

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	23	33

BEGIN 4" WHITE EDGE STRIPES & CENTERLINE MARKINGS @ STA. 0+00. FOR DETAILS SEE PLAN SHT. #25

R4-1
DO NOT PASS
INSTALL

(3EA.)
RM-1
INSTALL 100'-0" O.C.

(2EA.)
RM-1
INSTALL AT EDGES OF DRIVEWAYS

(3EA.)
RM-1
INSTALL 30'-0" O.C.

(4EA.)
RM-1
INSTALL ON CURVES

TRUE NORTH
SCALE: 1" = 100'

ALL BRIDGES WEIGHT LIMIT 10 TONS
INSTALL R12-G
60"
4" SERIES C LETTERS
NARROW WINDING ROAD NEXT 30 MILES
INSTALL W1-9
60"
4" SERIES C LETTERS
D10-2(19)
MILE 1 9
36
D10-7(36)
INSTALL (BI-DIRECTIONAL)

W1-5(L)
15 MPH
W13-1
INSTALL (4EA.)
RM-1

(2EA.)
RM-3
INSTALL NEXT TO HEAD WALLS

(4EA.)
RM-1
INSTALL BEHIND GUARD RAIL 30'-0" O.C.

(3EA.)
RM-1
INSTALL 50'-0" O.C.

(8EA.)
RM-1
INSTALL BEHIND GUARD RAIL 30'-0" O.C.

(2EA.)
RM-3
INSTALL NEXT TO HEAD WALLS (BI-DIRECTIONAL)

(4EA.)
RM-1
INSTALL

(4EA.)
RM-3
INSTALL NEXT TO HEAD WALL

ML STA. 36+00

NOTE: SEE TYPICAL DETAIL PLAN SHT #25 FOR AREAS SHOWN WITHIN CIRCLES.

NOTE: SIGNS R12-G & W1-9 SHALL CONFORM TO PLANS & SPECIFICATIONS FOR REGULATORY (R) & WARNING (W) SIGNS. COLOR: R12-G, BLACK LEGEND & BORDER ON WHITE REFL. BACKGROUND. W1-9, BLACK LEGEND & BORDER ON YELLOW REFL. BACKGROUND.
(4EA.)
RM-1
INSTALL 20'-0" O.C.

INSTALL BEHIND GUARD RAIL 20'-0" O.C. (BI-DIRECTIONAL)

(9EA.)
RM-1
INSTALL BEHIND GUARD RAIL 30'-0" O.C.

(4EA.)
RM-1
INSTALL 30'-0" O.C.

(4EA.)
RM-1
INSTALL 30'-0" O.C.

(3EA.)
RM-1
INSTALL BEHIND GUARD RAIL 35'-0" O.C.

(3EA.)
RM-1
INSTALL 35'-0" O.C.

INSTALL W1-5(L)
15 MPH
W13-1
INSTALL (4EA.)
RM-1

D10-2(20)
MILE 2 0
36
D10-7(36)
INSTALL (BI-DIRECTIONAL)

INSTALL BEHIND GUARD RAIL 20'-0" O.C.

(2EA.)
RM-1
INSTALL 60'-0" O.C.

(1EA.)
RM-3
INSTALL NEXT TO HEAD WALL

(4EA.)
RM-1
INSTALL

(4EA.)
RM-1
INSTALL 20'-0" O.C. (BI-DIRECTIONAL)

INSTALL NEXT TO HEAD WALLS

(4EA.)
RM-1
INSTALL 20'-0" O.C.

NARROW BRIDGE
W5-2
INSTALL

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

LAND TRANSPORTATION FACILITIES DIVISION

TRAFFIC SIGNS & PAVEMENT MARKINGS

HANA HIGHWAY IMPROVEMENTS

Huela Towards Wailua, Phase I

PROJECT NO. 360A-01-80

Scale: As Shown Date: July 1979

SHEET NO. 1 OF 11 SHEETS

23

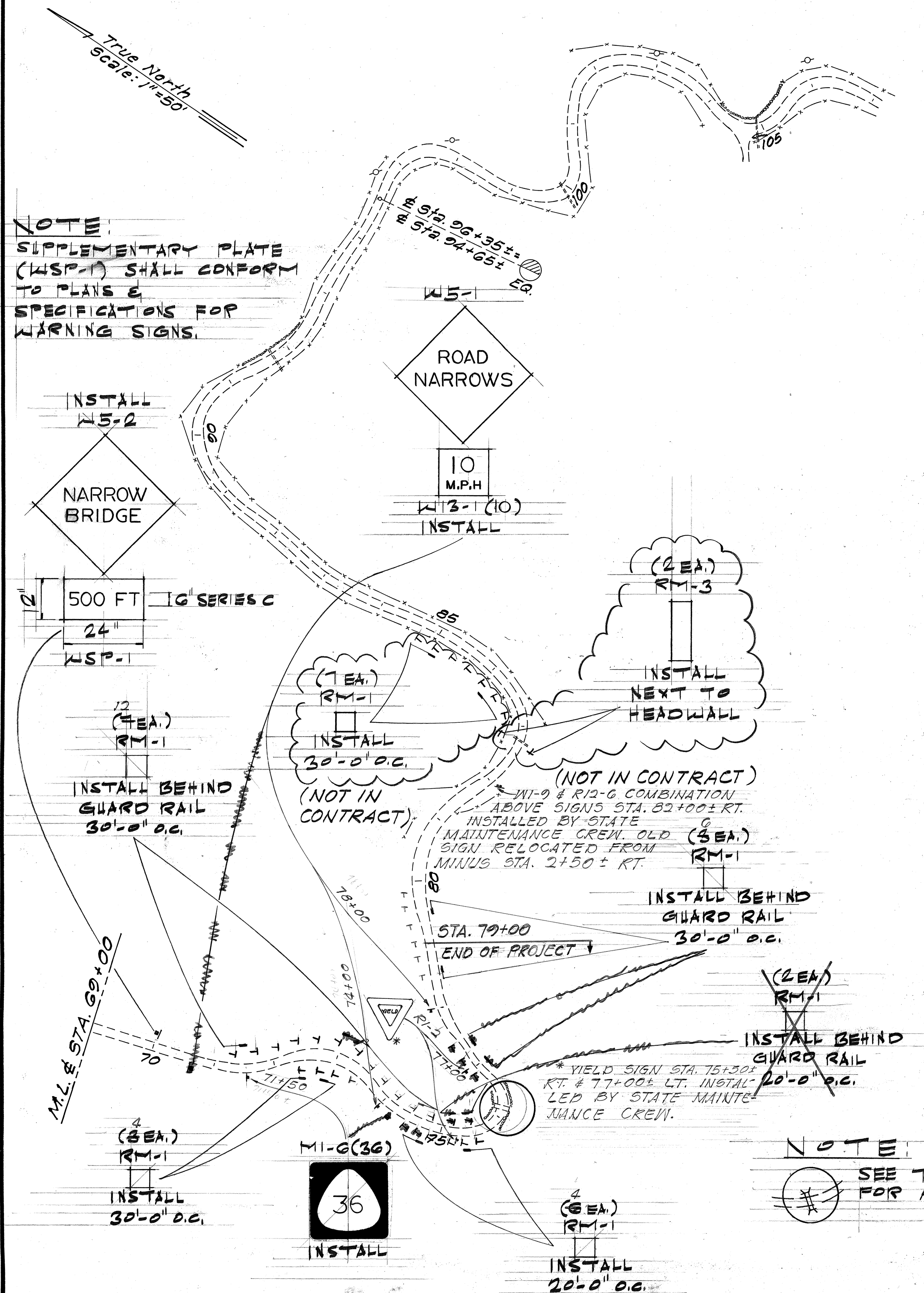
DATE	_____
SURVEY PLOTTED BY	_____
PLAN	_____
DRAWN BY	_____
TRACED BY	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
NO.	_____

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	24	33

GENERAL NOTES:

1. LATERAL LOCATIONS OF SIGNS & REFLECTOR MARKERS AS SHOWN ON PLANS ARE APPROXIMATE ONLY. SEE VARIOUS STANDARD & TYPICAL DETAILS FOR CORRECT LOCATIONS. FINAL LOCATIONS SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL REMOVE ALL EXISTING SIGNS. COST SHALL BE INCIDENTAL TO THE VARIOUS ITEMS OF G21, "REGULATORY & WARNING SIGNS".
3. THE LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO FINAL INSTALLATION.

NOTE:
SUPPLEMENTARY PLATE
(WSP-1) SHALL CONFORM
TO PLANS &
SPECIFICATIONS FOR
WARNING SIGNS.



NOTE:
SEE TYPICAL DETAIL PLAN SHT. # 25
FOR AREAS SHOWN WITHIN CIRCLES

7/22/80	Deleted RM's between & Sta. 82+80t to 86+00t and relocated Traffic Sign.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
TRAFFIC SIGNS &
PAVEMENT MARKINGS
HANA HIGHWAY IMPROVEMENTS
Huelo Towards Wailua, Phase I
PROJECT NO. 360A-01-80
Scale: As Shown Date: July, 1979
SHEET No. 2 OF 11 SHEETS

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

TRAFFIC SIGN SUMMARY

TYPE	DESCRIPTION	QUANTITY	
		W/ POST	W/O POST
R4-1	DO NOT PASS		
R12-6	ALL BRIDGES WEIGHT LIMIT 10 TONS		
W13-1(15)	15 MPH		2
W5-1	ROAD NARROWS	+ 2	
W5-2	NARROW BRIDGE	2	
W13-1(10)	10 MPH		+ 2
W1-9	NARROW WINDING ROAD NEXT 30 MILES		
D10-2(19)	MILE 19 (MILEPOST MARKER)		
D10-2(20)	MILE 20 (MILEPOST MARKER)		
D10-7(36)	36 (#WT. ROUTE NUMBER PLATE)		4
M1-6(36)	36 (STATE ROUTE MARKER)		
RM-1	REFLECTOR MARKER (WHITE)	137	+ 3/4
RM-3	REFLECTOR MARKER (YELLOW)	79 22	1
RM-4(L)	REFLECTOR MARKER (YELLOW & BLACK)	3	
RM-4(R)	REFLECTOR MARKER (YELLOW & BLACK)	3	
WSP-1	500 FT.		
W1-5(L)		2	

PAVEMENT MARKING SUMMARY

DESCRIPTION	QUANTITY
TYPE "D" RAISED PAVEMENT MARKERS	200 +TS EA.
PAVEMENT STRIPING	21,000 LF.

7/22/80 Revised Sign and Pavement
Marking Quantities
DATE REVISION

CENTERLINE STRIPING
(SEE TYPICAL DETAIL
THIS SHEET)

4" WHITE
EDGE STRIPE

8" WHITE
EDGE STRIPE

RM-3
INSTALL 25'-0" O.C.
OR AS DIRECTED BY
ENGINEER.

RM-3
INSTALL 50'-0" O.C.
OR AS DIRECTED BY
ENGINEER.

RM-4(L)

Deleted RM-4s

INSTALL NEXT
TO CULVERT

RM-3

INSTALL NEXT
TO CULVERT

RM-3

INSTALL 50'-0" O.C.
OR AS DIRECTED BY
ENGINEER

8" WHITE
EDGE STRIPE

4" WHITE
EDGE STRIPE

GUARD RAIL
CONTINUOUS OR
FLARED (AS SHOWN
ON PLANS).

TYPICAL DETAIL DELINEATION & PAVEMENT MARKINGS AT CULVERTS

SCALE: 1" = 20'

NOTE:
FOR ADDITIONAL
STRIPING DET'S,
SEE PLAN SHTS.
33

SHOULDER
VARIES

EDGE OF
PAVEMENT

40'-0"
12'-6" 15'-0" 12'-6"

TYPE "D"
PAV'T. MARKER

4" YELLOW
STRIPE

4" WHITE EDGE
STRIPE UNLESS
OTHERWISE
SHOWN.

TYPICAL PAVEMENT MARKING DETAIL

NOT TO SCALE

EDGE OF SHOULDER
OR GUARD RAIL

REFLECTOR MARKER

SHOULDER

NOTE:
FOR ADDITIONAL REFLECTOR
MARKER DETAILS, SEE
PLAN SHT. # 31

REFLECTOR MARKER MOUNTING DETAIL

NOT TO SCALE

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	25	33

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
MISCELLANEOUS DETAILS

HANA HIGHWAY IMPROVEMENTS
Huelo Towards Wailua, Phase I
PROJECT NO. 360A-01-80

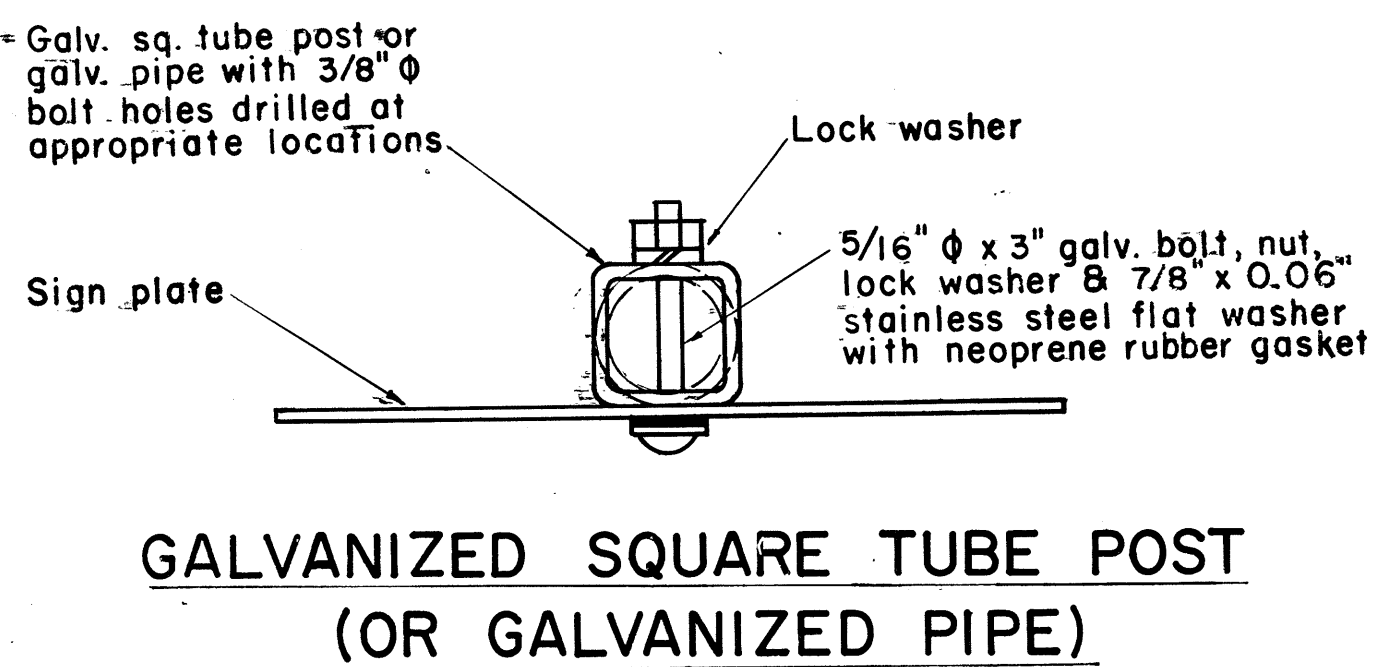
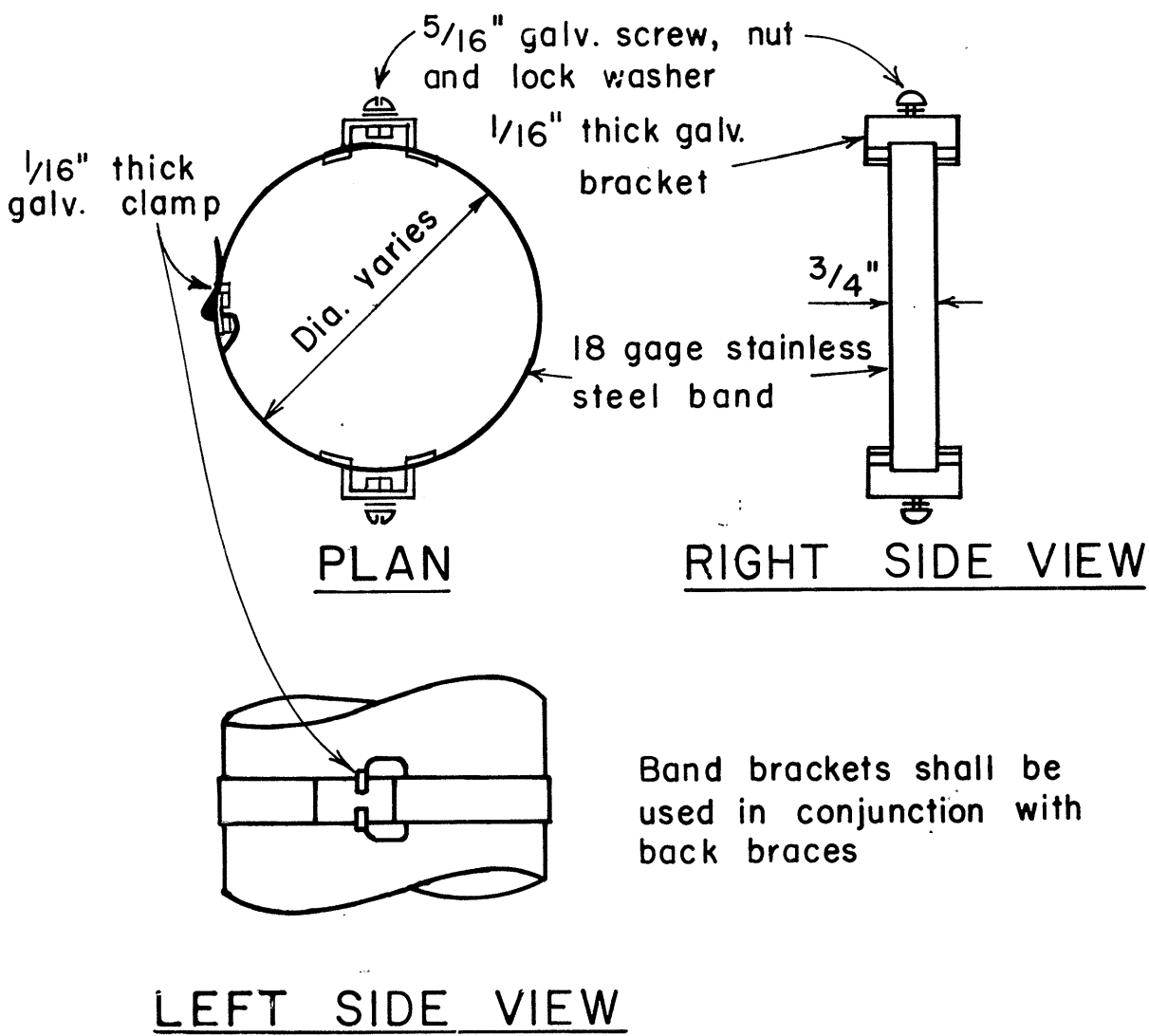
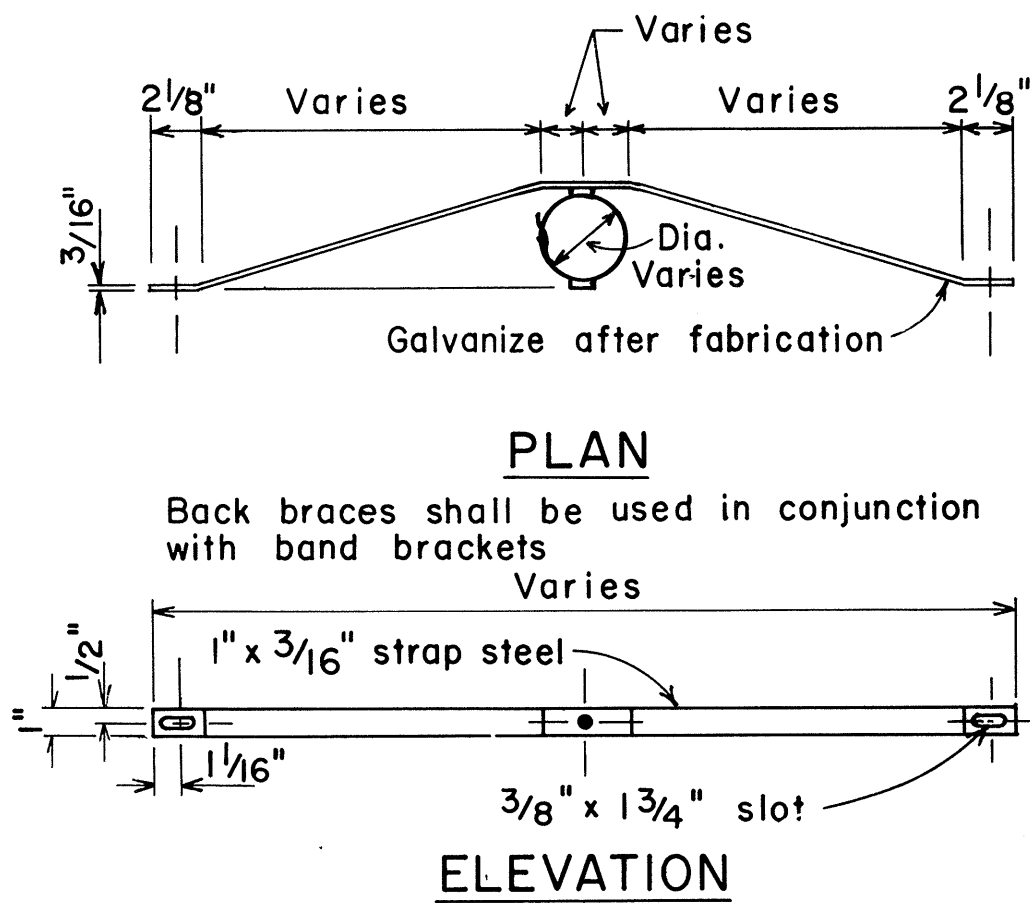
Scale: As Shown Date: July 1979
SHEET NO. 3 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	26	33

