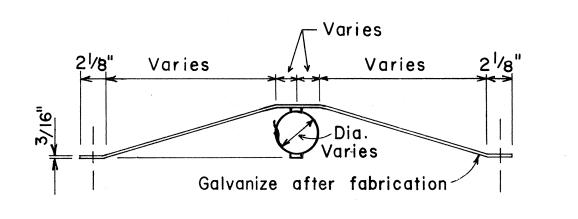


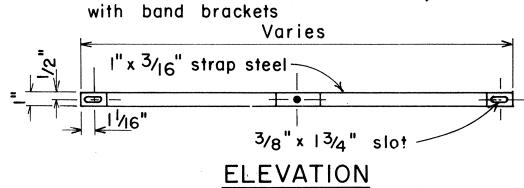
AND LATERAL LOCATION OF

TYPICAL INSTALLATION

MERGE



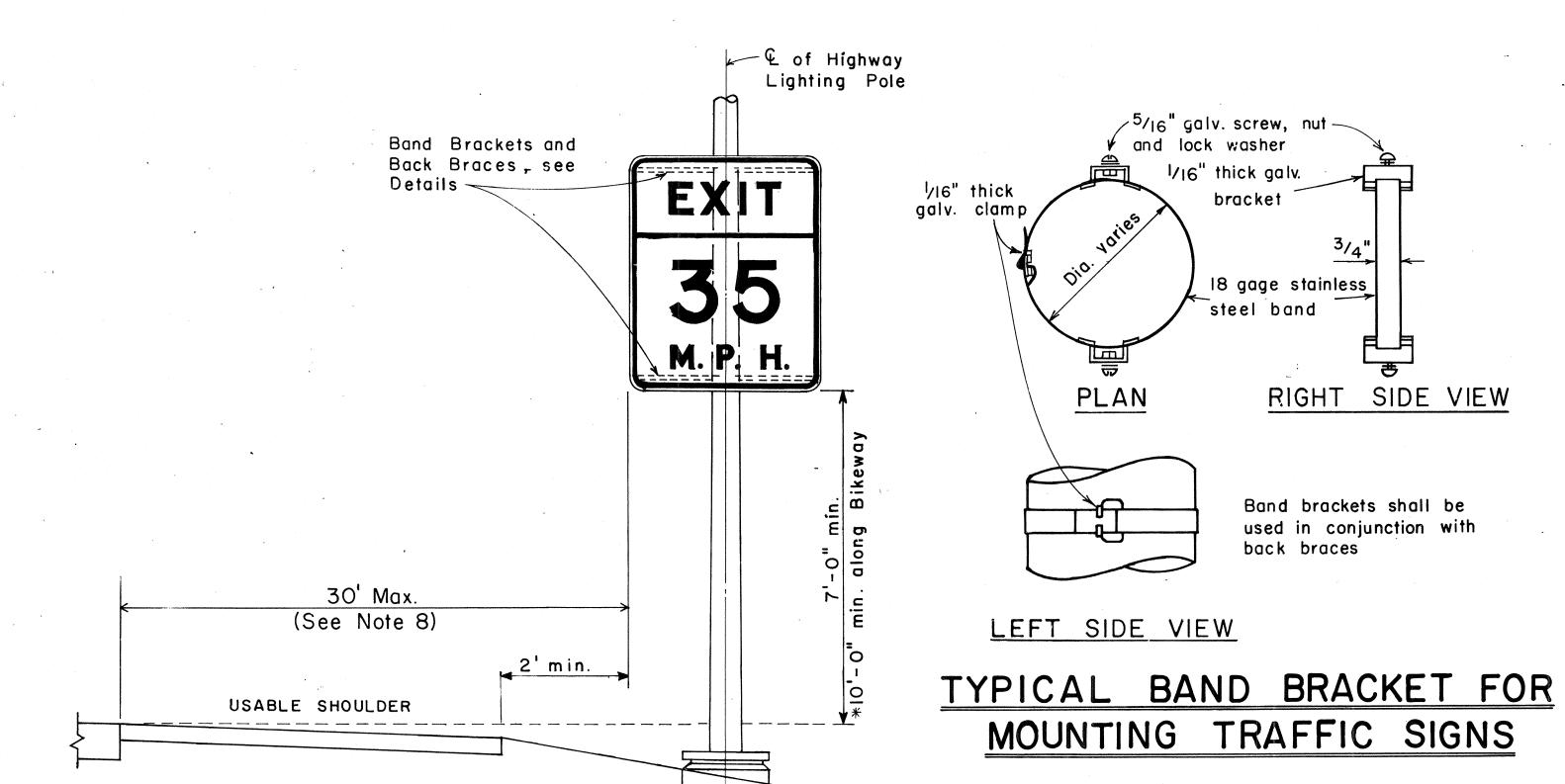
#### PLAN Back braces shall be used in conjunction

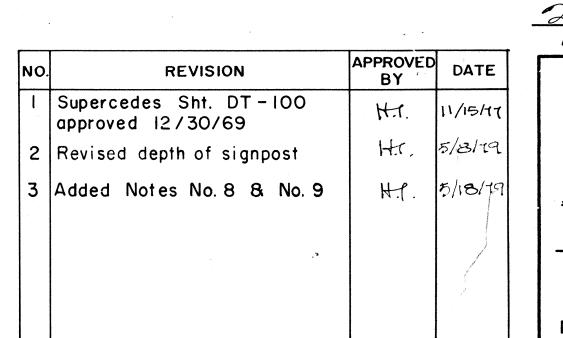


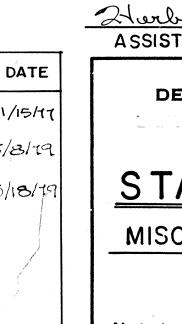
BACK BRACE DETAILS FOR BALANCED SIGN INSTALLATION

#### GENERAL NOTES

- I. Signs 48" and wider or larger than IO sq. ft in area shall be mounted on two sign posts.
- 2. All signs larger than 10 sq. ft. in area or 48" inches and wider, and mounted on other than two posts supports (i.e., on highway lighting poles) shall have at least two sets of band brackets and back braces.
- 3. All signs 28 sq. ft. in area or larger and mounted on other than two/ posts supports (i.e., on highway lighting poles) shall have at least three sets of band brackets and back braces.
- 4. Signs shall be attached to post with 5/16" galv. bolts with nuts and 7/8" x 0.06" stainless steel washers with neoprene rubber gasket.
- 5. Sign posts shall extend 31/2" above sign where required for City and County street name signs.
- 6. (R) or (L) indicates right or left and shall be as shown on the plans.
- \*7. See plans for special details.
- 8. 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.
- 9. 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 appropiate, signs for opposing directions shall be placed back to back.







APPROVED: Hurbert 2. Dal Eishi 11/15/17 ASSISTANT CHIEF, ENGINEERING STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION** 

