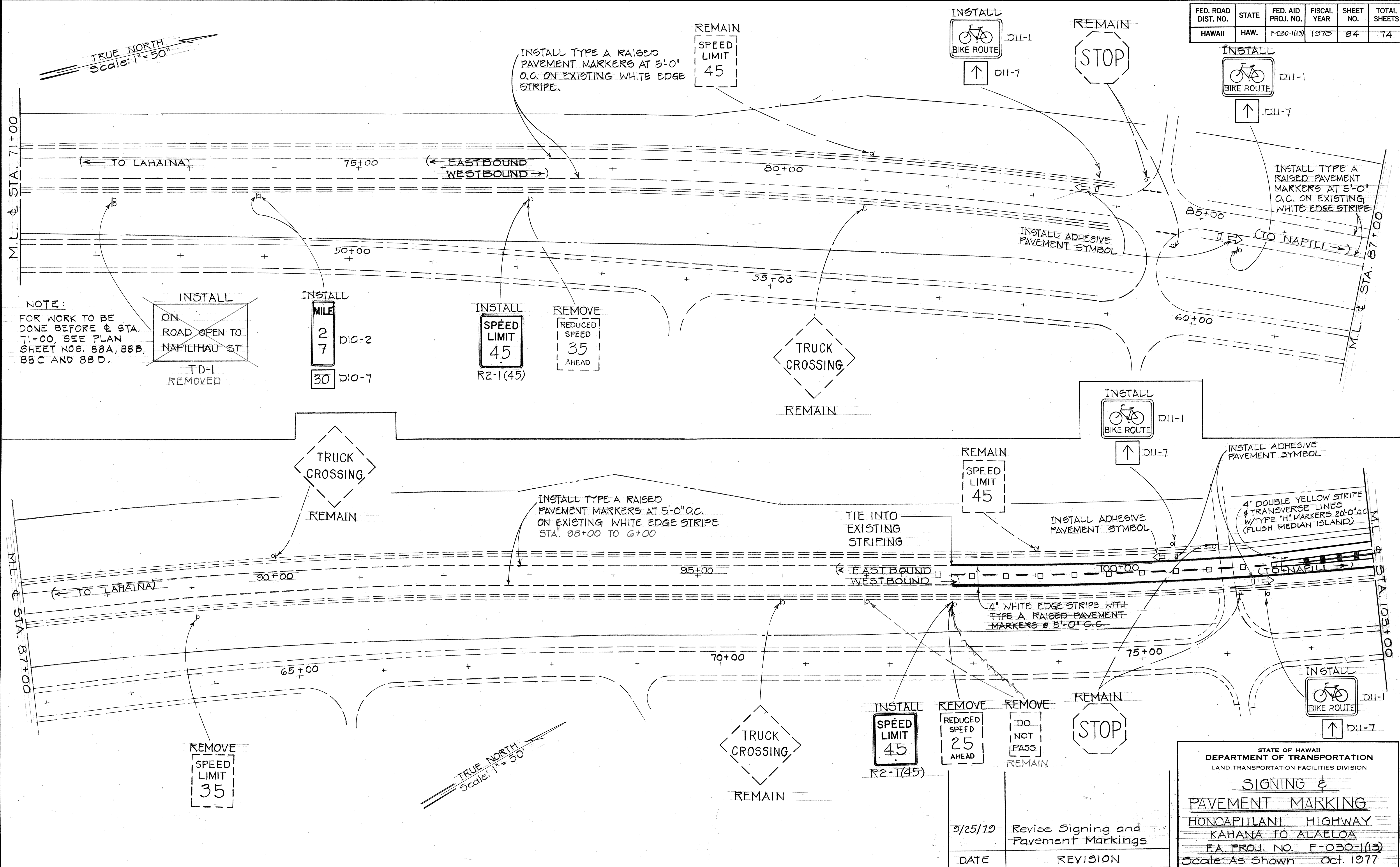


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	84	174

TRUE NORTH
Scale: 1" = 50'



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

9/25/79	Revise Signing and Pavement Markings
DATE	REVISION

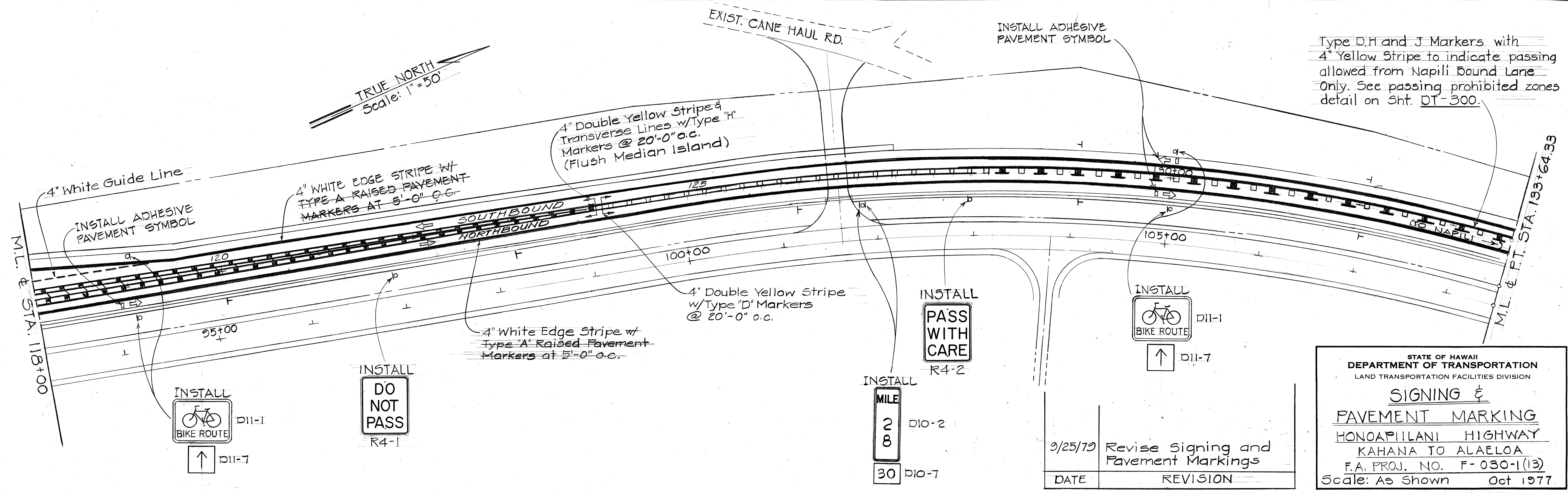
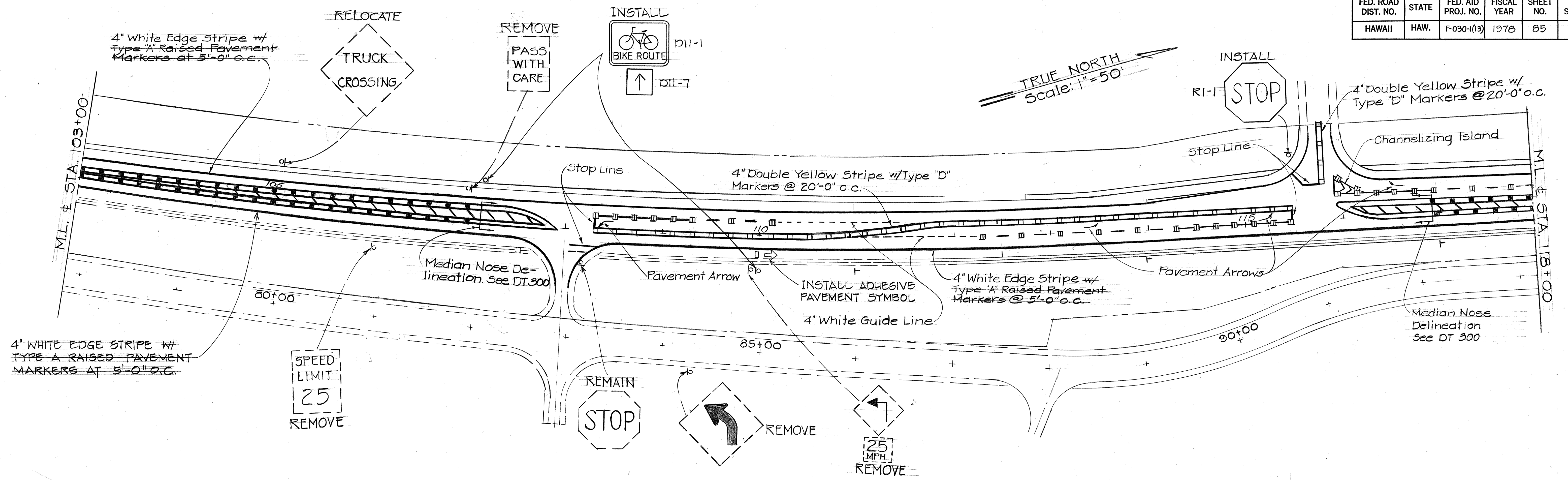
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

SIGNING & PAVEMENT MARKING

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. NO. F-030-1(13)
Scale: As Shown Oct. 1977

SHEET NO. 1 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	85	174



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

DATE	REVISION
9/25/79	Revise Signing and Pavement Markings

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

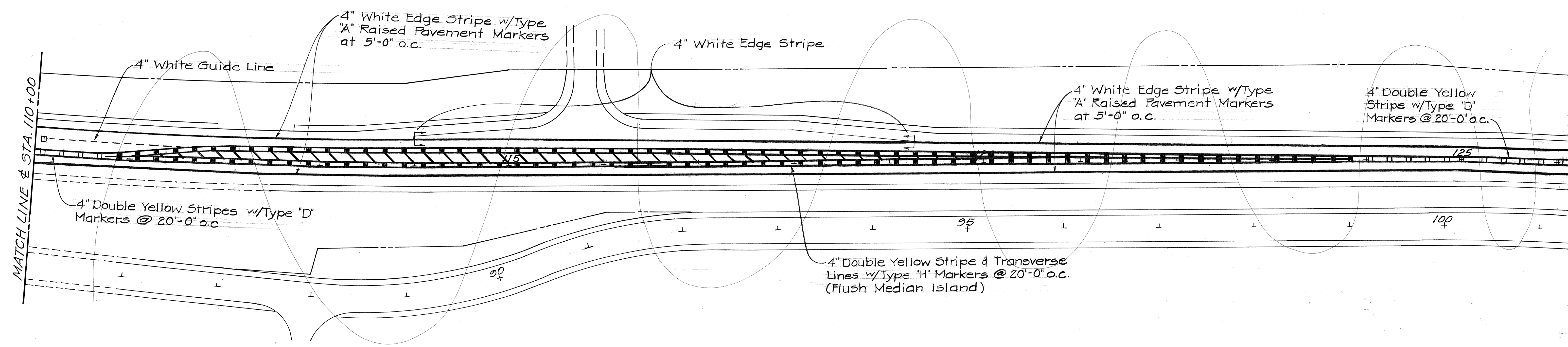
SIGNING & PAVEMENT MARKING

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. NO. F-030-1(13)
Scale: As Shown Oct 1977
SHEET No. 2 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	85S-1	174

True North
Scale: 1" = 50'

DELETE
NOT USED



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

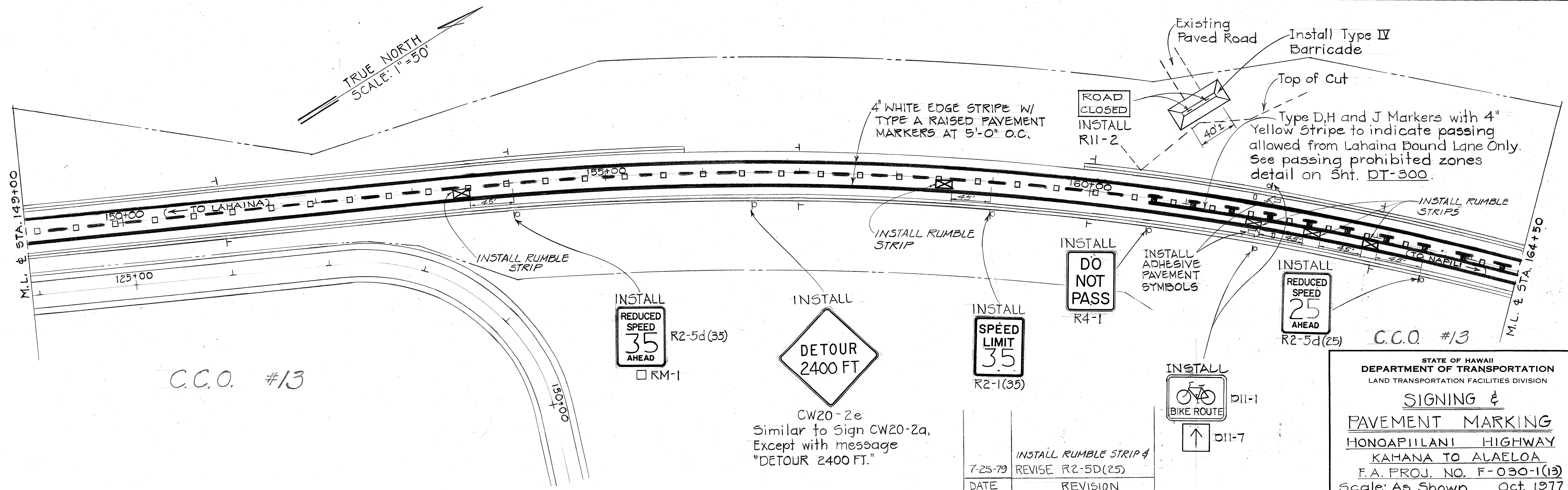
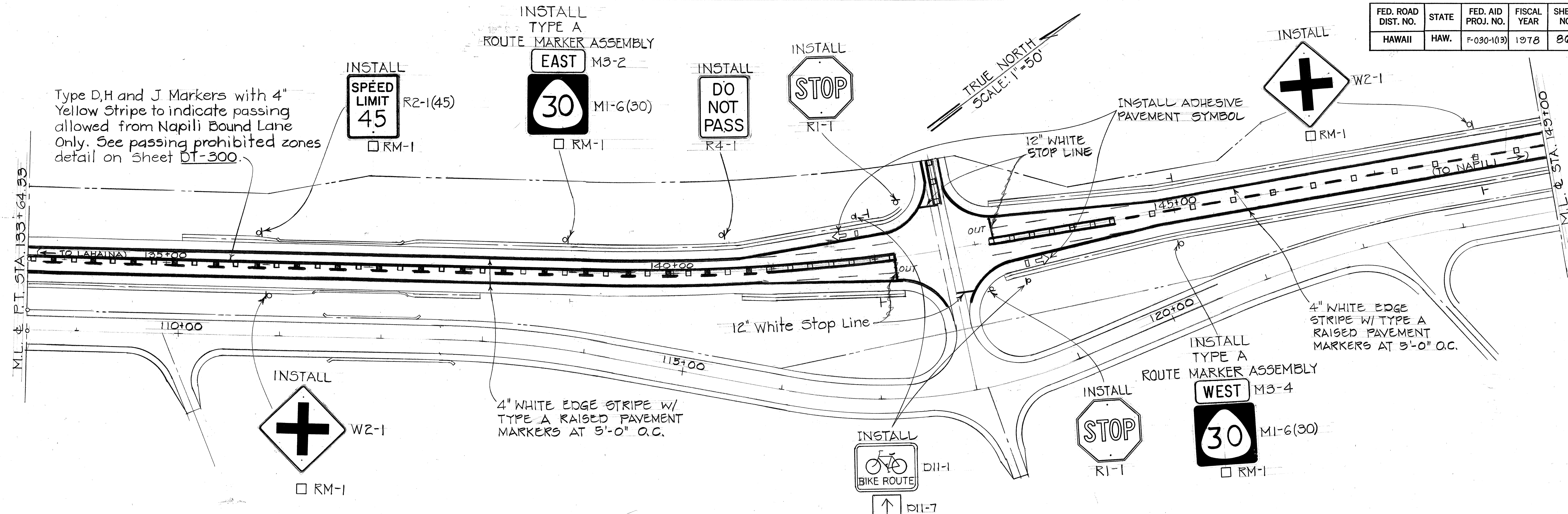
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & PAVEMENT MARKING

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. NO. F-030-1(13)
Scale: As Shown Oct. 1977

SHEET NO. OF SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(3)	1978	86	174



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

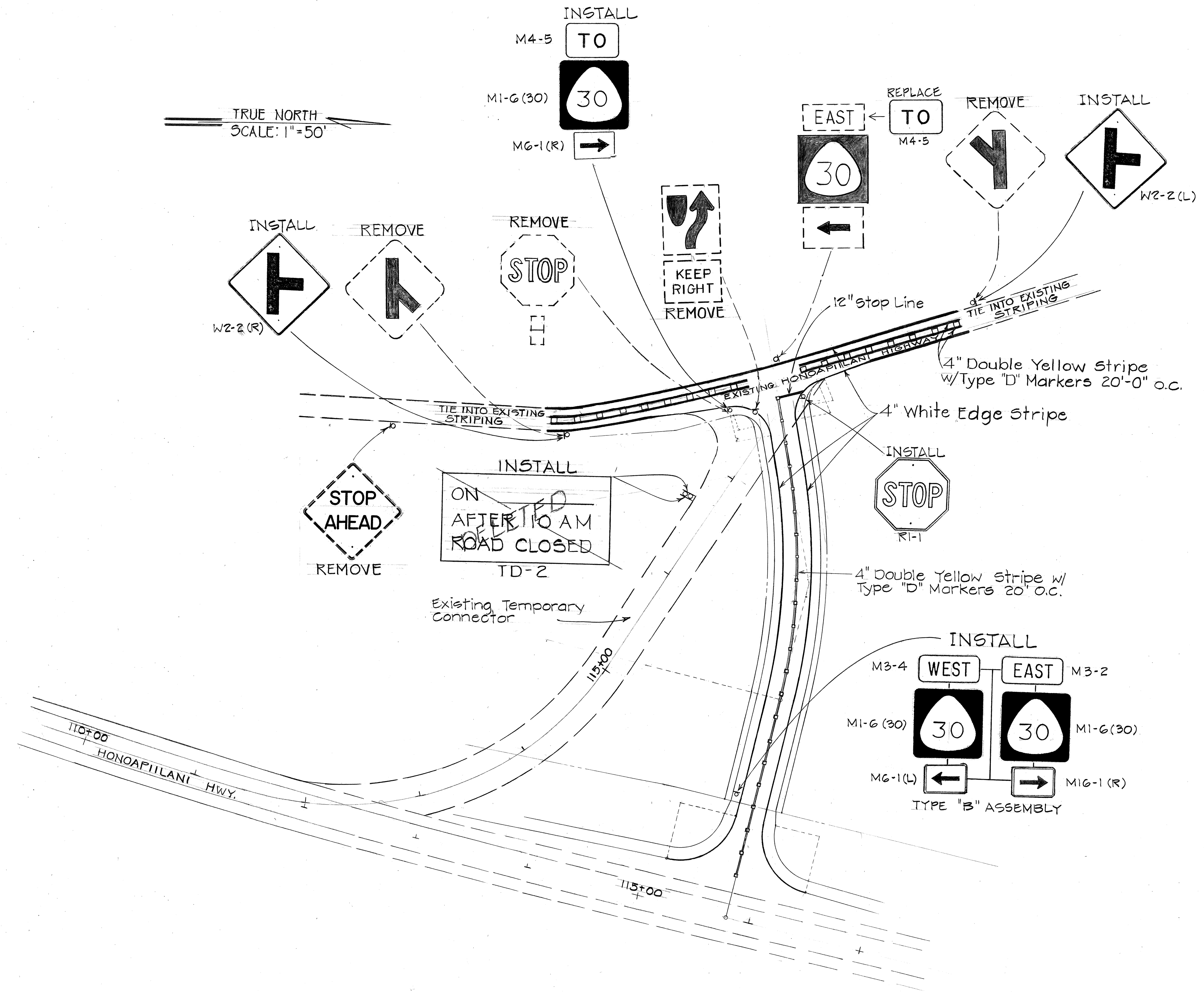
C.C.O. #13

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
SIGNING & PAVEMENT MARKING
 HONOAPIILANI HIGHWAY
 KAHANA TO ALAELOA
 F.A. PROJ. NO. F-030-1(13)
 Scale: As Shown Oct. 1977
 SHEET NO. 3 OF 21 SHEETS

DATE	REVISION
7-25-79	REVISE R2-5D(25)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	88	174

NOTE:
 1. All Signs and Reflector Markers on the existing Temporary Connector Roadway shall be removed and stockpiled as directed.



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

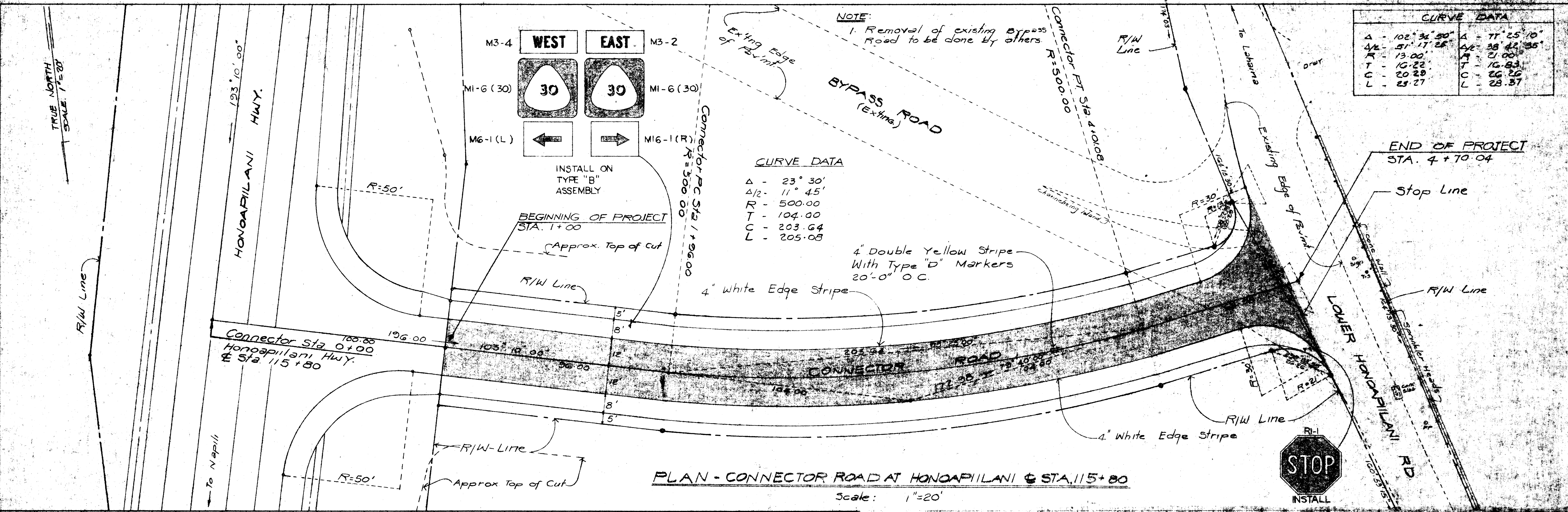
4-9-80	Install Signs For New Connector
Date	Revision

C.C.O. #15

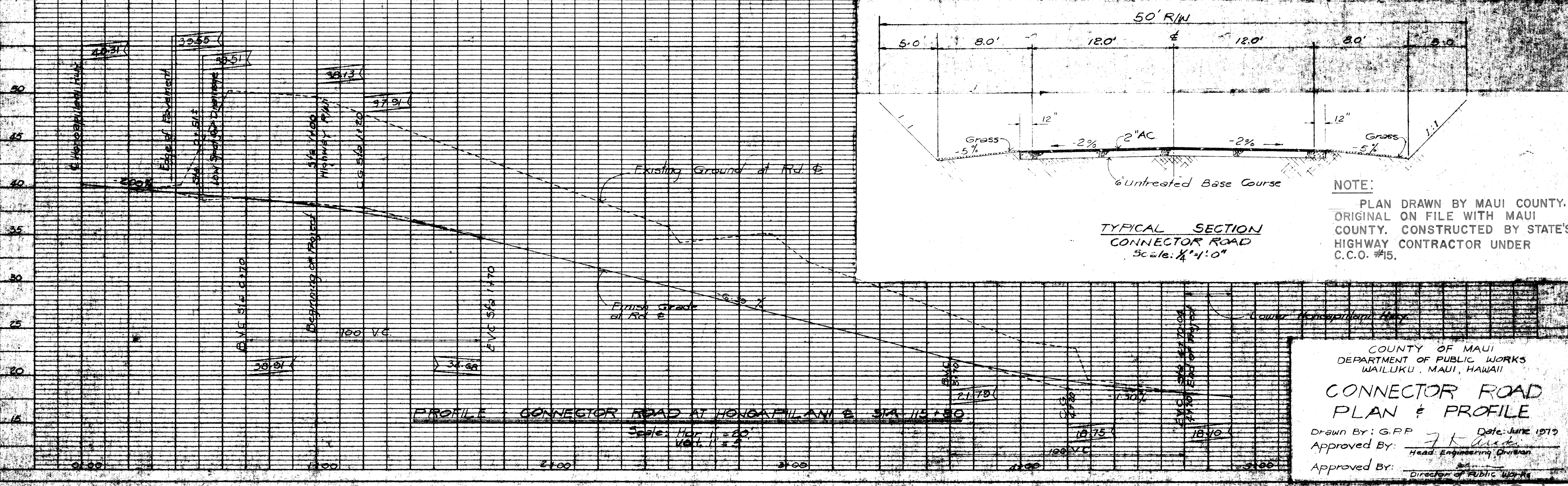
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

SIGNING & PAVEMENT MARKING
 HONOAPIILANI HIGHWAY
 KAHANA TO ALAELOA
 FA PROJ. NO. F-030-1(13)
 Scale: As Shown Oct. 1977
 SHEET NO. 5 OF 21 SHEETS

NO.	
DATE	
REVISION	
BY	
CHECKED	
DATE	
NO.	
DATE	
REVISION	
BY	
CHECKED	
DATE	



NO.	
DATE	
REVISION	
BY	
CHECKED	
DATE	
NO.	
DATE	
REVISION	
BY	
CHECKED	
DATE	



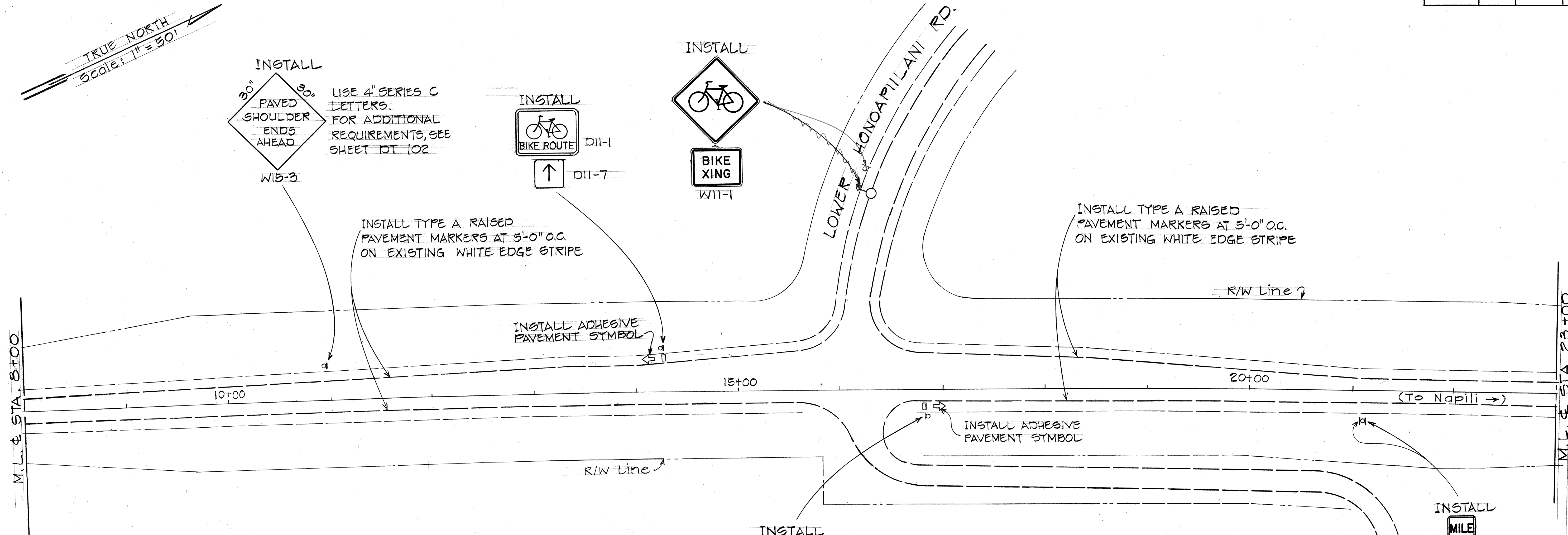
COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
WAILUKU, MAUI, HAWAII

**CONNECTOR ROAD
PLAN & PROFILE**

Drawn By: G.R.P. Date: June 1979
Approved By: *J.K. Anderson*
Head, Engineering Division
Approved By: *[Signature]*
Director of Public Works

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	88A	174

TRUE NORTH
Scale: 1" = 50'



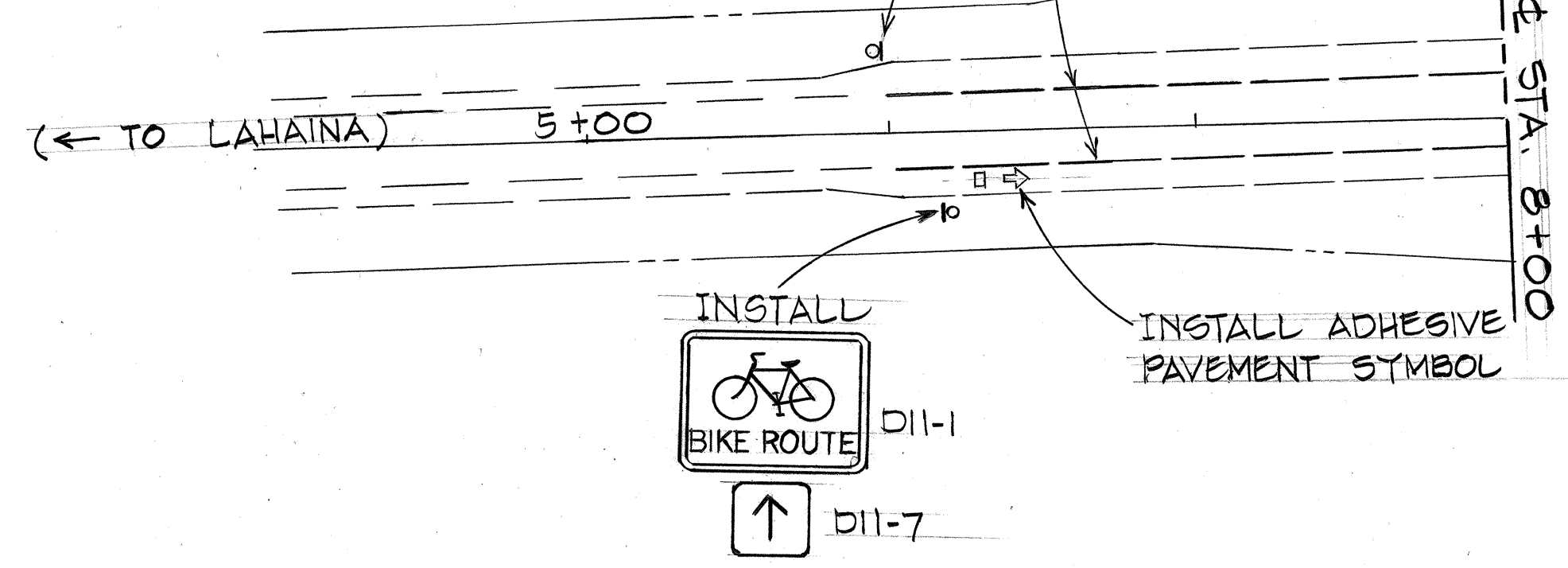
INSTALL
30" PAVED SHOULDER ENDS
W15-4
USE 4" SERIES C LETTERS.
FOR ADDITIONAL REQUIREMENTS, SEE SHEET DT 102

INSTALL TYPE A RAISED PAVEMENT MARKERS AT 5'-0" O.C. ON EXISTING WHITE EDGE STRIPE

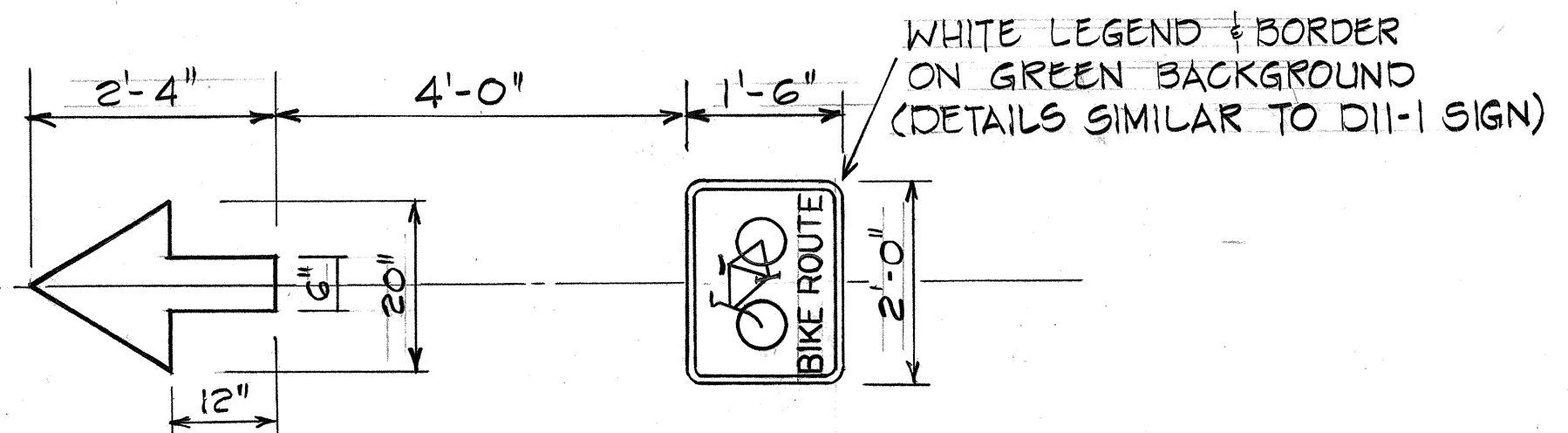
INSTALL
BIKE ROUTE D11-1
↑ D11-7

INSTALL
MILE 2 6 30 D10-2 D10-7

TRUE NORTH
Scale: 1" = 50'



☐ DIRECTION OF TRAVEL (BIKE ROUTE)



(WHITE REFLECTORIZED) (NON-REFLECTORIZED)
ARROW SYMBOL BIKE ROUTE SYMBOL

ADHESIVE PAVEMENT SYMBOLS

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

SIGNING & PAVEMENT MARKING

HONOAPIILANI HIGHWAY
KAHANA TO ALAEOA
F.A. PROJ. No. F-030-1(13)

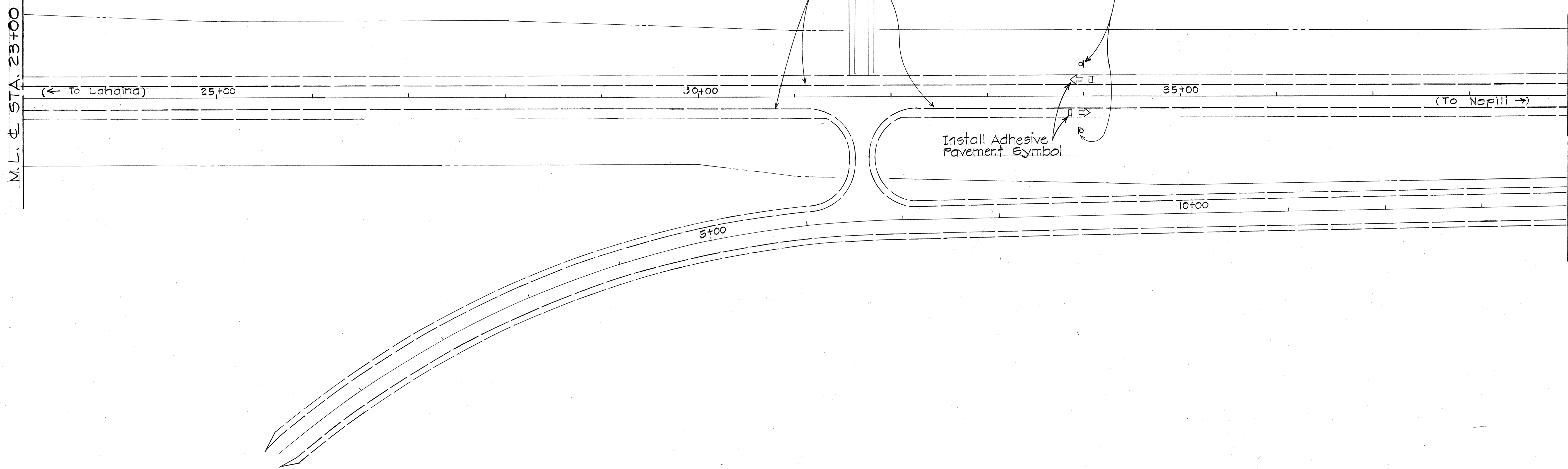
Scale: As Shown Date: Oct. 1977
SHEET No. 5A OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	88B	174

TRUE NORTH
Scale: 1" = 50'

