

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H1H-01-00M	2003	103	234

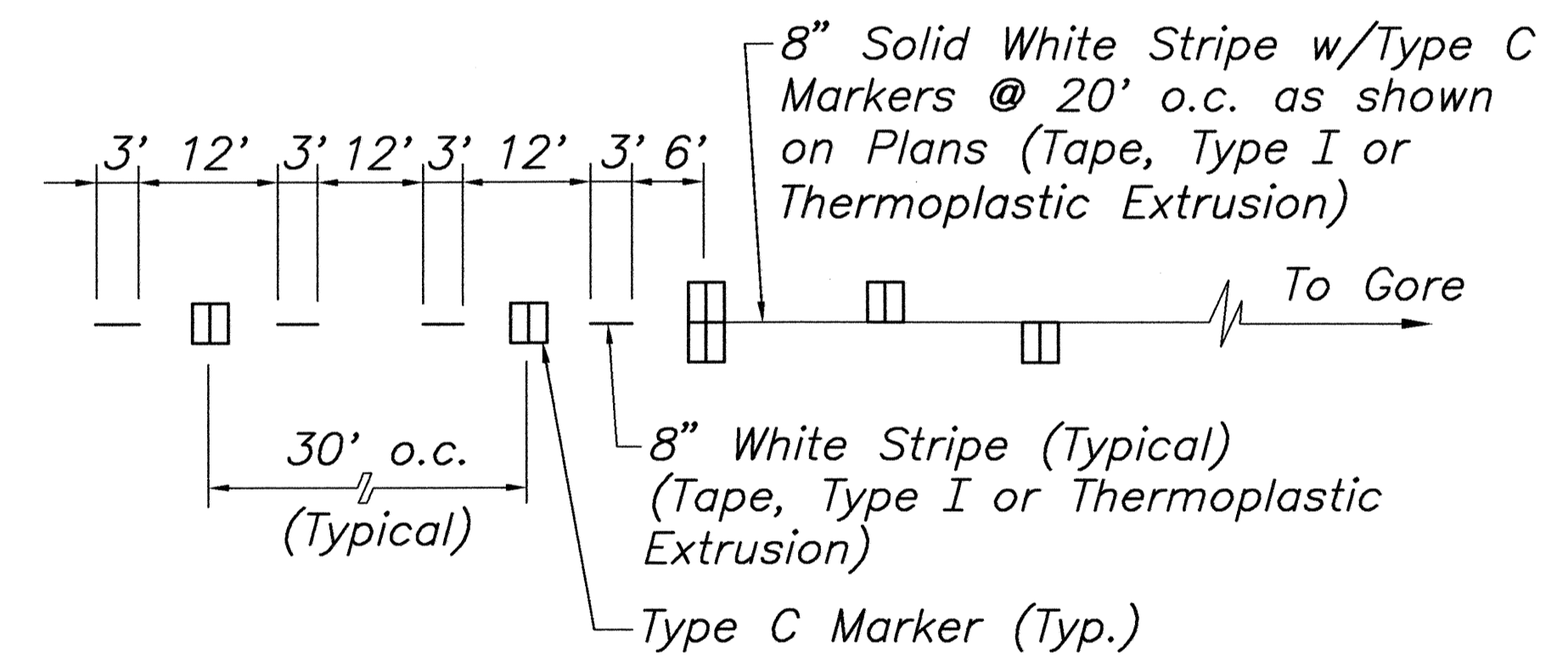
**LEGEND**

- 4 each Type A Raised Pavement Markers  
Type C Raised Pavement Markers at 40'-0" o.c.
- 4 each Type J Raised Pavement Markers (RPM)  
Type D Raised Pavement Markers @ 40'-0" o.c.
- 8" White Stripe with Type C  
Raised Pavement Markers (RPM) at 20'-0" o.c.  
(Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow with Type D  
Raised Pavement Markers (RPM) at 20'-0" o.c.  
(Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow Stripe with Type H  
Raised Pavement Markers (RPM) at 20'-0" o.c.  
(Tape, Type II or Thermoplastic Extrusion)
- 4" Double Solid White Stripes w/ Type D  
Raised Pavement Markers (RPM) at 20'-0" o.c.  
(Tape, Type I or Thermoplastic Extrusion)
- 4" Yellow Edge Stripe with Type H Raised Pavement  
Markers (RPM) at 40'-0" o.c., unless otherwise  
noted (Tape, Type II or Thermoplastic Extrusion)
- 4" or 8" White Edge Stripe with Type C  
Raised Pavement Markers at 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)
- 4 Each Type J Raised Pavement Markers  
Type D Raised Pavement Markers at 20'-0" o.c.  
Type H Raised Pavement Markings at 20'-0" o.c.  
(Reflective Surface Facing No-Passing Direction)  
4" Single Solid White Stripe  
(Tape, Type I or Thermoplastic Extrusion)
- Lane Drop Marking, 8" Wide x 3'-0" Long White  
Stripe at 15'-0" o.c. with Type C Markers at  
at 30'-0" o.c. (Tape, Type I or Thermoplastic  
Extrusion)

**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. The removal of existing pavement markings shall not be paid for separately but shall be considered 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. Removal of Existing Delineators and Posts as directed by the Engineer shall be considered incidental to the various signing items.
10. 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. Removal of existing signs and posts to be replaced shall be considered incidental to the various sign items.
11. Backing for all new regulatory and warning signs shall not be spliced.
12. 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"
  - c. "Standard Alphabets for Highways Signs"
13. All new and relocated signs and markers installed on pipe post or light standard are to be mounted with band brackets and steel braces.
14. 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 replaced 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 at the end of the project.
15. 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.

