

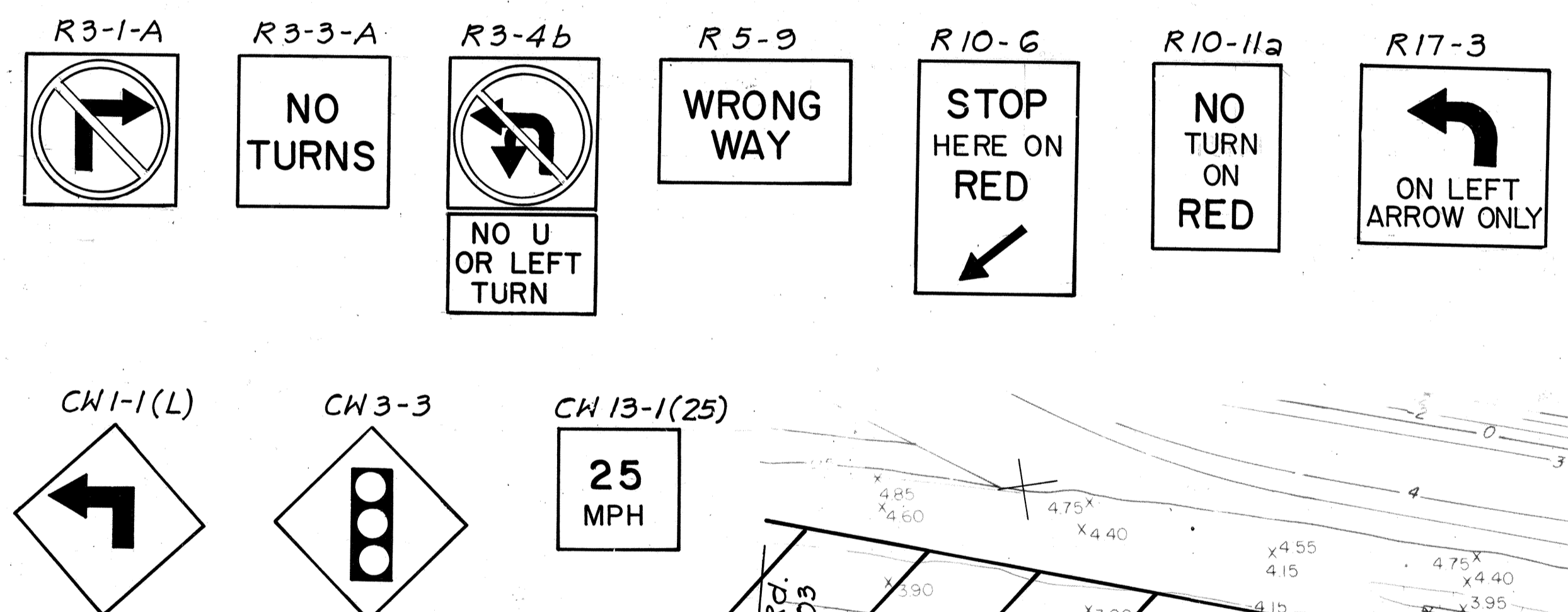
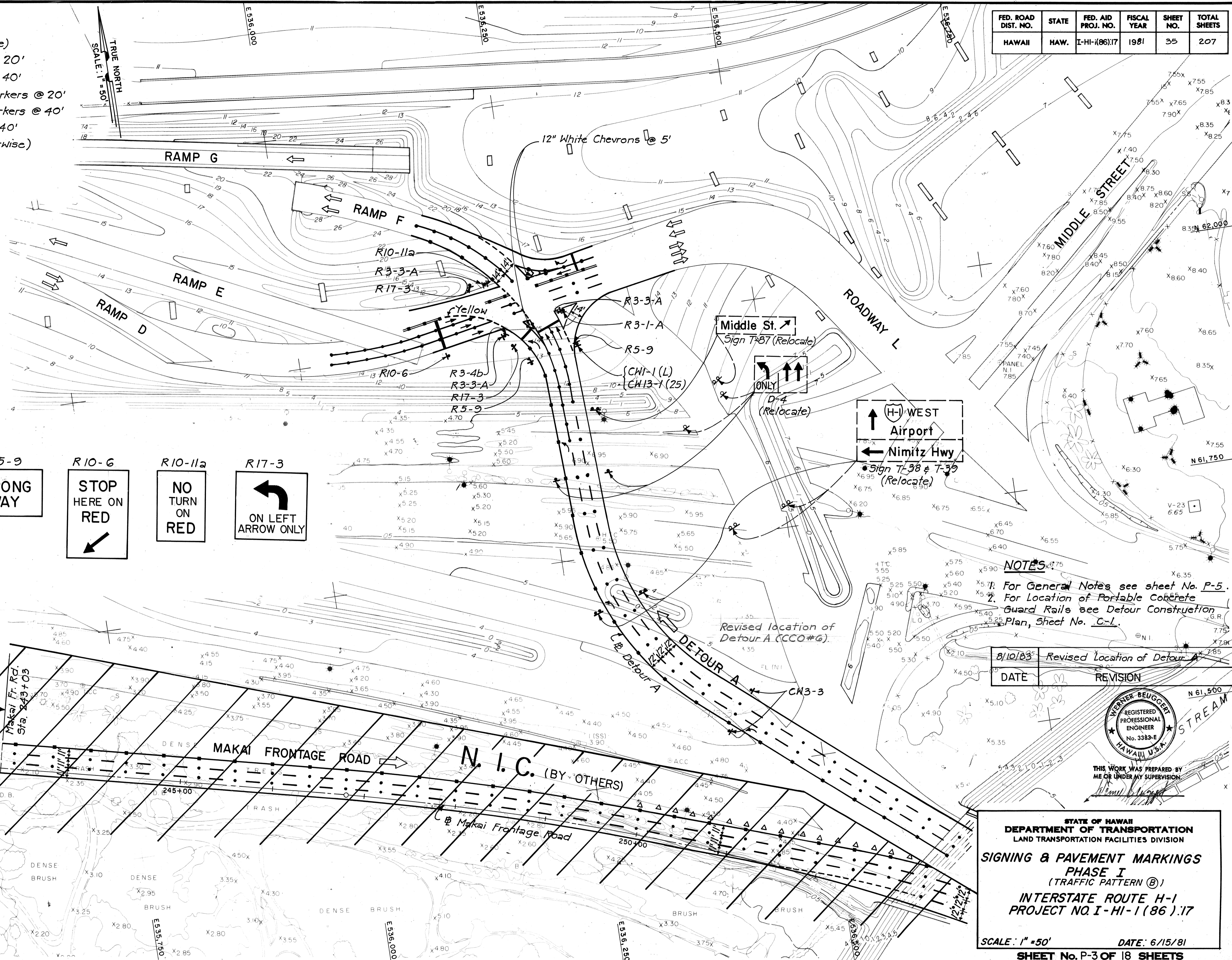




| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | I-HI-(86):17       | 1981        | 35        | 207          |

**LEGEND**

- 4" White Stripe (unless shown otherwise)
- 8" White Stripe with Type C Markers @ 20'
- 4" Yellow Stripe with Type H Markers @ 40'
- 4" Double Yellow Stripe with Type D Markers @ 20'
- . - . 4" White Stripe, 10' long, with Type C Markers @ 40'
- + . + . 4 Type A Markers & Type C Markers @ 40'
- - - 4" White Guide Line (unless shown otherwise)
- 12" White Stop Line
- Standard Pavement Arrows
- ⊥ Reflector Marker, Type RM-2
- △ Traffic Delineator (Tube)
- Portable Concrete Guard Rail
- ← Direction of Traffic
- ⊥ New or Relocated Sign
- ⊥ Existing Sign
- N.I.C. Not in Contract



**NOTES:**  
 1. For General Notes see sheet No. P-5.  
 2. For Location of Portable Concrete Guard Rails see Detour Construction Plan, Sheet No. C-1.

| DATE    | REVISION                     |
|---------|------------------------------|
| 8/10/83 | Revised Location of Detour A |

WALTER BEUGGER  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 3383-E  
 HAWAII, U.S.A.  
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

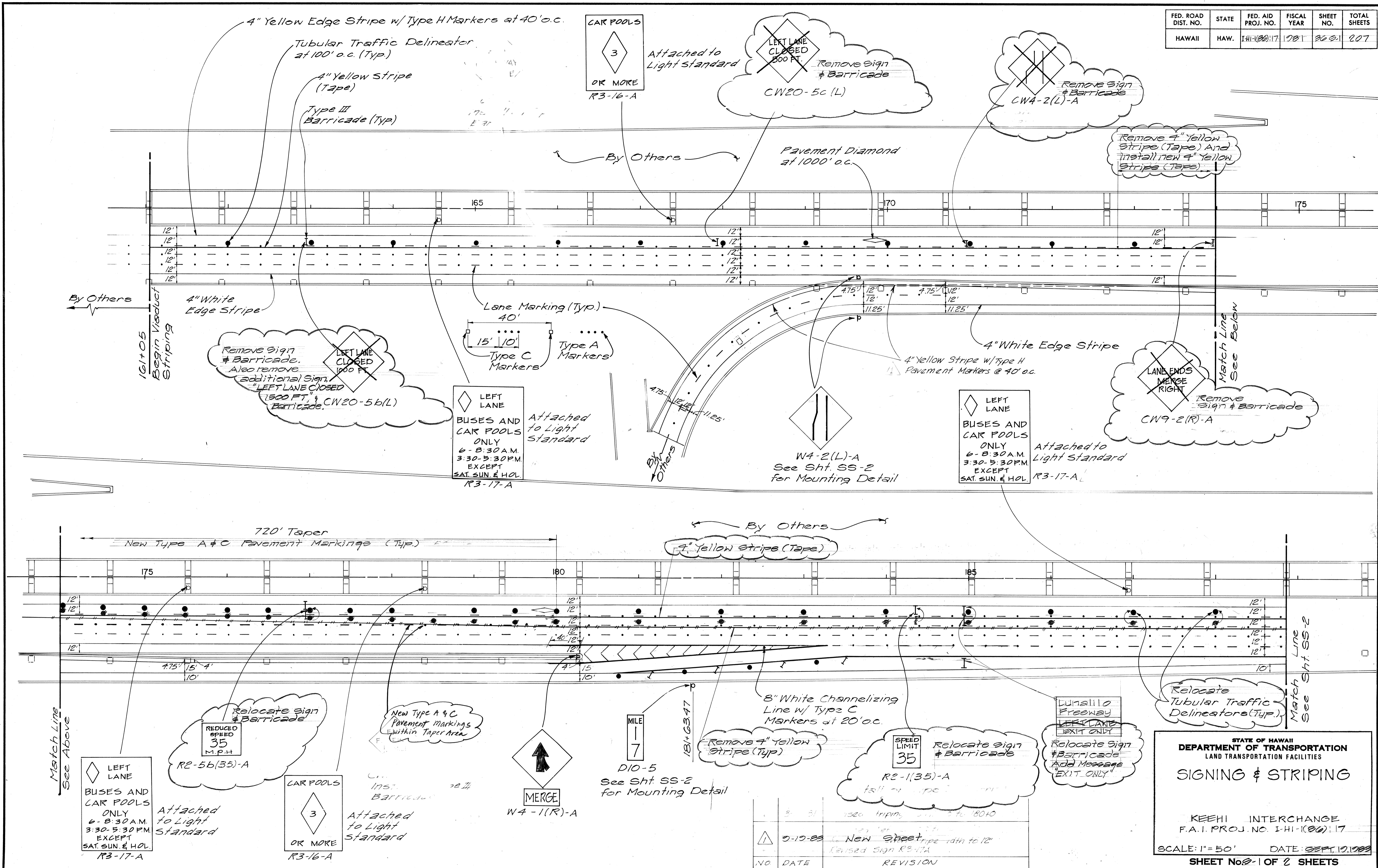
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION  
**SIGNING & PAVEMENT MARKINGS**  
 PHASE I  
 (TRAFFIC PATTERN @)  
 INTERSTATE ROUTE H-1  
 PROJECT NO. I-HI-1(86):17  
 SCALE: 1" = 50' DATE: 6/15/81  
 SHEET No. P-3 OF 18 SHEETS

DATE  
 SURVEY PLATTED BY  
 PLAN  
 TRACED BY  
 NOTE BOOK  
 DESIGNED BY  
 QUANTITIES BY  
 CHECKED BY

C.O.35  
 BY 11/22 9/1/83  
 NSB



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | I-H-100-17         | 198         | 207       | 207          |



|                   |       |
|-------------------|-------|
| DATE              | _____ |
| SURVEY PLOTTED BY | _____ |
| DRAWN BY          | _____ |
| TRACED BY         | _____ |
| NOTED BY          | _____ |
| CHECKED BY        | _____ |
| NO.               | _____ |

| NO. | DATE    | REVISION                         |
|-----|---------|----------------------------------|
| 1   | 3-10-88 | New sheet raised sign R3-17A     |
| 2   | 3-10-88 | 1500' striping from 1650 to 1800 |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES

## SIGNING & STRIPING

KEEHI INTERCHANGE  
F.A.I. PROJ. NO. I-H-100-17

SCALE: 1" = 50'      DATE: ~~SEP. 10, 1988~~

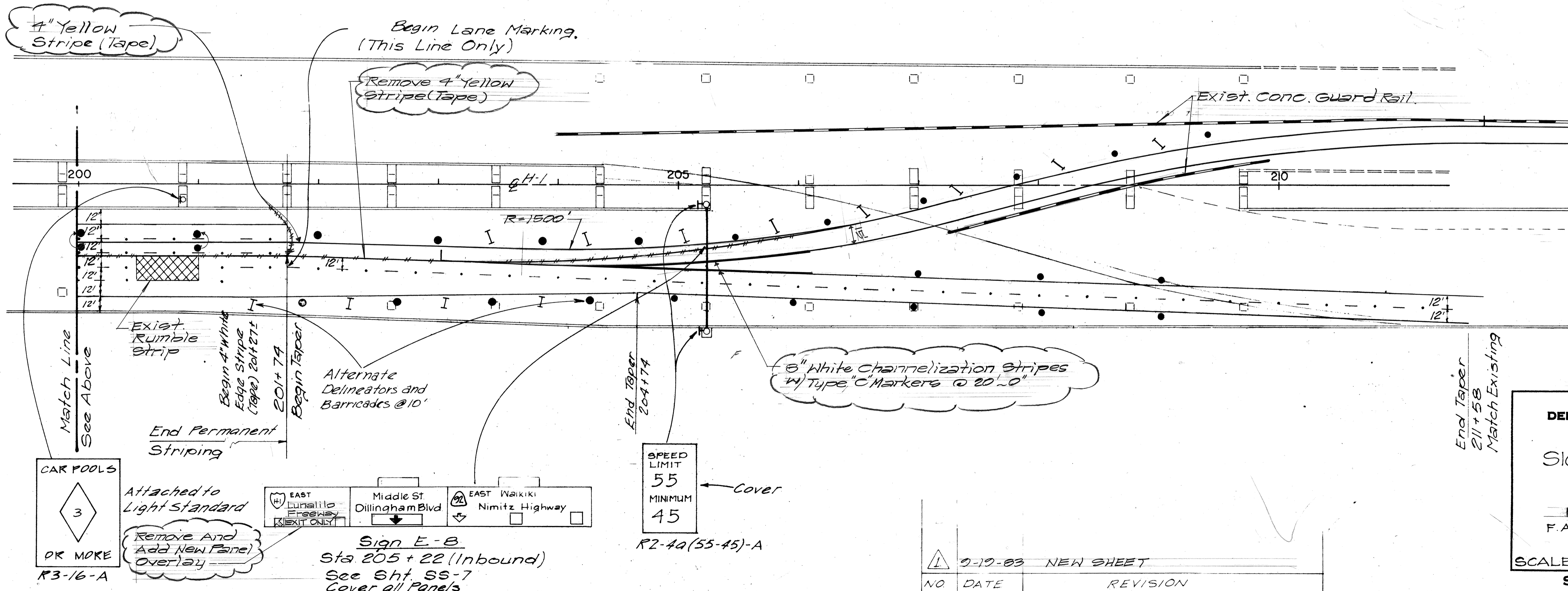
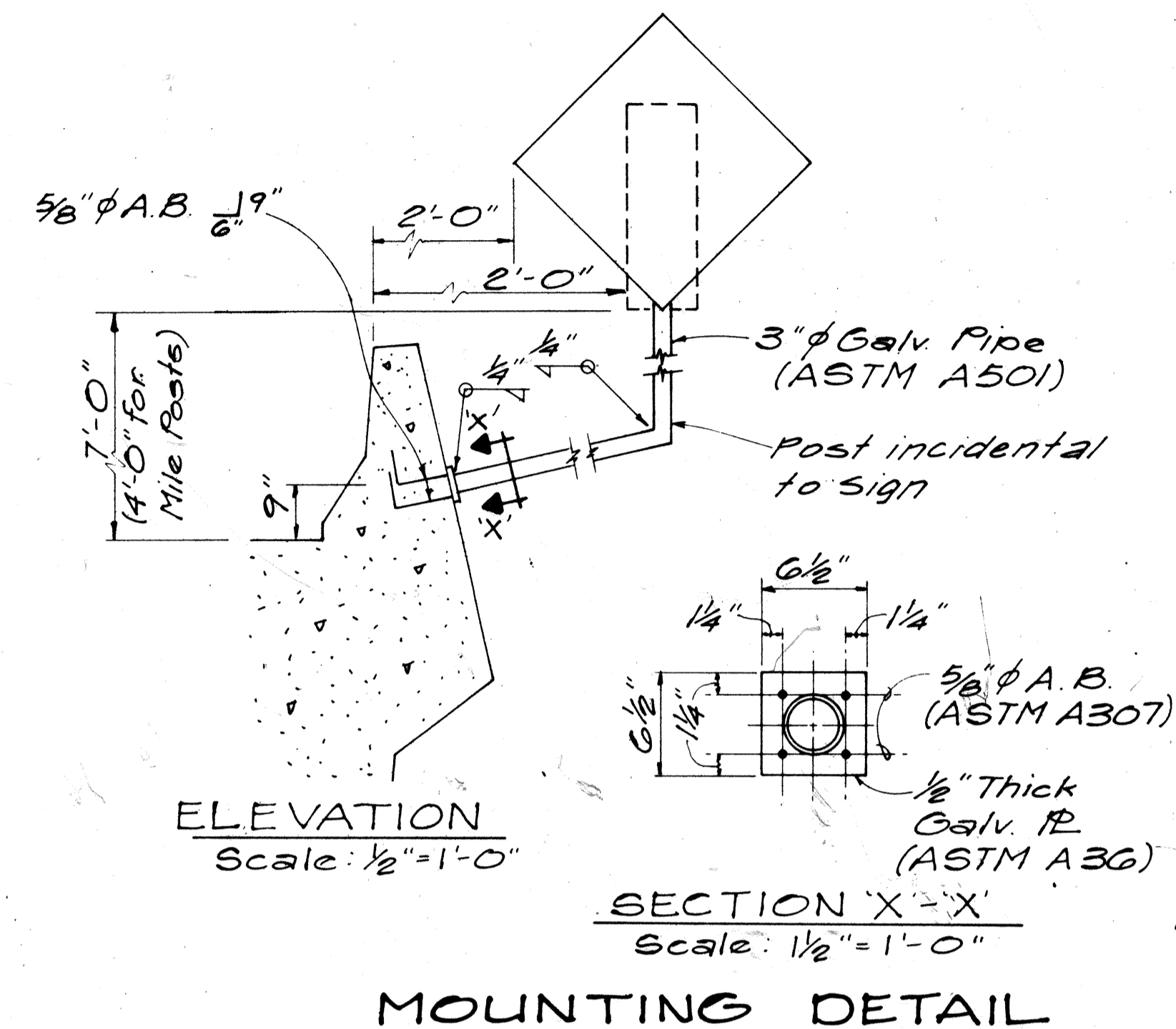
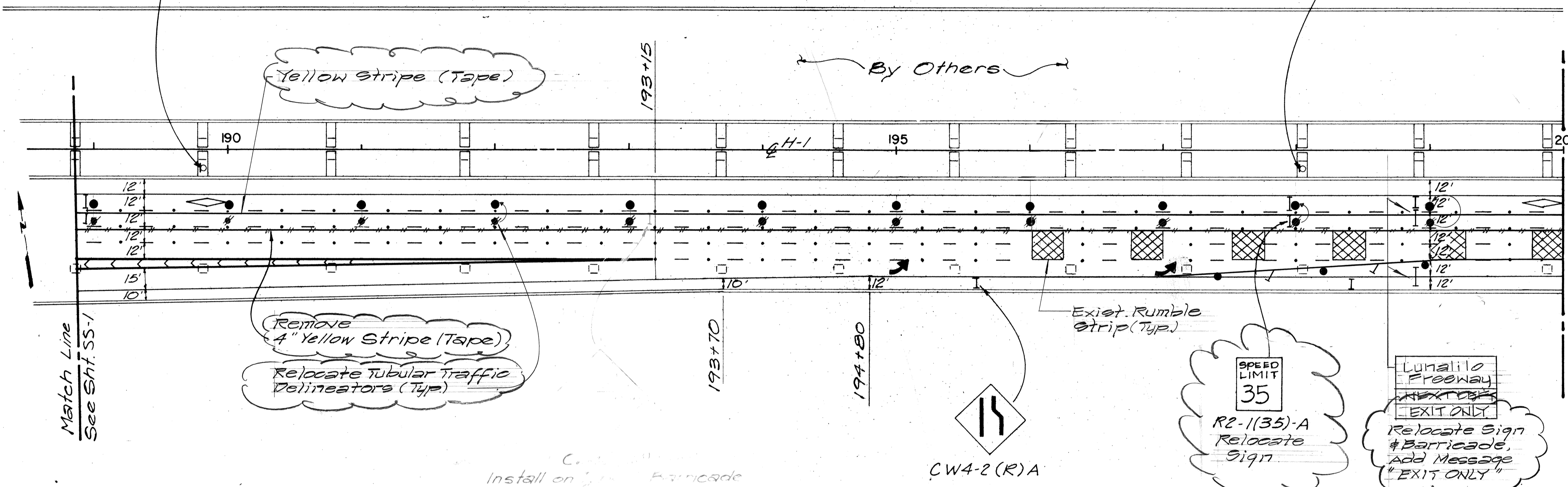
SHEET No. 1 OF 2 SHEETS

C.O.36S-1

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | I-HI-1(86)117      | 1981        | 207       | 207          |

CAR POOLS  
 Attached to Light Standard  
 3  
 OR MORE  
 R3-16-A

LEFT LANE  
 BUSES AND CAR POOLS  
 Attached to Light Standard  
 ONLY  
 6-8:30 AM  
 3:30-5:30 PM  
 EXCEPT SAT. SUN. & HOL.  
 R3-17-A



|                   |      |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          |      |
| DESIGNED BY       |      |
| NOTE BOOK         |      |
| QUANTITIES BY     |      |
| CHECKED BY        |      |

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES

**SIGNING & STRIPING**

KEEHI INTERCHANGE  
 F.A.I. PROJ. NO. I-HI-1(86)117

SCALE: 1"=50' DATE: SEPT 10, 1988  
 SHEET No 2 OF 2 SHEETS

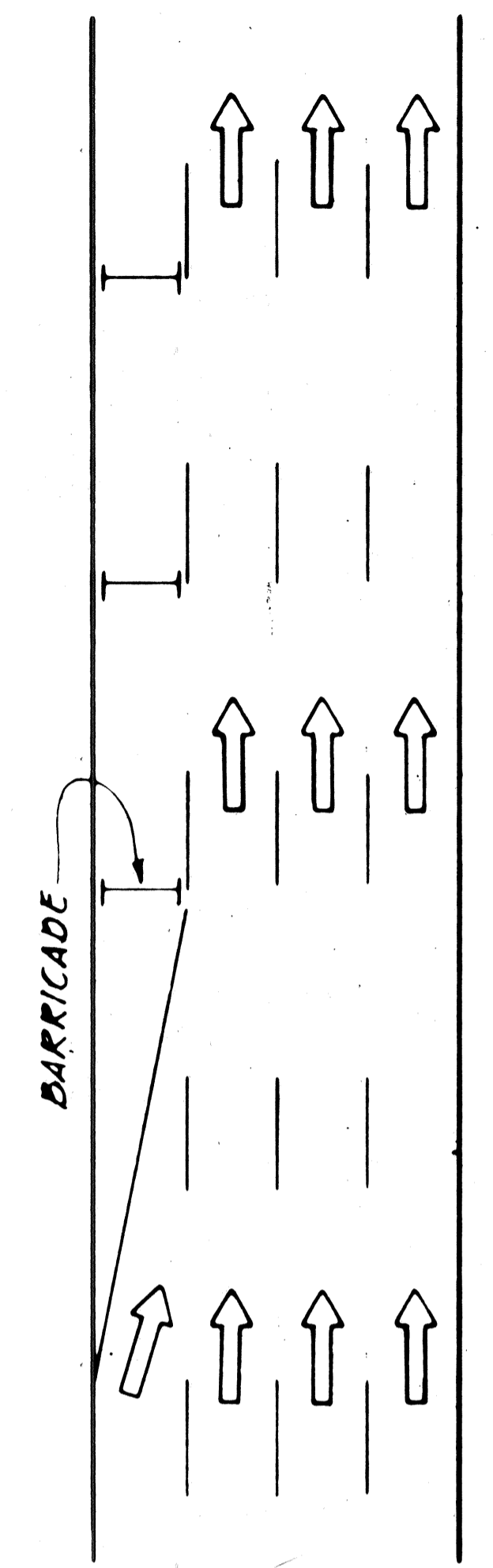
C.O.36 S-2



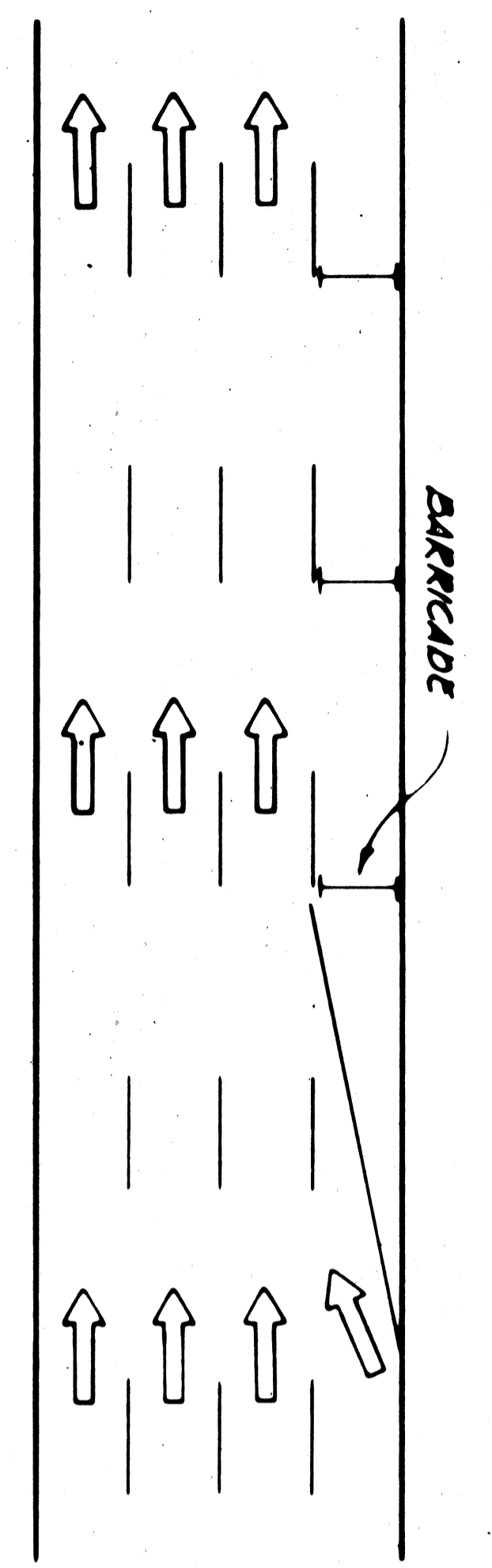
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HI-1(86)17         | 1981        | 38        | 207          |

**GENERAL NOTES**

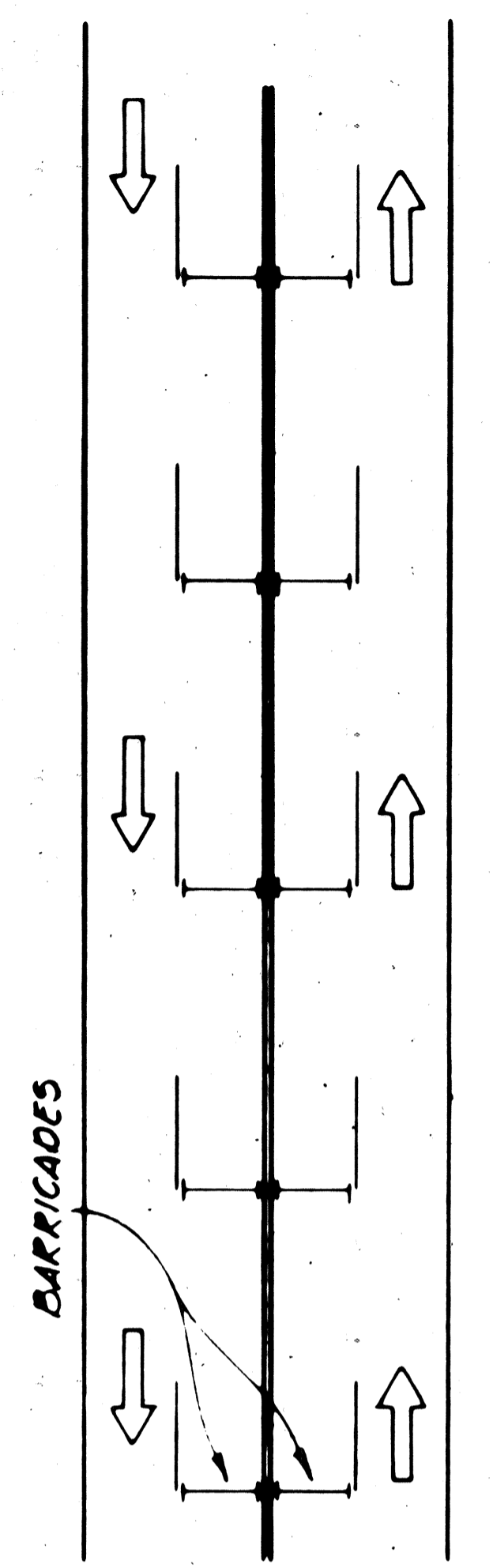
1. Barricade Type, Placement, and Arrangement shall be as shown on the Construction Plans.



