

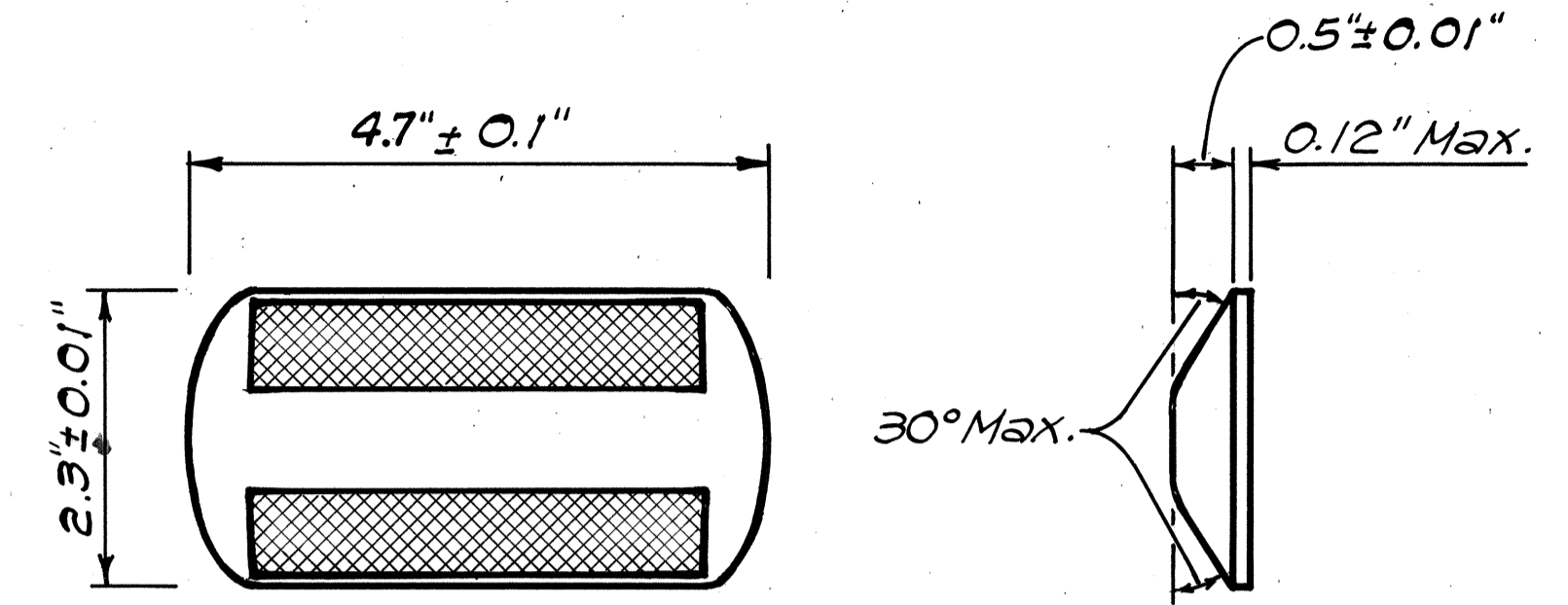
LEGEND

- 4 each Type A Raised Pavement Markers
Type CL Raised Pavement Markers @ 40'-0" o.c.
- 4 each Type J Raised Pavement Markers
Type DL Raised Pavement Markers @ 40'-0" o.c.
- 8" White Stripe with Type CL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I, or Thermoplastic Extrusion)
- 4" Double Solid Yellow Stripes with Type DL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I, or Thermoplastic Extrusion)
- 4" Double Solid Yellow Stripes with Type HL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" Yellow Edge Stripe with Type HL Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" Double Solid White Stripes with Type CL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I, or Thermoplastic Extrusion)
Lane Change Restriction Marking
- 4 each Type A Raised Pavement Markers
Type CL Raised Pavement Markers @ 20'-0" o.c.
4" Solid White Stripe (Tape, Type I, or Thermoplastic Extrusion)
- 4" White Edge Stripe (Tape, Type II, or Thermoplastic Extrusion)
- 4" White Guide Lines (Thermoplastic Extrusion)
- Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)
- Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)
- Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)
- Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment. (Thermoplastic Extrusion)
- Pavement Arrow (Tape, Type I, or Thermoplastic Extrusion)
- Pavement Word (Tape, Type I, or Thermoplastic Extrusion)
- 12" White Stop Line (Thermoplastic Extrusion)
- 4 each Type J Raised Pavement Markers
Type DL Raised Pavement Markers @ 40'-0" o.c.
Type HL Raised Pavement Markers (Reflective Surface facing no-passing direction)
- 4" Single Solid Yellow Strip (Tape, Type I, or Thermoplastic Extrusion)
Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type CL Markers @ 40'-0" o.c. (Thermoplastic Extrusion)
- Two-Way Left-Turn Only Lane
- 4 each Type J Raised Pavement Markers
Type DL Raised Pavement Markers @ 40'-0" o.c.
Type HL Raised Pavement Markers @ 20'-0" o.c.
4" Solid Yellow Stripe (Tape, Type I, or Thermoplastic Extrusion)

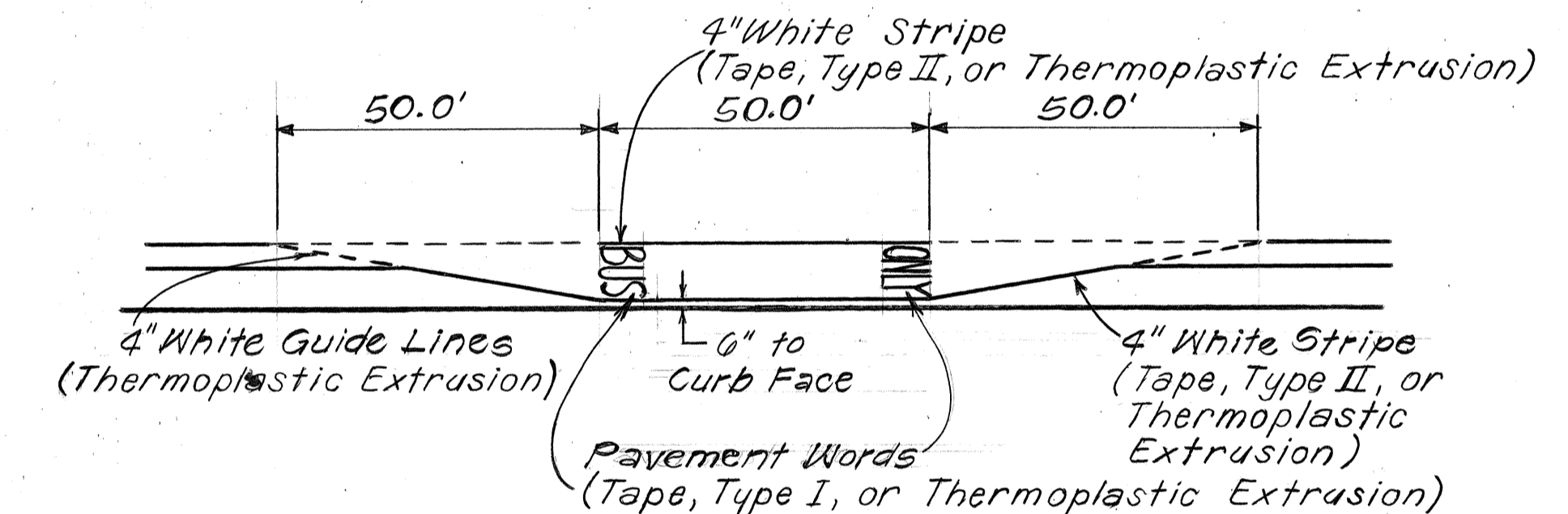
NOTES

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
3. Raised pavement markers shall not be installed within crosswalks.
4. Details of Type C, Type D and Type H Markers on Standard Plan Nos. TE-30, TE-31 and TE-32 shall be deleted and replaced with details of Type CL, Type DL and Type HL Markers as shown on this sheet. All references to Type C, Type D and Type H Markers in the plans shall mean Type CL, Type DL and Type HL Markers.
5. Final locations of all signs shall be approved by the Engineer prior to any installation work.
6. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans shall be incidental to the various signing items.
7. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
8. All pavement striping shall be as noted on the Legend or plans.
9. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.

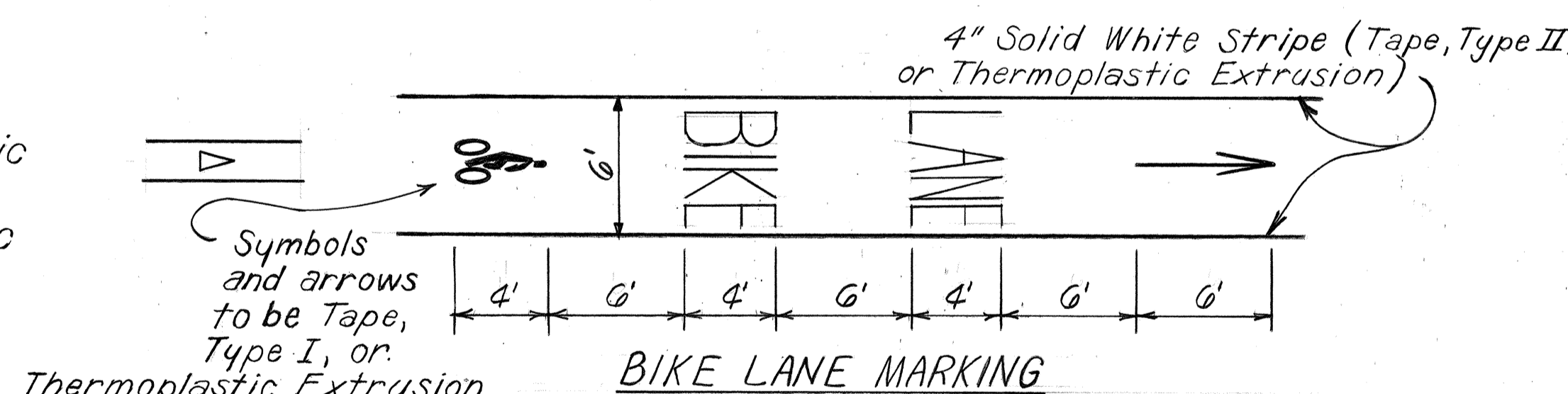
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) 6-R5-0760(R)W	1990	34	148



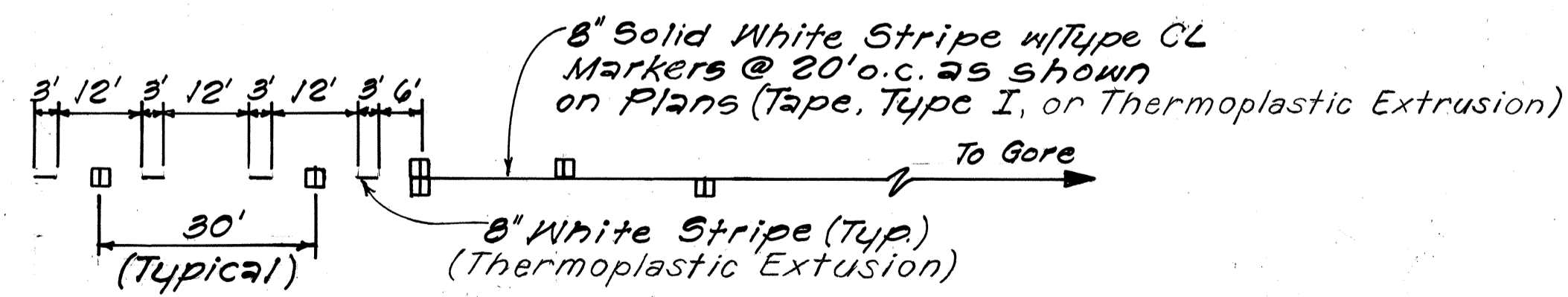
TYPE CL
Red-Clear Reflective Marker
or
TYPE DL
Two-Way Yellow Reflective Marker
or
TYPE HL
One-Way Yellow Reflective Marker
Not to Scale



TYPICAL BUS BAY STRIPING
w/BIKE LANE
Not to Scale



BIKE LANE MARKING



LANE DROP MARKING
Not to Scale

DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
TRACED BY	_____
QUANTITIES BY	_____
NOTE BOOK	_____
NO.	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING LEGEND
TYPICAL DETAILS & NOTES
FORT WEAVER ROAD
WIDENING & REALIGNMENT
HANAKAHI ST. TO EWA BEACH RD.
F.A.I. PROJECT Nos. F-076-1(2)
& 6-R5-0760(2)R/W
Scale: 1"=40' Date: Dec., 1989
SHEET No. 71 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) S-RS-0760(2) R/W	1990	35	148

TRUE NORTH
Scale: 1" = 40'

M.L. & STA.
201+03.07 =
STA. 7+52.58

Exist. Sign w/Post
HANAKAHI ST. ←
to Remain

TRUE NORTH
Scale: 1" = 40'

M.L. & Sta. 19+00

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
SIGNING & PAVEMENT MARKING PLAN
FORT WEAVER ROAD
WIDENING & REALIGNMENT
HANAKAHI ST. TO EWA BEACH RD.
F.A.I. PROJECT Nos. F-076-1(2)
& S-RS-0760(2) R/W
Scale: 1" = 40' Date: Dec., 1989
SHEET No. 7 2 OF 8 SHEETS

"AS-BUILT"

Install
END CONSTRUCTION
CG20-2
w/Post

CG20-2

500'

Tie into Exist.
Markings

Existing
SPEED LIMIT 45
to Remain

Remove
END

Exist. Sign w/Post
BIKE ROUTE
to Remain

Remove
BEGIN

Exist. Sign w/Post
BIKE ROUTE
to Remain

200' 200' Transition
12' to 11'
Lanes & Median Width

Install
ROAD CONSTRUCTION AHEAD
w/Post

CW20-1d

Install w/Post
D11-1
BIKE ROUTE

M7-1
→

R9-5
USE PED SIGNAL

INSTALL SIGN R7-107C
C.C.O. NO. 19
SEE DETAIL PLAN ON
SHT. CO.40S-2

Relocate
Exist. Sign
HANAKAHI ST. →
w/New Post

INSTALL BRACKET/BRACES FOR
SIGN. C.C.O. NO. 11
SEE DETAIL PLAN ON SHT.
C.O.40S-2

Install w/Post
CENTER LANE ONLY R3-9b
MILE 2 D10-1

M.L. & STA.
201+03.07 =
STA. 7+52.58

Install New Sign
R7-107a
w/Post

Install
BIKE ROUTE D11-1
↑ M7-2
w/Post

Install
BEGIN M4-11
CENTER LANE ONLY R3-9b
w/Post

Install
SPEED LIMIT 25 R2-1(25)
w/Post

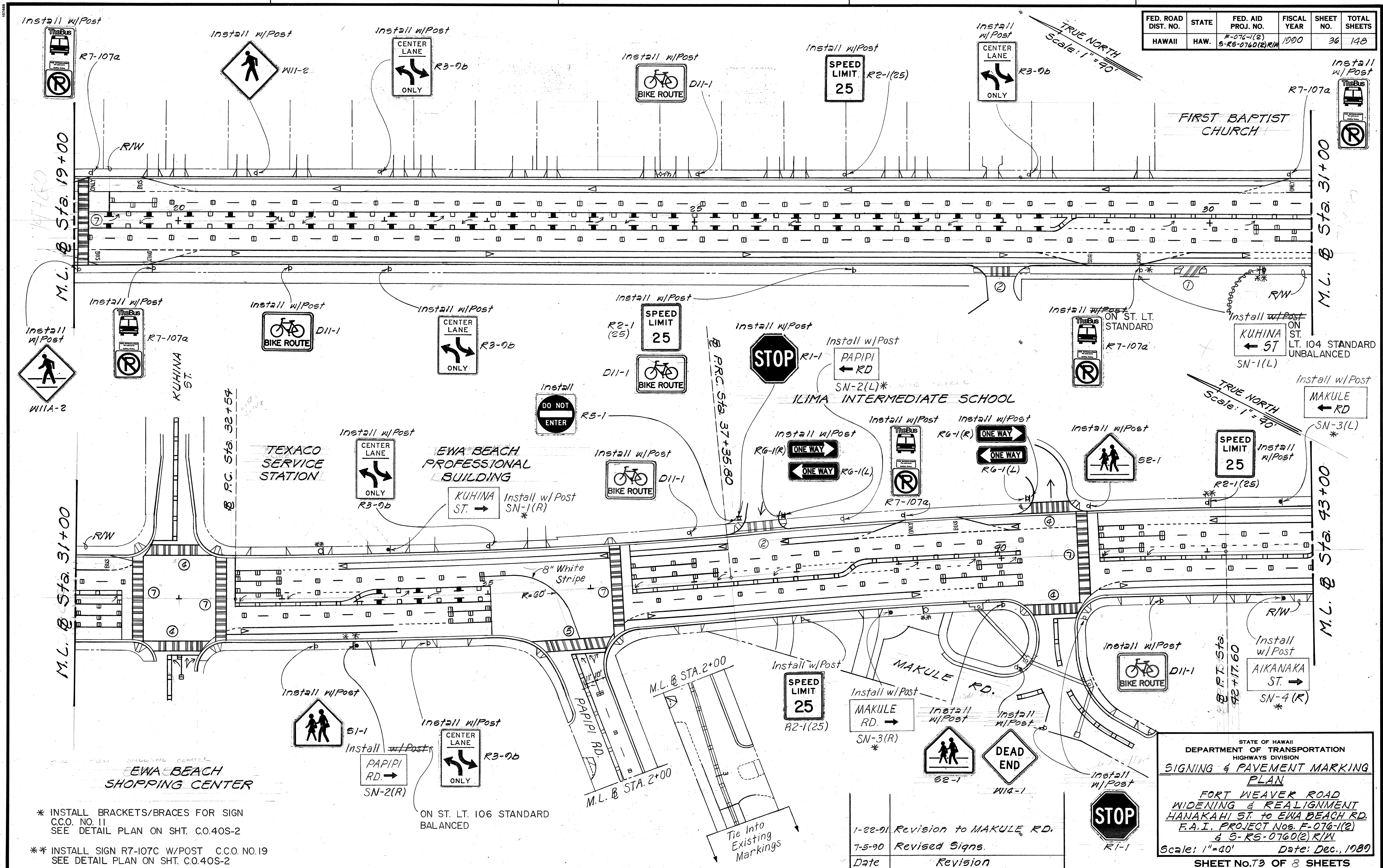
Install
CENTER LANE ONLY R3-9b
w/Post

Install w/Post
W11-2

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) S-RS-0760(2)R/W	1990	36	148

