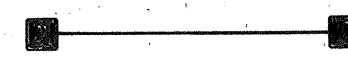
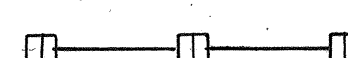
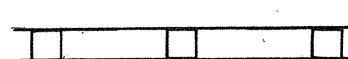
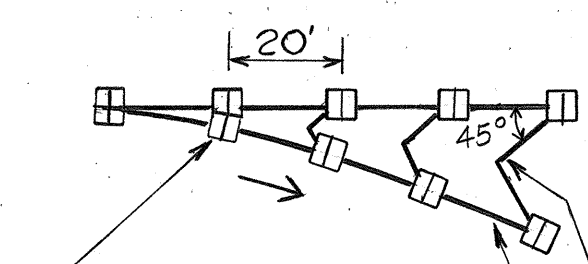
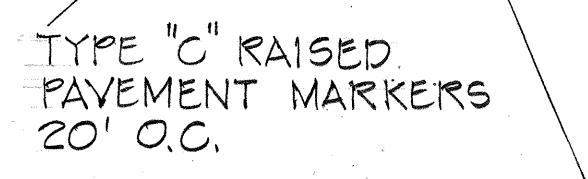
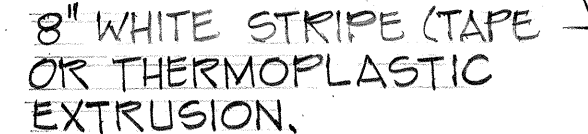
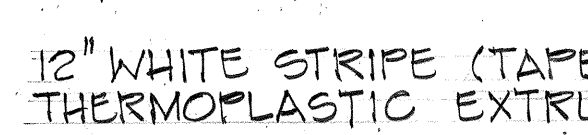


PAVEMENT MARKING SUMMARY		
DESCRIPTION	QUANTITY	
TYPE "A" PAVEMENT MARKERS	2,384	EA.
TYPE "C" PAVEMENT MARKERS	855	EA.
TYPE "D" PAVEMENT MARKERS	13	EA.
TYPE "H" PAVEMENT MARKERS	513	E.A.
4" PAVEMENT STRIPING (TAPE OR THERMOPLASTIC)	200	L.F.
4" PAVEMENT STRIPING (PAINT)	44,000	L.F.
DOUBLE 4" PAVEMENT STRIPING (TAPE)	80	L.F.
8" PAVEMENT STRIPING (TAPE OR THERMOPLASTIC)	5,300	L.F.
12" PAVEMENT STRIPING (TAPE OR THERMOPLASTIC)	320	L.F.
PAVEMENT ARROW (TAPE)	16	EA.
CROSSWALK MARKING (TAPE OR THERMOPLASTIC)	46	LANES
CROSSWALK MARKING (THERMOPLASTIC)	4	LANES

LEGEND

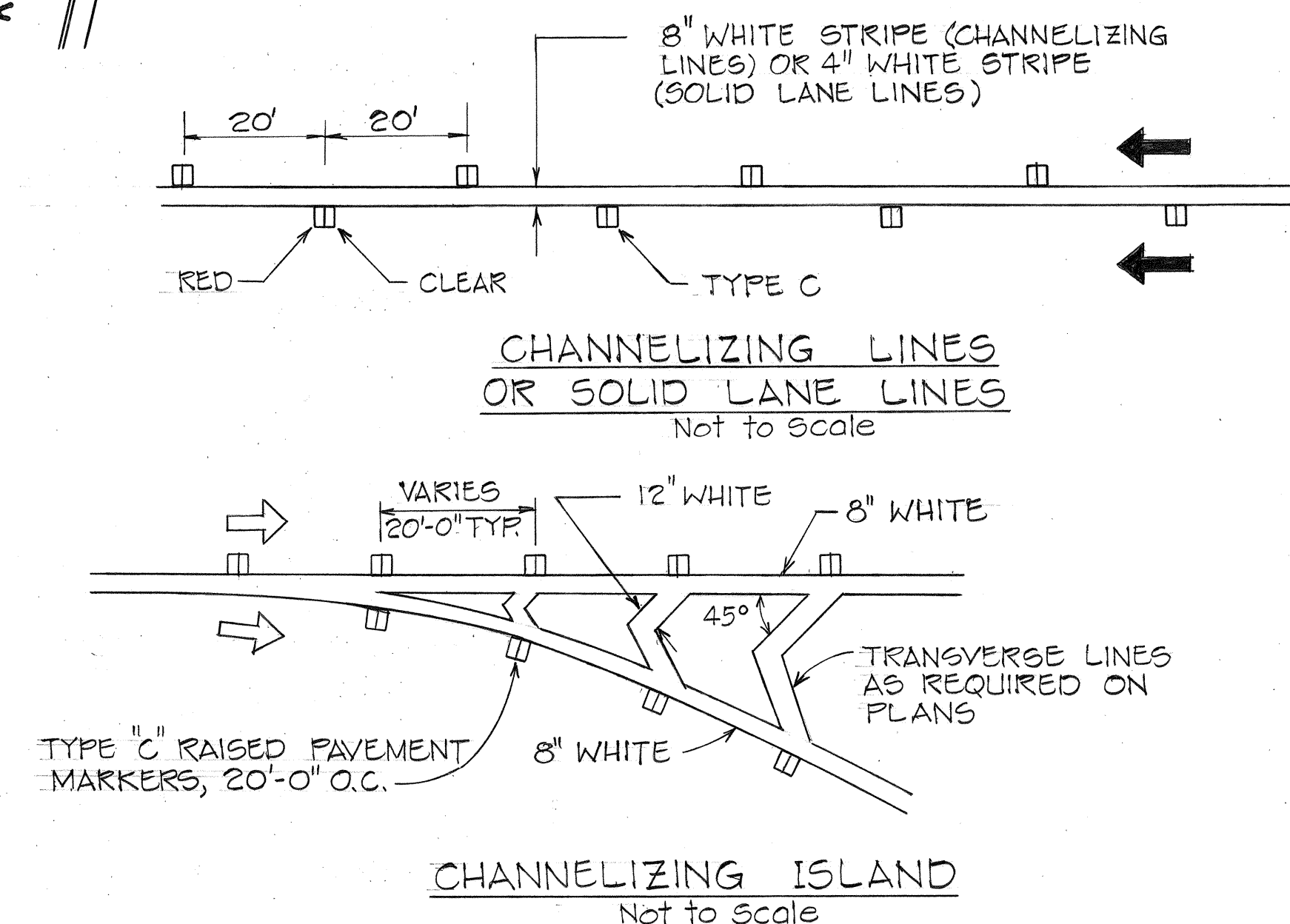
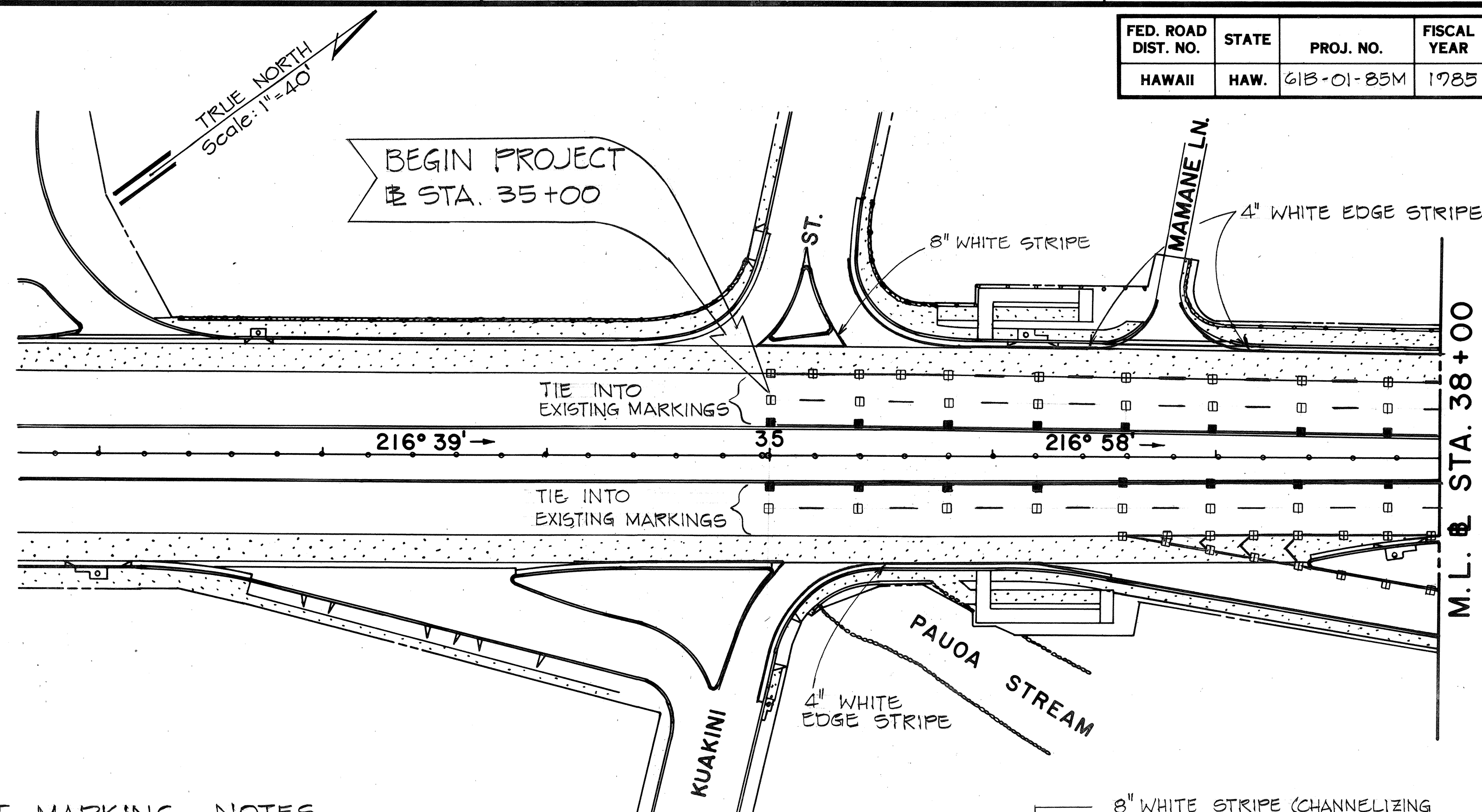
 TYPE "C" PAVEMENT MARKERS
 4 EACH TYPE "A" PAVEMENT MARKERS

 4" YELLOW STRIPE (PAINT) W/TYPE "H" PAVEMENT MARKERS 40' O.C. (SEE STD. DETAIL SHEET DT 300 FOR PROPER PLACEMENT OF TYPE "H" MARKERS)
 8" WHITE STRIPE W/TYPE "C" PAVEMENT MARKERS 20' O.C. (TAPE OR THERMOPLASTIC EXTRUSION) SEE DETAIL THIS SHEET FOR PROPER PLACEMENT OF TYPE "C" MARKERS.
 4" GUIDE LINE (TAPE OR THERMOPLASTIC EXTRUSION) COLOR AS SHOWN ON PLANS
 4" WHITE EDGE STRIPE (PAINT)
 DOUBLE 4" YELLOW STRIPE (TAPE) W/TYPE "D" PAVEMENT MARKERS 20' O.C.

 CHANNELIZING ISLAND MARKING SEE DETAIL THIS SHEET FOR PROPER PLACEMENT OF TYPE "C" MARKERS
 TYPE "C" RAISED PAVEMENT MARKERS 20' O.C.
 8" WHITE STRIPE (TAPE OR THERMOPLASTIC EXTRUSION).
 12" WHITE STRIPE (TAPE OR THERMOPLASTIC EXTRUSION)

PAVEMENT MARKING NOTES

- Locations of all new Pavement Markings shall be staked out in the field by the Contractor for approval by the Engineer prior to installation.
- Existing Pavement Markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various contract items.
- Raised Pavement Markings shall not be placed within Crosswalks.
- For additional Pavement Marking details, see Plan Sheets T12, T13, T14, T15.
- When not shown on the plans, Pavement Markings at ramps, shoulders and intersections removed due to project work shall be reinstalled as directed by the engineer.
- Disregard Channelizing Lines or Solid Lane Lines on Standard Detail DT 300 and Channelizing Island Detail on Standard Detail DT 302.

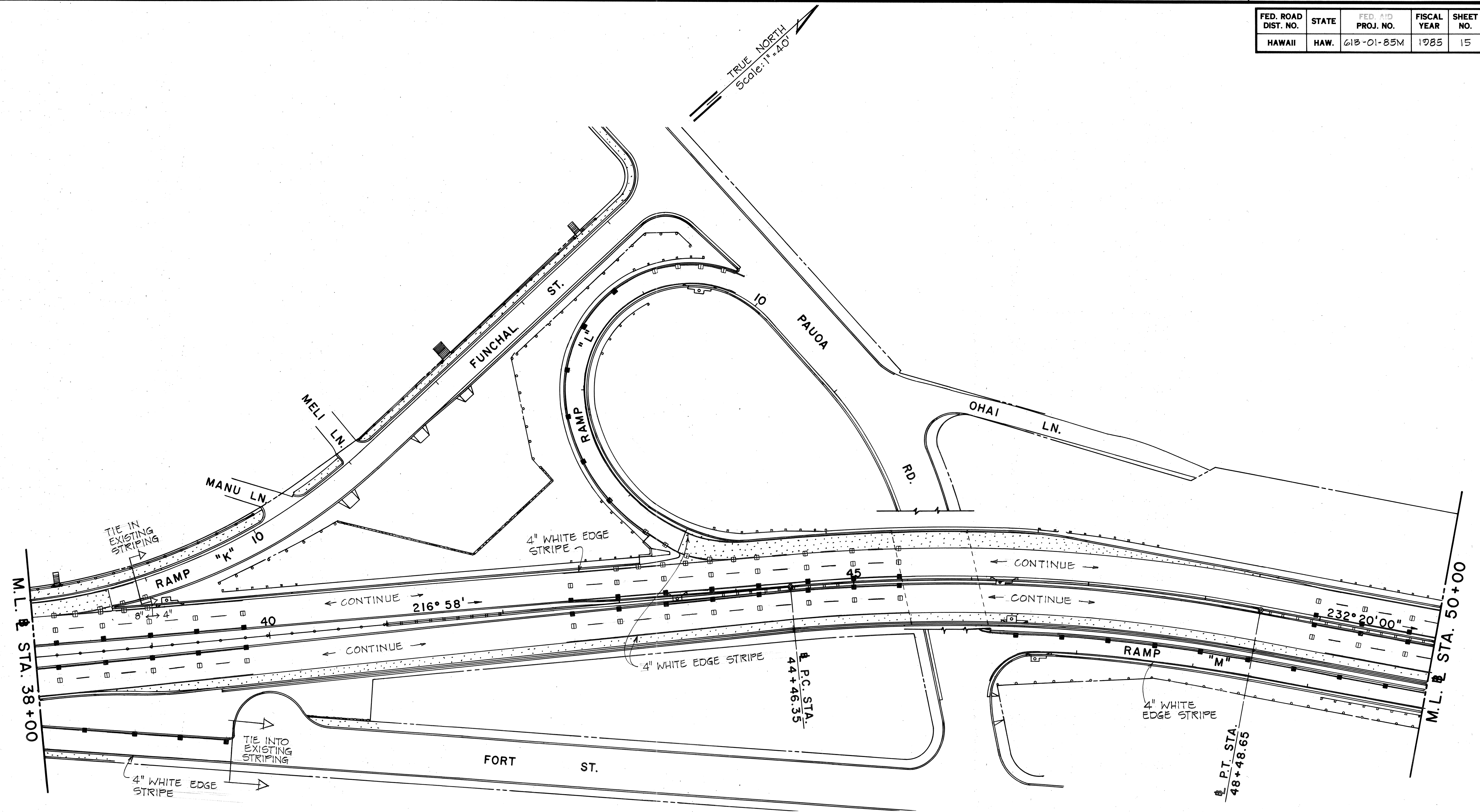


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	613-01-85M	1985	14	29

12/17/84	ADDED THERMOPLASTIC EXTRUSION STRIPING DETAILS AND NOTE #6.
DATE	REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PAVEMENT MARKING PLAN PALI HIGHWAY RESURFACING KUAKINI ST. TO HINALO PLACE PROJ. NO. 613-01-85M	
SCALE: 1"=40'	DATE: NOV. 1984
SHEET NO. T1 OF 16 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	613-01-85M	1985	15	29



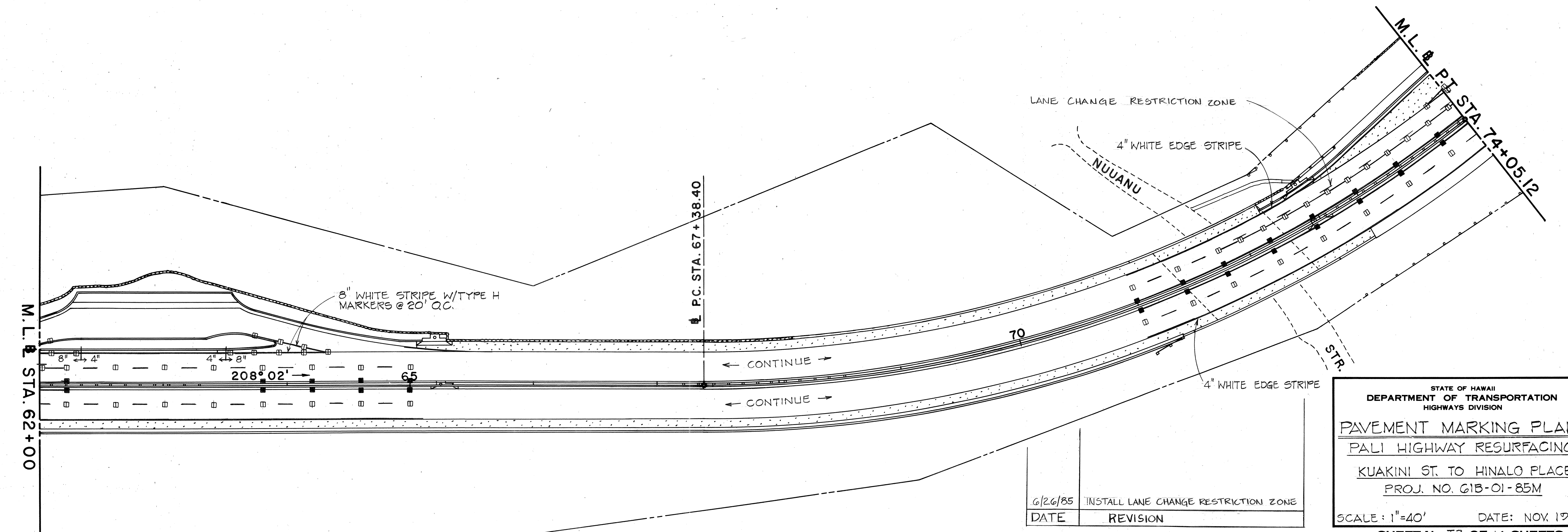
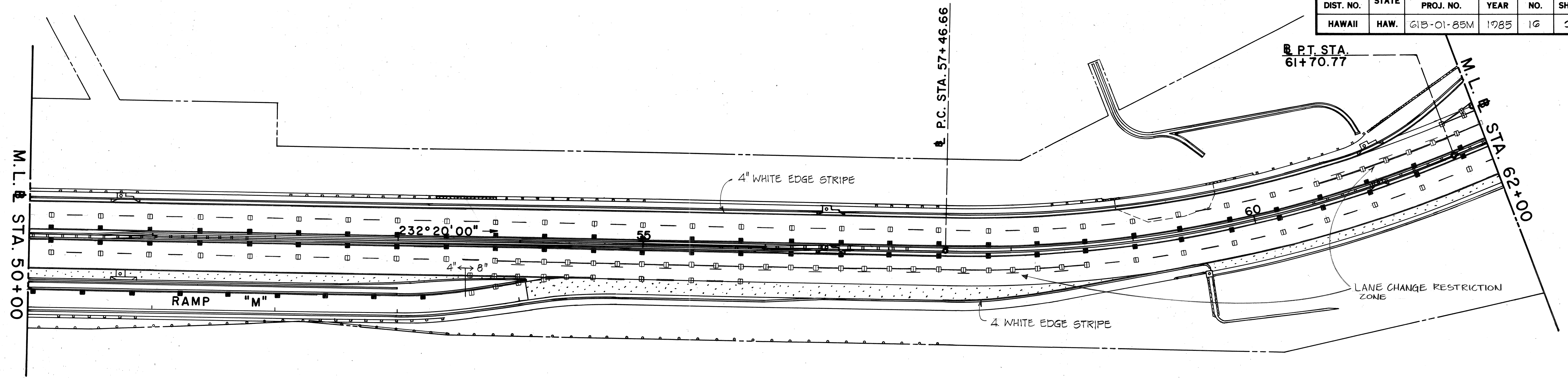
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING PLAN
PALI HIGHWAY RESURFACING
KUAKINI ST. TO HINALO PLACE
PROJ. NO. 613-01-85M

SCALE: 1"=40' DATE: NOV. 1984

SHEET No. T2 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61B-01-85M	1985	16	29



6/26/85	INSTALL LANE CHANGE RESTRICTION ZONE
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

