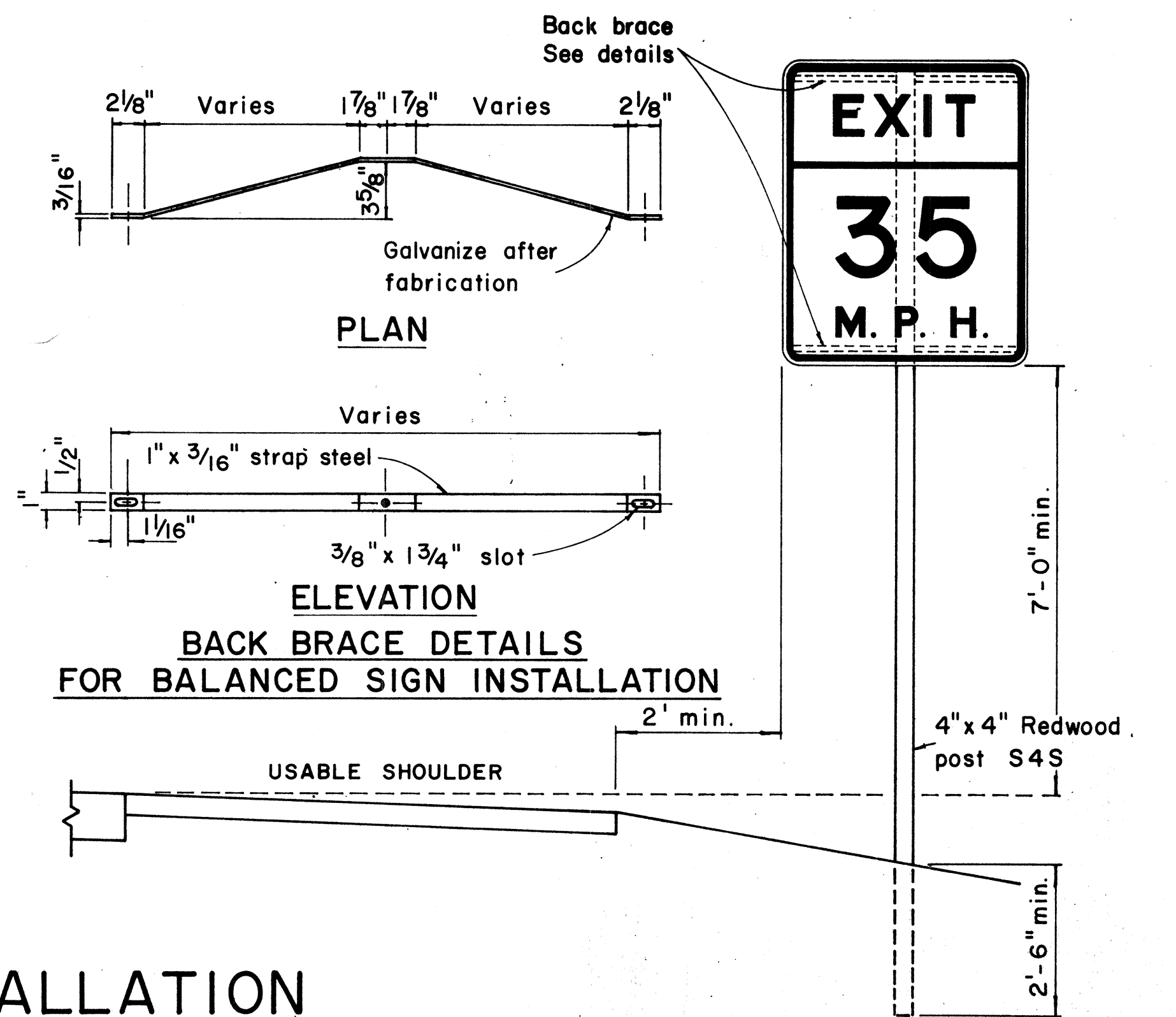
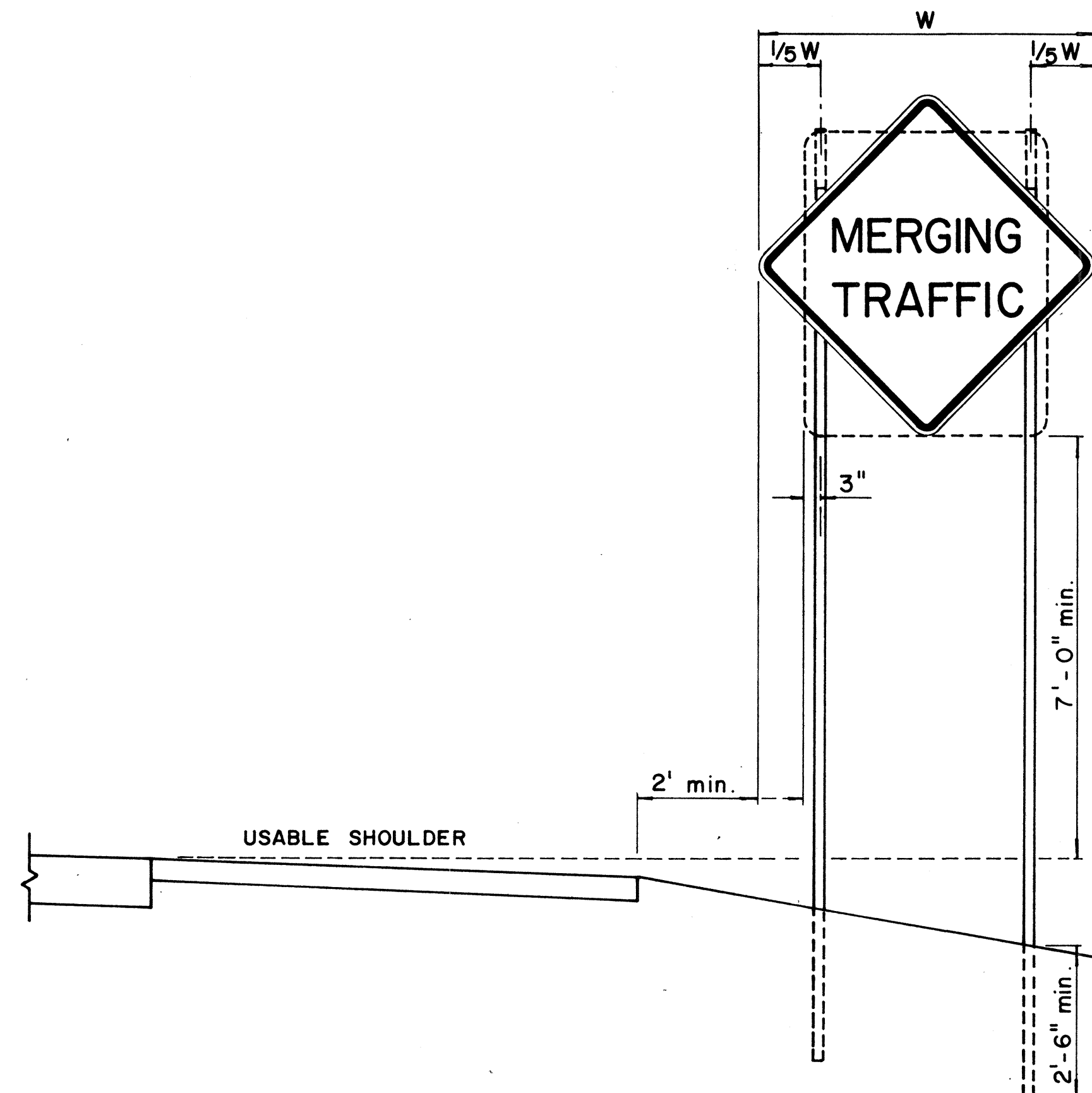
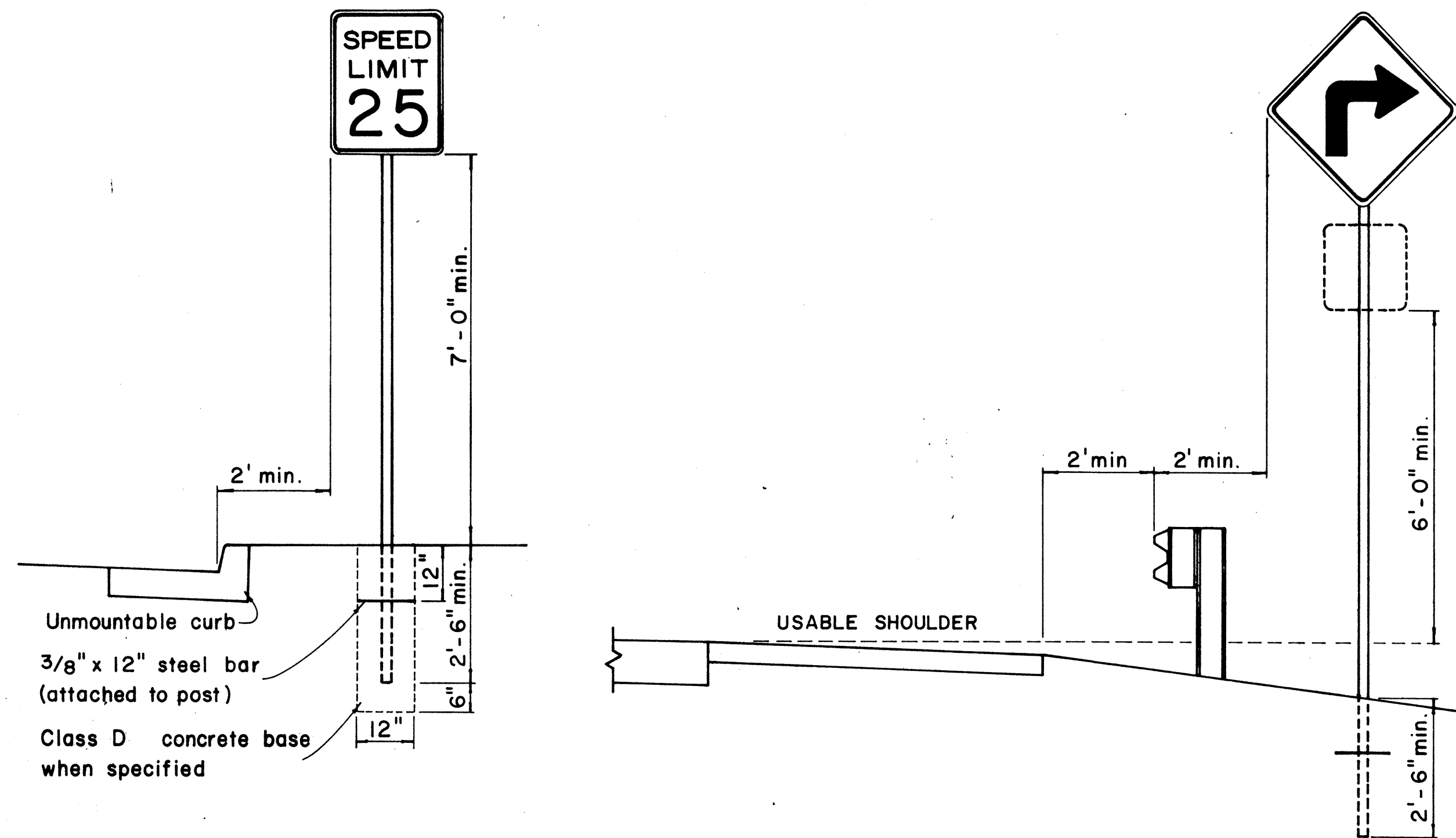
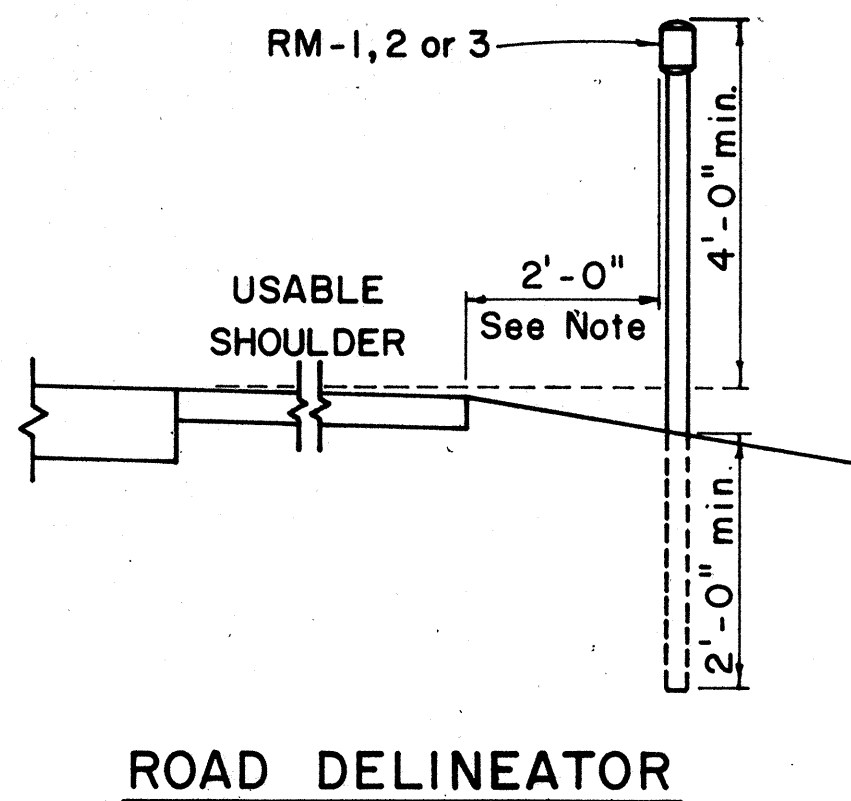


