

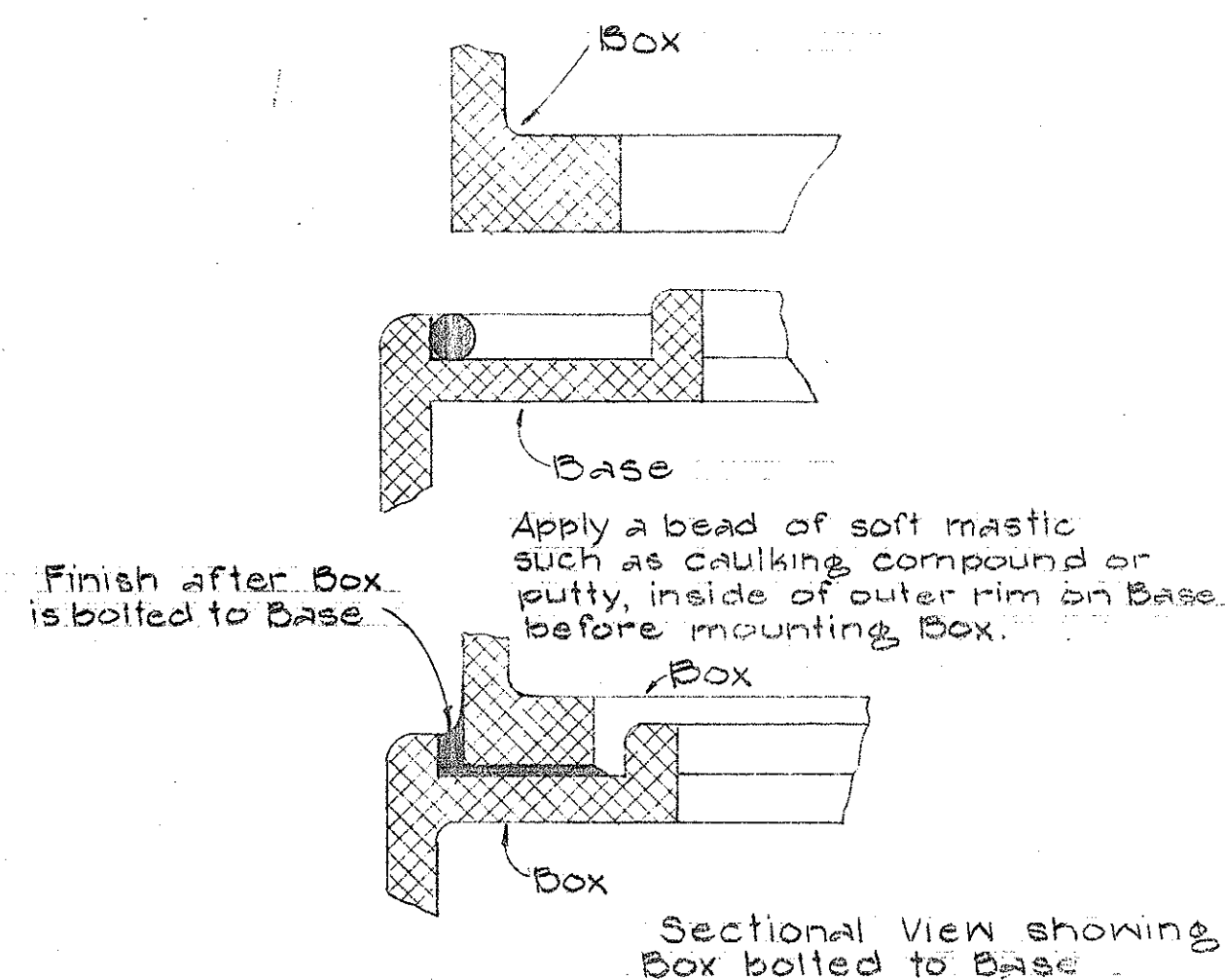
2' Conduit for Highway Lighting
2' Conduit for Traffic Signal System (as required)

Gutter

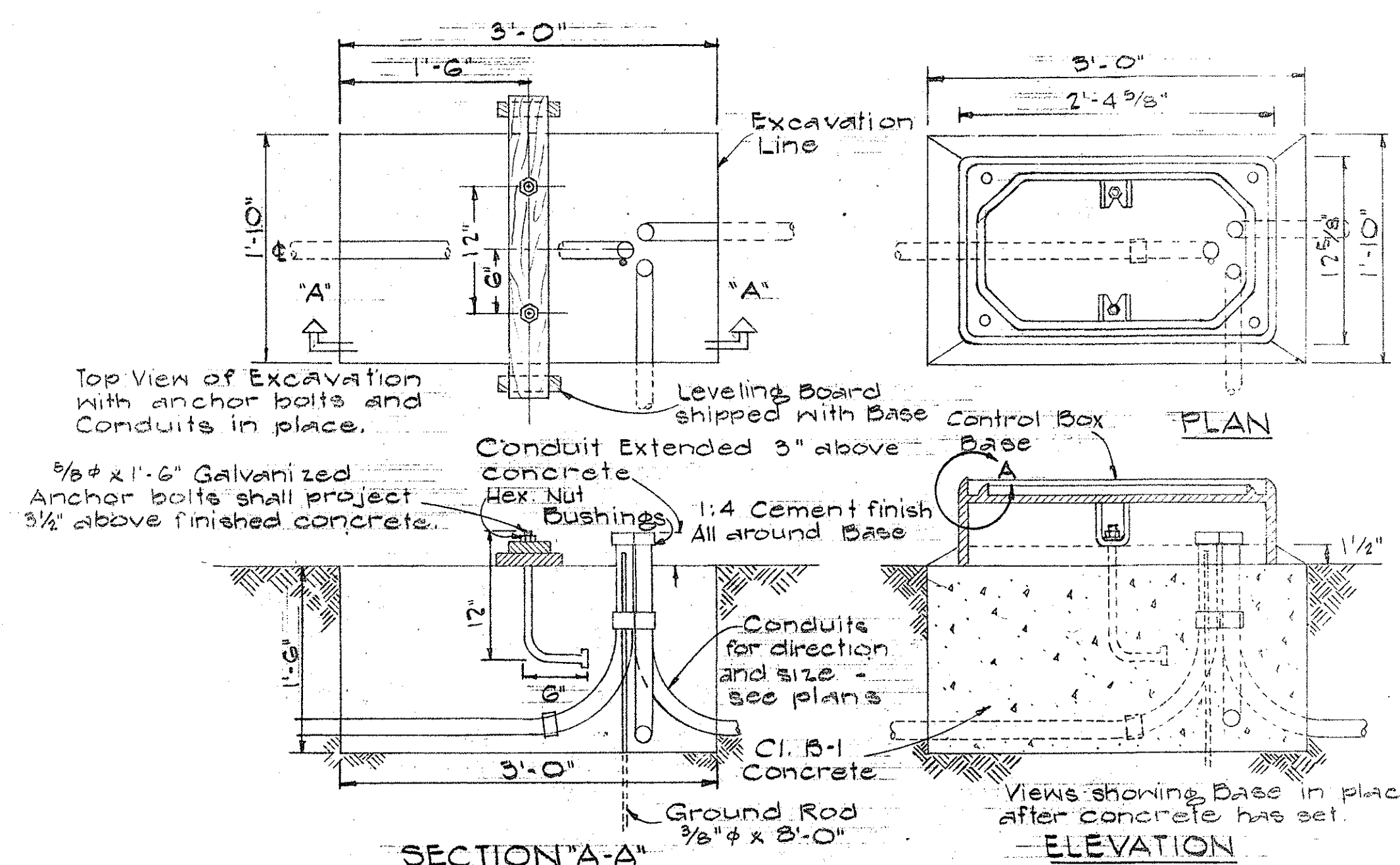
A.C. Pavement

Base Course

Select Borrow

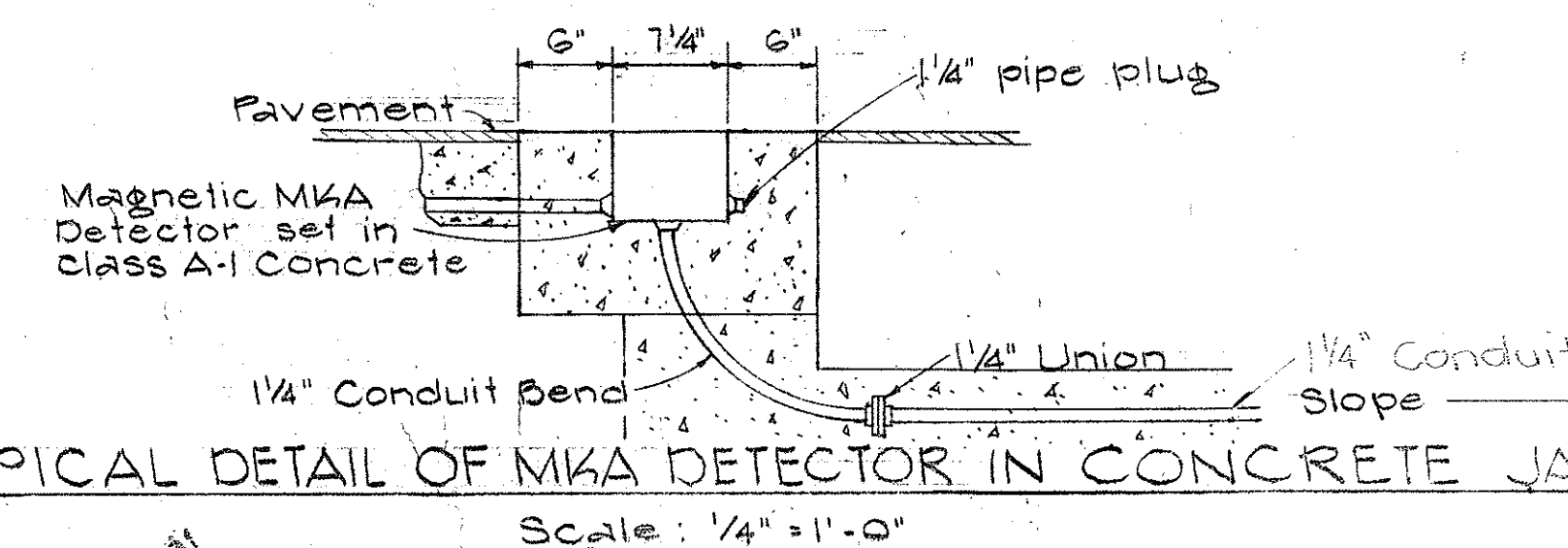
Scale $\frac{1}{2}'' = 1'-0''$ 

Sectional View showing
Box bolted to Base



Scale 111-0

TYPICAL LAYOUT OF MKA DETECTOR



TYPICAL DETAIL OF MKA DETECTOR IN CONCRETE JACKET

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

TYPE "M" CONTROLLER BASE, PULLBOX AND MAGNETIC DETECTORS

SCALE: As Noted

SHEET No. OF SHEETS

APPROVED:..... DATE:.....

