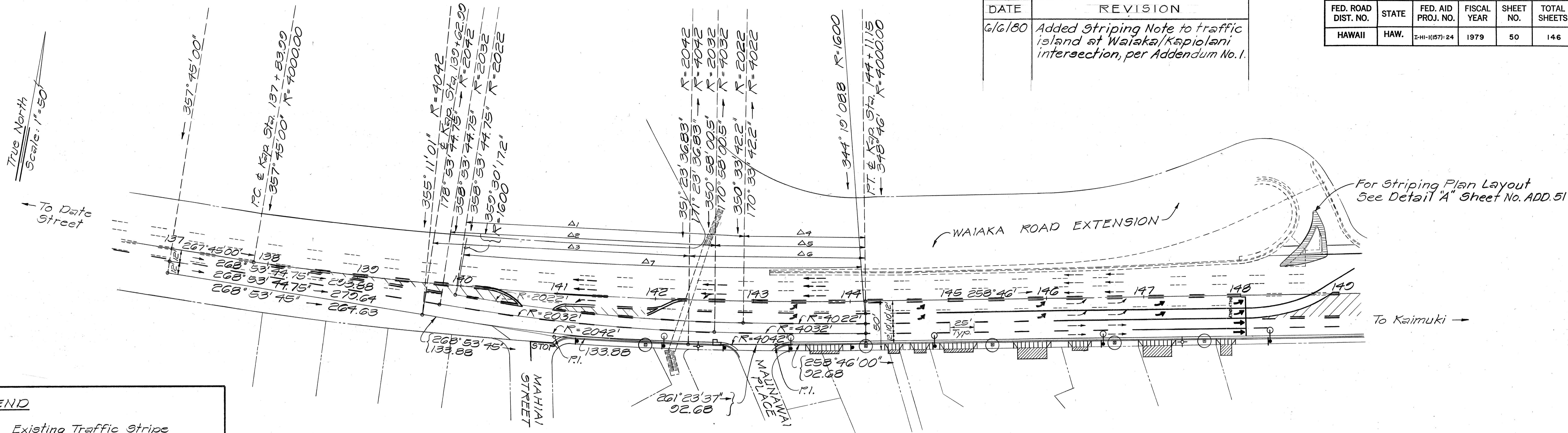


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(157)-24	1979	50	146

DATE	REVISION
6/6/80	Added Striping Note to traffic island at Waiaka/Kapiolani intersection, per Addendum No. 1.



**LEGEND**

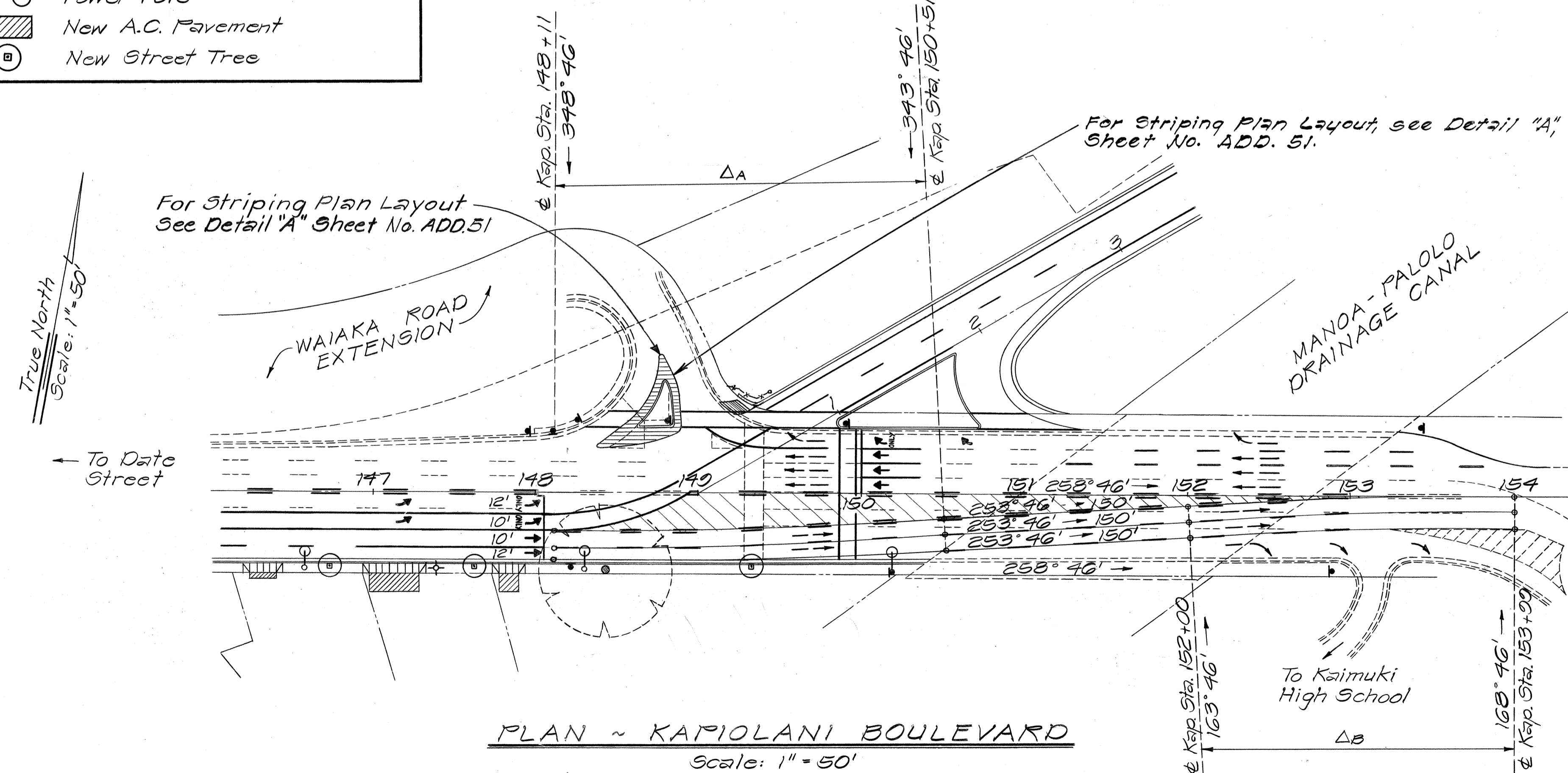
- Existing Traffic Stripe
- Traffic Direction
- New 15' Single White Stripe
- == New 15' Double Yellow Stripe
- Street Post Sign
- Catch Basin
- ⊕ Fire Hydrant
- ⊙ Power Pole
- ▨ New A.C. Pavement
- ⊙ New Street Tree

**STRIPING LAYOUT PLAN  
KAPIOLANI BOULEVARD**  
Scale: 1" = 50'

**CURVE DATA**

@ Kapa Blvd.	Δ1	Δ2	Δ3	Δ4	Δ5	Δ6	Δ7
Δ	8° 59' 00"	8° 20' 02.6"	7° 55' 44.3"	7° 30' 07.9"	1° 47' 42.2"	2° 12' 00.5"	2° 37' 36.8"
Δe	4° 29' 30"	4° 10' 01.3"	3° 57' 52.1"	3° 45' 04"	0° 53' 51.1"	1° 06' 00.2"	1° 18' 48.4"
R	4000'	2022'	2032'	2042'	4022'	4032'	4042'
T	314.2215'	147.32'	140.83'	133.88'	63.01'	77.42'	92.68'
C	626.5128'	293.85'	280.98'	267.18'	126.003'	154.82'	185.30'
Lc	627.1550'	294.11'	281.20'	267.38'	126.008'	154.83'	185.32'

DATE: \_\_\_\_\_  
 SURVEY PLOTTED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_



**PLAN ~ KAPIOLANI BOULEVARD**  
Scale: 1" = 50'

**CURVE DATA**

	ΔA	ΔA+10	ΔA+20	ΔB	ΔB+10	ΔB+20
Δ	5° 00'	5° 00'	5° 00'	5° 00'	5° 00'	5° 00'
Δe	2° 30'	2° 30'	2° 30'	2° 30'	2° 30'	2° 30'
R	2748.45'	2758.45'	2768.45'	2269.63'	2279.63'	2289.63'
T	120.00'	120.32'	120.76'	99.00'	99.53'	99.97'
C	239.77'	240.64'	241.52'	198.00'	198.87'	199.74'
Lc	239.85'	240.72'	241.59'	198.06'	198.94'	199.81'

APPROVED: \_\_\_\_\_ DATE: 6/2/79  
 Director, Dept. of Transportation Services  
 City & County of Honolulu

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION

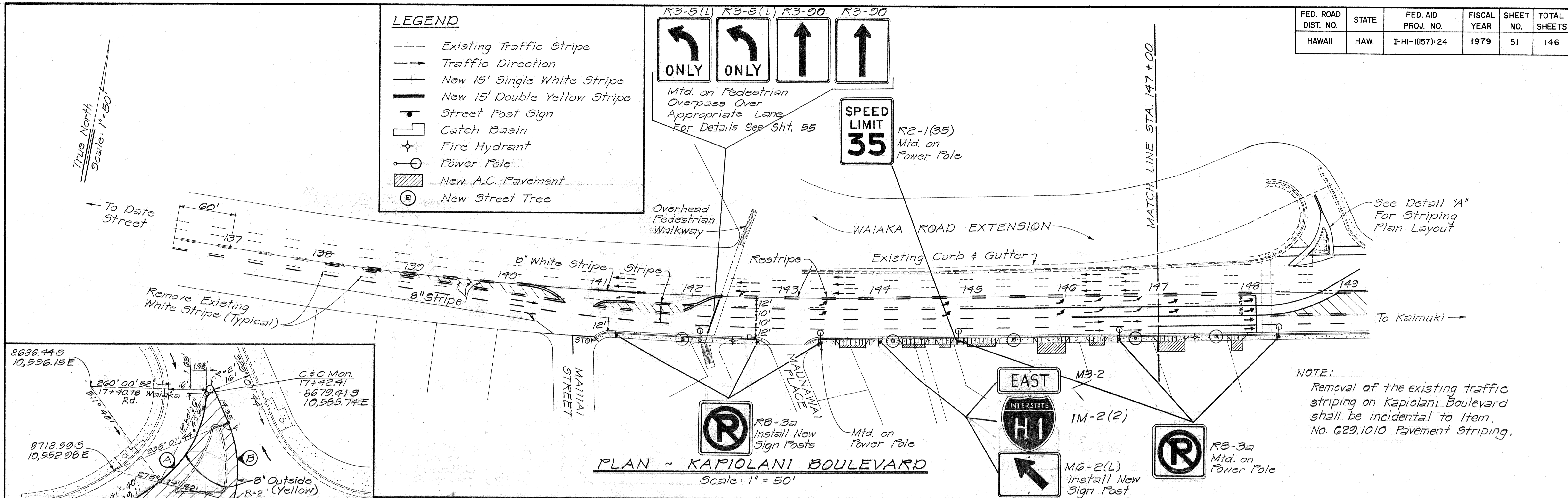
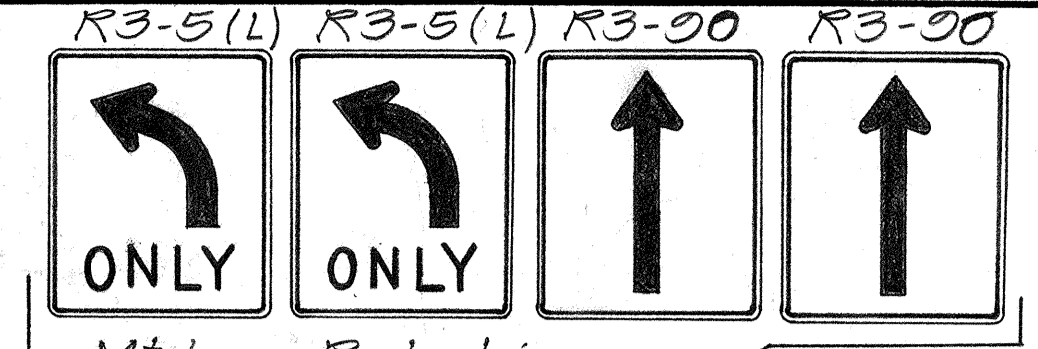
**SIGNING AND STRIPING PLAN**  
 KAPIOLANI BOULEVARD - RAMP HI-K

INTERSTATE ROUTE HI-1  
 KAPIOLANI INTERCHANGE ON-RAMP  
 F.A.I. PROJ. NO. I-HI-1(157)-24

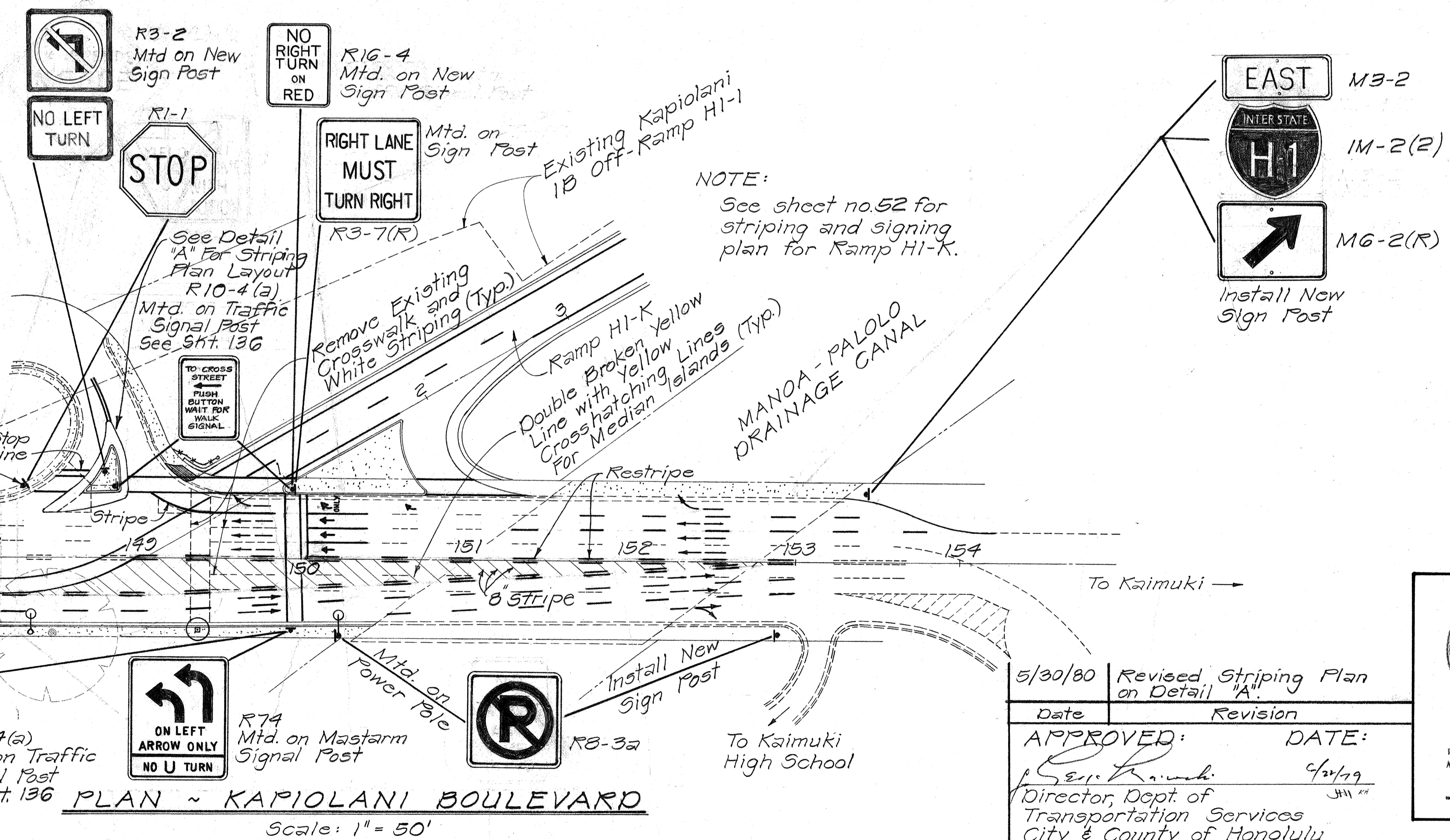
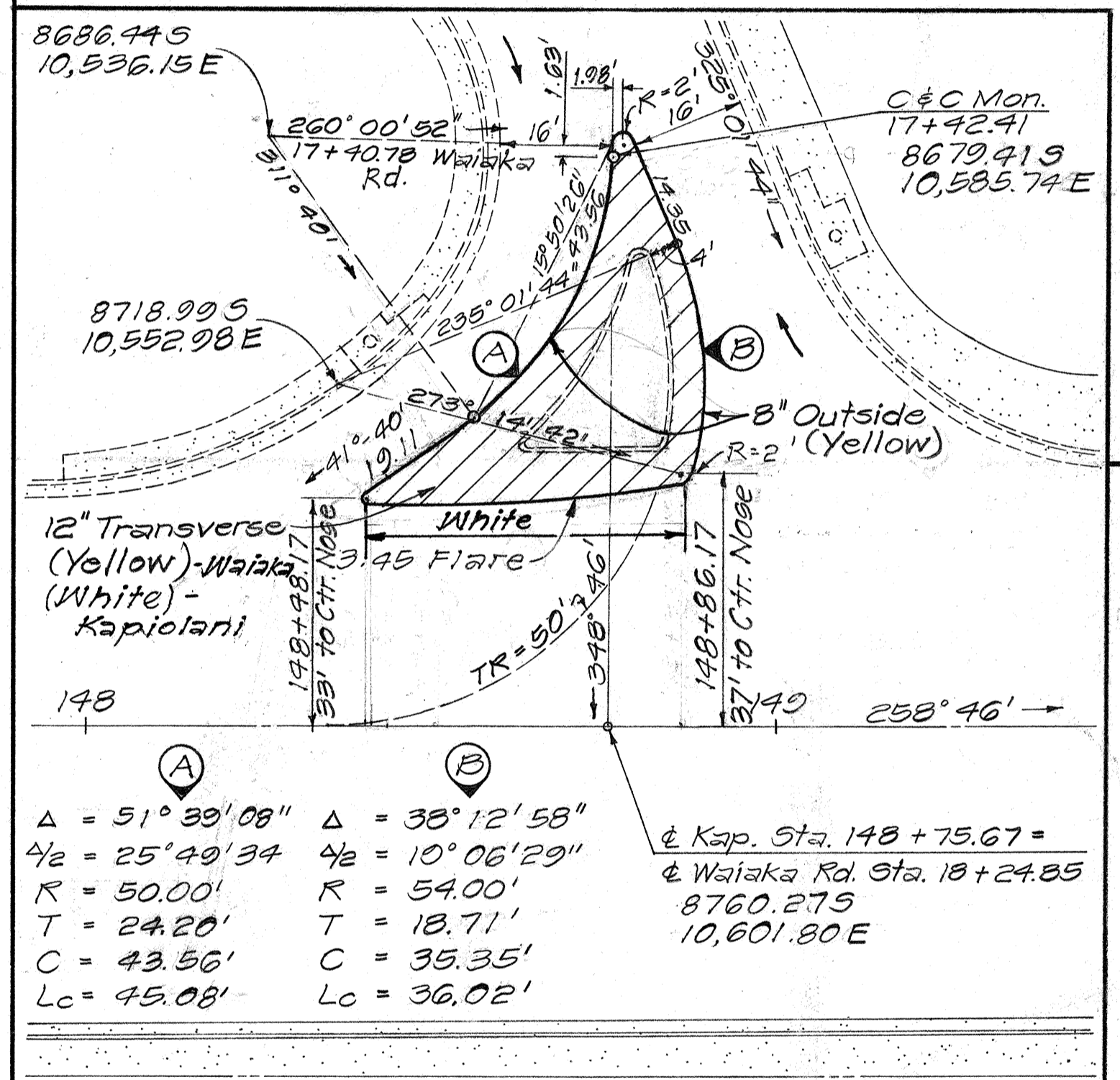
Scale: 1" = 50' Date: 10-15-79  
 SHEET No. 1 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(157)-24	1979	51	146

- LEGEND**
- Existing Traffic Stripe
  - Traffic Direction
  - New 15' Single White Stripe
  - == New 15' Double Yellow Stripe
  - ⊥ Street Post Sign
  - ⊥ Catch Basin
  - ⊕ Fire Hydrant
  - ⊙ Power Pole
  - ▨ New A.C. Pavement
  - ⊙ New Street Tree



**NOTE:**  
Removal of the existing traffic striping on Kapiolani Boulevard shall be incidental to Item No. 629.1010 Pavement Striping.

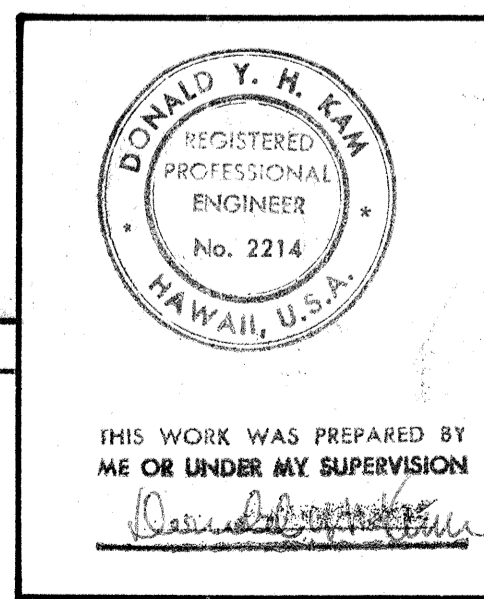


**SUMMARY OF PERMANENT SIGNS**

SIGN	EACH
IM-2(2)	2
M3-2	2
M6-2(R)	1
M6-2(L)	1
R2-1(35)	1
R3-3a	8
R10-4(a)	3
R1-1	1
R16-4	1
R74	1
R3-5(L)	2
R3-7(R)	1
R3-2	1
R3-90	2

**NOTE:**  
See sheet no. 52 for striping and signing plan for Ramp HI-K.

5/30/80 Revised Striping Plan on Detail "A"  
 Date Revision  
 APPROVED: \_\_\_\_\_ DATE: 6/21/79  
 Director, Dept. of Transportation Services  
 City & County of Honolulu

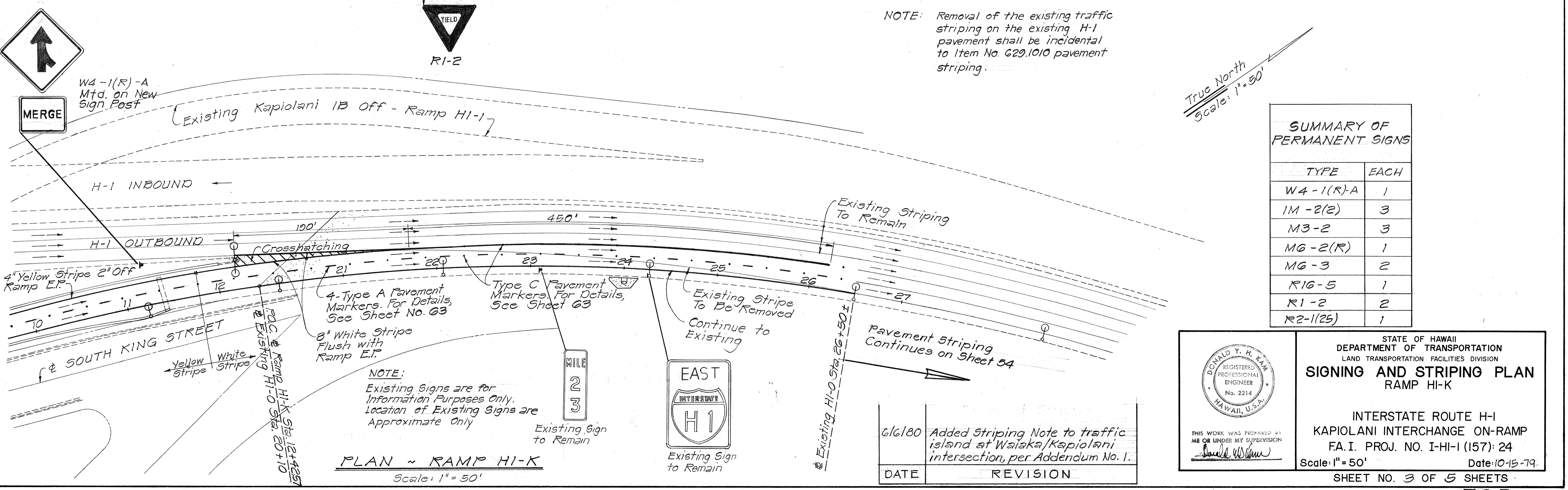
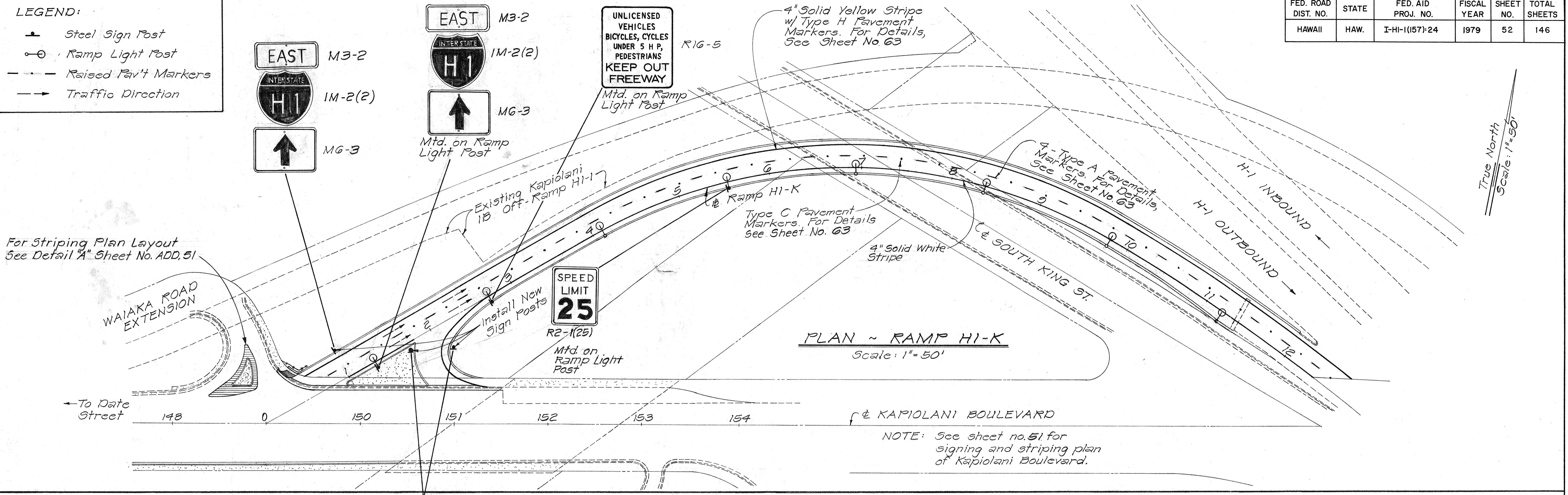


STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION  
**SIGNING AND STRIPING PLAN**  
 KAPIOLANI BOULEVARD - RAMP HI-K  
 INTERSTATE ROUTE HI  
 KAPIOLANI INTERCHANGE ON-RAMP  
 FA. I. PROJ. NO. I-HI-1 (157)-24  
 Scale: 1" = 50' Date: 10-15-79  
 SHEET NO. 2 OF 5 SHEETS

ADD. 51

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(157):24	1979	52	146

**LEGEND:**  
 — Steel Sign Post  
 ⊙ Ramp Light Post  
 - - - Raised Pav't Markers  
 → Traffic Direction



**SUMMARY OF PERMANENT SIGNS**

TYPE	EACH
W4-1(R)-A	1
1M-2(2)	3
M3-2	3
M6-2(R)	1
M6-3	2
R16-5	1
R1-2	2
R2-1(25)	1

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION  
**SIGNING AND STRIPING PLAN**  
 RAMP HI-K

INTERSTATE ROUTE H-1  
 KAPIOLANI INTERCHANGE ON-RAMP  
 FA. I. PROJ. NO. I-HI-1(157):24  
 Scale: 1" = 50' Date: 10-15-79  
 SHEET NO. 3 OF 5 SHEETS

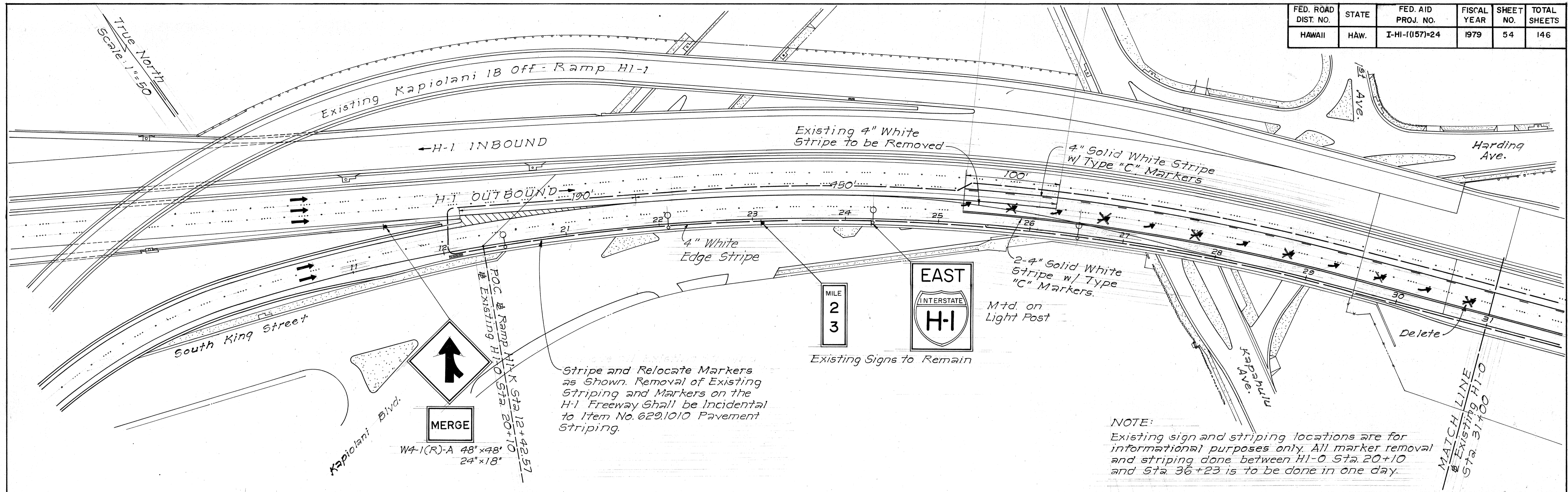
REGISTERED PROFESSIONAL ENGINEER  
 No. 2214  
 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION  
*Donald Y. H. Kim*

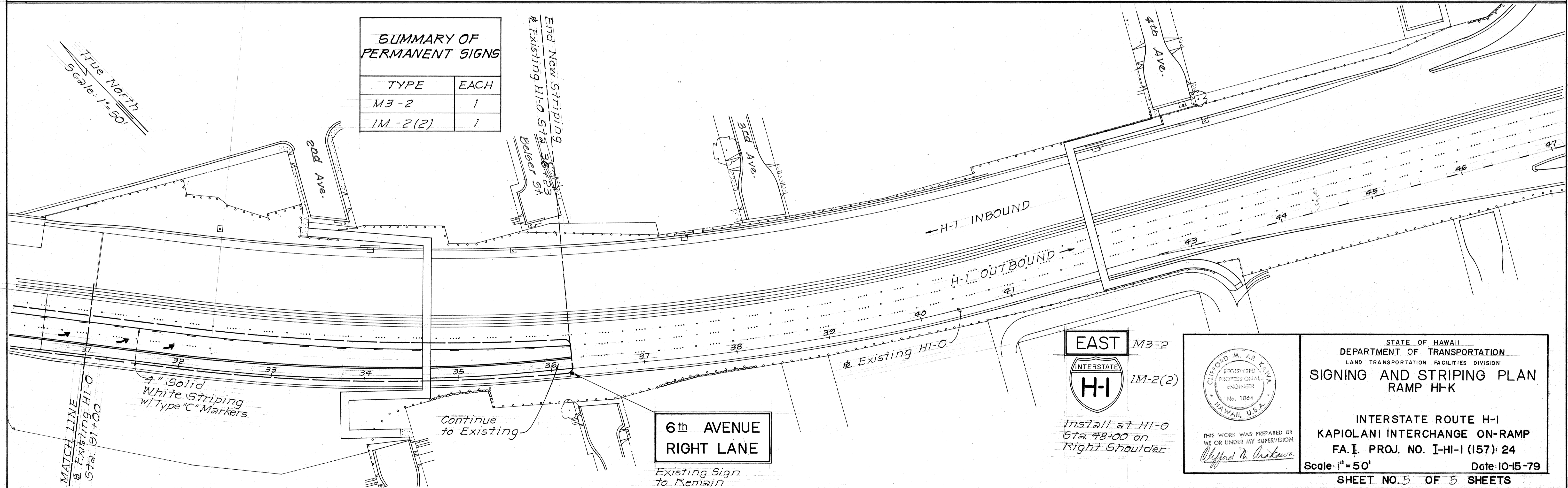
DATE	REVISION
6/6/80	Added Striping Note to traffic island at Waiaka/Kapiolani intersection, per Addendum No. 1.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(157)-24	1979	54	146



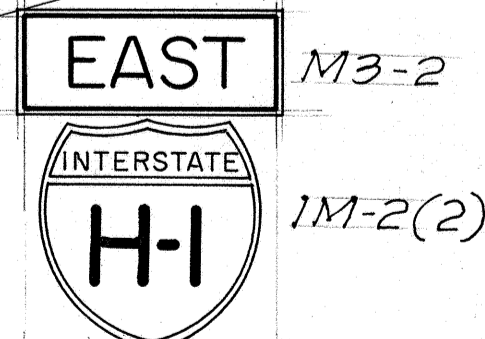
NOTE:  
Existing sign and striping locations are for informational purposes only. All marker removal and striping done between HI-0 Sta. 20+10 and Sta. 36+23 is to be done in one day.



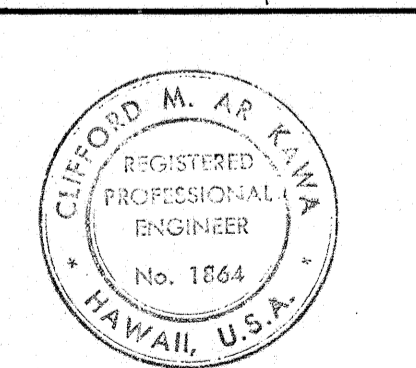
SUMMARY OF PERMANENT SIGNS

TYPE	EACH
M3-2	1
1M-2(2)	1

End New Striping at Existing HI-0 Sta. 36+23  
Belser St.



Install at HI-0 Sta. 48+00 on Right Shoulder.

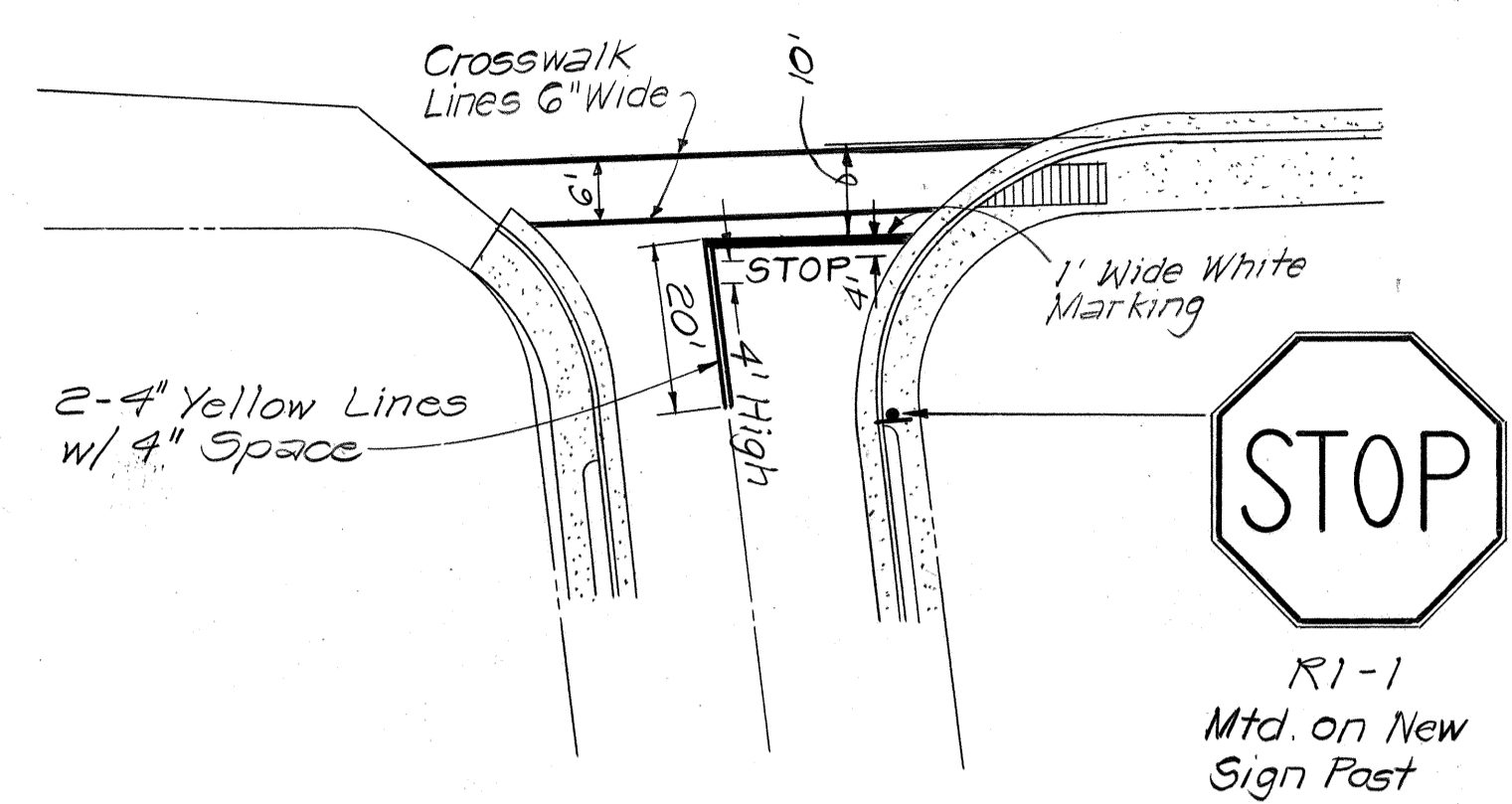


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION  
Clifford M. Arakawa

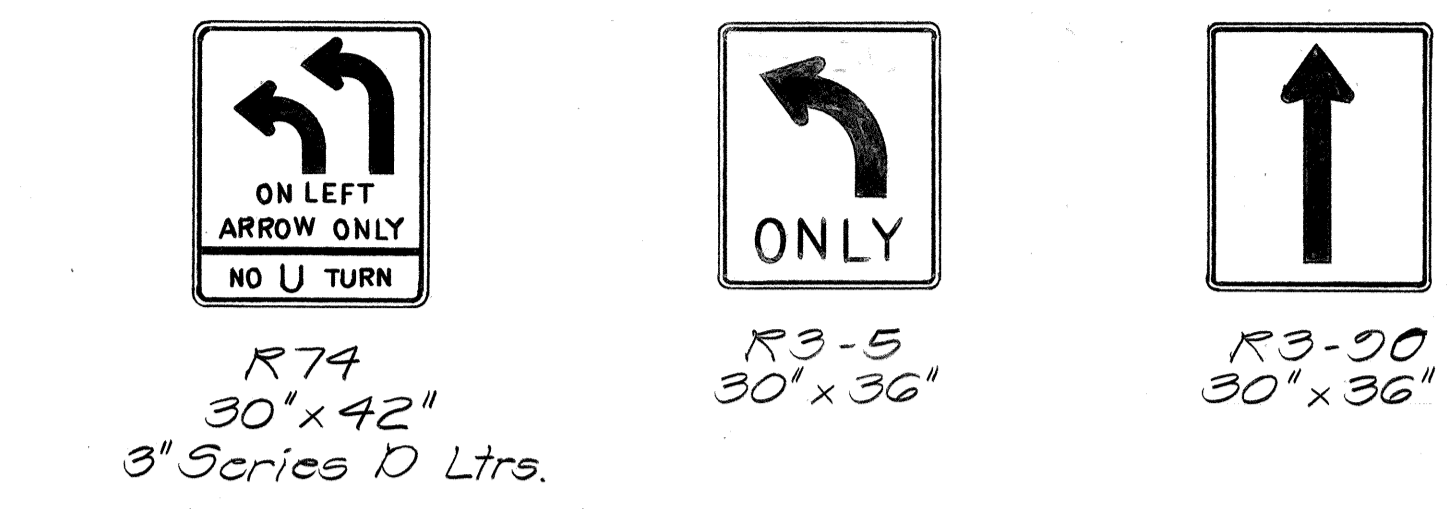
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION  
**SIGNING AND STRIPING PLAN  
RAMP HI-K**

INTERSTATE ROUTE HI-1  
KAPIOLANI INTERCHANGE ON-RAMP  
FA.I. PROJ. NO. I-HI-1 (157)-24  
Scale: 1" = 50' Date: 10-15-79  
SHEET NO. 5 OF 5 SHEETS

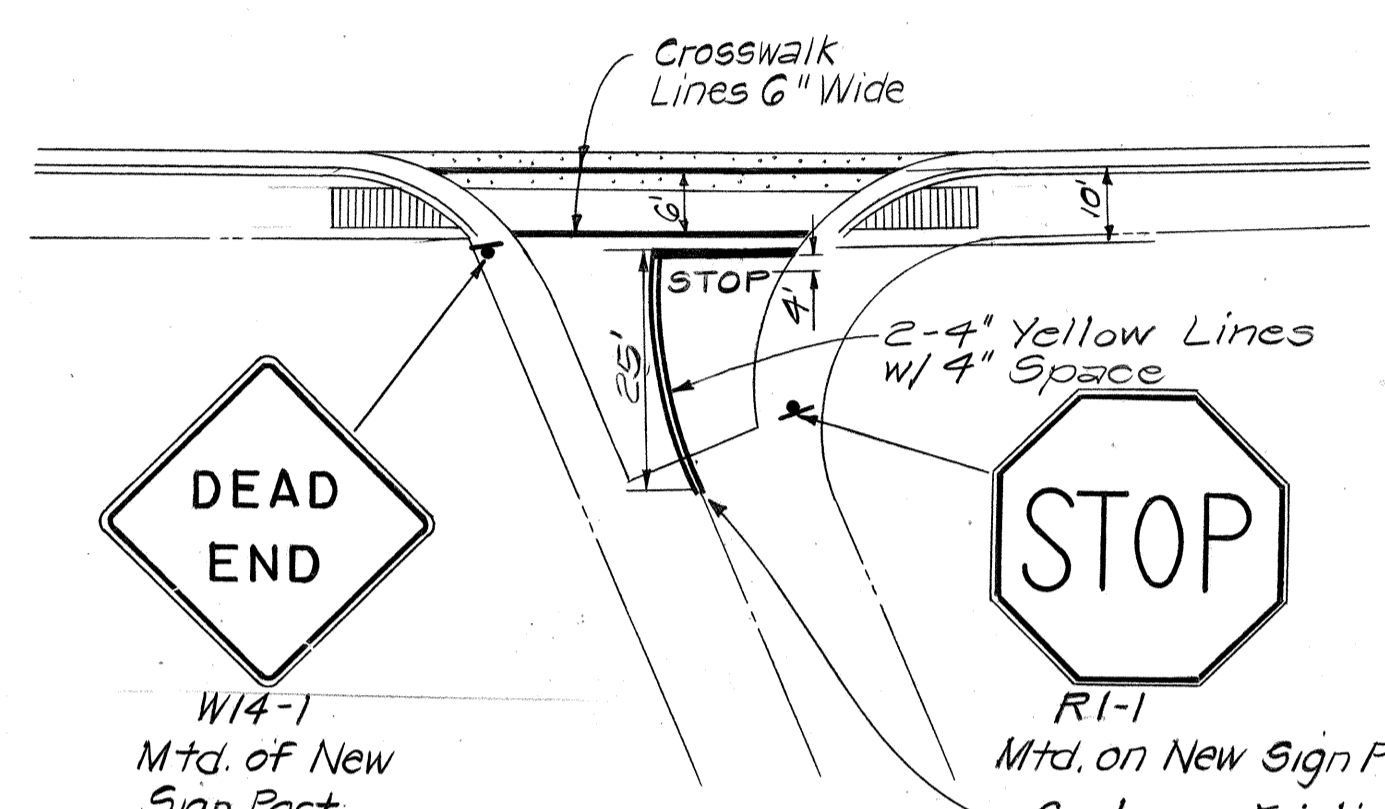
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(157)-24	1979	55	146



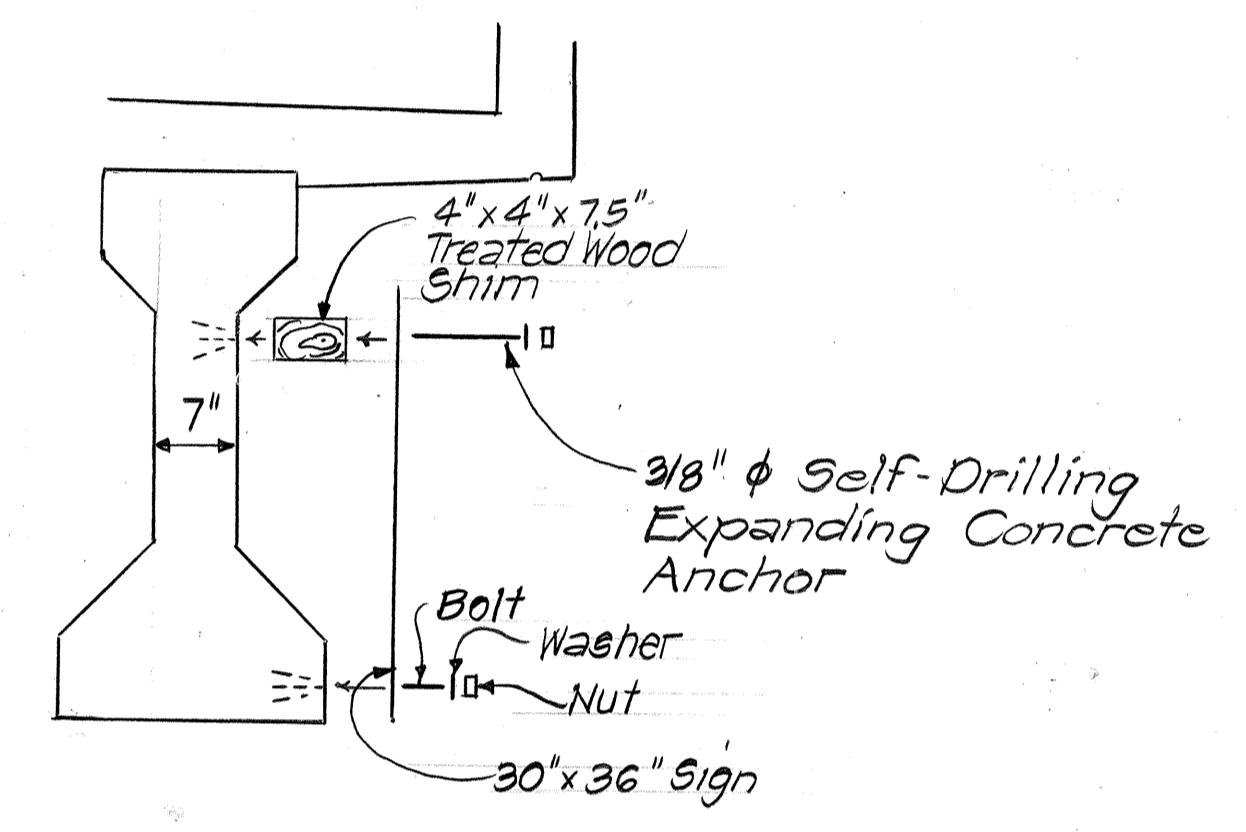
**MAHIAI STREET INTERSECTION  
SIGN & PAVEMENT MARKINGS**  
Scale: 1" = 20'



VERTICAL CLEARANCE FT.-IN  
CW34C  
120" x 18"  
6" Series D Ltrs.

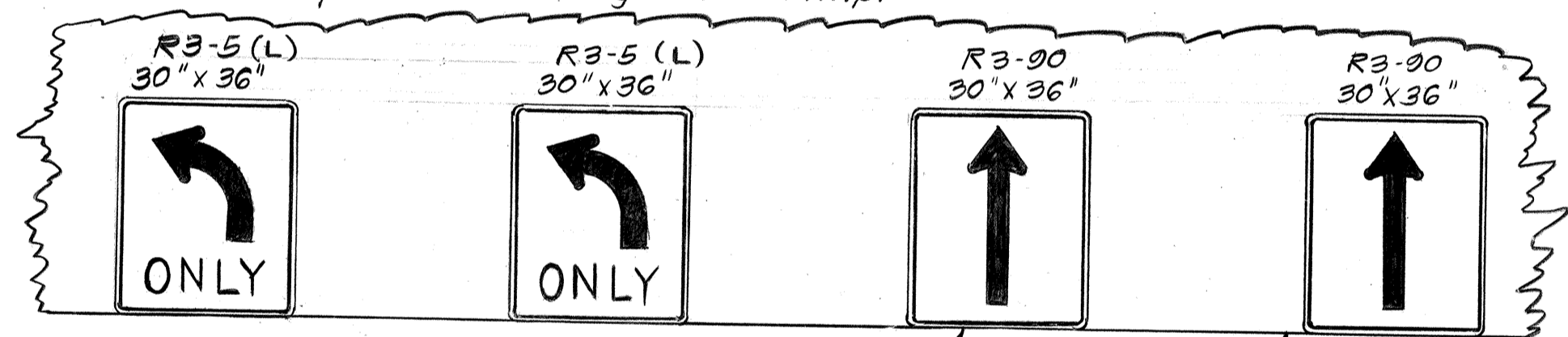


**MAUNAWAI PLACE INTERSECTION  
SIGN & PAVEMENT MARKINGS**  
Scale: 1" = 20'



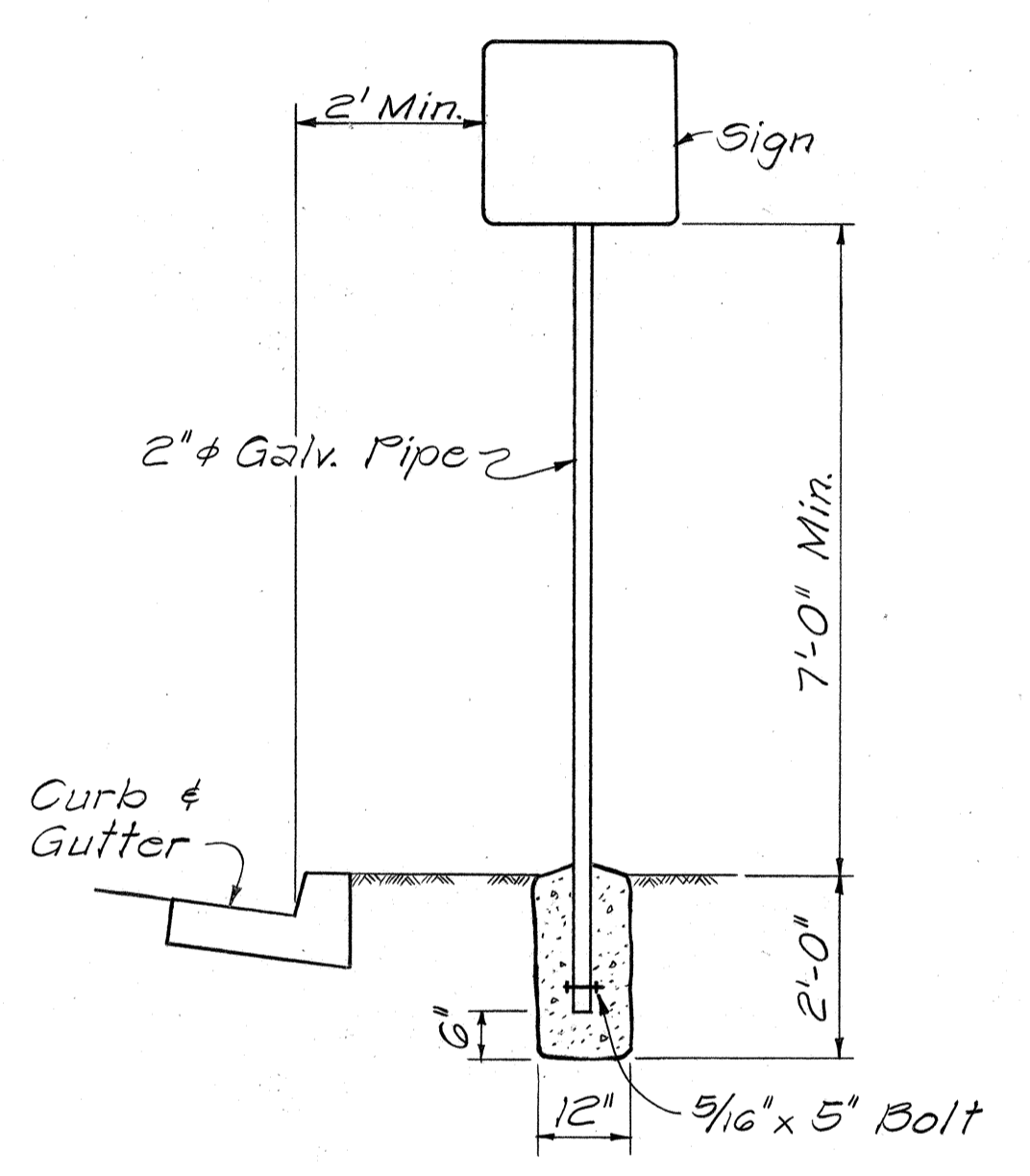
**DETAIL "A"**  
Scale: 3/4" = 1'-0"

NOTE: County Standard Details for sign installation apply for all signs on Kapiolani Boulevard  
State Highway Standard Details for Sign installation apply for all signs on the On-Ramp and existing Off-Ramp.



