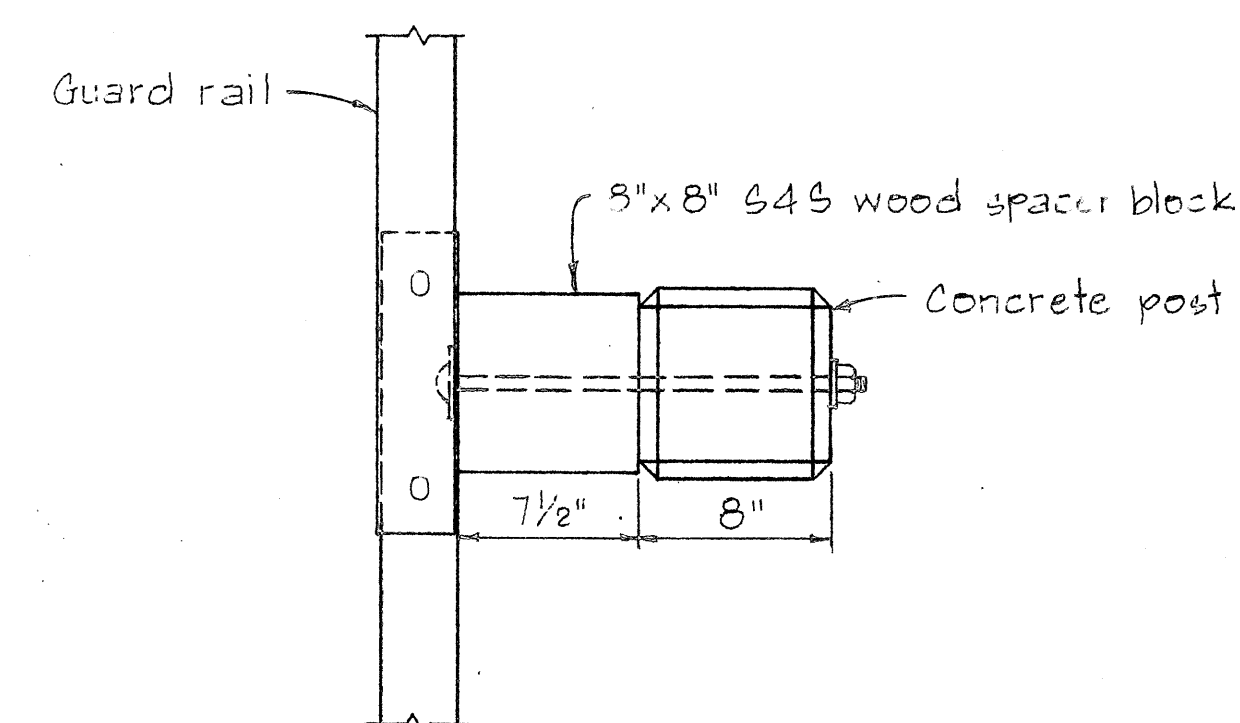
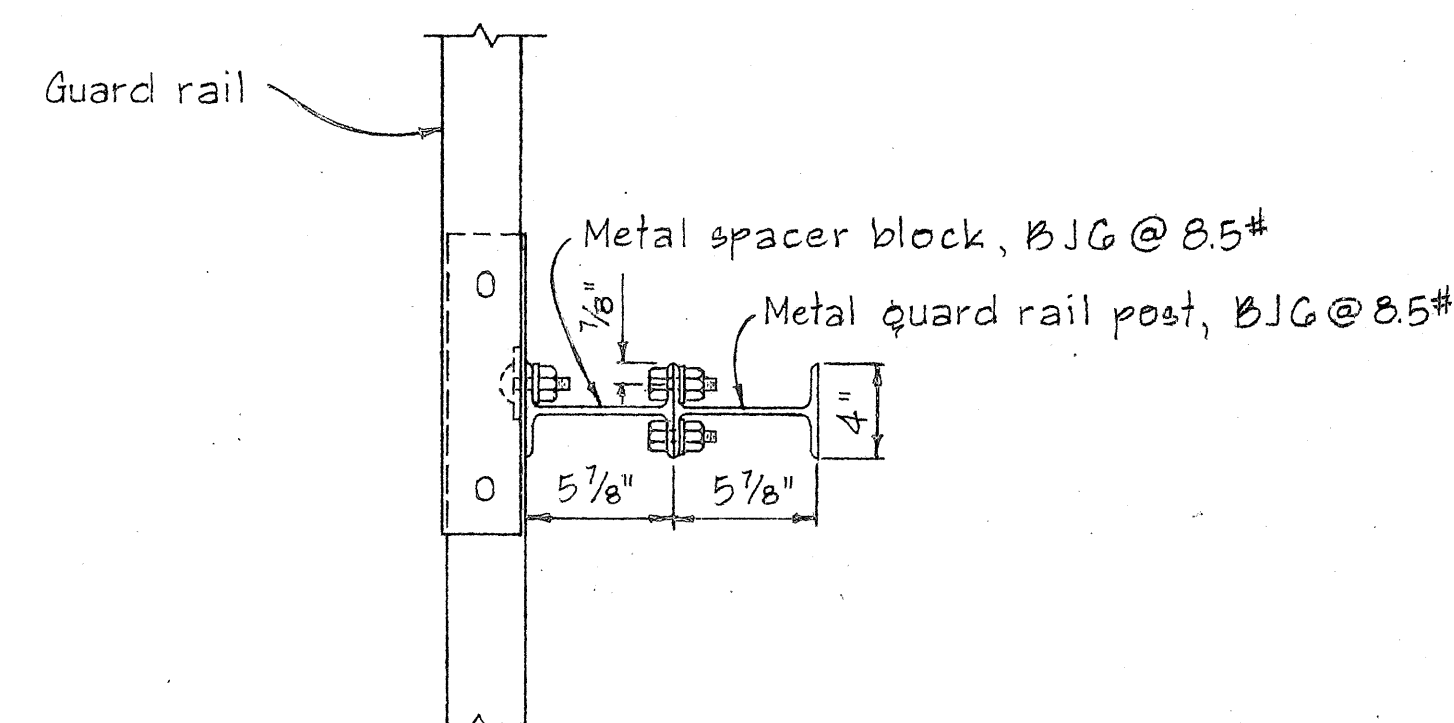


