GENERAL NOTES

- 1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
- 2. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
- 3. Raised pavement markers shall not be installed within crosswalks.
- 4. Final locations of all signs shall be approved by the Engineer prior to any installation work.
- 5. 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.
- 6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
- 7. All pavement striping shall be as noted on the legend or plans.
- 8. 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.
- 9. Sign posts shall be square tube posts (2" or 2 1/2") unless shown on these plans or directed by the Engineer.
- 10. Removal of Existing Delineators and Posts as directed by the Engineer shall be considered incidental to the various signing items.
- 11. 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.
- 12. Backing for all new regulatory and warning signs shall not be spliced.
- 13. All sign panels shall conform to Section 621 of Special Provisions and the latest editions and amendments of the following FHWA publications:
 - a. "Manual on Uniform Traffic Control Devices for Street and Highways" (MUTCD)
 - b. "Standard Highway Signs"

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- c. "Standard Alphabets for Highway Signs"
- 14. All new and relocated signs and markers installed on pipe post or light standard are to be mounted on new square tube posts or on light standard with band brackets and steel braces.
- 15. The Contractor shall erect at the beginning of the project and at the end of the project advance construction warning signs as indicated on the plans or as directed by the Engineer for the duration of the highway project and shall be maintained by the Contractor. 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 Maui District Baseyard or as directed by the Engineer at the end of the project.
- 16. The Contractor shall notify the County of Maui 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.

LEGEND

|||||||||

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

Type 3D Curb with Type H Raised Pavement

Markers @ 40'-0" o.c. & 4" Yellow Edge Stripe.

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

4 each Type A Raised Pavement Markers

1 each Type DB Raised Pavement Marker Offset at Existing
Fire Hydrant

Existing Fire Hydrant

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

4" White or Yellow Guide Lines 2'-0" long @ 6'-0" o.c. (Tape, Type III 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)

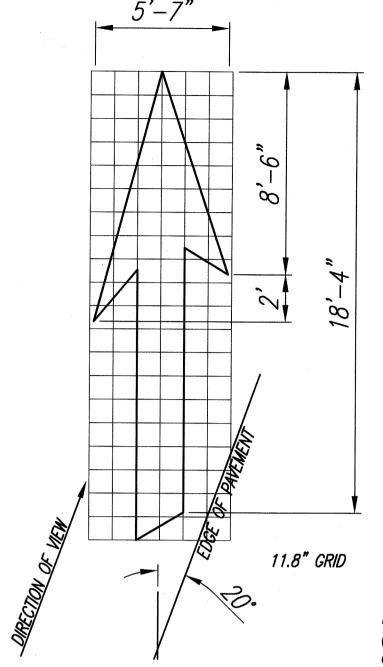
12" White Stop Line (Tape, Type III or Thermoplastic Extrustion)

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

Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)

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

White Yield Striping, 18" High Triangle with 12" Base @ 18" o.c. (Tape, Type III or Thermoplastic Extrusion)



FED. ROAD DIST. NO.

> Right Lane Drop Arrow (For Left Lane, Use Mirror Image)

FISCAL SHEET TOTAL YEAR NO. SHEETS

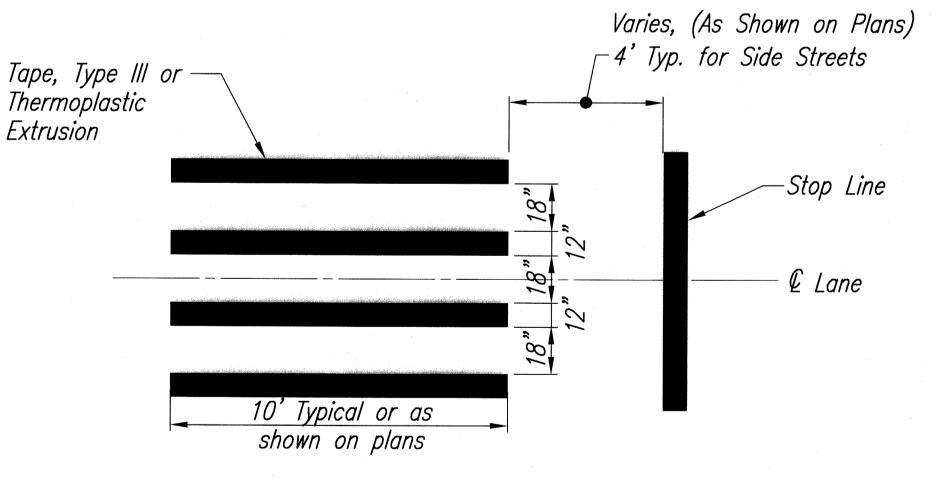
79

PROJ. NO.