GENERAL NOTES

- Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two sign posts.
- All signs larger than 10 sq. ft. in area or 48" inches and wider, and mounted on other than two posts supports (i.e., on highway lighting poles) shall have at least two sets of band brackets and back braces.
- All signs 28 sq. ft. in area or larger and mounted on other than two posts supports (i.e., on highway lighting poles) shall have at least three sets of band brackets and back braces.
- All parking restriction signs with arrows shall be mounted 45° to the line of traffic flow.
- Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
- (R) or (L) indicates right or left and shall be as shown on the plans.
- See plans for special details.
- When clear roadside recovery areas are provided, Signs shall be placed as far from the edge of traveled way as possible up to a maximum of 30 feet. When possible they shall be placed in protected locations.
- Signs in medians shall be placed at midpoint of median up to a maximum distance of 30 feet from the edge of traveled way. When appropriate, signs for opposing directions shall be placed back to back.

BACK BRACE DETAILS FOR BALANCED SIGN INSTALLATION



BAND BRACKET

TYPICAL MOUNTING DETAILS

NOT TO SCALE

NO.	REVISION	APPROVED BY	DATE
1	Supercedes Sht. DT-100 approved 12/30/69	H.T.	11/15/77
2	Revised depth of signpost	H.T.	8/21/79
3	Added Notes No. 8 & No. 9	H.T.	8/12/79
4	Revised Gen. Note #4 & Mounting Details	H.T.	4/23/80

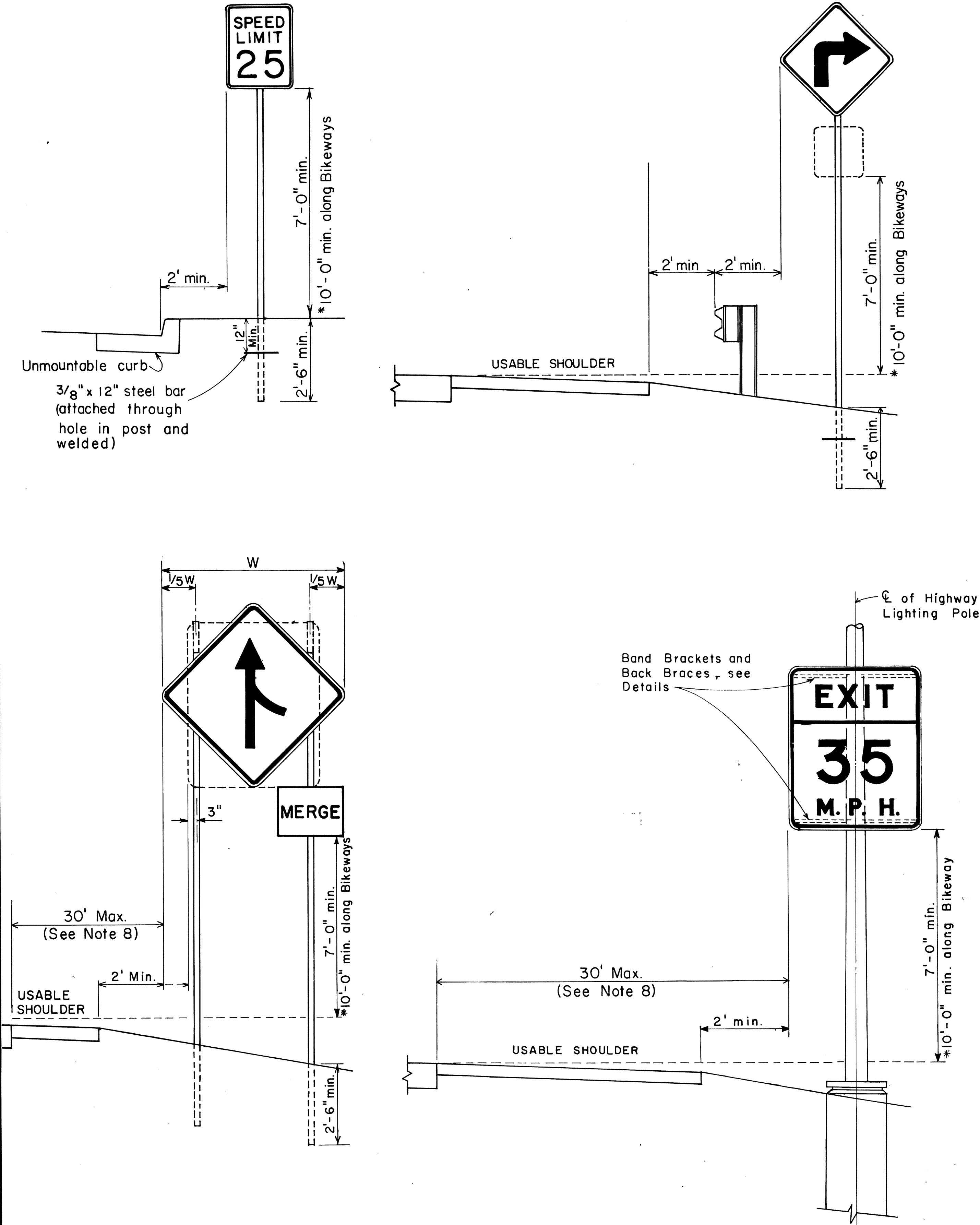
APPROVAL RECOMMENDED:
Eiichi Tanaka
TRAFFIC ENGINEER
11/10/77
DATE

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

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
STANDARD DETAILS
MISCELLANEOUS SIGN DETAILS
Not to scale June, 1977

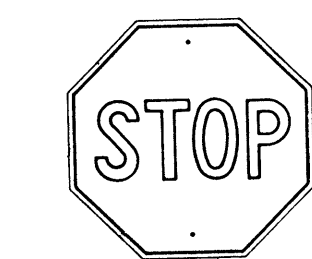
SHEET No. 4 OF 11 SHEETS DT 100

DATE	11/10/77
DESIGNED BY	H.T.
CHECKED BY	H.T.
QUANTITIES BY	H.T.
NOTED BY	H.T.
ORIGINAL PLAN	H.T.
NO.	1

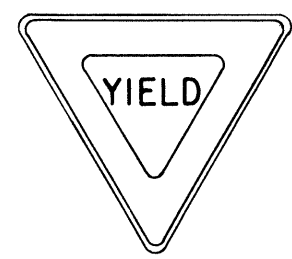


HEIGHT AND LATERAL LOCATION OF SIGNS TYPICAL INSTALLATION

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	27	33



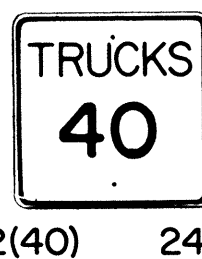
R1-1 30"x 30"
R1-1-A 36"x 36"
4-WAY
R1-3 12"x 6"
R1-3-A 18"x 9"



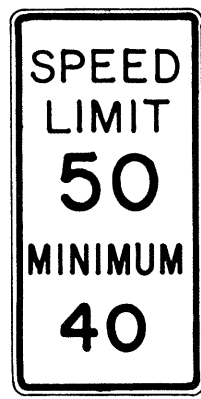
R1-2 36"x 36"x 36"
R1-2-A 48"x 48"x 48"



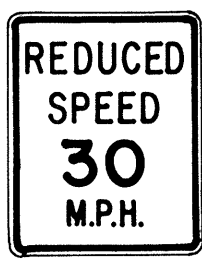
R2-1(50) 24"x 30"
R2-1(50)-A 48"x 60"



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



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



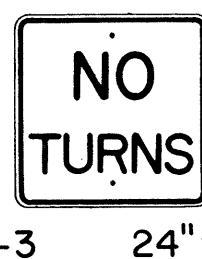
R2-5b(30) 24"x 30"
R2-5b(30)-A 48"x 60"



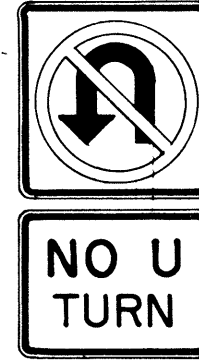
R3-1 24"x 24"
24"x 18"
R3-1-A 48"x 48"
48"x 36"



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



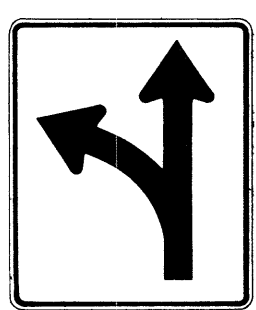
R3-3 24"x 24"
R3-3-A 48"x 48"



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



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



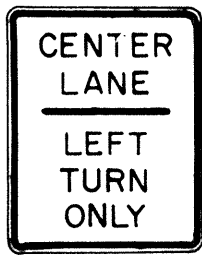
R3-6(L) 30"x 36"
R3-6(L)-A 48"x 60"



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



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



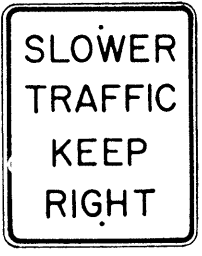
R3-9 24"x 30"



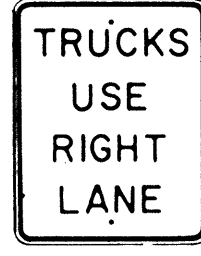
R4-1 24"x 30"



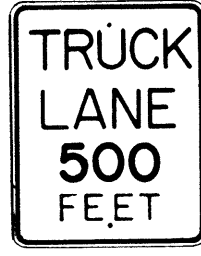
R4-2 24"x 30"



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



R4-5 24"x 30"



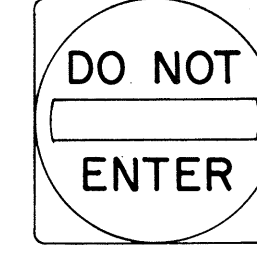
R4-6(500) 24"x 30"



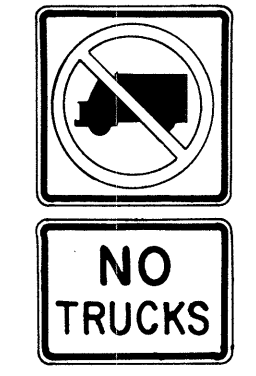
R4-7 24"x 30"
24"x 18"



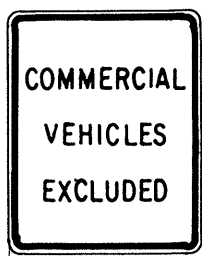
R4-8 24"x 30"
24"x 18"



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



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



R5-4 24"x 30"



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



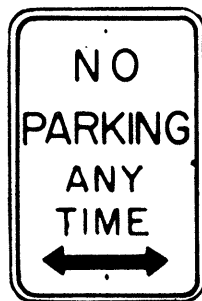
R5-9 36"x 24"



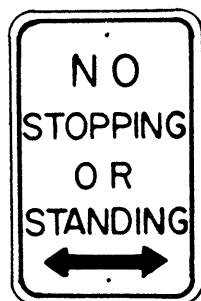
R6-1(R) 36"x 12"



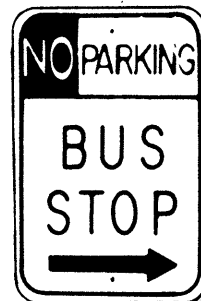
R6-2(R) 18"x 24"



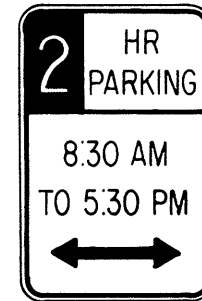
R7-1 12"x 18"
R7-1-A 24"x 30"



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



R7-1(7(R)) 12"x 18"



R7-108 12"x 18"



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



R8-1 24"x 30"



R8-2 24"x 30"



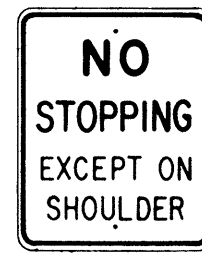
R8-3 24"x 30"



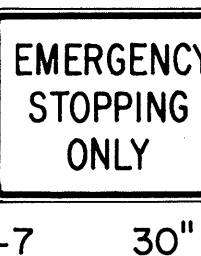
R8-4 30"x 24"
R8-4-A 48"x 36"



R8-5 24"x 30"



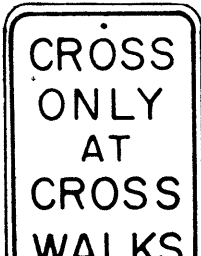
R8-6 24"x 30"



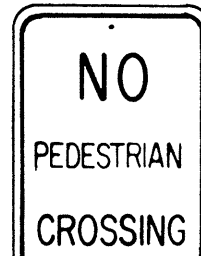
R8-7 30"x 24"
R8-7-A 48"x 36"



R9-1 18"x 24"



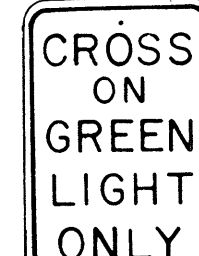
R9-2 12"x 18"



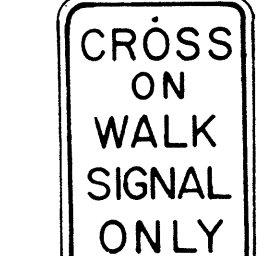
R9-3 12"x 18"



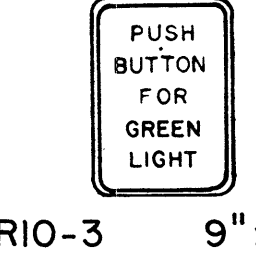
R9-4 18"x 24"



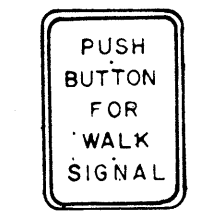
R10-1 12"x 18"



R10-2 12"x 18"



R10-3 9"x 12"



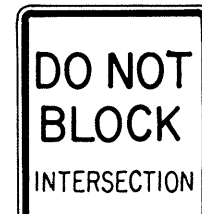
R10-4 9"x 12"



R10-5 24"x 30"



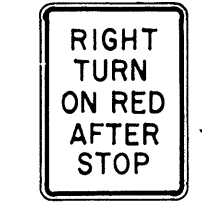
R10-6 24"x 36"



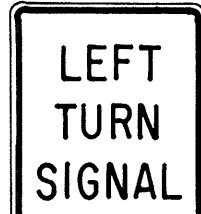
R10-7 24"x 30"



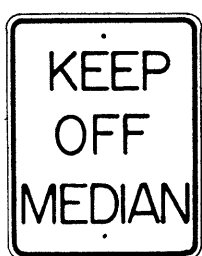
R10-8 24"x 30"



R10-9 24"x 30"



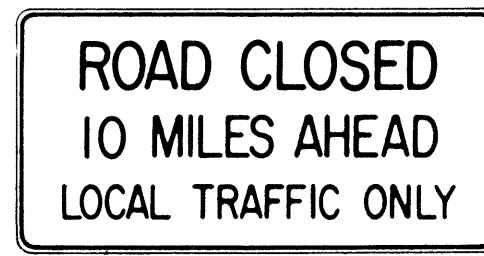
R10-10 24"x 30"



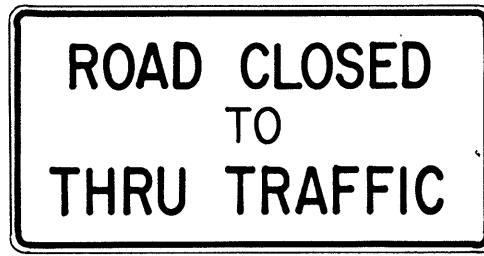
R11-1 24"x 30"



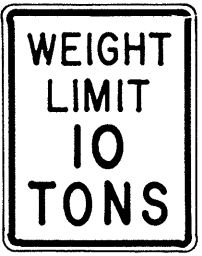
R11-2 48"x 30"



R11-3(10) 60"x 30"



R11-4 60"x 30"



R12-1(10) 24"x 30"

GENERAL NOTES

- 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 regulatory signs shall be reflectorized unless otherwise specified.
- All regulatory 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.
- All signs shall be erected without educational plaques unless called for in the plans.

