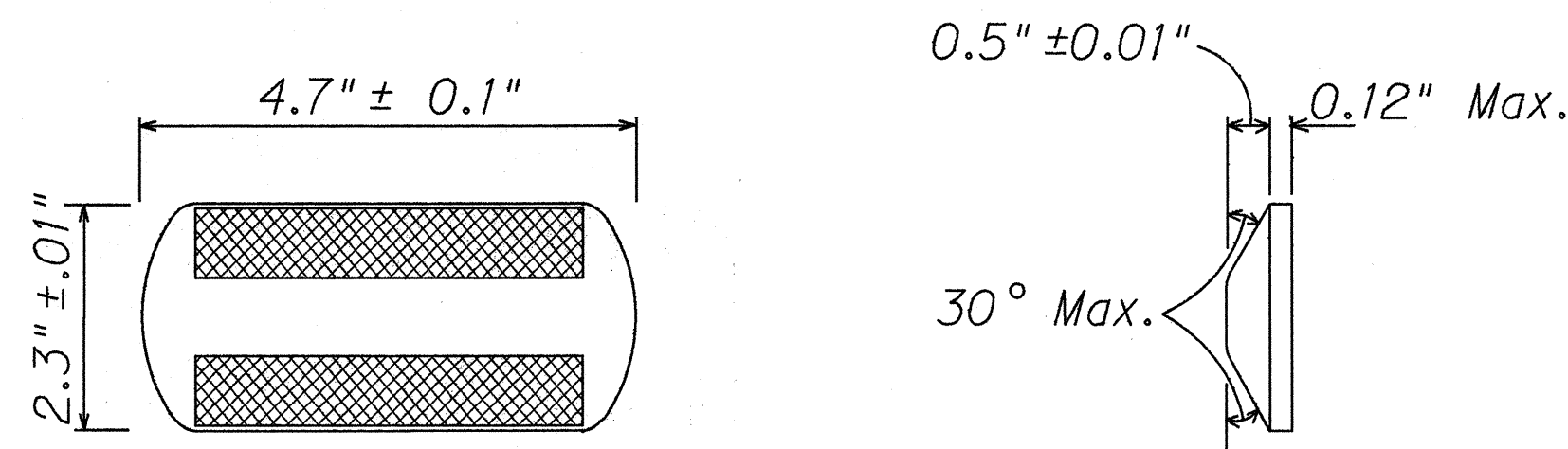


LEGEND

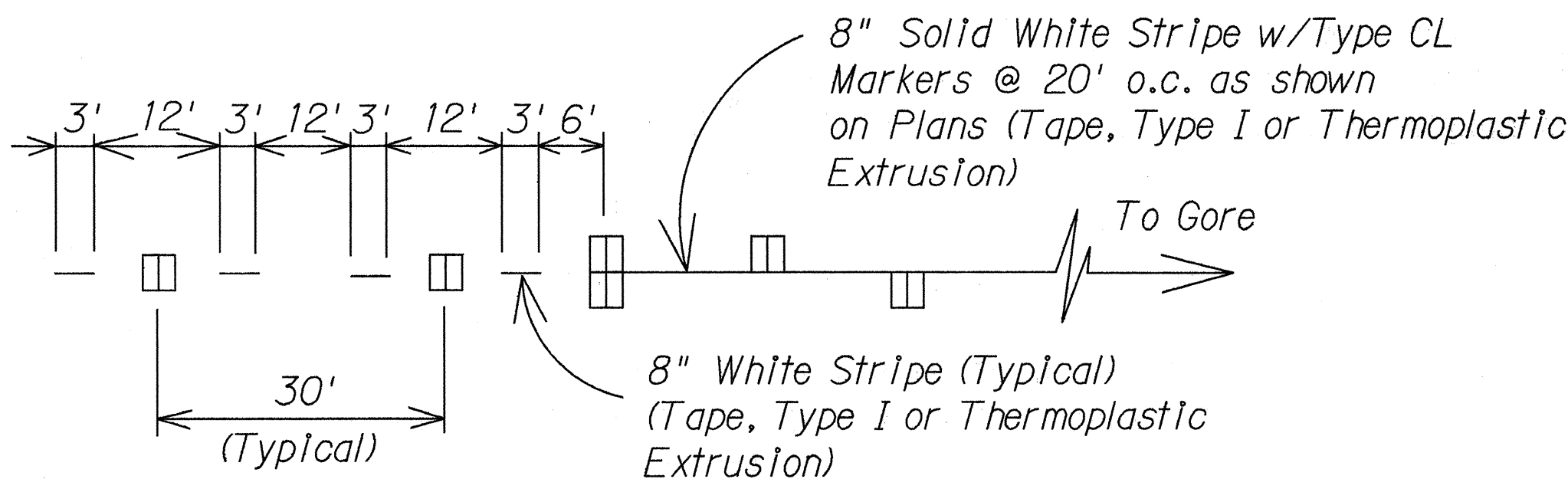
- 4 each Type A Raised Pavement Markers
Type CL Raised Pavement Markers @ 40'-0" o.c.
- 4 each Type J Raised Pavement Markers
Type DL Raised Pavement Markers @ 40'-0" o.c.
- 8" White Stripe with Type CL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow 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" White Stripe (Tape, Type I or Thermoplastic Extrusion)
- 4" or 8" White Edge Stripe with Type CL Raised Pavement Markers @ 40'-0" o.c. (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)
- 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 Stripe (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. (Tape, Type I or Thermoplastic Extrusion)

NOTES

- Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any Installation work.
- 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.
- Raised pavement markers shall not be installed within crosswalks.
- 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.
- Final locations of all signs shall be approved by the Engineer prior to any Installation work.
- 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.
- Final locations of all Stop Lines shall be approved by the Engineer prior to Installation.
- All pavement striping shall be as noted on the Legend or plans.
- 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.



