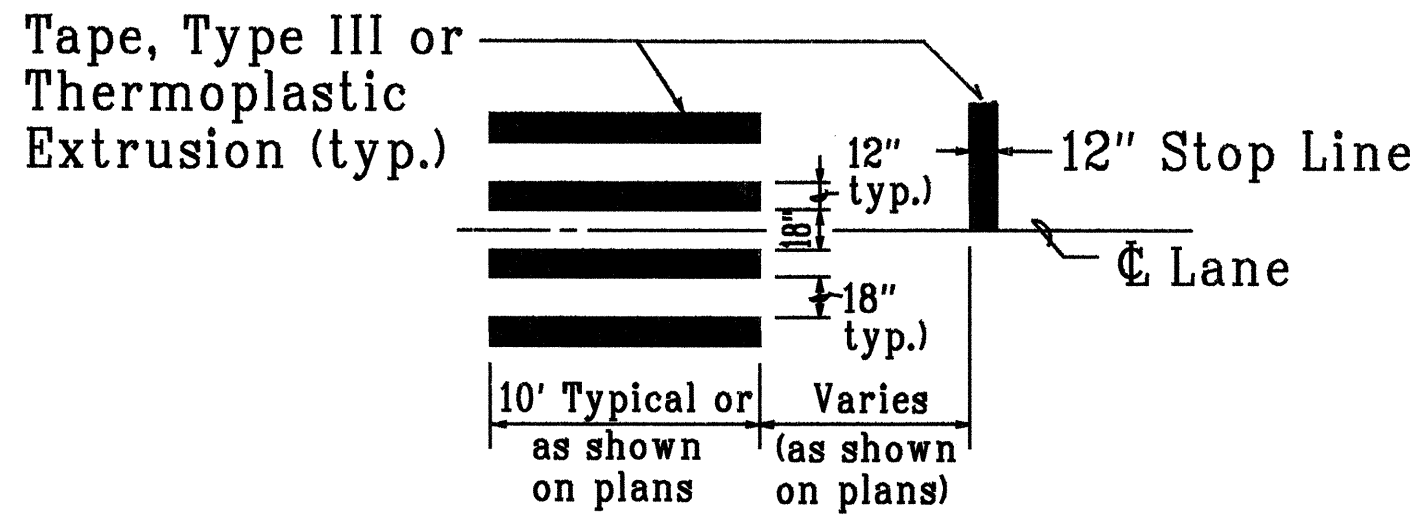
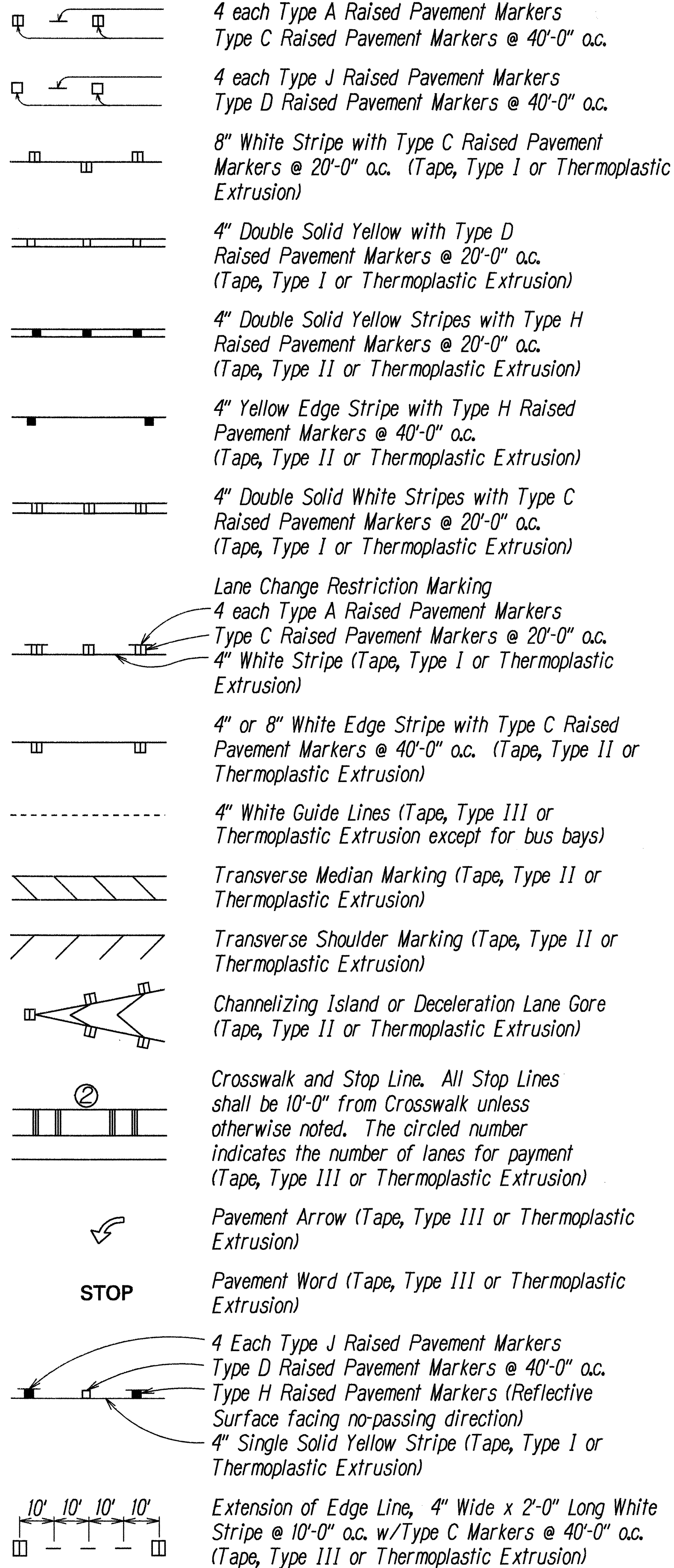


