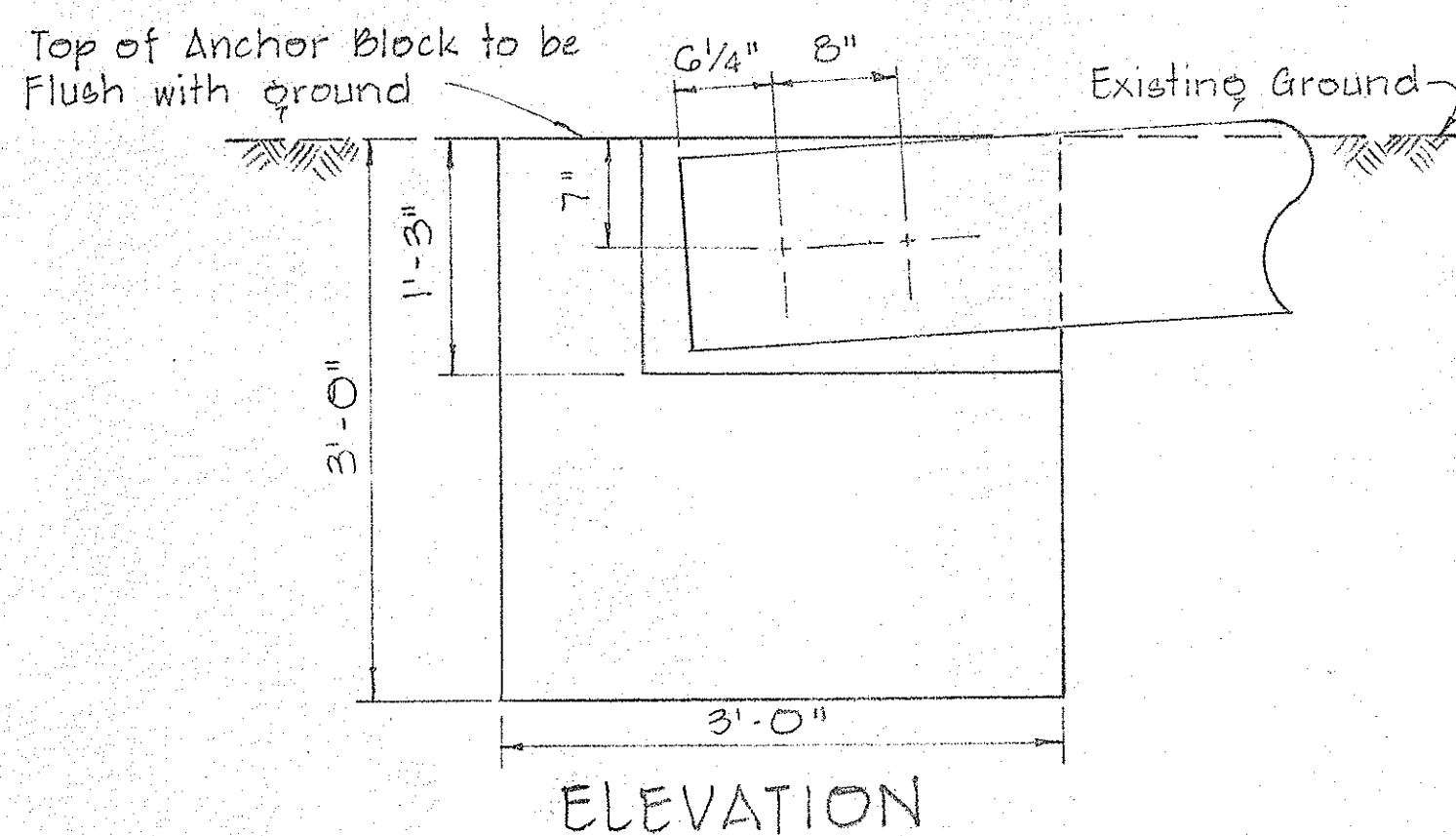
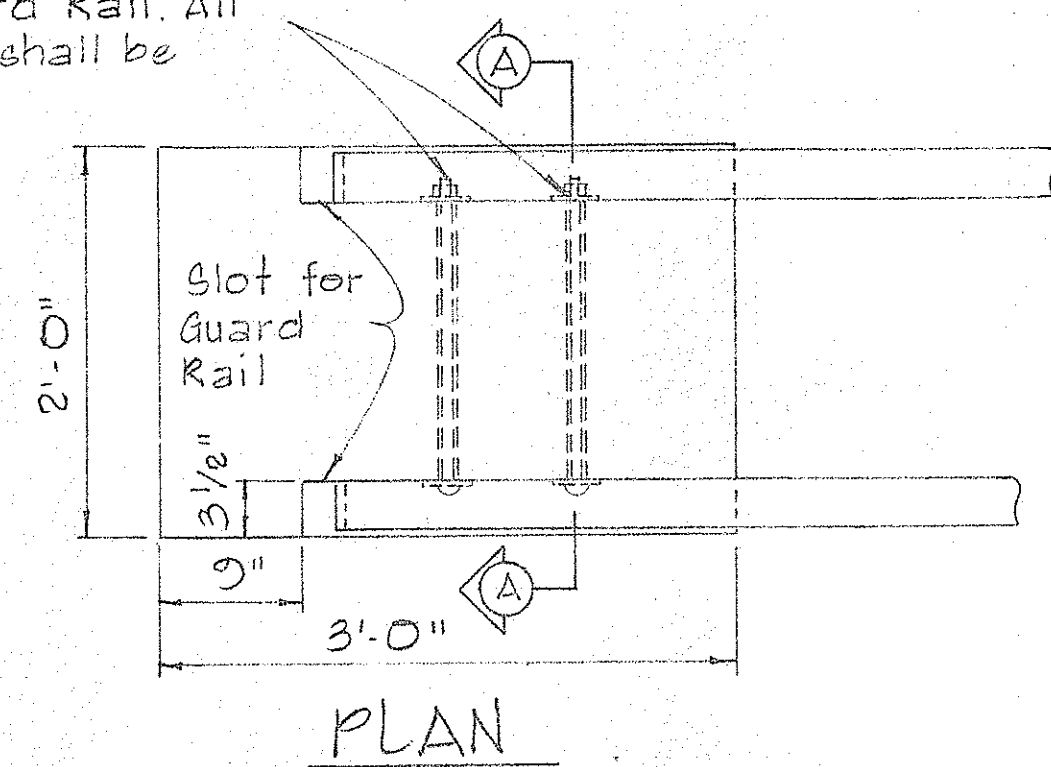
REVISED: 12-11-68
REVISED: 2-24-69