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



LANE DROP MARKING
Not to Scale

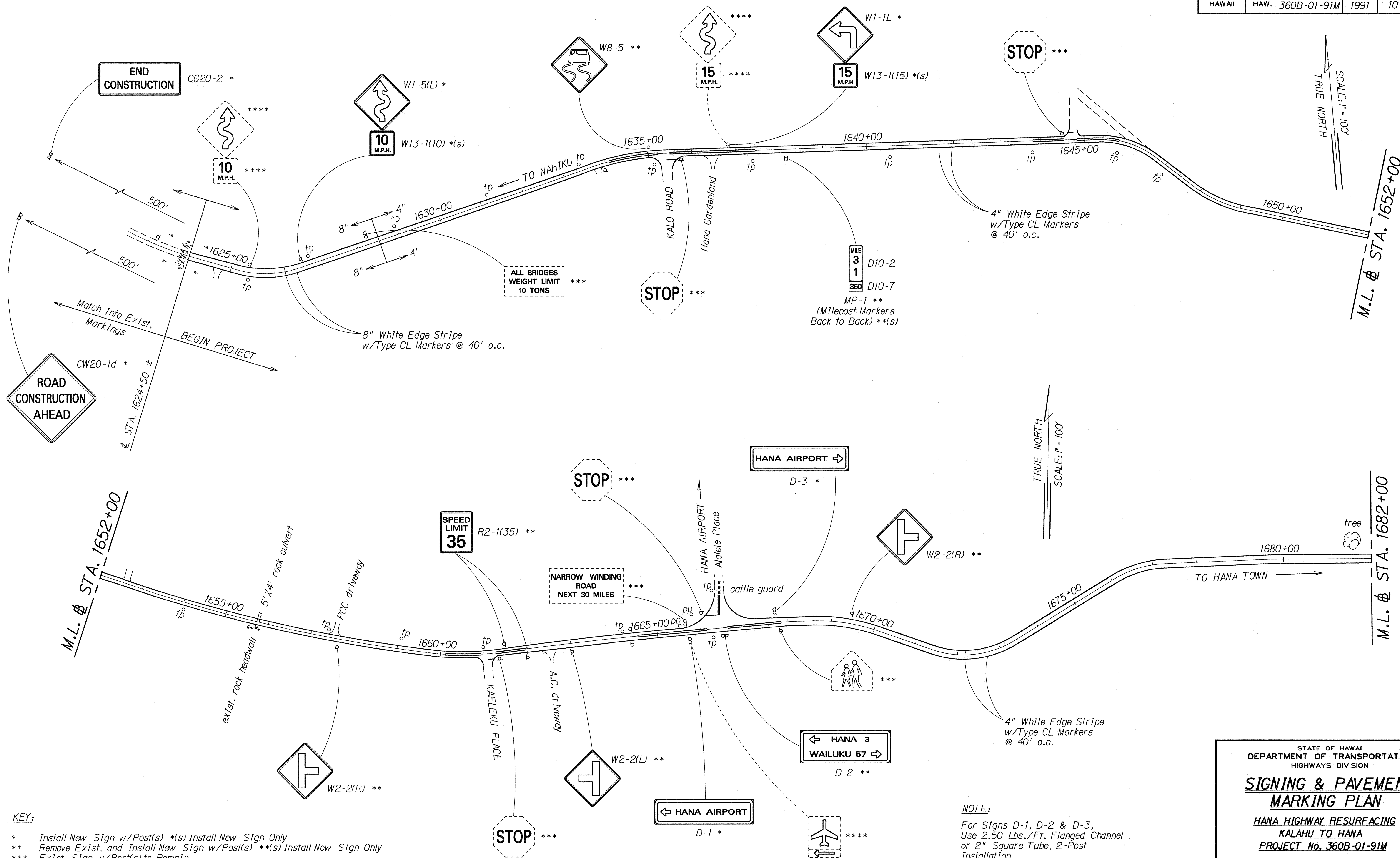
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LEGEND, DETAILS & NOTES

HANA HIGHWAY RESURFACING
KALAHU TO HANA
PROJECT No. 360B-01-91M

Scale: As Shown Date: Feb. 1991
SHEET No. 71 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-91M	1991	10	18



