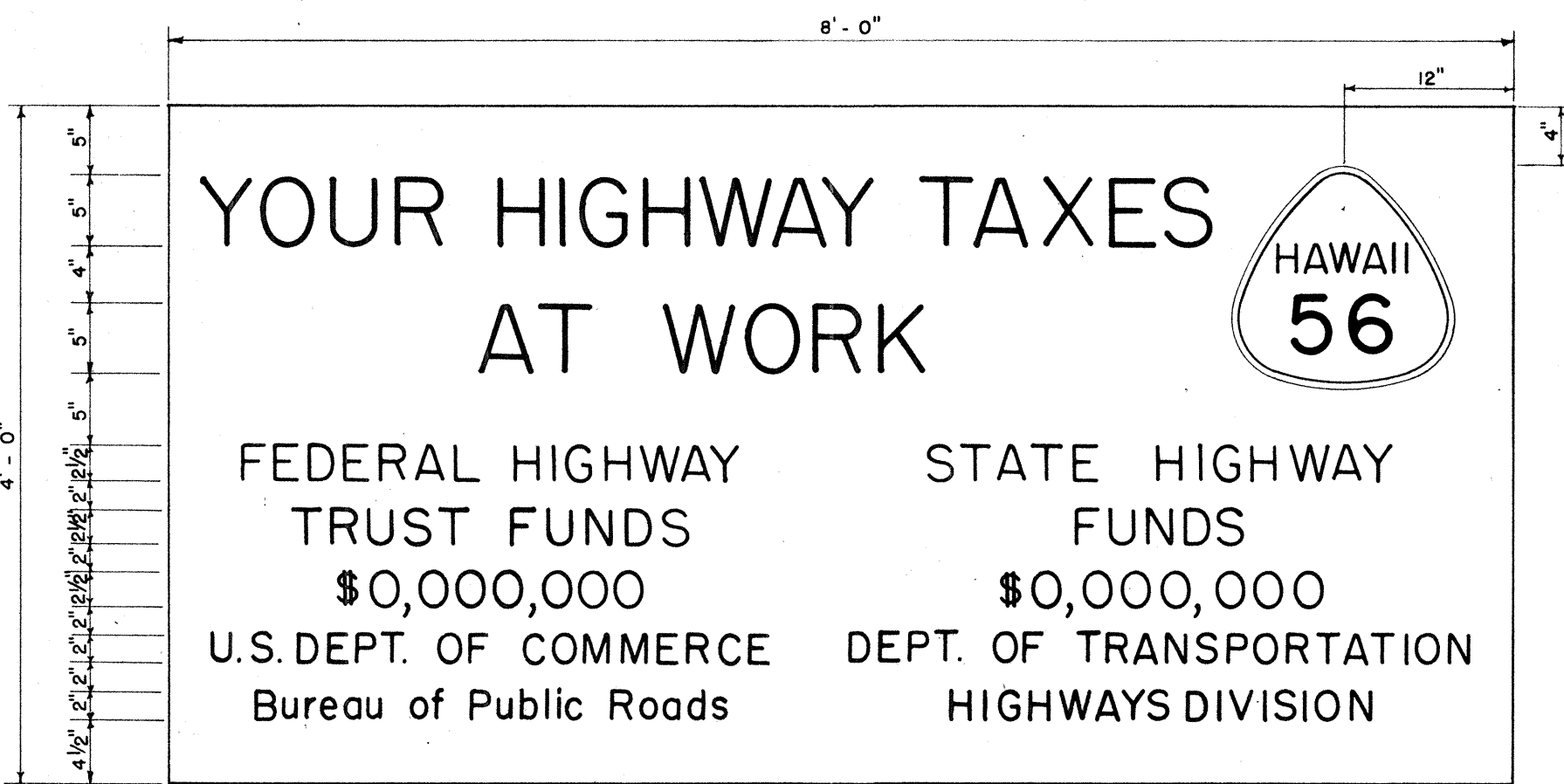
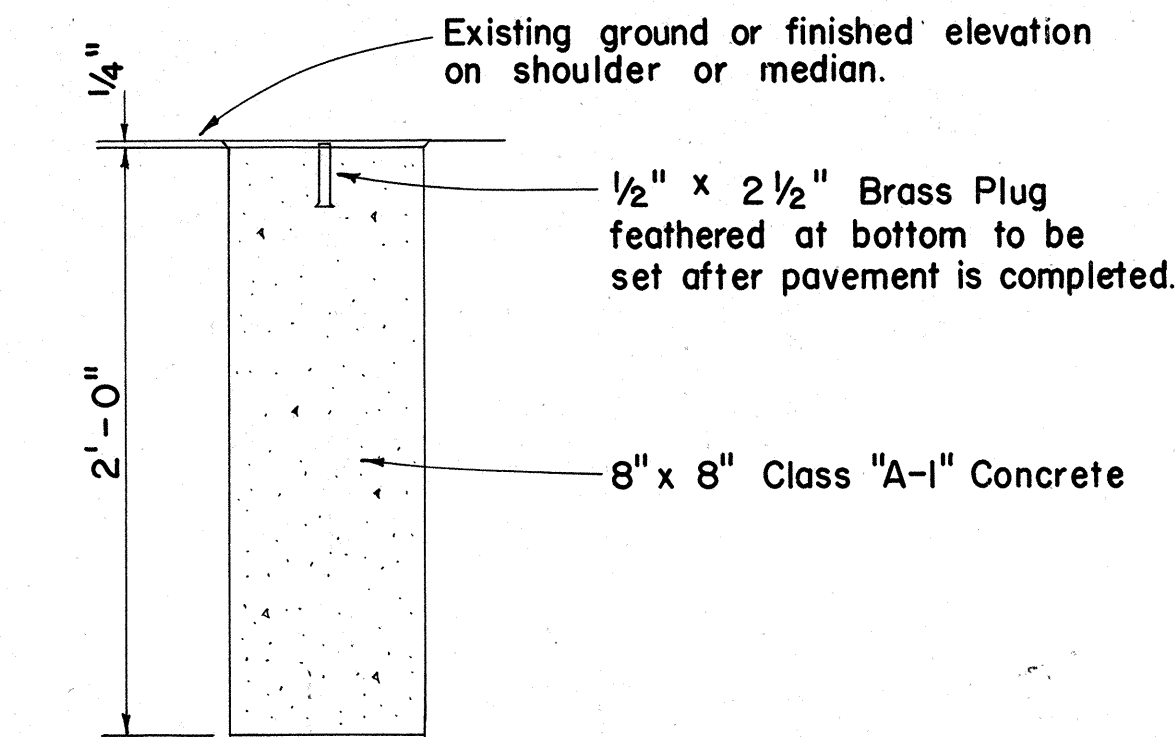
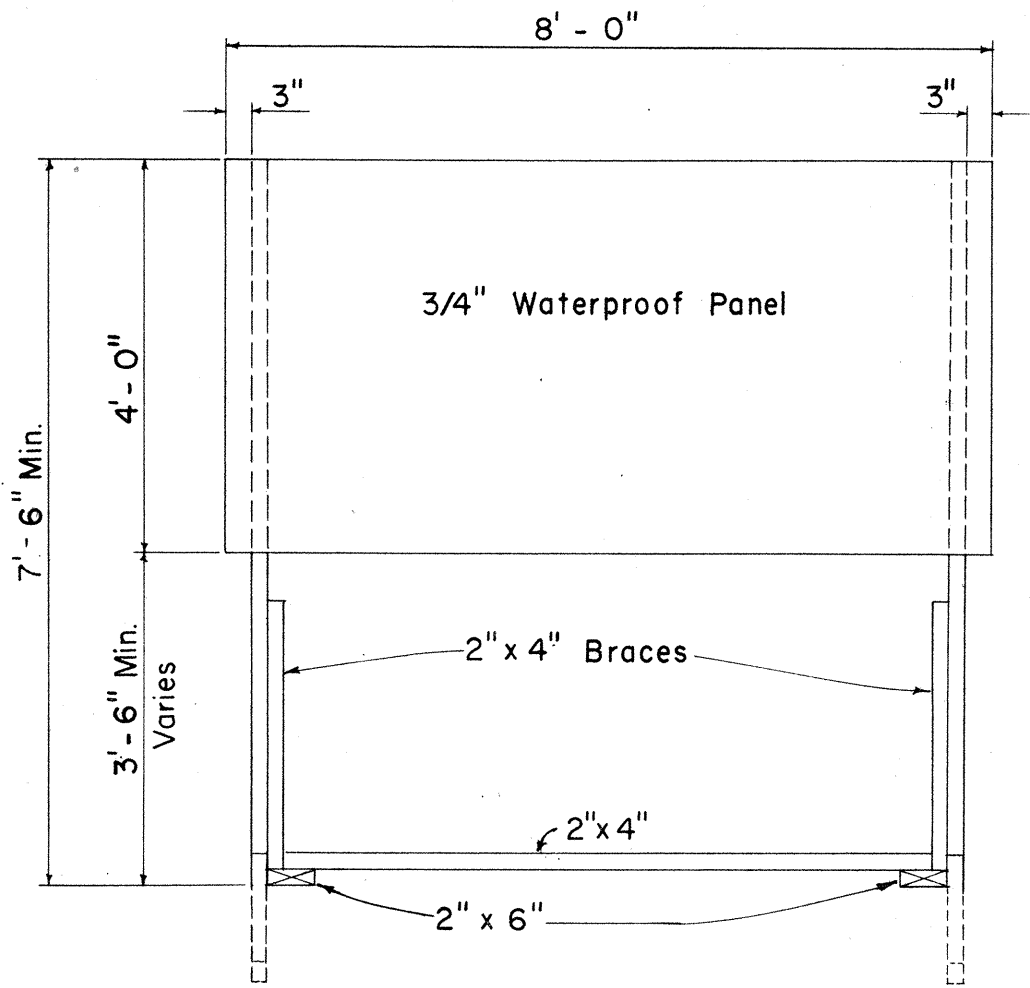
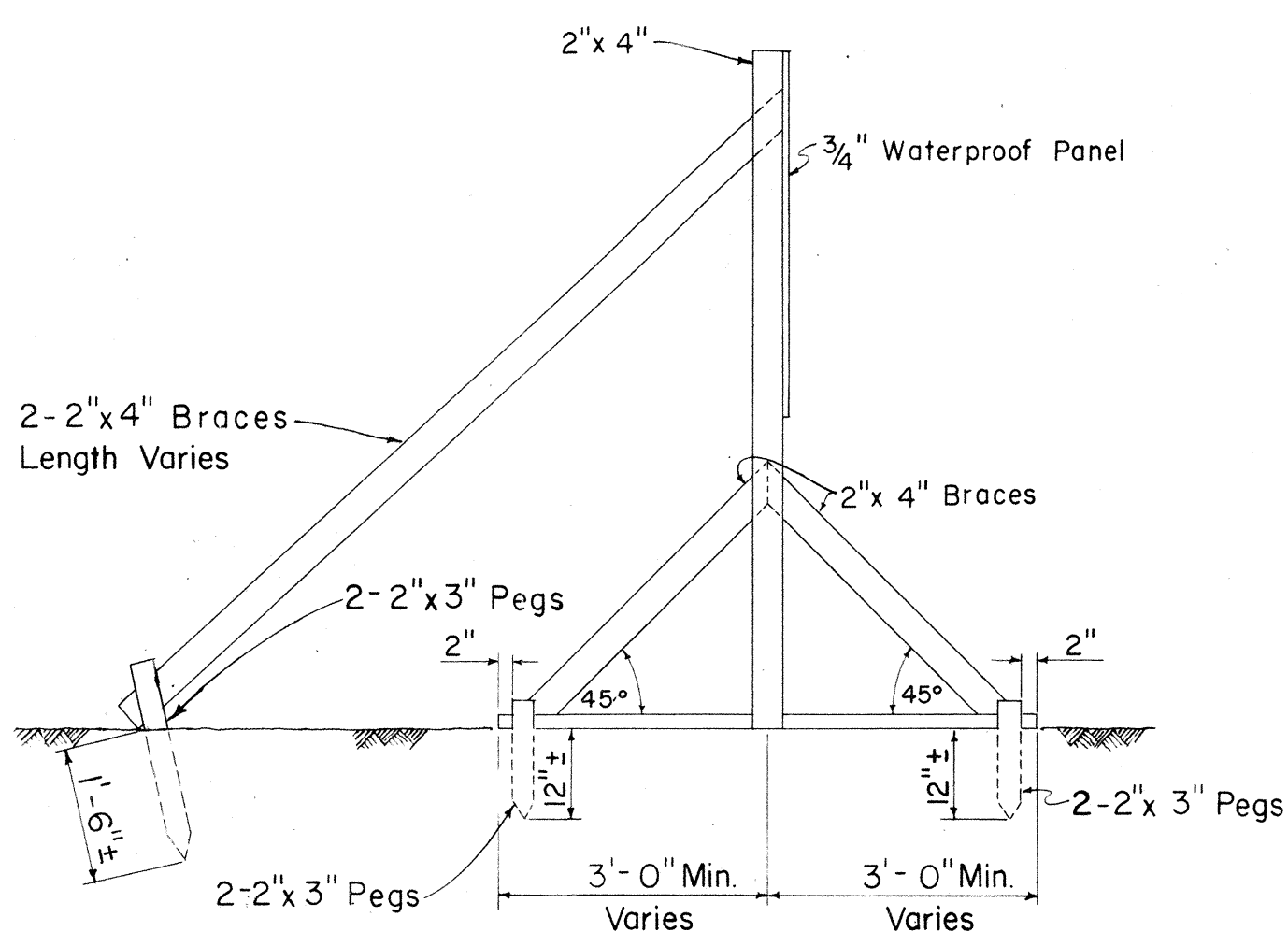
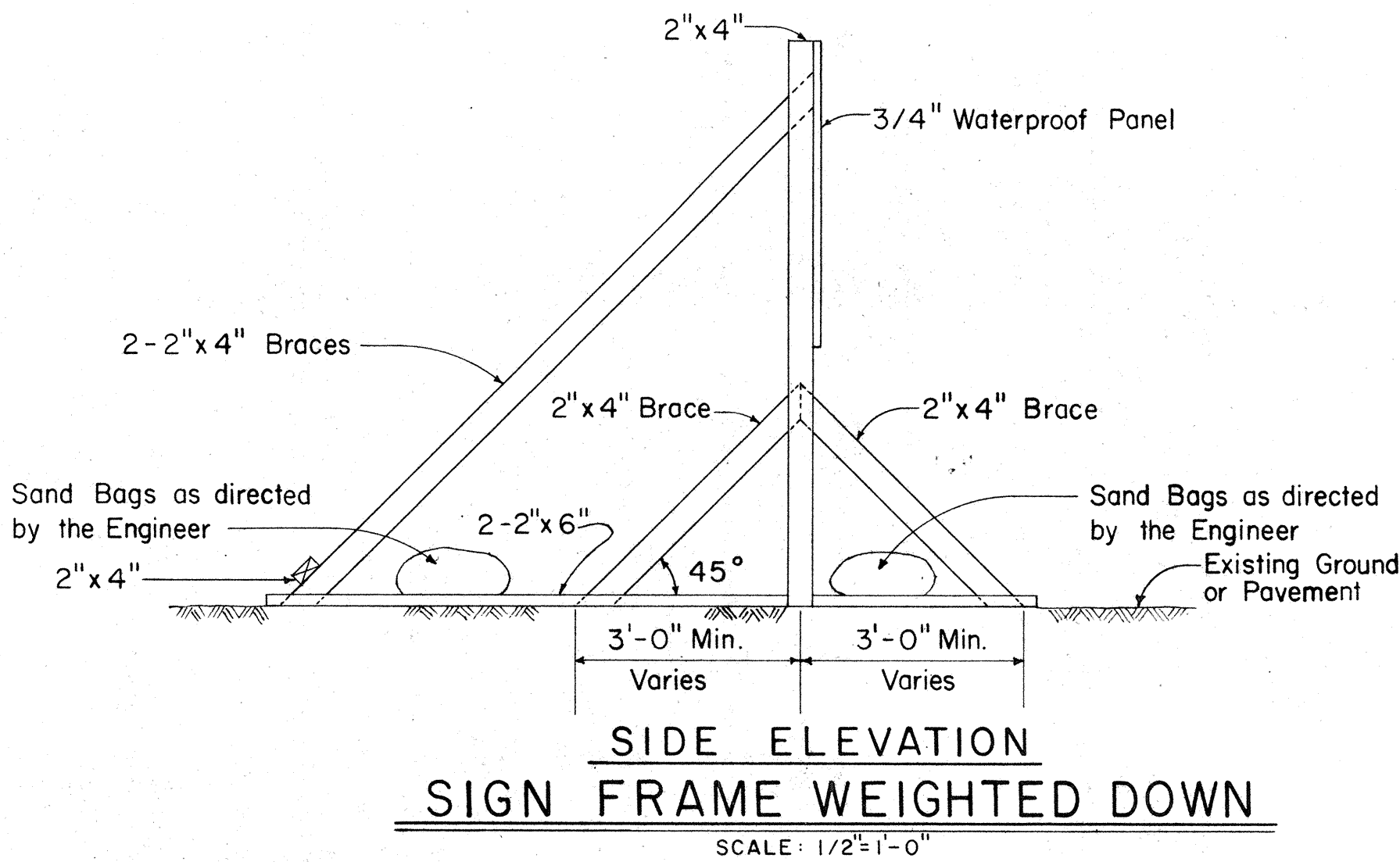


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0560(1) UNIT 2	1966	5	43



CONSTRUCTION IDENTIFICATION SIGN NOTES

1. The Contractor shall construct, install and maintain the Construction Identification Signs, at the locations shown on the plans and as ordered by the Engineer.
2. All costs incurred in the construction, installation and maintenance of the Construction Identification Signs, will not be paid for separately, but shall be considered as included in the unit price paid for the various items in the proposal.
3. The Construction Identification Signs shall be removed and stockpiled at the completion of the project as ordered by the Engineer and are to become State Property.
4. The exact figures for the various funds involved will be furnished to the Contractor for the incorporation in the Construction Identification Signs.
5. The legend shall be black on white background unless otherwise specified.
6. Refer to Sheet No. 11 for details on the exact shape and size of the State route marker to be shown on these Construction Identification Signs.
7. All letters shall be of size and design shown and shall conform with 'Standard Alphabets for Highway Signs', Bureau of Public Roads, 1952. Use Series 'C' letters unless otherwise noted.

