FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	107	214

BEG. PROJ. F-011-1(14) Sta. -15+00

P.C. Sta. -13+00 Curve Data "A"

P.R.C. & Sta. -8+00 Curve Data "A"

P.T. & Sta. -3+00 Curve Data "A"

← To: Kawaihae, Airport

19 M1-G(19) Install

SPEED LIMIT 55 R2-1(55) Install

Kailua
Volcano ~~96~~ 93
Airport 7
Kawaihae 33
D-2 Install

W3-3 Install

SIGNAL AHEAD

11 W4-2(R) Install

ONLY ONLY

12" White Solid "Stop" Bar

4" White Edge Pav't. Lines

4" Yellow Double Solid Lines

Type D Pav't. Mkrs.

4" White Guide Lines

Install W3-3

SIGNAL AHEAD Sta. (-) 7+50, Rt.

M1-G(190) Install 190

M1-G(11) Install 11

MG-1 Install

MG-3 Install

R2-5b(45) REDUCED SPEED 45 Sta. 20+00, Rt.

R2-1(45) SPEED LIMIT 45 Sta. (-) 16+00, Rt.

R2-5b(35) REDUCED SPEED 35 M.P.H. Sta. (-) 12+00, Rt.

R2-1(35) SPEED LIMIT 35 Sta. (-) 8+00, Rt.

Hwy. & Sta. 94+93.41 = Sta. 0+00

Volcano ~~96~~ 93
Waimea 38
Kailua
D-1 Install

Type A Pav't. Mkrs.

Type C Pav't. Mkrs.

M1-G(11) Install

MG-1 Install

MG-3 Install

Waimea 38
Airport 7
Kawaihae 33
Volcano 93
D-4 Install

ONLY ONLY

M1-G(19) Install 19

M1-G(11) Install 11

MG-1 Install

MG-1 Install

12" White Lines

8" White Lines

4" White Lines

8" White Solid Lines

Painted Cross Walks

Airport 7
Kawaihae 33
Kailua
Waimea 38
D-3 Install

ONLY ONLY

SIGNAL AHEAD Sta. 102+50, Lt.

Install W3-3

TRUE NORTH Scale: 1"=100'

M1-G(19) Install 19

M1-G(190) Install 190

MG-1 Install

MG-3 Install

R2-1(35) SPEED LIMIT 35 Sta. 104+00, Lt.

R2-56(35) REDUCED SPEED 35 M.P.H. Sta. 108+40, Lt.

P.R.C. & Sta. 110+00 Curve Data "A"

Match Line Sta. 110+00

4" Yellow Double Solid Lines

Type H Pav't. Mkrs. 105

4" White Edge Pav't. Lines

Type C Pav't. Mkrs.

Type A Pav't. Mkrs.

LANE ENDS MERGE LEFT W9-2(L) Install

11 W4-2(R) Install

45 SPEED LIMIT ~~55~~ 45 R2-1 Install

TRUE NORTH Scale: 1"=100'

M1-G(19) Install 19

M1-G(11) Install 11

MG-1 Install

MG-1 Install

Match Line Sta. 110+00

4" White Edge Pav't. Lines

115 120 125 130 135

Type H Pav't. Mkrs.

4" Yellow Double Solid Lines

Type J Pav't Mkrs.

Type H Pav't. Mkrs.

Type D Pav't. Mkrs.

P.C. Sta. 124+80.02 Ahead
P.C. Sta. 126+24.84 Back

Match Line Sta. 140+00

LEGEND

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

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE 5/82
	DRAWN BY	" "
NOTE BOOK	TRACED BY	" " 5/82
	DESIGNED BY	" "
No.	QUANTITIES BY	" "
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKERS, STRIPING & TRAFFIC SIGNS

HBR FAP ROUTE 11
PALANI RD. TO KILOHANA SUB'D.
PROJECT No. F-011-1(14)
NORTH KONA, HAWAII

Scale: As Noted Date: Apr. 1982

SHEET No. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	108	214

Match Line Sta. 140+00
Type J Pav't. Mkrs.
Type D Pav't Mkrs.
Type H Pav't. Mkrs.
4" White Edge Pav't. Lines
4" Yellow Double Solid Lines
Type H Pav't. Mkrs.
145
150
155
160
165
170
Match Line Sta. 172+00
SPEED LIMIT 45 55 R2-1 Install
RM-9 Install
M1-6(11) Install
12" White Stop Bar
W3-1a Install
STOP AHEAD
YIELD R1-2 Install
W2-1 Install
8" White Lines
12" White Lines
Type C Pav't. Mkrs.
Type A Pav't. Mkrs.
TRUE NORTH
Scale: 1"=100'
Hwy. & Sta. 148+27
S.R. Sta. 0+00
R1-1 Install
STOP
W2-1 Install
RM-9 Install
R1-2 Install
YIELD
W3-1a Install
STOP AHEAD
P.T. Sta. 157+65.74
M1-6(11) Install
SPEED LIMIT 45 55 R2-1 Install
W7-1 Install
HILL
STOP R1-1 Install
W5-1 Install
ROAD NARROWS
12" White Stop Bar
R=140'
P.T. Sta. 3+31.69
P.C. 2+13
P.C. 0+10
R=100'
R=100'
YIELD R1-2 Install
Holualoa Install D-8
4" Yellow Double Solid Lines
Type D Pav't. Mkrs.
4" White Edge Pav't. Lines
Type H Pav't. Mkrs.
Type J Pav't. Mkrs.
Type H Pav't. Mkrs.
Type D Pav't. Mkrs.
105
200
Match Line Sta. 204+00
SPEED LIMIT 45 55 R2-1(55) Install
M1-6(11) Install
EXIT 25 M.P.H Install K13-1(25)A
Sta. 174+00 Rt.
Hwy. & Sta. 177+63.45 S.R. Sta. 3+50 Ln-1 Rt. E.P. P.T. Sta. 3+52.22
Hwy. & Sta. 173+50 S.R. Sta. 0+00
STOP R1-1 Install
W3-1a Install
STOP AHEAD
Install 2 RM-9
Kailua Install D-6
YIELD R1-2 Install
Type D Pav't Mkrs
4" Yellow Double Solid Lines
Type A Pav't. Mkrs.
Type C Pav't. Mkrs.
8" White Solid Line
175
180
185
12" White "Stop" Bar
End Ln-1 Rt. E.P. P.T. 1+78.28
Ln-2 Rt. E.P. P.C. 1+45.68
Ln-3 Rt. E.P. P.C. 1+17.93
R1-2 Install
YIELD
Kailua Install D-5
Ln-4 Rt. E.P. P.C. Sta. 1+35.43
BEG. Ln-4 Rt. E.P. Sta. 0+00
Ln-4 Rt. E.P. P.T. Sta. 3+55.84 = Hwy. & Sta. 181+06.09
R3-5(L) Install
ONLY
R1-1 Install
STOP
Install 3 RM-9
Holualoa Install D-7
Hwy. & Sta. 189+50 = S.R. Sta. 0+00
12" White "Stop" Bar
M1-6(11) Install
SPEED LIMIT 45 55 R2-1 Install
END S.R. Sta. 3+50
W5-1 Install
ROAD NARROWS
W4-1(R) Install
MERGE
W12-1-A Install

ORIGINAL PLAN	NOTE BOOK No.	SURVEY PLOTTED BY	DATE 5/82
		DRAWN BY	" " "
		TRACED BY	" " "
		DESIGNED BY	" " "
		QUANTITIES BY	DATE 5/82
		CHECKED BY	" " "

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

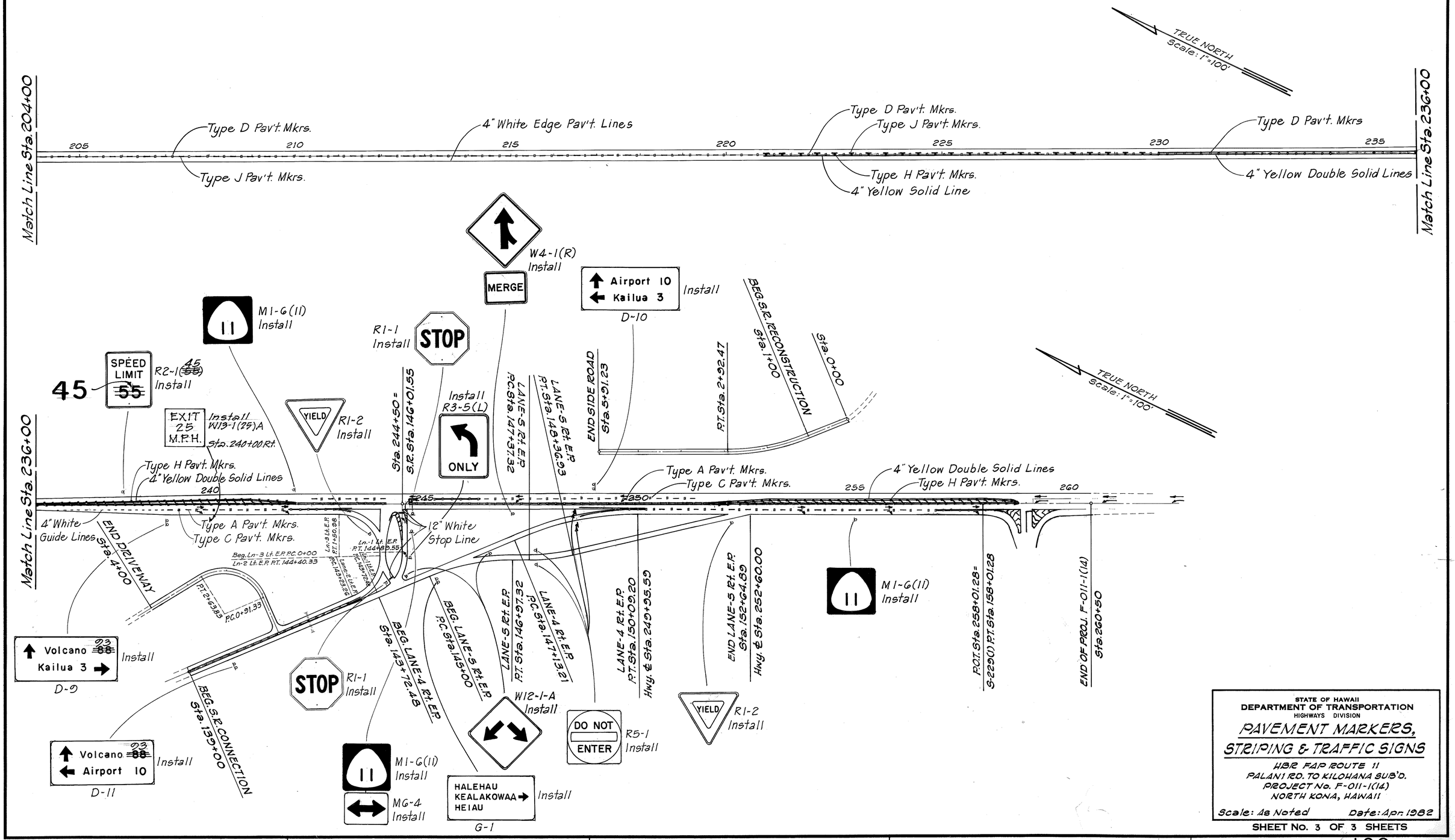
PAVEMENT MARKERS, STRIPING & TRAFFIC SIGNS

HBR FAP ROUTE 11
PALANI RD. TO KILOHANA SUB'D.
PROJECT No. F-011-1(14)
NORTH KONA, HAWAII

Scale: As Noted Date: Apr. 1982

SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	109	214



ORIGINAL PLAN		SURVEY PLOTTED BY	DATE 5/82
NOTE BOOK		DRAWN BY	" "
No.		TRACED BY	" "
		DESIGNED BY	5/82
		QUANTITIES BY	" "
		CHECKED BY	" "

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKERS, STRIPING & TRAFFIC SIGNS

HBR FAP ROUTE 11
PALANI RD. TO KILOHANA SUB'D.
PROJECT No. F-011-1(14)
NORTH KONA, HAWAII

Scale: As Noted Date: Apr. 1982

SHEET No. 3 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	110	214

NOTE:

1. For Lane Widths See Plan - Palani Rd. Junction Sheet No. 10
2. Unless otherwise indicated ends of curbed islands rounded to 2' radius.
3. Stop Bars, X-Walks and 8" White Channelizing Lines Shall Be Taped.

TRUE NORTH
Scale: 1"=20'

S.R. & Sta. 1+80.93 = P.C. Sta. 0+00

Hwy. & Sta. -1+80.93 = P.T. Sta. 2+31.47

CURVE DATA
Δ = 88°25'00"
R = 150.00'
T = 145.91'
C = 209.18'
L = 231.47'

W11-2 (To be Placed 100' From X-Walk)

12" White Stop Bar

8" White

4" Yellow

8" White Channelizing

1+05

Type "E" Wheelchair Ramp

Ahead Sta. 34+93.41
Back Sta. -0+00 =
Sideroad "A"
(Reconstruct & Mon.)

Road R/W & Control Of Access Line

4" White

Curb Type 2D

Helco M.H.

Exist. Lamp Post

6' Conc. Walk

12" White Stop Bar

Type "A" Wheelchair Ramp

R=7

R=65'

R=12.5

ROAD

To Waimea

Helco M.H.

S.R. & Sta. 1+90.90 = P.T. Sta. ~~2+39.76~~ 2+34.58

P.C. Sta. 0+00 = Hwy. & Sta. ~~96+73.81~~ 96+73.91

YIELD R1-2

CURVE DATA
Δ = ~~91°35'00"~~ 89°36'08"
R = 150.00'
T = ~~154.20'~~ 148.96'
C = ~~215.04'~~ 211.30'
L = ~~239.76'~~ 234.58'

0+96.50

12" White Stop Bar

Type "E" Wheelchair Ramp

Road R/W & Control Of Access Line

W11-2

Note: Another Set Of Arrows To Be Placed 120' Away

120'

8" White

-1+15

15'

12" White

4" Double Yellow

96+09

8" White Channelizing

To Airport & Kawaihae

HAWAII BELT ROAD

-3 -2 -1

Az. 115°51'00"

-1+28

4" Yellow Guide Line

℄ Mon.