HAWAII HAW. STP-030-1(39) 2008

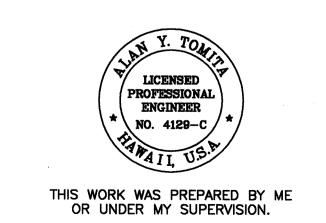
TYPE VI ARROW

Scale: 1:4



TYPICAL CROSSWALK STRIPING

Not to Scale



DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNAGE & PAVENENT MARKING

LEGEND & NOTES

Honoapiilani Highway Widening Lahainaluna Road to Aholo Road Project No. STP-030-1(39)

OF 9

Scale: As Shown
SHEET No.

Date: October 2008

May Samet

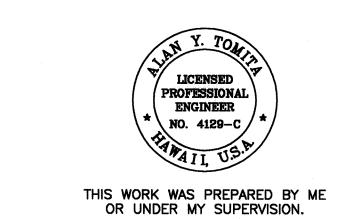
SHEETS

SIGNS & MARKINGS NOTES FOR WORK WITHIN COUNTY STREETS

- All traffic sign and pavement marking installations shall be done in accordance with the "Manual On Uniform Traffic Control Devices For Streets And Highways," 1978 Edition, the latest specifications from the County of Maui Department of Public Works Highways Division, and as shown on the plans.
- 2. Contractor shall notify and coordinate work with the County of Maui Department of Public Works Highways Division one (1) week in advance of commencing work at 527-5087.
- Contractor shall submit material brochures for all signs and paint materials to the County of Maui Department of Public Works Highways Division.
- 4. The signing and/or striping Contractor shall keep one (1) set of approved plans at the project site at all times during construction work.
- 5. Contractor shall paint temporary guidelines and outline of arrows, legends, and crosswalks with a two inch (2") wide brushed line on the day the roadway is opened to traffic. These markings must be approved by the Inspector from the TCounty of Maui Department of Public Works Highways Division before the permanent lines are painted.
- Contractor shall notify the County of Maui Department of Public Works Highways Division at 527-5087, three (3) days in advance of final inspection.
- Contractor shall meet with the inspector from the County of Maui Department of Public Works Highways Division during the final inspection.
- Within ten (10) days following notification of award of contract, the Contractor shall submit to the County of Maui Department of Public Works for approval, a list of any signing and pavement marking material which he proposes to install. The list shall be complete as to the name of manufacturer, catalog number, and shall be supplemented with material brochures.
- Upon final inspection of the project, the Contractor shall submit a letter of certification for all traffic signing and pavement marking materials installed.
- 10. Signs shall be attached to brackets with 5/16" zinc plated steel bolts, nuts and washers. Signs 48" wide or larger than 10 sq. ft. in area shall be mounted on two 2" galv. pipe post. The sign shall be installed with at least one (1) foot clearance from the sign edge to the curb face.
- 11. All traffic signs shall be reflectorized.
- 12. White and yellow paint (pavement markings) shall be reflectorized and conform to the standard specifications on file in the County of Maui Department of Public Works.
- 13. Raised pavement markers shall be installed in accordance with the County of Maui Department of Public Works standards.
- 14. Location of "Stop" sign:
 - A. Install "Stop" sign at curb tangent point.
 - B. Install "Stop" sign on metal street light standard if a standard is located within 10 feet of curb return.
 - C. Install "Stop" sign in front of utility pole if a pole is located within 10 feet of curb return.
- Pavement word and symbol markings shall be in accordance with the County of Maui Department of Public Works standards.
- 16. The Contractor shall use thermoplastic material, approved by the County of Maui Department of Public Works Highways Division, for all crosswalks, stop bars, pavement arrows, 8-inch lane and arc lines, and legends.

TRAFFIC NOTES FOR WORK ON COUNTY STREETS

- 1. A permit shall be obtained from the County of Maui Department of Public Works Highways Division before work on any portion of a public street or highway may begin. Construction traffic control plans approved by the County of Maui Department of Public Works Highways Division must be provided when applying for the permit.
- 2. The Contractor shall provide, install, and maintain all necessary signs and other protective facilities, which shall conform with the "Hawaii Administration Rules Governing The Use Of Traffic Control Devices At Work Sites On Or Adjacent To Public Streets And Highways" adopted by the Director of Transportation, and the current U.S. Federal Highways Administration's "Manual On Uniform Traffic Control Devices For Streets And Highways, Part VI - Traffic Controls For Street And Highway Construction And Maintenance Operations."
- 3. Work on any County street area may be performed only between the hours of 9:00 A.M. TO 3:00 P.M., Monday through Friday, unless otherwise permitted by the County of Maui Department of Public Works.
- 4. During working hours, the Contractor shall provide for through traffic. During non-working hours, all trenches shall be covered with a safe non-skid bridging material and all lanes shall be open to traffic.
- 5. As required by the County of Maui Department of Public Works, the Contractor shall provide off-duty police officers to control the flow of traffic.
- 6. Where pedestrian walkways exist, they shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
- 7. Driveways shall be kept open unless the Owners of the property using these Rights-of-Way are otherwise provided for satisfactorily.
- 8. Contractor shall reference to the approval of the County of Maui Department of Public Works Highways Division, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts and pavement markings disturbed by his activities.
- 9. The Contractor shall notify the County of Maui Department of Public Works one (1) week prior to any work to be done on signs, posts and pavement markings.
- 10. No material and/or equipment shall be stockpiles or otherwise stored within street Right-of-Way except at locations designated in writing and approved by the County of Maui Department of Public Works.
- 11. The Department of Transportation shall ensure that the Contractor installs the construction traffic control devices in accordance with the MUTCD and the Hawaii Administration Rules as specified in traffic note #2.