For Mounting Details  
See Detail Above

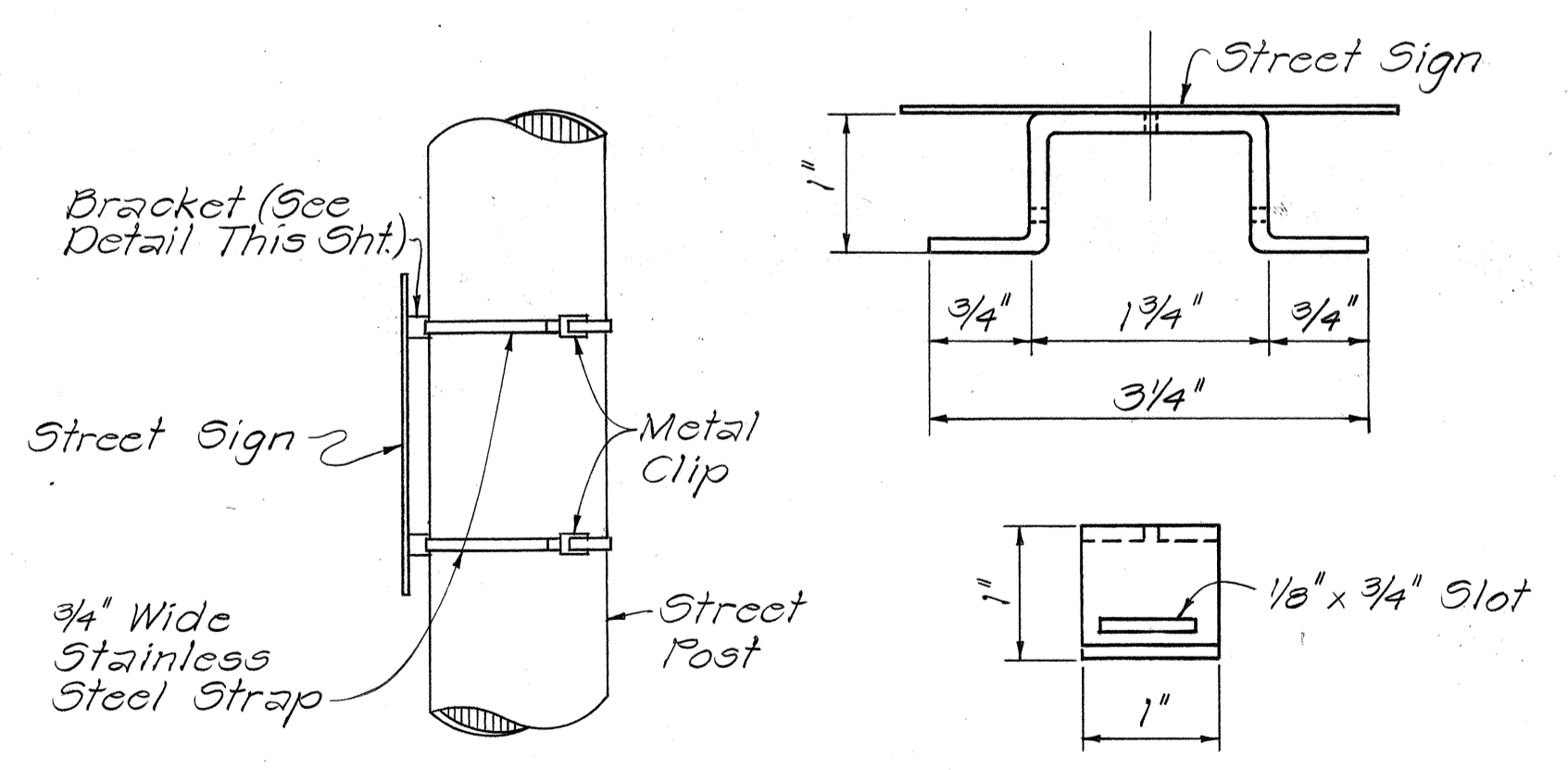
SUMMARY OF PERMANENT SIGNS	
SIGN	EACH
R1-1	2
W4-1	1



**TYPICAL SIGN POST DETAIL**  
ONLY APPLICABLE TO COUNTY SIGN INSTALLATION  
Scale: 1/2" = 1'-0"

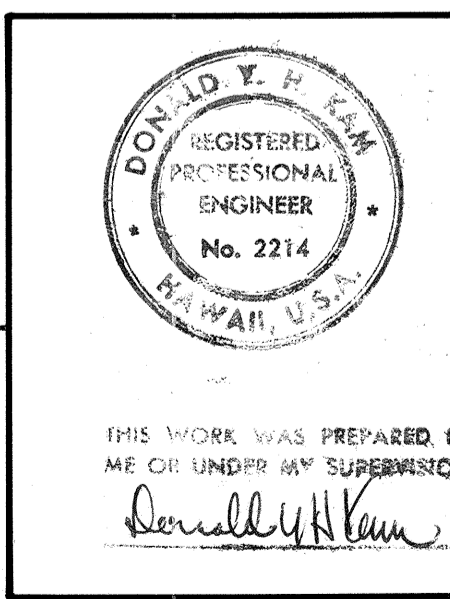
NOTE: Signs are to be centered and mounted over the appropriate lane. See sheet 51. The Contractor shall furnish all materials, equipment, and labor for the complete installation of the sign. All materials, equipment, and labor shall be incidental to Item No. 621,5000 Regulatory and Warning sign.

**PEDESTRIAN OVERPASS  
MOUNTING DETAILS**  
No Scale



**BRACKET AND STRAP DETAIL**  
ONLY APPLICABLE TO COUNTY SIGN INSTALLATION  
Not to Scale

Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
Director, Department of Transportation Services  
City & County of Honolulu



5/30/80 Revised Note Pedestrian Overpass Mounting Detail and Added CW34C Sign Detail  
Date Revision

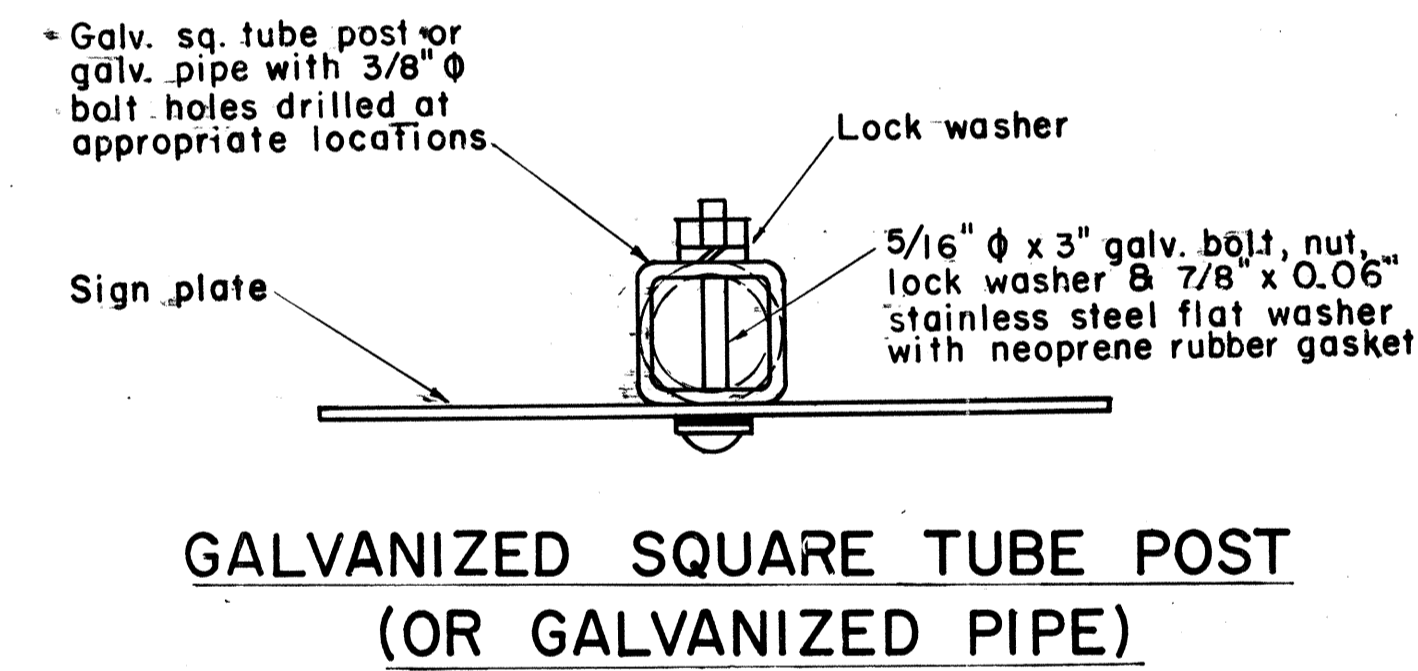
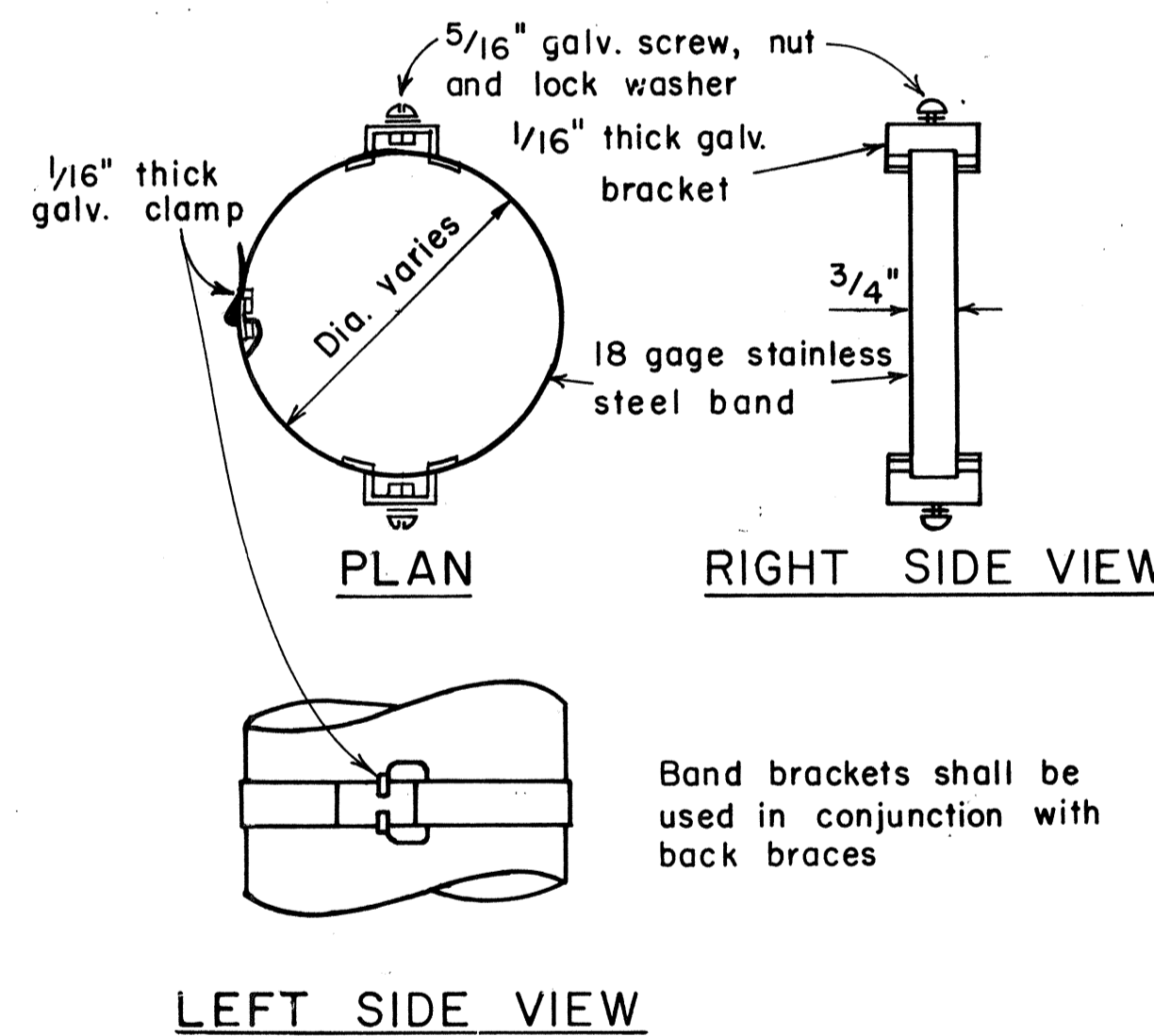
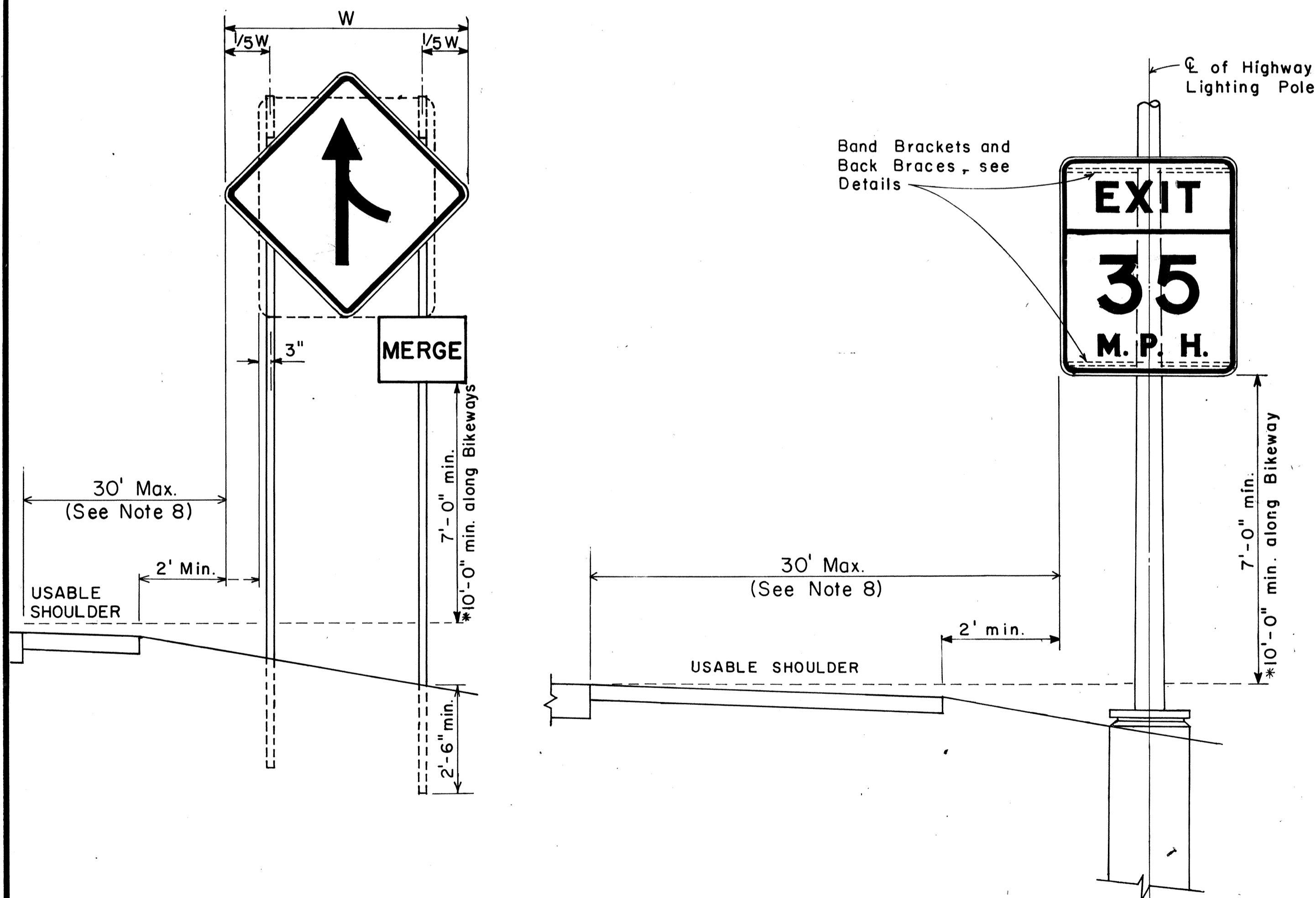
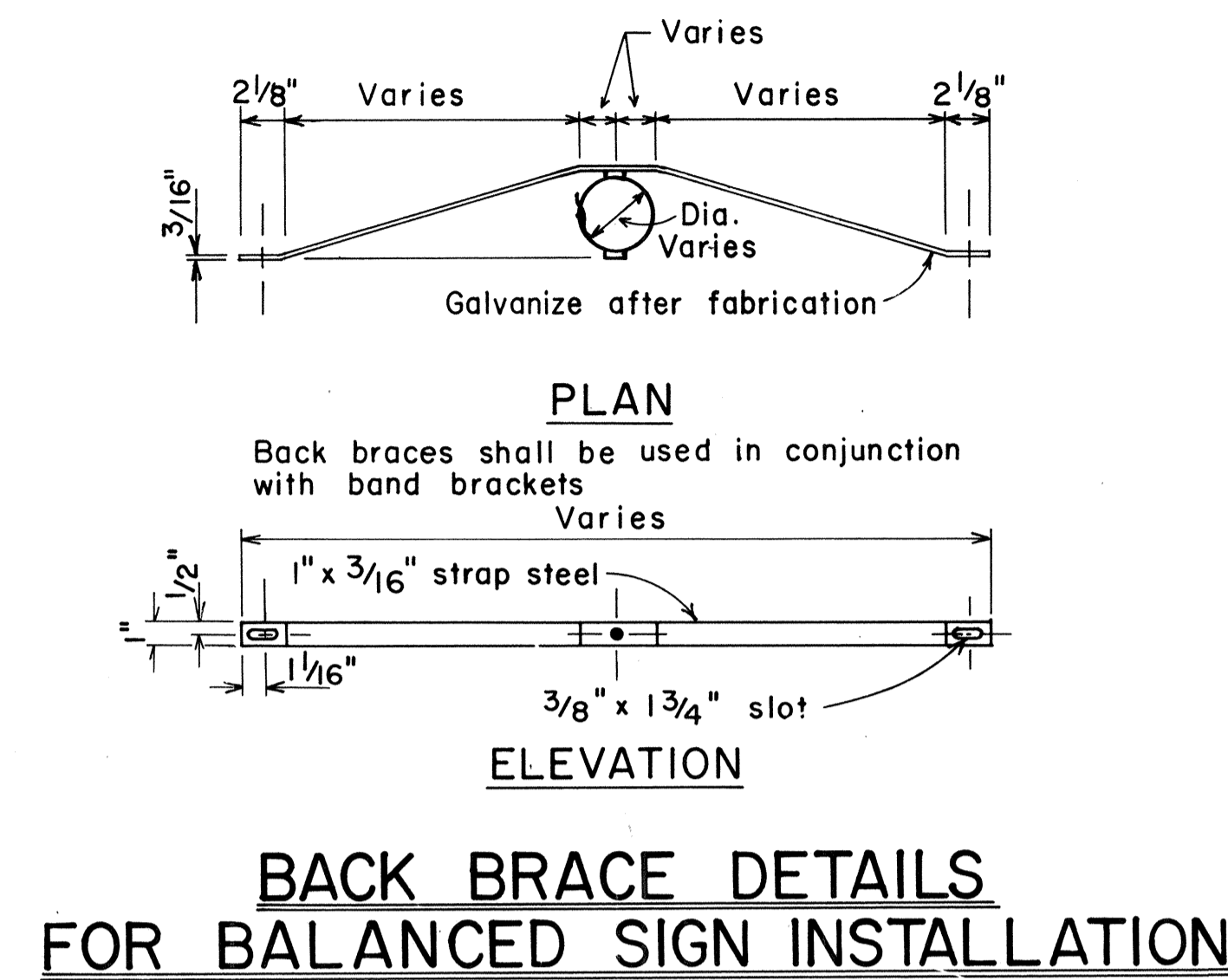
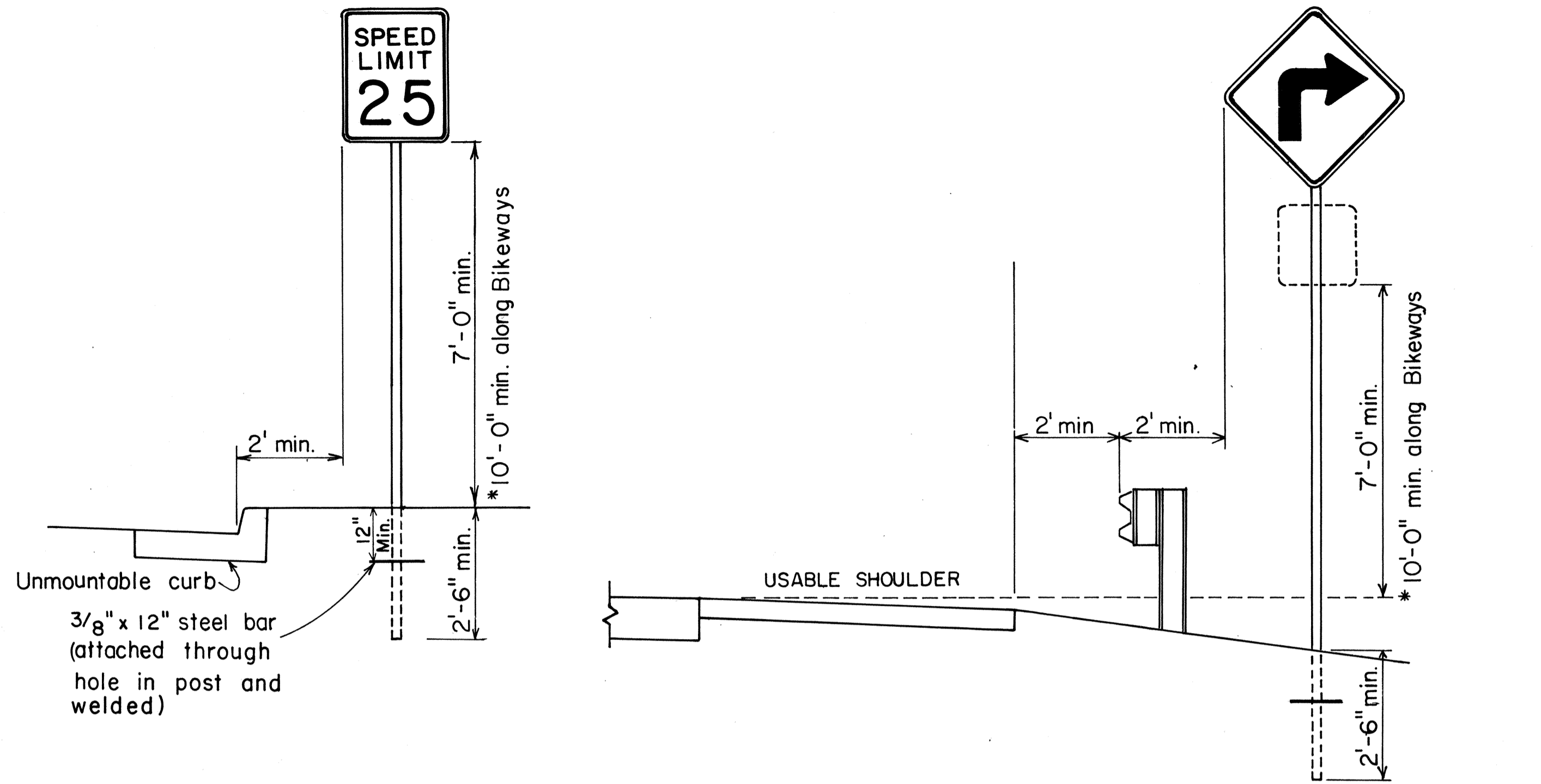
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION  
**SIGNING AND STRIPING DETAILS**  
KAPIOLANI BOULEVARD  
INTERSTATE ROUTE H-1  
KAPIOLANI INTERCHANGE ON-RAMP  
F.A.I. PROJ. NO. I-HI-1(157)-24  
Scale: As Shown Date: 10-15-79

DATE	.....
SURVEY PLOTTED BY	.....
DRAWN 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.	HI-1(157)-24	1979	56	146

### 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 1/2" 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.



### BAND BRACKET TYPICAL MOUNTING DETAILS NOT TO SCALE

APPROVAL RECOMMENDED:  
*Eichi Tanaka* 11/10/77  
TRAFFIC ENGINEER DATE

APPROVED:  
*Herbert S. Sakai* 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.	5/23/79
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

SHEET NO. 2 OF 6 SHEETS DT 100

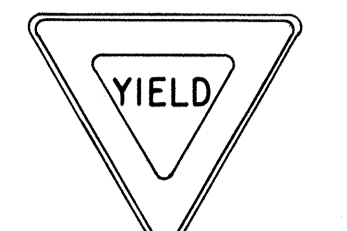
DATE	.....
SURVEY PLOTTED BY	.....
DRAWN BY	.....
DESIGNED BY	.....
QUANTITIES BY	.....
CHECKED BY	.....
ORIGINAL PLAN	.....
NOTE BOOK	.....
No.	.....