TRUE NORTH
Scale: 1"=90'



SURVEY PLOTTED BY	DATE
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

* INSTALL BRACKETS/BRACES FOR SIGN C.C.O. NO. 11 SEE DETAIL PLAN ON SHT. C.O.40S-2

** INSTALL SIGN R7-107C W/POST C.C.O. NO.19 SEE DETAIL PLAN ON SHT. C.O.40S-2

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & PAVEMENT MARKING PLAN

FORT WEAVER ROAD
WIDENING & REALIGNMENT
HANAKAHI ST. TO EWA BEACH RD.
F.A.I. PROJECT Nos. F-076-1(2)
& S-RS-0760(2)R/W

Scale: 1"=40' Date: Dec., 1989

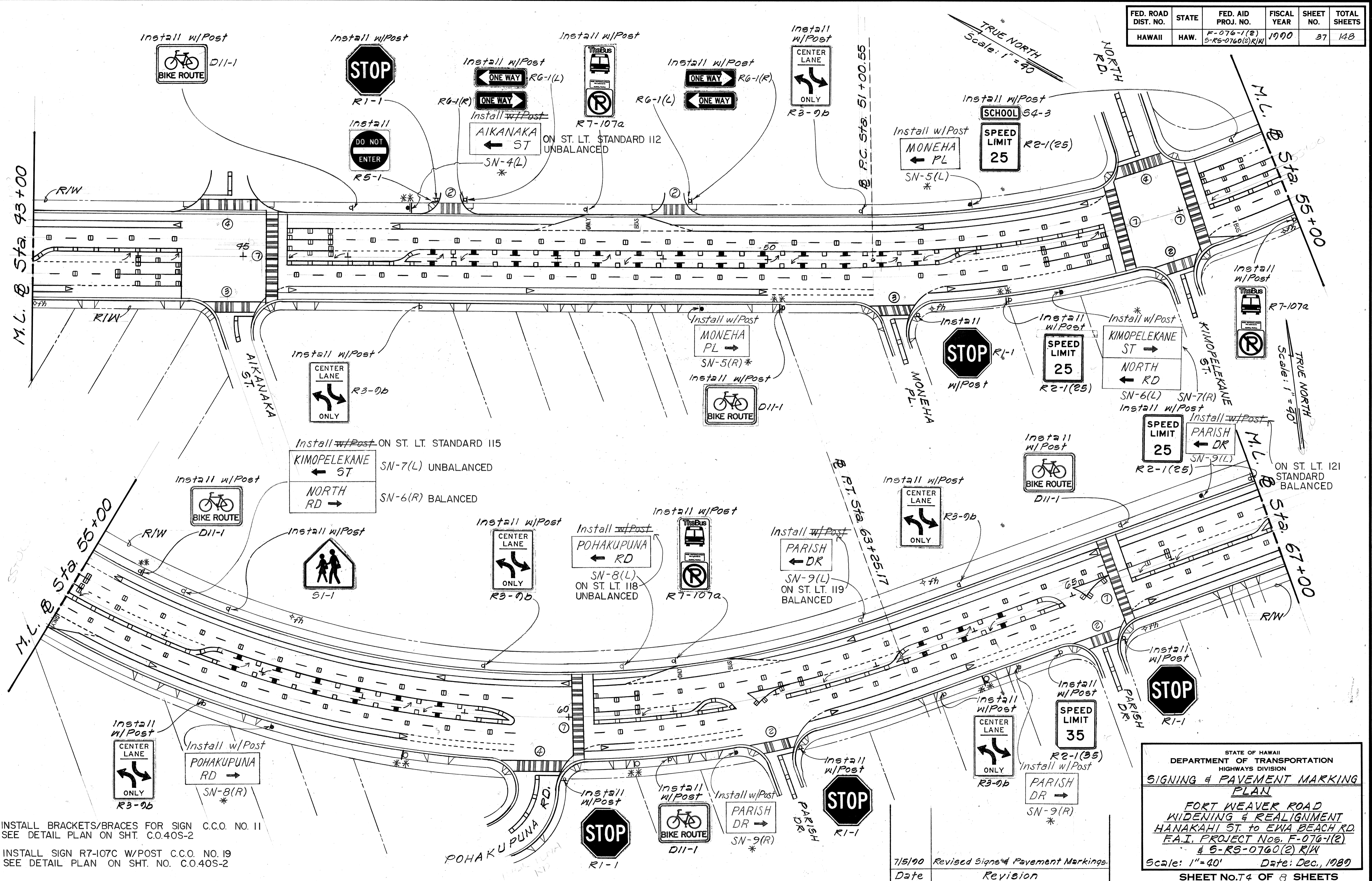
SHEET No. 36 OF 8 SHEETS

Date	Revision
1-22-91	Revision to MAKULE RD.
7-5-90	Revised Signs.

"AS-BUILT" C.O. 36
2 FT. WEAVER

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) S-RS-0760(2)R/W	1990	37	148

TRUE NORTH
Scale: 1" = 40'



DATE	
SURVEY PLOTTED BY	
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

* INSTALL BRACKETS/BRACES FOR SIGN C.C.O. NO. 11
SEE DETAIL PLAN ON SHT. C.O.40S-2

** INSTALL SIGN R7-107C W/POST C.C.O. NO. 19
SEE DETAIL PLAN ON SHT. NO. C.O.40S-2

7/5/90 Revised Signs & Pavement Markings.
Date Revision

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

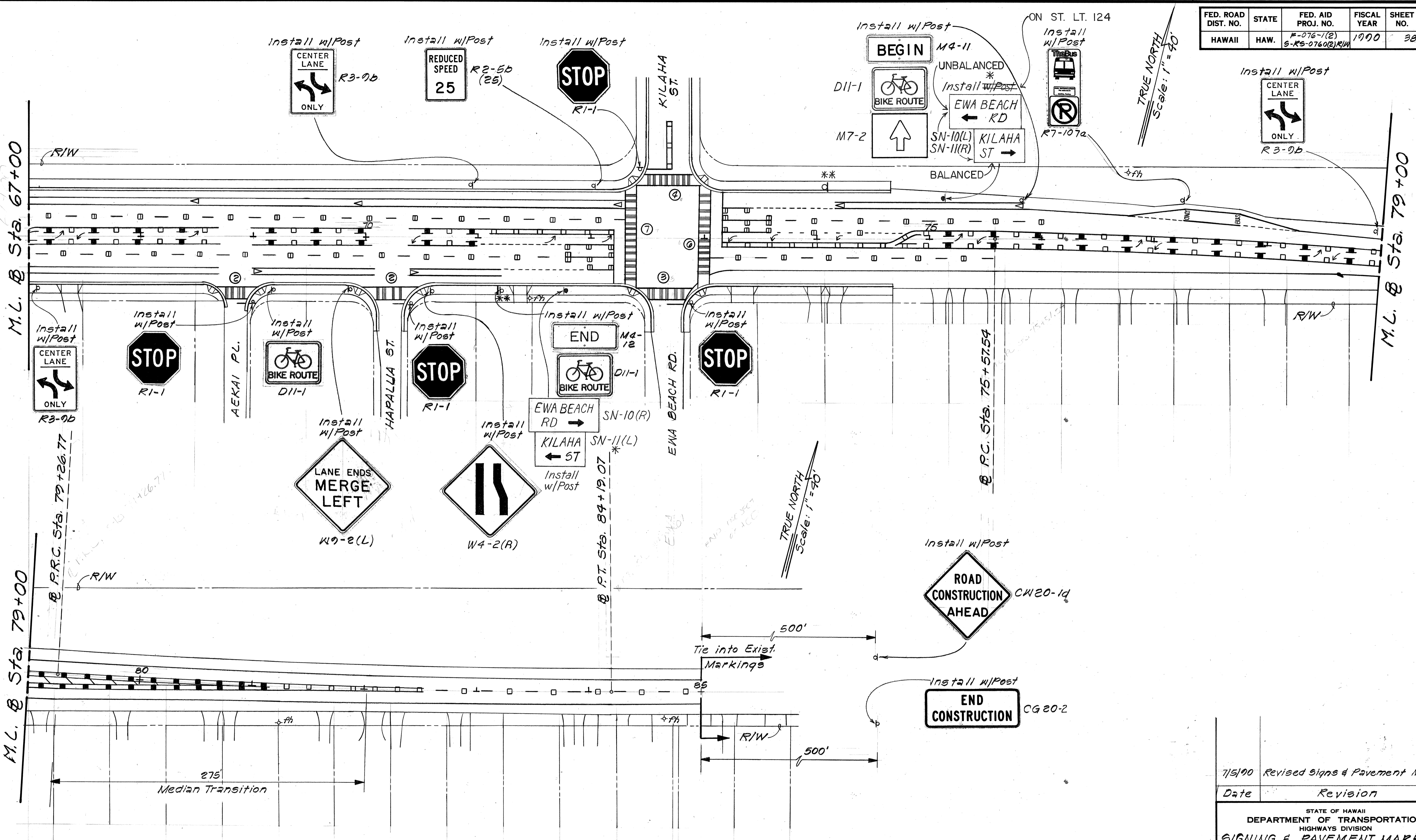
SIGNING & PAVEMENT MARKING PLAN

**FORT WEAVER ROAD
WIDENING & REALIGNMENT
HANAKAHI ST. TO EMMA BEACH RD.
F.A.I. PROJECT Nos. F-076-1(2)
& S-RS-0760(2)R/W**

Scale: 1" = 40' Date: Dec., 1989

SHEET No. 74 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) S-RS-0760(2)R/W	1990	38	148



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

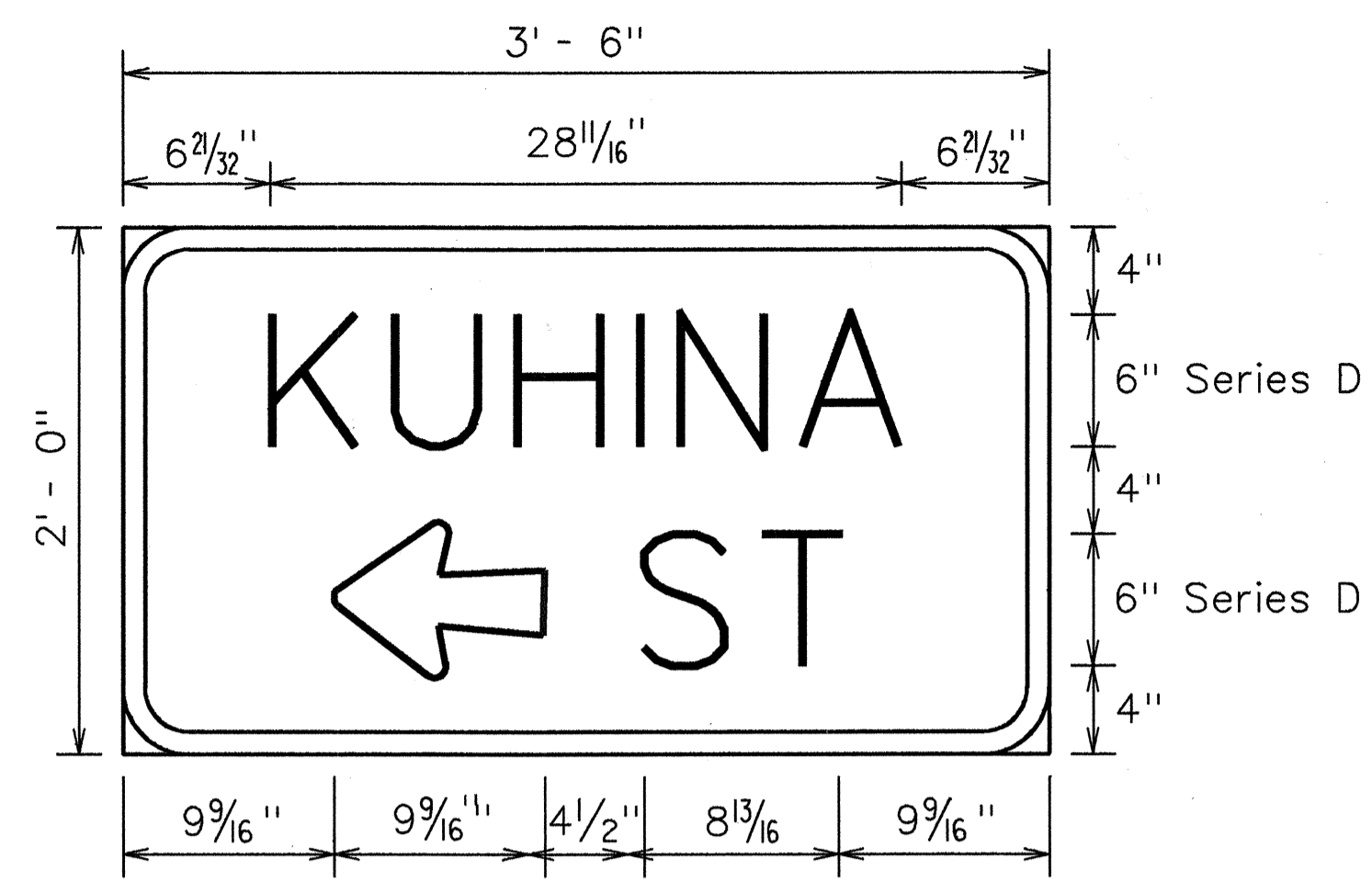
* INSTALL BRACKETS/BRACES FOR SIGN C.C.O. NO. 11
SEE DETAIL PLAN ON SHT. C.O.40S-2