FED. ROAD DIST. NO. FISCAL SHEET TOTAL YEAR NO. SHEETS PROJ. NO. HAWAII HAW. STP-030-1(39) 2008 *80*

APPROVED:

CHIEF, HIGHWAYS DIVISION, MAUI COUNTY DPWEM (FOR CONSTRUCTION W/IN COUNTY R/W ONLY)

> STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

SIGNAGE & PAVEMENT MARKING

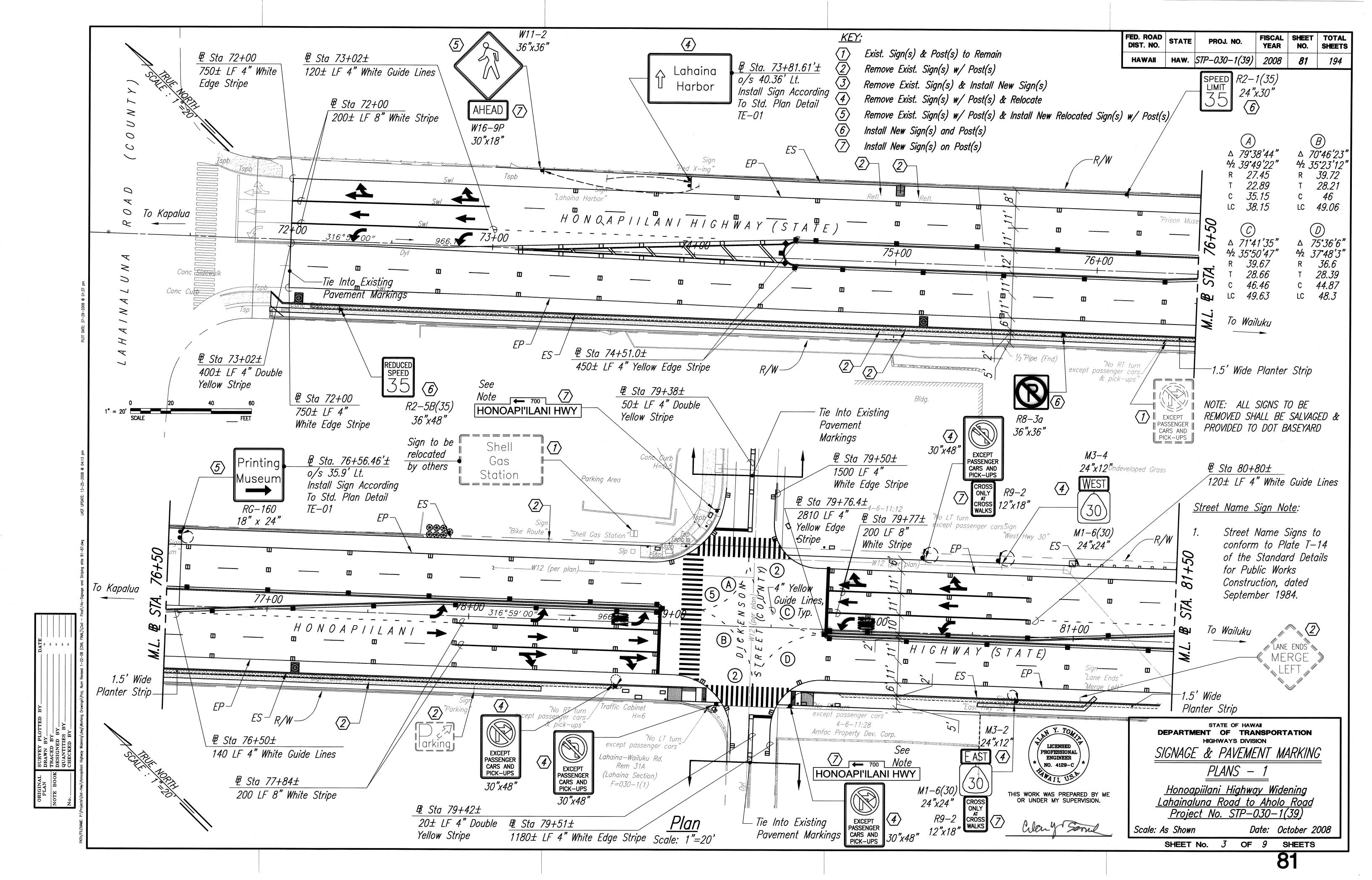
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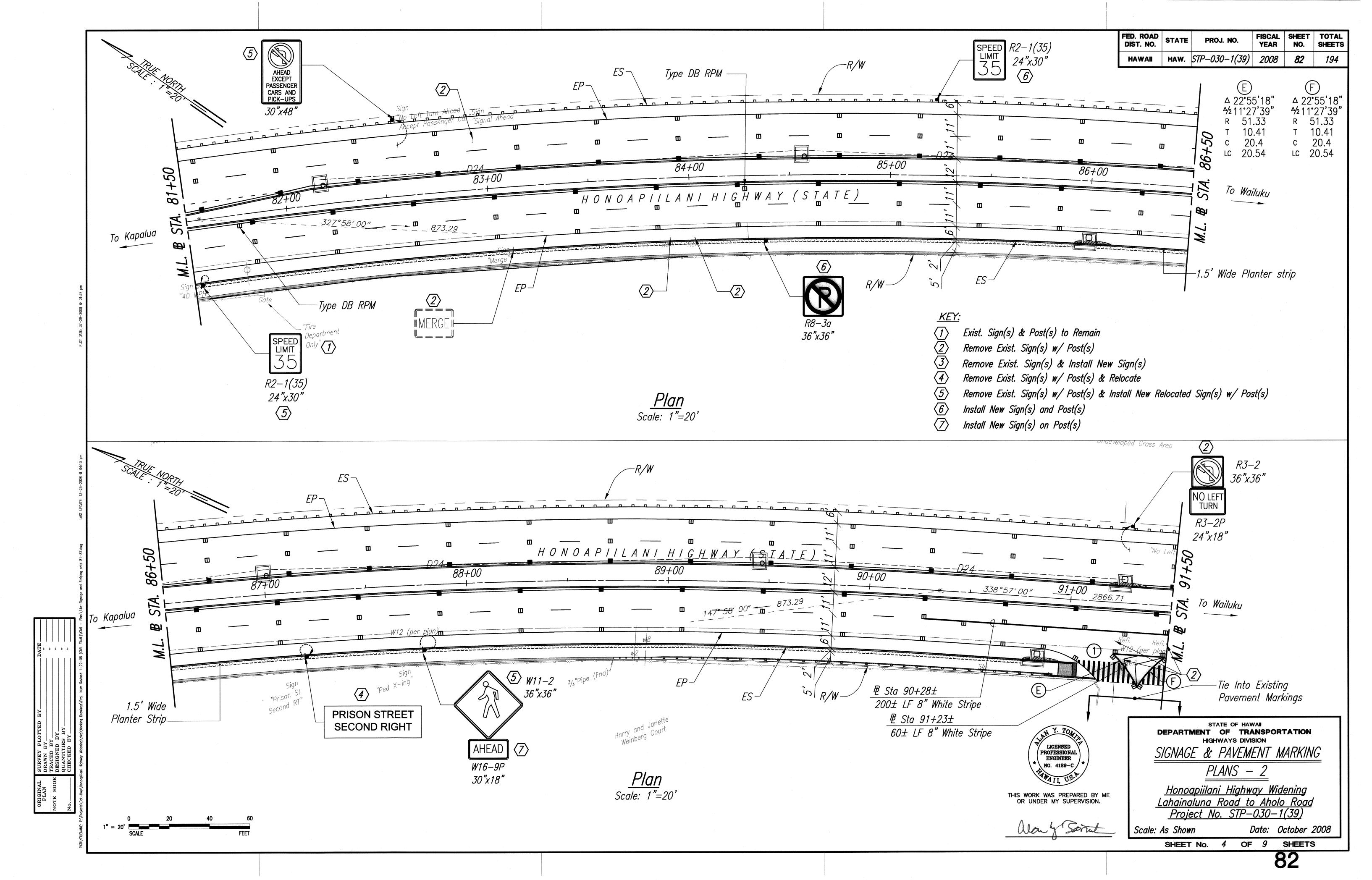
Honoapiilani Highway Widening Lahainaluna Road to Aholo Road <u>Project No. STP-030-1(39)</u>