### HEIGHT AND LATERAL LOCATION OF SIGNS TYPICAL INSTALLATION

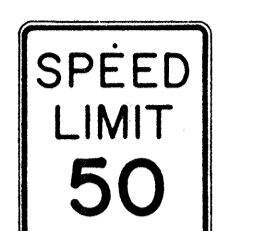
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(157)-24	1979	57	146



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



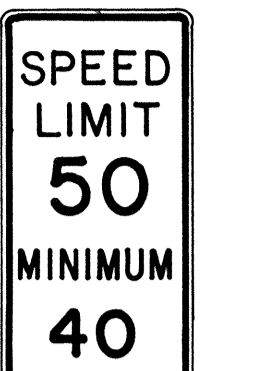
R1-2 36" x 36" x 36"  
R1-2-A 48" x 48" x 48"



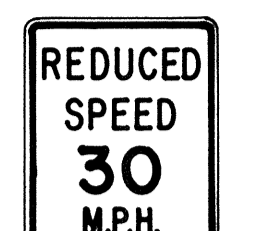
R2-1(50) 24" x 30"  
R2-1(50)-A 48" x 60"



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"



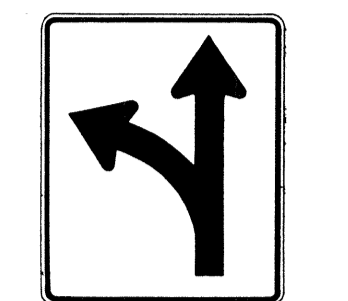
R3-3 24" x 24"  
R3-3-A 48" x 48"



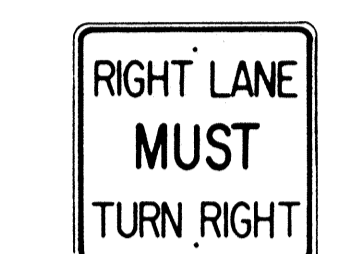
R3-4 24" x 24"  
24" x 18"  
R3-4-A 48" x 48"  
48" x 36"



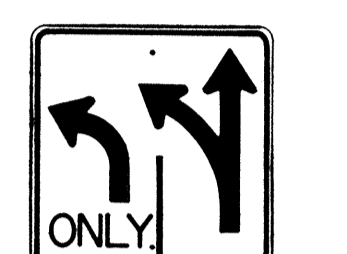
R3-5(L) 30" x 36"  
R3-5(L)-A 48" x 60"



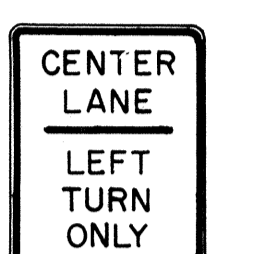
R3-6(L) 30" x 36"  
R3-6(L)-A 48" x 60"



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"



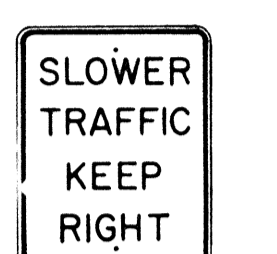
R3-9 24" x 30"



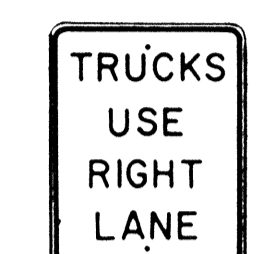
R4-1 24" x 30"



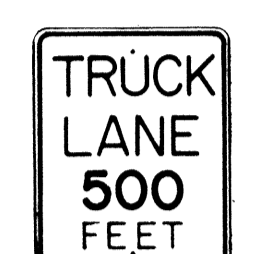
R4-2 24" x 30"



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



R4-5 24" x 30"



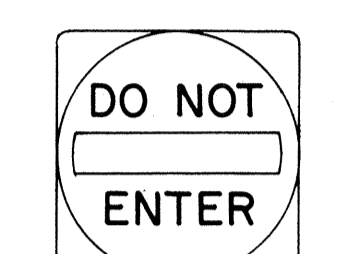
R4-6(500) 24" x 30"



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



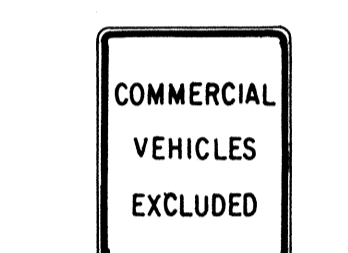
R4-8 24" x 30"  
24" x 18"



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"



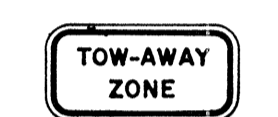
R7-4 12" x 18"  
R7-4-A 24" x 30"



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"



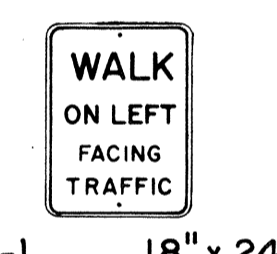
R8-5 24" x 30"



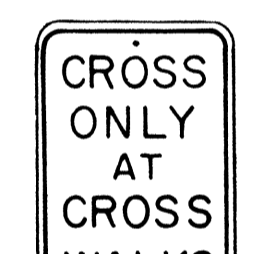
R8-6 24" x 30"



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



R9-1 18" x 24"



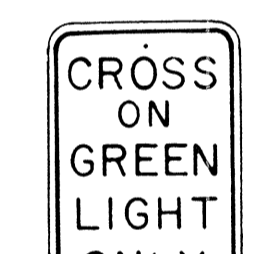
R9-2 12" x 18"



R9-3 12" x 18"



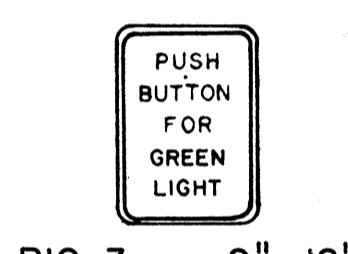
R9-4 18" x 24"



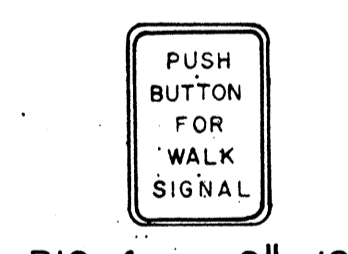
R10-1 12" x 18"



R10-2 12" x 18"



R10-3 9" x 12"



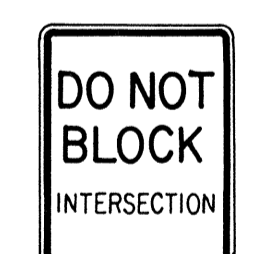
R10-4 9" x 12"



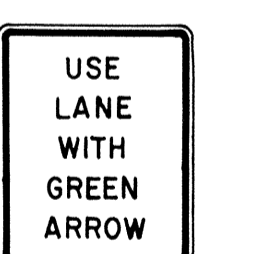
R10-5 24" x 30"



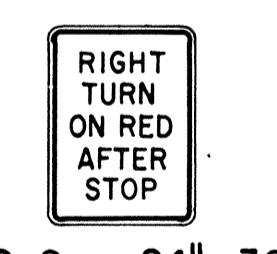
R10-6 24" x 36"



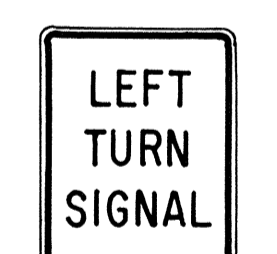
R10-7 24" x 30"



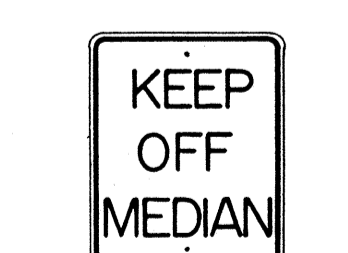
R10-8 24" x 30"



R10-9 24" x 30"



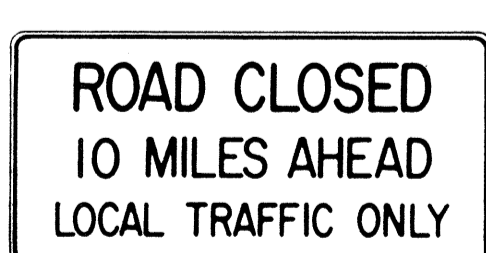
R10-10 24" x 30"



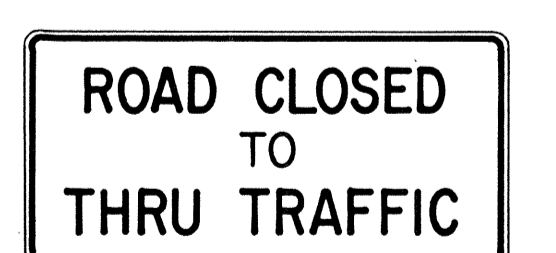
R11-1 24" x 30"



R11-2 48" x 30"



R11-3(10) 60" x 30"



R11-4 60" x 30"



R12-1(10) 24" x 30"

**GENERAL NOTES**

1. 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.
2. All regulatory signs shall be reflectorized unless otherwise specified.
3. All regulatory signs shall have 3/8" bolt holes drilled at appropriate locations.
4. Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
5. All signs shall be erected without educational plaques unless called for in the plans.

APPROVAL RECOMMENDED:  
*Erich Tanaka* 3/17/72  
TRAFFIC ENGINEER DATE

APPROVED:  
*Robert Zetser* 3-20-72  
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 101 Approved 12-30-69	H.I.	3/20/72
2	Revised General Note 1.	H.I.	10/10/74
3	Added General Note 5	H.I.	8/7/79

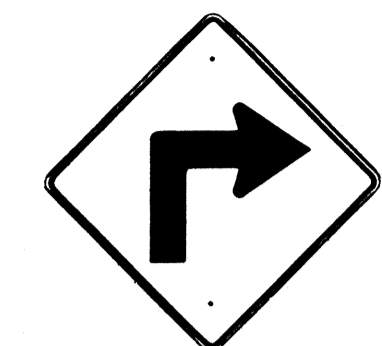
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION

**STANDARD DETAILS**  
**REGULATORY SIGNS**

NOT TO SCALE

SHEET No. 3 OF 6 SHEETS DT 101

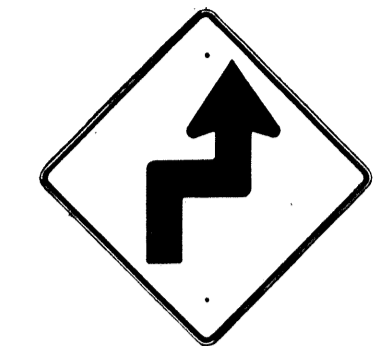
DATE: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NO. \_\_\_\_\_



W1-1(R) 30"x30"  
W1-1(R)-A 48"x48"



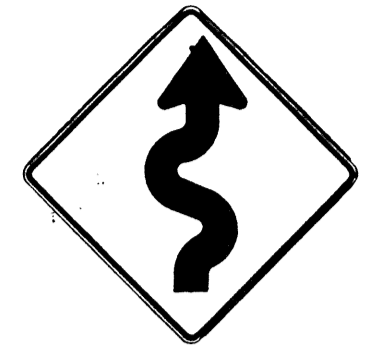
W1-2(R) 30"x30"  
W1-2(R)-A 48"x48"



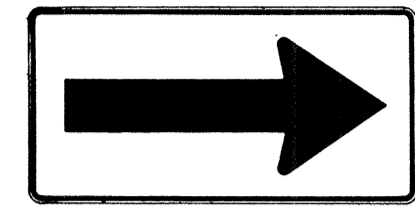
W1-3(R) 30"x30"  
W1-3(R)-A 48"x48"



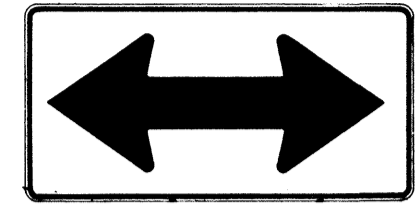
W1-4(R) 30"x30"  
W1-4(R)-A 48"x48"



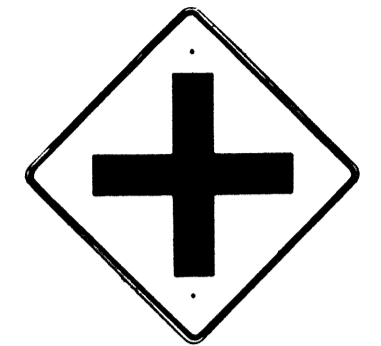
W1-5(R) 30"x30"  
W1-5(R)-A 48"x48"



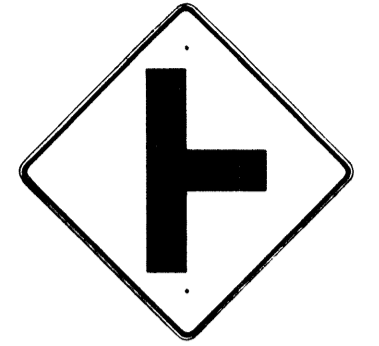
W1-6 48"x24"



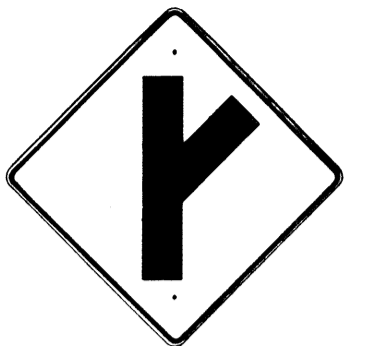
W1-7 48"x24"



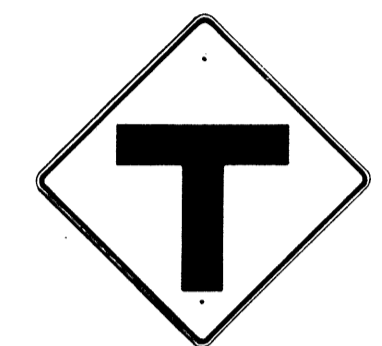
W2-1 30"x30"  
W2-1-A 48"x48"



W2-2 30"x30"  
W2-2-A 48"x48"



W2-3(R) 30"x30"  
W2-3(R)-A 48"x48"



W2-4 30"x30"  
W2-4-A 48"x48"



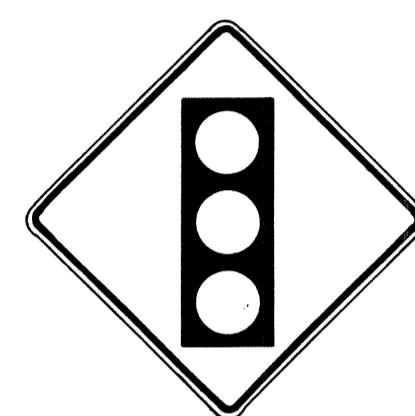
W2-5 30"x30"  
W2-5-A 48"x48"



W3-1 30"x30"  
W3-1-A 36"x36"



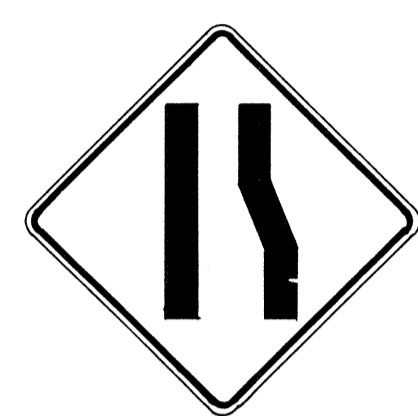
W3-2 30"x30"  
W3-2-A 36"x36"



SIGNAL AHEAD  
W3-3 36"x36"  
24"x18"



MERGE  
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"



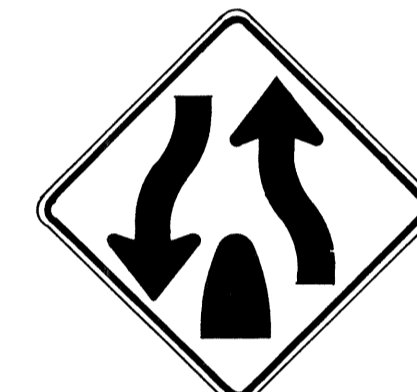
W5-2 30"x30"  
W5-2-A 36"x36"



W5-3 36"x36"



DIVIDED HIGHWAY  
W6-1 36"x36"  
24"x18"



DIVIDED HIGHWAY ENDS  
W6-2 36"x36"  
24"x18"



TWO WAY TRAFFIC  
W6-3 30"x30"  
24"x18"  
W6-3-A 36"x36"  
24"x18"  
W6-3-B 48"x48"  
24"x18"



HILL  
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"



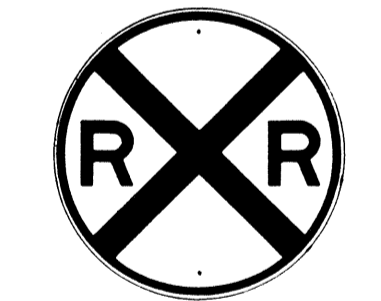
SLIPPERY WHEN WET  
W8-5 30"x30"  
24"x18"  
W8-5-A 36"x36"  
24"x18"



RIGHT LANE ENDS  
W9-1(R) 30"x30"  
W9-1(R)-A 36"x36"  
W9-1(R)-B 48"x48"



LANE ENDS MERGE LEFT  
W9-2(L) 36"x36"  
W9-2(L)-A 48"x48"



W10-1 36" Diameter



BIKE XING  
W11-1 30"x30"  
24"x18"  
W11-1-A 36"x36"  
24"x18"



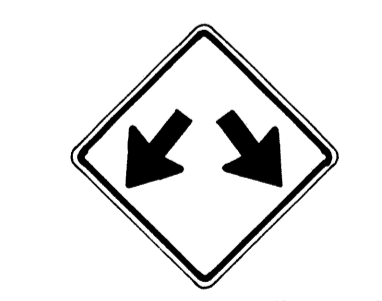
PED XING  
W11-2 30"x30"  
24"x18"  
W11-2-A 36"x36"  
24"x18"



CATTLE XING  
W11-4 30"x30"  
24"x18"  
W11-4-A 36"x36"  
24"x18"



FARM MACHINERY  
W11-5 30"x30"  
24"x18"  
W11-5-A 36"x36"  
24"x18"



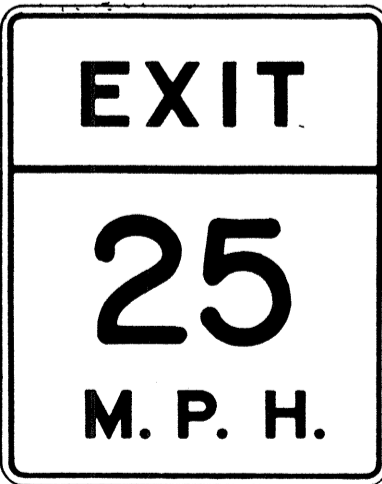
W12-1 24"x24"  
W12-1-A 36"x36"  
W12-1-B 48"x48"



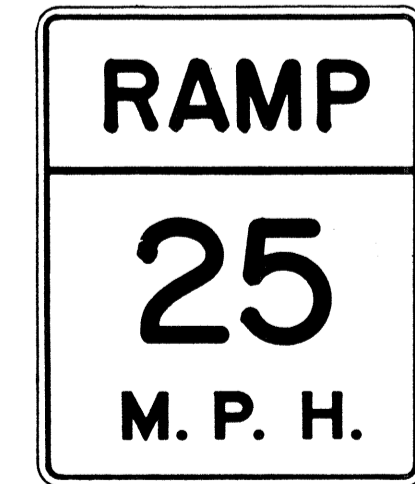
LOW CLEARANCE  
W12-2(12'-6") 36"x36"  
24"x18"



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"

**GENERAL NOTES**

1. 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.
2. All warning signs shall be reflectorized unless otherwise specified.
3. All warning signs shall have 3/8" bolt holes drilled at appropriate locations.
4. Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
5. Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized.

APPROVAL RECOMMENDED:  
*E. J. Tanaka* 3/17/72  
TRAFFIC ENGINEER DATE

APPROVED:  
*John J. ...* 3-20-72  
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.T.	3/20/72
2	Revised General Note 1	H.T.	10/16/74
3	Revised General Note 5	M.T.	9-16-75
4	Revised General Note 5	H.T.	9-14-76
5	Added Note 1	H.T.	11-9-79

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION

**STANDARD DETAILS**  
**WARNING SIGNS**

NOT TO SCALE

NOTE  
1. All signs shall be erected without educational plaques unless called for in the plans.

DATE: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
TRACED BY: \_\_\_\_\_  
ORIGINAL PLAN: \_\_\_\_\_  
NO. \_\_\_\_\_

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(157)-24	1979	59	146

General Notes

- Sign details shall conform to the latest editions of the following FHWA publications:
  - "Standard Alphabets for Highway Signs," and as amended.
  - "Standard Highway Signs," and as amended.
  - "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
- All signs shall be reflectorized with reflective sheeting, unless otherwise specified.
- All signs shall have  $\frac{3}{8}$ " bolt holes drilled at appropriate locations.
- Numerals in ( ) indicate 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 with reflective sheeting.
- All signs shall be erected without educational plaques unless called for in the plans.

