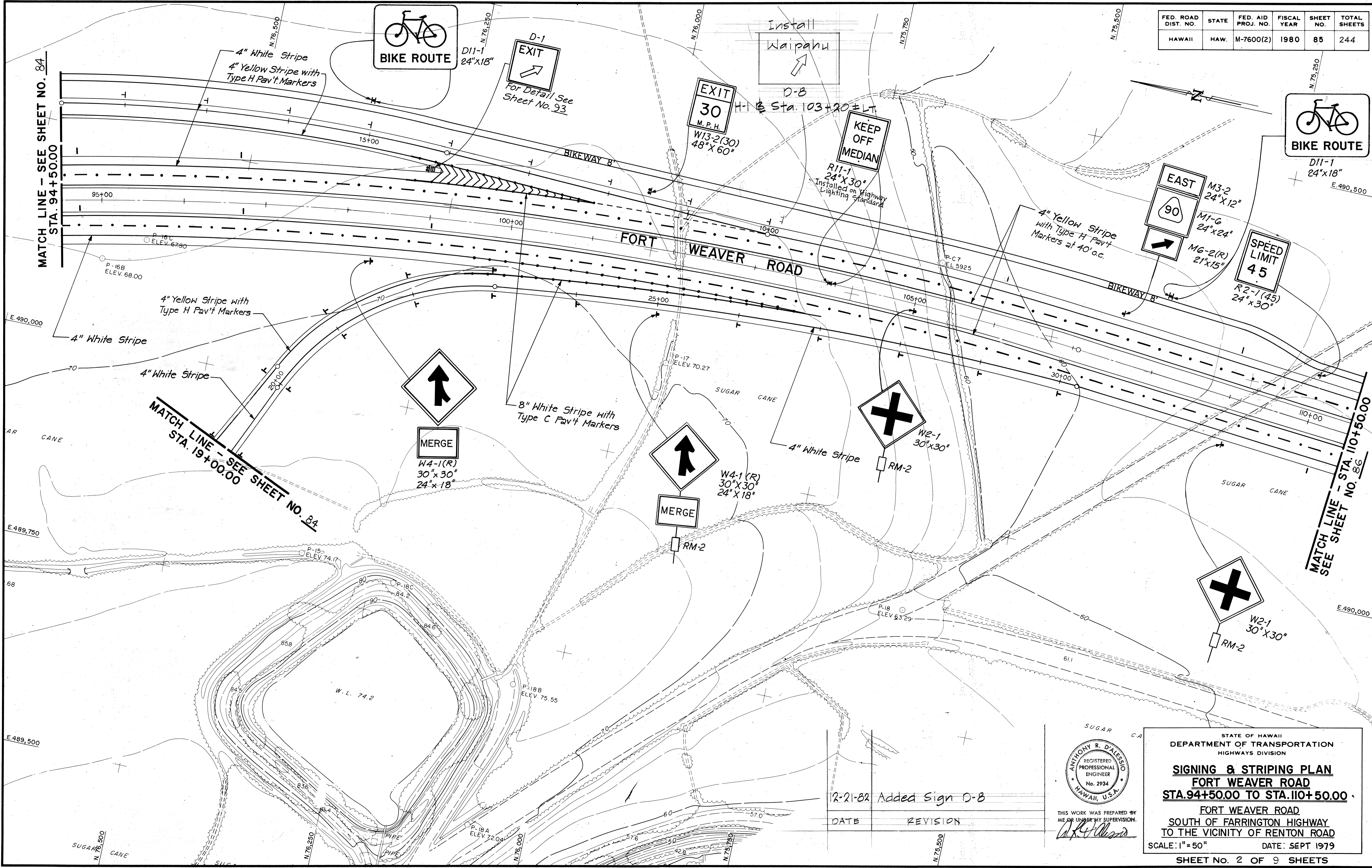


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	85	244



SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

12-21-82	Added Sign D-8
DATE	REVISION

ANTHONY R. DALESSIO
REGISTERED PROFESSIONAL ENGINEER
No. 2934
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & STRIPING PLAN
FORT WEAVER ROAD
STA. 94+50.00 TO STA. 110+50.00

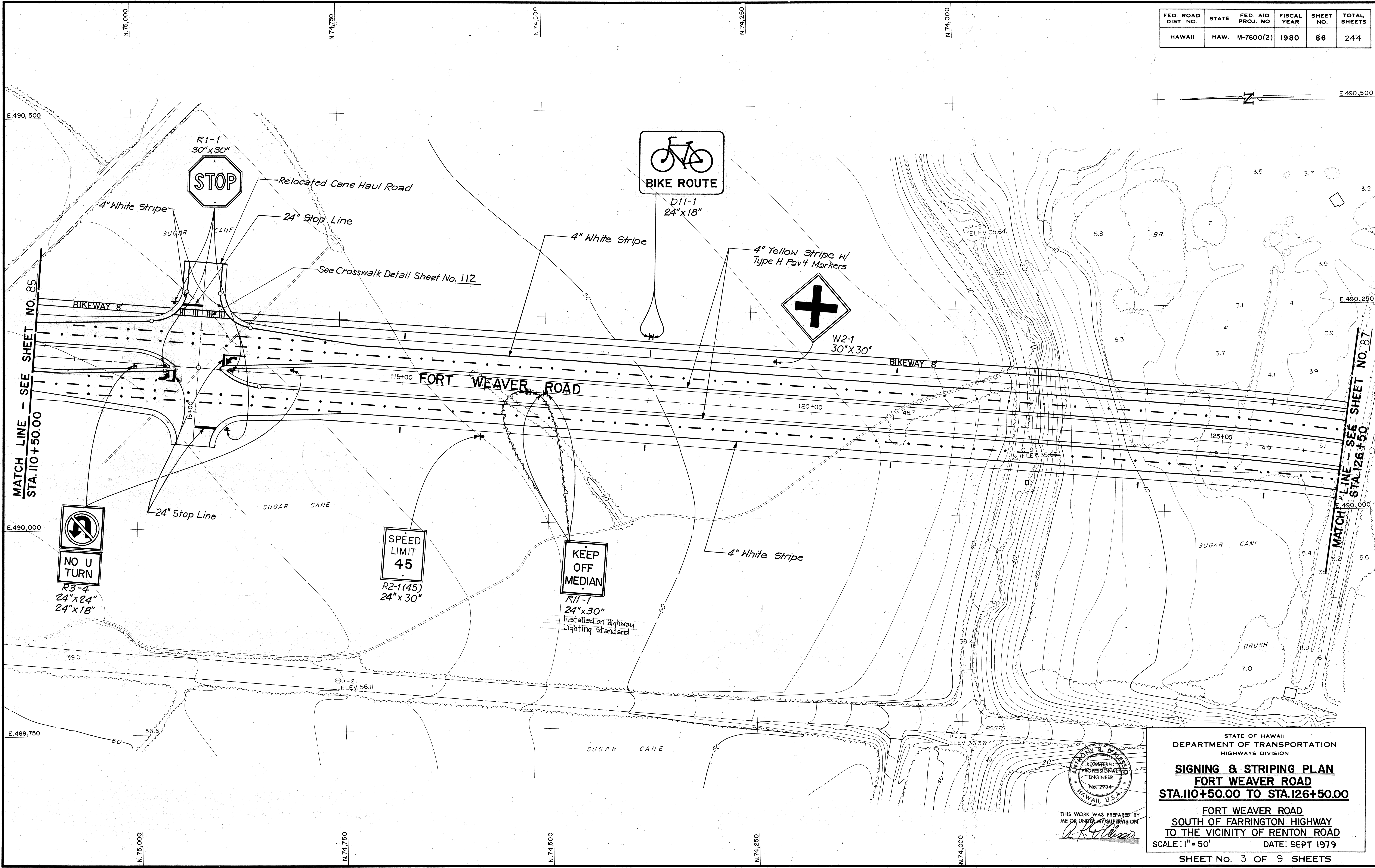
FORT WEAVER ROAD
SOUTH OF FARRINGTON HIGHWAY
TO THE VICINITY OF RENTON ROAD

SCALE: 1" = 50' DATE: SEPT 1979

SHEET No. 2 OF 9 SHEETS

C.O. 85

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	86	244



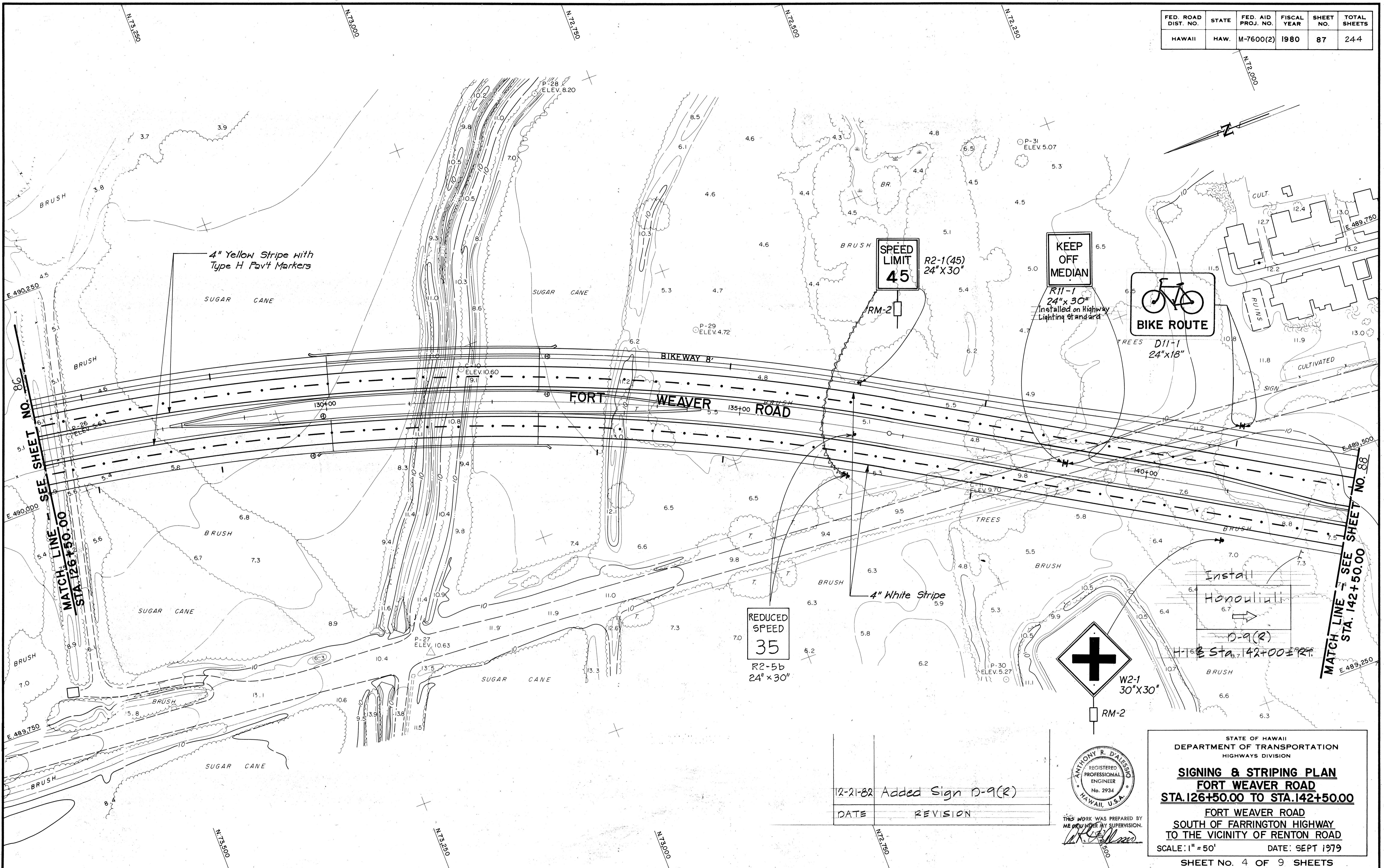
SURVEY PLOTTED BY _____ DATE _____
 ORIGINAL PLAN _____
 DRAWN BY _____
 TRACED BY _____
 NOTE BOOK _____
 QUANTITIES BY _____
 CHECKED BY _____
 No. _____

THIS WORK WAS PREPARED BY
 ME OR UNDER MY SUPERVISION.

 ANTHONY E. DILLARDS
 REGISTERED PROFESSIONAL ENGINEER
 No. 2934
 HAWAII, U.S.A.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SIGNING & STRIPING PLAN
FORT WEAVER ROAD
STA. 110+50.00 TO STA. 126+50.00
 FORT WEAVER ROAD
 SOUTH OF FARRINGTON HIGHWAY
 TO THE VICINITY OF RENTON ROAD
 SCALE: 1" = 50' DATE: SEPT 1979
 SHEET No. 3 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	87	244



DATE: _____
 SURVEY PLOTTED BY: _____
 ORIGINAL PLAN: _____
 TRACED BY: _____
 NOTE BOOK: _____
 QUANTITIES BY: _____
 CHECKED BY: _____

REDUCED
 SPEED
 35
 R2-5b
 24" x 30"

SPEED
 LIMIT
 45
 R2-1(45)
 24" x 30"

KEEP
 OFF
 MEDIAN
 R11-1
 24" x 30"
 Installed on Highway
 Lighting Standard

BIKE ROUTE
 D11-1
 24" x 18"

W2-1
 30" x 30"

DATE	REVISION
12-21-82	Added Sign D-9(R)

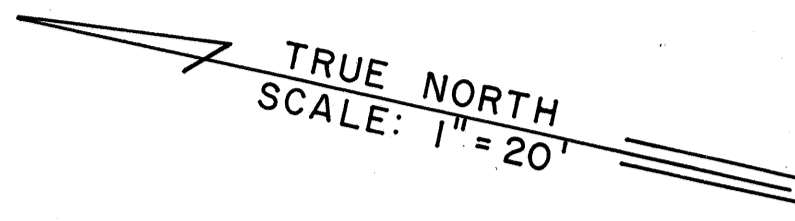
ANTHONY R. DALESIO
 REGISTERED
 PROFESSIONAL
 ENGINEER
 No. 2934
 HAWAII, U.S.A.
 THIS WORK WAS PREPARED BY
 ME UNDER MY SUPERVISION.
(Signature)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SIGNING & STRIPING PLAN
FORT WEAVER ROAD
STA. 126+50.00 TO STA. 142+50.00
 FORT WEAVER ROAD
 SOUTH OF FARRINGTON HIGHWAY
 TO THE VICINITY OF RENTON ROAD
 SCALE: 1" = 50' DATE: SEPT 1979
 SHEET NO. 4 OF 9 SHEETS

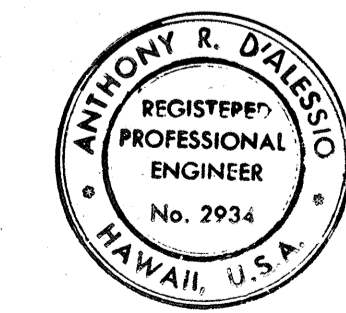
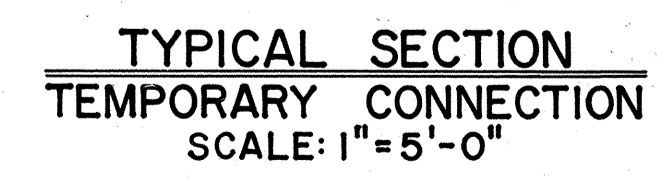
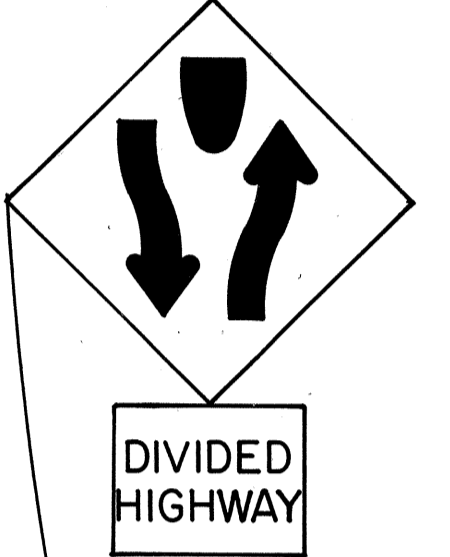
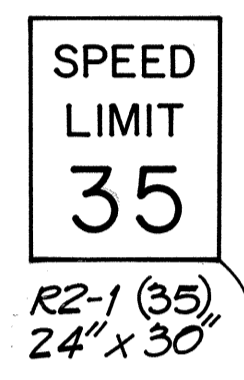
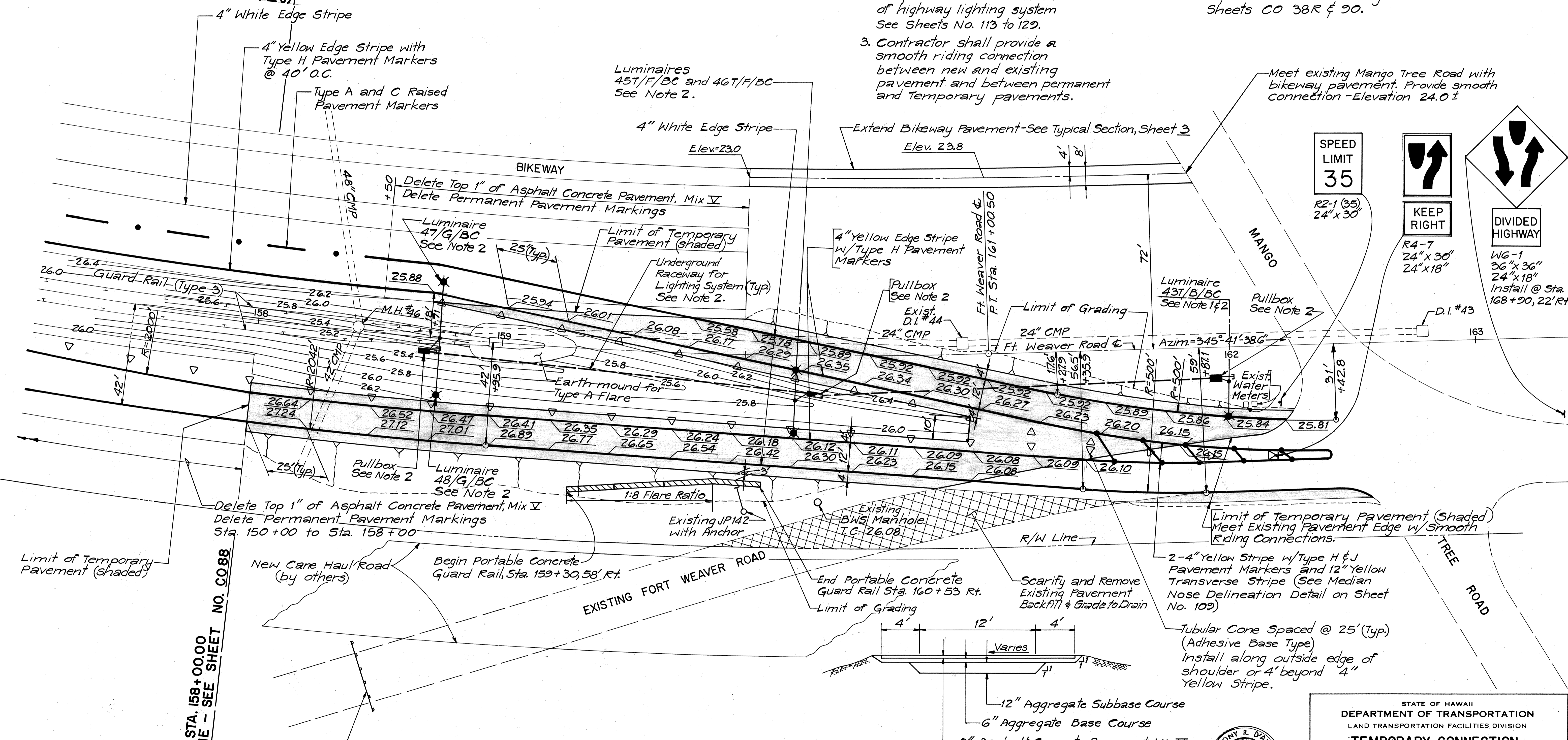
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1982	C088S-1	244

NOTES:

- Luminaires 43T, 45T and 46T are 250 watt units mounted on 15' bracket arms on metal Lighting Standards at temporary locations. Standards shall be relocated by others in future.
- For pertinent notes and details of highway lighting system See Sheets No. 113 to 129.
- Contractor shall provide a smooth riding connection between new and existing pavement and between permanent and Temporary pavements.
- All Striping shall be painted. No adhesive tape shall be allowed.
- Roadway construction signing and Striping shown on this sheet supersedes information given on Sheets CO 38R & 90.



STA. 158+00.00
MATCH LINE -
SEE SHEET NO. CO 88



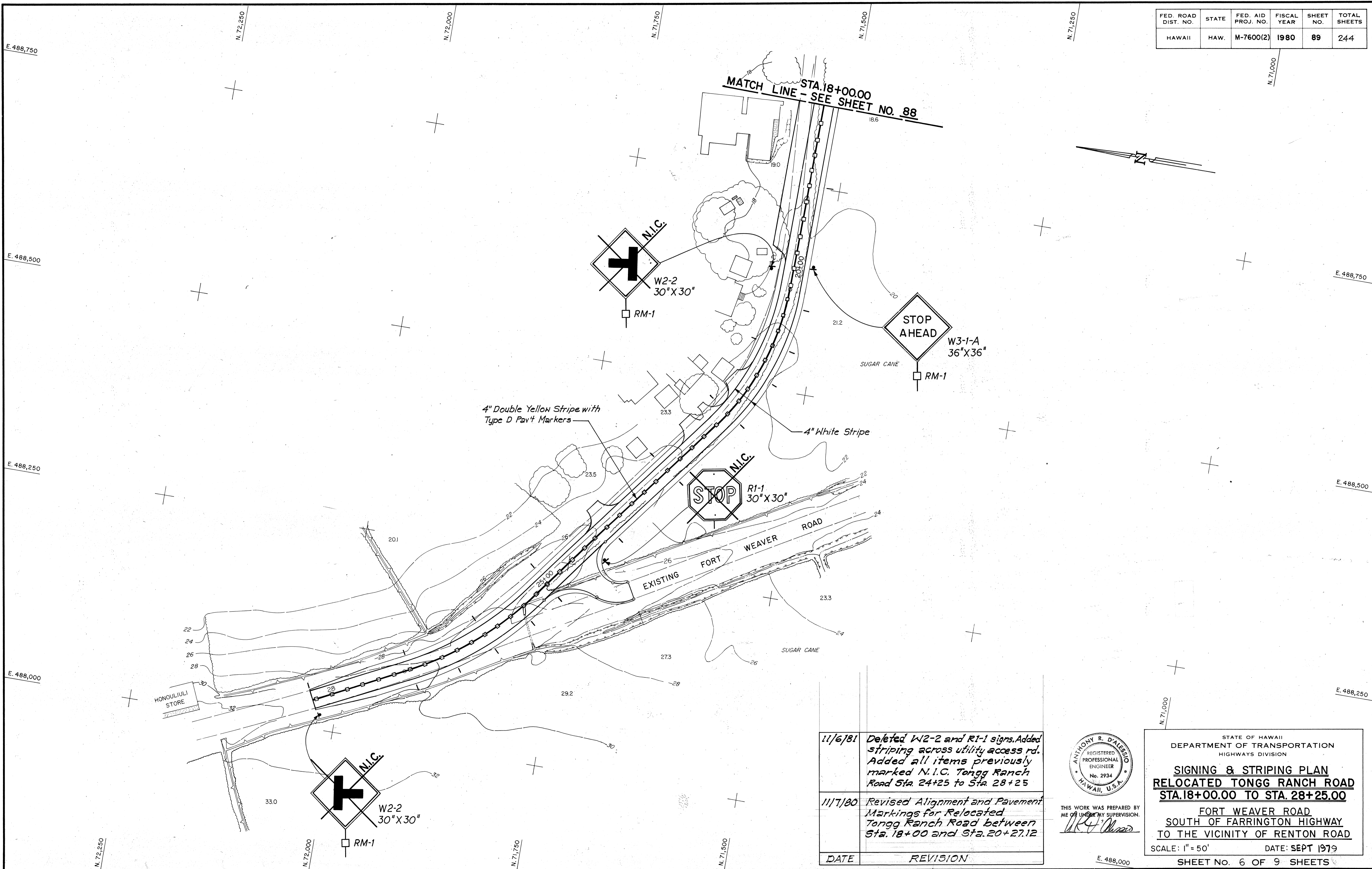
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
[Signature]

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
TEMPORARY CONNECTION
FORT WEAVER ROAD
STA. 158+00.00 TO STA. 162+40.00
FORT WEAVER ROAD
SOUTH OF FARRINGTON HIGHWAY
TO THE VICINITY OF RENTON ROAD
SCALE: 1" = 20'-0" DATE: NOV. 1981
SHEET No. 5A OF 9 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

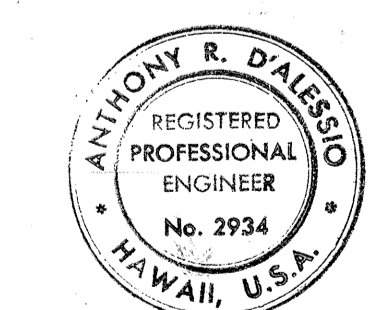
STA. 158+00.00
MATCH LINE - SEE SHEET NO. CO 88

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	89	244



DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NO. _____	_____

DATE	REVISION
11/6/81	Deleted W2-2 and R1-1 signs. Added striping across utility access rd. Added all items previously marked N.I.C. Tongg Ranch Road Sta. 24+25 to Sta. 28+25
11/7/80	Revised Alignment and Pavement Markings for Relocated Tongg Ranch Road between Sta. 18+00 and Sta. 20+27.12



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Anthony R. D'Alessio

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

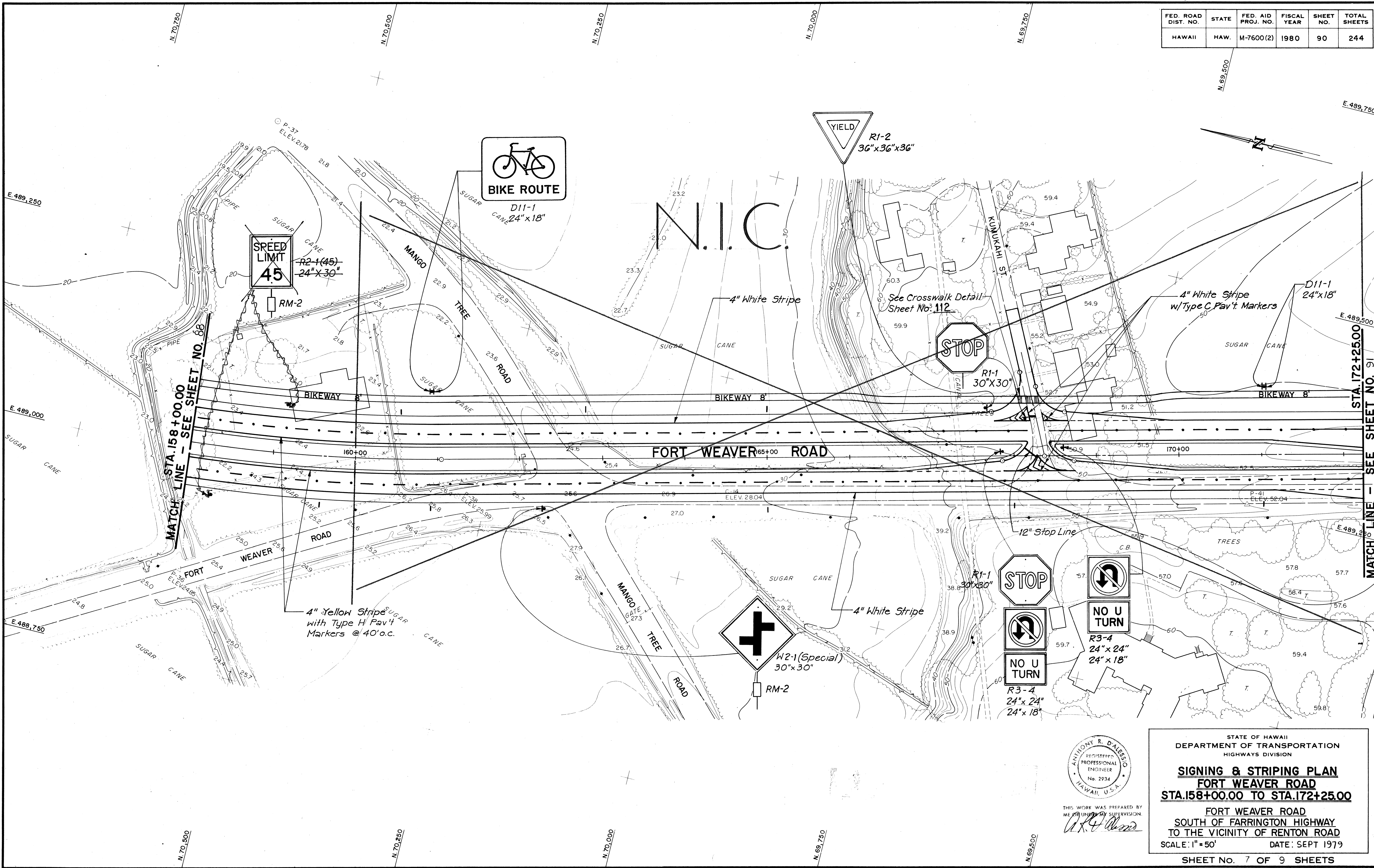
SIGNING & STRIPING PLAN
RELOCATED TONGG RANCH ROAD
STA. 18+00.00 TO STA. 28+25.00

FORT WEAVER ROAD
SOUTH OF FARRINGTON HIGHWAY
TO THE VICINITY OF RENTON ROAD

SCALE: 1" = 50' DATE: SEPT 1979
SHEET No. 6 OF 9 SHEETS

C.O. 89

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	90	244

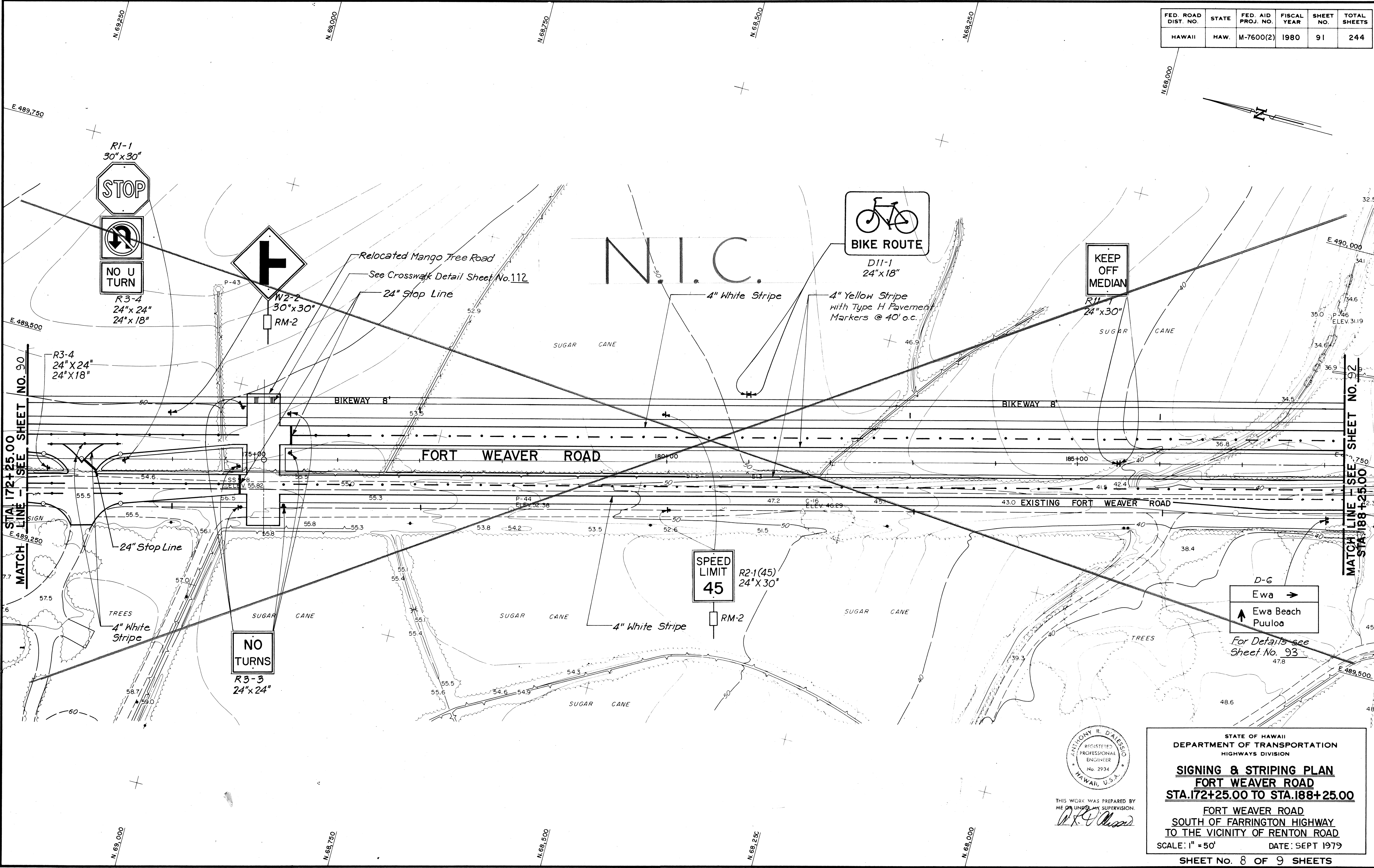


SURVEY PLOTTED BY _____ DATE _____
 DRAWN BY _____
 TRACED BY _____
 QUANTITIES BY _____
 CHECKED BY _____
 ORIGINAL PLAN _____
 NOTE BOOK _____
 No. _____

ANTHONY R. DIALESSO
 REGISTERED PROFESSIONAL ENGINEER
 No. 2934
 HAWAII, U.S.A.
 THIS WORK WAS PREPARED BY ME UNDER MY SUPERVISION.
A.R. Dialessio

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SIGNING & STRIPING PLAN
FORT WEAVER ROAD
STA. 158+00.00 TO STA. 172+25.00
 FORT WEAVER ROAD
 SOUTH OF FARRINGTON HIGHWAY
 TO THE VICINITY OF RENTON ROAD
 SCALE: 1"=50' DATE: SEPT 1979
 SHEET No. 7 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	91	244

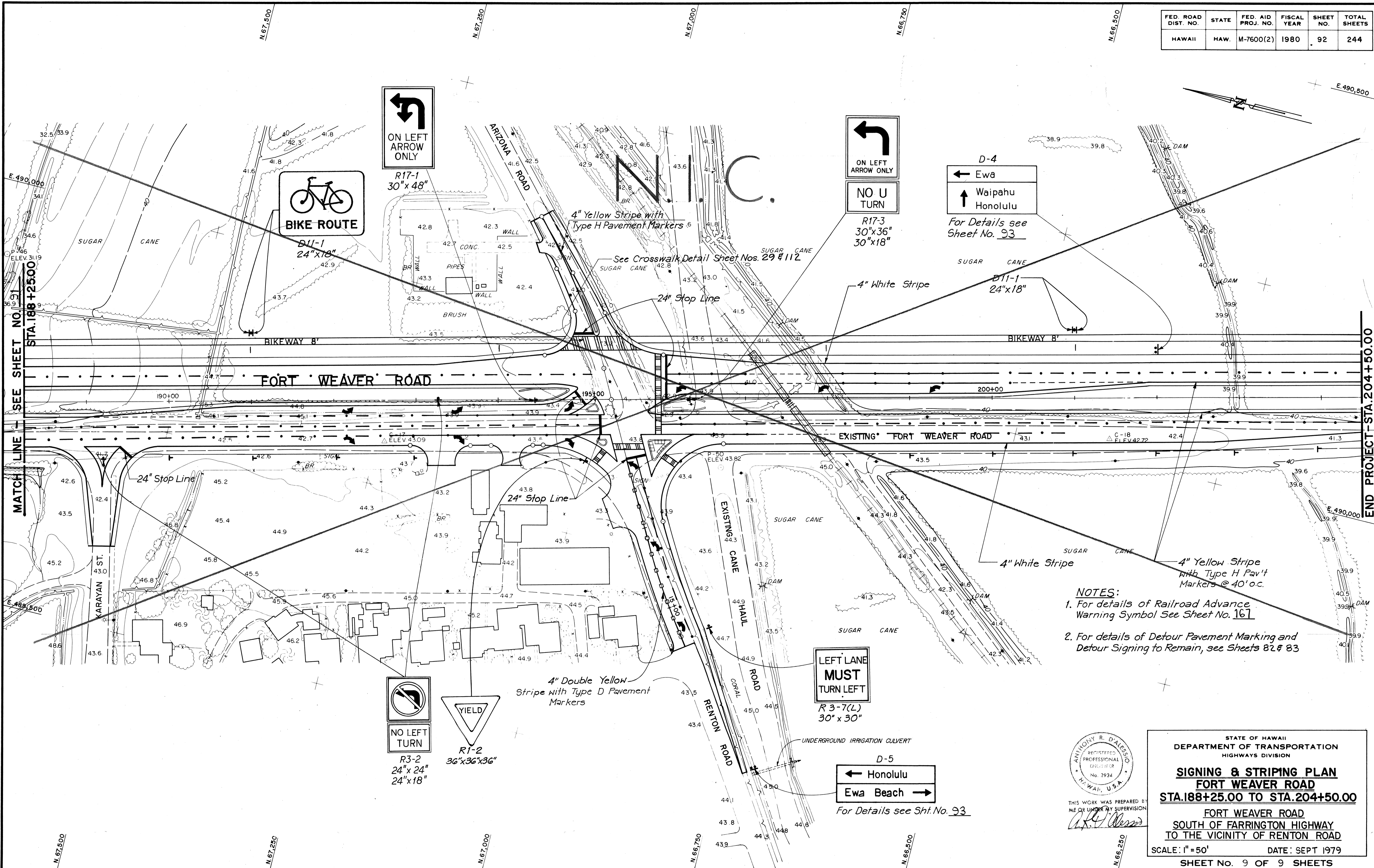


DATE _____
 SURVEY PLOTTED BY _____
 DRAWN BY _____
 DESIGNED BY _____
 QUANTITIES BY _____
 CHECKED BY _____
 NO. _____

ANTHONY R. DALESSIO
 REGISTERED PROFESSIONAL ENGINEER
 No. 2934
 HAWAII, U.S.A.
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
A.R. Dalessio

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SIGNING & STRIPING PLAN
FORT WEAVER ROAD
STA. 172+25.00 TO STA. 188+25.00
 FORT WEAVER ROAD
 SOUTH OF FARRINGTON HIGHWAY
 TO THE VICINITY OF RENTON ROAD
 SCALE: 1" = 50' DATE: SEPT 1979
 SHEET No. 8 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	92	244



MATCH LINE SEE SHEET NO. 91 STA. 188+25.00

END PROJECT STA. 204+50.00

- NOTES:**
1. For details of Railroad Advance Warning Symbol See Sheet No. 167
 2. For details of Detour Pavement Marking and Detour Signing to Remain, see Sheets 82 & 83

SURVEY PLOTTED BY _____ DATE _____
 DRAWN BY _____
 CHECKED BY _____
 NOTE BOOK _____
 NO. _____



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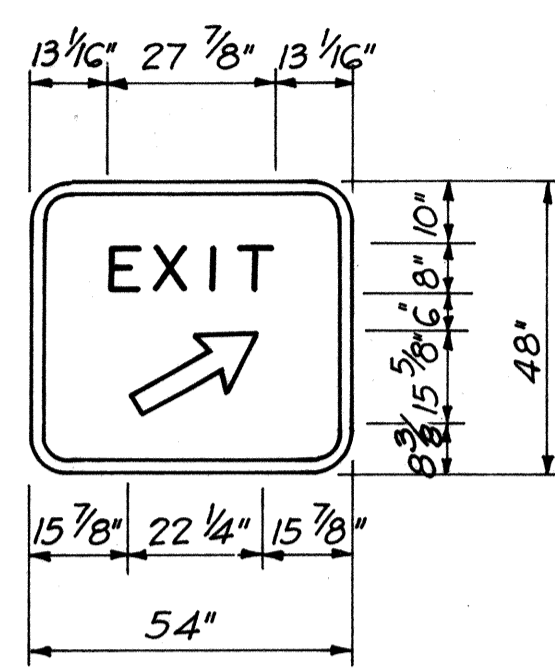
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & STRIPING PLAN
FORT WEAVER ROAD
STA. 188+25.00 TO STA. 204+50.00

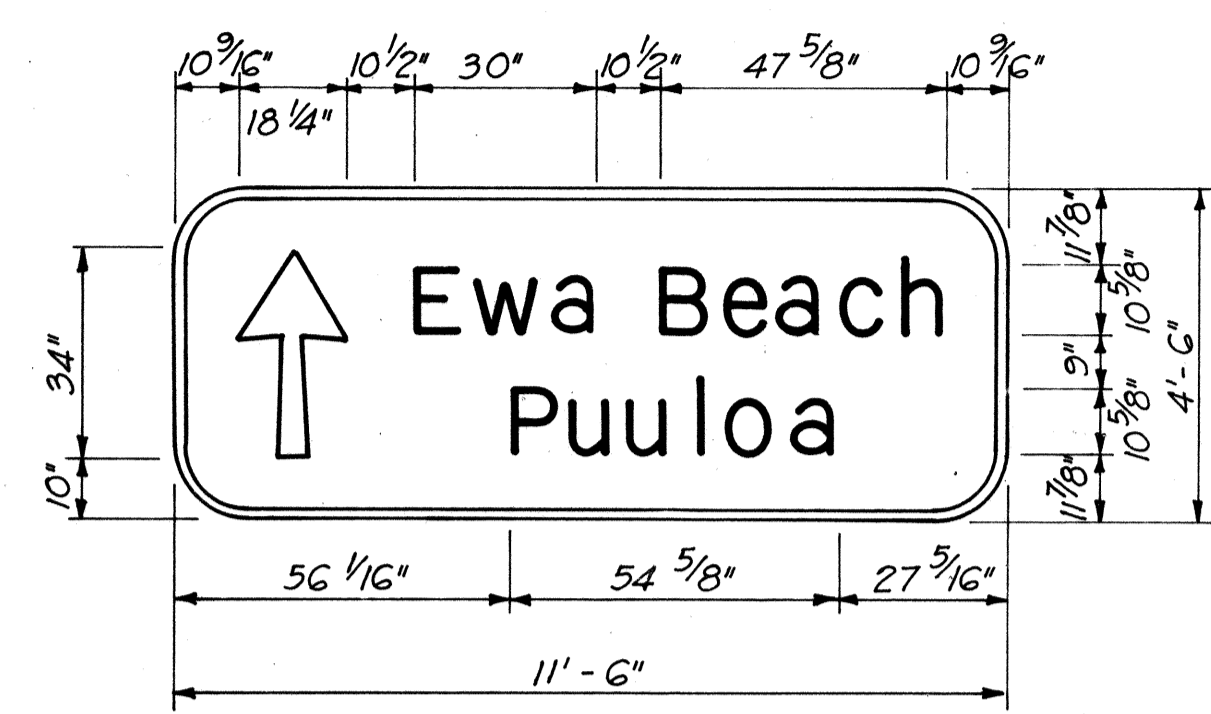
FORT WEAVER ROAD
SOUTH OF FARRINGTON HIGHWAY
TO THE VICINITY OF RENON ROAD

SCALE: 1" = 50' DATE: SEPT 1979
SHEET No. 9 OF 9 SHEETS

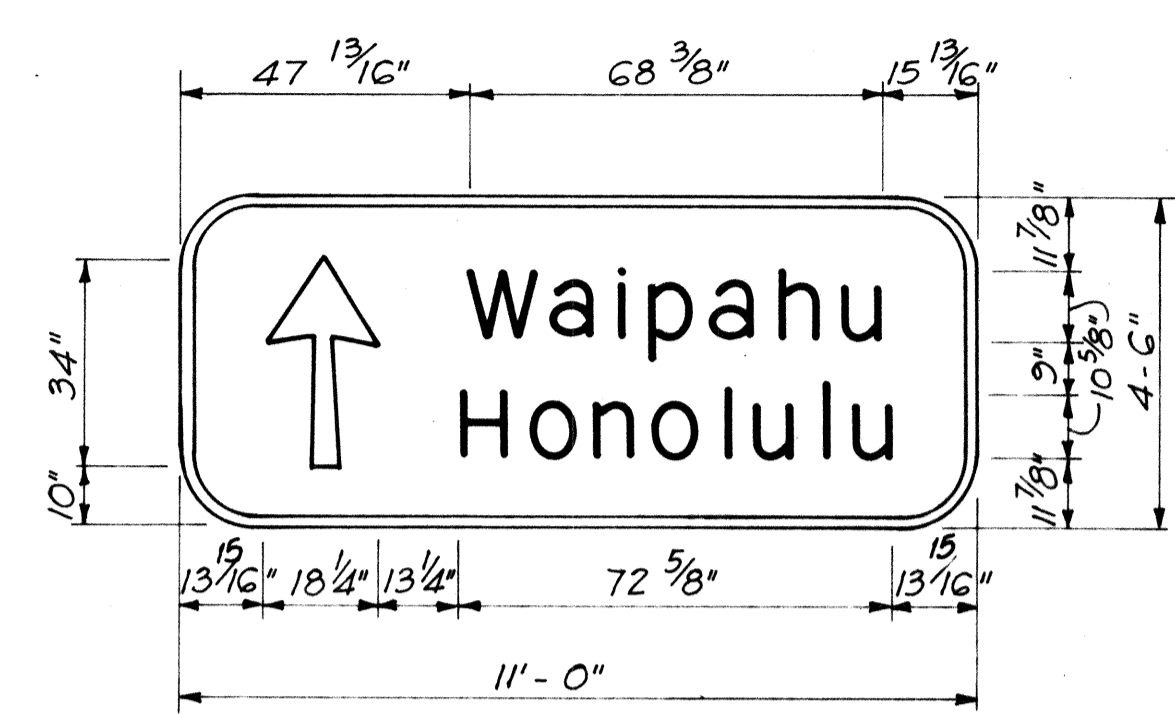
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	93	244