DIRECTOR OF TRANSPORTATION

A-92-02-64, D-90-02-64 (9)

ORIGINAL PLAN	SURVEY PLOTTED BY DESIGNED BY DRAWN BY TRACED BY QUANTITIES BY CHECKED BY	DATE JUL 57
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Note

1. $\frac{3}{8}$ " Rolled steel Plate Cover with non-slip Abrasive Surfacing Medium Grade, Natural Color shall be used on all Pull Boxes located on sidewalk areas where pedestrians are walking.
2. $\frac{3}{8}$ " Checkered Plate Cover shall be used on all Pull Boxes located on median areas and other locations where there are no pedestrians walking.
3. Pull Irons shall be placed opposite each other.
4. Covers of all pull boxes located in sidewalk areas shall be set flush with the concrete sidewalk.
5. Each Pull Box shall have a pair of pull irons opposite each other for lifting purposes.

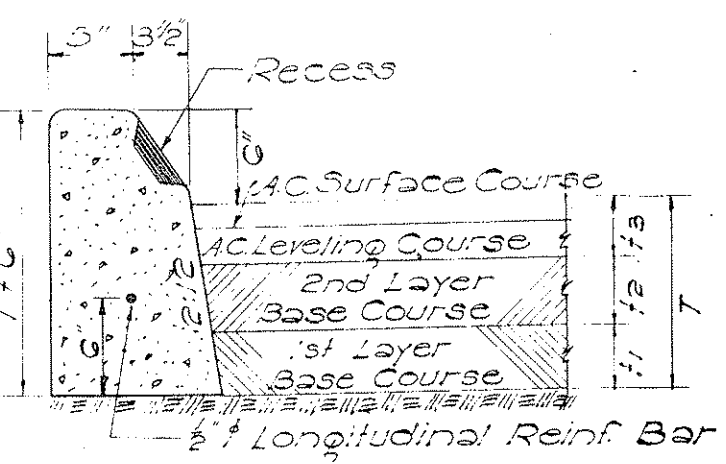
For direction and number and size of slots for conduits (see plan)

Grout Conduit Slot with 1:3 Cement Mortar after Conduit is placed.

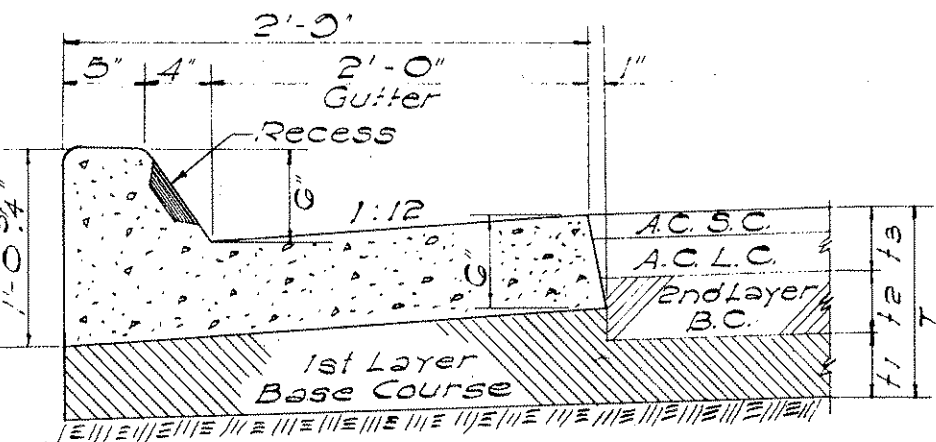
2/17/57
9/22/61

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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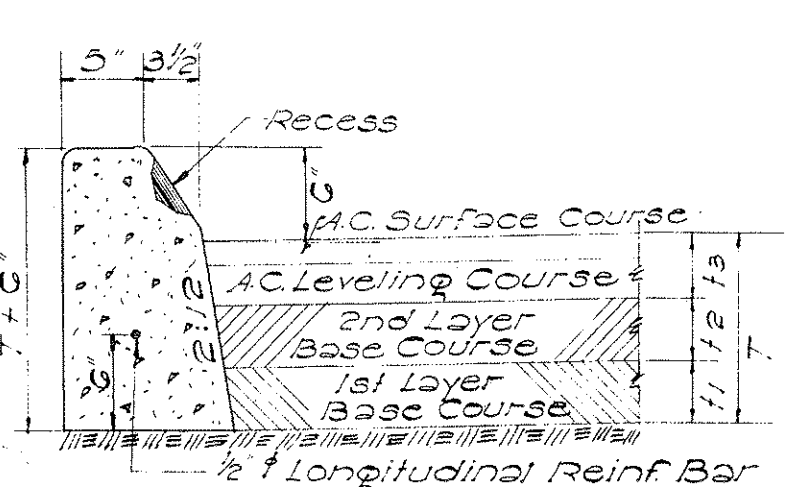
AUG. 1957



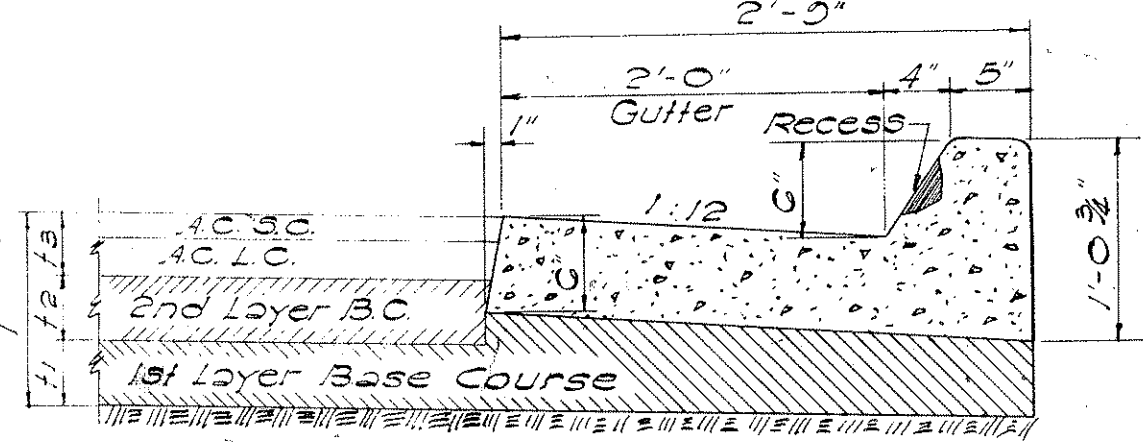
TYPE "A" & "B" CURB
SCALE: 1" = 1'-0"



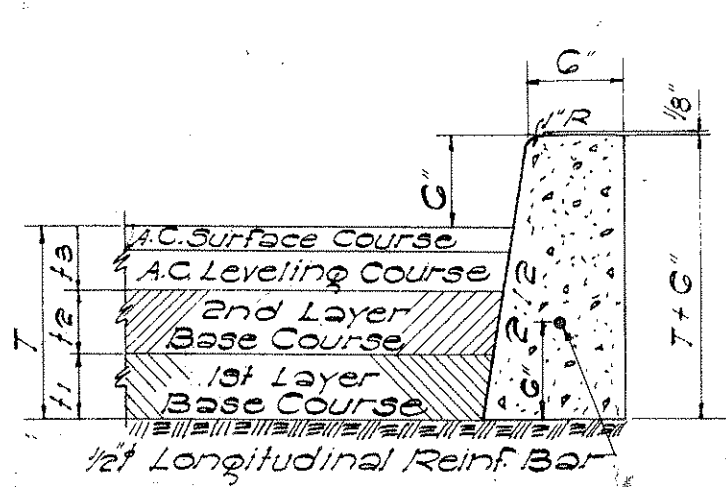
TYPE "AG" & "BG" CURB & GUTTER
SCALE: 1" = 1'-0"



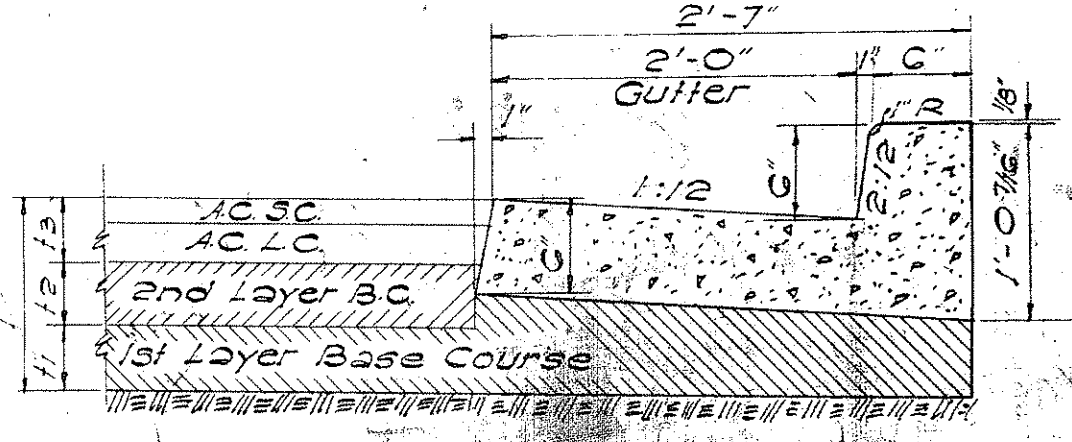
TYPE "C" CURB
SCALE: 1" = 1'-0"



TYPE "CG" CURB & GUTTER
SCALE: 1" = 1'-0"

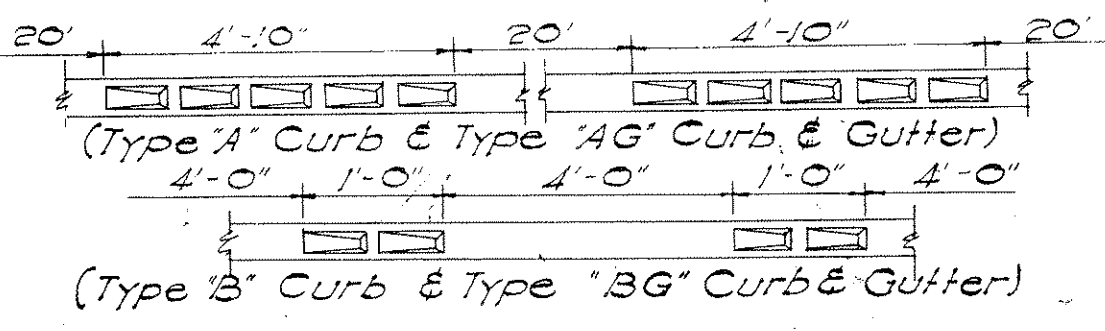


TYPE "D" CURB
SCALE: 1" = 1'-0"