** INSTALL SIGN R7-107C C.C.O. NO. 19
SEE DETAIL PLAN ON SHT. C.O.40S-2

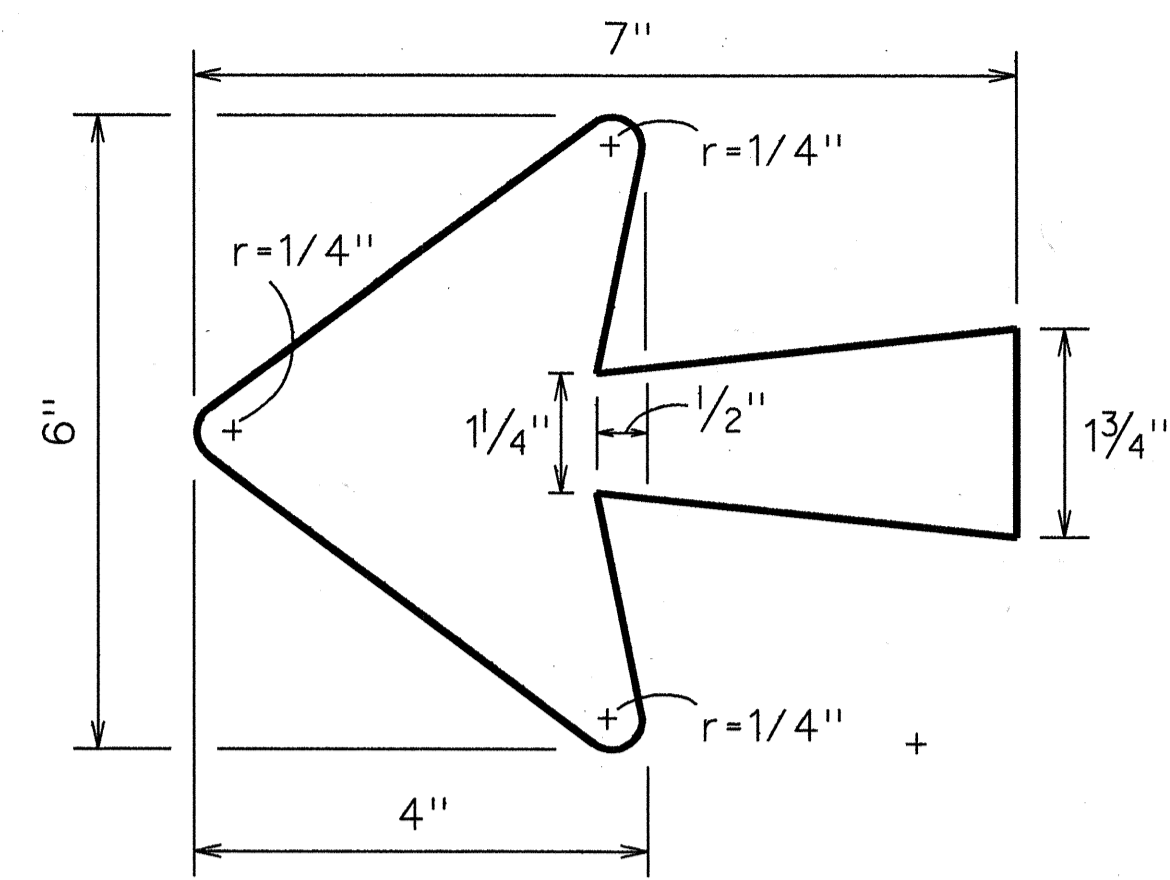
7/5/90	Revised Signs & Pavement Markings
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
SIGNING & PAVEMENT MARKING PLAN	
FORT WEAVER ROAD WIDENING & REALIGNMENT HANAKAHI ST. TO EWA BEACH RD. F.A.I. PROJECT Nos. F-076-1(2) & S-RS-0760(2)R/W	
Scale: 1"=40'	Date: Dec., 1989
SHEET NO. 75 OF 8 SHEETS	

AS-BUILT" **C.O. 38**
9 FT. WEAVER

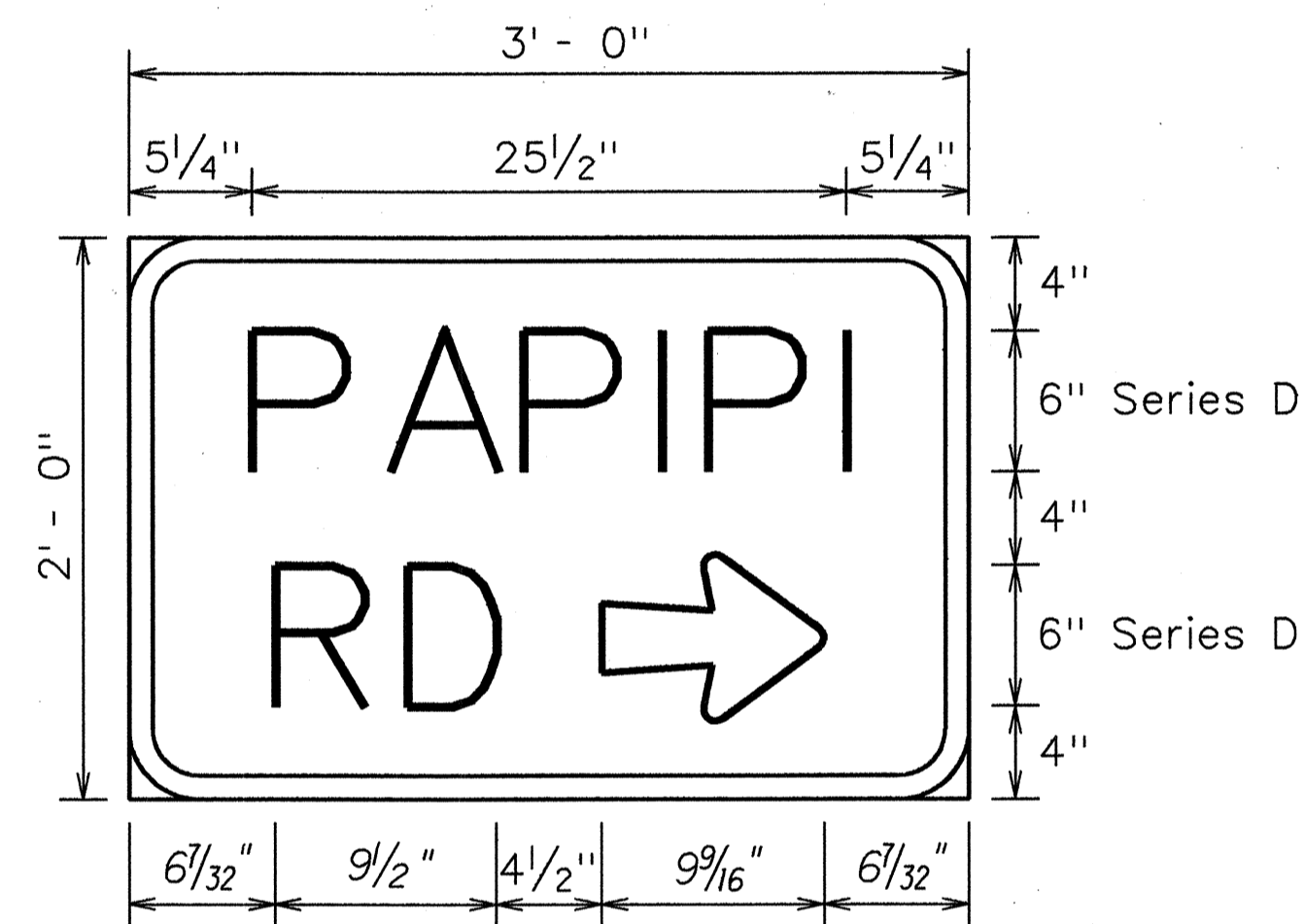
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) & S-RS-0760(2) R/W	1990	39	148



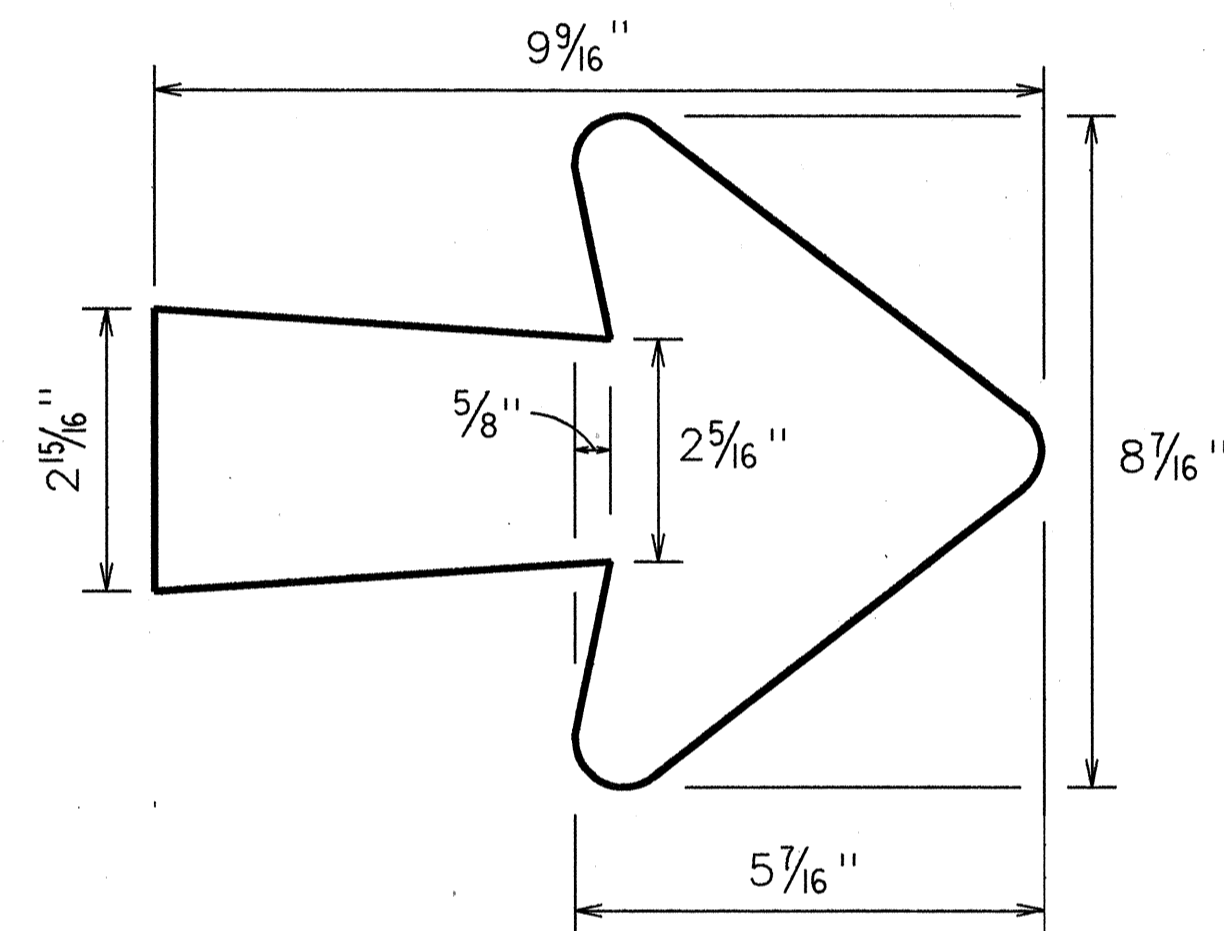
SN-1 (L)
1 1/2" = 1' - 0"



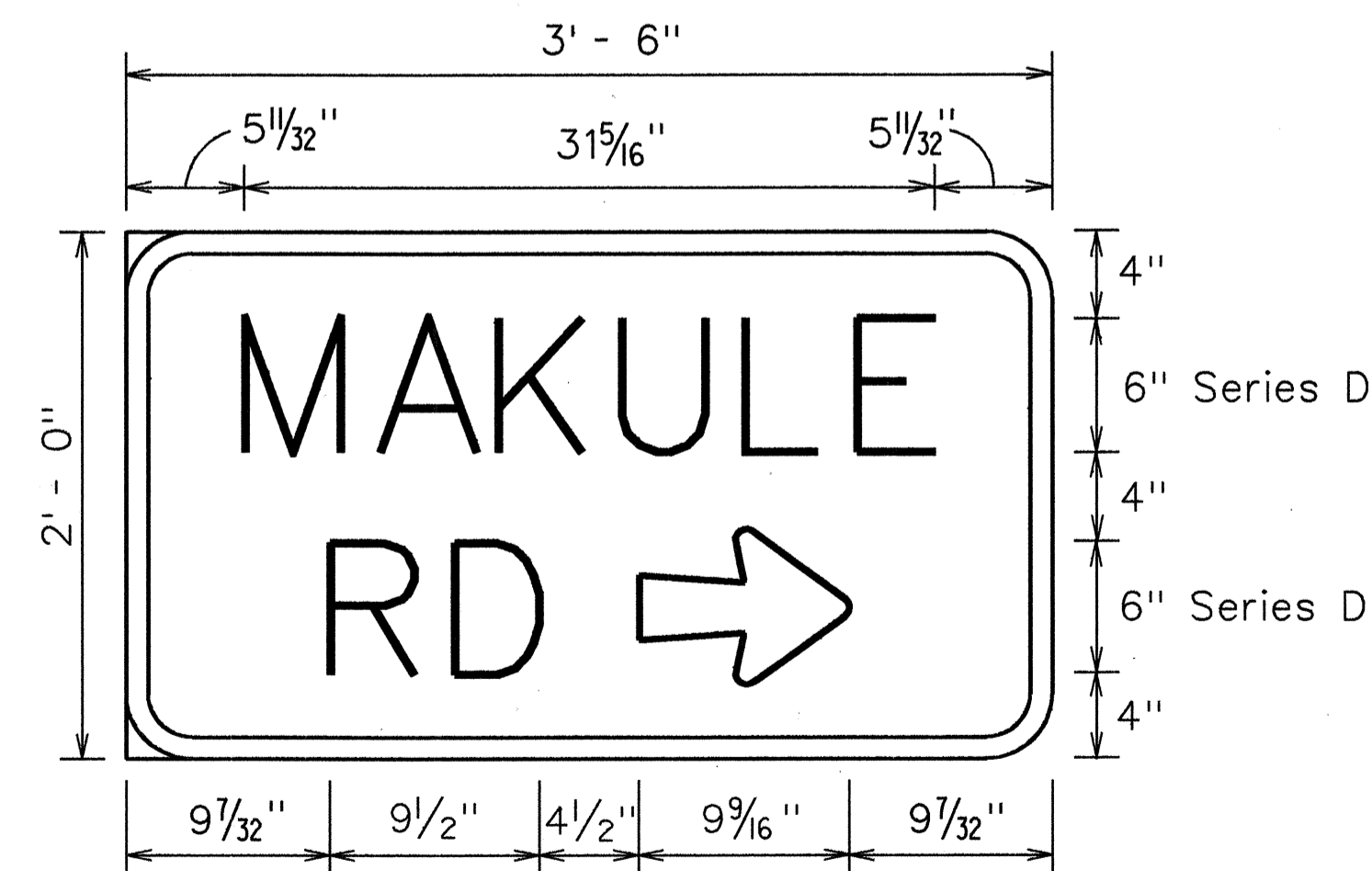
ARROW DETAIL
N.T.S.