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-0611(14)	1967	12	16

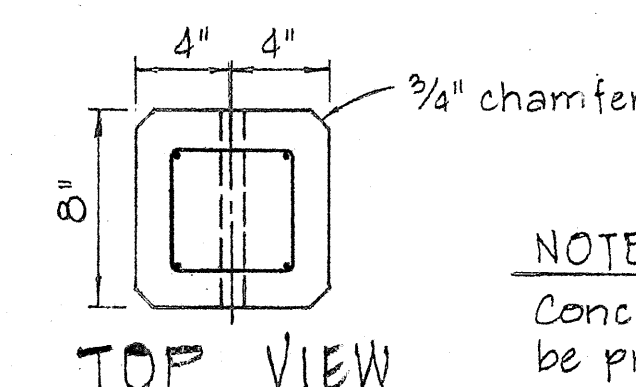
REVISED: 12-11-68



PLAN

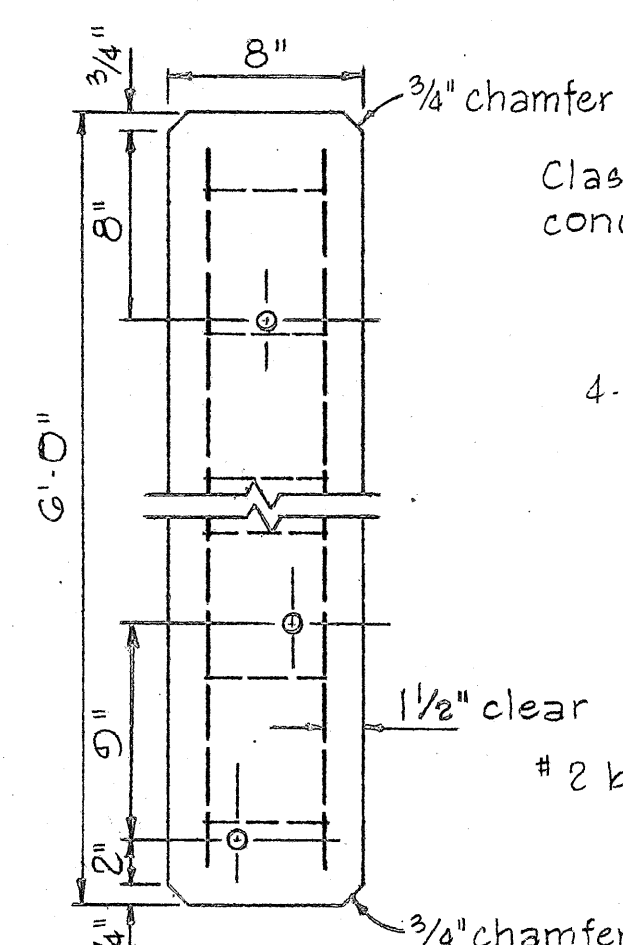


PLAN

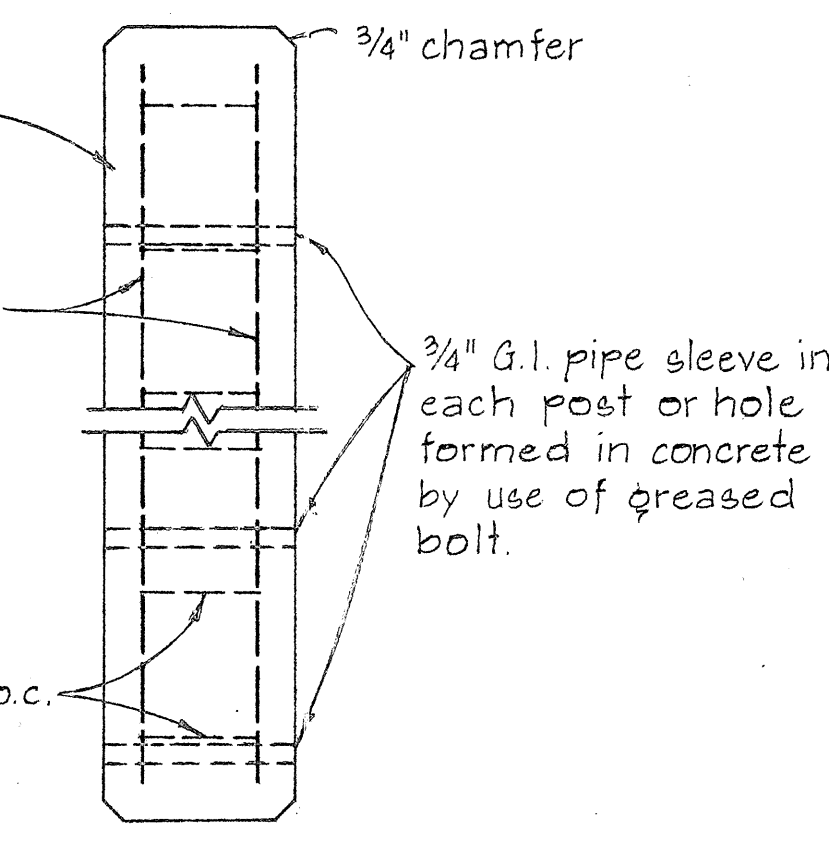


TOP VIEW

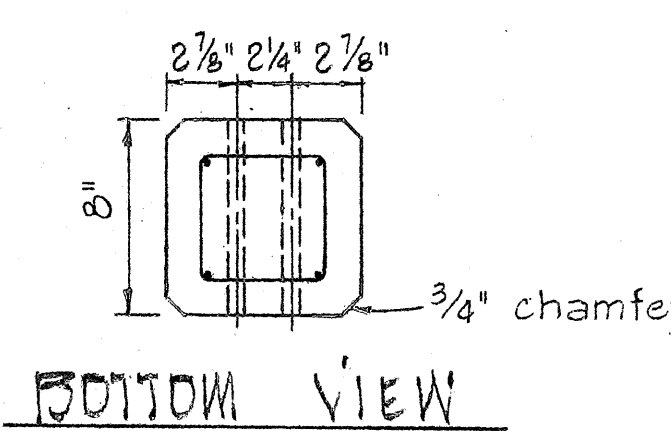
NOTE:
Concrete post shall be precast



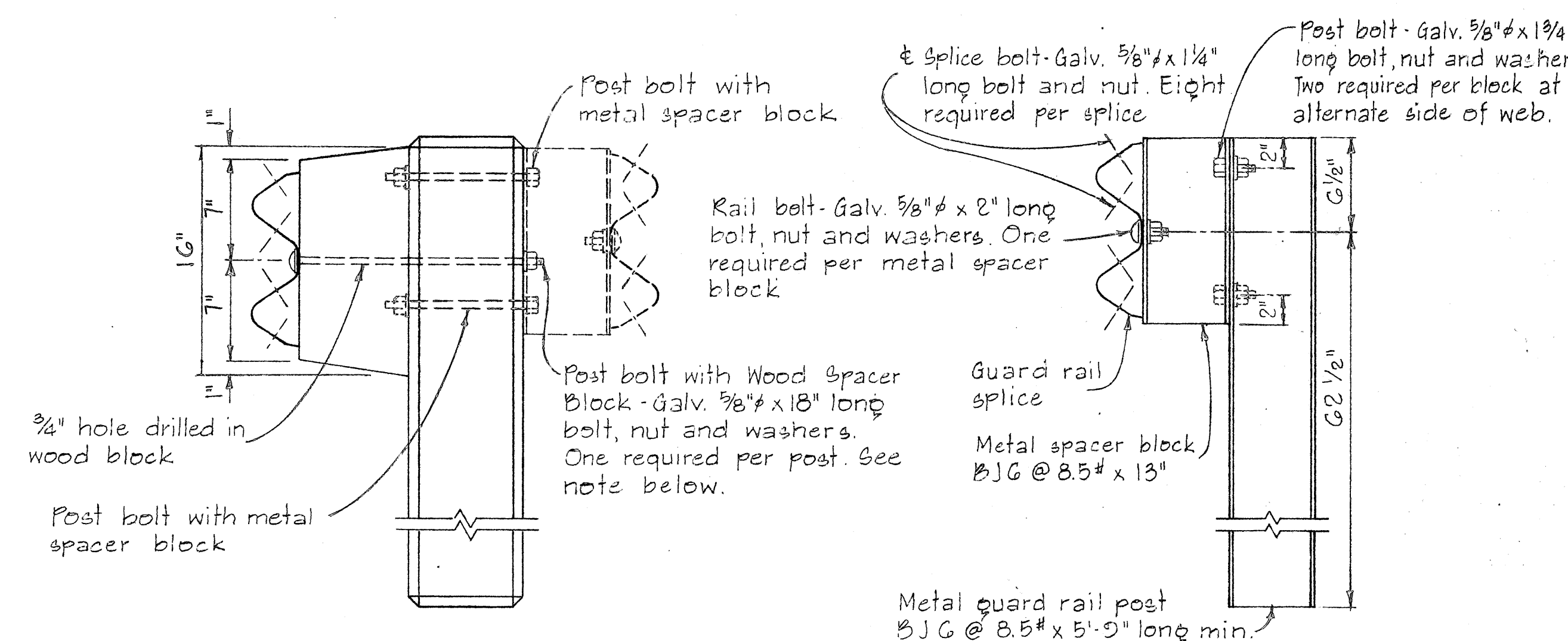
FRONT VIEW



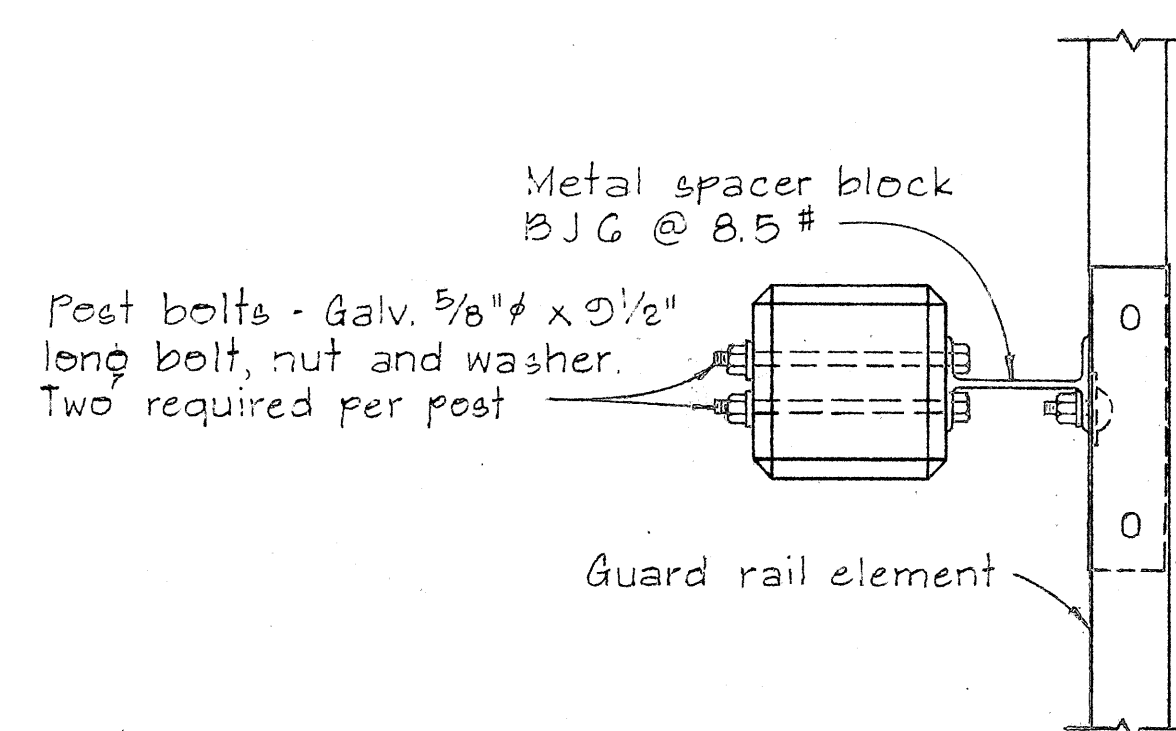
SIDE VIEW



BOTTOM VIEW

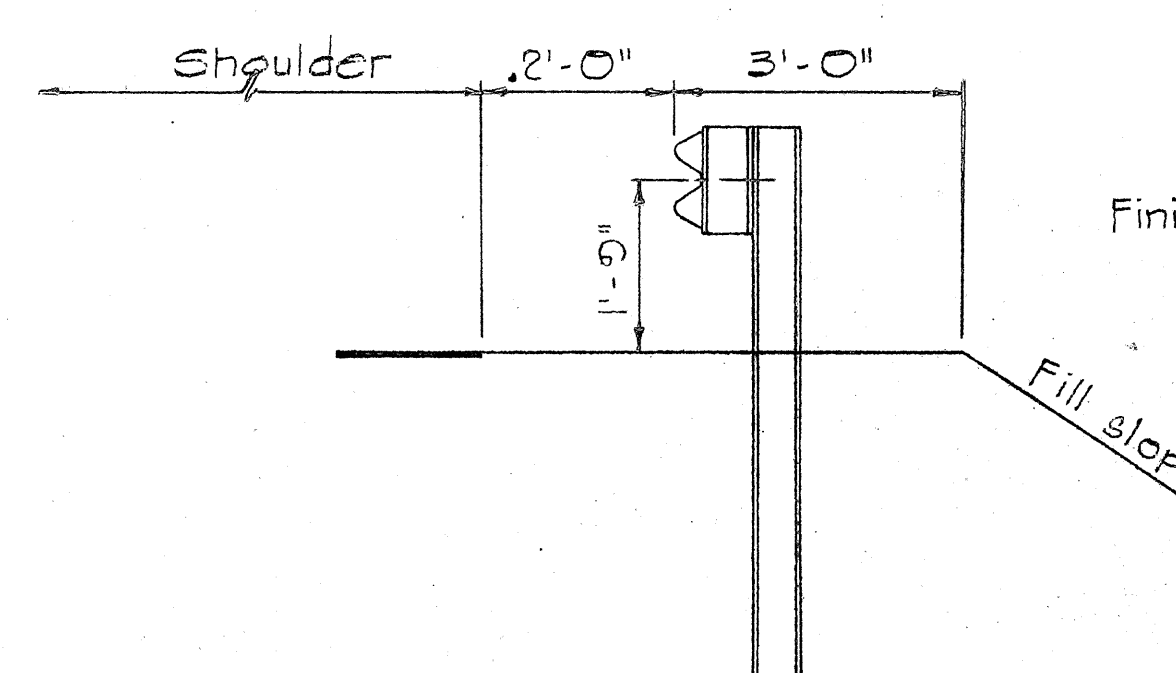


SINGLE METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"