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	12K-02-72	1972	12	17

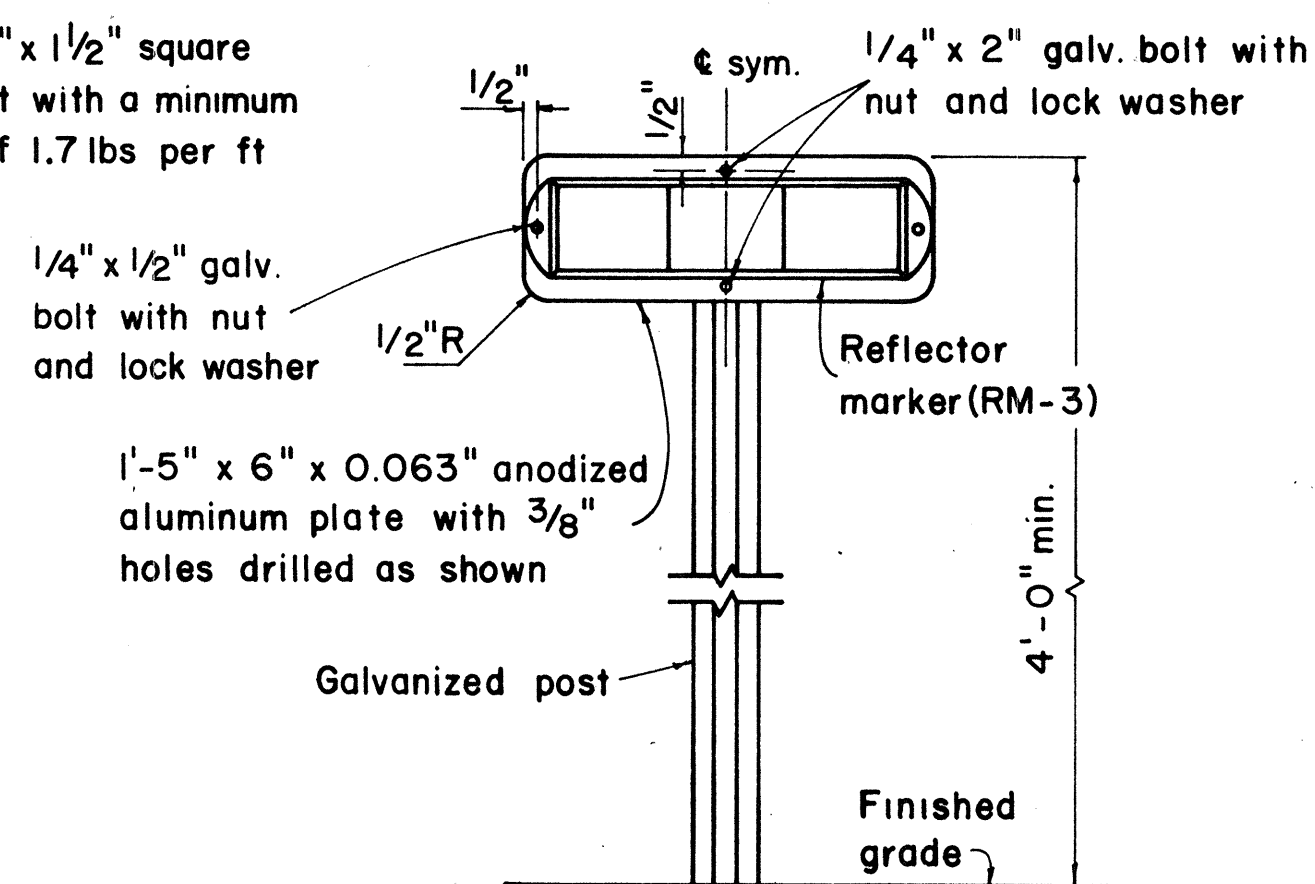
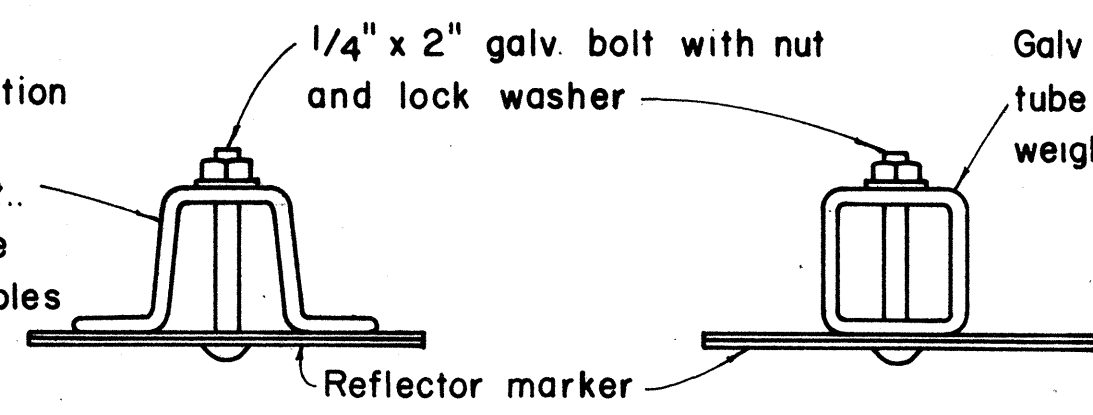


## HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION

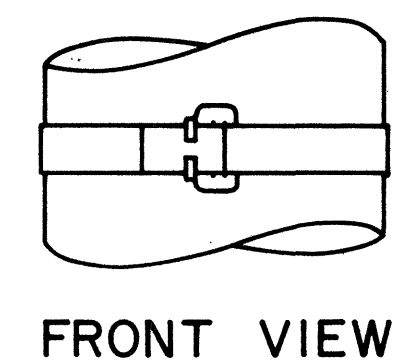
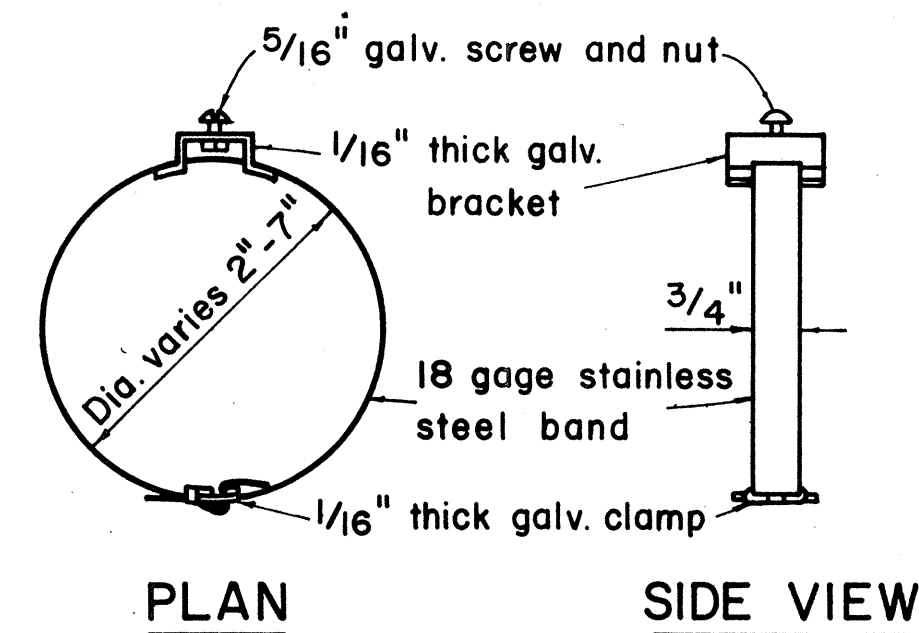


Galv. flanged channel  
1/8" x 3/16" rolled section  
post with a minimum  
weight of 2 lbs. per ft.  
Upper 2 ft. shall have  
a single row of 3/8" holes  
centered in the web at  
1" o.c.

TYPICAL SECTION OF ROAD DELINEATOR



TYPICAL DETAIL  
HORIZONTAL REFLECTOR MARKER  
RM-3H



TYPICAL BAND BRACKET FOR  
MOUNTING TRAFFIC SIGNS

## GENERAL NOTES:

- Sign posts shall be 2" galv. standard pipe or 2" x 2" galv. sq. tube post.
- Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 2" galv. standard pipe or two 2" x 2" galv. sq. tube post or 4" x 4" redwood post S4S.
- 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.
- Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
- Reflector markers RM-1, 2, 3 shall be glass sphere reflector markers with 4" x 5" reflector units (as shown) or plastic prismatic reflector markers with 3" diameter reflector units.
- Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
- (R) or (L) indicates right or left and shall be as shown on the plans.

APPROVAL RECOMMENDED:  
*Erich Tanaka* 12/29/69  
TRAFFIC ENGINEER DATE

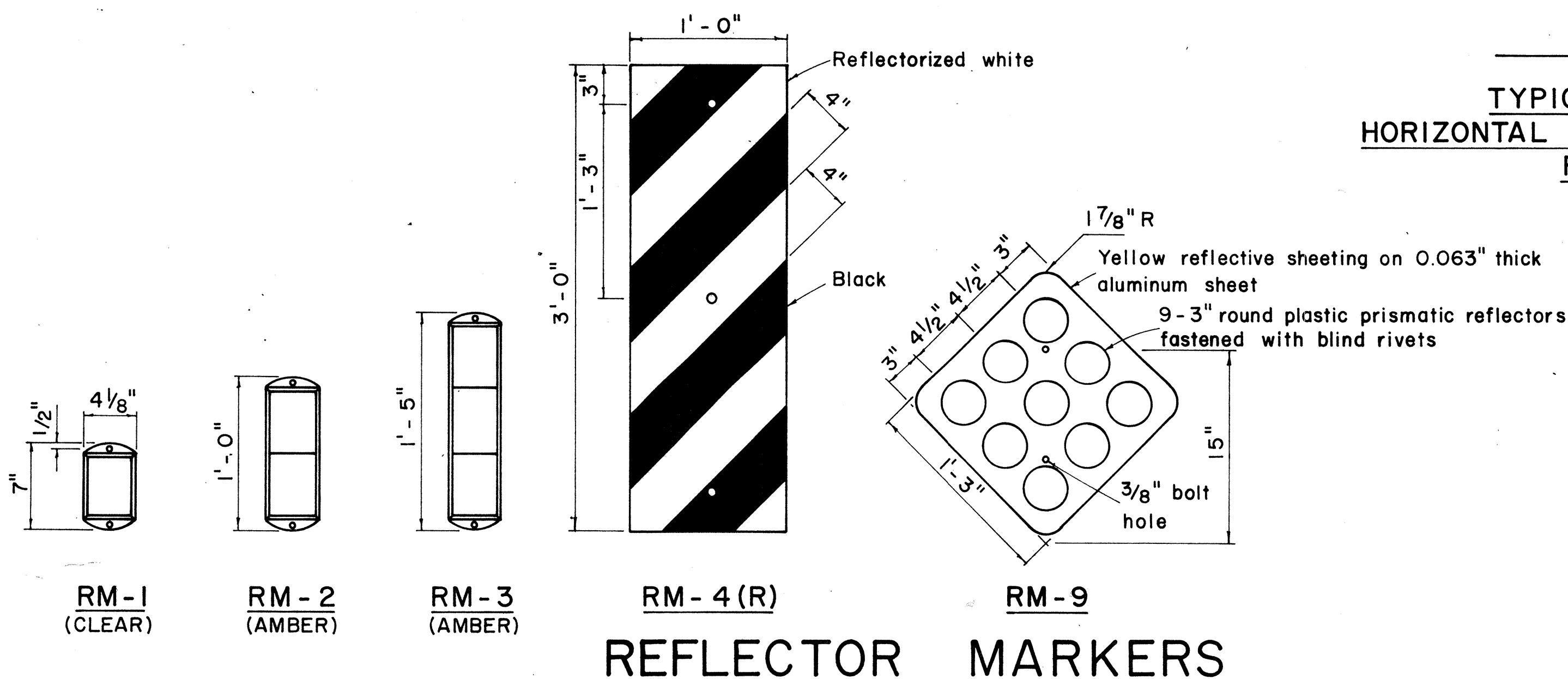
APPROVED:  
*John J. Jelinek* 12-30-69  
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

STANDARD DETAILS  
MISCELLANEOUS SIGN DETAILS

Not to scale March, 1968

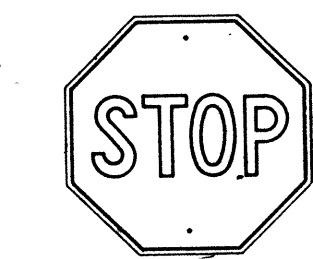
SHEET No. 1 OF 6 SHEETS DT 100



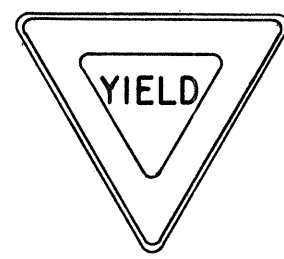
REFLECTOR MARKERS

ORIGINAL	DATE
PLAN	
DESIGNED BY	
NOTED BY	
CHECKED BY	
DATE	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	197K-02-72	1972	13	17



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



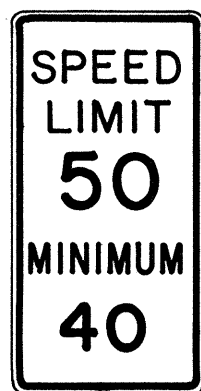
R1-2 36" x 36" x 36"  
R1-2-A 48" x 48" x 48"



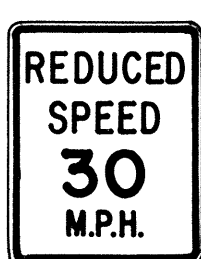
R2-1(50) 24" x 30"  
R2-1(50)-A 48" x 60"



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"



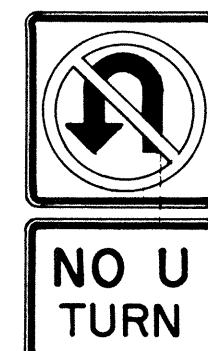
R3-1 24" x 24"  
24" x 18"  
R3-1-A 48" x 48"  
48" x 36"



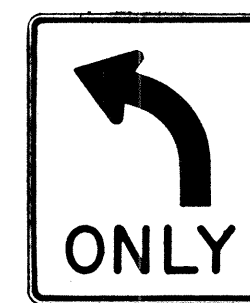
R3-2 24" x 24"  
24" x 18"  
R3-2-A 48" x 48"  
48" x 36"



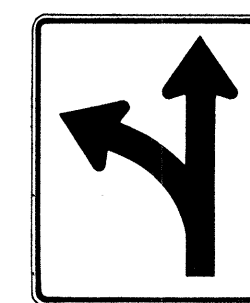
R3-3 24" x 24"  
R3-3-A 48" x 48"



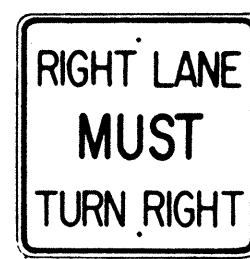
R3-4 24" x 24"  
24" x 18"  
R3-4-A 48" x 48"  
48" x 36"



