

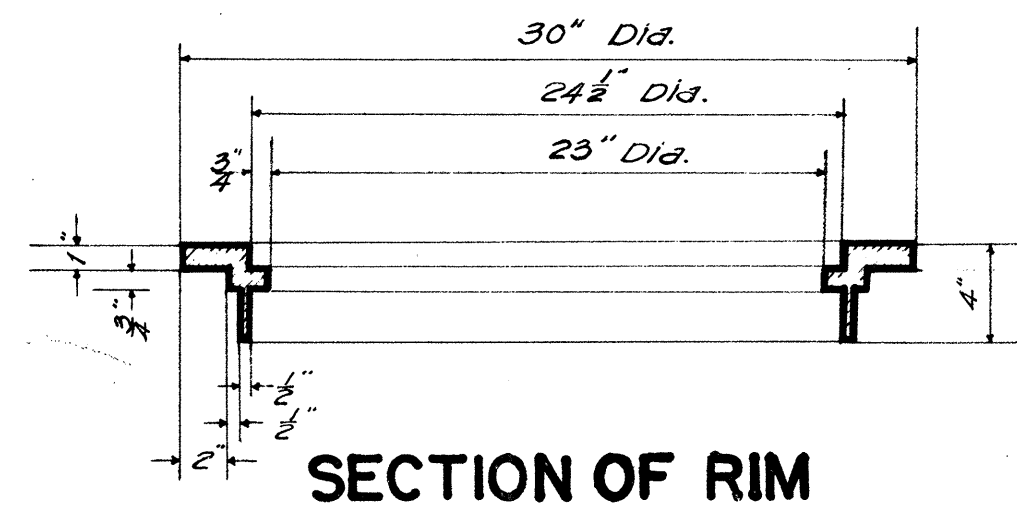




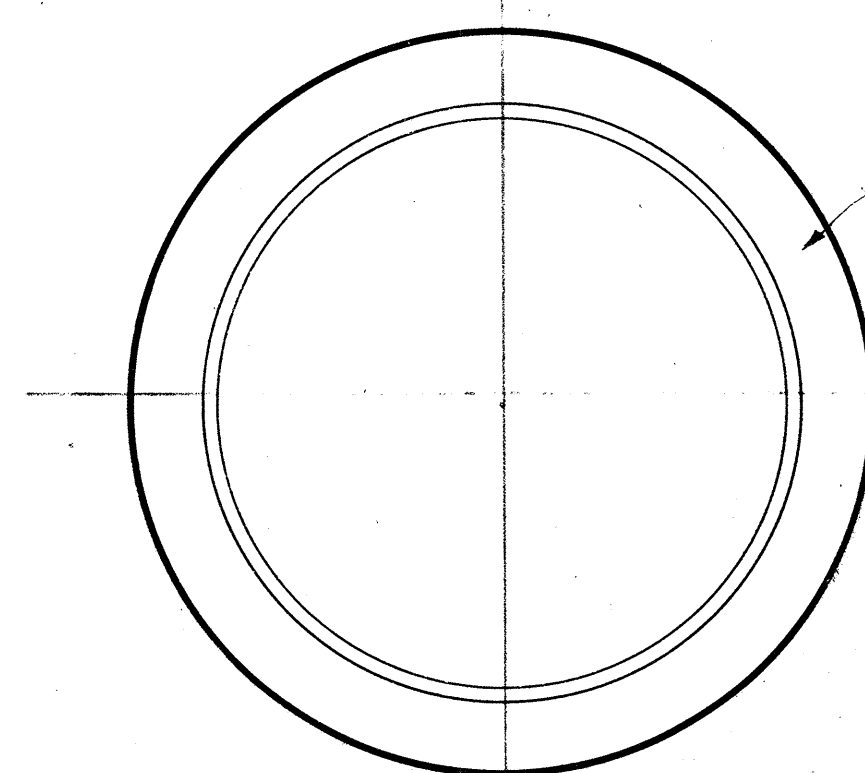




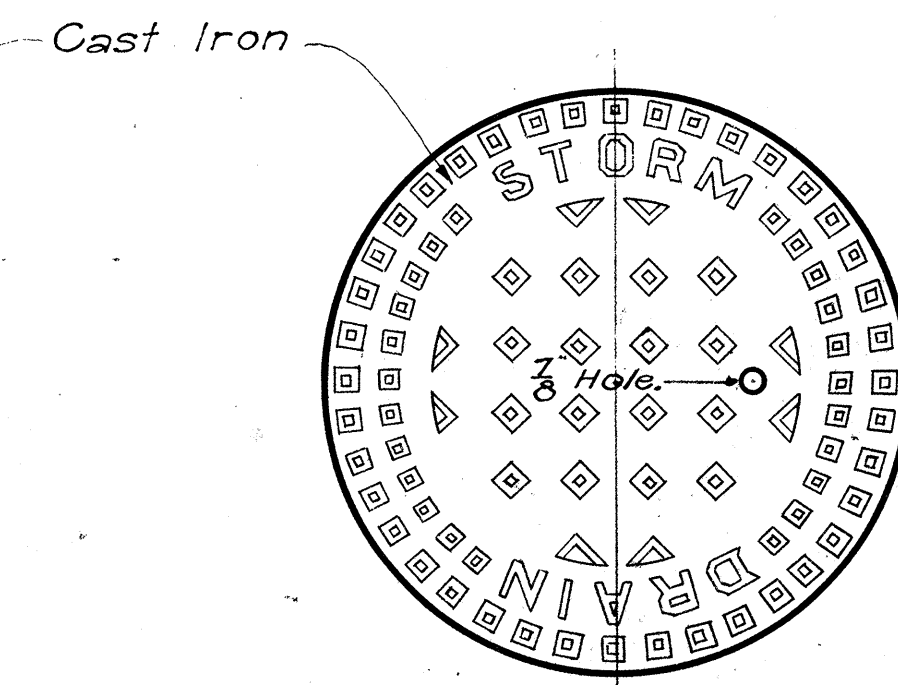
NOTE: The pattern for water manhole covers shall be the same as for sanitary sewer except that the word "Water" shall be substituted for Sanitary Sewer.



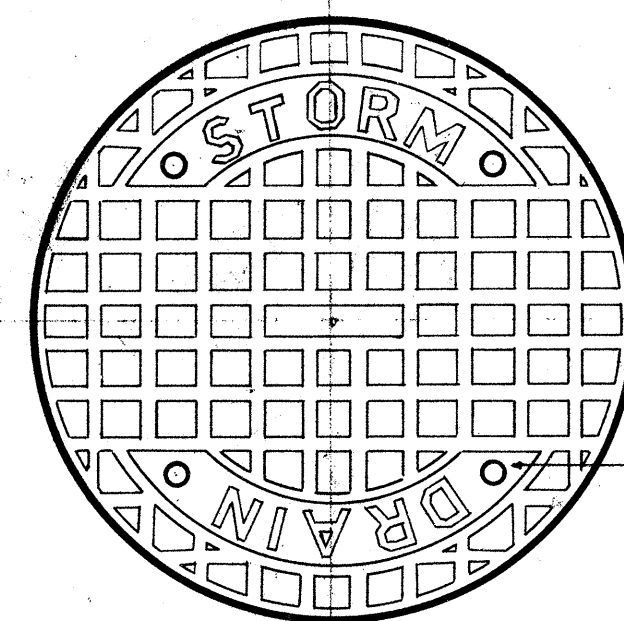
SECTION OF RIM



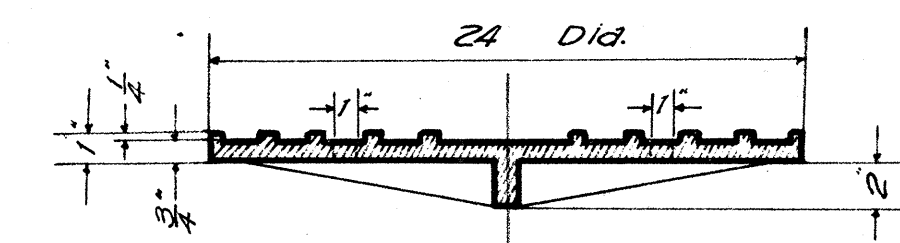
PLAN OF RIM



PATTERN FOR STORM DRAIN MANHOLE COVER

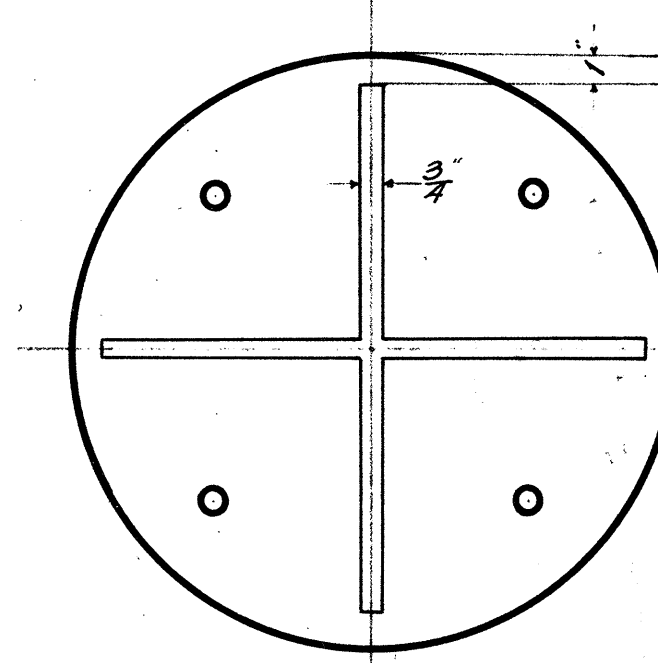


PLAN OF COVER TOP



SECTION OF COVER

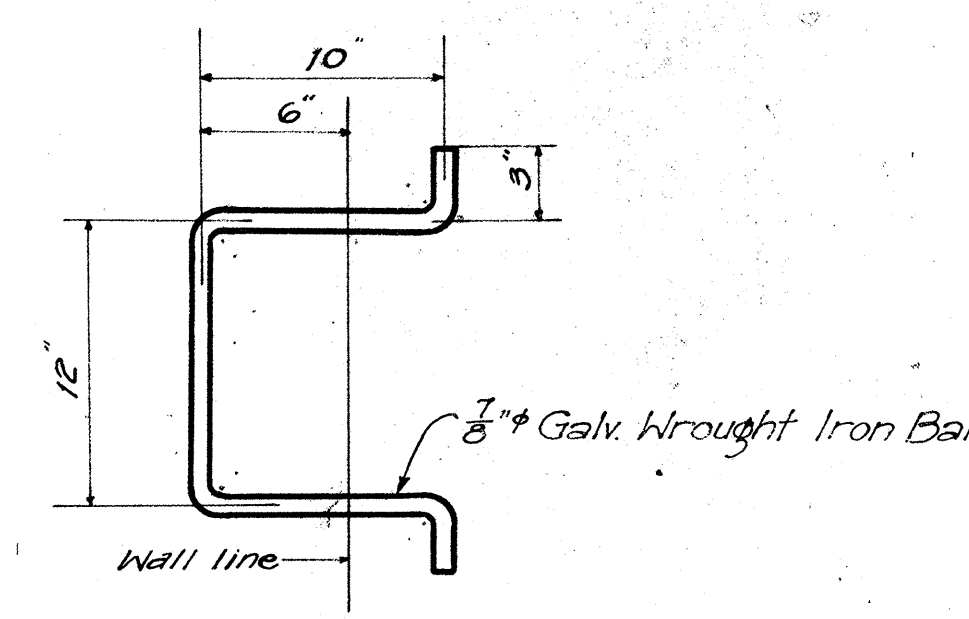
NOTE: A unit includes both Rim and Cover



BOTTOM VIEW OF COVER TYPE "B"