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

DETAIL FOR MONUMENT
Scale: 1/2" = 1'-0"

SIGN PANEL
Scale: 1" = 1'-0"

PRIMARY AND SECONDARY SYSTEMS CONSTRUCTION IDENTIFICATION SIGN

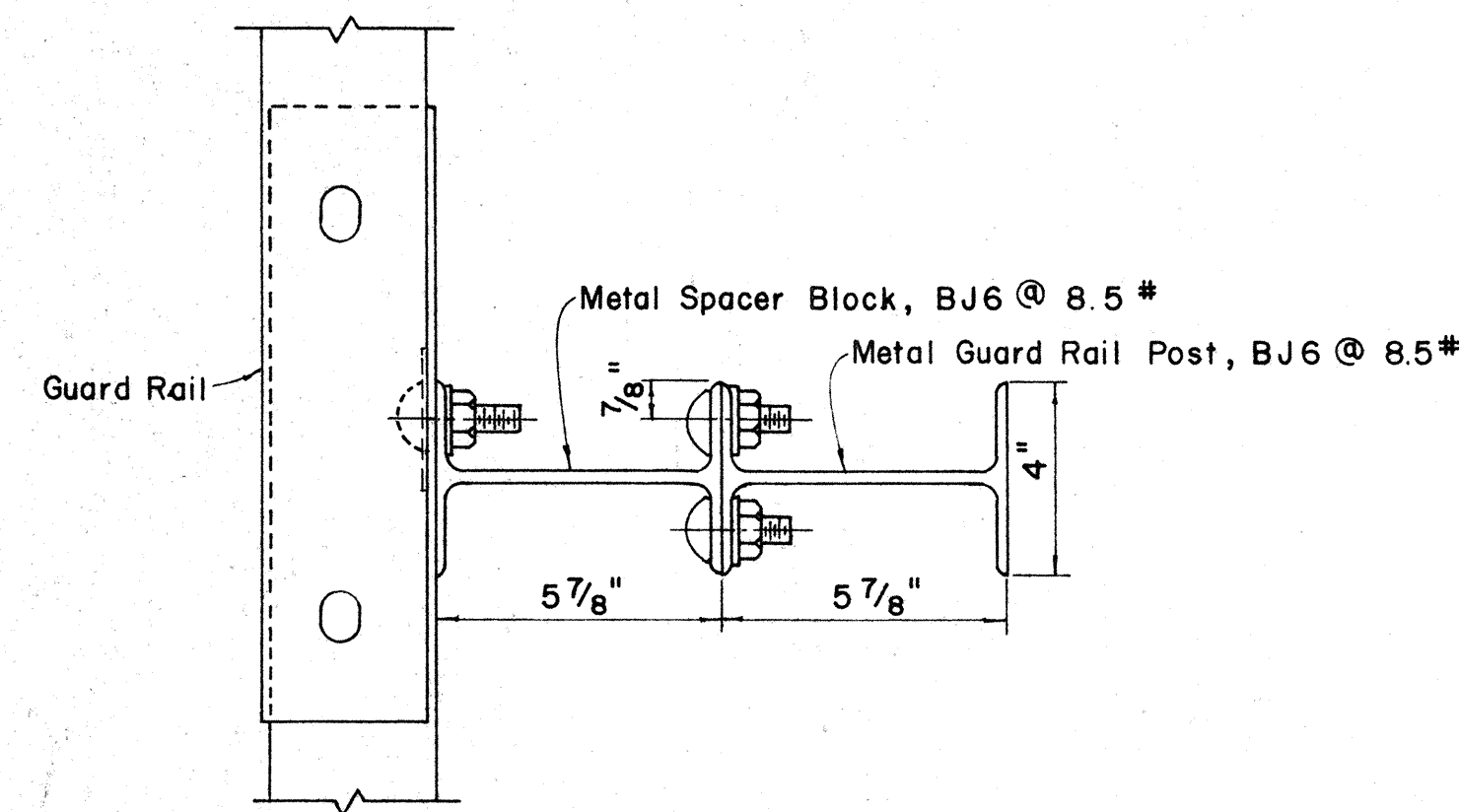
Scale: As Shown

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

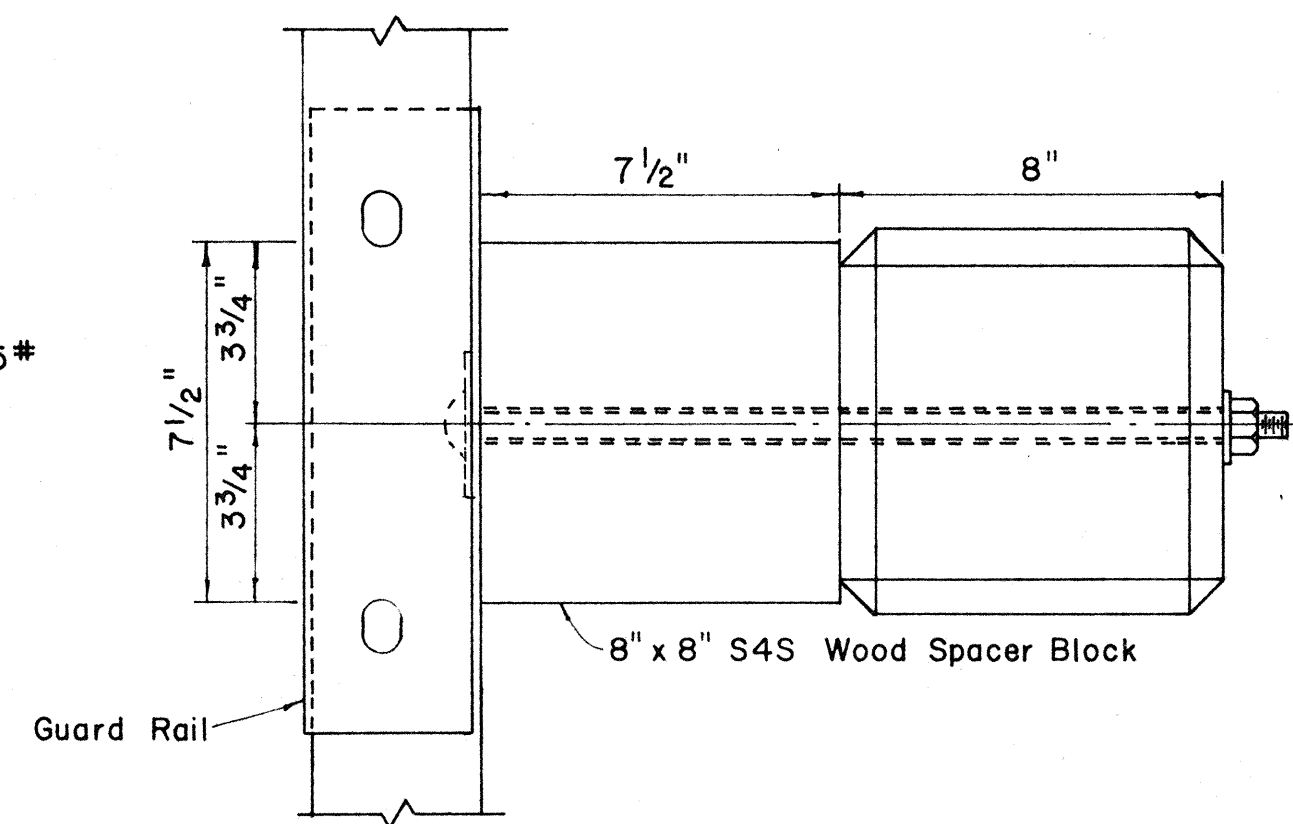
MISCELLANEOUS DETAILS

KAUAI BELT ROAD
PROJ. No. S-0560(1) UNIT 2
Scale: As Noted Nov. 1966

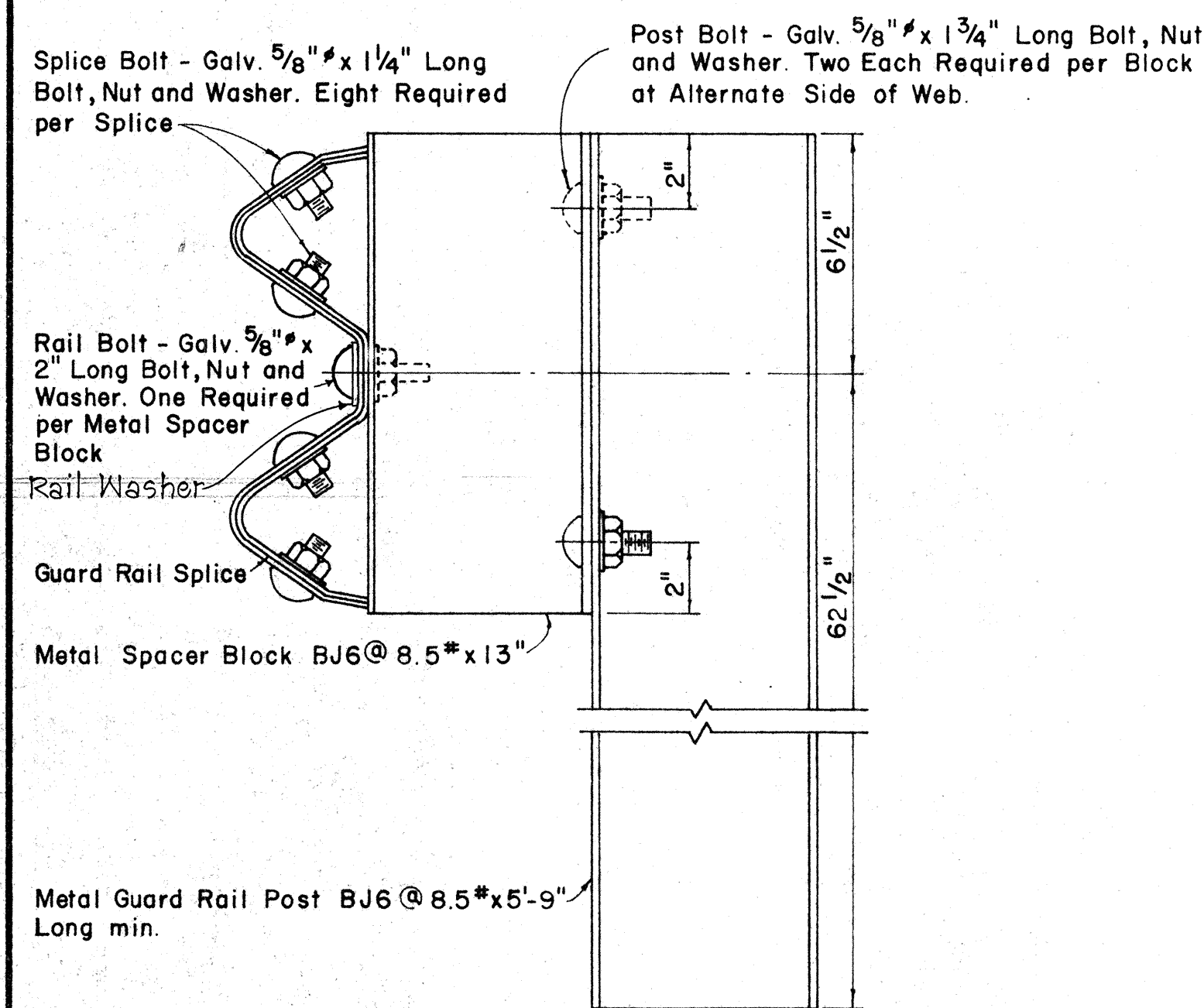
SHEET No. 1 OF 7 SHEETS



PLAN



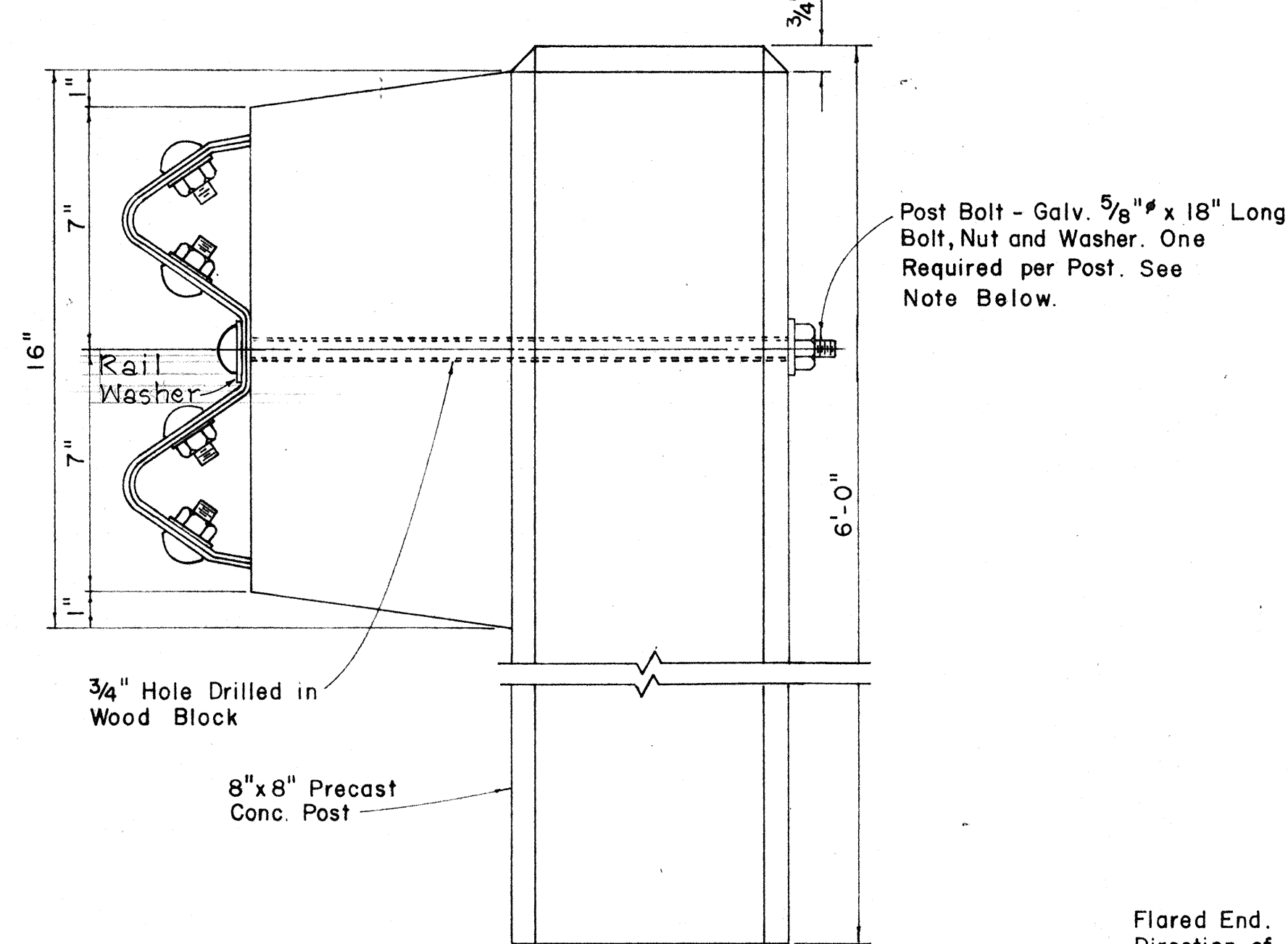
PLAN



NOTE: Omit Rail Splice Bolt Washers.

SINGLE GUARD RAIL ON METAL POST
WITH METAL SPACER BLOCK

Scale: 3" = 1' - 0"



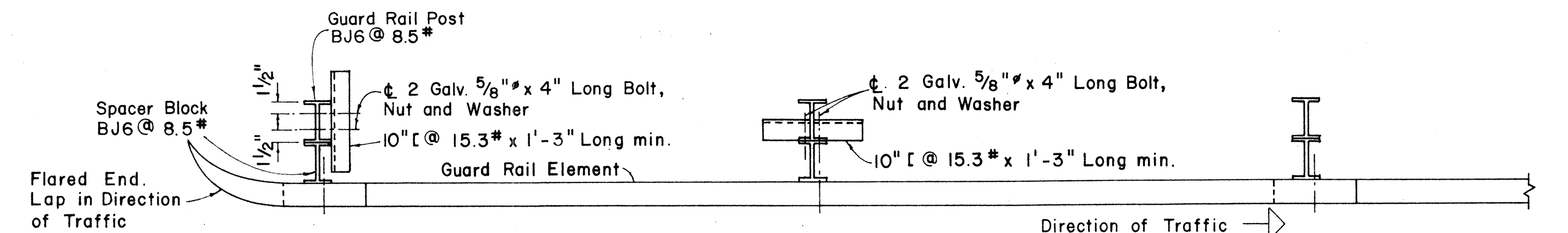
Wood Blocks shall be Laminated Douglas Fir, "Construction Grade - Joists and Planks", 1250 c, or "Dense Structural Redwood - Posts and Timbers", 1450 c, pressure treated with preservative as specified in the Standard Specifications.