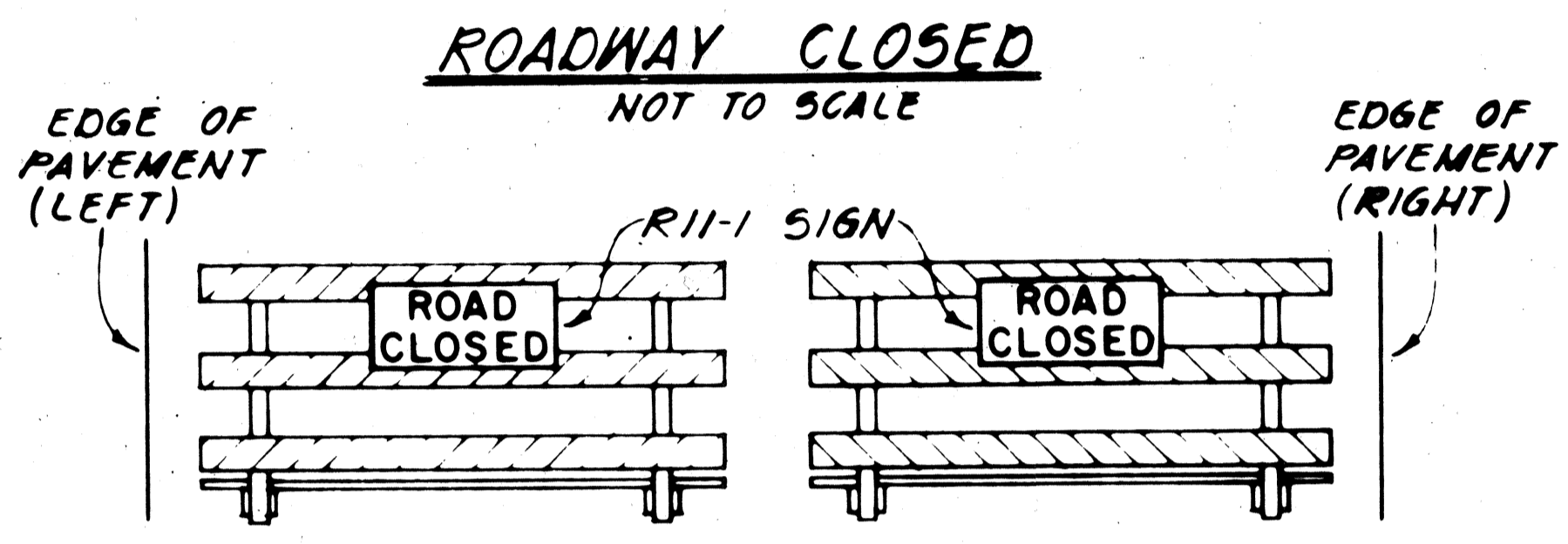
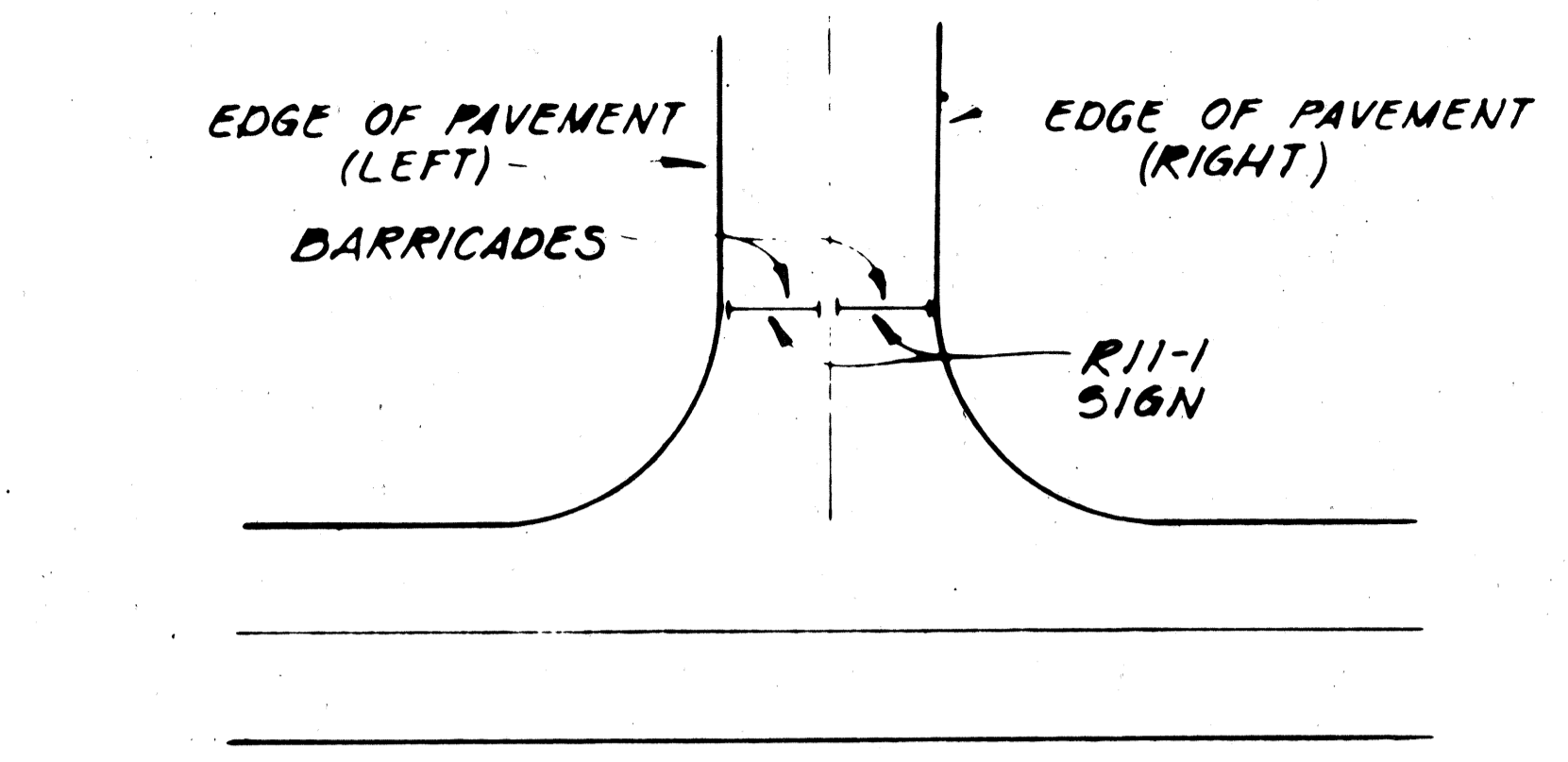
**ROADWAY DELINEATION TO THE RIGHT**  
NOT TO SCALE



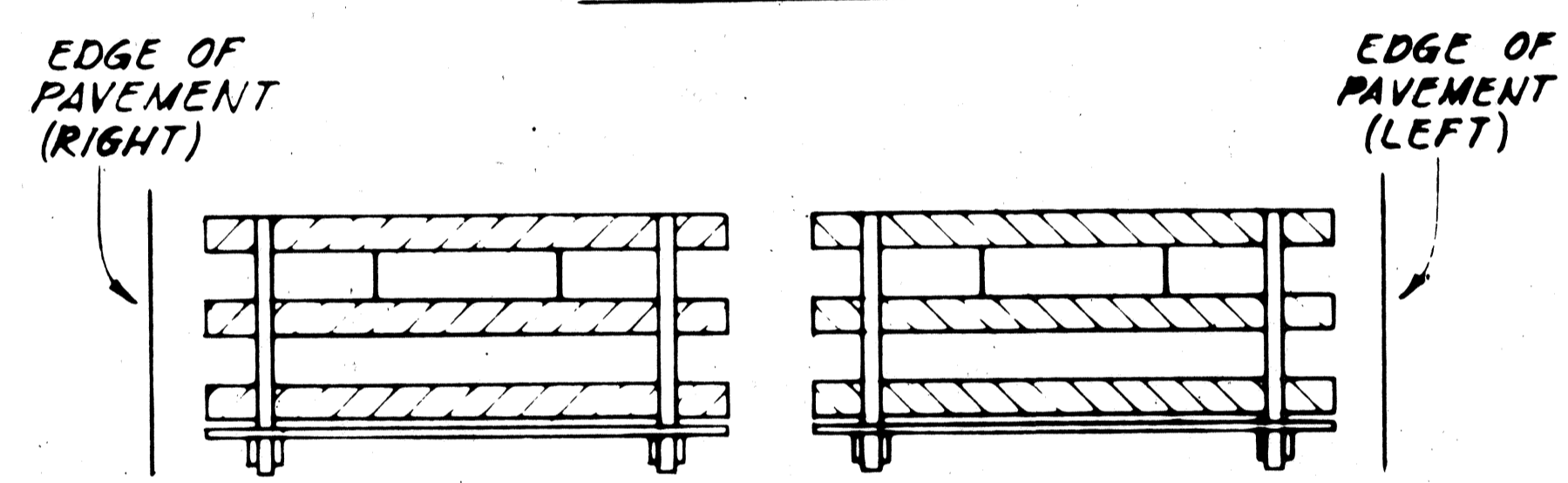
**ROADWAY DELINEATION TO THE LEFT**  
NOT TO SCALE



**ROADWAY DELINEATION FOR 2-WAY TRAFFIC**  
NOT TO SCALE

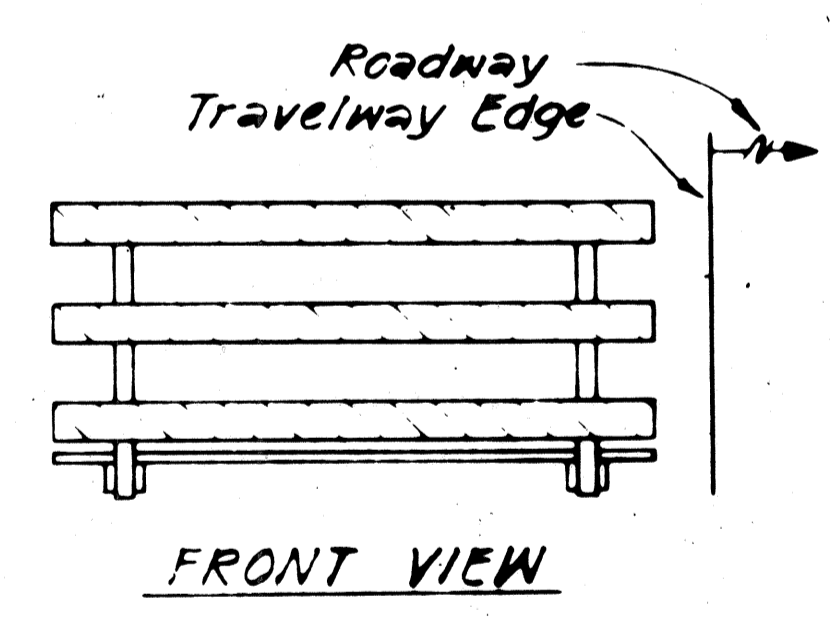


**FRONT VIEW**

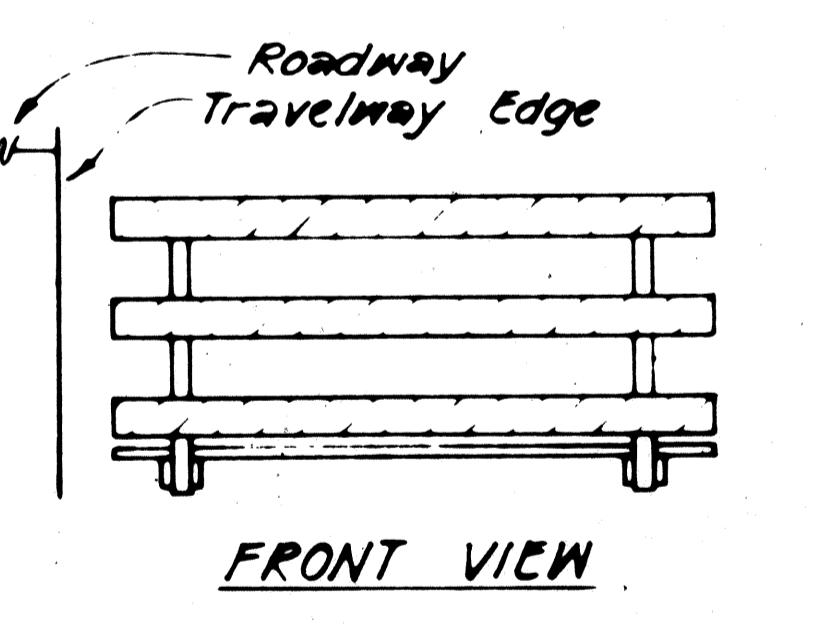


**BACK VIEW**

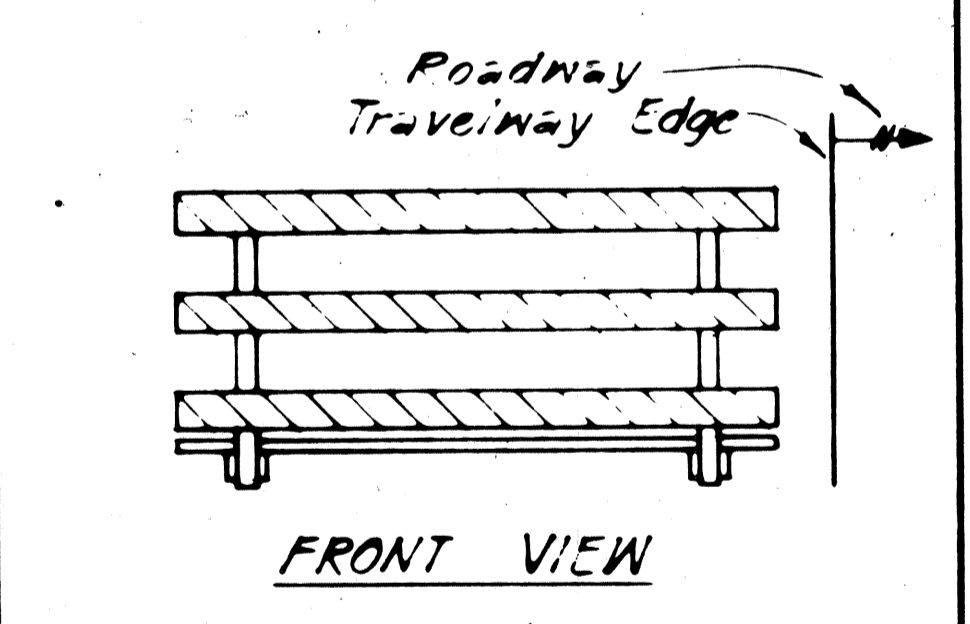
**BARRICADE STRIPING ARRANGEMENT**  
NOT TO SCALE



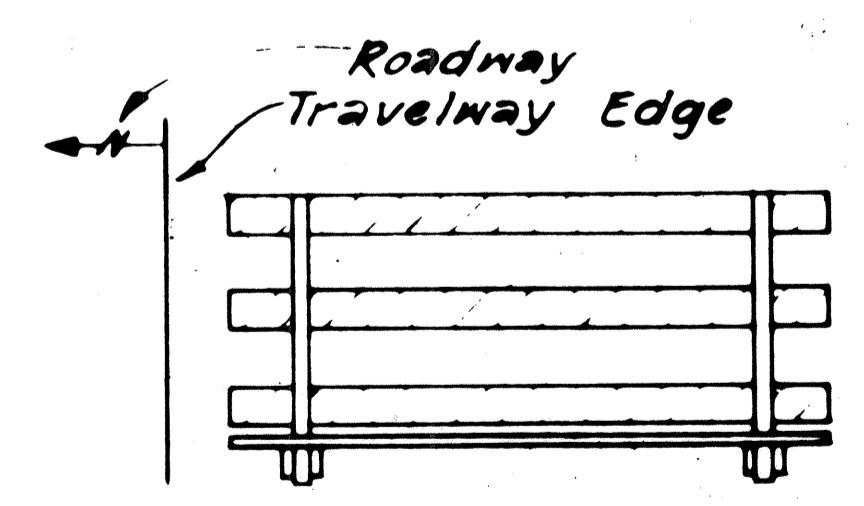
**FRONT VIEW**



**FRONT VIEW**

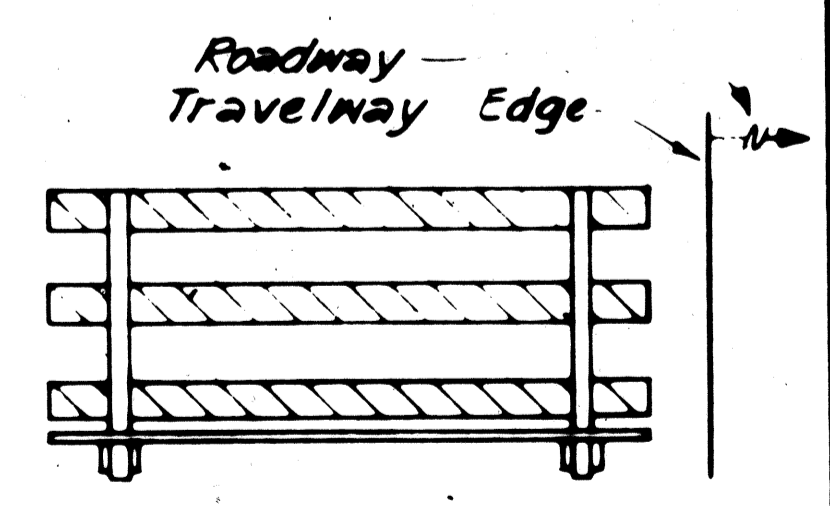


**FRONT VIEW**



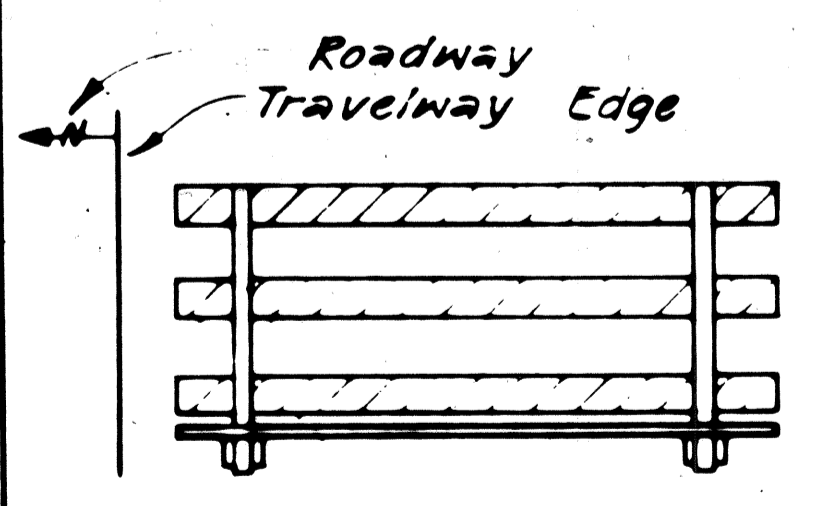
**BACK VIEW**

**BARRICADE STRIPING ARRANGEMENT**  
NOT TO SCALE



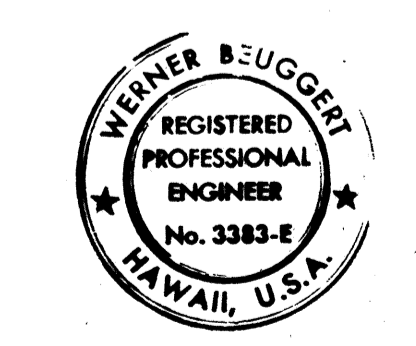
**BACK VIEW**

**BARRICADE STRIPING ARRANGEMENT**  
NOT TO SCALE



**BACK VIEW**

**BARRICADE STRIPING ARRANGEMENT**  
NOT TO SCALE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*Werner Beuggert*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

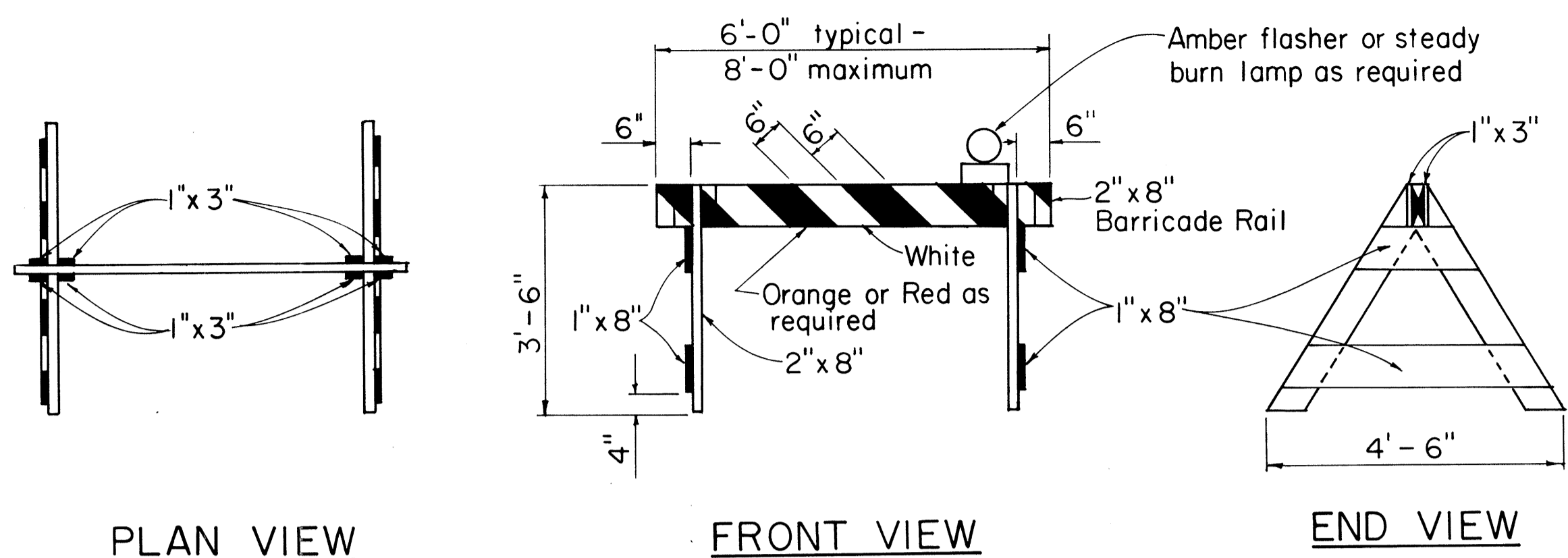
**TYPICAL DETAILS**  
**BARRICADE STRIPING DETAILS**

INTERSTATE ROUTE H-1  
PROJECT NO. I-HI-1 (86) 17

SCALE: AS SHOWN      DATE: 6/15/81

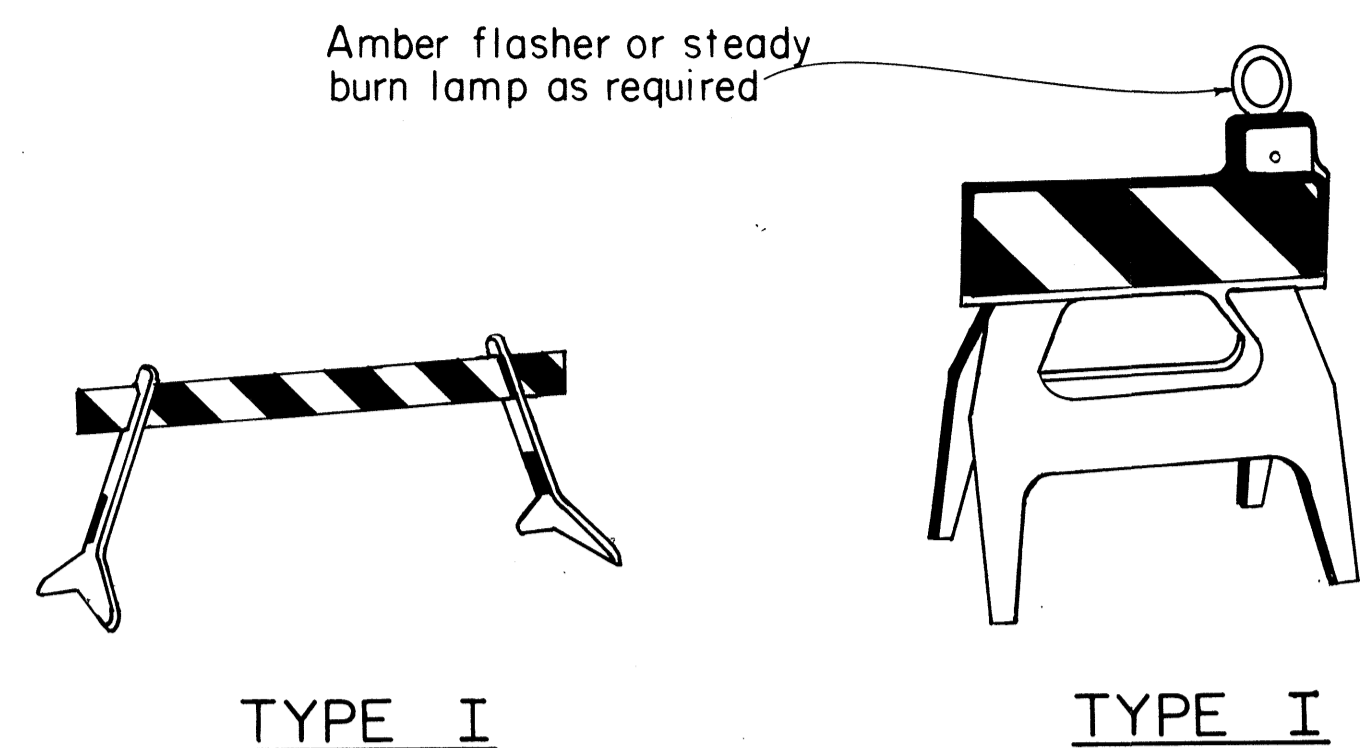
**SHEET No. P-6 OF 18 SHEETS**

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | [H-86]17           | 1981        | 39        | 207          |