M.L. & STA. 23+00

M.L. & STA. 37+00



INSTALL TYPE A RAISED PAVEMENT MARKERS AT 5'-0" O.C. ON EXISTING WHITE EDGE STRIPE

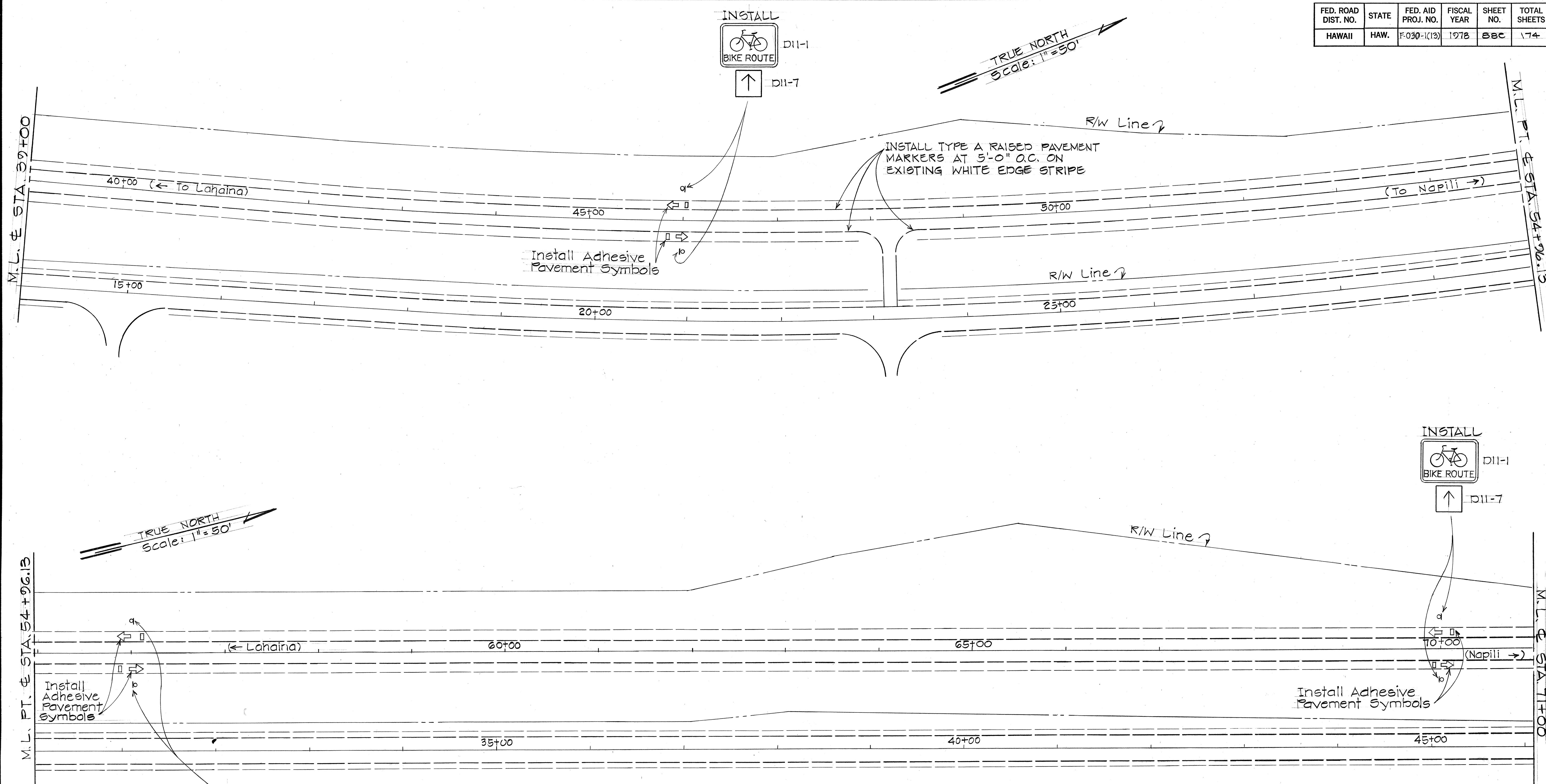
INSTALL
BIKE ROUTE
D11-1
↑ D11-7

Install Adhesive Pavement Symbol

ORIGINAL PLAN No.	DATE
SURVEY PLOTTED BY	"
DRAWN BY	"
DESIGNED BY	"
NOTED BY	"
QUANTITIES BY	"
CHECKED BY	"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
SIGNING & PAVEMENT MARKING
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. No. F-030-1(13)
Scale: As Shown Date: Oct. 1977
SHEET No. 52 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	88C	174

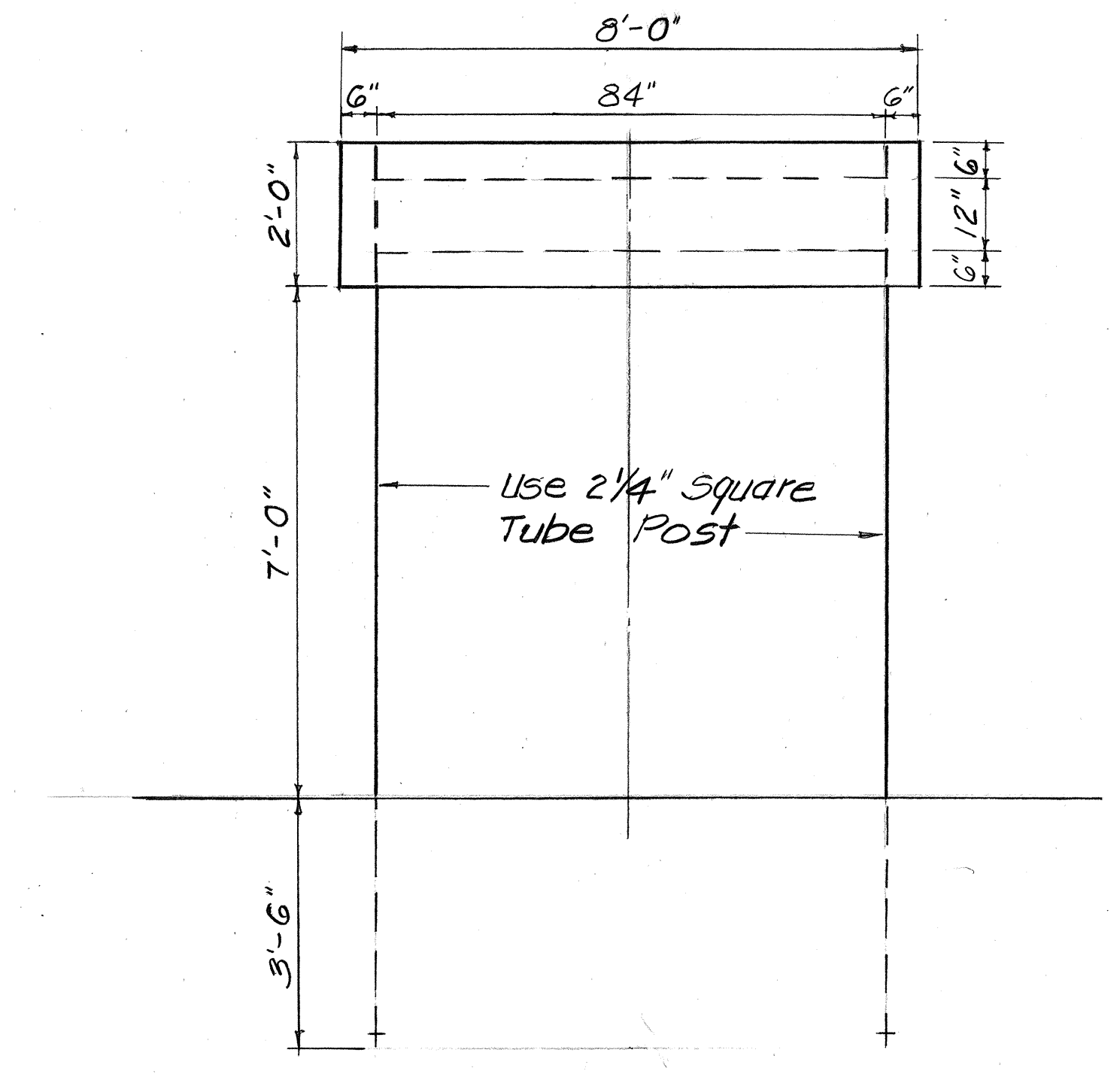


ORIGINAL PLAN No.	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

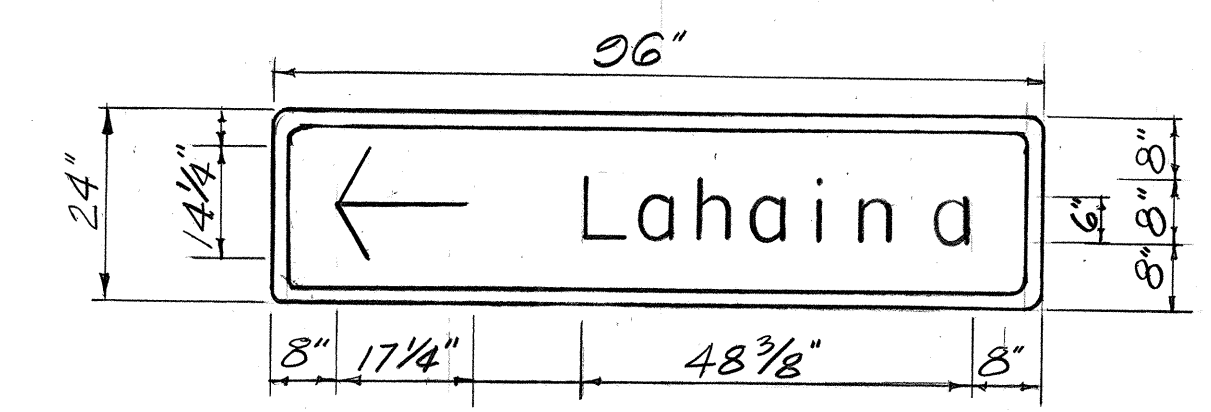
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
SIGNING & PAVEMENT MARKING
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. No. F-030-1(13)
Scale: As Shown Date: Oct. 1977
SHEET No. 5C OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	88D	174

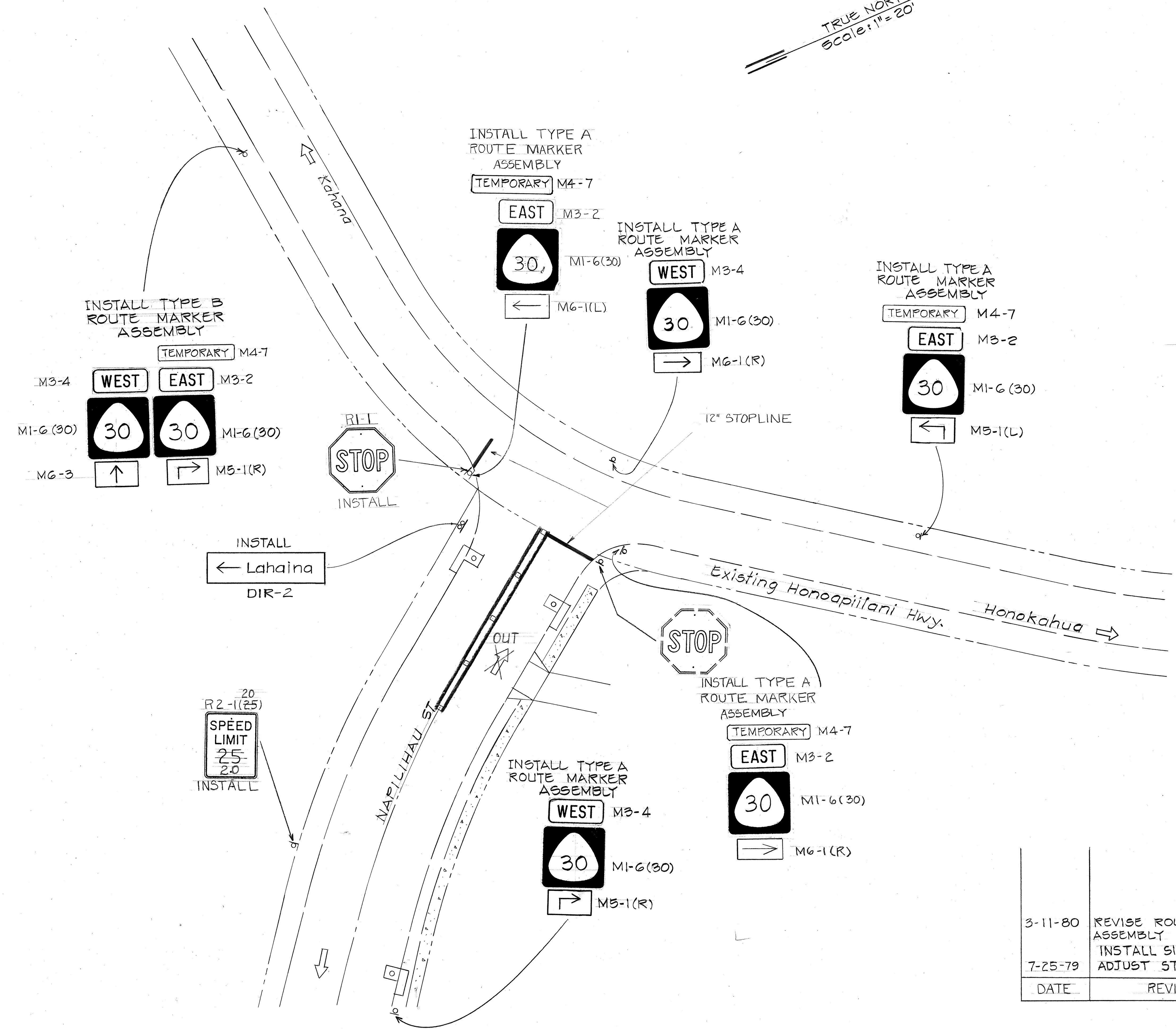
TRUE NORTH
Scale: 1" = 20'



TYPICAL DIRECTIONAL SIGN FRAME LAYOUT
Scale: 1/2" = 1'-0"



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



3-11-80	REVISE ROUTE MARKER ASSEMBLY
7-25-79	INSTALL SIGNS AND ADJUST STRIPING
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

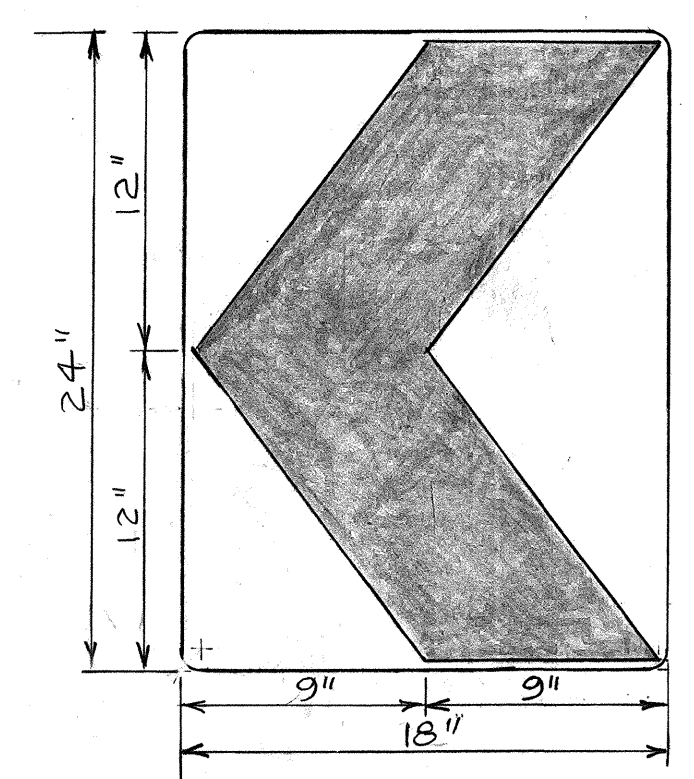
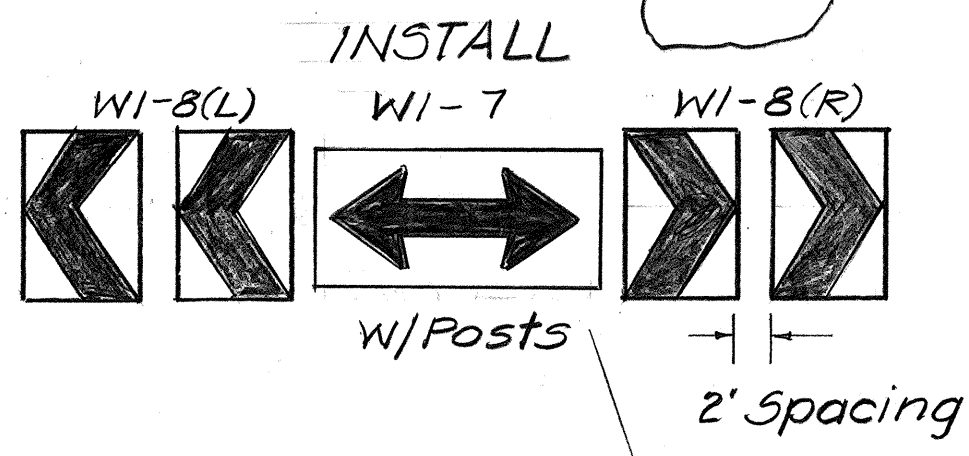
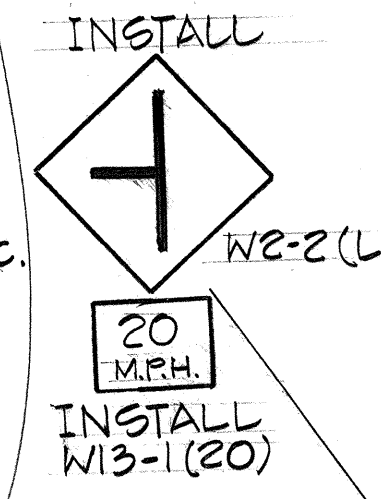
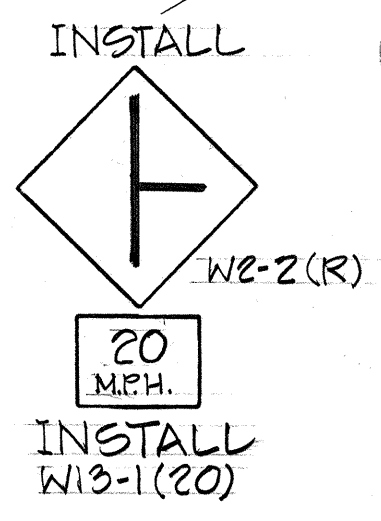
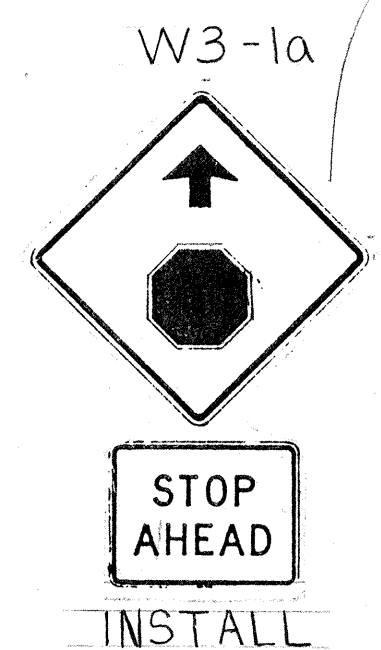
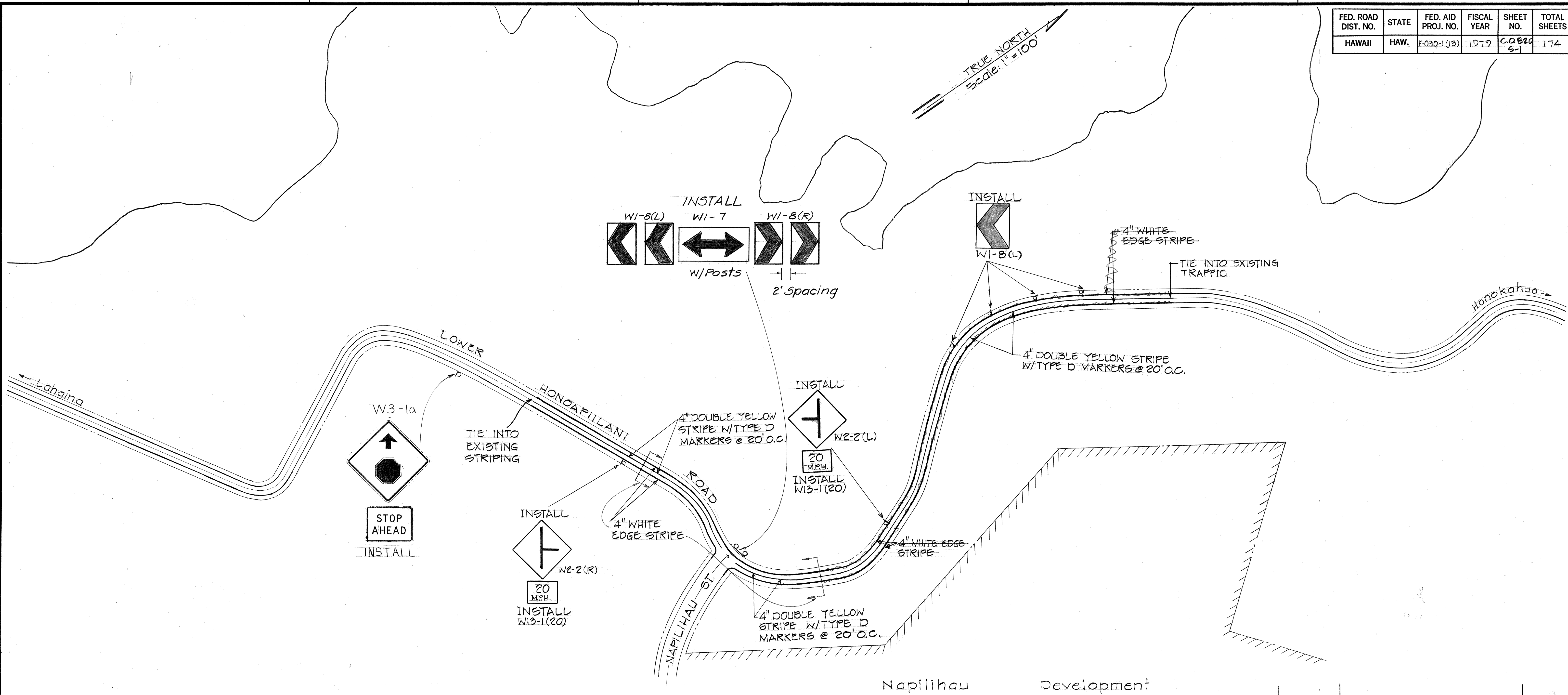
SIGNING & PAVEMENT MARKING

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. No. F-030-1(13)
Scale: As Shown Date: Oct. 1977
SHEET No. 5D OF 21 SHEETS

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED 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.	F-030-1(13)	1979	C.O.88D S-1	174

TRUE NORTH
Scale: 1" = 100'



SIGN W1-8(L) DETAIL
Not to Scale

NOTES:

1. PLAN LOCATION OF W1-8 SIGN IS APPROXIMATE ONLY. LOCATION SHALL BE VISUALLY DETERMINED BY THE ENGINEER IN THE FIELD.
2. W1-8 SIGN PLACEMENT CRITERIA:
 - a. SPACING OF SIGNS SHALL BE SUCH THAT MOTORIST ALWAYS HAS TWO W1-8 SIGNS IN VIEW UNTIL THE CHANGE IN ALIGNMENT ELIMINATES THE NEED FOR THE SIGNS.
 - b. W1-8 SIGNS SHOULD BE VISIBLE FOR AT LEAST 500' TRIAL RUNS BY DAY AND NIGHT MAY BE DESIRABLE TO DETERMINE FINAL POSITIONING.
 - c. W1-8 SIGNS SHALL BE PLACED IN LINE WITH AND AT RIGHT ANGLES TO APPROACHING TRAFFIC.

7-25-79	ADD NEW SIGNS
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

SIGNING & PAVEMENT MARKING

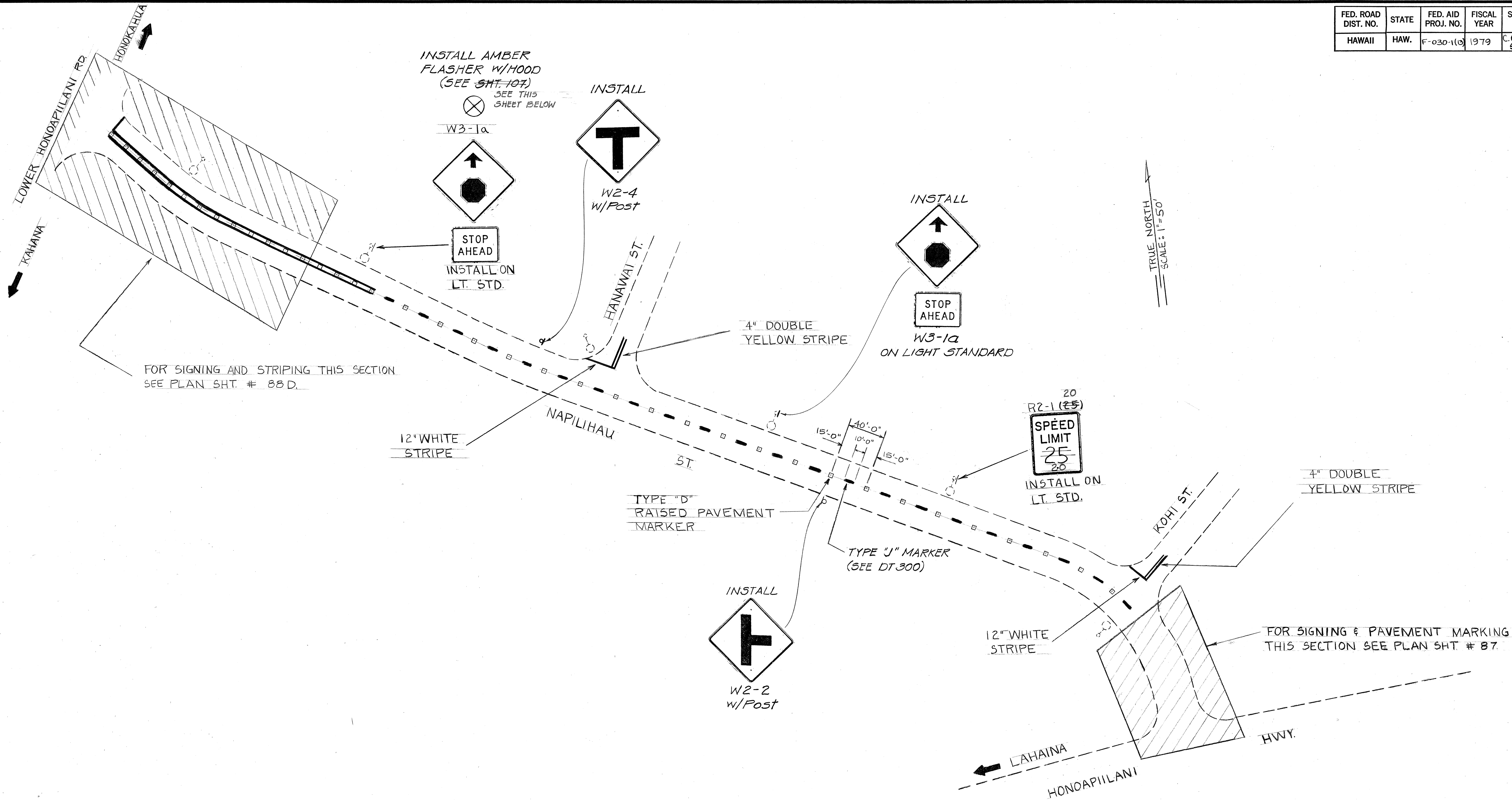
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. No. F-030-1(13)

Scale: As Shown Date: Nov. 1978
SHEET NO. OF SHEETS

C.O. 88D S-1

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1979	C.O. 88D 5-2	



ORIGINAL	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
No.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

**SIGNING &
PAVEMENT MARKING**

HONOAPIILANI HIGHWAY
KAHANA TO ALAELA
FA. PROJ. NO. F-030-1(13)
Scale: As Shown July 1979

SHEET NO. OF SHEETS

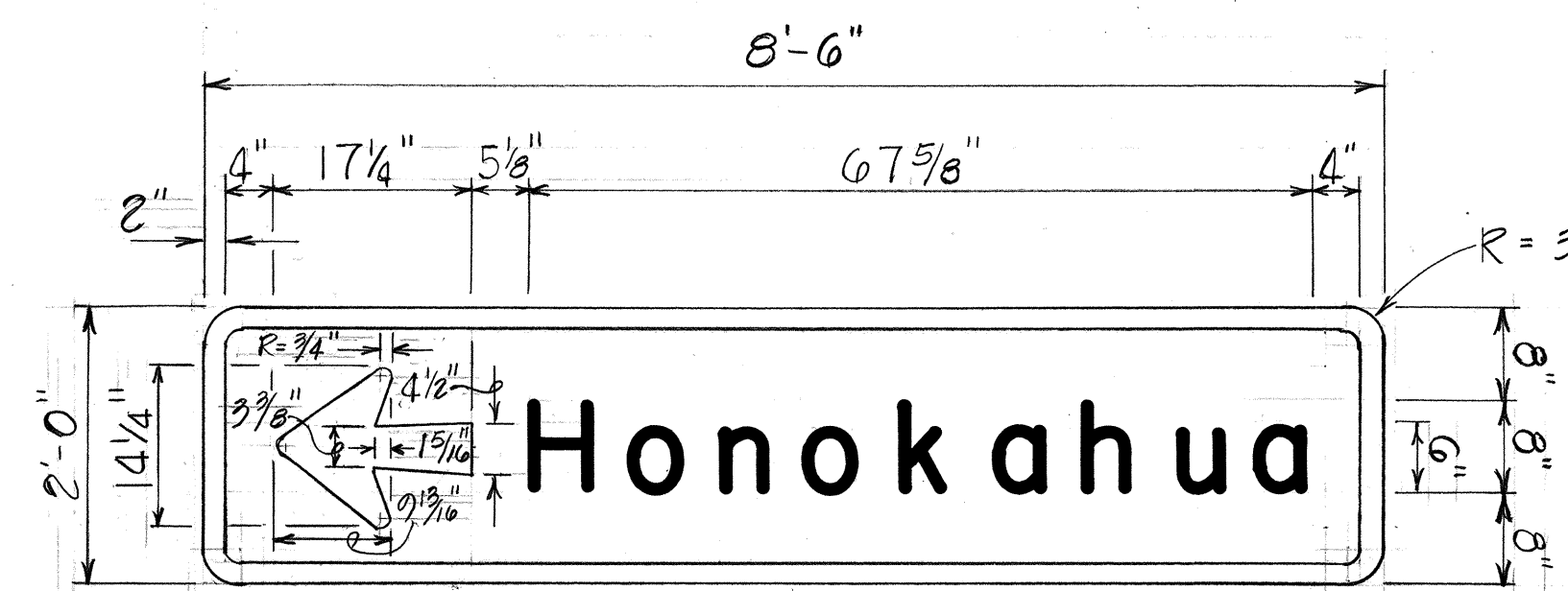
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	89	174

NOTES FOR TEMPORARY DESTINATION SIGNS

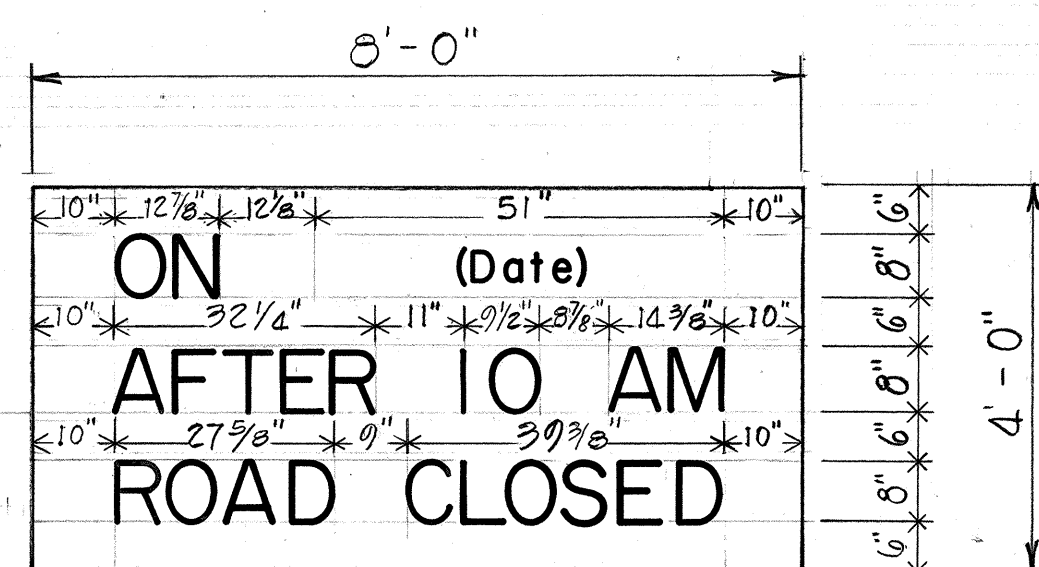
- LETTERS AND NUMERALS SHALL BE SERIES "D" AS SHOWN IN THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS," BUREAU OF PUBLIC ROADS, 1966.
- SIGNS SHALL HAVE WHITE REFLECTIVE SHEETING LEGENDS ON GREEN REFLECTIVE SHEETING BACKGROUND.
- SIGN PLATE SHALL BE 3/4" WEATHERPROOF PLYWOOD OR 0.100" SHEET ALUMINUM.
- DATES SHALL BE AS SPECIFIED BY THE ENGINEER. DATE FORMAT SHALL BE SIMILAR TO ONE OF THE FOLLOWING: APRIL 23, NOV. 22.
- SIGN SHALL BE INSTALLED AND DISPLAYED FOR AT LEAST TWO (2) WEEKS PRIOR TO DETOUR ROAD CLOSURE OR HIGHWAY OPENING, AND SUBSEQUENTLY REMOVED AND STOCKPILED AS DIRECTED.
- SEE MISCELLANEOUS SIGN DETAIL SHEET FOR MOUNTING DETAILS. USE THREE (3), 2 1/2" x 2 1/2", 10-GAGE GALVANIZED STEEL SQUARE TUBE POST SUPPORTS FOR EACH SIGN.
- THE UNIT PRICE PAID FOR TEMPORARY DESTINATION SIGNS SHALL INCLUDE ALL FABRICATION, INSTALLATION (INCLUDING POSTS), AND REMOVAL COST.

NOTES FOR DIRECTIONAL SIGNS

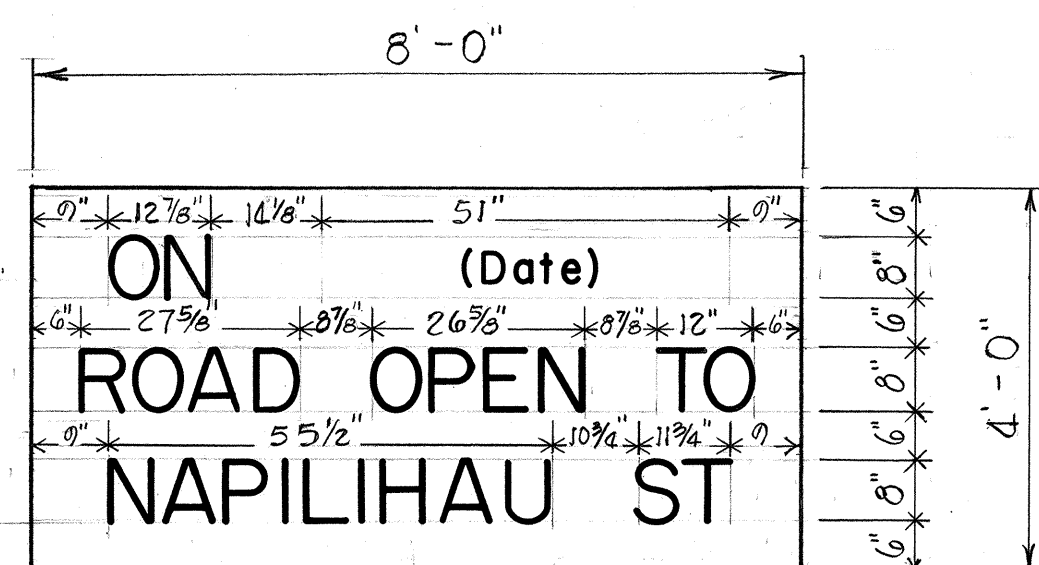
- SIGNS SHALL CONFORM TO THE MODIFIED SERIES "E" LETTERS SHOWN IN THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS," BUREAU OF PUBLIC ROADS, 1966.
- ARROWS, LEGENDS, AND BORDERS SHALL CONFORM WITH DETAILS SHOWN ON THE PLANS AND SHALL BE DEMOUNTABLE ALUMINUM CUTOUTS WITH WHITE REFLECTIVE SHEETING ON A GREEN REFLECTIVE SHEETING BACKGROUND.
- SIGN PANEL SHALL BE 0.100" SHEET ALUMINUM, SINGLE PLATE, WITH NO SPLICING ALLOWED.