**ALL WAY**  
R1-4 18" x 6"

**REDUCED SPEED AHEAD**  
R2-5d(35) 24" x 30"  
R2-5d(35)-A 48" x 60"

**SPEED LIMIT ENFORCED BY VASCAR**  
R2-10 24" x 30"

**CENTER LANE ONLY**  
R3-9b 24" x 36"

**BUS STOP**  
R7-107(R) 12" x 24"

**RESERVED PARKING**  
R7-8 12" x 18"  
R7-8-A 24" x 30"

**NO PARKING ANY TIME**  
R8-3a 24" x 24"  
24" x 18"  
R8-3a-A 48" x 48"

**NO PED XING**  
R9-3a 18" x 18"  
18" x 12"  
R9-3a-A 24" x 24"  
24" x 18"

**USE CROSSWALK**  
R9-3b(R) 18" x 12"  
R9-3b(L) 18" x 12"

**NO TURN ON RED**  
R10-11a 24" x 30"

**TURN RIGHT ANY TIME WITH CAUTION**  
R16-1 24" x 30"

**NO LEFT TURN ON RED**  
R16-3 18" x 24"

**NO RIGHT TURN ON RED**  
R16-4 18" x 24"

**UNLICENSED VEHICLES BICYCLES, CYCLES UNDER 5 H P, PEDESTRIANS KEEP OUT FREEWAY**  
R16-5 36" x 42"

**TURN AHEAD**  
R16-6 24" x 30"

**U TURN OK**  
R16-7 24" x 30"

**MOTOR-DRIVEN CYCLES PROHIBITED**  
R5-8 30" x 24"

**STOP AHEAD**  
W3-1a 36" x 36"  
24" x 18"  
W3-1a-A 48" x 48"  
24" x 18"

**YIELD AHEAD**  
W3-2a 36" x 36"  
24" x 18"  
W3-2a-A 48" x 48"  
24" x 18"

**STOP AHEAD WHEN FLASHING**  
W3-4 48" x 48"

**TRUCK CROSSING**  
W8-6 30" x 30"  
W8-6-A 36" x 36"

**THRU TRAFFIC MERGE LEFT**  
W9-3(L) 48" x 48"

**RIGHT LANE EXIT ONLY**  
W18-1 48" x 60"

**END FREEWAY 1/2 MI**  
CW16-1(1/2) 60" x 60"

**ADVANCE GREEN**  
W15-2 24" x 24"

**DELAYED GREEN**  
W15-1 24" x 24"

**LIMITED SIGHT DISTANCE**  
W14-4 36" x 36"  
W14-4-A 48" x 48"

**WHEELCHAIR**  
W11-9 36" x 36"  
W11-9-A 48" x 48"

**FIRE STATION**  
W11-8 36" x 36"  
24" x 18"  
W11-8-A 48" x 48"  
24" x 18"

**EQUESTRIAN XING**  
W11-7 36" x 36"  
24" x 18"  
W11-7-A 48" x 48"  
24" x 18"

**SCHOOL BUS STOP AHEAD**  
S3-1 30" x 30"

**8:00 AM TO 3:30 PM**  
S4-1 24" x 10"

**WHEN CHILDREN ARE PRESENT**  
S4-2 24" x 10"

**SCHOOL**  
S4-3 24" x 8"

**WHEN FLASHING**  
S4-4 24" x 10"

**SIDEWALK CLOSED**  
CW23-4 48" x 48"

**USE SIDEWALK**  
R18-1 24" x 18"

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

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

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

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht DT103 approved 3/20/72	H.T.	5/3/78
2	Added General Note 6	H.T.	11/9/78

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION  
**STANDARD DETAILS**  
 MISCELLANEOUS SIGNS

NOT TO SCALE DATE: MAY, 1978  
 SHEET No. 5 OF 6 SHEETS DT 103

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(157)24	1979	60	146



CW20-1a 48" x 48"



CW20-2d 48" x 48"



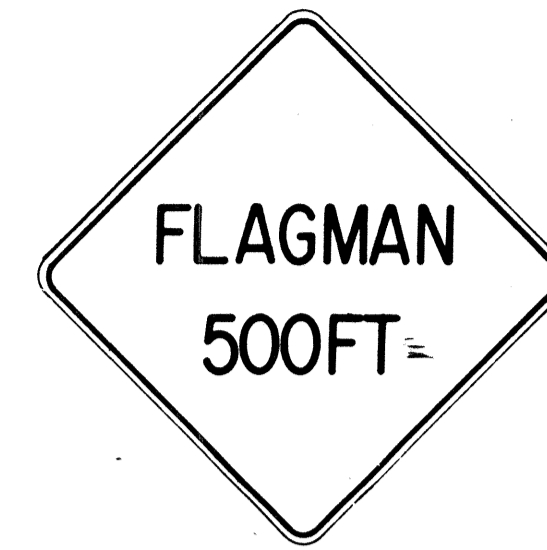
CW20-3b 48" x 48"



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"



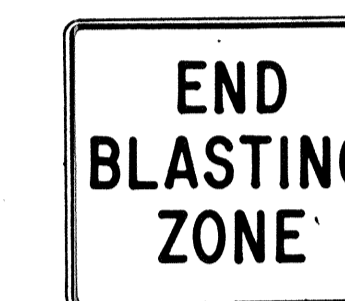
CW21-6 30" x 30"



CW22-1b 48" x 48"



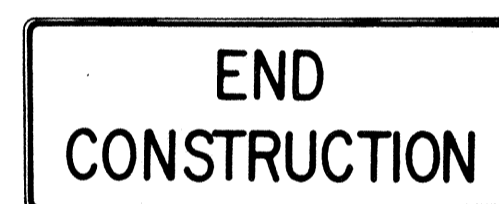
CW22-2 42" x 36"



CW22-3 42" x 36"



CG20-1(5) 60" x 36"



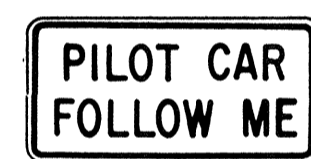
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



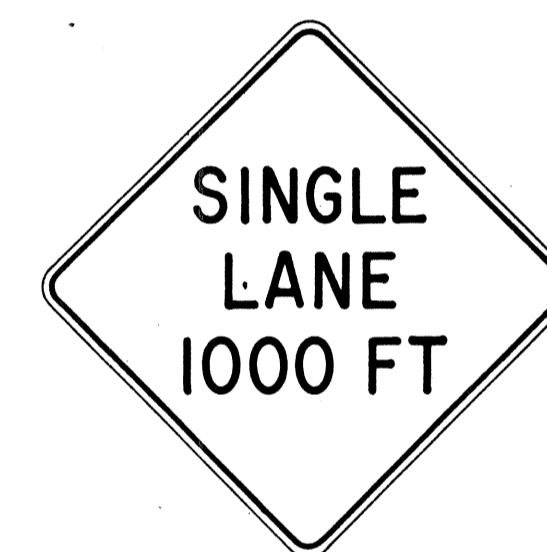
CM4-10(R) 48" x 18"



CG20-4 36" x 18"



CW23-1 36" x 36"



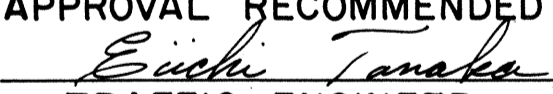
CW23-2b 48" x 48"




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:  
  
 TRAFFIC ENGINEER 3/21/72  
DATE

APPROVED:  
  
 ASSISTANT CHIEF, ENGINEERING 3/23/72  
DATE

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

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION

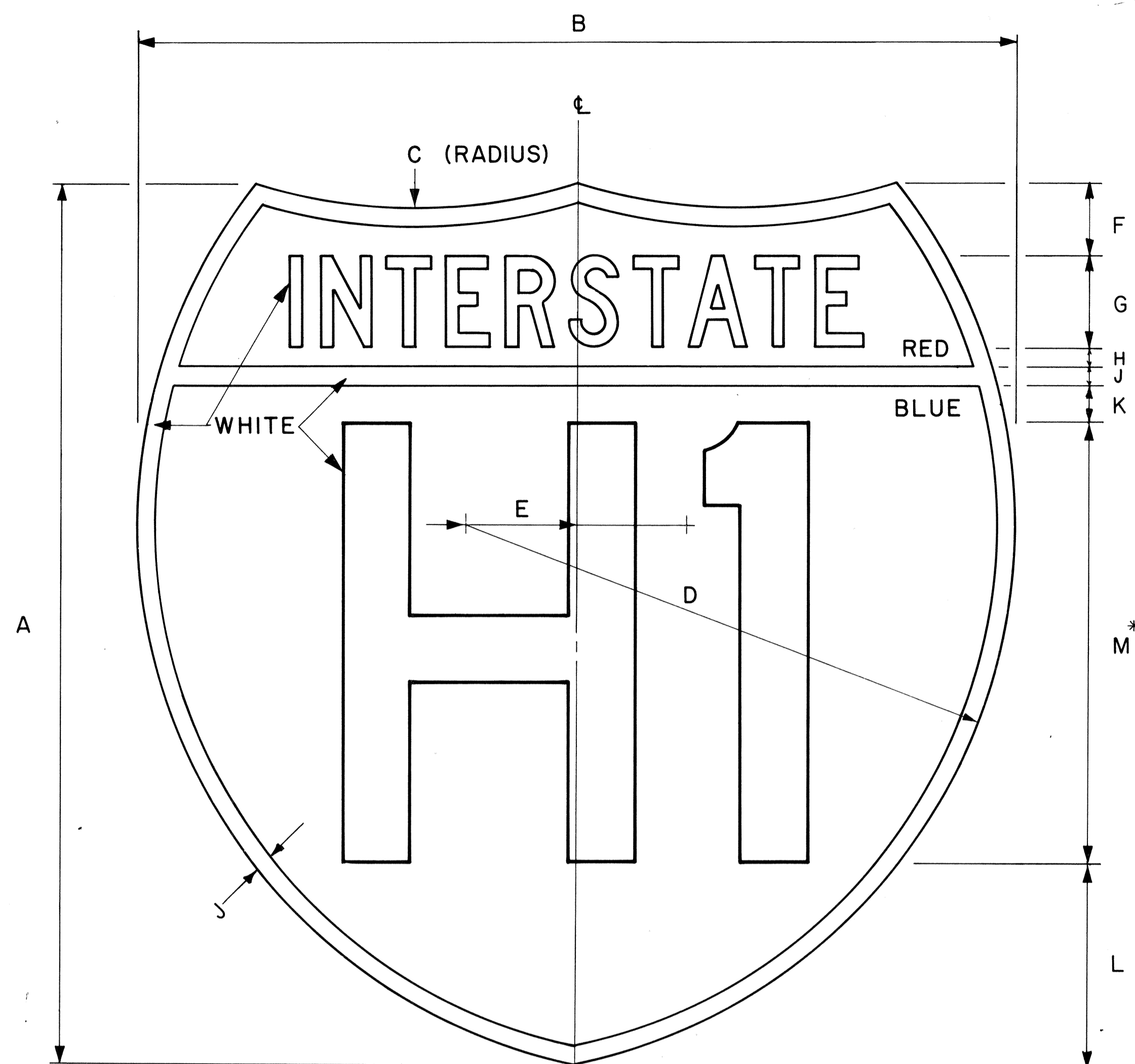
**STANDARD DETAILS**  
**CONSTRUCTION SIGNS**

NOT TO SCALE

SHEET No. 6 OF 6 SHEETS DT 104

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(157)24	1979	61	146



**INTERSTATE ROUTE MARKER**

IM-1( )

Scale: 3/8" = 1"

**GENERAL NOTES**

- Interstate route marker details shall conform to the latest FHWA publications:
  - "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
  - "Standard Alphabets for Highway Signs," and as amended.
  - "Standard Highway Signs," and as amended.
- All Interstate route markers shall be reflectorized with reflective sheeting.
- All Interstate route markers shall have 3/8" bolt holes drilled at appropriate locations unless otherwise specified.
- The Interstate route marker shall be a cut-out shield in a red, white and blue design as shown on the plans.

**INTERSTATE ROUTE MARKER SCHEDULE  
(INCHES)**

SIZE ( )	A	B	C	D	E	F	G	H	J	K	L	M
1	24	24	15	15	3	2	2 1/2 C	1/2	1/2	1	5 1/2	12D
2	36	36	22 1/2	22 1/2	4 1/2	3	3 3/4 C	3/4	3/4	1 1/2	8 1/4	18D
3	48	48	30	30	6	4	5 C	1	1	2	11	24D

\* If letters and numerals cannot be accommodated within available space, Series C letters may be used.

APPROVAL RECOMMENDED:

*Etschi Tanaka* 4/17/78  
TRAFFIC ENGINEER DATE

APPROVED:

*Herbert S. Ralschki* 4/18/78  
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Replaces DT 106 Approved 12/30/69.	H.T.	4-18-78

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION

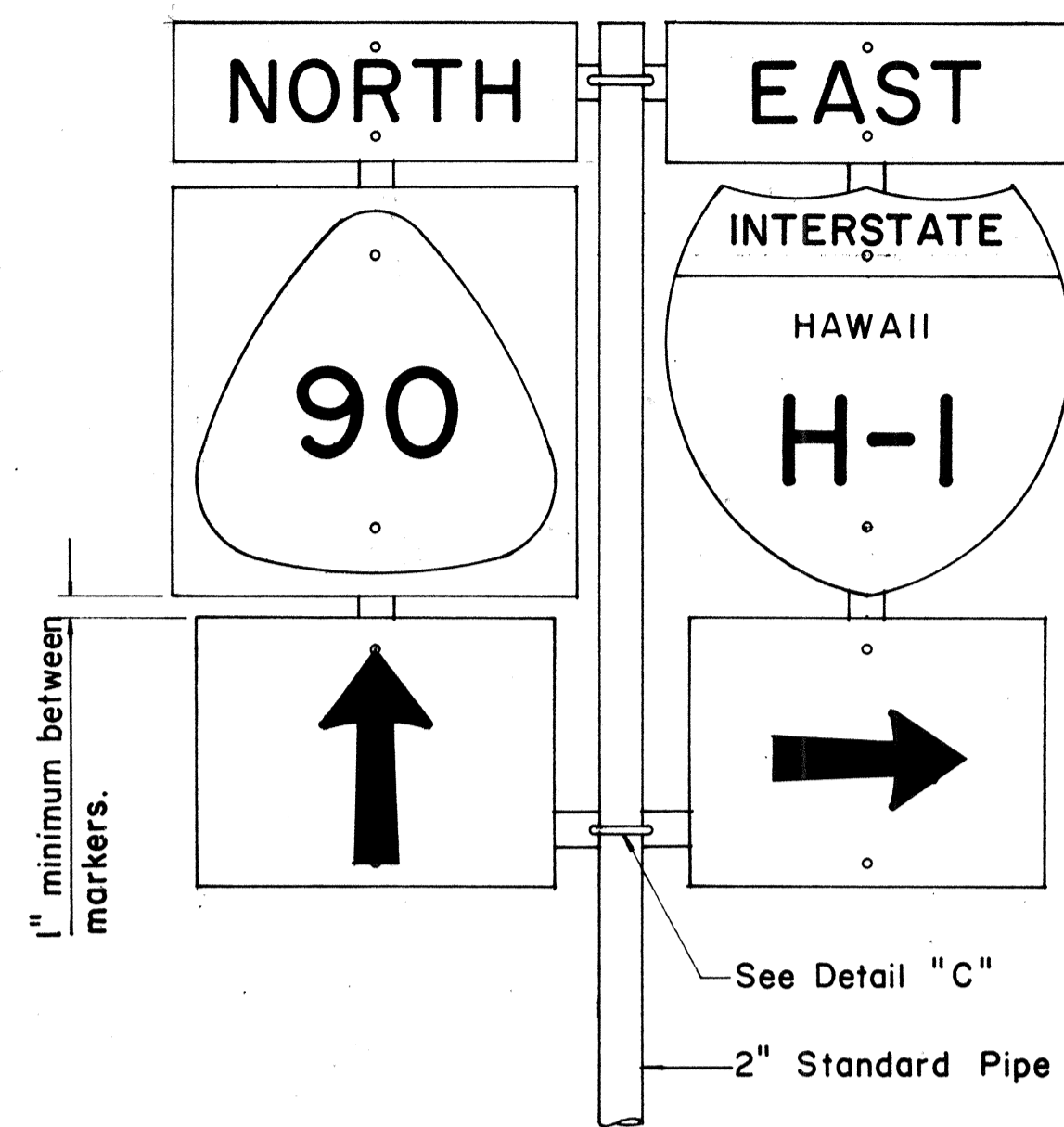
**STANDARD DETAILS**  
**INTERSTATE ROUTE MARKER**

Scale: 3/8" = 1" Date: January, 1978

SHEET No. 1 OF 3 SHEETS DT106

ORIGINAL PLAN NO. \_\_\_\_\_  
DESIGNED BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_  
DATE \_\_\_\_\_

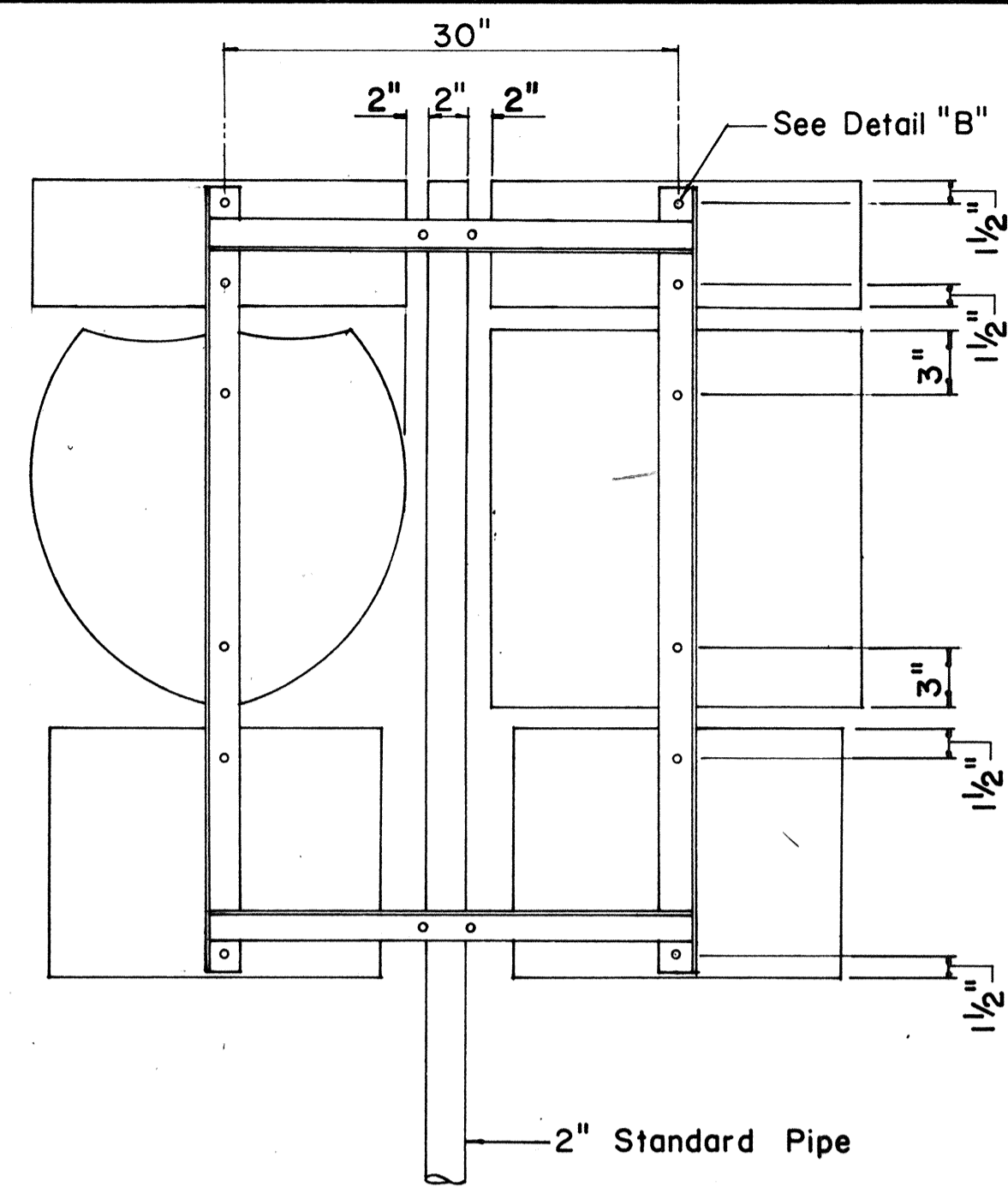
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(157)24	1979	62	146



FRONT ELEVATION

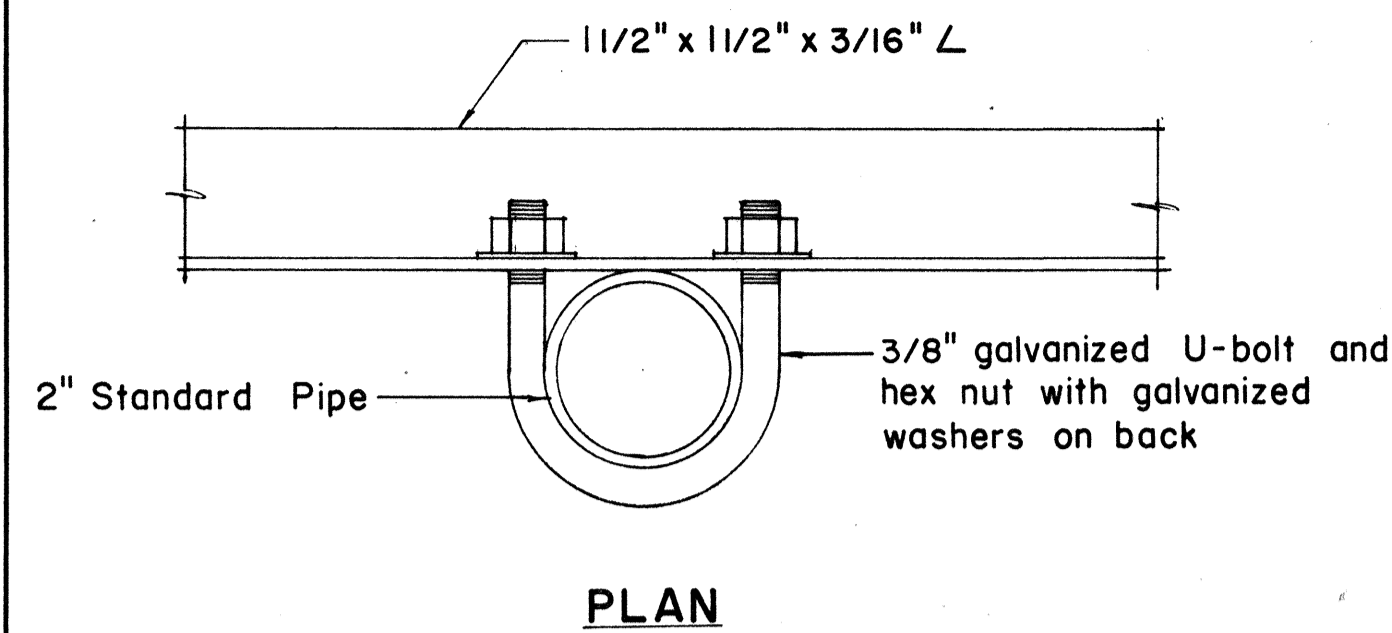
**TYPE "B" ASSEMBLY**

Not to Scale

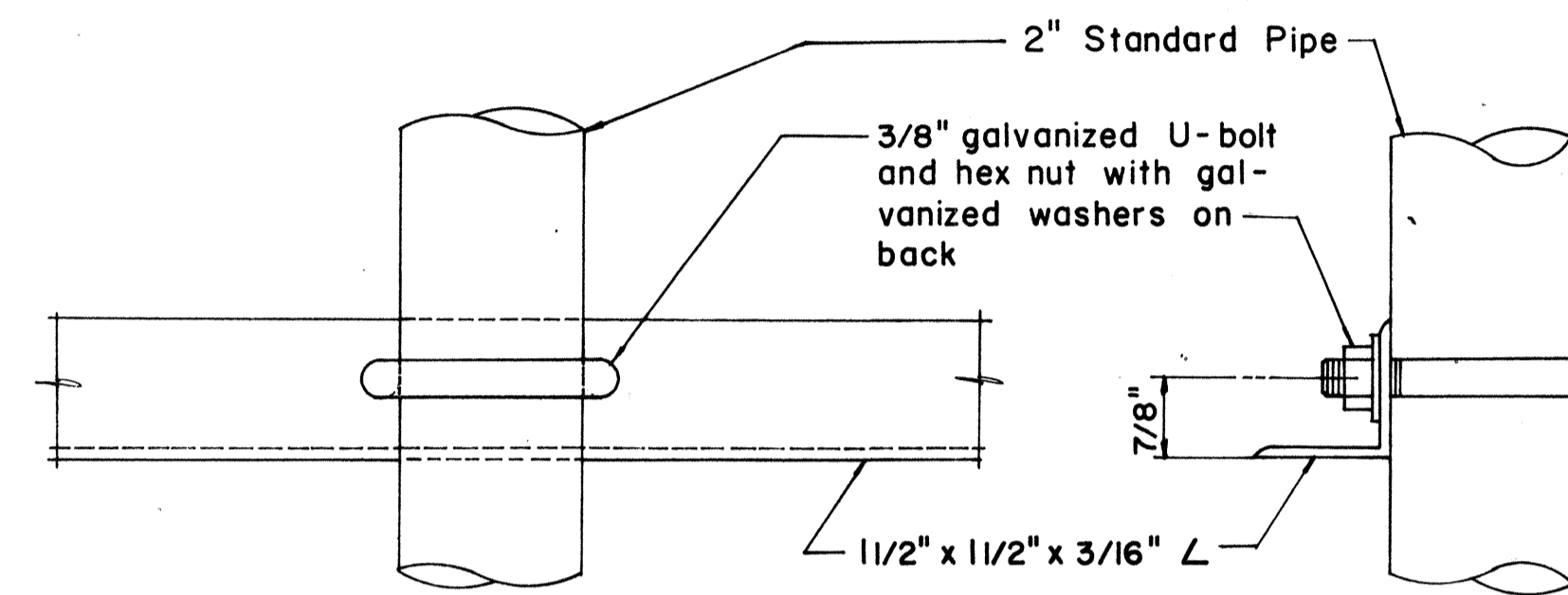


REAR ELEVATION

- 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.