STRAIGHT APPROACH - RAMP END ANCHORAGE (MEDIAN)

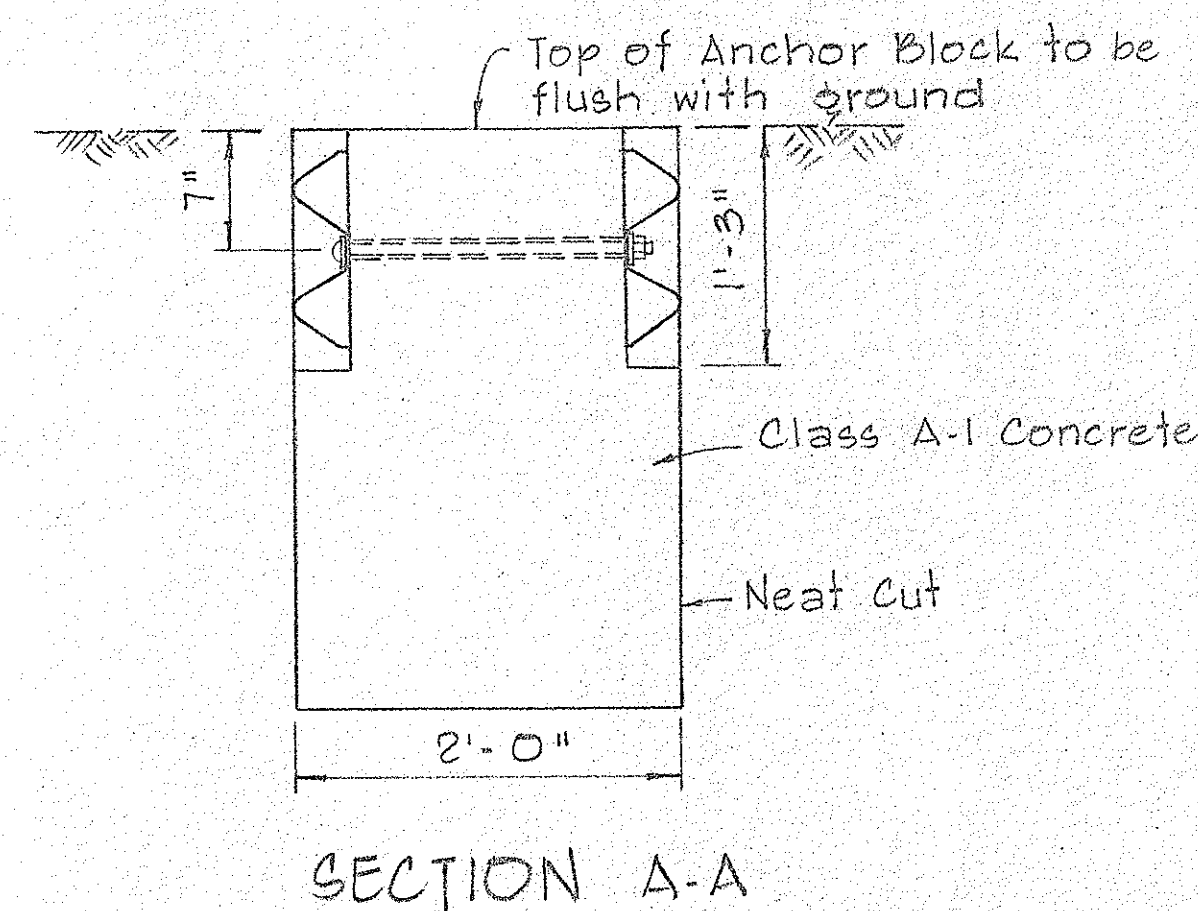
Scale: 1/2" = 1'-0"

5/8" Bolts with 3/4" G.I. Pipe Sleeve in each hole. Incidental to Metal Guard Rail. All Metal Pieces shall be Galvanized.