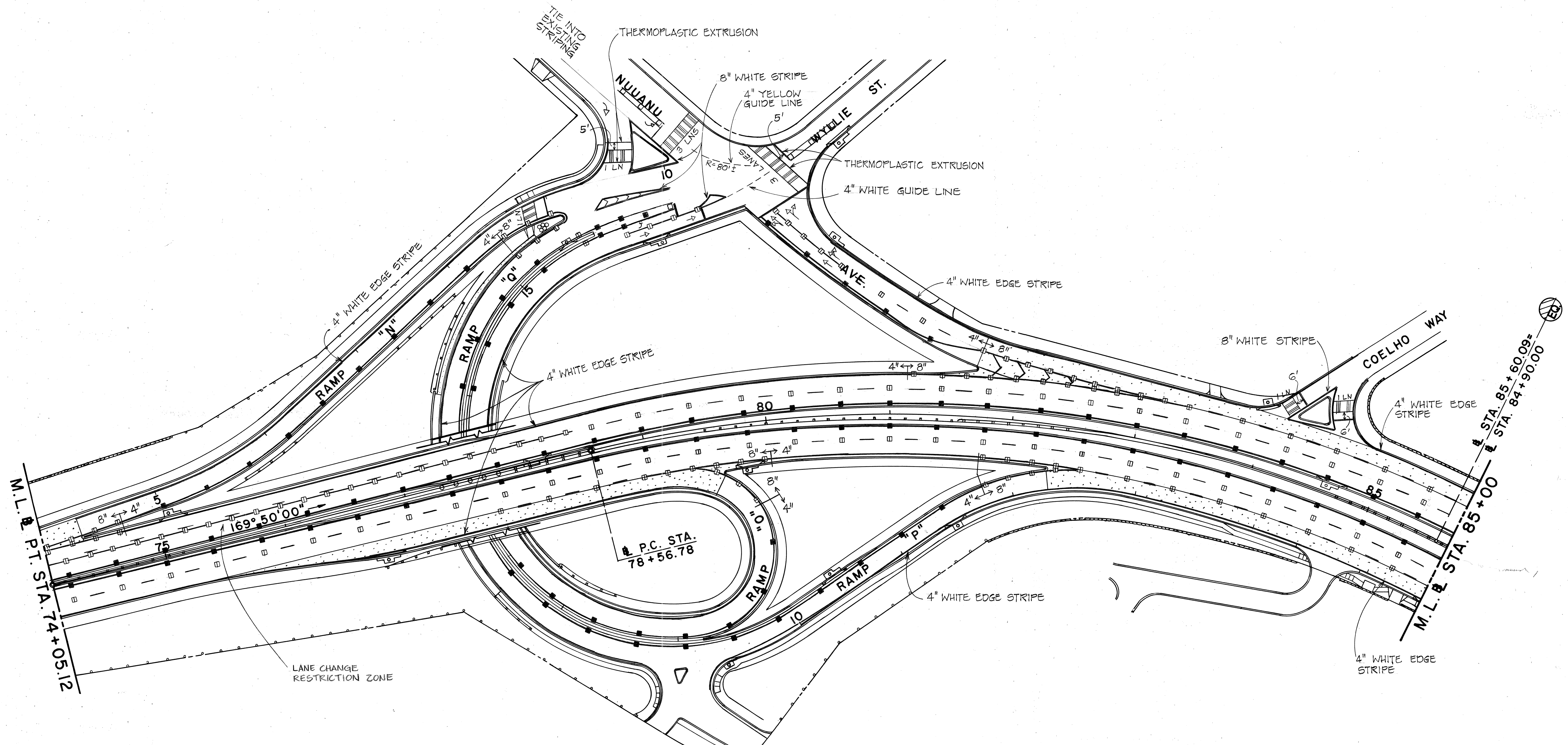
PAVEMENT MARKING PLAN
PALI HIGHWAY RESURFACING
KUAKINI ST. TO HINALO PLACE
PROJ. NO. 61B-01-85M

SCALE: 1"=40' DATE: NOV. 1984

SHEET No. 13 OF 16 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
CHECKED BY	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	
NO. 11	
NO. 12	
NO. 13	
NO. 14	
NO. 15	
NO. 16	
NO. 17	
NO. 18	
NO. 19	
NO. 20	
NO. 21	
NO. 22	
NO. 23	
NO. 24	
NO. 25	
NO. 26	
NO. 27	
NO. 28	
NO. 29	
NO. 30	
NO. 31	
NO. 32	
NO. 33	
NO. 34	
NO. 35	
NO. 36	
NO. 37	
NO. 38	
NO. 39	
NO. 40	
NO. 41	
NO. 42	
NO. 43	
NO. 44	
NO. 45	
NO. 46	
NO. 47	
NO. 48	
NO. 49	
NO. 50	
NO. 51	
NO. 52	
NO. 53	
NO. 54	
NO. 55	
NO. 56	
NO. 57	
NO. 58	
NO. 59	
NO. 60	
NO. 61	
NO. 62	
NO. 63	
NO. 64	
NO. 65	
NO. 66	
NO. 67	
NO. 68	
NO. 69	
NO. 70	
NO. 71	
NO. 72	
NO. 73	
NO. 74	
NO. 75	
NO. 76	
NO. 77	
NO. 78	
NO. 79	
NO. 80	
NO. 81	
NO. 82	
NO. 83	
NO. 84	
NO. 85	
NO. 86	
NO. 87	
NO. 88	
NO. 89	
NO. 90	
NO. 91	
NO. 92	
NO. 93	
NO. 94	
NO. 95	
NO. 96	
NO. 97	
NO. 98	
NO. 99	
NO. 100	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	613-01-85M	1985	17	29



SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

6/26/85	REVISE STRIPING
6/26/85	INSTALL LANE CHANGE RESTRICTION ZONE
12/17/84	ADDED THERMOPLASTIC EXTRUSION FOR CROSSWALKS.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING PLAN
PALI HIGHWAY RESURFACING

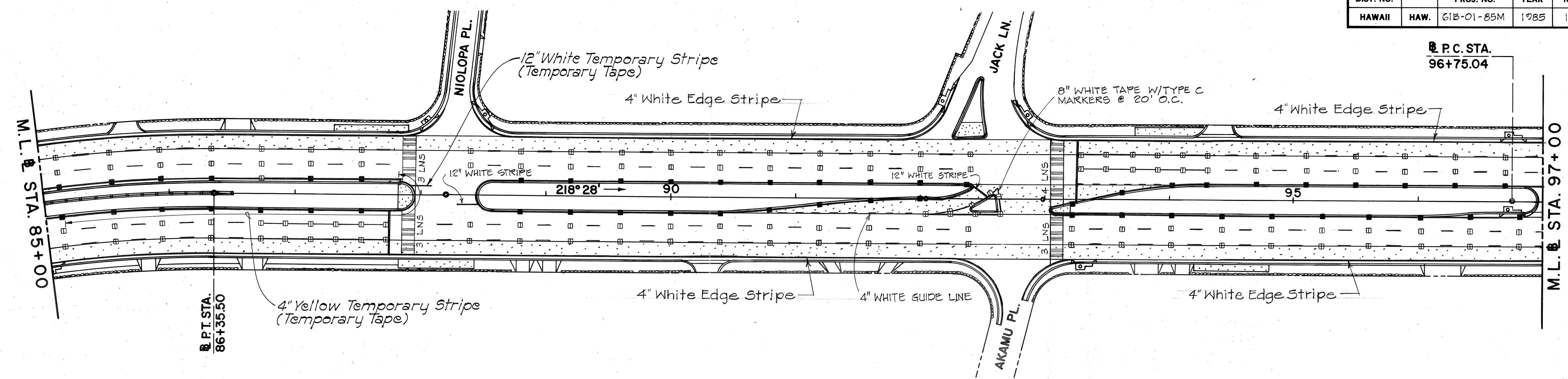
KUAKINI ST. TO HINALO PLACE
PROJ. NO. 613-01-85M

SCALE: 1"=40' DATE: NOV. 1984

SHEET No. 14 OF 16 SHEETS

C.O. ADD 17

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61B-01-85M	1985	18	29

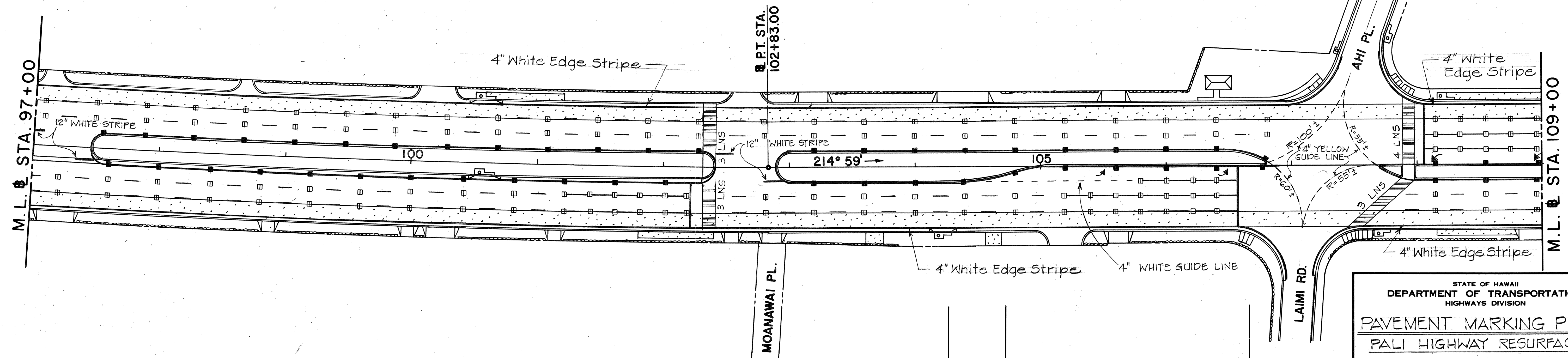


Sta. 85+15.5 9/8 Rt. to Sta. 87+84 9/8 Lt.

Delete: 4-Inch Yellow Permanent Pavement Striping (Paint) and Type H Pavement Markers 40' O.C.
 Estimated Quantities to be deleted
 4-Inch Pavement Striping (Paint) - 290 L.F.
 Type H Pavement Markers - 7 Each
 Install: 4-Inch Yellow Temporary Pavement Striping (Temporary Tape)
 Estimated Quantities to be installed
 4-Inch Pavement Striping (Temporary Tape) - 290 L.F.

Sta. 87+92 9/8 Lt. to Sta. 88+00 9/8 Lt.

Delete: 12-Inch White Pavement Striping (Thermoplastic Extrusion) (Stop Bar)
 Estimated Quantities to be deleted
 12-Inch Pavement Striping (Thermoplastic Extrusion) - 17 L.F.
 Install: 12-Inch White Temporary Pavement Striping (Temporary Tape)
 Estimated Quantities to be installed
 12-Inch Pavement Striping (Temporary Tape) - 17 L.F.



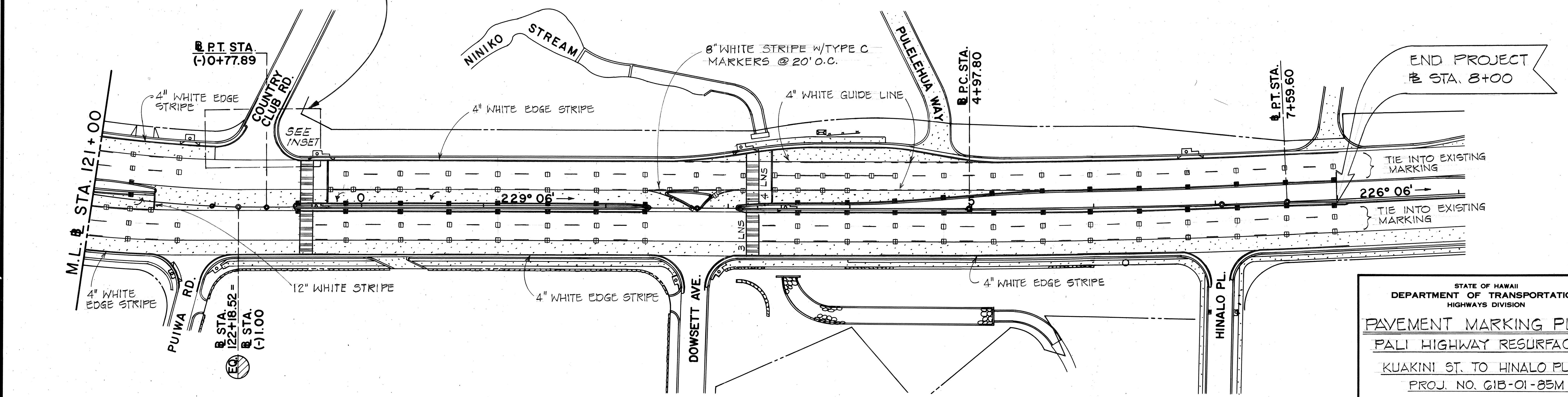
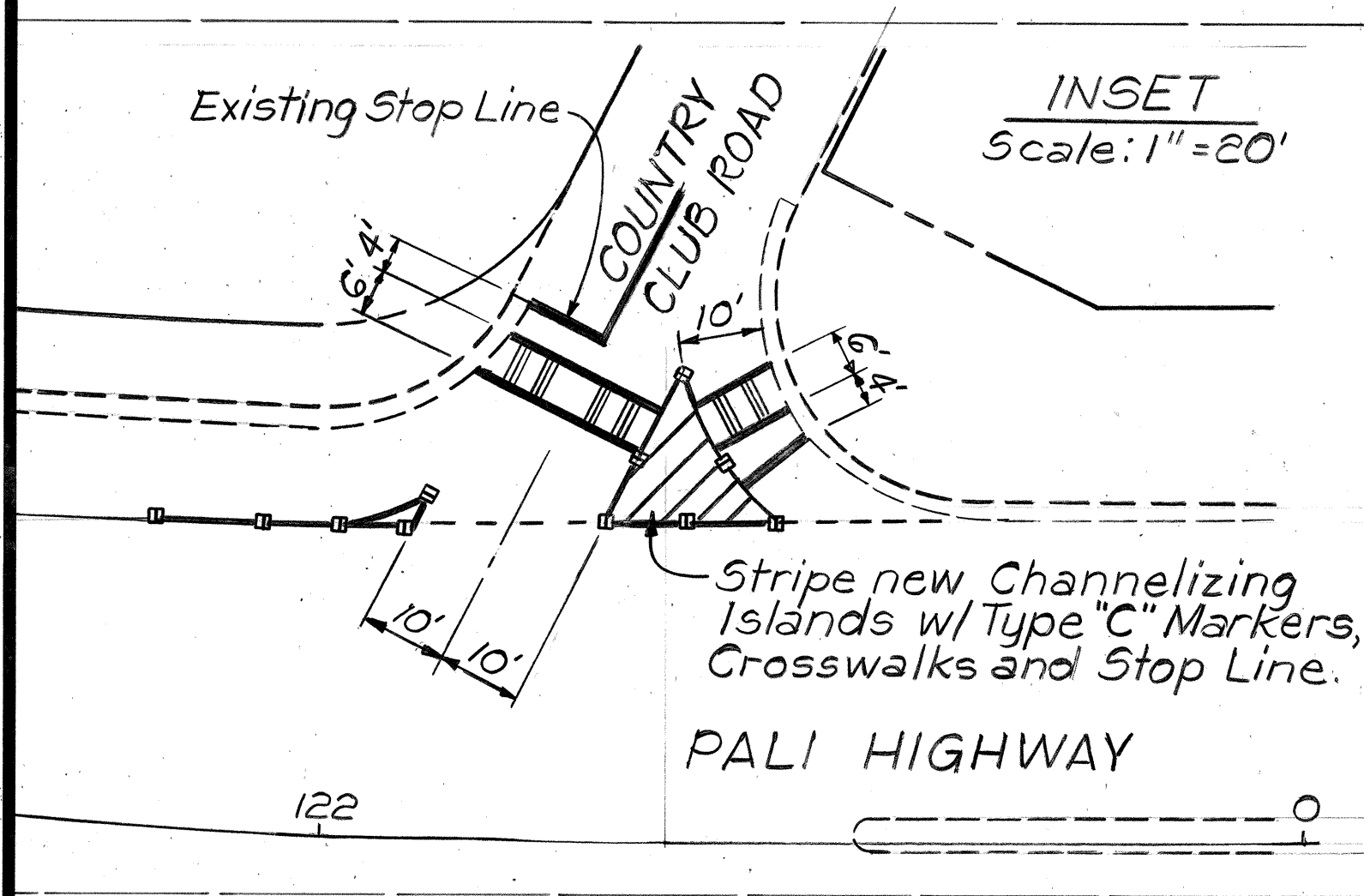
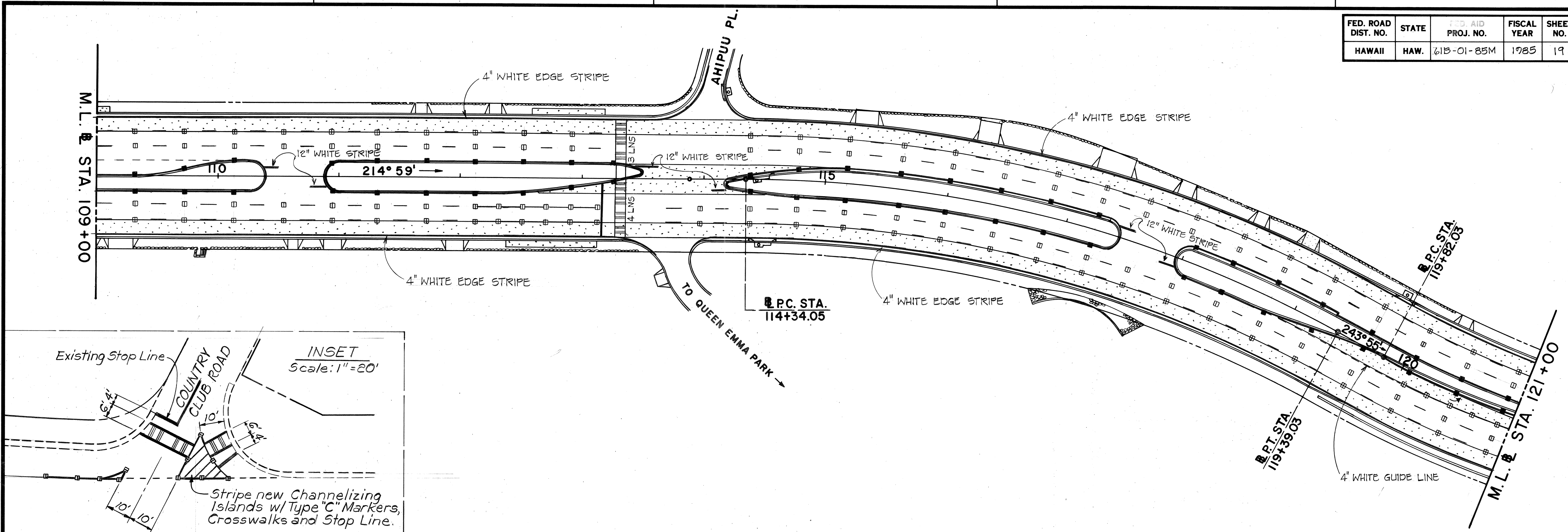
DATE	REVISION
5/17/85	Substituted median edge markings with temporary markings.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PAVEMENT MARKING PLAN
 PALI HIGHWAY RESURFACING
 KUAKINI ST. TO HINALO PLACE
 PROJ. NO. 61B-01-85M

SCALE: 1"=40' DATE: NOV. 1984
 SHEET No. T5 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	618-01-85M	1985	19	29



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING PLAN
PALI HIGHWAY RESURFACING
KUAKINI ST. TO HINALO PLACE
PROJ. NO. 618-01-85M

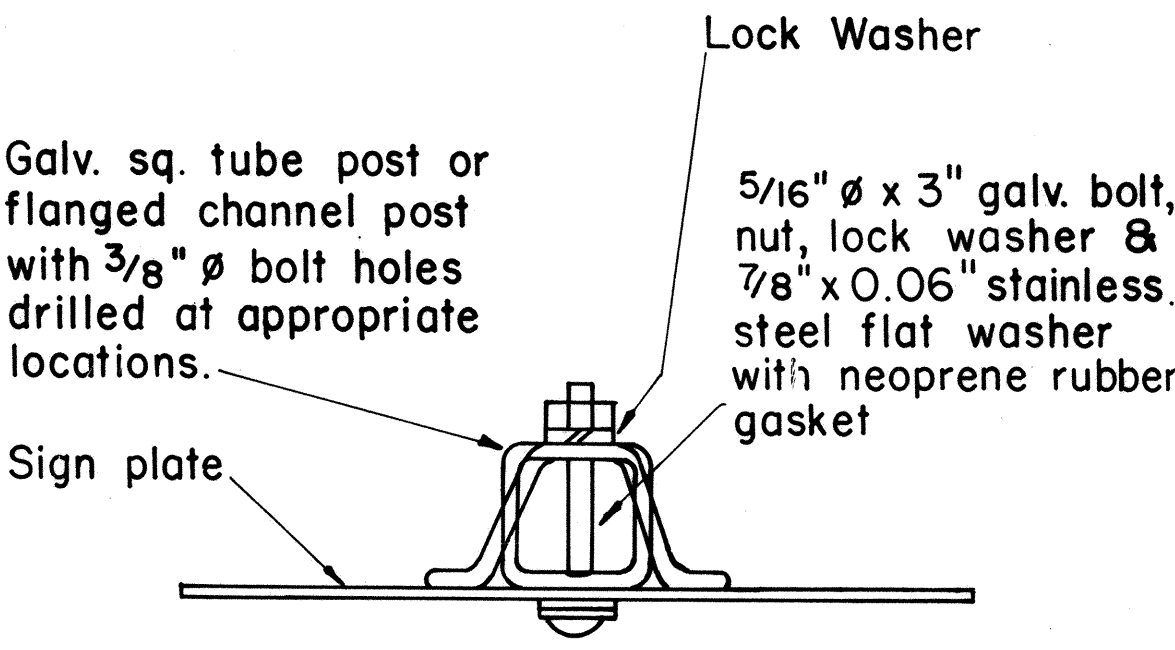
SCALE: 1"=40' DATE: NOV. 1984
SHEET No. 16 OF 16 SHEETS