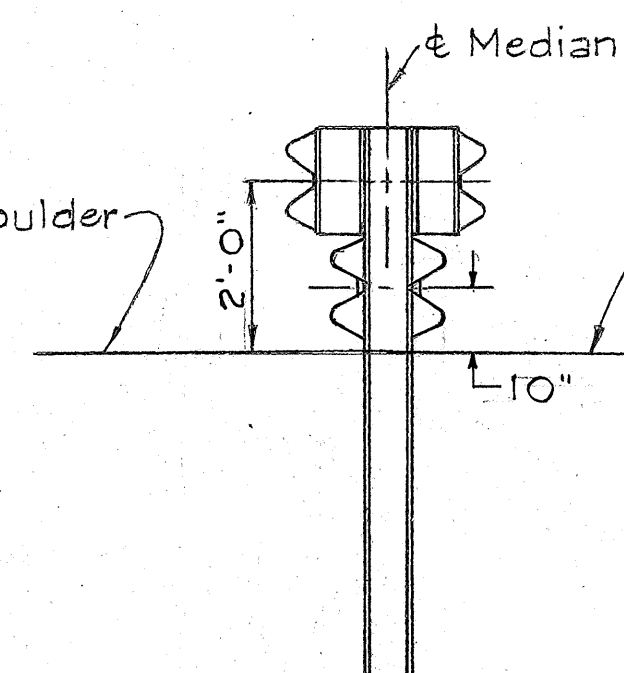


PLAN

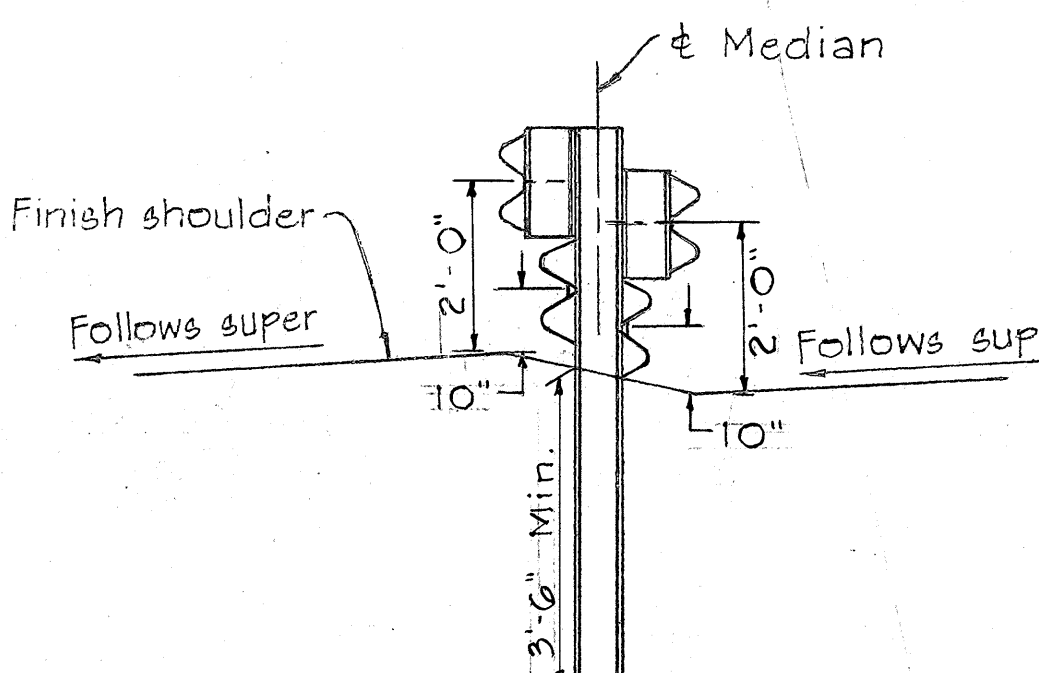
SINGLE METAL GUARD RAIL ON PRECAST CONCRETE POST WITH WOOD OR METAL SPACER BLOCK
SCALE: 1 1/2" = 1'-0"