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

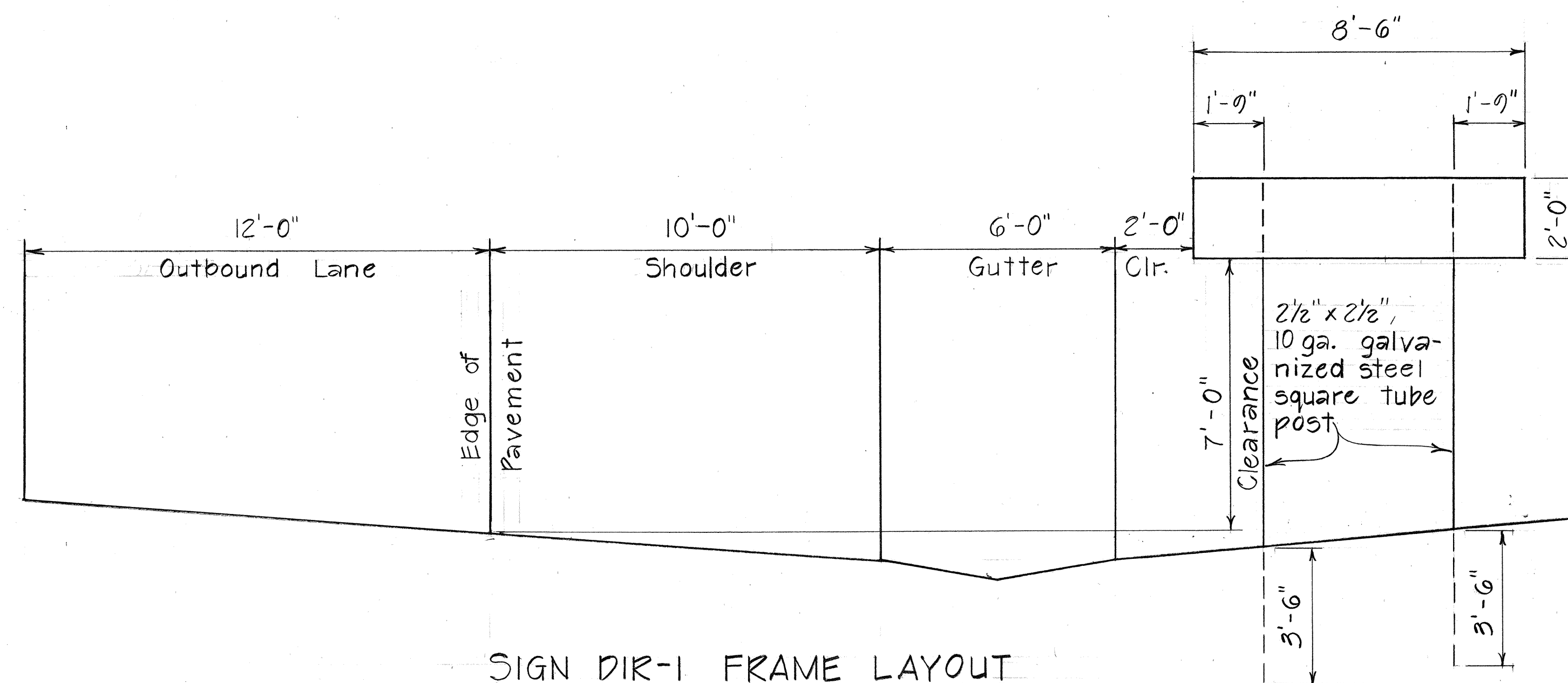


TD-2
Scale: 1/2" = 1'-0"



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

TEMPORARY DESTINATION SIGN DETAILS



SIGN DIR-1 FRAME LAYOUT

HONOAPIILANI HIGHWAY
+ STA. 179+00 O.B. RT.
Scale: 3/8" = 1'-0"

DIRECTIONAL SIGN DETAILS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

SIGN DETAILS & NOTES

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
E.A. PROJ. NO. F-030-1(13)

Scale: As Shown Date: Dec., 1977
SHEET NO. 6 OF 21 SHEETS

DATE	DATE
DESIGNED BY	DESIGNED BY
PLACED BY	PLACED BY
NOTE BOOK	NOTE BOOK
QUANTITIES BY	QUANTITIES BY
CHECKED BY	CHECKED BY
No.	No.

SIGNS, REFLECTOR MARKERS, AND ROUTE MARKER ASSEMBLIES SUMMARY

TYPE	DESCRIPTION	QUANTITY	
		w/Post	w/o Post
R1-1	STOP	4	
R2-1(20)	SPEED LIMIT 20	1	
R2-1(35)	SPEED LIMIT 35	1	
R2-1(45)	SPEED LIMIT 45	4	
R2-5d(20)	REDUCED SPEED 20 AHEAD	1	
R2-5d(35)	REDUCED SPEED 35 AHEAD	1	
R3-1	NO RIGHT TURN		1
R3-2	NO LEFT TURN		1
R4-1	DO NOT PASS	4	
R4-2	PASS WITH CARE	3	
* R11-2	ROAD CLOSED	2	6
W2-1	+	2	
CM4-10(L)	< DETOUR		4
* CW1-1(L)-A	←	2	
* CW13-1(10)-A	10 M.P.H.		1
CW20-2a	DETOUR 1500 FT.	1	
CW20-2b	DETOUR 1000 FT.	1	
CW20-2e	DETOUR 2400 FT.	1	
W11-1	BIKE XING		1
W15-3	PAVED SHOULDER ENDS AHEAD	1	
W15-4	PAVED SHOULDER ENDS	1	
RM-1	REFLECTOR MARKER	39 63	7
B	ROUTE MARKER ASSY. (WEST 30 ↑, TO EAST 30 →)	1	
A	ROUTE MARKER ASSEMBLY (TO EAST 30 ←)	1	
A	ROUTE MARKER ASSEMBLY (WEST 30 →)	1	
A	ROUTE MARKER ASSEMBLY (WEST 30 →)	1	
A	ROUTE MARKER ASSEMBLY (EAST 30)	2	
A	ROUTE MARKER ASSEMBLY (WEST 30)	1	

* REGULATORY AND WARNING SIGN (CONSTRUCTION)

PAVEMENT STRIPING, MARKING, SYMBOLS & MARKERS SUMMARY

DESCRIPTION	QUANTITY
PAVEMENT STRIPING	22,700 LIN. FT.
TYPE A PAVEMENT MARKERS	7,100 Each
TYPE D PAVEMENT MARKERS	218 Each
TYPE H PAVEMENT MARKERS	178 Each
TYPE J PAVEMENT MARKERS	175 Each
PAVEMENT SYMBOL	28 Each
PAVEMENT SYMBOL (ARROW)	28 Each

TYPE IV BARRICADE SUMMARY

LOCATION	LENGTH
HONOAPIILANI HWY. ± STA. 183+60±	50± FT.
HONOAPIILANI HWY. ± STA. 164+00± 9/16 RT.	63± FT.
HONOAPIILANI HWY. ± STA. 161+00± 9/16 LT.	40± FT.

LEGEND

- TYPE D RAISE PAVEMENT MARKER
- TYPE H RAISE PAVEMENT MARKER
- TYPE J RAISE PAVEMENT MARKER (4 EACH)
- 4" WHITE EDGE STRIPE (UNLESS SPECIFIED OTHERWISE)
- ||||| 4" DOUBLE YELLOW STRIPES WITH TYPE D MARKERS @ 20'-0" O.C.
- ■ □ TYPES D, H, & J RAISE PAVEMENT MARKERS WITH 4" YELLOW STRIPE TO INDICATE PASSING PROHIBITED ZONES.
- REFLECTOR MARKER (RM-1)
- 4" GUIDE LINE (COLOR AS INDICATED ON PLANS)

BIKE ROUTE SIGN SUMMARY

DESCRIPTION	QUANTITY	
	w/POST	w/o POST
BIKE ROUTE ←		2
BIKE ROUTE	28	
** ↑		28

** DENOTES SUPPLEMENTARY PLATE

MILE POST MARKER SUMMARY ***

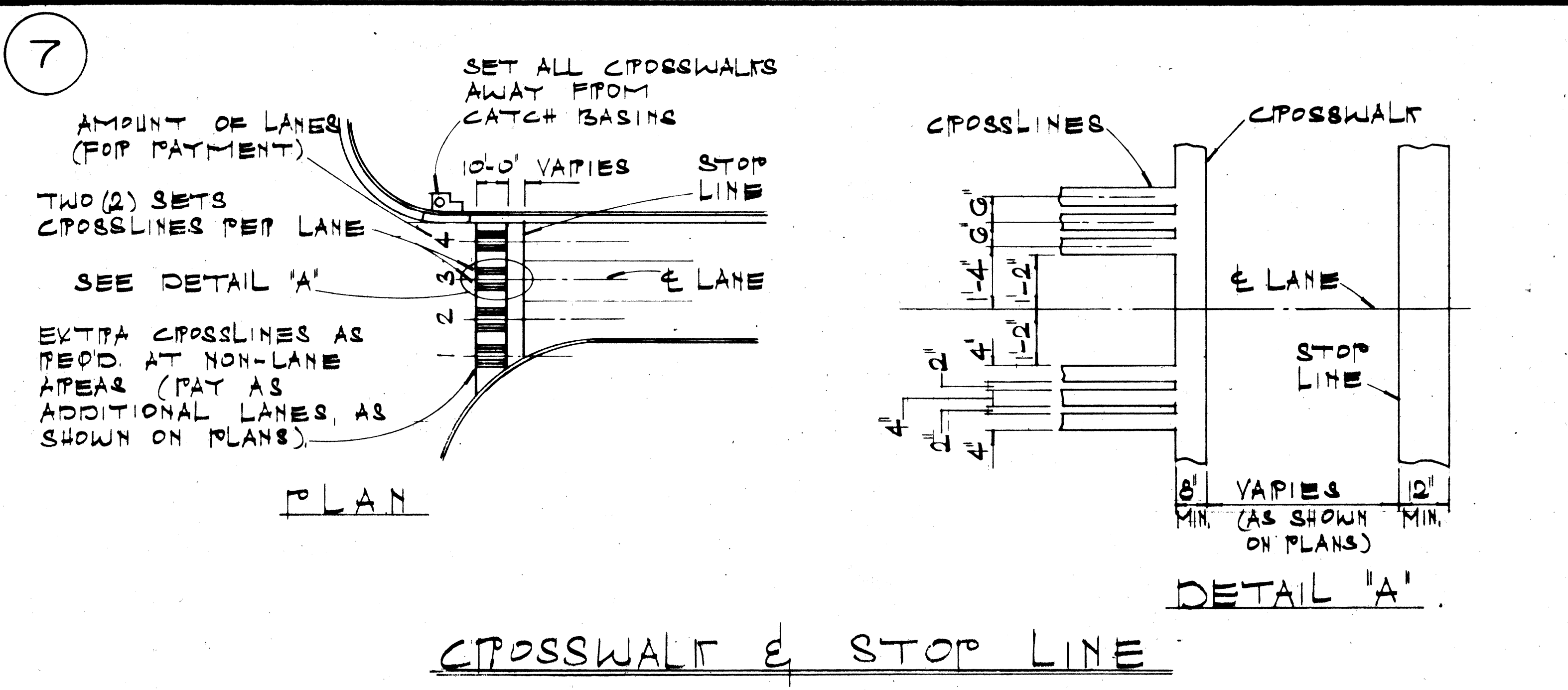
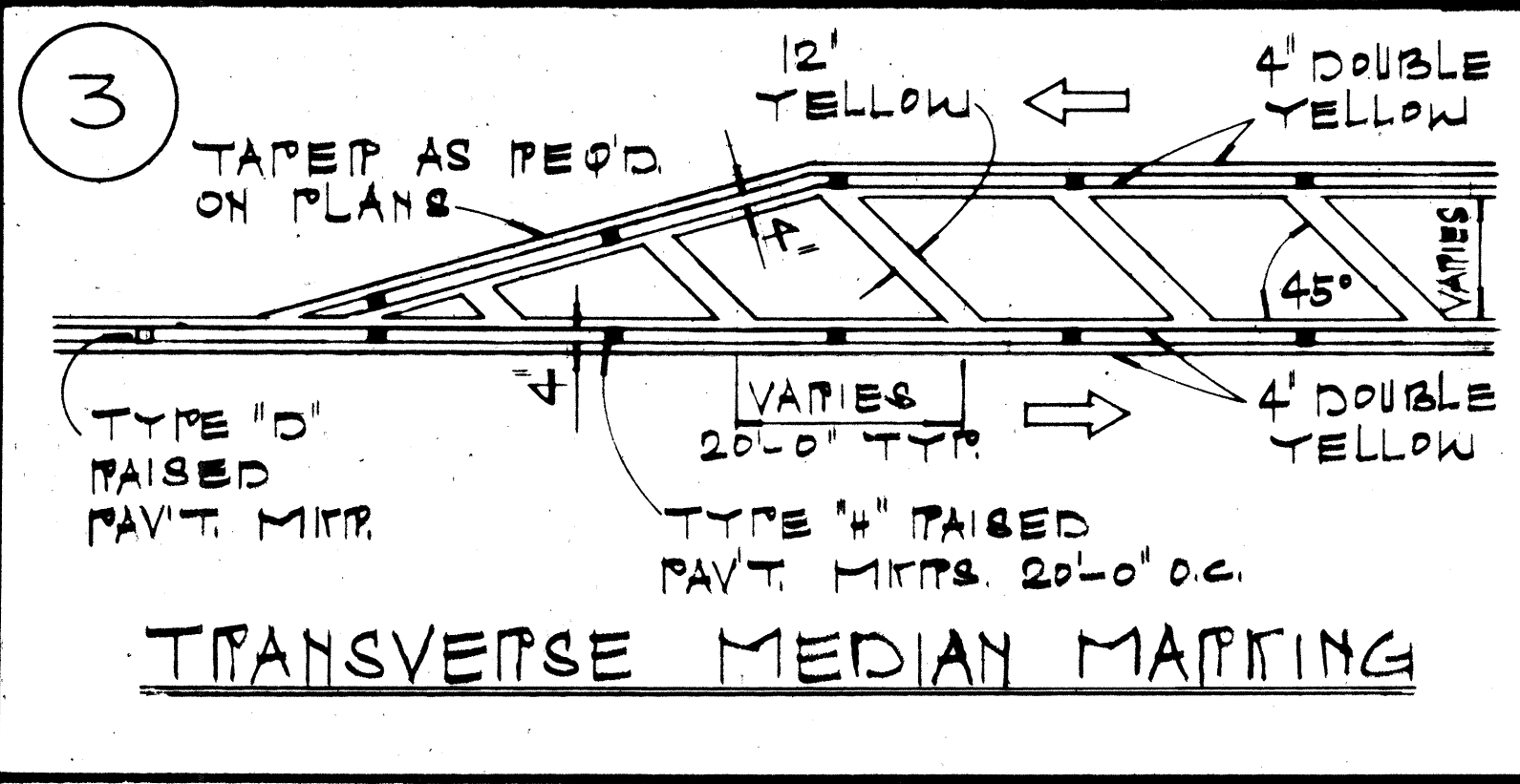
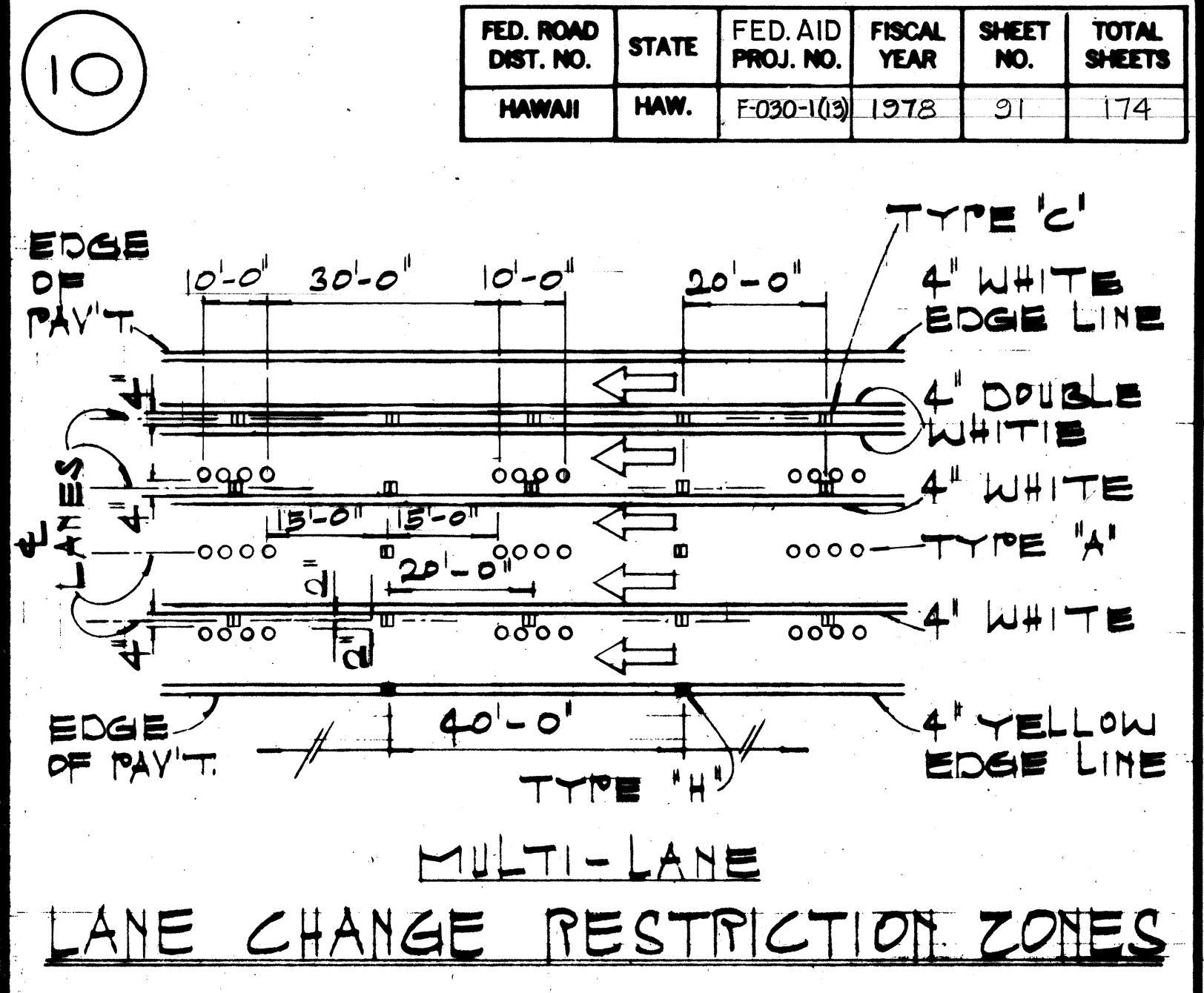
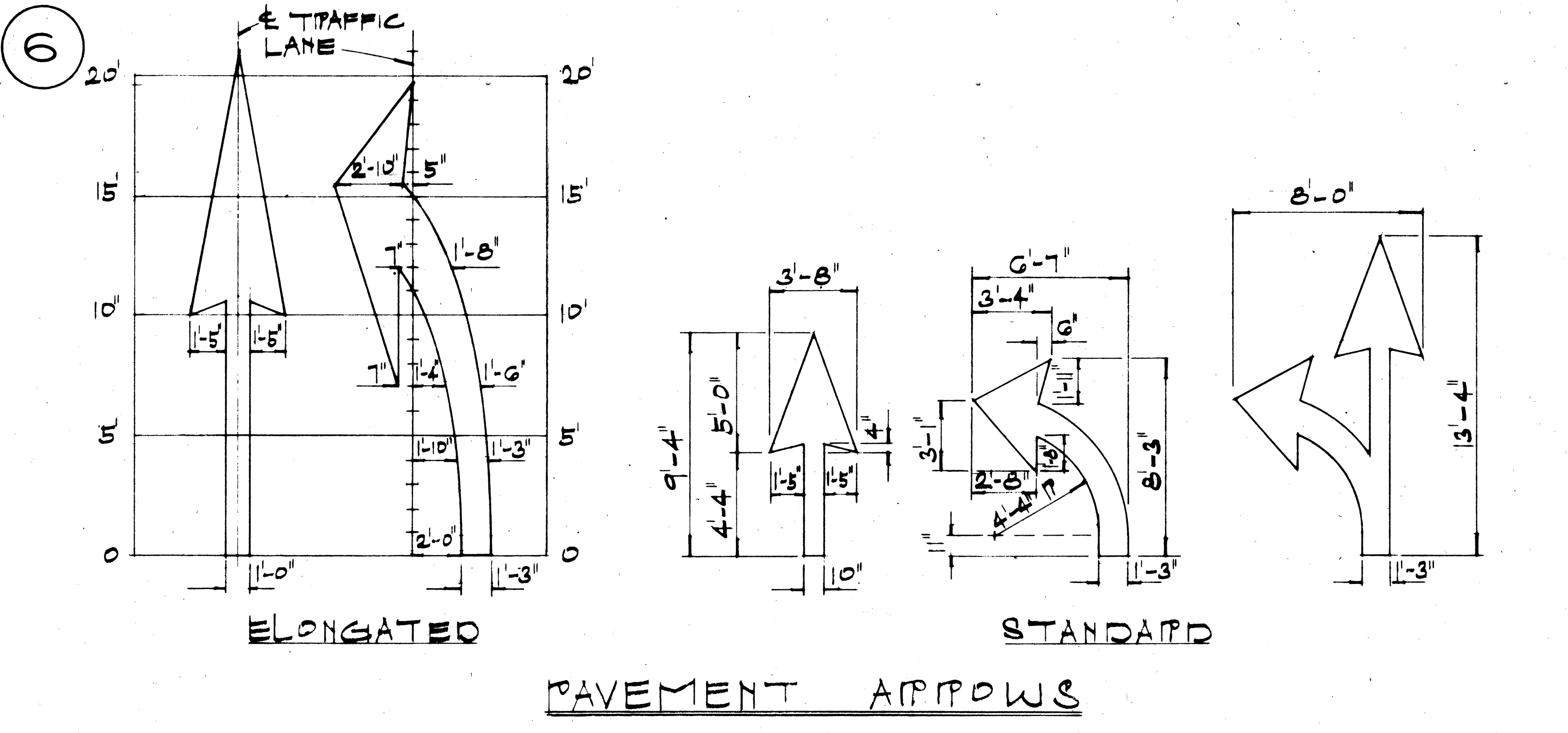
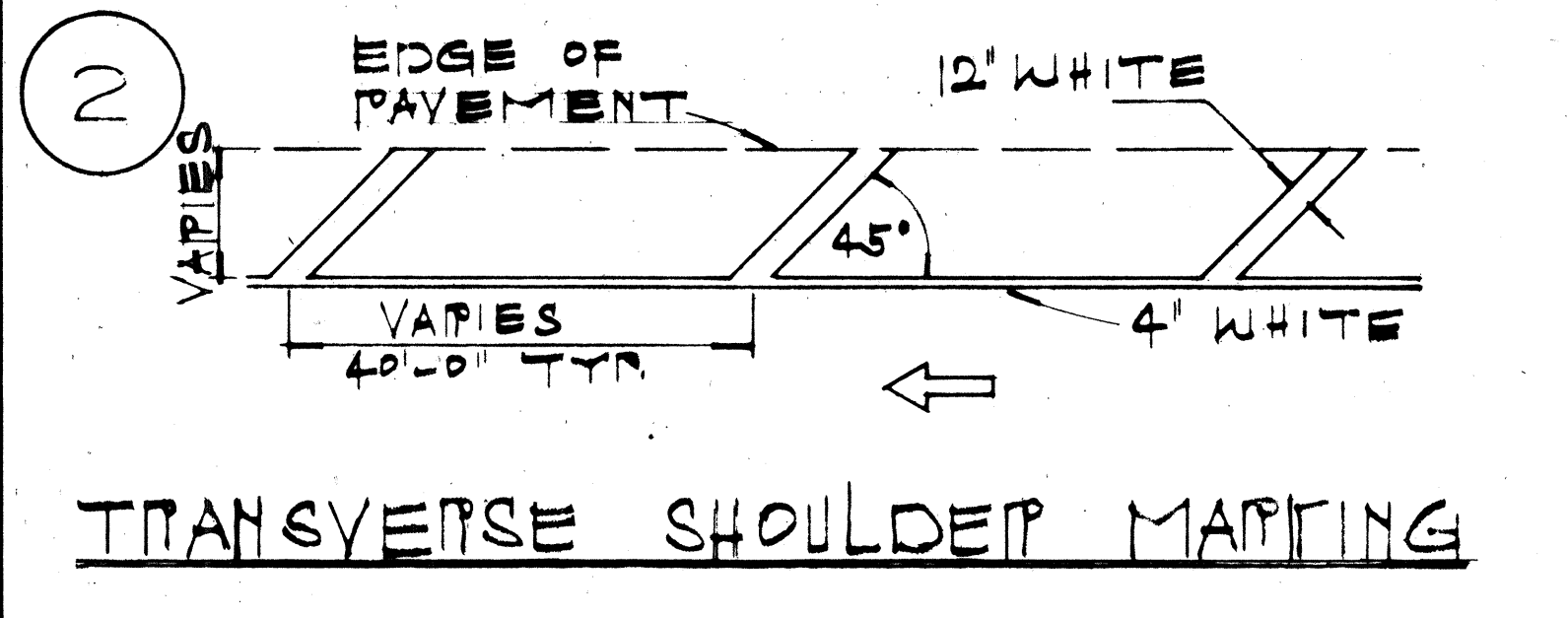
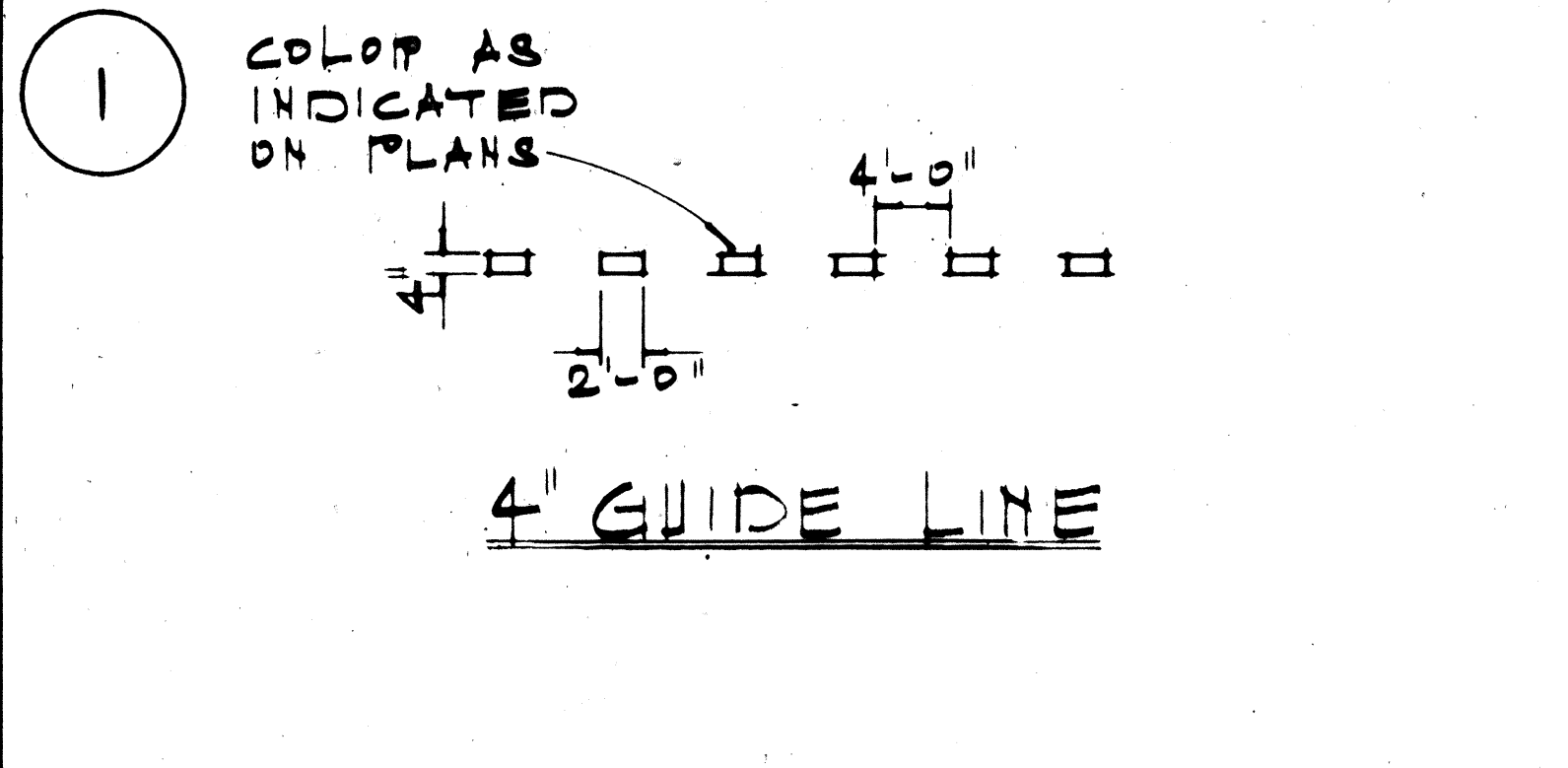
DESCRIPTION	QUANTITY	
	w/POST	w/o POST
MILE 26 , 30	1	1
MILE 27 , 30	1	1
MILE 28 , 30	1	1
MILE 29 , 30	1	1

*** LOCATION OF MILEPOST MARKERS ON THE PLAN ARE APPROXIMATE ONLY. THE EXACT LOCATION OF THE MILEPOST MARKERS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

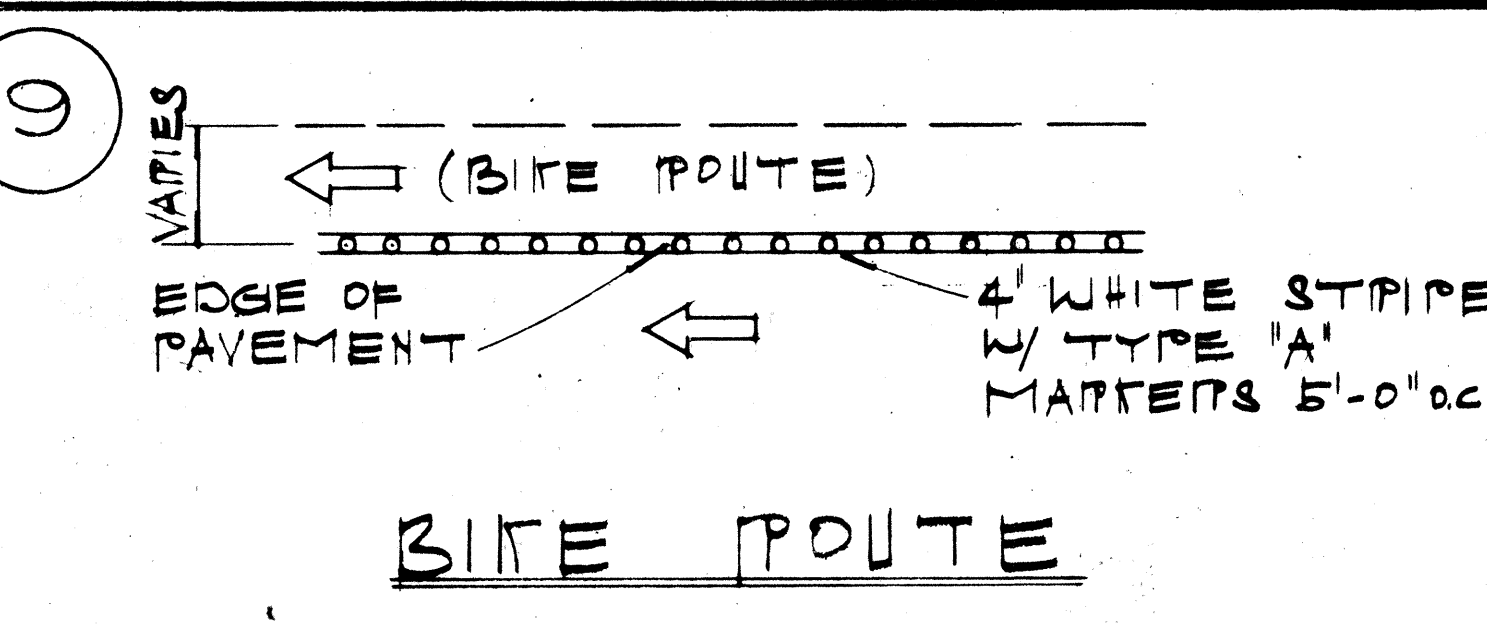
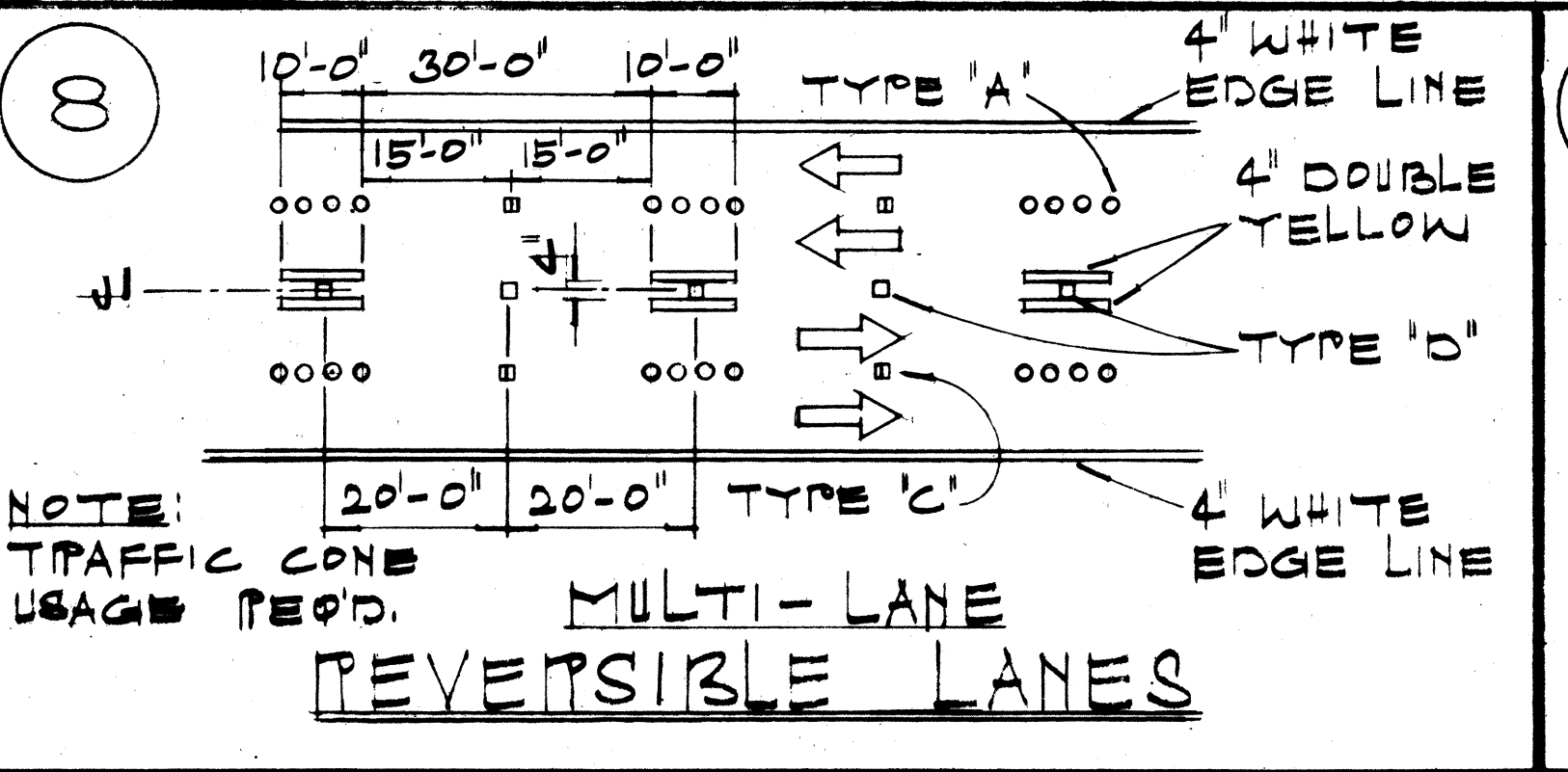
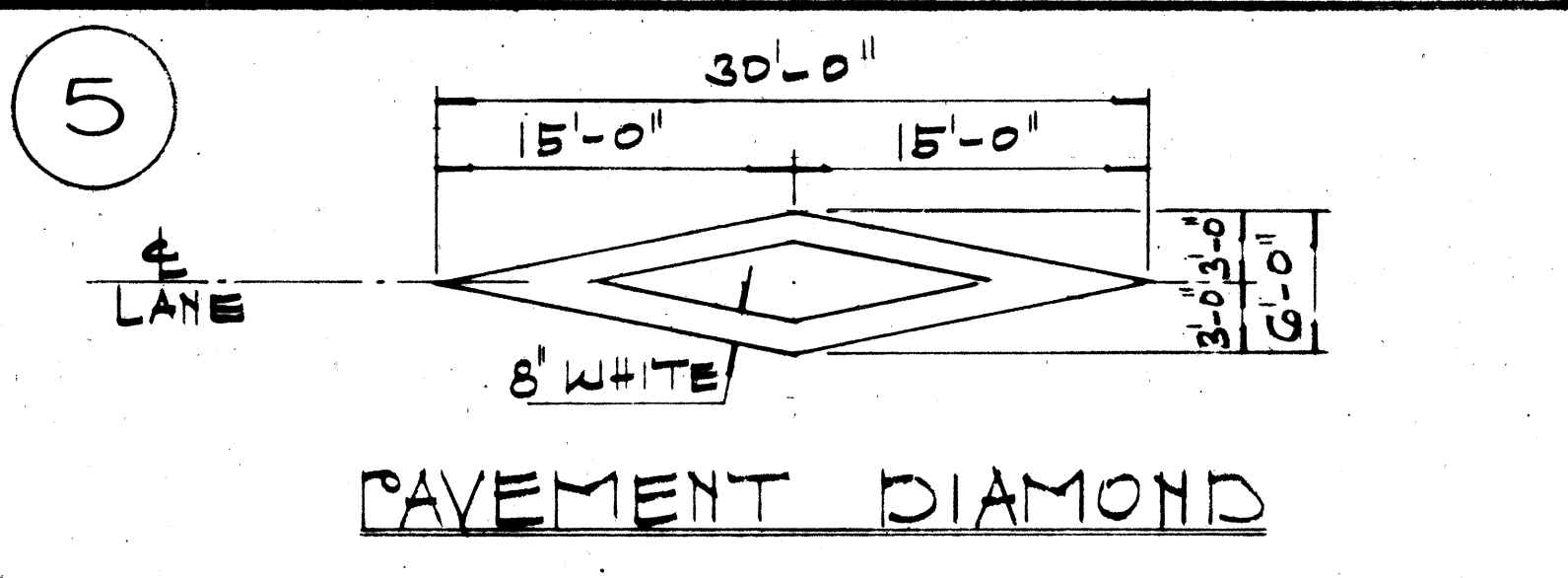
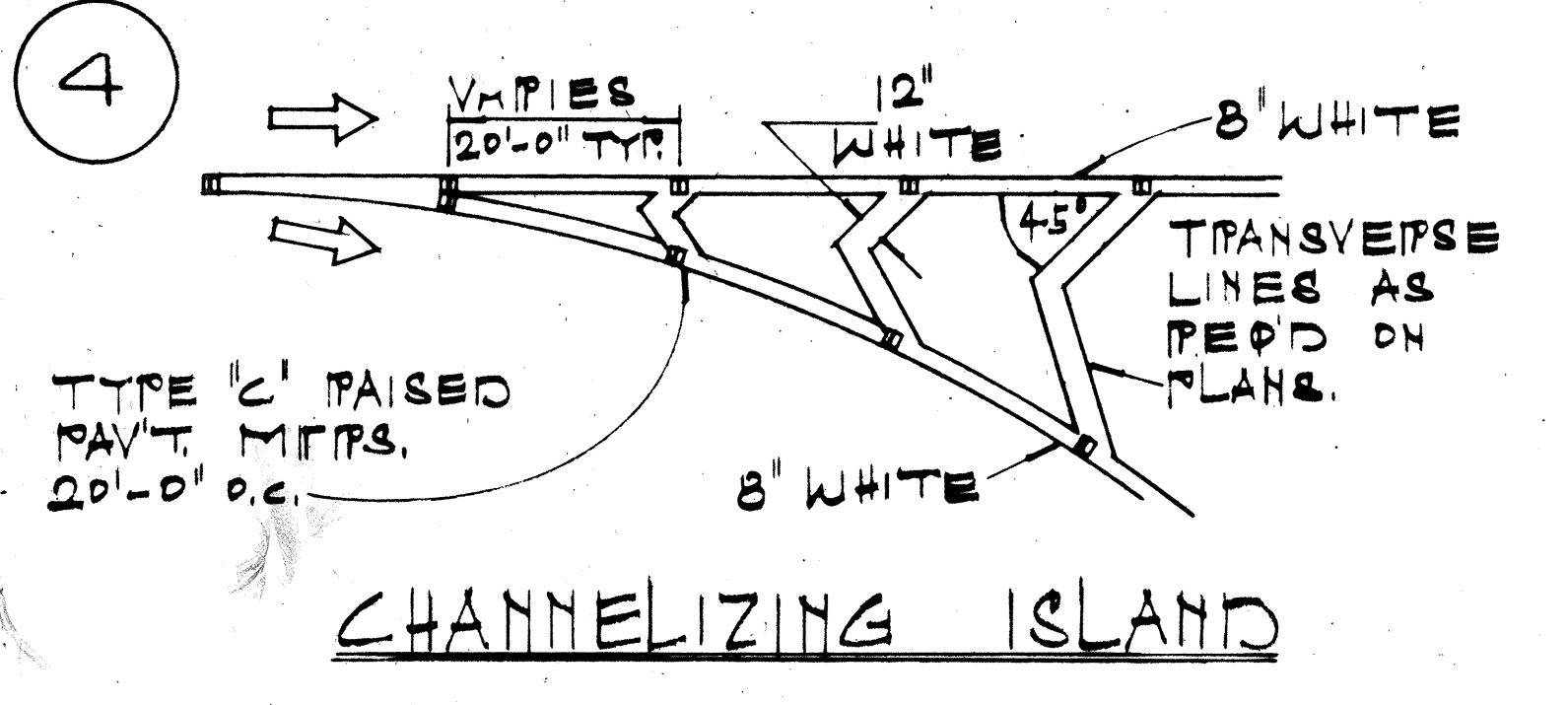
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
SIGNING & PAVEMENT MARKING
LEGEND AND SUMMARIES
 HONOAPIILANI HIGHWAY
 KAHANA TO ALAELOA
 F.A. PROJ. NO. F-030-1(13)
 Scale: As Shown Date: Dec., 1977
 SHEET NO. 7 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	91	174