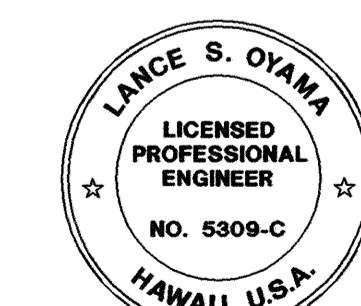
16. The Contractor shall install new Type II Object Markers on all utility poles that are within the State Highway Right-of-way as directed by the Engineer. This shall be considered incidental to the various sign items.
17. All traffic control devices including: signs, barricades, vertical panels, warning lights, arrow boards, changeable message signs, cones and tubular markers that meet the requirements of American Traffic Safety Services Association (ATSSA), "Quality Standard for Work Zone Traffic Control Devices, 1992" shall be used on this project. Compliance with this requirement will be considered incidental to the contract and no extra compensation will be allowed.



**LANE DROP MARKING**

Not to Scale

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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature of Lance S. Oyama

APRIL 30, 2004 EXPIRATION DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

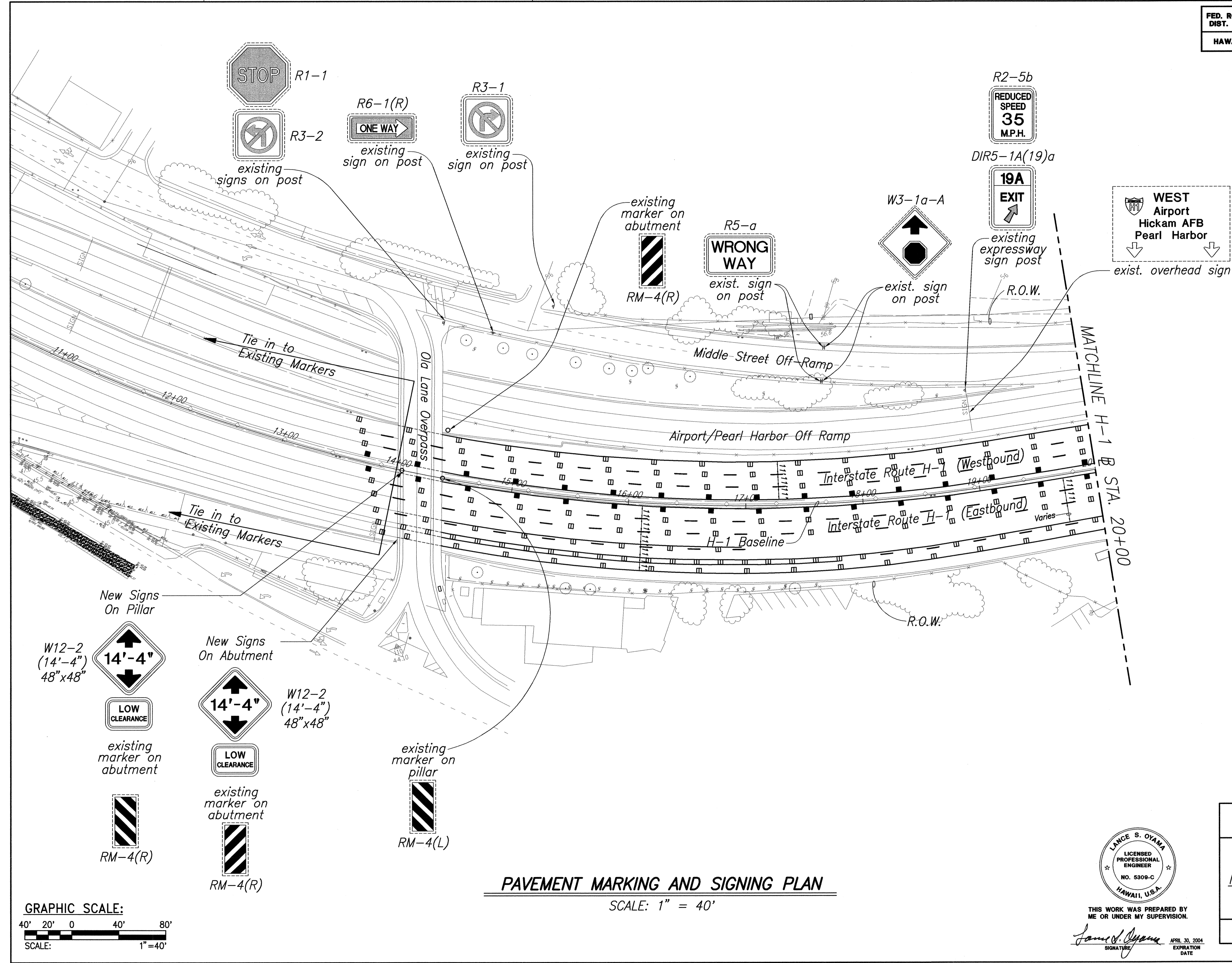
**PAVEMENT MARKING LEGEND  
DETAILS AND NOTES**