SINGLE GUARD RAIL ON PRECAST
CONCRETE POST WITH WOOD SPACER BLOCK

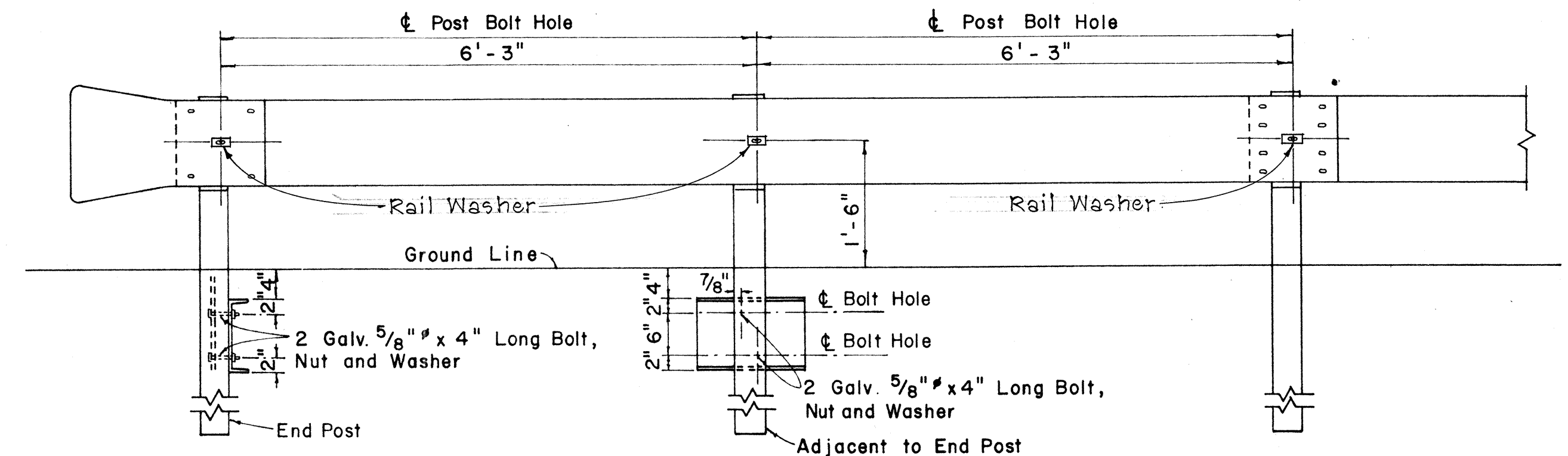
Scale: 3" = 1' - 0"

DETAILS FOR SINGLE GUARD RAIL

Scale: As Shown



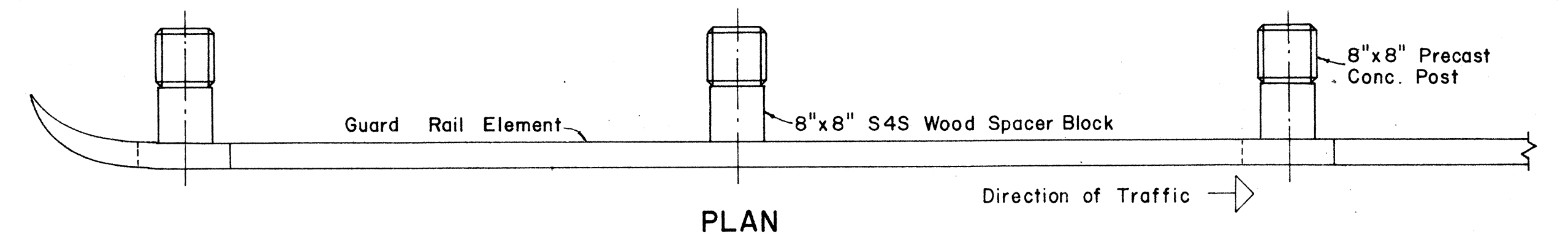
PLAN



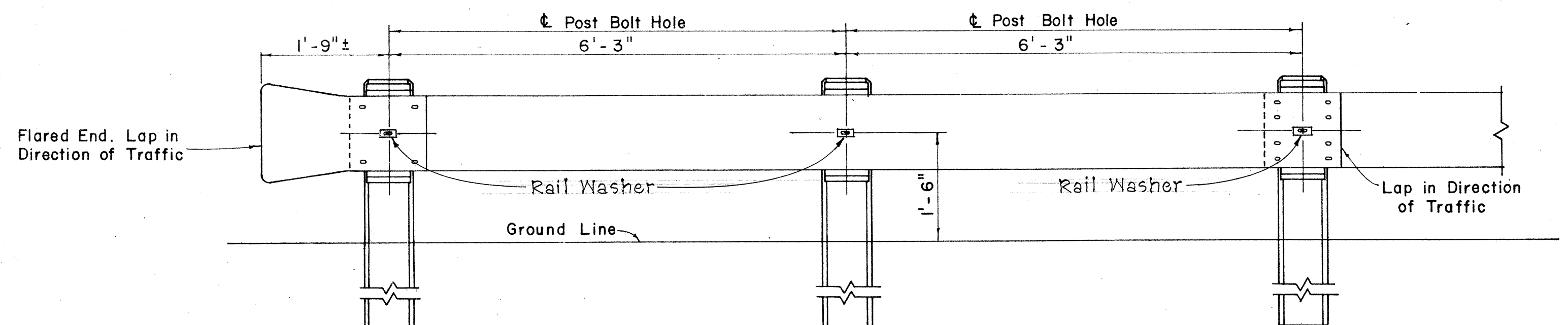
ELEVATION

METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

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



PLAN



ELEVATION

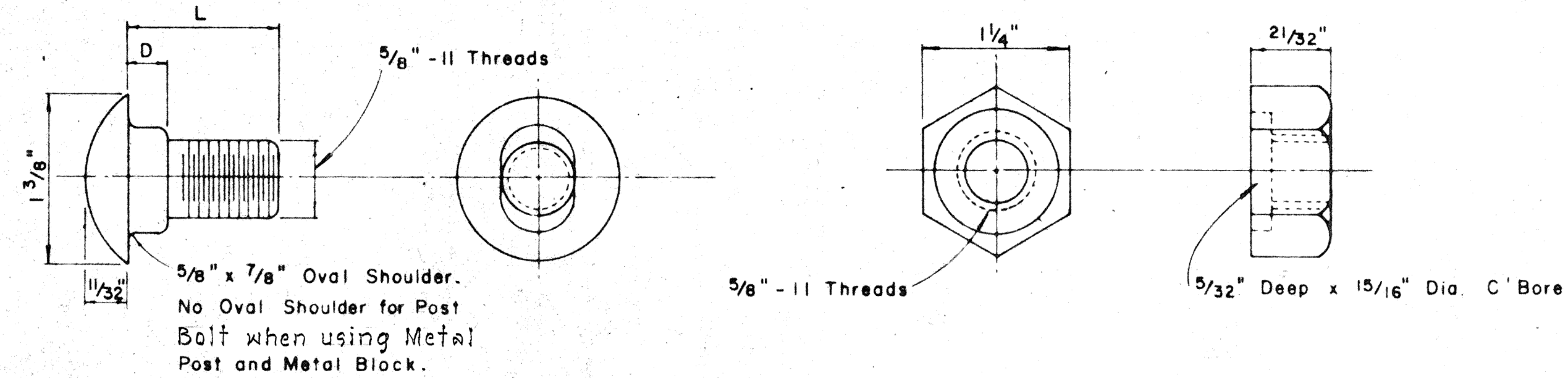
METAL GUARD RAIL ON CONCRETE POST WITH WOOD SPACER BLOCK

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS METAL GUARD RAIL

BOLT DIMENSIONS		
TYPE BOLT	D	L
Splice Bolt	5/16"	1 1/4"
Post Bolt for Conc. Post w/Double Wood Blocks	3/32"	25"
Rail Bolt for Metal Block	3/32"	2"
Post Bolt for Metal Post w/Metal Block	0"	1 3/4"
Post Bolt for Conc. Post w/Single Wood Block	3/32"	18"

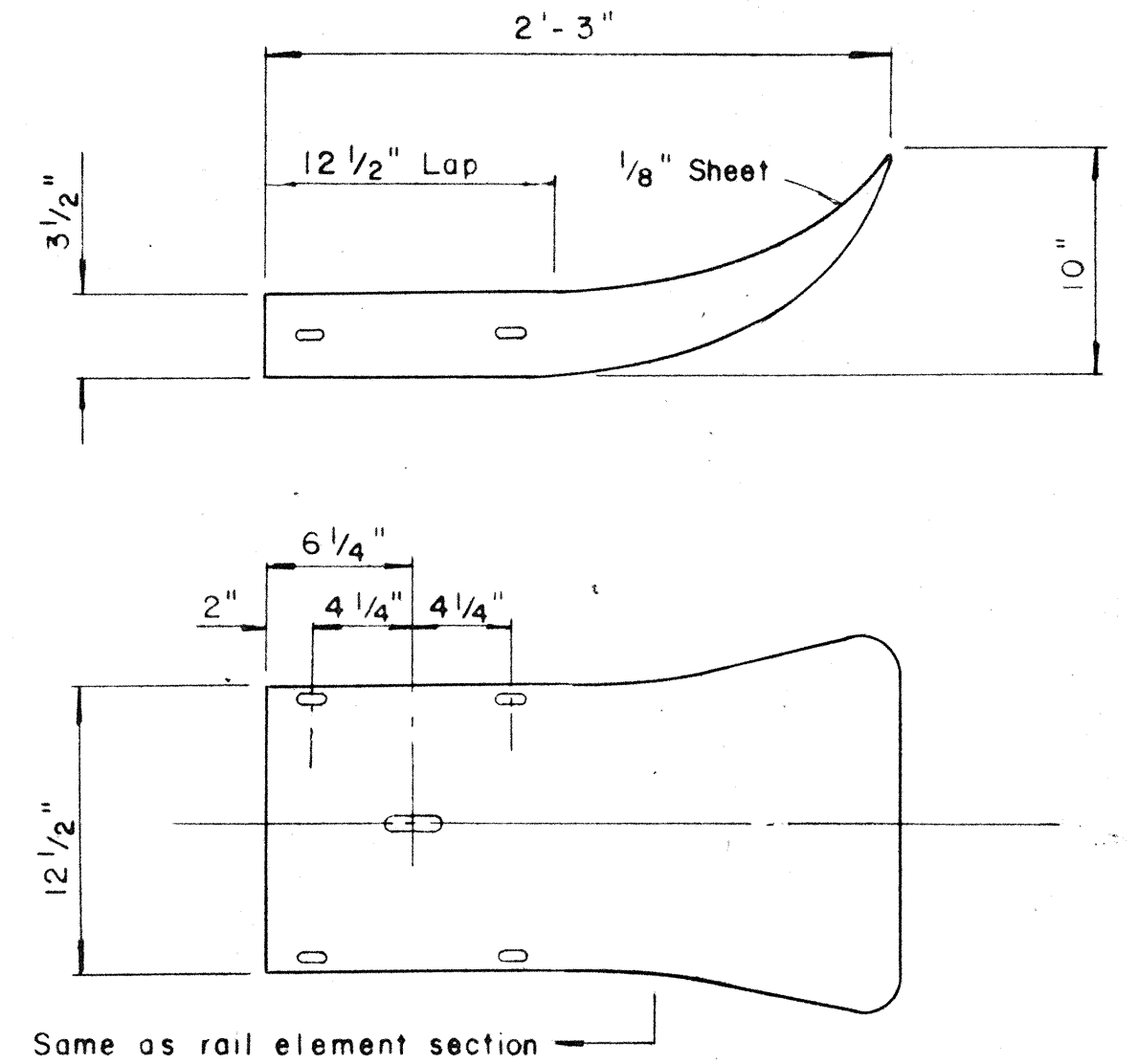
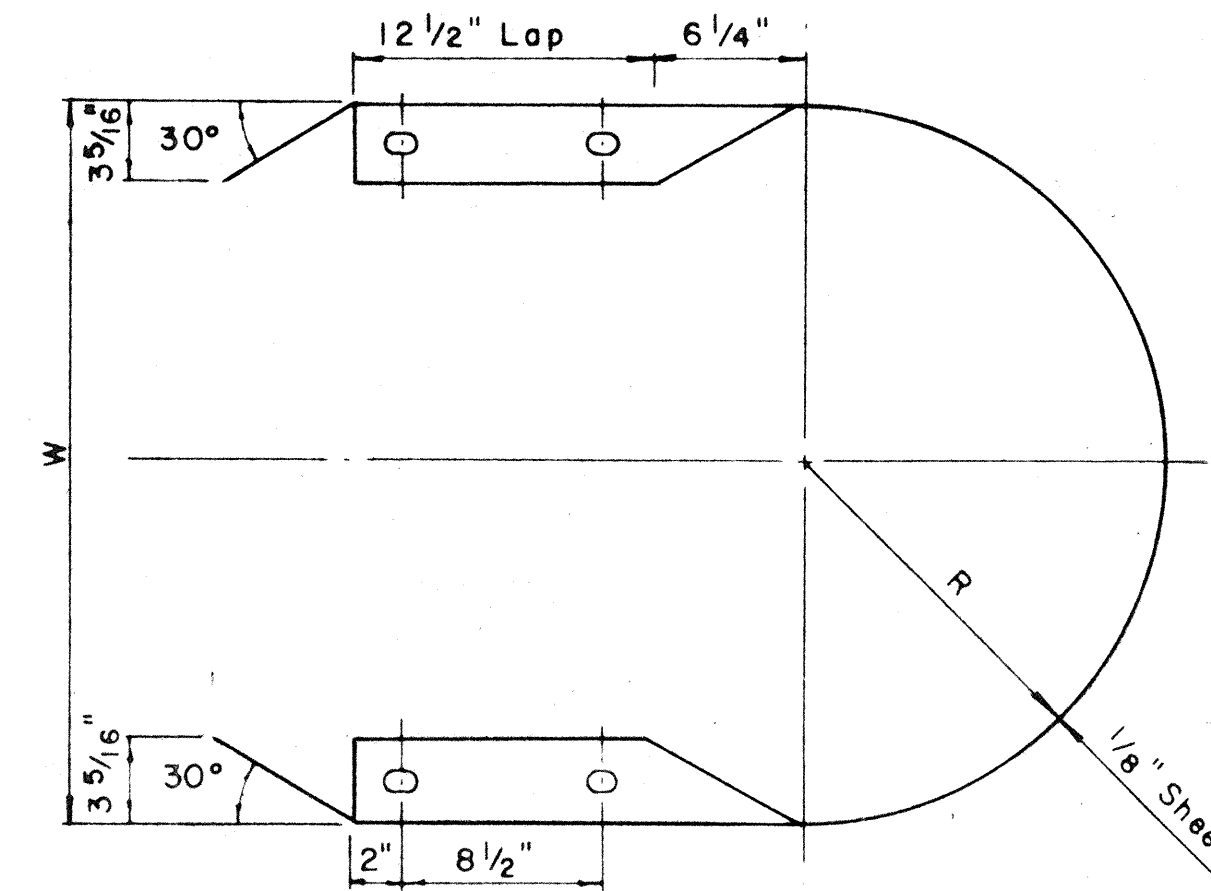


SPLICE RAIL AND POST BOLTS

Scale: Full Size

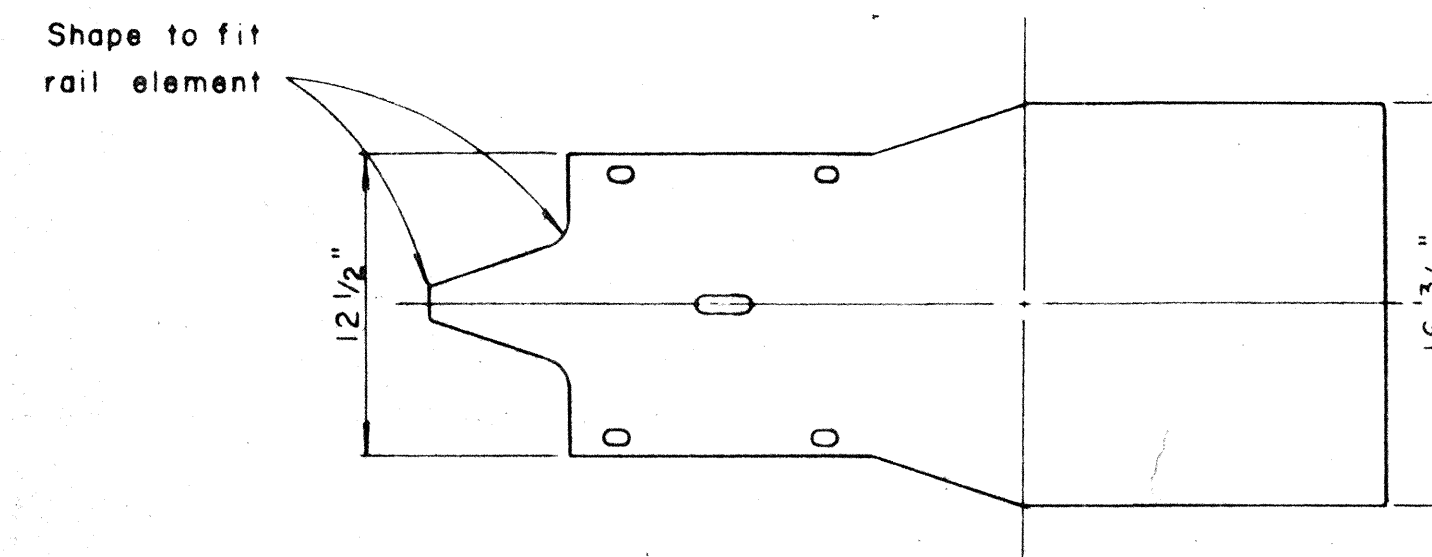
HEXAGON NUT

Scale: Full Size



FLARED END

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

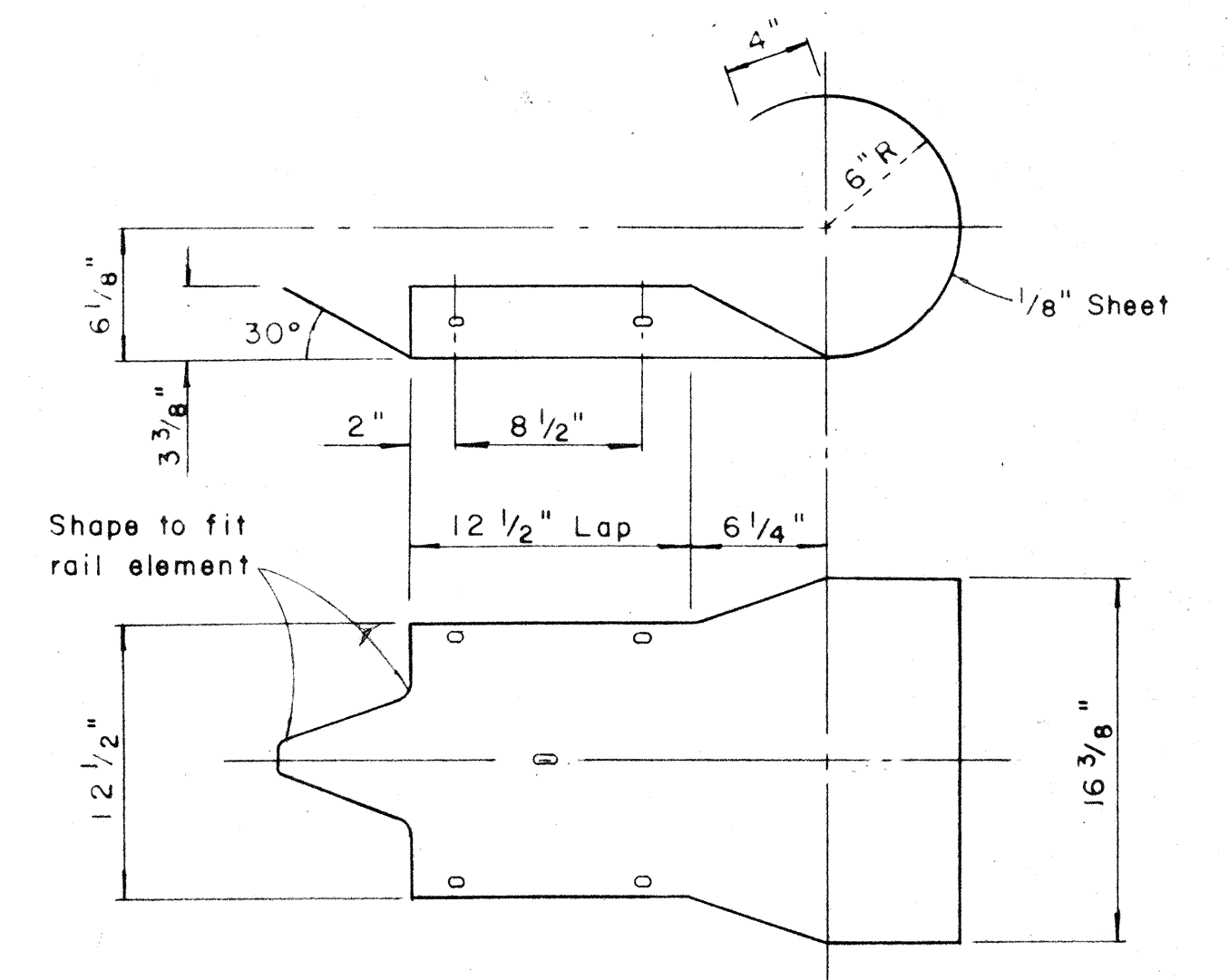


MEDIAN END

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

MEDIAN END DIMENSIONS

TYPE OF POST AND BLOCK	W	R
Double Metal Guard Rail on Concrete Post with Wood Blocks	29 3/4"	14 7/8"
Double Metal Guard Rail on Metal Post with Metal Blocks (B J 6)	24 3/4"	12 3/8"



