

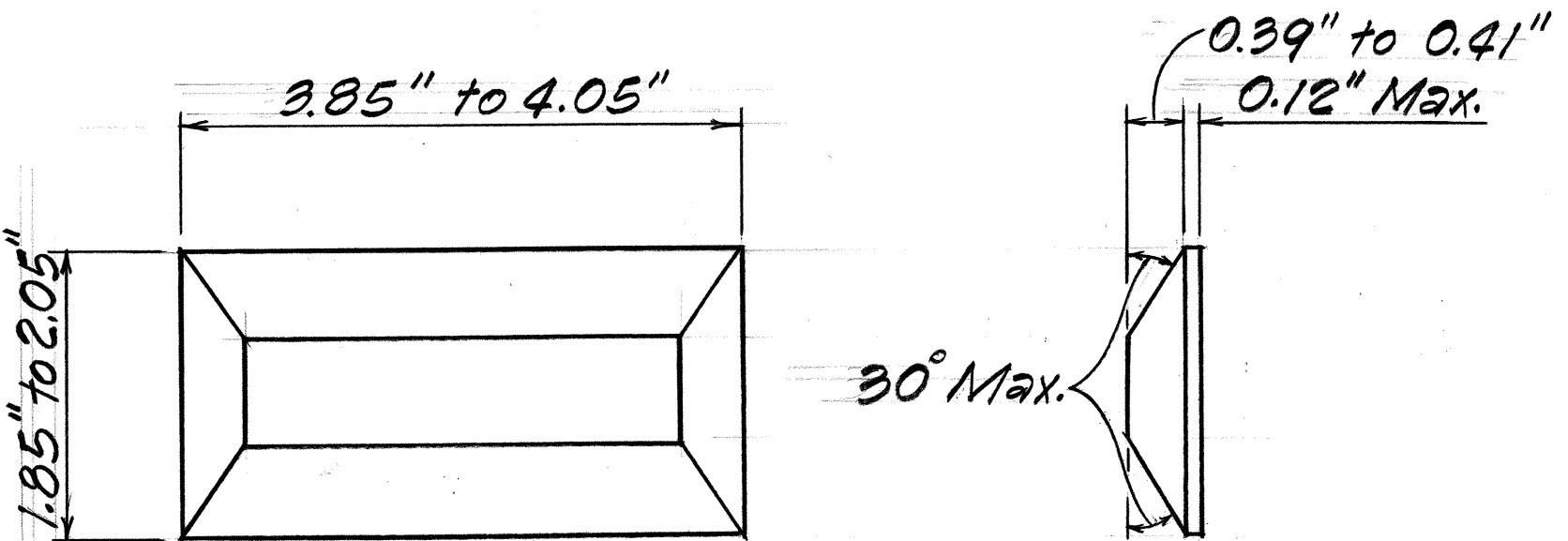
EDGE STRIPING SCHEDULE

LOCATION	PAVEMENT STRIPING		
Approximate Station to Station	OUTBOUND (To Kula Hwy.)	INBOUND (To Makawao)	LENGTH (Lin. Ft.)
0 + 00 - 24 + 00	4"	4"	4,800
24 + 00 - 30 + 25	8"	8"	3,000
30 + 25 - 43 + 50	4"	4"	850
43 + 50 - 58 + 50	8"	8"	3,000
58 + 50 - 127 + 00	4"	4"	13,700
127 + 00 - 145 + 80	8"	8"	3,000
145 + 80 - 0 + 12	4"	4"	4,174
	Total		32,524

FLEXIBLE DELINEATOR POST SCHEDULE

LOCATION			
Approximate Station to Station	OUTBOUND (To Kula Hwy.)	INBOUND (To Makawao)	No. of Posts W/RM-3
0 + 15 - 8 + 80	265'		6
38 + 75 - 41 + 25		250'	6
57 + 10 - 59 + 75	265'		6
128 + 30 - 130 + 40	210'		5
140 + 50 - 154 + 70		520'	11
	Total		34

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	28	39



TYPE CL
Red-Clear Reflective Marker
or
TYPE DL
Two-Way Yellow Reflective Marker
Not to Scale

CENTERLINE PAVEMENT STRIPING AND MARKING SCHEDULE

LOCATION	PAVEMENT STRIPING				PAVEMENT MARKERS		
Approximate Station to Station	OUTBOUND (To Kula Hwy.)	INBOUND (To Makawao)	Type	LENGTH (Lin. Ft.)	Type DL (Ea.)	Type J (Ea.)	
0 + 00 - 5 + 38	No Pass	No Pass	Double 4"	538	27		
5 + 79 - 26 + 35	No Pass	No Pass	Double 4"	2,056	103		
26 + 69 - 29 + 47	No Pass	No Pass	Double 4"	278	14		
29 + 47 - 46 + 01	Pass	Pass	—	—	41	164	
46 + 01 - 56 + 65	No Pass	No Pass	Double 4"	1,064	54		
56 + 65 - 62 + 45	Pass	Pass	—	—	15	58	
62 + 45 - 69 + 00	No Pass	No Pass	Double 4"	655	33		
69 + 00 - 76 + 78	Pass	Pass	—	—	20	80	
76 + 78 - 77 + 85	No Pass	No Pass	Double 4"	107	6		
78 + 15 - 122 + 00	No Pass	No Pass	Double 4"	4,385	220		
122 + 00 - 127 + 40	Pass	Pass	—	—	17	68	
127 + 40 - 151 + 55	No Pass	No Pass	Double 4"	2,415	121		
151 + 55 - 154 + 20	Pass	Pass	—	—	7	28	
154 + 20 - 0 + 12	No Pass	No Pass	Double 4"	1,246	63		
			Total	12,744	741	398	

GENERAL NOTES:

- For installation of Pavement Markers and Striping see Standard Detail DT 300. Details of Type C and Type D Markers on Standard Detail DT 300 shall be deleted and replaced with details of Type CL and Type DL Markers as shown on this sheet. All references to Type C and Type D Markers in the plans shall mean Type CL and Type DL Markers.
- All existing round Sign Posts shall be replaced with Galvanized Square Tube Type Posts in accordance with Standard Detail DT 100B. This work shall be considered incidental to various contract items.
- All existing and/or new reflective marker posts shall be placed behind guardrails where applicable and in accordance with Standard Detail DT 110.
- Stop bars and transverse striping in traffic island shall be paid under Item No. 629.1011, Pavement Striping (Paint). Final placement of new stop bars shall be approved by the Engineer.

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

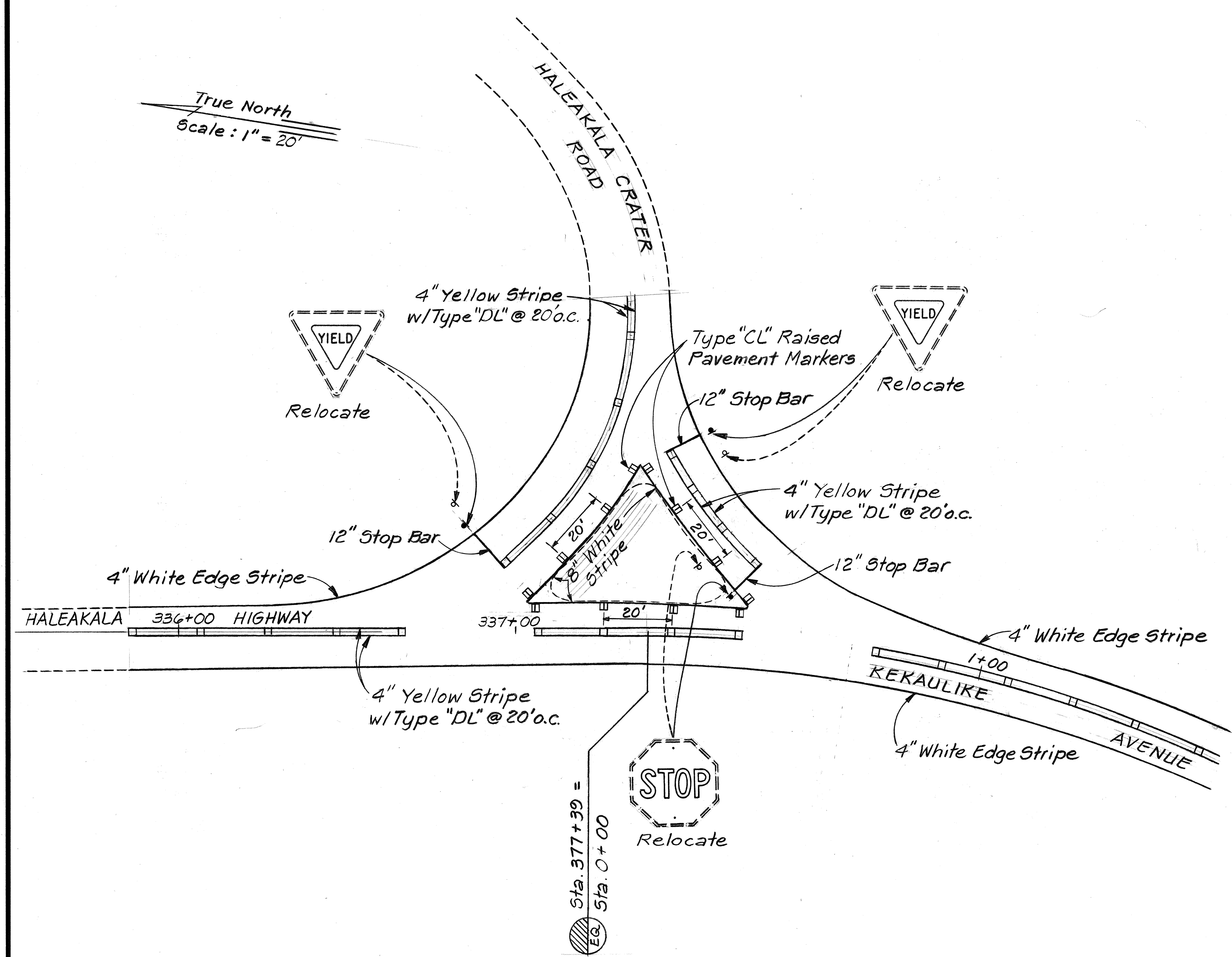
PAVEMENT MARKING, STRIPING &
DELINEATOR SCHEDULES

KEKAULIKE AVENUE IMPROVEMENTS
HALEAKALA CRATER RD. TO KULA HWY.
F.A. Project No. RS-0377(2)

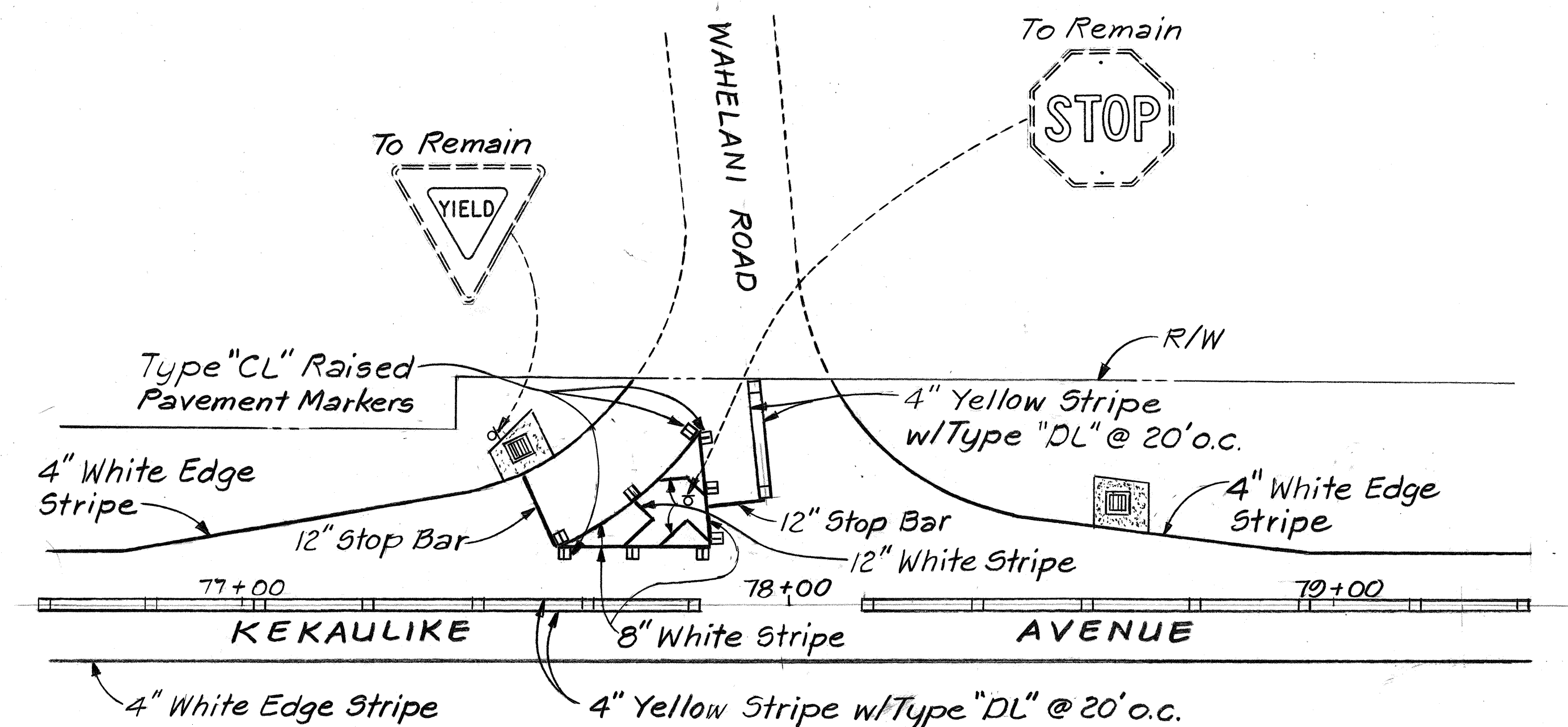
Date: April, 1986

SHEET No. 17 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	20	30



HALEAKALA CRATER ROAD INTERSECTION DETAIL
Scale: 1" = 20'



WAHELANI ROAD INTERSECTION DETAIL
Scale: 1" = 20'

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

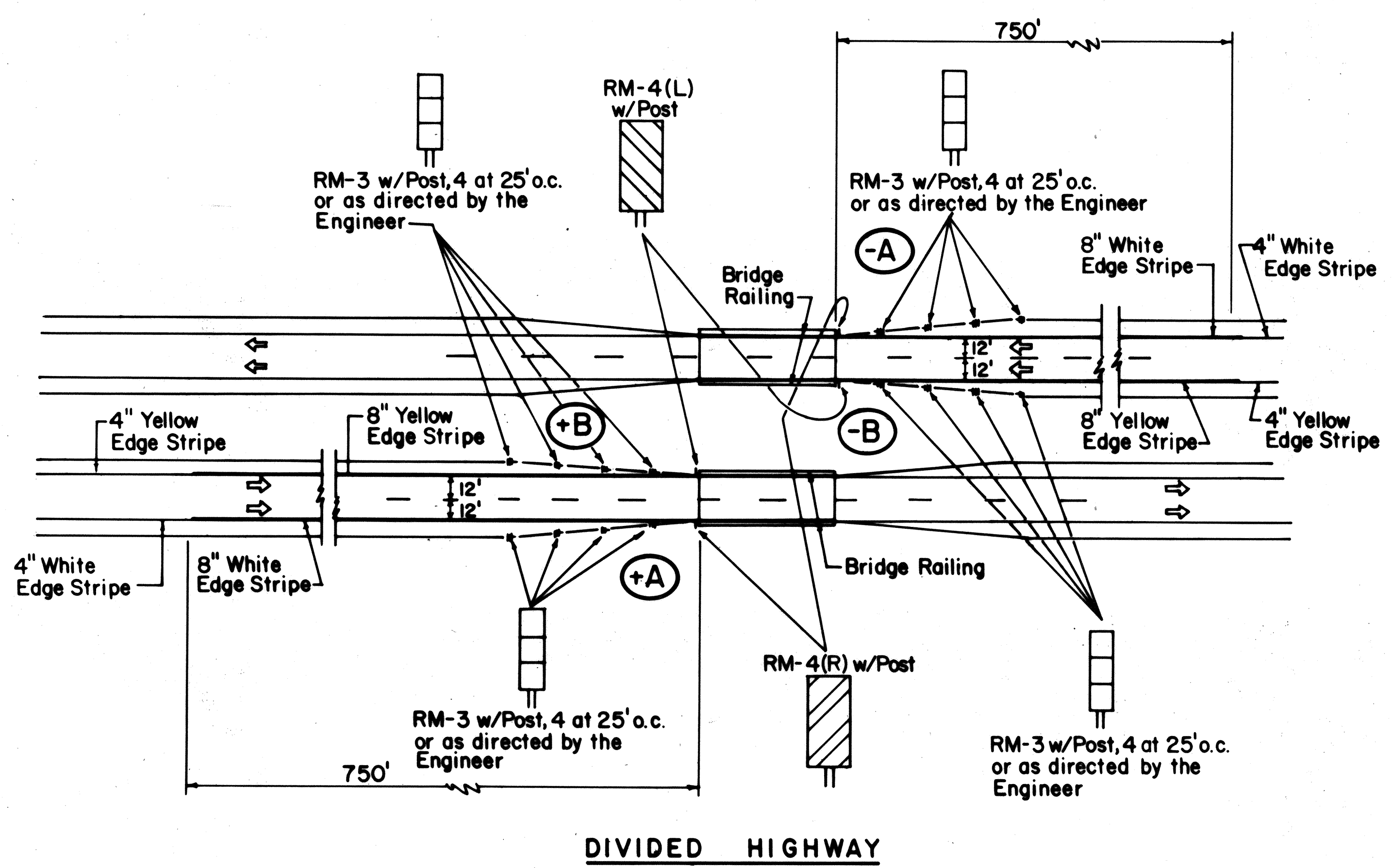
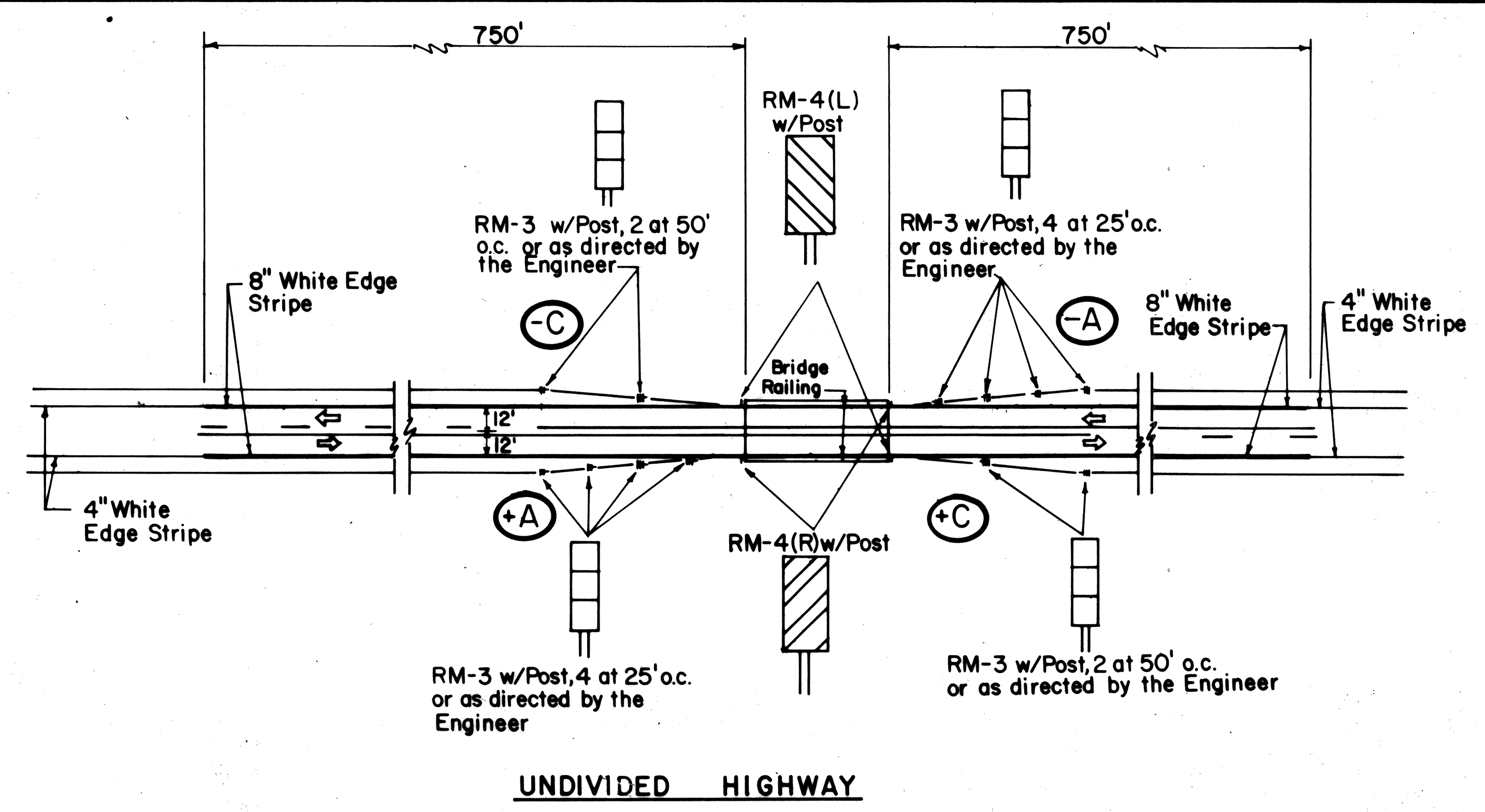
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