INTERSTATE ROUTE H-1 REHABILITATION  
OLA LANE TO KALIHI STREET  
PROJECT NO. H1H-01-00M

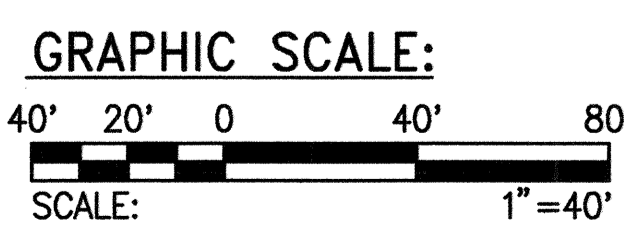
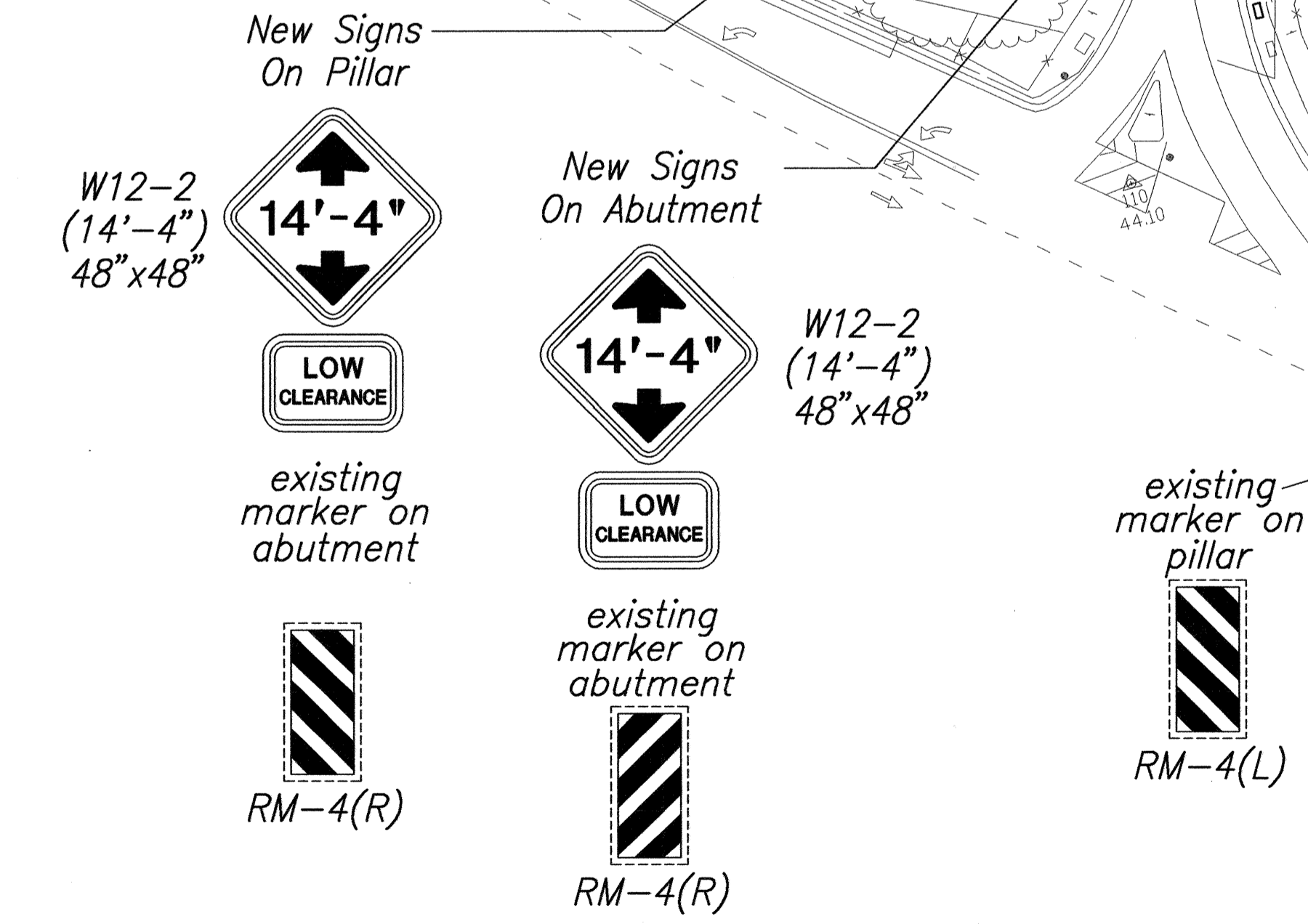
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SHEET NO. C-34 OF C-59 SHEETS

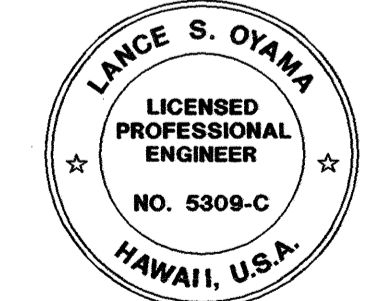
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H1H-01-00M	2003	104	234



SURVEY PLOTTED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 ORIGINAL PLAN DRAWN BY \_\_\_\_\_  
 TRACED BY \_\_\_\_\_  
 DESIGNED BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 No. \_\_\_\_\_