AT SHOULDER SECTION

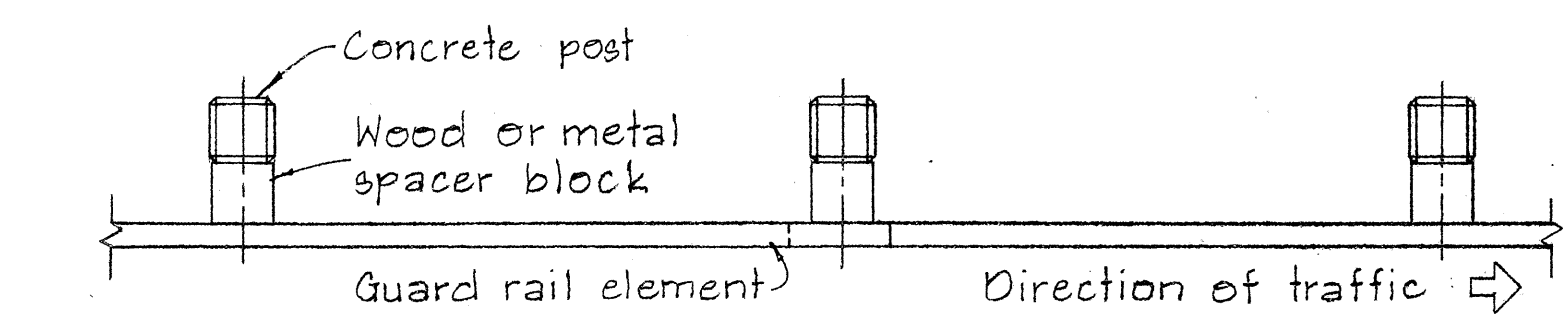


AT TANGENT SECTION

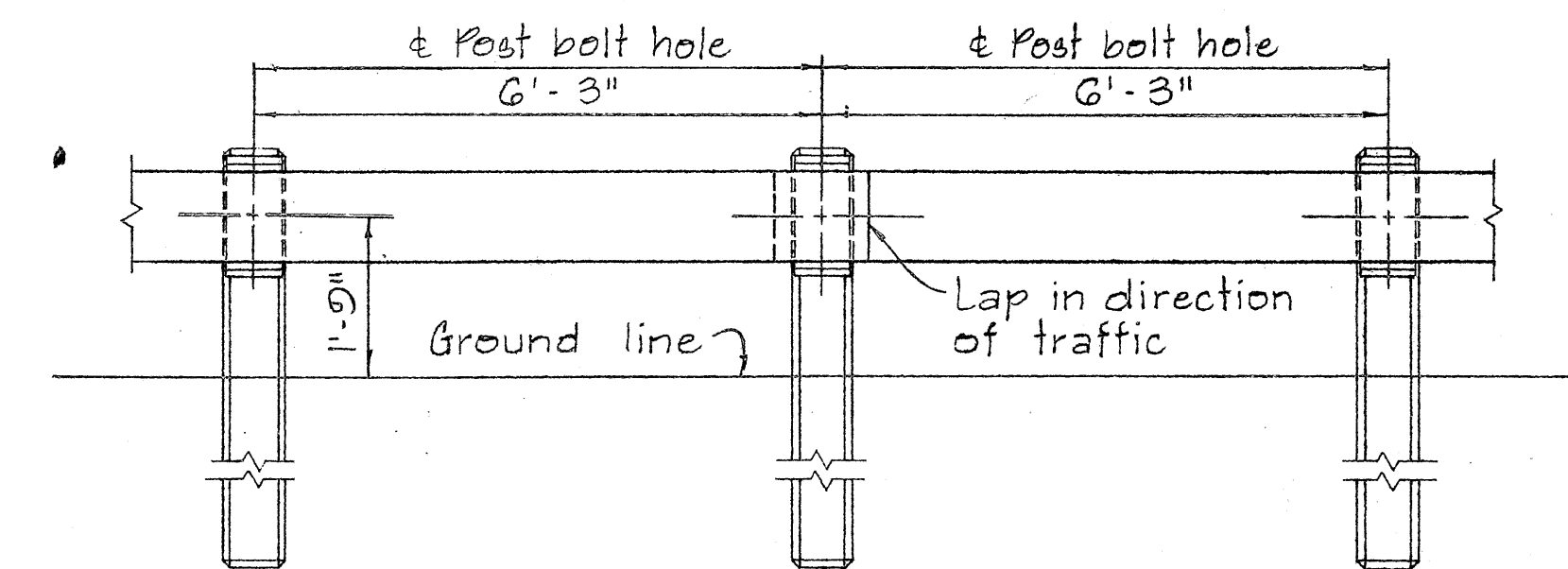


AT SUPER SECTION

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

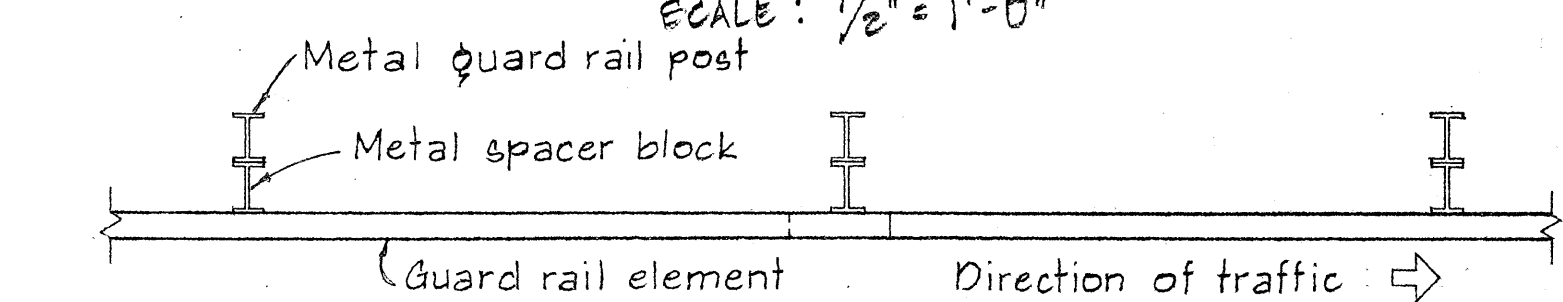


PLAN

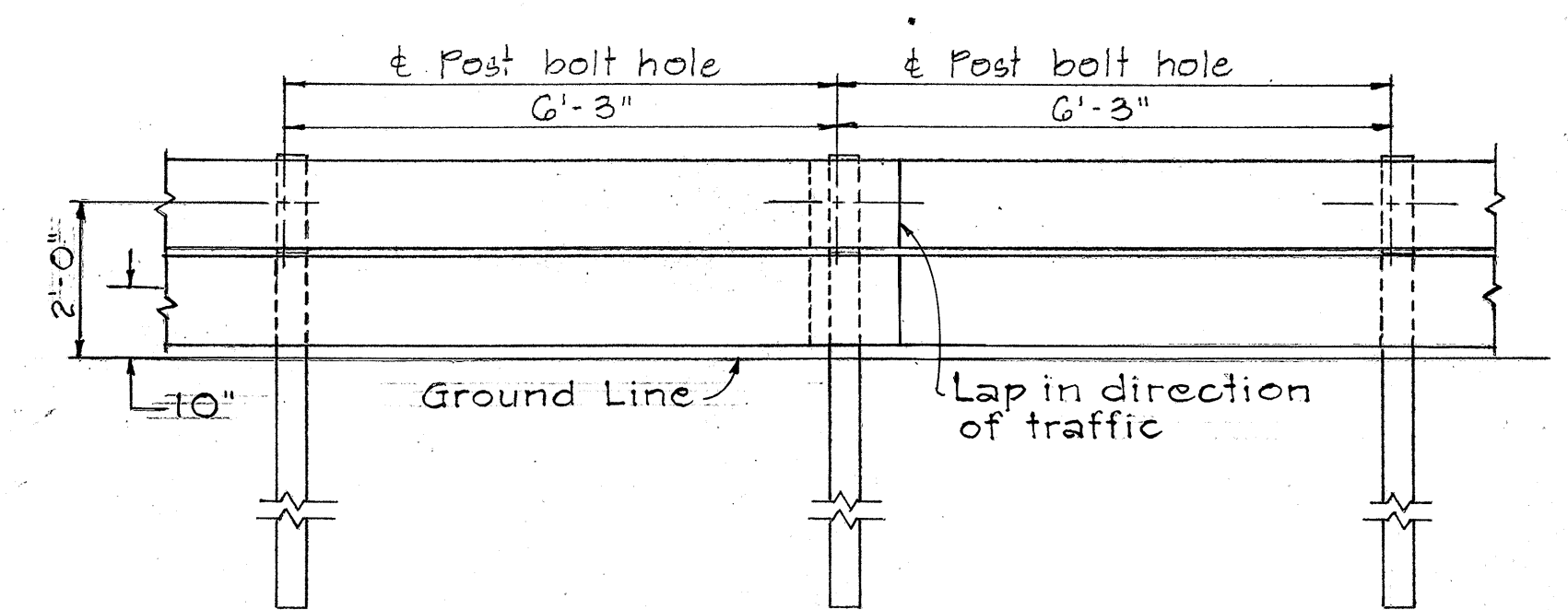


ELEVATION

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



PLAN



ELEVATION

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

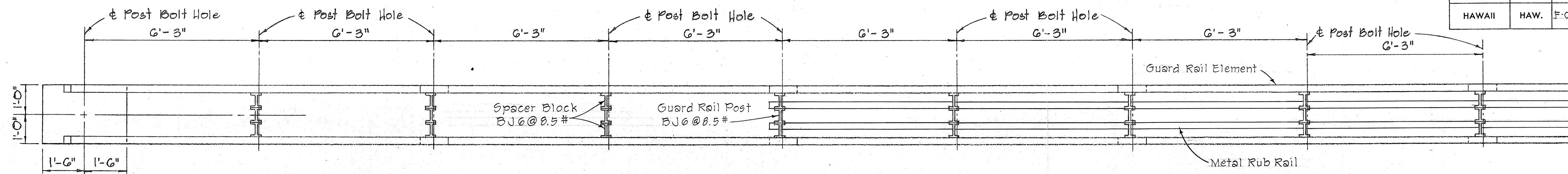
STANDARD DETAILS
METAL GUARD RAIL

SCALE: AS SHOWN NOV. 1968

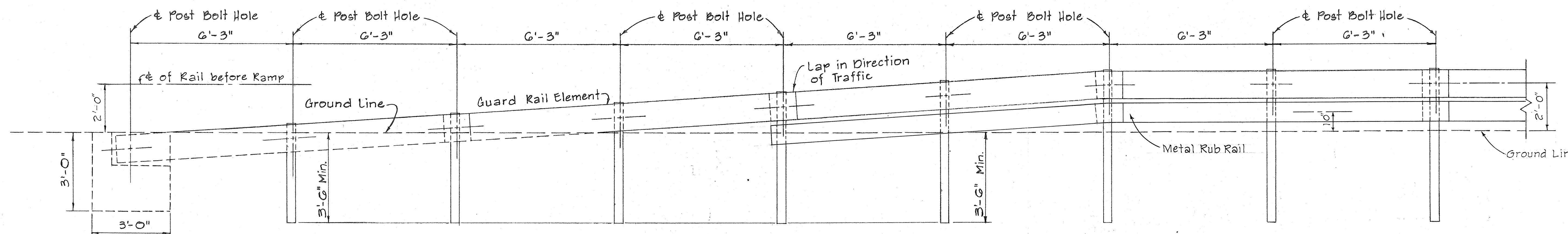
SHEET No. 1 OF 5 SHEETS DT 500

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(14)	1967	14	16

REVISED: 12-11-68



PLAN

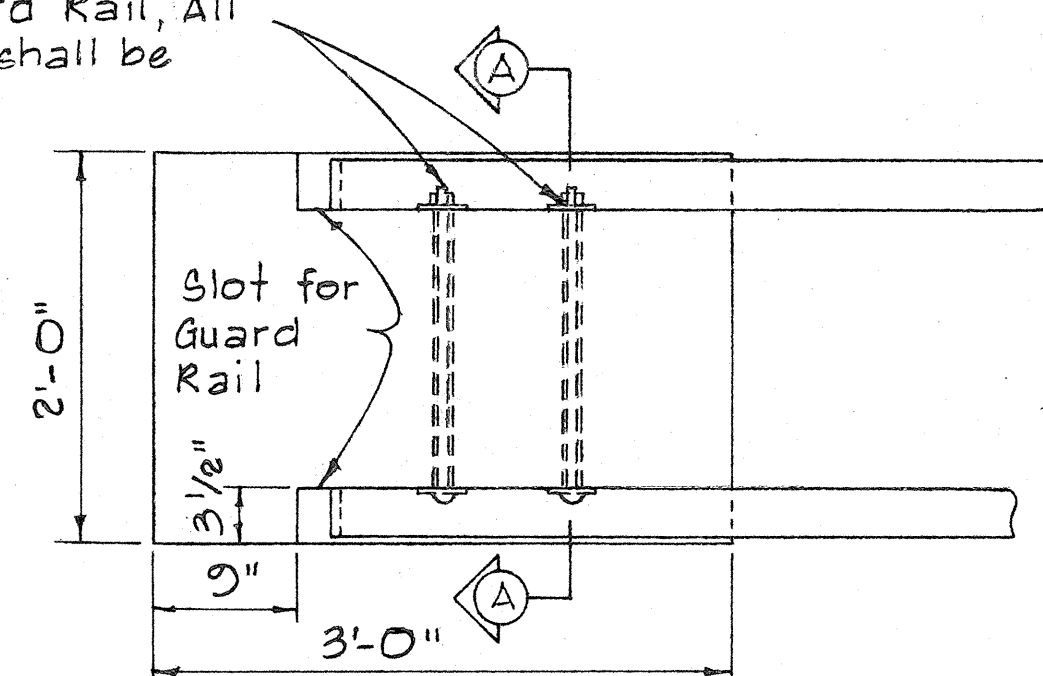


ELEVATION

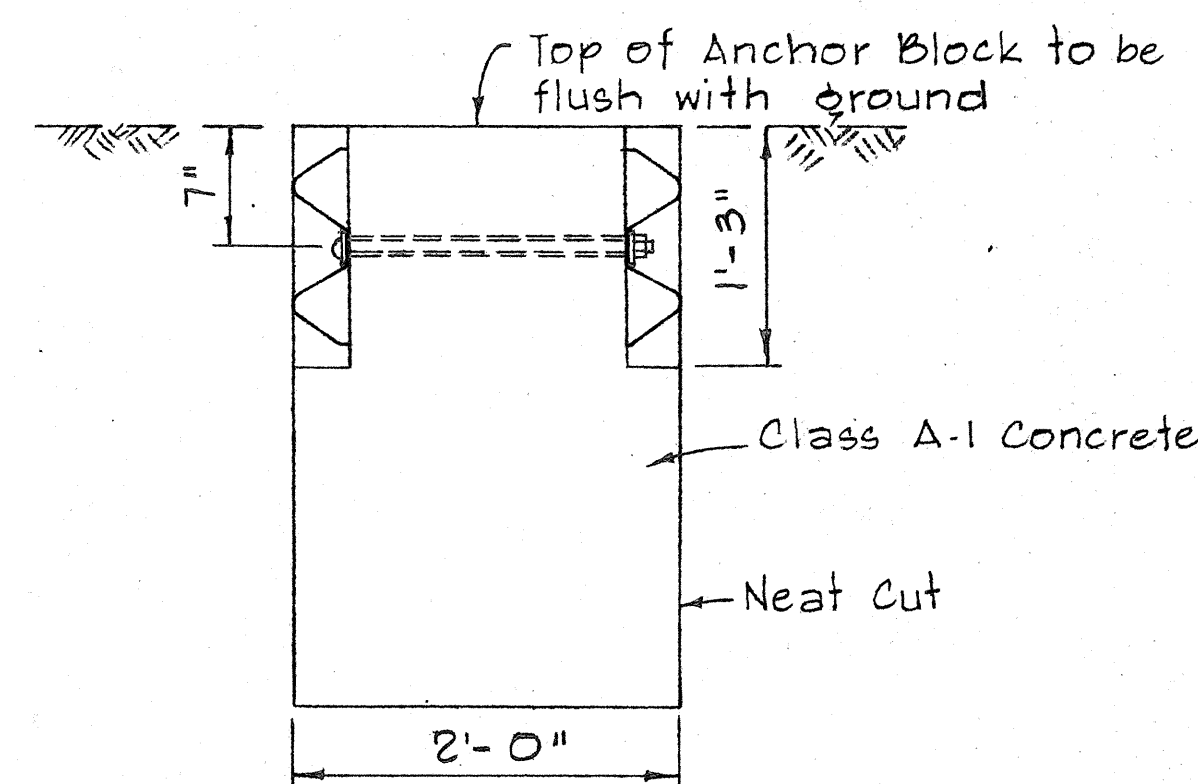
STRAIGHT APPROACH - RAMP END ANCHORAGE (MEDIAN)

