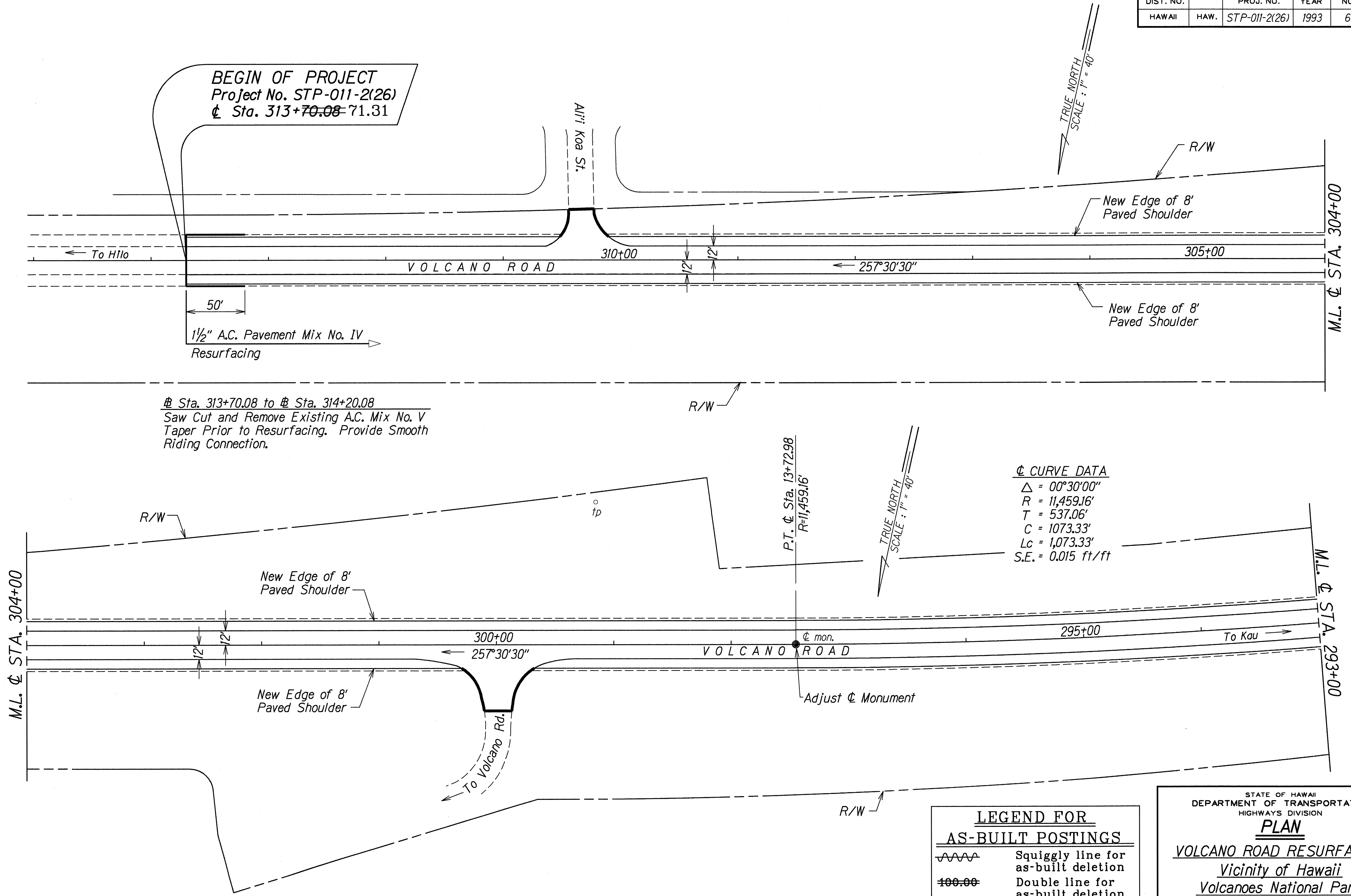
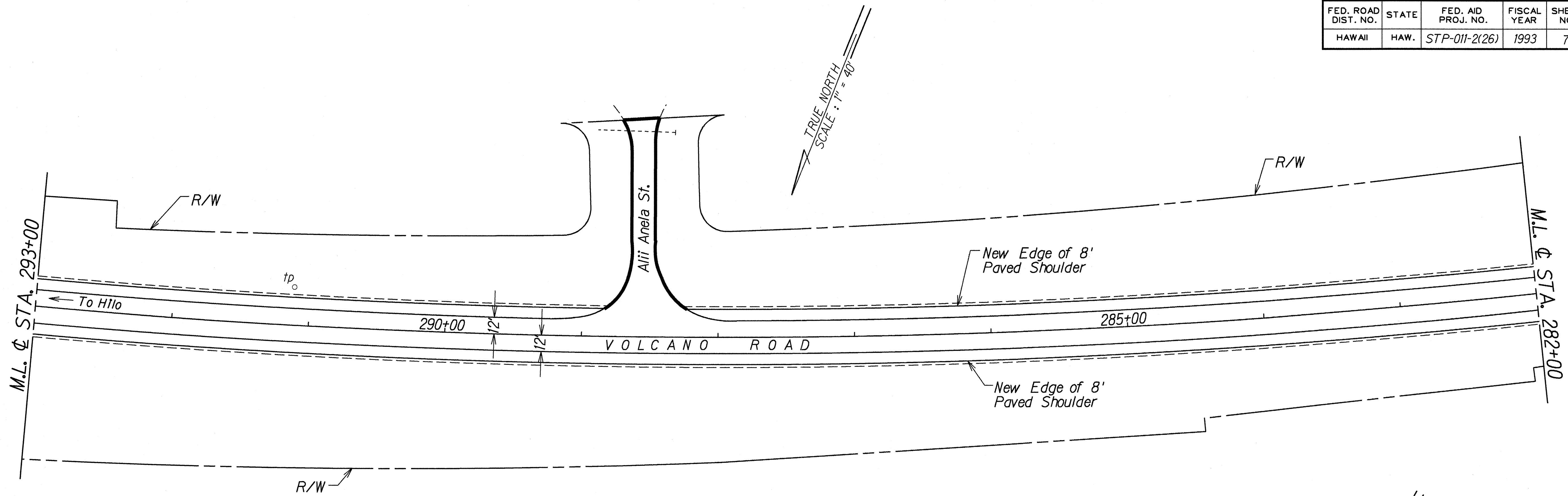


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	6	15

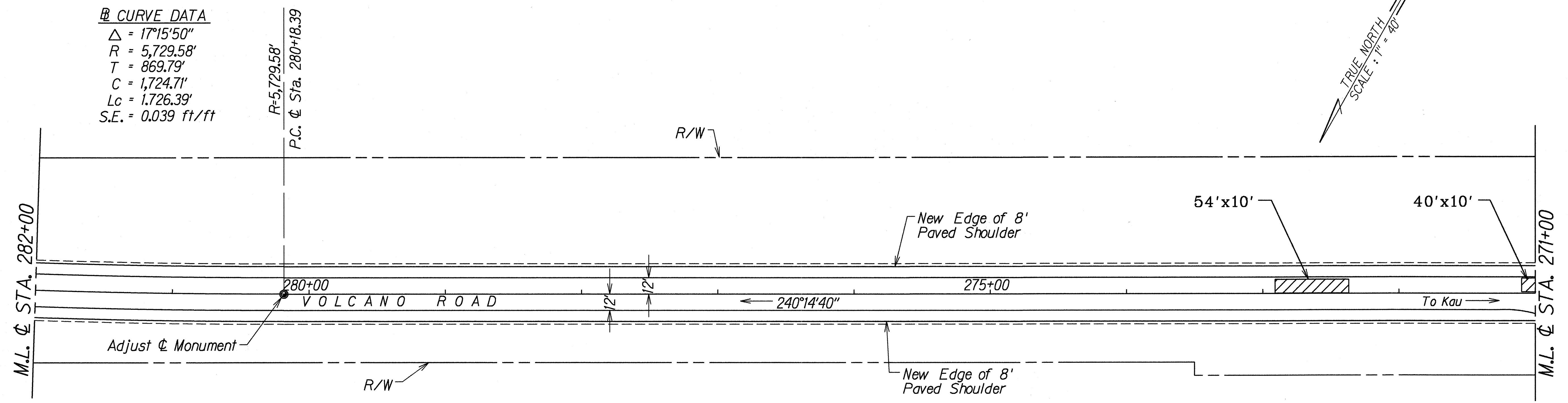


"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	7	15



CURVE DATA
 $\Delta = 17^{\circ}15'50''$
 $R = 5,729.58'$
 $T = 869.79'$
 $C = 1,724.71'$
 $Lc = 1,726.39'$
 $S.E. = 0.039 \text{ ft/ft}$



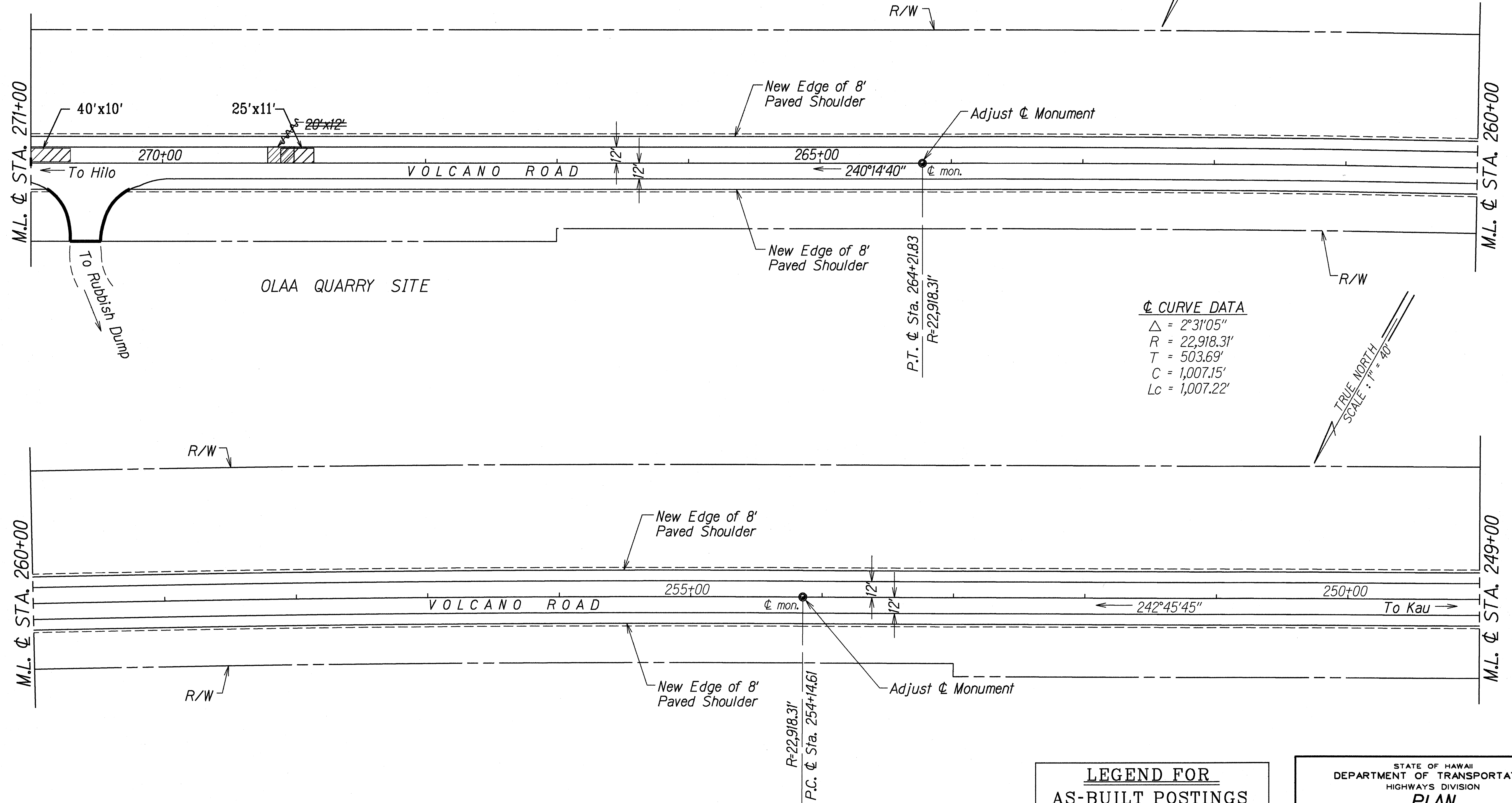
ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	

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
PLAN
VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 2 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	8	15



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
PLAN	DRAWN BY	DATE
NOTE BOOK	QUANTITIES BY	DATE
6/11/93	CHECKED BY	DATE
N. Shredg.dgn		

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

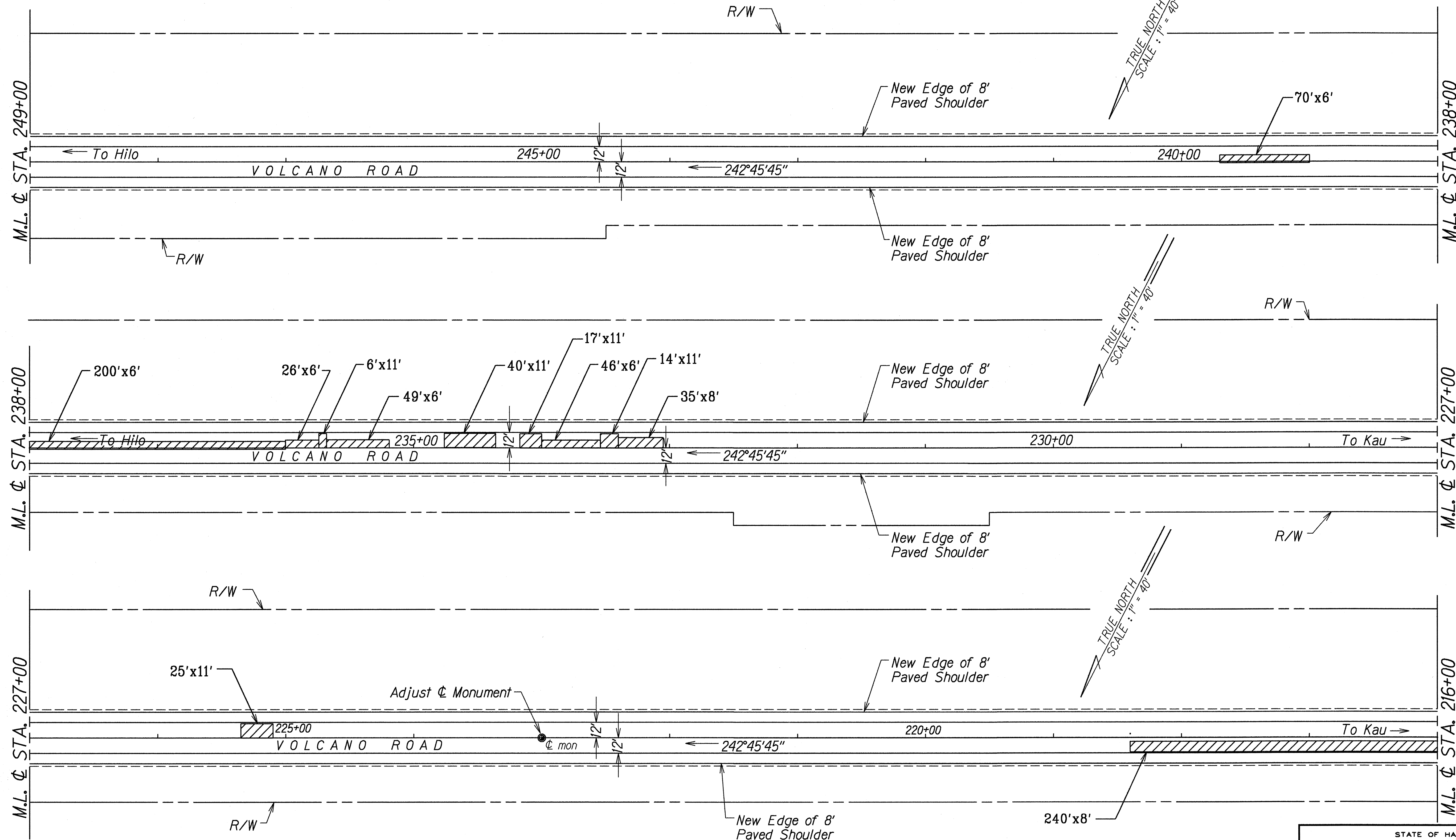
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 3 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	9	15