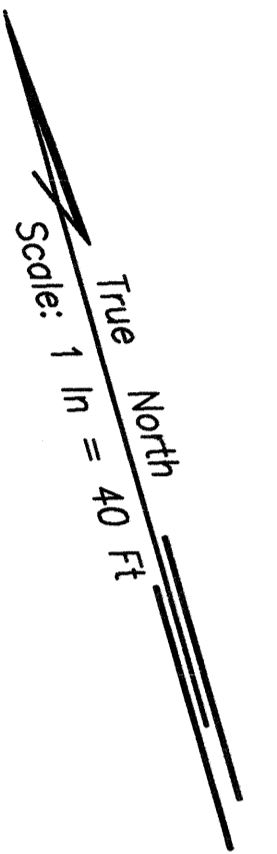


**PAVEMENT MARKING AND SIGNING PLAN**  
 SCALE: 1" = 40'

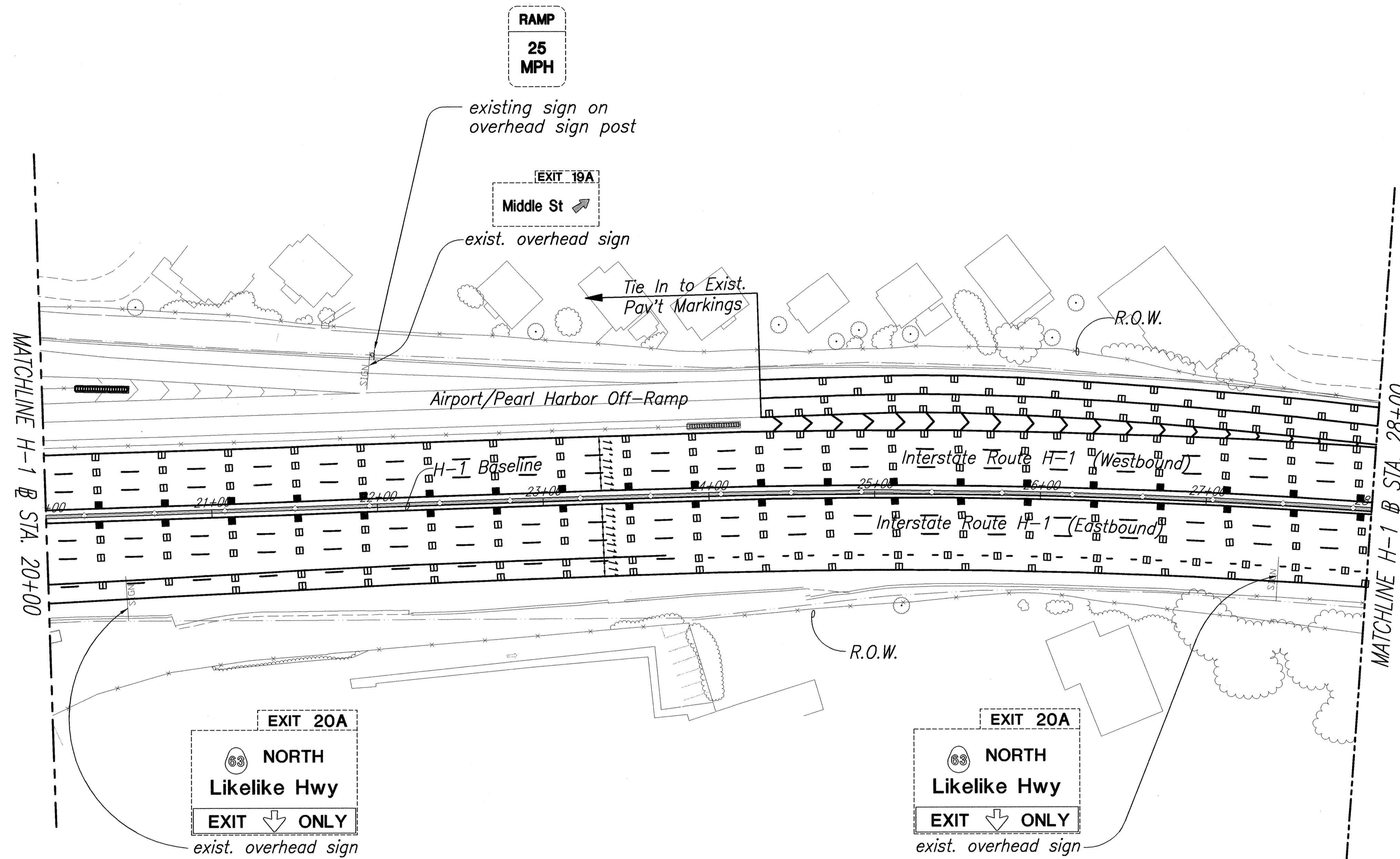


THIS WORK WAS PREPARED BY  
 ME OR UNDER MY SUPERVISION.  
*Lance S. Oyama*  
 SIGNATURE APRIL 30, 2004  
 EXPIRATION DATE

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**PAVEMENT MARKING  
 AND SIGNING PLAN**  
 INTERSTATE ROUTE H-1 REHABILITATION  
 OLA LANE TO KALIHI STREET  
 PROJECT NO. H1H-01-00M  
 Scale: As Noted Date: October 31, 2002  
**SHEET No. C-35 OF C-59 SHEETS**

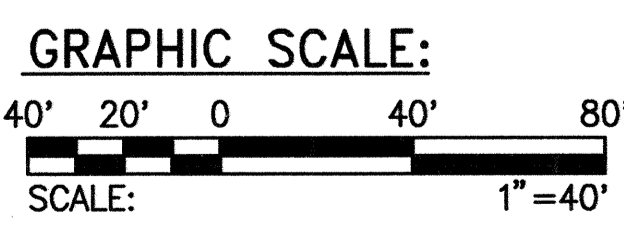


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H1H-01-00M	2003	105	234



True North  
Scale: 1 in = 40 ft

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	No.
NOTEBOOK	

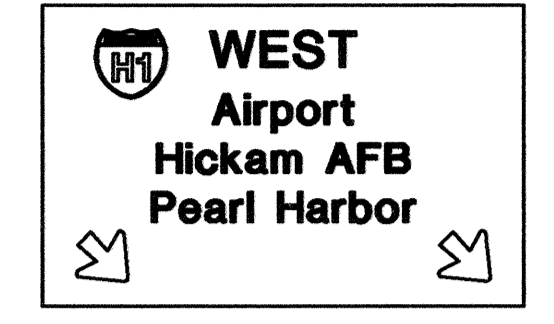
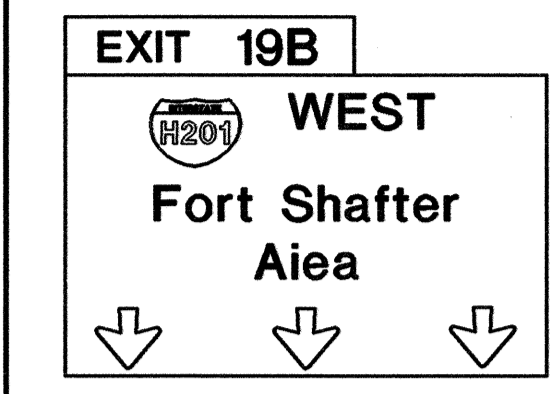


**PAVEMENT MARKING AND SIGNING PLAN**  
SCALE: 1" = 40'

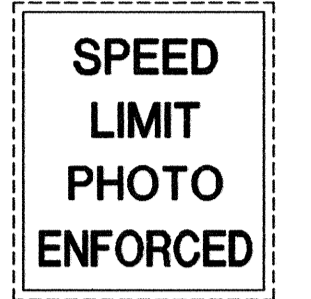
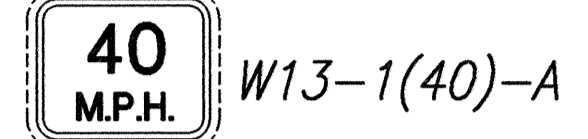
LANCE S. OYAMA  
LICENSED PROFESSIONAL ENGINEER  
NO. 5309-C  
HAWAII, U.S.A.  
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*Lance Oyama*  
SIGNATURE APRIL 30, 2004 EXPIRATION DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**PAVEMENT MARKING AND SIGNING PLAN**  
INTERSTATE ROUTE H-1 REHABILITATION  
OLA LANE TO KALIHI STREET  
PROJECT NO. H1H-01-00M  
Scale: As Noted Date: October 31, 2002  
SHEET No. C-36 OF C-59 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H1H-01-00M	2003	ADD.106	234



Exist. Overhead Sign Panels to Remain and Install New Lane Assign Overlay Sign Panels Center Arrow Over Lanes. See Plan Sht. No. 102



Install New Signs On Type A Modified Route Marker Assembly w/ 2-Posts. See Detail This Sht.