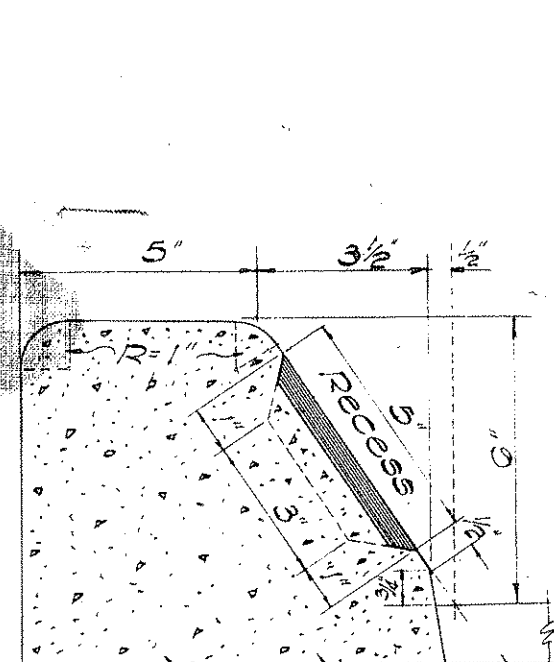


TYPE "DG" CURB & GUTTER
SCALE: 1" = 1'-0"

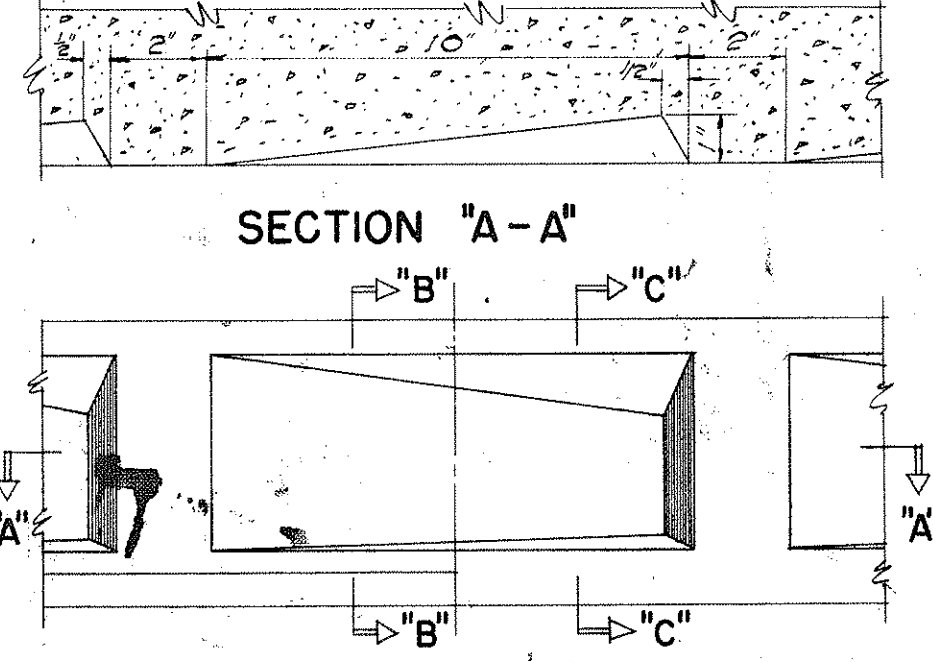
General Note Covering All Types of Curbs:
Occasionally curb rests on first layer of base course. See typical sections.



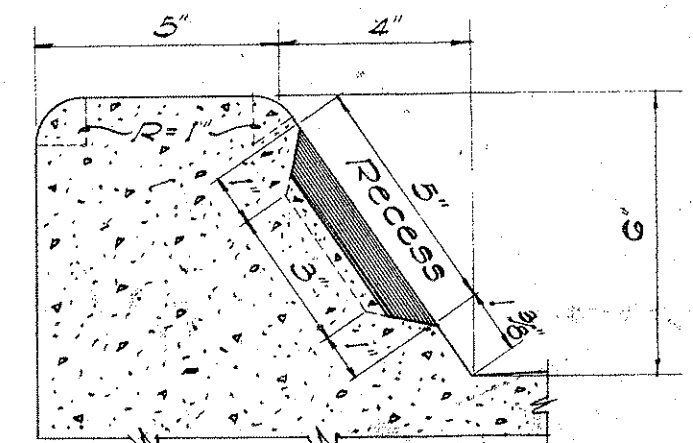
TYPE AND SPACING OF RECESSES



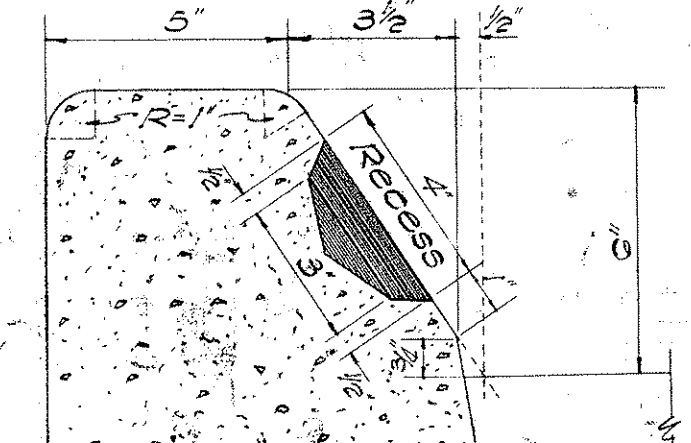
SECTION "B-B"
TYPE "A" & "B" CURB



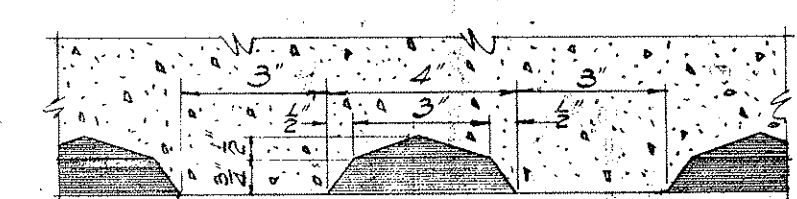
ELEVATION
SCALE: 3" = 1'-0"



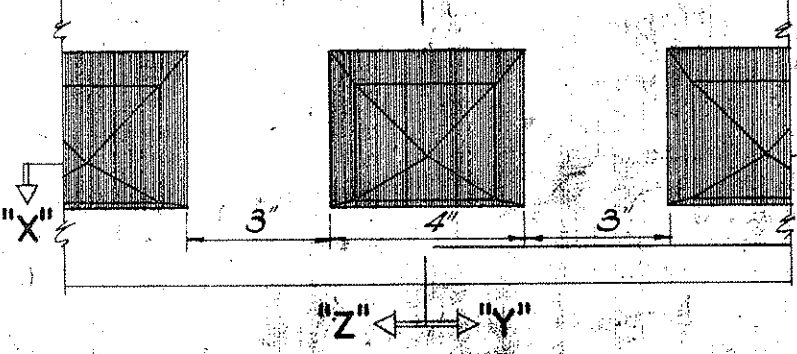
SECTION "C-C"
TYPE "AG" & "BG" CURB



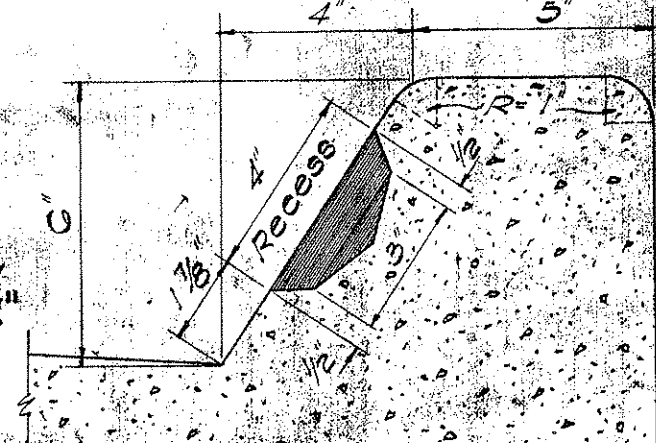
SECTION "Y-Y"
TYPE "C" CURB



SECTION "X-X"
TYPE "CG" CURB

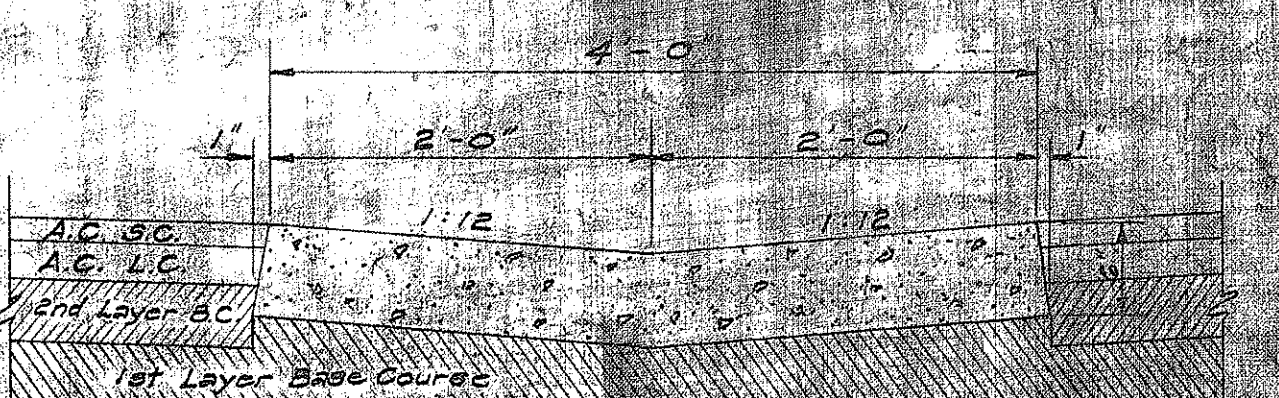


ELEVATION
SCALE: 3" = 1'-0"



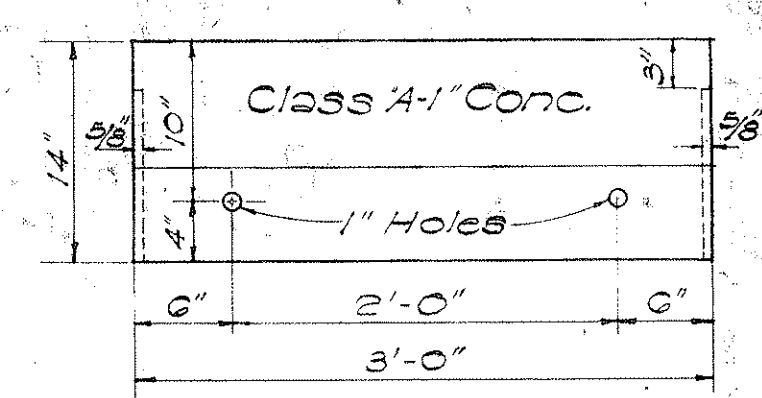
SECTION "Z-Z"
TYPE "CG" CURB

- NOTES:
- Types "AG", "BG", "CG", "DG" and "EG" Concrete Curbs and Gutters are to be poured monolithically.
 - Types "A", "B" and "C" Curbs and Types "AG", "BG" and "CG" Curbs and Gutters occur at Median Strips and Traffic Islands.
 - Shaded area in Curbs are to be painted with an approved white lacquer (One Coat).
 - All Concrete Curbs and Gutters shown herein are to be of Class "A-1" Conc. and Cast in Place.