APPROVAL RECOMMENDED:
Eugene Tanaka 3/17/72
TRAFFIC ENGINEER DATE

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

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

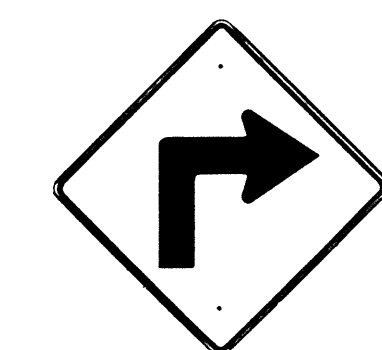
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS REGULATORY SIGNS

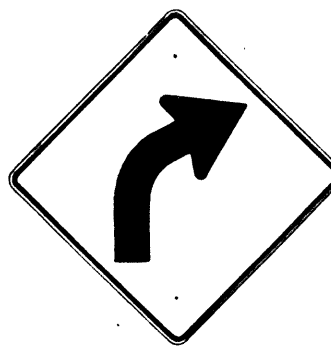
NOT TO SCALE

SHEET No. 5 OF 11 SHEETS DT 101

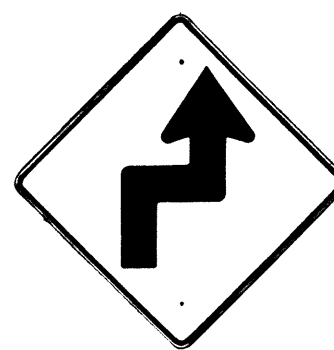
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII*	HAW.	360A-01-80	1980	28	33



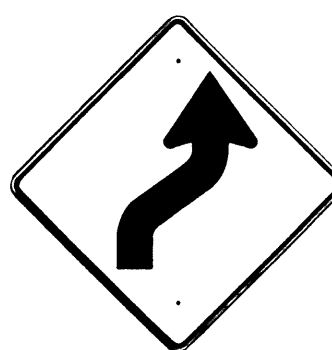
W1-1(R) 30"x 30"
W1-1(R)-A 48"x 48"



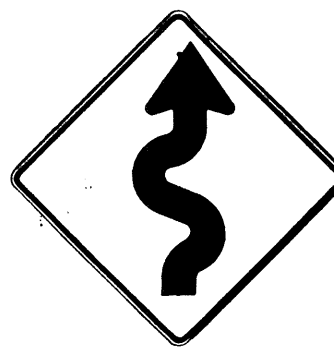
W1-2(R) 30"x 30"
W1-2(R)-A 48"x 48"



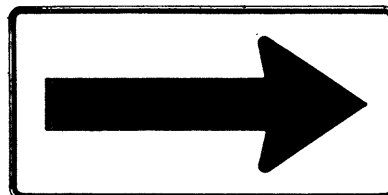
W1-3(R) 30"x 30"
W1-3(R)-A 48"x 48"



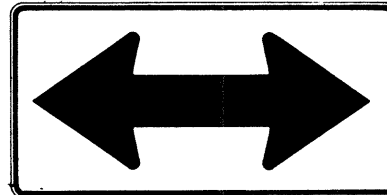
W1-4(R) 30"x 30"
W1-4(R)-A 48"x 48"



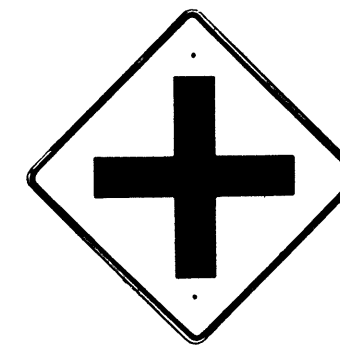
W1-5(R) 30"x 30"
W1-5(R)-A 48"x 48"



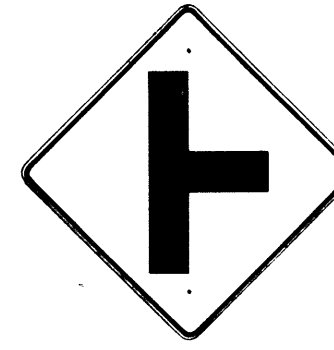
W1-6 48"x 24"



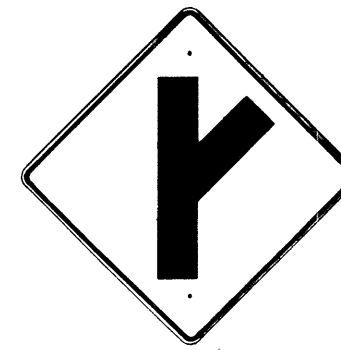
W1-7 48"x 24"



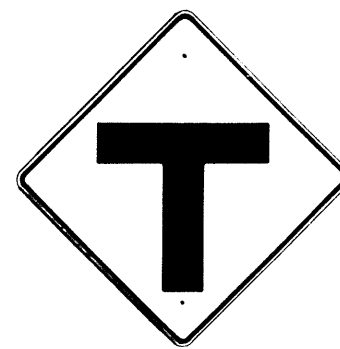
W2-1 30"x 30"
W2-1-A 48"x 48"



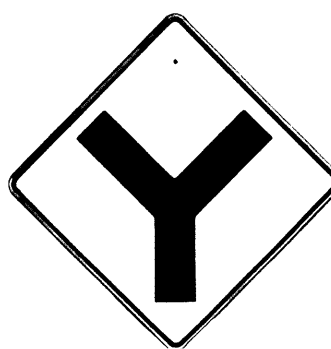
W2-2 30"x 30"
W2-2-A 48"x 48"



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



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



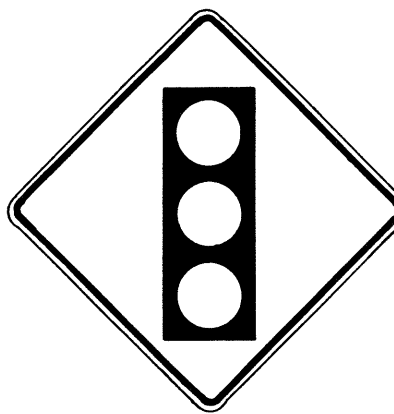
W2-5 30"x 30"
W2-5-A 48"x 48"



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



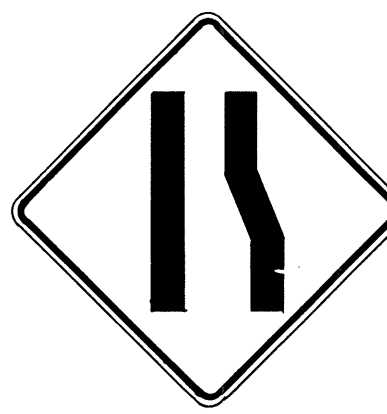
W3-2 30"x 30"
W3-2-A 36"x 36"



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



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"



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



W6-2 36"x 36"
24"x 18"



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"



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



W7-2 24"x 18"



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



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



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



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



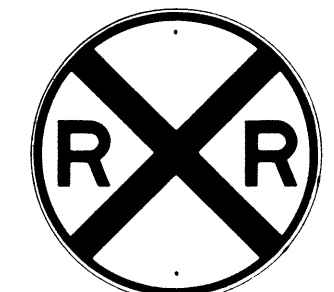
W8-5 30"x 30"
24"x 18"
W8-5-A 36"x 36"
24"x 18"



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



W9-2(L) 36"x 36"
W9-2(L)-A 48"x 48"



W10-1 36" Diameter



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



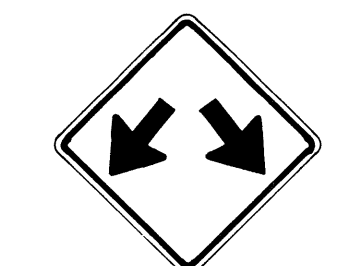
W11-2 30"x 30"
24"x 18"
W11-2-A 36"x 36"
24"x 18"



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



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



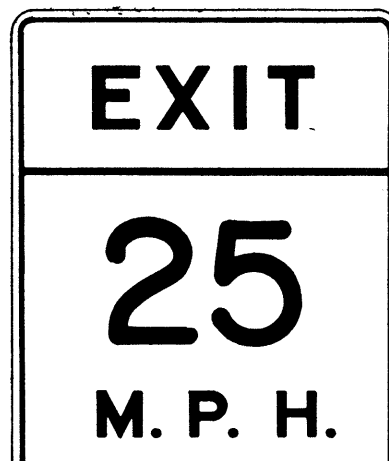
W12-1 24"x 24"
W12-1-A 36"x 36"
W12-1-B 48"x 48"



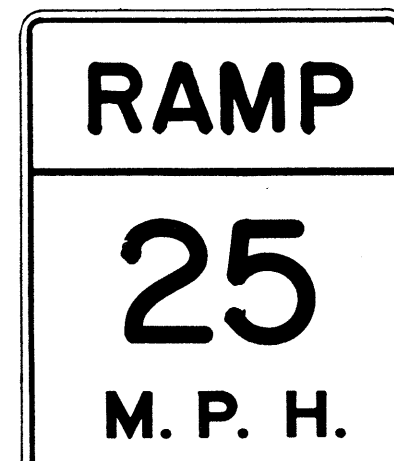
W12-2 (12'-6") 36"x 36"
24"x 18"



W13-1(25) 18"x 18"
W13-1(25)-A 24"x 24"



W13-2(25) 48"x 60"



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:
E. J. Tanaka
TRAFFIC ENGINEER

3/17/12
DATE

APPROVED:
John J. Davis
ASSISTANT CHIEF, ENGINEERING

3-20-12
DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.T.	3/20/12
2	Revised General Note 1	H.T.	10/16/12
3	Revised General Note 5	MA	9-16-75
4	Revised General Note 5	H.T.	9-14-76
5	Added Note 1	H.T.	11-7-77

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
WARNING SIGNS

NOT TO SCALE

SHEET No. 6 OF 11 SHEETS DT 102

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	29	33

GENERAL NOTES

- Marker details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, "Standard Alphabets for Highway Signs," 1966, and "Standard Highway Signs," 1972, and as amended.
- All markers shall be reflectorized unless otherwise specified.
- All markers shall have $\frac{3}{8}$ " bolt holes drilled at appropriate locations.
- Numerals in () indicates numerals to be inserted for marker message. (R) or (L) indicates right or left.
- Sign message of Cardinal Direction Marker (M3 series) shall be denoted by the following:

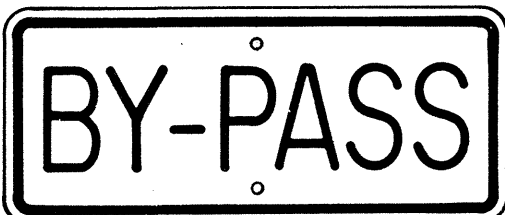
M3-1 : NORTH
 M3-2 : EAST
 M3-3 : SOUTH
 M3-4 : WEST
- Markers prefixed with "IM" on the plans shall have a white legend on a blue background.



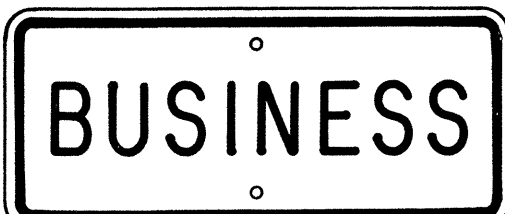
M3-1 24"x 12"
M3-1-A 36"x 18"



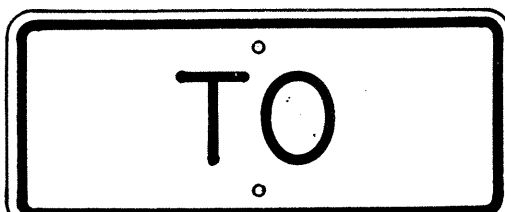
M4-1 24"x 12"



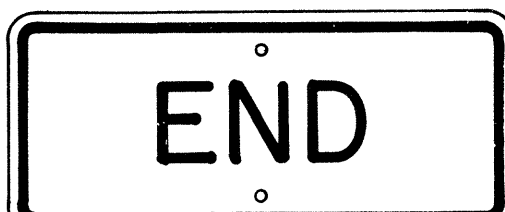
M4-2 24"x 12"



M4-3 24"x 12"



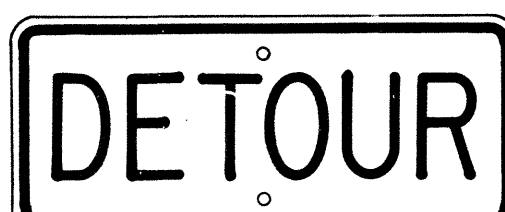
M4-5 24"x 12"



M4-6 24"x 12"



M4-7 24"x 12"



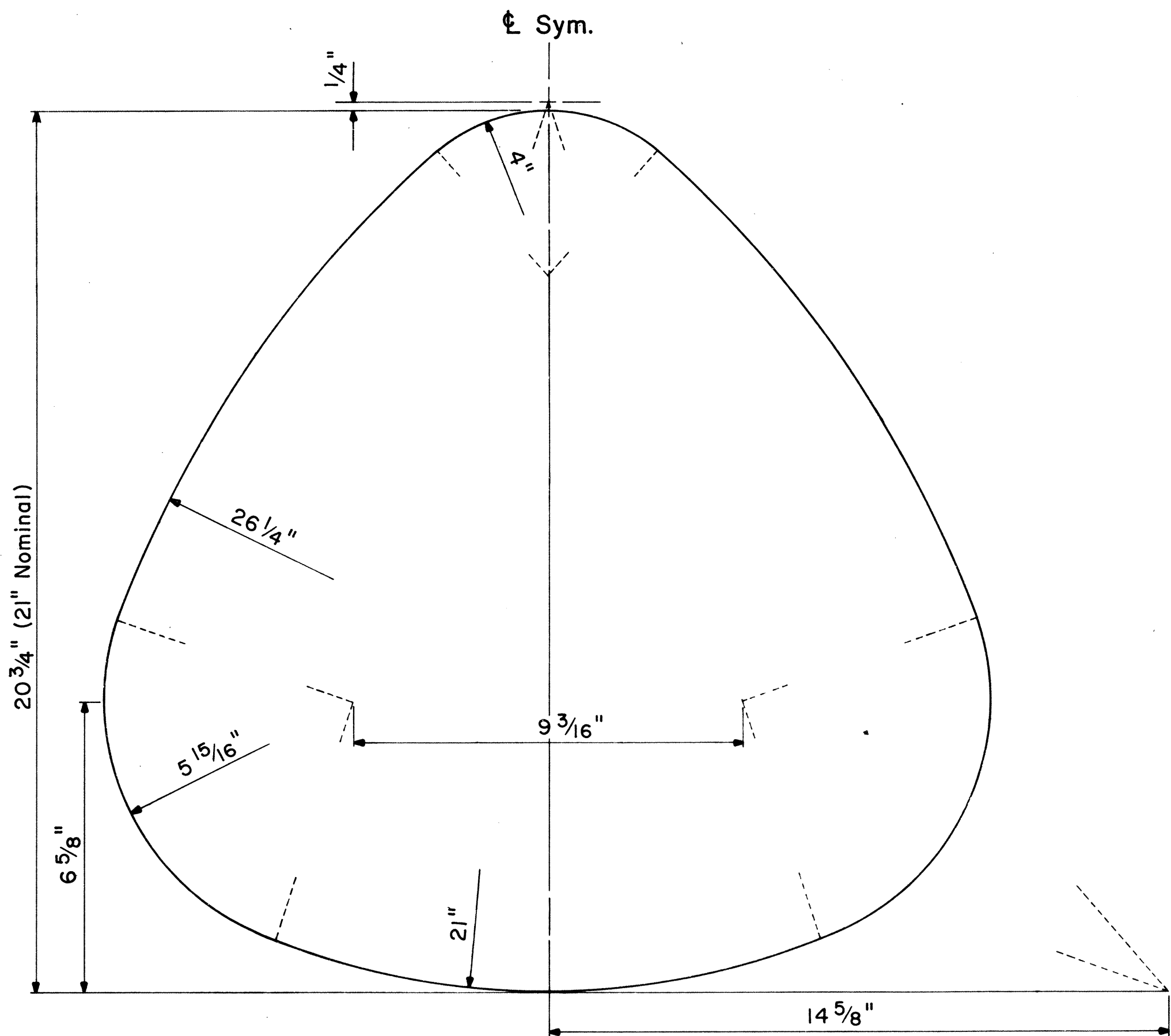
M4-8 24"x 12"