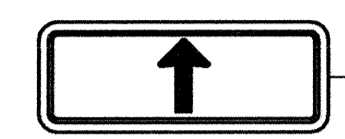
M3-1-A 36"x18"



IM-1(2)A 45"x36"



IM6-3 21"x15"



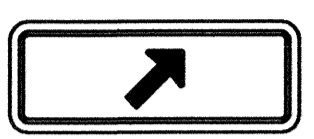
M3-1-A 36"x18"



IM-1(2) 36"x36"



IM6-2(R) 21"x15"

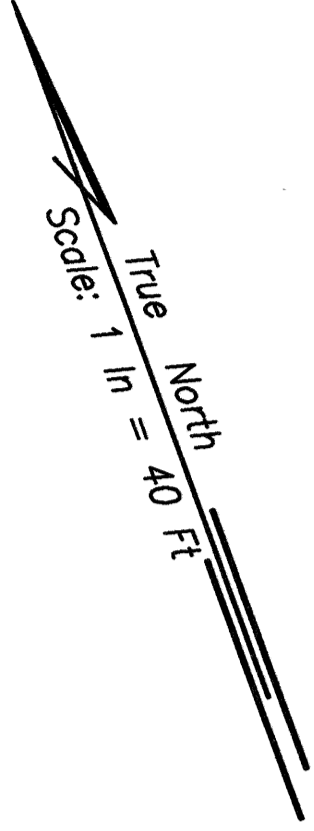


Remove Exist. Sign and Post

Install New Signs on Type A Route Marker Assembly

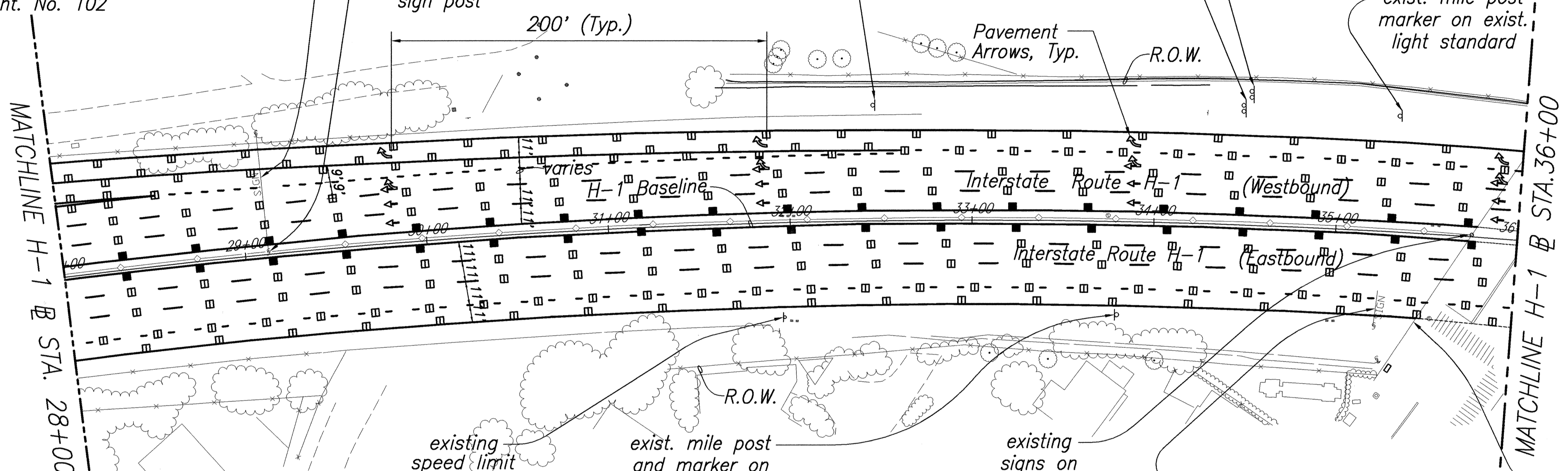


exist. mile post marker on exist. light standard

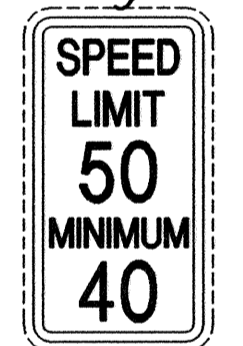


MATCHLINE H-1 @ STA. 28+00

MATCHLINE H-1 @ STA. 36+00



existing speed limit sign



exist. mile post and marker on exist. light standard



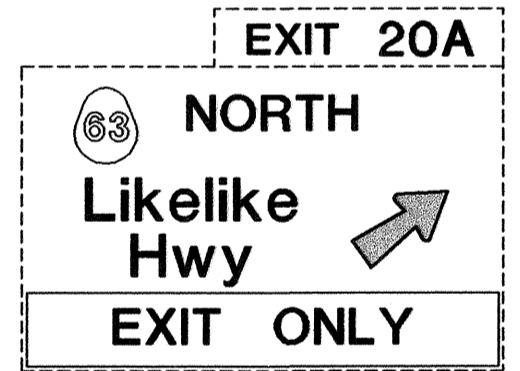
existing signs on pillar

W12-2 (14'-6")



RM-4(L)