CURVED END

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

RAIL SPLICE

Scale: 3" = 1'-0"

SPLICE BOLT SLOT

Scale: Full Size

SPLICE BOLT SLOT FOR ALL ENDS

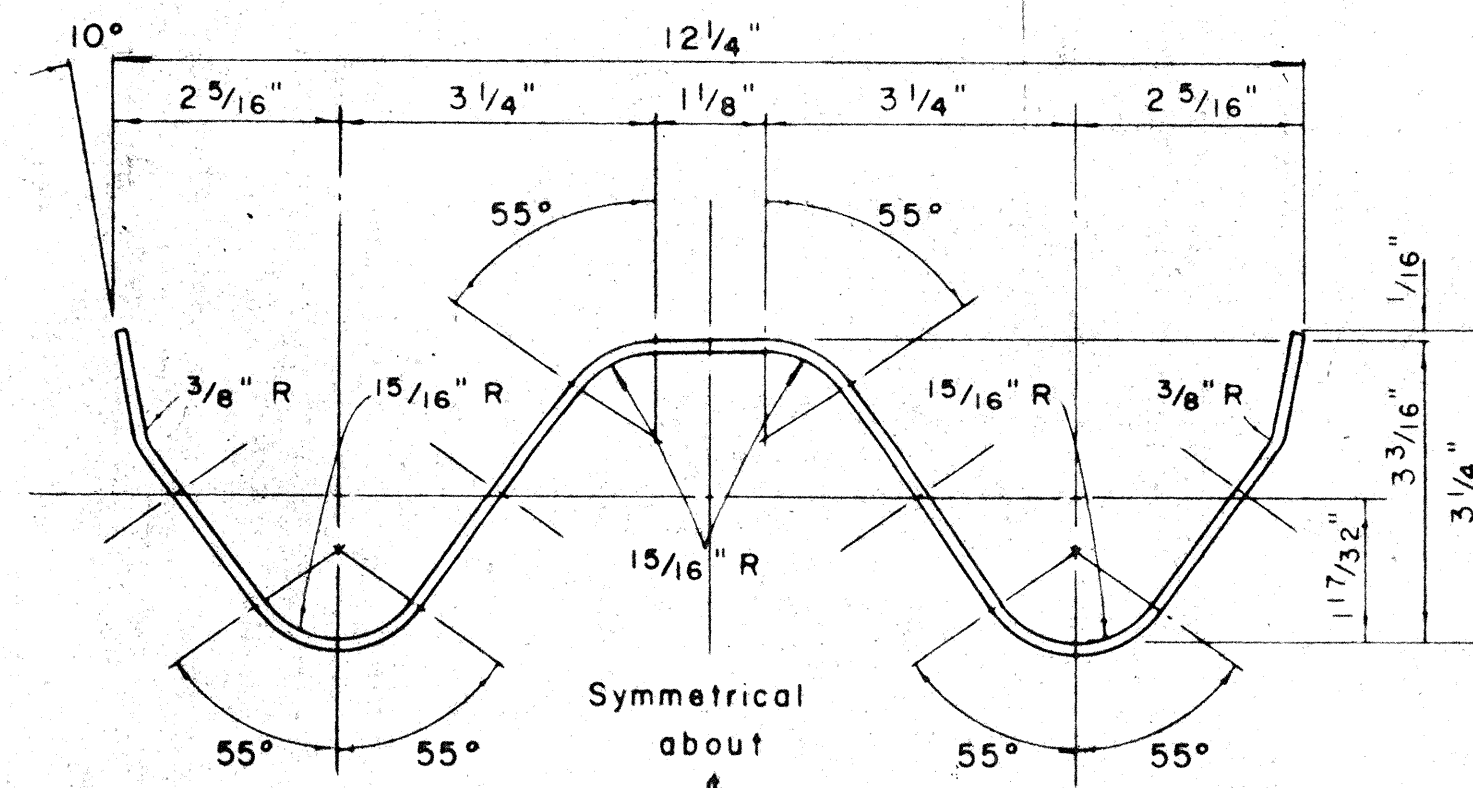
Scale: Full Size

POST BOLT SLOT

Scale: Full Size

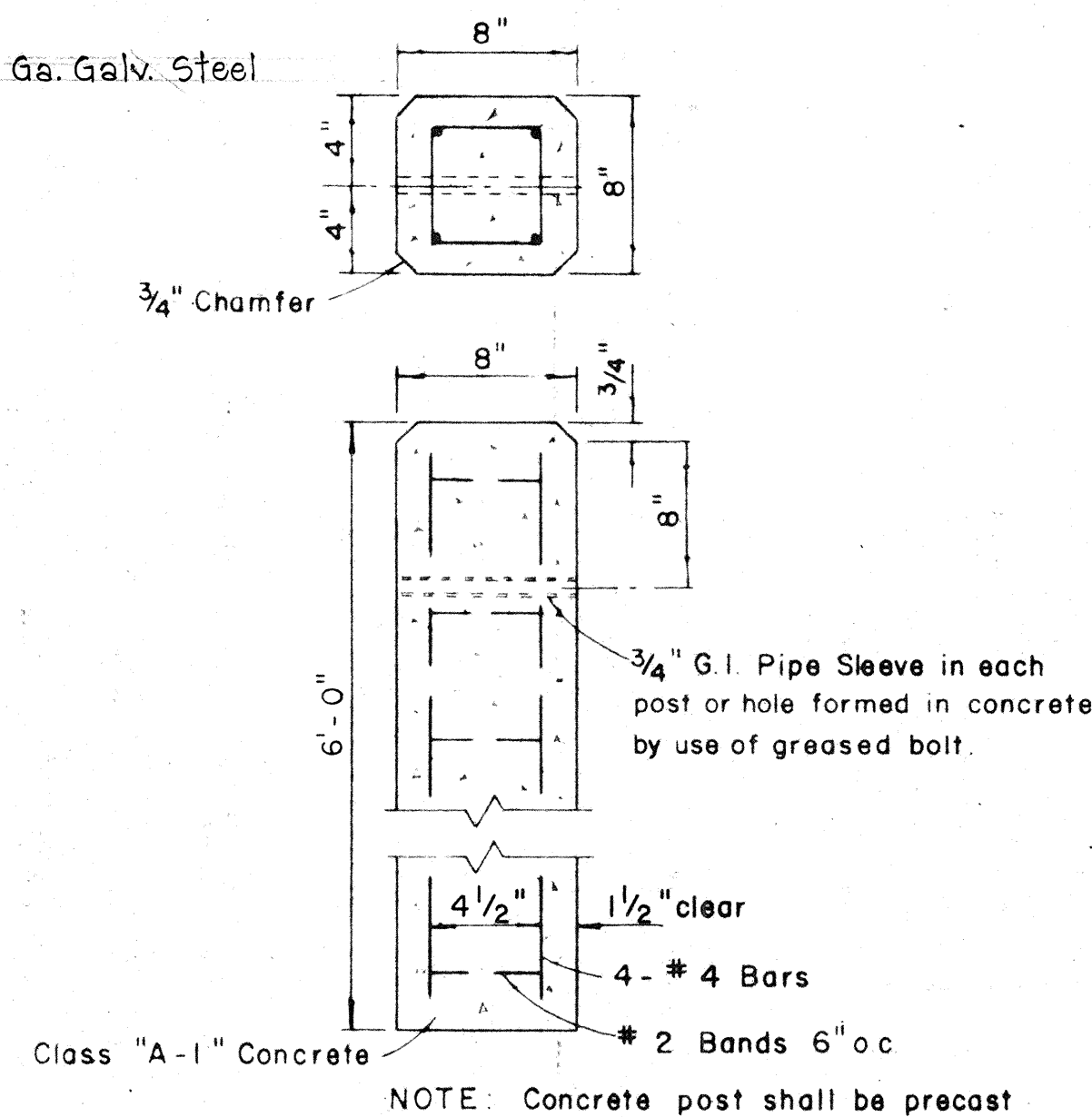
RAIL WASHER

Scale: Full Size



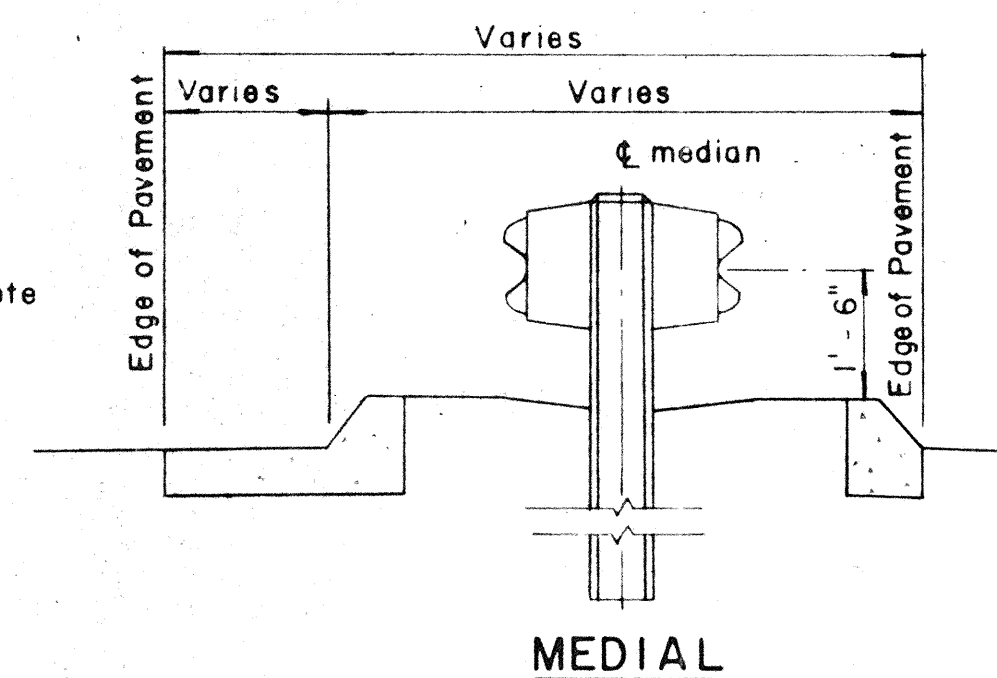
RAIL ELEMENT SECTION

Scale: 6" = 1'-0"