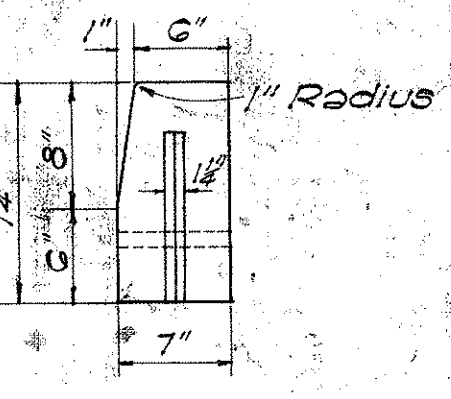


TYPE "G" GUTTER
SCALE: 1" = 1'-0"

DETAILS OF CAST-IN-PLACE CONC. CURBS AND GUTTERS



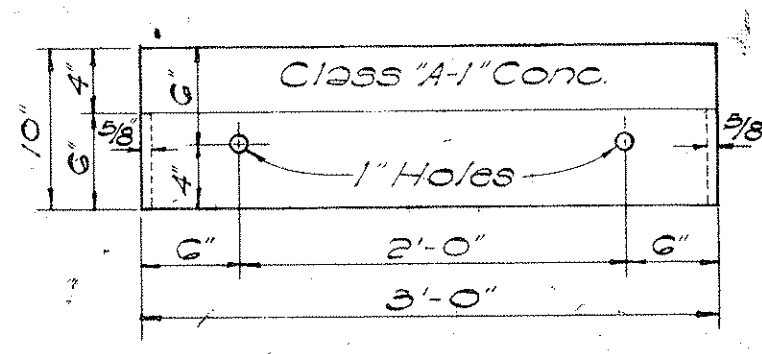
FRONT ELEV.



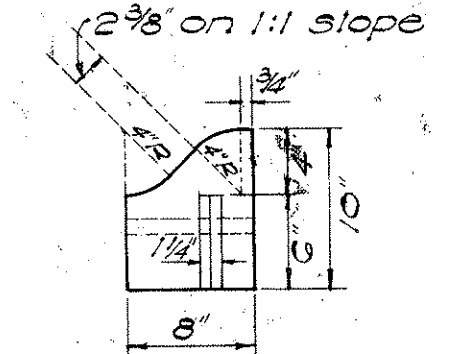
END ELEV.

PRECAST CONC. CURB

SCALE: 1" = 1'-0"



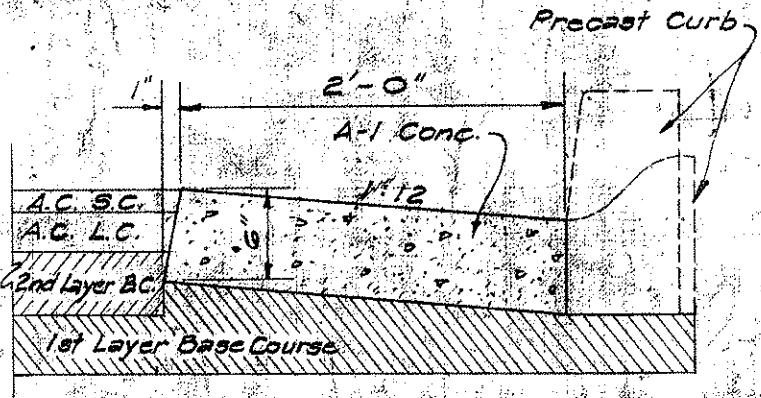
FRONT ELEV.



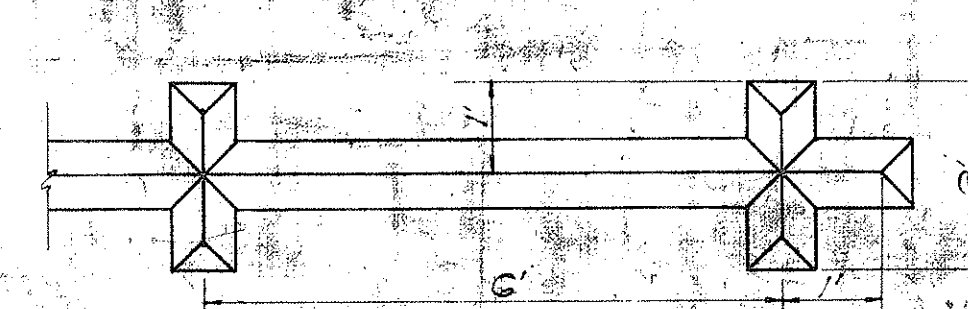
END ELEV.

PRECAST CONC. ROLL CURB

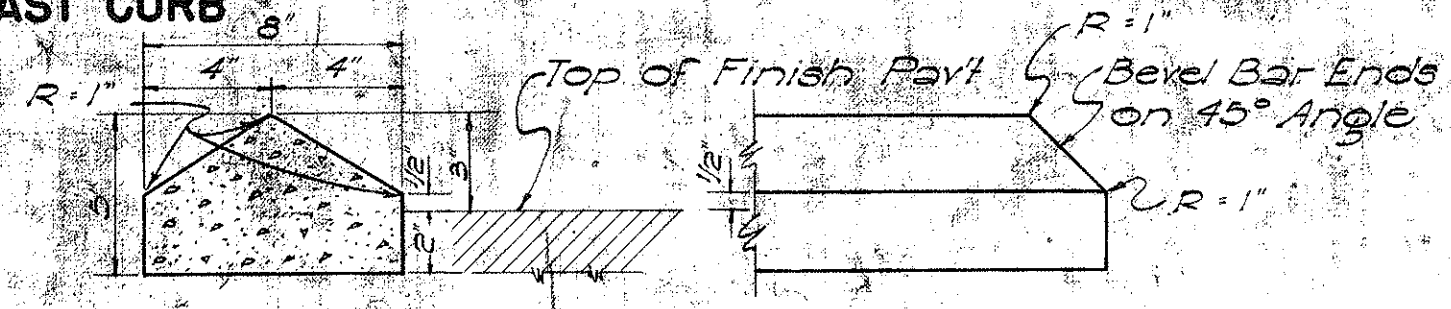
SCALE: 1" = 1'-0"



TYPE "F" GUTTER
FOR PRECAST CURB



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



ELEVATION

RAISED TRAFFIC BARS

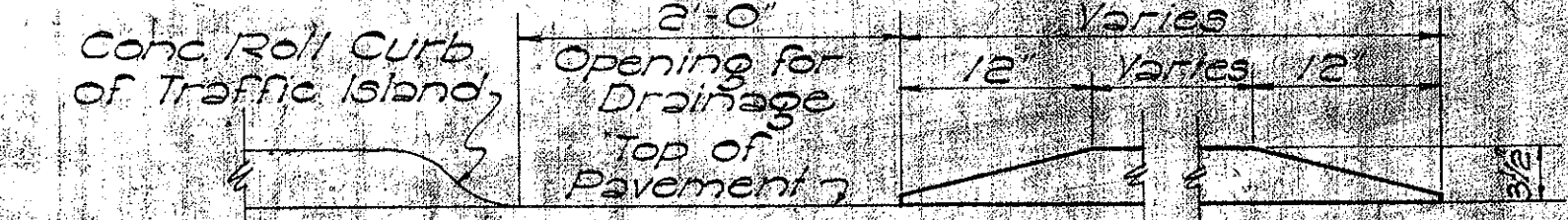
SCALE: 2" = 1'-0"

PLAN

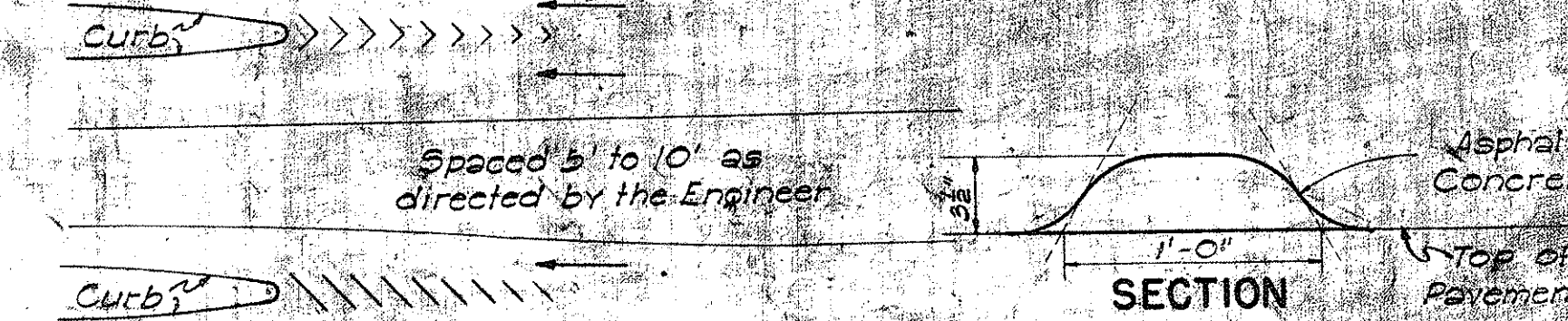
NOTE:
Section and Elevation for Joggle Bars are same as the Traffic Bars.