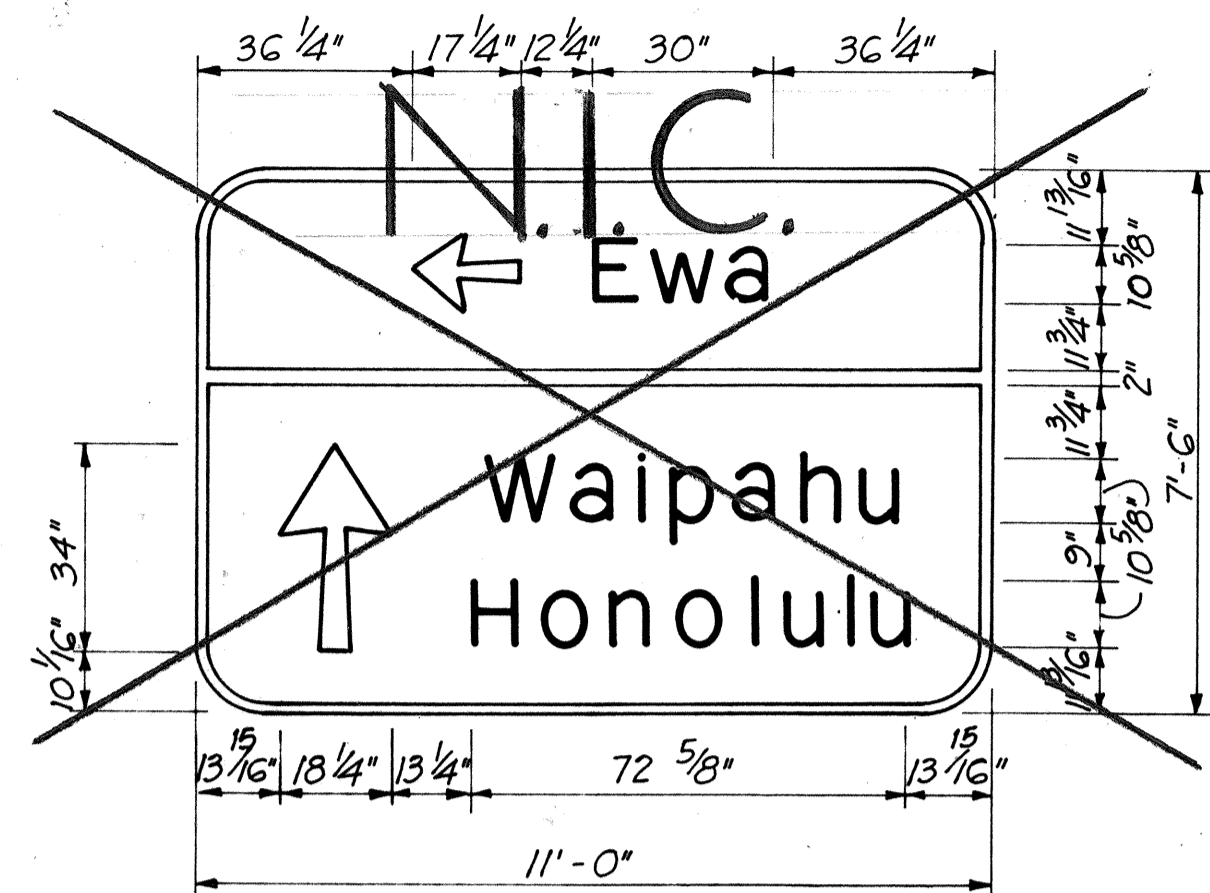
D-1



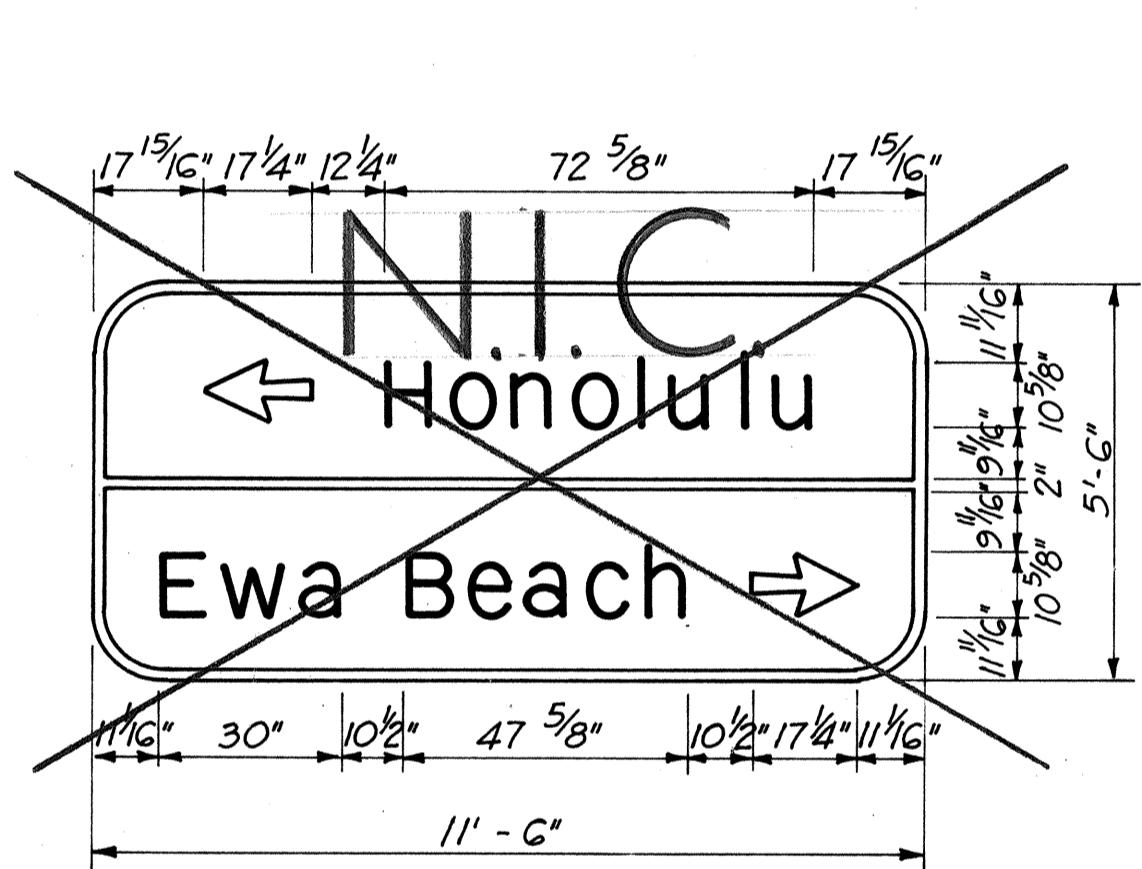
D-2



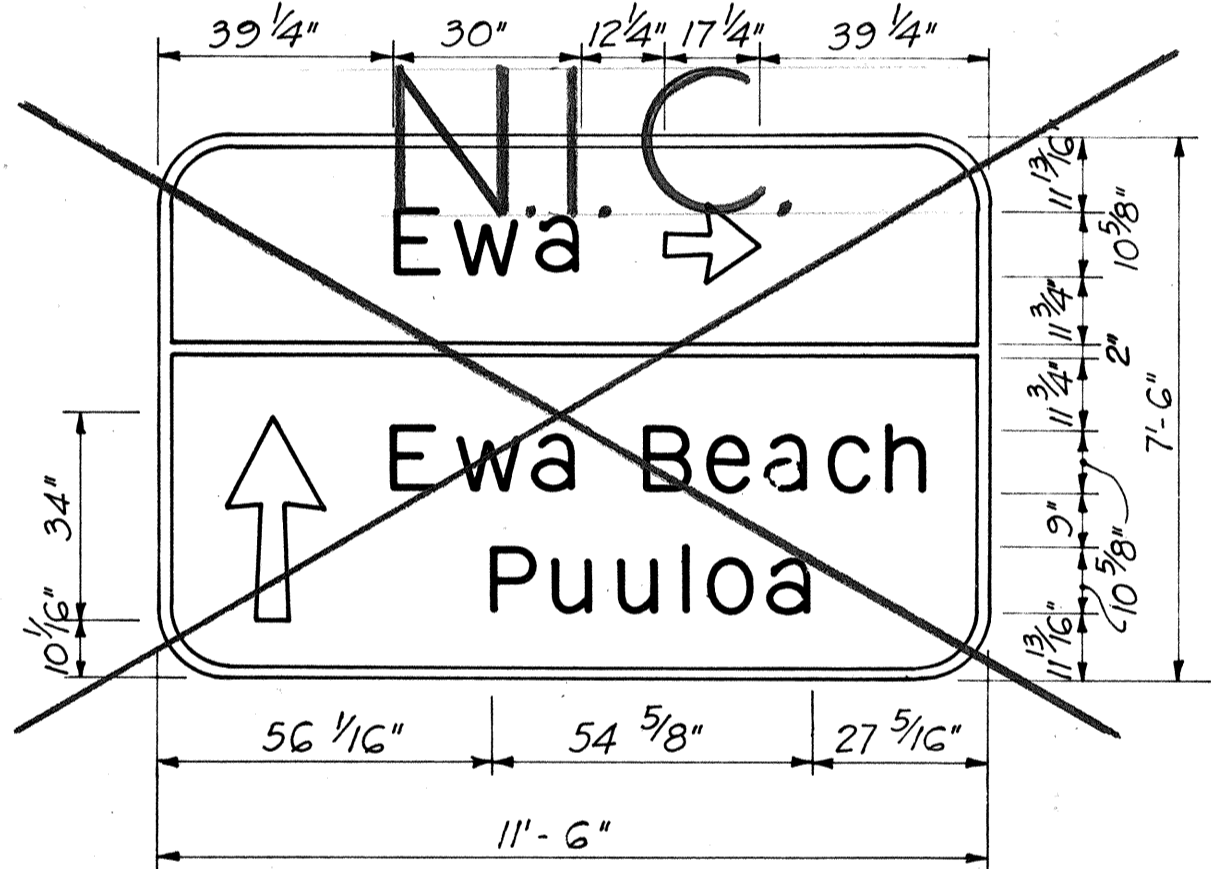
D-3



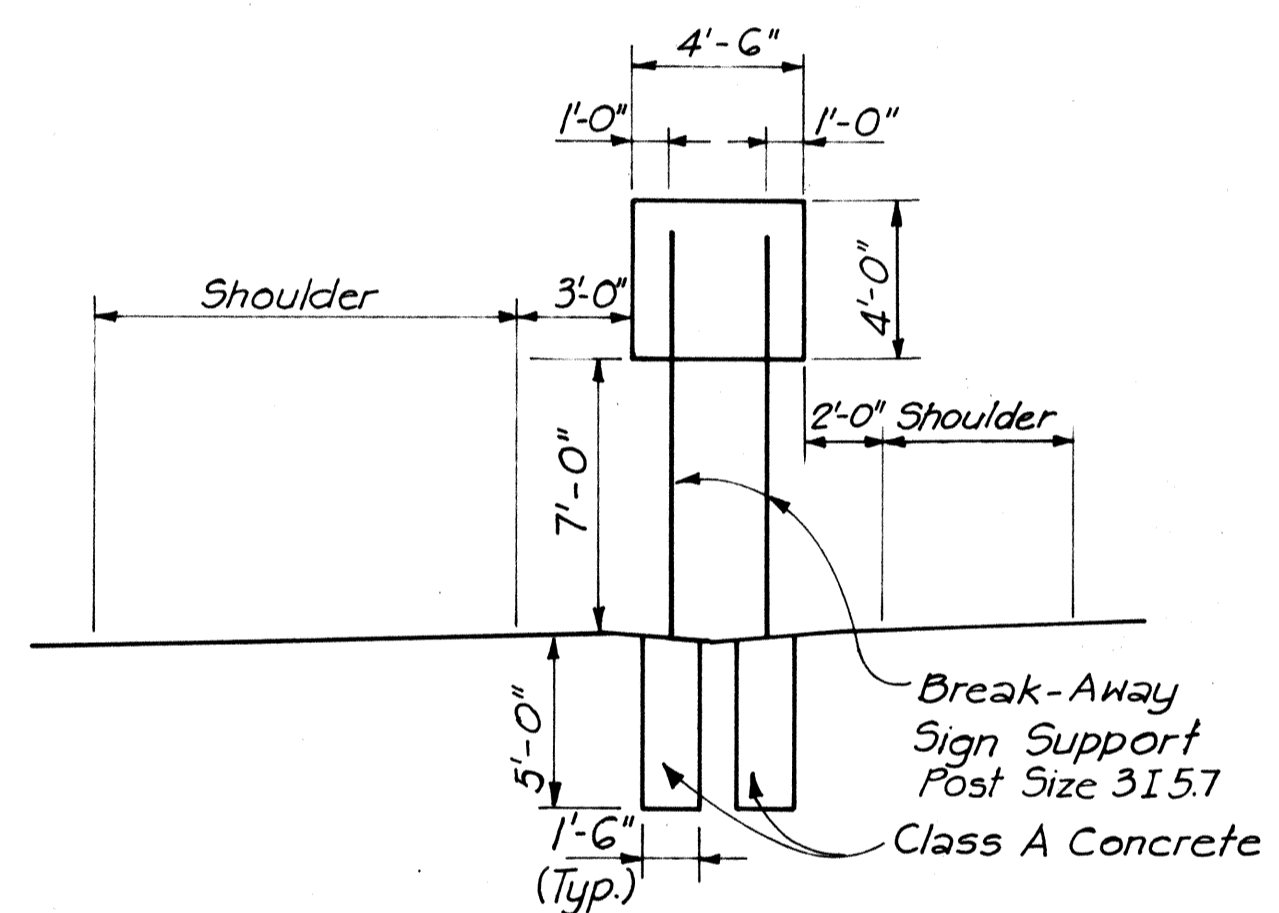
D-4



D-5

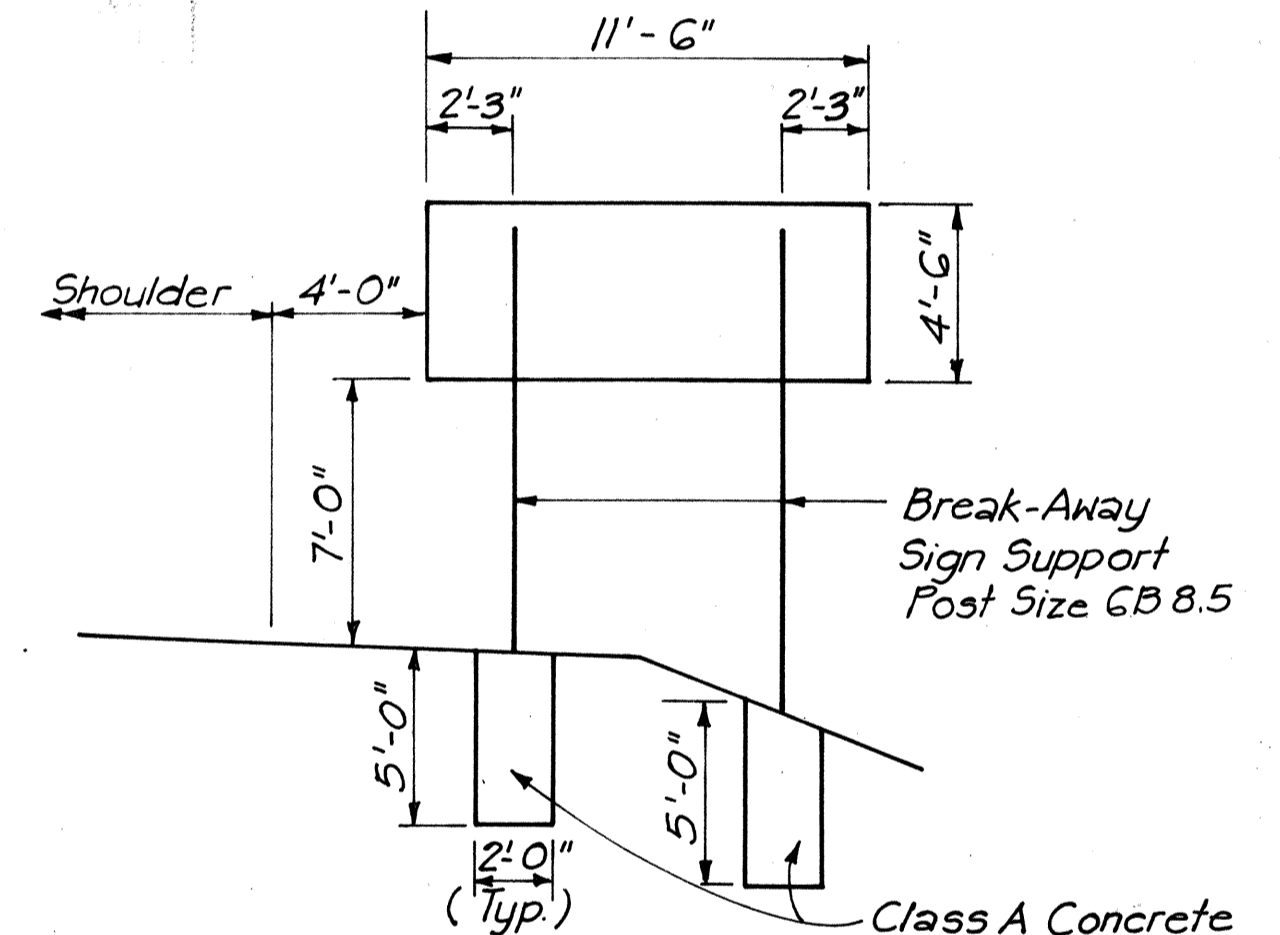


D-6



ELEVATION D-1

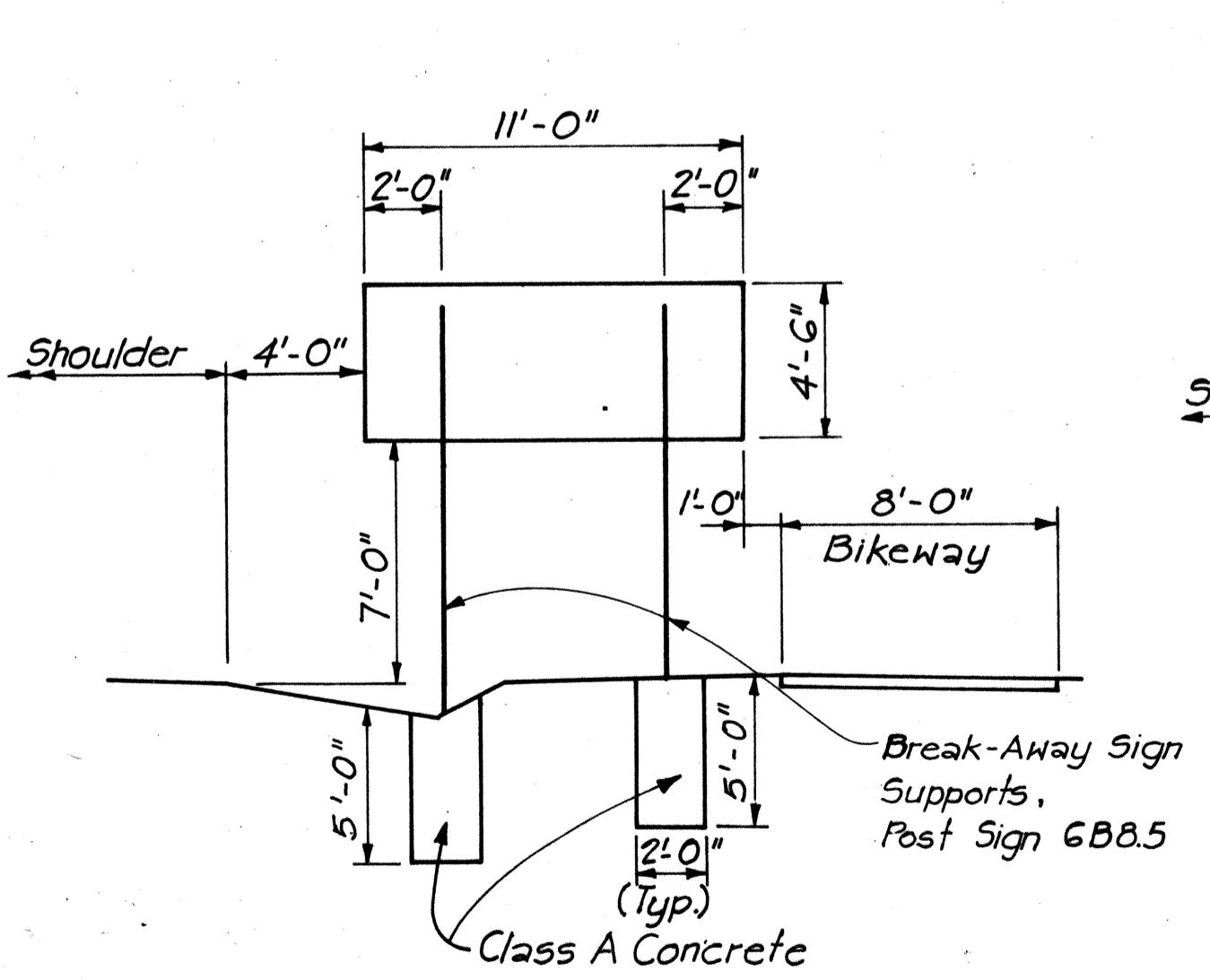
Fort Weaver Road Sta. 98+85 N.B.
Scale: 1" = 5'



ELEVATION D-2

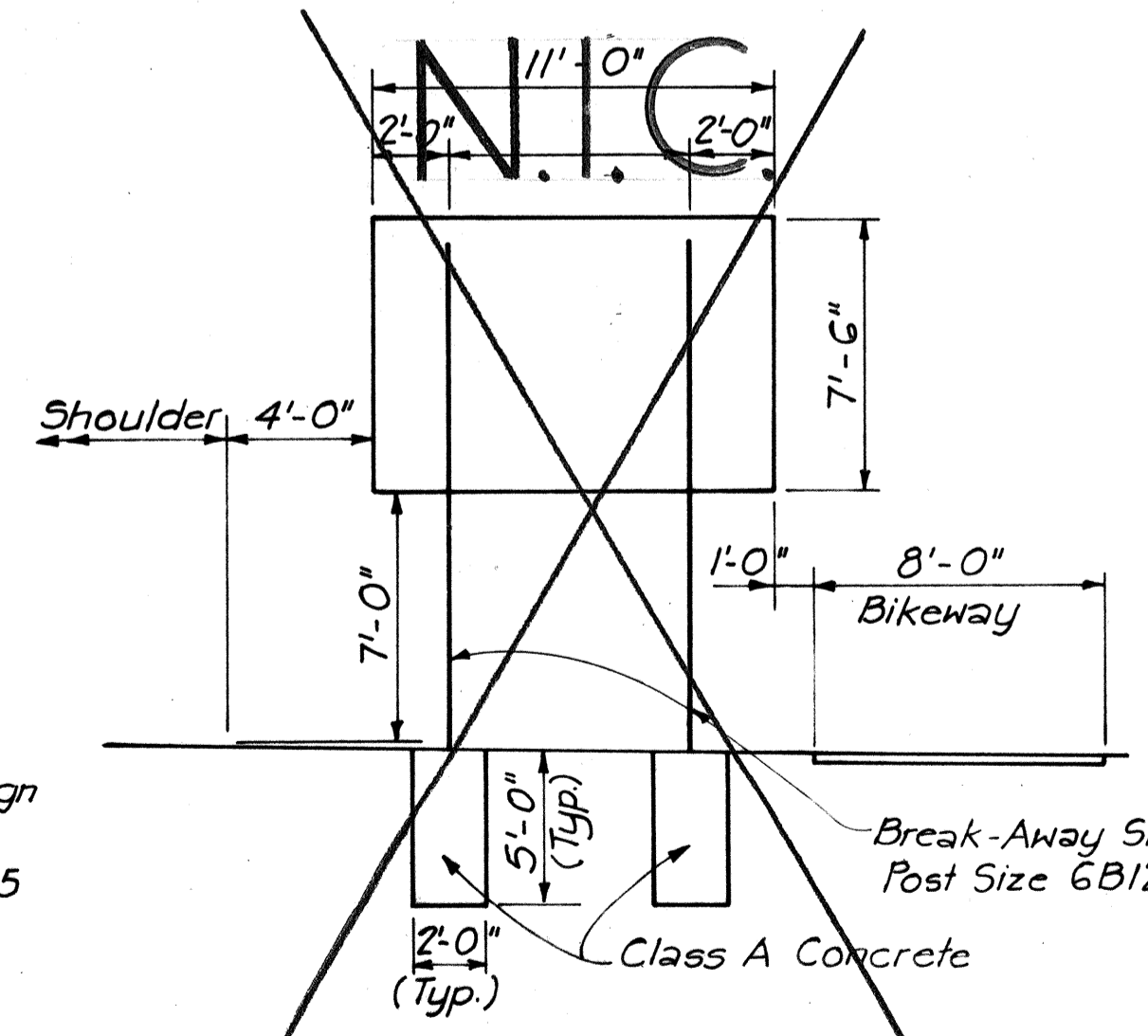
Fort Weaver Road Sta. 151+00 S.B.
Scale: 1" = 5'

- NOTES**
DESTINATION SIGNS (D)
- Letters, numerals, borders & arrows shall have white reflective sheeting on aluminum cut-outs on green reflective sheeting. Hardened aluminum backed reflective sheeting, letters, symbols, numbers and borders shall be used.
 - For additional Notes pertaining to Destination Signs, See Sheet No. 94.
 - Summary Tables for all Destination Signs are located on Sheet No. 94.
 - For Sign Support Details see Sheet No. 104.



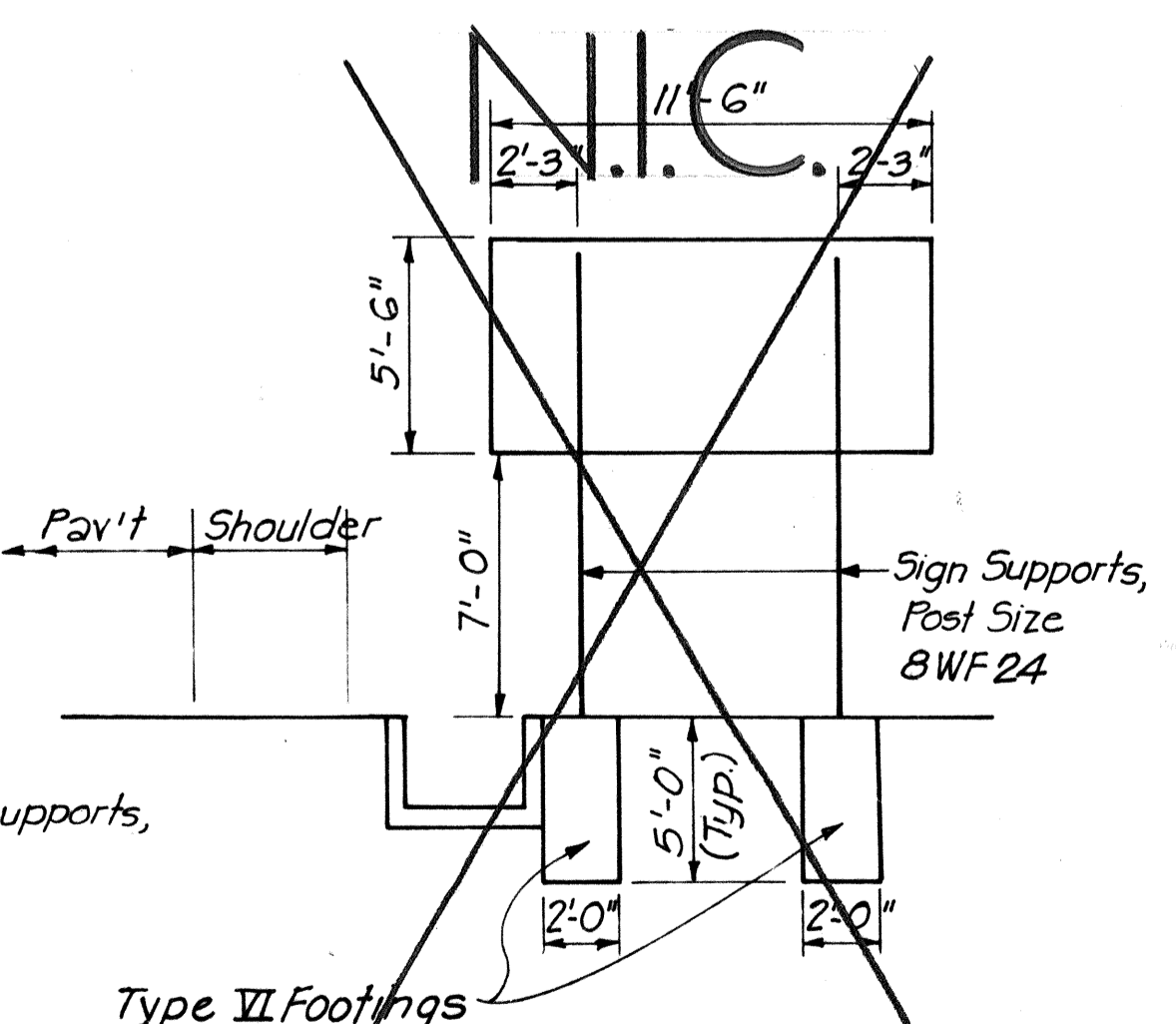
ELEVATION D-3

Fort Weaver Road Sta. 146+00 N.B.
Scale: 1" = 5'



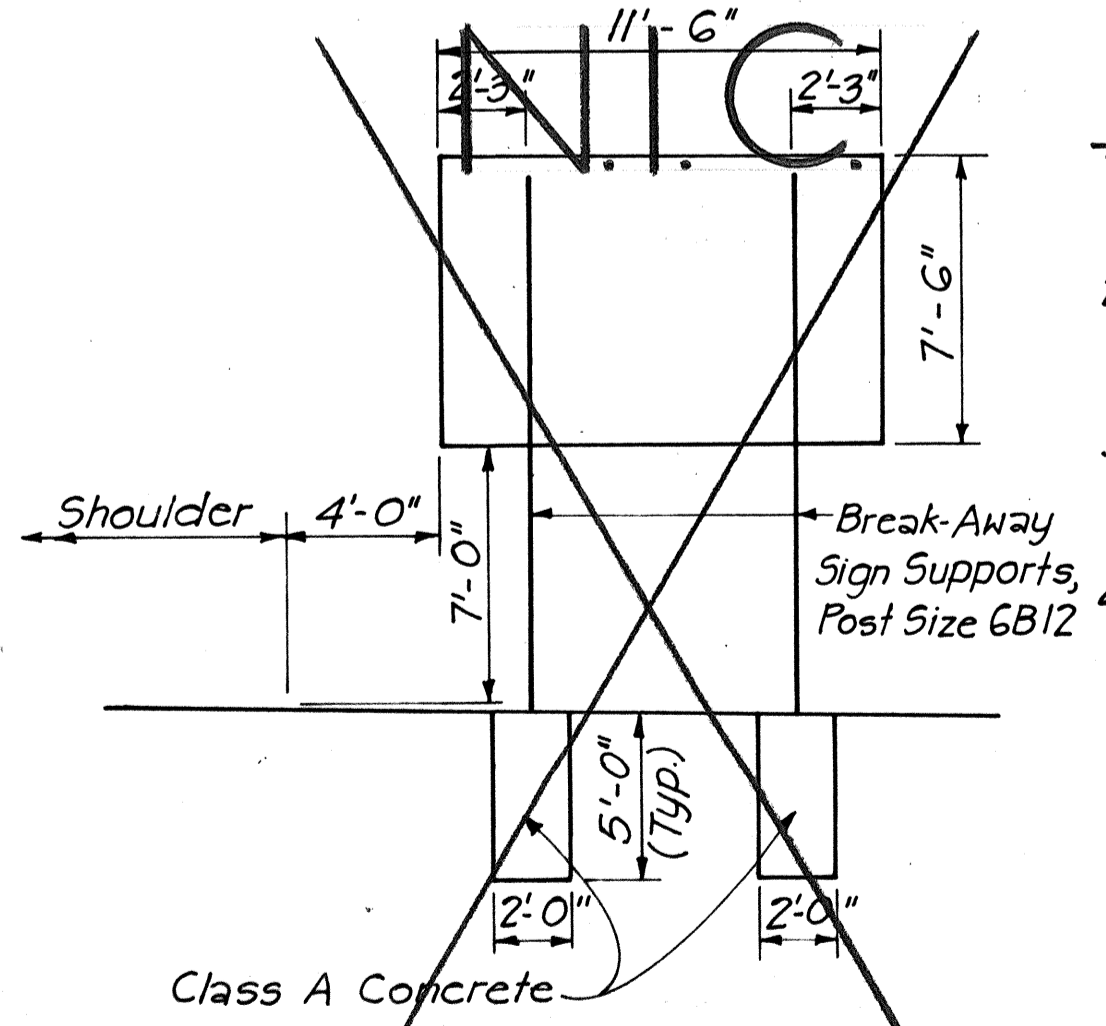
ELEVATION D-4

Fort Weaver Road Sta. 202+00 N.B.
Scale: 1" = 5'



ELEVATION D-5

Renton Road Sta. 17+20
Scale: 1" = 5'



ELEVATION D-6

Fort Weaver Road Sta. 188+00 S.B.
Scale: 1" = 5'



THIS WORK WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION
A.R. D'Alesio

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

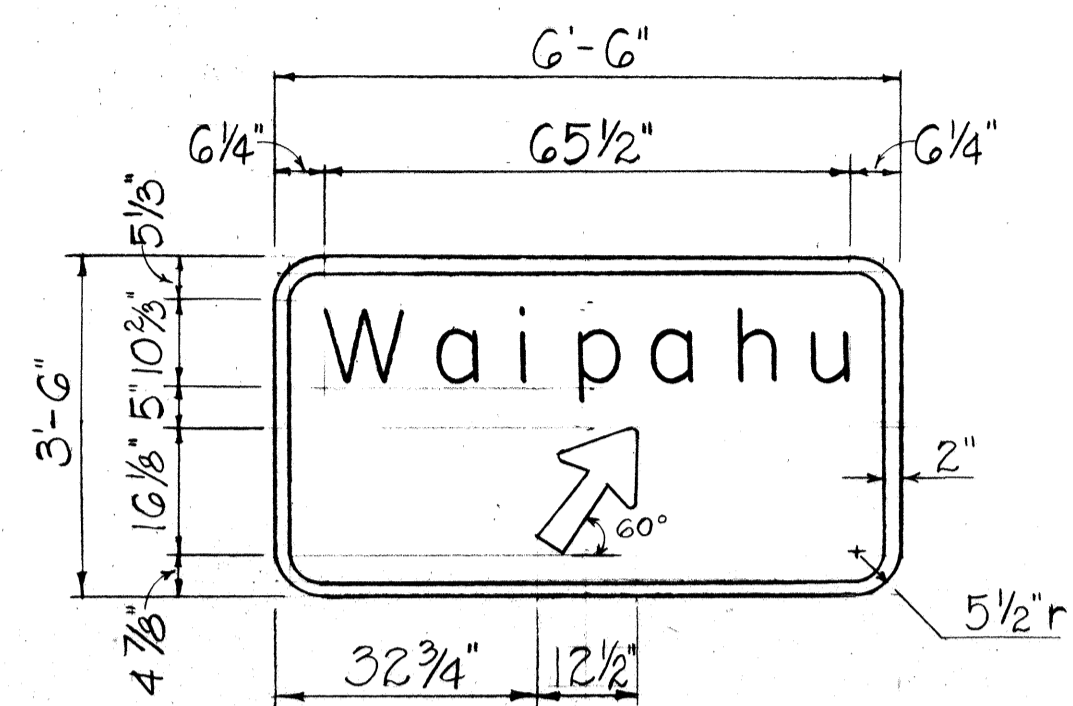
SIGN FACE AND MOUNTING DETAILS

FORT WEAVER ROAD
SOUTH OF FARRINGTON HIGHWAY
TO THE VICINITY OF RENTON ROAD

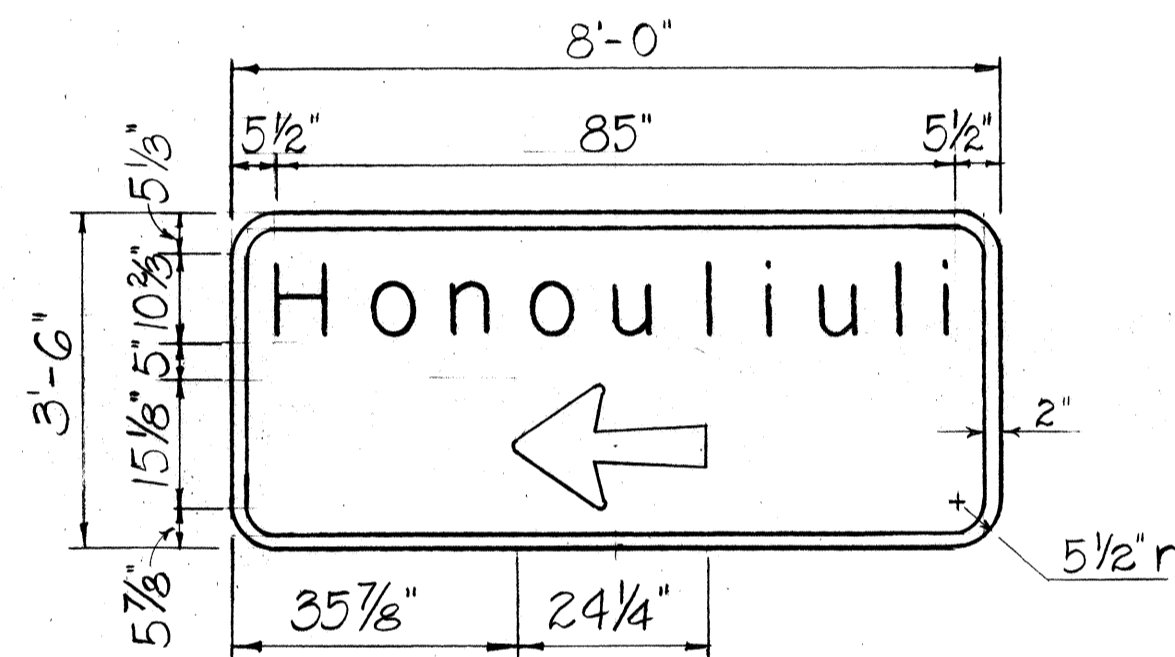
SCALE: AS SHOWN DATE: SEPT 1979
SHEET NO. 1 OF 2 SHEETS

DATE: _____
SURVEY PLOTTED BY: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
NO. _____

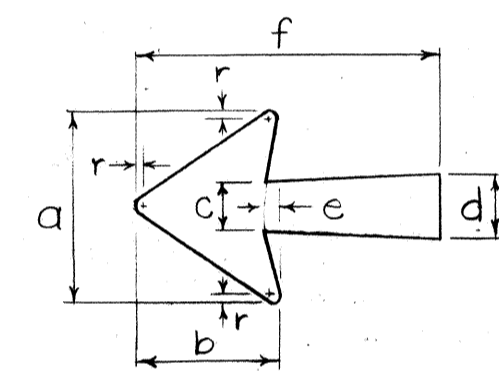
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1983	C.O. 935-1	244



D-8



D-9(L)



ARROW DETAILS

SIGN NO.	DIMENSIONS IN INCHES						
	a	b	c	d	e	f	r
D-8	1 1/4	2 3/8	3 3/8	4 1/2	1 5/16	1 7/4	3/4
D-9	15 1/8	11 1/8	3 3/4	5	1 5/8	24 1/4	1 1/16

SIGN NOTES:

- Signs shall conform to the latest editions and amendments of the following FHWA Publications:
 - "Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)
- Color:
 - Legend, Borders & Arrows shall be white reflectorized sheeting on a green reflectorized sheeting background.
- Letter Size: Series "E" (M).
- Sign Panel shall be 0.100" Sheet Aluminum.
- See shts. DT 100, 100A & 100B for Mounting & Frame Details. Mounting Ht. = 7'-0".
- (R) or (L) denotes right or left arrow, respectively.

PROJECT NO. M-7600(2)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

DIRECTIONAL SIGNS

FORT WEAVER ROAD
SOUTH OF FARRINGTON HWY.
TO THE VICINITY OF RENTON RD.

SCALE: 1/2" = 1'-0" DATE: DEC. 1982

SHEET NO. OF SHEETS

C.O. 935-1

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1983	C.O. 935-1	244

A or A,	C	C,
36"	6"	-
48"	9"	19"
60"	12"	24"

NOTE: Frame stiffeners are required when D is greater than 24". See Gen. Note 4.

GENERAL NOTES

- Sign posts and base posts shall be flanged channel type structural steel conforming to ASTM A 499 and galvanized in accordance with ASTM A 123.
NOMINAL DIMENSIONS:
2.50 lbs./ft. - 3.125" x 1.562"
4.00 lbs./ft. - 3.500" x 1.750"
- Retainer - Spacer Strap shall be AISI 1020 steel and galvanized in accordance with ASTM A 123.
- Retainer and Connector Bolts shall be 5/16 - 18 UNC x 1.75" long hex. head, integral flange conforming to ASTM A 354 Grade BC. Nuts shall be 5/16 - 18 UNC hex. head, integral flange conforming to ASTM A 563 Grade D. All bolts and nuts shall be cadmium plated per Federal spec. QQP 416 B, Class 2, Type 2.
- All accessories, fittings and stiffener details (as required) shall be submitted to Engineer for approval 20 days prior to installation.
- For additional details see sht. DT 100.
- Basic formulas for use with the windload charts:
Factor = $A \times B \times H$
Therefore, if sign area (A x B) is known,
Maximum H = $\frac{\text{Factor}}{\text{sign area (A x B)}}$
and if H is known,
Maximum sign area (A x B) = $\frac{\text{Factor}}{H}$

APPROVAL RECOMMENDED:

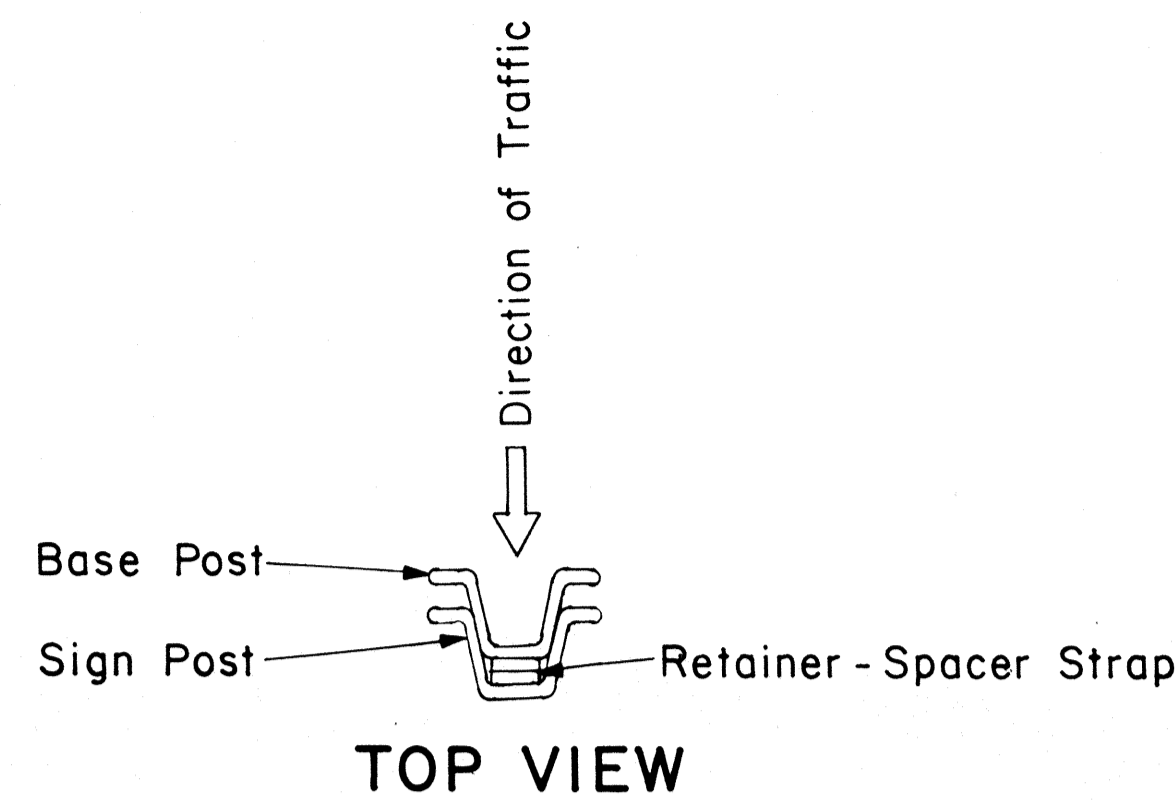
Eishi Tanaka 9/21/82
TRAFFIC ENGINEER DATE

APPROVED:
[Signature] 9/21/82
ASSISTANT CHIEF, ENGINEERING DATE

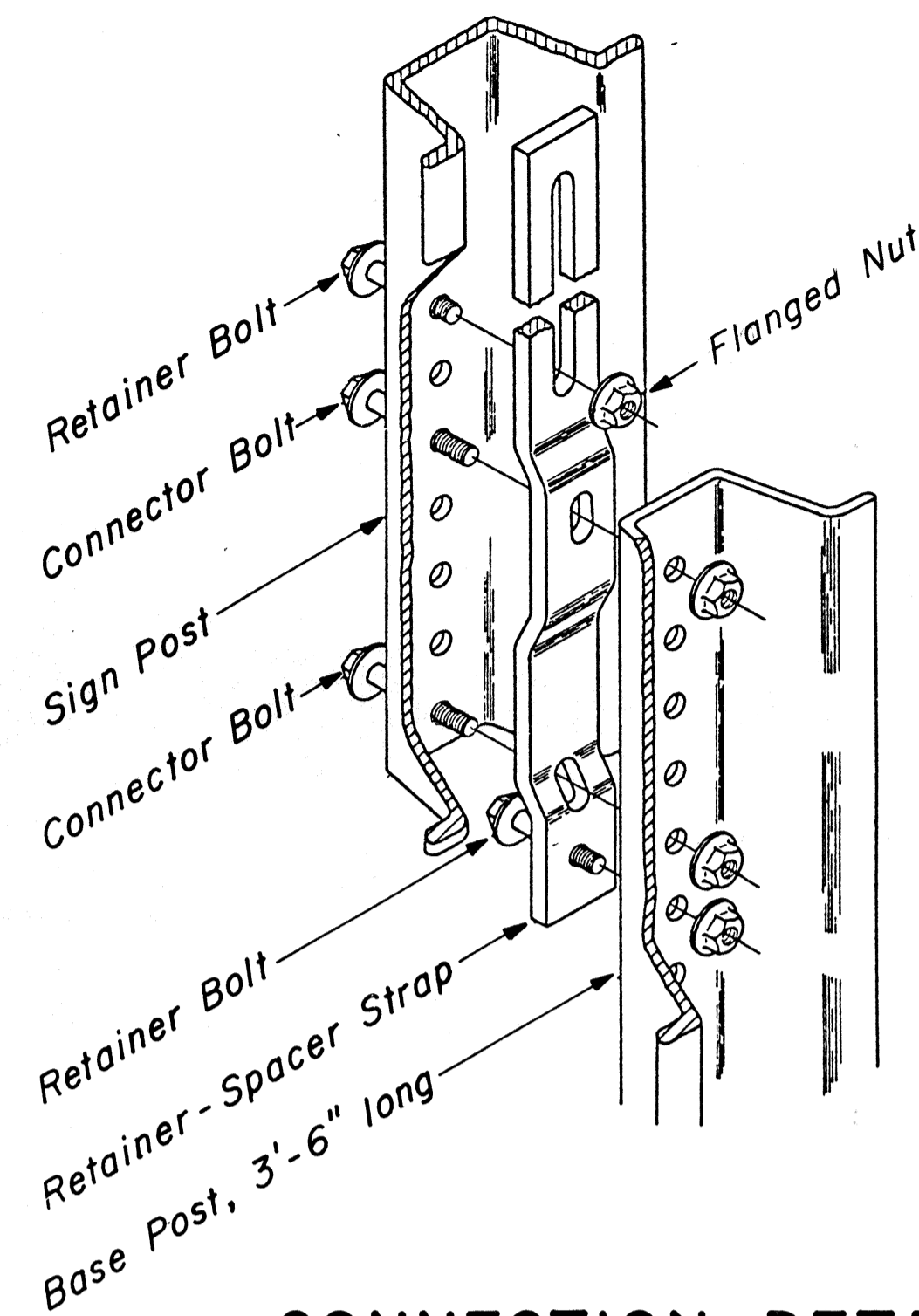
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
GALVANIZED FLANGED CHANNEL
SIGN POST MOUNTING

Scale: As Shown Date: Sept. 1982
SHEET No. OF SHEETS DT 100A

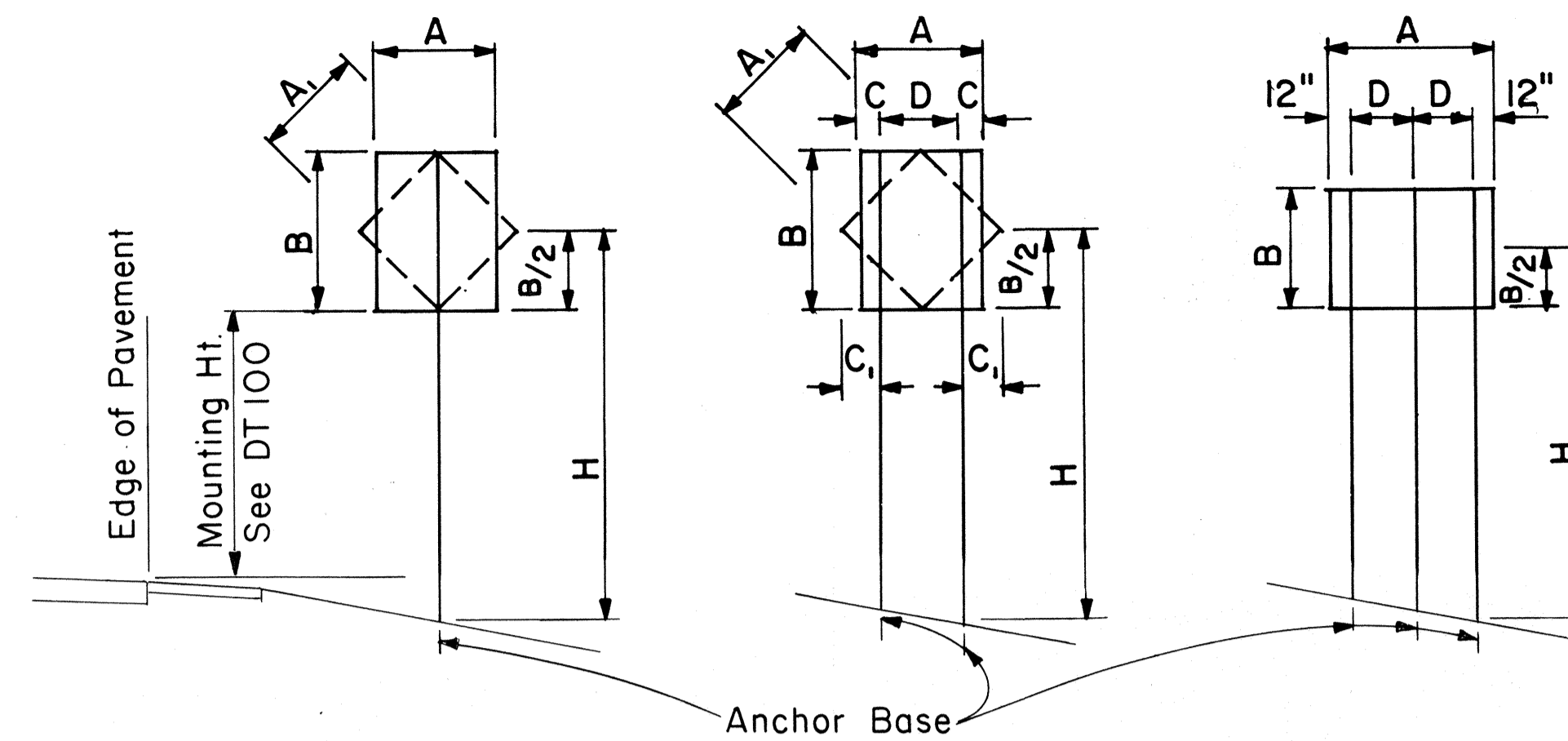


TOP VIEW



CONNECTION DETAIL

Not to Scale



1- POST Sign area 10 sq. ft. and less
2- POST Sign area greater than 10 sq. ft. or A=48"-60"
3- POST A = greater than 60"

TYPICAL INSTALLATION

Not to Scale

FLANGED CHANNEL: 1-POST INSTALLATION							
Post Size	A x B x H (Factor)	H = Ground Level to Midpoint (ft.)					
		7	8	9	10	11	12
2.50 lbs./ft.	57	8.14	7.13	6.33	5.70	5.18	4.75
4.00 lbs./ft.	112	-	-	-	-	-	9.33

A x B (Area, sq. ft.)

FLANGED CHANNEL: 2-POST INSTALLATION							
Post Size	A x B x H (Factor)	H = Ground Level to Midpoint (ft.)					
		7	8	9	10	11	12
2.50 lbs./ft.	124	17.71	15.50	13.77	12.40	11.27	10.33
4.00 lbs./ft.	241	34.43	30.13	26.78	24.10	21.91	20.08

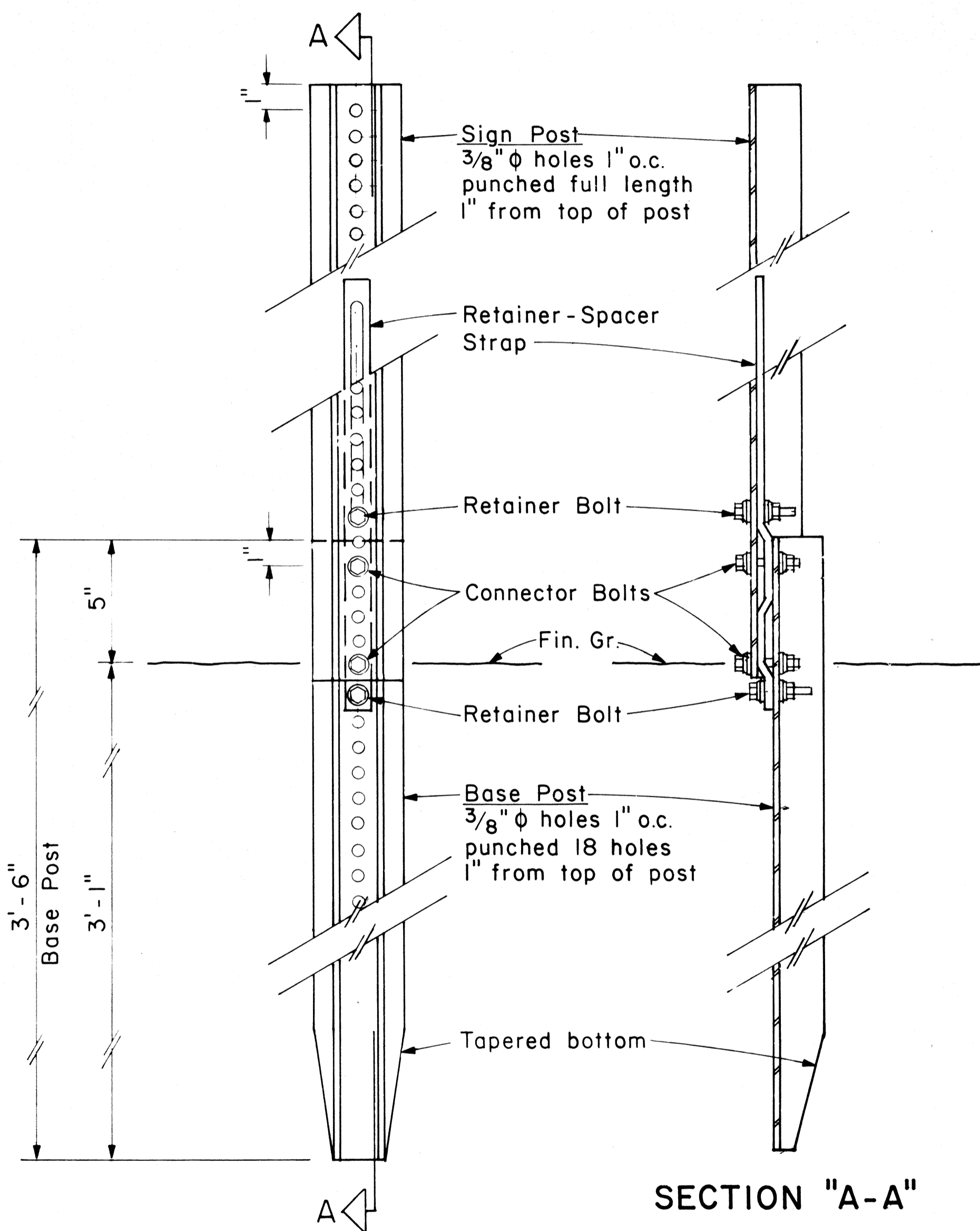
A x B (Area, sq. ft.)

FLANGED CHANNEL: 3-POST INSTALLATION							
Post Size	A x B x H (Factor)	H = Ground Level to Midpoint (ft.)					
		7	8	9	10	11	12
2.50 lbs./ft.	187	26.71	23.38	20.78	18.70	17.00	15.58
4.00 lbs./ft.	362	51.71	45.25	40.22	36.20	32.91	30.17

A x B (Area, sq. ft.)

WINDLOAD CHARTS

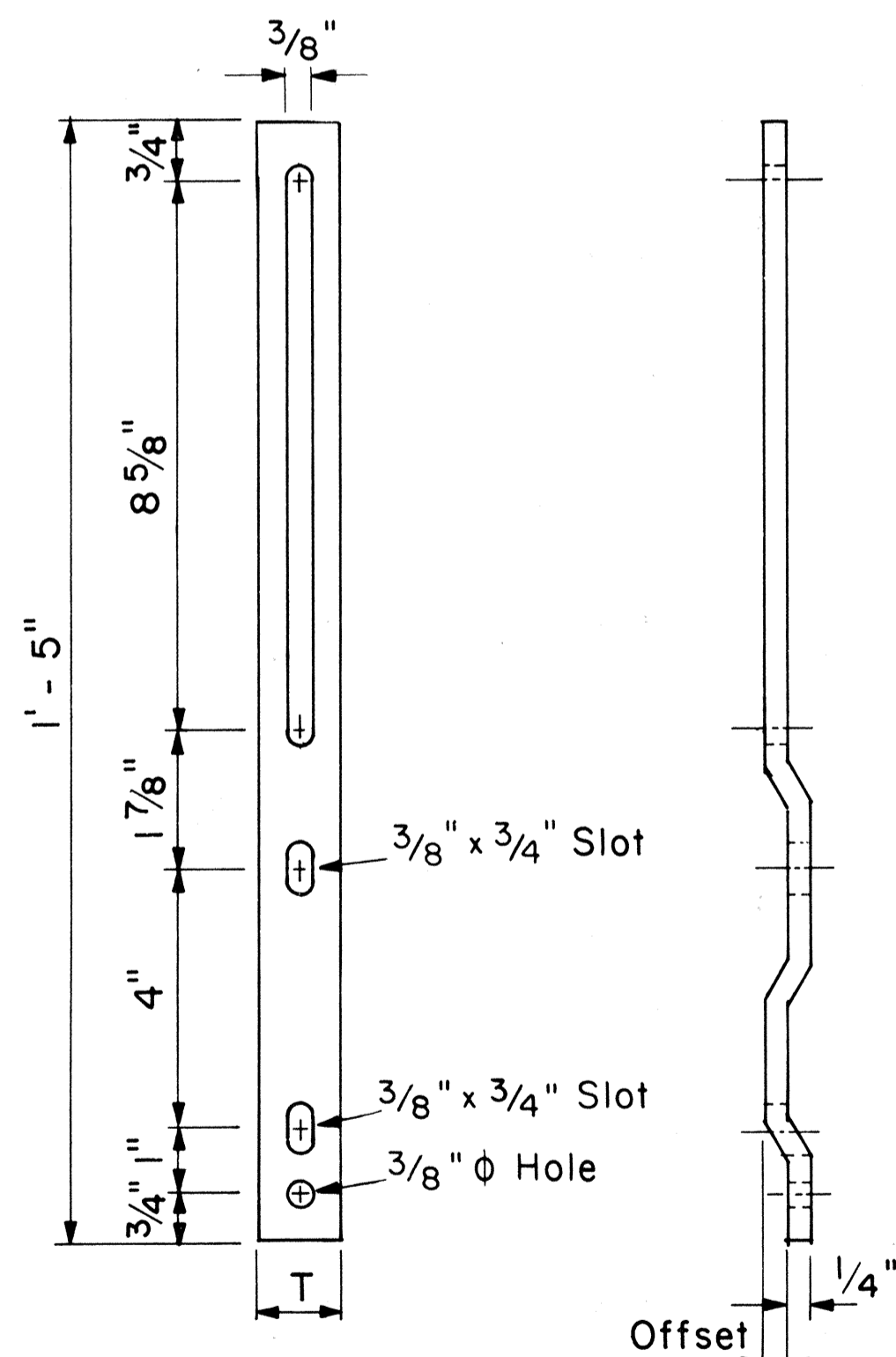
NO.	REVISION	APPROVED BY	DATE



BACK VIEW

ANCHOR BASE DETAIL

Scale: 3" = 1'-0"

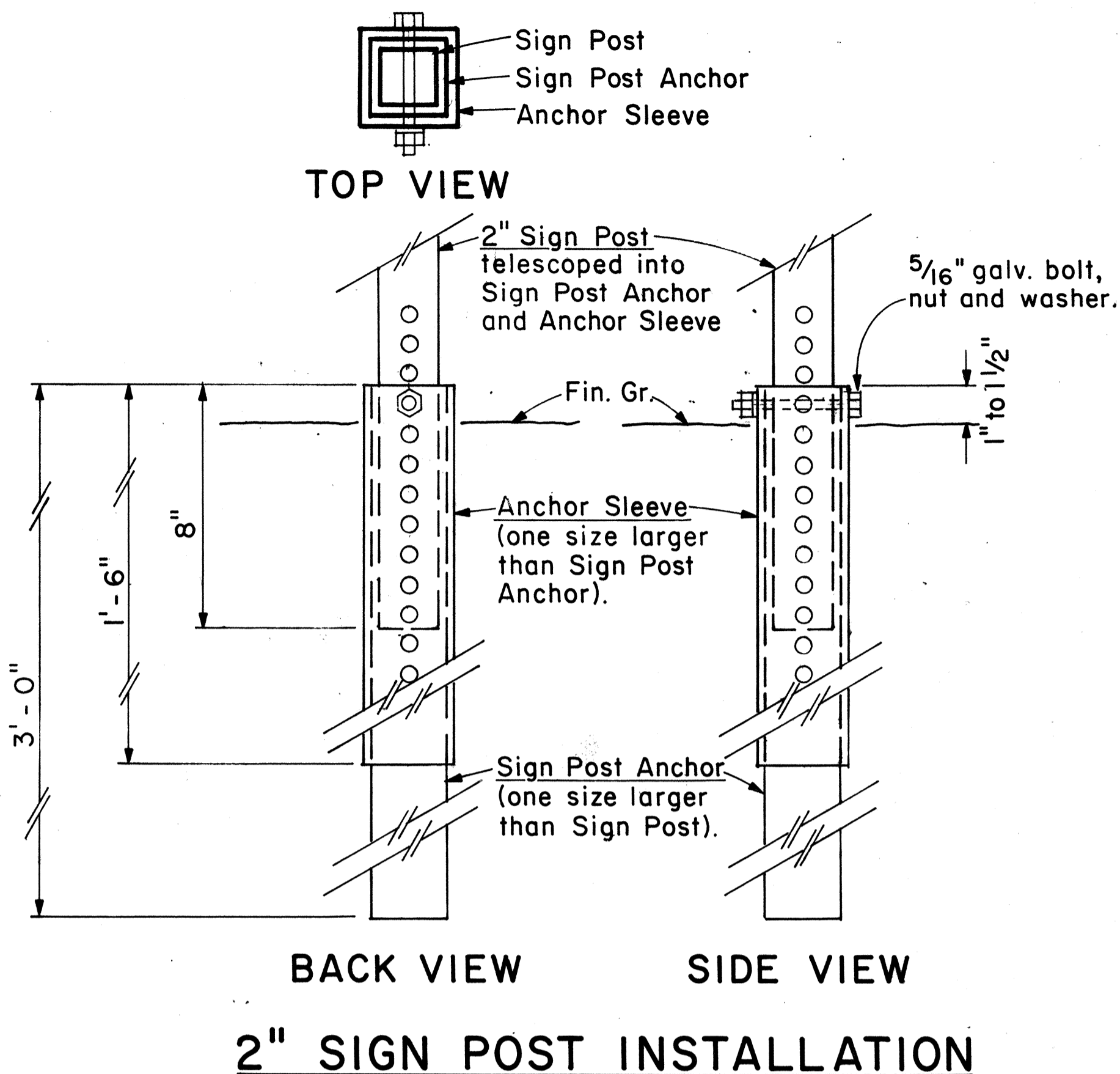


RETAINER-SPACER STRAP

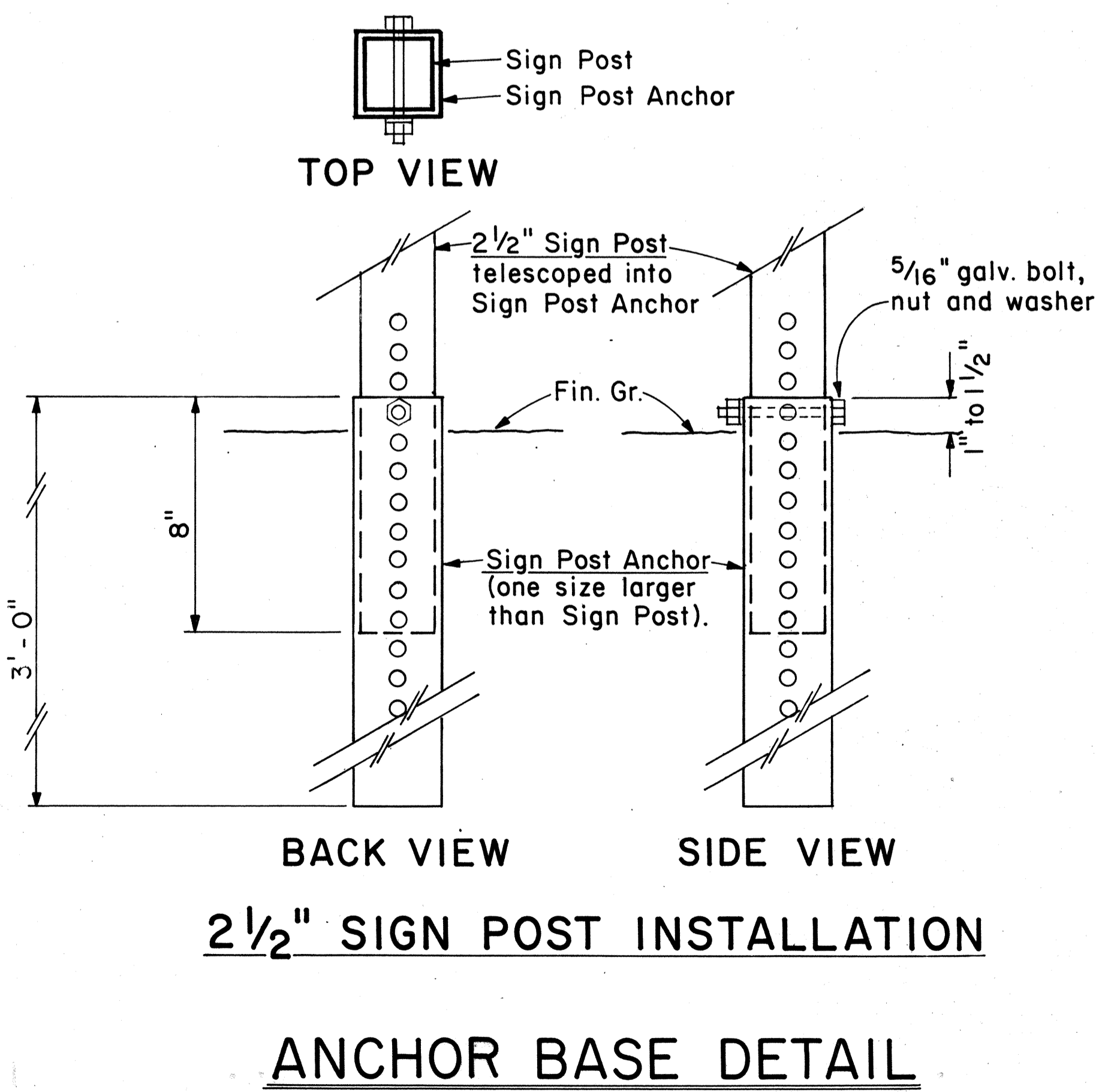
Not to Scale

Post Size	T	Offset
2.50 lbs./ft.	1.00"	0.145"
4.00 lbs./ft.	1.12"	0.280"

SURVEY PLOTTED BY: _____ DATE: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____
 ORIGINAL PLAN No. _____
 NOTE BOOK No. _____



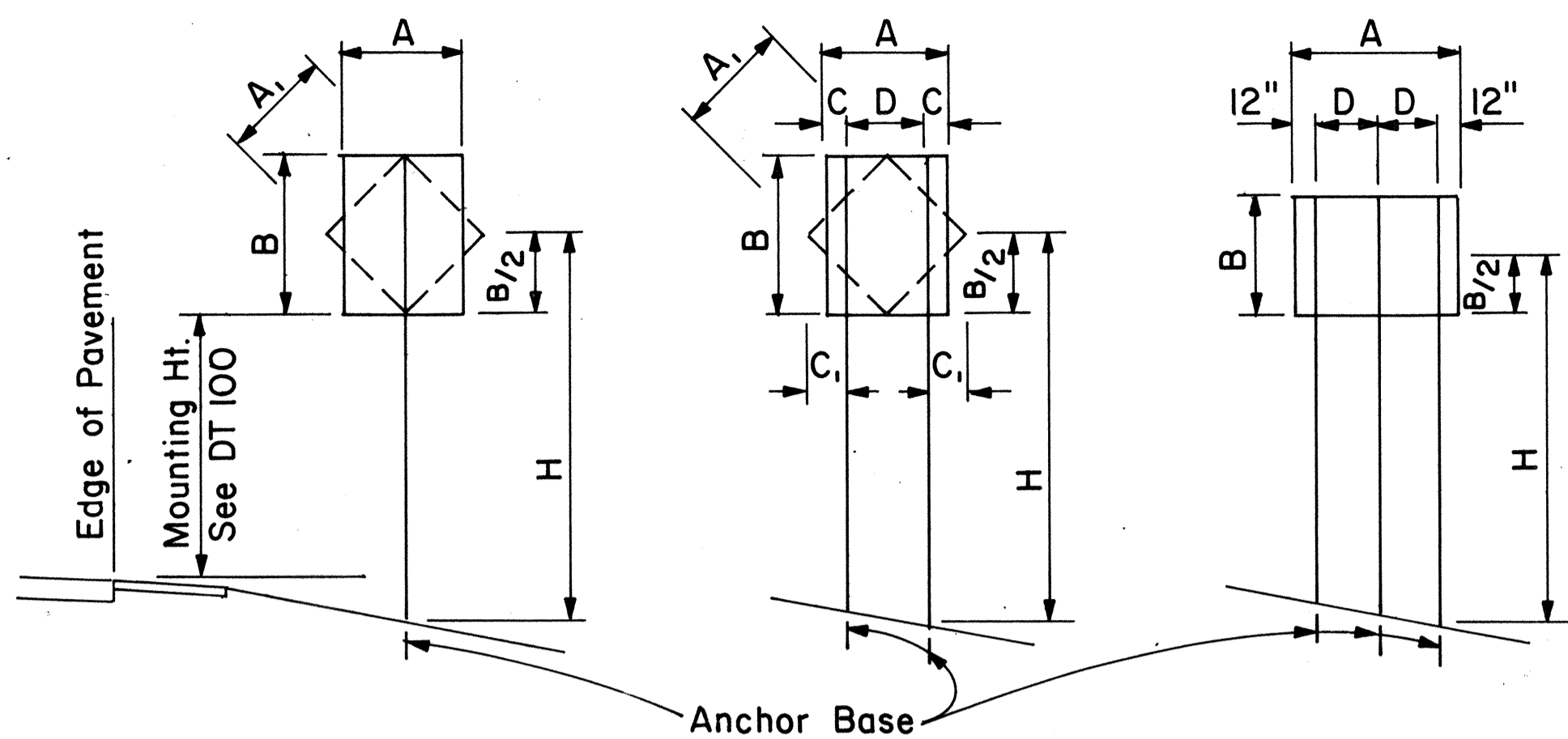
2" SIGN POST INSTALLATION



2 1/2" SIGN POST INSTALLATION

ANCHOR BASE DETAIL

Scale: 3" = 1'-0"



1 - POST Sign area 10 sq. ft. and less
2 - POST Sign area greater than 10 sq. ft. or A = 48" - 60"
3 - POST A = greater than 60"

TYPICAL INSTALLATION
Not to Scale

SQUARE TUBE: 1- POST INSTALLATION

Post Size	A x B x H (Factor)	H = Ground Level to Midpoint (ft.)						A x B (Area, sq. ft.)
		7	8	9	10	11	12	
2"	62	8.8	7.7	6.8	6.1	5.6	4.8	
2 1/2"	107	-	-	-	-	9.6	8.8	

SQUARE TUBE: 2- POST INSTALLATION

Post Size	A x B x H (Factor)	H = Ground Level to Midpoint (ft.)						A x B (Area, sq. ft.)
		7	8	9	10	11	12	
2"	122	17.4	15.2	13.5	12.2	11.0	10.1	
2 1/2"	212	30.2	26.5	23.5	21.1	19.2	17.6	
2 1/2", 10 ga.	260	37.0	32.0	28.6	26.0	23.5	21.5	

SQUARE TUBE: 3- POST INSTALLATION

Post Size	A x B x H (Factor)	H = Ground Level to Midpoint (ft.)						A x B (Area, sq. ft.)
		7	8	9	10	11	12	
2"	183	26.0	22.8	20.3	18.2	16.6	15.2	
2 1/2"	318	45.4	39.5	35.2	31.5	28.8	26.5	
2 1/2", 10 ga.	388	55.0	48.5	43.0	38.5	35.0	32.0	

WINDLOAD CHARTS

A or A,	C	C,
36"	6"	-
48"	9"	19"
60"	12"	24"

NOTE: Frame stiffeners are required when D is greater than 24". See Gen. Note 2.