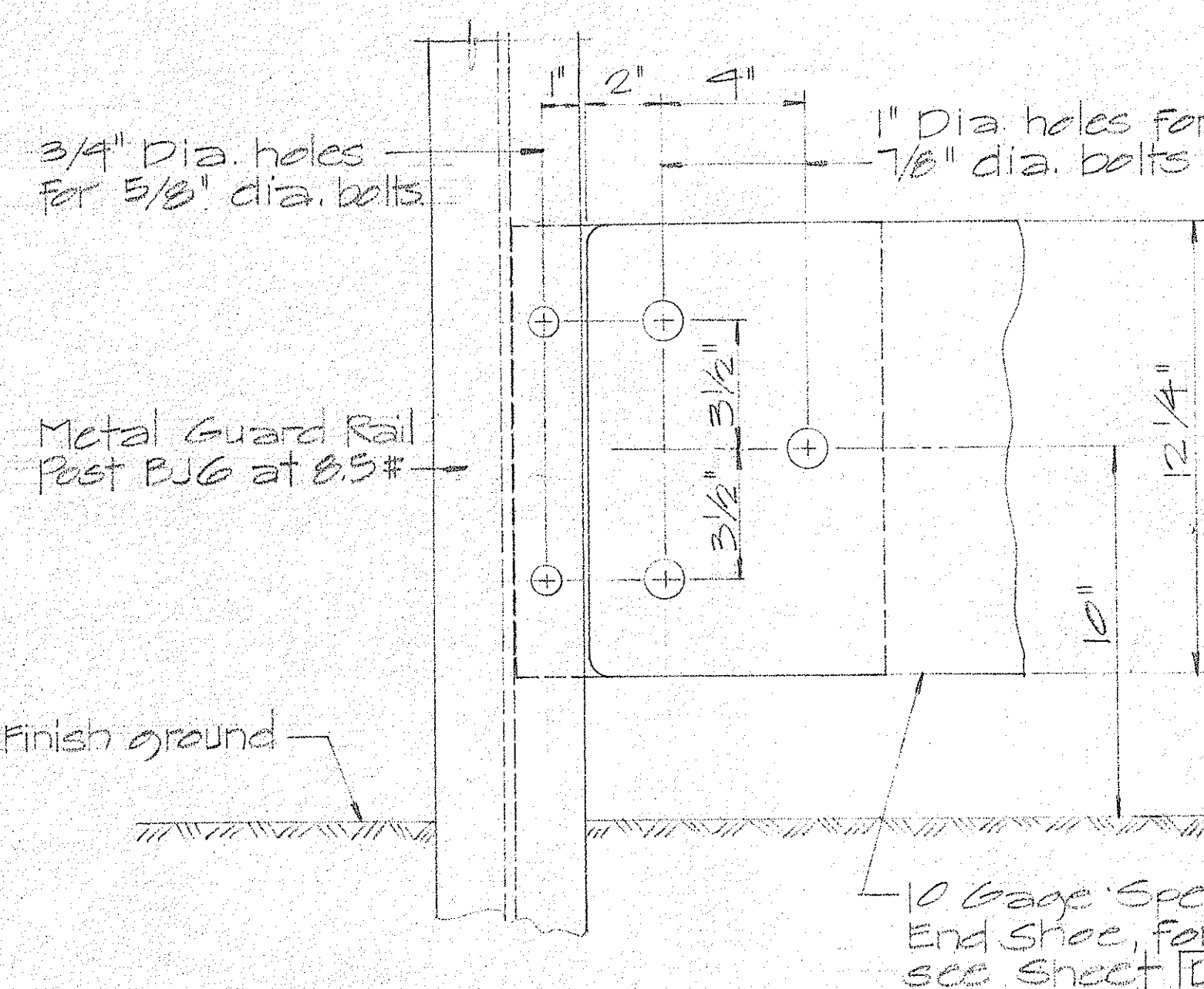


CONCRETE ANCHOR BLOCK FOR RAMP END

Scale: 1" = 1'-0"

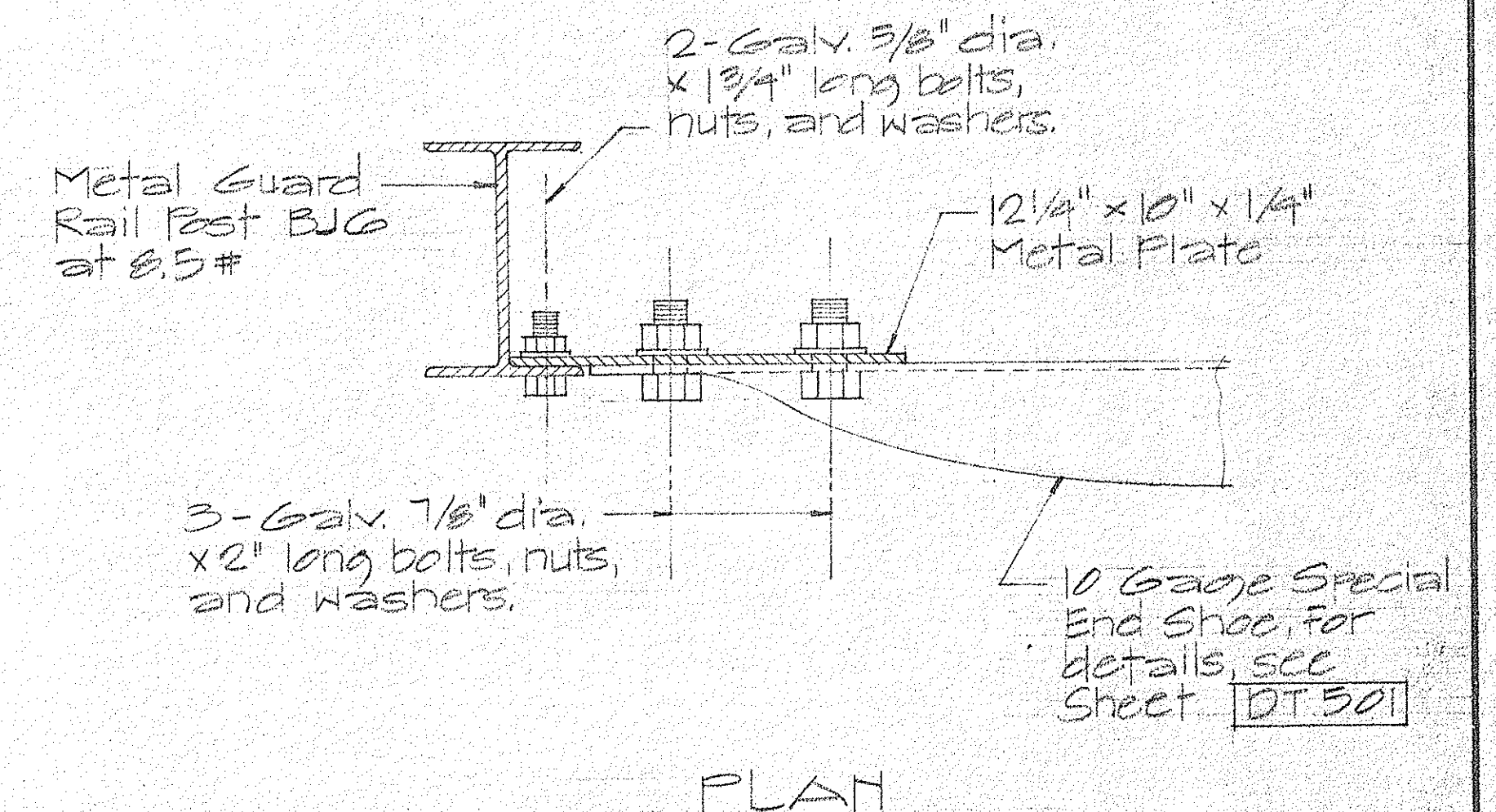


NOTE: Concrete, Excavation, and Miscellaneous Appurtenances necessary to anchor the Guard Rail Ends, shall be incidental to the Metal Guard Rail.