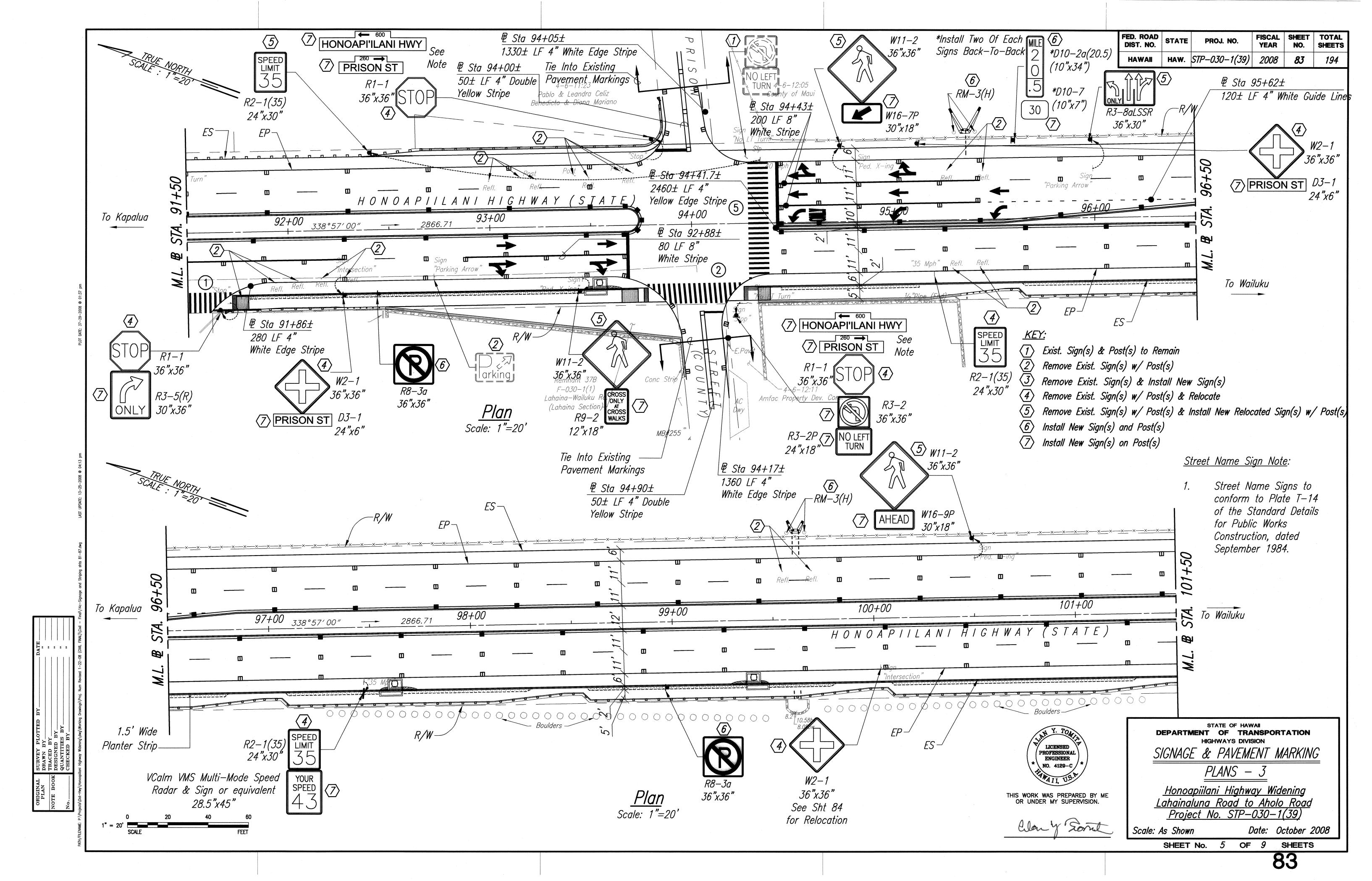
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