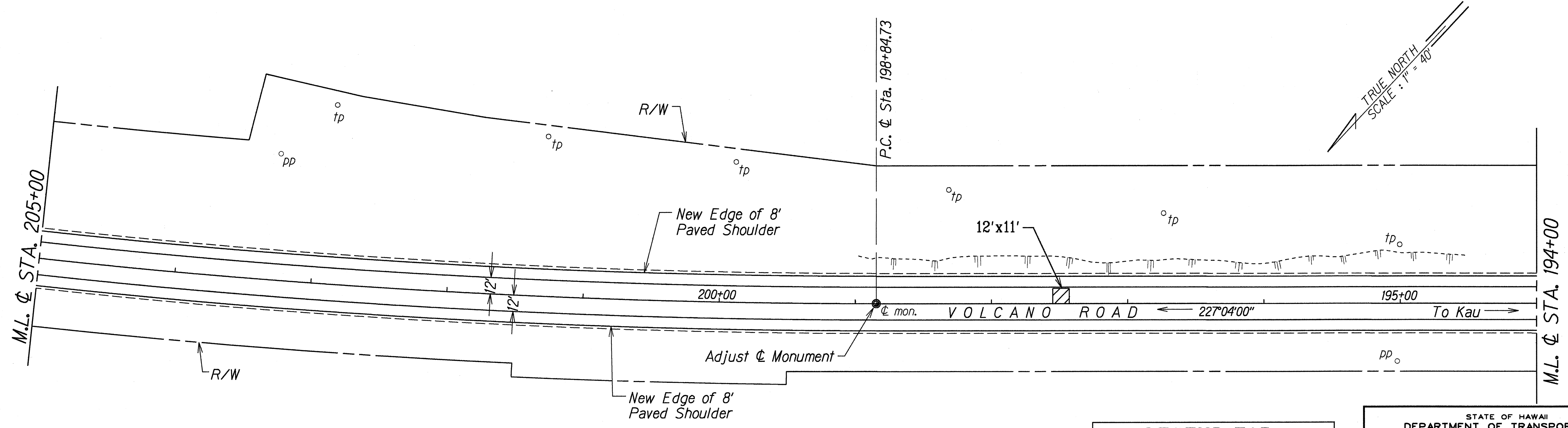
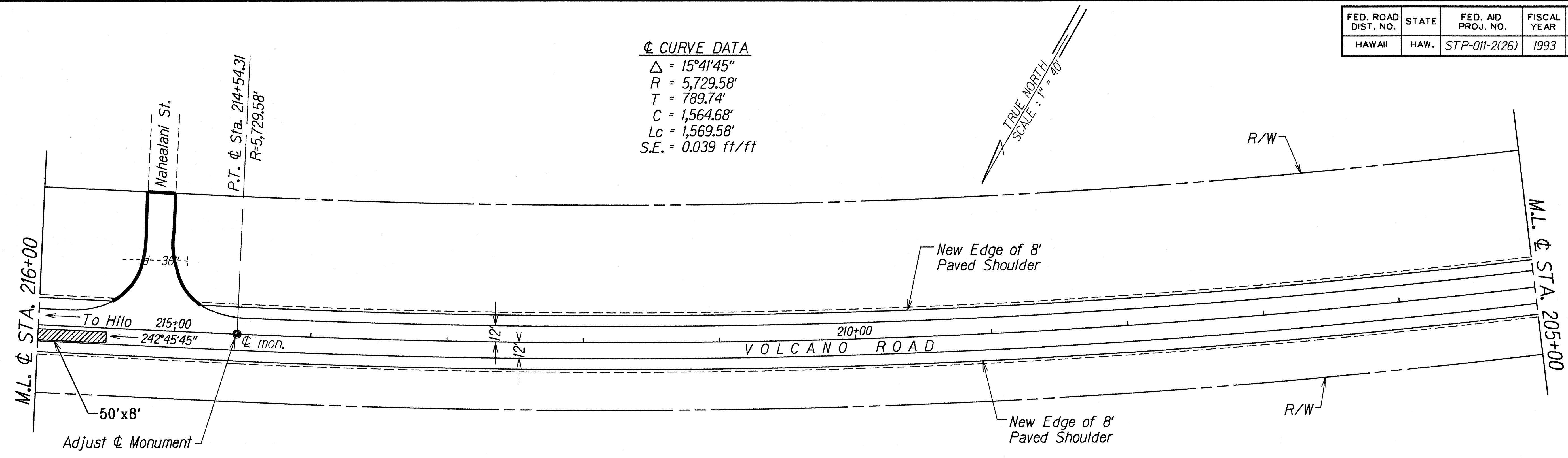
ORIGINAL PLAN	SURVEY PLATTED BY	DATE
NOTES	DRAWN BY	6/1/93
6/1/93	CHECKED BY	
6/1/93	CHECKED BY	
6/1/93	CHECKED BY	
6/1/93	CHECKED BY	
6/1/93	CHECKED BY	
6/1/93	CHECKED BY	
6/1/93	CHECKED BY	
6/1/93	CHECKED BY	

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
PLAN
VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 4 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	10	15

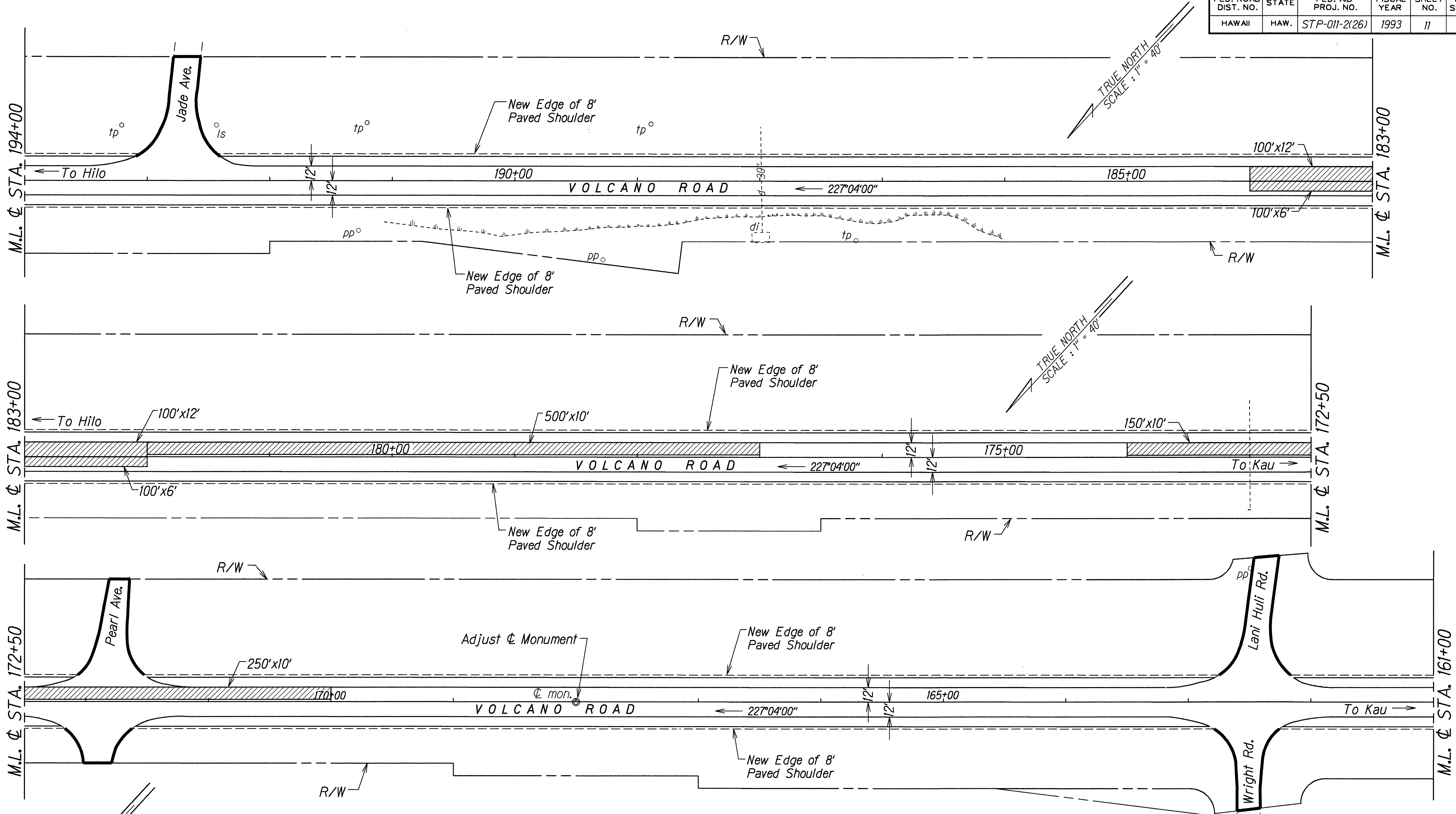


ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BOOK	DRAWN BY	
DESIGNED BY	DESIGNED BY	
CHECKED BY	CHECKED BY	
DATE	DATE	

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
PLAN
VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 5 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	11	15

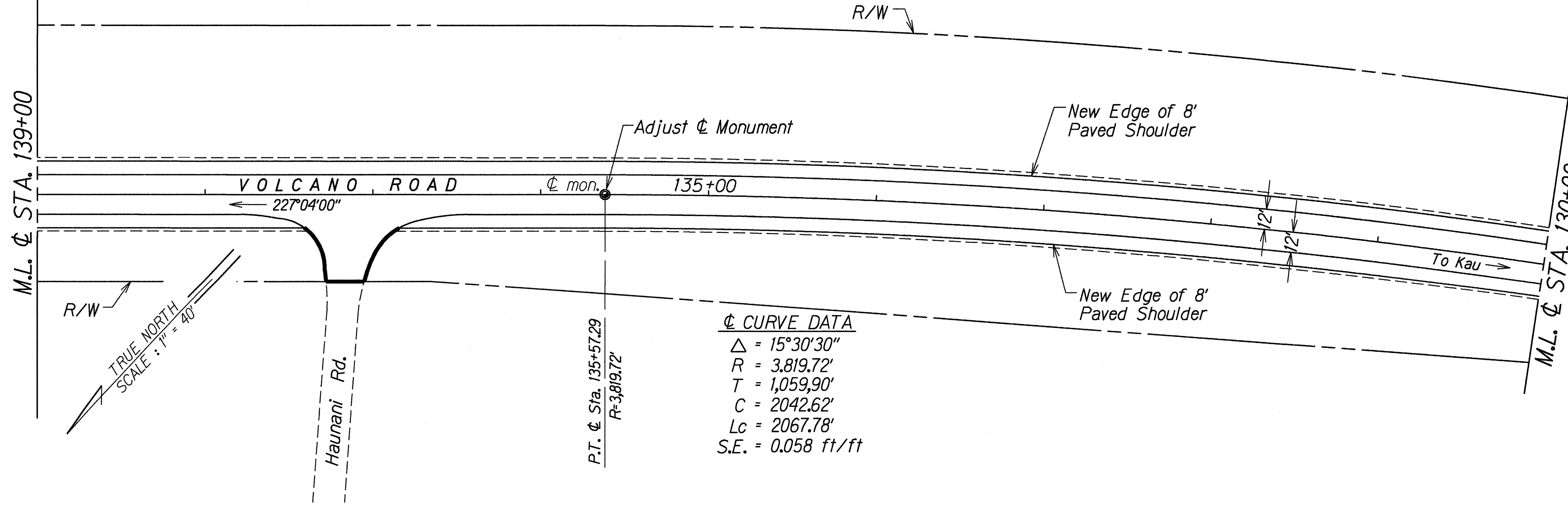
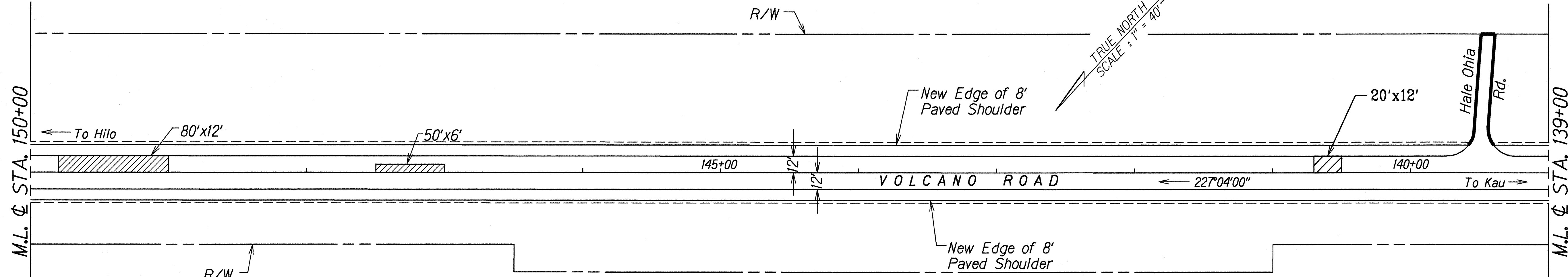
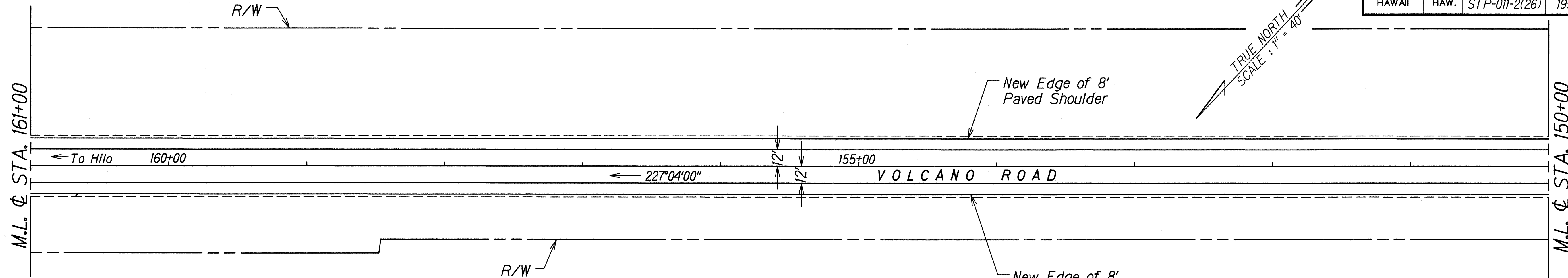


ORIGINAL PLAN	SURVEY PLATTED BY	DATE
NOTED BOOK	DRAWN BY	
DESIGNED BY	DESIGNED BY	
CHECKED BY	CHECKED BY	
DATE	DATE	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN
VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 6 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	12	15



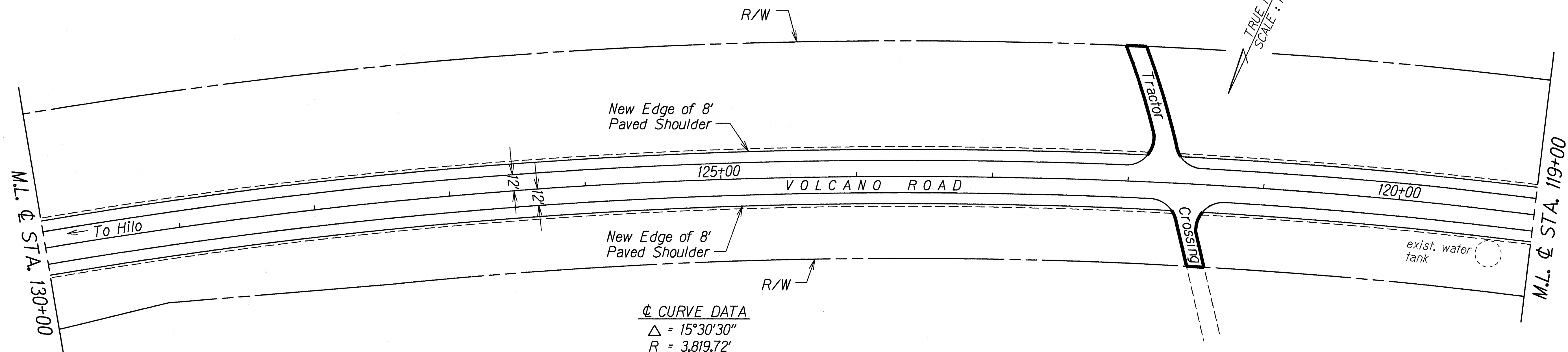
⊙ CURVE DATA
 $\Delta = 15^\circ 30' 30''$
 $R = 3,819.72'$
 $T = 1,059.90'$
 $C = 2042.62'$
 $L_c = 2067.78'$
 $S.E. = 0.058 \text{ ft/ft}$