STANDARD DETAILS MISCELLANEOUS SIGN DETAILS

Not to scale

APPROVAL RECOMMENDED

TRAFFIC ENGINEER

June, 1977

11/10/77 DATE

SHEET NO. / OF /O SHEETS DT 100

K-E ® TRACING PAPER

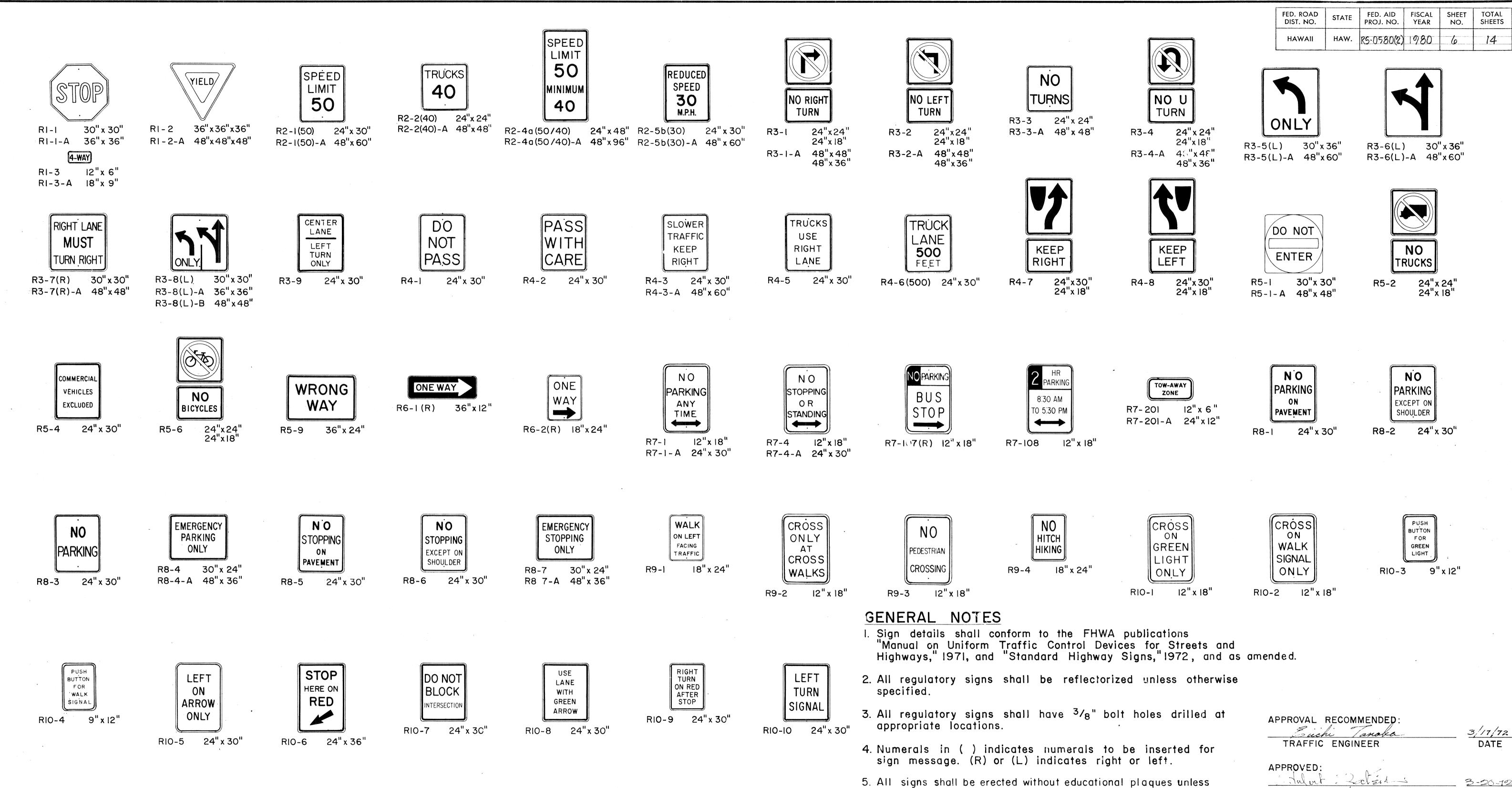
30' Max.

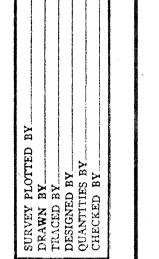
(See Note 8)

SHOULDER

2' Min.

HEIGHT





Azzzzz

MEDIAN 24" x 30"

KEEP

OFF

ROAD CLOSED 48"x 30" RII-2

ROAD CLOSED 10 MILES AHEAD LOCAL TRAFFIC ONLY

RII-3(IO) 60" x 30"

ROAD CLOSED TO THRU TRAFFIC

RII-4

60" x 30"

WEIGHT LIMIT TONS

R12-1(10) 24" x 30"

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

| NO. | REVISION                                    | APPROVED<br>BY | DATE     |
|-----|---|----------------|----------|
| l   | Supersedes Sht. DT 101<br>Approved 12-30-69 | H.(.           | 3/20/12  |
| 2   | Revised General Note 1                      | H.1.           | 10/16/14 |
| 3   | Added General Note 5                        | 14.7           | H,/3/17  |
|     |   |                |          |
|     |   |                |          |
|     |   |                | * .      |
|     |   |                |          |

2 Zatzil

ASSISTANT CHIEF, ENGINEERING

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

STANDARD DETAILS REGULATORY SIGNS

NOT TO SCALE

SHEET No. 2 OF 10 SHEETS DT 101

DATE

SHEETS



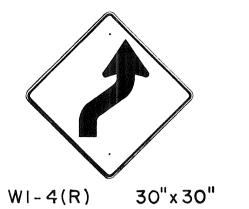
WI-I(R) 30"x30" WI-I(R)-A 48"x48"



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

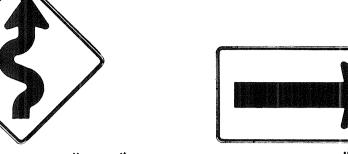


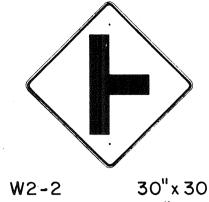
WI-3(R) 30"x30" WI-3(R)-A 48"x48"



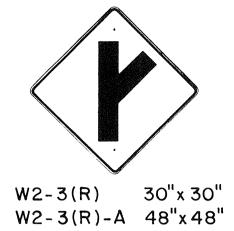
WI-4(R)-A 48"x48"

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





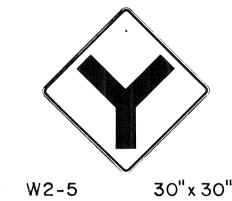
30"x 30" 48"x 48"



30"x30" W2-4

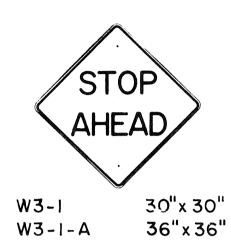
W2-4-A

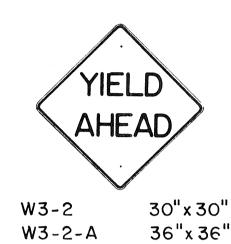
48"x48"

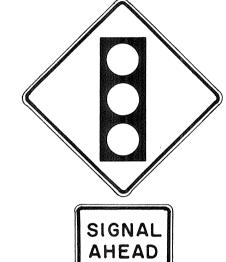


W2-5-A

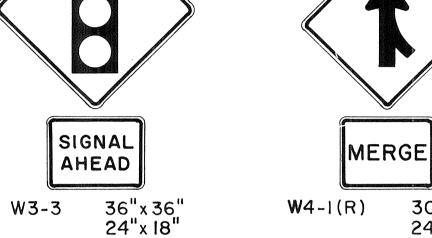
48"x 48"



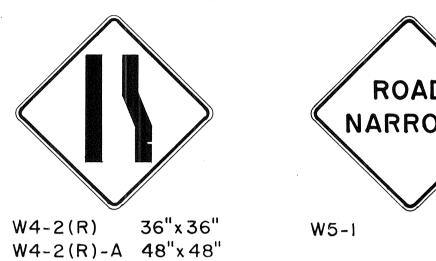




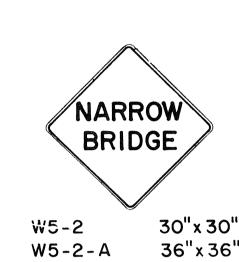
USE LOW GEAR



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





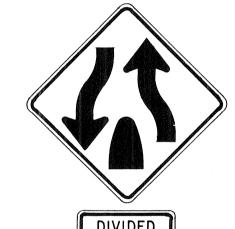


W2-2-A









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



**3**0"x 30" 24"x 18" W6-3



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

JA.