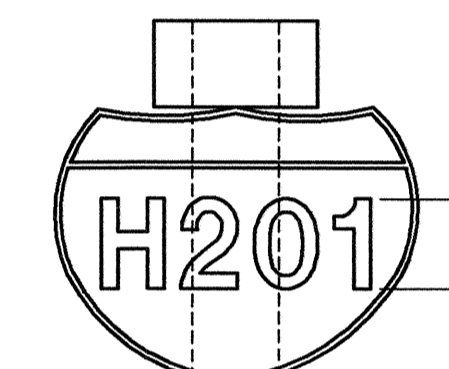
exist. overhead sign



existing marker on abutment



RM-4(R)



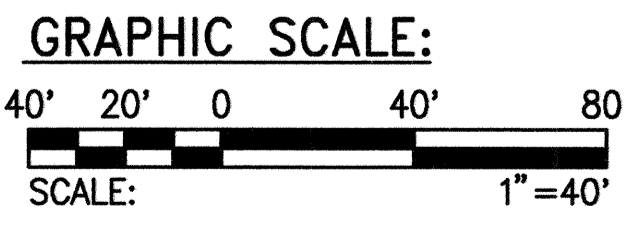
17B @ 35 % Font Spacing

18"

2"x2"x12 Ga. Galv. Sq. Tube Post

**TYPE A MODIFIED ROUTE MARKER ASSEMBLY**  
NOT TO SCALE

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	No.
NOTEBOOK	



**PAVEMENT MARKING AND SIGNING PLAN**

SCALE: 1" = 40'



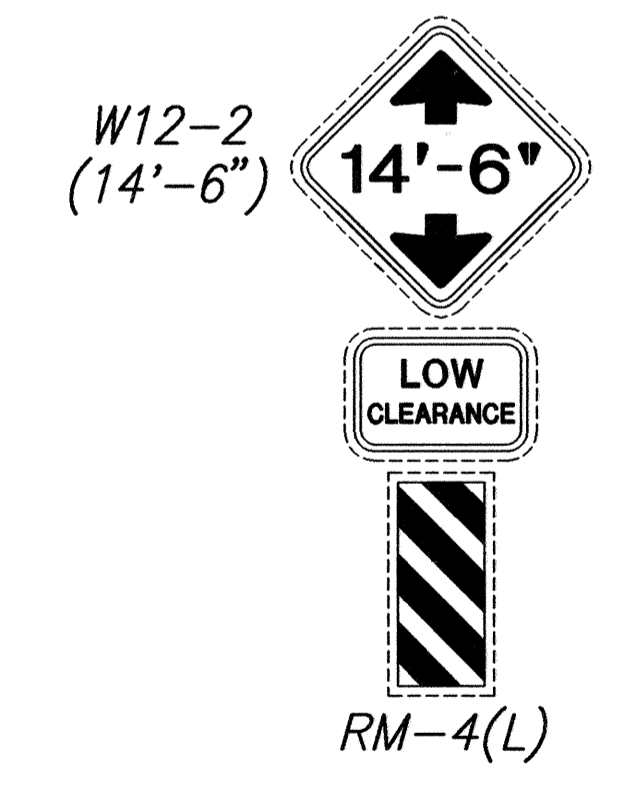
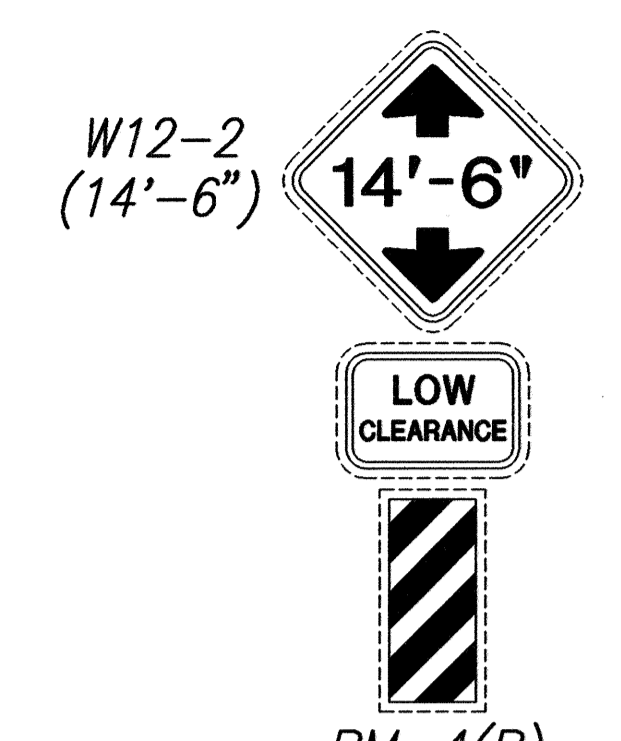
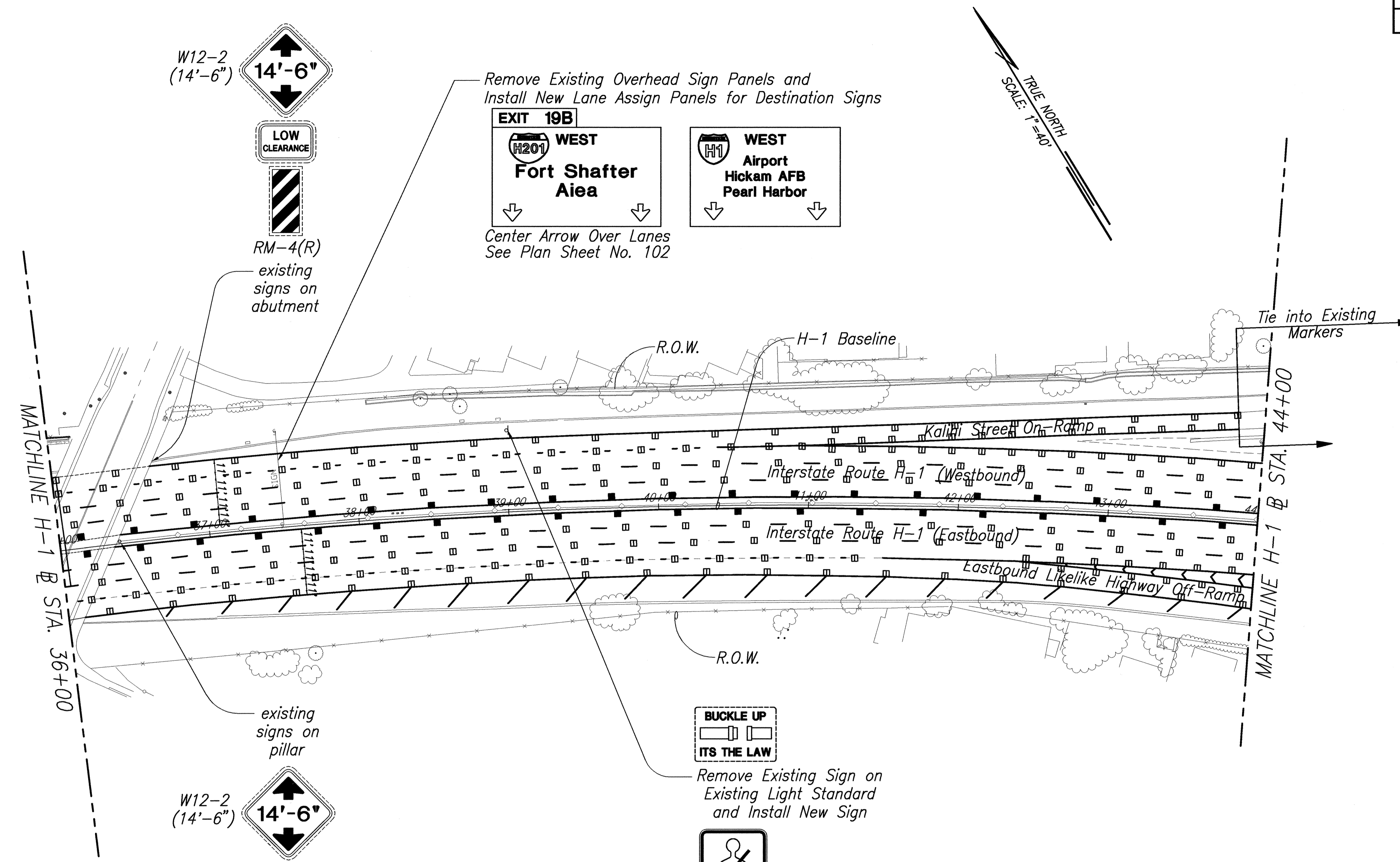
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*Lance S. Oyama*  
SIGNATURE APRIL 30, 2004 EXPIRATION DATE