INTERSECTION DETAILS

KEKAULIKE AVENUE IMPROVEMENTS
HALEAKALA CRATER RD. TO KULA HWY.
F.A. Proj. No. RS-0377(2)

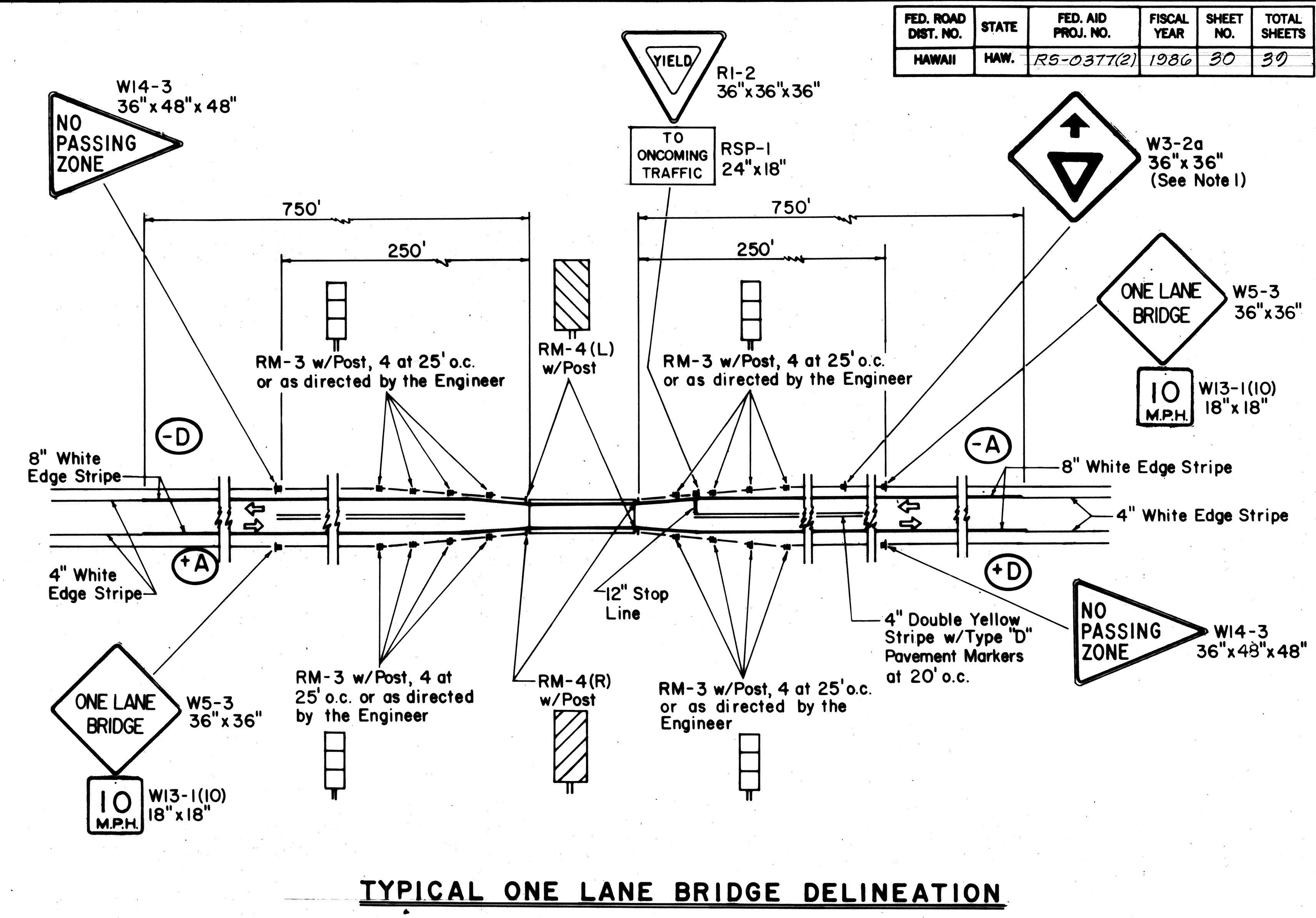
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SHEET No. 27 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	30	39



TYPICAL NARROW BRIDGE DELINEATION

- LEGEND**
- ➡ Direction of traffic
 - + Increasing Log Miles
 - Decreasing Log Miles
 - +A Type of reflector marker treatment



- NOTES:**
- YIELD AHEAD sign (W3-2a) shall be installed only on approaches to a YIELD sign (R1-2) that is not visible for a sufficient distance to permit a driver to bring his vehicle to a stop at the YIELD sign. Final location will be determined in the field by the Engineer.
 - Stop line and YIELD signs shall be installed on the approach that has the longer or better sight distance. Final location will be determined in the field by the Engineer.
 - Signs shall be spaced a minimum of 125 feet apart in the same direction of traffic.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DELINEATION AND PAVEMENT MARKINGS AT BRIDGES

Scale: N.T.S.

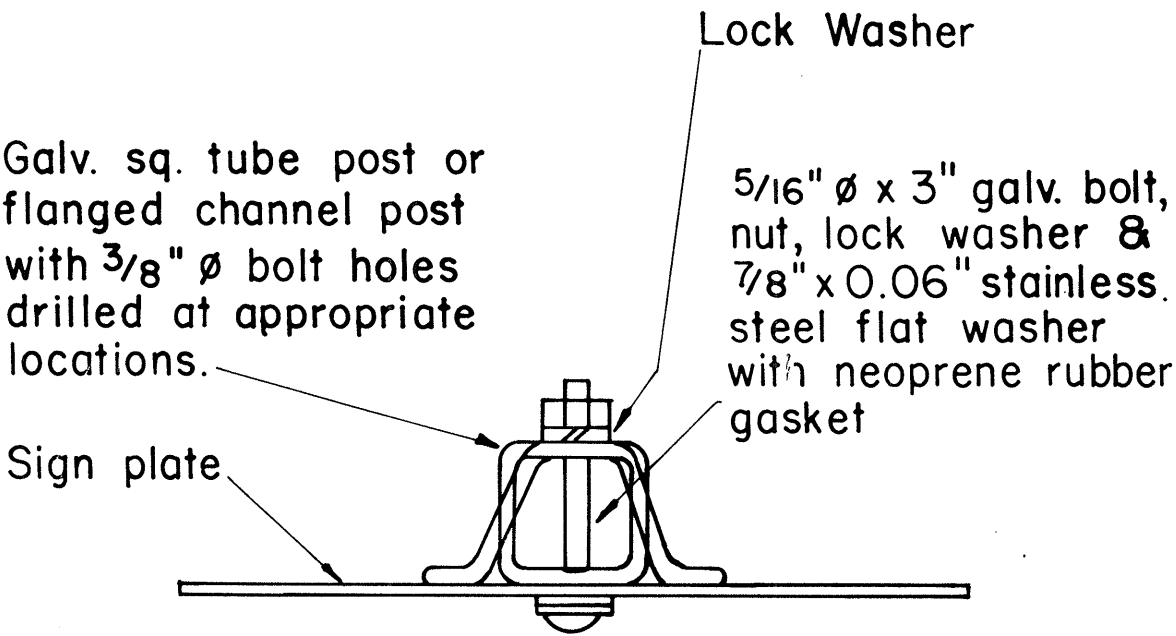
SHEET No. 37 OF 12 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
APPROVED BY	

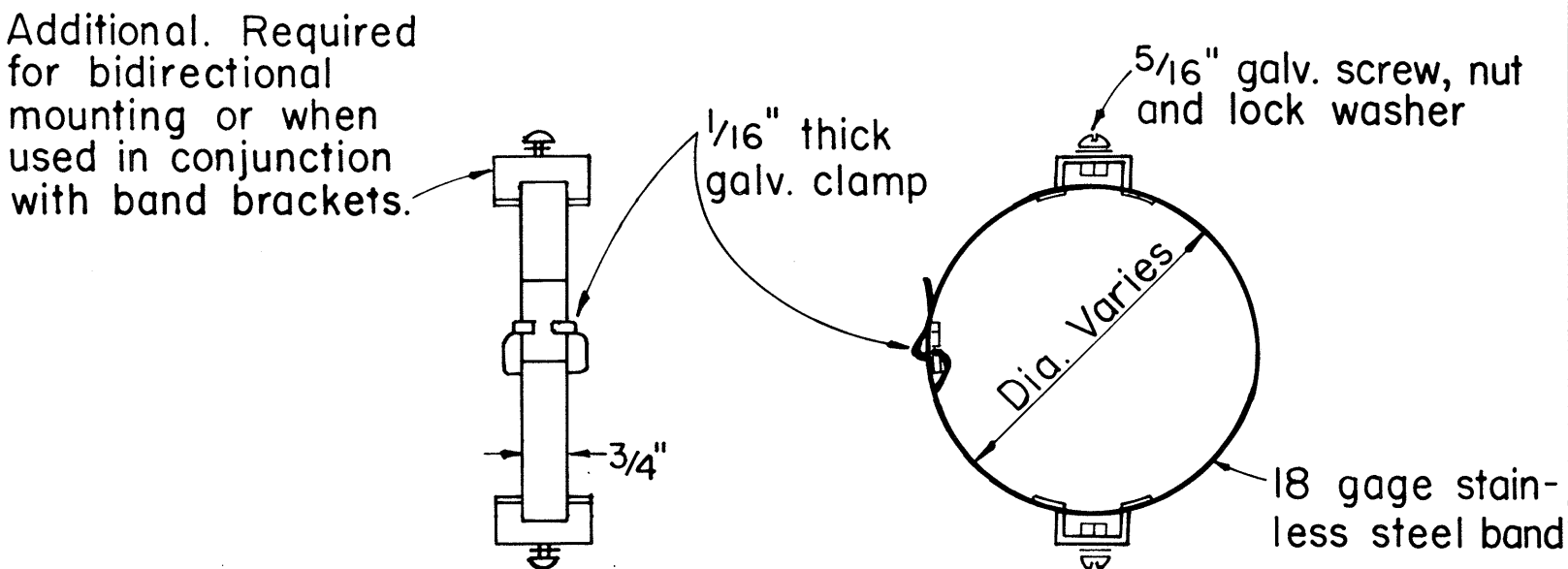
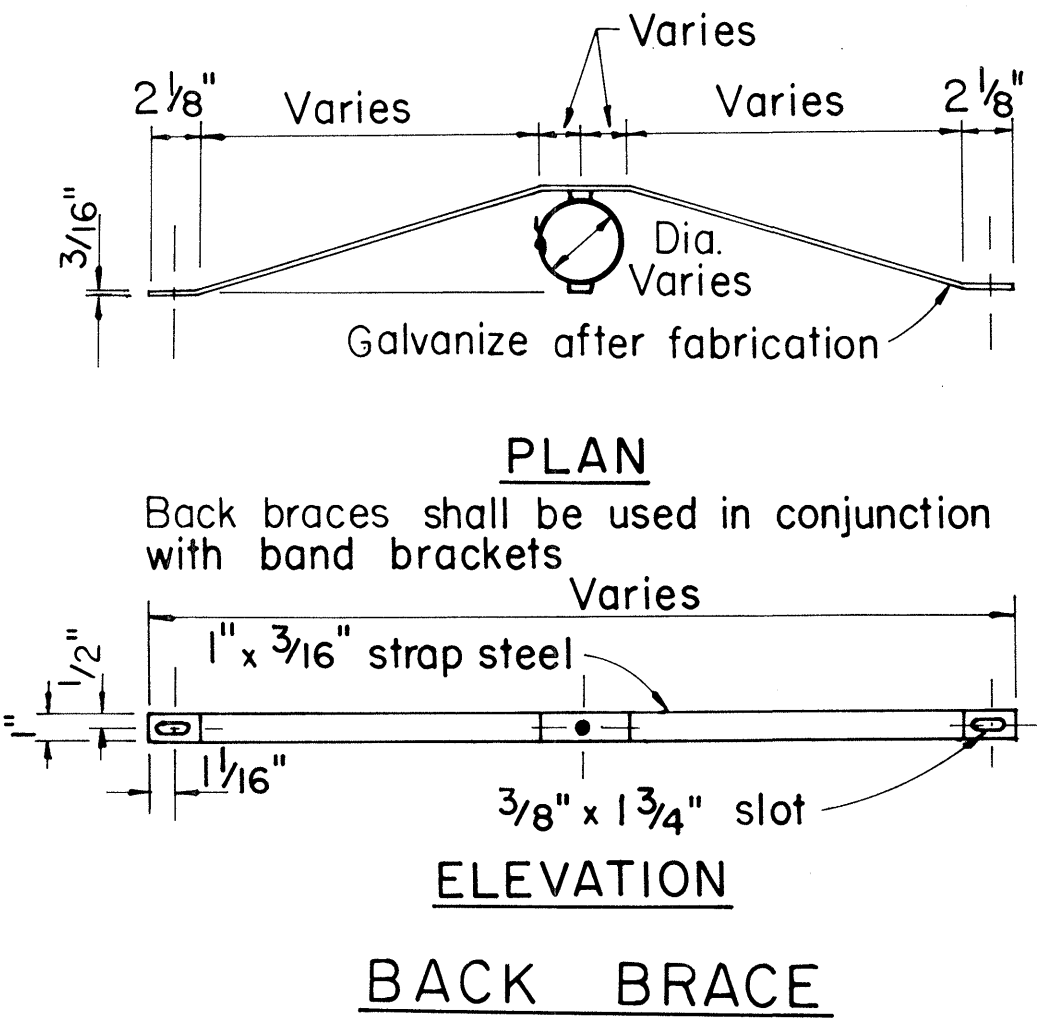
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	31	39

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



BAND BRACKET

APPROVAL RECOMMENDED:
Erich Tanaka 10/14/83
 TRAFFIC ENGINEER DATE

APPROVED:
S. Sijiyama 10-18-83
 ASSISTANT CHIEF, ENGINEERING DATE

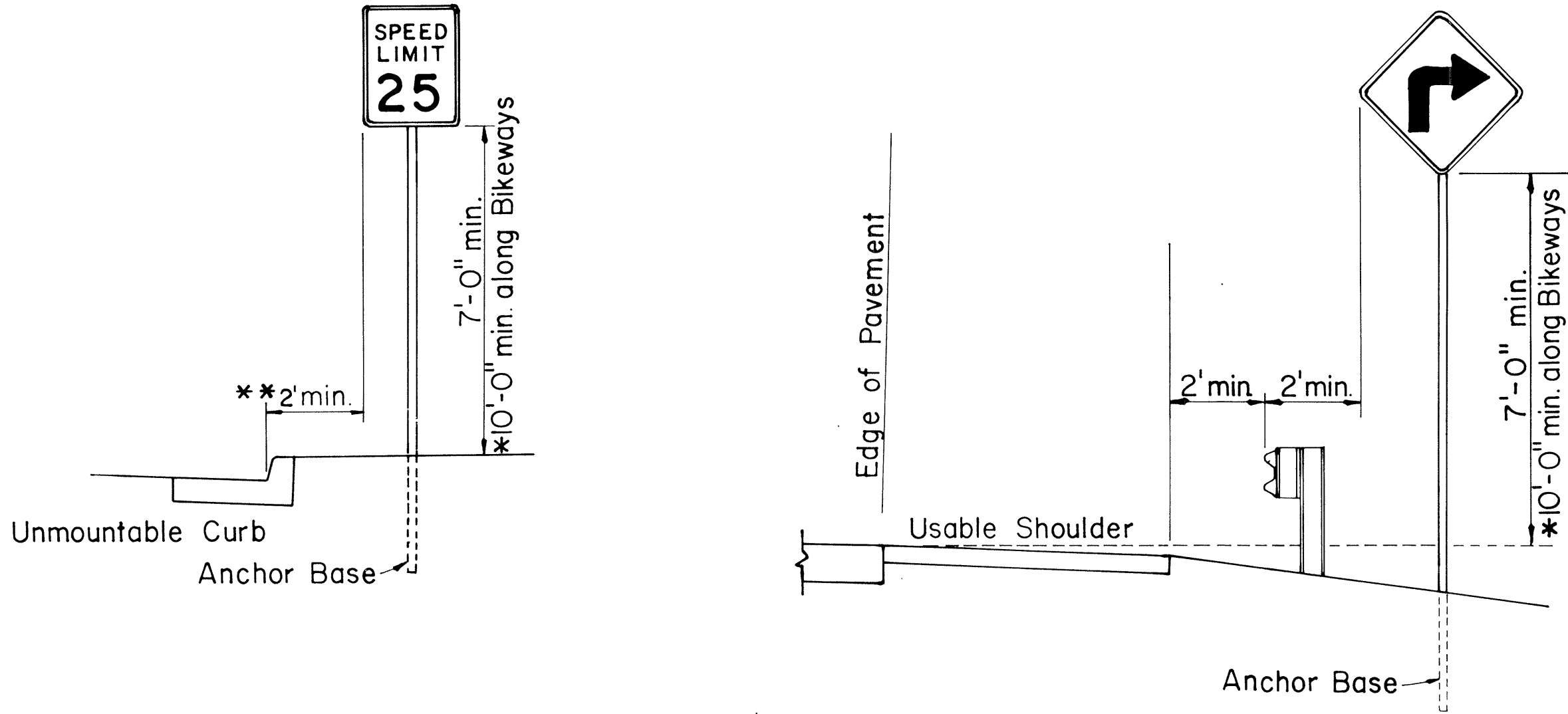
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAILS
 MISCELLANEOUS SIGN DETAILS