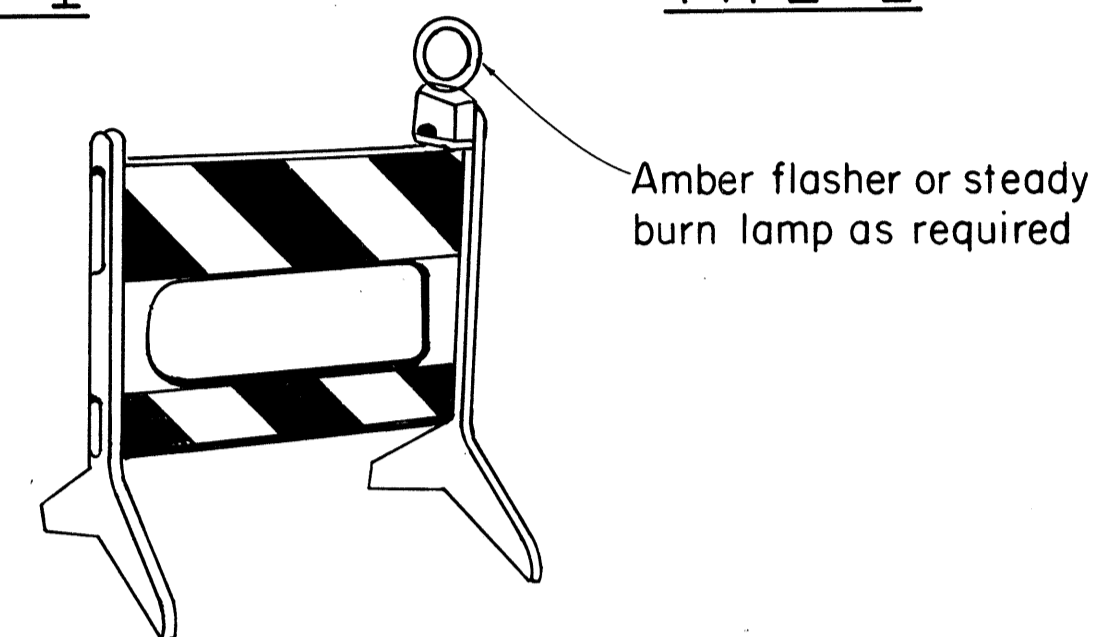
**TYPE I BARRICADE**

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



TYPE I

TYPE I

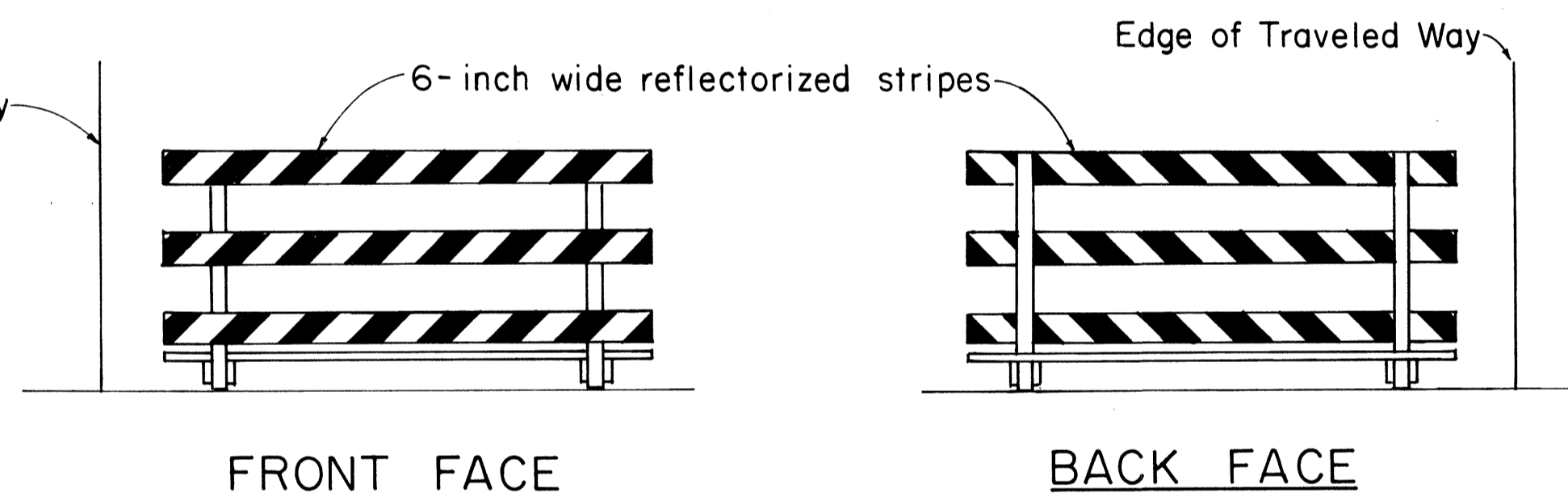


TYPE II

**PLASTIC MOLDED BARRICADE OPTIONS\***

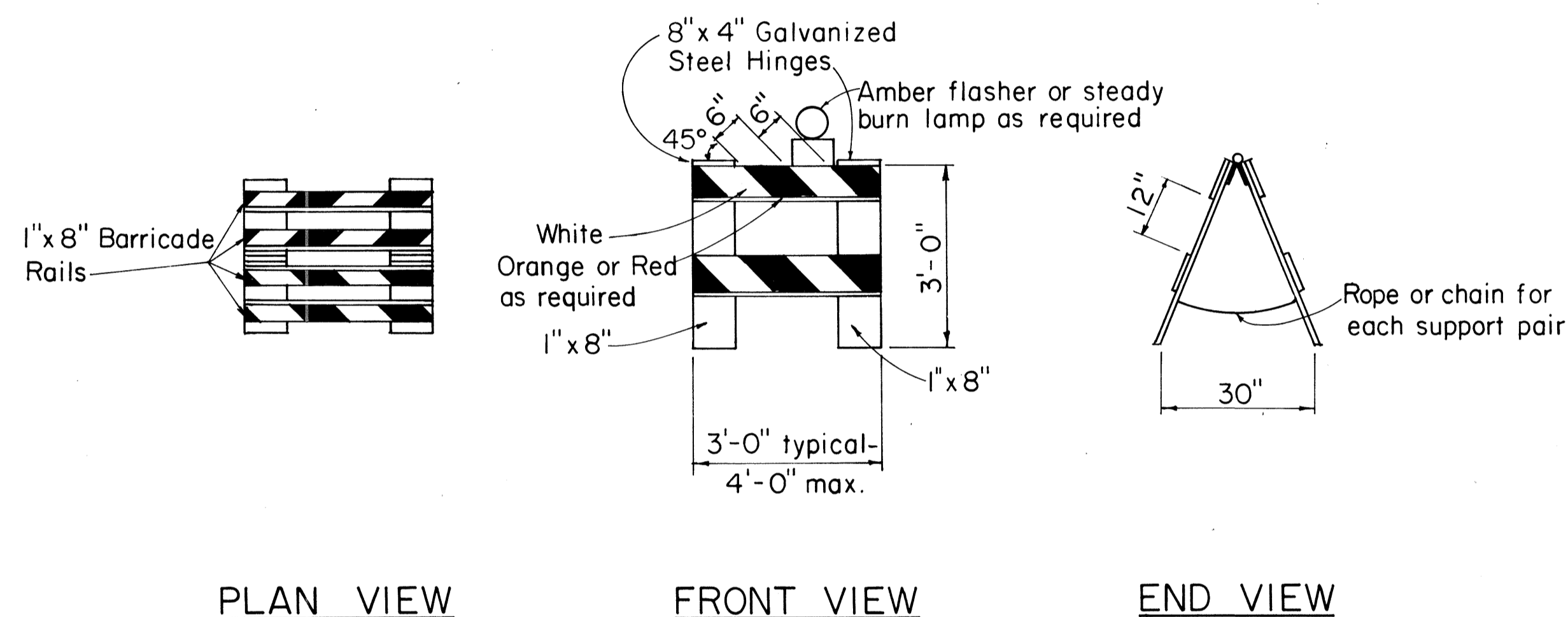
Not to Scale

\* Shop Drawings must be submitted for approval.



FRONT FACE

BACK FACE



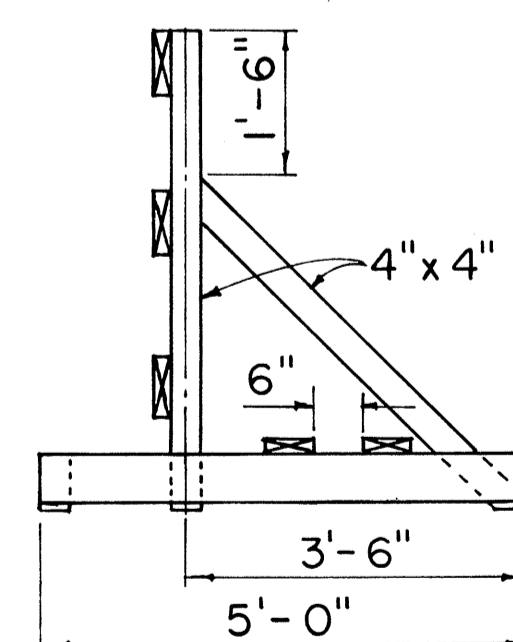
**TYPE II BARRICADE**

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

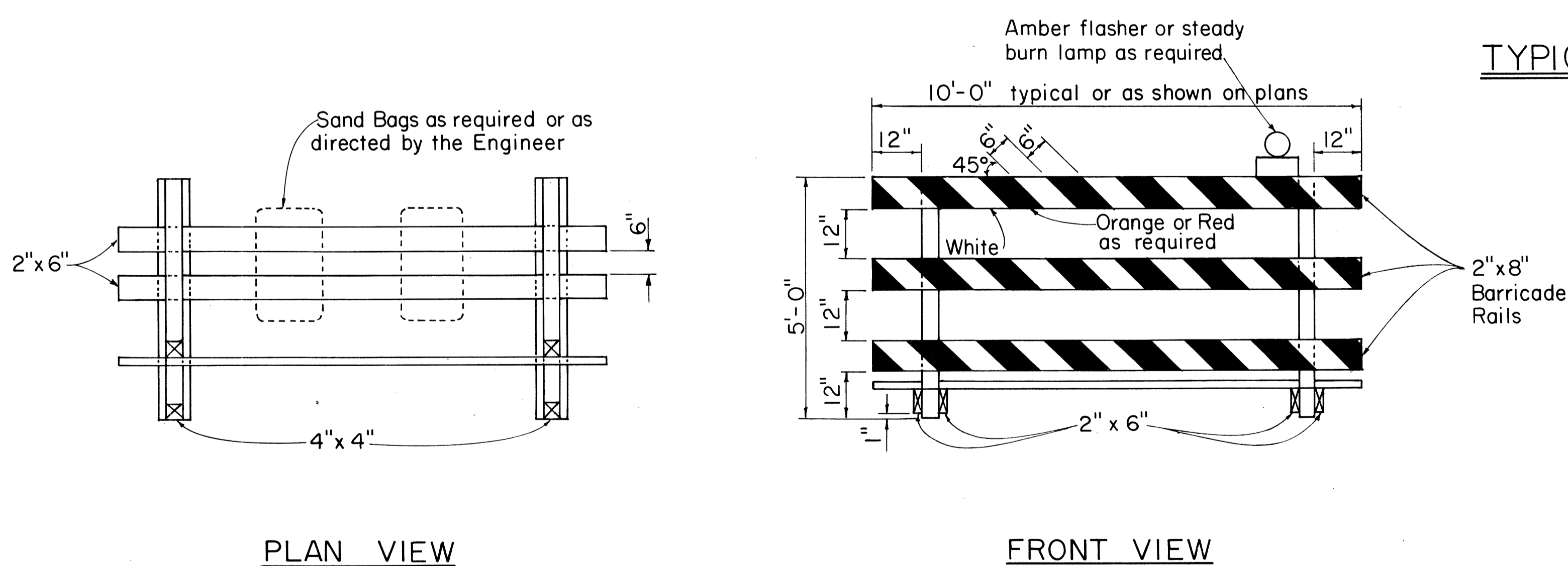
**TYPICAL BARRICADE STRIPING DETAILS\*\***

Not to Scale

\*\* Similar for Types I & II



END VIEW



**TYPE III BARRICADE**

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

**GENERAL NOTES**

1. The front and back faces of each barricade rail shall be reflectorized with stripes sloping downward toward the same side (traveled way) of each barricade.
2. Contractor may submit alternate barricade designs for approval.
3. Sandbags or other approved weights shall not be placed on top of any striped rail.
4. The Contractor is directed to Section 626.

|                   |      |
|-------------------|------|
| DATE              | ____ |
| SURVEY PLOTTED BY | ____ |
| PLAN              | ____ |
| DESIGNED BY       | ____ |
| NOTE BOOK         | ____ |
| QUANTITIES BY     | ____ |
| CHECKED BY        | ____ |
| No.               | ____ |

APPROVAL RECOMMENDED:  
*Eiichi Tanaka* 10/21/81  
 TRAFFIC ENGINEER DATE

APPROVED:  
*Shuhei S. Sakaiishi* 10/23/81  
 ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION                            | APPROVED BY | DATE     |
|-----|-------------------------------------|-------------|----------|
| 1   | Supersedes DT 800 Approved 12/30/69 | H.T.        | 10/23/81 |

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**STANDARD DETAILS**

**BARRICADES**

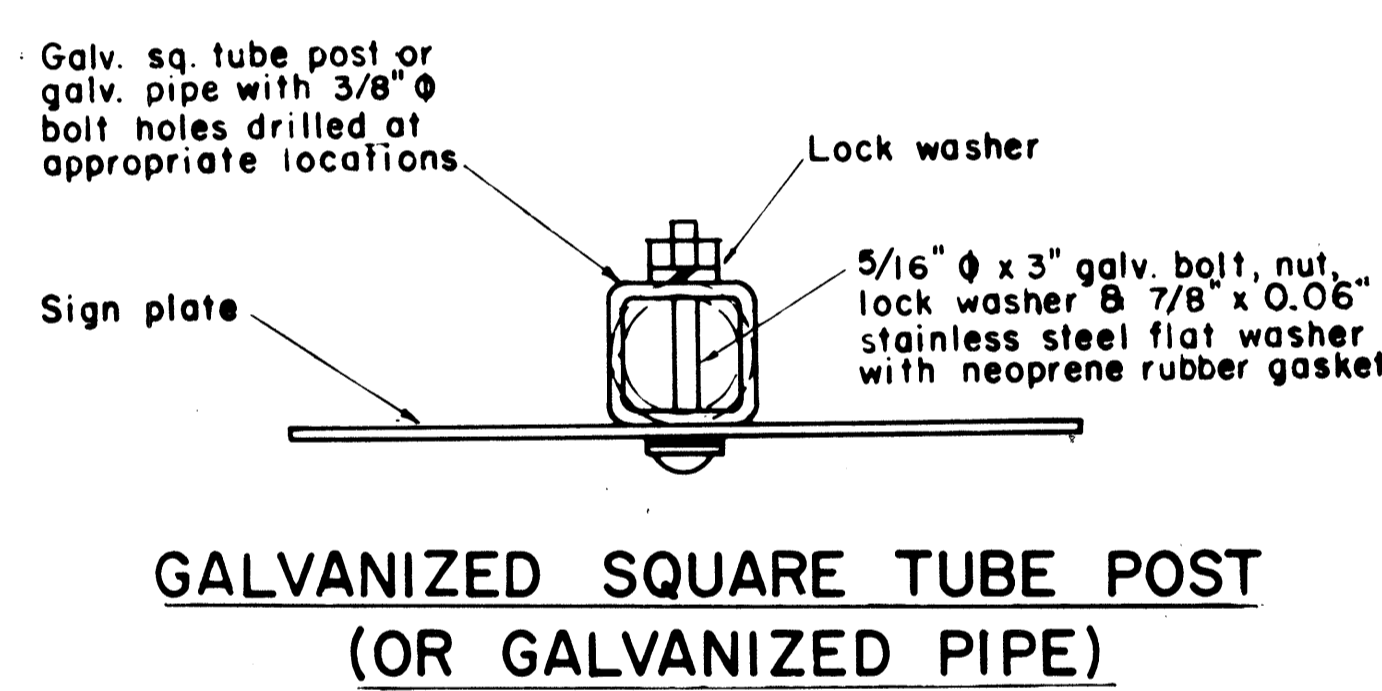
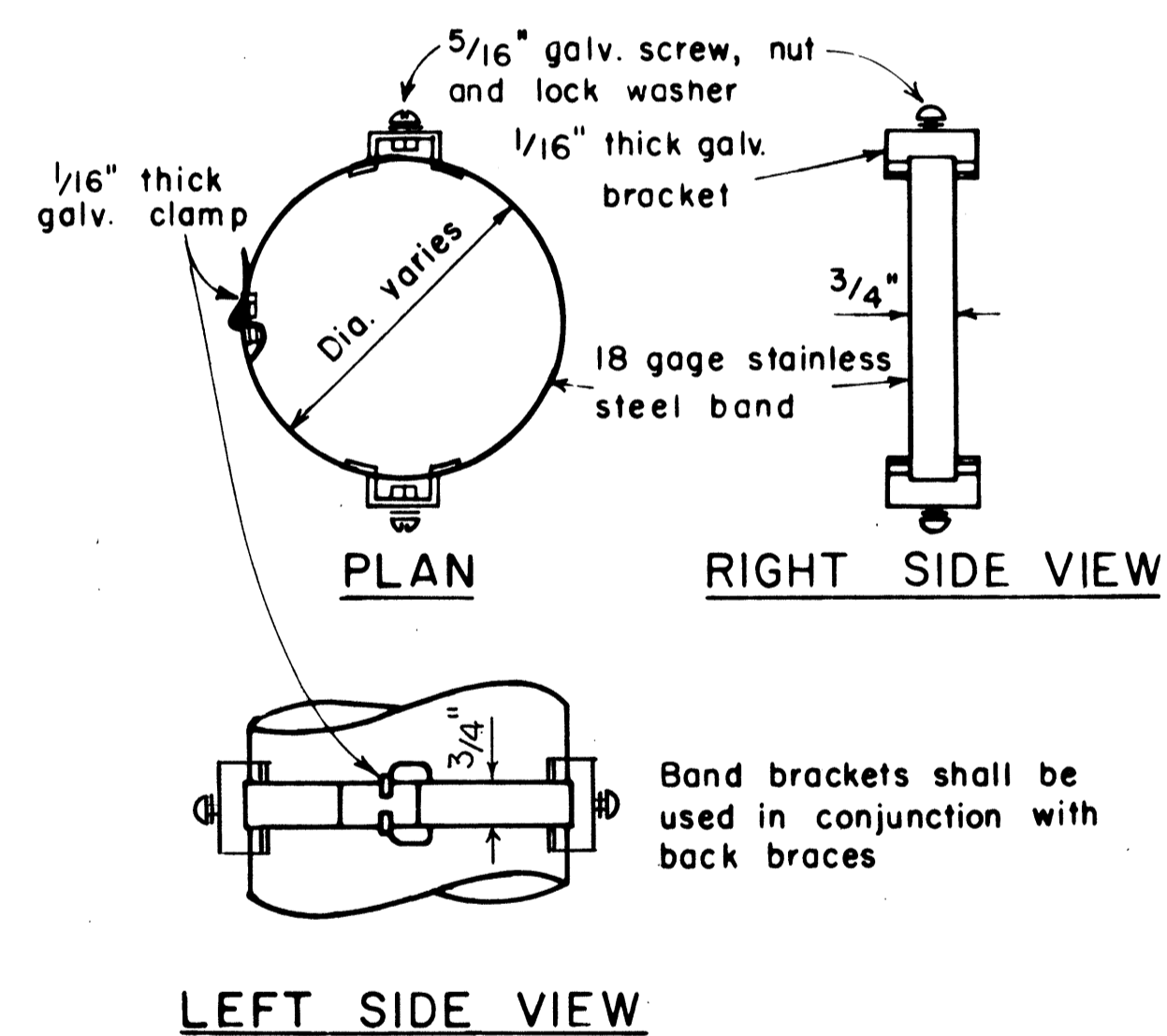
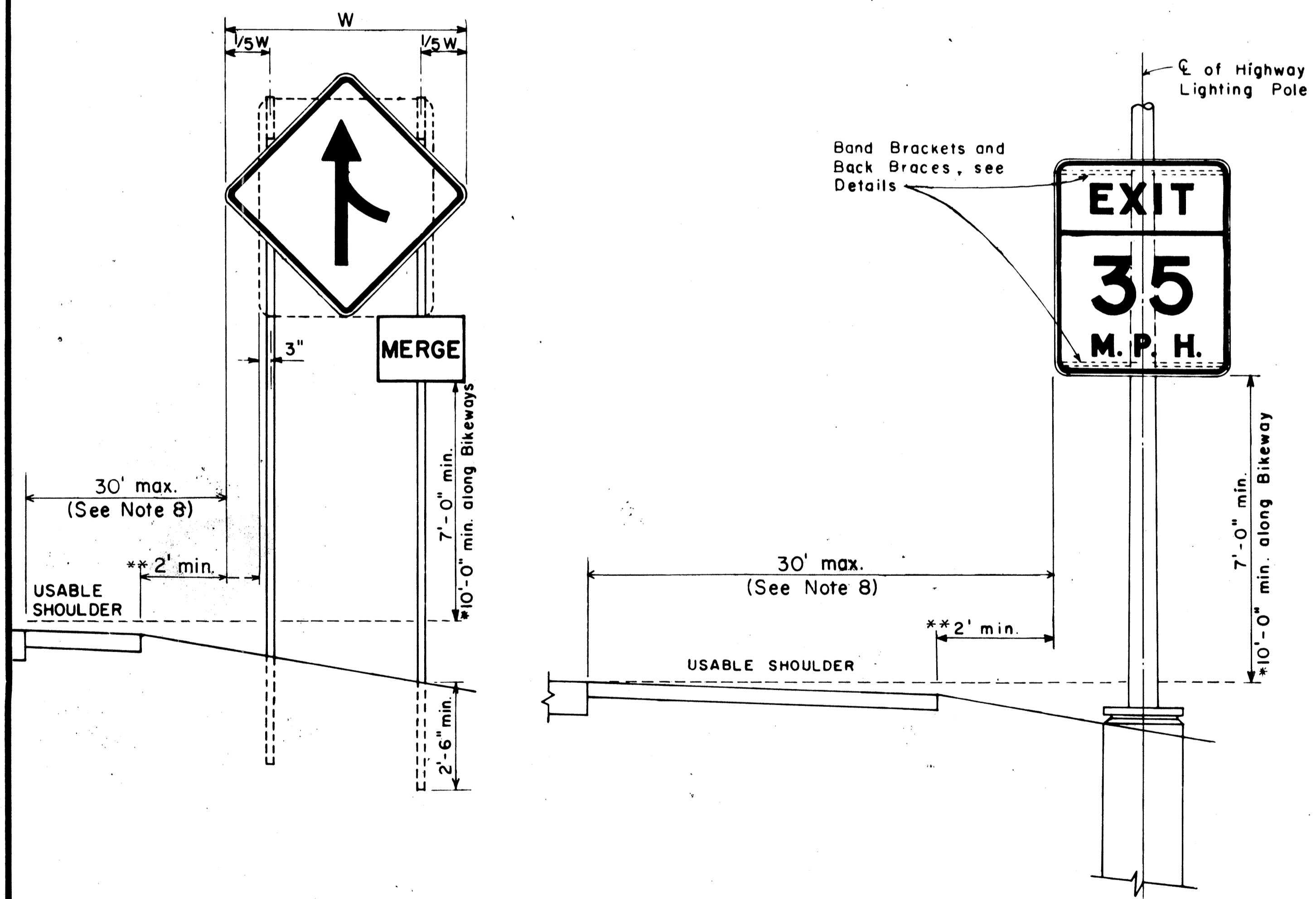
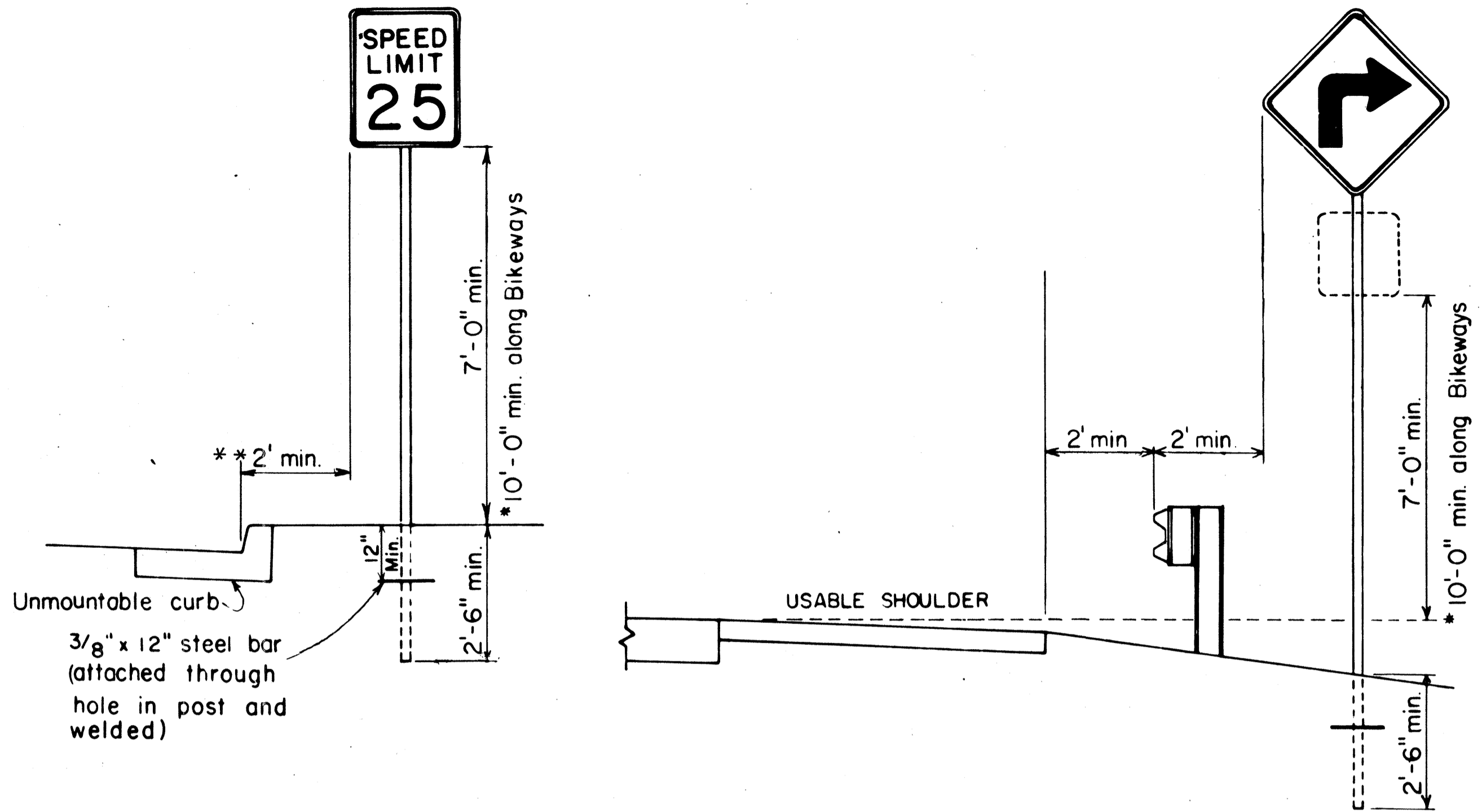
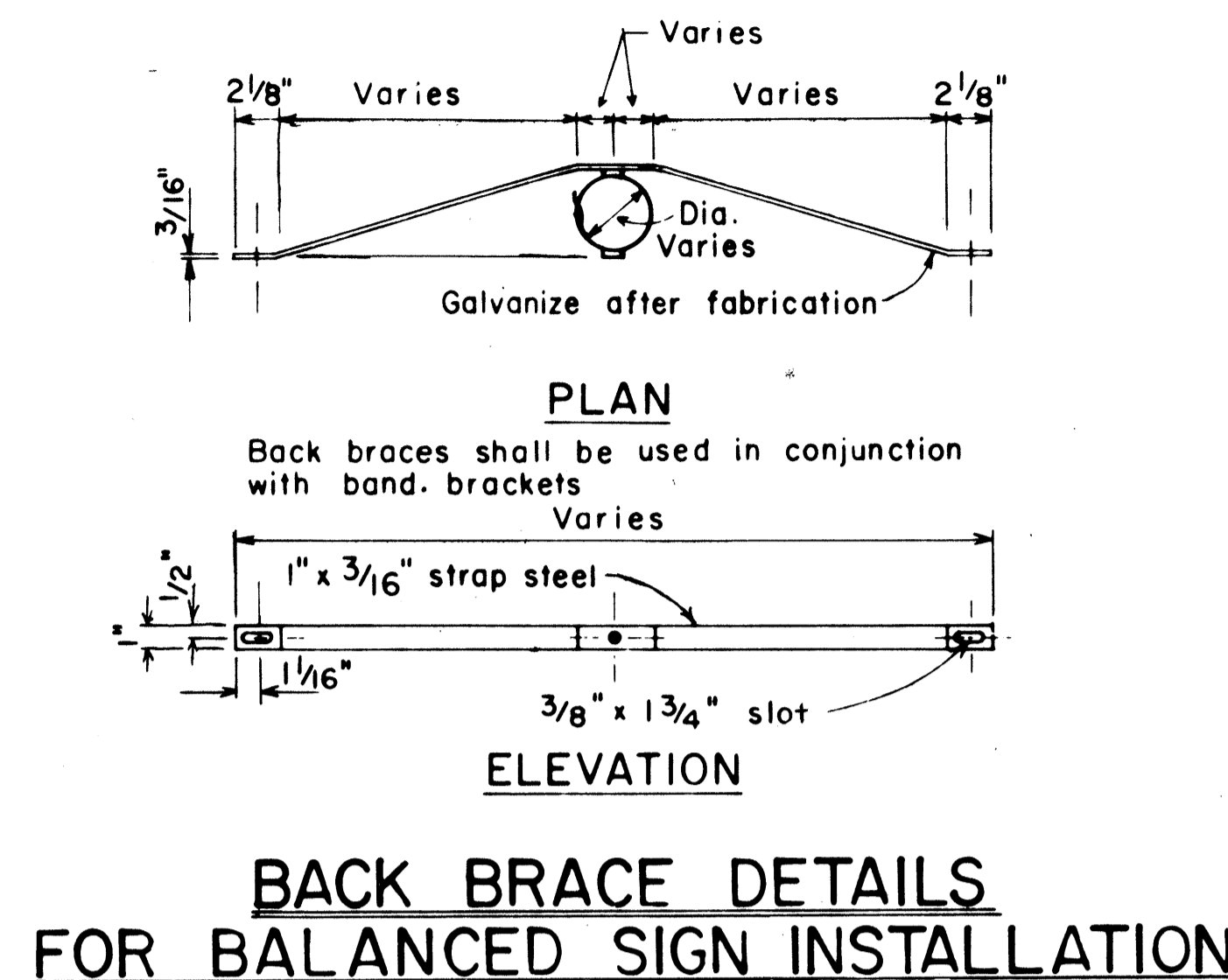
SCALE: As Shown