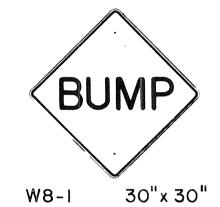
BIKE

XING

WII-I-A 36"x36" 24"x18"

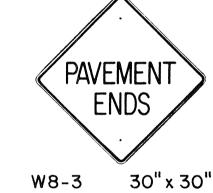
30"x 30'

24"x 18"

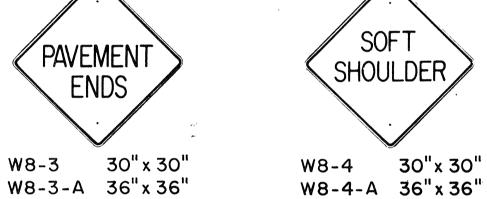


W8-I-A 36"x 36"





GENERAL NOTES





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



W9-I(R) 30"x 30" W9-I(R)-A 36"x 36" W9-I(R)-B 48"x48"

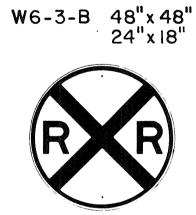


W9-2(L) 36" x 36" W9-2(L)-A 48" x 48"

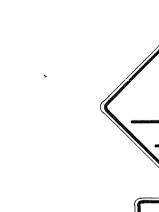
W12-2(12'-6") 36" x 36" 24" x 18"



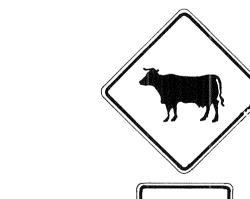
W6-3-A 36"x 36" 24"x 18"

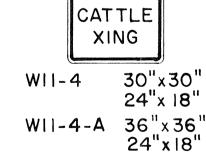


WIO-1 36" Diameter



PED XING WII-2 30"x 30" 24"x 18" WII-2-A 36"x36" 24"x18"



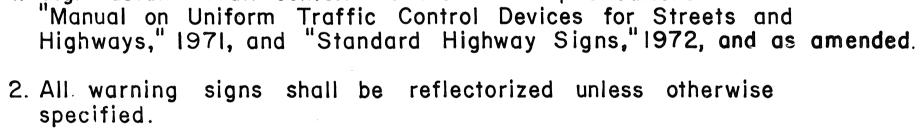




MACHINERY WII-5



30"x30" 24"x18" WII-5-A 36"x36" , 24"x18"



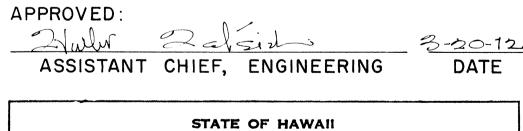
3. All warning signs shall have 3/8" bolt holes drilled at appropriate locations.

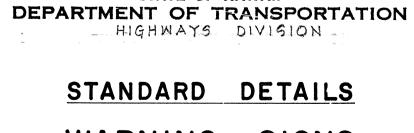
I. Sign details shall conform to the FHWA publications

- 4. Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- 5. Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized.

| NO. | REVISION ,                                  | APPROVED<br>BY | DATE               |
|-----|---|----------------|--------------------|
| l   | Supersedes Sht. DT 102<br>Approved 12-30-69 | 11.70          | 3/20/12            |
| 2   | Revised General Note I                      | H.1.           | 10/16/14           |
| 3   | Revised General Note 5                      | Mt             | 9-16-75<br>9-14-76 |
| 4   | Revised General Note 5                      | H.T.           | 9-14-760           |
| 5   | Added Note I                                | H1.            | 11-9-77            |
|     |   |                |                    |
|     |   |                |                    |
|     |   |                |                    |



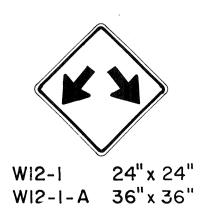




WARNING SIGNS

NOT TO SCALE

SHEET No. 3 OF 10 SHEETS DT 102



12'-6" LOW WI2-I-B 48"x 48" CLEARANCE

25 M.P.H. WI3-1(25) 18" x 18" WI3-I(25)-A 24"x 24"



W11-1

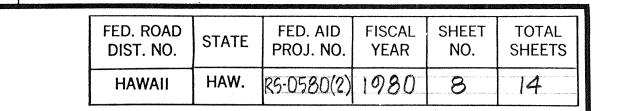
RAMP 25 M. P. H. W13-3(25) 48"x 60"

DEAD PASSING 30"x 30" W14-3 36" x 48" x 48" W14-1

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

WAST OFFICE OF

3/11/12 DATE



ALL WAY RI-4 18"x 6" REDUCED SPEED 35 AHEAD

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

R2-10 24"x 30"

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

> ONLY 24"x36" R3-9b

CENTER

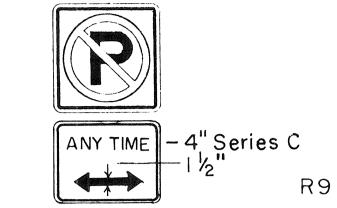
LANE



R7-107(R) 12" x 24"



R7-8 12"x18" R7-8-A 24"x30"



24" x 24" 2**4**" x 18" R8-3a

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

U

RI6-6 24"x 30"

3" Series C

> 4" Series E

-8" Series F

NO PED

R8-3a-A 48"x 48"

UNLICENSED

VEHICLES

BICYCLES, CYCLES UNDER 5 H P,

PEDESTRIANS

Streets and Highways," and as amended, 2. All signs shall be reflectorized with reflective

of the following FHWA publications:

General Notes

amended.

sheeting, unless otherwise specified. 3. All signs shall have  $\frac{3}{8}$ " bolt holes drilled at

b. "Standard Highway Signs," and as amended,

c. Manual on Uniform Traffic Control Devices for

I. Sign details shall conform to the latest editions

a. "Standard Alphabets for Highway Signs," and as

appropriate locations.

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

5. Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized with reflective sheeting.

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

USE -> CROSSWALK

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

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

NO TURN ON RED

RIO-IIa 24" x 30"

TURN RIGHT CAUTION

RI6-I 24"x30"

ANY TIME 4" Series C

NO - 4" Series D - LEFT - 3" Series D - TURN - 2" Series D - RED - 3" Series D -NO RIGHT TURN ON RED RI6-3 18"x 24"

RI6-4 18"x 24"

KEEP OUT ) FREEWAY RI6-5 36"x 42"

MOTOR-DRIVEN - 8" Series F 4" Series B **CYCLES** TURN PROHIBITED 5" Series D RI6 -7 24" x 30"

W17-1(L) 60"x60"

36"x 36" W3 - Ia 24 x 18" W3-la-A 48"x48" 24"x 18"

STOP AHEAD

YIELD AHEAD

W3-2a 36"x 36" 24"x | 8" W3-2a-A 48"x48" 24"x 18"

6" Series C TRUCK AHEAD CROSSING WHEN FLASHING

W3-4 48" x 48"

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

6" Series E TRAFFIC MERGE LEFT

W9-3(L) 48"x 48"

EQUESTRIAN XING

WII - 7 36"x 36" 24" x 18'

WII-7-A 48" x 48" 24" x 18"

36"x 36" SI-I



STATION WII-8 36"x 36"

24"x18" WII-8-A 48"x 48" 24"x 18"

\*\*\*

S2-I 36"x 36"

WII-9 36"x36" WII-9-A 48" x 48"

SCHOOL BUS STOP

AHEAD

S3-I 30"x30"



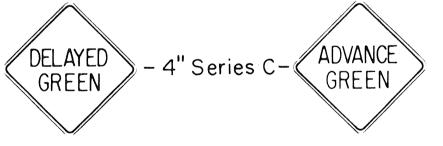
36" x 36" W14-4 W14-4-A 48"x48"

8:00 AM TO 3:30 PM

S4-1 24"x10"

WHEN CHILDREN ARE PRESENT

\$4-2 24"x10"



WI5-2 24"x 24" WI5-1 24"x 24"



ONLY WI8-I 48" x 60"

RIGHT

LANE

EXIT

8" Series E

REVISION

Supersedes Sht. DT 103 approved 3/20/72

2 Added General Note 6

 $CW16-1(\frac{1}{2}) 60" \times 60"$ 

SCHOOL S4-3 24"x8"

WHEN \$4-4 24"x10"



4" Series C R18-1 24"x18"

CW23-4 48"x48"

APPROVAL RECOMMENDED:

APPROVED DATE

H.P.