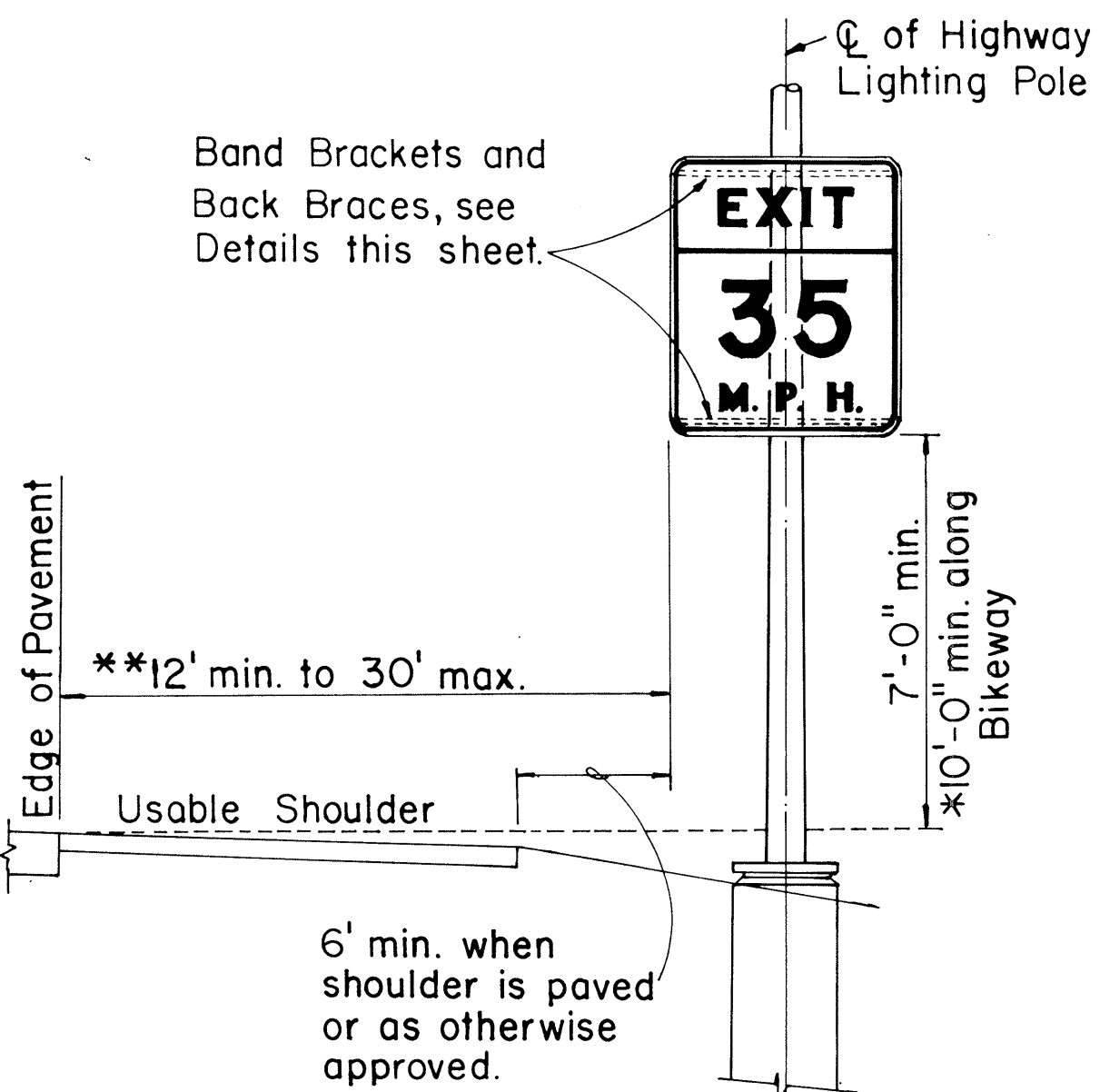
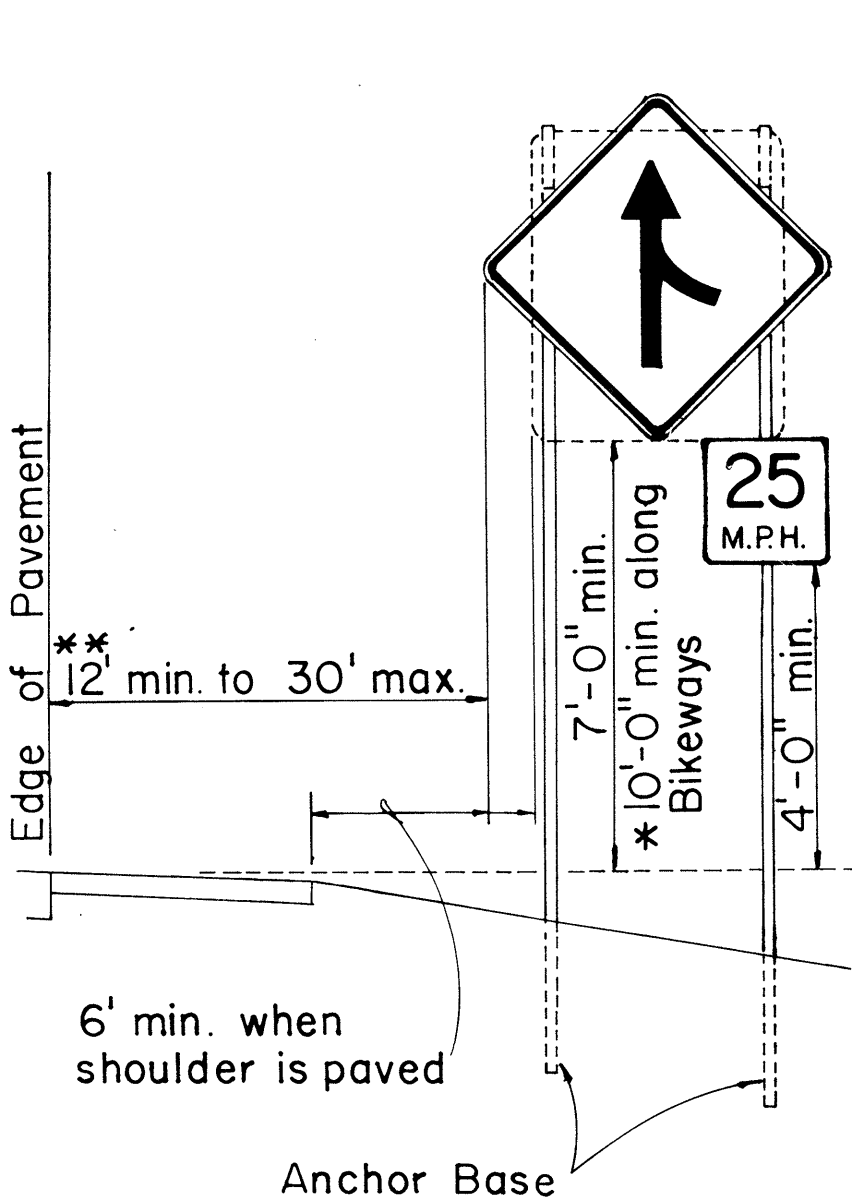
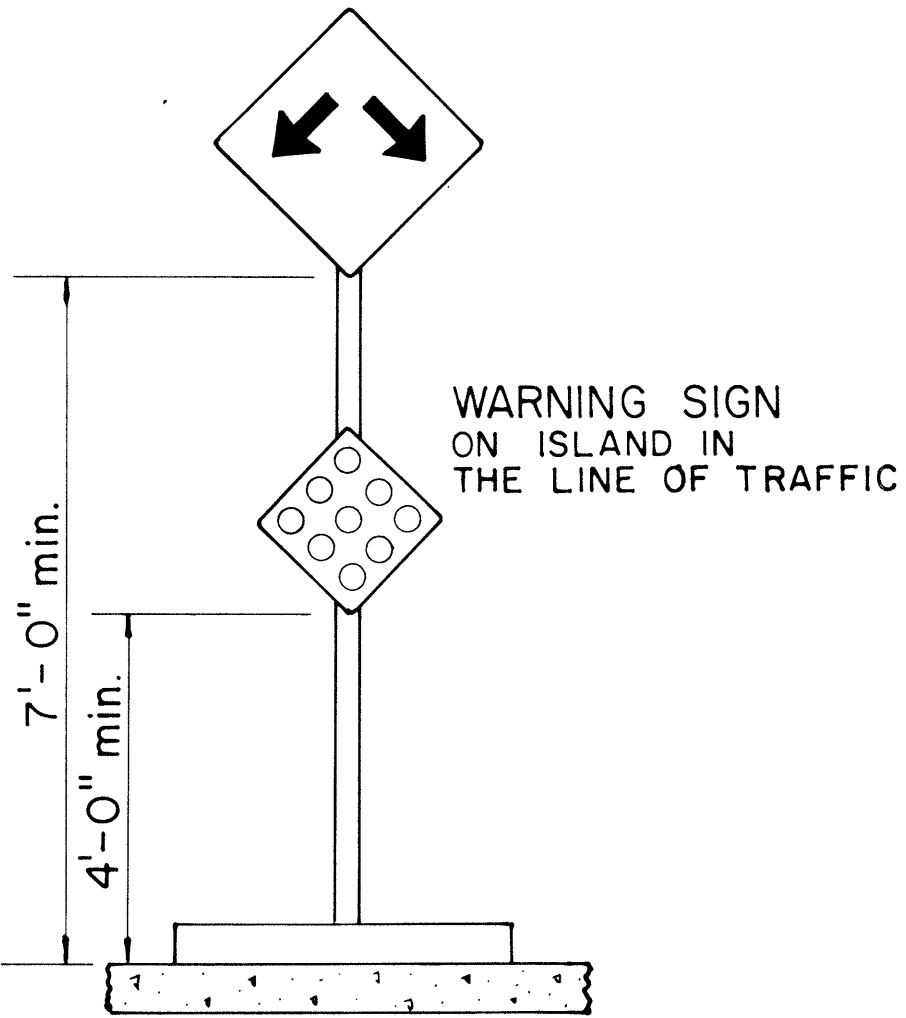
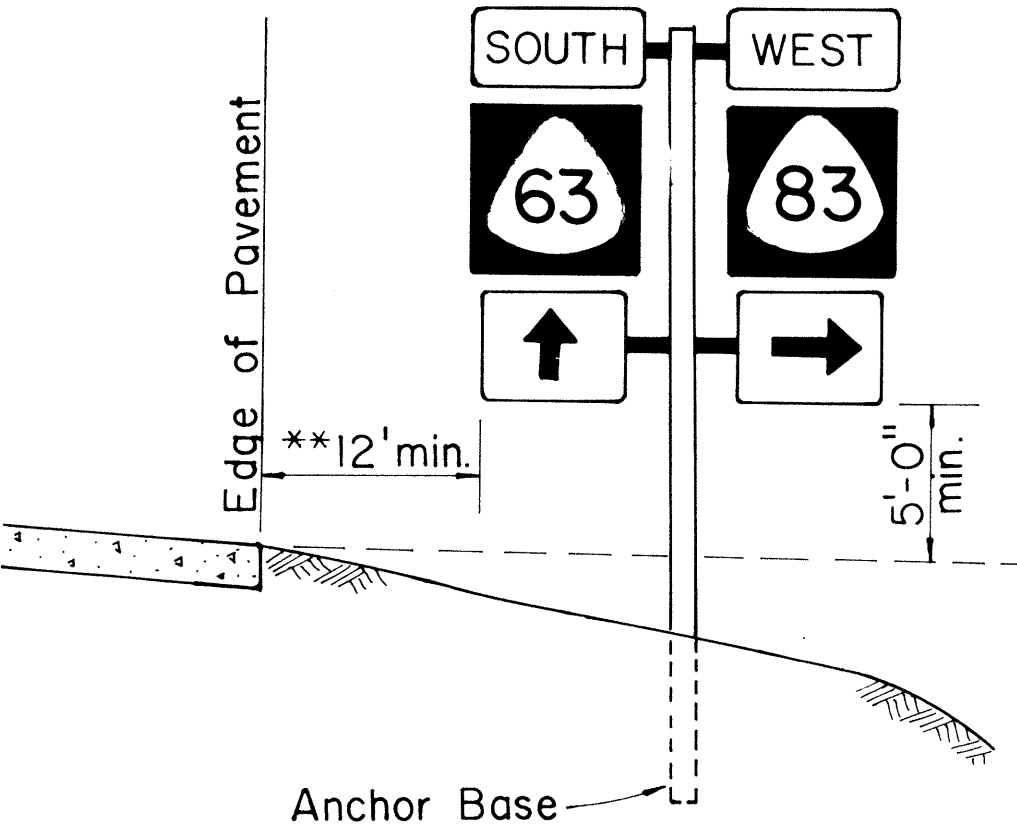
Not to Scale: Oct. 1983
 SHEET No. 47 OF 12 SHEETS DT 100

TYPICAL MOUNTING DETAILS

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



ROADSIDE ASSEMBLY
RURAL DISTRICT



HEIGHT AND LATERAL LOCATION OF SIGNS
TYPICAL INSTALLATION

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

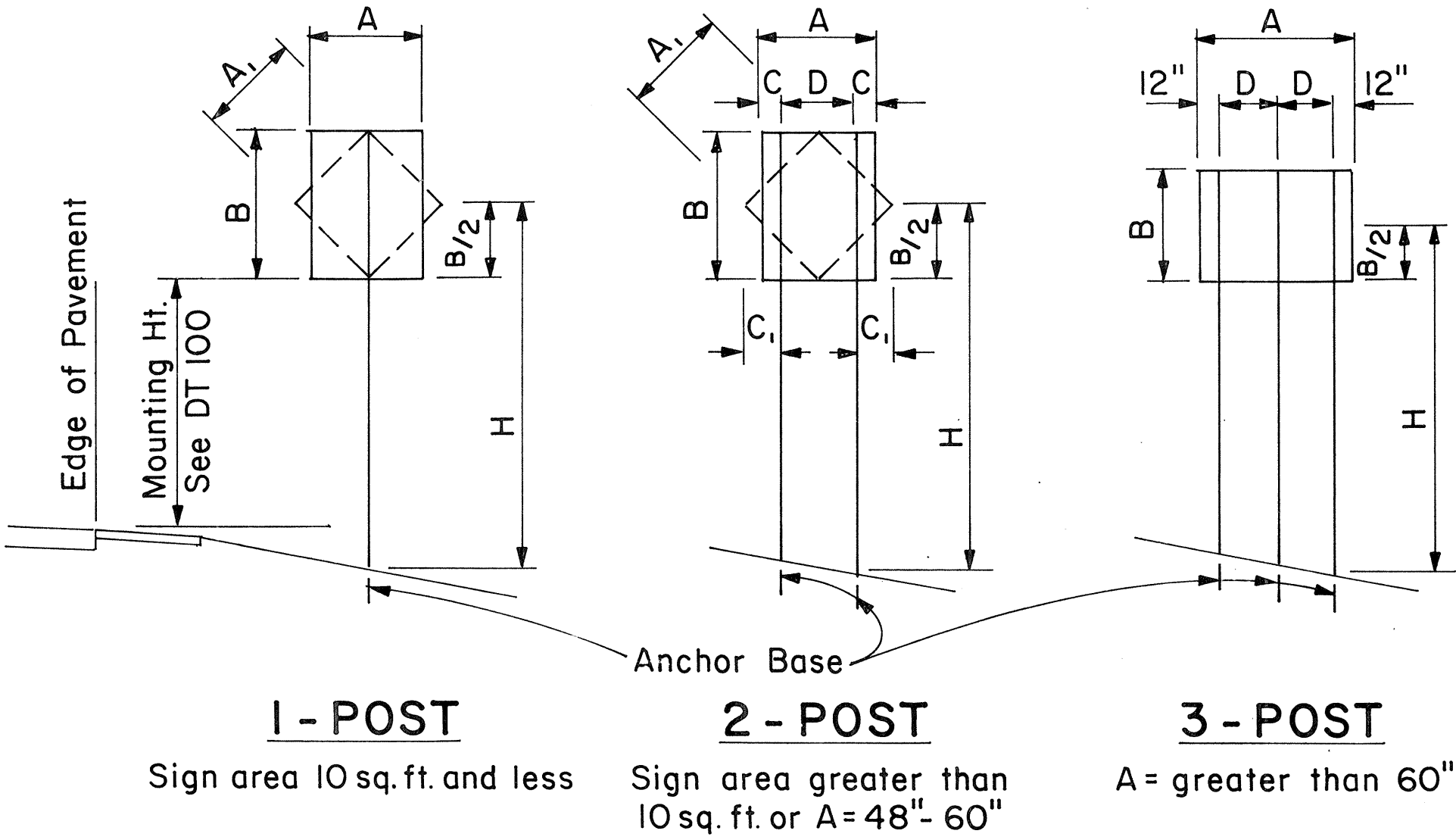
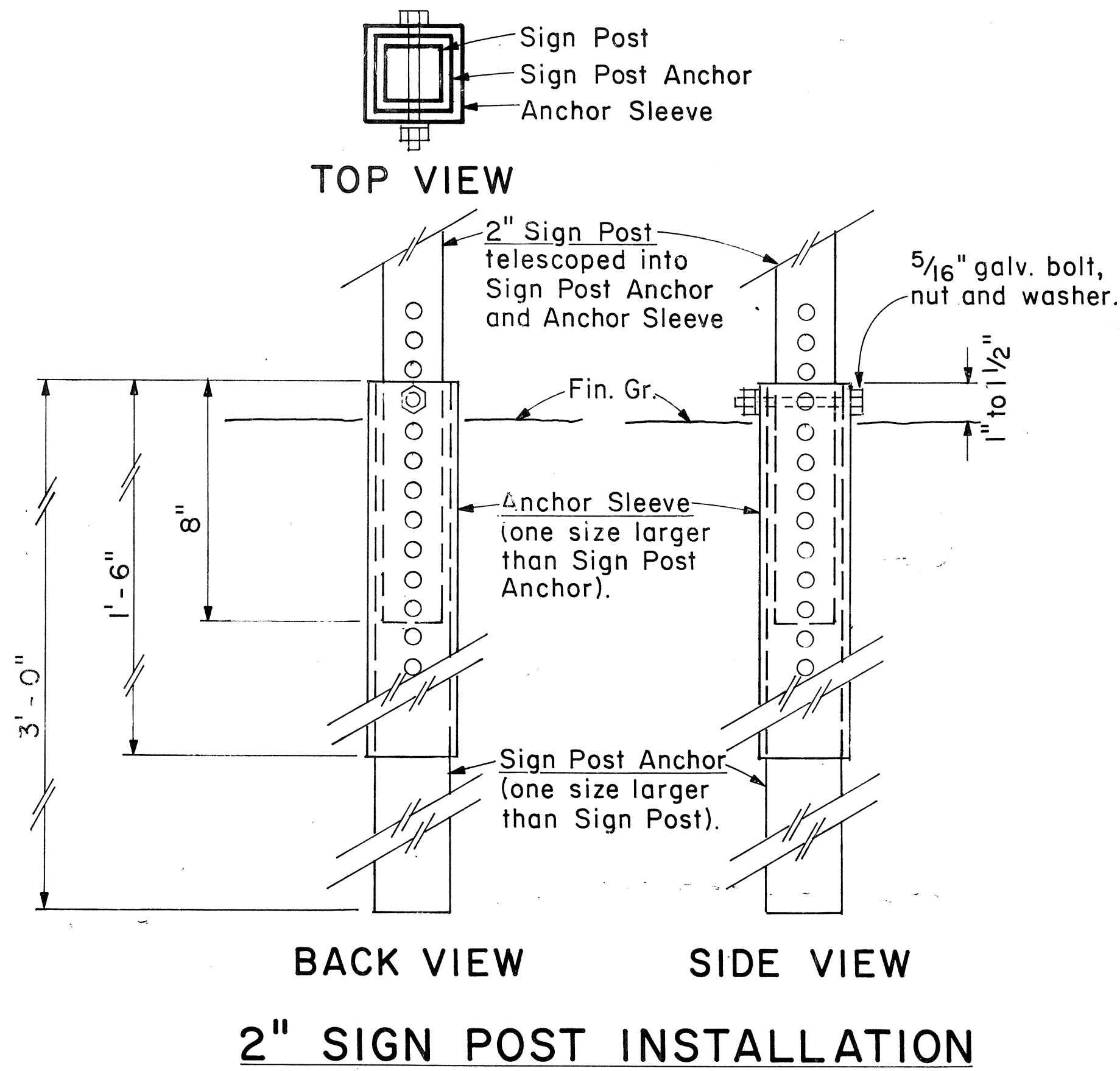
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	32	39