95 96 97 98

F.A.P. F-011-1(14)

Az. 295°51'00"

To Keauhou

Note: Another Set Of Arrows To Be Placed 120' Away

120'

Road R/W & Control Of Access Line

W11-2

Hwy. & Sta. ~~1+92.00~~ 1+93.28 = P.C. Sta. 0+00

12" White Stop Bar

Type "D" Wheelchair Ramp

℄ S.R. "A" Sta. 1+62.50

1+18.5

Curb & Gutter Type 2DG

Curb Type 2D

4" White

Conc. Walk

Exist. Lamp Post

6'

CURVE DATA
Δ = 91°35'00"
R = 150.00'
T = 154.20'
C = 215.04'
L = 239.76'

P.T. Sta. 2+39.76 = S.R. & Sta. 1+79.26

To Kailua Town

Az. 207°26'00"

PALANI (S.R. "A")

8" White Channelizing

Type "A" Wheelchair Ramp

Type "D" Wheelchair Ramp

1+05

℄ S.R. "A" Sta. 0+76.40

CURVE DATA
Δ = 88°25'00"
R = 150.00'
T = 145.91'
C = 209.18'
L = 231.47'

12" White Stop Bar

P.T. Sta. 2+31.47 = Hwy. & Sta. 96+76.67

P.C. Sta. 0+00 = S.R. & Sta. 1+68.87

Road R/W & Control of Access Line

PAVEMENT MARKERS LEGEND

- ○ = Type "A"
- ▥ = Type "C"
- □ = Type "D"
- ■ = Type "H"
- ● = Type "J"

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKERS, STRIPING & TRAFFIC SIGNS PALANI ROAD JUNCTION

HBR FAP ROUTE 11
PALANI RD. TO KILOHANA SUB'D.
PROJECT NO. F-011-1(14)
NORTH KONA, HAWAII

Scale: As Noted Date: June 1982

SHEET No. OF SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	111	214

SUMMARY ~ TRAFFIC SIGNS & MARKERS

ITEM NO.	TYPE	DESCRIPTION	STATION	NEW W/ POST	NEW W/O POST
G21.5100	R2-1(55)	Speed Limit 55 Sign	-6+00L	1	
G21.6200	M1-6(190)	Route Marker	-6+00R	1	
	M1-6(11)	Route Marker	-6+00R		1
	MG-1	Auxiliary Marker	-6+00R		1
	MG-3	Auxiliary Marker	-6+00R		1
G21.6100	M1-6(19)	Route Marker	-5+00L	1	
G21.5100		Lane Use Control Sign	-5+00R	1	
	W4-2	Pav't. Width Transition Sign	-4+00L	1	
G21.0200	D-1	Destination Sign	-3+50R	1	
	D-2	Destination Sign	-0+40L	1	
G21.5100		Lane Use Control Sign	-0+30L	1	
G21.6200	M1-6(11)	Route Marker	-0+25L	1	
	M1-6(19)	Route Marker	-0+25L		1
	MG-1	Auxiliary Marker	-0+25L		2
G21.5300	W3-3	Signal Ahead Sign	-0+15L	1	
G21.0200	D-4	Destination Sign	95+35R	1	
G21.5100		Lane Use Control Sign	95+35R	1	
G21.6200	M1-6(19)	Route Marker	95+35R	1	
	M1-6(11)	Route Marker	95+35R		1
	MG-1	Auxiliary Marker	95+35R		2
G21.5100	R1-2	Yield Sign	95+45L	1	
G21.6100	M1-6(11)	Route Marker	98+50R	1	
G21.0200	D-3	Destination Sign	99+00L	1	
G21.5100		Lane Use Control Sign	100+00L	1	
	R2-1(55)	Speed Limit 55 Sign	100+00R	1	
G21.6200	M1-6(19)	Route Marker	101+00L	1	
	M1-6(190)	Route Marker	101+00L		1
	MG-3	Auxiliary Marker	101+00L		1
	MG-1	Auxiliary Marker	101+00L		1
G21.5100	W9-2(L)	Lane Ends Merge Left	105+50R	1	
	W4-2(R)	Pav't. Width Transition Sign	107+00R	1	
G21.4100	RM-9	Reflector Marker	148+28R	1	
	RM-9	Reflector Marker	148+43R	1	
G21.5100	W2-1	Intersection Sign	150+00R	1	
G21.4100	RM-9	Reflector Marker	150+70R	1	
	RM-9	Reflector Marker	151+00R	1	
	RM-9	Reflector Marker	151+72L	1	
	RM-9	Reflector Marker	151+92L	1	
G21.5100	R2-1(55)	Speed Limit 55 Sign	152+00L	1	
G21.6100	M1-6(11)	Route Marker	153+50L	1	
G21.5100	R1-2	Yield Sign	155+20L	1	
G21.5300	W3-1a	Stop Ahead Sign	155+45L	1	
G21.5100	R1-2	Yield Sign	155+45R	1	
	R1-1	Stop Sign	155+60L	1	
	R1-2	Yield Sign	156+00L	1	
	R1-1	Stop Sign	156+00R	1	
G21.5300	W3-1a	Stop Ahead Sign	156+10R	1	
G21.5100	R1-2	Yield Sign	156+50R	1	
G21.6100	M1-6(11)	Route Marker	157+50R	1	
G21.5100	R2-1(55)	Speed Limit 55 Sign	150+00R	1	
G21.4100	RM-9	Reflector Marker	183+00-183+20L	2	
	RM-9	Reflector Marker	183+36-183+50R	3	

SUMMARY ~ TRAFFIC SIGNS & MARKERS (CONT.)

ITEM NO.	TYPE	DESCRIPTION	STATION	NEW W/ POST	NEW W/O POST
G21.5100	W2-1	Intersection Sign	162+00L	1	
	R2-1(55)	Speed Limit 55 Sign	174+00L	1	
G21.0200	D-5	Destination Sign	175+00R	1	
G21.6100	M1-6(11)	Route Marker	176+00L	1	
G21.5100	R1-2	Yield Sign	177+85R	1	
	W5-1	Road Narrows	178+00R	1	
	R1-1	Stop Sign	178+75R	1	
	W4-1(R)	Merge Sign	179+40R	1	
G21.0200	D-6	Destination Sign	182+00L	1	
	D-7	Destination Sign	191+00R	1	
G21.5100	R1-2	Yield Sign	193+90L	1	
	R1-1	Stop Sign	194+25L	1	
G21.5300	W3-1a	Stop Ahead Sign	194+35L	1	
G21.5100	R1-1	Stop Sign	194+35L	1	
	W5-1	Road Narrows Sign	194+75L	1	
	R1-2	Yield Sign	194+85L	1	
	W7-1	Hill Sign	195+75L	1	
G21.6100	M1-6(11)	Route Marker	196+00R	1	
G21.0200	D-8	Destination Sign	198+00L	1	
G21.5100	R2-1(55)	Speed Limit 55 Sign	198+00R	1	
	R2-1(55)	Speed Limit 55 Sign	238+00L	1	
G21.0200	D-9	Destination Sign	239+00R	1	
	D-11	Destination Sign	240+50R	1	
G21.6100	M1-6(11)	Route Marker	242+00L	1	
G21.5100	R1-2	Yield Sign	243+70R	1	
	R1-1	Stop Sign	244+10R	1	
	R1-1	Stop Sign	244+70R	1	
G21.6100	M1-6(11)	Route Marker	244+70R	1	
	MG-4	Auxiliary Marker	244+10R		1
G21.0200	G-1	Guide Sign	245+25R	1	
G21.5100	W4-1(R)	Merge Sign	247+00R	1	
	R5-1	Do Not Enter Sign	247+55R	2	
G21.0200	D-10	Destination Sign	249+00L	1	
G21.5100	R1-2	Yield Sign	252+15R	1	
G21.6100	M1-6(11)	Route Marker	255+00R	1	
G21.5100	R3-5(L)	Left Turn Only Sign	178+75R	1	
	W12-1-A	Double Arrow Sign	178+75R	1	
	W12-1-A	Double Arrow Sign	244+55R	1	
	R3-5(L)	Left Turn Only Sign	244+70R	1	
	W12-1-A	Double Arrow Sign	246+55R	1	
	W11-2	Pedestrian Crossing	97+70	1	
	W11-2	Pedestrian Crossing	-3+05L	1	
	W11-2	Pedestrian Crossing	SR"A" 2+80L	1	
	W11-2	Pedestrian Crossing	SR"A" 2+60L	1	
	W13-2(25)	Exit 25MPH for Sideroad "C"	174+00R	1	
	W13-2(25)	Exit 25MPH for Sideroad "E"	240+00R	1	
G21.5300	W3-3	Signal Ahead Sign	102+50L	1	
	W3-3	Signal Ahead Sign	(-)7+50R	1	
G21.5100	R1-1	Stop Sign	Kilohana Subdivision	1	
	R1-1	Stop Sign	S.R. "E"	1	
		~~TOTALS~~	~~84~~	~~13~~	
G21.5100	R5-1	Do Not Enter Sign	SR"E" Ln-4	2	

PAVEMENT MARKER SCHEDULE

STATION FROM	STATION TO	DESCRIPTION	TYPE A	TYPE C	TYPE D	TYPE H	TYPE J
-13+00	- 9+00	No Passing - Both Sides			21		
- 9+00	- 5+00	No Passing - Both Sides				45	
- 5+00	- 2+30	No Passing - Both Sides	84	20	13		
- 2+30	97+25	No Passing - Both Sides	130	138	20	35	
97+25	103+30	No Passing - Both Sides	136	35			
103+30	112+00	No Passing - Both Sides	40	10		90	
113+90 → 112+00	~~114+00~~	No Passing - Both Sides			11		
113+90							
110+10 → ~~114+00~~	~~118+15~~	No Passing-L Passing-R			13	13	52
119+10 → ~~118+15~~	~~138+85~~	Passing - Both Sides			53		216
139+00 → ~~138+85~~	~~143+30~~	Passing-L No Passing-R			12	13	52
144+20 → ~~143+30~~	145+15	No Passing - Both Sides			10		
145+15	151+80	No Passing - Both Sides				62	
151+80	159+30	No Passing - Both Sides	36	25	50		
159+30	162+00	No Passing - Both Sides				28	
162+00	171+00	No Passing - Both Sides			47		
171+00	176+10	No Passing - Both Sides	30	10		52	
176+10	180+15	No Passing - Both Sides		18	10	25	
180+15	194+50	No Passing - Both Sides	88	39	67	46	
199+10 → 194+50	~~199+15~~	No Passing - Both Sides			24		
199+10							
202+30 → ~~199+15~~	~~202+15~~	No Passing-L Passing-R			8	8	32
202+30							
202+30 → ~~202+15~~	~~220+85~~	Passing - Both Sides			46		184
220+20 → ~~220+85~~	~~230+00~~	Passing-L No Passing-R			24	23	92
229+00 → ~~230+00~~	236+00	No Passing - Both Sides			31		
236+00	241+95	No Passing - Both Sides	28	7		60	
241+95	246+30	No Passing - Both Sides	20	23	42	19	
246+30	251+75	No Passing - Both Sides	68	24	27	22	
251+75	258+85	No Passing - Both Sides	48	25		70	
		TOTALS	708	374	529	611	628

SURVEY PLOTTED BY		DATE	5/82
DRAWN BY		"	"
TRACED BY		"	"
DESIGNED BY		"	5/82
QUANTITIES BY		"	"
CHECKED BY		"	"
ORIGINAL PLAN			
NOTE BOOK			
No.			

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SUMMARY OF TRAFFIC SIGNS & MARKERS & PAVEMENT MARKERS

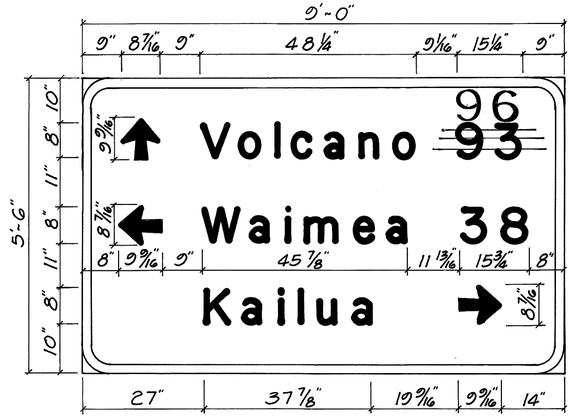
HBR FAP ROUTE 11
PALANI ROAD TO KILOHANA SUBDIVISION
PROJECT NO. F-011-1(14)
NORTH KONA, HAWAII

Scale: As Noted Date: May 1982

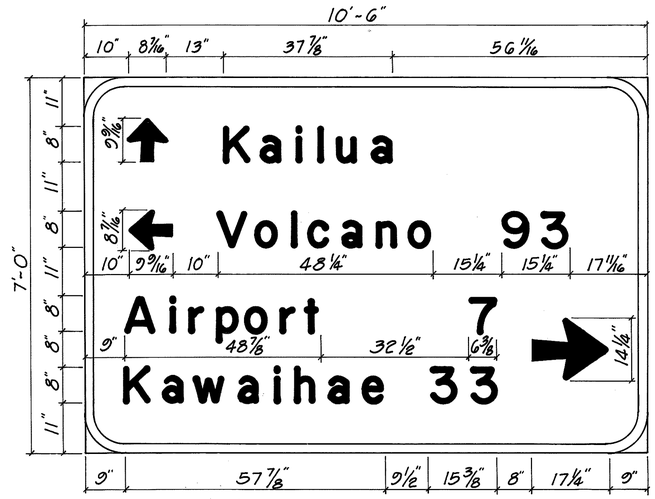
SHEET No. OF SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	112	214

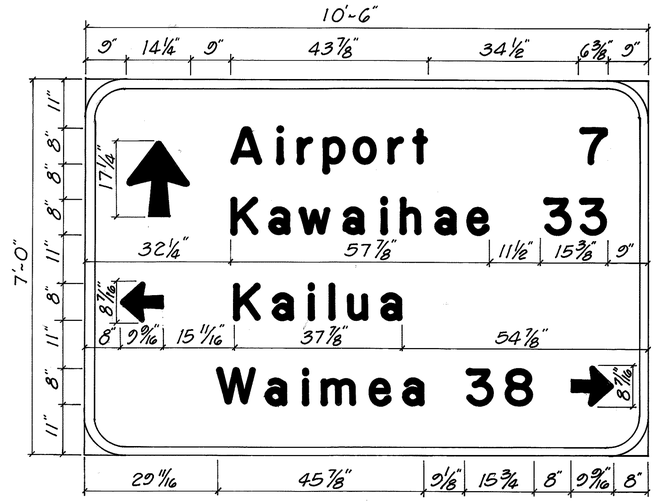
ADD. #1 9/24/82
All destination signs with destinations of different directions shall have separation borders across the whole width of the sign panels.
All legends shall be visually centered.



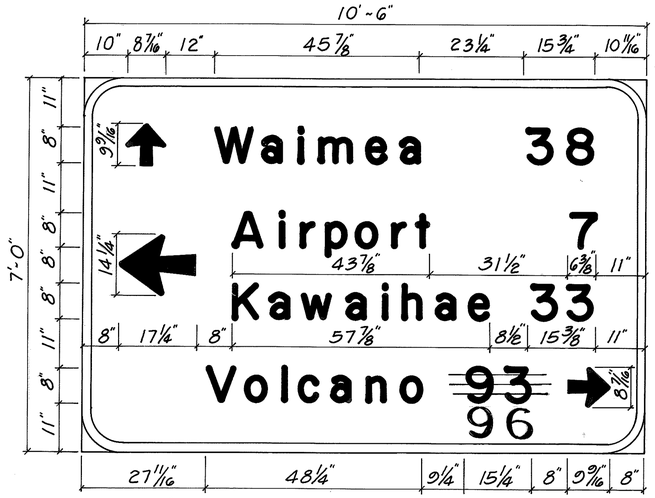
D-1 (49.50 Sq. Ft. Type Post)
(AT STA. -3+50 RT.)
Scale: 3/4"=1'-0"



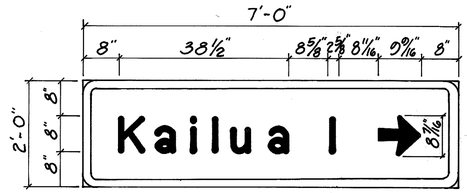
D-2 (73.50 Sq. Ft. Type Post)
(AT STA. -0+40 LT.)
Scale: 3/4"=1'-0"



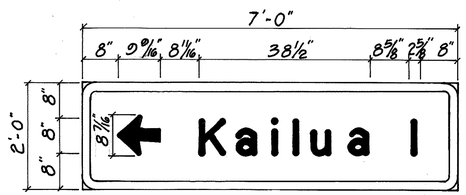
D-3 (73.50 Sq. Ft. Type Post)
(AT STA. 99+00 LT.)
Scale: 3/4"=1'-0"



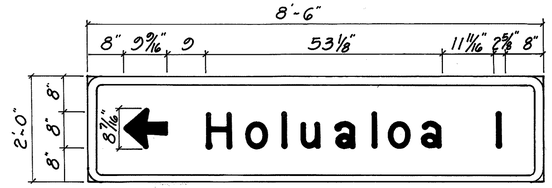
D-4 (73.50 Sq. Ft. Type Post)
(AT STA. 93+38 RT.)
Scale: 3/4"=1'-0"



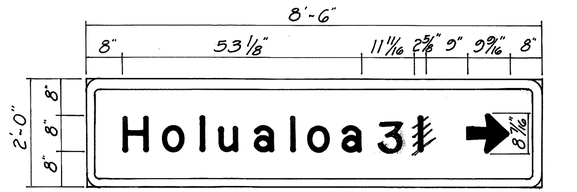
D-5 (14.00 Sq. Ft. Type Post)
(AT STA. 175+00 RT.)
Scale: 3/4"=1'-0"



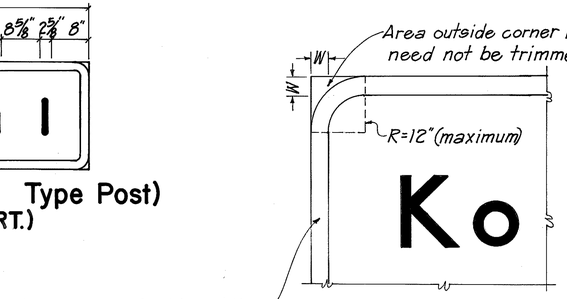
D-6 (14.00 Sq. Ft. Type Post)
(AT STA. 182+00 RT.)
Scale: 3/4"=1'-0"



D-7 (17.00 Sq. Ft. Type Post)
(AT STA. 191+00 RT.)
Scale: 3/4"= 1'-0"



D-8 (17.00 Sq. Ft. Type Post)
(AT STA. 198+00 LT.)
Scale: 3/4"= 1'-0"



All borders shall be white reflectorized cut-outs.