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

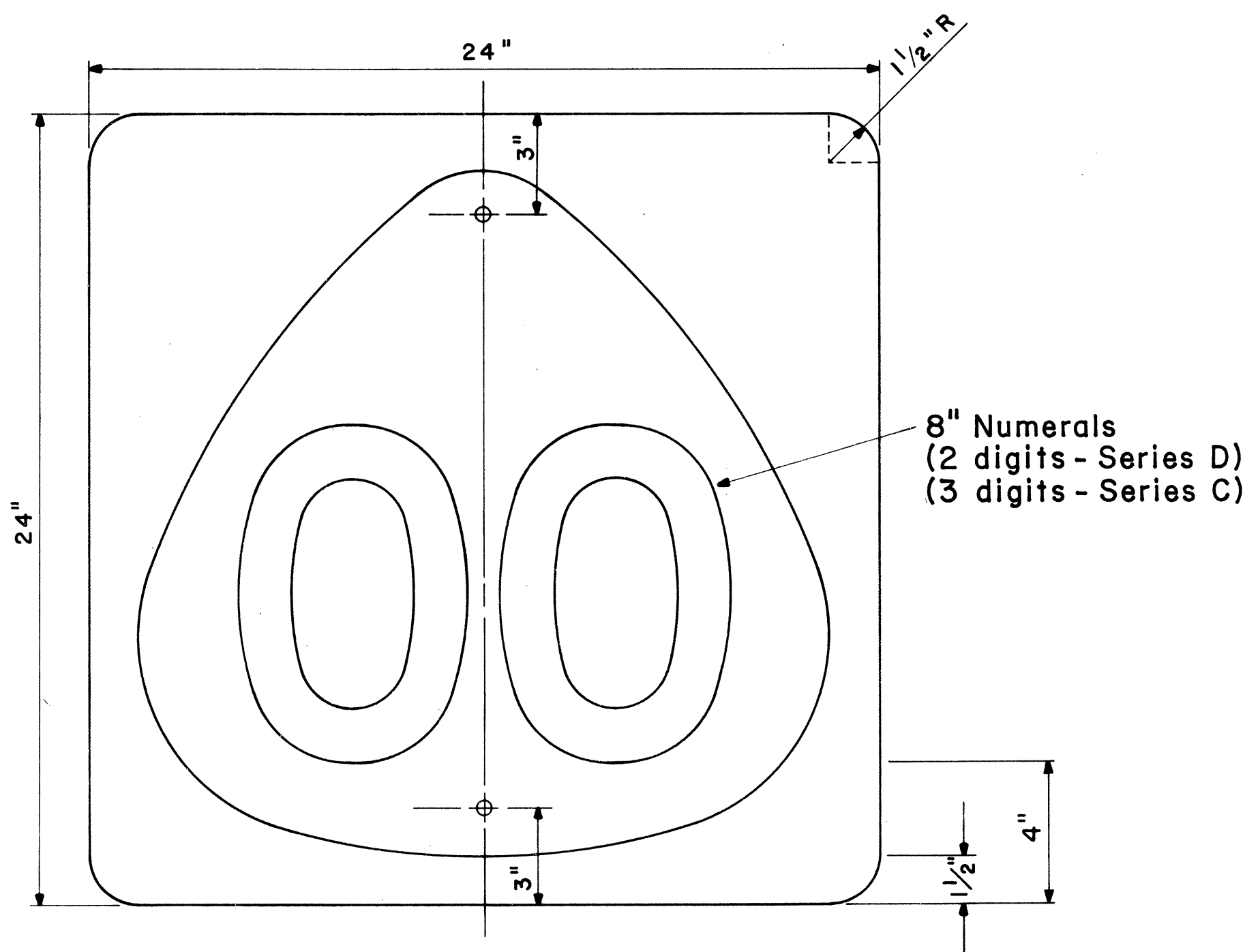
STANDARD DETAILS
**STATE ROUTE MARKER
AND AUXILIARY MARKERS**

Scale: As Shown
SHEET NO 7 OF 11 SHEETS DT 105



STATE ROUTE MARKER DETAIL

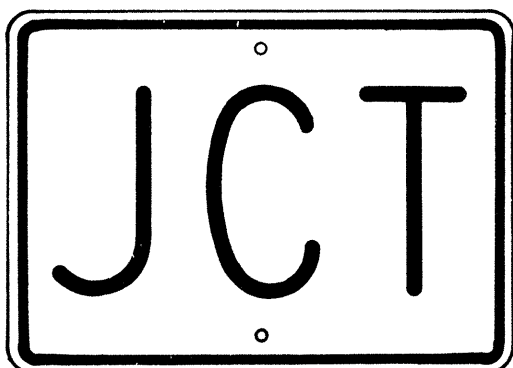
Not to Scale



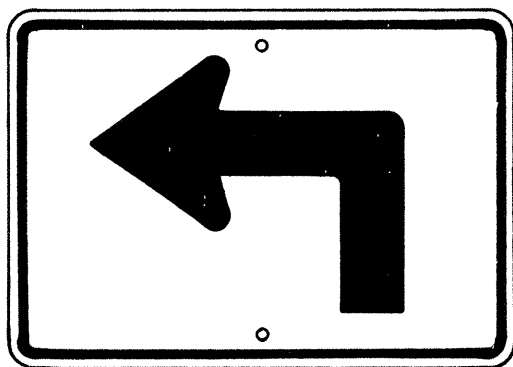
STATE ROUTE MARKER

M1-6 (00) 24"x 24"

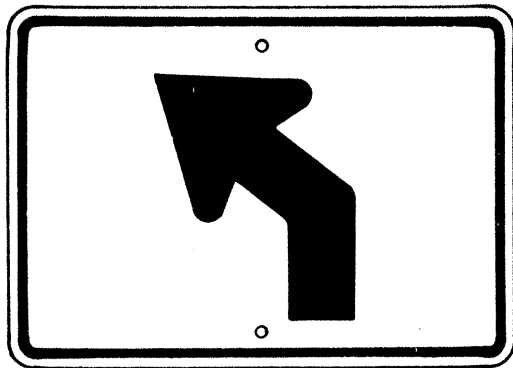
Scale: $\frac{1}{4}$ " = 1"



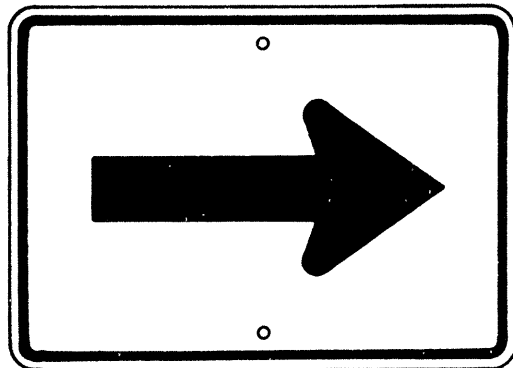
M2-1 21"x 15"



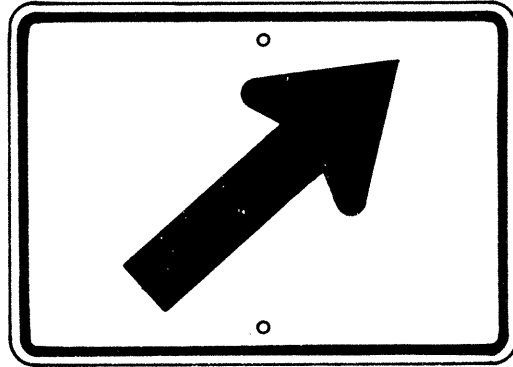
M5-1(L) 21"x 15"



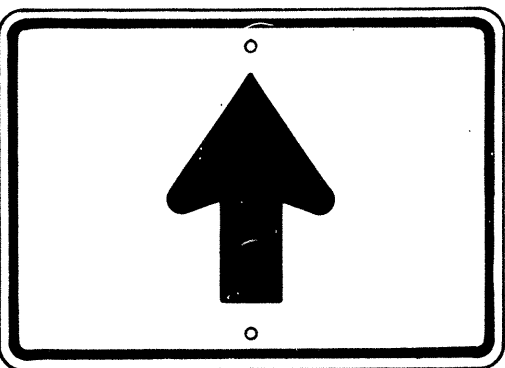
M5-2(L) 21"x 15"



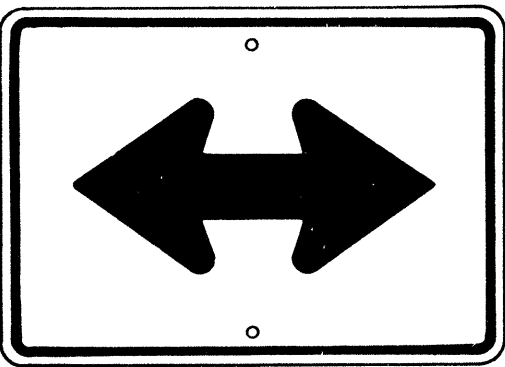
M6-1 21"x 15"



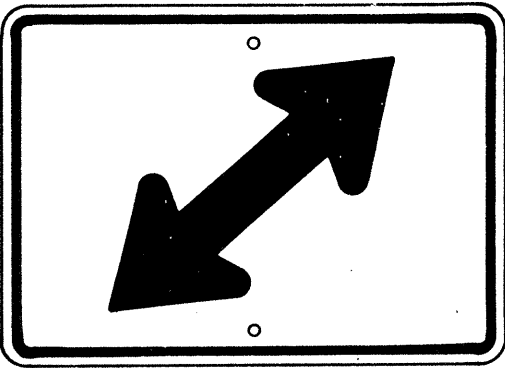
M6-2(R) 21"x 15"



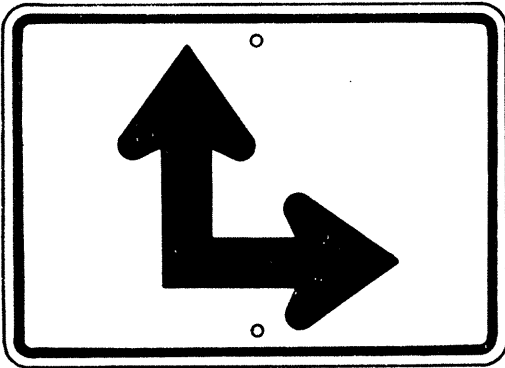
M6-3 21"x 15"



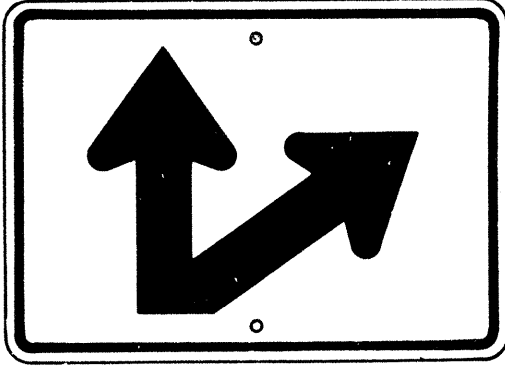
M6-4 21"x 15"



M6-5(R) 21"x 15"



M6-6(R) 21"x 15"



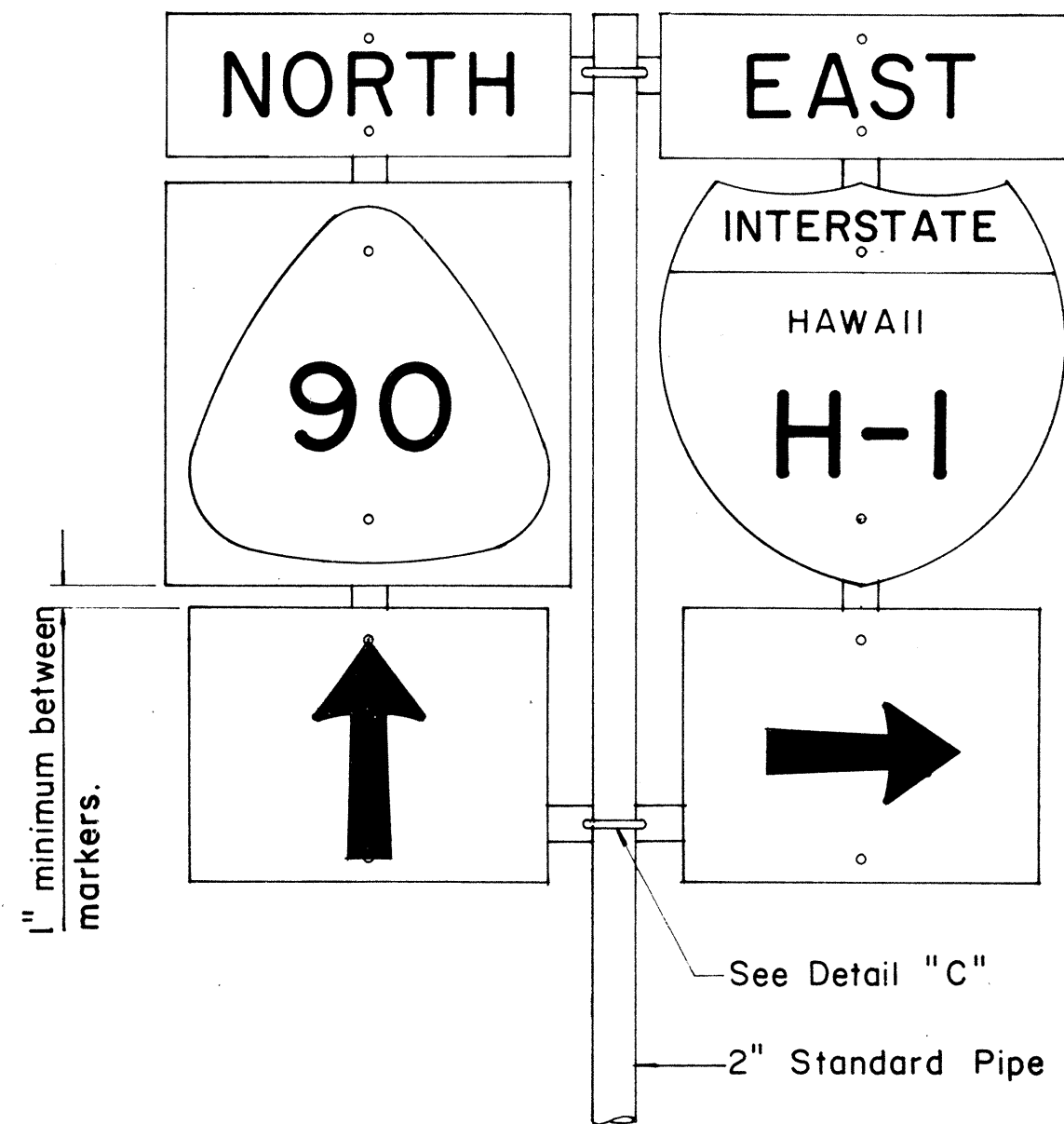
M6-7(R) 21"x 15"

AUXILIARY MARKERS

Not to Scale

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

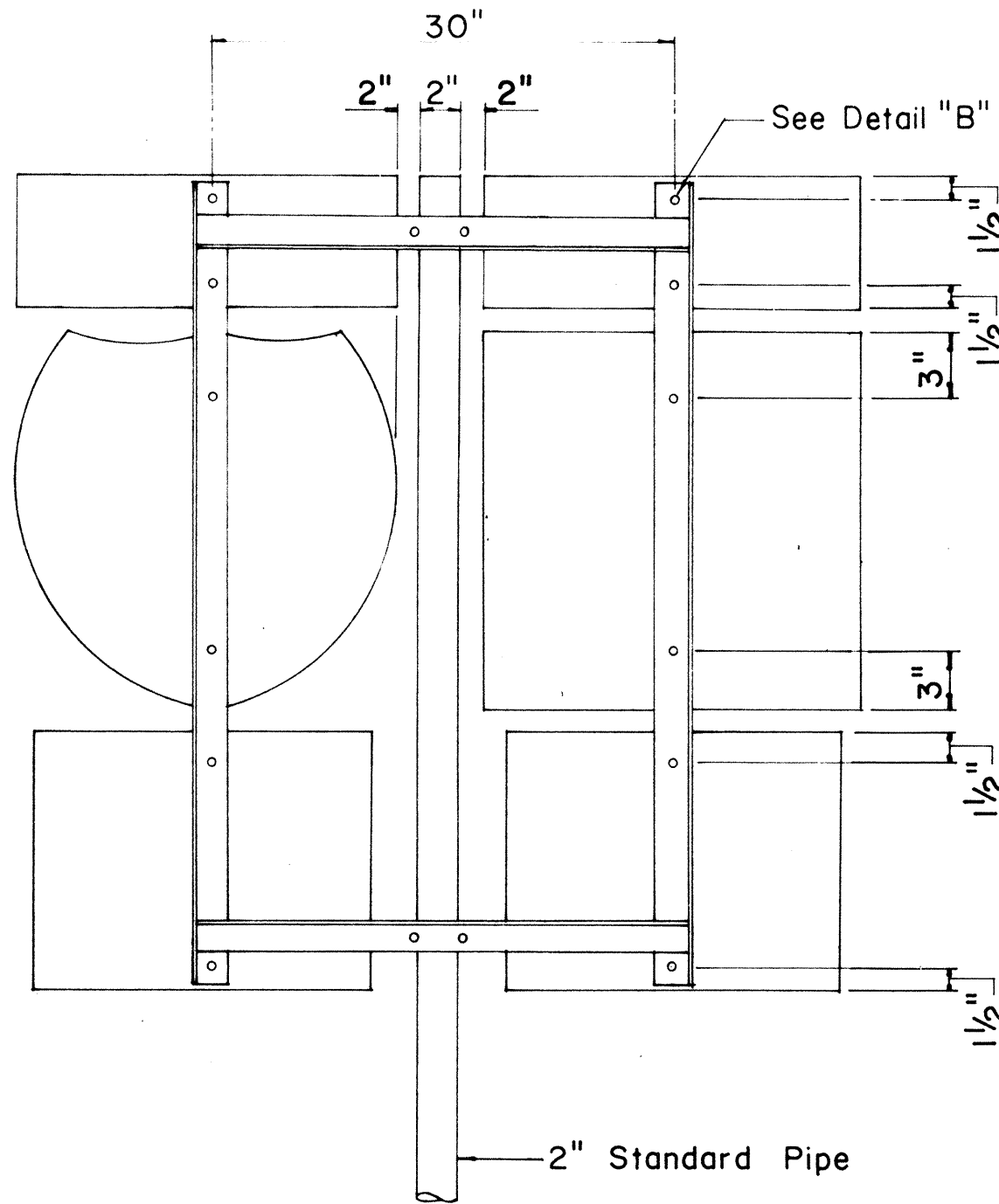
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360 A-01-80	1980	30	33