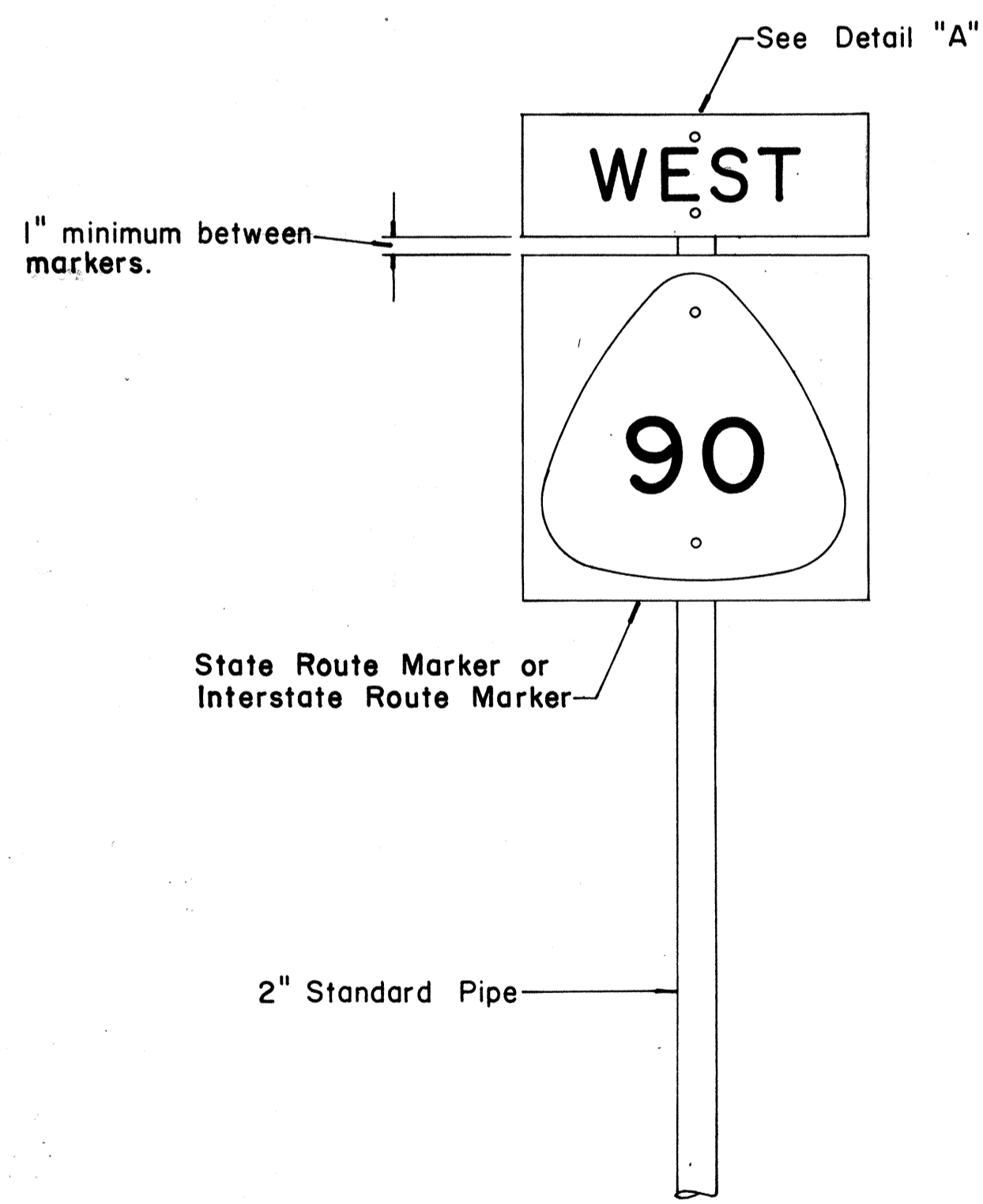
PLAN



FRONT ELEVATION

SIDE ELEVATION

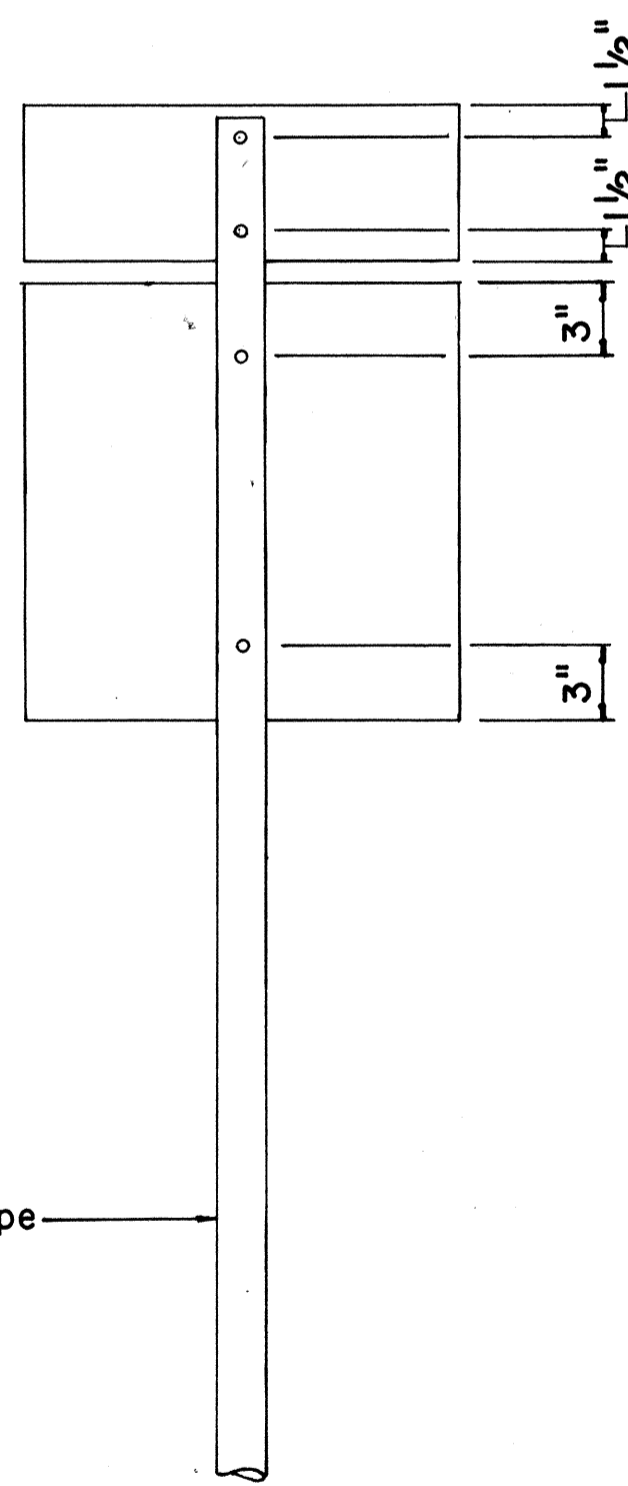
**DETAIL "C"**



FRONT ELEVATION

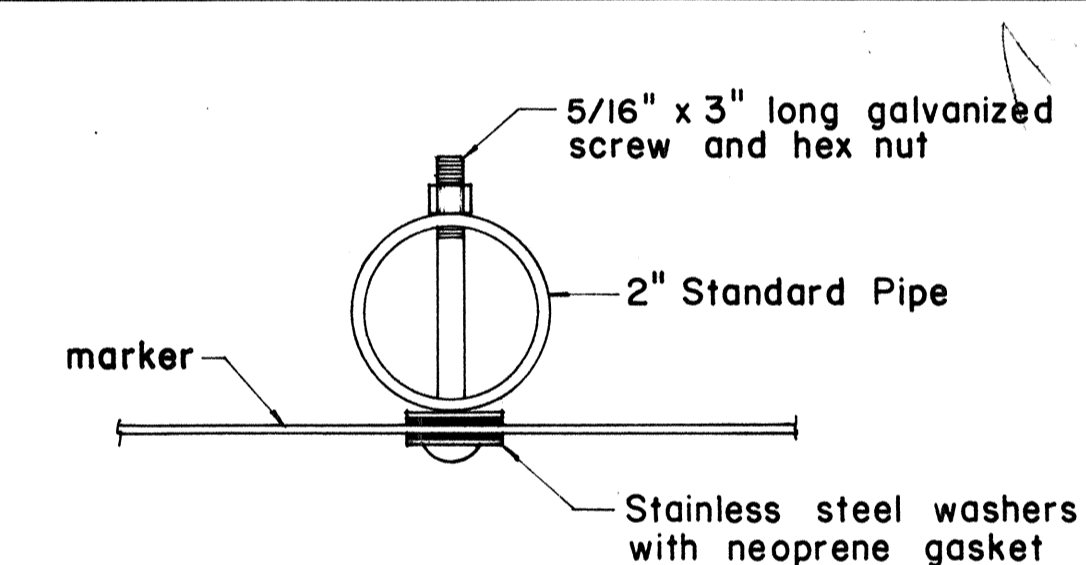
**TYPE "A" ASSEMBLY**

Not to Scale

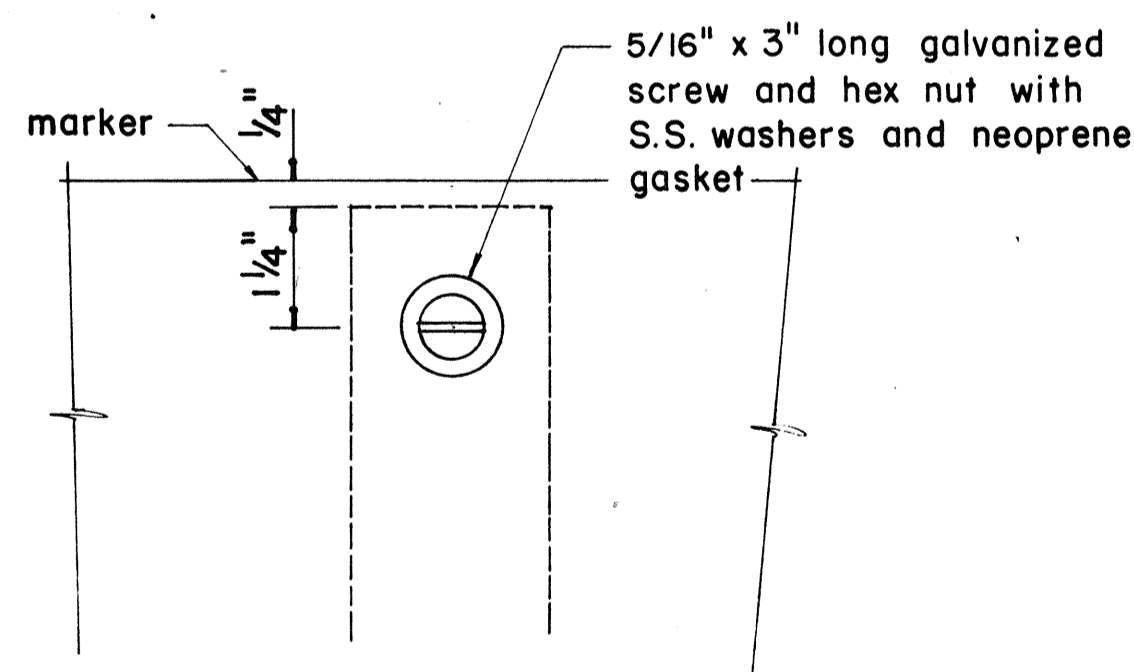


REAR ELEVATION

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

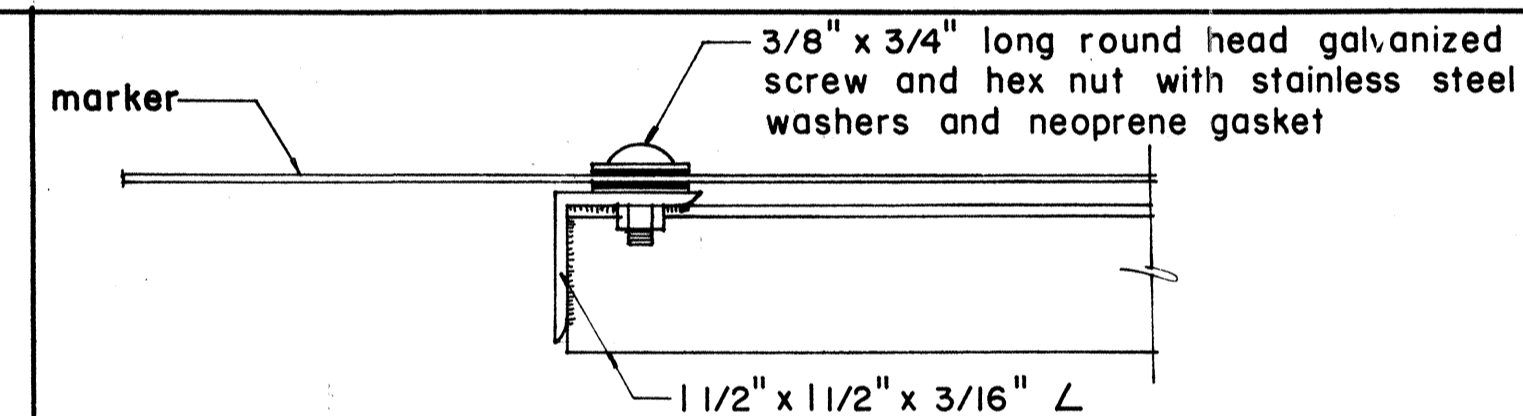


PLAN

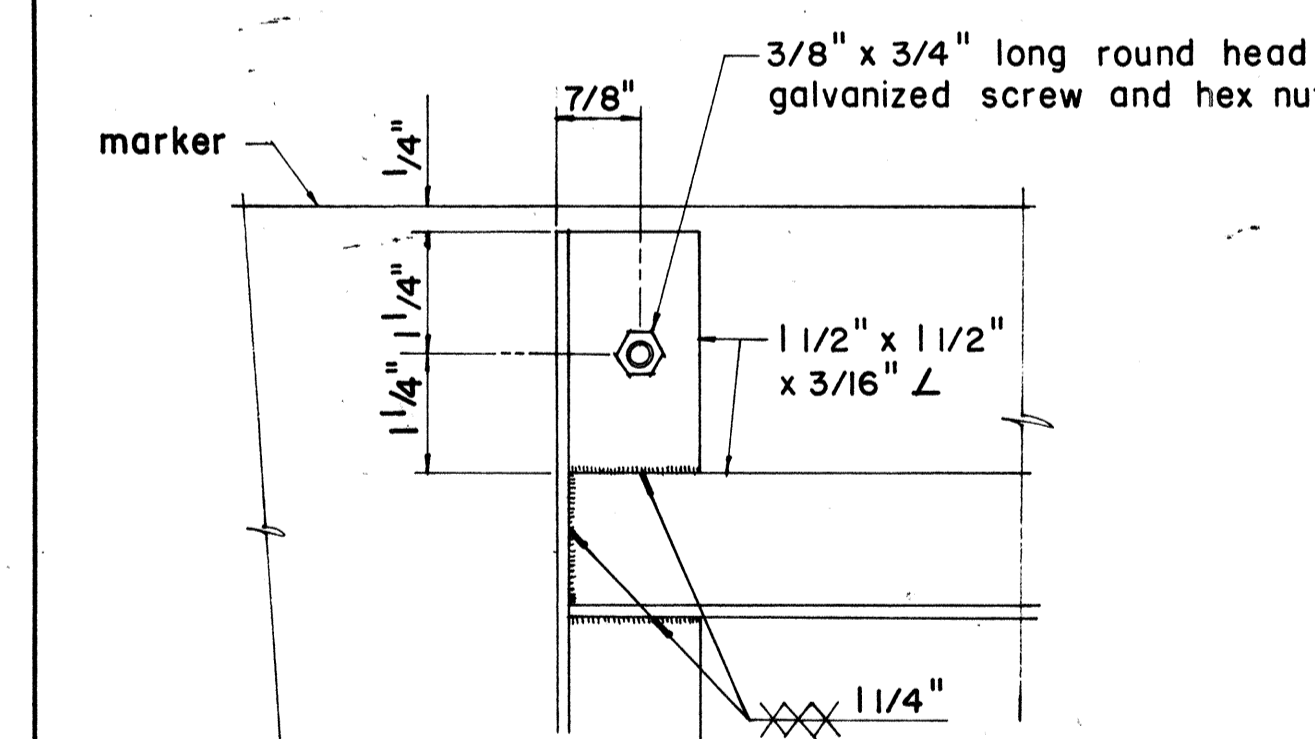


FRONT ELEVATION

**DETAIL "A"**

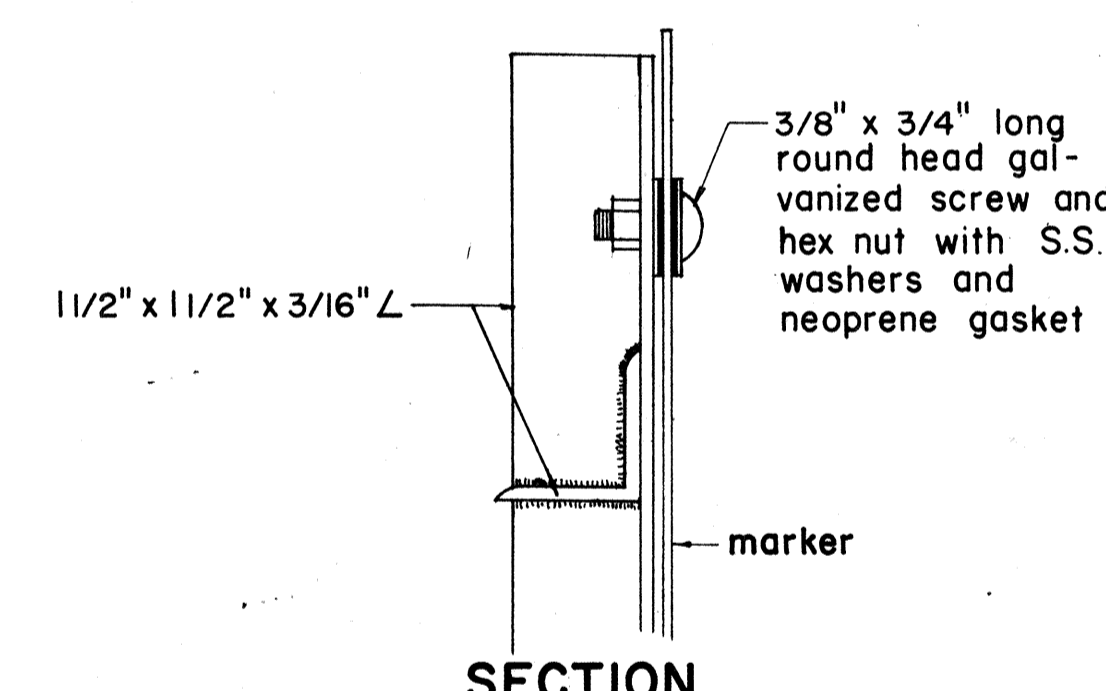


PLAN



ELEVATION

**DETAIL "B"**



SECTION

APPROVAL RECOMMENDED:  
*E. W. Tanaka*  
 TRAFFIC ENGINEER 12/29/69 DATE

APPROVED:  
*John J. Sakai*  
 ASSISTANT CHIEF, ENGINEERING 12-30-69 DATE

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

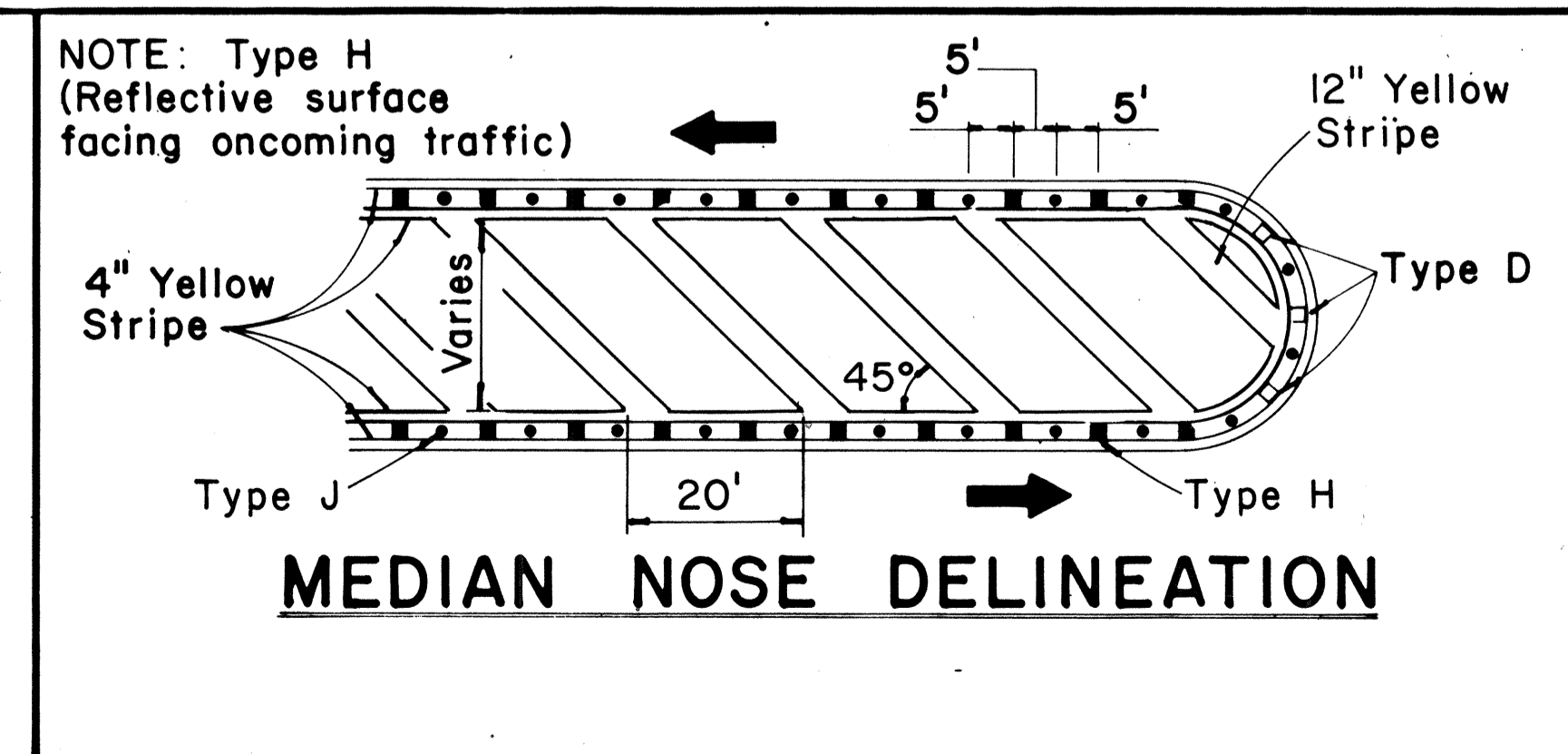
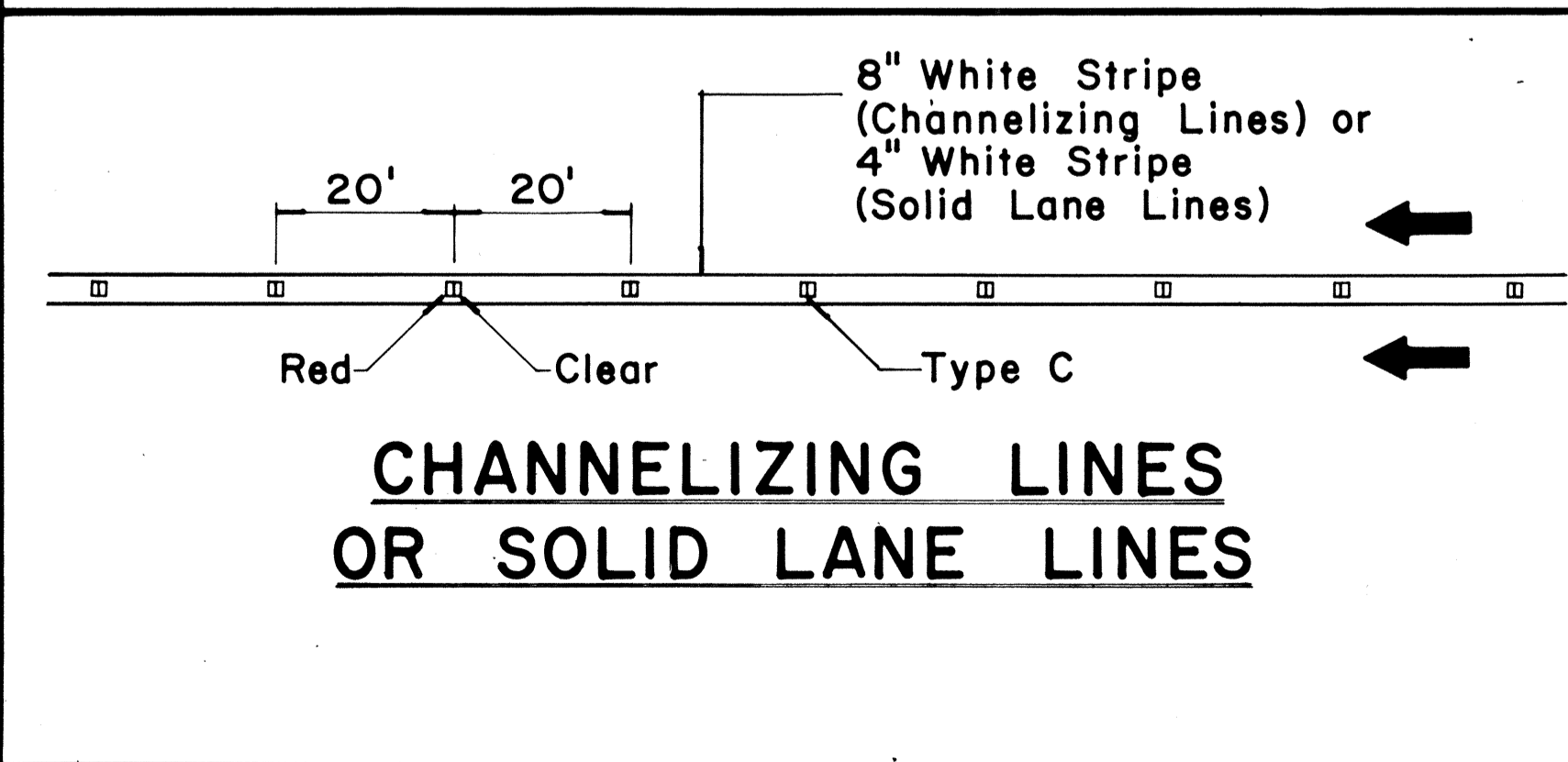
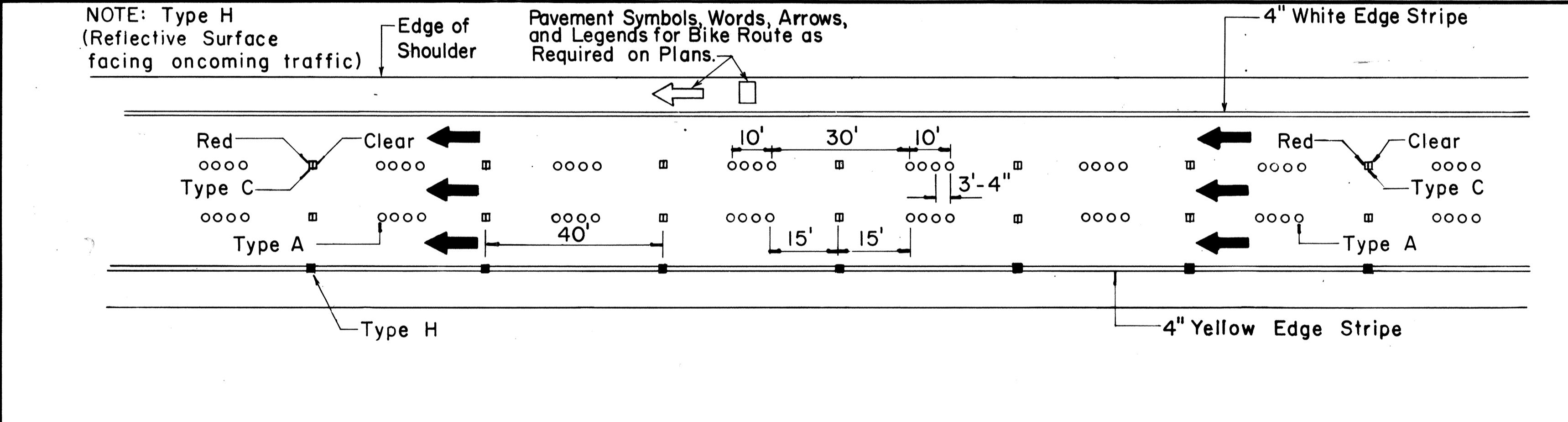
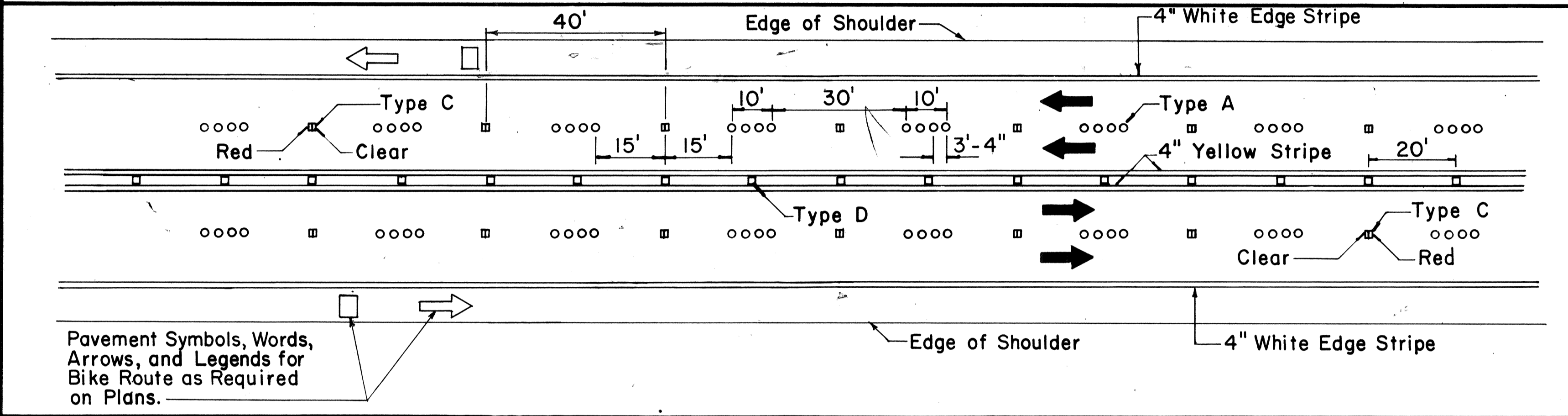
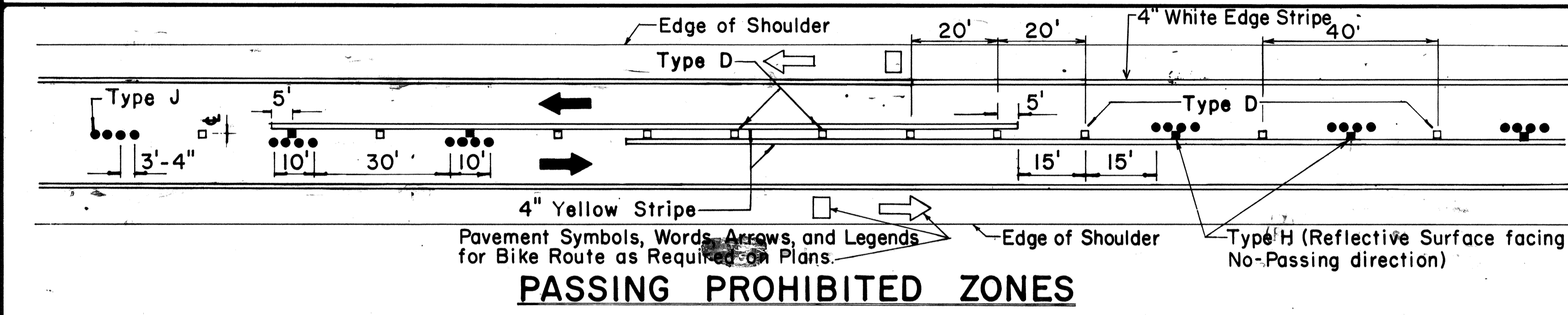
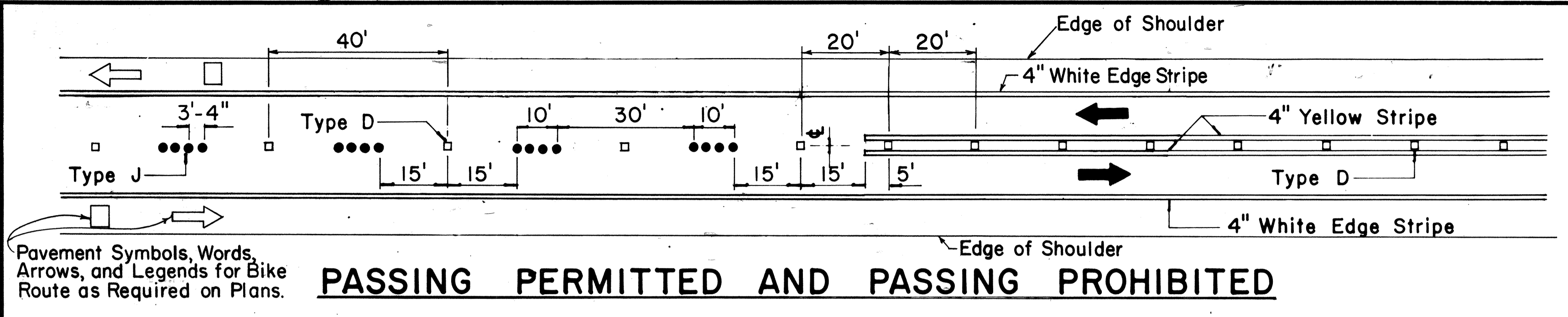
**STANDARD DETAILS**  
**ROUTE MARKER ASSEMBLIES**