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

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DESTINATION SIGNS

HBR FAP ROUTE 11

PALANI ROAD TO KILOHANA SUBDIVISION
PROJECT NO. F-011-1(14)
NORTH KONA, HAWAII

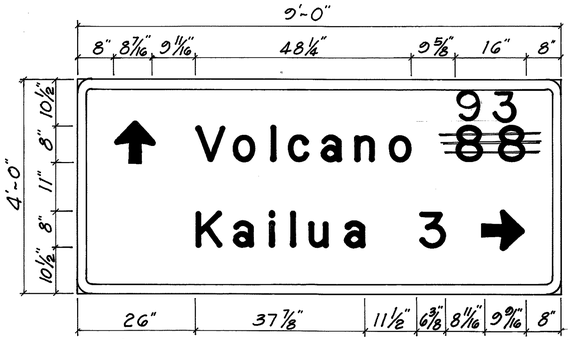
Scale: As Noted Date: June 1982

SHEET No. OF SHEETS

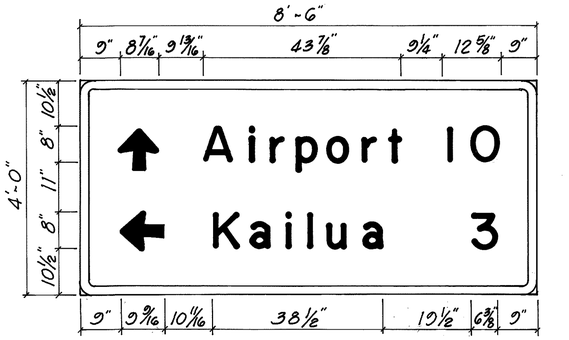
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	113	214

ADD #1
9/24/82

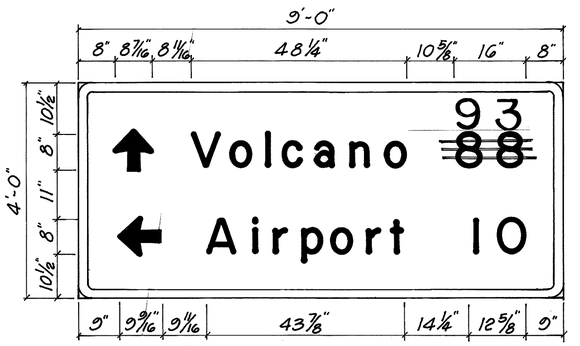
All destination signs with destinations of different directions shall have separation borders across the whole width of the sign panels. All legends shall be visually centered.



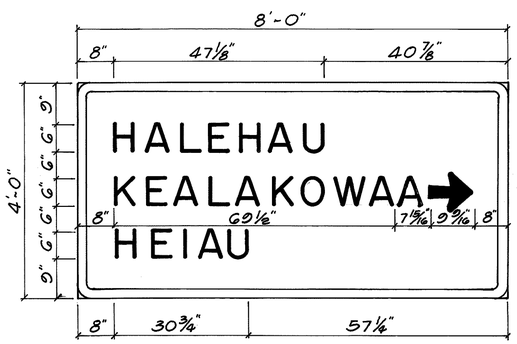
D-9 (36.00 Sq. Ft. Type Post)
(AT STA. 239+00 RT.)
Scale: 3/4" = 1'-0"



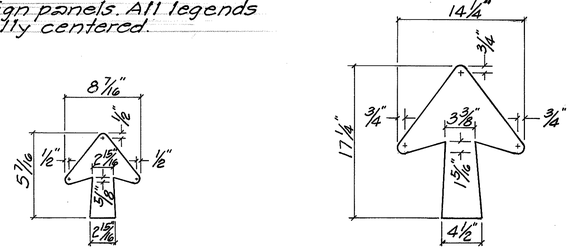
D-10 (34.00 Sq. Ft. Type Post)
(AT STA. 249+00 LT.)
Scale: 3/4" = 1'-0"



D-11 (36.00 Sq. Ft. Type Post)
(AT STA. 240+50 RT.)
Scale: 3/4" = 1'-0"



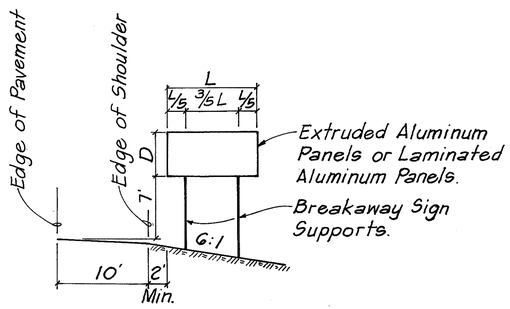
G-1 (32.00 Sq. Ft. Type Post)
(AT STA. 245+25)
Scale: 3/4" = 1'-0"



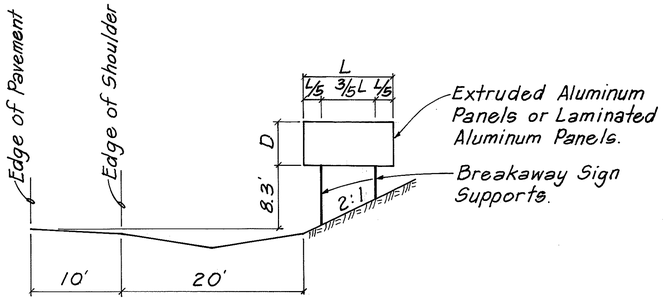
ARROW DETAIL
Not To Scale

GENERAL NOTES

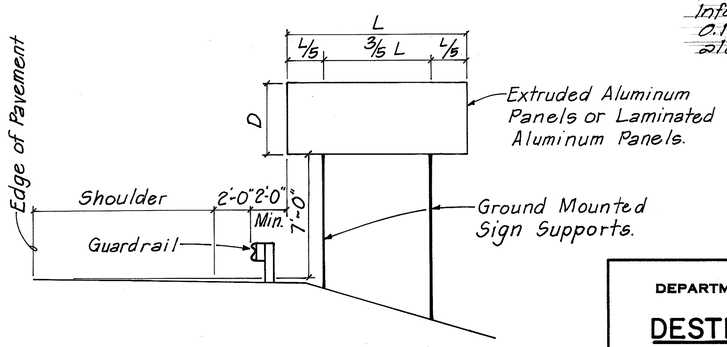
1. Letters and numerals shall conform to the manual "Standard Alphabets for Highway Signs" Bureau of Public Roads, 1966. Use Series "E" modified letters and numerals.
2. Arrows and borders shall conform with details as shown on plans.
3. Sign message and borders shall have white reflective sheeting on demountable aluminum cut-outs on green reflective sheeting background.
4. Cut-outs shall be fastened to sign panel with aluminum blind rivets.
5. Destination signs shall be mounted on breakaway or ground mounted posts. See Standard Details DT 203 and DT 204. (Sheet Nos. &).
6. All signs shall conform to the "Manual on Uniform Traffic Control Devices", U.S. Department of Transportation, 1978. Use high intensity reflective sheeting for all permanent and temporary roadside signs.
7. ~~Signs shall be 0.10 inch thick aluminum.~~ Temporary Destination and Information Signs shall be 0.10 inch thick sheet aluminum
8. Shop drawings for splicing on sign panel shall be submitted for approval.



D-1, D-2, D-6, D-9 & D-10



D-3, D-4, D-5 & D-7



D-8, D-11 & G-1

PLACEMENT OF DESTINATION SIGNS
Not To Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DESTINATION SIGNS
HBR FAP ROUTE 11
PALANI ROAD TO KILOHANA SUBDIVISION
PROJECT NO. F-011-1(14)
NORTH KONA, HAWAII

Scale: As Noted Date: June 1982

SHEET NO. OF SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	114	214

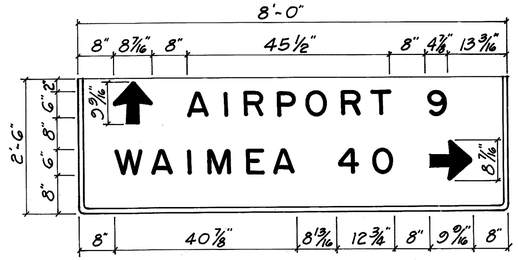
ADD. #1
9/24/82

SUMMARY - DESTINATION SIGNS

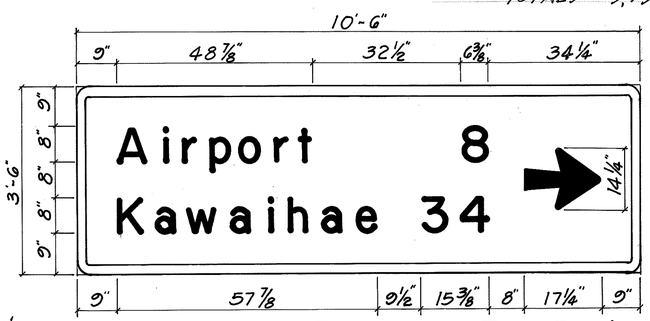
SIGN NO.	DESCRIPTION	SQ. FT.	TYPE POST	
D-1	↑ Volcano 93 ← Waimea 38 Kailua →	49.50	GB 8.5	621.1200
D-2	↑ Kailua ← Volcano 93 Airport 7 Kawaihae 33 →	73.50	GB 8.5	621.1200
D-3	↑ Airport 7 Kawaihae 33 ← Kailua Waimea 38 →	73.50	GB 8.5	621.1200
D-4	↑ Waimea 38 ← Airport 7 Kawaihae 33 Volcano 93 →	73.50	GB 8.5	621.1200
D-5	Kailua 1 →	14.00	3I 5.7	621.1300
D-6	← Kailua 1	14.00	3I 5.7	621.1300
D-7	← Holualoa 1	17.00	3I 5.7	621.1300
D-8	Holualoa 1 →	17.00	3I 5.7	621.1200
D-9	↑ Volcano 88 Kailua 3 →	36.00	4I 7.7	621.1300
D-10	↑ Airport 10 ← Kailua 3	34.00	4I 7.7	621.1300
D-11	↑ Volcano 88 ← Airport 10	36.00	4I 7.7	621.1200
G-1	HALEHAU KEALAKOWA → HEIAU	32.00	4I 7.7	621.1200
D-12	Airport 8 Kawaihae 34 →	36.75	3-2½" SQ.	Tube 10 GA or 3-4#/Ft Rail Steel Flanged Channel
D-13	↑ Airport 9 Waimea 40 →	20.00	3-2½ SQ.	Tube 10 GA. or 3-#4/Ft. Rail Steel Flanged Channel

GUARD RAIL SCHEDULE

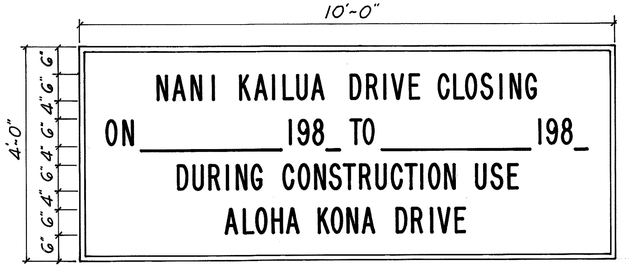
BEGIN STATION		BEGIN FLARE	END STATION		END FLARE	LINEAR FEET	BCT
99+50 ~~97+00~~	LT.	G	100+50 ~~101+25~~	LT.	G ~~C~~	99.7 ~~425~~	0
~~113+50~~ ~~113+60~~	LT.	BCT	121+00	LT.	G ~~BCT~~	149.3 ~~990~~	1 ~~2~~
138+00	LT.	G ~~F~~	140+00 ~~148+40~~	LT.	G	212 ~~1,055~~	0
172+25	LT.	BCT	174+50 ~~175+00~~	LT.	G ~~C~~	225 ~~250~~	1
~~182+98~~ ~~181+70~~	LT.	G ~~F~~	~~184+52~~ ~~185+00~~	LT.	BCT	154 ~~305~~	1
195.01 ~~194+75~~	LT.	BCT	198+76 ~~199+00~~	LT.	BCT	375.2	2
215+00	LT.	BCT	~~222+90~~ ~~223+50~~	LT.	G	~~862.3~~ ~~1,075~~	1
~~241+38~~ ~~240+50~~	LT.	G ~~F~~	243+75	LT.	C	212.5 ~~325~~	0
242+00	RT.	BCT	S.R. 141+50	RT.	G ~~BCT~~	~~535.6~~ 511	1 ~~2~~
S.R. 138+75 ~~139+50~~	RT.	BCT	S.R. 147+30	RT.	F	~~899.6~~ 760	1
140+20	LT.	G	148+56	LT.	G	875	0
154+00	LT.	F	155+35	LT.	C	132.7	0
182+75	LT.	—	183+25	LT.	—	51	—
S.R.D. 1+07	LT.	G	SPUR RD. 1+12	LT.	—	168.9	—
S.R.D. 2+81	RT.	G	S.R.D. 3+44	RT.	—	63	—
148+18 RT. 98 150+55 RT. 98 151+50 LT. 43		— — —	148+55 RT. 98 151+18 RT. 98 151+96 LT. 43		— — —	20 —TOTALS 5,771.50 414	— -10 —
S.R.C. Lane 2 2+87		B.C.T.	S.R.C. Lane 4 1+47		B.C.T.	187.5	2
					TOTALS	5,930.9	10



D-13 (20.00 Sq. Ft.)
(AT STA. 6+45 LT., PROJ. NO. S-229(1))
Temporary Sign - For Traffic Control - Phase II
Scale: 3/4" = 1'-0"



D-12(36.75 Sq. Ft. Type Post)
(ALONG OLD AIRPORT ROAD)
Temporary Sign - For Traffic Control - Phase II
Scale: 3/4" = 1'-0"



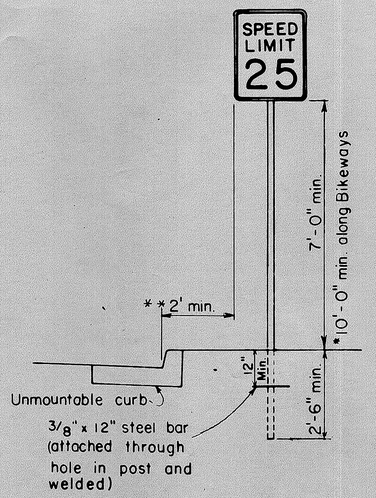
TEMPORARY MOTORIST INFORMATION SIGN
(HUALALAI ROAD DETOUR AREA)
Temporary Sign - For Traffic Control - Phase I
Not To Scale

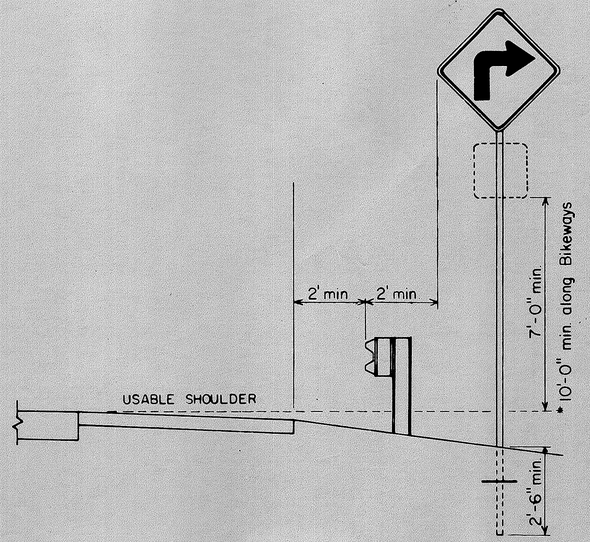
Note: Information Sign to be white reflectorized background with black letters mounted on aluminum sheeting. Borders to be 1" wide and black.