FRONT ELEVATION

TYPE "B" ASSEMBLY

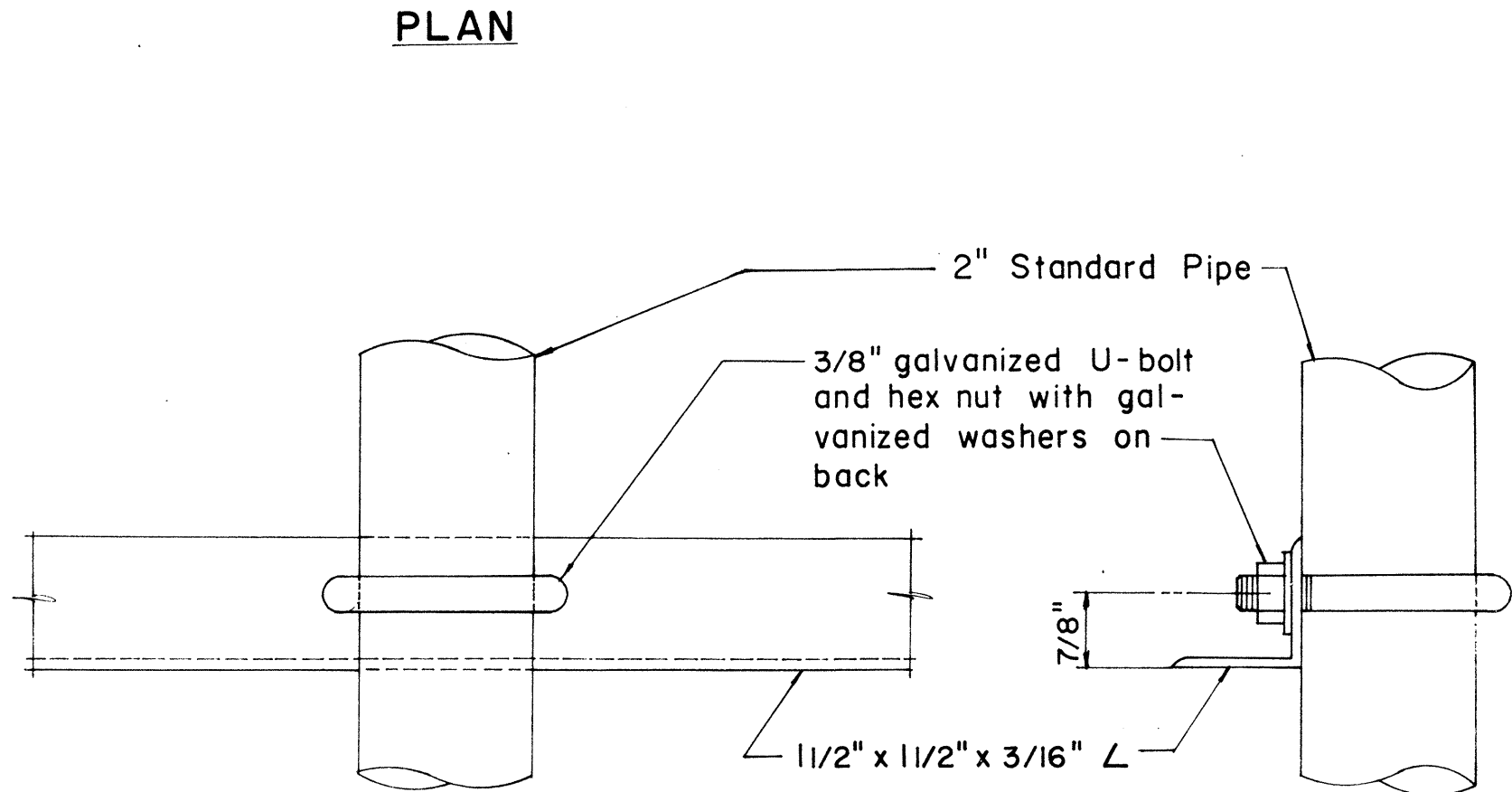
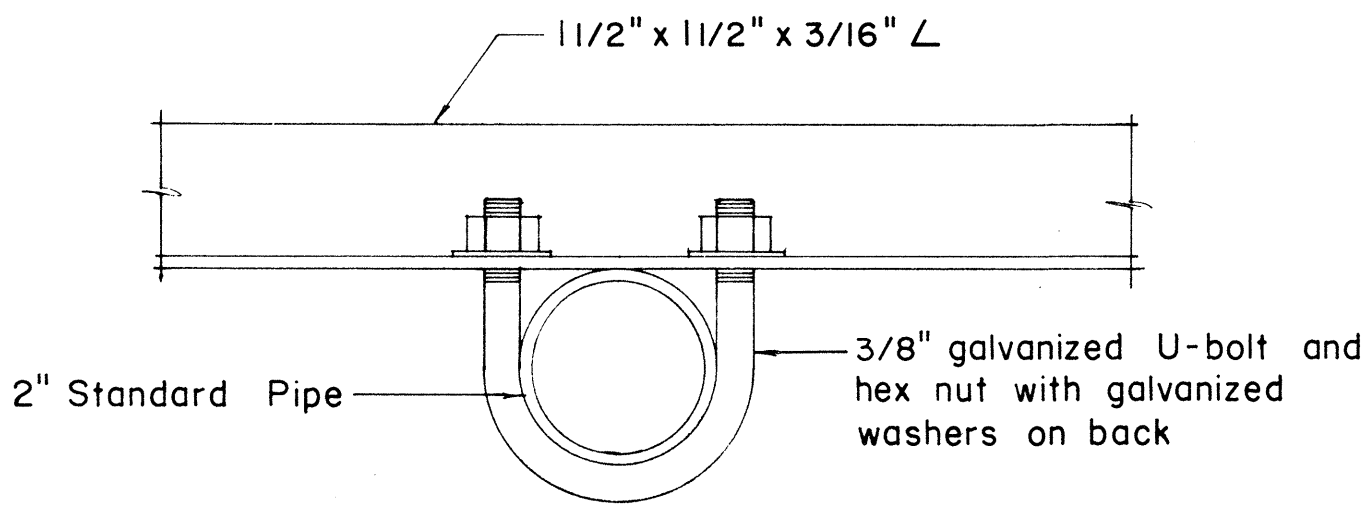
Not to Scale



REAR ELEVATION

NOTE:

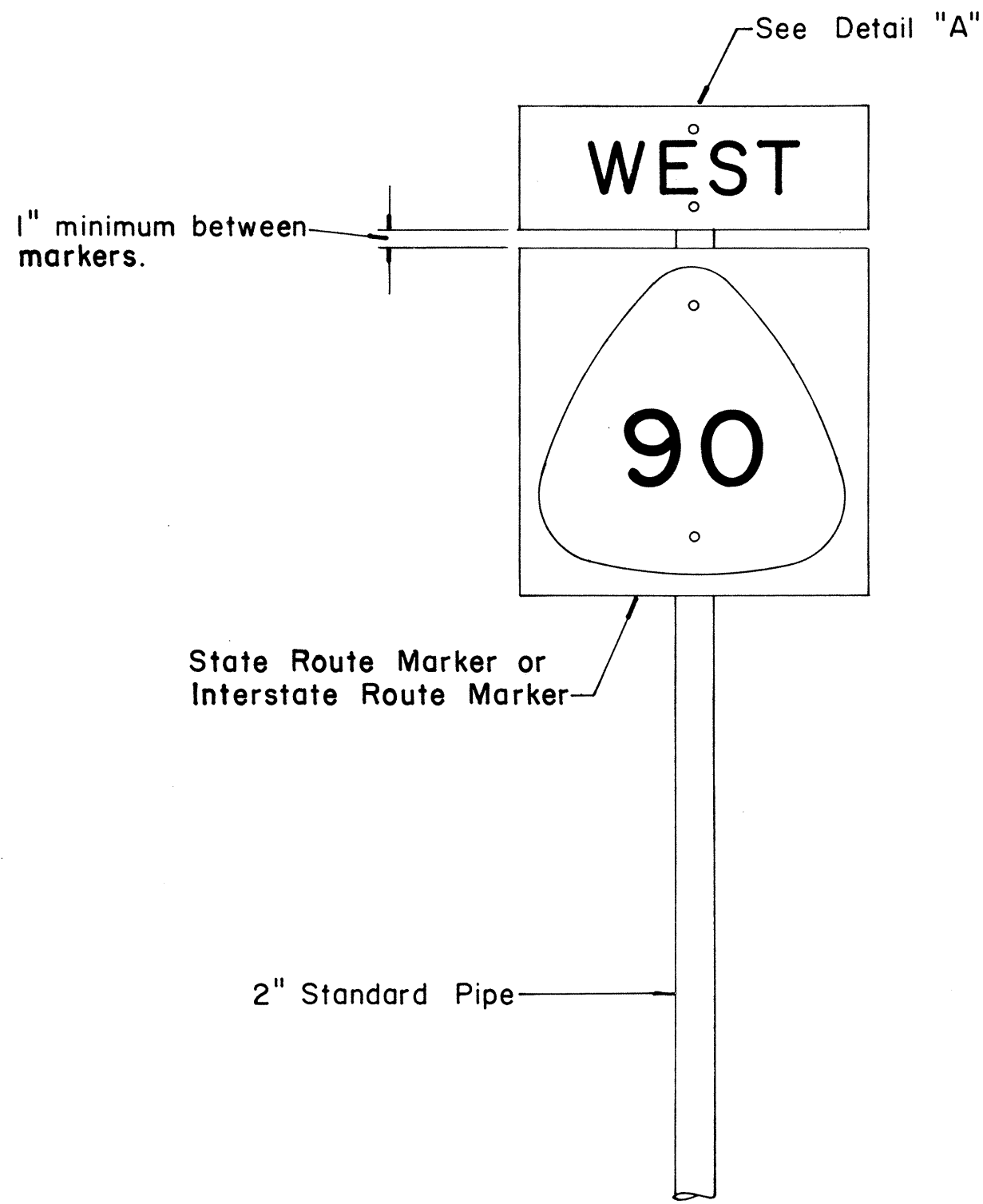
- Minimum clearance between markers shall be one inch. (Larger clearances shall be in multiples of one inch.)
- Pipe post for Type "A" & Type "B" Assembly shall be 2" Standard Pipe.



FRONT ELEVATION

DETAIL "C"

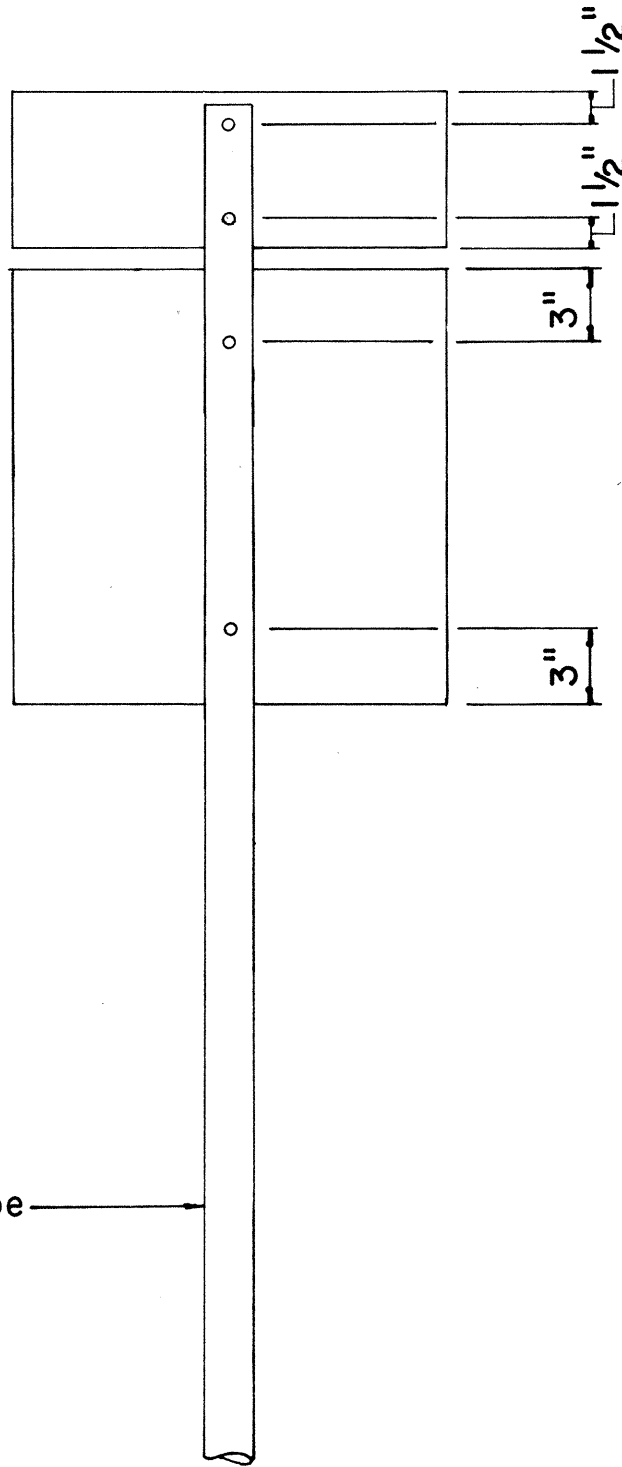
SIDE ELEVATION



FRONT ELEVATION

TYPE "A" ASSEMBLY

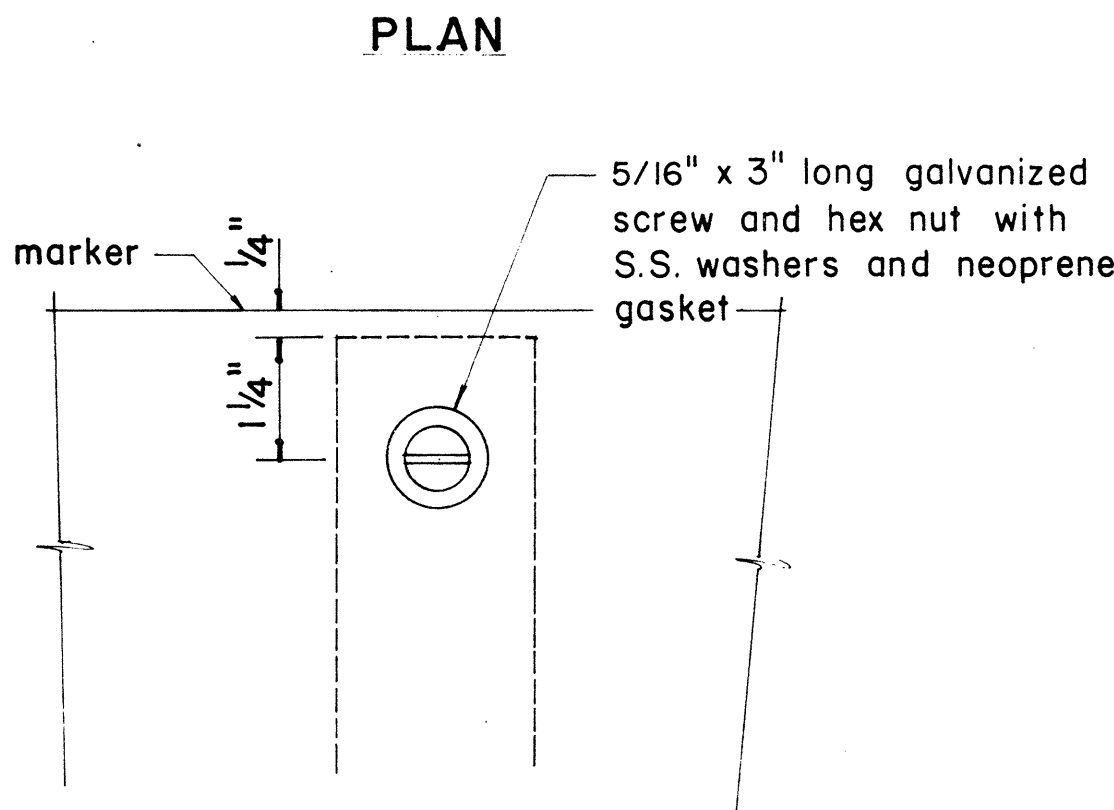
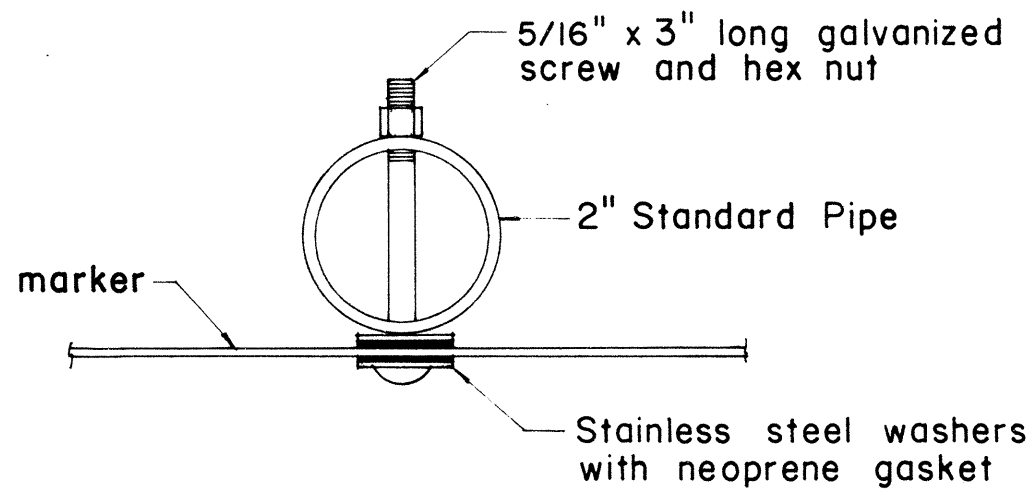
Not to Scale