GENERAL NOTES

- Square tube sign posts shall conform to Subsection 713.11(C) Square Tube Posts of the Specifications.
- All accessories, fittings and stiffener details (as required) shall be submitted to Engineer for approval 20 days prior to installation.
- Square tube posts shall be perforated with 7/16" φ holes, 1" o.c., 4 sides, along entire length of post.
- All posts shall be 12 gage unless otherwise specified or shown on the plans.
- For additional details see sht. DT 100.
- Basic formulas for use with the windload charts:
 $Factor = A \times B \times H$
Therefore, if sign area (A x B) is known,
 $Maximum\ H = \frac{Factor}{sign\ area\ (A \times B)}$
and if H is known,
 $Maximum\ sign\ area\ (A \times B) = \frac{Factor}{H}$

APPROVAL RECOMMENDED:
Eishi Tanaka 9/21/82
TRAFFIC ENGINEER DATE
APPROVED:
Robert Salzishi 9/22/82
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
GALVANIZED SQUARE TUBE
SIGN POST MOUNTING

Scale: As Shown Date: Sept. 1982
SHEET No. OF SHEETS DT100B

DATE: _____
SURVEY PLOTTED BY: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____
NOTE BOOK QUANTITIES BY: _____
ORIGINAL PLAN No. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	94	244

SUMMARY OF DESTINATION SIGNS		
SIGN NO.	MESSAGE	AREA (SQ.FT.)
D-1	EXIT	18.00
D-2	EWA BEACH, PUULOA	51.75
D-3	WAIPAHAU, HONOLULU	49.50
D-4	EWA, WAIPAHAU, HONOLULU	82.50
D-5	HONOLULU, EWA BEACH	63.25
D-6	EWA, EWA BEACH, PUULOA	86.25
D-7	WAIANAIE, EWA BEACH	63.25
TOTAL		182.50

NIC
NIC
NIC

SUMMARY OF REFLECTOR MARKERS								
SHEET NO.	RM-1 CLEAR		RM-2 AMBER		RM-3 AMBER		RM-9 AMBER	
	W/POST	W/O POST	W/POST	W/O POST	W/POST	W/O POST	W/POST	W/O POST
1	-	-	32	6	-	-	1	-
2	8	-	25	3	-	-	1	-
3	10	-	-	-	-	-	-	-
4	10	-	-	3	4	-	-	-
5	8	-	18	4	-	-	-	-
6	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-
8	7	-	3	-	-	-	-	-
9	4	-	10	3	-	-	-	-
TOTAL	49	2	75	24	4	-	2	-

NIC
NIC

NOTES

- Sign message shall conform to the modified Series "E" upper and lower case letters as shown in the "Standard Alphabets for Highway Signs", Bureau of Public Roads, 1966.
- Route Markers and Borders shall conform with details as shown on the Plans.
- ~~Cut-outs shall be fastened to sign panel with aluminum blind rivets.~~
- All sign footings to be type VI, except where noted otherwise.
- See Standard Details for Spacing Layout of Raised Pavement Markers.
- Refer to respective Standard Detail Sheets for all Data pertaining to Regulatory and Warning Standard Signs.
- Unless noted otherwise, exact location of traffic signs shall be determined in the field by the Engineer.
- Additional Sign Face Details of Destination Signs are shown on Sheet No. 93.
- Contractor shall maintain all signs in good condition until Completion of Project.
- Construction warning and speed reduction signs on Ft. Weaver Road placed under previous Contract M-7600(1) are to be relocated upon completion of previous Contract as directed by the Engineer. Such relocations are to be considered incidental to construction.
- All signs to be covered with polyethylene sheeting until completion of construction or until the applicable segment of roadway has been opened to traffic. Furnishing and maintaining sign covers shall be incidental to signs.

SUMMARY OF WARNING SIGNS			
TYPE	MESSAGE	QUANTITY	
		W/POST	W/O POST
W2-1	INTERSECTION (GRAPHIC)	5	-
W2-2	INTERSECTION (GRAPHIC)	1	-
W4-1(R)	MERGE	5	-
W13-3(30)	RAMP 30 MPH	2	-
W3-1-A	STOP AHEAD	1	-
W1-2(R)	RIGHT ARROW (GRAPHIC)	1	-
W13-2(30)	EXIT 30 MPH	1	-
W11-1	BIKE XING	2	-
TOTAL		18	0

SUMMARY OF RAISED PAVEMENT MARKERS				
SHEET NO.	QUANTITY			
	TYPE A	TYPE C	TYPE D	TYPE H
1	20	31	-	45
2	320	144	-	100
3	408	101	-	80
4	320	81	-	80
5	378	152	12	78
6	-	-	32	-
7	40	10	-	10
8	252	84	-	80
9	364	122	11	87
TOTAL	1486	519	44	560

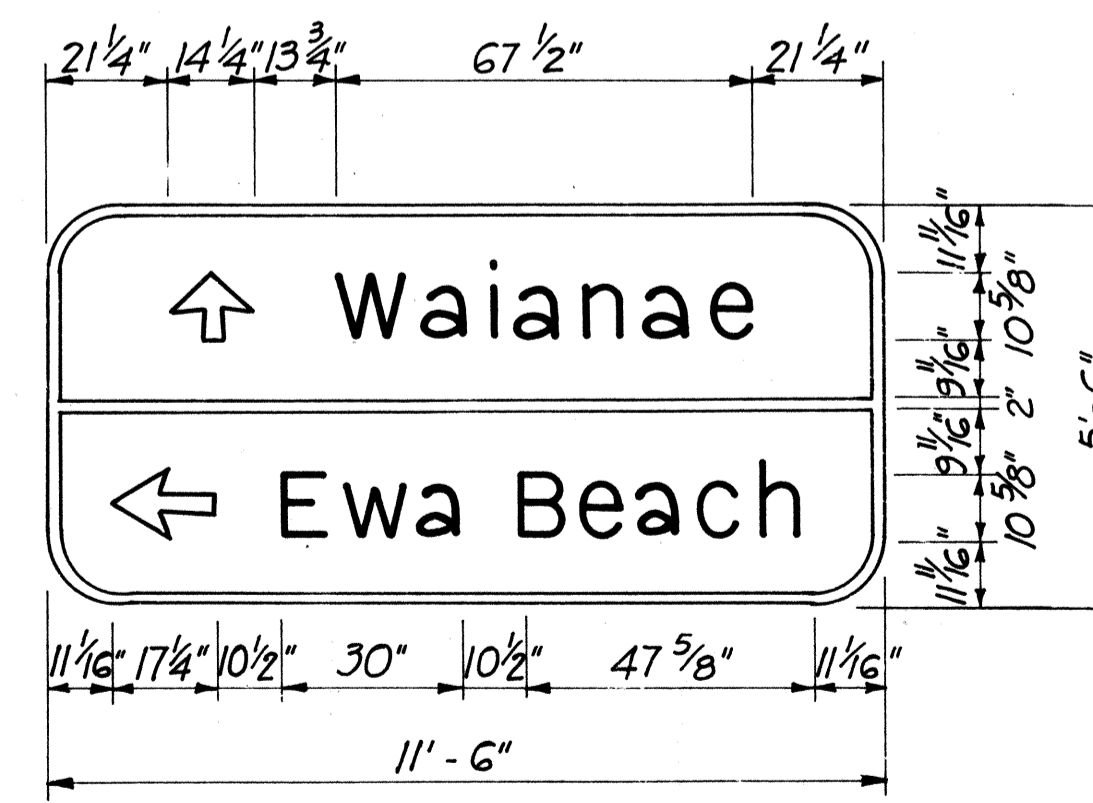
NIC
NIC

BARRICADE NOTES

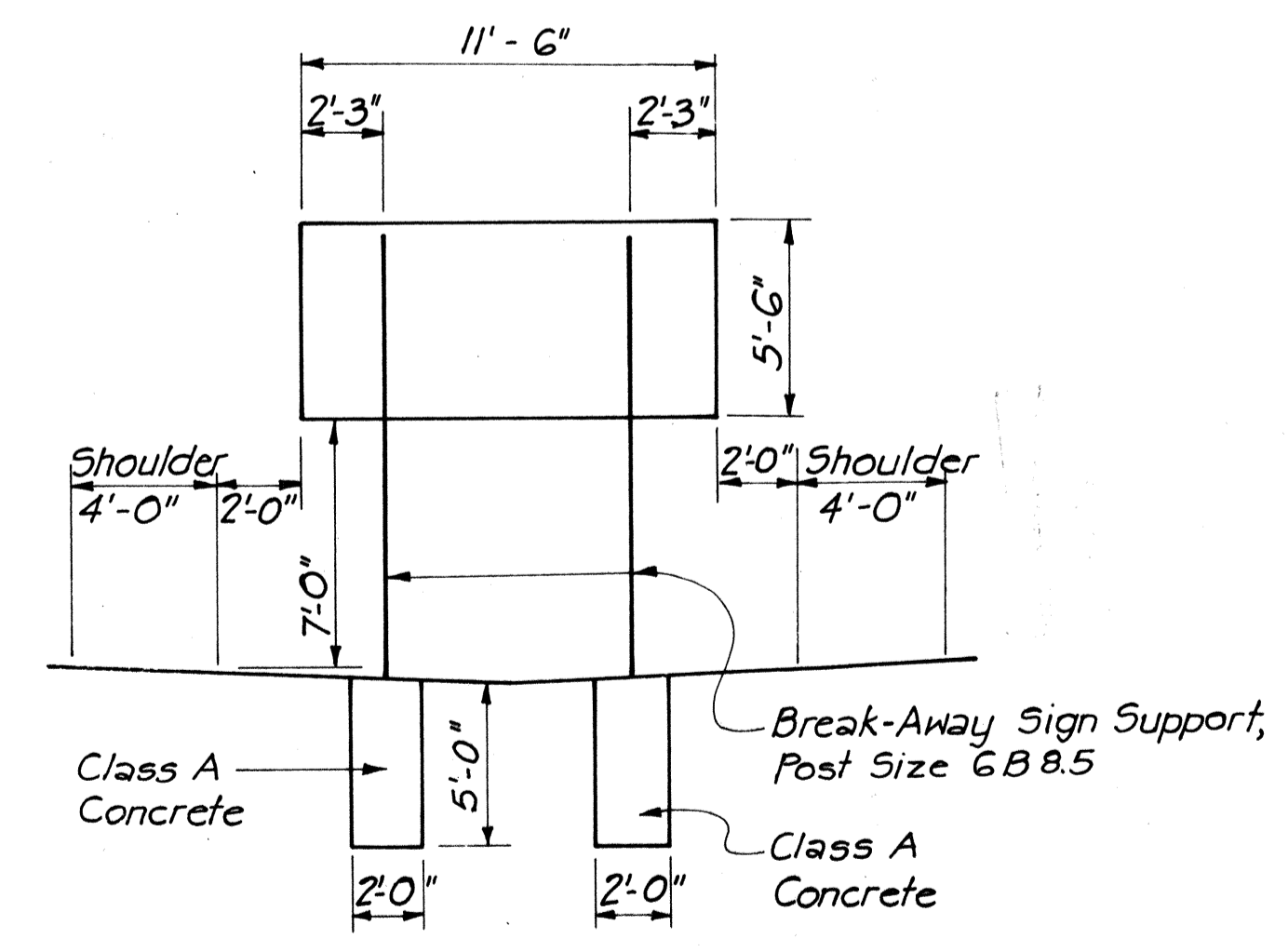
- The Contractor shall construct, install and maintain the barricades at the locations shown on the plans.
- The barricades shall be left in place or relocated upon completion of the project as ordered by the Engineer and are to become State property, unless otherwise specified.
- The orange and white stripes shall slant downward toward the side on which traffic is to pass and shall be reflectorized with reflective sheeting.
- Both faces of the barricade rails shall be striped. See "Striping Detail Arrangement".
- Contractor may submit alternate designs for approval.
- Barricade details shall conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways", 1978, by the Federal Highway Administration and as amended.
- If wooden rails are used, 26 gauge galvanized steel sheet shall be first tacked on to the rails and then over laid with reflective sheeting.

SUMMARY OF REGULATORY SIGNS			
TYPE	MESSAGE	QUANTITY	
		W/POST	W/O POST
R11-1	KEEP OFF MEDIAN	4	4
R2-1(45)	SPEED LIMIT 45 MPH	6	-
R3-4	NO U TURN	1	2
R1-1	STOP	8	-
R4-7b	KEEP RIGHT	-	2
R3-3	NO TURNS	6	-
R3-2	NO LEFT TURN	1	-
R3-7(L)	LEFT LANE MUST TURN LEFT	1	-
R1-2	YIELD	1	-
R17-1	ON LEFT ARROW ONLY	1	-
R17-3	ON LEFT ARROW ONLY	1	-
TOTAL		21	8

NIC
NIC
NIC
NIC

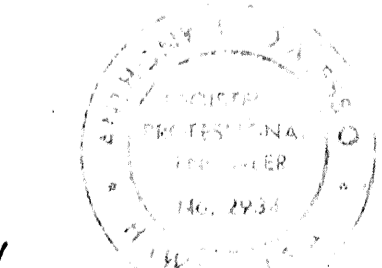


D-7



ELEVATION D-7
Farrington Hwy. Sta. 39+08 E
Scale: 1" = 5'

NOTE: For Reinforcing Steel in Sign Footing, See Sheet No. 105



6/6/80	Added to Note No. 11, per Addendum No. 1.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
SIGN FACE AND MOUNTING DETAILS SIGNING SUMMARIES	
FORT WEAVER ROAD SOUTH OF FARRINGTON HIGHWAY TO THE VICINITY OF RENTON ROAD	
SCALE:	DATE: SEPT 1979
SHEET NO. 2 OF 2 SHEETS	

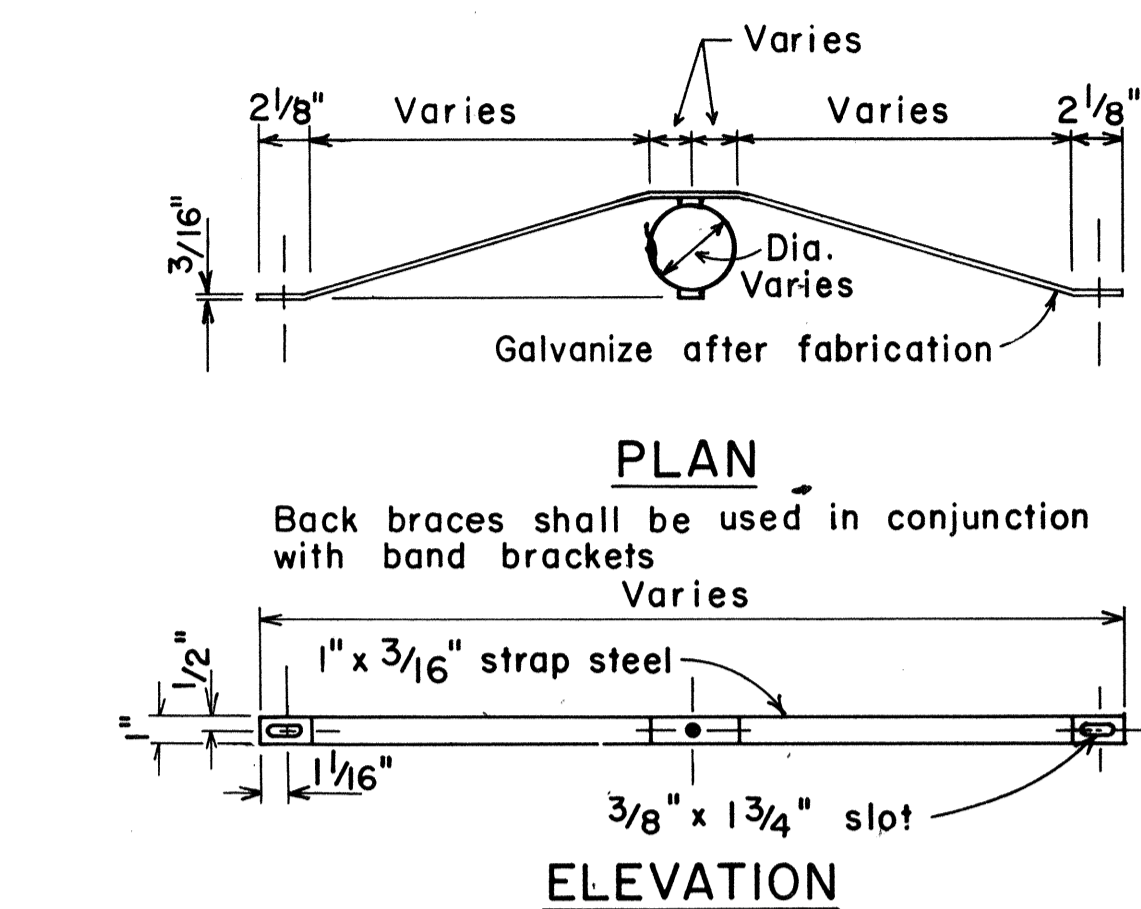
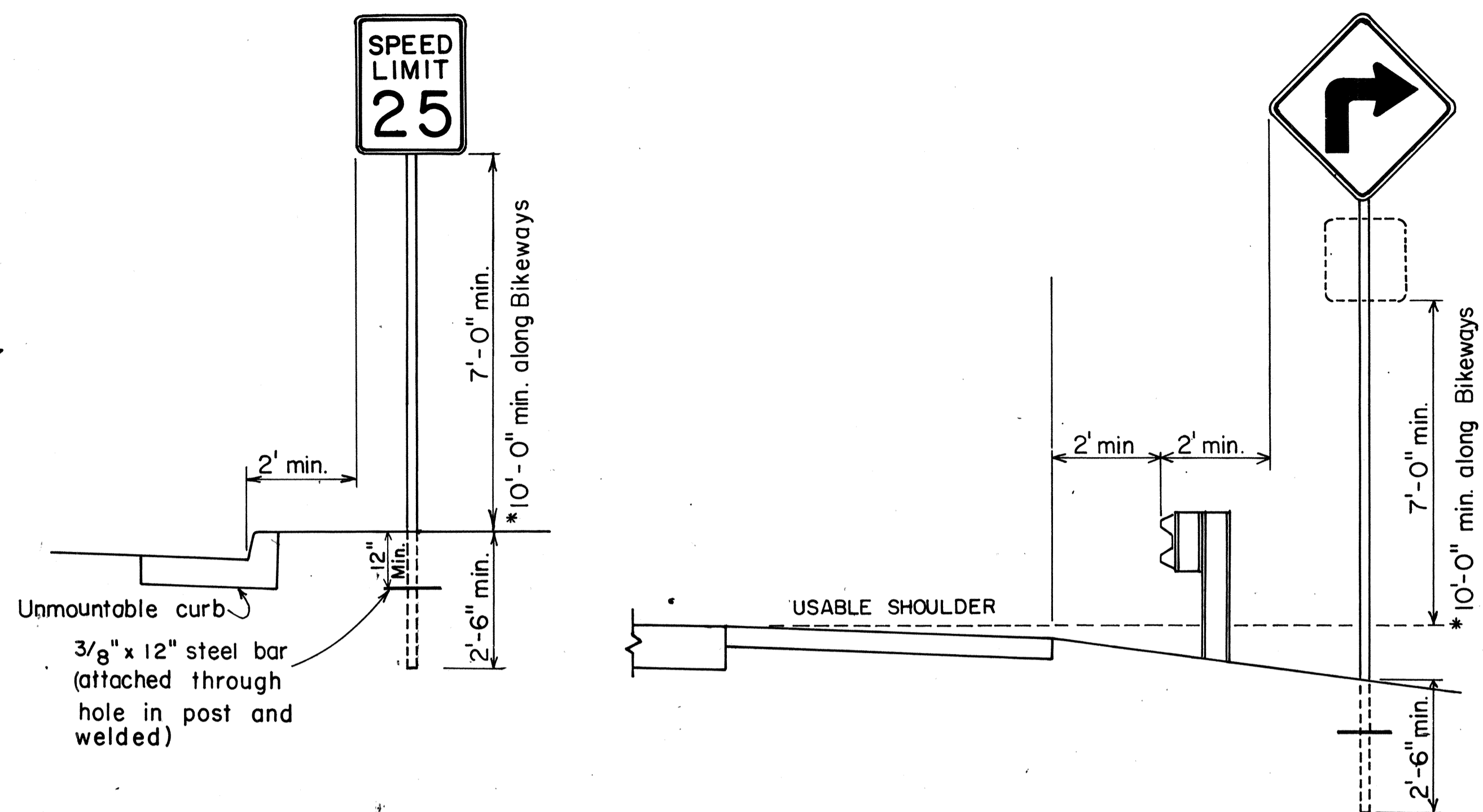
DATE: _____
 SURVEY PLOTTED BY: _____
 ORIGINAL DRAWN BY: _____
 TRACED BY: _____
 NOTE BOOK DESIGNED BY: _____
 NO. CHECKED BY: _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	95	244

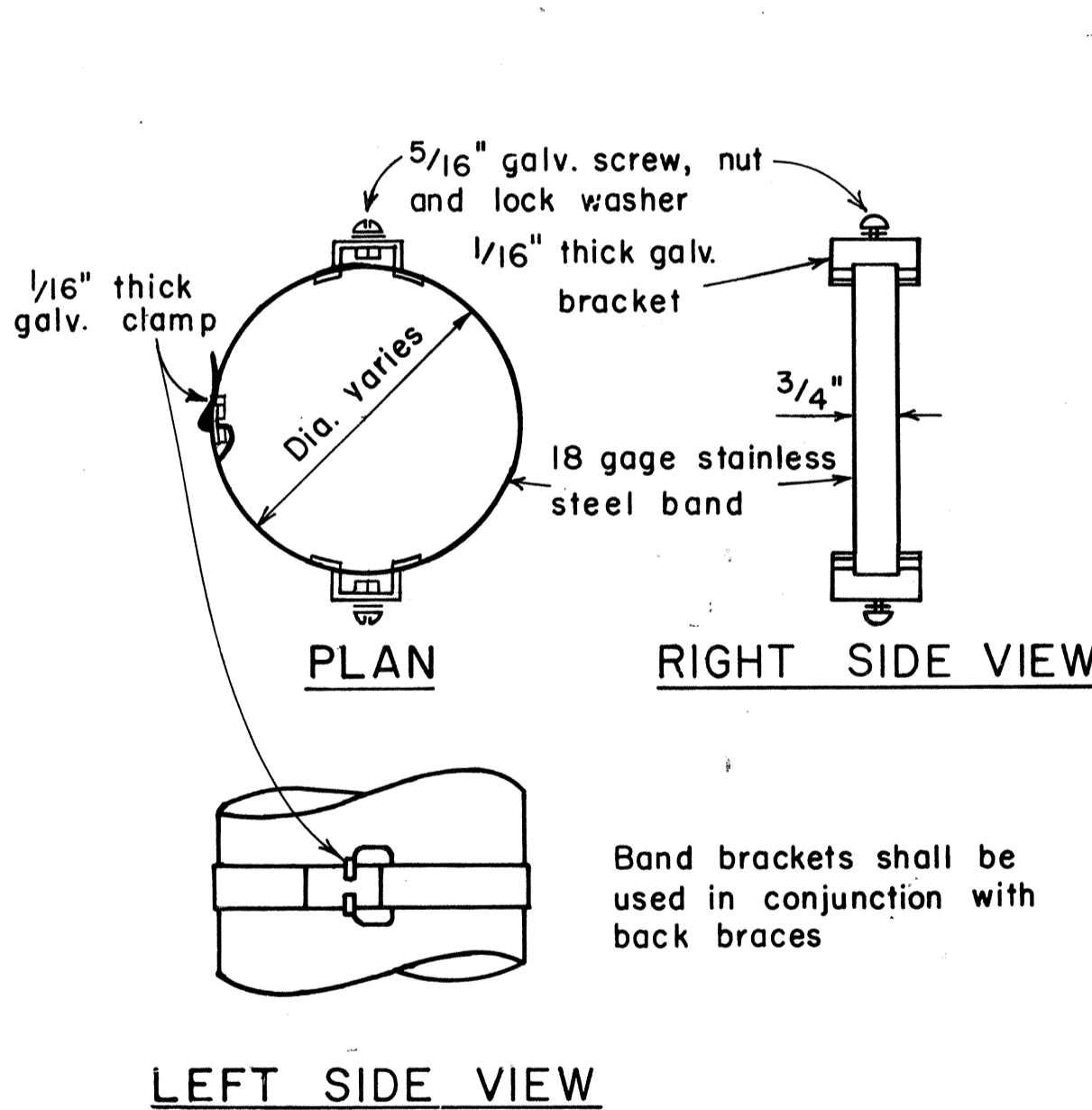
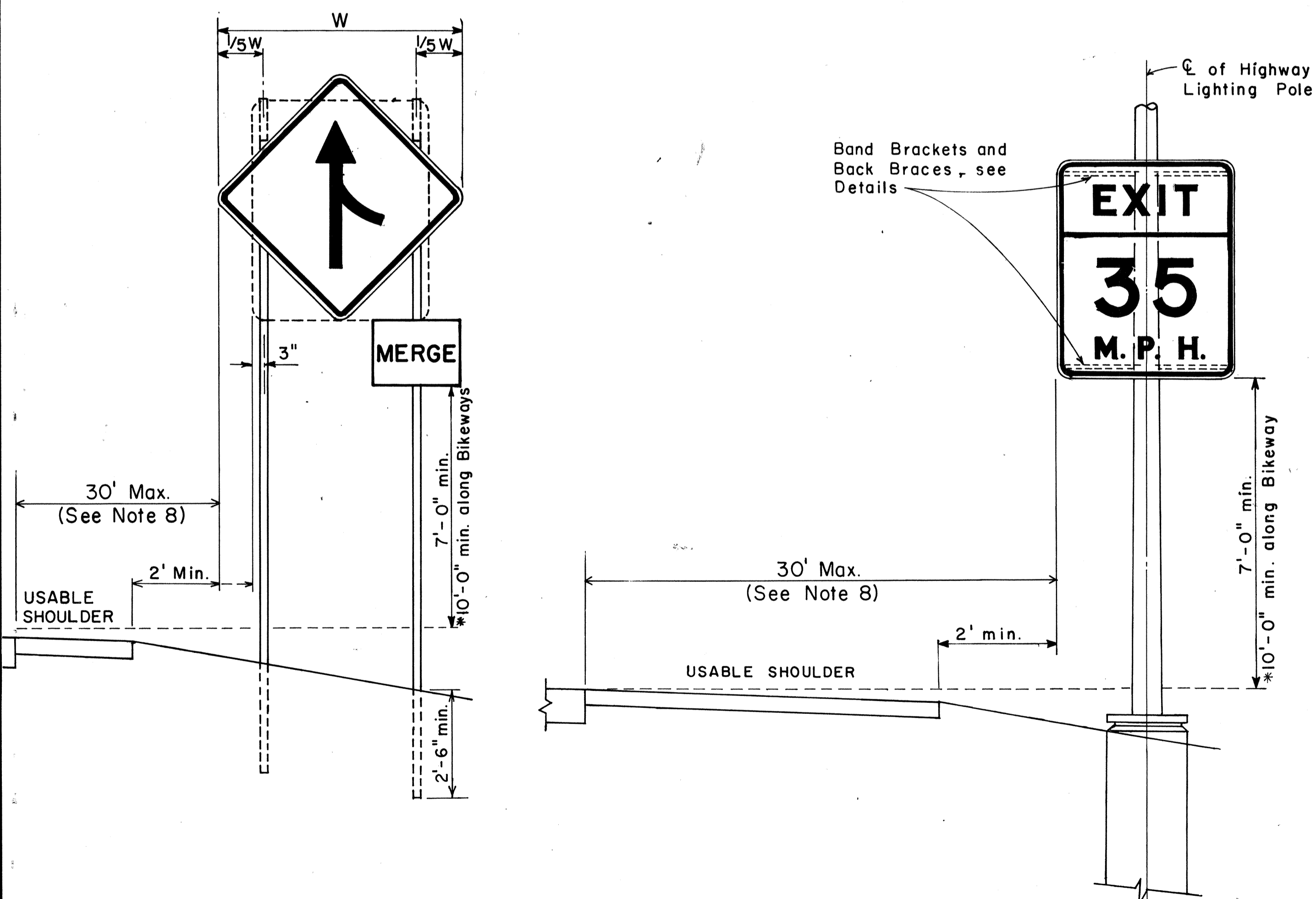
GENERAL NOTES

- Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two sign posts.
- All signs larger than 10 sq. ft. in area or 48" inches and wider, and mounted on other than two posts supports (i.e., on highway lighting poles) shall have at least two sets of band brackets and back braces.
- All signs 28 sq. ft. in area or larger and mounted on other than two posts supports (i.e., on highway lighting poles) shall have at least three sets of band brackets and back braces.
- All parking restriction signs with arrows shall be mounted 45° to the line of traffic flow.
- Sign posts shall extend 3/2" above sign where required for City and County street name signs.
- (R) or (L) indicates right or left and shall be as shown on the plans.
- See plans for special details.
- When clear roadside recovery areas are provided, Signs shall be placed as far from the edge of traveled way as possible up to a maximum of 30 feet. When possible they shall be placed in protected locations.
- Signs in medians shall be placed at midpoint of median up to a maximum distance of 30 feet from the edge of traveled way. When appropriate, signs for opposing directions shall be placed back to back.

NOTE:
2" GALVANIZED POST AND/OR 2"x2" SQUARE TUBING TO BE SUBSTITUTED BY EZE-ERECT SIGN SUPPORT SYSTEM. THE EZE-ERECT SIGN POST TO BE USED IS THE 2.5 LB/FT. AND 4.0 LB/FT.



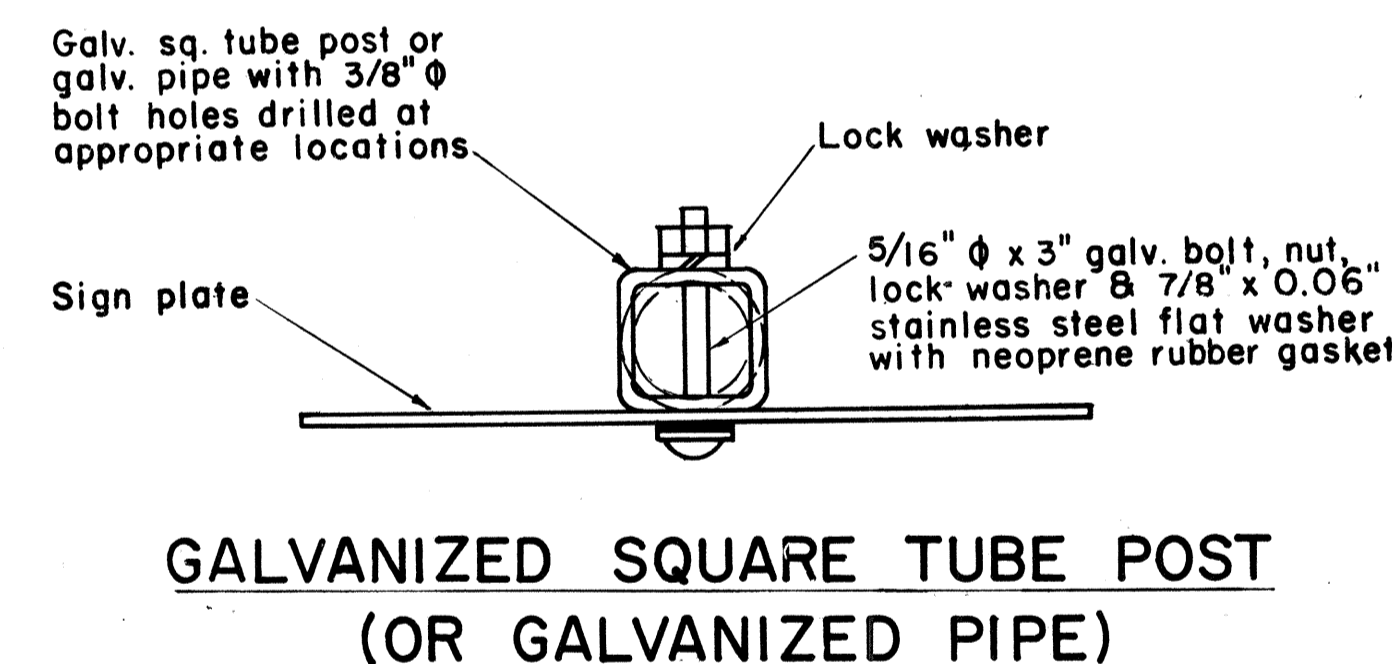
BACK BRACE DETAILS FOR BALANCED SIGN INSTALLATION



BAND BRACKET

TYPICAL MOUNTING DETAILS

NOT TO SCALE



APPROVAL RECOMMENDED:
Eishi Tanaka 11/10/77
TRAFFIC ENGINEER DATE

APPROVED:
Herbert S. Paleichis 11/15/77
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT-100 approved 12/30/69	H.T.	11/15/77
2	Revised depth of signpost	H.T.	5/3/79
3	Added Notes No. 8 & No. 9	H.T.	5/18/79
4	Revised Gen. Note # 4 & Mounting Details	H.T.	4/23/80

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

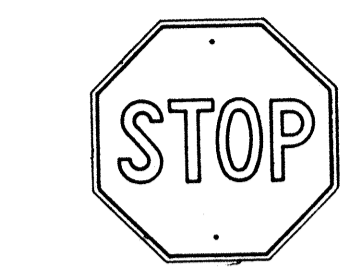
STANDARD DETAILS
MISCELLANEOUS SIGN DETAILS

Not to scale June, 1977

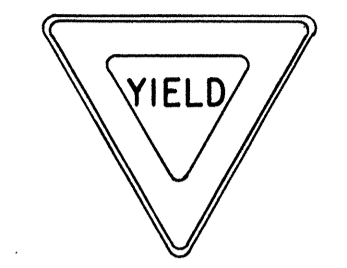
DATE
SURVEY PLOTTED BY
DRAWN BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY
No.

HEIGHT AND LATERAL LOCATION OF SIGNS TYPICAL INSTALLATION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	96	244



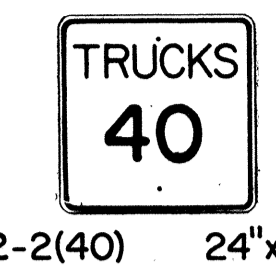
R1-1 30" x 30"
R1-1-A 36" x 36"
R1-3 12" x 6"
R1-3-A 18" x 9"



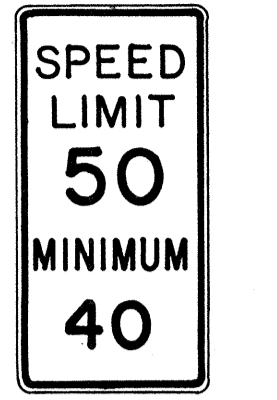
R1-2 36" x 36" x 36"
R1-2-A 48" x 48" x 48"



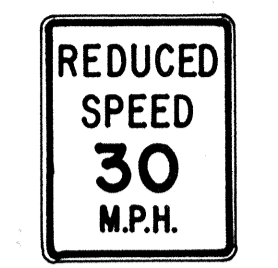
R2-1(50) 24" x 30"
R2-1(50)-A 48" x 60"



R2-2(40) 24" x 24"
R2-2(40)-A 48" x 48"



R2-4a(50/40) 24" x 48"
R2-4a(50/40)-A 48" x 96"



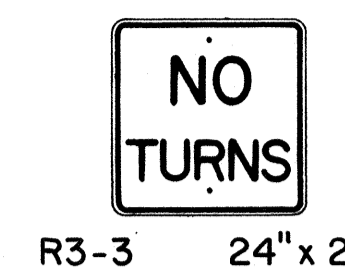
R2-5b(30) 24" x 30"
R2-5b(30)-A 48" x 60"



R3-1 24" x 24"
24" x 18"
R3-1-A 48" x 48"
48" x 36"



R3-2 24" x 24"
24" x 18"
R3-2-A 48" x 48"
48" x 36"



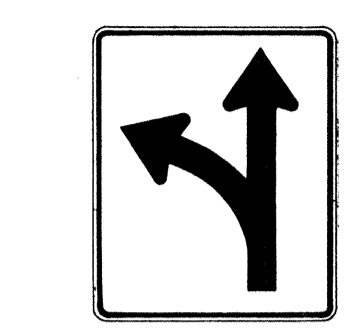
R3-3 24" x 24"
R3-3-A 48" x 48"



R3-4 24" x 24"
24" x 18"
R3-4-A 48" x 48"
48" x 36"



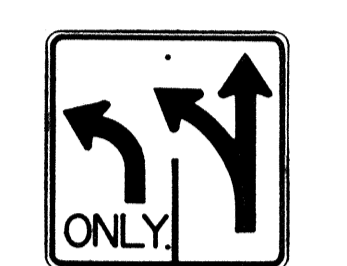
R3-5(L) 30" x 36"
R3-5(L)-A 48" x 60"



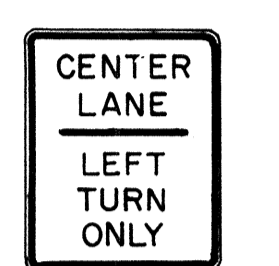
R3-6(L) 30" x 36"
R3-6(L)-A 48" x 60"



R3-7(R) 30" x 30"
R3-7(R)-A 48" x 48"



R3-8(L) 30" x 30"
R3-8(L)-A 36" x 36"
R3-8(L)-B 48" x 48"



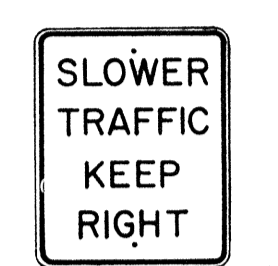
R3-9 24" x 30"



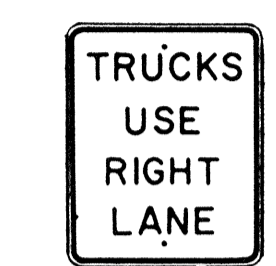
R4-1 24" x 30"



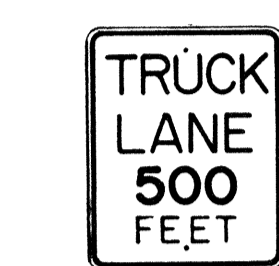
R4-2 24" x 30"



R4-3 24" x 30"
R4-3-A 48" x 60"



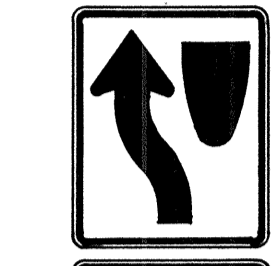
R4-5 24" x 30"



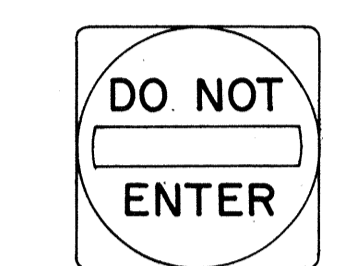
R4-6(500) 24" x 30"



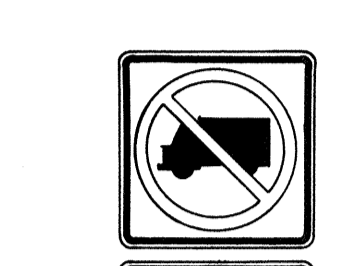
R4-7 24" x 30"
24" x 18"



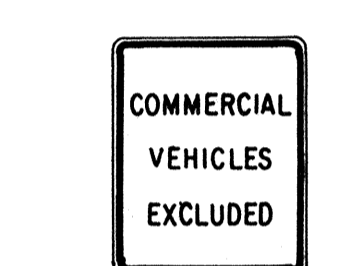
R4-8 24" x 30"
24" x 18"



R5-1 30" x 30"
R5-1-A 48" x 48"



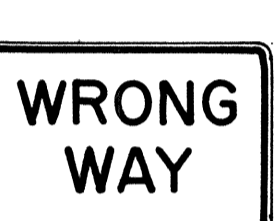
R5-2 24" x 24"
24" x 18"



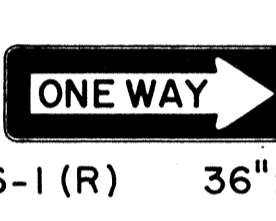
R5-4 24" x 30"



R5-6 24" x 24"
24" x 18"



R5-9 36" x 24"



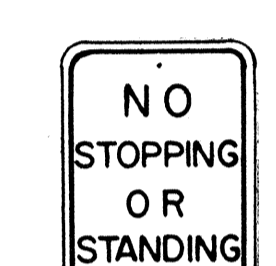
R6-1 (R) 36" x 12"



R6-2(R) 18" x 24"



R7-1 12" x 18"
R7-1-A 24" x 30"



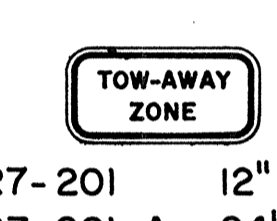
R7-4 12" x 18"
R7-4-A 24" x 30"



R7-1(7(R)) 12" x 18"



R7-108 12" x 18"



R7-201 12" x 6"
R7-201-A 24" x 12"



R8-1 24" x 30"



R8-2 24" x 30"



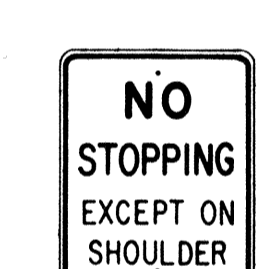
R8-3 24" x 30"



R8-4 30" x 24"
R8-4-A 48" x 36"



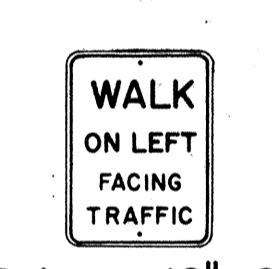
R8-5 24" x 30"



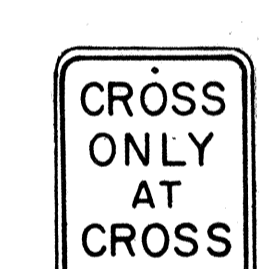
R8-6 24" x 30"



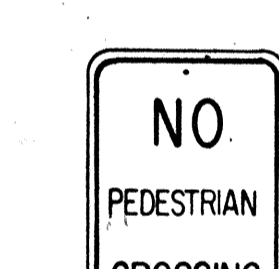
R8-7 30" x 24"
R8-7-A 48" x 36"



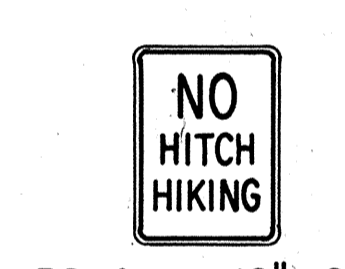
R9-1 18" x 24"



R9-2 12" x 18"



R9-3 12" x 18"



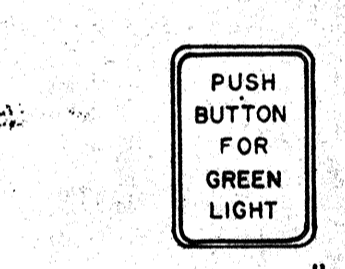
R9-4 18" x 24"



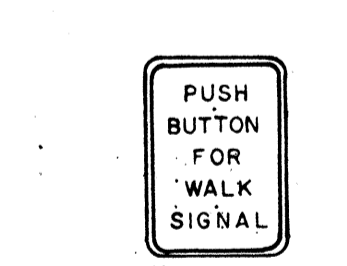
R10-1 12" x 18"



R10-2 12" x 18"



R10-3 9" x 12"



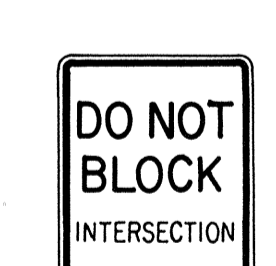
R10-4 9" x 12"



R10-5 24" x 30"



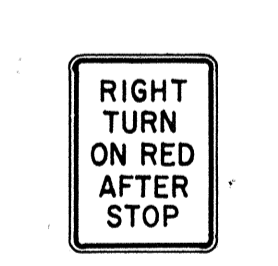
R10-6 24" x 36"



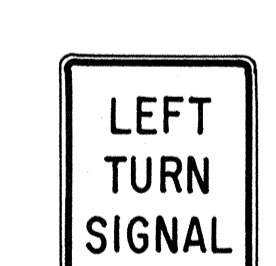
R10-7 24" x 30"



R10-8 24" x 30"



R10-9 24" x 30"



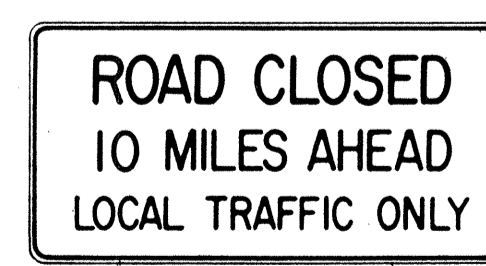
R10-10 24" x 30"



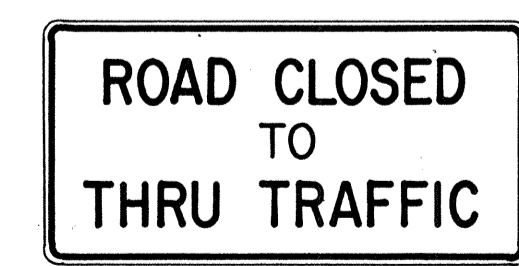
R11-1 24" x 30"



R11-2 48" x 30"



R11-3(10) 60" x 30"



R11-4 60" x 30"



R12-1(10) 24" x 30"

GENERAL NOTES

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All regulatory signs shall be reflectorized unless otherwise specified.
- All regulatory signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- All signs shall be erected without educational plaques unless called for in the plans.