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

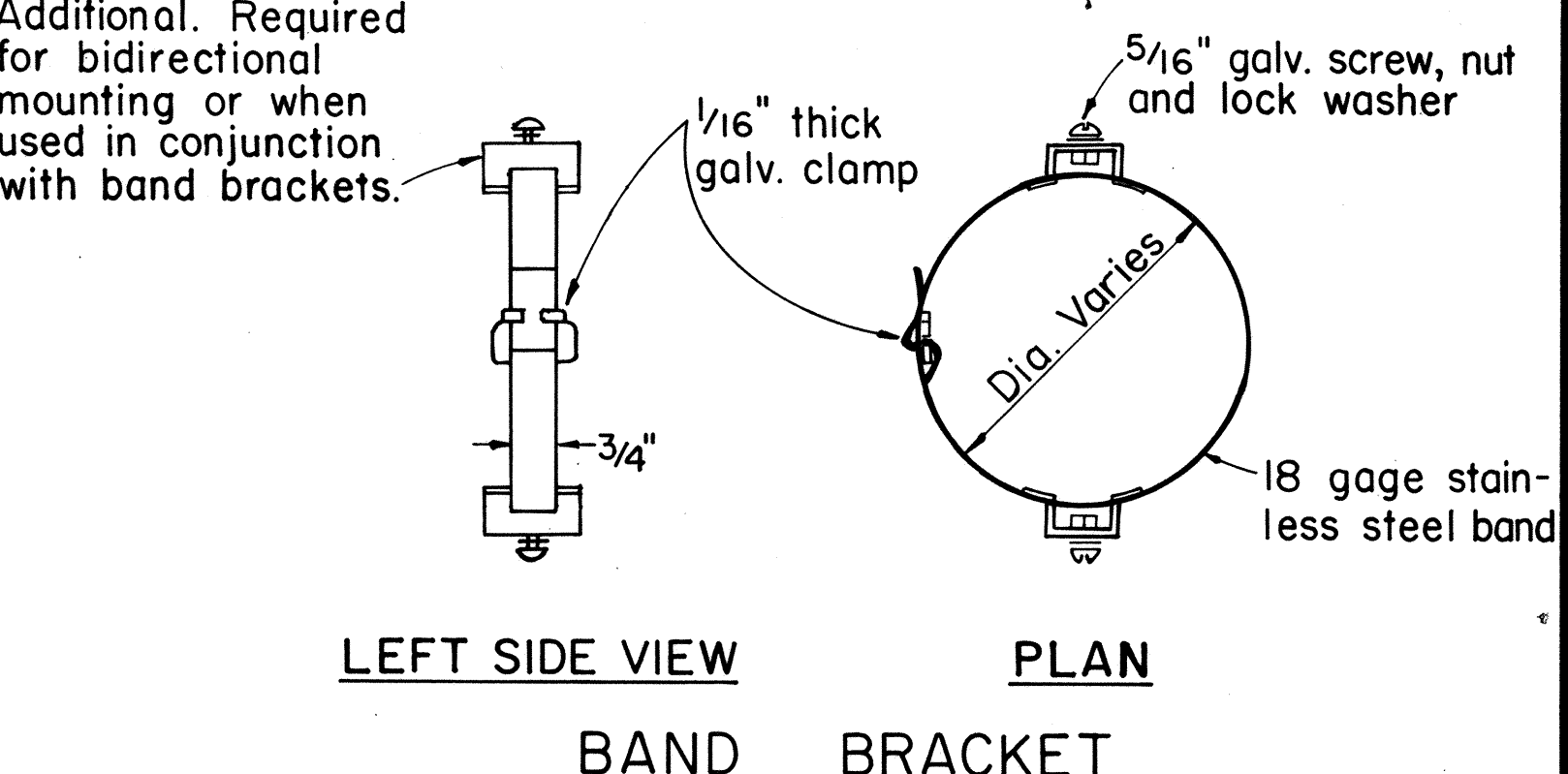
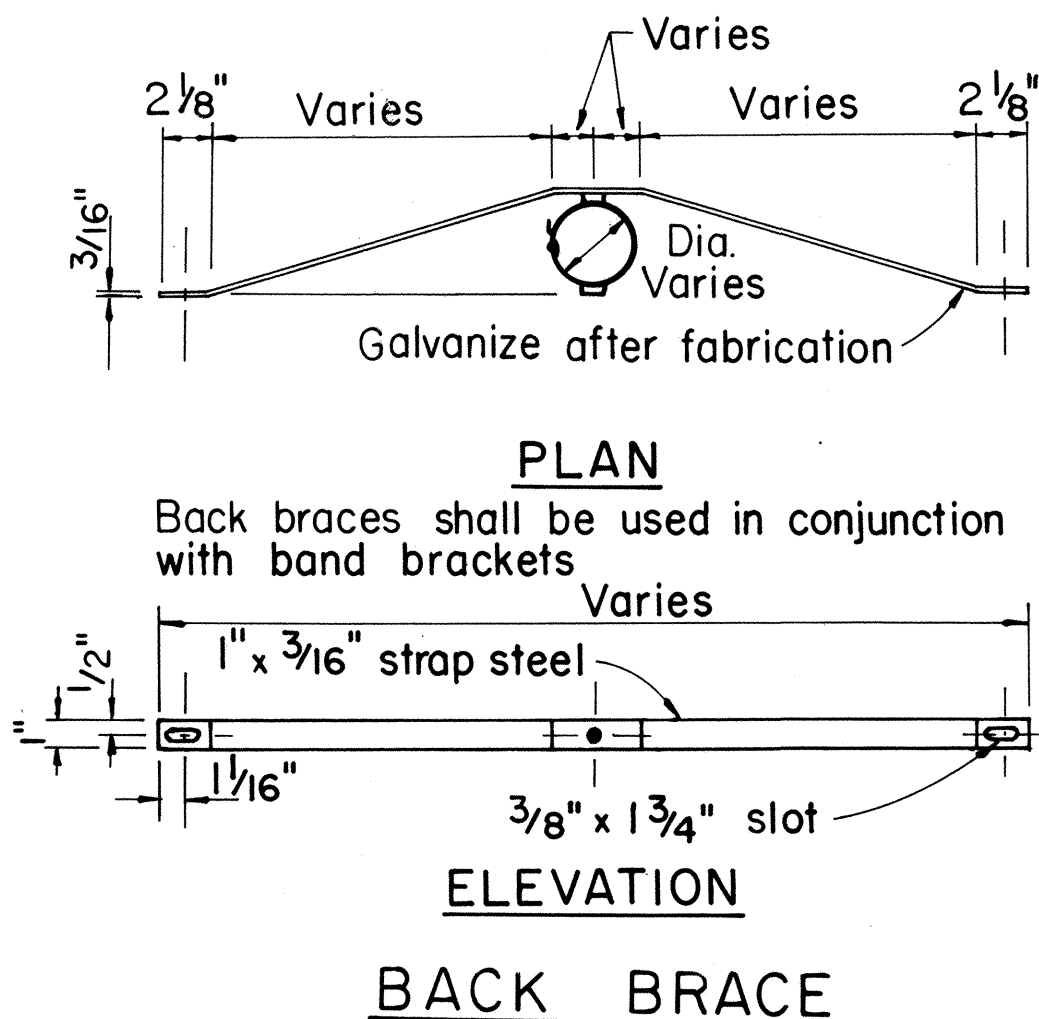
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61B-01-85M	1985	20	29

GENERAL NOTES

- Signs shall be placed in conformance with positions shown and described in the "Manual on Uniform Traffic Control Devices for Streets and Highways", 1978, Part II, Section 2A-21, as amended, and as supplemented herein.
- Sign 48" and wider or larger than 10 sq. ft. in area shall be mounted on two or more sign posts except as noted below.
- Signs 48" and wider or larger than 10 sq. ft. in area may be mounted on objects other than sign posts (i.e. on highway lighting poles) as follows:
 - Signs 48" and wider but less than 10 sq. ft. in area shall be mounted with a minimum of two sets of band bracket and back braces.
 - Signs larger than 10 sq. ft. and less than 28 sq. ft. in area shall be mounted with a minimum of two sets of band brackets and back braces.
 - Signs larger than 28 sq. ft. in area shall be mounted with a minimum of three sets of band bracket 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 each sign, where required, for attachment of City and County street name signs.
- (R) or (L) indicates right or left and shown on the plans.
- See plans for special details of signs along bikeways.
- The minimum lateral distances shown are guidelines and shall be exceeded whenever possible. The Contractor shall place signs at the maximum practical lateral distance from the edge of the traveled way up to 30 feet and shall utilize protected locations whenever possible. Final locations of all signs shall be approved by the Engineer.
- 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.
- Anchor bases shall be installed for all signpost installations, unless otherwise shown or directed. See sheets DT 100A and DT 100B.



GALVANIZED SQUARE TUBE OR FLANGED CHANNEL POST



TYPICAL MOUNTING DETAILS

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 100 approved 11/15/77	<i>[Signature]</i>	10-18-83

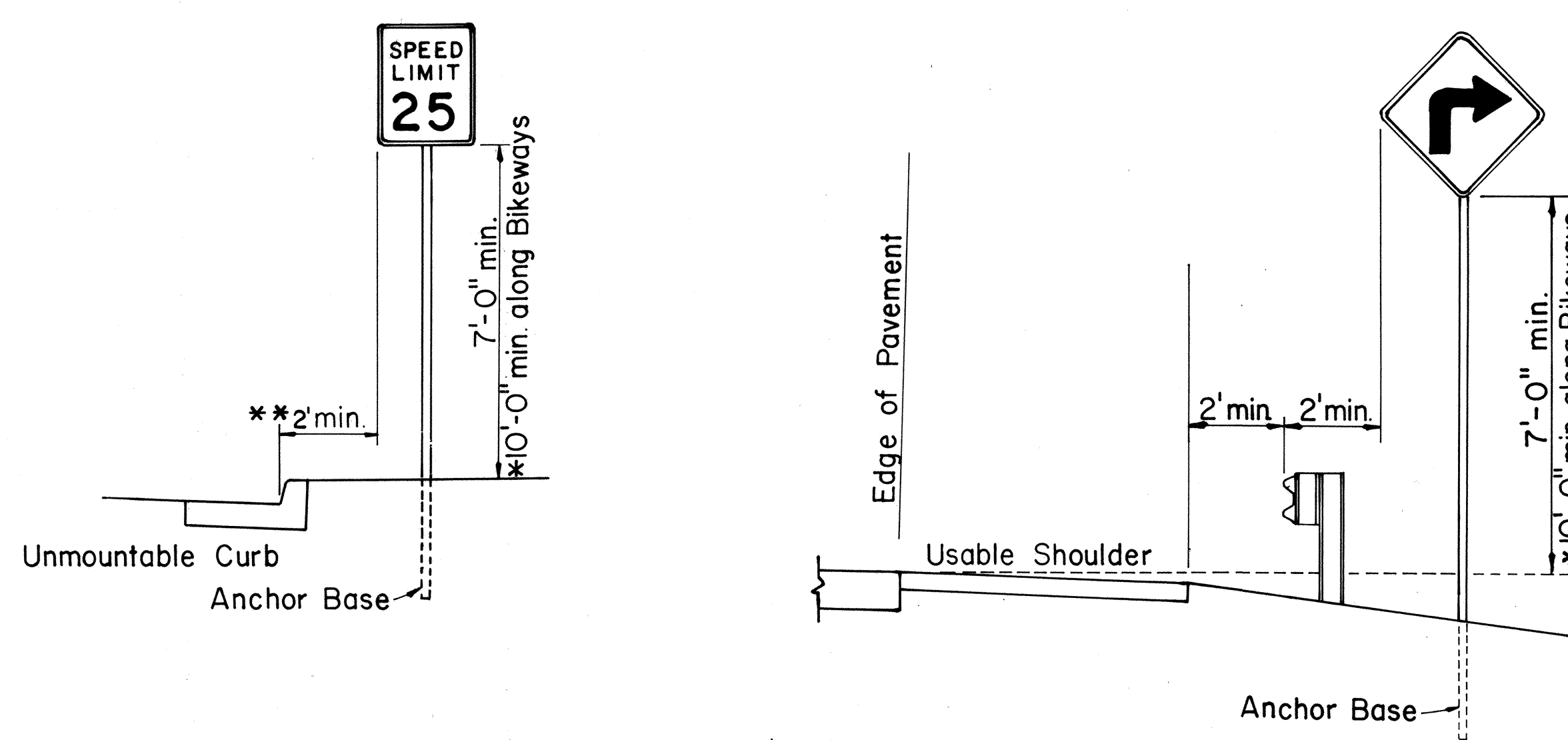
APPROVAL RECOMMENDED:
Erich Tanaka
 TRAFFIC ENGINEER
 DATE: 10/17/83

APPROVED:
[Signature]
 ASSISTANT CHIEF, ENGINEERING
 DATE: 10-18-83

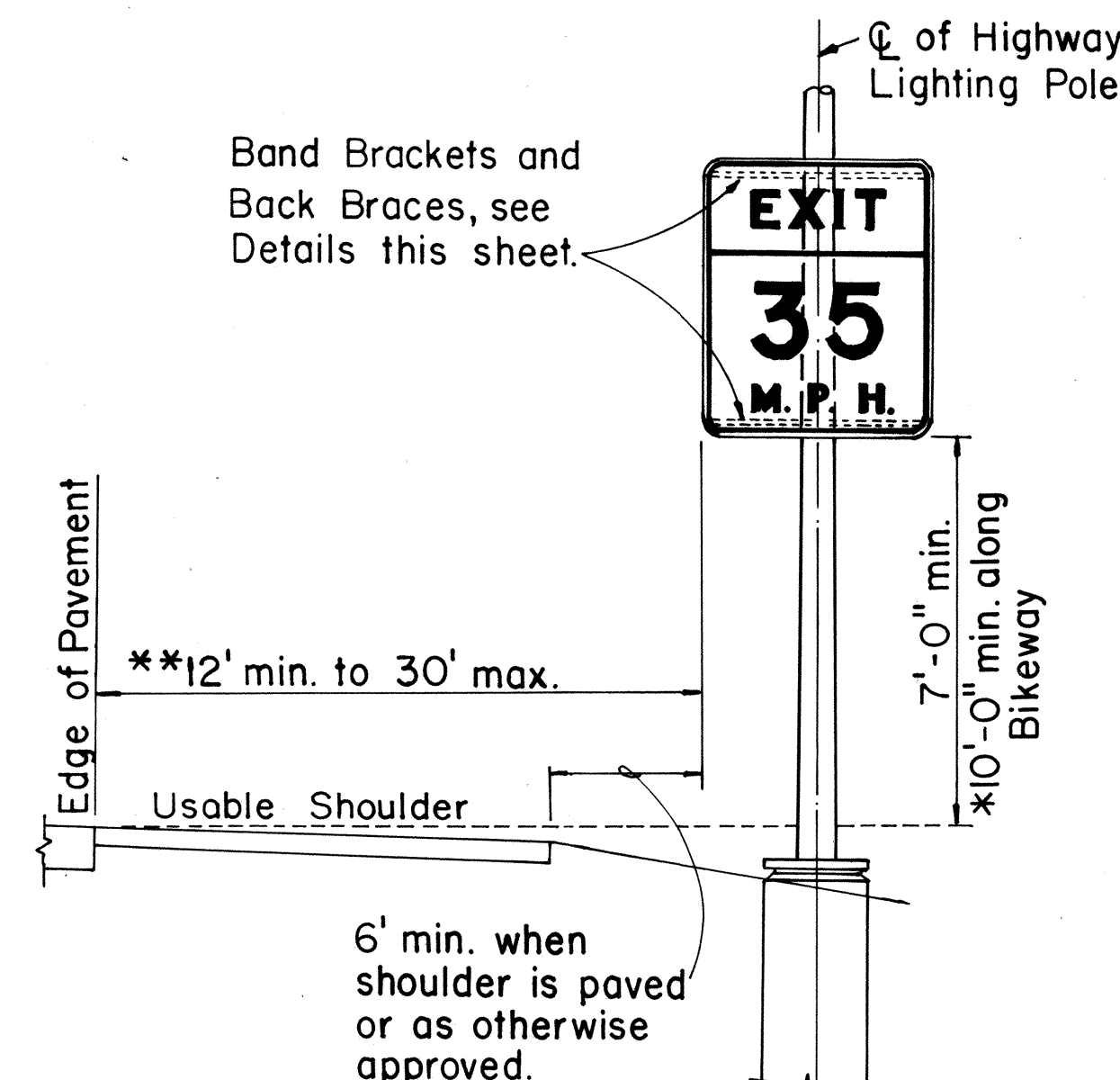
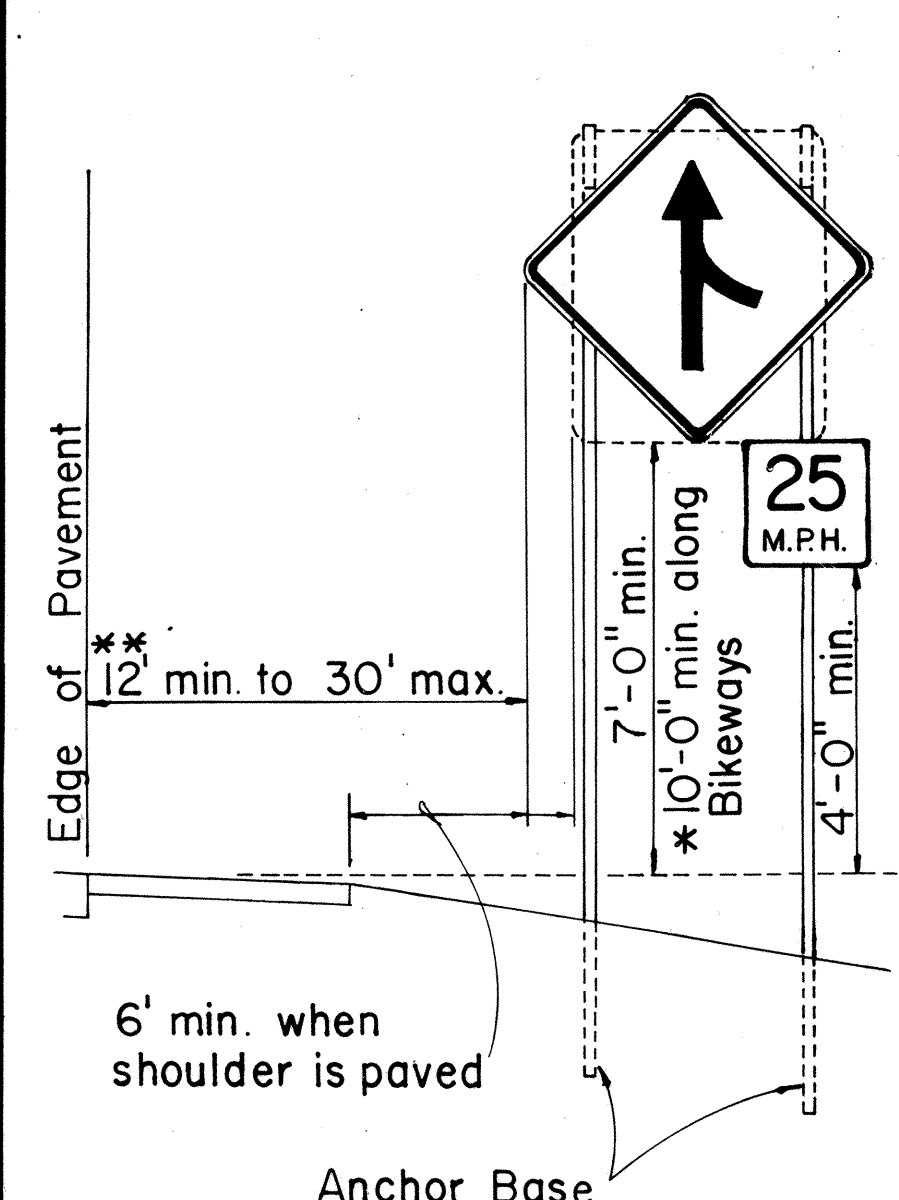
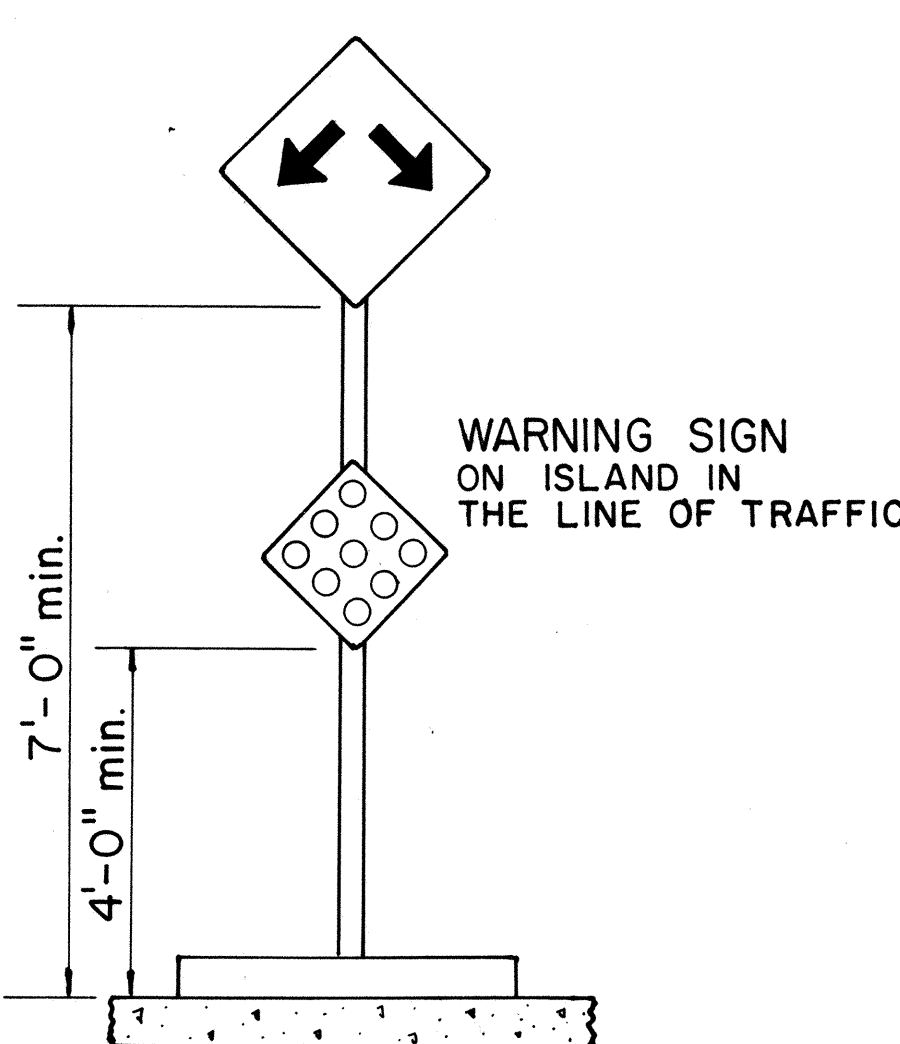
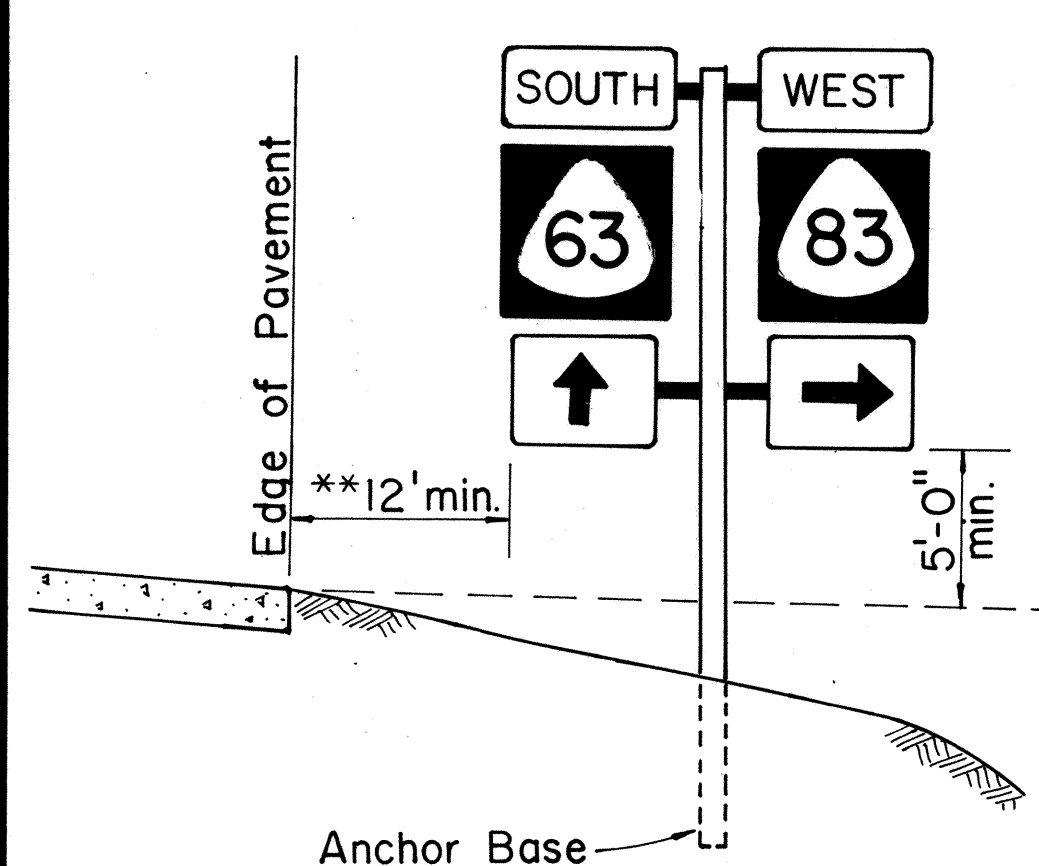
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAILS
 MISCELLANEOUS SIGN DETAILS