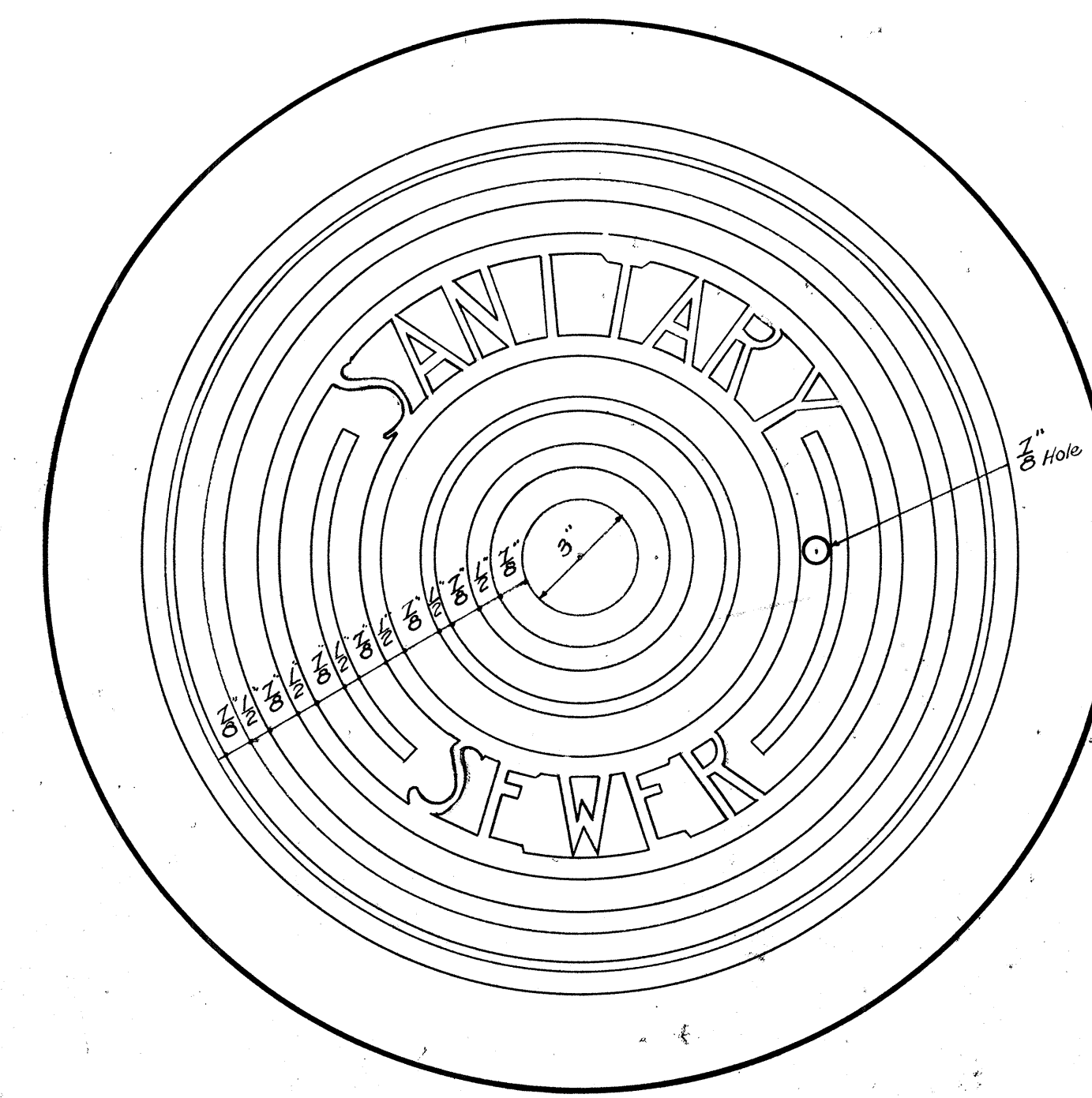
STANDARD CATCH BASIN CASTINGS

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

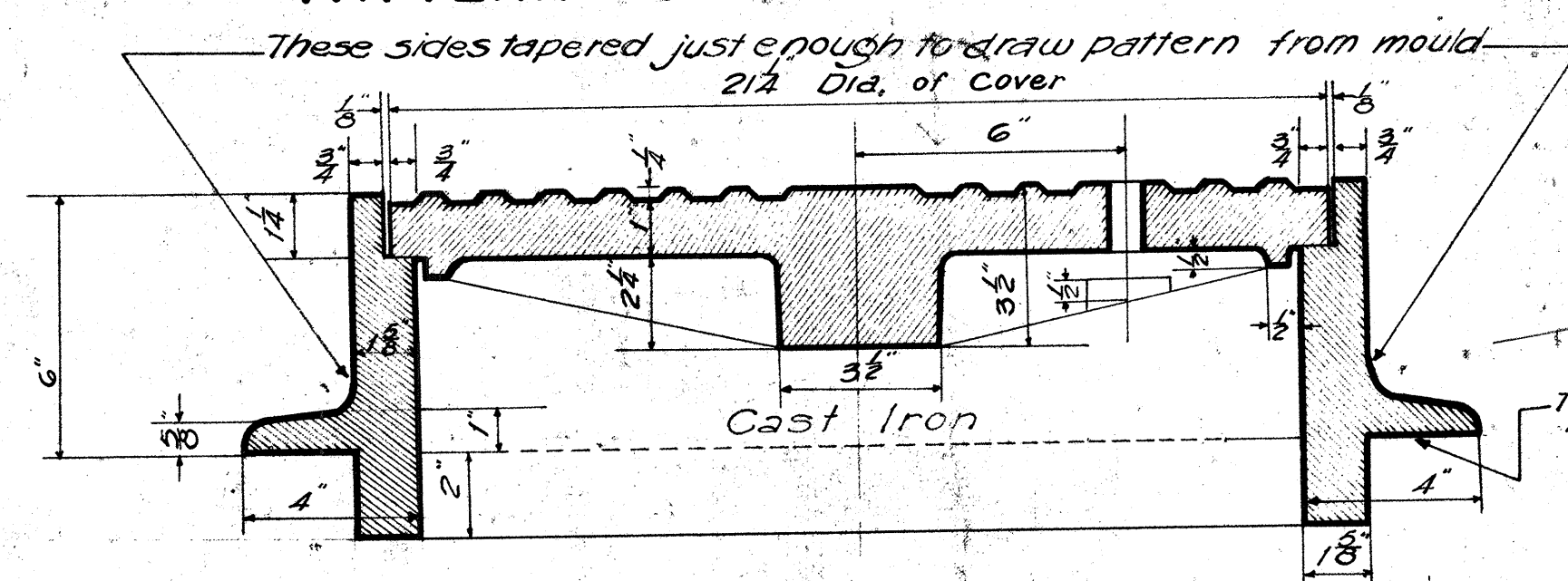


DETAIL OF MANHOLE RUNG

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

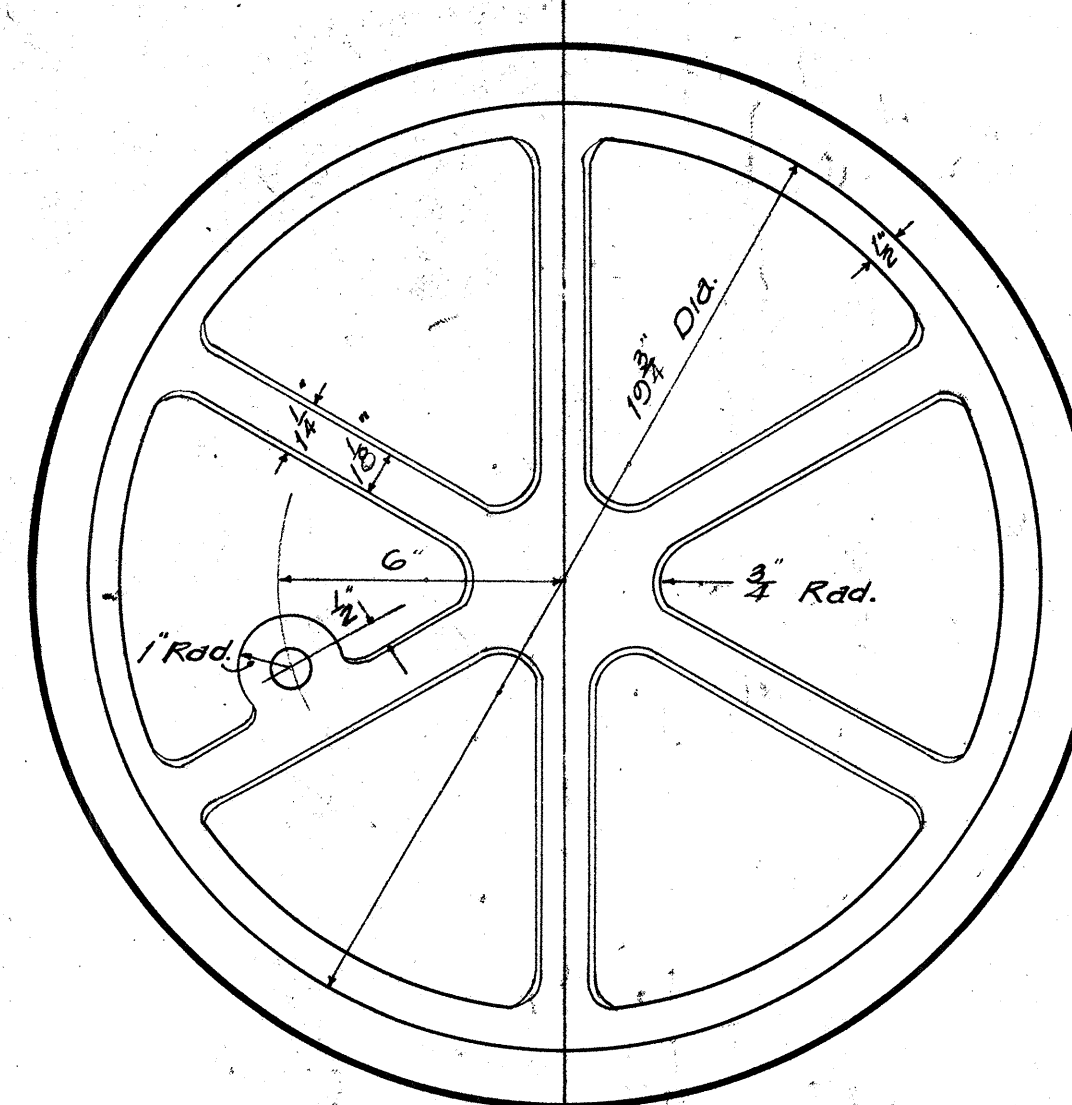


PATTERN FOR SEWER MANHOLE COVER



SECTION

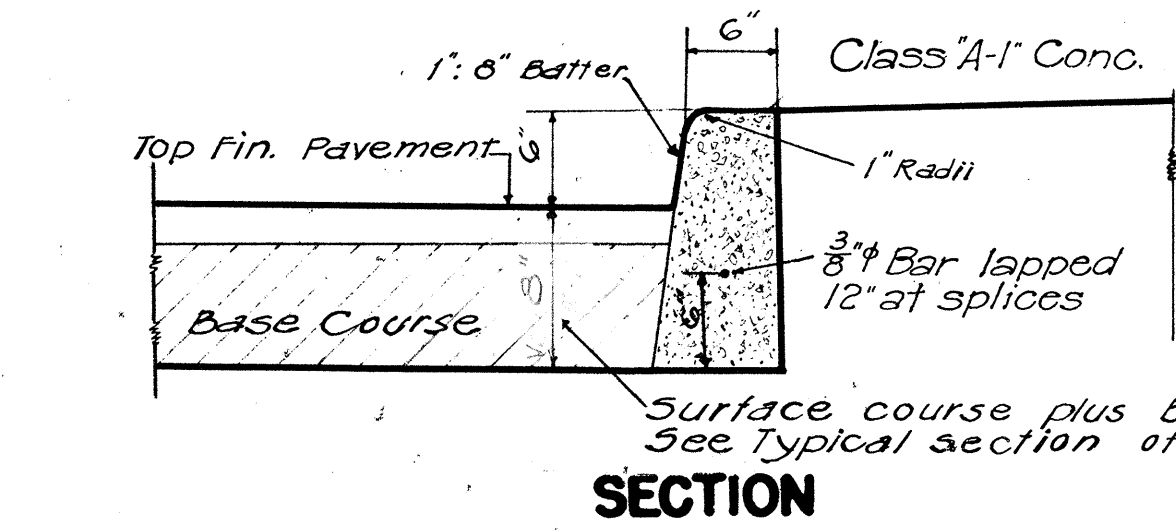
NOTE: A unit includes both Frame and Cover



BOTTOM VIEW OF COVER TYPE "A"

STANDARD MANHOLE CASTINGS

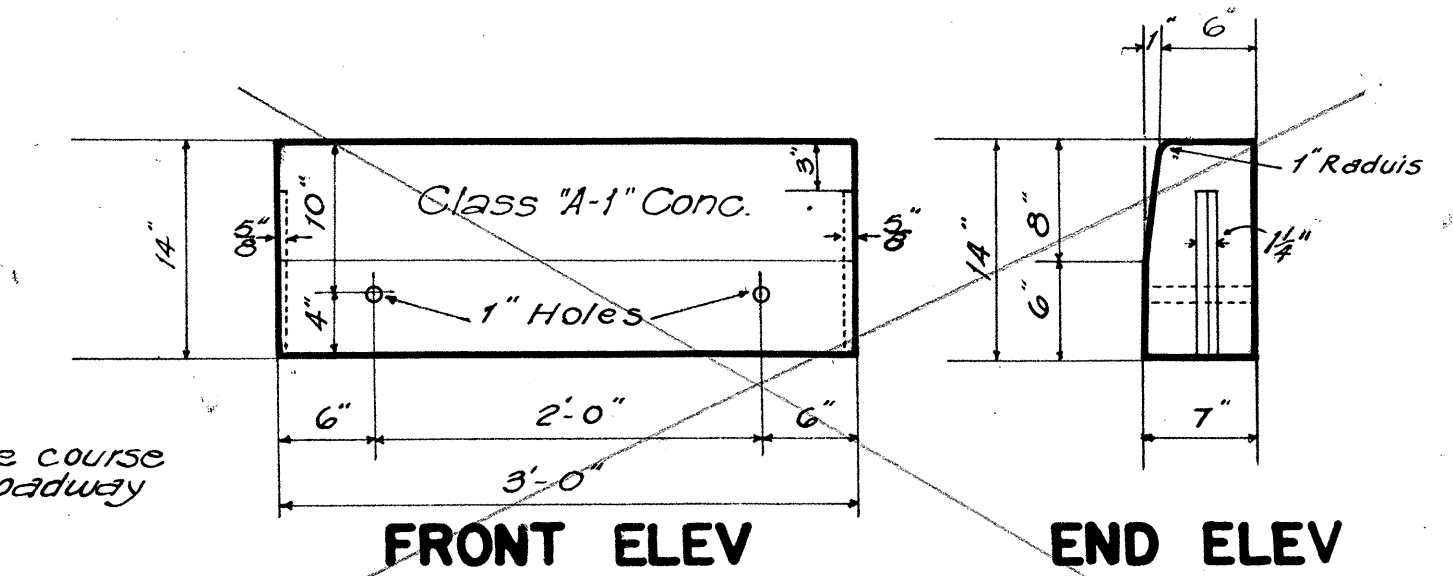
Scale: 3" = 1'-0"



SECTION

TYPE "D" CAST IN PLACE CONC. CURB

Scale: 1" = 1'-0"

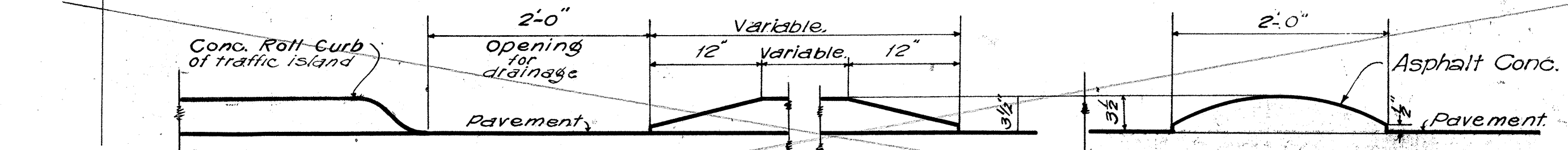


FRONT ELEV

END ELEV

ST'D. PRECAST CONC. CURB

Scale: 1" = 1'-0"

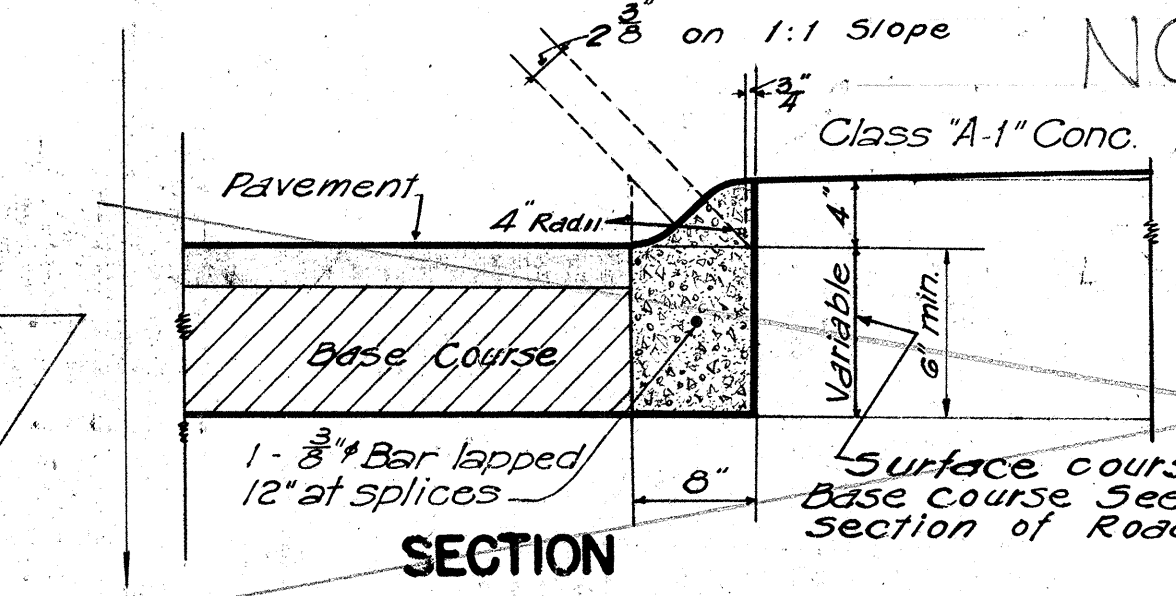


ELEVATION

DETAIL OF A.C. ROLL

Scale: 1" = 1'-0"

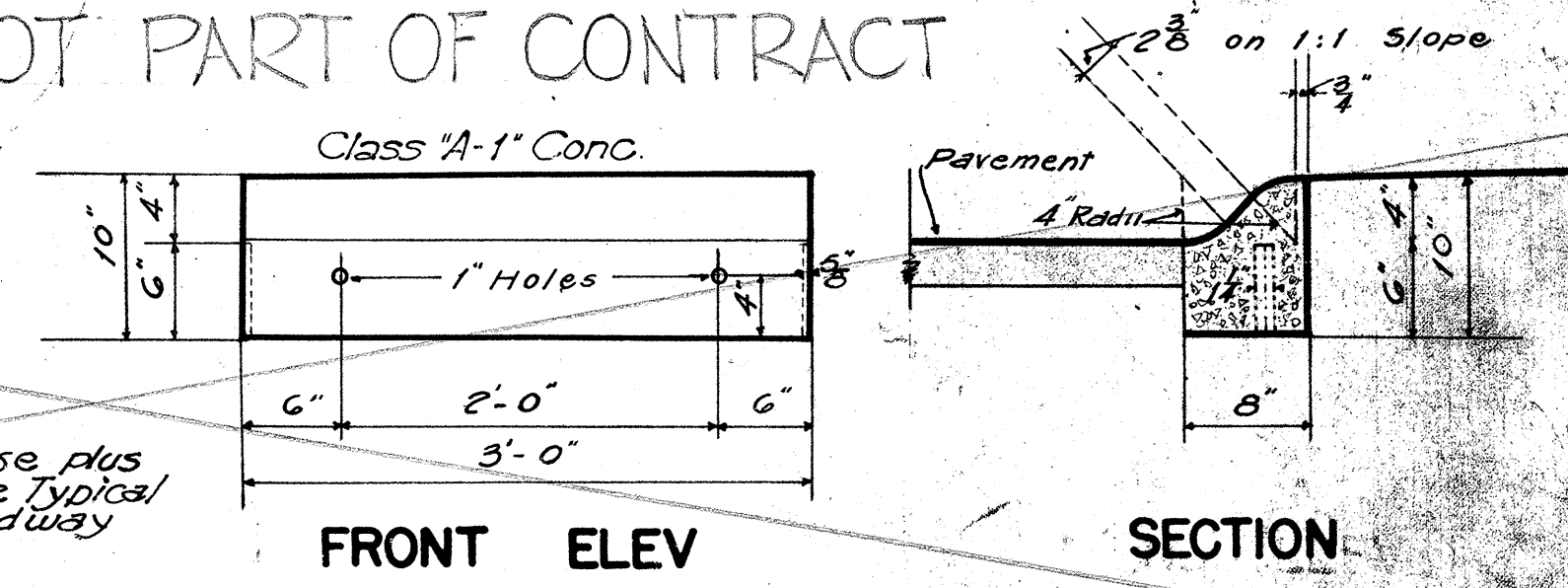
NOTE: There may be more than one over-all curb height used on an individual project depending upon Base Courses used, but this shall make no difference in items under which payment is made.