Scale: As Shown

SHEET No. 2 OF 3 SHEETS DT 107

DATE  
 DRAWN BY  
 CHECKED BY  
 DESIGNED BY  
 QUANTITIES BY  
 CHECKED BY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(157)-24	1979	63	146

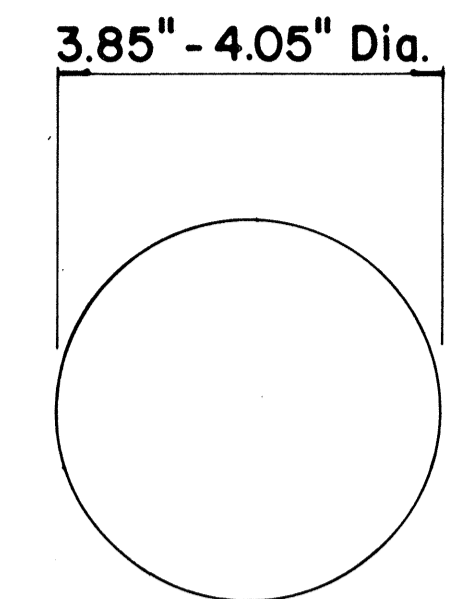


TWO - LANE

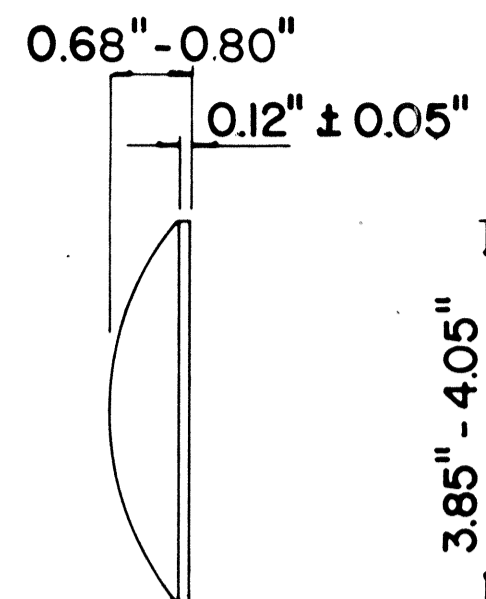
MULTI - LANE

DIVIDED HIGHWAY AND FREEWAY

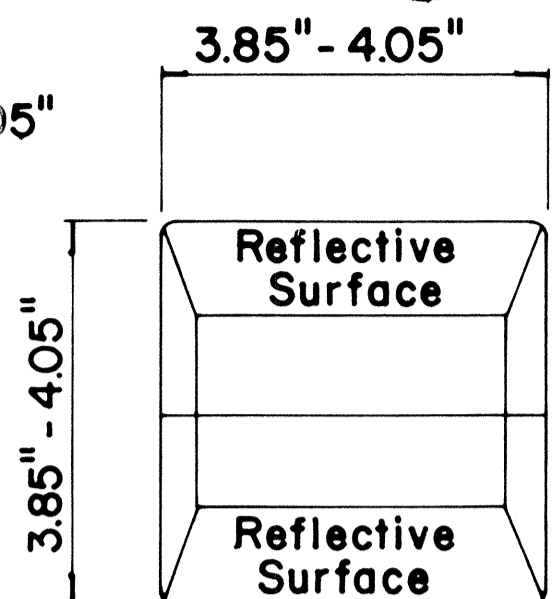
MISCELLANEOUS



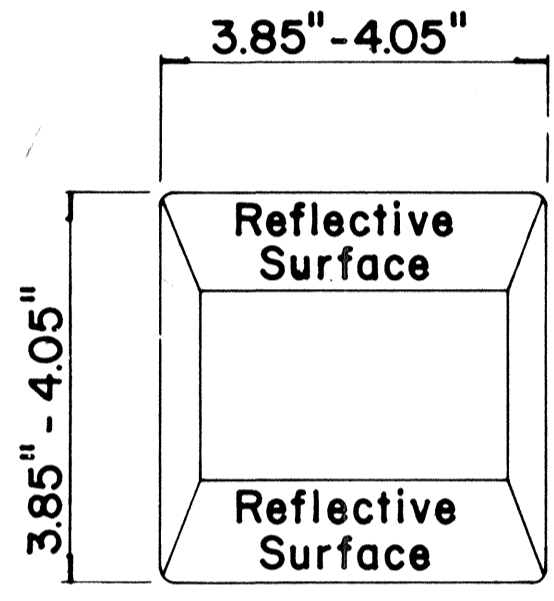
**TYPE A**  
NON-REFLECTIVE WHITE MARKER



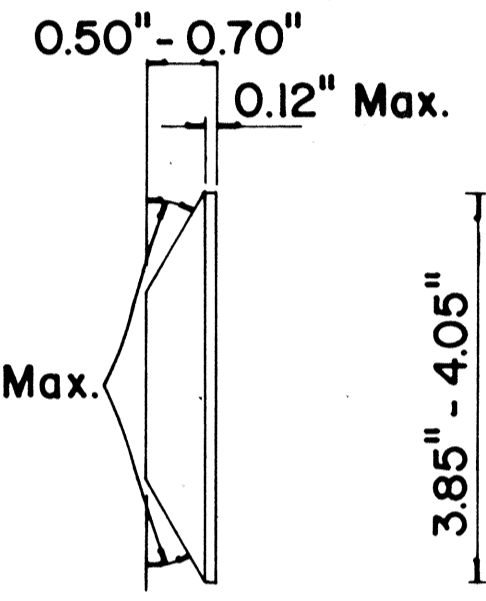
**TYPE J**  
NON-REFLECTIVE YELLOW MARKER



**TYPE C**  
RED-CLEAR REFLECTIVE MARKER



**TYPE D**  
TWO-WAY YELLOW REFLECTIVE MARKER



**TYPE H**  
ONE-WAY YELLOW REFLECTIVE MARKER

**GENERAL NOTES**

- Pavement marking and striping shall conform to the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
- 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:

*Erich Tanaka* 7/21/78  
TRAFFIC ENGINEER DATE

APPROVED:

*Robert J. Zekich* 1/24/78  
ASSISTANT CHIEF, ENGINEERING DATE

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

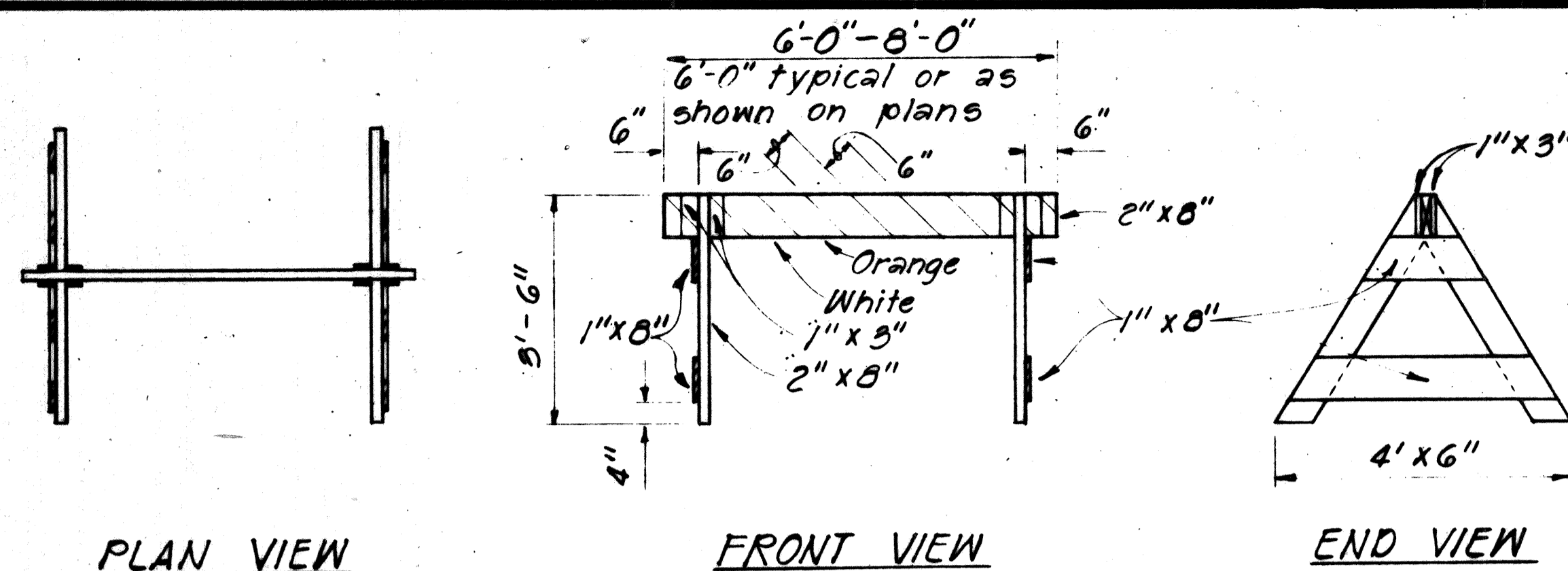
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION

**STANDARD DETAILS**  
**RAISED PAVEMENT MARKERS**  
**AND STRIPING**

Not to Scale July 1978  
SHEET No. 3 OF 3 SHEETS DT 300

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(157)24	1979	64	146



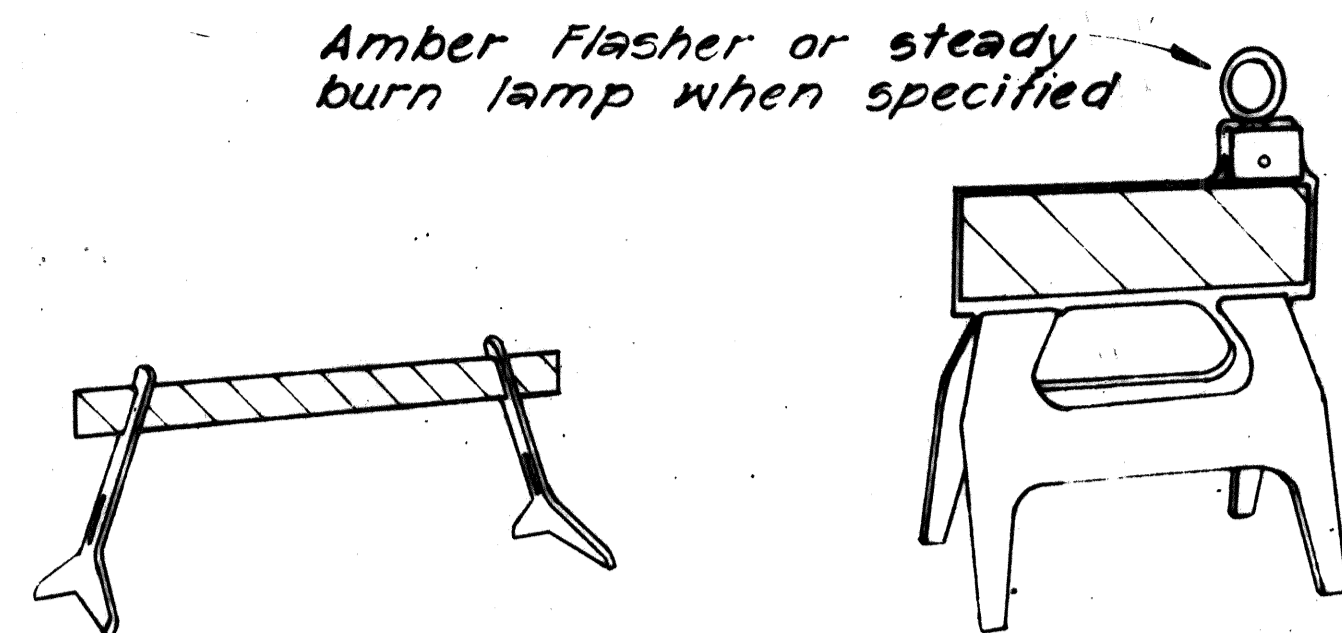
PLAN VIEW

FRONT VIEW

END VIEW

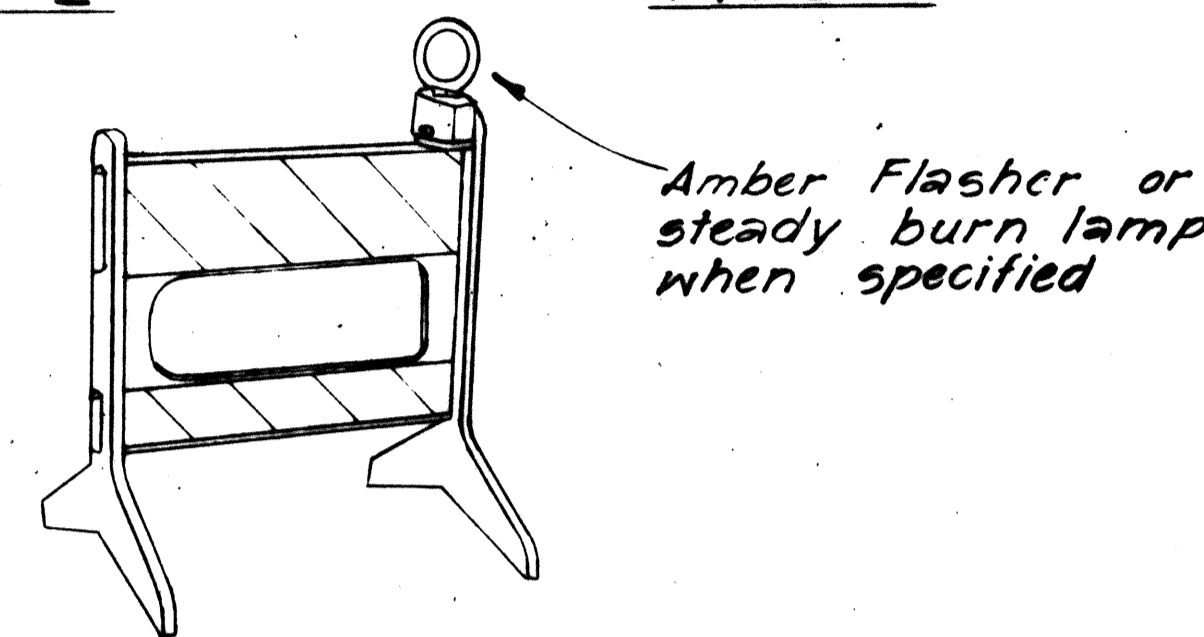
**TYPE I BARRICADE**

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



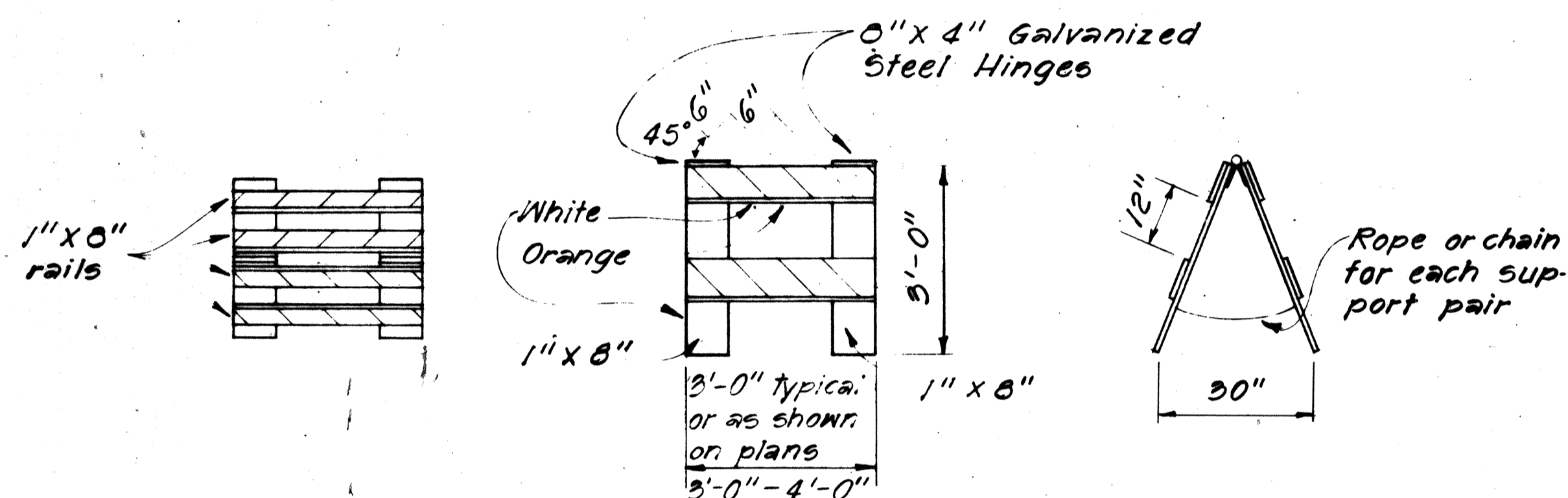
TYPE I

TYPE I



TYPE II

Amber Flasher or steady burn lamp when specified



PLAN VIEW

FRONT VIEW

END VIEW

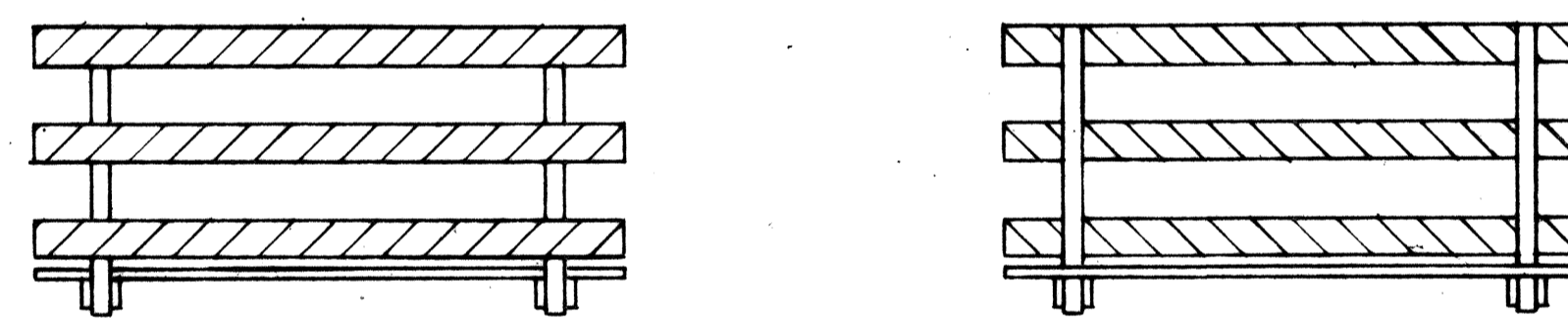
**TYPE II BARRICADE**

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

**PLASTIC MOLDED BARRICADE OPTIONS \***

Not to Scale

\* Shop Drawings must be submitted for approval.

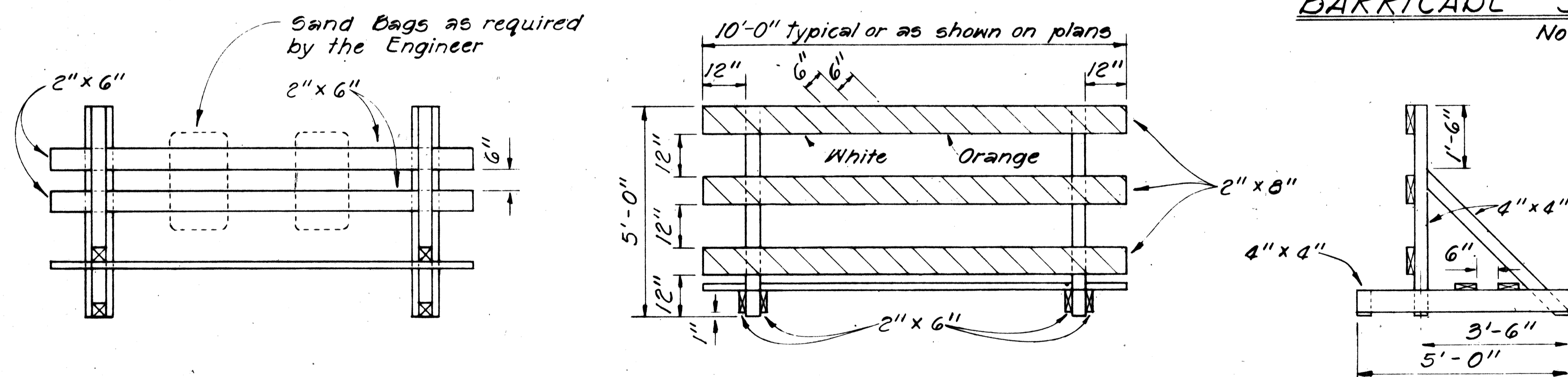


FRONT FACE

BACK FACE

**BARRICADE STRIPING DETAILS**

Not to Scale



PLAN VIEW

FRONT VIEW

END VIEW

**TYPE III BARRICADE**

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

- GENERAL NOTES**
1. The Contractor shall construct, install and maintain the barricades at the locations shown on the Plans.
  2. 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.
  3. The orange and white stripes shall slant downward toward the side on which traffic is to pass and shall be reflectorized with reflective sheeting.
  4. Both faces of the barricade rails shall be striped. See Striping Detail Arrangement.
  5. Contractor may submit alternate designs for approval.
  6. Barricade details shall conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, by the Federal Highway Administration and as amended.
  7. If wooden rails are used, 26 ga. galv. steel sheet shall be first tacked on to the rails and then overlaid with reflective sheeting.