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

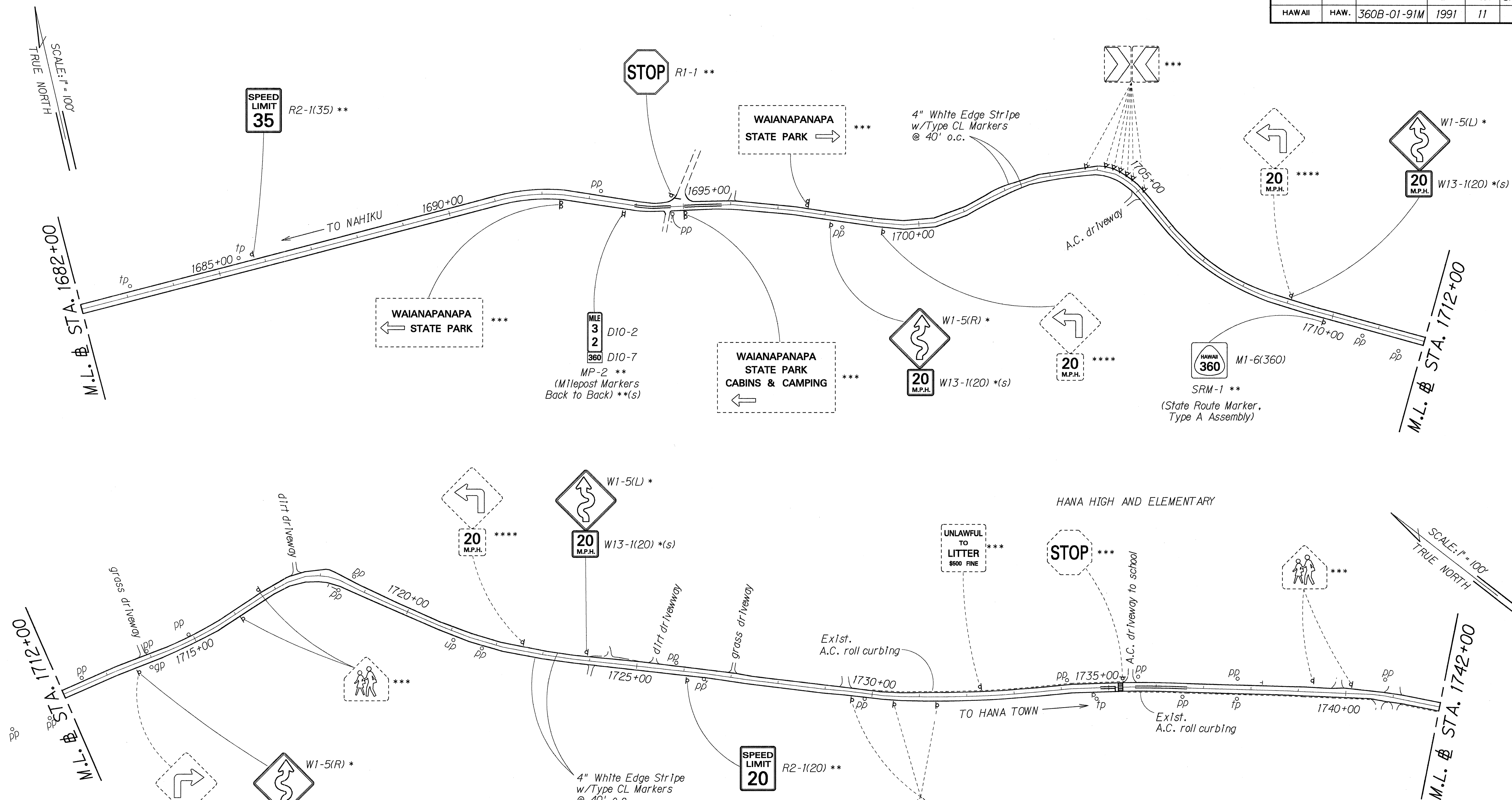
**SIGNING & PAVEMENT
MARKING PLAN**

**HANA HIGHWAY RESURFACING
KALAHU TO HANA**

PROJECT No. 360B-01-91M

Scale: 1"=100' Date: Feb. 1991
SHEET No. T2 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-91M	1991	11	18



KEY:

- * Install New Sign w/Post(s) *(s) Install New Sign Only
- ** Remove Exist. and Install New Sign w/Post(s) ***(s) Install New Sign Only
- *** Exist. Sign w/Post(s) to Remain
- **** Remove Exist. Sign w/Post(s)

NOTE:

Paint all sides of exist. A.C. roll curbs white. Payment to be made under Item No. 629.1050 - Bituminous Curb, Type 6 Markings.

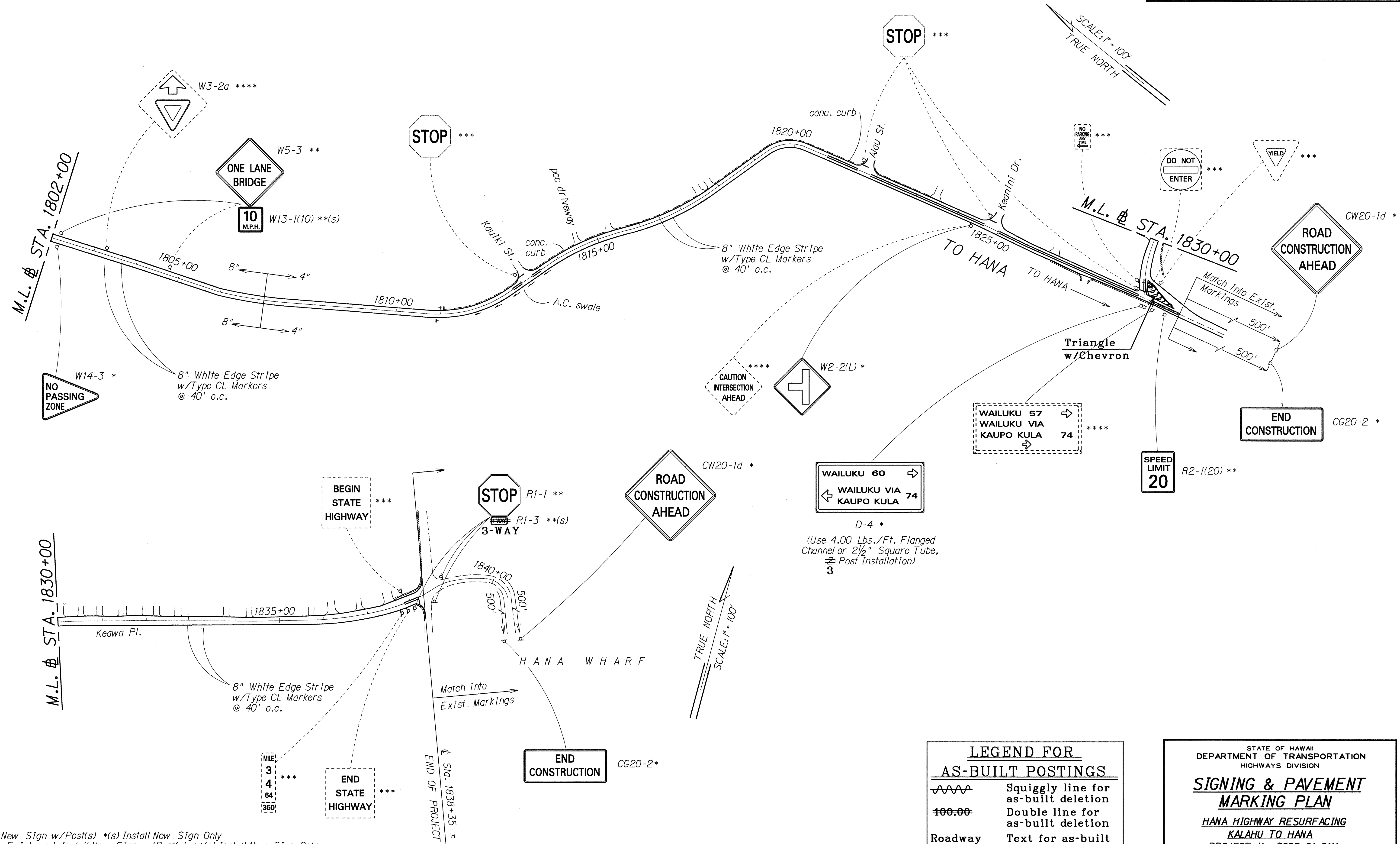
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & PAVEMENT MARKING PLAN