SECTION

ST'D. CAST IN PLACE CONC. ROLL CURB

Scale: 1" = 1'-0"

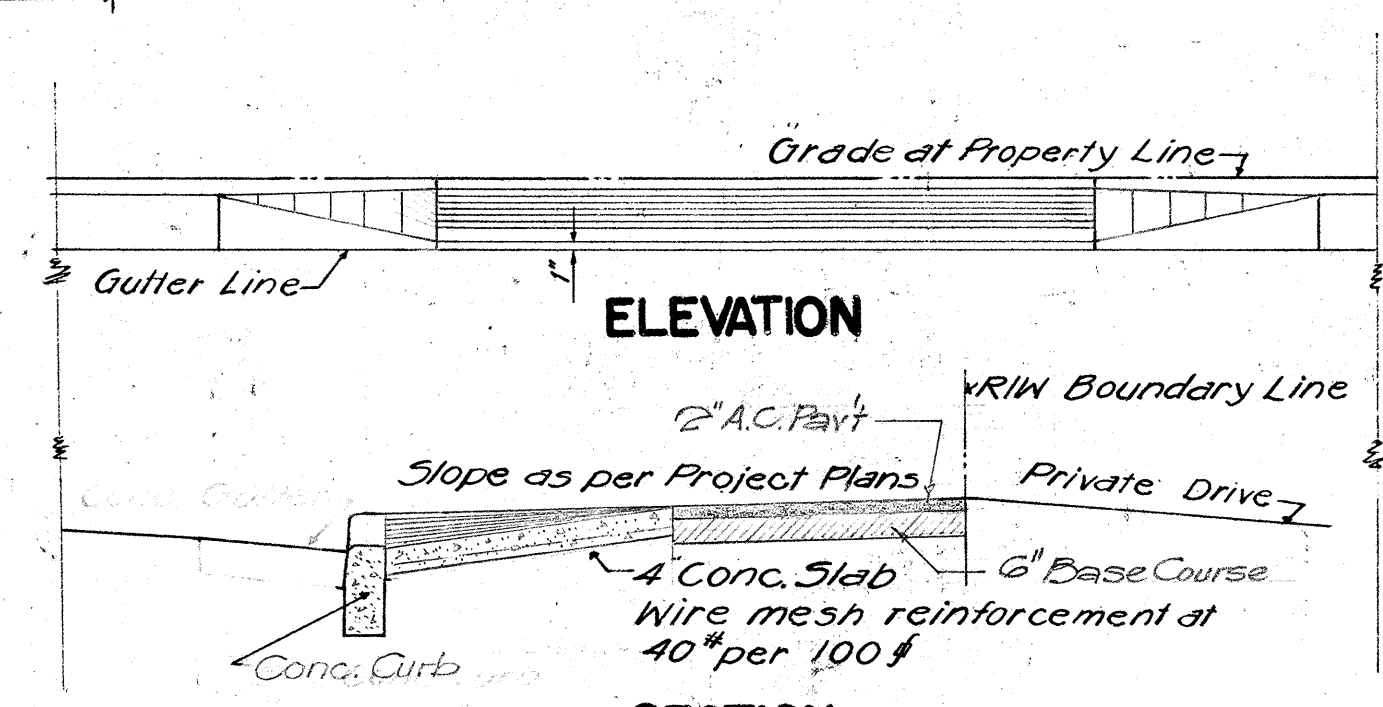


FRONT ELEV

SECTION

ST'D. PRECAST CONC. ROLL CURB

Scale: 1" = 1'-0"



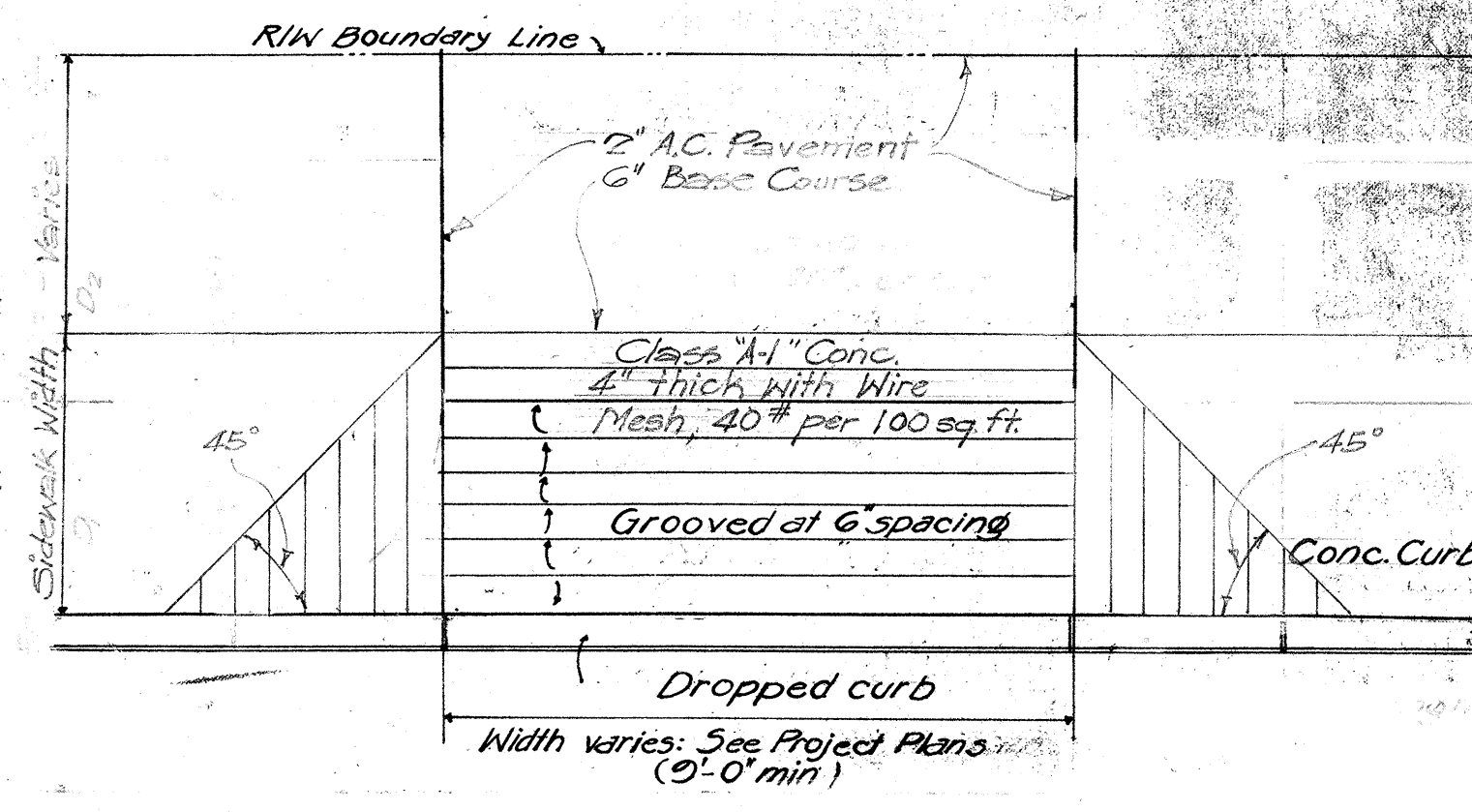
ELEVATION

SECTION

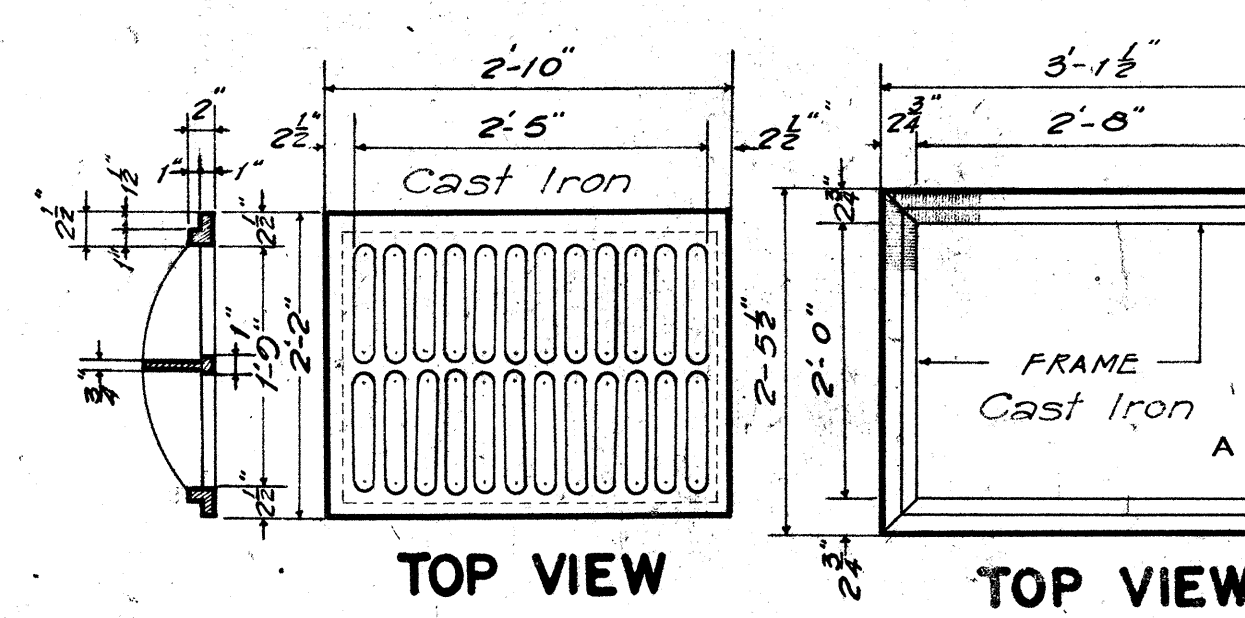
STANDARD C. I. FRAME AND GRATE TYPE "C"