APPROVAL RECOMMENDED:
Etsuki Tanaka 3/17/72
TRAFFIC ENGINEER DATE

APPROVED:
Robert Zabin 3-26-72
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 101 Approved 12-30-69	H.T.	3/20/72
2	Revised General Note 1.	H.T.	10/10/74
3	Added General Note 5	H.T.	6/9/79

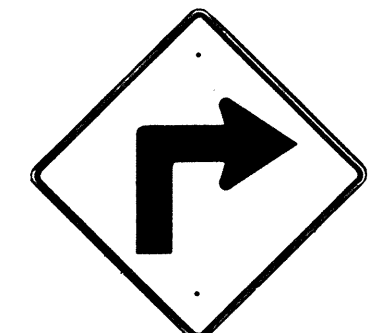
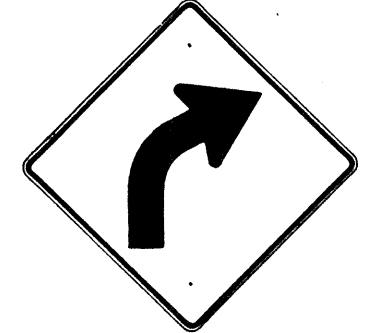
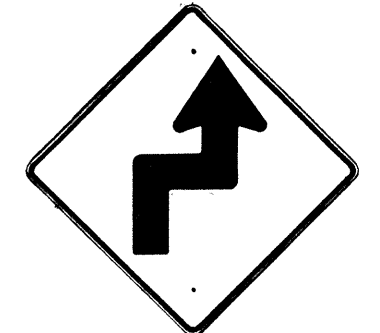
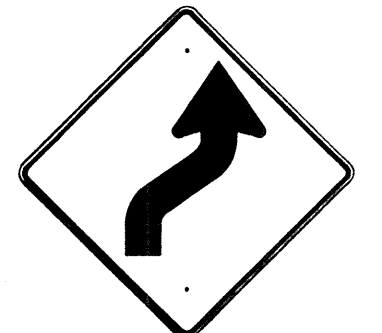
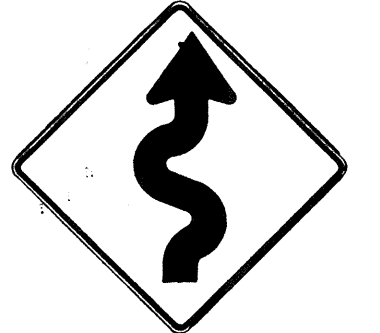
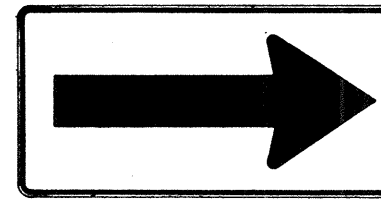
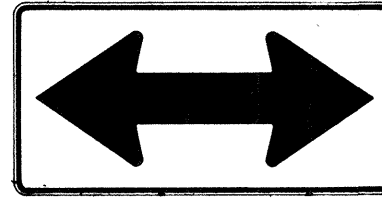
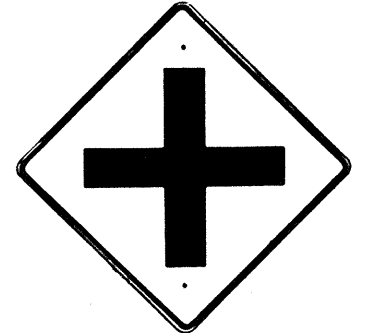
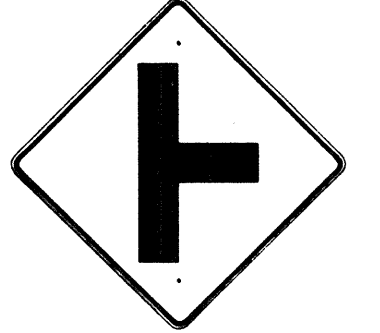
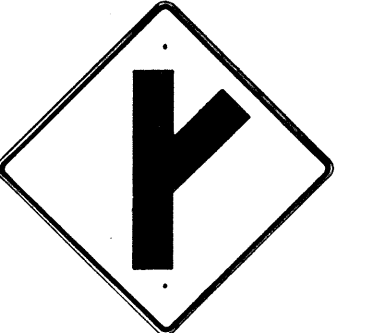
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

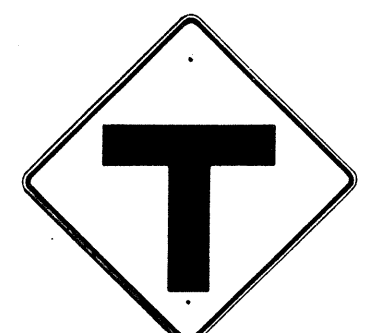
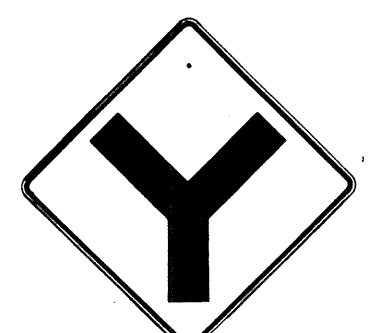


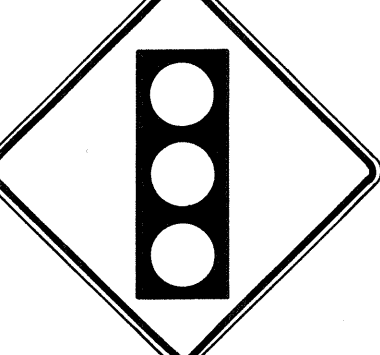

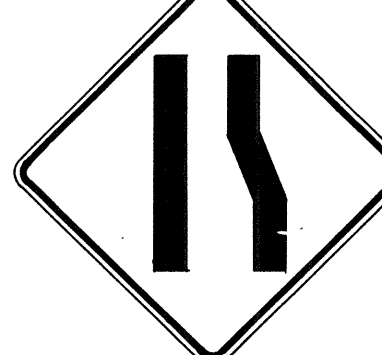



STANDARD DETAILS
REGULATORY SIGNS


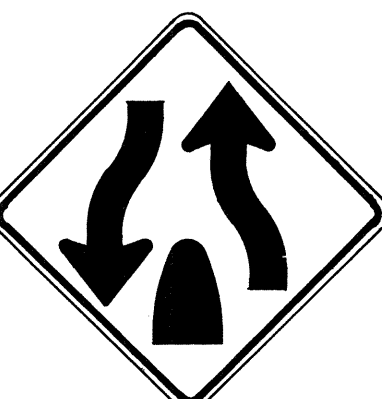
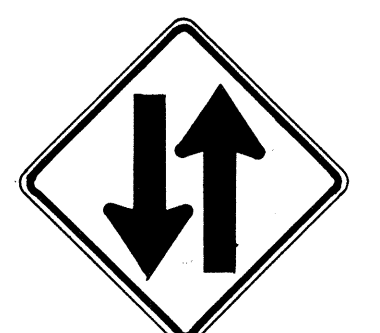







NOT TO SCALE
SHEET No. 2 OF 18 SHEETS DT 101



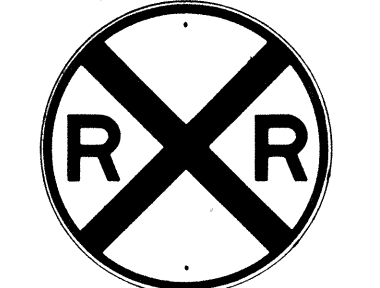




DATE _____
SURVEY PLOTTED BY _____
DRAWN BY _____
CHECKED BY _____
QUANTITIES BY _____
NOTE BOOK No. _____

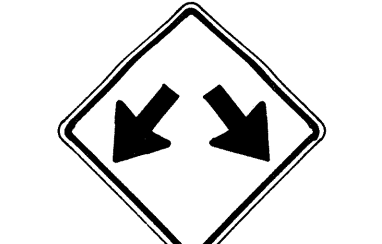


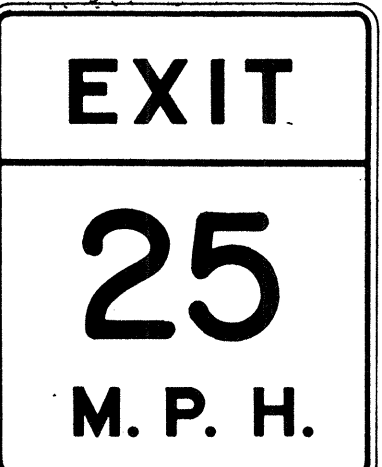
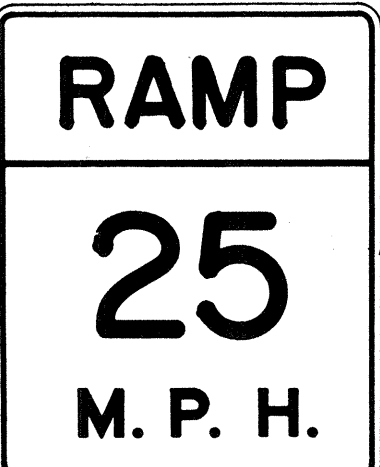


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII*	HAW.	M-7600(2)	1980	97	244

 W1-1(R) 30"x30" W1-1(R)-A 48"x48"	 W1-2(R) 30"x30" W1-2(R)-A 48"x48"	 W1-3(R) 30"x30" W1-3(R)-A 48"x48"	 W1-4(R) 30"x30" W1-4(R)-A 48"x48"	 W1-5(R) 30"x30" W1-5(R)-A 48"x48"	 W1-6 48"x24"	 W1-7 48"x24"	 W2-1 30"x30" W2-1-A 48"x48"	 W2-2 30"x30" W2-2-A 48"x48"	 W2-3(R) 30"x30" W2-3(R)-A 48"x48"
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 W2-4 30"x30" W2-4-A 48"x48"	 W2-5 30"x30" W2-5-A 48"x48"	 W3-1 30"x30" W3-1-A 36"x36"	 W3-2 30"x30" W3-2-A 36"x36"	 W3-3 36"x36" 24"x18"	 W4-1(R) 30"x30" 24"x18" W4-1(R)-A 48"x48" 24"x18"	 W4-2(R) 36"x36" W4-2(R)-A 48"x48"	 W5-1 36"x36"	 W5-2 30"x30" W5-2-A 36"x36"	 W5-3 36"x36"
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 W6-1 36"x36" 24"x18"	 W6-2 36"x36" 24"x18"	 W6-3 30"x30" 24"x18" W6-3-A 36"x36" 24"x18" W6-3-B 48"x48" 24"x18"	 W7-1 30"x30" 24"x18" W7-1-A 36"x36" 24"x18"	 W7-2 24"x18"	 W8-1 30"x30" W8-1-A 36"x36"	 W8-2 30"x30" W8-2-A 36"x36"	 W8-3 30"x30" W8-3-A 36"x36"	 W8-4 30"x30" W8-4-A 36"x36"	 W8-5 30"x30" 24"x18" W8-5-A 36"x36" 24"x18"
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 W9-1(R) 30"x30" W9-1(R)-A 36"x36" W9-1(R)-B 48"x48"	 W9-2(L) 36"x36" W9-2(L)-A 48"x48"	 W10-1 36" Diameter	 W11-1 30"x30" 24"x18" W11-1-A 36"x36" 24"x18"	 W11-2 30"x30" 24"x18" W11-2-A 36"x36" 24"x18"	 W11-4 30"x30" 24"x18" W11-4-A 36"x36" 24"x18"	 W11-5 30"x30" 24"x18" W11-5-A 36"x36" 24"x18"
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 W12-1 24"x24" W12-1-A 36"x36" W12-1-B 48"x48"	 W12-2(12'-6") 36"x36" 24"x18"	 W13-1(25) 18"x18" W13-1(25)-A 24"x24"	 W13-2(25) 48"x60"	 W13-3(25) 48"x60"	 W14-1 30"x30"	 W14-3 36"x48"x48"
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GENERAL NOTES

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All warning signs shall be reflectorized unless otherwise specified.
- All warning signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized.

APPROVAL RECOMMENDED:
Eiwa Tanaka 3/17/72
TRAFFIC ENGINEER DATE

APPROVED:
John R. Sisk 3-20-72
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	HT.	3/20/72
2	Revised General Note 1	HT.	10/10/72
3	Revised General Note 5	HT.	9-16-75
4	Revised General Note 5	HT.	9-14-76
5	Added Note 1	HT.	11-9-79

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
WARNING SIGNS

NOT TO SCALE
SHEET No. 3 OF 18 SHEETS DT 102

DATE _____
SURVEY PLOTTED BY _____
DRAWN BY _____
CHECKED BY _____
REVISIONS BY _____
QUANTITIES BY _____
NOTE BOOK No. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1980	98	244



CW20-1a 48" x 48"



CW20-2d 48" x 48"



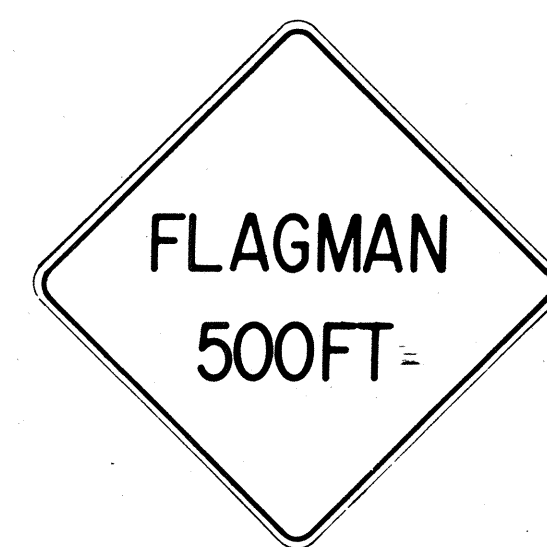
CW20-3b 48" x 48"



CW20-4d 48" x 48"



CW20-5d(L) 48" x 48"



CW20-7c 48" x 48"



CW21-1 30" x 30"



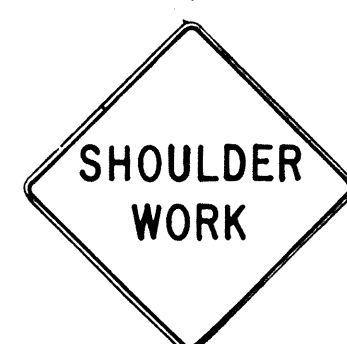
CW21-2 30" x 30"



CW21-3 36" x 36"



CW21-4 36" x 36"



CW21-5 30" x 30"



CW21-6 30" x 30"



CW22-1b 48" x 48"



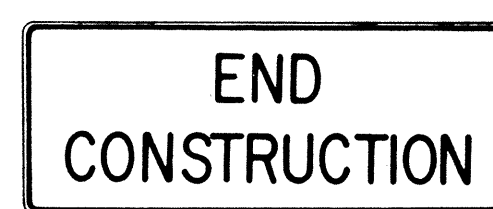
CW22-2 42" x 36"



CW22-3 42" x 36"



CG20-1(5) 60" x 36"



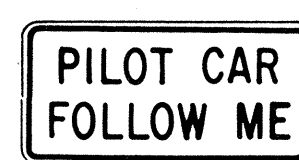
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



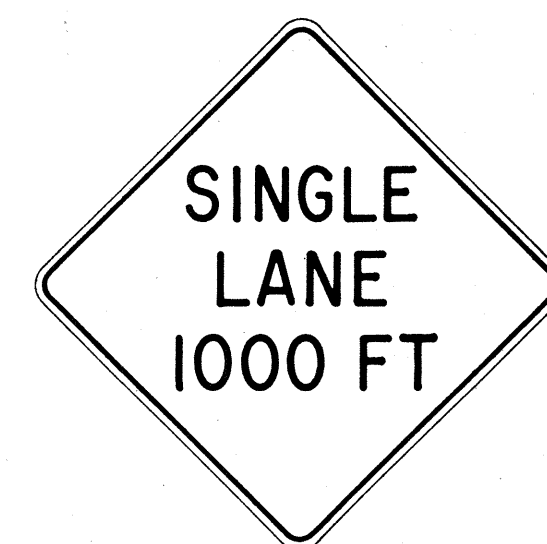
CM4-10(R) 48" x 18"



CG20-4 36" x 18"



CW23-1 36" x 36"



CW23-2b 48" x 48"



CW23-3(R) 48" x 48"

GENERAL NOTES

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All construction signs shall be reflectorized.
- All construction signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- For "CW" series signs, suffixes a, b, c and d are as follows:
a-1500 FT, b-1000 FT, c-500 FT and d-AHEAD.

APPROVAL RECOMMENDED:

Eishi Tanaka 3/21/72
TRAFFIC ENGINEER DATE

APPROVED:

Shigeru Sakai 3/23/72
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht DT 104 Approved 12-30-69	HT.	3/23/72
2	Revised General Note 1	HT.	10/10/74
3	Revised General Note 2	MH	9-16-75
4	Revised General Note 2 and sign CG20-1(5)	HT.	9-14-76

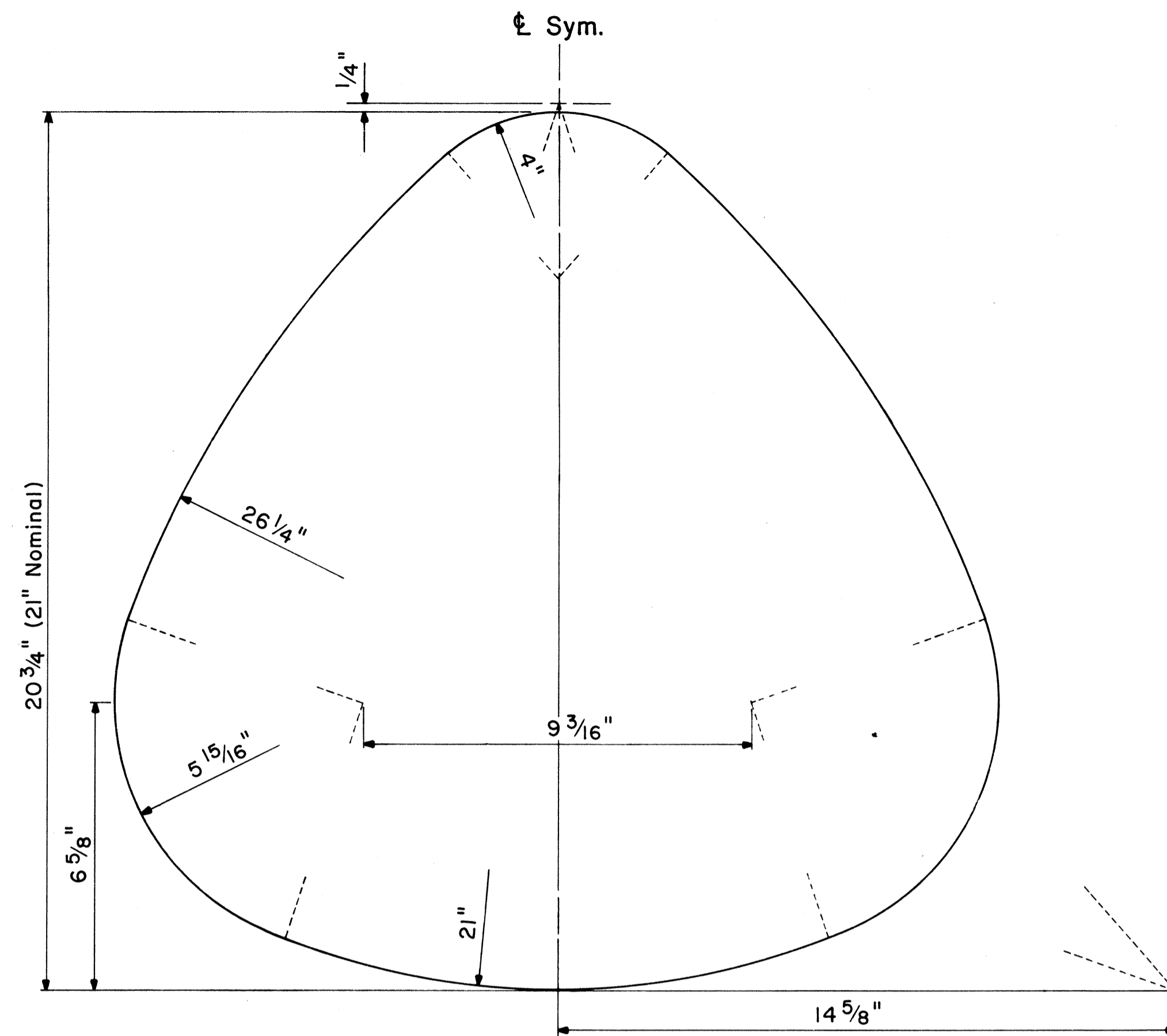
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
CONSTRUCTION SIGNS

NOT TO SCALE

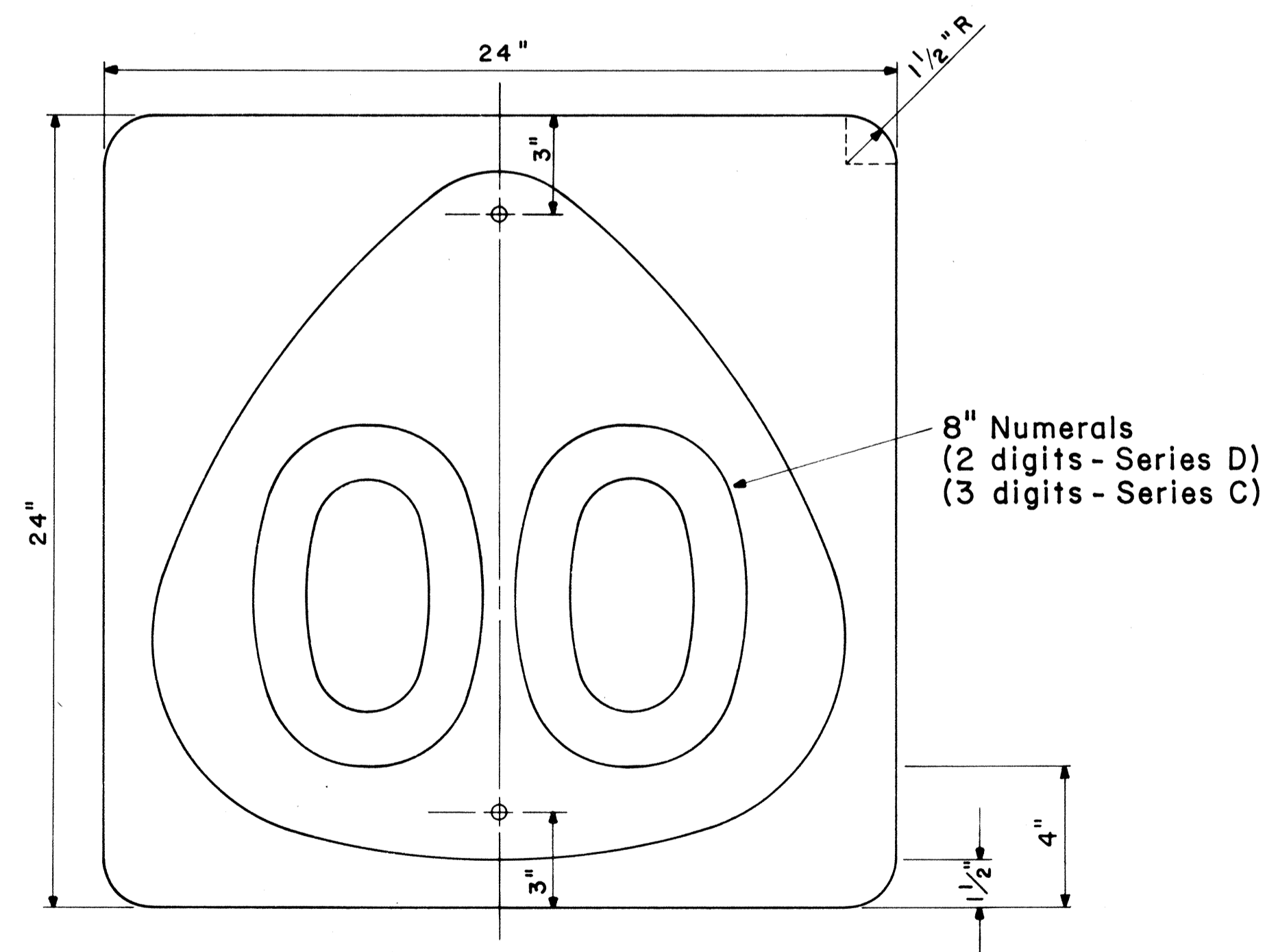
DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTE BOOK No.	_____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1980	99	244



STATE ROUTE MARKER DETAIL

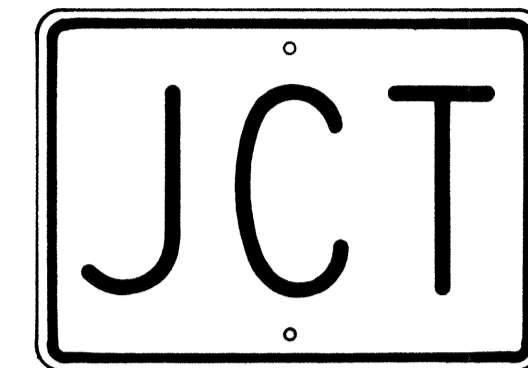
Not to Scale



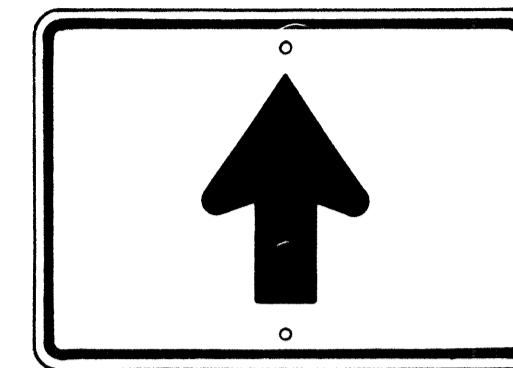
STATE ROUTE MARKER

M1-6 (00) 24" x 24"

Scale: 1/4" = 1"



M2-1 21" x 15"



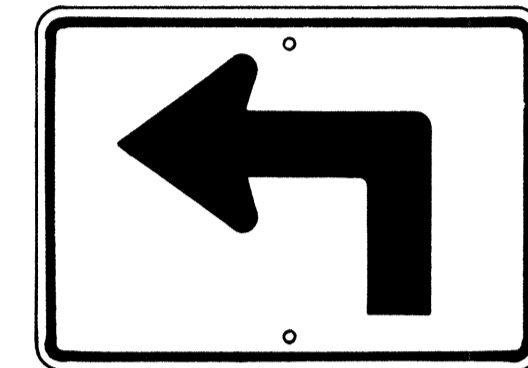
M6-3 21" x 15"



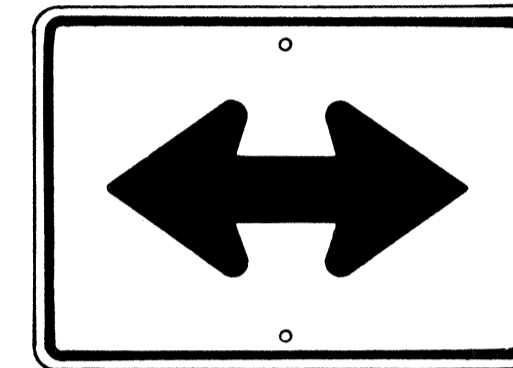
M3-1 24" x 12"
M3-1-A 36" x 18"



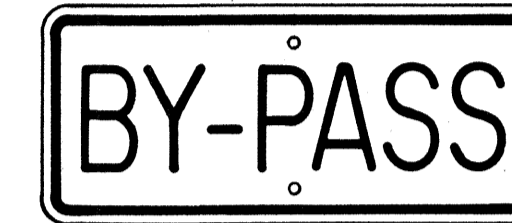
M4-1 24" x 12"



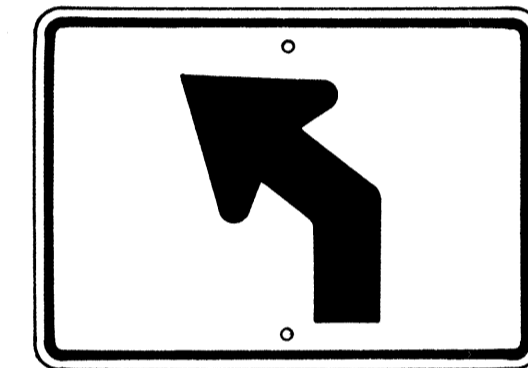
M5-1(L) 21" x 15"



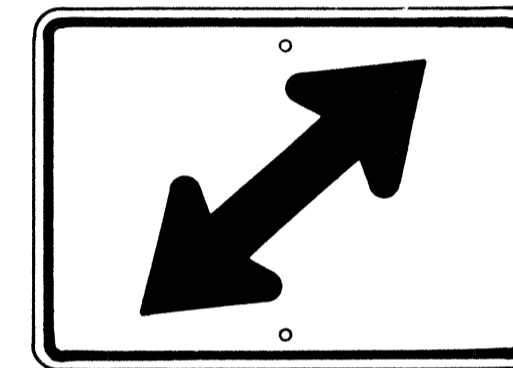
M6-4 21" x 15"



M4-2 24" x 12"



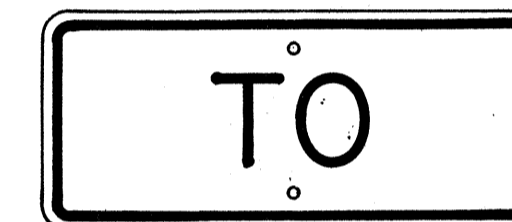
M5-2(L) 21" x 15"



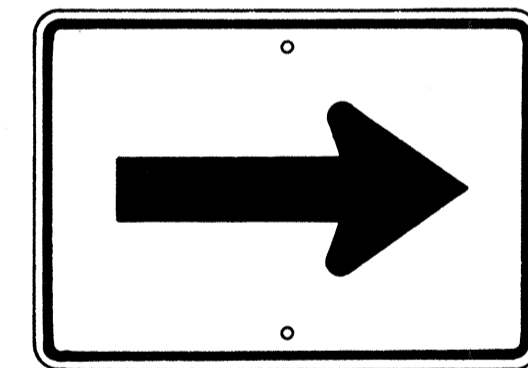
M6-5(R) 21" x 15"



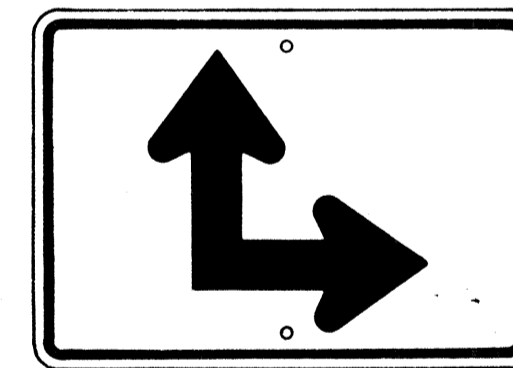
M4-3 24" x 12"



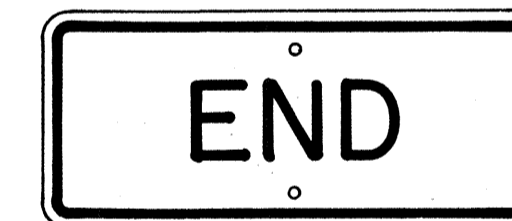
M4-5 24" x 12"



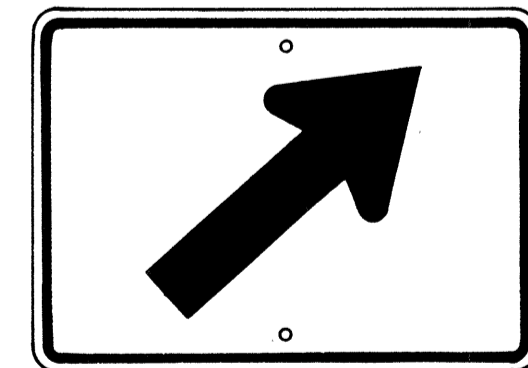
M6-1 21" x 15"



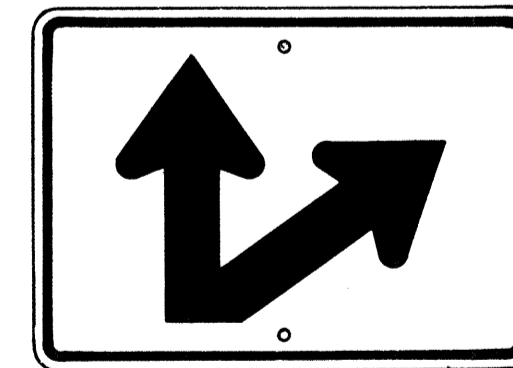
M6-6(R) 21" x 15"



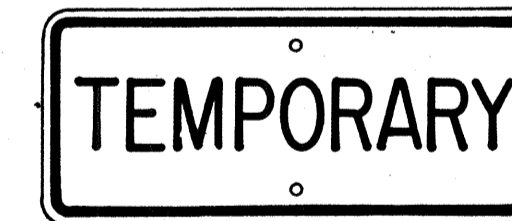
M4-6 24" x 12"



M6-2(R) 21" x 15"



M6-7(R) 21" x 15"



M4-7 24" x 12"



M4-8 24" x 12"

GENERAL NOTES

- Marker details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, "Standard Alphabets for Highway Signs," 1966, and "Standard Highway Signs," 1972, and as amended.
- All markers shall be reflectorized unless otherwise specified.
- All markers shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in () indicates numerals to be inserted for marker message. (R) or (L) indicates right or left.
- Sign message of Cardinal Direction Marker (M3 series) shall be denoted by the following:
M3-1 : NORTH
M3-2 : EAST
M3-3 : SOUTH
M3-4 : WEST
- Markers prefixed with "IM" on the plans shall have a white legend on a blue background.

APPROVAL RECOMMENDED:

Erich Tanaka 6/6/72
TRAFFIC ENGINEER DATE

APPROVED:

John J. ... 6-1-72
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 105 Approved 12-30-69	H.T.	6/1/72
2	Revised General Note 1	H.T.	10/16/74

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
STATE ROUTE MARKER
AND AUXILIARY MARKERS

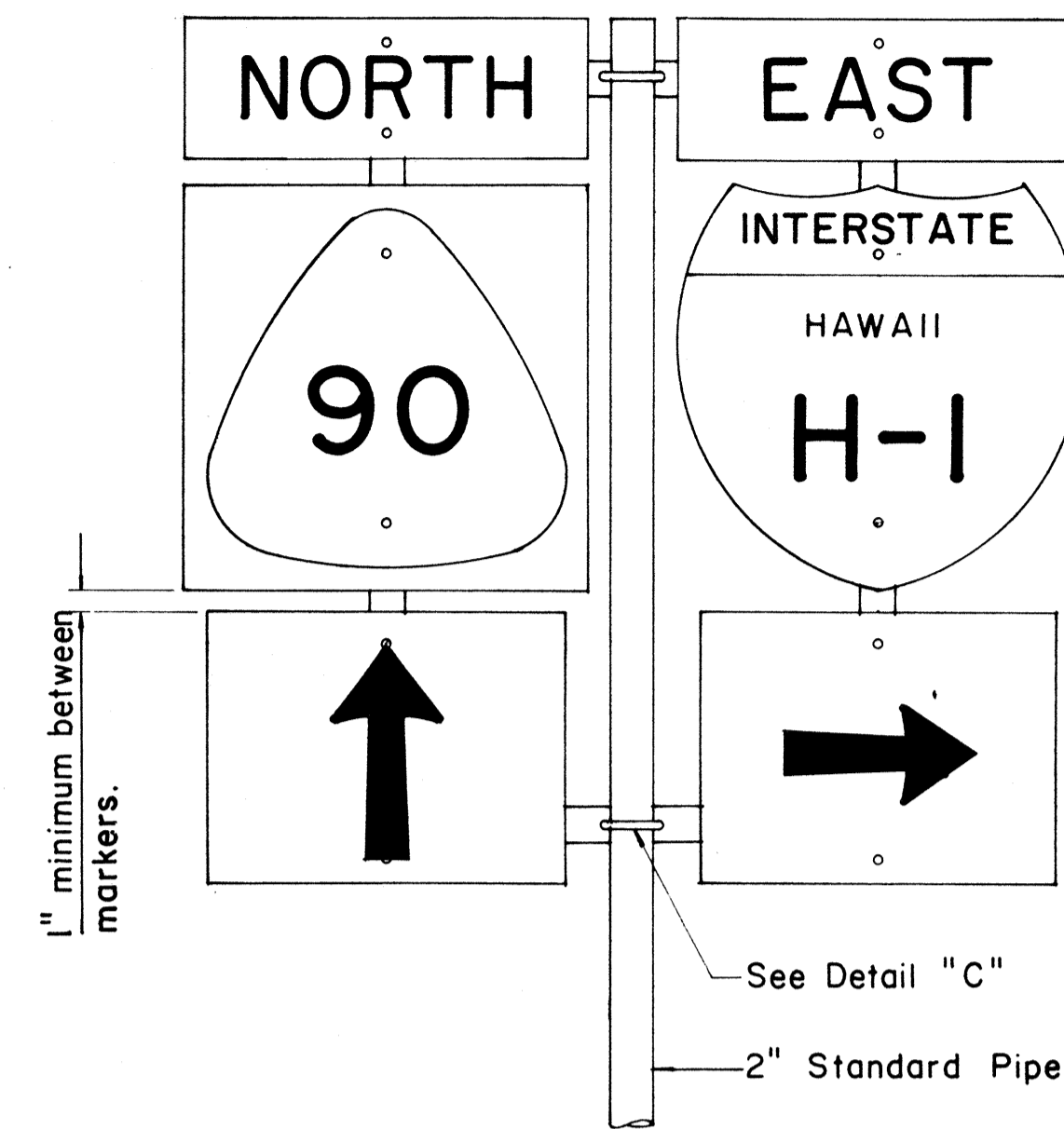
Scale: As Shown
SHEET NO. 5 OF 18 SHEETS DT105

AUXILIARY MARKERS

Not to Scale

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

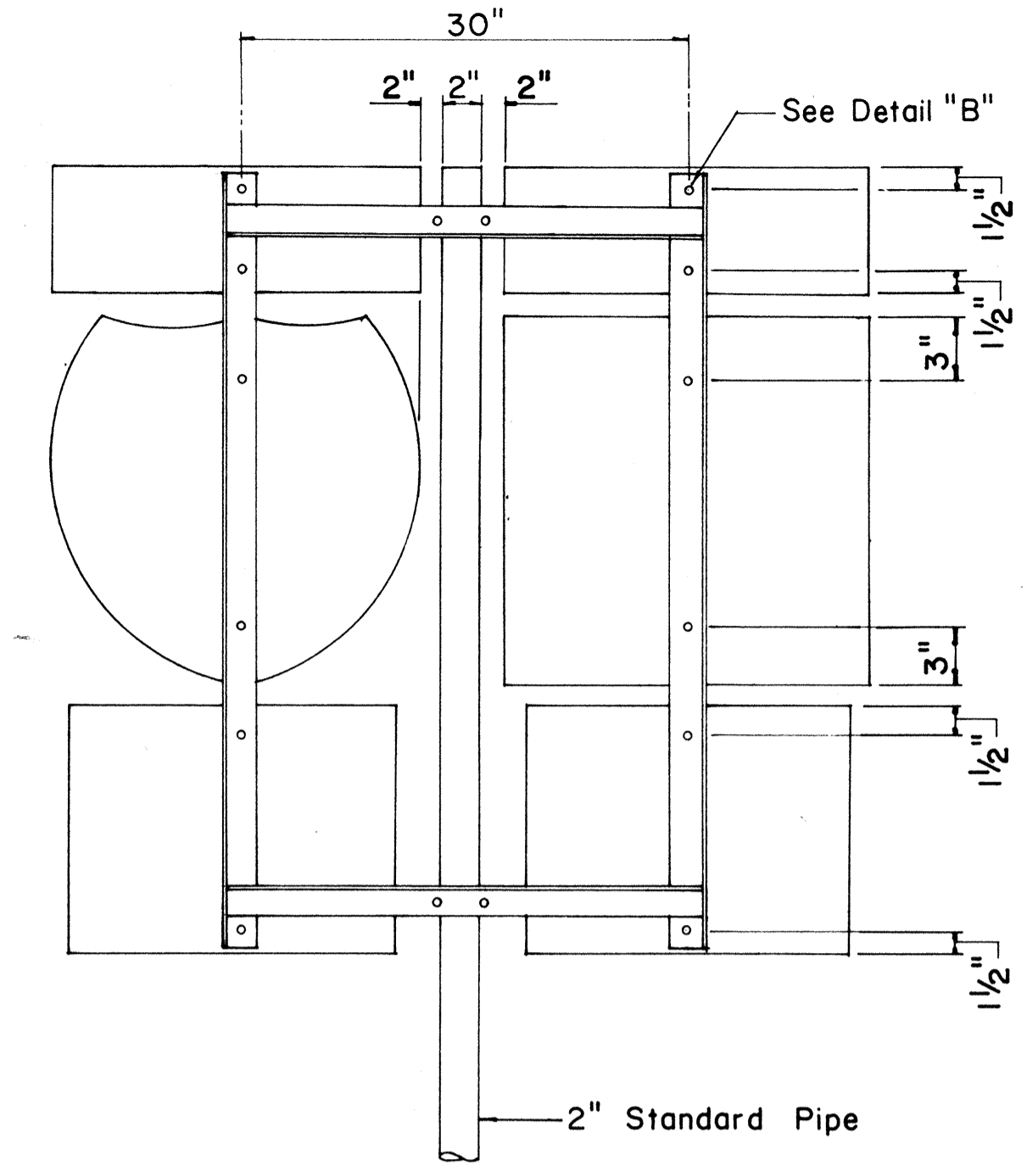
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1980	100	244



FRONT ELEVATION

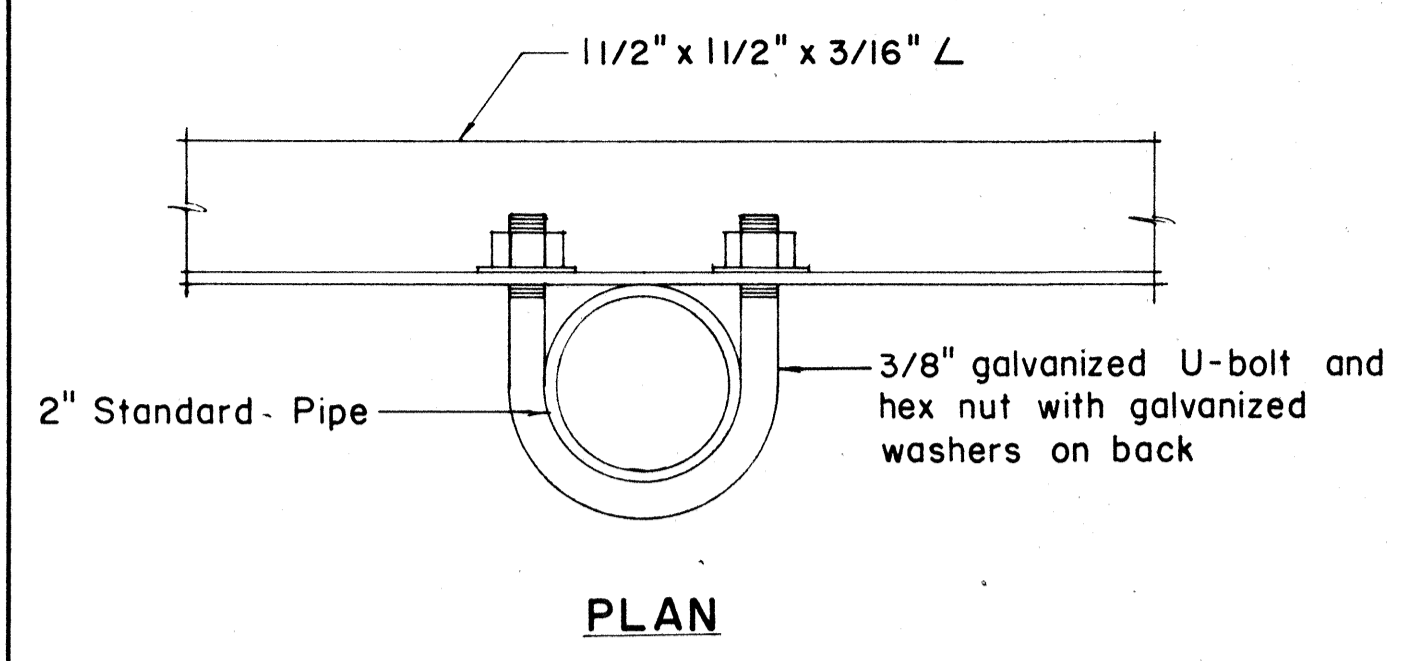
TYPE "B" ASSEMBLY

Not to Scale

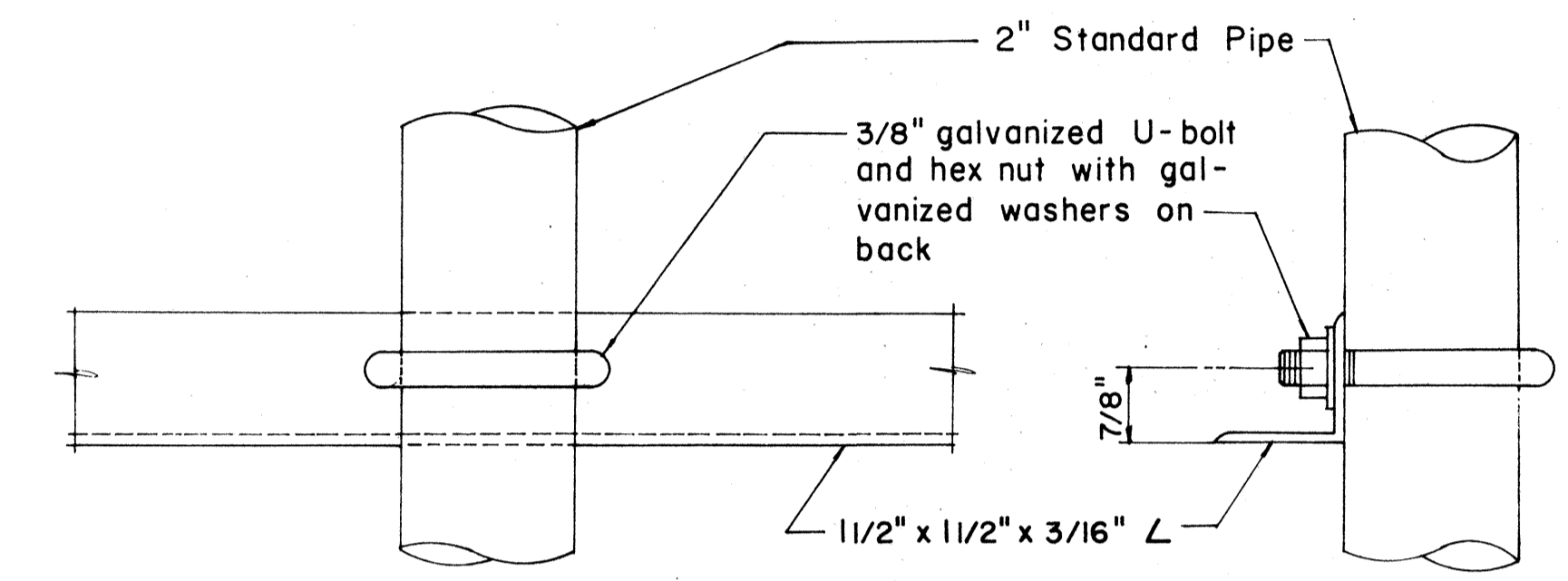


REAR ELEVATION

NOTE:
 1. Minimum clearance between markers shall be one inch. (Larger clearances shall be in multiples of one inch.)
 2. Pipe post for Type "A" & Type "B" Assembly shall be 2" Standard Pipe.



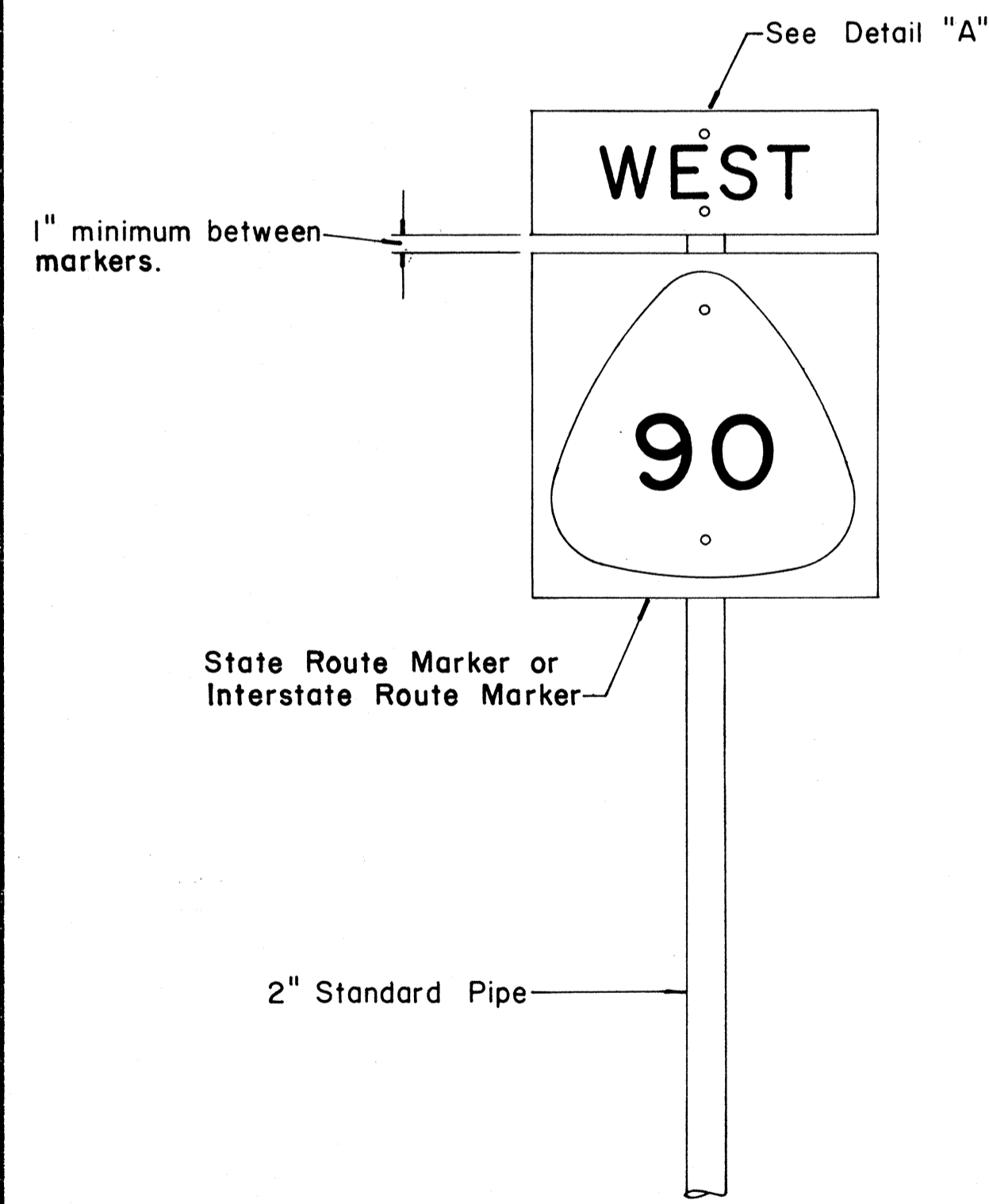
PLAN



FRONT ELEVATION

SIDE ELEVATION

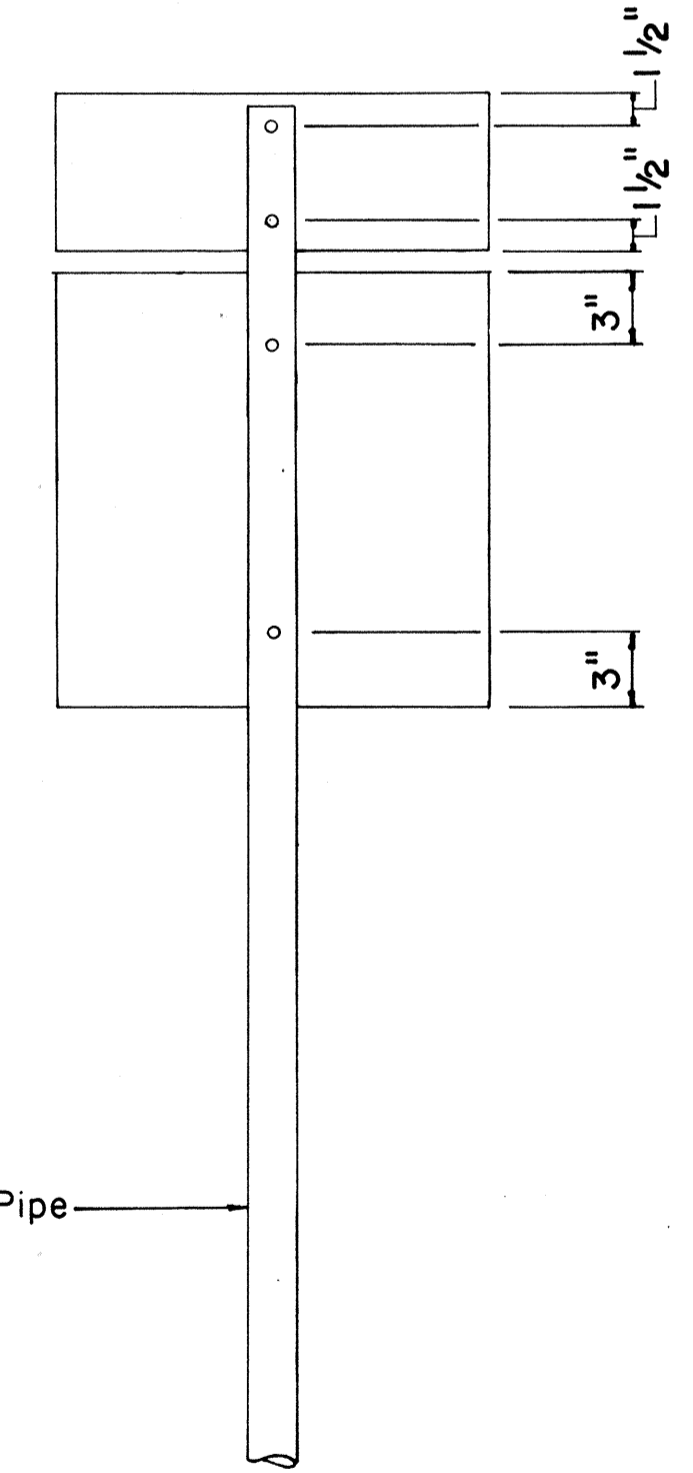
DETAIL "C"



FRONT ELEVATION

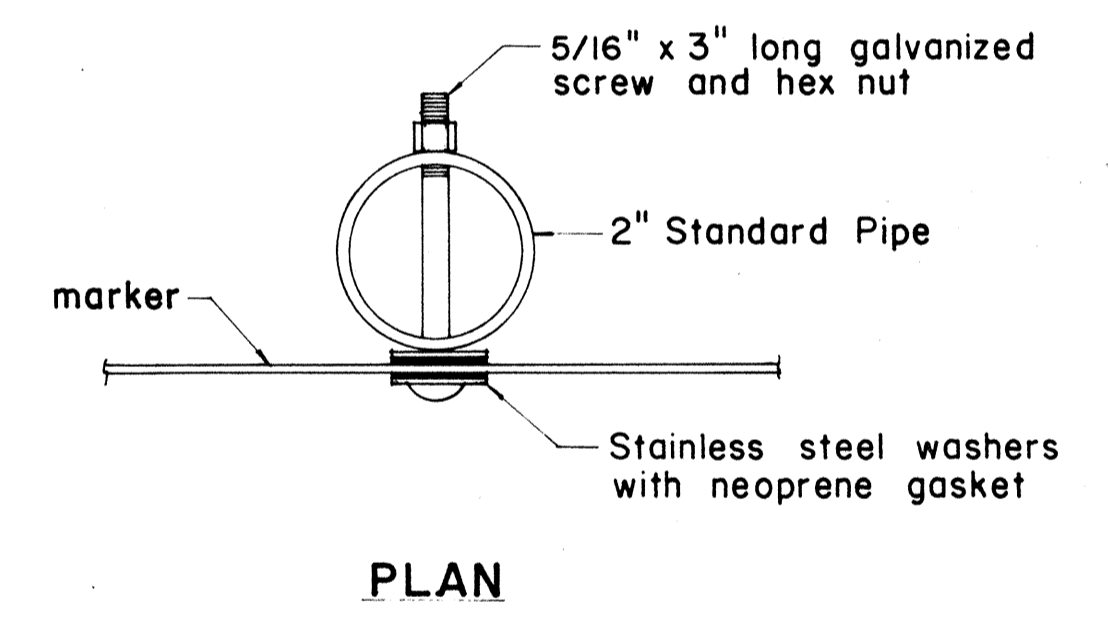
TYPE "A" ASSEMBLY

Not to Scale

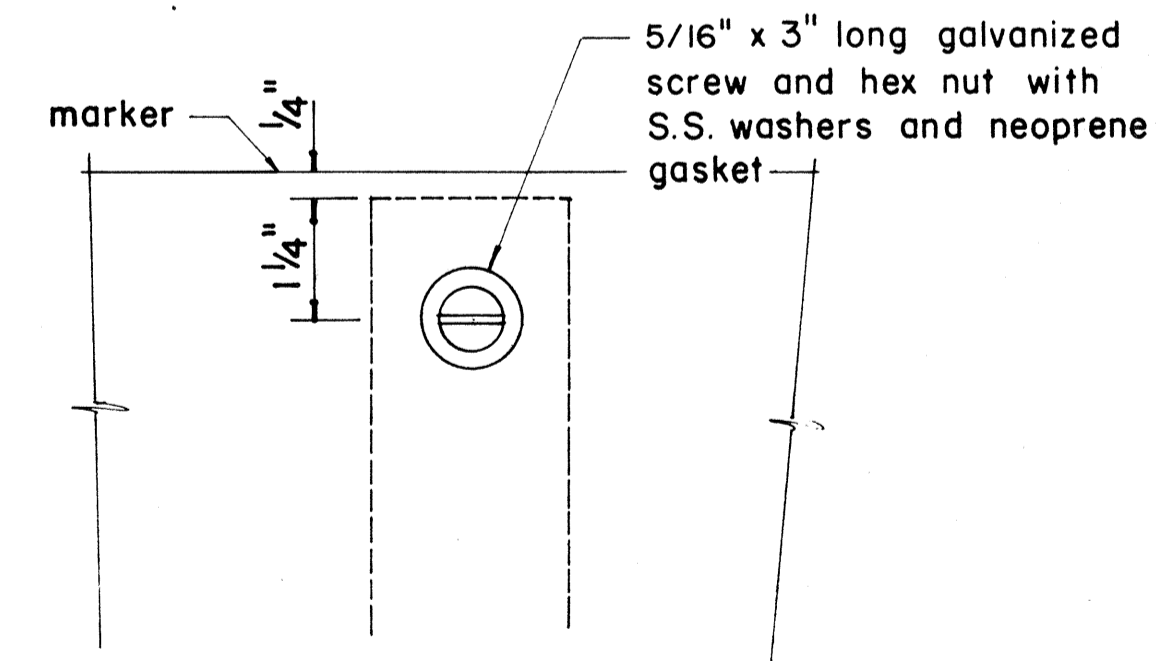


REAR ELEVATION

NOTE:
 For height and lateral location of Route Marker Assembly, see plan sheet DT 100.