**HANA HIGHWAY RESURFACING
KALAHU TO HANA
PROJECT No. 360B-01-91M**

Scale: 1"=100' Date: Feb. 1991
SHEET No. 13 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-91M	1991	13	18



SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTE BOOK	
CHECKED BY	
N.	

KEY:

* Install New Sign w/Post(s) *(s) Install New Sign Only

** Remove Exst. and Install New Sign w/Post(s) ***(s) Install New Sign Only

*** Exst. Sign w/Post(s) to Remain

**** Remove Exst. Sign w/Post(s)

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & PAVEMENT
MARKING PLAN

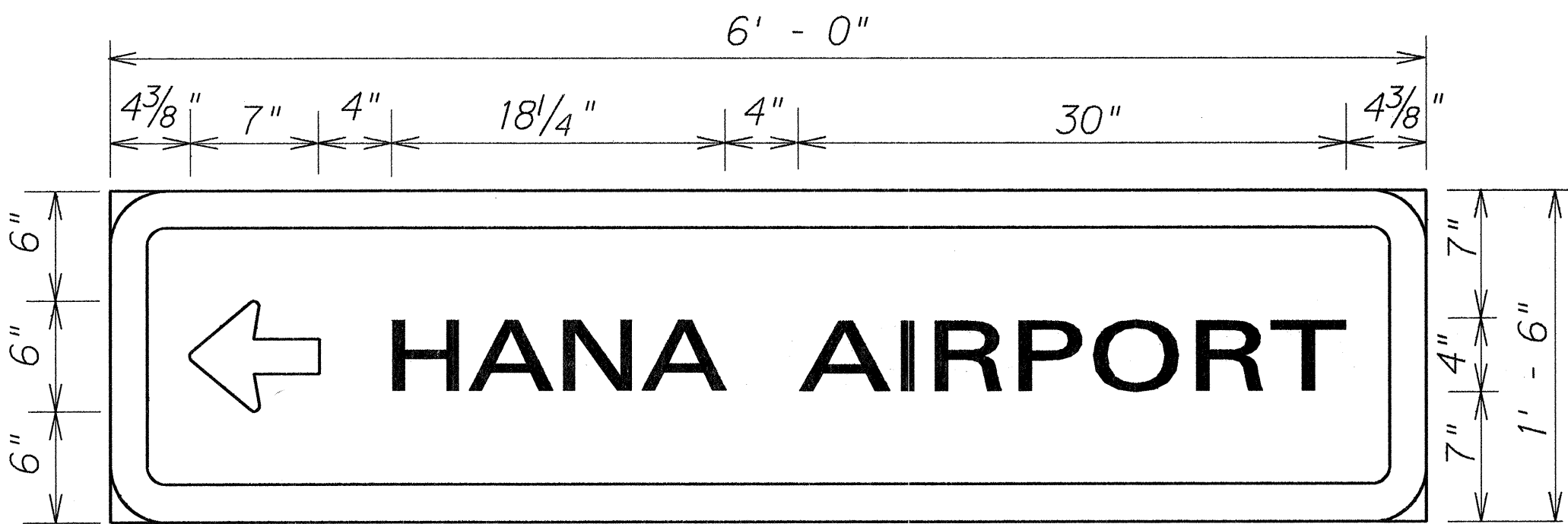
HANA HIGHWAY RESURFACING
KALAHU TO HANA
PROJECT No. 360B-01-91M