REAR ELEVATION

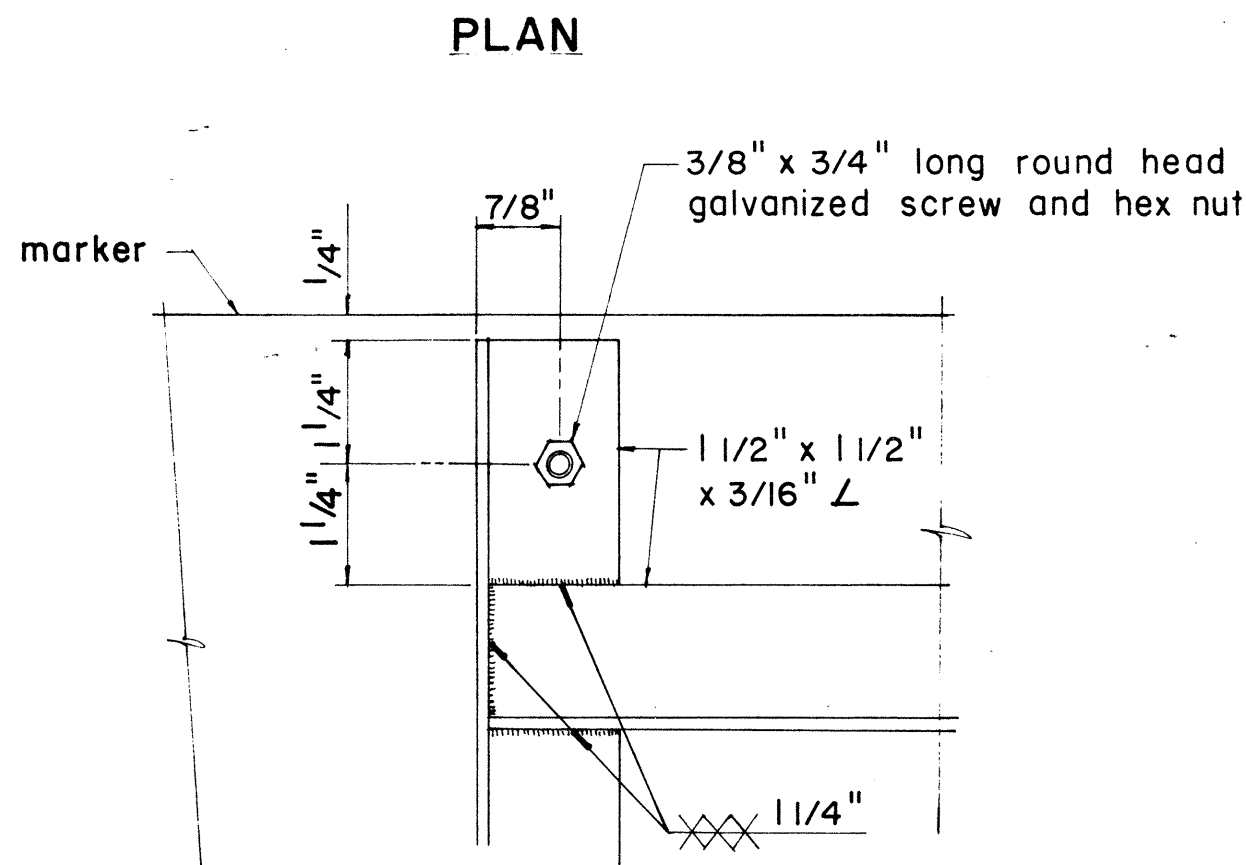
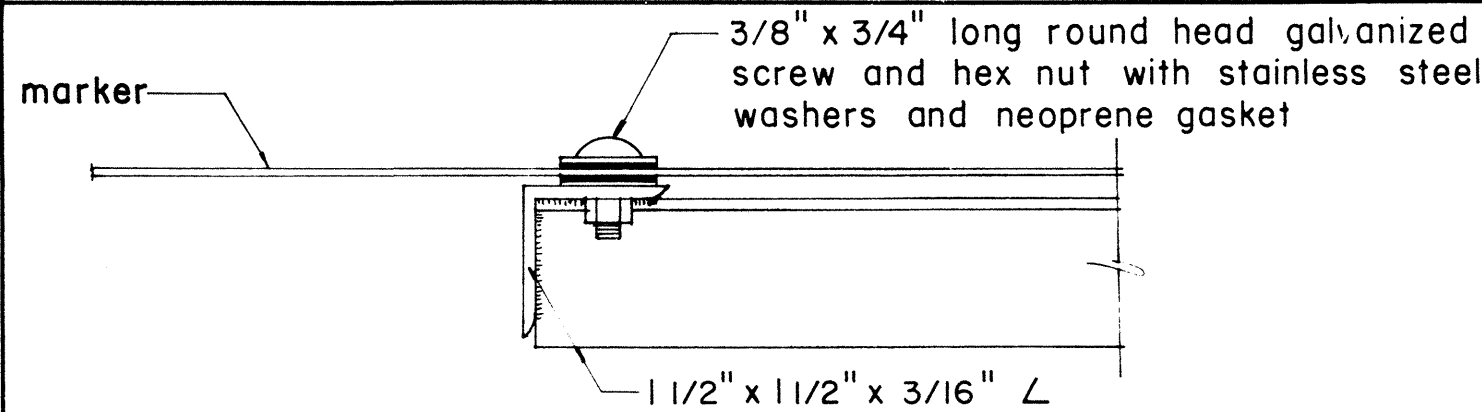
NOTE:

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



FRONT ELEVATION

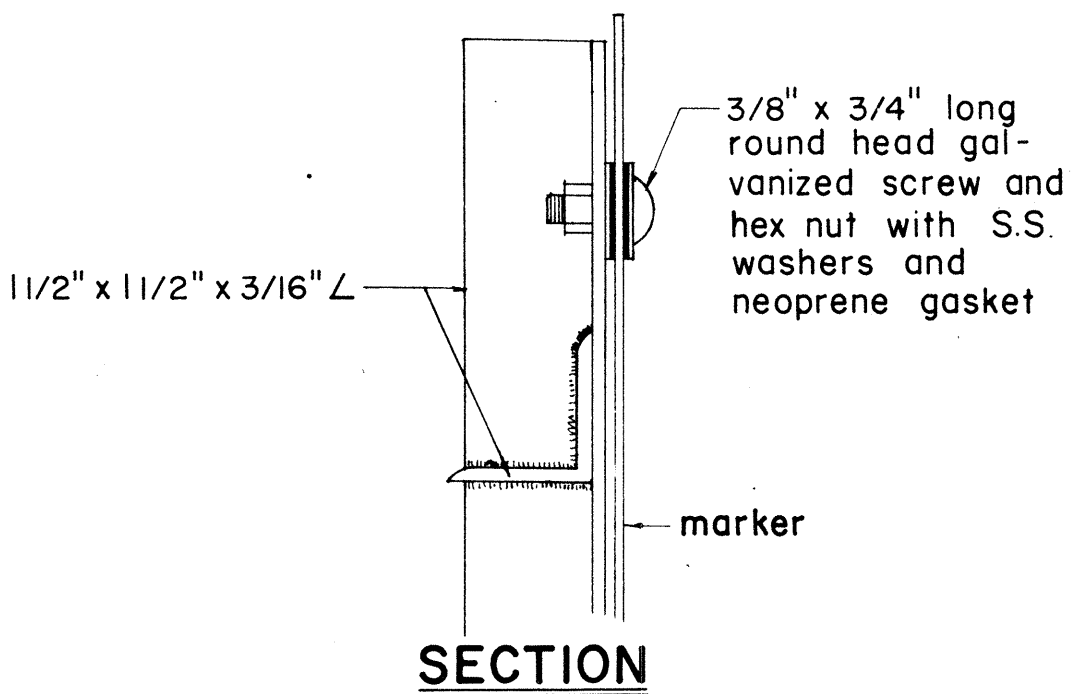
DETAIL "A"



ELEVATION

DETAIL "B"

NO.	REVISION	APPROVED BY	DATE
1	Revisions to Route Marker Assemblies.	H.T.	6/1/12



APPROVAL RECOMMENDED:

Enoch Tanaka 12/29/09
TRAFFIC ENGINEER DATE

APPROVED:

John S. Sefelt 12-30-09
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

ROUTE MARKER ASSEMBLIES

Scale: As Shown

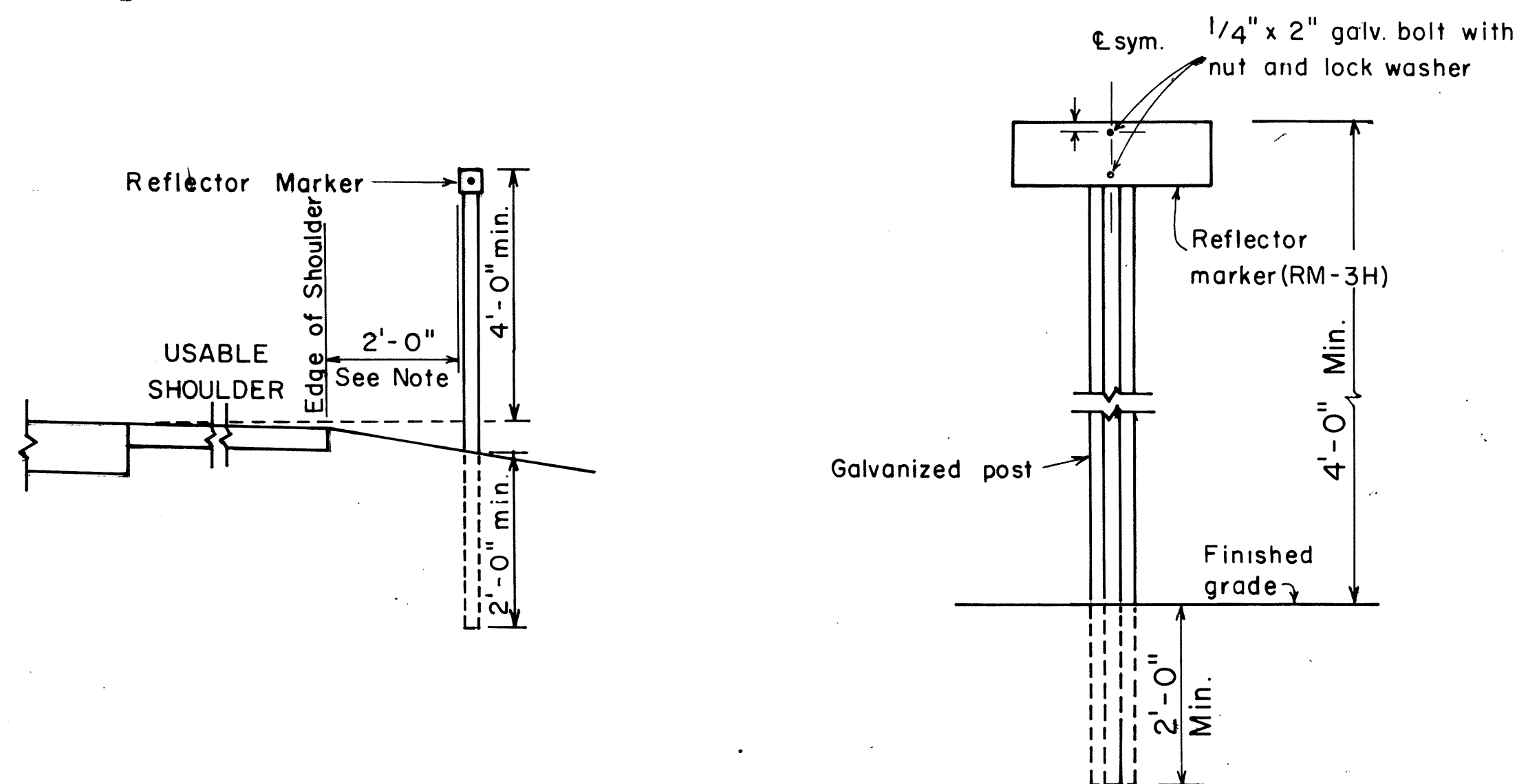
SHEET No. 8 OF 11 SHEETS DT 107

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

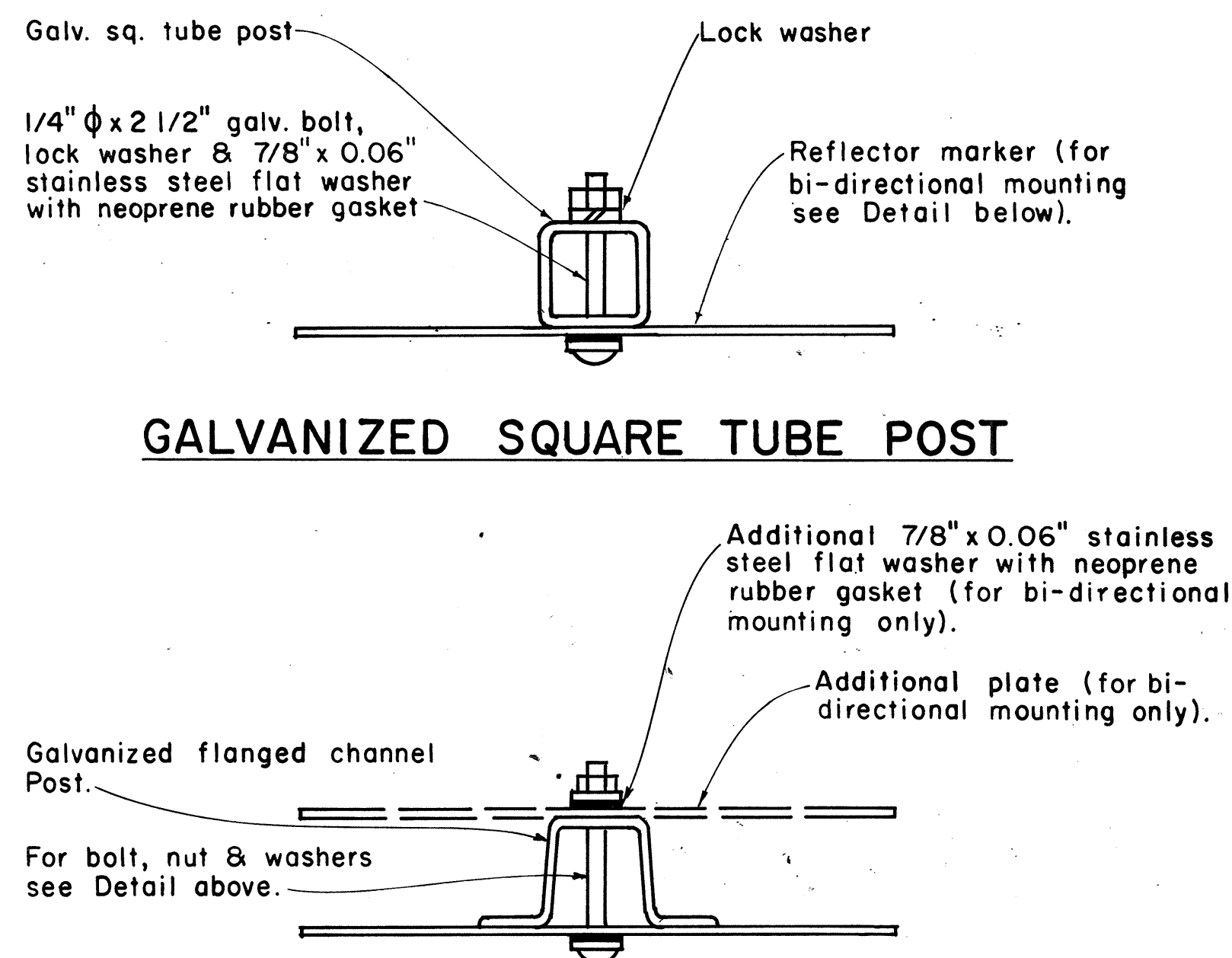
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	31	33

GENERAL NOTES:

1. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
2. (R) or (L) indicates right or left and shall be as shown on the plans.
3. Reflector markers RM-1 and RM-2 shall be:
 - a) Yellow if placed along the left edge of divided roadways, one-way roadways, and ramps in the direction of travel.
 - b) White if placed along the right edge of divided roadways, one-way roadways, and ramps in the direction of travel.
4. For reflector marker RM-9, reflective sheeting material may be used as an alternate.
5. For RM-4, the stripes shall slope downward at an angle of 45° in the direction of traffic.



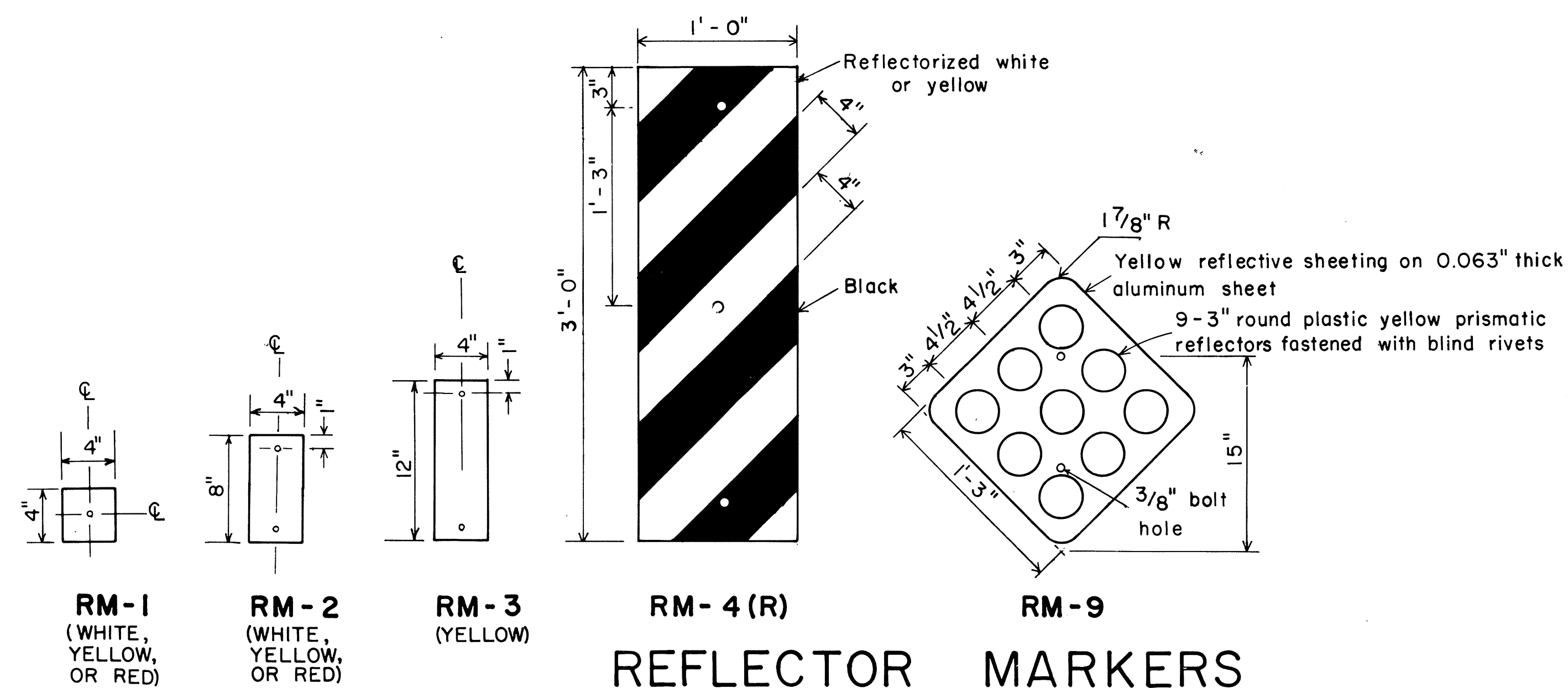
REFLECTOR MARKER MOUNTING DETAIL



GALVANIZED SQUARE TUBE POST

GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS



APPROVAL RECOMMENDED:
Enoch Tanaka 11/7/77
 TRAFFIC ENGINEER DATE
 APPROVED:
Harold S. Sakai 11/15/77
 ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Revised Mounting Details	H-1	4/23/80