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

NOTE: Stock Pattern from Novelty Foundry-Honolulu



DETAILS OF DROPPED DRIVEWAY



TOP VIEW

TOP VIEW

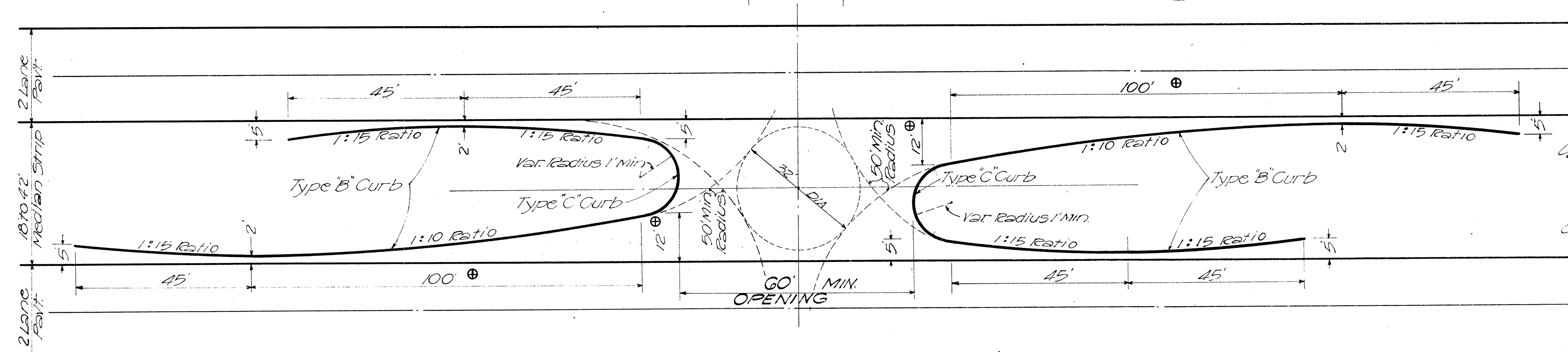
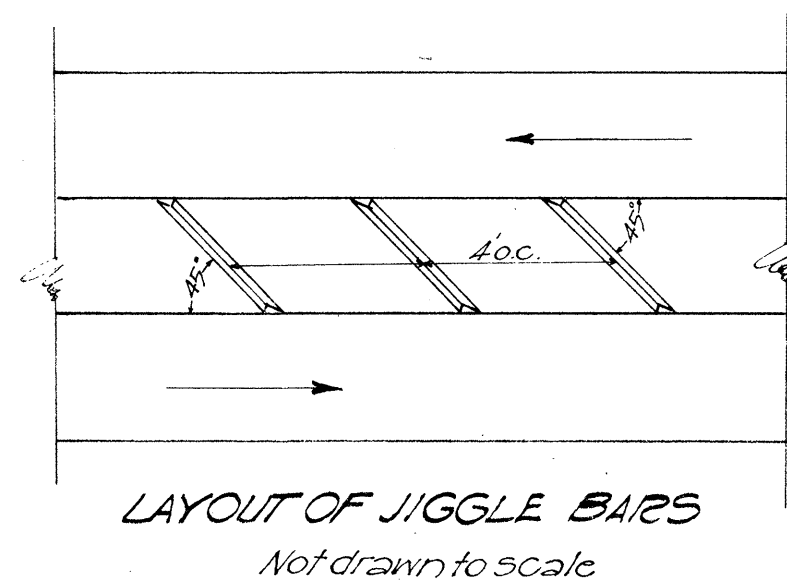
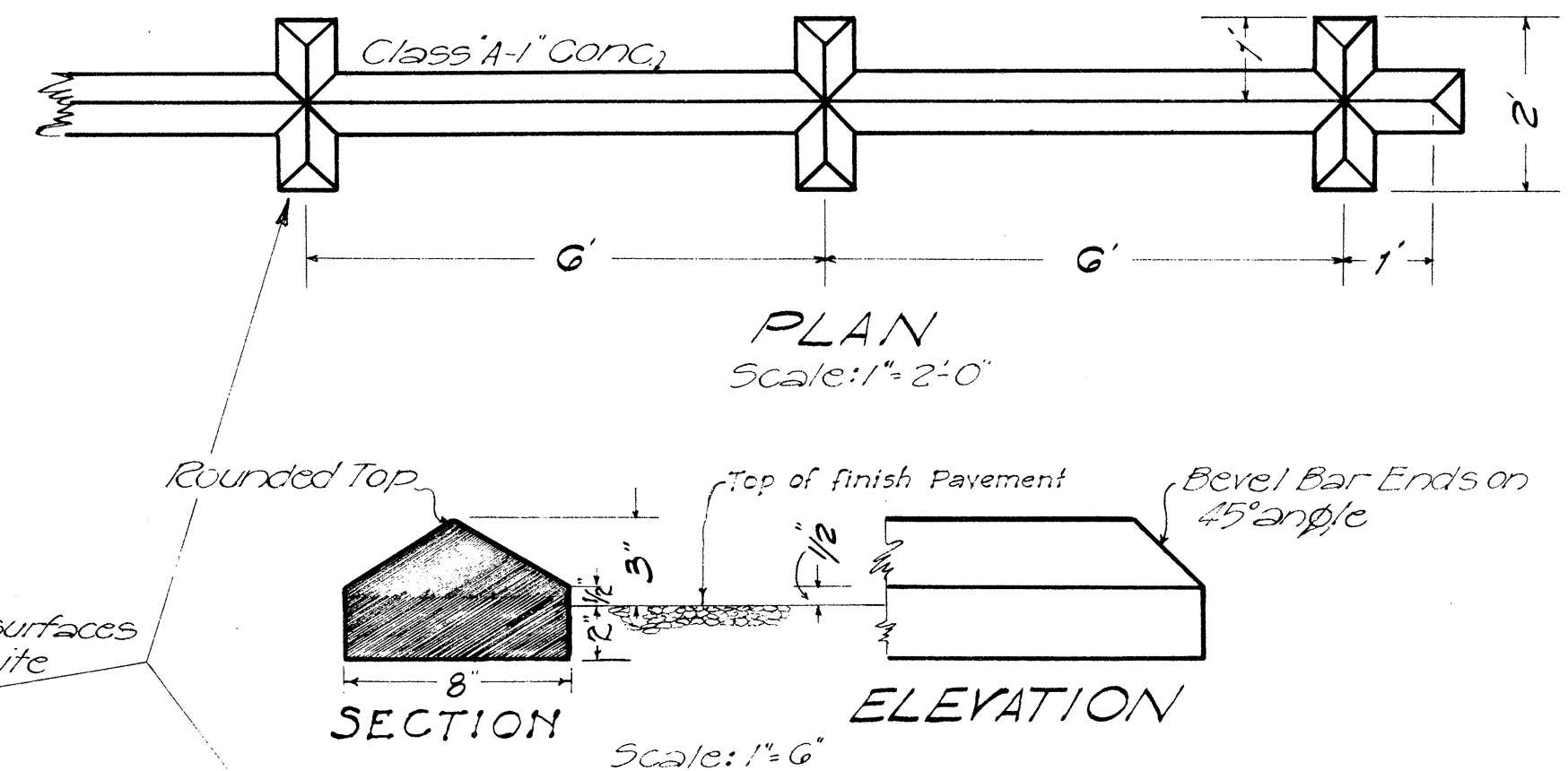
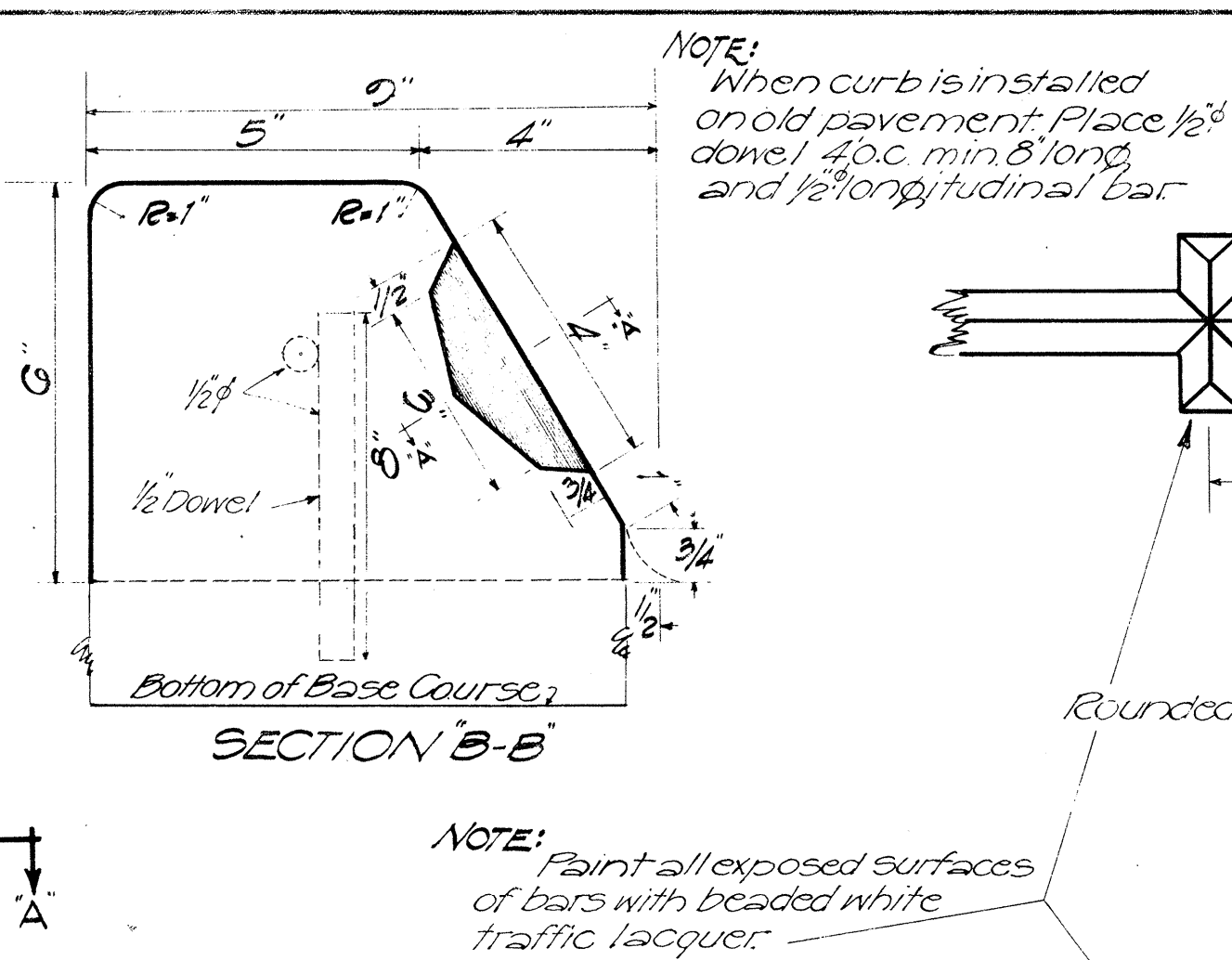
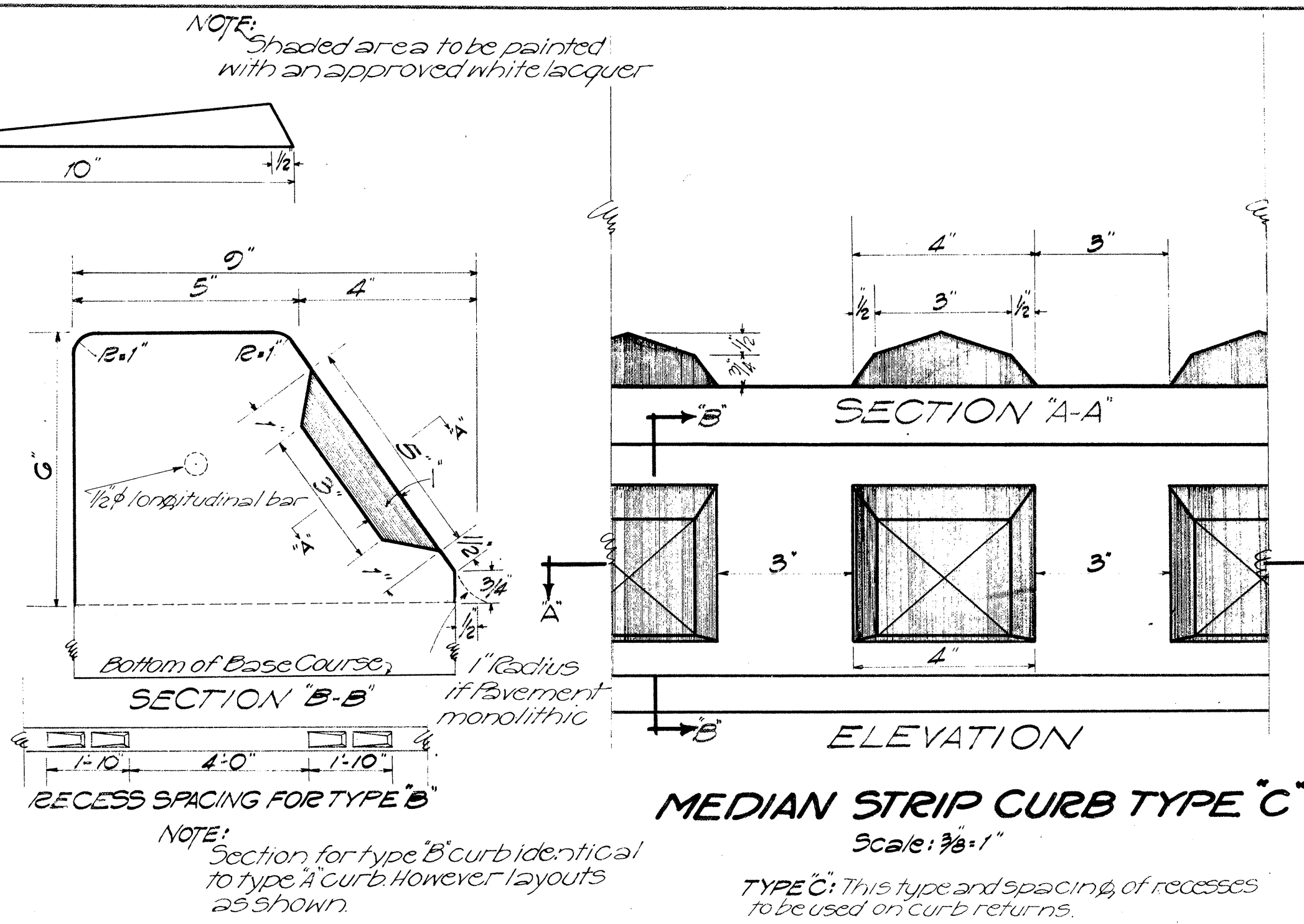
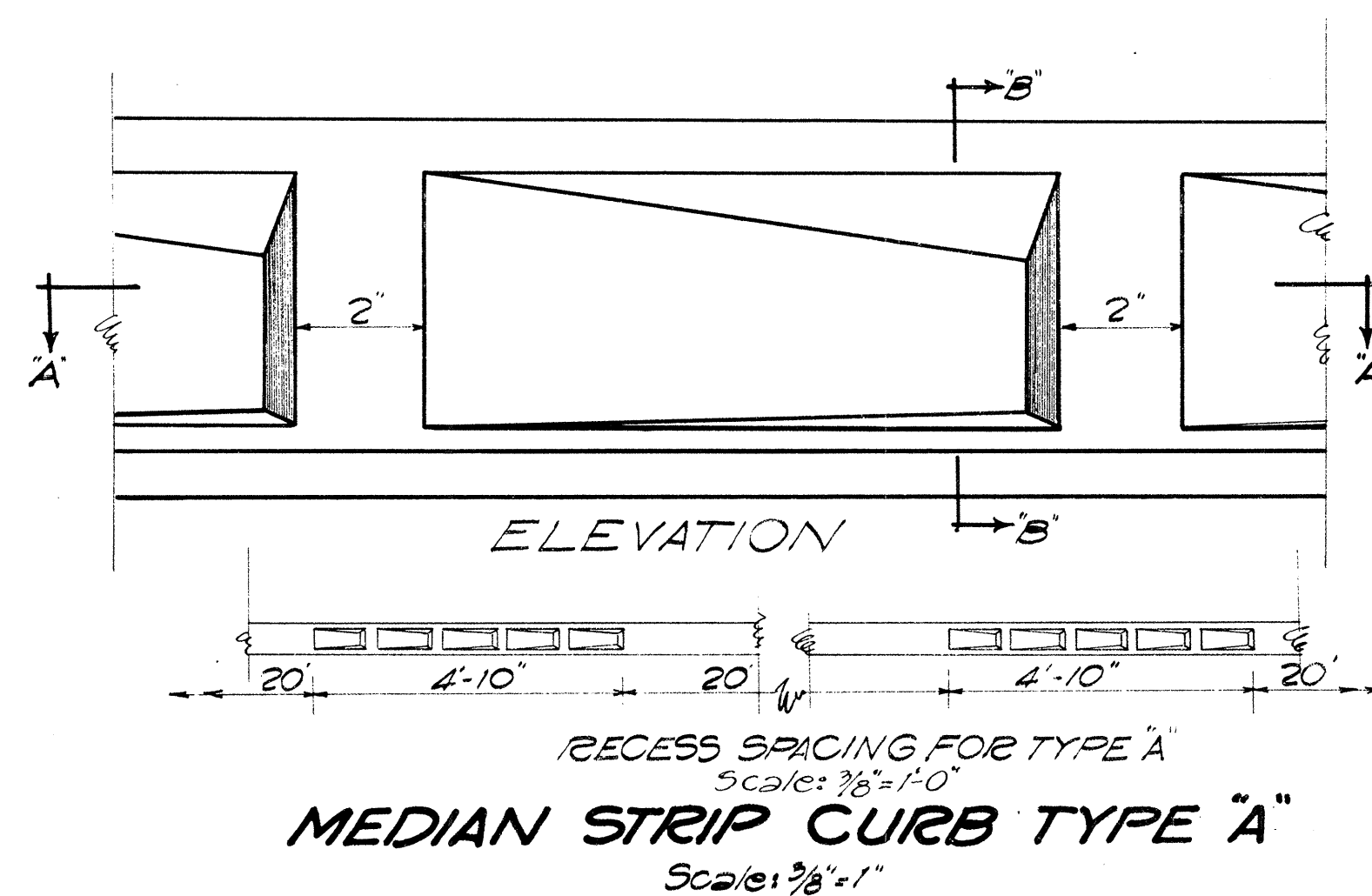
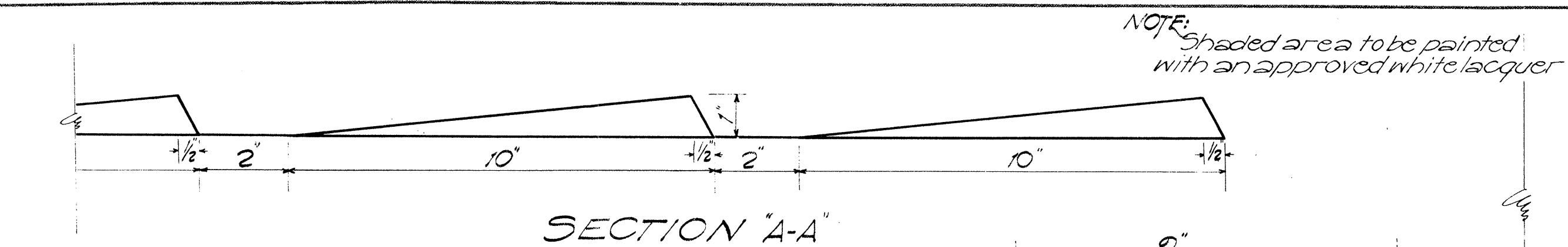
SECTION A-A

Scale: 3" = 1'-0"

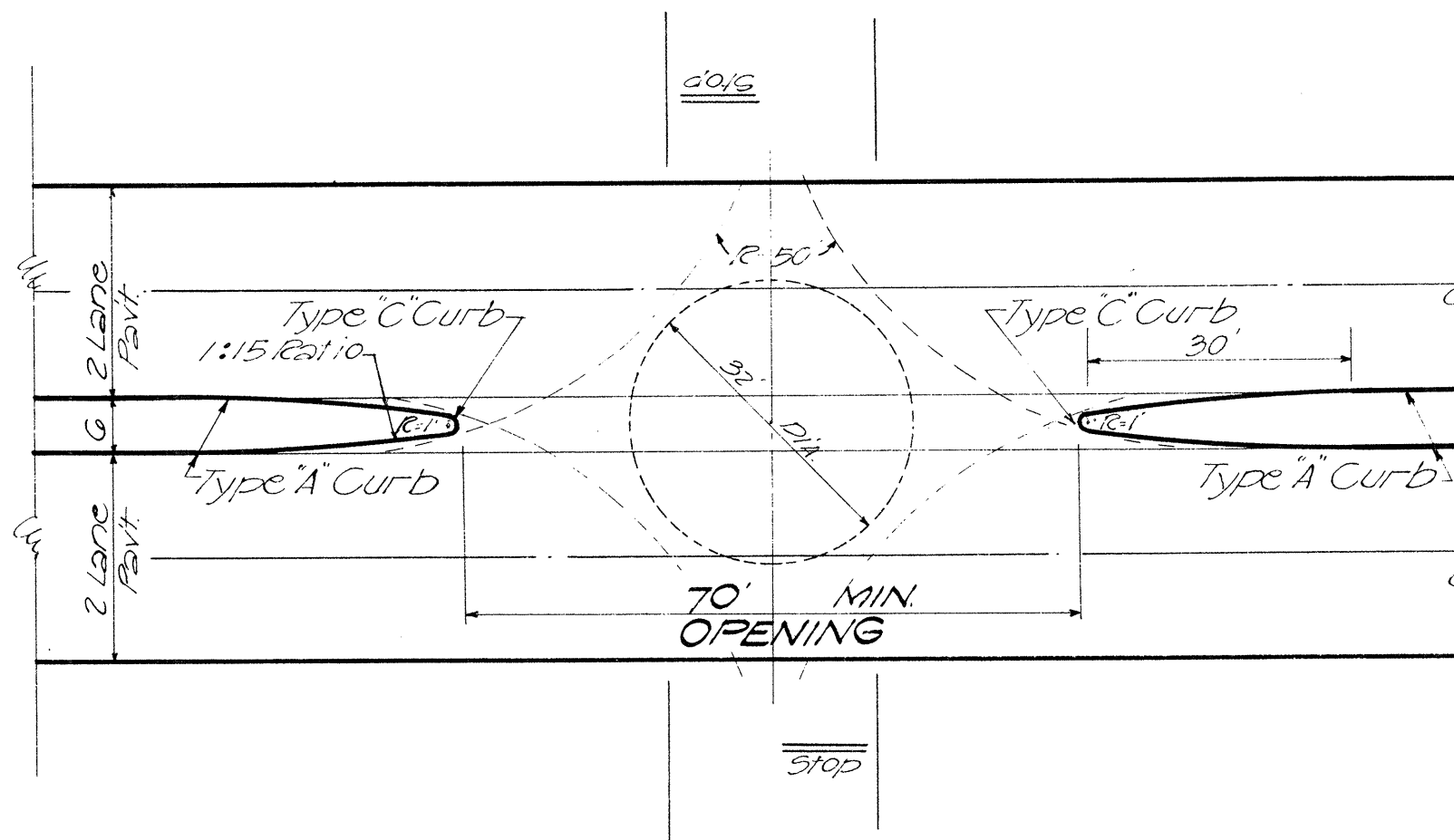
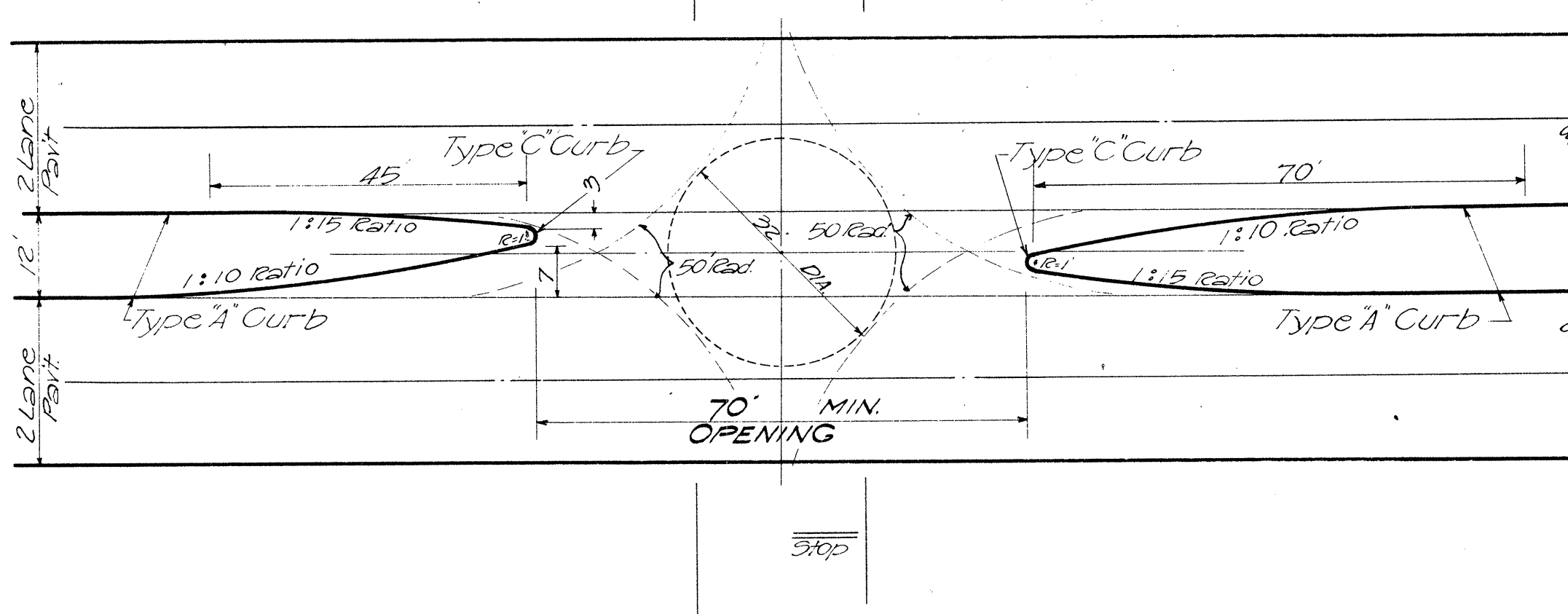
|                                                       |                              |
|-------------------------------------------------------|------------------------------|
| TERRITORIAL HIGHWAY DEPARTMENT<br>TERRITORY OF HAWAII |                              |
| STANDARD DETAILS                                      |                              |
| SCALES AS NOTED                                       | APR 15, 1948                 |
| APPROVED: <i>[Signature]</i>                          | Territorial Highway Engineer |
| SHEET NO. 17 OF 17 SHEETS                             |                              |