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	25	39

LEGEND

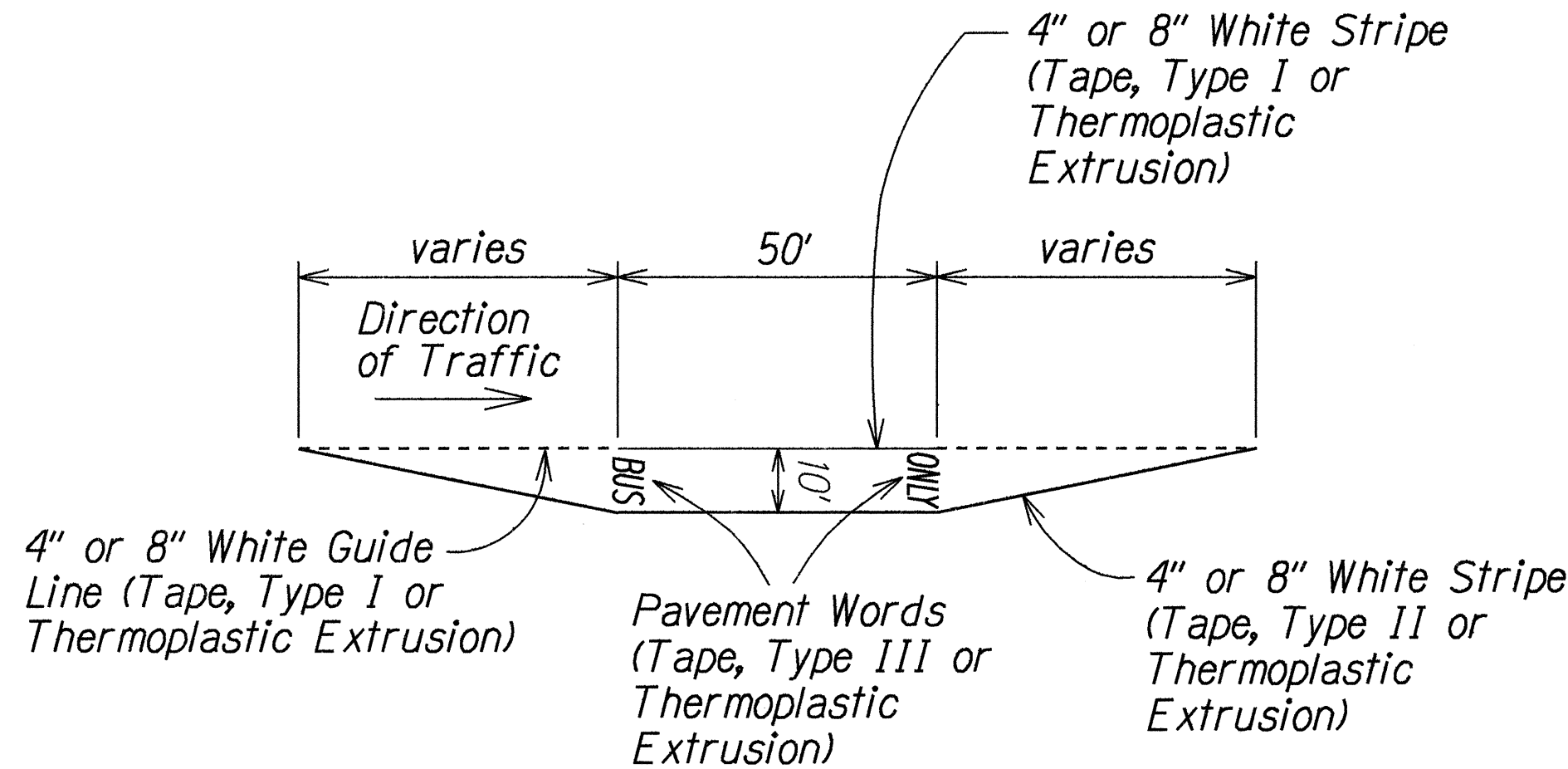


International Type Crosswalk Striping Detail (CCO No. 1)
Not to Scale

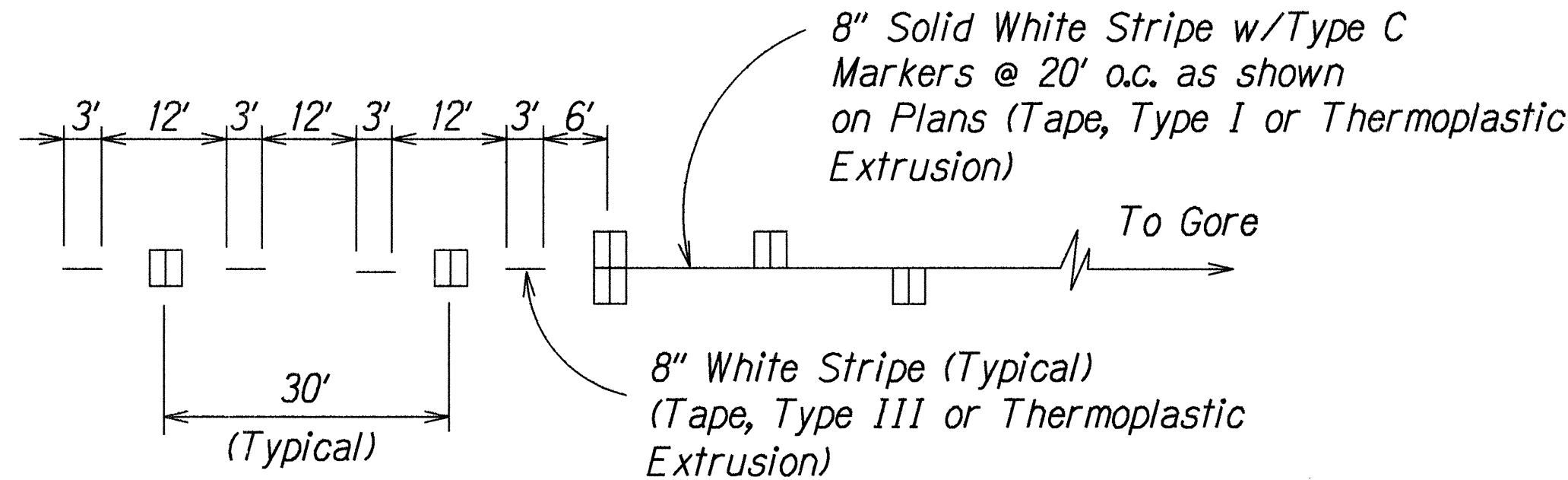
NOTES

- 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.
- Existing signs that are to be replaced shall not be removed until new signs are installed as replacements, or the messages are no longer necessary.
- Backing for all new regulatory and warning signs shall not be spliced.
- All sign panels shall conform to Section 621 of 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"
- State Route Marker Symbols, borders, messages, arrows, symbols and shields shall conform to details as shown on the plans and as specified in the MUTCD.
- All new and relocated signs and markers installed on pipe posts, light standard or expressway sign post are to be mounted with band brackets and steel braces.
- Removal of existing delineators and posts, as directed by the Engineer or shown on the plans, shall be considered incidental to the various signing items.
- Removal and reinstalling existing street name signs on regulatory and warning sign post shall not be paid for separately but shall be considered incidental to the various signing items.
- The Contractor shall notify the Oahu Transit Services Inc. (OTS), Ed Sniffen, at 848-4571 or Lowell Tom at 848-4578 two weeks prior to beginning any work, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stop.

- The Contractor shall install new Type II Object Marker on all utility poles that are within the State Highway Right-of-Way as directed by the Engineer.
- The Contractor shall erect and maintain at the beginning and end of the project advance construction warning signs placed as indicated on the plans or as directed by the Engineer for the duration of the highway project. These Signs shall be placed in addition to the required traffic control signs called for in Section 645 - Traffic Control. The advance construction warning signs shall be new and become the property of the State. The Contractor shall remove, clean, and deliver the signs and posts to the Oahu District Baseyard or as directed by the Engineer upon the completion of the project.