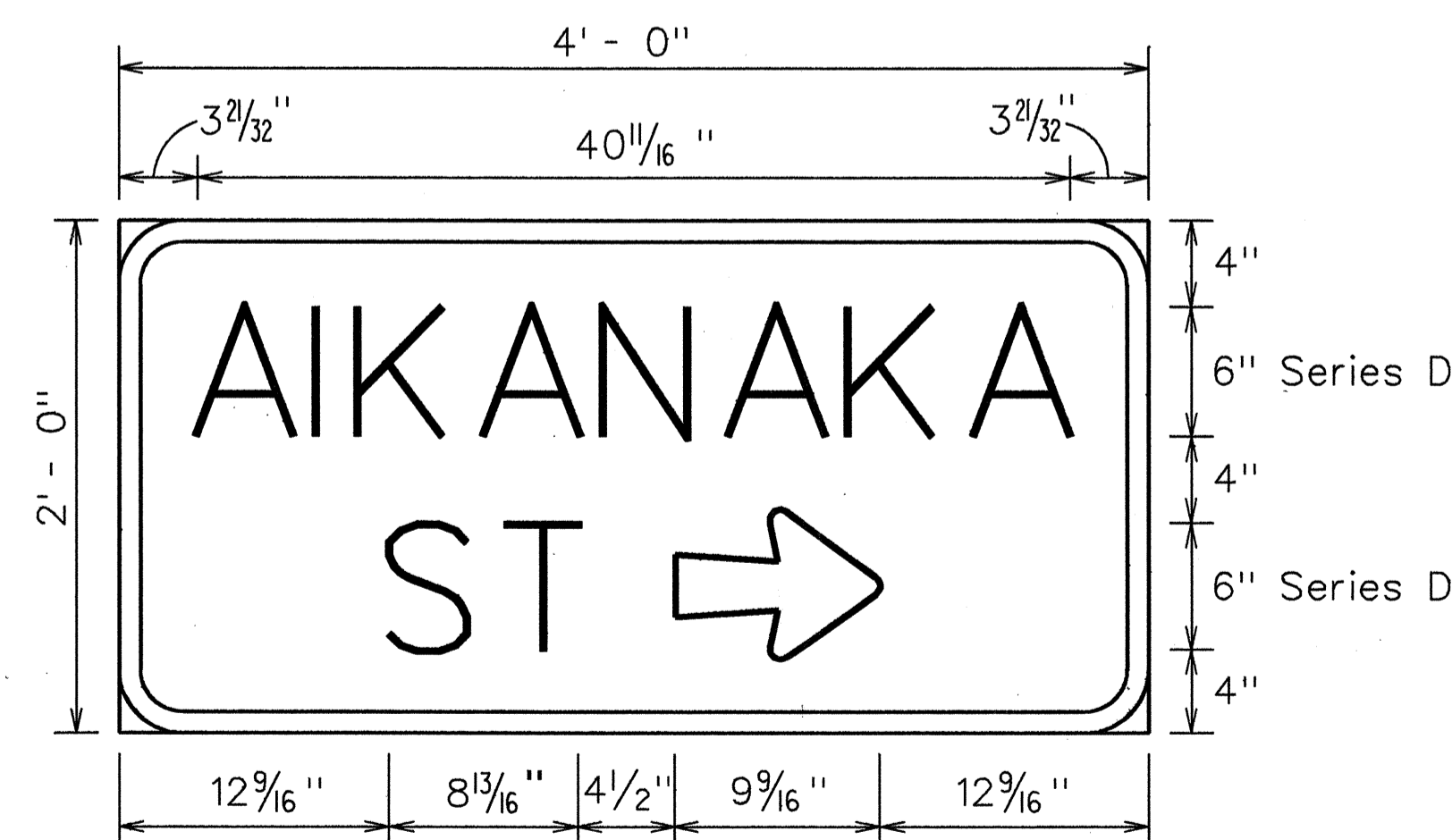
SN-2 (R)
1 1/2" = 1' - 0"



ARROW DETAIL
N.T.S.



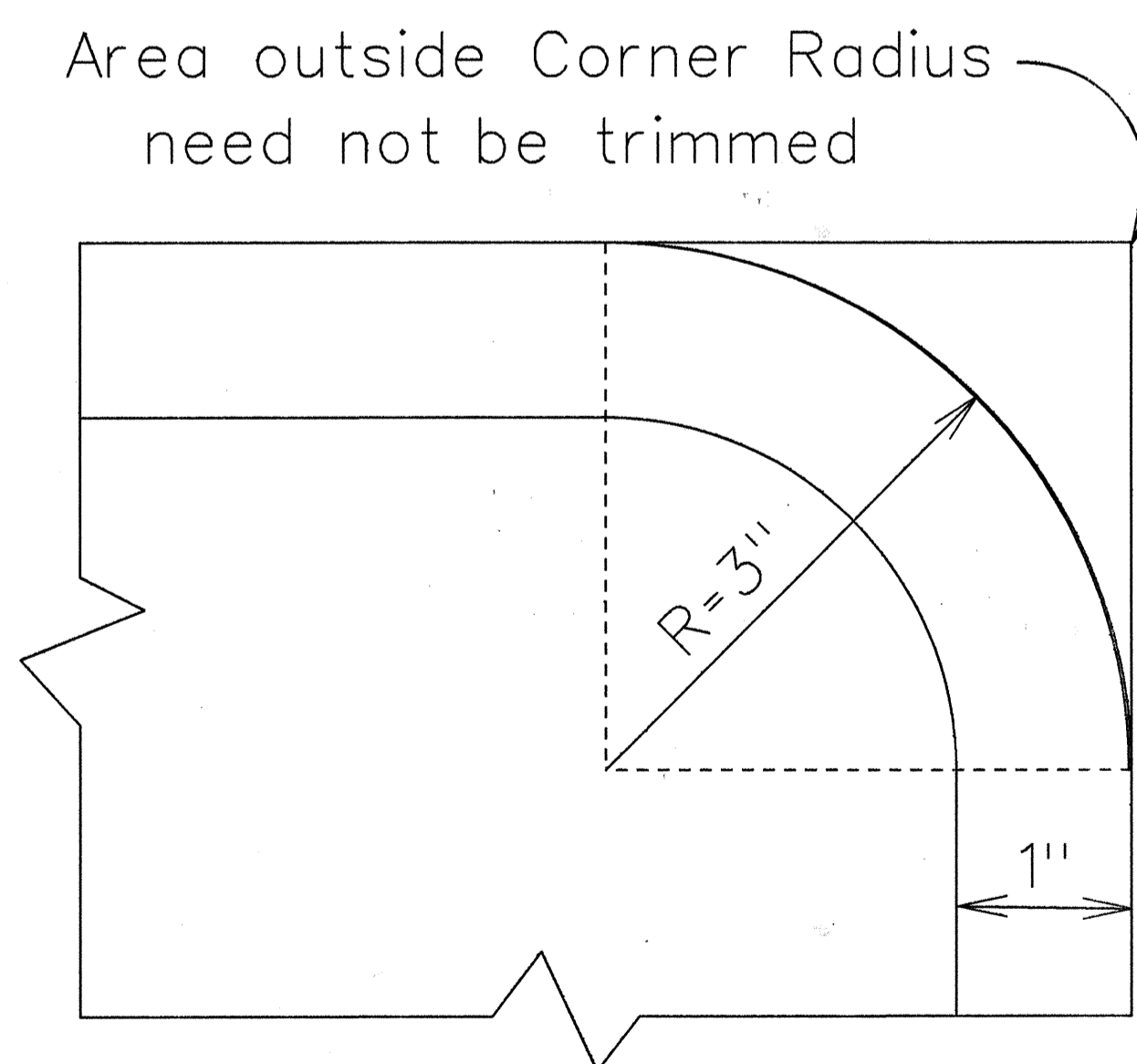
SN-3 (R)
1 1/2" = 1' - 0"



SN-4 (R)
1 1/2" = 1' - 0"

STREET NAME SIGN NOTES:

- Street name signs shall conform to the latest FHWA publications: "Manual on Uniform Traffic Control Devices for Streets & Highways" & as amended "Standard Alphabets for Highway Signs."
- Letters:
Series "D" Upper Case
Color:
Letters (White Reflective Sheeting on Demountable)
Borders (Aluminum Cut-Outs fastened to Sign Panel)
Arrows (With Aluminum Blind Rivets)
Sign Panel:
0.100" Thick Sheet Aluminum
- If splicing of Sign Panel is necessary, Contractor shall submit splice details to the Engineer for approval.



BORDER DETAIL
N.T.S.

7/5/90	Revised Sign Detail
DATE	REVISION

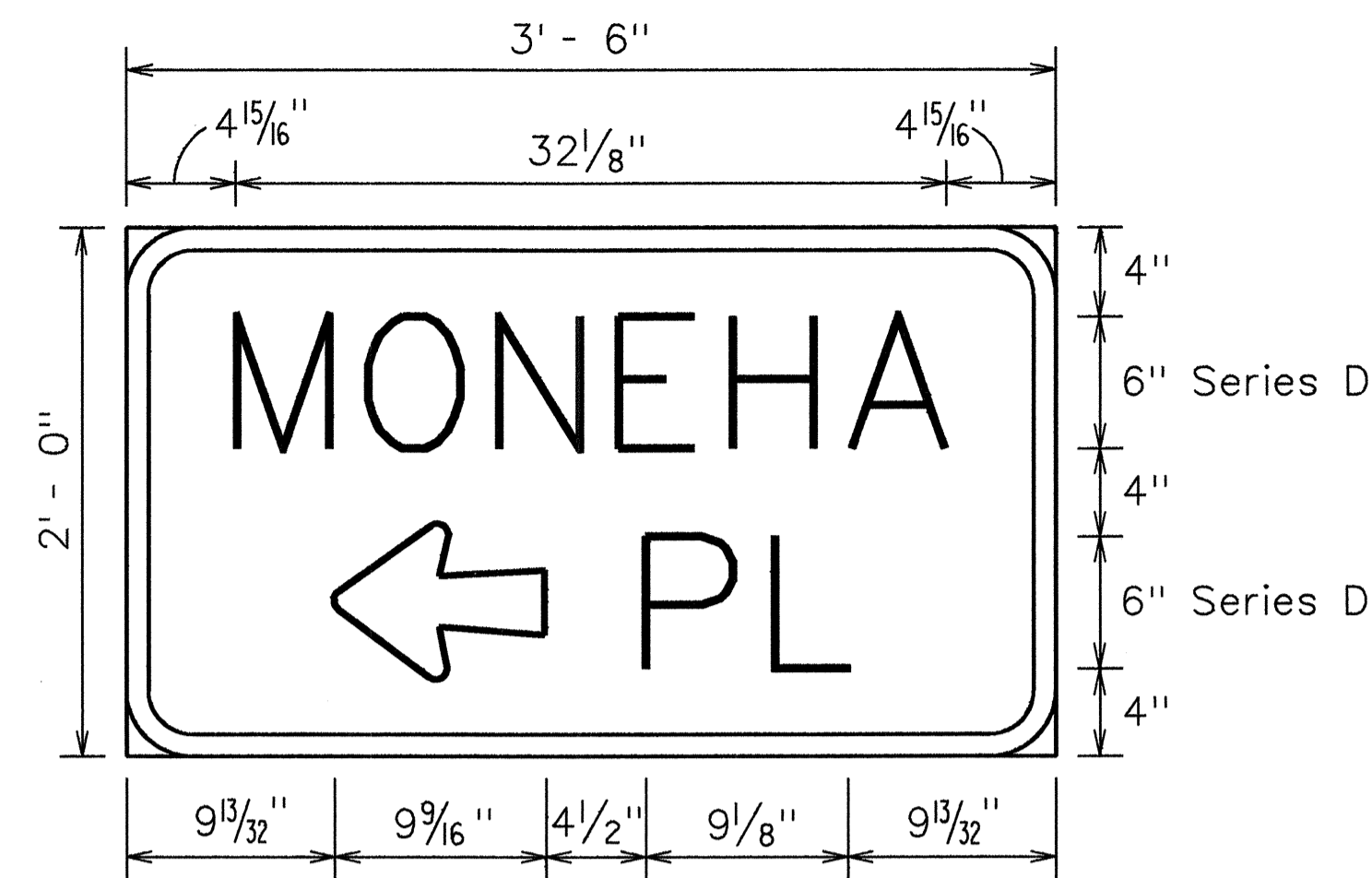
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**STREET NAME
SIGNS & DETAILS**
FORT WEAVER ROAD
WIDENING & REALIGNMENT
Hanalei St. to Ewa Beach Rd.
FAI Project Nos. F-76-1(2) & S-RS-0760(2) R/W
Scale: As Shown Date: 12/21/89

SHEET No. T6 OF T8 SHEETS

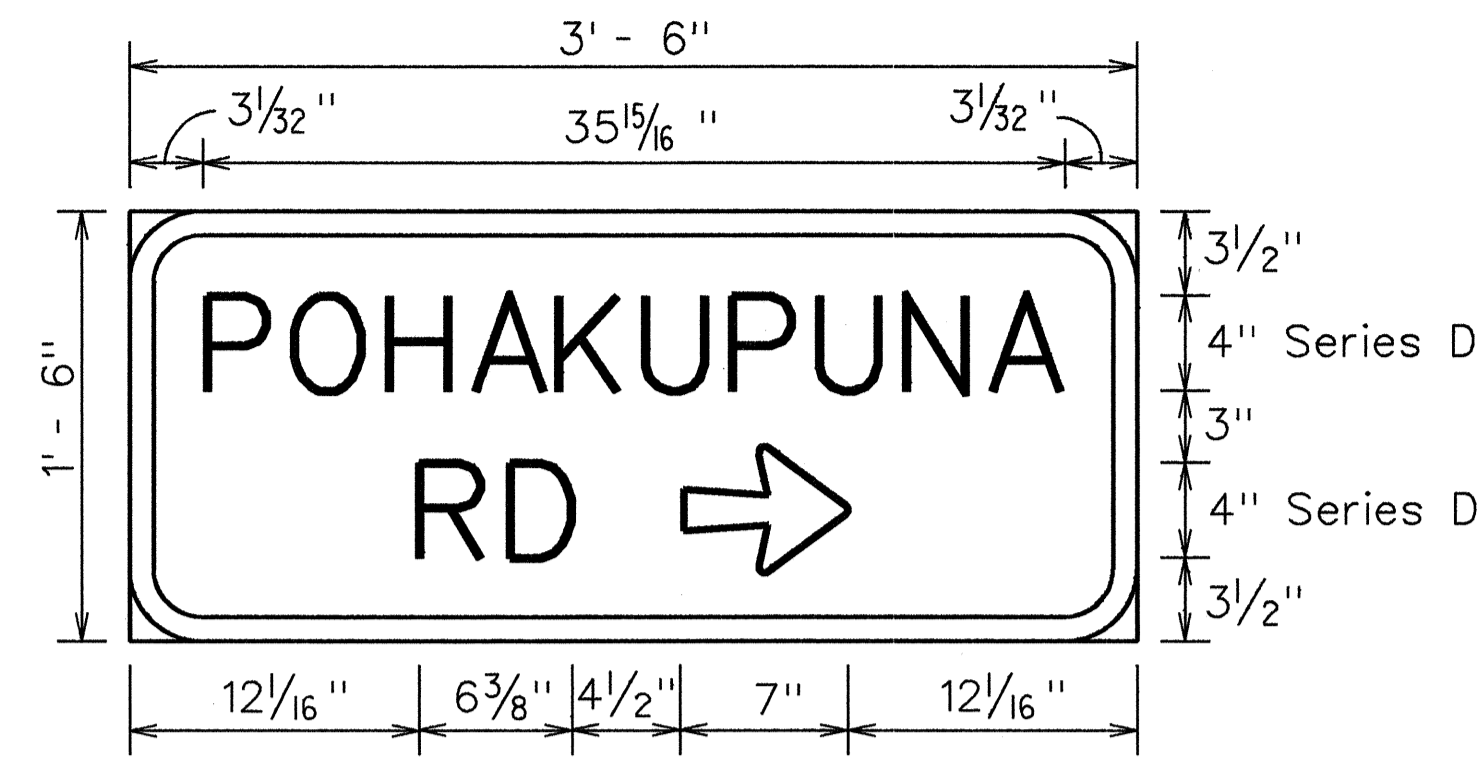
C. O. 39

DATE: _____
DESIGNED BY: _____
CHECKED BY: _____
QUANTITIES BY: _____
NOTE BOOK: _____
ORIGINAL PLAN: _____
SURVEY PLOTTED BY: _____