SURVEY PLOTTED BY: DATE: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: S. Nambu  
 CHECKED BY: \_\_\_\_\_  
 ORIGINAL PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 No. \_\_\_\_\_



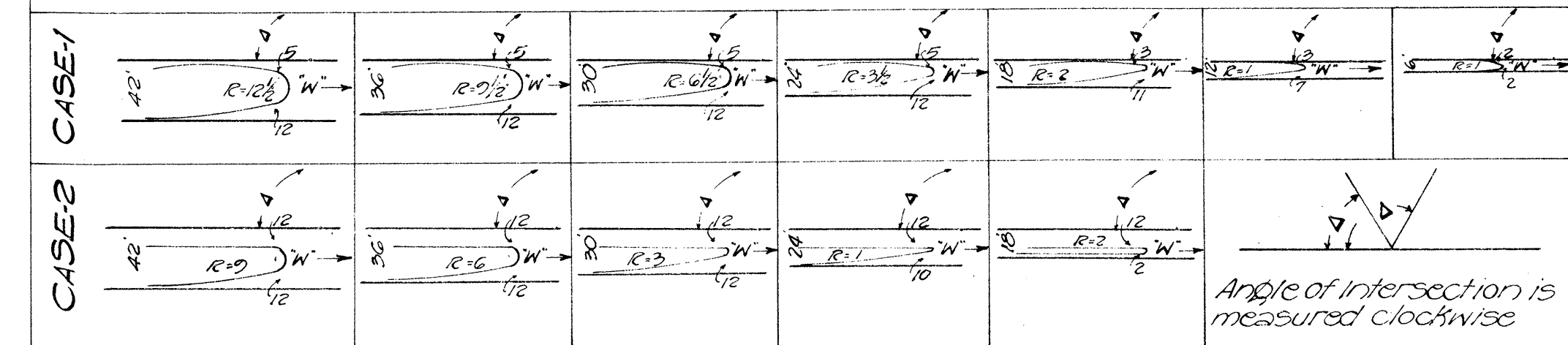


NOTE: With an 18' Median Strip, the 12' Offset must be reduced to 11', which in turn reduces the 1:10 flare to 90'



| Angle of Inters. | WIDTH OF MEDIAN STRIP |     |     |     |     |     |     |     |     |     |     |     |
|------------------|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                  | 22'                   | 24' | 26' | 28' | 30' | 32' | 34' | 36' | 38' | 40' | 42' | 44' |
| 60°              | 54                    | 58  | 62  | 66  | 70  | 74  | 78  | 82  | 86  | 90  | 94  | 98  |
| 65°              | 48                    | 52  | 56  | 60  | 64  | 68  | 72  | 76  | 80  | 84  | 88  | 92  |
| 70°              | 42                    | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  | 78  | 82  | 86  |
| 75°              | 36                    | 40  | 44  | 48  | 52  | 56  | 60  | 64  | 68  | 72  | 76  | 80  |
| 80°              | 32                    | 36  | 40  | 44  | 48  | 52  | 56  | 60  | 64  | 68  | 72  | 76  |
| 85°              | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |
| 90°              | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |
| 95°              | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |
| 100°             | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |
| 105°             | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |
| 110°             | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |
| 115°             | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |
| 120°             | 30                    | 34  | 38  | 42  | 46  | 50  | 54  | 58  | 62  | 66  | 70  | 74  |

"W" = Distance in feet from Island Nose to Centerline of Intersection



NOTE: Sketches are not to scale

## STANDARD MEDIAN STRIP OPENING

Scale: 1"=20'

TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII

STANDARD DETAILS

Scale as shown

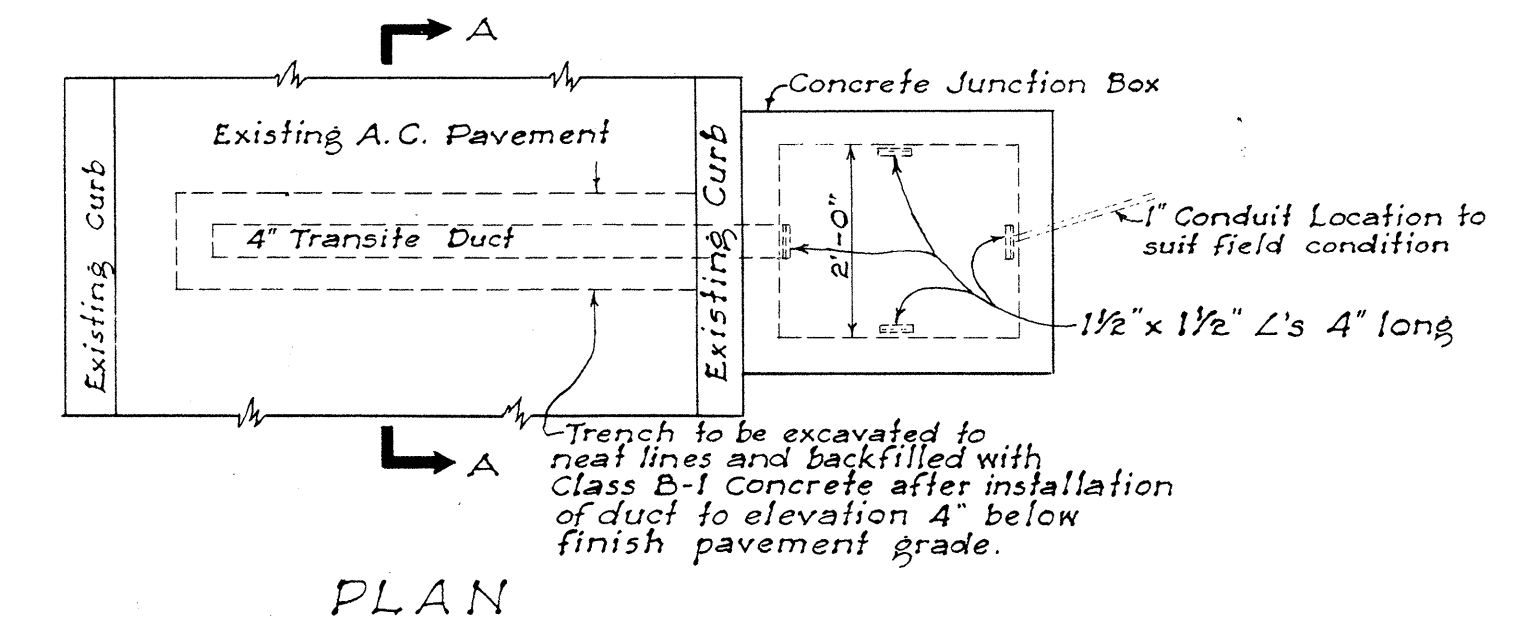
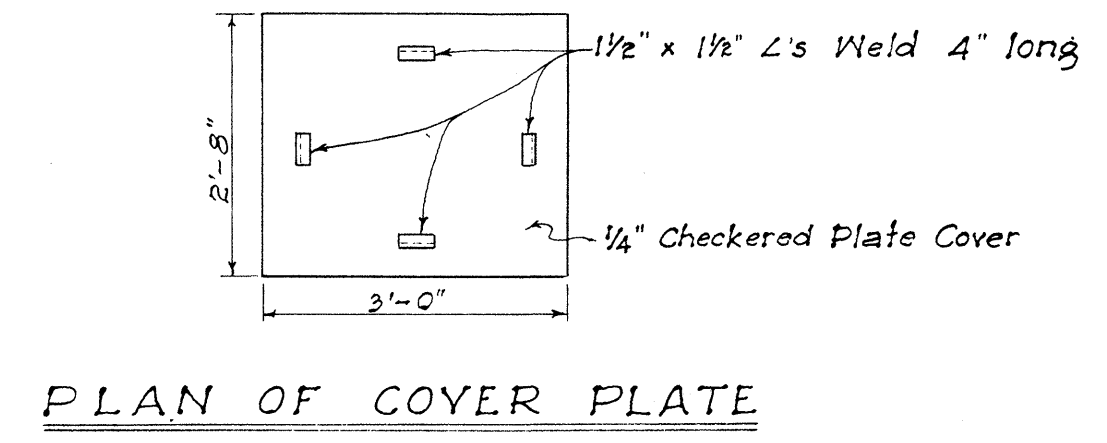
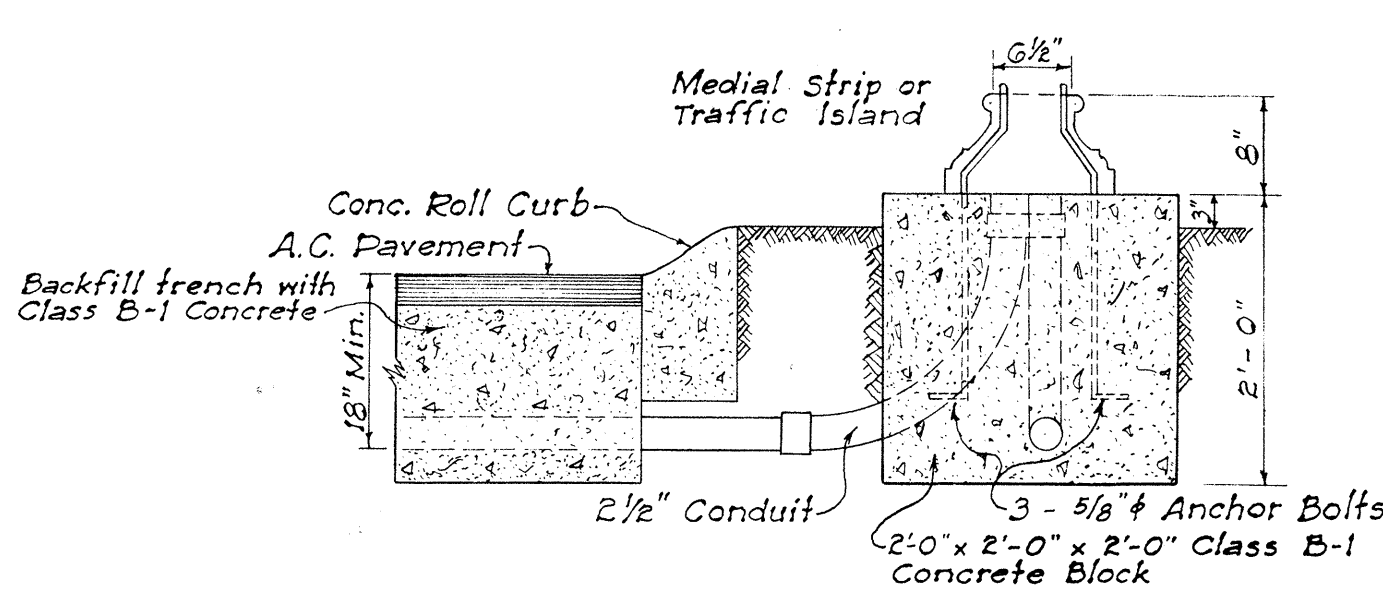
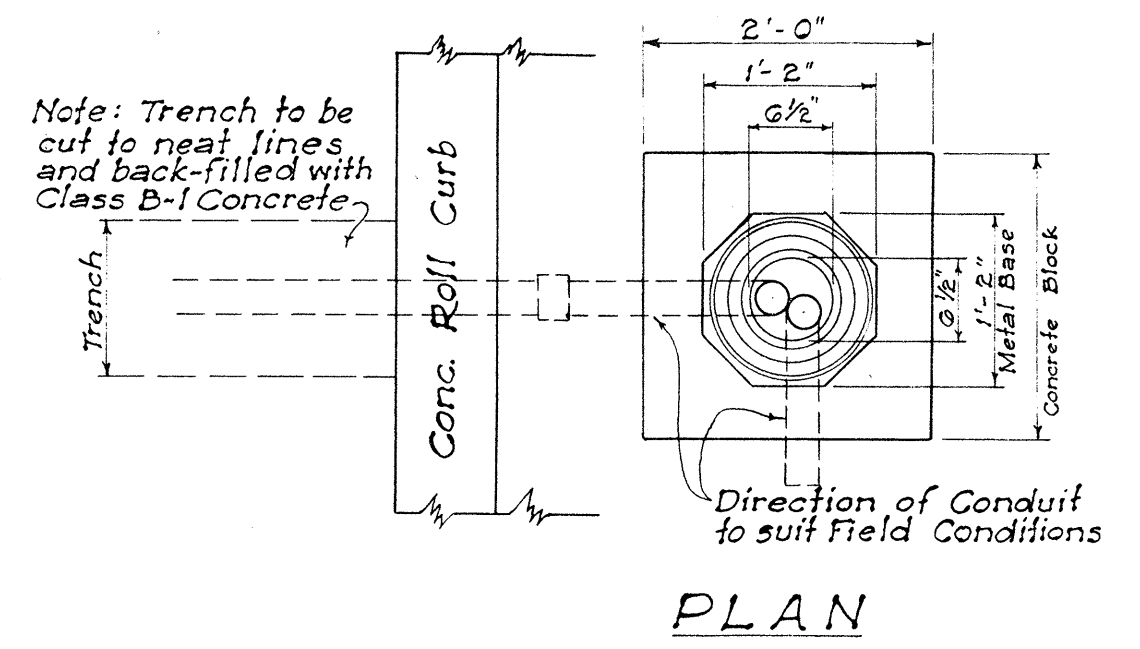
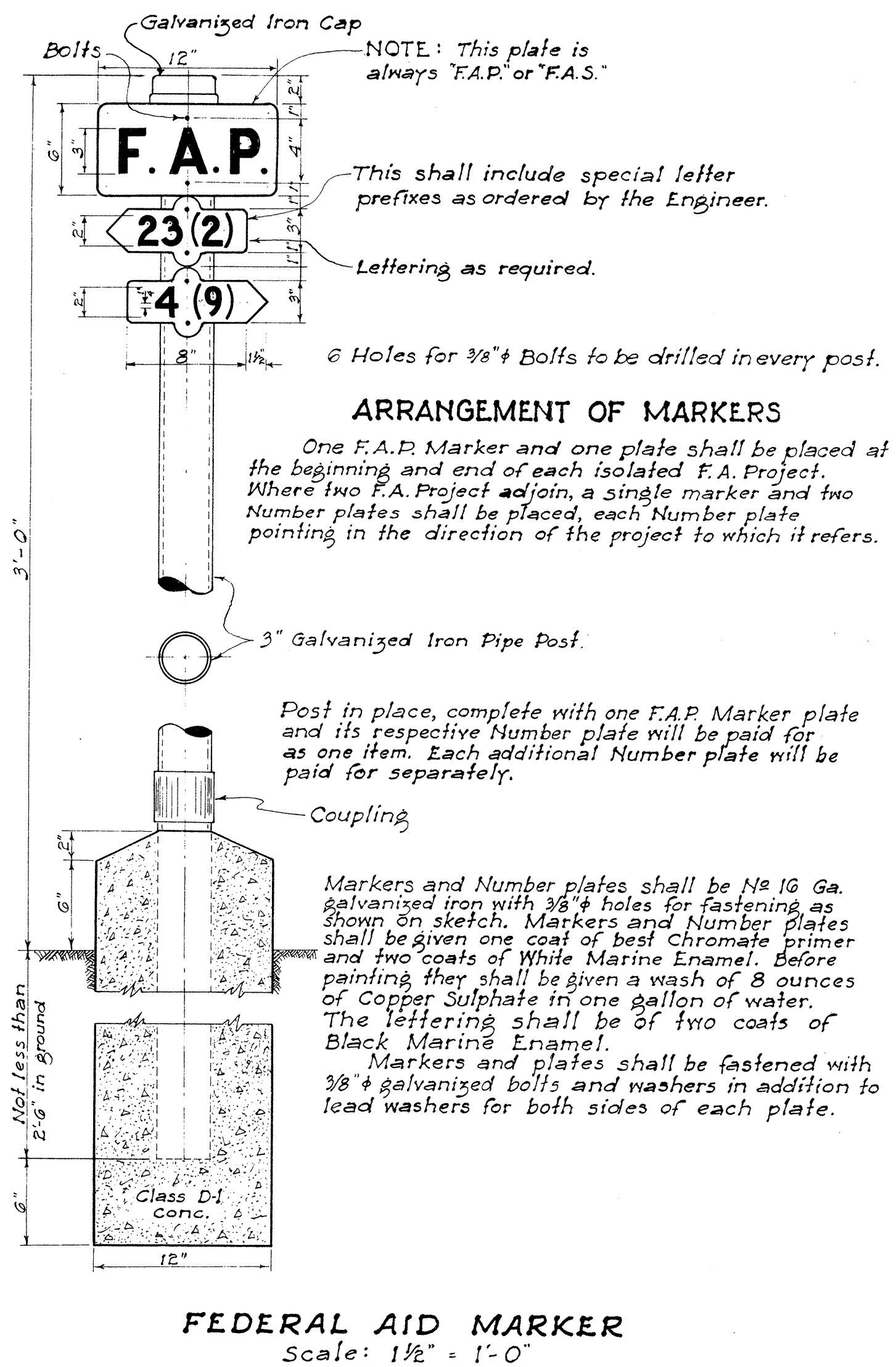
APPROVED