GENERAL NOTES:

- PAVEMENT MARKINGS SHALL CONFORM TO THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS & HIGHWAYS', 1971, (MUTCD), SUBSEQUENT REVISIONS TO THE MUTCD & AS SHOWN ON THE PLANS.
- LAYOUT OF PAVEMENT MARKINGS & STRIPING SHALL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL CHECK LAYOUT OF MARKERS & STRIPING WITH THE ENGINEER PRIOR TO PERFORMING WORK.
- FOR ADDITIONAL PAVEMENT MARKING DETAILS SEE SHT. DT 300.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS
MISCELLANEOUS
PAVEMENT MARKINGS

F.A. PROJ. NO. F-030-1(13)

NOT TO SCALE

SHEET NO. 8 OF 21 SHEETS

DATE: _____

DESIGNED BY: _____

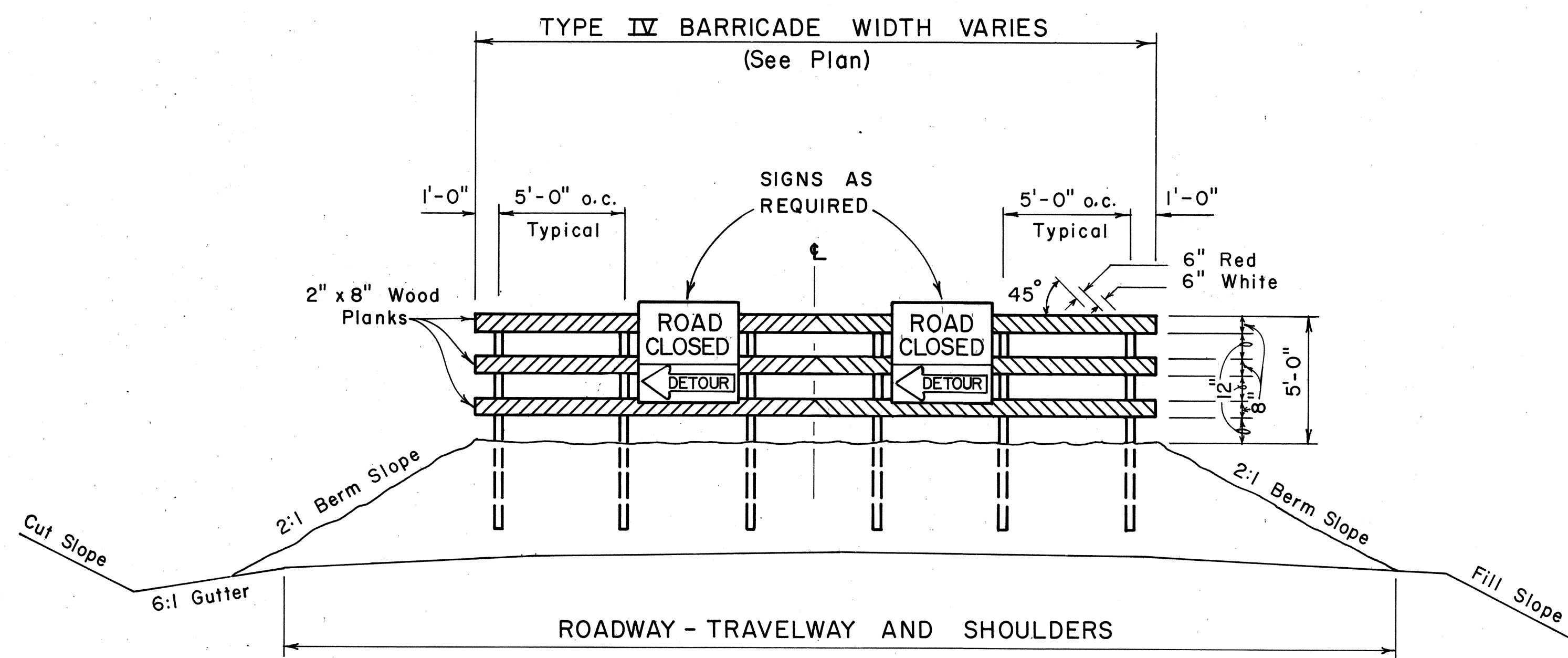
DRAWN BY: _____

CHECKED BY: _____

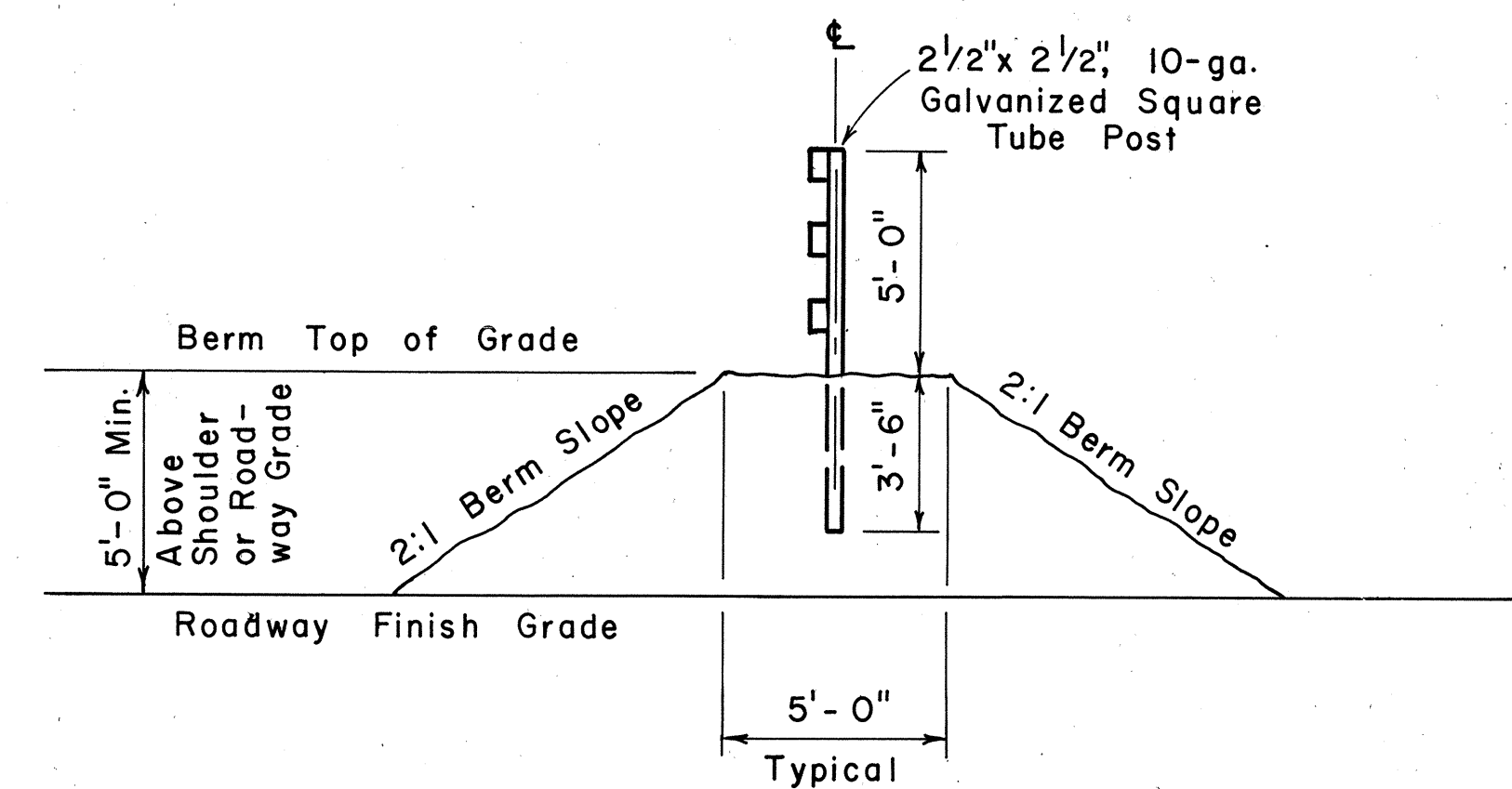
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F030-1(13)	1978	93	174

GENERAL NOTES:

- 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.
- The red and white stripes shall be reflectorized with reflective sheeting.
- A 26-gage galvanized steel sheet shall be first tacked on to the rails and then overlaid with reflective sheeting.
- The wooden rails shall be of one continuous plank. Splicing, if allowed, shall be by methods approved by the Engineer.
- The three (3) horizontal rails shall be supported by 2 1/2" x 2 1/2", 10-gage, galvanized steel square tube posts at 5'-0" off center. The square tube posts shall conform to the requirements of Section 713.11(C)-Square Tube Posts of the Standard Specifications.
- Each wooden rail shall be supported at each post by two (2) sets of 1/4" carriage bolts.
- The berm shall be constructed to the dimensions shown on the plan, and as specified in Section 203-Excavation and Embankment of the Standard Specifications.
- The berm shall be grassed in accordance with the requirements of Section 641-Hydromulch Seeding of the Standard Specifications.
- The Type IV barricade shall be constructed at the locations shown on the plans. Type IV barricade lengths shall be as specified in the plans.
- The item for "Type IV Barricade" shall include all costs for:
 - Constructing and grassing the berm,
 - Constructing and installing the barricade.
- Any required signs to be installed on the barricades shall be paid for under the appropriate item in Section 621-Destination, Directional, Regulatory and Warning Signs.



ELEVATION VIEW



SIDE VIEW

TYPE IV BARRICADE DETAILS

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

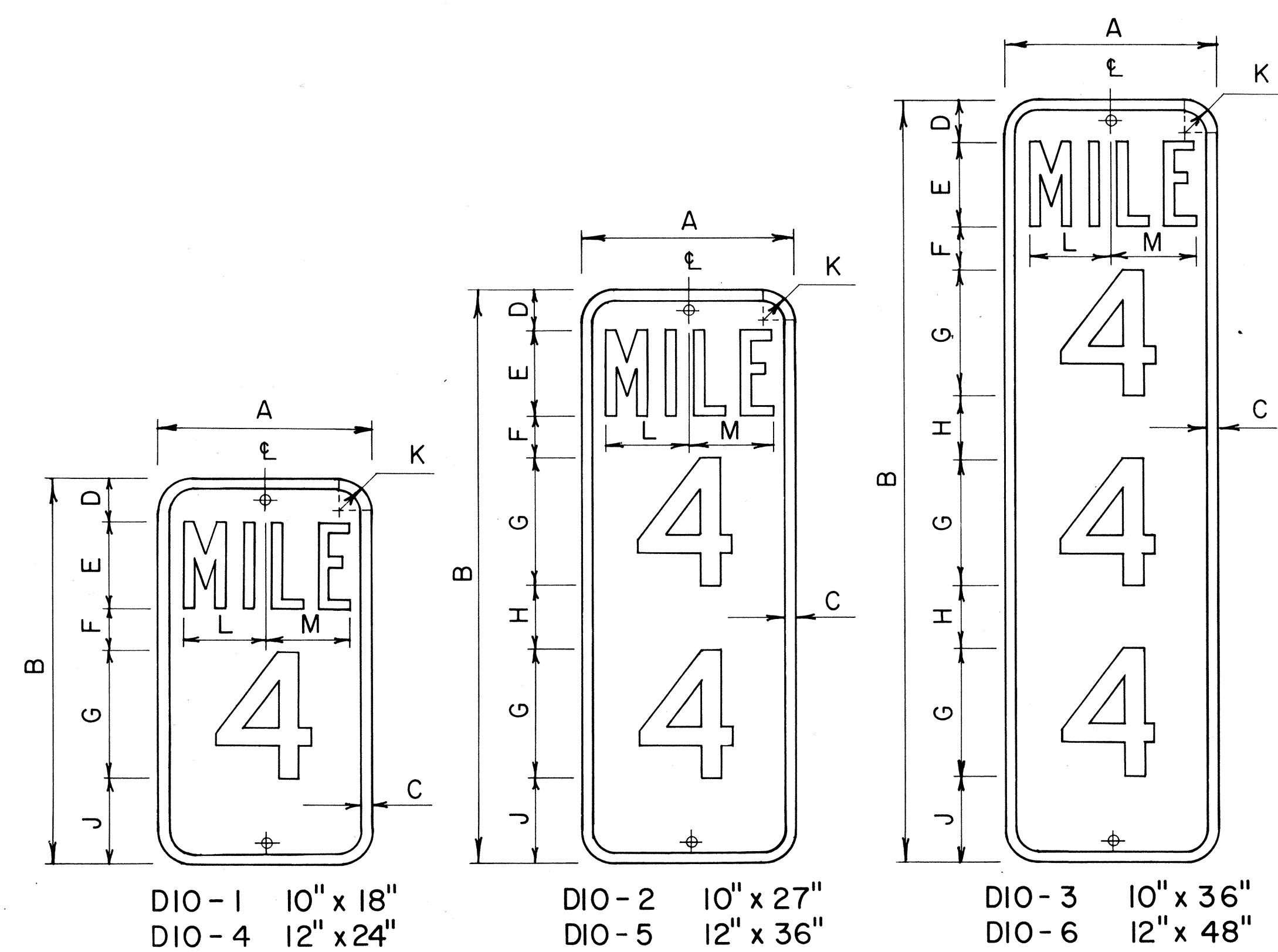
DATE	
SURVEYED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
TYPICAL DETAILS
TYPE IV BARRICADES
 HONOAPIILANI HIGHWAY
 KAHANA TO ALAELOA
 F.A. Proj. No. F030-1(13)
 Scale: As Shown Date: Feb., 1978
 SHEET NO. 10 OF 21 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F030/(13)	1978	ADD.94	174

GENERAL NOTES:

- Milepost marker and highway route number plates 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.
- Milepost markers and highway route numbers shall be completely reflectorized with reflective sheeting as follows:
 - Milepost markers shall have white legends and border on a green background.
 - Highway route numbers shall have black numerals on a white background.
- The plate backings for milepost markers and highway route numbers shall conform to the requirements for standard highway signs. The plates shall have 3/8" bolt holes drilled at appropriate locations.
- Highway route number plates shall be used in conjunction with milepost marker plates on all roadways, except interstate freeways. Fabrication and installation costs of highway route number plates shall be considered incidental to the milepost marker assembly.
- Milepost markers shall be installed on all roadways as follows:
 - One milepost on each side of multi-lane roadways.
 - Back-to-back mileposts on one side of 2-lane roadways. (Right side of roadway in direction of increasing mileage.)

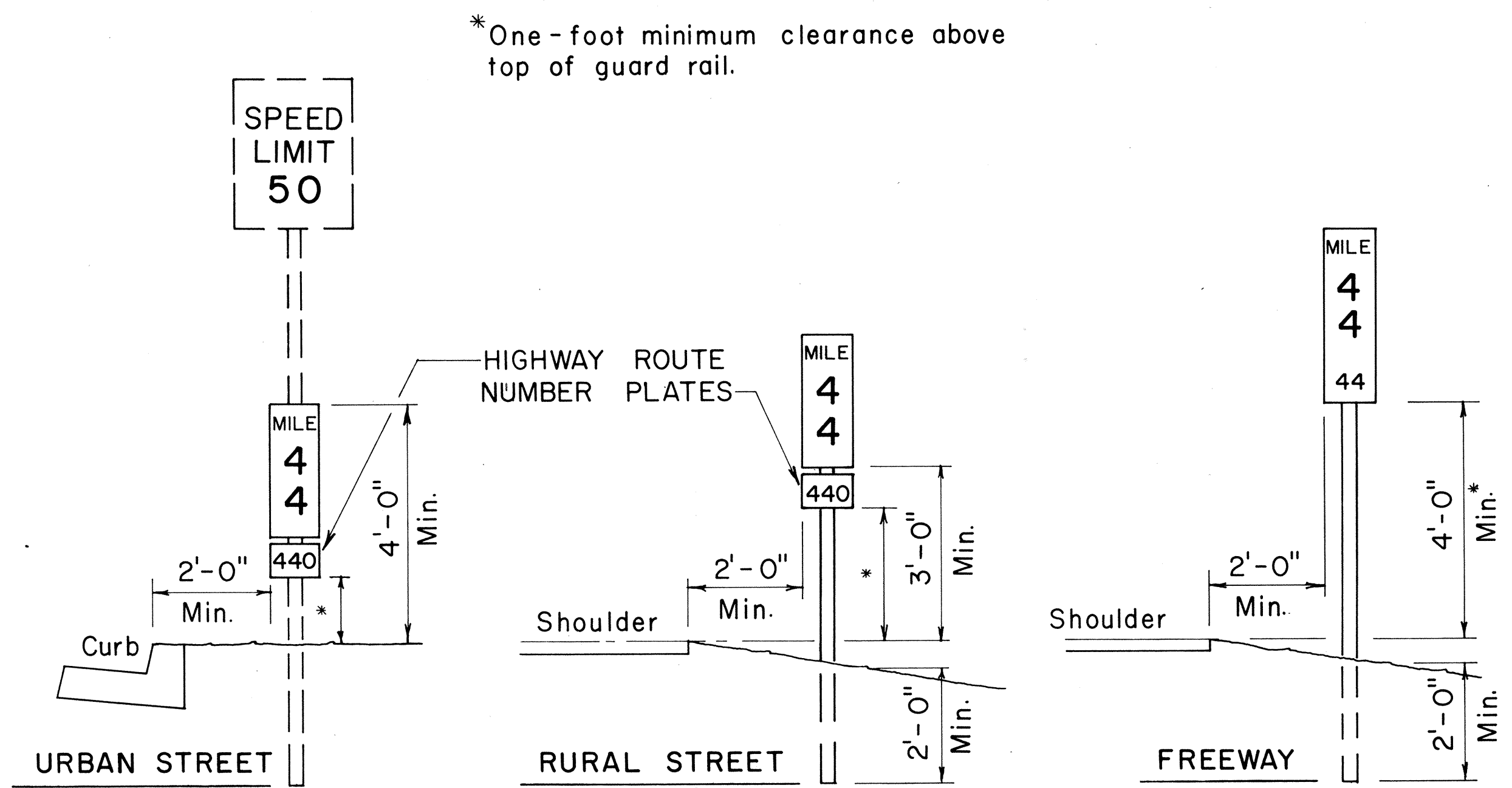


DIO-1 10" x 18"
DIO-4 12" x 24"
DIO-2 10" x 27"
DIO-5 12" x 36"
DIO-3 10" x 36"
DIO-6 12" x 48"

MILEPOST MARKER PLATE DETAILS

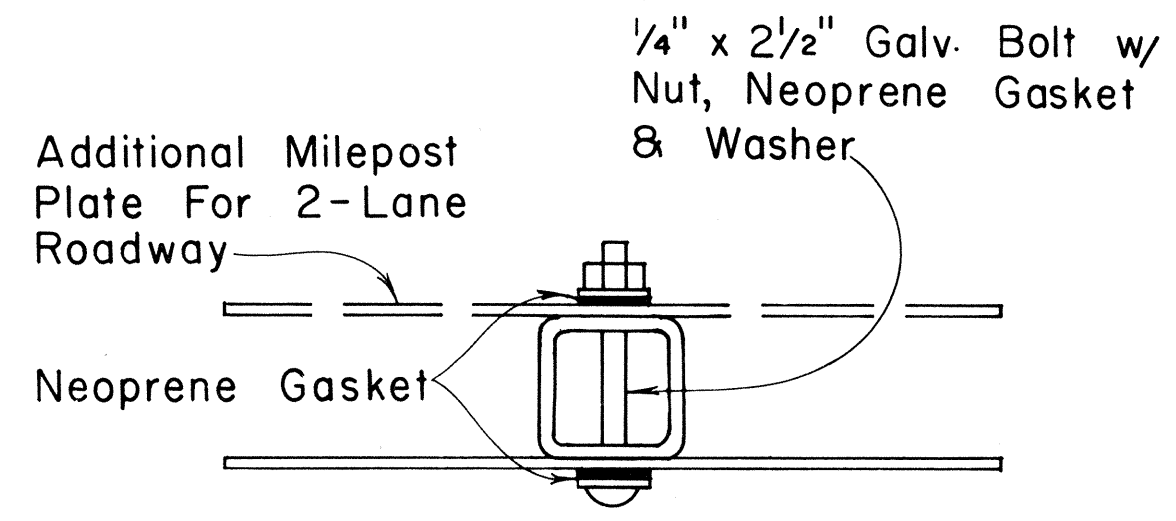
Scale: 3/16" = 1"

MILEPOST PLATE SCHEDULE (INCHES)															
NAME	SIZE	A	B	C	D	E	F	G	H	J	K	L	M	LETTER SERIES	NUMERAL SERIES
DIO-1	10 x 18	10	18	1/2	2	4	2	6		4	1 1/2	3 5/8	3 7/8	B	C
DIO-4	12 x 24	12	24	1/2	3	4	3	10		4	1 1/2	4 5/8	4 7/8	C	C
DIO-2	10 x 27	10	27	1/2	2	4	2	6	3	4	1 1/2	3 5/8	3 7/8	B	C
DIO-5	12 x 36	12	36	1/2	3	4	3	10	3	3	1 1/2	4 5/8	4 7/8	C	C
DIO-3	10 x 36	10	36	1/2	2	4	2	6	3	4	1 1/2	3 5/8	3 7/8	B	C
DIO-6	12 x 48	12	48	1/2	3	4	3	10	2 1/2	3	1 1/2	4 5/8	4 7/8	C	C

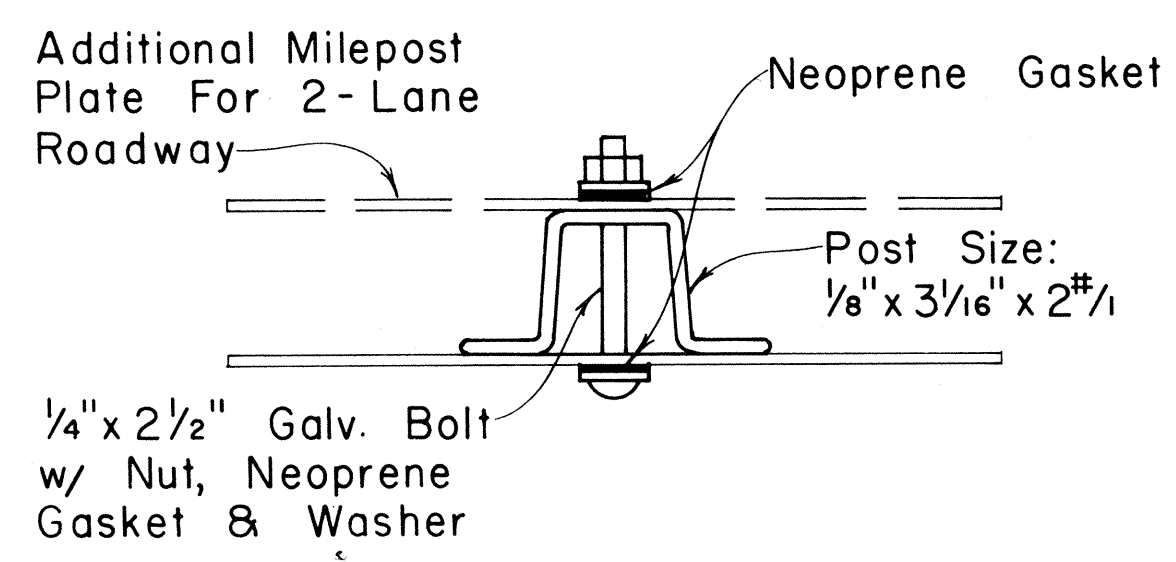


TYPICAL ROADSIDE INSTALLATION

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



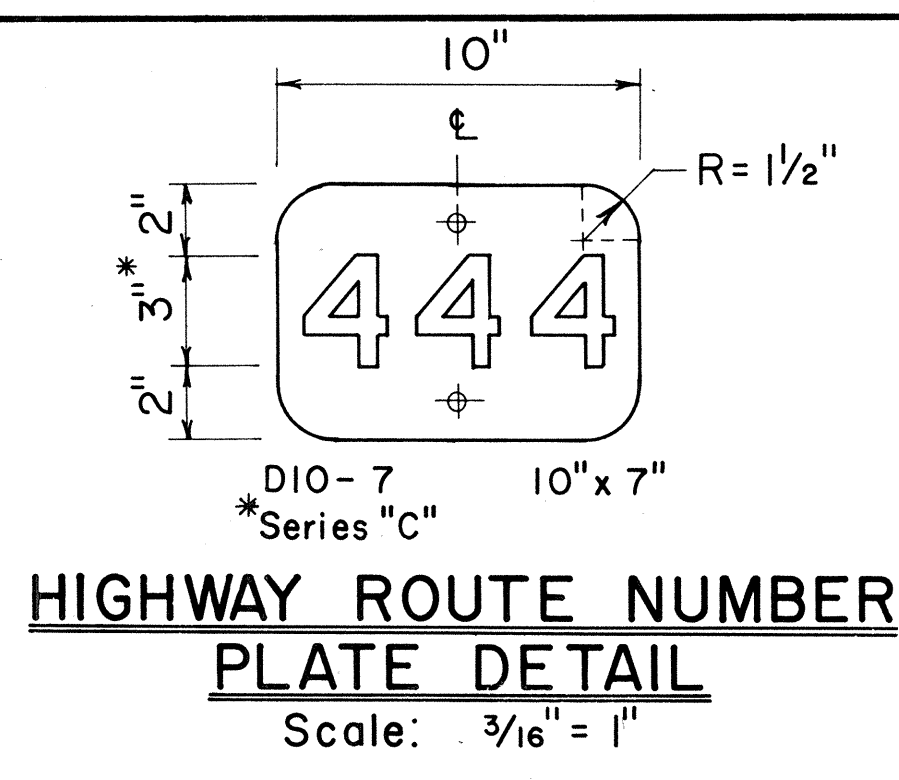
GALVANIZED SQUARE TUBE POST



GALVANIZED FLANGED CHANNEL POST

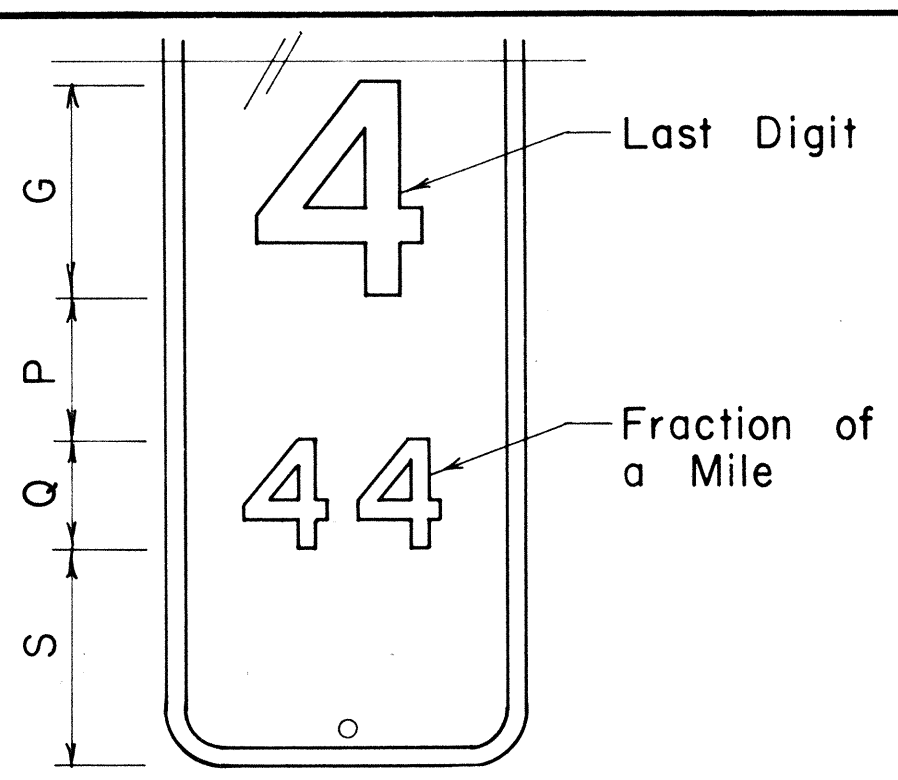
TYPICAL MOUNTING DETAILS

Scale: 1/2" = 1"



HIGHWAY ROUTE NUMBER PLATE DETAIL

Scale: 3/16" = 1"



MILEPOST MARKER FRACTION DETAIL

Scale: 3/16" = 1"

MILEPOST PLATE SCHEDULE WITH FRACTION OF A MILE						
NAME	SIZE	G	P	Q	S	NUMERAL SERIES
DIO-1a	10" x 27"	6"	4"	3"	6"	C
DIO-4a	12" x 36"	10"	4"	5"	7"	C
DIO-2a	10" x 36"	6"	4"	3"	6"	C
DIO-5a	12" x 48"	10"	4"	5"	6"	C
DIO-3a	10" x 45"	6"	4"	3"	6"	C
DIO-6a	12" x 60"	10"	4"	5"	6"	C

NO.	REVISION	APPROVED BY	DATE

APPROVAL RECOMMENDED:
Eiichi Tanaka 1/17/78
 TRAFFIC ENGINEER DATE

APPROVED:
Robert S. Sakai 1/18/78
 ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