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

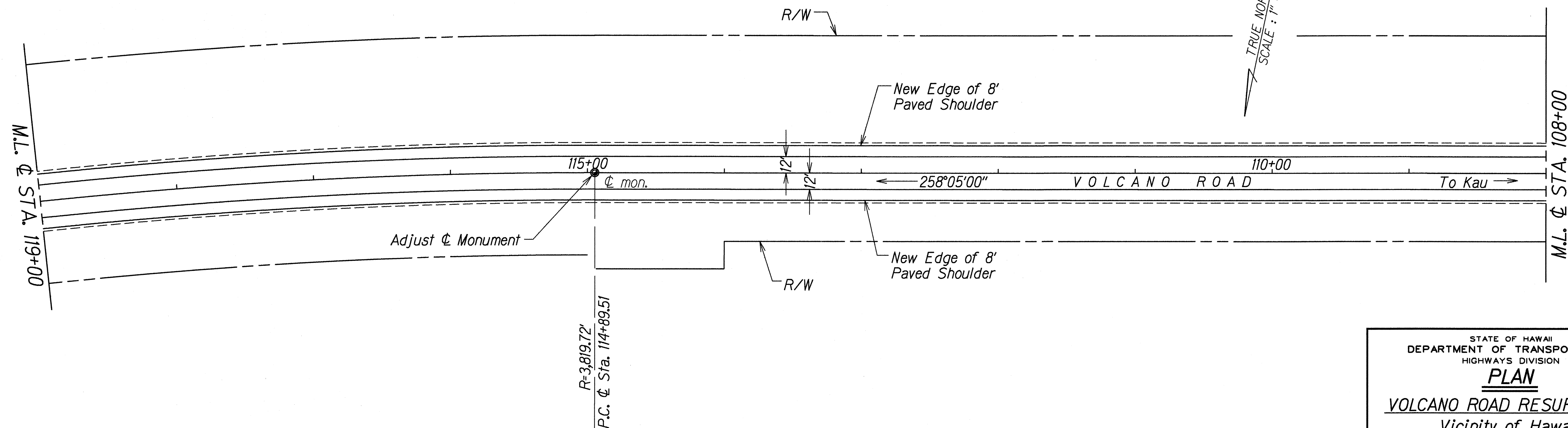
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PLAN
VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 7 OF 10 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED	DRAWN BY	
DESIGNED BY	CHECKED BY	
DATE		
NO.		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	13	15



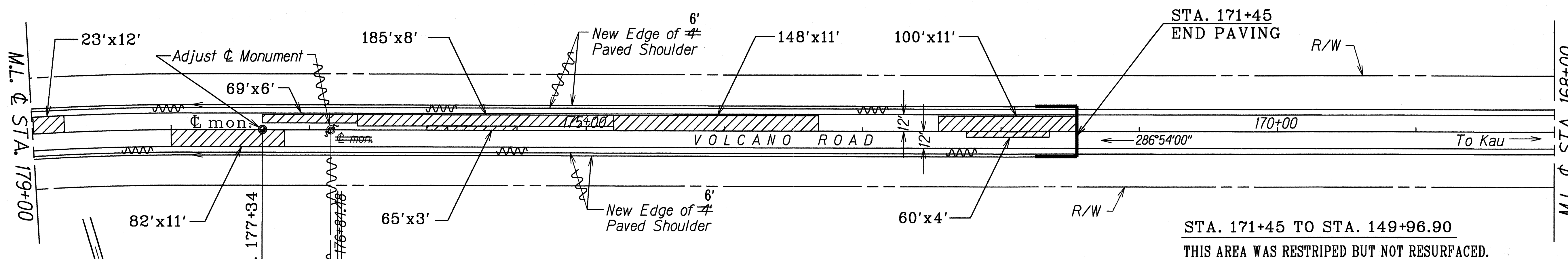
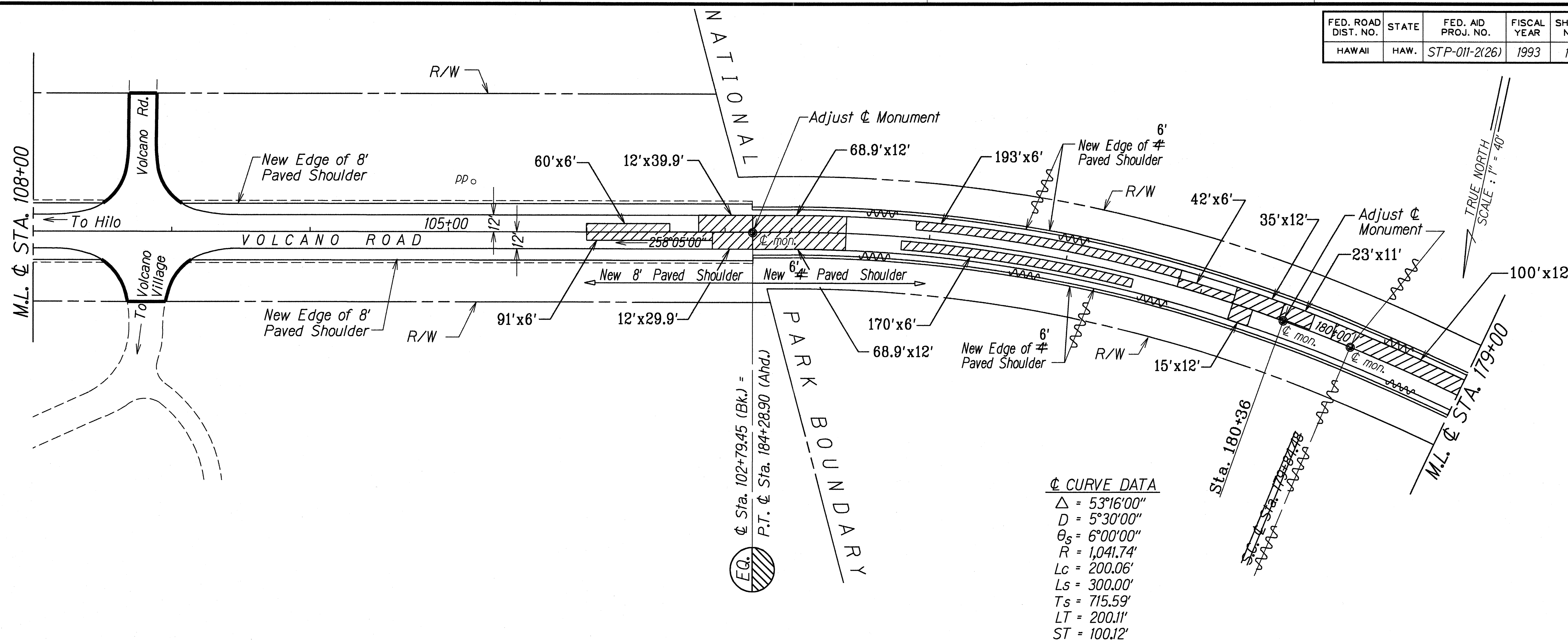
☉ CURVE DATA
 $\Delta = 15^\circ 30' 30''$
 $R = 3,819.72'$
 $T = 1,059.90'$
 $C = 2,042.62'$
 $Lc = 2067.78'$
 $S.E. = 0.058 \text{ ft/ft}$



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
NOTES	
dd1/groce	
CHECKED BY	
dd1/groce	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PLAN
VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 8 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	14	15



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	

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

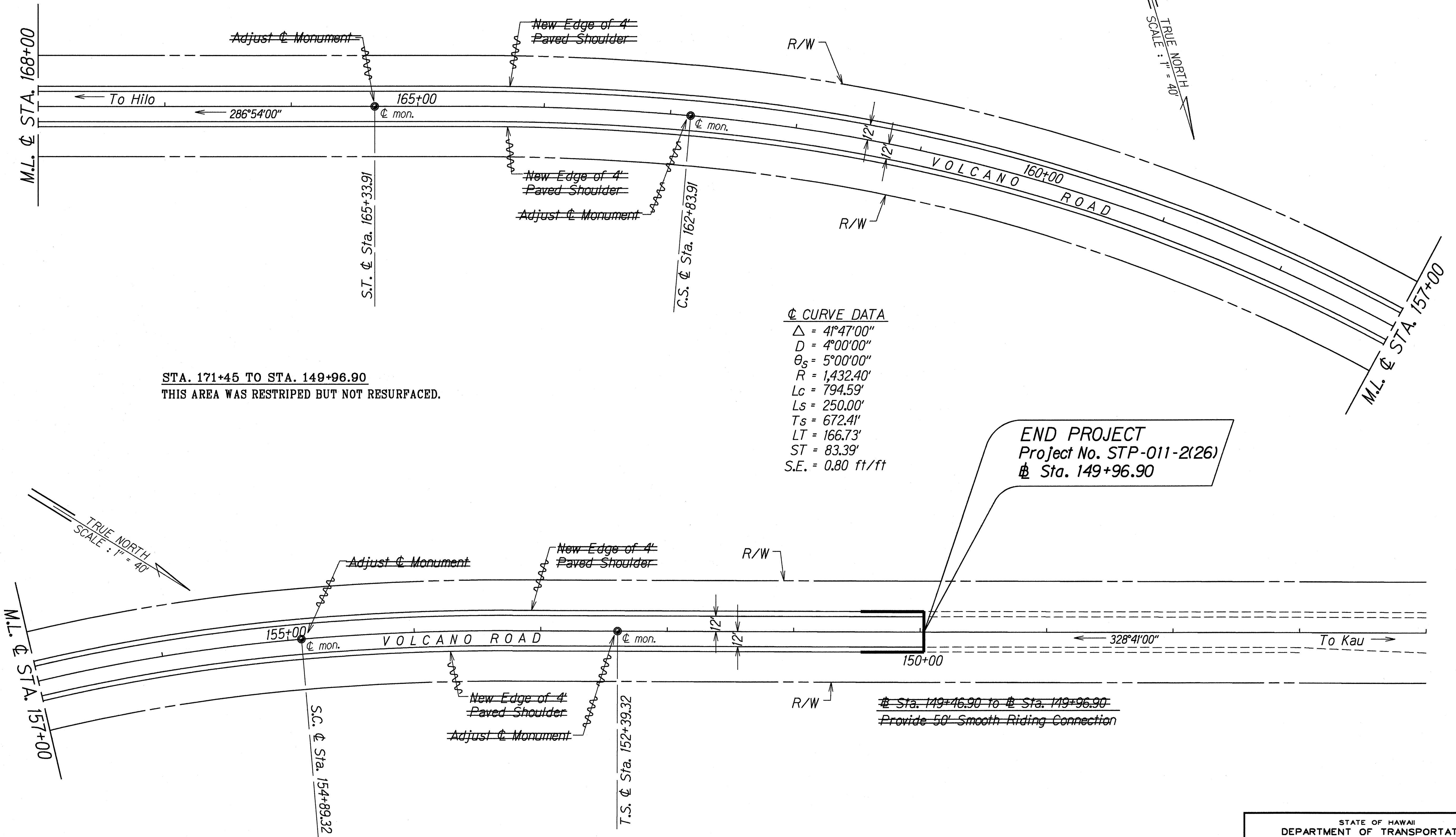
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: March, 1993
SHEET No. 9 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993	15	15



STA. 171+45 TO STA. 149+96.90
THIS AREA WAS RESTRIPTED BUT NOT RESURFACED.

CL CURVE DATA
 $\Delta = 41^\circ 47' 00''$
 $D = 4^\circ 00' 00''$
 $\theta_s = 5^\circ 00' 00''$
 $R = 1,432.40'$
 $L_c = 794.59'$
 $L_s = 250.00'$
 $T_s = 672.41'$
 $LT = 166.73'$
 $ST = 83.39'$
 $S.E. = 0.80 \text{ ft/ft}$

END PROJECT
Project No. STP-011-2(26)
Sta. 149+96.90

Sta. 149+46.90 to # Sta. 149+96.90
Provide 50' Smooth Riding Connection

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

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

PLAN

VOLCANO ROAD RESURFACING

Vicinity of Hawaii

Volcanoes National Park

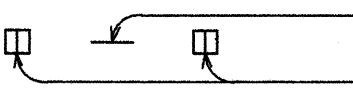
Fed. Aid Proj. No. STP-011-2(26)

Scale: 1"=40' Date: March, 1993

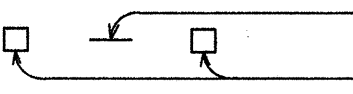
SHEET No. 10 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		

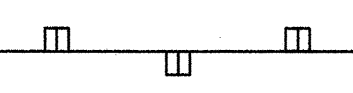
LEGEND



4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 40'-0" o.c.



4 each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.



8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)



4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)



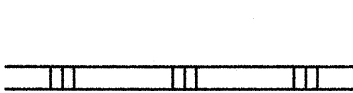
4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)



4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)



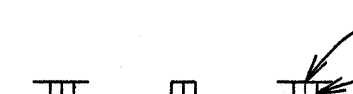
4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)



Lane Change Restriction Marking
4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 20'-0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)



4" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)



4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)



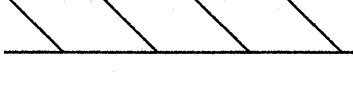
Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)



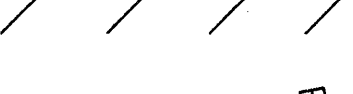
Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)



Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)



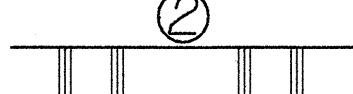
Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment (Tape, Type III or Thermoplastic Extrusion)



Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)



STOP
Pavement Word (Tape, Type III or Thermoplastic Extrusion)



4 Each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
Type H 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 C Markers @ 40'-0" o.c. (Tape, Type III 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.
- 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.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTES BOOK	DRAWN BY	
10/1/93	CHECKED BY	
10/1/93	QUANTITIES BY	
10/1/93	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

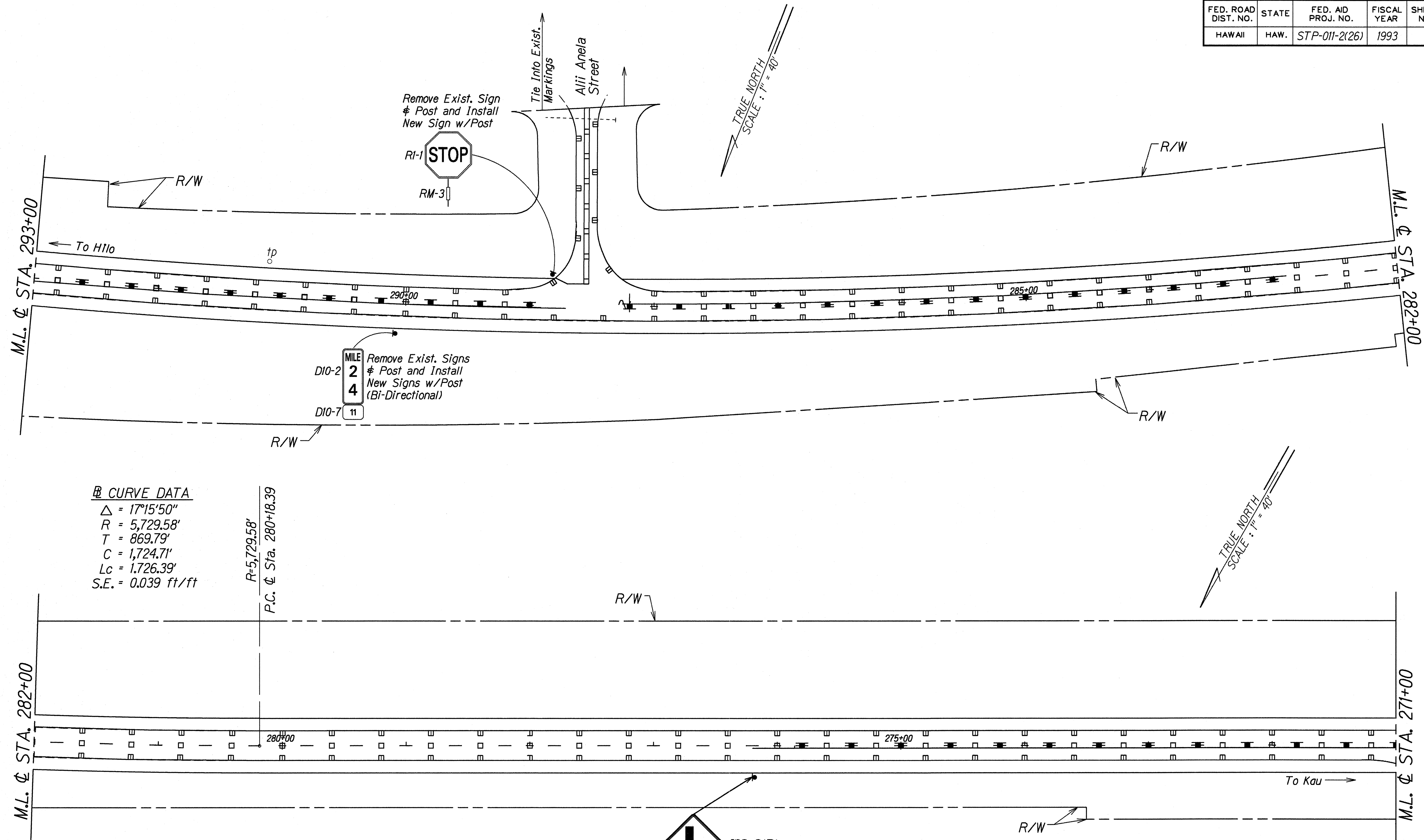
PAVEMENT MARKING
LEGEND & NOTES

VOLCANO ROAD RESURFACING
Vicinity of Hawaii Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)