Date 9-2-49  
Territorial Highway Engineer

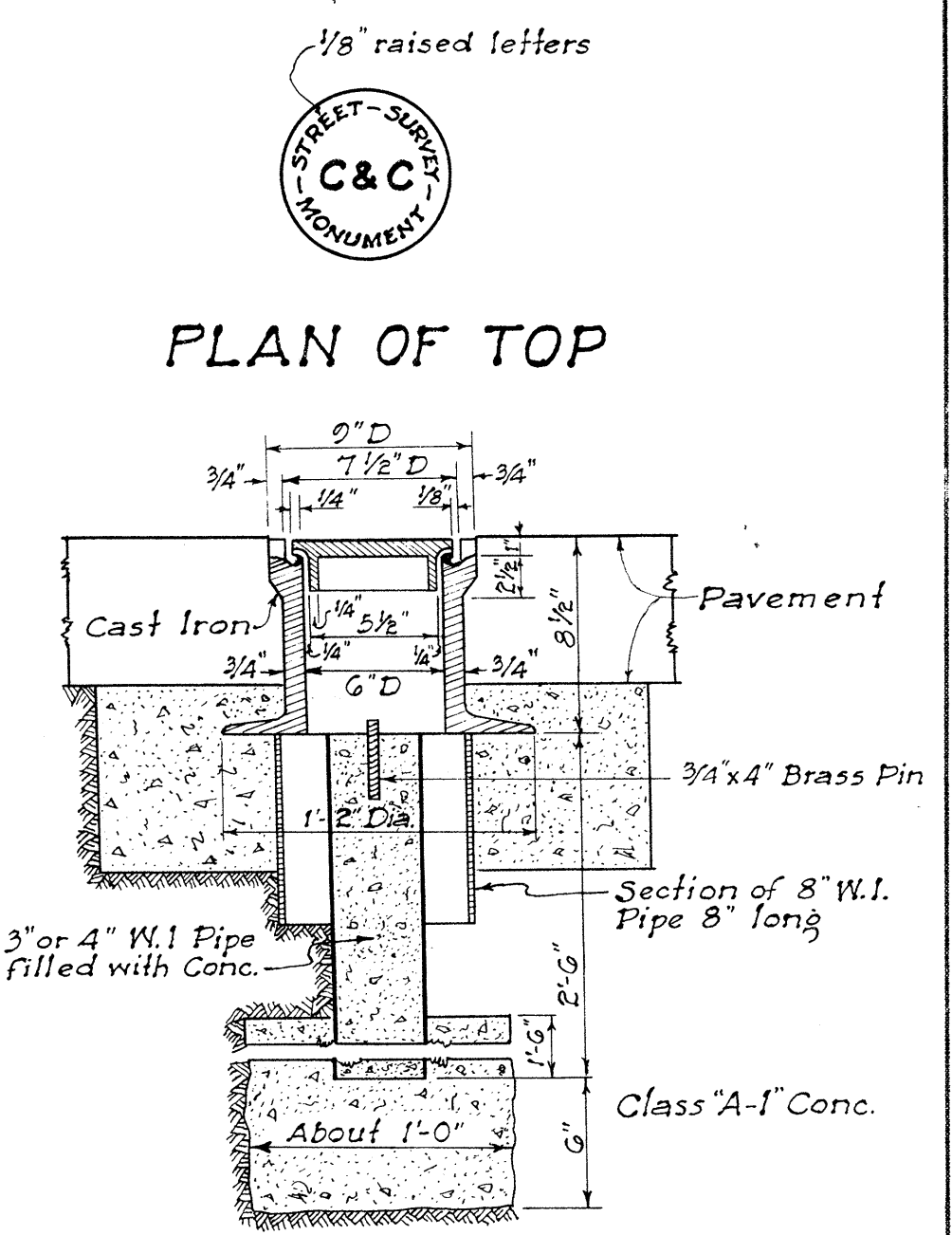
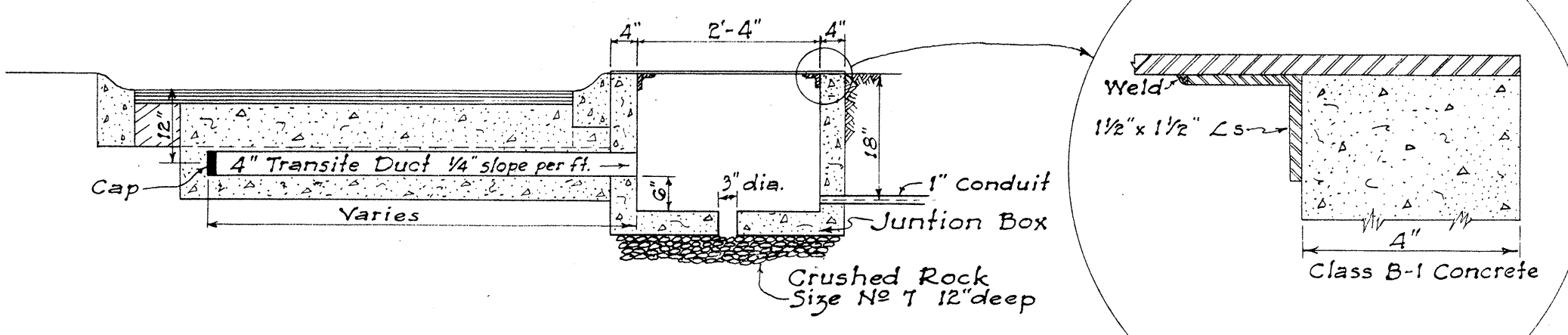
SHEET No 4 OF 7 SHEETS

5473.18

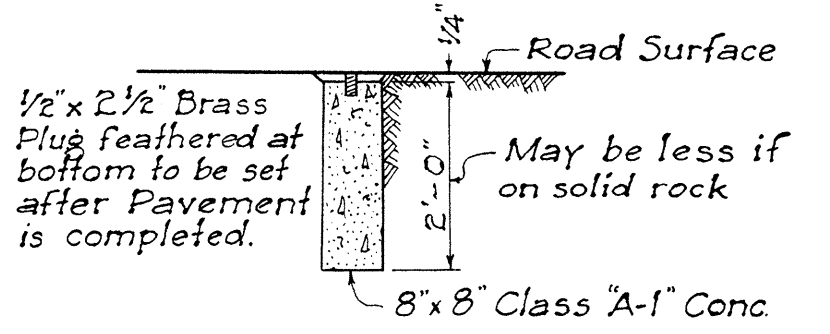




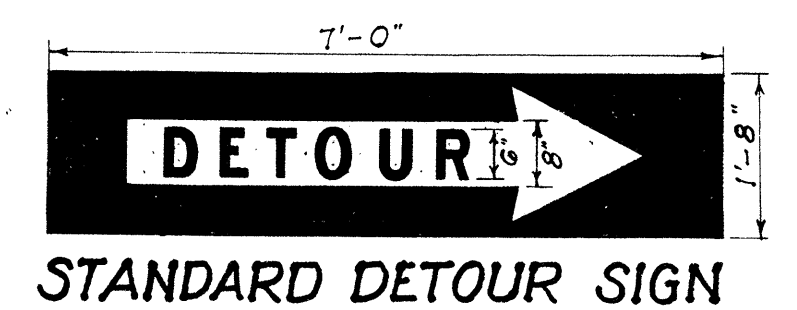
SECTION "A-A"



STANDARD C&C STREET SURVEY MONUMENT



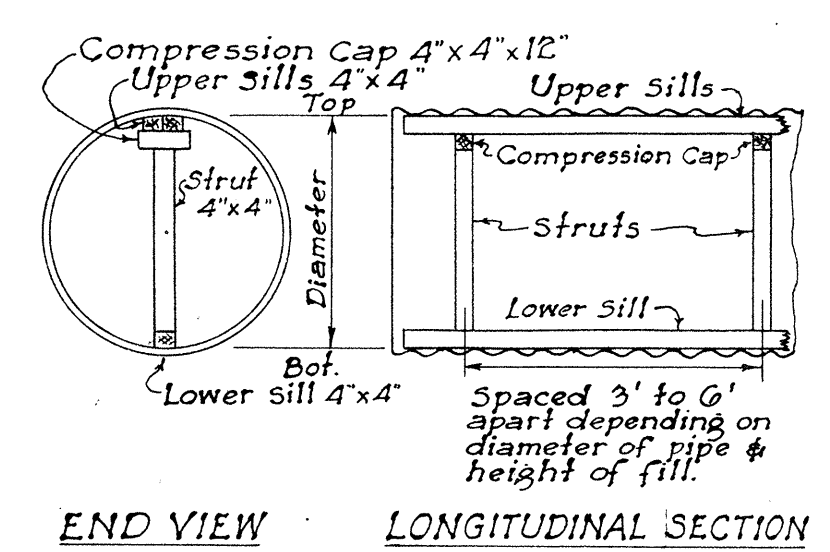
CENTER LINE MONUMENT Scale: 1/2 inch = 1 foot 0 inches



STANDARD DETOUR SIGN

SECTION

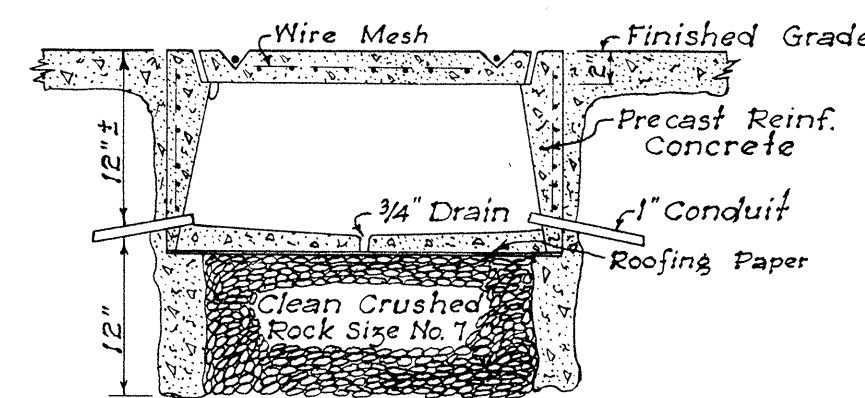
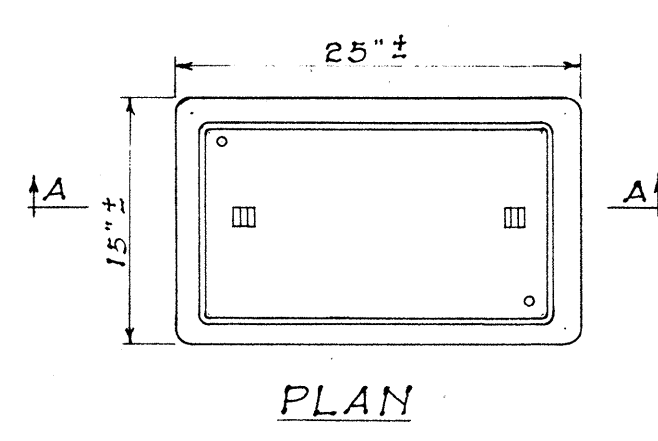
DETAIL OF BASE FOR TRAFFIC STANDARD AND DISPATCHER PEDESTAL



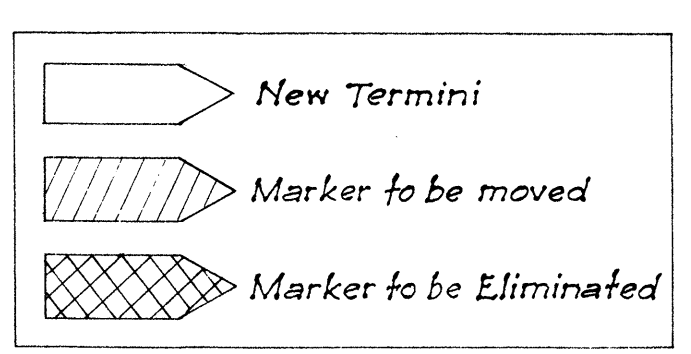
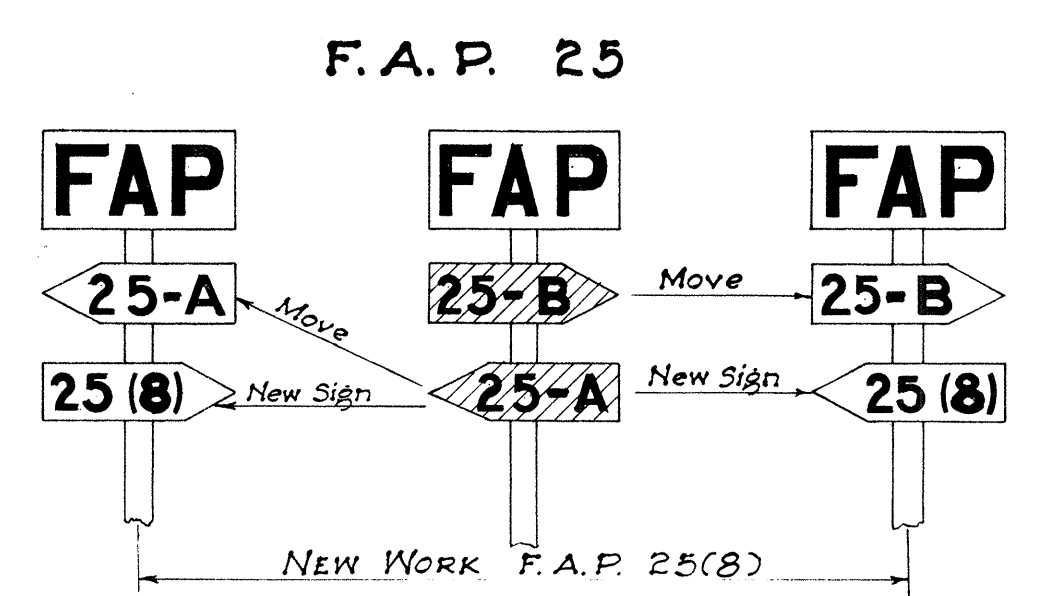
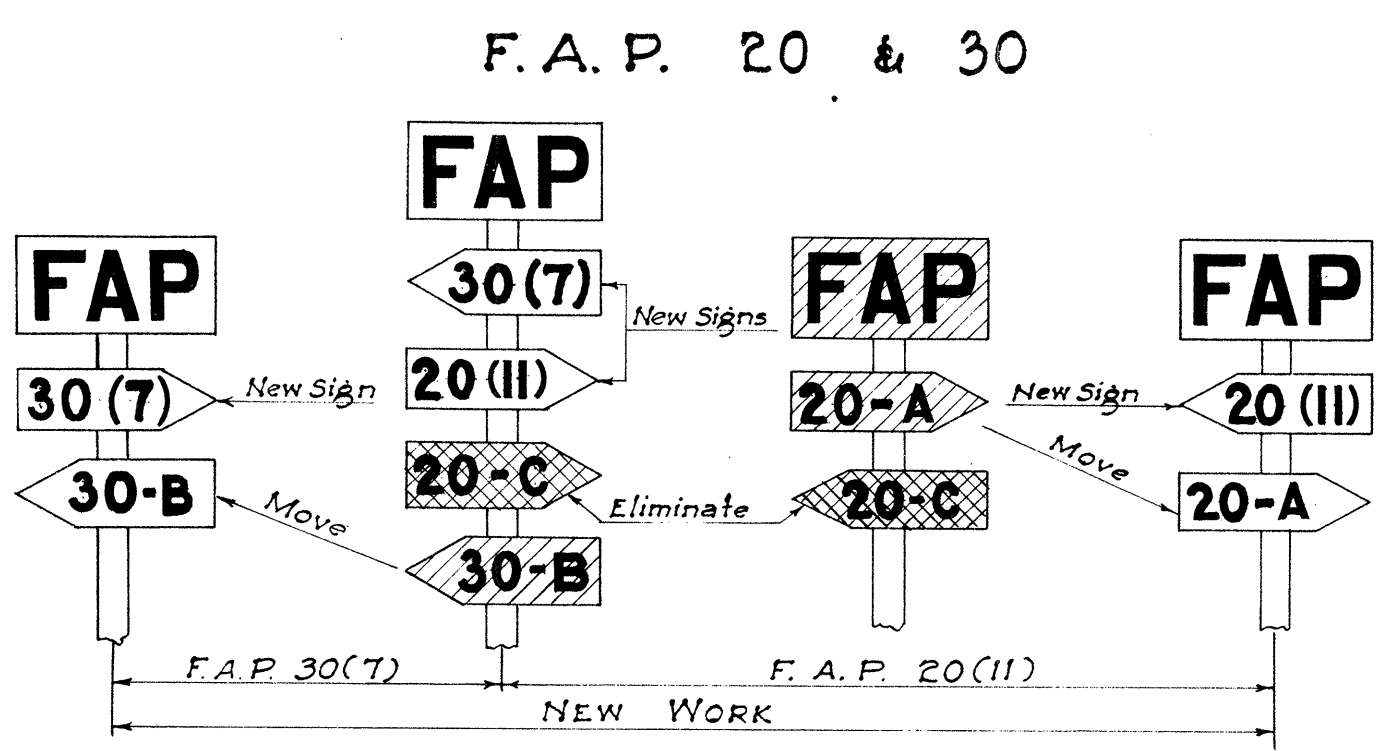
| Diameter of Pipe in inches | Length of Struts in inches | Spacing of Struts in ft. for Various Heights |                |                 |                 |               |
|----------------------------|----------------------------|----------------------------------------------|----------------|-----------------|-----------------|---------------|
|                            |                            | FILL 1' to 5'                                | FILL 5' to 10' | FILL 10' to 20' | FILL 20' to 30' | FILL Over 30' |
| 48                         | 38 3/4                     | 6                                            | 6              | 6               | 6               | 4             |
| 54                         | 44 3/4                     | 6                                            | 6              | 6               | 6               | 4             |
| 60                         | 51                         | 6                                            | 6              | 6               | 6               | 4             |
| 66                         | 57 1/4                     | 6                                            | 6              | 6               | 6               | 4             |
| 72                         | 63 3/8                     | 6                                            | 6              | 6               | 5               | 3.5           |
| 78                         | 69 1/8                     | 6                                            | 6              | 6               | 4.5             | 3.5           |
| 84                         | 75 1/4                     | 6                                            | 6              | 6               | 4               | 3             |

NOTE: Length of struts are based on 4"x4" timbers which is the minimum size recommended. If larger sills or compression caps are used, length of struts should be changed accordingly.