Not to Scale: Oct. 1983
 SHEET NO. 17 OF 16 SHEETS DT 100



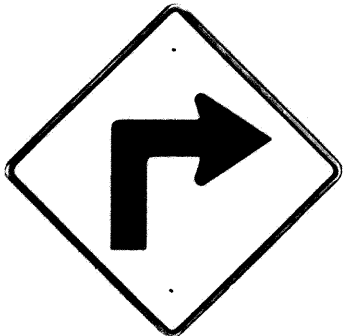
ROADSIDE ASSEMBLY RURAL DISTRICT



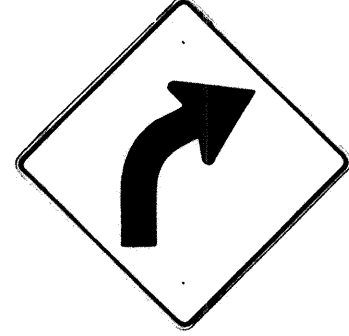
HEIGHT AND LATERAL LOCATION OF SIGNS TYPICAL INSTALLATION

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

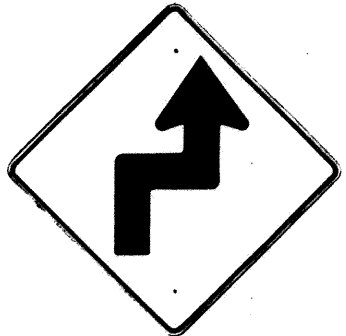
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII*	HAW.	618-01-85M	1985	21	29



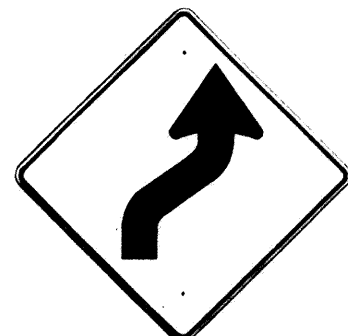
W1-1(R) 30"x 30"
W1-1(R)-A 48"x 48"



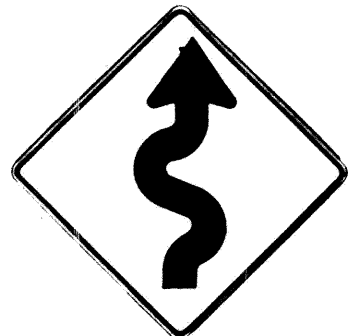
W1-2(R) 30"x 30"
W1-2(R)-A 48"x 48"



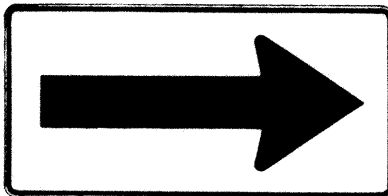
W1-3(R) 30"x 30"
W1-3(R)-A 48"x 48"



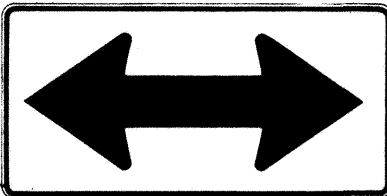
W1-4(R) 30"x 30"
W1-4(R)-A 48"x 48"



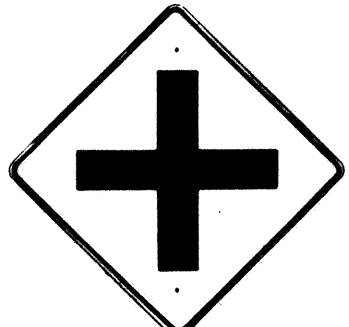
W1-5(R) 30"x 30"
W1-5(R)-A 48"x 48"



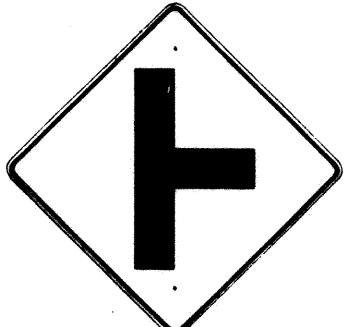
W1-6 48"x 24"



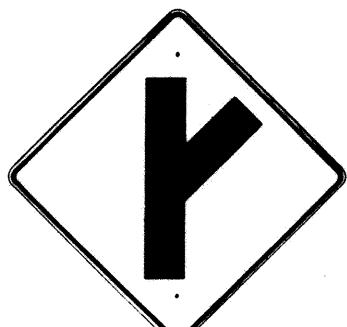
W1-7 48"x 24"



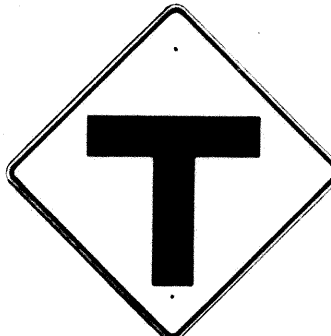
W2-1 30"x 30"
W2-1-A 48"x 48"



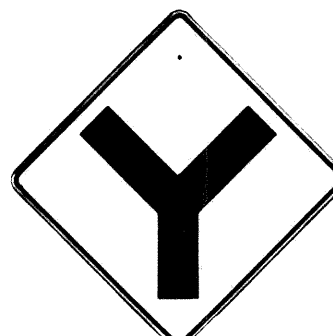
W2-2 30"x 30"
W2-2-A 48"x 48"



W2-3(R) 30"x 30"
W2-3(R)-A 48"x 48"



W2-4 30"x 30"
W2-4-A 48"x 48"



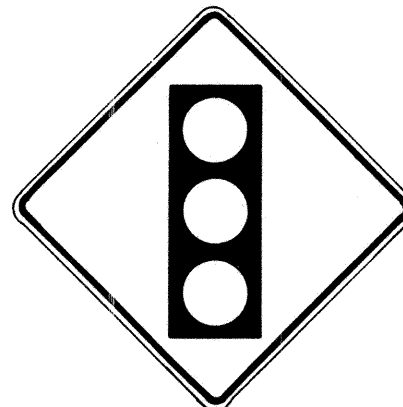
W2-5 30"x 30"
W2-5-A 48"x 48"



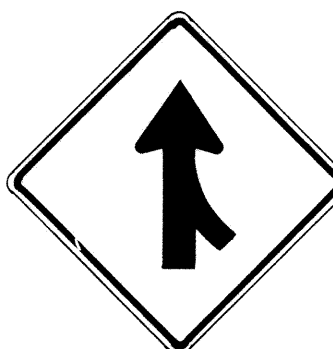
W3-1 30"x 30"
W3-1-A 36"x 36"



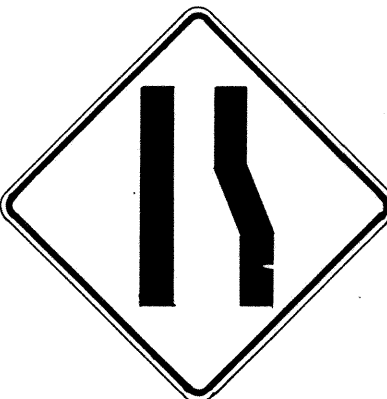
W3-2 30"x 30"
W3-2-A 36"x 36"



SIGNAL AHEAD
W3-3 36"x 36"
24"x 18"



MERGE
W4-1(R) 30"x 30"
24"x 18"
W4-1(R)-A 48"x 48"
24"x 18"



W4-2(R) 36"x 36"
W4-2(R)-A 48"x 48"



W5-1 36"x 36"



W5-2 30"x 30"
W5-2-A 36"x 36"



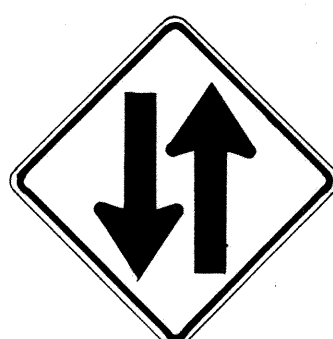
W5-3 36"x 36"



DIVIDED HIGHWAY
W6-1 36"x 36"
24"x 18"



DIVIDED HIGHWAY ENDS
W6-2 36"x 36"
24"x 18"



TWO WAY TRAFFIC
W6-3 30"x 30"
24"x 18"
W6-3-A 36"x 36"
24"x 18"
W6-3-B 48"x 48"
24"x 18"



HILL
W7-1 30"x 30"
24"x 18"
W7-1-A 36"x 36"
24"x 18"



USE LOW GEAR
W7-2 24"x 18"



BUMP
W8-1 30"x 30"
W8-1-A 36"x 36"



DIP
W8-2 30"x 30"
W8-2-A 36"x 35"



PAVEMENT ENDS
W8-3 30"x 30"
W8-3-A 36"x 36"



SOFT SHOULDER
W8-4 30"x 30"
W8-4-A 36"x 36"



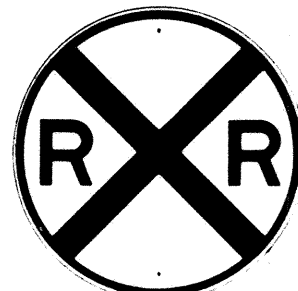
SLIPPERY WHEN WET
W8-5 30"x 30"
24"x 18"
W8-5-A 36"x 36"
24"x 18"



RIGHT LANE ENDS
W9-1(R) 30"x 30"
W9-1(R)-A 36"x 36"
W9-1(R)-B 48"x 48"



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



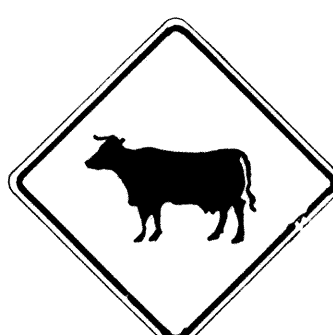
W10-1 36" Diameter



BIKE XING
W11-1 30"x 30"
24"x 18"
W11-1-A 36"x 36"
24"x 18"



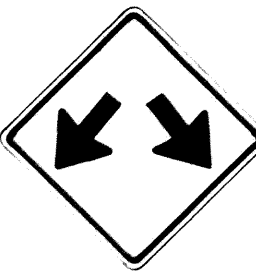
PED XING
W11-2 30"x 30"
24"x 18"
W11-2-A 36"x 36"
24"x 18"



CATTLE XING
W11-4 30"x 30"
24"x 18"
W11-4-A 36"x 36"
24"x 18"



FARM MACHINERY
W11-5 30"x 30"
24"x 18"
W11-5-A 36"x 36"
24"x 18"



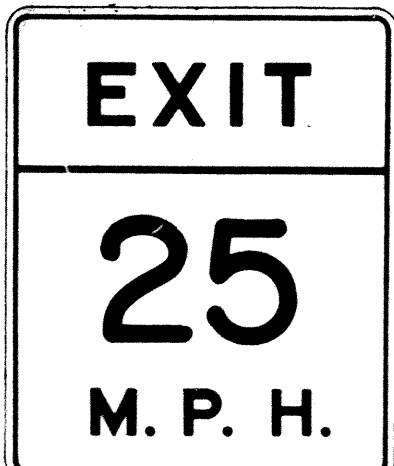
W12-1 24"x 24"
W12-1-A 36"x 36"
W12-1-B 48"x 48"



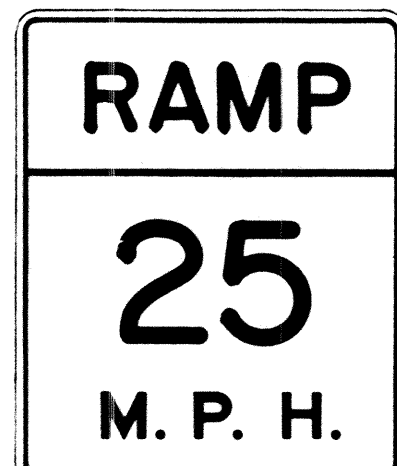
12'-6"
LOW CLEARANCE
W12-2(12'-6") 36"x 36"
24"x 18"



25 M.P.H.
W13-1(25) 18"x 18"
W13-1(25)-A 24"x 24"



EXIT 25 M. P. H.
W13-2(25) 48"x 60"



RAMP 25 M. P. H.
W13-3(25) 48"x 60"



W14-1 30"x 30"



W14-3 36"x 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 warning signs shall be reflectorized unless otherwise specified.
 - All warning signs shall have 3/8" bolt holes drilled at appropriate locations.
 - Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
 - Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized.

APPROVAL RECOMMENDED:
[Signature] 3/17/12
 TRAFFIC ENGINEER DATE

APPROVED:
[Signature] 3-20-12
 ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.C.	3/20/12
2	Revised General Note 1	H.C.	10/16/14
3	Revised General Note 5	M.	9-16-75
4	Revised General Note 5	H.C.	9-14-76
5	Added Note 1	H.	11-1-77

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAILS
WARNING SIGNS

NOT TO SCALE
 SHEET No.18 OF 16 SHEETS DT 102

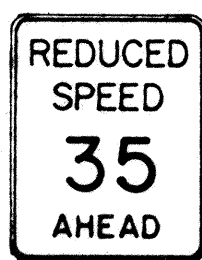
DESIGNED BY	DATE
CHECKED BY	
IN CHARGE	
NOTED BY	
APPROVED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	610-01-85M	1985	22	29

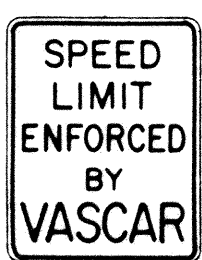
General Notes

- 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"

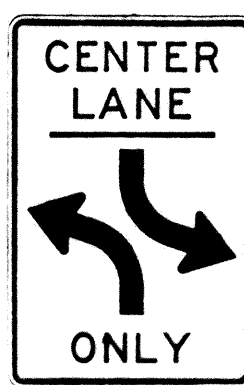


R2-5d(35) 24"x 30"
R2-5d(35)-A 48"x 60"



R2-10 24"x 30"

4" Series D
- 4" Series C
- 3" Series D
- 5" Series C



R3-9b 24"x 36"



R7-107(R) 12"x 24"



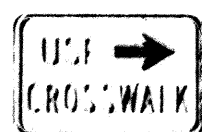
R7-8 12"x 18"
R7-8-A 24"x 30"



ANY TIME - 4" Series C
1 1/2"
R8-3a 24"x 24"
24"x 18"
R8-3a-A 48"x 48"



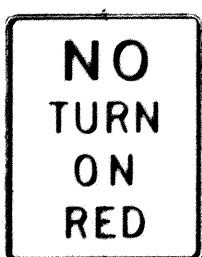
R9-3a 18"x 18"
18"x 12"
R9-3a-A 24"x 24"
24"x 18"



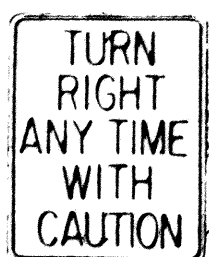
R9-3b(R) 18"x 12"



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



R10-11a 24"x 30"



R16-1 24"x 30"

NO LEFT TURN - 4" Series D -
- 3" Series D -
RED - 2" Series D -
- 3" Series D -

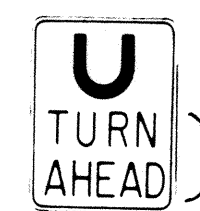
R16-3 18"x 24"

NO RIGHT TURN - 4" Series D -
- 3" Series D -
RED - 2" Series D -
- 3" Series D -

R16-4 18"x 24"

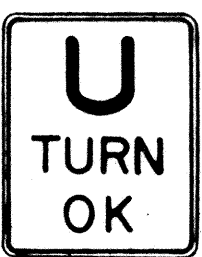


R16-5 36"x 42"

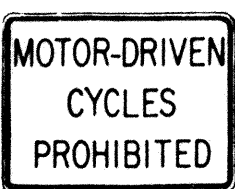


R16-6 24"x 30"

- 8" Series F
- 5" Series D

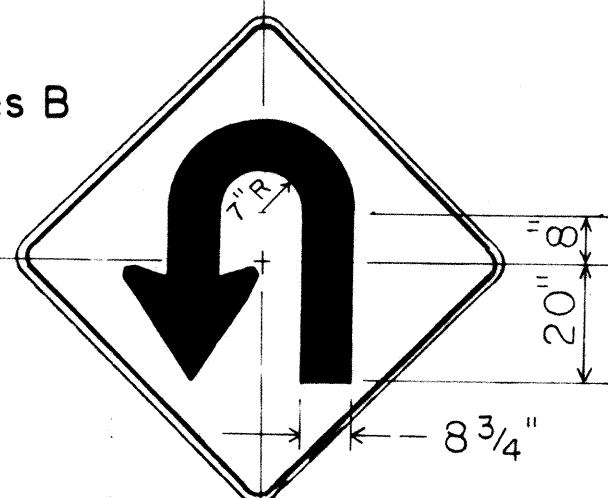


R16-7 24"x 30"

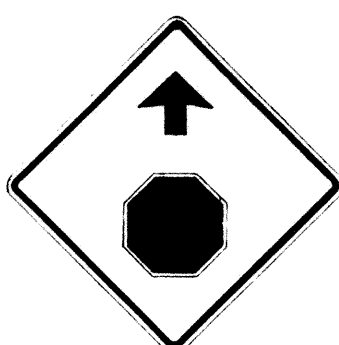


R5-8 30"x 24"

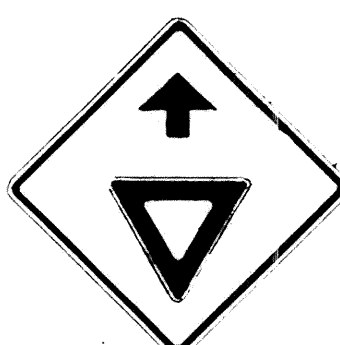
4" Series B



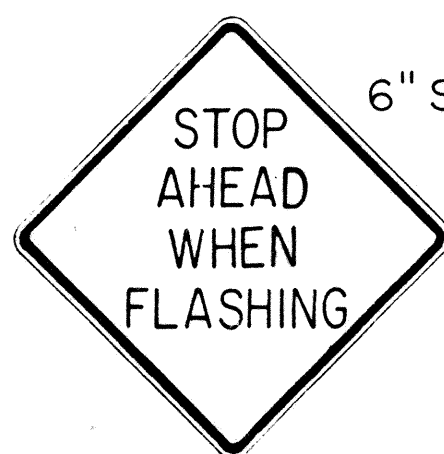
W17-1(L) 60"x 60"



