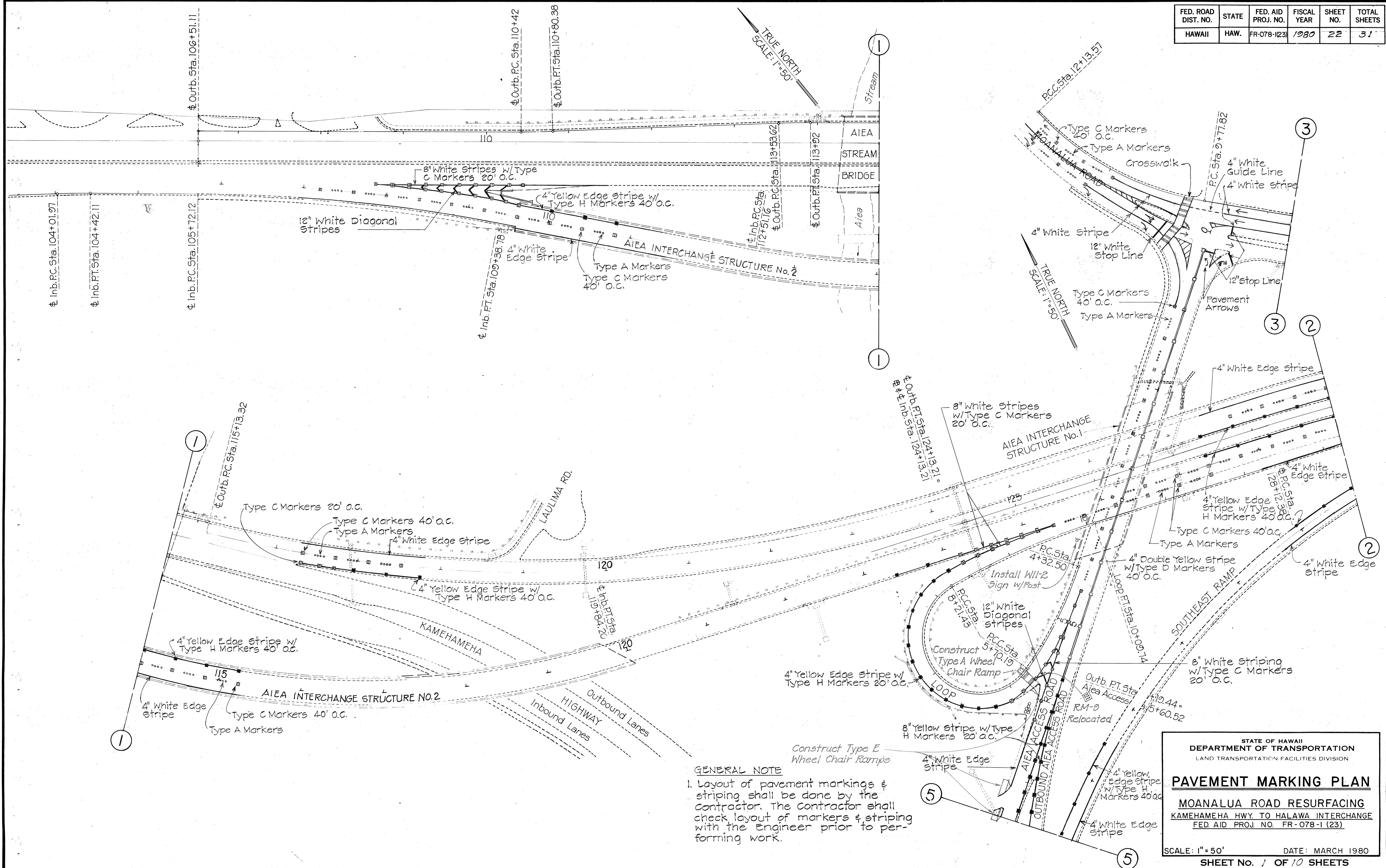
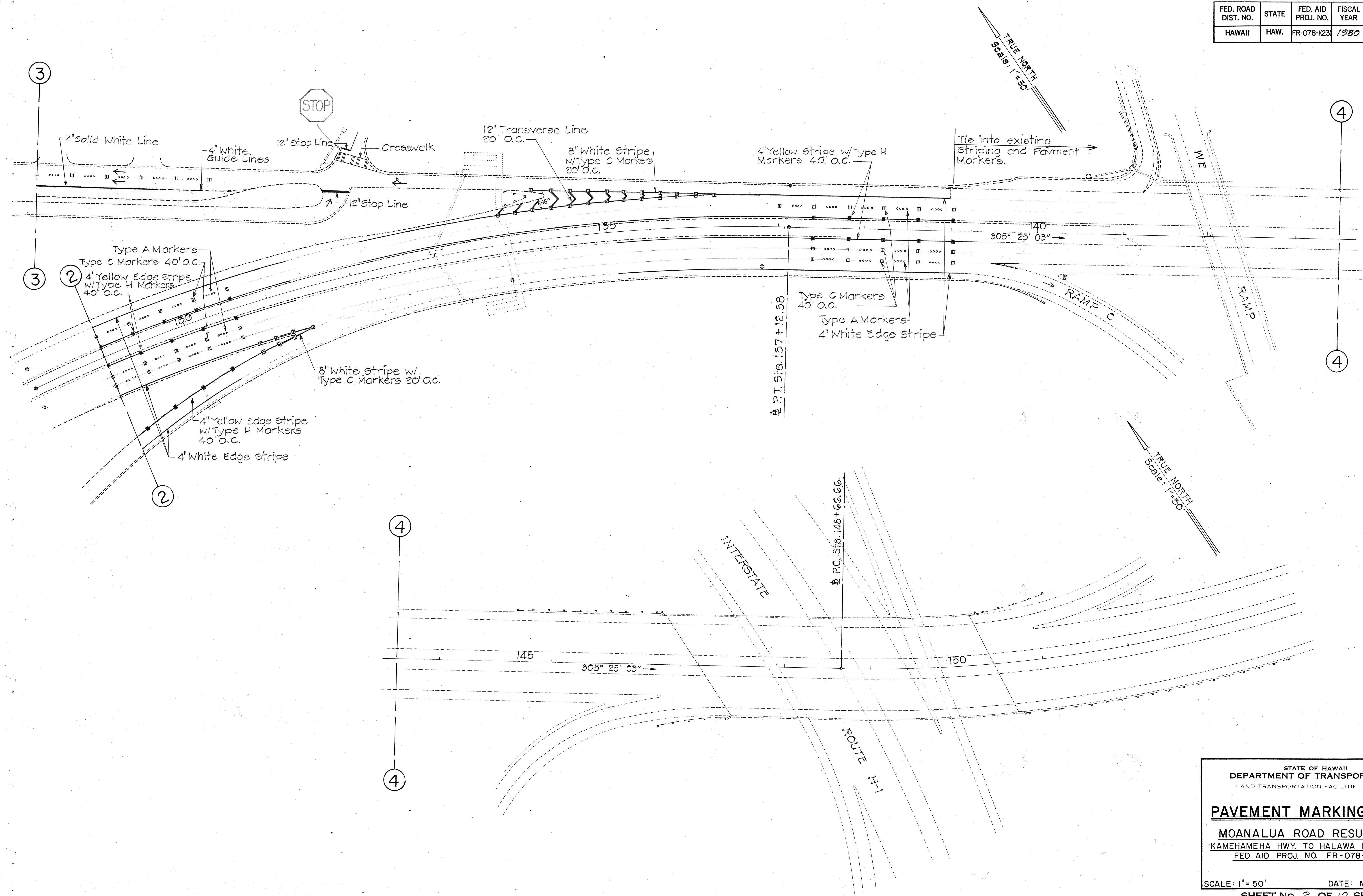


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR-078-1(23)	1980	22	31



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR-078-1(23)	1980	23	31



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

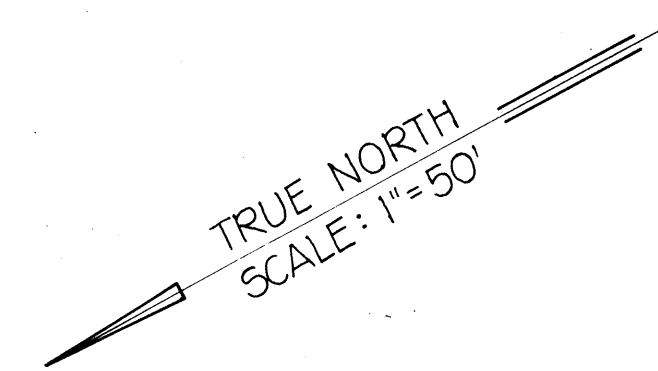
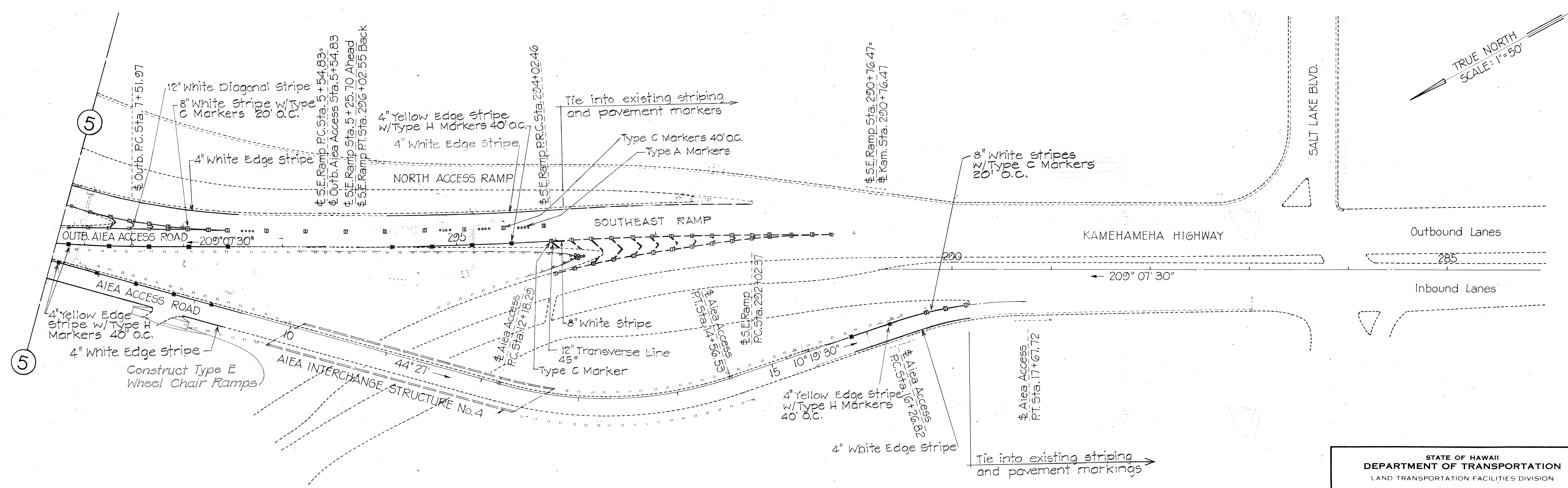
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

PAVEMENT MARKING PLAN

MOANALUA ROAD RESURFACING
KAMEHAMEHA HWY. TO HALAWA INTERCHANGE
FED. AID PROJ. NO. FR-078-1 (23)

SCALE: 1" = 50' DATE: MARCH 1980
SHEET No. 2 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR-078-1(23)	1980	24	31



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

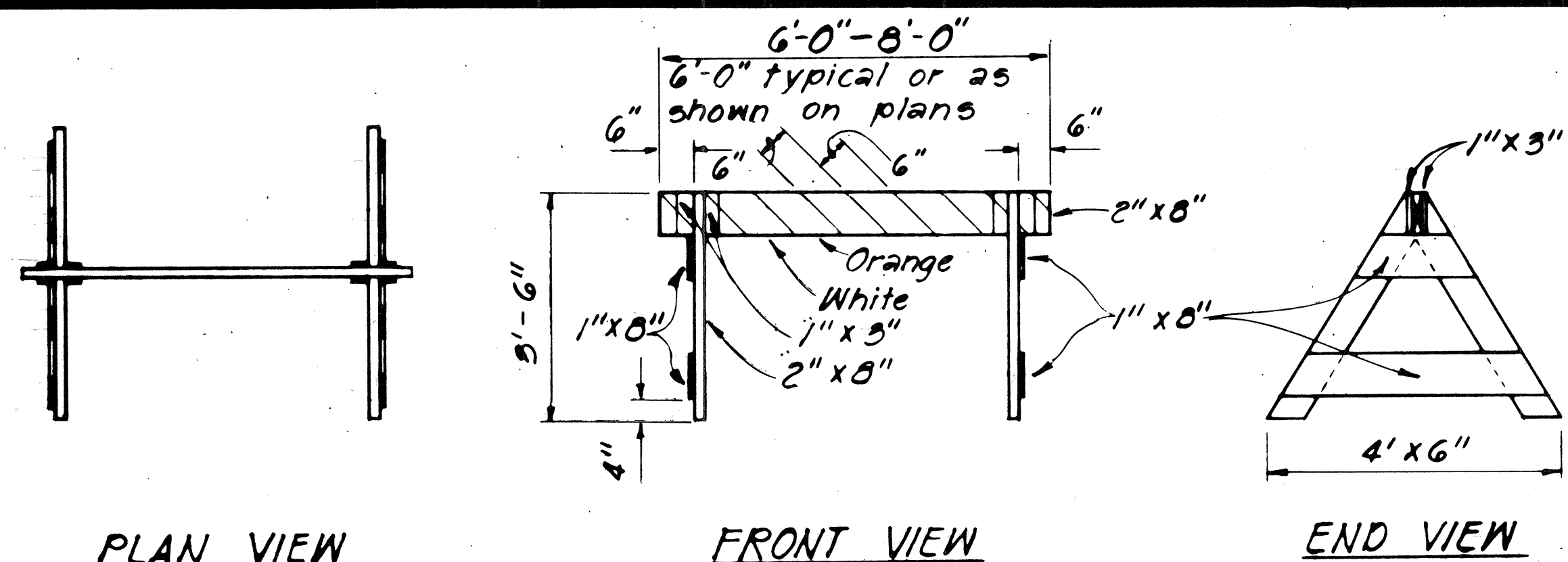
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