TYPICAL BUS BAY STRIPING DETAIL
Not to Scale



LANE DROP MARKING
Not to Scale

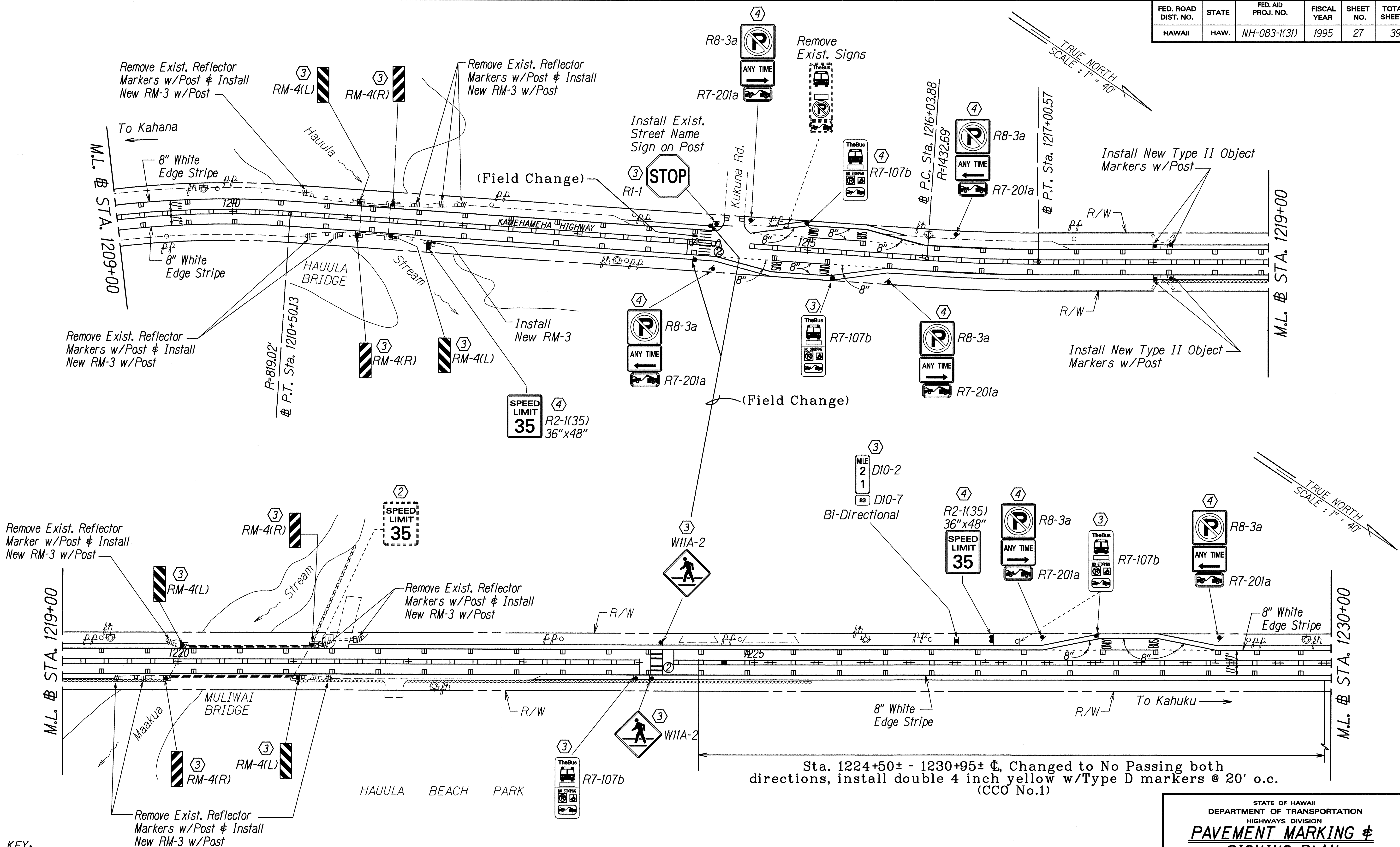
LEGEND

- Reflecter Marker (RM-2, white or yellow) w/post
- Reflecter Marker (RM-3) w/post
- FA Reflecter Marker (RM-3) w/Flexible Delineator Post (Type A)

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
**TRAFFIC LEGEND,
DETAILS & NOTES**
KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)
Scale: As Noted Date: Mar., 1995
SHEET No. 11 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	27	39



SURVEY PLOTTED BY	DATE
DRAWN BY	8/11/94
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
102 Ruby	
NA Mem102	

KEY:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) w/Post(s)
- ③ Remove Exist. Sign(s) w/Post(s) & Install New w/Post(s)
- ④ Install New Sign(s) w/Post(s)
- ⑤ Install New Sign(s) on Exist. Post(s)

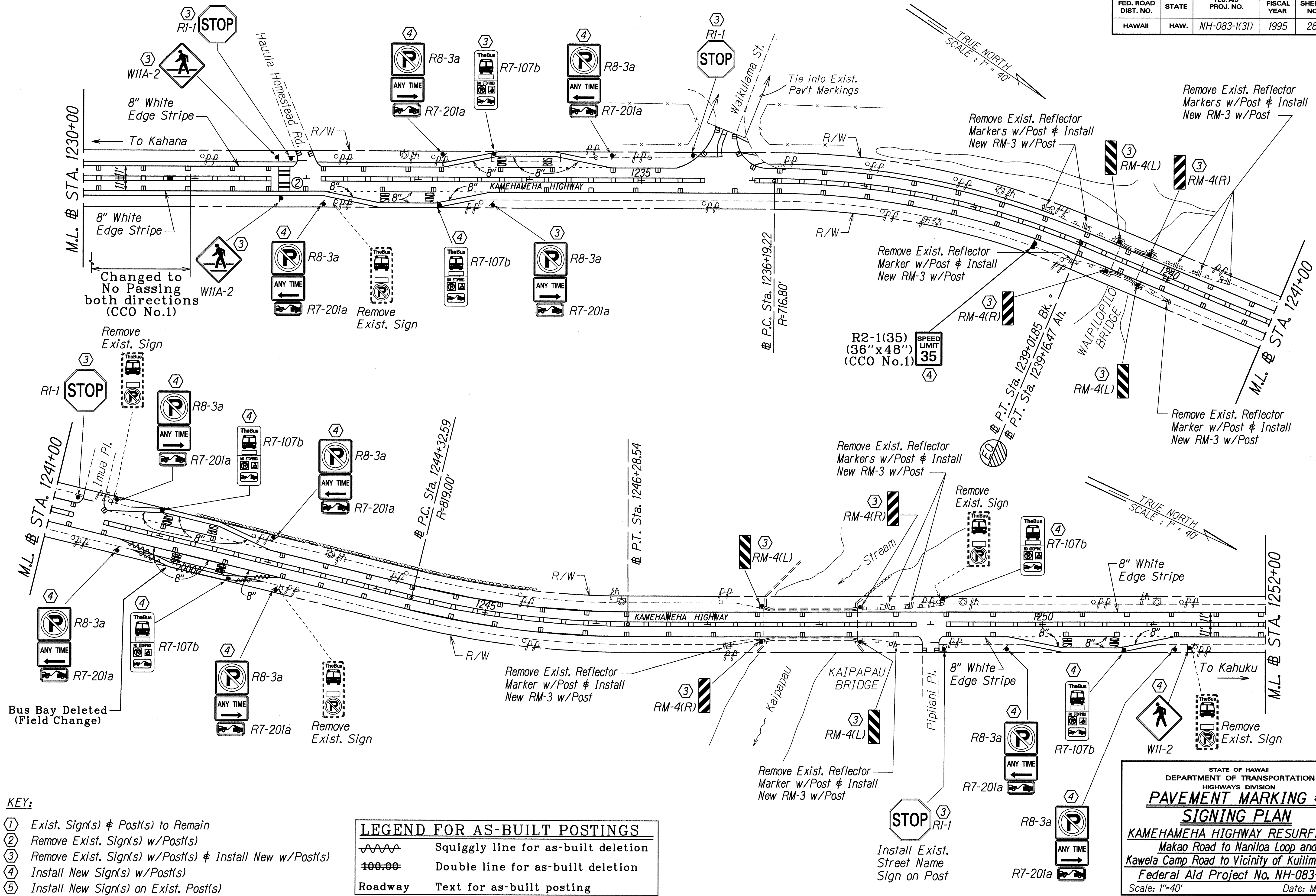
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN
KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)
Scale: 1"=40' Date: Mar., 1995

SHEET No. T3 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	28	39



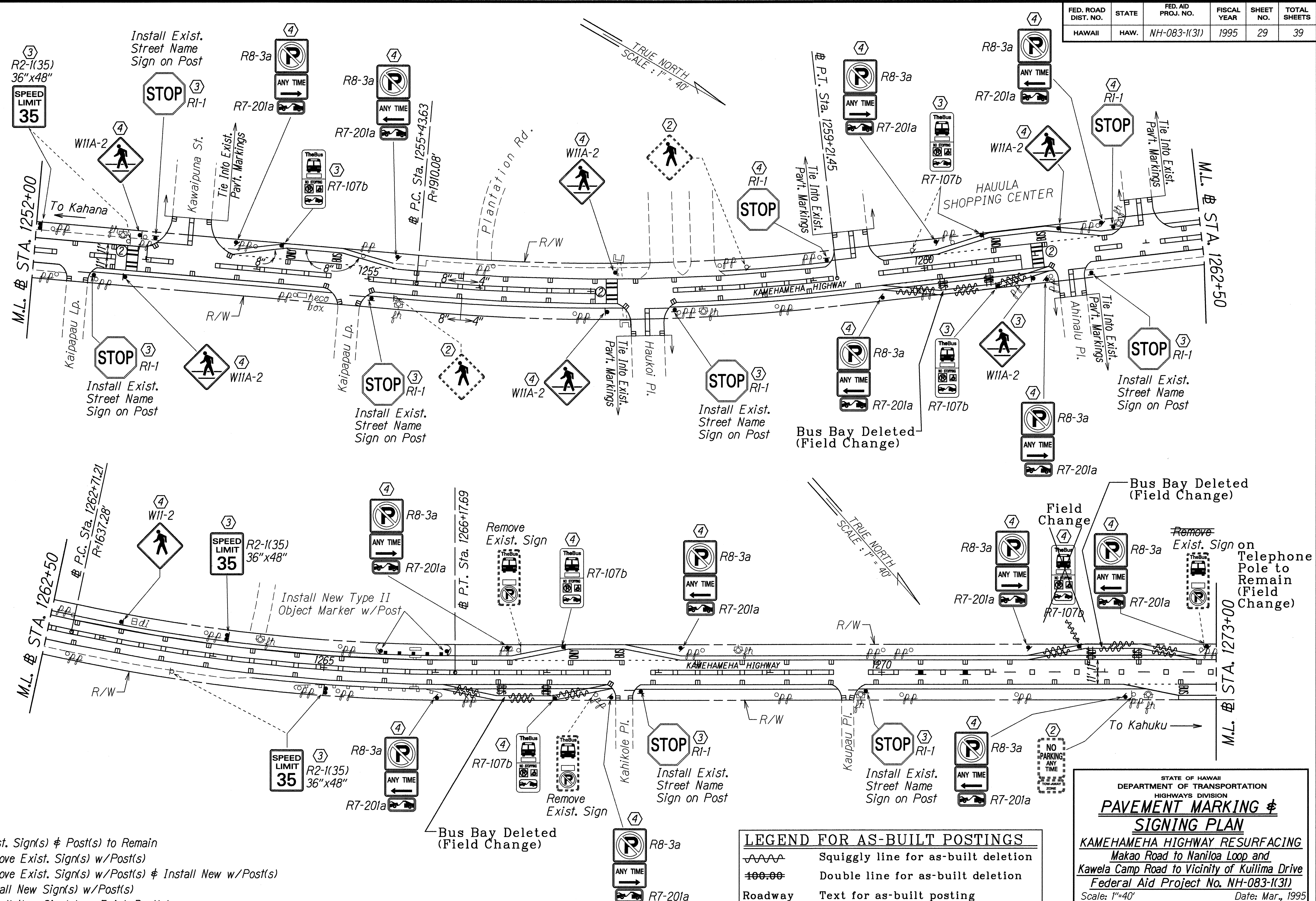
- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Install New Sign(s) on Exist. Post(s)