5/3/18

11/9/13

5/2/78 Euchi Janak TRAFFIC ENGINEER DATE

APPROVED: 2 Julier 2. 2 af Ei shi

ASSISTANT CHIEF, ENGINEERING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
\_HIGHWAYS\_DIVISION

5/3/18 DATE

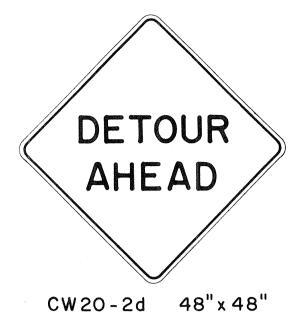
STANDARD DETAILS

MISCELLANEOUS SIGNS

NOT TO SCALE DATE: MAY, 1978

SHEET NO. 4 OF 10 SHEETS DT 10



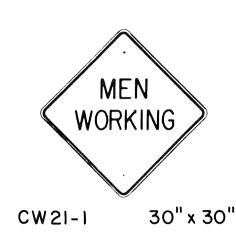










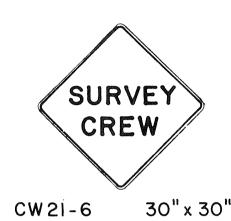












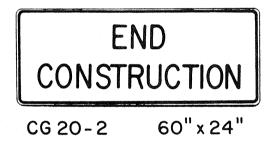


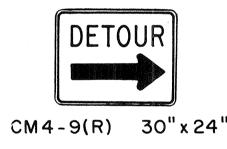


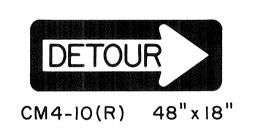


ROAD CONSTRUCTION NEXT 5 MILES

CG 20-1(5) 60" x 36"

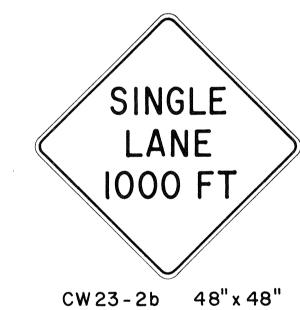














#### GENERAL NOTES

- I. Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- 2. All construction signs shall be reflectorized.
- 3. All construction signs shall have <sup>3</sup>/<sub>8</sub>" 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. 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<br>BY | DATE     |
|-----|---|----------------|----------|
| I   | Supersedes Sht. DT 104<br>Approved 12-30-69 | H.T.           | 3/23/12  |
| 2   | Revised General Note I                      | 14.1.          | 10/16/12 |
| 3   | Revised General Note 2                      | Mt             | 9-16-75  |
| 4   | Revised General Note 2 and sign CG20-1(5)   | HP             | 9-16-75  |
|     |   |                |          |
|     |   |                |          |

APPROVAL RECOMMENDED:

Euch makes

TRAFFIC ENGINEER

<u>3/21/72</u> DATE

APPROVED:

ASSISTANT CHIEF, ENGINEERING

DATE

3/23/12

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

CONSTRUCTION SIGNS

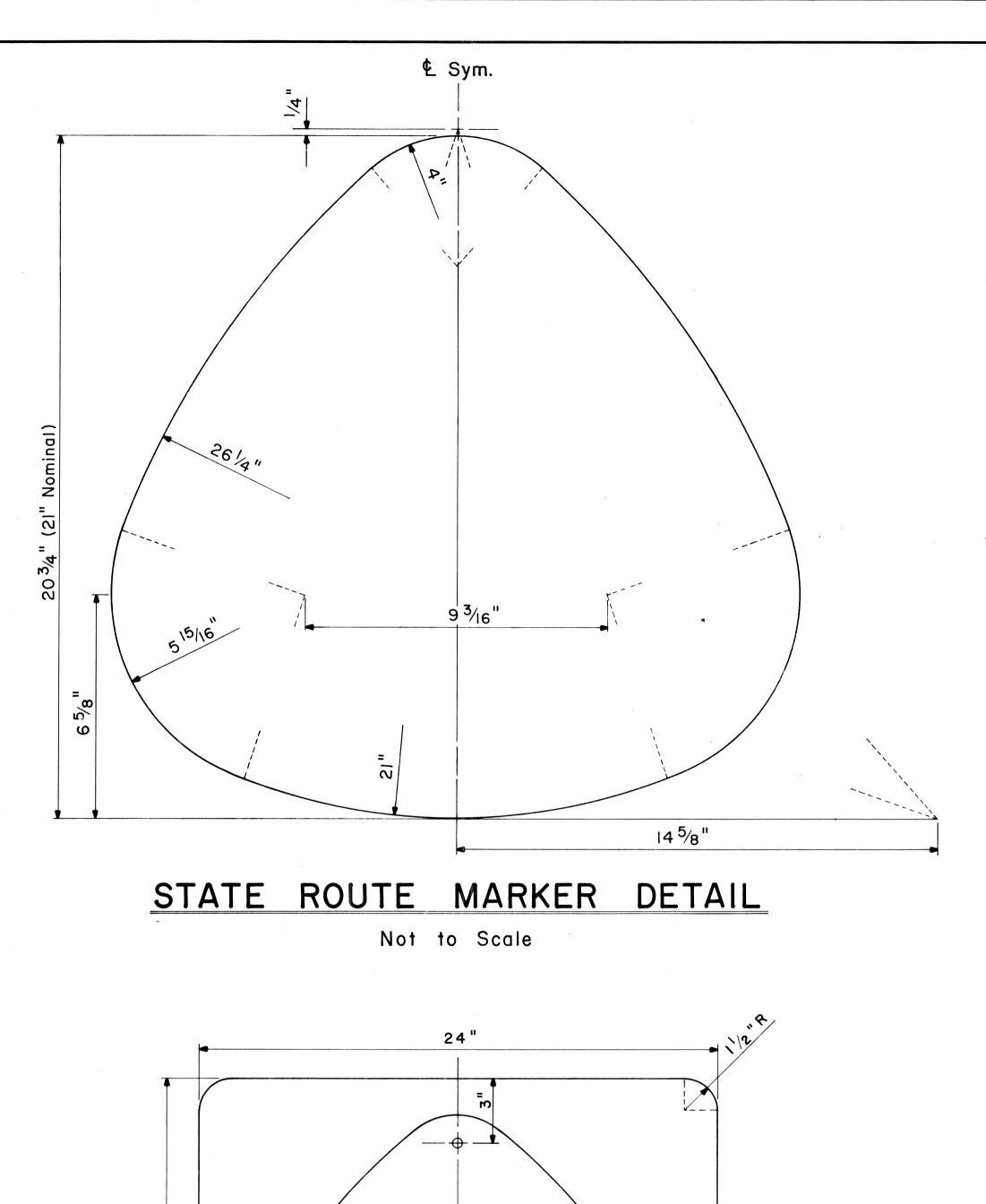
NOT TO SCALE

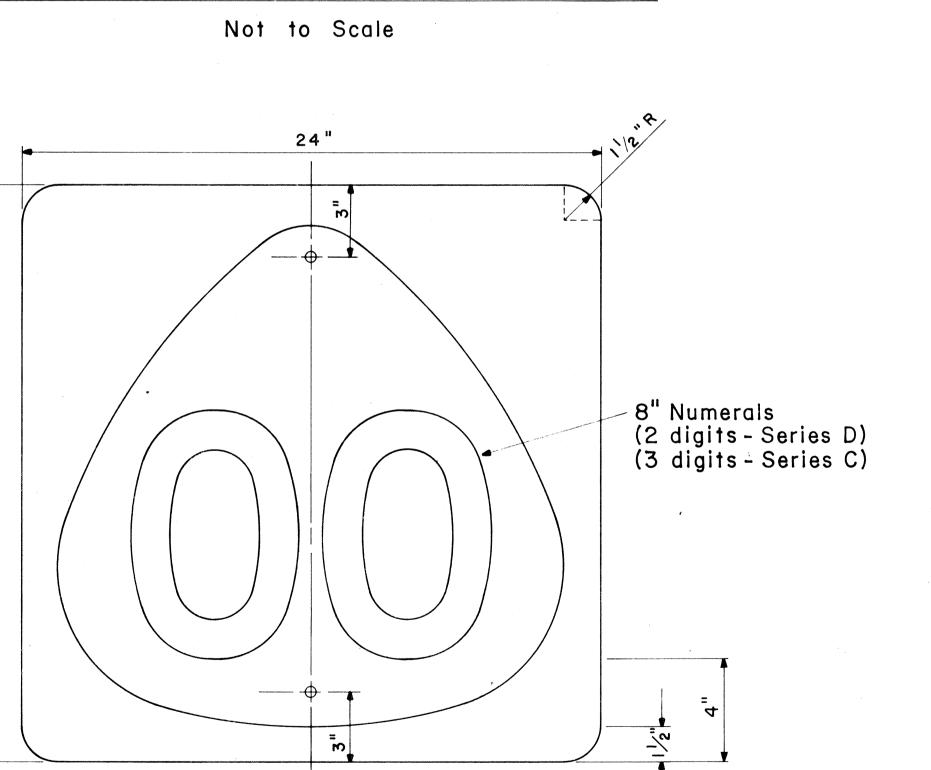
SHEET No. 5 OF 10 SHEETS DT 104

PLAN PRAN PLAN TPLAC NOTE BOOK DESIG OUAN

IMPLHIAL 1 LA 3207

9

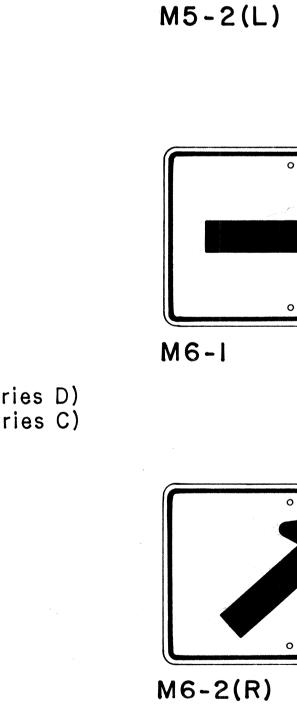


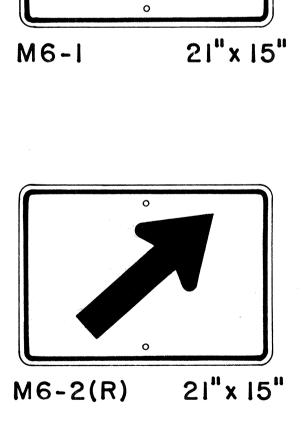


STATE ROUTE MARKER

MI-6 (00) 24"x 24"

Scale: 1/4" = 1"





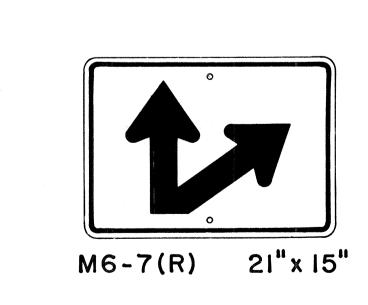
21" x 15"

21"x 15"

21"x 15"

M2-1

M5-I(L)



21"x 15"

21"x 15"

21"x 15"

21"x 15"

M6 - 3

M6 - 4

M6-5(R)

M6-6(R)



Not to Scale

# NORTH

M3-I 24" x I2" M3-I-A 36" x I8"



14-1 24" x 12"



M4-2 24" x 12"



M4-3 24" x 12"



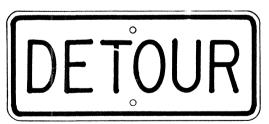
4-5 24"x 12"



M4-6 24"x 12"

TEMPORARY

14-7 24"x 12"



M4-8 24"x 12"

| NO. | REVISION                                    | APPROVED<br>BY | DATE     |
|-----|---|----------------|----------|
| I   | Supersedes Sht. DT 105<br>Approved 12-30-69 |                | 6/1/12   |
| 2   | Revised General Note I                      | H.C.           | 10/16/14 |
|     |   |                |          |
|     |   |                |          |
|     |   |                |          |
|     |   |                |          |

#### 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.
- 2. All markers shall be reflectorized unless otherwise specified.

FED. ROAD DIST. NO.

- 3. All markers shall have <sup>3</sup>/<sub>8</sub>" bolt holes drilled at appropriate locations.
- 4. Numerals in ( ) indicates numerals to be inserted for marker message. (R) or (L) indicates right or left.
- 5. 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

FED. AID FISCAL PROJ. NO. YEAR

RS-0580(2) 1980 10

6. Markers prefixed with "IM" on the plans shall have a white legend on a blue background.

APPROVAL RECOMMENDED:

Euchi Janake TRAFFIC ENGINEER

APPROVED:

ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

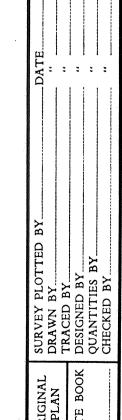
STATE ROUTE MARKER

AND AUXILIARY MARKERS

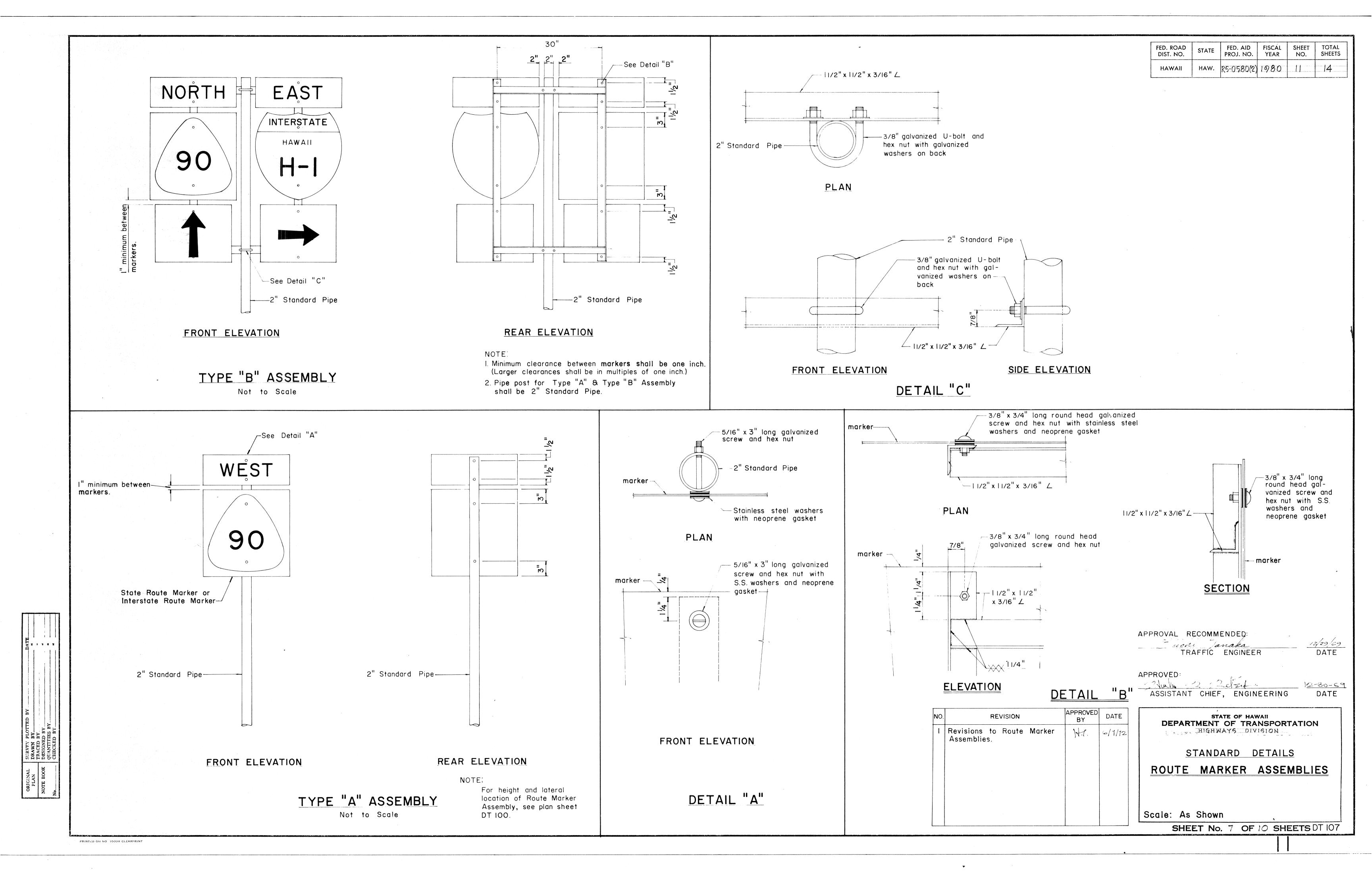
Scale: As Shown

SHEET Nº 6 OF 10 SHEETS DT 105

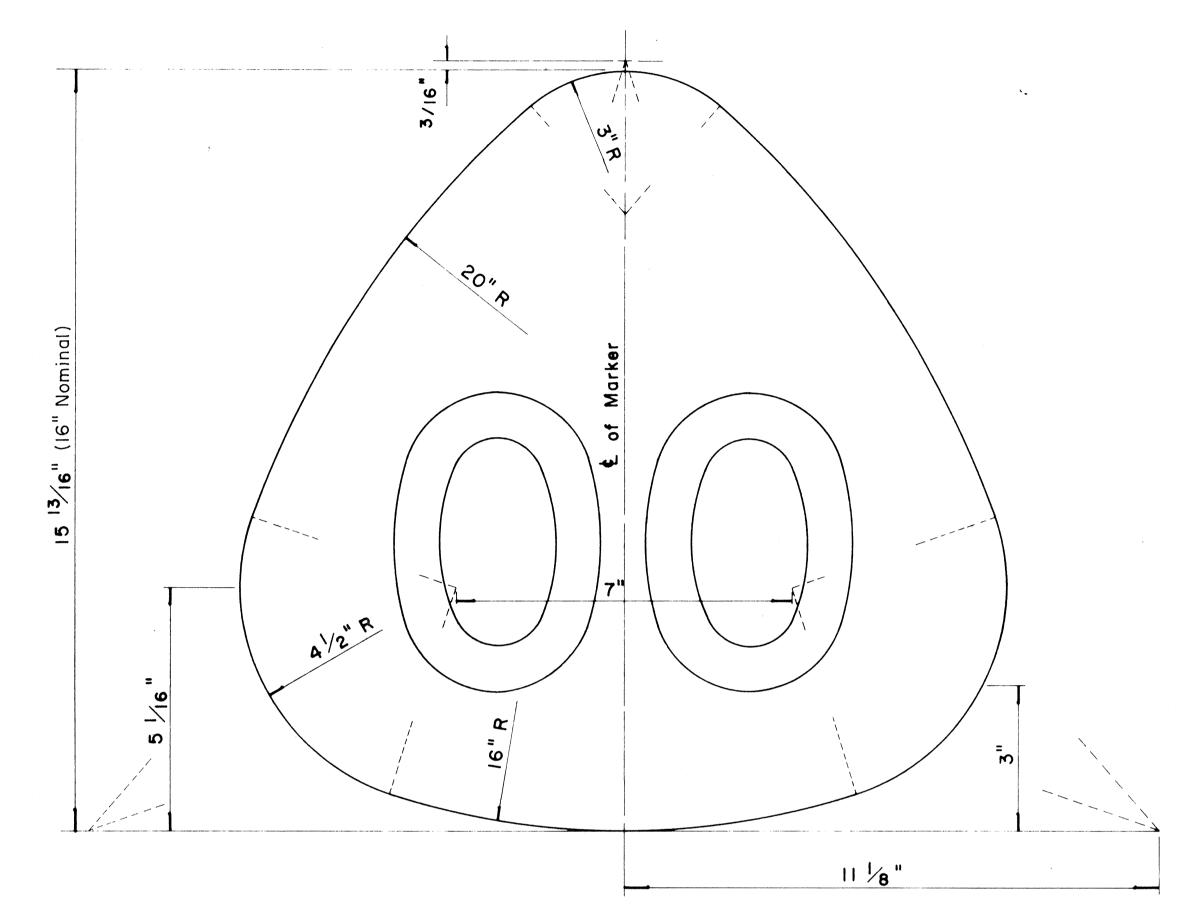
10



LIETZ 1103 ARKWRIGHT TRACING CLOTH 10-60 200P



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



## STATE ROUTE MARKER FOR GUIDE SIGNS

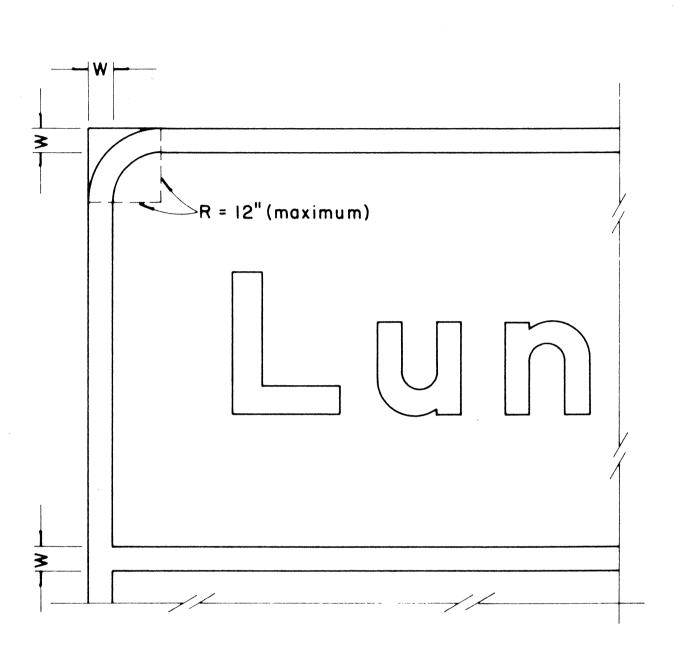
Scale: Half Size

#### NOTE:

- State Route Markers on Guide signs shall have black numerals on a white reflectorized background mounted on a flat aluminum cut-out.
- 2. Numerals shall conform to the FHWA publication "Standard Alphabets for Highway Signs," 1966.
- 3. Cut-outs shall be fastened on sign panel with aluminum blind rivets. See Standard Specifications.

| FED. ROAD<br>DIST. NO. | STATE | FED. AID<br>PROJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |  |
|------------------------|-------|-----------------------|----------------|--------------|-----------------|--|
| HAWAH                  | HAW.  | RS-0580(2)            | 1980           |              |                 |  |

| RADII FOR SIGNS         | 3  |     |
|-------------------------|----|-----|
| Least Dimension of Sign | W  | R   |
| 2'-0" to 4'-6"          | 2" | 3"  |
| 4'-9" to 5'-6"          | 2" | 6"  |
| 5'-9" to 7'-6"          | 2" | 9"  |
| 7'-9" and greater       | 2" | 12" |



## BORDER DETAIL FOR GUIDE SIGNS

Not to Scale

#### NOTE:

- I. Area outside corner radius need not be trimmed.
- 2. All borders shall be white reflectorized cut-outs.
- 3. All Guide signs shall have borders.