MILEPOSTS

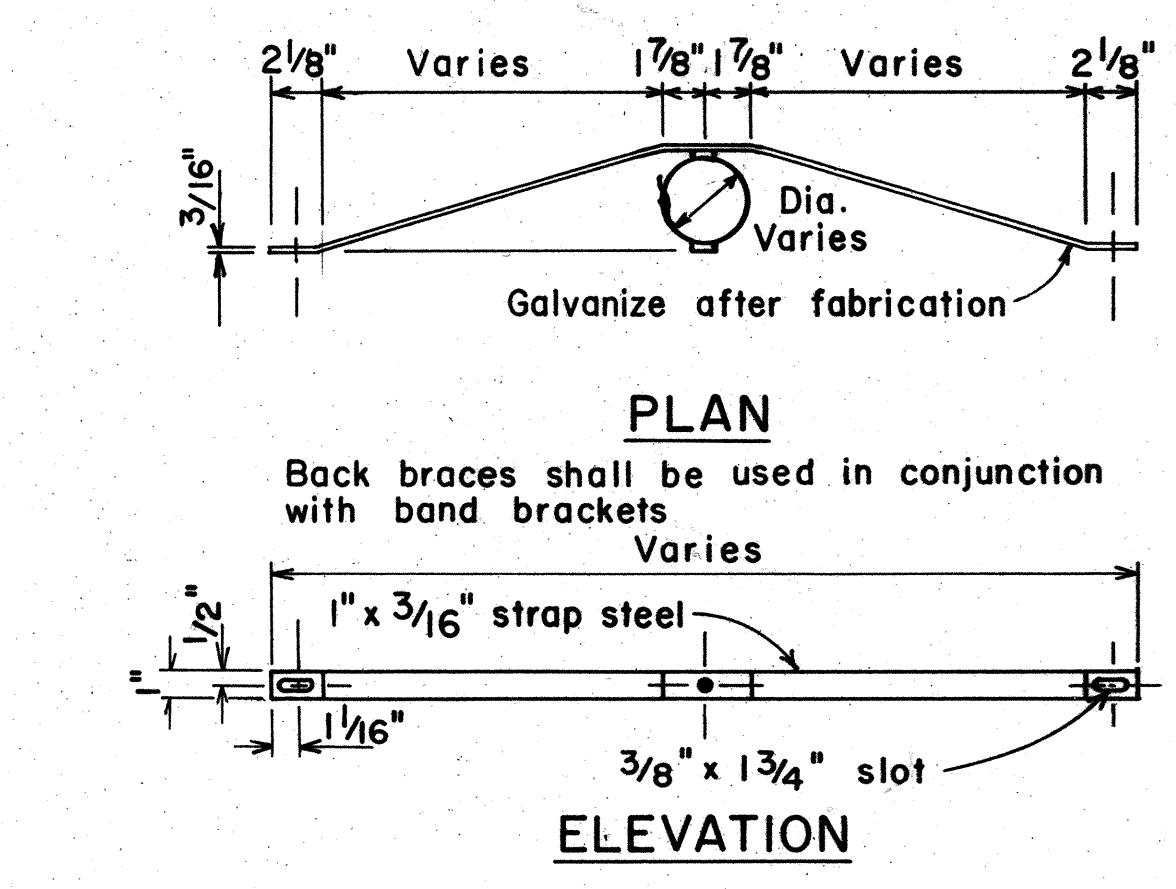
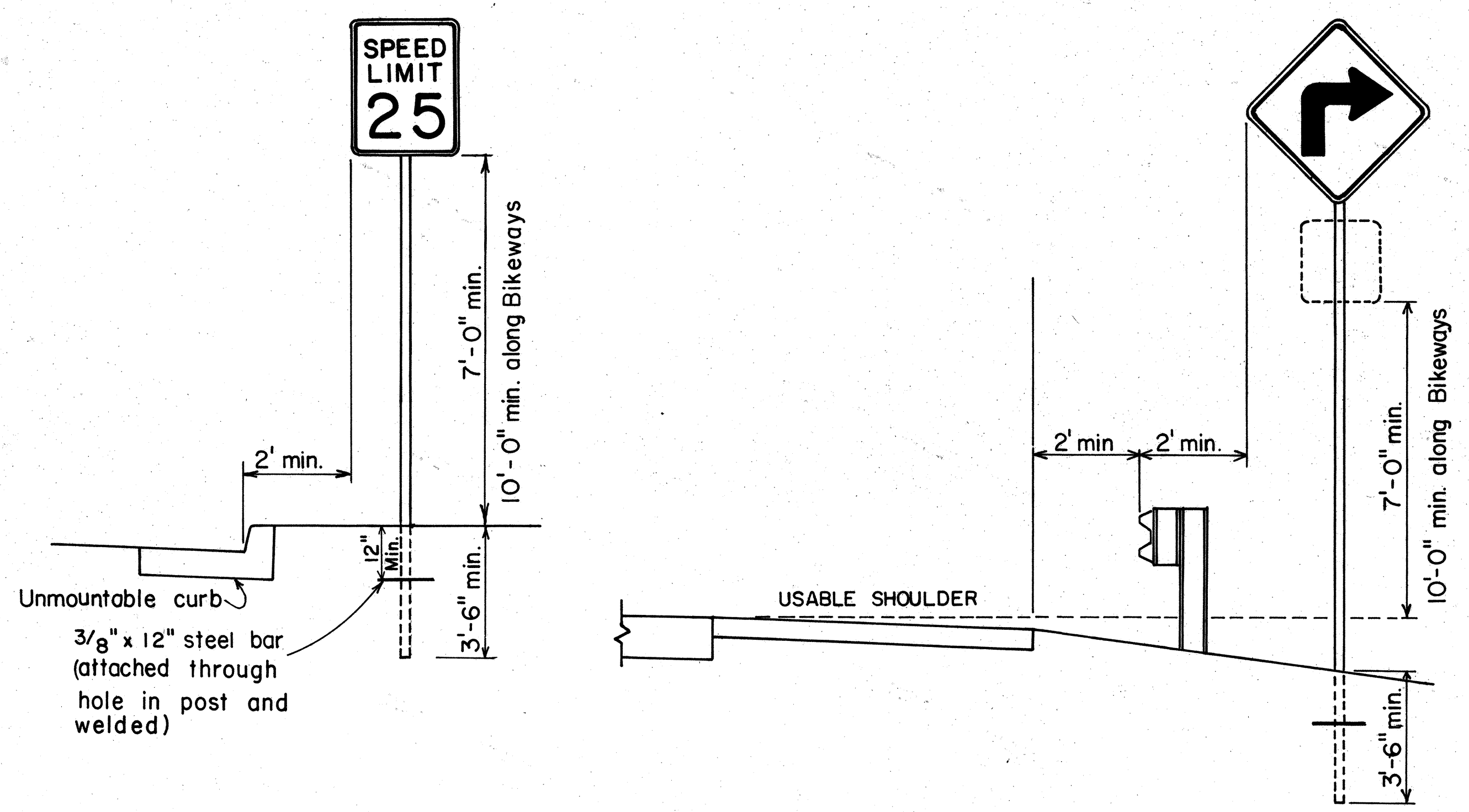
SCALE: As Shown DATE: December, 1977

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

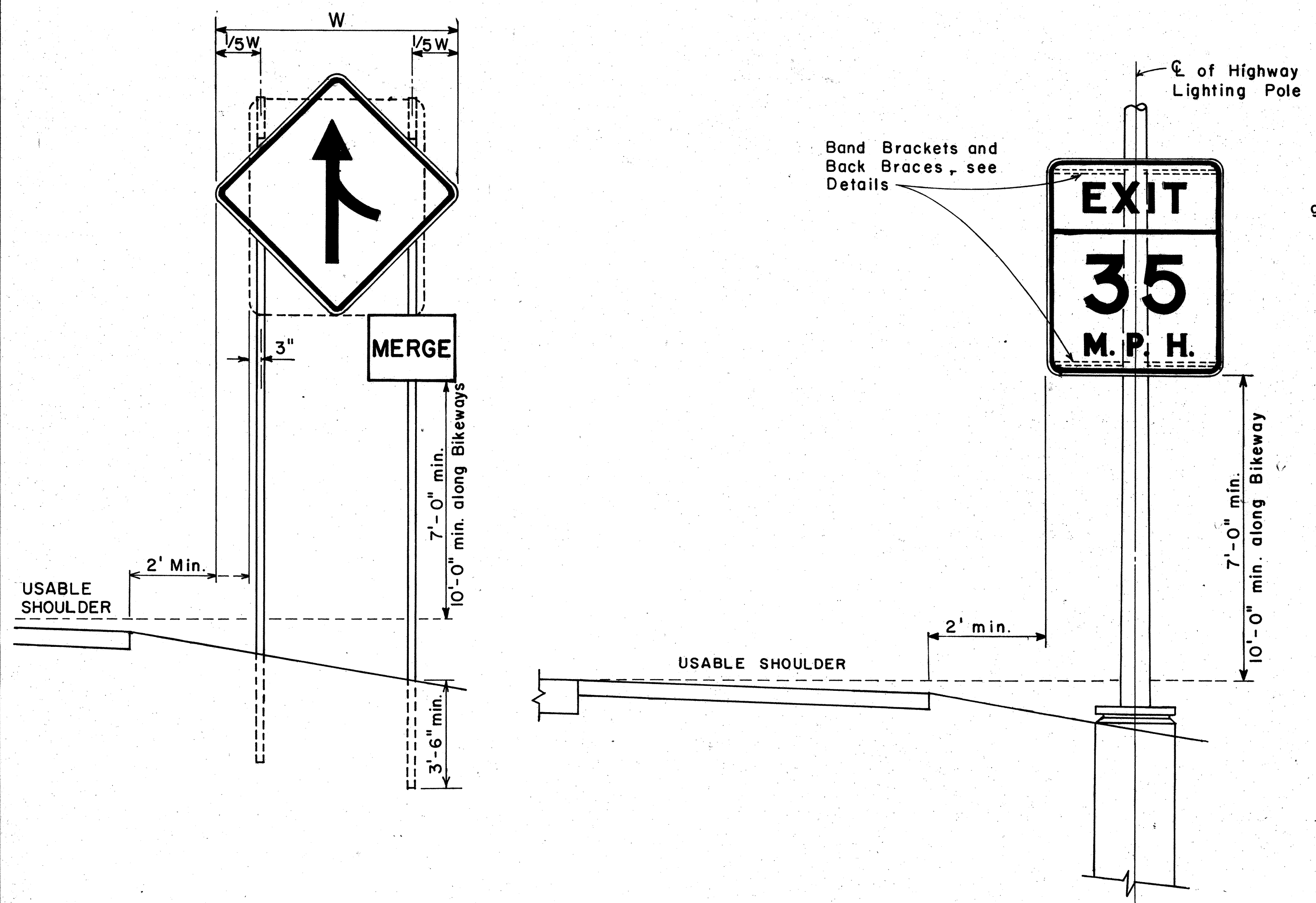
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-090-1(13)	1978	95	174

GENERAL NOTES

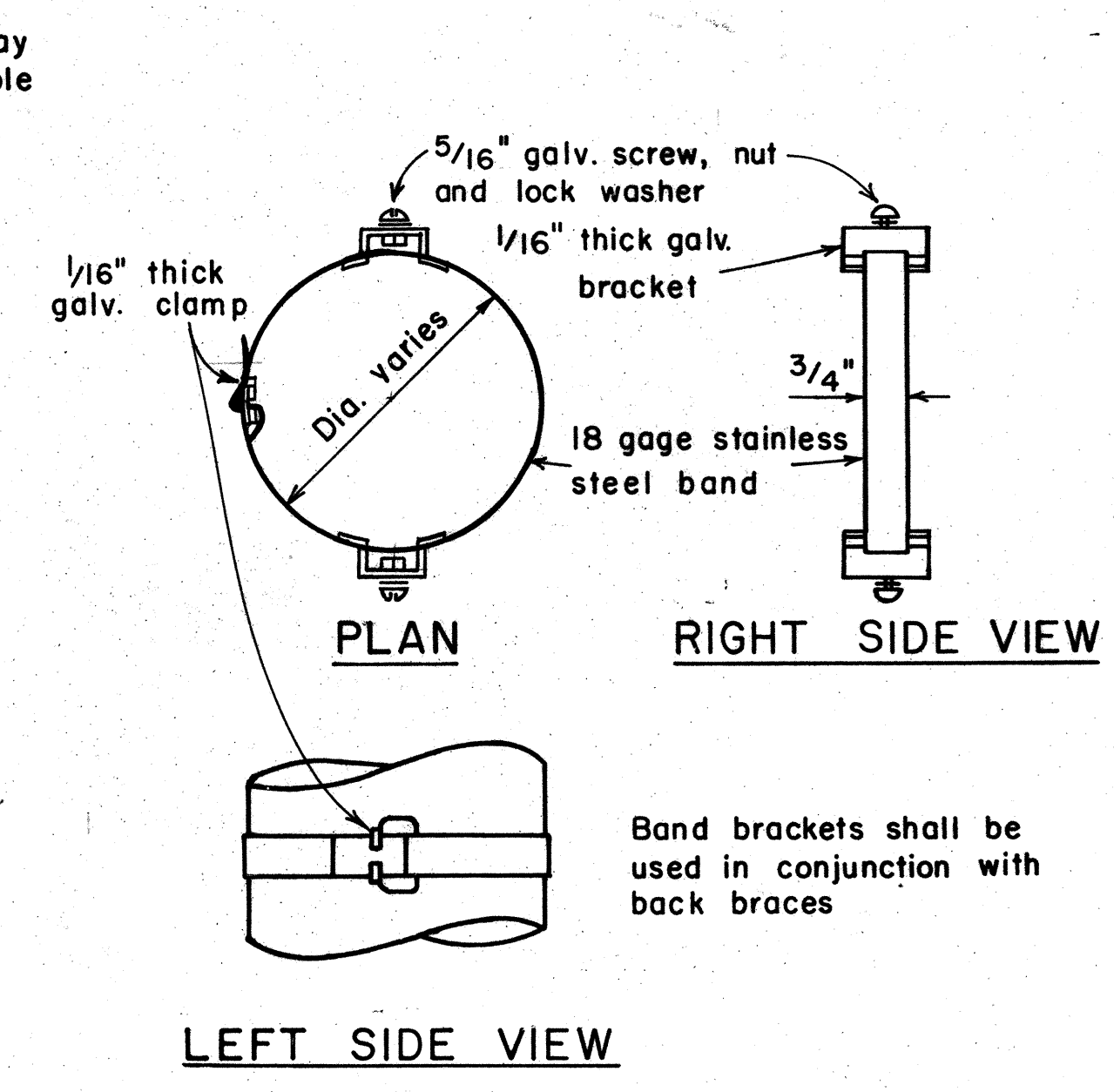
1. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two sign posts.
2. All signs larger than 10 sq. ft. in area or 48" inches and wider, and mounted on other than two posts supports (i.e., on highway lighting poles) shall have at least two sets of band brackets and back braces.
3. 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.
4. Signs shall be attached to post with 5/16" galv. bolts with nuts and 7/8" x 0.06" stainless steel washers with neoprene rubber gasket.
5. Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
6. (R) or (L) indicates right or left and shall be as shown on the plans.



BACK BRACE DETAILS FOR BALANCED SIGN INSTALLATION



**HEIGHT AND LATERAL LOCATION OF SIGNS
TYPICAL INSTALLATION**



TYPICAL BAND BRACKET FOR MOUNTING TRAFFIC SIGNS

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

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

NO.	REVISION	APPROVED BY	DATE
1	Supercedes Sht. DT-100 approved 12/30/69	H.T.	11/15/77

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES 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. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	36	174

 R1-1 30"x30" R1-1-A 36"x36" 4-WAY R1-3 12"x6" R1-3-A 18"x9"	 R1-2 36"x36"x36" R1-2-A 48"x48"x48"	 R2-1(50) 24"x30" R2-1(50)-A 48"x60"	 R2-2(40) 24"x24" R2-2(40)-A 48"x48"	 R2-4a(50/40) 24"x48" R2-4a(50/40)-A 48"x96"	 R2-5b(30) 24"x30" R2-5b(30)-A 48"x60"	 R3-1 24"x24" 24"x18" R3-1-A 48"x48" 48"x36"	 R3-2 24"x24" 24"x18" R3-2-A 48"x48" 48"x36"	 R3-3 24"x24" R3-3-A 48"x48"	 R3-4 24"x24" 24"x18" R3-4-A 48"x48" 48"x36"	 R3-5(L) 30"x36" R3-5(L)-A 48"x60"	 R3-6(L) 30"x36" R3-6(L)-A 48"x60"
 R3-7(R) 30"x30" R3-7(R)-A 48"x48"	 R3-8(L) 30"x30" R3-8(L)-A 36"x36" R3-8(L)-B 48"x48"	 R3-9 24"x30"	 R4-1 24"x30"	 R4-2 24"x30"	 R4-3 24"x30" R4-3-A 48"x60"	 R4-5 24"x30"	 R4-6(500) 24"x30"	 R4-7 24"x30" 24"x18"	 R4-8 24"x30" 24"x18"	 R5-1 30"x30" R5-1-A 48"x48"	 R5-2 24"x24" 24"x18"
 R5-4 24"x30"	 R5-6 24"x24" 24"x18"	 R5-9 36"x24"	 R6-1(R) 36"x12"	 R6-2(R) 18"x24"	 R7-1 12"x18" R7-1-A 24"x30"	 R7-4 12"x18" R7-4-A 24"x30"	 R7-107(R) 12"x18"	 R7-108 12"x18"	 R7-201 12"x6" R7-201-A 24"x12"	 R8-1 24"x30"	 R8-2 24"x30"
 R8-3 24"x30"	 R8-4 30"x24" R8-4-A 48"x36"	 R8-5 24"x30"	 R8-6 24"x30"	 R8-7 30"x24" R8-7-A 48"x36"	 R9-1 18"x24"	 R9-2 12"x18"	 R9-3 12"x18"	 R9-4 18"x24"	 R10-1 12"x18"	 R10-2 12"x18"	 R10-3 9"x12"
 R10-4 9"x12"	 R10-5 24"x30"	 R10-6 24"x36"	 R10-7 24"x30"	 R10-8 24"x30"	 R10-9 24"x30"	 R10-10 24"x30"					
 R11-1 24"x30"	 R11-2 48"x30"	 R11-3(10) 60"x30"	 R11-4 60"x30"	 R12-1(10) 24"x30"							

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.

APPROVAL RECOMMENDED:
Eisaki Tanaka
 TRAFFIC ENGINEER 3/17/78 DATE

APPROVED:
Robert Roberts
 ASSISTANT CHIEF, ENGINEERING 3-20-78 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.	10/16/74

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

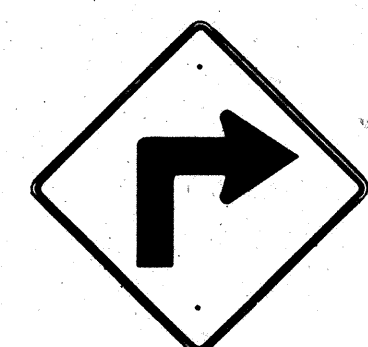
STANDARD DETAILS
REGULATORY SIGNS

NOT TO SCALE

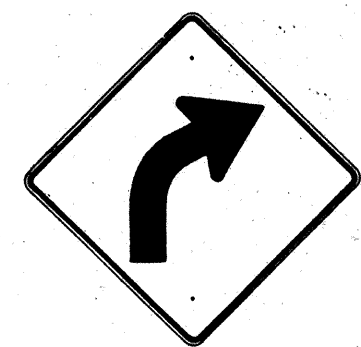
SHEET No. 13 OF 21 SHEETS DT 101

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

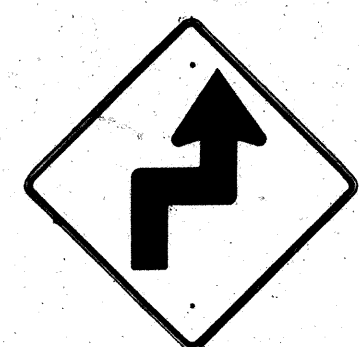
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII*	HAW.	F-030-1(13)	1978	97	174



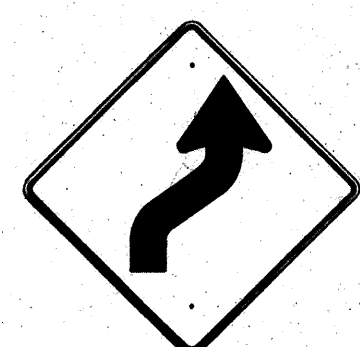
W1-1(R) 30"x30"
W1-1(R)-A 48"x48"



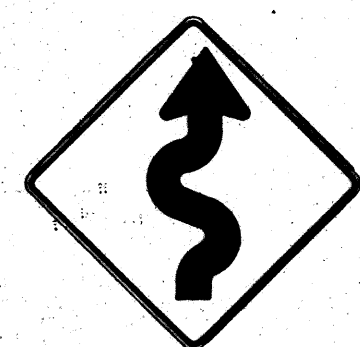
W1-2(R) 30"x30"
W1-2(R)-A 48"x48"



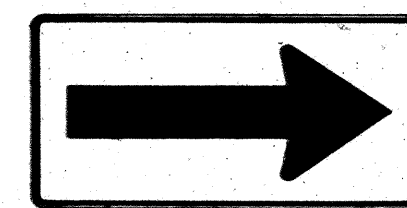
W1-3(R) 30"x30"
W1-3(R)-A 48"x48"



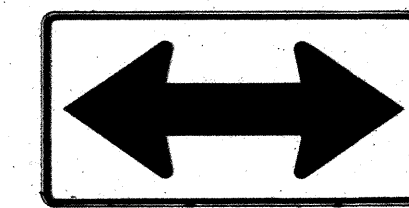
W1-4(R) 30"x30"
W1-4(R)-A 48"x48"



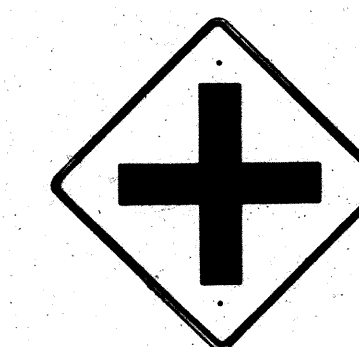
W1-5(R) 30"x30"
W1-5(R)-A 48"x48"



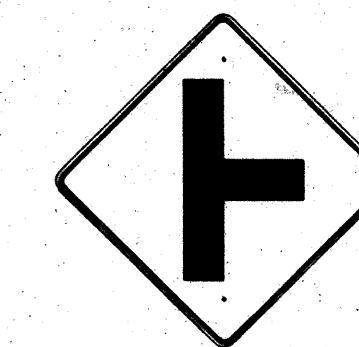
W1-6 48"x24"



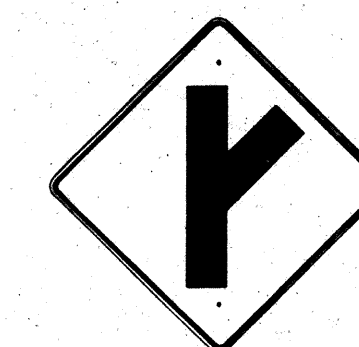
W1-7 48"x24"



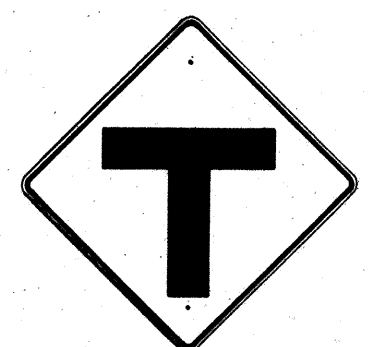
W2-1 30"x30"
W2-1-A 48"x48"



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"



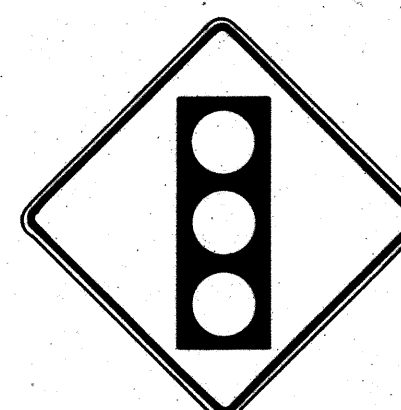
W2-5 30"x30"
W2-5-A 48"x48"



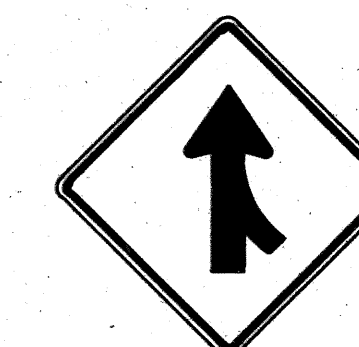
W3-1 30"x30"
W3-1-A 36"x36"



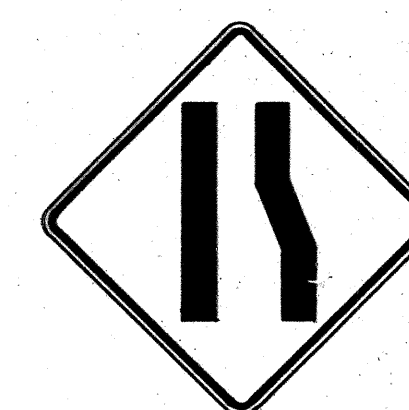
W3-2 30"x30"
W3-2-A 36"x36"



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"



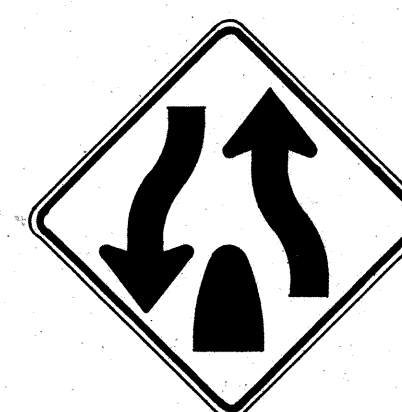
W5-2 30"x30"
W5-2-A 36"x36"



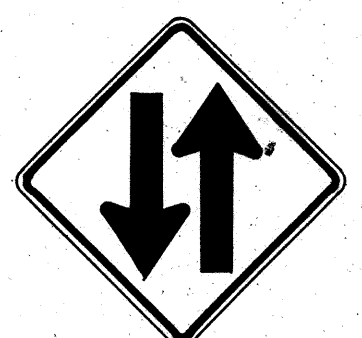
W5-3 36"x36"



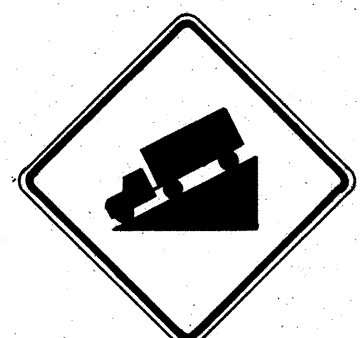
DIVIDED HIGHWAY
W6-1 36"x36"
24"x18"



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"



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



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



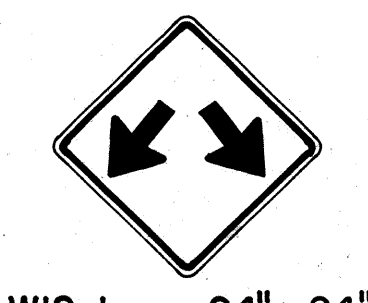
PED XING
W11-2 30"x30"
24"x18"
W11-2-A 36"x36"
24"x18"



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



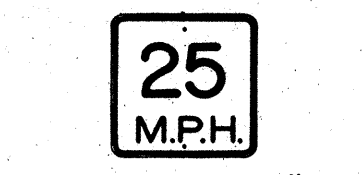
FARM MACHINERY
W11-5 30"x30"
24"x18"
W11-5-A 36"x36"
24"x18"



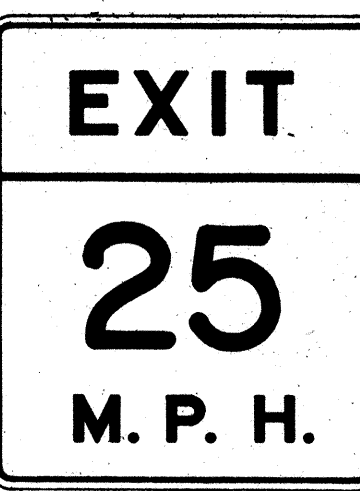
W12-1 24"x24"
W12-1-A 36"x36"
W12-1-B 48"x48"



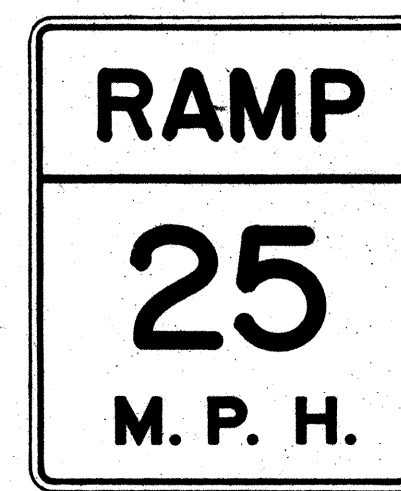
W12-2(12'-6") 36"x36"
24"x18"



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
TRAFFIC ENGINEER
DATE 3/17/72

APPROVED:
Shelton D. Selside
ASSISTANT CHIEF, ENGINEERING
DATE 3-20-72

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.H.	7-16-75
4	Revised General Note 5	H.T.	9-14-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
WARNING SIGNS

NOT TO SCALE

SHEET No. 14 OF 21 SHEETS DT 102

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F0301(13)	1978	ADD.98	174

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 WAY
R1-4 18" x 6"

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

SPEED LIMIT ENFORCED BY VASCAR
4" Series D
- 4" Series C
- 3" Series D
- 5" Series C
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"

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"

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

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

TURN RIGHT ANY TIME WITH CAUTION
4" Series C
R16-1 24" x 30"

NO LEFT TURN ON RED
4" Series D -
3" Series D -
2" Series D -
3" Series D -
R16-3 18" x 24"

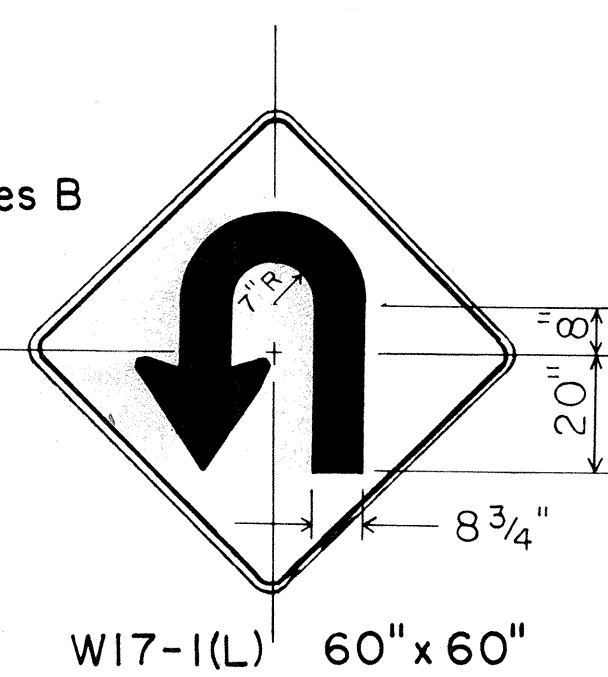
NO RIGHT TURN ON RED
R16-4 18" x 24"

UNLICENSED VEHICLES, BICYCLES, CYCLES UNDER 5 H.P., PEDESTRIANS KEEP OUT FREEWAY
3" Series C
4" Series E
R16-5 36" x 42"

U TURN AHEAD
8" Series F
5" Series D
R16-6 24" x 30"

U TURN OK
8" Series F
5" Series D
R16-7 24" x 30"

MOTOR-DRIVEN CYCLES PROHIBITED
4" Series B
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
6" Series C
W3-4 48" x 48"

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

THRU TRAFFIC MERGE LEFT
6" Series E
W9-3(L) 48" x 48"

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

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

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

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

DELAYED GREEN
4" Series C
W15-1 24" x 24"

ADVANCE GREEN
W15-2 24" x 24"

END FREEWAY 1/2 MI
8" Series E
CW16-1(1/2) 60" x 60"

RIGHT LANE EXIT ONLY
8" Series E
W18-1 48" x 60"

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

APPROVED:
Robert Z. Dakeishi 5/3/78
ASSISTANT CHIEF, ENGINEERING DATE

DATE	_____
ORIGINAL PLAN	_____
DESIGNED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

NO.	REVISION	APPROVED BY	DATE
	Supersedes Sht. DT 103 approved 3/20/72	H.T.	5/3/78

S1-1 36" x 36"

S2-1 36" x 36"

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
7" Series D
CW23-4 48" x 48"

USE SIDEWALK
4" Series C
R18-1 24" x 18"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
MISCELLANEOUS SIGNS
NOT TO SCALE DATE: MAY, 1978
SHEET No. 15 OF 21 SHEETS DT 103

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	99	174



CW20-1a 48"x 48"



CW20-2d 48"x 48"



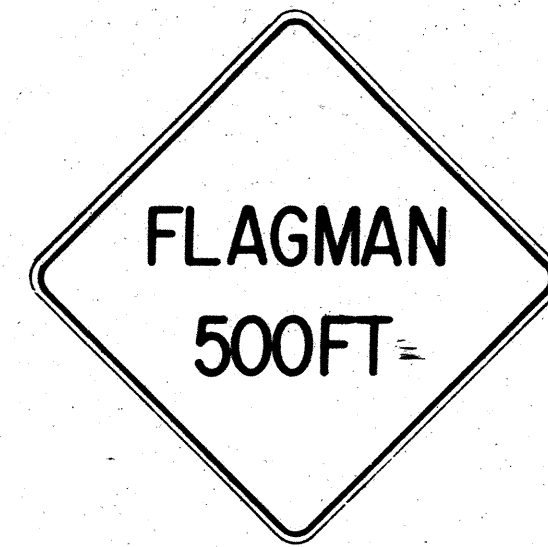
CW20-3b 48"x 48"



CW20-4d 48"x 48"



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



CW20-7c 48"x 48"



CW21-1 30"x 30"



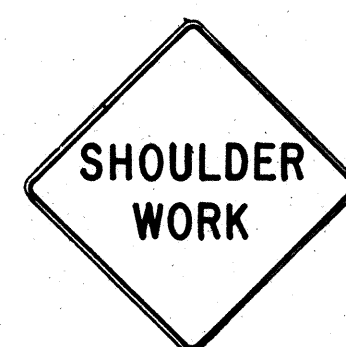
CW21-2 30"x 30"



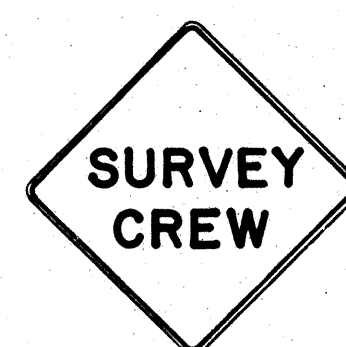
CW21-3 36"x 36"



CW21-4 36"x 36"



CW21-5 30"x 30"



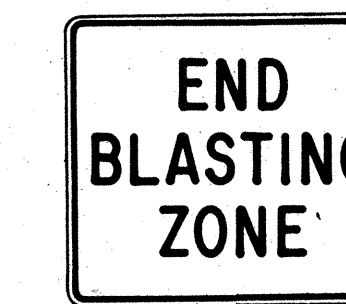
CW21-6 30"x 30"



CW22-1b 48"x 48"



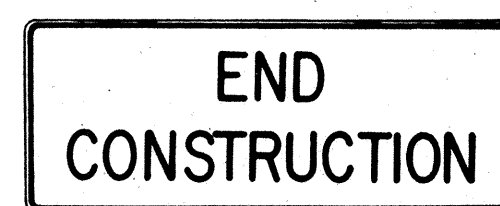
CW22-2 42"x 36"



CW22-3 42"x 36"



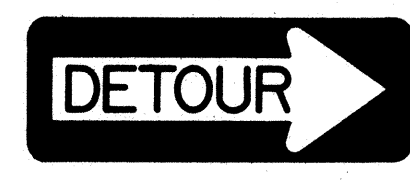
CG20-1(5) 60"x 36"



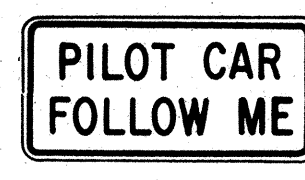
CG20-2 60"x 24"



CM4-9(R) 30"x 24"



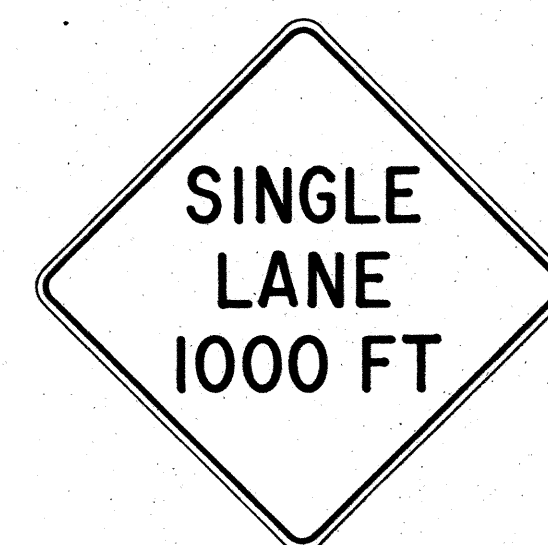
CM4-10(R) 48"x 18"



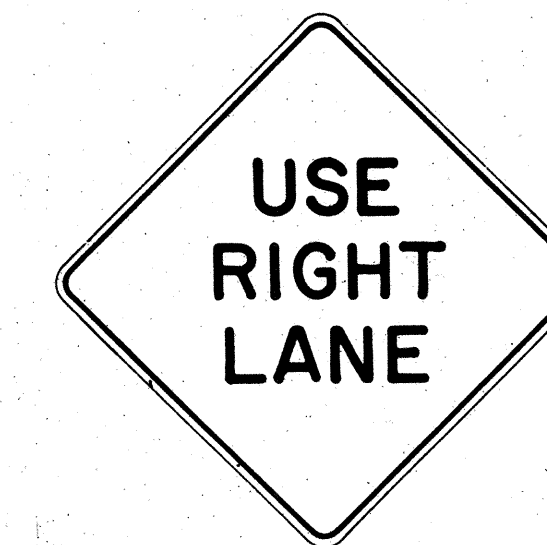
CG20-4 36"x 18"



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 2/23/72
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.	10/16/74
3	Revised General Note 2	HT.	9-16-75
4	Revised General Note 2 and sign CG20-1(5)	HT.	7-14-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