SHEET No. P-7 OF 18 SHEETS DT 800

|                     |       |                    |             |           |              |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| HAWAII              | HAW.  | -HI-(86)17         | 1981        | 40        | 207          |

**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.
- Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two sign posts except as noted below.
- Signs 48" and wider or larger than 10 sq. ft. in area may be mounted on other than two sign posts (i.e. on highway lighting poles)
  - 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 brackets and back braces.
- All parking restriction signs with arrows shall be mounted 45° to the line of traffic flow.
- Sign posts shall extend 3/2" above each sign, where required, for attachment of City and County street name signs.
- (R) or (L) indicates right or left and shall be shown on the plans.
- See plans for special details.
- 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.



**TYPICAL MOUNTING DETAILS**  
NOT TO SCALE

APPROVAL RECOMMENDED:  
*Eishi Tanaka* 11/10/77  
TRAFFIC ENGINEER DATE

APPROVED:  
*Harbert S. Sakai* 11/15/77  
ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION   | APPROVED BY | DATE     |
|-----|--|-------------|----------|
| 1   | Supersedes Sht. DT-100 approved 12/30/69                           | H.T.        | 11/15/77 |
| 2   | Revised depth of signpost  | H.T.        | 5/2/79   |
| 3   | Added Notes No. 8 & No. 9  | H.T.        | 5/12/79  |
| 4   | Revised Gen. Note #4 & Mounting Details                            | H.T.        | 4/23/80  |
| 5   | Revised General Notes, Lateral Sign Locations and Mounting Details | H.T.        | 5/15/81  |

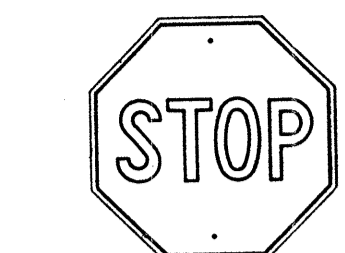
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**  
MISCELLANEOUS SIGN DETAILS

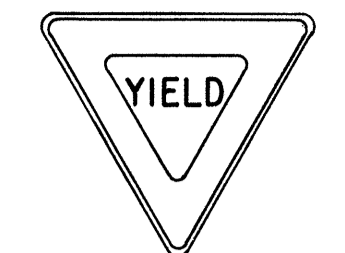
Not to scale June, 1977

ORIGINAL PLAN  
DATE: \_\_\_\_\_  
SURVEY ELICITED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | HI-(86)17          | 1981        | 41        | 207          |



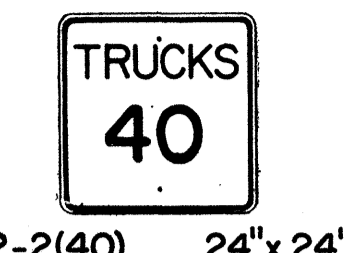
R1-1 30" x 30"  
R1-1-A 36" x 36"  
4-WAY  
R1-3 12" x 6"  
R1-3-A 18" x 9"



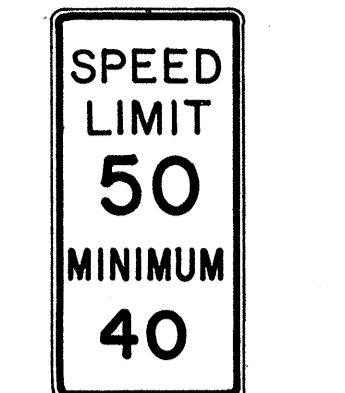
R1-2 36" x 36" x 36"  
R1-2-A 48" x 48" x 48"



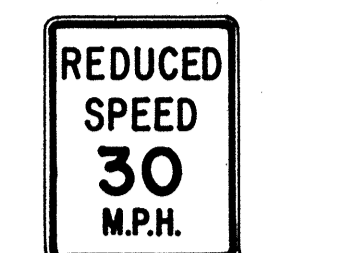
R2-1(50) 24" x 30"  
R2-1(50)-A 48" x 60"



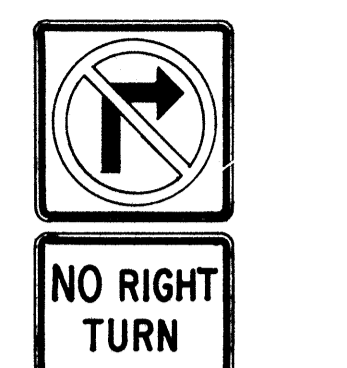
R2-2(40) 24" x 24"  
R2-2(40)-A 48" x 48"



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



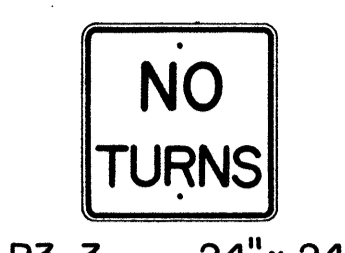
R2-5b(30) 24" x 30"  
R2-5b(30)-A 48" x 60"



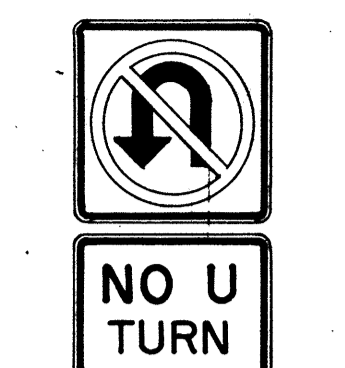
R3-1 24" x 24"  
24" x 18"  
R3-1-A 48" x 48"  
48" x 36"



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"



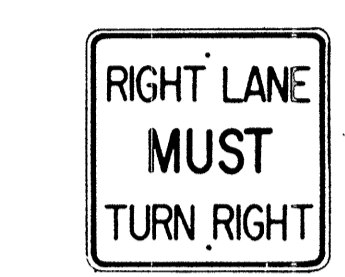
R3-4 24" x 24"  
24" x 18"  
R3-4-A 48" x 48"  
48" x 36"



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



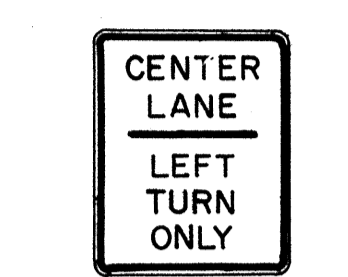
R3-6(L) 30" x 36"  
R3-6(L)-A 48" x 60"



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"



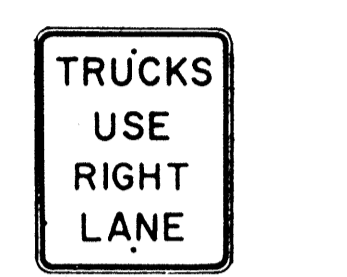
R4-1 24" x 30"



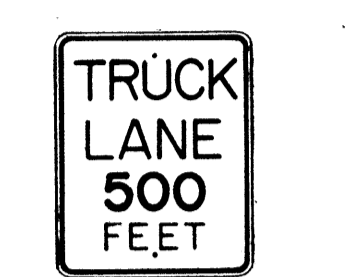
R4-2 24" x 30"



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



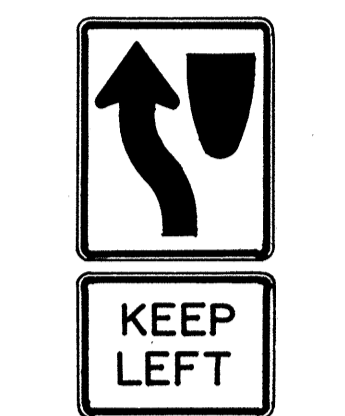
R4-5 24" x 30"



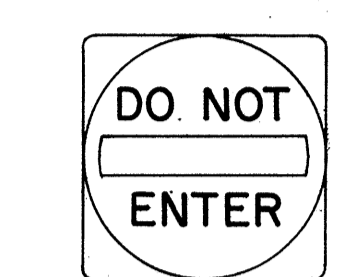
R4-6(500) 24" x 30"



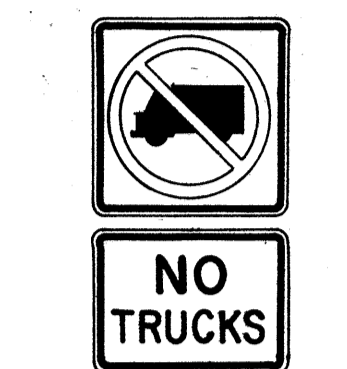
R4-7 24" x 30"  
24" x 18"



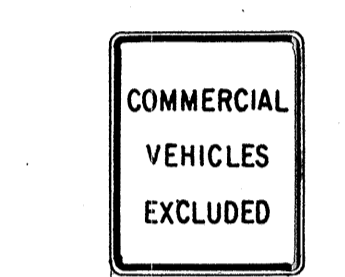
R4-8 24" x 30"  
24" x 18"



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



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



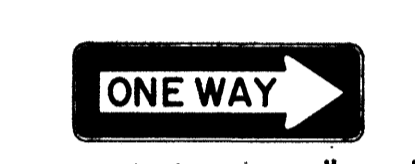
R5-4 24" x 30"



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



R5-9 36" x 24"



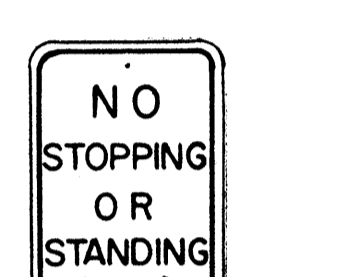
R6-1 (R) 36" x 12"



R6-2(R) 18" x 24"



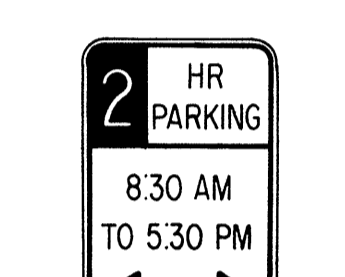
R7-1 12" x 18"  
R7-1-A 24" x 30"



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"



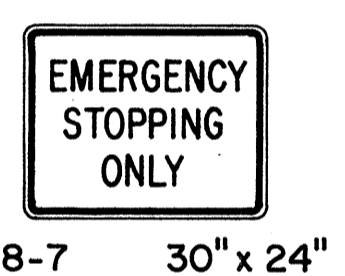
R8-4 30" x 24"  
R8-4-A 48" x 36"



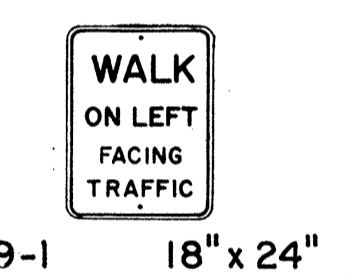
R8-5 24" x 30"



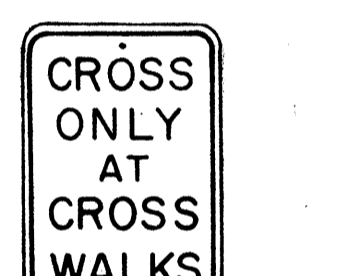
R8-6 24" x 30"



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



R9-1 18" x 24"



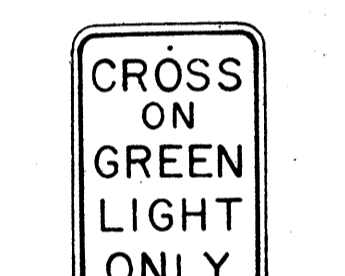
R9-2 12" x 18"



R9-3 12" x 18"



R9-4 18" x 24"



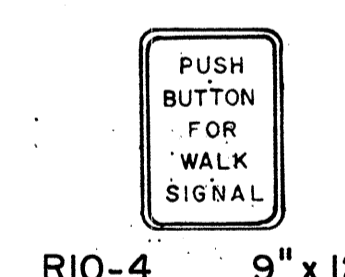
R10-1 12" x 18"



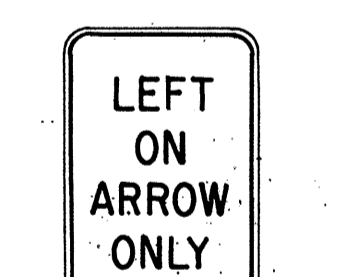
R10-2 12" x 18"



R10-3 9" x 12"



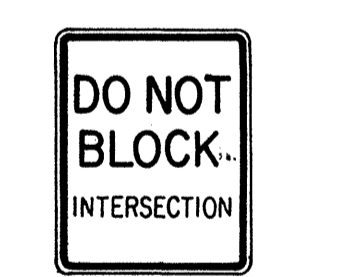
R10-4 9" x 12"



R10-5 24" x 30"



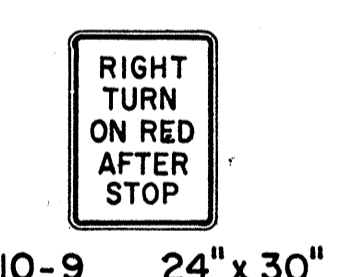
R10-6 24" x 36"



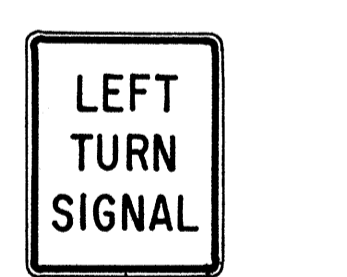
R10-7 24" x 30"



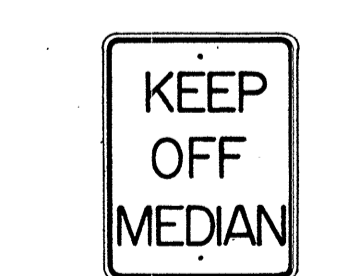
R10-8 24" x 30"



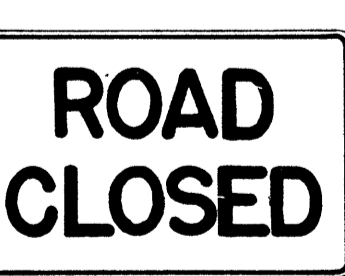
R10-9 24" x 30"



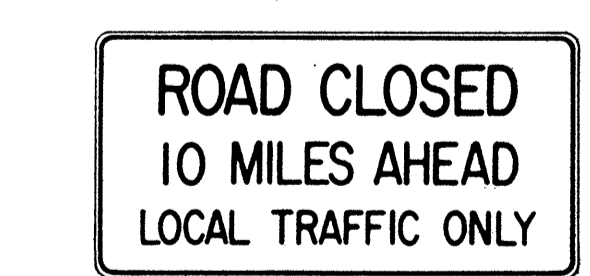
R10-10 24" x 30"



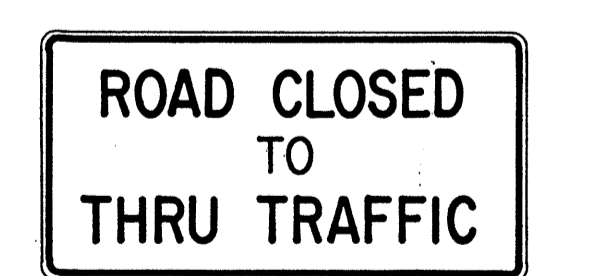
R11-1 24" x 30"



R11-2 48" x 30"



R11-3(10) 60" x 30"



R11-4 60" x 30"



R12-1(10) 24" x 30"

**GENERAL NOTES**

1. 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 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:  
*Etsuki Tanaka* 3/17/72  
TRAFFIC ENGINEER DATE

APPROVED:  
*Robert Roberts* 3-20-72  
ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION                                 | APPROVED BY | DATE     |
|-----|--|-------------|----------|
| 1   | Supersedes Sht. DT 101 Approved 12-30-69 | H.T.        | 3/20/72  |
| 2   | Revised General Note 1                   | H.T.        | 10/10/74 |
| 3   | Added General Note 5                     | H.T.        | 6/9/79   |

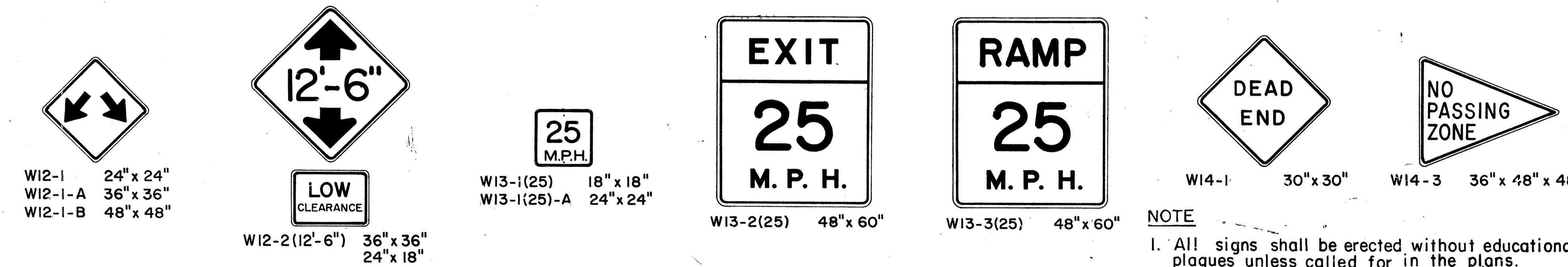
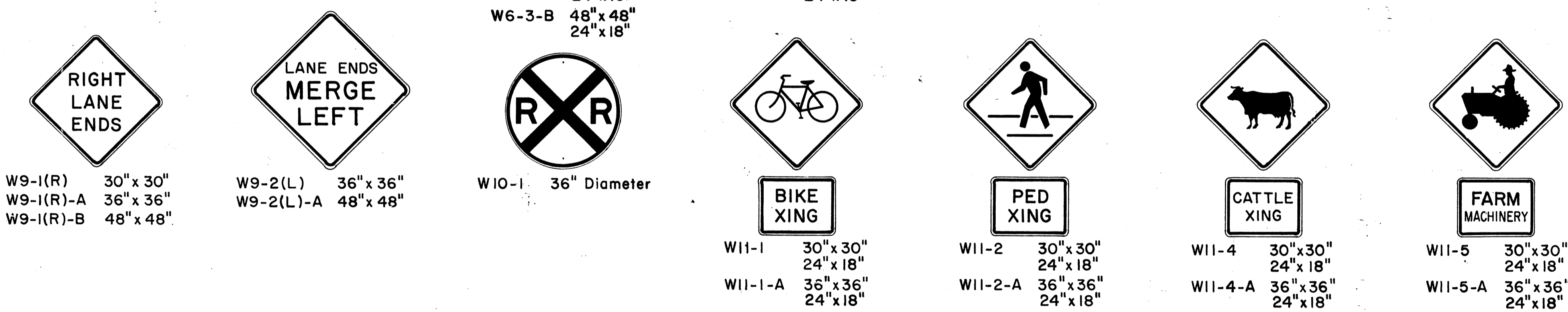
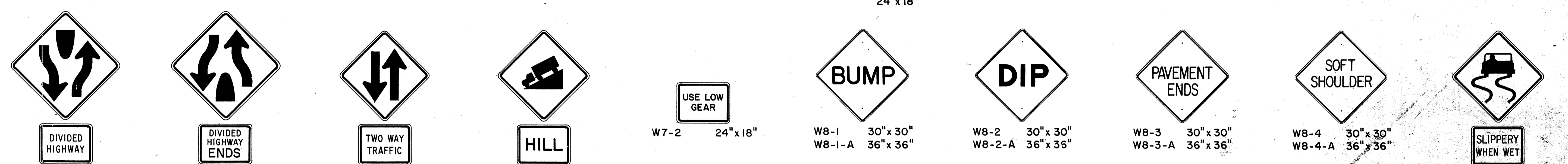
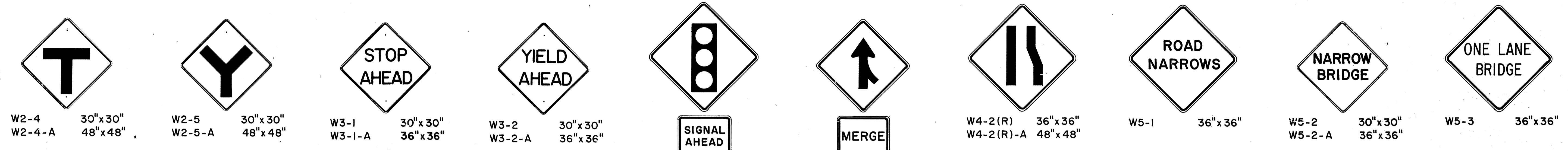
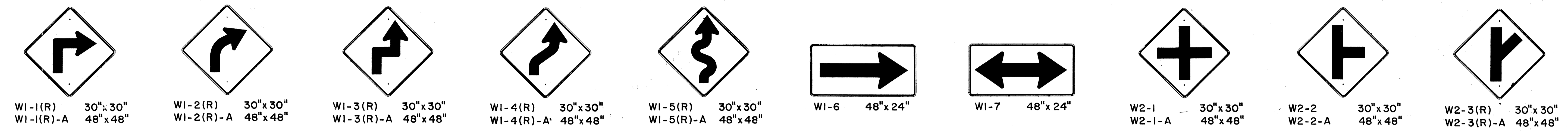
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**  
**REGULATORY SIGNS**

NOT TO SCALE

SHEET No. P-9 OF 18 SHEETS DT 101

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
NOTE BOOK: \_\_\_\_\_  
QUANTITIES BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
No. \_\_\_\_\_



**GENERAL NOTES**

1. 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 warning signs shall be reflectorized unless otherwise specified.
3. All warning 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. Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized.

APPROVAL RECOMMENDED:  
*Eiichi Tanaka* 3/17/72  
 TRAFFIC ENGINEER DATE

APPROVED:  
*Robert Selsick* 3-20-72  
 ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION                                 | APPROVED BY | DATE     |
|-----|--|-------------|----------|
| 1   | Supersedes Sht. DT 102 Approved 12-30-69 | HT.         | 3/20/72  |
| 2   | Revised General Note 1                   | HT.         | 10/16/72 |
| 3   | Revised General Note 5                   | MA.         | 9-16-73  |
| 4   | Revised General Note 5                   | HT.         | 7-14-70  |
| 5   | Added Note 1                             | HT.         | 11-7-79  |

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**STANDARD DETAILS**  
**WARNING SIGNS**

NOT TO SCALE

SHEET No. P-10 OF 18 SHEETS DT 102

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

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

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | H-11-(86)17        | 1981        | 43        | 207          |

General Notes

- Sign details shall conform to the latest editions of the following FHWA publications:
  - "Standard Alphabets for Highway Signs," and as amended.
  - "Standard Highway Signs," and as amended.
  - "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
- All signs shall be reflectorized with reflective sheeting, unless otherwise specified.
- All signs shall have  $\frac{3}{8}$ " bolt holes drilled at appropriate locations.
- Numerals in ( ) indicate numerals to be inserted for sign message. (R) or (L) indicates right or left.
- Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, and shall be reflectorized with reflective sheeting.
- All signs shall be erected without educational plaques unless called for in the plans.