Scale: 1" = 100'
Date: Feb. 1991
SHEET No. 15 OF 10 SHEETS

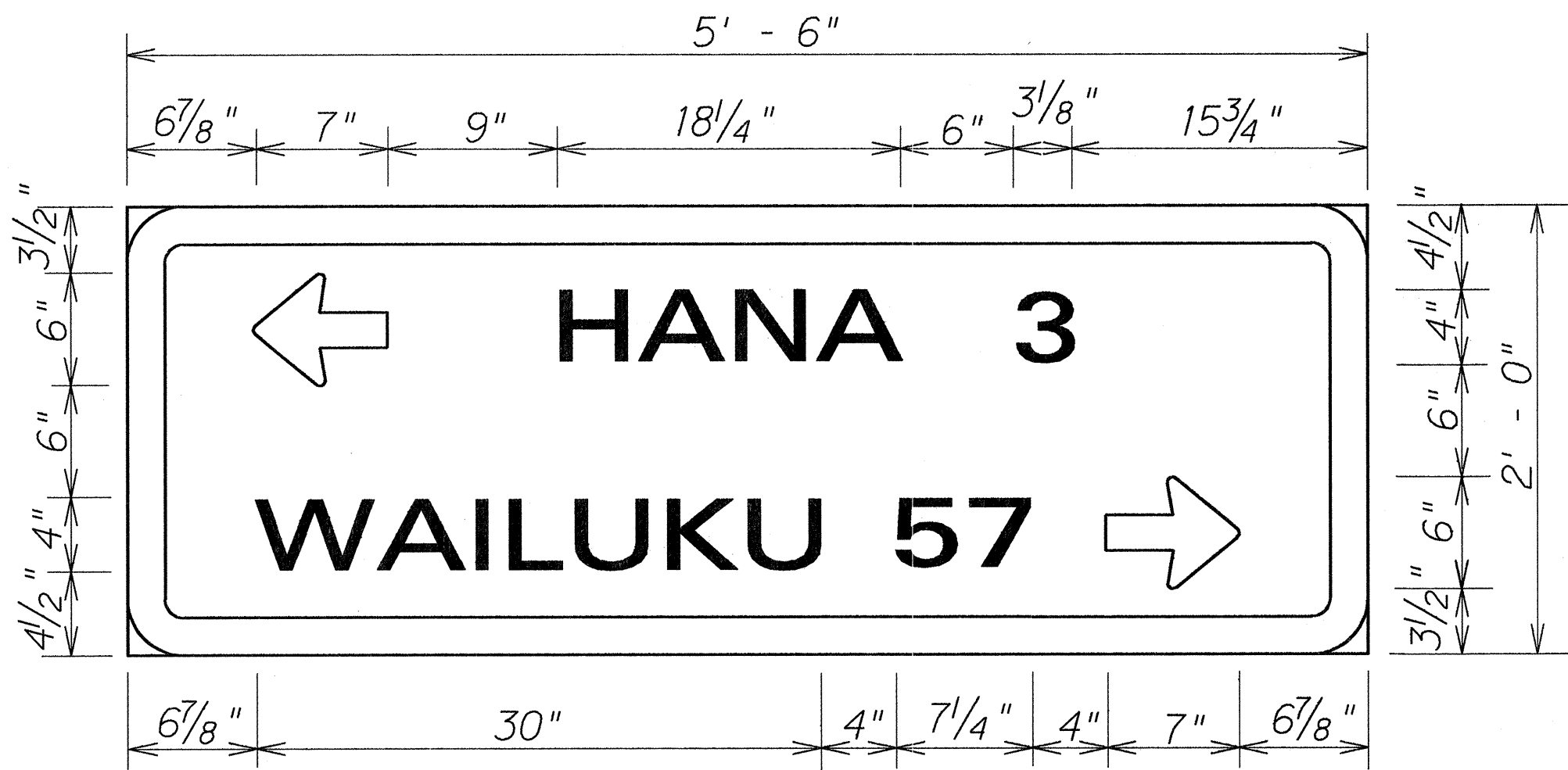
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-91M	1991	14	18

GENERAL NOTES

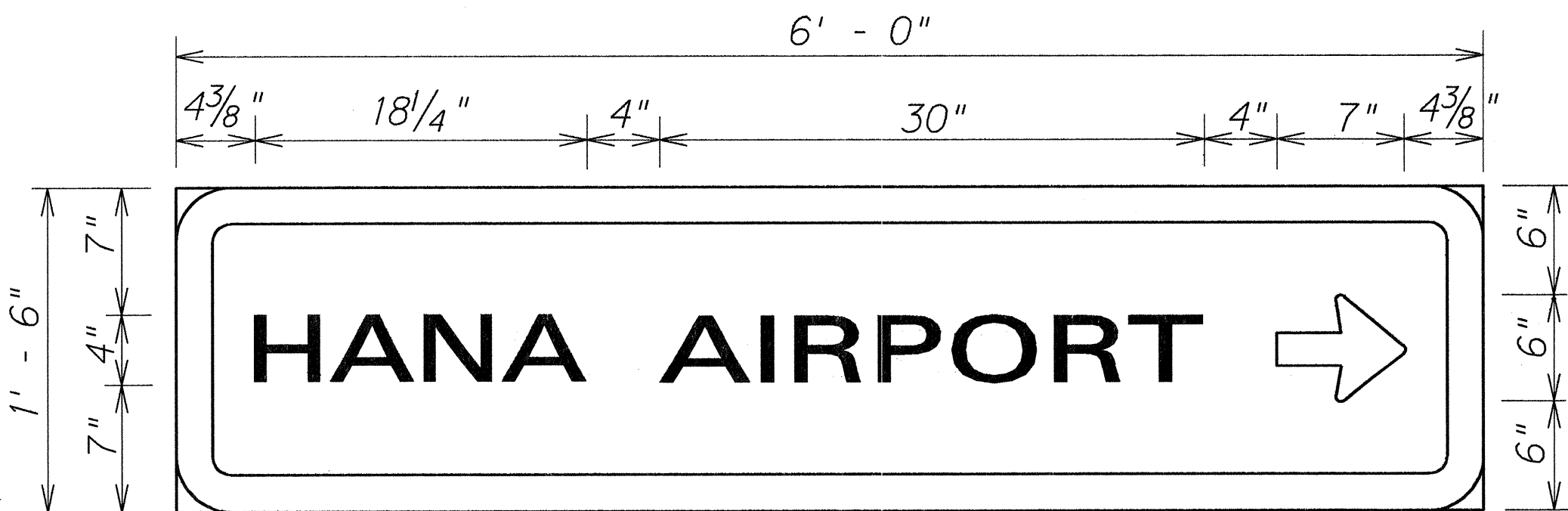
- Letter Size:
 - When letters are all uppercase, use series "E"
 - When initial uppercase letter is used in conjunction with lowercase letters, use series "E" (M) for uppercase letter.
- All signs shall conform to Section 621 of the Special Provisions and the latest editions and amendments of the following FHWA publications
 - "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
 - "Standard Highway Signs"
 - "Standard Alphabets for Highway Signs"
- Borders, messages, arrows, symbols and shield shall conform to details as shown on the plans and as specified in the MUTCD.
- Sign messages shall be as indicated on the plan.
- All panels shall be reflectorized in accordance with Section 712.20 of the Standard Specifications. Minimum width of panels shall be 2 ft. abutting edges of panels shall be in only one direction if vertical abutting edges are used, no horizontal abutting edges shall be allowed and vice versa.
- Contractor shall submit all sign splicing details to the Engineer for approval. All backing for signs 4 feet by 6 feet or less shall be of one sheet.
- Destination Sign Posts shall be as noted on the plans.