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

SURVEY PLOTTED BY	DATE
DRAWN BY	8/11/94
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)
Scale: 1"=40' Date: Mar., 1995
SHEET No. T4 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	29	39



- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Install New Sign(s) on Exist. 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

PAVEMENT MARKING & SIGNING PLAN

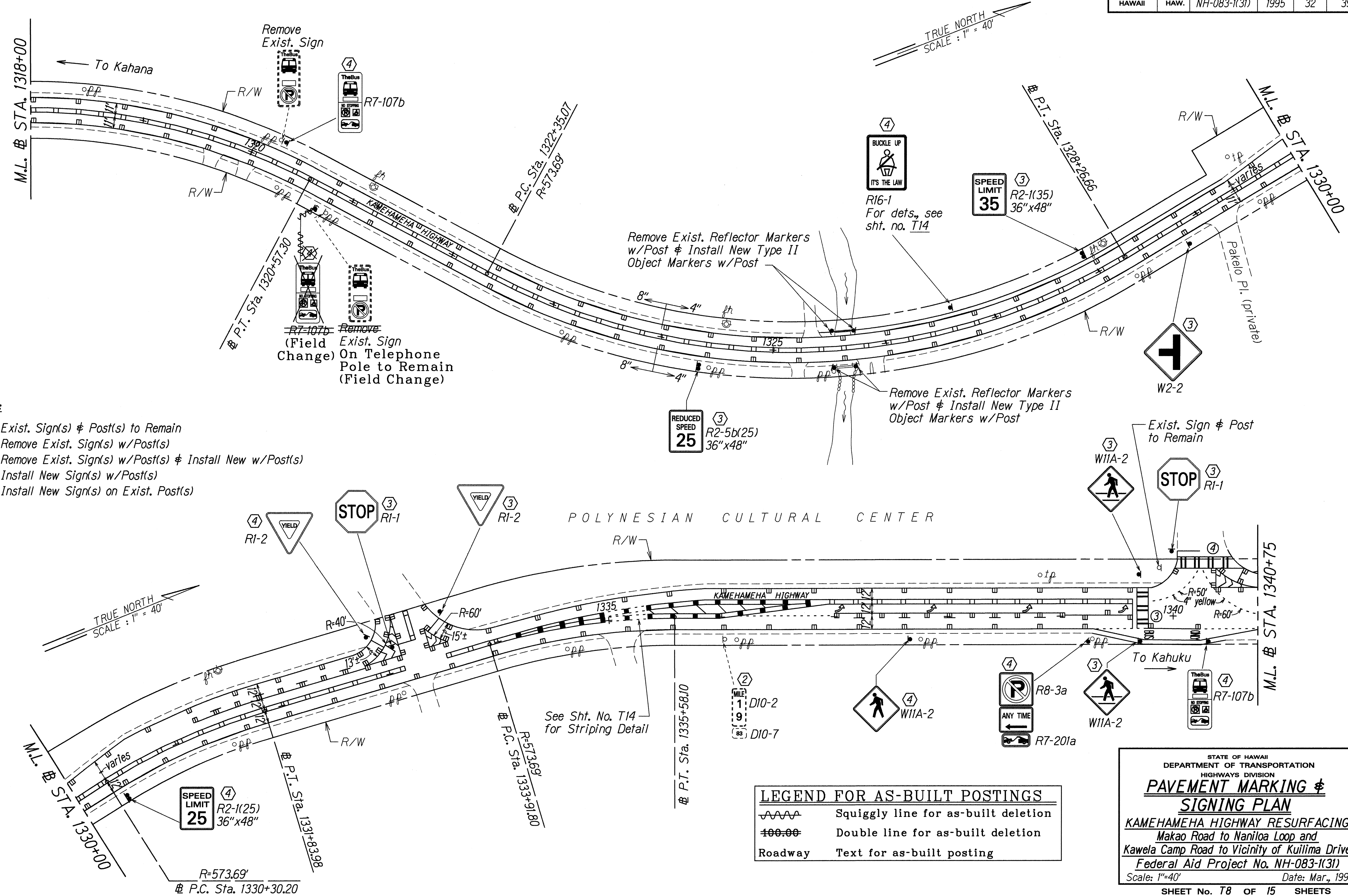
KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)

Scale: 1"=40' Date: Mar., 1995

SHEET No. T5 OF 15 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	8/1/94
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
142-ruby	
N. Kemppa	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	32	39



- KEY:
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Install New Sign(s) on Exist. Post(s)

ORIGINAL PLAN	DATE	8/1/94
SURVEY PLOTTED BY		
DRAWN BY		
TRACED BY		
NOTES		
102-ruby		
QUANTITIES BY		
CHECKED BY		
N. Hamidi		

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 & SIGNING PLAN

KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)