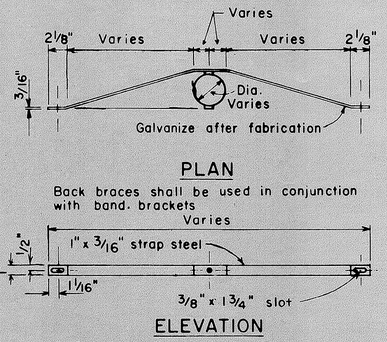
ORIGINAL PLANS	SIGNS PLOTTED BY	DATE 6/82
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DESTINATION SIGNS SUMMARY & GUARD RAIL SCHEDULE
HBR FAP ROUTE 11
PALANI ROAD TO KILOHANA SUBDIVISION
PROJECT NO. F-011-1(14)
NORTH KONA, HAWAII
Scale: As Noted Date: June 1982
SHEET NO. OF SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	115	214







BACK BRACE DETAILS FOR BALANCED SIGN INSTALLATION

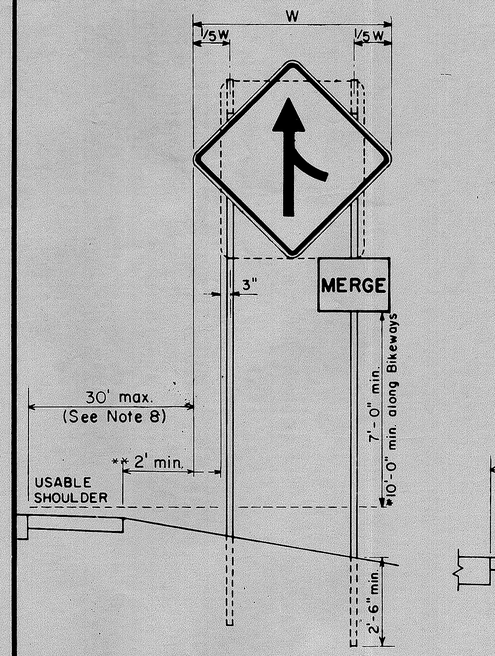
GENERAL NOTES

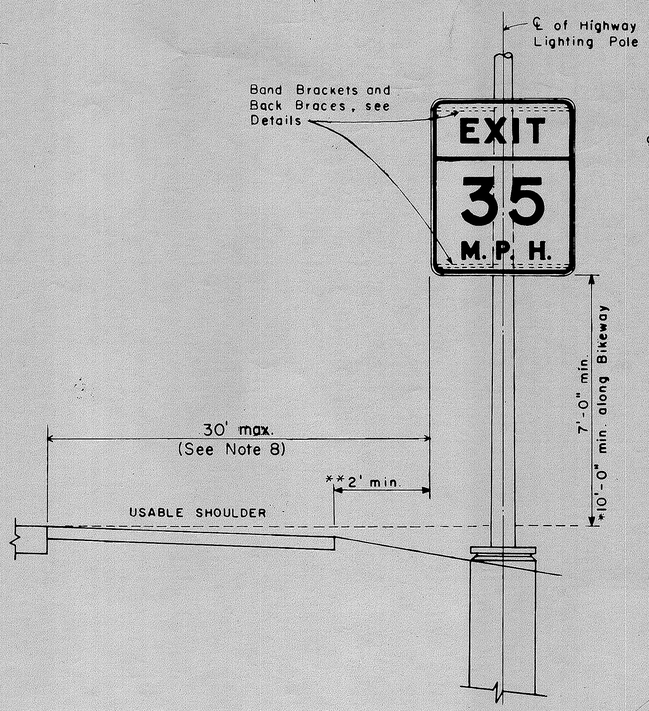
1. Signs shall be placed in conformance with positions shown and described in the "Manual on Uniform Traffic Control Devices for Streets and Highways", 1978, Part II, Section 2A-21, as amended, and as supplemented herein.
2. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two sign posts except as noted below.
3. 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)
   a. 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.
   b. Signs larger than 28 sq. ft. in area shall be mounted with a minimum of three sets of band brackets and back braces.
4. All parking restriction signs with arrows shall be mounted 45° to the line of traffic flow.
5. Sign posts shall extend 3 1/2" above each sign, where required, for attachment of City and County street name signs.
6. (R) or (L) indicates right or left and shall be shown on the plans.

* 7. See plans for special details.

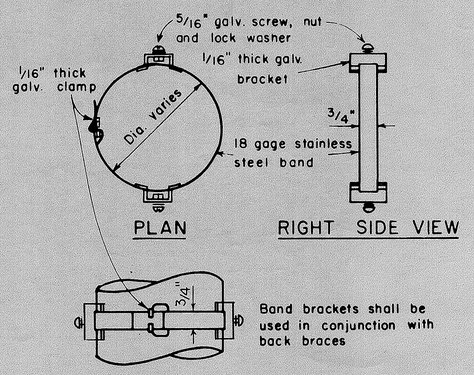
** 8. The minimum lateral distances shown are guidelines and shall be exceeded whenever possible. The Contractor shall place signs at the maximum practical lateral distance from the edge of the traveled way up to 30 feet and shall utilize protected locations whenever possible. Final locations of all signs shall be approved by the Engineer.

9. Signs in medians shall be placed at midpoint of median up to a maximum distance of 30 feet from the edge of traveled way. When appropriate, signs for opposing directions shall be placed back to back.

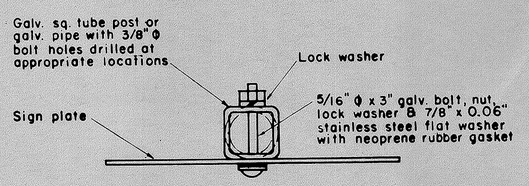




HEIGHT AND LATERAL LOCATION OF SIGNS TYPICAL INSTALLATION



BAND BRACKET



GALVANIZED SQUARE TUBE POST (OR GALVANIZED PIPE)

TYPICAL MOUNTING DETAILS

NOT TO SCALE

NO.	REVISION	APPROVED BY	DATE
1	Supercedes Sht. DT-100 approved 12/30/69	H.T.	11/15/77
2	Revised depth of signpost	H.T.	5/8/79
3	Added Notes No. 8 & No. 9	H.T.	5/15/79
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

APPROVAL RECOMMENDED:
Eucki Tanaka — TRAFFIC ENGINEER — 11/10/77 DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS SIGN DETAILS

Not to scale — June, 1977

SHEET No. OF SHEETS DT 100

115

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	116	214



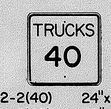
R1-1 30"x30"
R1-1-A 36"x36"



R1-2 36"x36"x36"
R1-2-A 48"x48"x48"



R2-1(50) 24"x30"
R2-1(50)-A 48"x60"



R2-2(40) 24"x24"
R2-2(40)-A 48"x48"



R2-4a(50/40) 24"x48"
R2-4a(50/40)-A 48"x96"



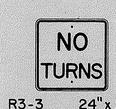
R2-5b(30) 24"x30"
R2-5b(30)-A 48"x60"



R3-1 24"x24"
24"x18"
R3-1-A 48"x48"
48"x36"



R3-2 24"x24"
24"x18"
R3-2-A 48"x48"
48"x36"



R3-3 24"x24"
R3-3-A 48"x48"



R3-4 24"x24"
24"x18"
R3-4-A 48"x48"
48"x36"



R3-5(L) 30"x36"
R3-5(L)-A 48"x60"


R3-6(L) 30"x36"
R3-6(L)-A 48"x60"



R3-7(R) 30"x30"
R3-7(R)-A 48"x48"



R3-8(L) 30"x30"
R3-8(L)-A 36"x36"
R3-8(L)-B 48"x48"



R3-9 24"x30"



R4-1 24"x30"



R4-2 24"x30"



R4-3 24"x30"
R4-3-A 48"x60"



R4-5 24"x30"



R4-6(500) 24"x30"



R4-7 24"x30"
24"x18"



R4-8 24"x30"
24"x18"



R5-1 30"x30"
R5-1-A 48"x48"



R5-2 24"x24"
24"x18"



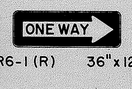
R5-4 24"x30"



R5-6 24"x24"
24"x18"



R5-9 36"x24"



R6-1(R) 36"x12"



R6-2(R) 18"x24"



R7-1 12"x18"
R7-1-A 24"x30"



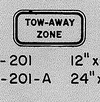
R7-4 12"x18"
R7-4-A 24"x30"



R7-107(R) 12"x18"



R7-108 12"x18"



R7-201 12"x6"
R7-201-A 24"x12"



R8-1 24"x30"



R8-2 24"x30"



R8-3 24"x30"



R8-4 30"x24"
R8-4-A 48"x36"



R8-5 24"x30"



R8-6 24"x30"



R8-7 30"x24"
R8 7-A 48"x36"



R9-1 18"x24"



R9-2 12"x18"



R9-3 12"x18"



R9-4 18"x24"



R10-1 12"x18"



R10-2 12"x18"



R10-3 9"x12"



R10-4 9"x12"



R10-5 24"x30"



R10-6 24"x36"



R10-7 24"x30"



R10-8 24"x30"



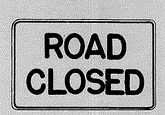
R10-9 24"x30"



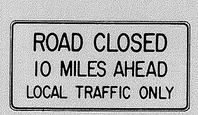
R10-10 24"x30"



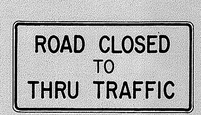
R11-1 24"x30"



R11-2 48"x30"



R11-3(10) 60"x30"



R11-4 60"x30"



R12-1(10) 24"x30"

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:
Eiichi Tanaka 3/17/72
TRAFFIC ENGINEER DATE

APPROVED:
Hulent Redfish 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.	10/16/14
3	Added General Note 5	H.T.	6/9/19

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

REGULATORY SIGNS

NOT TO SCALE

SHEET No. OF SHEETS DT 101

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

K&E IMPERIAL LA 3207

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F011-1(14)	1982	117	214



W1-1(R) 30"x30"
W1-1(R)-A 48"x48"



W1-2(R) 30"x30"
W1-2(R)-A 48"x48"



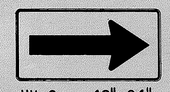
W1-3(R) 30"x30"
W1-3(R)-A 48"x48"



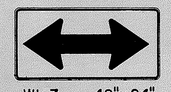
W1-4(R) 30"x30"
W1-4(R)-A 48"x48"



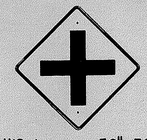
W1-5(R) 30"x30"
W1-5(R)-A 48"x48"



W1-6 48"x24"



W1-7 48"x24"



W2-1 30"x30"
W2-1-A 48"x48"



W2-2 30"x30"
W2-2-A 48"x48"



W2-3(R) 30"x30"
W2-3(R)-A 48"x48"



W2-4 30"x30"
W2-4-A 48"x48"



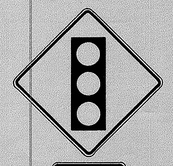
W2-5 30"x30"
W2-5-A 48"x48"



W3-1 30"x30"
W3-1-A 36"x36"



W3-2 30"x30"
W3-2-A 36"x36"



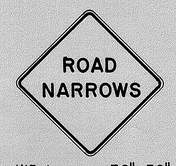
W3-3 36"x36"
24"x18"



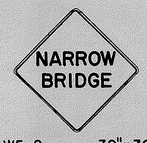
W4-1(R) 30"x30"
24"x18"
W4-1(R)-A 48"x48"
24"x18"



W4-2(R) 36"x36"
W4-2(R)-A 48"x48"



W5-1 36"x36"



W5-2 30"x30"
W5-2-A 36"x36"



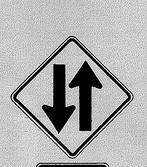
W5-3 36"x36"



W6-1 36"x36"
24"x18"



W6-2 36"x36"
24"x18"



W6-3 30"x30"
24"x18"
W6-3-A 36"x36"
24"x18"
W6-3-B 48"x48"
24"x18"



W7-1 30"x30"
24"x18"
W7-1-A 36"x36"
24"x18"



W7-2 24"x18"



W8-1 30"x30"
W8-1-A 36"x36"



W8-2 30"x30"
W8-2-A 36"x36"



W8-3 30"x30"
W8-3-A 36"x36"



W8-4 30"x30"
W8-4-A 36"x36"



W8-5 30"x30"
24"x18"
W8-5-A 36"x36"
24"x18"



W9-1(R) 30"x30"
W9-1(R)-A 36"x36"
W9-1(R)-B 48"x48"



W9-2(L) 36"x36"
W9-2(L)-A 48"x48"



W10-1 36" Diameter



W11-1 30"x30"
24"x18"
W11-1-A 36"x36"
24"x18"



W11-2 30"x30"
24"x18"
W11-2-A 36"x36"
24"x18"



W11-4 30"x30"
24"x18"
W11-4-A 36"x36"
24"x18"



W11-5 30"x30"
24"x18"
W11-5-A 36"x36"
24"x18"



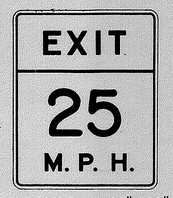
W12-1 24"x24"
W12-1-A 36"x36"
W12-1-B 48"x48"



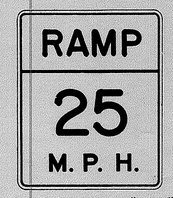
W12-2(12'-6") 36"x36"
24"x18"



W13-1(25) 18"x18"
W13-1(25)-A 24"x24"



W13-2(25) 48"x60"



W13-3(25) 48"x60"



W14-1 30"x30"



W14-3 36"x48"x48"

NOTE

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

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 3/17/82
TRAFFIC ENGINEER DATE

APPROVED:
Walter Takeshita 3-20-82
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.T.	3/20/82
2	Revised General Note 1	H.T.	10/10/74
3	Revised General Note 5	M.F.	9-16-75
4	Revised General Note 5	H.T.	9-14-76
5	Added Note 1	H.T.	11-9-79

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

WARNING SIGNS

NOT TO SCALE

SHEET No. OF SHEETS DT 102

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

K&E IMPERIAL LA 3207

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	118	214

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"x30"

CENTER LANE ONLY
R3-9b 24"x36"

BUS STOP
R7-107(R) 12"x24"

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

ANY TIME – 4" Series C – 1½"
R8-3a 24"x24" 24"x18"
R8-3a-A 48"x48"

NO PED XING
R9-3a 18"x18" 18"x12"
R9-3a-A 24"x24" 24"x18"

USE CROSSWALK
R9-3b(R) 18"x12"

USE CROSSWALK
R9-3b(L) 18"x12"

NO TURN ON RED
R10-11a 24"x30"

TURN RIGHT ANY TIME WITH CAUTION 4" Series C
R16-1 24"x30"

NO LEFT TURN ON RED – 4" Series D – 3" Series D – 2" Series D – 3" Series D
R16-3 18"x24"

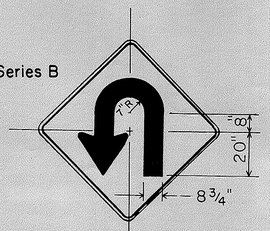
NO RIGHT TURN ON RED
R16-4 18"x24"

UNLICENSED VEHICLES BICYCLES, CYCLES UNDER 5 H.P. PEDESTRIANS KEEP OUT FREEWAY } 3" Series C – 4" Series E
R16-5 36"x42"

U TURN AHEAD } – 8" Series F – 5" Series D
R16-6 24"x30"

U TURN OK } – 8" Series F – 5" Series D
R16-7 24"x30"

MOTOR-DRIVEN CYCLES PROHIBITED 4" Series B
R5-8 30"x24"



W17-1(L) 60"x60"

STOP AHEAD
W3-1a 36"x36" 24"x18"
W3-1a-A 48"x48" 24"x18"

YIELD AHEAD
W3-2a 36"x36" 24"x18"
W3-2a-A 48"x48" 24"x18"

STOP AHEAD WHEN FLASHING 6" Series C
W3-4 48"x48"

TRUCK CROSSING
W8-6 30"x30"
W8-6-A 36"x36"

THRU TRAFFIC MERGE LEFT 6" Series E
W9-3(L) 48"x48"

EQUESTRIAN XING
W11-7 36"x36" 24"x18"
W11-7-A 48"x48" 24"x18"

FIRE STATION
W11-8 36"x36" 24"x18"
W11-8-A 48"x48" 24"x18"

W11-9 36"x36"
W11-9-A 48"x48"

LIMITED SIGHT DISTANCE
W14-4 36"x36"
W14-4-A 48"x48"

DELAYED GREEN – 4" Series C – ADVANCE GREEN
W15-1 24"x24"
W15-2 24"x24"

END FREEWAY ½ MI 8" Series E
CW16-1(½) 60"x60"

RIGHT LANE EXIT ONLY 8" Series E
W18-1 48"x60"

SCHOOL
S1-1 36"x36"

S2-1 36"x36"

SCHOOL BUS STOP AHEAD
S3-1 30"x30"

8:00 AM TO 3:30 PM
S4-1 24"x10"

WHEN CHILDREN ARE PRESENT
S4-2 24"x10"

SCHOOL
S4-3 24"x8"

WHEN FLASHING
S4-4 24"x10"

SIDEWALK CLOSED 7" Series D
CW23-4 48"x48"

USE SIDEWALK 4" Series C
R18-1 24"x18"

General Notes

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

APPROVAL RECOMMENDED:
Eiichi Tanaka
TRAFFIC ENGINEER — 5/2/78 DATE

APPROVED:
Herbert Y. Kataoka
ASSISTANT CHIEF, ENGINEERING — 5/3/78 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.	11/9/79

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

MISCELLANEOUS SIGNS

NOT TO SCALE DATE: MAY, 1978

SHEET No. OF SHEETS DT 103

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	119	214



CW20-1a 48"x48"