Not To Scale

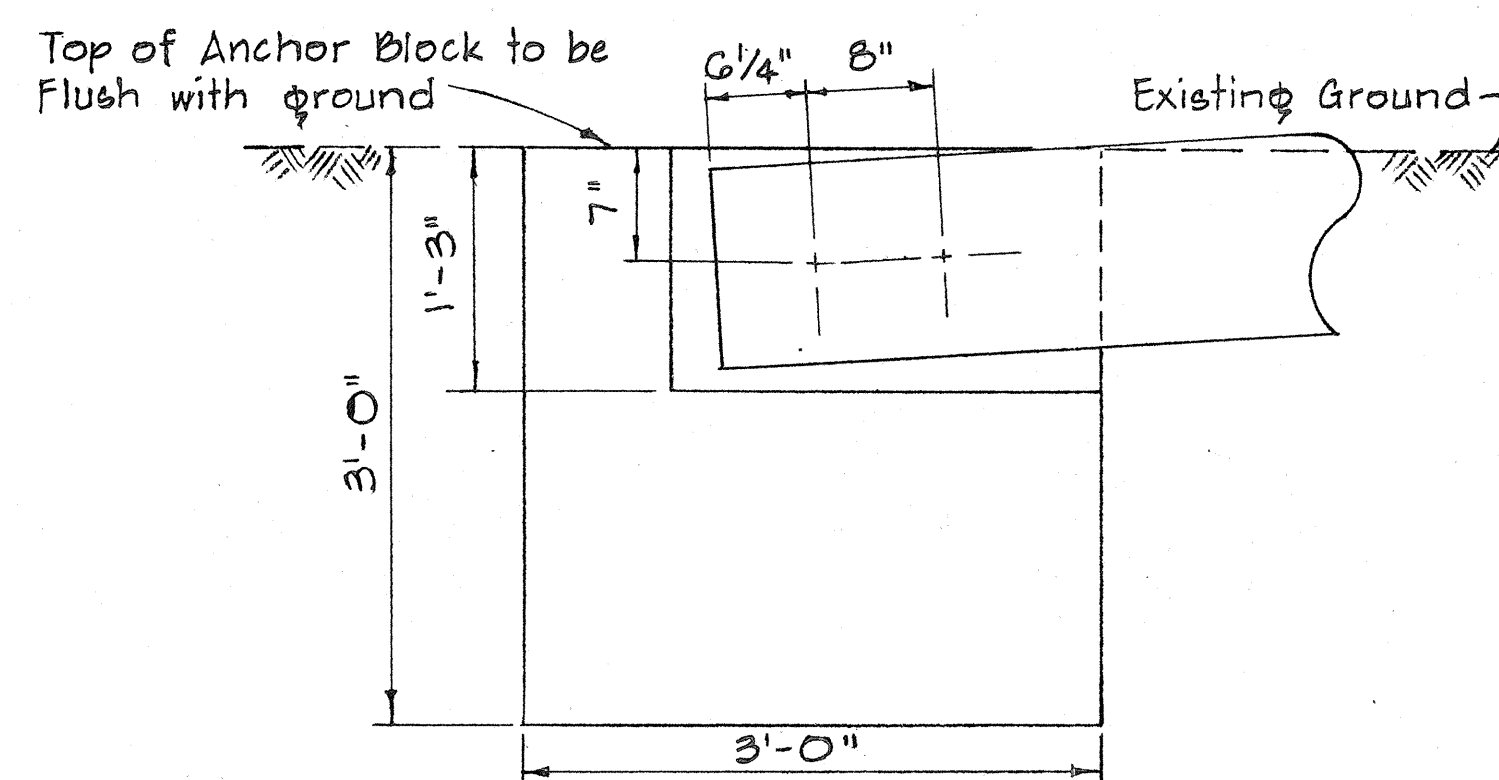
3/8" ϕ Bolts with 3/4" G.I. Pipe Sleeve in each hole incidental to Metal Guard Rail, All Metal Pieces shall be Galvanized.



PLAN



SECTION A-A



ELEVATION

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.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

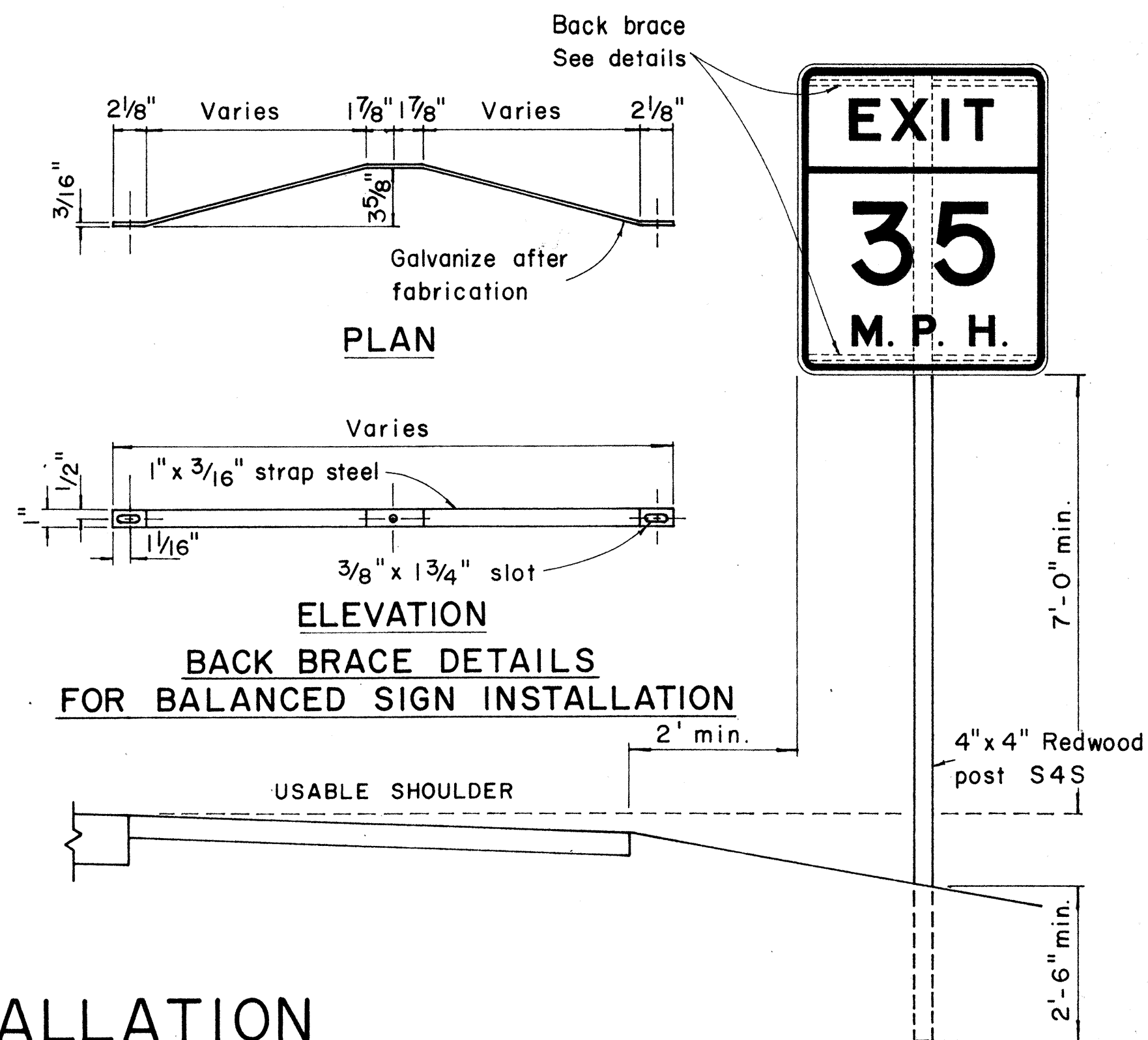
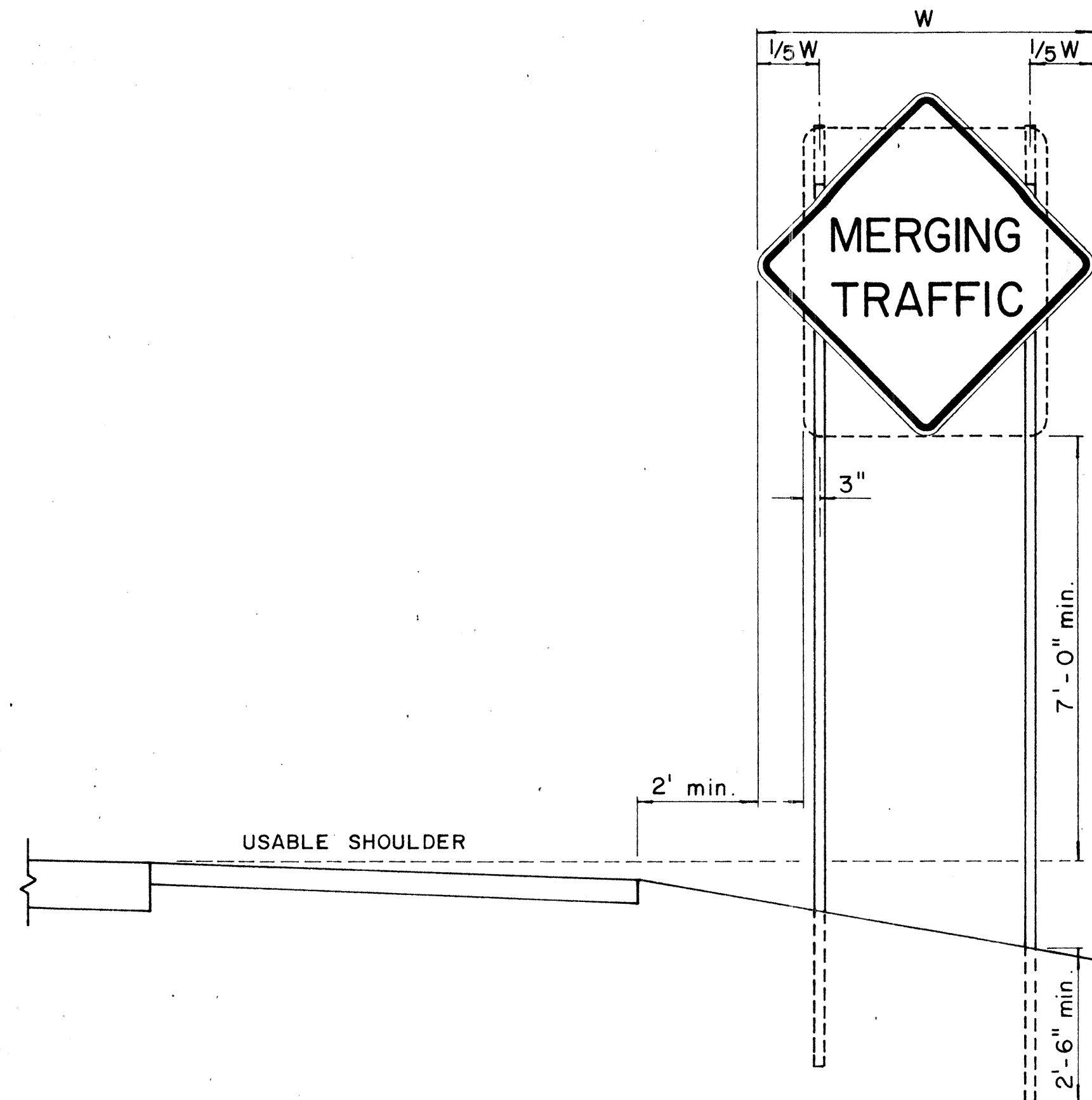
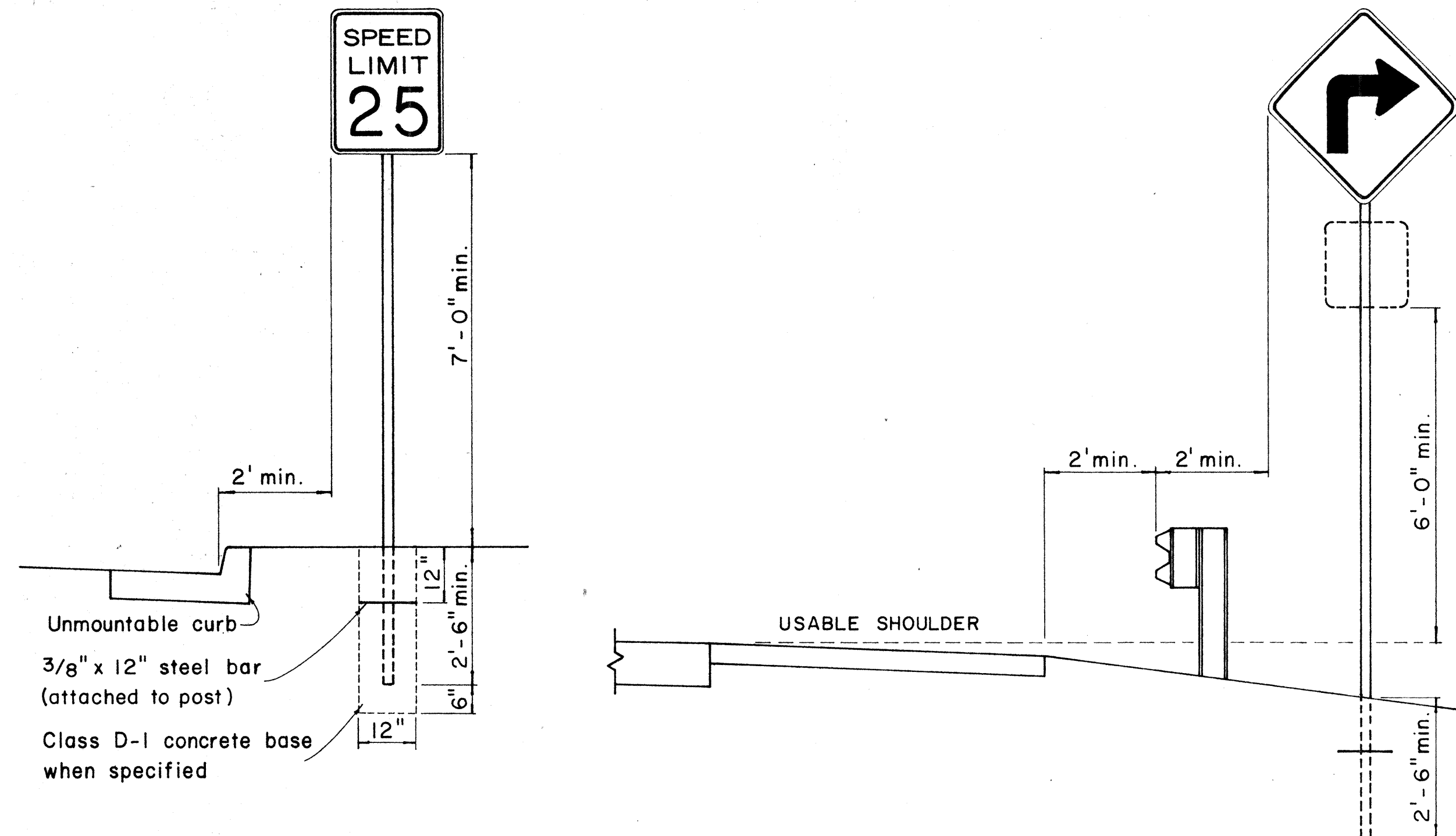
STANDARD DETAIL
GUARD RAIL
RAMP END ANCHORAGE