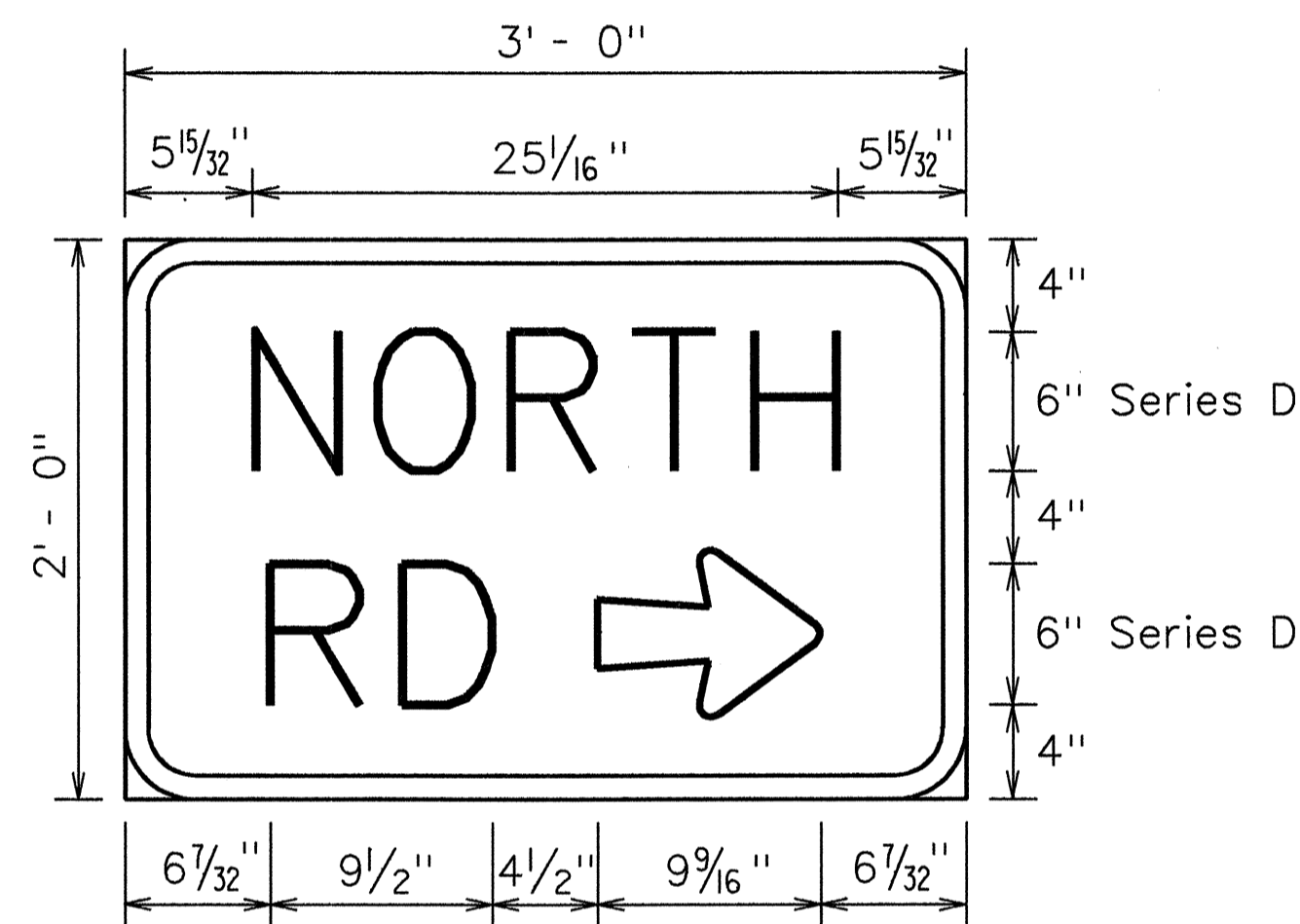
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) & S-RS-0760(2) R/W	1990	40	148



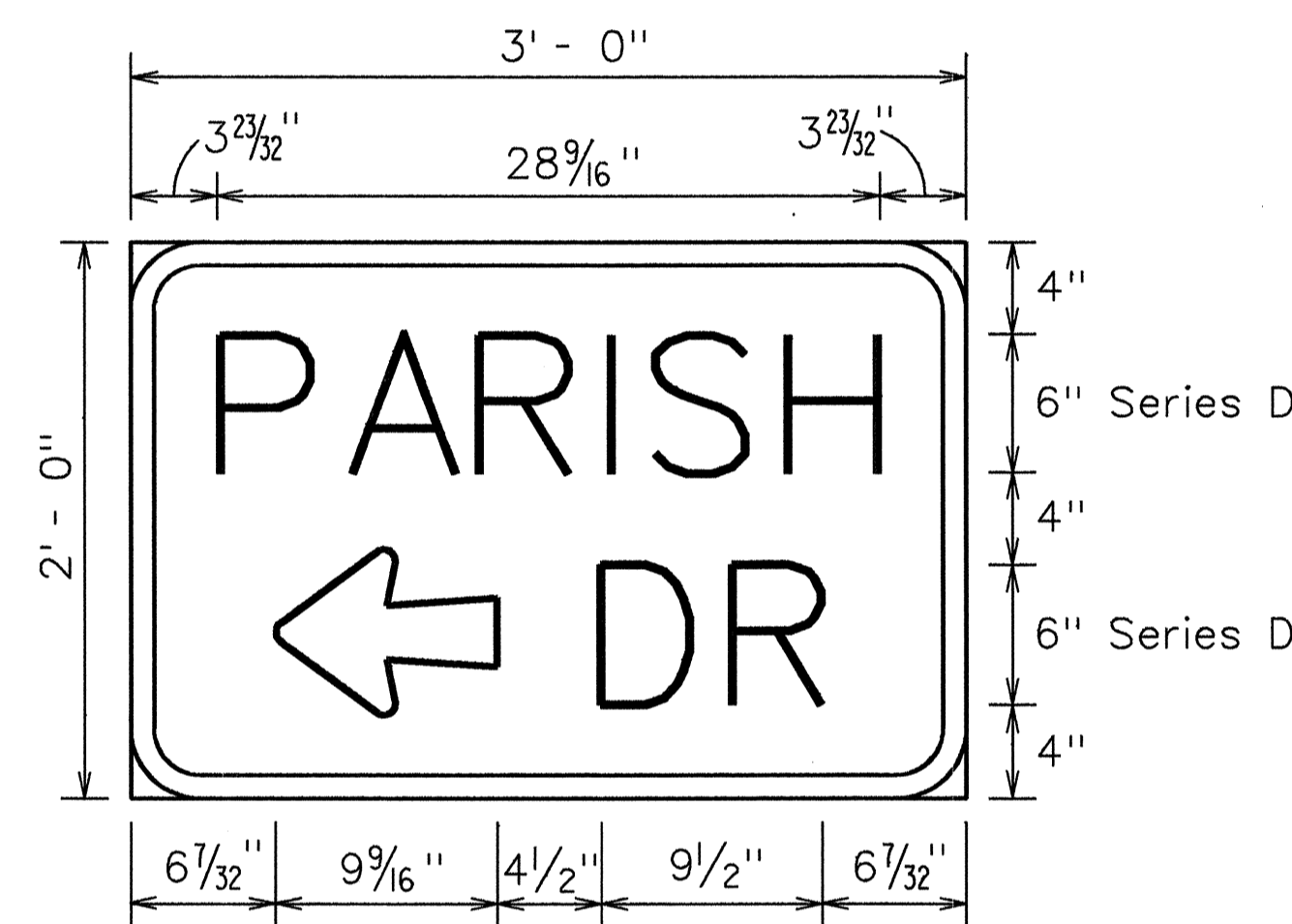
SN-5 (L)
1 1/2" = 1' - 0"



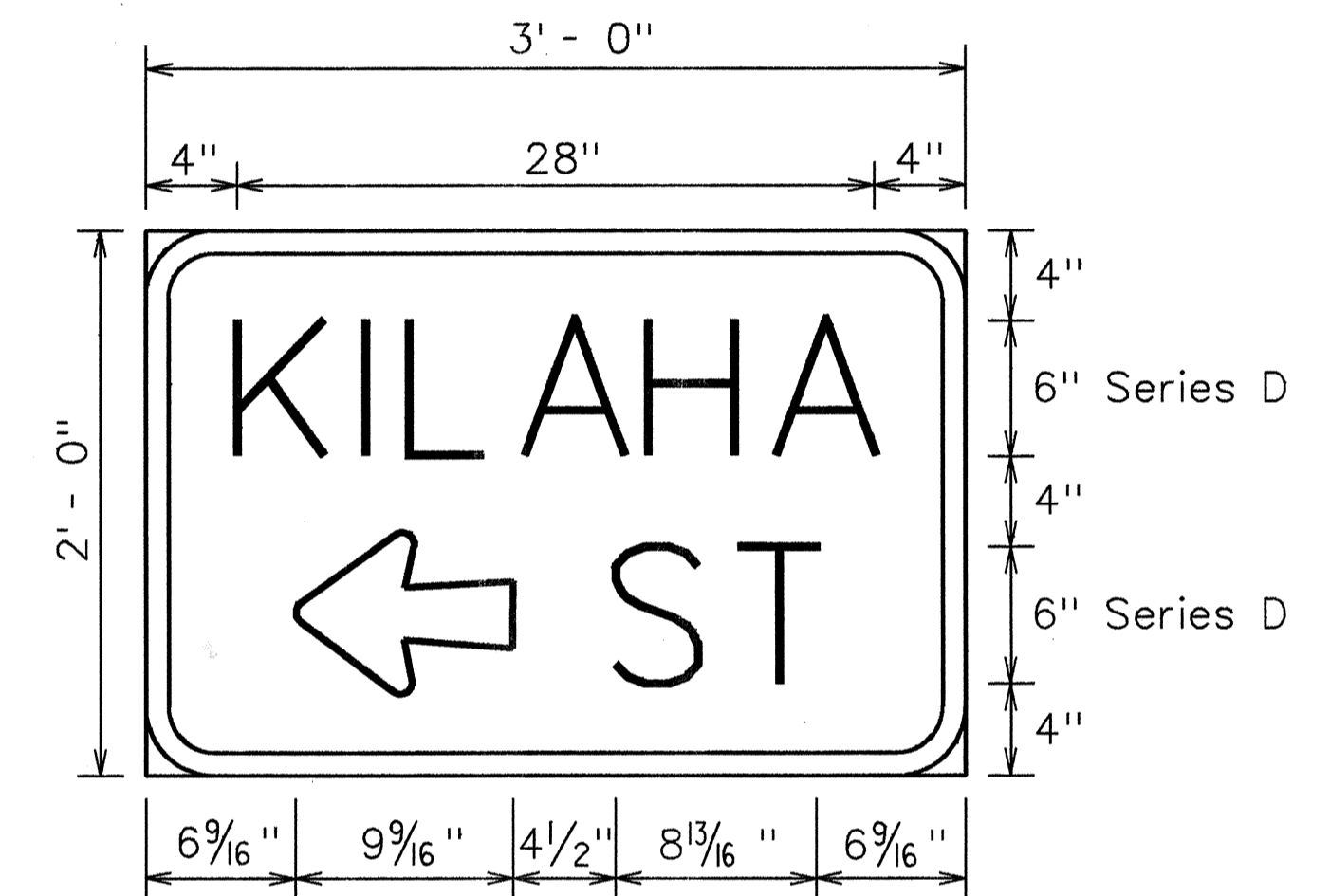
SN-8 (R)
1 1/2" = 1' - 0"



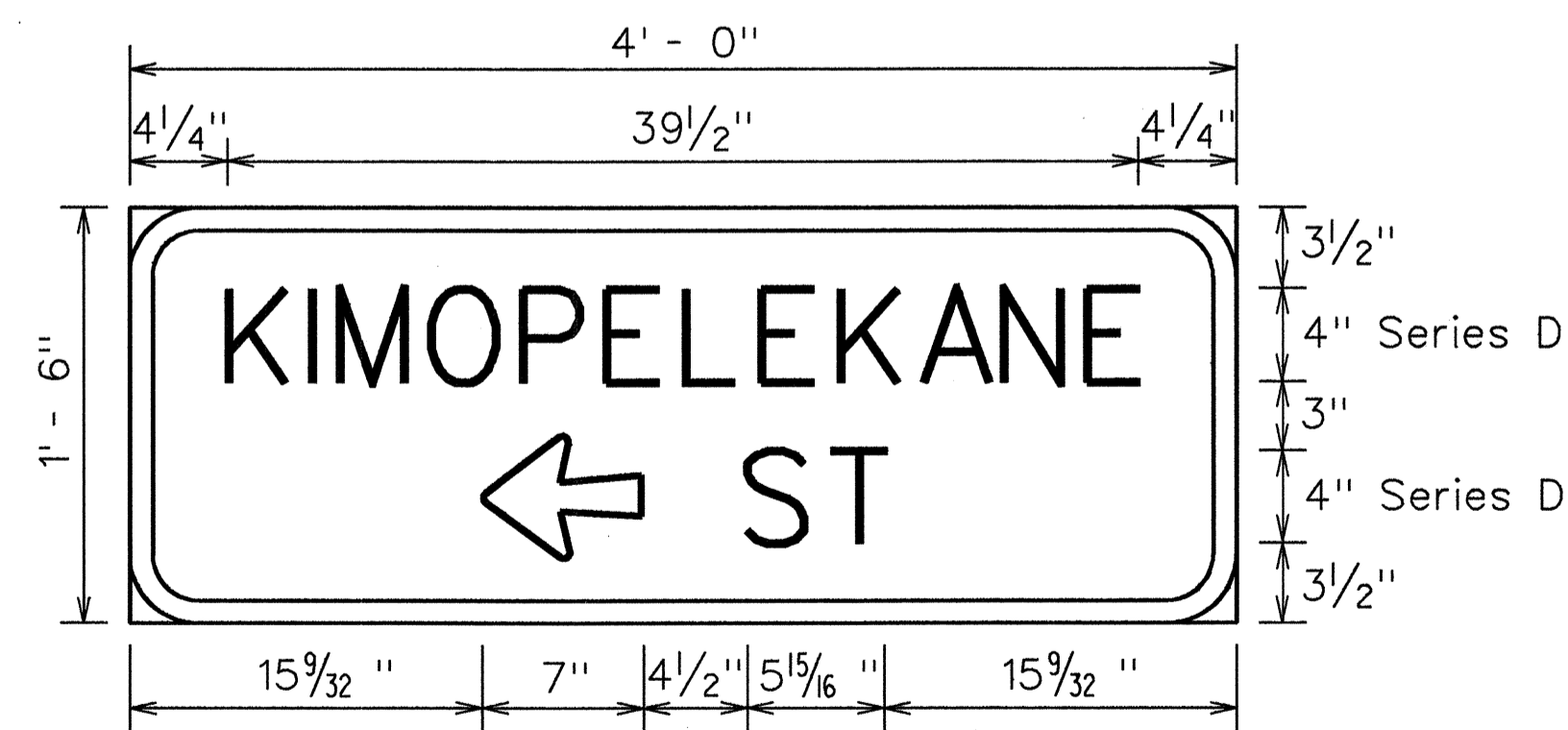
SN-6 (R)
1 1/2" = 1' - 0"



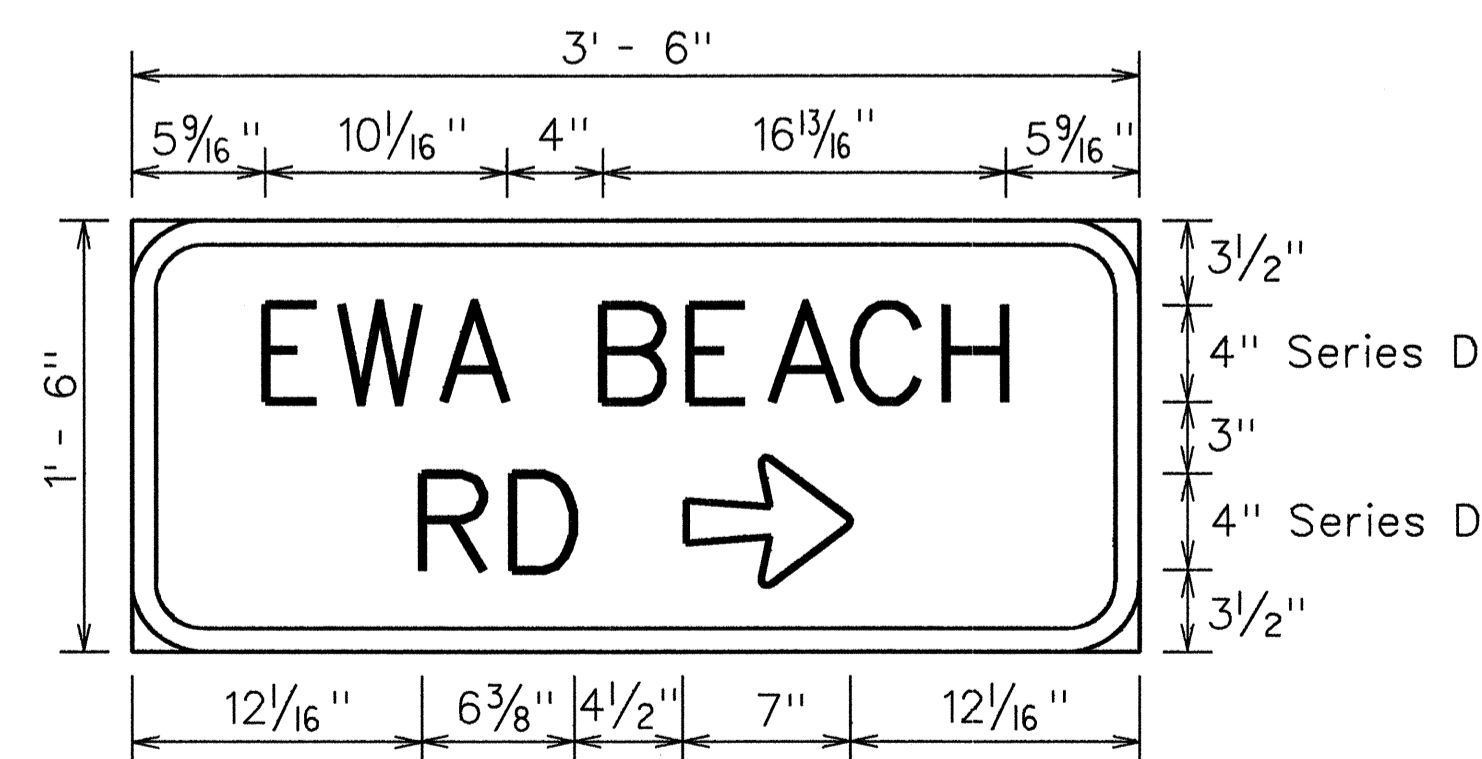
SN-9 (L)
1 1/2" = 1' - 0"