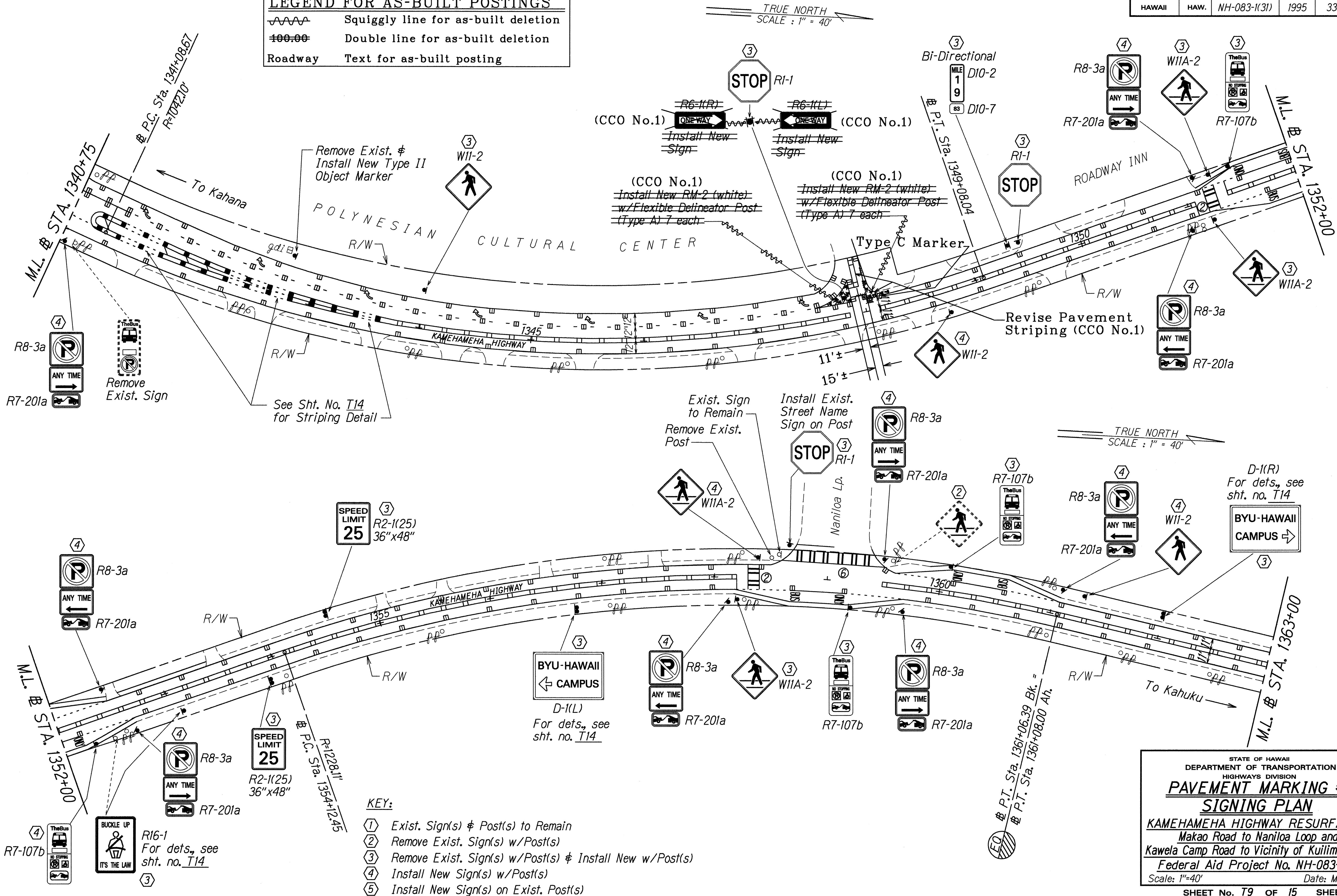
Scale: 1"=40' Date: Mar., 1995

SHEET No. T8 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	33	39

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	DATE	8/11/94
SURVEY PLOTTED BY		
DRAWN BY		
NOTED BY		
CHECKED BY		
IN CHARGE		
BY		
DATE		

- KEY:
- 1 Exist. Sign(s) & Post(s) to Remain
 - 2 Remove Exist. Sign(s) w/Post(s)
 - 3 Remove Exist. Sign(s) w/Post(s) & Install New w/Post(s)
 - 4 Install New Sign(s) w/Post(s)
 - 5 Install New Sign(s) on Exist. Post(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

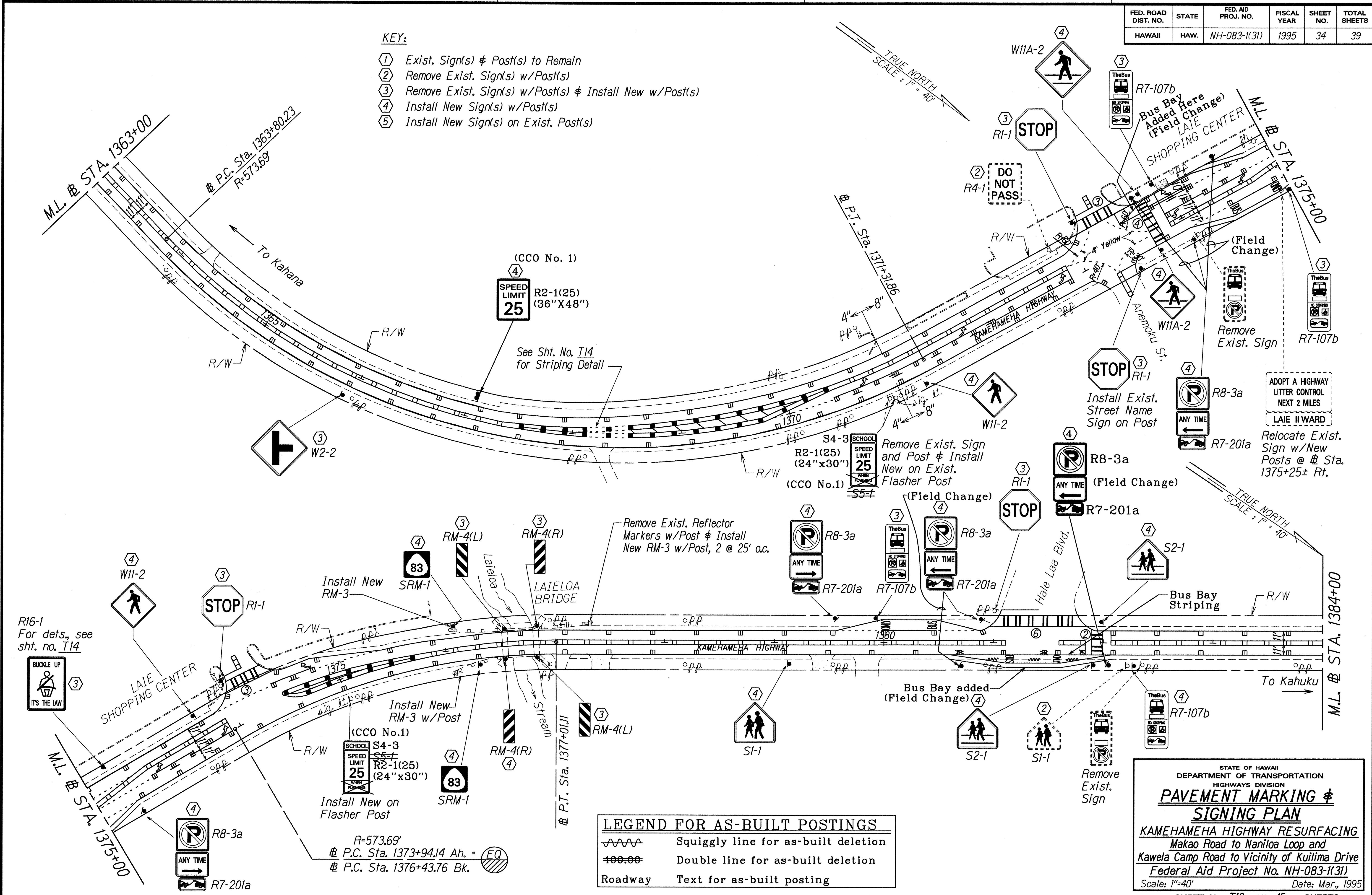
KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Nanihoa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)

Scale: 1"=40' Date: Mar., 1995

SHEET No. T9 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	34	39

- KEY:
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) w/Post(s)
 - ③ Remove Exist. Sign(s) w/Post(s) & Install New w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Install New Sign(s) on Exist. Post(s)



SURVEY PLOTTED BY	DATE
PLAN	8/1/94
TRACED BY	
NOTE BOOK	
INSTRUMENT	
QUANTITIES BY	
CHECKED BY	
ORIGINAL	
PLAN	
NOTE BOOK	
INSTRUMENT	
QUANTITIES BY	
CHECKED BY	
ORIGINAL	