STRUTTING DIAGRAM & TABLE FOR CORRUGATED METAL PIPE CULVERT



DETAIL OF PULL BOX Scale: 1 inch = 1 foot 0 inches



NOTE: Federal Aid Markers should be placed at the termini of suffix designated sections. Intermediate letter designated markers of adjacent sections located within the limits of new improvements should be moved to the termini of the new work. The same procedure would be followed on each successive improvement until all markers for letter designated sections are eventually eliminated.

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

TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII

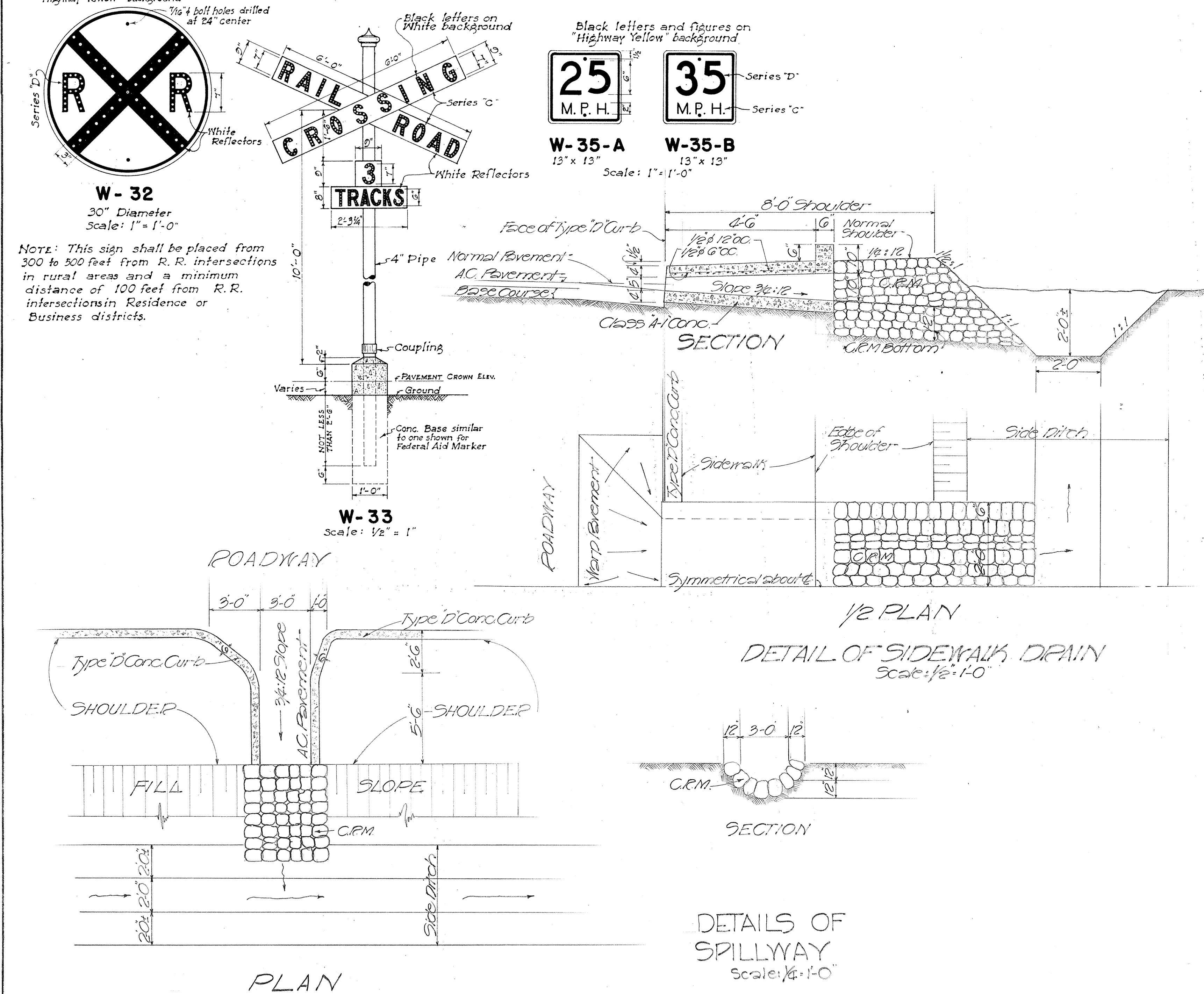
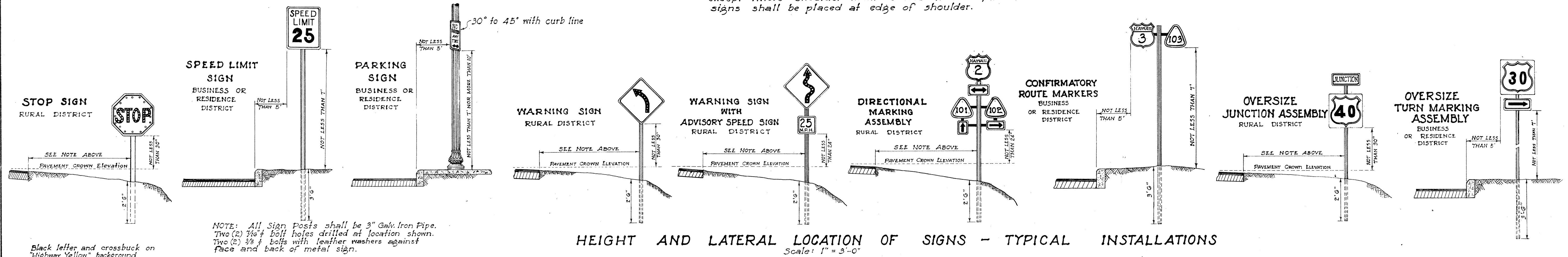
**STANDARD DETAILS**

SCALES: AS NOTED May 31, 1949

APPROVED: *[Signature]*  
Territorial Highway Engineer



Note: All signs shall be placed 10' from edge of pavement except where shoulder width is less than 10', in which case signs shall be placed at edge of shoulder.



TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII

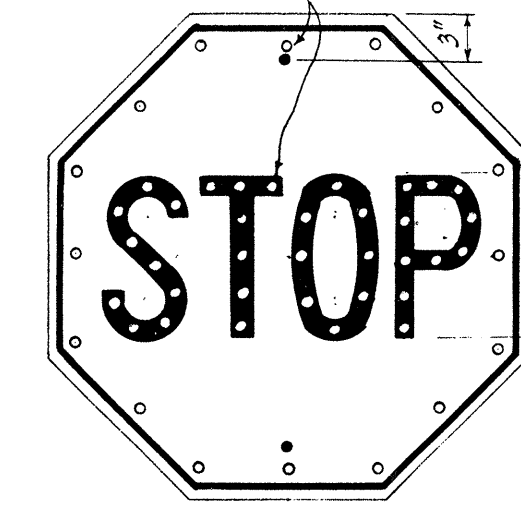
STANDARD DETAILS

SCALE AS NOTED May 31, 1949

APPROVED: *Hubert*  
Territorial Highway Engineer

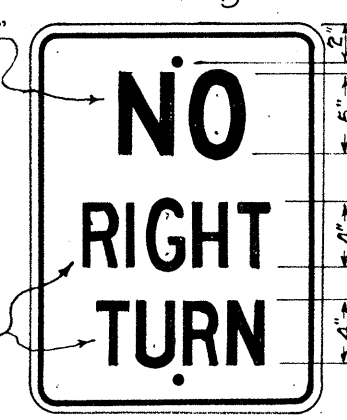


Black Letters on "Highway Yellow" Background White Reflectors



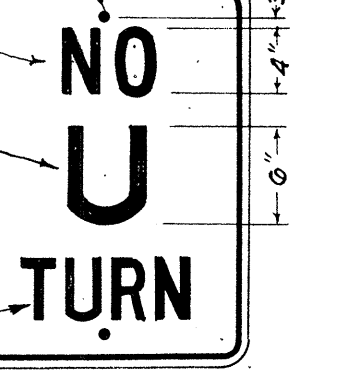
R-1  
30" x 30"

Black Letters on White Background



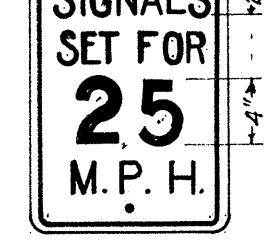
R-6  
18" x 24"

1/16" bolt hole



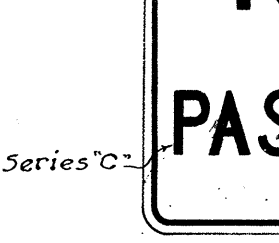
R-8  
18" x 24"

Series "D"

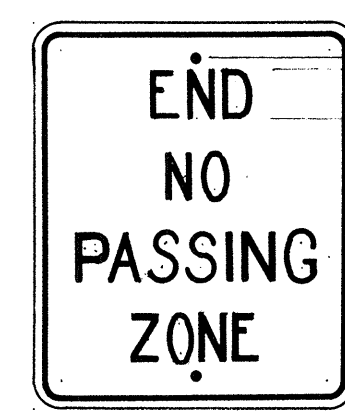


R-10  
12" x 18"

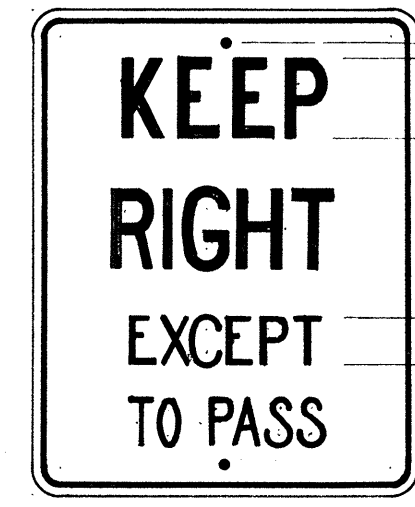
Series "C"



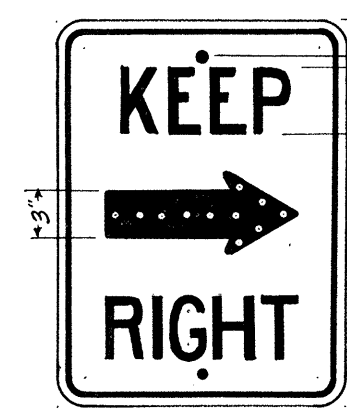
R-11  
20" x 24"



R-12  
20" x 24"



R-13  
24" x 30"

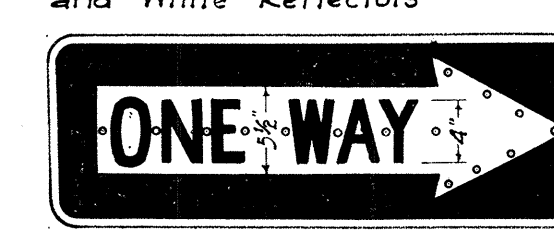


R-14  
18" x 24"



R-15  
24" x 24"

Black letters, White Arrow on Black Background, White Border and White Reflectors



R-16-R  
\*R-16-L  
36" x 12"

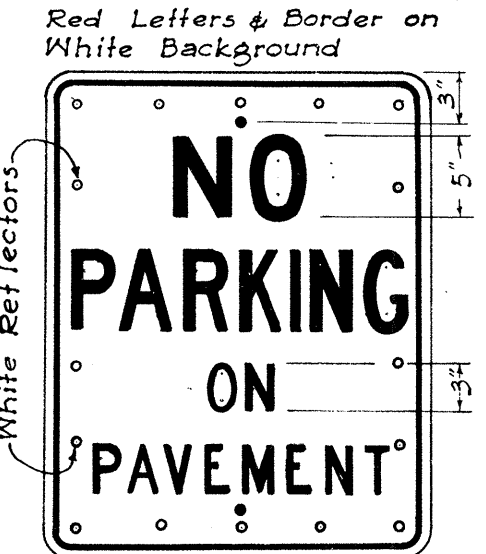
Red Letters & Border on White Background



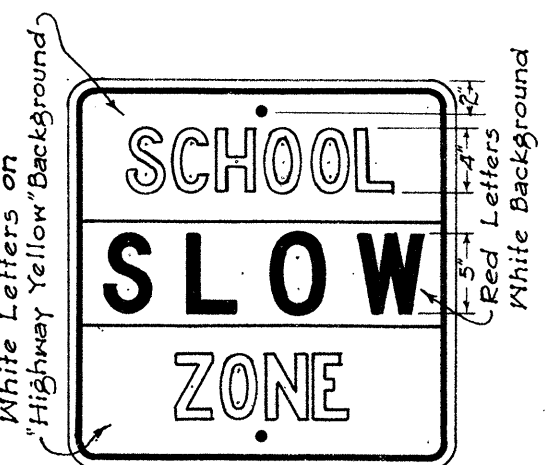
R-18  
12" x 18"



R-26  
12" x 18"

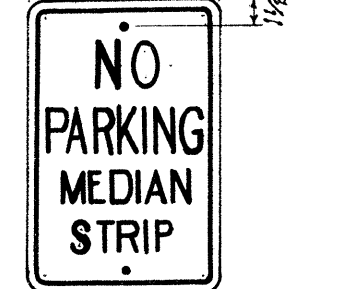


R-29  
24" x 30"



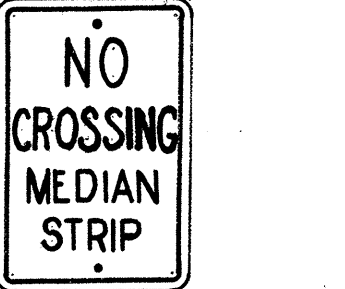
R-41-S  
24" x 24"

Red Letters & Border on White Background



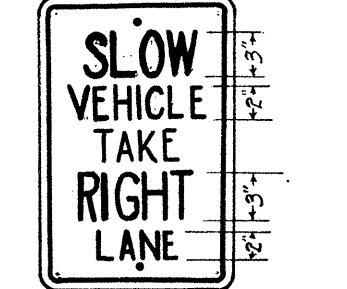
R-42-S  
12" x 18"

Black Letters on White Background

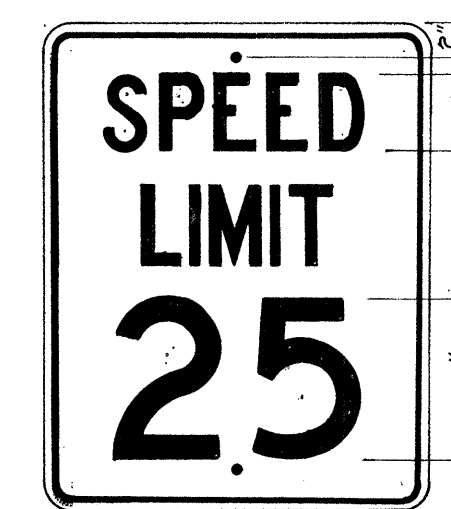


R-43-S  
12" x 18"

Black Letters on White Background



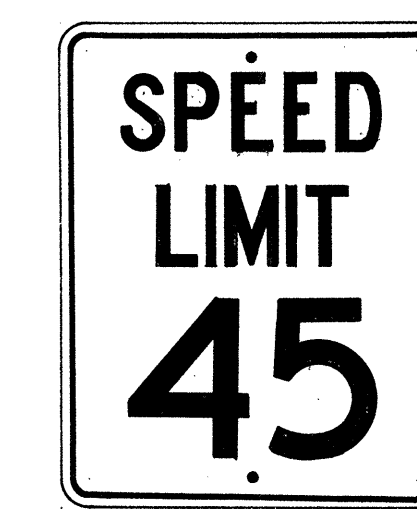
R-44-S  
12" x 18"