CW20-2d 48"x48"



CW20-3b 48"x48"



CW20-4d 48"x48"



CW20-5d(L) 48"x48"



CW20-7c 48"x48"



CW21-1 30"x30"



CW21-2 30"x30"



CW21-3 36"x36"



CW21-4 36"x36"



CW21-5 30"x30"



CW21-6 30"x30"



CW22-1b 48"x48"



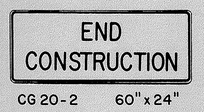
CW22-2 42"x36"



CW22-3 42"x36"



CG20-1(5) 60"x36"



CG20-2 60"x24"



CM4-9(R) 30"x24"



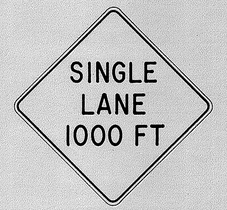
CM4-10(R) 48"x18"



CG20-4 36"x18"



CW23-1 36"x36"



CW23-2b 48"x48"



CW23-3(R) 48"x48"

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 construction signs shall be reflectorized.
3. All construction 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. 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:
Eiichi Tanaka — TRAFFIC ENGINEER — 3/21/72 DATE

APPROVED:
Walter Baleid — ASSISTANT CHIEF, ENGINEERING — 3/23/72 DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 104 Approved 12-30-69	H.T.	3/23/72
2	Revised General Note 1	H.T.	10/10/74
3	Revised General Note 2	MH	9-16-75
4	Revised General Note 2 and sign CG20-1(5)	H.T.	9-14-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

CONSTRUCTION SIGNS

NOT TO SCALE

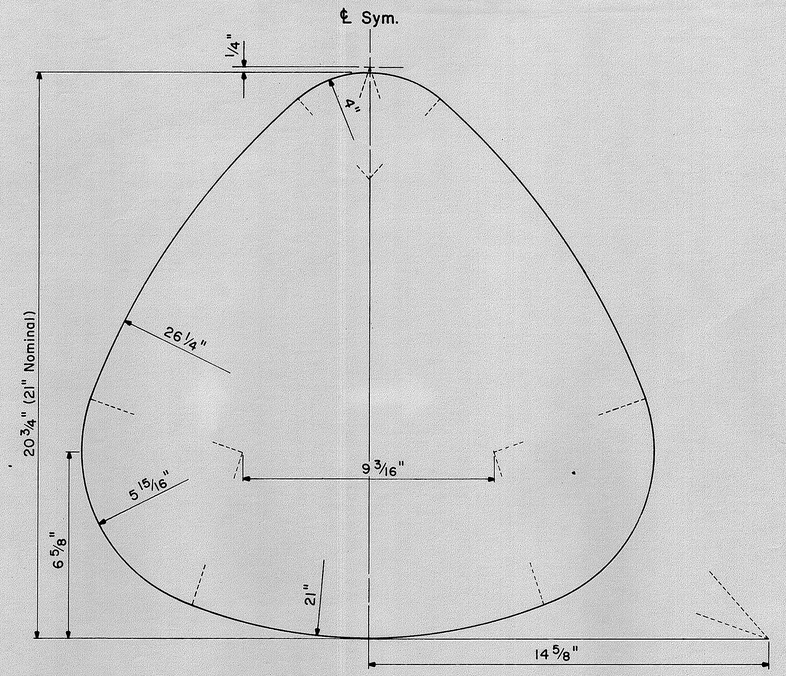
SHEET No. OF SHEETS DT 104

119

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

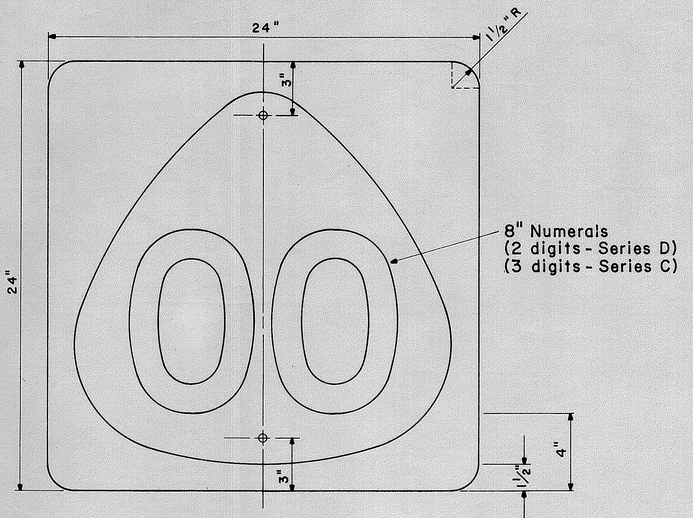
K+E IMPERIAL LA3207

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	120	214



STATE ROUTE MARKER DETAIL

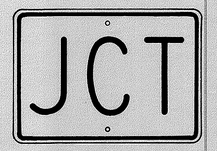
Not to Scale



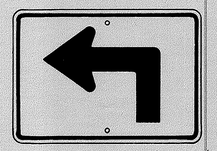
STATE ROUTE MARKER

M1-6 (00) 24"x 24"

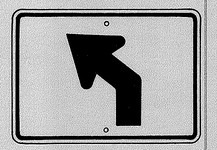
Scale: 1/4" = 1"



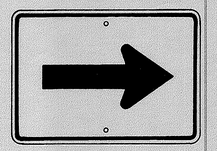
M2-1 21"x 15"



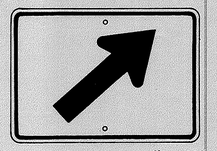
M5-1(L) 21"x 15"



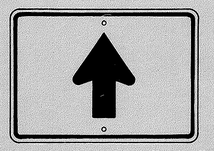
M5-2(L) 21"x 15"



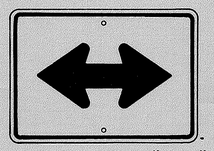
M6-1 21"x 15"



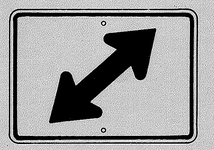
M6-2(R) 21"x 15"



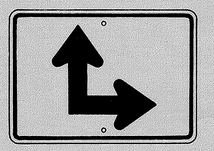
M6-3 21"x 15"



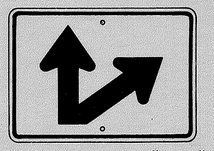
M6-4 21"x 15"



M6-5(R) 21"x 15"



M6-6(R) 21"x 15"



M6-7(R) 21"x 15"

AUXILIARY MARKERS

Not to Scale



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



M4-1 24"x 12"



M4-2 24"x 12"



M4-3 24"x 12"



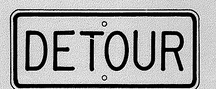
M4-5 24"x 12"



M4-6 24"x 12"



M4-7 24"x 12"



M4-8 24"x 12"

GENERAL NOTES

1. Marker details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, "Standard Alphabets for Highway Signs," 1966, and "Standard Highway Signs," 1972, and as amended.
2. All markers shall be reflectorized unless otherwise specified.
3. All markers shall have 3/8" bolt holes drilled at appropriate locations.
4. Numerals in ( ) indicates numerals to be inserted for marker message. (R) or (L) indicates right or left.
5. Sign message of Cardinal Direction Marker (M3 series) shall be denoted by the following:
   - M3-1 : NORTH
   - M3-2 : EAST
   - M3-3 : SOUTH
   - M3-4 : WEST
6. Markers prefixed with "IM" on the plans shall have a white legend on a blue background.

APPROVAL RECOMMENDED:

Eiichi Tanaka — TRAFFIC ENGINEER — 6/6/72 DATE

APPROVED:

Walter S. Hakeda — ASSISTANT CHIEF, ENGINEERING — 6-1-72 DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
STATE ROUTE MARKER
AND AUXILIARY MARKERS

Scale: As Shown

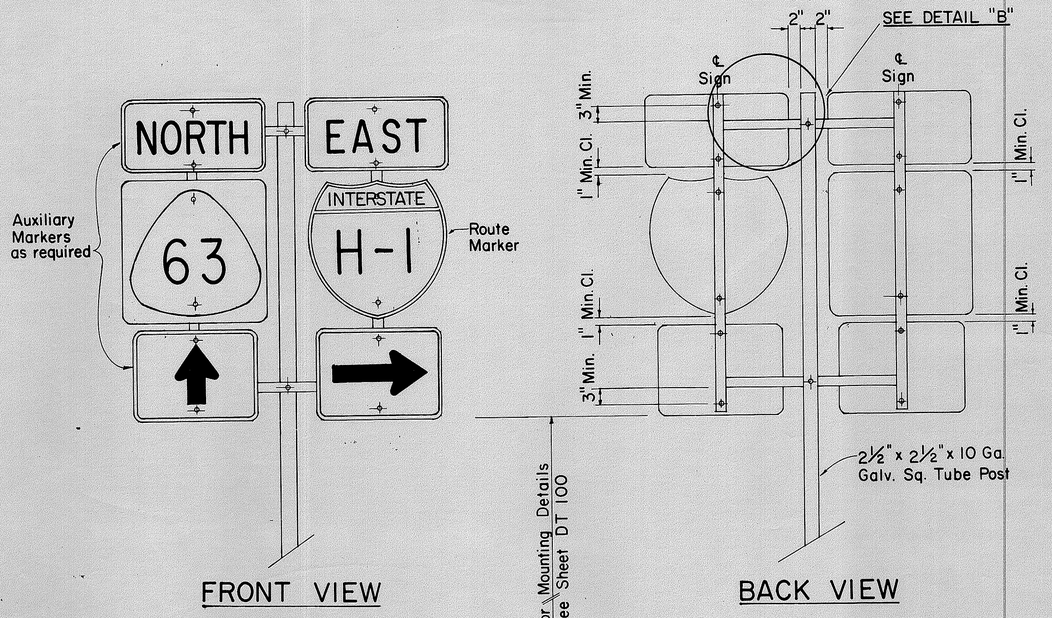
SHEET Nº OF SHEETS DT 105

120

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

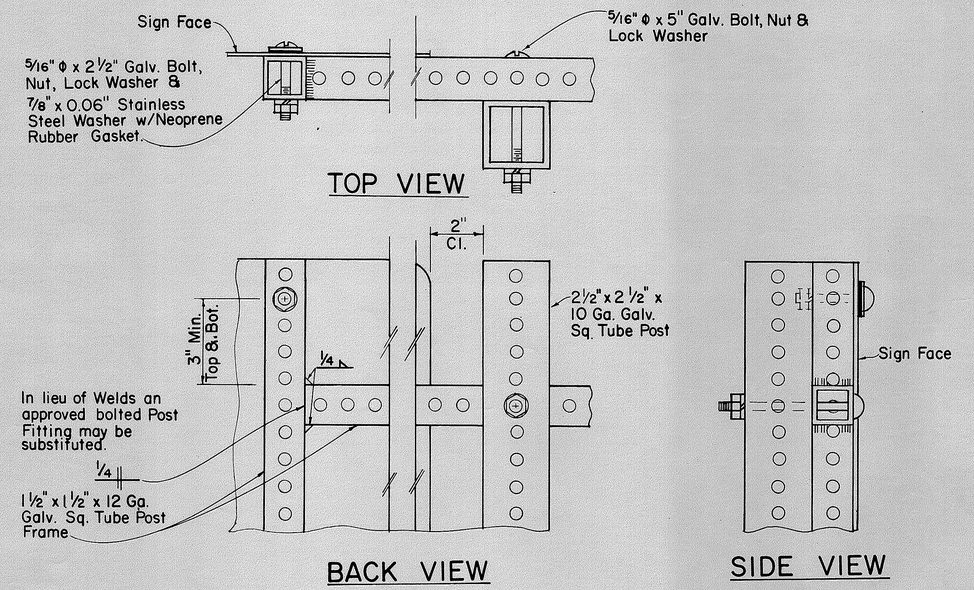
LIETZ 1103 ARKWRIGHT TRACING CLOTH 10-60 200P

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	121	214



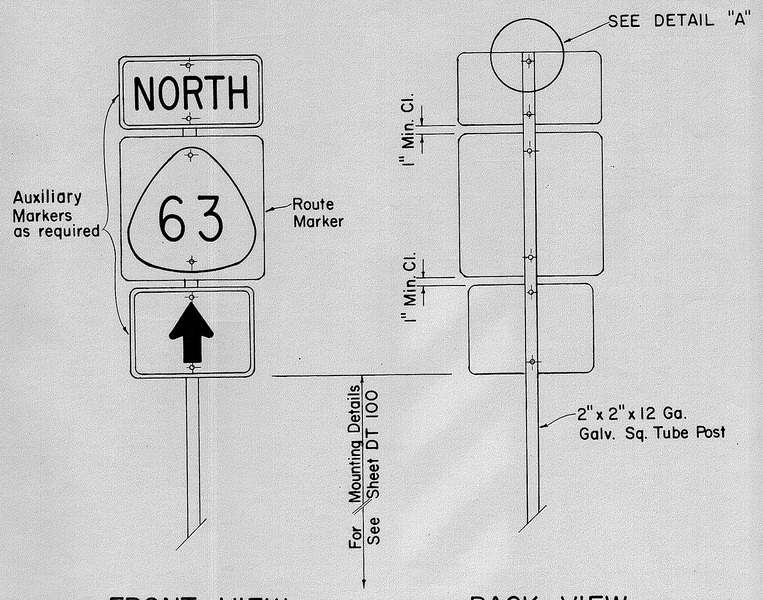
TYPE "B" ASSEMBLY

SCALE: 1" = 1'-0"



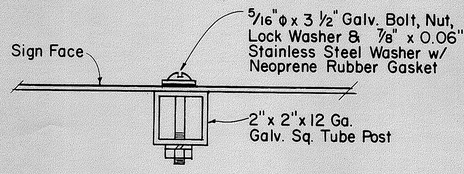
DETAIL "B"

SCALE: 3/8" = 1"



TYPE "A" ASSEMBLY

SCALE: 1" = 1'-0"



TOP VIEW

DETAIL "A"

SCALE: 3/8" = 1"

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

APPROVAL RECOMMENDED:

Eiichi Tanaka — TRAFFIC ENGINEER — 7/31/80 DATE

APPROVED:

Herbert T. Matsuzaki — ASSISTANT CHIEF, ENGINEERING — 7/31/80 DATE

NO	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 107 dated 12/30/69.	H.T.	7/31/80

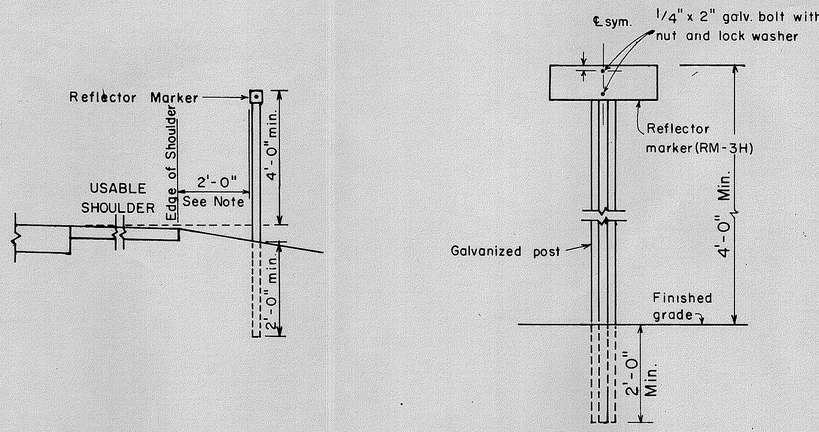
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
ROUTE MARKER ASSEMBLIES

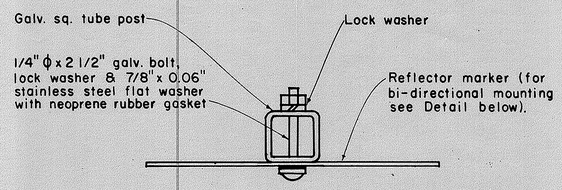
SCALE: AS SHOWN

SHEET NO. OF SHEETS DT 107

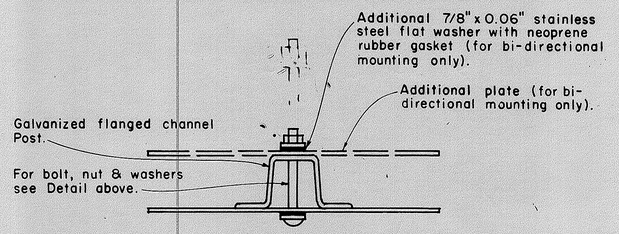
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	122	214



REFLECTOR MARKER MOUNTING DETAIL



GALVANIZED SQUARE TUBE POST

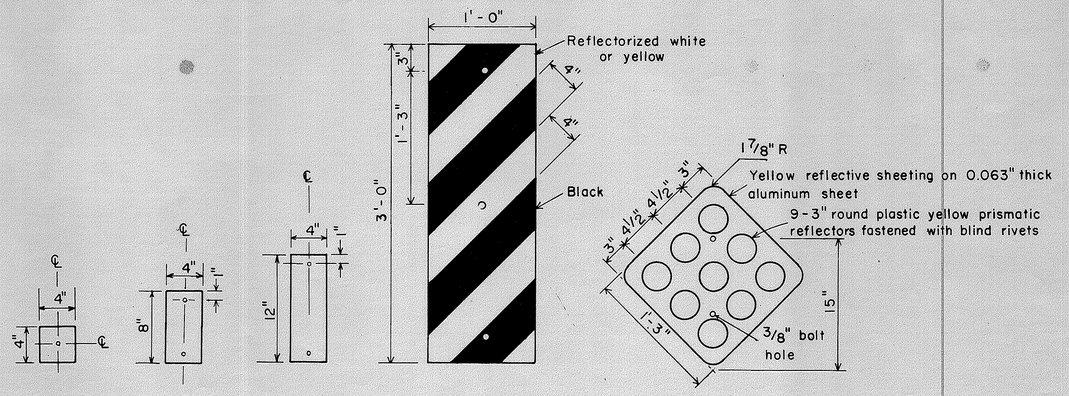


GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS

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.