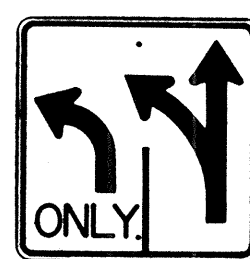
R3-5(L) 30" x 36"  
R3-5(L)-A 48" x 60"



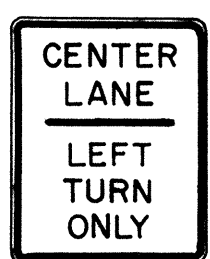
R3-6(L) 30" x 36"  
R3-6(L)-A 48" x 60"



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"



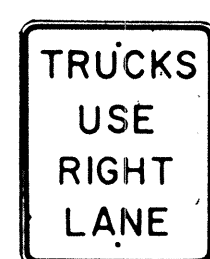
R4-1 24" x 30"



R4-2 24" x 30"



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



R4-5 24" x 30"



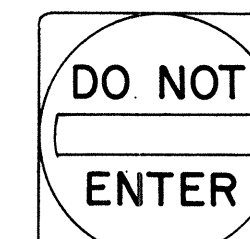
R4-6(500) 24" x 30"



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



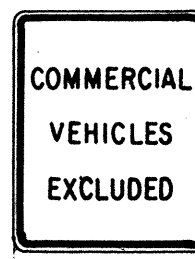
R4-8 24" x 30"  
24" x 18"



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



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



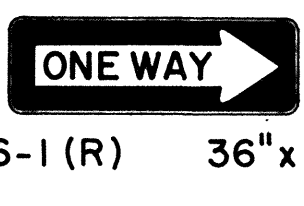
R5-4 24" x 30"



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



R5-9 36" x 24"



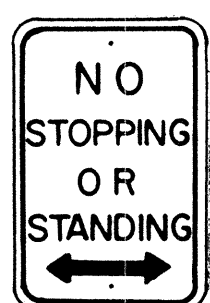
R6-1(R) 36" x 12"



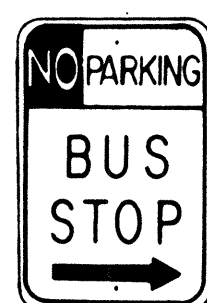
R6-2(R) 18" x 24"



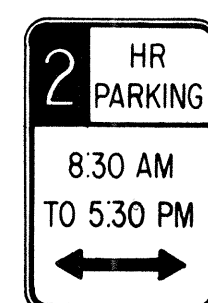
R7-1 12" x 18"  
R7-1-A 24" x 30"



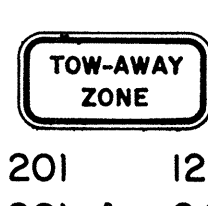
R7-4 12" x 18"  
R7-4-A 24" x 30"



R7-107(R) 12" x 18"



R7-108 12" x 18"



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



R8-1 24" x 30"



R8-2 24" x 30"



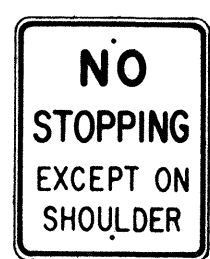
R8-3 24" x 30"



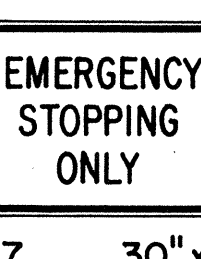
R8-4 30" x 24"  
R8-4-A 48" x 36"



R8-5 24" x 30"



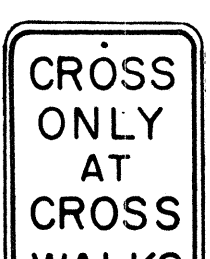
R8-6 24" x 30"



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



R9-1 18" x 24"



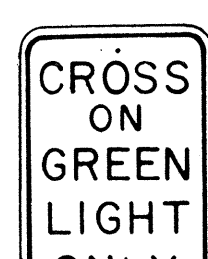
R9-2 12" x 18"



R9-3 12" x 18"



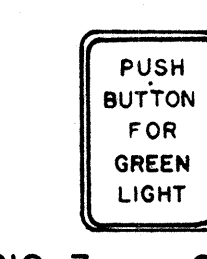
R9-4 18" x 24"



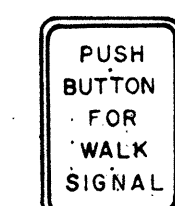
R10-1 12" x 18"



R10-2 12" x 18"



R10-3 9" x 12"



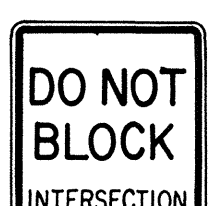
R10-4 9" x 12"



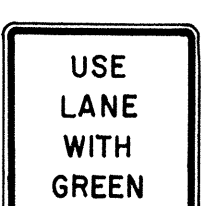
R10-5 24" x 30"



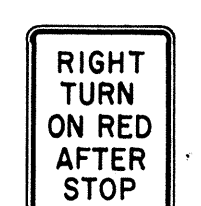
R10-6 24" x 36"



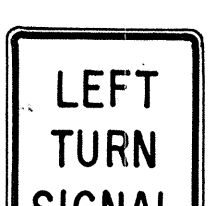
R10-7 24" x 30"



R10-8 24" x 30"



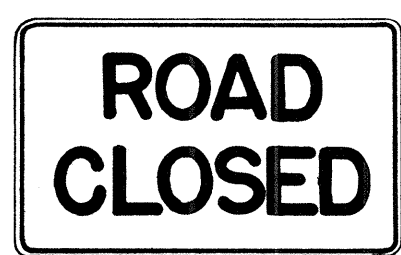
R10-9 24" x 30"



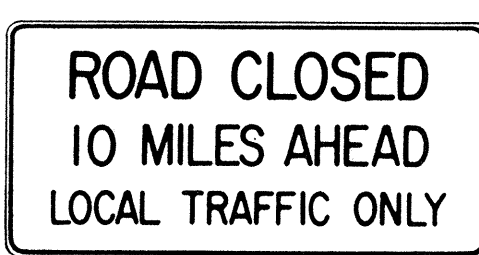
R10-10 24" x 30"



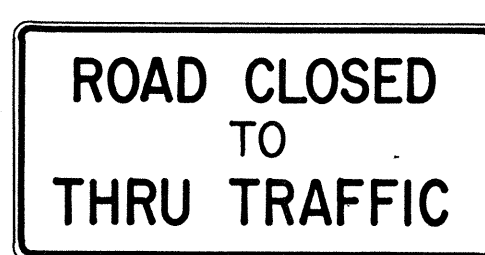
R11-1 24" x 30"



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."
- 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.

APPROVAL RECOMMENDED:

*Erich Tanaka*  
TRAFFIC ENGINEER

3/11/72  
DATE

APPROVED:

*Robert Zaleski*  
ASSISTANT CHIEF, ENGINEERING

2-20-72  
DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 101 Approved 12-30-69	H.C.	3/20/72

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

## STANDARD DETAILS REGULATORY SIGNS

NOT TO SCALE

SHEET No. 2 OF 6 SHEETS DT 101

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTED BY	_____
NO.	_____



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	197K02-72	1972	14	17



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"



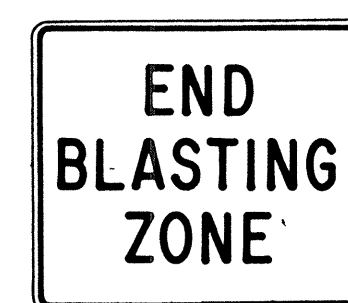
CW21-6 30" x 30"



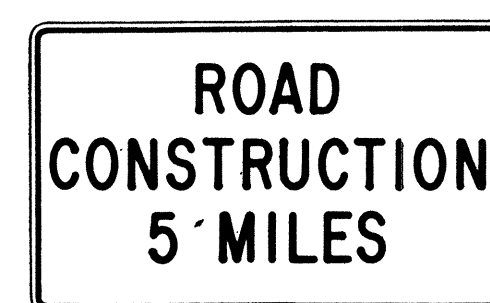
CW22-1b 48" x 48"



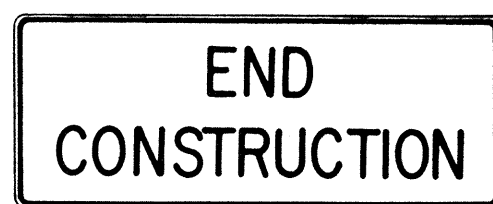
CW22-2 42" x 36"



CW22-3 42" x 36"



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



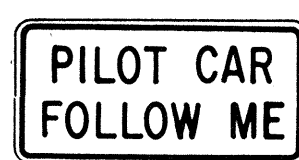
CG 20-2 60" x 24"



CM 4-9(R) 30" x 24"



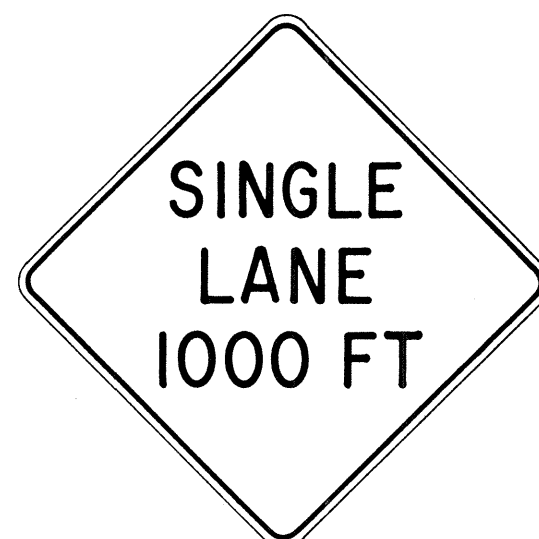
CM 4-10(R) 48" x 18"



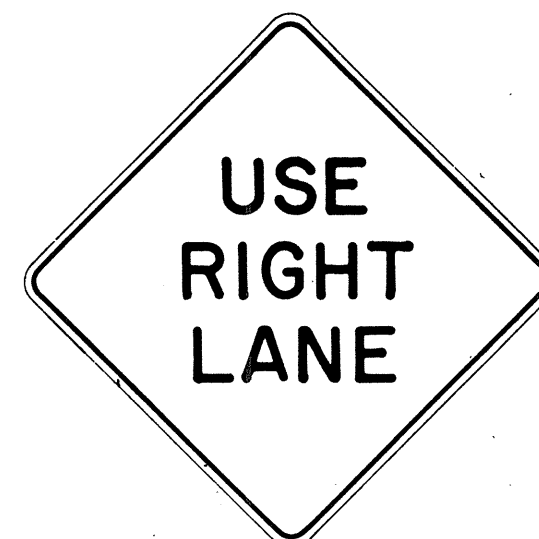
CG 20-4 36" x 18"



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."
- All construction signs shall be reflectorized unless otherwise specified.
- All construction signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in ( ) indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- For "CW" series signs, suffixes a,b,c and d are as follows:  
a-1500 FT, b-1000 FT,  
c-500 FT and d-AHEAD.