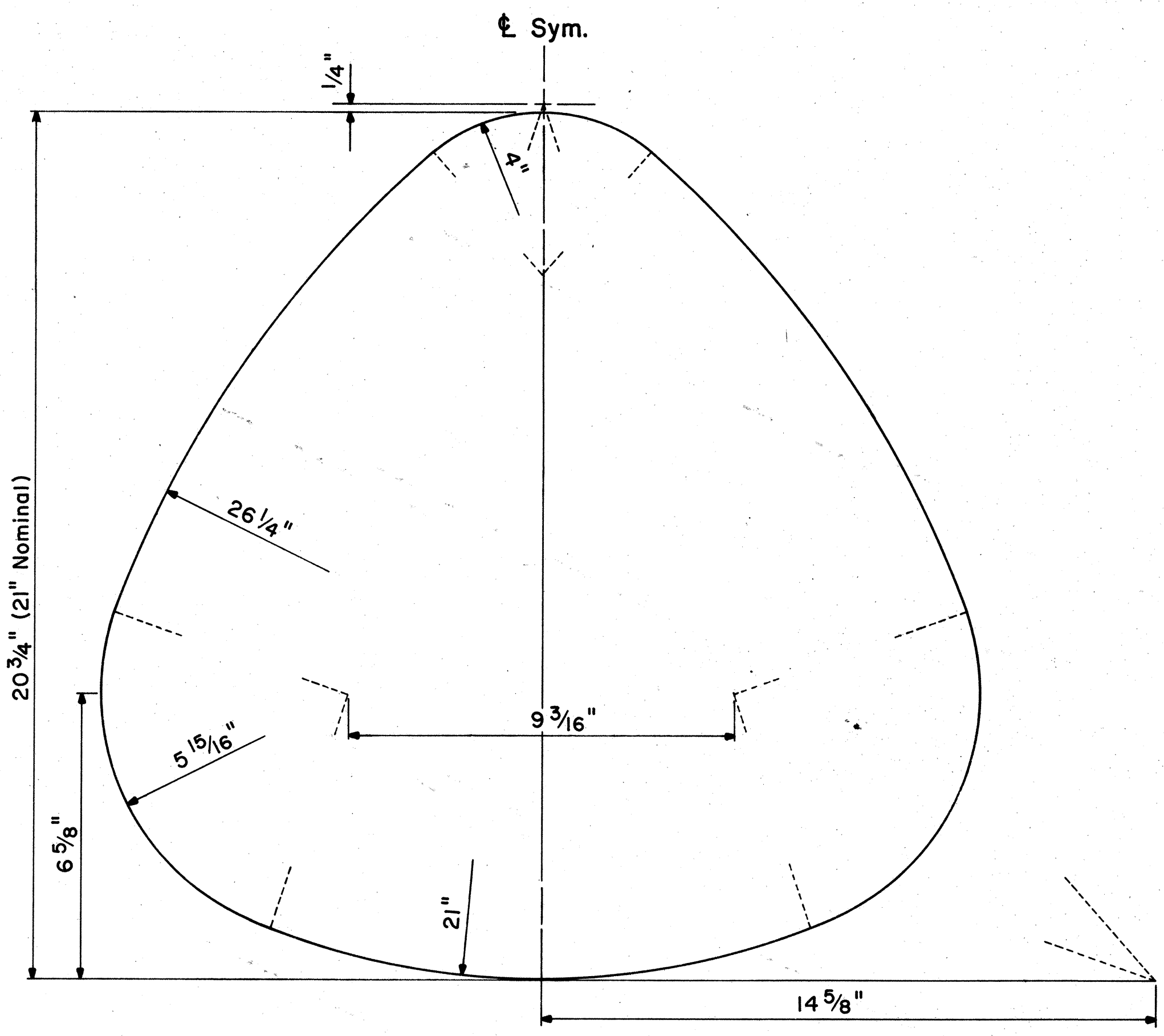
STANDARD DETAILS
CONSTRUCTION SIGNS

NOT TO SCALE

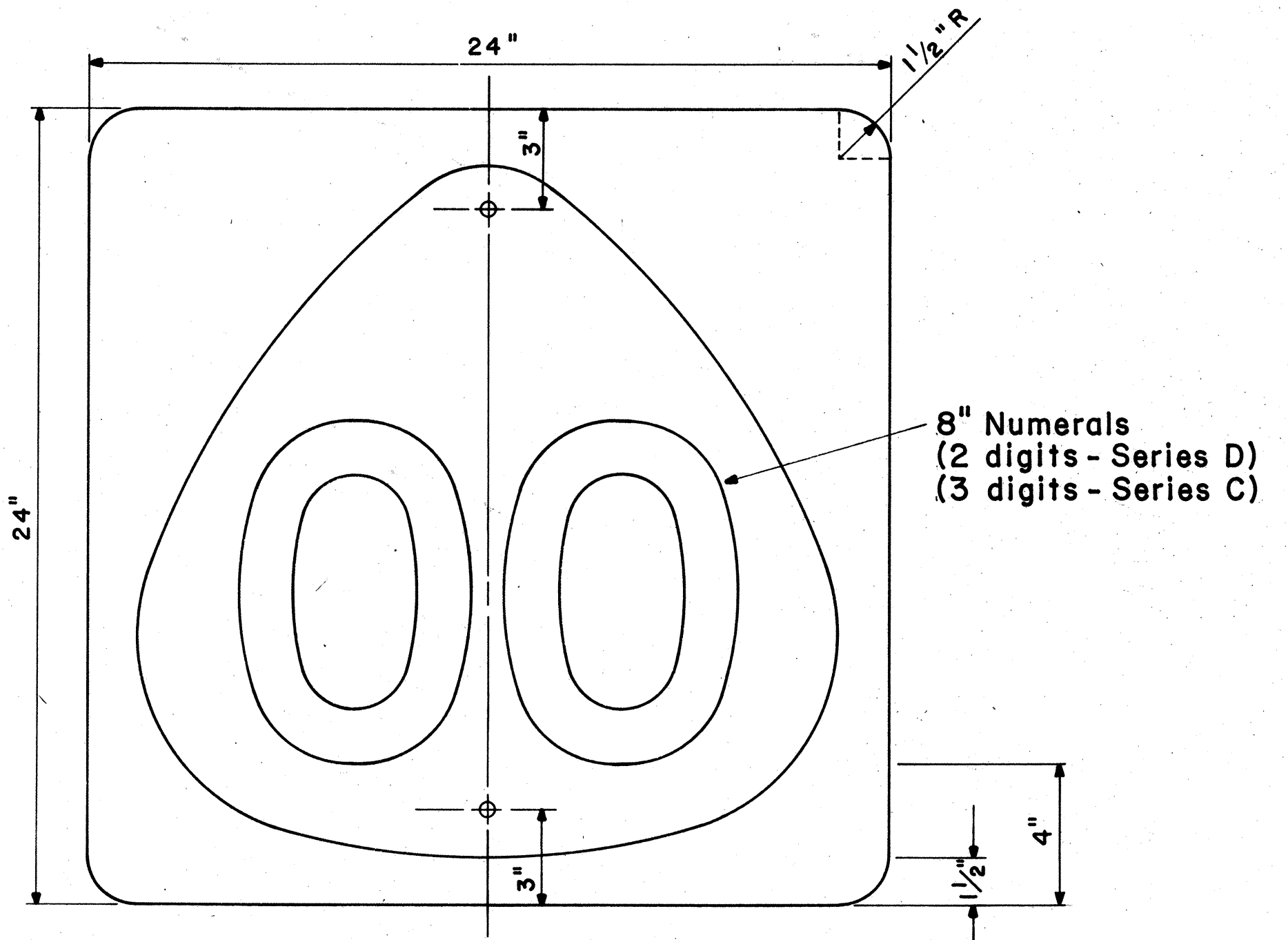
SHEET No. 10 OF 21 SHEETS DT 104

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

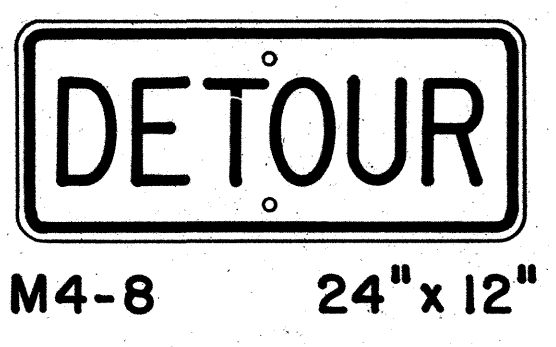
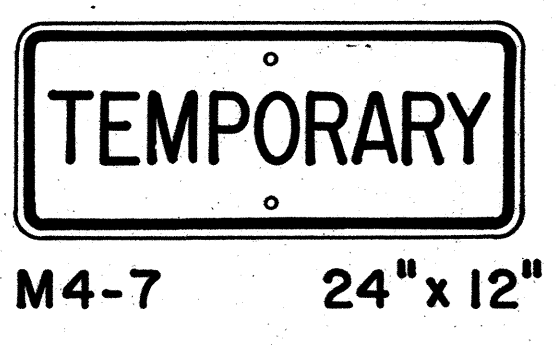
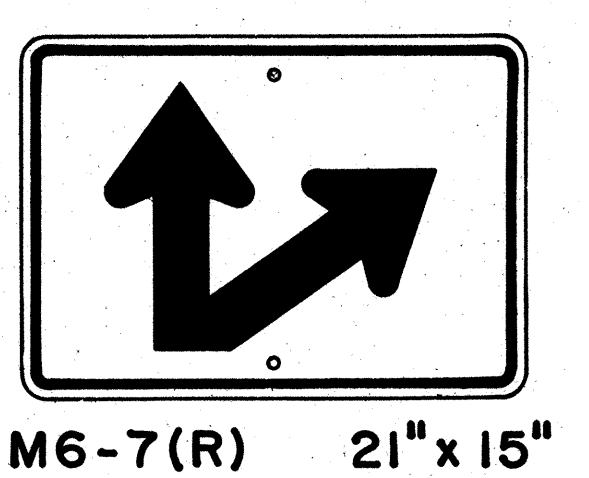
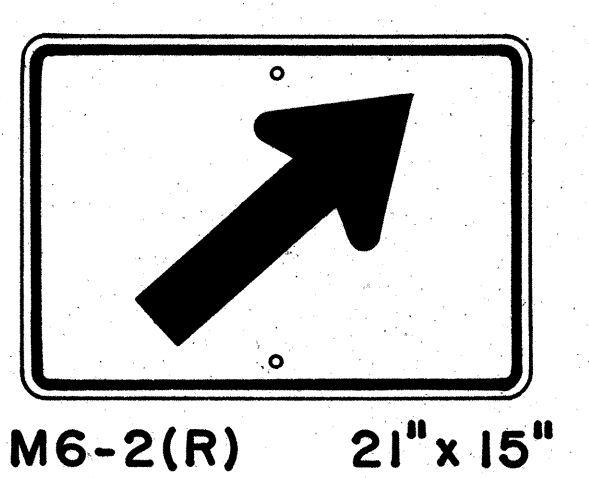
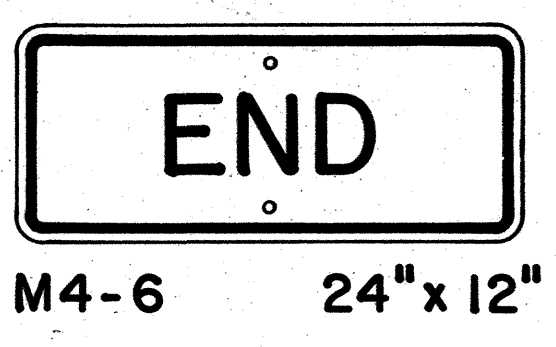
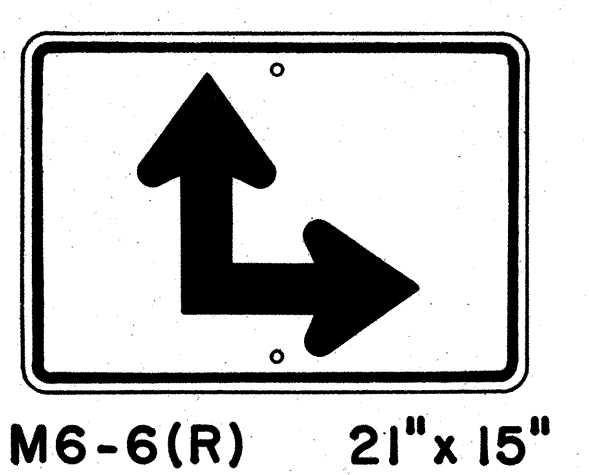
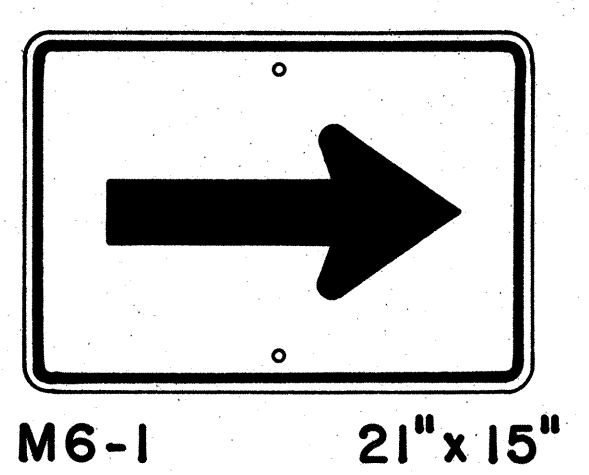
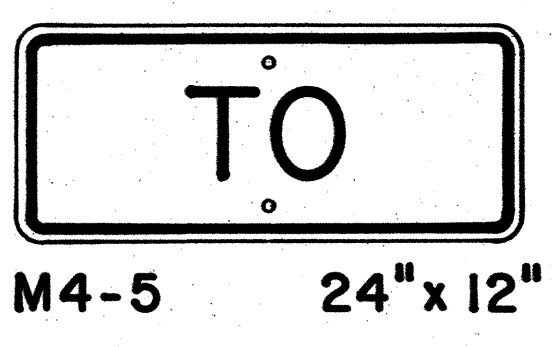
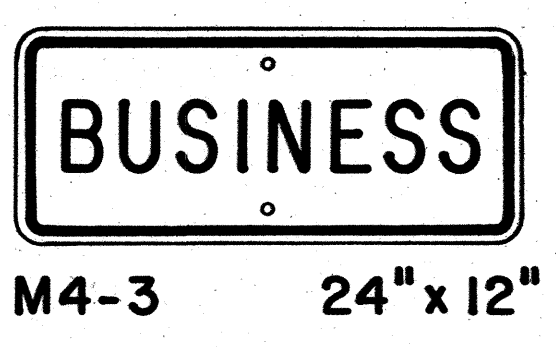
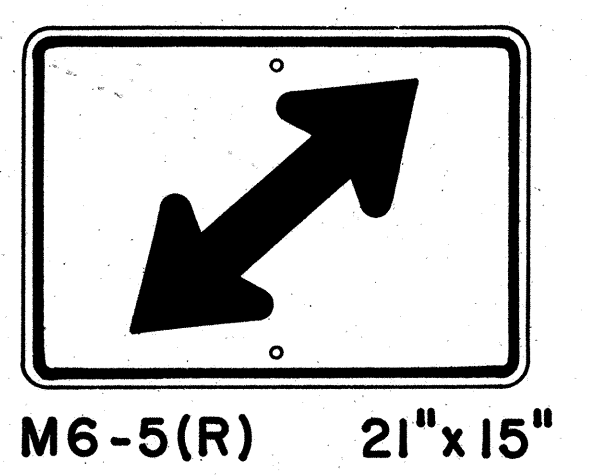
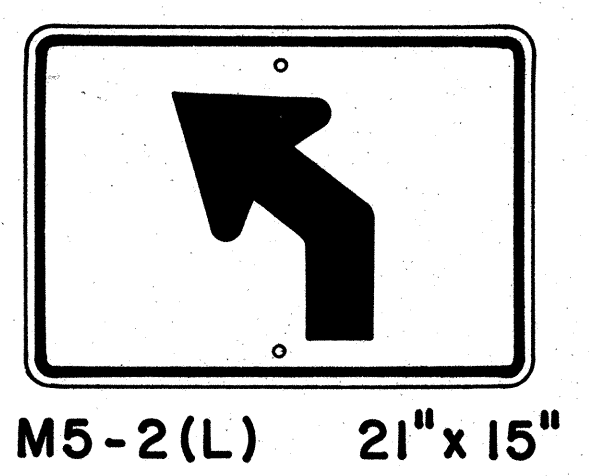
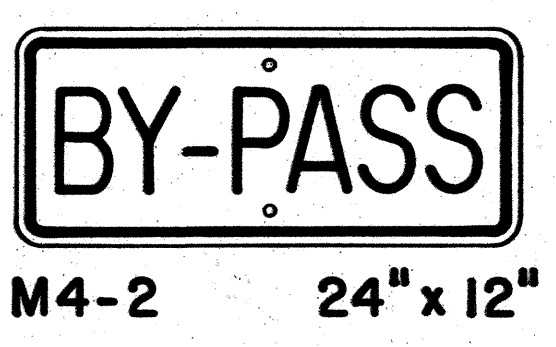
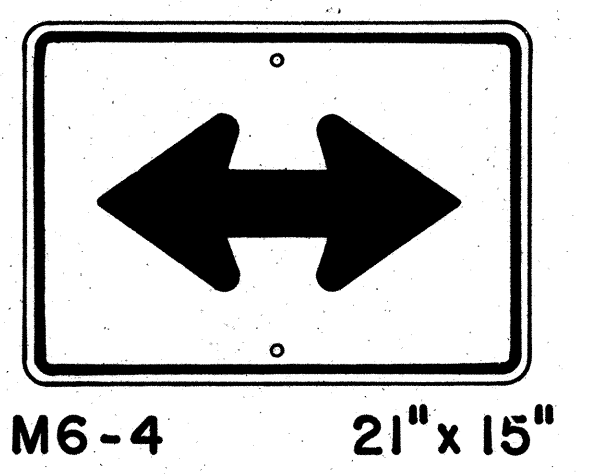
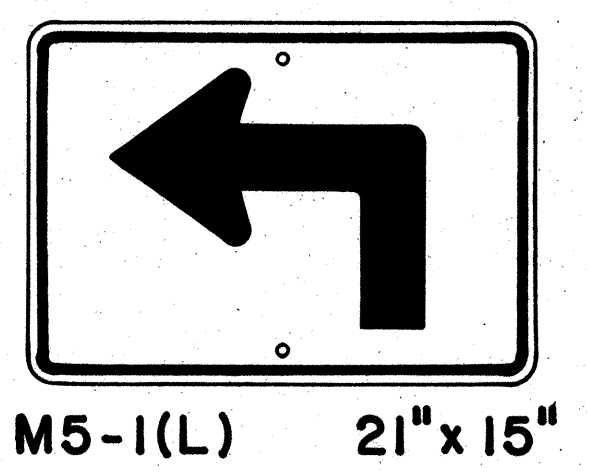
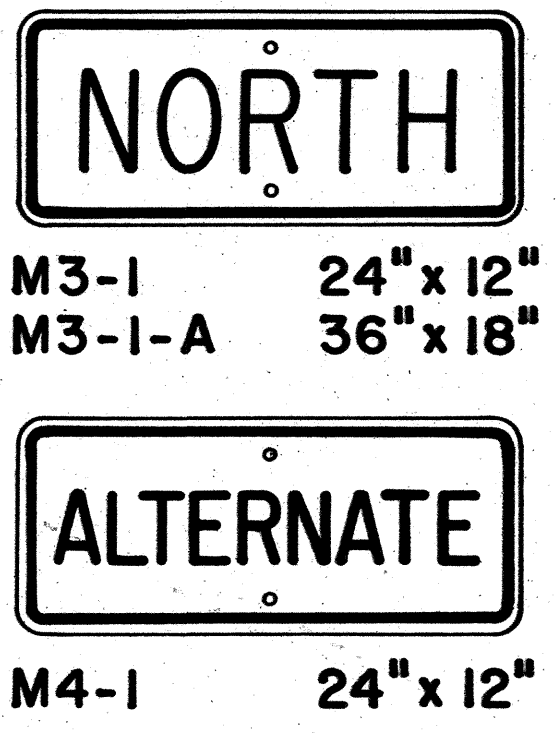
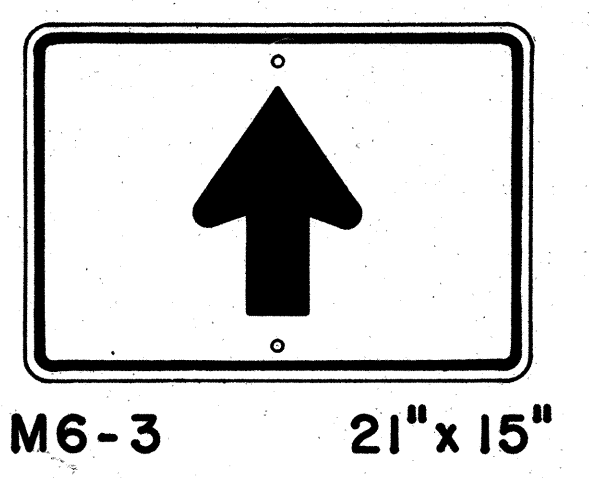
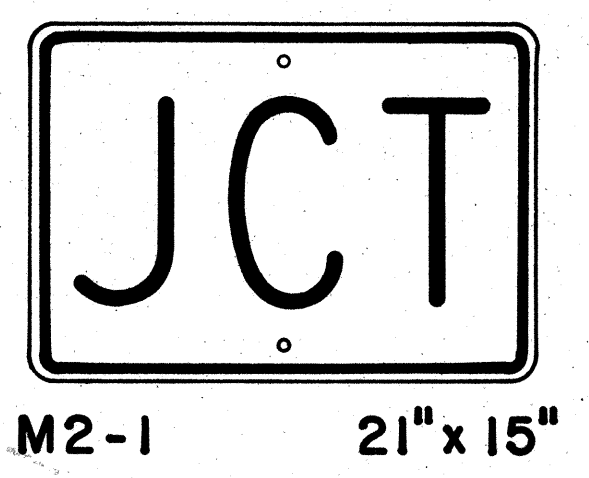
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F030-1(13)	1978	100	174



STATE ROUTE MARKER DETAIL
Not to Scale



STATE ROUTE MARKER
M1-6(00) 24" x 24"
Scale: 1/4" = 1"



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.

AUXILIARY MARKERS
Not to Scale

APPROVAL RECOMMENDED:
Erich Tanaka 6/6/72
TRAFFIC ENGINEER DATE

APPROVED:
Robert S. Sakai 6-1-72
ASSISTANT CHIEF, ENGINEERING DATE

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

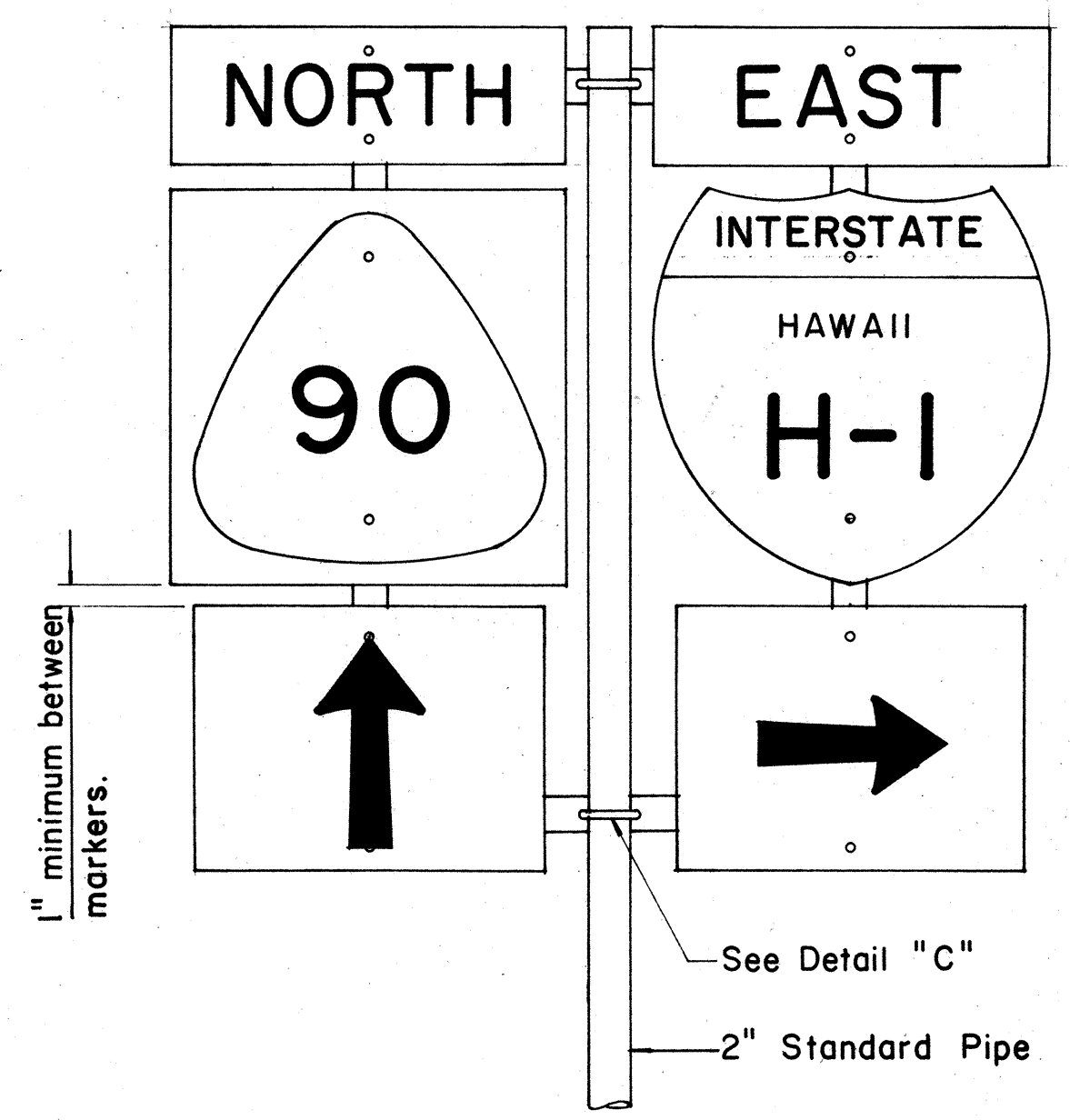
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
STATE ROUTE MARKER
AND AUXILIARY MARKERS

Scale: As Shown
SHEET NO 17 OF 21 SHEETS DT105

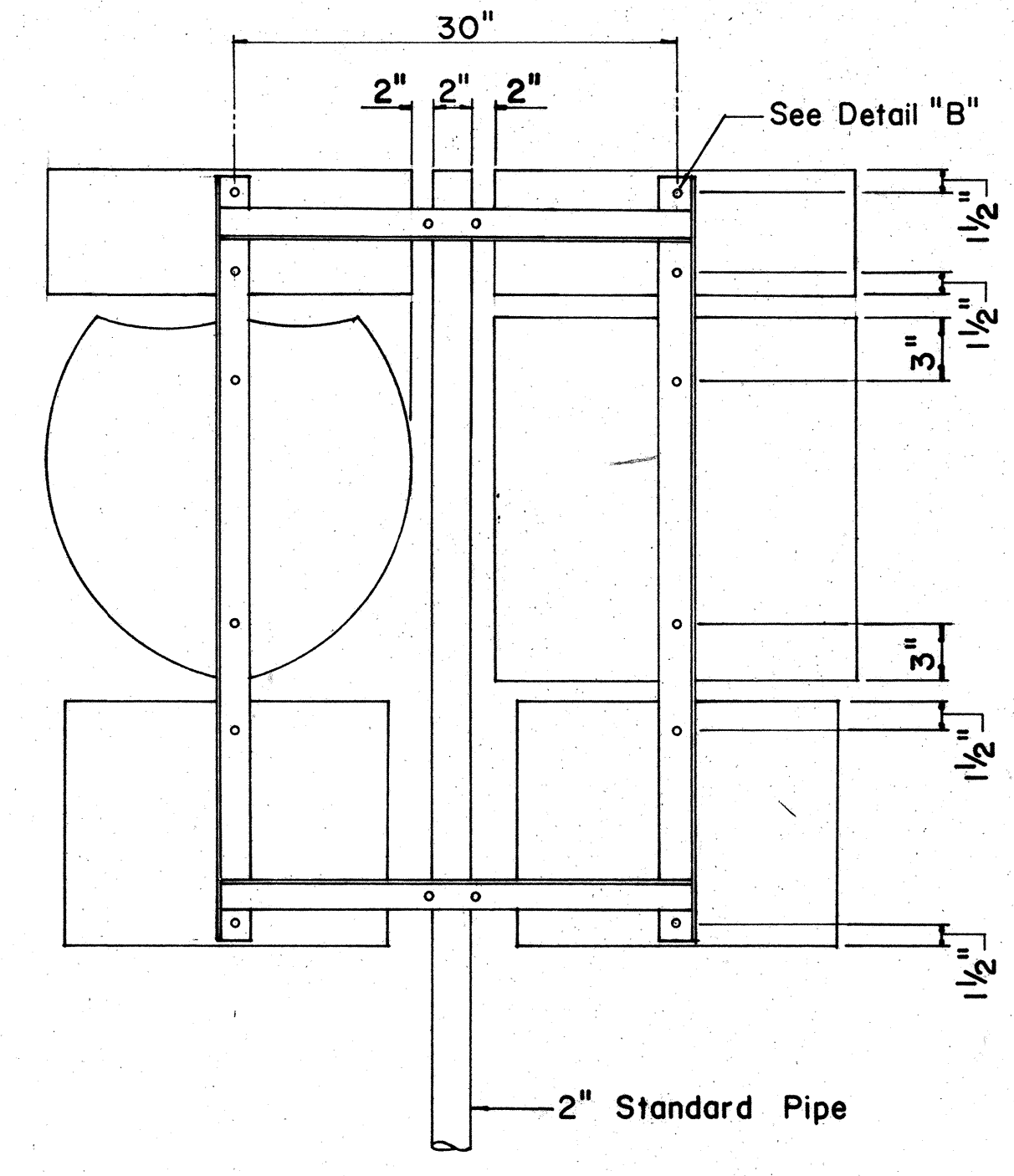
DATE
DRAWN BY
DESIGNED BY
CHECKED BY
ORIGINAL PLAN
NOTE BOOK
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(3)	1978	101	174



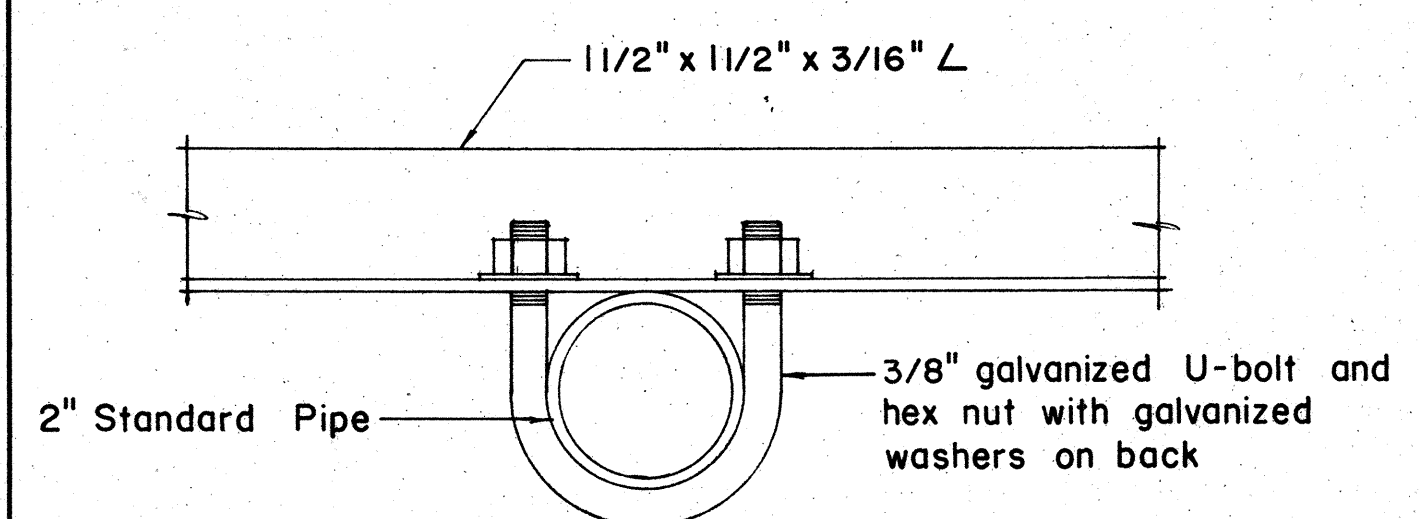
FRONT ELEVATION

TYPE "B" ASSEMBLY
Not to Scale

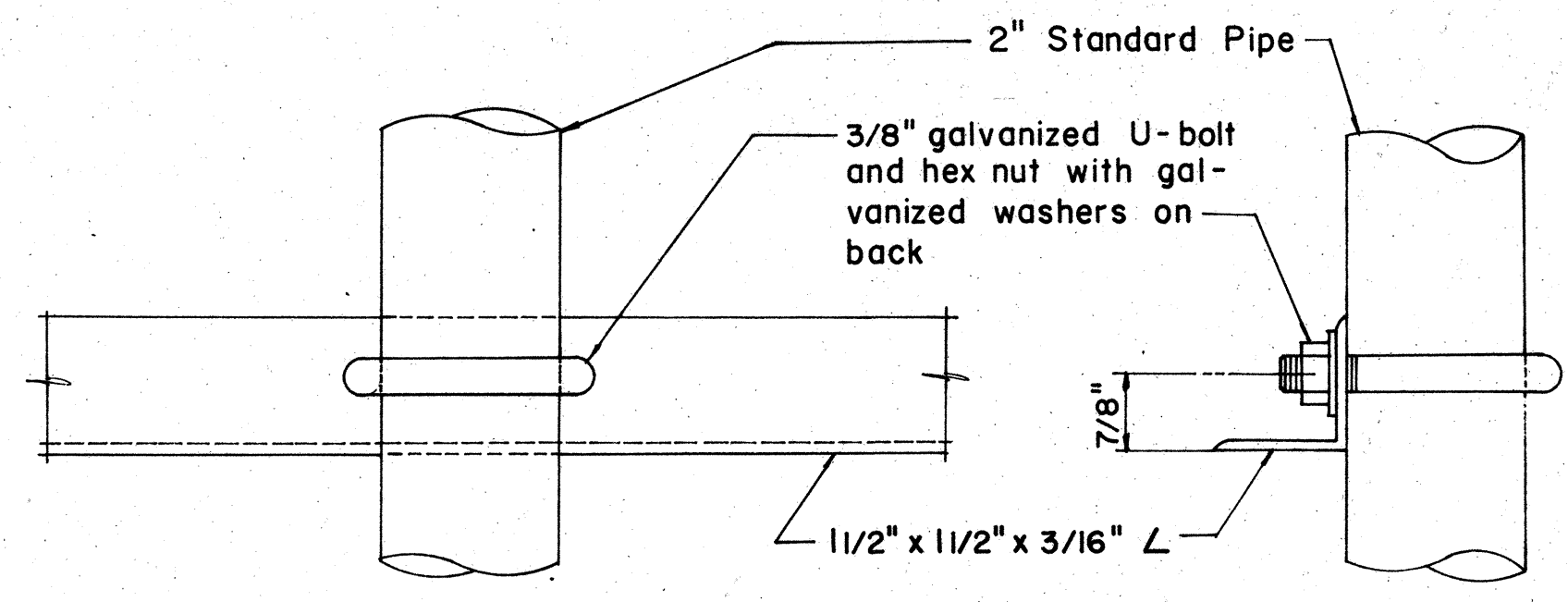


REAR ELEVATION

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.