Scale: as Noted

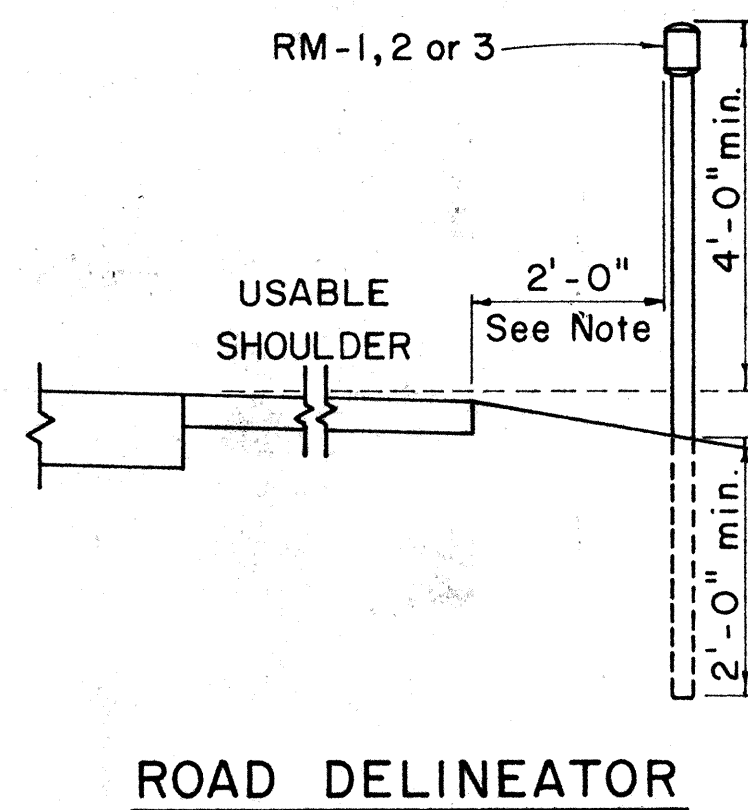
August, 1968

SHEET No. 3 OF 5 SHEETS DT 502

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(14)	1969	16	16

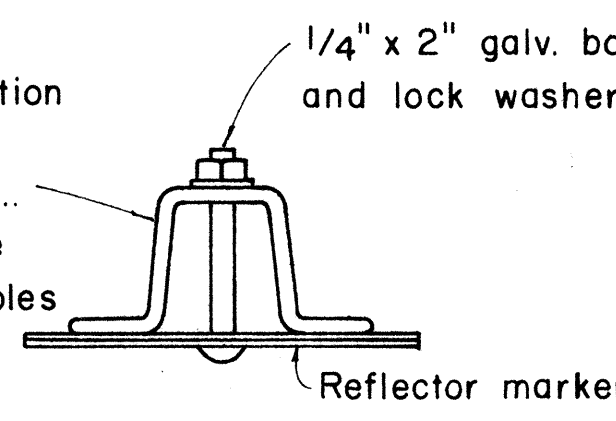


HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION



Galv. flanged channel
1/8" x 3/16" rolled section
post with a minimum
weight of 2 lbs. per ft..
Upper 2 ft. shall have
a single row of 3/8" holes
centered in the web at
1" o.c.

TYPICAL SECTION OF ROAD DELINEATOR



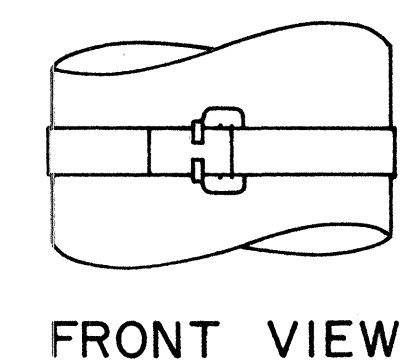
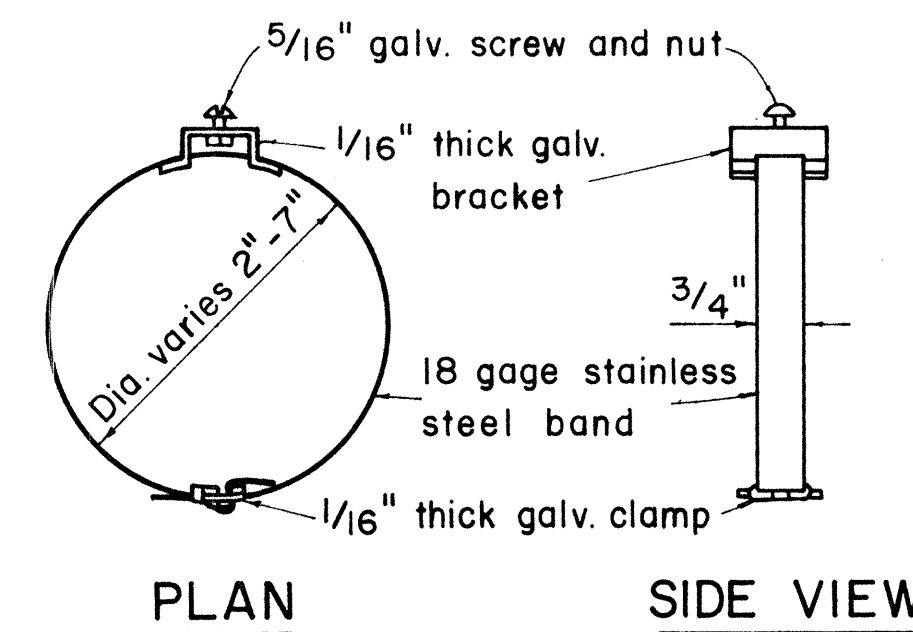
Galv. 1 1/2" x 1 1/2" square
tube post with a minimum
weight of 1.7 lbs. per ft