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 104 Approved 12-30-69	H.T.	3/23/72

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

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

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
STANDARD DETAILS CONSTRUCTION SIGNS
NOT TO SCALE
SHEET No. 3 OF 6 SHEETS DT 104

DATE	DESIGNED BY	CHECKED BY
PLANNED BY	NOTED BY	
DESIGNED BY	QUANTITIES BY	
NOTED BY	CHECKED BY	
ORIGINAL		
PLAN		
NOTE BOOK		
No.		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19K02-72	1972	15	17

GENERAL NOTES

- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961, unless otherwise specified.
- All letters and figures shall conform to the manual "Standard Alphabets for Highway Signs," Dept. of Commerce, Bureau of Public Roads, 1966
- All markers shall be reflectorized unless otherwise specified.
- All markers shall have 3/8" bolt holes drilled at appropriate locations unless otherwise specified.
- All markers shall have a black legend on a white background unless otherwise specified.
- Sign message of Cardinal Direction Marker (M6-1) shall be denoted by the following suffixes:  
M6-1-N : NORTH  
M6-1-E : EAST  
M6-1-S : SOUTH  
M6-1-W : WEST
- Auxiliary markers denoted with the suffix "I": (M4-1-I) shall have a white legend on a blue background.
- Cardinal Direction Marker (M6-1) with suffix I (3) shall have a white legend on a blue background and shall be 30" x 15" in size.
- For M1-3 and M1-4 signs, number in ( ) indicates route number and shall be as shown on the plan.

APPROVAL RECOMMENDED:

*Eiichi Tanaka* 12/29/62  
TRAFFIC ENGINEER DATE

APPROVED:

*Arthur S. Satal* 12-30-62  
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

STANDARD DETAILS

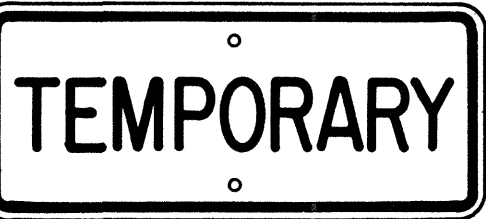
STATE ROUTE MARKERS

AND

AUXILIARY MARKERS

Scale: As Noted

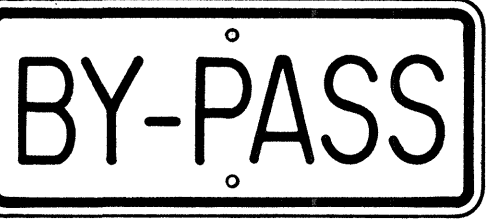
SHEET NO. 4 OF 6 SHEETS DT105



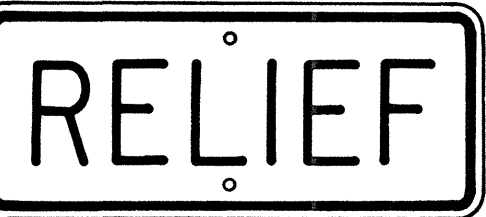
M5-1  
21" x 9"



M5-2  
21" x 9"



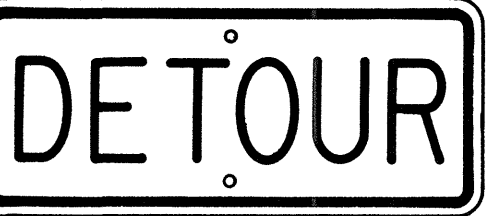
M5-3  
21" x 9"



M5-4  
21" x 9"



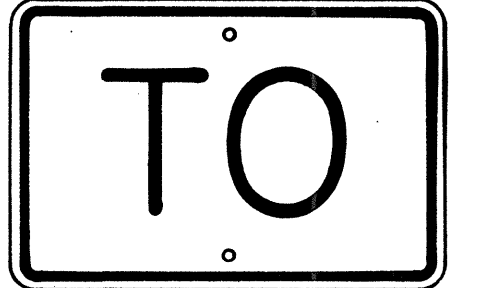
M5-5  
21" x 9"



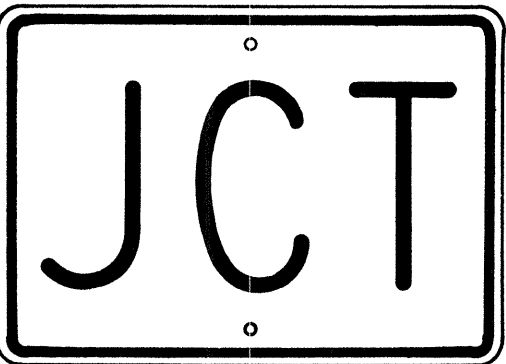
M5-6  
21" x 9"



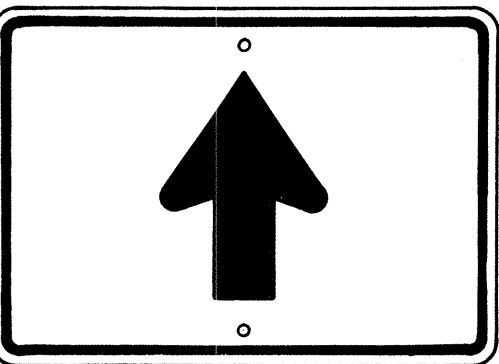
M6-1-N  
21" x 9"  
(See Note 6)



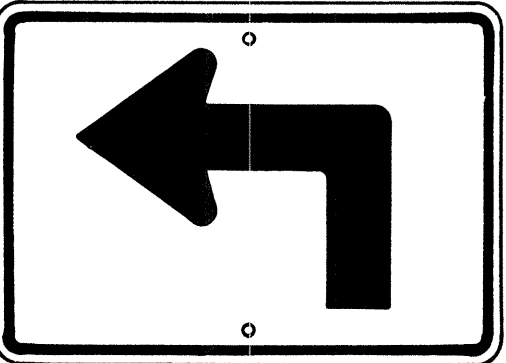
M7-1  
18" x 12"



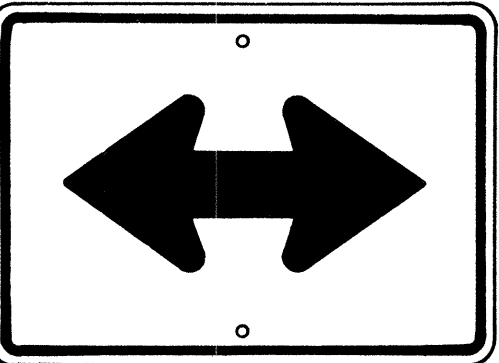
M2-1  
21" x 15"



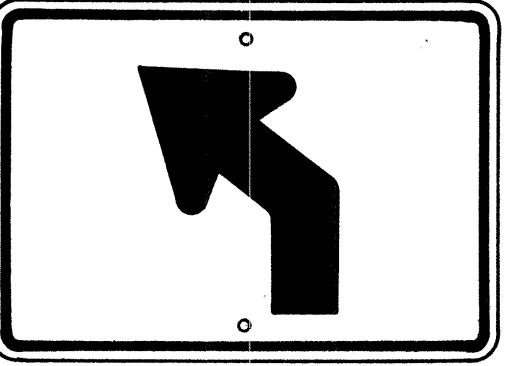
M4-3  
21" x 15"



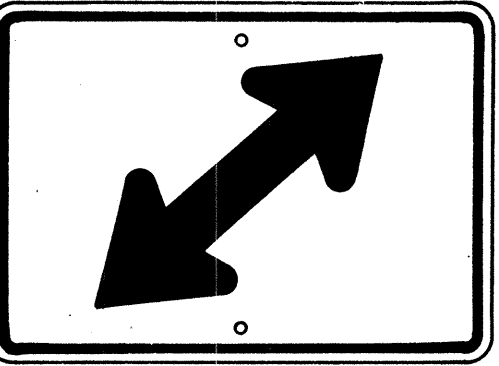
M3-1-L  
\* M3-1-R  
21" x 15"



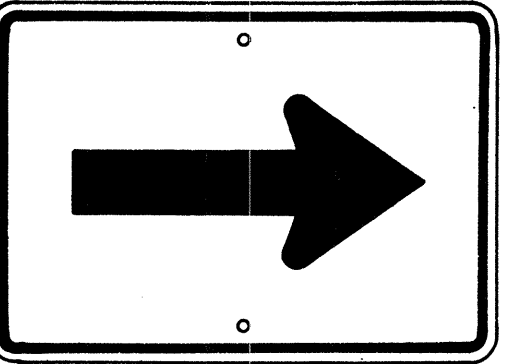
M4-4  
21" x 15"