Scale: 1"=40' Date: Aug., 1993

SHEET No. 71 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		



Curve Data
 $\Delta = 17^{\circ}15'50''$
 $R = 5,729.58'$
 $T = 869.79'$
 $C = 1,724.71'$
 $Lc = 1.726.39'$
 $S.E. = 0.039 \text{ ft/ft}$

$R=5,729.58'$
P.C. & Sta. 280+18.39

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

**PAVEMENT MARKING AND
SIGNING PLAN**

VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)

Scale: 1"=40' Date: Aug., 1993

SHEET No. 73 OF 14 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BOOK	DRAWN BY	
DESIGNED BY	DESIGNED BY	
CHECKED BY	CHECKED BY	
NO. 300102.dgn		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		

Remove Exist. Sign
Post and Install
New Sign w/Posts

SPEED LIMIT 55
R2-1(55)-B
36"x48"

RM-3 RM-3

R/W
W2-2(L)

M.L. ϕ STA. 271+00
To Hilo
Tie Into Exist. Markings
To Rubbish Dump

STOP R1-1

Remove Exist. Sign
Post and Install
New Sign w/Post

OLAA QUARRY SITE

R/W

P.T. ϕ Sta. 264+21.83
R-22,918.31'

ϕ CURVE DATA
 $\Delta = 00^{\circ}00'00''$
 $R = 0,000$
 $T = 0,000$
 $C = 0,000$
 $Lc = 0,000$
 $S.E. = 0.00$ ft/ft

SPEED LIMIT 55
R2-1(55)-B
(36"x48")

RM-3 RM-3

Remove Exist. Sign
Post and Install
New Sign w/Posts

TRUE NORTH
SCALE: 1"=40'

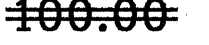
M.L. ϕ STA. 260+00

R-22,918.31'
P.C. ϕ Sta. 254+1461

R/W

To Kau $\rightarrow$

M.L. ϕ STA. 249+00

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

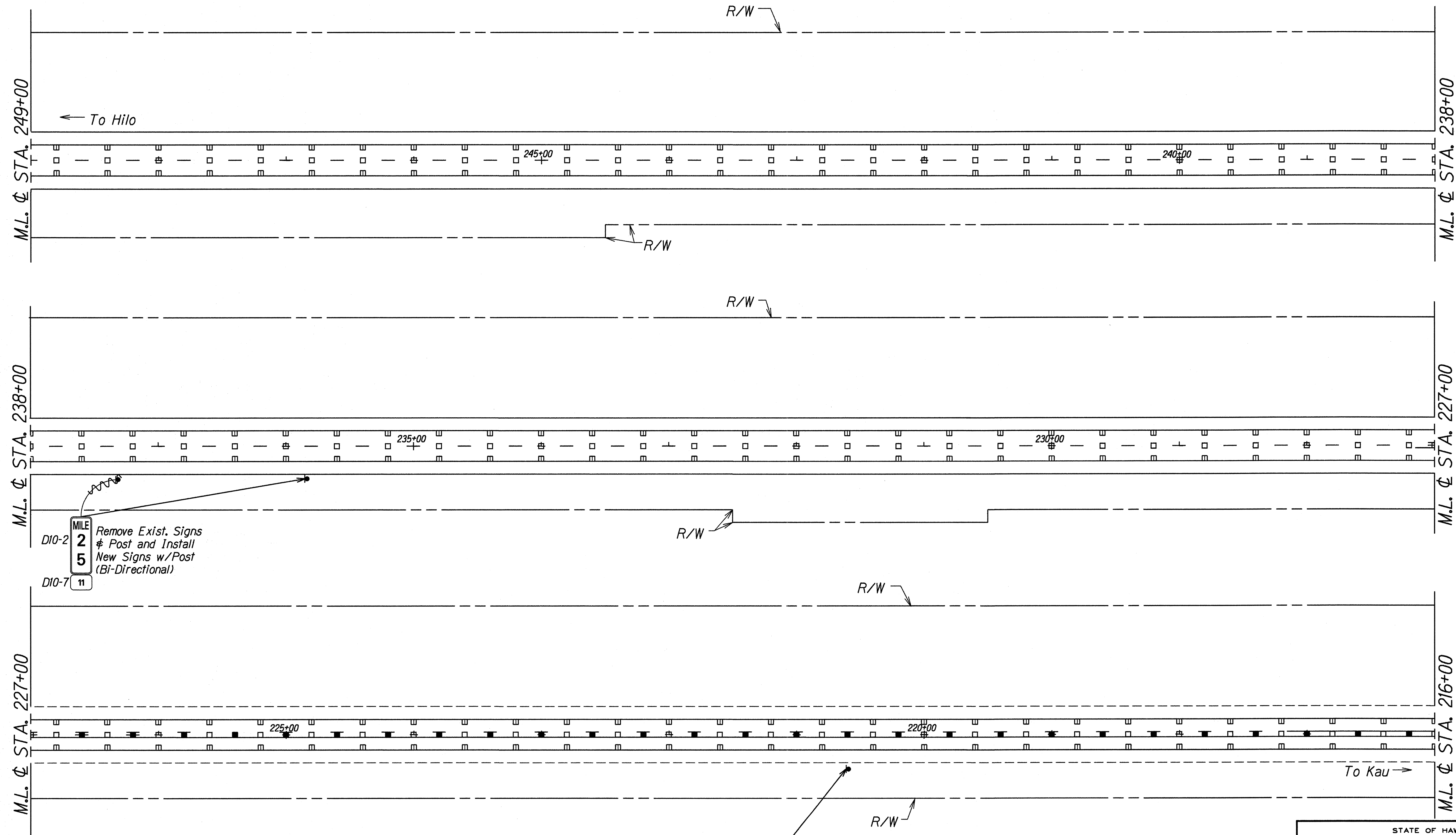
**PAVEMENT MARKING AND
SIGNING PLAN**

VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=40' Date: Aug, 1993

SHEET No. T4 OF 14 SHEETS

DESIGNED BY	DATE
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.	STP-011-2(26)	1993		



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

**PAVEMENT MARKING AND
SIGNING PLAN**

VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)

Scale: 1"=40' Date: Aug., 1993

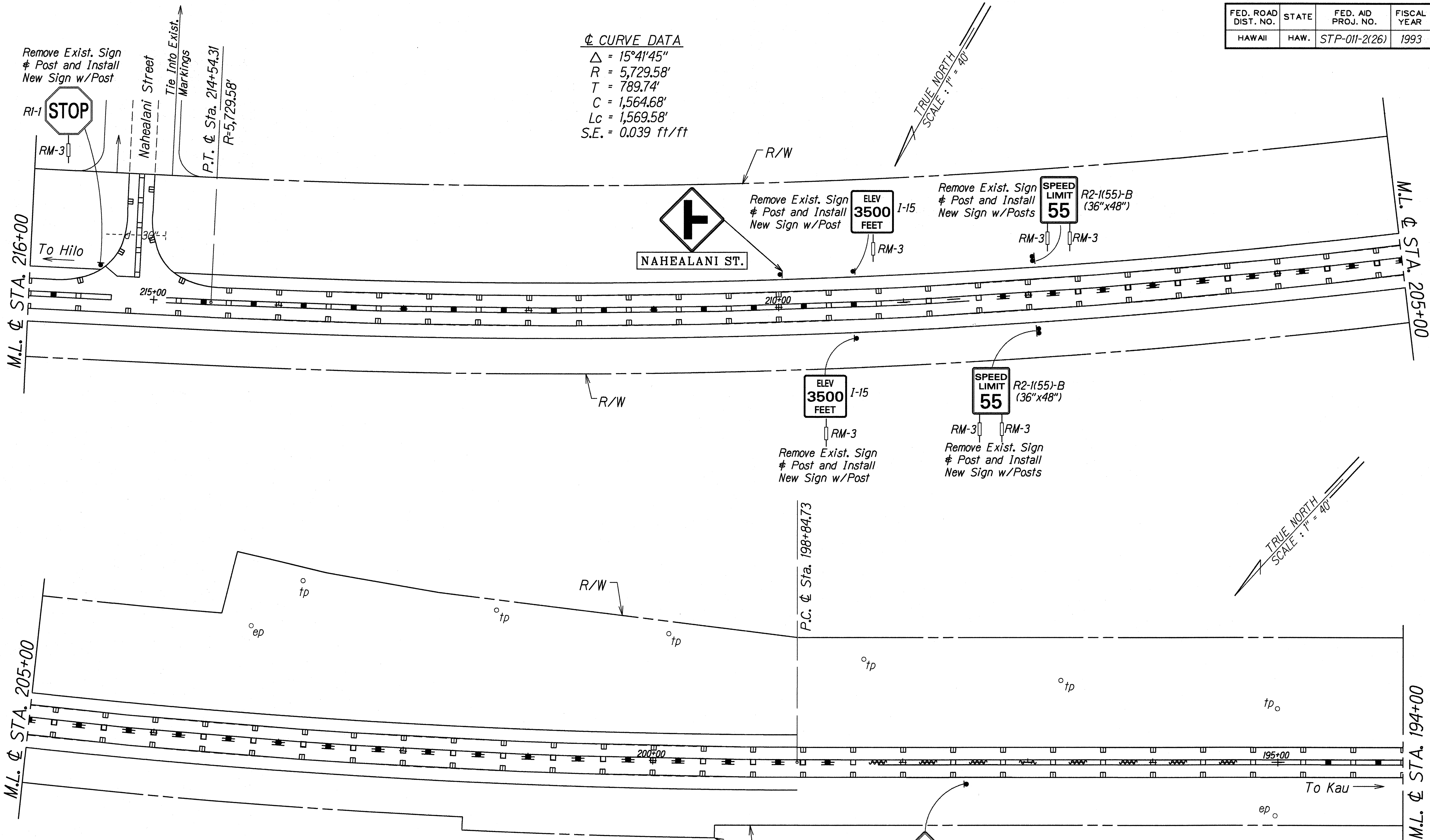
SHEET No. 75 OF 14 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLotted BY	R. M. H.
DRAWN BY	G. T. Onda
NOTE BOOK	DESIGNED BY
QUANTITIES BY	CHECKED BY
DATE	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		

☉ CURVE DATA

$\Delta = 15^\circ 41' 45''$
 $R = 5,729.58'$
 $T = 789.74'$
 $C = 1,564.68'$
 $Lc = 1,569.58'$
 $S.E. = 0.039 \text{ ft/ft}$



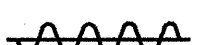
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PAVEMENT MARKING AND SIGNING PLAN
 VOLCANO ROAD RESURFACING
 Vicinity of Hawaii
 Volcanoes National Park
 Fed. Aid Proj. No. STP-011-2(26)
 Scale: 1"=40' Date: Aug, 1993
 SHEET No. 76 OF 14 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DESIGNED BY	DR. M. J.	
CHECKED BY	G. T. T. T.	
NOTED BY		
DATE		

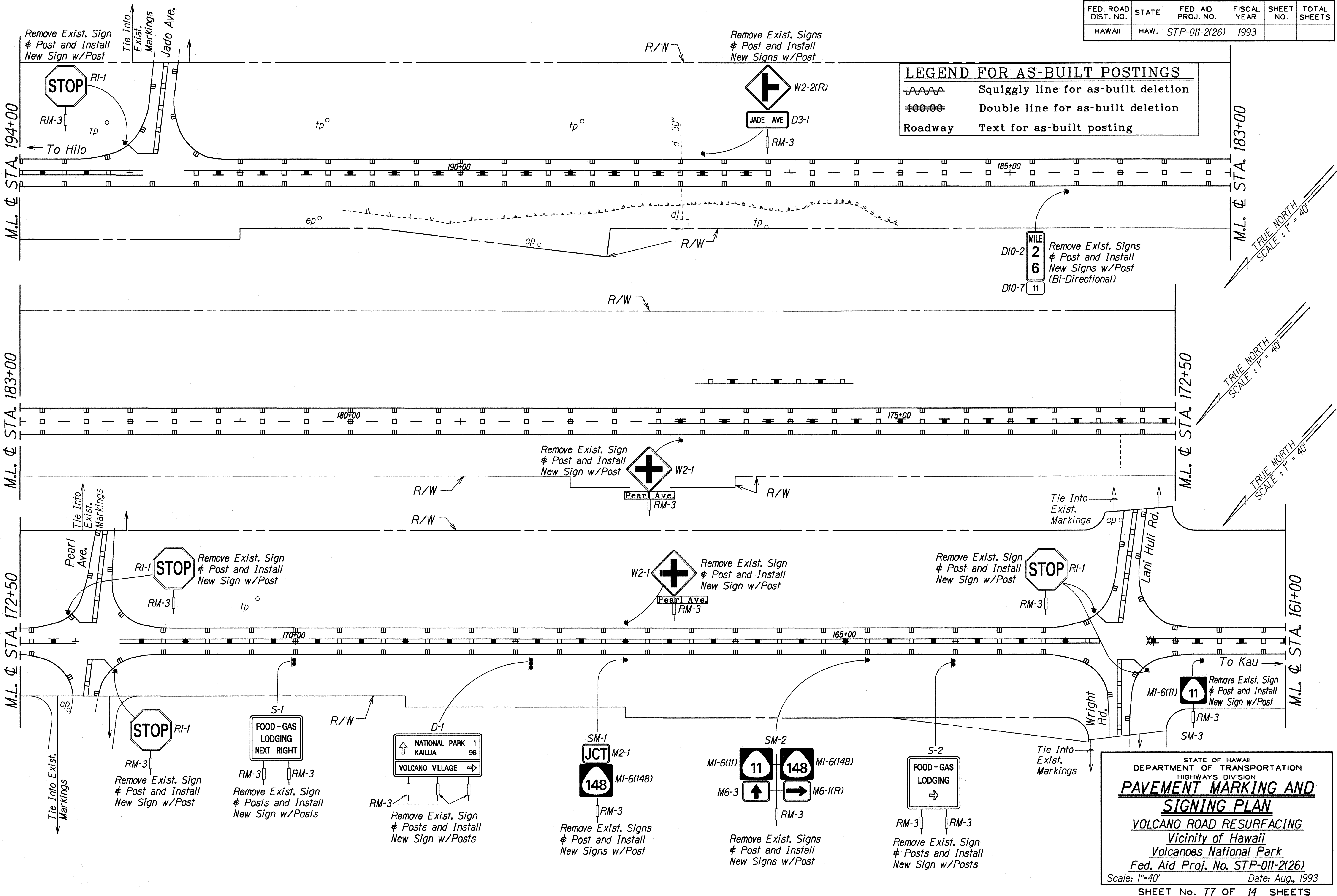
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		