DETAIL "B"

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



NOTE: All Shoe Assembly, including anchor bolts, nuts, and washers, shall be galvanized.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

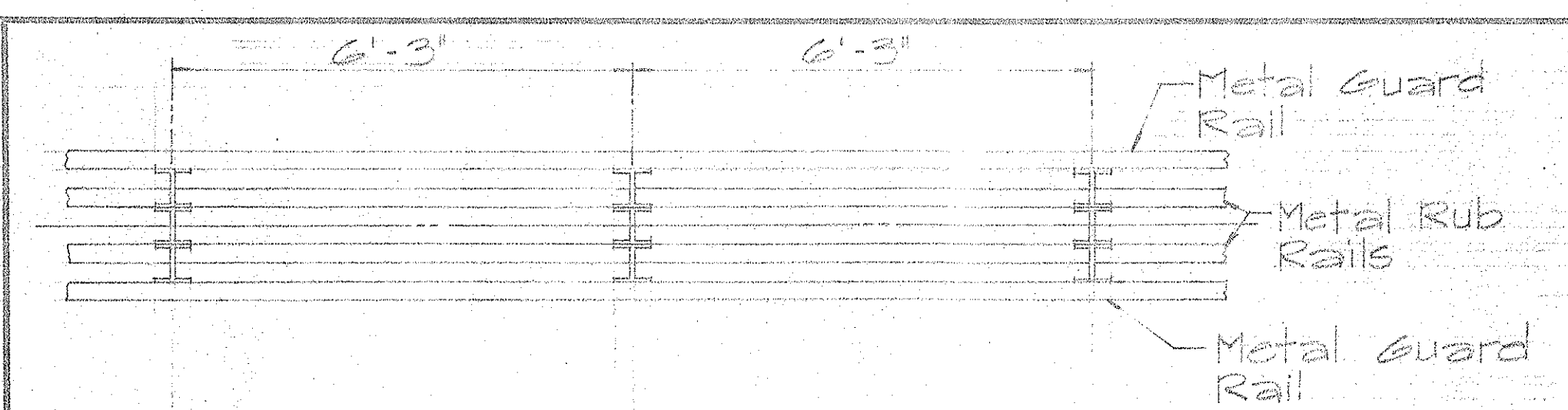
STANDARD DETAIL GUARD RAIL RAMP END ANCHORAGE