SN-11 (L)
1 1/2" = 1' - 0"



SN-7 (L)
1 1/2" = 1' - 0"



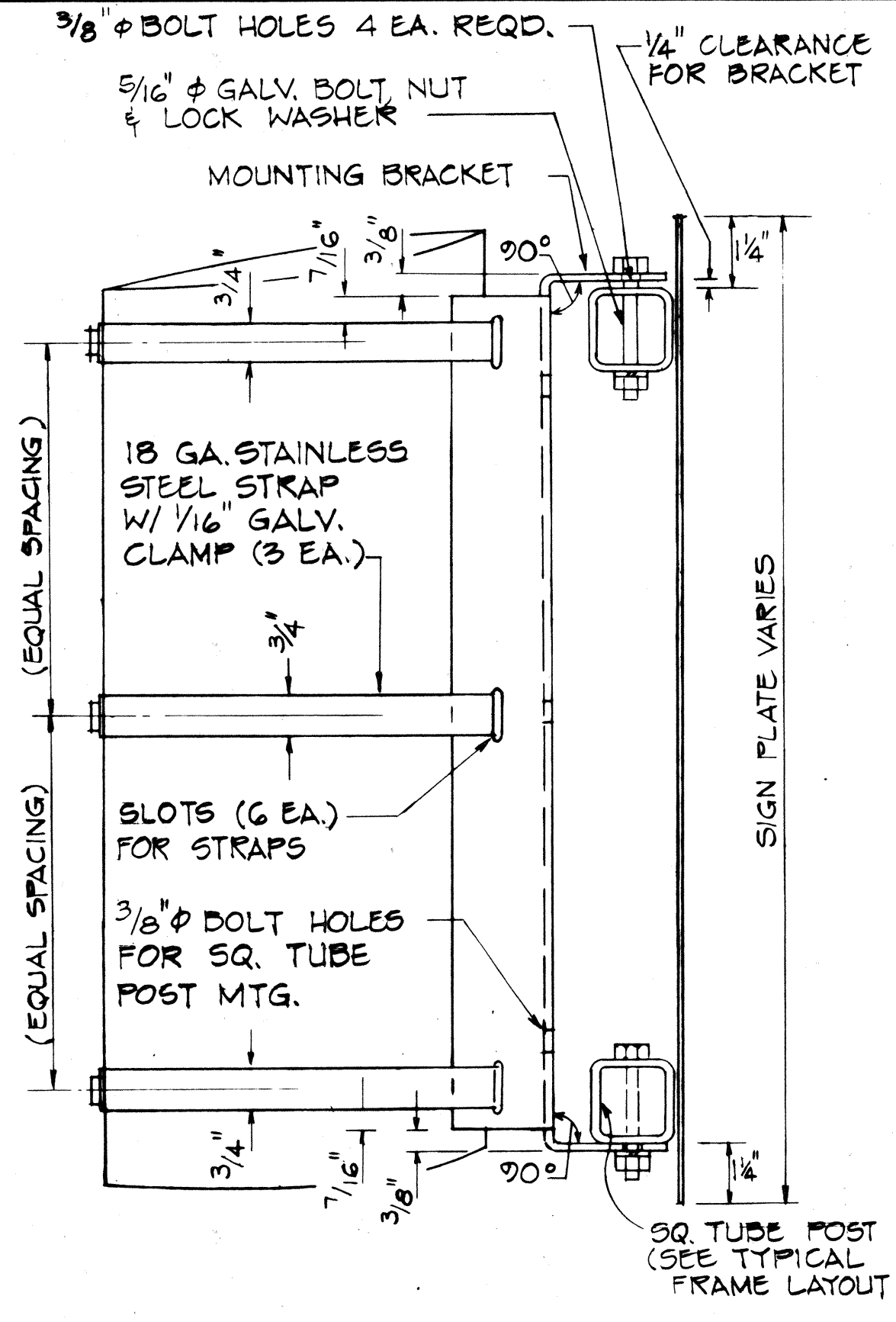
SN-10 (R)
1 1/2" = 1' - 0"

DATE	REVISION
7/5/90	Revised Sign Detail

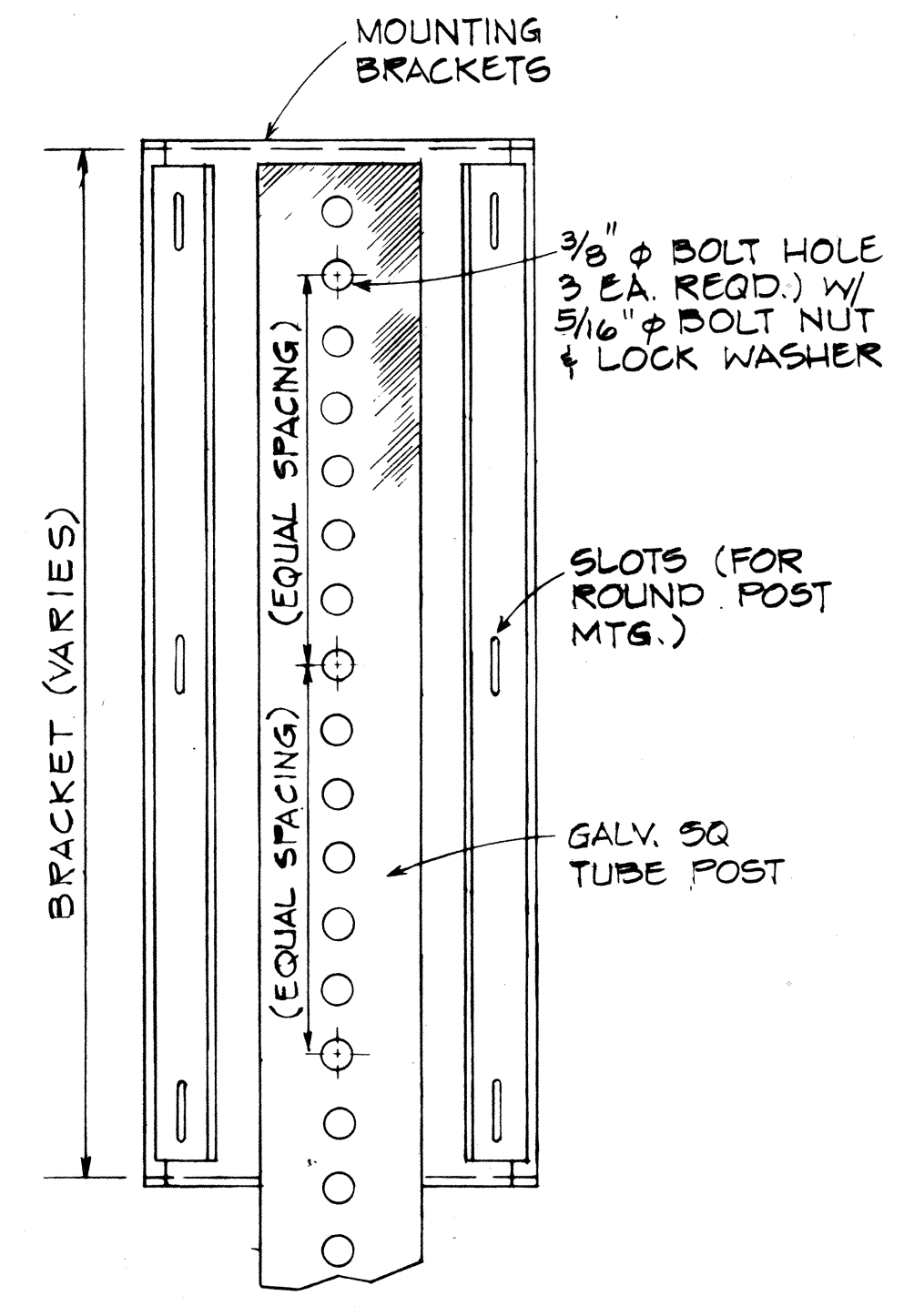
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**STREET NAME
SIGNS & DETAILS**
FORT WEAVER ROAD
WIDENING & REALIGNMENT
Hanakahi St. to Ewa Beach Rd.
FAI Project Nos. F-76-1(2) & S-RS-0760(2) R/W
Scale: 1 1/2" = 1' - 0" Date: 12/21/89
SHEET No. 77 OF 78 SHEETS

DATE _____
SERVEY PLOTTED BY _____
DESIGNED BY _____
QUANTITIES BY _____
CHECKED BY _____
NOTE BOOK _____

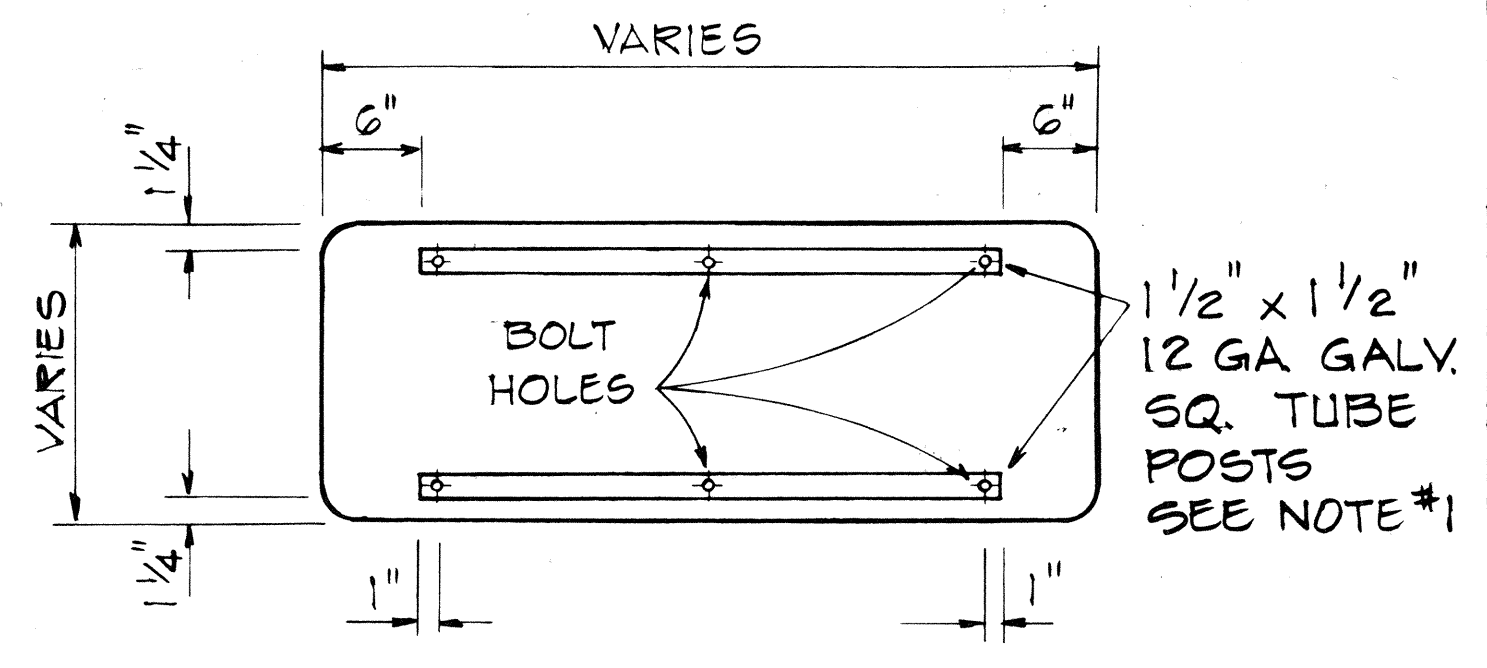
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2) & 5-RS-0760(2) R/W	1990	0440 5-1	148



SIDE VIEW



SQ. TUBE POST MOUNTING BACK VIEW

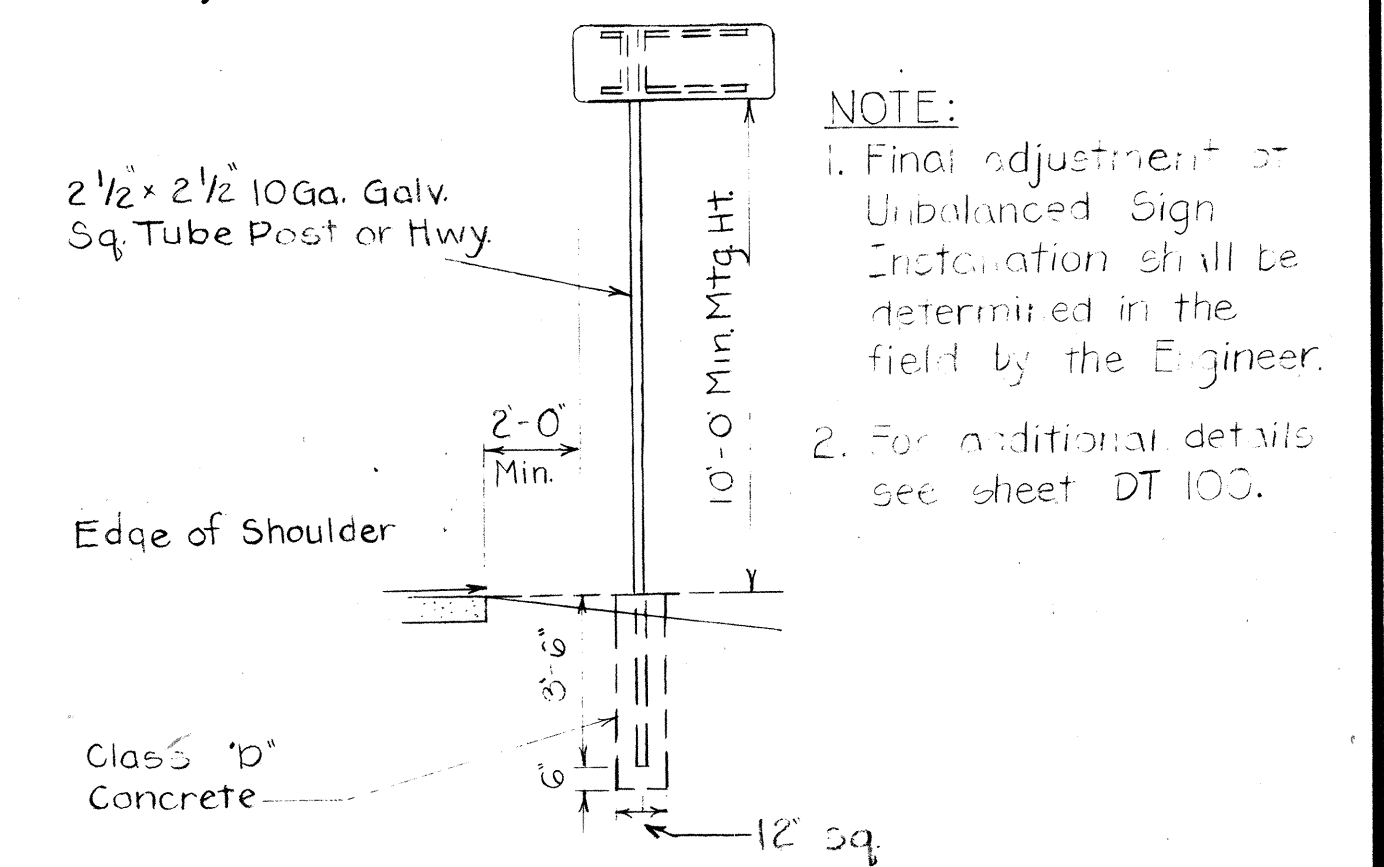


TYPICAL FRAME LAYOUT
Scale: 1"=1'-0"

1. SQ. TUBE POSTS SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.
2. SIGN PANEL SHALL BE ATTACHED TO SQ. TUBE POST WITH 5/16" φ GALV. BOLT, NUT, LOCK WASHER & 7/8" x 0.06" STAINLESS STEEL FLAT WASHER WITH NEOPRENE RUBBER GASKET.