ALL WAY  
R1-4 18" x 6"

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

SPEED LIMIT ENFORCED BY VASCAR  
4" Series D  
4" Series C  
3" Series D  
5" Series C  
R2-10 24" x 30"

CENTER LANE ONLY  
R3-9b 24" x 36"

BUS STOP  
R7-107(R) 12" x 24"

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

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

NO PED XING  
R9-3a 18" x 18"  
18" x 12"  
R9-3a-A 24" x 24"  
24" x 18"

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

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

NO TURN ON RED  
R10-11a 24" x 30"

TURN RIGHT ANY TIME WITH CAUTION  
4" Series C  
R16-1 24" x 30"

NO LEFT TURN ON RED  
4" Series D  
3" Series D  
2" Series D  
3" Series D  
R16-3 18" x 24"

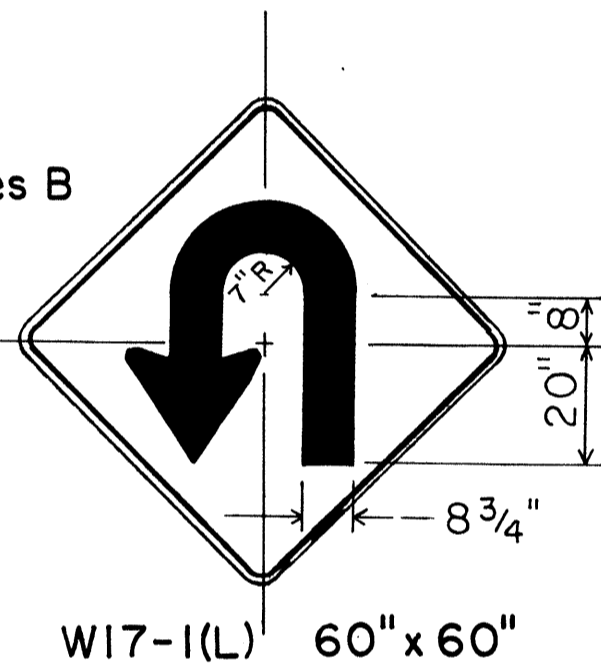
NO RIGHT TURN ON RED  
R16-4 18" x 24"

UNLICENSED VEHICLES BICYCLES, CYCLES UNDER 5 H.P., PEDESTRIANS KEEP OUT FREEWAY  
3" Series C  
4" Series E  
R16-5 36" x 42"

TURN AHEAD  
8" Series F  
5" Series D  
R16-6 24" x 30"

U TURN OK  
8" Series F  
5" Series D  
R16-7 24" x 30"

MOTOR-DRIVEN CYCLES PROHIBITED  
4" Series B  
R5-8 30" x 24"



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

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

STOP AHEAD WHEN FLASHING  
6" Series C  
W3-4 48" x 48"

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

THRU TRAFFIC MERGE LEFT  
6" Series E  
W9-3(L) 48" x 48"

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

FIRE STATION  
W11-8 36" x 36"  
24" x 18"  
W11-8-A 48" x 48"  
24" x 18"

W11-9 36" x 36"  
W11-9-A 48" x 48"

LIMITED SIGHT DISTANCE  
W14-4 36" x 36"  
W14-4-A 48" x 48"

DELAYED GREEN  
4" Series C  
W15-1 24" x 24"

ADVANCE GREEN  
W15-2 24" x 24"

END FREEWAY 1/2 MI  
8" Series E  
CW16-1(1/2) 60" x 60"

RIGHT LANE EXIT ONLY  
8" Series E  
W18-1 48" x 60"

SCHOOL BUS STOP AHEAD  
S1-1 36" x 36"

S2-1 36" x 36"

S3-1 30" x 30"

8:00 AM TO 3:30 PM  
S4-1 24" x 10"  
WHEN CHILDREN ARE PRESENT  
S4-2 24" x 10"

SCHOOL  
S4-3 24" x 8"  
WHEN FLASHING  
S4-4 24" x 10"

SIDEWALK CLOSED  
7" Series D  
CW23-4 48" x 48"

USE SIDEWALK  
4" Series C  
R18-1 24" x 18"

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

APPROVED:  
*Andrew Z. Zakeich* 5/3/78  
ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION                               | APPROVED BY | DATE    |
|-----|--|-------------|---------|
| 1   | Supersedes Sht. DT103 approved 3/20/72 | H.T.        | 5/3/78  |
| 2   | Added General Note 6                   | H.T.        | 11/9/78 |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**

MISCELLANEOUS SIGNS

NOT TO SCALE DATE: MAY, 1978  
SHEET No. P-11 OF 18 SHEETS. DT 103



CW20-1a 48" x 48"



CW20-2d 48" x 48"



CW20-3b 48" x 48"



CW20-4d 48" x 48"



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



CW20-7c 48" x 48"



CW21-1 30" x 30"



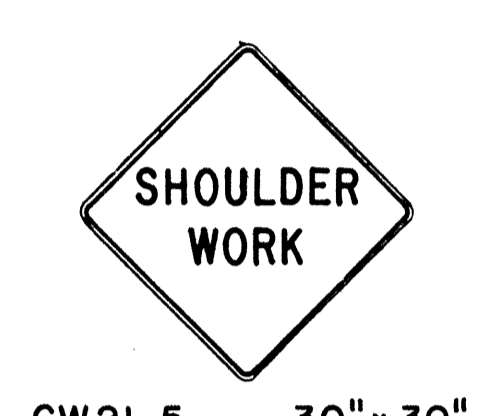
CW21-2 30" x 30"



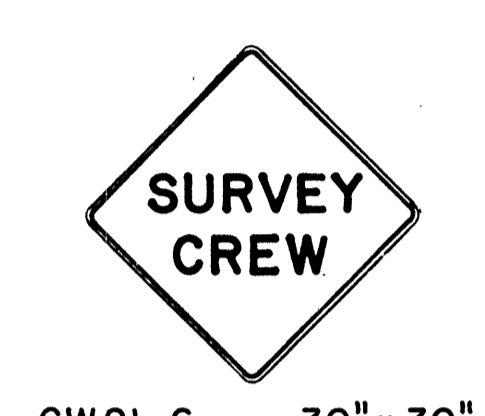
CW21-3 36" x 36"



CW21-4 36" x 36"



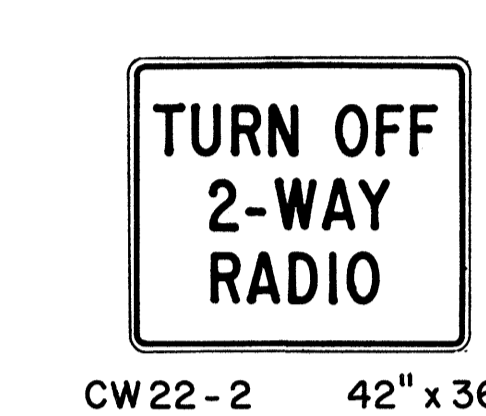
CW21-5 30" x 30"



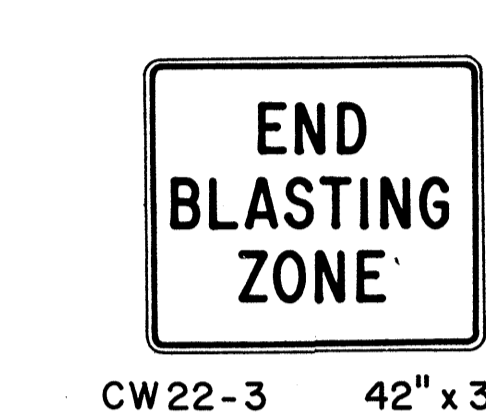
CW21-6 30" x 30"



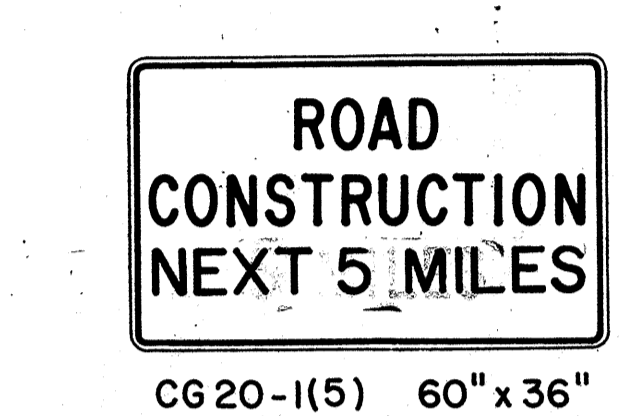
CW22-1b 48" x 48"



CW22-2 42" x 36"



CW22-3 42" x 36"



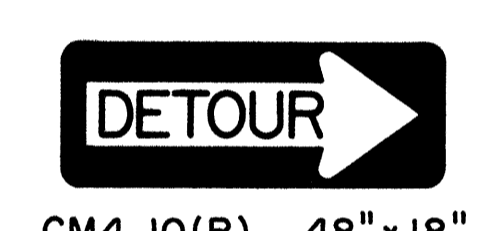
CG20-1(5) 60" x 36"



CG20-2 60" x 24"



CM4-9(R) 30" x 24"



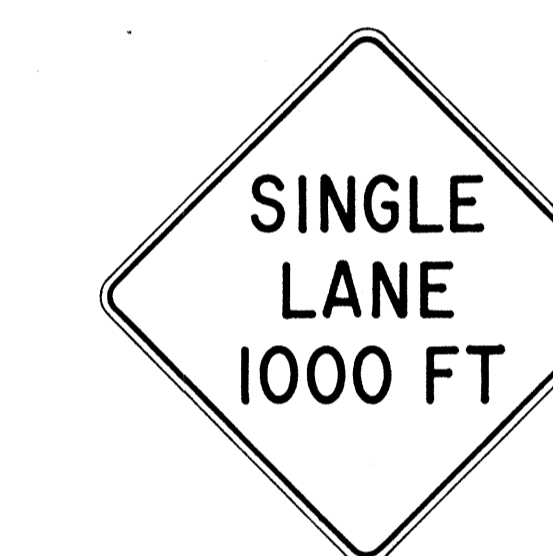
CM4-10(R) 48" x 18"



CG20-4 36" x 18"



CW23-1 36" x 36"



CW23-2b 48" x 48"



CW23-3(R) 48" x 48"

**GENERAL NOTES**

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All construction signs shall be reflectorized.
- All construction signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- For "CW" series signs, suffixes a,b,c and d are as follows:  
a-1500 FT, b-1000 FT, c-500 FT and d-AHEAD.

APPROVAL RECOMMENDED:  
*Eishi Tanaka* 3/21/72  
 TRAFFIC ENGINEER DATE

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

| 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                    | M.H.        | 9-16-75  |
| 4   | Revised General Note 2 and sign CG20-1(5) | H.C.        | 9-14-76  |

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**STANDARD DETAILS**  
**CONSTRUCTION SIGNS**

NOT. TO SCALE

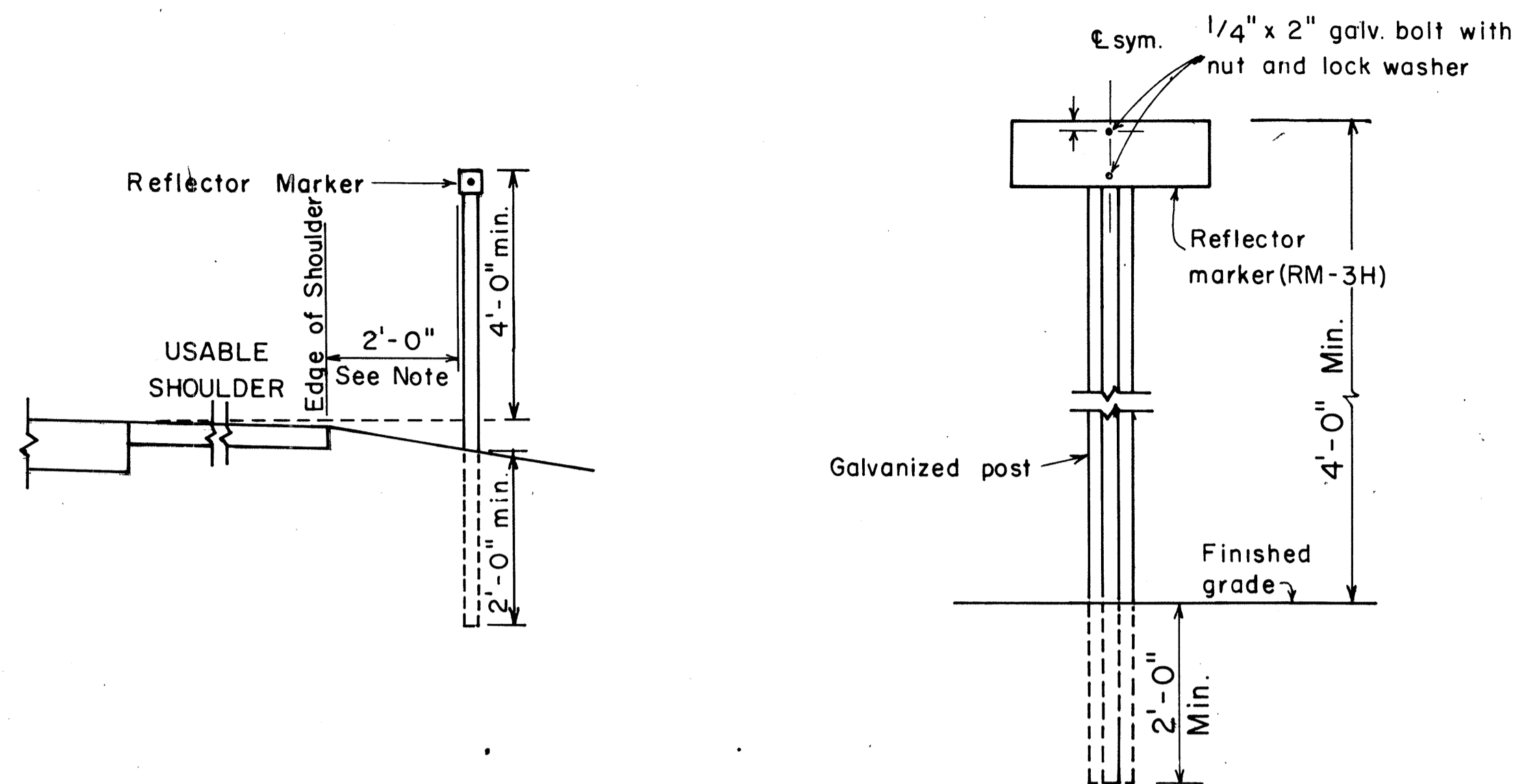
SHEET No. P-12 OF 18 SHEETS DT 104

DATE: \_\_\_\_\_  
 SURVEY PLOTTED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 NOTE BOOK No. \_\_\_\_\_

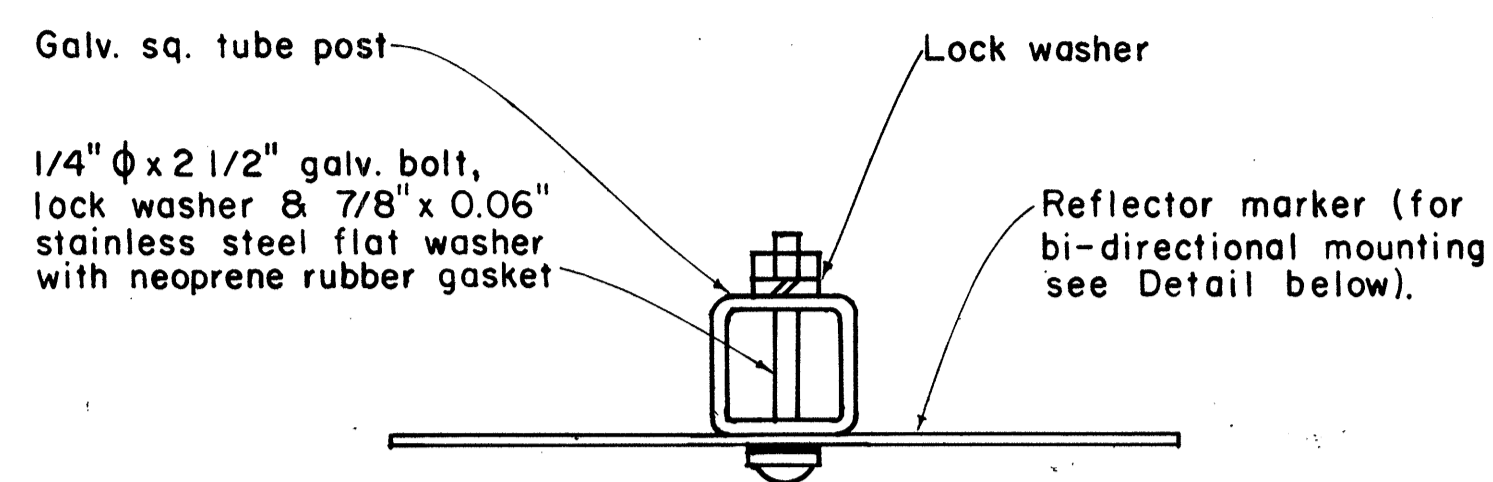
|                     |       |                    |             |           |              |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| HAWAII              | HAW.  | I-HH(86)17         | 1981        | 45        | 207          |

**GENERAL NOTES:**

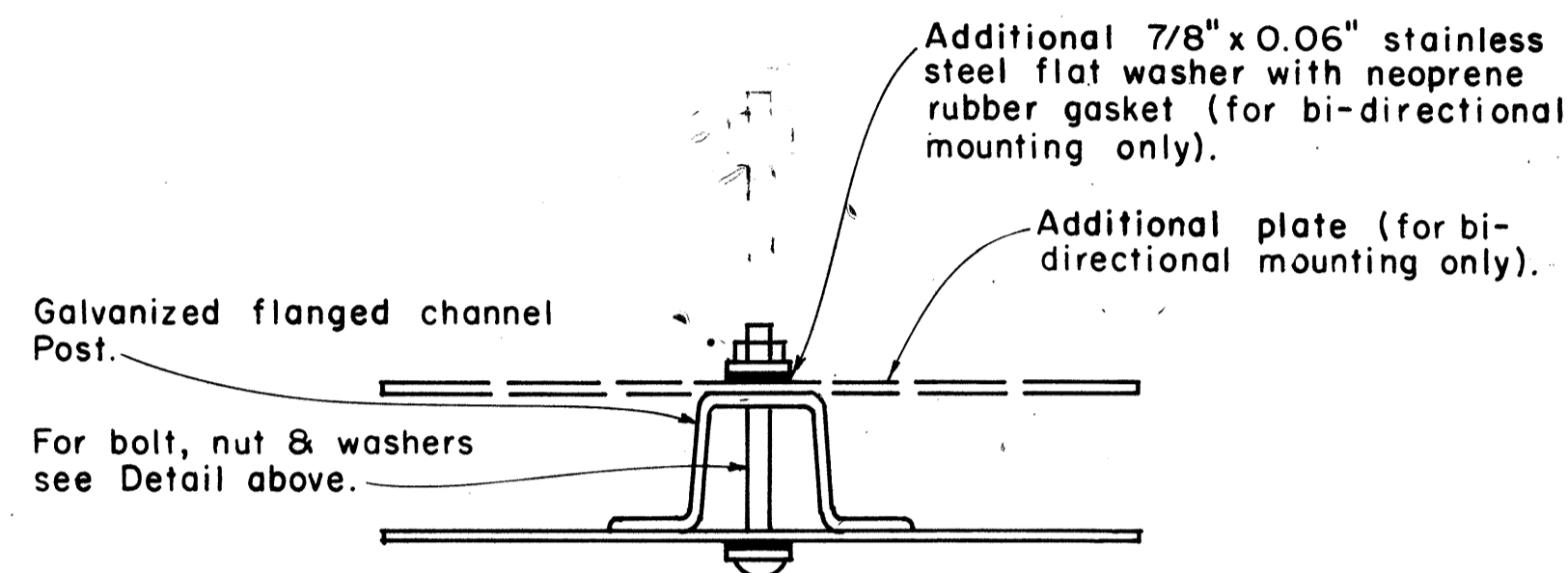
1. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
2. (R) or (L) indicates right or left and shall be as shown on the plans.
3. Reflector markers RM-1 and RM-2 shall be:
  - a) Yellow if placed along the left edge of divided 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**

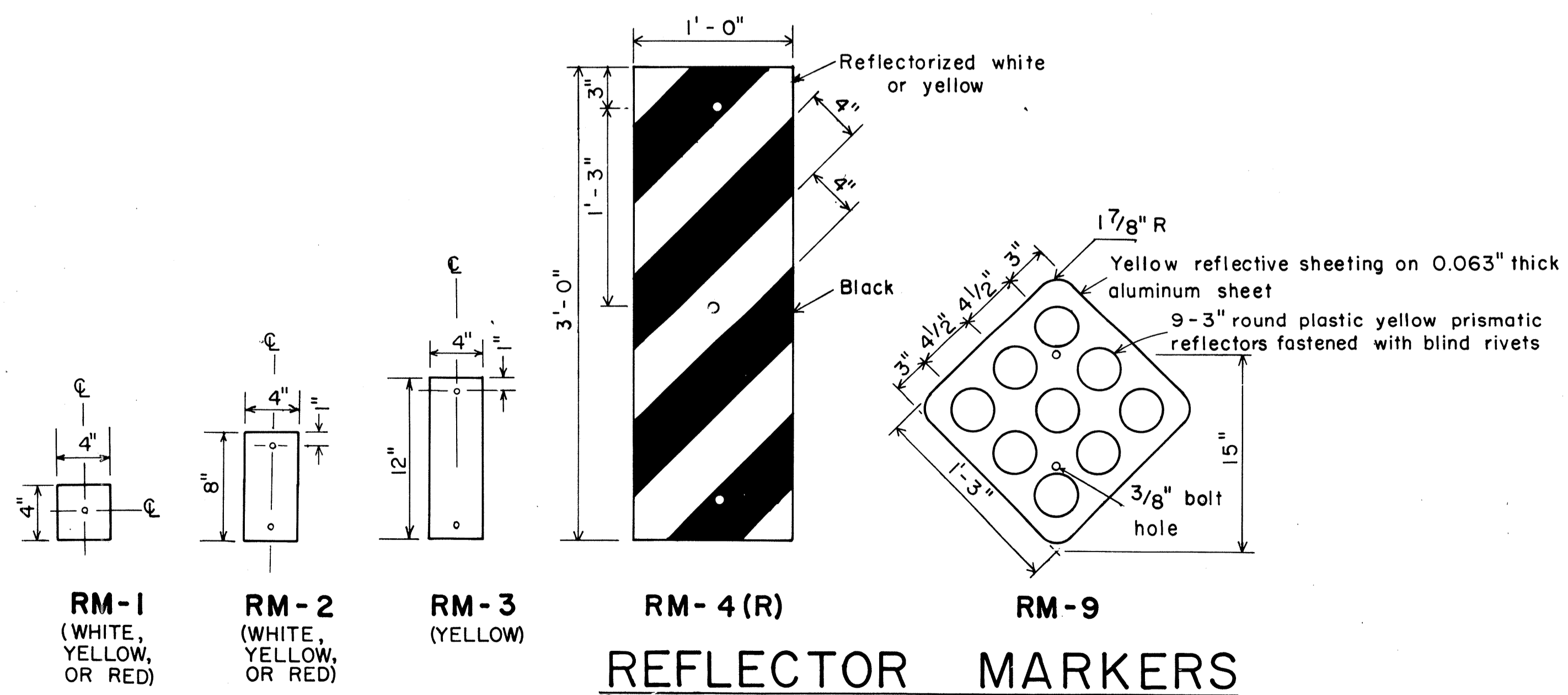


**GALVANIZED SQUARE TUBE POST**



**GALVANIZED FLANGED CHANNEL POST**

**TYPICAL MOUNTING DETAILS**



**REFLECTOR MARKERS**

APPROVAL RECOMMENDED:  
*Eishi Tanaka* 11/7/77  
 TRAFFIC ENGINEER DATE

APPROVED:  
*Herbert R. Sakai* 11/15/77  
 ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION                 | APPROVED BY | DATE    |
|-----|--------------------------|-------------|---------|
| 1   | Revised Mounting Details | H.T.        | 4/25/80 |

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

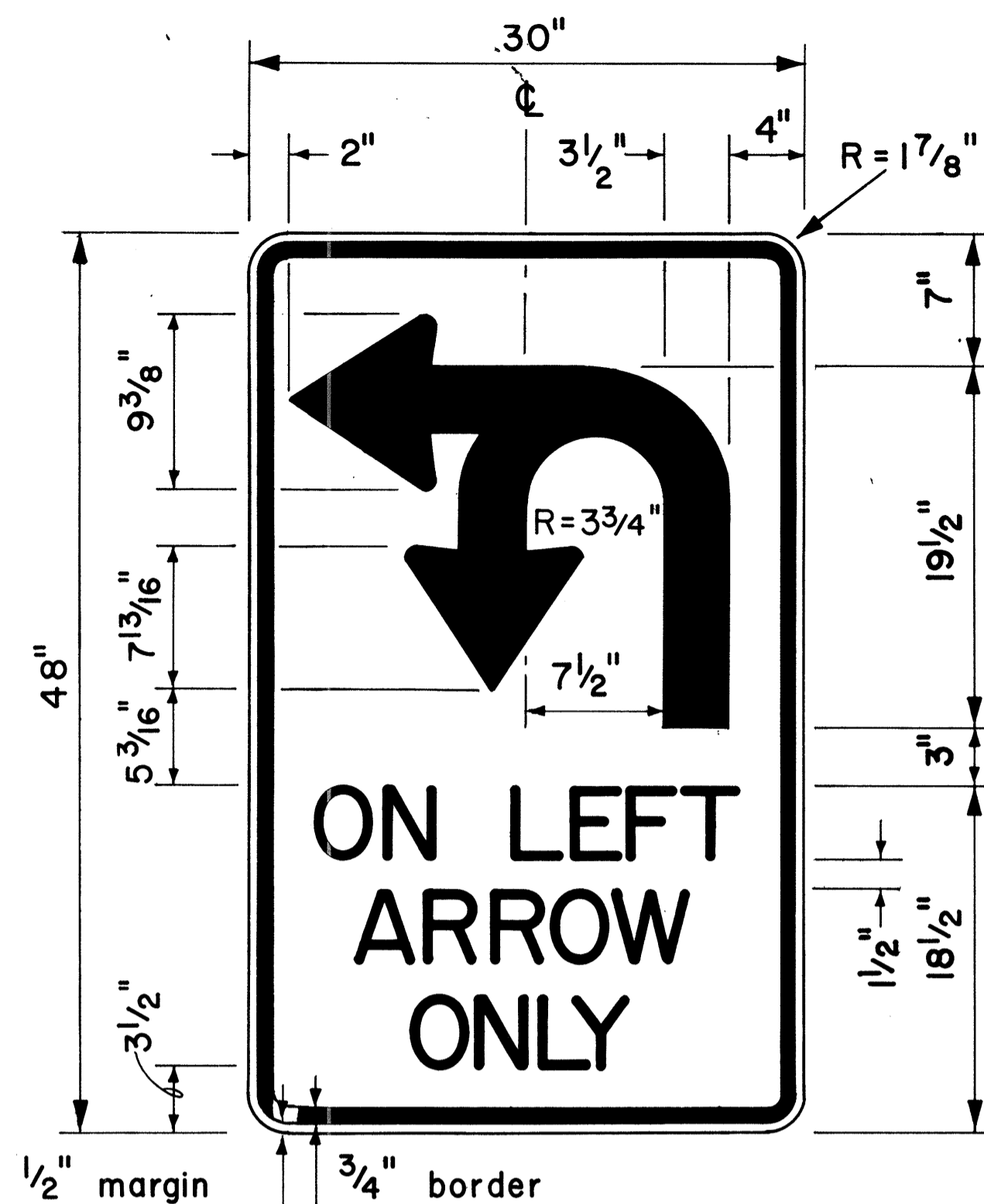
**STANDARD DETAILS**  
 MISCELLANEOUS REFLECTOR MARKERS

Not to scale June, 1977

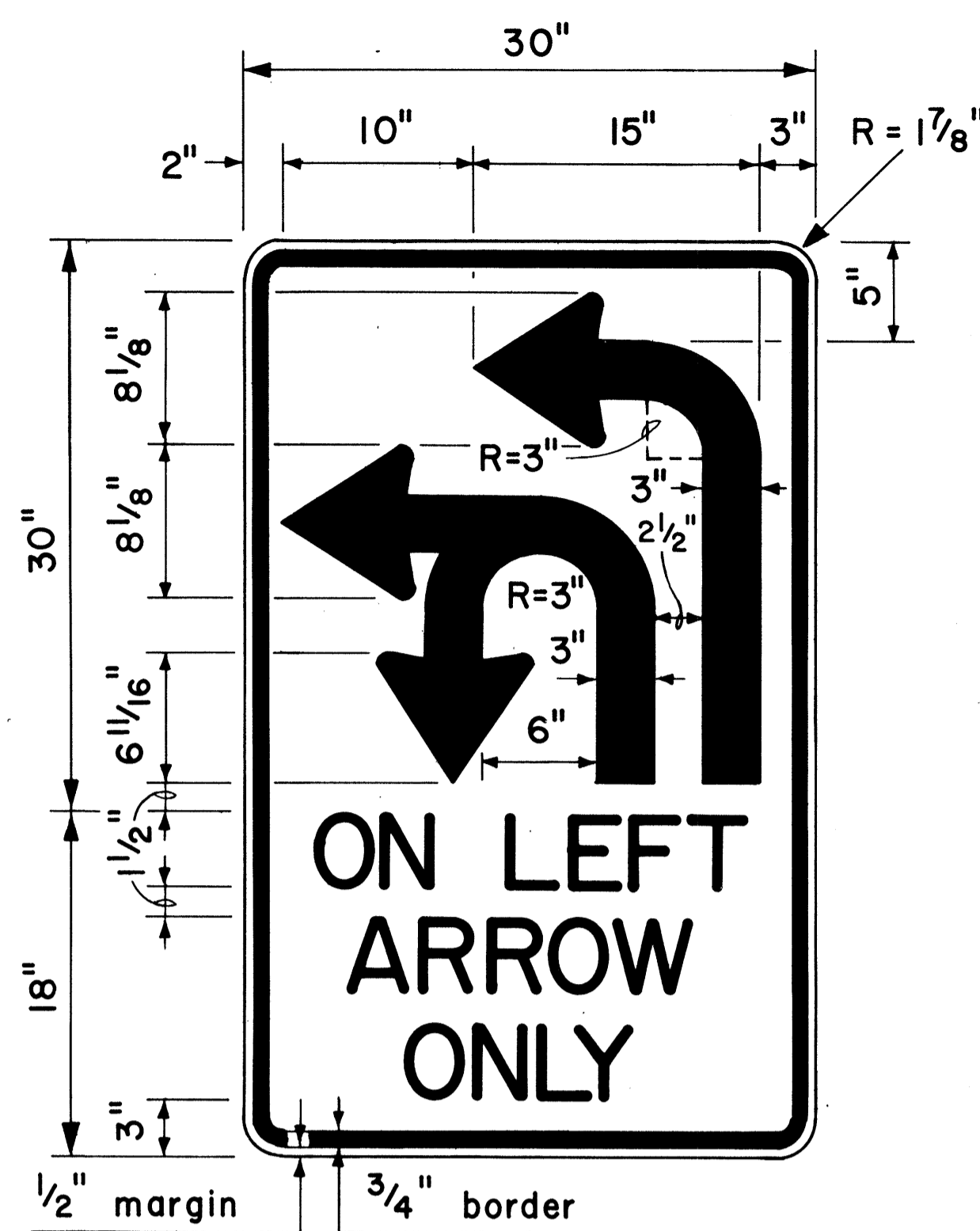
SHEET No. P-13 OF 18 SHEETS DT 110

|                    |       |
|--------------------|-------|
| DATE               | _____ |
| SURVEY ELICITED BY | _____ |
| DRAWN BY           | _____ |
| DESIGNED BY        | _____ |
| NOTE BOOK          | _____ |
| QUANTITIES BY      | _____ |
| CHECKED BY         | _____ |
| No.                | _____ |