Scale: as Noted

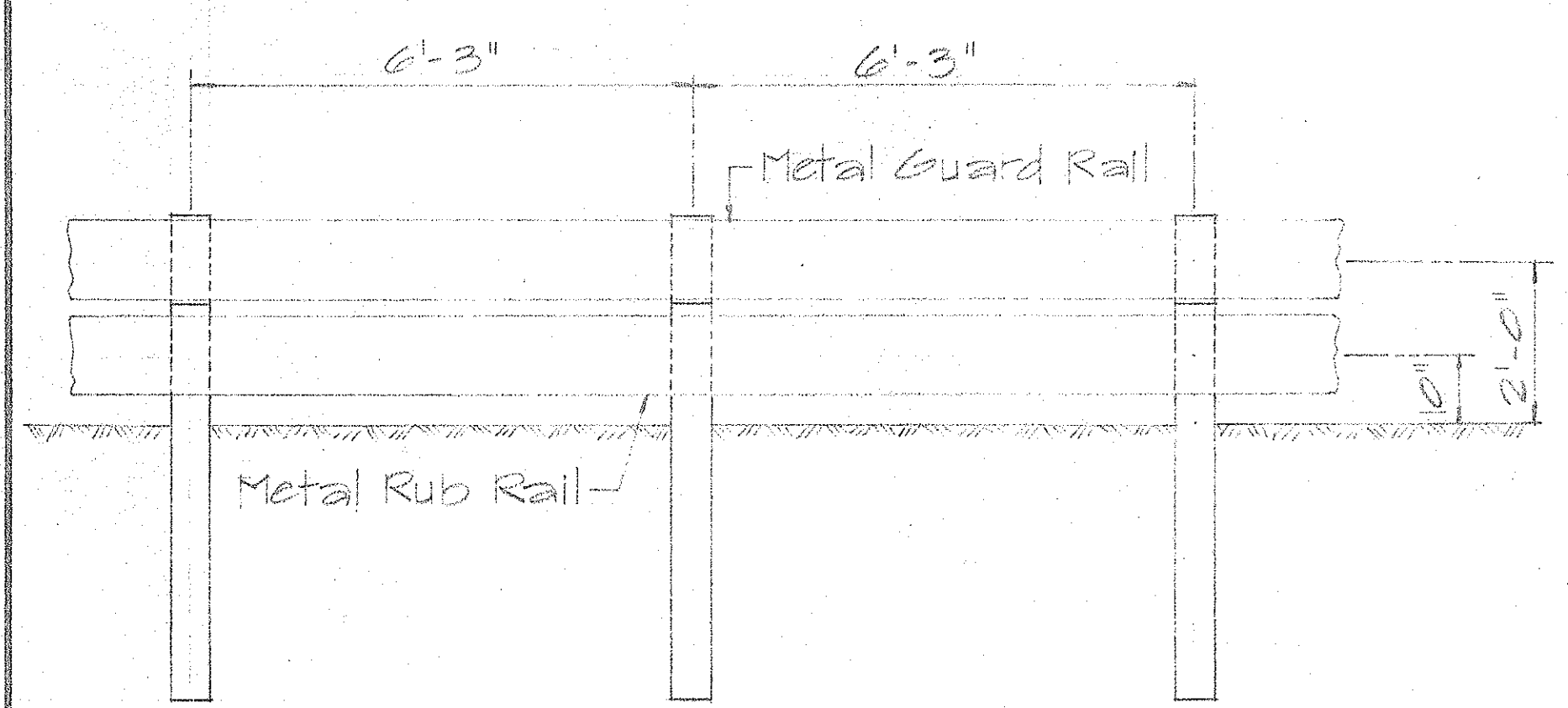
August, 1968

SHEET No. 5 OF 6 SHEETS DT 502

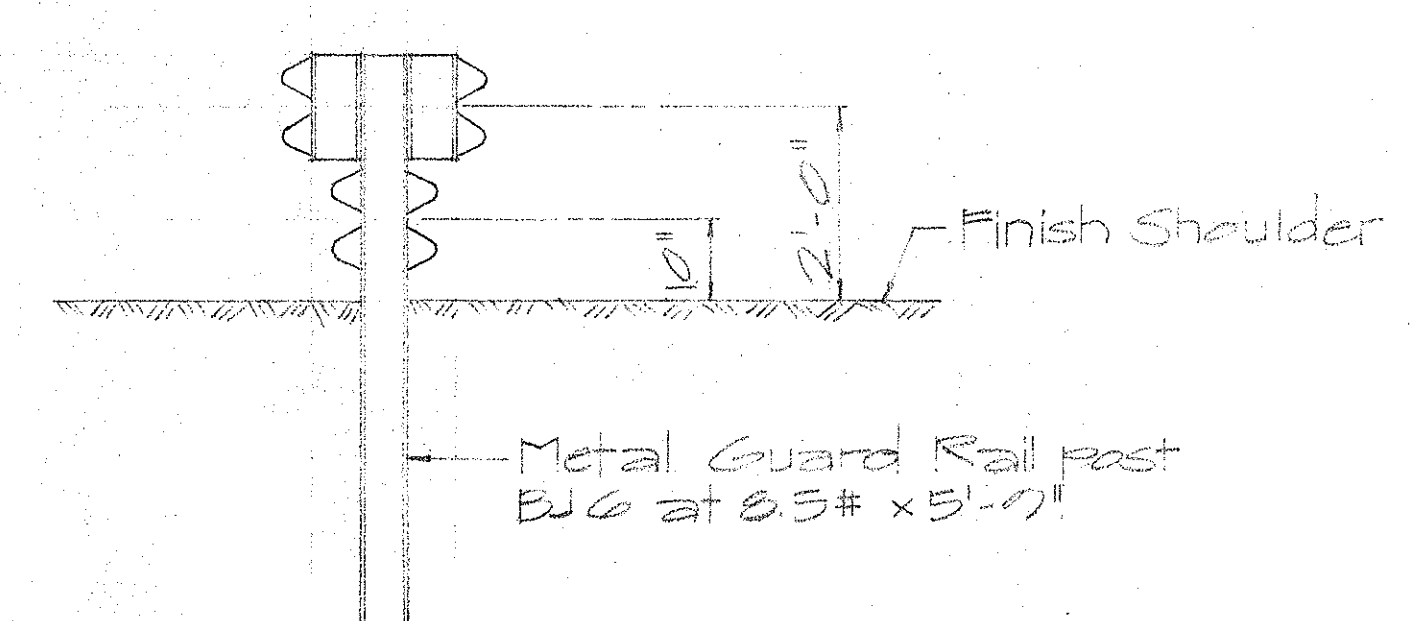
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(74)10	1969	20	20