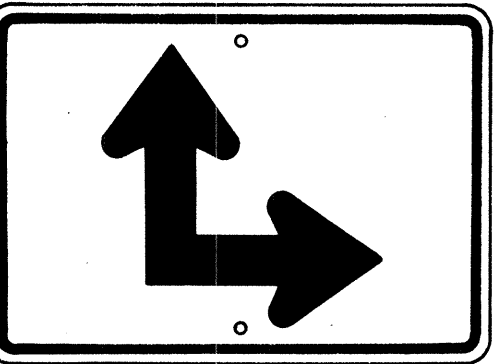
M3-2-L  
\* M3-2-R  
21" x 15"



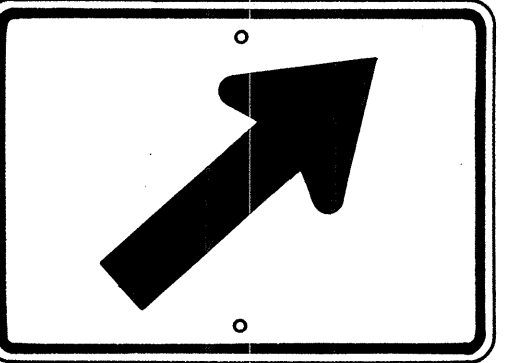
M4-5-R  
\* M4-5-L  
21" x 15"



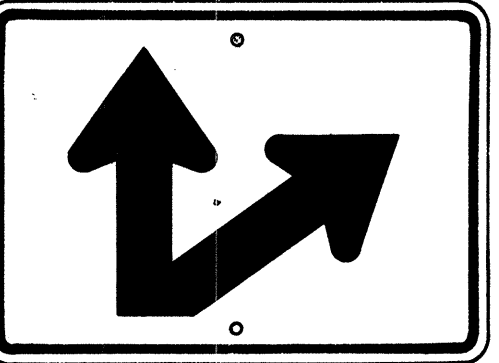
M4-1  
21" x 15"



M4-6-R  
\* M4-6-L  
21" x 15"



M4-2-R  
\* M4-2-L  
21" x 15"

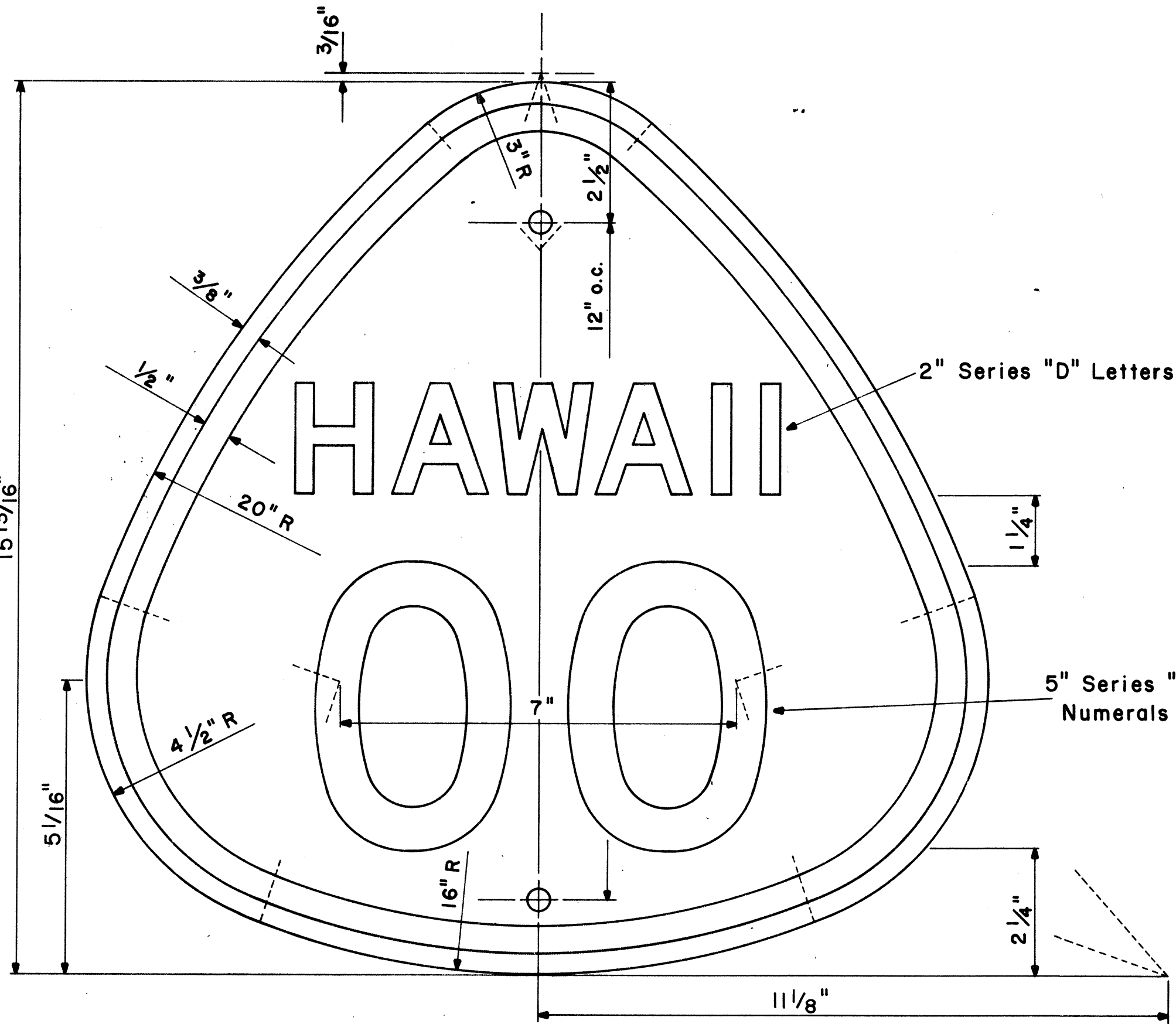


M4-7-R  
\* M4-7-L  
21" x 15"

AUXILIARY MARKERS

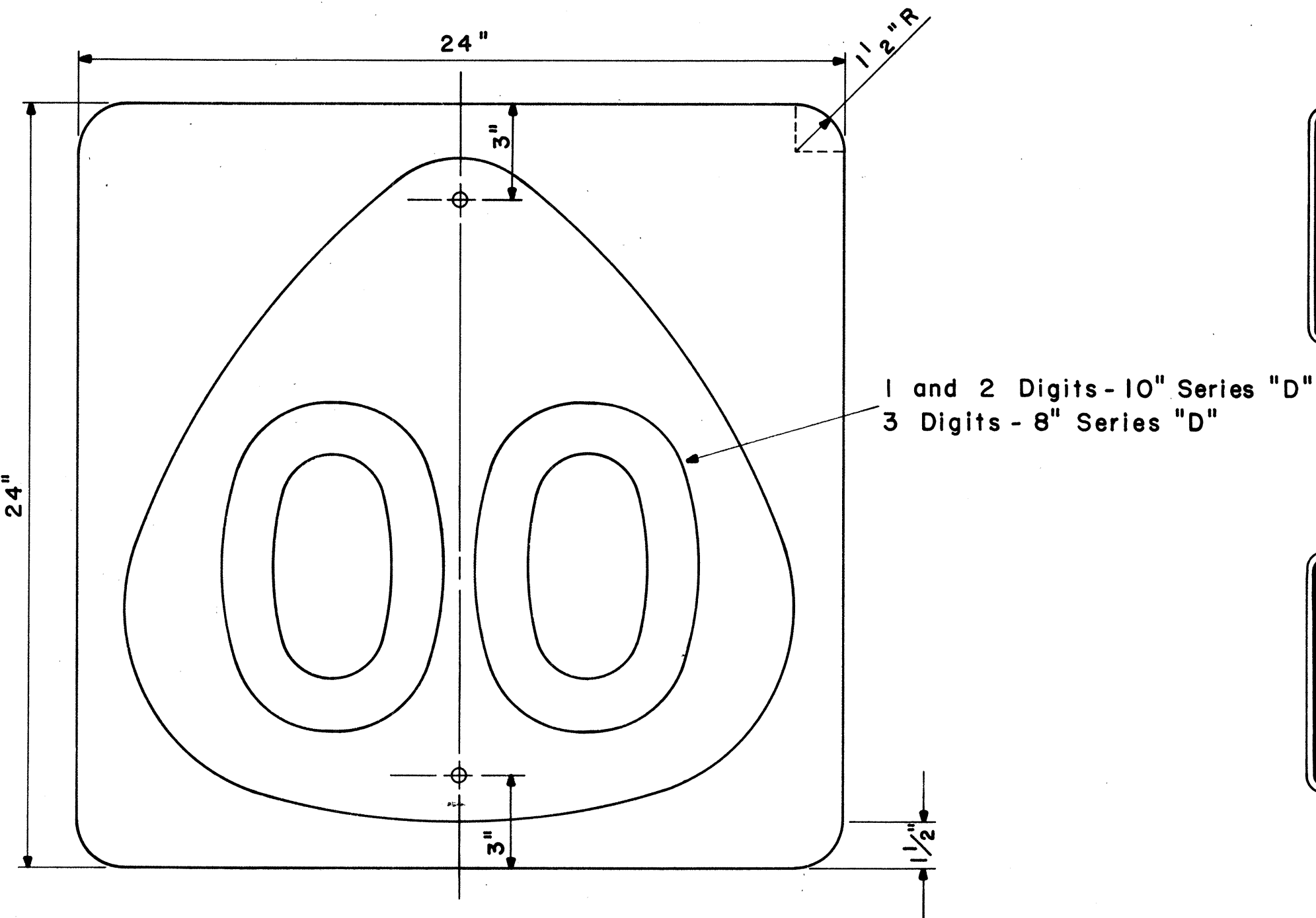
Scale: 1/8" = 1"

\* NOTE:  
Signs shall be similar but opposite in direction.