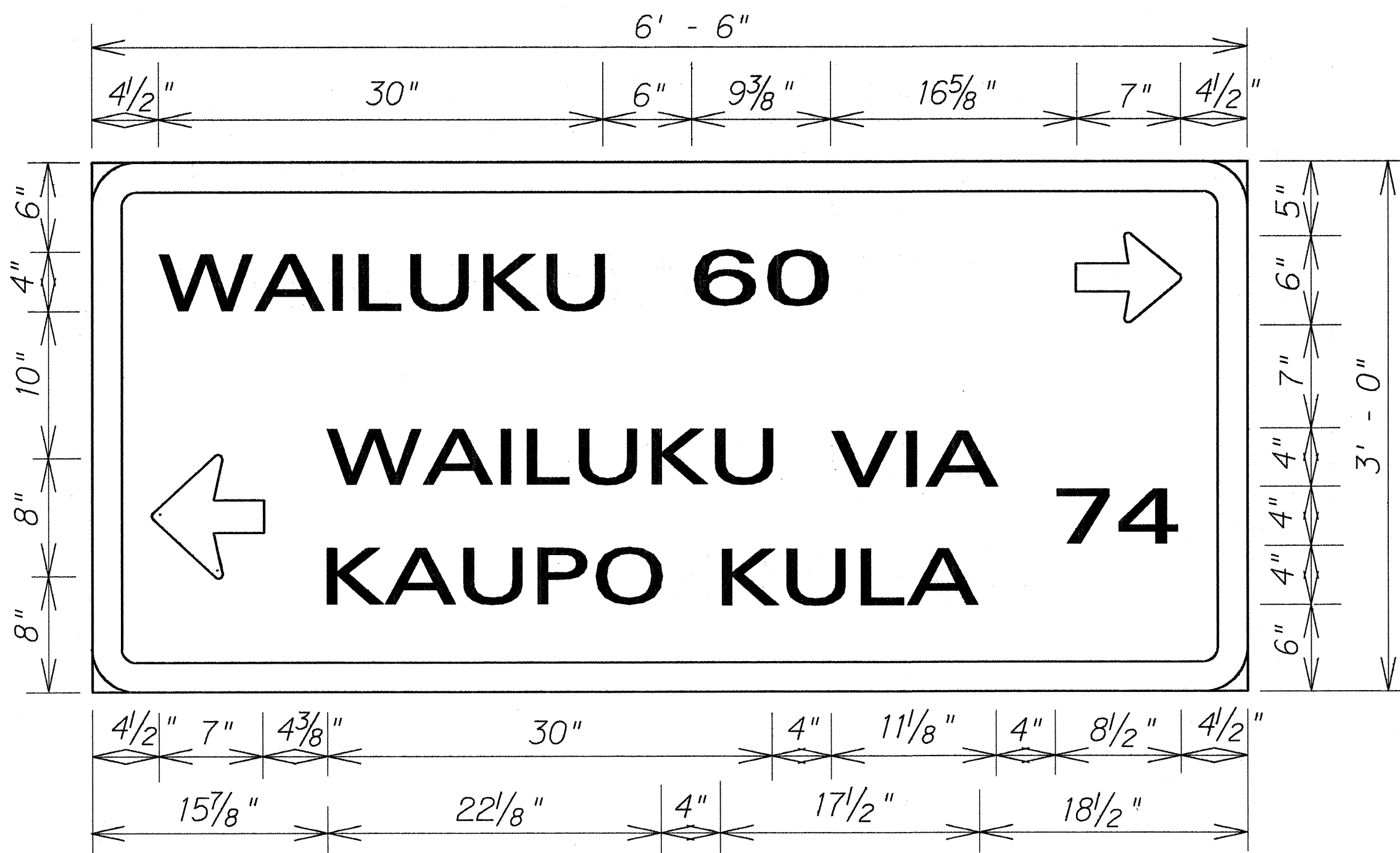
D - 1



D - 2



D - 3



D - 4

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
SIGN PANEL LAYOUT & NOTES
HANA HIGHWAY RESURFACING
KALAHU TO HANA
PROJECT No. 360B-01-91M