W3-1a 36"x 36"
24"x 18"
W3-1a-A 48"x 48"
24"x 18"



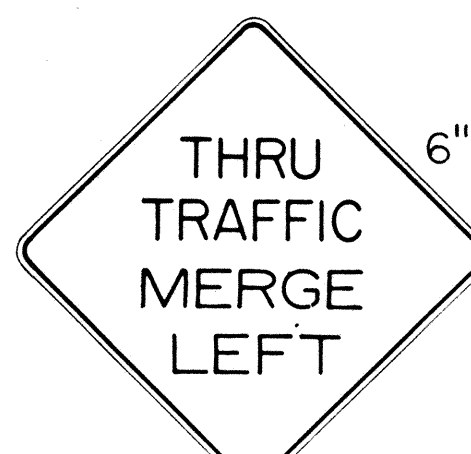
W3-2a 36"x 36"
24"x 18"
W3-2a-A 48"x 48"
24"x 18"



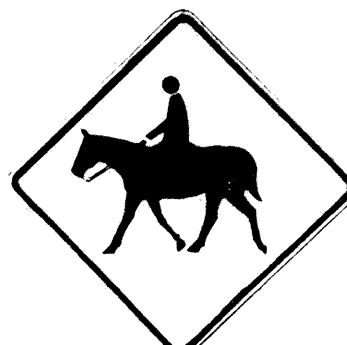
W3-4 48"x 48"



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



W9-3(L) 48"x 48"



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



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"



W14-4 36"x 36"
W14-4-A 48"x 48"



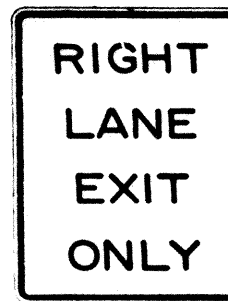
W15-1 24"x 24"



W15-2 24"x 24"



CW16-1(1/2) 60"x 60"



W18-1 48"x 60"



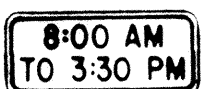
S1-1 36"x 36"



S2-1 36"x 36"



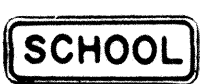
S3-1 30"x 30"



S4-1 24"x 10"



S4-2 24"x 10"



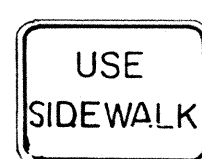
S4-3 24"x 8"



S4-4 24"x 10"



CW23-4 48"x 48"



R18-1 24"x 18"

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 103 approved 3/20/72	H.T.	5/3/78
2	Added General Note 6		

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

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
MISCELLANEOUS SIGNS
NOT TO SCALE DATE: MAY, 1978
SHEET NO. 22 OF 16 SHEETS DT 103

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NO. 1	DRAWN BY	
2	TRACED BY	
3	DESIGNED BY	
4	QUANTITIES BY	
5	CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	618-01-85M	1985	23	29



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"



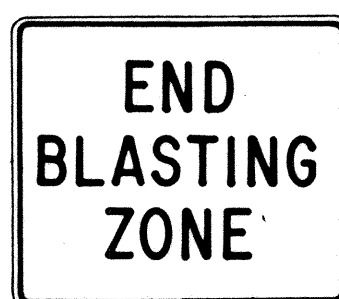
CW21-6 30" x 30"



CW22-1b 48" x 48"



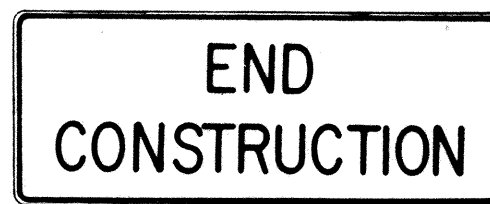
CW22-2 42" x 36"



CW22-3 42" x 36"



CG20-1(5) 60" x 36"



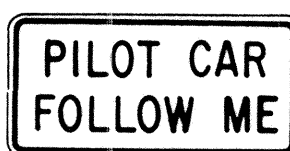
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



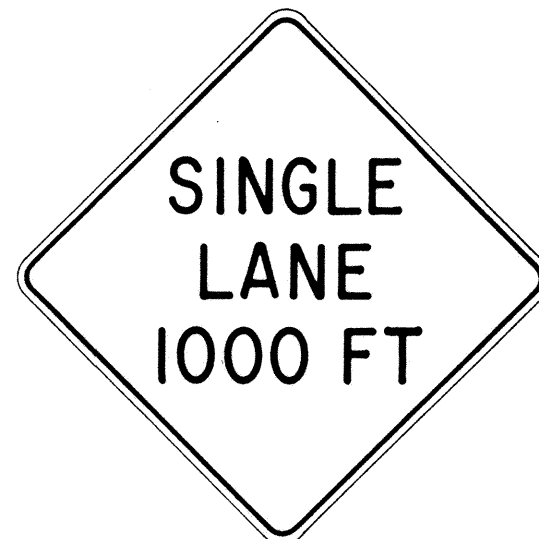
CM4-10(R) 48" x 18"



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.

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

APPROVAL RECOMMENDED:
Erich Tanaka 3/21/72
 TRAFFIC ENGINEER DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
CONSTRUCTION SIGNS

NOT TO SCALE

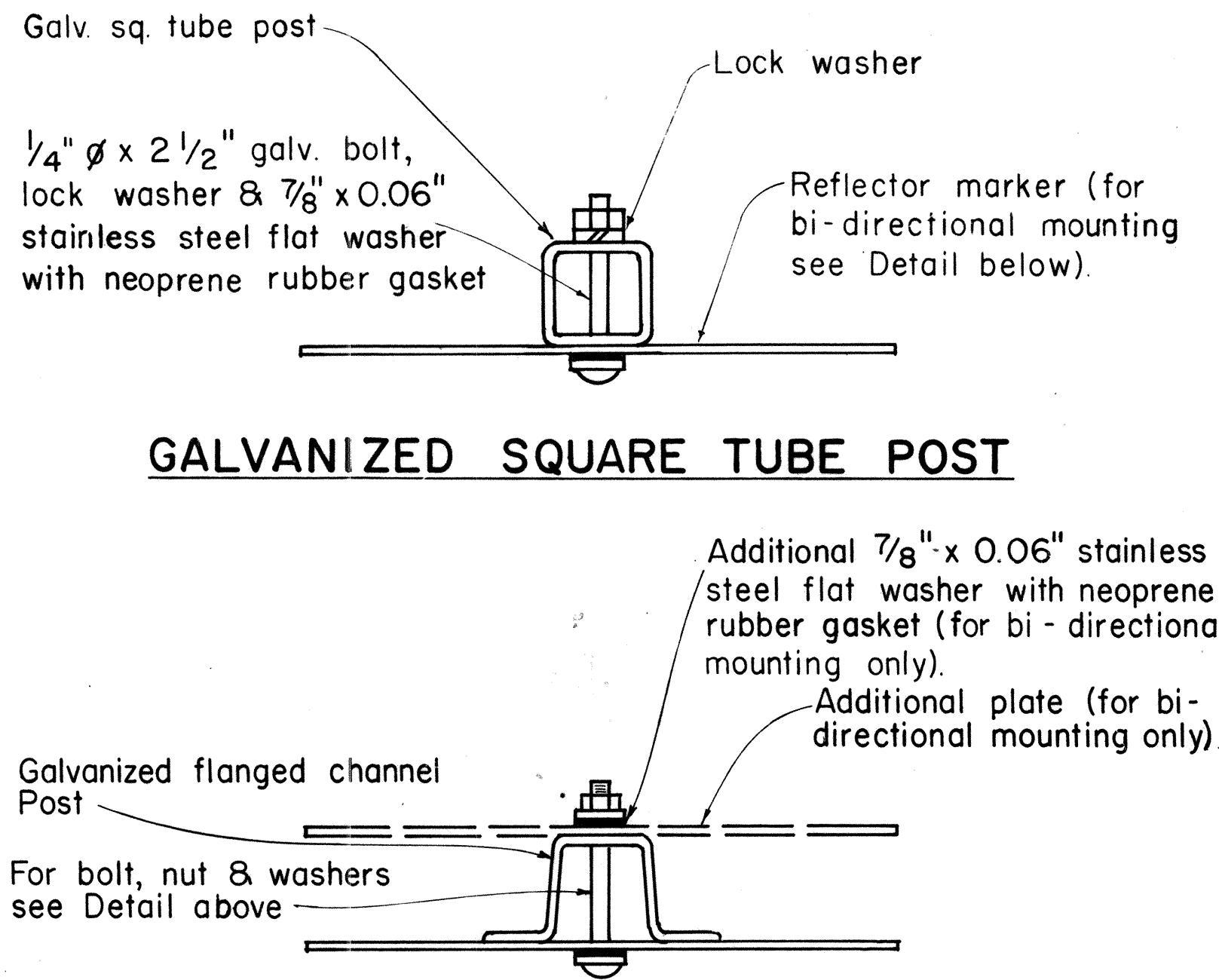
SHEET No.110 OF 16 SHEETS DT 104

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

GENERAL NOTES:

-

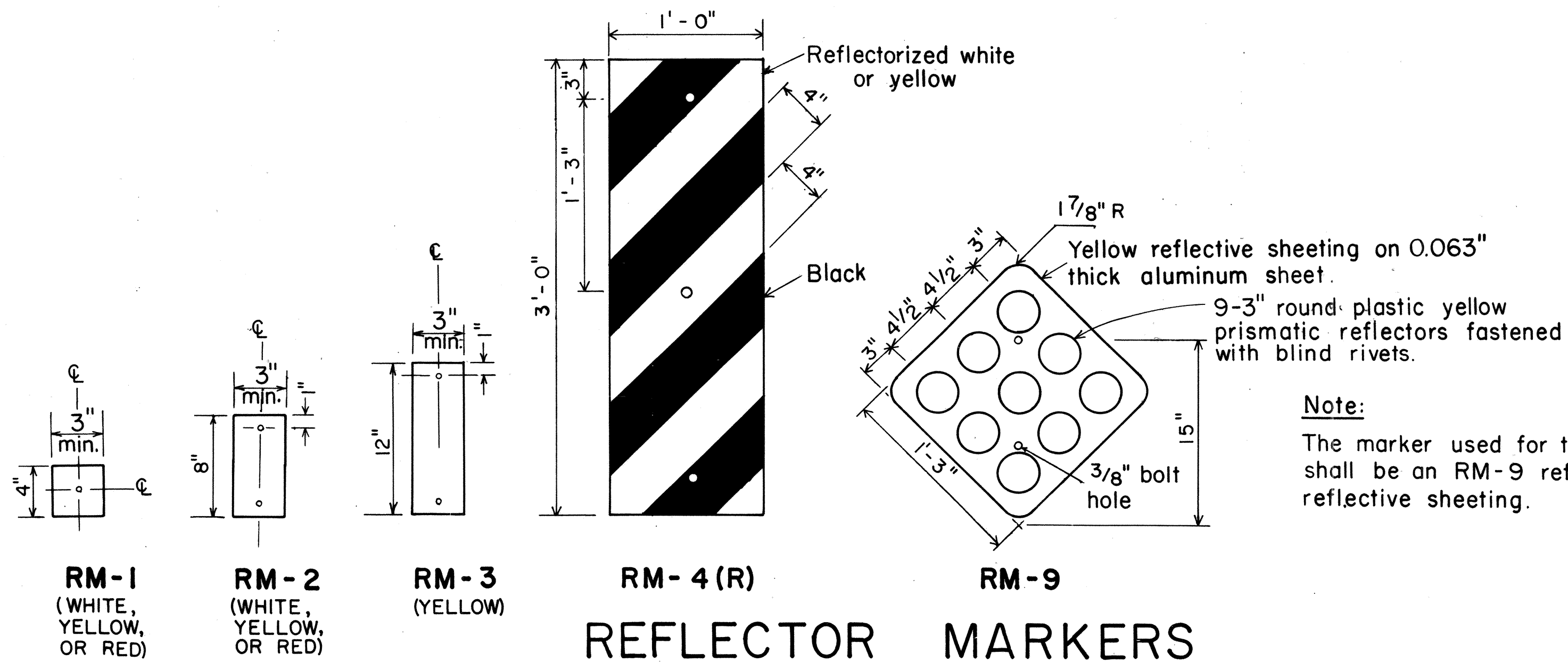
REFLECTOR MARKER MOUNTING DETAIL



GALVANIZED SQUARE TUBE POST

GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS



Note:

The marker used for the end of a roadway shall be an RM-9 reflectorized with red reflective sheeting.

APPROVED: Herbert Z. Zakrisch 11/15/77
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Revised Mounting Details	H.T.	4/23/80
2	Revised General Notes, Mounting Details and Re- flector Markers.	<i>[Signature]</i>	7-28-83

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

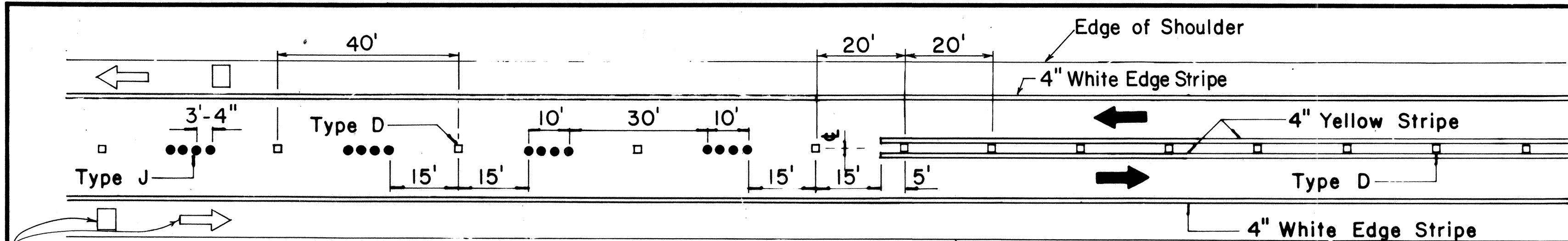
STANDARD DETAILS

MISCELLANEOUS REFLECTOR MARKERS

Not to scale June , 1977

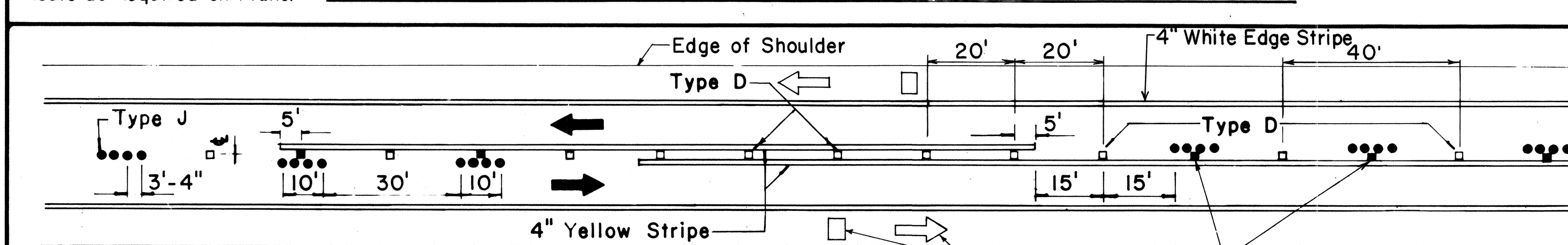
SHEET No. III OF 16 SHEETS DT 110

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	618-01-85M	1985	25	29



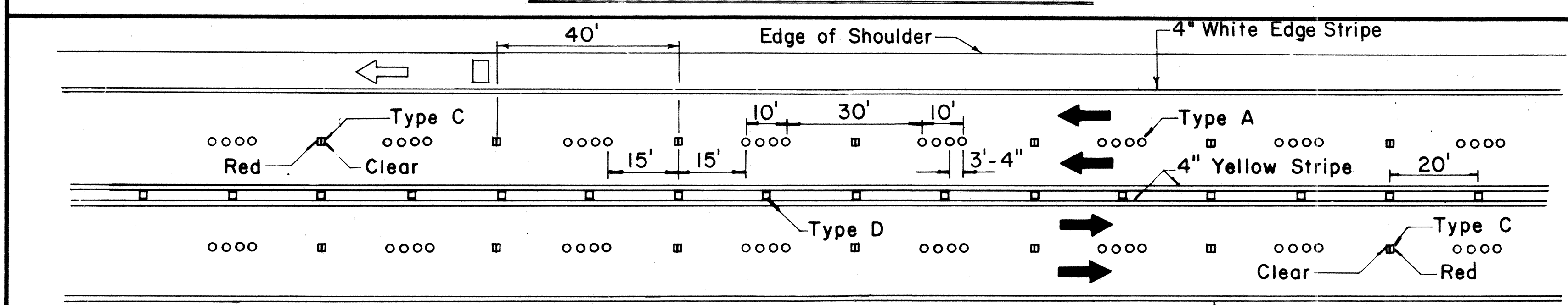
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

PASSING PERMITTED AND PASSING PROHIBITED



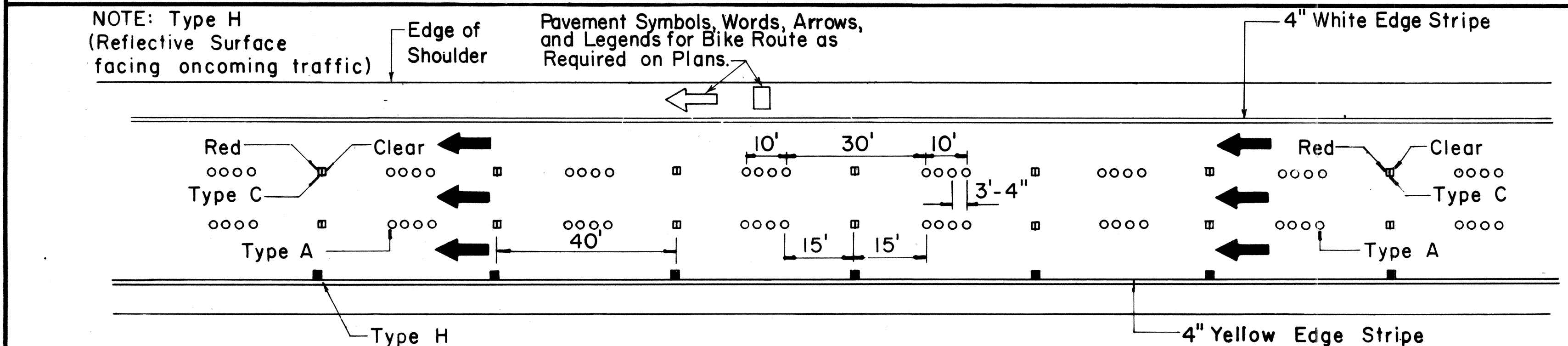
Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

PASSING PROHIBITED ZONES

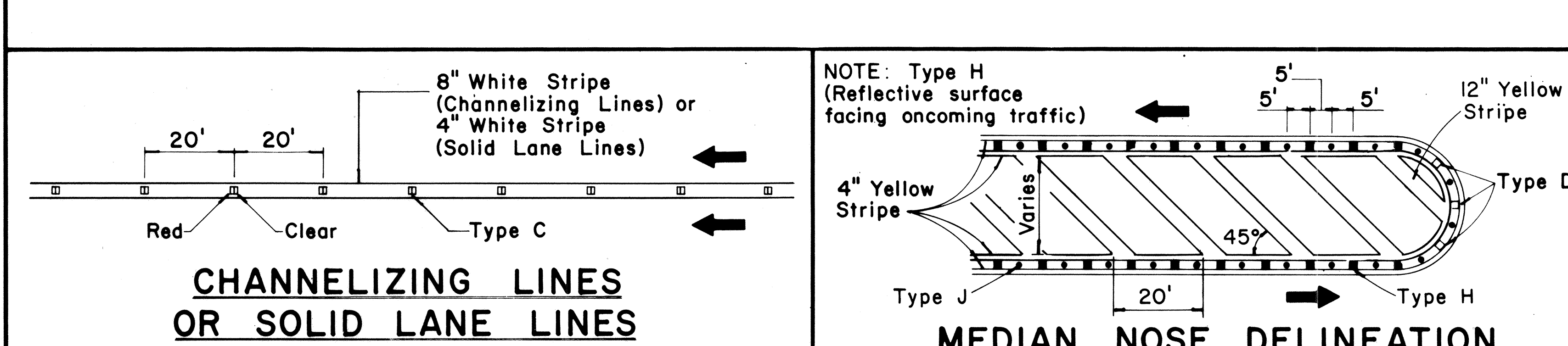


Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

NOTE: Type H (Reflective Surface facing oncoming traffic)

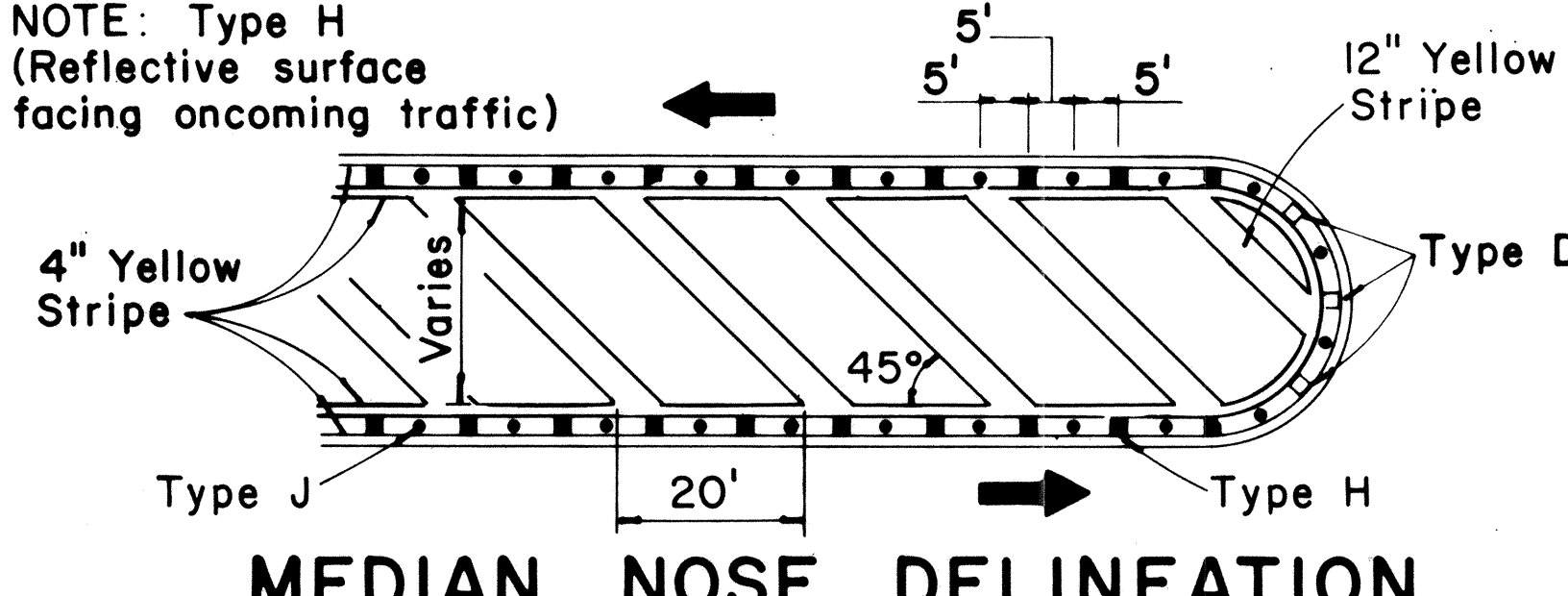


Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.



Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

CHANNELIZING LINES OR SOLID LANE LINES



Pavement Symbols, Words, Arrows, and Legends for Bike Route as Required on Plans.

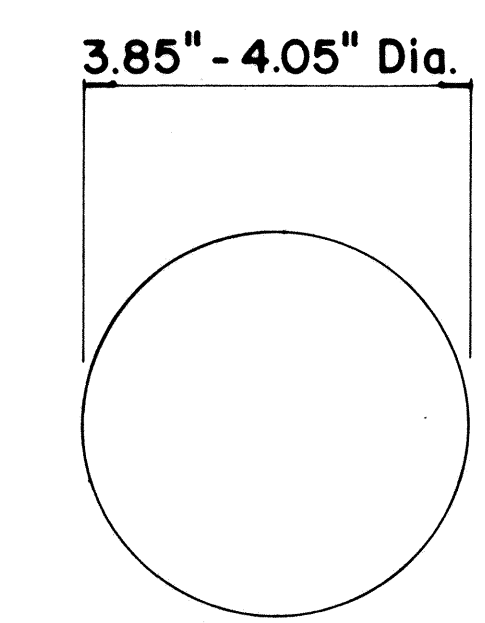
MEDIAN NOSE DELINEATION

TWO - LANE

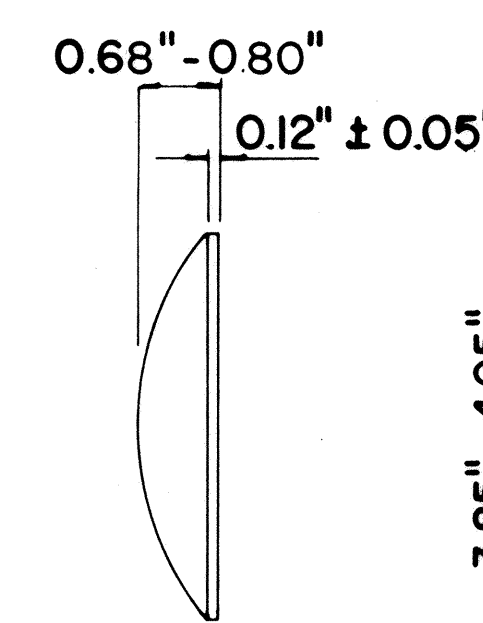
MULTI - LANE

DIVIDED HIGHWAY AND FREEWAY

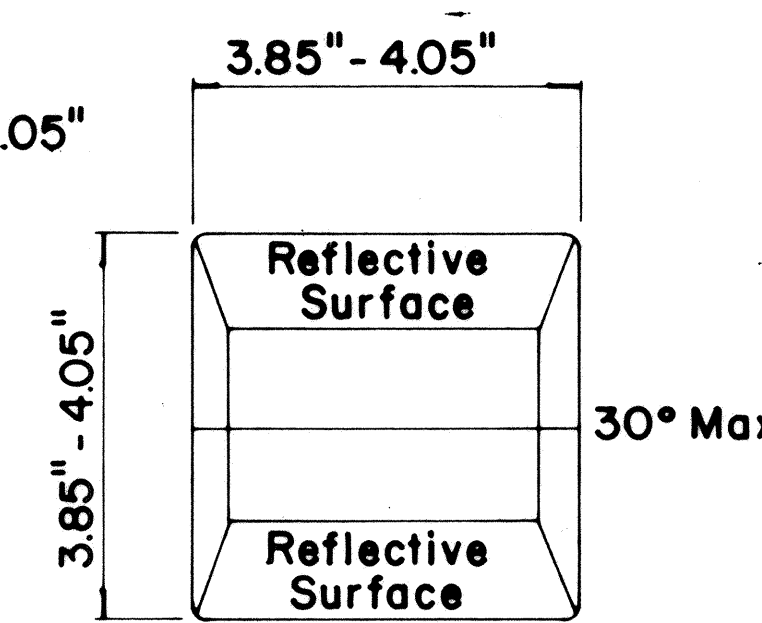
MISCELLANEOUS



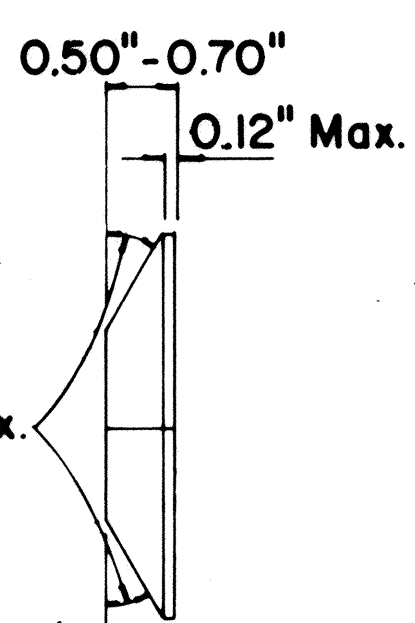
TYPE A
NON-REFLECTIVE WHITE MARKER



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.
- Edge lines shall not be continued through intersections and shall not be broken for driveways unless otherwise shown or directed.

LEGEND

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

APPROVAL RECOMMENDED:

Erich Tanaka
TRAFFIC ENGINEER

7/21/78
DATE

APPROVED:

Robert J. DeLoach
ASSISTANT CHIEF, ENGINEERING

1/24/78
DATE

No.	REVISION	APPROVED BY	DATE
1	Supersedes DT 300 approved 11/18/71.	H.C.	1/24/78
2	Delete Type A Markers from Bike Route Delineation.	H.C.	10/15/79
3	Added General Note 3. Revised left edge stripe.	H.C.	9-28-83

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS
AND STRIPING

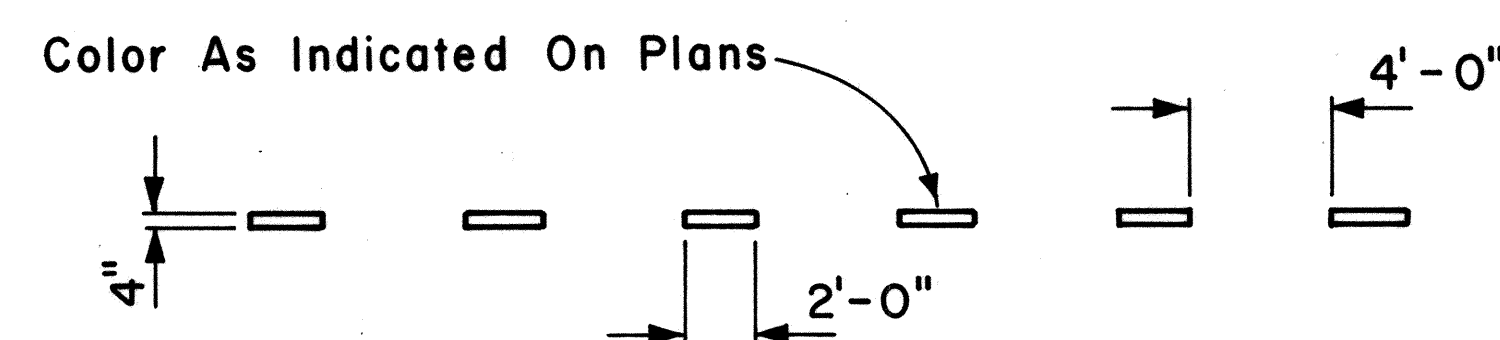
Not to Scale July 1978

SHEET No. 112 OF 16 SHEETS DT 300

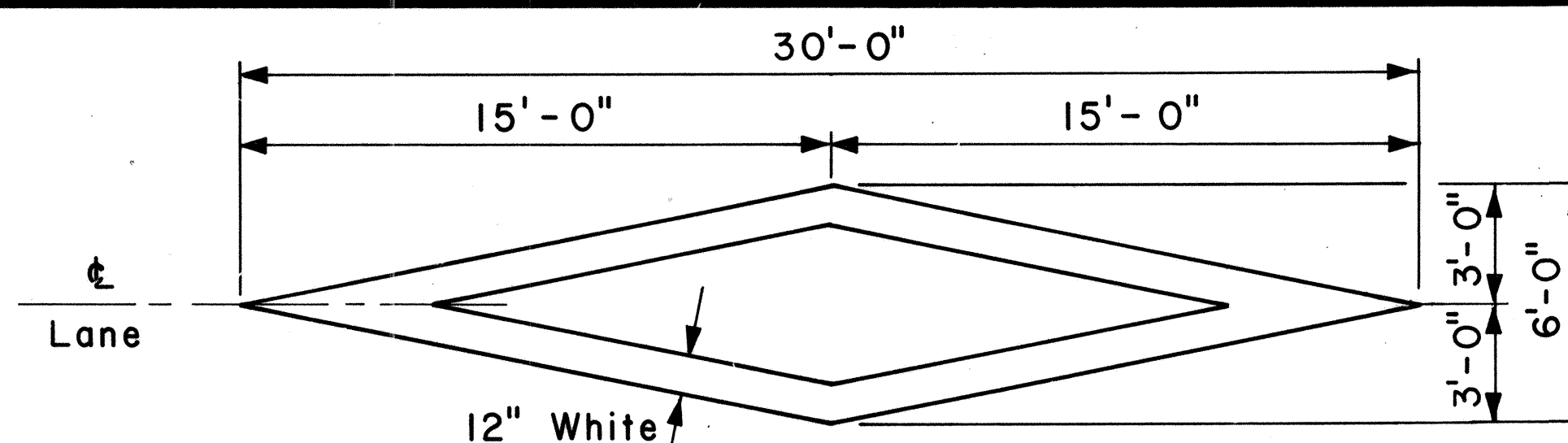
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	618-01-85M	1985	26	29

GENERAL NOTES:

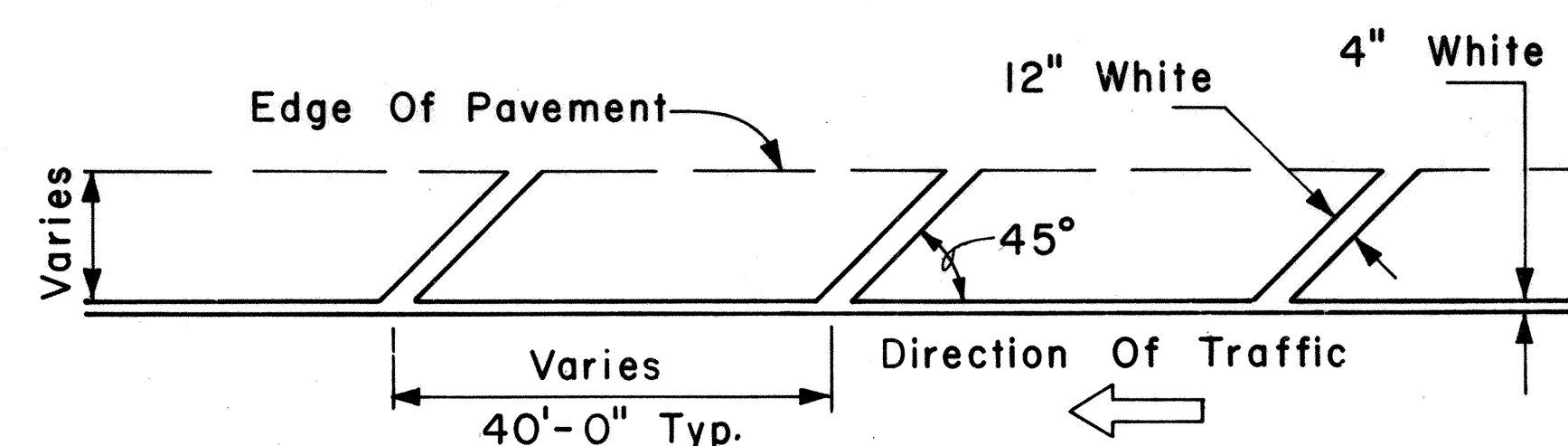
1. Pavement marking and striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of pavement markings and striping shall be done by the Contractor. The Contractor shall check layout of markings and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