LEGEND FOR AS-BUILT POSTINGS

 Squiggly line for as-built deletion

 Double line for as-built deletion

Roadway Text for as-built posting



ORIGINAL PLAN	SURVEY PLATTED BY	DATE
NOTE BOOK	DRAWN BY	
DESIGNED BY	DESIGNED BY	
CHECKED BY	CHECKED BY	
NO. 2/8/1996-dgn		

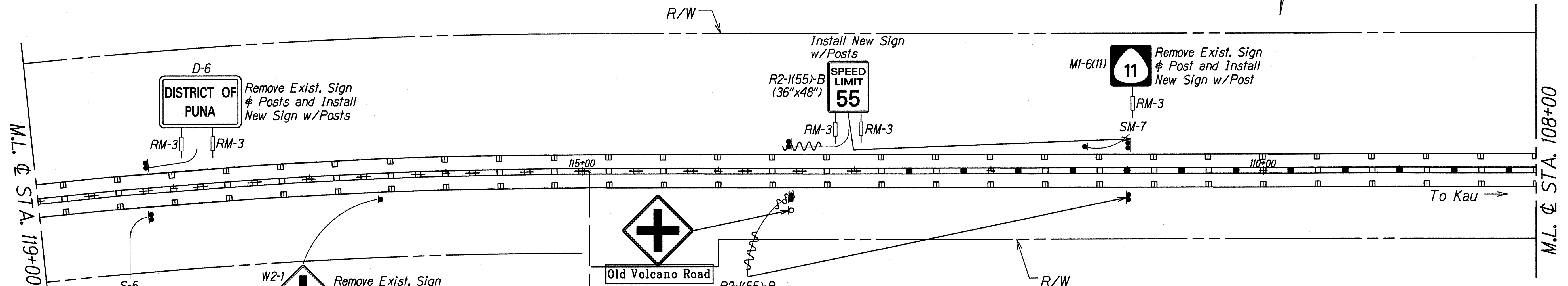
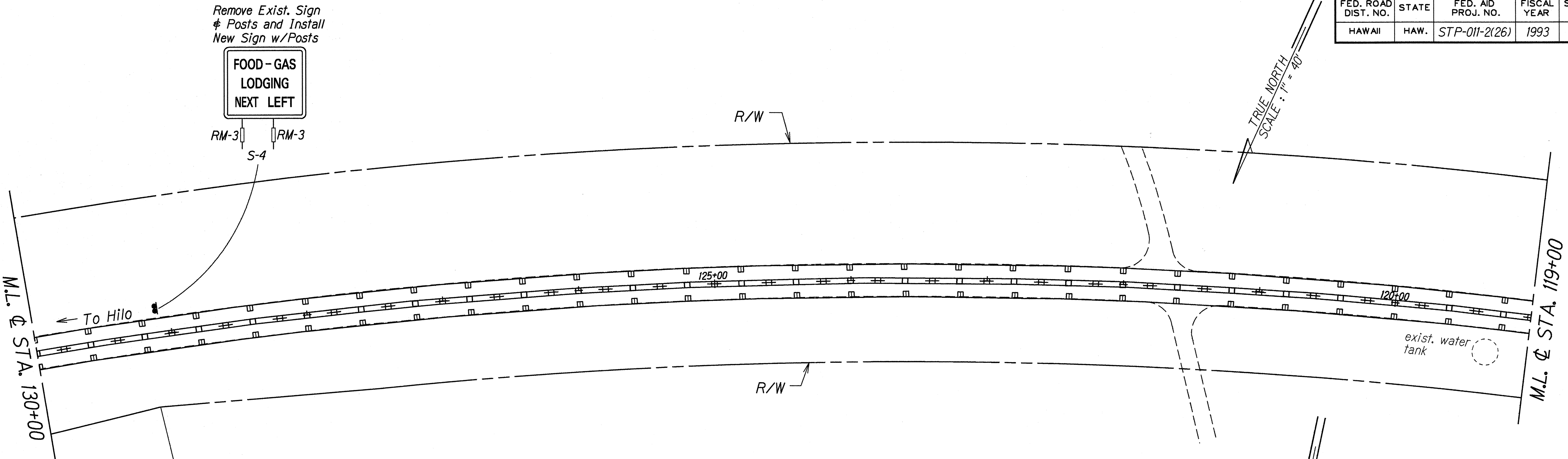
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**PAVEMENT MARKING AND
SIGNING PLAN**
VOLCANO ROAD RESURFACING
 Vicinity of Hawaii
 Volcanoes National Park
 Fed. Aid Proj. No. STP-011-2(26)
 Scale: 1"=40' Date: Aug., 1993

SHEET No. 77 OF 14 SHEETS

[illegible][illegible][illegible]

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		



Δ = 15°30'30"
 R = 3,819.72'
 T = 1,059.90'
 C = 2,042.62'
 Lc = 2067.78'
 S.E. = 0.058 ft/ft

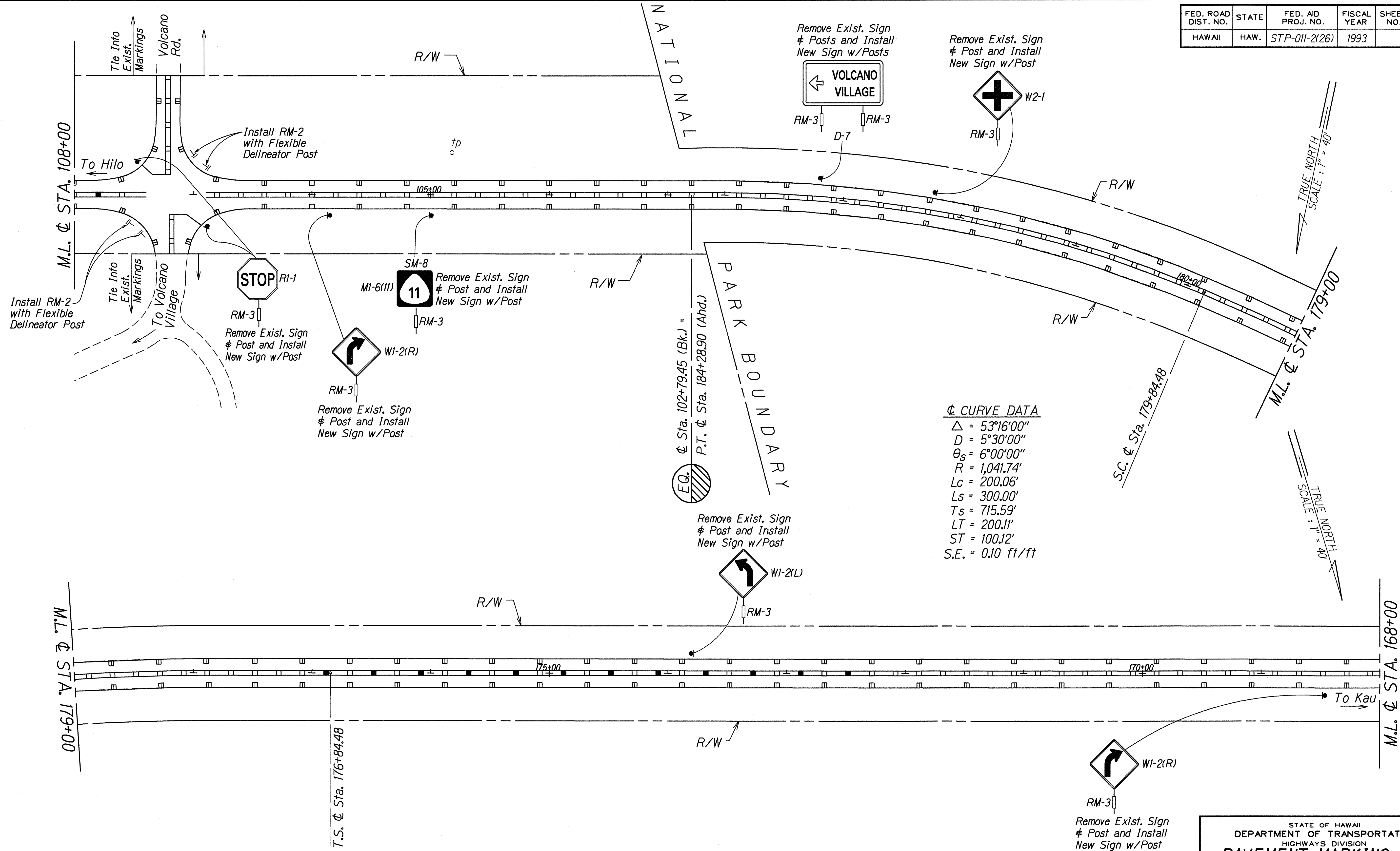
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PAVEMENT MARKING AND SIGNING PLAN
 VOLCANO ROAD RESURFACING
 Vicinity of Hawaii
 Volcanoes National Park
 Fed. Aid Proj. No. STP-011-2(26)
 Scale: 1"=40'

Date: Aug., 1993
 SHEET No. 19 OF 14 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLATTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		



ORIGINAL PLAN	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
NOTED BY	DATE

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

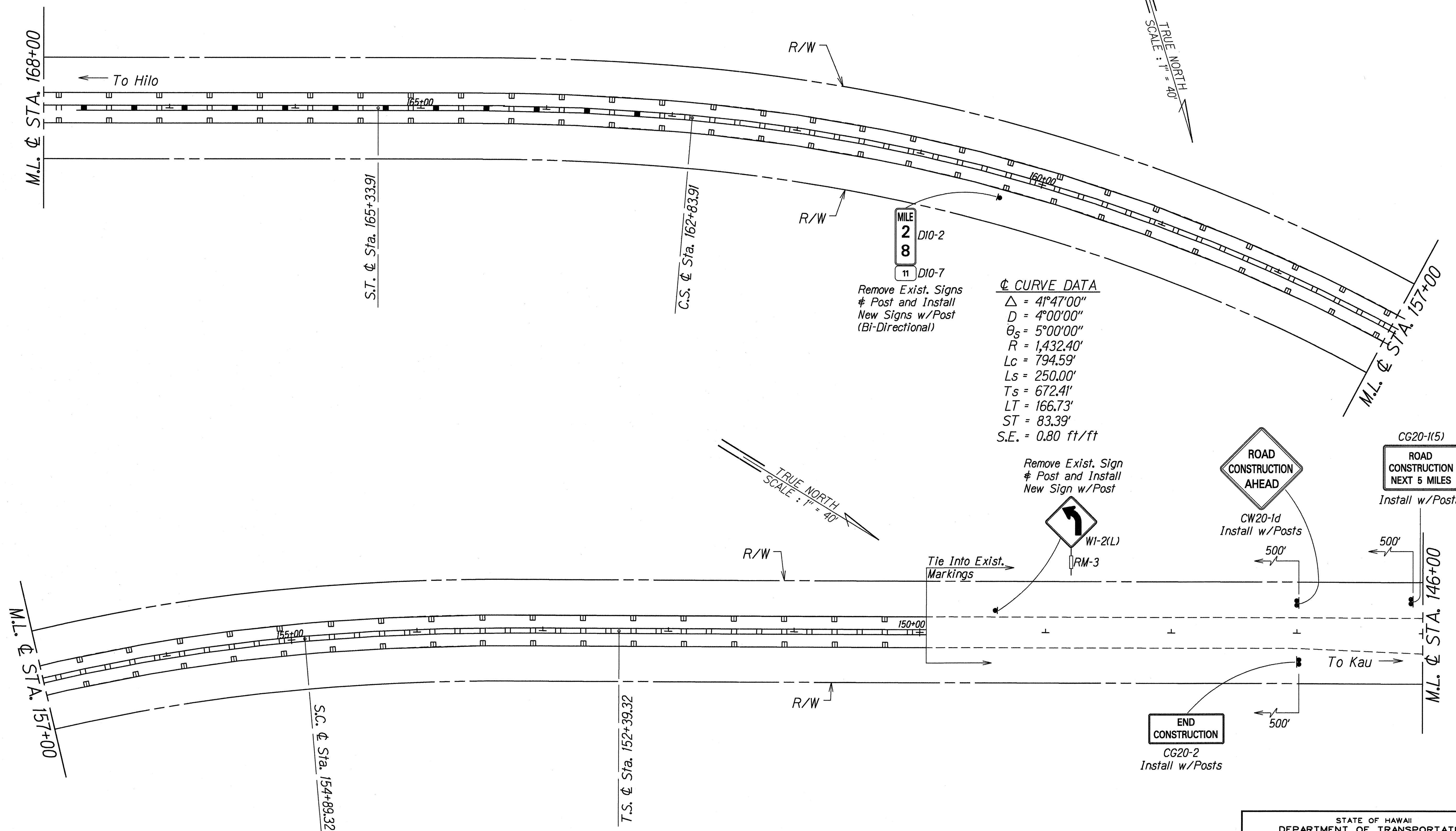
PAVEMENT MARKING AND SIGNING PLAN

VOLCANO ROAD RESURFACING
Vicinity of Hawaii
Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)

Scale: 1"=40' Date: Aug., 1993

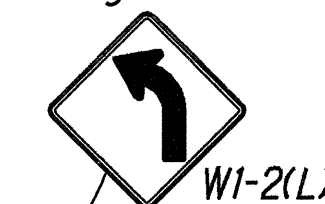
SHEET No. 110 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		



☉ CURVE DATA
 $\Delta = 41^\circ 47' 00''$
 $D = 4^\circ 00' 00''$
 $\theta_s = 5^\circ 00' 00''$
 $R = 1,432.40'$
 $L_c = 794.59'$
 $L_s = 250.00'$
 $T_s = 672.41'$
 $LT = 166.73'$
 $ST = 83.39'$
 $S.E. = 0.80 \text{ ft/ft}$

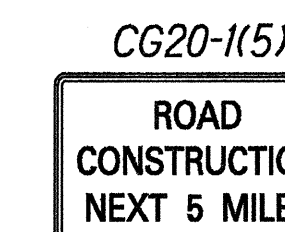
Remove Exist. Sign
 & Post and Install
 New Sign w/Post



Tie Into Exist.
 Markings



CW20-1d
 Install w/Posts



Install w/Posts



CG20-2
 Install w/Posts

LEGEND FOR AS-BUILT POSTINGS

- Squiggly line for as-built deletion
- Double line for as-built deletion
- Roadway Text for as-built posting