GENERAL NOTES

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

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

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



TYPICAL INSTALLATION
Not to Scale

SQUARE TUBE: 1- POST INSTALLATION							
Post Size	AxBxH (Factor)	H = Ground Level to Midpoint (ft.)					
		7	8	9	10	11	12
2"	62	8.8	7.7	6.8	6.1	5.6	4.8
2 1/2"	107	-	-	-	-	9.6	8.8

SQUARE TUBE: 2- POST INSTALLATION							
Post Size	AxBxH (Factor)	H = Ground Level to Midpoint (ft.)					
		7	8	9	10	11	12
2"	122	17.4	15.2	13.5	12.2	11.0	10.1
2 1/2"	212	30.2	26.5	23.5	21.1	19.2	17.6
2 1/2", 10 ga.	260	37.0	32.0	28.6	26.0	23.5	21.5

SQUARE TUBE: 3- POST INSTALLATION							
Post Size	AxBxH (Factor)	H = Ground Level to Midpoint (ft.)					
		7	8	9	10	11	12
2"	183	26.0	22.8	20.3	18.2	16.6	15.2
2 1/2"	318	45.4	39.5	35.2	31.5	28.8	26.5
2 1/2", 10 ga.	388	55.0	48.5	43.0	38.5	35.0	32.0

WINDLOAD CHARTS

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

STANDARD DETAILS

GALVANIZED SQUARE TUBE

SIGN POST MOUNTING

Scale: As Shown

Date: Sept. 1982

SHEET NO. 57 OF 12 SHEETS

DT100B

SURVEY PLOTTED BY

DATE

DRAWN BY

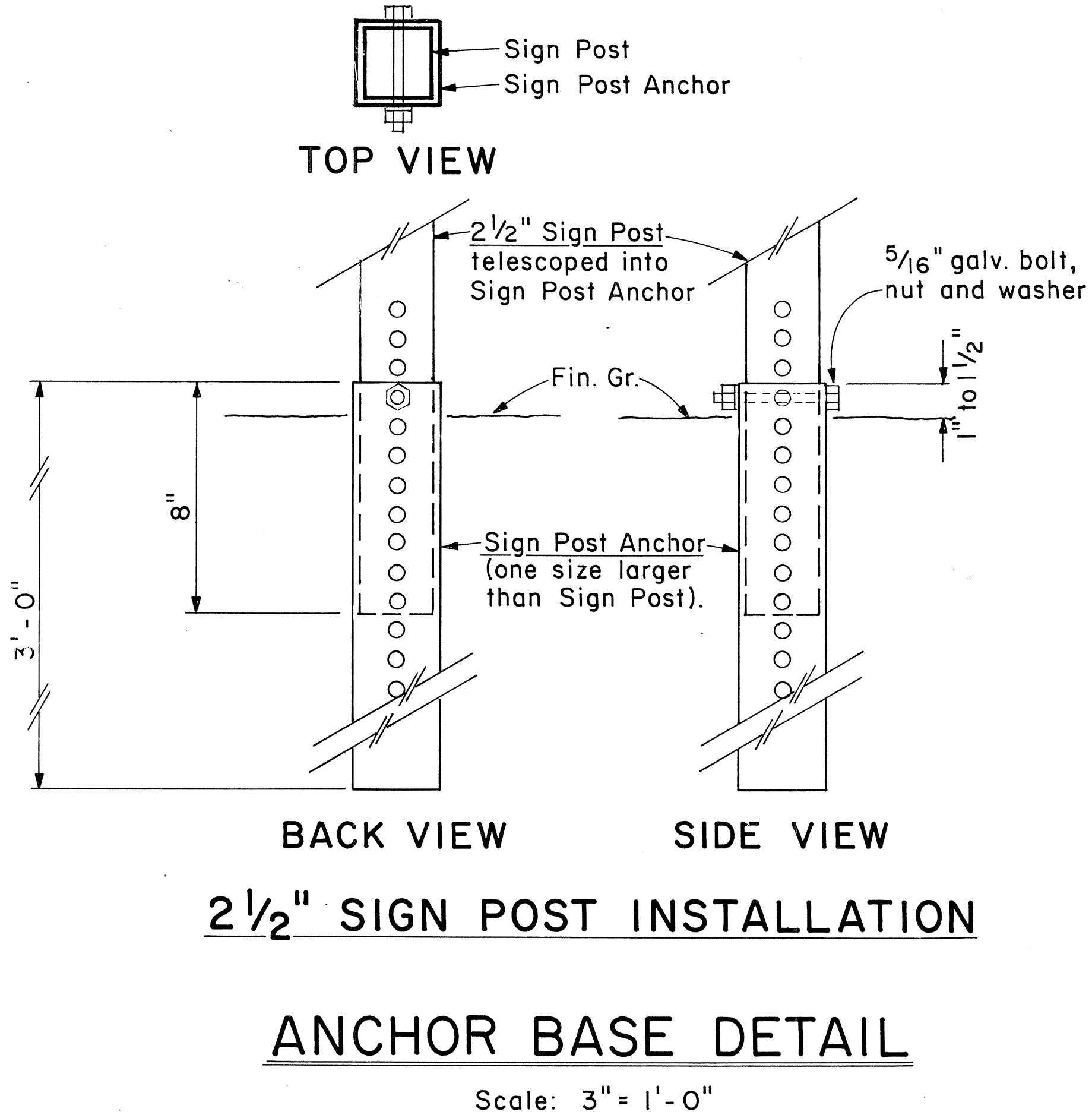
DESIGNED BY

CHECKED BY

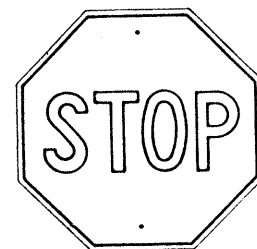
ORIGINAL PLAN

NOTE BOOK

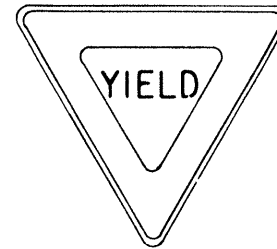
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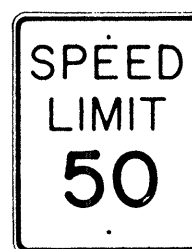
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HS-0377(2)	1986	33	39



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



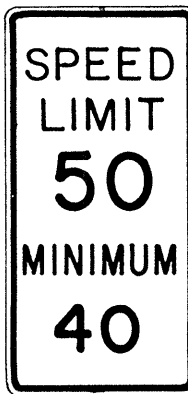
R1-2 36" x 36" x 36"
R1-2-A 48" x 48" x 48"



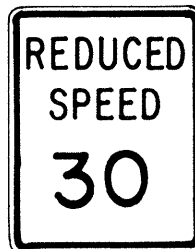
R2-1(50) 24" x 30"
R2-1(50)-A 48" x 60"



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



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



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



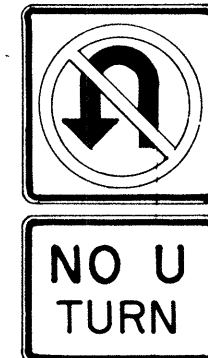
R3-1 24" x 24"
24" x 18"
R3-1-A 48" x 48"
48" x 36"



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



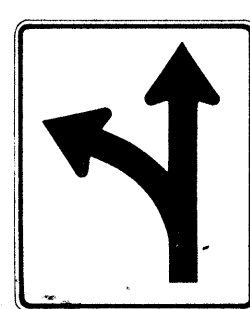
R3-3 24" x 24"
R3-3-A 48" x 48"



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



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



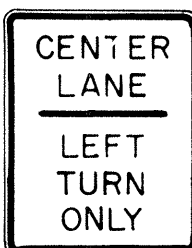
R3-6(L) 30" x 36"
R3-6(L)-A 48" x 60"



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



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



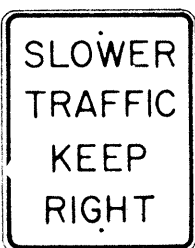
R3-9 24" x 30"



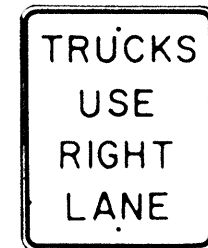
R4-1 24" x 30"
R4-1-A 48" x 60"



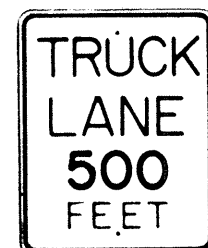
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R4-2-A 48" x 60"



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



R4-5 24" x 30"
R4-5-A 48" x 60"



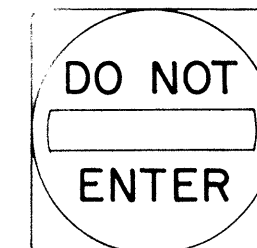
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R4-7 24" x 30"
24" x 18"
R4-7-A 48" x 60"



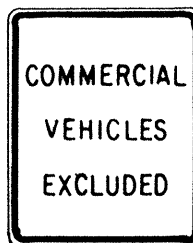
R4-8 24" x 30"
24" x 18"
R4-8-A 48" x 60"



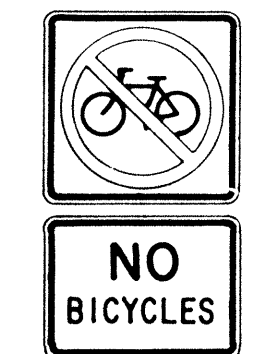
R5-1 30" x 30"
R5-1-A 48" x 48"



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



R5-4 24" x 30"
R5-4-A 48" x 60"



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



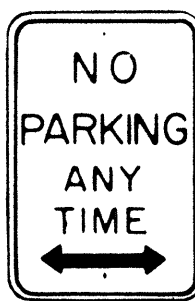
R5-9 36" x 24"



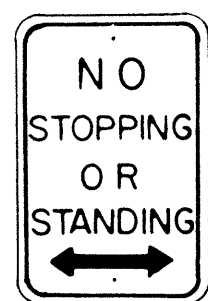
R6-1(R) 36" x 12"



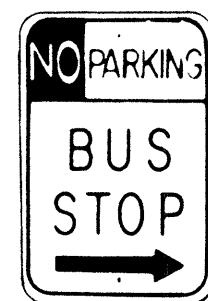
R6-2(R) 18" x 24"



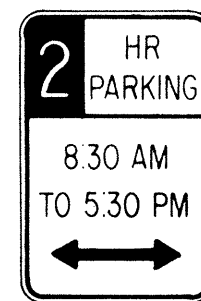
R7-1 12" x 18"
R7-1-A 24" x 30"



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



R7-107(R) 12" x 18"



R7-108 12" x 18"



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



R8-1 24" x 30"
R8-1-A 48" x 60"



R8-2 24" x 30"
R8-2-A 48" x 60"



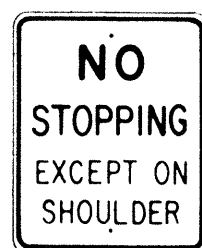
R8-3 24" x 30"
R8-3-A 48" x 48"



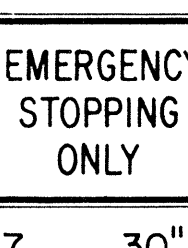
R8-4 30" x 24"
R8-4-A 48" x 36"



R8-5 24" x 30"
R8-5-A 48" x 60"



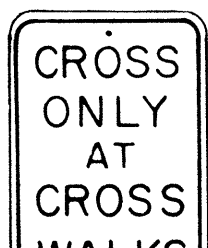
R8-6 24" x 30"
R8-6-A 48" x 60"



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



R9-1 18" x 24"



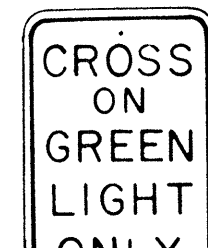
R9-2 12" x 18"



R9-3 12" x 18"



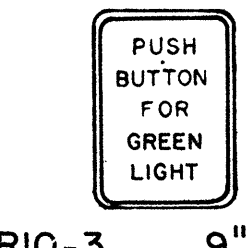
R9-4 18" x 24"



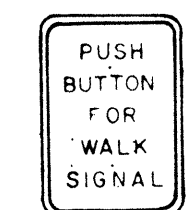
R10-1 12" x 18"



R10-2 12" x 18"



R10-3 9" x 12"



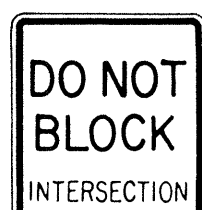
R10-4 9" x 12"



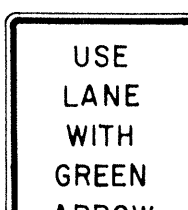
R10-5 24" x 30"



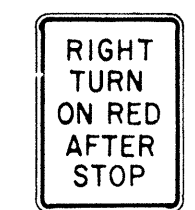
R10-6 24" x 36"



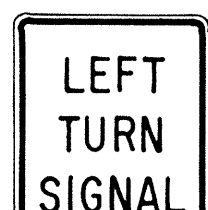
R10-7 24" x 30"



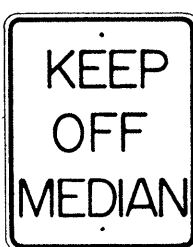
R10-8 24" x 30"



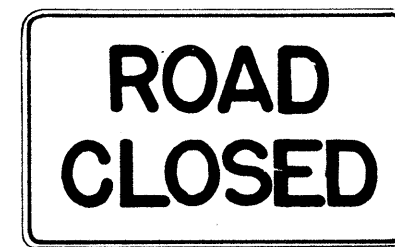
R10-9 24" x 30"



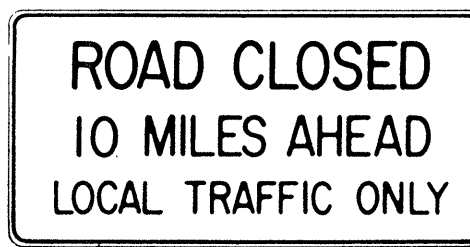
R10-10 24" x 30"



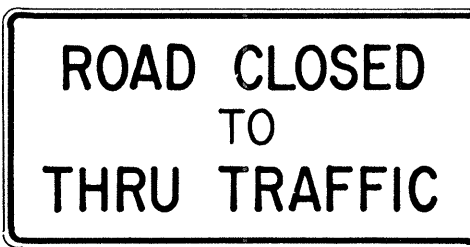
R11-1 24" x 30"



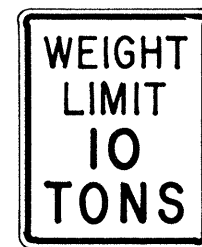
R11-2 48" x 30"



R11-3(10) 60" x 30"



R11-4 60" x 30"



R12-1(10) 24" x 30"

GENERAL NOTES

1. Sign details shall conform to the latest editions of FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," "Standard Alphabets for Highway Signs," and "Standard Highway Signs," and as amended.

2. All regulatory signs shall be reflectorized unless otherwise specified.

3. All regulatory signs shall have 3/8" bolt holes drilled at appropriate locations.

4. Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.

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

APPROVAL RECOMMENDED:

Enishi Tanaka
TRAFFIC ENGINEER

3/17/92
DATE

APPROVED:

Robert J. Zelen
ASSISTANT CHIEF, ENGINEERING

3-20-92
DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 101 Approved 12-30-69	H.I.	4/20/72
2	Revised General Note 1	H.I.	10/14/74
3	Added General Note 5	H.I.	8/3/77
4	Revised Signs and General Note 1	E.T.	9/18/82

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS REGULATORY SIGNS

NOT TO SCALE

SHEET No. 07 OF 12 SHEETS DT 101

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	35	39



CW20-1a 48" x 48"



CW20-2d 48" x 48"



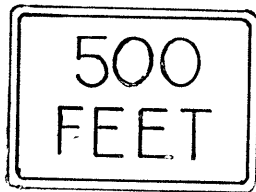
CW20-3b 48" x 48"



CW20-4d 48" x 48"



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



CW20-7c 36" x 36"
24" x 18"
CW20-7c-A 48" x 48"
24" x 18"



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"



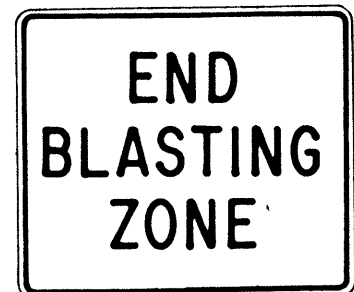
CW21-6 30" x 30"



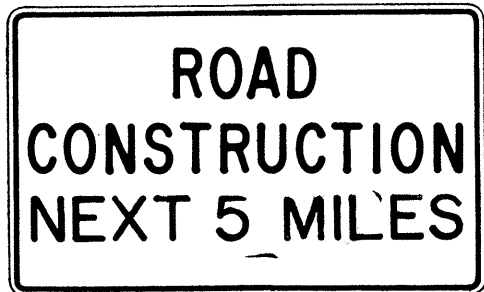
CW22-1b 48" x 48"



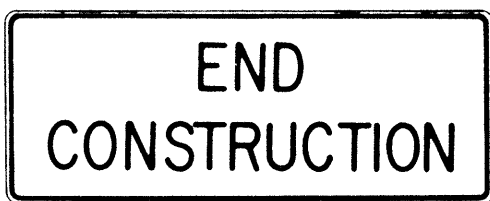
CW22-2 42" x 36"



CW22-3 42" x 36"



CG20-1(5) 60" x 36"



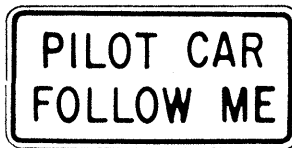
CG20-2 60" x 24"



CM4-9(R) 30" x 24"



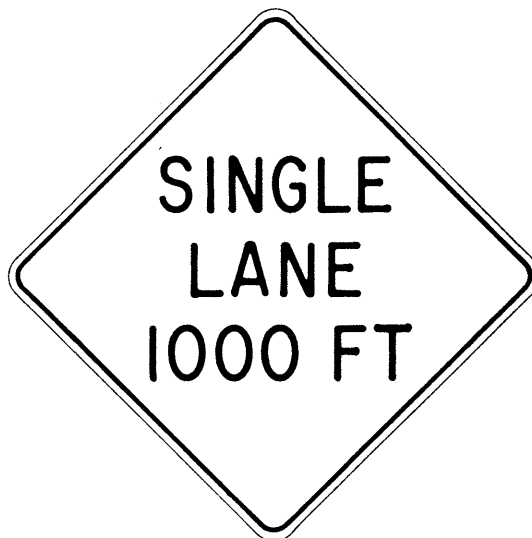
CM4-10(R) 48" x 18"