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

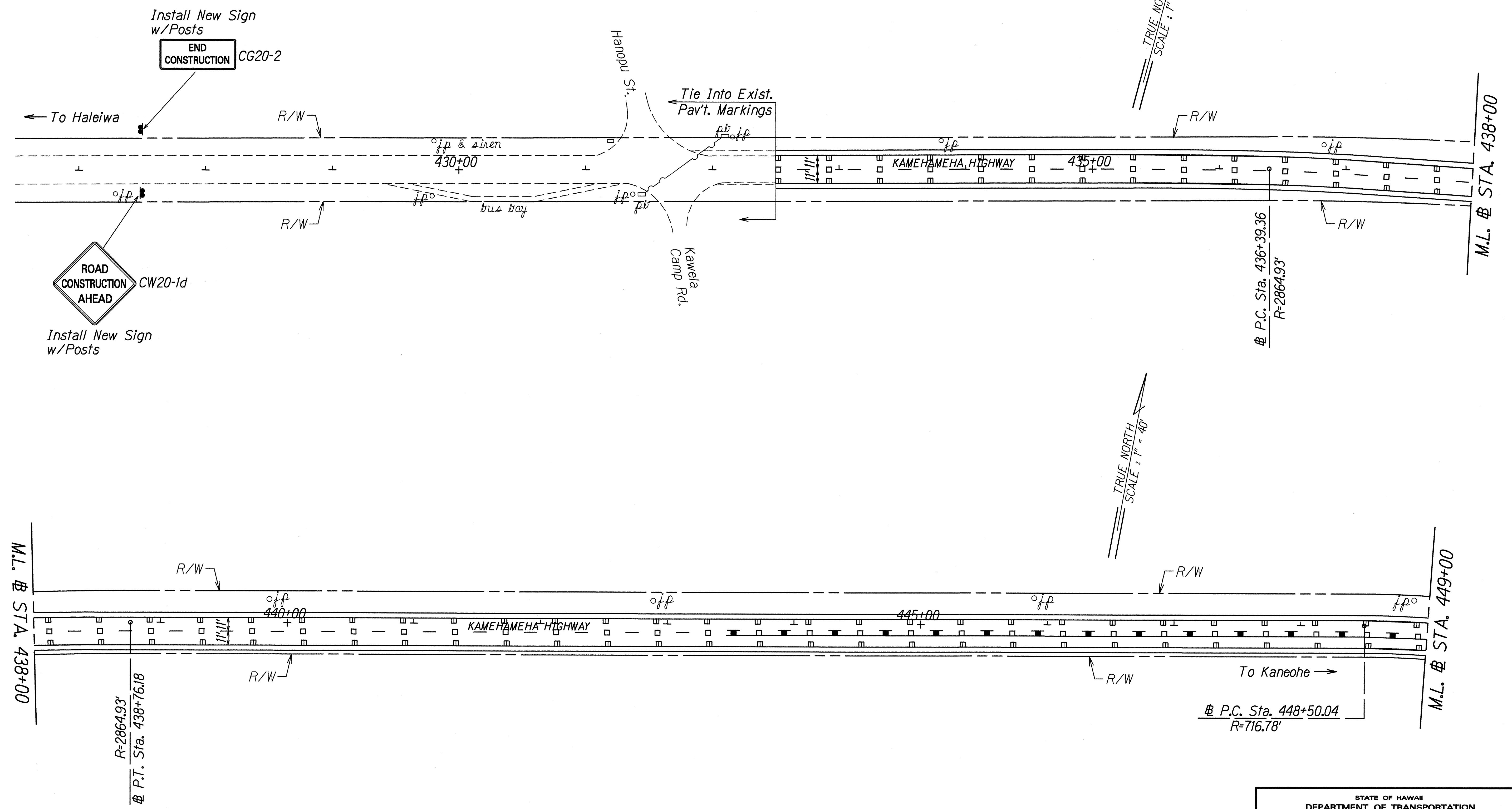
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)
Scale: 1"=40' Date: Mar., 1995

SHEET No. T10 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	36	39



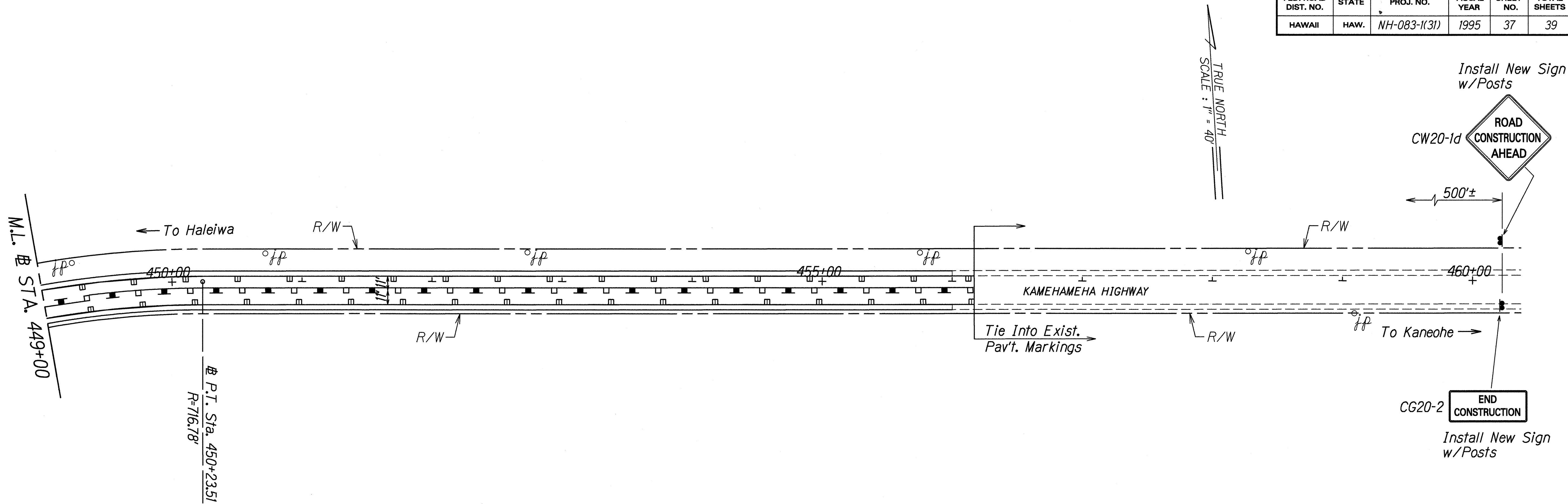
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BY	DRAWN BY	10/22/94
CHECKED BY	TRACED BY	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN
KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)
Scale: 1"=40' Date: Mar., 1995

SHEET No. T12 OF 15 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	37	39



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	10/22/94
1422700	TRACED BY	
1422700	CHECKED BY	
1422700		
1422700		
1422700		
1422700		
1422700		
1422700		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

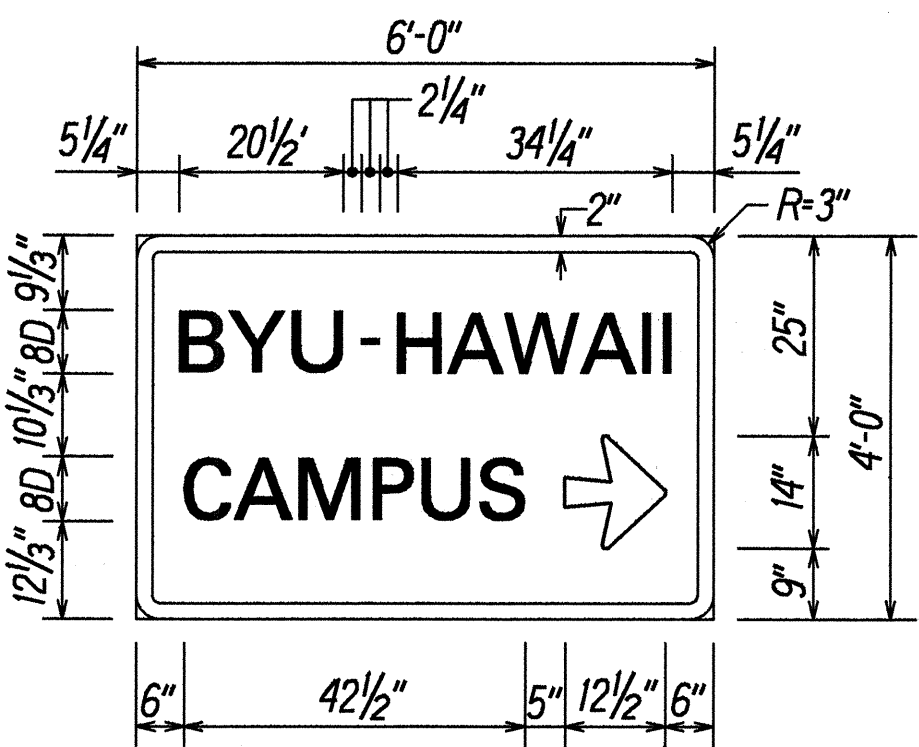
PAVEMENT MARKING &
SIGNING PLAN

KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)