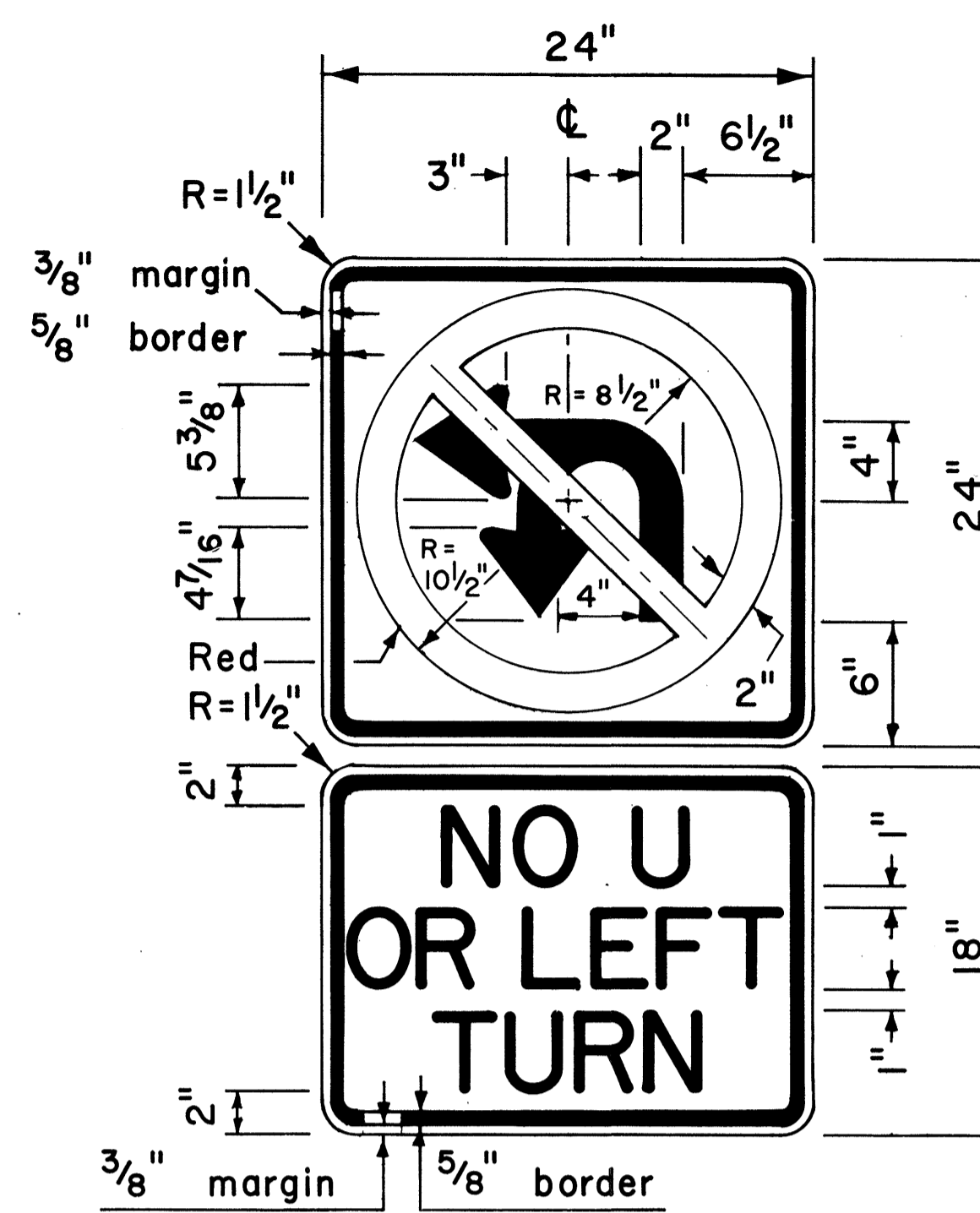
|                     |       |                    |             |           |              |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| HAWAII              | HAW.  | FHI-(86)17         | 1981        | 46        | 207          |



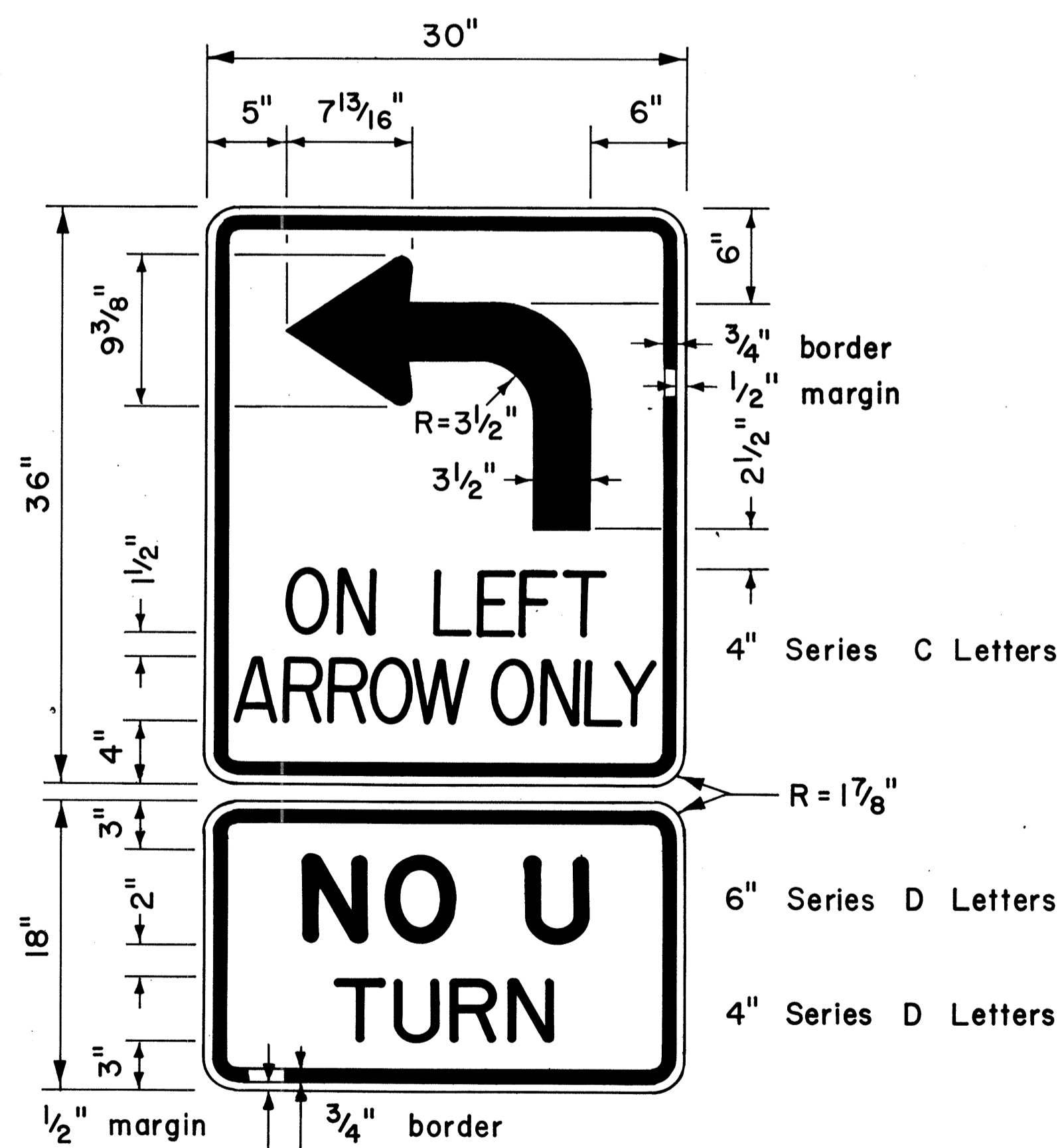
4" Series D Letters  
**R17-1**



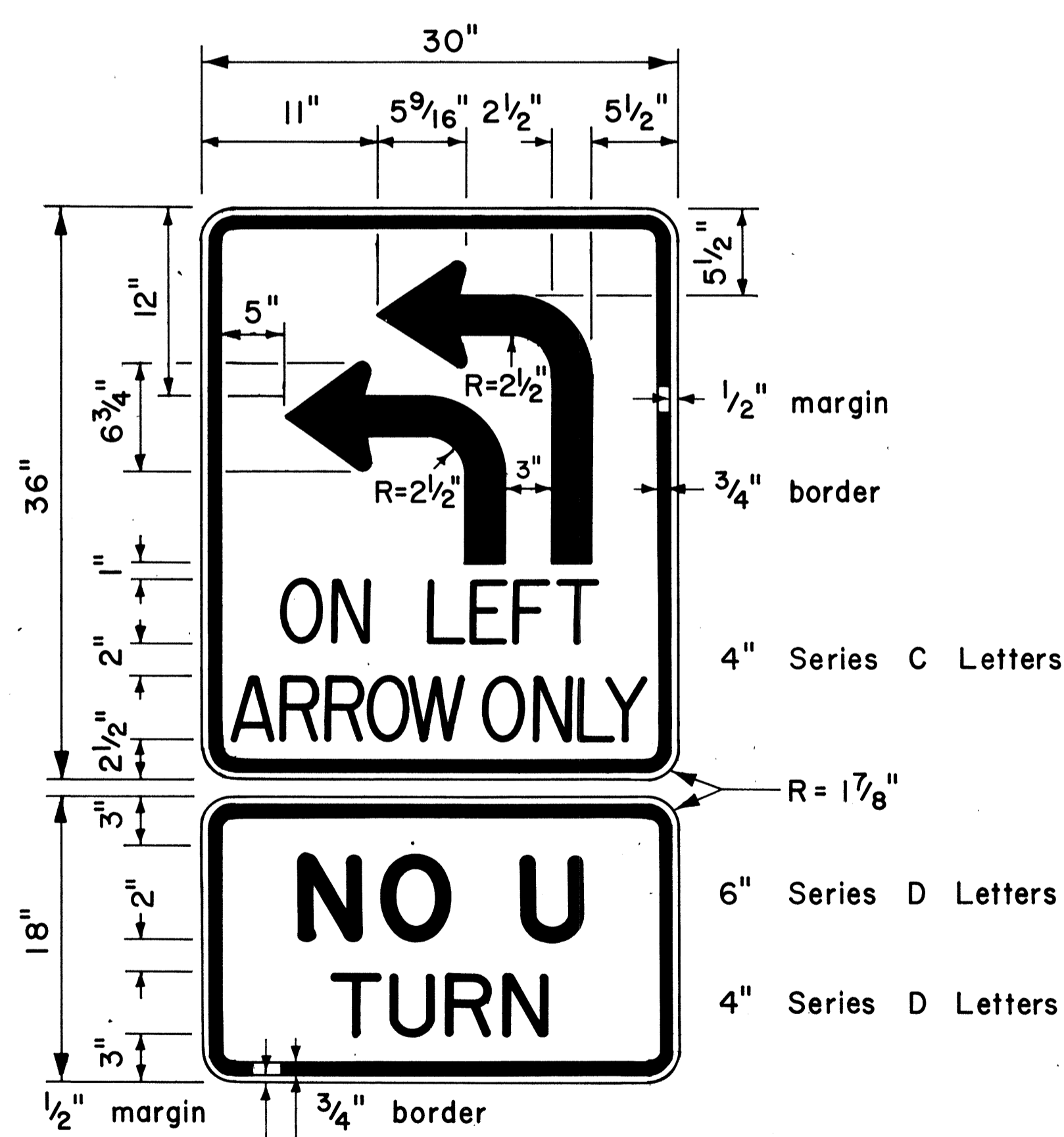
4" Series D Letters  
**R17-2**



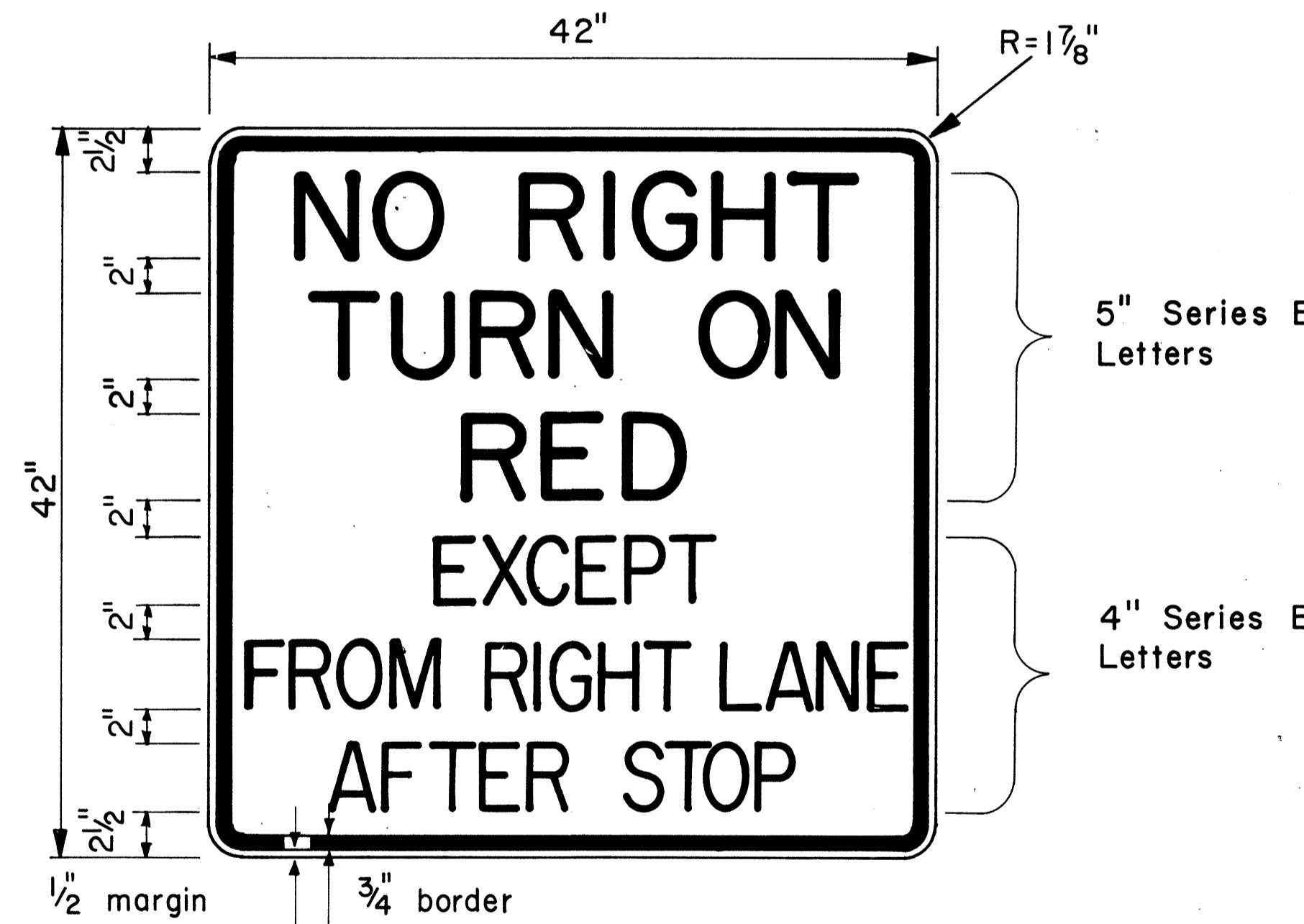
4" Series D Letters  
**R3-4b**



**R17-3**



**R17-4**



**R10-11d**

**GENERAL NOTES**

1. Sign details shall conform to the latest editions of the following FHWA publications: "Manual on Uniform Traffic Control Devices for Streets and Highways," 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.

APPROVAL RECOMMENDED:

*Eiichi Tanaka* 8/1/77  
TRAFFIC ENGINEER DATE

APPROVED:

*Hubert Zaleski* 8/16/77  
ASSISTANT CHIEF, ENGINEERING DATE

| NO. | REVISION | APPROVED BY | DATE |
|-----|----------|-------------|------|
|     |          |             |      |

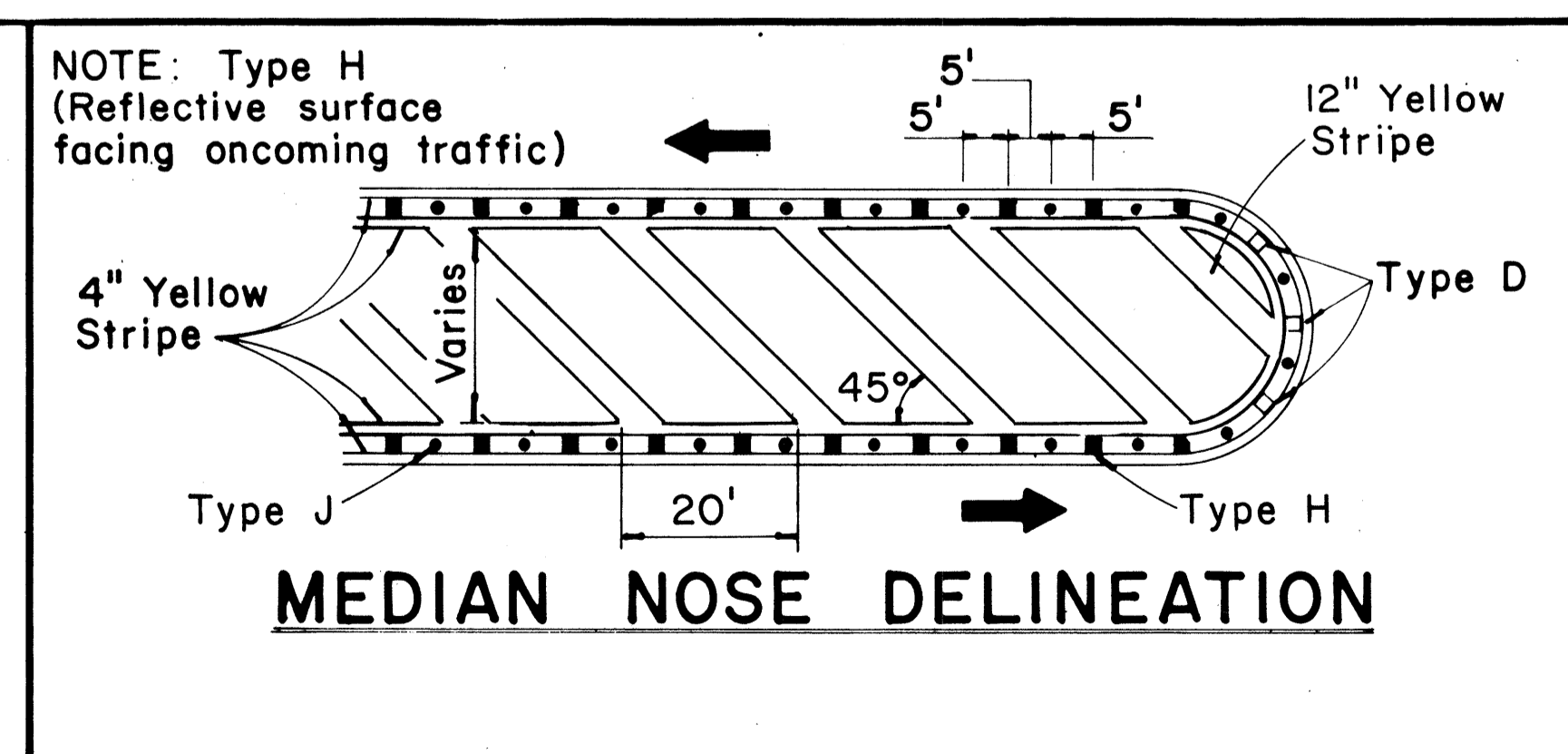
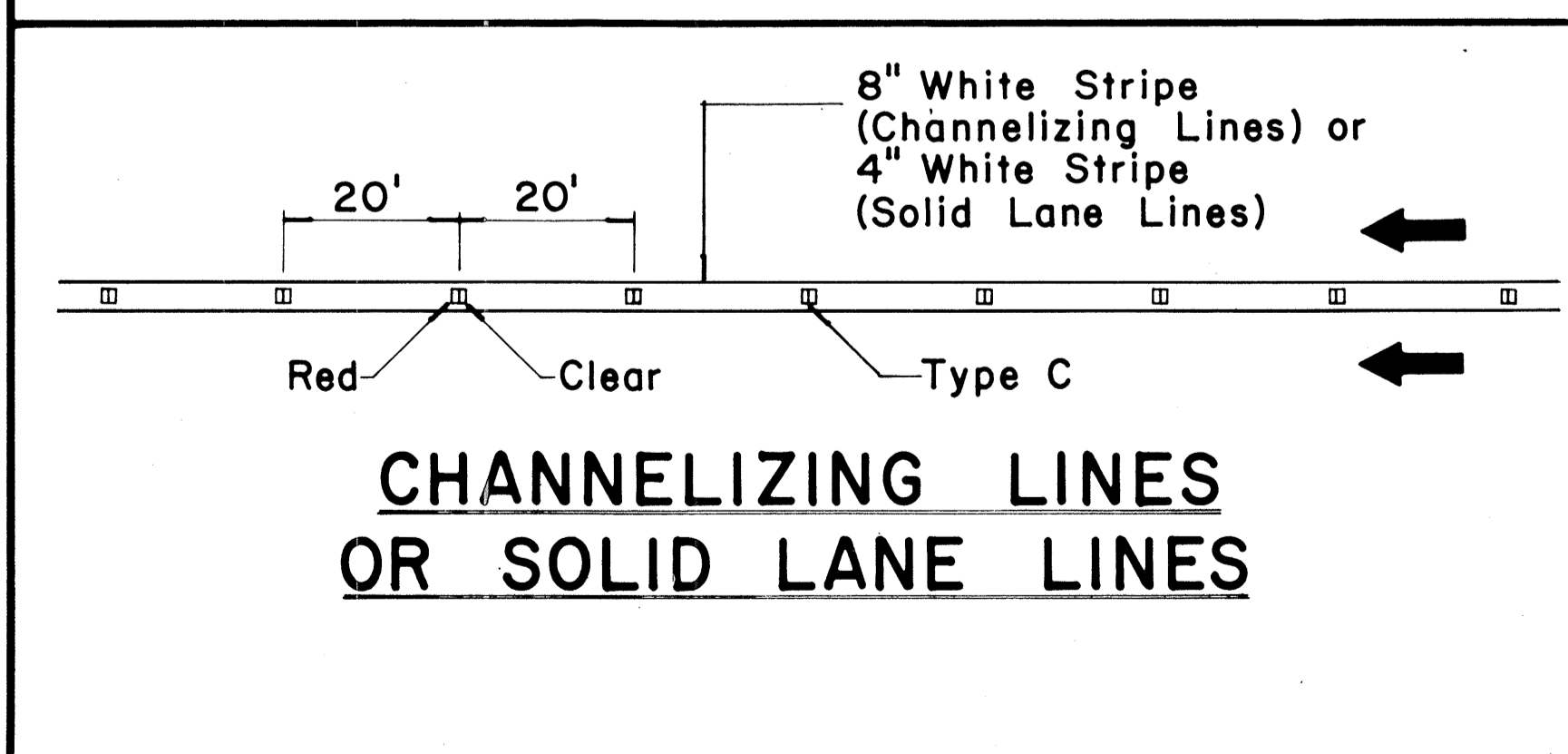
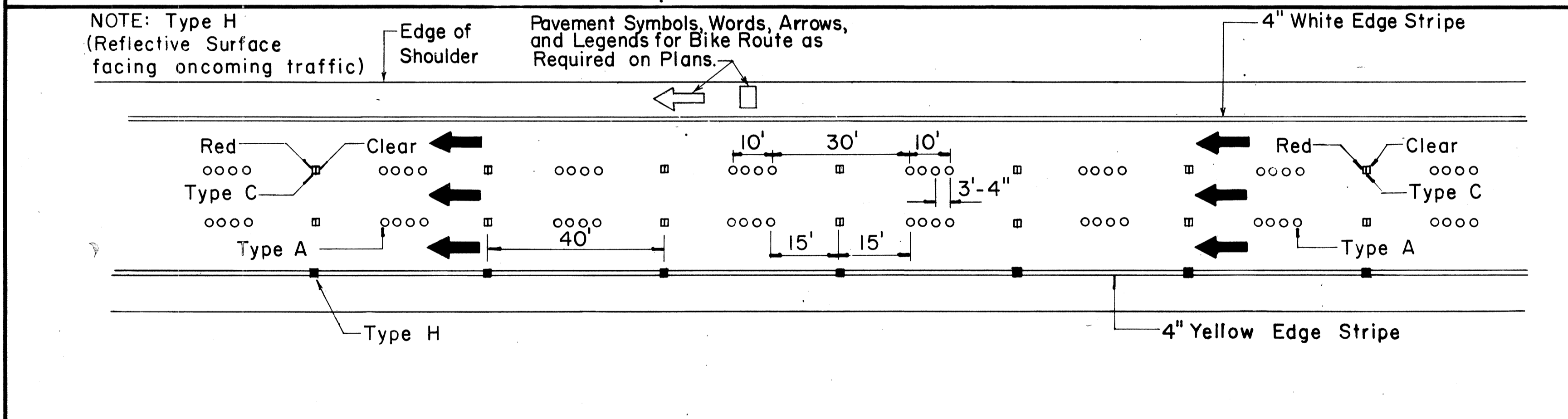
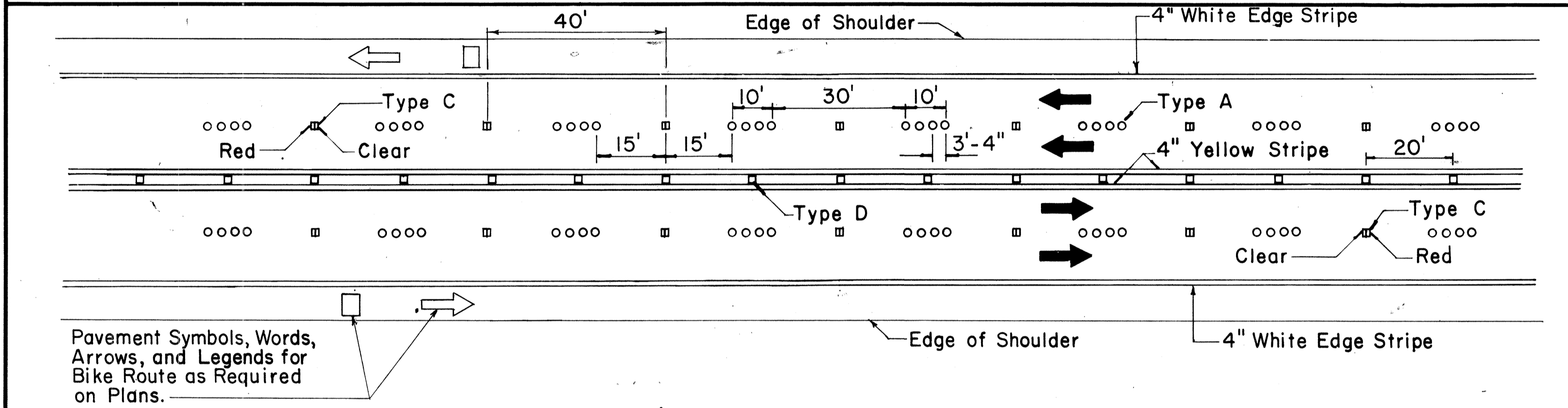
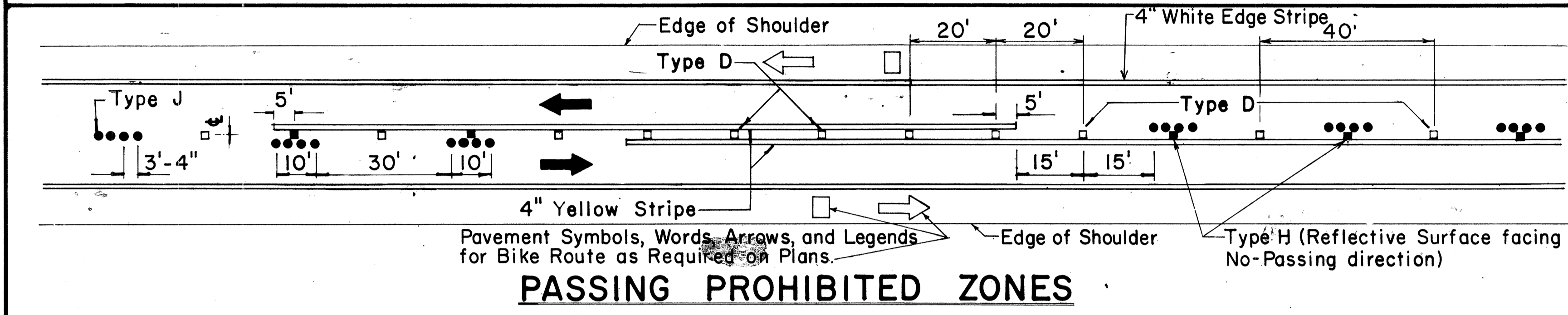
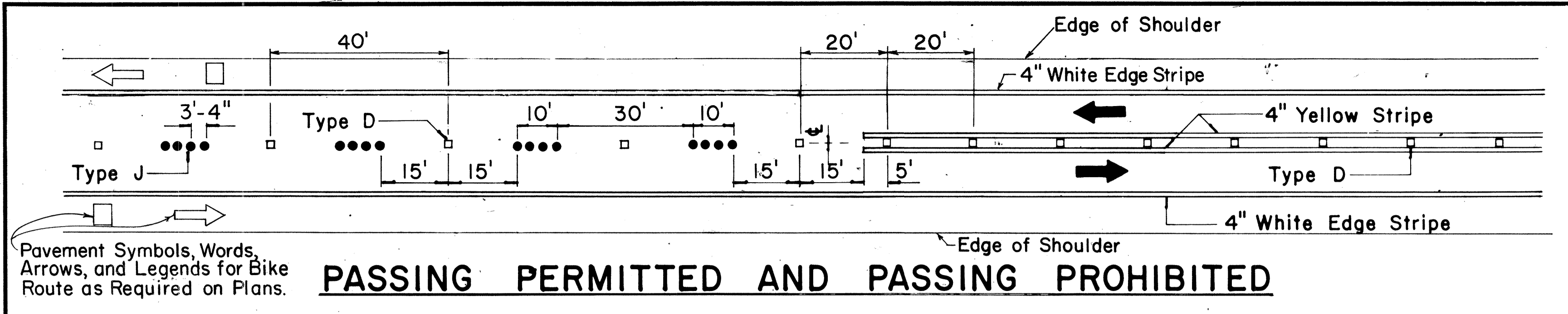
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
LAND TRANSPORTATION FACILITIES DIVISION