RAISED JOGGLE BARS

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



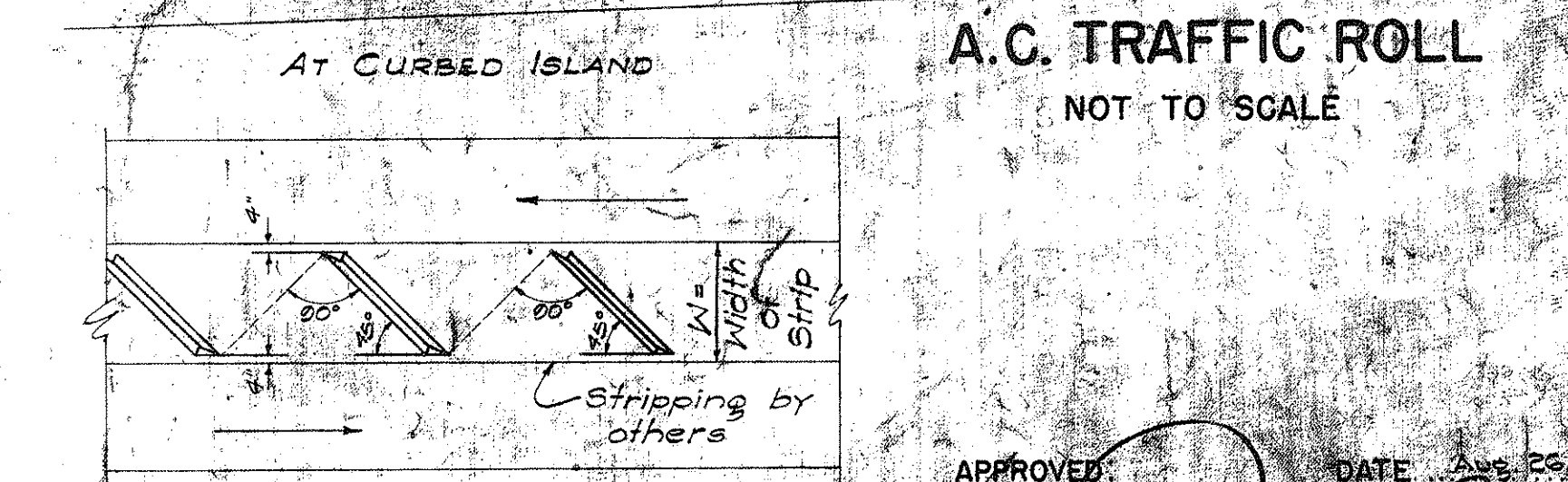
ELEVATION



SECTION

A.C. TRAFFIC ROLL

NOT TO SCALE

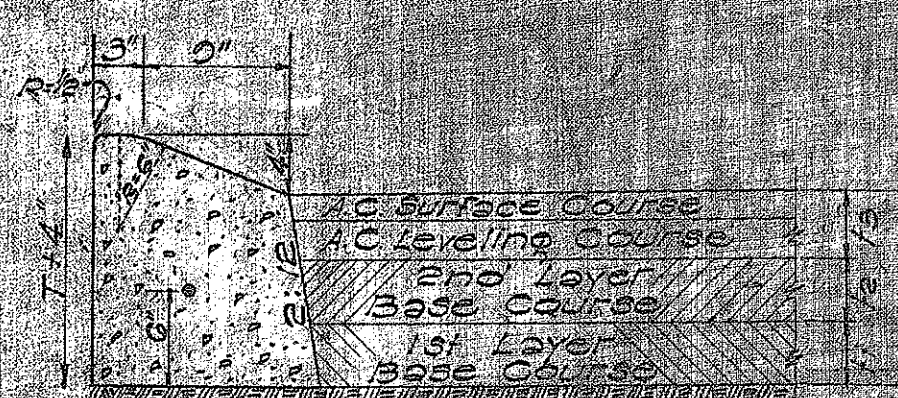


AT CURBED ISLAND

Median Strip

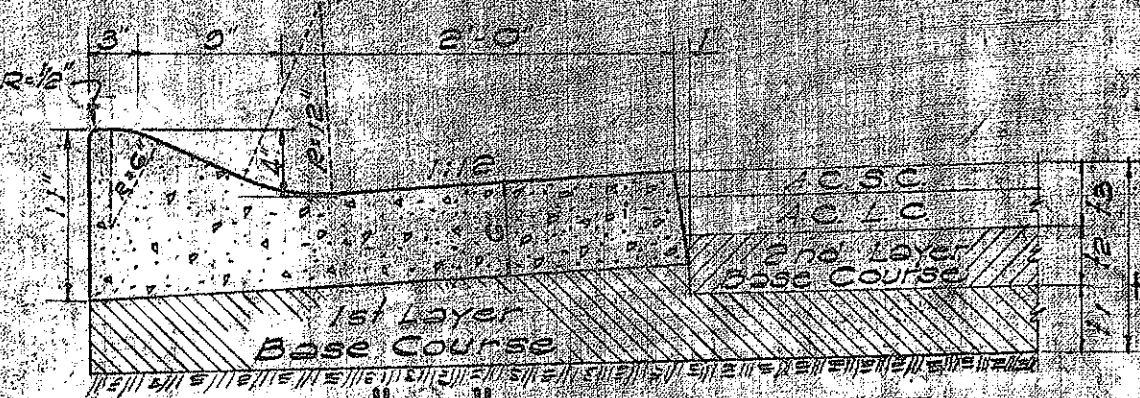
LAYOUT OF JOGGLE BARS

NOT TO SCALE



TYPE "E" CAST-IN-PLACE
CONCRETE CURB

SCALE: 1" = 1'-0"



TYPE "EG" CAST-IN-PLACE
CONC. CURB & GUTTER

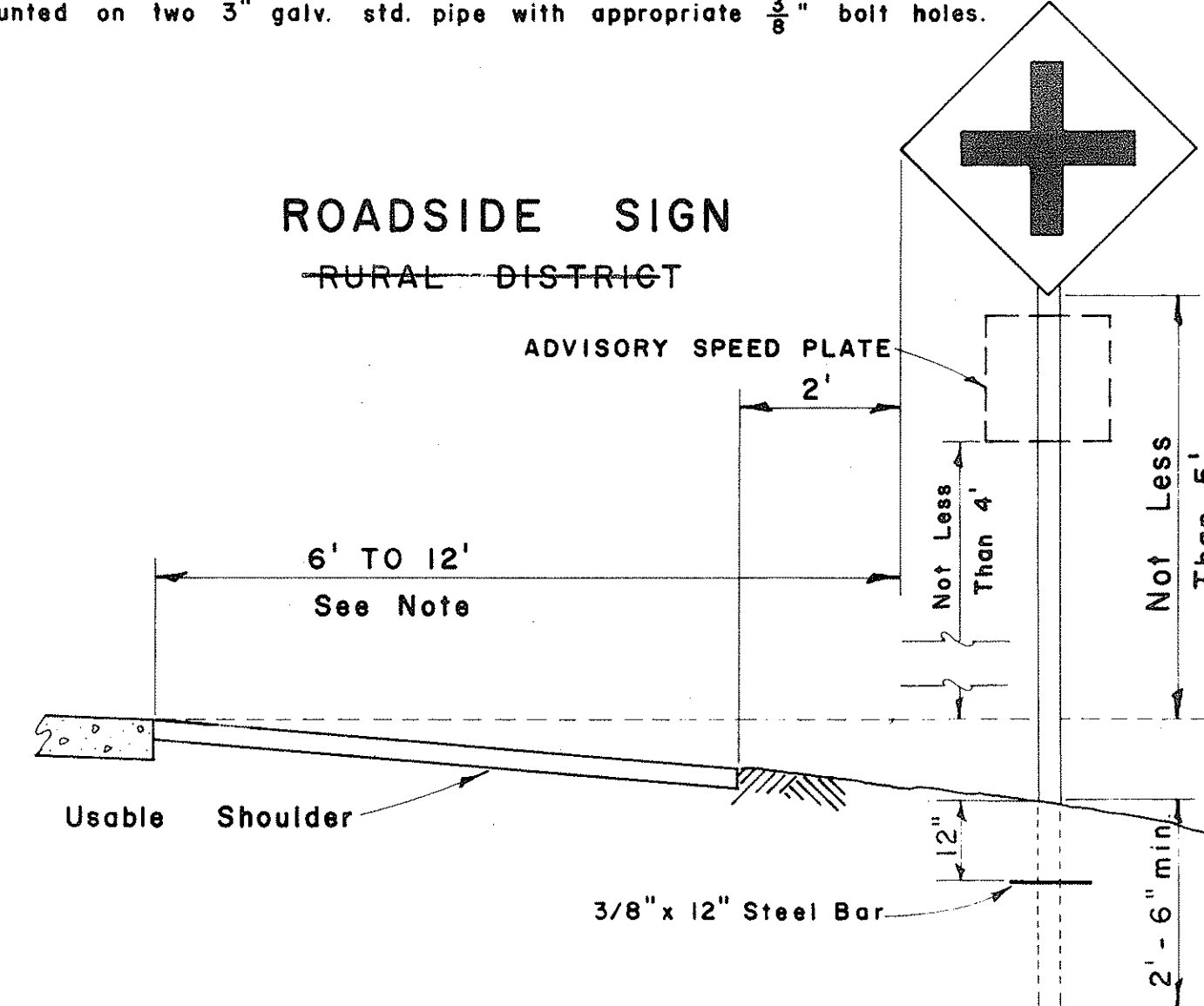
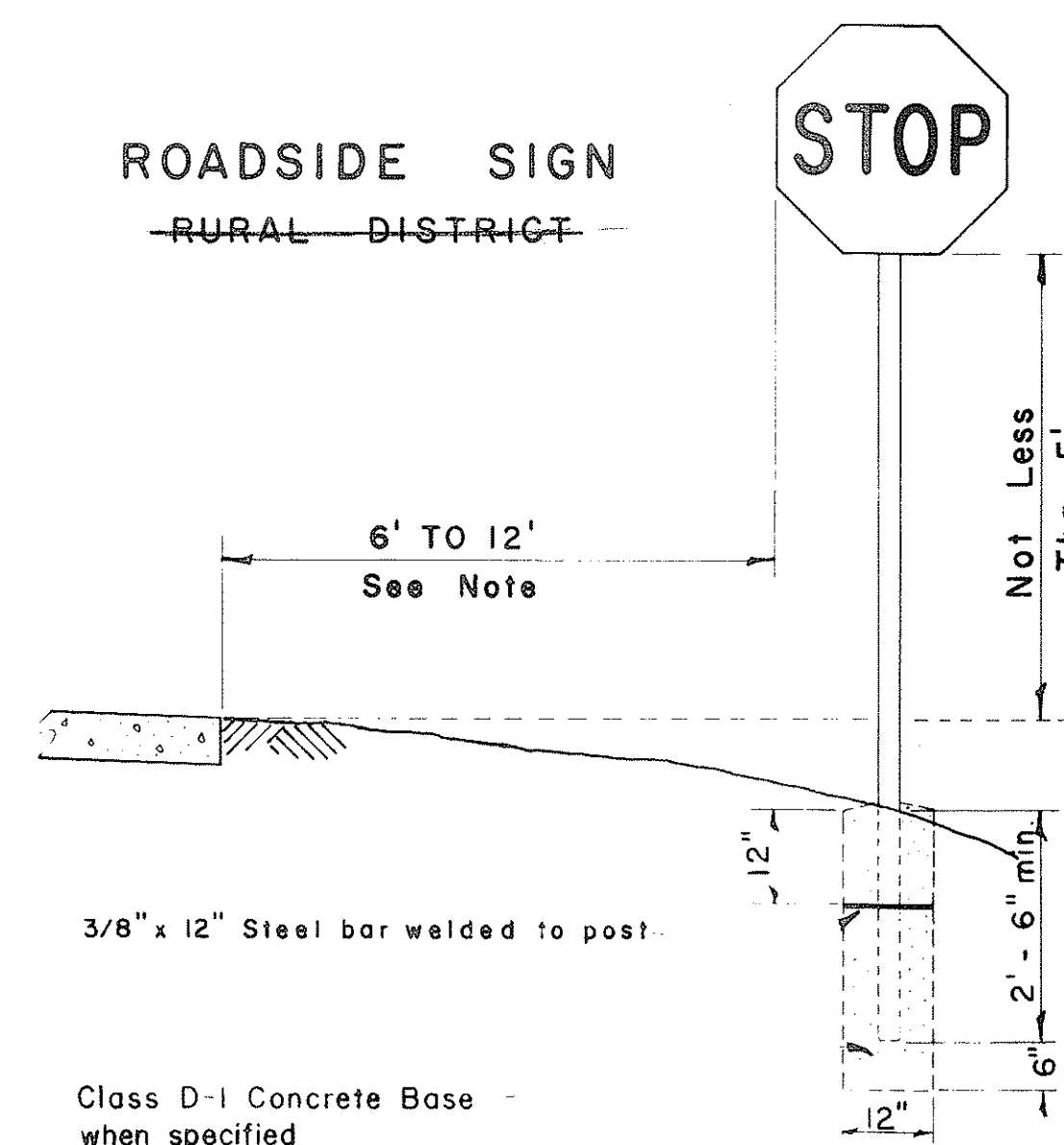
SCALE: 1" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
CONCRETE CURBS,
CONCRETE CURBS & GUTTERS
SCALES AS NOTED
SHEET NO. OF SHEETS