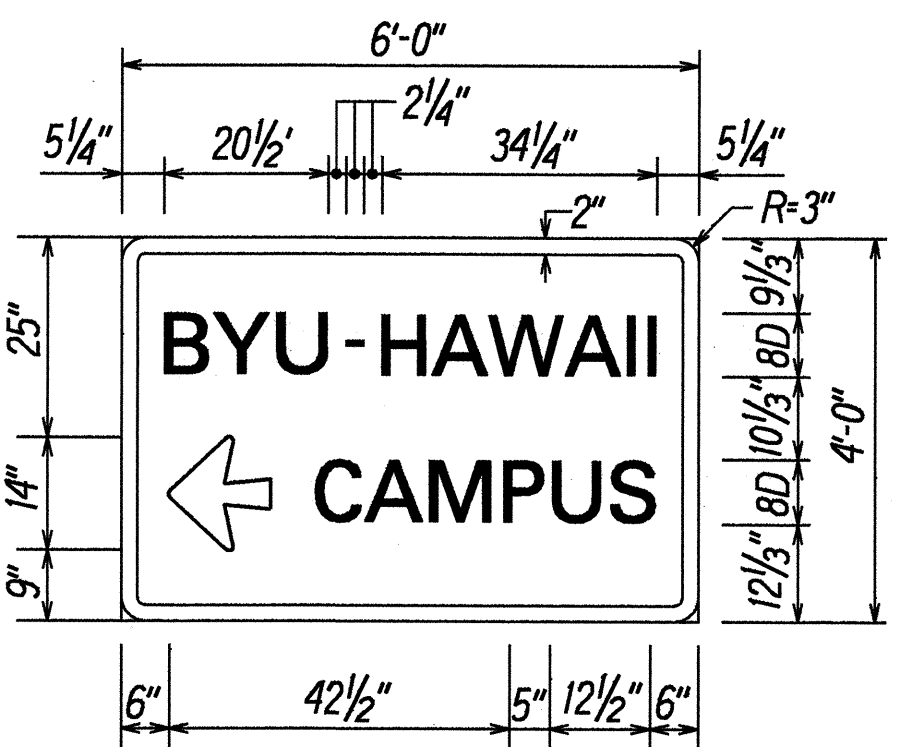
Scale: 1"=40'
Date: Mar., 1995

SHEET No. T13 OF 15 SHEETS

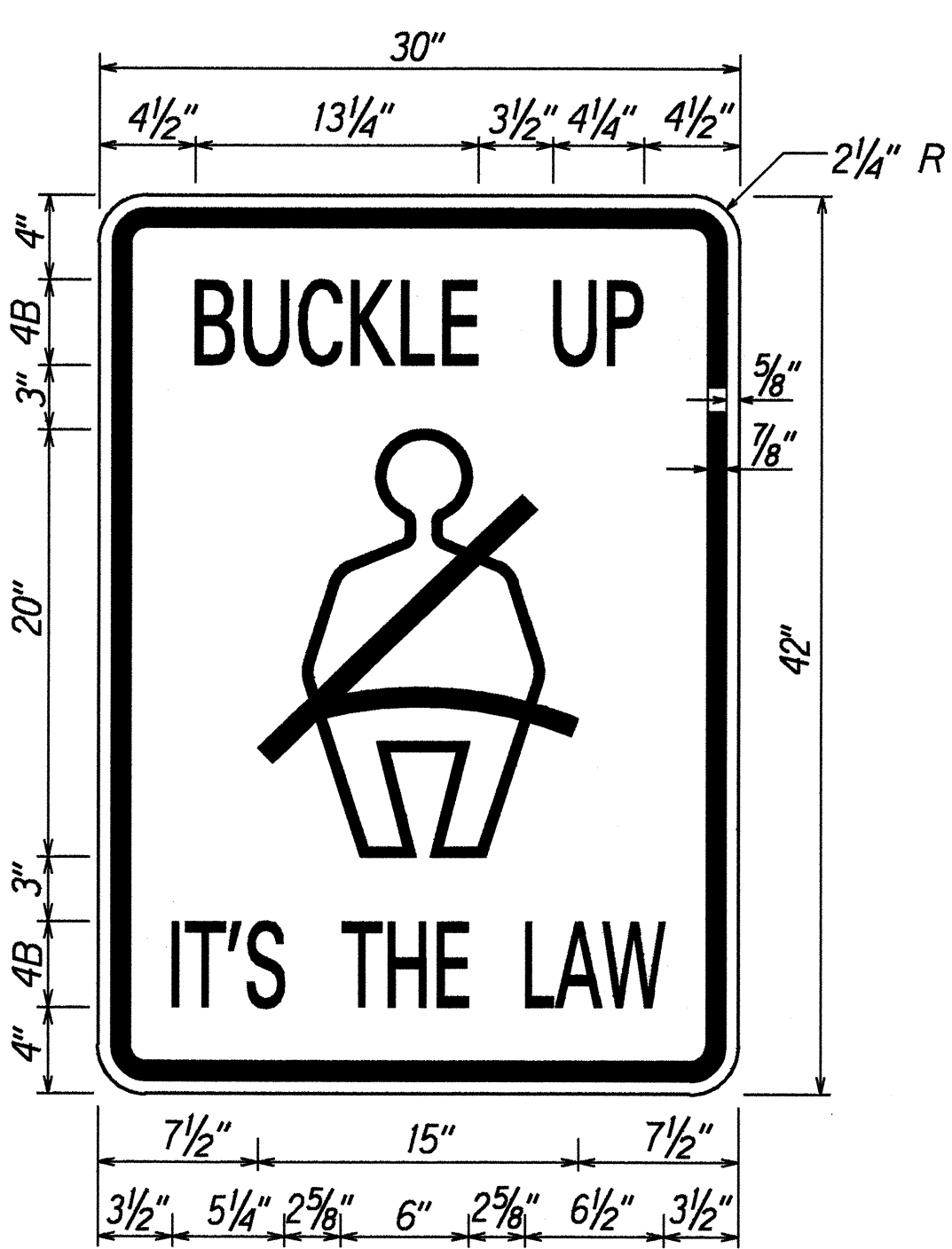
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(31)	1995	38	39



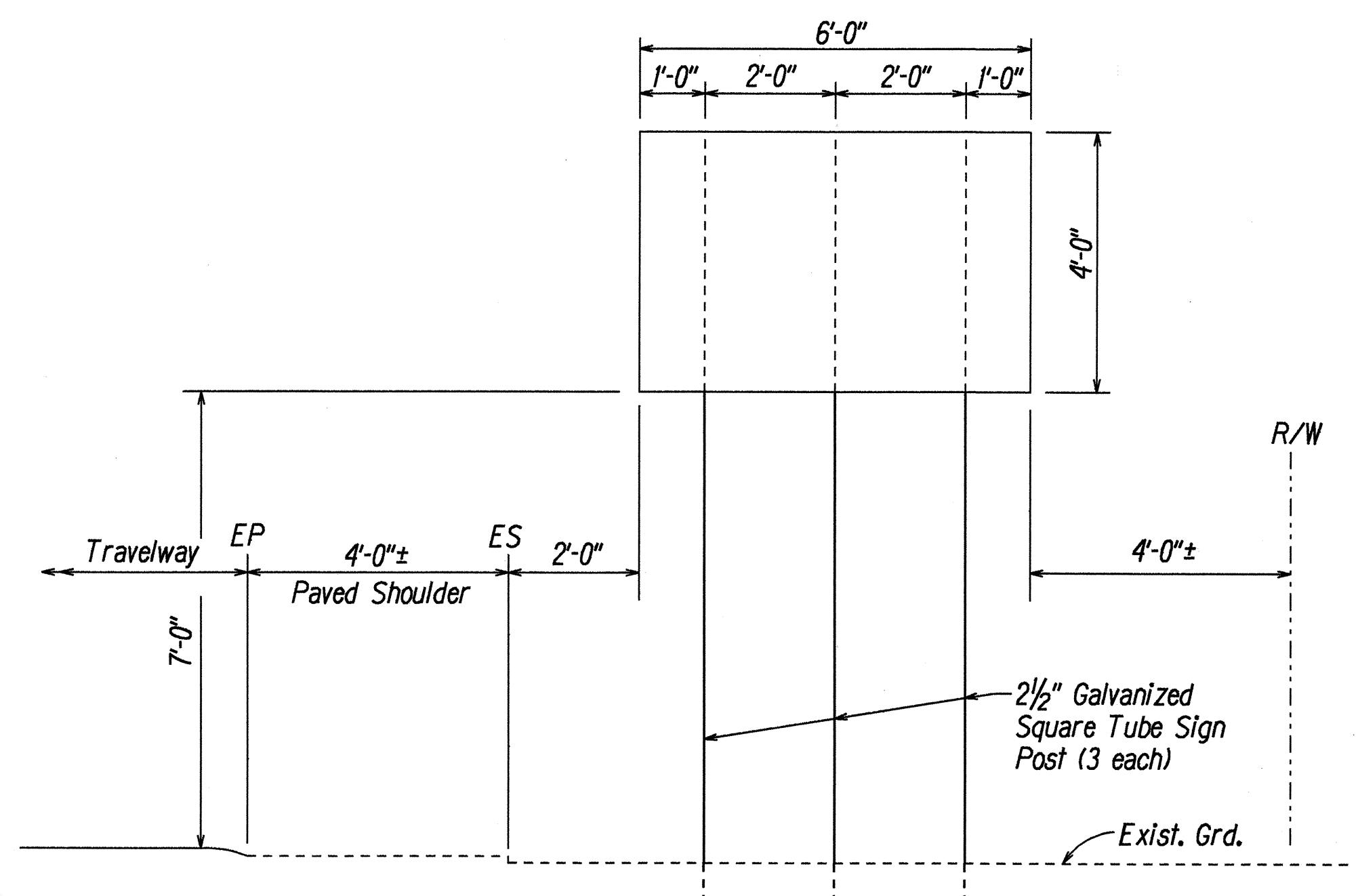
D-1 (R)
 Sta. 1362+00± Lt.
 Scale: 1/2" = 1'-0"