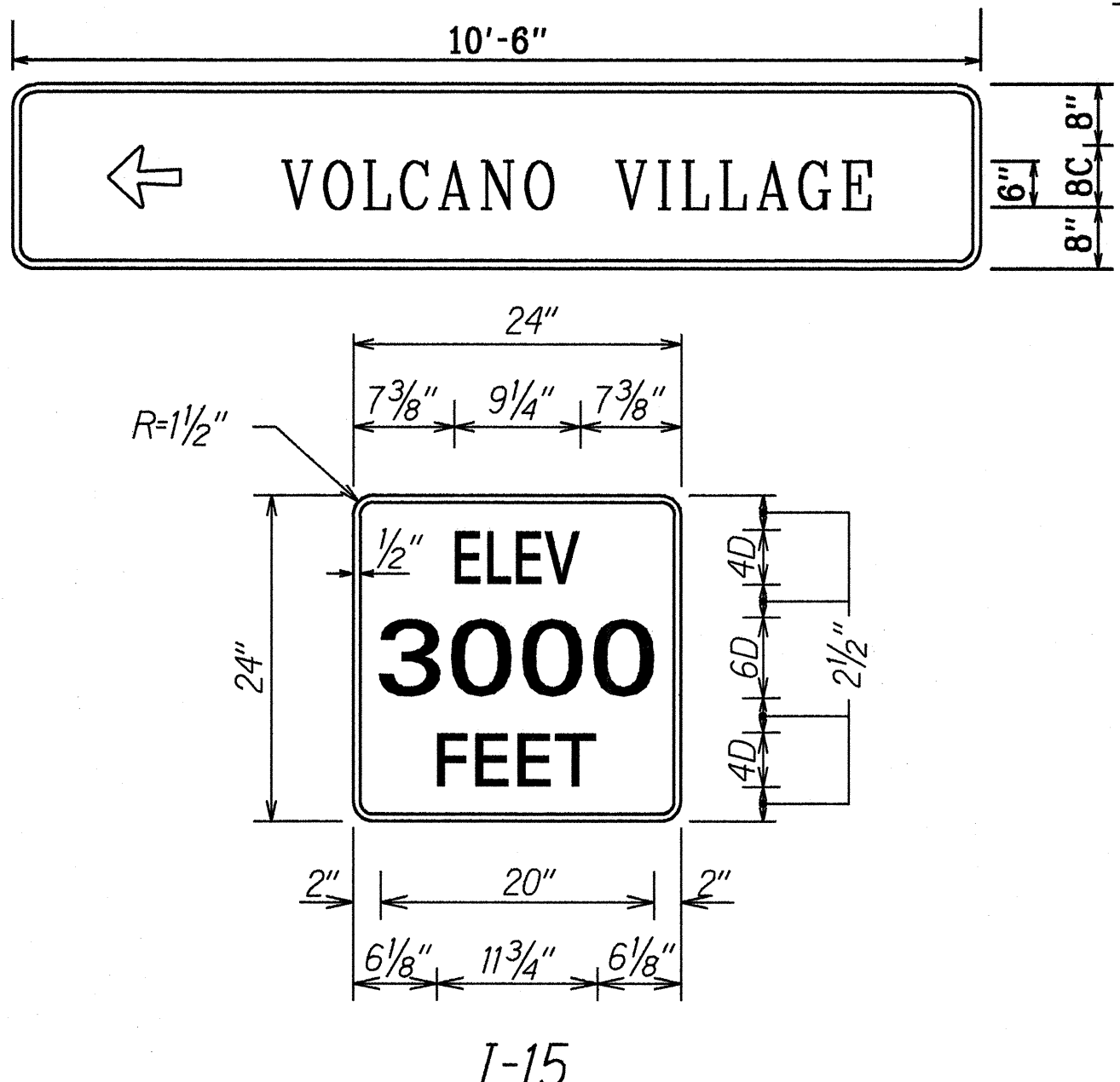
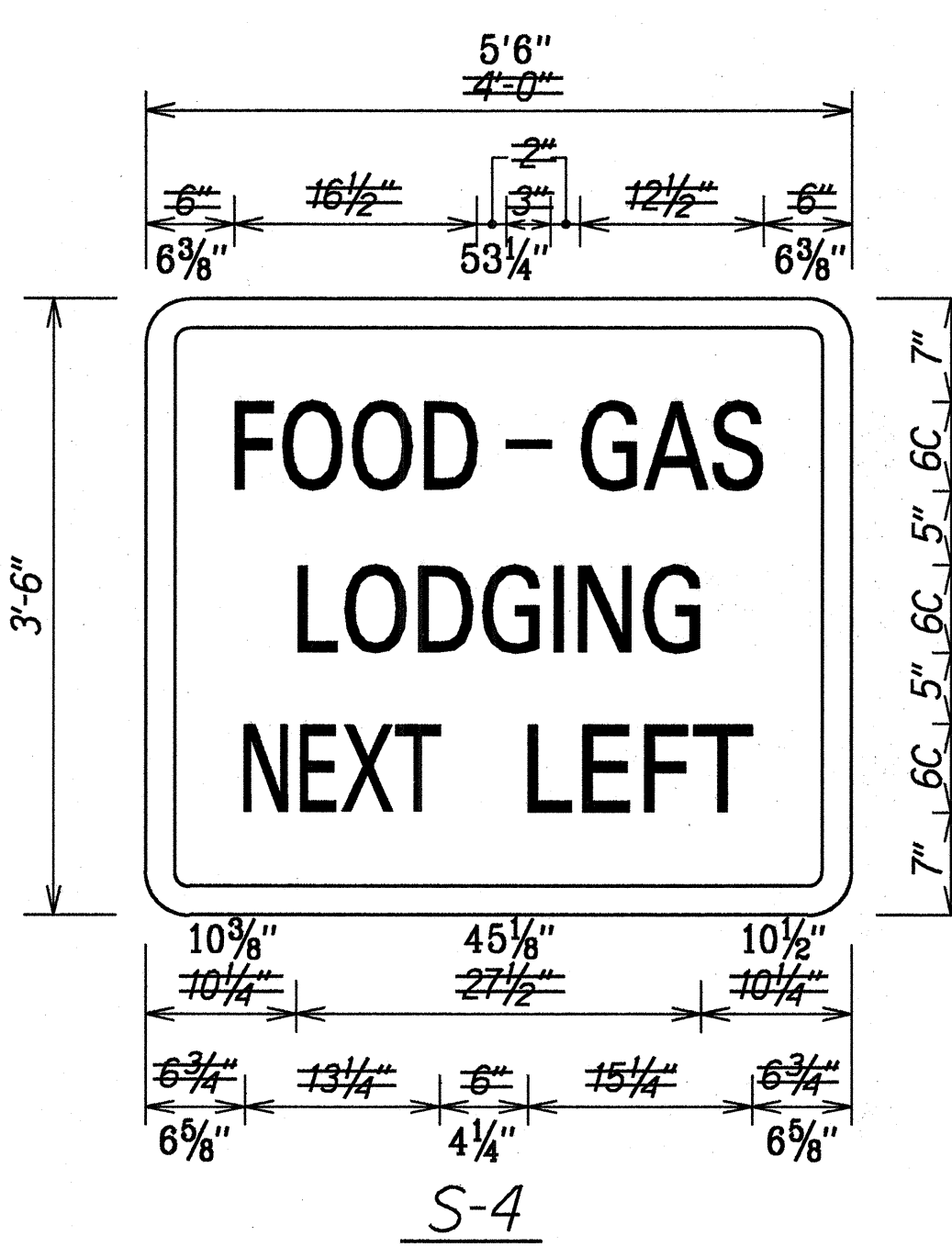
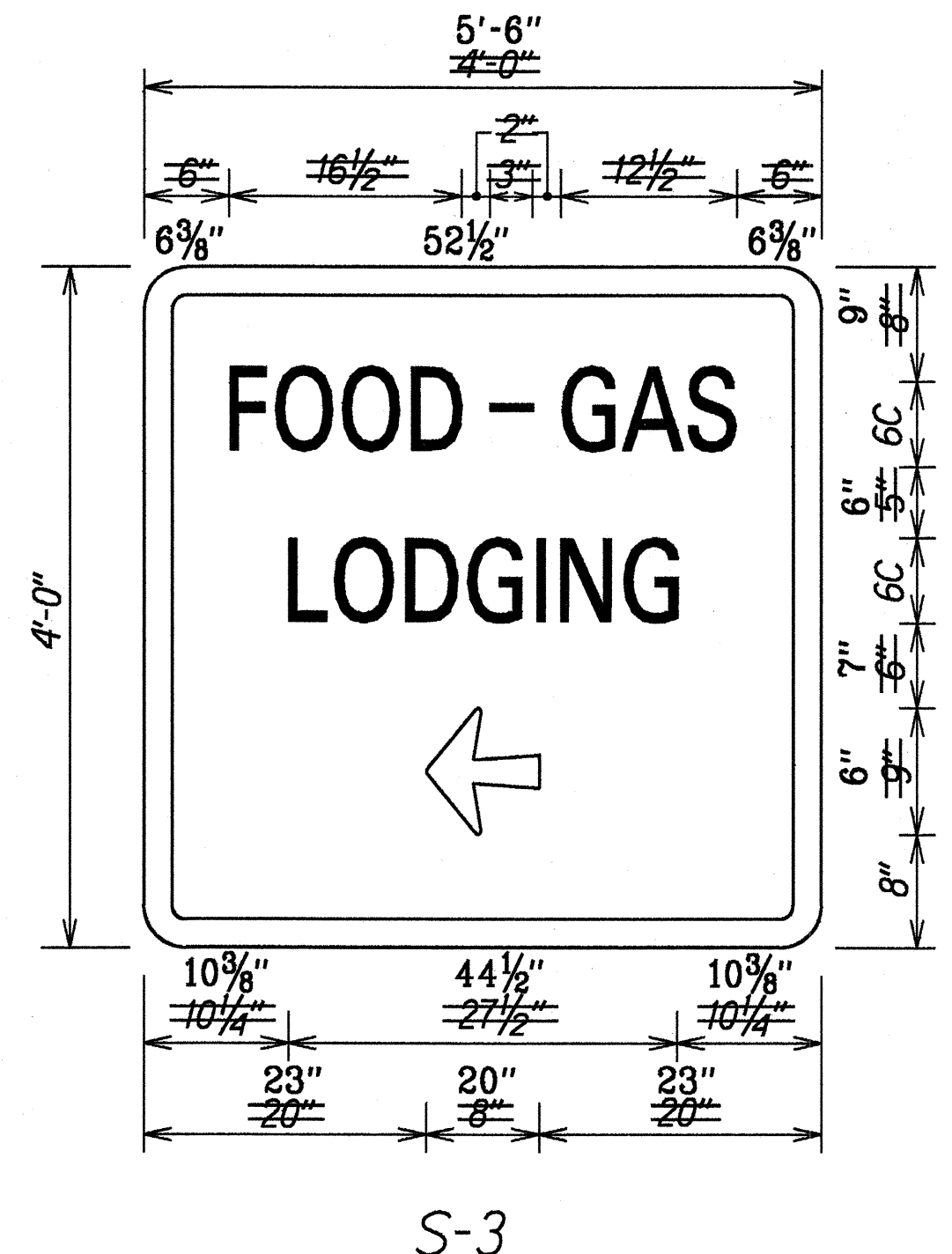
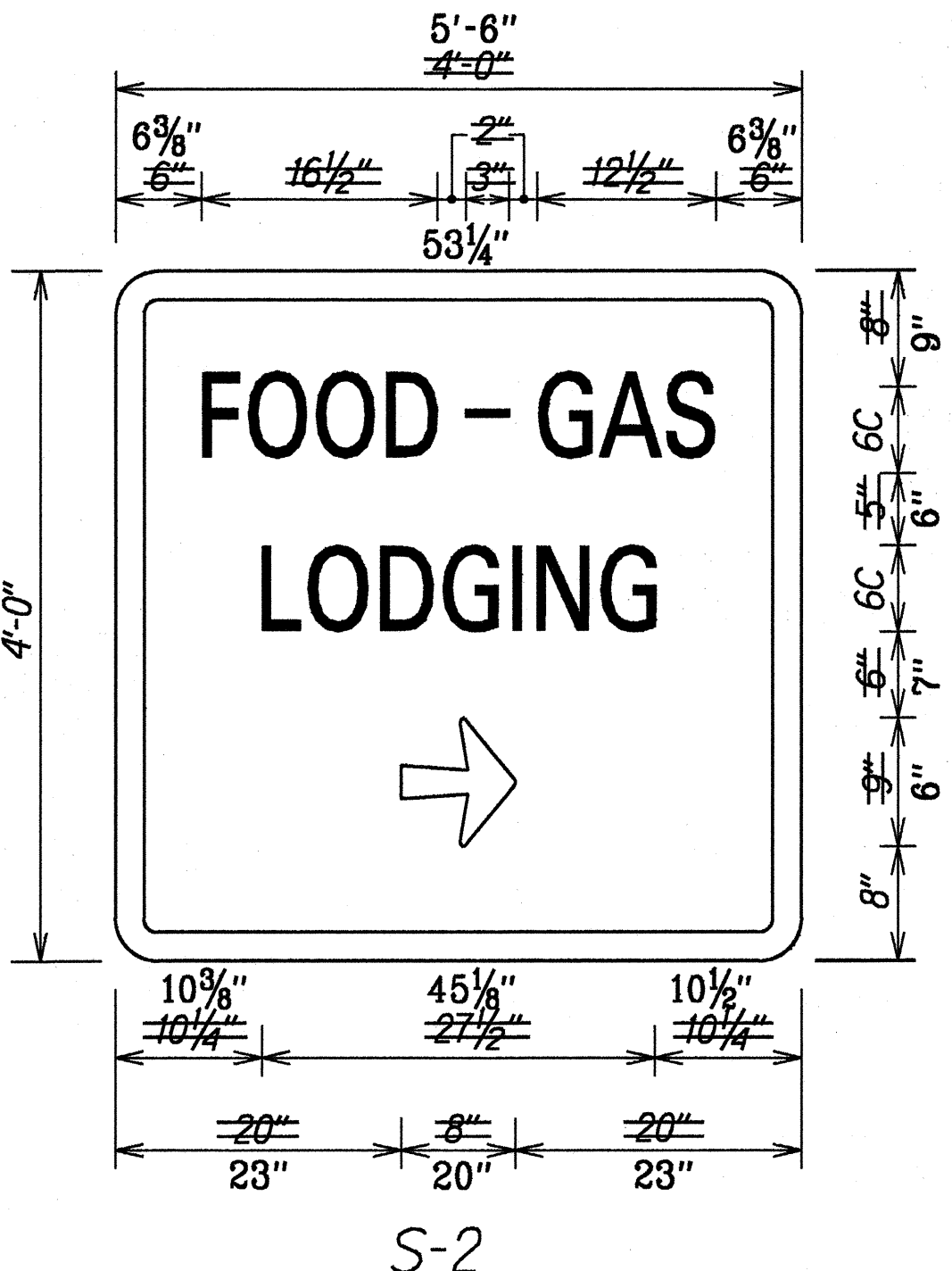
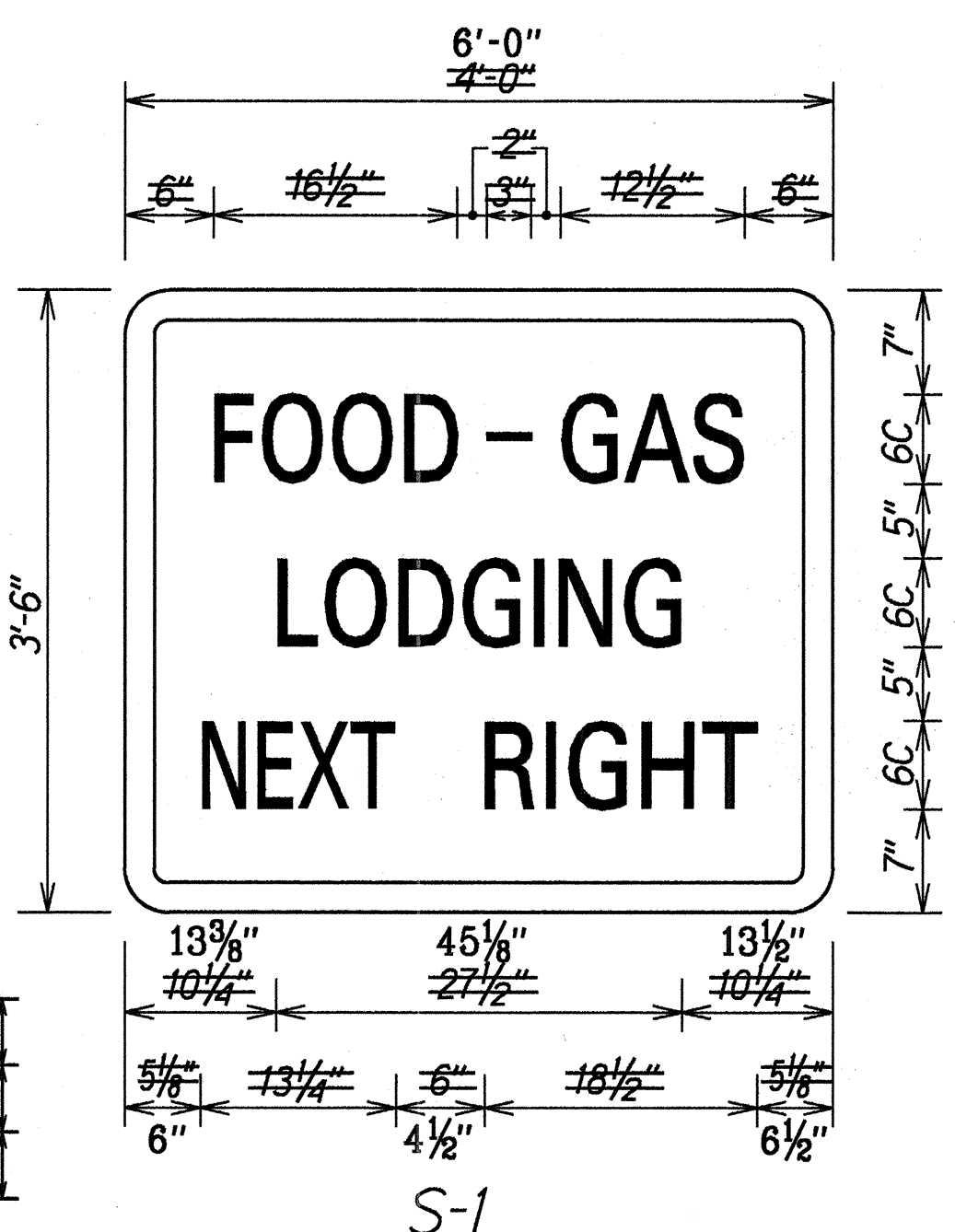
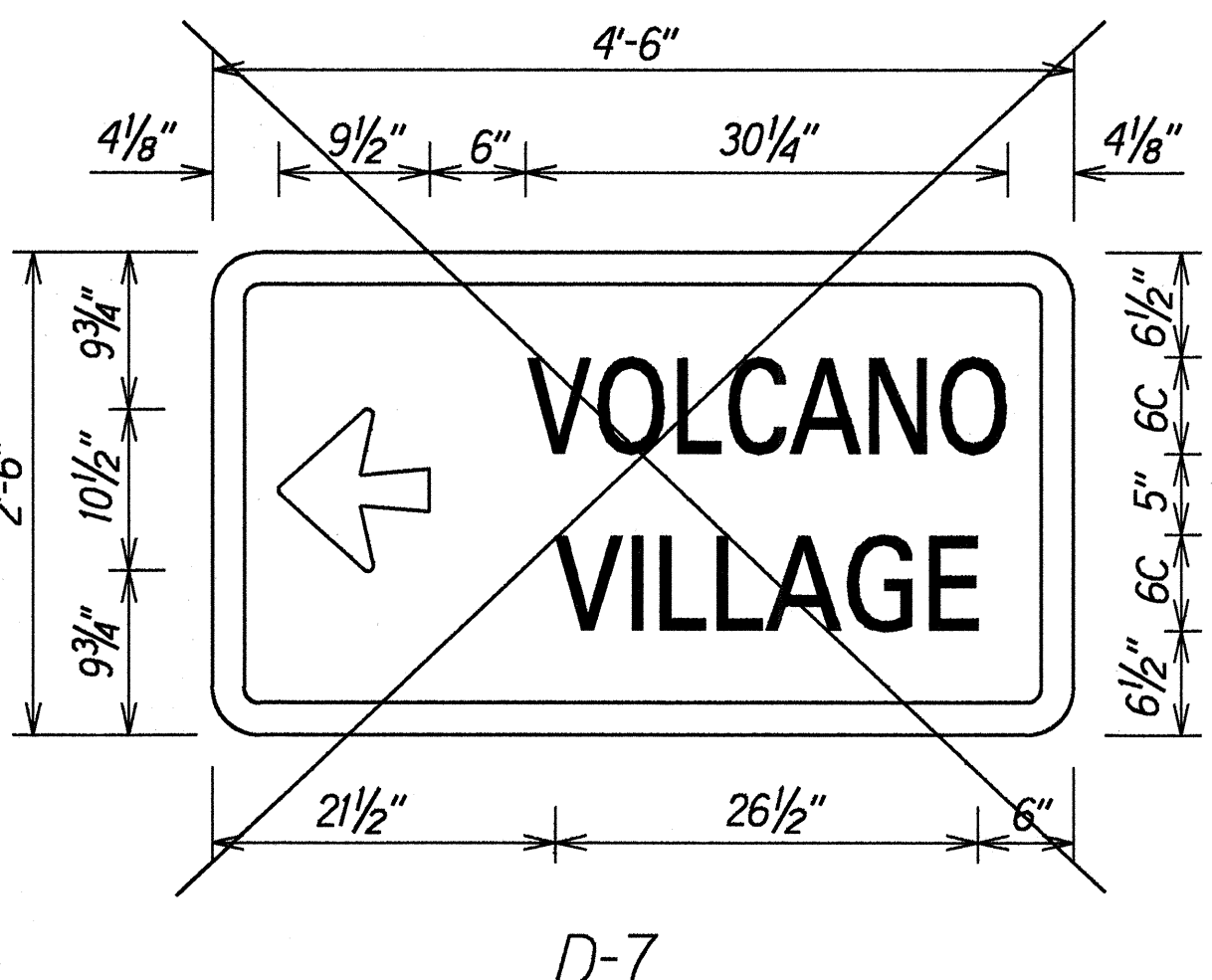
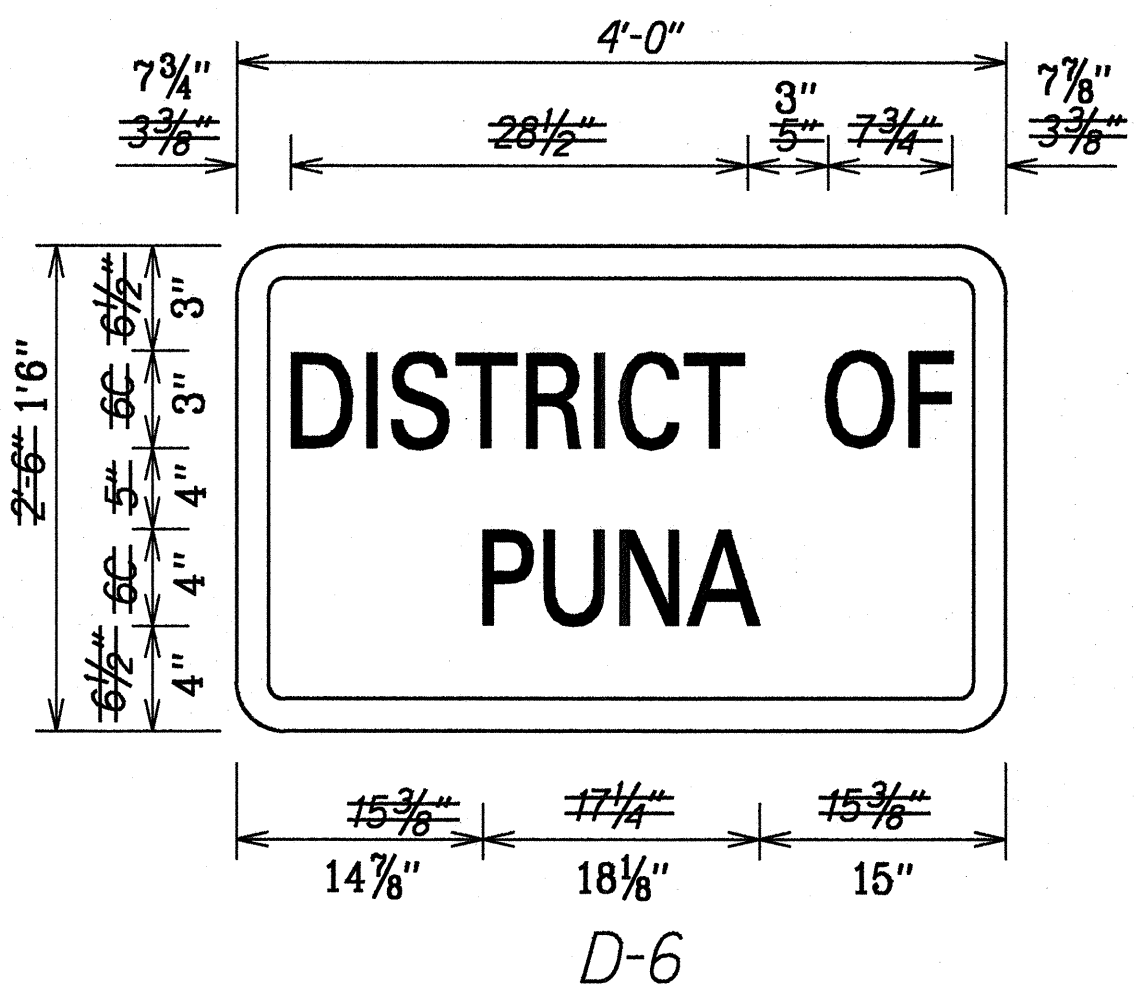
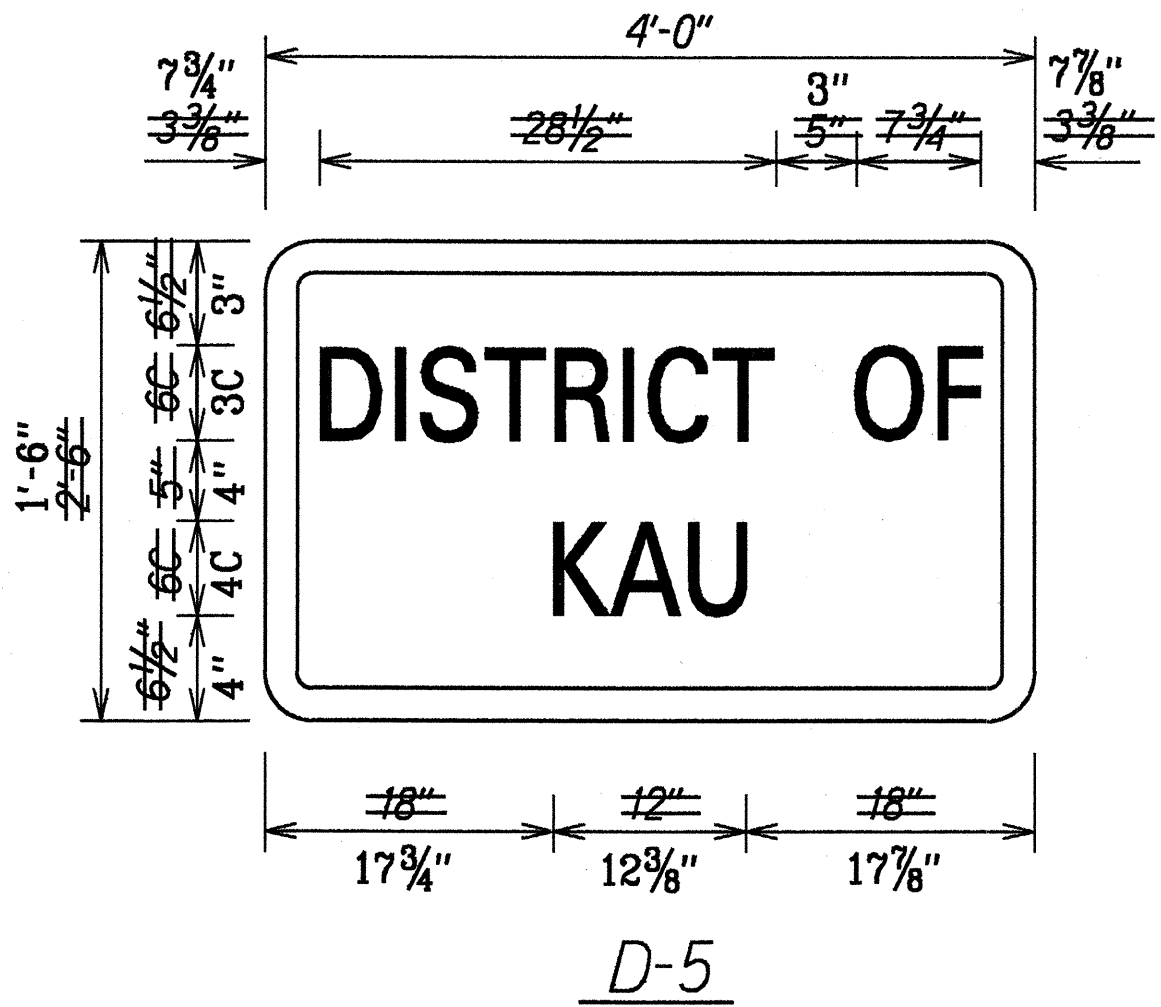
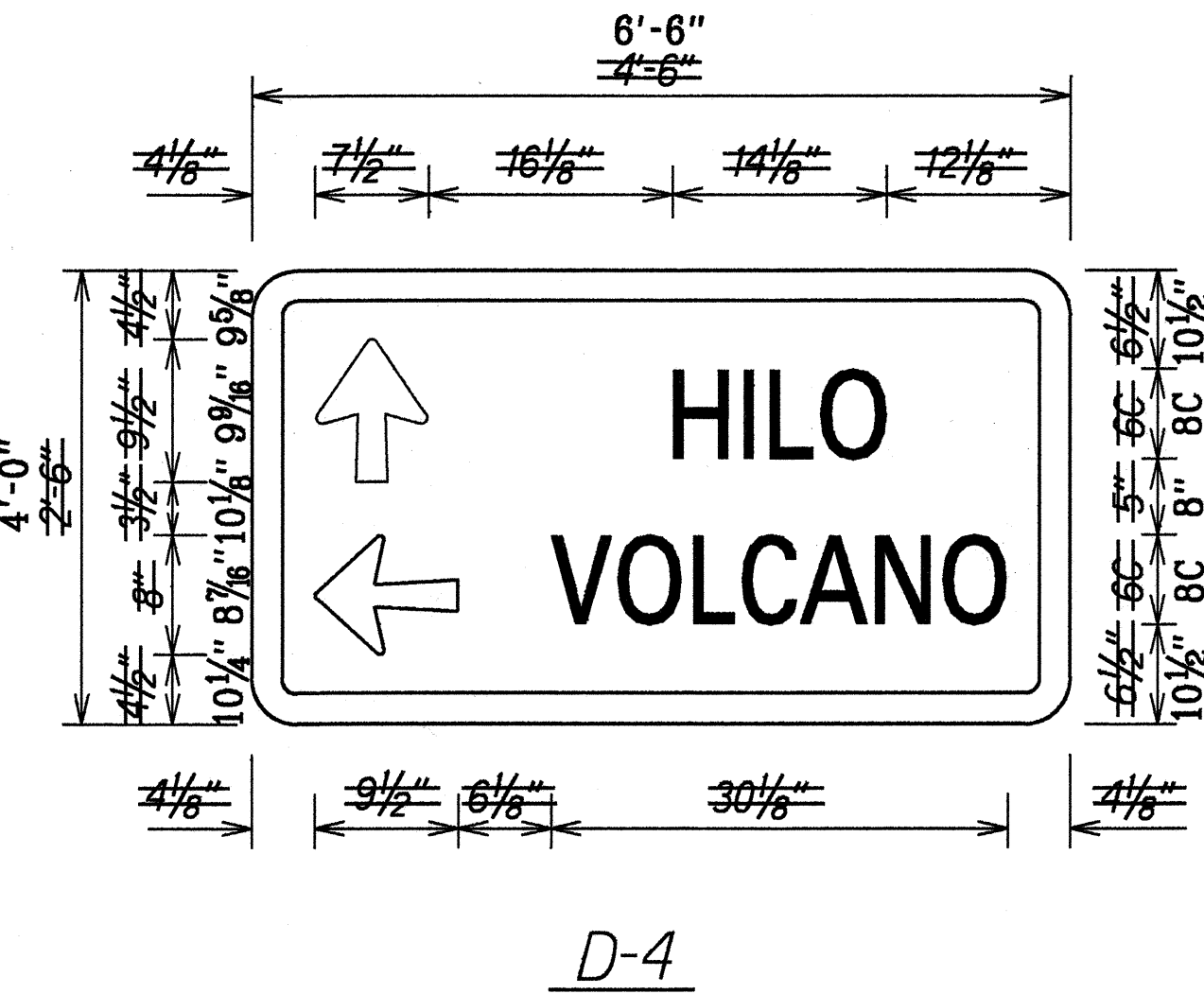