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

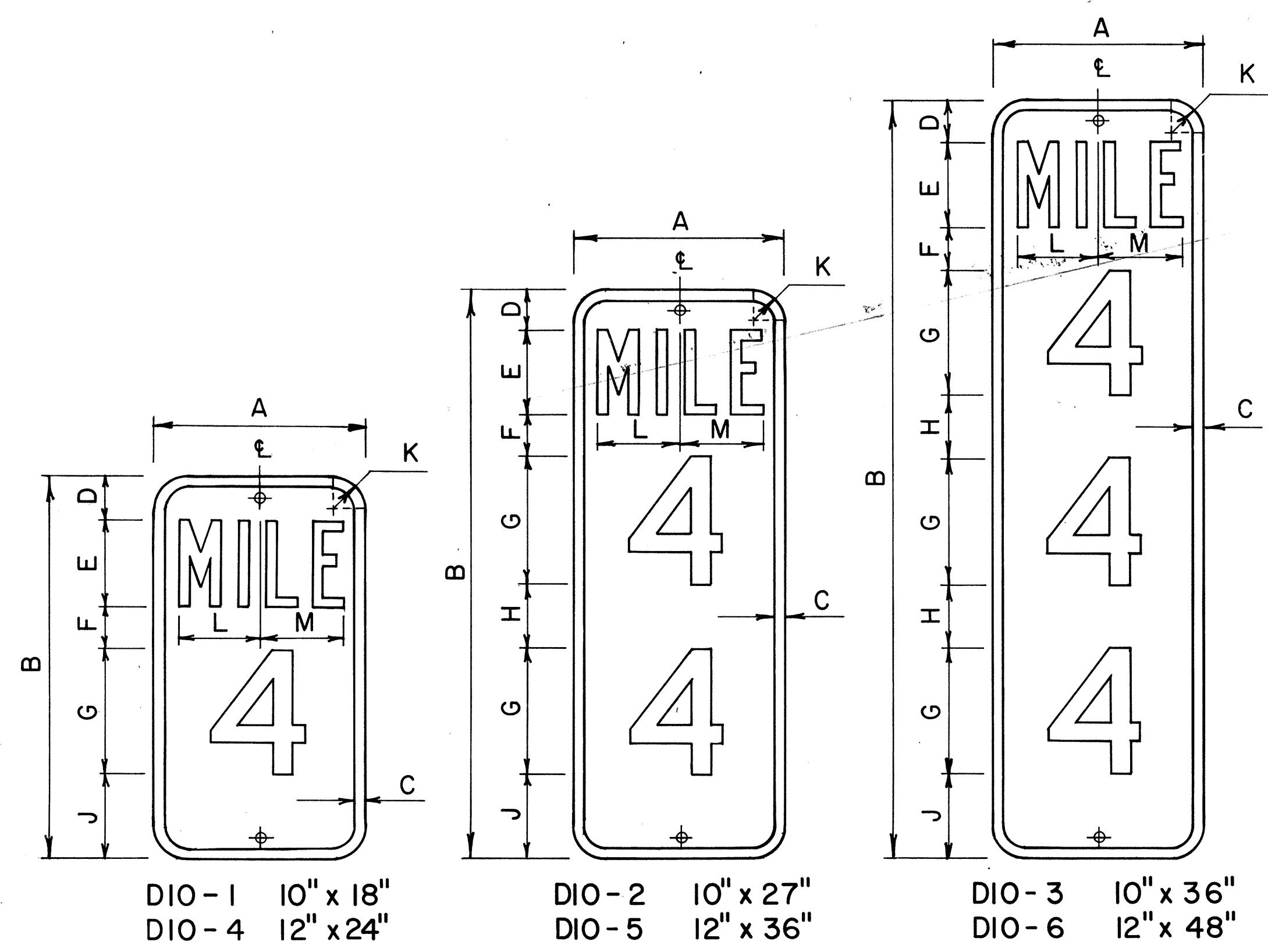
STANDARD DETAILS
MISCELLANEOUS REFLECTOR MARKERS

Not to scale
June, 1977

SHEET NO. 9 OF 11 SHEETS DT 110

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	32	33

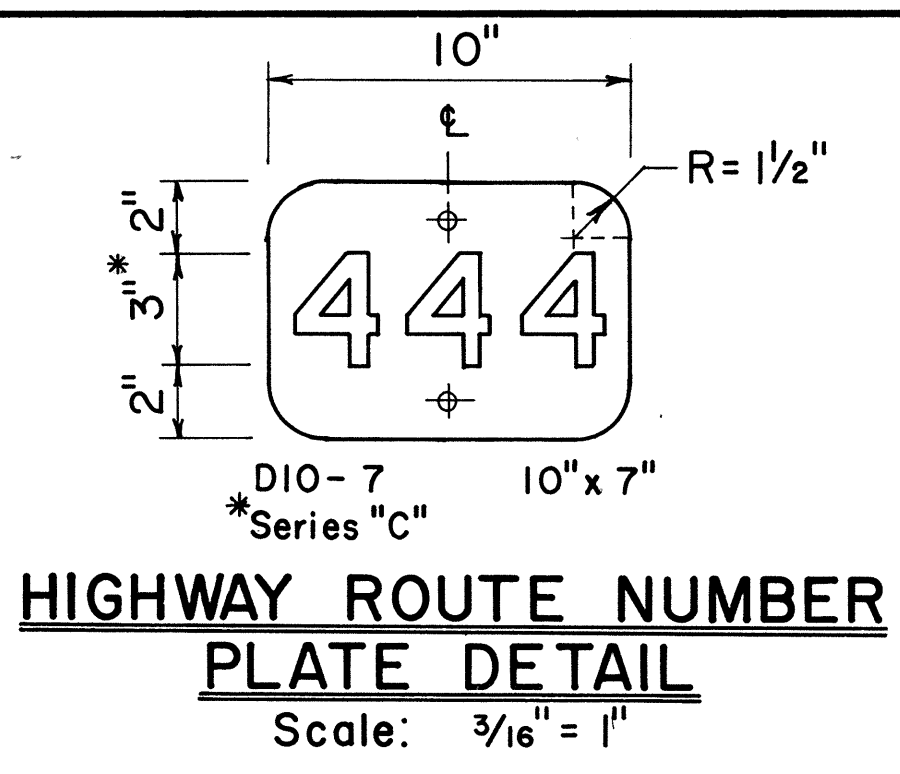
- GENERAL NOTES:**
- Milepost marker and highway route number plates shall conform to the latest editions of the following FHWA publications:
 - "Standard Alphabets for Highway Signs," and as amended.
 - "Standard Highway Signs," and as amended.
 - "Manual on Uniform Traffic Control Devices for Streets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



MILEPOST MARKER PLATE DETAILS

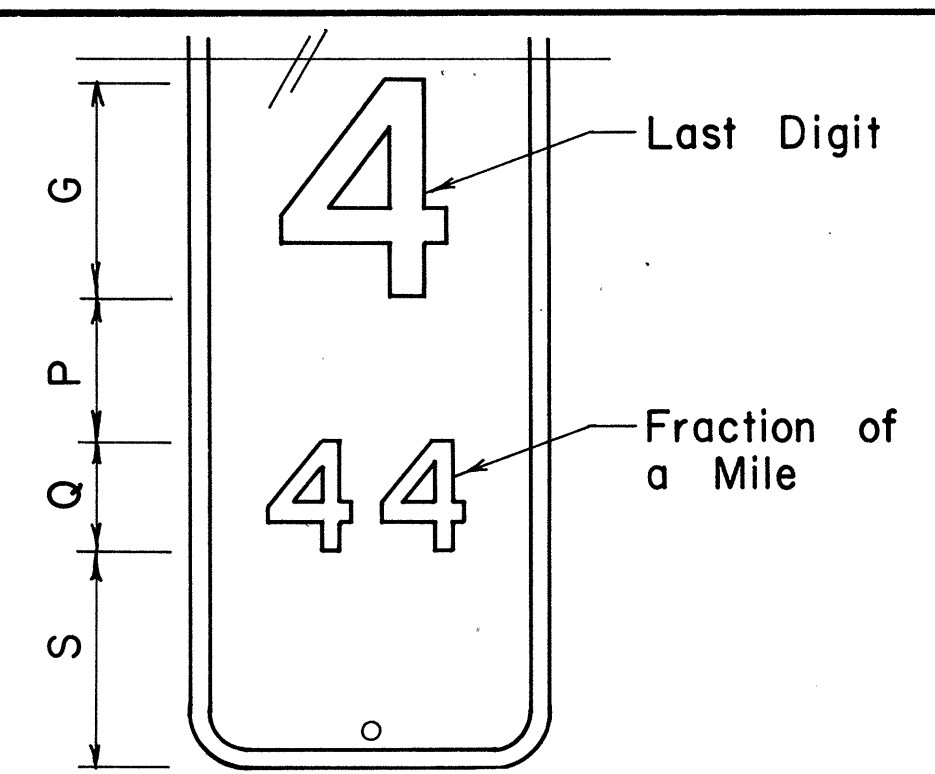
Scale: 3/16" = 1"

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



HIGHWAY ROUTE NUMBER PLATE DETAIL

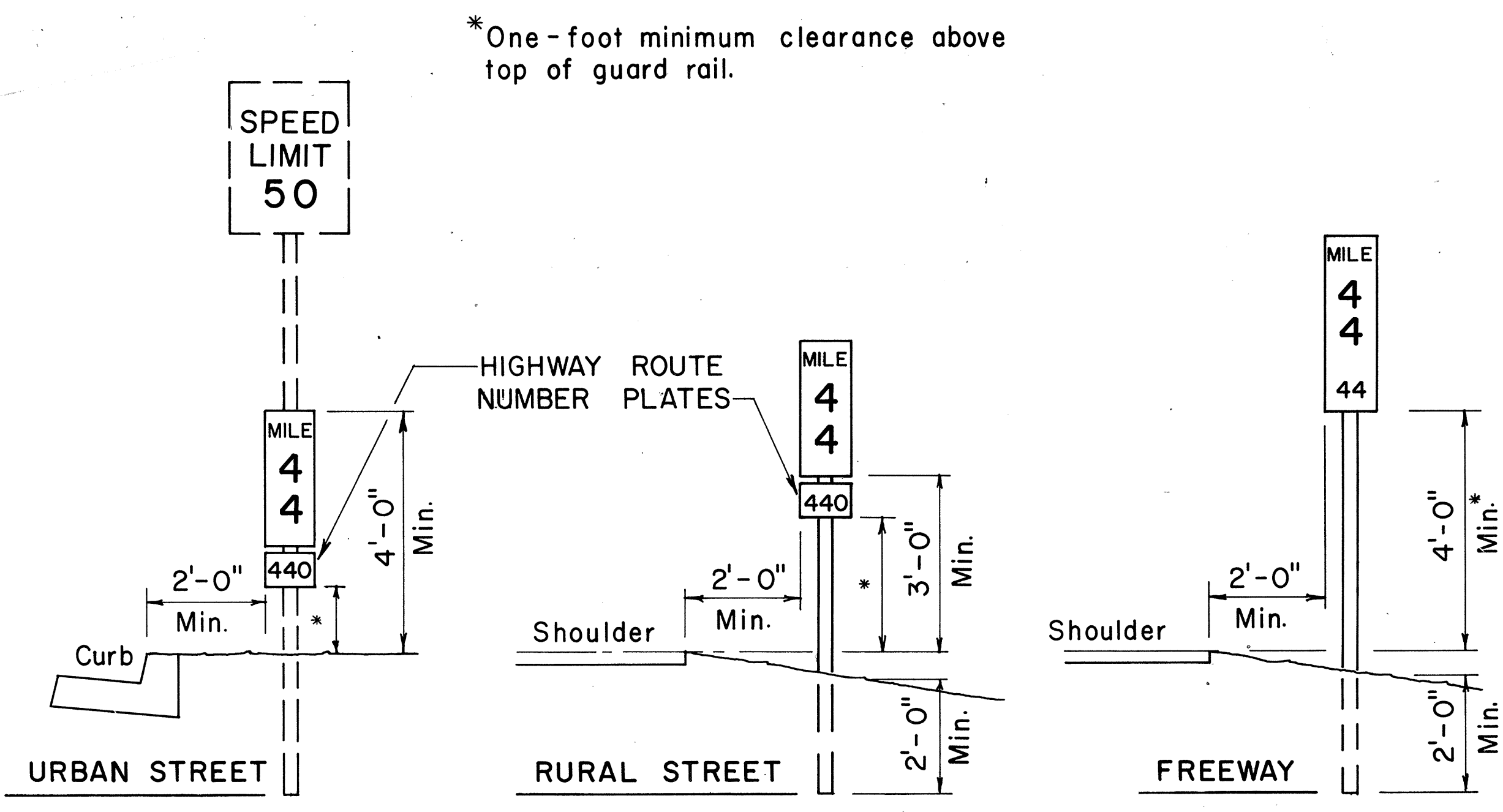
Scale: 3/16" = 1"



MILEPOST MARKER FRACTION DETAIL

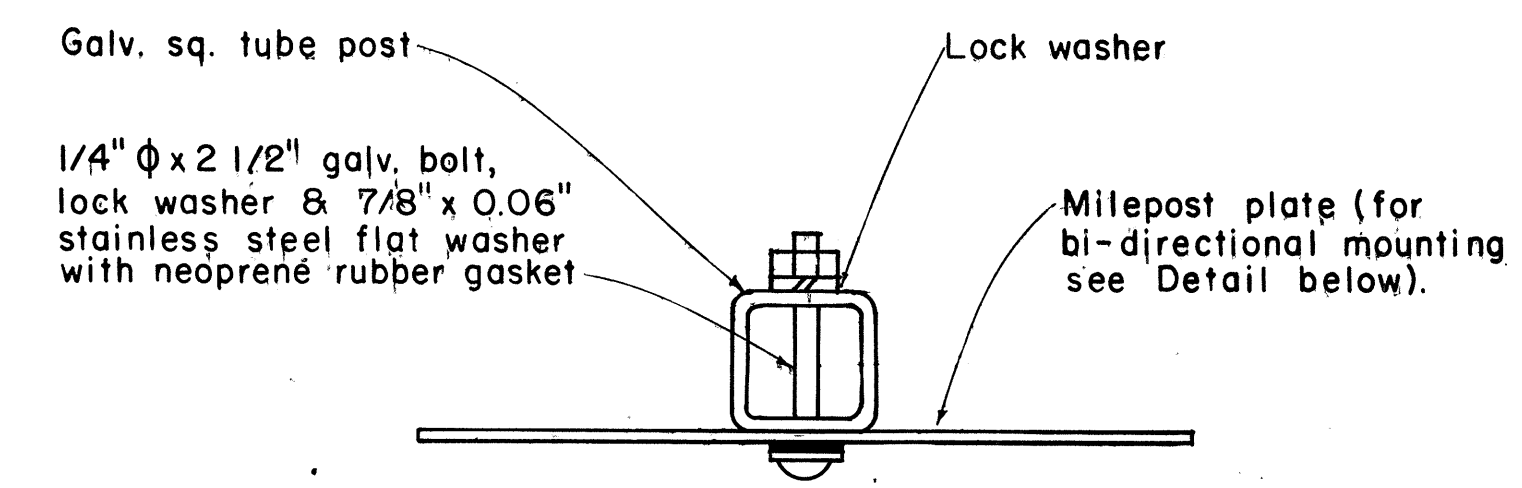
Scale: 3/16" = 1"

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

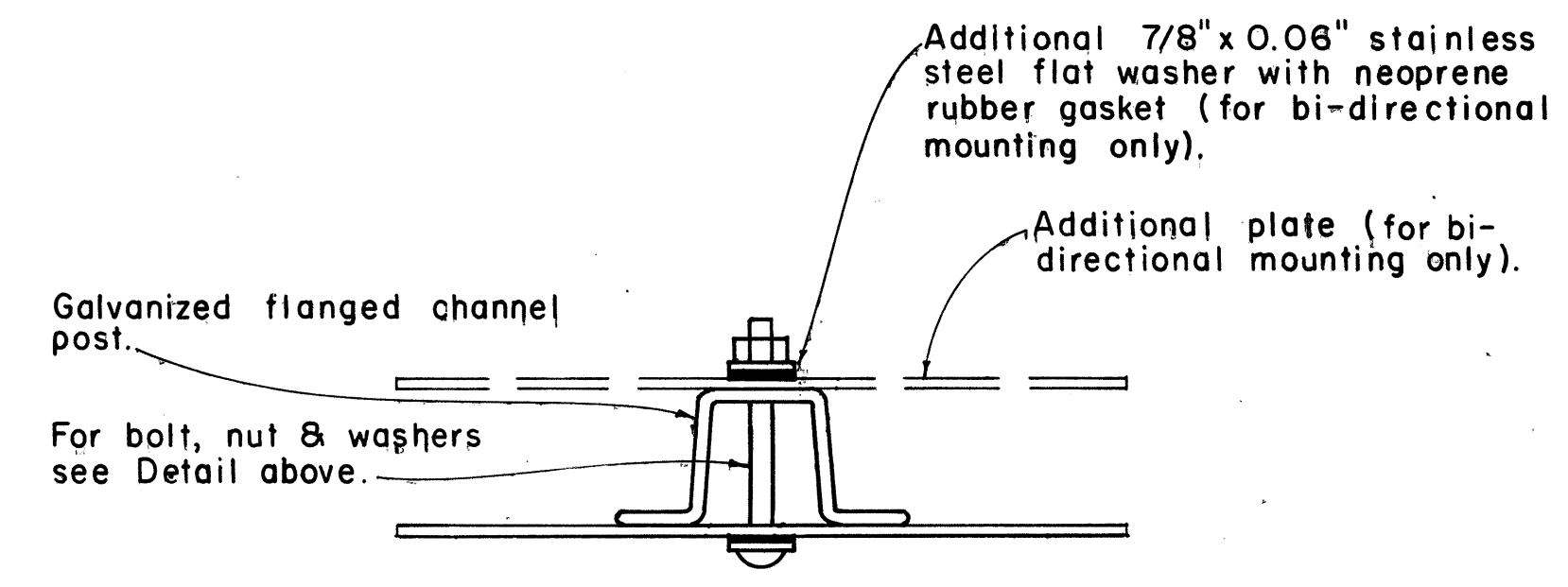


TYPICAL ROADSIDE INSTALLATION

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



GALVANIZED SQUARE TUBE POST



GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS

Scale: 1/2" = 1"

NO.	REVISION	APPROVED BY	DATE
1	Revised Mounting Details	H.T.	4/23/80

APPROVAL, RECOMMENDED:
Eishi Tanaka 1/17/78
TRAFFIC ENGINEER DATE

APPROVED:
Robert R. Sakai 1/12/78
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