**STANDARD DETAILS**  
MISCELLANEOUS  
INTERSECTION SIGNS

Scale: 1/2" = 1'-0" Date: Aug., 1977

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
TRACED BY: \_\_\_\_\_  
NOTE BOOK QUANTITIES BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | H-11-(86)17        | 1981        | 47        | 207          |

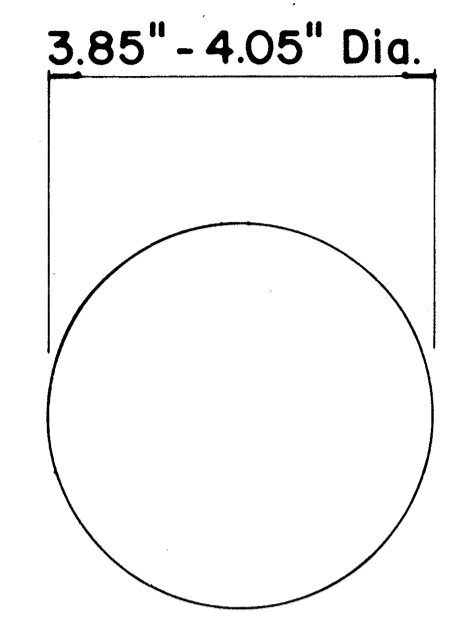


TWO - LANE

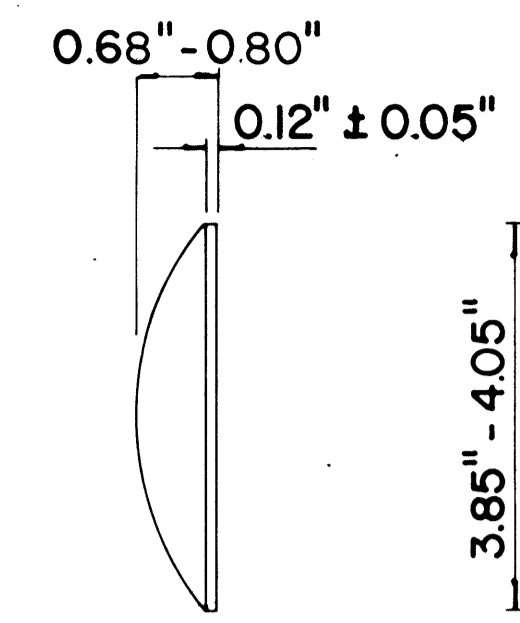
MULTI - LANE

DIVIDED HIGHWAY AND FREEWAY

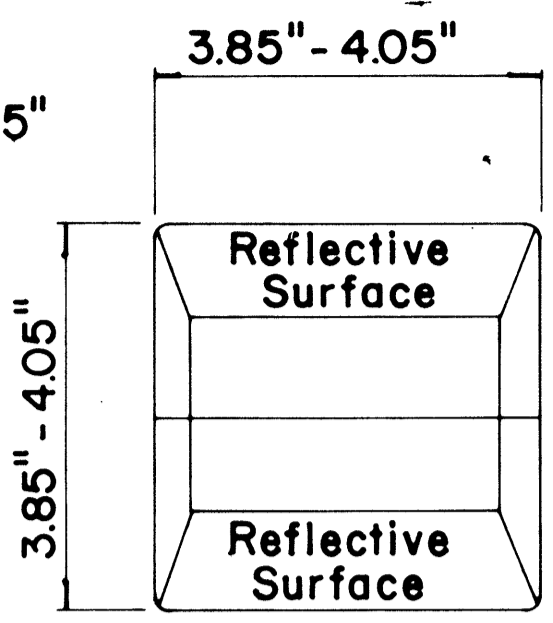
MISCELLANEOUS



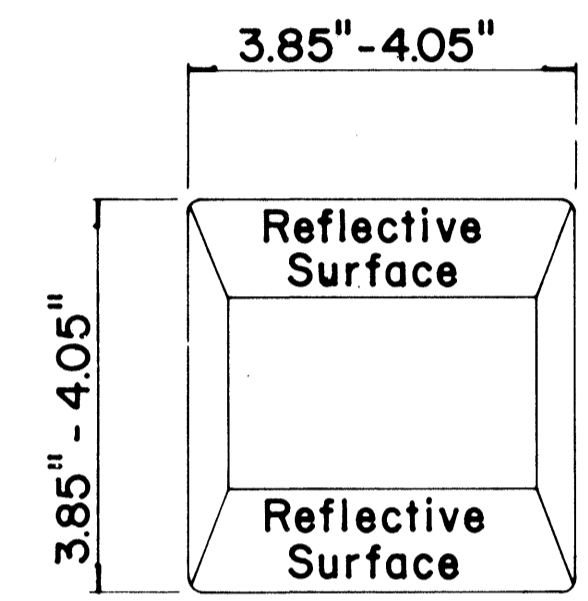
**TYPE A**  
NON-REFLECTIVE WHITE MARKER



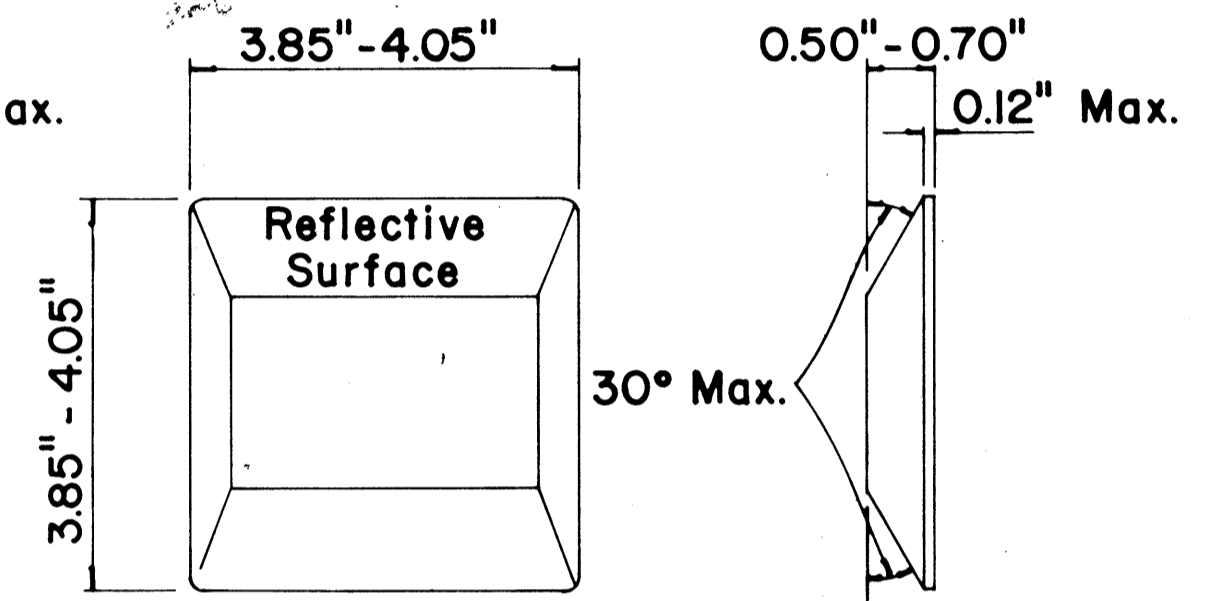
**TYPE J**  
NON-REFLECTIVE YELLOW MARKER



**TYPE C**  
RED-CLEAR REFLECTIVE MARKER



**TYPE D**  
TWO-WAY YELLOW REFLECTIVE MARKER



**TYPE H**  
ONE-WAY YELLOW REFLECTIVE MARKER

**GENERAL NOTES**

- Pavement marking and striping shall conform to the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
- Layout and installation of pavement marking and striping shall be done by the Contractor. The Contractor shall check the layouts with the Engineer prior to performing work.

**LEGEND**

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

APPROVAL RECOMMENDED:  
*Ericki Tanaka* 7/21/78  
TRAFFIC ENGINEER DATE

APPROVED:  
*Robert J. Zaleski* 7/24/78  
ASSISTANT CHIEF, ENGINEERING DATE

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

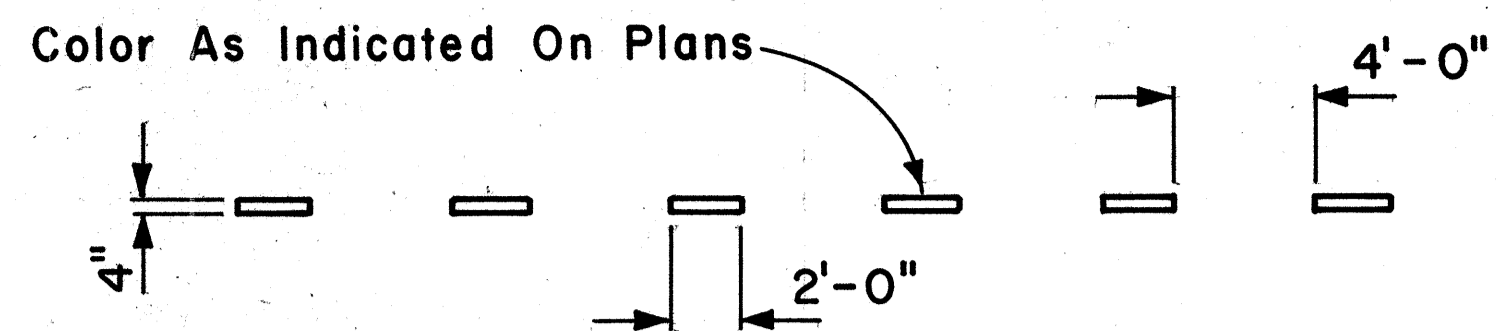
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**  
**RAISED PAVEMENT MARKERS**  
**AND STRIPING**

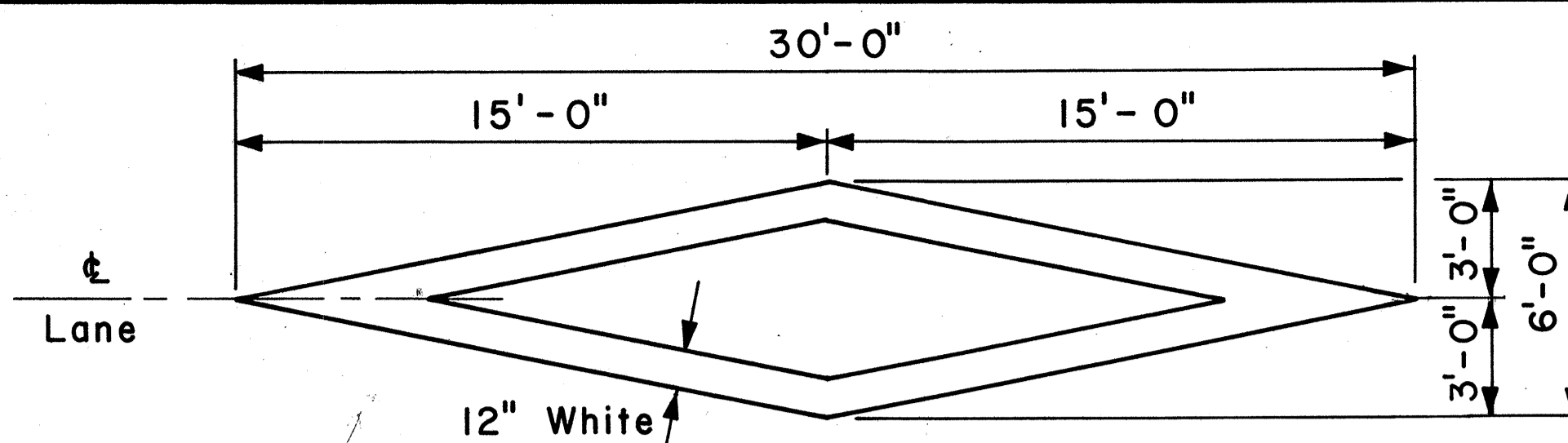
Not to Scale July 1978  
SHEET No. P-15 OF 18 SHEETS DT 300

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
ORIGINAL PLAN: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
NOTED BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
No. \_\_\_\_\_

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | H-11(86):17        | 1981        | 48        | 207          |



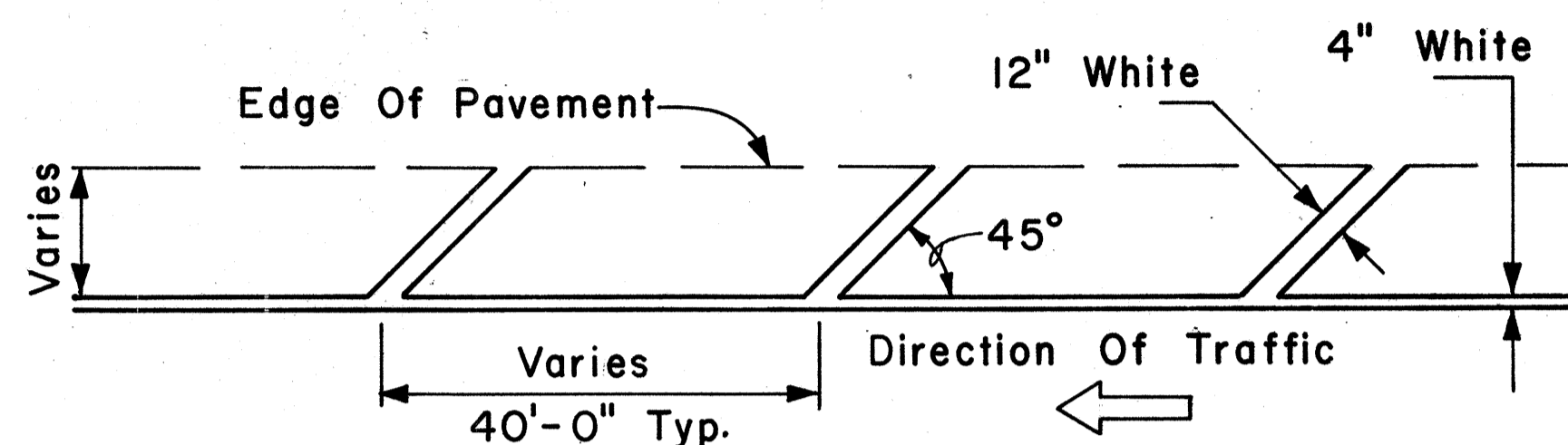
**4" GUIDE LINE**



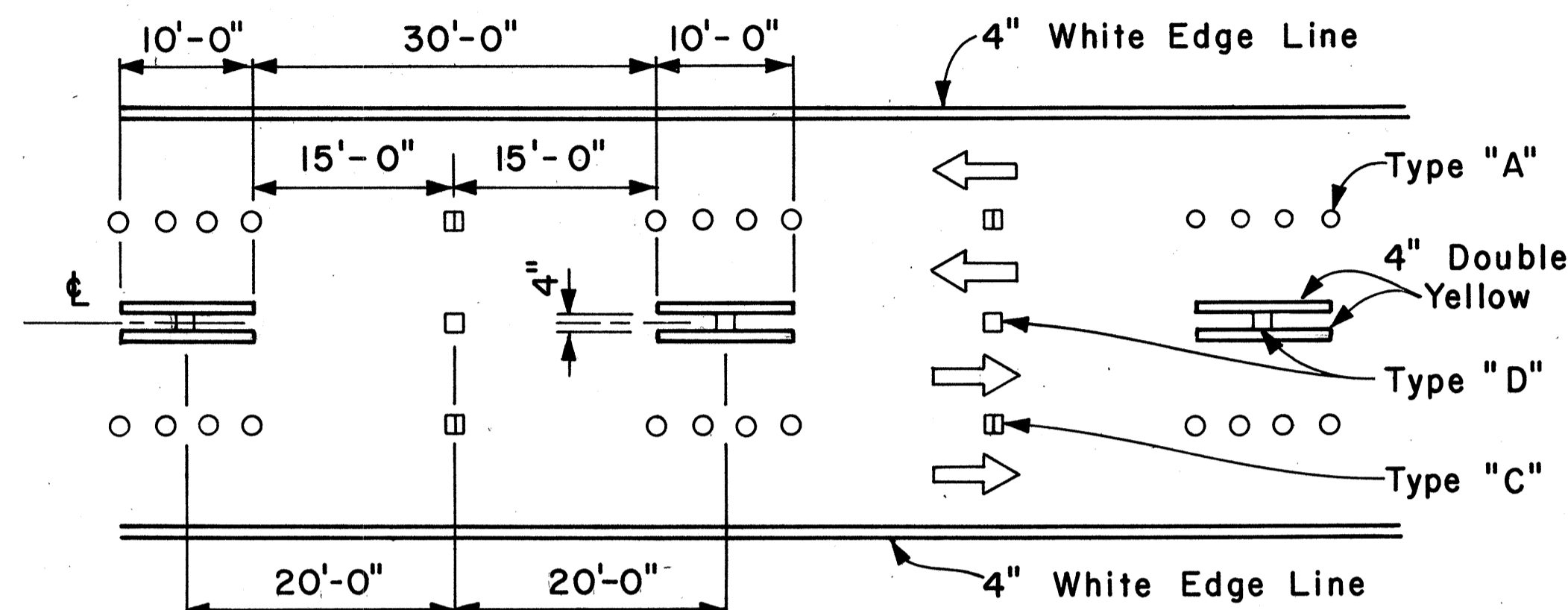
**PAVEMENT DIAMOND**

**GENERAL NOTES:**

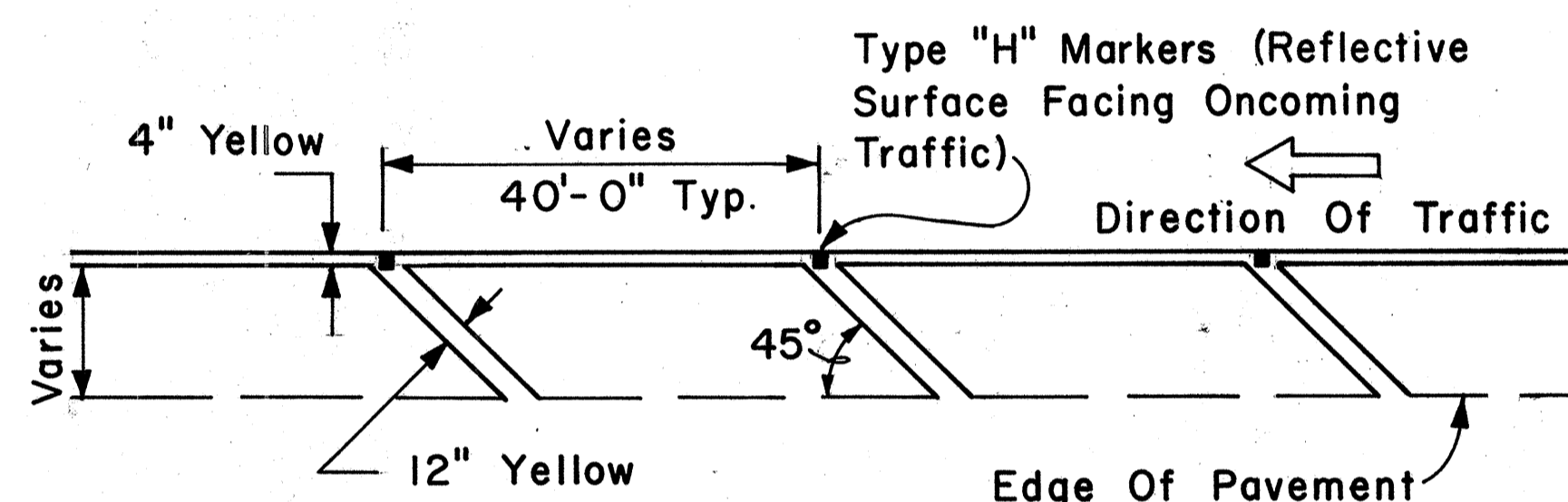
1. Pavement marking and striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of pavement markings and striping shall be done by the Contractor. The Contractor shall check layout of markings and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