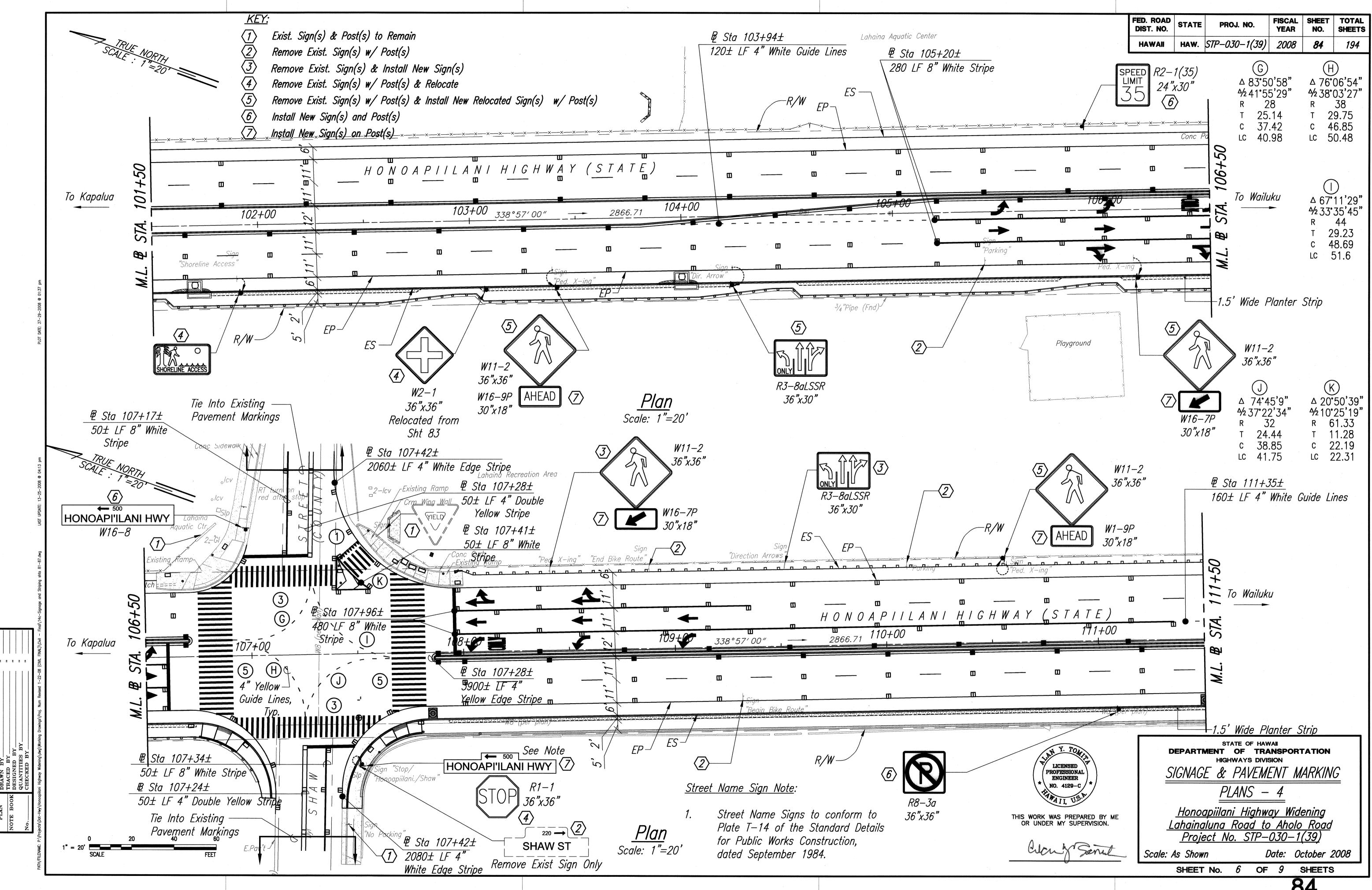
Date: October 2008