PAVEMENT MARKING PLAN

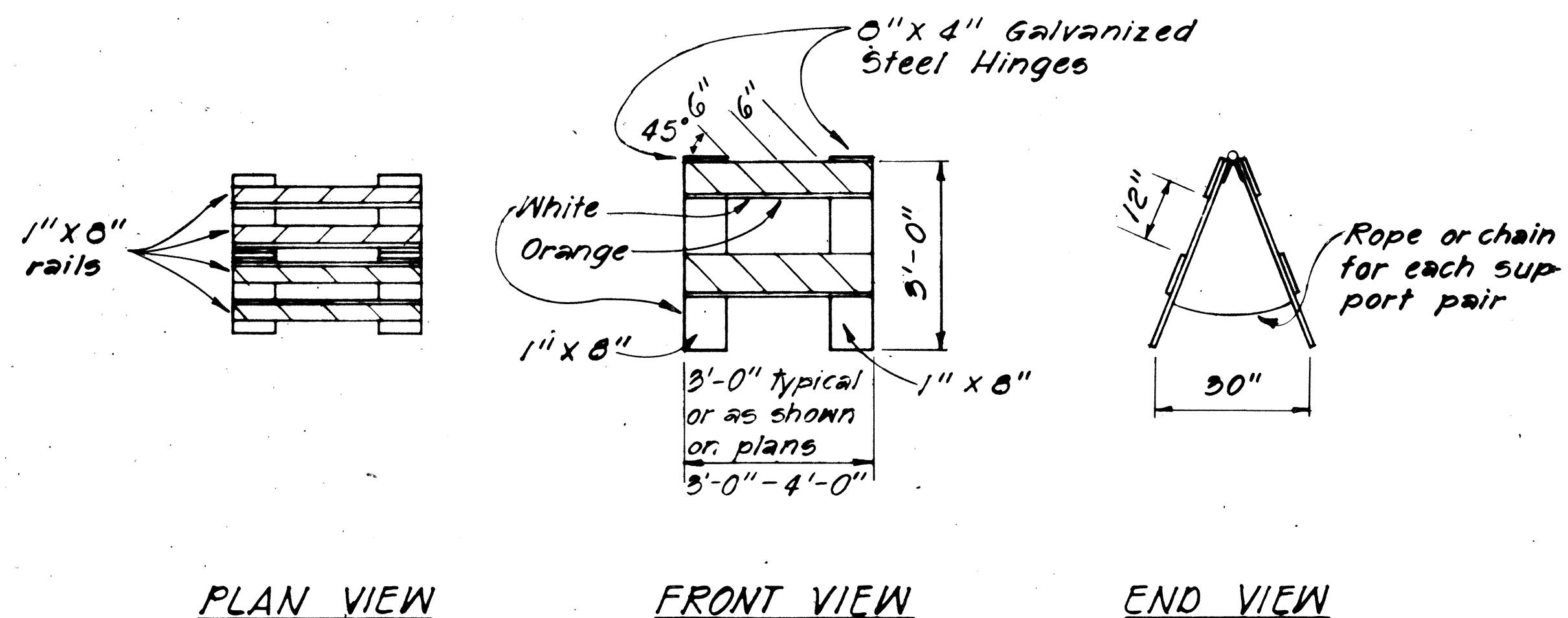
MOANALUA ROAD RESURFACING
KAMEHAMEHA HWY. TO HALAWA INTERCHANGE
FED. AID PROJ. NO. FR-078-1 (23)

SCALE: 1" = 50' DATE: MARCH 1980
SHEET NO. 3 OF 10 SHEETS

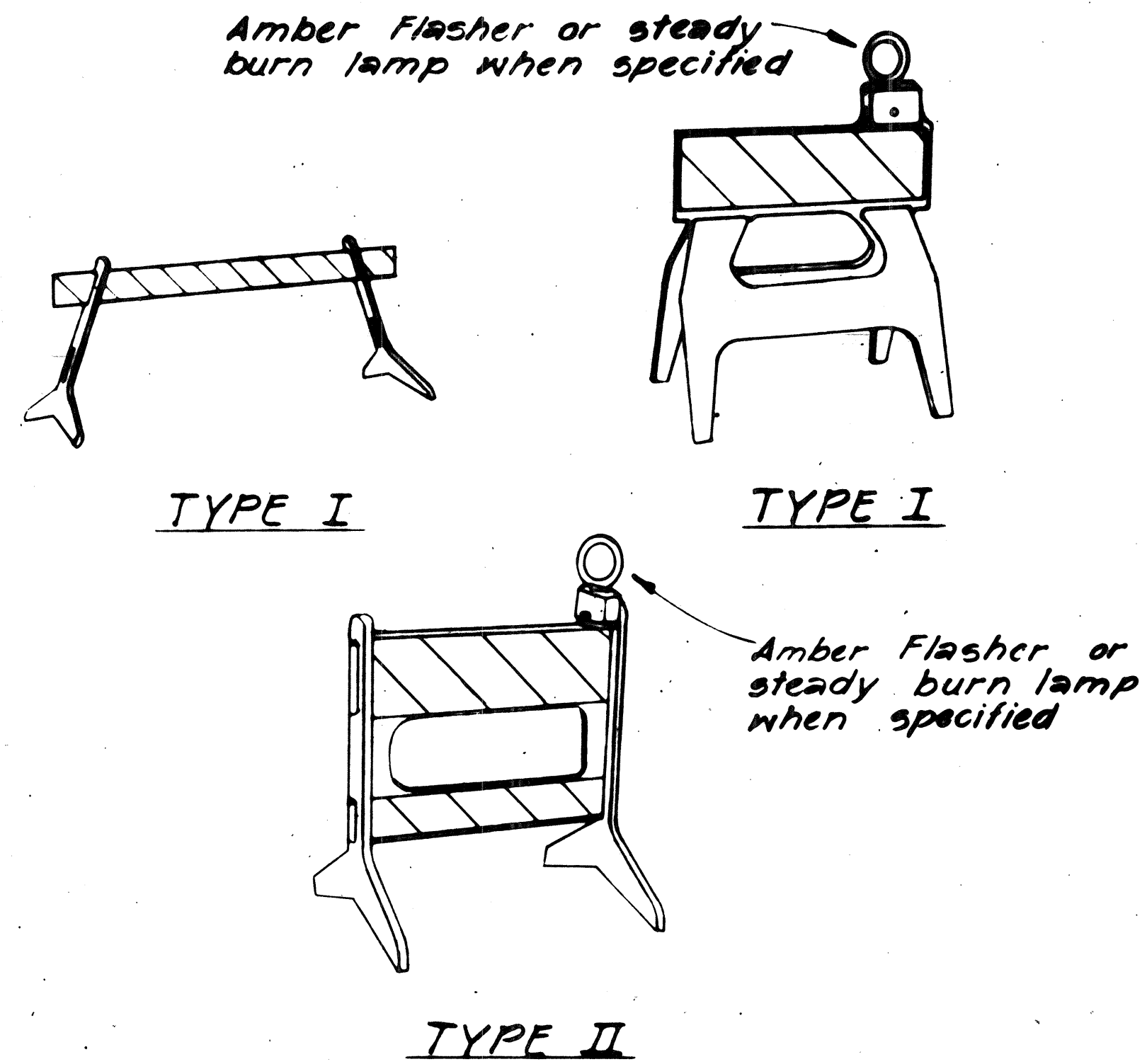
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR-078-1(23)	1980	25	31



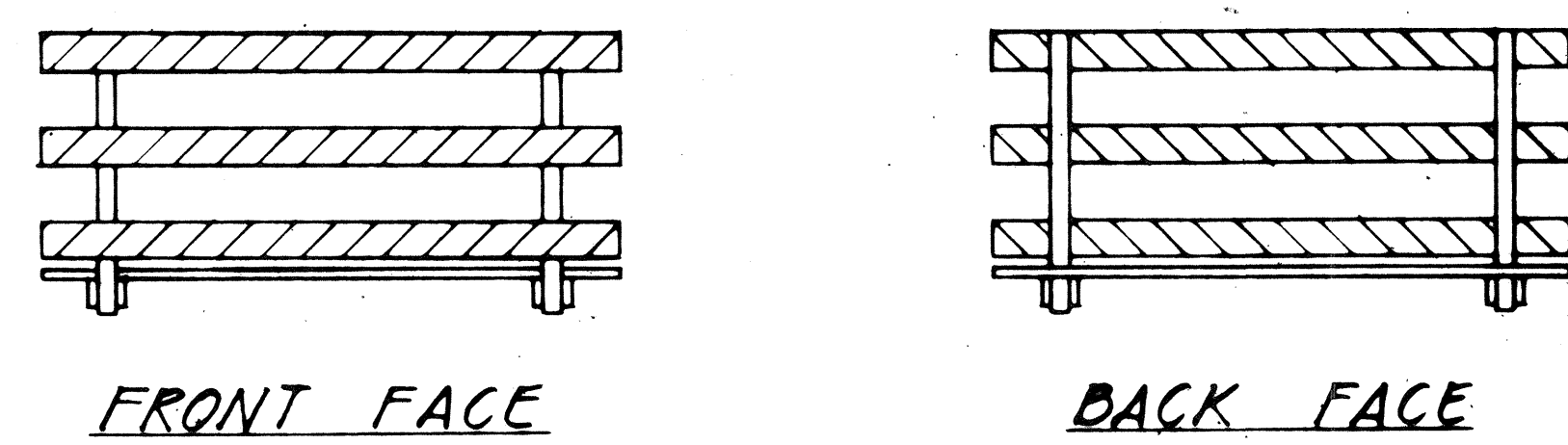
TYPE I BARRICADE
Scale: 1/2" = 1'-0"



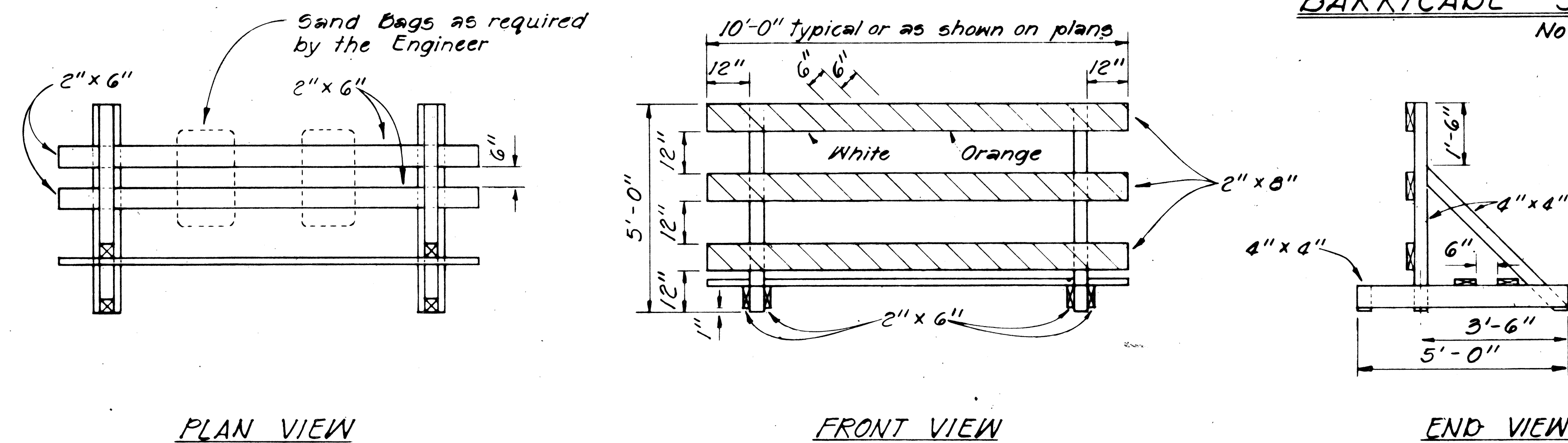
TYPE II BARRICADE
Scale: 1/2" = 1'-0"



PLASTIC MOLDED BARRICADE OPTIONS *
Not to Scale
* Shop Drawings must be submitted for approval.



BARRICADE STRIPING DETAILS
Not to Scale



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, or as when called for.
 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.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS

BARRICADES

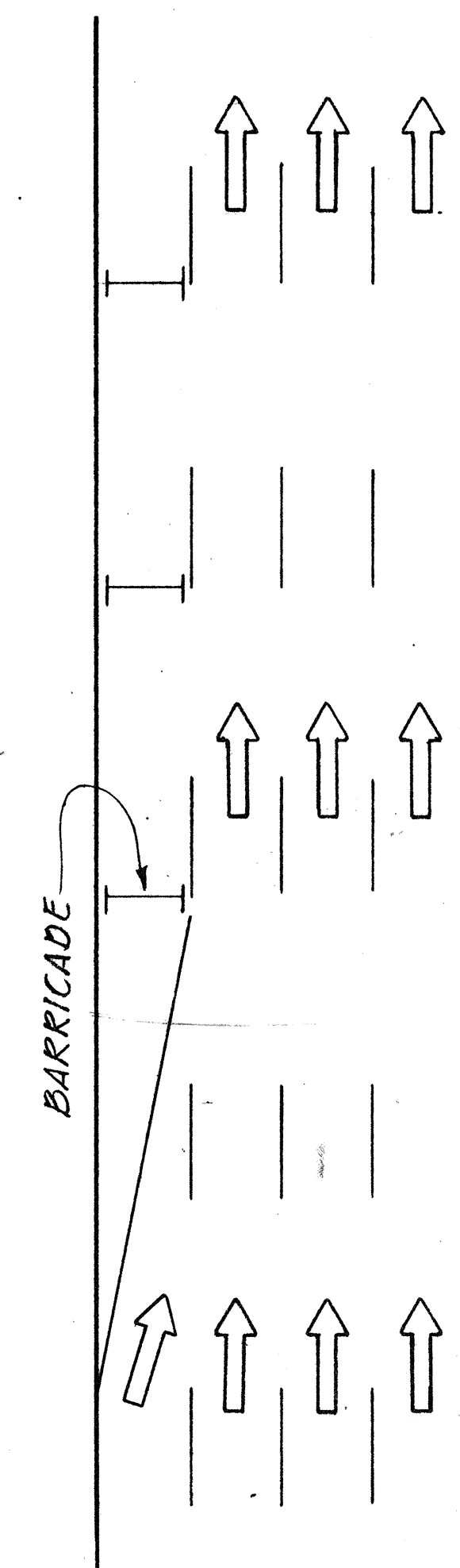
SCALE: As Shown
SHEET NO. 4 OF 10 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
NOTE BOOK	