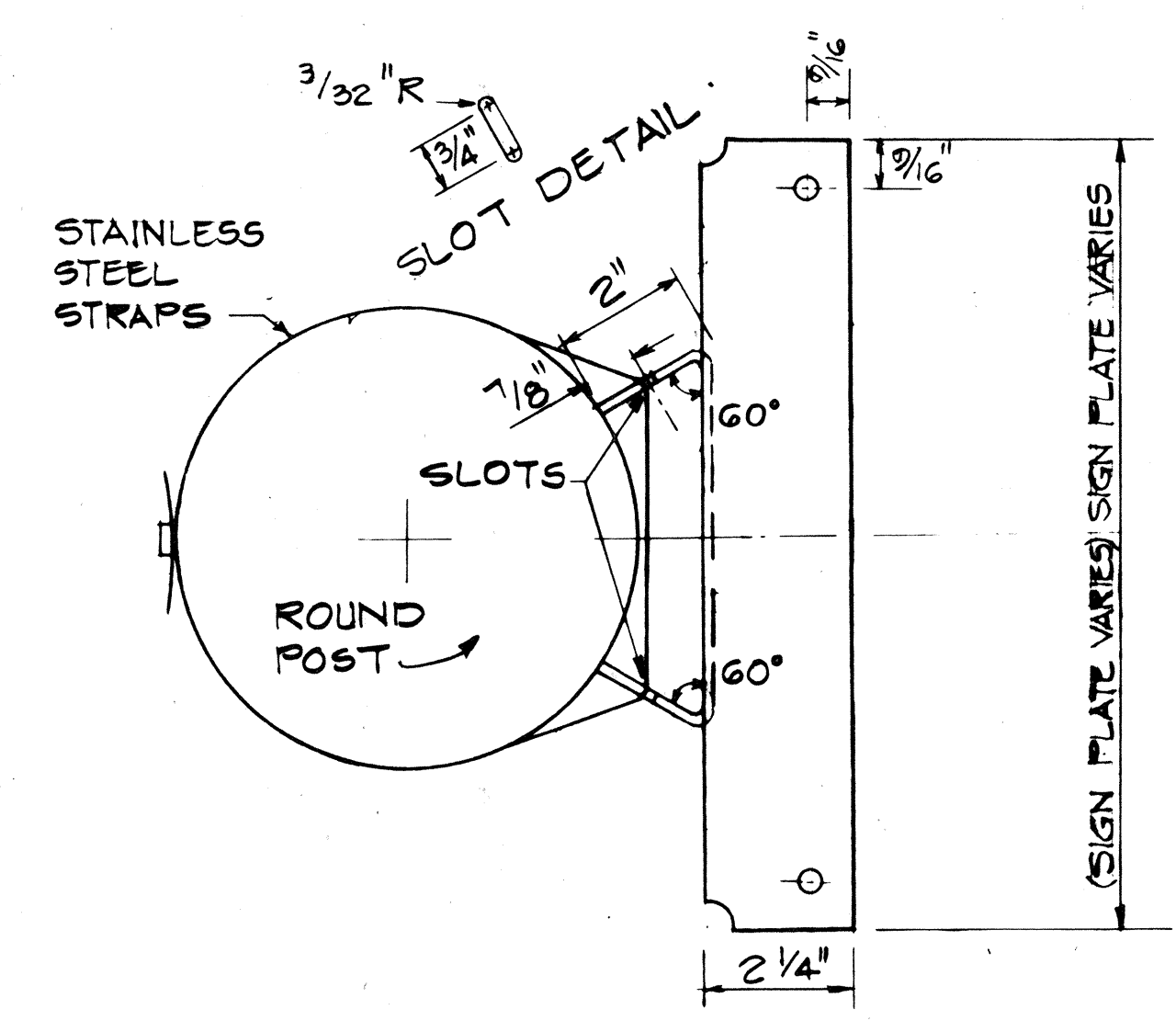
NOTE:

1. MATERIAL TO BE 12 GA. HOT ROLLED STEEL SHEET, LOW CARBON, COMMERCIAL QUALITY, SPECIFICATIONS QQS-636 GRADE 1010.
2. BRACKET TO BE HOT DIPPED GALV. AFTER FABRICATION PER SPECIFICATION ASTM-A-123-G8.
3. ALL BEND RADII TO BE 1/8".
4. DEBURR ALL SHARP EDGES.
5. TOLERANCES: DIMENSIONS, ± 1/32" ANGLES, ± 0°-30'



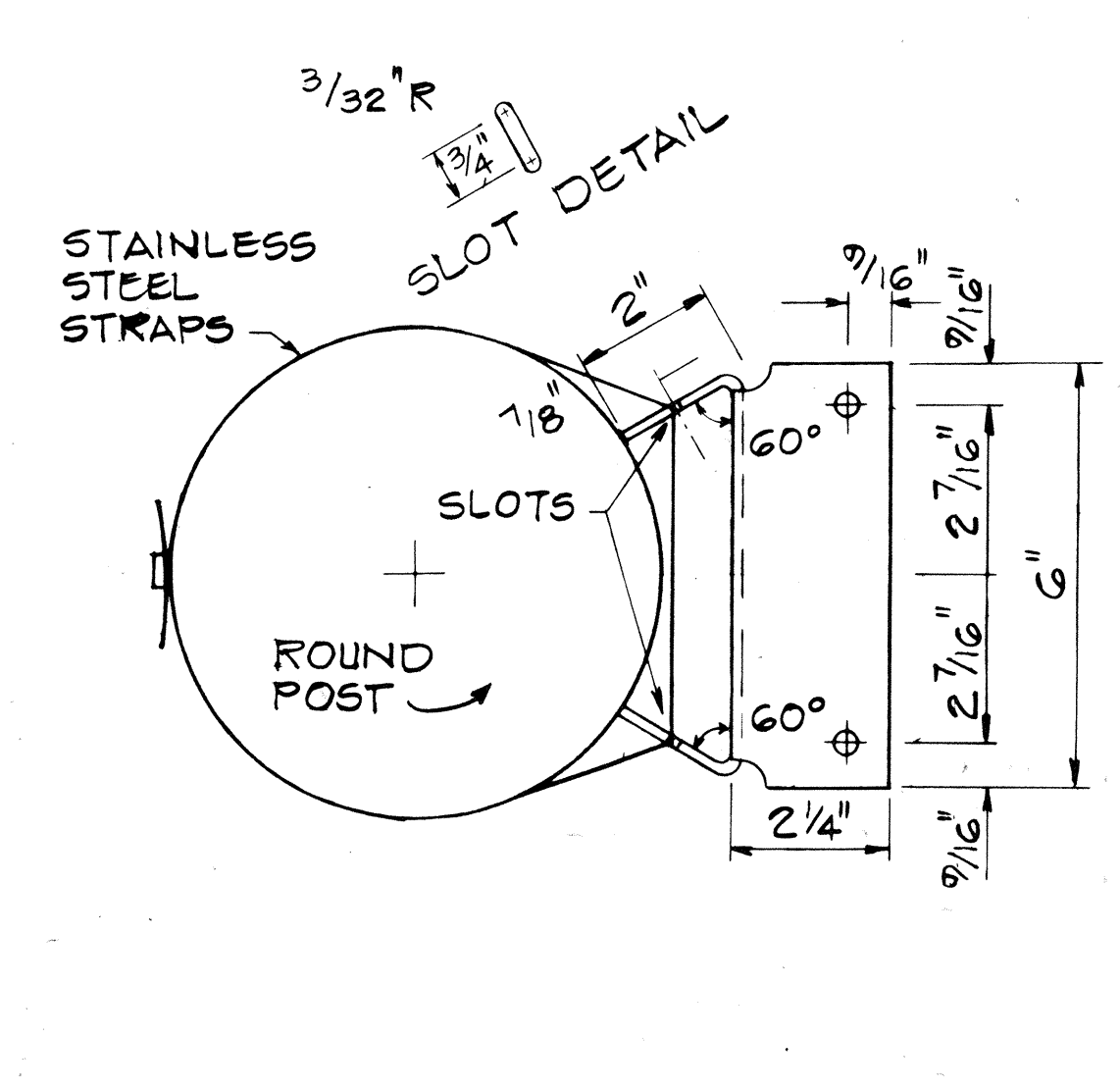
TYPICAL UNBALANCED SIGN MOUNTING N.T.S.

- NOTE:
1. Final adjustment of Unbalanced Sign Installation shall be determined in the field by the Engineer.
 2. For additional details see sheet DT 100.

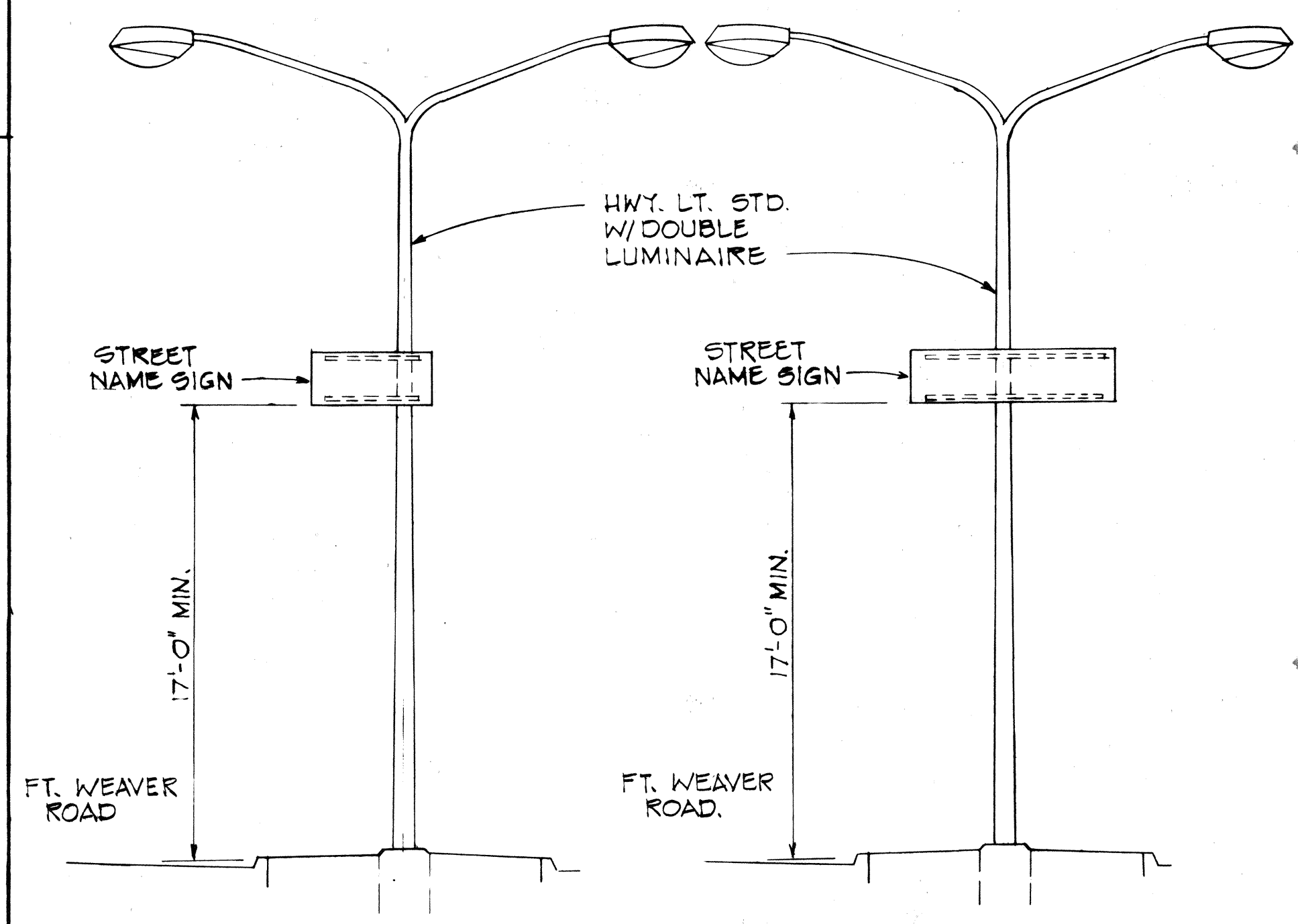


TOP VIEW BALANCED SIGN

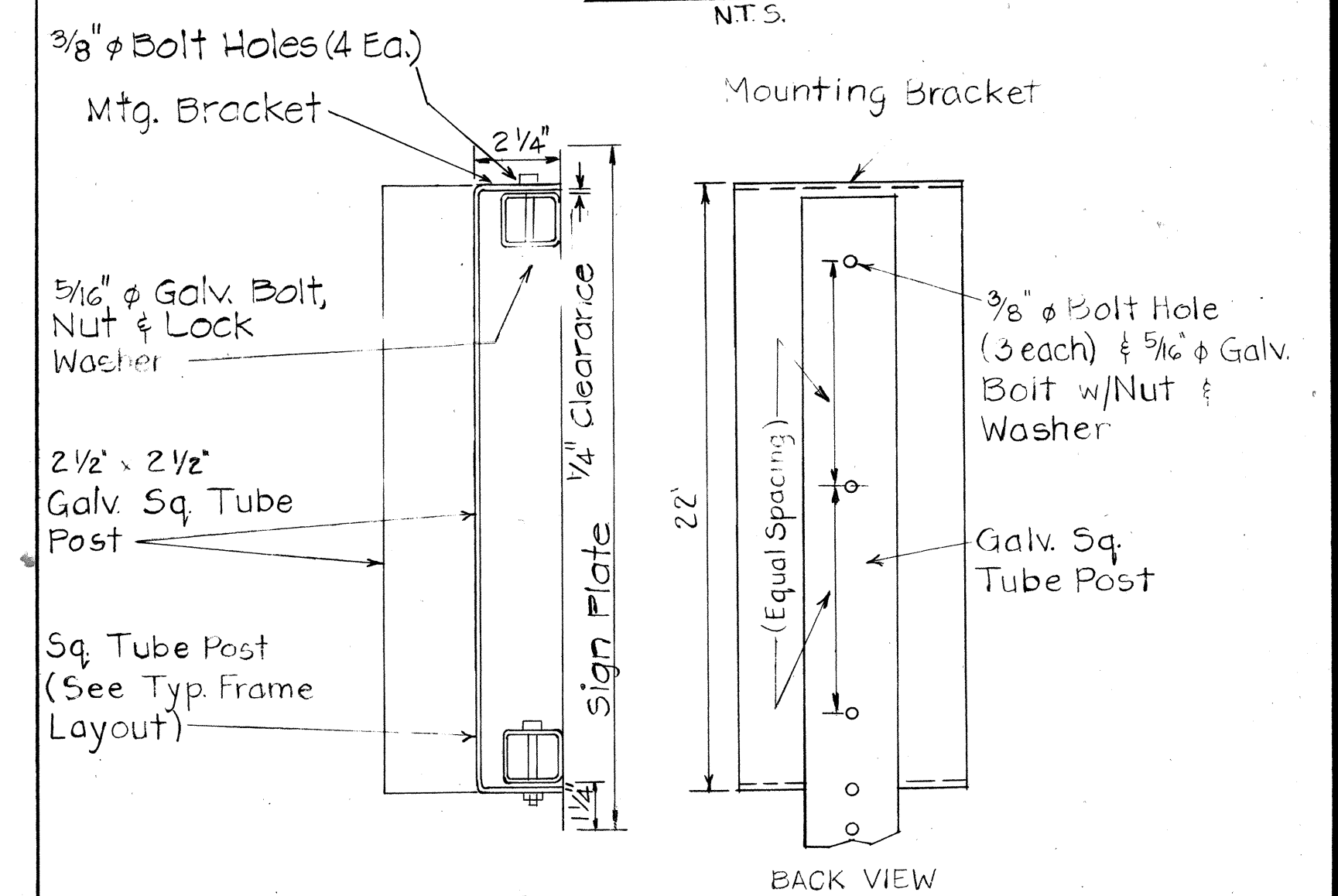
ROUND POST MOUNTING NOT TO SCALE



TOP VIEW UNBALANCED SIGN



SIGN MOUNTING NOT TO SCALE



MOUNTING BRACKET FOR UNBALANCED SIGN INSTALLATION N.T.S.