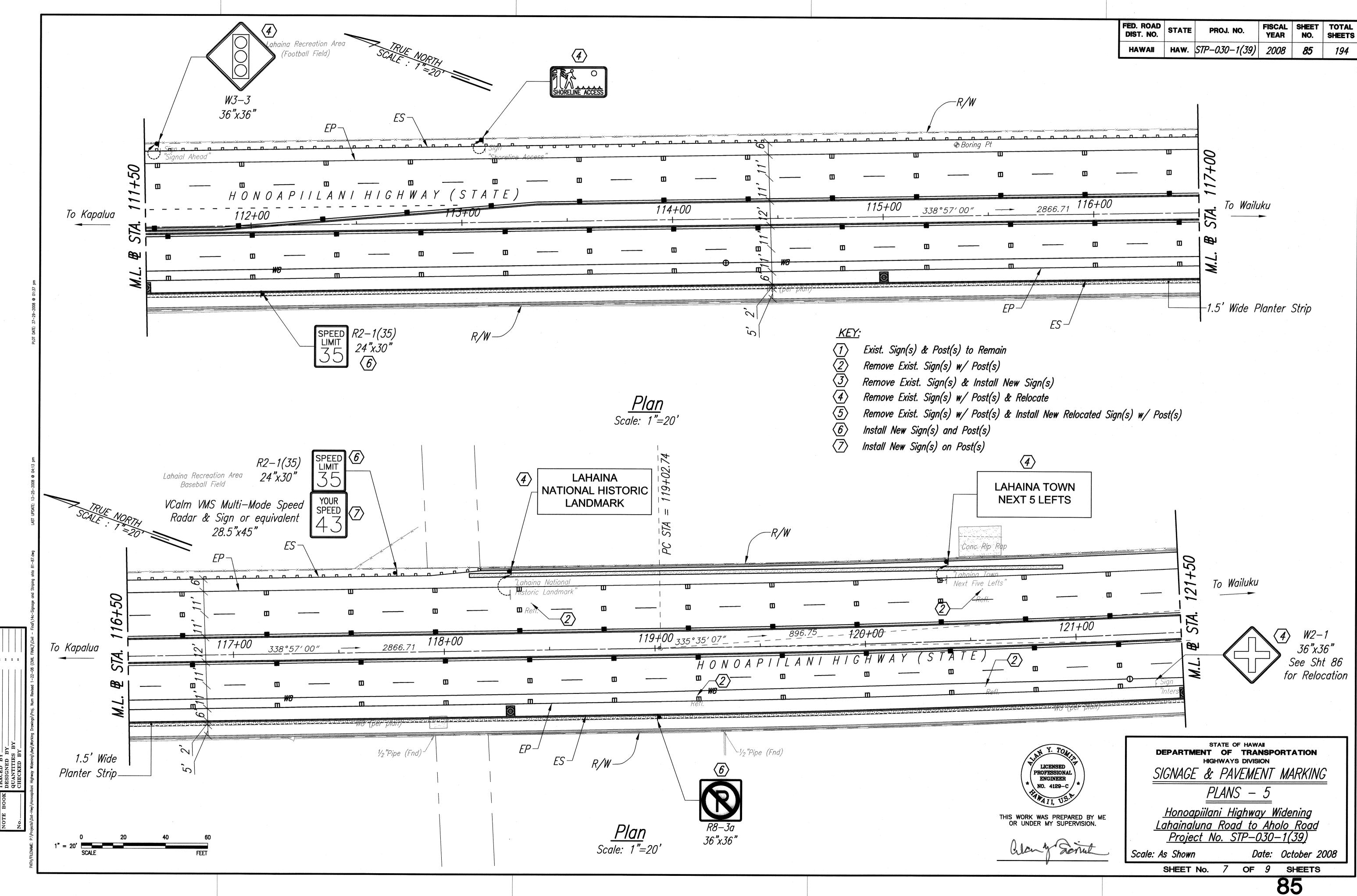
OF 9 SHEETS SHEET No. 2

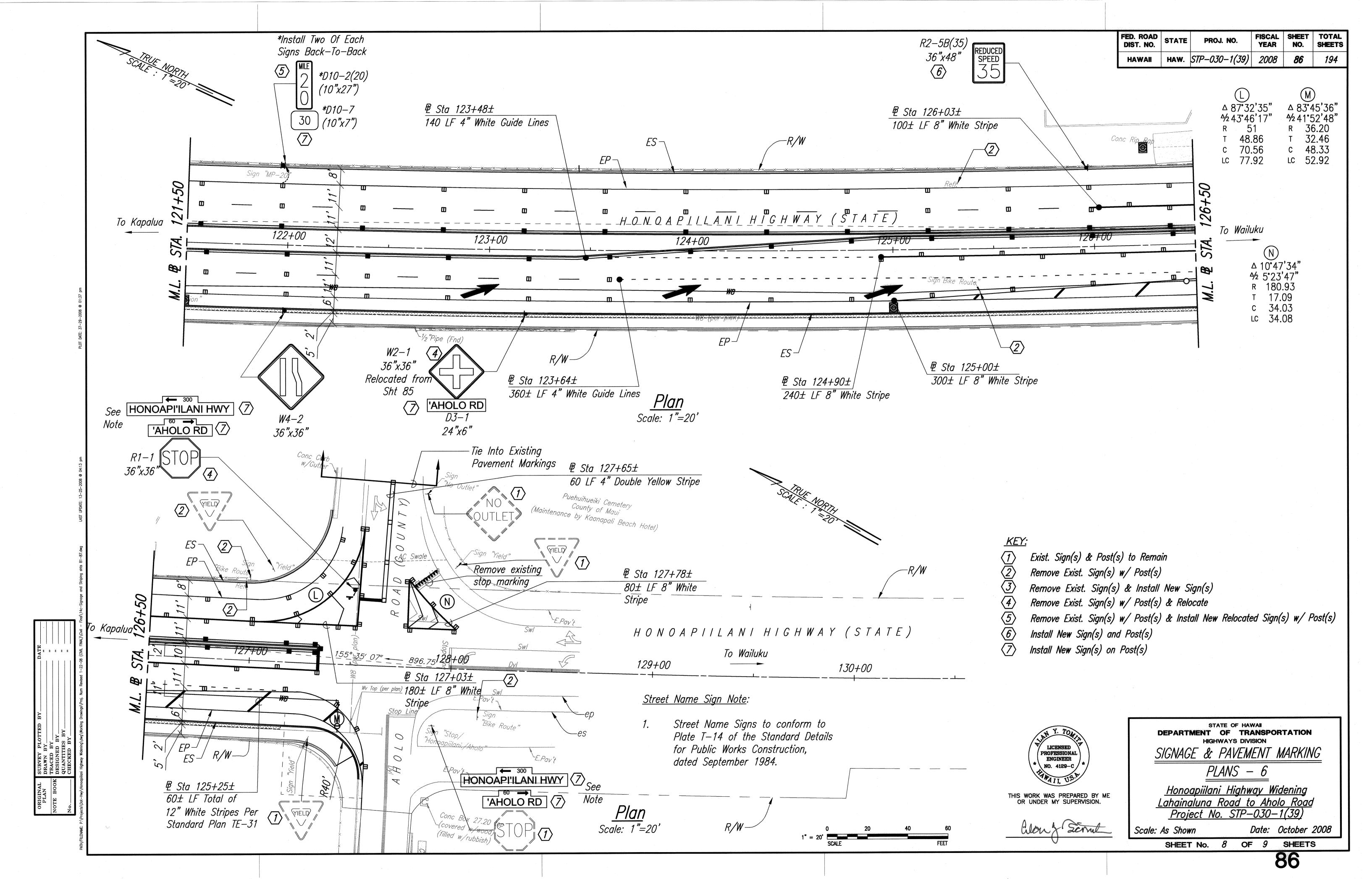












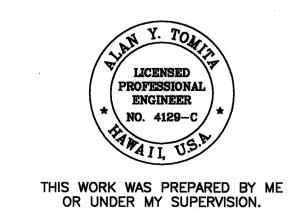
	TRAFFIC SIGN SUMMARY			
SIGN NO.	MESSAGE	QUANTITY		REMOVE &
3161V 1VO.	(ALL SIGNS 10 SQ. FT. OR LESS)	W/POST	W/O POST	RELOCATE
D10-2(20)	MILE POINT 20	1	1	
D10-2(20.5)	MILE POINT 20.5	1	1	
D10-7	30		2	
M1-6(30)	30			2
M3-4	WEST			1
M3-2	EAST			1
R1-1 (36"x36")	STOP			5
R1-2 (36"x36")	YIELD	1		
R2-1(35) (24"x30")	SPEED LIMIT 35	7		2
R3-2 (36"x36")	NO LEFT TURN		1	1
R3-2P (24"x18")	NO LEFT TURN		1	1
R3-5(R)	RIGHT TURN ONLY		1	
R3-8aLSSR	LEFT ONLY, STRAIGHT, STRAIGHT OR RIGHT	2	1	
R8-3a	NO PARKING	6		
R9-2	CROSS ONLY AT CROSSWALKS		3	
RG-160	PRINTING MUSEUM	1		1
W11A-2 (36"x36")	PEDESTRIAN CROSSING	7	1	1
W2-1 (36"x36")	CROSSROAD	1		3
W3-3 (36"x36")	SIGNAL AHEAD			1
W4-2	LANE ENDS MERGE LEFT	2		
W16-7P	ARROW		3	
W16-8	HONOAPIILANI HWY	1		and the state of t
W16-9P	AHEAD	1	4	
D3-1	AHOLO RD	,	1	
	PRISON ST		2	
	VCALM VMS MULTI-MODE SPEED RADAR		2	
COUNTY OF MAUL DPW	AHOLO RD		2	
	PRISON ST		2	<u></u>
· · · · · · · · · · · · · · · · · · ·	HONOAPIILANI HWY		7	
	PASSENGER CARS AND PICK-UPS (30"x48")			2
	CEPT PASSENGER CARS AND PICK-UPS (30"x48")	1		
	PT PASSENGER CARS AND PICK-UPS (30"x48")			2
	TOTAL	32	35	23

ROUTE MARKER SUMMARY				
LOCATION	SIGN NO. AND MESSAGE		ASSEMBLY W/O POSTS	REMOVE & RELOCATE