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 latest editions of FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," "Standard Alphabets for Highway Signs," and "Standard Highway Signs," 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.	3/23/72
2	Revised General Note 1	H.C.	10/16/74
3	Revised General Note 2	H.C.	9-16-75
4	Revised General Note 2 and sign CG20-1(5)	H.C.	9-14-76
5	Revised General Note 1 and sign CW20-7c	E.T.	9/19/85

APPROVAL RECOMMENDED:
Erich Tanaka
TRAFFIC ENGINEER

3/21/72
DATE

APPROVED:
Arthur J. ...
ASSISTANT CHIEF, ENGINEERING

3/23/72
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
CONSTRUCTION SIGNS

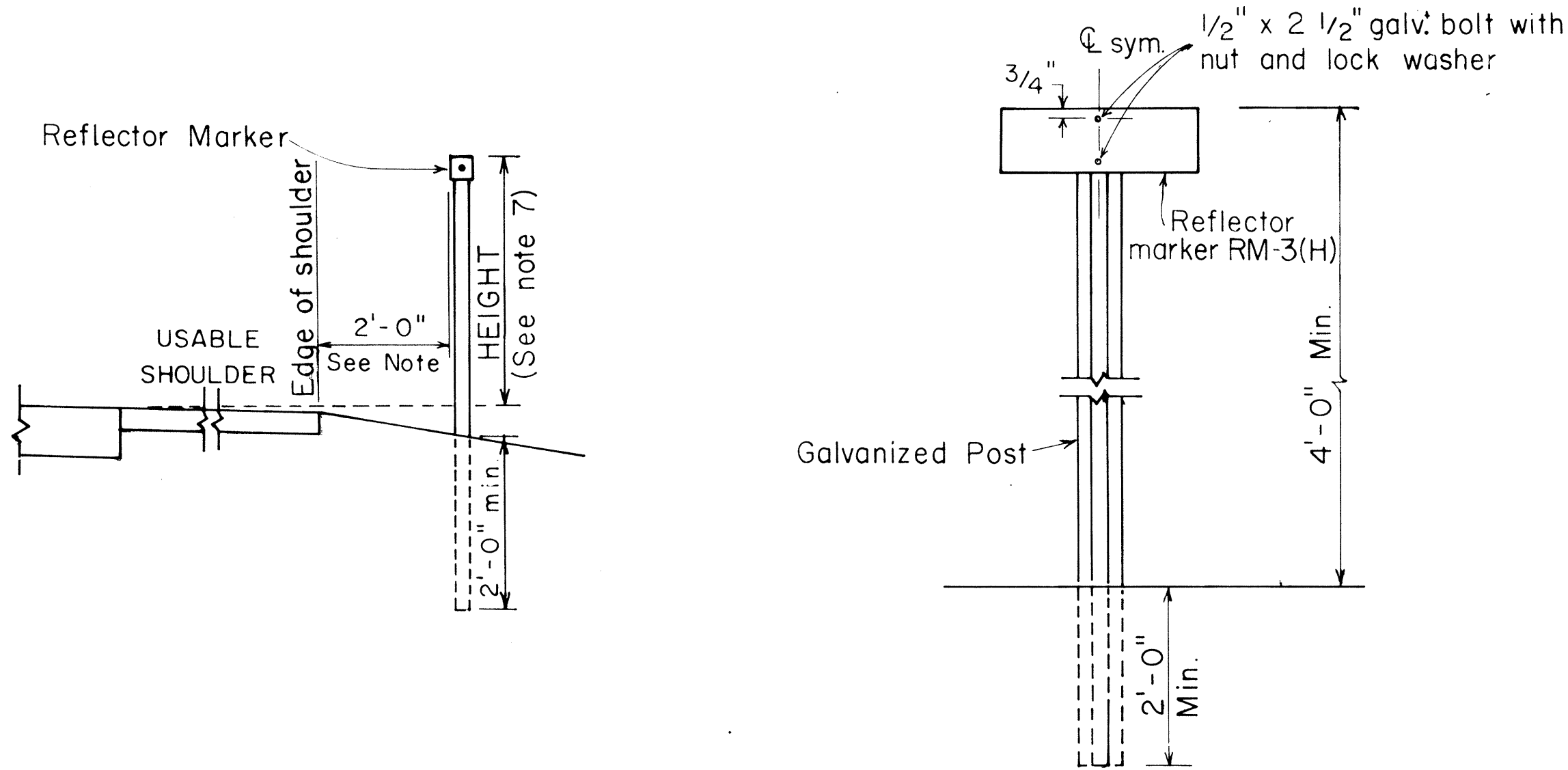
NOT TO SCALE

SHEET No. 87 OF 12 SHEETS DT 104

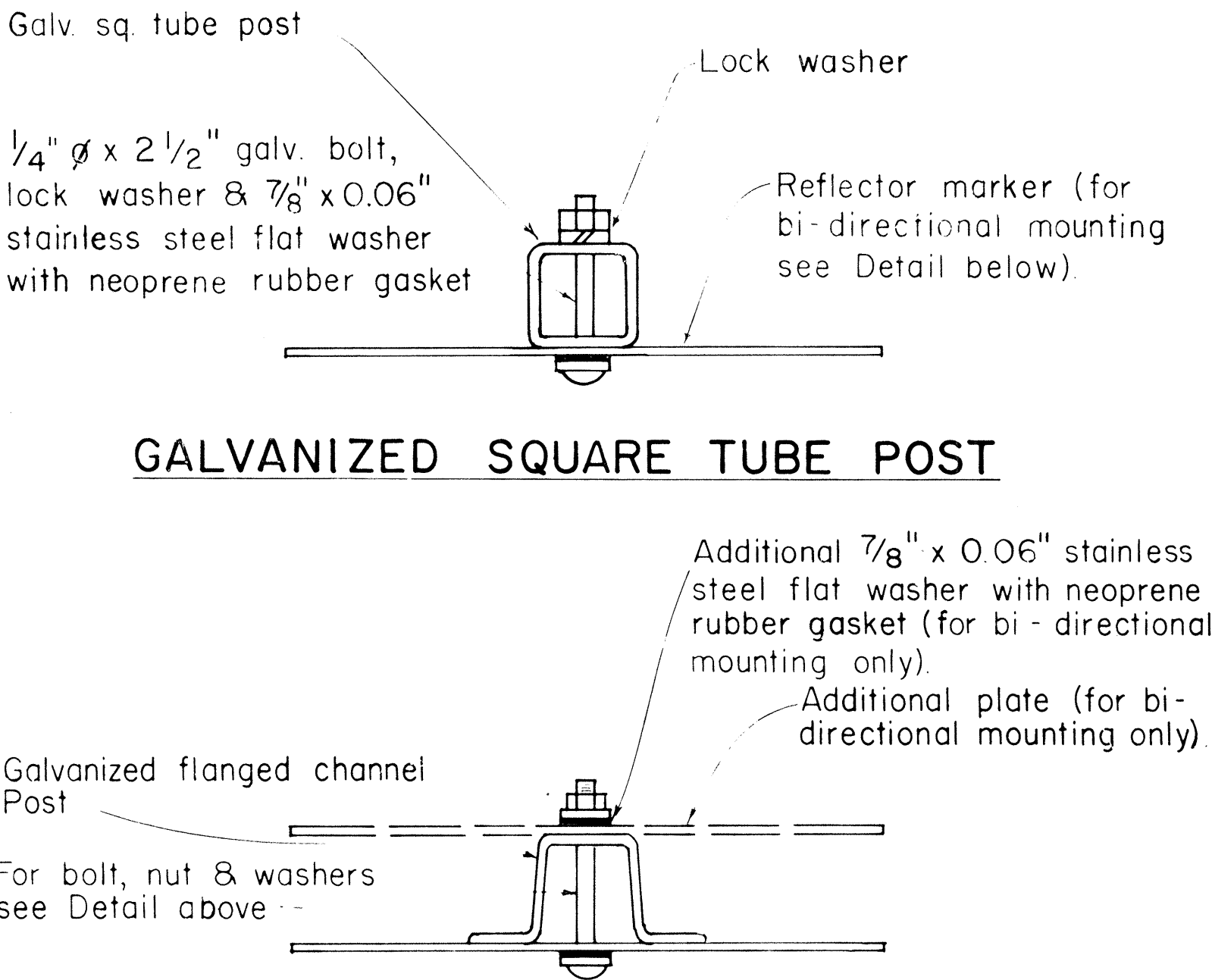
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	36	30

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 RM-4, the stripes shall slope downward at an angle of 45° toward the side of the obstruction that traffic is to pass.
5. For reflector marker RM-9, reflective sheeting material may be used as an alternate.
6. (H) indicates horizontal mounting of reflector marker.
7. Height = 4'- 0" min. for RM-1, RM-2 and RM-3.
Height = 5'- 6" min. for RM-4 and RM-9.
8. Final locations of reflector markers shall be approved by the Engineer.



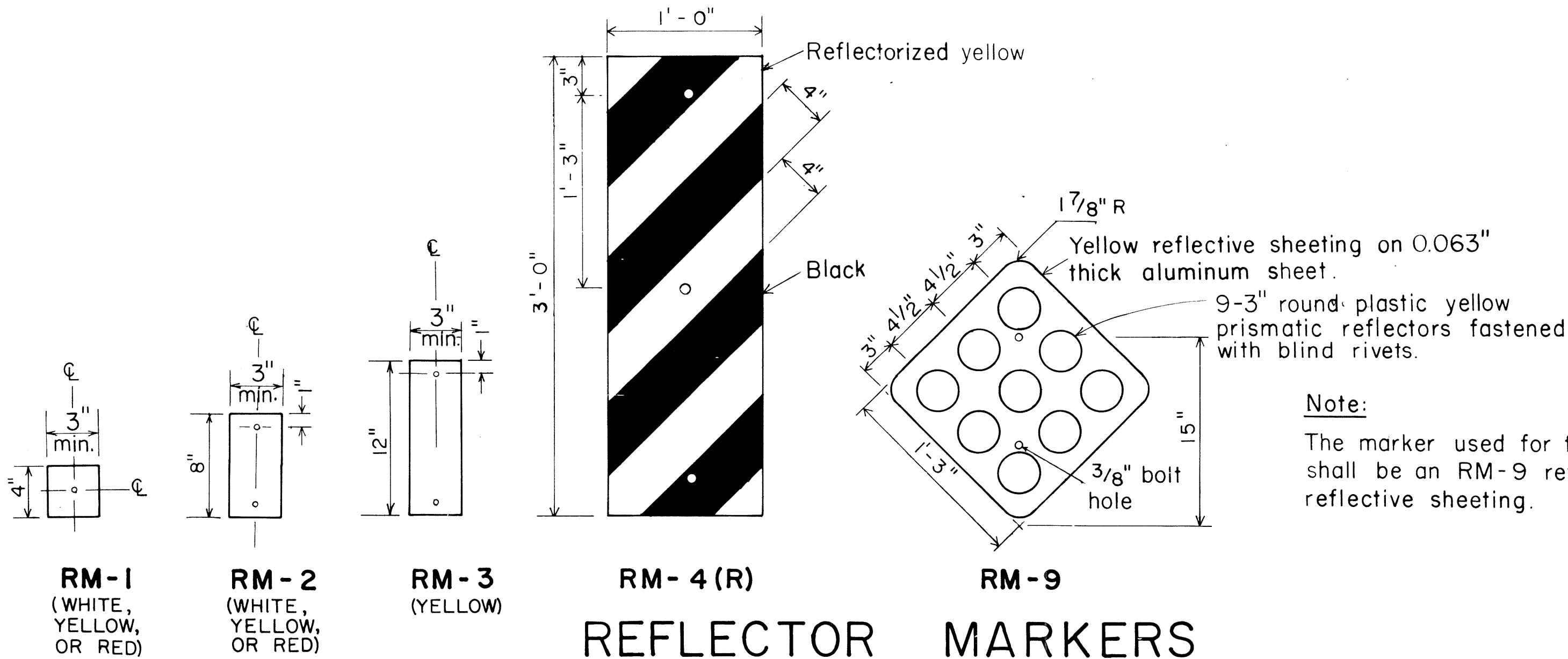
REFLECTOR MARKER MOUNTING DETAIL



GALVANIZED SQUARE TUBE POST

GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS



REFLECTOR MARKERS

APPROVAL RECOMMENDED:
Eishi Tanaka 4/23/80
 TRAFFIC ENGINEER DATE

APPROVED:
Herbert S. Sakai 11/15/91
 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 Reflector Markers.	<i>p.d.</i>	7-28-83
3	Eliminated White for RM-4	<i>p.d.</i>	1-30-88