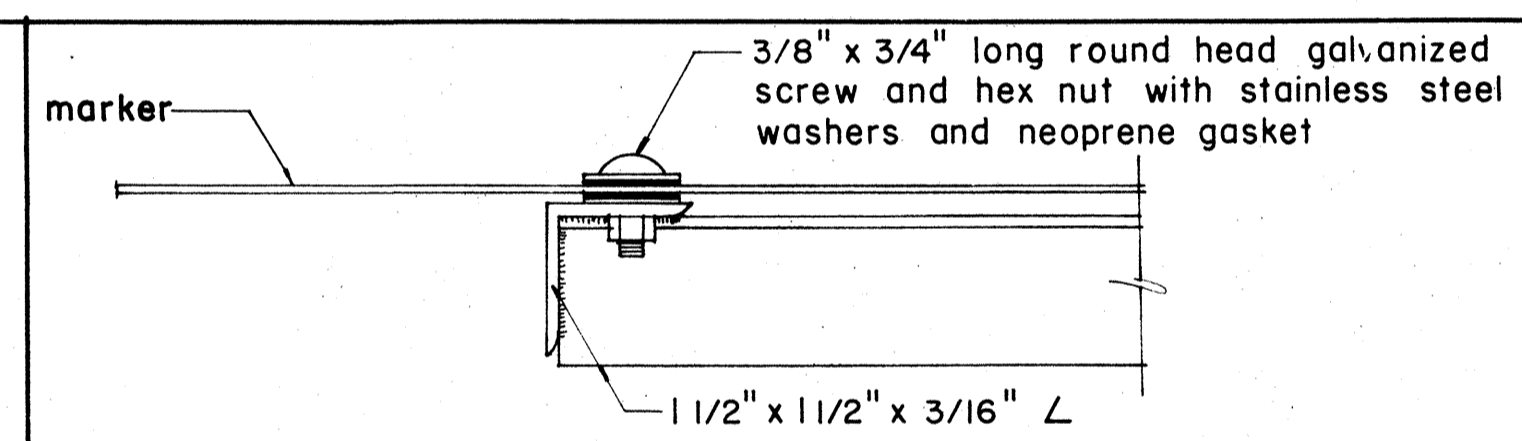


PLAN

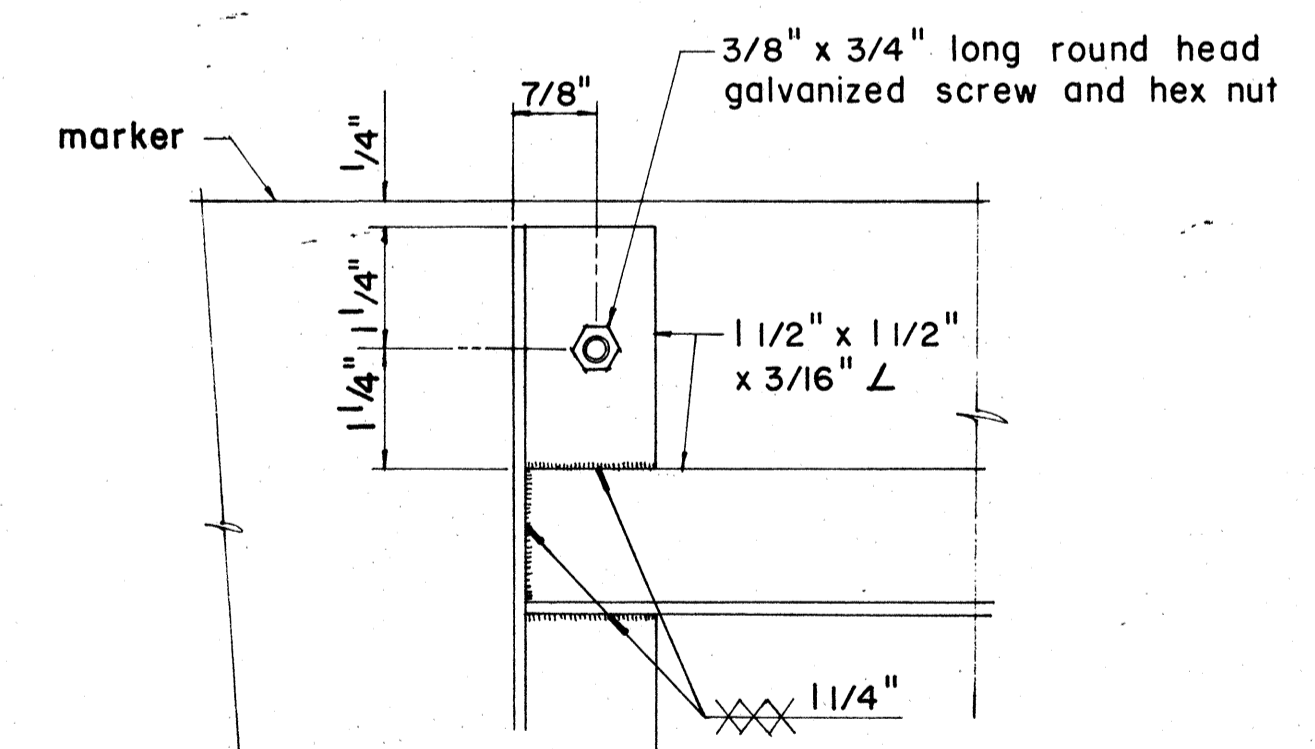


FRONT ELEVATION

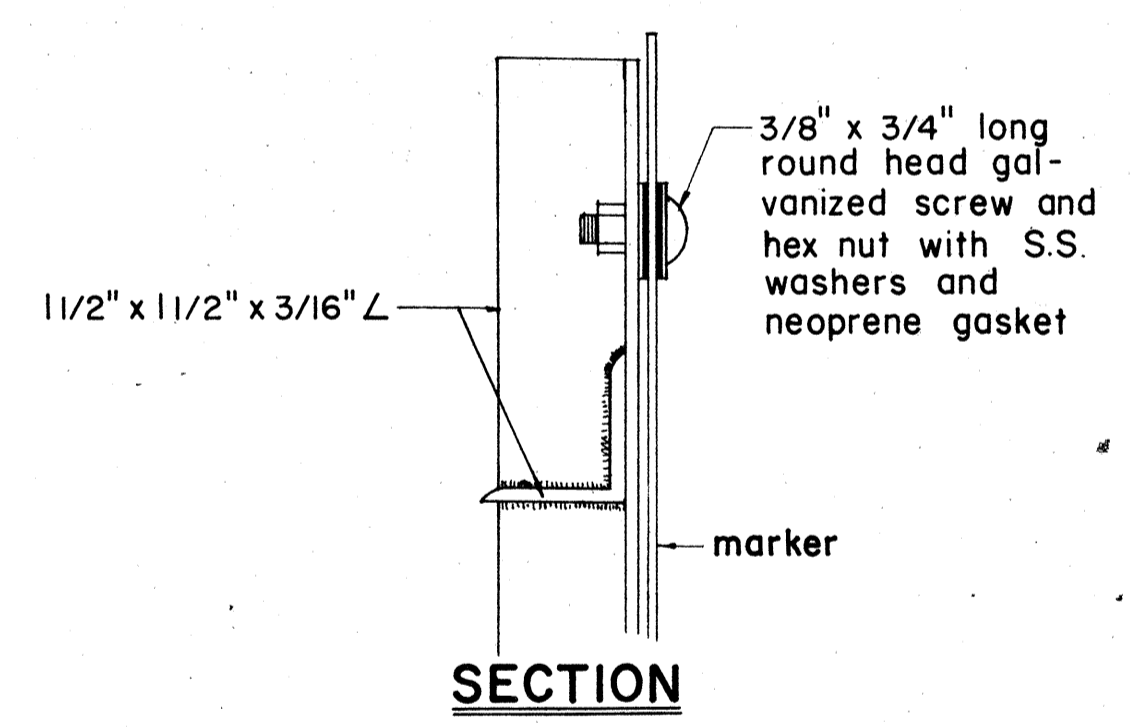
DETAIL "A"



PLAN



ELEVATION



SECTION

APPROVAL RECOMMENDED:
E. Tanaka
 TRAFFIC ENGINEER DATE 12/29/79

APPROVED:
[Signature]
 ASSISTANT CHIEF, ENGINEERING DATE 12-30-79

NO.	REVISION	APPROVED BY	DATE
1	Revisions to Route Marker Assemblies.	H.T.	6/1/72

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
ROUTE MARKER ASSEMBLIES

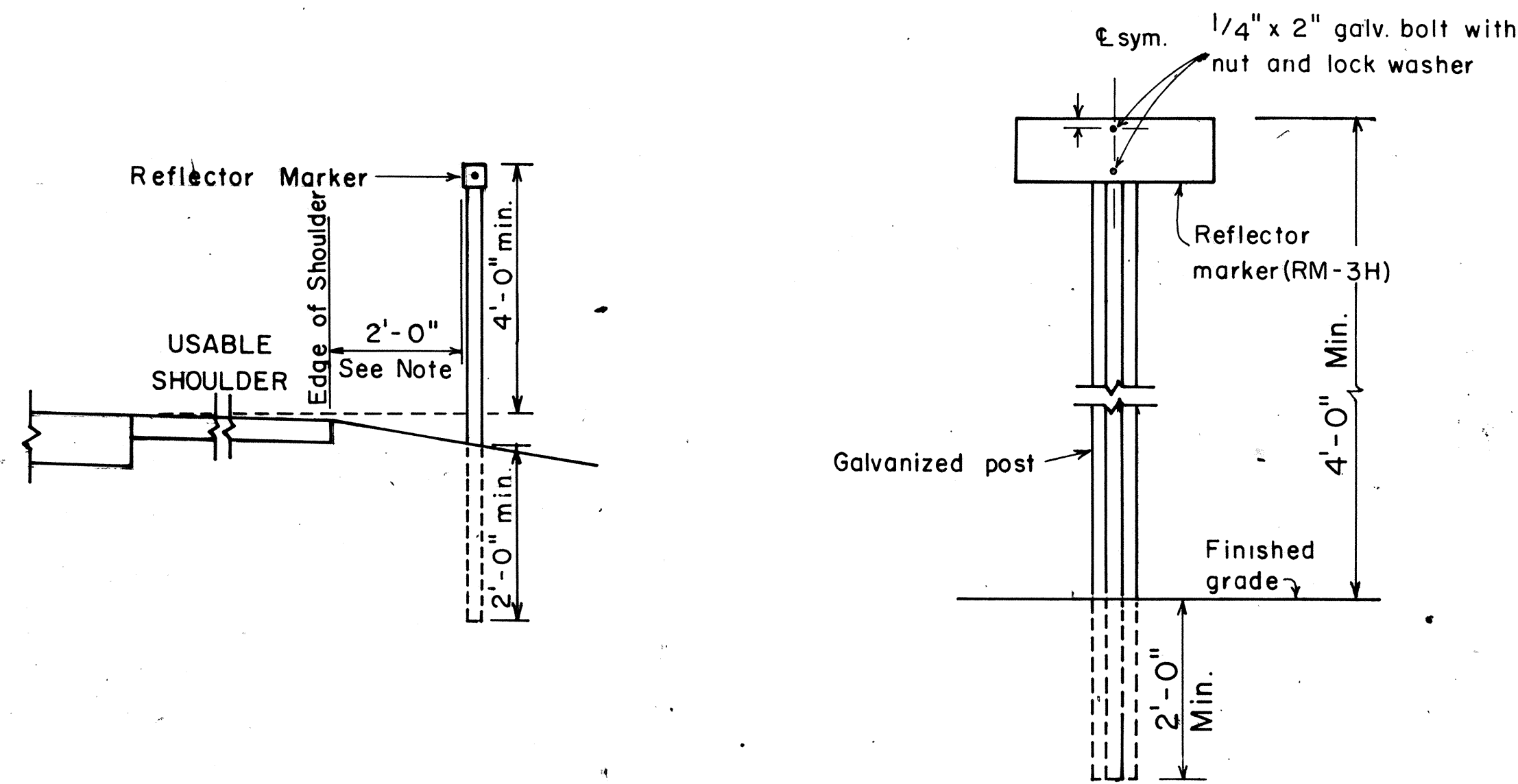
Scale: As Shown
 SHEET No. 6 OF 18 SHEETS DT 107

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

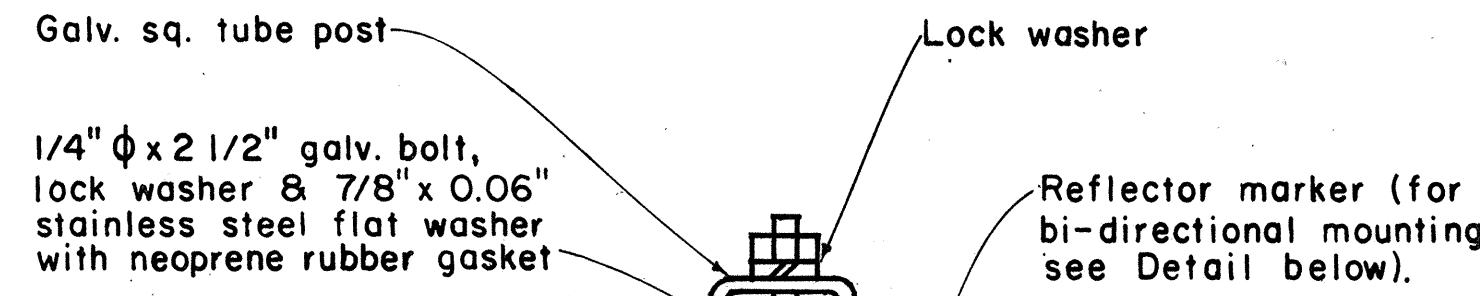
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	101	244

GENERAL NOTES:

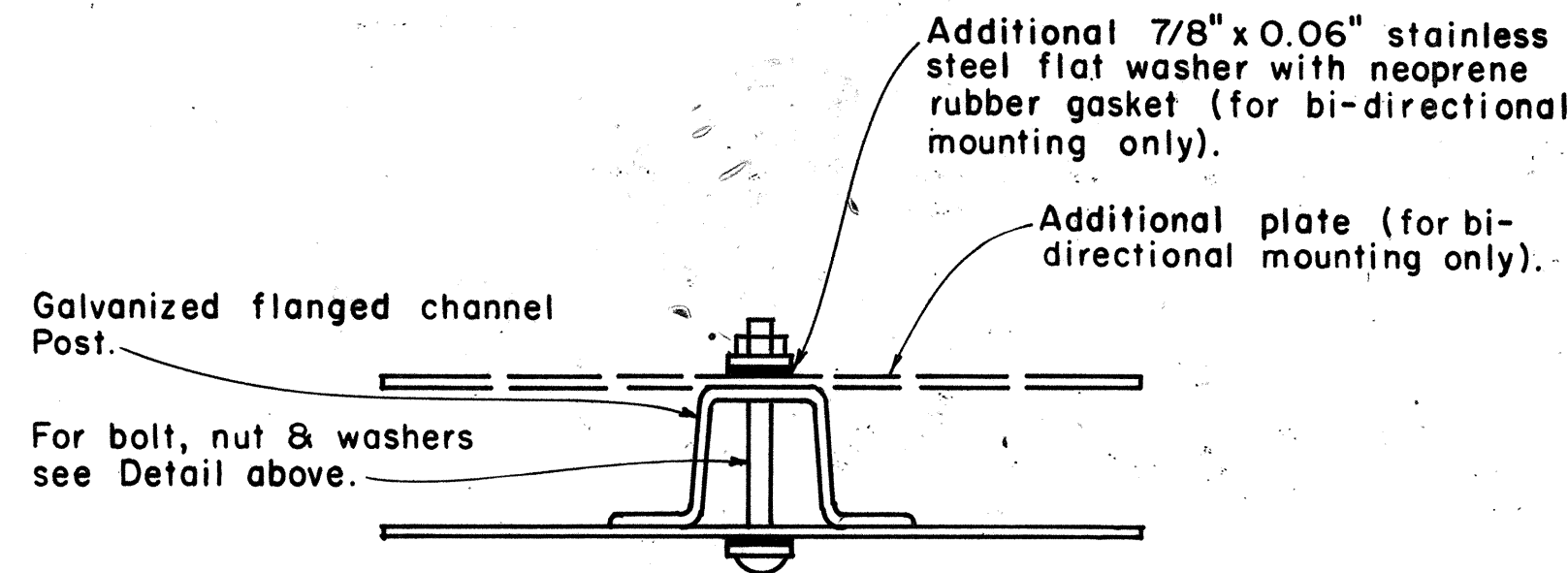
1. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
2. (R) or (L) indicates right or left and shall be as shown on the plans.
3. Reflector markers RM-1 and RM-2 shall be:
 - a) Yellow if placed along the left edge of divided roadways, one-way roadways, and ramps in the direction of travel.
 - b) White if placed along the right edge of divided roadways, one-way roadways, and ramps in the direction of travel.
4. For reflector marker RM-9, reflective sheeting material may be used as an alternate.
5. For RM-4, the stripes shall slope downward at an angle of 45° in the direction of traffic.



REFLECTOR MARKER MOUNTING DETAIL

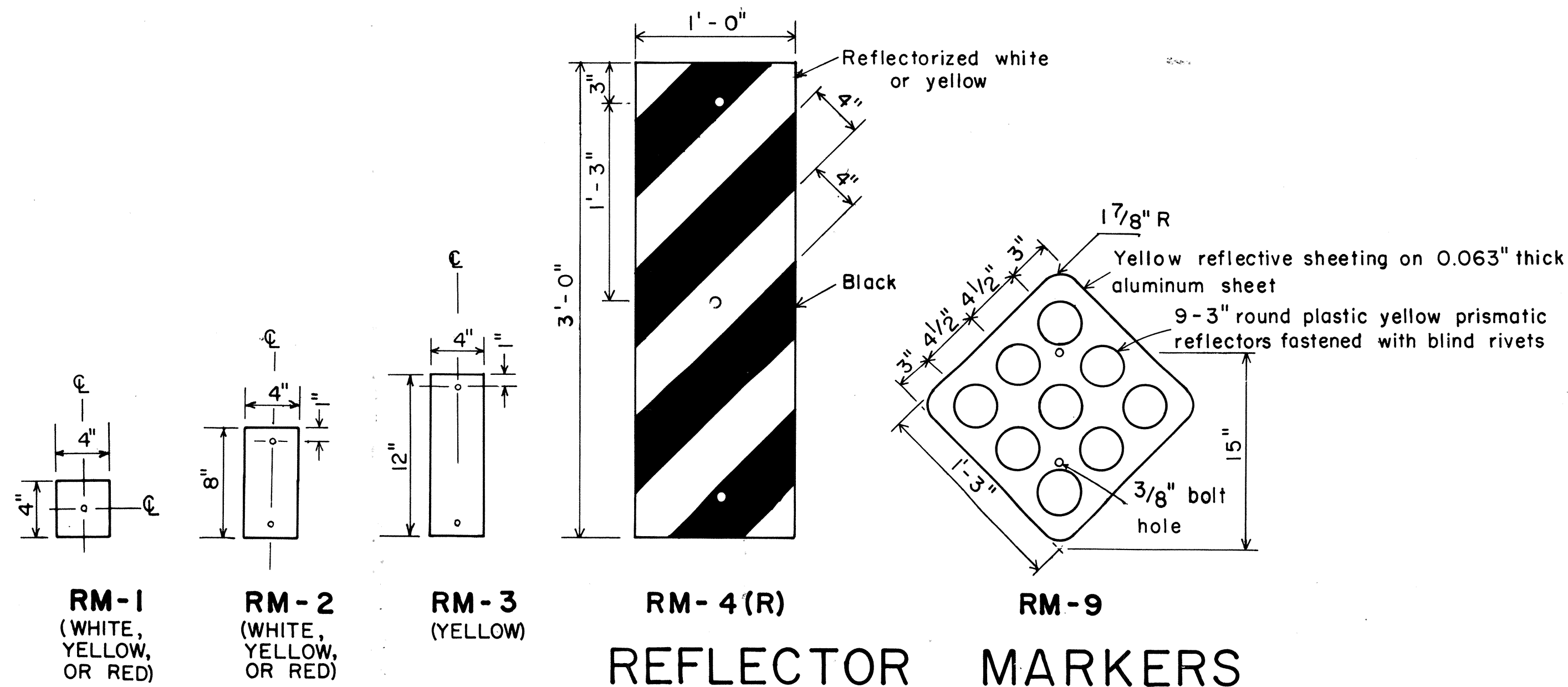


GALVANIZED SQUARE TUBE POST



GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS



REFLECTOR MARKERS

APPROVAL RECOMMENDED:
Etsuki Tanaka 11/17/77
 TRAFFIC ENGINEER DATE

APPROVED:
Hubert B. Sakai 11/15/77
 ASSISTANT CHIEF, ENGINEERING DATE

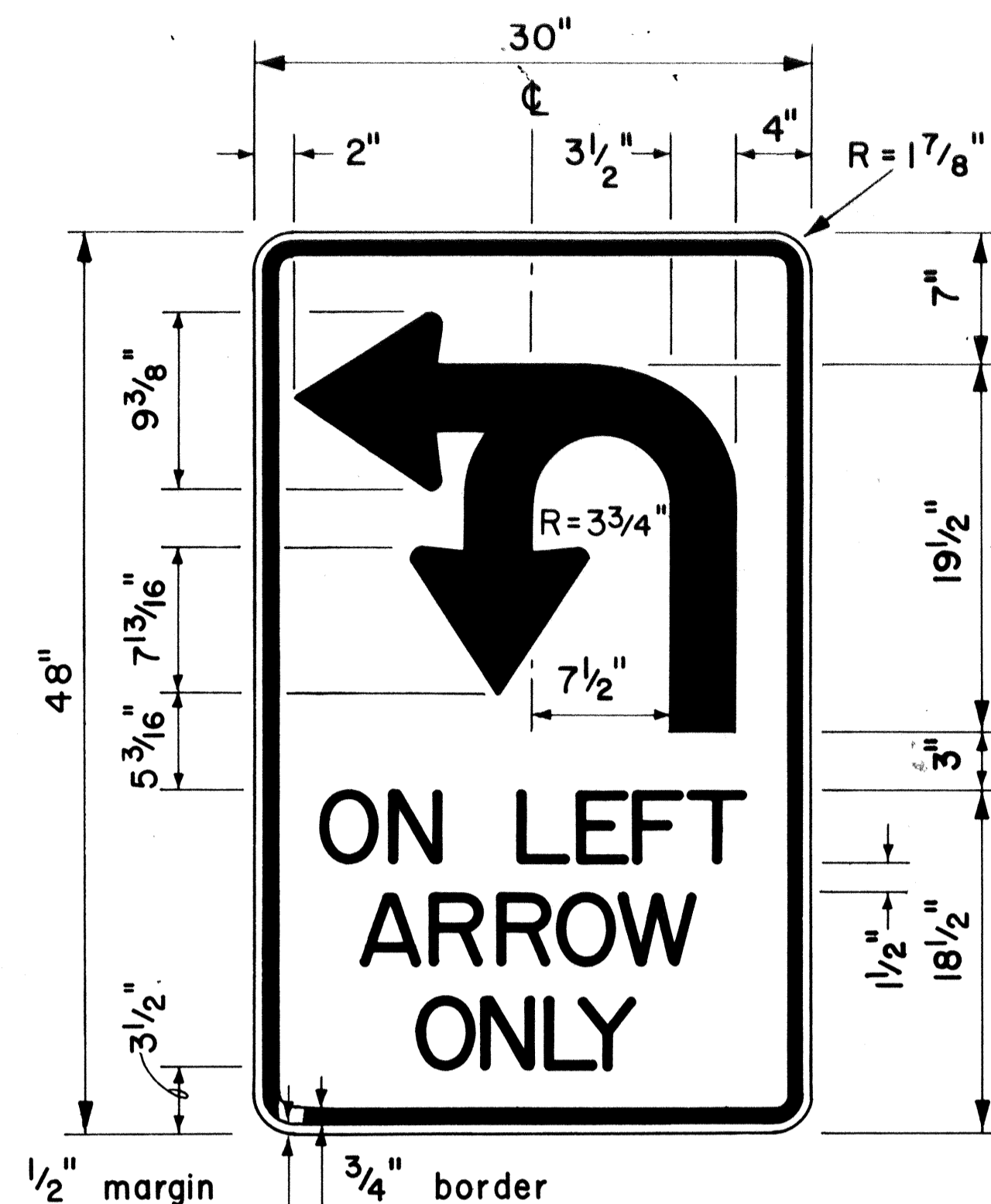
NO.	REVISION	APPROVED BY	DATE
1	Revised Mounting Details	H-1	4/23/80

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

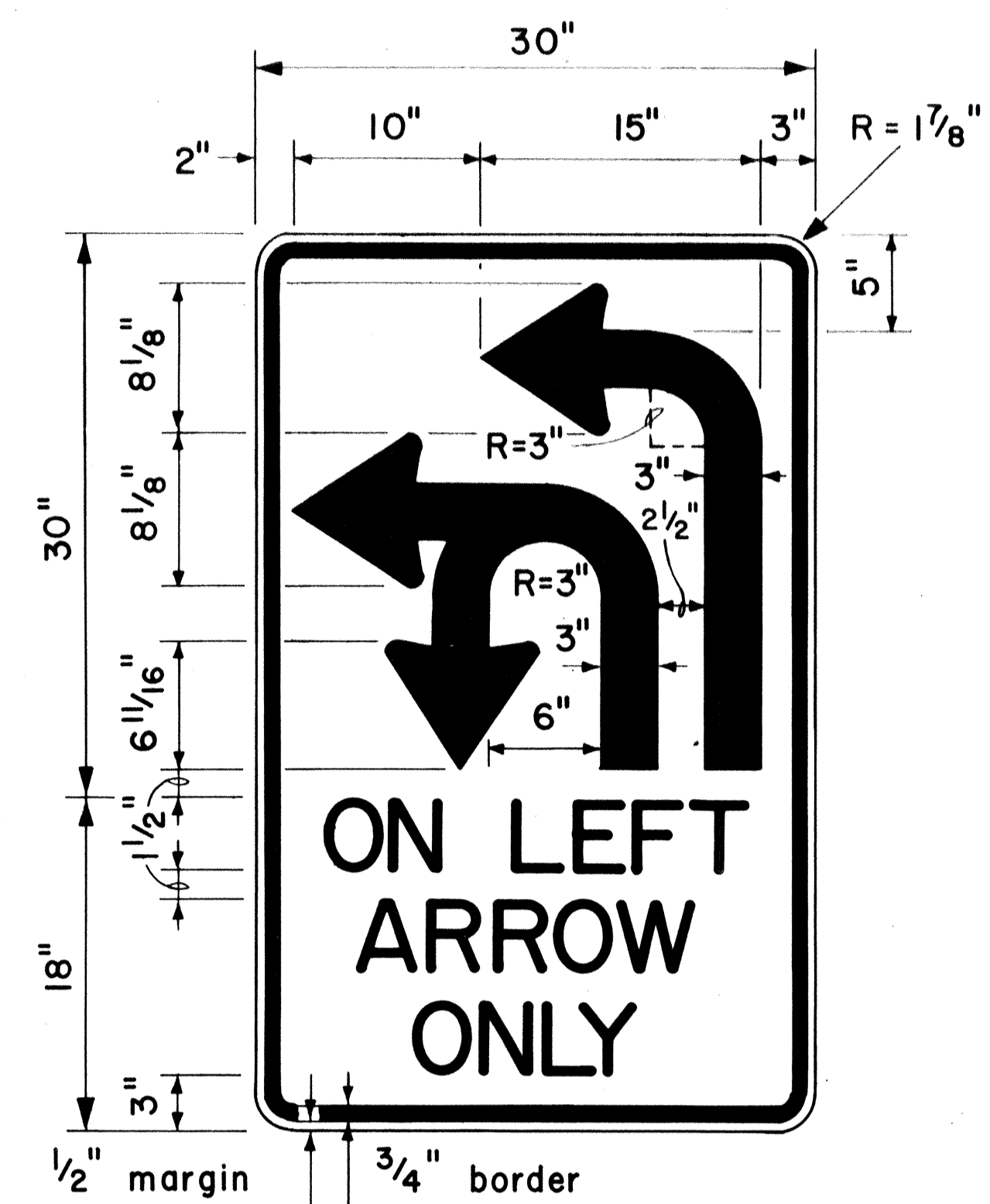
STANDARD DETAILS
 MISCELLANEOUS REFLECTOR MARKERS

Not to scale June, 1977

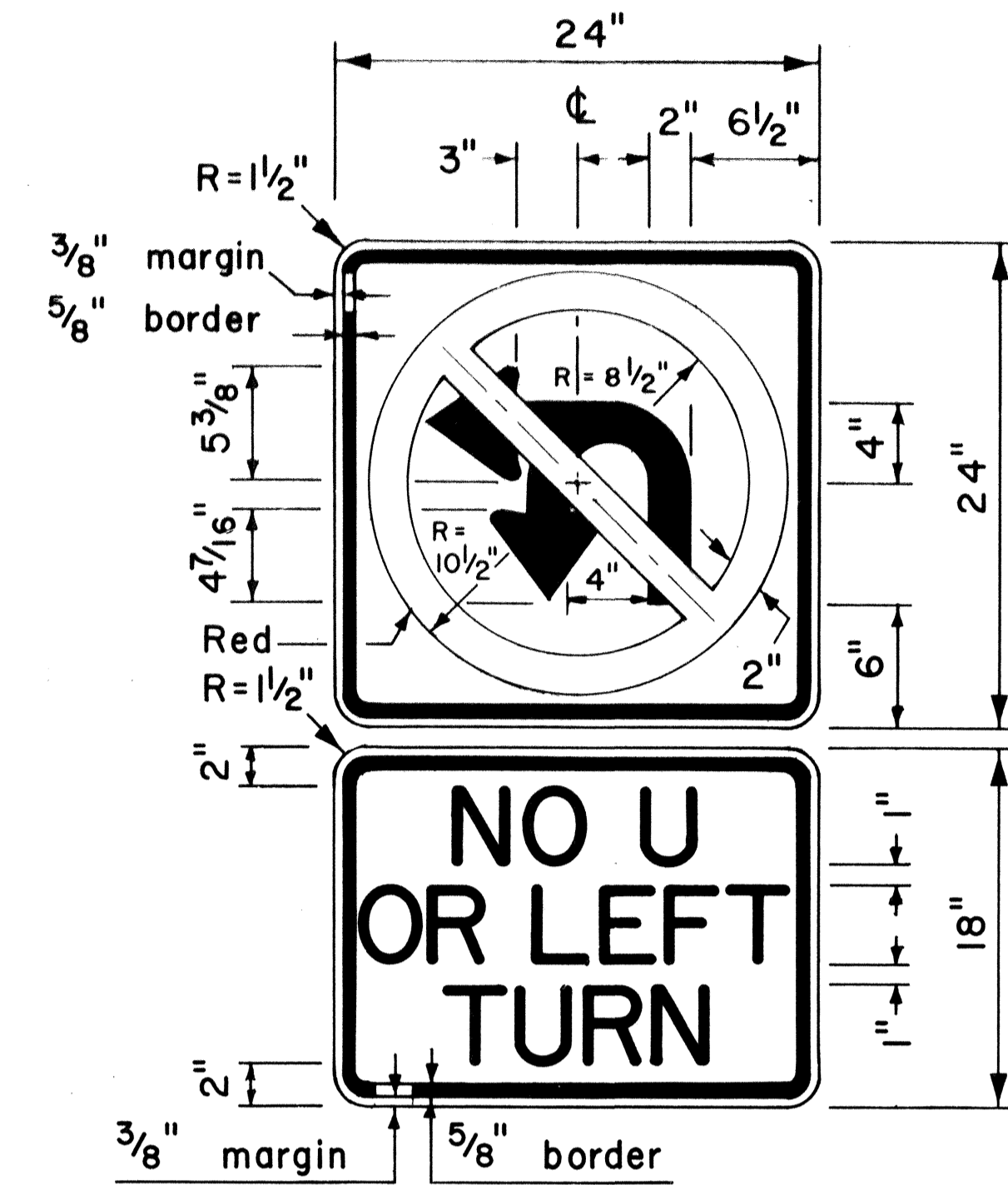
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	102	244



4" Series D Letters
R17-1



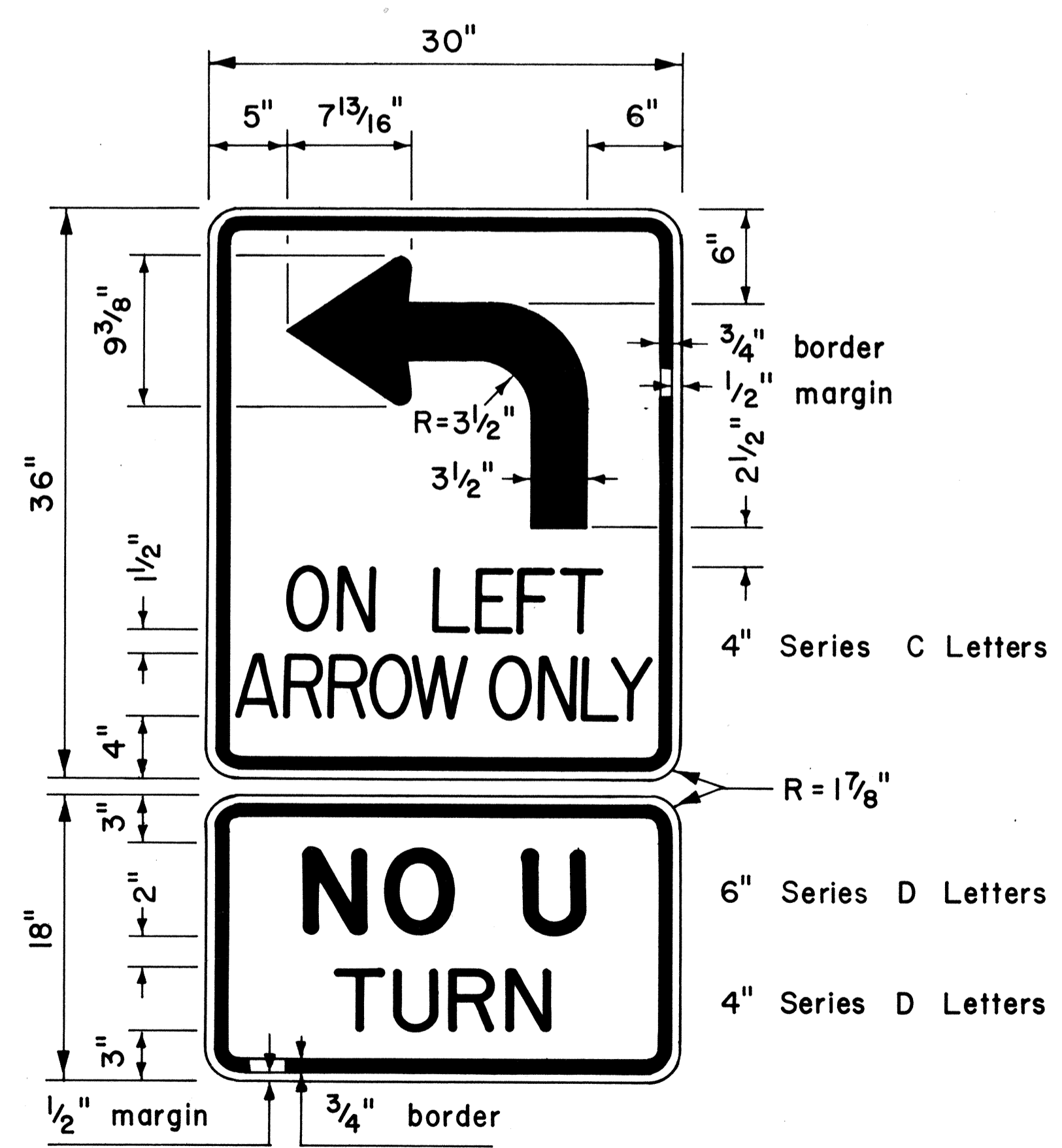
4" Series D Letters
R17-2



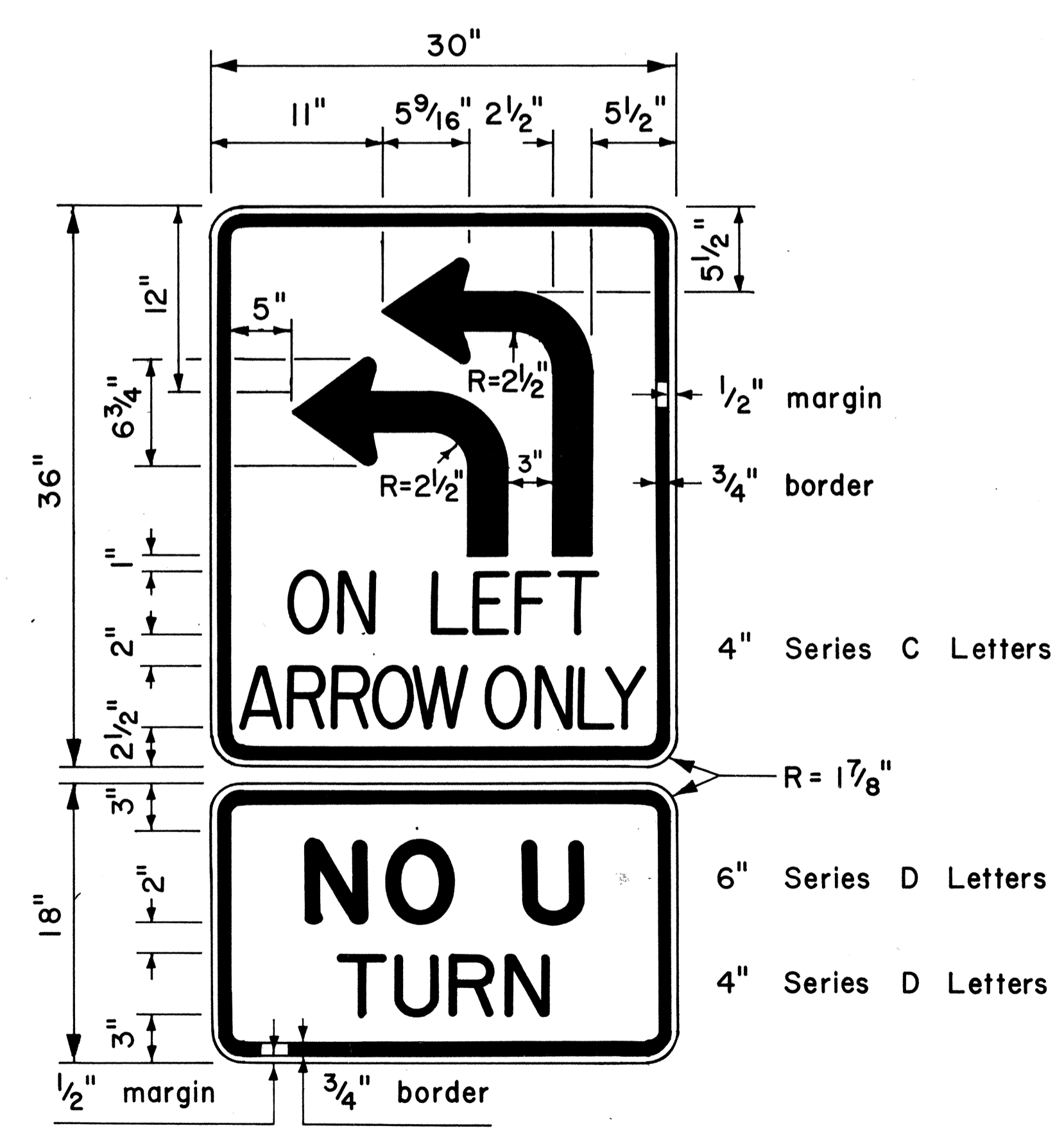
4" Series D Letters
R3-4b

GENERAL NOTES

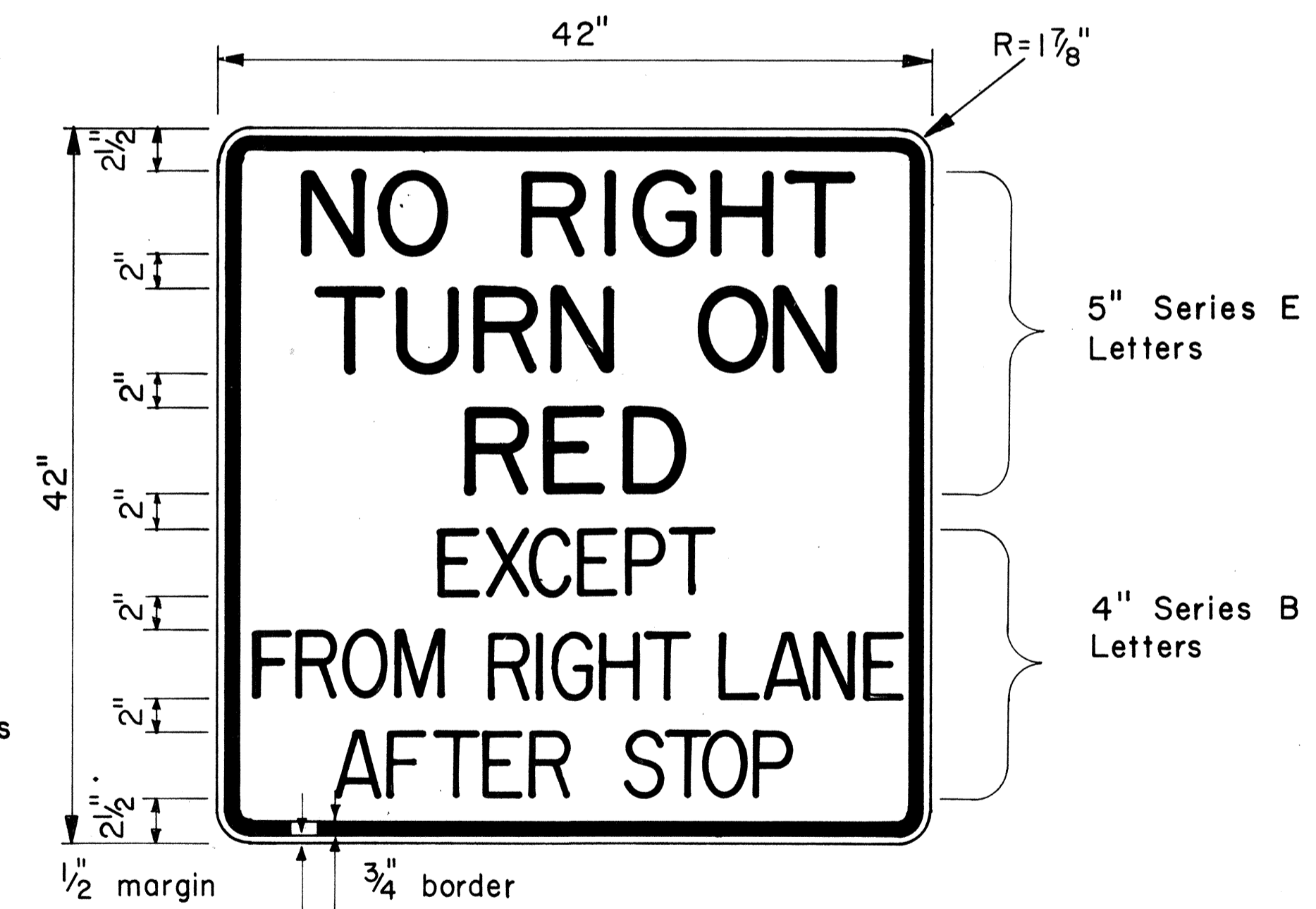
1. Sign details shall conform to the latest editions of the following FHWA publications: "Manual on Uniform Traffic Control Devices for Streets and Highways," and "Standard Highway Signs," and as amended.
2. All regulatory signs shall be reflectorized unless otherwise specified.
3. All regulatory signs shall have 3/8" bolt holes drilled at appropriate locations.



R17-3



R17-4



R10-11d

5" Series E Letters
4" Series B Letters

APPROVAL RECOMMENDED:
Eiichi Tanaka 8/1/77
TRAFFIC ENGINEER DATE

APPROVED:
Harbert Sakaiishi 8/16/77
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
MISCELLANEOUS
INTERSECTION SIGNS

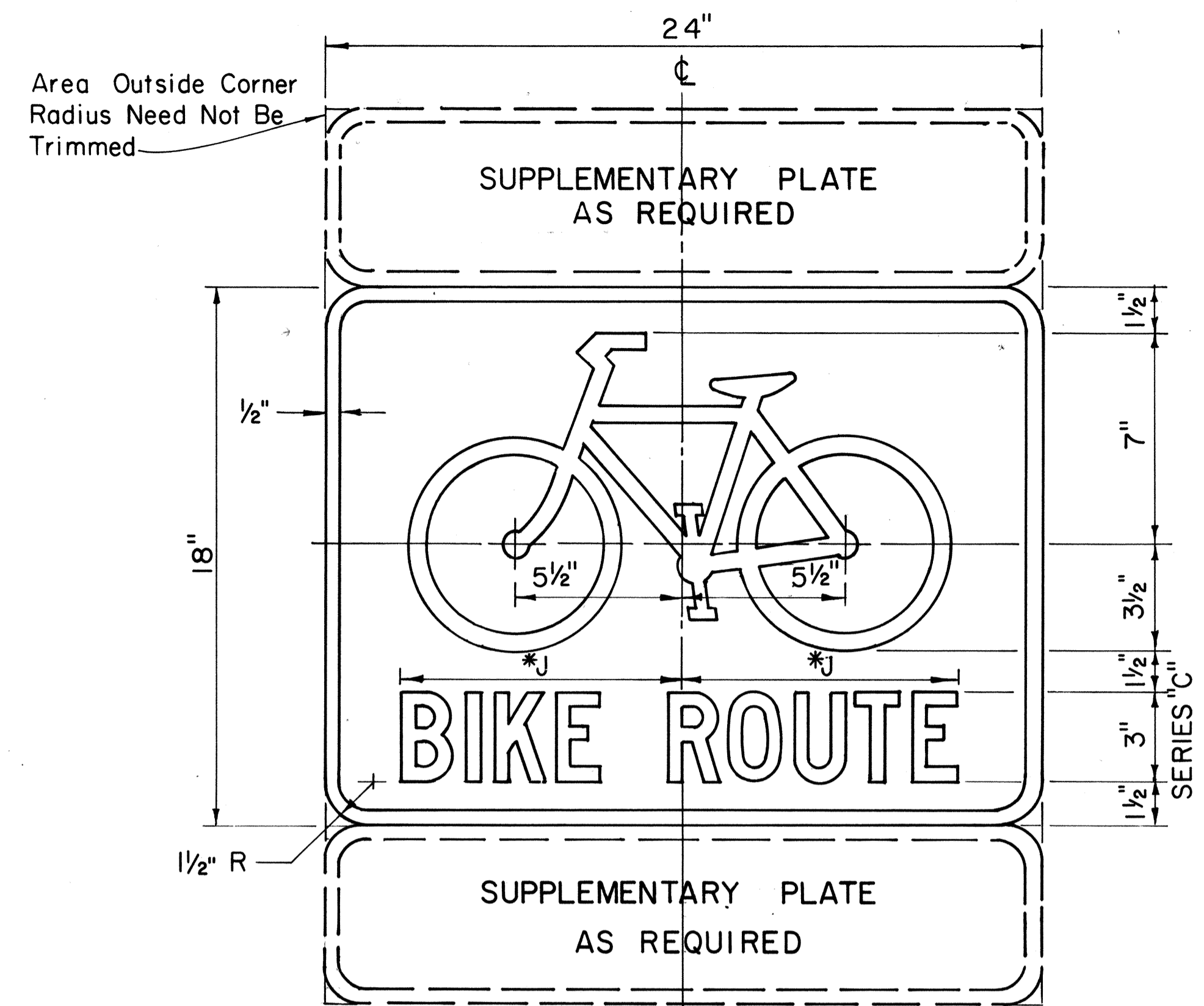
Scale: 1/2" = 1'-0" Date: Aug., 1977
SHEET NO. 8 OF 18 SHEETS DT 112

DATE: _____
SURVEY PLOTTED BY: _____
DRAWN BY: _____
CHECKED BY: _____
ORIGINAL PLAN: _____
NOTE BOOK: _____
No. _____

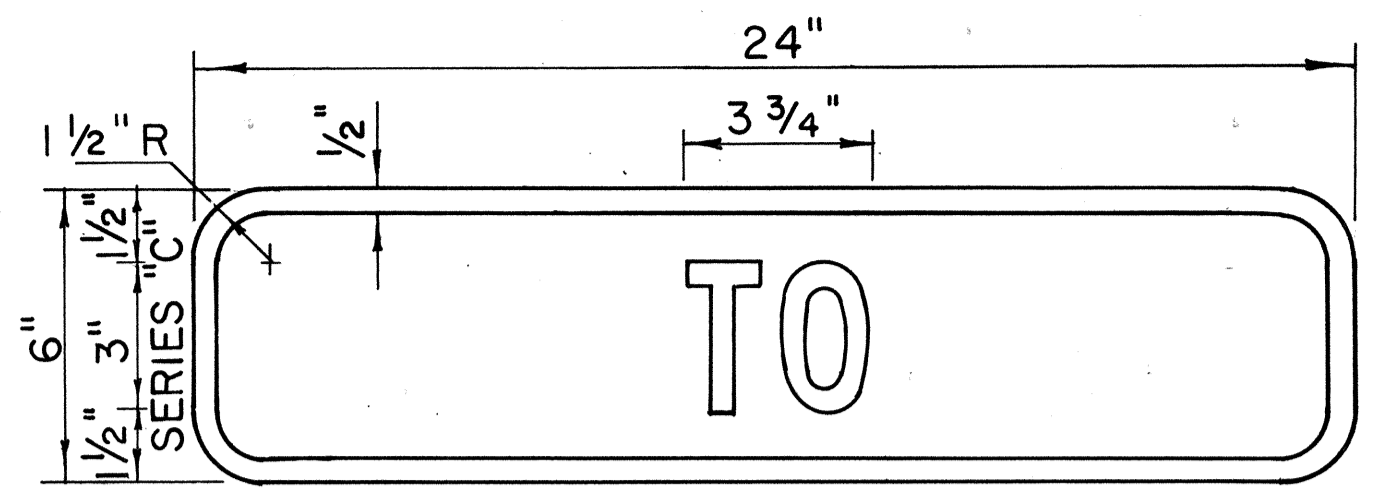
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-760012	1980	103	244

GENERAL NOTES BIKE ROUTE SIGN & SUPPLEMENTARY PLATES

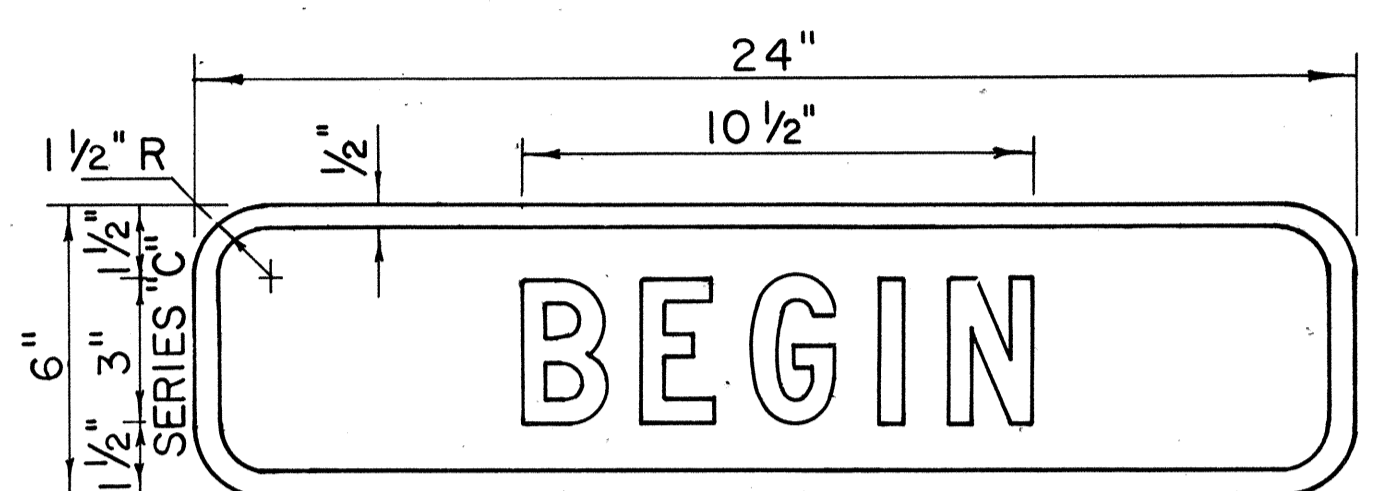
- Sign details shall conform to the latest edition of the following FHWA publications: "Manual on Uniform Traffic Control Devices for Streets and Highways", "Standard Highway Signs" and "Standard Alphabets for Highway Signs" and as amended.
 - Legend and borders shall be white (reflectORIZED) on a green (reflectORIZED) background.
 - Drill $\frac{3}{8}$ " ϕ bolt holes (for mounting) at appropriate locations.
 - When Supplementary Plates (DII-2 to DII-6 only) are required with Bike Route Sign (DII-1 or Alternate), the Sign Assembly shall be mounted on a single metal plate (24" x 24" or 24" x 30") and shall be arranged as shown on the plans.
 - Alternate sign messages shall be denoted by the following:
 - DII-1a: Bike Lane
 - DII-1b: Bike Path
 - DII-1c: Bikeway
 Dimension "J" varies. Visually center Alternate message.
- **6. See Plans for special details.