TRAFFIC ENGINEER

APPROVED:

ASSISTANT CHIEF, ENGINEERING

A/11/72

ASSISTANT CHIEF, ENGINEERING

A/11/72

DATE

APPROVAL RECOMMENDED:

| NO. | REVISION                                    | APPROVED DATE |
|-----|---|---------------|
| 1   | Supersedes Sht. DT 209<br>Approved 12-30-69 | H-C. 4/12/1   |
| 2   | Revised Notes and<br>Schedules              | HT. 9-14-76   |
|     |   |               |
|     |   |               |
|     |   |               |

| STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION |         |        |  |  |
|--|---------|--------|--|--|
| STA  | NDARD D | ETAILS |  |  |
| STATE  | ROUTE   | MARKER |  |  |
| AND  | BORDER  | DETAIL |  |  |
| FOR  | GUIDE   | SIGNS  |  |  |

Scale: As Shown

SHEET No. 8 OF 10 SHEETS DT 209

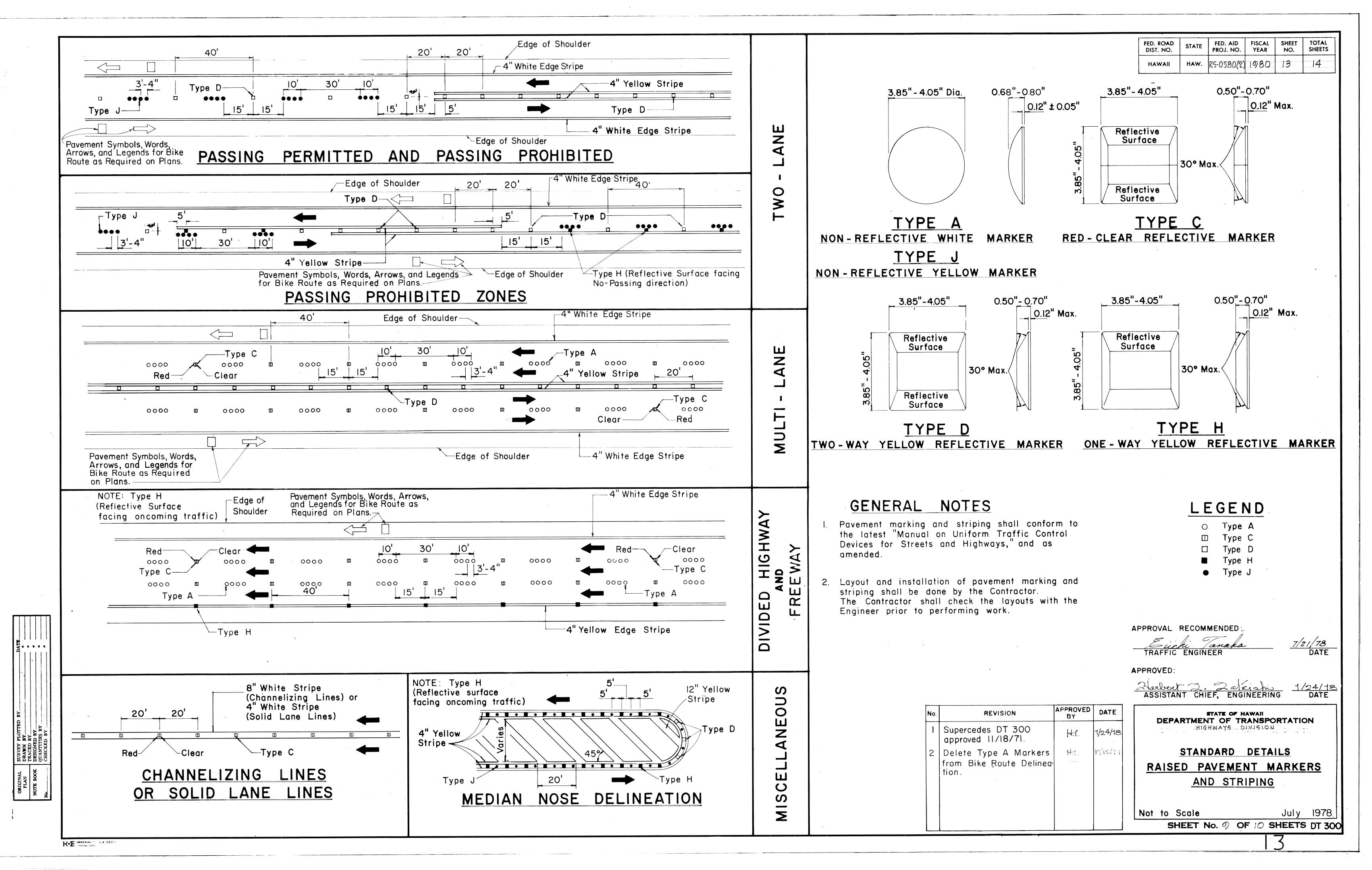
NAL SURVEY PLOTTED BY

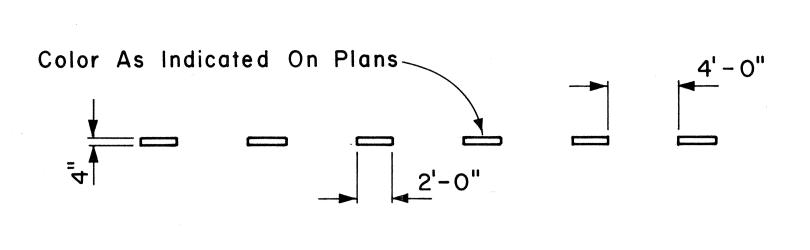
DRAWN BY

TRACED BY

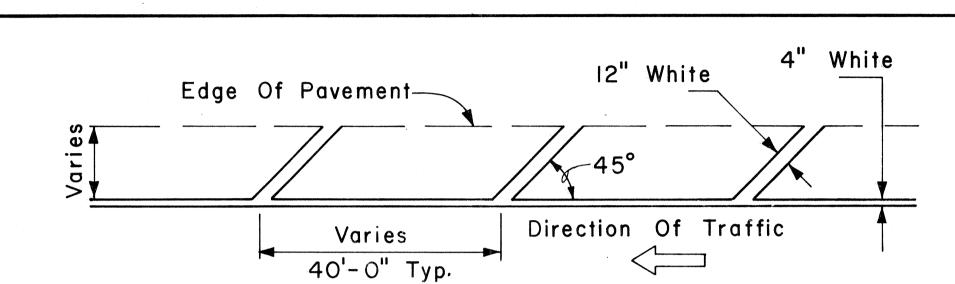
QUANTITIES BY

CHECKED BY

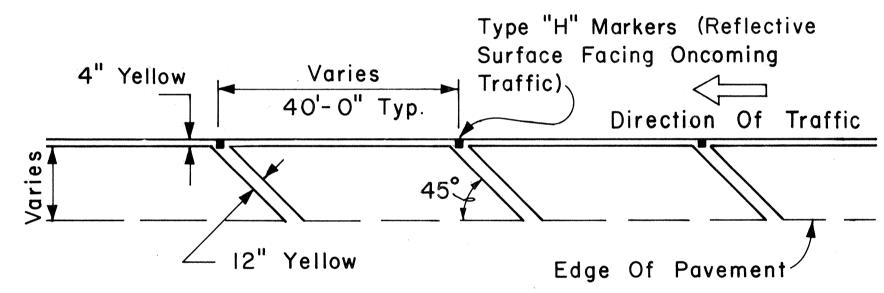




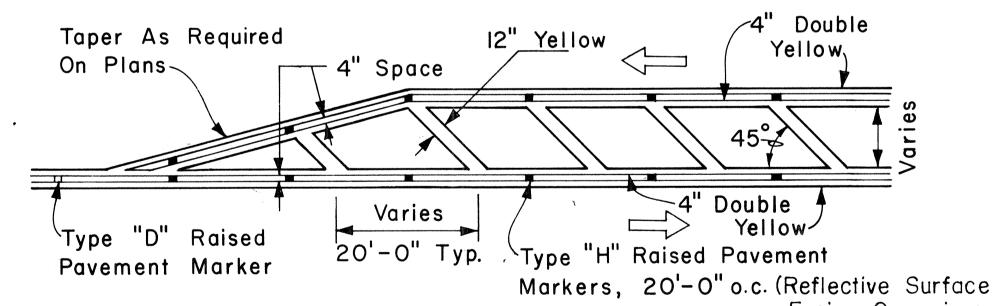
### 4" GUIDE LINE



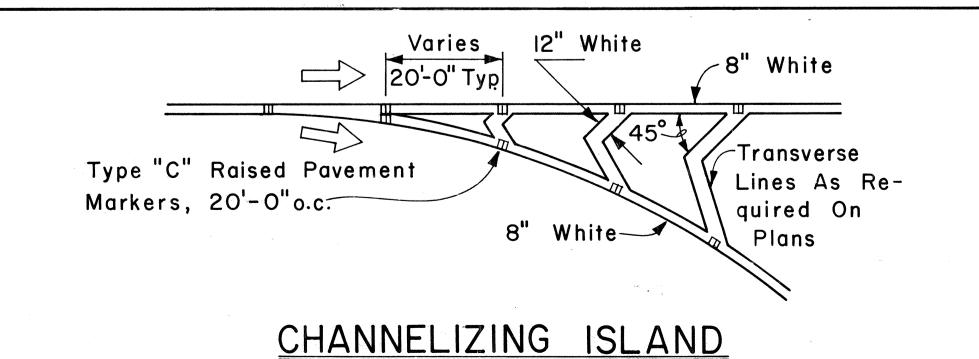
### TRANSVERSE RIGHT SHOULDER MARKING

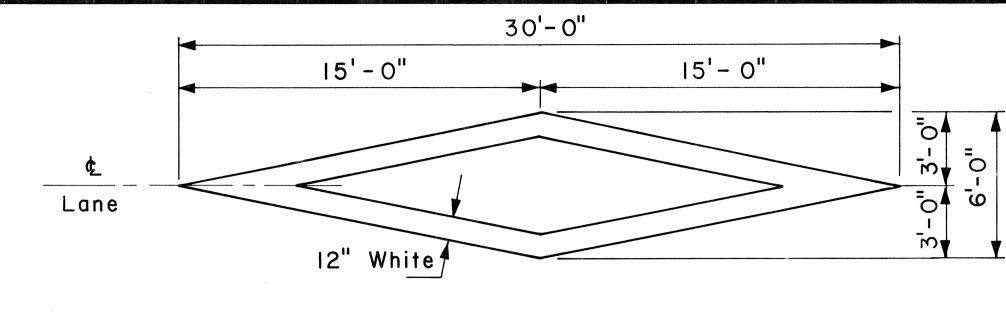