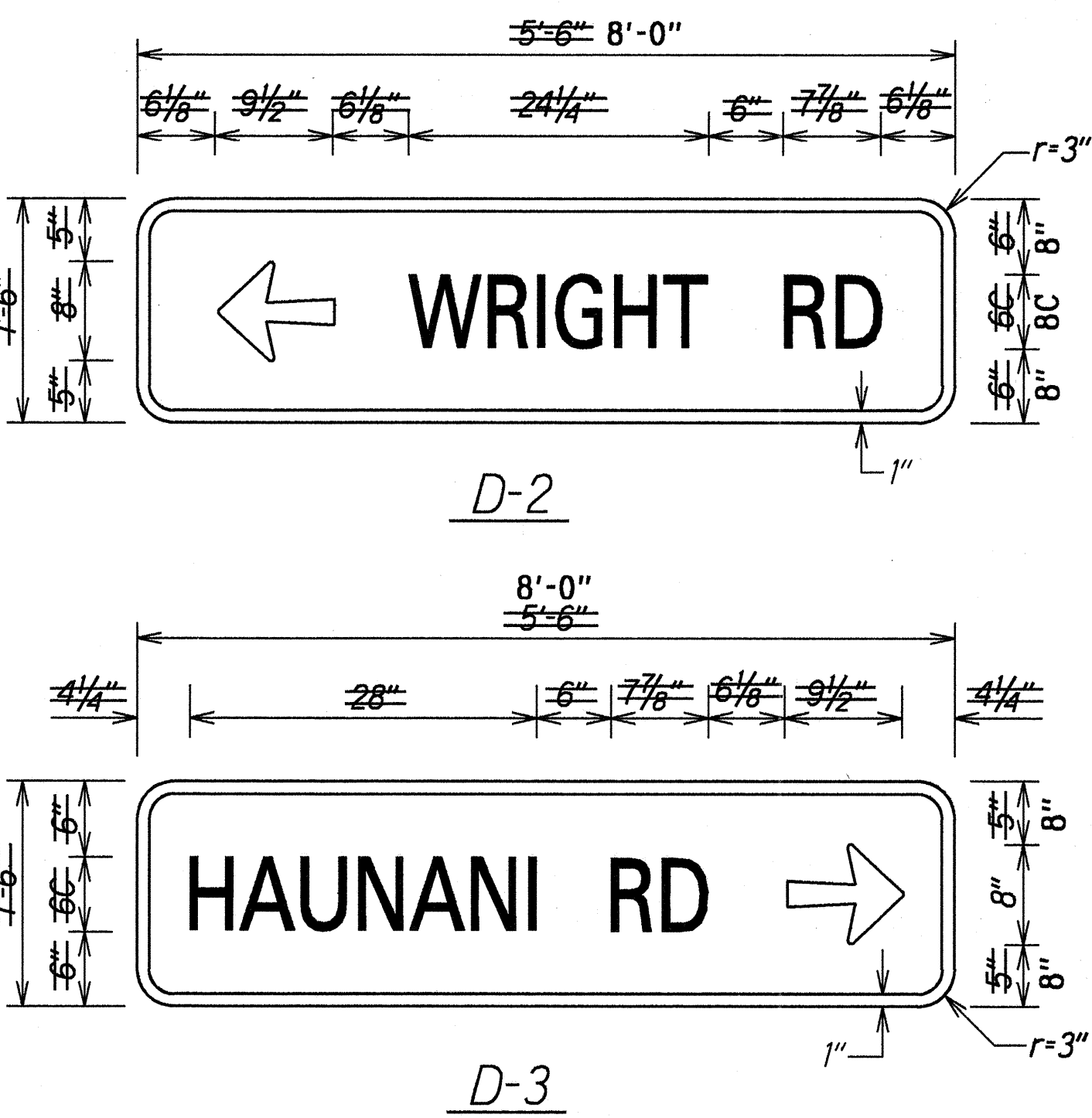
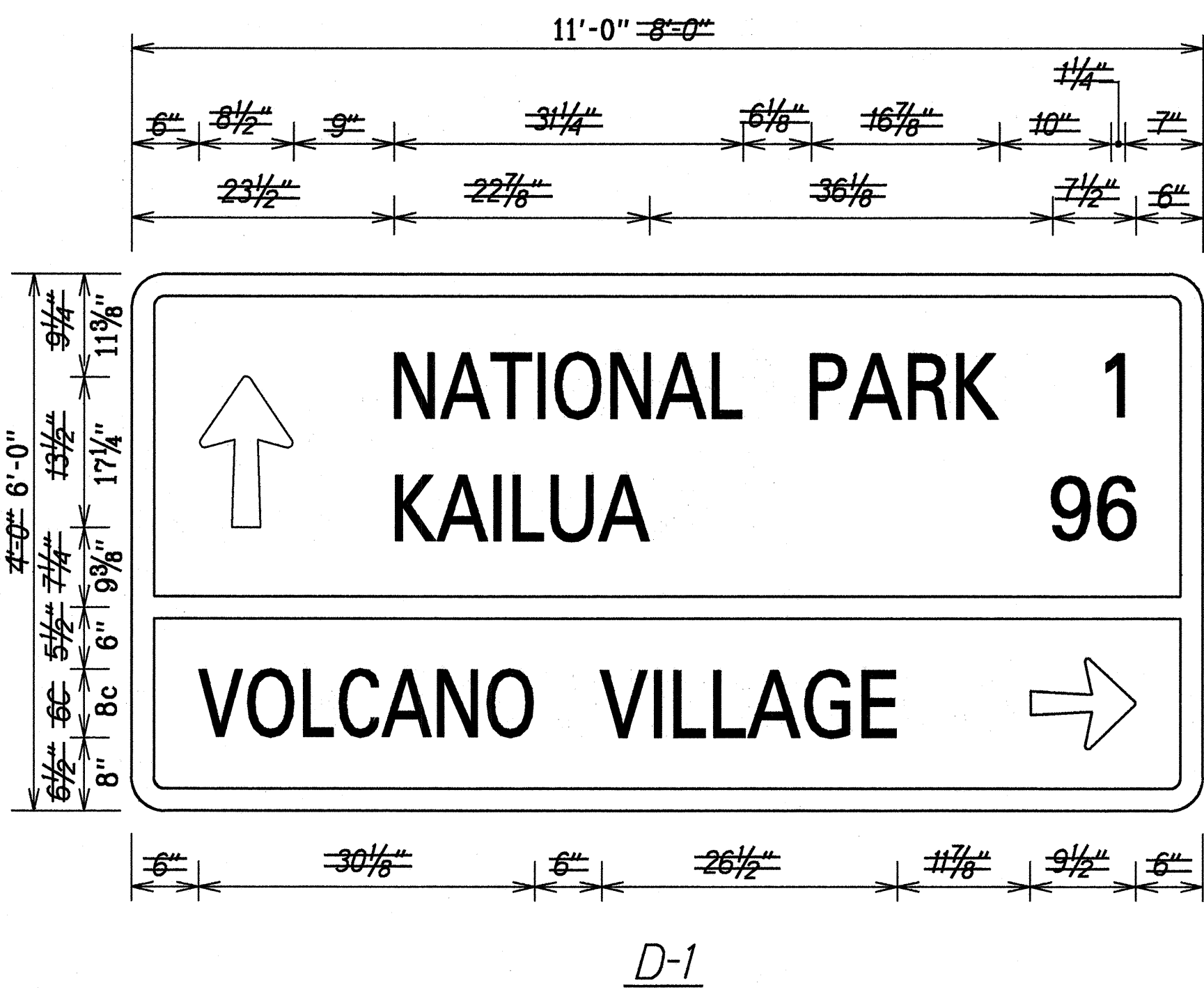
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
	CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**PAVEMENT MARKING AND
 SIGNING PLAN**
 VOLCANO ROAD RESURFACING
 Vicinity of Hawaii
 Volcanoes National Park
 Fed. Aid Proj. No. STP-011-2(26)
 Scale: 1"=40' Date: Aug, 1993