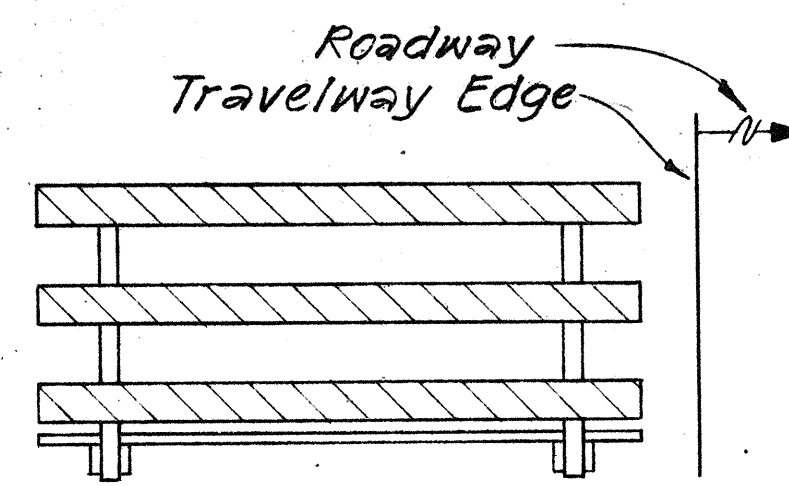
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR-078-1(23)	1980	26	31

GENERAL NOTES

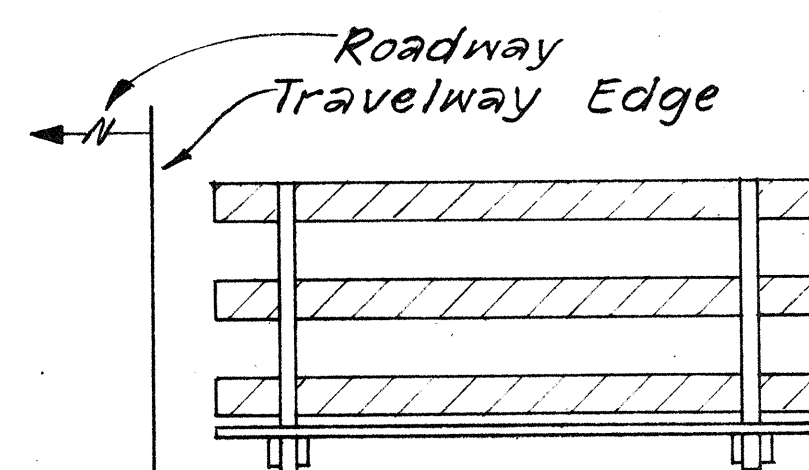
1. Barricade Type, Placement, and Arrangement shall be as shown on the Construction Plans or as when called for.



ROADWAY DELINEATION
TO THE RIGHT
NOT TO SCALE

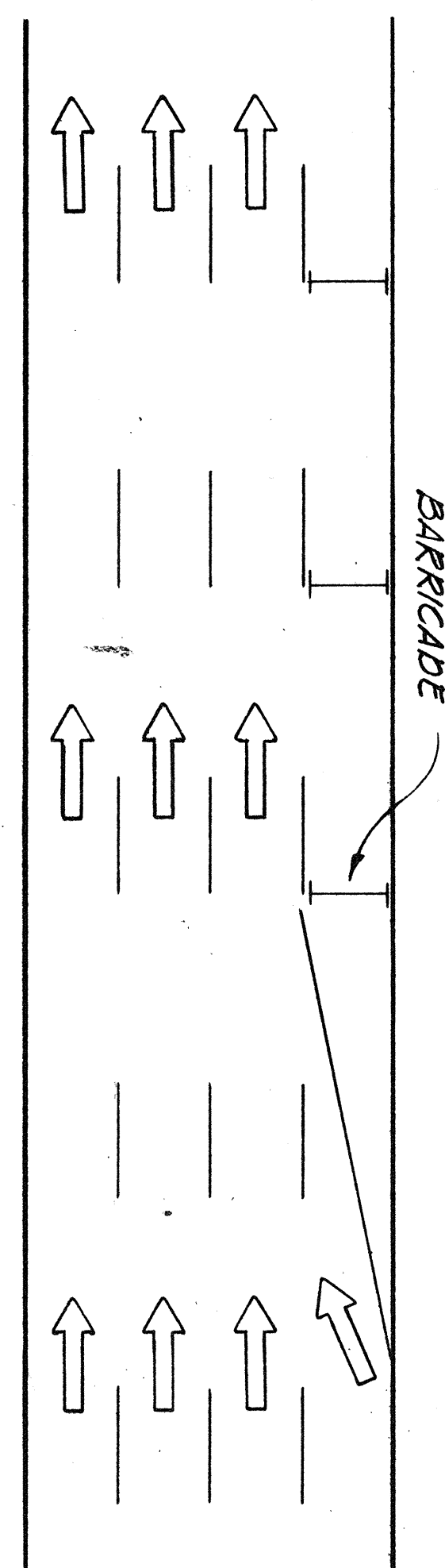


FRONT VIEW

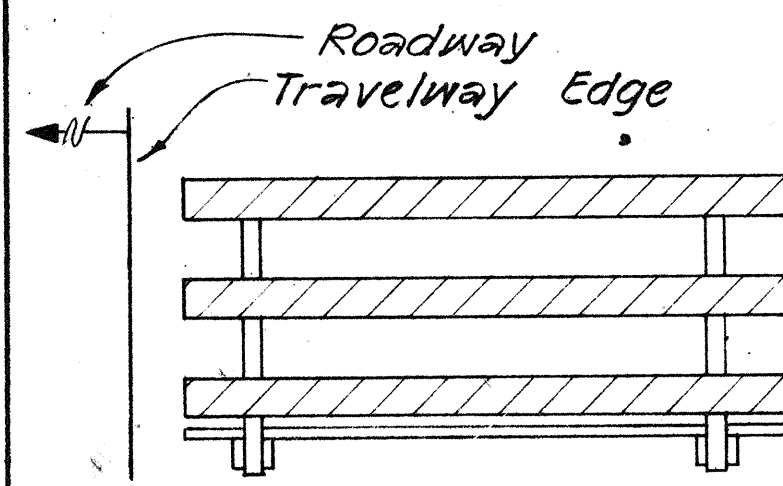


BACK VIEW

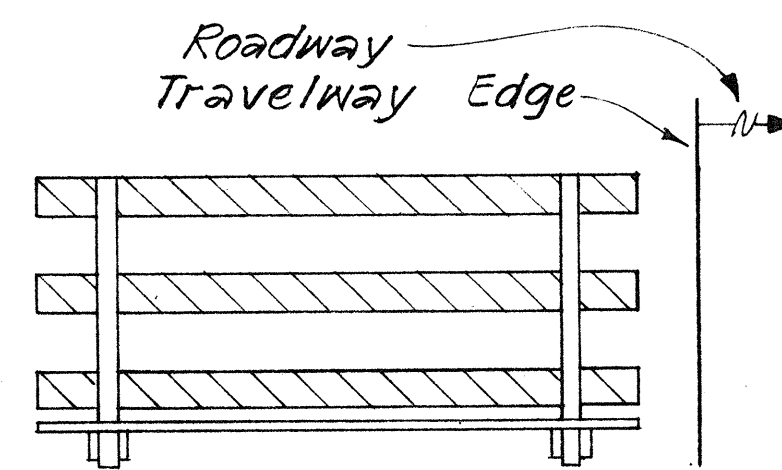
BARRICADE STRIPING
ARRANGEMENT
NOT TO SCALE



ROADWAY DELINEATION
TO THE LEFT
NOT TO SCALE

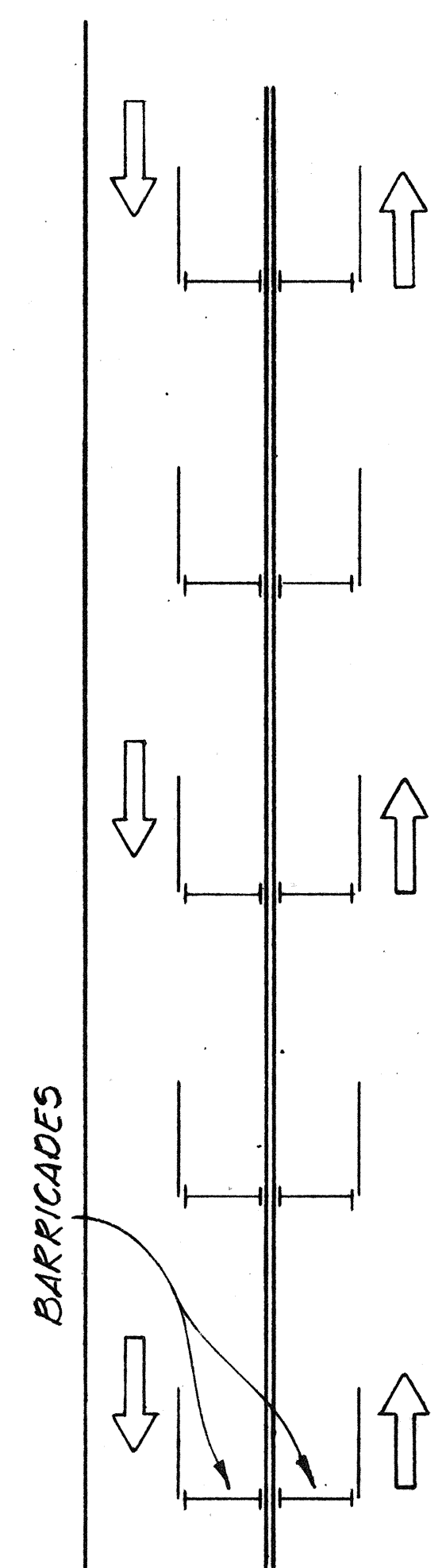


FRONT VIEW

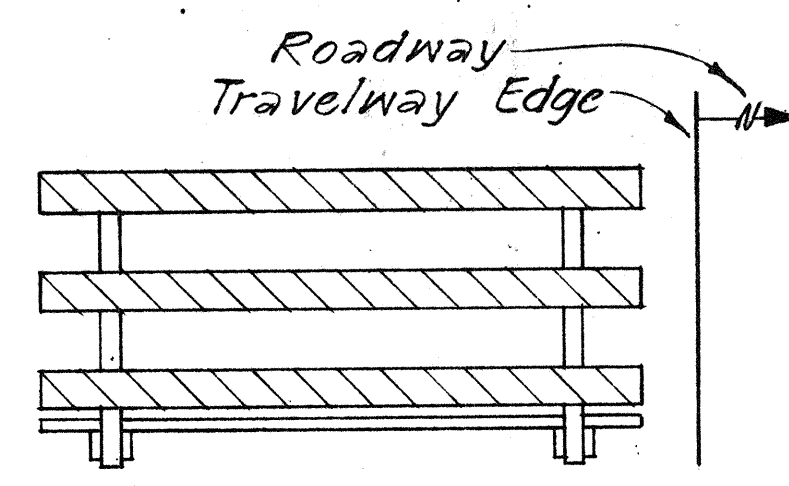


BACK VIEW

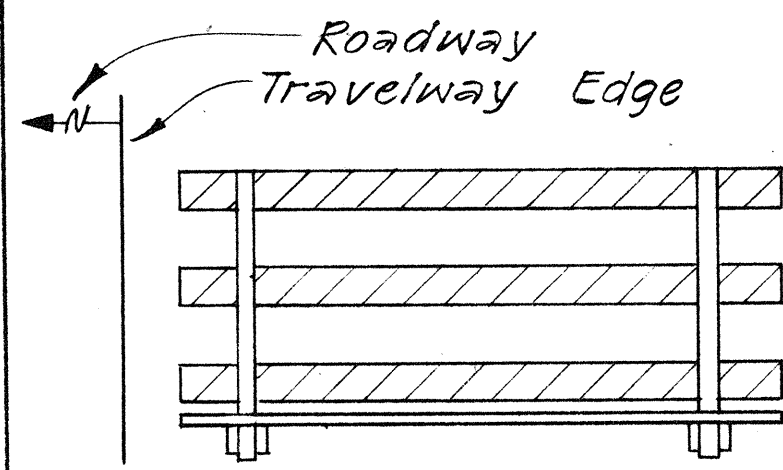
BARRICADE STRIPING
ARRANGEMENT
NOT TO SCALE