RM-1 (WHITE, YELLOW, OR RED)

RM-2 (WHITE, YELLOW, OR RED)

RM-3 (YELLOW)

RM-4(R)

RM-9

REFLECTOR MARKERS

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

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 11/7/77 DATE

APPROVED:
Herbert Z. Takeiahi — ASSISTANT CHIEF, ENGINEERING — 11/15/77 DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

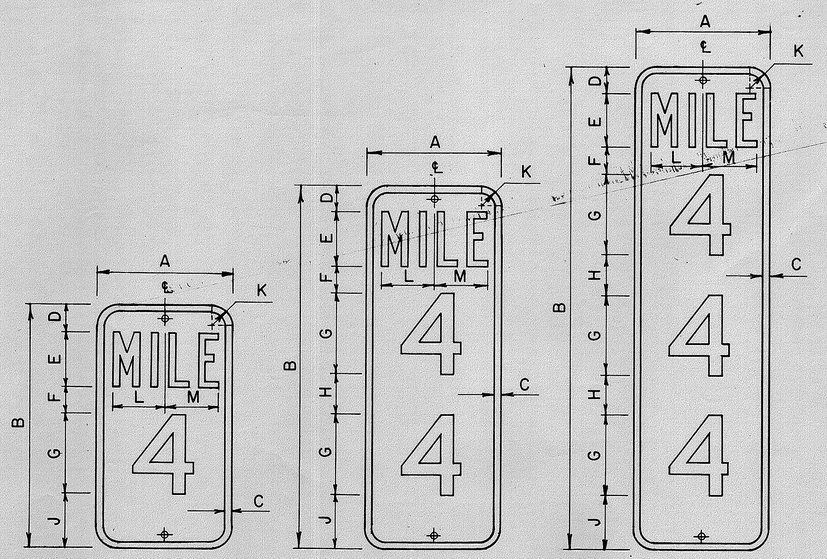
STANDARD DETAILS

MISCELLANEOUS REFLECTOR MARKERS

Not to scale — June, 1977

SHEET No. OF SHEETS DT 110

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	123	214



D10-1 10"x18"
D10-4 12"x24"

D10-2 10"x27"
D10-5 12"x36"

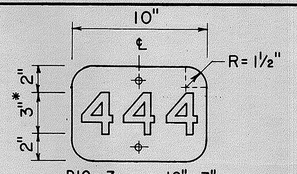
D10-3 10"x36"
D10-6 12"x48"

MILEPOST MARKER PLATE DETAILS

Scale: 3/16" = 1"

MILEPOST PLATE SCHEDULE (INCHES)

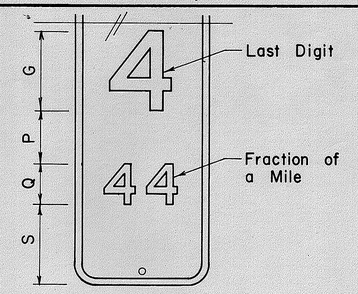
NAME	SIZE	A	B	C	D	E	F	G	H	J	K	L	M	LETTER SERIES	NUMERAL SERIES
D10-1	10 x 18	10	18	1/2	2	4	2	6		4	1 1/2	3 5/8	3 7/8	B	C
D10-4	12 x 24	12	24	1/2	3	4	3	10		4	1 1/2	4 5/8	4 7/8	C	C
D10-2	10 x 27	10	27	1/2	2	4	2	6	3	4	1 1/2	3 5/8	3 7/8	B	C
D10-5	12 x 36	12	36	1/2	3	4	3	10	3	3	1 1/2	4 5/8	4 7/8	C	C
D10-3	10 x 36	10	36	1/2	2	4	2	6	3	4	1 1/2	3 5/8	3 7/8	B	C
D10-6	12 x 48	12	48	1/2	3	4	3	10	2 1/2	3	1 1/2	4 5/8	4 7/8	C	C



D10-7 10"x7"
*Series "C"

HIGHWAY ROUTE NUMBER PLATE DETAIL

Scale: 3/16" = 1"

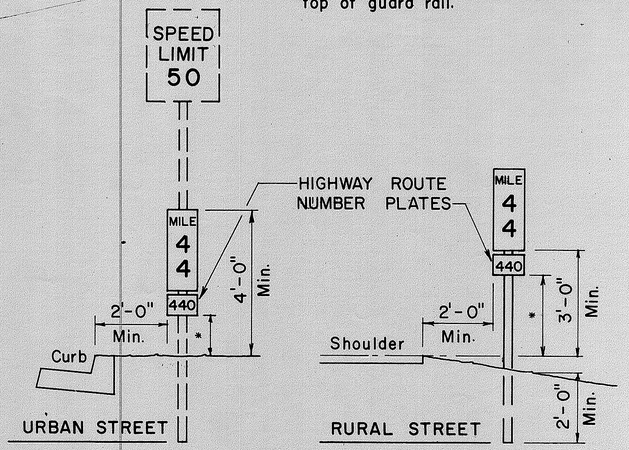


MILEPOST MARKER FRACTION DETAIL

Scale: 3/16" = 1"

MILEPOST PLATE SCHEDULE WITH FRACTION OF A MILE

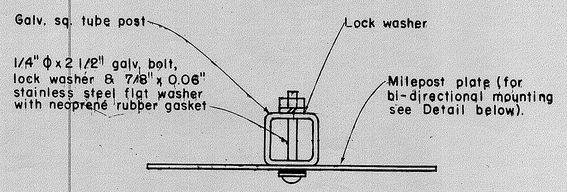
NAME	SIZE	G	P	Q	S	NUMERAL SERIES
D10-1a	10" x 27"	6"	4"	3"	6"	C
D10-4a	12" x 36"	10"	4"	5"	7"	C
D10-2a	10" x 36"	6"	4"	3"	6"	C
D10-5a	12" x 48"	10"	4"	5"	6"	C
D10-3a	10" x 45"	6"	4"	3"	6"	C
D10-6a	12" x 60"	10"	4"	5"	6"	C



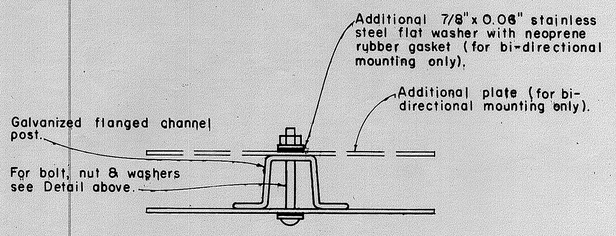
*One-foot minimum clearance above top of guard rail.

TYPICAL ROADSIDE INSTALLATION

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



GALVANIZED SQUARE TUBE POST



GALVANIZED FLANGED CHANNEL POST

TYPICAL MOUNTING DETAILS

Scale: 1/2" = 1"

GENERAL NOTES:

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

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 1/17/78 DATE

APPROVED:
Hubert B. Nakasone — ASSISTANT CHIEF, ENGINEERING — 1/18/78 DATE

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

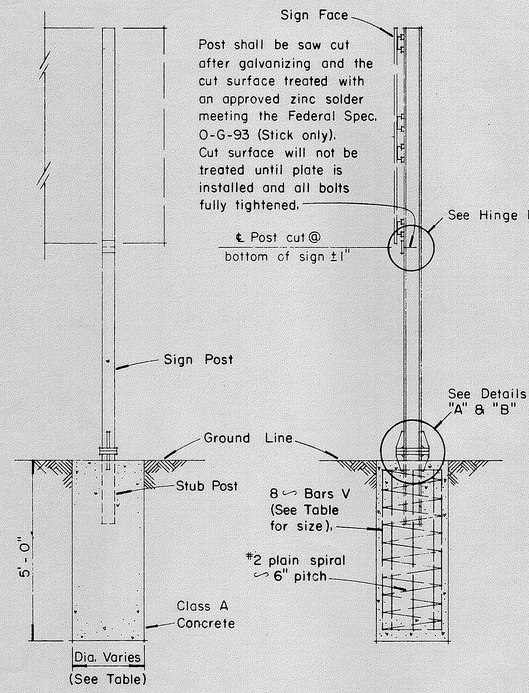
MILEPOSTS

SCALE: As Shown DATE: December, 1977

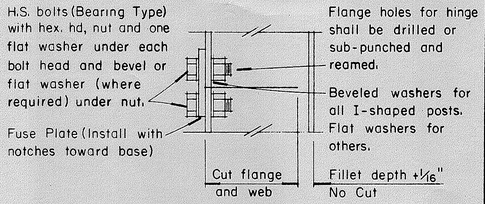
SHEET No. OF SHEETS DT 116

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

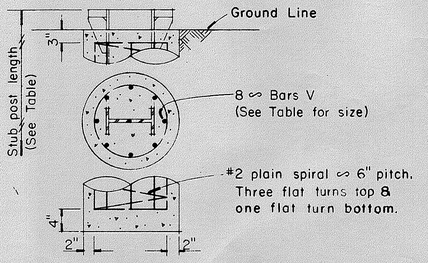
	BASE CONNECTION DATA TABLE										FUSE PLATE DATA TABLE										FOUNDATION DATA			
Post Size	Bolt Size & Torque	A	B	C	D	E	t1	t2	W	R	F	G	H	J	K	L	N	d1	t3	Bolt Dia.	Wt. of each Fuse ℄	Stub Length	Stub Projection	Footing Diameter	Bars V Size
6 B 8.5	5/8"ø x 2 3/4" Torque = 450"#	5"	2"	1 1/4"	2 3/4"	1 1/8"	3/4"	1/2"	1/4"	11/32"	3 5/8"	2"	1 1/8"	4"	2 1/4"	7/8"	1/2"	9/16"	1/4"	1/2"ø	1.09#	2'-0"	3"	2'-0"	#5
6 B 12											3 3/4"	2"	1 1/8"	4"	2 1/4"	7/8"	5/8"	11/16"	3/8"	5/8"ø	1.60#	2'-0"	3"	2'-0"	#5
6 B 15.5											4 1/2"	2 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	3/4"	13/16"	1/2"	3/4"ø	3.75#	2'-6"	3"	2'-0"	#6
8 WF 17											4 1/2"	2 1/2"	1 1/4"	5 1/4"	2 3/4"	1 1/4"	3/4"	13/16"	1/2"	3/4"ø	3.27#	2'-6"	3"	2'-0"	#7
8 WF 20	3/4"ø x 3 1/2" Torque = 750"#	6"	2 1/4"	1 3/8"	3 1/2"	1 1/4"	1"	3/4"	5/16"	13/32"	4 7/8"	2 1/2"	1 1/2"	5 1/4"	2 3/4"	1 1/4"	7/8"	15/16"	9/16"	7/8"ø	3.93#	3'-0"	2 1/2"	2'-0"	#8
10 WF 21											5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	15/16"	9/16"	7/8"ø	4.75#	3'-0"	2 1/2"	2'-0"	#9
10 WF 25											5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	15/16"	9/16"	7/8"ø	4.79#	3'-0"	2 1/2"	2'-0"	#10
12 WF 27											5 3/8"	3"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	7/8"	15/16"	9/16"	7/8"ø	5.42#	3'-0"	2 1/2"	2'-0"	#11
3 1 5.7	1/2"ø x 2 1/2" Torque = 200"#	SEE DETAIL "A"									3 1/8"	1 1/2"	1 1/8"	2 5/8"	1 1/2"	9/16"	1/2"	9/16"	1/4"	1/2"ø	0.64#	1'-6"	3 1/2"	1'-6"	#5
4 1 7.7											3 1/8"	1 1/2"	1 1/8"	2 5/8"	1 1/2"	9/16"	1/2"	9/16"	1/4"	1/2"ø	0.64#	1'-6"	3 1/2"	1'-6"	#5



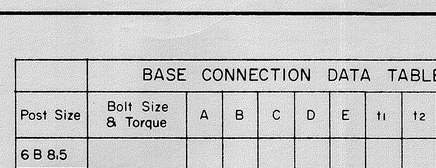
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	124	214



HINGE DETAIL

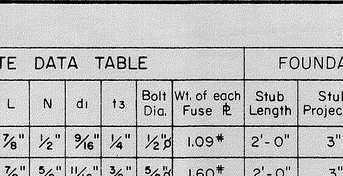


FOUNDATION DETAIL

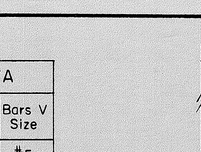


SECTION "A-A"

NOTE:
Sections shown are for installations on right shoulder and in gore. Reverse plate slot bevels for installations on left shoulder.



SECTION "B-B" SECTION "C-C" SECTION "D-D"



STIFFENER PLATE DETAIL



FUSE PLATE DETAIL



SHIM DETAIL

Furnish 2-0.012" ± thick and 2-0.032" ± thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM-B36.

GENERAL NOTES

1. Design shall conform with AASHTO Specifications for the design and Construction of Structural Supports for Highway Signs.
2. Materials and Fabrication shall conform to the requirements of the Standard Specifications and Special Provisions.
3. All holes shall be drilled. All plate cuts shall preferably be saw cuts, however; flame cutting will be permitted provided all edges are ground. Metal projecting beyond the plane of the plate face will not be tolerated.
4. Tighten the high strength bolts in the base connection only to the torque shown, do not overtighten. All bolts other than high strength bolts shall conform to ASTM A 307, Class A.
5. All structural steel, bolts, nuts and washers shall be galvanized as per the Standard Specifications and Special Provisions. Structural steel to be galvanized after fabrication except as noted.
6. Structural steel shall conform to the requirements of ASTM A 441.
7. Galvanize all of the post projecting above the concrete plus 6 inches minimum.
8. All friction fuse bolts shall be tightened in the shop following a method approved by the Engineer. Tightening shall be to such a degree as to obtain the following minimum residual tension in each bolt:

Bolt Size	Min. Tension	Bolt Size	Min. Tension
1/2"ø	12050 Lbs.	3/4"ø	28400 Lbs.
5/8"ø	19200 Lbs.	7/8"ø	36050 Lbs.

9. Supplemental Sign shall not be installed below the Breakaway Hinges.

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 12/29/69 DATE

APPROVED:
Walter D. Bethel — ASSISTANT CHIEF, ENGINEERING — 12-30-69 DATE

NO.	REVISION	APPROVED BY	DATE
1	Added General Note No. 9	H.T.	6/3/80

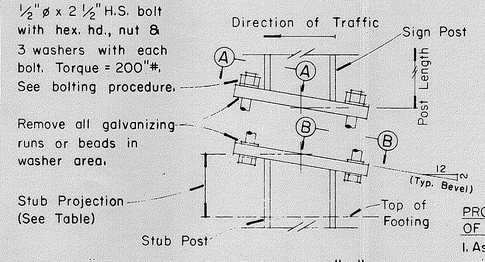
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
BREAK-AWAY SIGN SUPPORTS FOR GROUND MOUNTED GUIDE SIGNS

Not to Scale

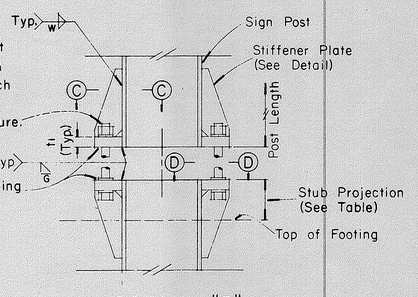
SHEET No. OF SHEETS DT204

124



DETAIL "A"
SIGN POST ℄ STUB POST
(For 4 1 7.7 and 3 1 5.7 Shapes)

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:
1. Assemble post to stub with bolts and with one flat washer on each bolt between plates.
2. Shim as required to plumb post.
3. Tighten all bolts the max. possible with 12" to 15" wrench to bed washers & shims and to clean bolt threads then loosen each bolt in turn & retighten bolts in systematic order to prescribed torque. (See Table)
4. Burr threads at junction with nut using a center punch to prevent nut loosening.