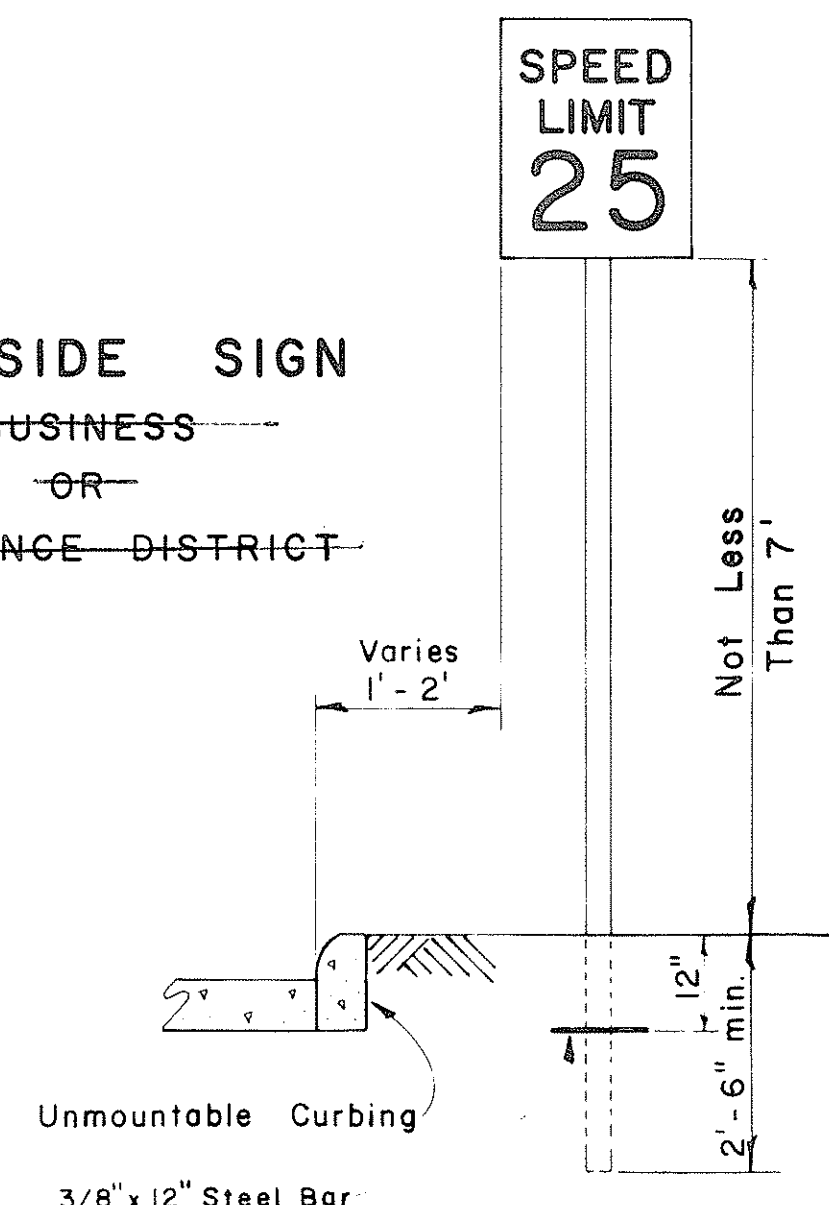
APPROVED: [Signature]
DATE: AUG 25, 1957
STATE HIGHWAY ENGINEER

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: 8/22/61

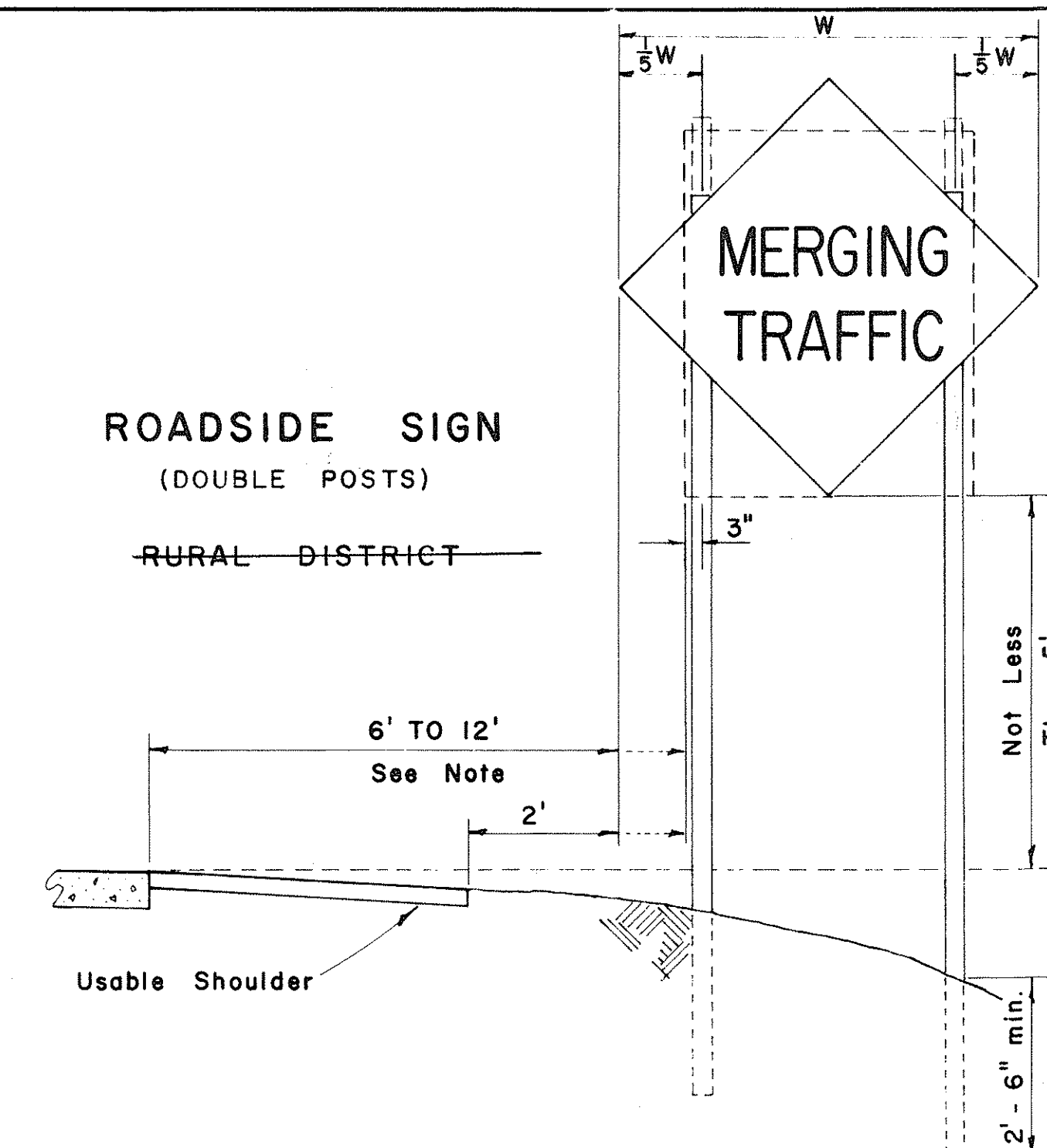
NOTE:
 1. All signs and road delineators shall be placed 2' outside the usable roadway shoulder or 1' outside unmountable curbing present and within the limits shown below.
 2. Except as noted below, sign posts shall be 3" galv. std. pipe for signs larger than 24" in any dimension and 2" galv. std. pipe for signs not over 24" in any dimension, with two 5/8" ϕ bolt holes or adjustable band brackets.
 3. Sign shall be attached to post with 3/8" galvanized carriage bolts with nuts and 7/8" x 7/16" x .120 stainless - steel washers with neoprene rubber gasket.
 4. Clearance Markers (RM-4, RM-3) shall be installed with the inside edge of the marker in line with the inner edge of the obstruction.
 5. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 3" galv. std. pipe with appropriate 3/8" bolt holes.



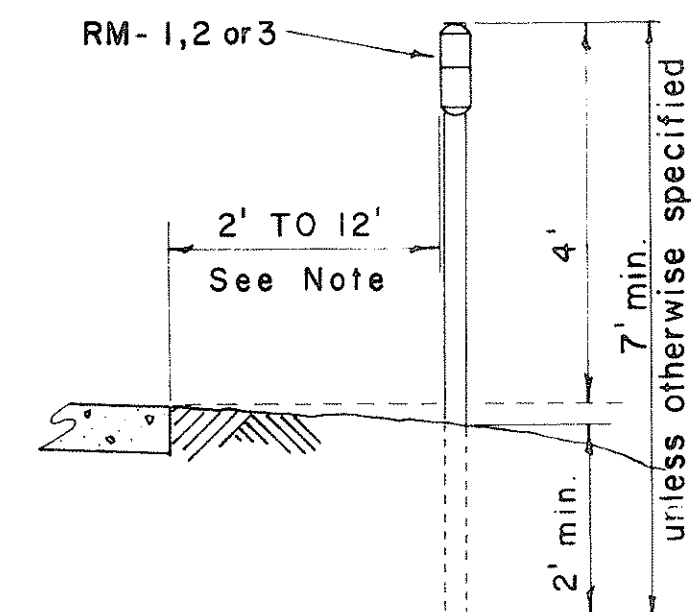
ROADSIDE SIGN
~~BUSINESS OR RESIDENCE DISTRICT~~