ROADWAY DELINEATION
FOR 2-WAY TRAFFIC
NOT TO SCALE

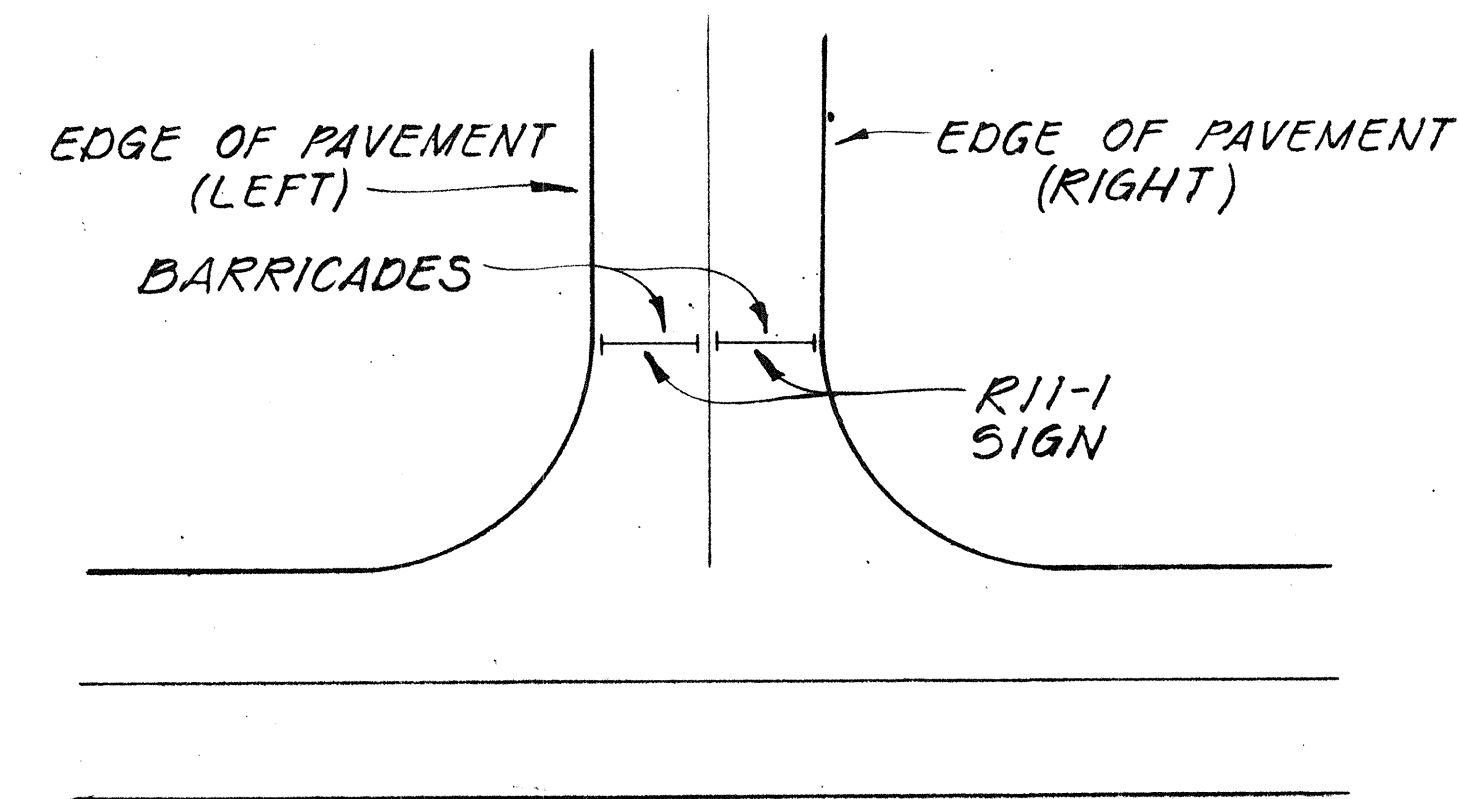


FRONT VIEW

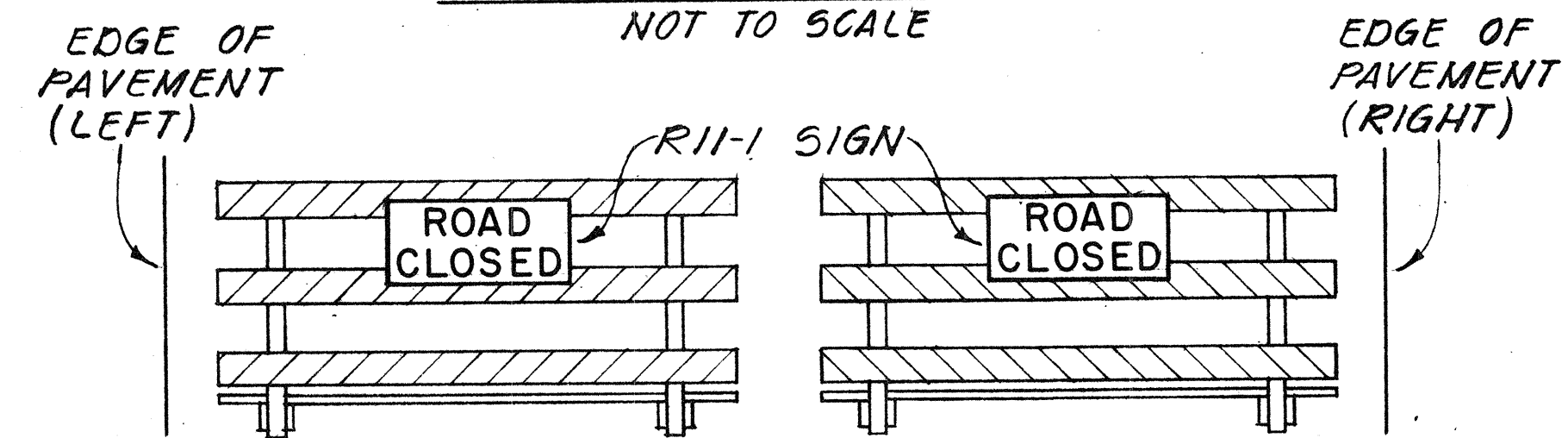


BACK VIEW

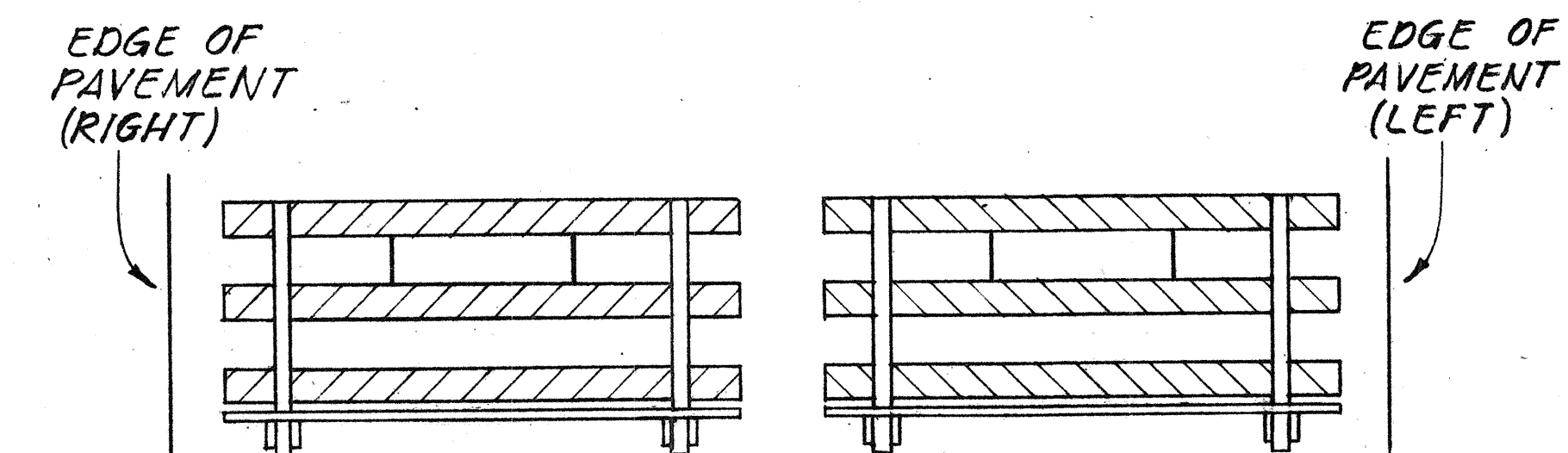
BARRICADE STRIPING
ARRANGEMENT
NOT TO SCALE



ROADWAY CLOSED
NOT TO SCALE



FRONT VIEW



BACK VIEW

BARRICADE STRIPING
ARRANGEMENT
NOT TO SCALE

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION					
<u>TYPICAL DETAILS</u>					
<u>BARRICADE STRIPING DETAILS</u>					
SHEET NO. 5 OF 10 SHEETS					

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR-078-1(30)	1980	27	31



CW20-1a 48" x 48"



CW20-2d 48" x 48"



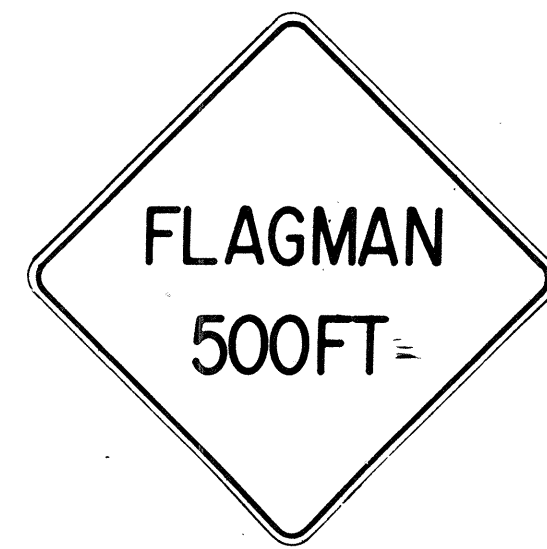
CW20-3b 48" x 48"



CW20-4d 48" x 48"



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



CW20-7c 48" x 48"



CW21-1 30" x 30"



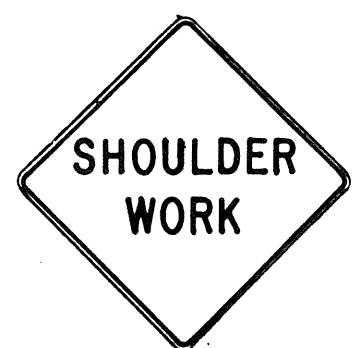
CW21-2 30" x 30"



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"



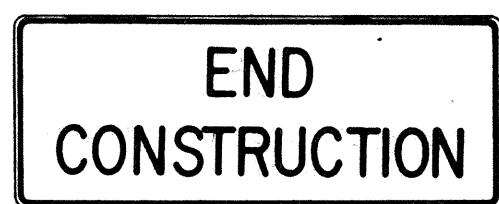
CW22-2 42" x 36"



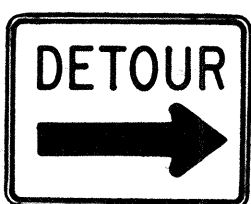
CW22-3 42" x 36"



CG20-1(5) 60" x 36"



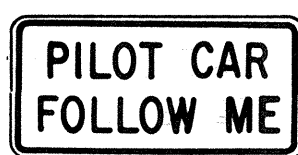
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



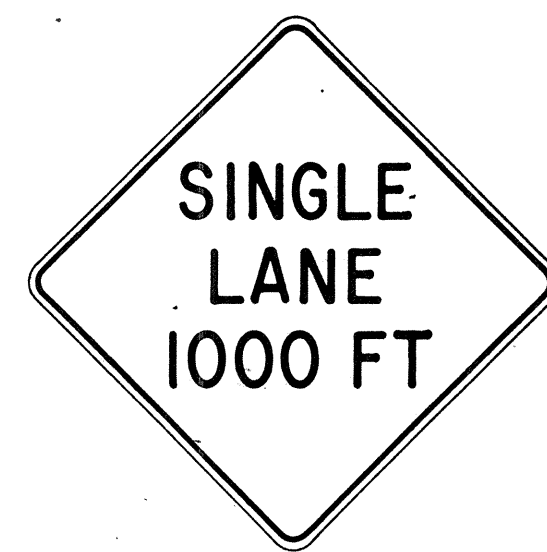
CM4-10(R) 48" x 18"



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 $\frac{3}{8}$ " 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.

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 104 Approved 12-30-69	H.T.	3/25/72
2	Revised General Note 1	H.T.	10/16/74
3	Revised General Note 2	H.T.	9-16-75
4	Revised General Note 2 and sign CG20-1(5)	H.T.	9-14-76

APPROVAL RECOMMENDED:
Eushe Tanaka
TRAFFIC ENGINEER

3/21/72
DATE

APPROVED:
Shirley S. S. S.
ASSISTANT CHIEF, ENGINEERING

3/23/72
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

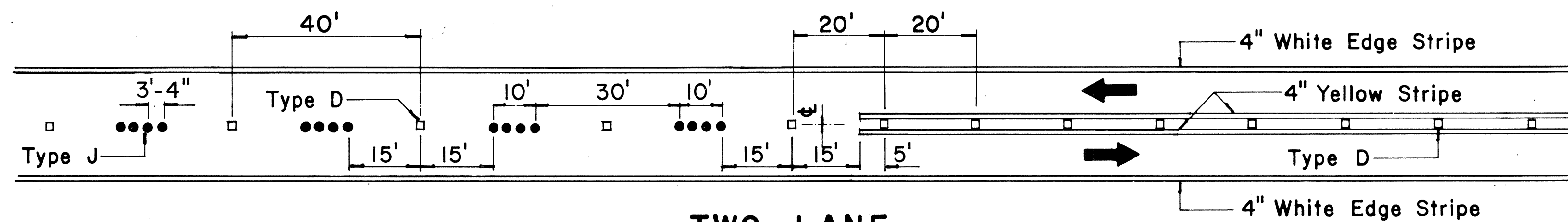
STANDARD DETAILS CONSTRUCTION SIGNS

NOT TO SCALE

SHEET NO. 6 OF 10 SHEETS DT 104

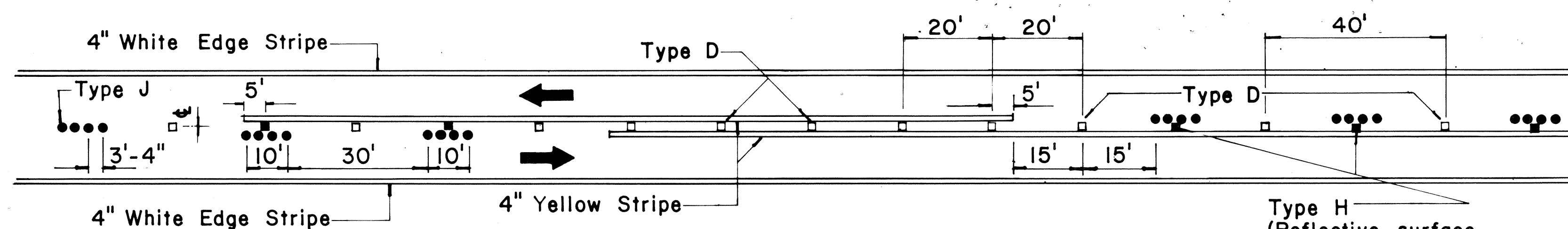
DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TELETYPE BY	_____
NOTE BOOK	_____
CHECKED BY	_____
No.	_____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR-07B-1(23)	1980	28	31