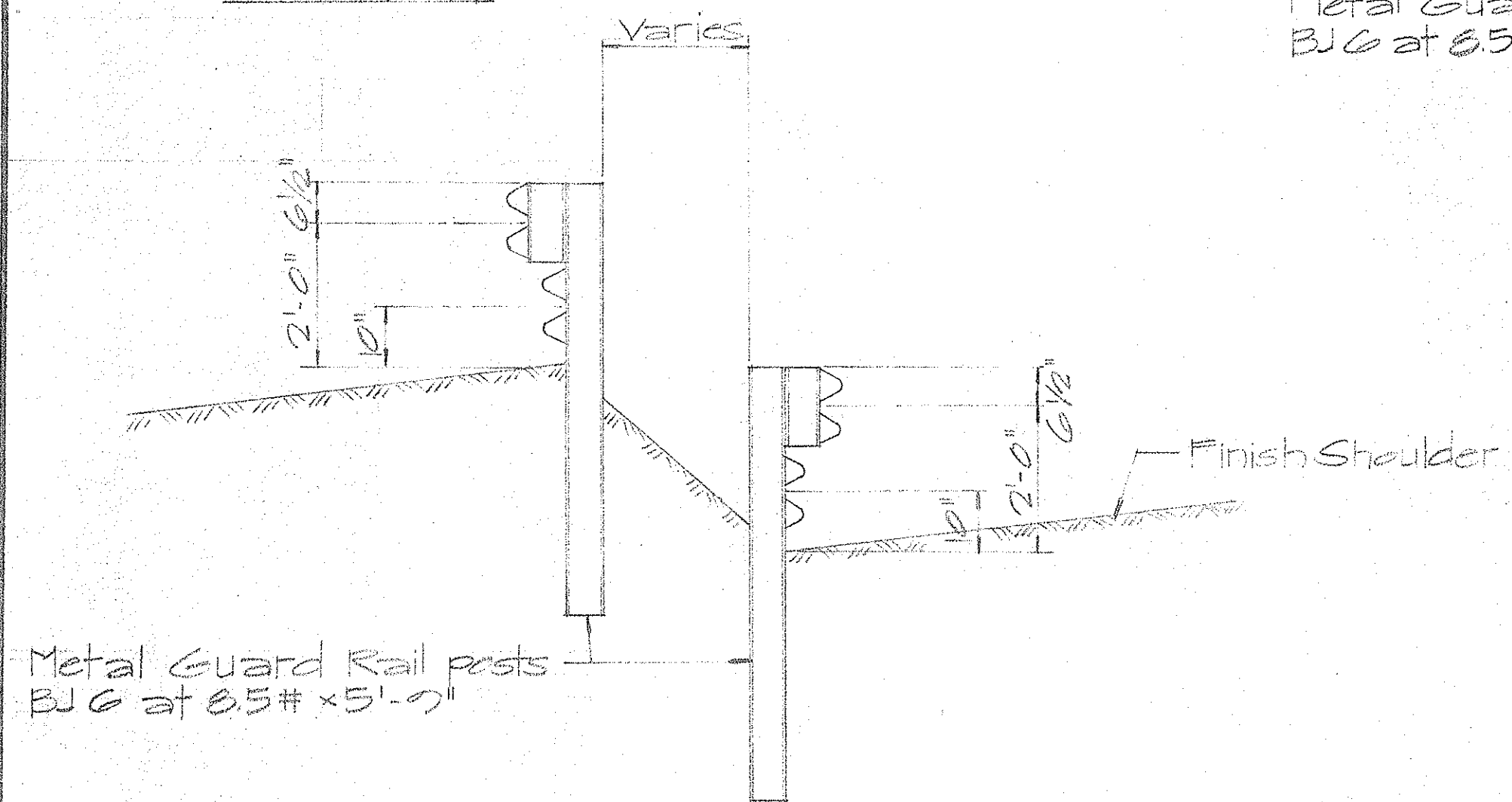
PLAN



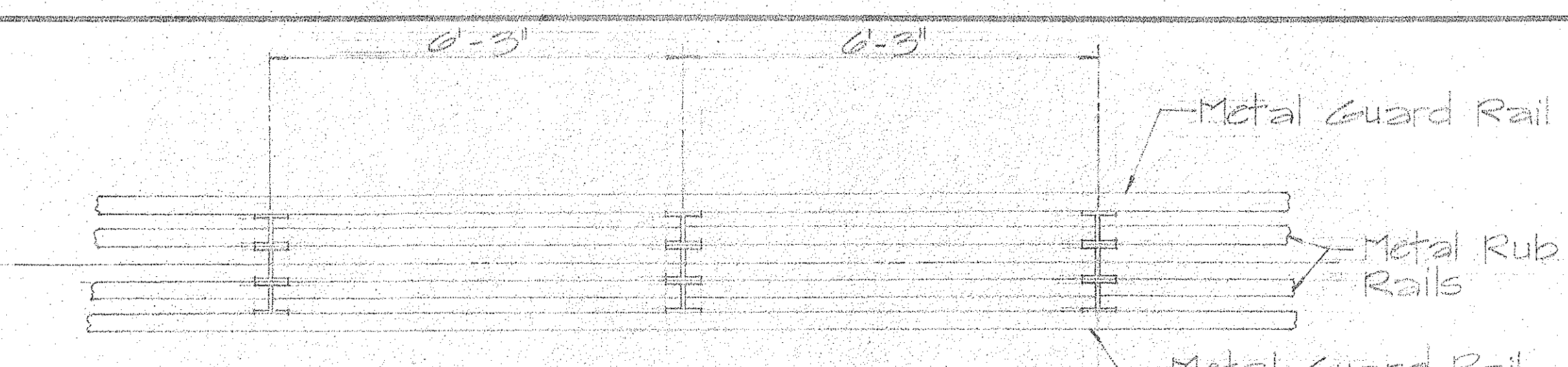
ELEVATION