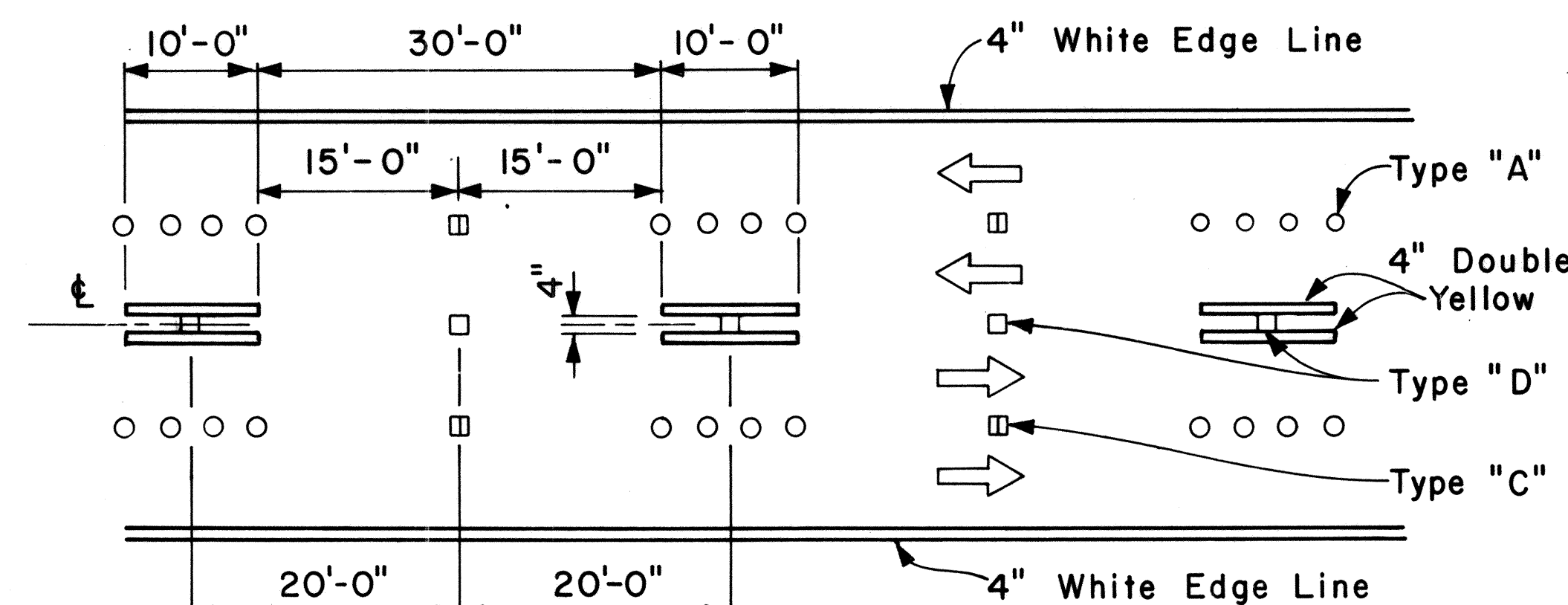
4" GUIDE LINE



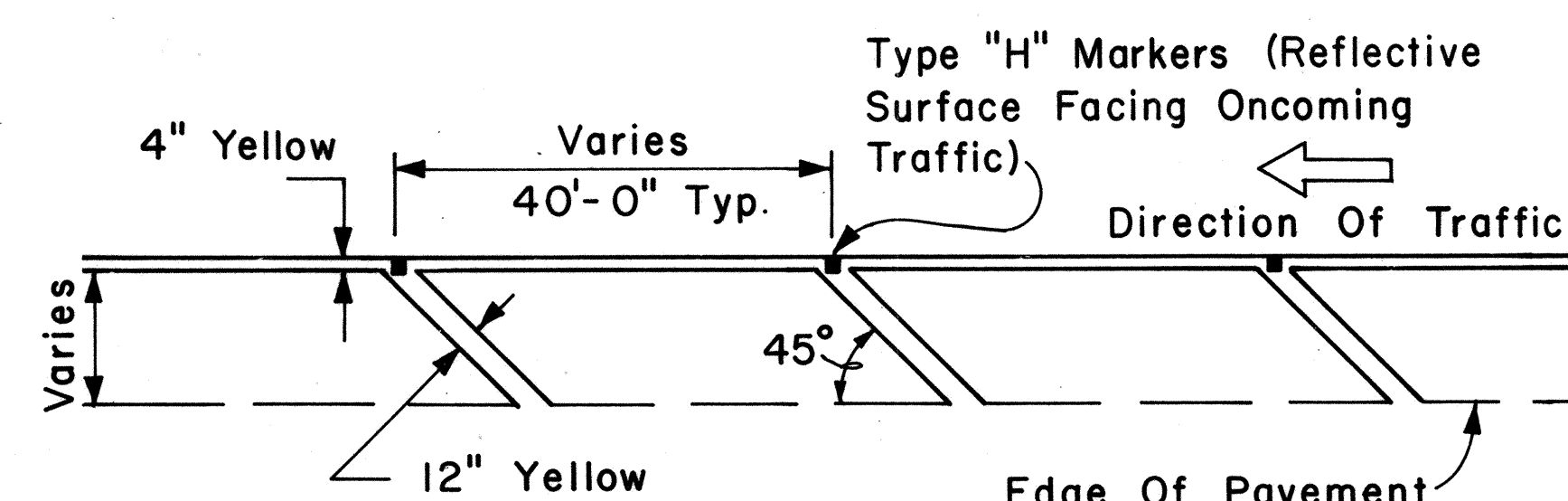
PAVEMENT DIAMOND



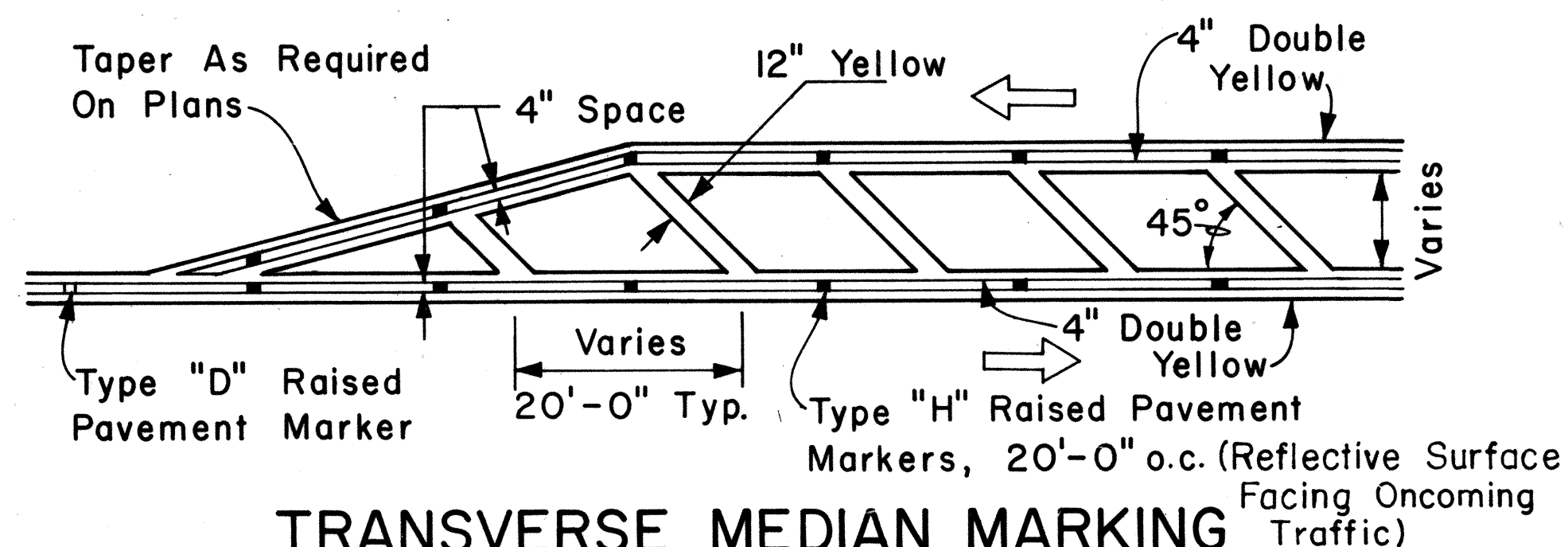
TRANSVERSE RIGHT SHOULDER MARKING



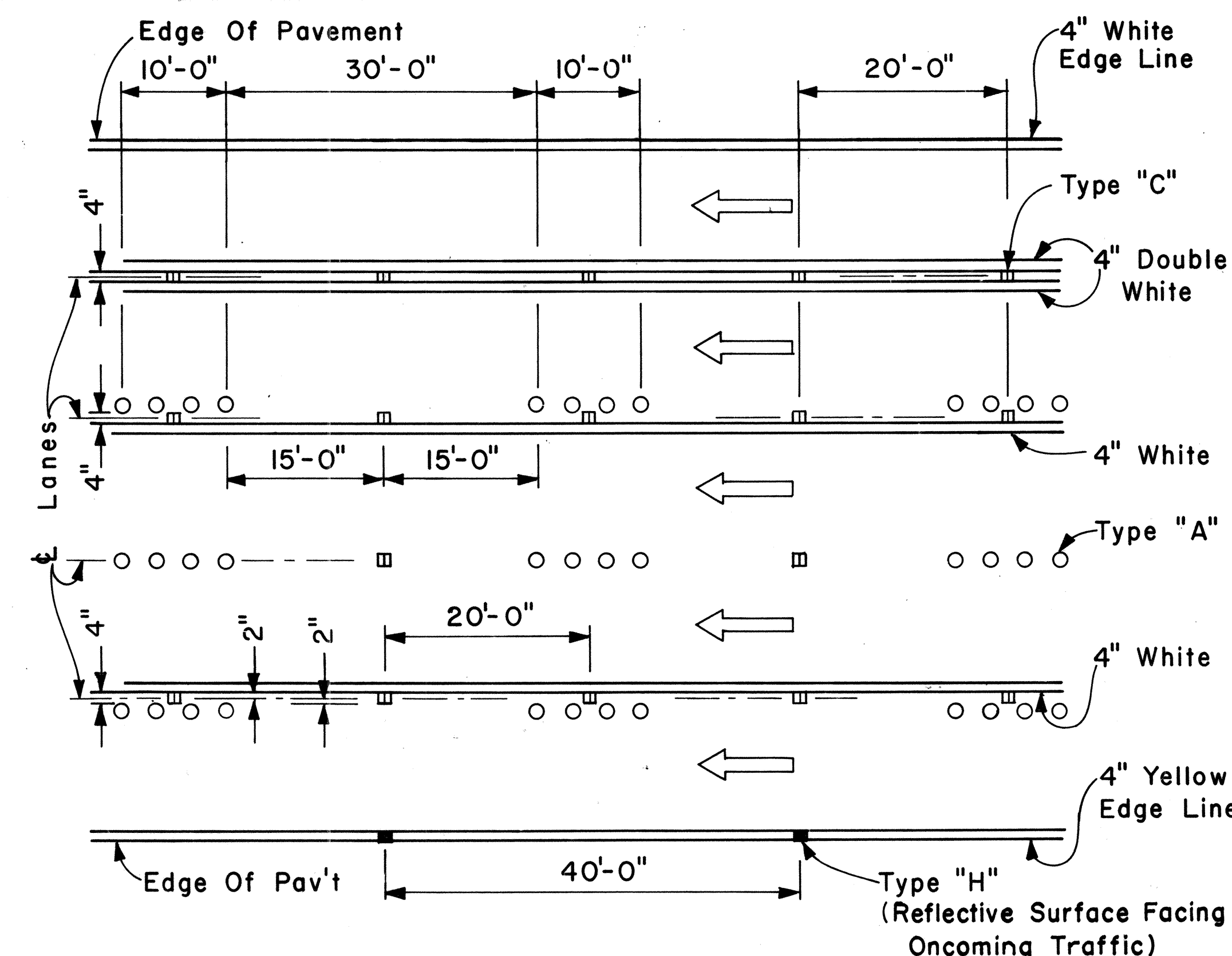
MULTI-LANE REVERSIBLE LANES



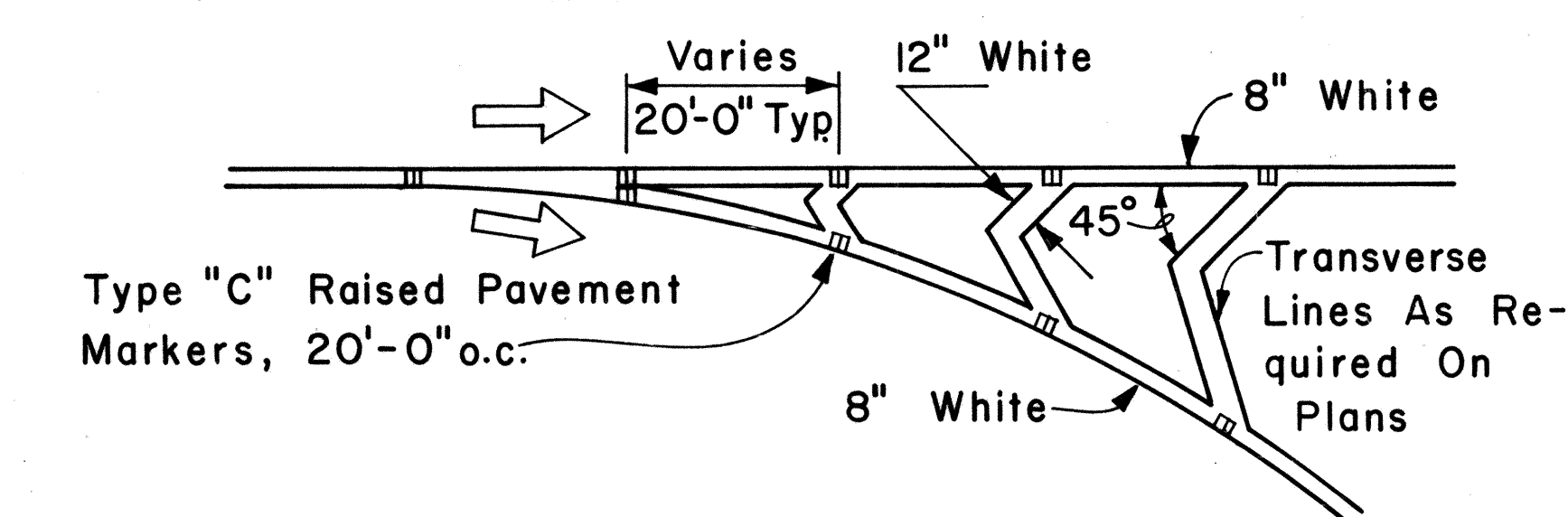
TRANSVERSE LEFT SHOULDER MARKING



TRANSVERSE MEDIAN MARKING



MULTI-LANE LANE CHANGE RESTRICTION ZONES



CHANNELIZING ISLAND

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

APPROVED: Herbert Z. Zafra 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

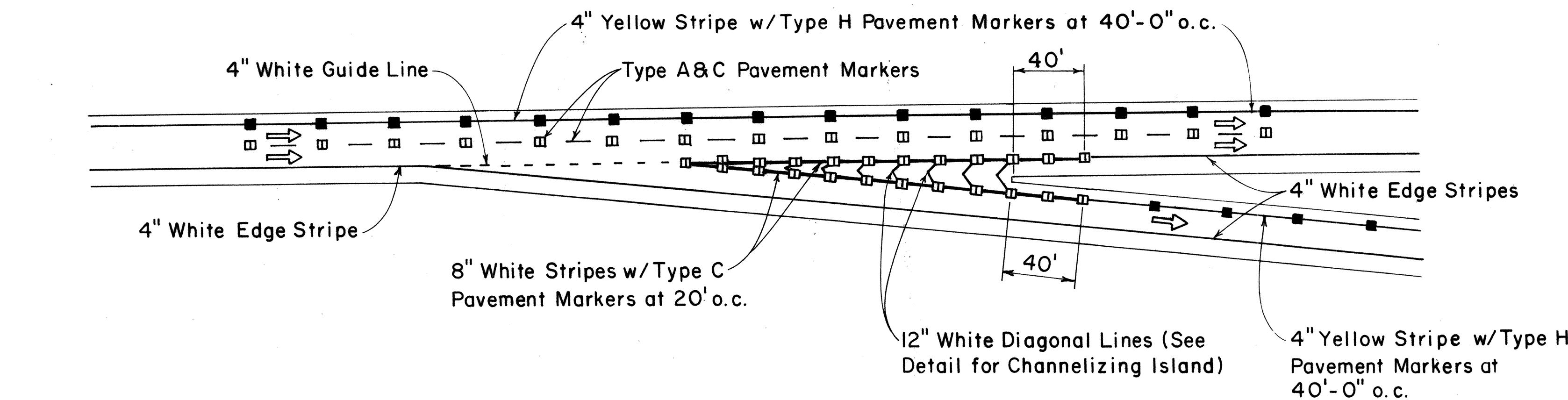
SHEET No. 13 OF 16 SHEETS DT 302

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61B-01-85H	1985	27	29

GENERAL NOTES:

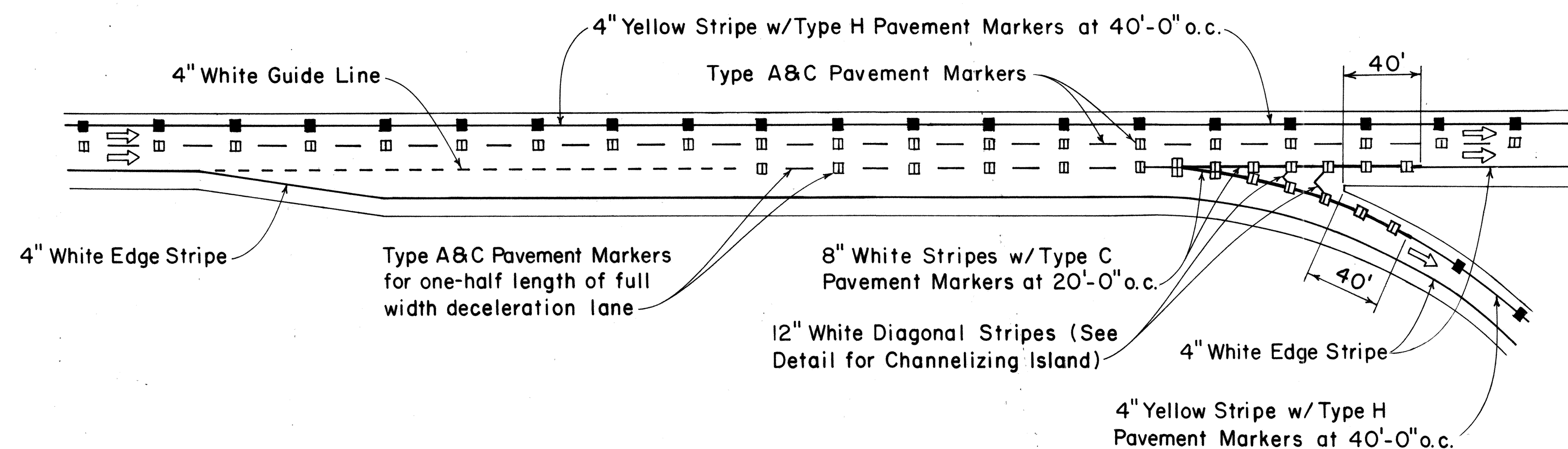
- Pavement Markings and Striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", by the FHWA, and as amended.
- Layout of Pavement Markings and Striping shall be done by the Contractor. The Contractor shall check layout of markings and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

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



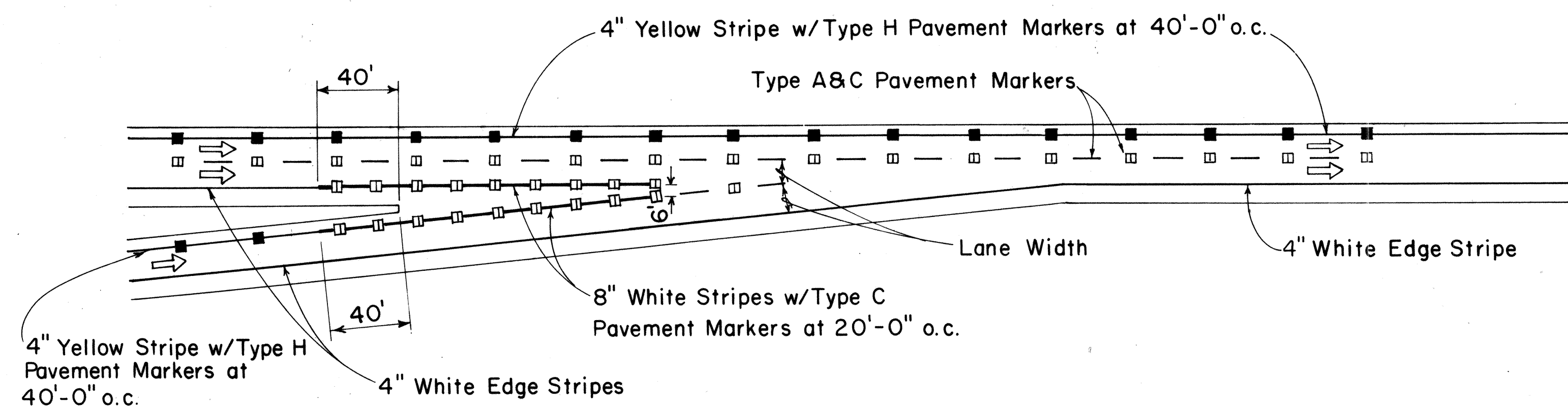
TAPERED DECELERATION LANE

TYPICAL ROADWAY EXIT MARKINGS

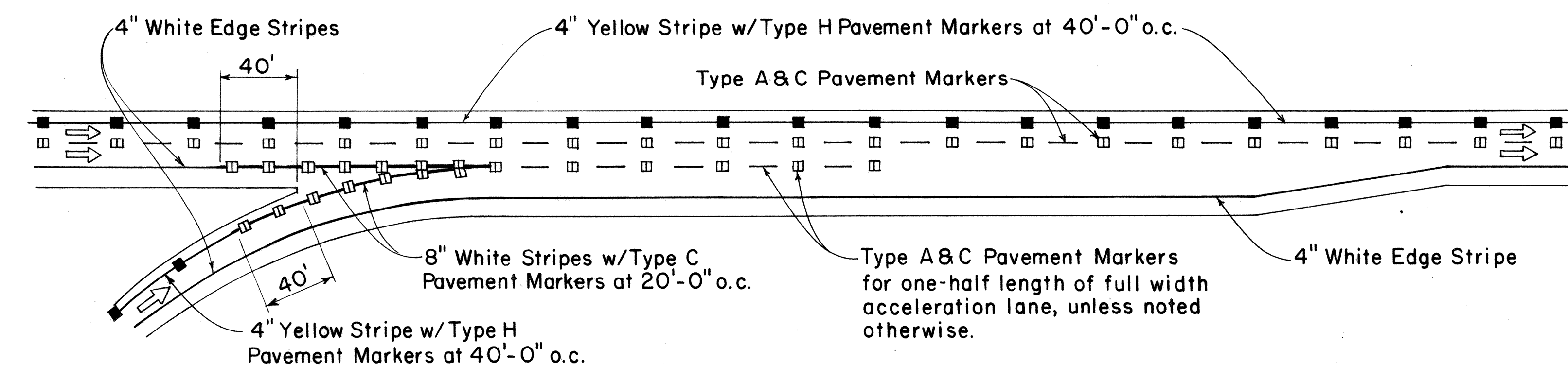


PARALLEL DECELERATION LANE

TYPICAL ROADWAY ENTRANCE MARKINGS



TAPERED ACCELERATION LANE



PARALLEL ACCELERATION LANE

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

APPROVED:
Robert D. Zakeishi 7/24/78
 ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

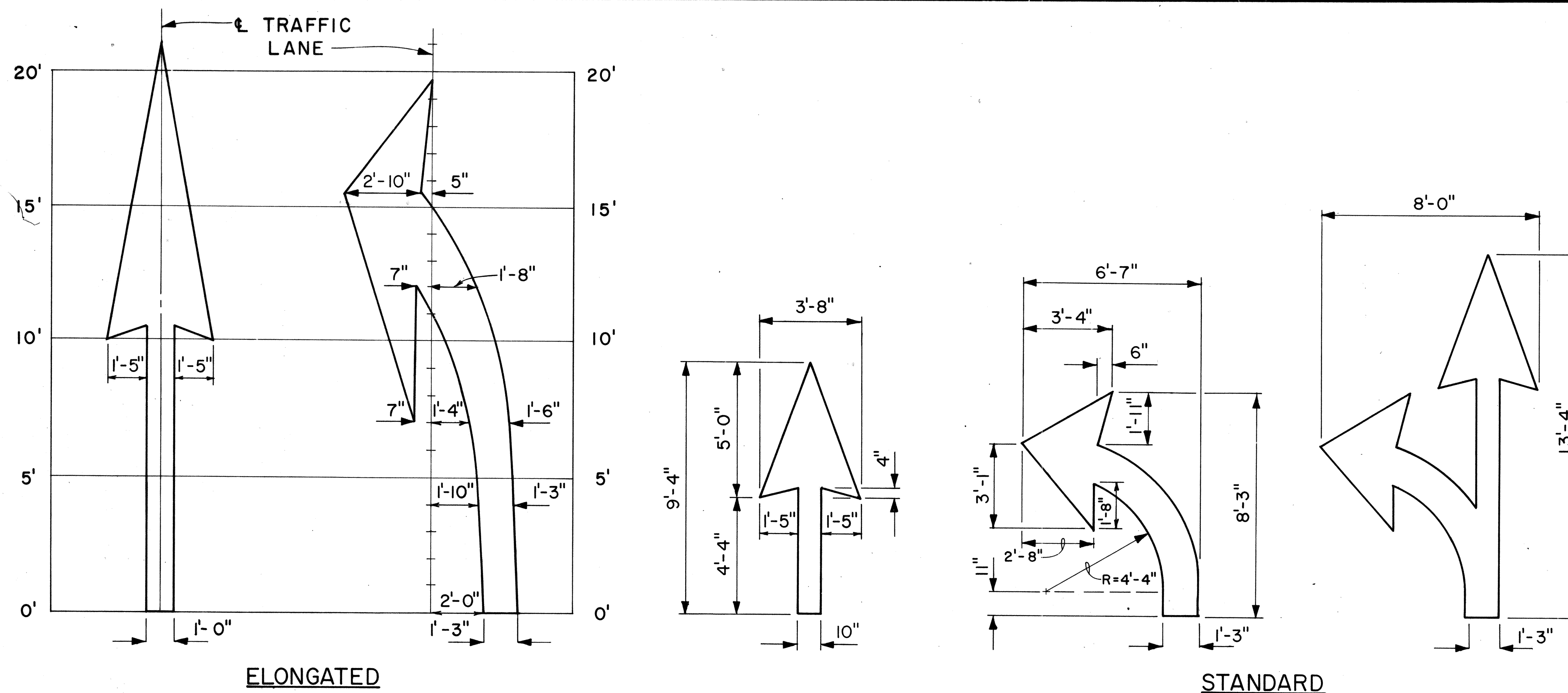
STANDARD DETAILS
MISCELLANEOUS
PAVEMENT MARKINGS

Not to Scale July 1978
 SHEET NO. 114 OF 16 SHEETS DT 304

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61B-01-85M	1985	28	29

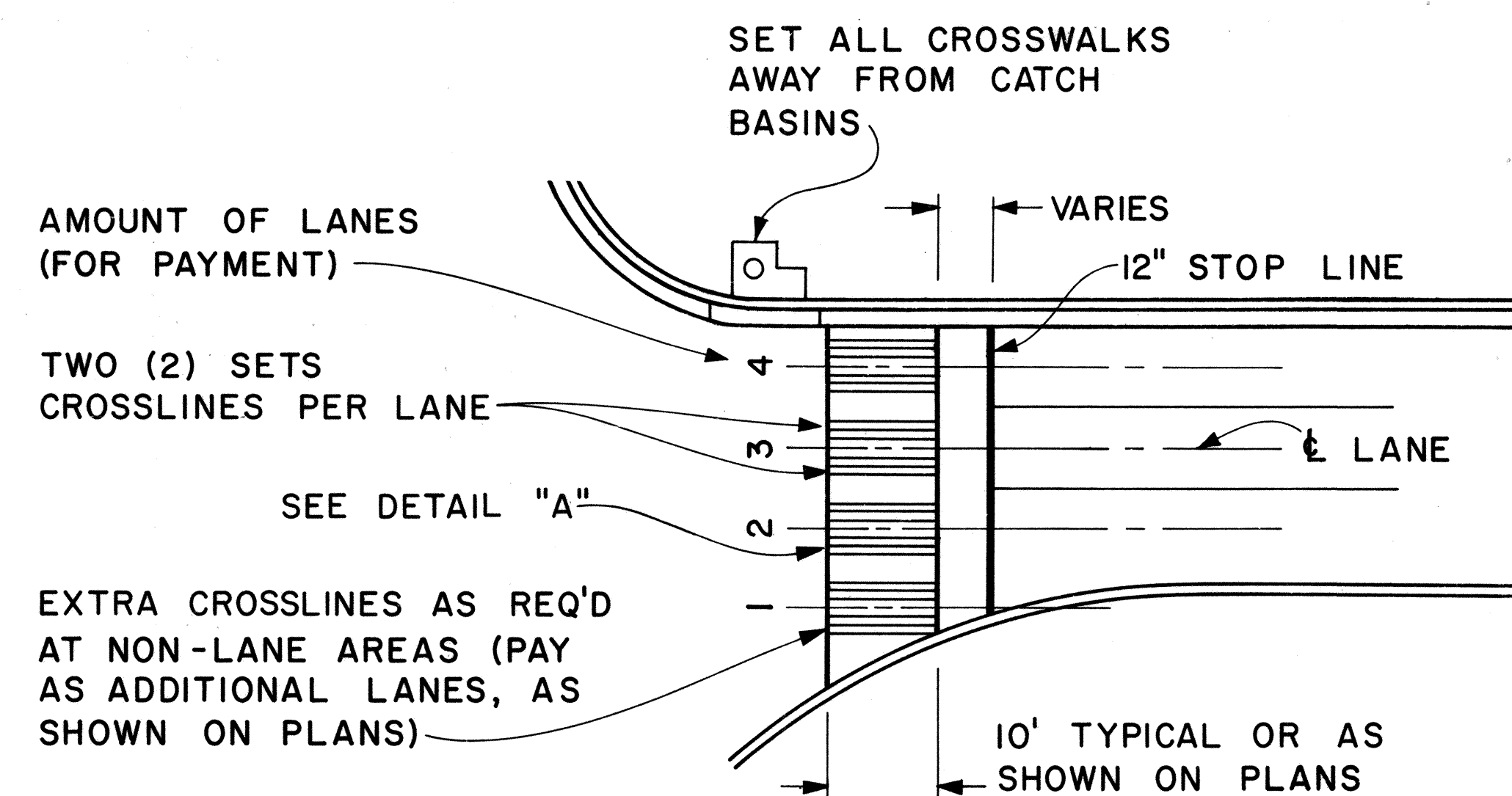
GENERAL NOTES:

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.