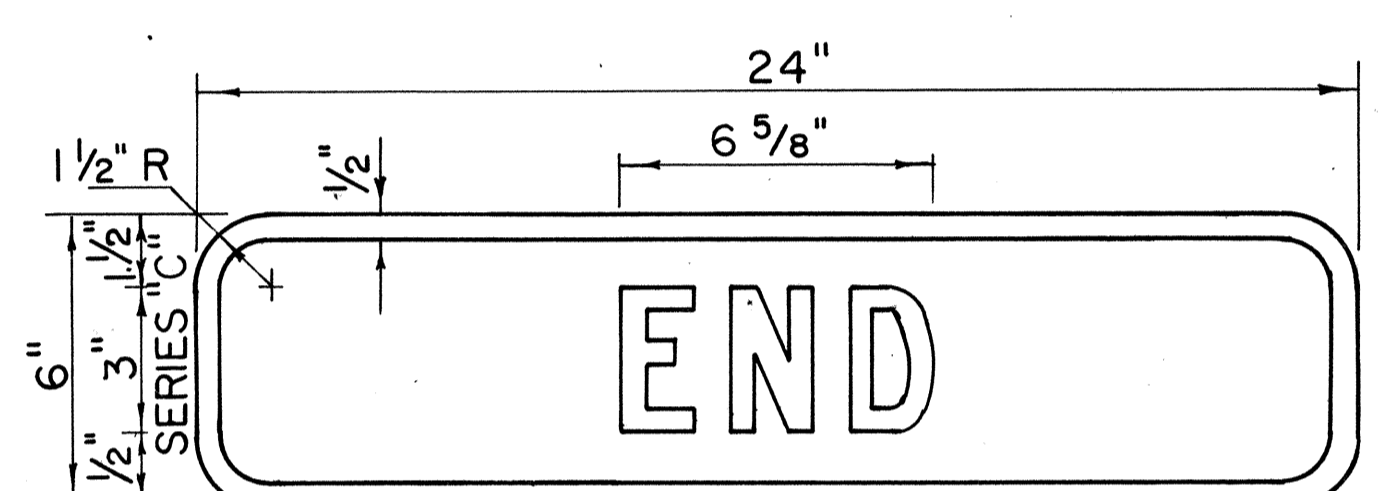
DII-1
BIKE ROUTE SIGN
Scale: 3" = 1'-0"



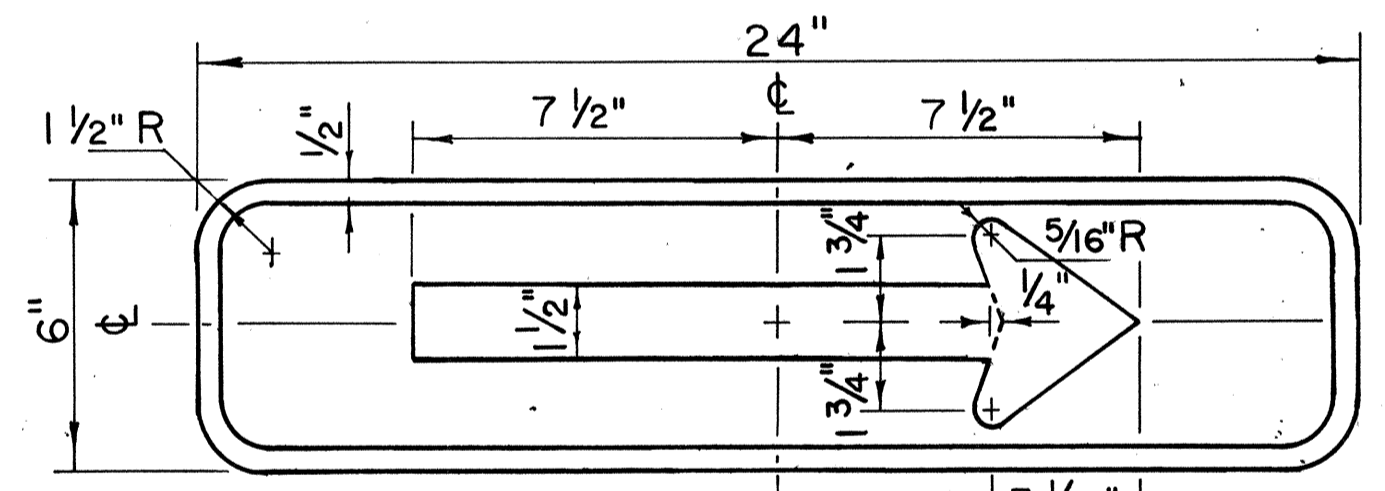
DII-2



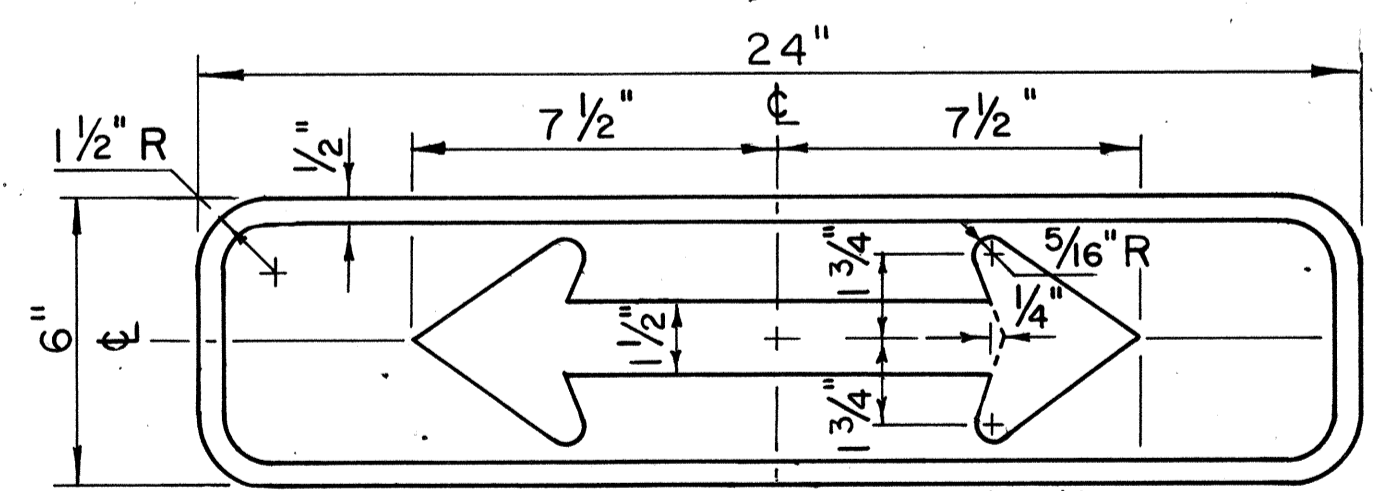
DII-3



DII-4



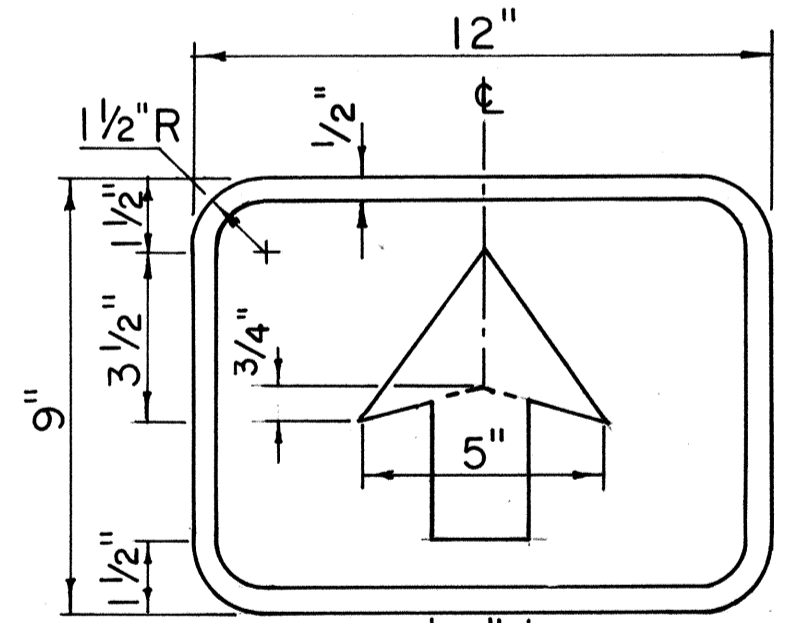
DII-5(R)



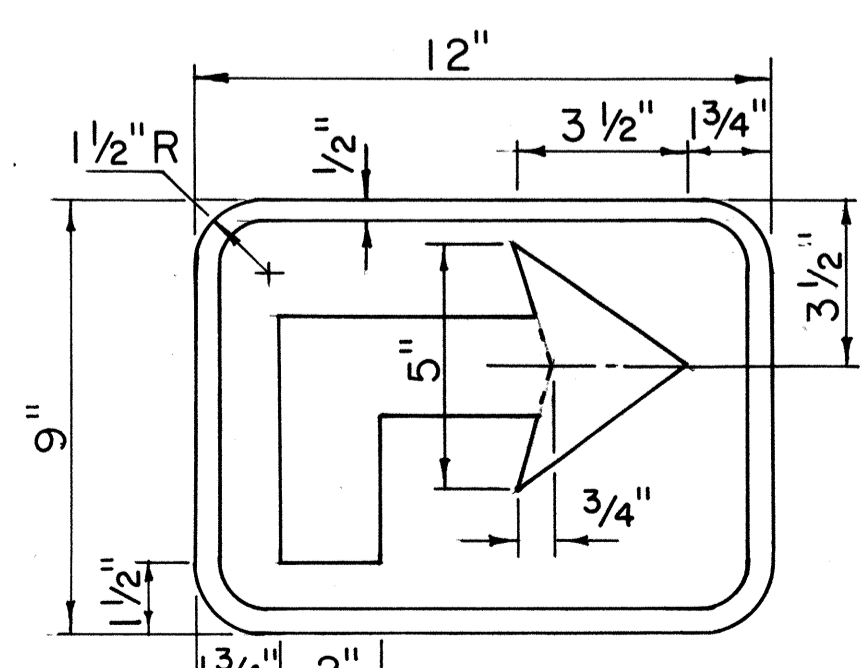
DII-6

SUPPLEMENTARY PLATES

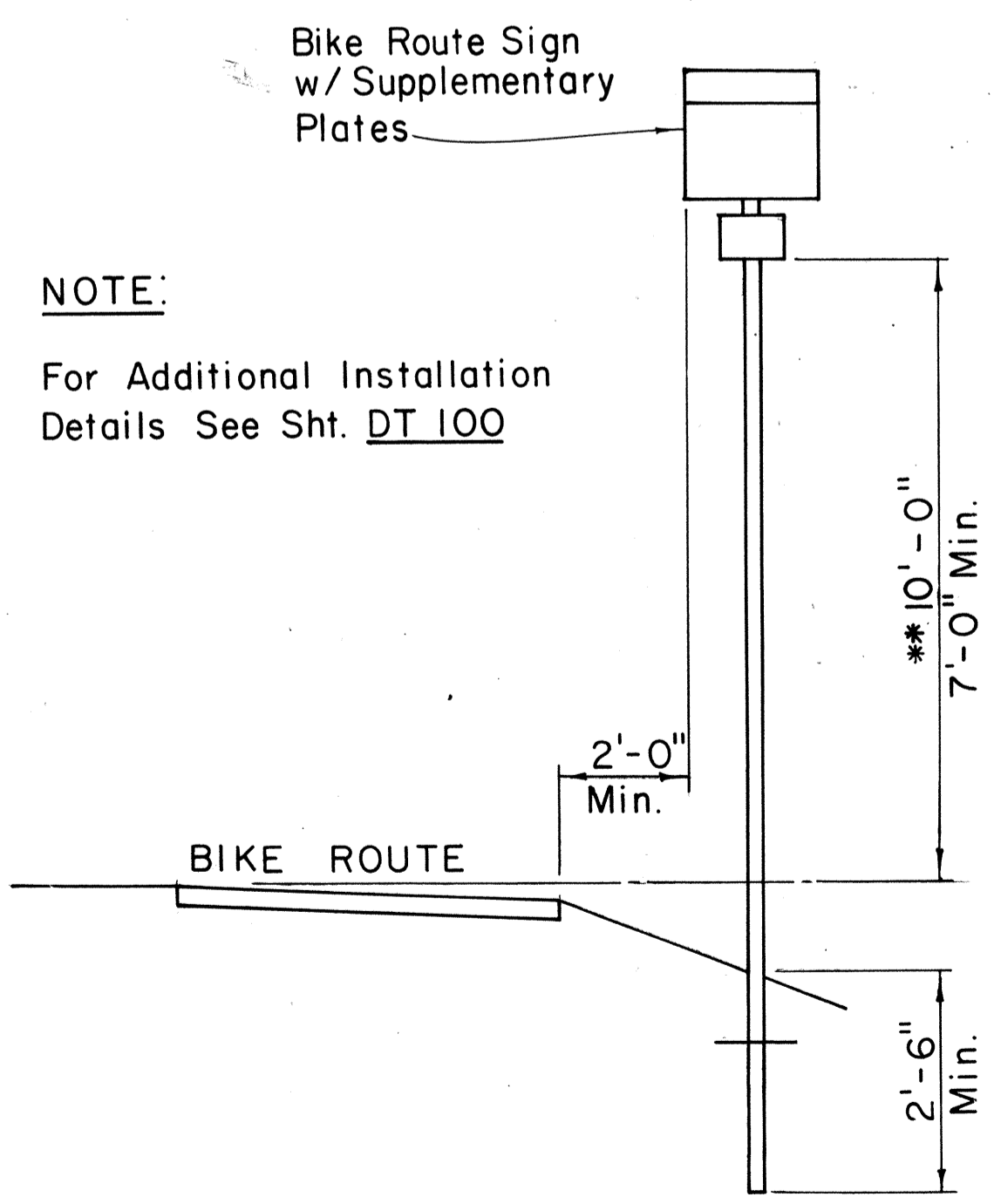
Scale: 3" = 1'-0"



DII-7



DII-8(R)



TYPICAL INSTALLATION
Scale: Not to Scale

NOTE:
For Additional Installation
Details See Sht. DT 100

DATE	_____
ORIGINAL SURVEY PLOTTED BY	_____
PLAN DRAWN BY	_____
TRACED BY	_____
DESIGNED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

NO.	REVISION	APPROVED BY	DATE
1	Revised depth of Sign Post	H.T.	5/2/79

APPROVAL RECOMMENDED:
Eishi Tanaka 11/2/77
TRAFFIC ENGINEER DATE

APPROVED:
Herbert Satoishi 11/2/77
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

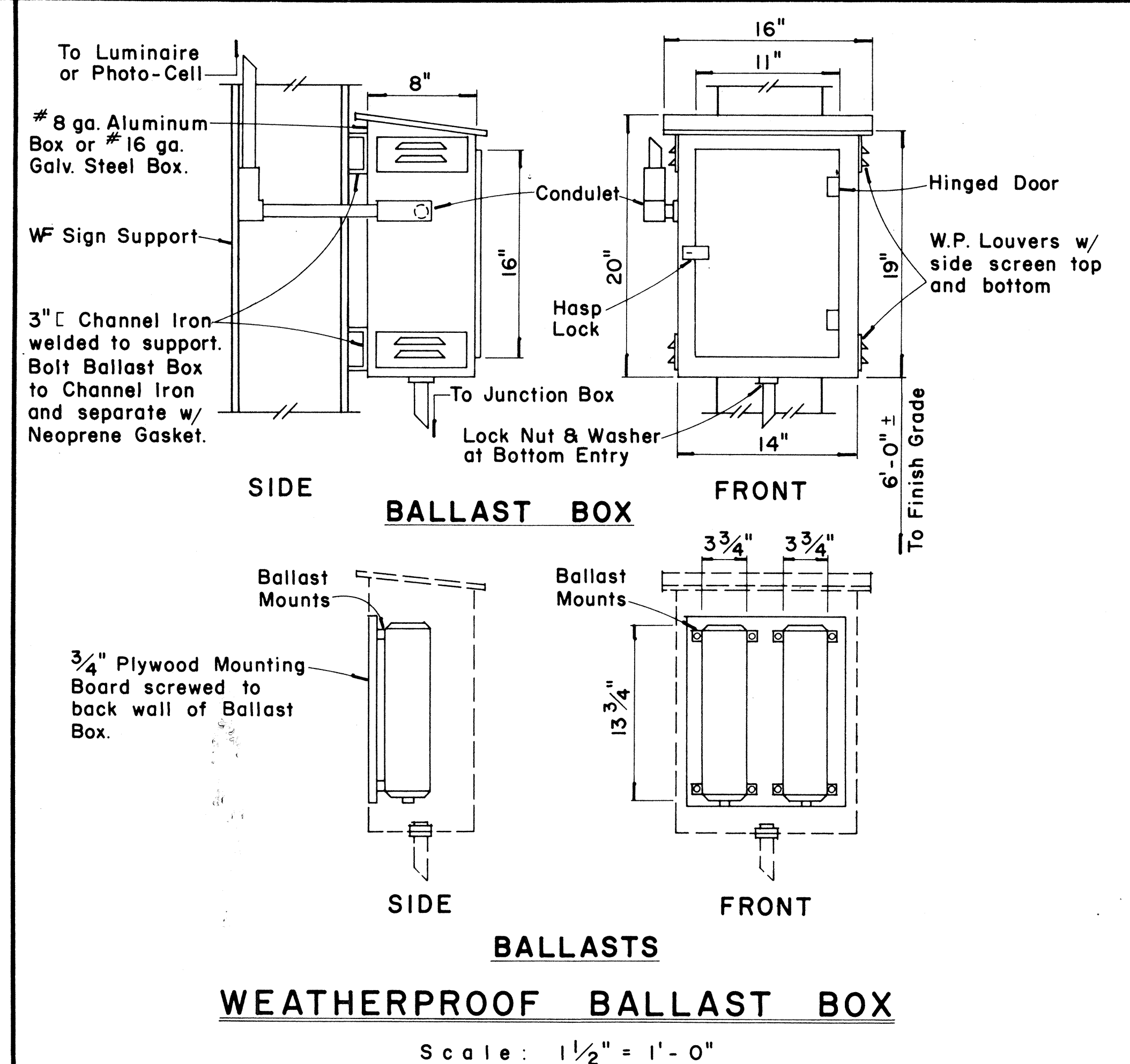
BIKE ROUTE SIGN
& SUPPLEMENTARY PLATES

Scale: As Shown June 1977

SHEET No. 9 OF 18 SHEETS DT 114

* For moment calculations only. Post shall be from top of foundation to top of sign.
 ** For fills with side slopes flatter than 4:1, Minimum Footing Depth shall be 4½ feet.

DATA TABLE FOR TYPE VI FOOTING																	
POST SIZE	MAXIMUM SIGN AREA	POST HEIGHT TOP OF FOUNDATION TO CENTER OF SIGN *	DIMENSIONS											ANCHOR BOLT DIA.	MINIMUM FOOTING DEPTH		
			H	J	K	M	N	O	P	S	T	U	V		W	CUT	FILL**
8 J 10	50 sq. ft.	14'	14"	5"	24"	17¼"	1⅝"	6"	1¼"	9"	6"	10"	2"	1"	1⅝" ∅	4½'	4½'
8 WF24	90 sq. ft.	21'															5'
8 WF35	190 sq. ft.	15'	16½"	6¾"	30"	20"	1¾"	6"	1⅜"	11¾"	6½"	10"	1¾"	1"	1¼" ∅	6'	7'
10 WF45	190 sq. ft.	25'															
10 WF45	200 sq. ft.	25'															
12 WF50	230 sq. ft.	25'															
12 WF50	250 sq. ft.	23'															



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1980	104	244

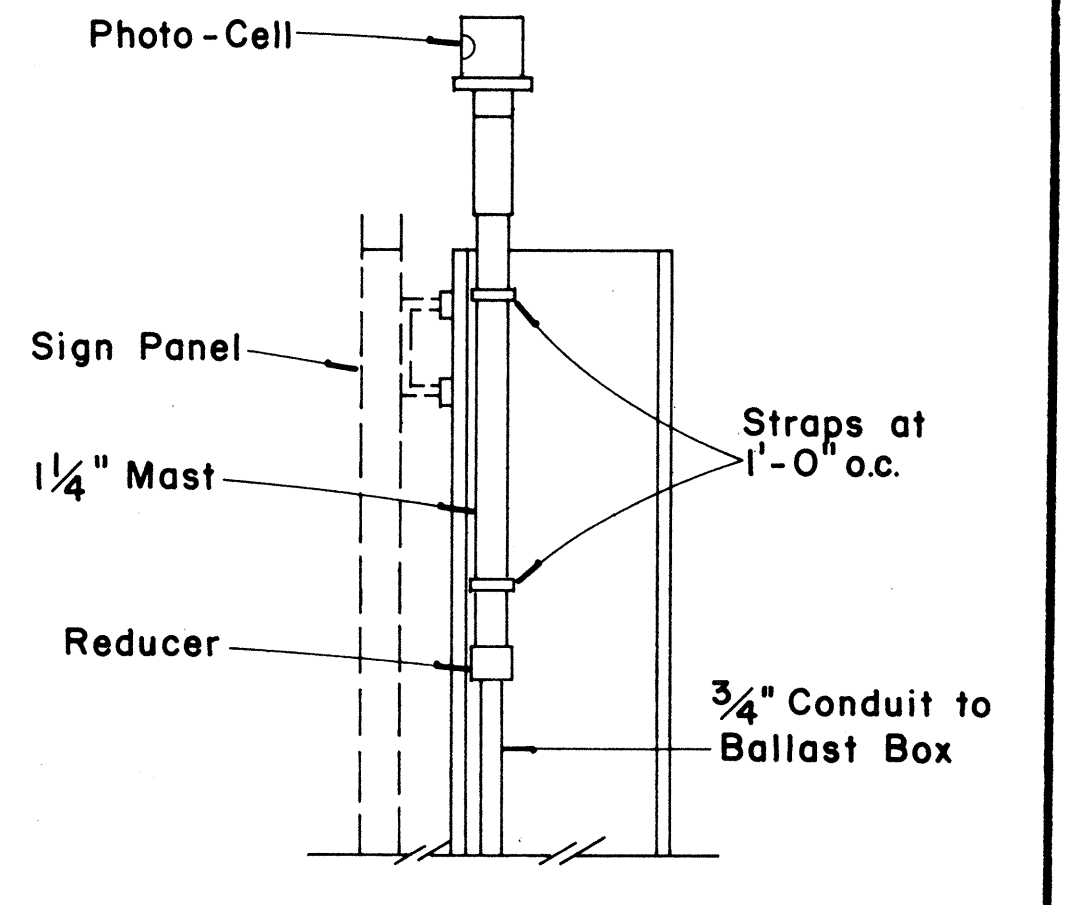
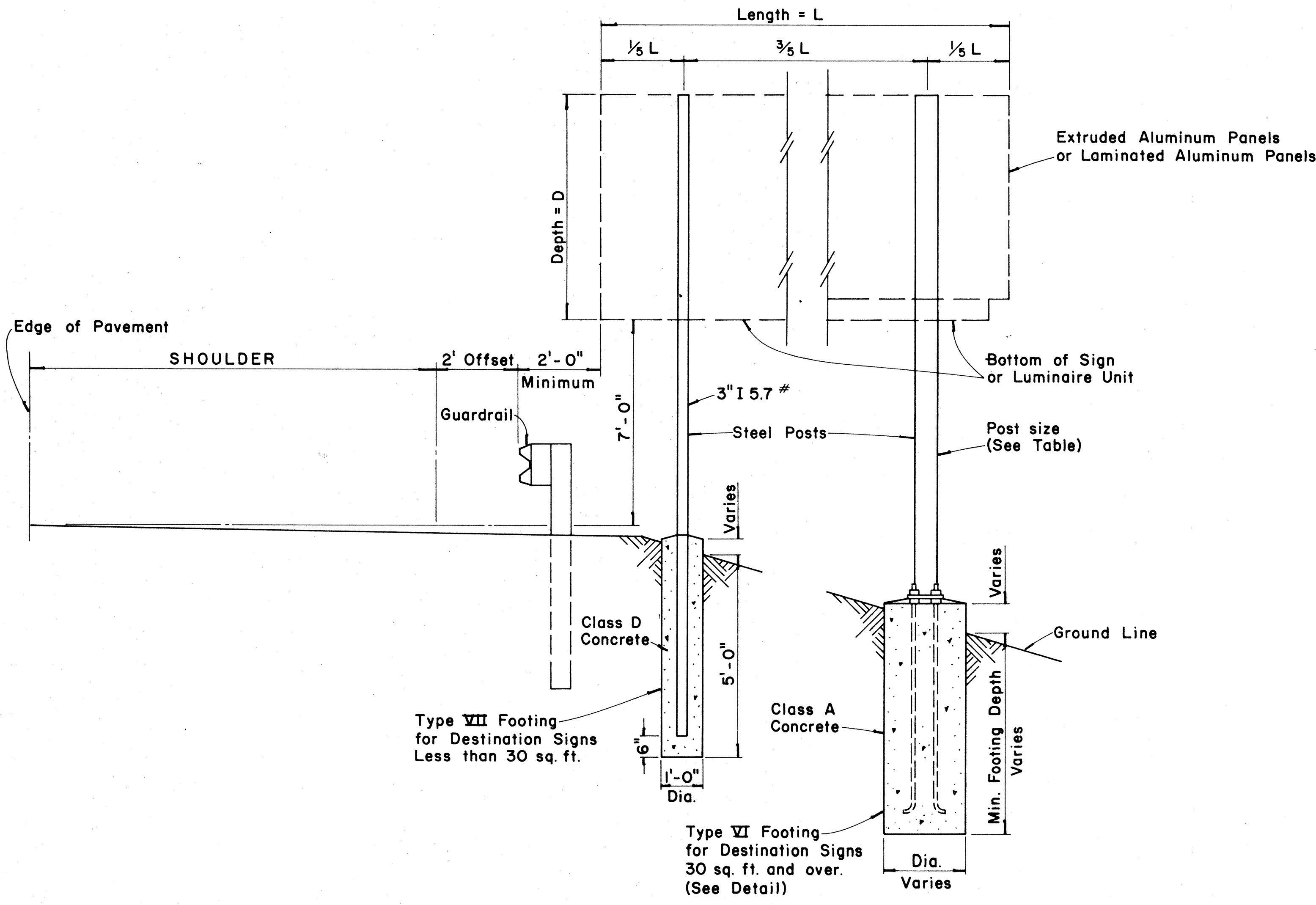
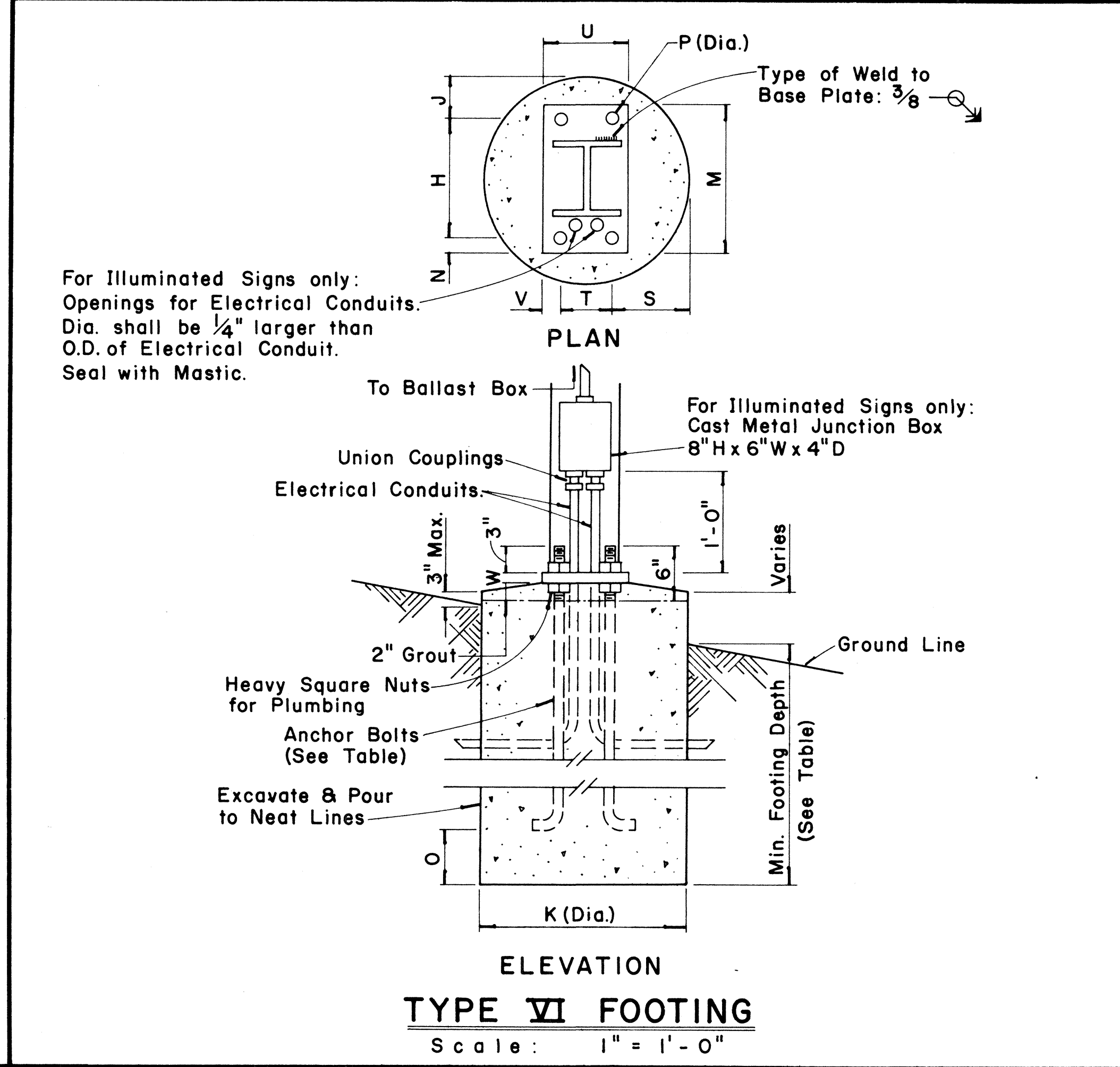


PHOTO-CELL DETAIL
 Scale: 1½" = 1'-0"



TYPICAL DESTINATION & GROUND MOUNTED EXPRESSWAY SIGN
 Not to Scale



For Illuminated Signs only:
 Openings for Electrical Conduits.
 Dia. shall be ¼" larger than
 O.D. of Electrical Conduit.
 Seal with Mastic.

APPROVAL RECOMMENDED:
Eishi Tanaka 12/29/69
 TRAFFIC ENGINEER DATE

APPROVED:
July S. Salas 12-30-69
 ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

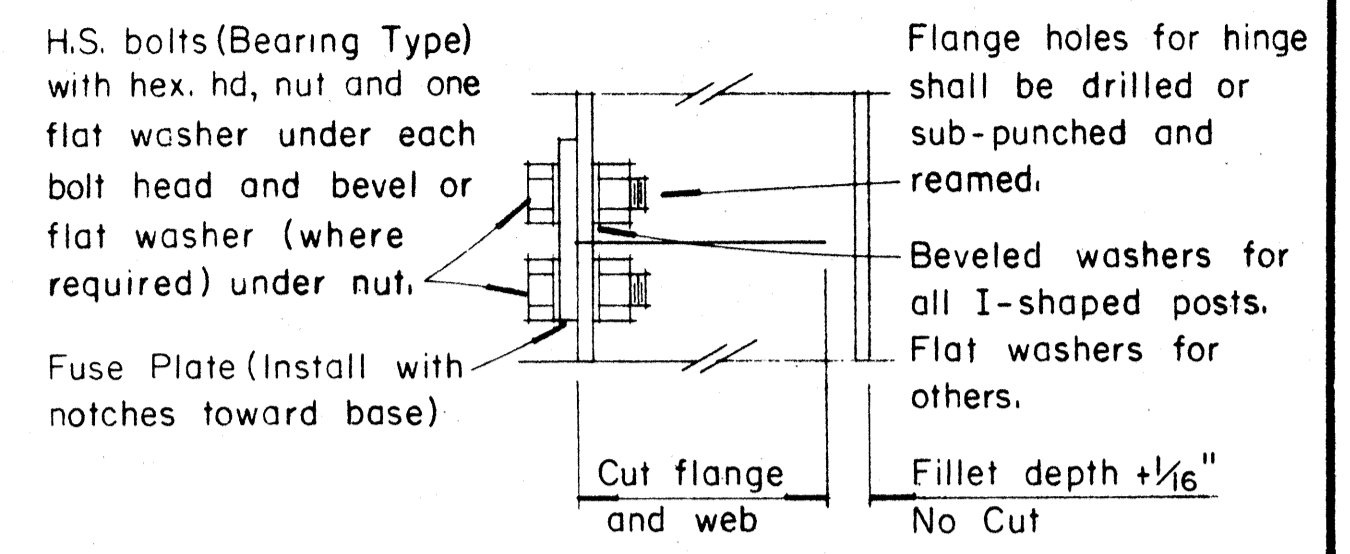
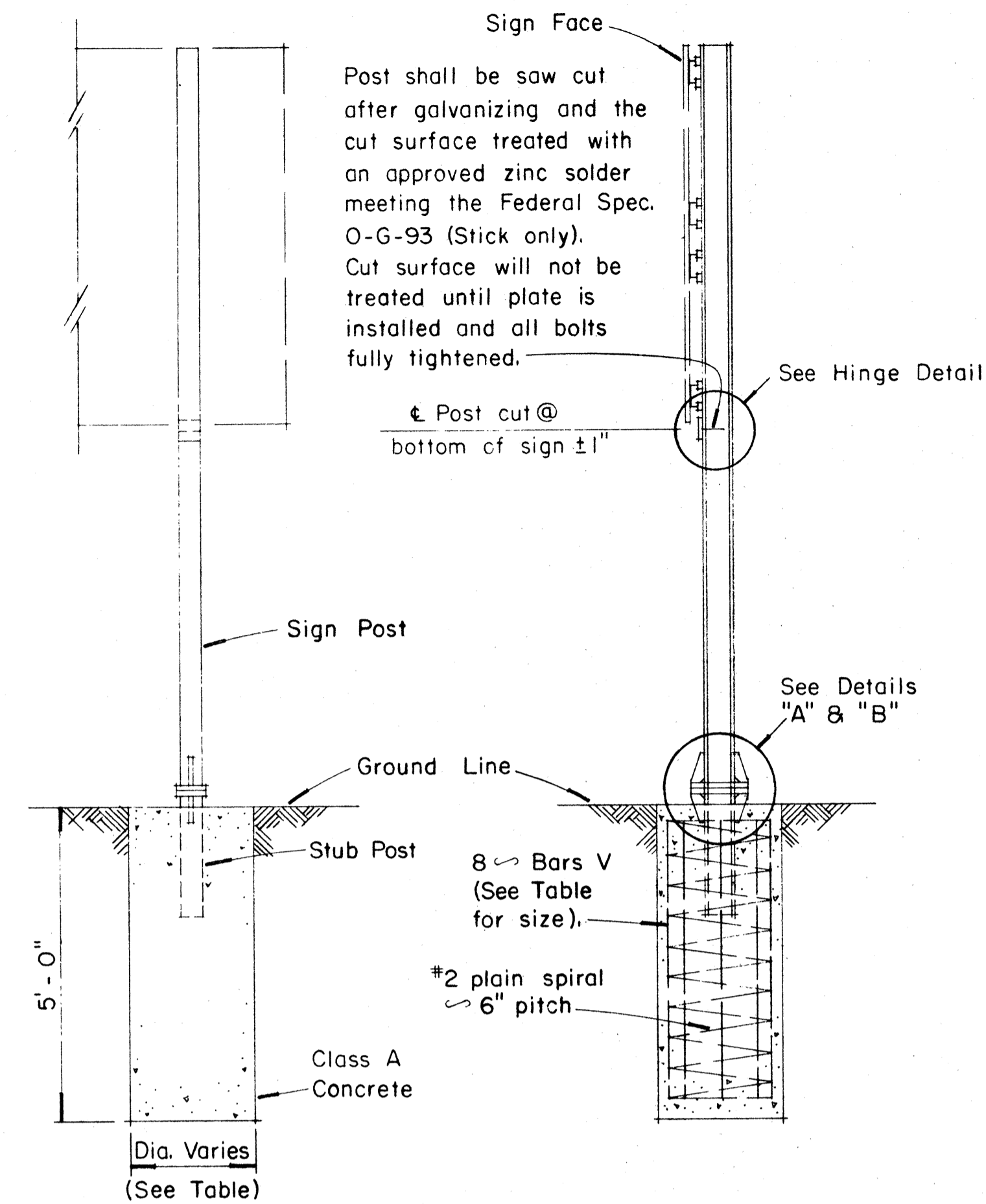
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
 DESTINATION & GROUND MOUNTED
 EXPRESSWAY SIGNS

Scale: As Shown
 SHEET No. 10 OF 18 SHEETS DT 203

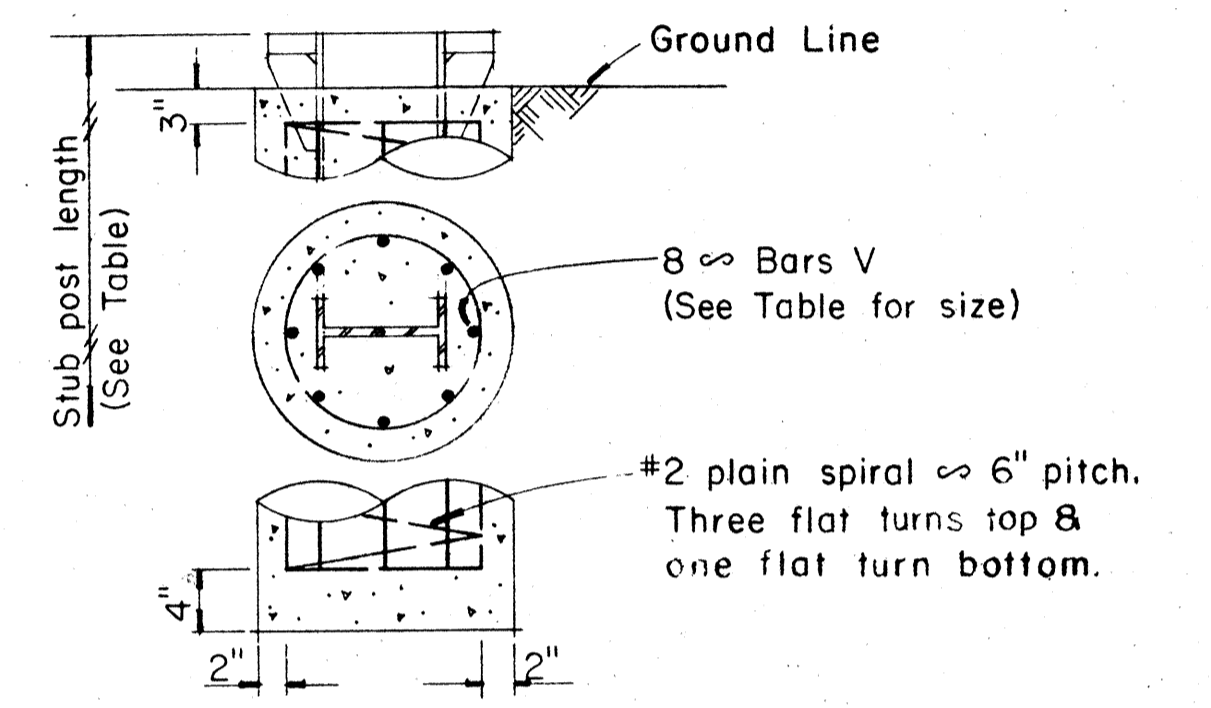
DATE
 DRAWN BY
 CHECKED BY
 ORIGINAL PLAN
 DESIGNED BY
 NOTE BOOK
 No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1980	105	244

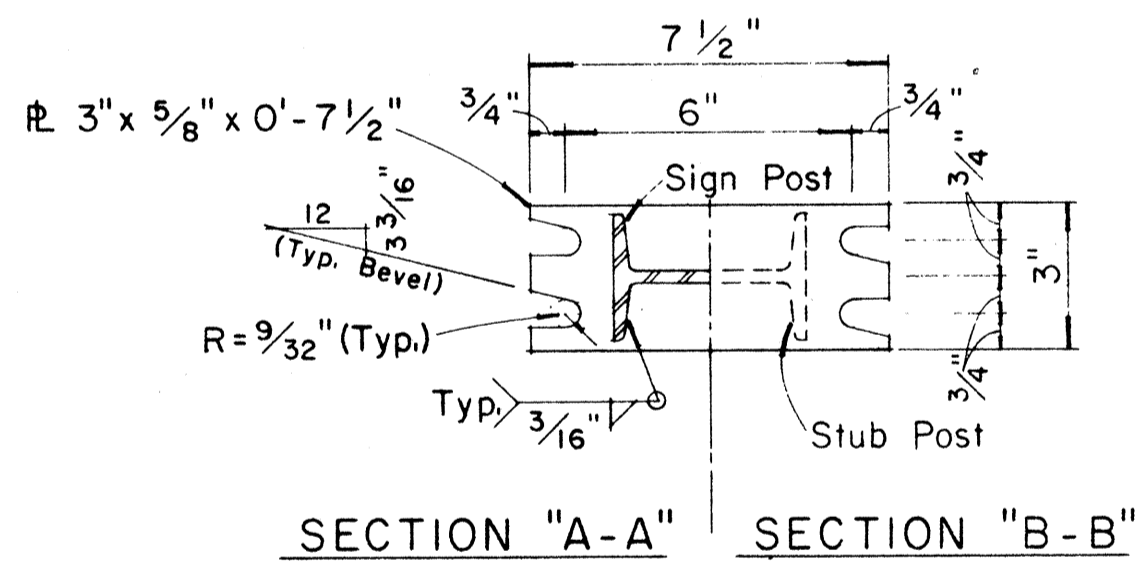
Post Size	BASE CONNECTION DATA TABLE										FUSE PLATE DATA TABLE										FOUNDATION DATA				
	Bolt Size & Torque	A	B	C	D	E	t1	t2	W	R	F	G	H	J	K	L	N	d1	t3	Bolt Dia.	Wt. of each Fuse Pl.	Stub Length	Stub Projection	Footing Diameter	Bars V Size
6 B 8.5	5/8" ϕ x 2 3/4" Torque = 450" #	5"	2"	1 1/4"	2 3/4"	1 1/8"	3/4"	1/2"	1/4"	1 1/32"	3 5/8"	2"	1 1/8"	4"	2 1/4"	7/8"	1/2"	9/16"	1/4"	1/2" ϕ	1.09 #	2'-0"	3"	2'-0"	#5
6 B 12											3 3/4"	2"	1 1/8"	4"	2 1/4"	7/8"	5/8"	1 1/16"	3/8"	5/8" ϕ	1.60 #	2'-0"	3"	2'-0"	#5
6 B 15.5											4 1/2"	2 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	3/4"	1 3/16"	1/2"	3/4" ϕ	3.75 #	2'-6"	3"	2'-0"	#6
8 W 17											4 1/2"	2 1/2"	1 1/4"	5 1/4"	2 3/4"	1 1/4"	3/4"	1 3/16"	1/2"	3/4" ϕ	3.27 #	2'-6"	3"	2'-0"	#7
8 W 20	3/4" ϕ x 3 1/2" Torque = 750" #	6"	2 1/4"	1 3/8"	3 1/2"	1 1/4"	1"	3/4"	5/16"	1 3/32"	4 7/8"	2 1/2"	1 1/2"	5 1/4"	2 3/4"	1 1/2"	7/8"	1 5/16"	9/16"	7/8" ϕ	3.93 #	3'-0"	2 1/2"	2'-0"	#8
10 W 21											5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	1 5/16"	9/16"	7/8" ϕ	4.75 #	3'-0"	2 1/2"	2'-0"	#9
10 W 25											5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	1 5/16"	9/16"	7/8" ϕ	4.79 #	3'-0"	2 1/2"	2'-0"	#10
12 W 27											5 3/8"	3"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	7/8"	1 5/16"	9/16"	7/8" ϕ	5.42 #	3'-0"	2 1/2"	2'-0"	#11
3 I 5.7	1/2" ϕ x 2 1/2" Torque = 200" #	SEE DETAIL "A"									3 1/8"	1 1/2"	1 1/8"	2 5/8"	1 1/2"	9/16"	1/2"	9/16"	1/4"	1/2" ϕ	0.64 #	1'-6"	3 1/2"	1'-6"	#5
4 I 7.7		3 1/8"	1 1/2"	1 1/8"	2 5/8"	1 1/2"	9/16"	1/2"	9/16"	1/4"	1/2" ϕ	0.64 #	1'-6"	3 1/2"	1'-6"	#5									



HINGE DETAIL

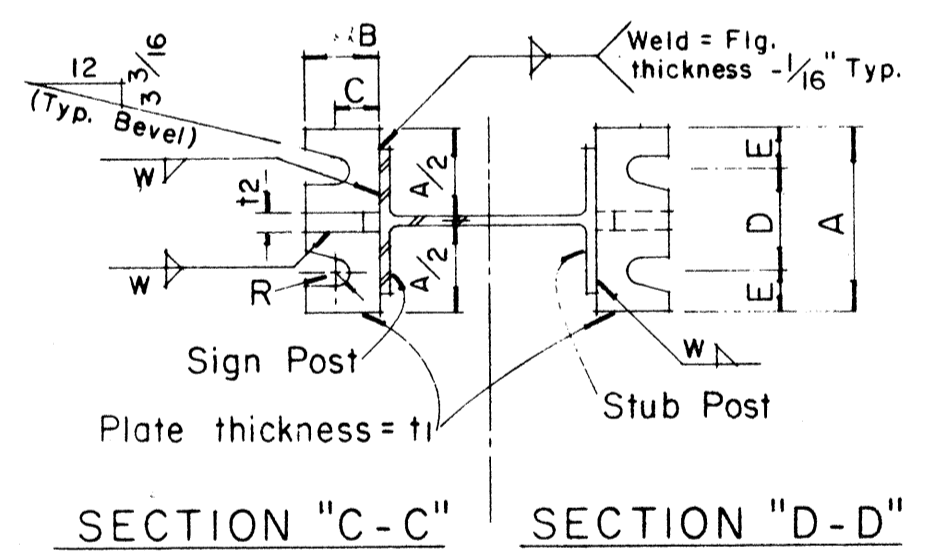


FOUNDATION DETAIL

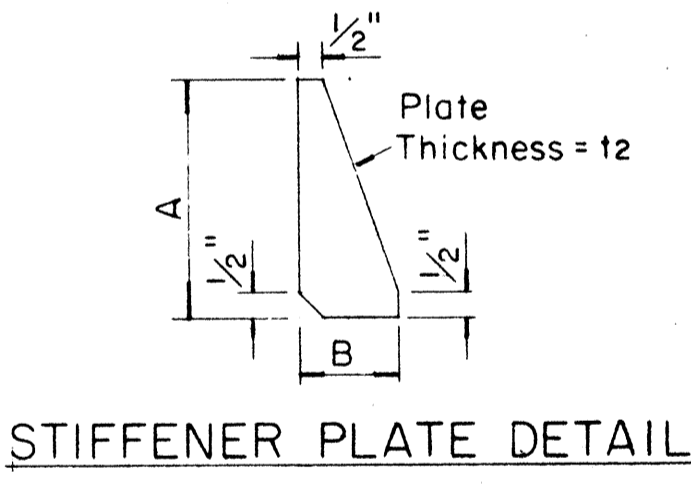


SECTION "A-A" SECTION "B-B"

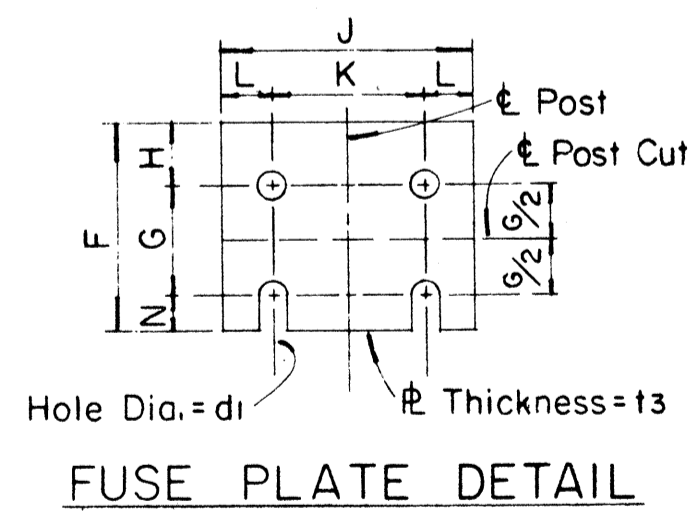
NOTE: Sections shown are for installations on right shoulder and in gore. Reverse plate slot bevels for installations on left shoulder.



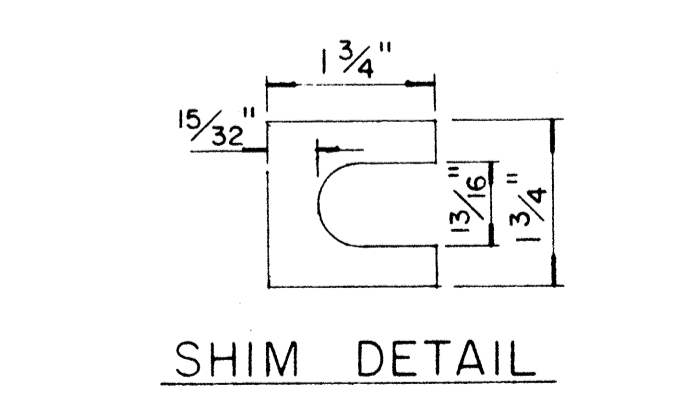
SECTION "C-C" SECTION "D-D"



STIFFENER PLATE DETAIL



FUSE PLATE DETAIL



SHIM DETAIL

GENERAL NOTES

- Design conforms with AASHTO Specifications for the design and Construction of Structural Supports for Highway Signs.
- Materials and Fabrication shall conform to the requirements of the Standard Specifications and Special Provisions.
- All holes shall be drilled. All plate cuts shall preferably be saw cuts, however; flame cutting will be permitted provided all edges are ground. Metal projecting beyond the plane of the plate face will not be tolerated.
- Tighten the high strength bolts in the base connection only to the torque shown, do not overtighten. All bolts other than high strength bolts shall conform to ASTM A 307, Class A.
- All structural steel, bolts, nuts and washers shall be galvanized as per the Standard Specifications and Special Provisions. Structural steel to be galvanized after fabrication except as noted.
- Structural steel shall conform with with the requirements of ASTM A 441
- Galvanizing of all posts shall be projection above concrete plus 6" minimum.
- All friction fuse bolts shall be tightened in the shop following a method approved by the Engineer. Tightening shall be to such a degree as to obtain the following minimum residual tension in each bolt:

Bolt Size	Min. Tension	Bolt Size	Min. Tension
1/2" ϕ	12050 Lbs.	3/4" ϕ	28400 Lbs.
5/8" ϕ	19200 Lbs.	7/8" ϕ	36050 Lbs.