6-18-03	Revised Callouts and Added Detail
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**PAVEMENT MARKING AND SIGNING PLAN**  
INTERSTATE ROUTE H-1 REHABILITATION  
OLA LANE TO KALIHI STREET  
PROJECT NO. H1H-01-00M

Scale: As Noted Date: October 31, 2002  
SHEET No. C-37 OF C-59 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H1H-01-00M	2003	ADD.107	234



Remove Existing Overhead Sign Panels and Install New Lane Assign Panels for Destination Signs

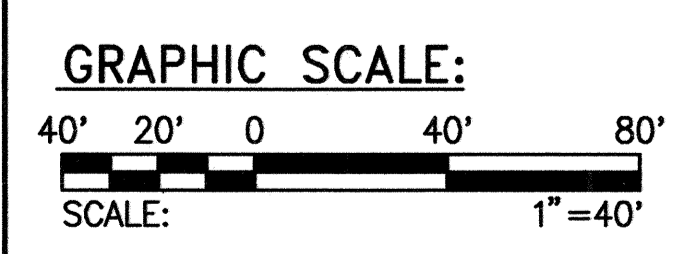
**EXIT 19B**  
**WEST**  
**Fort Shafter Aiea**

**WEST**  
**Airport Hickam AFB Pearl Harbor**

Center Arrow Over Lanes See Plan Sheet No. 102



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	No.
NOTEBOOK	



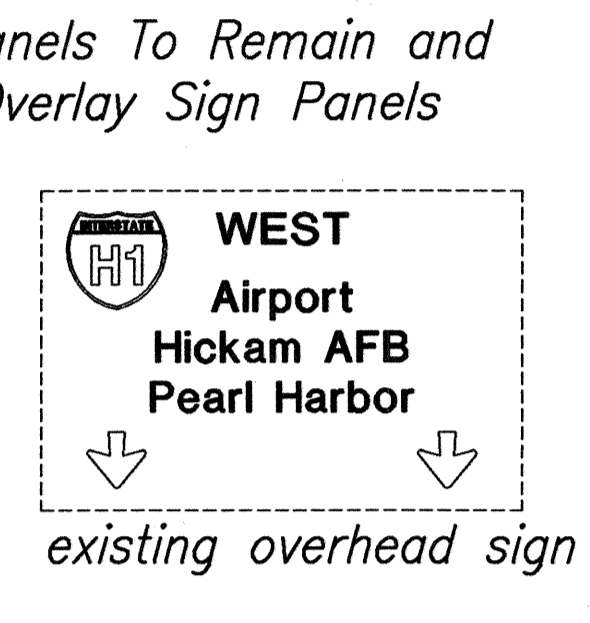
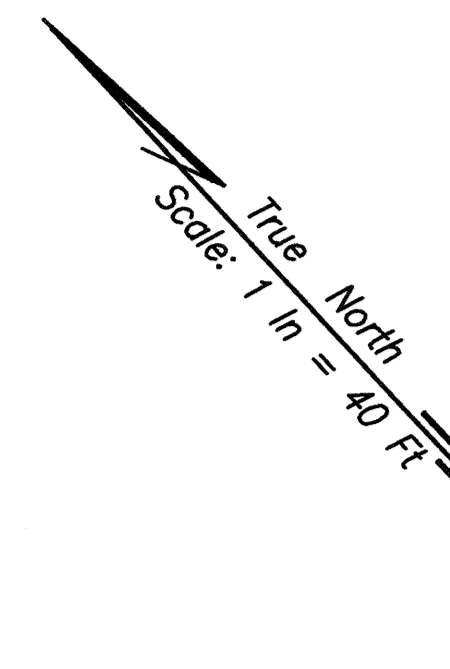
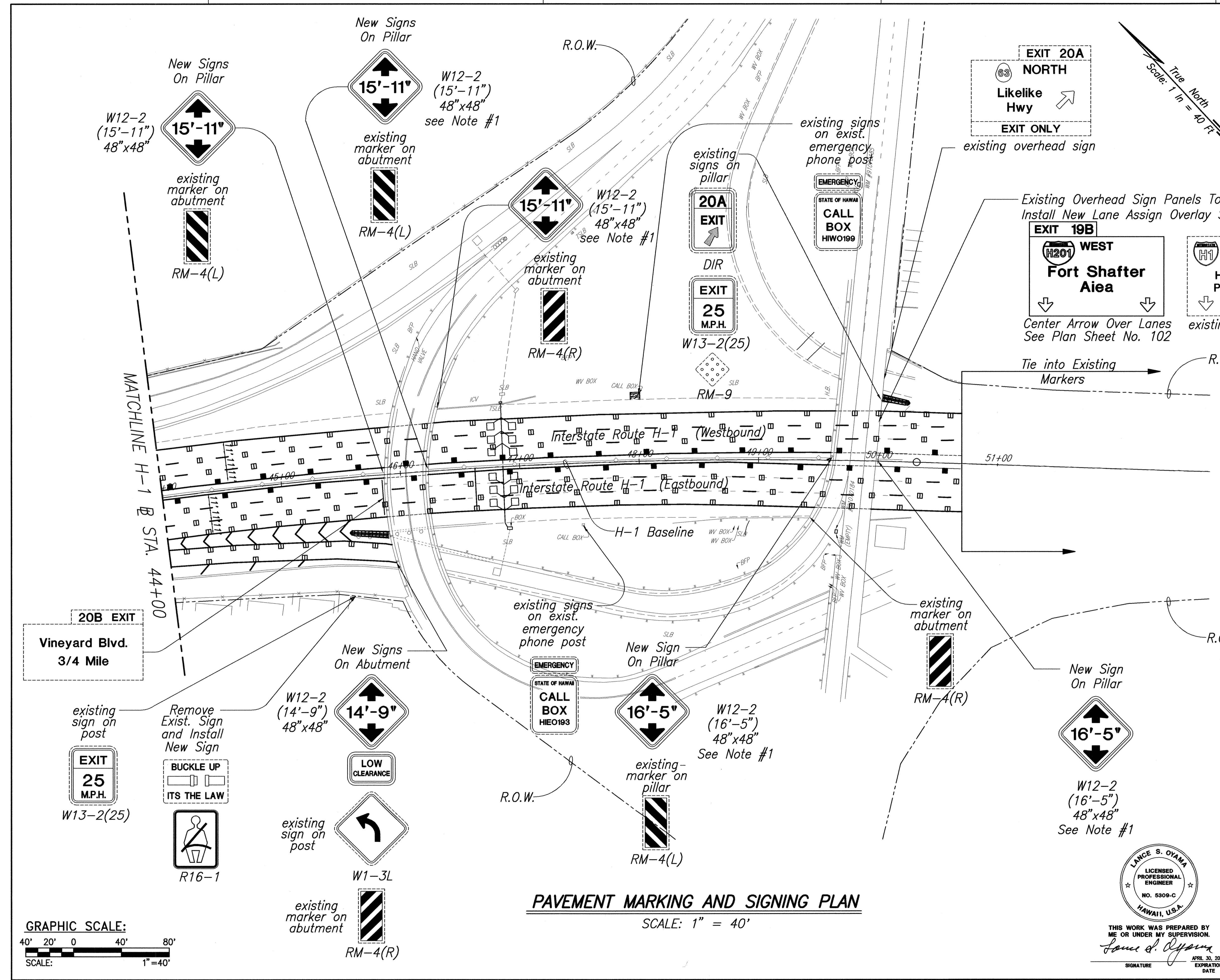
**PAVEMENT MARKING AND SIGNING PLAN**  
 SCALE: 1" = 40'

LANCE S. OYAMA  
 LICENSED PROFESSIONAL ENGINEER  
 NO. 5309-C  
 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*Lance S. Oyama*  
 SIGNATURE APRIL 30, 2004 EXPIRATION DATE