ROADSIDE SIGN
 (DOUBLE POSTS)
~~RURAL DISTRICT~~

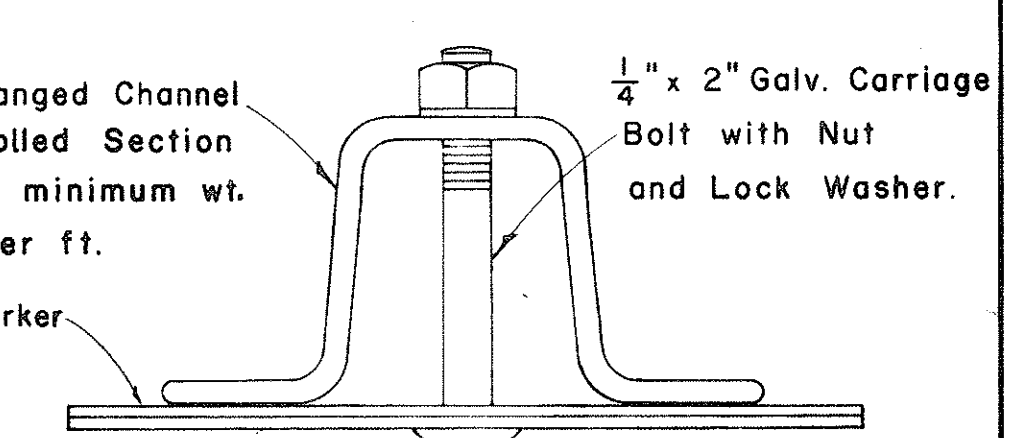
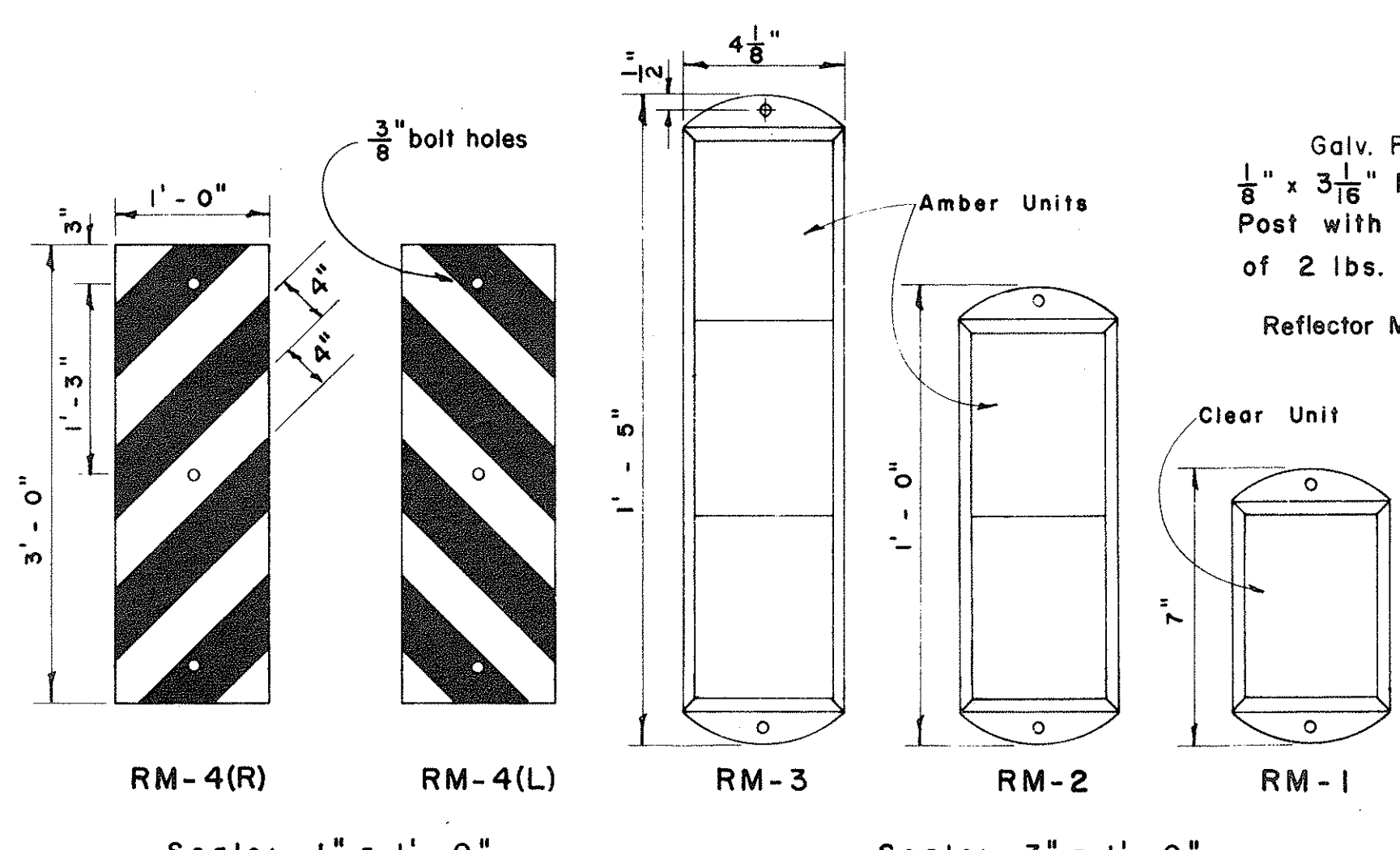
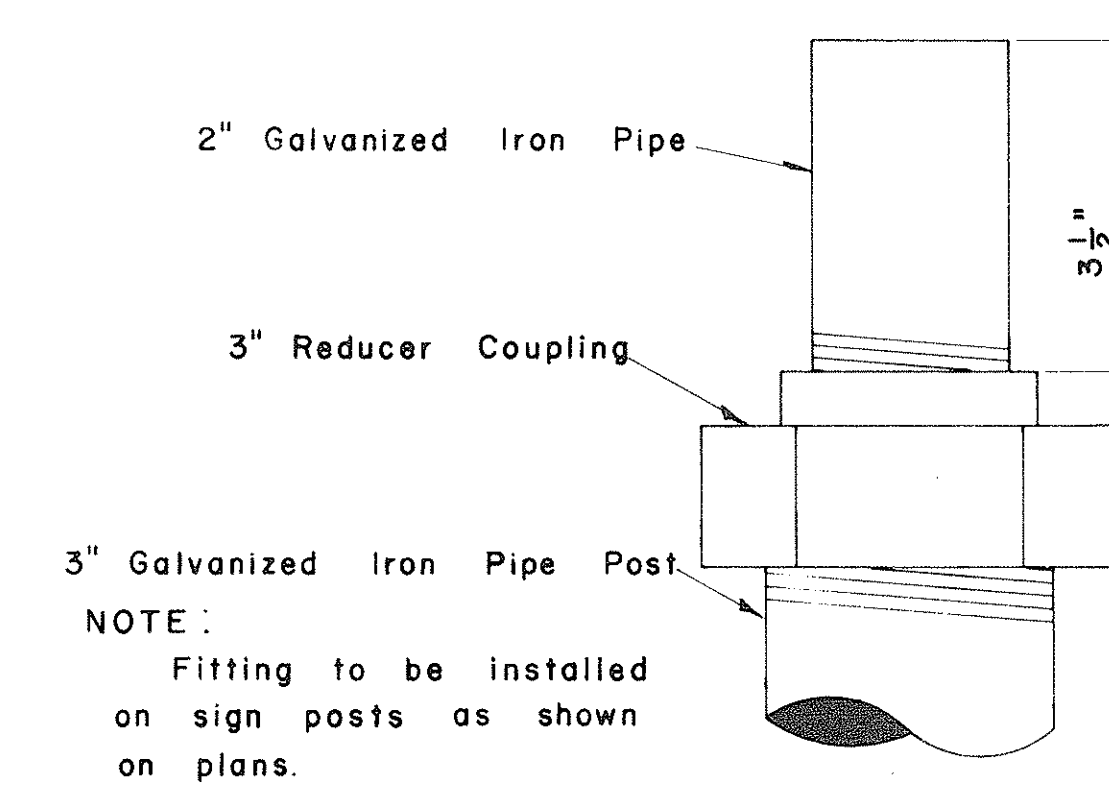
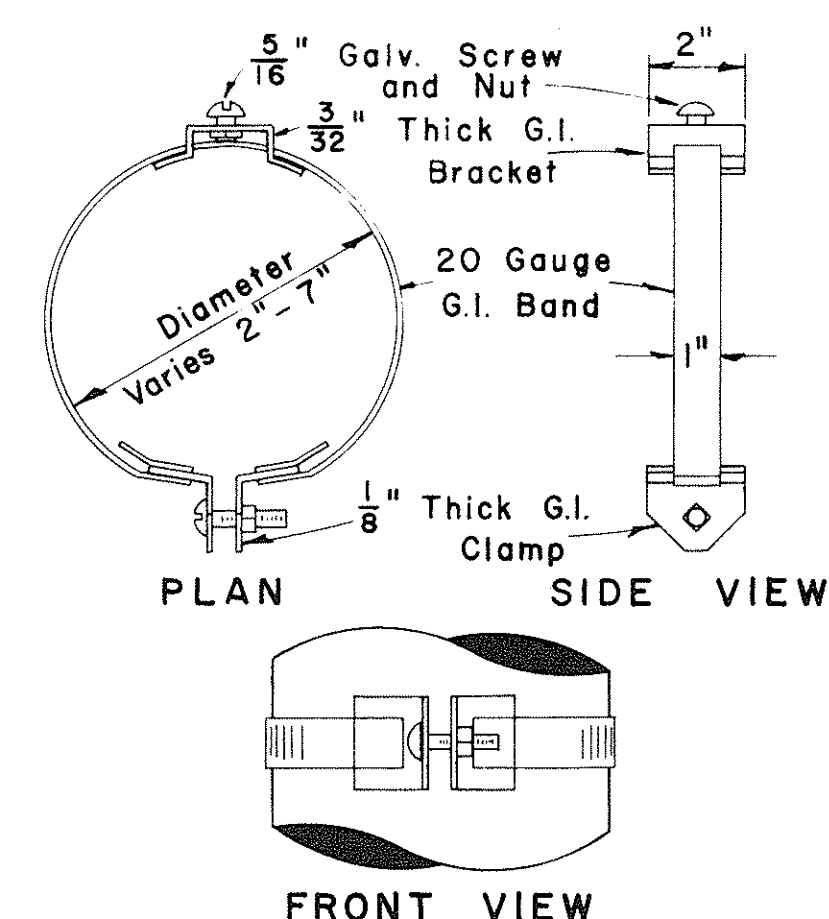
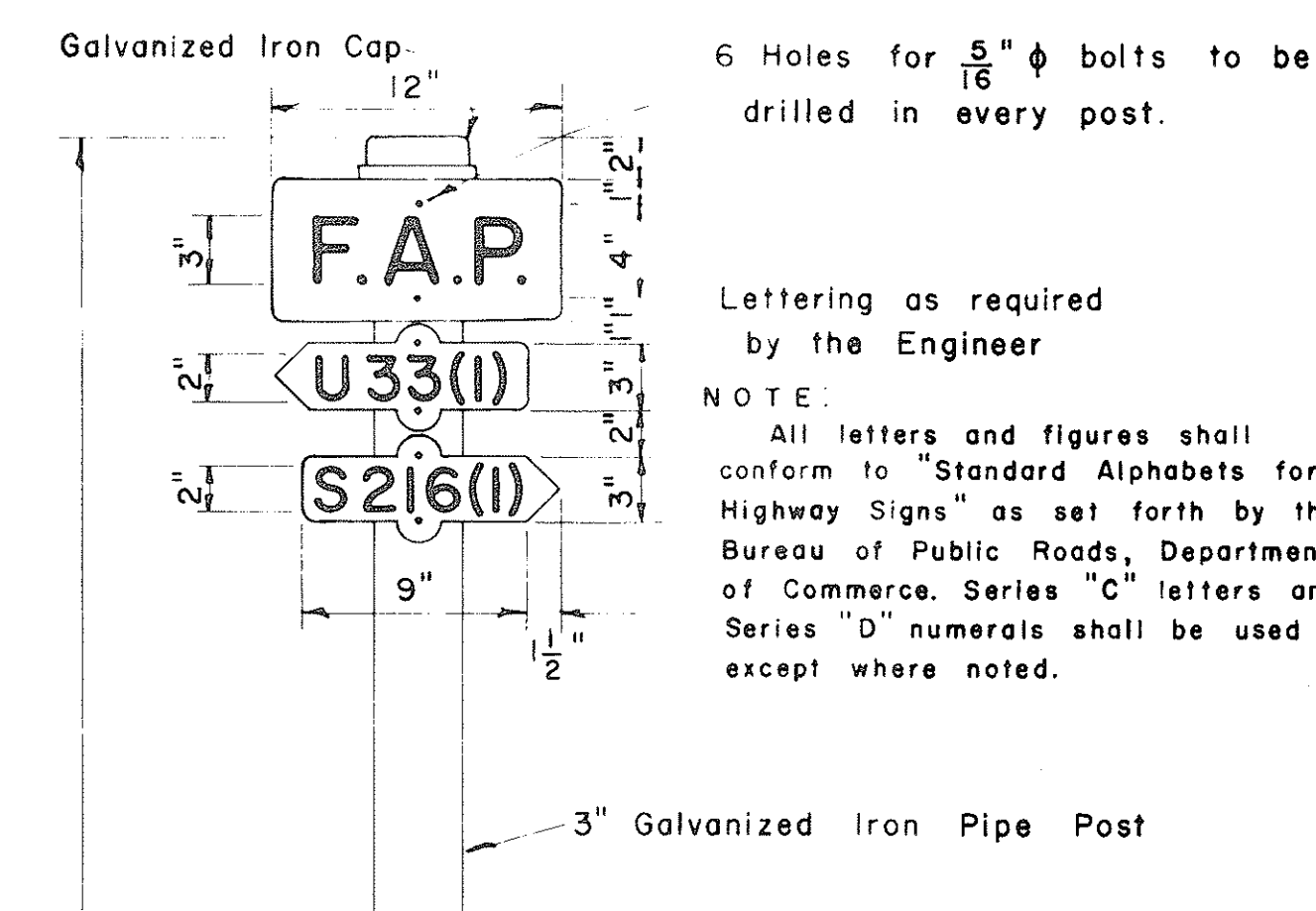