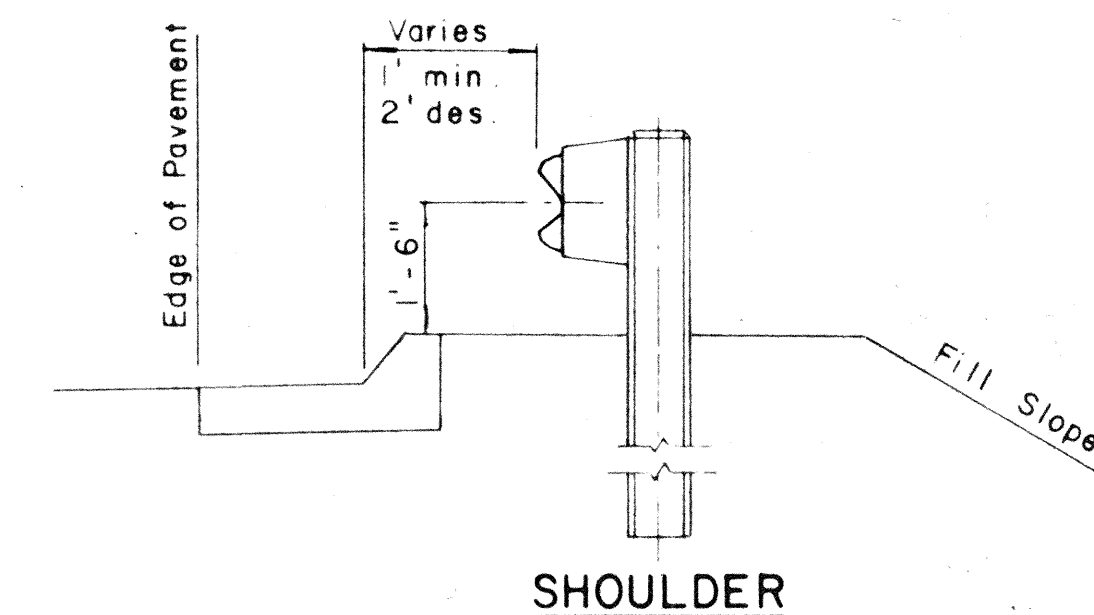
DETAIL OF CONCRETE POST

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



TYPICAL GUARD RAIL DETAIL

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

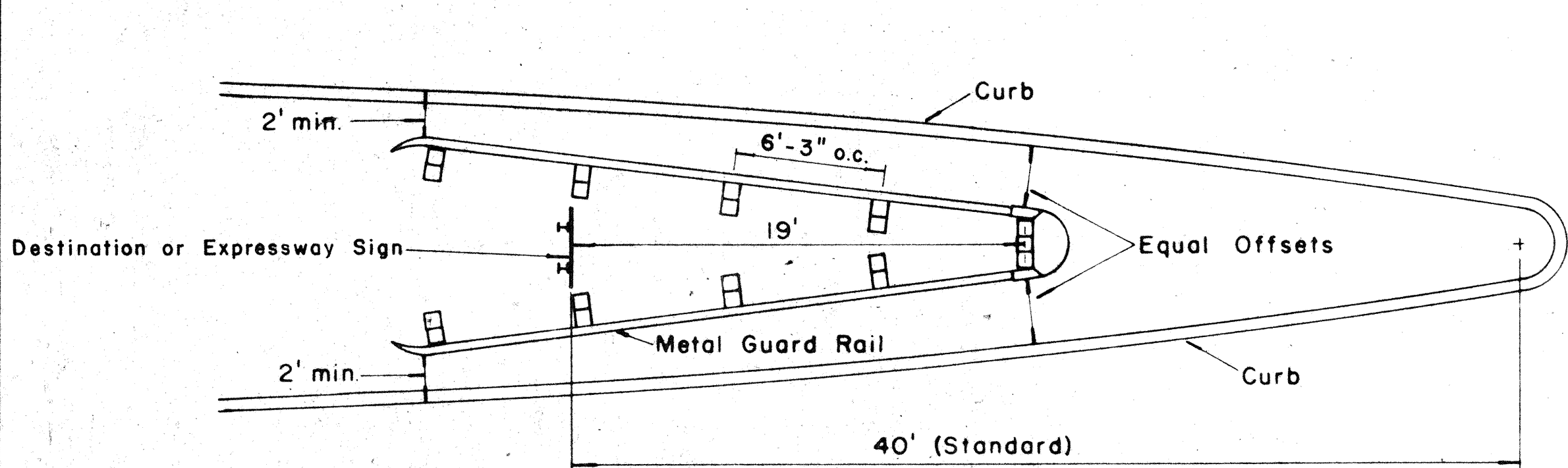


SHOULDER

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

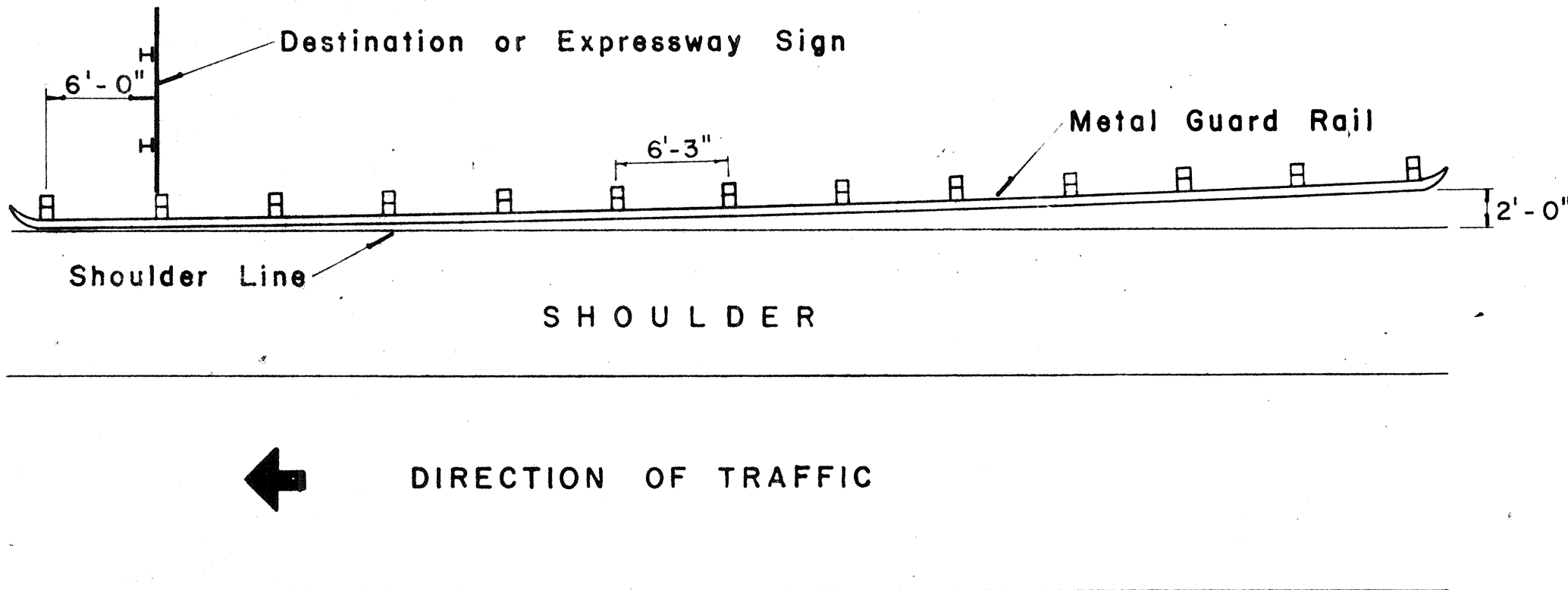
STANDARD DETAILS
METAL GUARD RAIL

SHEET No. 4 OF 7 SHEETS



GORE MOUNTED SIGN

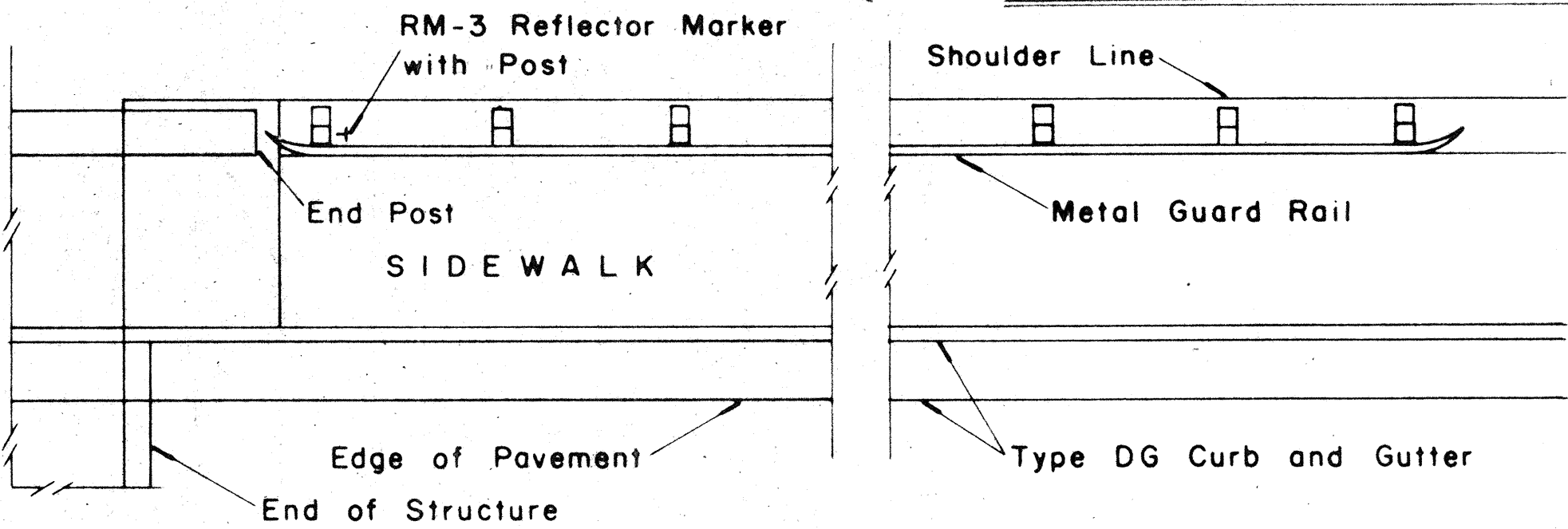
Scale: $\frac{3}{16}" = 1' - 0"$



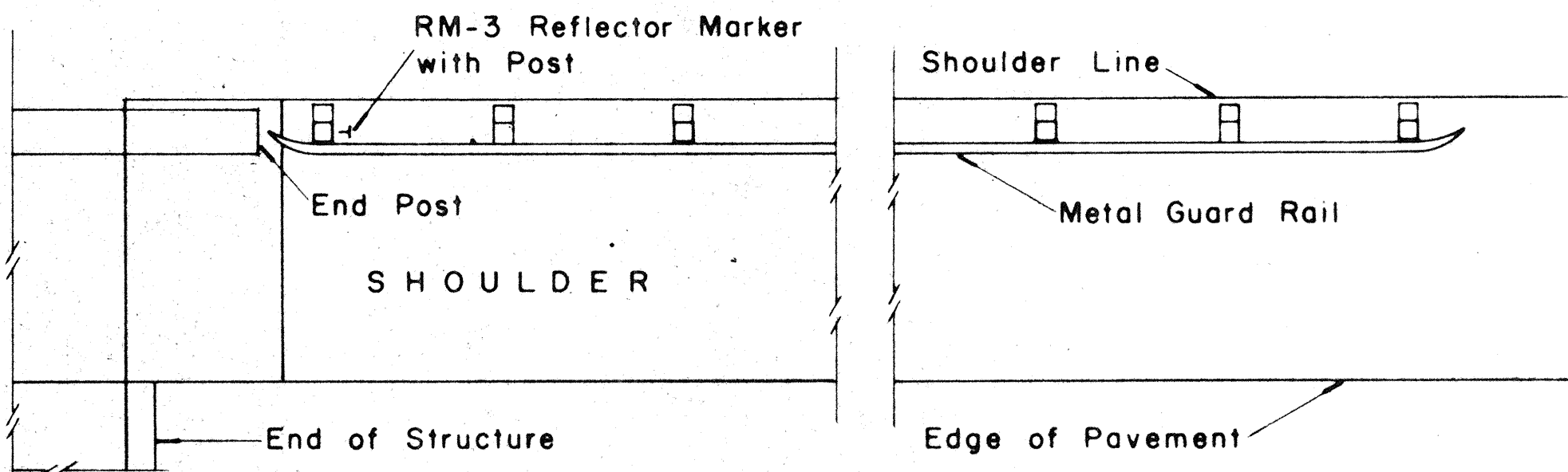
SHOULDER MOUNTED SIGN

Scale: $\frac{1}{8}" = 1' - 0"$

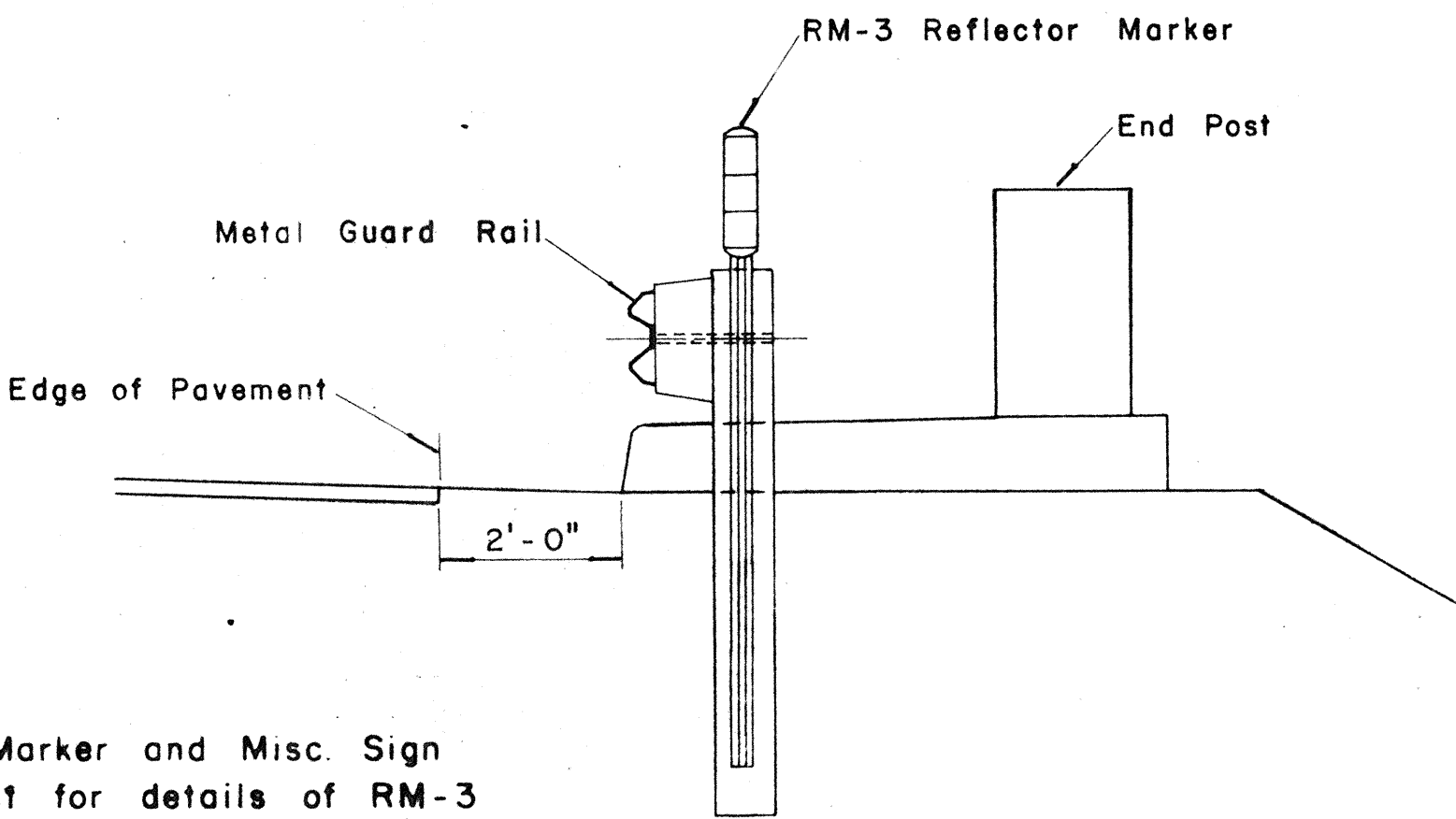
INSTALLATION OF METAL GUARD RAIL FOR DESTINATION AND EXPRESSWAY SIGNS



SIDEWALK CARRIED THROUGH STRUCTURE



SHOULDER CARRIED THROUGH STRUCTURE



SECTION "A-A"

Scale: $\frac{1}{2}" = 1' - 0"$

NOTE
See F.A. Marker and Misc. Sign
Detail sheet for details of RM-3
Reflector Marker with Post.

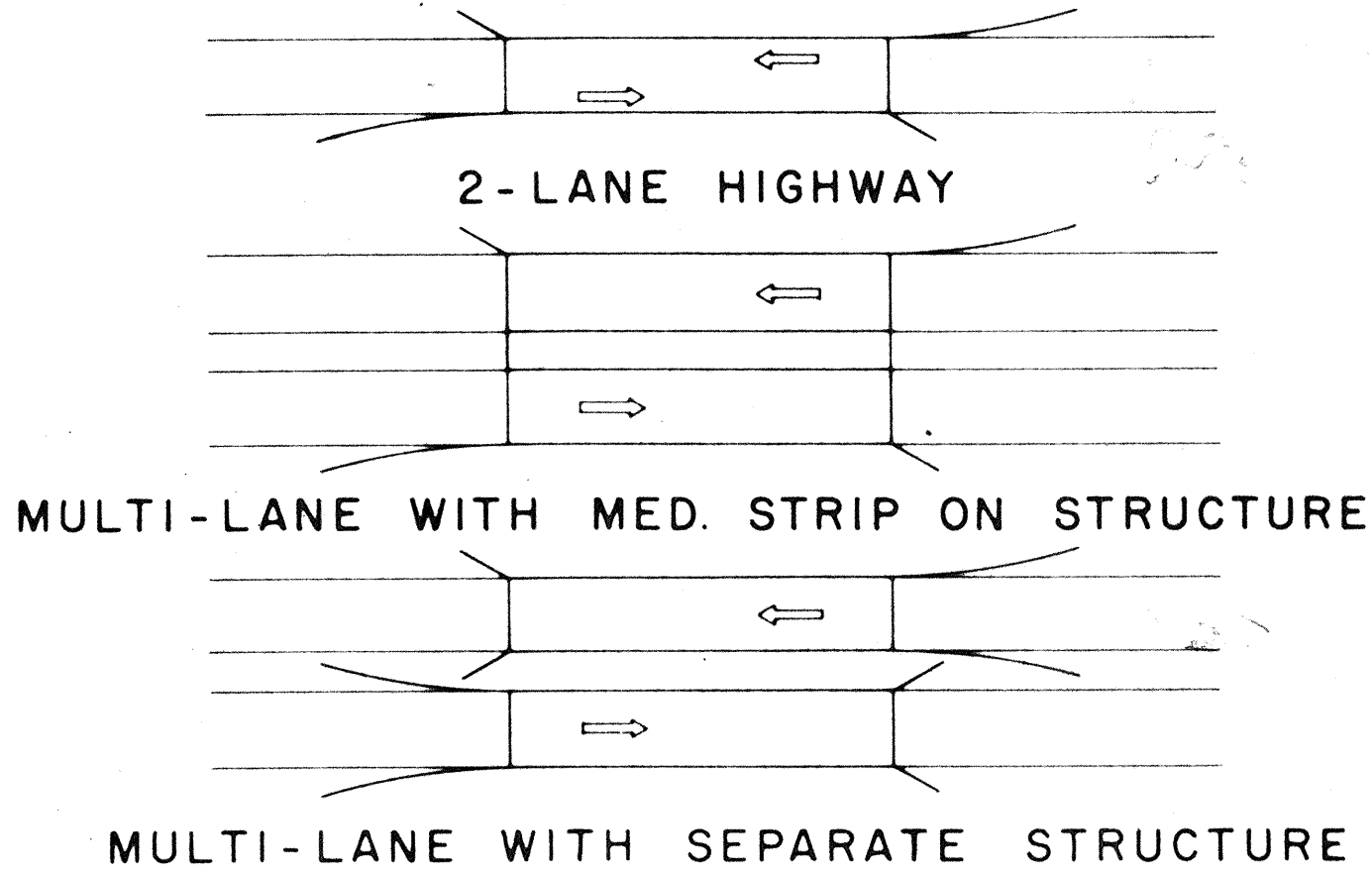
X	Y					
	W=3'	W=4'	W=5'	W=6'	W=7'	W=8'
12.5	0.19	0.16	0.14	0.12	0.09	0.08
25.0	0.75	0.64	0.55	0.49	0.35	0.32
37.5	1.69	1.44	1.25	1.10	0.78	0.72
50.0	3.00	2.56	2.22	1.96	1.38	1.28
62.5		4.00	3.47	3.06	2.16	2.00
75.0			5.00	4.41	3.11	2.85
87.5				6.00	4.23	3.92
100.0					5.53	5.12
112.5					7.00	6.48
125.0						8.00

W = GUARD RAIL FLARE

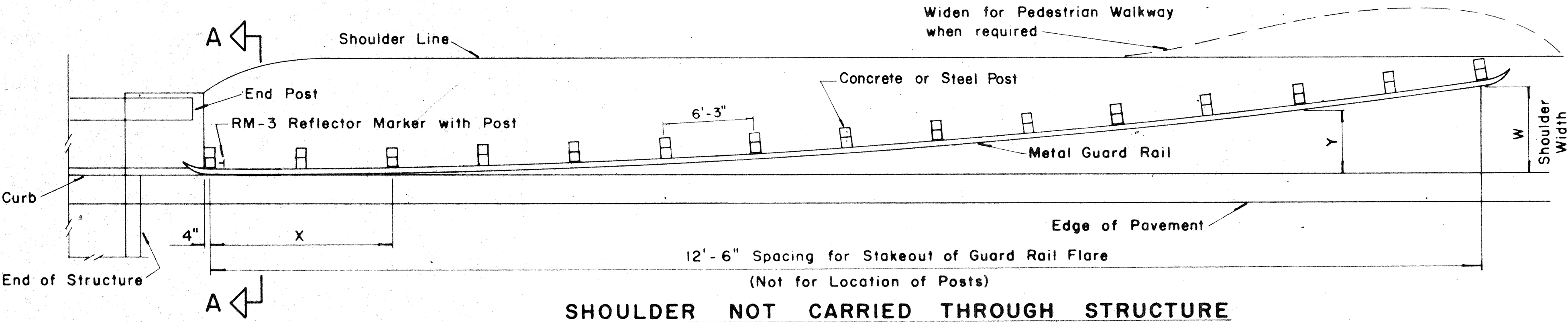
X = DISTANCE FROM POST AT
BRIDGE TO OFFSET POINTS