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

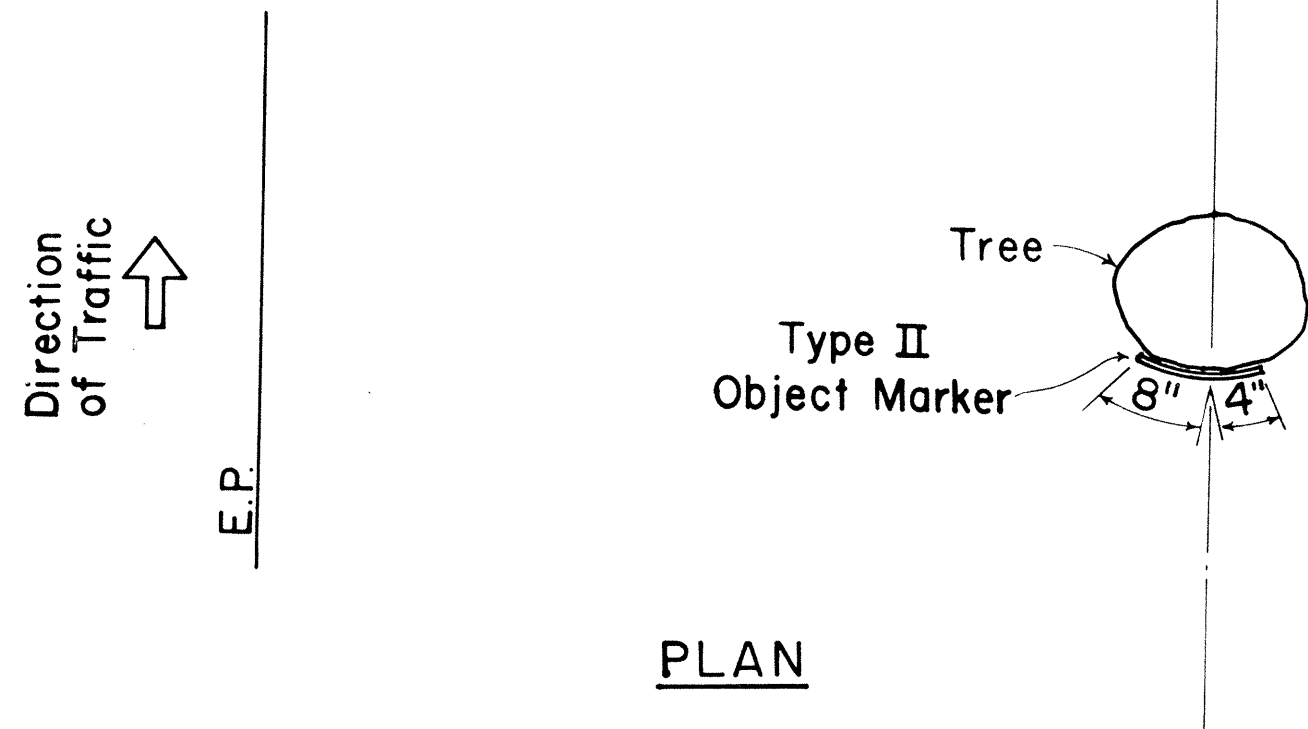
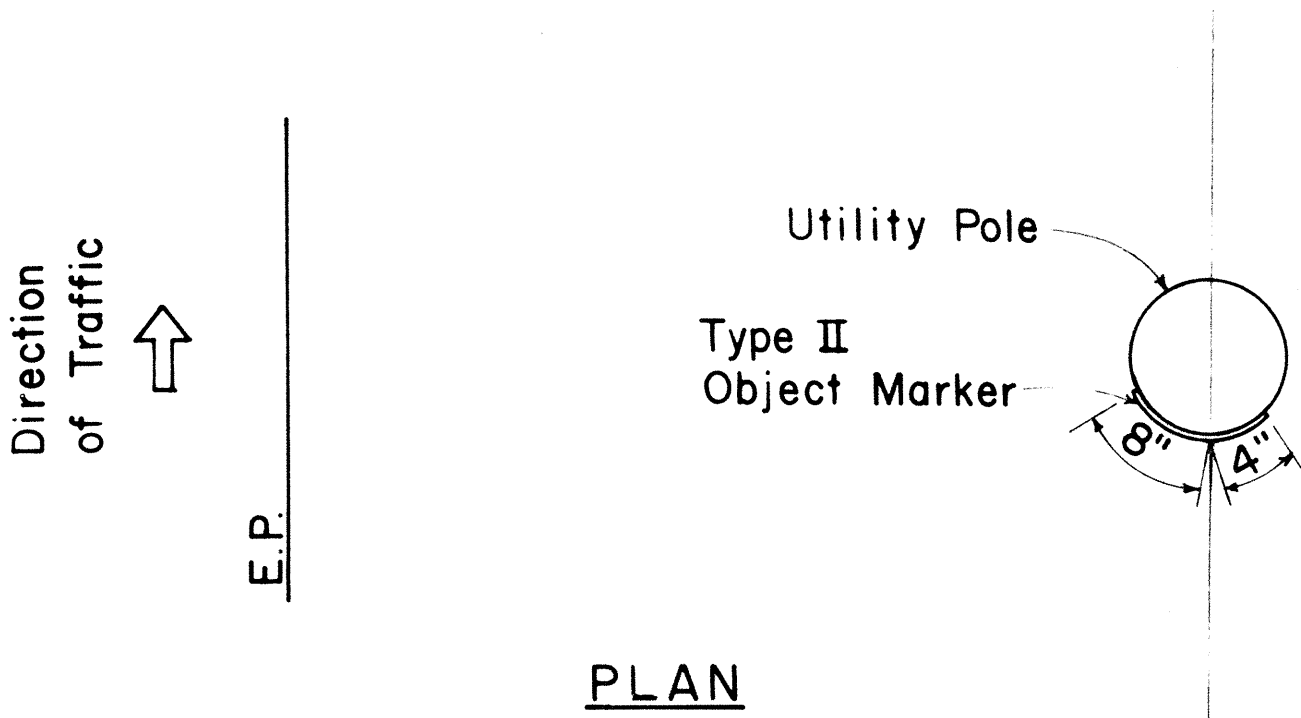
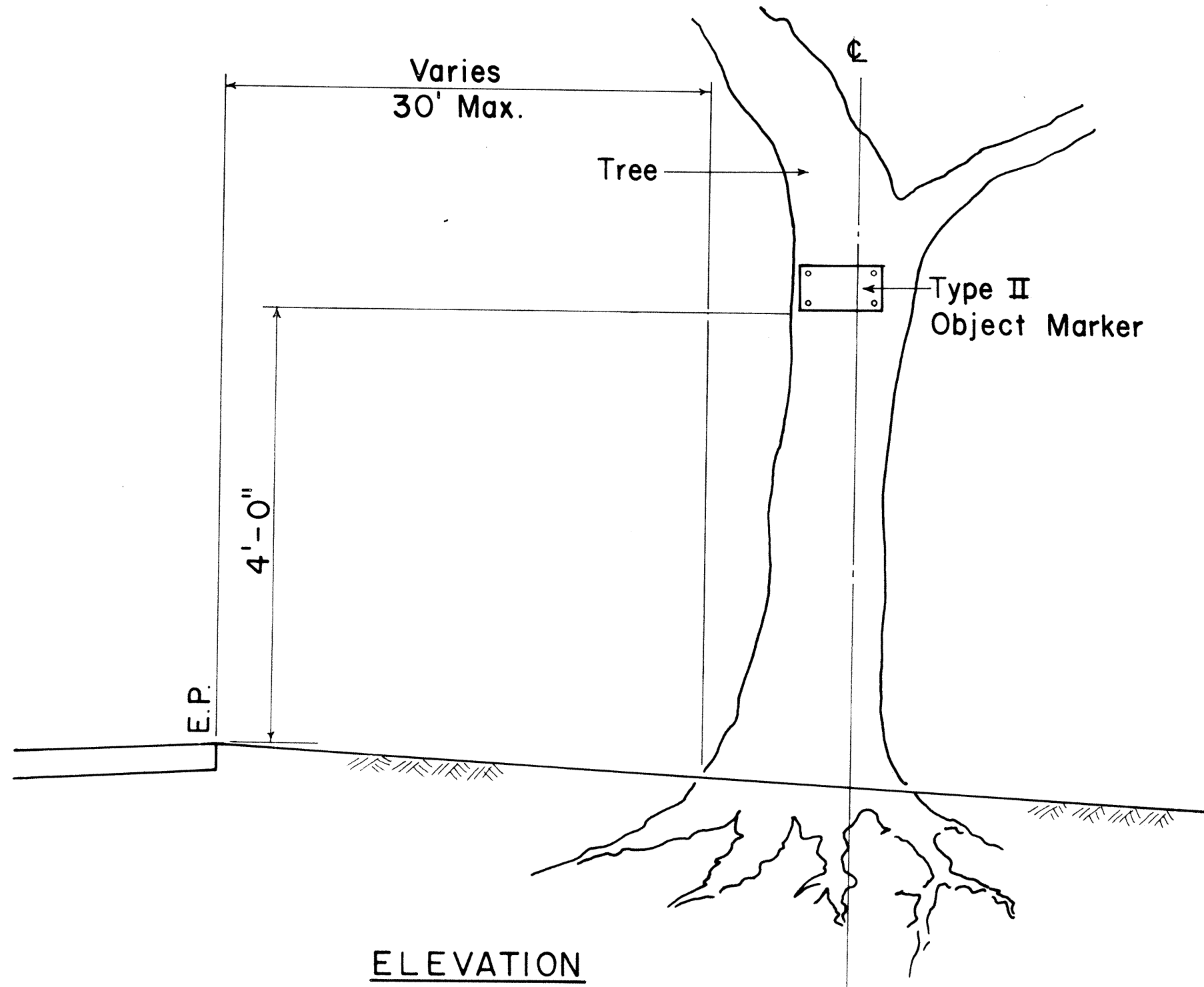
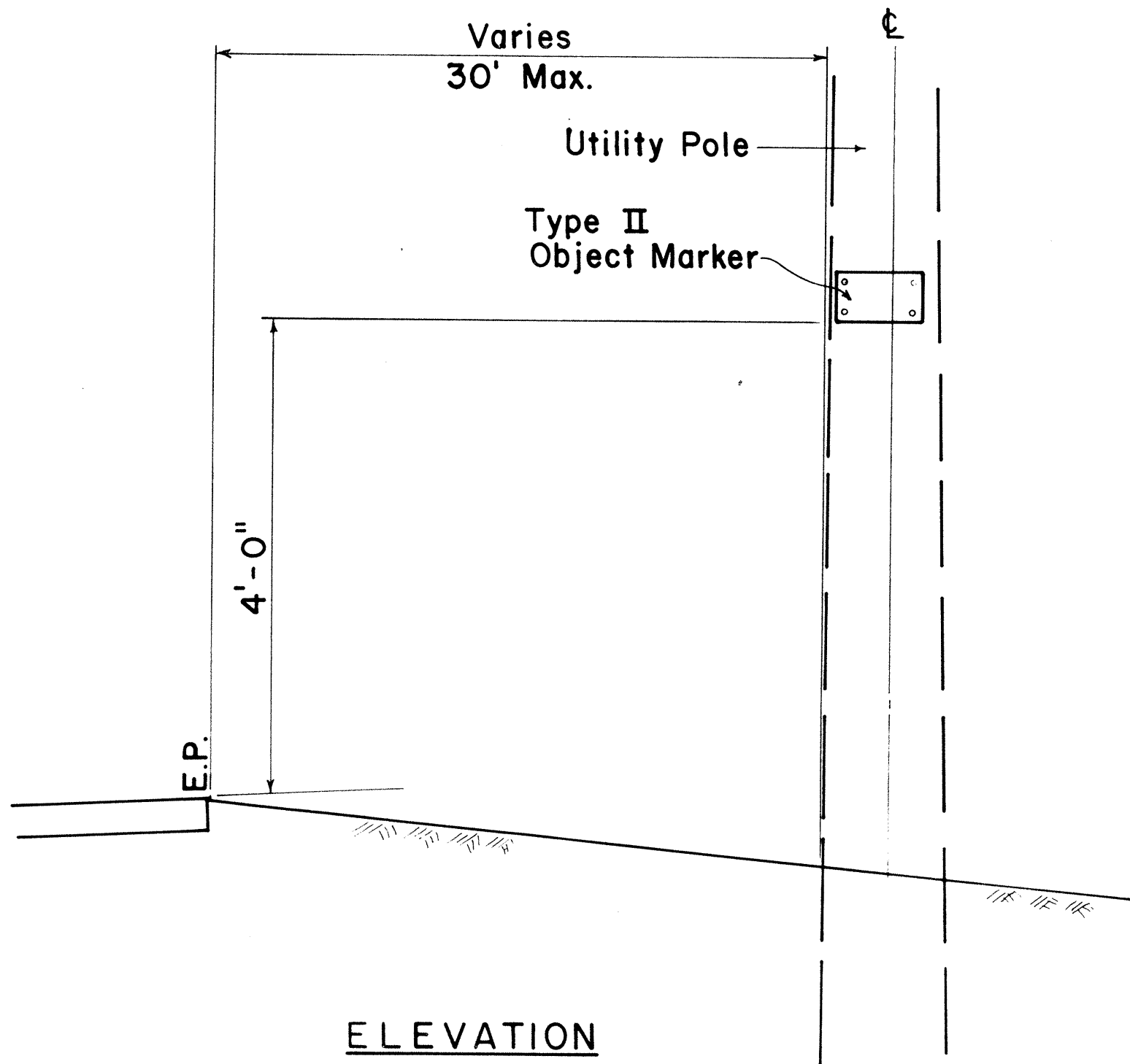
STANDARD DETAILS
MISCELLANEOUS REFLECTOR MARKERS

Not to scale
June, 1977

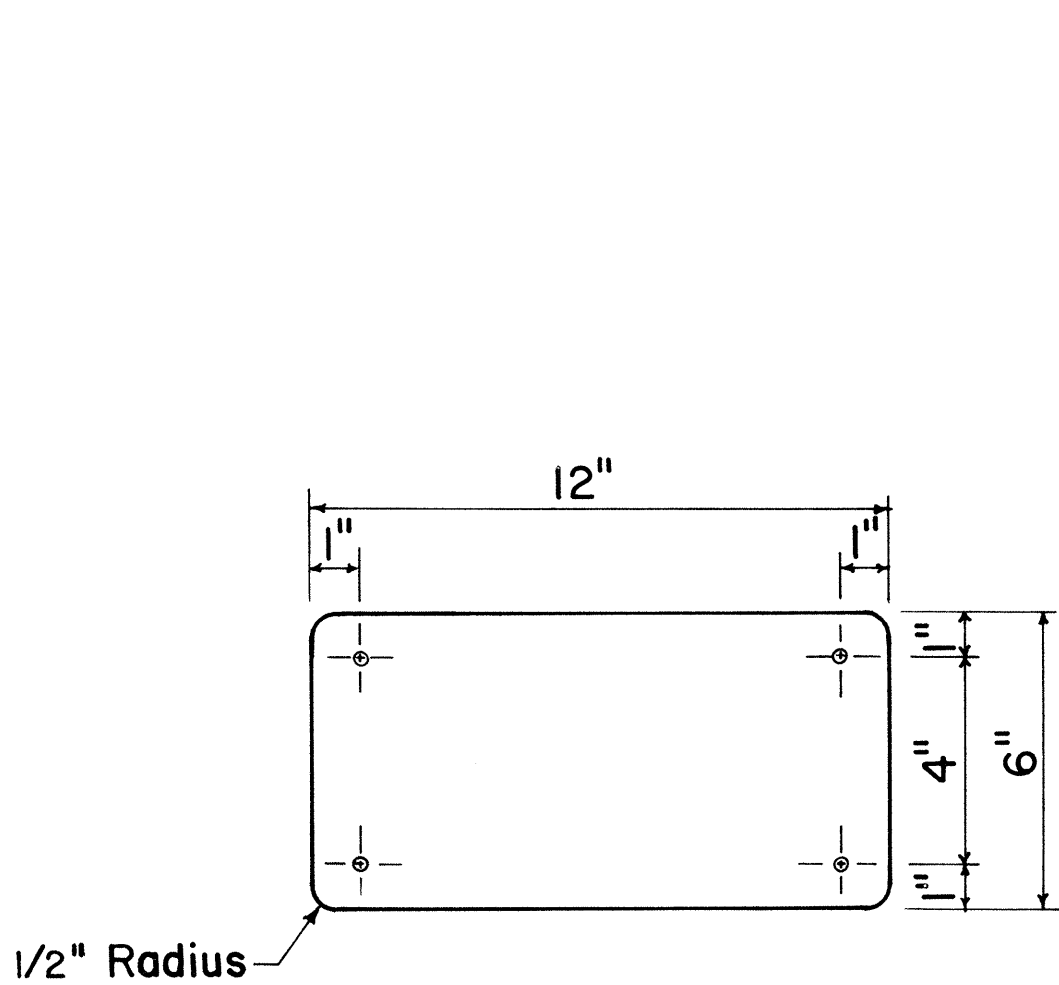
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-0377(2)	1986	37	39

GENERAL NOTES

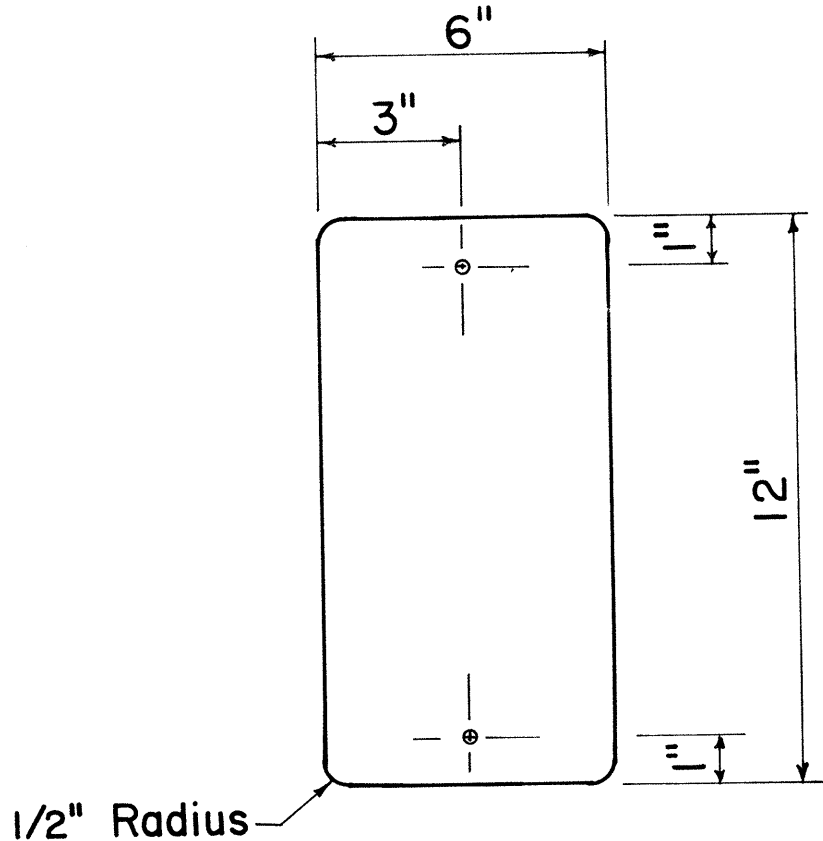
1. All objects (utility poles or trees) that are within the State highway right of way and within 30 feet of the roadway edge of pavement shall be marked as directed by the Engineer.
2. The Contractor shall prepare the mounting surface of each object as directed by the Engineer and place the Type II Object Marker as shown on this plan.
3. Type II Object Markers shall be mounted on utility poles and trees with 13/4" galv. roofing nails (4 ea.).
4. Branches of trees which obscure the object markers shall be trimmed. (Payment shall be incidental to Type II Object Markers as shown in the proposal).
5. Type II Object Markers for utility poles and trees, etc., shall be made of amber reflective sheeting material overlayed on 0.020" aluminum sheeting.
6. Objects such as concrete posts, concrete or rock walls and boxes, metal posts (greater than 2" in diameter), or metal boxes shall be marked with post mounted object markers. Post mounted Type II Object Markers shall conform to the following requirements:
 - a. It shall consist of amber reflective sheeting material overlayed on 0.063" thick sheet aluminum backing of the dimensions shown on the plans.
 - b. It shall be mounted on either metal posts or flexible delineator posts with 1/4"x2" galv. bolts, nuts and washers. Metal posts shall be galvanized and shall be either 1 1/2"x1 1/2", 12 gage square tube posts or 1.12 lbs. per ft. flanged channel posts.



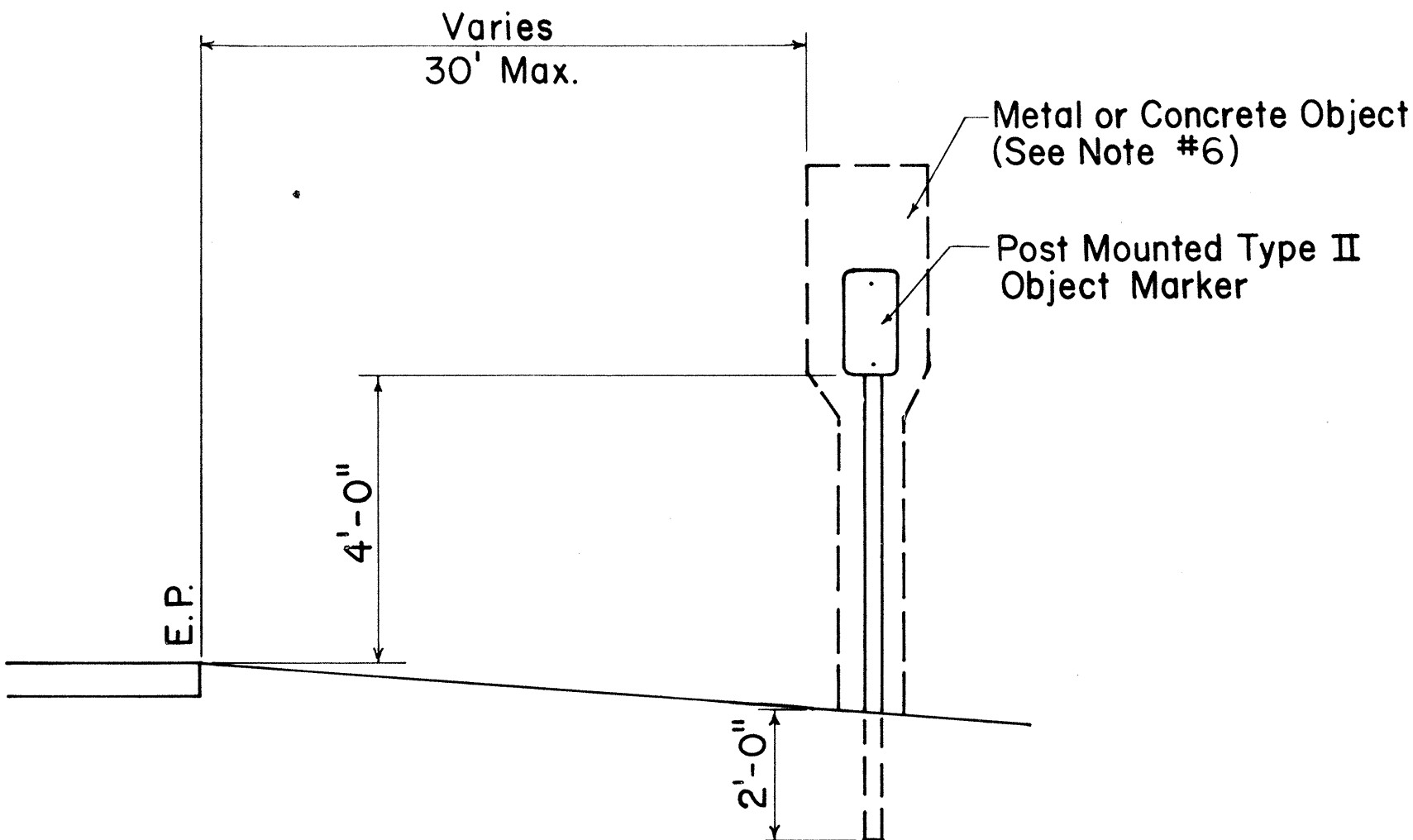
TYPICAL TYPE II OBJECT MARKER MOUNTING DETAIL



TYPE II OBJECT MARKER



TYPE II OBJECT MARKER POST MOUNTED



POST MOUNTED TYPE II OBJECT MARKER DETAIL

APPROVAL RECOMMENDED:

Eiichi Tanaka 3/30/83
TRAFFIC ENGINEER DATE

APPROVED:

S. Fujiyama 3-31-83
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

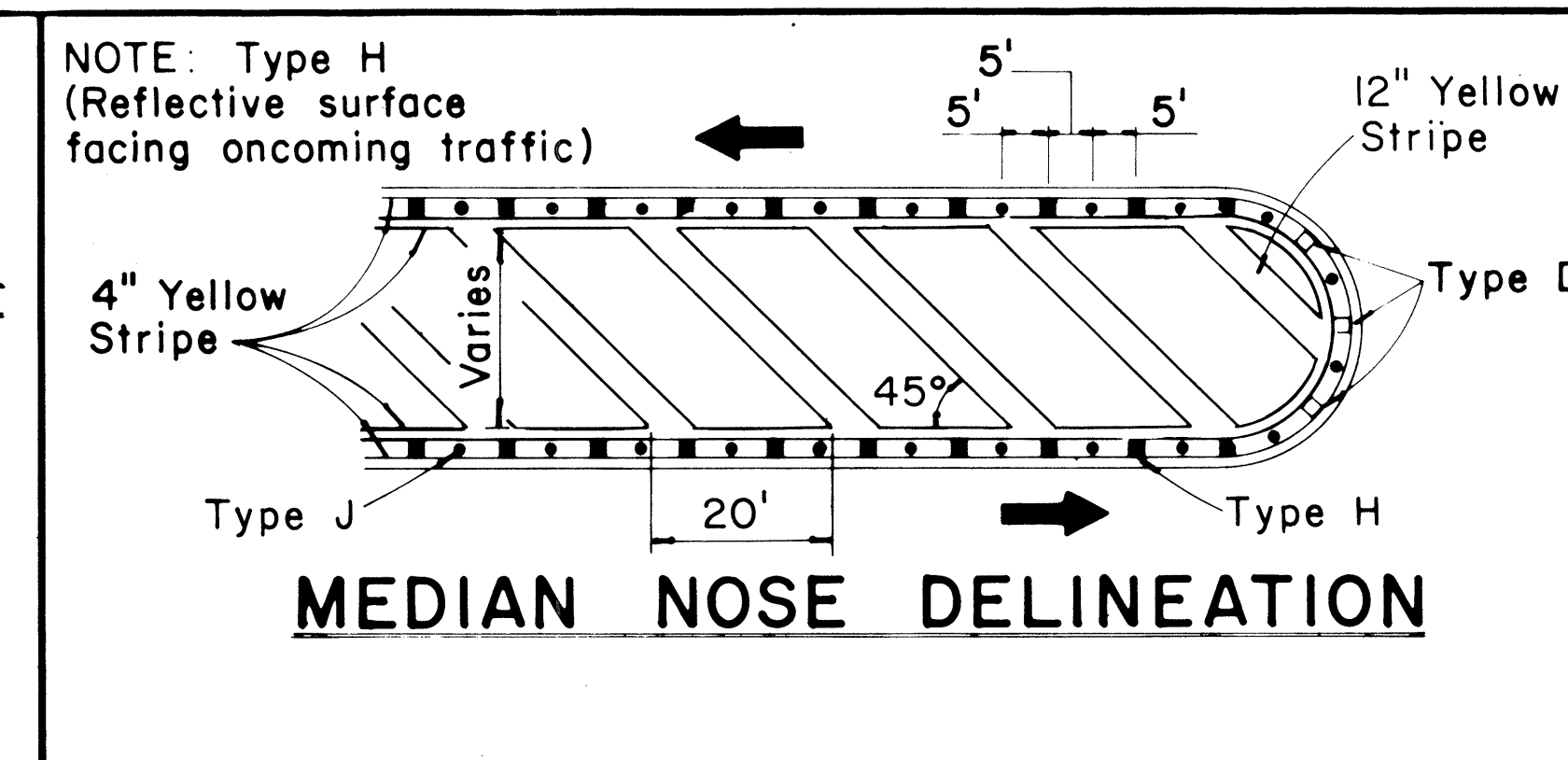
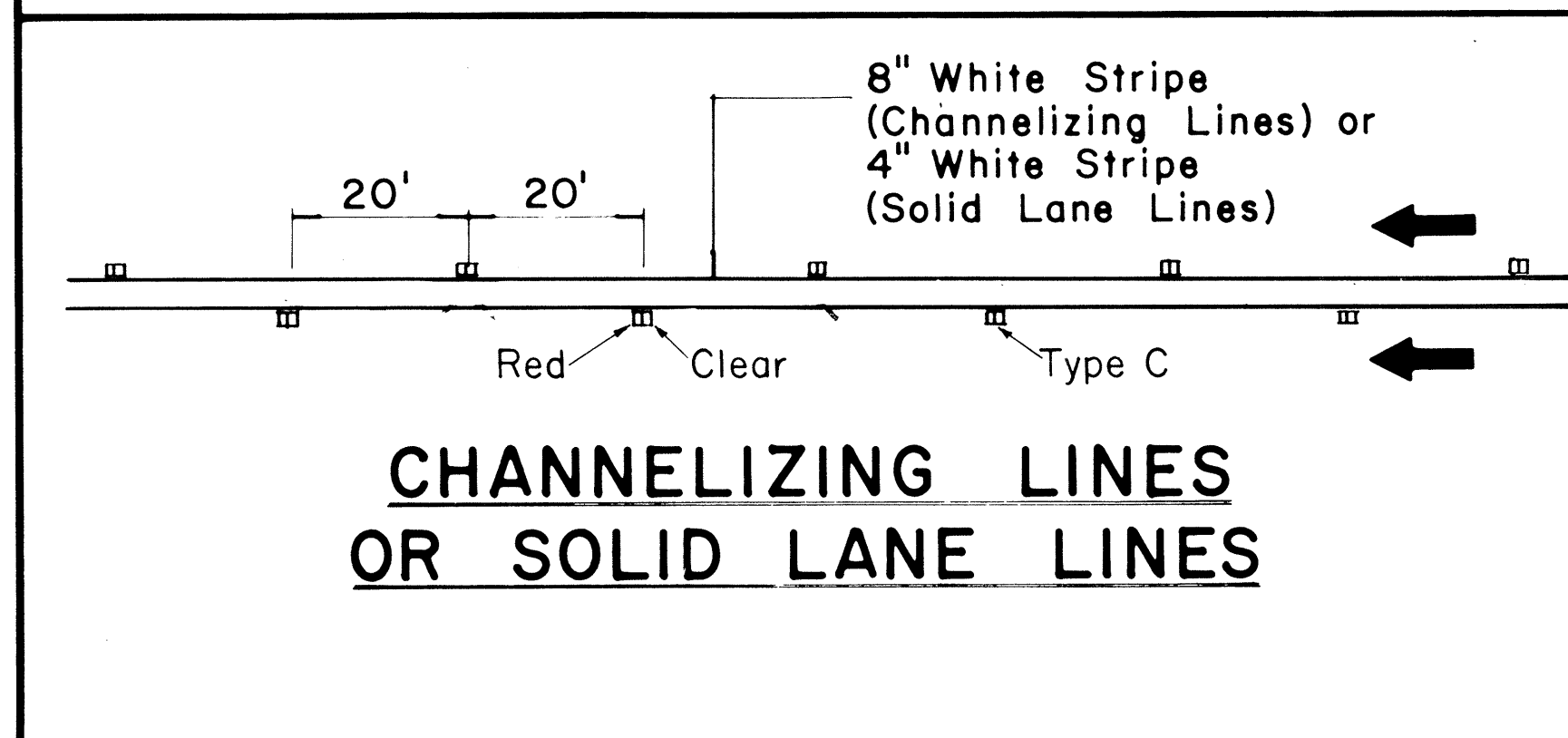
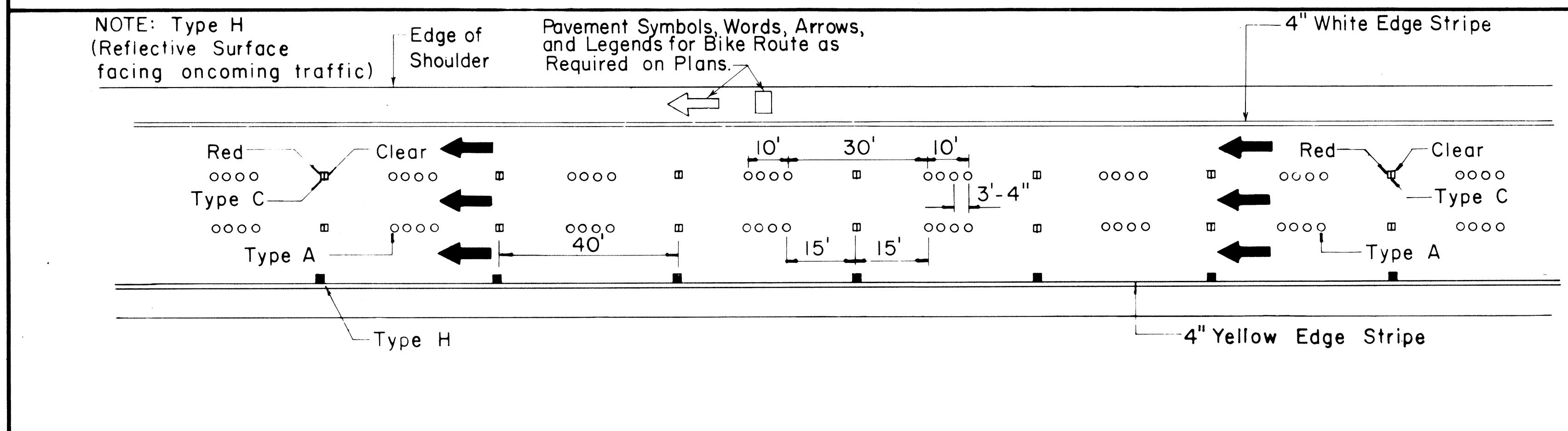
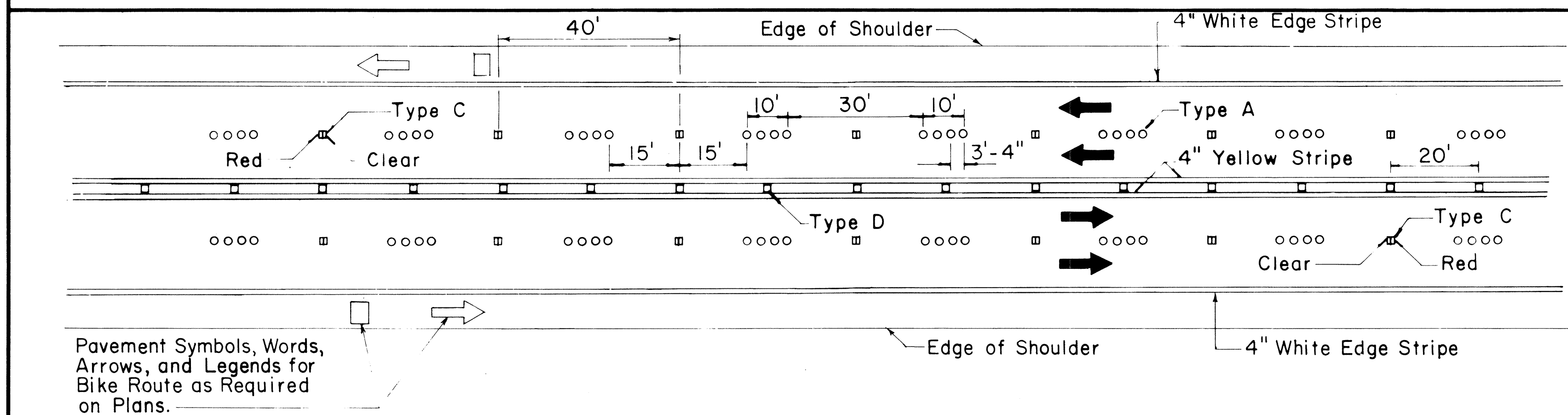
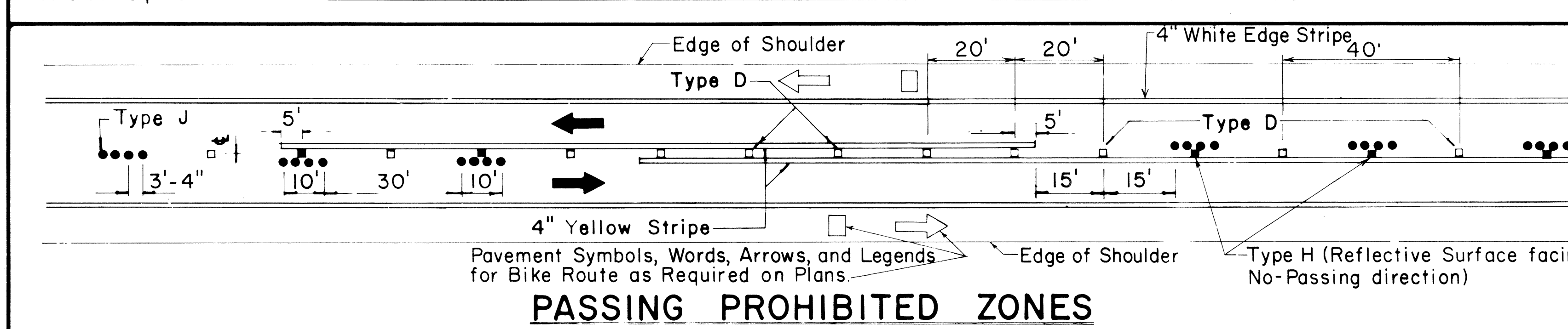
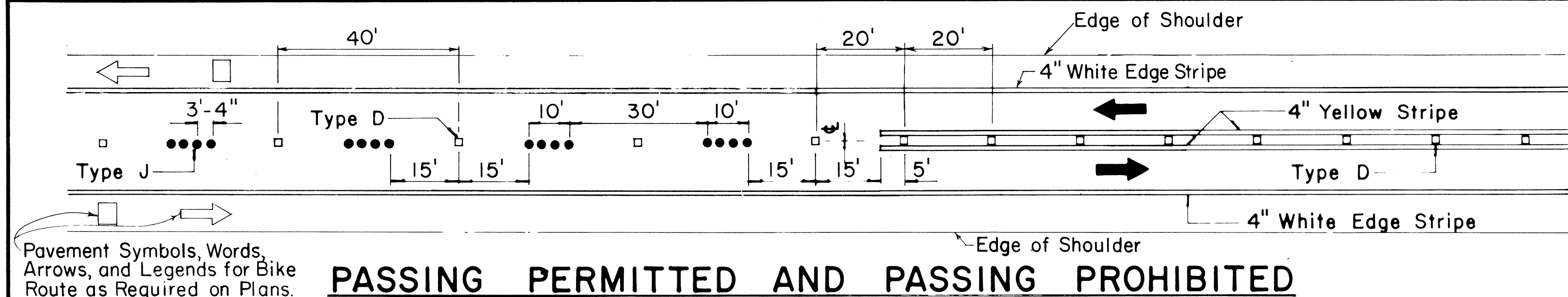
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
TYPE II OBJECT MARKERS

Scale: Not to scale Date: March 1983
SHEET No. 107 OF 12 SHEETS DT III

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
TRACED 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.	HS-0377(2)	1986	38	39

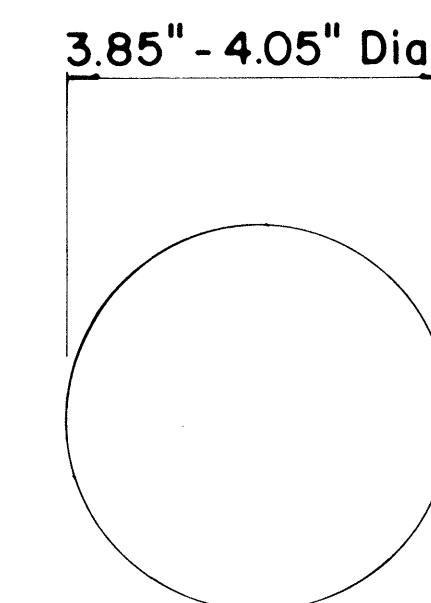


TWO - LANE

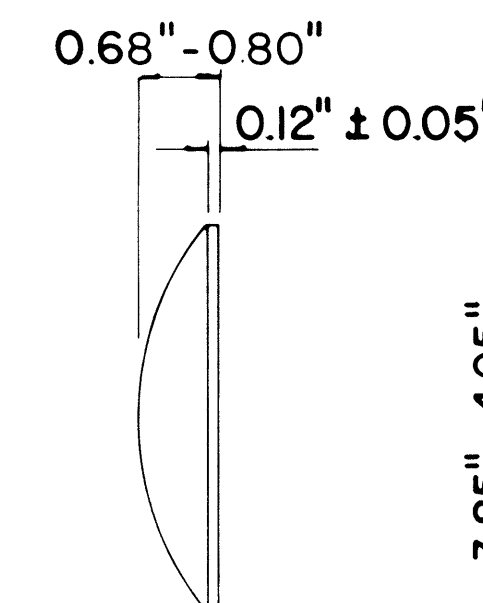
MULTI - LANE

DIVIDED HIGHWAY
AND
FREEWAY

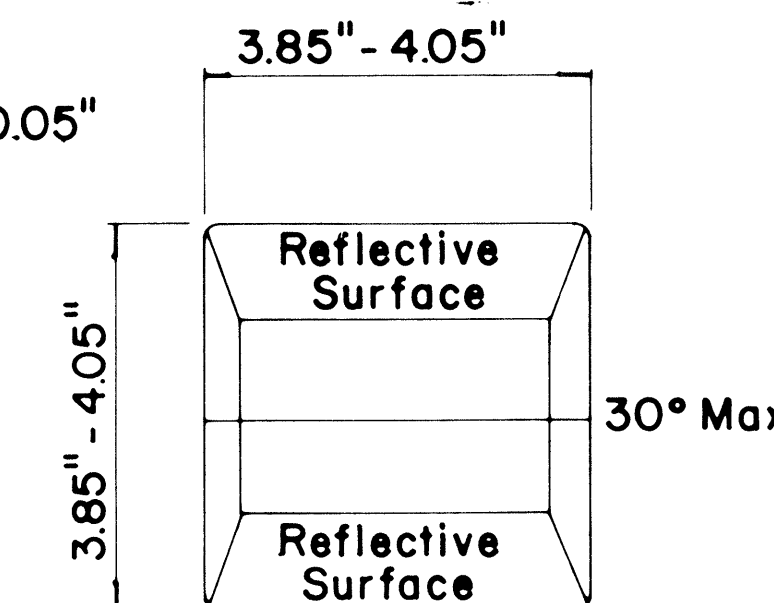
MISCELLANEOUS



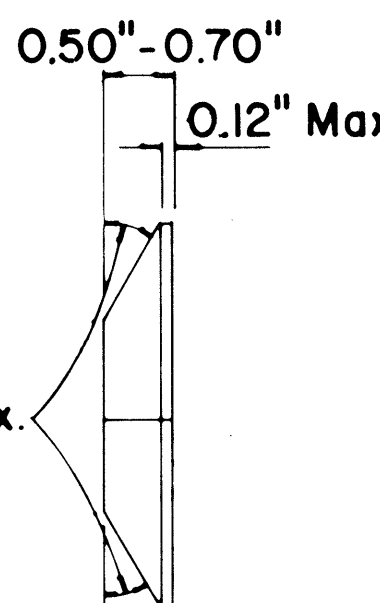
TYPE A
NON - REFLECTIVE WHITE MARKER



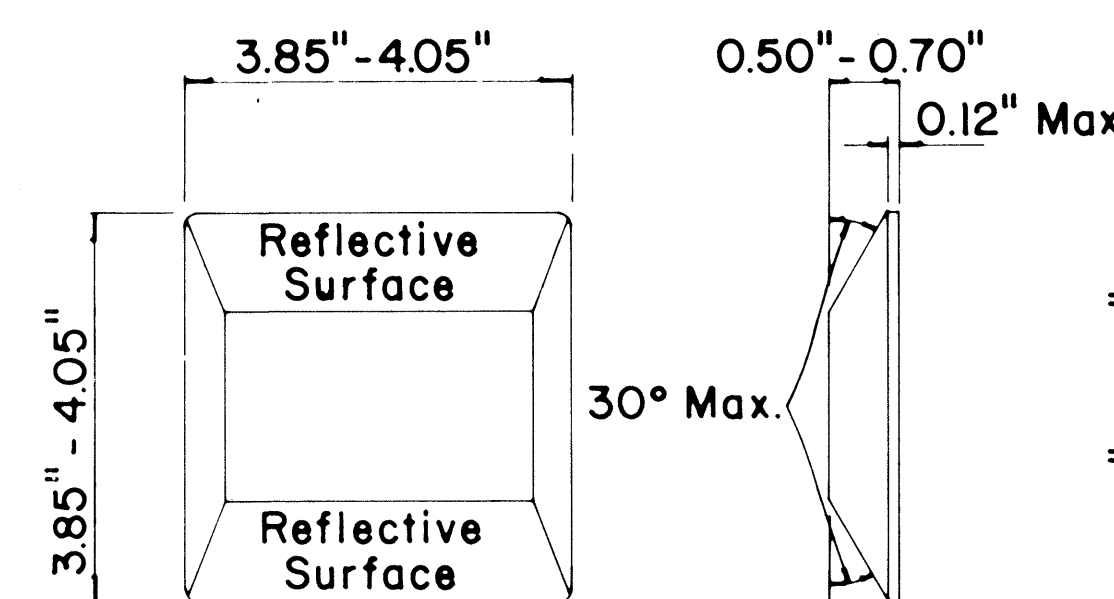
TYPE J
NON - REFLECTIVE YELLOW MARKER



TYPE C
RED - CLEAR REFLECTIVE MARKER



TYPE 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.
- 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 7/21/78
TRAFFIC ENGINEER DATE