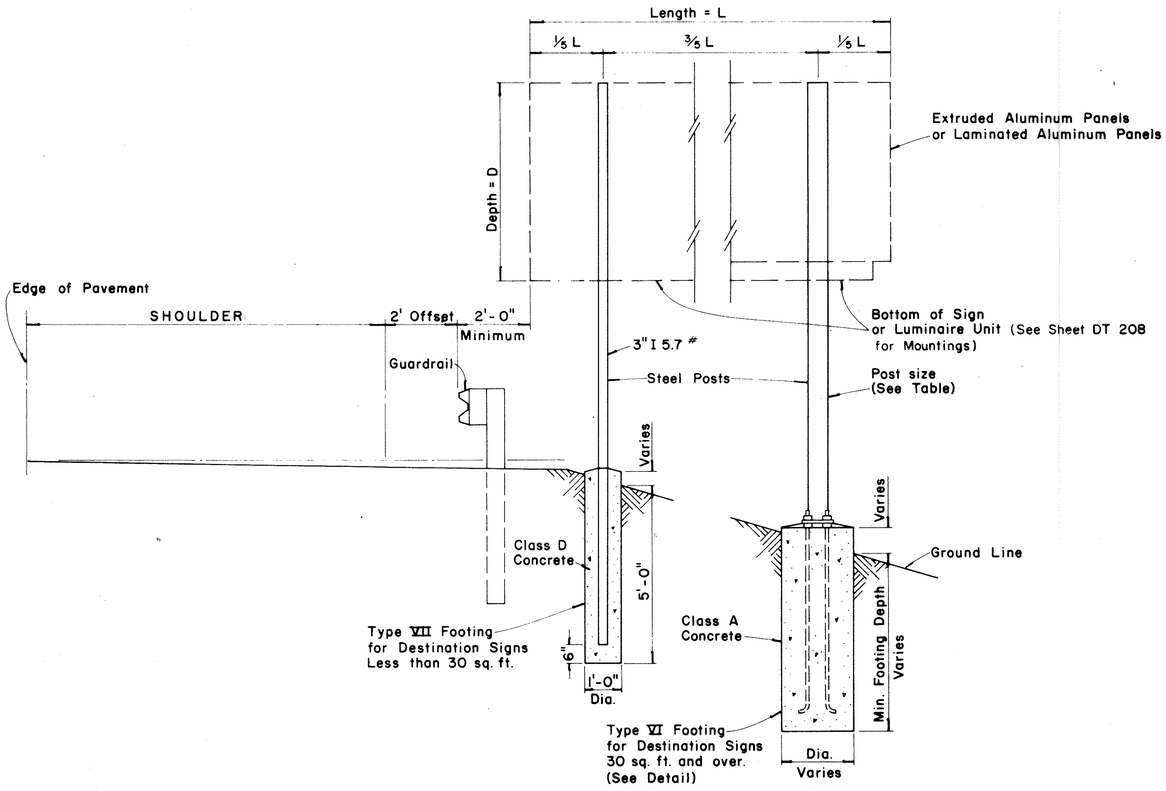
DETAIL "B"
SIGN POST ℄ STUB POST
(For WF and B Shapes)

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

PRINTED ON NO. 1000H CLEARPRINT

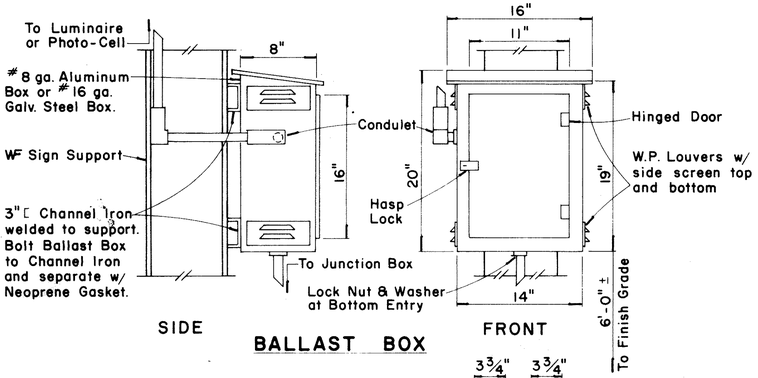
DATA TABLE FOR TYPE VI FOOTING

DIMENSIONS												ANCHOR BOLT DIA.	MINIMUM FOOTING DEPTH	
H	J	K	M	N	O	P	S	T	U	V	W		CUT	FILL
14"	5"	24"	17¼"	15⅝"	6"	1¼"	9"	6"	10"	2"	9"	1⅛"ø	4½'	4½'

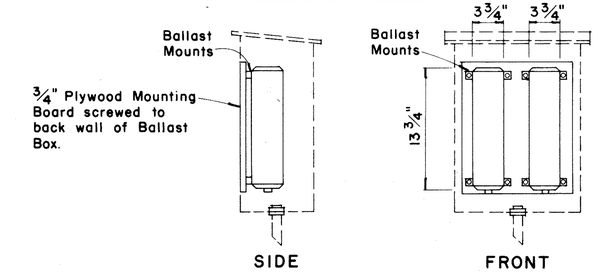


TYPICAL DESTINATION & GROUND MOUNTED EXPRESSWAY SIGN

Not to Scale



BALLAST BOX



BALLASTS

WEATHERPROOF BALLAST BOX

Scale: 1½" = 1'-0"

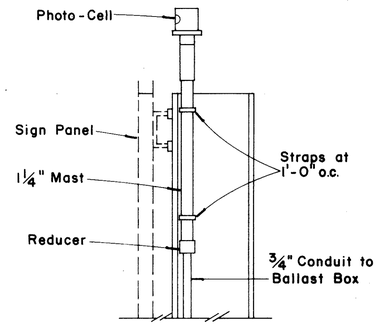
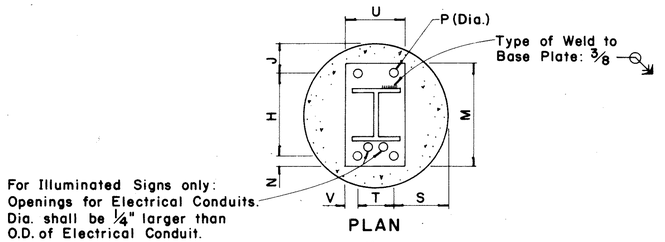
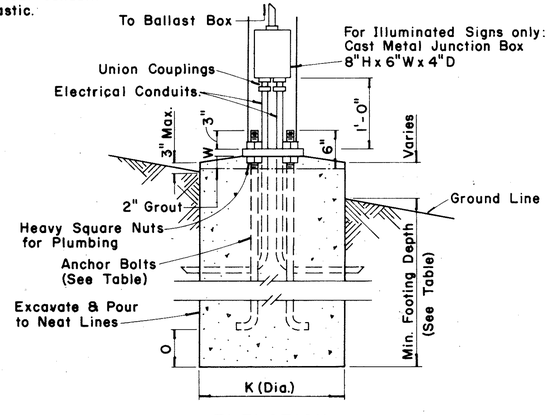


PHOTO-CELL DETAIL

Scale: 1½" = 1'-0"



PLAN



ELEVATION

TYPE VI FOOTING

Scale: 1" = 1'-0"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1983	124 S-1	214

DATE	REVISION
10/25/82	Sign post & footing details not included in contract plans.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS

DESTINATION & GROUND MOUNTED EXPRESSWAY SIGNS

PROJ. NO. F-011-1(14)

Scale: As Shown Date: Sept. 1982

SHEET No. OF SHEETS

C.O. 124 S-1

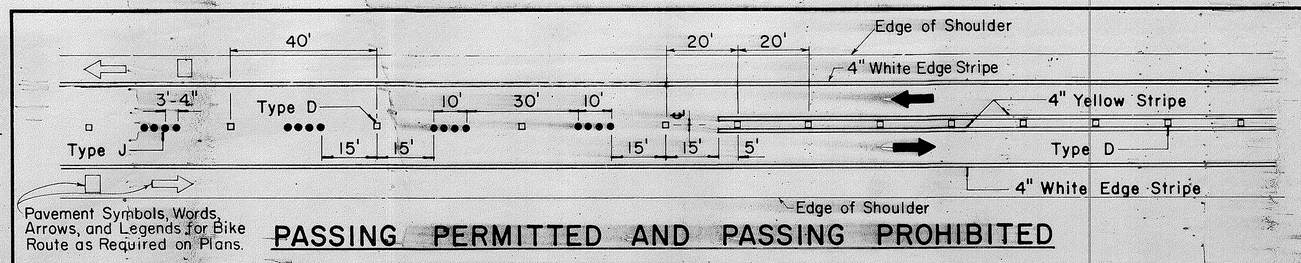
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

PRINTED ON NO. 1000H CLEARPRINT

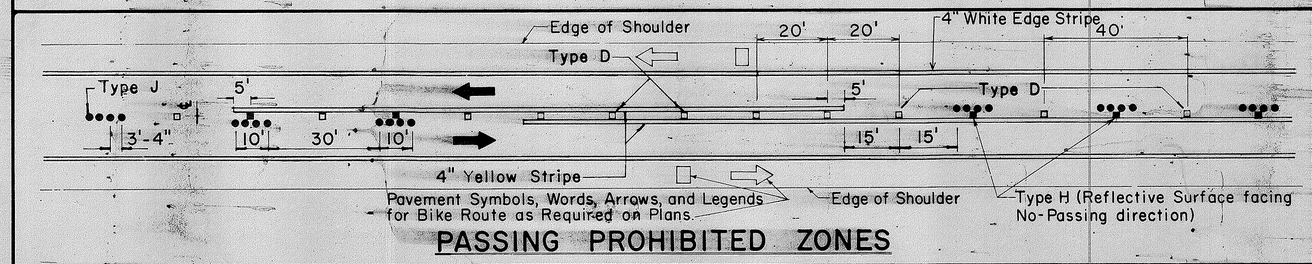
F-A-7

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	125	214

TWO - LANE

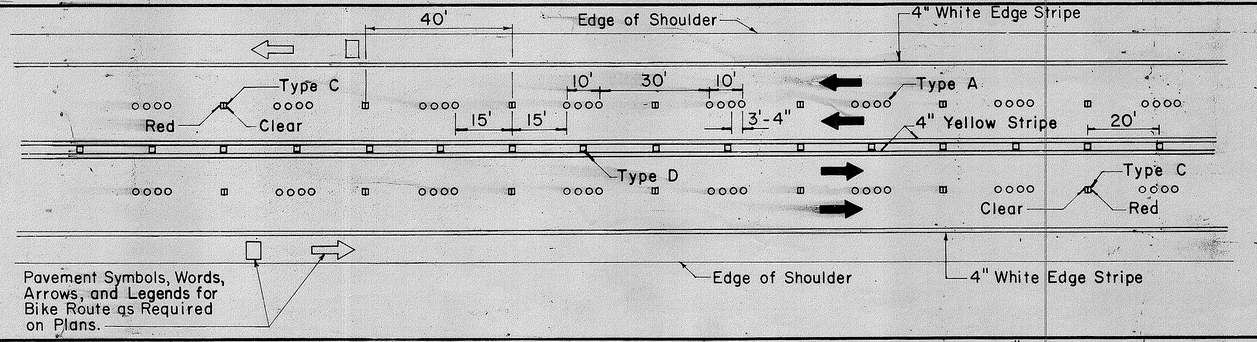


PASSING PERMITTED AND PASSING PROHIBITED

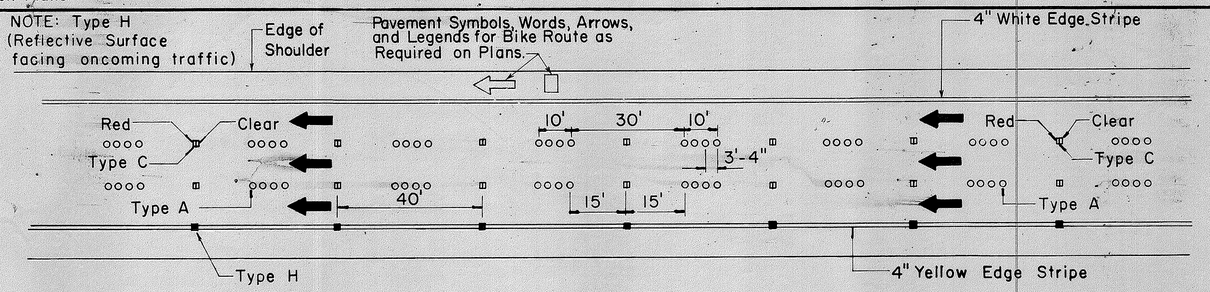


PASSING PROHIBITED ZONES

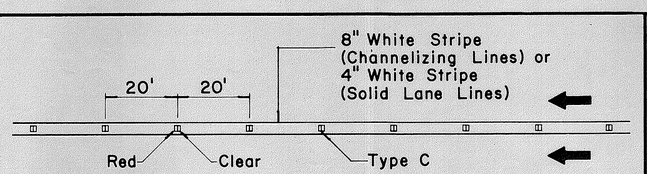
MULTI - LANE



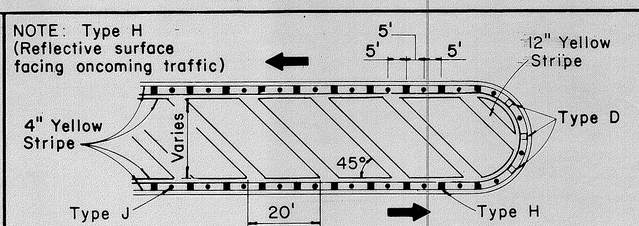
DIVIDED HIGHWAY AND FREEWAY



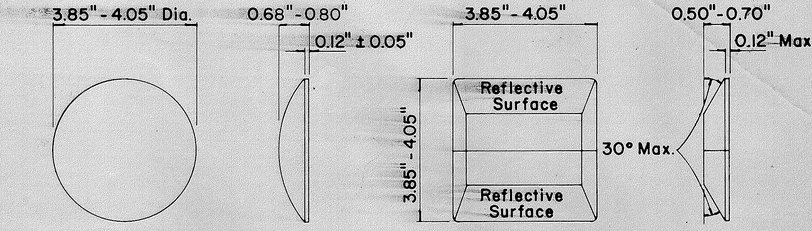
MISCELLANEOUS



CHANNELIZING LINES OR SOLID LANE LINES



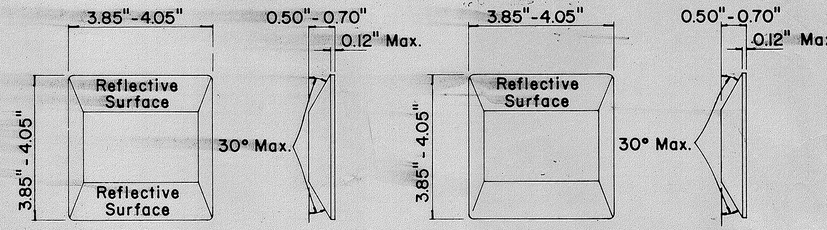
MEDIAN NOSE DELINEATION



TYPE A — NON-REFLECTIVE WHITE MARKER

TYPE C — RED-CLEAR REFLECTIVE MARKER

TYPE J — NON-REFLECTIVE YELLOW MARKER



TYPE D — TWO-WAY YELLOW REFLECTIVE MARKER

TYPE H — ONE-WAY YELLOW REFLECTIVE MARKER

GENERAL NOTES

1. Pavement marking and striping shall conform to the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.
2. 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:

Eiichi Tanaka — TRAFFIC ENGINEER — 7/21/78 DATE

APPROVED:

Herbert T. Takeishi — ASSISTANT CHIEF, ENGINEERING — 1/24/78 DATE

No.	REVISION	APPROVED BY	DATE
1	Supercedes 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

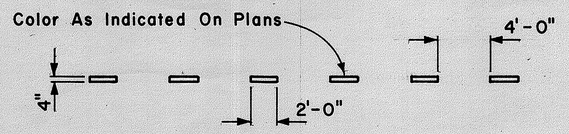
SHEET No. OF SHEETS DT 300

125

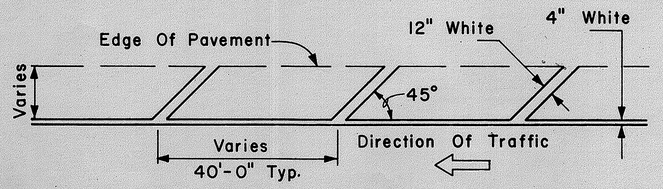
ORIGINAL PLAN	SURVEY PLOTTED BY	DRAWN BY	TRACED BY	DESIGNED BY	QUANTITIES BY	CHECKED BY	DATE
NOTE BOOK							
No.							