STATE ROUTE MARKER  
M1-3(00)

Scale: 1/2" = 1"



STATE ROUTE MARKER  
M1-4(00)

Scale: 1/4" = 1"

NOTE:  
Multiply all dimensions of State Route Marker M1-3 by 1.3 for the dimensions of the shield for M1-4.

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





1. The Contractor shall construct, install and maintain the wood barricades at the locations shown on the Plans.
2. The permanent wood barricades shall be left in place or relocated upon completion of the project as ordered by the Engineer and are to become State property.
3. The black and white stripes shall slant downward toward the side on which traffic is to pass.



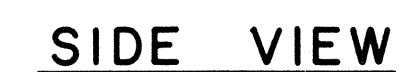
Scale:  $1/2'' = 1'-0''$



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

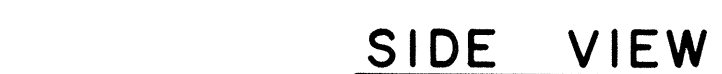


Scale: 1/2" = 1'-0"



(SIGN FRAME WEIGHTED DOWN)

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



(SIGN FRAME ANCHORED IN GROUND)

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

Scale: As Shown

Diagram of a highway tax sign with dimensions and text:

- Dimensions:**
  - Overall width: 12"
  - Overall height: 4'-0"
  - Top section height: 2'-1/2"
  - Bottom section height: 3'-1/2"
  - Section width: 5" 4" 5" 5"
  - Section height: 2"
- Text:**
  - YOUR HIGHWAY TAXES
  - AT WORK
  - FEDERAL HIGHWAY TRUST FUNDS
  - \$ 0,000,000
  - U.S. DEPT. OF TRANSPORTATION
  - FEDERAL HIGHWAY ADMIN.
  - STATE HIGHWAY FUNDS
  - \$ 0,000,000
  - HAWAII STATE.
  - DEPT. OF TRANSPORTATION
  - HIGHWAYS DIVISION
- Graphic:** A circular logo with the letters "OO" inside.

Scale:  $3/4" = 1'-0"$



Scale:  $3/4" = 1'-0"$

1. The sign legend shall be black on white background.
2. The Contractor shall construct, install and maintain the project signs at the locations shown on the plans and as ordered by the Engineer.
3. Letters shall be Series "C" of the sizes shown on the plan and shall conform to the FHWA publication "Standard Alphabets for Highway Signs," 1966.
4. The Contractor shall fill in the proper numerals in place of ciphers as ordered by the Engineer.
5. For State Route Marker detail, see sht. DT 209.

Include 1/2" black border around edge of marker.

APPROVAL RECOMMENDED:  
Eichi Tanaka 12/29/71  
TRAFFIC ENGINEER DATE

APPROVED:

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**STANDARD DETAILS**

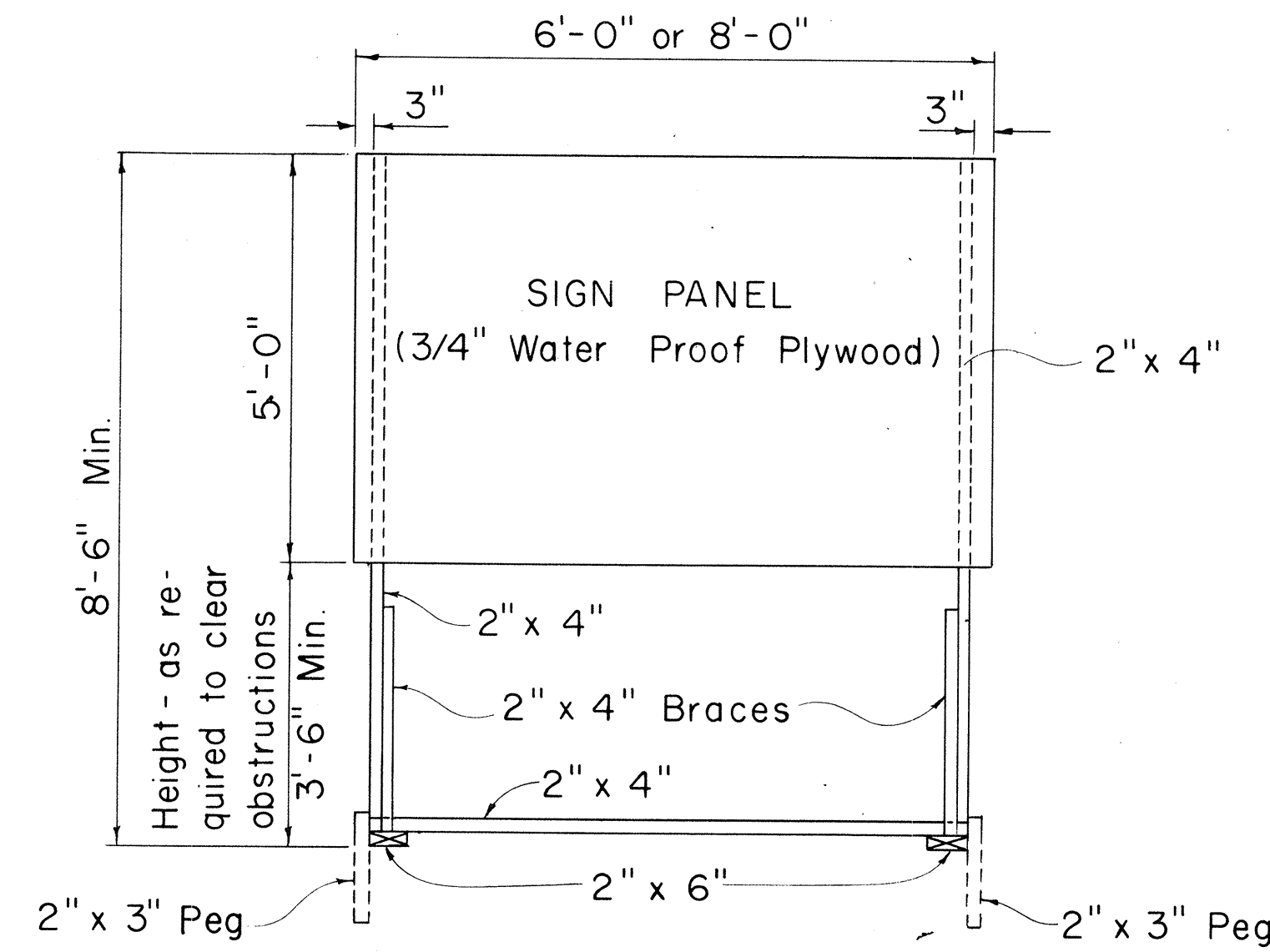
CONSTRUCTION IDENTIFICATION SIGN  
AND  
WOOD BARRICADES

Scale: As Shown

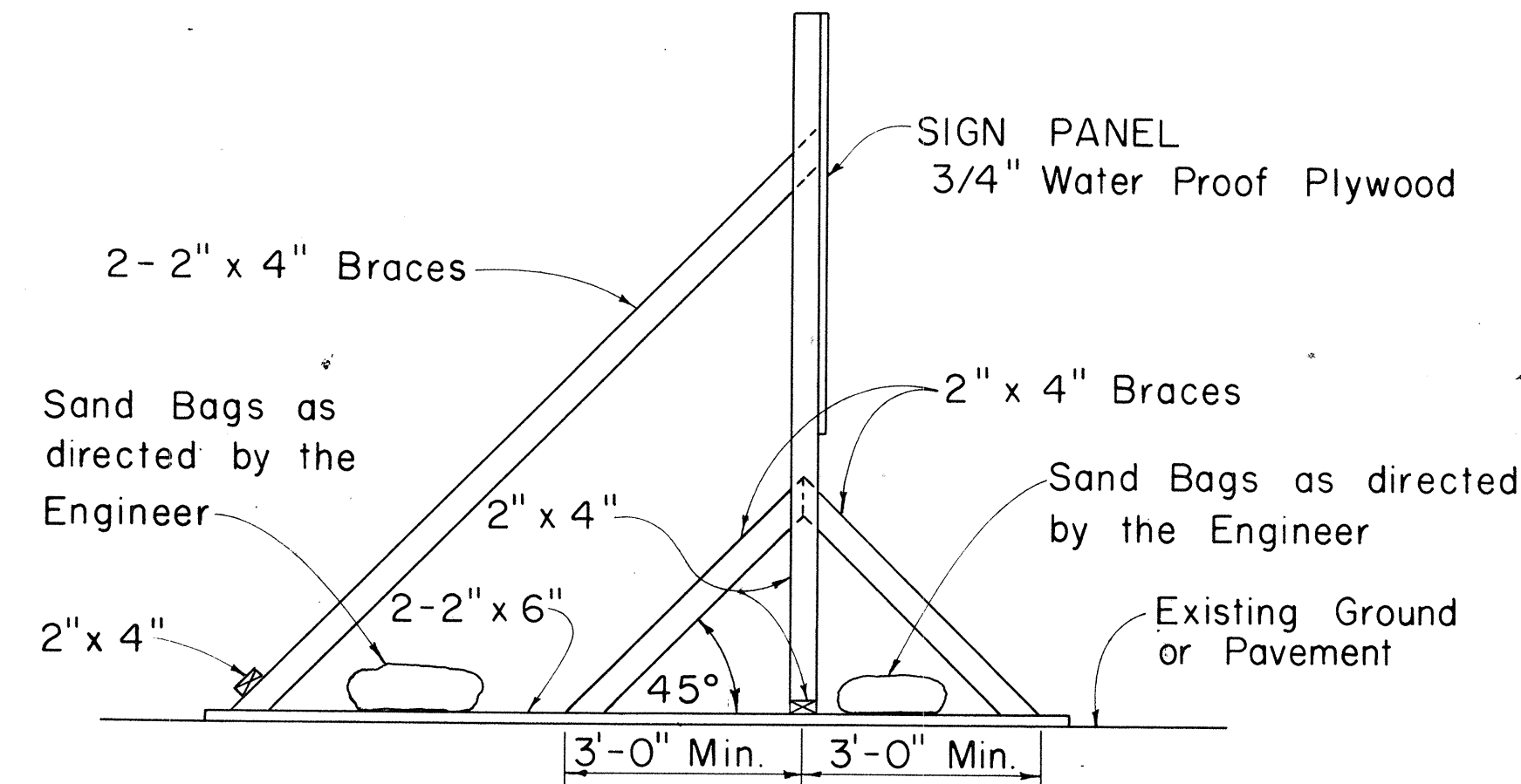
Scale: As Shown

SHEET No. 5 OF 6 SHEETS DT. 801

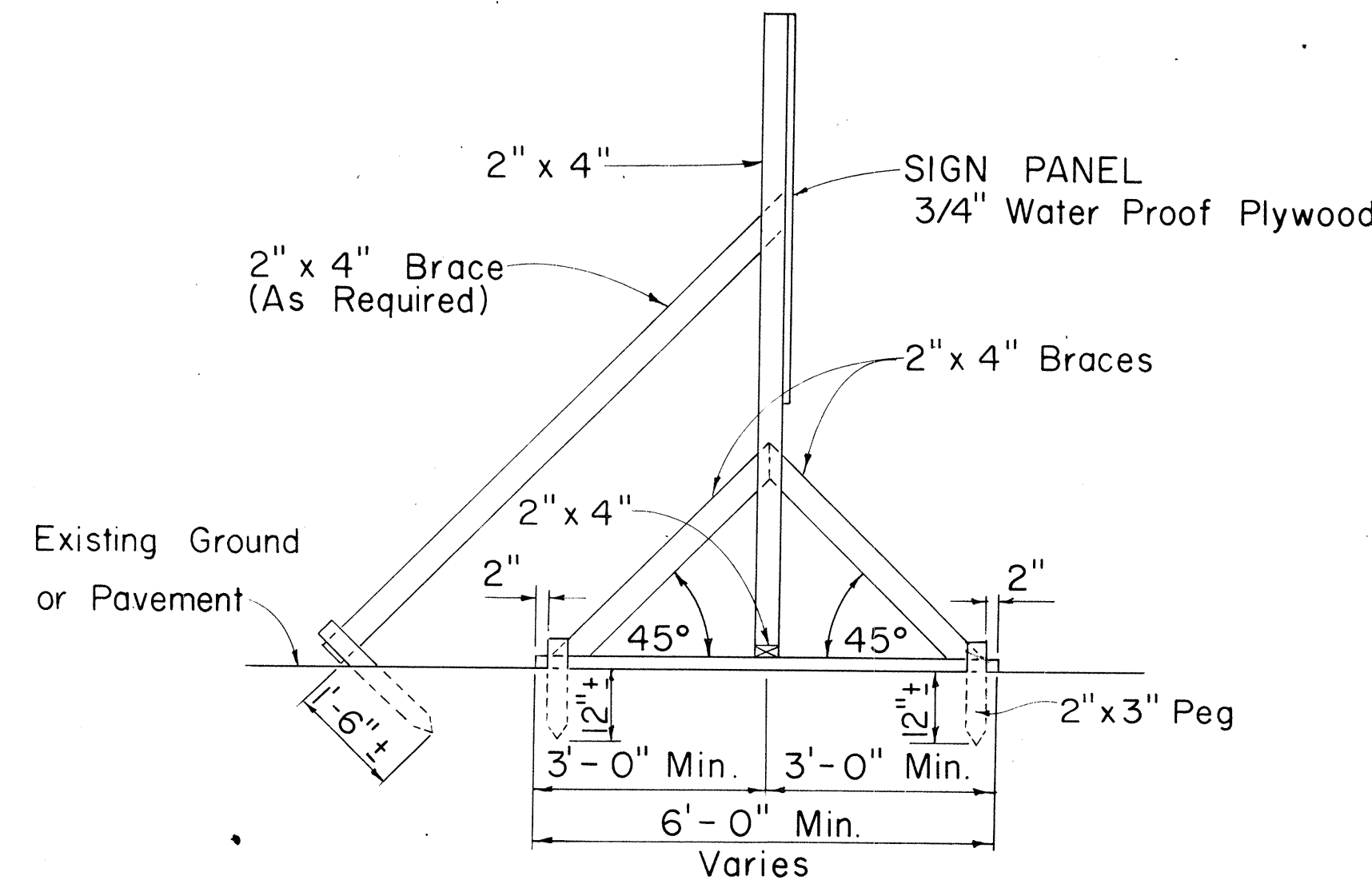
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19K-02-72	1972	17	17



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

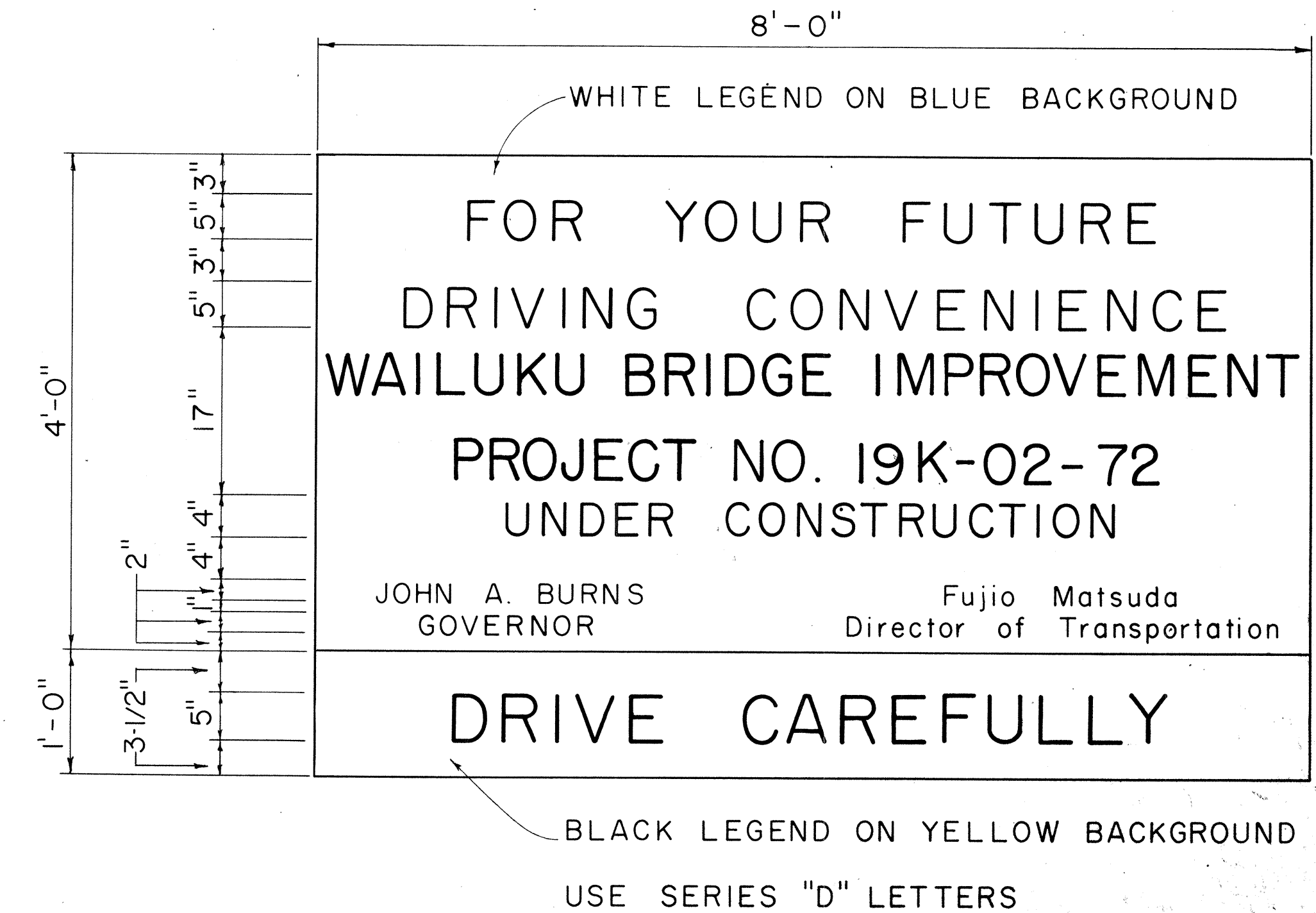


SIDE VIEW  
(SIGN SUPPORT AND FRAME WEIGHTED DOWN)  
Scale: 1/2" = 1'-0"



SIDE VIEW  
(SIGN SUPPORT AND FRAME ANCHORED IN GROUND)  
Scale: 1/2" = 1'-0"

SIGN SUPPORT AND FRAME  
Scale: As Shown



### GENERAL NOTES

1. The sign panels will be constructed by the State and will be available for pick up by the Contractor from the State Highway Maintenance Yard.
2. The Contractor shall construct the sign supports and frames and install the sign panels at the locations shown on the plans and as ordered by the Engineer.
3. At the end of construction the Contractor shall remove the sign panels and return it to the State Highway Maintenance Yard. Sign supports and frames shall be removed and cleared from the project site.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

TYPICAL DETAILS

PROJECT INFORMATION SIGN

Scale: As Shown

SHEET No. 6 OF 6 SHEETS

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