## TRANSVERSE LEFT SHOULDER MARKING

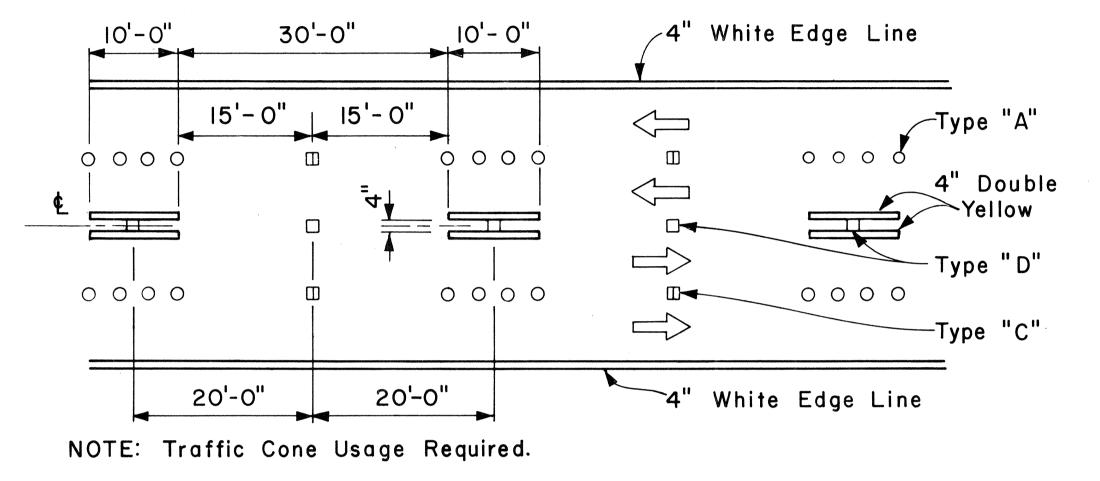


TRANSVERSE MEDIAN MARKING Facing Oncoming Traffic)

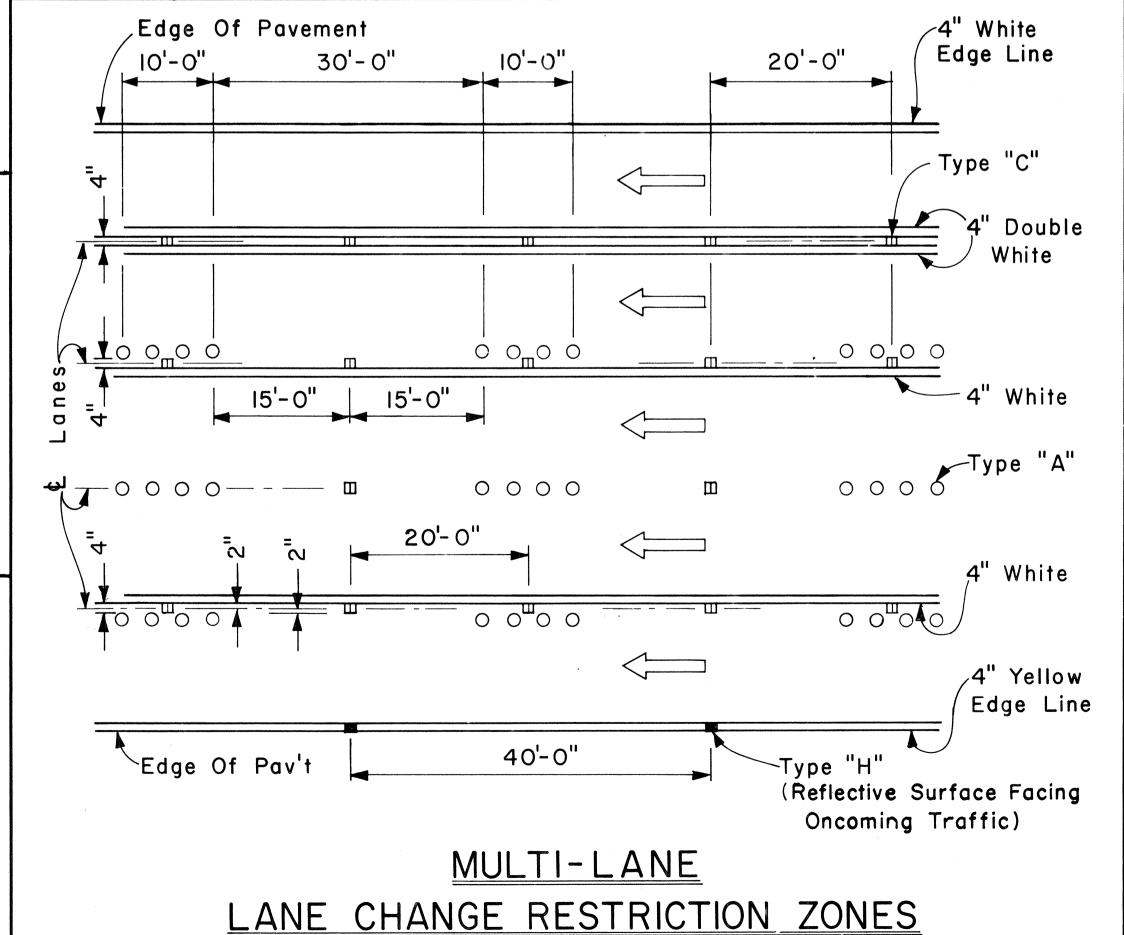




## PAVEMENT DIAMOND



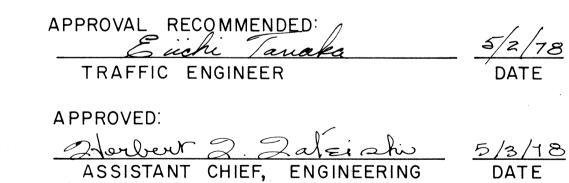
## MULTI-LANE REVERSIBLE LANES



| FED. ROAD<br>DIST. NO. | STATE | FED. AID<br>PROJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|------------------------|-------|-----------------------|----------------|--------------|-----------------|
| HAWAII                 | HAW.  | RS-0580(2)            | 1980           |              | 4               |

#### 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.



| NO. | REVISION | APPROVED<br>BY | DATE |
|-----|----------|----------------|------|
|     |          |                |      |
|     |          | •              |      |
|     |          |                |      |
|     |          |                |      |
|     |          |                |      |
|     |          |                |      |

STANDARD DETAILS

MISCELLANEOUS

PAVEMENT MARKINGS

Scale: Not to Scale Date: April, 1978

SHEET NO. 10 OF 10 SHEETS DT 302

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