Y = GUARD RAIL FLARE OFFSET

GUARD RAIL OFFSET



TYPICAL GUARD RAIL FLARES AT STRUCTURE APPROACHES

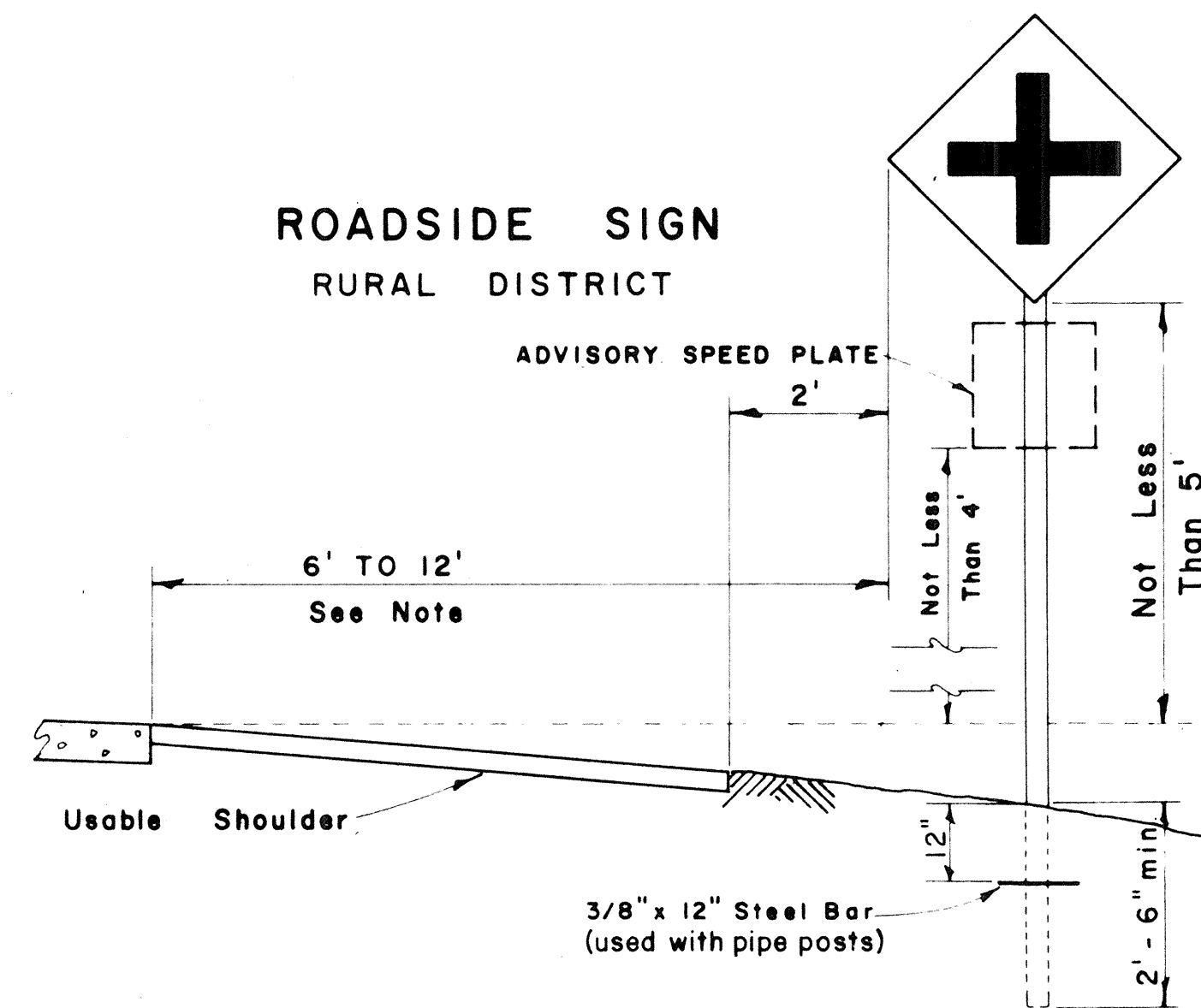
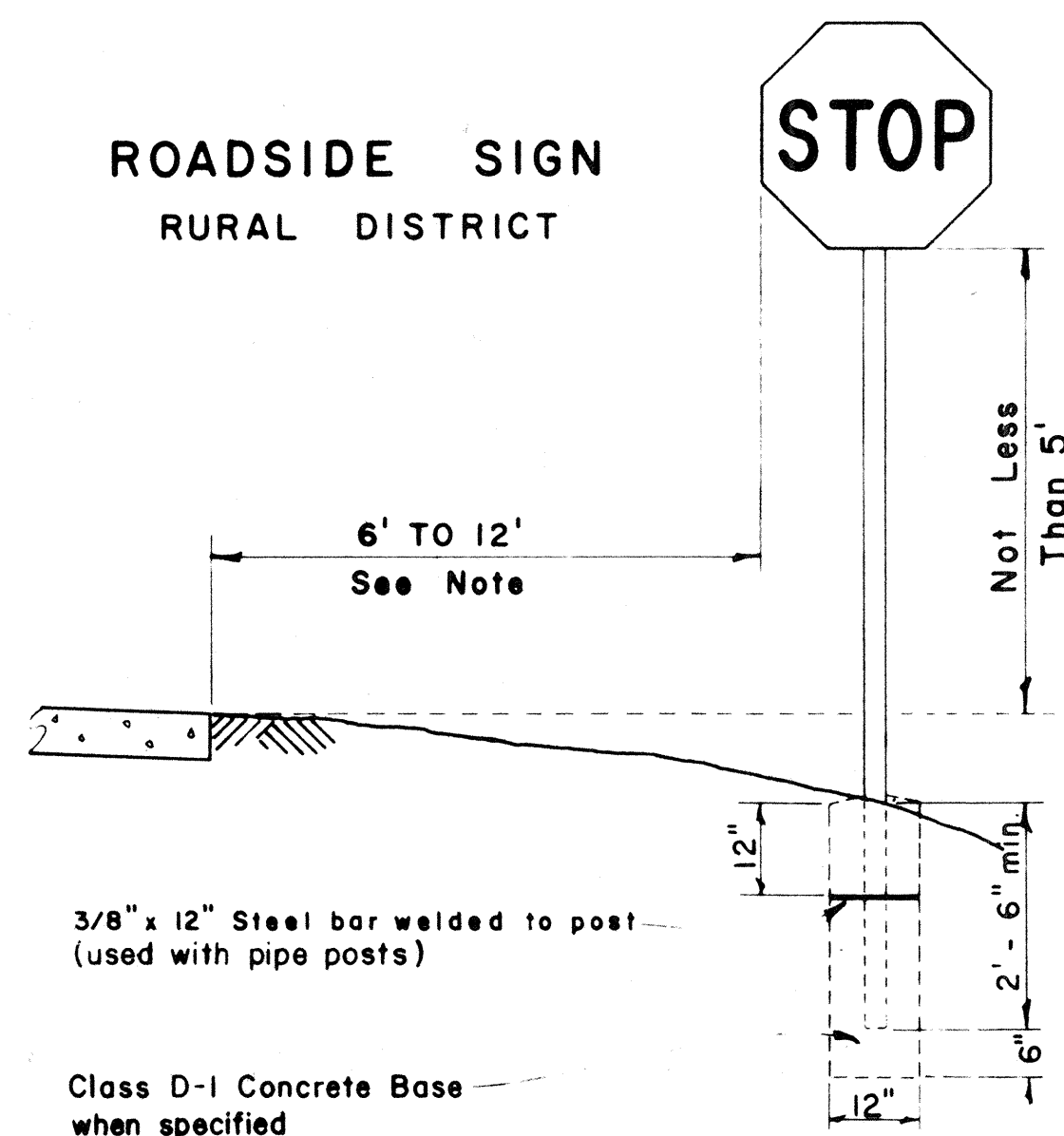


SHOULDER NOT CARRIED THROUGH STRUCTURE

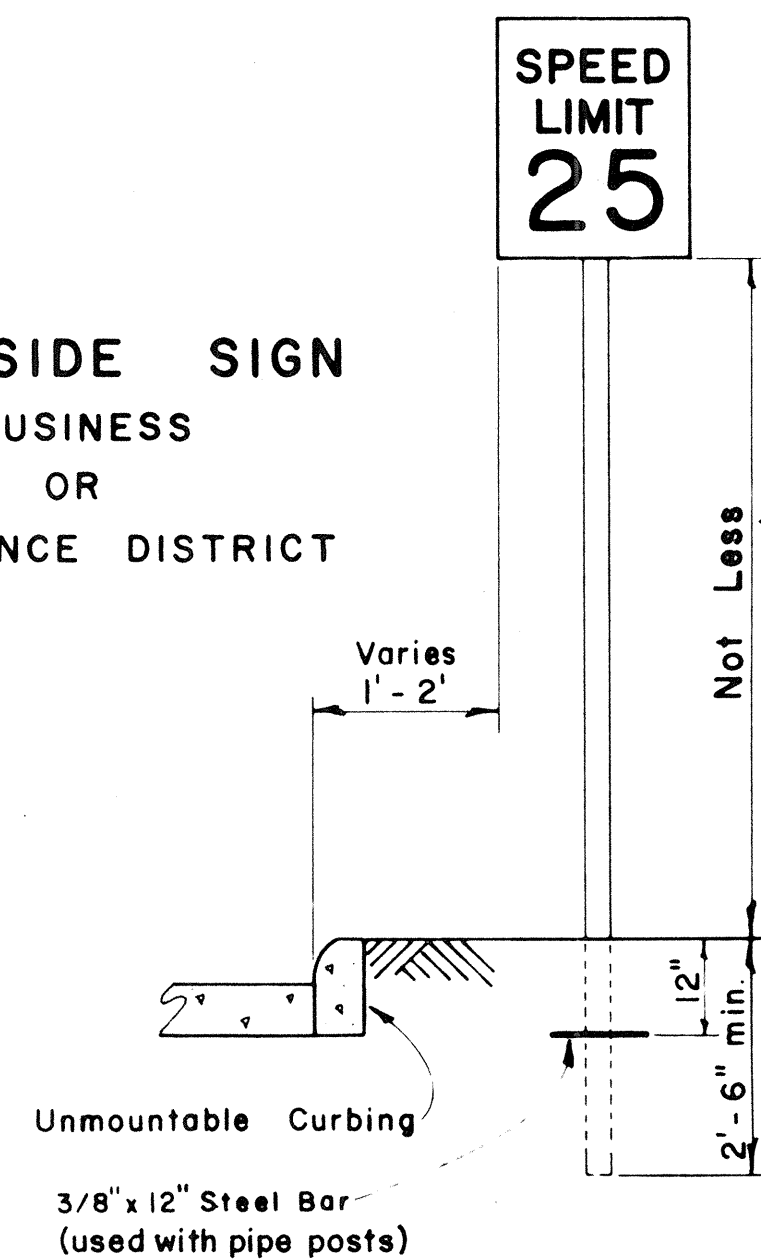
INSTALLATION OF METAL GUARD RAIL FLARE AT STRUCTURES

Scale: $\frac{3}{16}" = 1' - 0"$

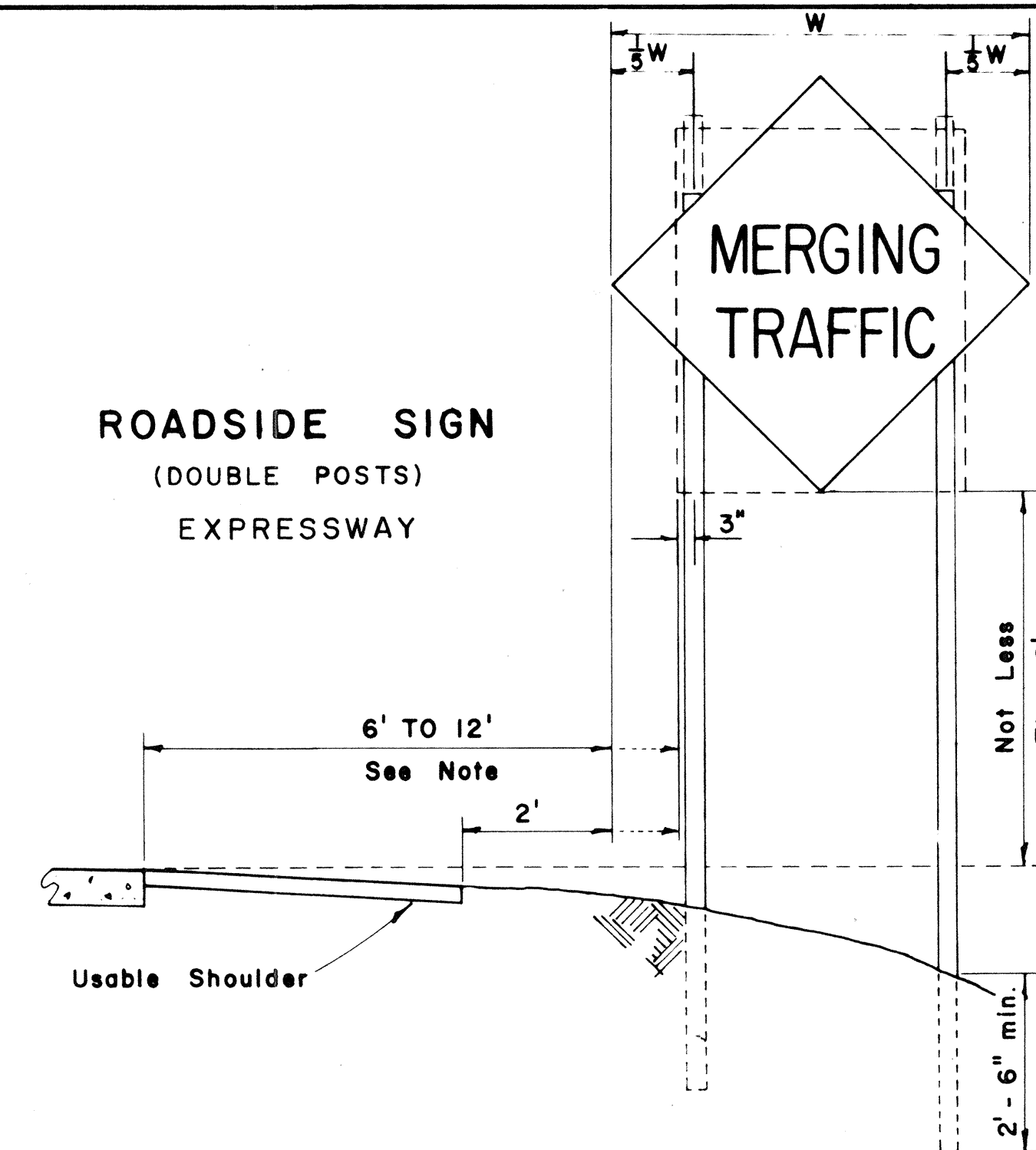
- NOTE:
- All signs and road delineators shall be placed 2' outside the usable roadway shoulder or 1' outside unmountable curbing present and within the limits shown below.
 - Except as noted below, sign posts shall be either 3" galv. std. pipe or 2 1/2" x 2 1/2" galv. square tube posts for signs larger than 24" in any dimension; 2" galv. std. pipe or 2" x 2" galv. square tube posts for signs 24" or less in any dimension.
 - Sign shall be attached to post with 5/16" galvanized bolts with nuts and 7/8" x 7/8" x .120" stainless-steel washers with neoprene rubber gasket.
 - Clearance Markers (RM-3, RM-4) shall be installed with the inside edge of the marker in line with the inner edge of the obstruction.
 - Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 3" galv. std. pipe or two 2 1/2" x 2 1/2" galv. square tube posts.



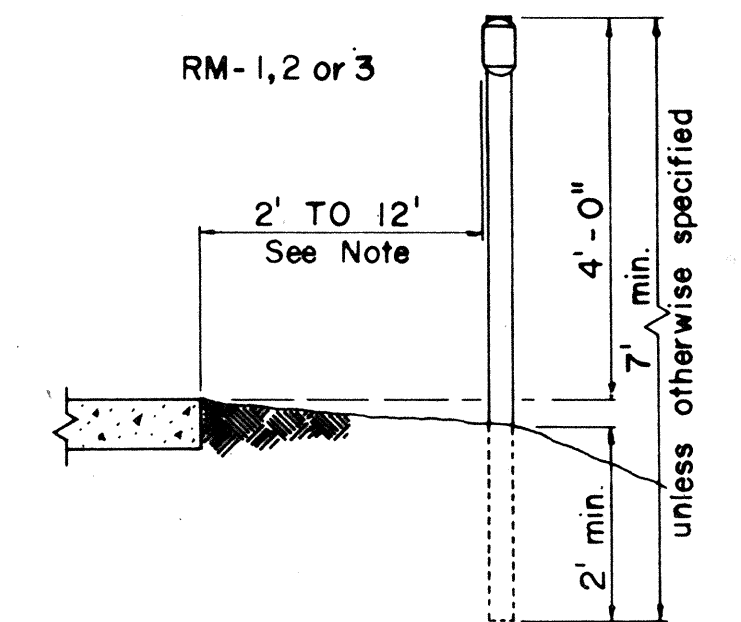
ROADSIDE SIGN
BUSINESS
OR
RESIDENCE DISTRICT