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

TWO - LANE

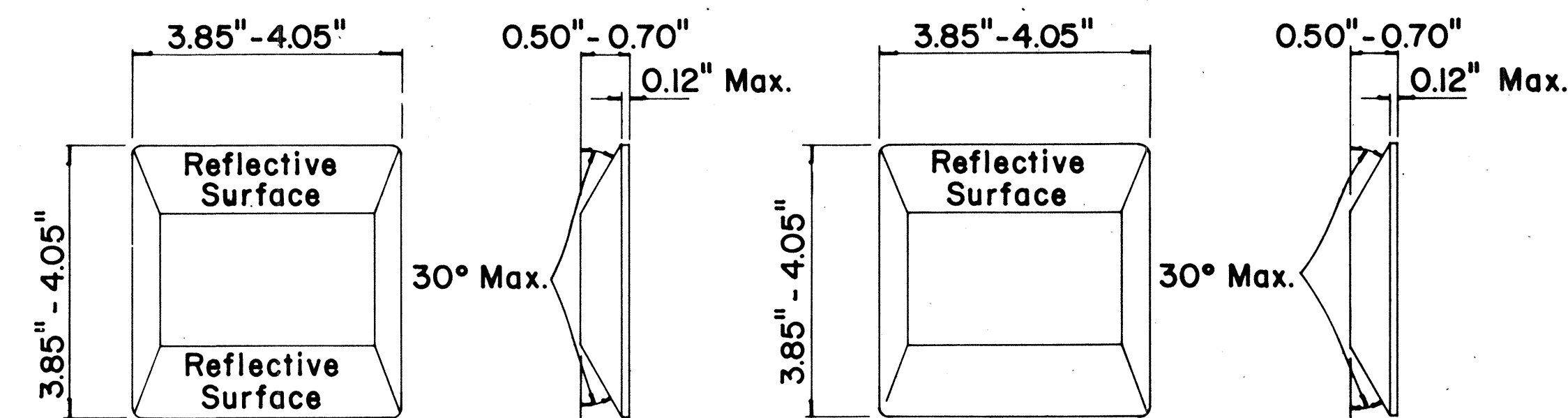


**TWO - LANE
PASSING PROHIBITED ZONES**

**TYPE A
NON-REFLECTIVE WHITE MARKER**

**TYPE C
RED-CLEAR REFLECTIVE MARKER**

**TYPE J
NON-REFLECTIVE YELLOW MARKER**



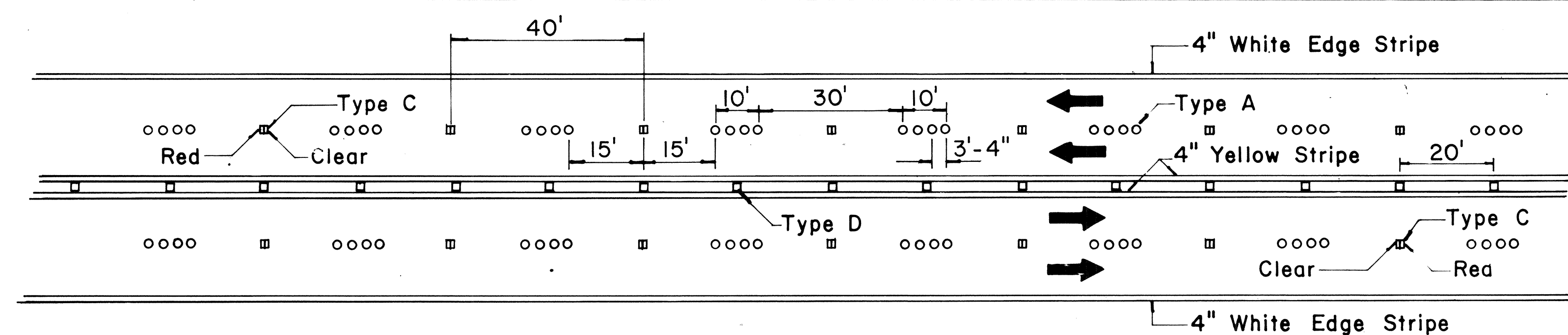
TYPE D

TYPE H

TWO-WAY YELLOW REFLECTIVE MARKER

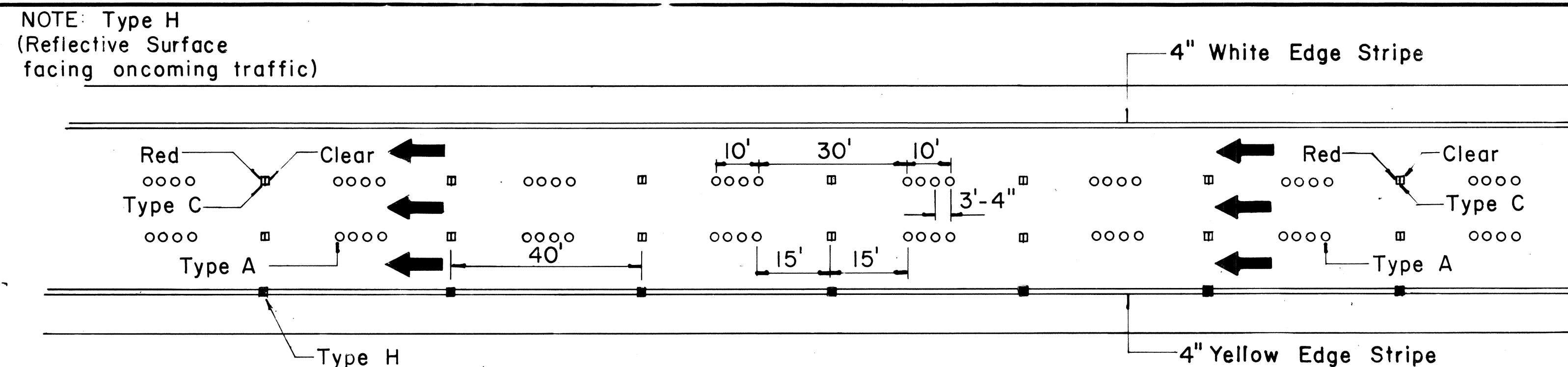
ONE-WAY YELLOW REFLECTIVE MARKER

MULTI - LANE



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

**DIVIDED HIGHWAY
AND
FREEWAY**



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

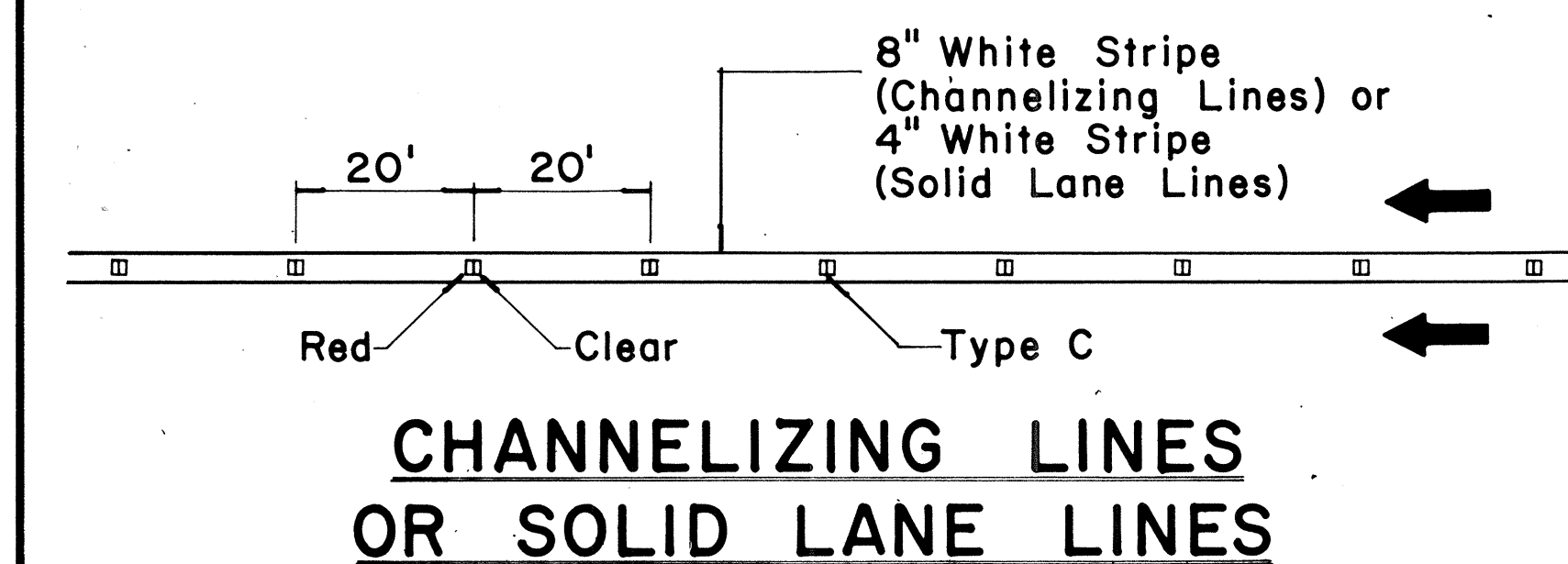
APPROVAL RECOMMENDED:
E. iuku Tanaka 11/18/71
TRAFFIC ENGINEER DATE

APPROVED:
Shelton Z. Katsush 11/18/71
ASSISTANT CHIEF, ENGINEERING DATE

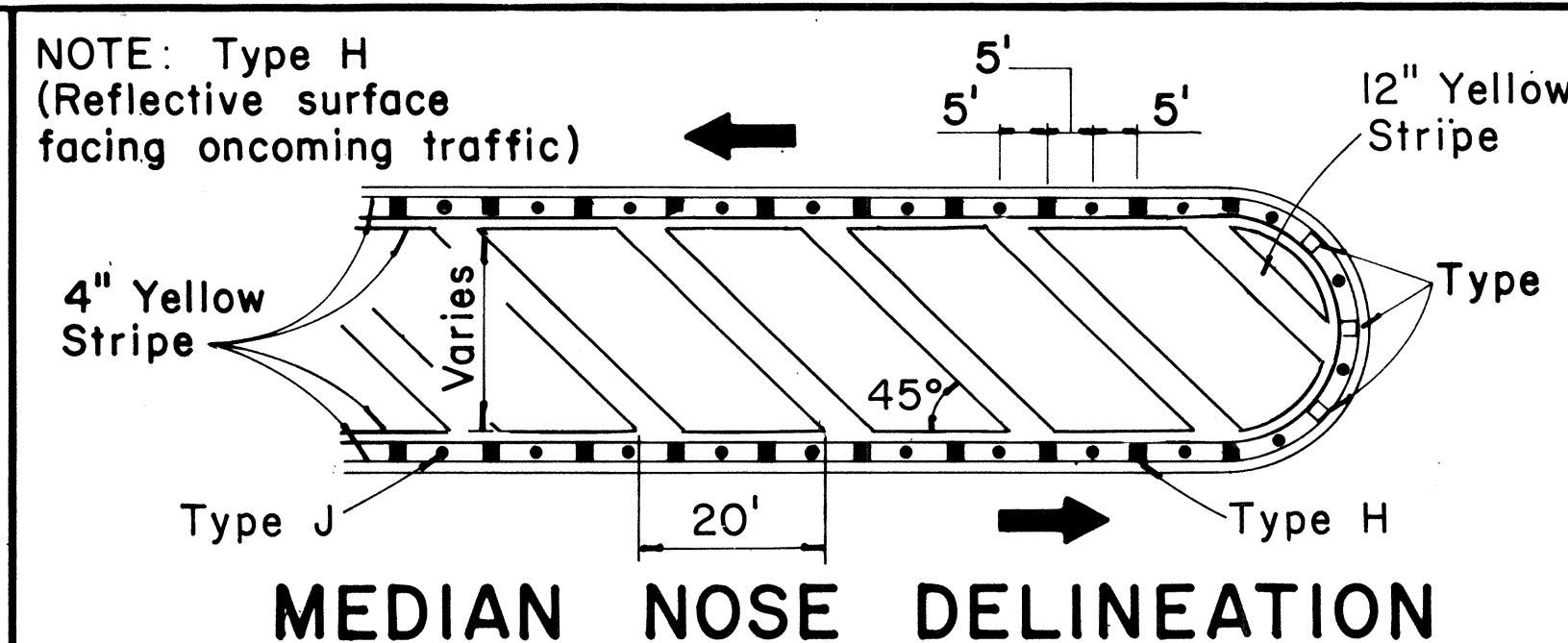
No.	REVISION	APPROVED BY	DATE
1	Add reflector marker in each line gap.	H.T.	10-21-72
2	Revised General Notes.	H.T.	10-21-72
3	Change 4" white edge stripe to 4" solid yellow edge stripe to left edge of a travel path and Add Type H Reflector Marker.	H.T.	5-22-74
4	Revised details, General Notes & Title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

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

Not to Scale October 1971
SHEET No. 7 OF 10 SHEETS DT 300



**CHANNELIZING LINES
OR SOLID LANE LINES**



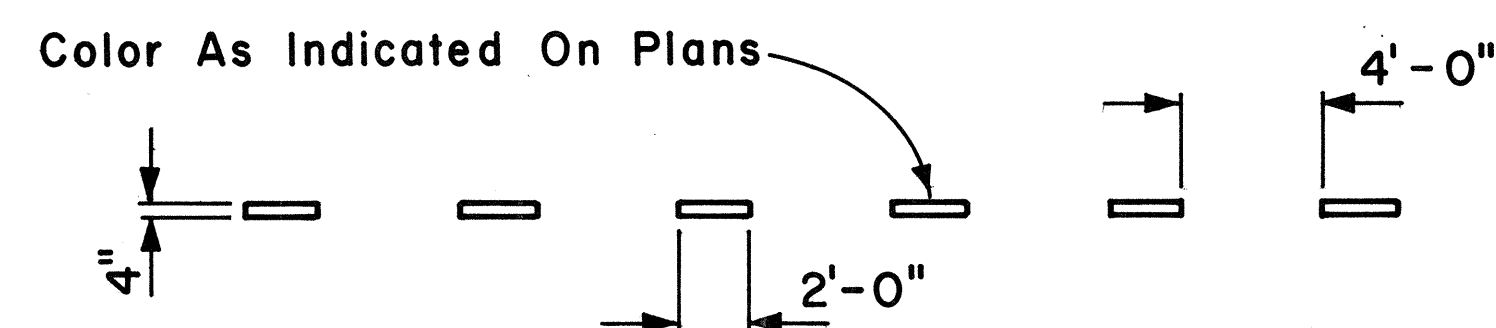
MEDIAN NOSE DELINEATION

MISCELLANEOUS

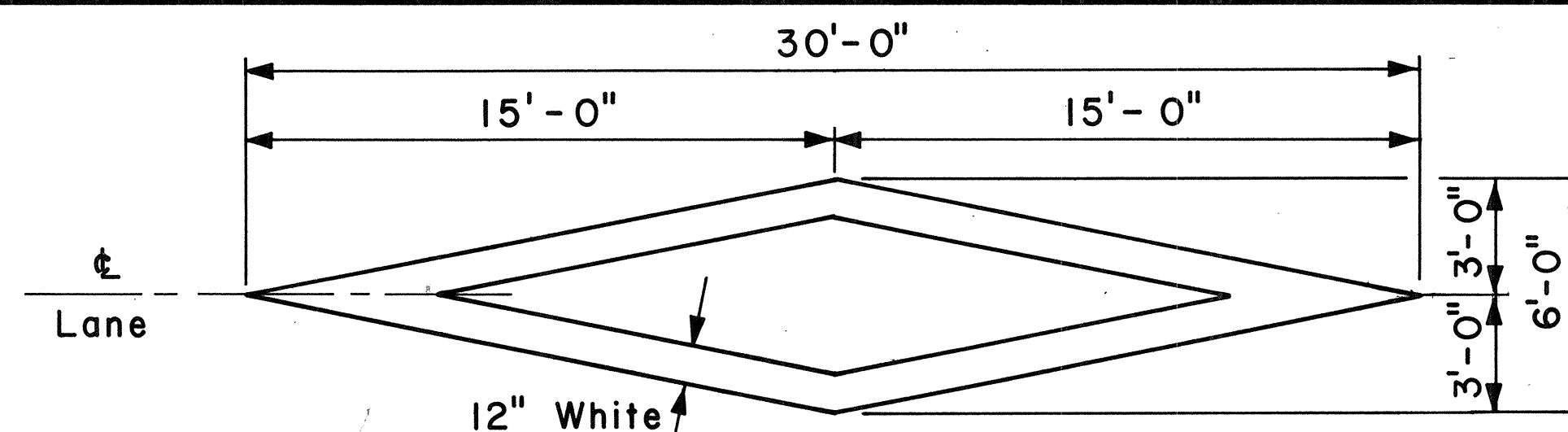
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	PR-078-1(23)	1980	29	31