1/4" x 1/2" galv.
bolt with nut
and lock washer

1'-5" x 6" x 0.063" anodized
aluminum plate with 3/8"
holes drilled as shown

Galvanized post
Finished grade

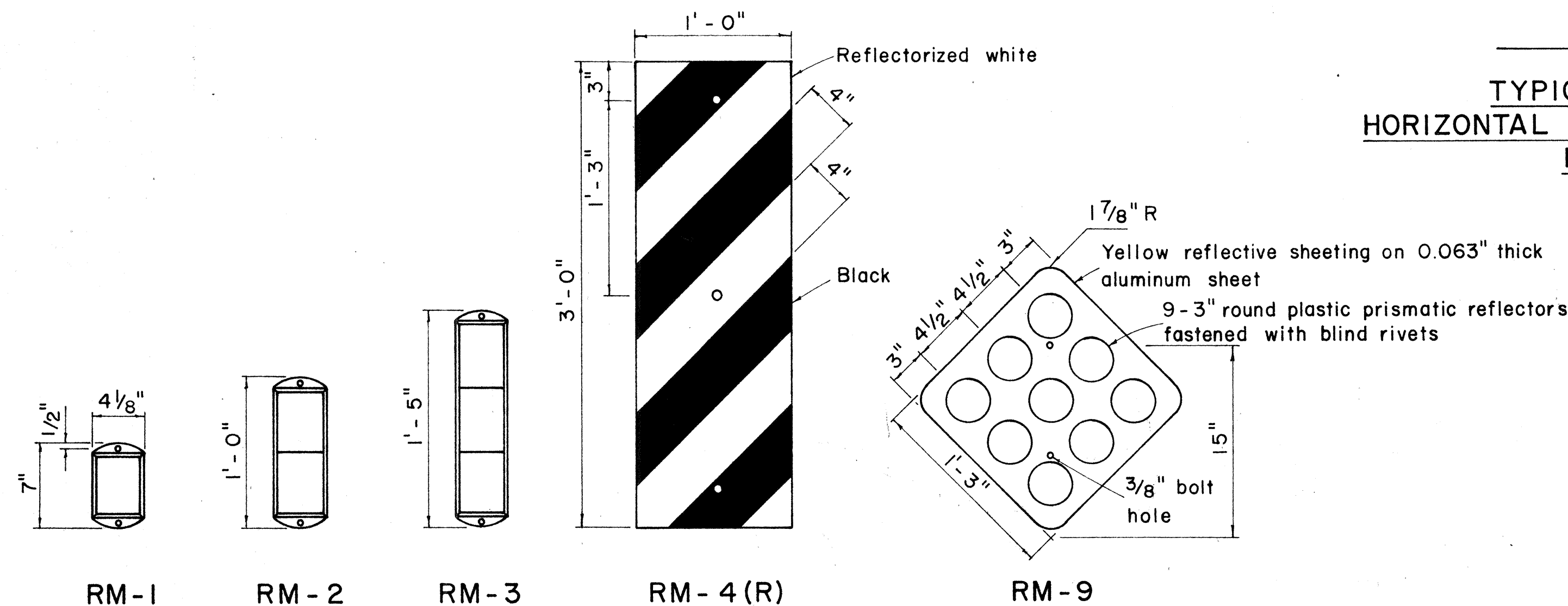
TYPICAL DETAIL
HORIZONTAL REFLECTOR MARKER
RM-3H



TYPICAL BAND BRACKET FOR
MOUNTING TRAFFIC SIGNS

GENERAL NOTES:

- Sign posts shall be 2" galv. standard pipe or 2" x 2" galv. sq. tube post.
- 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.
- 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.
- Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
- 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.
- Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
- (R) or (L) indicates right or left and shall be as shown on the plans.



REFLECTOR MARKERS

RM-1
(CLEAR)

RM-2
(AMBER)

RM-3
(AMBER)

RM-4 (R)

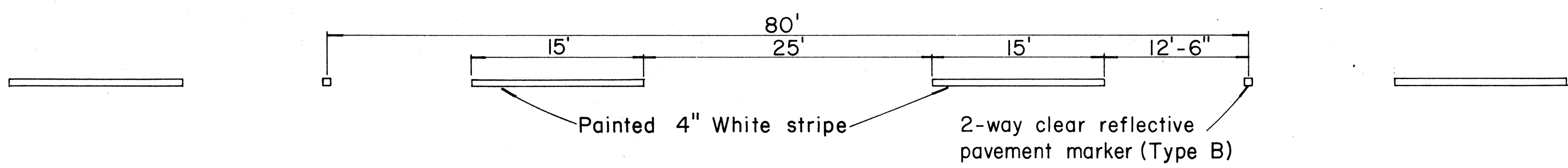
RM-9

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
NO.	

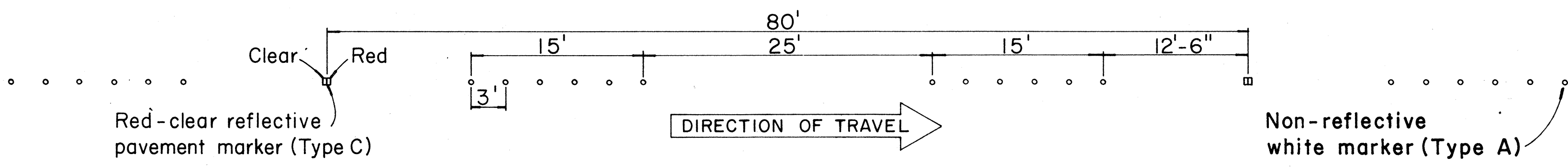
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
STANDARD DETAILS MISCELLANEOUS SIGN DETAILS
Not to scale
March, 1968
SHEET No. 5 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(14)	1969	0016A	16

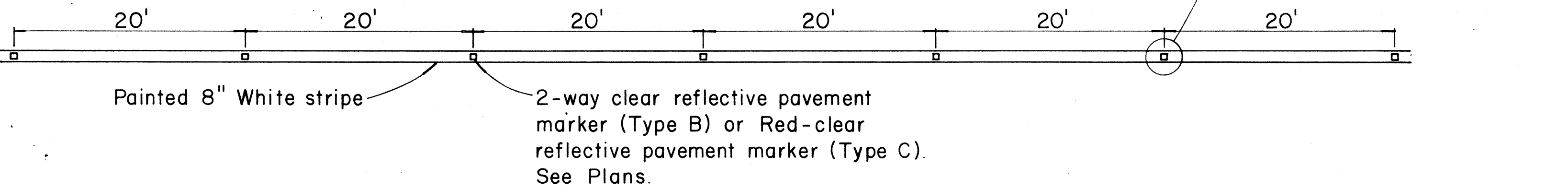
1 CENTER LINES ON TWO - LANE RURAL ROADS AND CITY STREETS



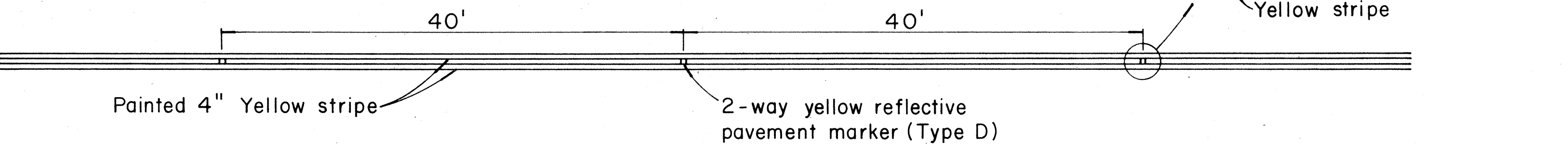
2 LANE LINES



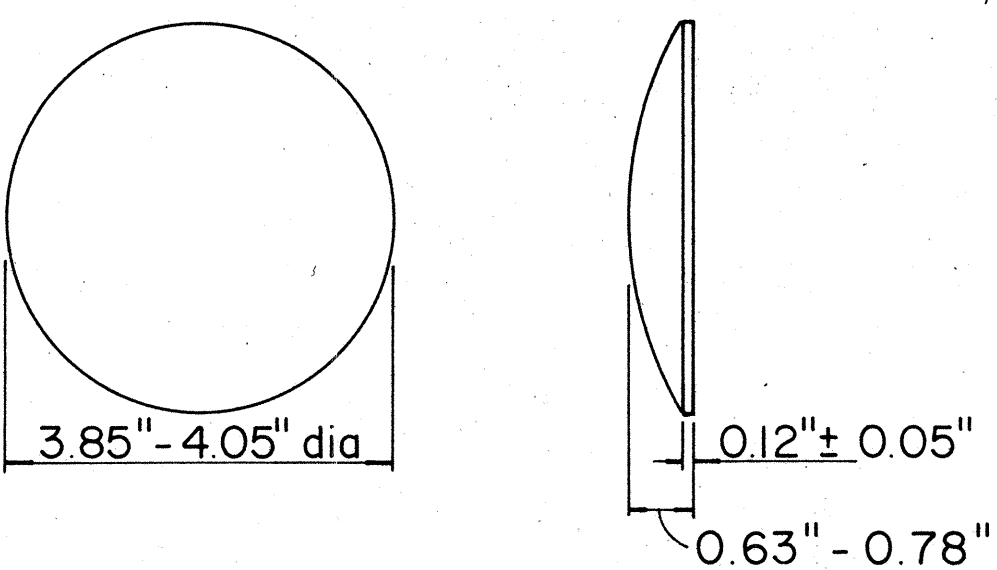
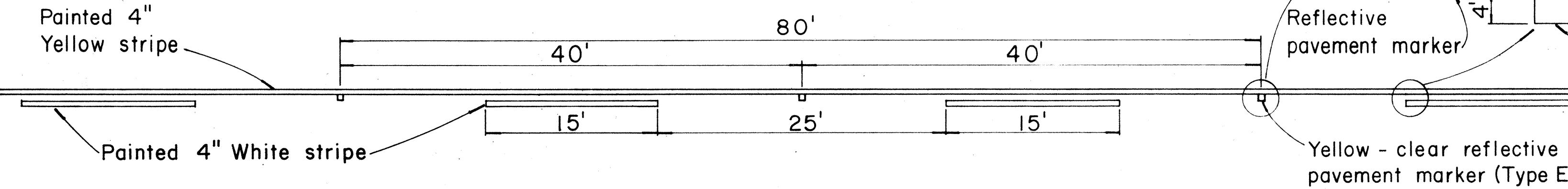
3 CHANNELIZING LINES