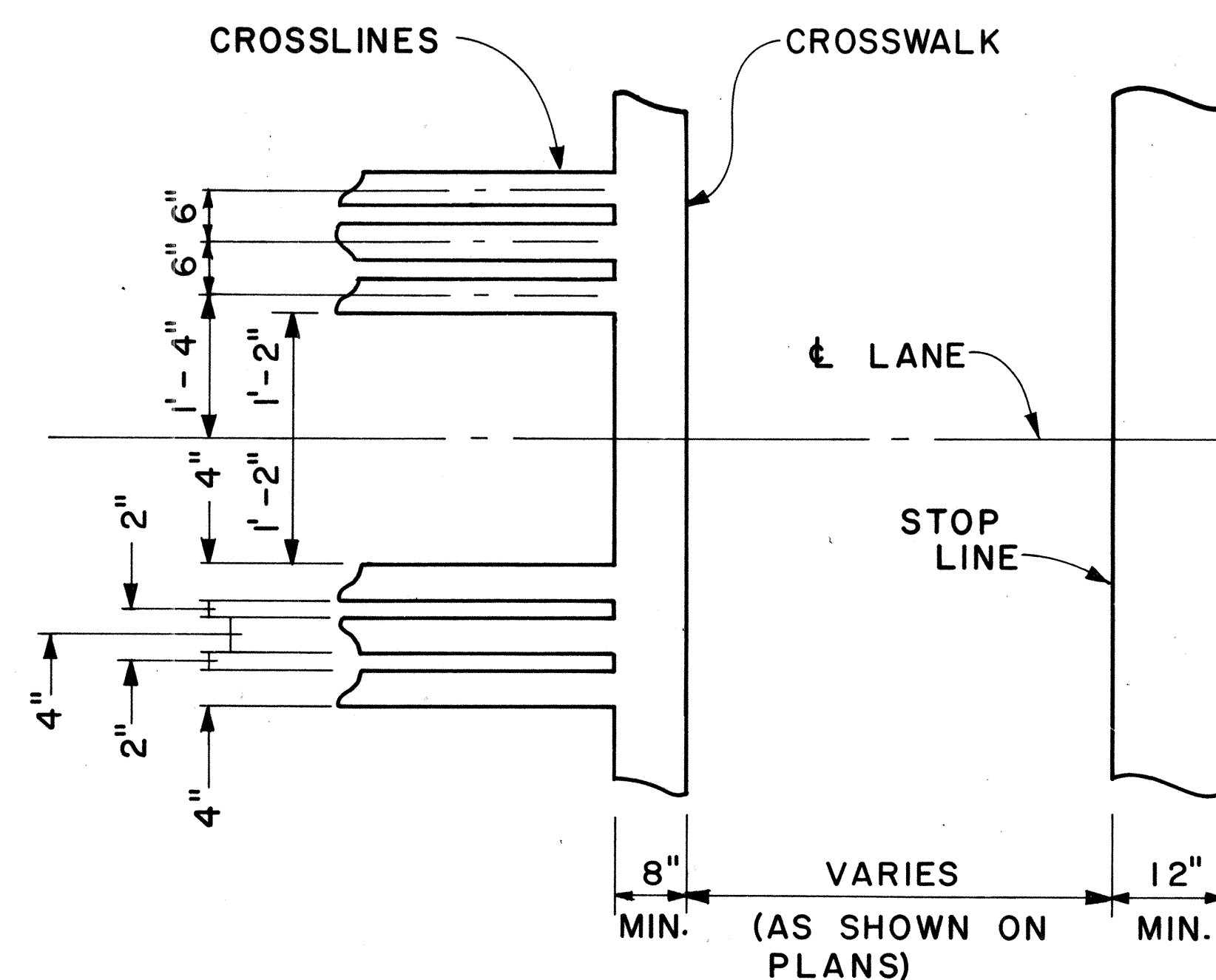


PAVEMENT ARROWS

Scale: 3/8" = 1'



PLAN



DETAIL "A"

CROSSWALK & STOP LINE

Scale: Not to Scale

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

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

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

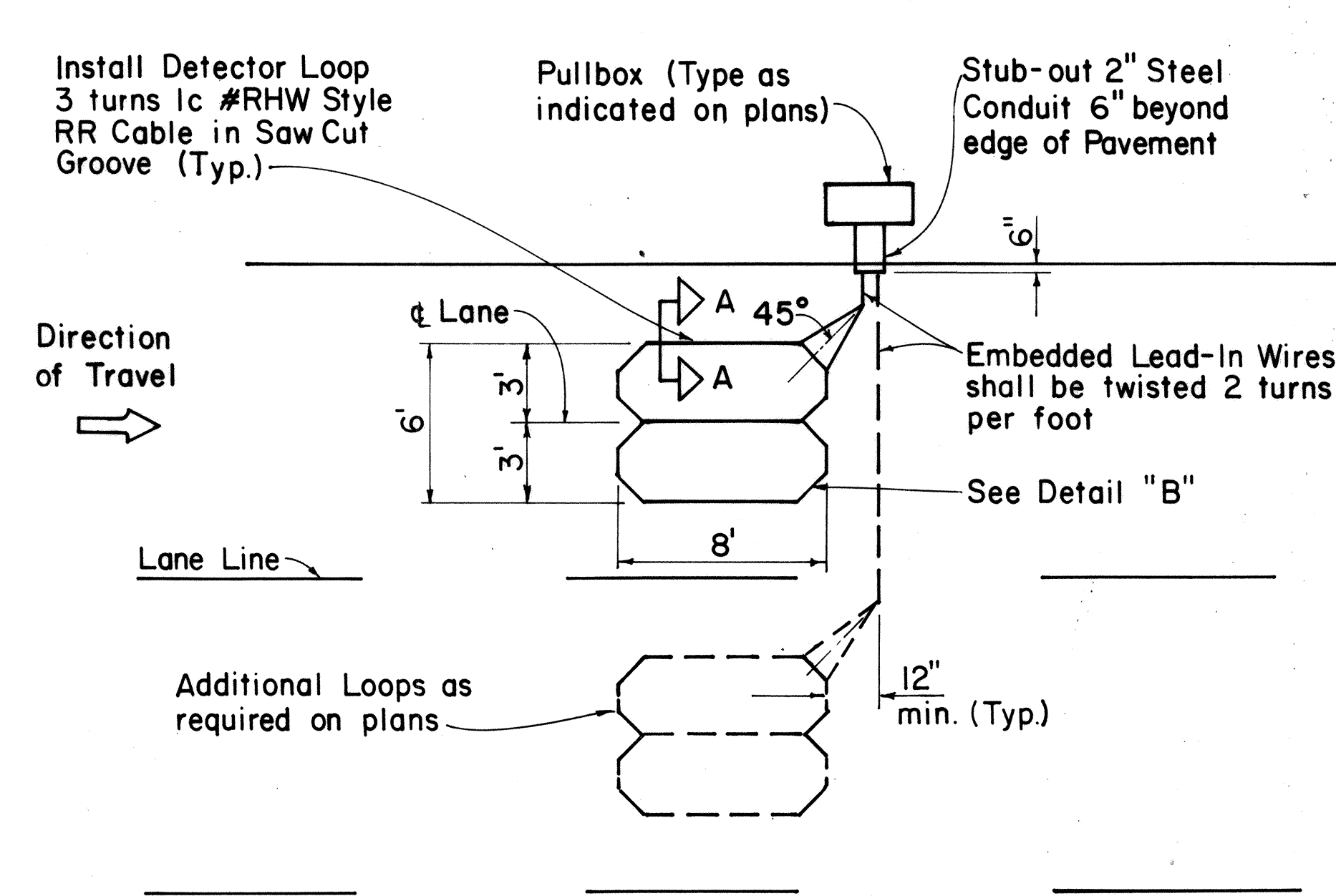
STANDARD DETAILS

MISCELLANEOUS
 PAVEMENT MARKINGS

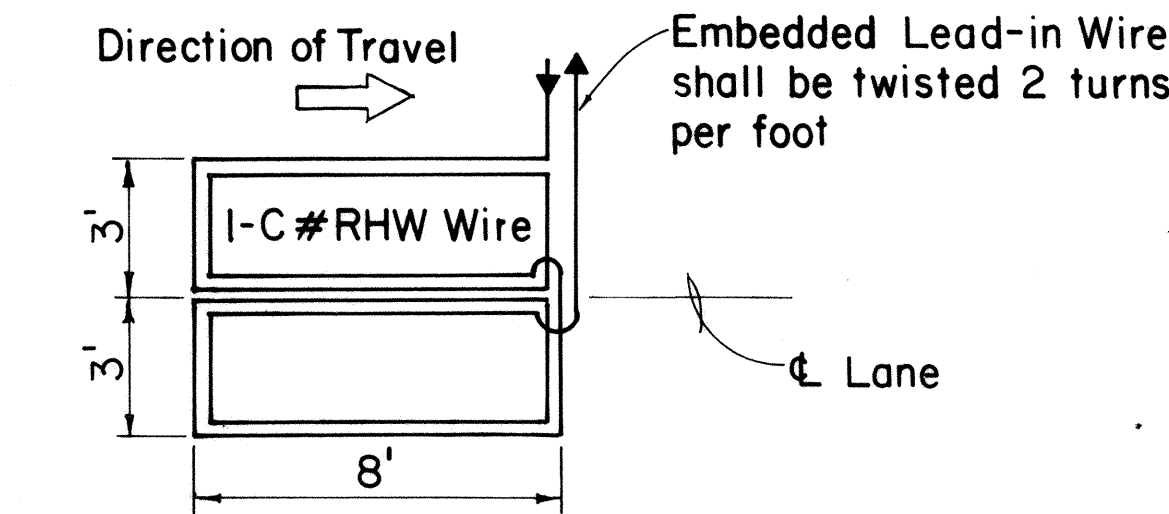
Scale: As Shown Date: March, 1978

SHEET No. 15 OF 16 SHEETS DT 306

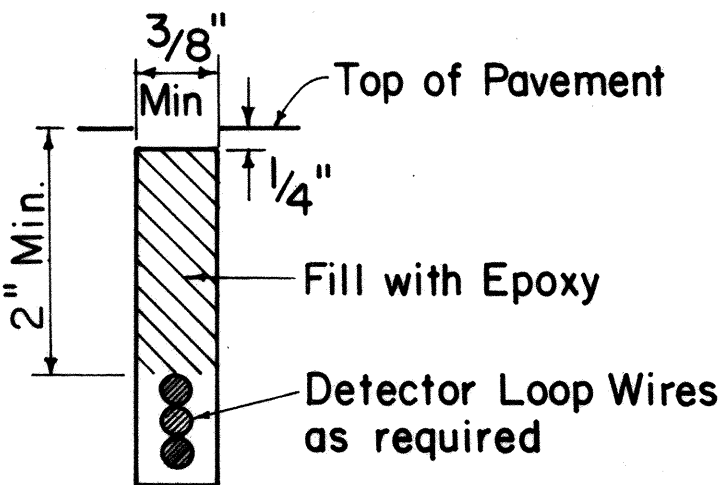
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61B-DT-85M	1985	29	29



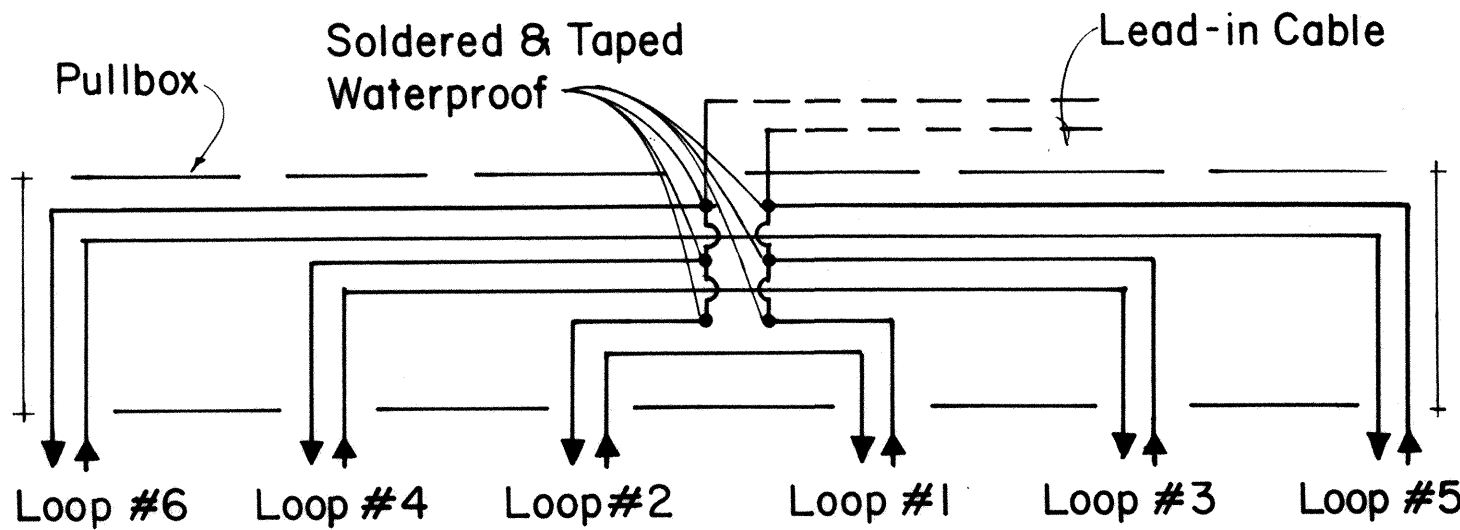
SINGLE LOOP LAYOUT



WIRING DIAGRAM



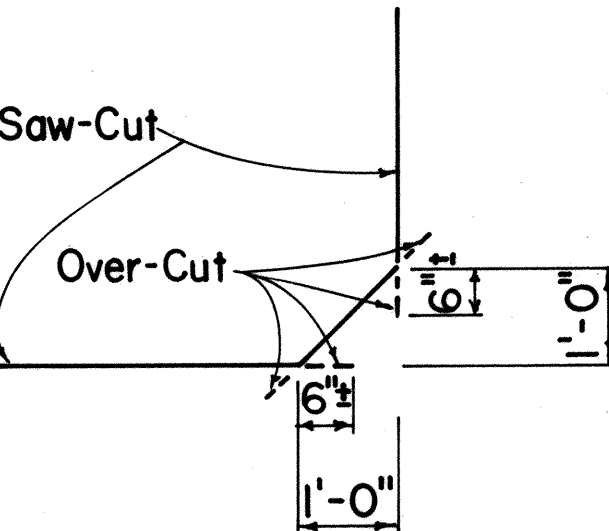
DETECTOR LOOP SAW-CUT SECTION A-A (TYPICAL)



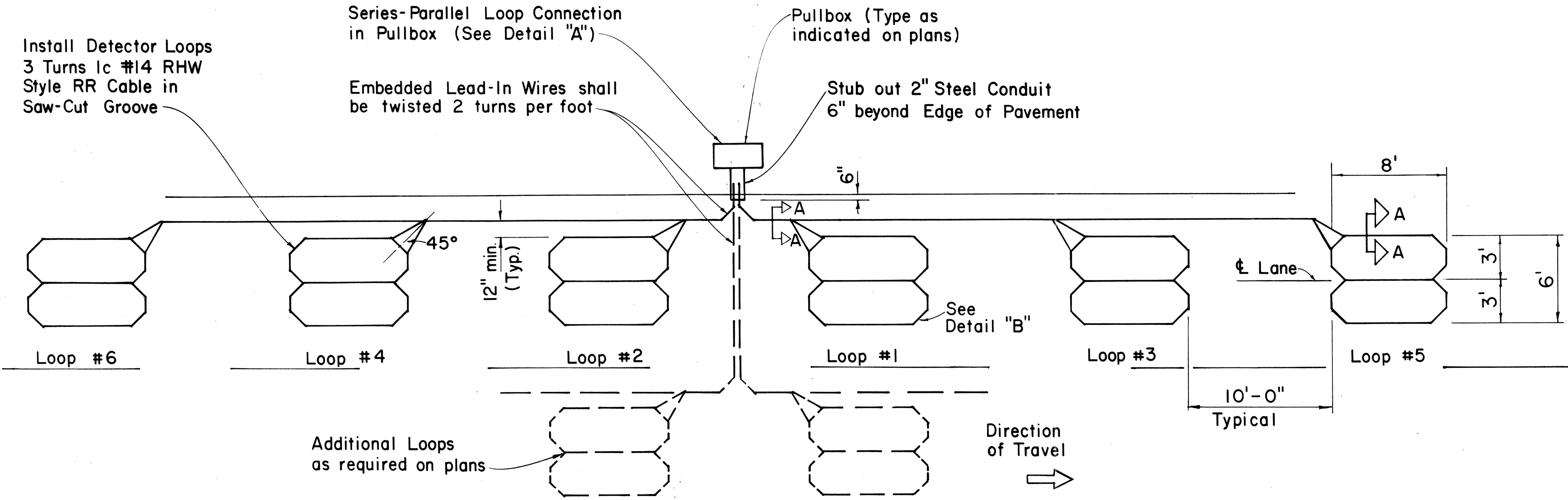
DETAIL "A"

TYPICAL SERIES-PARALLEL LOOP CONNECTION

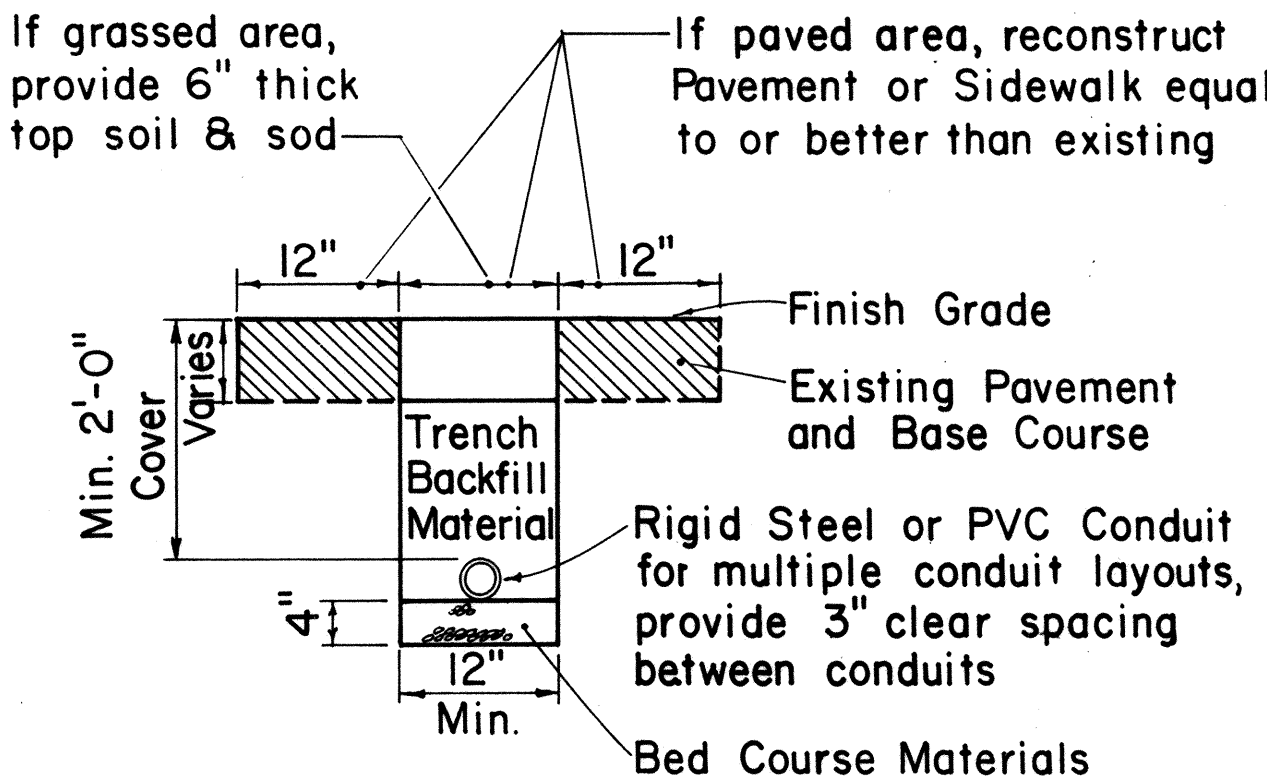
Note: Back-Fill Over-Cuts with Epoxy



DETAIL "B" SAW-CUT AT CORNERS



MULTIPLE LOOP LAYOUT



TYPICAL TRENCH SECTION FOR CONDUIT

NOTE:
1. All conduits under roadways shall be steel or PVC schedule 80. All other conduits shall be steel or PVC schedule 40.

APPROVAL RECOMMENDED:
Erick Tanaka 9/26/80
TRAFFIC ENGINEER DATE
APPROVED:
Shabur Rafiqi 9/30/80
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Replaces Sht. DT 405 dated 3/5/76	H.T.	9/30/80
2	Revised Section A-A	H.T.	5/15/81

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
LOOP DETECTORS

Not to Scale
SHEET NO. 16 OF 16 SHEETS DT 405

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