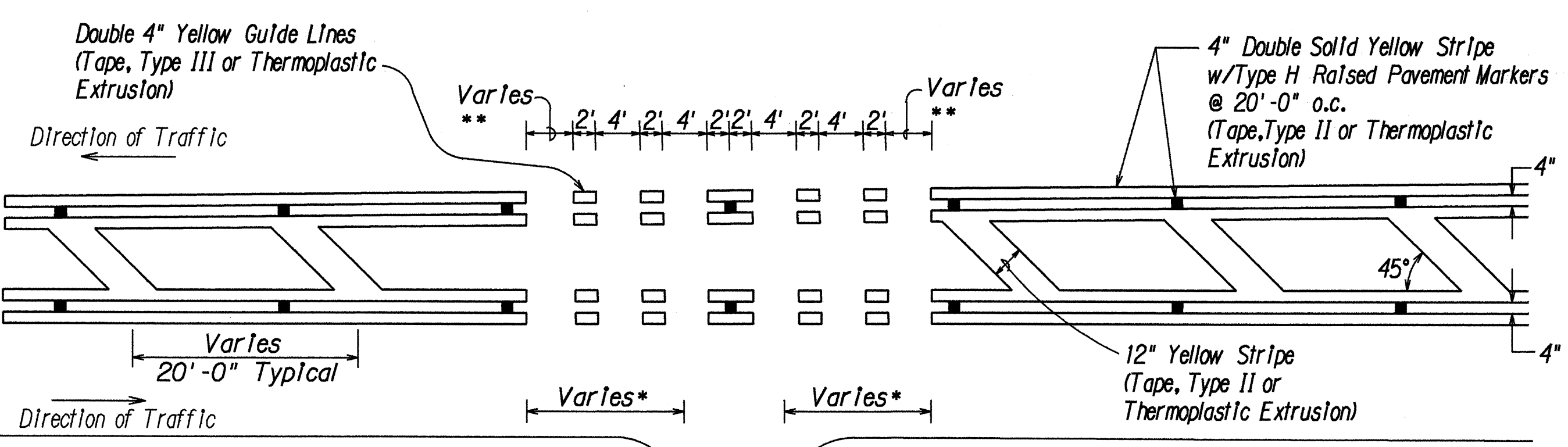
D-1 (L)
 Sta. 1356+75± Rt.
 Scale: 1/2" = 1'-0"



R16-1
 Not to Scale



D-1 (L) & (R)
FRAME LAYOUT
 Scale: 1/2" = 1'-0"



- NOTE:**
- Striping shall border each raised pavement marker.
 - Dashed striping shall be layed out using raised pavement markers as control points.
- * varies: 8' min., 12' max.
 ** varies: 2' min., 5' max.

TYPICAL PAVEMENT STRIPING DETAIL FOR
MEDIAN ISLAND @ PRIVATE DRIVEWAY
 Not to scale

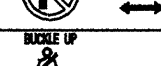
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC DETAILS

KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)

Scale: As Noted Date: Mar., 1995

ORIGINAL PLAN	DATE	1/2/95
DRAWN BY E. A. G.		
TRACED BY C. A. G.		
NOTED BY M. J. G.		
CHECKED BY M. J. G.		

TRAFFIC SIGN SUMMARY					
SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POSTS	W/O POSTS
R1-1	STOP	30			
R1-2	YIELD	4			
R2-1(25)	SPEED LIMIT 25			4	
R2-1(35)	SPEED LIMIT 35			9	
R2-5b(25)	REDUCED SPEED 25			2	
R6-1(R)			≠		
R6-1(L)			≠		
R7-107b *		45			
R7-201a			71		
R8-3a		71			
R16-1		3			
W2-2		2			
W11-2		10			
W11A-2		14			
SI-1		6			
S2-1		6			
S5-1	SCHOOL SPEED LIMIT 25 WHEN FLASHING		5		
TOTAL		191	78 76	15	0

* For Sign No. R7-107b Detail, contact:
Alan Kim
Honolulu Public Transit Authority
711 Kapiolani Blvd.
Suite 275
Honolulu, Hawaii 96813
Ph. No. 523-4734

PAVEMENT MARKING SUMMARY	
DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE A _____	68 EA.
TYPE C _____	1,330 EA.
TYPE D _____	965 EA.
TYPE H _____	179 EA.
TYPE J _____	648 EA.
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	2,720 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	2,870 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	2,650 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	15,750 L.F.
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	26,250 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	23,940 L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	240 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) _____	250 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	1,340 L.F.
TAPE - TYPE III OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	540 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	375 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	640 L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	880 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	400 L.F.
CROSSWALK MARKINGS _____	53 LANES
PAVEMENT ARROW _____	20 EA.
PAVEMENT WORD _____	68 EA.

MILEPOST MARKER SUMMARY		
SIGN NO. AND MESSAGE	QUANTITY	
	W/POST	W/O POST
D10-2 18		1
D10-7 83		
D10-2 19	1	
D10-7 83		
D10-2 20	1	
D10-7 83		
D10-2 21	1	
D10-7 83		
D10-2 22	1	
D10-7 83		
TOTAL	4	1

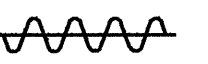
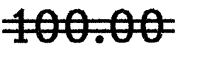
NOTE: All Milepost Markers are Bi-directional

DESTINATION SIGN SUMMARY					
SIGN NO.	LOCATION	MESSAGE	SIZE	NEW PANEL AREA (SQ. FT.)	
				W/O POSTS	W/POSTS
D-1(R)	# STA. 1362+00± LT.	BYU - HAWAII CAMPUS ➡	4'-0" x 6'-0"		24.0
D-1(L)	# STA. 1356+75± RT.	BYU - HAWAII ← CAMPUS	4'-0" x 6'-0"		24.0
TOTAL				0	48.0

CONSTRUCTION SIGN SUMMARY		
SIGN NO.	MESSAGE	W/POSTS
CG20-1(4.1)	ROAD CONSTRUCTION NEXT 4.1 MILES	2
CG20-2	END CONSTRUCTION	4
CW20-1d	ROAD CONSTRUCTION AHEAD	4
TOTAL		10

ROUTE MARKER SUMMARY			
SIGN ASSEMBLY	SIGN NO. AND MESSAGE	TYPE A ASSEMBLY	
		W/POST	W/O POST
SRM-1	M1-6(83) 	6	
TOTAL		6	0

REFLECTOR MARKER & TYPE II OBJECT MARKER SUMMARY						
TYPE	QUANTITY					
	W/O POST		W/STEEL POST		W/FLEXIBLE POST (TYPE A)	
	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE
RM-2						14
RM-3	3		46			
RM-4			36			
OM-II	224		21			

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
MISCELLANEOUS TRAFFIC SUMMARIES
KAMEHAMEHA HIGHWAY RESURFACING
Makao Road to Naniloa Loop and
Kawela Camp Road to Vicinity of Kuilima Drive
Federal Aid Project No. NH-083-1(31)
Date: Mar., 1995

SHEET No. T15 OF 15 SHEETS