APPROVED:

Harold J. Zalewski 7/24/78
ASSISTANT CHIEF, ENGINEERING DATE

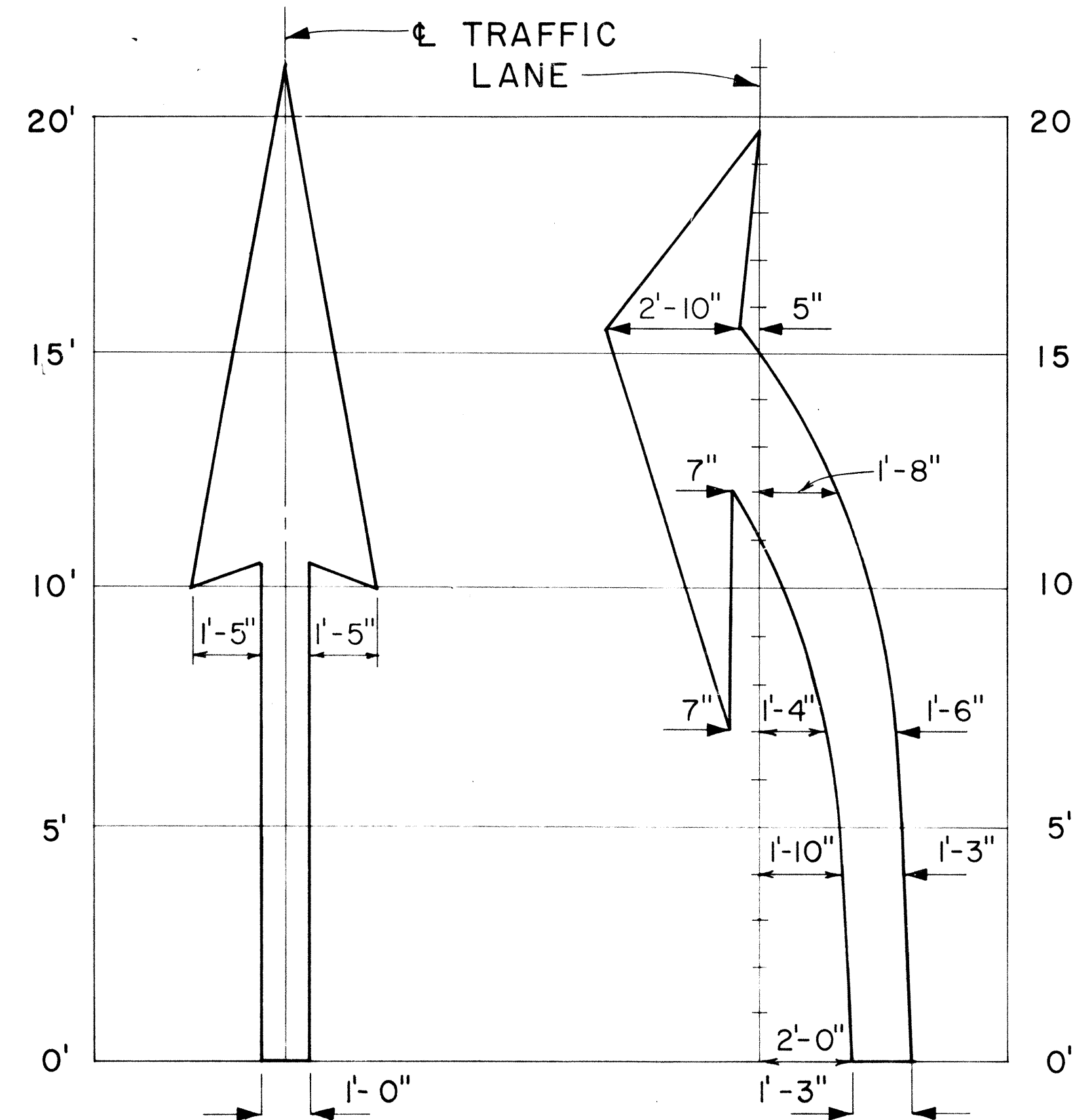
No.	REVISION	APPROVED BY	DATE
1	Supersedes DT 300 approved 11/18/71.	H.C.	7/24/78
2	Delete Type A Markers from Bike Route Delineation.	H.C.	10/15/79
3	Added General Note 3. Revised left edge stripe.	H.C.	9-28-83
4	Revised Channelizing Lines or Solid Lane Lines.	H.C.	7/18/85

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
STANDARD DETAILS RAISED PAVEMENT MARKERS AND STRIPING	
Not to Scale	July 1978
SHEET No. 117 OF 12 SHEETS DT 300	

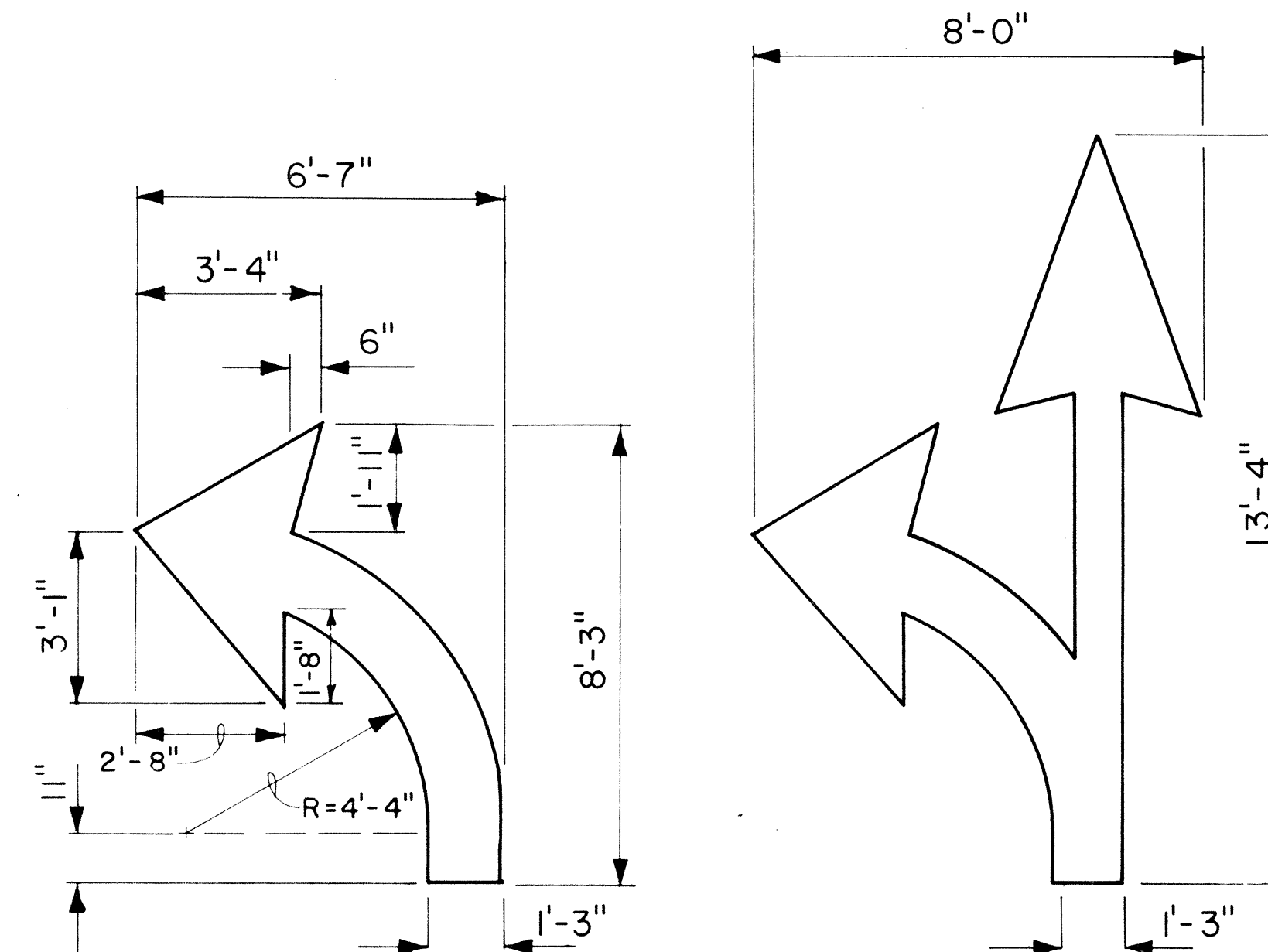
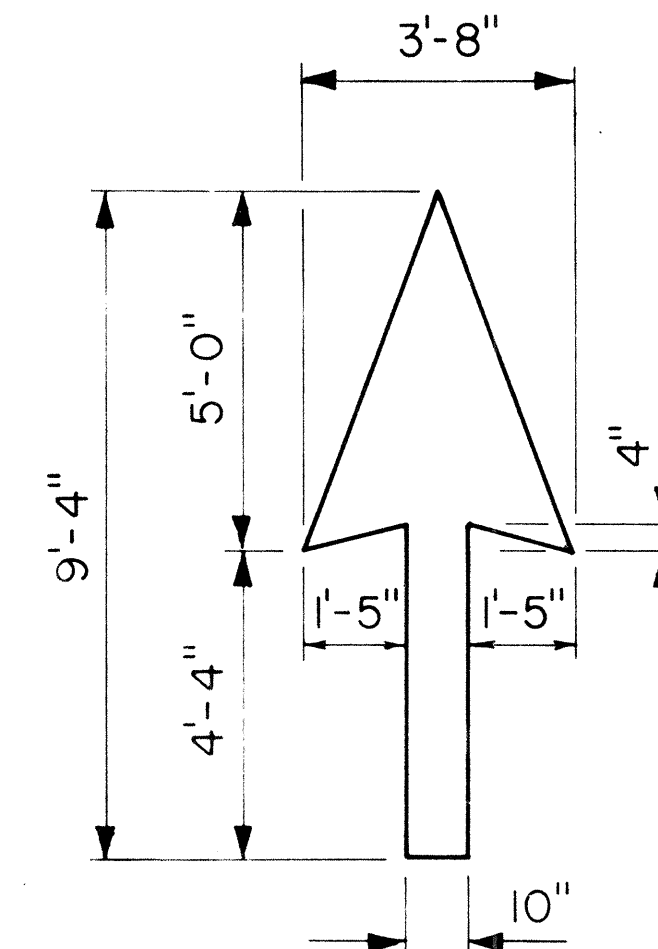
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	RS-03770	1986	30	30

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.



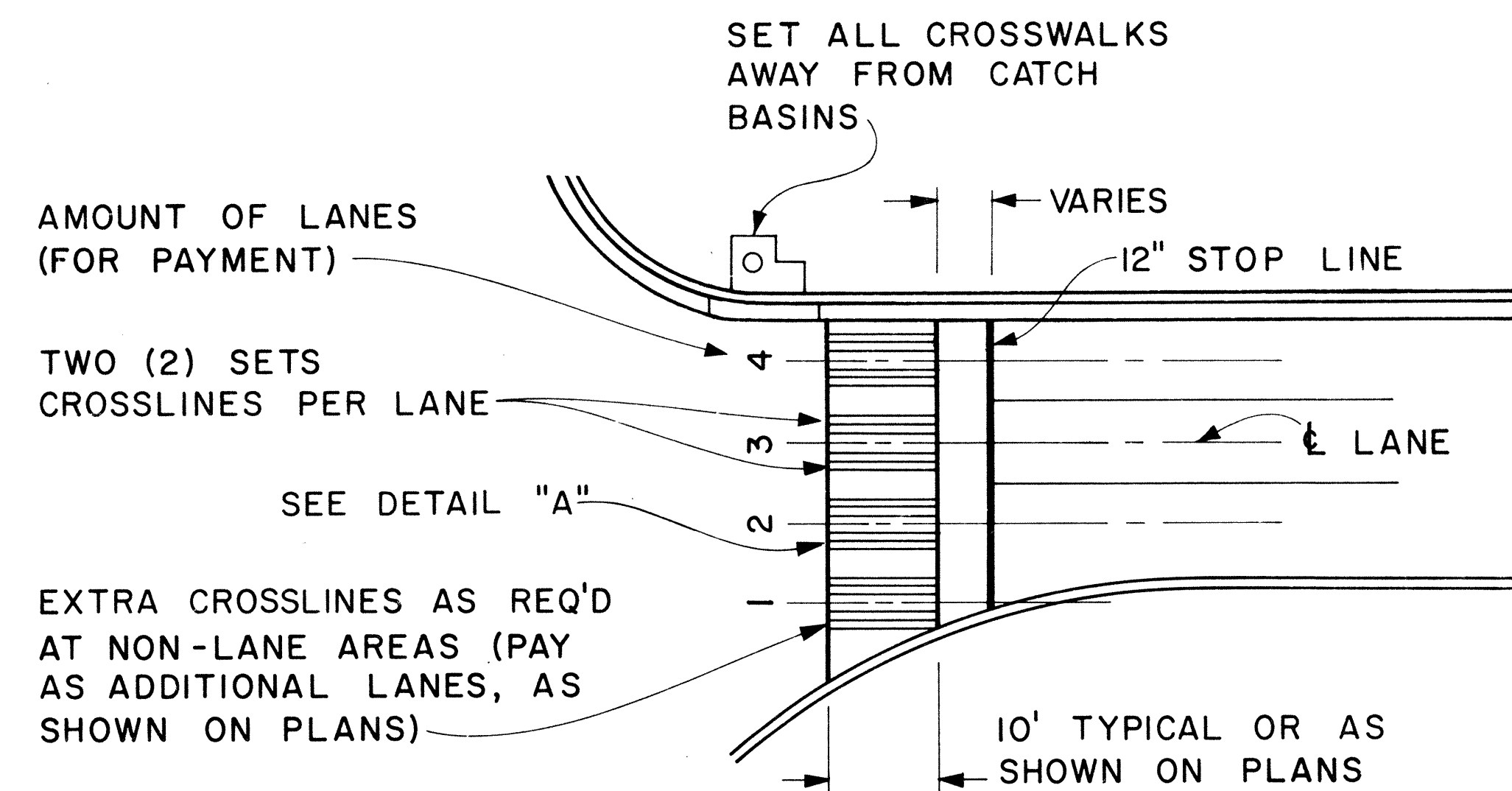
ELONGATED



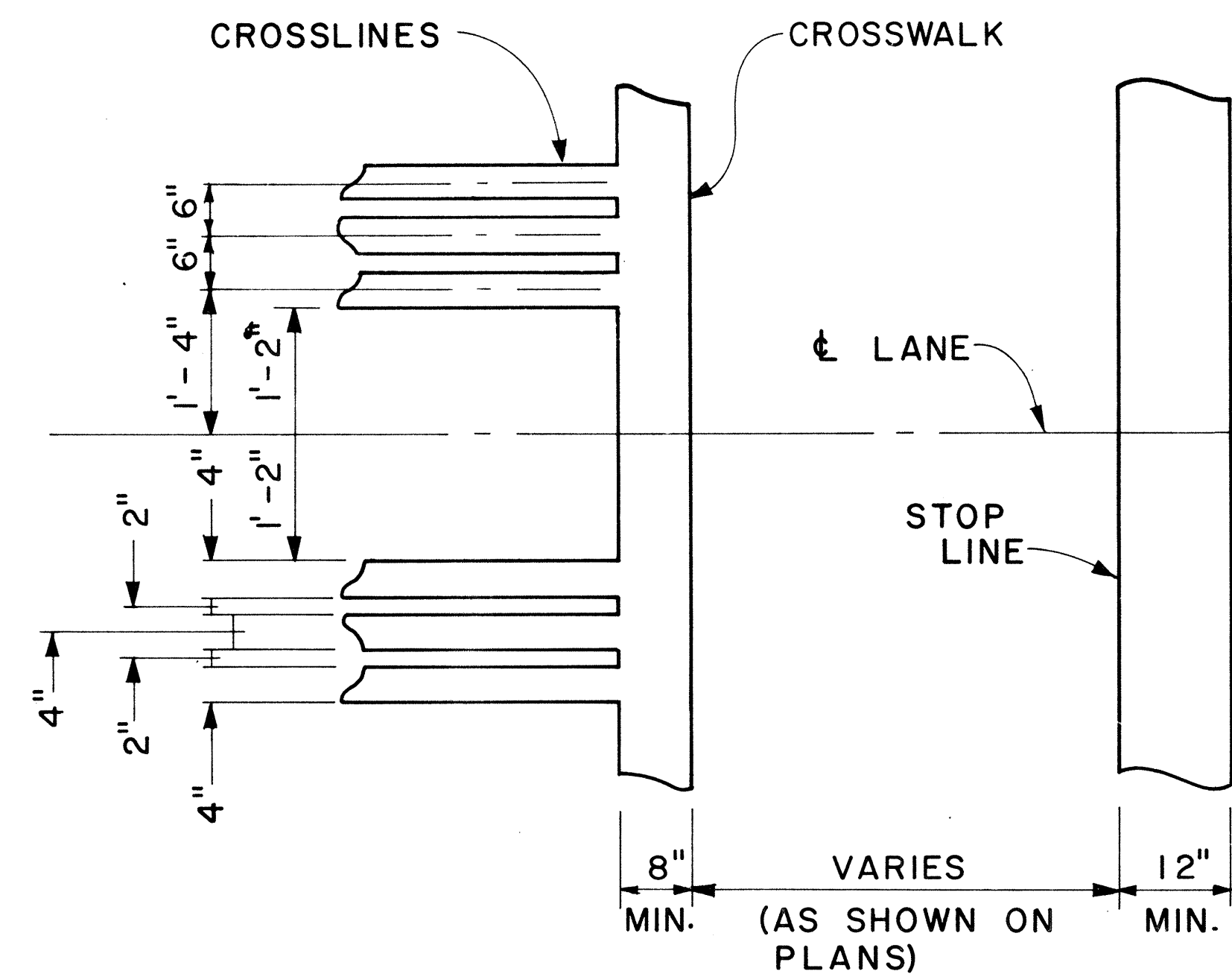
STANDARD

PAVEMENT ARROWS

Scale: 3/8" = 1'



PLAN



DETAIL "A"

CROSSWALK & STOP LINE

Scale: Not to Scale

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

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

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

MISCELLANEOUS
 PAVEMENT MARKINGS

Scale: As Shown Date: March, 1978

SHEET NO. 127 OF 12 SHEETS DT 306