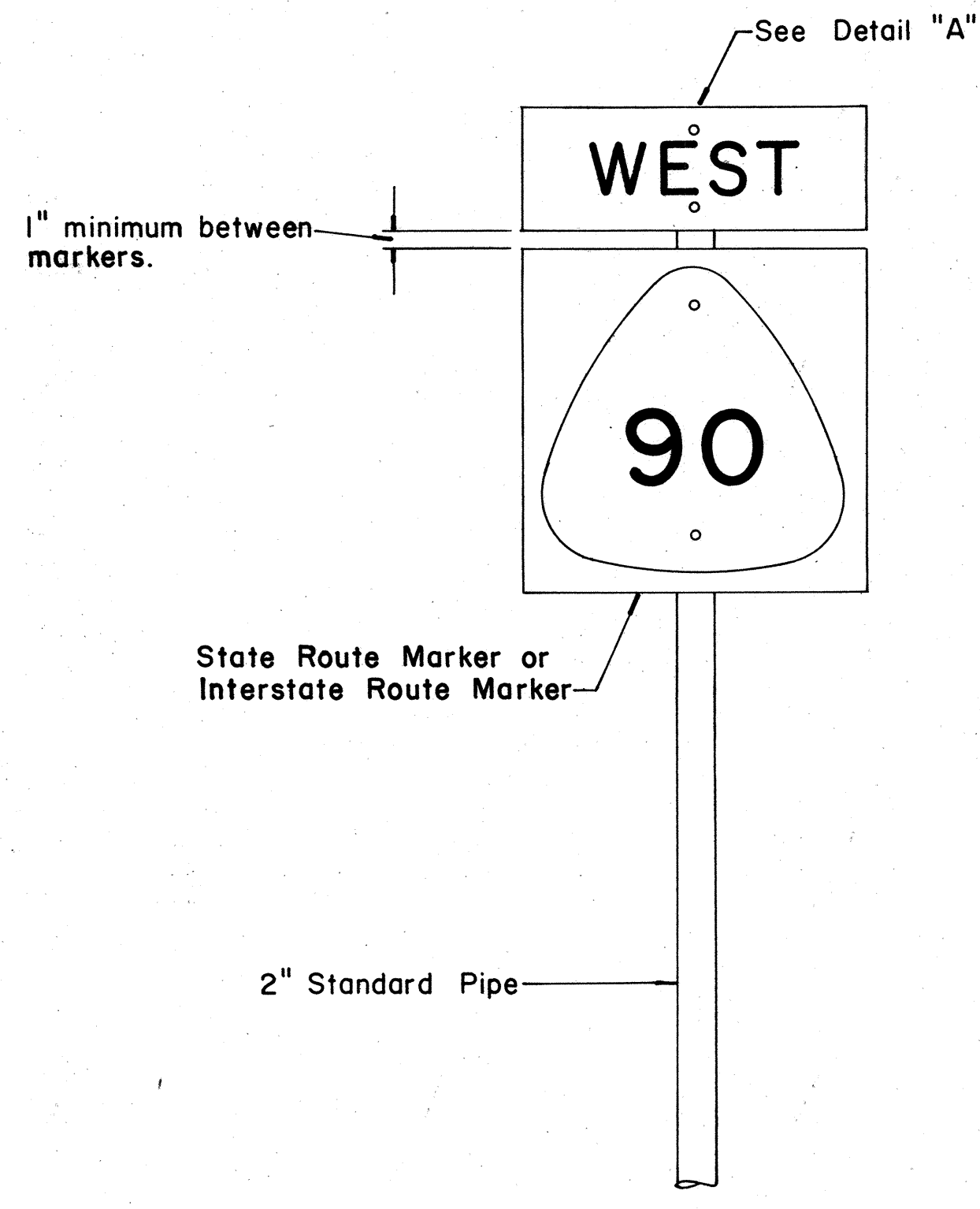
PLAN



FRONT ELEVATION

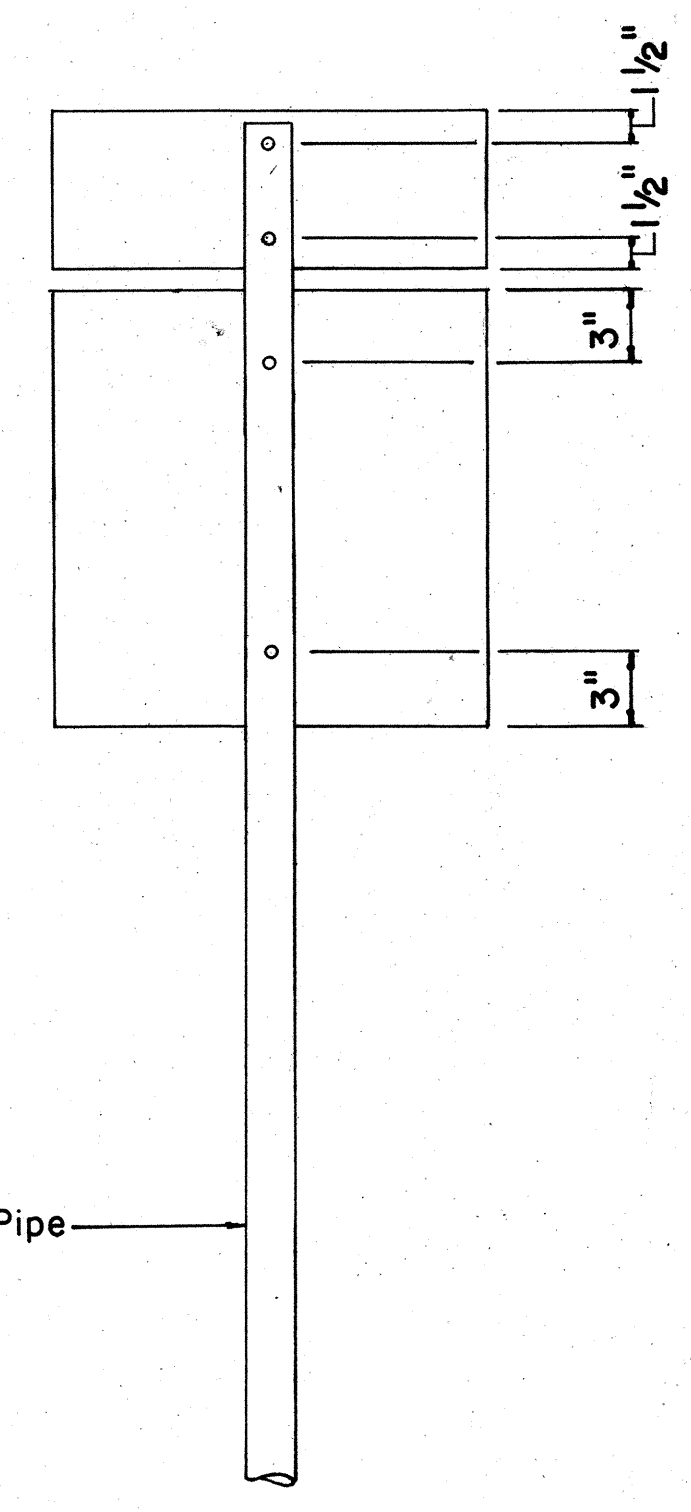
SIDE ELEVATION

DETAIL "C"



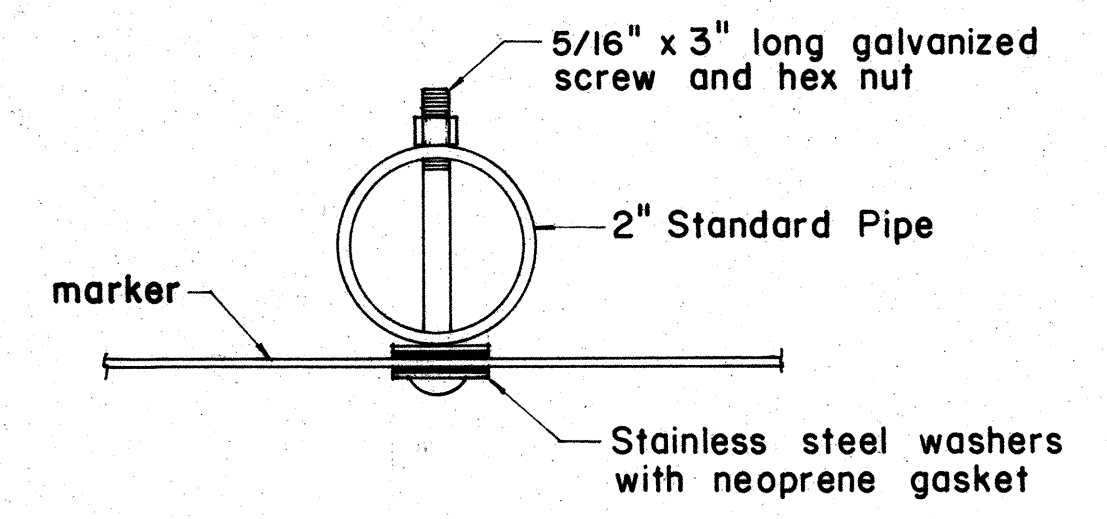
FRONT ELEVATION

TYPE "A" ASSEMBLY
Not to Scale

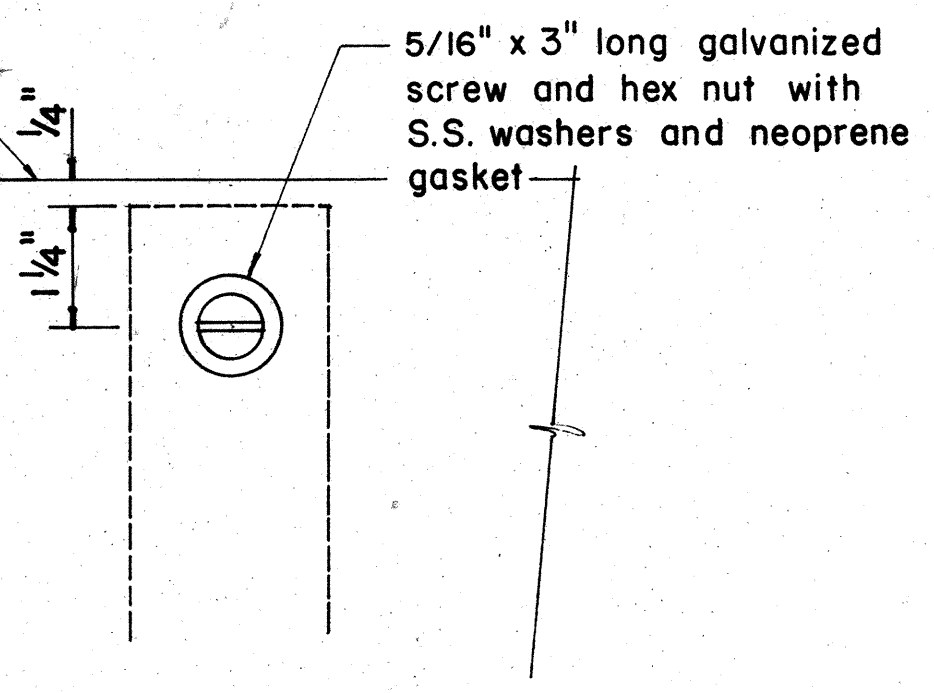


REAR ELEVATION

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

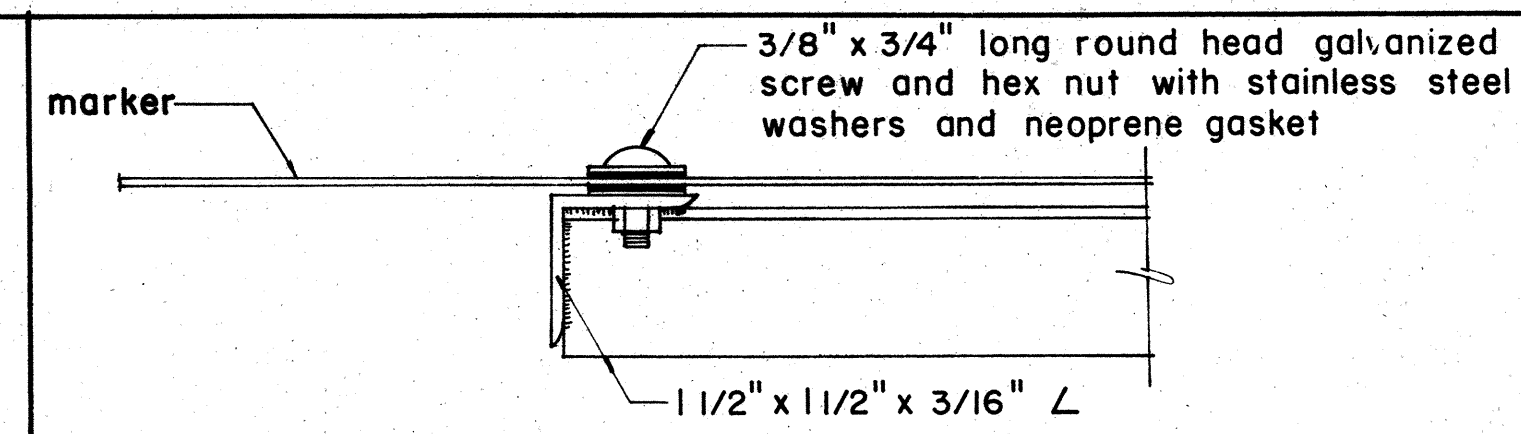


PLAN

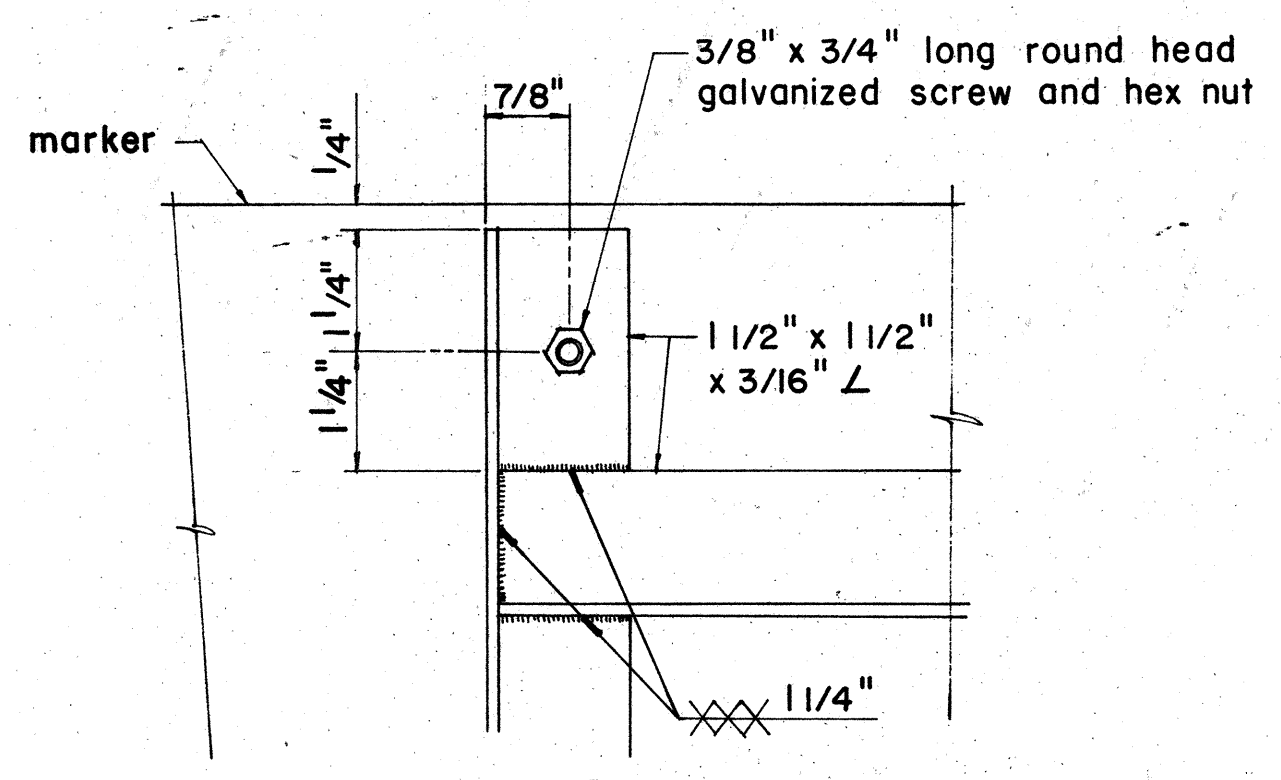


FRONT ELEVATION

DETAIL "A"

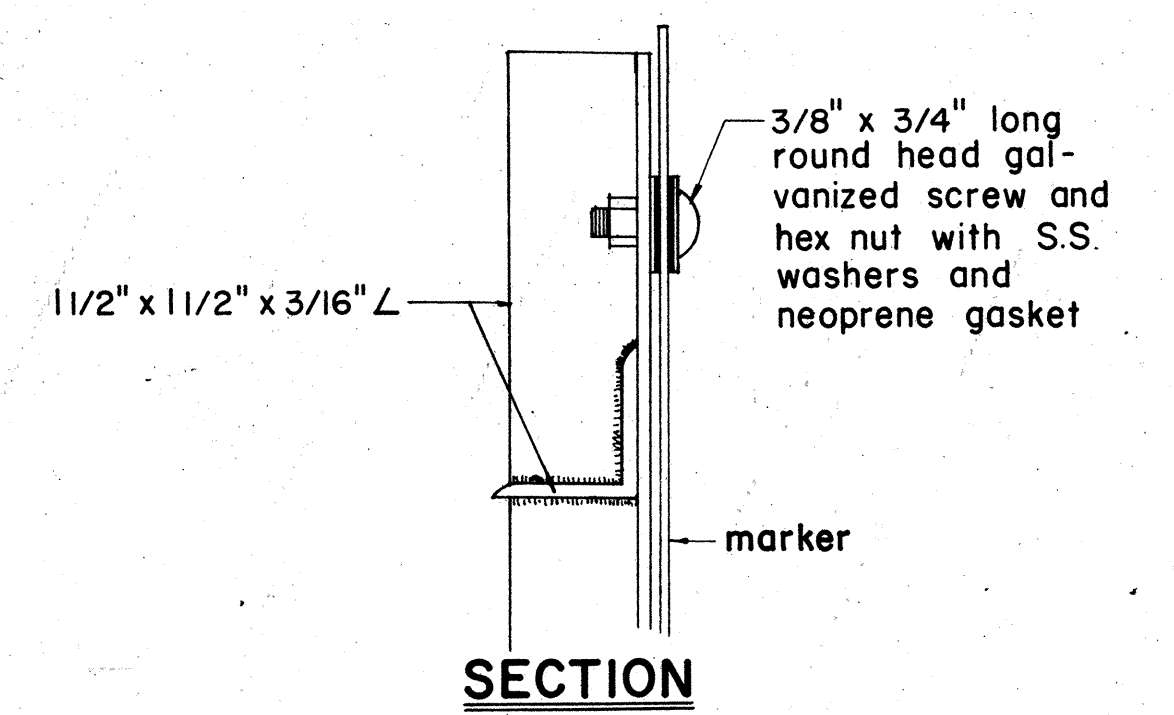


PLAN



ELEVATION

DETAIL "B"



SECTION

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

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

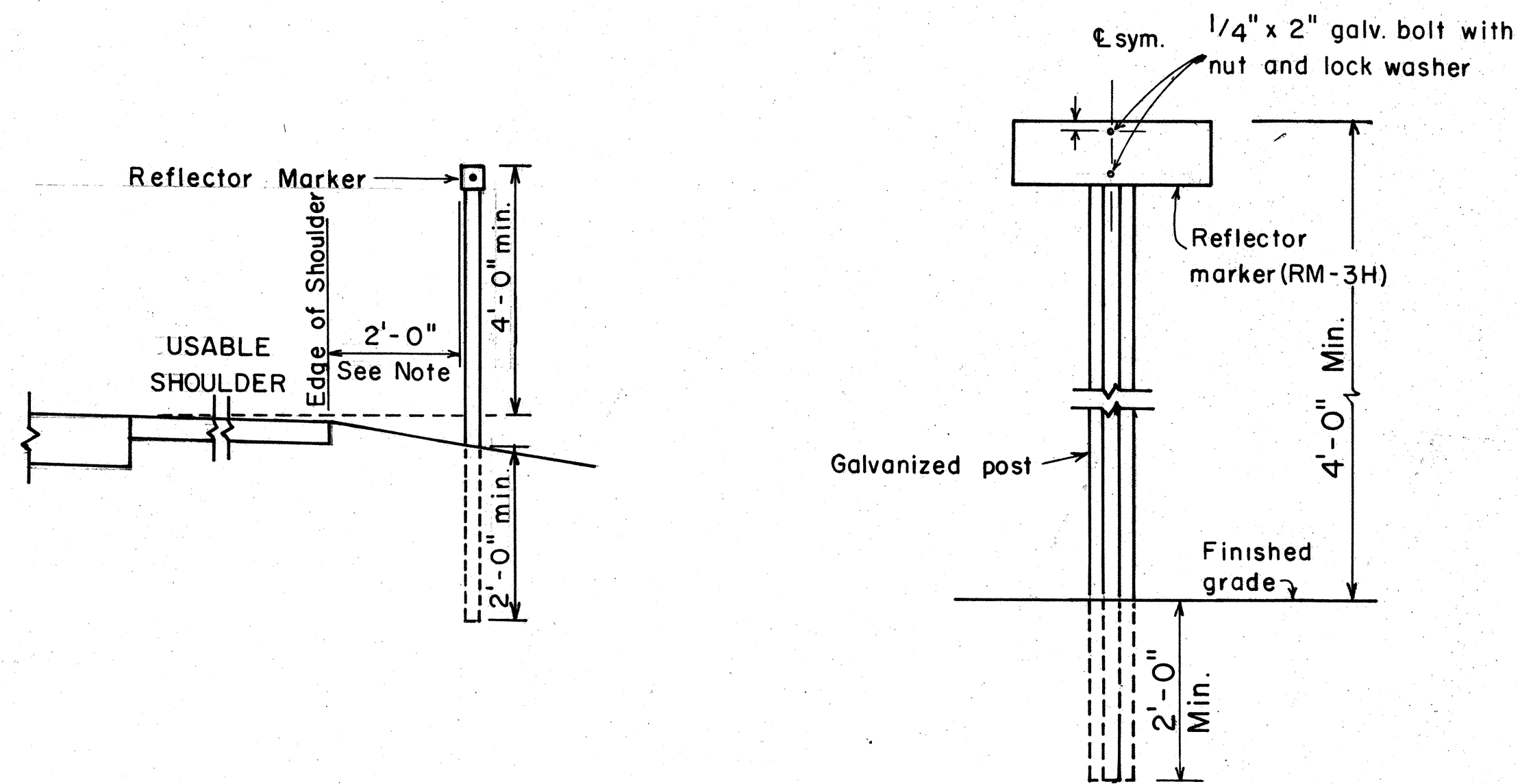
NO.	REVISION	APPROVED BY	DATE
1	Revisions to Route Marker Assemblies.	H.T.	6/1/72

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
ROUTE MARKER ASSEMBLIES

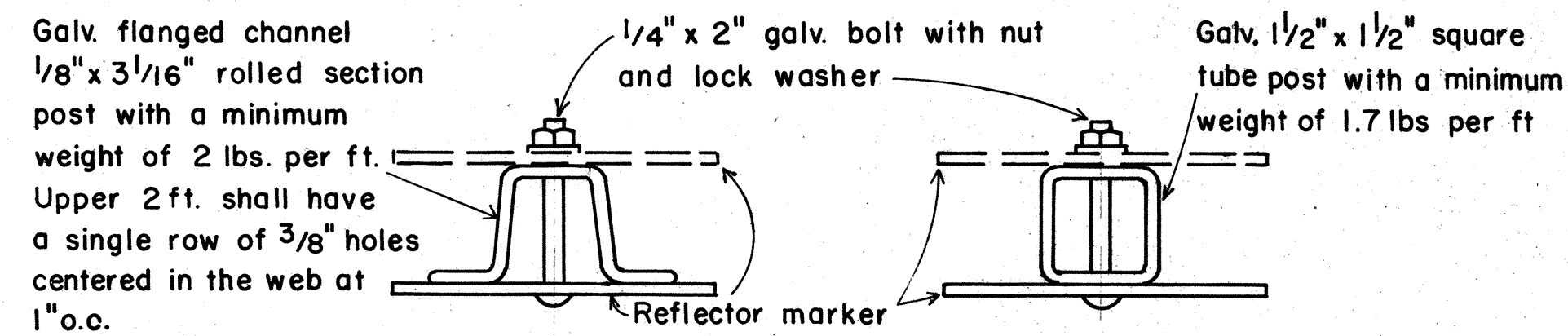
Scale: As Shown
SHEET No. 18 OF 21 SHEETS DT 107

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(19)	1978	102	174



REFLECTOR MARKER MOUNTING DETAIL

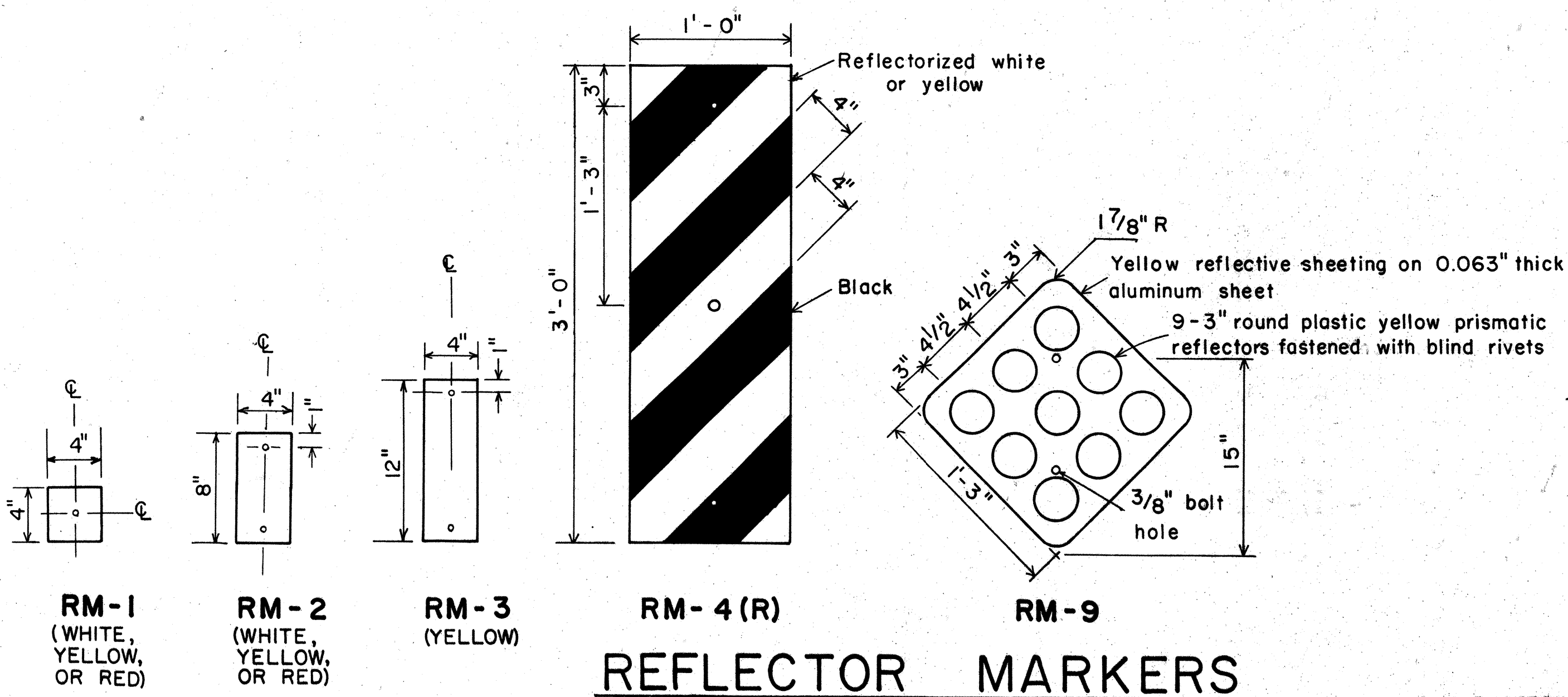


TYPICAL SECTION OF ROAD DELINEATOR

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.

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



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

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

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

MISCELLANEOUS REFLECTOR MARKERS

Not to scale June, 1977

SHEET NO. 19 OF 21 SHEETS DT 110

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F030-1(13)	1978	ADD. 102 S-1	174

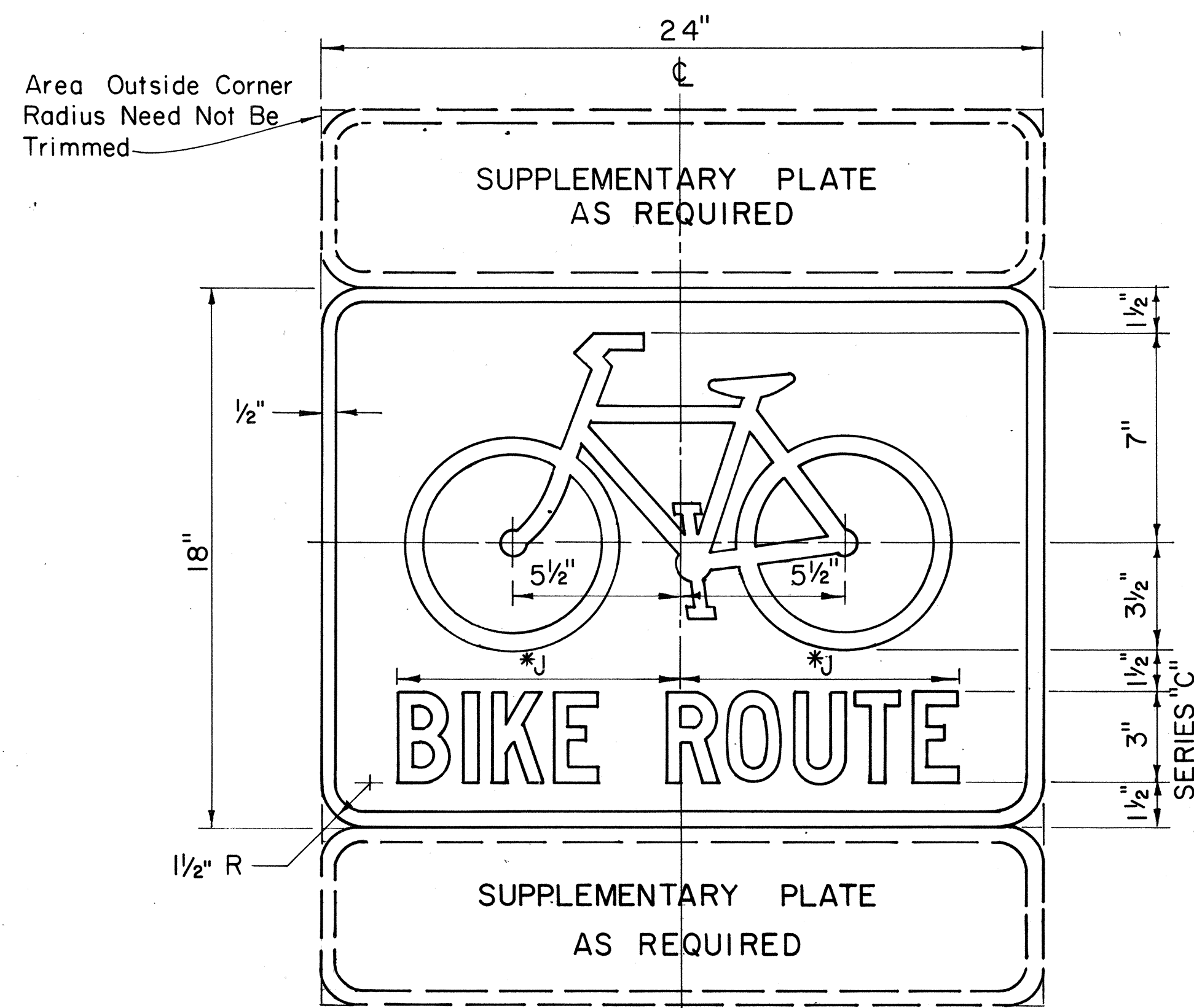
GENERAL NOTES BIKE ROUTE SIGN & SUPPLEMENTARY PLATES

- 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.

*5. Alternate sign messages shall be denoted by the following:

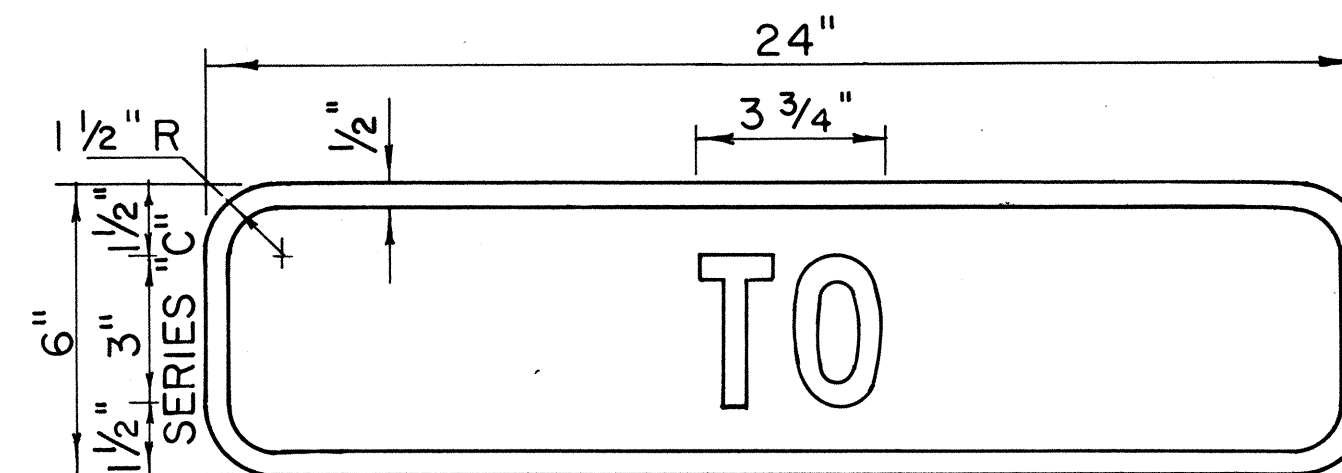
DII-1a: Bike Lane
DII-1b: Bike Path
DII-1c: Bikeway

Dimension "J" varies. Visually center Alternate message.

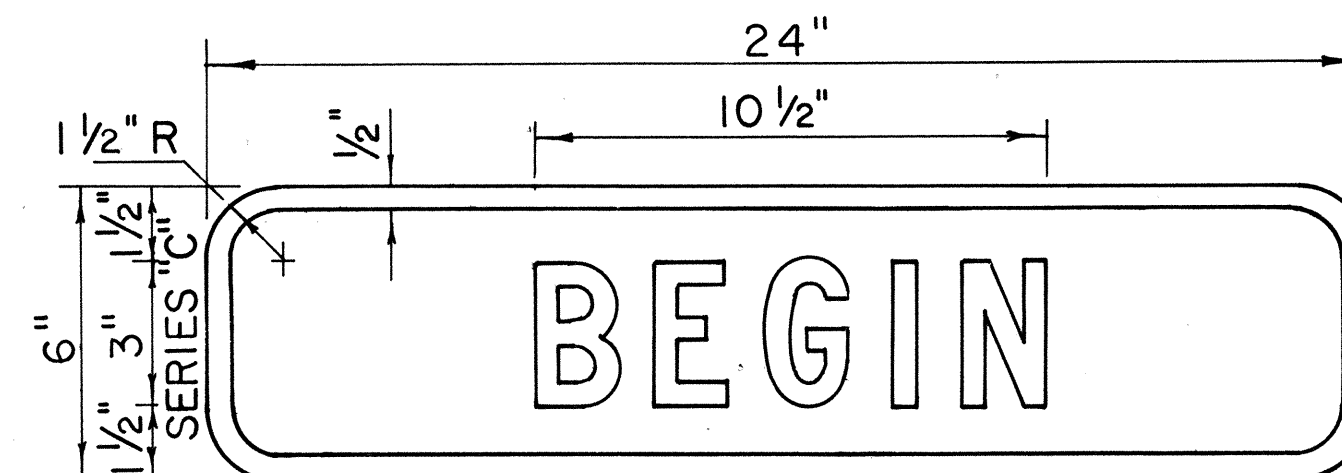


DII-1
BIKE ROUTE SIGN

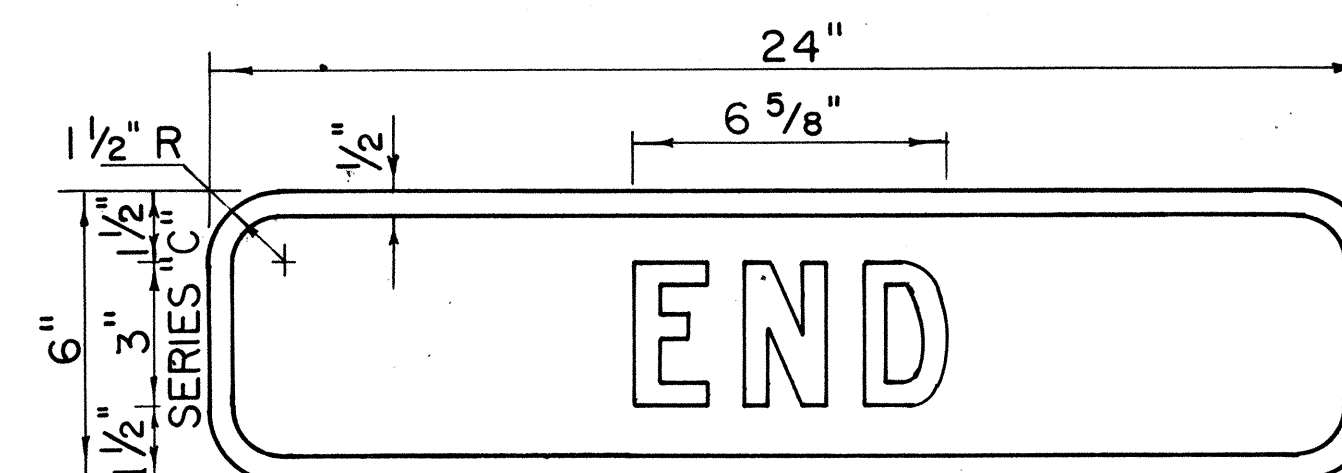
Scale: 3" = 1'-0"



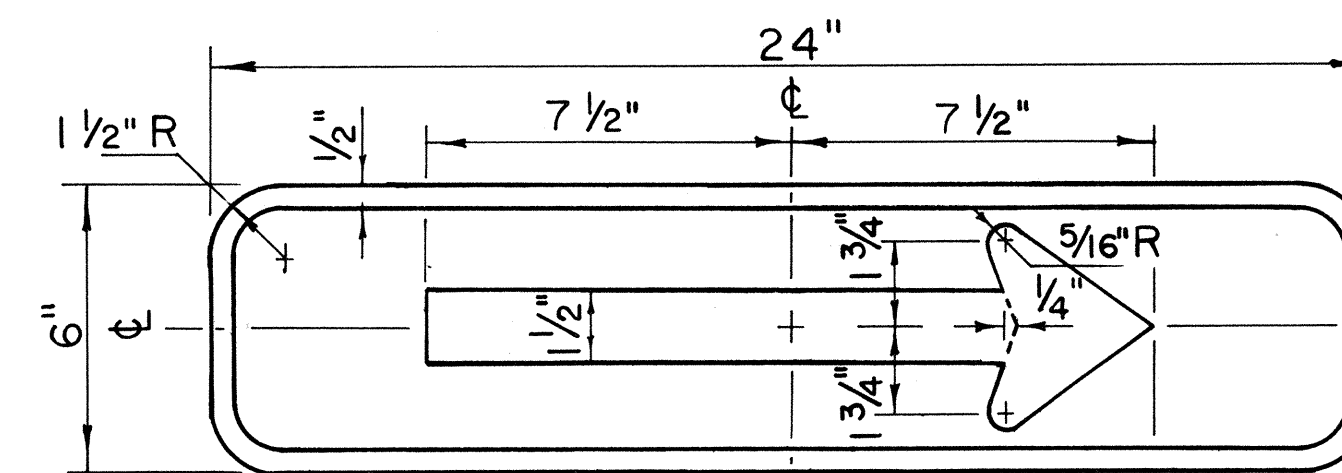
DII-2



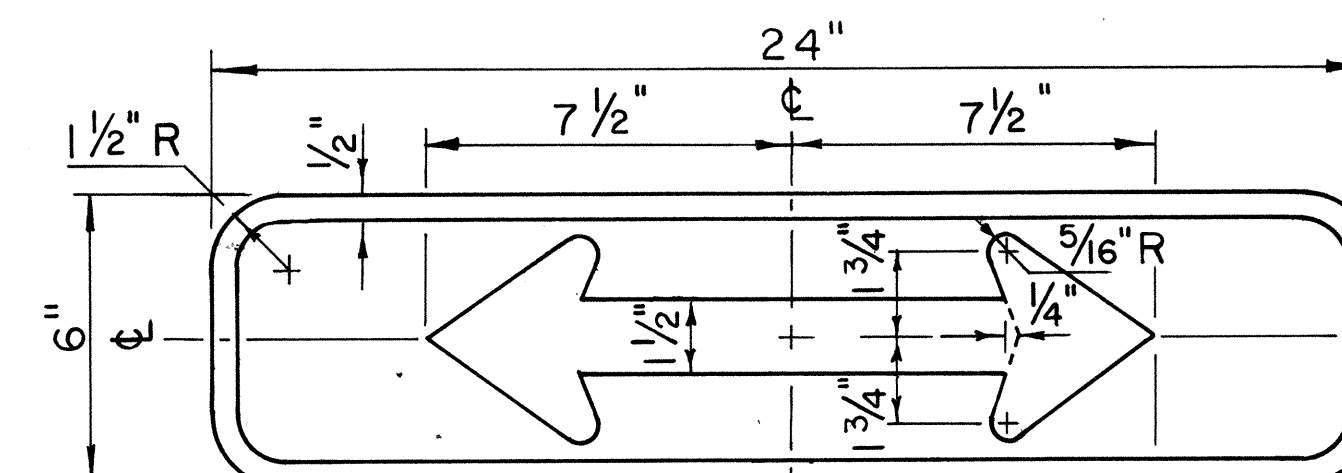
DII-3



DII-4



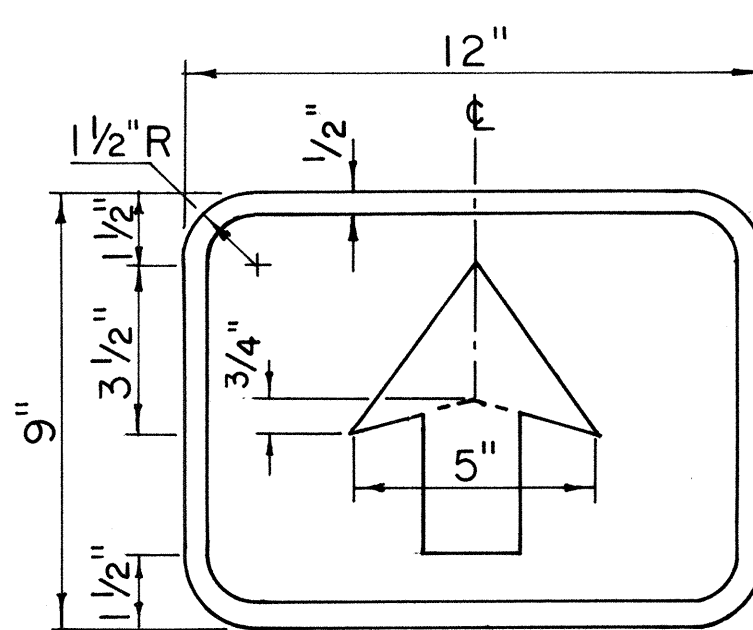
DII-5(R)