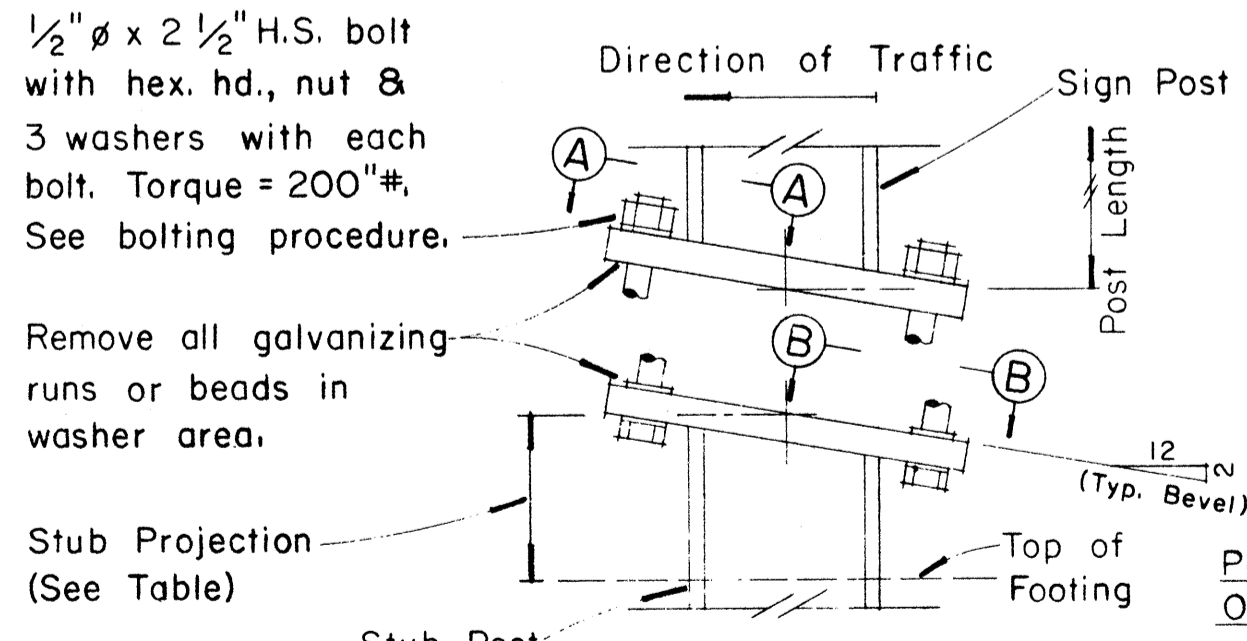
APPROVAL RECOMMENDED:
Eishi Tanaka 12/23/69
 TRAFFIC ENGINEER DATE

APPROVED:
[Signature] 12-30-69
 ASSISTANT CHIEF, ENGINEERING DATE

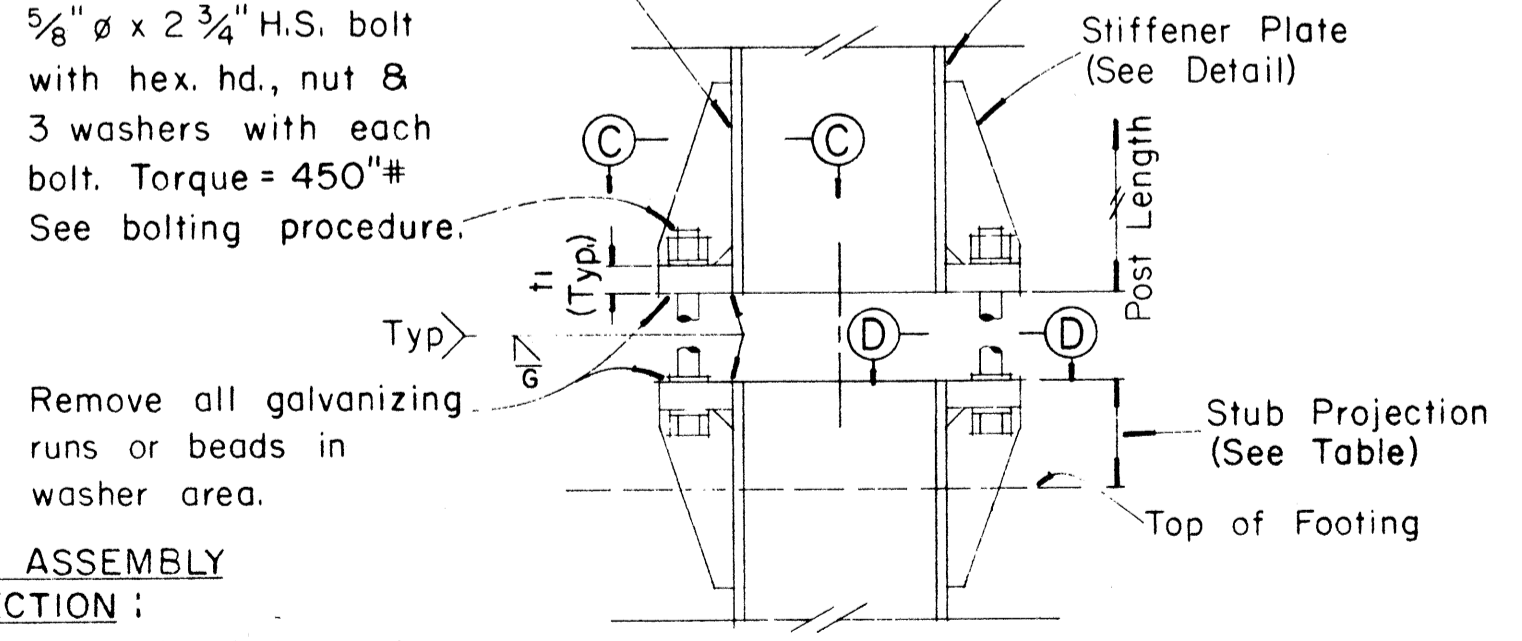
NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
BREAK-AWAY SIGN SUPPORTS
FOR
GROUND MOUNTED GUIDE SIGNS
 Not to Scale

DATE: _____
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 NOTE BOOK NO. _____



DETAIL "A"
SIGN POST & STUB POST
(For 4I7.7 and 3I5.7 Shapes)



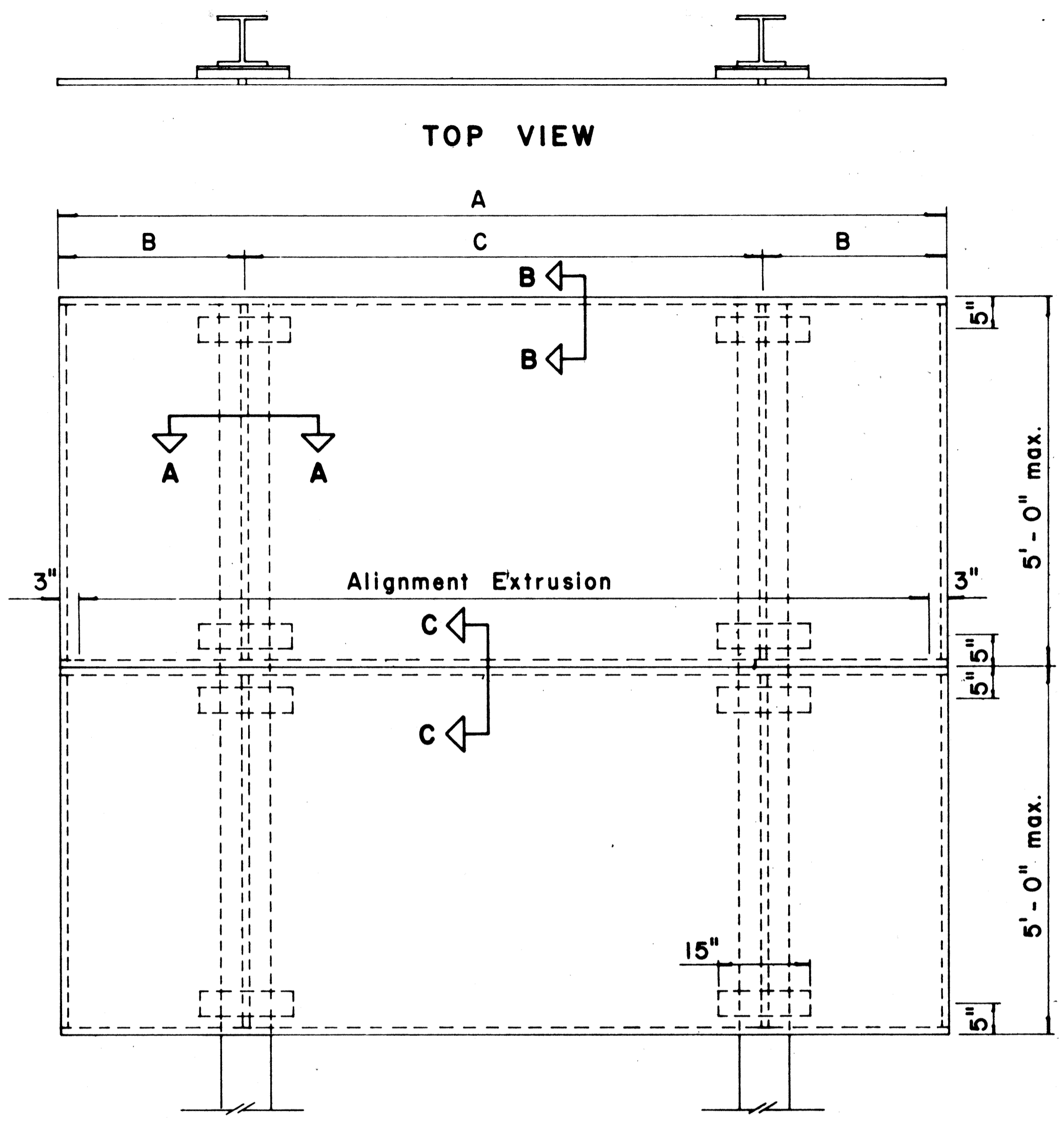
DETAIL "B"
SIGN POST & STUB POST
(For WF and B Shapes)

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:
 1. Assemble post to stub with bolts and with one flat washer on each bolt between plates.
 2. Shim as required to plumb post.
 3. Tighten all bolts the max. possible with 12" to 15" wrench to bed washers & shims and to clean bolt threads then loosen each bolt in turn & retighten bolts in systematic order to prescribed torque. (See Table)
 4. Burr threads at junction with nut using a center punch to prevent nut loosening.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	106	244

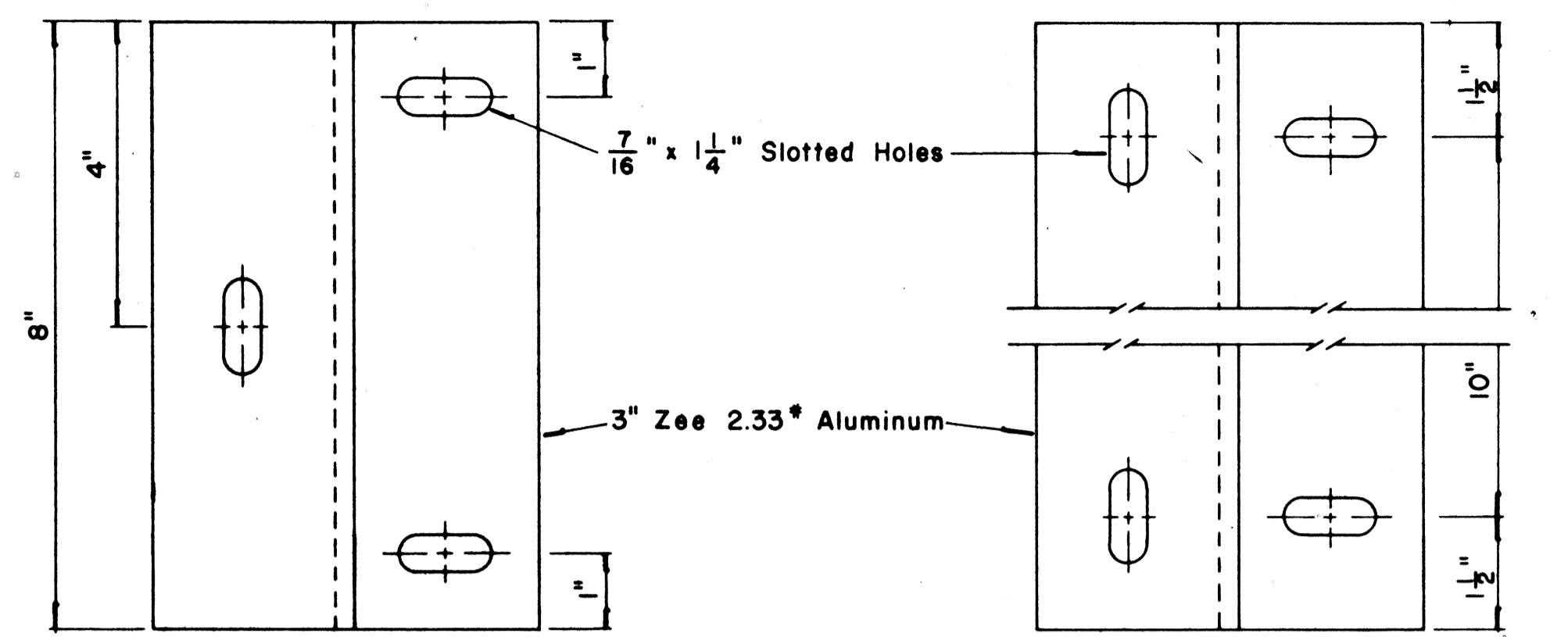
(GROUND MOUNTED SIGNS)
SUPPORT SPACING TABLE

PANEL THICK.	LENGTH OF SIGN	NO. OF SUPPORTS	OVERHANG	SUPPORT SPACING
	A		B	C
1"	6'-0"	2	12"	48"
1"	6'-6"	2	15"	48"
1"	7'-0"	2	15"	54"
1"	7'-6"	2	18"	54"
1"	8'-0"	2	18"	60"
1"	8'-6"	2	20"	62"
1"	9'-0"	2	22"	64"
1"	9'-6"	2	23"	68"
1"	10'-0"	2	24"	72"
1"	10'-6"	2	24"	78"
1"	11'-0"	2	24"	84"
1"	11'-6"	2	27"	84"
1"	12'-0"	2	30"	84"
1"	12'-6"	2	30"	90"
1"	13'-0"	2	30"	96"
1"	13'-6"	2	30"	102"
1"	14'-0"	2	30"	108"
1"	14'-6"	2	36"	102"
1"	15'-0"	2	36"	108"
2.5"	15'-6"	2	36"	114"
2.5"	16'-0"	2	39"	114"
2.5"	16'-6"	2	39"	120"
2.5"	17'-0"	2	39"	126"
2.5"	17'-6"	2	42"	126"
2.5"	18'-0"	2	42"	132"
2.5"	18'-6"	2	45"	132"
2.5"	19'-0"	2	45"	138"
2.5"	19'-6"	2	45"	144"
2.5"	20'-0"	2	48"	144"
2.5"	20'-6"	2	48"	150"
2.5"	21'-0"	2	51"	150"
2.5"	21'-6"	2	51"	156"
2.5"	22'-0"	2	51"	162"
2.5"	22'-6"	2	54"	162"
2.5"	23'-0"	2	54"	168"
2.5"	23'-6"	2	54"	174"
2.5"	24'-0"	2	57"	174"



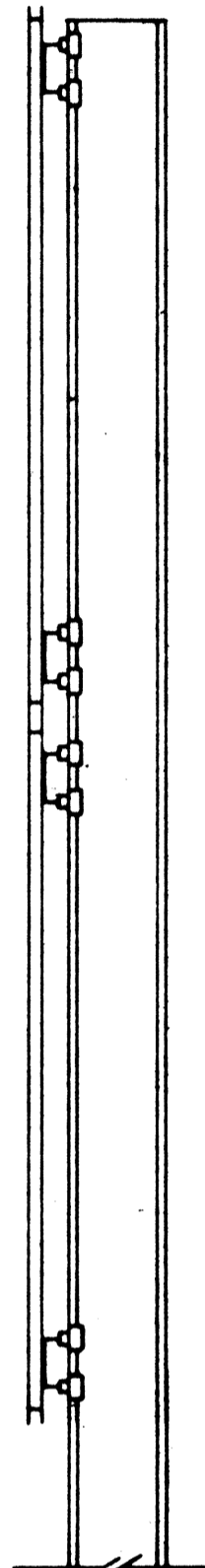
TYPICAL SIGN ASSEMBLY

Scale: $\frac{3}{4}$ " = 1'-0"

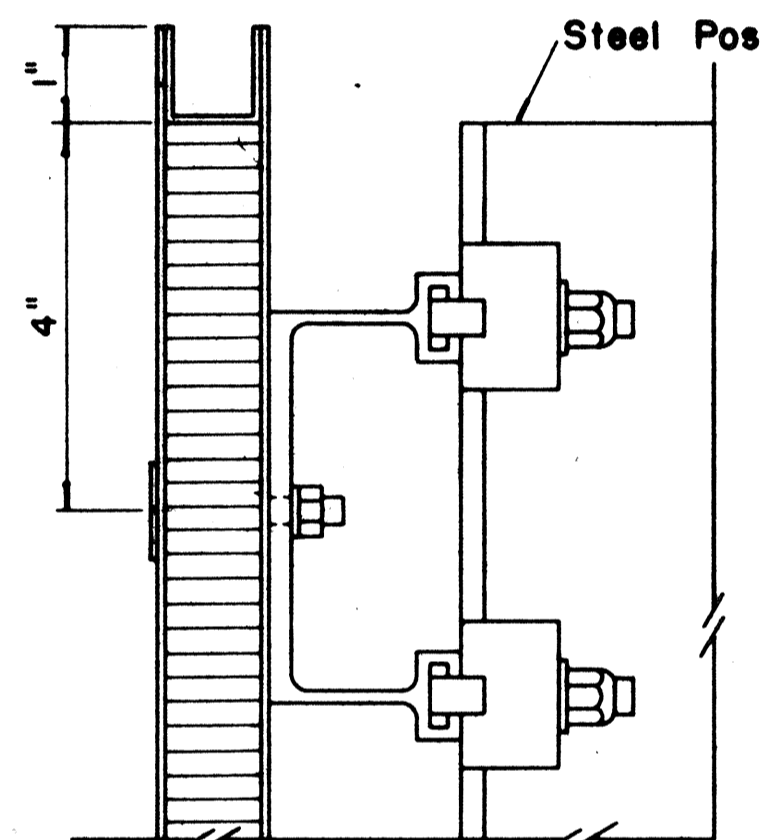


ZEE MOUNTING DETAILS

Scale: $\frac{1}{2}$ " = 1"

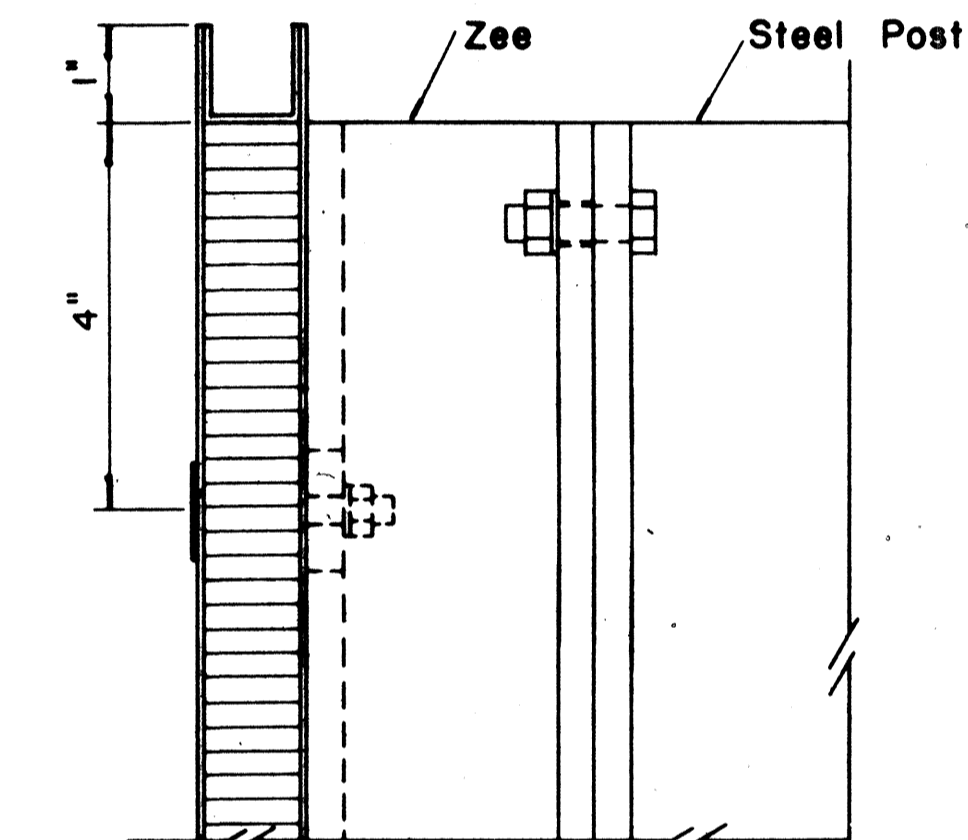


SIDE VIEW



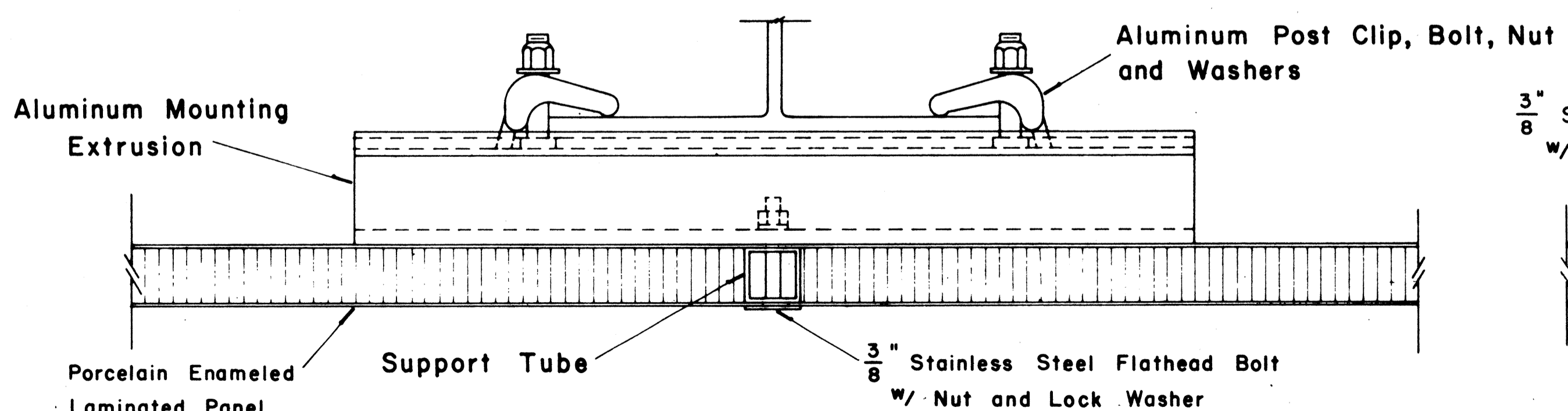
SECTION "B-B"

Scale: $\frac{1}{2}$ " = 1"



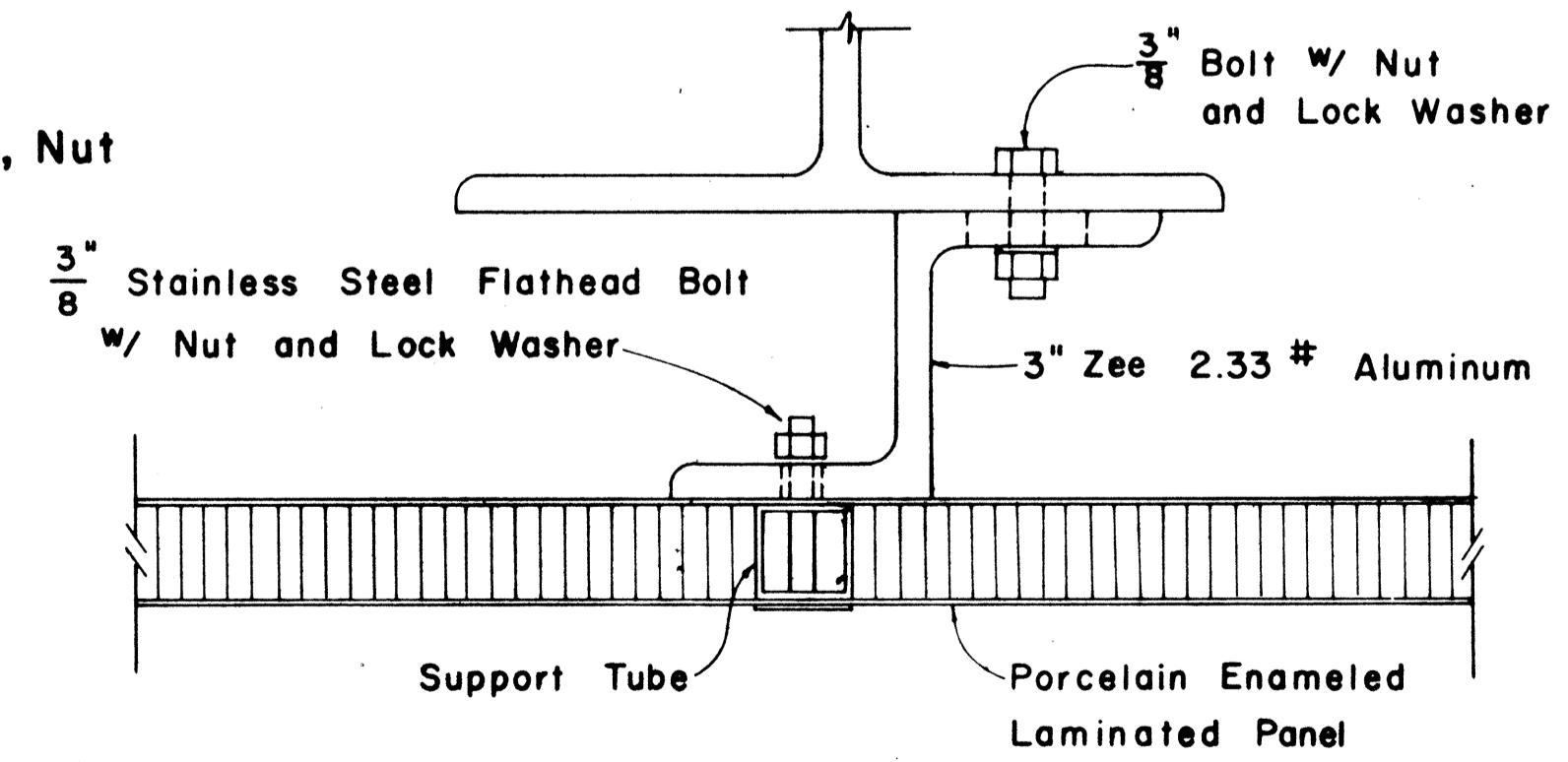
SECTION "B-B" (Alternate)

Scale: $\frac{1}{2}$ " = 1"



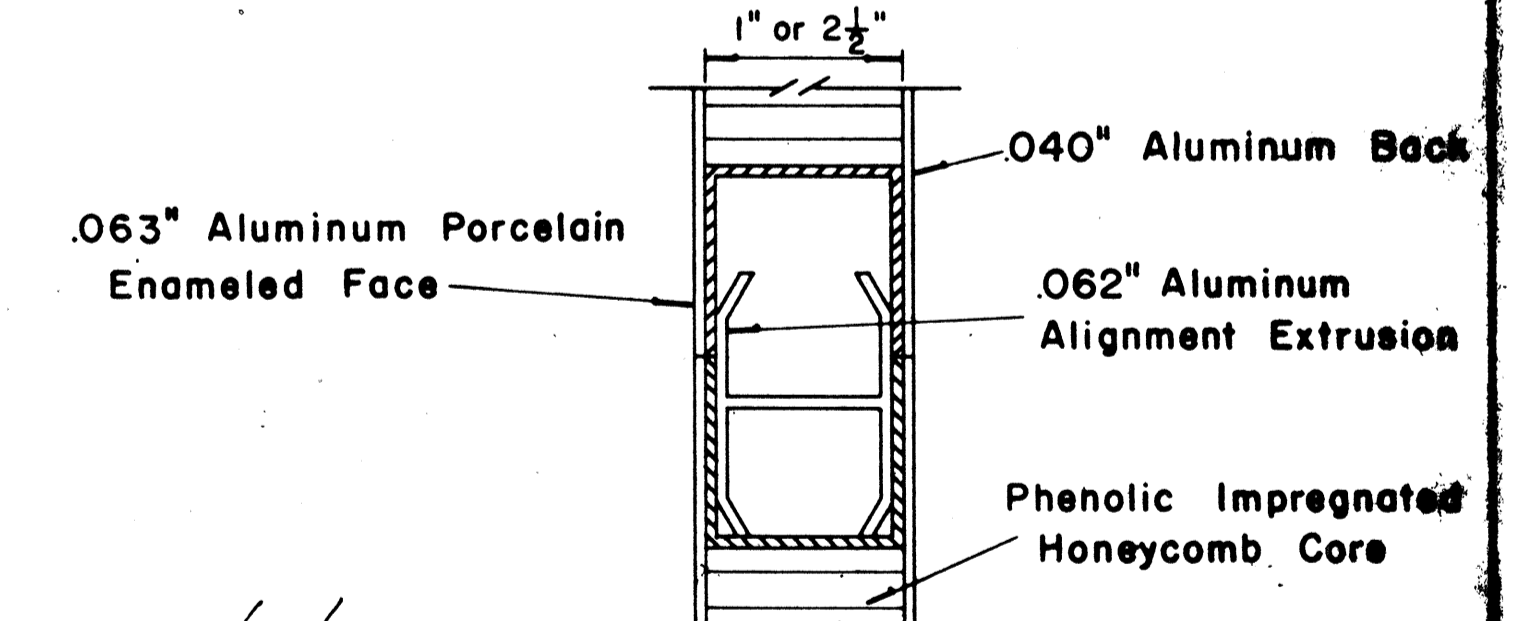
SECTION "A-A"

Scale: $\frac{1}{2}$ " = 1"



SECTION "A-A" (Alternate)

Scale: $\frac{1}{2}$ " = 1"



CLOSURE DETAIL SECTION "C-C"

FULL SCALE

APPROVAL RECOMMENDED:
Euchi Tanaka 12/29/69
TRAFFIC ENGINEER DATE

APPROVED:
Shelby S. S. S. 12-30-69
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

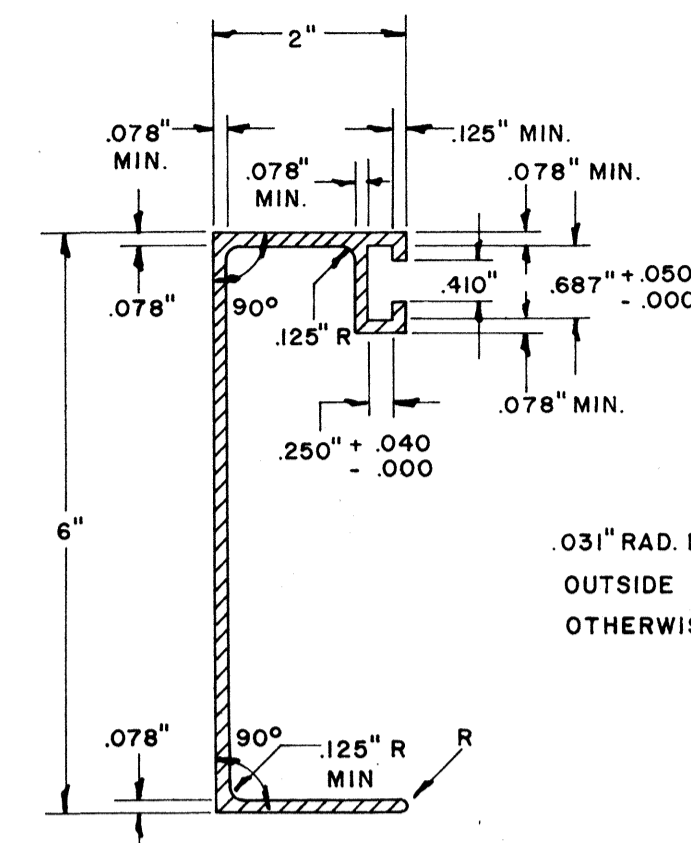
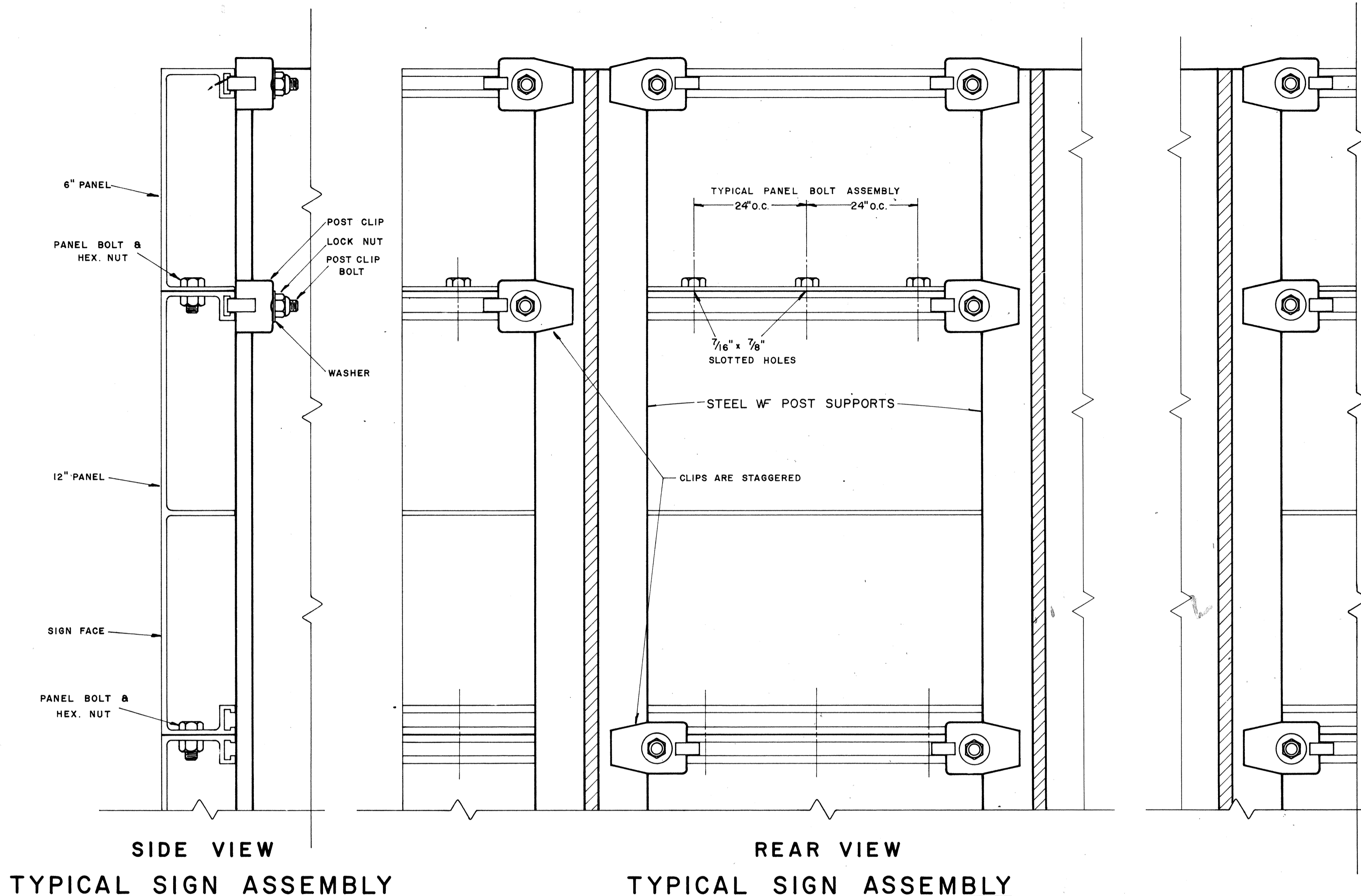
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
LAMINATED ALUMINUM
SIGN PANELS
(GROUND MOUNTED)

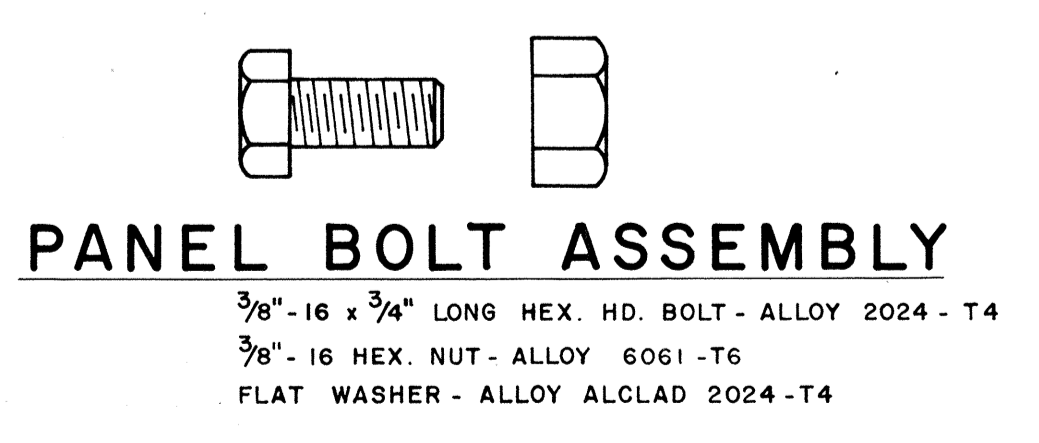
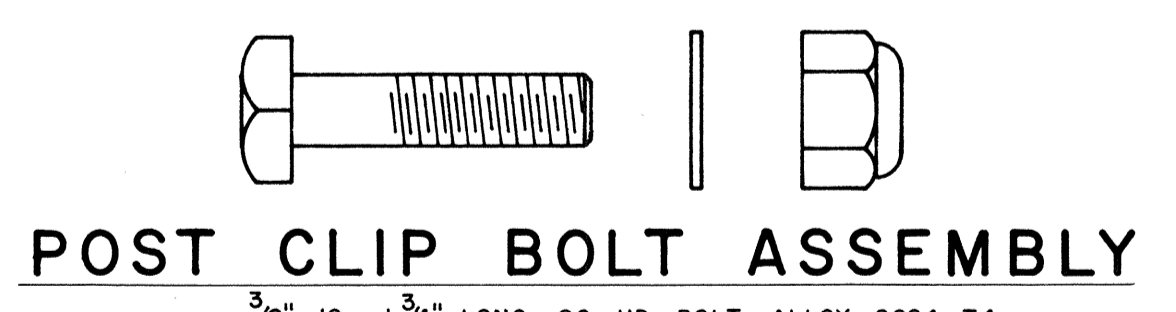
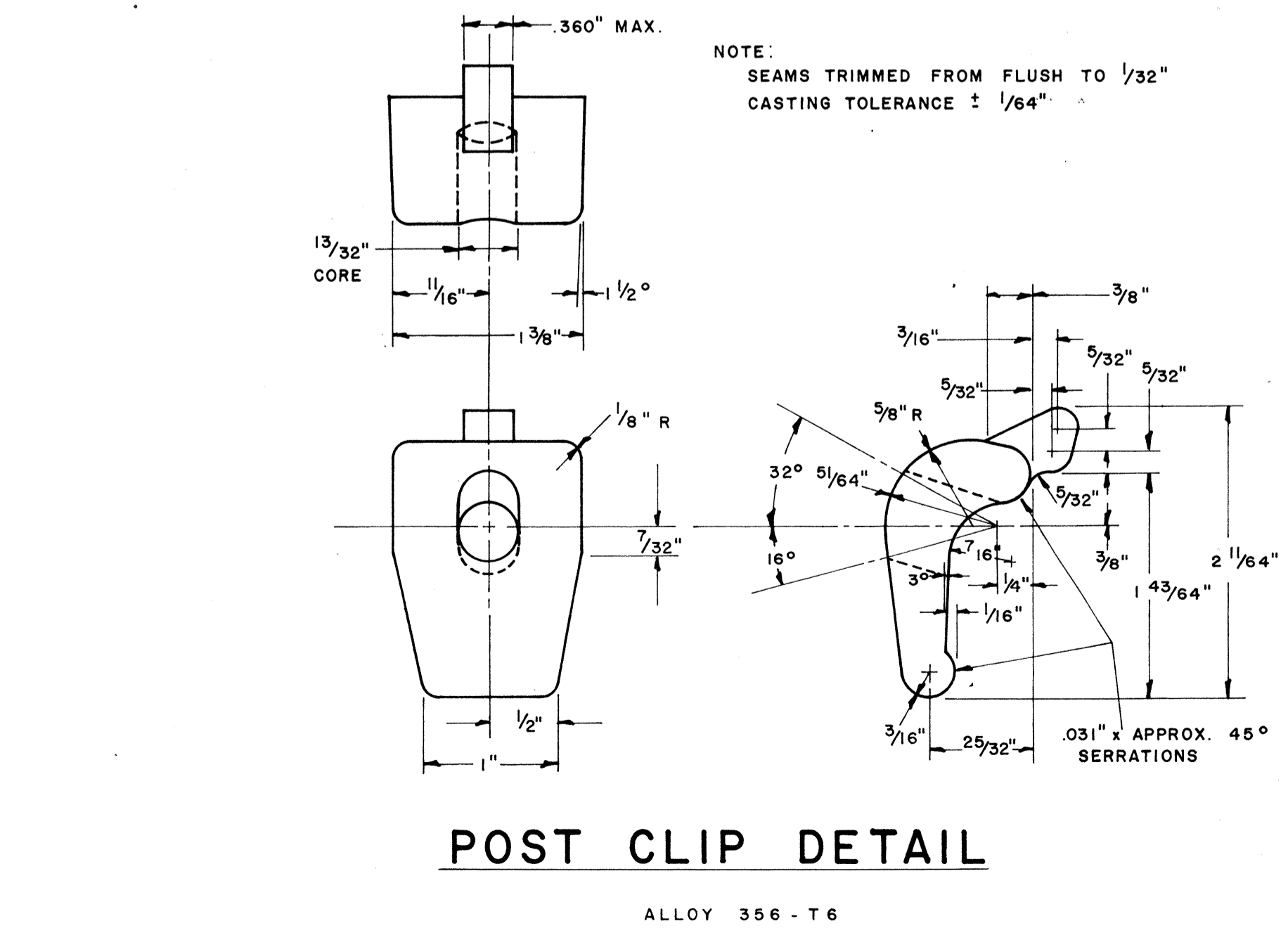
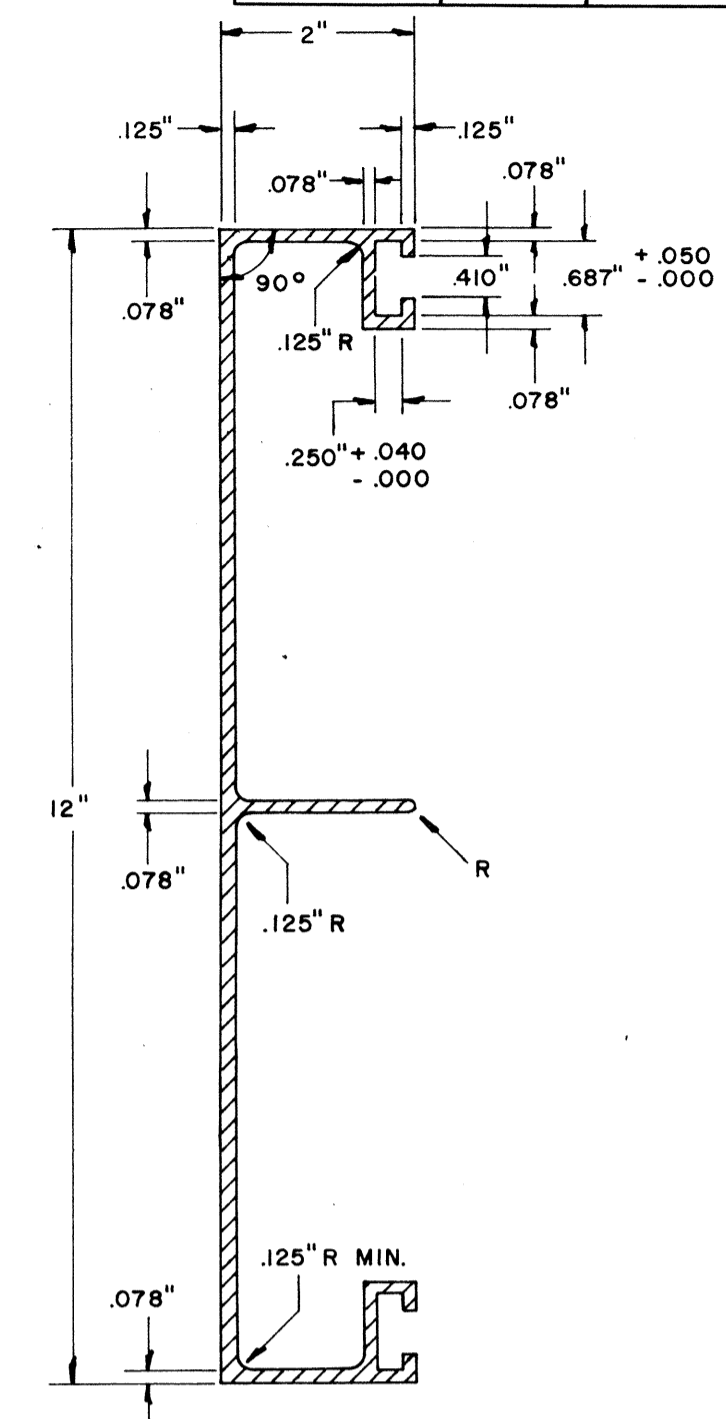
Scale: As Shown

SURVEY PLOTTED BY _____ DATE _____
 ORIGINAL PLAN _____
 DESIGNED BY _____
 QUANTITIES BY _____
 CHECKED BY _____
 No. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	107	244



SOLID EXTRUDED SIGN PANEL DETAILS



NOTE:
Extruded Aluminum Panels to be used for
Destination Signs with Reflective Sheeting Background

APPROVAL RECOMMENDED:
Etschi Tanaka 12/29/62
TRAFFIC ENGINEER DATE

APPROVED:
Walter S. S. S. 12-30-62
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

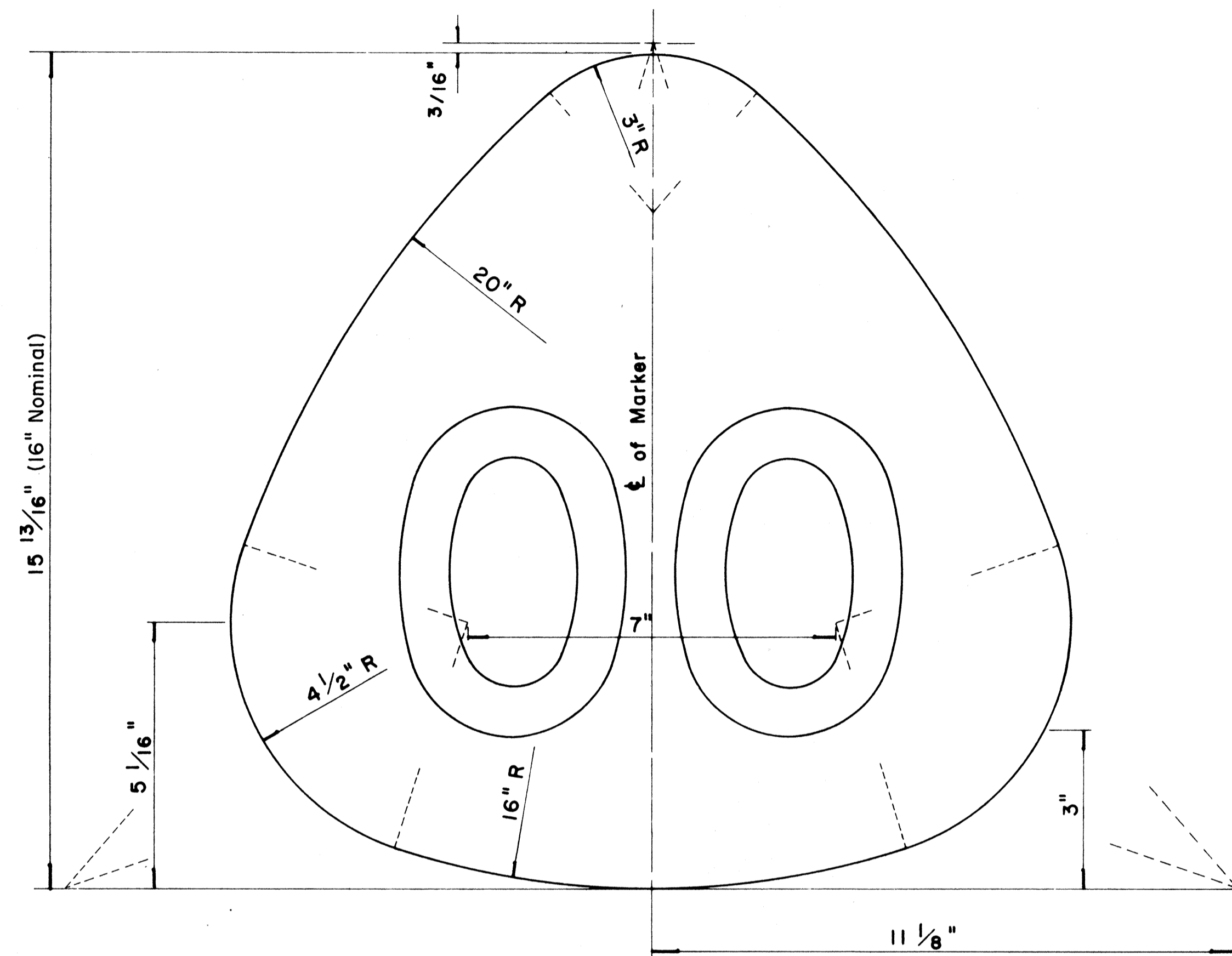
SOLID ALUMINUM
EXTRUDED SIGN PANEL
AND
ACCESSORY DETAILS

SCALE:

DATE: _____
DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
QUANTITIES CHECKED BY: _____
NOTE BOOK No. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1980	108	244

MARKER SIZE	MULTIPLY DIMENSIONS BY	NUMERAL SIZE
21"	1.3	8"
32"	2.0	12"
42"	2.63	16"



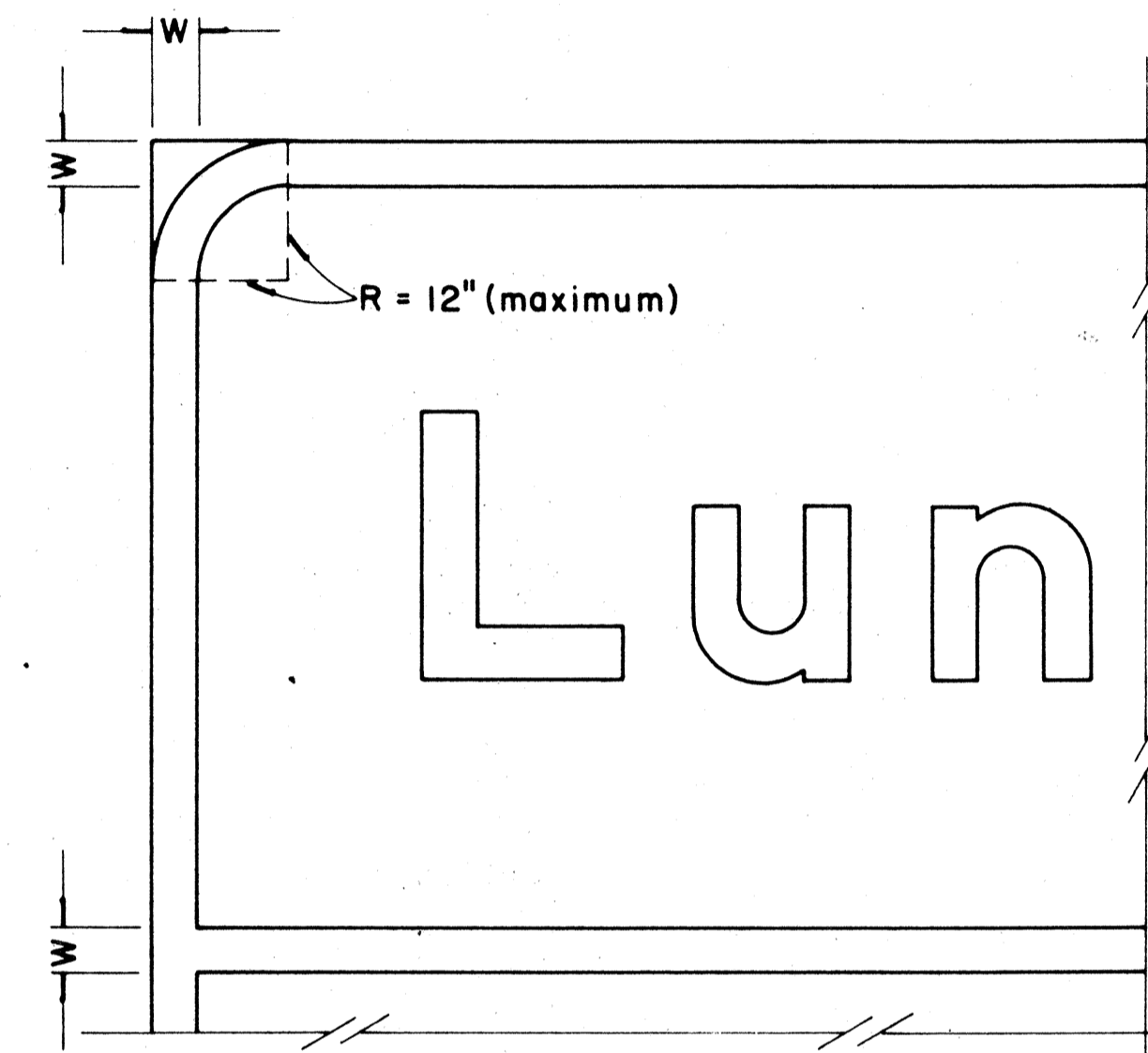
**STATE ROUTE MARKER
FOR GUIDE SIGNS**

Scale: Half Size

NOTE :

1. State Route Markers on Guide signs shall have black numerals on a white reflectorized background mounted on a flat aluminum cut-out.
2. Numerals shall conform to the FHWA publication "Standard Alphabets for Highway Signs," 1966.
3. Cut-outs shall be fastened on sign panel with aluminum blind rivets. See Standard Specifications.

RADII FOR SIGNS		
Least Dimension of Sign	W	R
2'- 0" to 4'- 6"	2"	3"
4'- 9" to 5'- 6"	2"	6"
5'- 9" to 7'- 6"	2"	9"
7'- 9" and greater	2"	12"



**BORDER DETAIL
FOR GUIDE SIGNS**

Not to Scale

NOTE :

1. Area outside corner radius need not be trimmed.
2. All borders shall be white reflectorized cut-outs.
3. All Guide signs shall have borders.

APPROVAL RECOMMENDED:

Eushe Tanaka 4/11/72
TRAFFIC ENGINEER DATE

APPROVED:

Malcolm S. Sakai 4/12/72
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 209 Approved 12-30-69	H.T.	4/12/72
2	Revised Notes and Schedules	H.T.	9-14-70

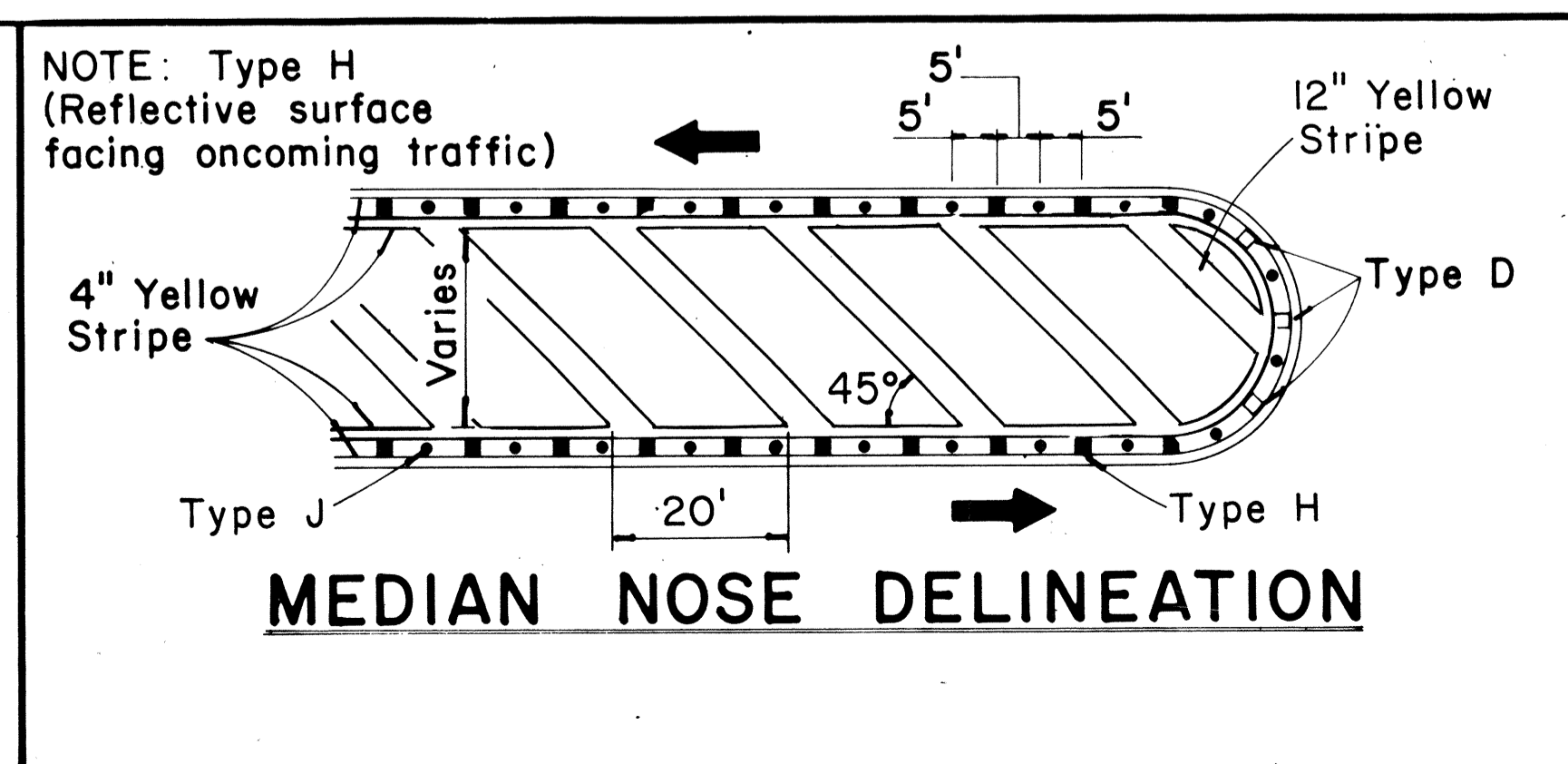
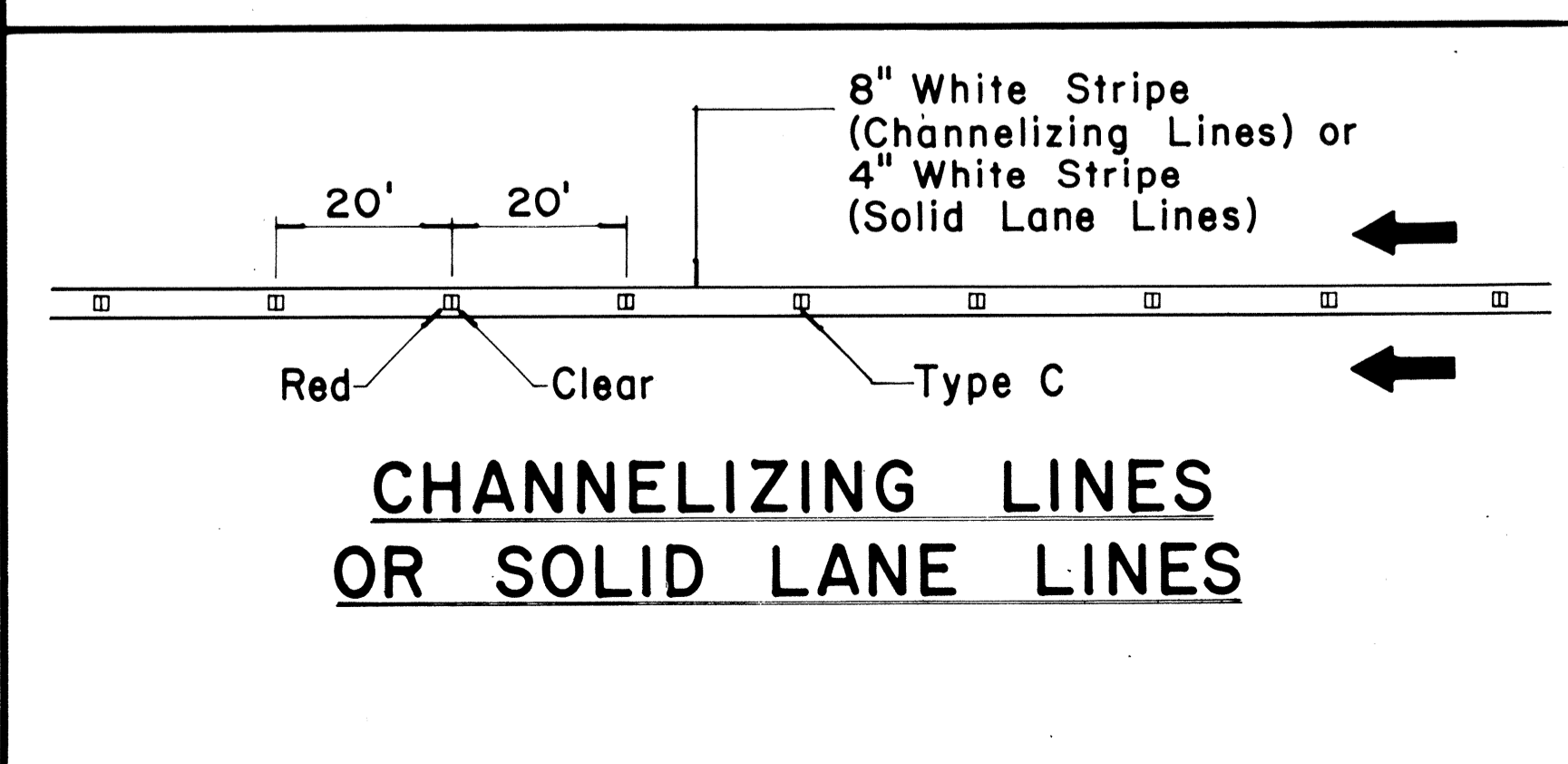
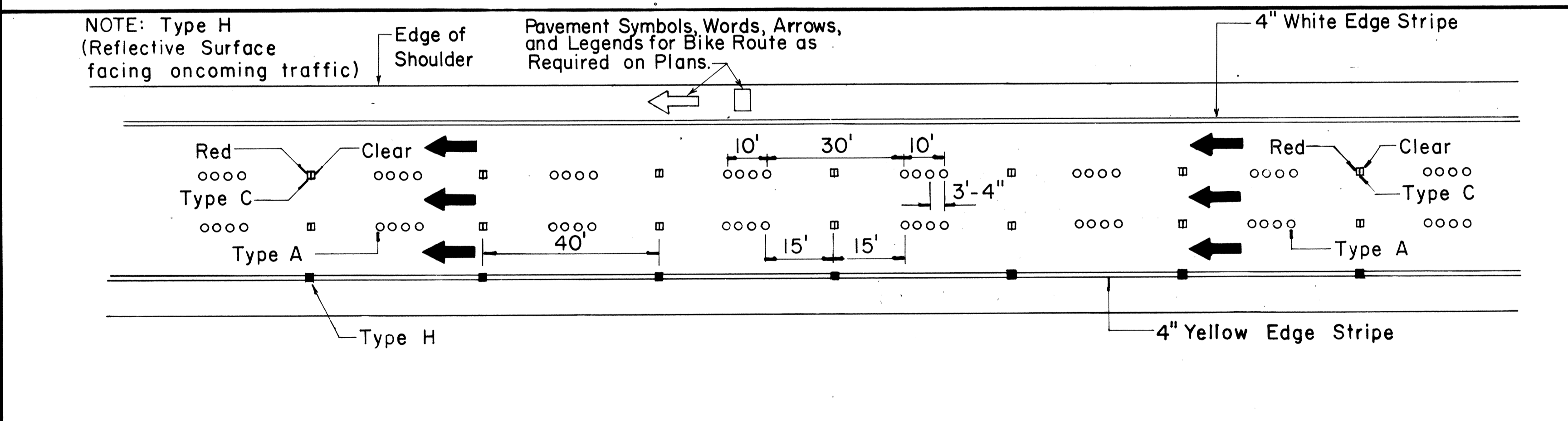
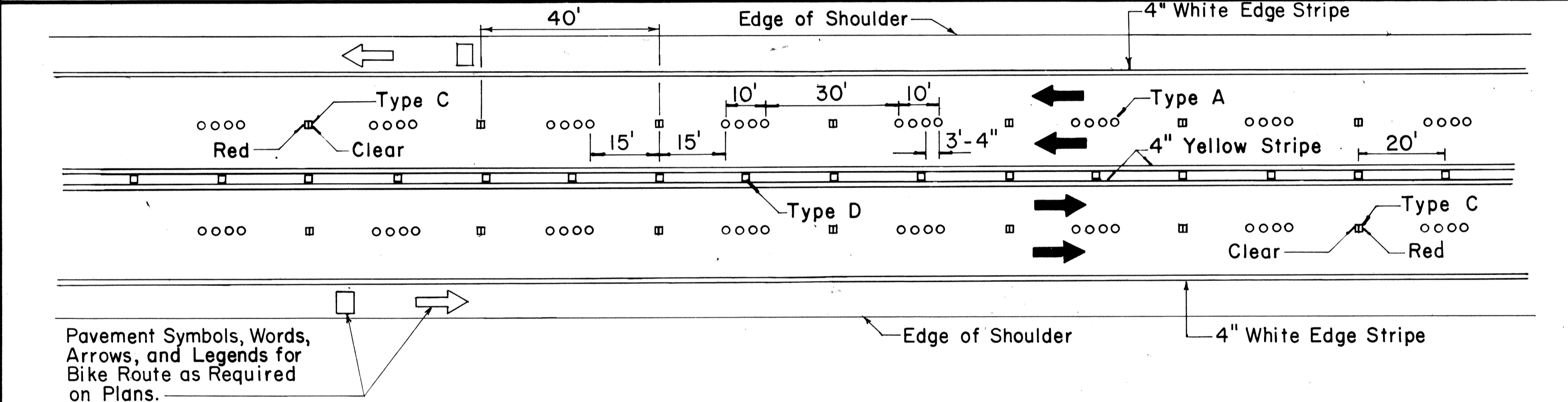
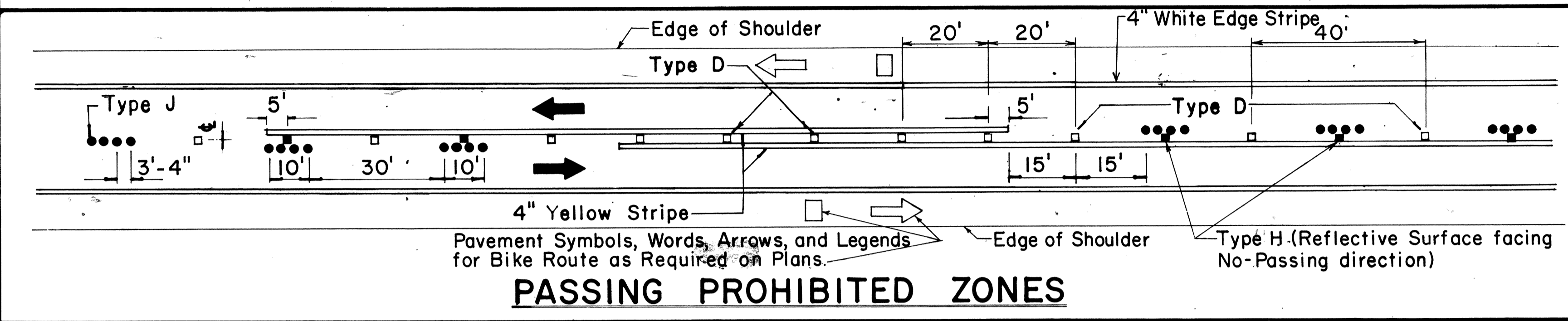
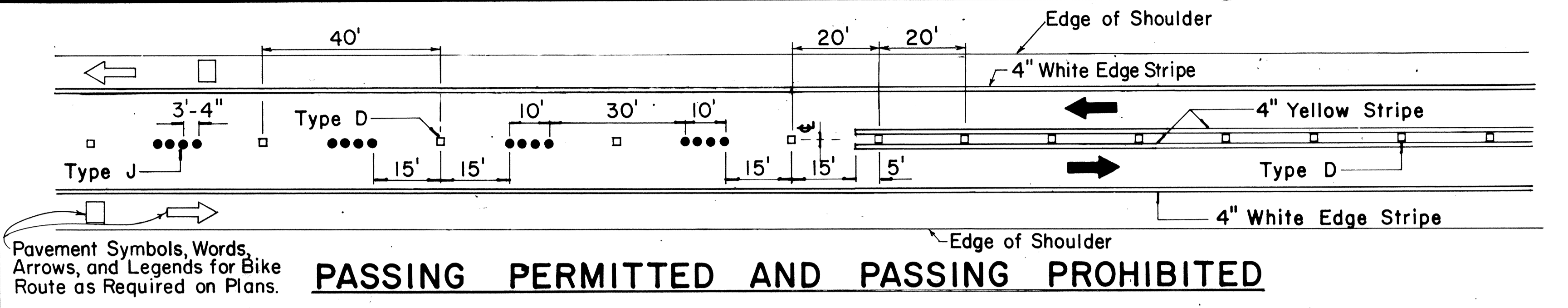
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
**STATE ROUTE MARKER
AND BORDER DETAIL
FOR GUIDE SIGNS**