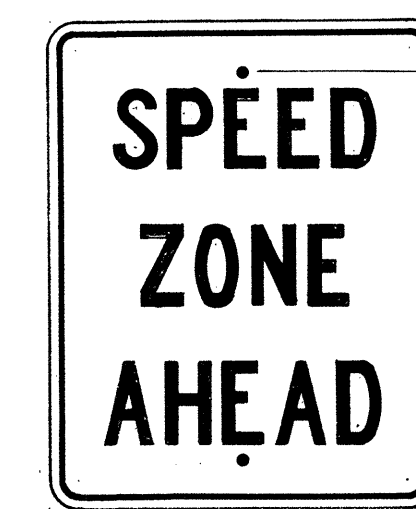
R-102-A  
24" x 30"



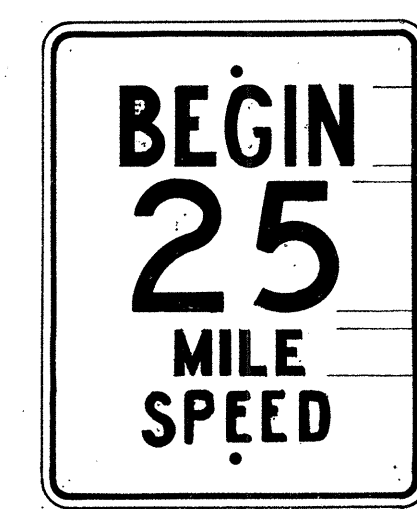
R-102-B  
24" x 30"



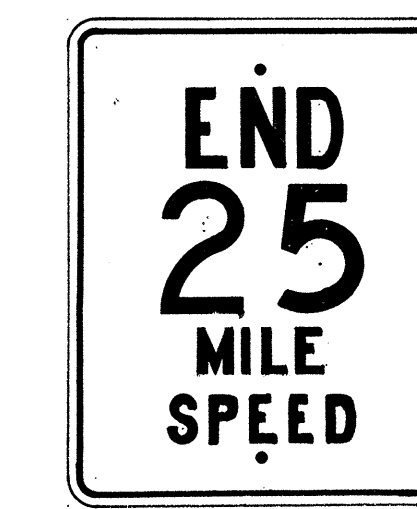
R-102-C  
24" x 30"



R-104  
24" x 30"



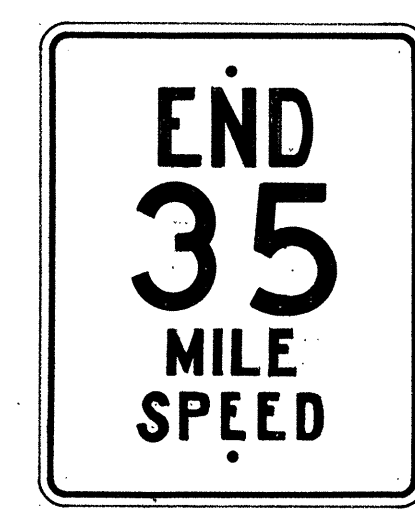
R-105-A  
24" x 30"



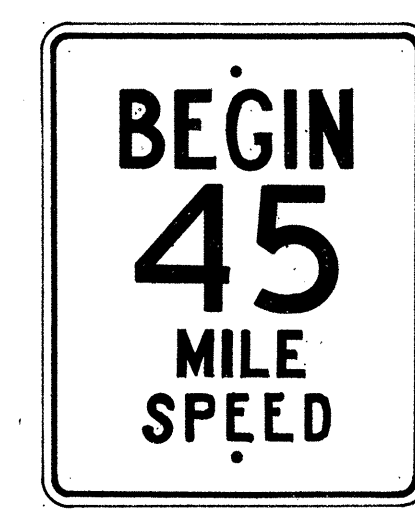
R-105-B  
24" x 30"



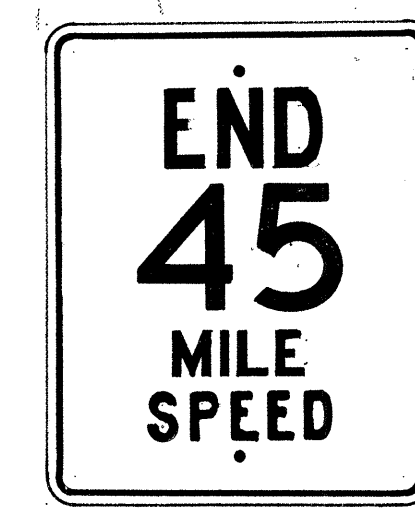
R-105-C  
24" x 30"



R-105-D  
24" x 30"



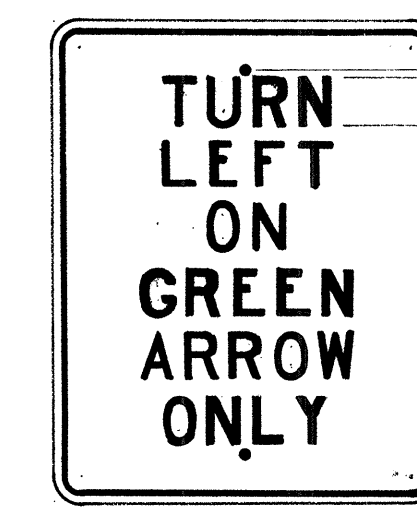
R-105-E  
24" x 30"



R-105-F  
24" x 30"



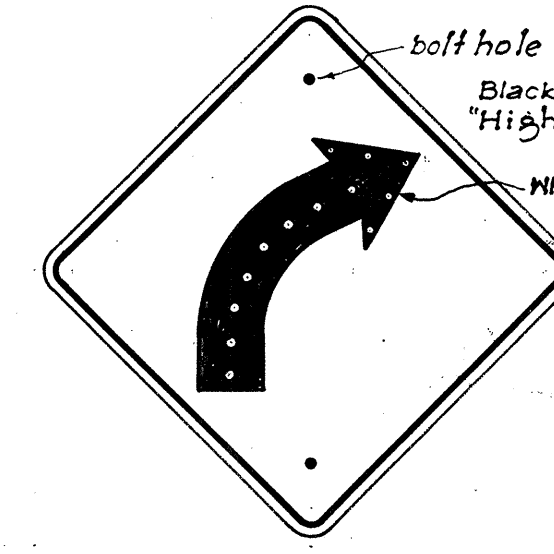
R-106  
24" x 30"



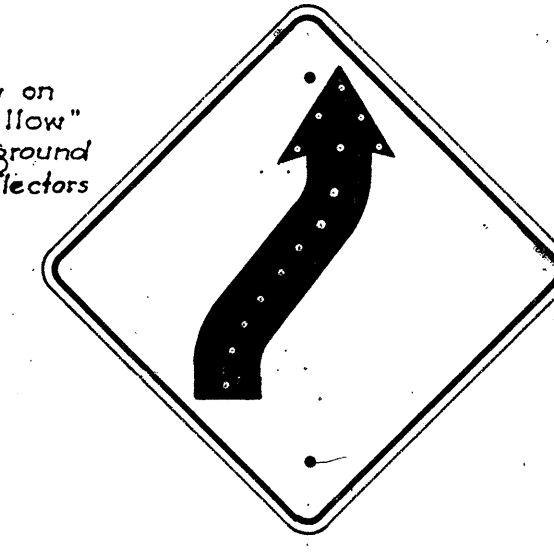
R-107-A  
24" x 30"



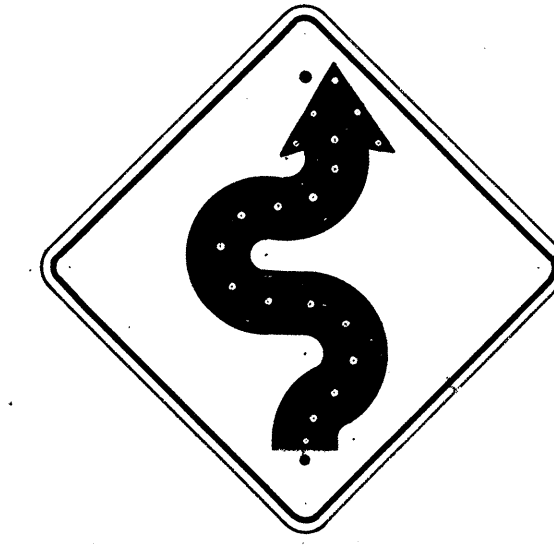
R-107  
14" x 9"



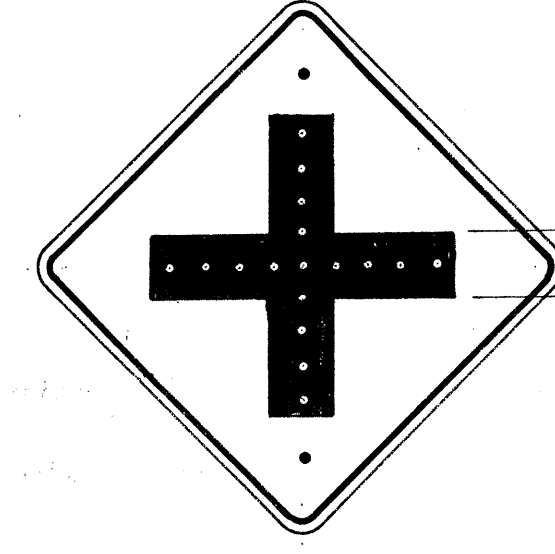
W-2-R  
\*W-2-L  
24" x 24"



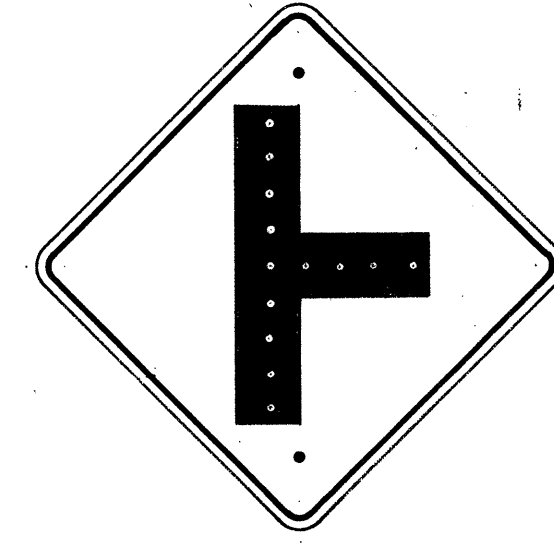
W-4-R  
\*W-4-L  
24" x 24"



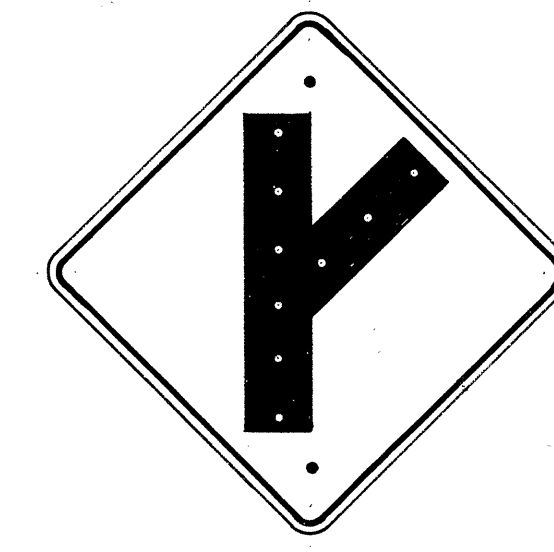
W-5-R  
\*W-5-L  
24" x 24"



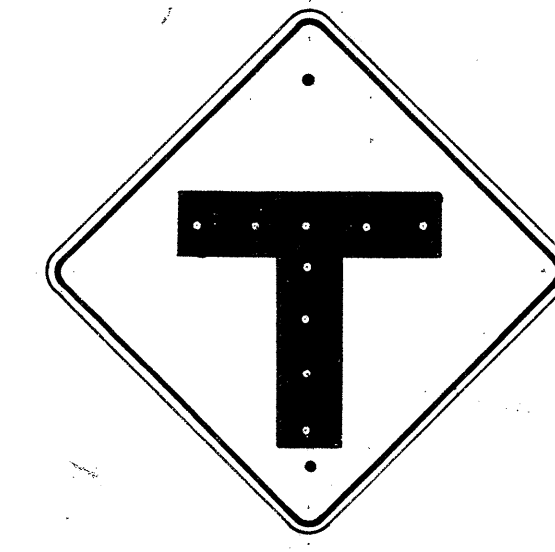
W-6  
24" x 24"



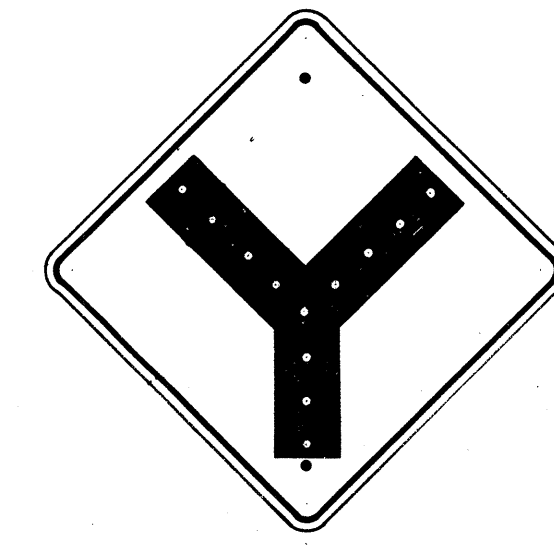
W-7  
24" x 24"



W-8-R  
\*W-8-L  
24" x 24"



W-9  
24" x 24"



W-10  
24" x 24"



W-13  
24" x 24"



W-14  
24" x 24"



W-14-A  
24" x 24"



W-19  
30" x 30"



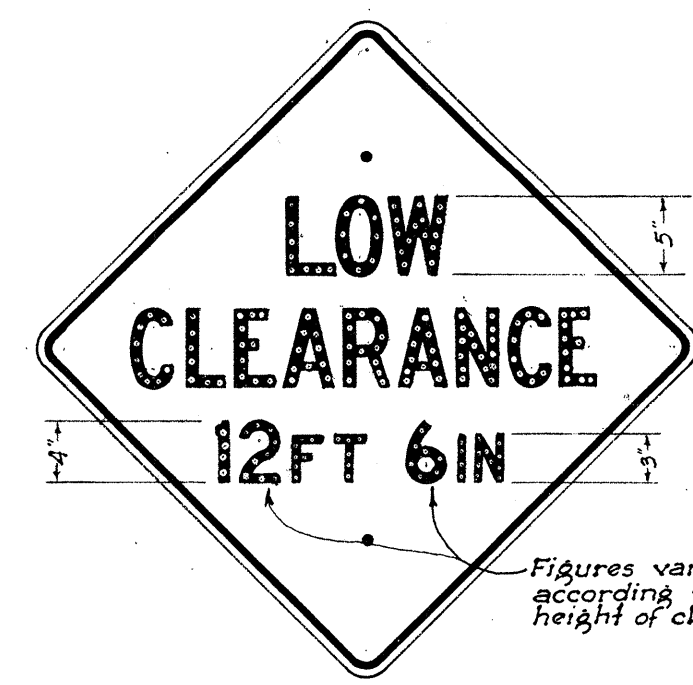
W-20  
30" x 30"



W-21  
30" x 30"



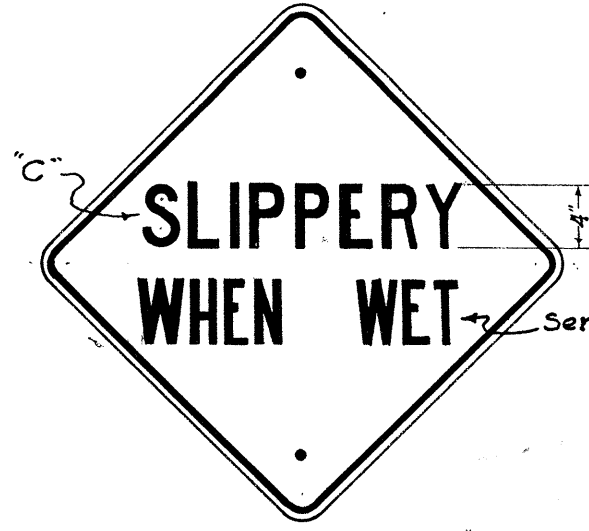
W-22  
24" x 24"



W-24  
30" x 30"



W-25  
24" x 24"



W-29  
24" x 24"



W-38  
24" x 24"



W-39  
24" x 24"

NOTE: All Warning Signs shall have two (2) 1/16" bolt holes drilled at 24" center unless otherwise noted.

All letters and figures shall be of size and design shown and shall conform with "Standard Alphabets for Highway Signs" as set forth by the Public Roads Administration, Federal Works Agency. Series "C" letters and Series "D" numerals shall be used except where noted.

Note: All Regulatory (R) signs shall have black letters on a white background except where noted. All Warning (W) signs shall have black letters or figures on a "Highway Yellow" background. \*Signs shall be similar but opposite in direction.

TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII  
REGULATORY & WARNING SIGNS

Scale: 1" = 1'  
APPROVED: *[Signature]*  
TERRITORIAL HIGHWAY ENGINEER

See Specifications for Materials & Finish.

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
TRACED BY: T. Tokunaga  
QUANTITIES BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NOTE BOOK No. \_\_\_\_\_