ROADSIDE SIGN
(DOUBLE POSTS)
EXPRESSWAY

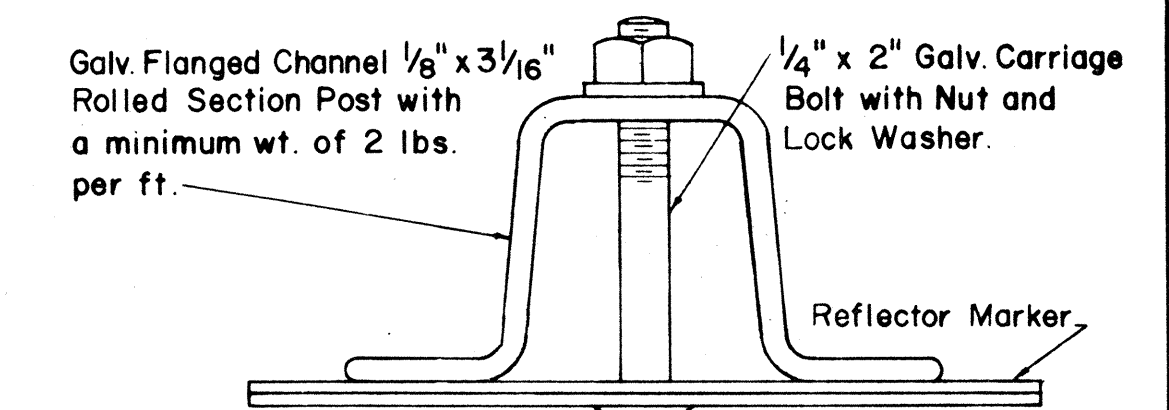


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-0560 (1) UNIT 2	1966	10	43



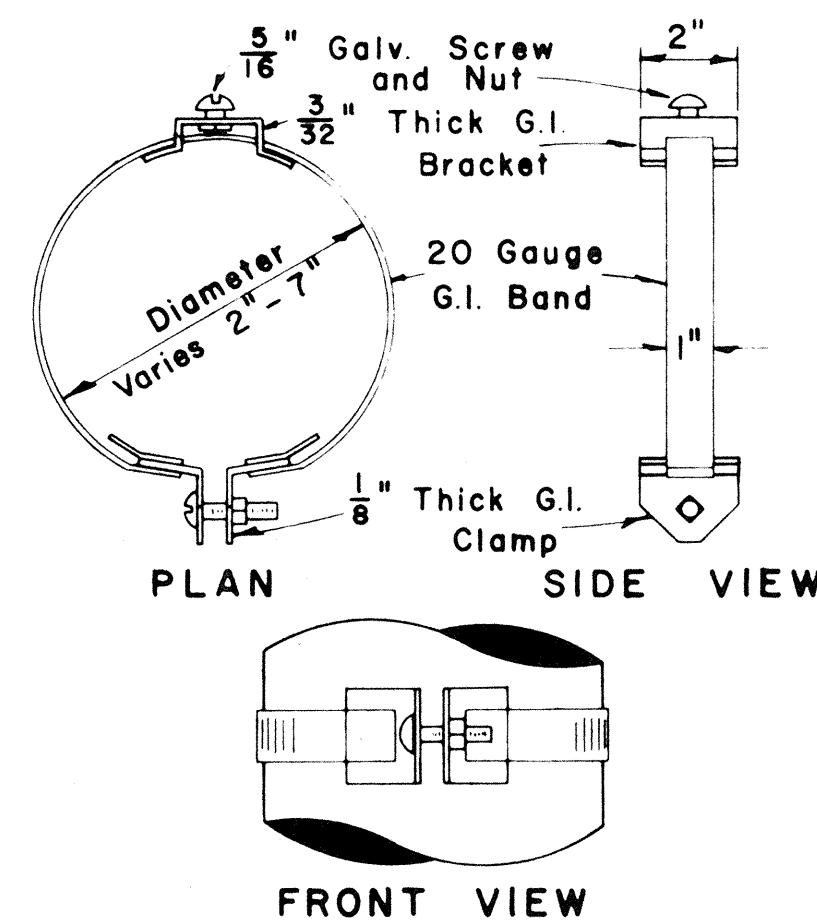
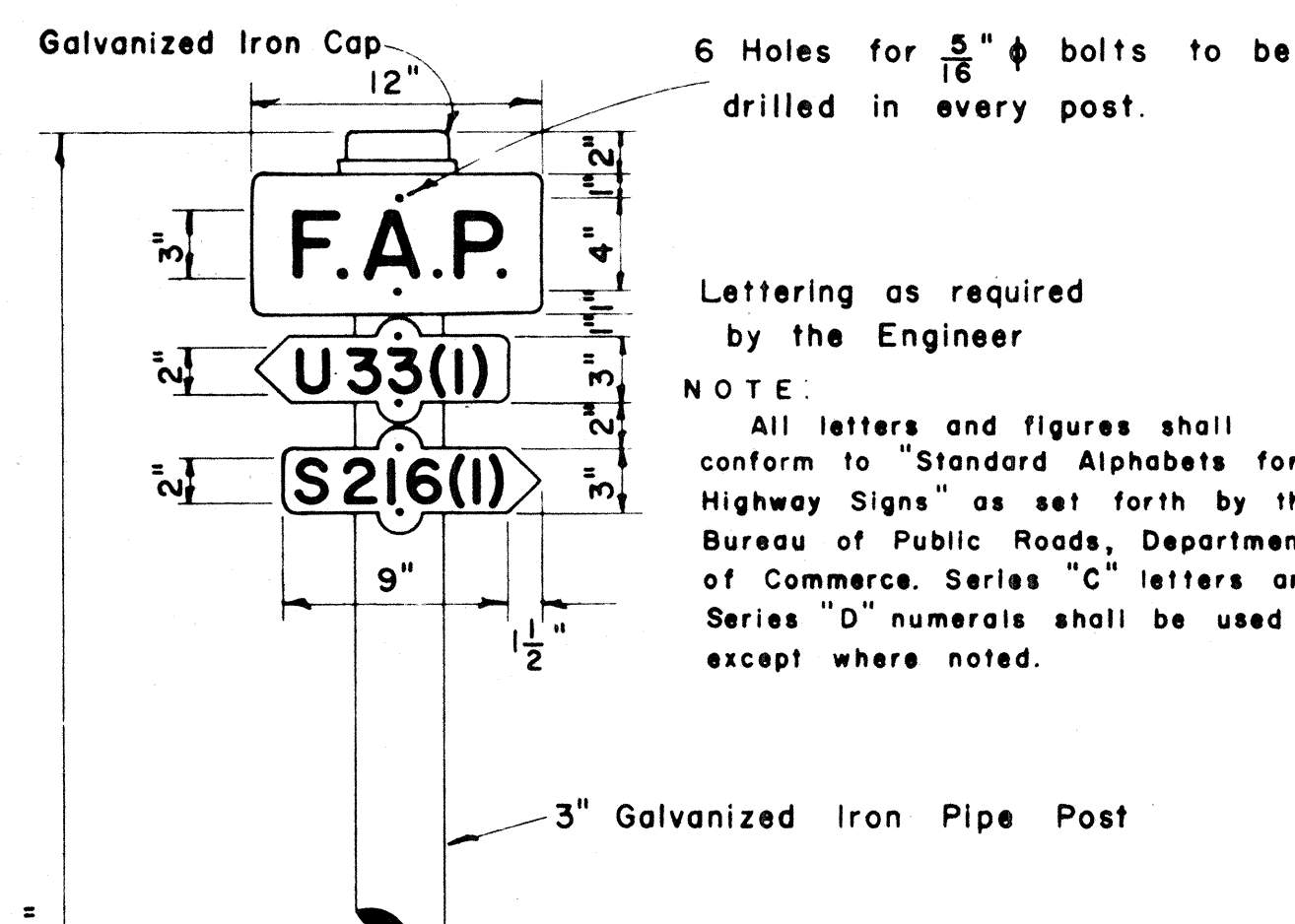
ROAD DELINEATOR

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



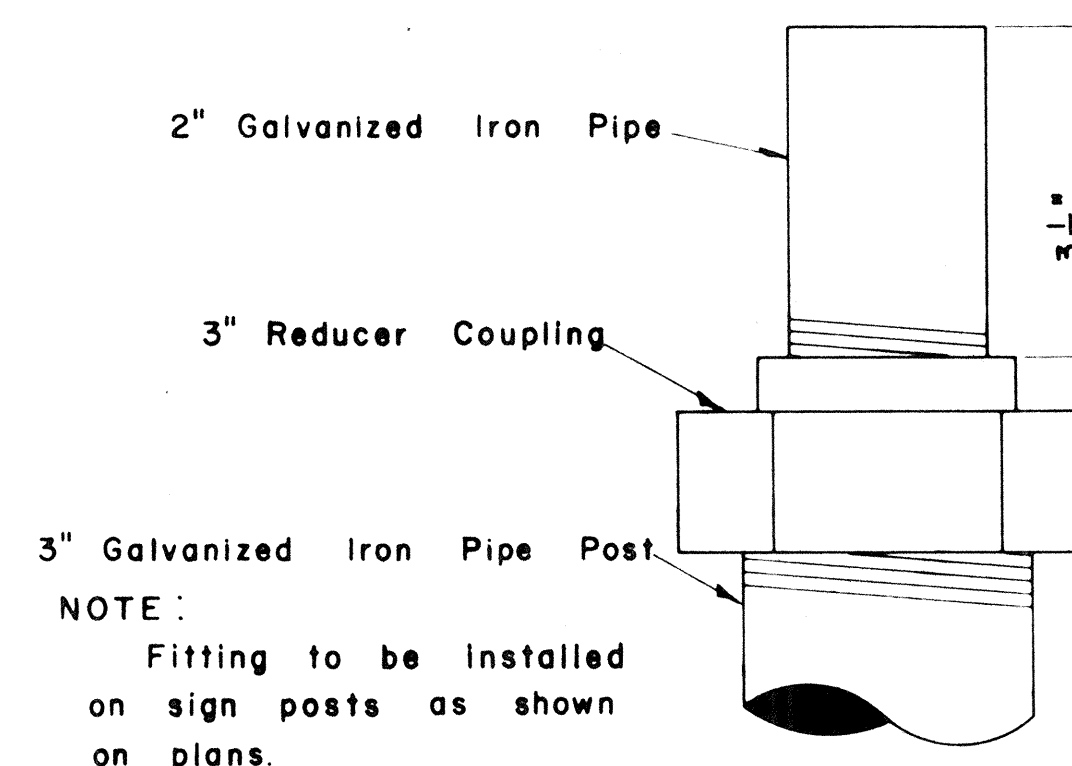
HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS

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



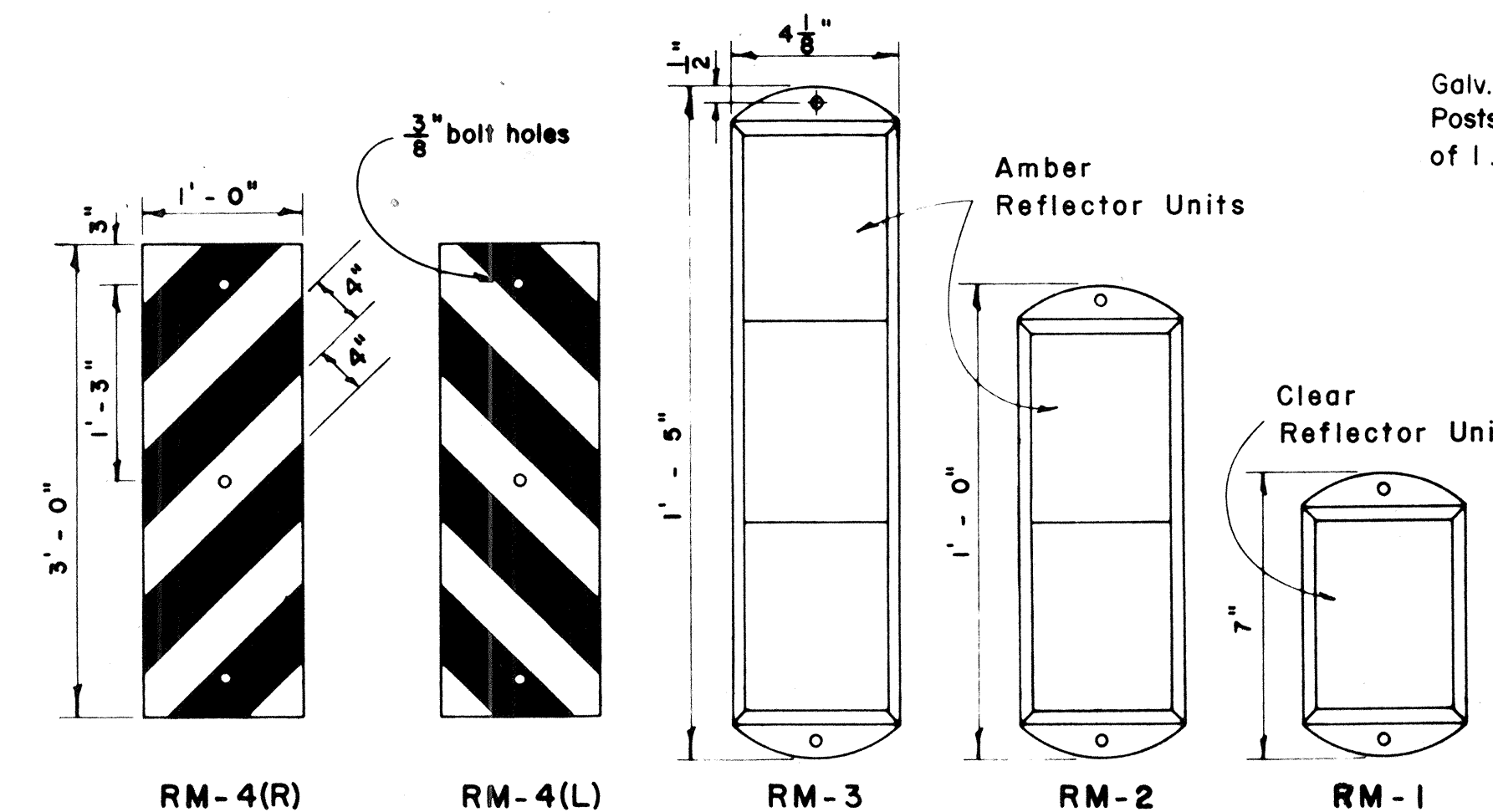
TYPICAL BAND BRACKET FOR MOUNTING TRAFFIC SIGNS

Scale: 3" = 1' - 0"



DETAIL OF SIGN POST FITTING FOR CITY & COUNTY STREET NAME SIGNS

Scale: 1/2" = 1'

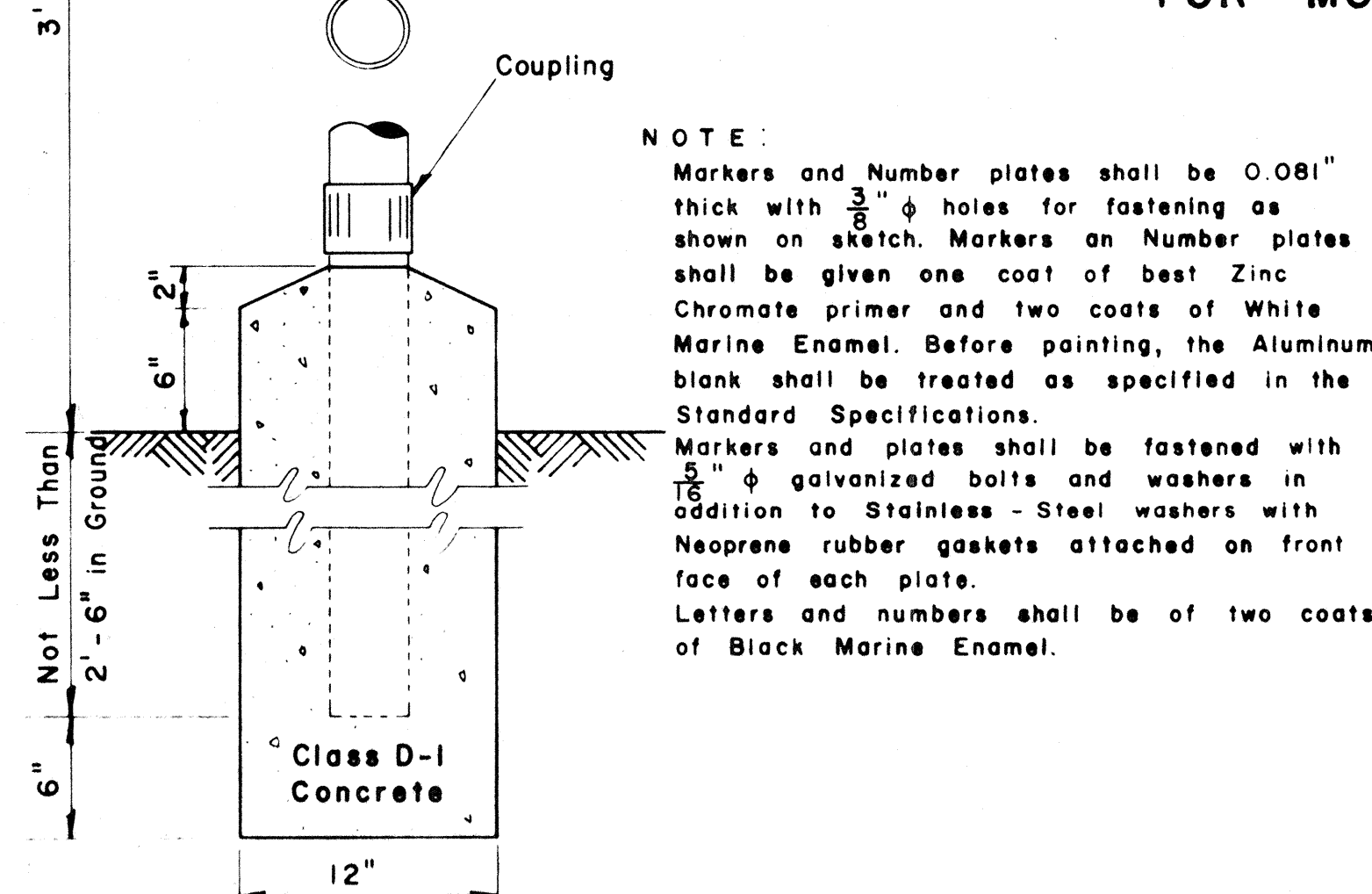


Scale: 1" = 1' - 0"

Scale: 3" = 1' - 0"

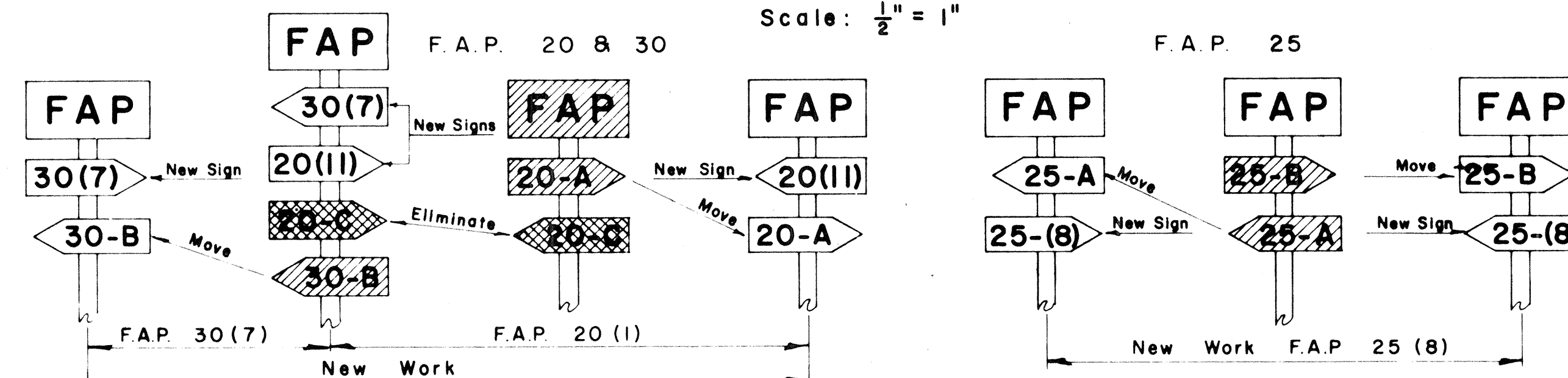
REFLECTOR MARKERS

Scale: As Shown

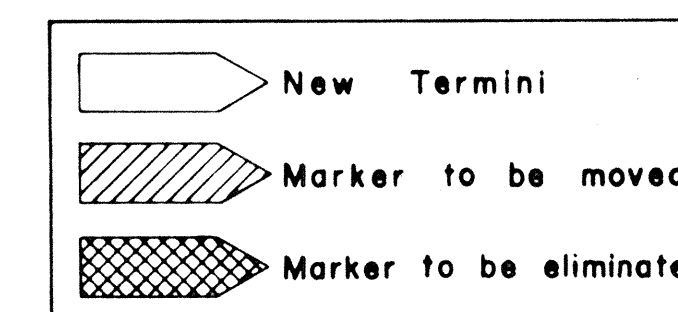


FEDERAL AID MARKER

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



METHOD OF MARKING F.A. PROJECTS AT OVERLAPS
(USING NUMBER SUFFIX ON NEW WORK)