Scale: As Shown

SHEET No. 14 OF 18 SHEETS DT 209

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	109	244

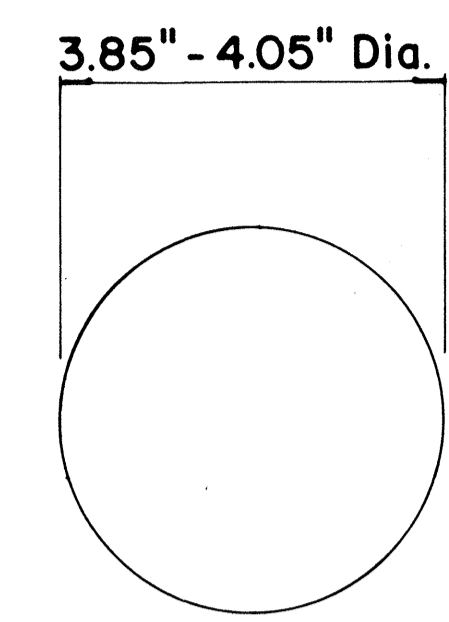


TWO - LANE

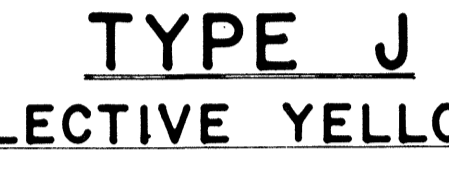
MULTI - LANE

DIVIDED HIGHWAY AND FREEWAY

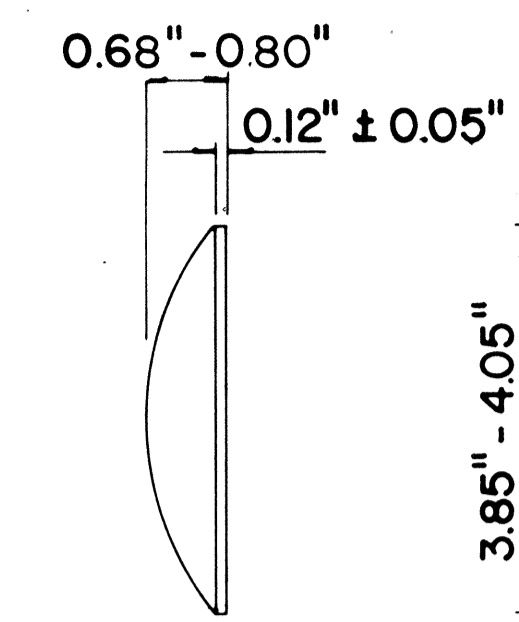
MISCELLANEOUS



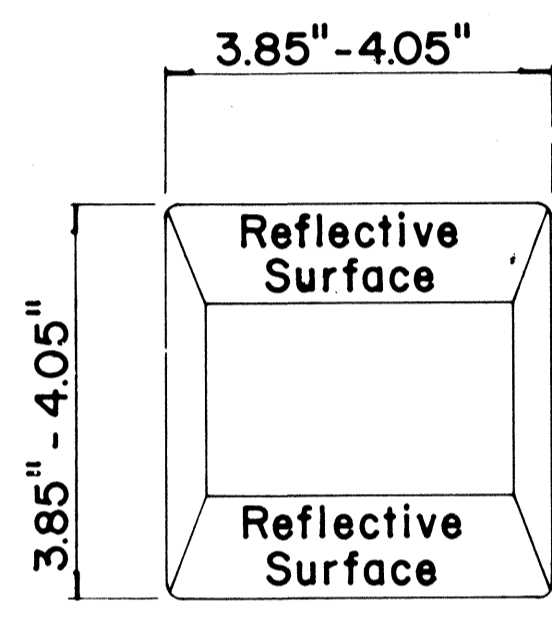
TYPE A
NON-REFLECTIVE WHITE MARKER



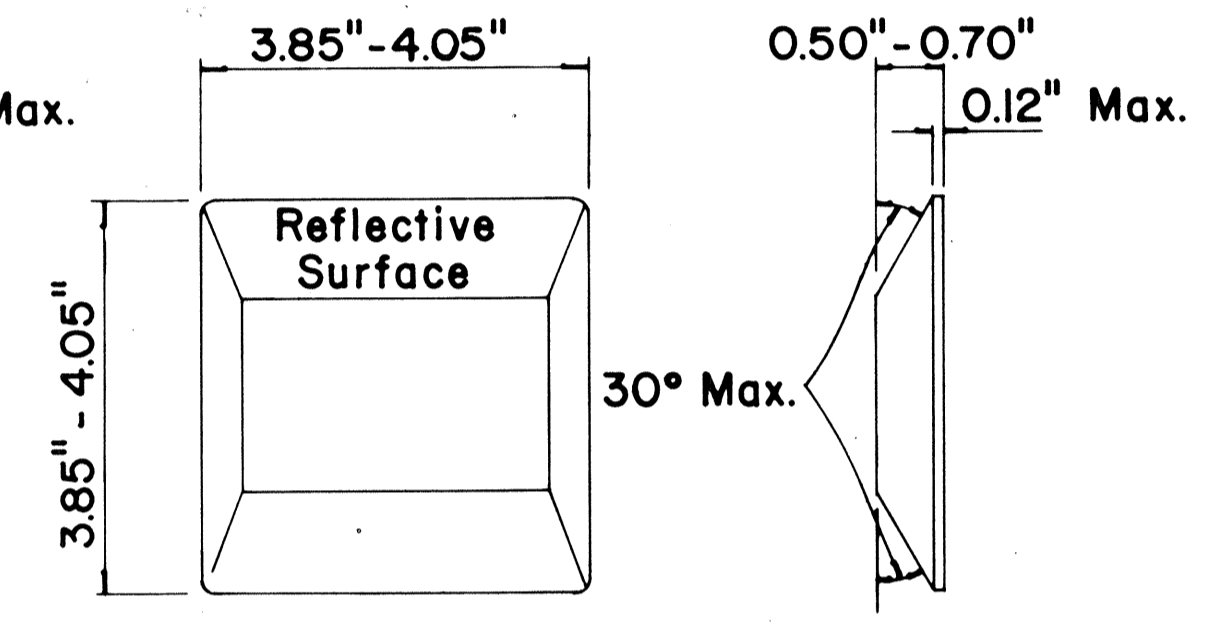
TYPE J
NON-REFLECTIVE YELLOW MARKER



TYPE C
RED-CLEAR REFLECTIVE MARKER



TYPE D
TWO-WAY YELLOW REFLECTIVE MARKER



TYPE H
ONE-WAY YELLOW REFLECTIVE MARKER

GENERAL NOTES

1. Pavement marking and striping shall conform to the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
2. Layout and installation of pavement marking and striping shall be done by the Contractor. The Contractor shall check the layouts with the Engineer prior to performing work.

LEGEND

- Type A
- Type C
- Type D
- Type H
- Type J

APPROVAL RECOMMENDED:
Eishi Tanaka 7/21/78
TRAFFIC ENGINEER DATE

APPROVED:
Herbert J. Zaleski 7/24/78
ASSISTANT CHIEF, ENGINEERING DATE

No.	REVISION	APPROVED BY	DATE
1	Supersedes DT 300 approved 11/18/71.	H.C.	1/24/78
2	Delete Type A Markers from Bike Route Delineation.	H.C.	10/15/79

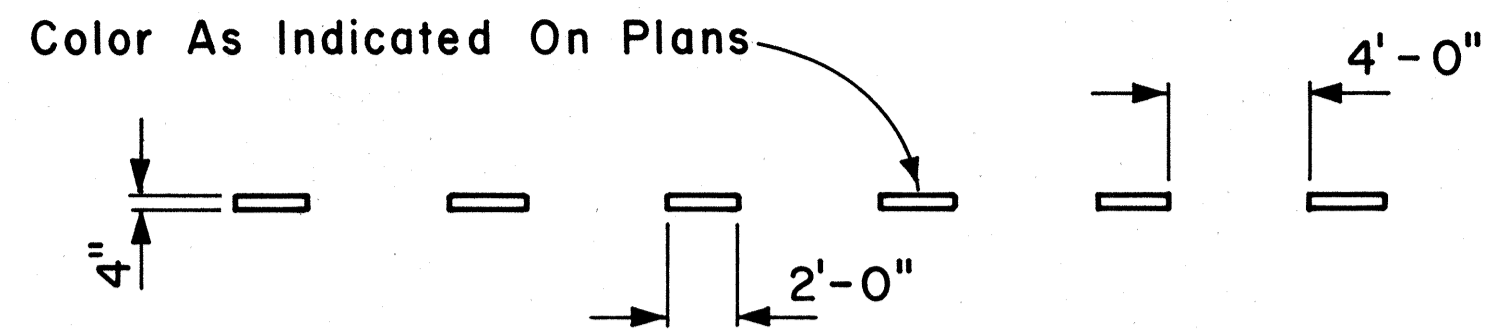
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS
AND STRIPING

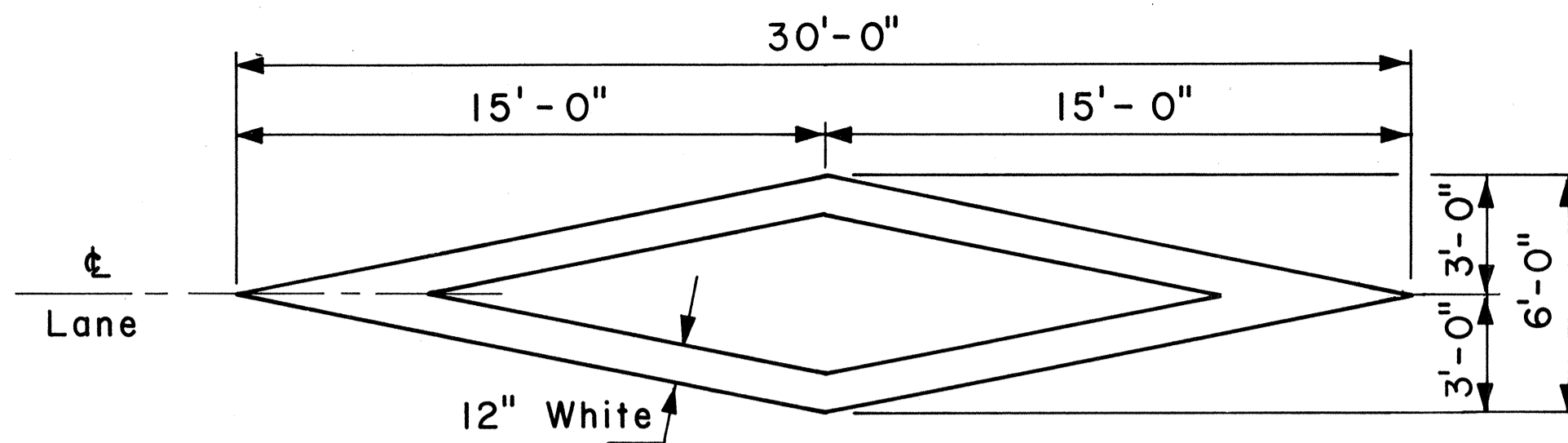
Not to Scale July 1978
SHEET No. 15 OF 18 SHEETS DT 300

DATE
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
NOTED BY
QUANTITIES BY
CHECKED BY
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600 (2)	1980	110	244



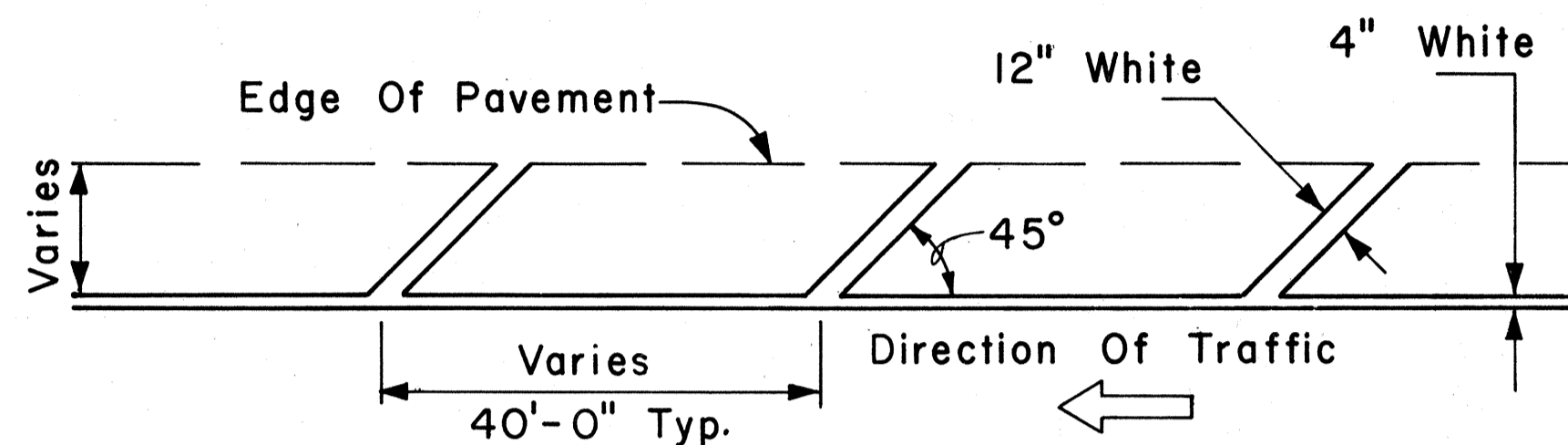
4" GUIDE LINE



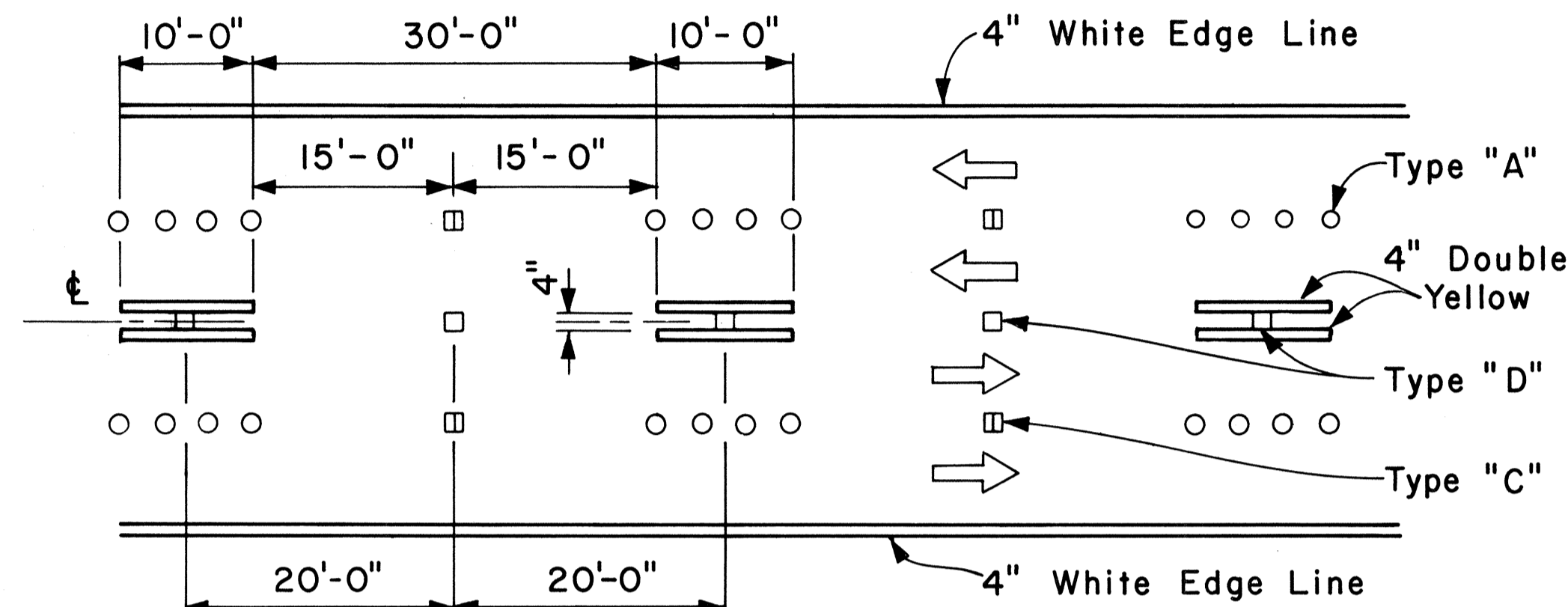
PAVEMENT DIAMOND

GENERAL NOTES:

1. Pavement marking and striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of pavement markings and striping shall be done by the Contractor. The Contractor shall check layout of markings and striping with the Engineer prior to performing work.
3. For additional pavement marking details, see sheet DT 300.

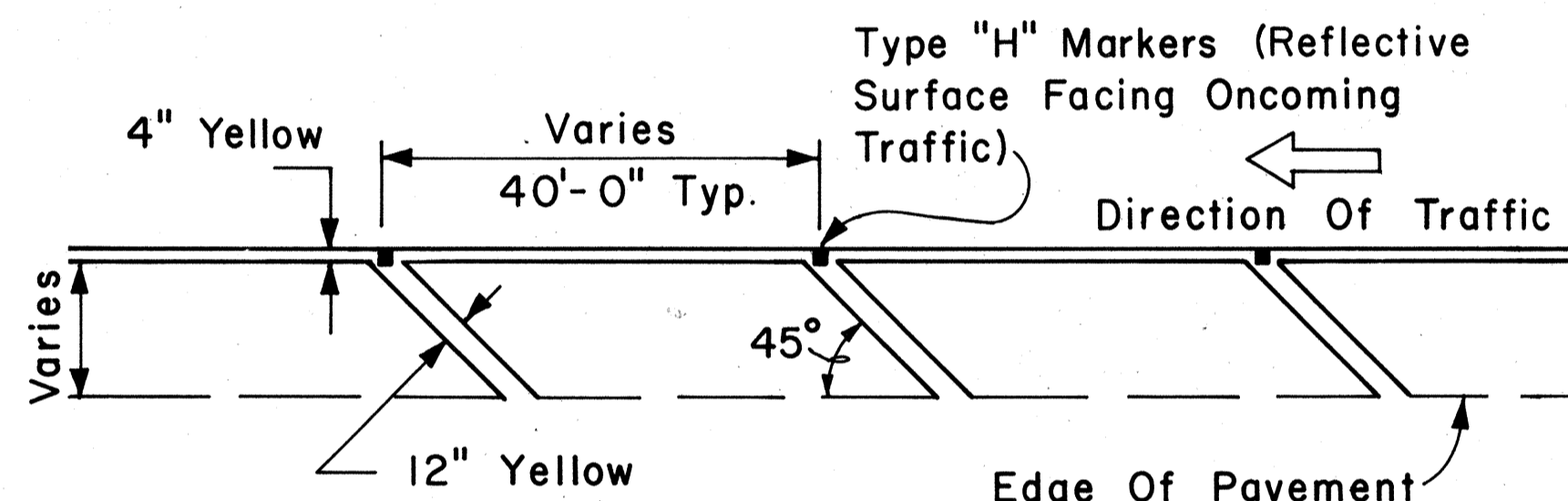


TRANSVERSE RIGHT SHOULDER MARKING

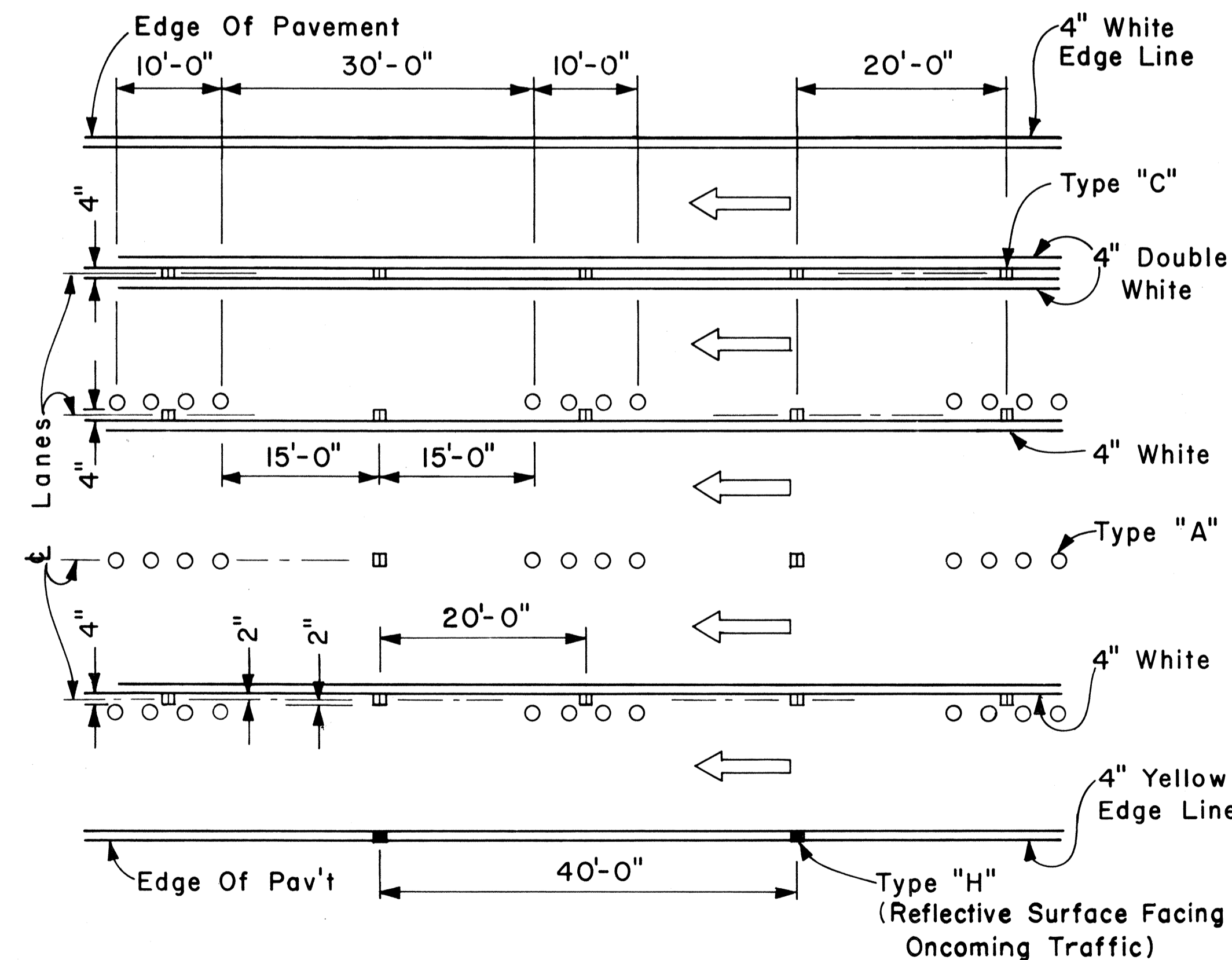


NOTE: Traffic Cone Usage Required.

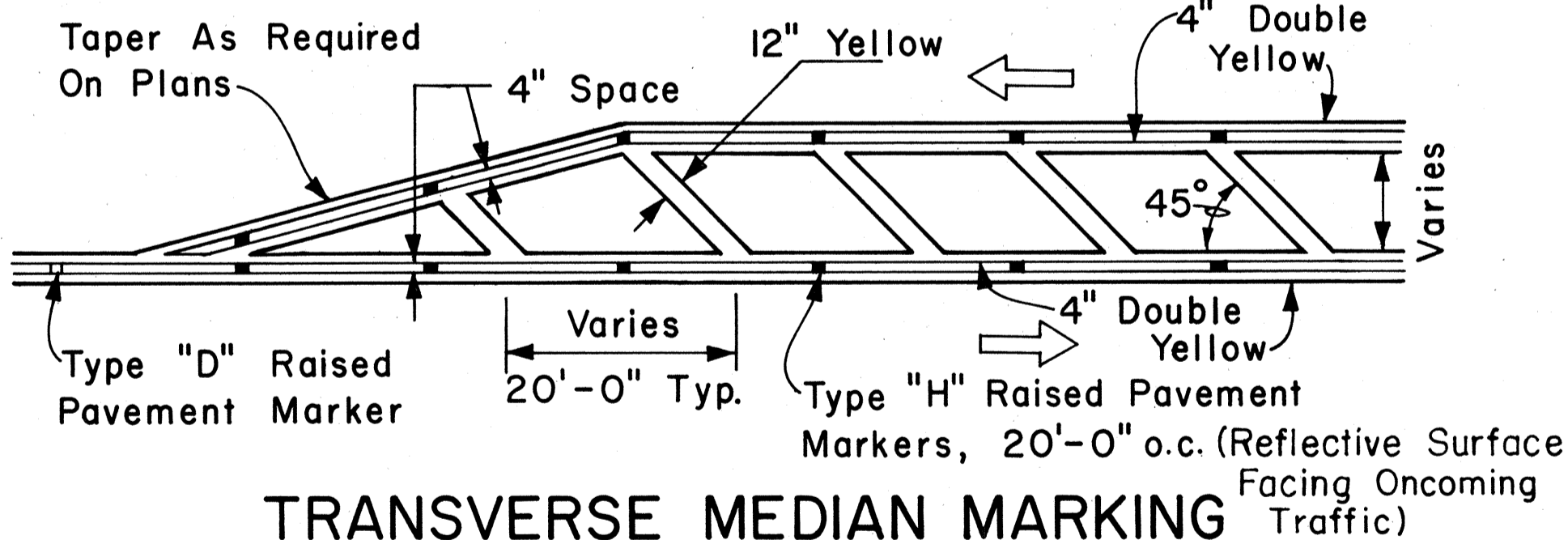
MULTI-LANE REVERSIBLE LANES



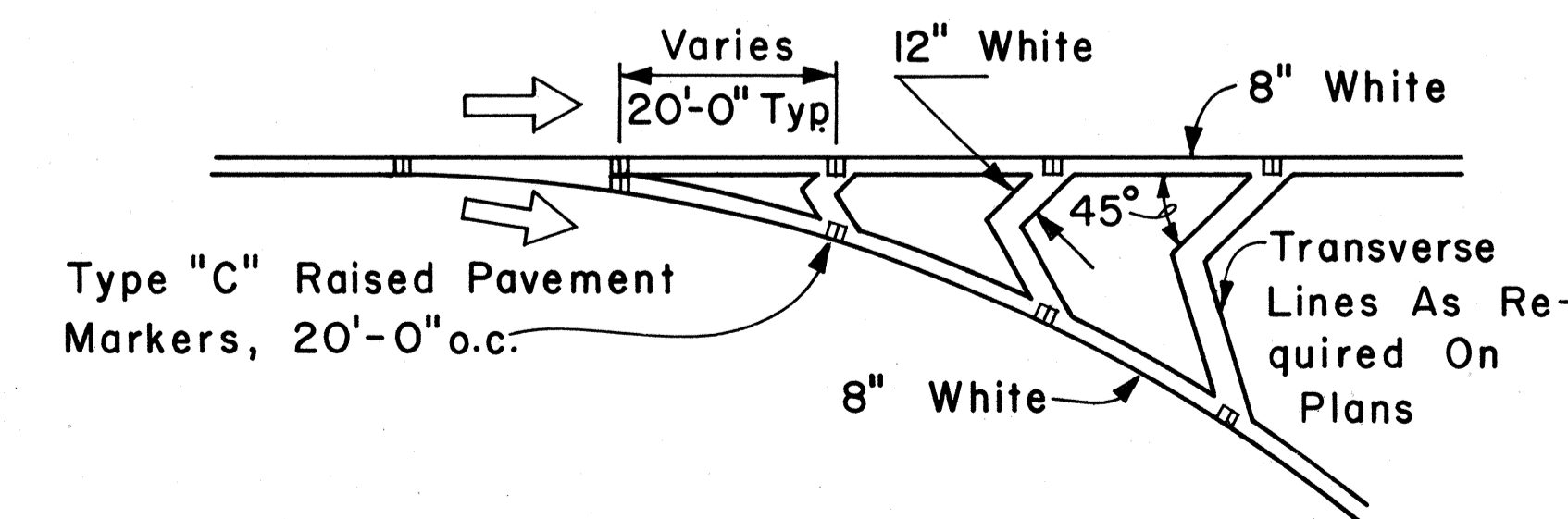
TRANSVERSE LEFT SHOULDER MARKING



MULTI-LANE LANE CHANGE RESTRICTION ZONES



TRANSVERSE MEDIAN MARKING



CHANNELIZING ISLAND

APPROVAL RECOMMENDED:
Eishi Tanaka 5/2/78
 TRAFFIC ENGINEER DATE

APPROVED:
Harbert S. Zafrechio 5/3/78
 ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

MISCELLANEOUS
 PAVEMENT MARKINGS

Scale: Not to Scale Date: April, 1978
 SHEET No. 16 OF 18 SHEETS DT 302

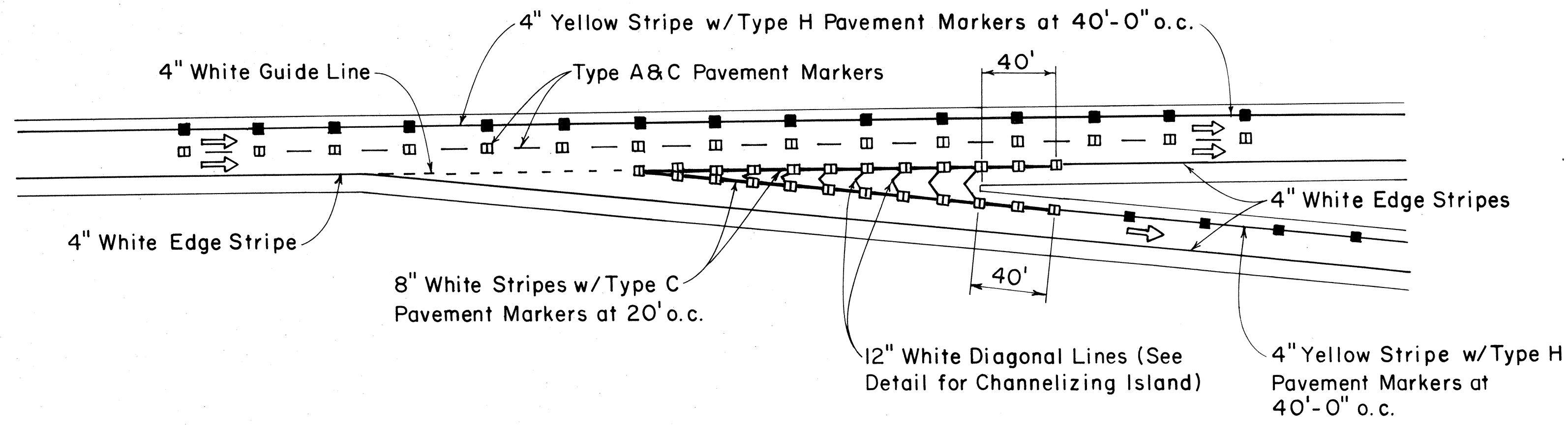
DATE: _____
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 QUANTITIES BY: _____
 CHECKED BY: _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	III	244

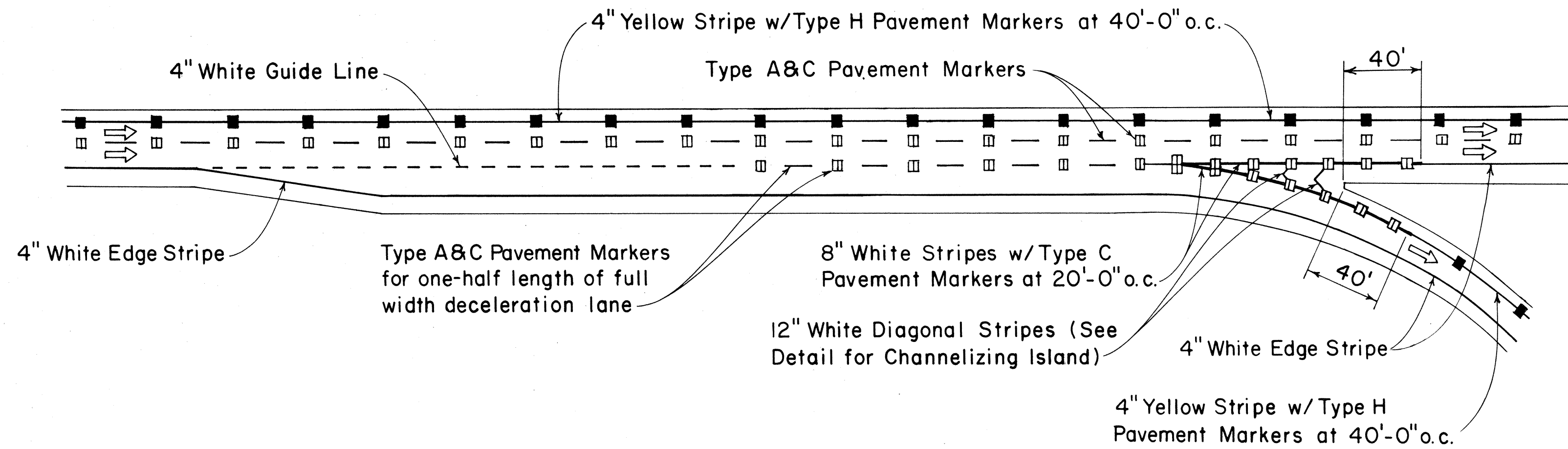
GENERAL NOTES:

1. Pavement Markings and Striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of Pavement Markings and Striping shall be done by the Contractor. The Contractor shall check layout of markings and striping with the Engineer prior to performing work.
3. For additional details, see sheet DT 300.

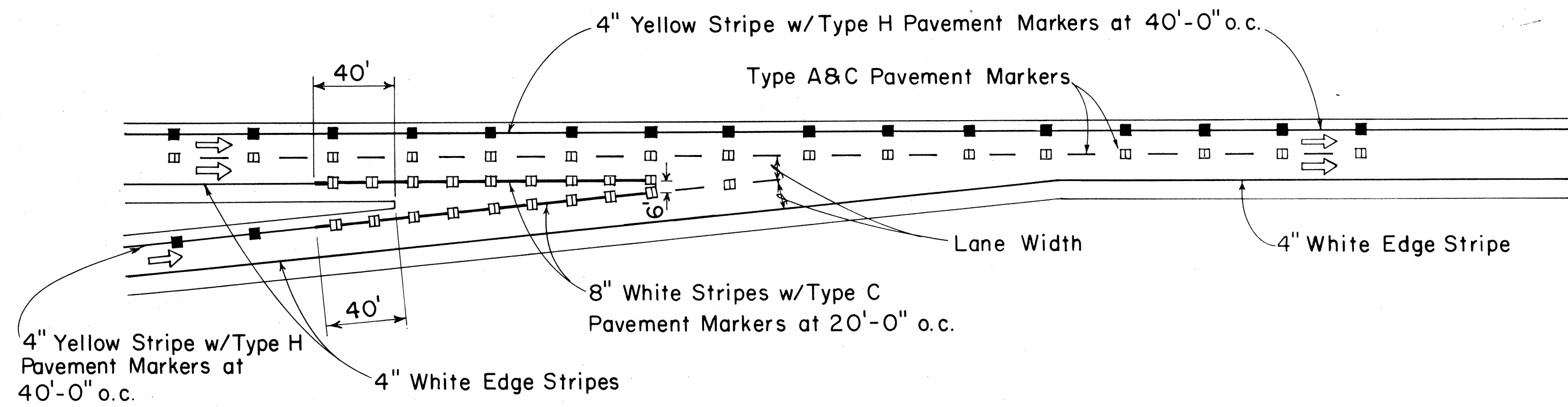
TAPERED DECELERATION LANE



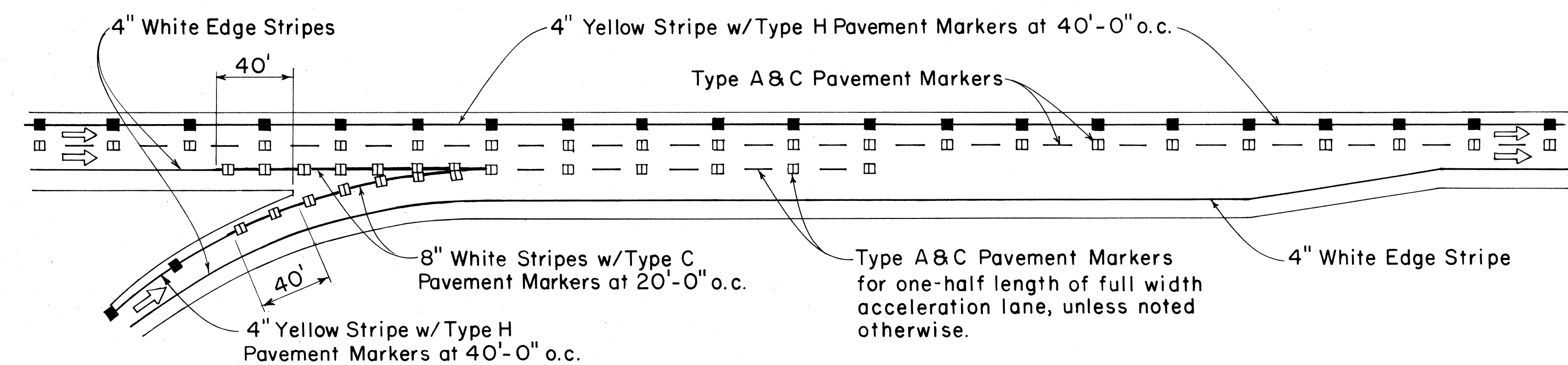
PARALLEL DECELERATION LANE



TAPERED ACCELERATION LANE



PARALLEL ACCELERATION LANE



TYPICAL ROADWAY EXIT MARKINGS

TYPICAL ROADWAY ENTRANCE MARKINGS

APPROVAL RECOMMENDED:
Eiichi Tanaka 7/21/78
 TRAFFIC ENGINEER DATE

APPROVED:
Robert S. Sakai 7/24/78
 ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

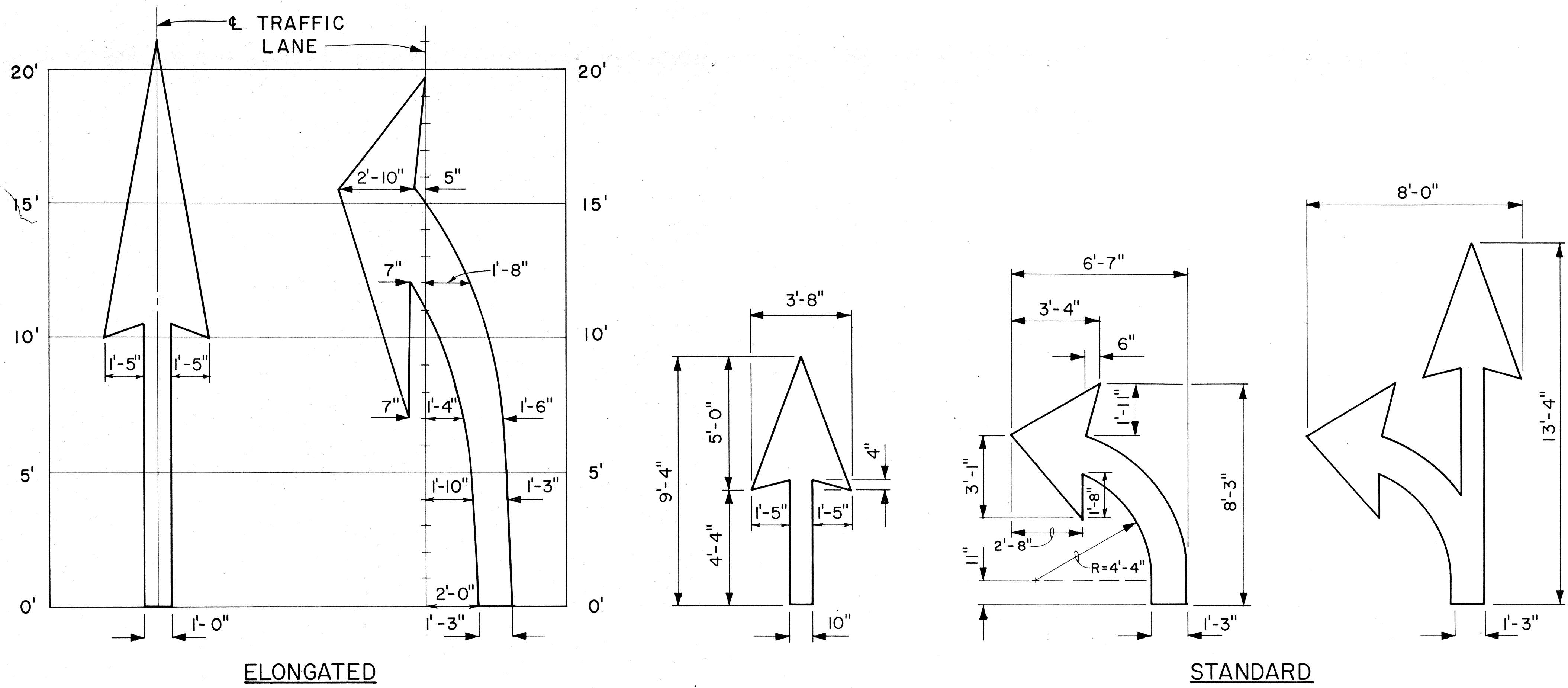
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
MISCELLANEOUS
PAVEMENT MARKINGS

Not to Scale July 1978
 SHEET No. 17 OF 18 SHEETS DT 304

DATE _____
 SURVEY PLOTTED BY _____
 ORIGINAL PLAN _____
 DRAWN BY _____
 TRACED BY _____
 DESIGNED BY _____
 NOTE BOOK _____
 QUANTITIES BY _____
 CHECKED BY _____
 No. _____

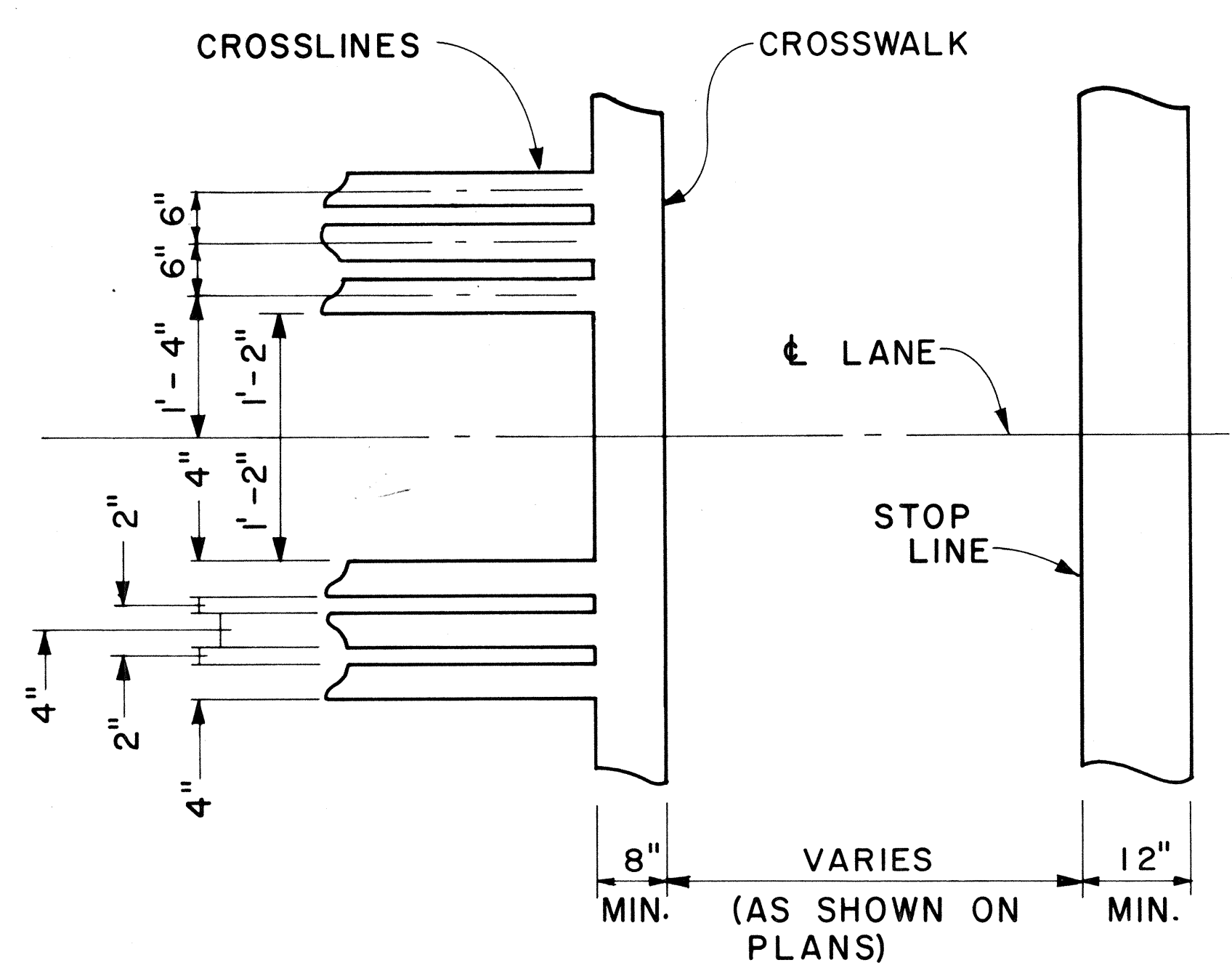
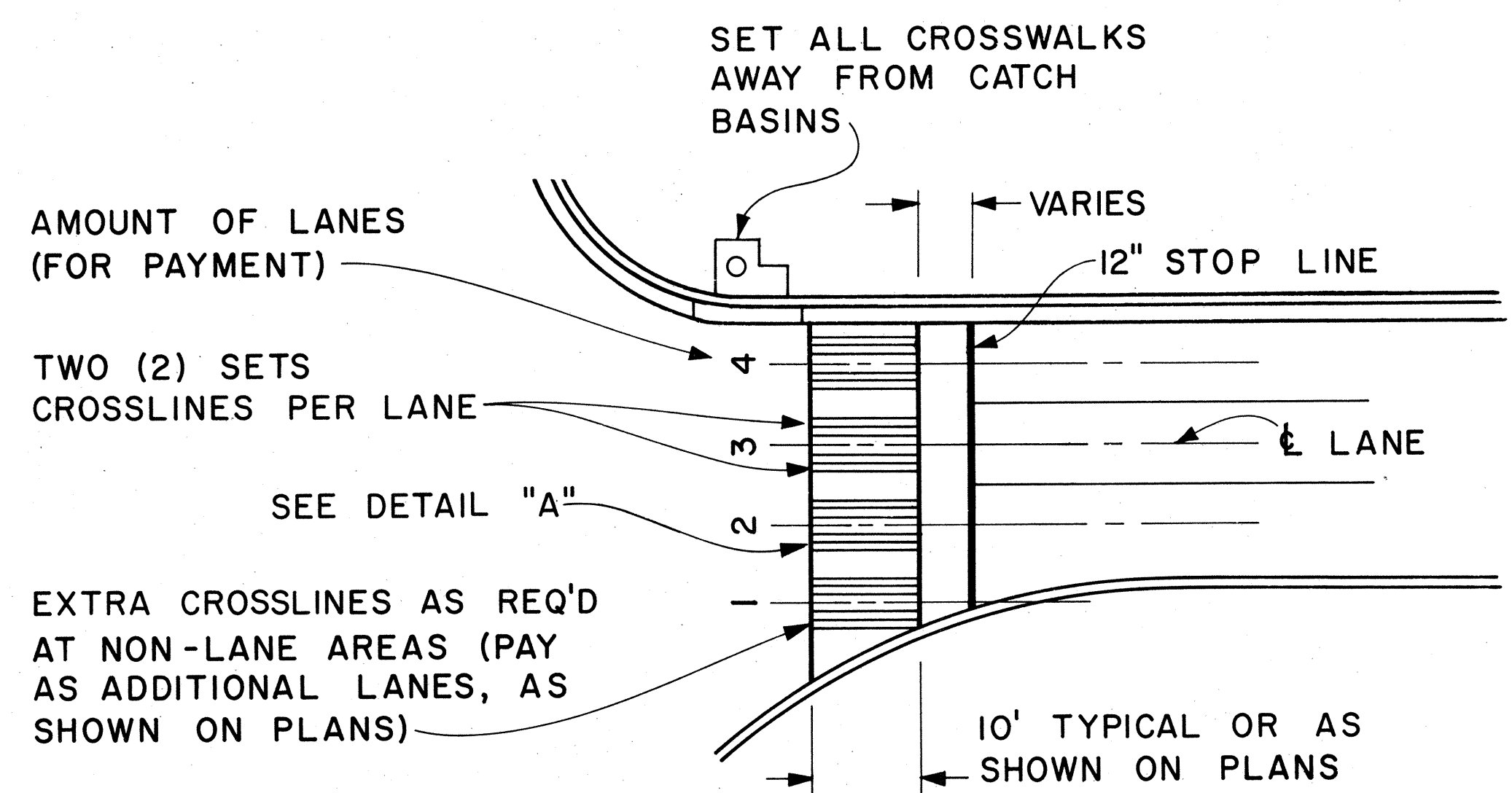
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	M-7600(2)	1980	112	244



PAVEMENT ARROWS
Scale: 3/8" = 1'

GENERAL NOTES:

1. Pavement marking and striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of pavement markings and striping shall be done by the Contractor. The Contractor shall check layout of markings and striping with the Engineer prior to performing work.
3. For additional pavement marking details, see sheet DT 300.



CROSSWALK & STOP LINE
Scale: Not to Scale

APPROVAL RECOMMENDED:
Eiichi Tanaka 5/2/78
TRAFFIC ENGINEER DATE

APPROVED:
Harbor 2. Takashi 5/3/78
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

MISCELLANEOUS
PAVEMENT MARKINGS

Scale: As Shown Date: March, 1978
SHEET NO. 18 OF 18 SHEETS DT 306

DATE	
SURVEY PLOTTED BY	
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
NO.	