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
PROJECT NO.	
SHEET NO.	
TOTAL SHEETS	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL DETAILS**

**BARRICADES**

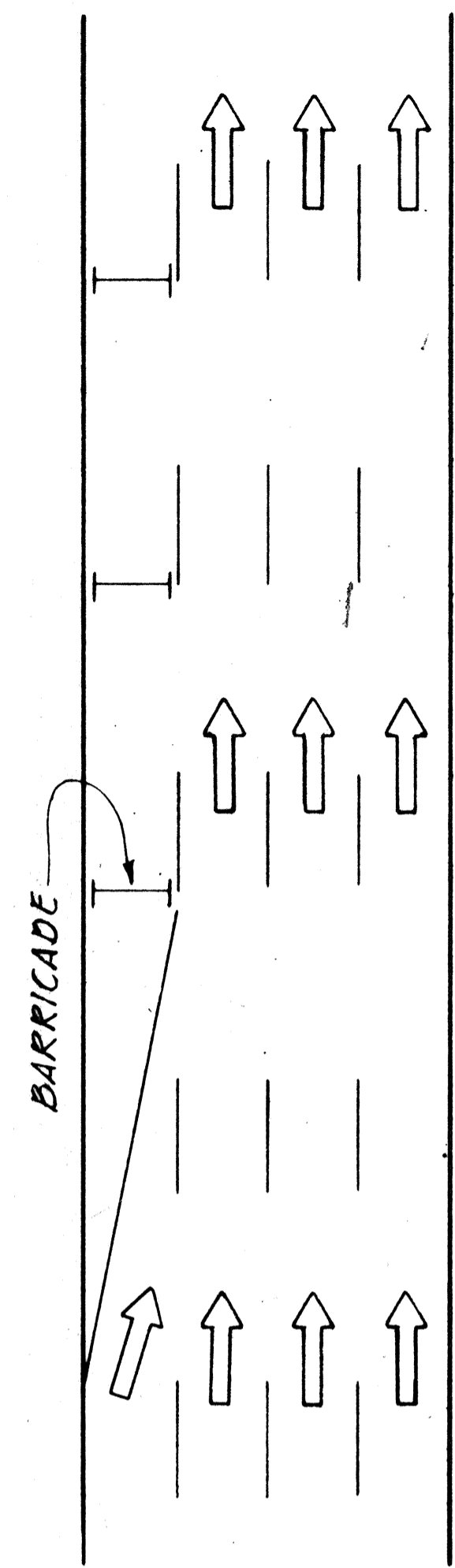
SCALE: As Shown

SHEET NO. 1 OF 2 SHEETS

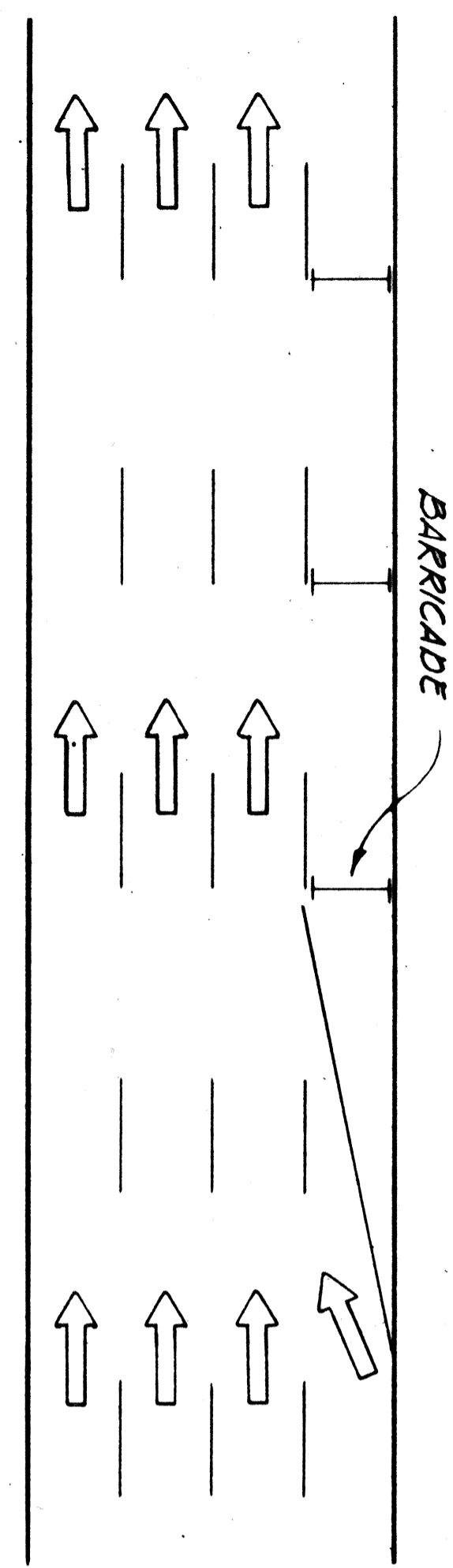
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-11-(157)24	1979	65	146

GENERAL NOTES

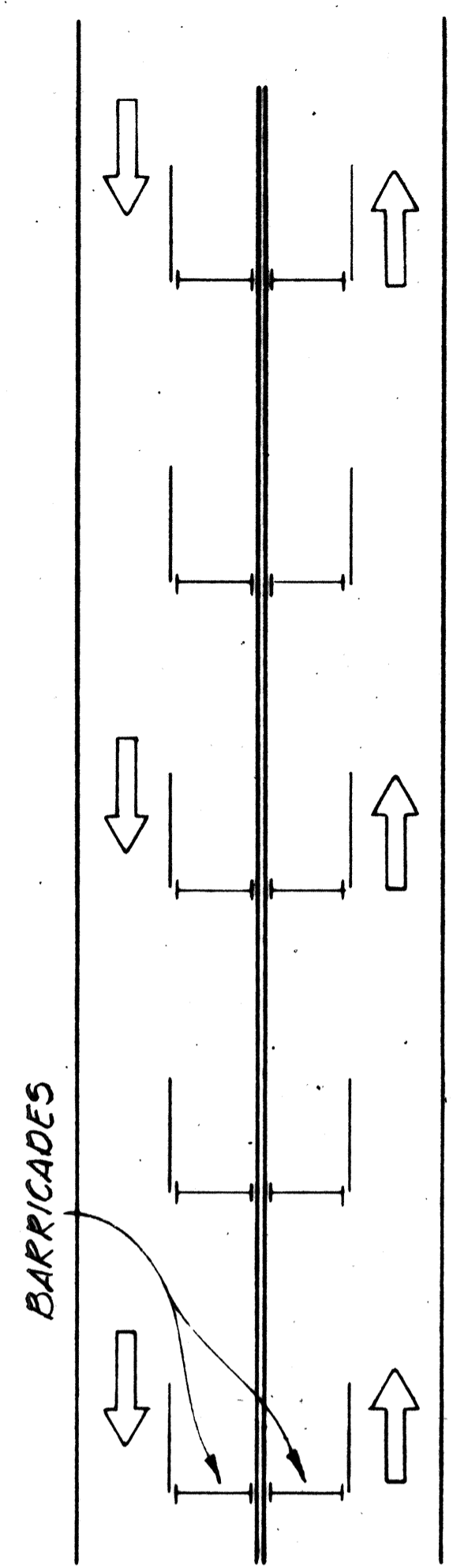
- Barricade Type, Placement, and Arrangement shall be as shown on the Construction Plans.



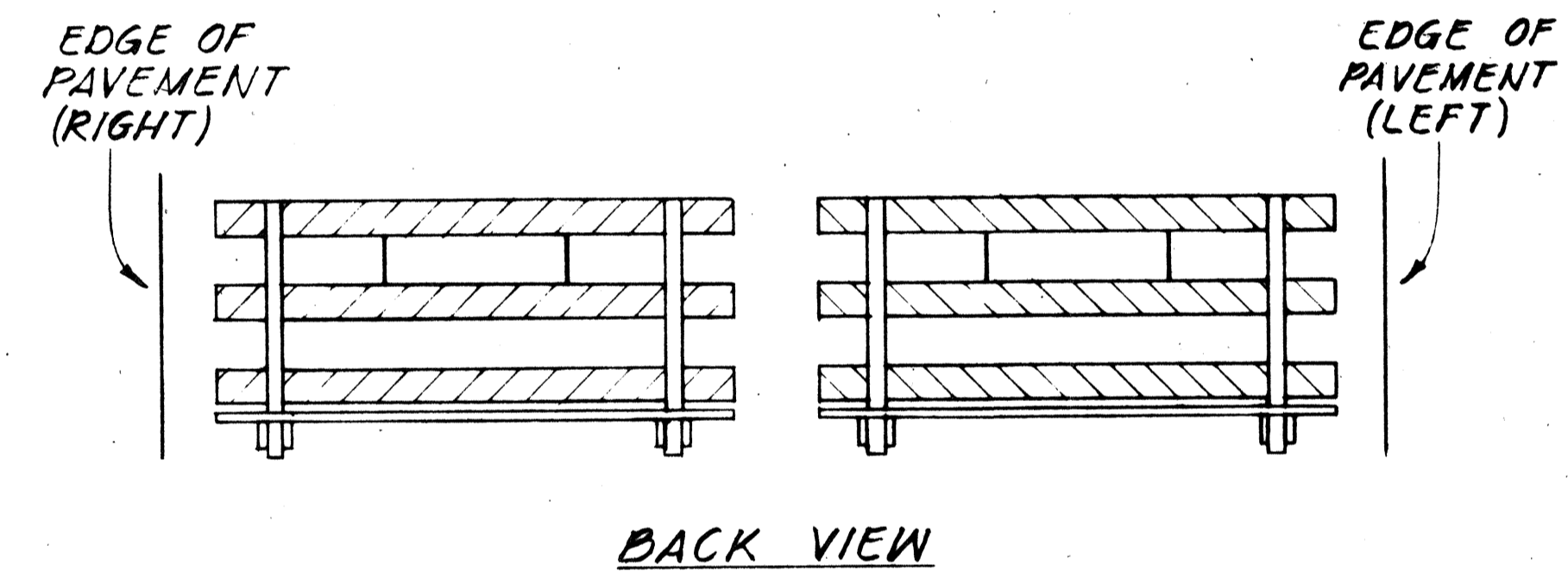
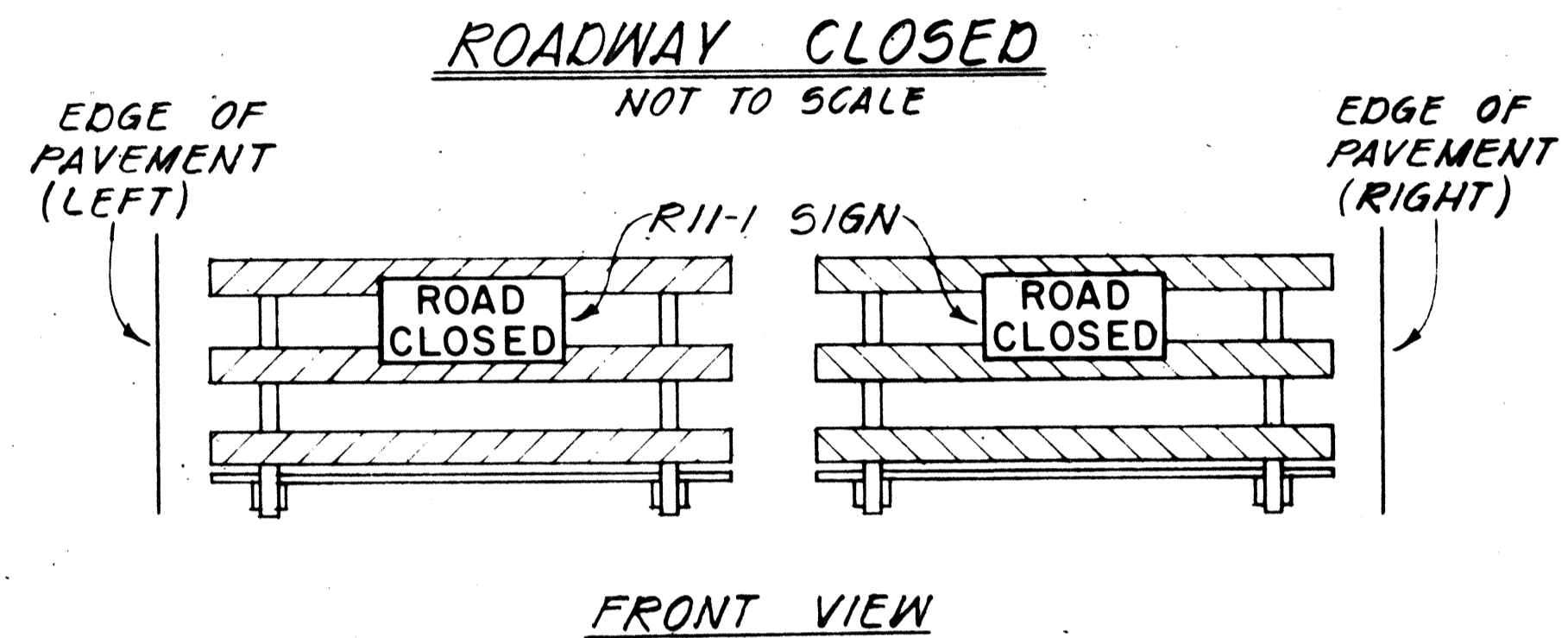
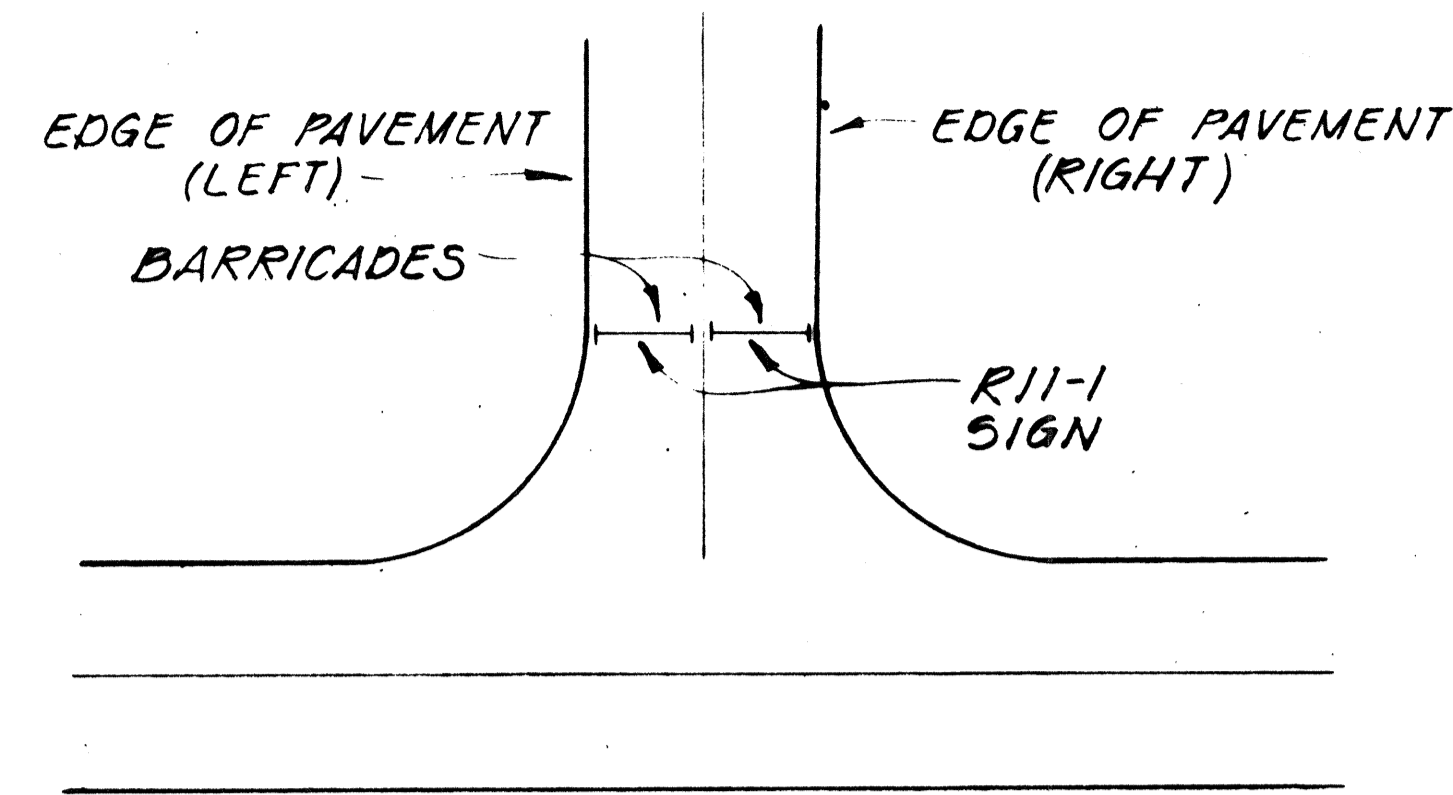
ROADWAY DELINEATION TO THE RIGHT  
NOT TO SCALE



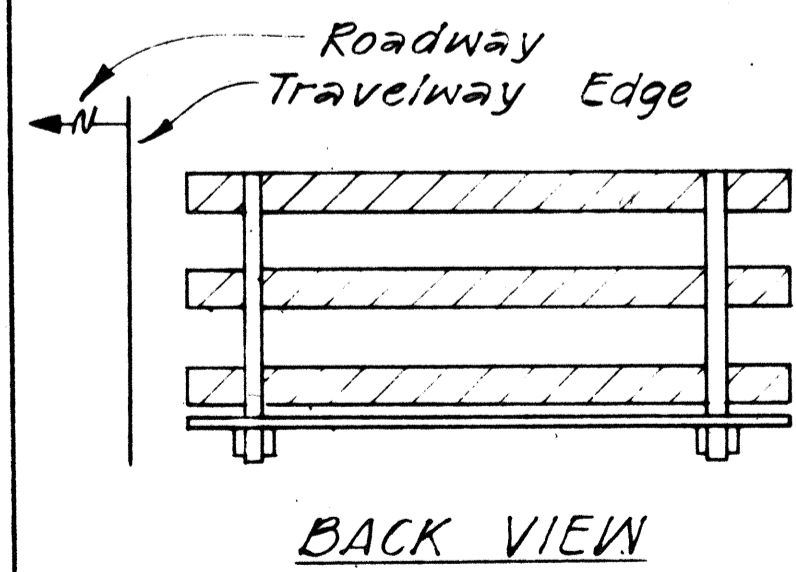
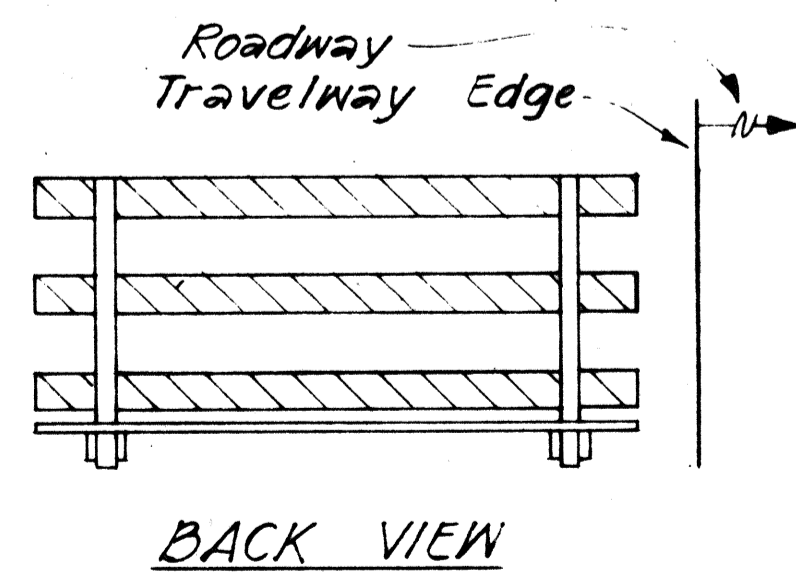
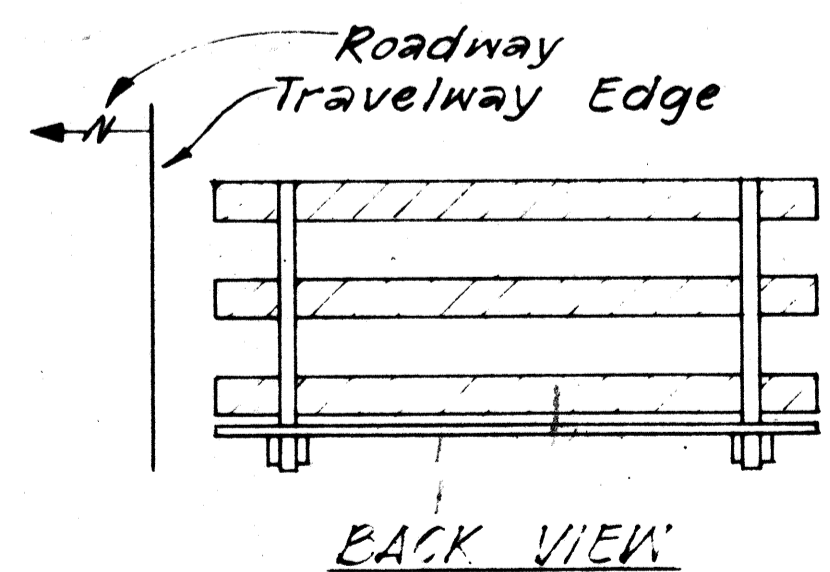
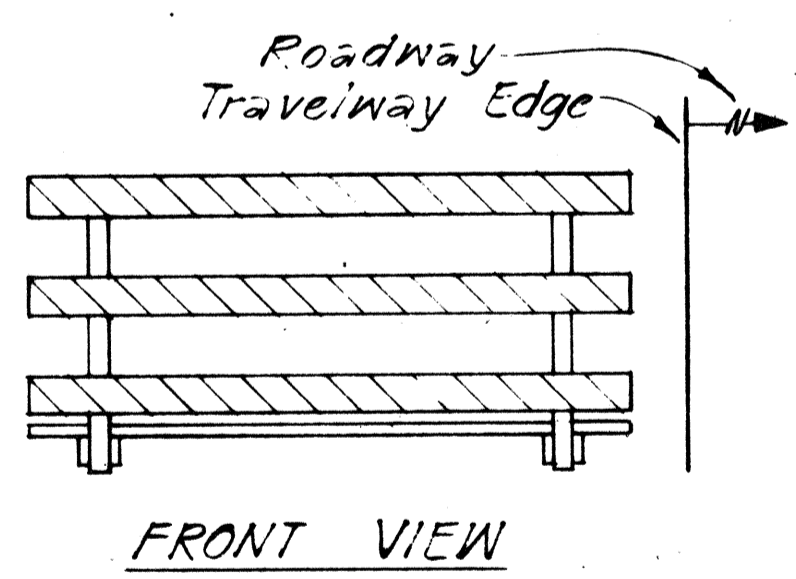
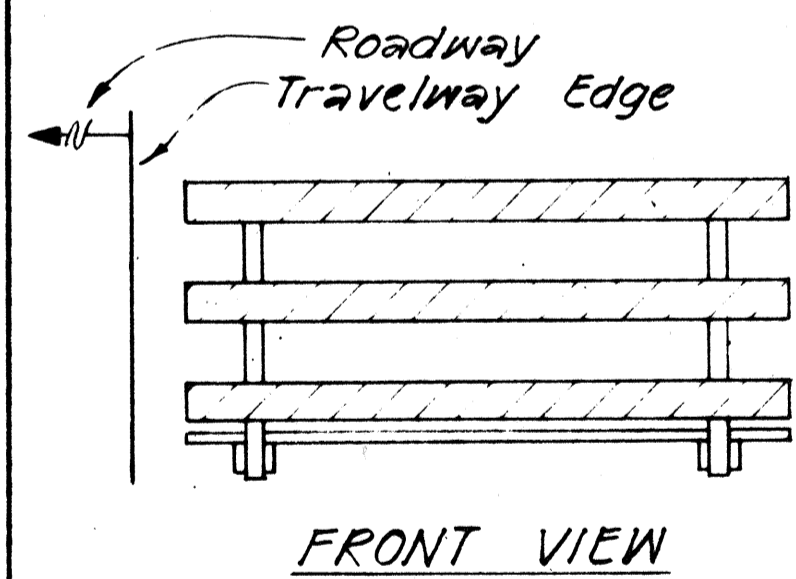
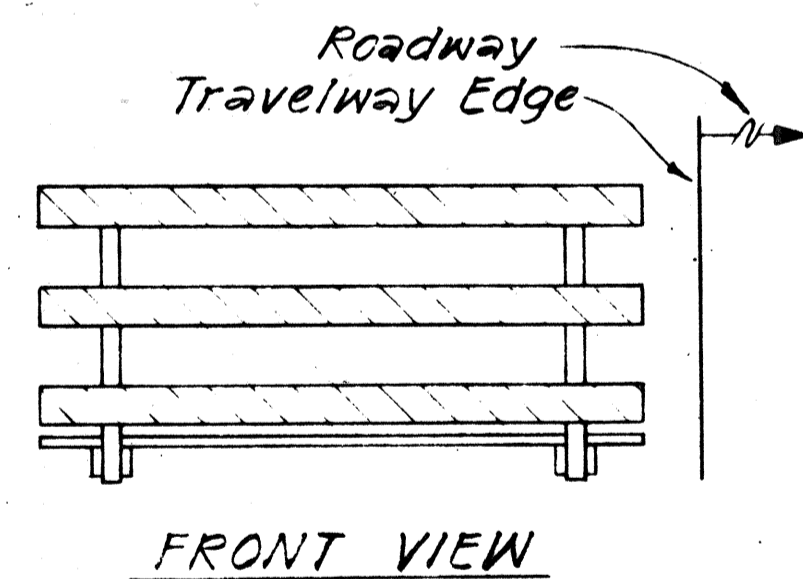
ROADWAY DELINEATION TO THE LEFT  
NOT TO SCALE



ROADWAY DELINEATION FOR 2-WAY TRAFFIC  
NOT TO SCALE



BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE



BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE

BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE

BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE

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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

TYPICAL DETAILS

BARRICADE STRIPING DETAILS