K-E IMPERIAL LA 3207

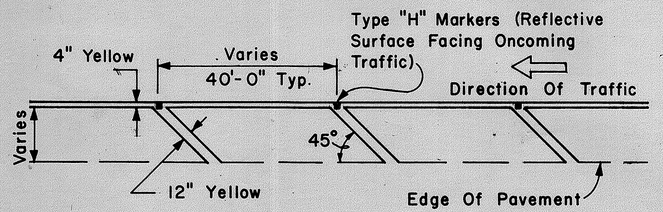
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	126	214



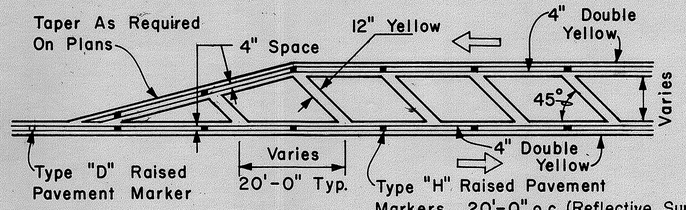
4" GUIDE LINE



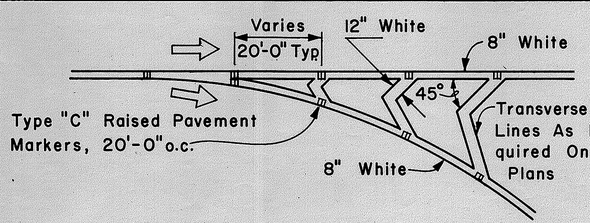
TRANSVERSE RIGHT SHOULDER MARKING



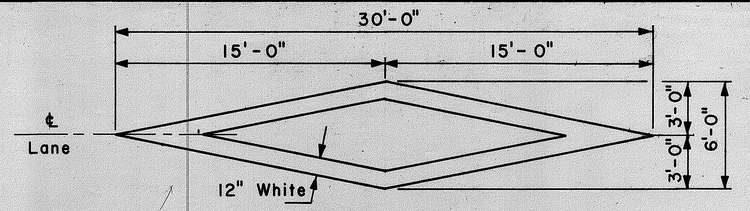
TRANSVERSE LEFT SHOULDER MARKING



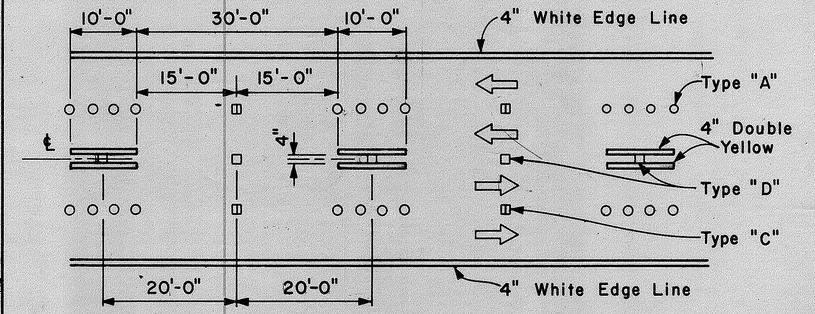
TRANSVERSE MEDIAN MARKING



CHANNELIZING ISLAND

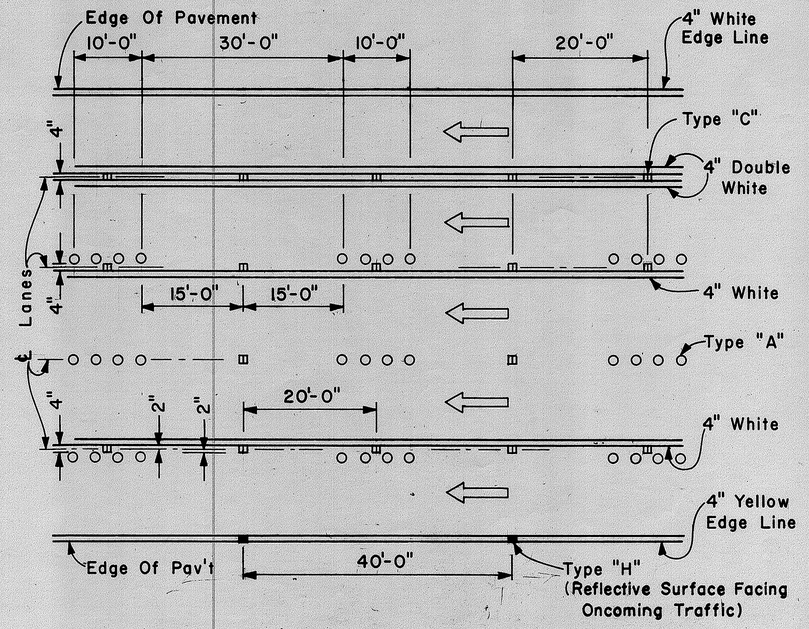


PAVEMENT DIAMOND



NOTE: Traffic Cone Usage Required.

MULTI-LANE REVERSIBLE LANES



MULTI-LANE LANE CHANGE RESTRICTION ZONES

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.

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 5/2/78 DATE

APPROVED:
Herbert Z. Takeiahi — ASSISTANT CHIEF, ENGINEERING — 5/3/78 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

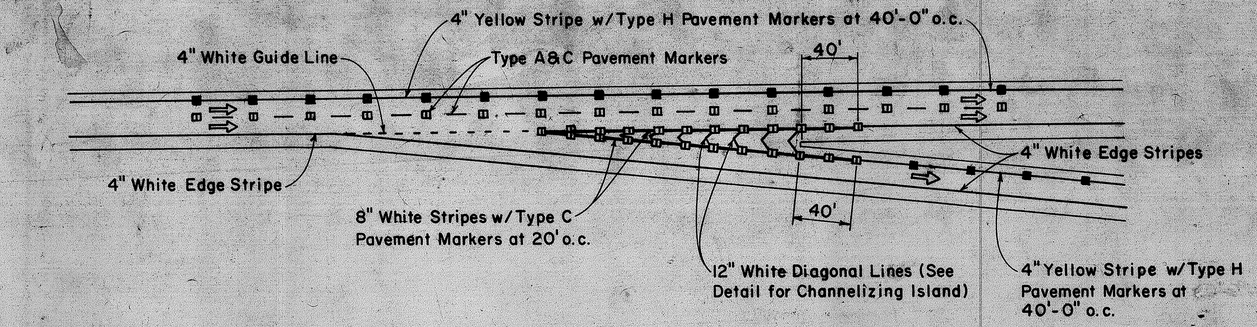
SHEET NO. OF SHEETS DT 302

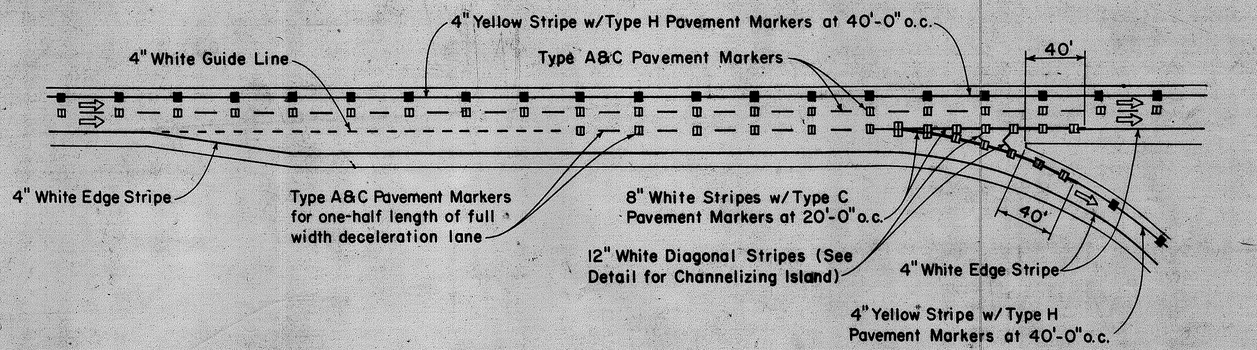
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	127	214

PARALLEL DECELERATION LANE — TAPERED DECELERATION LANE

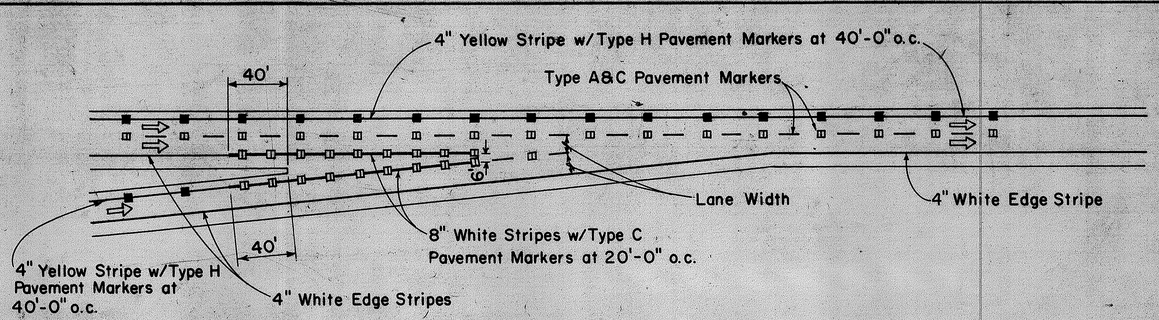
TYPICAL ROADWAY EXIT MARKINGS

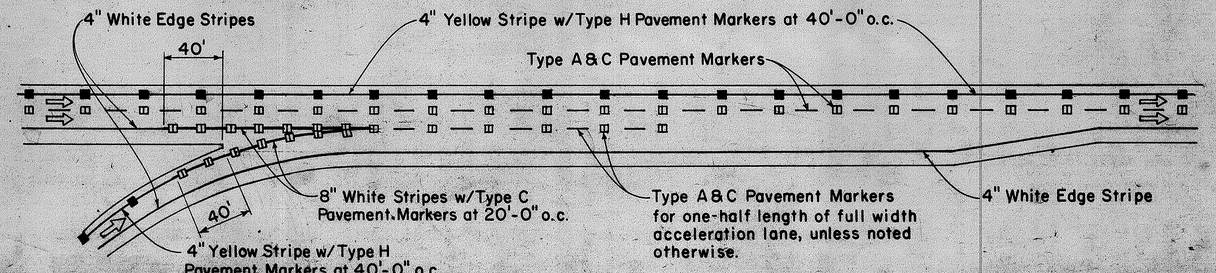




PARALLEL ACCELERATION LANE — TAPERED ACCELERATION LANE

TYPICAL ROADWAY ENTRANCE MARKINGS





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.

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 7/21/78 DATE

APPROVED:
Herbert S. Takeichi — ASSISTANT CHIEF ENGINEERING — 7/24/78 DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

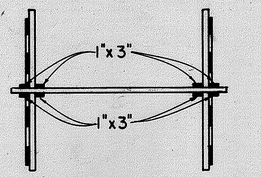
MISCELLANEOUS PAVEMENT MARKINGS

Not to Scale — July 1978

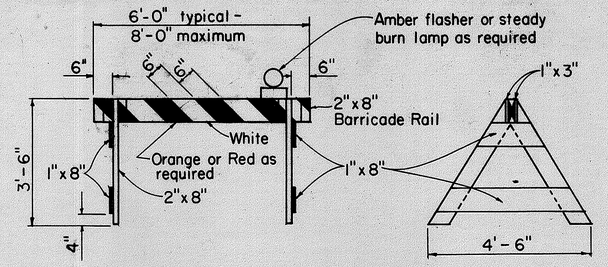
SHEET NO. OF SHEETS DT 304

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-011-1(14)	1982	128	214



PLAN VIEW

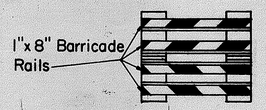


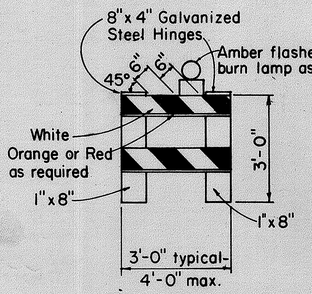
FRONT VIEW

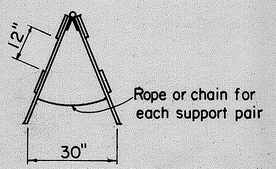
END VIEW

TYPE I BARRICADE

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



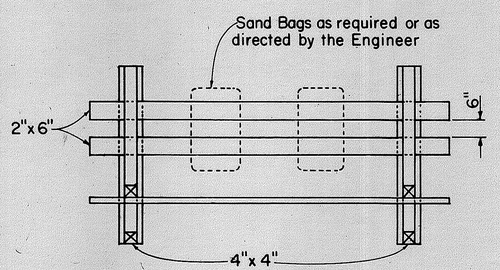




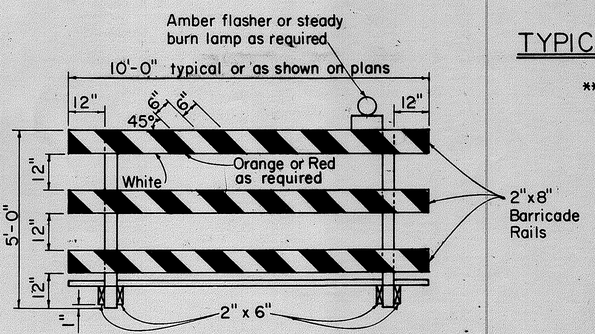
PLAN VIEW FRONT VIEW END VIEW

TYPE II BARRICADE

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



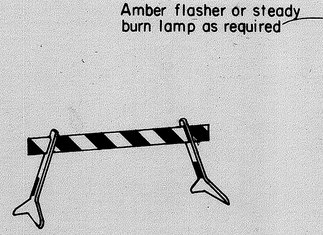
PLAN VIEW



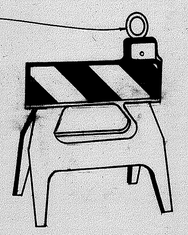
FRONT VIEW

TYPE III BARRICADE

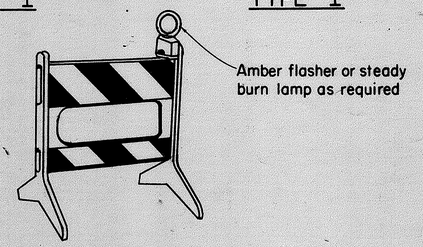
Scale: 1/2" = 1'-0"



TYPE I



TYPE I

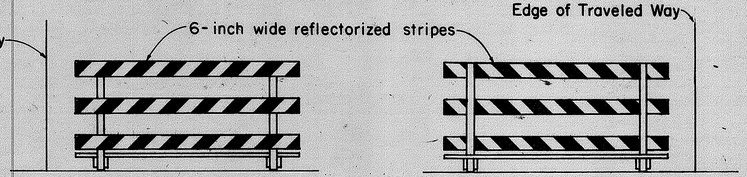


TYPE II

PLASTIC MOLDED BARRICADE OPTIONS*

Not to Scale

* Shop Drawings must be submitted for approval.

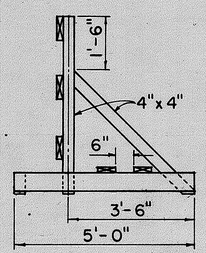


FRONT FACE BACK FACE

TYPICAL BARRICADE STRIPING DETAILS**

Not to Scale

** Similar for Types I & II



END VIEW

GENERAL NOTES

1. The front and back faces of each barrieade 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.

APPROVAL RECOMMENDED:

Eiichi Tanaka — TRAFFIC ENGINEER — 10/21/81 DATE

APPROVED:

Herbert S. Matsuda — ASSISTANT CHIEF, ENGINEERING — 10/23/81 DATE

NO.	REVISION	APPROVED BY	DATE
1	Supercedes DT 800 Approved 12/30/69	HT.	10/23/81

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS

BARRICADES

SCALE: As Shown

SHEET No. OF SHEETS DT 800

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