® STA. 80+62± LT	M1-6(30)/M3-4 (West)			1
® STA. 80+73± RT	M1-6(30)/M3-2 (East)			1
	TOTAL	<u> </u>	-	2

PAVEMENT MARKING SUMMARY	
DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE A	<i>912 EA</i> .
TYPE C	<i>683 EA</i> .
TYPE D	_ <i>36 EA</i> .
TYPE DB	_ 2 EA.
TYPE H	_ <i>275 EA</i> .
THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE)	<i>12,180 L.F.</i>
4-INCH PAVEMENT STRIPE (YELLOW)	<i>10,460 L.F.</i>
8-INCH PAVEMENT STRIPE (WHITE)	1 .
USED FOR CHANNELIZING LINES	
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW)	<i>730 L.F.</i>
12-INCH PAVEMENT STRIPE (WHITE)	_ <i>320 L.F.</i>
PAVEMENT ARROW	
CROSSWALK MARKINGS	35 LANES
YIELD MARKERS	_ 2 LANES
"ONLY" LETTERS	_ 5 <i>EA</i> .

М	ILEPOST MARKER SUMM	<i>IARY</i>		
LOCATION	SIGN NO. AND MESSAGE	QUANTITY W/POST W/O POST		
₿ STA. 122+00± Lt & Rt	D10-2(20) / D10-7(30)	1	1	
	TOTAL	1	1	

REFLECTOR MARKER SUMMARY				
TYPE	QUANTITY			
ITE	W/0	POST	W/STEE	TL POST
	YELLOW	WHITE	YELLOW	WHITE
RM-3			4	
TOTAL			4	_



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION SIGNAGE & PAVEMENT MARKING

SUMMARY

Honoapiilani Highway Widening
Lahainaluna Road to Aholo Road
Project No. STP-030-1(39)

Scale: As Shown

Date: October 2008 SHEET No. 9 OF 9 SHEETS

FISCAL SHEET TOTAL YEAR NO. SHEETS

PROJ. NO.

HAWAII HAW. STP-030-1(39) 2008 87