Scale: 1 1/2" = 1' - 0" Date: Feb., 1991

SHEET No. T6 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-91M	1991	15	18

DESTINATION SIGN SUMMARY						
SIGN NO.	LOCATION	MESSAGE	SIZE	OVERLAY AREA (SQ. FT.)	NEW PANEL AREA (SQ. FT.)	
					W/O POST	W/POST
D-1	STA.1665+70± RT.	↵ HANA AIRPORT	6'-0" x 1'-6"			9.00
D-2	STA. 1666+50± RT.	↵ HANA 3 WAILUKU 57 ➡	5'-6" x 2'-0"			11.00
D-3	STA. 1667+75± LT.	HANA AIRPORT ➡	6'-0" x 1'-6"			9.00
D-4	STA.1828+60± RT.	WAILUKU 60 ➡ ↵ WAILUKU VIA KAUPU KULA 74	6'-6" x 3'-0"			19.50
TOTAL						48.50

CONSTRUCTION SIGN SUMMARY				
SIGN NO.	LOCATION	MESSAGE	W/POSTS	W/O POST
CW20-1d	STA. 1619+50± RT.	ROAD CONSTRUCTION AHEAD	1	
CG20-2	STA. 1619+50± LT.	END CONSTRUCTION	1	
CG20-2	UA KEA RD. - 500' AFTER INTERSECTION	END CONSTRUCTION	1	
CW20-1d	UA KEA RD. - 500' BEFORE INTERSECTION	ROAD CONSTRUCTION AHEAD	1	
CG20-2	HANA HWY. - 500' AFTER KEAWA PL.	END CONSTRUCTION	1	
CW20-1d	HANA HWY. - 500' BEFORE KEAWA PL.	ROAD CONSTRUCTION AHEAD	1	
CG20-2	KEAWE PL. - 500' AFTER END OF PROJECT	END CONSTRUCTION	1	
CW20-1d	KEAWE PL. - 500' BEFORE END OF PROJECT	ROAD CONSTRUCTION AHEAD	1	
TOTAL			8	

REFLECTOR MARKER SUMMARY					
TYPE	QUANTITY				
	W/O POST		W/FLEXIBLE POST (TYPE B)		W/STEEL POST
	YELLOW	WHITE	YELLOW	WHITE	YEL. w/BLKSTRIPES
RM-4					2
RM-3			30		

ORIGINAL PLAN

DATE

SURVEY PLOTTED BY

DATE

DESIGNED BY

DATE

NOTED BY

DATE

CHECKED BY

DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS SUMMARIES

HANA HIGHWAY RESURFACING
KALAHU TO HANA
PROJECT No. 360B-01-91M

Date: Feb., 1991

SHEET No. 15 OF 10 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	_____
	TRACED BY _____	_____
	DESIGNED BY _____	_____
	QUANTITIES BY _____	_____
N _o _____	CHECKED BY _____	_____

EDGE STRIPING SUMMARY

APPROXIMATE STATION TO STATION	PAVEMENT STRIPING				TYPE CL MARKER (EA.)
	LT.E.P.		RT.E.P.		
	8"	4"	8"	4"	
1624+50 - 1628+50	—	—	400	—	10
1628+50 - 1635+25	—	—	—	675	17
1635+70 - 1661+00	—	—	—	2,530	64
1661+20 - 1768+15	—	—	—	10,695	268
1768+15 - 1807+00	—	—	3,885	—	98
1807+00 - 1838+35	—	—	—	3,135	79
1624+50 - 1628+50	400	—	—	—	10
1628+50 - 1644+70	—	1,620	—	—	41
1644+85 - 1646+00	115	—	—	—	6
1646+00 - 1666+30	—	2,030	—	—	51
1666+60 - 1694+80	—	2,820	—	—	71
1695+00 - 1735+40	—	4,040	—	—	101
1735+50 - 1807+00	7,150	—	—	—	179
1,807+00 - 1813+00	—	600	—	—	15
1813+30 - 1821+65	—	835	—	—	21
1821+80 - 1824+75	—	295	—	—	8
1825+00 - 1838+35	—	1,335	—	—	34
TOTAL	7,665	13,575	4,285	17,035	1,073

INTERSECTION STRIPING SUMMARY

APPROXIMATE STATION TO STATION	LOCATION	MARKINGS		
		8" STRIPE (LIN. FT.)	12" STRIPE (LIN. FT.)	TYPE CL (EACH)
1827+50 -1827+80	Hana Hwy. & Keawa Pl. (Channelizing Island)	220	100	12
TOTAL		220	100	12

MISCELLANEOUS SUMMARIES

Date: Feb., 1991

SHEET No. 78 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-91M	1991	17	18

PAVEMENT MARKING SUMMARY	
DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE A -----	---
TYPE CL -----	1,085 EA.
TYPE DL -----	942 EA.
TYPE HL -----	64 EA.
TYPE J -----	512 EA.
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) -----	---
4-INCH PAVEMENT STRIPE (YELLOW) -----	2,275 L.F.
8-INCH PAVEMENT STRIPE (WHITE) -----	---
12-INCH PAVEMENT STRIPE (WHITE) -----	---
12-INCH PAVEMENT STRIPE (YELLOW) -----	---
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) -----	16,135 L.F.
PAVEMENT ARROW -----	---
PAVEMENT WORD -----	---
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) -----	30,610 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) -----	---
8-INCH PAVEMENT STRIPE (WHITE) -----	12,170 L.F.
12-INCH PAVEMENT STRIPE (WHITE) -----	100 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) -----	---
THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) -----	---
8-INCH PAVEMENT STRIPE (WHITE) -----	---
12-INCH PAVEMENT STRIPE (WHITE) -----	260 L.F.
CROSSWALK MARKINGS -----	4 LANE