GENERAL NOTES:

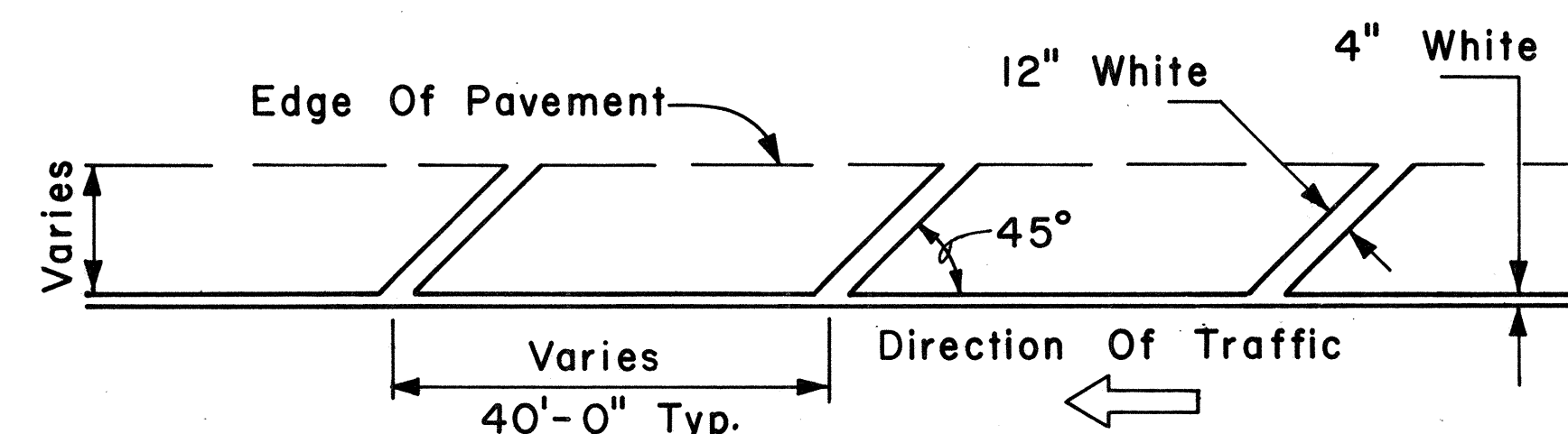
1. Pavement marking and striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of pavement markings and striping shall be done by the Contractor. The Contractor shall check layout of markings and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



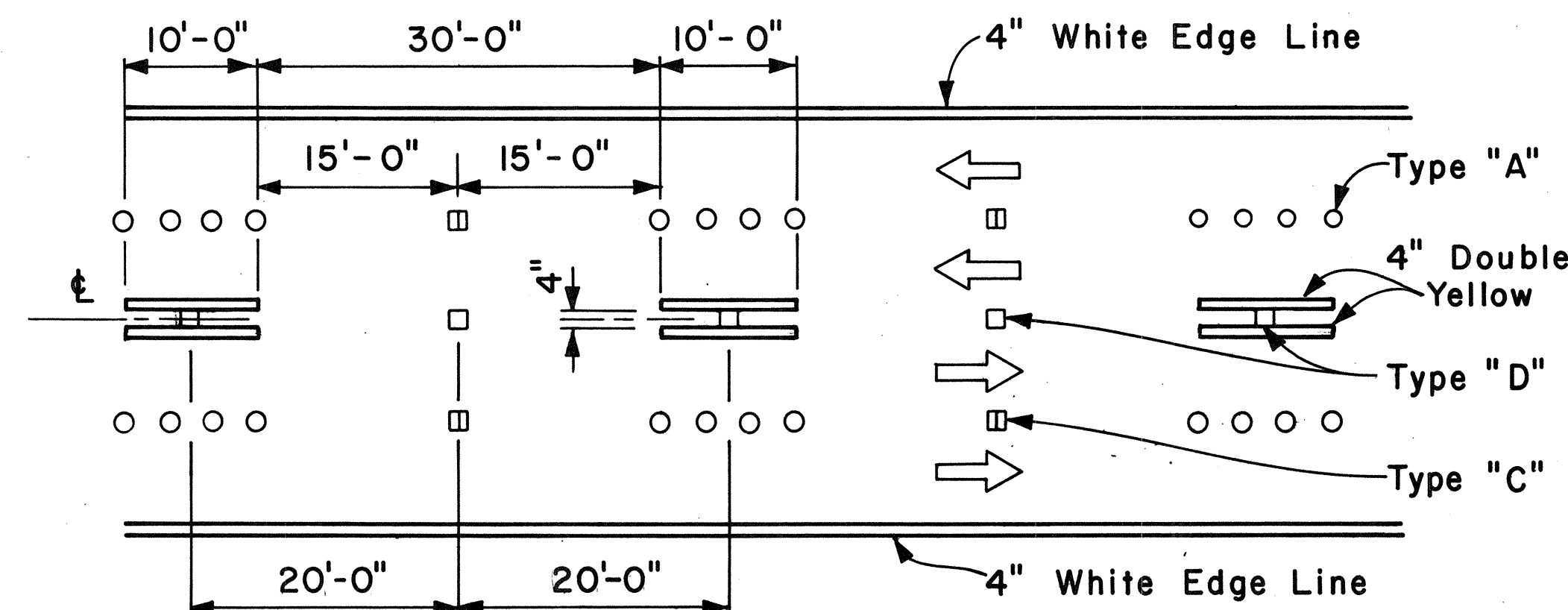
4" GUIDE LINE



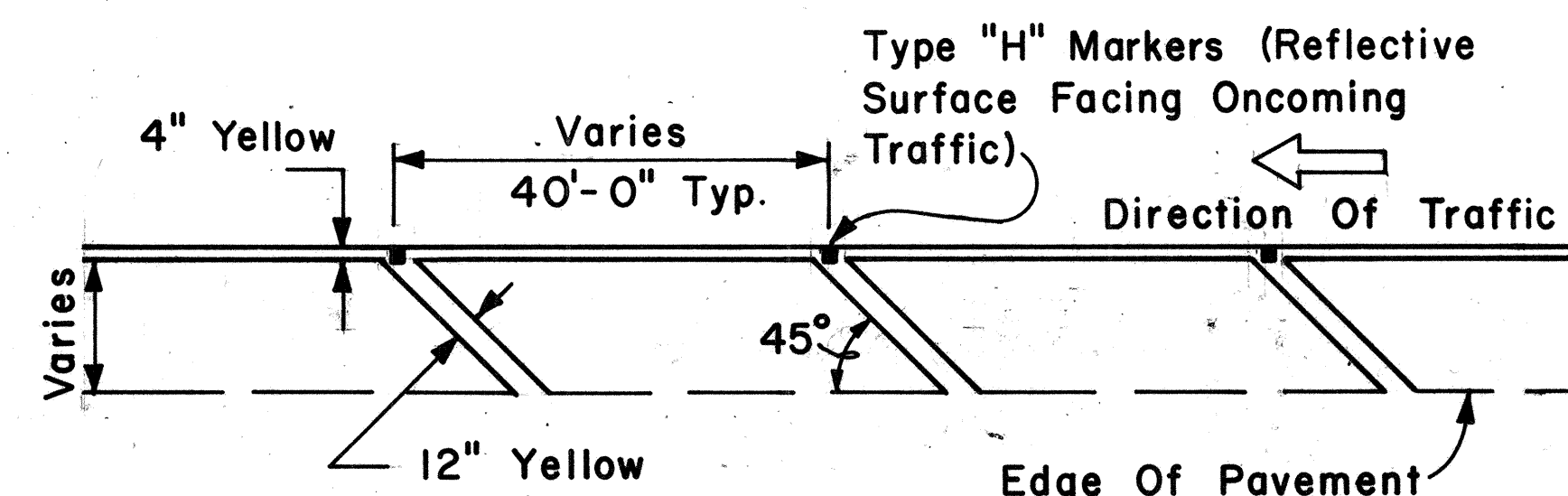
PAVEMENT DIAMOND



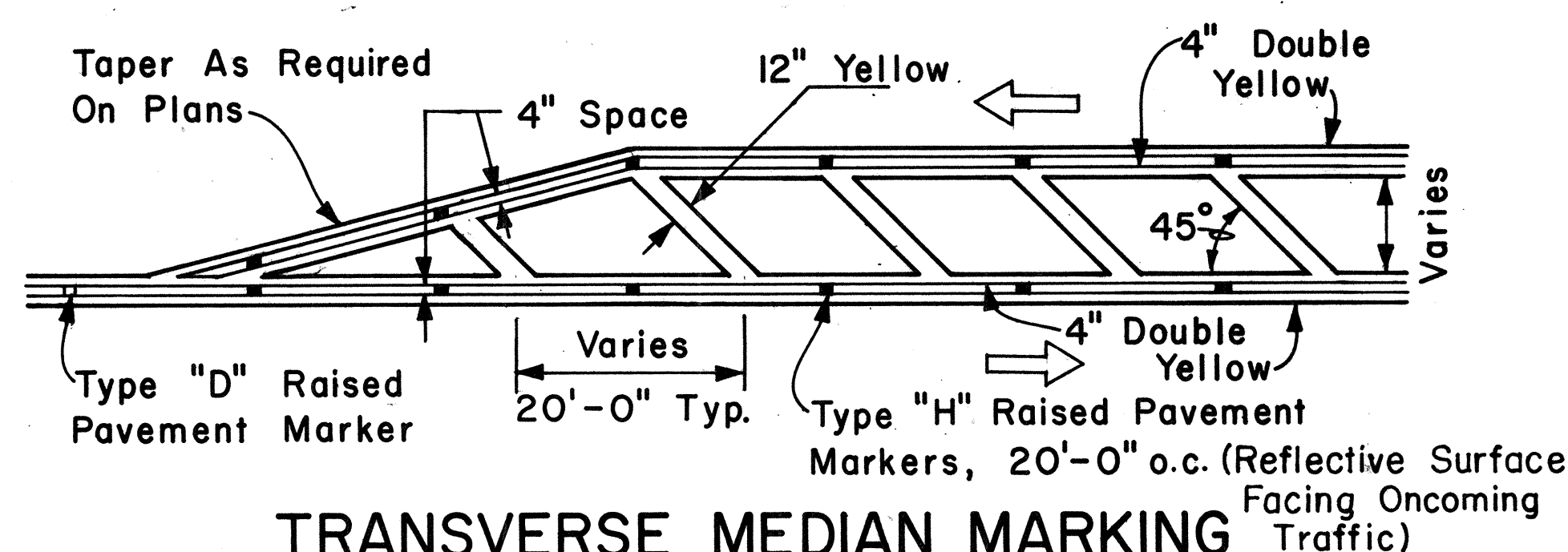
TRANSVERSE RIGHT SHOULDER MARKING



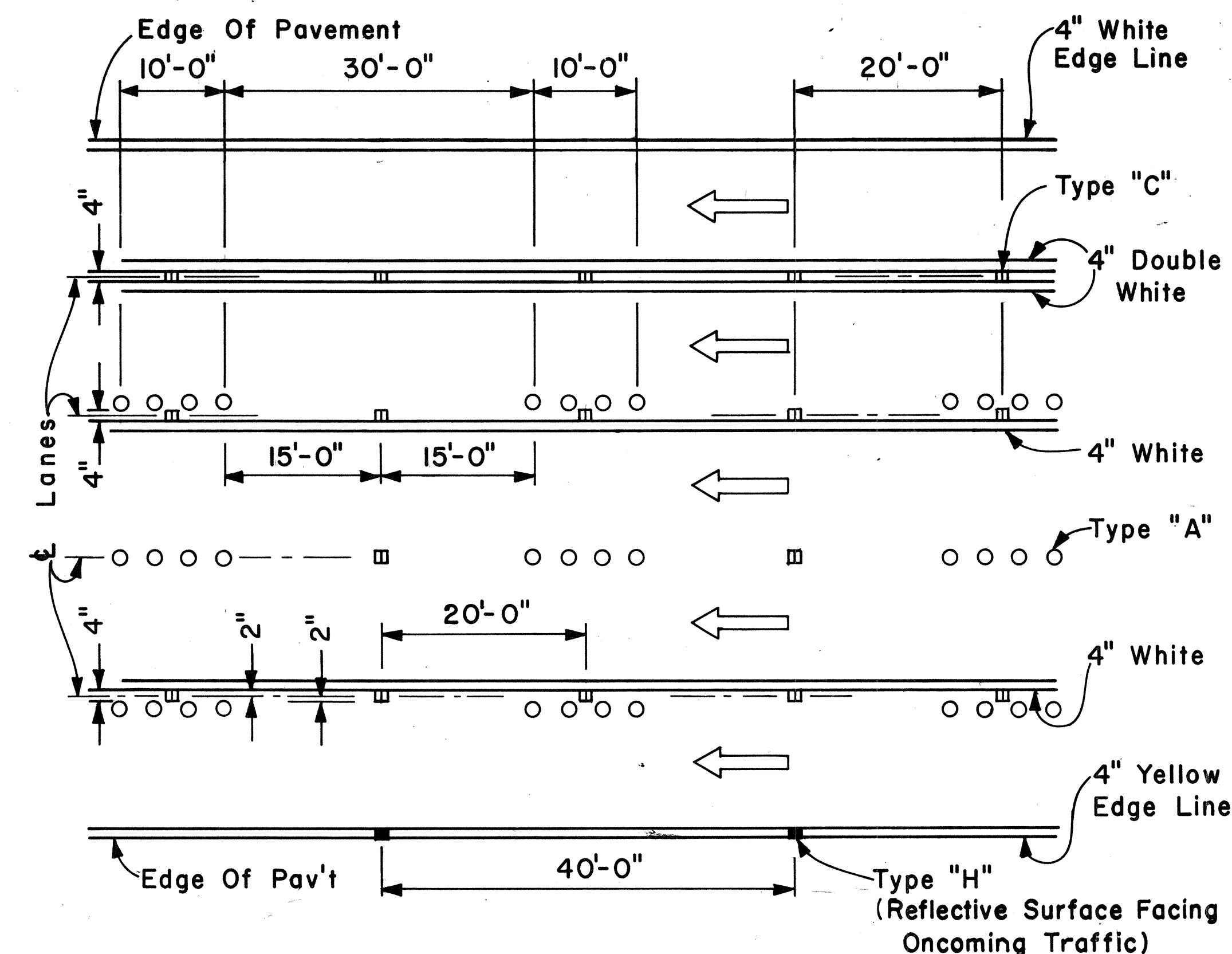
MULTI-LANE REVERSIBLE LANES



TRANSVERSE LEFT SHOULDER MARKING



TRANSVERSE MEDIAN MARKING



MULTI-LANE LANE CHANGE RESTRICTION ZONES

APPROVAL RECOMMENDED: *E. A. Tanaka* 5/2/78
TRAFFIC ENGINEER DATE

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

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
MISCELLANEOUS
PAVEMENT MARKINGS