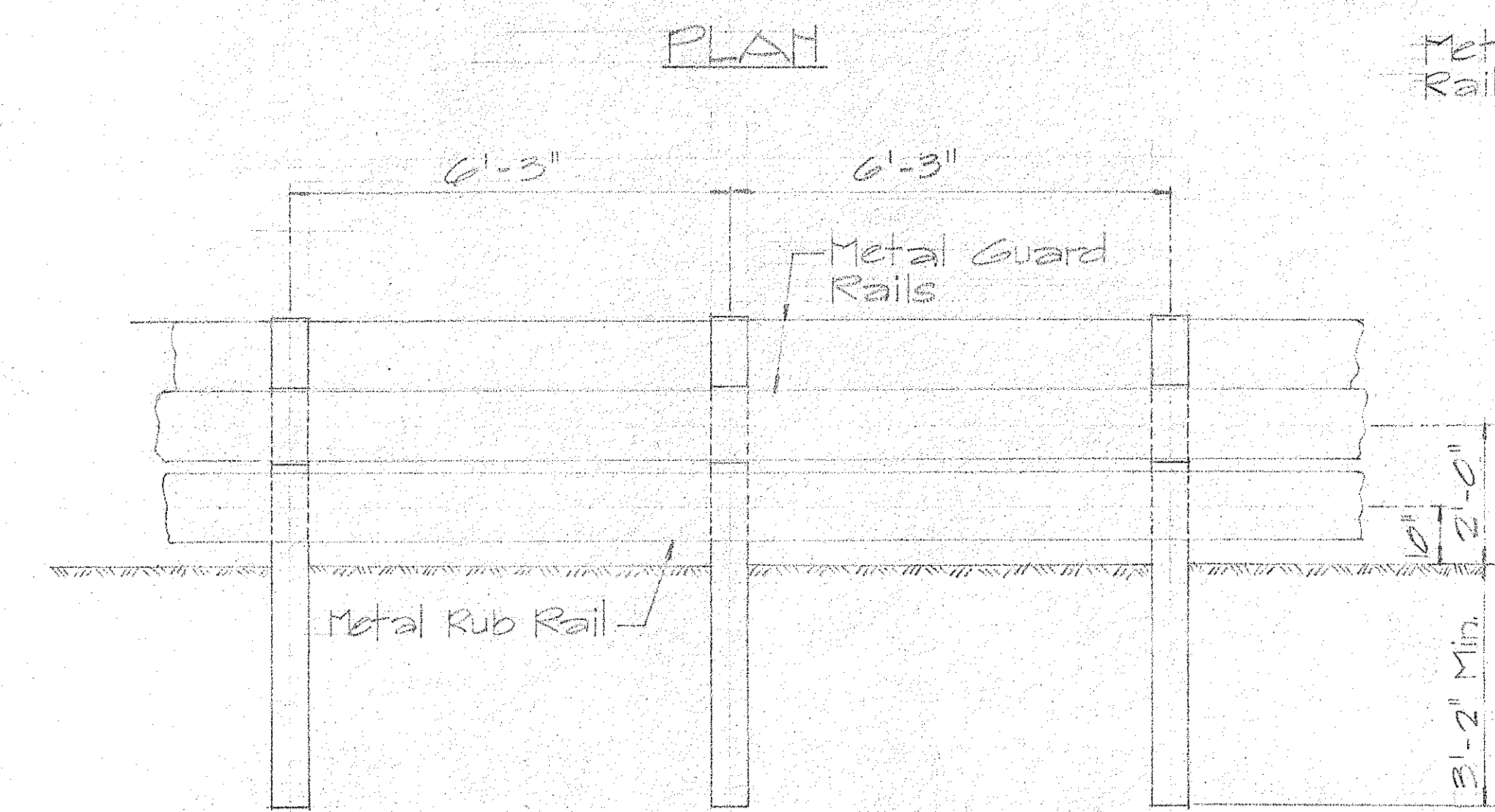
SECTION



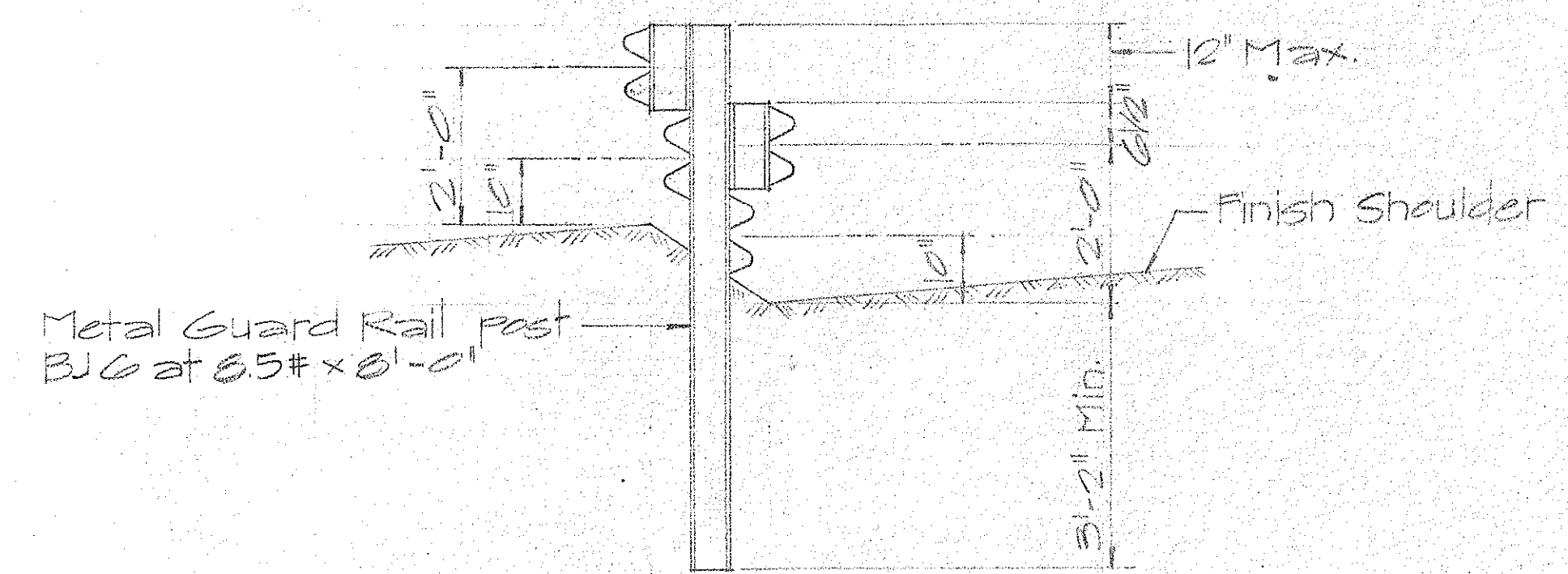
TYP DOUBLE POST SEC.