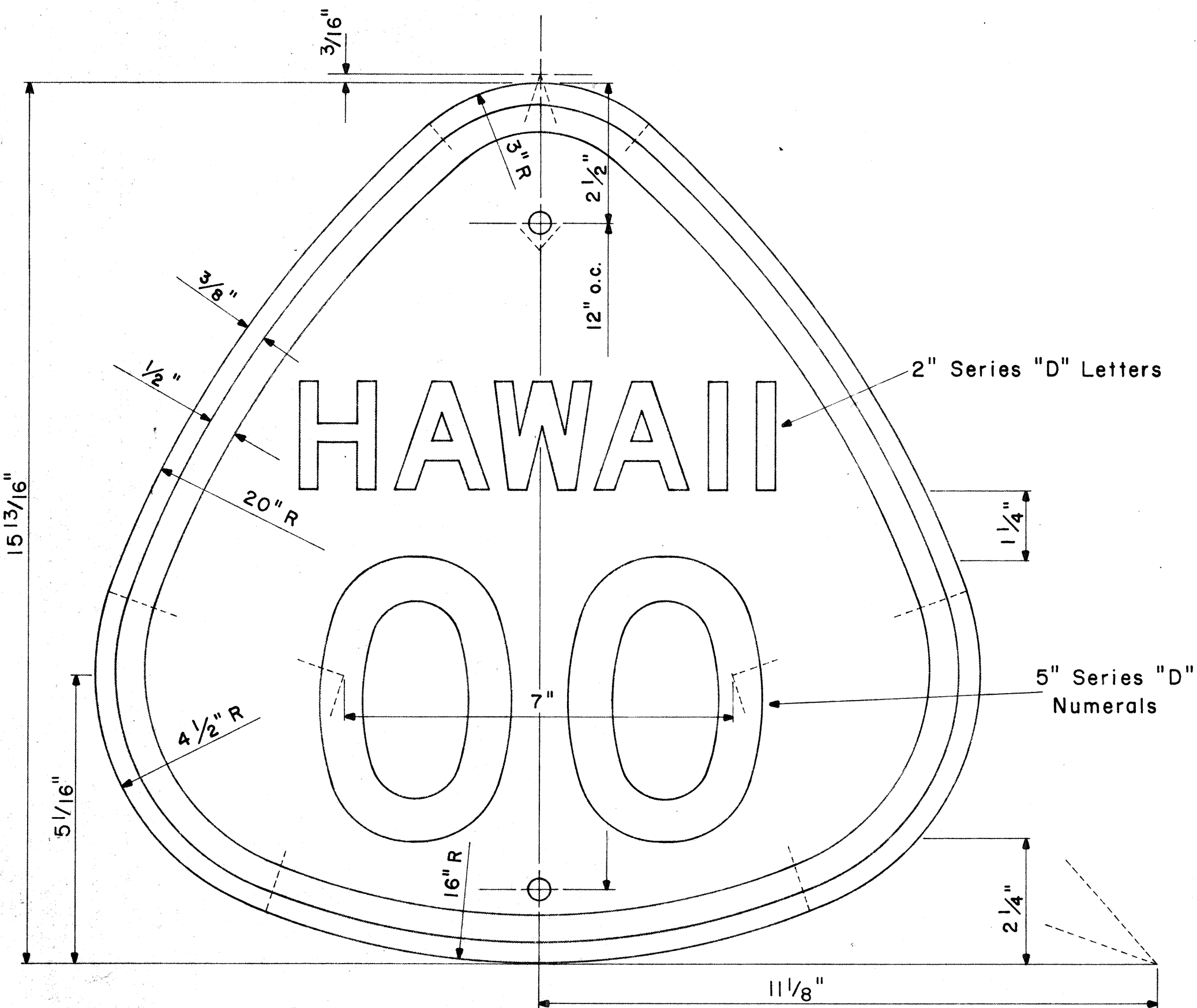


APPROVED: _____ DATE: _____
DIRECTOR OF TRANSPORTATION

DECEMBER 8, 1964
REVISED: FEBRUARY 25, 1964

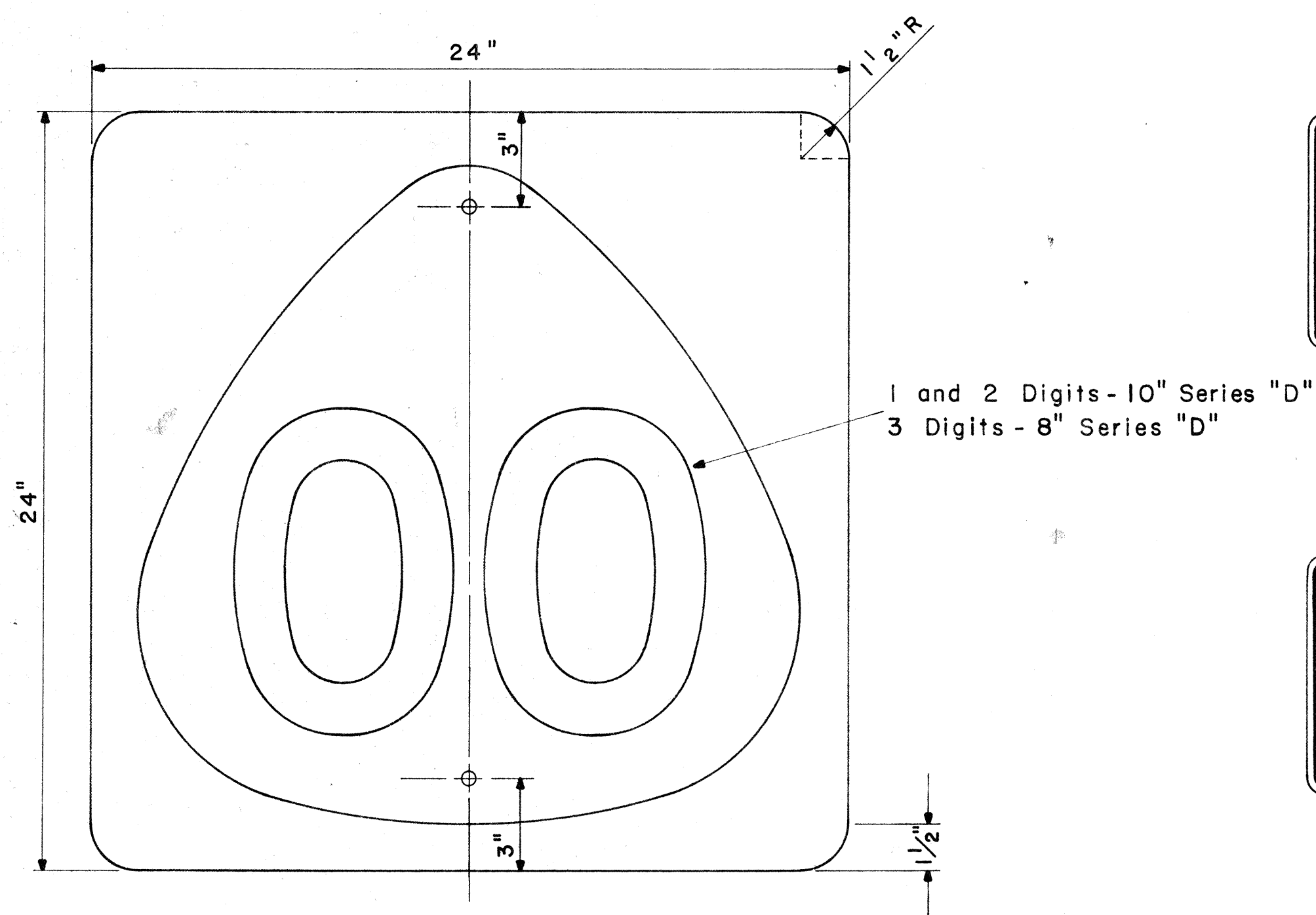
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
F.A. MARKER
AND
MISCELLANEOUS SIGN
DETAILS
Scale: As Shown

SHEET No. 6 OF 7 SHEETS



STATE ROUTE MARKER
M1-3(00)

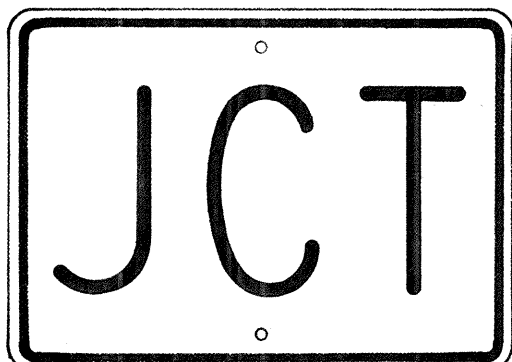
Scale: 1/2" = 1"



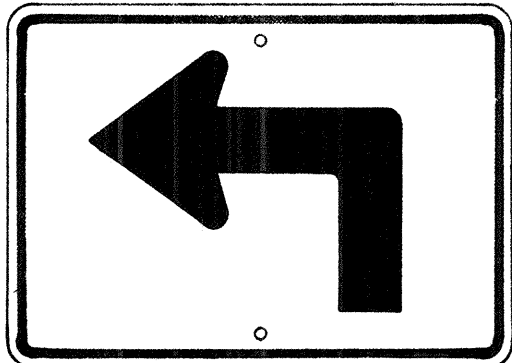
STATE ROUTE MARKER
M1-4(00)

Scale: 1/4" = 1"

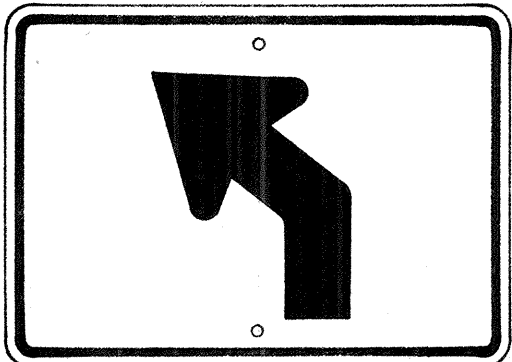
NOTE:
Multiply all dimensions of State Route Marker M1-3 by 1.3 for the dimensions of the shield for M1-4.



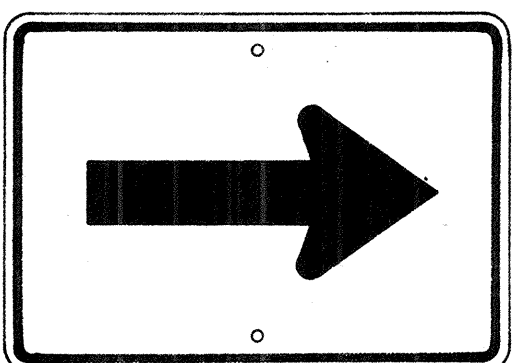
M2-1
21" x 15"



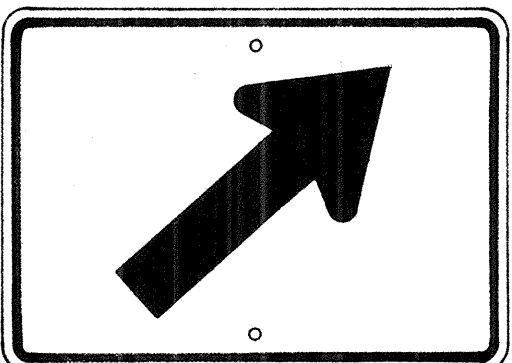
M3-1-L
* M3-1-R
21" x 15"



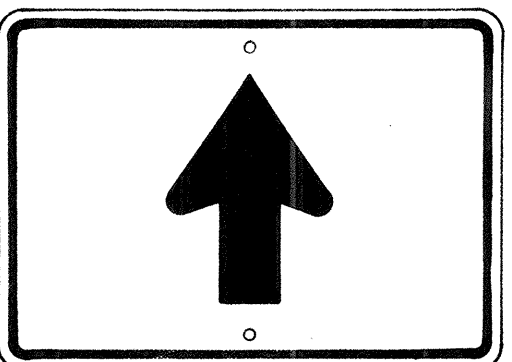
M3-2-L
* M3-2-R
21" x 15"



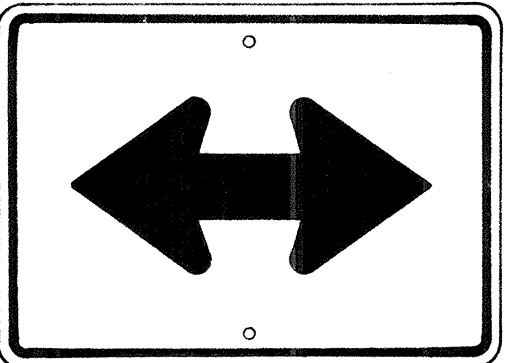
M4-1
21" x 15"



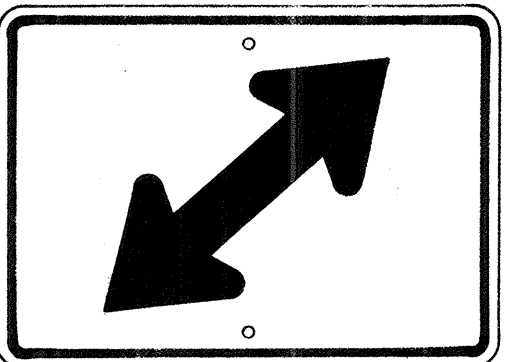
M4-2-R
* M4-2-L
21" x 15"



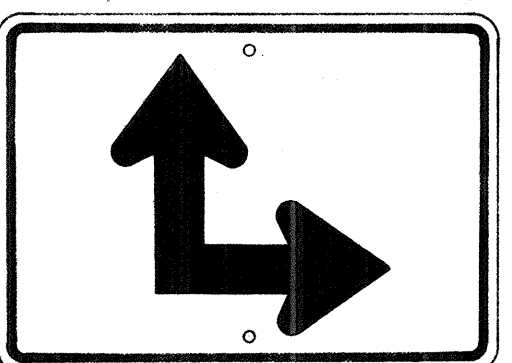
M4-3
21" x 15"



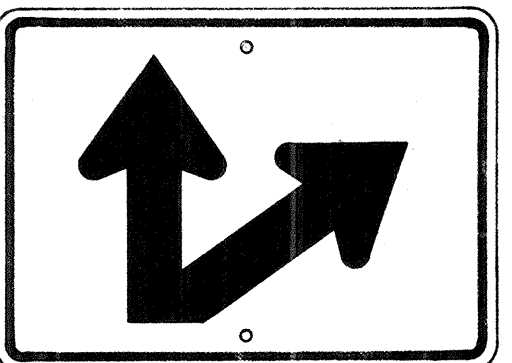
M4-4
21" x 15"



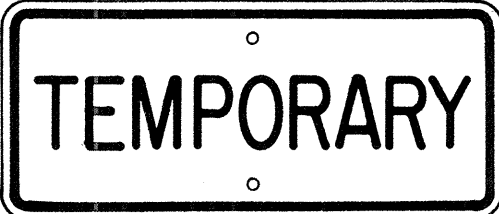
M4-5-R
* M4-5-L
21" x 15"



M4-6-R
* M4-6-L
21" x 15"



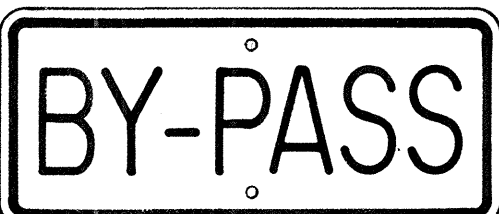
M4-7-R
* M4-7-L
21" x 15"



M5-1
21" x 9"



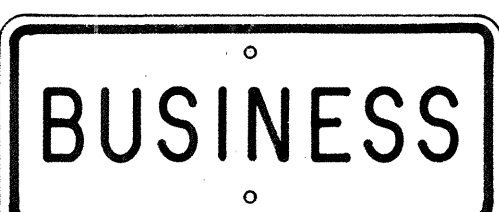
M5-2
21" x 9"



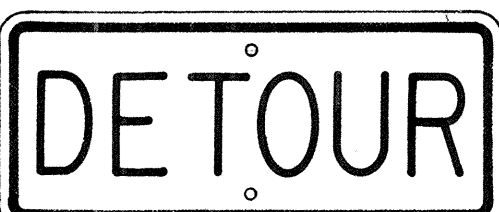
M5-3
21" x 9"



M5-4
21" x 9"



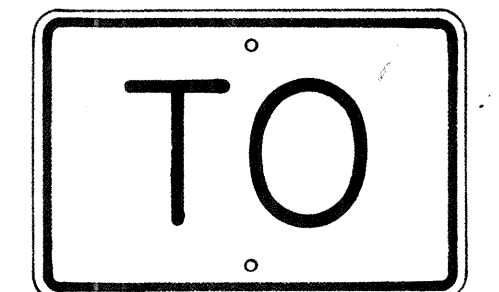
M5-5
21" x 9"



M5-6
21" x 9"



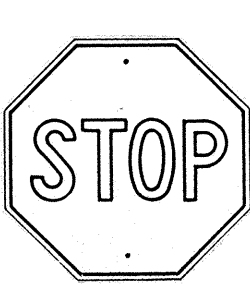
M6-1-N
21" x 9"
(See Note 6)



M7-1
18" x 12"

GENERAL NOTES

- The shape, color, dimensions, symbols, wording, lettering and reflectorizing 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 letters and figures shall conform to the manual "Standard Alphabets for Highway Signs," Dept. of Commerce, Bureau of Public Roads, 1952.
- All markers shall be reflectorized unless otherwise specified.
- All markers shall have 3/8" bolt holes drilled at appropriate locations unless otherwise specified.
- All markers shall have a black legend on a white background unless otherwise specified.
- Sign message of Cardinal Direction Marker (M6-1) shall be denoted by the following suffixes:
M6-1-N : NORTH
M6-1-E : EAST
M6-1-S : SOUTH
M6-1-W : WEST
- Auxiliary markers denoted with the suffix "I" (M4-1-I) shall have a white legend on a blue background.
- Cardinal Direction Marker (M6-1) with suffix I (3) shall have a white legend on a blue background and shall be 30" x 15" in size.
- For M1-3 and M1-4 signs, number in () indicates route number and shall be as shown on the plan.



R1-1 30" x 30"



W5-1 30" x 30"

AUXILIARY MARKERS

Scale: 1/8" = 1"

* NOTE:
Signs shall be similar but opposite in direction.