4 YELLOW DOUBLE CENTER LINES

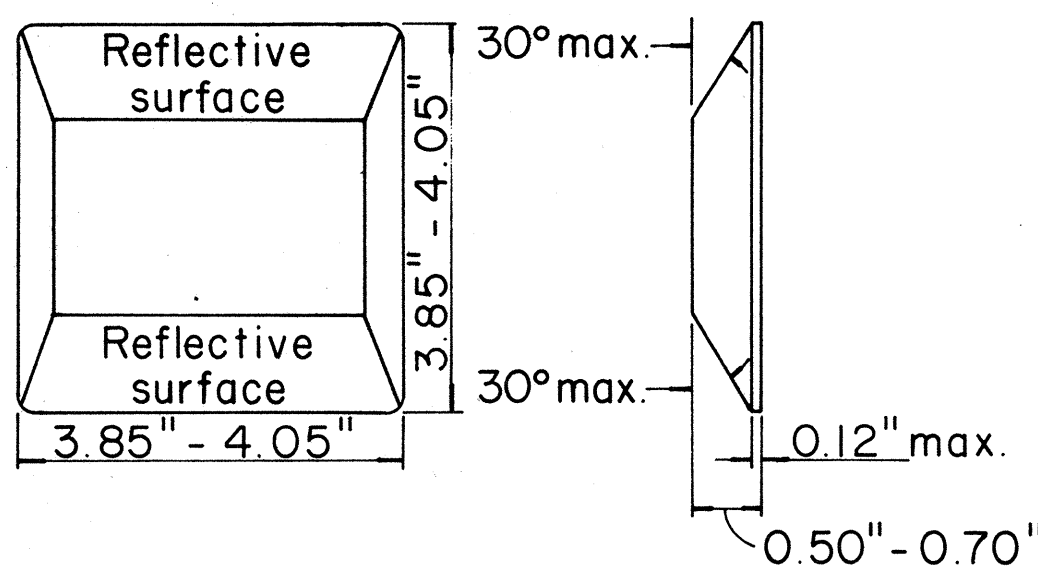


5 NO PASSING - PASSING ZONES ON TWO-LANE ROADS



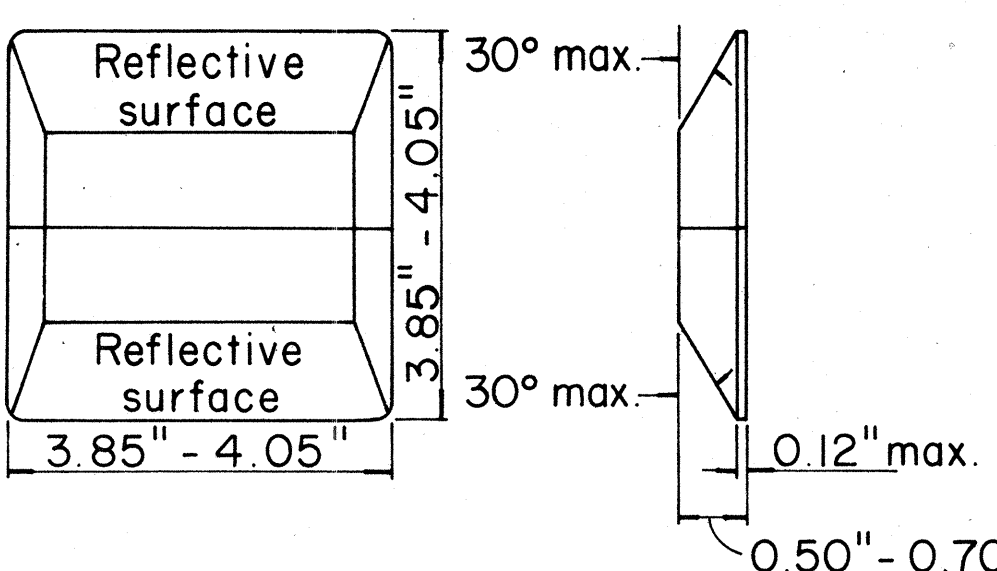
TYPE A
Non-reflective white marker

TYPE J
Non-reflective yellow marker



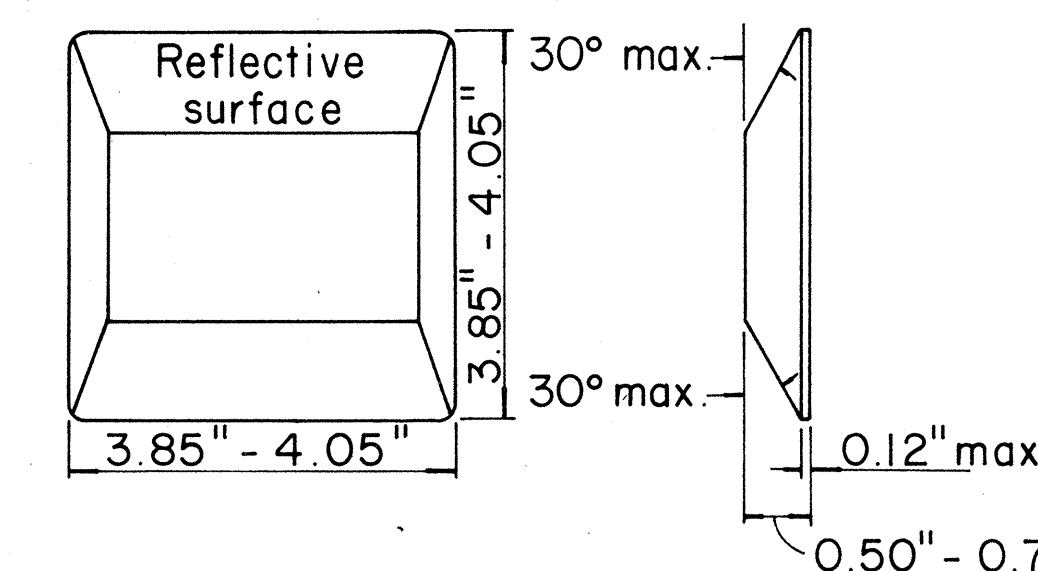
TYPE B
2-way clear reflective surface

TYPE D
2-way yellow reflective surface



TYPE C
Red-clear reflective surface

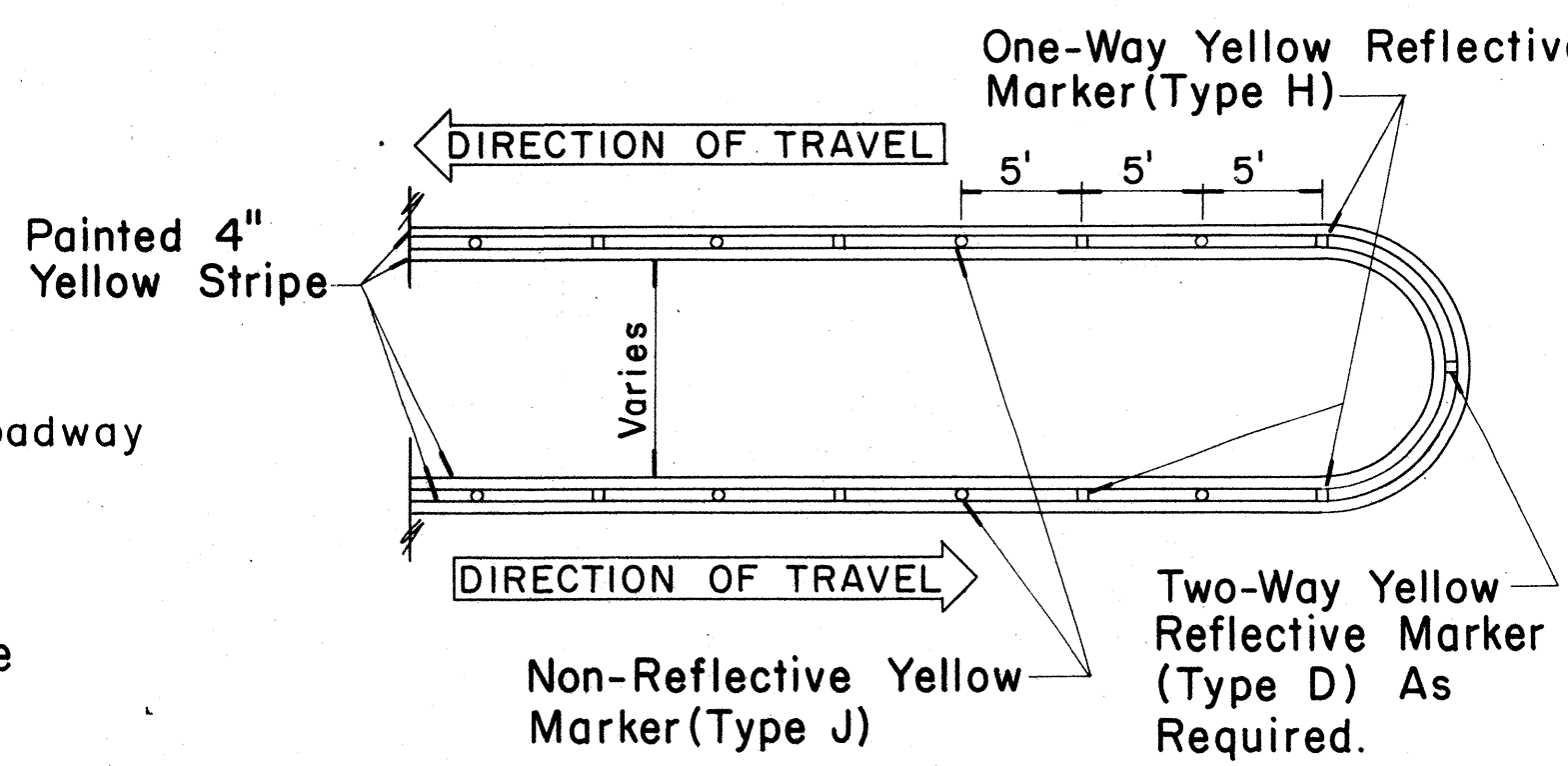
TYPE E
Yellow-clear reflective surface



TYPE H
One-way yellow reflective surface

TYPE G
One-way clear reflective surface

6 MEDIAN NOSE DELINEATION



NOTE
Painted stripes to be done by State forces.

June 23, 1969
REVISED: Aug. 26, 1968

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS

NOT TO SCALE
SHEET No. OF SHEETS

July 3, 1969

C D . 1 G A