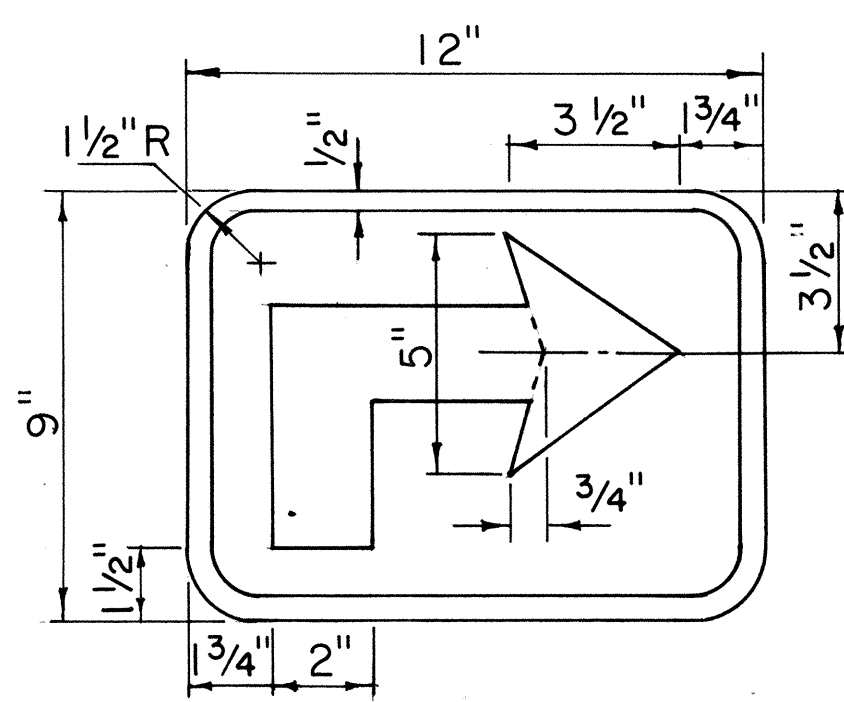
DII-6

SUPPLEMENTARY PLATES

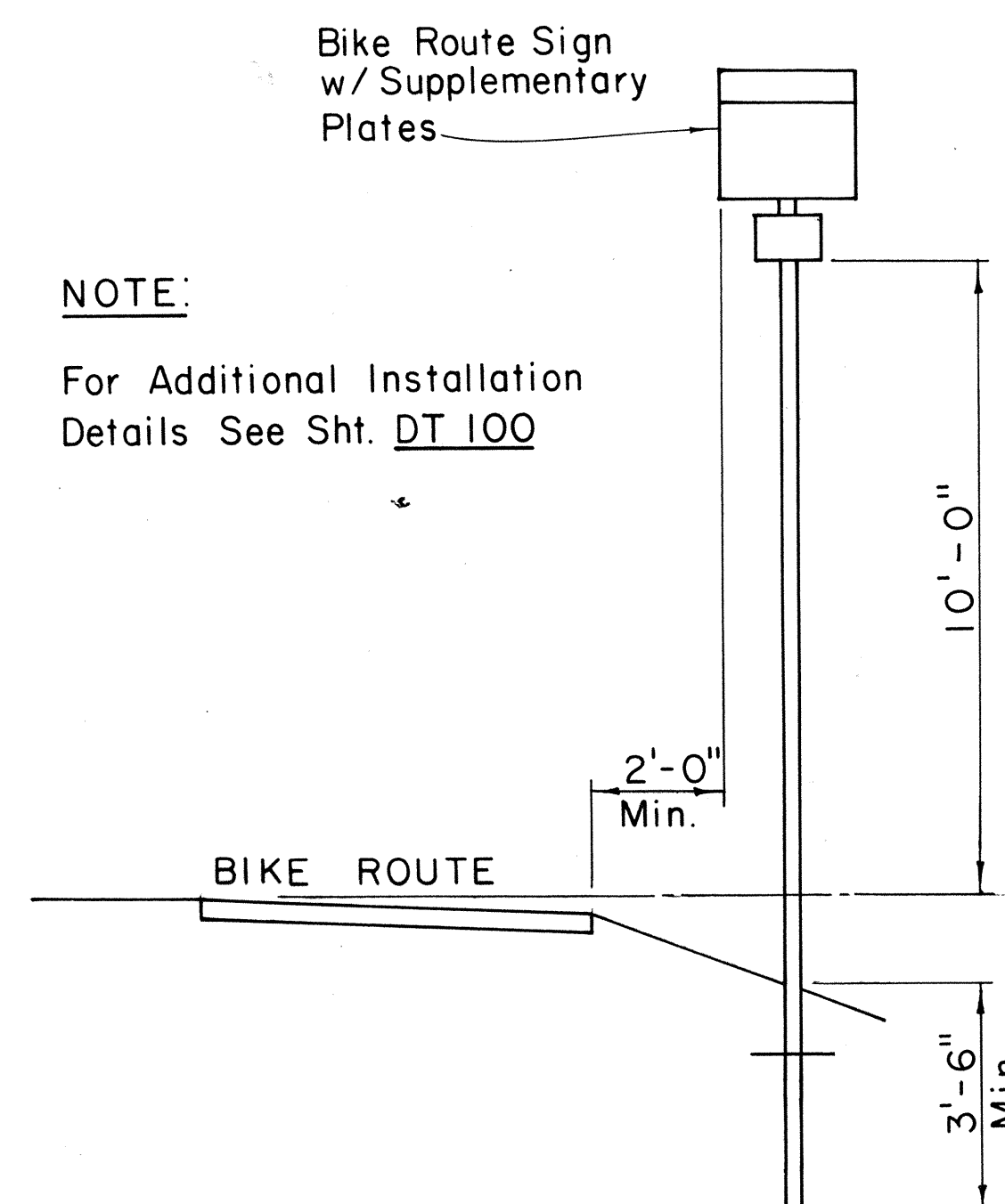
Scale: 3" = 1'-0"



DII-7



DII-8(R)



TYPICAL INSTALLATION

Scale: 3/8" = 1'-0"

NOTE:
For Additional Installation
Details See Sht. DT 100

Bike Route Sign
w/ Supplementary
Plates

BIKE ROUTE

NO.	REVISION	APPROVED BY	DATE

APPROVAL RECOMMENDED:
Eishi Tanaka
TRAFFIC ENGINEER 11/7/77 DATE

APPROVED:
Robert Saleish
ASSISTANT CHIEF, ENGINEERING 11/7/77 DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
BIKE ROUTE SIGN
& SUPPLEMENTARY PLATES

Scale: As Shown June 1977

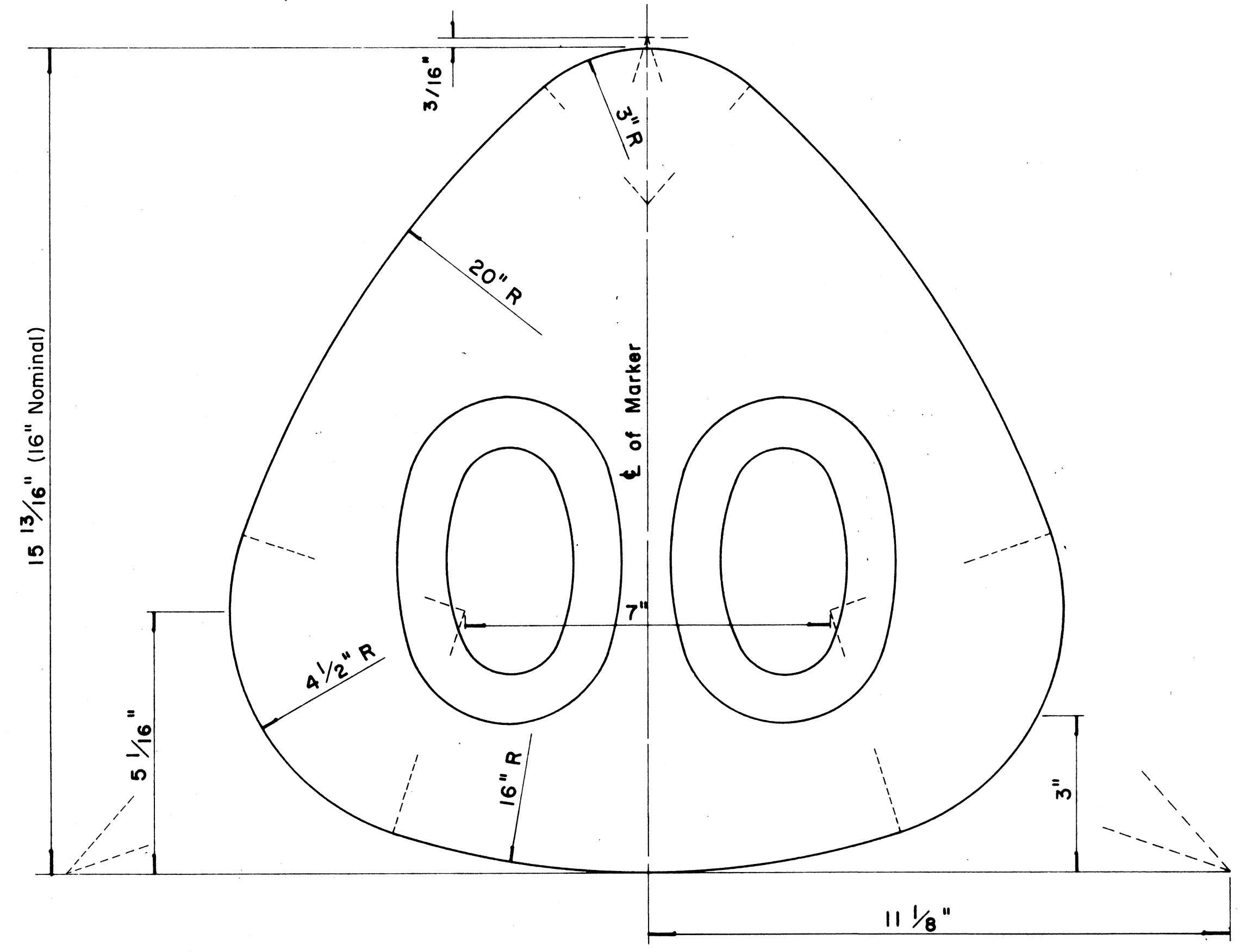
SHEET No. 19A OF 21 SHEETS DT 114

ADD. 102 S-1

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
TRACED 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.	F-030-1(13)	1978	103	174

MARKER SIZE	MULTIPLY DIMENSIONS BY	NUMERAL SIZE
		2 Digit - Series D 3 Digit - Series C
21"	1.3	8"
32"	2.0	12"
42"	2.63	16"



**STATE ROUTE MARKER
FOR GUIDE SIGNS**

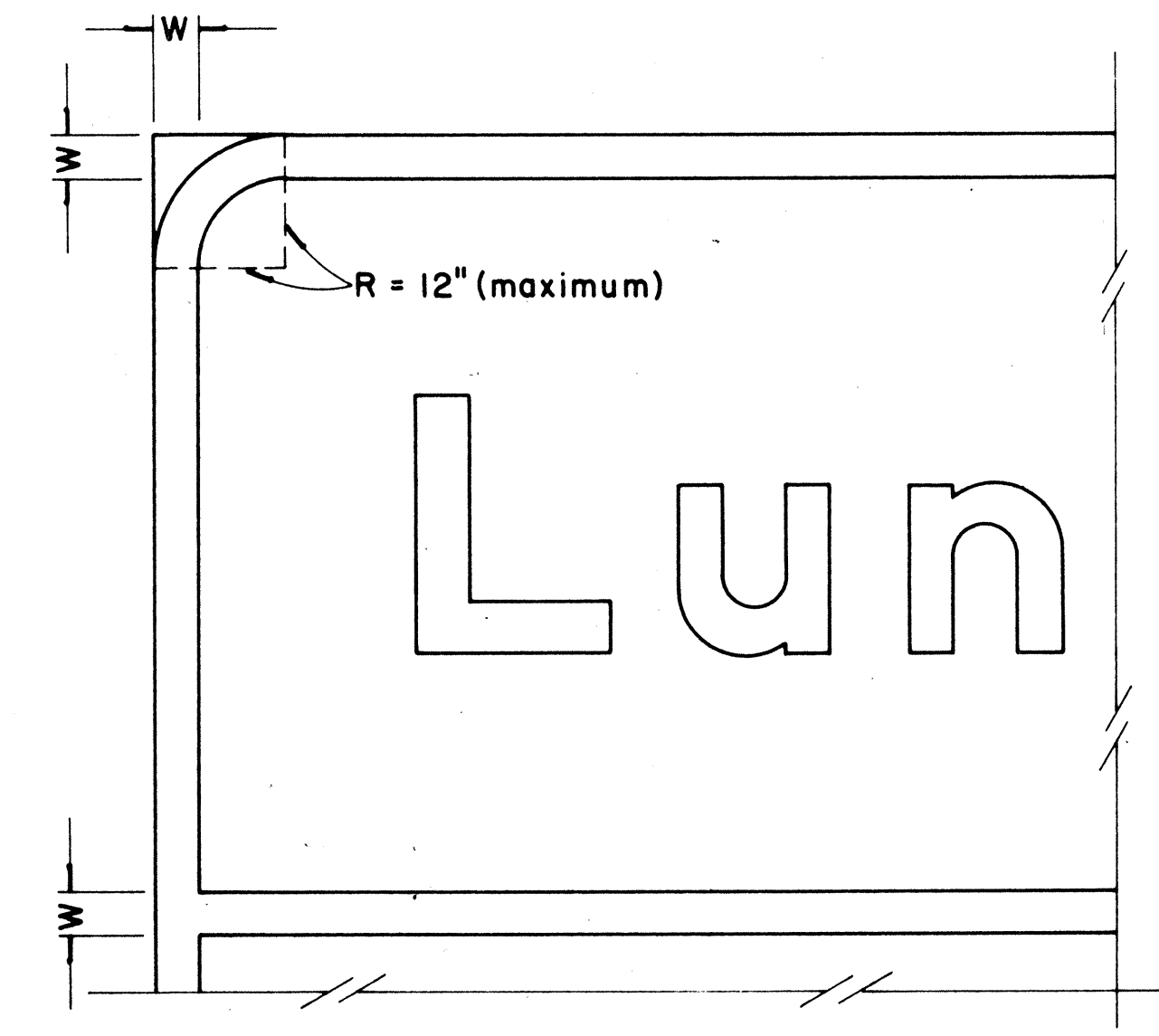
Scale: Half Size

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.

RADI 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:

Eishi Tanaka 4/11/72
TRAFFIC ENGINEER DATE

APPROVED:

Walter Z. Salaschi 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

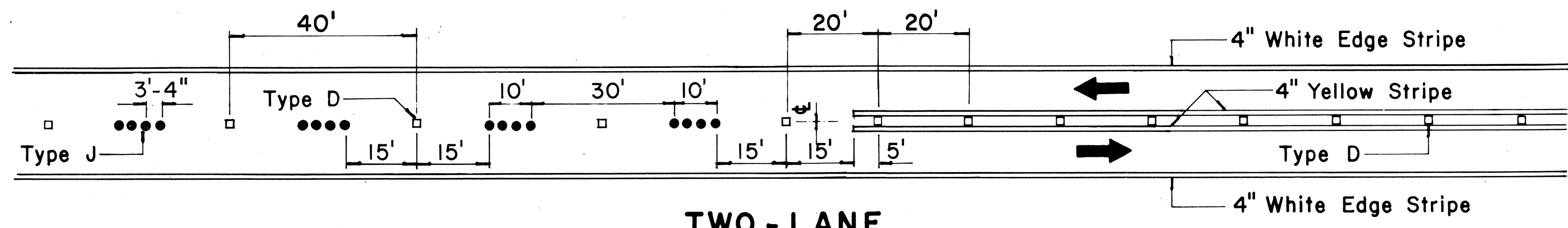
**STATE ROUTE MARKER
AND BORDER DETAIL
FOR GUIDE SIGNS**

Scale: As Shown

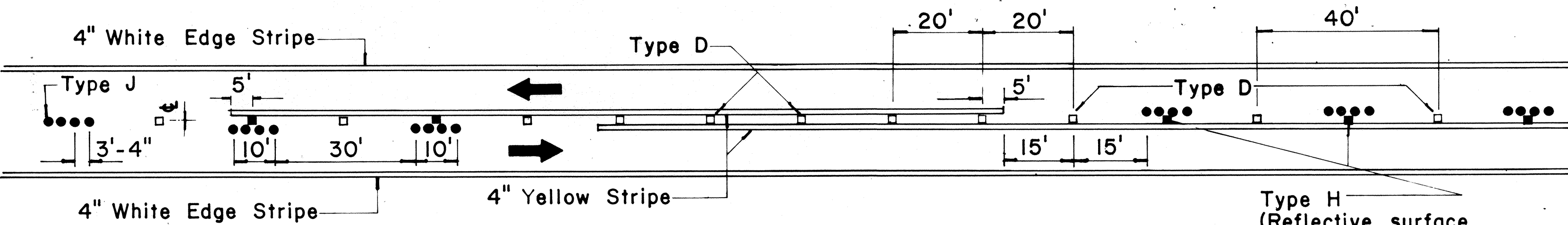
SHEET No. 20 OF 21 SHEETS DT 209

DATE	
DESIGNED BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

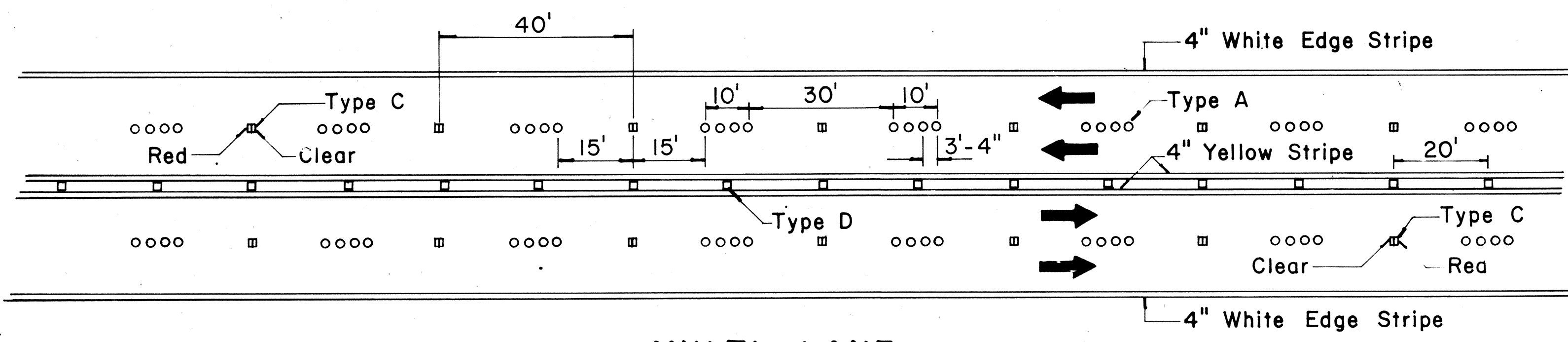
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F0301(13)	1978	ADD.104	174



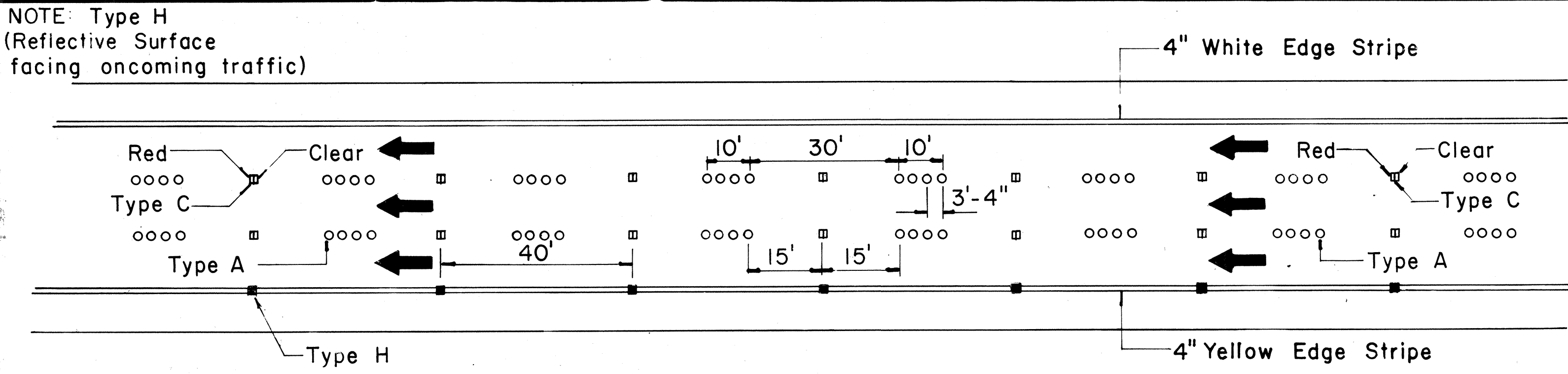
**TWO-LANE
PASSING PERMITTED AND PASSING PROHIBITED**



**TWO-LANE
PASSING PROHIBITED ZONES**

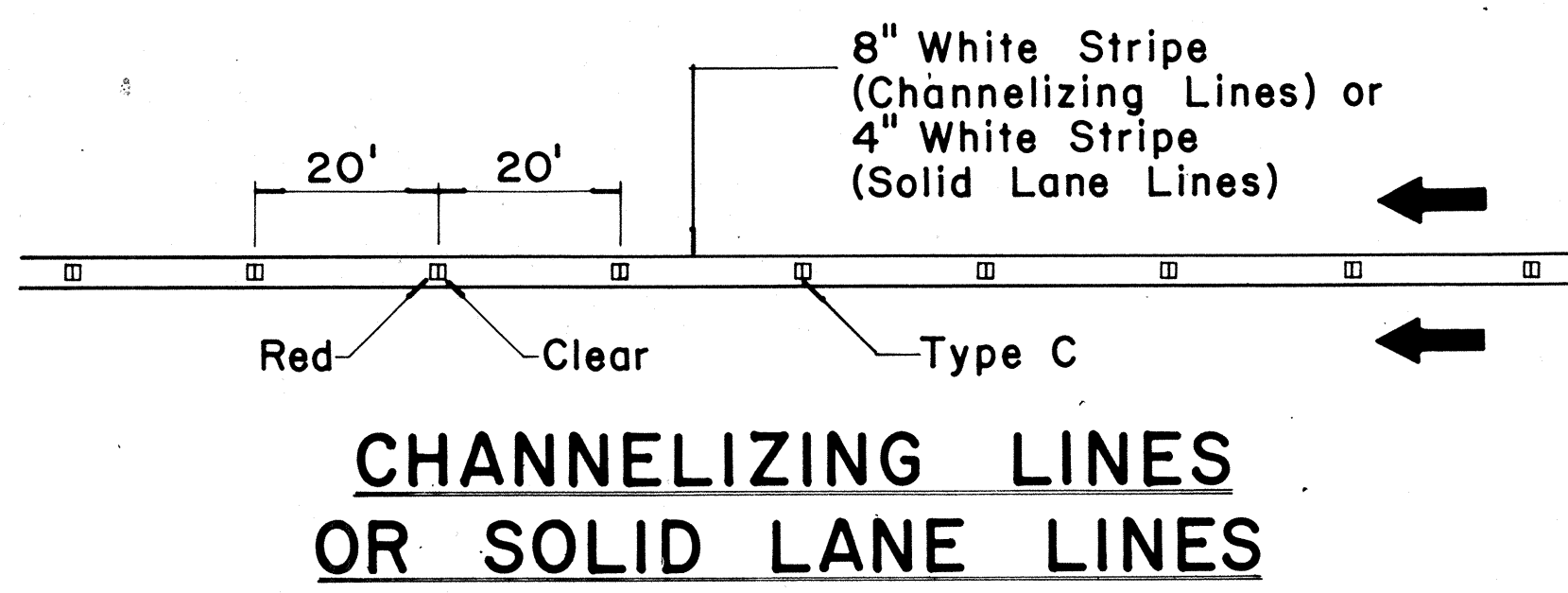


**MULTI-LANE
LANE LINES AND CENTER LINE**

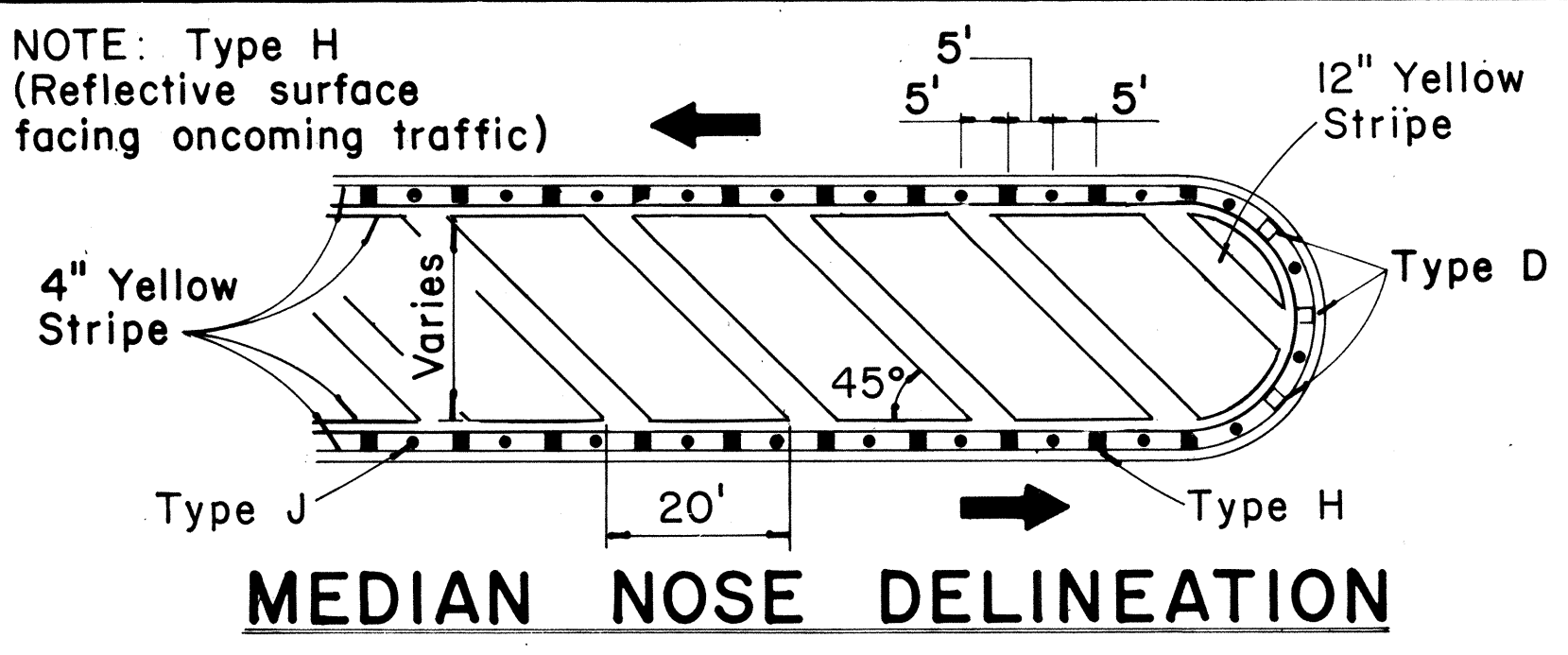


NOTE: Type H (Reflective Surface facing oncoming traffic)

**DIVIDED HIGHWAY
AND
FREEWAY**



**CHANNELIZING LINES
OR SOLID LANE LINES**

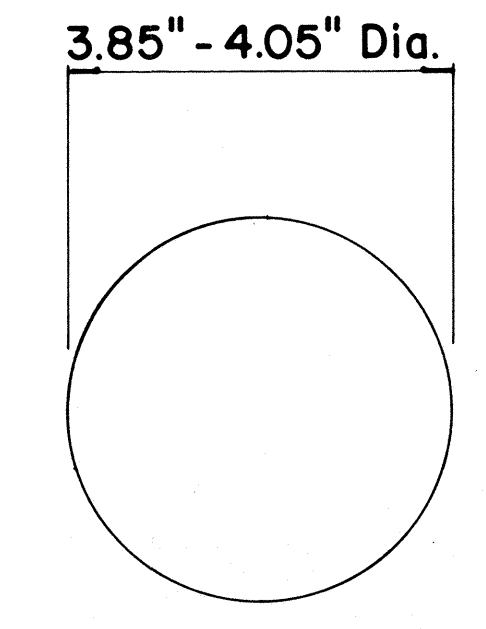


MEDIAN NOSE DELINEATION

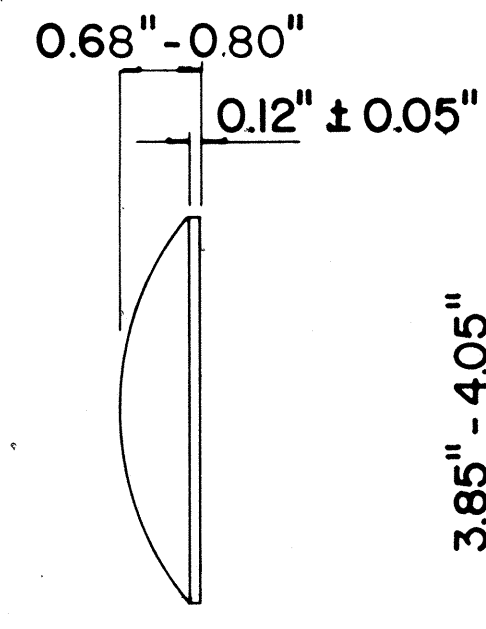
MISCELLANEOUS

TWO-LANE

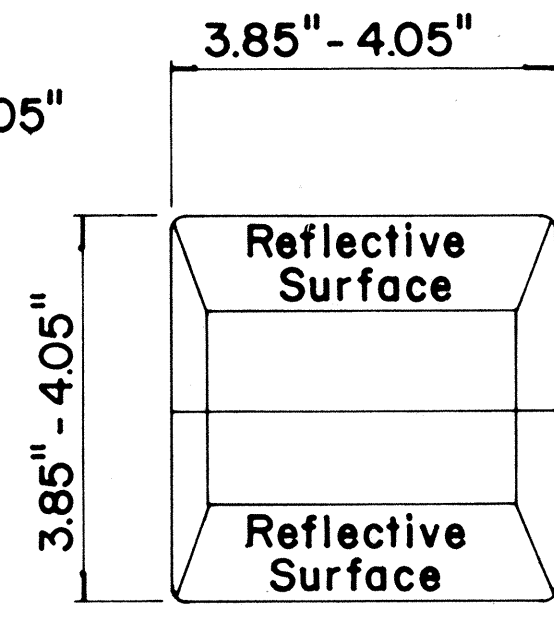
MULTI-LANE



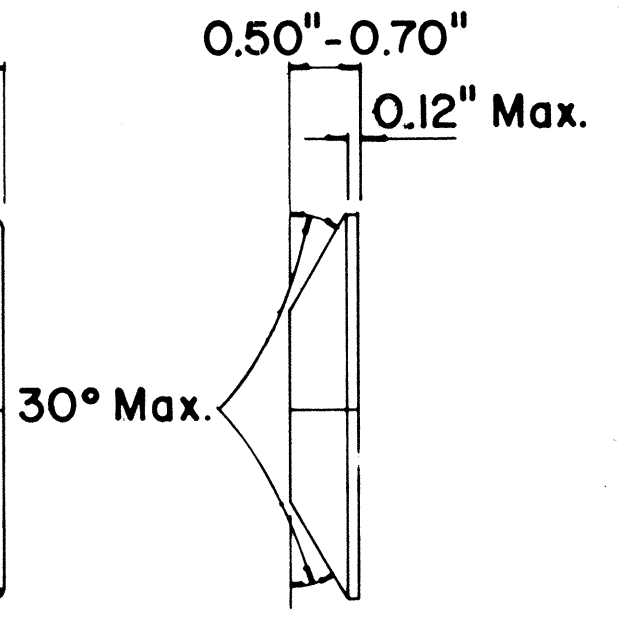
**TYPE A
NON-REFLECTIVE WHITE MARKER**



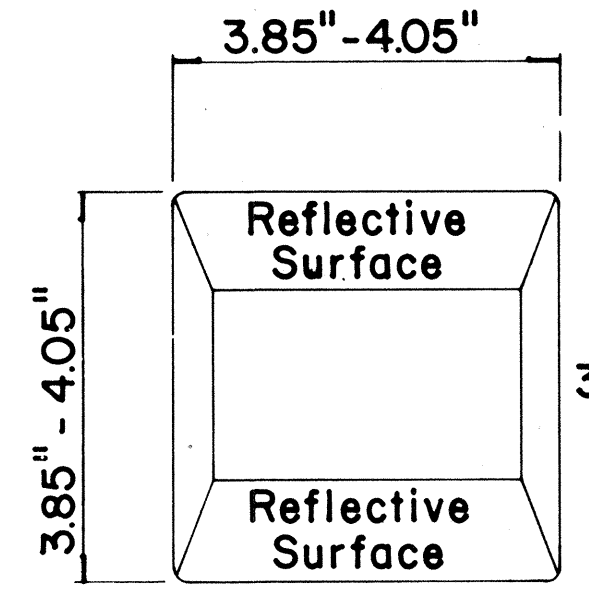
**TYPE J
NON-REFLECTIVE YELLOW MARKER**



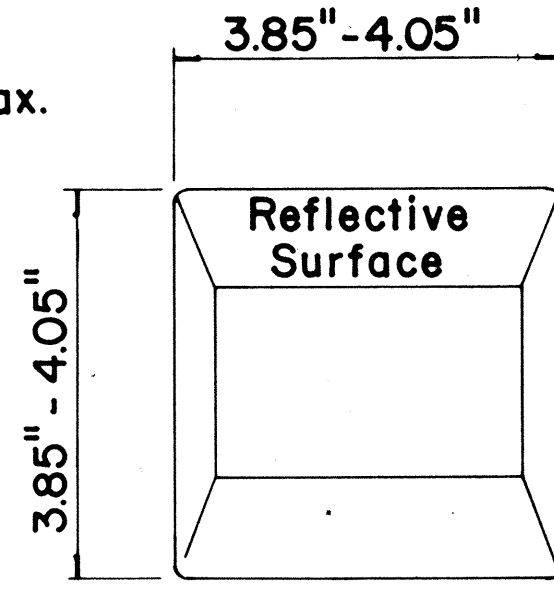
**TYPE C
RED-CLEAR REFLECTIVE MARKER**



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



**TYPE D
TWO-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:
Eishi Tanaka 11/18/71
TRAFFIC ENGINEER DATE

APPROVED:
Shigeru Sato 11/18/71
ASSISTANT CHIEF, ENGINEERING DATE

No.	REVISION	APPROVED BY	DATE
1	Add reflector marker in each line gap.	H.C.	10-21-72
2	Revised General Notes.	H.C.	10-21-72
3	Change 4" white edge stripe to 4" solid yellow edge stripe to left edge of a travel path and Add Type H Reflector Marker.	H.C.	5-22-74
4	Revised details, General Notes & Title Box.	H.C.	1-13-77
5	Revised dimensions on Type A & J Markers	H.C.	4-18-78

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
**STANDARD DETAILS
RAISED PAVEMENT MARKERS
AND STRIPING**

Not to Scale October 1971
SHEET No. 21 OF 21 SHEETS DT 300

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