PLAN

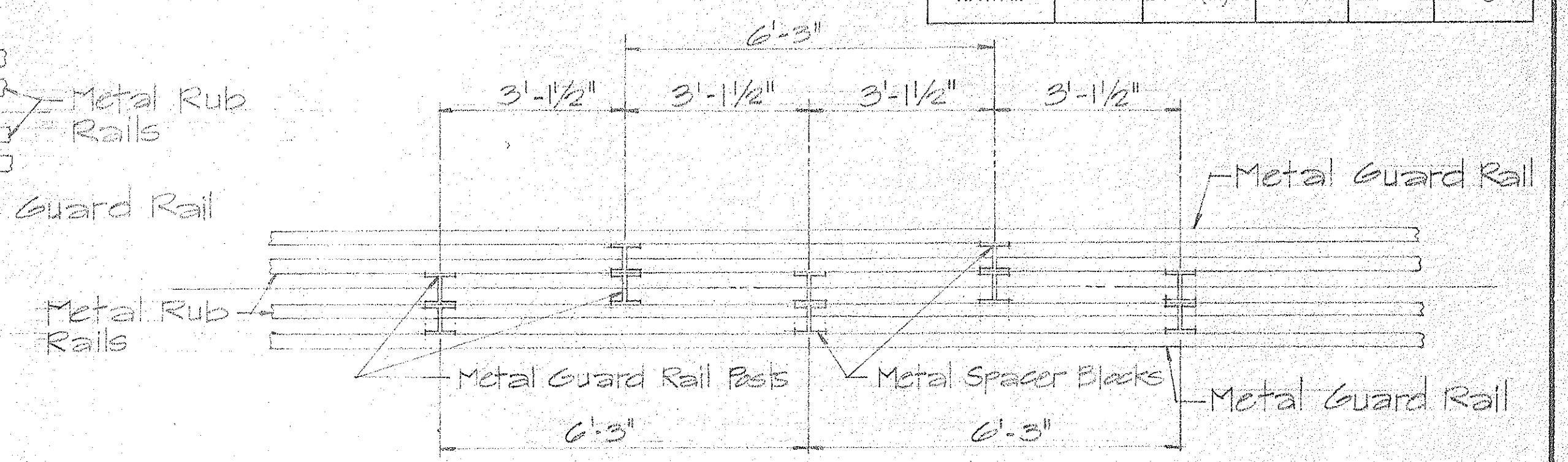


ELEVATION

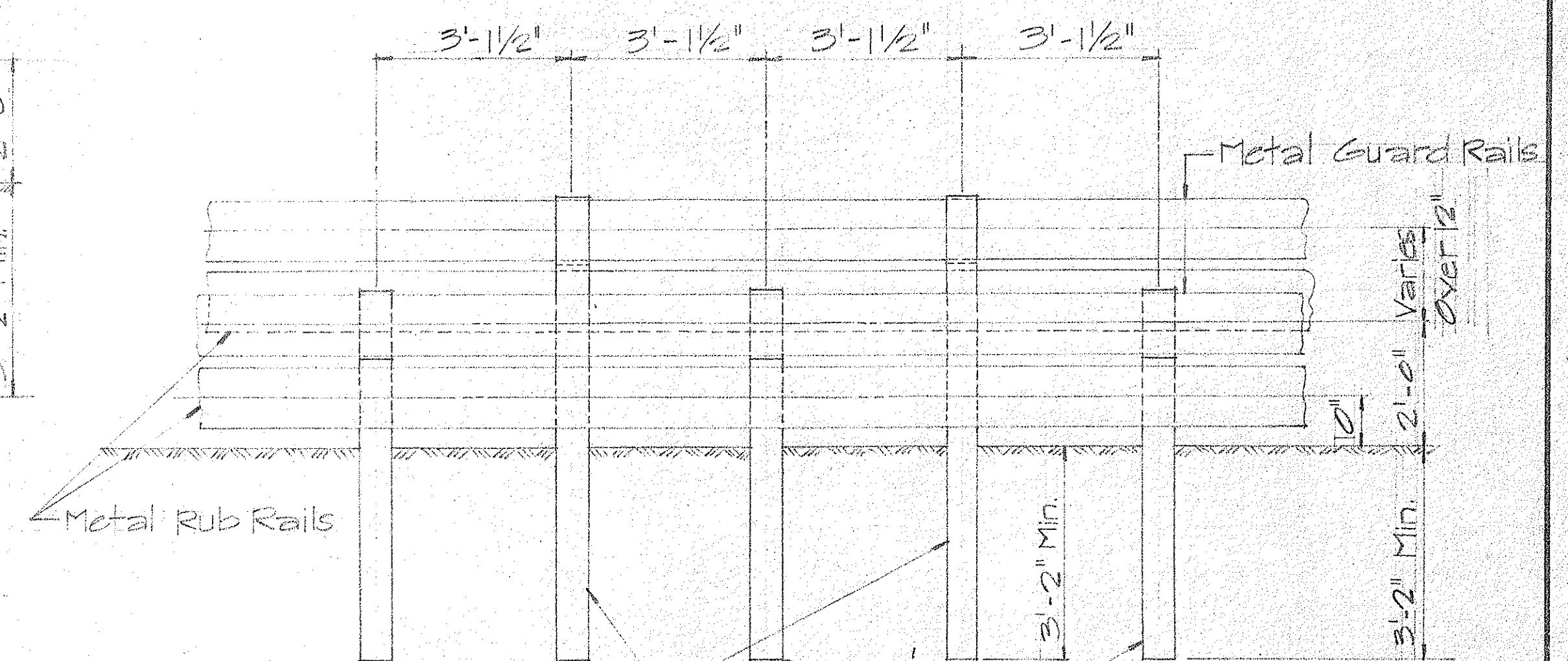


SECTION

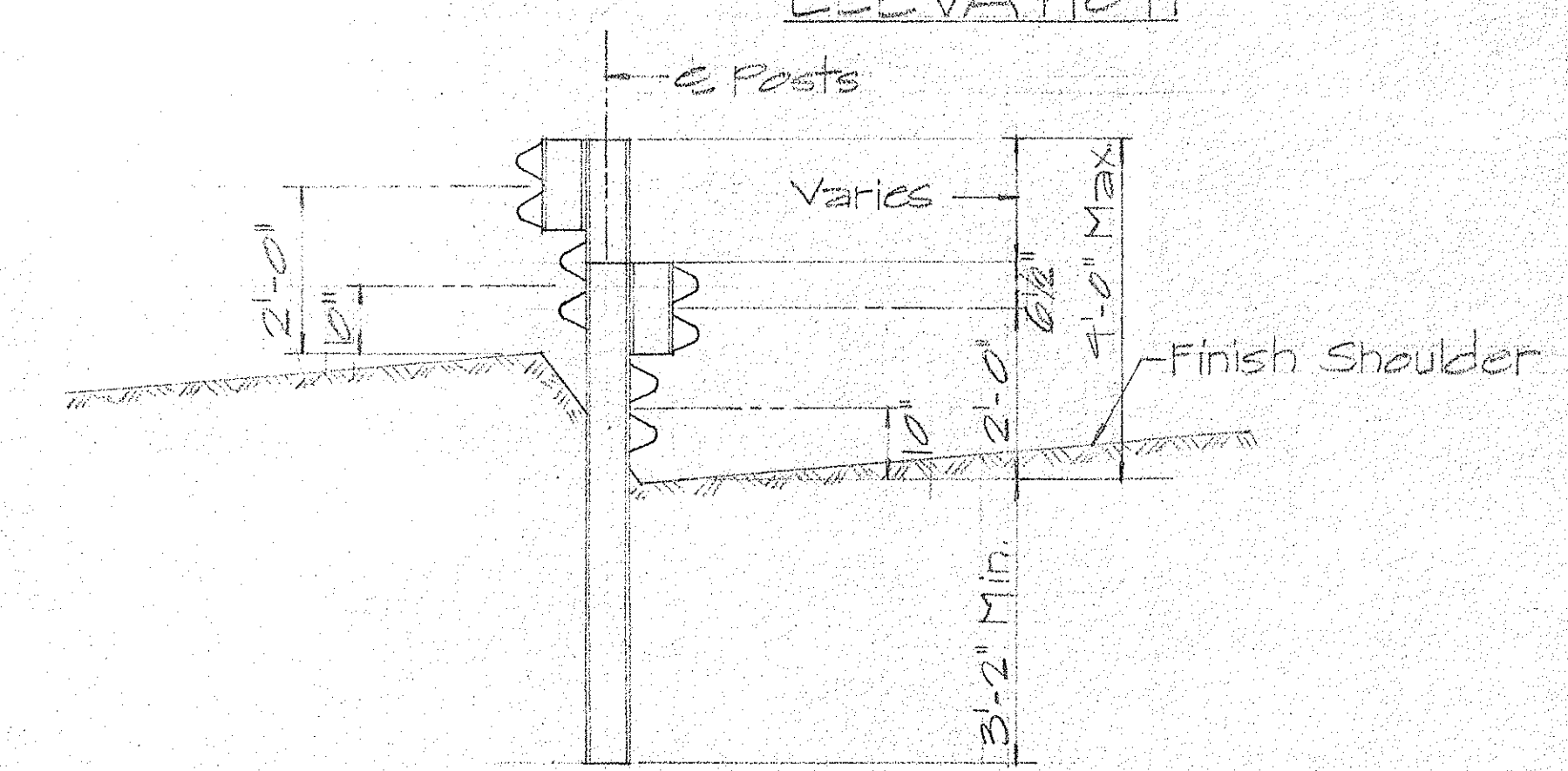
TYPICAL SAW TOOTH INSTALLATION
SC. 1/2" = 1'-0"



PLAN



ELEVATION



SECTION

TYPICAL STAGGERED INSTALLATION
SC. 1/2" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAIL
METAL GUARD RAIL
WITH RUB RAIL

Scale: 1/2" = 1'-0" Feb. 1969

SHEET No. 6 OF 6 SHEETS DT 514