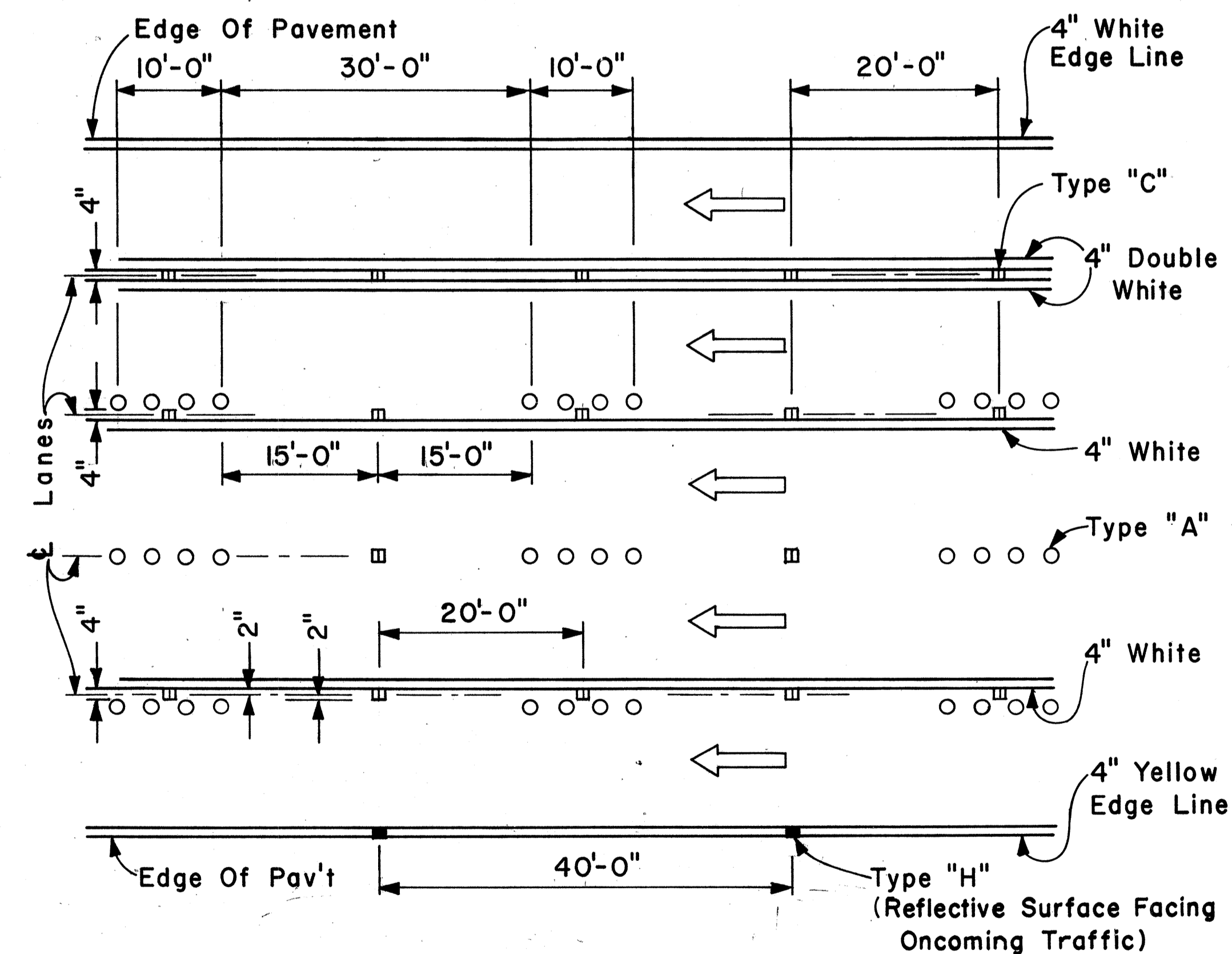
**TRANSVERSE RIGHT SHOULDER MARKING**



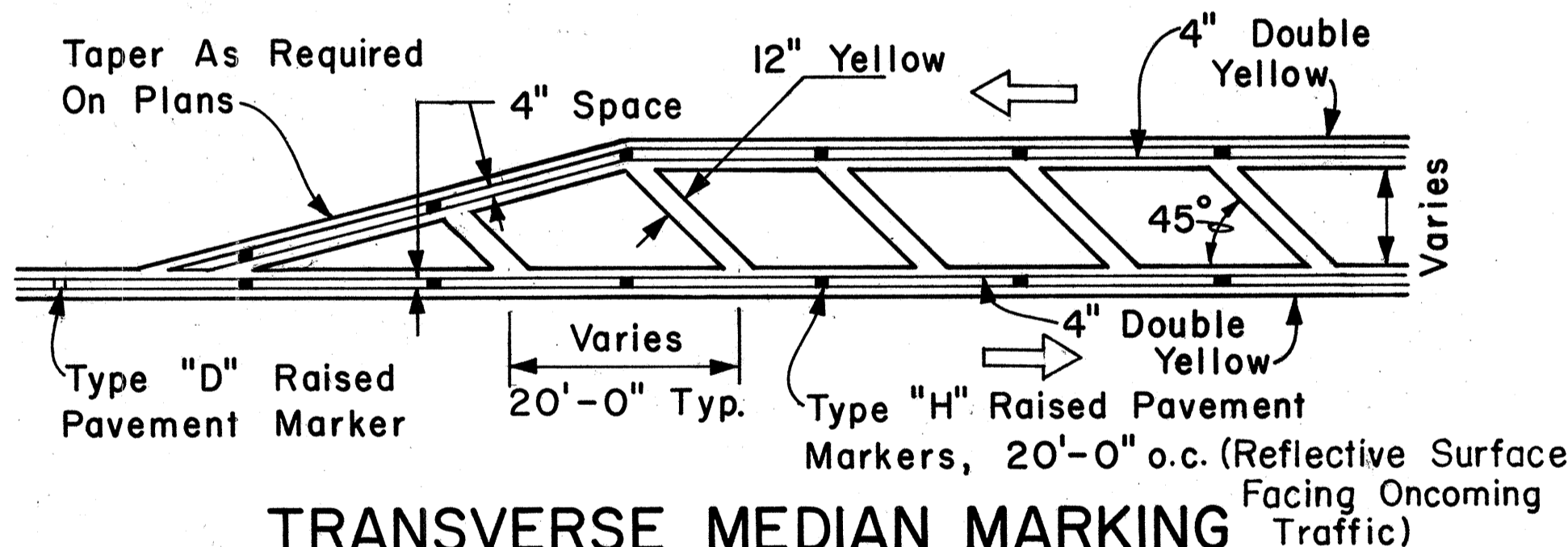
**MULTI-LANE REVERSIBLE LANES**



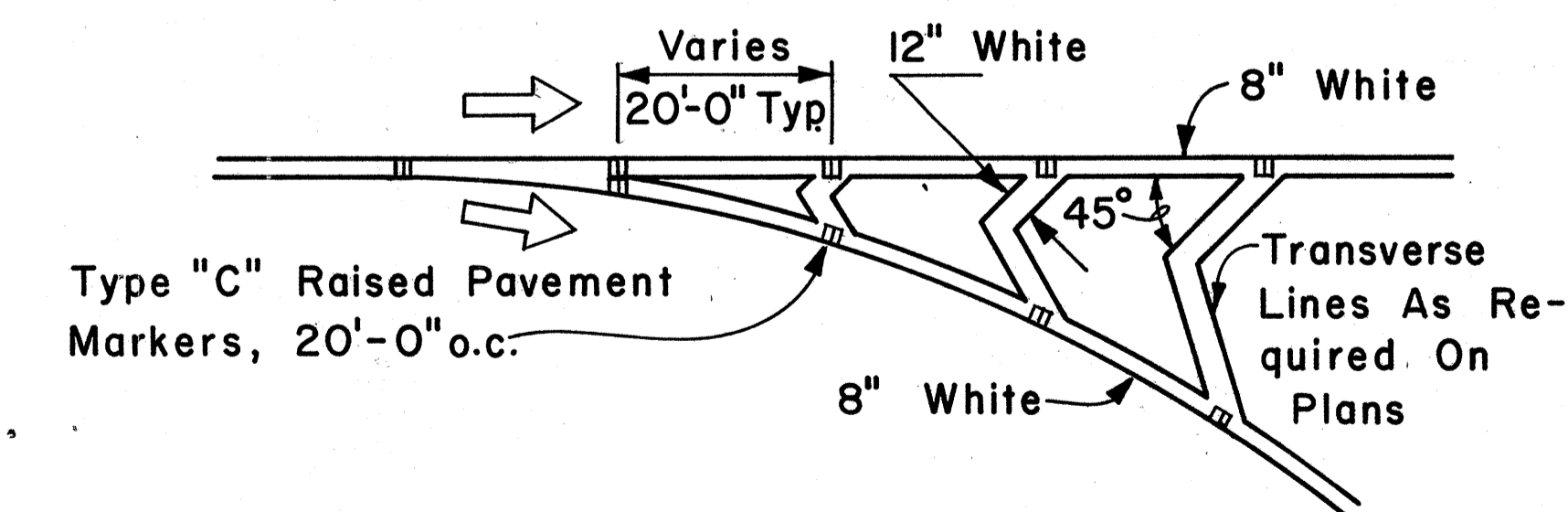
**TRANSVERSE LEFT SHOULDER MARKING**



**MULTI-LANE LANE CHANGE RESTRICTION ZONES**



**TRANSVERSE MEDIAN MARKING**



**CHANNELIZING ISLAND**

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

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

| NO. | REVISION | APPROVED BY | DATE |
|-----|----------|-------------|------|
|     |          |             |      |

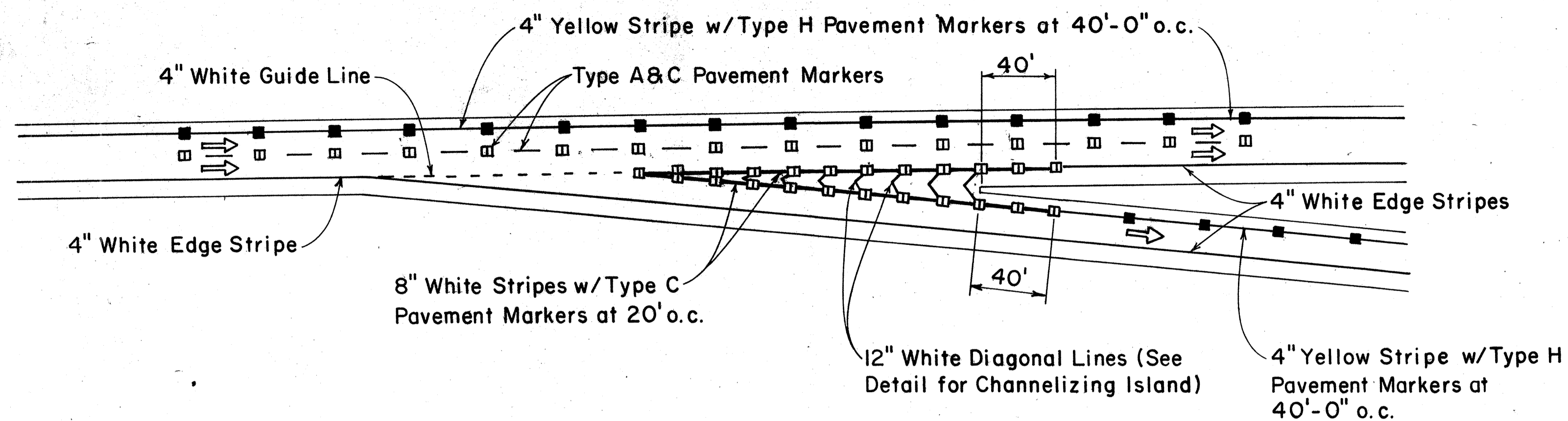
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION  
**STANDARD DETAILS**  
 MISCELLANEOUS  
 PAVEMENT MARKINGS  
 Scale: Not to Scale Date: April, 1978  
 SHEET No. P-16 OF 18 SHEETS DT 302

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

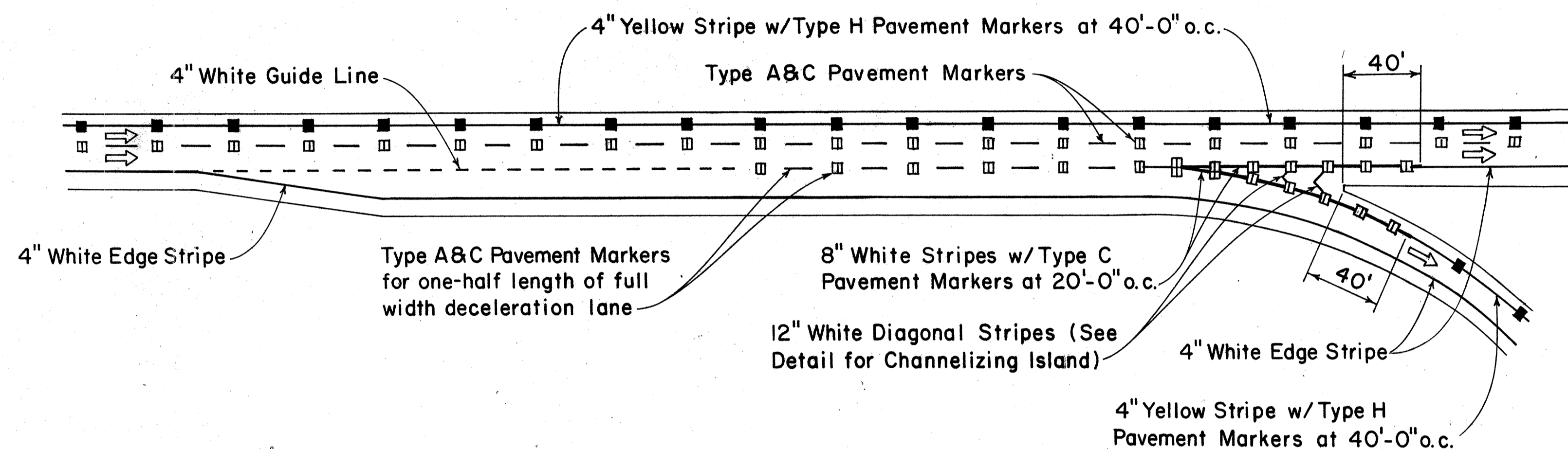
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | H-11-(86)-17       | 1981        | 49        | 207          |

**GENERAL NOTES:**

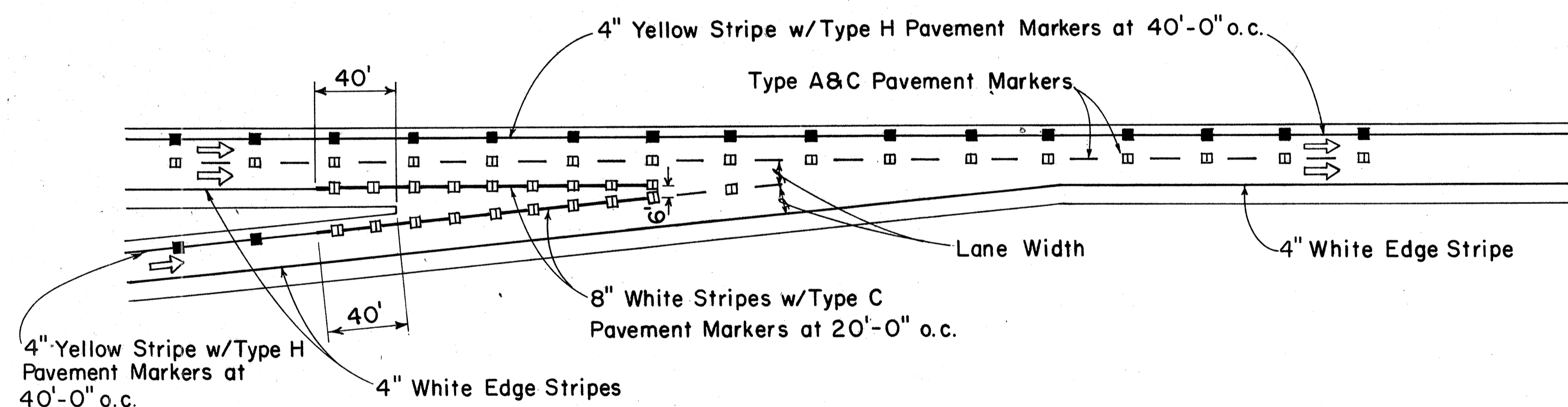
1. Pavement Markings and Striping shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," by the FHWA, and as amended.
2. Layout of Pavement Markings and Striping shall be done by the Contractor. The Contractor shall check layout of markings and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



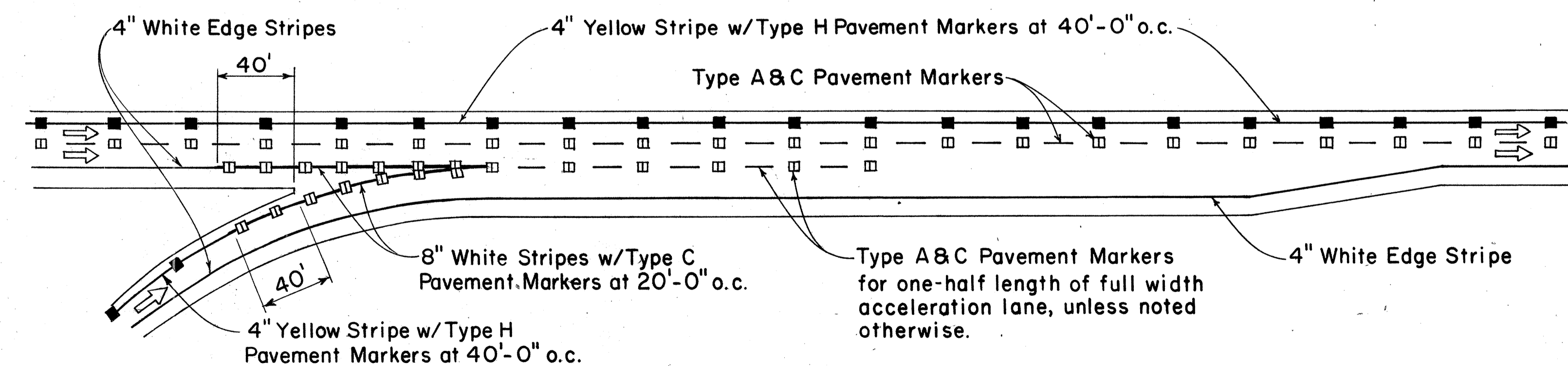
TAPERED DECELERATION LANE



PARALLEL DECELERATION LANE



TAPERED ACCELERATION LANE



PARALLEL ACCELERATION LANE

TYPICAL ROADWAY EXIT MARKINGS

TYPICAL ROADWAY ENTRANCE MARKINGS

|      |             |            |
|------|-------------|------------|
| DATE | DESIGNED BY | CHECKED BY |
|      |             |            |
|      |             |            |
|      |             |            |
|      |             |            |

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

APPROVED:  
*Robert S. Sakai* 7/24/78  
 ASSISTANT CHIEF ENGINEERING DATE

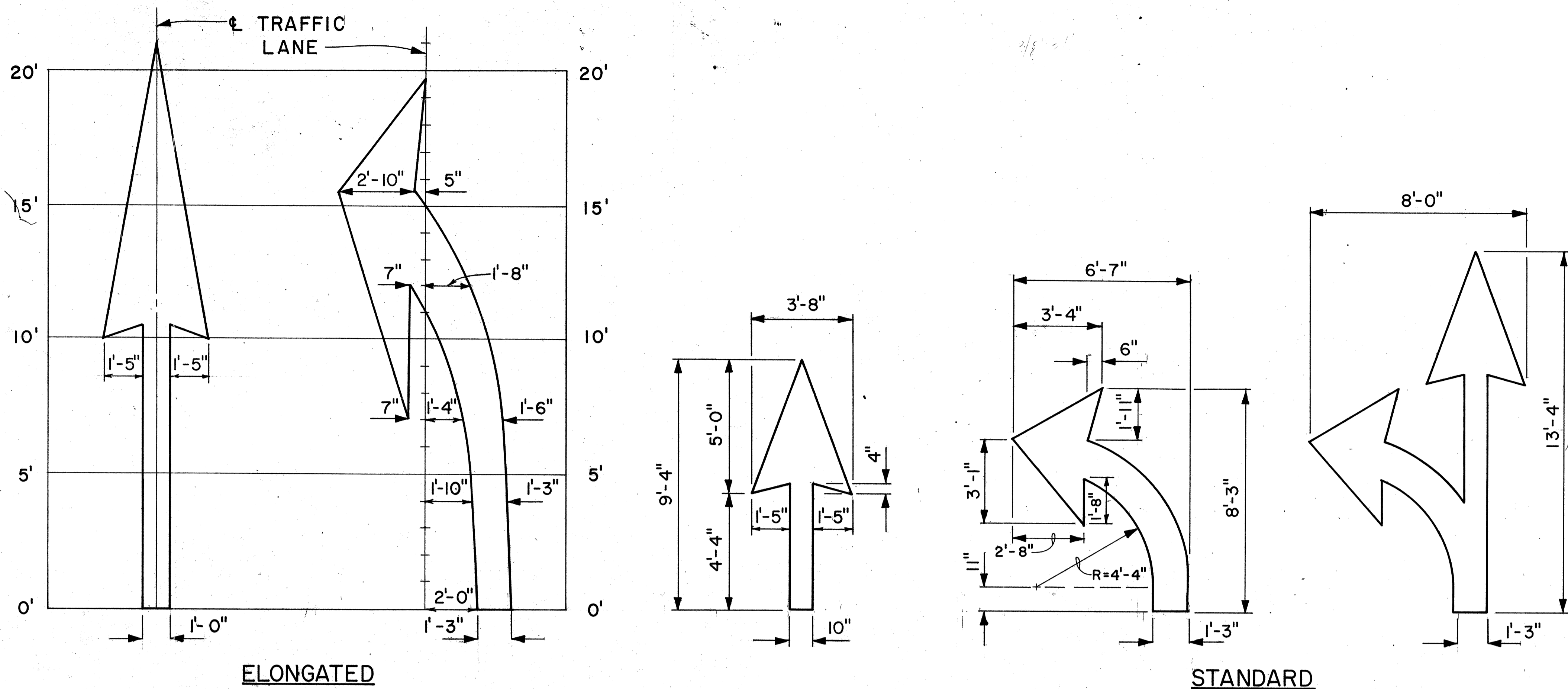
| NO. | REVISION | APPROVED BY | DATE |
|-----|----------|-------------|------|
|     |          |             |      |
|     |          |             |      |

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION

**STANDARD DETAILS**  
**MISCELLANEOUS**  
**PAVEMENT MARKINGS**

Not to Scale July 1978  
 SHEET No. P-17 OF 18 SHEETS DT 304

|                     |       |                    |             |           |              |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| HAWAII              | HAW.  | HI-1(86)17         | 1981        | 50        | 207          |

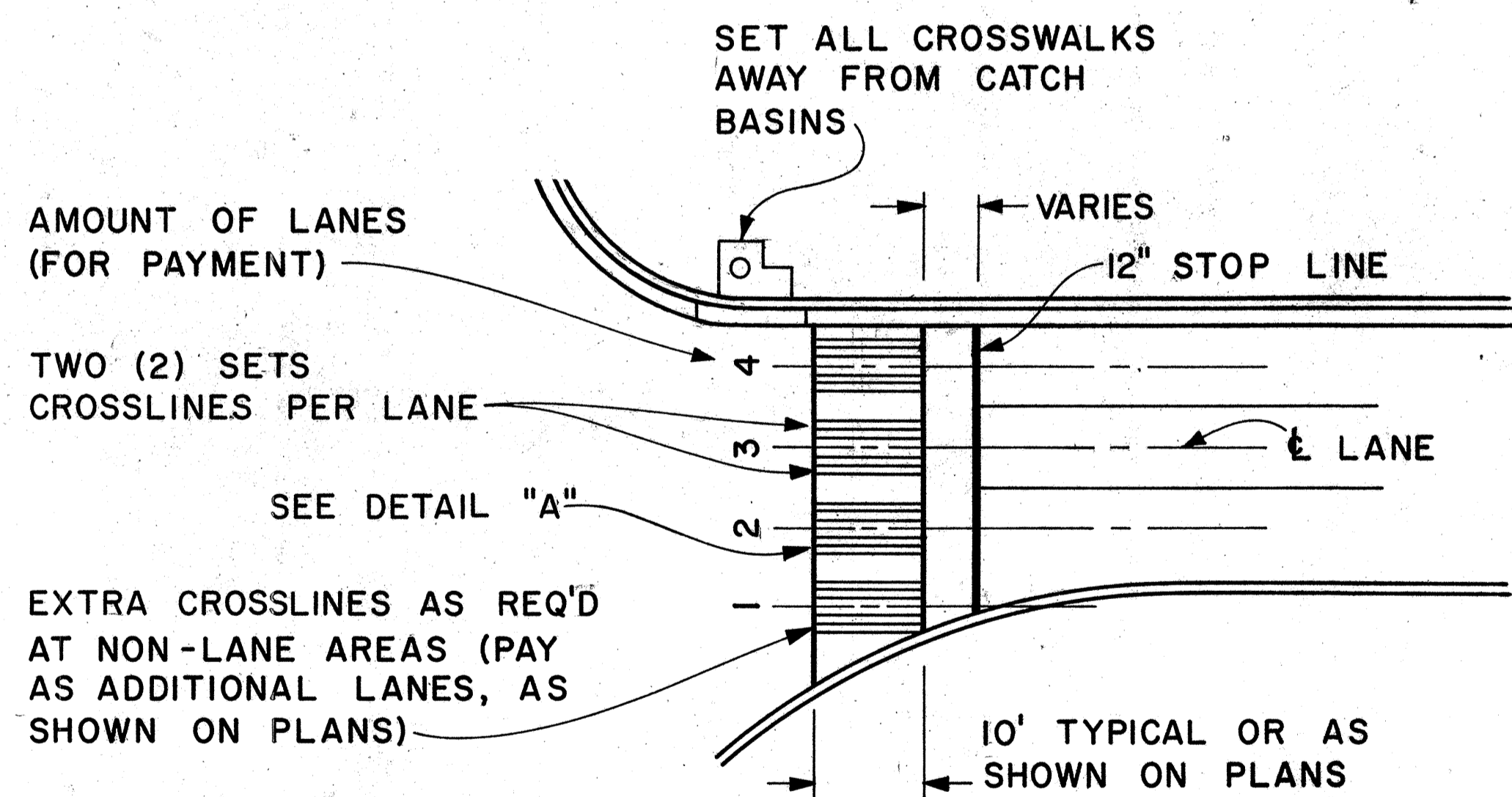


**PAVEMENT ARROWS**

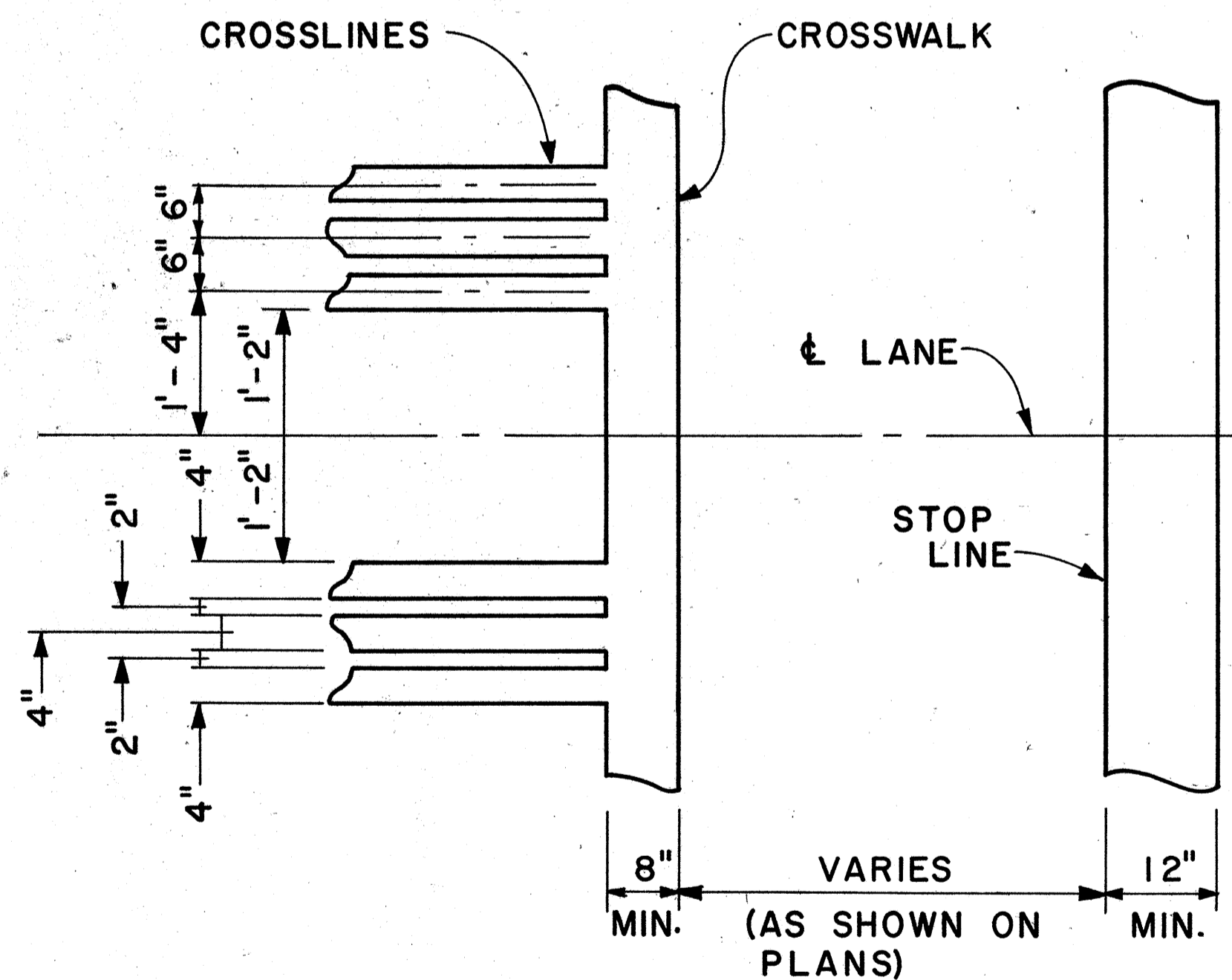
Scale: 3/8" = 1'

**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.



**PLAN**



**DETAIL "A"**

**CROSSWALK & STOP LINE**

Scale: Not to Scale

APPROVAL RECOMMENDED:  
*Ericchi Tanaka* 5/2/78  
 TRAFFIC ENGINEER DATE

APPROVED:  
*Herbert S. Sakai* 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. P-18 OF 18 SHEETS DT 306

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