6-18-03	Revised Overhead Sign Panel Callouts
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>PAVEMENT MARKING AND SIGNING PLAN</b>	
INTERSTATE ROUTE H-1 REHABILITATION OLA LANE TO KALIHI STREET PROJECT NO. H1H-01-00M	
Scale: As Noted	Date: October 31, 2002
SHEET No. C-38 OF C-59 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HIH-01-00M	2003	ADD.108	234



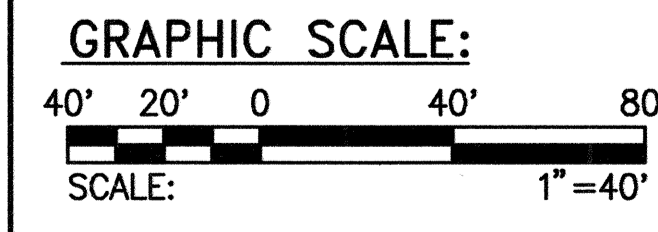
**NOTE:**  
1. Contractor shall field verify vertical height prior to ordering of these signs.

6-18-03	Revised Overhead Sign Panel Callouts
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>PAVEMENT MARKING AND SIGNING PLAN</b>	
INTERSTATE ROUTE H-1 REHABILITATION OLA LANE TO KALIHI STREET PROJECT NO. HIH-01-00M	
Scale: As Noted	Date: October 31, 2002
SHEET No. C-39 OF C-59 SHEETS	

LANCE S. OYAMA  
LICENSED PROFESSIONAL ENGINEER  
NO. 5309-C  
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*Lance S. Oyama*  
SIGNATURE      APRIL 30, 2004 EXPIRATION DATE

**PAVEMENT MARKING AND SIGNING PLAN**  
SCALE: 1" = 40'



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTEBOOK	
No.	