DATE	
REVISION	
DATE	
REVISION	
DATE	
REVISION	

7-5-90	Revised Details for Balanced, Unbalanced Sign Installation
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

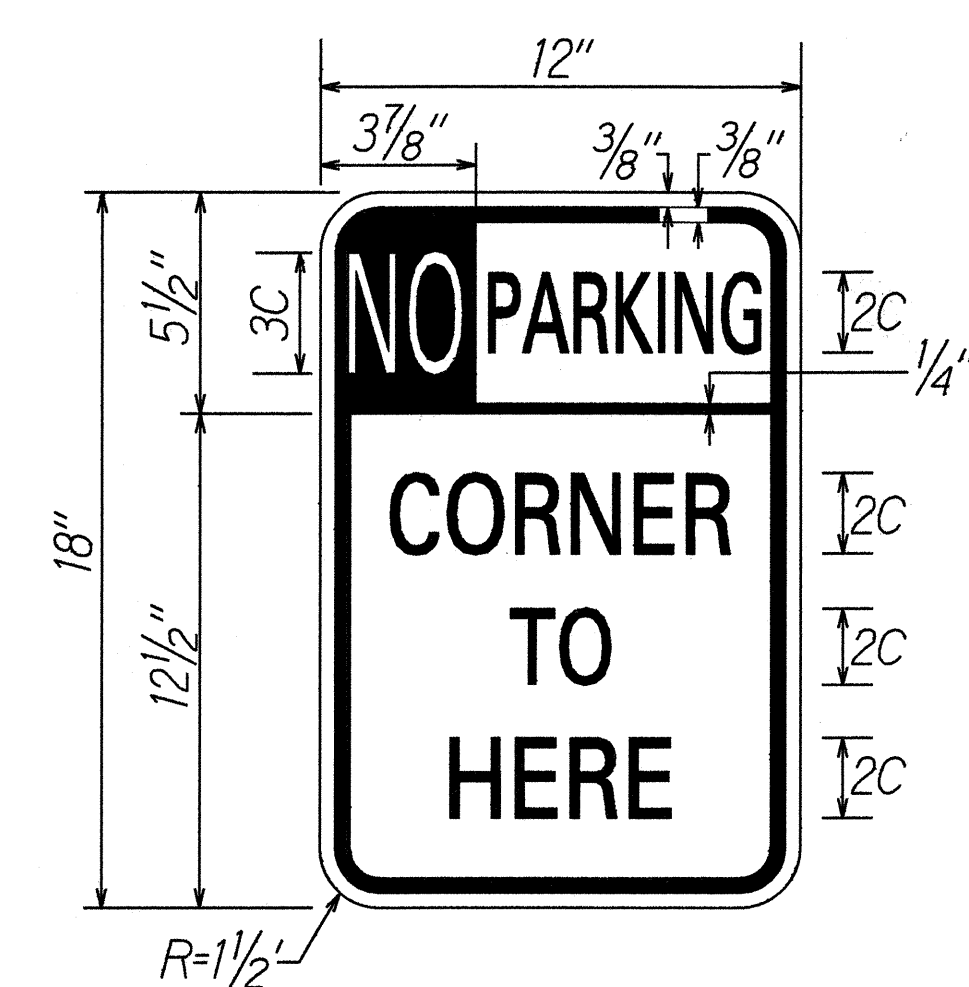
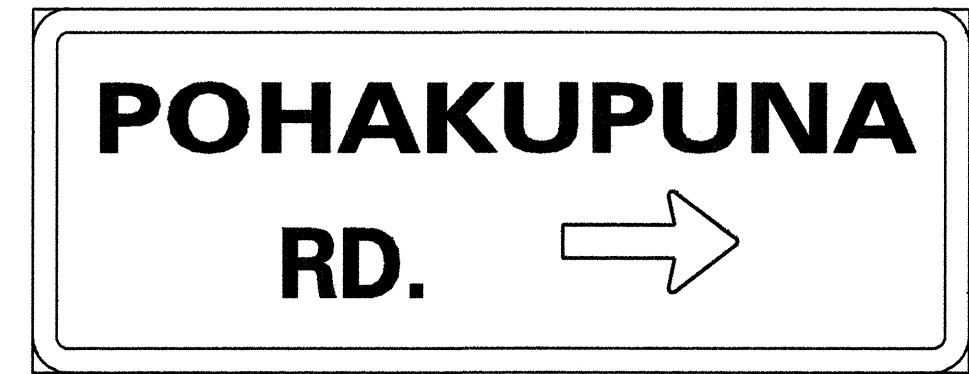
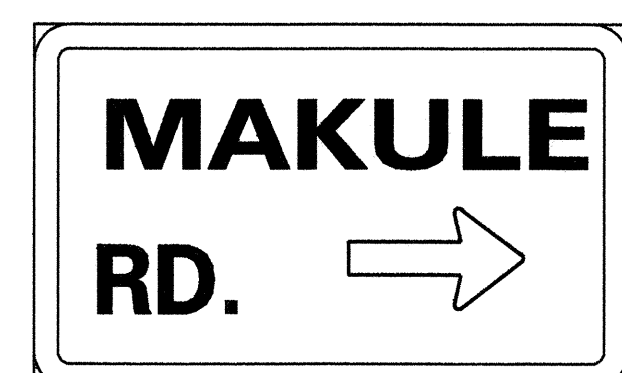
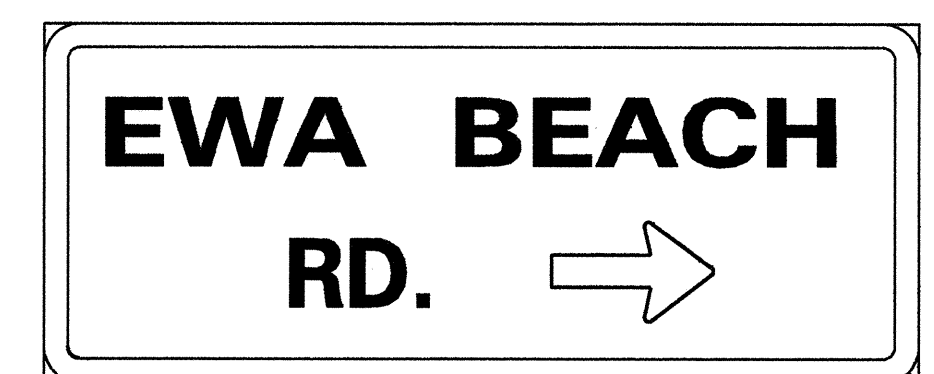
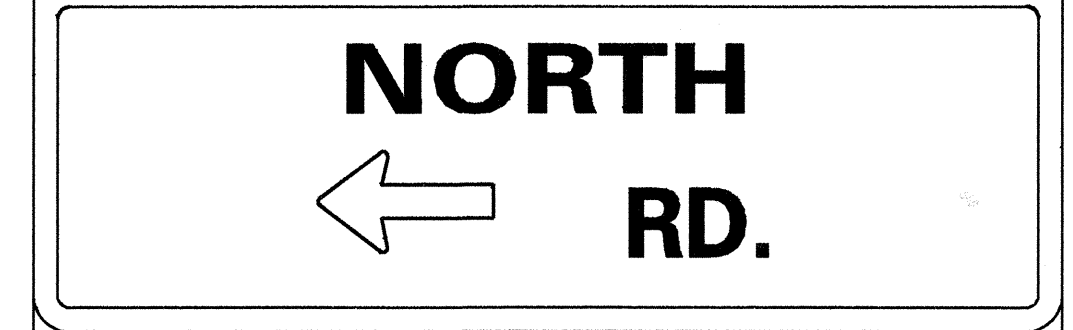
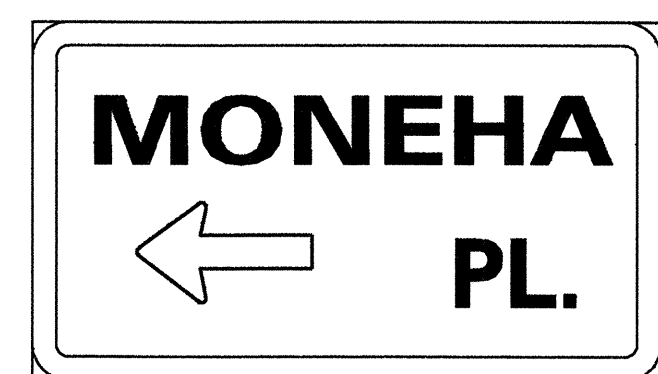
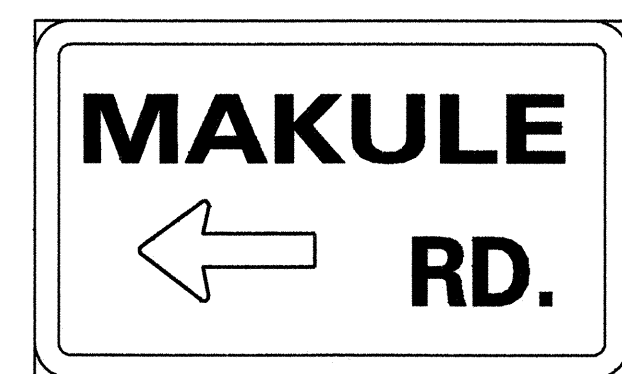
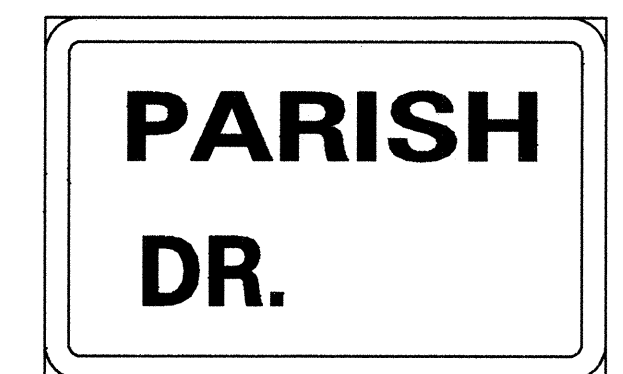
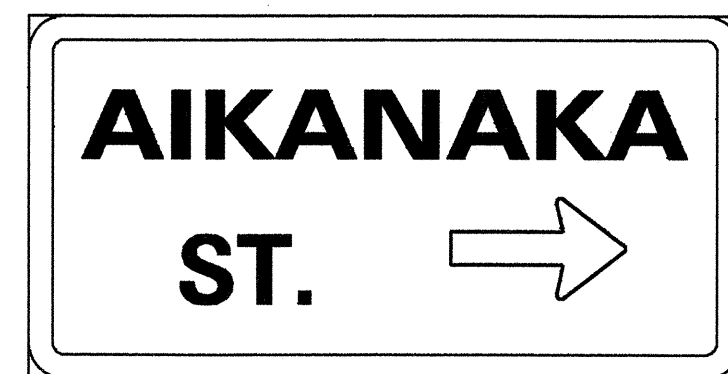
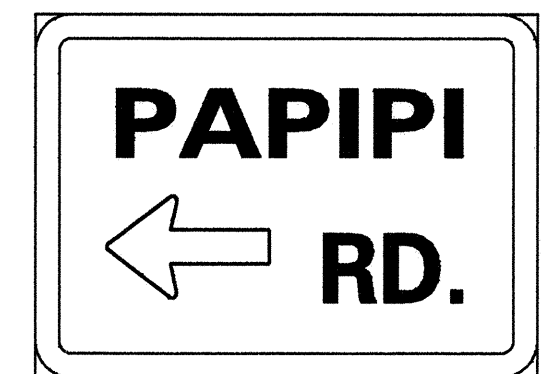
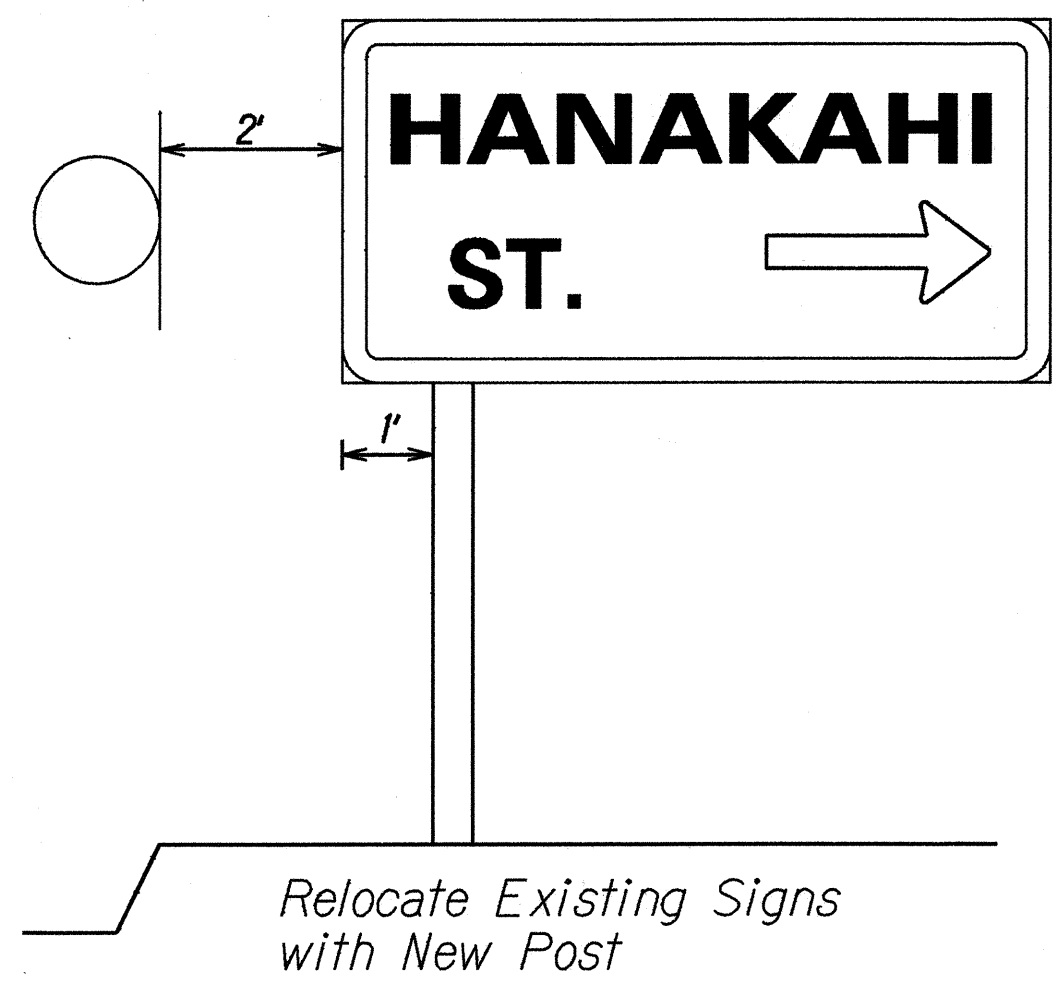
BALANCED, UNBALANCED SIGN INSTALLATION

FORT WEAVER ROAD
WIDENING & REALIGNMENT
Hanalei St. to Ewa Beach Rd.
F.A.I. PROJECT NOS. F-076-1(2) & 5-RS-0760(2) R/W

Scale: As Shown Date: July, 1990

SHEET NO. 5-1 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-076-1(2)	1990	0	0



*R7-107C
 *Except where noted, all dimension's similar to R7-107b

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
QUANTITIES BY	
NO. BOOK	
PLAN	
ORIGINAL	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
DETAIL PLANS
 FORT WEAVER ROAD
 Widening & Realignment
 Hanakahi St. to Ewa Beach Rd.
 F.A.I. Project No. F-076-1(2)
 & S-RS-0760(2) R/W
 Scale: 1"=40' Date: Dec., 1989
 SHEET No. X OF X SHEETS