ROAD DELINEATOR

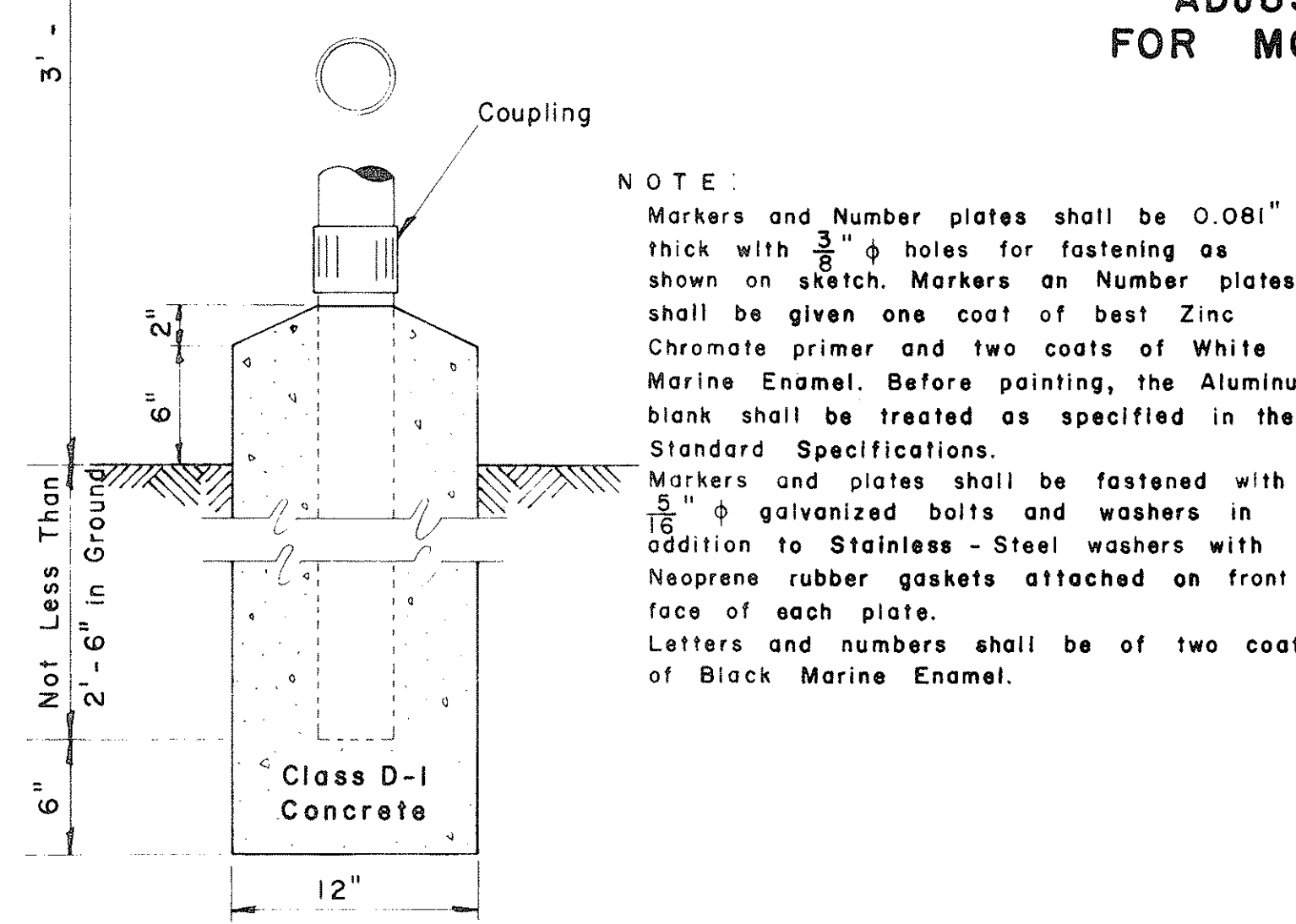


HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATIONS

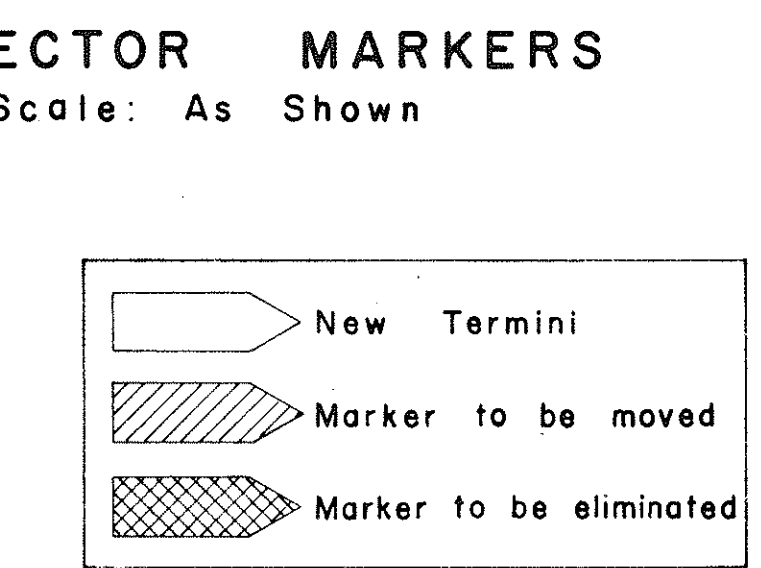
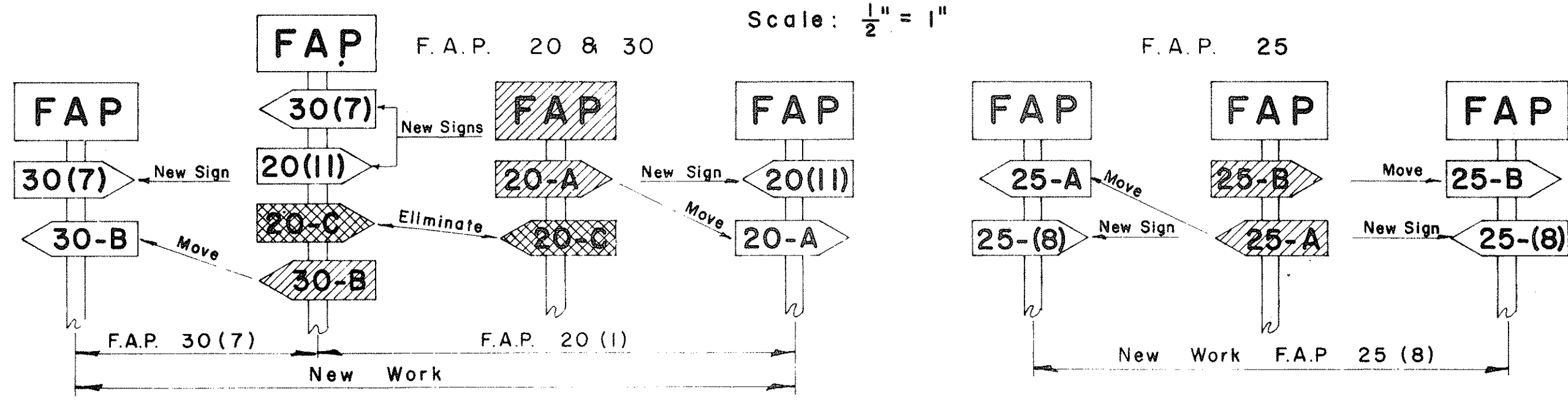
Scale: 1/2" = 1' - 0"



NOTE:
 1. Reflector Units for RM-1,2,3 shall be 4" x 5" in size and shall consist of reflective sheeting encapsulated in acrylic plastic.
 2. The upper 2 feet of the Galvanized Flanged Channel shall have a single row of 3/8" holes centered in the web and spaced 1 inch on centers.



NOTE:
 Markers and Number plates shall be 0.081" thick with 3/8" ϕ holes for fastening as shown on sketch. Markers and Number plates shall be given one coat of best Zinc Chromate primer and two coats of White Marine Enamel. Before painting, the Aluminum blank shall be treated as specified in the Standard Specifications.
 Markers and plates shall be fastened with 5/8" ϕ galvanized bolts and washers in addition to Stainless - Steel washers with Neoprene rubber gaskets attached on front face of each plate.
 Letters and numbers shall be of two coats of Black Marine Enamel.



APPROVED: _____ DATE: 11/1/63

DIRECTOR OF TRANSPORTATION

REVISED: JULY 3, 1963

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAILS
 F.A. MARKER
 AND
 MISCELLANEOUS SIGN
 DETAILS

Scale: As Shown