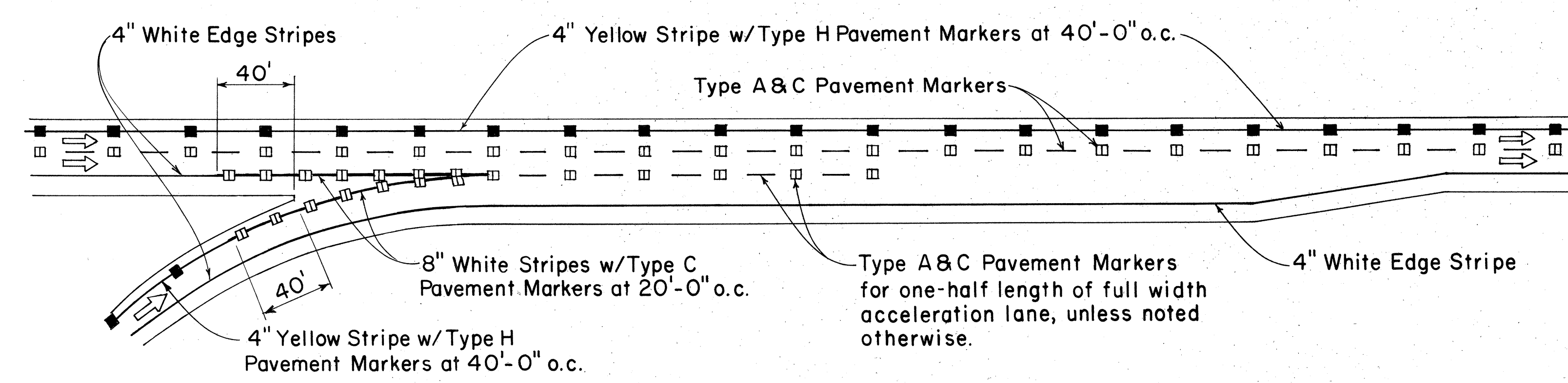
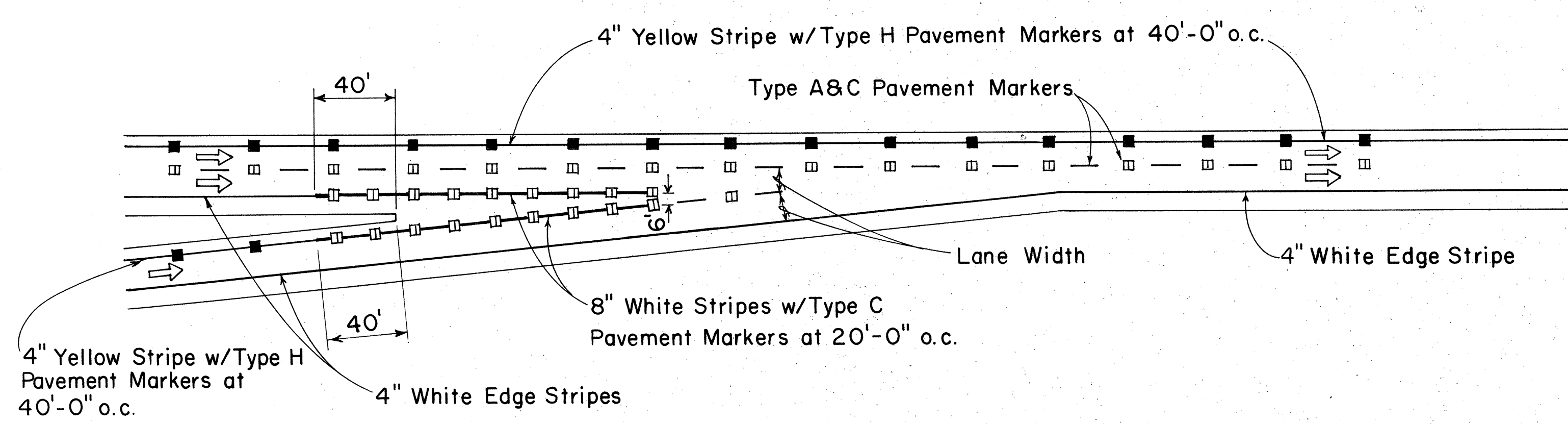
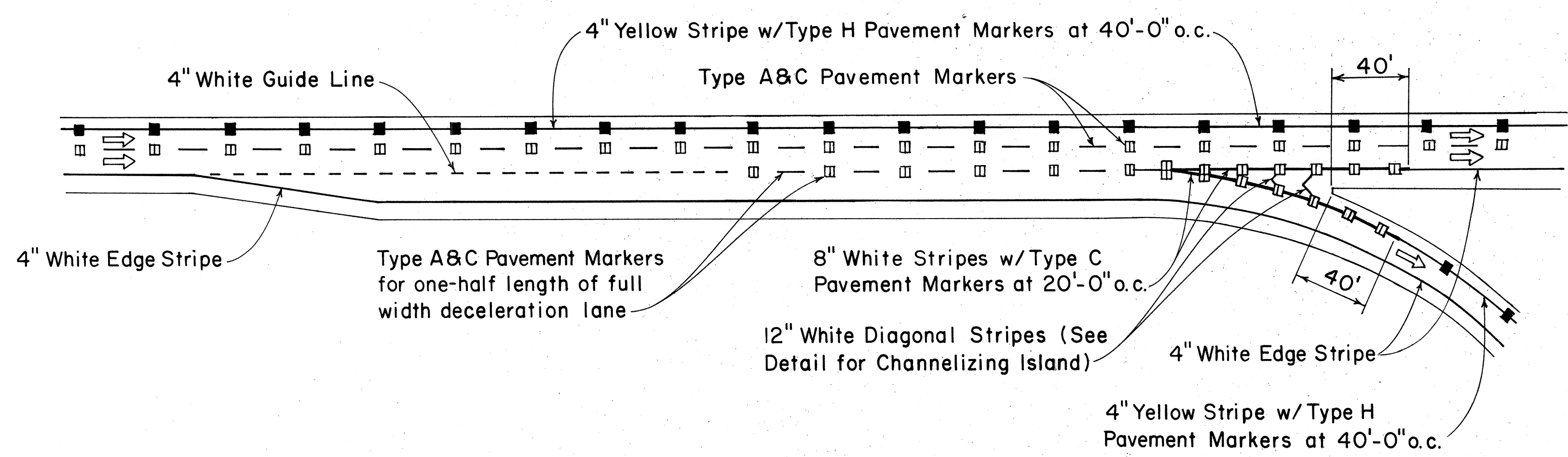
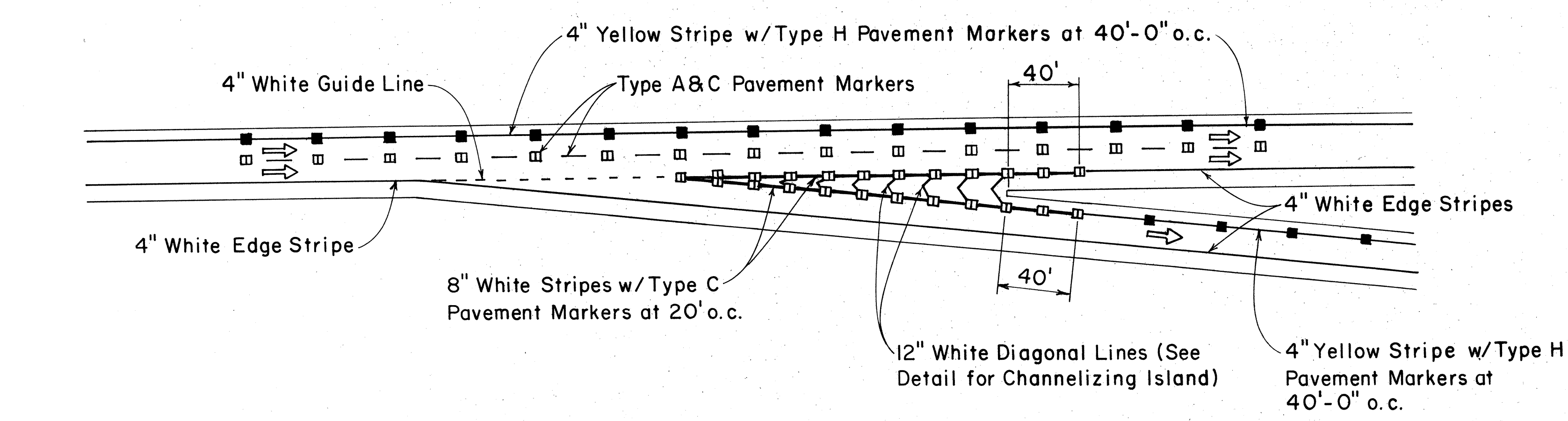
Scale: Not to Scale Date: April, 1978
SHEET NO. 8 OF 10 SHEETS DT 302

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR078-1(23)	1980	30	31

GENERAL NOTES:

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

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	



TAPERED DECELERATION LANE
PARALLEL DECELERATION LANE
TAPERED ACCELERATION LANE
PARALLEL ACCELERATION LANE
TYPICAL ROADWAY EXIT MARKINGS
TYPICAL ROADWAY ENTRANCE MARKINGS

NO.	REVISION	APPROVED BY	DATE

APPROVAL RECOMMENDED:
Eishi Tanaka 1/21/78
 TRAFFIC ENGINEER DATE

APPROVED:
Robert D. Zakeishi 1/24/78
 ASSISTANT CHIEF, ENGINEERING DATE

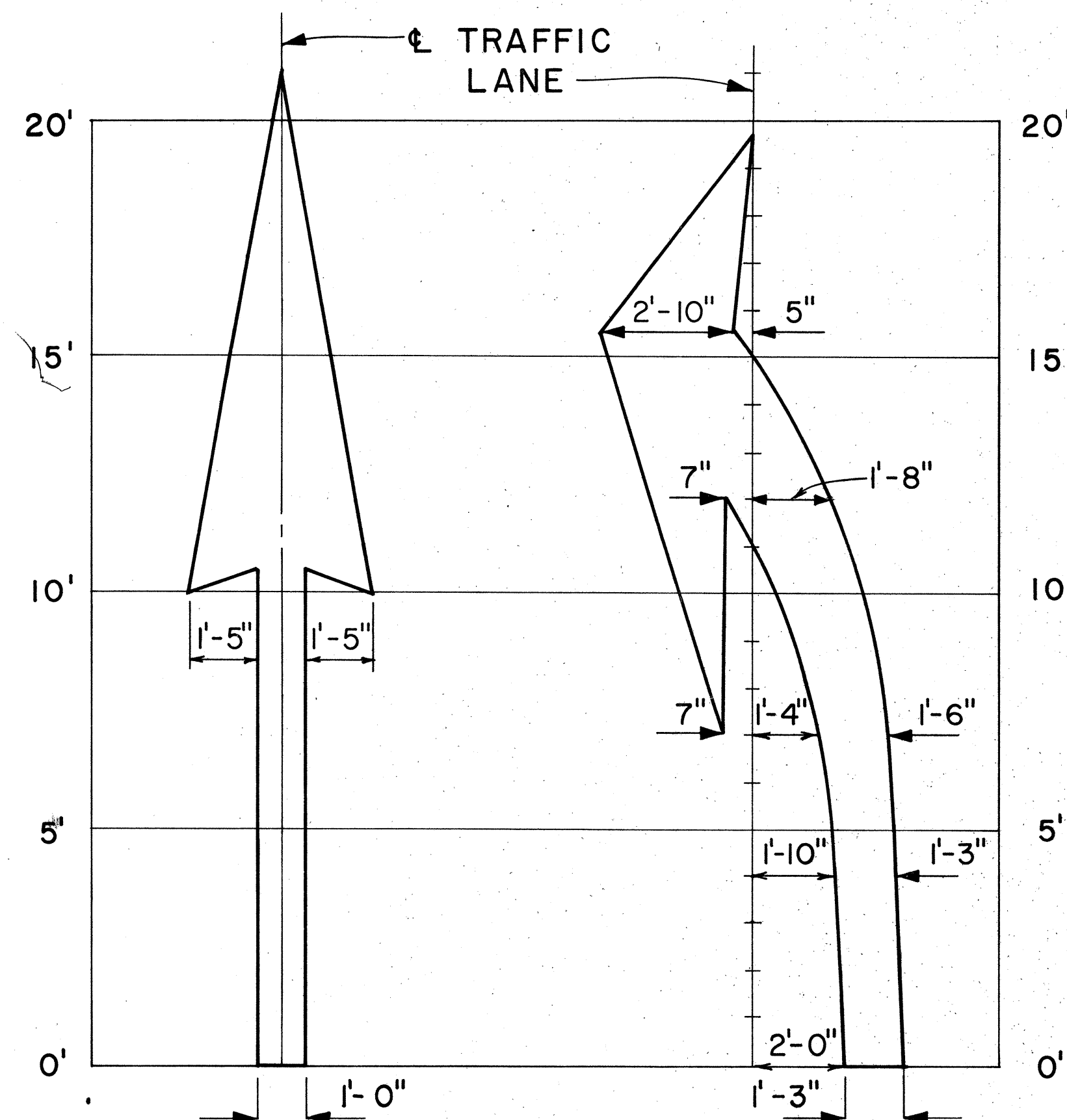
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
 STANDARD DETAILS
 MISCELLANEOUS
 PAVEMENT MARKINGS
 Not to Scale July 1978
 SHEET No. 2 OF 10 SHEETS DT 304