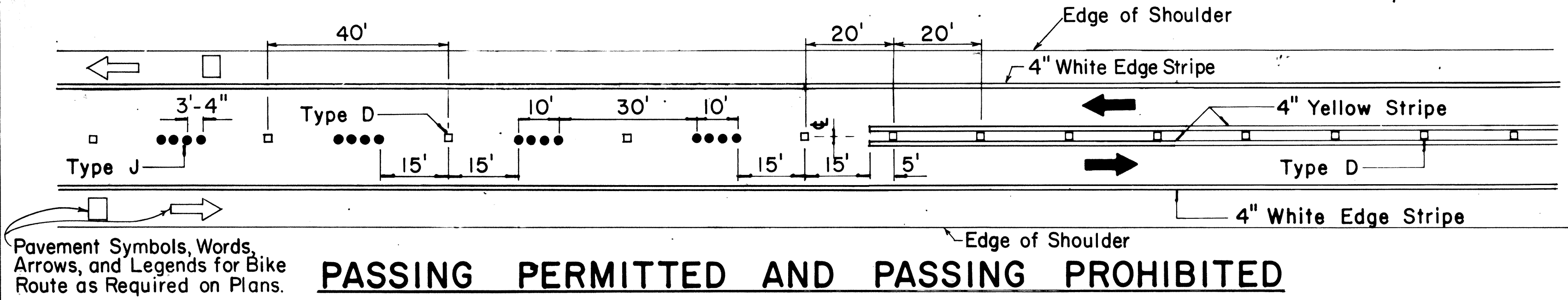
MILEPOSTS

SCALE: As Shown DATE: December, 1977

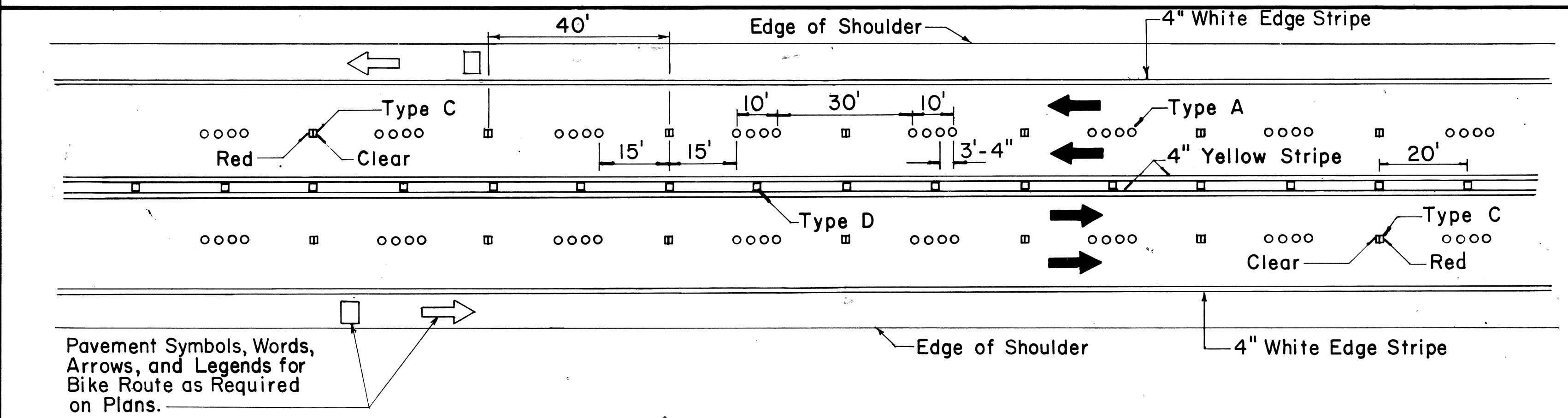
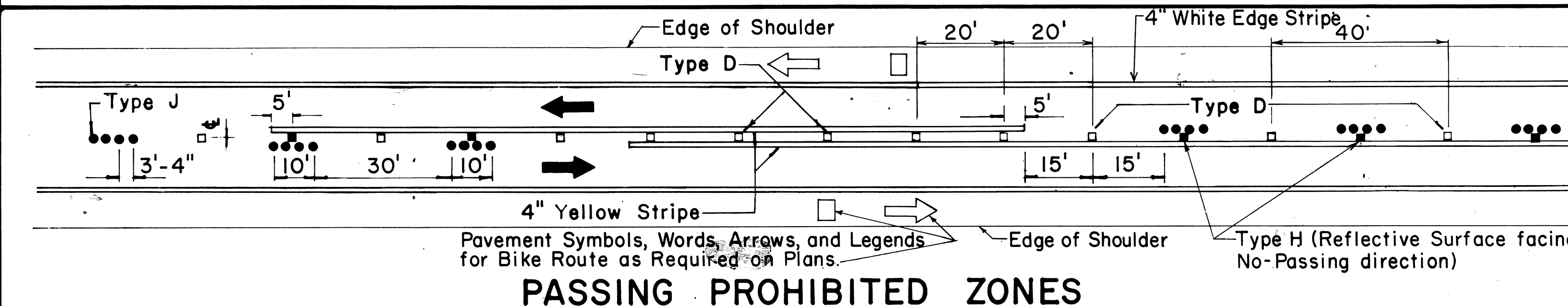
SHEET No. 10 OF 11 SHEETS DT 116

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

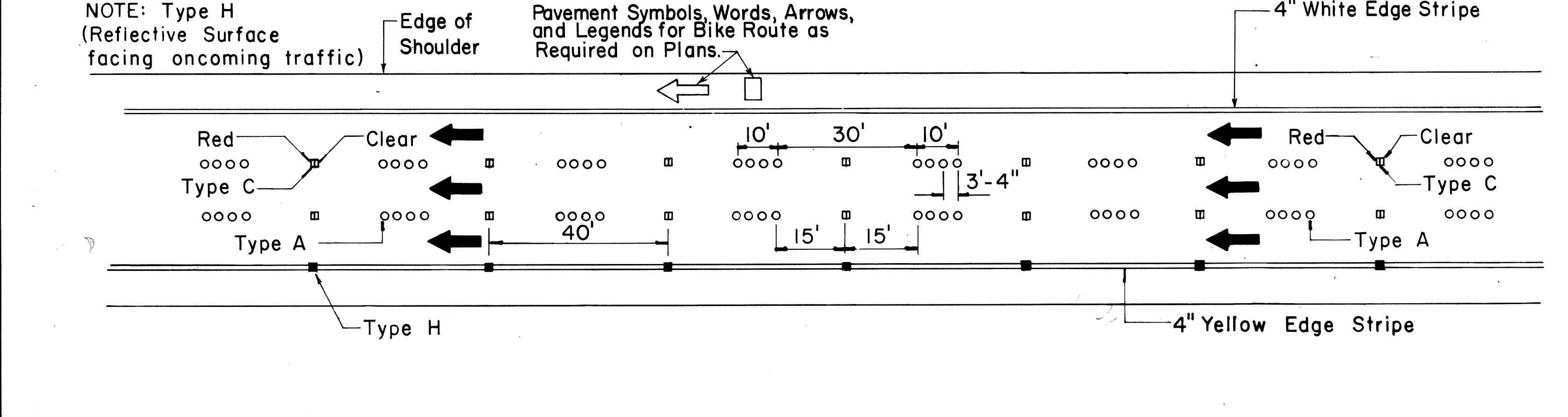
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-01-80	1980	33	33



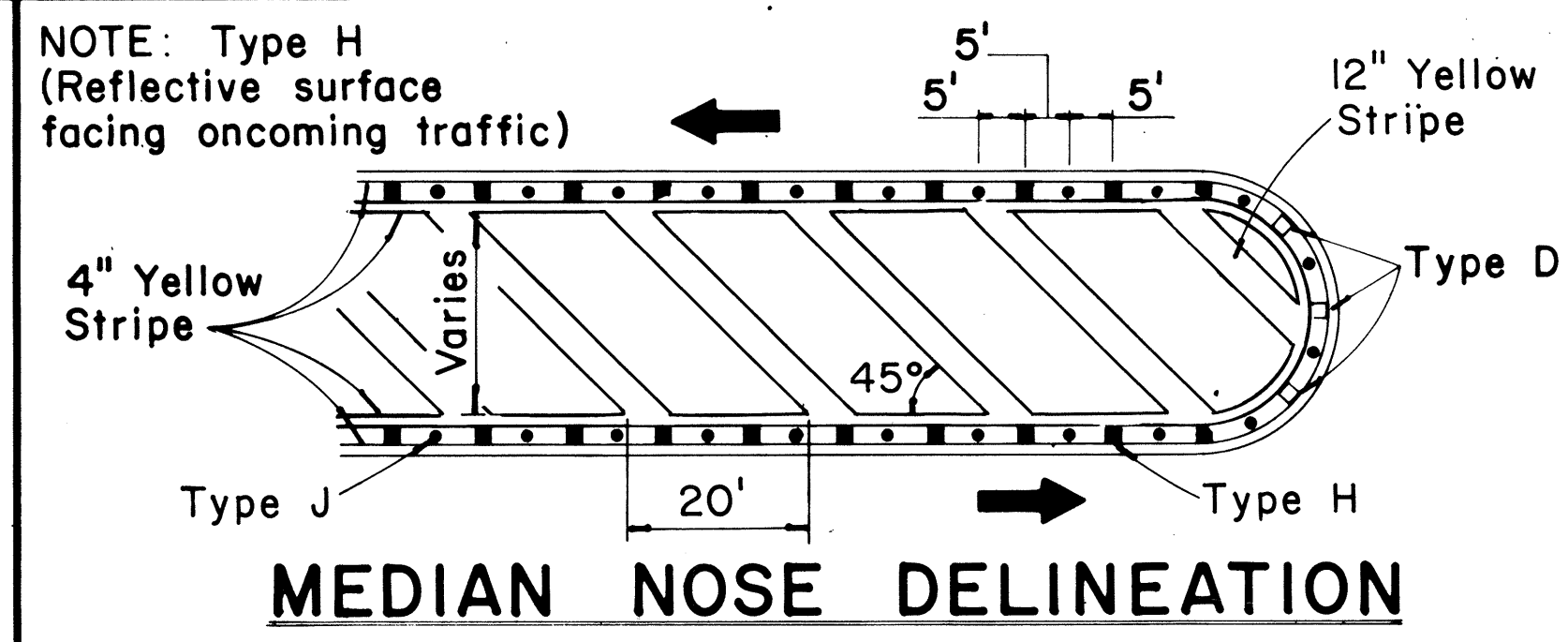
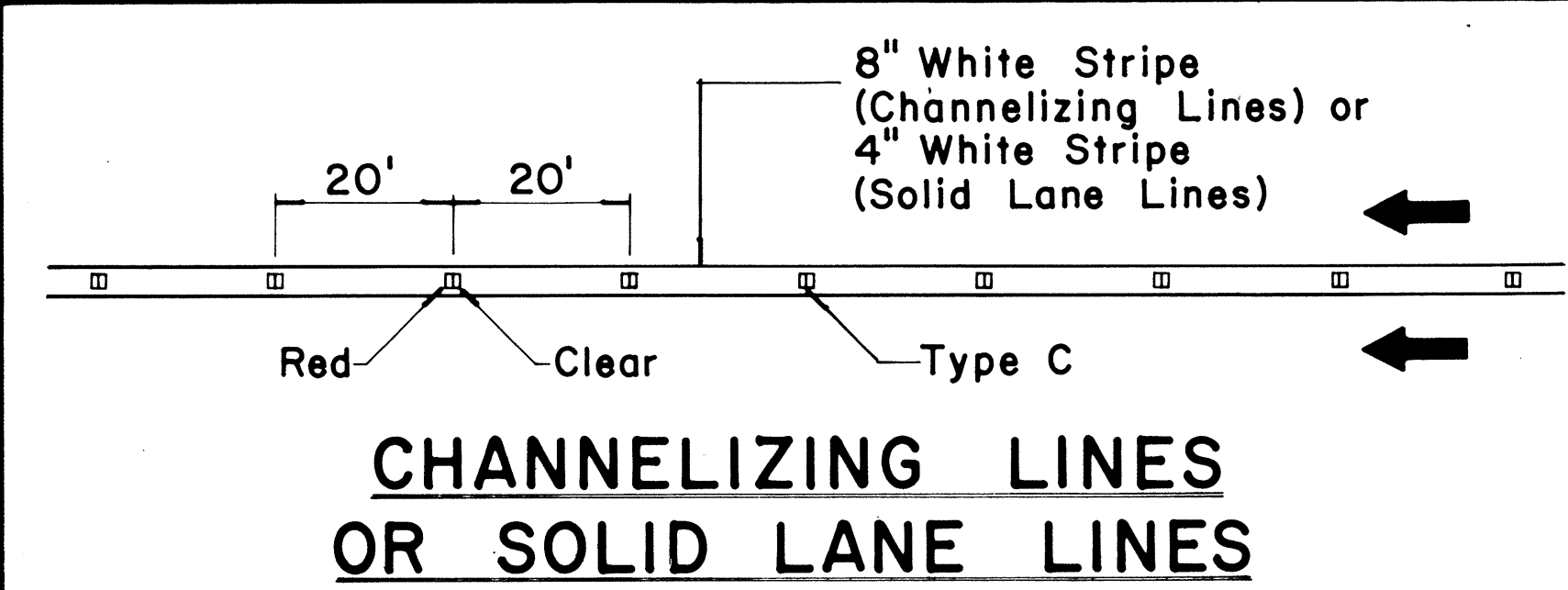
TWO - LANE



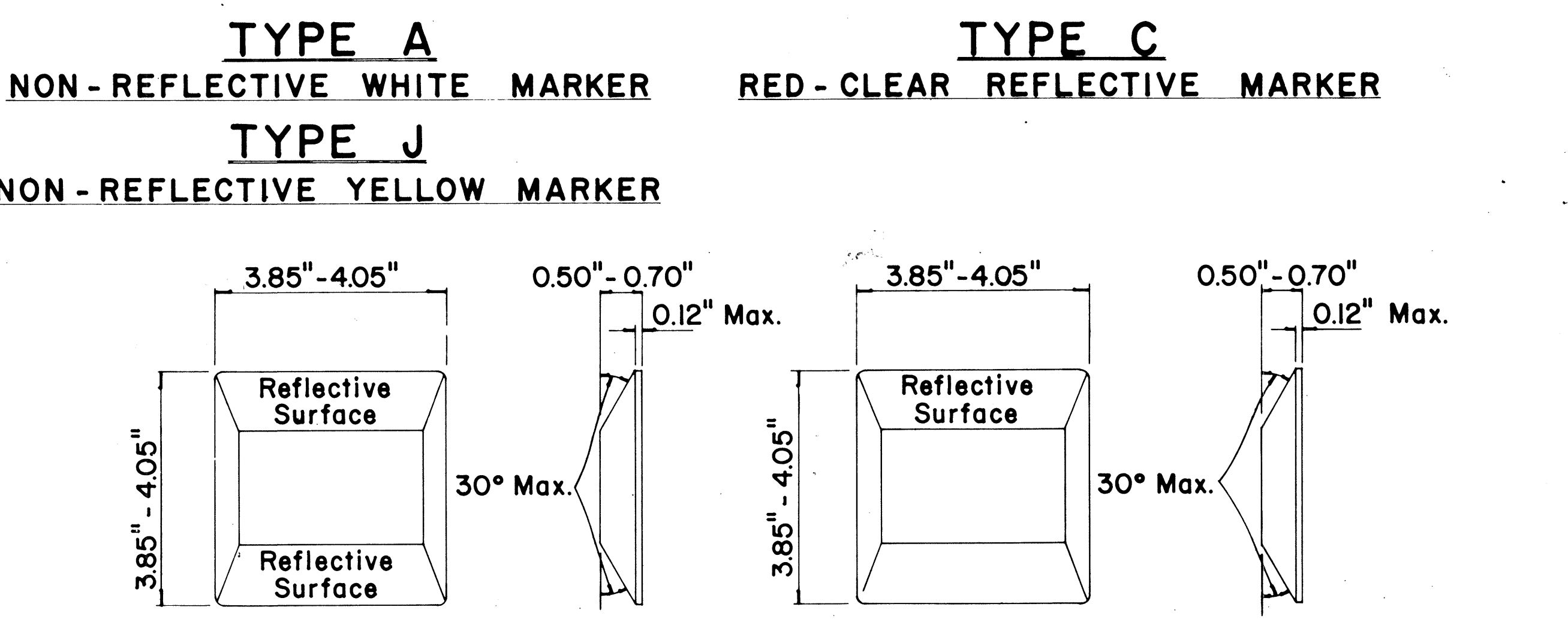
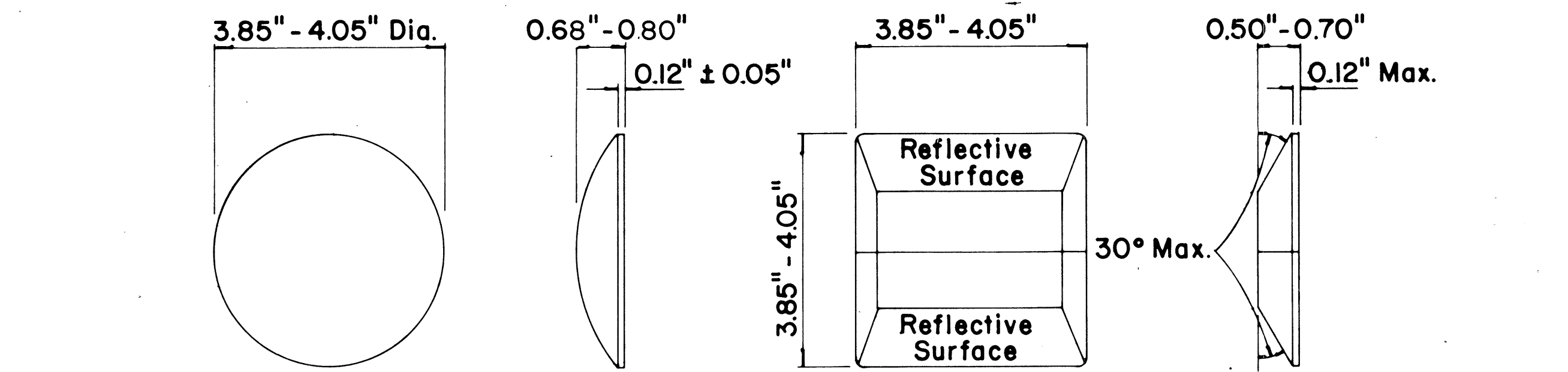
MULTI - LANE



DIVIDED HIGHWAY AND FREEWAY



MISCELLANEOUS



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:
Erick Tanaka 7/21/78
 TRAFFIC ENGINEER DATE

APPROVED:
Robert J. Delia 1/24/78
 ASSISTANT CHIEF, ENGINEERING DATE

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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS AND STRIPING

Not to Scale July 1978
 SHEET No. 11 OF 11 SHEETS DT 300

DATE	
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	