OBJECT MARKER SUMMARY		
APPROX. STA.	REMARKS	TYPE II (EACH)
1625+40 RT.	Install on Existing Pole	1
1681+50 LT.	Install on Existing Tree	1
1683+10 LT.	Install on Existing Pole	1
1635+30 LT.	Install on Existing Pole	1
1693+15 LT.	Install on Existing Pole	1
1694+80 RT.	Install on Existing Pole	1
1712+60 LT.	Install on Existing Pole	1
1713+90 RT.	Install on Existing Pole	1
1714+00 LT.	Install on Existing Pole	1
1714+90 LT.	Install on Existing Pole	1
1718+50 RT.	Install on Existing Pole	1
1721+10 RT.	Install on Existing Pole	1
1721+70 RT.	Install on Existing Pole	1
1726+40 RT.	Install on Existing Pole	1
1729+85 RT.	Install on Existing Pole	1
1743+75 RT.	Install on Existing Pole	1
1744+75 RT.	Install on Existing Pole	1
1745+90 RT.	Install on Existing Pole	1
1747+30 RT.	Install on Existing Pole	1
1750+90 RT.	Install on Existing Pole	1
1774+20 RT.	Install on Existing Pole	1
1777+85 RT.	Install on Existing Pole	1
1785+30 RT.	Install on Existing Pole	1
1828+60 RT.	Install on Existing Pole	1
TOTAL		24

EXISTING A.C. ROLL CURB SUMMARY		
APPROXIMATE STA. TO STA.	LENGTH (LIN.FT.)	
1730+00 - 1735+30 LT.	530	
1735+40 - 1740+50 RT.	510	
1740+80 - 1774+40 RT.	2,820	
1777+70 - 1786+15 RT.	810	
1786+40 - 1787+50 LT.	110	
TOTAL	4,780	

MILEPOST SUMMARY				
SIGN ASSEMBLY	LOCATION	SIGN NO. AND MESSAGE	W/POST	W/O POST
MP-1	STA. 1638+15± RT.	D10-2 MILE 31 D10-7 360	1	1
MP-2	STA. 1693+70± RT.	D10-2 MILE 32 D10-7 360	1	1
MP-3	STA. 1743+60± RT.	D10-2 MILE 33 D10-7 360	1	1
MP-4	STA. 1799+10± RT.	D10-2 MILE 34 D10-7 360	1	1
TOTAL			4	4

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
MISCELLANEOUS SUMMARIES
HANA HIGHWAY RESURFACING
KALAHU TO HANA
PROJECT No. 360B-01-91M

Date: Feb., 1991
SHEET No. T9 OF 10 SHEETS

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

REGULATORY AND WARNING SIGN SUMMARY					
SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POST	W/O POST
R1-1	STOP	7			
R1-2	YIELD	2			
R1-3	3-WAY		3		
R2-1(20)	SPEED LIMIT 20	3			
R2-1(30)	SPEED LIMIT 30	1			
R2-1(35)	SPEED LIMIT 35	2			
RSP-1	TO ONCOMING TRAFFIC		2		
W1-1(L)	TURN SIGN SYMBOL	1			
W1-5(R)	WINDING ROAD SYMBOL	2			
W1-5(L)	WINDING ROAD SYMBOL	5			
W2-2(R)	├	2			
W2-2(L)	┤	2			
W3-2a	YIELD AHEAD SYMBOL	1			
W5-3	ONE LANE BRIDGE	3			
W8-5	SLIPPERY WHEN WET SYMBOL	1			
W13-1(10)	10 M.P.H.		4		
W13-1(15)	15 M.P.H.		3		
W13-1(20)	20 M.P.H.		4		
W13-3	NO PASSING ZONE	4			
	TOTAL	36	16		

GUIDE SIGN SUMMARY					
SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POST	W/O POST
D9-2(R)	H →	1			
D9-2(L)	H ←	1			
D9-14(R)	POLICE →	1			
	TOTAL	3			

SCHOOL SIGN SUMMARY					
SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POST	W/O POST
S1-1	SCHOOL ADVANCE SYMBOL	1			
S4-2	WHEN CHILDREN ARE PRESENT		1		
S4-3	SCHOOL		1		
	TOTAL	1	2		

ROUTE MARKER SUMMARY						
SIGN ASSEMBLY	LOCATION	SIGN NO. AND MESSAGE	TYPE A ASSEMBLY		TYPE B ASSEMBLY	
			W/POST	W/O POST	W/POST	W/O POST
SRM-1	STA. 1709+90± RT.	M1-6(360) 360	1			
SRM-2	STA. 1786+60± LT.	M3-4 WEST M1-6(360) 360	1			
SRM-3	STA. 1786+90± RT.	M1-6(31) M6-3 M1-6(360) 360 M6-2(R) ↗			1	
SRM-4	STA. 1787+75± LT.	M1-6(360) 360 M1-6(L) ← M1-6(31) 31 M1-6(R) →			1	
SRM-5	STA. 1787+70± RT.	M3-2 EAST M1-6(360) 360	1			
SRM-6	STA. 1789+10± LT.	M2-1 JCT M1-6(360) 360	1			
TOTAL			4		2	

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
IN.	