30

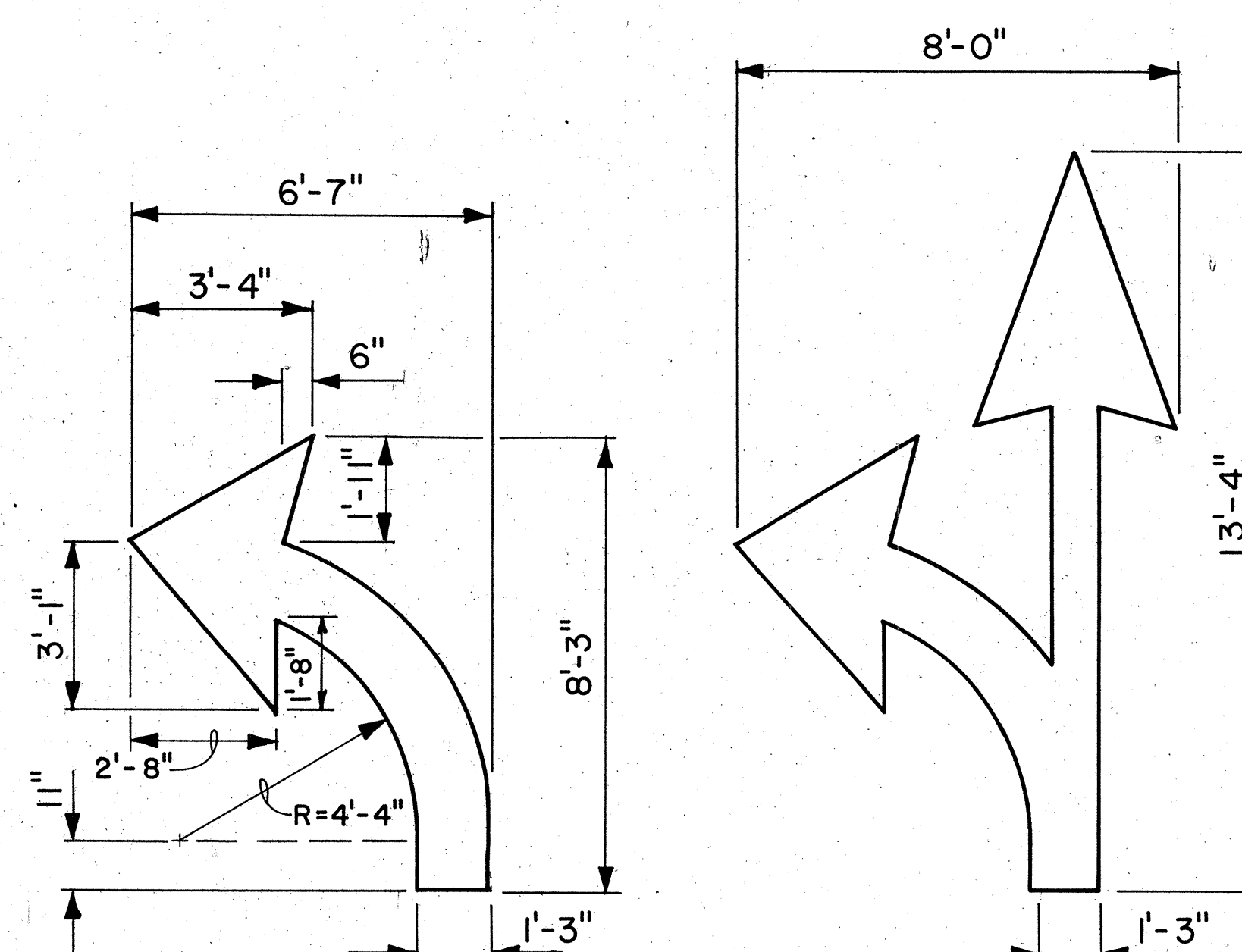
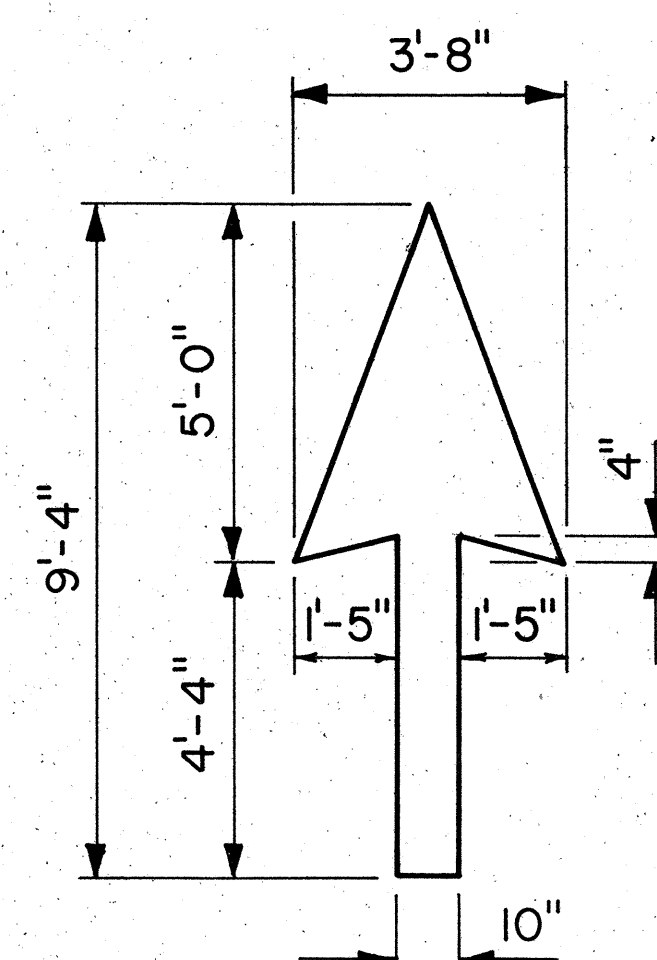
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FR078-123	1980	31	31

GENERAL NOTES:

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



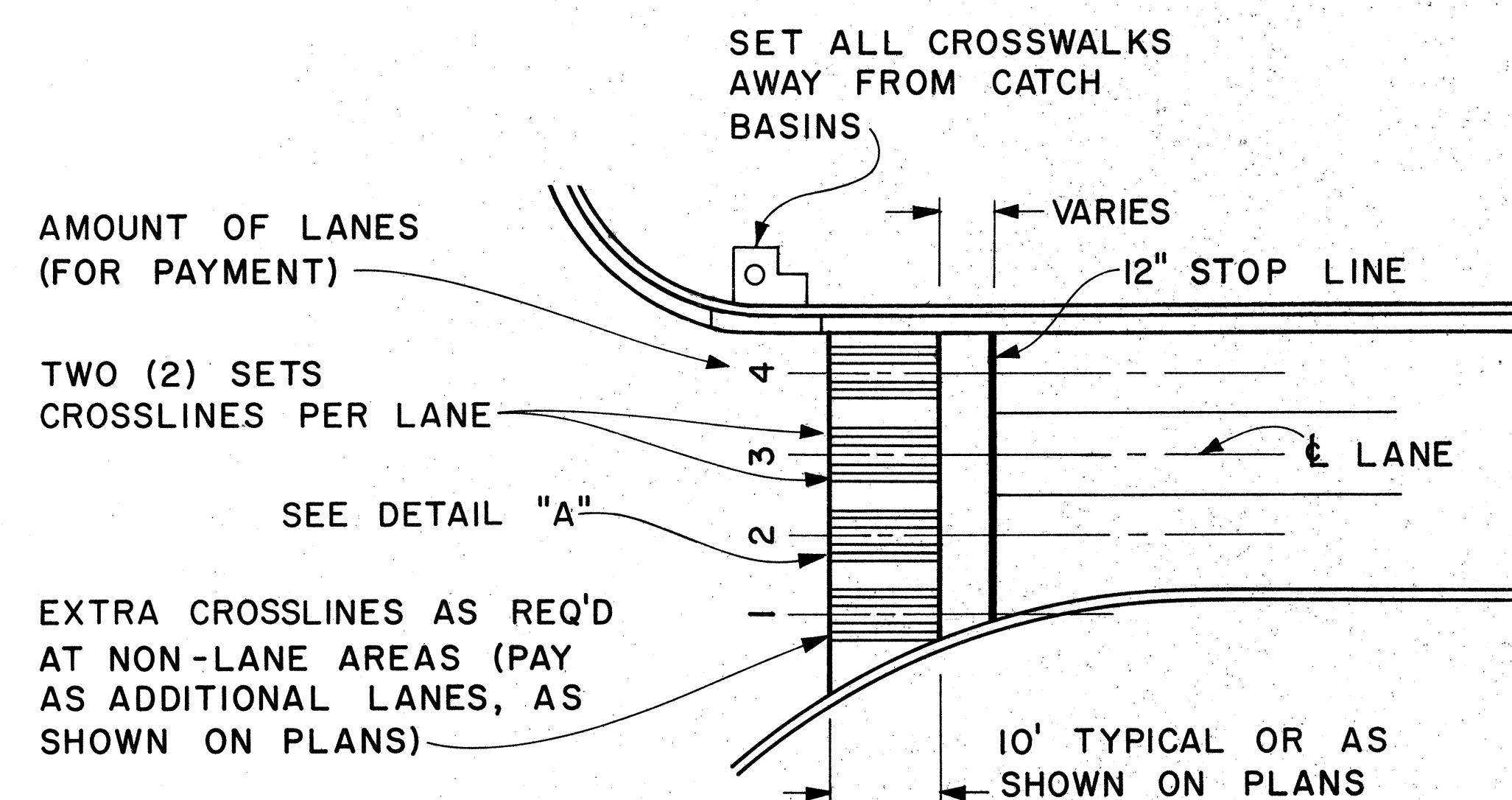
ELONGATED



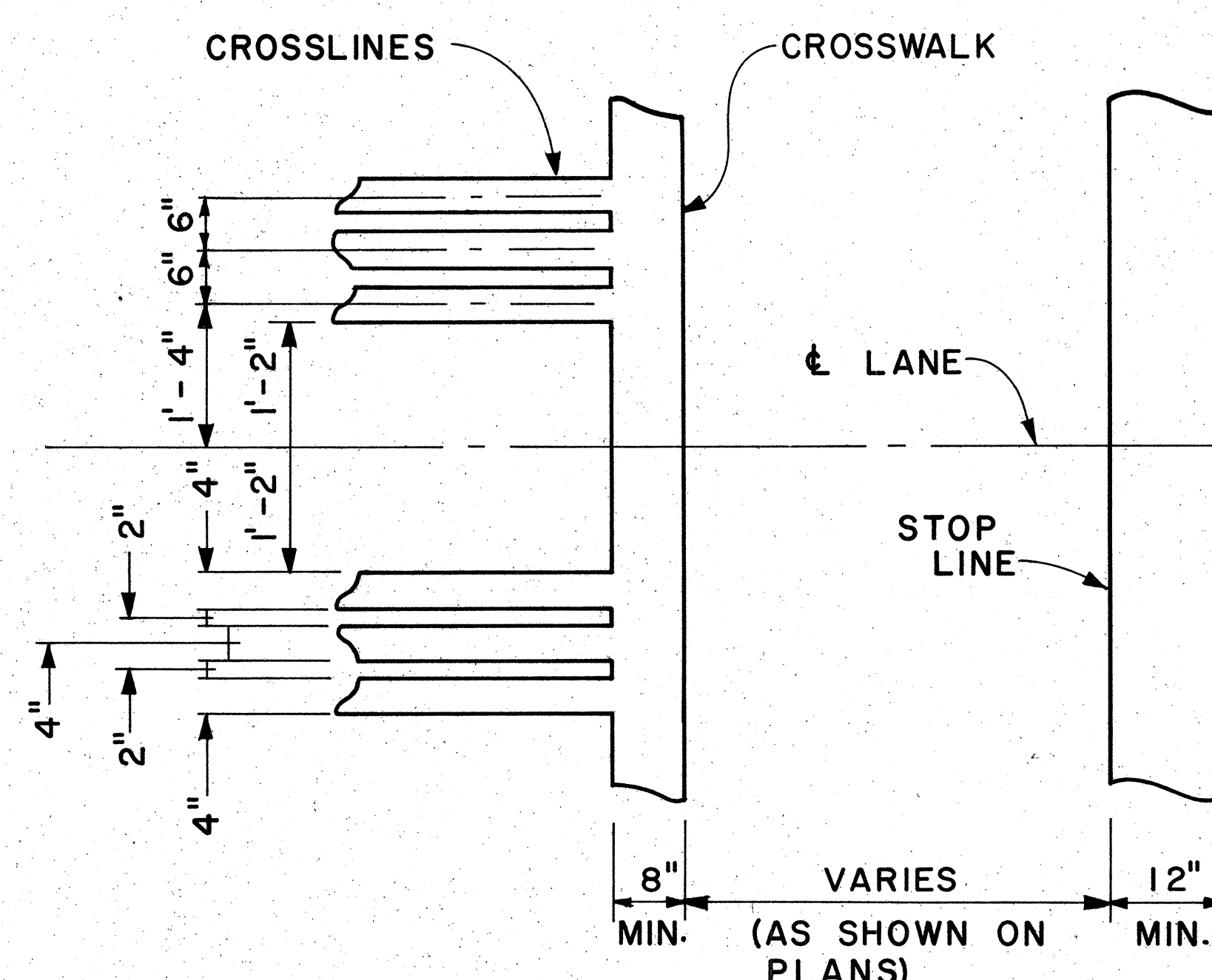
STANDARD

PAVEMENT ARROWS

Scale: 3/8" = 1'



PLAN



DETAIL "A"

CROSSWALK & STOP LINE

Scale: Not to Scale

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

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

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
 MISCELLANEOUS
 PAVEMENT MARKINGS

Scale: As Shown Date: March, 1978
 SHEET No. 10 OF 10 SHEETS DT 306