SHEET No. 11 OF 14 SHEETS

AS-BUILT 15S-11

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		



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

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
SIGN DETAILS
VOLCANO ROAD RESURFACING
Vicinity of Hawaii Volcanoes National Park
Fed. Aid Proj. No. STP-011-2(26)
Scale: 1"=1'-0"
Date: Aug., 1993

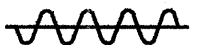
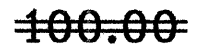
ORIGINAL PLAN	DATE
SURVEY PLATTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(26)	1993		

TRAFFIC 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	12			
R2-1(55)-B	SPEED LIMIT 55			10	
W1-2(R)		2			
W1-2(L)		2			
W2-1		5			
W2-2(R)		1			
W2-2(L)		3			
I-15	ELEVATION 3000 FEET	2			
I-15	ELEVATION 3500 FEET	2			
D3-1	JADE ST		2		
TOTAL		29	2	10	

MILEPOST MARKER SUMMARY				
LOCATION	SIGN NO. AND MESSAGE		QUANTITY	
			W/O POST	W/POST
Sta. 290+13± Lt.	D10-2 24 D10-7 11		1	1
Sta. 237+33± Lt.	D10-2 25 D10-7 11		1	1
Sta. 184+53± Lt.	D10-2 26 D10-7 11		1	1
Sta. 131+73± Lt.	D10-2 27 D10-7 11		1	1
Sta. 160+43± Lt.	D10-2 28 D10-7 11		1	1
TOTAL			5	5

PAVEMENT MARKING SUMMARY	
DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE A _____	1,175 Ea.
TYPE C _____	1,275 Ea.
TYPE D _____	720 Ea.
TYPE H _____	190 Ea.
TYPE J _____	750 Ea.
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (YELLOW) _____	7,280 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	3,8000 L.F.
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	59,100 L.F.
TAPE - TYPE III OR THERMOPLASTIC EXTRUSION	
12-INCH PAVEMENT STRIPE (WHITE) _____	350 L.F.

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

DESTINATION SIGN SUMMARY					
SIGN NO.	LOCATION	MESSAGE	SIZE	NEW PANEL AREA (SQ. FT.)	
				W/O POST	W/POST
D-1	Sta. 167+87 Lt.	NATIONAL PARK 1, KAILUA 96, VOLCANO VILLAGE →	8'-0"x4'-0"		32.00
D-2	Sta. 157+14 Rt.	← WRIGHT RD	5'-6"x1'-6"		8.25
D-3	Sta. 142+43 Lt.	HAUNANI RD →	5'-6"x1'-6"		8.25
D-4	Sta. 133+31 Rt.	↑ HILO ← VOLCANO	4'-6"x2'-6"		11.25
D-5	Sta. 118+18 Lt.	DISTRICT OF KAU	4'-0"x2'-6"		10.00
D-6	Sta. 118+18 Rt.	DISTRICT OF PUNA	4'-0"x2'-6"		10.00
D-7	Sta. 183+32 Rt.	← VOLCANO VILLAGE	4'-6"x2'-6"		11.25
TOTAL				0	91.00

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
SM-1	⊥ STA. 166+85 Lt.	M2-1 JCT M1-6(148) 148	1			
SM-2	⊥ STA. 163+54 Lt.	M1-6(11) 11 148 M1-6(148) M6-3 ⬆ ⬆ M6-1(R)			1	
SM-3	⊥ STA. 161+80 Lt.	M1-6(11) 11	1			
SM-4	⊥ STA. 160+20 Lt.	M1-6(148) 148 11 M1-6(11) M6-1(L) ⬆ ⬆ M6-3			1	
SM-5	⊥ STA. 158+00 Rt.	M2-1 JCT M1-6(148) 148	1			
SM-6	⊥ STA. 137+15 Lt.	M1-6(11) 11	1			
SM-7	⊥ STA. 111+32 Rt.	M1-6(11) 11	1			
SM-8	⊥ Sta. 104+99 LT.	M1-6(11) 11	1			
TOTAL			6	0	2	0

SERVICE SIGN SUMMARY					
SIGN NO.	LOCATION	MESSAGE	SIZE	NEW PANEL AREA (SQ. FT.)	
				W/O POST	W/POSTS
S-1	Sta. 171+03 Lt.	FOOD-GAS, LODGING NEXT RIGHT	4'-0"x'-6"		14.00
S-2	Sta. 164+06 Lt.	FOOD-GAS, LODGING →	4'-0"x4'-0"		16.00
S-3	Sta. 135+57 Rt.	FOOD-GAS, LODGING ←	4'-0"x4'-0"		16.00
S-4	Sta. 129+09 Rt.	FOOD-GAS, LODGING NEXT LEFT	4'-0"x3'-6"		14.00
TOTAL				0	60.00

CONSTRUCTION SIGN SUMMARY				
SIGN NO.	LOCATION	MESSAGE	W/POST(S)	W/O POST
CW20-1d	Sta. 318+70± RT.	ROAD CONSTRUCTION AHEAD	1	
CG20-2	Sta. 318+70± LT.	END CONSTRUCTION	1	
CG20-1(5)	Sta. 323+70± Rt.	ROAD CONSTRUCTION NEXT 5 MILES	1	
CG20-1(5)	Sta. 140+03± LT.	ROAD CONSTRUCTION NEXT 5 MILES	1	
CG20-2	Sta. 145+03± RT.	END CONSTRUCTION	1	
CW20-1d	Sta. 145+03± LT.	ROAD CONSTRUCTION AHEAD	1	
TOTAL			6	

REFLECTOR MARKER SUMMARY				
TYPE	QUANTITY			
	W/O POST		W/FLEXIBLE POST, TYPE B	
			YELLOW	WHITE
RM-2				26
RM-3	65			

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION MISCELLANEOUS TRAFFIC SUMMARIES VOLCANO ROAD RESURFACING Vicinity of Hawaii Volcanoes National Park Fed. Aid Proj. No. STP-011-2(26) Date: Aug., 1993
SHEET No. 713 OF 14 SHEETS

STRIPING SCHEDULE													
Sideroads													
From	To	Lnth	Lt.	Rt.	Regime	Single Type I Yellow	Double-4" Type I Yellow	Type II White	C Marker	D Marker	H Marker	J Marker	Remarks
0+00	0+30	30	NP	NP	3		30	60	2	3			Alli Koa
0+00	0+40	40	NP	NP	3		40	80	2	4			300+00
0+00	1+40	140	NP	NP	3		140	280	7	9			Alli Anela
0+00	0+40	40	NP	NP	3		40	80	2	4			Rubbish Dump
0+00	0+84	84	NP	NP	3		84	168	4	6			Nahealani St.
0+00	0+80	80	NP	NP	3		80	160	4	6			Jade Ave.
0+00	0+80	80	NP	NP	3		80	160	4	6			Pearl Ave.
0+00	0+35	35	NP	NP	3		35	70	2	3			Pearl Ave.
0+00	1+00	100	NP	NP	3		100	200	5	7			Lani Huli Rd.
0+00	0+70	70	NP	NP	3		70	140	4	5			Wright Rd.
0+00	0+35	35	NP	NP	3		35	70	2	3			Haunani Rd.
0+00	0+85	85	NP	NP	3		85	170	4	6			Volcano
0+00	0+35	35	NP	NP	3		35	70	2	3			Volcano
854		Subtotals—				854	1,708	44	65	0	0		

[illegible]

SIGN SCHEDULE

	Baseline STATION	M.P.	O/S LT./RT.	SIGN DESCRIPTION
44.	165+50	26.33	RT.	W2-1 /PEARL AVE. SIGN
46.	165+00	26.34	LT.	SM-2
49.	162+60	26.39	RT.	R1-1-A(36"X36")
50.	162+28	26.39	LT.	R1-1-A(36"X36")
51.	161+20	26.41	LT.	SM-3
54.	160+20	26.43	RT.	SM-4
57.	158+50	26.47	RT.	SM-5
61.	150+00	26.63	LT.	R2-1(55)-B
62.	150+00	26.63	RT.	R2-1(55)-B
65.	143+00	26.76	LT.	W2-2(R)
68.	139+64	26.82	RT.	R1-1-A(36"X36")
70.	136+94	26.87	LT.	R1-1-A(36"X36")
71.	136+50	26.88	LT.	SM-6
74.	130+20	27.00	LT.	D10-2(27) W/D10-7(11) (BI-DIRECTIONAL)
75.	130+00	27.00	RT.	W2-2(L)
79.	113+00	27.33	LT.	W2-1 W/OLD VOLCANO RD. SIGN
80.	111+00	27.36	RT.	R2-1(55)-B
81.	111+00	27.36	LT.	R2-1(55)-B
83.	109+00	27.40	RT.	M1-6(11)
84.	107+46	27.43	RT.	R1-1-A(36"X36")
85.	106+95	27.44	LT.	R1-1-A(36"X36")
86.	106+00	27.46	LT.	W1-2(R)
87.	105+00	27.48	LT.	M1-6(11)
90.	182+50	27.55	RT.	W2-1
92.	174+00	27.72	RT.	W1-2(L)
95.	168+50	27.82	LT.	W1-2(R)
102.	159+00	28.00	LT.	D10-2(28) W/D10-7(11) (BI-DIRECTIONAL)
104.	149+50	28.18	RT.	W1-2(L)

AS-BUILT 15S-14

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY <i>6.6.97</i>	• <i>X</i>
	TRACED BY _____	• _____
NOTE BOOK	DESIGNED BY <i>X</i>	• _____
	QUANTITIES BY <i>102 may</i>	• _____
	CHECKED BY <i>3hbritsum</i>	• _____
	N ^o . _____	• _____